

## Bedford Peel & Stick® Applier model 52-B



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## Safety

**Read this section before using the equipment. This section contains recommendations and practices applicable to the safe installation, operation, and maintenance of the product described in this document. Additional safety information, in the form of task-specific safety alert messages, appears as appropriate throughout this document.**

**Be sure the following safety instructions are read, understood, and become a part of daily practice when operating or maintaining the closure equipment.**

1. Do not attempt to operate the closure equipment until you understand its function.
2. Be sure all guards and safety switches are in place before operating machine.
3. Keep all foreign material away from the drive system.
4. Keep fingers out of the stamping block and feed roller area.
5. Disconnect the power cord before making any equipment adjustments or maintenance. All moving parts must be completely stopped.
6. After any adjustment, cycle the machine a few times without tie material to ensure proper adjustment has been made.

### **Responsibilities of the Equipment Owner**

Equipment owners are responsible for managing safety information, ensuring that all instructions and regulatory requirements for use of the equipment are met, and for qualifying all potential users.

## 1.0 Specifications

### 1.1 Closure

- A. The Peel & Stick® Applier machine is a tabletop machine designed to apply a Peel & Stick® closure to a bag or other product.
- B. The Peel & Stick® Applier model 52-B uses .315" (0.80cm) material and comes in 1,500 ft spools.

### 1.2 Principal of Operation

- A. The machine is electronically controlled by a PLC. The PLC is equipped with an HMI touchscreen that allows the operator to run various tie length, adjust clamp time, and count the number of closures that have been applied.
- B. After the bag is inserted into the slot in the front of the Applier, depress the foot switch. The tie is cut to the required length and applied to the bag.
- C. Then a set of feed rollers advance the tie material off the spool and into the guide blocks. The release liner on the tie material is removed and collected on the spool located on the lower front of the machine.
- D. Once this process of cutting and applying the closure is complete, the applier is then ready for another bag to be inserted.

## 2.0 Installation

### 2.1 Machine Inspection

- A. Remove machine from shipping container and examine for damage. If damaged, notify carrier immediately.
- B. Remove loose parts and service manual from shipping container.

### 2.2 Power Requirements

- A. Standard electrical specifications for the Peel & Stick® Applier model 52-B machine are: 120 VAC, 15 Amp, 1 phase, 60 Hz  
*(Optional electrical specifications are: 240 VAC, 15 Amp, 1 phase, 50-60 Hz)*
- B. Be sure machine is connected to building electrical safety ground to avoid shock hazard.

### 2.3 Machine Set Up

- A. Add 0.1 oz. (3ml) of light mineral oil to Wicked Oiler. Do not overfill. *(Reference Section 4.2)*
- B. Connect machine to a compressed air supply of at least 100 psi. Then check the pressure regulator on the machine. The regulator should already be set at 80 psi. Adjust if needed. Total compressed air consumption is 0.11 cfm.
- C. Plug machine into properly grounded 3-wire outlet.
- D. Locate the power switch on the front of the control panel and turn it to the ON position. The PLC will take about 30 seconds to power up.

## 3.0 Operation

### 3.1 HMI Touchscreen Operation

#### A. HMI Main Screen

1. The touch screen has 4 settings that the operator can access from the Main Screen. There are also 3 function buttons available on the Main Screen.



**Main Screen**

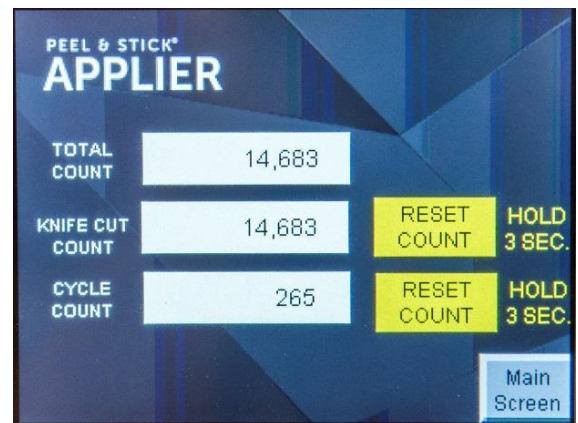
#### B. Settings

1. **CYCLE COUNT:** records the number of cycles the machine has made during the last production run, or since the last reset.
  - i. Reset the Cycle Count before you start your production run.
  - ii. Press and hold the yellow **RESET COUNT** button for three seconds, or until the counter resets to zero.
2. **TIE LENGTH:** set the Tie Length for the tie material you are using. The Tie Length is the distance from one registration mark to the next.
  - i. Press the white numeric entry button next to “TIE LENGTH”. A new screen with a keypad will appear. The current tie length setting is shown at the bottom right of the screen.
  - ii. Use the keypad to enter the desired tie length. You must enter three digits (5-5-0 = 5.50”). Your new tie length will appear in the top right of the screen.
  - iii. Press the **Enter** button to set your tie length and return to the Main Screen.
3. **OFFSET:** change the Offset if the machine is not cutting on the registration mark. Default is 0.00 in.
  - i. Press the white numeric entry button next to “OFFSET”. A new screen with a keypad will appear. The current offset setting is shown at the bottom of the screen.
  - ii. Use the keypad to enter the amount of offset you need. You must enter three digits (0-2-0 = 0.20 in). Your new offset will appear in the top right of the screen.
  - iii. If the machine is cutting the tie too short (cutting on the right of the registration mark), then enter a number on the keypad to increase the offset value.
  - iv. If the machine is cutting the tie too long (cutting on the left of the registration mark), then enter a number on the keypad to increase the offset value (use the +/- button on the keypad to enter a negative number).
  - v. Press the **Enter** button to set your offset length and return to the Main Screen.

4. CLAMP TIME: change the amount of time that pressure is applied to the tie closure. Default is 0.4 seconds.
  - i. Press the white numeric entry button next to “CUT/CLAMP TIME”. A new screen with a keypad will appear. The current clamp time setting is shown at the bottom right of the screen.
  - ii. Use the keypad to enter the desired clamp time. You must enter two digits (0-4 = 0.4 seconds).
  - iii. Press the **Enter** button to set your tie length and return to the Main Screen.

## C. Function buttons

1. **JOG** JOG button: Press and hold the Jog button to feed tie off the spool. Use this to string up the Applier machine.
2. **Counter** COUNTER button: Use to access the Counter Screen.
  - i. TOTAL COUNT: Total machine cycles: This cannot be changed.
  - ii. KNIFE COUNT: Total cycles for knife and anvil. Reset this after replacing or sharpening the knife and anvil.
  - iii. CYCLE COUNT: Total cycles for current production run. Reset as needed. This can also be accessed from the Main Screen.
3. **Maint/Setup** MAINT/SETUP button: For factory diagnostics. Security code required.



**Counter Screen**

## 3.2 Tie Registration Set Up Procedure

For trouble free application, the Applier machine must be set up to cut the tie material on the black registration mark. Load the machine with Bedford Peel & Stick® tie material. Leave the release liner on the tie material when you string it up (as shown in Figure 3.1). The “TIE LENGTH” must be set for the material you are using.

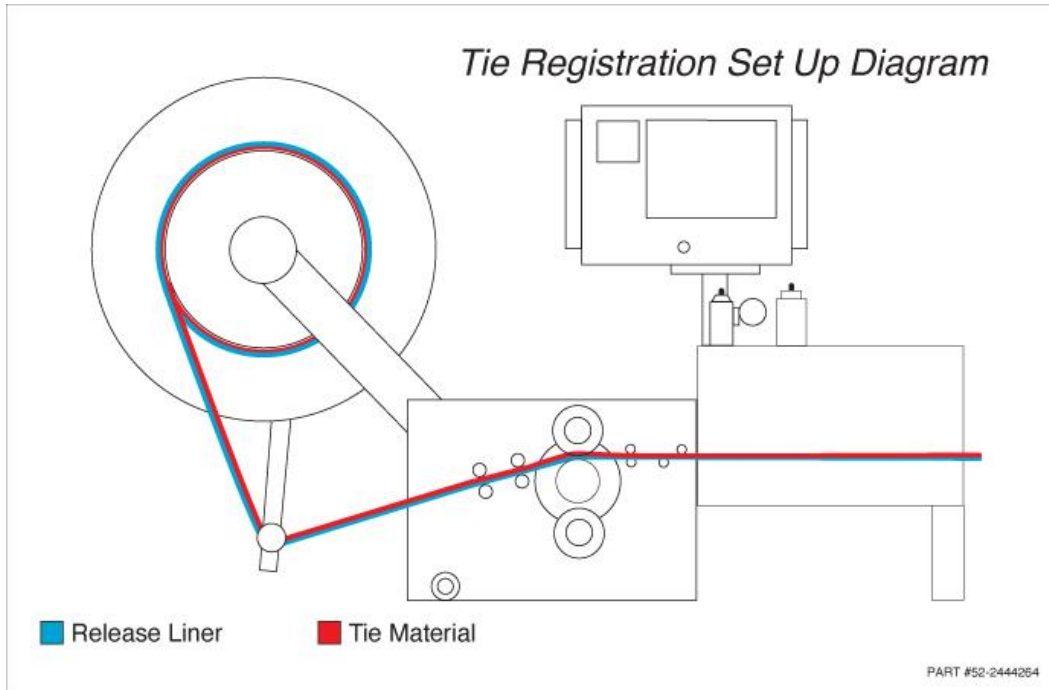


Figure 3.1 (String up Diagram)

- A. Turn the power off and load a spool of Bedford Peel & Stick® tie material onto the Spool Adapter.
  1. Remove the Adapter Flange from the Spool Adapter.
  2. Place the spool on the Spool Adapter so the tie material pulls off the left side (Figure 3.2)
  3. Put the Adapter Flange back on the Spool Adapter.
  4. Pull approximately 12” (30 cm) of tie material off the spool.
  5. Feed the tie through the hole in the Payout Guide.

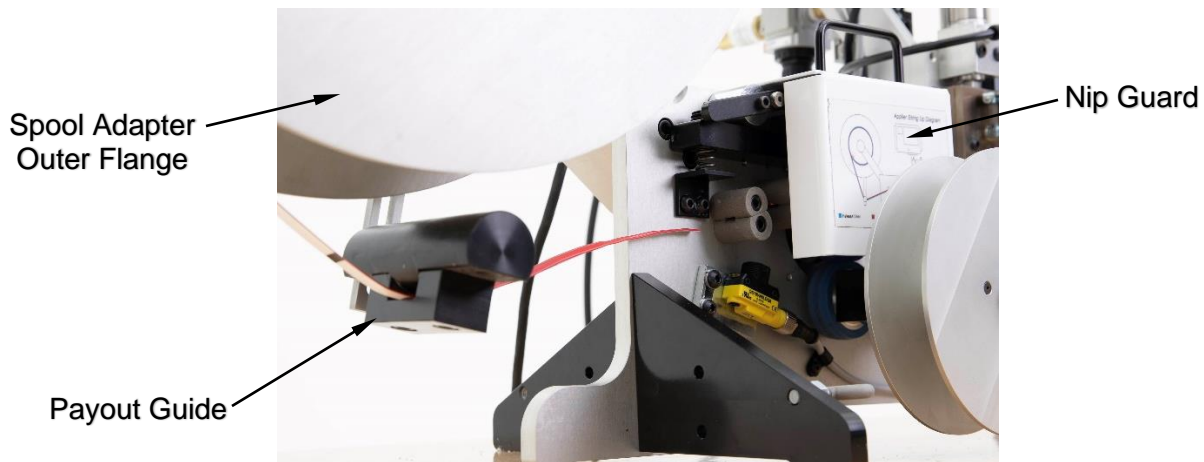


Figure 3.2



- B. Remove the Nip Guard so the feed rollers and guides are visible. **WARNING:** Nip Guard must be back in place before operating the machine.
- C. Turn the Top Cam Lever counterclockwise to open the Top Feed Roller.
- D. Pull the Quick Pin to release the Bottom Guide Block. The Quick Pin and the Bottom Guide Block should come out together.
- E. Feed the tie through the two sets of Round Guides and push it into the feed rollers.
- F. Put a slight downward bend on the end of the tie before you push it through the feed rollers. This will help guide the tie under the Top Guide Block.

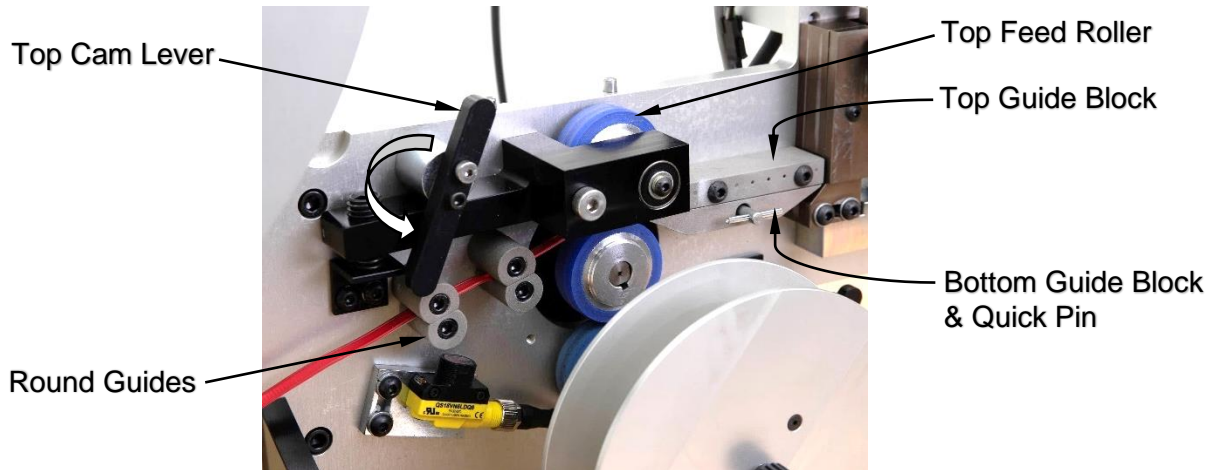


Figure 3.3

- G. Turn the Spool Adapter so that more tie material is presented.
- H. Push the end of the tie into the slot in the Knife Guide Assembly, just above the Anvil (Figure 3.4). Be sure to leave the release liner on the tie.

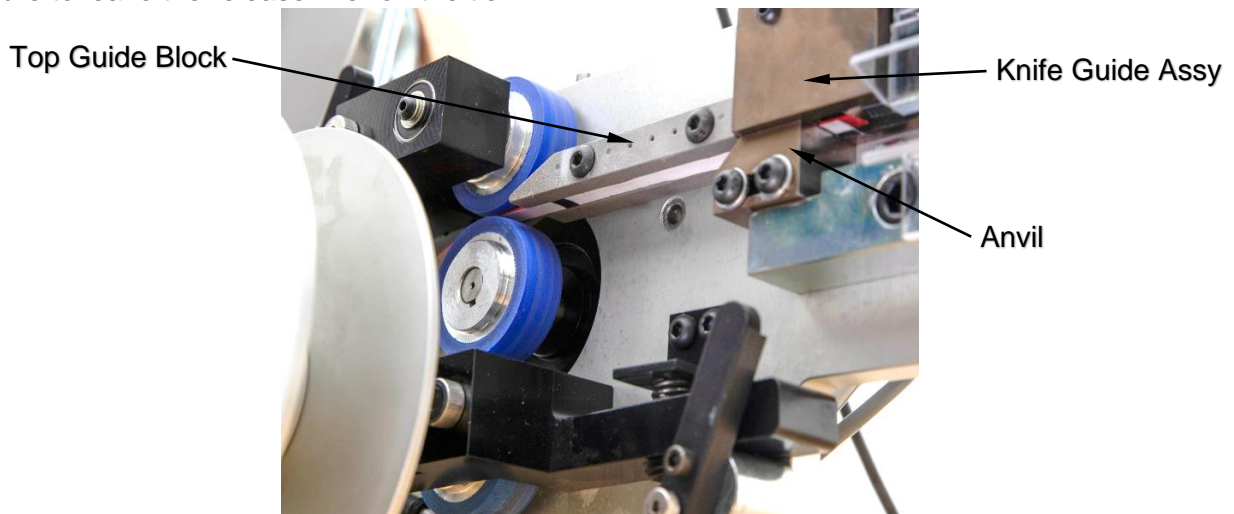


Figure 3.4

- I. Make sure the tie is sitting in the groove of the Top Guide Block. Replace the Bottom Guide Block and Quick Pin. Turn the Top Cam Lever back (clockwise) to close the Top Feed Roller.
- J. Replace the Nip Guard and turn the power on. Push and hold the **JOG** button on the touchscreen so that more tie material feeds through the machine.
- K. Check the touch screen and make sure the "TIE LENGTH" is set for the tie length you are using. (refer to section **3.1 HMI Touchscreen Operation**)

- L. Cycle the machine three times by depressing the footswitch. Three cycles will allow the sensor to adjust the position of the tie, so it is cutting on the registration mark. Throw these ties away.
- M. Cycle the machine 5 times and check the release liner on these cut ties to see where the tie is being cut (Figure 3.5). The tie should be cut near the center of the black registration mark printed on the release liner.

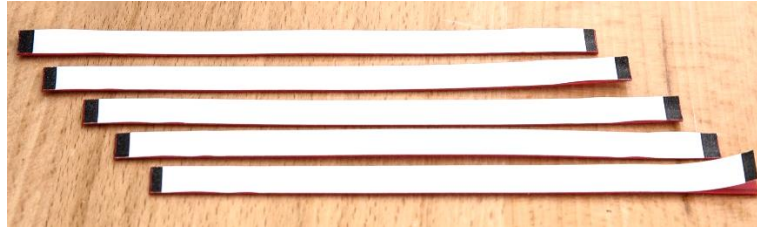


Figure 3.5

- N. If the machine is not cutting on the registration mark, change the “OFFSET” to adjust where the machine is cutting. (refer to section **3.1 HMI Touchscreen Operation**)
- O. Cycle the machine 5 more times and check the cut again. More minor adjustments may need to be made until the machine is cutting on the black registration mark. Each time you adjust a setting on the touchscreen, the machine needs to be cycled three times to allow the sensor to adjust.
- P. If the tie length cannot be set, it may be necessary to calibrate the sensor. (refer to section **3.6 Sensor**)

## 3.3 String Up for Operation Procedure

To ensure proper cut length of the tie material, the “TIE LENGTH” must be set for the material you are using. Load the machine with Bedford Peel & Stick® tie material. Peel off the release liner and spool it up on the Release Liner Spooler (Figure 3.5)

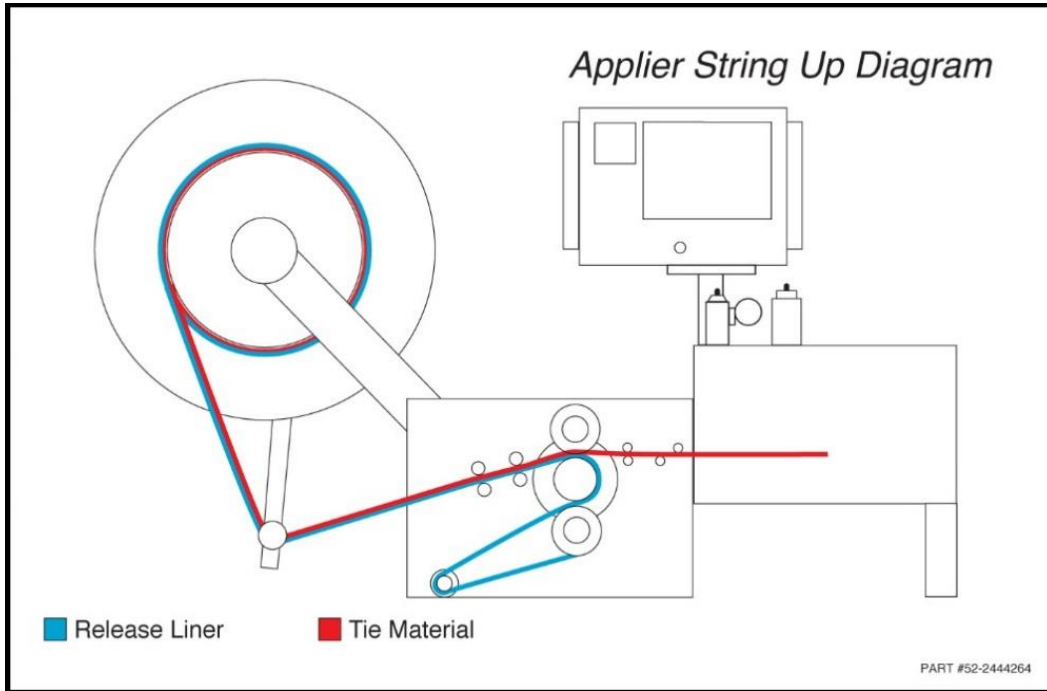


Figure 3.5 (String up Diagram)

- A. Turn the power off and load a spool of Bedford Peel & Stick® tie material onto the Spool Adapter.
  1. Remove the Outer Flange from the Spool Adapter.
  2. Place the spool on the Spool Adapter so the tie material pulls off the left side (Figure 3.6)
  3. Put the Outer Flange back on the Spool Adapter.
  4. Pull approximately 12” (30 cm) of tie material off the spool.
  5. Feed the tie through the hole in the Payout Guide.



Figure 3.6

- B. Cut the tie on the black registration mark printed on the release liner.
- C. Remove the Nip Guard so the feed rollers and guides are visible. **WARNING:** Nip Guard must be back in place before operating the machine.
- D. Turn the Top Cam Lever counterclockwise to open the Top Feed Roller.
- E. Pull the Quick Pin to release the Bottom Guide Block. The Quick Pin and the Bottom Guide Block should come out together.
- F. Feed the tie through the two sets of Round Guides and push it into the feed rollers.
- G. Put a slight downward bend on the end of the tie before you push it through the feed rollers. This will help guide the tie under the Top Guide Block.

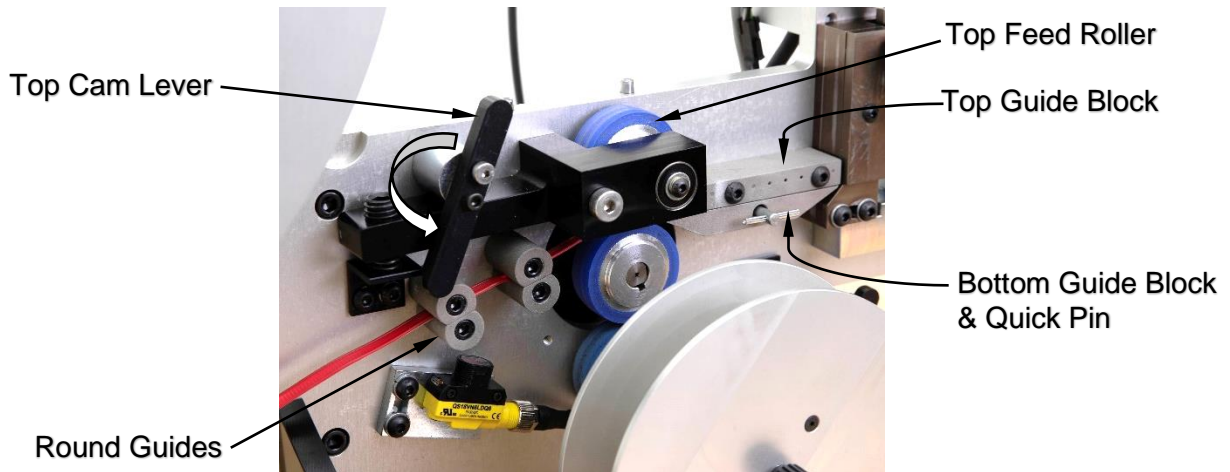


Figure 3.7

- H. Turn the Spool Adapter so that more tie material is presented.
- I. Peel the release liner from the tie material. Push the end of the tie into the slot in the Knife Guide Assembly, just above the Anvil. (Figure 3.8)

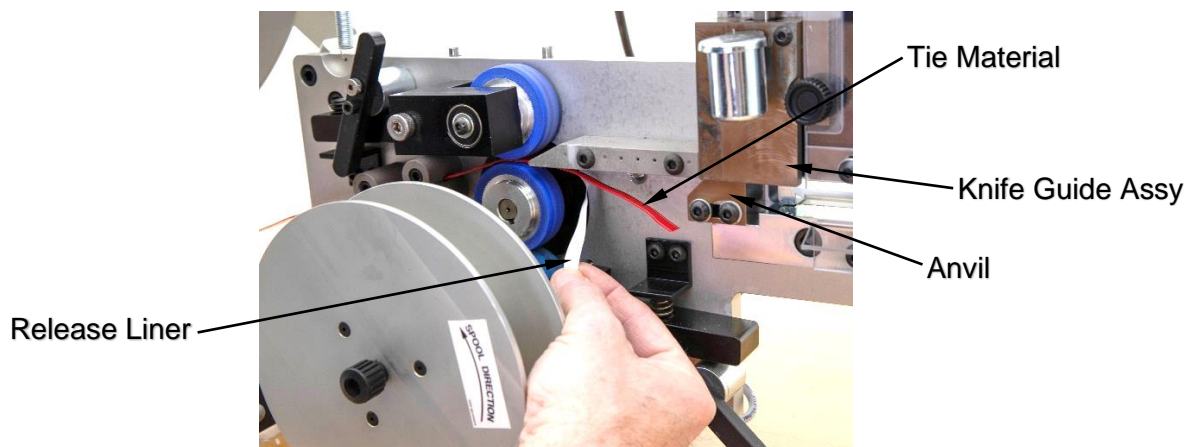


Figure 3.8

- J. Turn the Bottom Cam Lever counterclockwise to open the Bottom Feed Roller. Pull the release liner tightly around the Middle Feed Roller (Figure 3.9). Then turn the Bottom Cam Lever back (clockwise) to close the Bottom Feed Roller.
- K. Turn the Top Cam Lever back (clockwise) to close the Top Feed Roller.

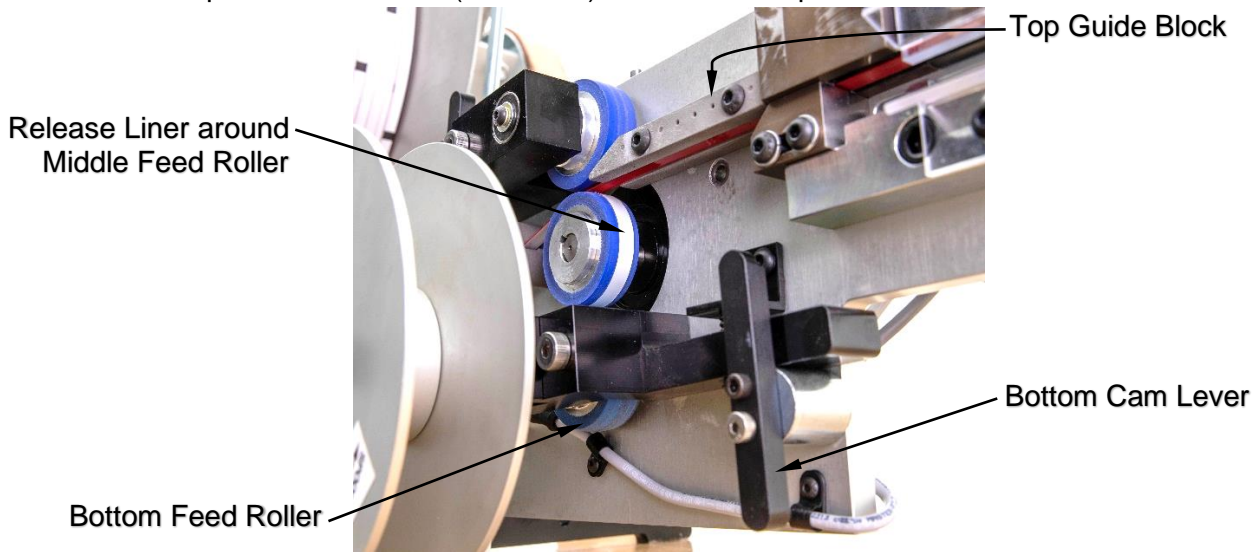


Figure 3.9

- L. Make sure the tie is sitting in the groove of the Top Guide Block (Figure 3.9). Replace the Bottom Guide Block and Quick Pin.
- M. Replace the Nip Guard and turn the power on. Push and hold the **JOG** button on the touchscreen so that more tie material feeds through the machine. Be sure to pull the release liner to the left as you do this. You will need about 18" of release liner. (Figure 3.10)
- N. Thread the release liner through the Eyelet Bolt. Unscrew the Thumb Knob on the front of the Release Liner Spooler and remove the Front Flange.

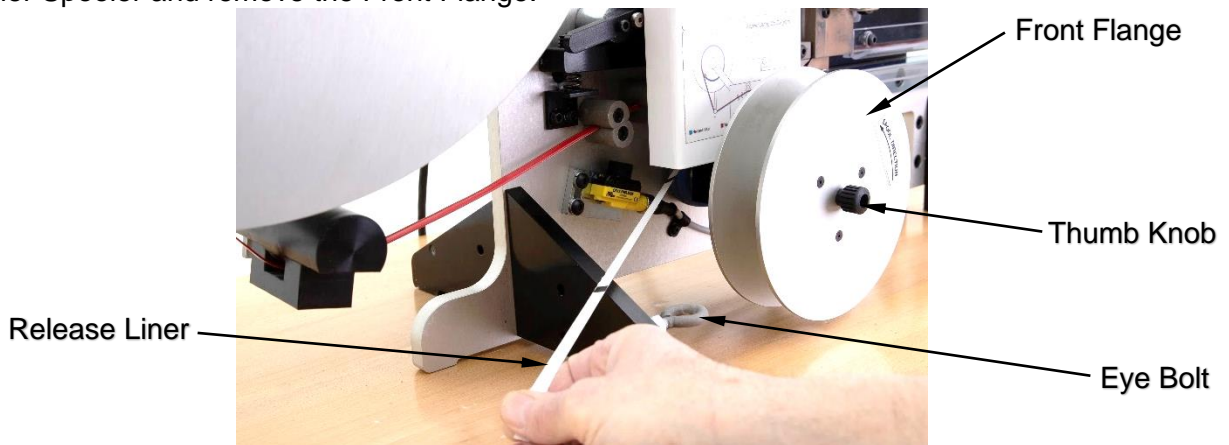


Figure 3.10

- O. Place the release liner in the notch on the Spooler Flange. (Figure 3.11)
- P. Replace the Spooler Flange, pinching the release liner between the two flanges. Replace the Thumb Knob and tighten it against the Spooler Flange. (Figure 3.12)

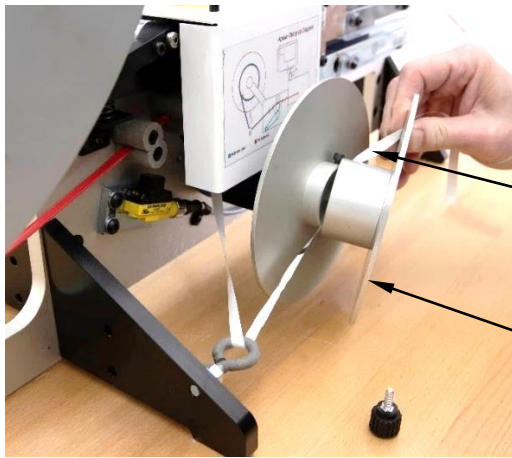
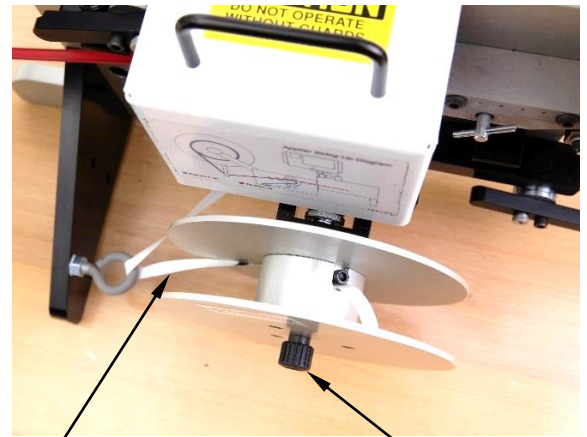


Figure 3.11

Release Liner  
in notch

Front Flange



Release Liner  
pinched between  
flanges

Figure 3.12

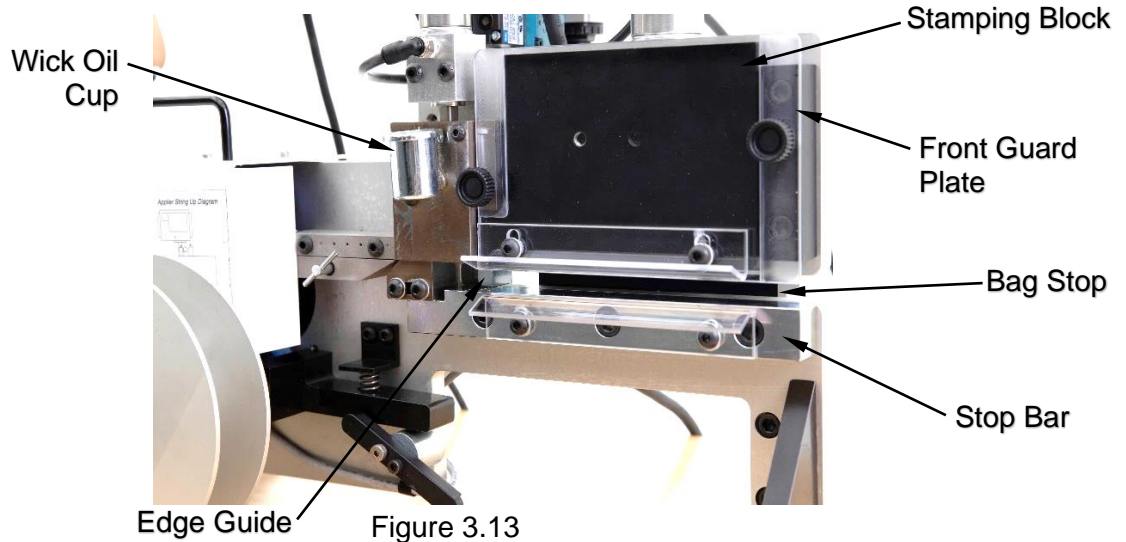
Thumb Knob

- Q. Turn the spooler counterclockwise until the release liner is tight.
- R. Check the touch screen and make sure the "TIE LENGTH" is set for the tie material you are using (refer to section **3.1 HMI Touchscreen Operation**)
- S. Place a bag or other material under the Stamper Plate.
- T. Cycle the machine three times by depressing the footswitch. Three cycles will allow the machine to adjust the position of the tie so it is cut correctly.
- U. Take the last tie you just cut and turn it over. Verify that there is no adhesive on the end of the tie, and the adhesive patch is centered on the tie.

### 3.4 Bag Stop Set Up

Once you have strung up the Applier machine with Bedford Peel & Stick® tie material, and you have set the “TIE LENGTH”, you are ready to set up the machine for your bag.

- A. The end of the bag is placed in the long slot on the front of the Applier machine. The silver Stop Bar is on the bottom of the slot. The black Stamping Block is located above the slot. The silver Edge Guide is mounted on the backside of the machine frame but sticks into the slot on the left side. The black Bag Stop is mounted on the backside of the machine. (Figure 3.13)



- B. Bag Stop: used to place the tie closure the desired distance from the top of the bag. The Bag Stop is mounted on two pins on the backside of the machine.

1. Loosen the two Small Thumb Knobs on the bottom of the Bag Stop. Slide the Bag Stop in or out to the desired length. (Figure 3.14)
2. Tighten the two Small Thumb Knobs to hold the Bag Stop in place, making sure the Bag Stop is square with the machine. If the Bag Stop is not square with the machine, then the tie closure will not be square with the end of the bag.



Figure 3.14

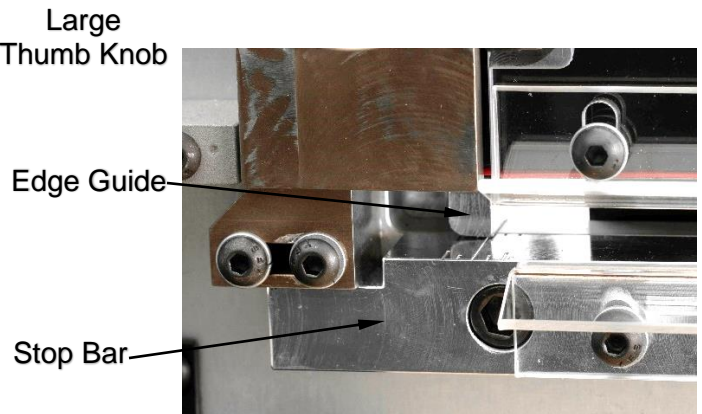


Figure 3.15

- C. Edge Guide: used to center the bag under the tie before the Stamper Plate places it onto the bag.

1. Loosen the Large Thumb Knob on the back side of the Applier machine. (Figure 3.14)
2. Move the Edge Guide so the flat edge is lined up with the long guideline on the Stop Bar (Figure 3.15). This is just a starting point and should place the tie closure about 1” from the left edge of the bag. Adjust as needed to get tie centered on bag.
3. Tighten the Large Thumb Knob to lock the Edge Guide in place.

### 3.5 Machine Operation

- A. Make sure the machine is connected to the proper power supply (refer to section **2.0 Installation**). Connect machine to air supply and make sure the pressure regulator is set at 80 psi.
- B. String up the machine with Bedford Peel & Stick® tie material and set the machine up for the desired tie length (refer to section **3.3 String Up for Operation Procedure**).
- C. Applying tie closure to a full bag, or an empty bag.
  1. Insert bag horizontally between the Bag Lead Ins on the front of the machine until it touches the Bag Stop
  2. Next, slide the bag to the left until the bag comes into contact with the Edge Guide. (Figure 3.16)
  3. Depress the foot switch to cycle the machine and apply the tie closure.
  4. Slide the bag out of the machine. The Applier is ready for another bag. (Figure 3.17)

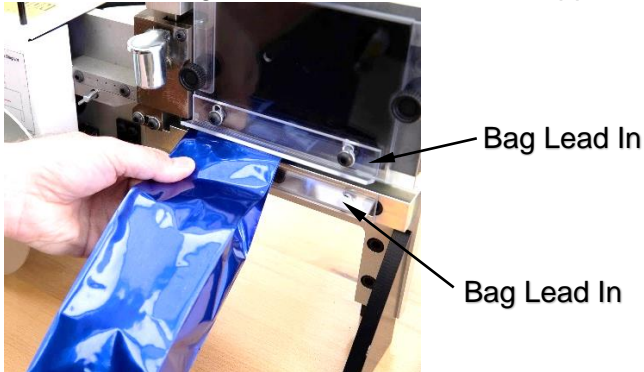


Figure 3.16



Figure 3.17

- D. When starting a new spool, apply tie to three bags and check the length of the tie closure.
  1. Check the placement of the tie closure on the bag.
  2. If the tie is cut to the proper length, and it is placed in the correct position on the bag, then the machine is ready for operation.
- E. **Optional Bag Tray:** for applying tie closure to empty bags only.
  1. Remove Edge Guide and Thumb Knob from the back of the machine.
  2. Remove the bottom Bag Lead In and install the Bag Tray using the two small thumb screws.
    - i. Move the Bag Tray until the left edge is lined up with the long line on the Stop Bar. Lock in place with the thumb screws. This should place the tie closure about 1" from the left edge of the bag. Adjust as needed.
  3. Place empty bag on the Bag Tray. Slide bag to the left until it comes into contact with the edge of the Bag Tray. (Figure 3.18)
  4. Slide the bag forward, under the Bag Lead In, until it touches the Bag Stop.
  5. Depress the foot switch to cycle the machine and apply the tie closure.
  6. Slide the bag out of the machine. The Applier is ready for another bag. (Figure 3.19)

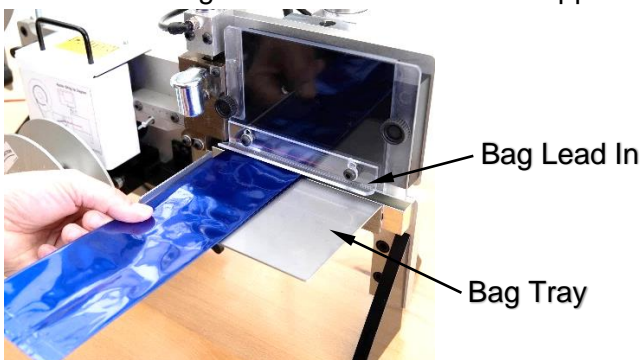


Figure 3.18



Figure 3.19



F. **Bag Stop Extension:** The Bag Stop has a flat side and an extended side. If you want to place the tie closer to the top of the bag, you can turn the Bag Stop around and slide the extension into the slot. (Figure 3.20)

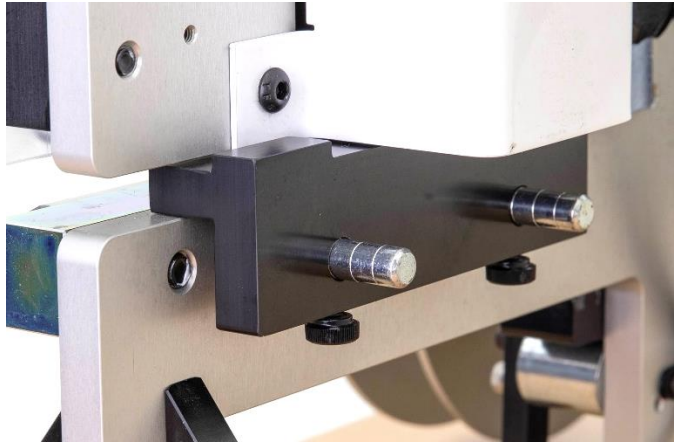


Figure 3.20

## 3.6 Sensor

- A. The sensor has been pre-set at the factory prior to shipping. No adjustments need to be made for normal operation of the Applier machine.
- B. If sensor is not operating properly, the sensitivity can be adjusted by turning the small potentiometer dial on the bottom of the sensor. *Read all safety information below before making any adjustments to the sensor.*

### **BANNER - WORLD-BEAM QS18LD Laser Diffuse Series Sensors**

#### **WARNING: Not To Be Used for Personnel Protection**

**Never use this device as a sensing device for personnel protection. Doing so could lead to serious injury or death. This device does not include the self-checking redundant circuitry necessary to allow its use in personnel safety applications. A sensor failure or malfunction can cause either an energized or de-energized sensor output condition.**

#### **Description of Laser Classes**

##### **Class 1 Lasers**

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

Reference IEC 60825-1:2001, Section 8.2.

#### **CAUTION: Do Not Disassemble for Repair**

**This device contains no user-serviceable components. Do not attempt to disassemble for repair. Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.**

#### **For Safe Laser Use (Class 1 or Class 2):**

- Do not stare at the laser.
- Do not point the laser at a person's eye.
- Mount open laser beam paths either above or below eye level, where practical.
- Terminate the beam emitted by the laser product at the end of its useful path.

##### **Indicators**

2 LED indicators on sensor top:

**Green solid:** Power on

**Amber solid:** Light sensed

**Green flashing:** Output overloaded

**Amber flashing:** Marginal excess gain (1 to 1.5 times excess gain)

##### **Adjustments**

Single-turn sensitivity (Gain) adjustment potentiometer



- C. Adjusting Sensor. *Clean the sensor lens with a dry cloth before making any adjustments.*

1. Cut a 10" piece of tie material from the spool, with the release liner on.
2. When you turn the machine on, the GREEN lights should come on and stay on.
3. Insert the tie material into the round guides with the release liner facing down.
4. When the white part of the release liner is over the sensor, you should see a solid AMBER light.
  - i. If the AMBER light is flashing, or off, then turn the dial clockwise (toward the +) until the AMBER light turns on.
5. When the black registration mark is over the sensor, the AMBER light should turn off.
  - i. If the amber light is flashing, or on, then turn the dial counterclockwise (toward the -) until the AMBER light turns off.

## 4.0 Maintenance

*CAUTION: Power should be disconnected before performing any maintenance.*

### 4.1 Parts Inspection

Inspect all tie guides and knife components for wear and adhesive build up every 9,000 cycles, or at least once a week. (Reference Figure 4.1) Adhesive build up can cause the tie material to jam or affect the knife's ability to cut the material.

#### A. Silicone Feed Rollers

1. Remove Nip Guard by pulling up on handle.
2. Release pressure on Feed Rollers by turning the Cam Levers on the top and bottom rollers.
3. Turn feed rollers by hand and inspect for adhesive build up. If needed, clean by applying 3M Adhesive Remover to a clean rag and wipe down rollers.
4. Inspect the Feed Rollers for cuts or grooves worn in the outer silicone layer. Check the inner silicone layer to see that it is not separating from the metal hub.

#### B. Round Guides

1. Remove the bolts that hold the two top Round Guides. You can leave the bottom guides in place.
2. Clean all four Round Guides by applying 3M Adhesive Remover to a clean rag and wiping down the parts.
3. Inspect the non-stick coating in the grooves of all four Round Guides.
4. Replace Round Guides if there is excessive wear.

#### C. Bottom Guide Block

1. Pull the Quick Pin to release the Bottom Guide Block. The Quick Pin and the Bottom Guide Block should come out together.
2. Clean the Bottom Guide Block by applying 3M Adhesive Remover to a rag and wiping down the part.
3. Inspect the non-stick coating on the Bottom Guide Block.
4. Replace the Bottom Guide Block if there is excessive wear.

#### D. Top Guide Block

1. You can either leave the Top Guide Block in place or remove it by removing the two bolts holding it to the machine base.
2. Clean the groove in the Top Guide Block by applying 3M Adhesive Remover to a rag and wiping it down.
3. Inspect the non-stick coating in the groove of the Top Guide Block.
4. Replace the Top Guide Block if there is excessive wear.

#### E. Knife Assembly

1. To access the Knife Assembly, remove the two bolts holding the Knife Plate.
2. Inspect the Knife Assembly and the back of the Knife Plate for adhesive build up. Remove any adhesive by applying 3M Adhesive Remover to a rag and wiping it down.
3. Inspect the Knife and Anvil for excessive wear. Replace these parts if needed.
4. The Knife Assembly needs to be lubricated in order to work properly. Apply a few drops of light mineral oil to the Knife Assembly before replacing the Knife Plate.

F. Stamper Assembly

1. Remove the Front Cover Plate by removing the two thumbscrews.
2. Clean the front side and bottom side of the Stamping Block by applying 3M Adhesive Remover to a rag and wiping them down.
3. Clean all sides of the Front Cover Plate with 3M Adhesive Remover. Then re-attach to the machine using the thumbscrews.

G. Sensor

1. Use a clean dry cloth to clean dust off the Sensor lens.

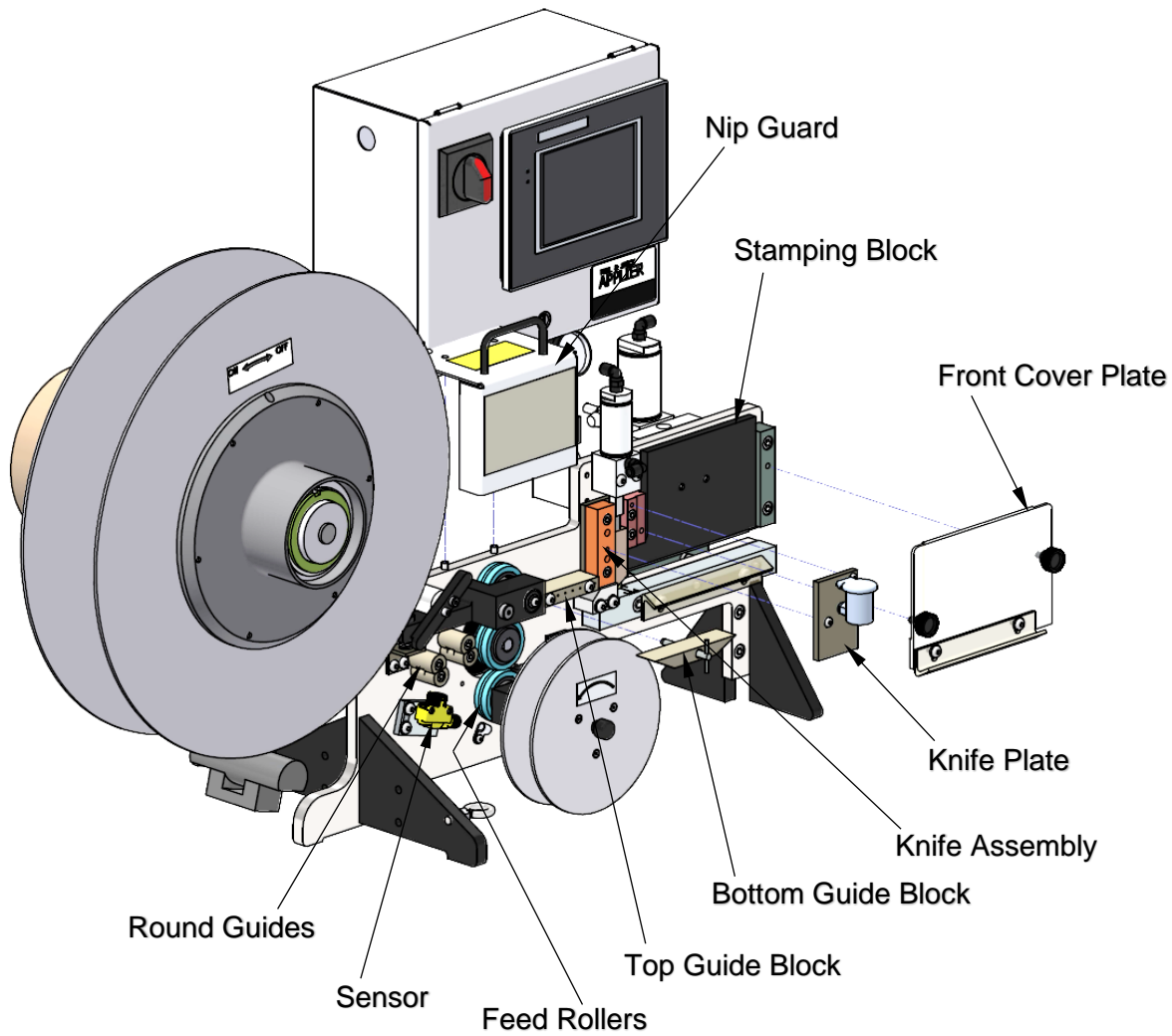


Figure 4.1

## 4.2 Lubrication

### A. Wicked Oiler

1. Check the oil level in the Wick Oil Cup every month. Make sure it has a small amount of light mineral oil in it.
2. The Wick Oil Cup requires only 0.1 oz (3 ml) of light mineral oil. Just enough to cover the bottom of the oil cup. **Do Not Overfill.**

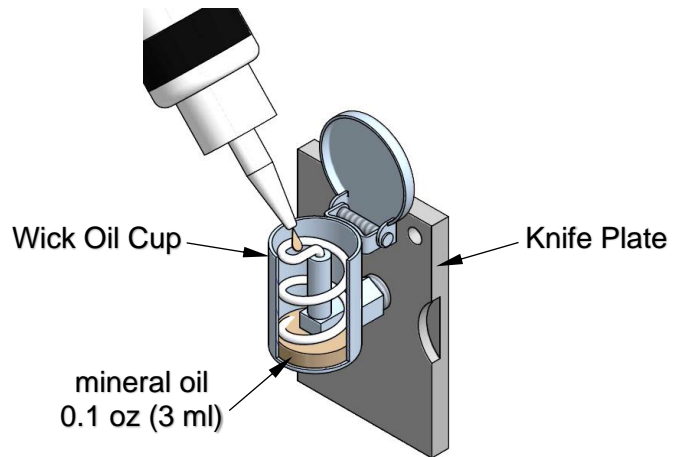


Figure 4.2

## 5.0 Troubleshooting

Problem	Possible Cause	Corrective Action
Machine does not run	No power No air Amperage overload	Check power cord and circuit breaker Check air supply Check fuse in control panel
Machine does not cut	Adhesive build up on knife assembly Air pressure is too low Knife or Anvil is dull	Clean with 3M Adhesive Remover Air pressure should be at least 80 psi to operate properly. Replace or re-sharpen knife and anvil
Tie material does not feed	Feed rollers are open Tie material is not strung up correctly Tie material is tangled on spool adapter Adhesive build up on the tie guides	Turn cam levers to close the feed rollers Refer to section 3.3 Untangle the tie material Clean the guides with 3M Adhesive Remover
Machine does not cut the correct length	Tie Length is not set correctly Tie material is not strung up correctly Tie material is tangled on spool adapter	Adjust Tie Length on the HMI screen. Refer to section 3.1 Refer to section 3.3 Untangle the tie material
Machine feeds out a very long tie	The sensor lens is dirty The sensor sensitivity needs to be reset	Clean lens with a clean dry cloth Refer to section 3.6

<p>Adhesive is not centered on tie</p>	<p>Tie is not in registration</p> <p>“TIE LENGTH” does not match the tie material</p> <p>Tie material is not strung up correctly</p> <p>Tie material is tangled on spool adapter</p>	<p>Change the “OFFSET” setting. Refer to section 3.1</p> <p>Change the tie material, or the “TIE LENGTH”</p> <p>Refer to section 3.3</p> <p>Untangle the tie material</p>
<p>Tie closure does not stick to bag</p>	<p>The “CUT/CLAMP TIME” is not long enough</p> <p>Air pressure is too low</p> <p>Front guard plate is not in place</p> <p>Tie bounced off stamper block</p>	<p>Refer to section 3.1 and increase clamp time (minimum of 0.4 sec)</p> <p>Air pressure should be at least 80 psi to operate properly. You can increase this if necessary.</p> <p>Put front guard plate in place</p> <p>Change the timing of the air cylinders by adjusting the set screw on the back of the flow control valve</p>
<p>Left end of tie closure is bent up</p>	<p>Adhesive build up on knife assembly</p> <p>Stamper plate moves before tie is cut</p>	<p>Clean with 3M adhesive remover</p> <p>Change the timing of the air cylinders by adjusting the set screw on the back of the flow control valve</p>
<p>Tie closure is bowed down</p>	<p>Bottom guide block is not in place</p> <p>Too much pressure on the top feed roller</p>	<p>Put bottom guide block in place</p> <p>Adjust set screw on top arm assembly (no more than 1 ½ turns total)</p>
<p>Release liner breaks</p>	<p>Adhesive build up on the feed rollers</p> <p>Adhesive build up on the tie guides</p> <p>Too much pressure on the bottom feed roller</p> <p>Too little pressure on the bottom feed roller</p>	<p>Clean with 3M adhesive remover</p> <p>Clean with 3M adhesive remover</p> <p>Loosen set screw on bottom arm assembly</p> <p>tighten set screw on bottom arm assembly</p>
<p>Release liner does not spool up</p>	<p>Bottom feed roller is open</p> <p>Clutch on bottom arm assembly is not working</p>	<p>Turn cam lever to close feed roller. Refer to section 3.3</p> <p>Increase tension on clutch, or replace clutch</p>

## 6.0 Mechanical Drawings

The Peel & Stick® Applier assembly drawings show all of the parts and where they are located on the machine. The other drawings are of common replacement parts and the sub-assemblies where they are found.

When ordering parts, locate the machine nameplate on the back of the machine (example shown in Figure 6.1) and provide the model number and serial number with your request for parts. This information will aid in providing quick and accurate service from Bedford Industries or any machine distributor that provides parts for the Bedford Peel & Stick® Applier machine.

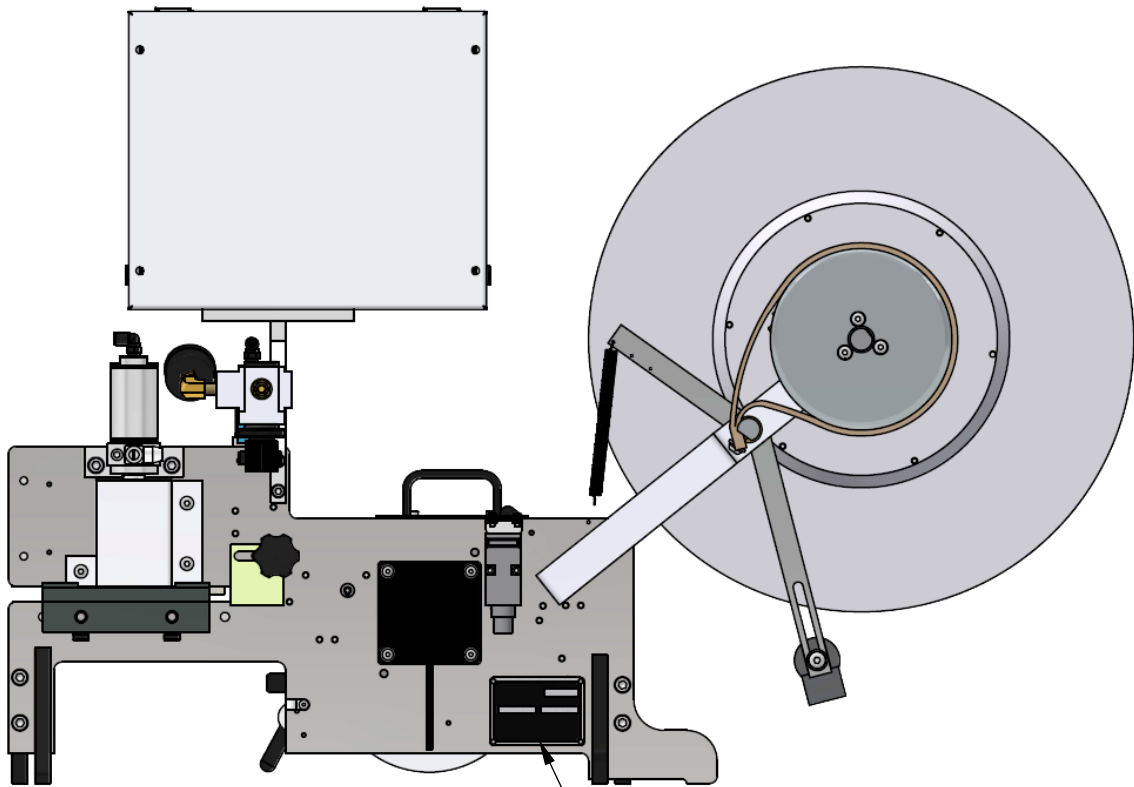


Figure 6.1  
(backside of machine)

Nameplate

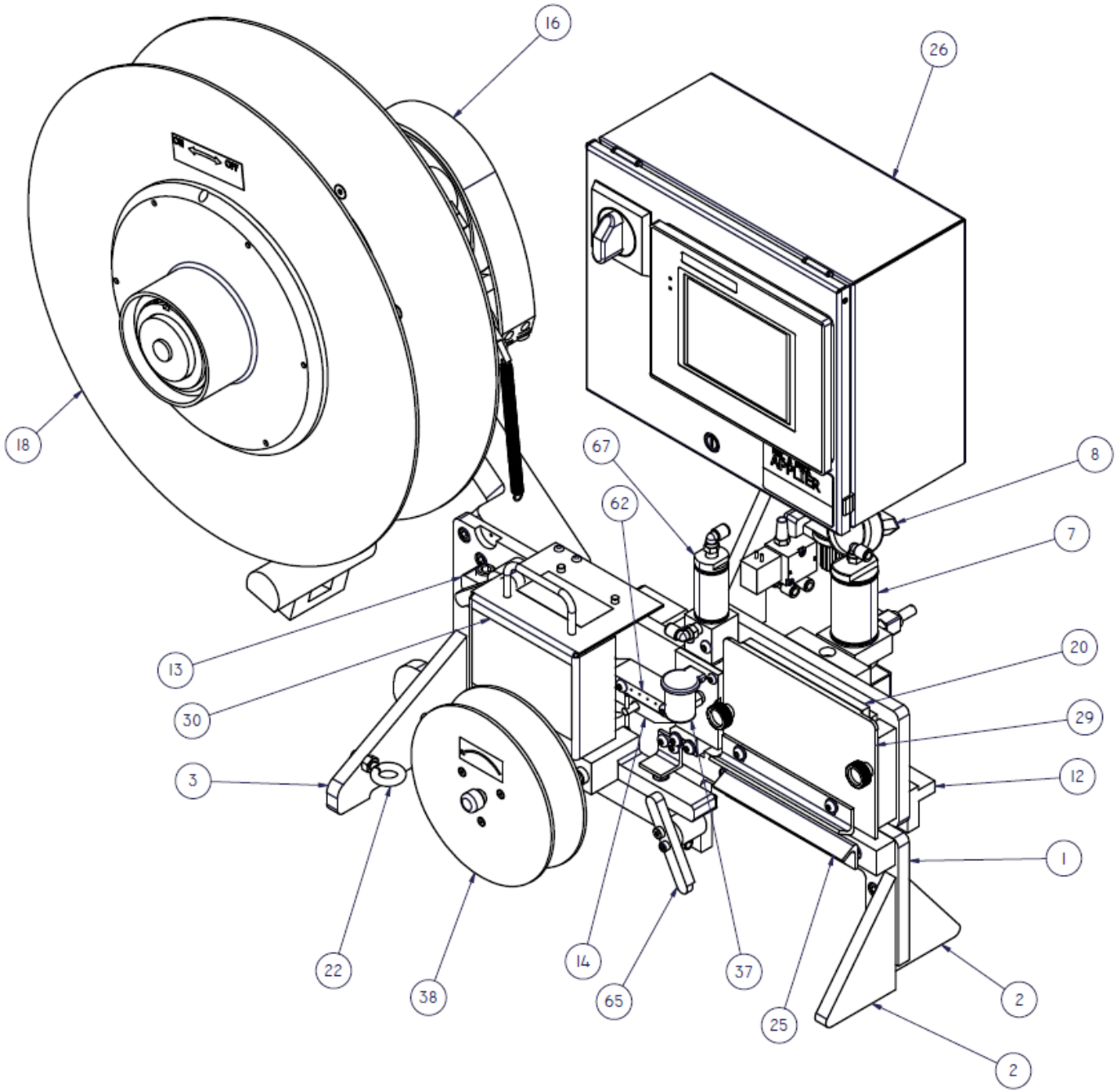
Model Number \_\_\_\_\_ Serial Number \_\_\_\_\_

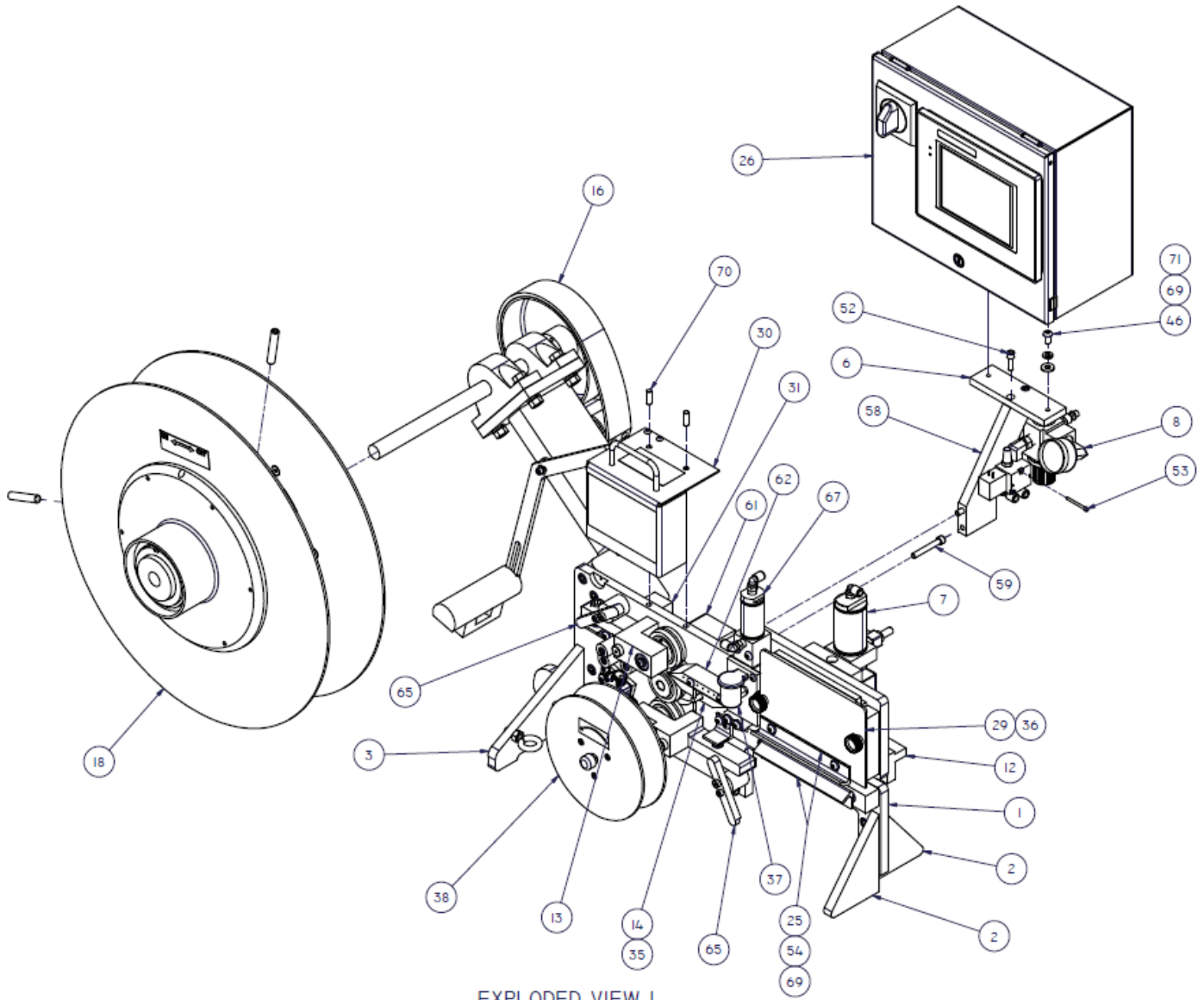
## 6.1 Machine Assembly Drawings for Model 52-B

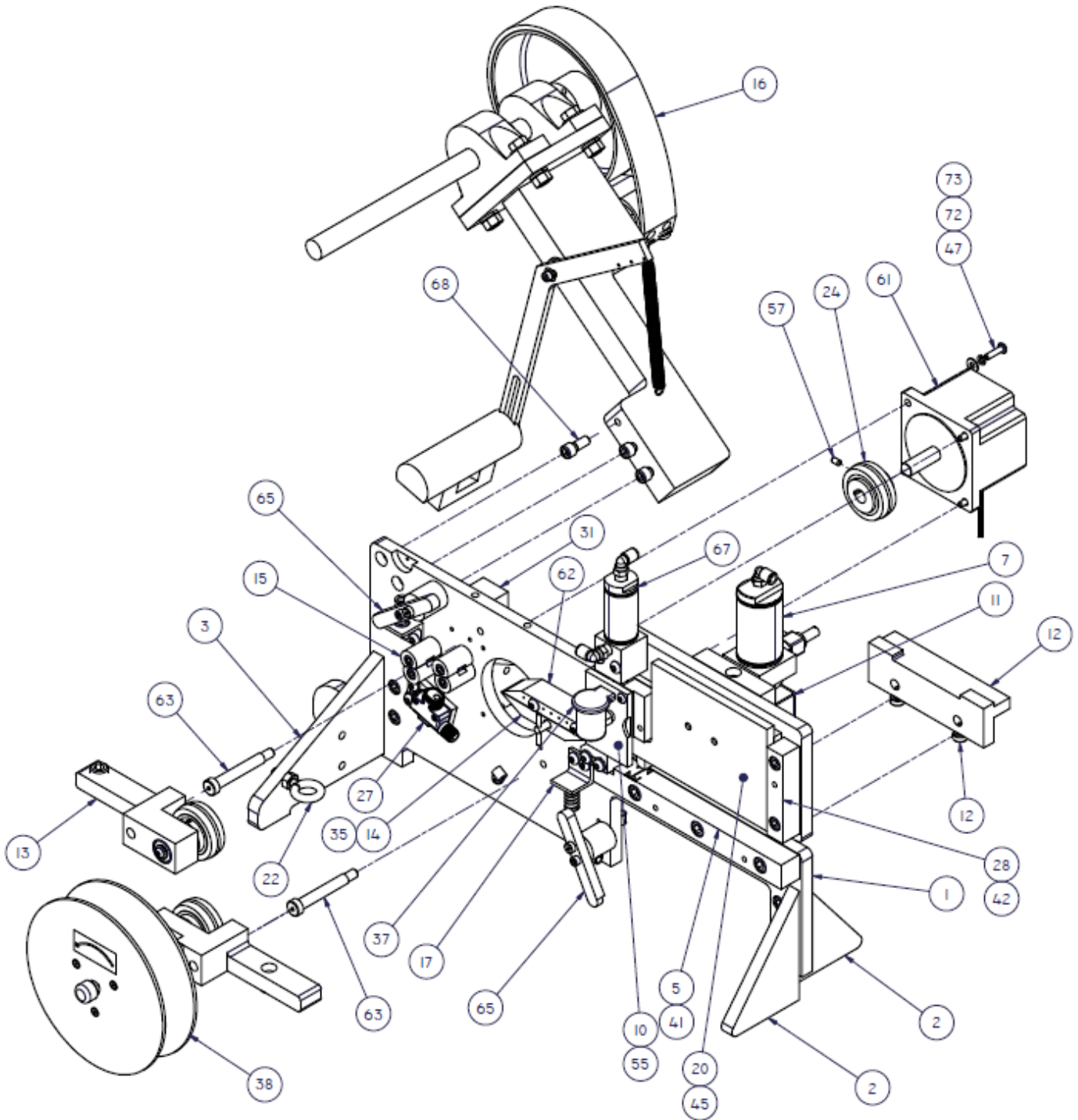
Assembly Part Number: 2743000 Peel & Stick® Applier Assembly, Model 52-B

ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	2743107	BASEPLATE, APPLIER
2	2	2444138	SMALL LEG
3	2	2743024	FRONT LEG
4	1	2743137	LINEAR SLIDE BACK, APPLIER
5	1	2743193	ELEVATED STOP, APPLIER
6	1	2444270	BASE SUPPORT, ELECTRICAL BOX
7	1	2444202	CYLINDER SLIDE ASSEMBLY
8	1	2743268	PNEUMATIC ASSEMBLY, APPLIER
9	2	2444199	GUIDE, BAG STOP
10	1	2444407	KNIFE PLATE
11	1	2444197	GUARD, CYLINDER
12	1	2743267	BAG STOP ASSEMBLY, APPLIER
13	1	2743205	TOP ARM ASSEMBLY, APPLIER
14	1	2743017	BOTTOM GUIDE BLOCK, .315 APPLIER
15	4	2743018	ROUND GUIDE
16	1	2743180	SPOOL PAYOUT ASSEMBLY, APPLIER
17	2	2444121	STOP, SRING
18	1	2743030	APPLIER ADAPTER 18" FLANGE, CORE 6"
19	1	2743050	KNIFE GUIDE ASSEMBLY, .315 APPLIER
20	1	2743111	STAMPER ASSEMBLY, APPLIER
21	1	2743241	ANVIL, APPLIER
22	1	2444293	EYELET BOLT
23	1	52-138915	BEDFORD NAMEPLATE
24	1	2743025	SILICONE ROLLERS, APPLIER 52-B, 55-A, 55-F
25	2	2743194	BAG LEAD IN, APPLIER
26	1	52-2743E01	ELECTRICAL ASSEMBLY, APPLIER
27	1	2743200	SENSOR ASSEMBLY, APPLIER
28	1	2743221	STAMP HOUSING SPACER, APPLIER
29	1	2743006	FRONT PLATE, .315 APPLIER
30	1	2743263	NIP GUARD ASSEMBLY, APPLIER
31	1	52-AZ1711ZK	SAFETY SWITCH
32	3	52-7625K	1/4" CABLE CLAMP
33	1	52-8491A232	DRIL BUSHING
34	2	52-S1530	COMPRESSION SPRING
35	1	52-FPD110	QUICK PIN
36	2	52-JCL515	THUMB KNOB
37	1	52-1223K2	WICK OIL CUP
38	1	2743219	BOTTOM ARM ASSEMBLY, APPLIER
39	8	52-5161812CH	CAP HEAD 5/16-18 X 1/2 SOCKET HEAD ?????
40	4	52-83212CH	CAP HEAD 8-32 X 1/2
41	3	52-38161CH	CAP HEAD 3/8-16 X 1
42	2	52-516181CH	CAP HEAD 5/16-18 X 1
43	4	52-1420114CH	CAP HEAD 1/4-20 X 1-1/4
44	2	52-836114CH	CAP HEAD 8-36 X 1-1/4
45	2	52-51618112CH	SOCKET HEAD CAP SCREW 5/16-18 X 1-1/2
46	9	52-142012BH	BUTTON HEAD 1/4-20 X 1/2
47	4	52-102434BH	BUTTON HEAD 10-24 X 3/4
48	4	52-14201CH	CAP HEAD 1/4-20 X 1
49	2	52-142034BH	BUTTON HEAD 1/4-20 X 3/4
50	2	52-1420134BH	BUTTON HEAD 1/4-20 X 1-3/4
51	4	52-1420112BH	BUTTON HEAD 1/4-20 X 1-1/2
52	2	52-142034CH	CAP HEAD 1/4-20 X 3/4
53	2	52-440114CH	CAP HEAD 4-40 X 1-1/4
54	4	25-142038BH	BUTTON HEAD 1/4-20 X 3/8
55	2	52-102412BH	BUTTON HEAD 10-24 X 1/2
56	3	52-83212BH	BUTTON HEAD 8-32 X 1/2
57	1	52-1032516SS	SET SCREW 10-32 X 5/16
58	1	2743007	VERTICAL MOUNT
59	2	52-1420134CH	CAP HEAD 1/4-20 X 1-3/4
60	4	52-91654A076	SCREW NAIL, #2 X 3/16 S.S.
61	1	52-STP-MTR-34066	STEPPER MOTOR
62	1	2743020	TOP GUIDE BLOCK ASSY, APPLIER .315
63	2	52-90298A633	SHOULDER BOLT 3/8 X 2-1/4
64	2	52-90298A546	SHOULDER BOLT 1/4 X 1-1/2
65	2	2743217	CAM LEVER ASSEMBLY, APPLIER
66	1	2743040	EDGE STOP ASSEMBLY, APPLIER
67	1	2743350	KNIFE CYLINDER ASSEMBLY
68	7	52-5161834CH	CAP HEAD 5/16-18 X 3/4
69	10	52-14LW	LOCK WASHER 1/4
70	2	52-1434DP	DOWEL PIN 1/4 X 3/4
71	2	52-14FW	FLAT WASHER 1/4
72	4	52-10LW	LOCK WASHER #10
73	4	52-10FW	FLAT WASHER #10
74	4 FT	52-1B04801	TUBING PE BLACK, 250 OD X .170 ID
75	1	2743060	BAG TRAY ASSEMBLY, 52-B

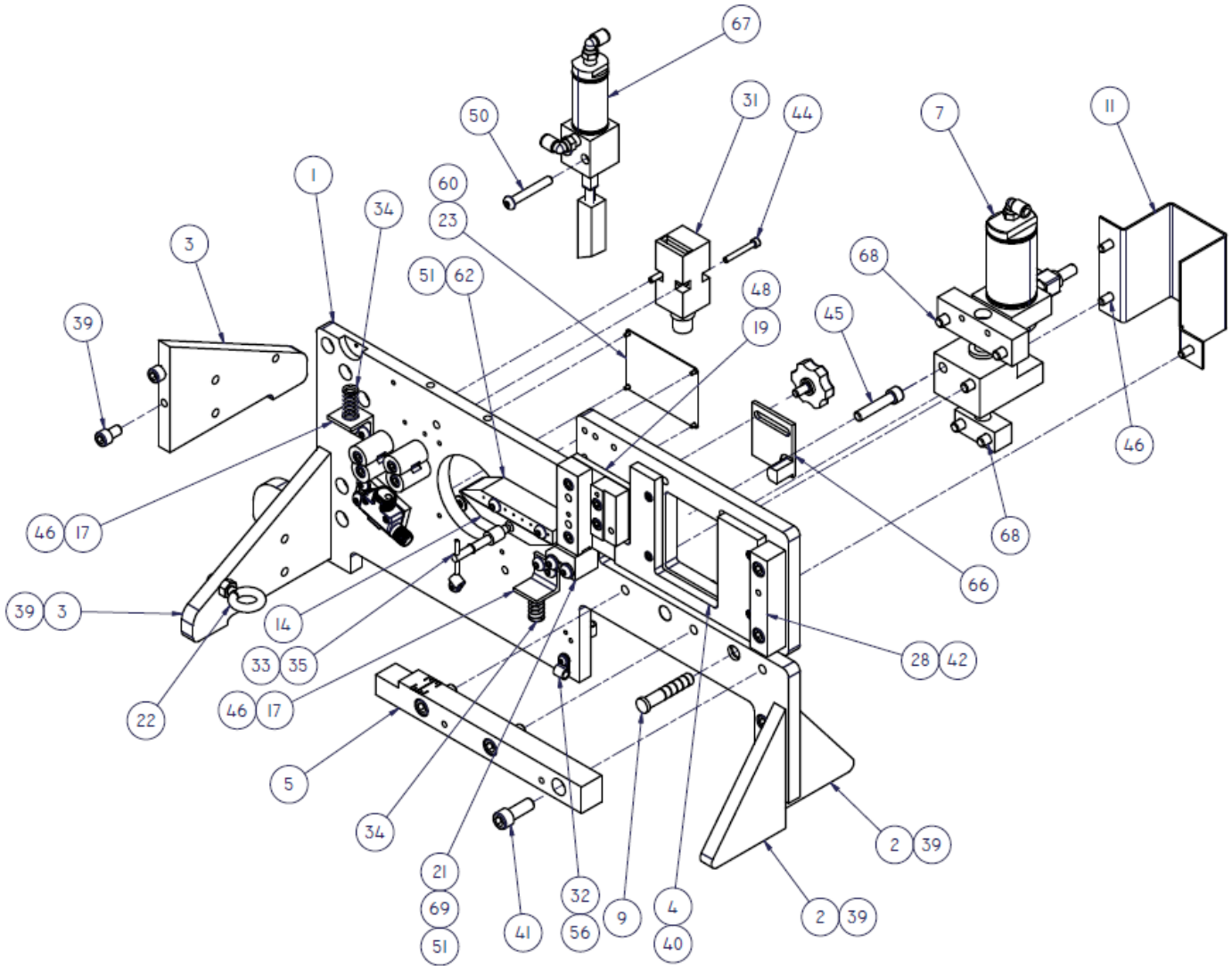






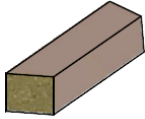


EXPLODED VIEW 2

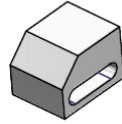


EXPLODED VIEW 3

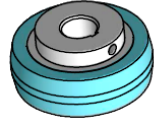
## 6.2 Parts and Sub-Assembly Drawings



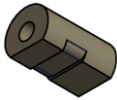
Knife  
2444248



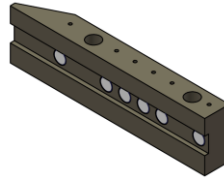
Anvil  
2743241



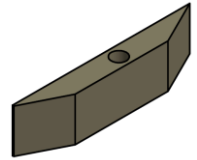
Silicone Feed Roller  
2743025



Round Guide  
2743018



Top Guide  
2743020



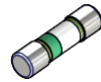
Bottom Guide  
2743017



Clutch  
52-T251642S

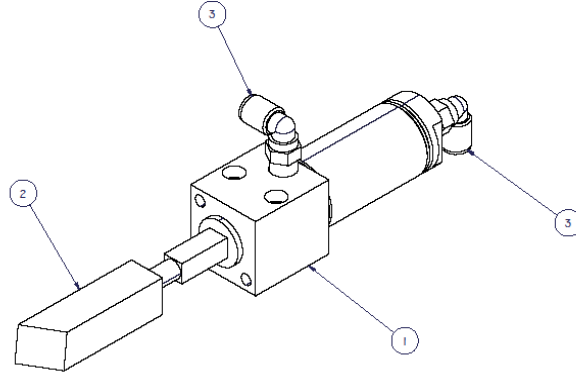


Bearing  
52-99R6

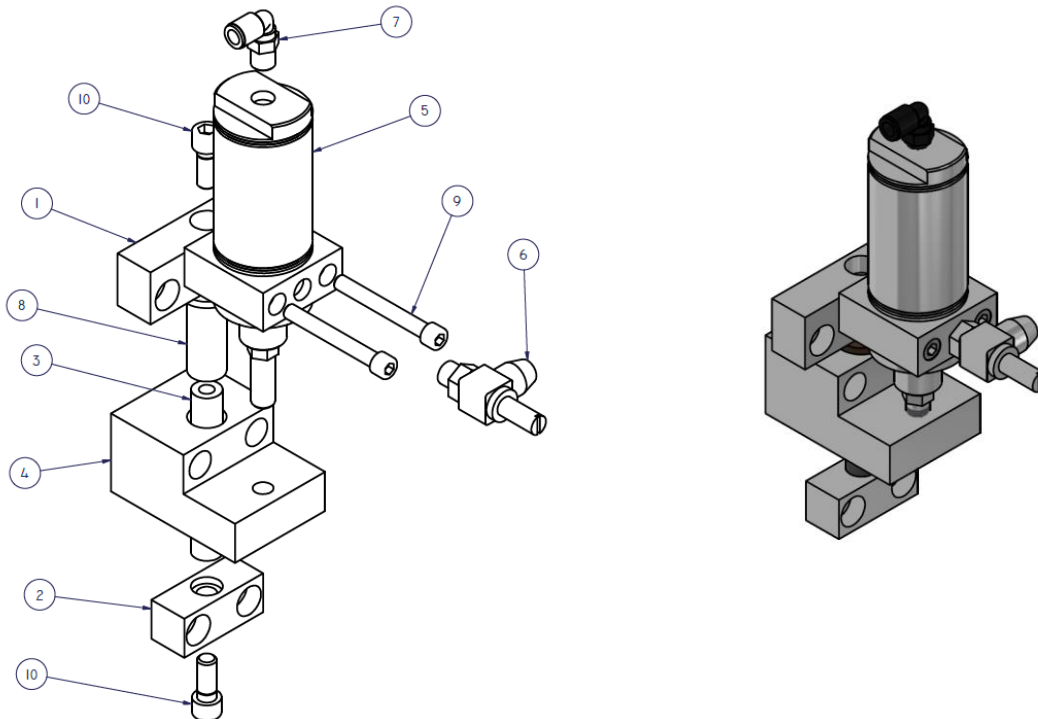


Fuse  
52-FLM2A

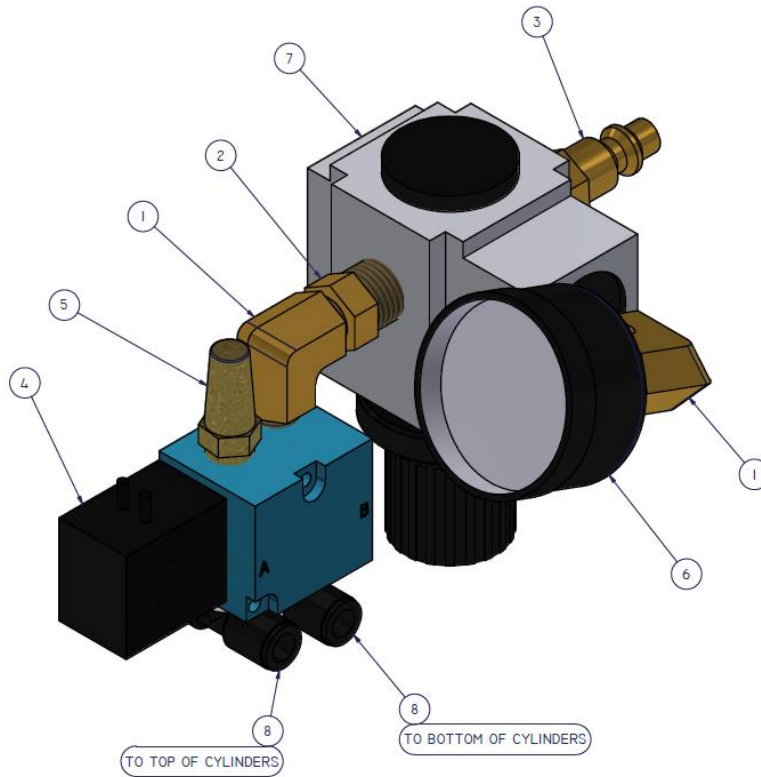
Assembly Part Number 2743350		KNIFE CYLINDER ASSEMBLY	
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	2444280	REWORK PNEUMATIC CYLINDER
2	1	2444248	KNIFE
3	2	52-5779K151	TUBE ELBOW, 1/8 PIPE x 1/4 TUBE



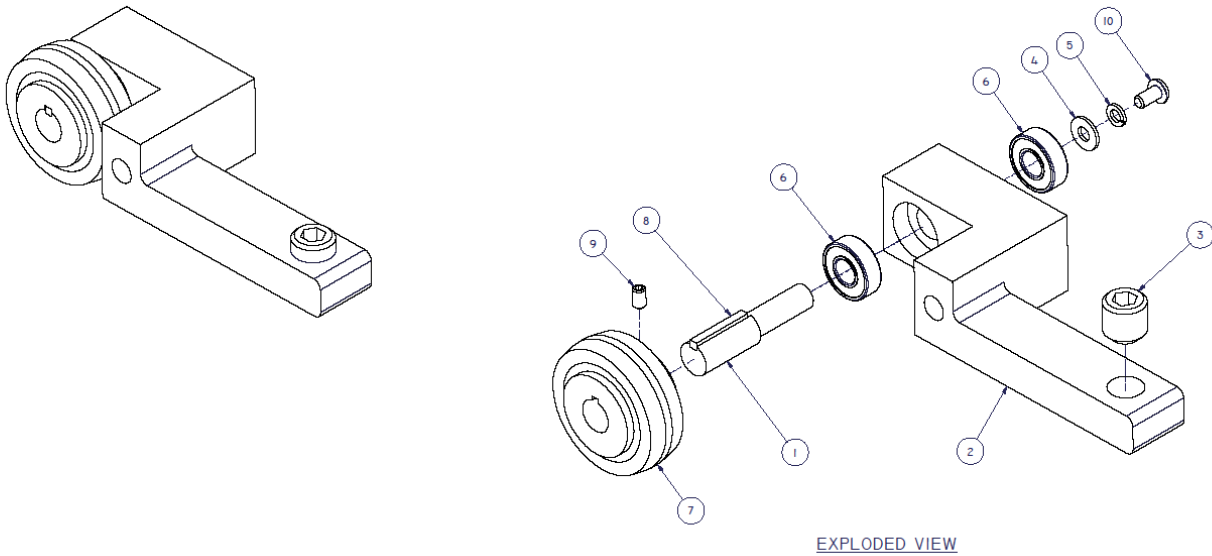
Assembly Part Number 2444202		CYLINDER ASSEMBLY, STAMPING BLOCK	
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	2444123	SLIDE ROD SUPPORT
2	1	2444129	SLIDE ROD BASE SUPPORT
3	1	2444124	GUIDE ROD
4	1	2444148	SLIDING BLOCK
5	1	52-D90345A1	AIR CYLINDER, 1.5 BORE, 1.0 STROKE
6	1	52-FQ02K	BIMBA VALVE, FLOW CONTROL
7	1	52-5779K151	FITTING, ELBOW 1/8" PIPE TO 1/4" TUBE
8	1	52-FBP2K	BUSHING
9	2	55-14202CH	SOCKET HEAD CAP SCREW 1/4-20 X 2
10	2	52-5161834CH	SOCKET HEAD CAP SCREW 5/16-18 X 3/4



Assembly Part Number 2743268		PNEUMATIC ASSEMBLY	
ITEM	QTY	PART NUMBER	DESCRIPTION
1	2	52-126B02	90 STREET ELBOW 1/8"
2	1	52-123B0402	NIPPLE, REDUCING 1/8" - 1/4" #6AZF1
3	1	52-6534K46	QUICK CONNECT COUPLER
4	1	52-45AAA2DDAA1BA	SOLENOID VALVE 4-WAY, 1/8"NPTF
5	1	52-46020002	MUFFLER EM12 1/8" MPT
6	1	52-13524	PRESSURE GAUGE 0-160 psi
7	1	52-PR2-N02B1	REGULATOR 1/4", 150 psi
8	2	52-5779K174	FITTING TEE 1/4 TUBE X 1/8 NPT

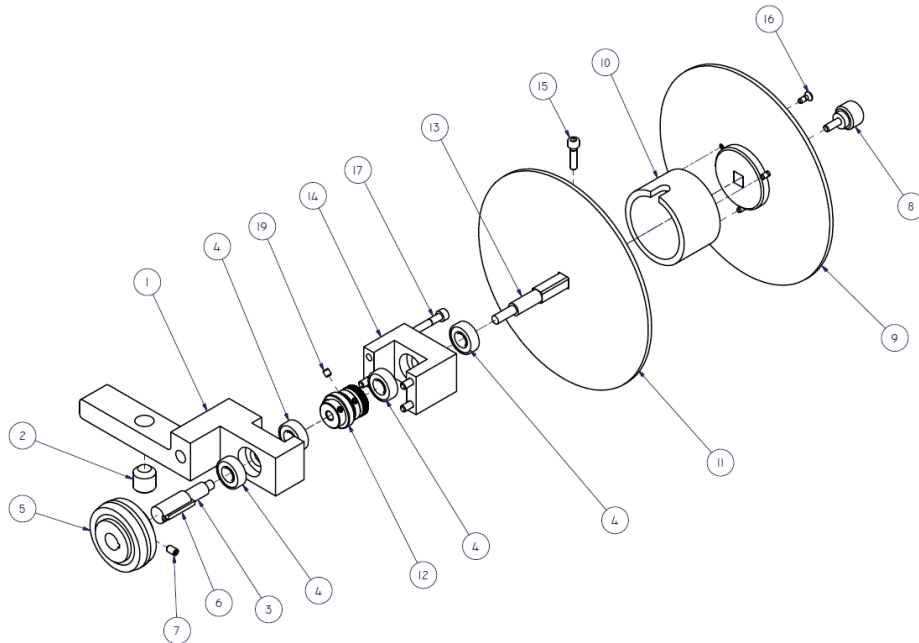
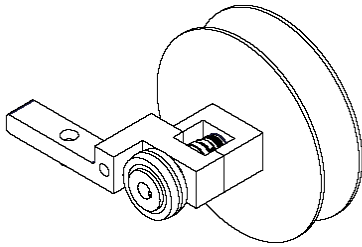


Assembly Part Number 2743205		TOP ARM ASSEMBLY	
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	2444204	NIP SHAFT
2	1	2444213	TOP ARM
3	1	52-581158SS	SCREW, SOCKET SET 5/8-11 x 58
4	1	52-10FW	WASHER, FLAT #10
5	1	52-10LW	WASHER, LOCK #10
6	2	52-99R6	RADIAL BALL BEARING
7	1	2743025	SILICONE FEED ROLLER
8	1	2444256	1/8 x 1.0 KEY
9	1	52-1032516SS	SCREW, SOCKET SET 10-32 x 5/16
10	1	52-102438BH	BUTTON HEAD 10-24 x 3/8



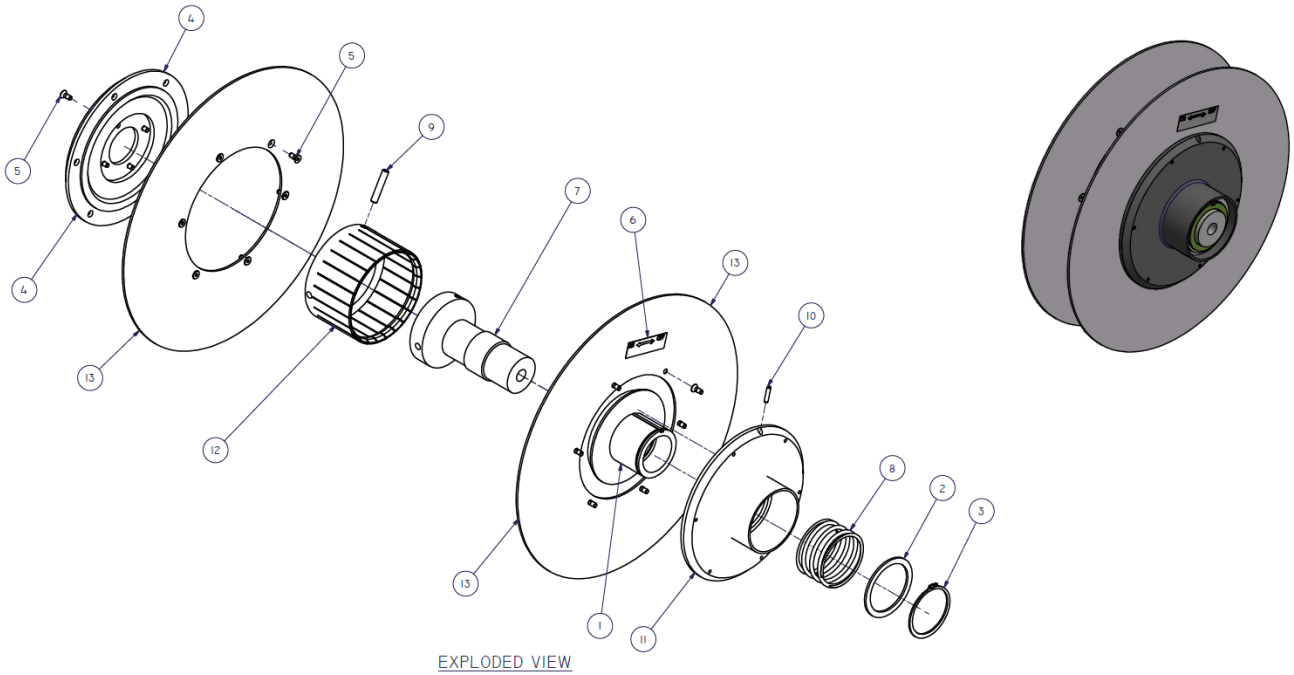


Assembly Part Number 2743219		BOTTOM ARM ASSEMBLY	
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	2444218	BOTTOM LINER ARM
2	1	52-581158SS	5/8-11 x 5/8
3	1	2444224	NIP SHAFT
4	4	52-99R6	RADIAL BALL BEARING
5	1	2743025	SILICONE FEED ROLLER
6	1	2444256	1/8 x 1.0 KEY
7	1	52-1032516SS	HEXAGON SOCKET SET SCREW 1.0
8	1	52-JCL685	THUMB SCREW
9	1	2444238	FRONT FLANGE PLATE
10	1	2444227	SPOOLER CORE
11	1	2444226	INSIDE SPOOLER PLATE
12	1	52-T251642S	SLIP CLUTCH
13	1	2444225	SPOOLER SHAFT
14	1	2444262	CLUTCH SUPPORT
15	1	52-102434CH	HEXAGON SOCKET HEAD CAP SCEW NO.10
16	3	52-63238FH	HEXAGON SOCKET FLAT COUNTERSUNK HED CAP SCREW NO.6
17	4	52-1024138CH	HEXAGON SOCKET HEAD CAP SCEW NO.10
18	1	2444278	SPOOL DIRECTION LABEL
19	4	52-832316SS	HEXAGON SOCKET SET SCREW NO. 8, FLAT POINT

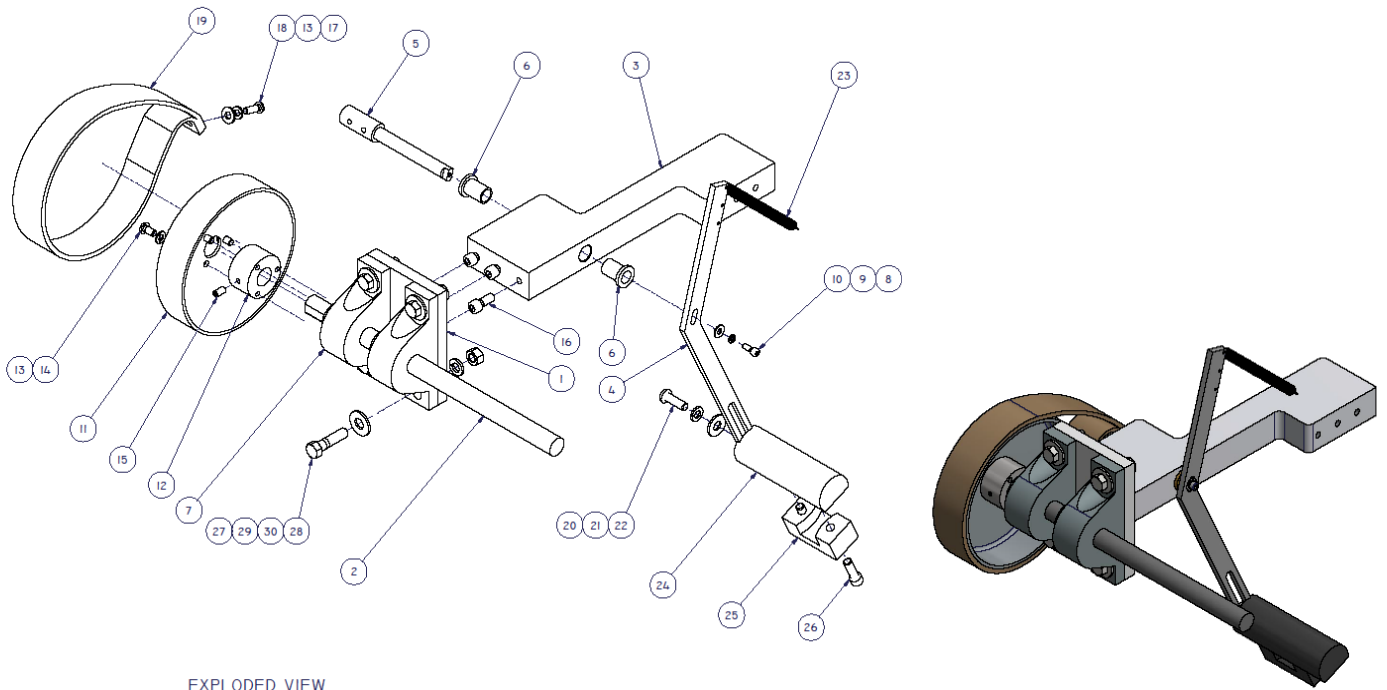


EXPLODED VIEW

Assembly Part Number 2743030		SPOOL ADAPTER ASSEMBLY	
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	302372-OM	EXPANDER, LEFT HAND
2	1	52-200754	WASHER 3" ID
3	1	52-3100306ST	RETAINING RING
4	1	500006	HUB, STATIONARY
5	16	52-142058FH	HEXAGON SOCKET FLAT CONTERSUNK HEAD CAP SCREW 1/4
6	1	52-LABEL	ON/OFF LABEL LH
7	1	500001	ARBOR ADAPTER, LEFT-HAND
8	1	52-202271	COMPRESSION SPRING
9	2	52-38162SS	HEXAGON SOCKET SET SCREW 3/8
10	1	52-7321TP	PIN, TENSION 7/32 X 1
11	1	500008	HUB FOR FLOATING FLANGE
12	1	500005	SLEEVE, COLLET
13	2	1793461	FLANGE-SPOOL ADAPTER

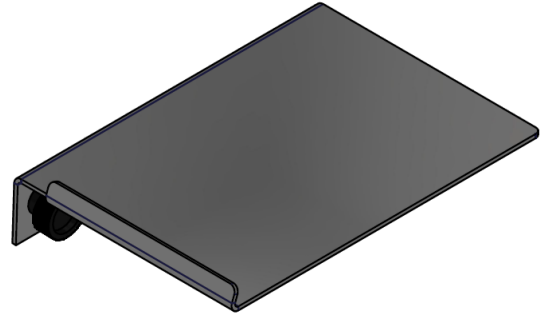
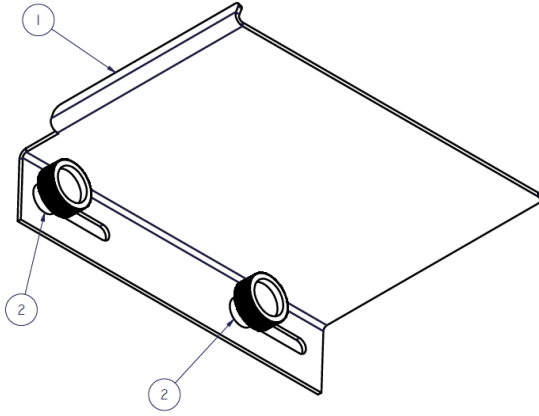


Assembly Part Number 2743180		SPOOL PAYOUT ASSEMBLY	
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	2444164	SPOOL BEARING PLATE
2	1	2444163	SPOOL SHAFT
3	1	2743057	PAYOUT RISER
4	1	2743033	DANCER ARM
5	1	2444177	BRAKE CAM
6	2	52-FB8108	BRASS BUSHING
7	2	52-RAK34	PILLOW BLOCK BEARING
8	1	52-10FW	WASHER
9	1	52-10LW	LOCK WASHER
10	1	52-102412CH	HEXAGON SOCKET HEAD CAP SCREW NO.10
11	1	2444261	REWORK, BRAKE HUB
12	1	2444260	HUB
13	5	52-14LW	LOCK WASHER
14	3	52-142012BH	HEXAGON SOCKET BUTTON HEAD CAP SCREW 1/4
15	1	52-142012SS	HEXAGON SOCKET SET SCREW FLAT POINT 1/4
16	3	52-5161834CH	HEXAGON SOCKET HEAD CAP SCREW 5/16
17	2	52-14FW	WASHER
18	2	52-142034BH	HEXAGON SOCKET BUTTON HEAD CAP SCREW 1/4
19	1	2444279	LEATHER BRAKE
20	1	52-516FW	WASHER
21	1	52-516LW	LOCK WASHER
22	1	52-516181BHCS	HEXAGON SOCKET BUTTON HEAD CAP SCREW 5/16
23	1	52-570	EXTENSION SPRING
24	1	2743022	DANCER GUIDE TOP
25	1	2743023	DANCER GUIDE BOTTOM
26	2	52-516181CH	SOCKET HEAD CAP SCREW 5/16
27	4	52-3816N	HEX NUT
28	4	52-3816112HH	HEX BOLT 3/8
29	4	52-38LW	WASHER, LOCK
30	4	52-38FW	WASHER, FLAT



EXPLODED VIEW

Assembly Part Number 2743060		BAG TRAY ASSEMBLY	
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	2743041	BAG TRAY
2	2	52-JCL515	THUMB KNOB



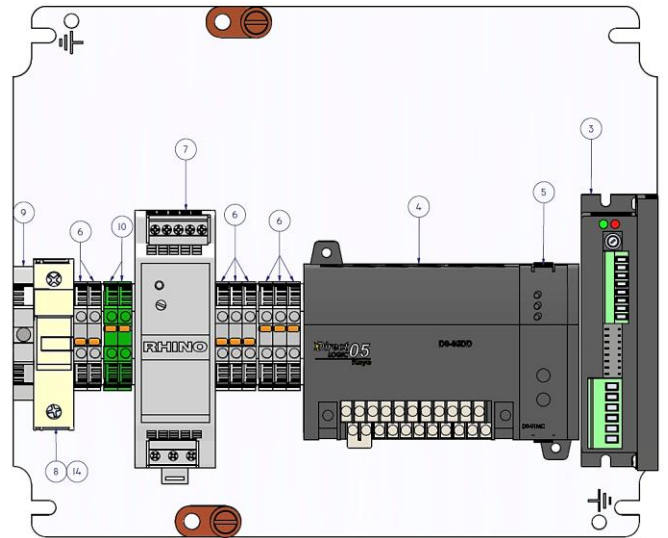
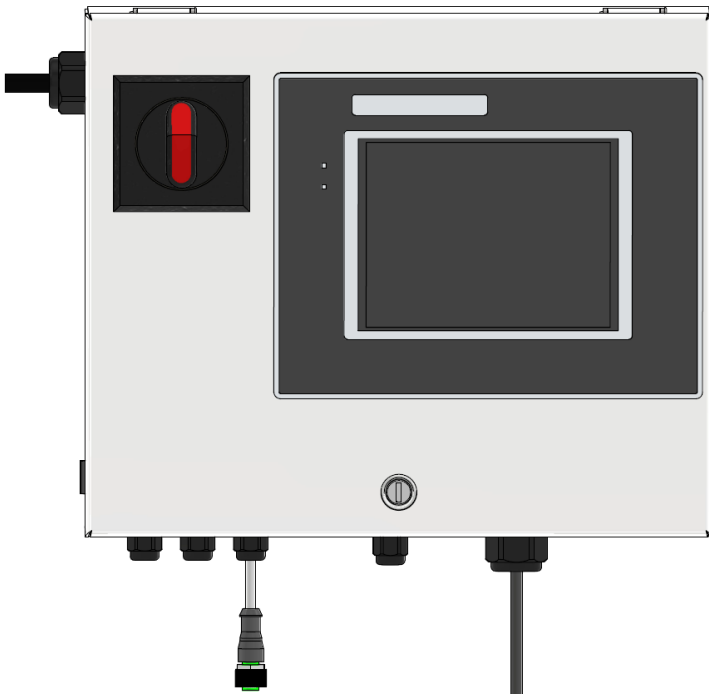
7.0 Electrical

**7.1 Electrical Enclosure**

Assembly Part Number: 52-2743E01

CONTROL PANEL

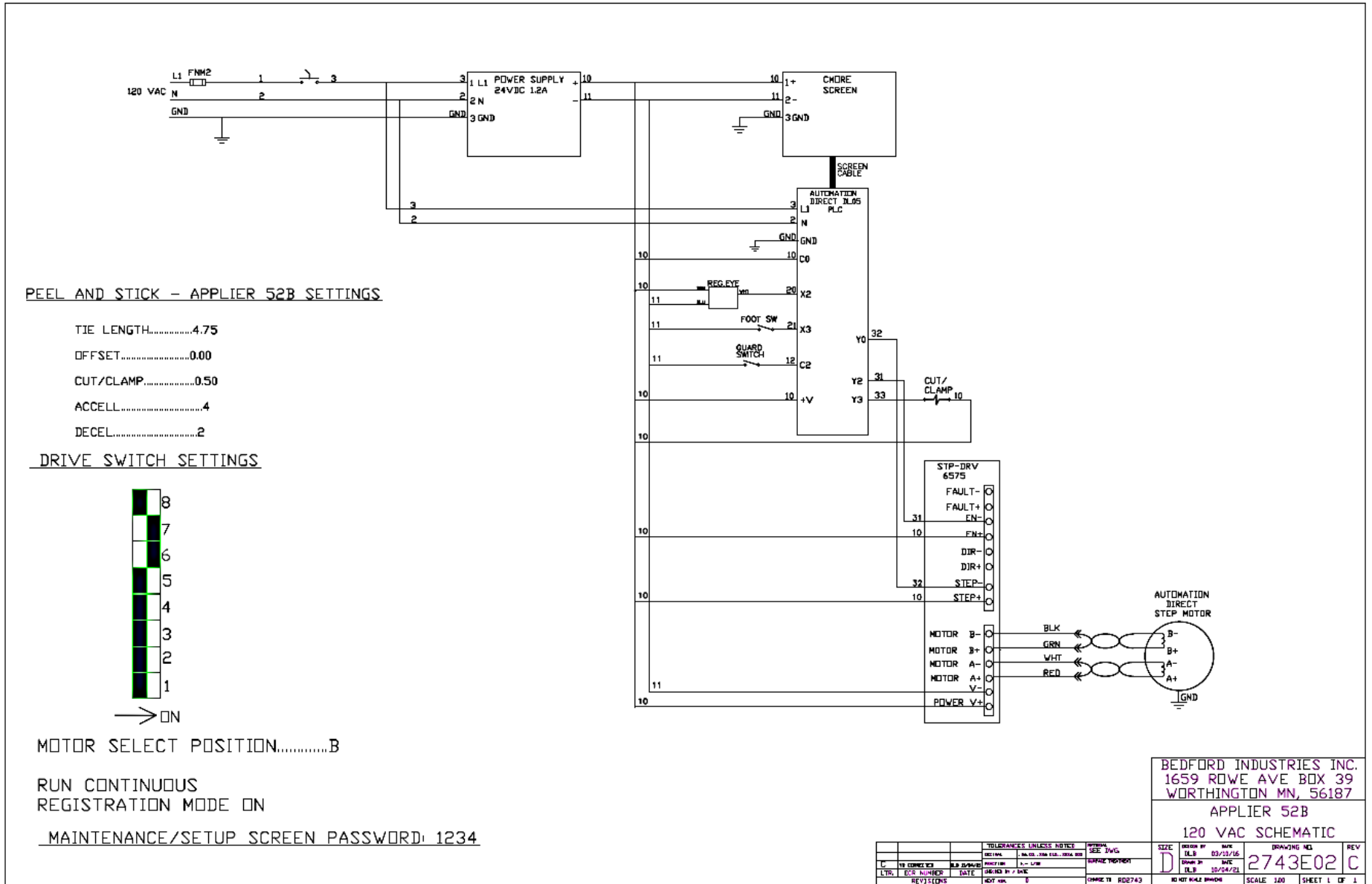
PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	52-LP3025	HOFFMAN PANEL LP3025
2	1	2743902	35MM STEEL DIN RAIL, 9.5"
3	1	52-STP-DRV-6575	STEPPER DRIVE 7.5A 24-65VDC 2-PH
4	1	52-D0-05DD	PLC, DL05 8DCIN/6DCOUT 120V POWER
5	1	52-D0-01MC	REMOVABLE MEMORY CARTRIDGE W/ 32k RAM
6	8	52-DN-T10-A	SNGL LEVEL TERMINAL BLOCK 24-10 AWG GRAY,30A,600V, 100CT
7	1	52-PSM24-090S	POWER SUPPLY 24VDC 90W
8	1	52-EHMIDU	FUSE HOLDER 30A 12/PK 600V-IPOLE # EHMIDU-12
9	1	52-DN-EB35	END BRACKET, #DN-EB35 AUTOMATION DIRECT 50ct
10	2	52-DN-T10GRN-A	TERM BLK GRN 30A 24-10AWG 600V , 100ct
11	4	52-DN-ECI210	END COVER #DN-ECI210 FOR MINI TERMINALS 100ct
12	10	52-DN24J4Y	JUMPER 24-POLE 5 CT BAG # DN-24J4Y , 120PK
13	2	52-BLA-L70	BLA LUG CU 1 HOLE F/4
14	1	52-FLM2A	2A 250V TIME DELAY FUSE # FLM 2A
15	1	2743275	ELEC. BOX, APPLIER
16	4	52-69915K47	CORD GRIP .12-.26" CORD OD , 1/4 KO
17	2	52-69915K57	CORD GRIP STRAIGHT 1/2" NPT
18	1	52-DG9015MF3	ADPT,DBI5M/F ORENTATION 3
19	1	52-EA-2CBL	CABLE - AUTO-DIRECT
20	1	52-CDI2L-0B-020-A0	CABLE 2M MI2 Q/D AXIAL F 4POLE GRY
21	1	52-0HBS-2PJ	ABB DISCONNECT HANDLE DOOR MOUNT
22	1	52-OT40FT3	ABB SWITCH DIS ISCA104902R100I
23	1	52-EA9-T6CL-R	TOUCH PANEL 6" COLOR 320X240 QVGA
24	1	52-2W687	CORD, SJO 16/3 12' # IFD89
25	8.0 FT	52-SJOCORDI6-3	CORD, SJ016-3
26	1	52-5A287	SWITCH, FOOT ( NEW ) # 5X36I
27	1	52-STP-EXT-020	CABLE MTR EXT 20FT W/CONN FOR STP



## 7.2 Wiring Diagrams

Assembly Part Number: 2743E02

SCHEMATIC DRAWING



BEDFORD INDUSTRIES INC.  
 1659 ROWE AVE BOX 39  
 WORTHINGTON MN, 56187

APPLIER 52B  
 120 VAC SCHEMATIC

DATE	03/23/16	DATE	10/24/21
BY	DLB	BY	DLB
CHKD BY		CHKD BY	
REV		REV	
LIT. NO. 2743E02		LIT. NO. 2743E02	
REVISED		REVISED	

SCALE: 1:00 SHEET 1 OF 1

## 8.0 Spare Parts List and Replacement Schedule

This list includes parts that are common wear items and will need to be replaced over time. The replacement schedule is our estimate of when each part will likely need to be replaced based on machine cycles. The life of these parts may vary based on maintenance care and use. (refer to **Section 6.2** for parts drawings)

PART NUMBER	QTY	DESCRIPTION	REPLACE
52-2444248	1	KNIFE *	1,000,000 cycles
52-2743241	1	ANVIL *	1,000,000 cycles
52-2743025	3	SILICONE FEED ROLLER	2,000,000 cycles
52-T251642S	1	CLUTCH	2,000,000 cycles
52-2743018	4	ROUND GUIDE	3,000,000 cycles
52-2743020	1	TOP GUIDE BLOCK	3,000,000 cycles
52-2743017	1	BOTTOM GUIDE BLOCK	3,000,000 cycles
52-99R6	6	BEARING	5,000,000 cycles
52-45AAA2DDAA1BA	1	SOLENOID VALVE	10,000,000 cycles
52-2444280	1	PNEUMATIC CYLINDER FOR KNIFE	10,000,000 cycles
52-D90345A1	1	PNEUMATIC CYLINDER FOR STAMPER BLOCK	10,000,000 cycles
52-FLM2A	1	FUSE	

*\*NOTE: Bedford offers sharpening services for the Knife and Anvil.*

When ordering parts, locate the machine nameplate on the back of the machine (refer to **Section 6.0** for nameplate location) and provide the model number and serial number with your request for parts. This information will aid in providing quick and accurate service from Bedford Industries or any machine distributor that provides parts for the Bedford Peel & Stick® Applier machine.



**Bedford Peel & Stick® Applier model 52-B**