



## **Xtreme XME-900BC Friction Feeder**

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### **Operation Instructions, Technical Guide, And Parts List Information**



**For Model:  
Xtreme XME-900BC**

Have this information ready when calling in about your equipment:

Model: \_\_\_\_\_ Serial #: \_\_\_\_\_ Firmware #: \_\_\_\_\_  
Warranty Start Date: \_\_\_\_\_

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**Illustrations in this guide are for reference only and may depict optional features that are available at additional costs.**

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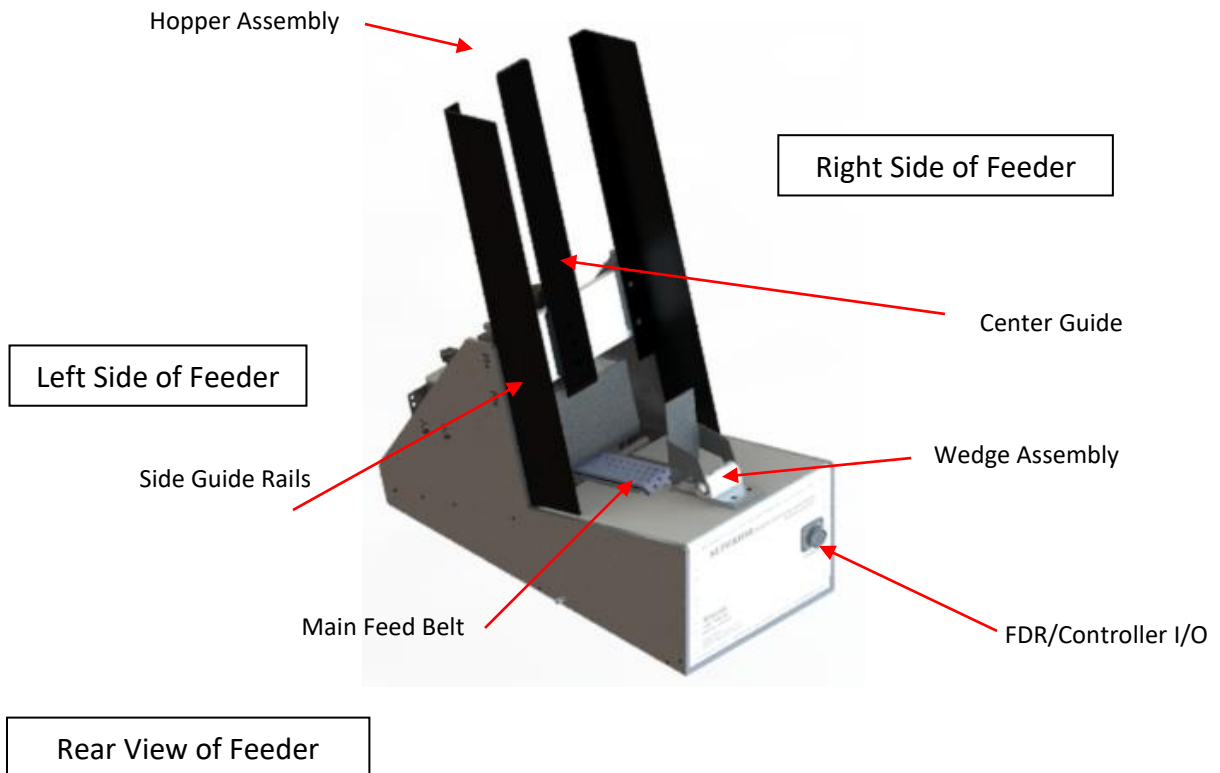
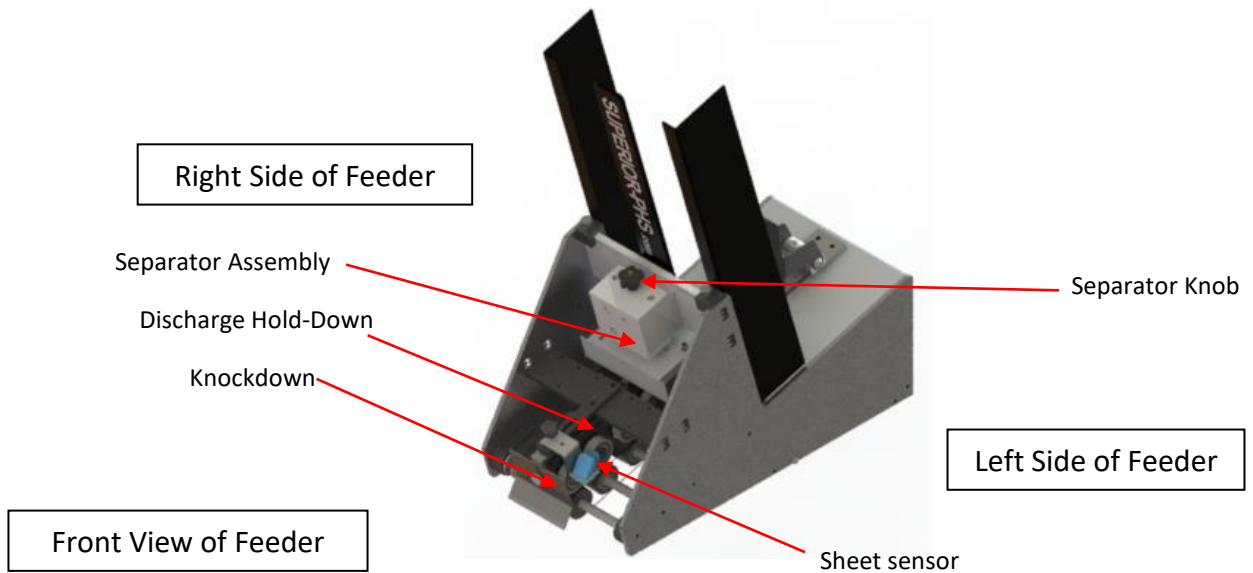
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## SECTION 1: MACHINE OVERVIEW

Please review the components and descriptions to become familiarized with your new Xtreme XME-900 Friction Feeder.



## SECTION 2: SETUP

This section will walk you through setup adjustments for the Xtreme XM-900 Friction Feeder. Refer to the Basic Setup Guide for assembling your feeder when shipped from the manufacturer.

For a video demonstration of basic feeder set up, visit

<http://www.superior-phs.com/setup.html>

Take a moment to get familiarized with the basic feeder components on the previous page. Basic feeder setup consists of three main components: Separator, Hopper & Wedge Assembly, and Discharge Hold-Down. **Power to the feeder should remain off** during the Separator and Hopper & Wedge Assembly setup.



**Never Plug-In or Unplug Any Wires, Cables, or Electrical Components on the Feeder Without First Powering Down the Feeder and Removing All Power**

### Separator Setup

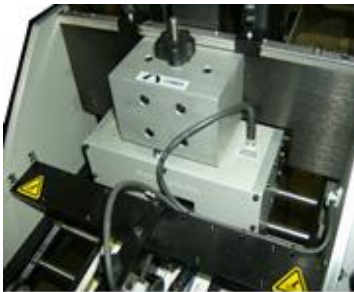


Figure 2.1\*



Figure 2.2\*



Figure 2.3\*

The Separator (Figure 2.1) is the device that separates product from the stack in the Hopper. Turning the knob clockwise will increase the gap between the gate assembly and the main feed belt; counter-clockwise will decrease the gap. This will create drag on the product and separation as product is pulled through the feeder.

Raise the Separator and advance one piece of product underneath the Gate Rollers (Figure 2.2). Slide the piece forward and backward while turning the separator knob counter-clockwise (Figure 2.3) to create a medium drag on the piece.

Make certain that the drag is not too tight or too loose. If the drag is too tight, the rollers may “mark” some products, or prevent products from advancing causing miss-feeds. If the drag is too loose, the rollers will allow extra products to advance at the same time causing double feeds.

The Separator is equipped with a gear motor that automatically rotates the Gate Rollers as the feeder is running.

**NOTE: Always power off the feeder *before* removing power to the Separator.**

\* Images are for training and may not reflect the actual feeder model

## Hopper Setup



Figure 2.4\*



Figure 2.5\*

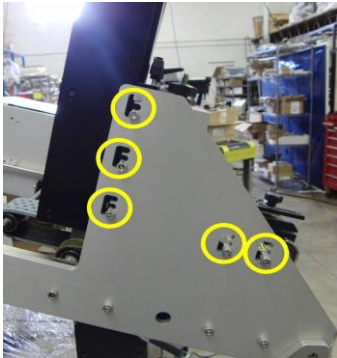


Figure 2.6\*



Figure 2.7\*

The hopper consists of a cross mount plate, center plate, two side guides, side guide clamps, and handles/knobs shown in Figure 2.4. The side guides are adjustable side-to-side to allow for different product widths.

*Optional:* Some of the feeders come with two rods for each side guide. (Not available on the XM-1200 or the XME products) They can be installed to reduce drag, pinch-points, and possible marking. The rods can be adjusted up and down to assist in skew control (Figure 2.5). Using the rods depend on the type of product being fed.

**NOTE:**

**BE SURE THAT THE RODS DO NOT CONTACT THE BELTS**

Load one piece of product in the center of the hopper and adjust the side guides up to the edge of the product. Proper setup allows approximately 1/16" to 1/8" clearance from the side guides to the product.

For product thicknesses of 1/4" and under, the hopper assembly should be mounted in the lower slot of the "E" mount of the feeder's left and right-side plate (Figure 2.6). For thicker products, loosen the fasteners and slide the assembly up (1/4"-1/2" and 1/2"-3/4"). *Note:* You will need to perform the same operation on the hold down assembly.

For products 3.25" wide up to 12" wide, loosen the handle/knob and manually slide the side guide to the desired position. Tighten the handle/knob when completed.

For products 2" wide up to 3.25" wide, "flip-flop" the two side guides (Figure 2.7) so that the smooth side of the side guides are now on the inside. This is done by removing the screws that fasten the side guides to the side guide clamps. Swap the side guides and refasten using the same screws.

\* Images are for training and may not reflect the actual feeder model

## Wedge Assembly Setup

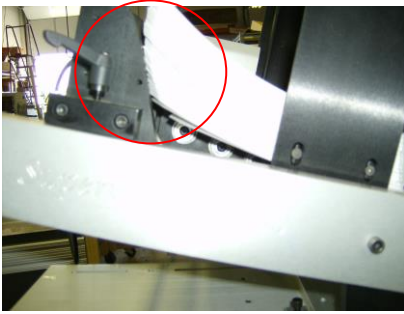


Figure 2.8\*

\* Images are for training and may not reflect the actual feeder model

The Wedge Assembly provides “lift” to the rear of the product in the hopper. The amount of lift and wedge configuration will depend on the type of product. Typically, products that are rigid need less lift/support than products with less rigidity. Adjustment of the wedge will, in part, determine the amount of overlap of the products as they pass through the Gate Rollers.

A good starting point is a lift angle of approximately 20-degrees on the first piece (Figure 2.8) Depending on your product, you may need to increase or decrease this angle once more product is loaded and you have test run a few cycles.

## Discharge Hold-Down Setup

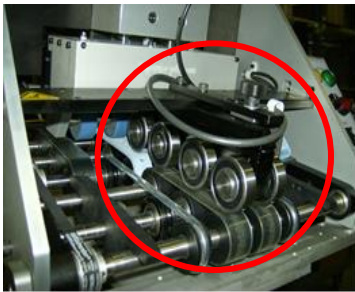


Figure 2.9\*

The Discharge Hold-Down (Figure 2.9) is designed to assist in accelerating the product to create a gap between them. This assembly consists of self-adjusting spring-loaded wheels and two fine-tuning adjustment screws.

The fine-tuning adjustment screws allow for more or less tension to be applied to the product as it passes through the discharge of the feeder. The rear adjusting screw is located just behind the cross bar and the front one is located through the opening on the sensor mount bracket.



Figure 2.10\*

To set the Hold-Down, power on the feeder and slowly press the Jog button to jog one piece of product through the feeder until it rests under the Hold-Down. By hand, move the product back and forth under the Hold-Down while adjusting the adjustment screws with a 3/16” allen wrench until there is a good amount of drag on either end of the Hold-Down (Figures 2.10 and 2.11). For products such as corrugate, minimal drag is needed.

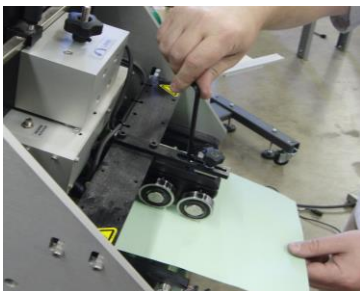


Figure 2.11\*

\* Images are for training and may not reflect the actual feeder model

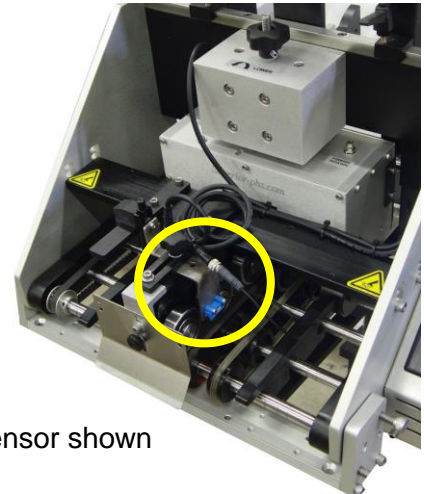


## Sheet Sensor Photo Eye

The Sheet Sensor Photo Eye is used to detect the leading edge of a piece of product as it exits the feeder. Position the sensor at the discharge of the feeder where you want your product to stop. Be sure not to position the Sheet Sensor over a shaft or other obstruction. This will cause inaccurate counts.

*Note:* The Sheet Sensor must detect a gap between each product in order to maintain accurate counts. This is indicated by the light going on and off. A gap of 1" or more as product passes the Sheet Sensor is recommended.

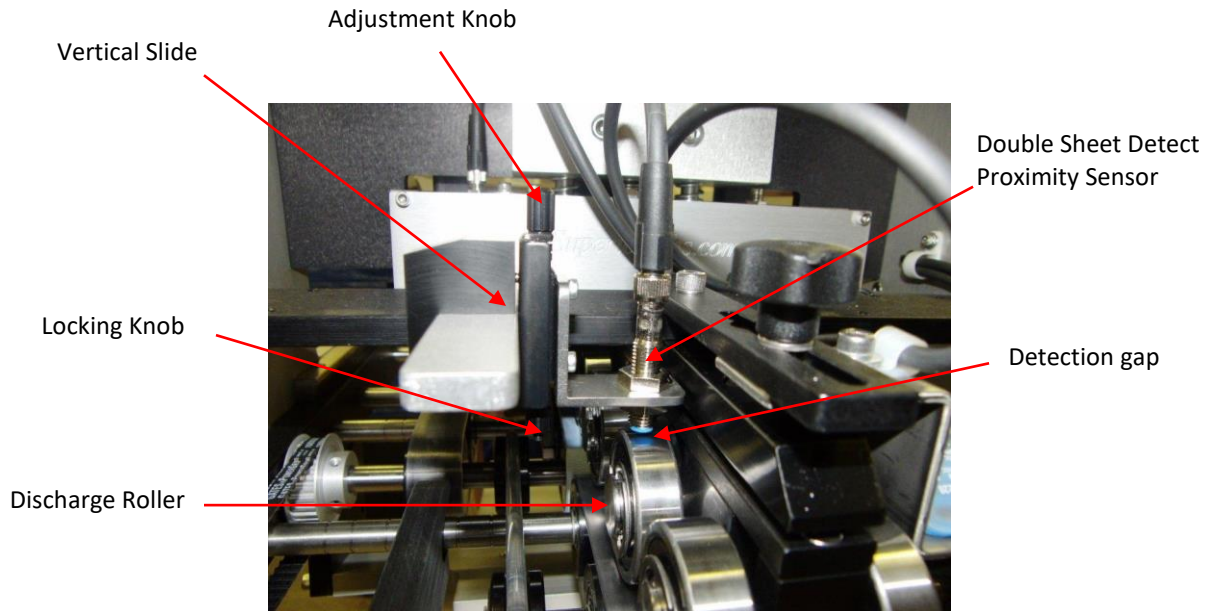
If the Sheet sensor is blocked or open for a Period of 1.5 seconds, the XME-900 will STOP and the red light will blink (Every 2 sec) to indicate A TIME-OUT Fault. This is to insure gap separation and empty hoppers are watched for.



High-Speed Sensor shown

## OPTIONAL: Electro-Mechanical Double Sheet Detector

The electro-mechanical double sheet detector is a Proximity Sensor mounted above the middle discharge roller. When this sensor is activated (sensing a double), the feeder will stop and illuminate the Reset lamp with a slow blink (Every 1/2 sec). To reset, simply remove the product from under the discharge roller and press the Reset button. Press the Cycle button once to stage a new piece to the sheet detect sensor.





**Setup** – To adjust the proximity sensor, advance 2 pieces under the hold down roller below the proximity sensor. Loosen the bottom locking knob on the vertical slide. Loosen or tighten the top adjustment knob on the vertical slide to move the proximity sensor up or down. Adjust the position so that you are just detecting the double and tighten the bottom locking knob. If the position is too far into the detection range, false triggers may occur from the bounce of the roller under normal operation. Next, remove one of the pieces of product and make certain that the proximity sensor is not detecting a single piece. Once satisfied, cycle a few pieces through the feeder to ensure that singles do not trip the proximity sensor.

### OPTIONAL: Burn-Thru Double Sheet Detector

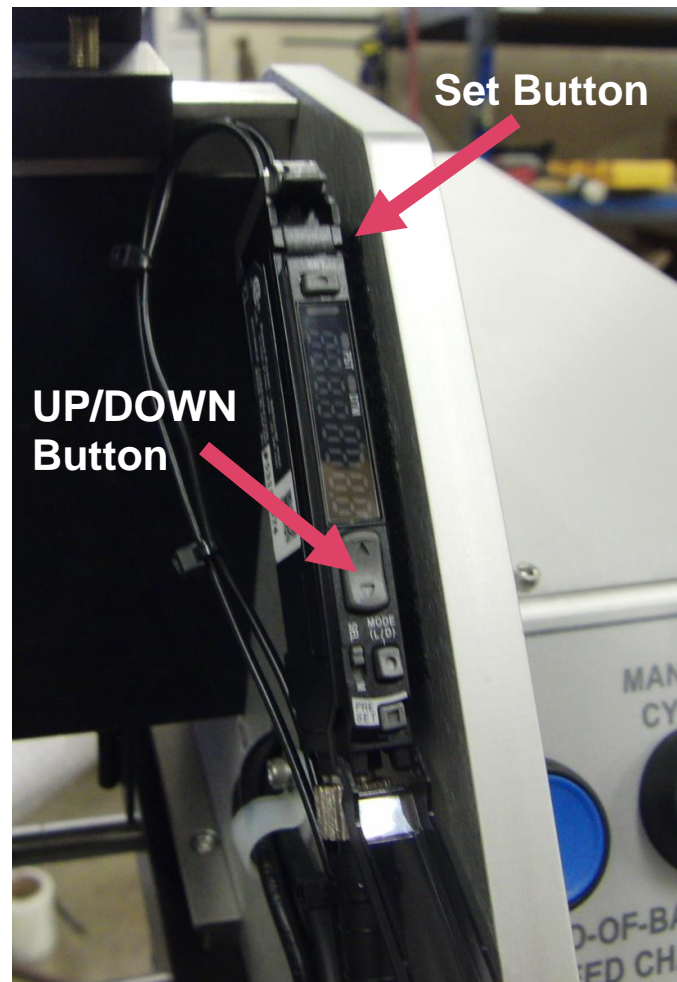
The Optional Burn-Thru Double Sheet Detect feature provides added security to applications where all sheets fed need to be accounted for. Along with the standard Miss Detect feature, the optional Burn-Thru Double Sheet Detect feature ensures that only one product is being fed at a time.

#### Setting the Double Sheet Detect feature

1. Manually insert 2 paper sheets into the discharge of the feeder between the upper and lower double detect sensor.
2. Open the cover on the Amplifier, push the Set button twice. On second time, display will flash.
3. When done flashing, Double Detect is set. At any time, you can adjust the trigger threshold up or down by using the up/down button
4. Close and secure the cover to the amplifier and remove the paper sheets from the discharge of the feeder.
5. To clear a double, Jog the paper sheets from the feeder and press the reset button, the feeder will return to ready mode.

**Note: You cannot cycle the feeder when there is a double. It will stop each time. You can Jog the double out or pull it out by hand.**

*Please note: Sensor needs to always be set to Dark-on mode. Refer to sensor instruction sheet that came with the feeder if you're not sure.*



## SECTION 3: OPERATION



### **Before Powering on the Feeder:**

If you are using the Trigger Sensor assembly provided (or any external I/O interface cable) to automatically cycle the feeder, plug-in the Trigger Sensor located in the Rear Operator Panel and mount it directly to the feeder near the discharge or near the equipment that will be triggering the sensor, such as a conveyor.

**DO NOT PLUG OR UNPLUG POWER TO THE TRIGGER SENSOR OR EXTERNAL INTERFACE CABLE AT ANYTIME WITHOUT FIRST POWERING DOWN THE FEEDER.**

**FAILURE TO DO SO CAN RESULT IN DAMAGE TO THE CONTROLS INTERFACE ON THE PLC.**

### **Apply Power**

1. It is important to make sure that you are applying the correct voltage to the unit. At the Rear Operator Panel, the display will state the required voltage. You must only supply the power to the unit as stated on the module.
2. Once you have applied power, switch the unit to the “On” position (-) by pressing the on/off switch located on the Rear Operator Panel.
3. Press the “Reset” button and the “Ready” button will light up green indicating the feeder is in Ready Mode and is ready to receive a trigger signal from the Trigger Sensor, I/O external trigger or by manually cycling the feeder by pushing the green “Cycle” button.

### **Trigger Sensor (Optional for feeders built with SYSTEM Controllers)**



The trigger signal is what initiates the feed cycle. This signal is received by either the Trigger Sensor, I/O external trigger or by manually cycling the feeder. When received, this puts the feeder into motion and dispenses product(s).

*Note:* If more than one trigger signal is received prior to completion of the feed cycle, a “Miss-Feed” will be detected and the red Reset light will blink (Every 4 sec)

## Loading Product

1. Load one piece of product in the Hopper as described in the Hopper Setup section. To start, this piece of product should be resting on the Wedges with approximately 20 degrees of lift.
2. Pre-shingle, or fan out, a 1" stack of product (Fig 3.1) and load into the hopper resting under the gate rollers (Fig 3.2). Make sure to maintain the pre-shingle effect so it matches that of the lead-in plate on the Separator.
3. Repeat Step 2 with another 1" stack until you have approximately 3" to 4" of product in the Hopper. All of the product in the Hopper should be evenly fanned out along the Wedges with no random pieces sticking out. This initial setup of product is very important to maintain even feeding as you continue to load the Hopper.
4. Press or hold down the Jog button to gauge the feeding performance of a few pieces of product. If necessary, Jog the feeder while adjusting the Separator until product is feeding evenly. Ideally, you are looking for a 1" gap between the products as it passes the Sheet Sensor photo eye.



Figure 3.1\*

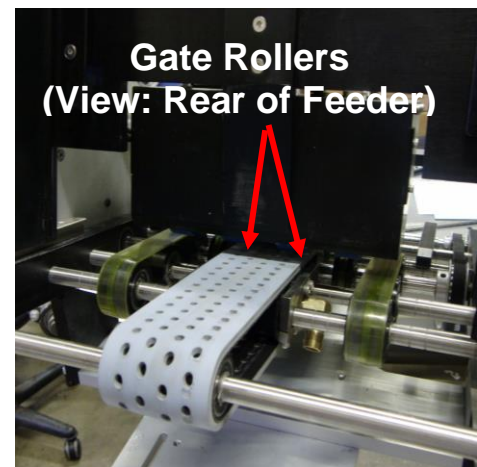


Figure 3.2\*

\* Images are for training and may not reflect the actual feeder model

5. All products are different in characteristics. While you may be able to load higher stack heights of one product, the next product you run may require lower stack heights for optimal performance. For example, thin or flimsy sheets may only perform at a 3" to 4" stack height while more ridged products such as chipboard and corrugate can be stacked in excess of 24". You will need to experiment by loading or unloading product to determine the effective stack heights for each product. Use the chart below as a general guideline on product stack heights.

Product Types	Thin, Flimsy Sheets	Glossy Sheets	Card Stock	Corrugate
Stack Height	3 to 6"	4 to 8"	8 to 15"	10" to 20"+

Xtreme XM Series Friction Feeders can run over 2,000 different products; however, it is impossible to provide a complete setup guide for all products types. You may experience significantly different stack height results than what is listed above. For maximum results, use trial-and-error to find the optimal stack height for your specific product type.

6. As you start feeding, you can add or remove product to adjust your stack height. Be sure to keep a consistent stack height as the feeder runs because the weight of the stack will affect the performance. For more information on different variables of feeding product, see Additional Setup Information section.

## Control Panel Features



### *Jog Button*

The feeder will advance when the Jog button is pressed. The feeder will continuously run when the jog button is activated. This option is typically used when setting up product in the feeder or clearing any product under the Separator. While holding down the Jog button, you can adjust the Separator and feed product until the product feeds consistently.

### *Stop Button*

The feeder is in Stop Mode when the Stop light is lit or in a blink mode (FAULT). The feeder will only respond to the “Jog” input. Pressing the Stop button when lit will attempt to put the feeder into Ready Mode (Assuming all FAULTS have been cleared)

### *Cycle Button*

While the feeder is in Ready Mode, pressing the “Cycle” button will trigger a feed.

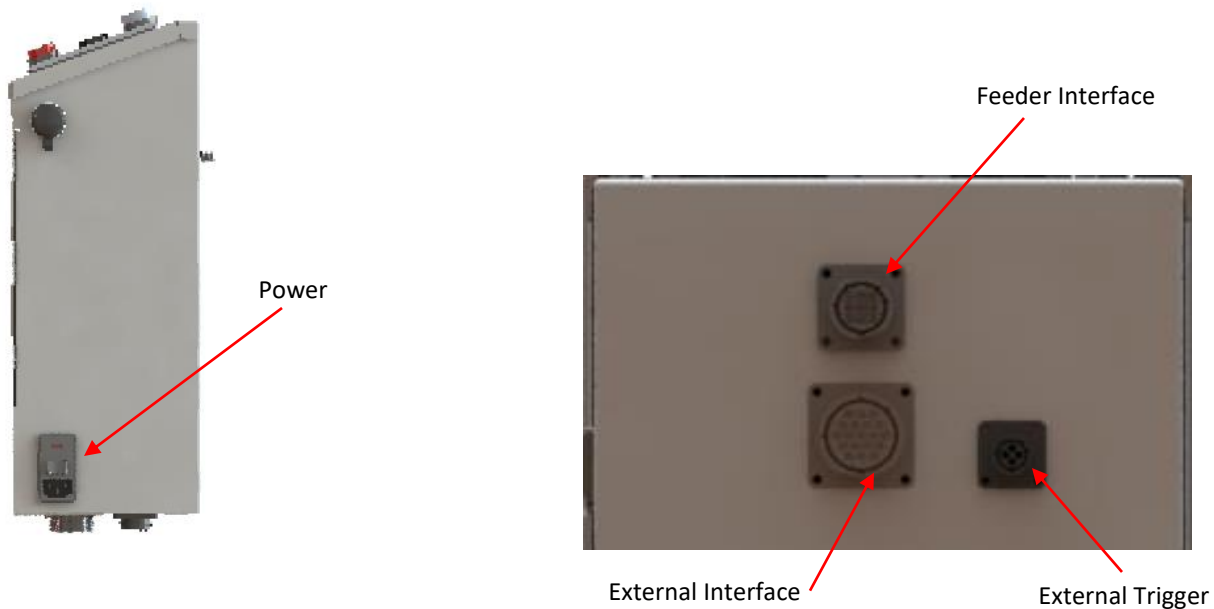
### *Ready Mode*

Pressing the Stop button will clear the illumination of the stop light and put the unit into “Ready” mode. Ready mode is represented by a solid illumination of the ready lamp (Green). The unit is now ready to receive a trigger signal from one of three sources (green cycle button, trigger sensor, or externally through the I/O interface).

### *Shutdown*

Completely power off the feeder when not in use. To do this, move the on/off switch located on the side of the Control Enclosure to the “off” position (O) and remove the product from the hopper.

\*\*\*NOTE\*\*\* Reference “XM1200/XME900BC Screen Operator Manual” for instructions of the HMI Program. (RUN and SETUP)



**Feeder Interface**

Input for 9-pin FDR/Controller cable.

**External Interface**

Input for 37-pin external I/O interface cable if communicating with a host system.

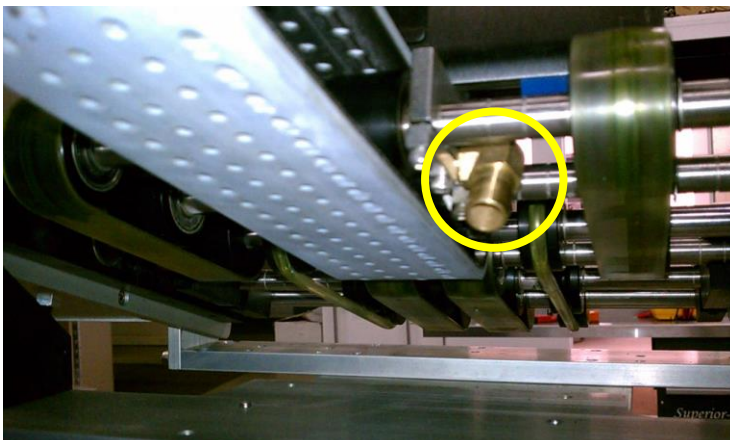
**External Trigger**

Input for 4-pin trigger sensor assembly.

**Power**

Cor Com power inlet module. 110 VAC.

**Vacuum Belt and Manifold**



The vacuum manifold has either a 1/2" barbed fitting (shown) or a 5/16" push in connector.

Works with any vacuum source provided by customer: Venturi - House Air, Pump, or Regen Blower.

We recommend an adjustment valve be placed between the vacuum source and the vacuum manifold. The amount of vacuum required depends on product type and application speed.

Range 1.0 to 20 in-Hg.



## Additional Set-Up Information

### *Different Variables of Feeding Product*

In any friction feeder there is an inherent trade-off between stack height (load weight) and feeding performance. Smaller products like most 5" x 7" and smaller can stack 16" to 20". Larger products vary greatly in their stack height. Variables include:

- Coefficient of friction of the product such as glossy sheets versus card stock;
- Rigidity of the product such as paper versus chipboard;
- Weight of the product such as a 3" stack of paper verses a 3" stack of corrugate pizza backers.

Products of the exact same size can vary greatly in the maximum stack height allowed at full speed. It is not uncommon to have stack heights in the 4" or less range for higher coefficient of friction 8.5 x 11 (or larger) thin sheets.

If full speed is the primary goal, then stack heights may need to be reduced. If maximum stack heights are the goal, then speeds may need to be reduced. If the goal is to run at full speed with maximum stacking capacity, a bulk loader is the only available solution for some products. Please see the XM-100 Bulk Loader in the Section 6: Accessories and Aftermarket Options.

### *Repositioning the Separating Rollers*

The purpose of repositioning the separating rollers off the belt is to create a "flex" separation (figure 3.3) vs. nip point separation (figure 3.4). This can be done with the separator mounted or removed from the feeder. The preferred method is the nip point separation.

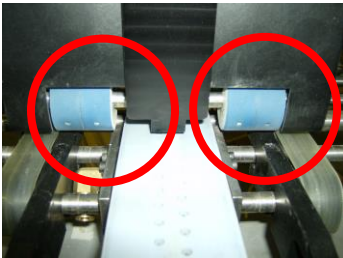


Figure 3.3\*

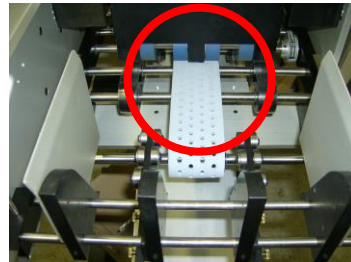


Figure 3.4\*

\* Images are for training and may not reflect the actual feeder model

The blue gate rollers are designed to move anywhere on the 8" wide gate roller shaft. Most customers leave the 2 rollers over the feed belt as it is easier for most operators to set-up a wide range of product with these rollers in this position.

It is never recommended to try and lower the gate rollers below the surface of the feed belt for thinner products. Lowering the gate roller too far below the surface of the feed belt can cause marking or scoring of the product due to too much pressure of the product on the edge of the belt and gate rollers.



### **Rotating Gate**

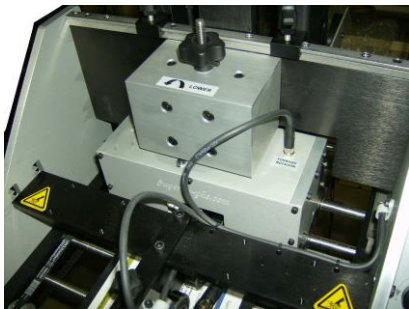
#### **\*\* POWER OFF THE FEEDER BEFORE REMOVING POWER TO THE SEPARATOR\*\***

The primary function of the rotating gate rollers is to create uniform wear and not create flat spots on the rollers that would require the operator to stop the feeder and correct. The rotation rate is approximately .25 RPM (1/4 turn every minute). The gate rollers only rotate when the feed belt is moving.

The best way to verify the separator rollers are turning is to remove all product from the feeder, turn Continuous Mode 'on', set Time Out to off, set speed to about 50%, place a finger under the sheet sensor then press cycle. Place a finger on one of the rollers. You will feel the gate rollers pulse and rotate.

If you would prefer not to set a finger on the roller, you can mark a line on a roller, or locate a set screw hole and observe these as the rollers turn.

Note: You will need to observe or feel for a period longer than 15 seconds.



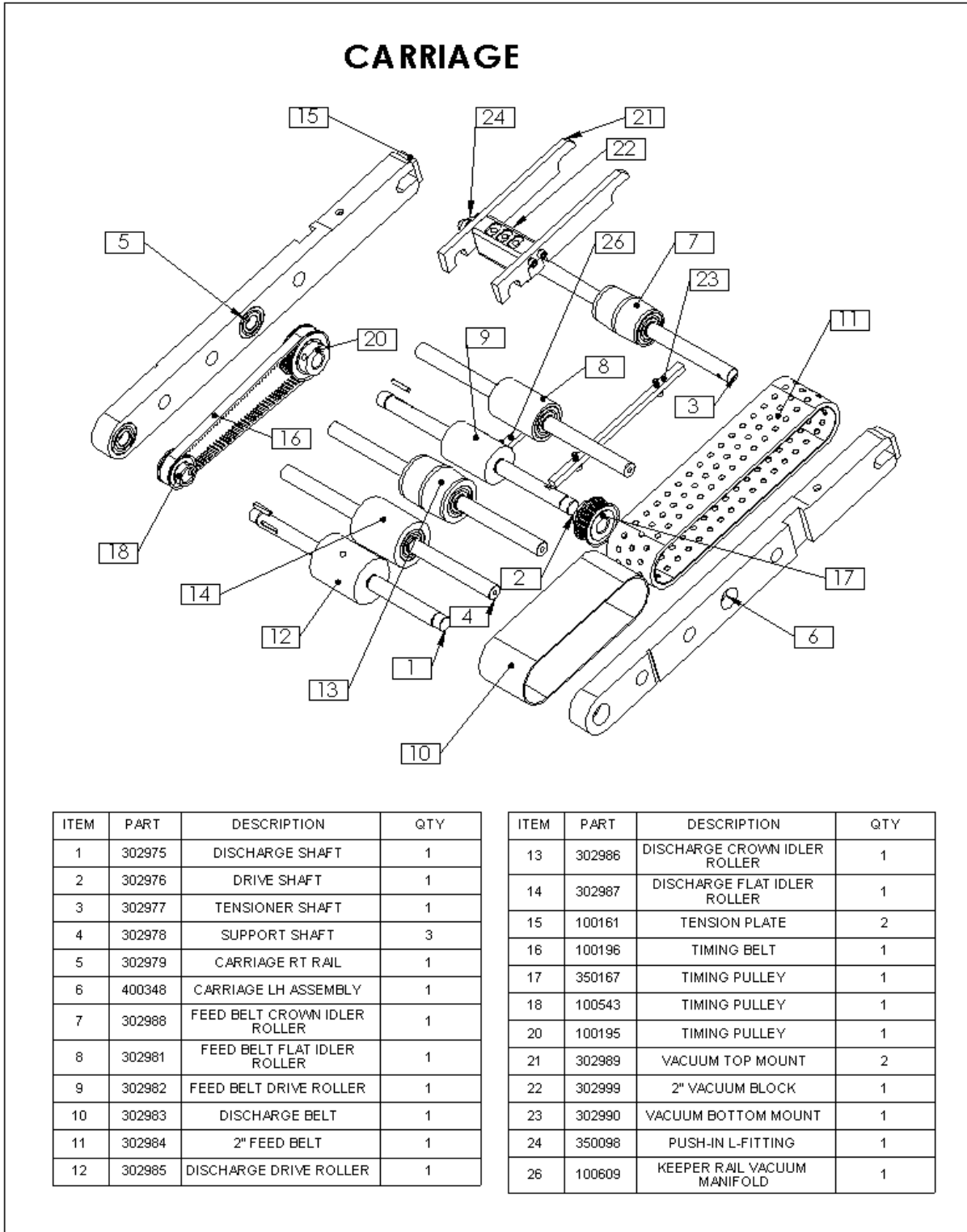
## SECTION 4: COMPONENTS / PARTS LIST

### XME-900BC

ITEM	PART	DESCRIPTION	QTY
1	400354	CHASSIS	1
2	400604	CARRIAGE	1
3	400668	HOLD DOWN ASSEMBLY	1
4	400671	HOPPER ASSEMBLY	1
5	400642	SEPARATOR POWERED ASSEMBLY	1
6	400670	CONTROLLER	1

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Assembly Number:  
500108

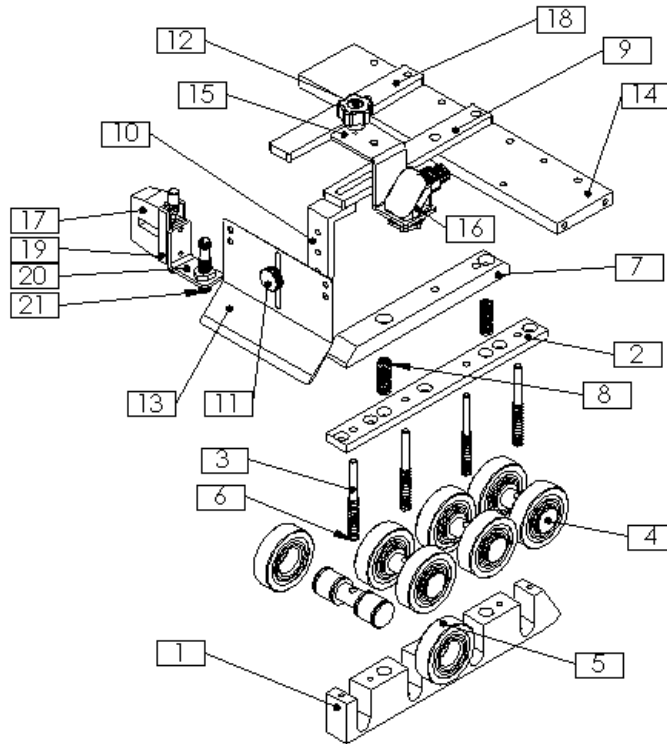


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Assembly Number:  
**400604**

## HOLD DOWN ASSEMBLY



ITEM	PART	DESCRIPTION	QTY
1	100208C	BOTTOM SECTION	1
2	100216C	HOLDDOWN	1
3	100688	DOWEL PIN	4
4	100209	HOLD DOWN AXEL	4
5	100214	BEARING	8
6	100212	SPRING	4
7	100208D	HOLD DOWN TOP	1
8	350081	SPRING	2
9	100259	MOUNTED SHEET SENSOR BRACKET	1
10	301875	SENSOR MOUNT	1
11	350082	THUMB SCREW	1

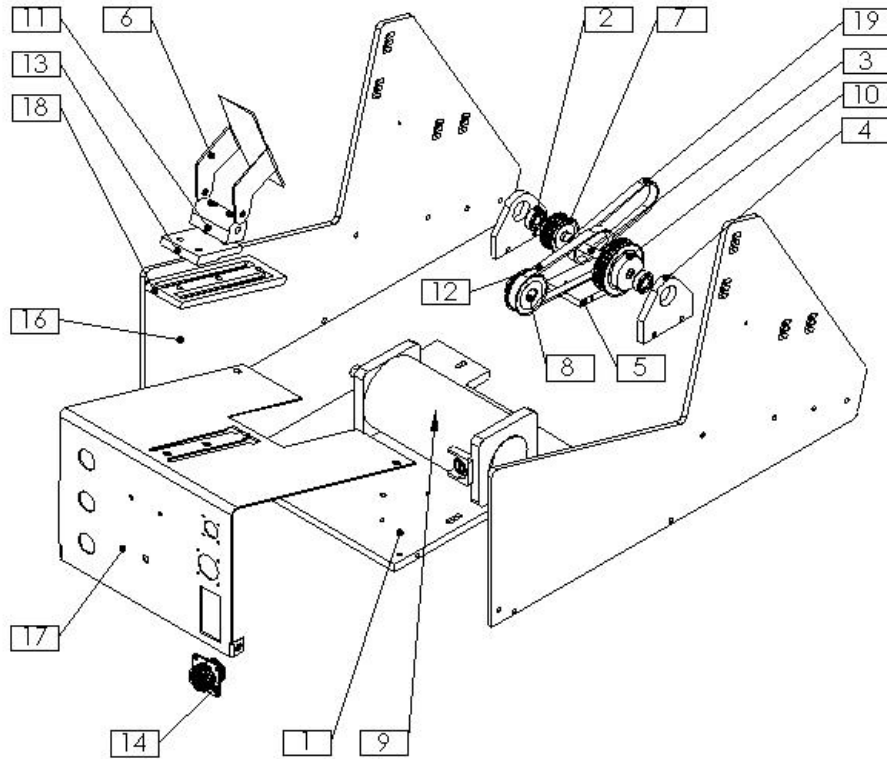
ITEM	PART	DESCRIPTION	QTY
12	100391	KNOB	1
13	100566D	DEFLECTOR	1
14	302991	DISCHARGE CROSS BAR	1
15	100260	SENSOR BRACKET	1
16	100388	SENSOR	1
17	300090	SLIDE CLAMP (OPTION)	1
18	300092	SENSOR RAIL (OPTION)	1
19	300095	ADJUSTMENT DEVICE (OPTION)	1
20	300091	SENSOR BRACKET (OPTION)	1
21	100482	PROX SENSOR (OPTION)	1

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Assembly Number:  
**400668**

### CHASSIS



ITEM	PART	DESCRIPTION	QTY
1	302971	BOTTOM PLATE	1
2	100135	BEARING	2
3	302844	SHAFT	1
4	302968	REDUCER SIDE PLATE	2
5	302969	REDUCER BASE	1
6	302974	WEDGE PLATE	1
7	350002	TIMING PULLEY	1
8	350164	TIMING PULLEY	1
9	350169	MOTOR	1

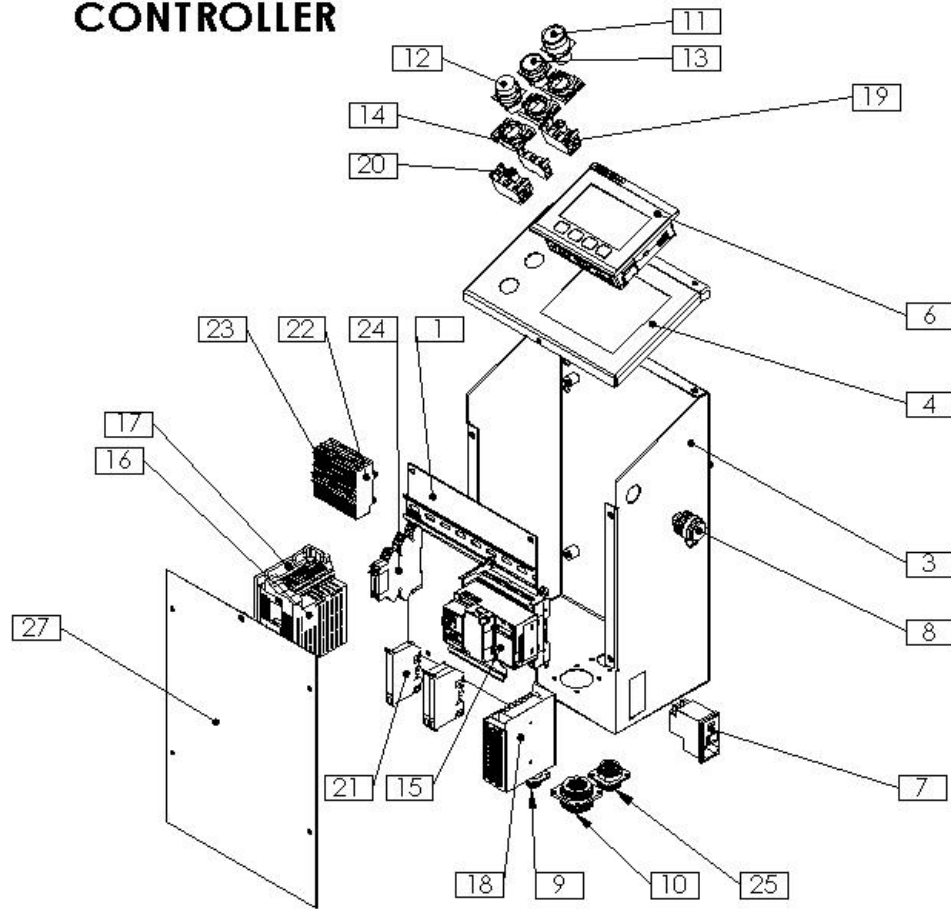
ITEM	PART	DESCRIPTION	QTY
10	350425	TIMING PULLEY	1
11	350675	WEDGE NUB	1
12	350450	TIMING BELT	1
13	302578	WEDGE ADJUSTMENT BLOCK	1
14	301059	AMP PANEL MOUNT	1
16	302970	SIDE PLATE	2
17	303022	OPERATOR PANEL	1
18	302973	WEDGE SLOT RECEIVER	1
19	350680	TIMING BELT	1

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Assembly Number:  
**400666**

# CONTROLLER



ITEM	PART	DESCRIPTION	QTY
1	350740	SUBPANEL	1
3	303060	CONTROLLER BASE	1
4	303061	TOP PANEL	1
5	303062	FRONT PANEL	1
6	350394	AB HMI	1
7	350856	AC INLET SINGLE VOLTAGE	1
8	300702	ETHERNET CONNECTOR (OPTION)	1
9	112039	AMP CONNECTOR	1
10	350393	19 PIN RECEPTACLE	1
11	350114	GREEN PUSH BUTTON	1
12	100414	RED PUSH BUTTON	1
13	100413	BLUE PUSH BUTTON	1

ITEM	PART	DESCRIPTION	QTY
14	350113	MOUNTING COLLAR	3
15	350384	PLC	1
16	350542	MOTOR DRIVER ANALOG CARD	1
17	350255	MOTOR DRIVE	1
18	301066	POWER SUPPLY	1
19	350116	NO CONTACT BLOCK	3
20	350115	LIGHTING UNIT	2
21	350387	FUSEHOLDER	3
22	301073	GROUND BLOCK	1
23	350085	TERMINAL BLOCK	12
24	350388	SSR BASE	2
25	301059	AMP PANEL MOUNT	1

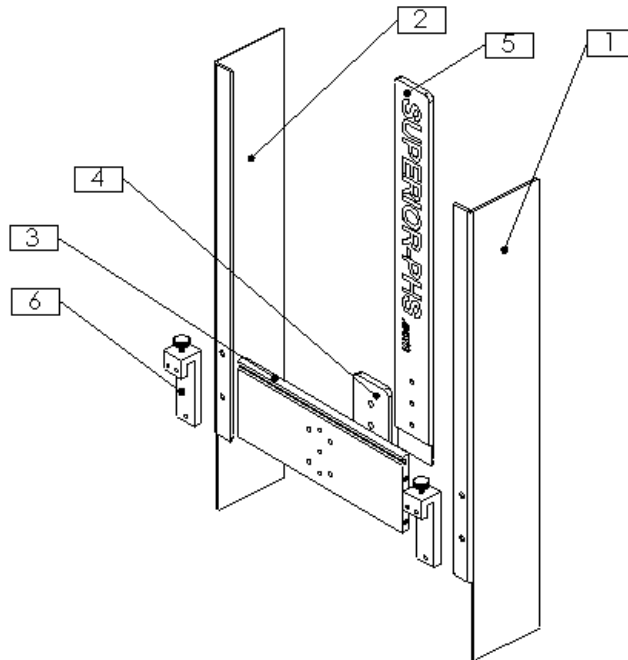
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Assembly Number:  
**400670**



# HOPPER



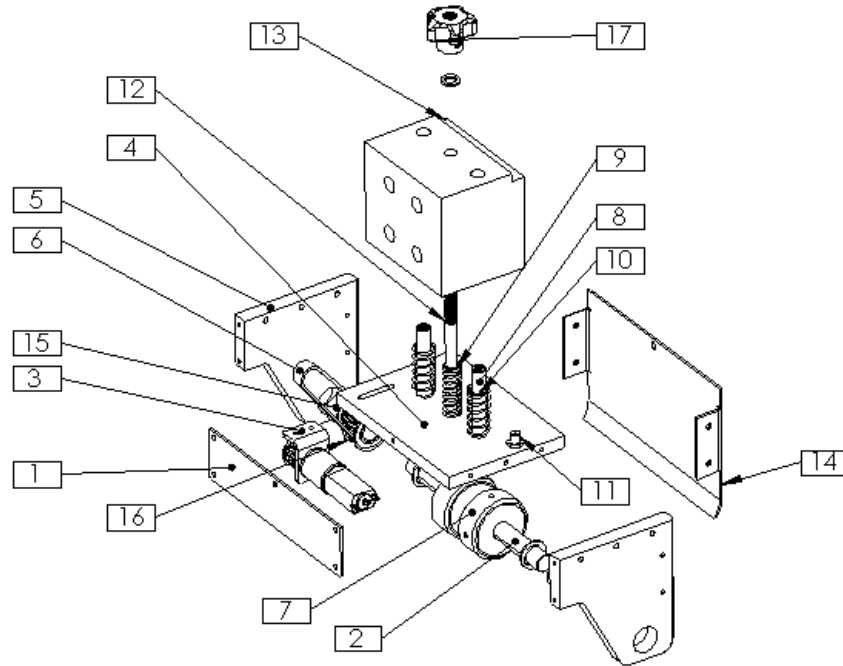
ITEM	PART	DESCRIPTION	QTY
1	302848	SIDE GUIDE LEFT	1
2	302849	SIDE GUIDE RIGHT	1
3	302998	HOPPER CROSS BAR	1
4	302855	HOPPER CENTER BAR SPACER	1
5	302859	HOPPER CENTER BAR	1
6	400513	HOPPER ADJUSTMENT ASSEMBLY	2

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Assembly Number:  
**400671**

## POWERED SEPARATOR ASSEMBLY



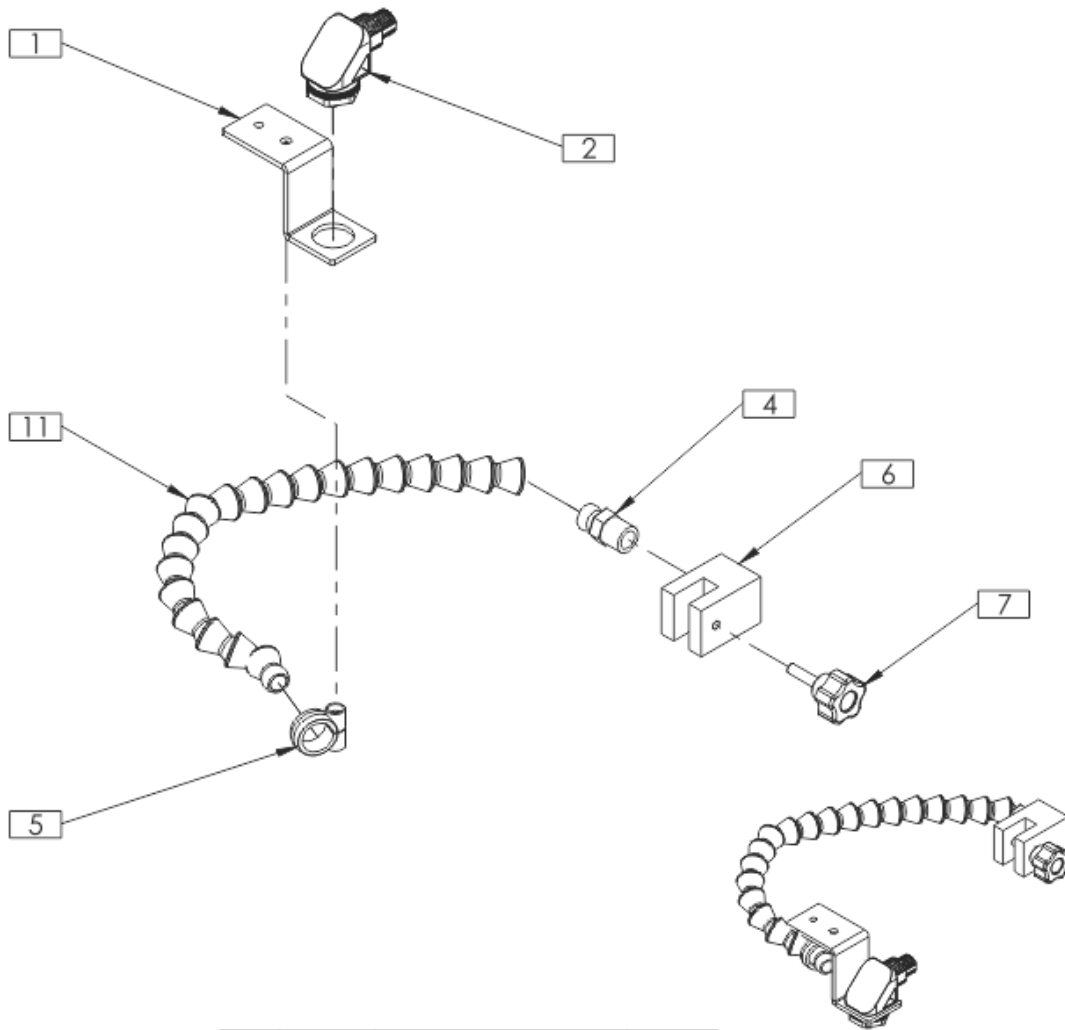
ITEM	PART	DESCRIPTION	QTY
1	302579	SEPARATOR FACE PLATE	1
2	302593	SEPARATOR ROLLER SHAFT	1
3	400573	SEPARATOR MOTOR ASSY	1
4	302595	SEPARATOR TOP PLATE	1
5	302596	SEPARATOR SIDE PLATE	2
6	350725	TIMING BELT	1
7	100172	SEPARATOR ROLLER	2
8	100177	DOWEL PIN	2
9	100184	COMPRESSION SPRING	1
10	100372	COMPRESSION SPRING	2
11	100428	BULK HEAD CONNECTOR	1
12	301596	ADJUSTMENT ROD	1
13	302965	MOUNT POWER SEPARATOR	1
14	302996	SEPARATOR ENTRY PLATE	1
15	350036	BEARING	2
16	350723	TIMING PULLEY	1
17	100173	THREADED KNOB	1

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Assembly Number:  
**400642**

### TRIGGER SENSOR ASSEMBLY



ITEM NO.	PartNo	DESCRIPTION	QTY.
1	100260	SENSOR BRACKET	1
2	100388	SENSOR	1
4	100394	NPT CONNECTOR	1
5	100395	CLAMP	1
6	100261	SENSOR BRACKET	1
7	100392	KNOB	1
8	100389	CABLE (NOT SHOWN)	1
9	100398	CONNECTOR (NOT SHOWN)	1
10	100399	CLAMP (NOT SHOWN)	1
11	100393	LOC LINE	2

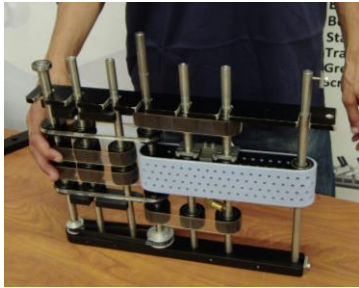
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**Superior**  
 PAPER HANDLING SOLUTIONS

Assembly Number:  
**100390**

## SECTION 5: ACCESSORIES AND AFTERMARKET OPTIONS

### Carriage Jig



The Carriage Jig is a tool designed to help you change Xtreme XM feeder belt in a matter of minutes. Simply remove the carriage holder,

swap out the belts, and use the Carriage Jig to hold all the shafts in place and slide the carriage holder back in place...effortlessly!



### Vacuum Extension



Add vacuum assist feeding for scanning, reading, printing, and labeling applications. Product is accurately and consistently fed with a secure hold

### Vacuum Pump



feeding performance. (Image shown is for reference purposes only. Not the actual pump.)

All Xtreme XM feeders come with a vacuum assist belt and manifold. Adding a vacuum supply while feeding product aids in product separation and consistent

### Adjustable Mounting Stand



Designed with locking swivel casters and low-toe profile for mobility on the production floor. Available in 30-40" adjustable and 40-50" adjustable heights. P/N 100966

### XM Batching Trays



Designed to accumulate batch counted products in neat stacks for manual removal. Easily adjusts to product sizes - the perfect semi-automated counting solution. Available in three sizes: products up to 12", 20", and 30" wide.

### Victory BD Dropper



Eliminate the need for off-line product counting and batching. Add a Victory Dropper inline to automate batching and stacking of product over an existing flighted/lugged conveyor. A Victory Dropper automatically drops counted stacks onto the moving conveyor. Available in Bombay, Shutter, Retractable, and Rotary Star Wheel™ styles.

## **SECTION 6: MAINTENANCE**

Please remember that all maintenance to the XTREME Versatile Feeding Solution should only be performed by qualified technicians. Always disconnect power before attempting any maintenance or service procedure.

### **Belts**

Over time, you will notice “build-up” on the feed and discharge belts and the separator rollers. This is normal and is usually from the dust, finish, or coating normally on the products fed. Regular cleaning of the belts and rollers will extend their life.

Belts, pulleys, and rollers should **only be cleaned with Isopropyl Alcohol**.

A good practice is to clean the belts and rollers weekly. If running UV or Aqueous coated materials, daily cleanings are recommended.

### **Sensors**

Wipe sensors with a clean lint free cloth to clear any dust build up. Recheck the adjustment of the sensors if they were moved during cleaning and reset.

### **Machine**

It is always best to keep machines clean. Keep them dusted and free of spills.

Always inspect your machine for loose or damaged items and replace them immediately.

### **Service**

All service to the XTREME feeders should be done by a qualified technician.

Manufacturer assistance can be received by:

1. Previewing the FREE “Support” section at [www.Superior-PHS.com](http://www.Superior-PHS.com)
2. Calling/emailing service department at Superior Product Handling Solutions.

**Technical assistance:**

**763-546-9140**

**[service@superior-phs.com](mailto:service@superior-phs.com)**

## SECTION 7: TROUBLESHOOTING

<b>Difficulty</b>	<b>Possible Cause</b>	<b>Proposed Solution</b>
<b>No AC power to the unit</b>	<ol style="list-style-type: none"> <li>1. On/Off switch in Off position (O)</li> <li>2. Power cord loose or not plugged into unit</li> <li>3. Blown Fuse(s)</li> </ol>	<ol style="list-style-type: none"> <li>1. Move switch to On position (-)</li> <li>2. Check connection to AC source</li> <li>3. Replace fuse(s)</li> </ol>
<b>Belts are turning but product is not feeding</b>	<ol style="list-style-type: none"> <li>1. Separator not properly adjusted</li> <li>2. Hopper side guides are too tight</li> <li>3. Interlocking or adhered product</li> <li>4. Static</li> <li>5. Product stack-height too low or too high</li> <li>6. Slick feed belt</li> </ol>	<ol style="list-style-type: none"> <li>1. Review Separator setup instructions</li> <li>2. Loosen Side Guide Adjustments</li> <li>3. Check product</li> <li>4. Consult with a qualified technician</li> <li>5. Add/Subtract product as needed</li> <li>6. Clean belt</li> </ol>
<b>Double feeding</b>	<ol style="list-style-type: none"> <li>1. Separator not properly adjusted</li> <li>2. Wedge support not properly adjusted</li> <li>3. Worn separator rollers</li> <li>4. Separator rollers spin freely</li> </ol>	<ol style="list-style-type: none"> <li>1. Review Separator setup instructions</li> <li>2. Review Wedge setup instructions</li> <li>3. Replace rollers</li> <li>4. Check Assembly belt and pulleys</li> </ol>
<b>Jamming or skewing</b>	<ol style="list-style-type: none"> <li>1. Improper setup</li> <li>2. Interlocking or adhered product</li> </ol>	<ol style="list-style-type: none"> <li>1. Review Setup Section #2</li> <li>2. Check product</li> </ol>
<b>Gate Rollers Not Turning</b>	<ol style="list-style-type: none"> <li>1. Separator drive components broken</li> <li>2. No power to Gate motor</li> </ol>	<ol style="list-style-type: none"> <li>1. Check Assembly belt and pulleys</li> <li>2. Verify Separator cable is connected</li> </ol>



## SECTION 8: WARRANTY

### ***SUPERIOR-PHS LIMITED WARRANTY***

Superior Product Handling Solutions, Inc. (Superior-PHS) warrants this product to be free from defects in materials and workmanship, when used under recommended operating conditions, for a period of one year from the date of original shipment.

If you discover a defect during the warranty period, please notify the company from whom you purchased this product, who will then arrange for the replacement parts to be sent to you. Defective parts must be returned to Superior-PHS for credit on warranty replacement parts. Shipping and labor costs are not included in this warranty. If the defect is not field repairable, and if you return it to Superior-PHS during the warranty period, Superior-PHS will, at its sole option, repair or replace this product, at no charge to you other than shipping charges to and from the facility in Minneapolis, Minnesota.

If you return this product to Superior-PHS for warranty repair or replacement, please attach to the returned product your name, your company's name, address, telephone number and fax number, a description of the problem, and a copy of the bill of sale or invoice that shows the appropriate serial number for the product. All returns must be accompanied by an authorized Superior-PHS Returned Goods Authorization (RGA) number. An authorized RGA number can be obtained from the company you purchased this product.

The warranty applies only to products manufactured by Superior-PHS. This warranty does not apply if the product has been damaged by accident, abuse, misuse, neglect, improper maintenance, misapplication, or as a result of being attached to equipment not supplied by Superior-PHS; if the product has been modified without the written permission of Superior-PHS; or if the product's serial number has been removed or defaced. This warranty further does not apply to the failure of any rubber-based, air actuated or consumable components including, but not limited to, rollers, bearings, belts, fuses, relays, air actuators or light bulbs.

### **ALL IMPLIED WARRANTIES INCLUDING WITHOUT LIMITATION THE IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE AND THE IMPLIED WARRANTY OF MERCHANTABILITY ARE HEREBY DISCLAIMED.**

Superior-PHS is not responsible for special, incidental, or consequential damages resulting from any breach of warranty or under any other legal theory, including lost profits, downtime, goodwill, or damage to or replacement of equipment or property.

This warranty and the remedies set forth above are exclusive and are in lieu of all others, oral or written, express or implied. There are no warranties that extend beyond the description on the face hereof. No Superior-PHS employee, distributor, or agent is authorized to make any modification, extension, or addition to this warranty.

