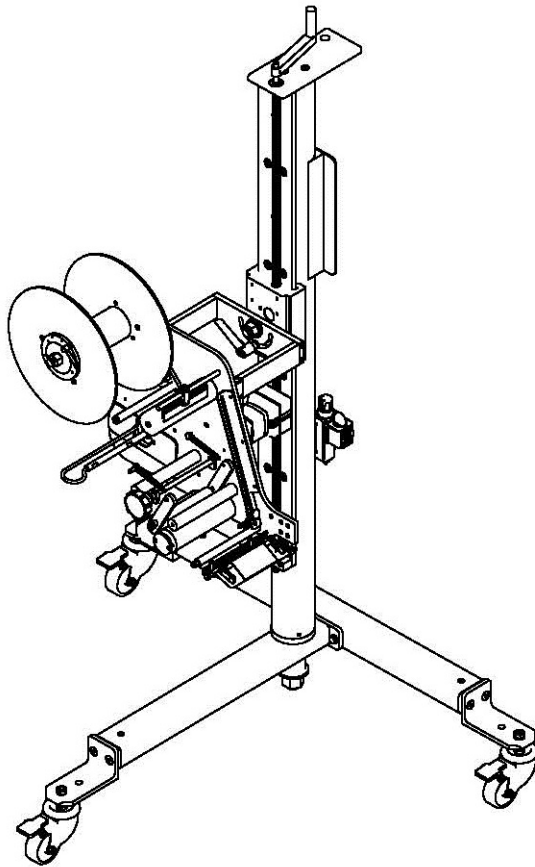


LX600 Apply Only Labeling System



PN: LSMANUAL-LX600

Version: 05B (For use with the Allen-Bradley Micro830™ PLC)

Operator's Manual

LABEL APPLICATION SYSTEM

Labeler Operation

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Tuesday, March 10, 2020

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Introduction

ICON KEY

 Important information

Thank you for purchasing the Little David™ model LX600 series Apply Only labeler. The LX600 series apply only labelers are designed to be versatile enough to suit a variety of carton labeling requirements with one standard unit. All employees who will be required to operate the labeler should read this manual to ensure proper set-up, operating safety and a long machine life. After reading this manual you will know how to perform the following functions,

- How to position the labeler to achieve maximum performance.
- How to thread the labeler and adjust the sensors to apply labels in the most efficient manner.
- How to use the controller interface.
- Troubleshooting and replacing of worn or defective parts.

Throughout this manual there are several illustrations designed to help you perform the variety of tasks described. These illustrations all depict the right-hand version of the machine. You can tell a right hand and left hand machine apart by facing the machine. The side with the plate holding all of the rollers is the hand version of the machine. The hand designation of your individual machine does not affect any of the procedures or maintenance operations described below only that your left hand machine appears as a mirrored image of the machine depicted in the illustrations.

Operating Safety

Observe the warnings and cautions below when using the Little David Label Application Systems. Within this manual, a warning indicates that the potential for bodily injury exists, and a caution indicates when the machine may suffer damage.

Instruction: Requirement for System Operation

Instruction: Socket-outlet shall be installed near the equipment and shall be easily accessible.

Instruction: Fuses marked MDA 5A are of type: 250V, 5 Amp, Slow Blow.

Fuses marked MDA 10A are of type: 250V, 10 Amp, Slow Blow.

Warning: Potential Bodily Injury

Warning: Always turn off the electrical power before clearing jams, and before performing maintenance. Use Proper Lock Out / Tag Out Procedures. Never operate unit without guards in place.

Warning: Avoid liquid or excessive moisture when using the system. Do not operate the system with wet hands, nor in a very humid environment. Do not spill liquid on the system.

Warning: Do not touch moving parts. Turning hubs can bruise or scrape, rapidly moving label stock can cut like a knife.

Warning: If a problem arises that is not covered in this manual, do not attempt to repair the system yourself, instead, call your nearest service office for immediate and correct care of the equipment. Trained personnel should perform all adjustments and service.

This manual contains operator information for Little David LX600 Label Application Equipment. It is directed toward the person who operates that system. You should take the time to read through this manual once before operating it. Thereafter, refer to it as necessary.

Take special note of all warnings, cautions, and maintenance instructions. Like any other piece of equipment, the Little David LX600 Label Application System functions best when cared for and used carefully. Note that only an authorized technician should perform any procedures not described in this manual.

Caution: Potential Machine Damage

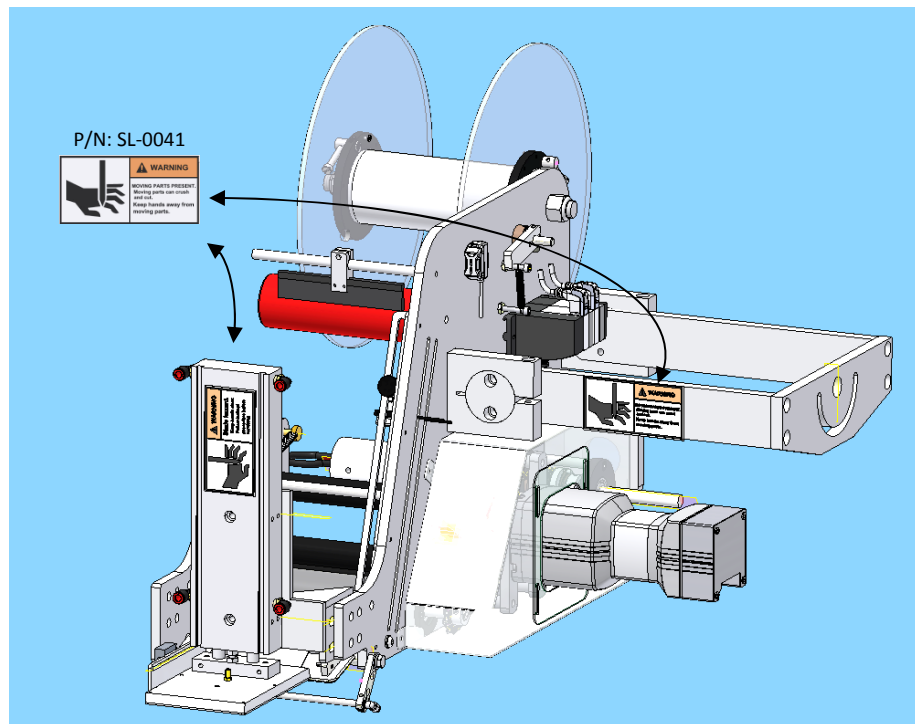
Caution: **Do not install the system in direct sunlight.**

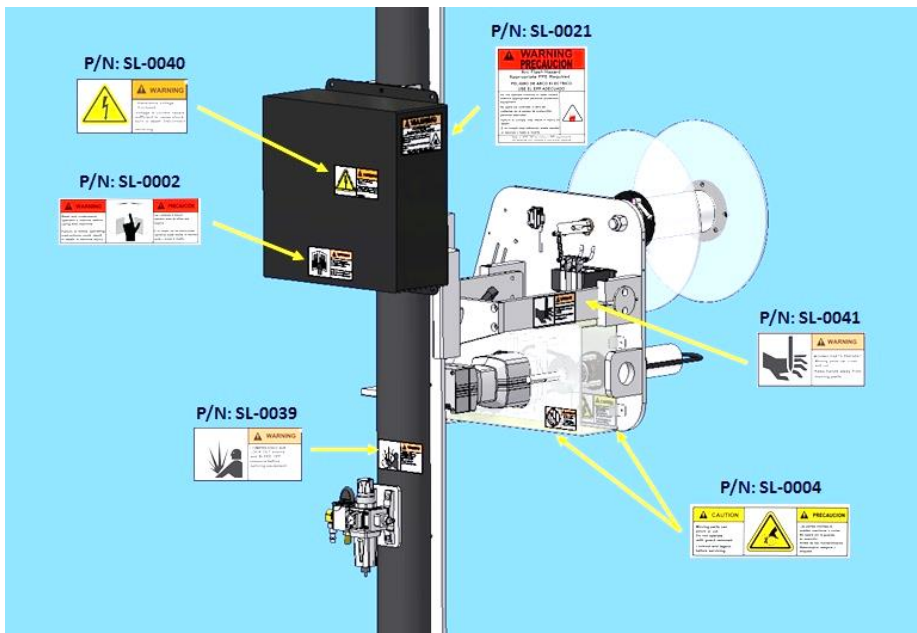
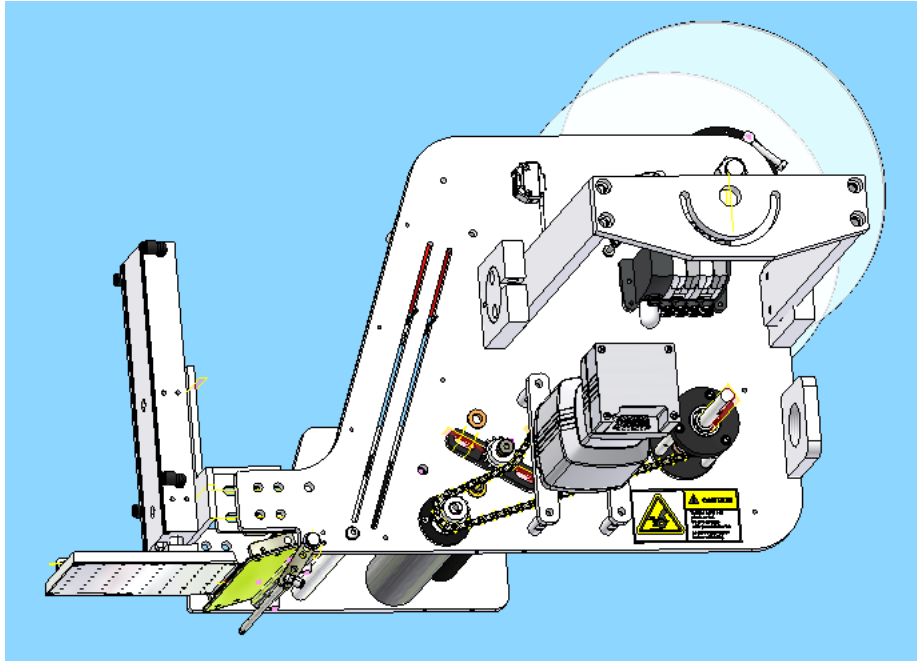
Caution: **Do not install the system near a heater or heat emitting equipment.**

Caution: **Provide and use proper electrical power. Clean / noise free electrical power is required for proper / trouble free operation.**

Caution: **Do not operate, maintain, or otherwise use the system, except as described in this manual.**

Safety Decal Locations





Safety Decal Locations

Safety Decal Part Number

P/N: SL-0002



P/N: SL-0039



P/N: SL-0004



P/N: SL-0041



P/N: SL-0021



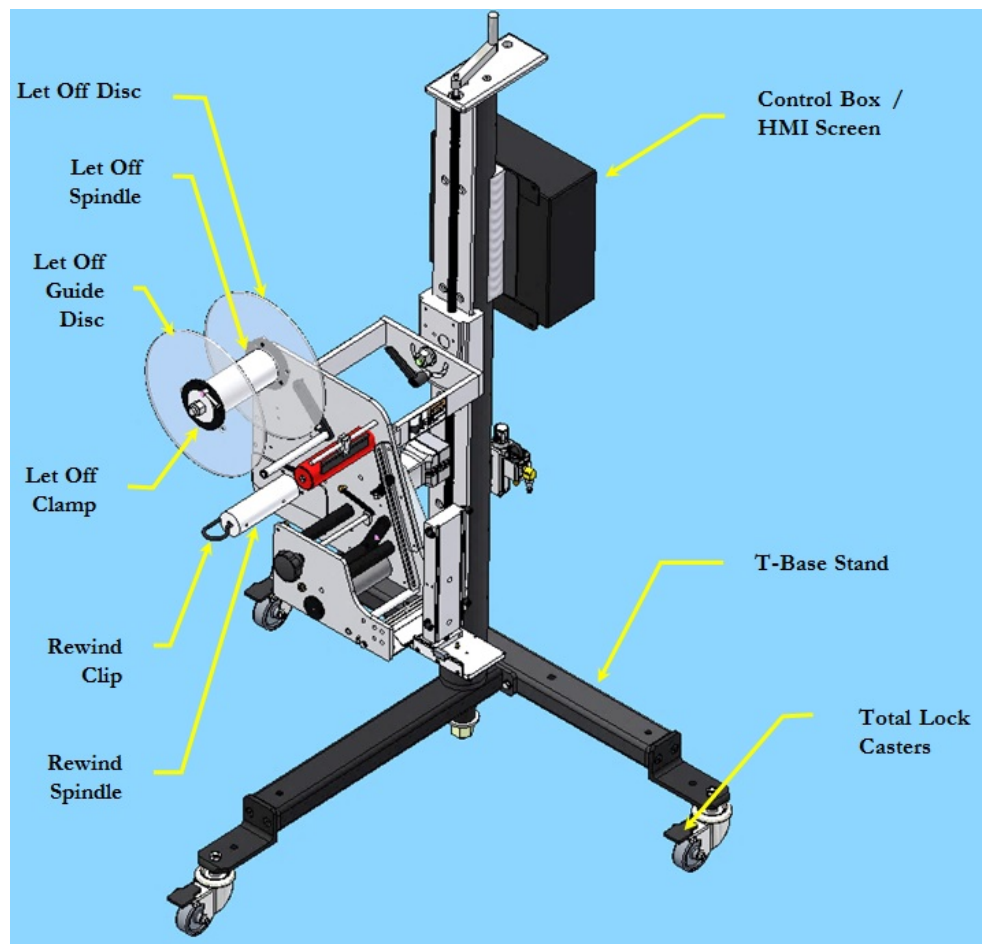
P/N: SL-0040



Labeler Sections

Overview

This manual covers several parts of the machine. The following diagram identifies the key sections of the machine.



Installation and Threading

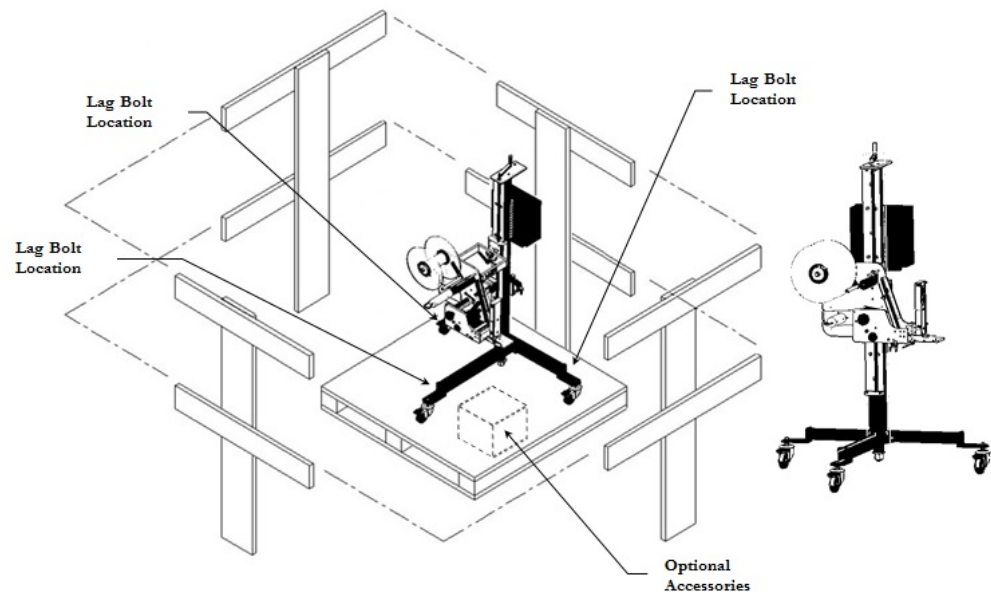


Always check for any signs that the machine may have been damaged before fully removing it from the shipping skid.

Section 1: Placing the Machine

The labeler comes fully assembled and already on the mounting stand. The Plant Manager at your facility might have already determined a pre-arranged location for the labeler. If no pre-arranged location exists following the steps below will help determine the ideal spot.

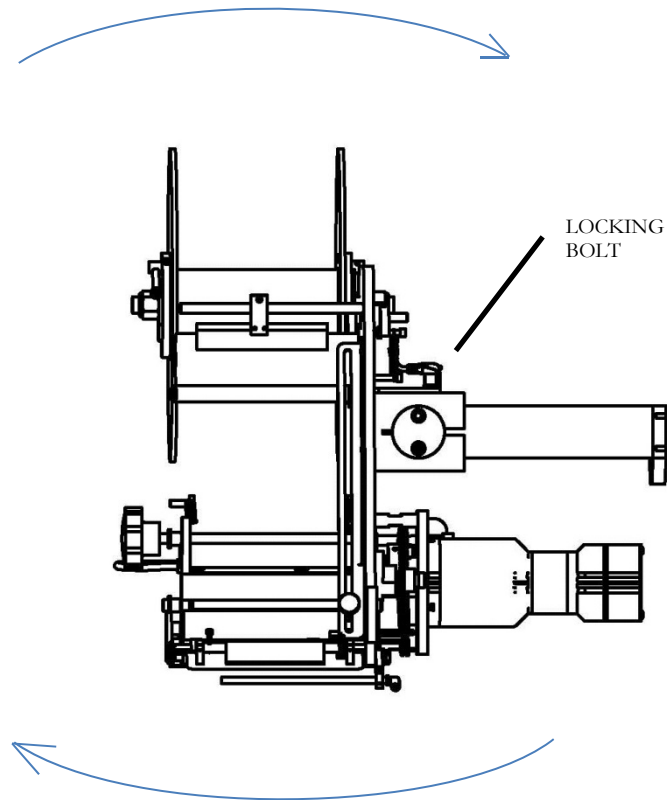
Step One: Carefully remove all of the items in the shipping box and skid. There are three lag bolts fastening the labeler to the base of the skid. While the machine is fully assembled, certain options such as software or spare parts kits may be packaged separately.



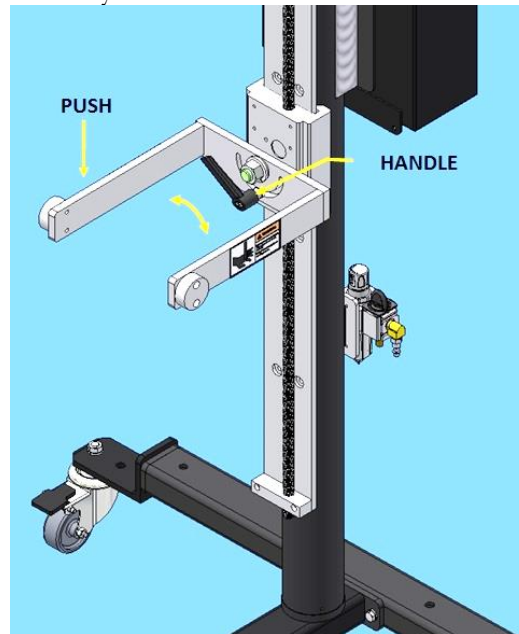
Step Two: *Take care removing the machine from the skid as it weighs approximately 190 pounds depending on configuration and options.*

Step Three: You will need to move and orient the label machine along your production line in a position relative to your label and product.

- A. Positioning the machine for top application or side application utilizes two locking bolts located on the top of the machine as shown.

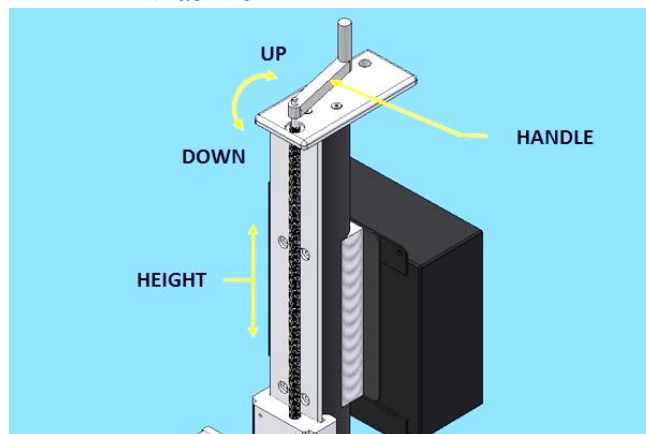


- B. Alternatively or additionally, you may want to turn the machine vertically. This is done with the handle found behind the machine.

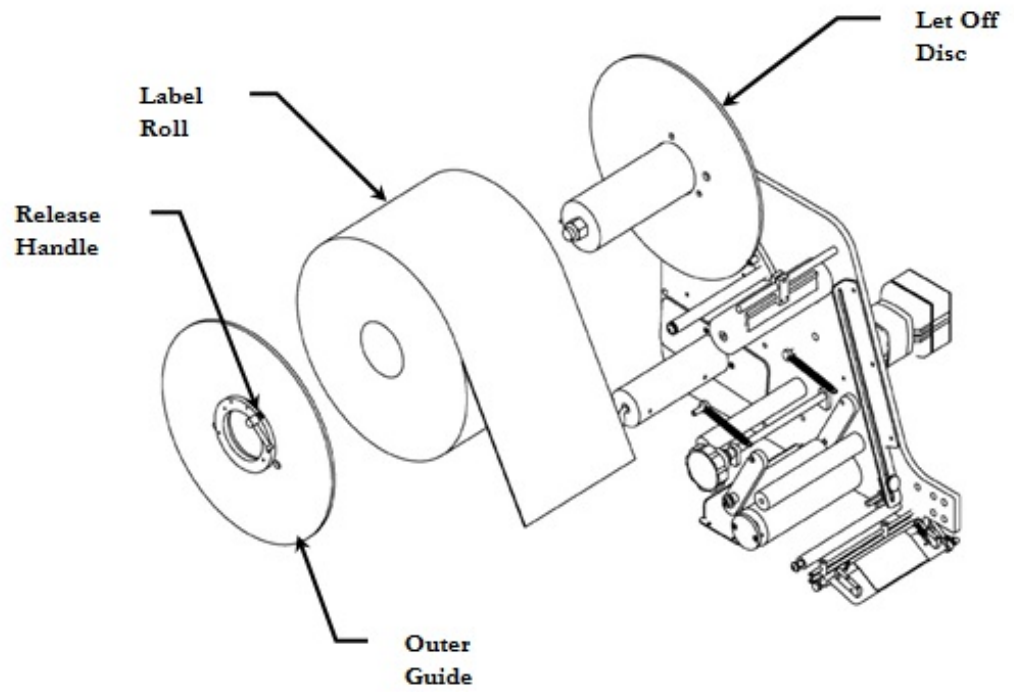


Note: If the machine is to be inverted (sometimes called bottom labeling) the handle should be completely removed to move the machine upside-down. This will expose a new hole that can be used for the lock handle so that the position is maintained.

- C. Vertical height is changed with the handle on the top of the machine.



Step Four: Once the labeler has been rotated to the desired position, you will want to load the labels. Loosen the outer clamp with the handle and remove it, then load your labels as shown and replace the outer guide. Prior to locking the outer guide in place, leave a little clearance between the outer guide and the roll of labels; **Do Not** press the outer guide tightly against the label roll as it will stop the label roll from unwinding normally and stall the label feed. **(Note: Side Frame Plate and cylinder are removed to show detail.)**



Refer to Section 2: Threading the Label Stock.



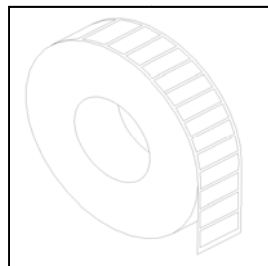
Section 2: Threading the Label Stock

Always make sure that the power is off, the unit is unplugged, and no product is moving past the labeler before threading new label stock or re-threading after a web breaks. This section will detail the threading operation in detail beyond the illustration on the machine.

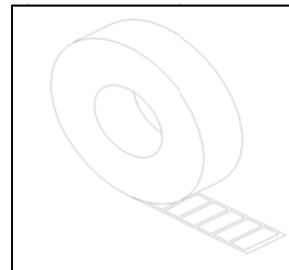
Step One:

- Make sure that the let-off discs are not holding the label roll too tightly. The roll should spin when light pressure is applied to it.
- The label path is justified to the inside edge. Make sure that all guide collars and plates are properly aligned to the Let-Off Disk.
- Make sure that when the leading edge of the label roll is pulled away, the labels face the top of the machine regardless of the machine orientation to top, side, or bottom application.
- The machine is only designed to accept labels that are wound on the outside of the reel. See Label stock windings below.
- Clear the first 36" of labels from the liner / web.

Label Stock Windings

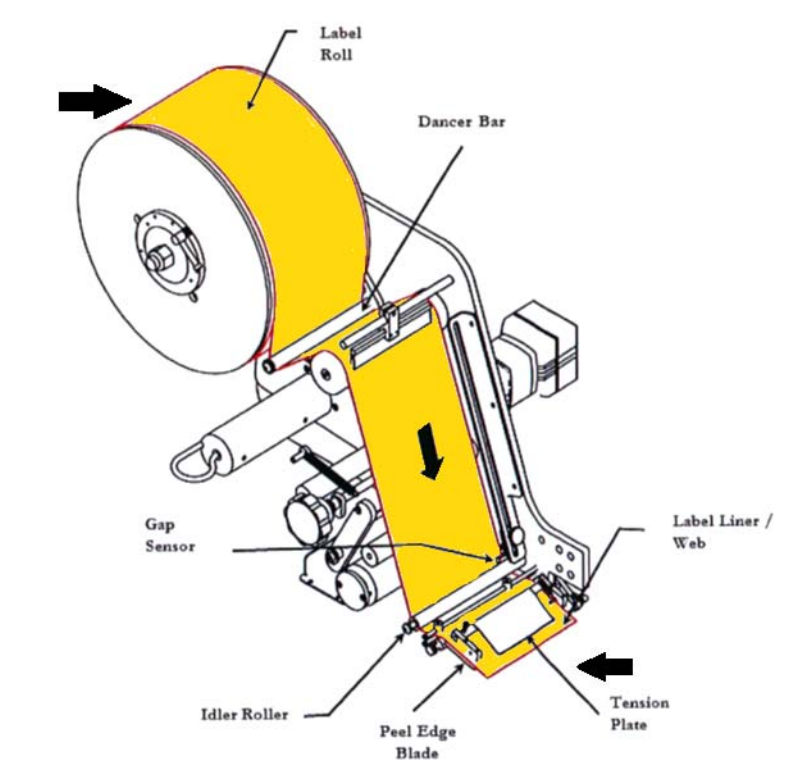


Labels wound outside (mount as shown)

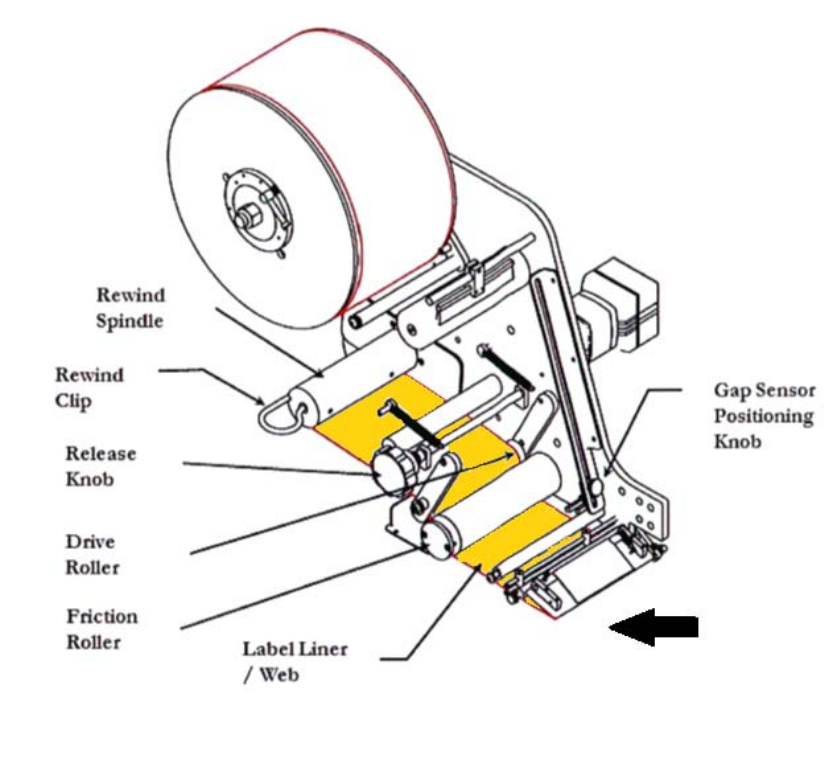


Labels wound inside

Step Two: Take the cleared strip of label web and thread it under the dancer bar, over the anti-static roller and brush assembly, through **the Gap Sensor**, under the idler roller and onto the peel edge under the spring plate tensioner finger as shown in the following illustration. *(Note the side plate has been removed for illustration.)*



Step Three: Take the Label Liner / Web back under the peel edge. Make sure that the liner threading path does not go over the Blow Tube when you take the label liner/ web back under the peel edge blade. Next release the knurled friction roller with the black knob. Thread the web over the drive roller and under the friction roller and attach it to the rewind spindle via the clip. *(Note: Side Frame Plate and cylinder are removed to show detail.)*



The labeler is now threaded and ready to be plugged in and turned on. You can use the **JOG** selection on the PanelView Touch Screen of the control box to advance one label onto the applicator. If the label comes out too far or not far enough, make a manual adjustment to the gap sensor position along the slotted bracket. This will be necessary to achieve the appropriate label position on the peel edge blade.

Theory of Operation

Apply Only Labeling

Straight Tamp (Touch and Go Linear Applicator) or Swing Arm Applicator.

The LX600 Apply Only Labeling system is configured in either a Straight Tamp (Linear Actuator) with a “Touch and Go” Sensor or with a Rotary Actuator that would provide for a “Swing Arm” type Label Application for various label application scenarios.

In Straight Tamp (Touch and Go Applications), the labeler operates when it gets a signal from the product sensor. The motor turns on and the label is presented out to the applicator pad and held in place by a vacuum pad that has been designed for the label size being applied to the box. While being dispensed out to the vacuum pad, a blow tube is turned on to blow a stream of air to orient the label out to the pad. The fiber optic Label Gap Sensor determines the end of the label and the PLC program turns off the blow tube and engages the vacuum solenoid and stops the motor from turning. At this point the Product Delay timer times out to the setting as entered by the operator. Once the Product Delay has time out, the PLC engages the Tamp Cylinder Apply Solenoid valve to extend and tamp the label on to the box. A sensor on the pad (Touch and Go Sensor) sees the target; it sends a signal back to the PLC to turn on the Cylinder Retract Solenoid valve to return the cylinder to the home position where a Reed Switch senses the home Position which signals the PLC that it can accept another label should the product detection photocell detect another box.

In the Swing Arm Applicator, a timer replaces the Reed switch and the home sensor provides that signal for proper sequencing as described above.

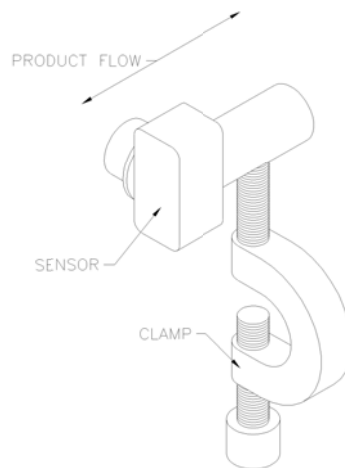
Product Sensing

Proximity Photo-eye

Sensor P/N: E7763-P1-LX

The labeler operates when it gets a signal from the product sensor telling it that the product is in place to receive the label. A standard photoelectric eye comes packaged with the machine and wired, via quick disconnect cable, to the control cabinet.

A standard Sensor Mounting Bracket (PN: **E2725-S1A**) allows the photo-eye to be mounted to a conveyor or guide rail with the addition of a Clamp Bracket (PN: **B25267-01A**). Note: The sensor must be placed so that the eye is no greater than 18 inches (300mm) away from the product. The Sensor Bracket can be used with or without the clamp bracket at time of installation. Select the position of the product sensor so that the product will pass in front of it when you want the label apply cycle to start. A potentiometer on the photo-eye allows for sensitivity adjustment. The Sensor Bracket with Clamp bracket can be purchased as an assembly on (PN: **.A7367-LX-01A**)



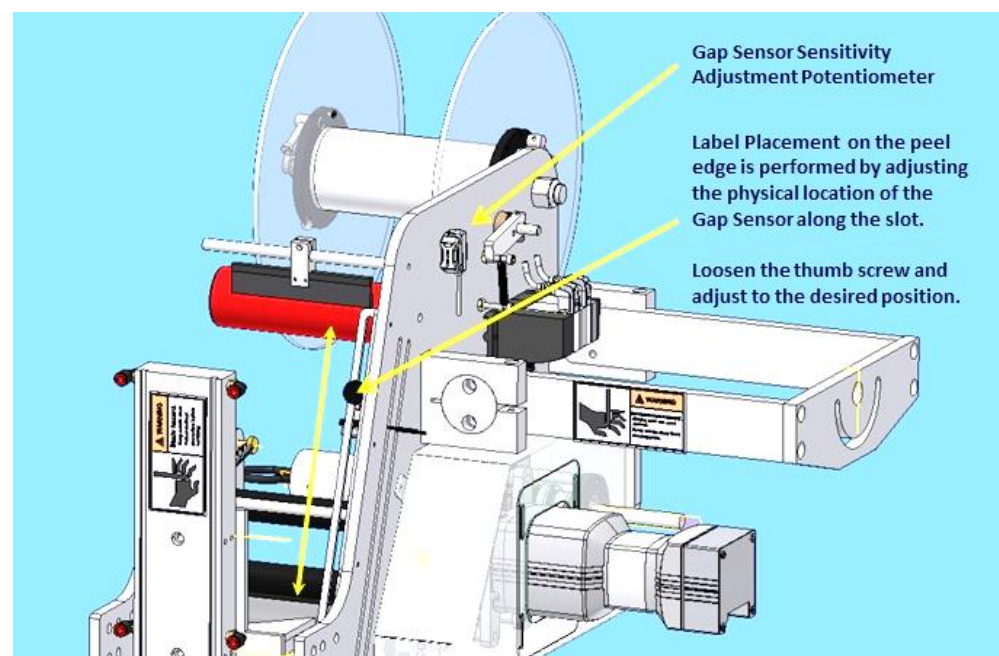
Applicators and Label placement to Peel Edge (Gap Sensor)

Gap Sensor

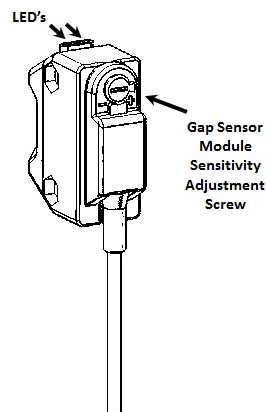
Gap Sensor Sensitivity

Note: The Gap Sensor Sensitivity and label position is preset at the factory. However if no labels are provided, a suitable labels is used for testing and run off. Label placement and gap sensor fine tuning may be required at installation and or label changes.

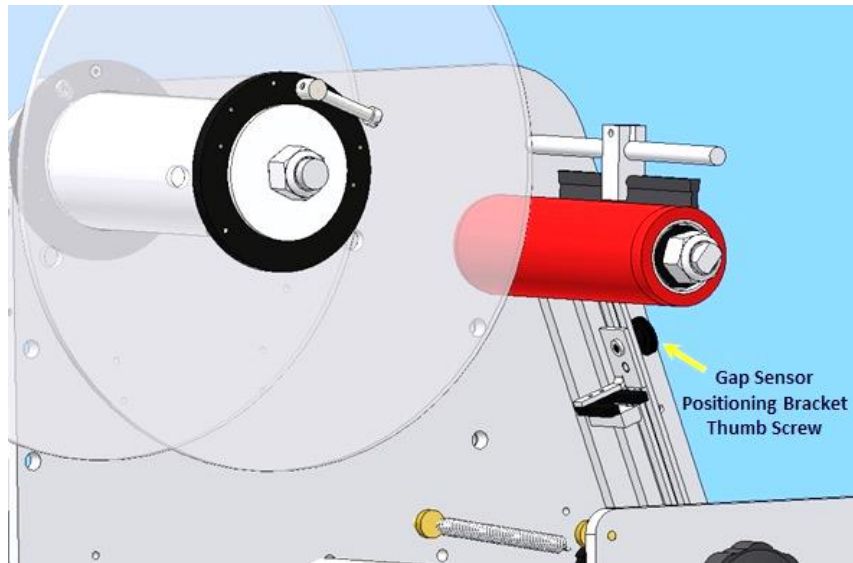
Sensor Operation: The fiber optic Gap Sensor emits light from the control module through fiber optic tubes to the gap sensor assembly. A transitions occurs between the amount of light that is received through the backing paper (liner) and then through the label on the liner. (Note: A red “SPOT Light” is emitted to show the sensor target location on the label.) LED indicators on the control module will illuminate when this is transition occurs.



Sensitivity is adjusted from the control module located on the back of the unit near the top of the frame. A potentiometer located on the control module adjusts the sensitivity gain. LED indicators on the control module will illuminate when this is transition occurs. Again: **The desired setting on the control module is two green LED lights on strobing / or steady (depending on the backing material and the amount of gain required to create the transition correctly) at the transition seeing the gap and reading light through the liner material, then transitioning to only one Green LED On seeing the label causing the label to stop dispensing.**

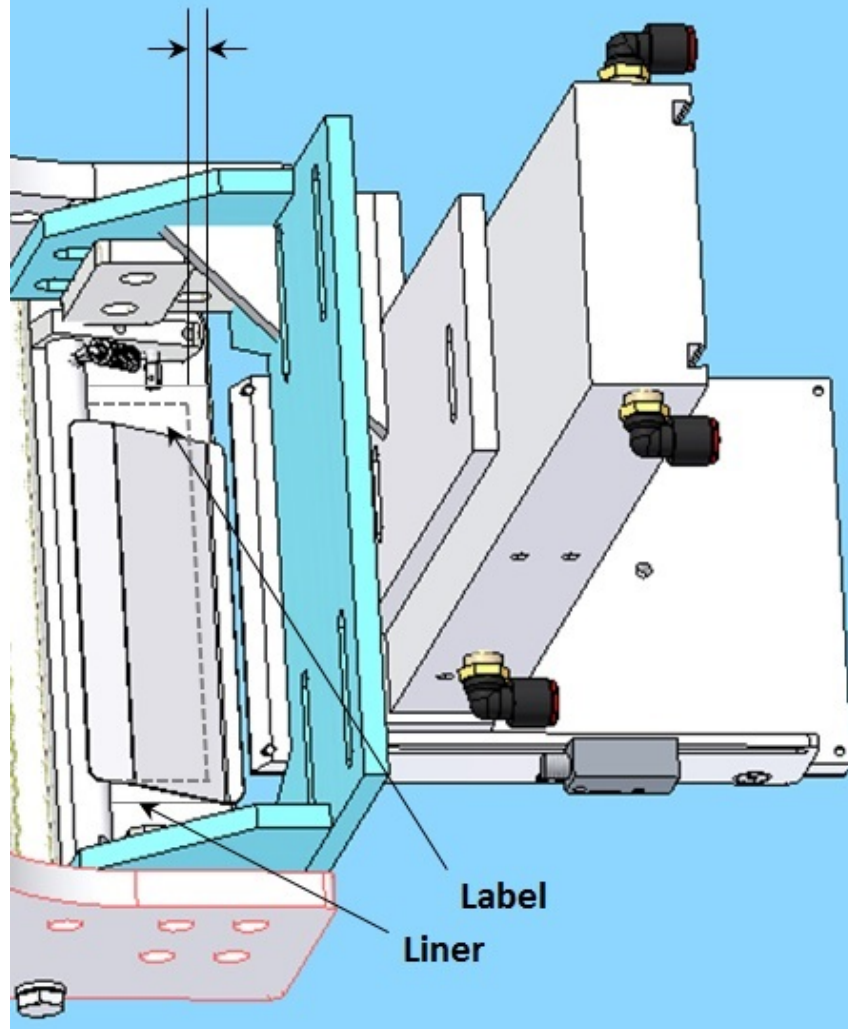


Adjusting the Label Position on the Peel Edge The label is positioned by physically moving the Gap Sensor along the slot on the frame. Loosen the thumb screw and move the sensor along the slot until the leading edge of the label is presented to the edge of the peel edge.



A desired position for the leading edge of the label should be approximately $1/8^{\text{th}}$ to $1/16^{\text{th}}$ inch from the edge of the peed edge. Note: For longer labels, let the trailing edge of the label touch the liner once it is dispensed to the pad. This will assist with label alignment to the pad.

Position leading edge of the Label to about $1/8^{\text{th}}$ to $1/16^{\text{th}}$ inch from the edge of the peel blade



Standard Stroke Tamp

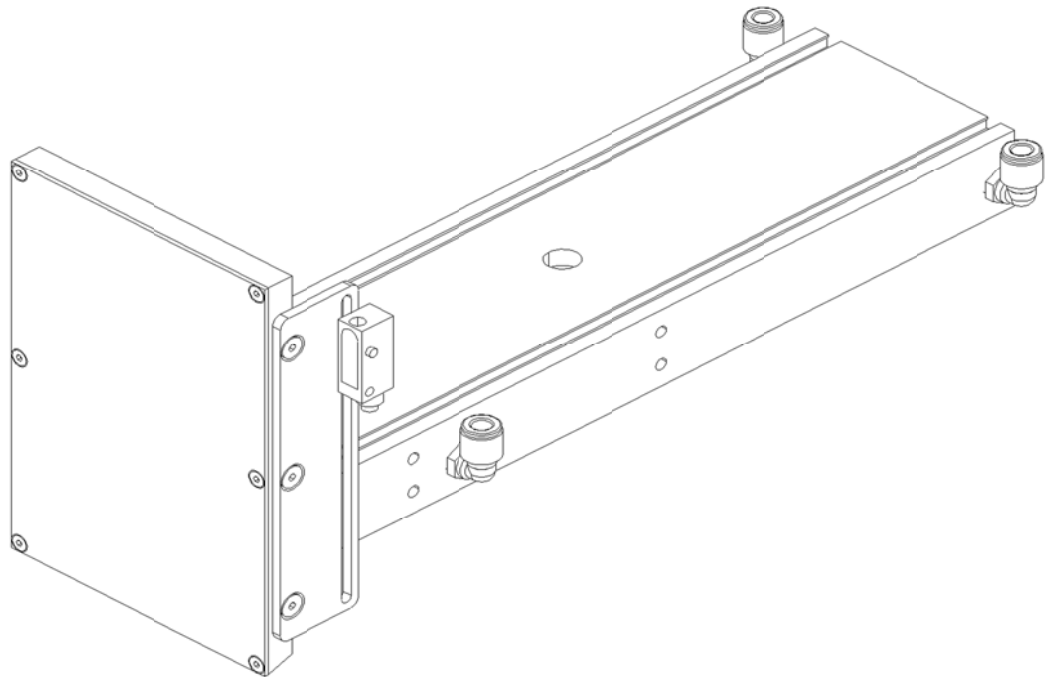
(200mm / 8")

Assembly P/N: .914-LX-ST

For further details on assembly components, see Chapter 12.

Adjusting the Applicator (Standard Stroke)

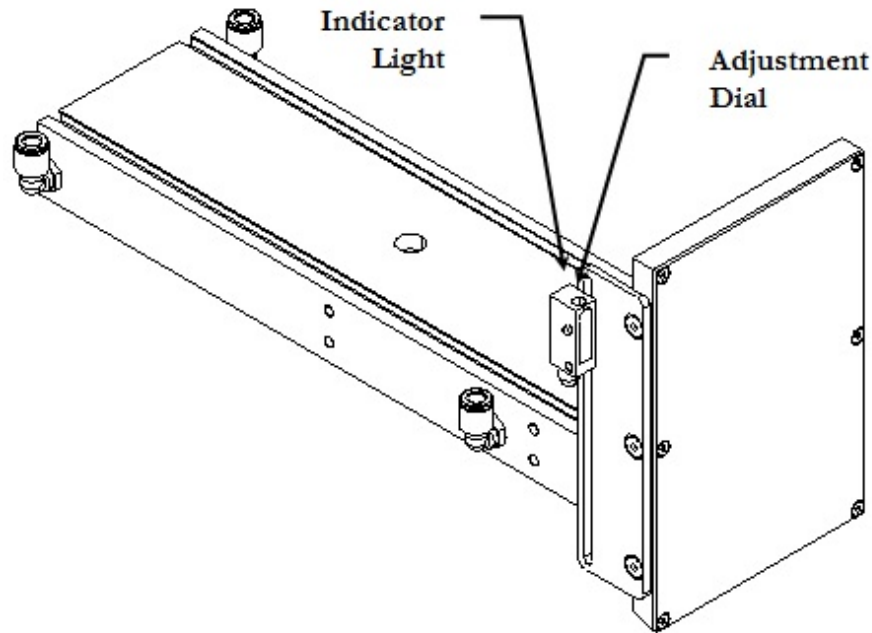
The applicator has only three adjustments; stroke length (or distance to product), pitch, and offset. All other timing is done through sensors.



Background Suppressed Sensor P/N: E7367-BS2

Adjusting the Applicator Stroke Length

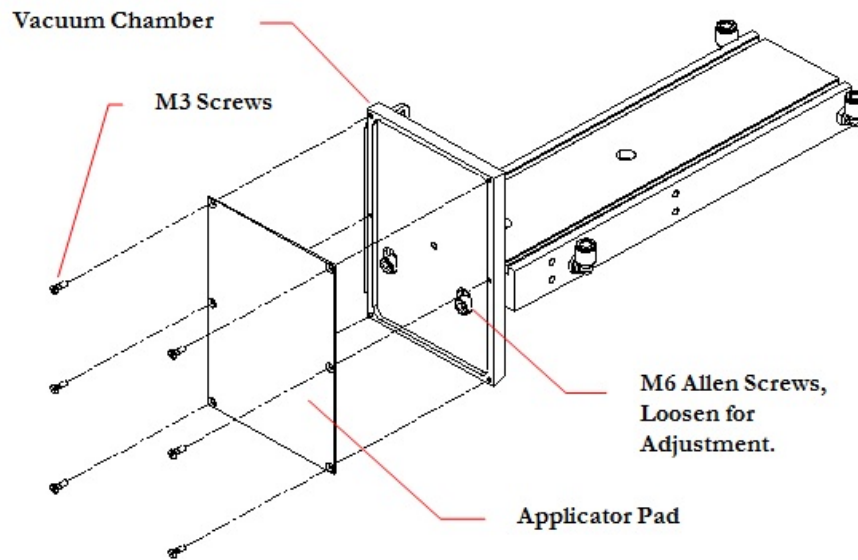
The tamp applicator uses a sensor to detect when the applicator has made contact with your product. It may be necessary to adjust the sensitivity or range of this sensor to apply the label to your desired specifications.



With the air off and the power on, extend the cylinder until the applicator pad touches the surface to be labeled and then turn the dial until the yellow indicator light has just turned on. When the light is illuminated, the sensor has detected the labeled surface and will begin to blow the label down and retract the cylinder. It is important that the sensor does not detect too early as the cylinder will retract before applying the label and if it detect too late, it may stall or damage your product or cylinder.

Adjusting the Applicator Pad Pitch

Depending on your label size, you may need to move the pad closer (short labels) or further (long labels) from the peel edge of the labeler. The applicator pad has a pitch adjustment inside the vacuum chamber, under the pad.



Optional Extended Stroke Tamp

(350mm / 14", 400mm / 16", 500mm / 20",
600mm / 24")

Assembly P/N's: .914 - LX - 350 .914 - LX - 400
.914 - LX - 500 .914 - LX - 600

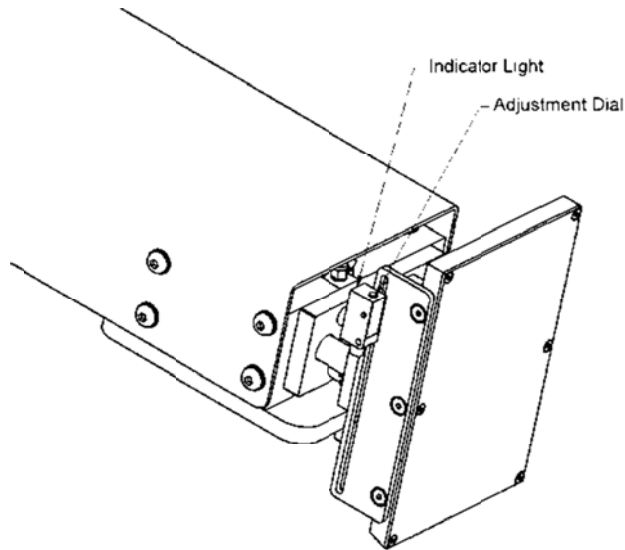
For further details on assembly components, see Chapter 12.

Adjusting the Applicator

The applicator has four adjustments; stroke length (or distance to product), pitch, and offset. All other timing is done through sensors.

Background Suppressed Sensor P/N: E7367-BS2

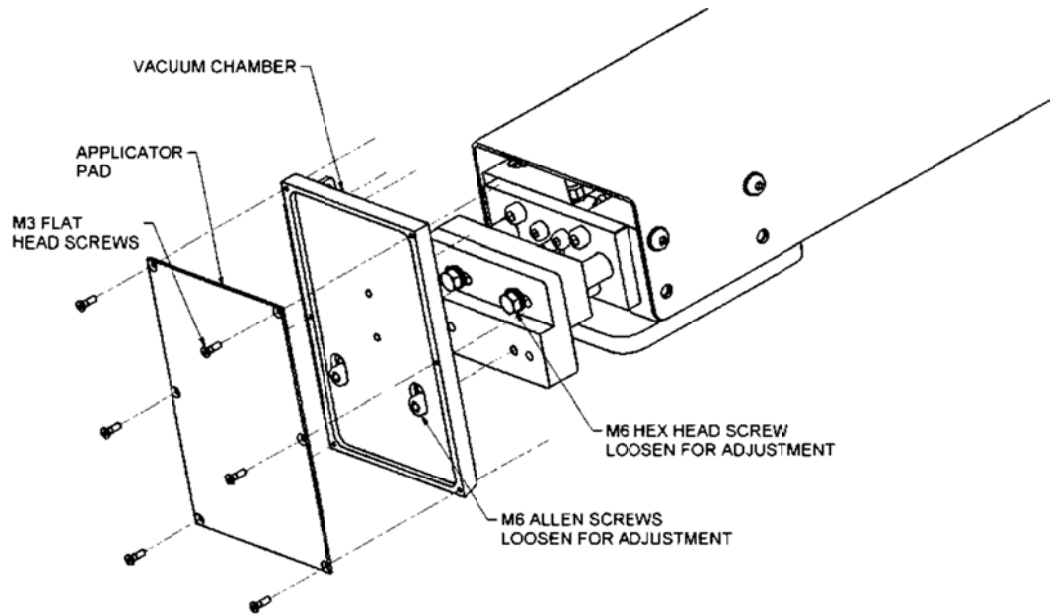
Adjusting the Applicator Stroke Length The tamp applicator uses a sensor to detect when the applicator has made contact with your product. It may be necessary to adjust the sensitivity or range of this sensor to apply the label to your desired specifications.



With the air off and the power on, extend the cylinder until the applicator pad touches the surface to be labeled and then turn the dial until the yellow indicator light has just turned on. When the light is illuminated, the sensor has detected the labeled surface and will begin to retract the cylinder. It is important that the sensor does not detect too early as the cylinder will retract before applying the label and if it detect too late, it may stall or damage your product or cylinder.

Adjusting the Applicator Pad Pitch

Depending on your label size, you may need to move the pad closer (short labels) or further (long labels) from the dispensing edge of the printer. The applicator pad has a pitch adjustment inside the vacuum chamber, under the pad. There is also a side to side adjustment; loosen the M6 hex head screws and adjust accordingly.



Dual Tamp (Swing Arm) Applicator

Assembly P/N: .914 - LX - DT/RH or LH

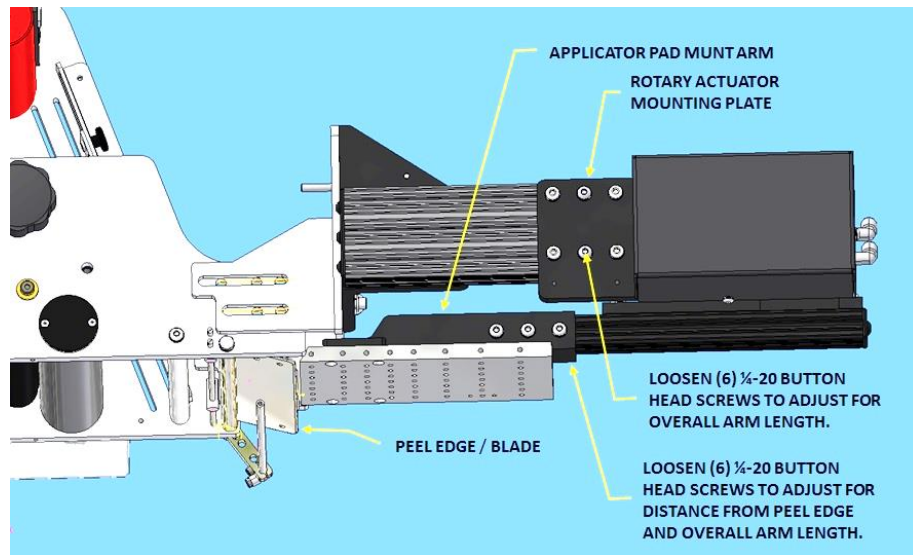
For further details on assembly components, see Chapter 12.

Adjusting the Applicator

The DT (Swing Arm) applicator has several adjustments; pitch, offset, swing arm length and maximum swing angle. All other timing is done through sensors.

Adjusting the
Applicator Pad
Pitch and
Overall Arm
Length

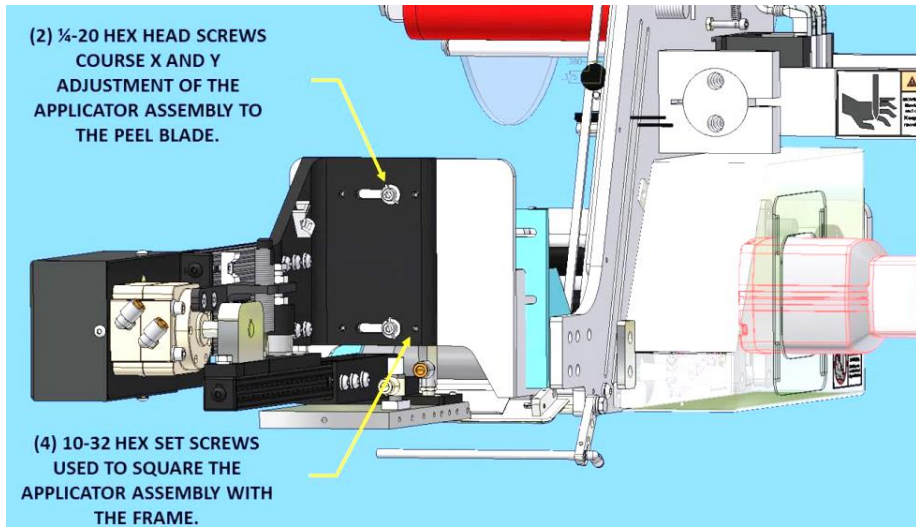
The overall arm length is usually manufactured to your specific application, although there is at least 2.00" of adjustment in the arm if it becomes necessary to change the length. To change the length, loosen the (6) 1/4-20 button head screws on the rotary actuator mounting plate and the (6) screws (3 each side) on the applicator pad mount arm and position the arm as needed, then re-tighten the screws.



To make small pitch adjustments between the peel blade and the applicator pad edge, loosen the (6) screws (3 each side) on the applicator pad mount arm and adjust accordingly. Re-tighten screws. Typically, a 1/8" gap is a good starting point.

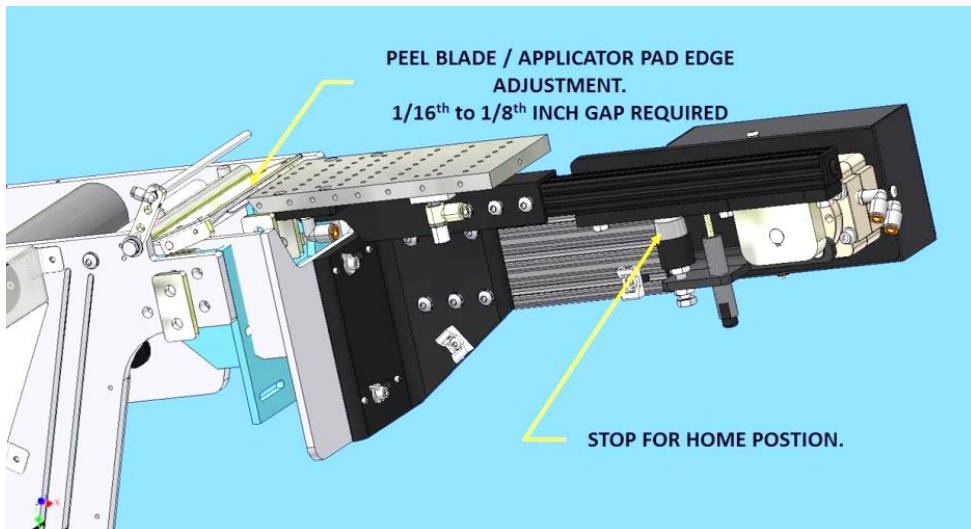
Adjusting the Applicator Pad in Relation to the Peel Blade

Depending on your label size, you may need to move the pad closer (short labels) or further (long labels) from the dispensing edge of the printer. The applicator pad has a pitch adjustment inside the vacuum chamber, under the pad. There is also a side to side adjustment; loosen the M6 hex head screws and adjust accordingly.



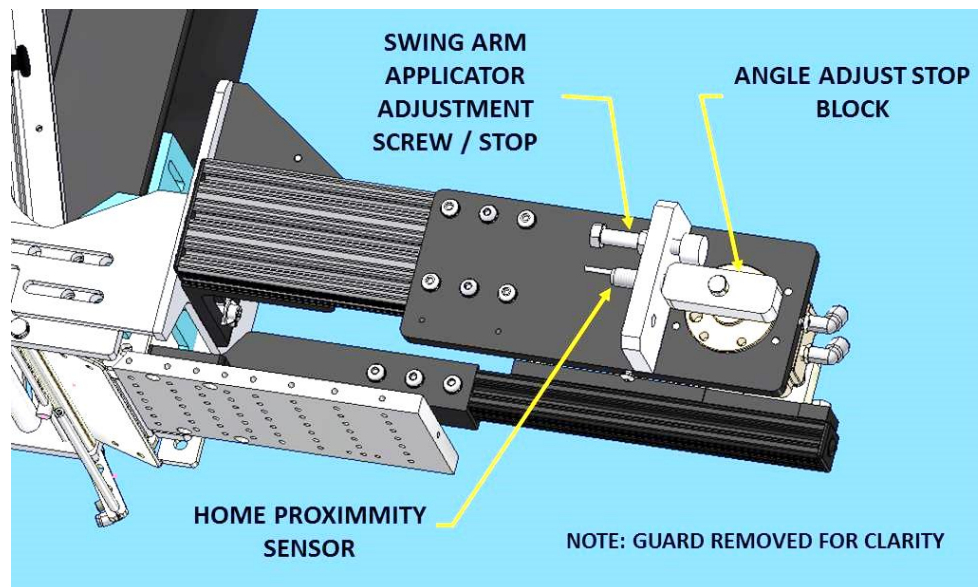
Adjusting the Applicator Pad Home Position

To fine tune the applicator pad home position, loosen the jam nut on the stop adjusting bolt and adjust the home stop as needed to allow proper label feed onto the applicator pad. Typically, the applicator pad is adjusted in the same plane and slightly behind the peel edge.



Adjusting the Swing Arm Maximum Application Angle

After locating the labeler in the application area and locking down the casters, manually swing the application arm out to insure it can apply the label squarely to the box or product. If the applicator pad doesn't place the label squarely on the product (arm stops short of being parallel with application area), you may need to adjust the arms application angle. First, with air removed and locked out, remove the guard covering the shaft of the rotary actuator, then loosen the jam nut on the angle adjust screw. Rotate the screw so the application arm will actually swing 5 degrees past the required application point, then re-tighten the jam nut and re-install the guard. Note: do not adjust the overall angle more than 135 degrees in relation to the applicator arms home position.



There is a small steel tube below the dispensing edge of the printer. During the dispensing cycle air will flow through the tube to assist guide the label away from the backing and towards the

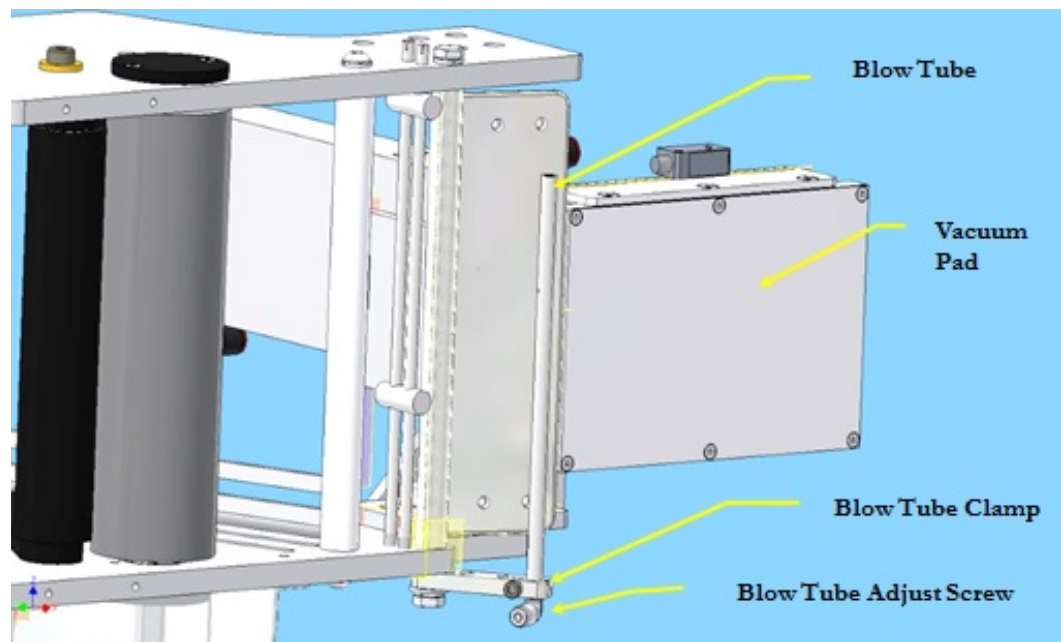
vacuum pad. Adjusting the position is covered here while adjusting the air pressure is covered in Chapter 11 *Maintenance* as it requires removal of the rear cover.

Blow Tube Assembly P/N: .14018-LT

Adjusting the Blow Tube Position

The air tube is just to function as an assist. The label will want to curl away from the vacuum pad for various reasons and the blow tube is to ensure that it lays back and flat against the pad for the vacuum to hold it until application.

As a starting position, center the air stream on the width of the label and within the first 1/4 of the length of the label. Fine tune angle as required. Tighten clamp on blow tube after adjustment.

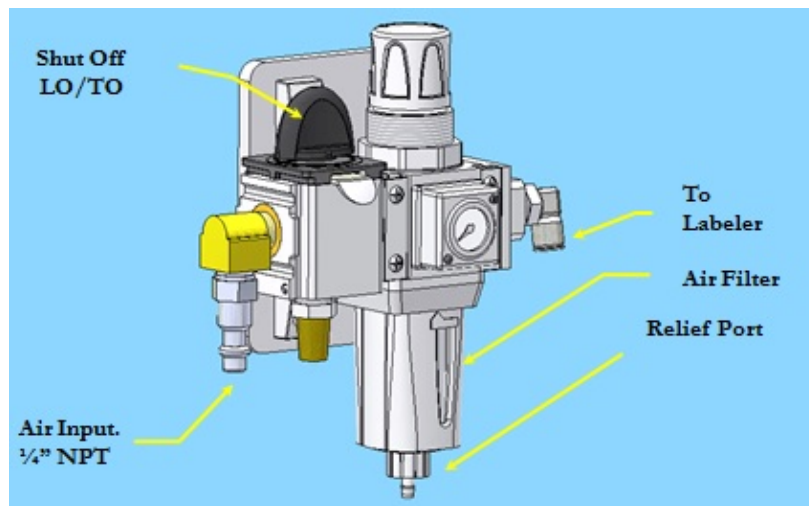


Pneumatic System

Air Filter and Shut-Off

See Chapter 12 for Detailed for Pneumatic Drawings and individual part numbers

The air filter and shut off valve is located at the back of the stand and is positioned so that you can bleed your air lines before introducing air into the labeling system. Loveshaw has placed a Lock Out / Tag Out style shut off on the system for your safety.



You will need to provide the appropriate fitting for your air connections to the unit. The connection port is 1/4" NPT.



You must disconnect air before draining any collected water.

The air pressure is controlled by a regulator which is located behind the safety cover. A minimum operating pressure of 45 psi is required to properly operate the air piloted valves. A specific factory setting will be determined based on the type of unit ordered and may vary from 50-55 + psi depending on the size of

the Cylinder Size and Pad configuration. In the event that the regulator is not at this value; consult Chapter 11, *Maintenance*.

In-Line Air Filters – P/N: 14199

For tamp applicators, there are two vacuum line filters on the exterior of the machine. They will keep most debris from entering the vacuum system and clogging the lines. The regularity that these filters need to be replaced will depend on the amount of dust and dirt in the air around the machine throughout its life.

The air filters also serve as in-line check valves for the vacuum and air assist. The air filters are one directional and it is important to install them in the proper direction relative to the air flow of the lines.

The blue lines are used for the vacuum and the air flows towards the vacuum generator assembly (**P/N: .14210-S**) while the black hose is the pressure line to the pad for its air assist.

NOTE: For a Dual Tamp (Swing Arm) applicator, one or two vacuum filters are utilized for vacuum (blue airline).

Further details on the pneumatics can be found in Chapter 11, *Maintenance*.

Features and Options

Feature: Scrolling Message Status Screen: On the PanelView HIM Main Screen, a scrolling Machine Status screen is provided to alert the operator of various operational conditions of the Machine Status and other Diagnostic Notifications. Some of these conditions are: Machine Ready, No Faults, No Labels or Web Break and Low Labels if the Optional Low Label Sensor is ordered with the system.

Optional: Low Label Sensing.

PN: A219-PF-7 (Included with Optional Light Tower)

When ordered, attached to the back of the labeler behind the let off disk is an optional sensor that detects when the label stock is getting low on the core. The sensor will provide the Low Label Sensing on all LX600 Apply Only Labelers. When the labels run low, the Main Screen will display the Low Label Condition.

Optional: Light Tower; 3 Color.

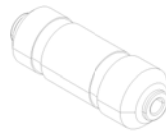
P/N: .LWA-LX6-3C

The light tower is an optional accessory that compliments the optional Low Labels Sensor. The light tower is designed to be mounted to the top of the labeler stand for highest visibility. The light tower will indicate **GREEN** when no errors are present, **YELLOW** when the labels are in low supply or **RED** when there is a total system fault or in the STOP mode.

Optional: Cleanable Vacuum Filter

P/N: P3587-C1

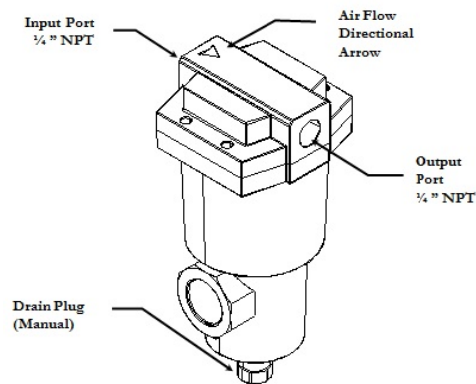
Loveshaw offers a in-line cleanable vacuum air filter that can be opened and cleaned of dirt and debris.



Optional: Air Dryer

P/N: P3587-D1

Preceding your main-line air filter, you may find an air dryer. The air dryer is designed to contain and trap 99.9% of any incoming moisture and keep your system free of fluid contaminants.



Incoming air pressure should be disconnected before draining any fluid from the dryer. Follow Proper Lock out /Tag out Procedures.

Optional: Spare Parts Kit (Standard Stroke Straight Tamp) - 120/1/60

P/N: .SPK-LX6-T

Spare Parts Kits contain common wear parts conveniently in one kit. The list of components is as follows:

- N698-FR (Filter / Regulator Gauge Qty-1)
 - E7367-BS2 (Background Suppressed Sensor Qty-1)
 - A125SB-10-326 (Fuse, 10A, 250V, Time Delay, Qty-5)
 - A125SB-5-326 (Fuse, 5A, 250V, Time Delay, Qty-5)
 - N402-163 (Valve Solenoid Coil Qty-1)
 - LABN-0162-4 (Tape Release Pin Qty-1)
 - .01956 (Let-Off Clamp Qty-1)
 - B258824-02A (Rewind Clutch Qty-1)
 - .14018-LT (Blow Tube Qty-1)
 - B0190-019 (Dancer Bar Spring Qty-1)
 - 14199 (Vacuum Line Filter Qty-1, 4 Pack)
 - .14210-S (Vacuum Generator Qty-1)
 - P4010-027 (Fitting, Straight, ¼" Push Lock Qty-1)
 - P4010-U14 (Fitting, Universal Y-Double Stack, ¼" Push Lock Qty-1)
-

Optional: Spare Parts Kit (Straight Tamp) - 230/1/50-60

P/N: .SPK-LX6-T-230

Spare Parts Kits contain common wear parts conveniently in one kit. The list of components is as follows:

- N698-FR (Filter / Regulator Gauge Qty-1)
 - E7367-BS2 (Background Suppressed Sensor Qty-1)
 - A125SB-10-326 (Fuse, 10A, 250V, Time Delay, Qty-5)
 - A125SB-5-326 (Fuse, 5A, 250V, Time Delay, Qty-5)
 - N402-163 (Valve Solenoid Coil Qty-1)
 - LABN-0162-4 (Tape Release Pin Qty-1)
 - .01956 (Let-Off Clamp Qty-1)
 - B258824-02A (Rewind Clutch Qty-1)
 - .14018-LT (Blow Tube Qty-1)
 - B0190-019 (Dancer Bar Spring Qty-1)
 - 14199 (Vacuum Line Filter Qty-1, 4 Pack)
 - .14210-S (Vacuum Generator Qty-1)
 - P4010-027 (Fitting, Straight, 1/4" Push Lock Qty-1)
 - P4010-U14 (Fitting, Universal Y-Double Stack, 1/4" Push Lock Qty-1)
-

Optional: Spare Parts Kit (Dual Tamp – Swing Arm) - 120/1/60

P/N: .SPK-LX6-DT

Spare Parts Kits contain common wear parts conveniently in one kit. The list of components is as follows:

- N698-FR (Filter / Regulator Gauge Qty-1)
 - A125SB-10-326 (Fuse, 10A, 250V, Time Delay, Qty-5)
 - A125SB-5-326 (Fuse, 5A, 250V, Time Delay, Qty-5)
 - N402-163 (Valve Solenoid Coil Qty-1)
 - LABN-0162-4 (Tape Release Pin Qty-1)
 - .01956 (Let-Off Clamp Qty-1)
 - B258824-02A (Rewind Clutch Qty-1)
 - .14018-LT (Blow Tube Qty-1)
 - B0190-019 (Dancer Bar Spring Qty-1)
 - 14199 (Vacuum Line Filter Qty-1, 4 Pack)
 - .14210-S (Vacuum Generator Qty-1)
 - B0140-018 (Shock Absorber Qty-1)
 - F3MB (Bumper – Rubber Qty-1)
 - P4010-027 (Fitting, Straight, ¼” Push Lock Qty-1)
 - P4010-U14 (Fitting, Universal Y-Double Stack, ¼” Push Lock Qty-1)
-

Controller Operation

Overview

This section will cover the controller aspects of the machine and how to change the cycle functions of the labeler. From here you will learn how to:

- Typical Views of Panel View Screen Boot Sequence
- Operation of the Panel View Touch Screen
- Change the cycle operation from “Straight Tamp” that has a single Linear Cylinder Applicator with touch and go sensor to “Dual Tamp or also known as “Swing Arm” mode that has a dual function of the rotary actuator.



Touch Screen (Note: Now Updated to a Larger Color Screen not Shown.)

The LX600 Straight Tamp and Dual Tamp Labeler utilizes a HMI Interface touch screen to engage (START) the unit for label application, select the various modes (Dual Tamp or Single Tamp), Jog (Feed) a label out on the applicator pad, show machine status and change product / applicator delays or to provide a bypass condition such as the STOP mode.

The unit has five save areas for each mode when selected. These areas are handy when you are running different boxes/products that require different product delays (label placement) or application delays (the time the applicator arm needs to be engaged on the product).

Upon energizing the labeler, the touch screen can take up to 60 – 70 seconds to load information from the PLC before it can be utilized. The following screens will be displayed on power up.



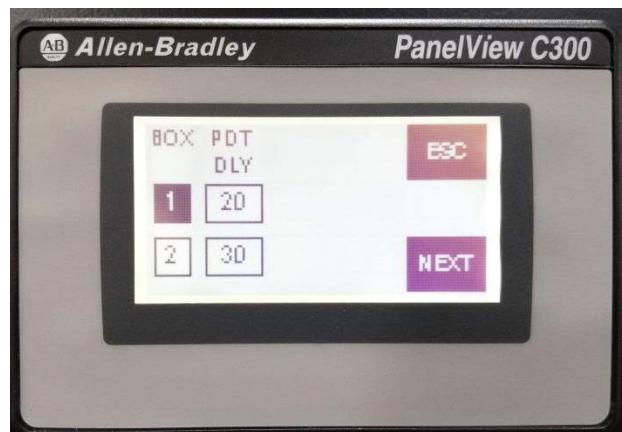
After the touch screen initializes, the main application screen will appear. This screen will allow stopping and starting of the labeler as well as jogging a label out on the applicator pad. The mode button will allow you to access the modes, save areas and timers

and the display will give various machine status (i.e. **MACHINE READY, NO FAULTS**, etc.)



The main screen will boot up in the Stop condition. The general operator screen navigations will be from this main screen once the system is set up. If you want to **JOG** a label out to the applicator pad, depress the **JOG** button which will momentarily turn black, then return to the **STOP**. To run the labeler, depress the **START** button (**START** button will toggle to black and the **STOP** button will turn white).

Always go to the **STOP** button first prior to going to another function. Once back to the main screen, depress the **SET UP** button to enter other functions. The next screen will appear. In this instance the Straight Tamp Program is shown for illustration.



Note: The desired Preset area must be selected. The screen shot at the left shows that Preset 1 is selected.

The following pages will show how to make timer changes. **The process is similar for either a Straight Tamp or Dual Tamp Applicator PLC program.**

Note: a Dual Tamp HMI Screen will have similar screen layouts however it will display more timers to adjust depending on the particular application. Regardless of the type applicator, the process is very similar. Since this is a Straight Tamp Version, only a Product Delay setting needs to be changed as the return of the cylinder is controlled by a Touch and Go sensor on the Pad.

With a Dual Tamp Applicator, in the SET UP mode, the operator must determine the mode of operation of the Swing Arm first (Single Tamp or Dual Tamp) before changing any of the individual timers. The following screens are used to configure between a **Single Tamp** mode (i.e. Corner Wrap, Side Apply or Front Apply only applications) or, **Dual Tamp** mode (Front and Side Apply) and then the follow-on Save Areas and Timers setup menus. Press the desired mode and then the **TIMING SET UP** Screen will display:



If the **DUAL TAMP SETUP** was selected the following screen will be displayed to select the desired Save Area / Preset Timers and adjust the Product Delay(s) and Applicator Delay(s):

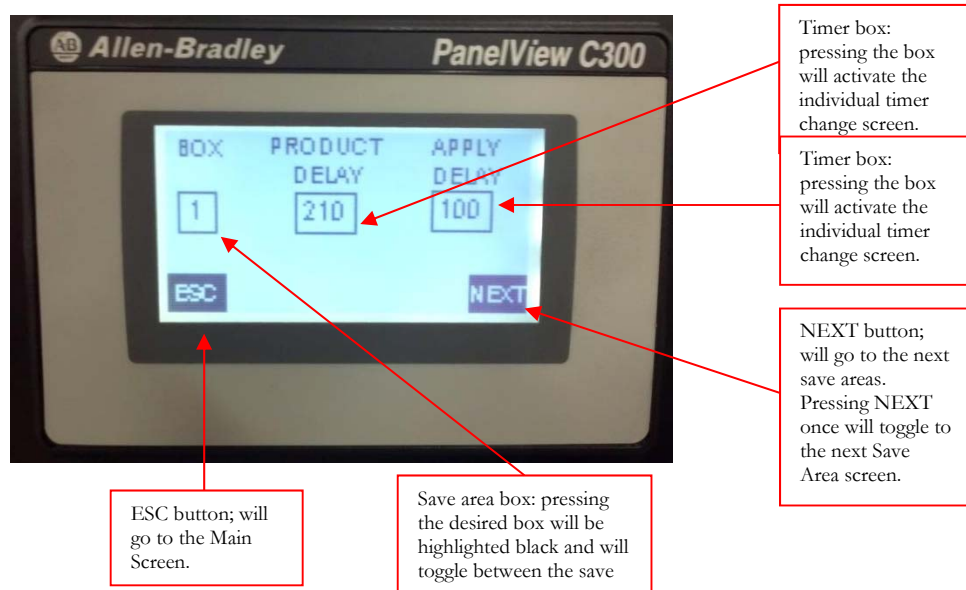


Note: Save Areas and Product Delay timers are now displayed. In this screen shot example, the operator has

made timer changes and has selected and pressed the 1 in the box. When selected the state of the selected preset changes to a black background indicated that this preset timer (SAVE AREA) was selected. This timer change sequence is also similar for the Swing Arm applicator and Straight Tamp mode settings.

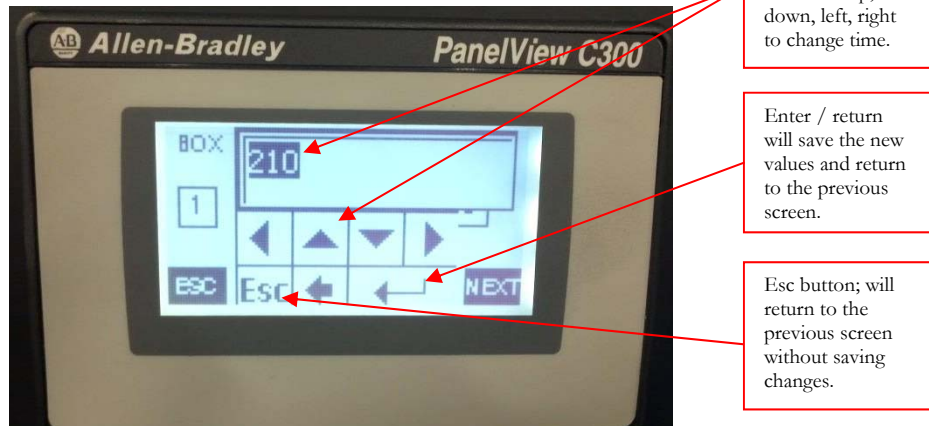
Additional note on Save Area information: When toggling between the Tamp modes, the PLC will use the last Saved Areas picked under each mode. For example, if save area 1 has been previously selected for Single Tamp mode and Save Area 3 was previously selected for Dual Tamp mode, these would be the areas for timing that the labeler would be performing.

Press the desired mode to make setup changes. To change save areas or time delays in the SINGLE TAMP mode, press the **SINGLE TAMP SETUP**, the next screen will appear:



The **PRODUCT DELAY** is the time from which the product sensor senses the leading edge of the product to when it tells the labeler to apply the label. The **APPLY DELAY** (Applicator Delay) is the time the applicator arm is extended and engaging the product.

To change a time value, press the appropriate timer box to be changed and the next screen will appear:



Once the Enter/Return button is pressed, the changes will be saved and the previous screen will displayed.

Note: If the **DUAL TAMP SETUP** is selected instead of the SINGEL TAMP SETUP (in the **SETUP** screen), the save areas are very similar and the timer change screens are identical as the Single Tamp screens. See below:



There are five screens each having a separate save areas. Pressing **ESC** will access the Main Screen; pressing **NEXT** will scroll through the save areas. To change a timer value, follow the same procedures previously outlined.

Notice there are four timers required for the Dual Tamp mode. **PROD DLY1** (Product Delay 1) is the time delay between the product sensor sensing the leading edge of the product to when the applicator applies the first label; **APPL DLY1** (Applicator Delay 1) is how long the applicator engages the product for the first label prior to returning home. **PROD DLY2** (Product Delay 2) is the time delay after the applicator returns home until the next label is applied and **APPL DLY2** (Applicator Delay 2) is how long the applicator engages the product (second label) prior to returning home. Press **ESC** (Escape) will exit this mode.



If required, a **Config** Button is provided in the Dual Tamp Settings of a LX600DT or displayed along with the 5th Save Area in a LX600T. The **Config** button is used to perform firmware upgrades to the PanelView Screen only as they become available and to configure the screen for another application as required by the factory or a trained distributor technician.

Note: This button is not a required operator accessed button for labeler functional changes. All necessary labeler timer changes are found in the Setup Modes. Disregard this button and press the **ESC** button to return to the main screen.

Note: If Config button was pressed and it was not intend to enter this screen, simply cycle power to the unit which will reboot the PanelView screen to normal screen function.

Should a Config screen require access, contact the factory for further instructions.

Maintenance

In normal operation, the labeler is simply turned-on and products are moved past its sensor equipment and the labeler responds by feeding a label to the applicator pad then applying the label to the box or substrate. There may be times when a part of the machine wears down and part of the machine's operation fails. This section will guide you through servicing and maintaining your labeler. Some of these operations will require access to components behind the protective cover and should be done by a technician with access to tools.

Pneumatic System

Do NOT Use Lubricated Air! The label machine is designed to run on clean dry air. The components used are not specified for use with oils of any kind.

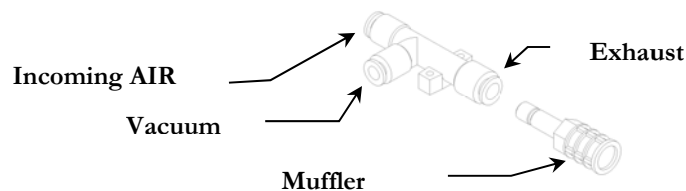


Do NOT Try to service the machine with the air engaged.

Your labeling system was factory installed with a lock-out ready disconnect valve. Air should be deactivated from the system prior to servicing the lines or components and even if lock-out procedures are not used in your plant, it is recommended that the valve be at least tagged to prevent anyone from energizing the system while work is performed on it.

Loss or Decline of Vacuum

The most likely cause of poor vacuum performance may be due to blocked filters. In the event that the vacuum filters are clean, check the exhaust mufflers of the venturi vacuum generators (**P/N: .14210-S**). The exhaust mufflers may have collected some particulate that the filter missed. Simply removing it and making sure that it is clear will improve performance.



Blow Tube Pressure

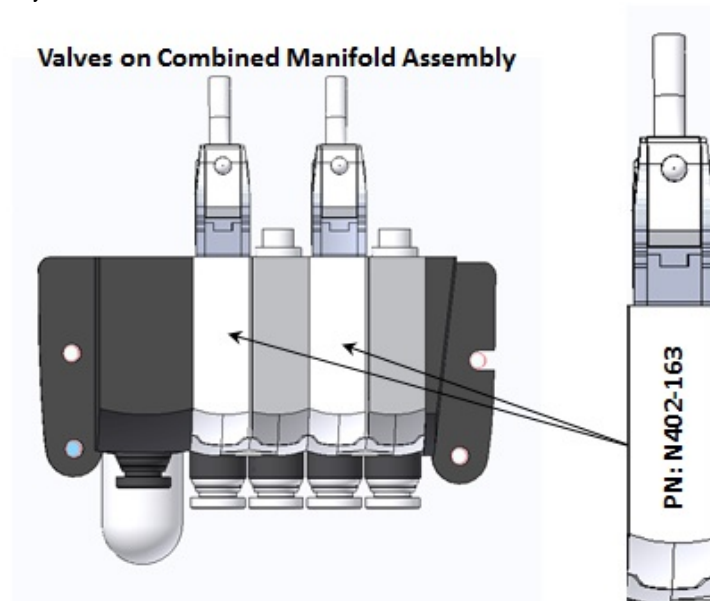
The Blow Tube (P/N: .14018-LT) that guides the label onto the pad from the dispensing edge of the printer is regulated by a flow control. **DO NOT increase air pressure to the system.** Adjust the blow tube flow control.

Air Pressure and Regulation

The incoming air pressure of the machine should not exceed 100psi. You may damage the pneumatic components if the pressure exceeds this value. **Note: A minimum air pressure of 43 psi is required by the valve manufacturer to properly operate the air piloted stacking style solenoid valves below.** Your labeler was optimized for performance at the factory using between 45 and 50 + pounds of incoming air pressure depending on the application setup.

Solenoids

The **LX600** labeler uses two “air piloted stacking style” solenoid valves **PN: (N402-163)** as part of a combined manifold assembly (with individual cable per solenoid) to perform its operations. **Each valve has a manual activation button to manually override and actuate the valve for testing. (Locate the small Yellow button near the bottom of the valve. Use a small flat blade screw driver tip to engage this button.)** The pneumatic diagram in the next chapter is used for to determine functionality, diagnosis, and piping in conjunction with the LX600 system.



Motor and Chain Maintenance

Your label machine utilizes a Servo motor and chain along with a slip clutch to rewind the waste paper from your label roll.



DO NOT Work on any porting of the motor or chain maintenance / tensioning while Chain Guard is removed and unit is plugged in.

Follow proper Lock out / Tag out Procedures and make sure that power is off to the entire system and that the unit is unplugged before working on the motor or chain drive. The Chain Guard must be in place during operation.

Lubrication

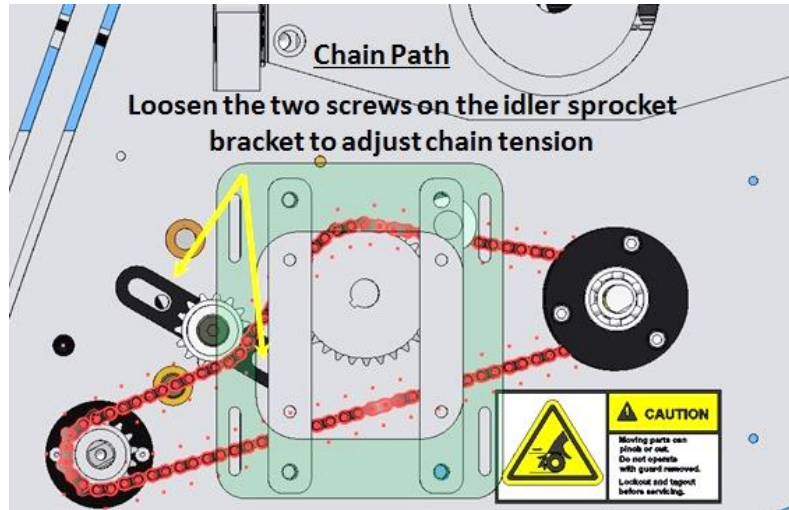
The motor with built-in controller (**P/N: 50100-069**) requires no lubrication and the chain will need very little lubricant over its lifetime. Over lubricating the chain may have adverse effects on the rewind clutch (see below). To lubricate the chain simply supply a few drops of machine or motor oil to the chain. The continuous run of the motor during normal operation will work the lubricant into the chain.

Slip Clutch

The slip clutch (**P/N: B258824-02A**) on the rewind spindle is a fixed spring tension. Make sure to keep the clutch dry and free of corrosives and oils. Over time the components of the clutch will wear and when the tension (8oz-in torque) prevents the rewind from turning underweight, it should be replaced.

Chain Tension

The use of a slip clutch means that very little tension is desired on the system. The chain should have a little sag when properly installed.



Chain Path and Tension Adjustment (Note: Transparent view to observe chain path shown above.)

Electrical Control Box

Your system uses an Allen-Bradley Micro830™ PLC to control its function along with a series of terminal blocks and relays. A copy of the PLC program is available upon request for your reference. It is not advised that you alter this program unless you have the appropriate Rockwell Software on your computer and are experienced with PLC programming.



DO NOT Work on the Electrical Control Box while Unit is Plugged In.

Follow proper Lock out / Tag out Procedures and make sure that power is off to the entire system and that the unit is unplugged before working on the electrical system / control panel of the unit. Ensure all guards are in place during operation.

The control box is supplied power directly by plugging it into a power receptacle. **Note: There is no On/Off Switch on this unit.**

Note: It is best practice is to provide a dedicated electrical circuit to the Labeler system for trouble free operation. Any unexpected surge or voltage spike to the electrical line may cause damage to the electrical panel circuitry, PLC and associated PLC components.

All related parts and service documentation is located in Section 12: Assemblies and Schematics.

Warranty
For: LABELING SYSTEMS

1 YEAR WARRANTY

(EXCEPT FOR MOVING PARTS WHICH ARE SUBJECT TO NORMAL WEAR, TEAR AND REPLACEMENT WHICH ARE WARRANTED ONLY TO BE FREE FROM DEFECTS IN MATERIAL AND WORKMANSHIP).

ABOVE WARRANTY EXCLUDES CUSTOMERS SELECTED OEM THERMAL TRANSFER PRINTER OR MATERIAL HANDLING SYSTEM. PRINTER AND/OR CONVEYOR WARRANTY AVAILABLE UNDER SEPARATE COVER.

*LIMITED WARRANTY – **LOVESHAW** COMPANY (HEREIN AFTER "**LOVESHAW**") WARRANTS ONLY THAT THE GOODS SOLD BY IT SHALL BE FREE FROM DEFECTS IN MATERIAL AND WORKMANSHIP, UNDER PROPER AND NORMAL USE AND MAINTENANCE,

AS FOLLOWS:

THE WARRANTY PERIOD SHALL COMMENCE AS OF THE DATE OF DELIVERY TO THE PURCHASER. THE OBLIGATION OF LOVESHAW UNDER THIS WARRANTY IS STRICTLY LIMITED TO THE COST OF REPAIRING OR REPLACING, AS LOVESHAW MAY ELECT, ANY PART OR PARTS THAT PROVE IN LOVESHAW'S JUDGEMENT TO HAVE BEEN DEFECTIVE IN MATERIAL OR WORKMANSHIP AT THE TIME THE GOODS WERE SHIPPED FROM LOVESHAW'S PLANT. ANY WARRANTY CLAIM NOT MADE IN WRITING TO LOVESHAW AT ITS HOME OFFICE WITHIN THE APPLICABLE WARRANTY PERIOD AND WITHIN 10 DAYS OF FAILURE WILL NOT BE VALID. THIS IS THE SOLE AND EXCLUSIVE REMEDY AVAILABLE UNDER THIS WARRANTY. UNDER NO CIRCUMSTANCES WILL LOVESHAW BE LIABLE FOR INCIDENTAL, SPECIAL OR CONSEQUENTIAL DAMAGES. IF REQUESTED BY LOVESHAW, PURCHASER SHALL RETURN ANY DEFECTIVE PART OR PARTS TO LOVESHAW'S PLANT, FREIGHT PREPAID. ALL WARRANTY PART REPLACEMENTS AND REPAIRS MUST BE MADE BY LOVESHAW OR A LOVESHAW DEALER AUTHORIZED TO HANDLE THE GOODS COVERED BY THIS WARRANTY. ANY OUTSIDE WORK OR ALTERATIONS DONE WITHOUT LOVESHAW'S PRIOR WRITTEN APPROVAL WILL RENDER THIS WARRANTY VOID. **LOVESHAW** WILL NOT ASSUME ANY EXPENSE OR LIABILITY FOR ANY REPAIRS MADE TO ITS GOODS OUTSIDE ITS WORKS WITHOUT ITS PRIOR WRITTEN CONSENT. THIS WARRANTY SHALL NOT APPLY TO ANY ITEM THAT HAS NOT BEEN USED, OPERATED, AND MAINTAINED IN ACCORDANCE WITH LOVESHAW'S RECOMMENDED PROCEDURES. LOVESHAW SHALL HAVE NO LIABILITY WHATSOEVER WHERE THE GOODS HAVE BEEN ALTERED, MISUSED, ABUSED OR INVOLVED IN AN ACCIDENT. NO PERSON IS AUTHORIZED TO MAKE ANY WARRANTY OR TO CREATE ANY LIABILITY BINDING UPON LOVESHAW WHICH IS NOT STATED IN THIS WARRANTY. THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES OF ANY KIND, EXPRESSSED OR IMPLIED, WHICH ARE HEREBY EXCLUDED. IN PARTICULAR, THE IMPLIED WARRANTY OF MERCHANTABILITY, AS WELL AS THE IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE ARE HEREBY EXCLUDED.

LOVESHAW

2206 Easton Turnpike, PO. Box 83
SOUTH CANAAN, PA 18459
570.937.4921 - 800.572.3434 - FAX 570.937.3229

LABEL CONVERTING SPECIFICATIONS

In order to insure the labeling machines function, the following label specifications are offered as part of this proposal. Seller recommends that Buyer include a copy of these specifications with Buyer's purchase order for labels from Buyer's label converter. There may be exceptions to these specifications, depending upon the particular label construction used.

- Labels shall be converted with $3\text{ mm} \pm .13\text{ mm}$ minimum spacing between labels, and a minimum side gap of $1.5\text{ mm} \pm .15\text{ mm}$ slit on each side of the label. Maximum media width is determined as appropriate for the print engine selected. Labels shall not be converted with perforations or other separations between labels.
 - A standard minimum 76 mm ID core is recommended [101 mm or 152 mm ID cores may also be acceptable]. Standard maximum roll OD shall be 305 mm [rolls up to 406 mm may also be acceptable]. Cores shall be slit cleanly to the final media width, including tolerance, and shall be of such composition so as to resist crushing distortion. The roll end shall not be attached to the core with tape or adhesive.
 - Labels shall be wound to the outside of the roll unless otherwise specified. The labels shall be cleanly die cut, waste removed with no nicks or marks to the outside label perimeter, and centered on the backing media. If possible [unless otherwise specified] the labels shall be oriented: (1) to feed the trailing edge perpendicular to the backing media edge; and, (2) to feed the label with its shortest dimension parallel to the feed path.
 - There shall be no strike-through or fractures of the backing media by the label processing die which can be detected by ink or marker penetration after wiping. There shall be no tears or cuts on the backing media edges. The backing media shall be of a uniform density and thickness. It shall be sufficiently translucent as to assure reliable gap detection, given the label stock selected.
 - All eye marks or sensing notches shall be located with the same tolerance as specified for the labels and located on the backing media as is appropriate for the print engine selected. Eye marks shall be opaque, of a uniform density, and a minimum of 6 mm in width by 3 mm in the feed direction. Sensing notches, if possible, shall be as small as practical and located away from the edge of the backing media.
 - The label rolls shall not be wound so tightly as to cause the adhesive to bleed out from around the label edges nor so loosely as to cause roll telescoping. The labels shall be wound with consistent wind tension and shall be flat within 3 mm when measured from a reference surface.
 - Where splicing is necessary in the label roll, splicing shall be consistent with the requirement of the automatic labeling machinery. Preferred splices, when required, shall be of a diagonal style, using a clear transparent pressure sensitive tape applied to the back side of the backing web only (non-release coated side). All factory splices shall be removed, unless they meet the preferred splice specification.
 - All finished label rolls shall be appropriately marked for identification per customer requirements and shall be packed to assure that the rolls arrive clean, flat and without shipping damage.
 - The label adhesive shall be tested thoroughly to insure the compatibility of the label to the Buyer's product and to have the proper amount of permanence or removability according to Buyer's specifications. All face stock and adhesive combinations are subject to testing for dispensability on automatic labelers prior to acceptance.
-

Assemblies and Schematics

This section contains assembly drawings and schematics required to repair or rebuild your label machine. The drawings are organized under the following sub-headings.

1. **Main Frame and Stand Assemblies (for all models)**
 2. **Pneumatic Assemblies (for all models)**
 3. **Pneumatic Diagram (Straight Tamp models)**
 4. **Pneumatic Diagram (Dual Tamp/CW – Swing Arm model)**
 5. **Applicator Assemblies (Straight Tamp models)**
 6. **Applicator Assembly (Dual Tamp/CW – Swing Arm model)**
 7. **Electrical Assembly and Schematics for both the Straight Tamp model and for Dual Tamp/CW – Swing Arm model**
 8. **PLC Program (Straight Tamp & Dual Tamp/CW - Swing Arm model) Note: The PLC Program is available upon request. Consult the factory to obtain a hard copy / PDF of that document.**
-

MAIN FRAME AND STAND
ASSEMBLIES

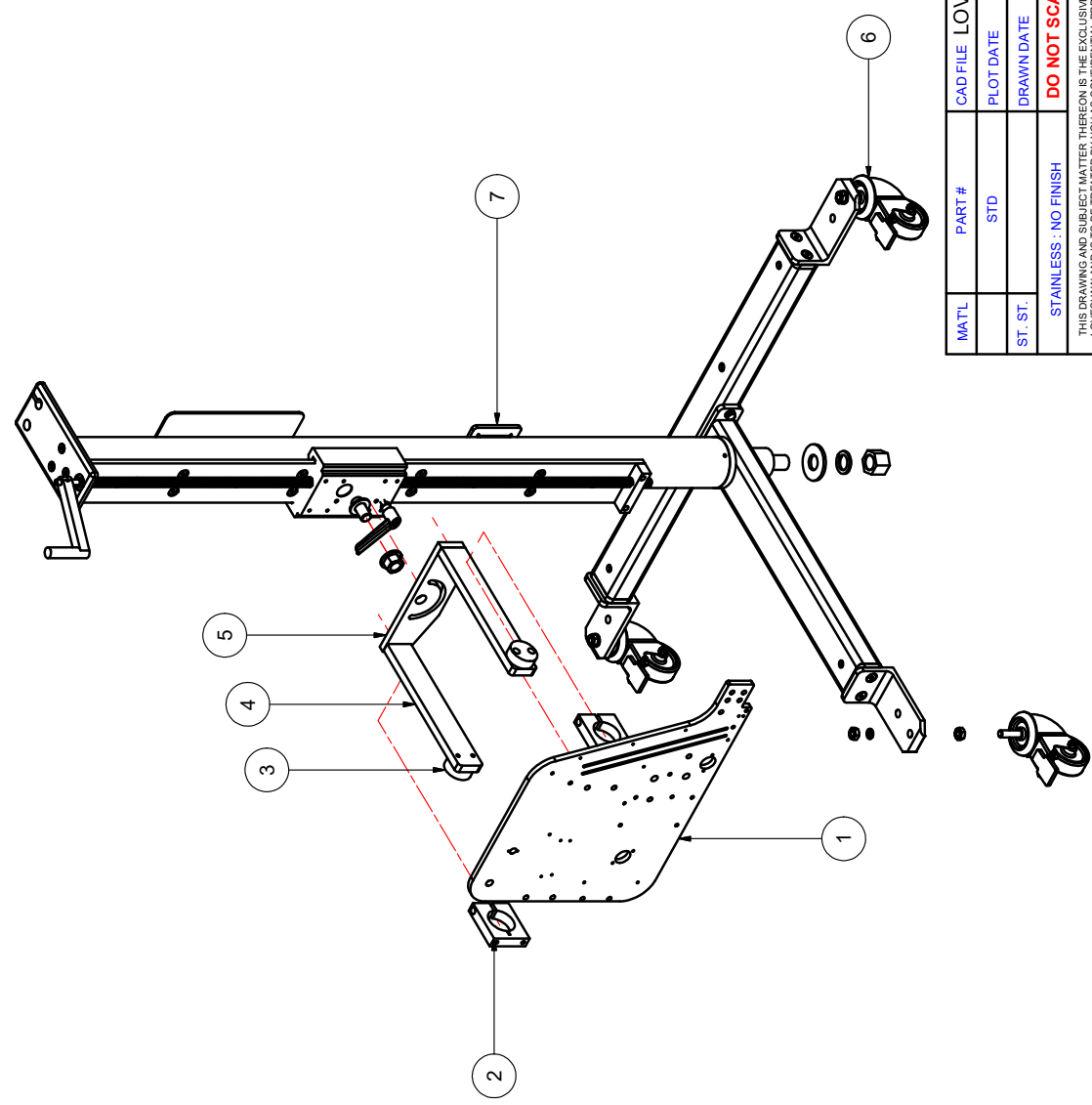
(FOR ALL MODELS)



1 2 3 4

REVISION HISTORY			
REV	DESCRIPTION	DATE	BY
A	RELEASED	2/18/2019	AMS

Parts List			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	LABN-0187-6	LX600 MAIN PLATE
2	2	LABN-0171-4	STAND MOUNTING EAR
3	2	LABN-0172-4	MOUNTING EAR RECIEVER
4	2	LABN-0173-4	MOUNTING ARM
5	1	LABN-0174-5	BASE, MOUNTING ARM
6	1	BASE DISCOUNT	STAND ASSY., LX SERIES, STAND ALONE
7	1	LABN-0182-4	MOUNT AIR PREP



MATL	PART #	CAD FILE	LOVESHAW BORDER	FINISHES UNLESS OTHERWISE NOTED:	LOVESHAW	TITLE	2206 EASTON TPK., SOUTH CANAAN, PA.
ST. ST.	STD	PLOT DATE	DRAWN DATE	2/18/2019	DO NOT SCALE PRINT	LX600 STANDARD STAND	
STAINLESS : NO FINISH		X = ±.050		INCH .XX = ±.015	ANGLES ±.1/2°	DWG NO	LX600 STAND
		.XXX = ±.005		MACH. FINISH		MATERIAL	CHECKED
		X = ±1.0mm		METRIC .XX = ±.3mm		DRAWN	brycef
		.XXX = ±.1mm		FRACTIONS ± 1/64		APPROVED	
THIS DRAWING AND SUBJECT MATTER THEREON IS THE EXCLUSIVE PROPERTY OF LOVESHAW AND IS TO BE TREATED BY YOU AS CONFIDENTIAL PROPRIETARY INFORMATION. THIS DRAWING OR SUBJECT MATTER THEREOF SHALL NOT BE REPRODUCED OTHER THAN FOR YOUR OWN USE OR TO BE DISCLOSED TO OTHERS WITHOUT THE WRITTEN CONSENT OF LOVESHAW AND WILL BE RETURNED TO LOVESHAW UPON REQUEST.							

1

B

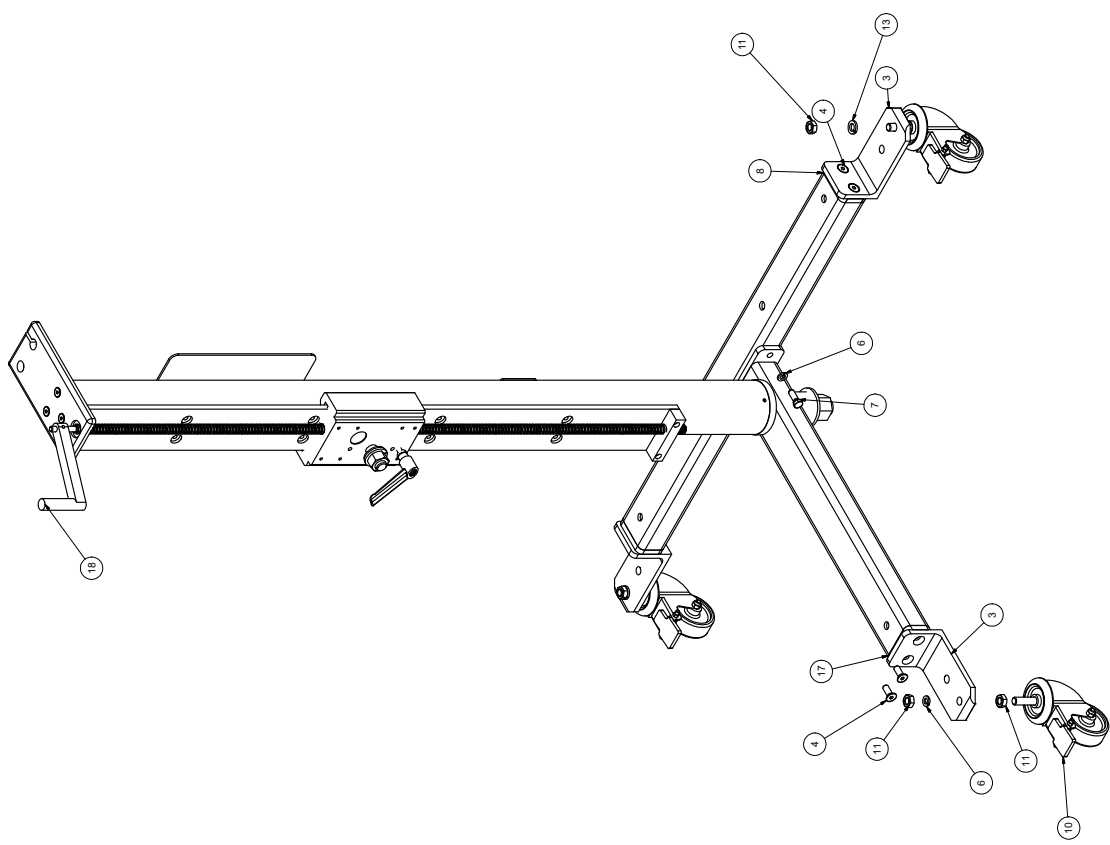
A

B

A

REVISION HISTORY		
REV	DESCRIPTION	DATE
A	RELEASED	5/13/2016

Parts List		
ITEM	QTY	PART NUMBER DESCRIPTION
3	3	LABN-0094-4 CASTER MOUNTING PAD
4	6	FFHSJ100B05 FHCS, 3/8-18 x 1.00 LG
5	2	FFHSJ100B05 LOCK WASHER 3/8
6	3	FLWSHP 1/2" LOCK WASHER
7	2	OPC511ASS 1/2" O.P.C.511 ASS
8	1	LABN-0100A-5 I/F RACK SUPPORT BEAM, LX SERIES
10	3	OPC511ASS CASTER S.S. SWIVEL
11	9	FLJNSNP HEX JAM NUT 1/2-20
13	2	FLWSHP 1/2" LOCK WASHER
17	1	LABN-0101-5 MAIN CENTER BEAM, LX SERIES (BOLTED TWO SLIDE)
18	1	WZ273-02 LABELER'S STAND UPRIGHT



MATL	PART #	CAST FILE	BASE FILE	TOLERANCES UNLESS OTHERWISE NOTED:	LOVESHAW
BT 31		DATE	5/13/2016	XXX.XX.XX ANGLES 1/2"	2208 EAST ON TRK., SOUTH HAVEN, PA.
STAINLESS NO FINISH		DATE	5/13/2016	XXX.XX.XX ANGLES 1/2"	STAND ASSY., LX SERIES.
<small>THIS DRAWING AND ALL DIMENSIONS ARE THE PROPERTY OF LOVESHAW. IT IS TO BE USED ONLY FOR THE PROJECT AND QUANTITY SPECIFIED. ANY REUSE OR MODIFICATION OF THIS DRAWING WITHOUT THE WRITTEN PERMISSION OF LOVESHAW IS STRICTLY PROHIBITED. DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED. DIMENSIONS IN METERS ARE IN PARENTHESES. DIMENSIONS IN MILLIMETERS ARE IN PARENTHESES. DIMENSIONS IN FRACTIONS ARE IN PARENTHESES. DIMENSIONS IN DECIMALS ARE IN PARENTHESES. DIMENSIONS IN DECIMALS ARE IN PARENTHESES.</small>					STAND ALONE
<small>FOR INFORMATION: THIS DRAWING IS THE PROPERTY OF LOVESHAW. IT IS TO BE USED ONLY FOR THE PROJECT AND QUANTITY SPECIFIED. ANY REUSE OR MODIFICATION OF THIS DRAWING WITHOUT THE WRITTEN PERMISSION OF LOVESHAW IS STRICTLY PROHIBITED. DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED. DIMENSIONS IN METERS ARE IN PARENTHESES. DIMENSIONS IN MILLIMETERS ARE IN PARENTHESES. DIMENSIONS IN DECIMALS ARE IN PARENTHESES.</small>					SCALE
<small>FOR INFORMATION: THIS DRAWING IS THE PROPERTY OF LOVESHAW. IT IS TO BE USED ONLY FOR THE PROJECT AND QUANTITY SPECIFIED. ANY REUSE OR MODIFICATION OF THIS DRAWING WITHOUT THE WRITTEN PERMISSION OF LOVESHAW IS STRICTLY PROHIBITED. DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED. DIMENSIONS IN METERS ARE IN PARENTHESES. DIMENSIONS IN MILLIMETERS ARE IN PARENTHESES. DIMENSIONS IN DECIMALS ARE IN PARENTHESES.</small>					CHECKED
<small>FOR INFORMATION: THIS DRAWING IS THE PROPERTY OF LOVESHAW. IT IS TO BE USED ONLY FOR THE PROJECT AND QUANTITY SPECIFIED. ANY REUSE OR MODIFICATION OF THIS DRAWING WITHOUT THE WRITTEN PERMISSION OF LOVESHAW IS STRICTLY PROHIBITED. DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED. DIMENSIONS IN METERS ARE IN PARENTHESES. DIMENSIONS IN MILLIMETERS ARE IN PARENTHESES. DIMENSIONS IN DECIMALS ARE IN PARENTHESES.</small>					DRAWN
<small>FOR INFORMATION: THIS DRAWING IS THE PROPERTY OF LOVESHAW. IT IS TO BE USED ONLY FOR THE PROJECT AND QUANTITY SPECIFIED. ANY REUSE OR MODIFICATION OF THIS DRAWING WITHOUT THE WRITTEN PERMISSION OF LOVESHAW IS STRICTLY PROHIBITED. DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED. DIMENSIONS IN METERS ARE IN PARENTHESES. DIMENSIONS IN MILLIMETERS ARE IN PARENTHESES. DIMENSIONS IN DECIMALS ARE IN PARENTHESES.</small>					APPROVED

REVISION HISTORY			
REV	DESCRIPTION	DATE	BY
A	RELEASED	11/3/2011	KK

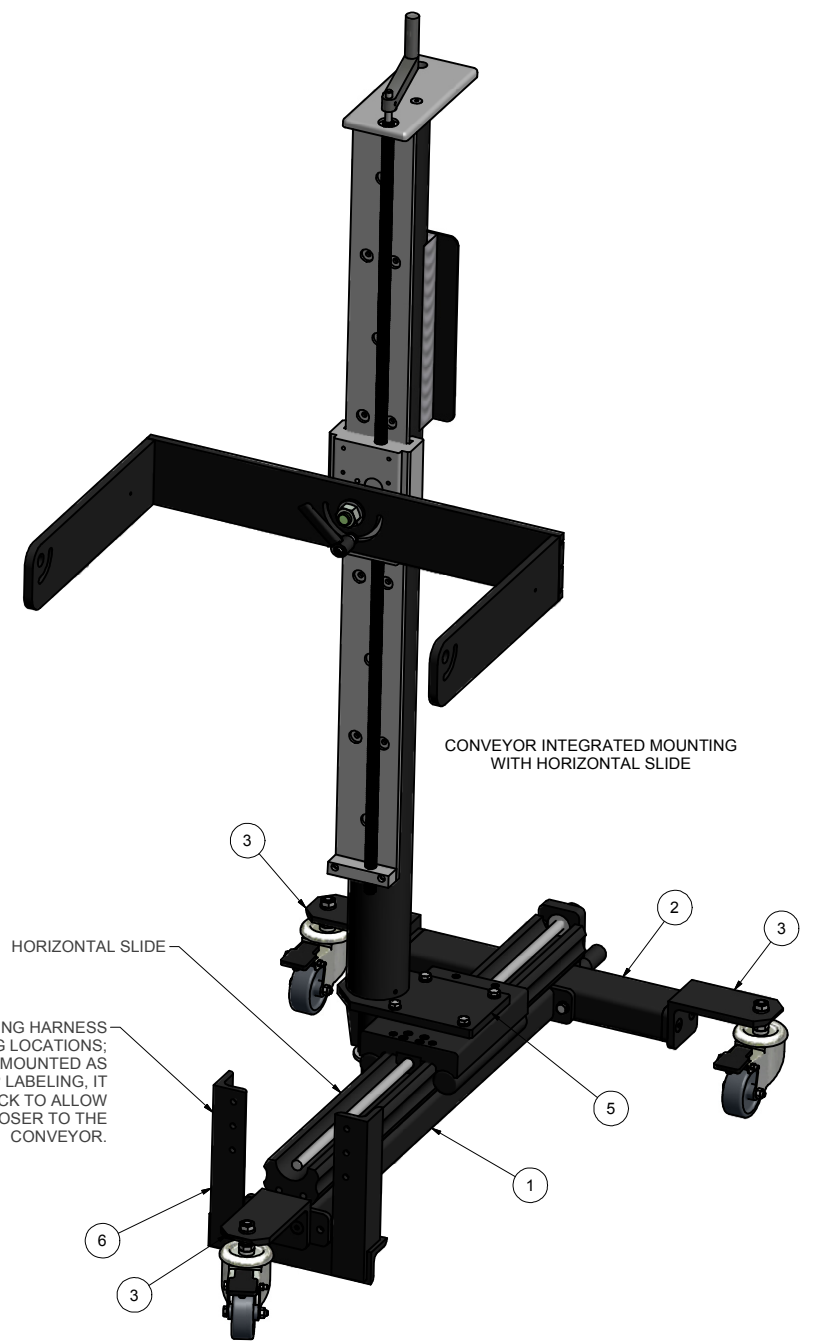
NOTE: THE THREE BASE CONFIGURATIONS ARE ALL BOLT TOGETHER CONSTRUCTION BUILT FROM THE (7) FRAME PIECES.



STANDARD STAND ALONE LX SERIES MOUNTING



STAND ALONE MOUNTING WITH HORIZONTAL SLIDE



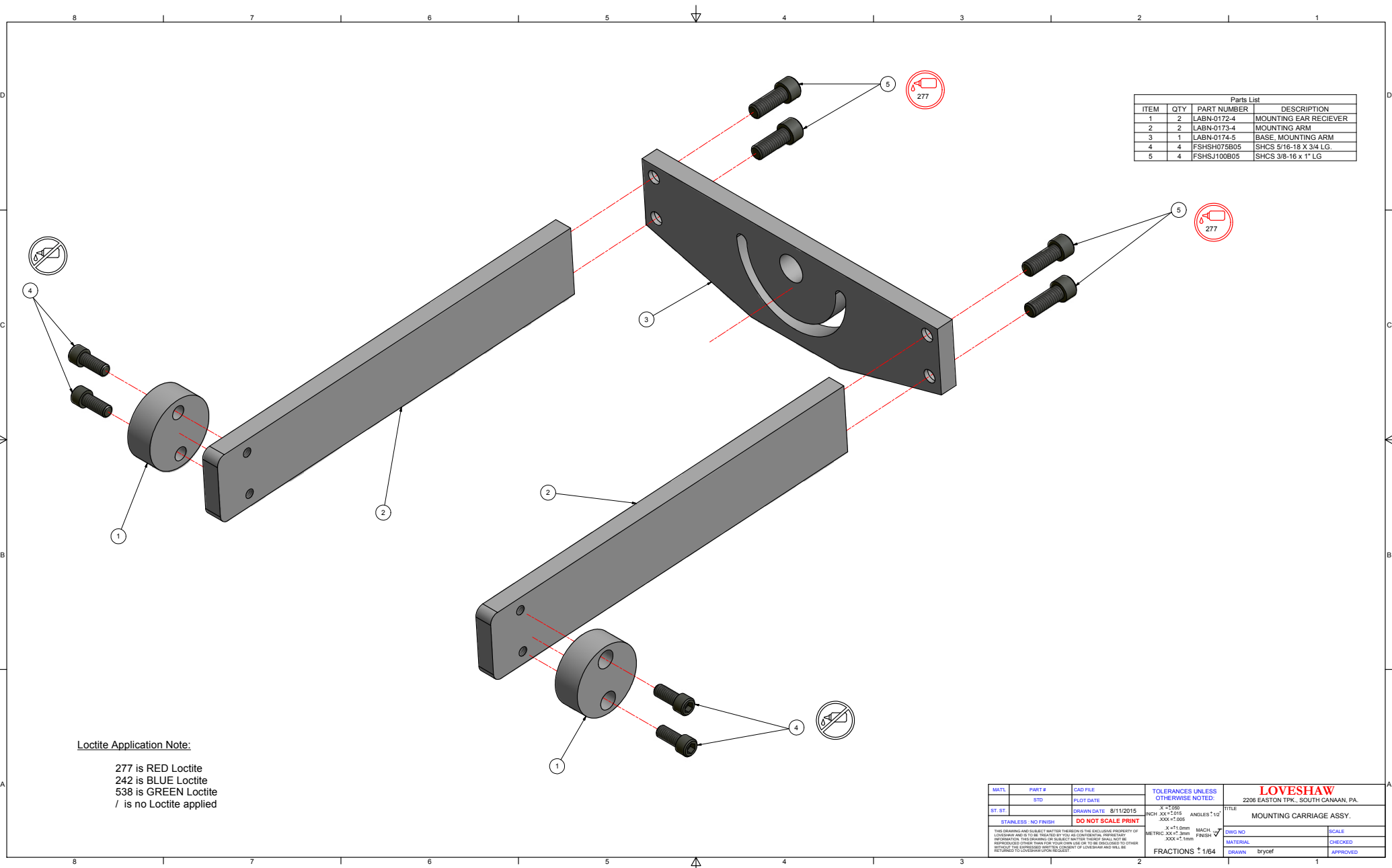
CONVEYOR INTEGRATED MOUNTING WITH HORIZONTAL SLIDE

ADDED FRAME MEMBER AND CASTERS REQUIRED FOR STABILITY AS THE LABELER LOAD SHIFTS FROM FRONT TO BACK

MOUNTING HARNESS HAS THREE MOUNTING LOCATIONS; IF SIDE LABELING, MOUNTED AS SHOWN; IF OVERTOP LABELING, IT CAN BE MOVED BACK TO ALLOW THE STAND TO BE CLOSER TO THE CONVEYOR.

Parts List			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	2	LABN-0099-5	MAIN CENTER BEAM, I-FRAME, LX SERIES
2	2	LABN-0100-5	BACK SUPPORT BEAM, I-FRAME, LX SERIES
3	10	LABN-0094-4	CASTER MOUNTING PAD
4	2	LABN-0100A-5	BACK SUPPORT BEAM, I-FRAME, LX SERIES
5	2	LABN-0089-5	MOUNTING PLATE, VERTICAL POST, LX SERIES
6	1	LABN-0091-5	MOUNTING HANGER, I FRAME
7	1	LABN-0101-5	MAIN CENTER BEAM, LX SERIES, (BOLTED W/O SLIDE)

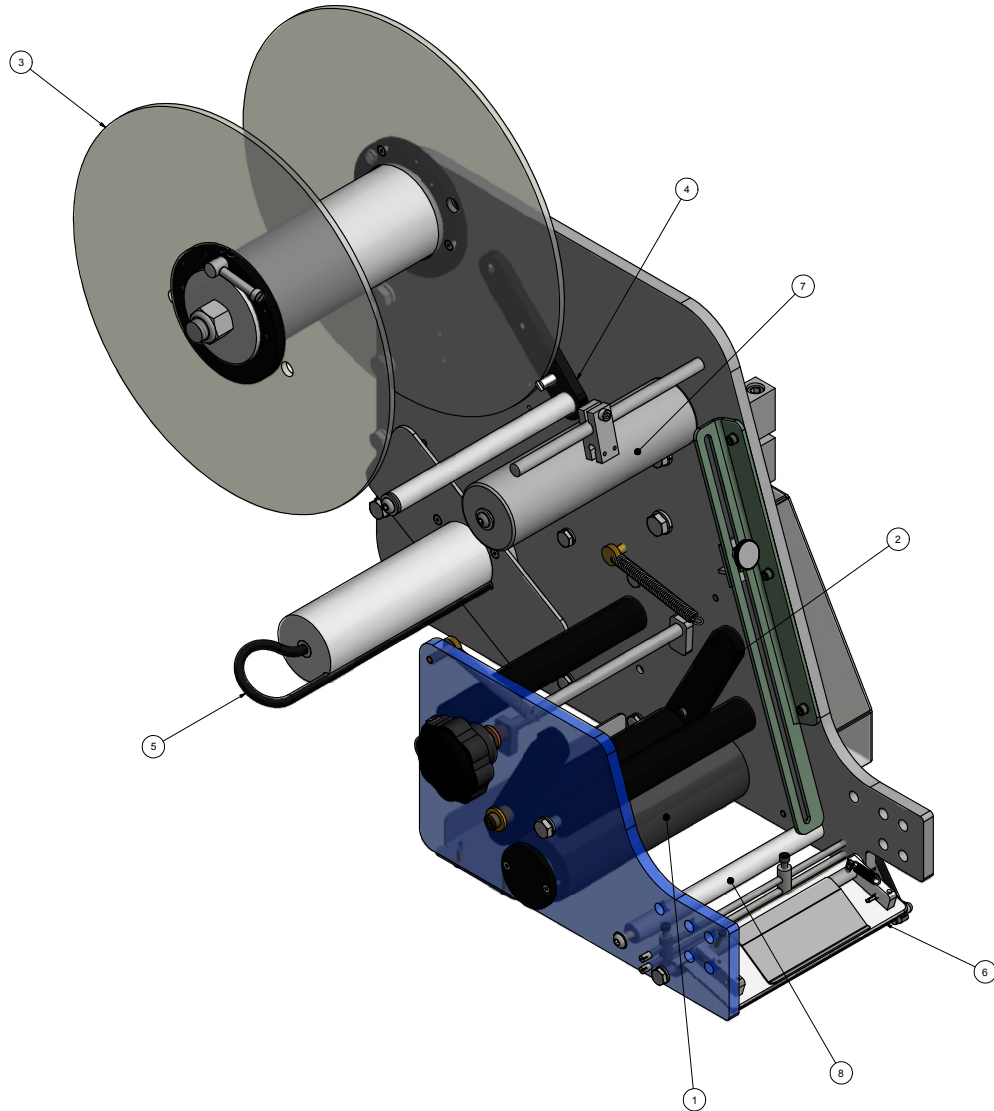
MATL	PART #	CAD FILE .CIP-LX-002.idw	TOLERANCES UNLESS OTHERWISE NOTED:	LOVESHAW an ITW Company RT. 296, SOUTH CANAAN, PA.
ST. ST	STD	PLOT DATE	X = ±.050 INCH XX = ±.015 ANGLES ±.1/2° XXX = ±.005	
STAINLESS - NO FINISH		DO NOT SCALE PRINT	X = ±1.0mm MACH. ✓ METRIC XX = ±.3mm FINISH ✓ XXX = ±.1mm	TITLE
<small>THIS DRAWING AND SUBJECT MATTER THEREON IS THE EXCLUSIVE PROPERTY OF LOVESHAW ITW AND IS TO BE TREATED BY YOU AS CONFIDENTIAL PROPRIETARY INFORMATION. THIS DRAWING OR SUBJECT MATTER THEREOF SHALL NOT BE REPRODUCED OTHER THAN FOR YOUR OWN USE OR TO BE DISCLOSED TO OTHER WITHOUT THE EXPRESSED WRITTEN CONSENT OF LOVESHAW ITW AND WILL BE RETURNED TO LOVESHAW ITW UPON REQUEST.</small>				DWG NO .CIP-LX-002
FRACTIONS ± 1/64				SCALE
				MATERIAL
				CHECKED
				DRAWN KENK
				APPROVED



Parts List			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	2	LABN-0172-4	MOUNTING EAR RECIEVER
2	2	LABN-0173-4	MOUNTING ARM
3	1	LABN-0174-5	BASE, MOUNTING ARM
4	4	FSHSH075B05	SHCS 5/16-18 X 3/4 LG.
5	4	FSHSJ100B05	SHCS 3/8-16 x 1" LG

Loctite Application Note:
 277 is RED Loctite
 242 is BLUE Loctite
 538 is GREEN Loctite
 / is no Loctite applied

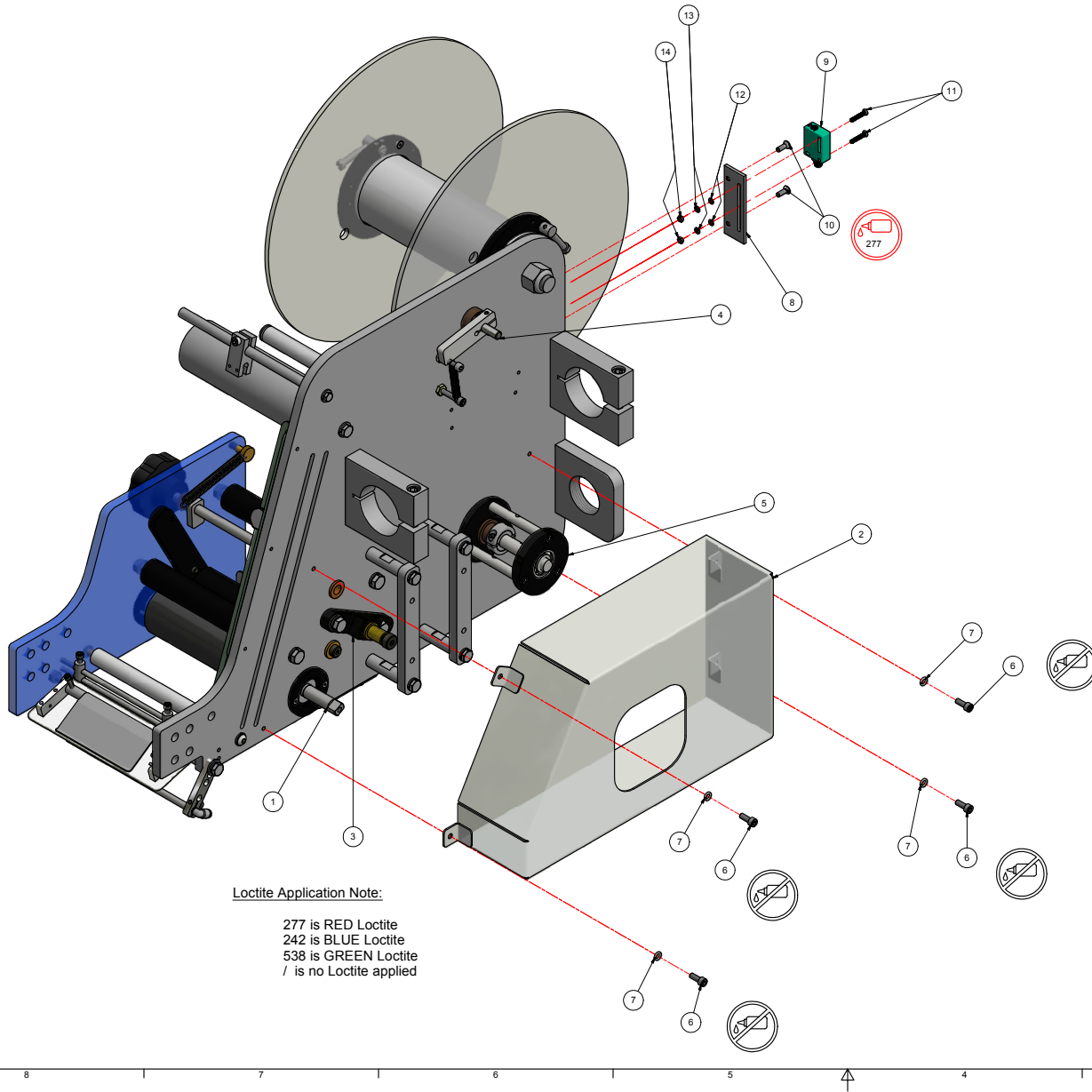
MATL	PART#	CAD FILE	TOLERANCES UNLESS OTHERWISE NOTED:	LOVESHAW 2206 EASTON TPK., SOUTH CANAAN, PA.
BT ST	STD	PLOT DATE	X=.000 INCH .XX+.015 .XXX+.005 ANGLS ° 1/2	
STAINLESS: NO FINISH DO NOT SCALE PRINT			X=.116mm METRIC .XX+.2mm .XXX+.1mm ANGLS ° 1/2	TITLE MOUNTING CARRIAGE ASSY.
<small>THIS DRAWING AND SUBJECT MATTER THEREON IS THE EXCLUSIVE PROPERTY OF LOVESHAW AND IS TO BE TREATED BY YOU AS CONFIDENTIAL. INFORMATION CONTAINED HEREIN IS UNCLASSIFIED EXCEPT WHERE SHOWN OTHERWISE. REPRODUCTION OF THIS DRAWING OR SUBJECT MATTER THEREON SHALL NOT BE REPRODUCED OTHER THAN FOR YOUR OWN USE OR TO BE ASSIGNED TO OTHER PERSONS WITHOUT THE EXPRESS WRITTEN CONSENT OF LOVESHAW AND WILL BE RETURNED TO LOVESHAW UPON REQUEST.</small>				DWG NO. _____ MATERIAL _____ DRAWN Brycef SCALE _____ CHECKED _____ APPROVED _____



Parts List			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1		FRICITION ROLLER ASSY.
2	1		FRICITION RELEASE ROLLER ASSY.
3	1		LABEL ROLL CORE ASSY.
4	1		DANCER ARM ASSY.
5	1		REWIND ASSY.
6	1		PEEL EDGE ASSY.
7	1		ANTI STATIC ASSY.
8	1		GUIDE ROLLER ASSY.
32	1	LABN-0193-3	PHOTOEYE BRACKET
33	1	A219-PF-7	PHOTO EYE
34	1	LABN-0185-4	ROLLER GUARD
35	4	FBHSB050B08	8-32 X 1/2 BHCS
36	2	FFHSD050B05	FLAT HEAD CAP SCREW #8-32 x 1/2
39	2	FBHMD018P10	BH M3 x 18mm
40	2	FFWMDP	M3 FLAT WASHER
41	2	FLWMDP	Spring Washer
42	2	FFHMDP	M3 nut

MATL	PART #	CAD FILE	TOLERANCES UNLESS OTHERWISE NOTED:	LOVESHAW 2206 EASTON TPK., SOUTH CANAAN, PA.
BT ST	STD	PLOT DATE	X = ±.000 INCH .XX ±.015 ANGLSES ° 1/2 .XXX ±.005	
STAINLESS - NO FINISH DO NOT SCALE PRINT			X = ±1.0mm METRIC .XX ±.3mm .XXX ±.1mm	TITLE FRONT SIDE OVERVIEW
THIS DRAWING AND SUBJECT MATTER THEREON IS THE EXCLUSIVE PROPERTY OF LOVESHAW AND IS TO BE TREATED BY YOU AS CONFIDENTIAL INFORMATION. NO REPRODUCTION OR SUBJECT MATTER THEREOF SHALL BE REPRODUCED OTHER THAN FOR YOUR OWN USE OR TO BE ASSIGNED TO OTHER WITHOUT THE EXPRESS WRITTEN CONSENT OF LOVESHAW AND WILL BE RETURNED TO LOVESHAW UPON REQUEST.				DWG NO. _____ SCALE _____ MATERIAL _____ CHECKED _____ DRAWN brycef APPROVED _____
FRACTIONS 1/64				

8 7 6 5 4 3 2 1



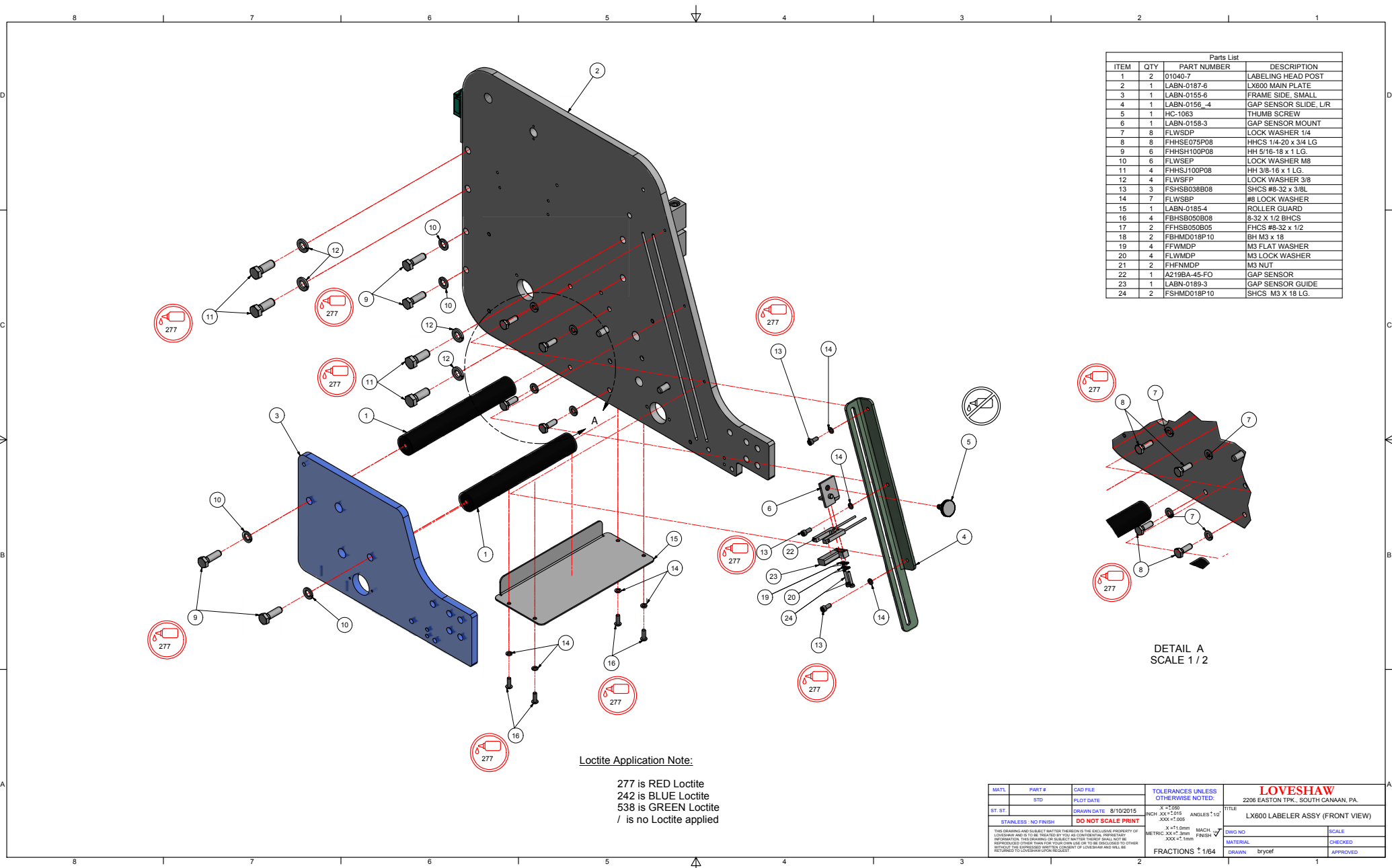
Parts List			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1		FRICITION ROLLER
2	1	LABN-0179-6	CHAIN GUARD
3	1		IDLER ASSY.
4	1		DANCER ARM ASSY.
5	1		REWIND ASSY.
6	4	FSHSD050P05	10-32 X 1/2 SHCS
7	4	FLWSCP	#10 LOCK WASHER
8	1	LABN-0193-3	PHOTOEYE BRACKET
9	1	AZ19-PF-7	PHOTO EYE
10	2	FFHSD050B05	FHCS #8-32 x 1/2
11	2	FBHMD018P10	BH M3 x 18mm
12	2	FFWMDP	M3 FLAT WASHER
13	2	FLWMDP	M3 LOCK WASHER
14	2	FFHMDP	M3 NUT

Loctite Application Note:

277 is RED Loctite
 242 is BLUE Loctite
 538 is GREEN Loctite
 / is no Loctite applied

MATL	PART#	CAD FILE	TOLERANCES UNLESS OTHERWISE NOTED:	LOVESHAW 2206 EASTON TPK., SOUTH CANAAN, PA.
BT ST	STD	PLOT DATE	X = ±.000 INCH .XX ±.015 .XXX ±.005 X = ±1.0mm METRIC .XX ±.0mm .XXX ±.1mm	
STAINLESS - NO FINISH		DO NOT SCALE PRINT	MACH FRESH FRACTIONS 1/64	TITLE REAR SIDE OVERVIEW DWG NO MATERIAL DRAWN Brycef SCALE CHECKED APPROVED

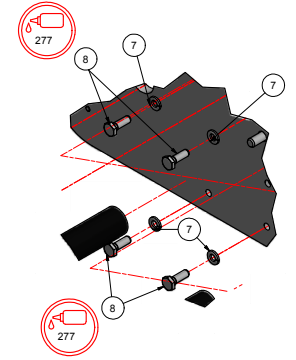
8 7 6 5 4 3 2 1



Parts List			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	2	01040-7	LABELING HEAD POST
2	1	LABN-0187-6	LX600 MAIN PLATE
3	1	LABN-0155-6	FRAME SIDE, SMALL
4	1	LABN-0156_-4	GAP SENSOR SLIDE, L/R
5	1	HC-1063	THUMB SCREW
6	1	LABN-0158-3	GAP SENSOR MOUNT
7	8	FLWSDP	LOCK WASHER 1/4
8	8	FHSE075P08	HHCS 1/4-20 x 3/4 LG
9	6	FHSH100P08	HH 5/16-18 x 1 LG.
10	6	FLWSEP	LOCK WASHER M8
11	4	FHSH100P08	HH 3/8-16 x 1 LG.
12	4	FLWSEFP	LOCK WASHER 3/8
13	3	FSHSB038B08	SHCS #8-32 x 3/8L
14	7	FLWSBP	#8 LOCK WASHER
15	1	LABN-0185-4	ROLLER GUARD
16	4	FBHSB050B08	8-32 X 1/2 BHCS
17	2	FFHCB050B05	FHCS #8-32 x 1/2
18	2	FBHMD018P10	BH M3 x 18
19	4	FFWMDP	M3 FLAT WASHER
20	4	FLWMDP	M3 LOCK WASHER
21	2	FHFNDP	M3 NUT
22	1	A219BA-45-FO	GAP SENSOR
23	1	LABN-0189-3	GAP SENSOR GUIDE
24	2	FSHMD018P10	SHCS M3 X 18 LG.

Loctite Application Note:

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 242 is BLUE Loctite
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 / is no Loctite applied



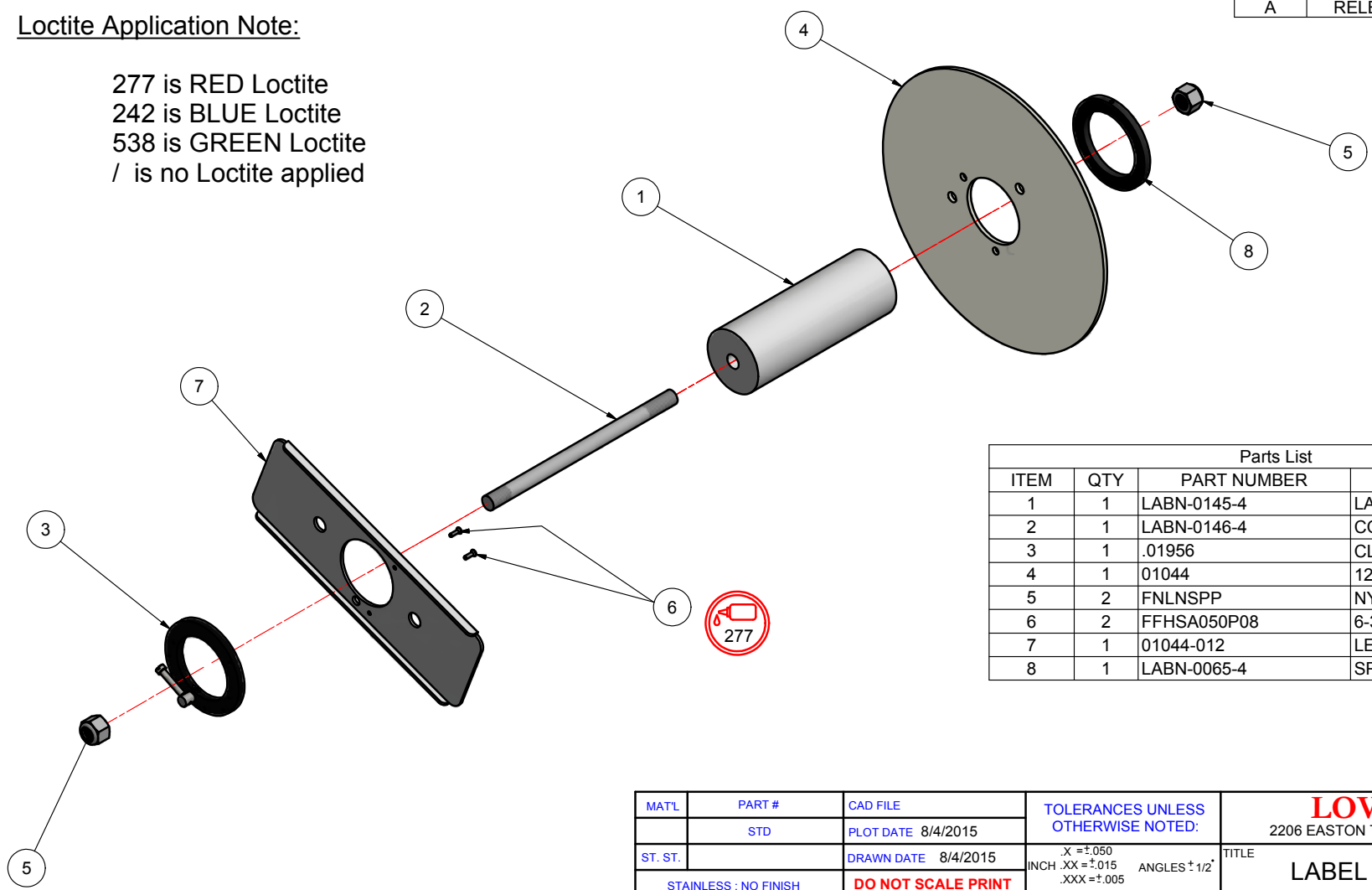
DETAIL A
 SCALE 1 / 2

MATL	PART #	CAD FILE	TOLERANCES UNLESS OTHERWISE NOTED:	LOVESHAW
BT ST	BTD	PLOT DATE	INCH XXX ±.015 ANGLES ±1/2 X ±.005 XXX ±.005	2206 EASTON TPK., SOUTH CANAAN, PA.
DRAWN DATE 8/10/2015			MACH FURNISH	TITLE LX600 LABELER ASSY (FRONT VIEW)
STAINLESS - NO FINISH DO NOT SCALE PRINT			FRACTIONS 1/64	DWG NO SCALE
THIS DRAWING AND SUBJECT MATTER THEREON IS THE EXCLUSIVE PROPERTY OF LOVESHAW AND IS TO BE TREATED BY YOU AS CONFIDENTIAL INFORMATION. NO REPRODUCTION OR SUBJECT MATTER THEREOF SHALL BE REPRODUCED OTHER THAN FOR YOUR OWN USE OR TO BE ASSIGNED TO OTHER WITHOUT THE EXPRESS WRITTEN CONSENT OF LOVESHAW AND WILL BE RETURNED TO LOVESHAW UPON REQUEST.				MATERIAL CHECKED
				DRAWN brycef APPROVED

REVISION HISTORY			
REV	DESCRIPTION	DATE	BY
A	RELEASED	8/4/2015	BJF

Loctite Application Note:

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 242 is BLUE Loctite
 538 is GREEN Loctite
 / is no Loctite applied



Parts List			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	LABN-0145-4	LABEL CORE
2	1	LABN-0146-4	CORE SHAFT
3	1	.01956	CLAMP ASSY - LET OFF
4	1	01044	12" LET - OFF DISK
5	2	FNLNSPP	NYLOCK NUT 5/8-11
6	2	FFHSA050P08	6-32 X 1/2 FHS
7	1	01044-012	LET-OFF GUIDE PLATE
8	1	LABN-0065-4	SPACER, LET-OFF

MATL	PART #	CAD FILE
	STD	PLOT DATE 8/4/2015
ST. ST.		DRAWN DATE 8/4/2015
STAINLESS : NO FINISH	DO NOT SCALE PRINT	
<small>THIS DRAWING AND SUBJECT MATTER THEREON IS THE EXCLUSIVE PROPERTY OF LOVESHAW AND IS TO BE TREATED BY YOU AS CONFIDENTIAL PROPRIETARY INFORMATION. THIS DRAWING OR SUBJECT MATTER THEREOF SHALL NOT BE REPRODUCED OTHER THAN FOR YOUR OWN USE OR TO BE DISCLOSED TO OTHER WITHOUT THE EXPRESSED WRITTEN CONSENT OF LOVESHAW AND WILL BE RETURNED TO LOVESHAW UPON REQUEST.</small>		

TOLERANCES UNLESS OTHERWISE NOTED:

X = ±.050
 INCH .XX = ±.015 ANGLES ± 1/2°
 .XXX = ±.005

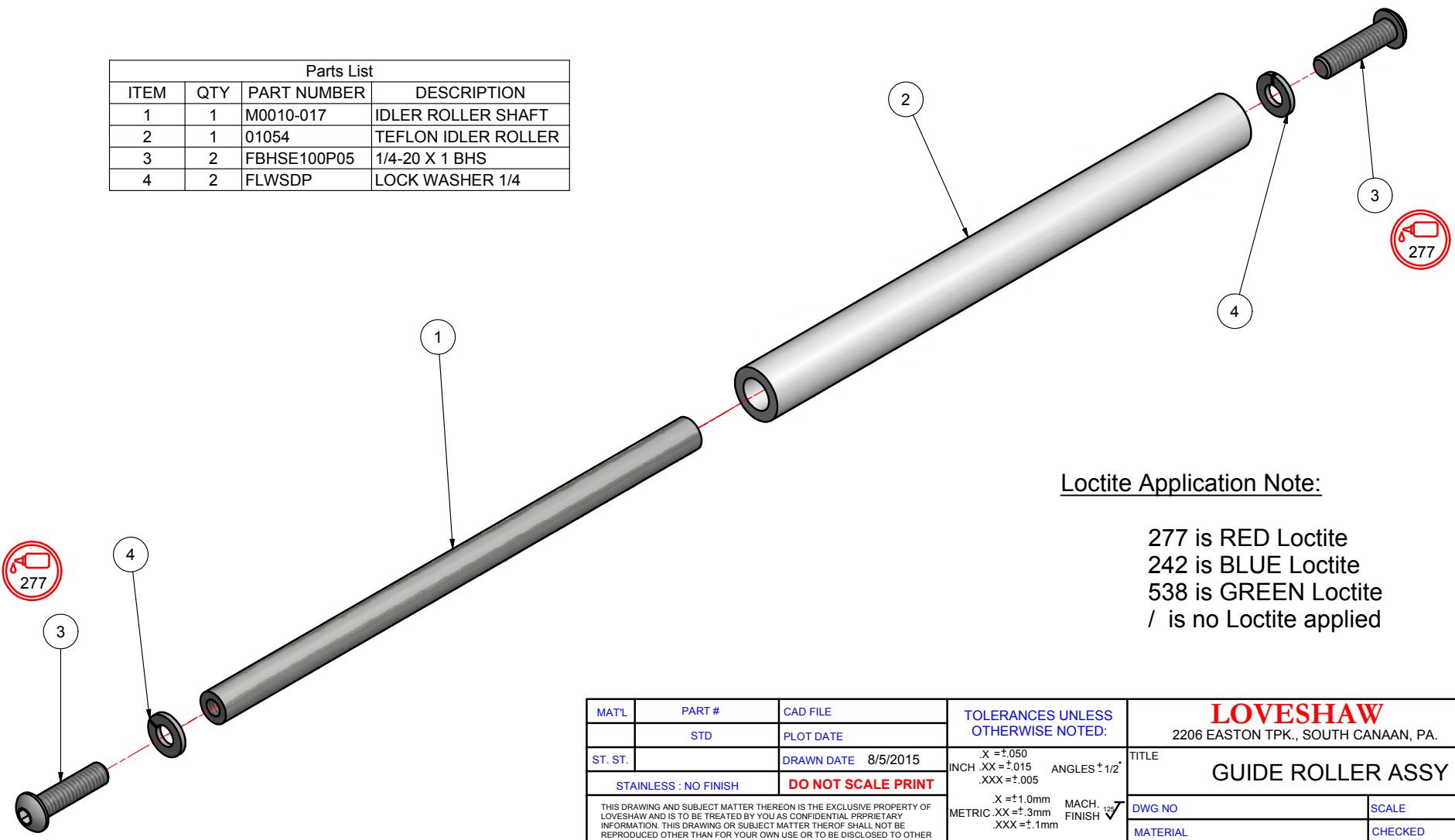
X = ±1.0mm MACH. FINISH ✓
 METRIC .XX = ±.3mm
 .XXX = ±.1mm

FRACTIONS ± 1/64

LOVESHAW	
2206 EASTON TPK., SOUTH CANAAN, PA.	
TITLE LABEL ROLL CORE ASSY	
DWG NO	SCALE
MATERIAL	CHECKED
DRAWN brycef	APPROVED

REVISION HISTORY			
REV	DESCRIPTION	DATE	BY
A	RELEASED	8/5/2015	BJF

Parts List			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	M0010-017	IDLER ROLLER SHAFT
2	1	01054	TEFLON IDLER ROLLER
3	2	FBHSE100P05	1/4-20 X 1 BHS
4	2	FLWSDP	LOCK WASHER 1/4



Loctite Application Note:

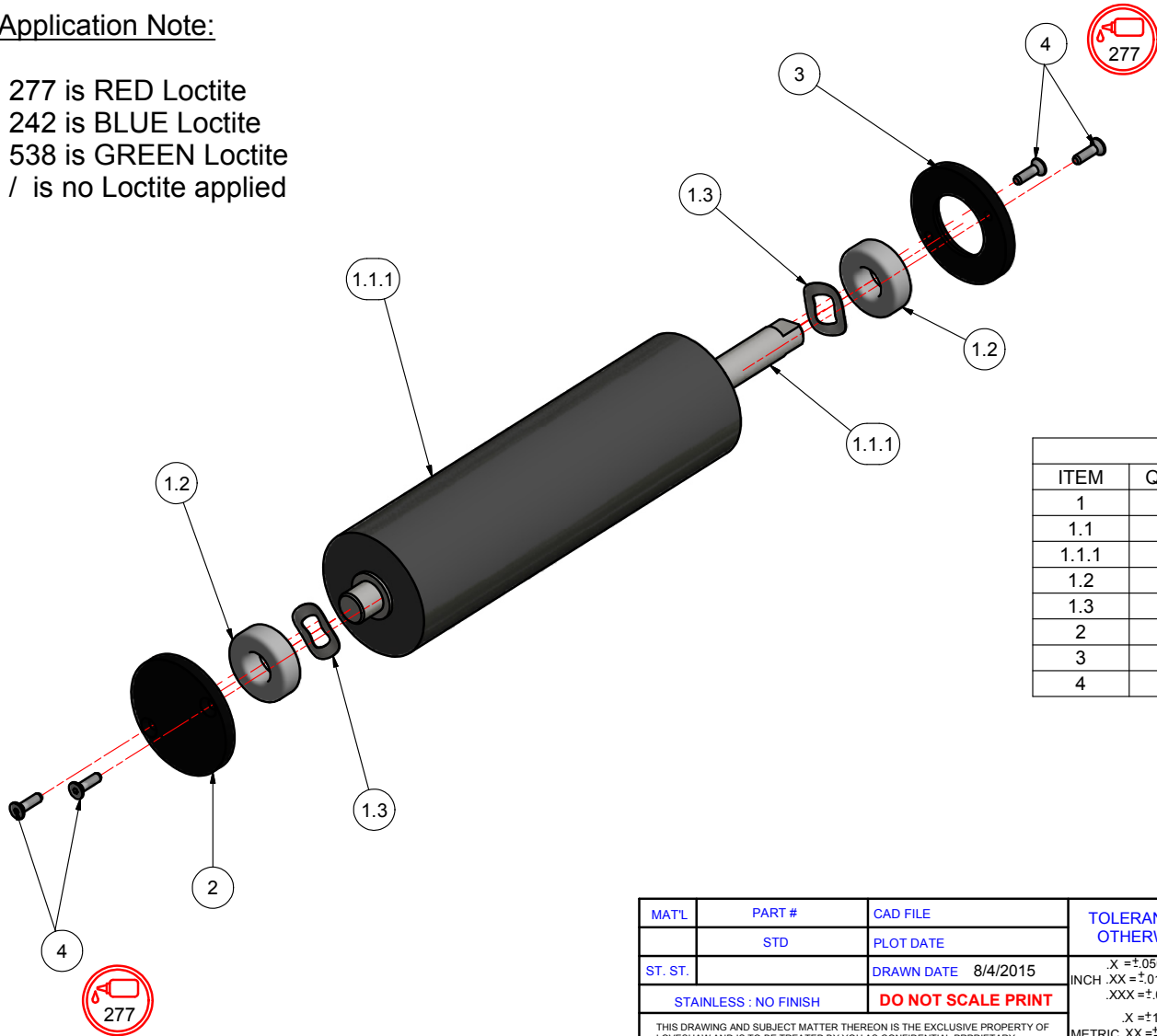
277 is RED Loctite
 242 is BLUE Loctite
 538 is GREEN Loctite
 / is no Loctite applied

MATL	PART #	CAD FILE	TOLERANCES UNLESS OTHERWISE NOTED:	LOVESHAW 2206 EASTON TPK., SOUTH CANAAN, PA.	
	STD	PLOT DATE			
ST. ST.		DRAWN DATE 8/5/2015	X = ±.050 INCH .XX = ±.015 ANGLES ± 1/2° .XXX = ±.005 X = ±1.0mm MACH. FINISH ✓ METRIC .XX = ±.3mm .XXX = ±.1mm FRACTIONS ± 1/64	TITLE	
STAINLESS : NO FINISH		DO NOT SCALE PRINT		GUIDE ROLLER ASSY	
<small>THIS DRAWING AND SUBJECT MATTER THEREON IS THE EXCLUSIVE PROPERTY OF LOVESHAW AND IS TO BE TREATED BY YOU AS CONFIDENTIAL PROPRIETARY INFORMATION. THIS DRAWING OR SUBJECT MATTER THEREOF SHALL NOT BE REPRODUCED OTHER THAN FOR YOUR OWN USE OR TO BE DISCLOSED TO OTHER WITHOUT THE EXPRESSED WRITTEN CONSENT OF LOVESHAW AND WILL BE RETURNED TO LOVESHAW UPON REQUEST.</small>			DWG NO	SCALE	
			MATERIAL	CHECKED	
			DRAWN brycef	APPROVED	

Loctite Application Note:

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REVISION HISTORY			
REV	DESCRIPTION	DATE	BY
A	RELEASED	8/4/2015	BJF

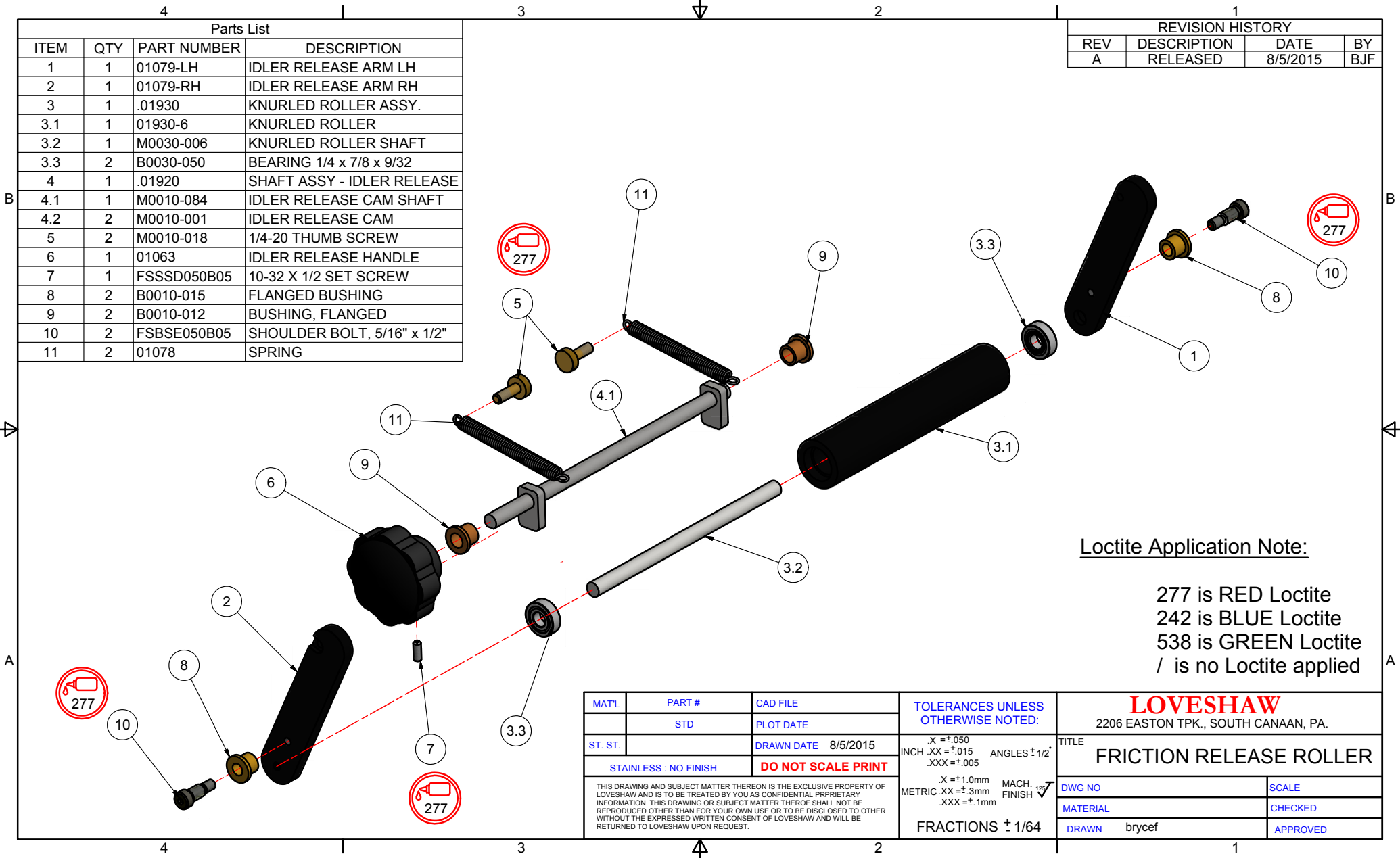


Parts List			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	.01990	ROLLER ASSY. RUBBER DRIVE
1.1	1	B0090-004	RUBBER ROLLER
1.1.1	2	600590	SHAFT & ROLLER ASSY.
1.2	2	BRG-1041	BEARING
1.3	2	H2020-400	WAVE WASHER
2	1	01041	RUBBER ROLLER BEARING COVER
3	1	01042	BEARING OUTSIDE END CAP
4	4	FFHSA050P08	6-32 X 1/2 FHS

MATL	PART #	CAD FILE	TOLERANCES UNLESS OTHERWISE NOTED:	LOVESHAW 2206 EASTON TPK., SOUTH CANAAN, PA.	
	STD	PLOT DATE			
ST. ST.		DRAWN DATE 8/4/2015	X = ±.050 INCH .XX = ±.015 ANGLES ± 1/2° .XXX = ±.005 X = ±1.0mm MACH. FINISH ✓ METRIC .XX = ±.3mm .XXX = ±.1mm FRACTIONS ± 1/64	TITLE	
STAINLESS : NO FINISH		DO NOT SCALE PRINT		FRICITION ROLLER	
THIS DRAWING AND SUBJECT MATTER THEREON IS THE EXCLUSIVE PROPERTY OF LOVESHAW AND IS TO BE TREATED BY YOU AS CONFIDENTIAL PROPRIETARY INFORMATION. THIS DRAWING OR SUBJECT MATTER THEREOF SHALL NOT BE REPRODUCED OTHER THAN FOR YOUR OWN USE OR TO BE DISCLOSED TO OTHER WITHOUT THE EXPRESSED WRITTEN CONSENT OF LOVESHAW AND WILL BE RETURNED TO LOVESHAW UPON REQUEST.					
			DWG NO	SCALE	
			MATERIAL	CHECKED	
			DRAWN brycef	APPROVED	

Parts List			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	01079-LH	IDLER RELEASE ARM LH
2	1	01079-RH	IDLER RELEASE ARM RH
3	1	.01930	KNURLED ROLLER ASSY.
3.1	1	01930-6	KNURLED ROLLER
3.2	1	M0030-006	KNURLED ROLLER SHAFT
3.3	2	B0030-050	BEARING 1/4 x 7/8 x 9/32
4	1	.01920	SHAFT ASSY - IDLER RELEASE
4.1	1	M0010-084	IDLER RELEASE CAM SHAFT
4.2	2	M0010-001	IDLER RELEASE CAM
5	2	M0010-018	1/4-20 THUMB SCREW
6	1	01063	IDLER RELEASE HANDLE
7	1	FSSSD050B05	10-32 X 1/2 SET SCREW
8	2	B0010-015	FLANGED BUSHING
9	2	B0010-012	BUSHING, FLANGED
10	2	FSBSE050B05	SHOULDER BOLT, 5/16" x 1/2"
11	2	01078	SPRING

REVISION HISTORY			
REV	DESCRIPTION	DATE	BY
A	RELEASED	8/5/2015	BJF



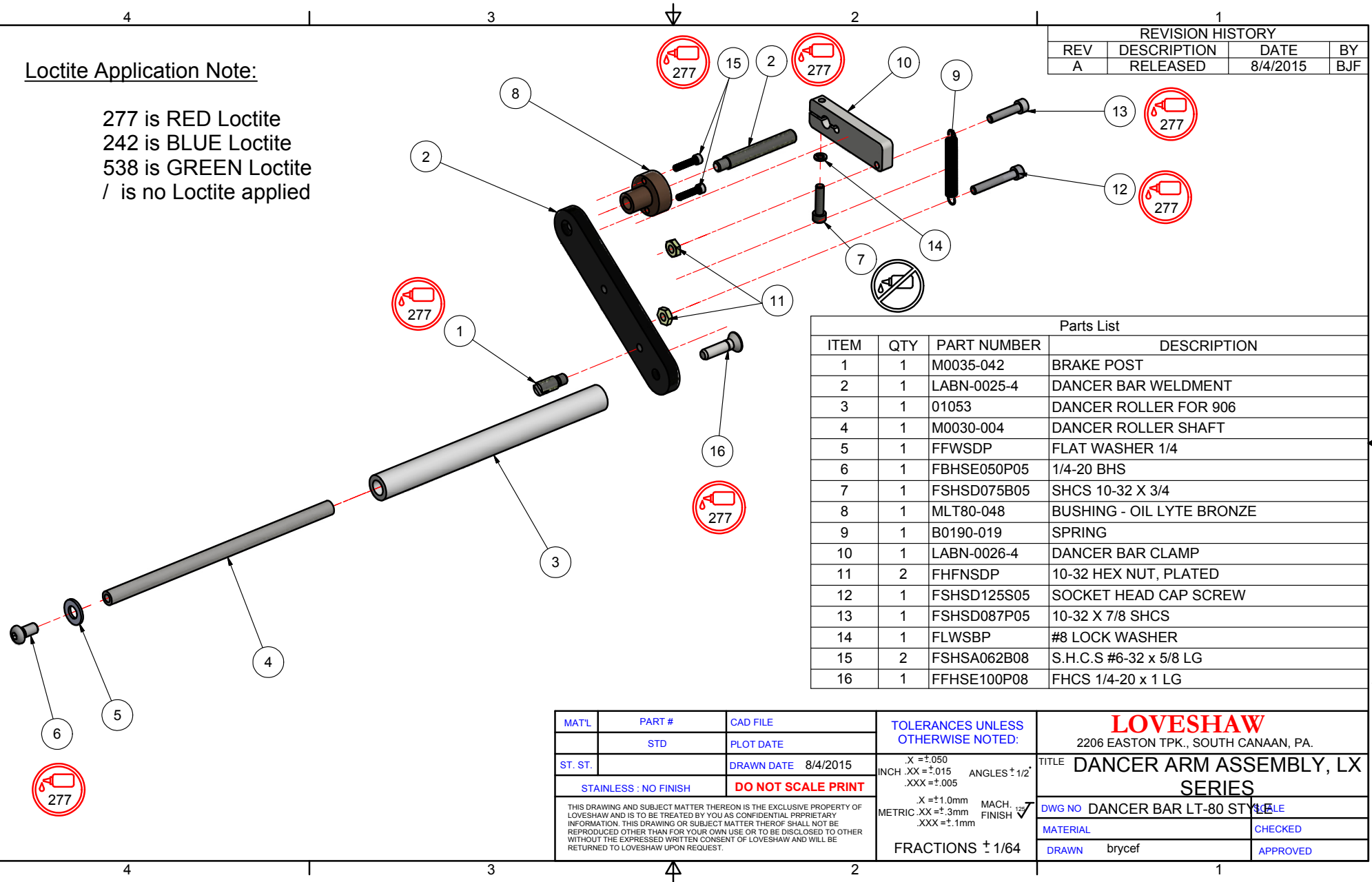
Loctite Application Note:

277 is RED Loctite
 242 is BLUE Loctite
 538 is GREEN Loctite
 / is no Loctite applied

MATL	PART #	CAD FILE	TOLERANCES UNLESS OTHERWISE NOTED:	LOVESHAW	
	STD	PLOT DATE		2206 EASTON TPK., SOUTH CANAAN, PA.	
ST. ST.		DRAWN DATE 8/5/2015	X = ±.050 INCH .XX = ±.015 ANGLES ± 1/2° .XXX = ±.005	TITLE FRICION RELEASE ROLLER	
STAINLESS : NO FINISH		DO NOT SCALE PRINT	X = ±1.0mm MACH. FINISH ✓ METRIC .XX = ±.3mm .XXX = ±.1mm	DWG NO	SCALE
THIS DRAWING AND SUBJECT MATTER THEREON IS THE EXCLUSIVE PROPERTY OF LOVESHAW AND IS TO BE TREATED BY YOU AS CONFIDENTIAL PROPRIETARY INFORMATION. THIS DRAWING OR SUBJECT MATTER THEROF SHALL NOT BE REPRODUCED OTHER THAN FOR YOUR OWN USE OR TO BE DISCLOSED TO OTHER WITHOUT THE EXPRESSED WRITTEN CONSENT OF LOVESHAW AND WILL BE RETURNED TO LOVESHAW UPON REQUEST.			FRACTIONS ± 1/64	MATERIAL	CHECKED
				DRAWN brycef	APPROVED

Loctite Application Note:

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 242 is BLUE Loctite
 538 is GREEN Loctite
 / is no Loctite applied



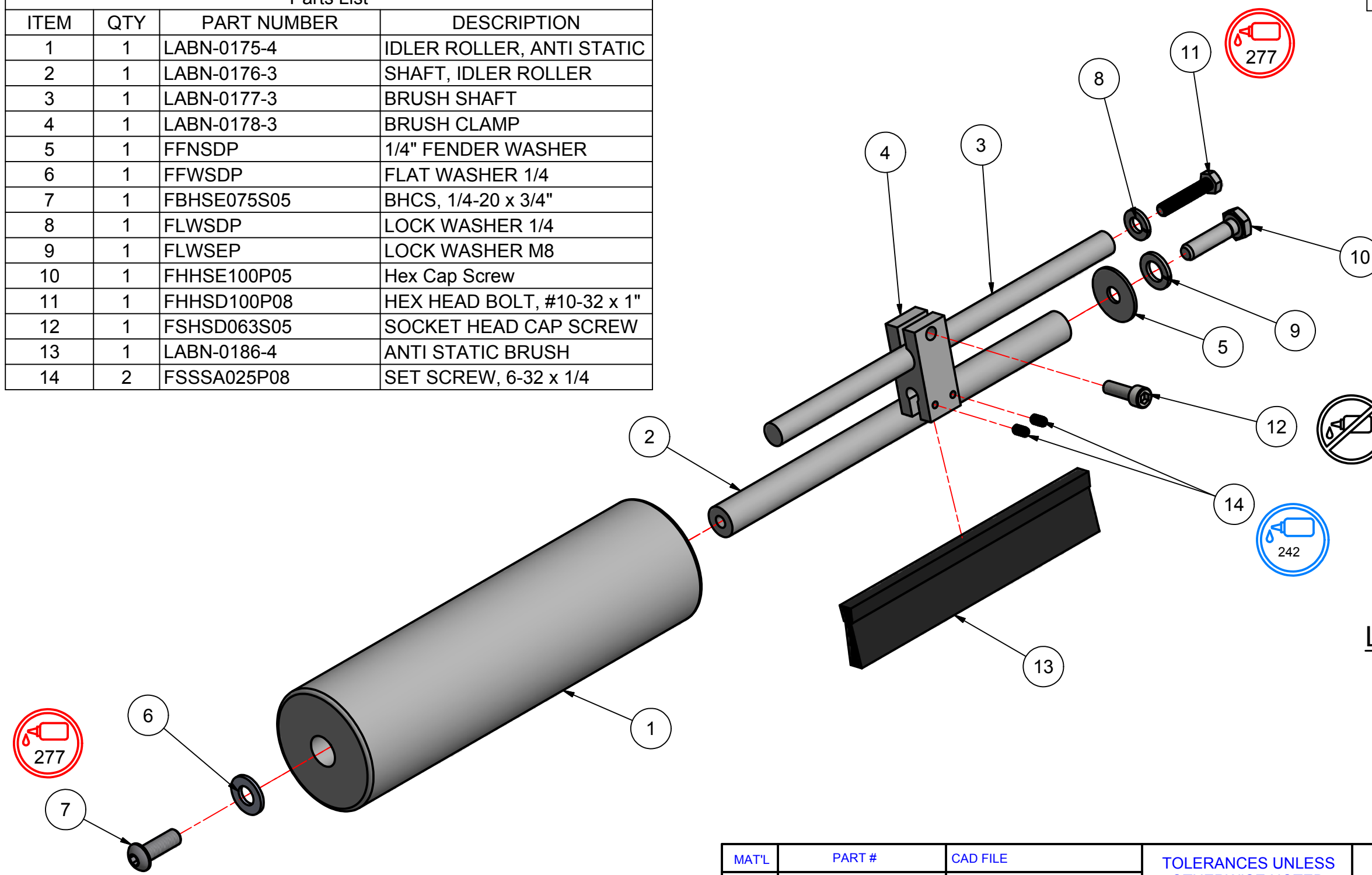
REVISION HISTORY			
REV	DESCRIPTION	DATE	BY
A	RELEASED	8/4/2015	BJF

Parts List			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	M0035-042	BRAKE POST
2	1	LABN-0025-4	DANCER BAR WELDMENT
3	1	01053	DANCER ROLLER FOR 906
4	1	M0030-004	DANCER ROLLER SHAFT
5	1	FFWSDP	FLAT WASHER 1/4
6	1	FBHSE050P05	1/4-20 BHS
7	1	FSHSD075B05	SHCS 10-32 X 3/4
8	1	MLT80-048	BUSHING - OIL LYTE BRONZE
9	1	B0190-019	SPRING
10	1	LABN-0026-4	DANCER BAR CLAMP
11	2	FFHNSDP	10-32 HEX NUT, PLATED
12	1	FSHSD125S05	SOCKET HEAD CAP SCREW
13	1	FSHSD087P05	10-32 X 7/8 SHCS
14	1	FLWSBP	#8 LOCK WASHER
15	2	FSHSA062B08	S.H.C.S #6-32 x 5/8 LG
16	1	FFHSE100P08	FHCS 1/4-20 x 1 LG

MATL	PART #	CAD FILE	TOLERANCES UNLESS OTHERWISE NOTED: X = ±.050 INCH .XX = ±.015 ANGLES ± 1/2° .XXX = ±.005	LOVESHAW 2206 EASTON TPK., SOUTH CANAAN, PA. TITLE DANCER ARM ASSEMBLY, LX SERIES
ST. ST.	STD	PLOT DATE		
STAINLESS : NO FINISH		DO NOT SCALE PRINT	X = ±1.0mm MACH. FINISH ✓ METRIC .XX = ±.3mm .XXX = ±.1mm	DWG NO DANCER BAR LT-80 STYLE
THIS DRAWING AND SUBJECT MATTER THEREON IS THE EXCLUSIVE PROPERTY OF LOVESHAW AND IS TO BE TREATED BY YOU AS CONFIDENTIAL PROPRIETARY INFORMATION. THIS DRAWING OR SUBJECT MATTER THEREOF SHALL NOT BE REPRODUCED OTHER THAN FOR YOUR OWN USE OR TO BE DISCLOSED TO OTHER WITHOUT THE EXPRESSED WRITTEN CONSENT OF LOVESHAW AND WILL BE RETURNED TO LOVESHAW UPON REQUEST.				MATERIAL DRAWN brycef
				CHECKED APPROVED

Parts List			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	LABN-0175-4	IDLER ROLLER, ANTI STATIC
2	1	LABN-0176-3	SHAFT, IDLER ROLLER
3	1	LABN-0177-3	BRUSH SHAFT
4	1	LABN-0178-3	BRUSH CLAMP
5	1	FFNSDP	1/4" FENDER WASHER
6	1	FFWSDP	FLAT WASHER 1/4
7	1	FBHSE075S05	BHCS, 1/4-20 x 3/4"
8	1	FLWSDP	LOCK WASHER 1/4
9	1	FLWSEP	LOCK WASHER M8
10	1	FHHSE100P05	Hex Cap Screw
11	1	FHHSD100P08	HEX HEAD BOLT, #10-32 x 1"
12	1	FSHSD063S05	SOCKET HEAD CAP SCREW
13	1	LABN-0186-4	ANTI STATIC BRUSH
14	2	FSSSA025P08	SET SCREW, 6-32 x 1/4

REVISION HISTORY			
REV	DESCRIPTION	DATE	BY
A	RELEASED	1/22/2016	BJF

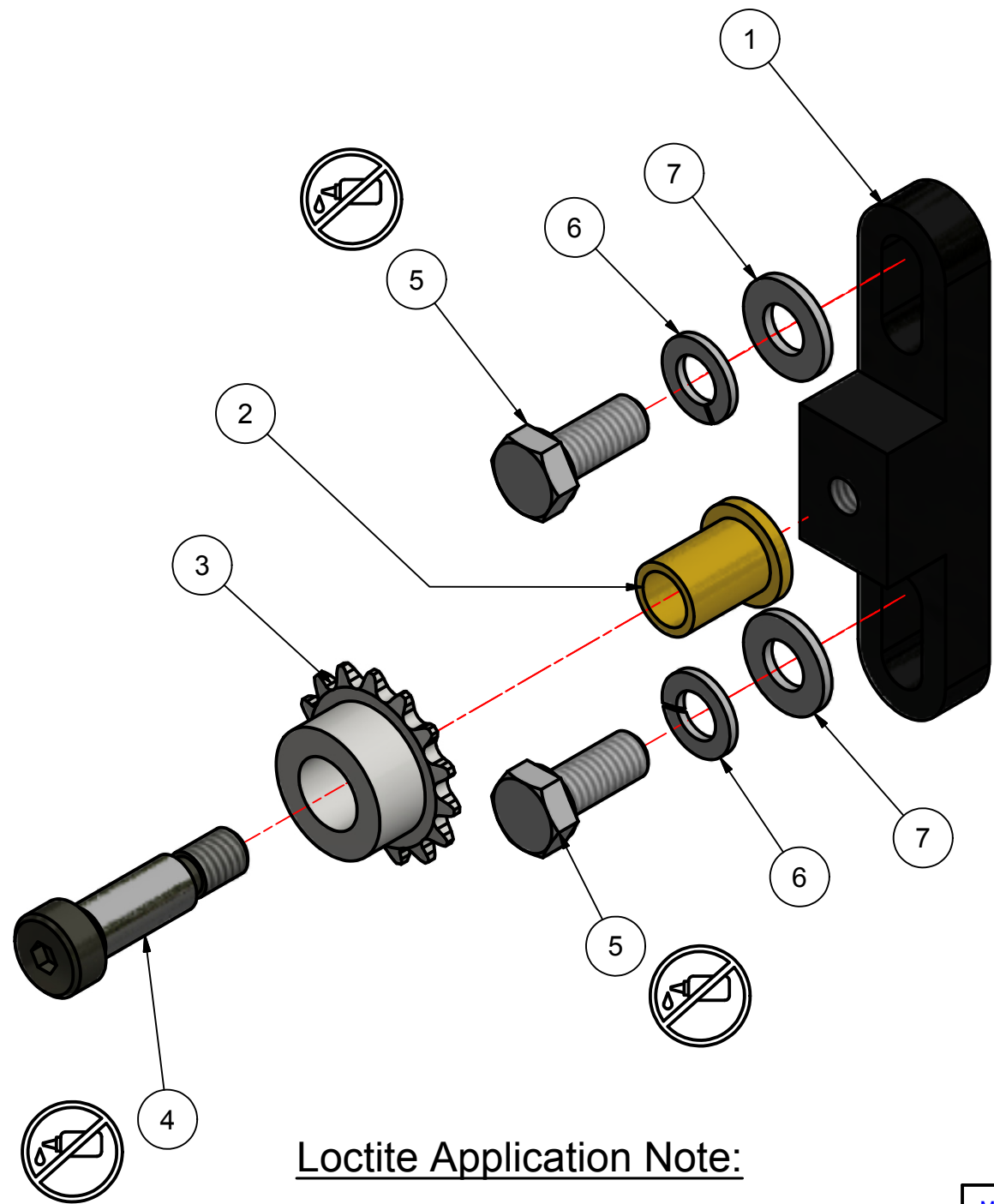


Loctite Application Note:

277 is RED Loctite
 242 is BLUE Loctite
 538 is GREEN Loctite
 / is no Loctite applied

MAT'L	PART #	CAD FILE	TOLERANCES UNLESS OTHERWISE NOTED: .X = ±.050 INCH .XX = ±.015 ANGLES ± 1/2° .XXX = ±.005 .X = ±1.0mm MACH. FINISH ✓ METRIC .XX = ±.3mm .XXX = ±.1mm FRACTIONS ± 1/64	LOVESHAW 2206 EASTON TPK., SOUTH CANAAN, PA.	
ST. ST.	STD	PLOT DATE		TITLE ANTI STATIC ASSEMBLY	
STAINLESS : NO FINISH		DRAWN DATE 1/22/2016	DWG NO		SCALE
THIS DRAWING AND SUBJECT MATTER THEREON IS THE EXCLUSIVE PROPERTY OF LOVESHAW AND IS TO BE TREATED BY YOU AS CONFIDENTIAL PROPRIETARY INFORMATION. THIS DRAWING OR SUBJECT MATTER THEREOF SHALL NOT BE REPRODUCED OTHER THAN FOR YOUR OWN USE OR TO BE DISCLOSED TO OTHER WITHOUT THE EXPRESSED WRITTEN CONSENT OF LOVESHAW AND WILL BE RETURNED TO LOVESHAW UPON REQUEST.			MATERIAL		CHECKED
			DRAWN BRYCEF		APPROVED

REVISION HISTORY			
REV	DESCRIPTION	DATE	BY
A	RELEASED	1/22/2016	BJF



Parts List			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	MLT80-036	IDLER MOUNT
2	1	B0010-033	FLANGED BUSHING
3	1	08850	IDLER SPROCKET, 25-B-15
4	1	FSBSH087B05	SHOULDER BOLT
5	2	FHSH075P05	HHCS, 5/16-18 X 0.75 LG
6	2	FLWSEP	LOCK WASHER M8
7	2	FFWSEP	5/8" FLAT WASHER

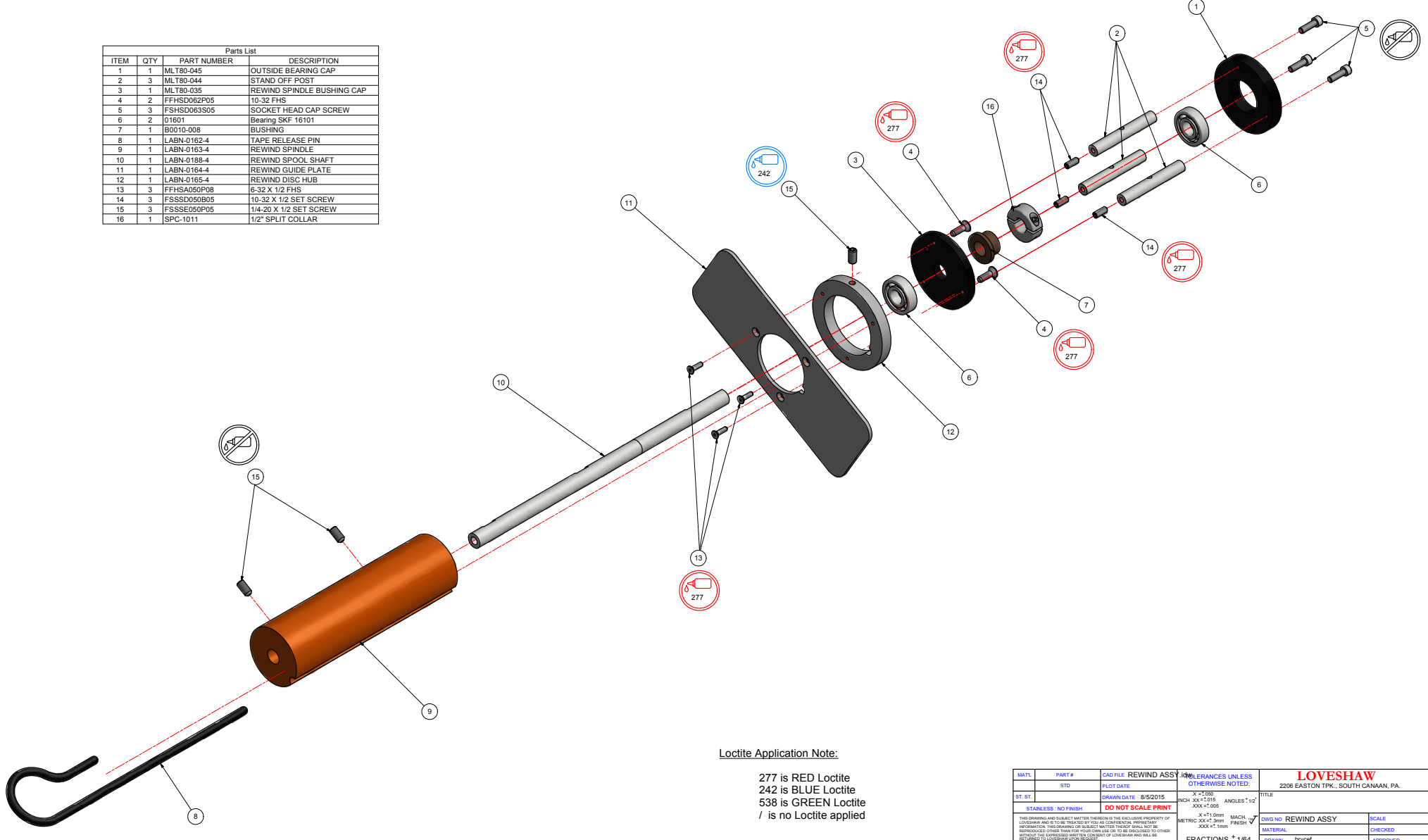
Loctite Application Note:

277 is RED Loctite
 242 is BLUE Loctite
 538 is GREEN Loctite
 / is no Loctite applied

MAT'L	PART #	CAD FILE	TOLERANCES UNLESS OTHERWISE NOTED:	LOVESHAW 2206 EASTON TPK., SOUTH CANAAN, PA.		
	STD	PLOT DATE				
ST. ST.		DRAWN DATE 1/22/2016	.X = ±.050 INCH .XX = ±.015 .XXX = ±.005 ANGLES ± 1/2° .X = ±1.0mm METRIC .XX = ±.3mm .XXX = ±.1mm MACH. FINISH 125 ✓ FRACTIONS ± 1/64	TITLE		
STAINLESS : NO FINISH		DO NOT SCALE PRINT		IDLER ASSEMBLY		
THIS DRAWING AND SUBJECT MATTER THEREON IS THE EXCLUSIVE PROPERTY OF LOVESHAW AND IS TO BE TREATED BY YOU AS CONFIDENTIAL PROPRIETARY INFORMATION. THIS DRAWING OR SUBJECT MATTER THEREOF SHALL NOT BE REPRODUCED OTHER THAN FOR YOUR OWN USE OR TO BE DISCLOSED TO OTHER WITHOUT THE EXPRESSED WRITTEN CONSENT OF LOVESHAW AND WILL BE RETURNED TO LOVESHAW UPON REQUEST.			DWG NO .A4353-01		SCALE	
			MATERIAL		CHECKED	
			DRAWN BRYCEF	APPROVED		

REVISION HISTORY			
REV	DESCRIPTION	DATE	BY
A	RELEASED	8/5/2015	BJF

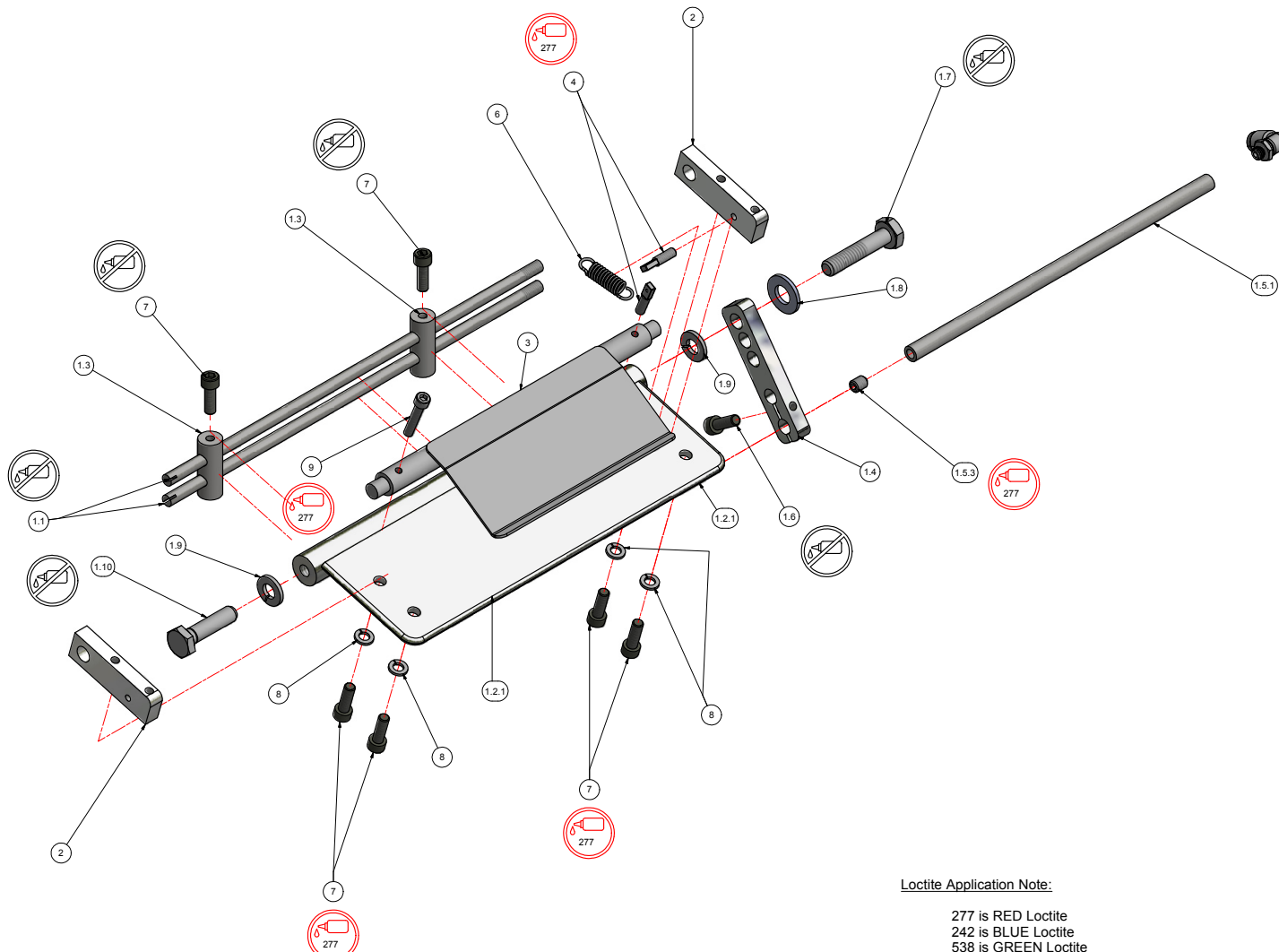
Parts List			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	MLT80-045	OUTSIDE BEARING CAP
2	3	MLT80-044	STAND OFF POST
3	1	MLT80-035	REWIND SPINDLE BUSHING CAP
4	2	FFHSD062P05	10-32 FHS
5	3	FSHSD063S05	SOCKET HEAD CAP SCREW
6	2	01601	Bearing SKF 16101
7	1	B0010-008	BUSHING
8	1	LABN-0162-4	TAPE RELEASE PIN
9	1	LABN-0163-4	REWIND SPINDLE
10	1	LABN-0189-4	REWIND SPOOL SHAFT
11	1	LABN-0164-4	REWIND GUIDE PLATE
12	1	LABN-0165-4	REWIND DISC HUB
13	3	FFHSA050P08	6-32 X 1/2 FHS
14	3	FSSSD050B05	10-32 X 1/2 SET SCREW
15	3	FSSSE050P05	1/4-20 X 1/2 SET SCREW
16	1	SPC-1011	1/2" SPLIT COLLAR



Loctite Application Note:
 277 is RED Loctite
 242 is BLUE Loctite
 538 is GREEN Loctite
 / is no Loctite applied

MATL	PART#	CAD FILE	REWIND ASSY	TOLERANCES UNLESS OTHERWISE NOTED:	LOVESHAW 2206 EASTON TPK., SOUTH CANAAN, PA.
BT ST	STD	PLOT DATE			
		DRAWN DATE	8/5/2015	X = ±.000 YCH .XX = ±.015 XXX = ±.005 Z = ±1.0mm MACH FINISH METRIC .XX = ±.3mm .XXX = ±.1mm	TITLE
STAINLESS - NO FINISH			DO NOT SCALE PRINT		DWG NO: REWIND ASSY
				FRACTIONS 1/64	MATERIAL
					CHECKED
					DRAWN brycef
					APPROVED

REVISION HISTORY			
REV	DESCRIPTION	DATE	BY
A	RELEASED	8/5/2015	BJF



Parts List			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1		PEEL EDGE ASSY
1.1	2	01067	WEB GUIDE RAILS
1.2	1	01033	ASSY. DISPENSING BLADE & SHAFT
1.2.1	1	600736 1	STD. 2" DISPENSING BLADE
1.2.2	1	600262 1	DISPENSE BLADE SHAFT
1.3	2	01069	WEB GUIDE POST
1.4	1	14020	AIR TUBE BRACKET
1.5	1	14019	AIR TUBE ASSY - 1 HOLE
1.5.1	1	08056	SINGLE HOLE AIR TUBE
1.5.2	1	14012	FITTING 90 DEG. 10-32 to 1/8" TUBE
1.5.3	1	FSSSD025P05	10-32 X 1/4 SET SCREW
1.6	1	FSHSB050B08	8-32 X 1/2 SHCS
1.7	1	FHHSE125P08	HEX HEAD BOLT, 1/4-20 x 1 1/4"
1.8	1	FFWSDP	FLAT WASHER 1/4
1.9	2	FLWSBP	LOCK WASHER 1/4
1.10	1	FHHSE100P05	HEX HEAD BOLT, 1/4-20 x 1"
2	2	LABN-0183-3	MOUNT PEEL EDGE HOLD DOWN
3	1	LABN-0184-4	FINGER, HOLD DOWN
4	2	SPH-1615	
6	1	SPR-1078	CATCH SPRING
7	6	FSHSB050B08	8-32 X 1/2 SHCS
8	4	FLWSBP	#8 LOCK WASHER
9	1	FSHSA075B08	SHCS, 8-32 X 0.75 LG

Loctite Application Note:
 277 is RED Loctite
 242 is BLUE Loctite
 538 is GREEN Loctite
 / is no Loctite applied

MATL	PART#	CAD FILE	TOLERANCES UNLESS OTHERWISE NOTED:	LOVESHAW 2206 EASTON TPK., SOUTH CANAAN, PA. PEEL EDGE ASSY
BT ST.	STD	PLOT DATE	X = ±.000 INCH .XX ±.015 XXX ±.005 X = ±1.0mm MACH F METRIC .XX ±.3mm .XXX ±.1mm F	
STAINLESS - NO FINISH		DO NOT SCALE PRINT	FRACTIONS 1/64	TITLE: 2206 EASTON TPK., SOUTH CANAAN, PA. PEEL EDGE ASSY DWG NO. SCALE MATERIAL CHECKED DRAWN brycef APPROVED

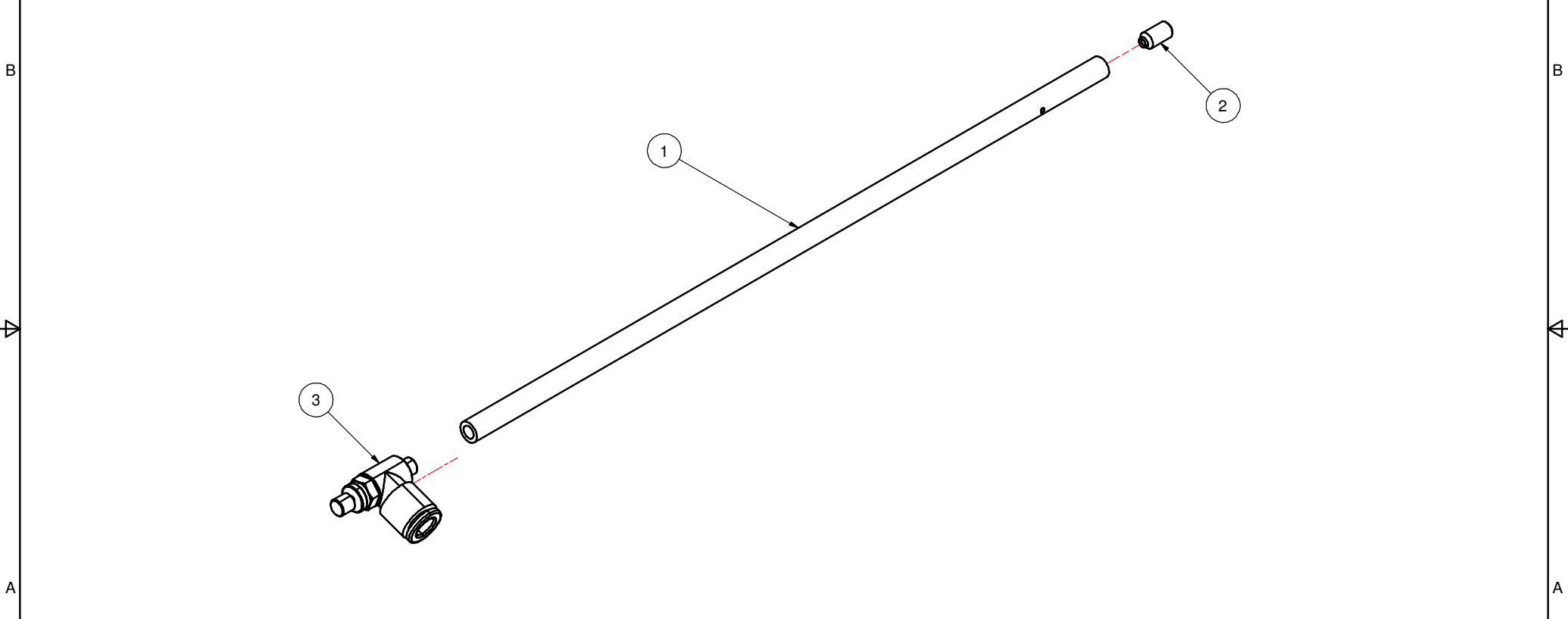
PNEUMATIC ASSEMBLIES

(FOR ALL MODELS)



Parts List			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	08056-SS	SINGLE (1) HOLE AIR TUBE
or 1	1	08056-SS-3	THREE (3) HOLE AIR TUBE
2	1	FSSSD037B05	10-32 X 3/8 SET SCREW
3	1	P6010-007A	FLOW CONTROL ELBOW - METER IN

REVISION HISTORY				
REV	DESCRIPTION	DATE	DESIGNER	APPROVED
A	08-192	9/25/08	A.L.S.	W.M.
B	ADDED 3-HOLE TUBE	12/21/2009	KK	

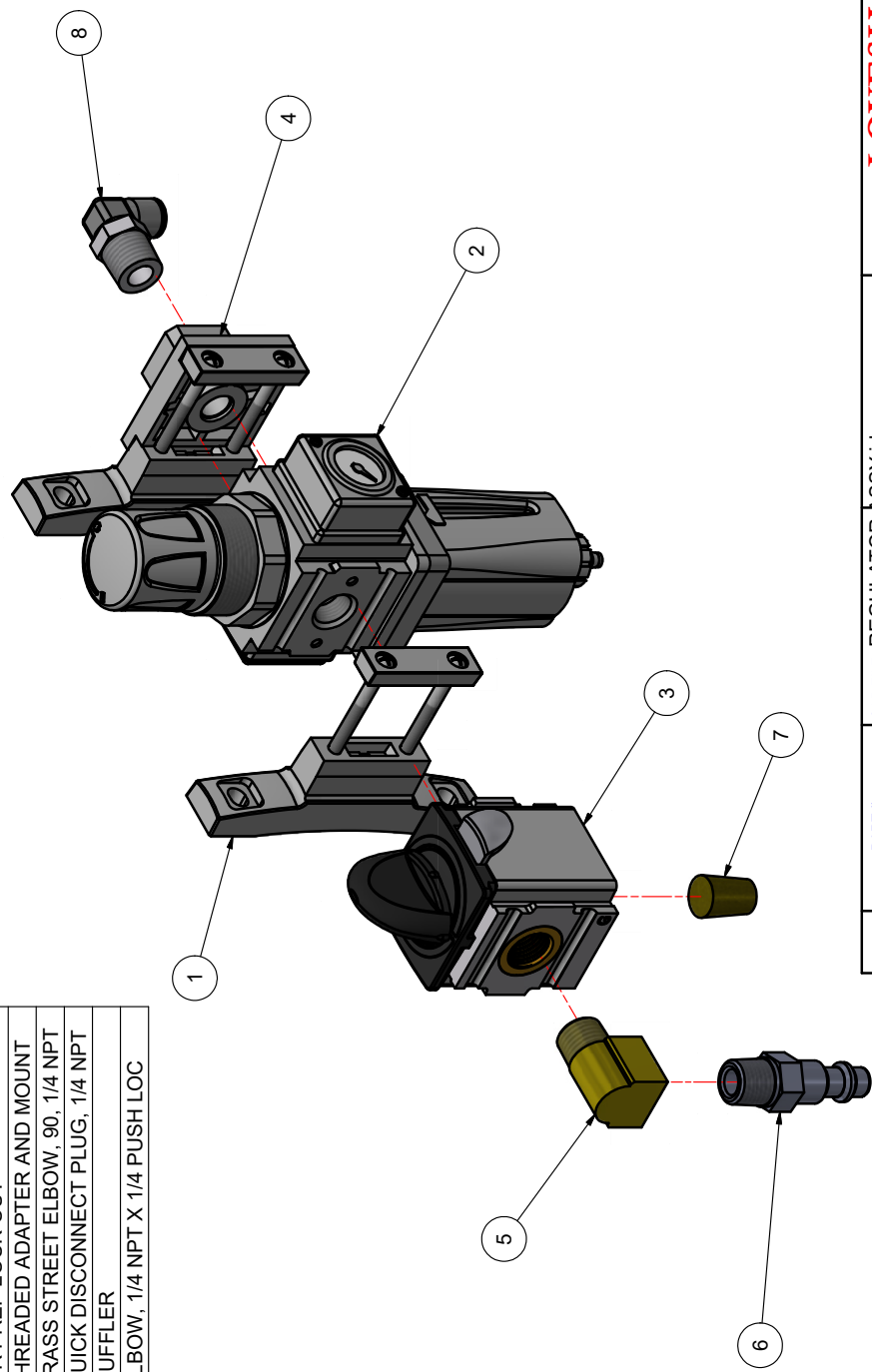


MATL	PART #	CAD FILE .14018-LT.idw	TOLERANCES UNLESS OTHERWISE NOTED: .X = ±.050 INCH .XX = ±.015 ANGLES ±1/2° .XXX = ±.005 .X = ±1.0mm MACH. FINISH ✓ METRIC .XX = ±.3mm .XXX = ±.1mm	LOVESHAW an <i>ITW</i> Company RT. 296, SOUTH CANAAN, PA.	
ST. ST.	STD	PLOT DATE 11/19/2007		TITLE AIR TUBE ASSEMBLY	
STAINLESS : NO FINISH		DO NOT SCALE PRINT	FRACTIONS ± 1/64	DWG NO .14018-LT	SCALE
<small>THIS DRAWING AND SUBJECT MATTER THEREON IS THE EXCLUSIVE PROPERTY OF LOVESHAW-ITW AND IS TO BE TREATED BY YOU AS CONFIDENTIAL PROPRIETARY INFORMATION. THIS DRAWING OR SUBJECT MATTER THEREOF SHALL NOT BE REPRODUCED OTHER THAN FOR YOUR OWN USE OR TO BE DISCLOSED TO OTHER WITHOUT THE EXPRESSED WRITTEN CONSENT OF LOVESHAW-ITW AND WILL BE RETURNED TO LOVESHAW-ITW UPON REQUEST.</small>				MATERIAL	CHECKED
				DRAWN ADAM	APPROVED ADAM

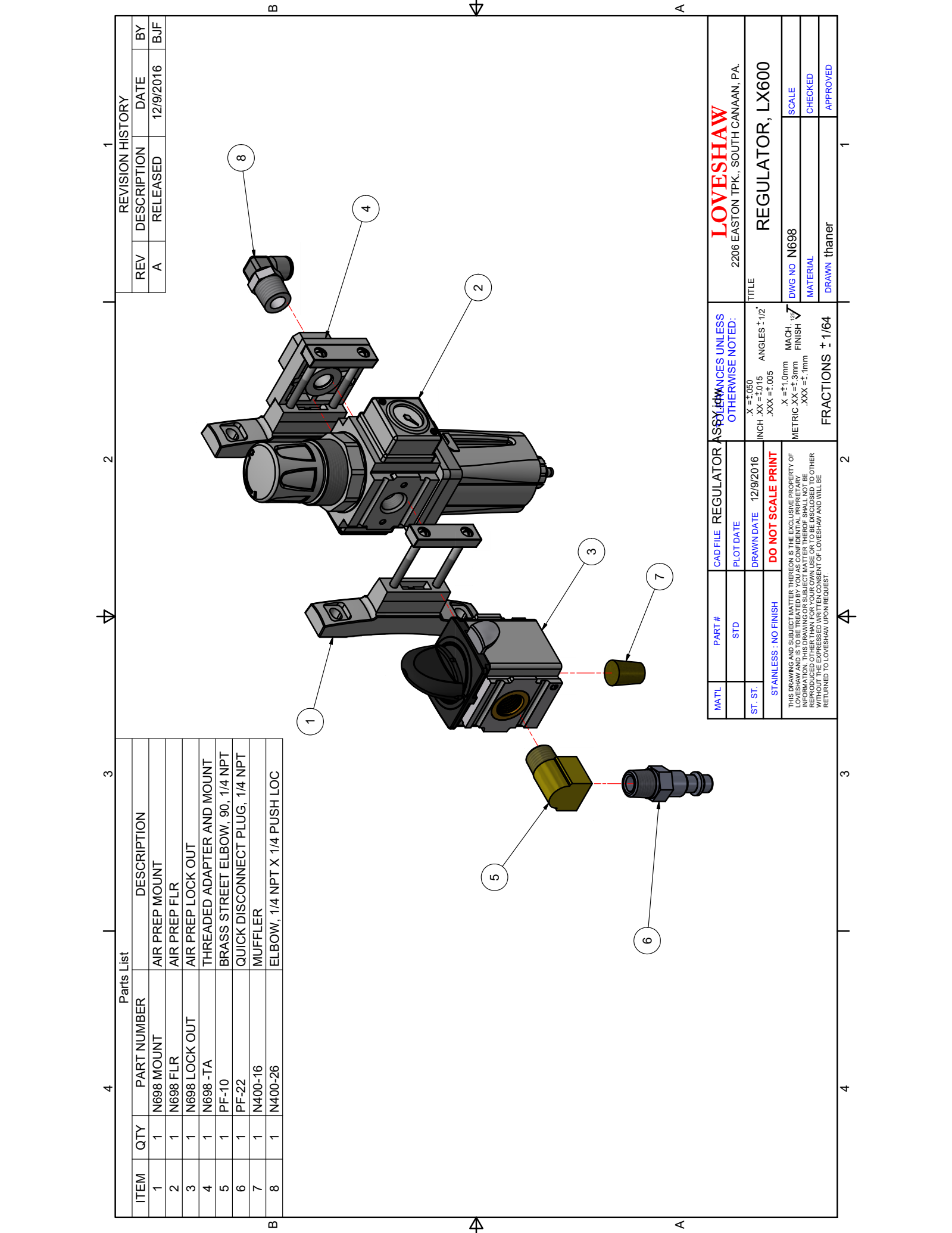
1 2 3 4

REVISION HISTORY			
REV	DESCRIPTION	DATE	BY
A	RELEASED	12/9/2016	BJF

Parts List		
ITEM	QTY	DESCRIPTION
1	1	AIR PREP MOUNT
2	1	AIR PREP FLR
3	1	AIR PREP LOCK OUT
4	1	THREADED ADAPTER AND MOUNT
5	1	BRASS STREET ELBOW, 90, 1/4 NPT
6	1	QUICK DISCONNECT PLUG, 1/4 NPT
7	1	MUFFLER
8	1	ELBOW, 1/4 NPT X 1/4 PUSH LOC



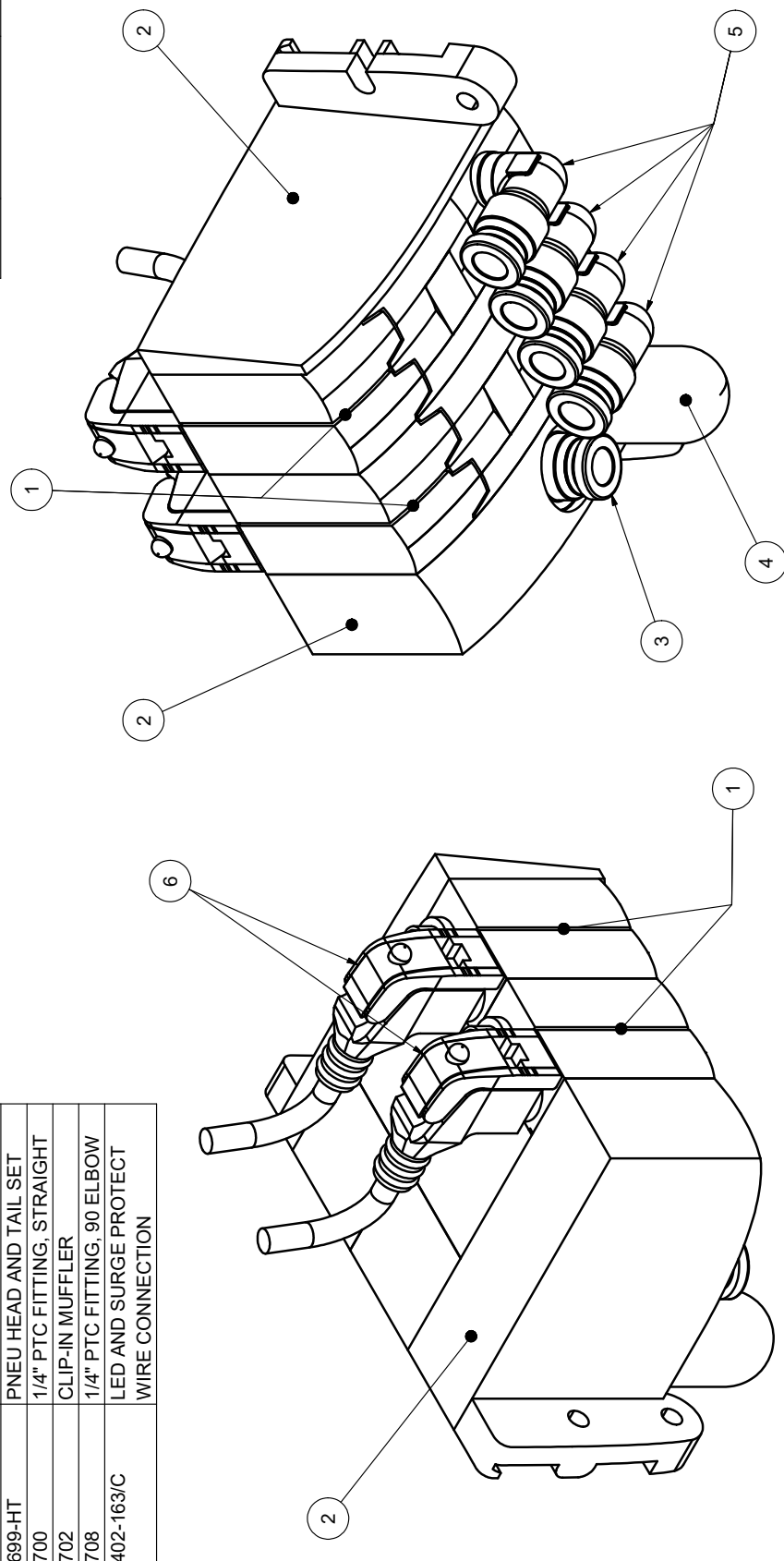
MATL	PART #	CAD FILE	REGULATOR ASSY	UNLESS NOTED:	LOVESHAW	2206 EASTON TPK., SOUTH CANAAN, PA.
ST. ST.	STD	PLOT DATE	12/9/2016	INCH .XX = ±.015 ANGLES ±.12°	TITLE	REGULATOR, LX600
STAINLESS : NO FINISH		DO NOT SCALE PRINT		.XXX = ±.005	DWG NO	N698
THIS DRAWING AND SUBJECT MATTER THEREON IS THE EXCLUSIVE PROPERTY OF LOVESHAW AND IS TO BE TREATED BY YOU AS CONFIDENTIAL PROPRIETARY INFORMATION. THIS DRAWING OR SUBJECT MATTER THEREOF SHALL NOT BE REPRODUCED OTHER THAN FOR YOUR OWN USE OR TO BE DISCLOSED TO OTHER PARTIES WITHOUT THE WRITTEN CONSENT OF LOVESHAW AND WILL BE RETURNED TO LOVESHAW UPON REQUEST.				MACH. FINISH	MATERIAL	DRAWN
				.X = ±1.0mm	SCALE	
				METRIC .XX = ±.3mm	CHECKED	
				.XXX = ±.1mm	APPROVED	
				FRACTIONS ± 1/64		



1 2 3 4

REVISION HISTORY			
REV	DESCRIPTION	DATE	BY
A	RELEASED	12/9/2016	BJF

Parts List		
ITEM	QTY	DESCRIPTION
1	2	N402-163
2	1	N699-HT
3	1	N700
4	1	N702
5	4	N708
6	1	N402-163/C

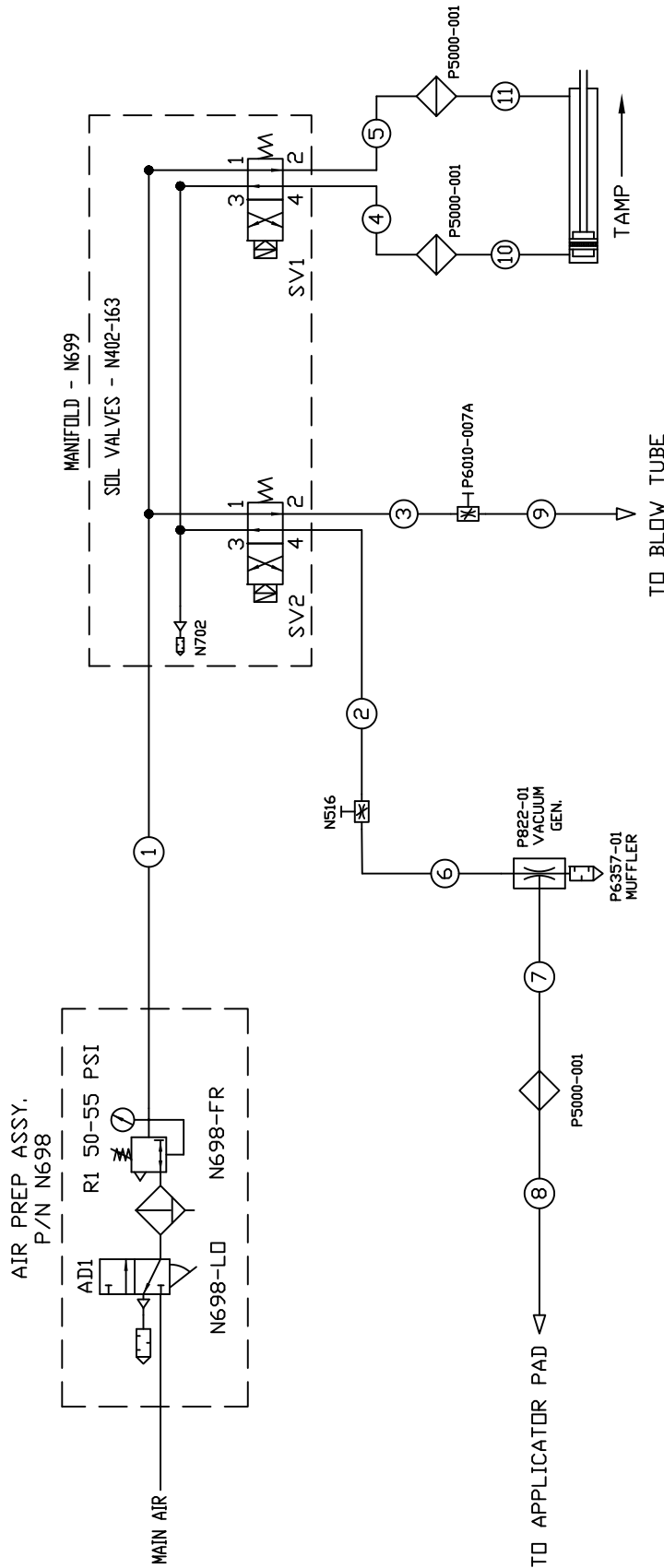


MATL	PART #	CAD FILE	N699 PNEU MANIFOLD	OTHERS UNLESS OTHERWISE NOTED:	LOVESHAW 2206 EASTON TPK., SOUTH CANAAN, PA.
STD	STD	PLOT DATE	12/9/2016		TITLE PNEU MANIFOLD, LX600
ST. ST.	STAINLESS : NO FINISH	DRAWN DATE	12/9/2016	X = ±.050 INCH .XX = ±.015 ANGLES ±.12° .XXX = ±.005 X = ±1.0mm MACH. FINISH METRIC .XX = ±.3mm .XXX = ±.1mm	DWG NO N699 MATERIAL DRAWN thaler
				FRACTIONS ± 1/64	SCALE CHECKED APPROVED

B A

PNEUMATIC DIAGRAM
(STRAIGHT TAMP MODELS)

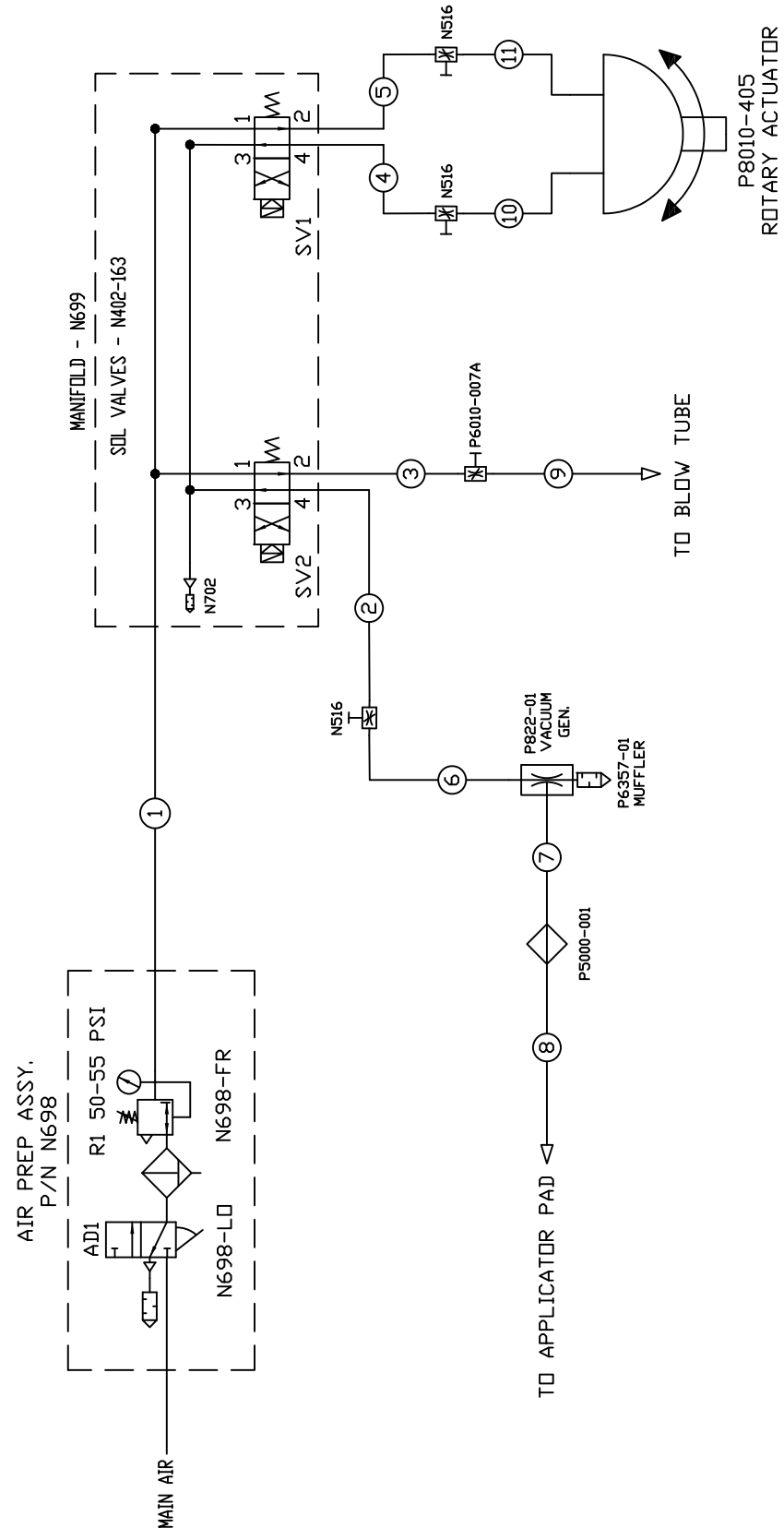
REVISION RECORD				
REV	DESCRIPTION	DATE	ATH	DR CK
A	RELEASED	12/19/16		RTR



MAT'L	PART #	CAD FILE: G86386	LOVESHW on TW Company RT. 296, SOUTH CANAAN, PA.	
ST. ST.	STD	PLOT DATE: 12/19/16 DRAWN DATE: 12/19/16	TITLE: PNEUMATIC SCHEMATIC LX1600 TAMP	
STAINLESS: NO FINISH		DO NOT SCALE PRINT	DWG. #: PNEU-0281-4	
<small> THIS DRAWING AND SUBJECT MATTER THEREON IS THE EXCLUSIVE PROPERTY OF LOVESHW-TW AND IS TO BE TREATED BY YOU AS CONFIDENTIAL PROPRIETARY INFORMATION. THIS DRAWING OR SUBJECT MATTER THEREON SHALL NOT BE REPRODUCED, COPIED, OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, WITHOUT THE EXPRESS WRITTEN CONSENT OF LOVESHW-TW AND WILL BE RETURNED TO LOVESHW-TW UPON REQUEST. </small>				
TOLERANCES UNLESS OTHERWISE NOTED:		<small> X. = ±.090 .XX = ±.005 .XXX = ±.001 X. = ±.10mm .XX = ±.05mm .XXX = ±.02mm ANGLES ±1/2° FRACTIONS ±1/64 INCH UNLESS OTHERWISE NOTED </small>	MATERIAL: PNEU-0281-4	
			DESIGNED:	APPROV'D:
			DRAWN: RTR	

PNEUMATIC DIAGRAM
**(DUAL TAMP – SWING ARM
MODEL)**

REVISION RECORD			
REV	DESCRIPTION	DATE	ATH
A	RELEASED	12/19/16	RTR

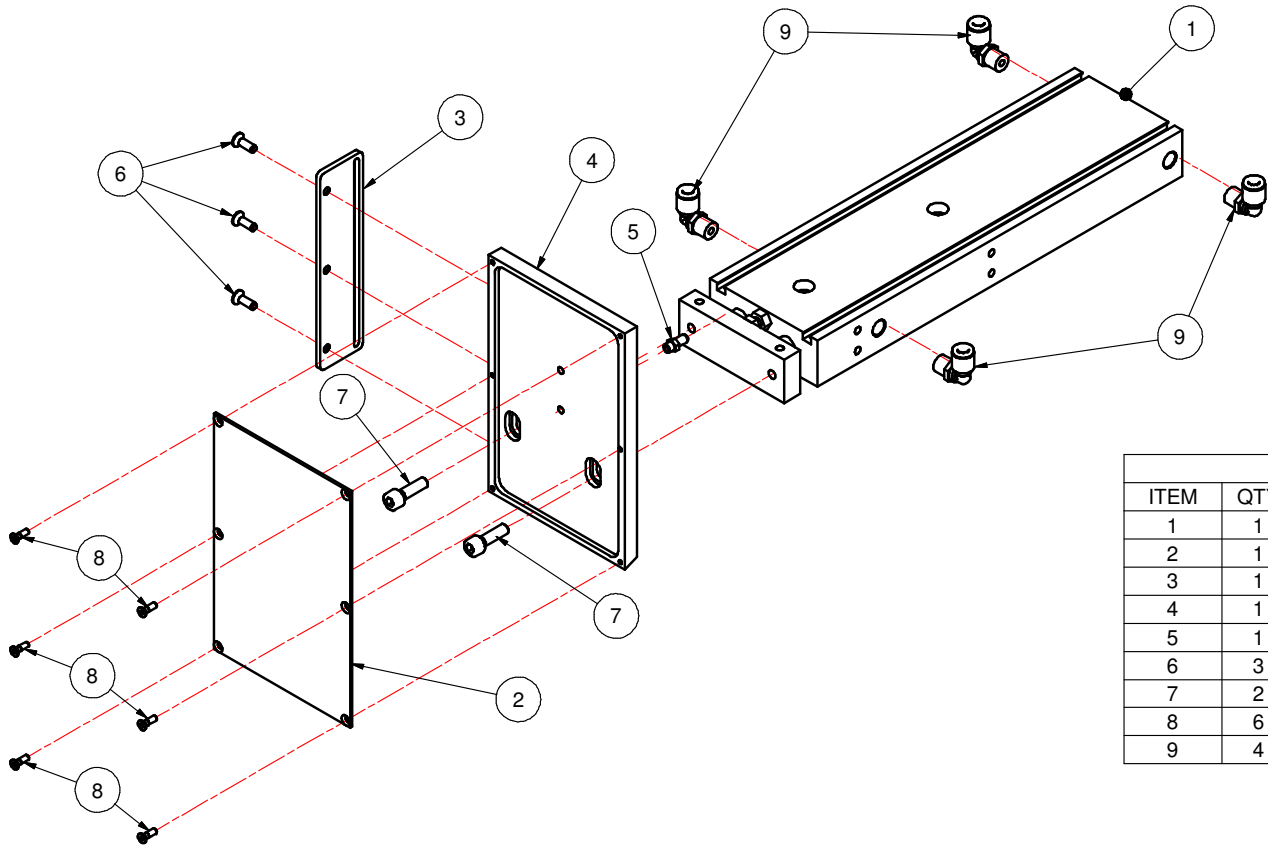


MAT'L	PART #	CAD FILE: C86387	TOLERANCES UNLESS OTHERWISE NOTED:
ST. ST.	STD	PLOT DATE: 12/19/16	INCH = ± .009 XXX = ± .005 X = ± .005
STAINLESS: NO FINISH		DRAWN DATE: 12/19/16	METRIC X = ± 1.0mm XX = ± .5mm XXX = ± .1mm
THIS DRAWING AND SUBJECT MATTER THEREON IS THE EXCLUSIVE PROPERTY OF LOVESHAW-TW AND IS TO BE TREATED BY YOU AS CONFIDENTIAL PROPRIETARY INFORMATION. THIS DRAWING OR SUBJECT MATTER THEREON SHALL NOT BE REPRODUCED, COPIED, OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, WITHOUT THE EXPRESS WRITTEN CONSENT OF LOVESHAW-TW AND WILL BE RETURNED TO LOVESHAW-TW UPON REQUEST.		ANGLES ± 1/2° FRACTIONS ± 1/64 MACHINE FINISH	
TITLE: PNEUMATIC SCHEMATIC		DWG. #: PNEU-0282-4	SCALE: N/A
DESIGNED:		DRAWN: RTR	APPRVD:

LOVESHAW an ITW Company		RT. 296, SOUTH CANAAN, PA.	
P8010-405 ROTARY ACTUATOR			

APPLICATOR ASSEMBLIES
(STRAIGHT TAMP MODELS)

REVISION HISTORY			
REV	DESCRIPTION	DATE	BY
A		10/31/2008	AR
B	ADDED ITEM 10	04/27/2009	KK



Parts List			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	P8010-416	TWIN ROD AIR CYLINDER
2	1	140LT-046	VACUUM GRID
3	1	MLT80-042	SENSOR MOUNT PLATE
4	1	MLT80-033	VACUUM CHAMBER
5	1	14030	FITTING
6	3	FFHSB050B05	FLAT HD.CAP SCREW #8-32 x 1/2
7	2	FSHMG020P10	SOC. HD. CAP SCREW M6 X 20 LG.
8	6	FFHMD010P10	FLAT HD. CAP SCREW M3 X 10 LG.
9	4	P4010-34S	LOW PROFILE ELBOW

MATL	PART #	CAD FILE TP-LX80-40X80
C.R.S.	STD	PLOT DATE
ST. ST.		DRAWN DATE 10/31/2008
STAINLESS : NO FINISH		DO NOT SCALE PRINT
<small>THIS DRAWING AND SUBJECT MATTER THEREON IS THE EXCLUSIVE PROPERTY OF LOVESHAW-ITW AND IS TO BE TREATED BY YOU AS CONFIDENTIAL PROPRIETARY INFORMATION. THIS DRAWING OR SUBJECT MATTER THEREOF SHALL NOT BE REPRODUCED OTHER THAN FOR YOUR OWN USE OR TO BE DISCLOSED TO OTHER WITHOUT THE EXPRESSED WRITTEN CONSENT OF LOVESHAW-ITW AND WILL BE RETURNED TO LOVESHAW-ITW UPON REQUEST.</small>		

TOLERANCES UNLESS OTHERWISE NOTED:

.X = ±.050
 INCH .XX = ±.015 ANGLES ±1/2°
 .XXX = ±.005

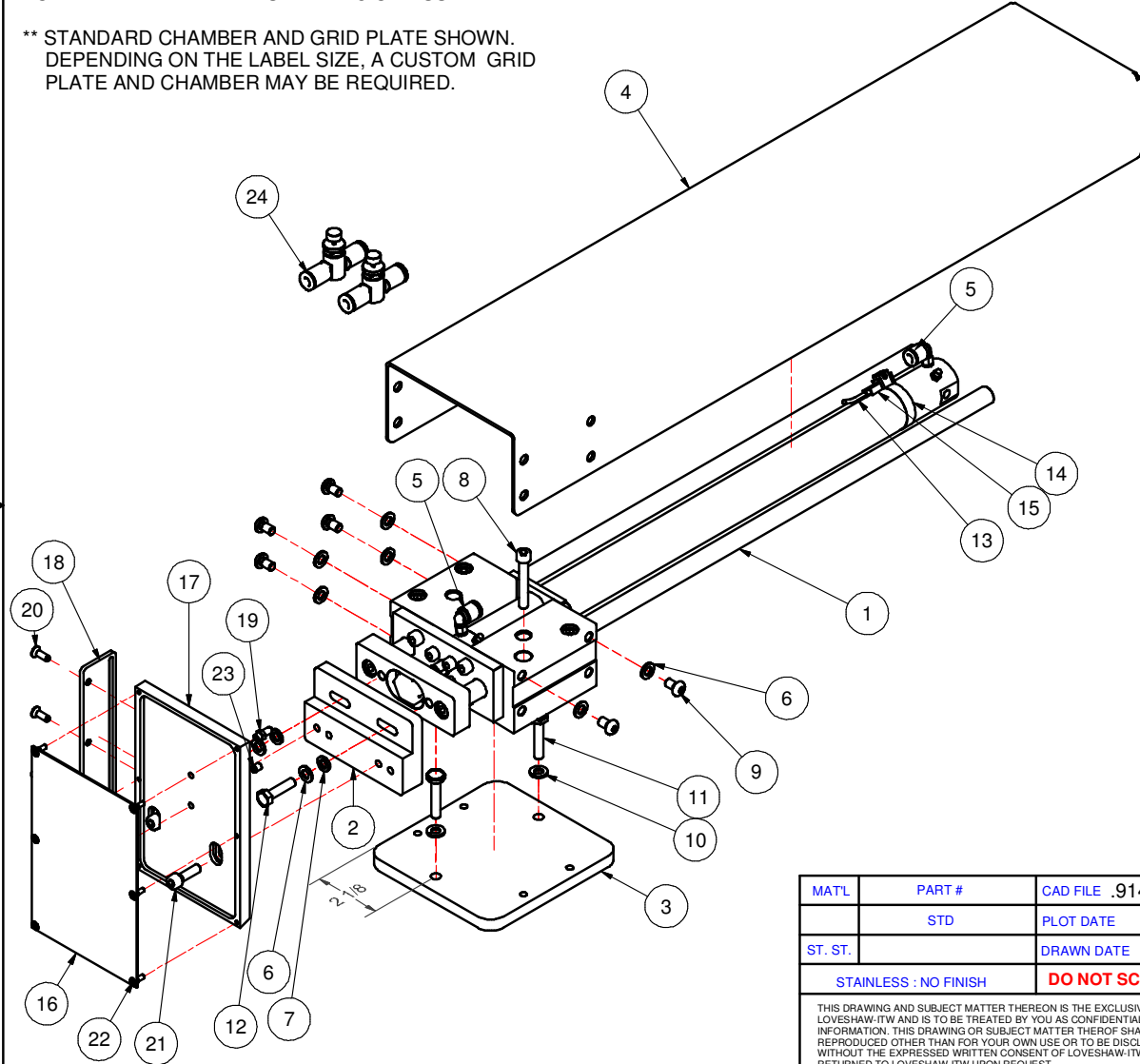
.X = ±1.0mm MACH. FINISH ✓
 METRIC .XX = ±.3mm
 .XXX = ±.1mm

FRACTIONS ± 1/64

LOVESHAW an <i>ITW</i> Company RT. 296, SOUTH CANAAN, PA.	
TITLE	
DWG NO	SCALE
MATERIAL	CHECKED
DRAWN amy	APPROVED

NOTE: RIGHT HAND (STANDARD) IMAGE SHOWN.
FOR LEFT HAND - REVERSE PART 3 ON ASSEMBLY.

** STANDARD CHAMBER AND GRID PLATE SHOWN.
DEPENDING ON THE LABEL SIZE, A CUSTOM GRID
PLATE AND CHAMBER MAY BE REQUIRED.



REVISION HISTORY			
REV	DESCRIPTION	DATE	BY
A	RELEASED	9/4/2009	KK

Parts List			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	P8010-420	AIR CYL. 350mm (13.75") STROKE
OR			
1	1	P8010-421	AIR CYL., 500mm (19.68") STROKE
2	1	LABN-0013-4	INTERFACE BLOCK, EXT. CYL.
3	1	LABN-0014-4	INTERFACE PLATE, EXT CYL LX80
4	1	LABN-0015A-4	GUARD, EXT. CYL. (350mm STROKE)
OR			
4	1	LABN-0015-4	GUARD, EXT. CYL. (500mm STROKE)
5	2	14012	1/4" HOSE X 10-32 TH 90 DEG. FITTING
6	8	FLWMGP	LOCK WASHER M6
7	2	FFWMGP	FLAT WASHER M6
8	4	FSHMG040P10	SHCS M6 X 1.0 X 40 LG.
9	6	FBHMG010P10	BUTT. HD. CAP SCERW M6 X 10 LG.
10	2	FLWSDP	LOCK WASHER 1/4
11	2	FHHSE125P05	HHCS, 1/4-20 X 1.25
12	2	FHHMG025P10	HHCS M6 X 25
13	1	E2000-127	SENSOR, AUTO SWITCH
14	1	P0010-037	STRAP, SENSOR (25mm BORE)
15	1	P0010-038	ADAPTER PLATE, SENSOR
16	REF.	140LT-046 **	VACUUM GRID
17	REF.	MLT80-033 **	VACUUM CHAMBER
18	1	MLT80-042	SENSOR MOUNT PLATE
19	1	14030	FITTING
20	3	FFHSB050B05	FLAT HEAD CAP SCREW #8-32 x 1/2
21	2	FSHMG020P10	SHCS M6 X 20
22	6	FFHMD010P10	FLAT HEAD CAP SCREW M3 X 10 LG.
23	1	FSSSD025P05	10-32 X 1/4 SET SCREW
24	2	P6010-002	FLOW CONTROL, IN-LINE 1/4"
25	2	P4010-007 (NOT SHOWN)	PLUG, 1/4"

MATL	PART#	CAD FILE .914-LX-350-500.itw	REFERENCES UNLESS OTHERWISE NOTED:
	STD	PLOT DATE	
ST. ST.		DRAWN DATE 9/4/2009	
STAINLESS : NO FINISH		DO NOT SCALE PRINT	
<small>THIS DRAWING AND SUBJECT MATTER THEREON IS THE EXCLUSIVE PROPERTY OF LOVESHAW-ITW AND IS TO BE TREATED BY YOU AS CONFIDENTIAL PROPRIETARY INFORMATION. THIS DRAWING OR SUBJECT MATTER THEREOF SHALL NOT BE REPRODUCED OTHER THAN FOR YOUR OWN USE OR TO BE DISCLOSED TO OTHER WITHOUT THE EXPRESSED WRITTEN CONSENT OF LOVESHAW-ITW AND WILL BE RETURNED TO LOVESHAW-ITW UPON REQUEST.</small>			
		X = ±.050 INCH .XX = ±.015 ANGLES ±1/2° .XXX = ±.005 X = ±1.0mm MACH. FINISH METRIC .XX = ±.3mm .XXX = ±.1mm	
		FRACTIONS ± 1/64	

LOVESHAW an ITW Company RT. 296, SOUTH CANAAN, PA.	
TITLE EXTENDED STROKE ASSY, LX SERIES	
DWG NO .914-LX-350-500	SCALE
MATERIAL	CHECKED
DRAWN KENK	APPROVED

APPLICATOR ASSEMBLY
**(DUAL TAMP – SWING ARM
MODEL)**

4

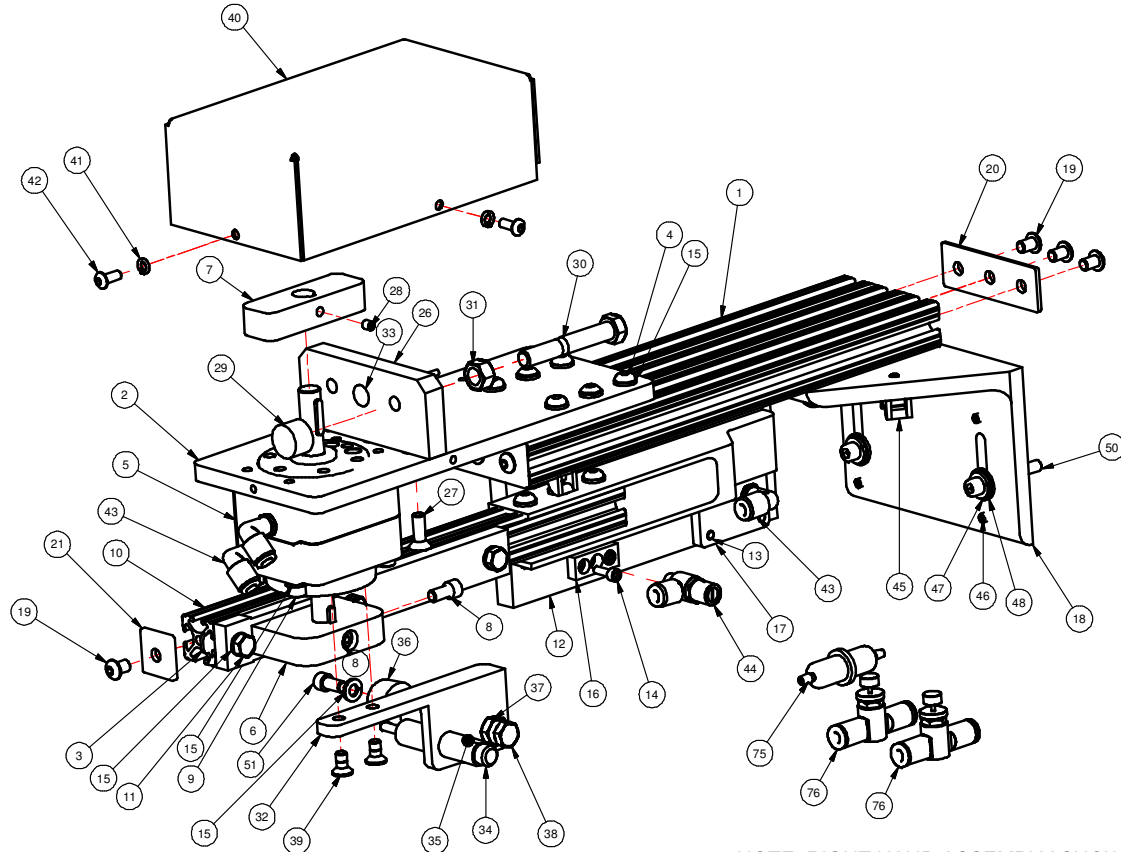
3

2

1

REVISION HISTORY			
REV	DESCRIPTION	DATE	BY
A	RELEASED	10/14/2009	KK

Parts List			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	R000-004/BLK_	EXTRUSION, 1" X 3", BLACK
2	1	LABN-0017-4	MOUNTING PLATE, ROTARY
3	5	B0020-016	DOUBLE T-NUT, 1/4-20 THREADS
4	6	FBHSE075P05	BUTTON HEAD, 1/4-20 X 3/4
5	1	P8010-405	ROTARY ACTUATOR
6	1	M0040-049	ACTUATOR BLOCK
7	1	M0040-050	ACTUATOR STOP BLOCK
8	2	FSHSE050P05	SOCKET HEAD SCREW, 1/4-20 X 1/2
9	4	FSHSE225P05	SOCKET HEAD SCREW, 1/4-20 X 2.25
10	1	R0000-003/BLK_	EXTRUSION, 1" X 1", BLACK
11	3	FHHSE075P05	HEX HEAD SCREW, 1/4-20 X 3/4
12	1	14000-XXX	APPLICATOR PAD, CUSTOMER SPECIFIC
13	4	FSHSD050P05	SOCKET HEAD SCREW, 10-32 X 1/2
14	2	FSHSD050P05	SOCKET HEAD SCREW, 8-32 X 1/2
15	26	FLWSDP	LOCK WASHER 1/4
16	1	M0020-267	FITTING ATTACHMENT PLATE
17	1	LABN-0001-4	APPL. PAD MOUNTING ARM
18	1	LABN-0003R-4	MOUNTING ANGLE (RIGHT HAND)
OR 18	1	LABN-0003L-4	MOUNTING ANGLE (LEFT HAND)
19	7	FBHSE037B05	Button Head, Hex, 0.25 UNC x 0.625
20	2	B0020-060	END CAP
21	1	B0020-005	END CAP
22	6	B0020-039	T-NUT, 3 HOLE
23	6	FBHSE050P05	1/4-20 BHS
24	8	FBHSE075S05	Button Head, Hex, 0.25 UNC x 0.625
25	1	LABO-0006-4	SUPPORT PLATE
26	1	LABN-0018-4	MOUNT, PROXIMITY SENSOR
27	3	FHHSE075P05	FLAT HEAD SCREW 1/4-20 X 3/4"
28	1	FSSSD025P05	10-32 X 1/4 SET SCREW, WITH PATCH
29	1	M0160-202	STOP CUSHION
30	1	FHHSJ250P05	HEX BOLT 3/8-16 X 2 1/2
31	1	FHFNSJP	HEX NUT 3/8-16
32	1	LABN-0019R-4	BRACKET, SHOCK AND STOP (RIGHT HAND)
OR 32	1	LABN-0019L-4	BRACKET, SHOCK AND STOP (LEFT HAND)
33	1	A219-PF-6 and A219-PF-6/CON	PROXIMITY SENSOR WITH QD CONNECTOR
34	1	B0140-018	SHOCK ABSORBER
35	1	LABO-0005-3	STOP ADJUST BRACKET
36	1	F3MB	RUBBER BUMPER
37	2	FHJNSHP	5/16-18 HEX JAM NUT
38	1	FHHSH125P05	HEX HEAD, FULL THREAD, 5/16-18 X 1.25
39	2	FFHMG012P10	FHCS M6x12 LG.
40	1	LABN-0020-4	GUARD, ROTARY
41	3	FLWSCP	#10 LOCK WASHER
42	5	FBHSD050P05	BUTTON HEAD, HEX, 10-32 x 0.5
43	3	14441	FITTING, ELBOW
44	1	P6010-004	FLOW CONTROL VALVE
45	2	AH206	WIRE / HOSE CRADLE
46	4	FSSSD050B05	10-32 X 1/2 SET SCREW
47	2	FLWSEP	LOCK WASHER 5/16
48	2	FFWSEP	FW 5/16
49	1	B0020-006	ECONO T-NUT 10-32
50	2	FSHSE200P05	1/4-20 X 2 SHCS
51	1	FSHSE050B08	SHCS, 1/4-20 x 1/2" LG.
75	1	P5000-001 (4-PACK P/N 14199)	VACUUM LINE FILTER
76	2	P6010-002	FLOW CONTROL, IN-LINE 1/4"



NOTE: RIGHT HAND ASSEMBLY SHOWN.

MATL	PART #	CAD FILE .914-LX-DT.idw
N/A	STD	PLOT DATE 10/14/2009
ST. ST.	N/A	DRAWN DATE 10/14/2009
STAINLESS : NO FINISH		DO NOT SCALE PRINT
THIS DRAWING AND SUBJECT MATTER THEREON IS THE EXCLUSIVE PROPERTY OF LOVESHAW-ITW AND IS TO BE TREATED BY YOU AS CONFIDENTIAL PROPRIETARY INFORMATION. THIS DRAWING OR SUBJECT MATTER THEREOF SHALL NOT BE REPRODUCED OTHER THAN FOR YOUR OWN USE OR TO BE DISCLOSED TO OTHER WITHOUT THE EXPRESSED WRITTEN CONSENT OF LOVESHAW-ITW AND WILL BE RETURNED TO LOVESHAW-ITW UPON REQUEST.		

TOLERANCES UNLESS OTHERWISE NOTED:	
X = ±.050	ANGLES ±1/2°
INCH .XX = ±.015	
.XXX = ±.005	
X = ±1.0mm	MACH. FINISH
METRIC .XX = ±.3mm	
.XXX = ±.1mm	
FRACTIONS ± 1/64	

LOVESHAW an <i>ITW</i> Company RT. 296, SOUTH CANAAN, PA.	
TITLE DUAL TAMP APPLICATOR ASSEMBLY	
DWG NO .914-LX-DT	SCALE 3:8
MATERIAL N/A	CHECKED
DRAWN KENK	APPROVED

4

3

2

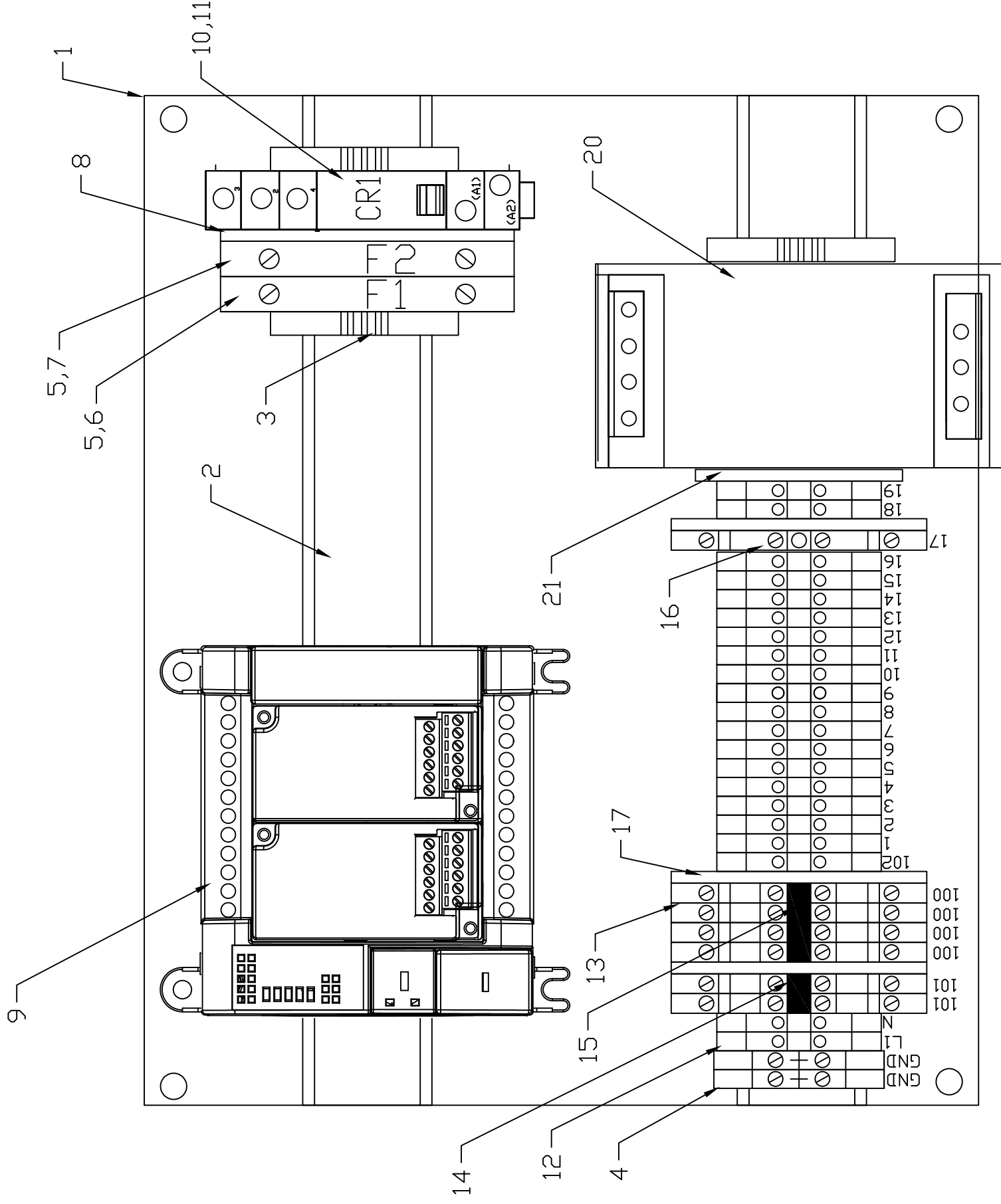
1

ELECTRICAL ASSEMBLY
AND SCHEMATICS FOR

(STRAIGHT TAMP
And
DUAL TAMP – SWING ARM
MODELS)

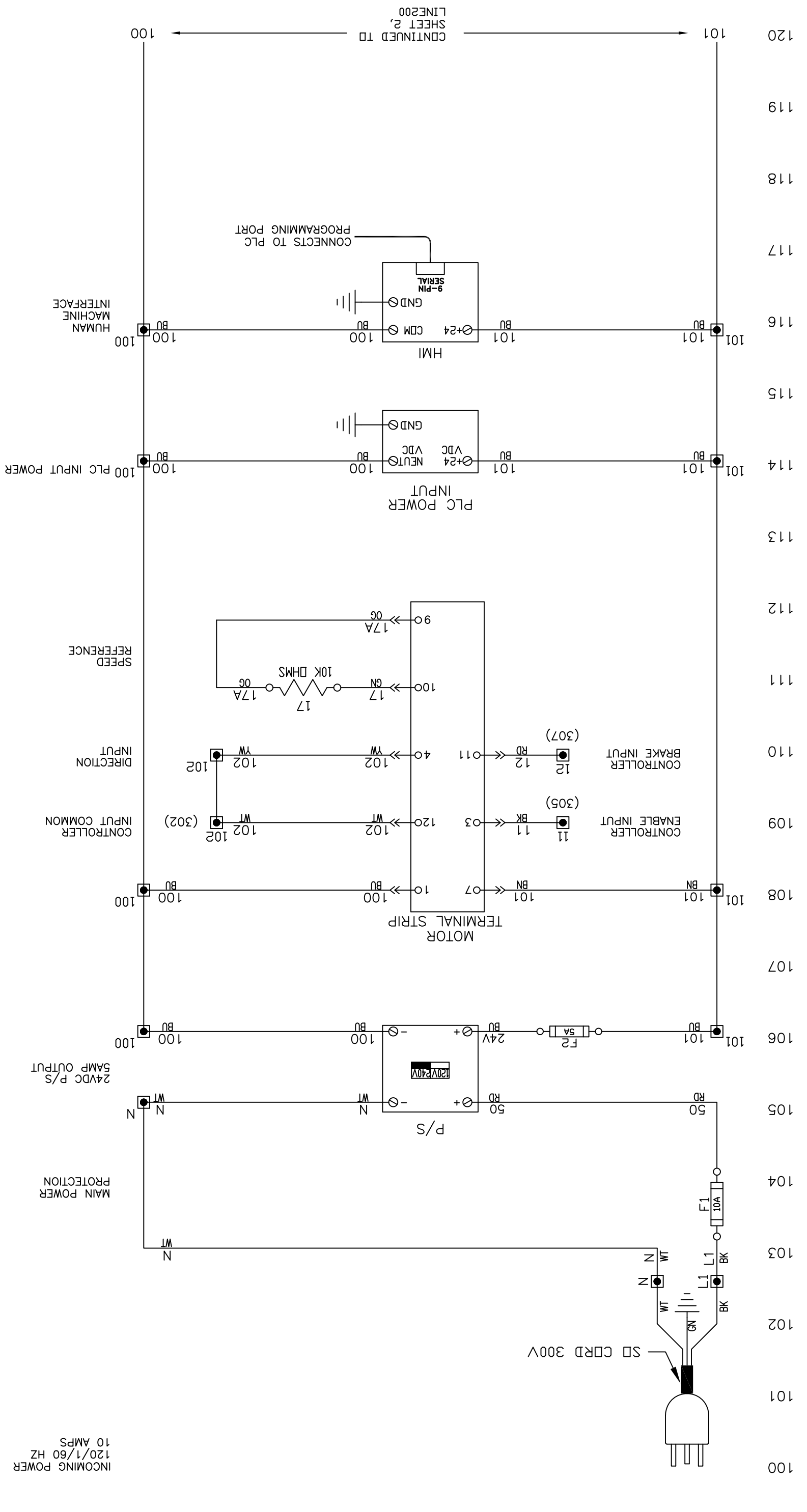
REVISION RECORD

REV	DESCRIPTION	DATE	ATH	DR	CK
A	RELEASED	03/12/14			WM



KEY	PART NUMBER	PART DESCRIPTION
1	A100N-1210P	ELECTRICAL PANEL
2	A209-AB-2	DIN RAIL
3	A128-AB-ERL35	TERMINAL ANCHOR
4	A124-AB-JG4	GROUND BLOCK
5	A125BH-AB-DIN	FUSE HOLDER
6	A125SB-10-326	FUSE, 10 AMPS, SLOW BLOW
7	A125SB-5-326	FUSE, 5 AMPS, SLOW BLOW
8	A128B-AB16	FUSE BARRIER
9	A241AB-830-1	PLC
10	A184-AB-2	RELAY BASE
11	A183-AB-7-24VDC	RELAY, 24VDC
12	A124-AB-J3	SINGLE TERMINAL BLOCK
13	A124-AB-JD3C	DOUBLE TERMINAL BLOCK
14	A124-AB-CJS-2	2 POLE JUMPER
15	A124-AB-CJJ-10	10 POLE JUMPER
16	A124-AB-J3-RES7	SINGLE TERM. W/10K OHM RESISTOR
17	A128-AB-PPJD3	BARRIER PLATE
18	A124-AB-MARK-ST	TERMINAL MARKER CARD
19	A124-AB-MARK-DT	TERMINAL MARKER CARD
20	A268PS-31	24VDC / 5A POWER SUPPLY
21	A128-AB-EBJ3	TERMINAL END BARRIER

TOLERANCES EXCEPT AS NOTED	THE LOVESHAW CORPORATION RT 296, SOUTH CANAAN, PA.
DECIMAL (3 PLC) +/- .005	TITLE: ELECTRICAL PANEL ASSEMBLY LX600DT / T
FRACTIONAL +/- 1/64	DWG. NO. ED2702-MICRO830 SCALE: 3 : 4
ANG. - 1/2°	MATERIAL: COMMERCIAL DATE: 09/25/17
	DESIGNED: MENTA DRAWN: WM APPRVD: --



WIRE CONNECTION KEY

100 TERMINAL BLOCK LOCATED ON TERMINAL STRIP.

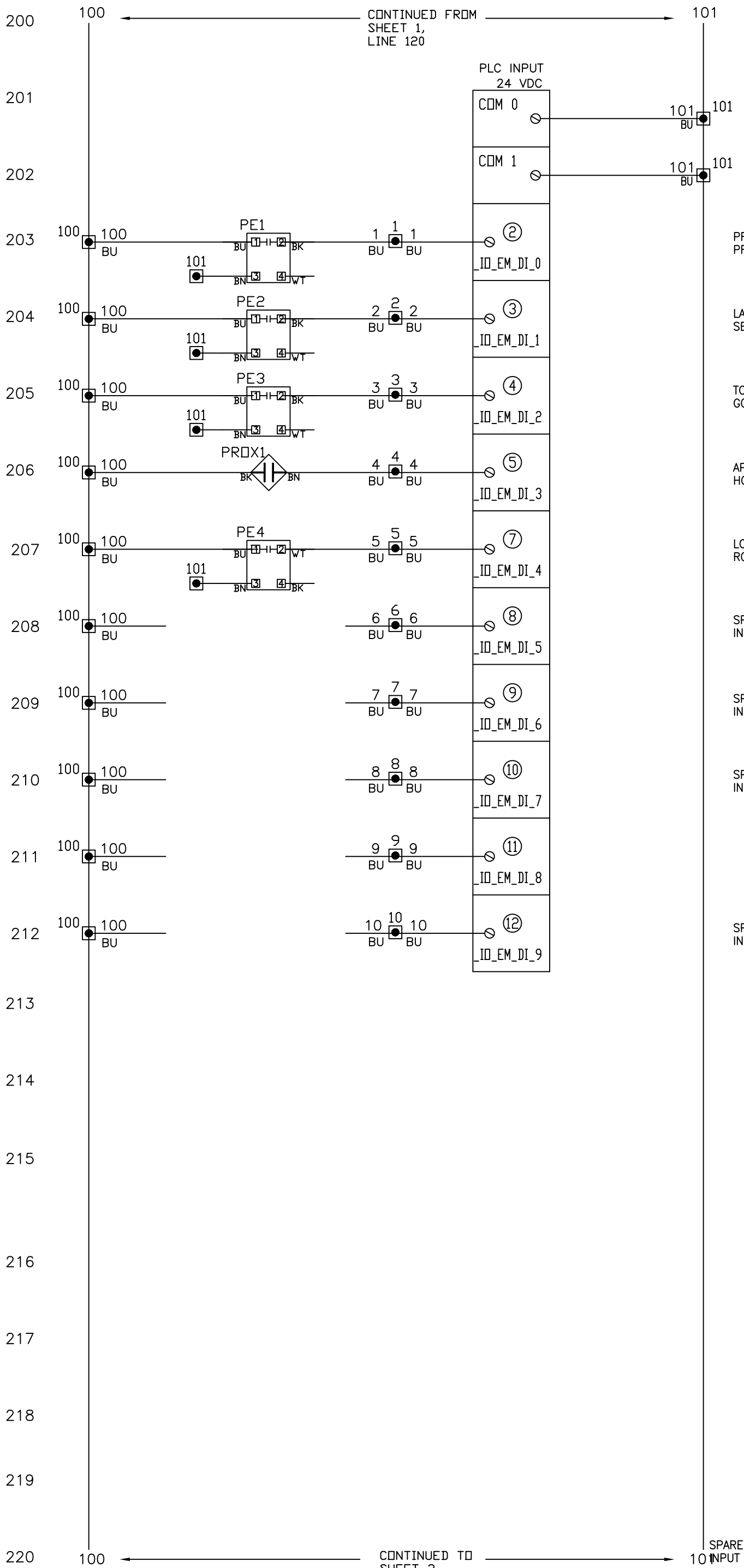
100 WIRE CONNECTION ON ELECTRICAL COMPONENT.

- WIRING NOTES:**
1. WIRE COLORS ARE AS NOTED.
 2. AC CONTROL WIRE MIN. 18 AWG.
 3. DC CONTROL WIRE MIN 20 AWG.
 4. MOTOR WIRE MIN. 16 AWG.

TOLERANCES EXCEPT AS NOTED		THE LOVESHAW CORPORATION	
RT 296, SOUTH CANNAN, PA.		TITLE: ELECTRICAL SCHEM. SHEET 1 OF 3	
DECIMAL (3 PLC)	+/- .005	LX600T/DT - MICRO 830	
FRACTIONAL	+/- 1/64	DWG. NO. ED2701S1	MICRO830
ANG. - 1/2°	DESIGNED: MENTA	MATERIAL: N/A	SCALE: N/A
	DRAWN: WM	DATE: 09/25/17	APPRVD: --

INCOMING POWER
120/1/60 HZ
10 AMPS

CONTINUED TO
SHEET 2,
LINE 200



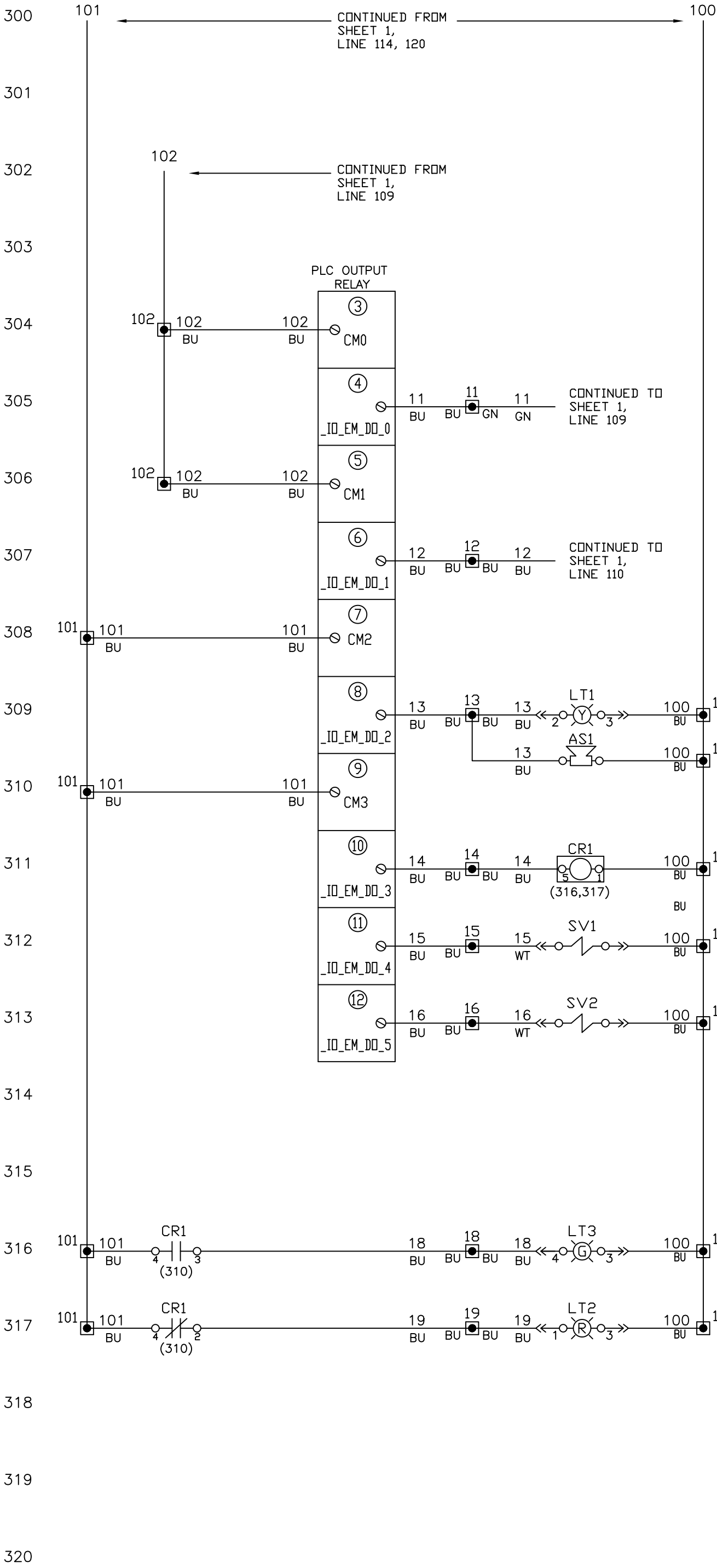
THE LOVESHAW CORPORATION RT 296, SOUTH CANAAN, PA.	
TOLERANCES EXCEPT AS NOTED	DECIMAL (3 PLC) +/- .005
FRACATIONAL	+/- 1/64
ANG. - 1/2°	
TITLE: ELECTRICAL SCHEM. SHEET 2 OF 3 LX600T/DT - MICRO 830	
DWG. NO. ED2701S2	MICRO830
MATERIAL: N/A	SCALE: N/A
DESIGNED: MENTA	DATE: 09/25/17
DRAWN: WM	APPRVD: --

- WIRING NOTES:
1. WIRE COLORS ARE AS NOTED.
 2. AC CONTROL WIRE MIN. 18 AWG.
 3. DC CONTROL WIRE MIN 20 AWG.
 4. MOTOR WIRE MIN. 16 AWG.

WIRE CONNECTION KEY	
100	TERMINAL BLOCK LOCATED ON TERMINAL STRIP.
100	WIRE CONNECTION ON ELECTRICAL COMPONENT.

PRODUCT PRESENT
 LABEL GAP SENSOR
 TOUCH AND GO SENSOR
 APPLICATION CYLINDER HOME SENSOR
 LOW LABEL ROLL
 SPARE INPUT
 SPARE INPUT
 SPARE INPUT
 SPARE INPUT

SPARE INPUT



CONTINUED FROM SHEET 1, LINE 114, 120

CONTINUED FROM SHEET 1, LINE 109

CONTINUED TO SHEET 1, LINE 109

CONTINUED TO SHEET 1, LINE 110

THE LOVESHAW CORPORATION RT 296, SOUTH CANAAN, PA.			
TOLERANCES EXCEPT AS NOTED	DECIMAL (3 PLC) +/- .005	FRACTIONAL +/- 1/64	ANG. - 1/2°
TITLE: ELECTRICAL SCHEM. SHEET 3 OF 3		DWG. NO. ED2701S2 MICRO830	DATE: 09/25/17
RT 296, SOUTH CANAAN, PA.		LX600T/DT - MICRO 830	SCALE: N/A
DESIGNED: MENTA		DRAWN: WM	APPRVD: --

RELAY OUTPUT COMMON

DC MOTOR CONTROL START / STOP

RELAY OUTPUT COMMON

DC MOTOR CONTROL BRAKE

RELAY OUTPUT COMMON

LOW LABEL INDICATOR

OPTIONAL SOUNDER

RELAY OUTPUT COMMON

STATUS CONTROL RELAY

LABEL APPLICATOR SOLENOID VALVE

LABEL VAC / BLOW SOLENOID VALVE

LABLER RUNNING INDICATOR

WEB BREAK INDICATOR

WIRING NOTES:
1. WIRE COLORS ARE AS NOTED.
2. AC CONTROL WIRE MIN. 18 AWG.
3. DC CONTROL WIRE MIN 20 AWG.
4. MOTOR WIRE MIN. 16 AWG.

WIRE CONNECTION KEY	
100	TERMINAL BLOCK LOCATED ON TERMINAL STRIP.
100	WIRE CONNECTION ON ELECTRICAL COMPONENT.

PLC PROGRAM
Micro830 PLC

**(STRAIGHT TAMP MODELS
and
DUAL TAMP – SWING ARM
MODELS)**

**(Note: Call Factory for an
Electronic Copy of the Program)**
