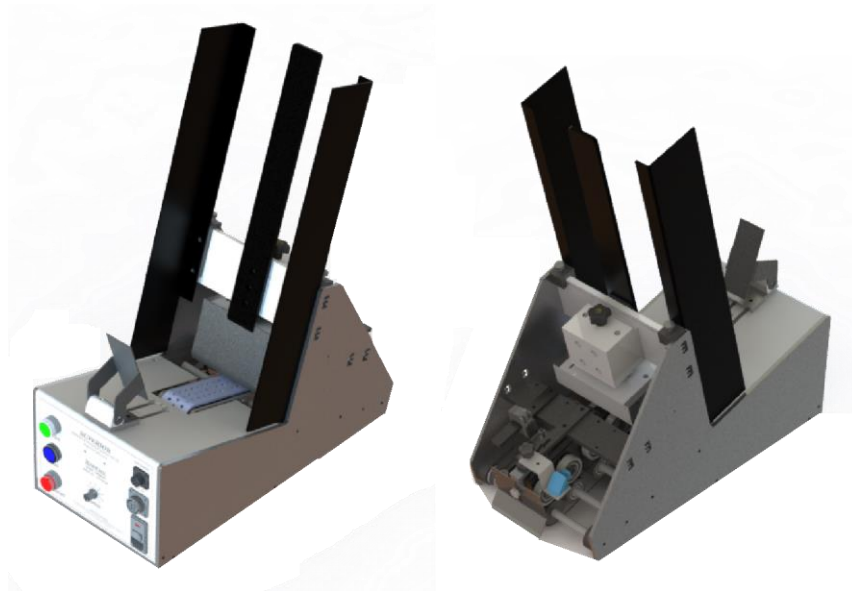




Xtreme XME-900D Friction Feeder

Operation Instructions, Technical Guide, And Parts List Information



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

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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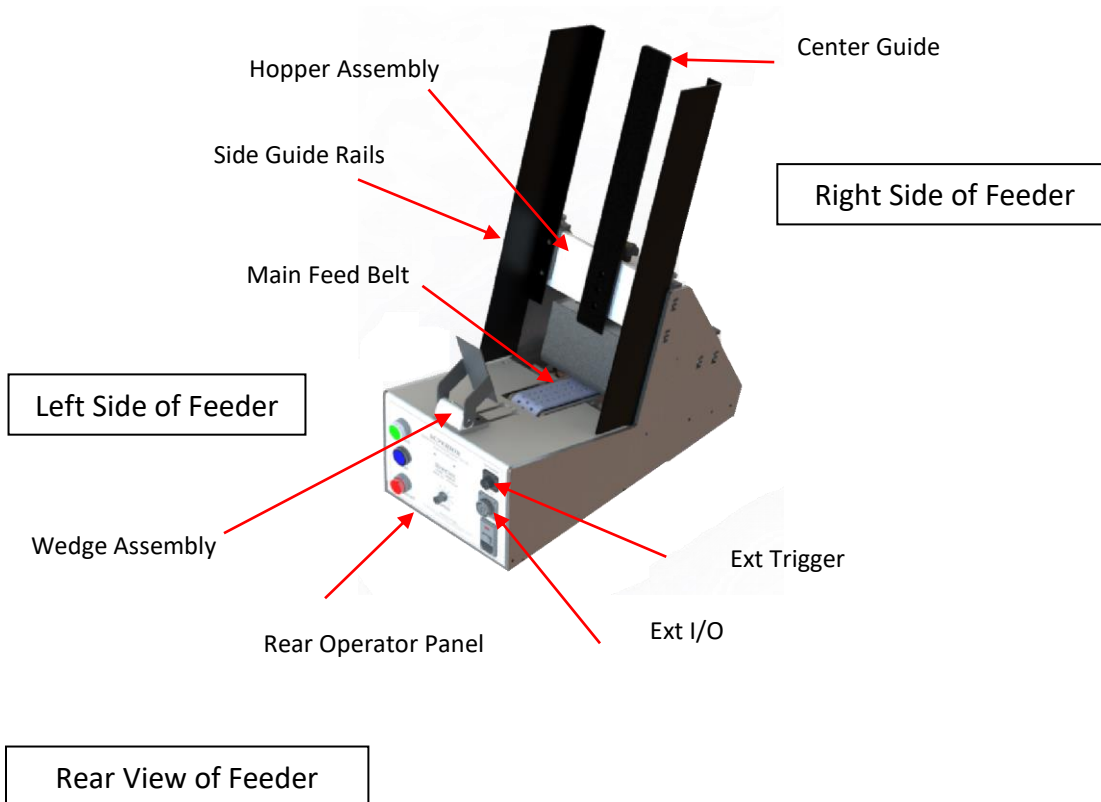
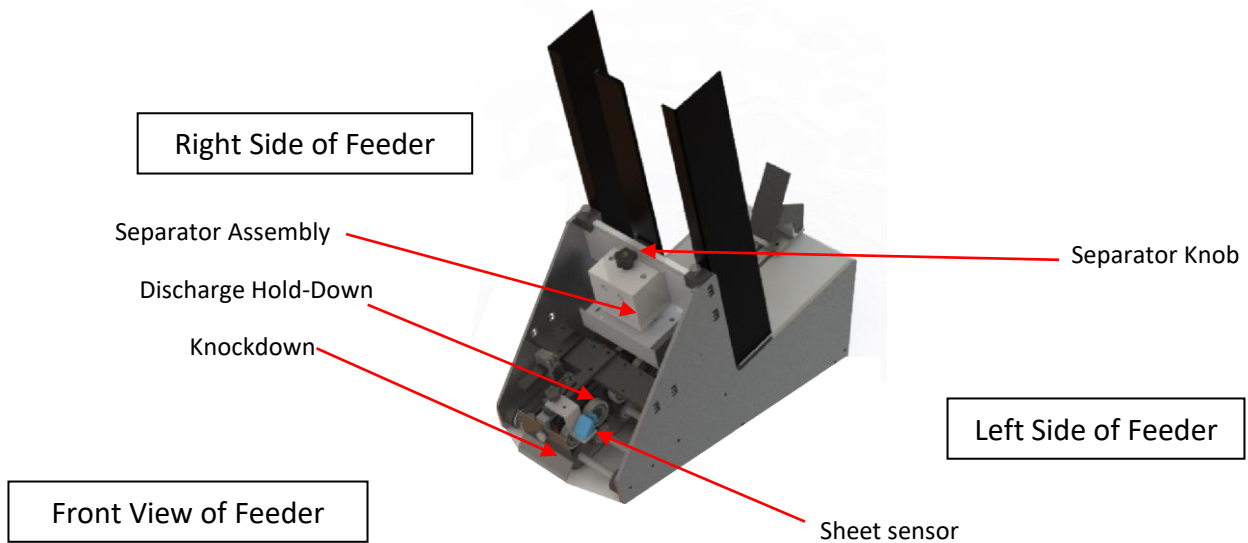
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Table of Contents

SECTION 1: MACHINE OVERVIEW	4
SECTION 2: SETUP	4
Separator Setup	5
Hopper Setup	6
Wedge Assembly Setup	6
Discharge Hold-Down Setup	7
Sheet Sensor Photo Eye	8
OPTIONAL: Electro-Mechanical Double Sheet Detector	8
SECTION 3: OPERATION	9
Apply Power	10
Trigger Sensor (Optional for feeders built with SYSTEM Controllers)	10
Loading Product	11
Rear Control Panel Features	12
External Interface	12
External Trigger	12
Blink mode Error Faults	13
Vacuum Belt and Manifold	13
Additional Set-Up Information	14
<i>Different Variables of Feeding Product</i>	14
<i>Repositioning the Separating Rollers</i>	14
<i>Rotating Gate</i>	15
SECTION 4: I/O PIN OUTS	16
SECTION 5: COMPONENTS / PARTS LIST	17
SECTION 6: ACCESSORIES AND AFTERMARKET OPTIONS	24
SECTION 7: MAINTENANCE	25
Belts	25
Sensors	25
Machine	25
Service	25
SECTION 8: TROUBLESHOOTING	26
SECTION 9: WARRANTY	27
SECTION 10: NOTES	28

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. The 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

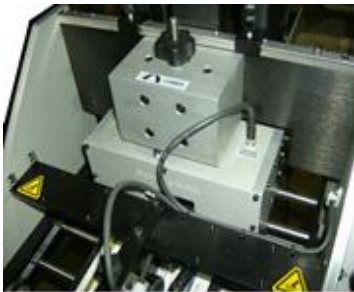


Figure 2.1*

The Separator (Figure 2.1) is the device that separates the 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 the product is pulled through the feeder.



Figure 2.2*

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.



Figure 2.3*

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*

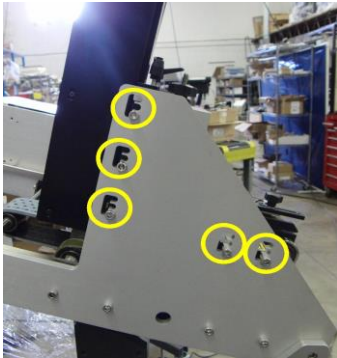


Figure 2.6*



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 depends 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. The 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

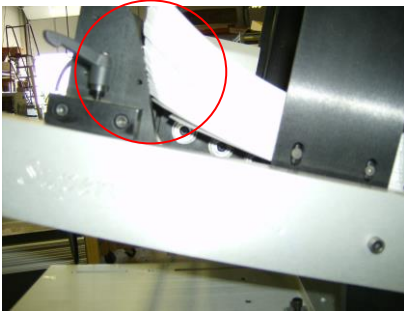


Figure 2.8*

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

The Wedge Assembly provides a “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, rigid products 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

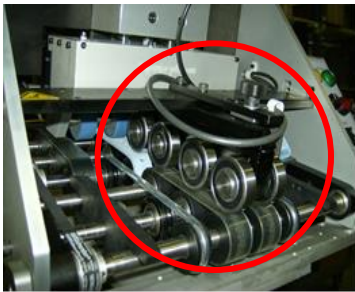


Figure 2.9*

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 crossbar 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.

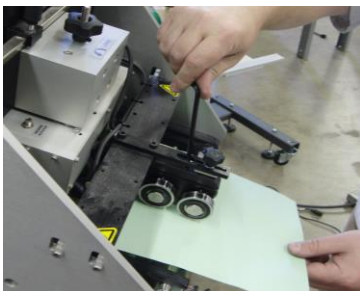


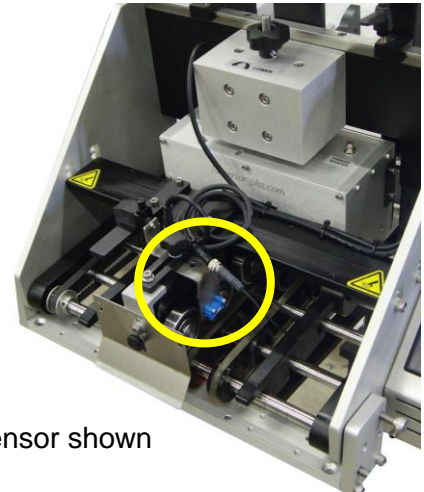
Figure 2.11*

* 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 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.

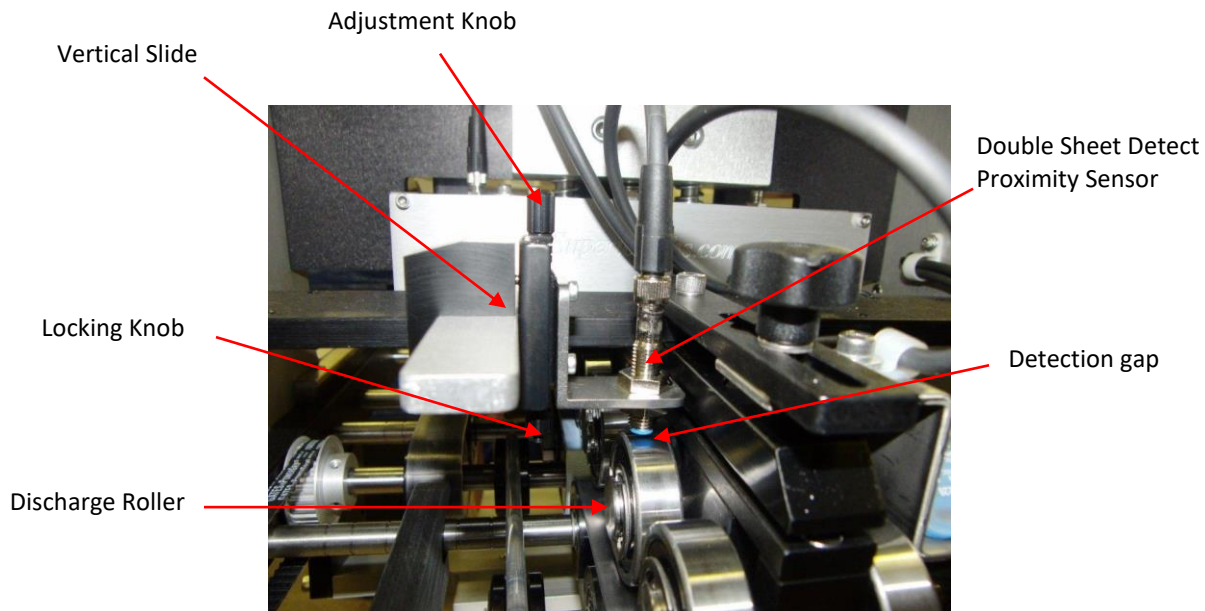


If the Sheet sensor is blocked or open for a Period of 1.5 seconds, the XME-900 will STOP and the red light will blink (Every 2 sec) to indicate A TIME-OUT Fault. This is to ensure gap separation and empty hoppers are watched for.

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

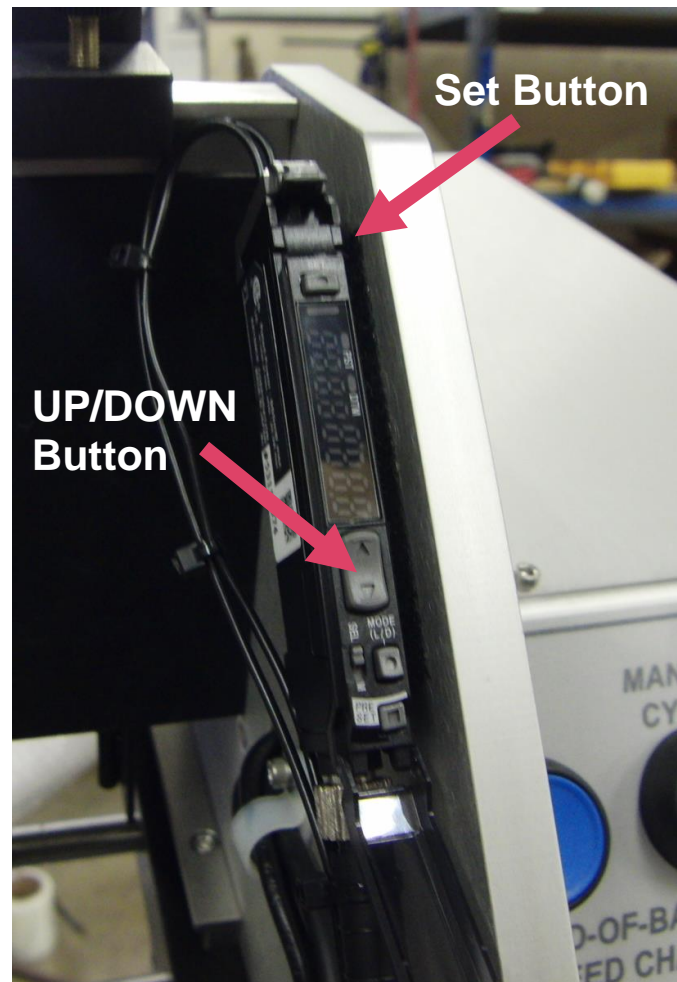
The Optional Burn-Thru Double Sheet Detect feature provides added security to applications where all sheets fed need to be accounted for. Along with the standard Miss Detect feature, the optional Burn-Thru Double Sheet Detect feature ensures that only one product is being fed at a time.

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 the 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 the product (Fig 3.1) and load it 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 the 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 the 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*

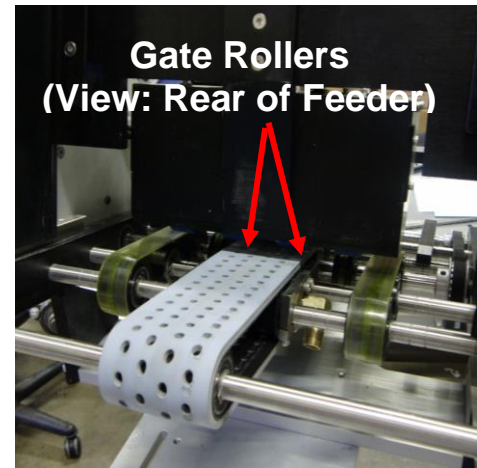


Figure 3.2*

* 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 products 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 products, see the Additional Setup Information section.

Rear Control Panel Features



External Interface

Input for 9-pin external I/O interface cable if communicating with a host system.

External Trigger

Input for 4-pin trigger sensor assembly.

Power

CorCom power inlet module. 110 VAC.

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 the 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.

Speed Knob

Sets the speed of the machine.

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

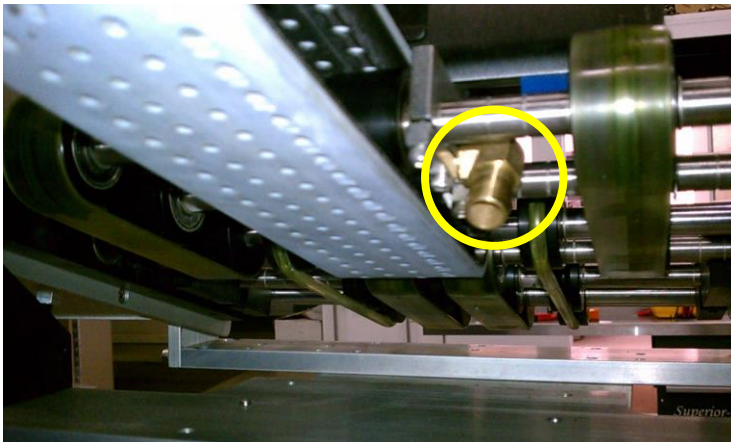
Completely power off the feeder when not in use. To do this, move the on/off switch located on the Rear Control Panel to the “off” position (O) and remove the product from the hopper.

Blink mode Error Faults

Miss Detect This occurs when a second CYCLE command is received before the original cycle is finished. **[Flashes ON/OFF every ¼ second]**

Timeout Occurs whenever the sheet sensor is blocked or open for 1.5 seconds while the feeder is in run mode. **[Flashes ON/OFF every 1 second]**

Double Detect *(Optional) This occurs at any time if 2 pieces are detected under the DD Sensor.*
[Flashes ON/OFF every 2 seconds]

Vacuum Belt and Manifold

The vacuum manifold has either a ½” barbed fitting (shown) or a 5/16” push-in connector.

Works with any vacuum source provided by the 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 versus 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 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.

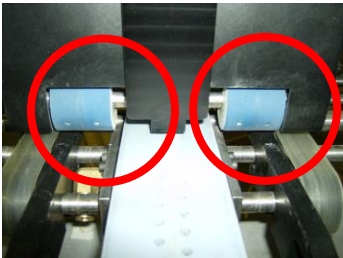


Figure 3.3*

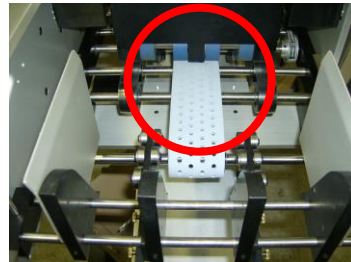


Figure 3.4*

* 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 products 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 feed belt's surface can cause the product's marking or scoring due to too much pressure of the product on the edge of the belt and gate rollers.

Rotating Gate

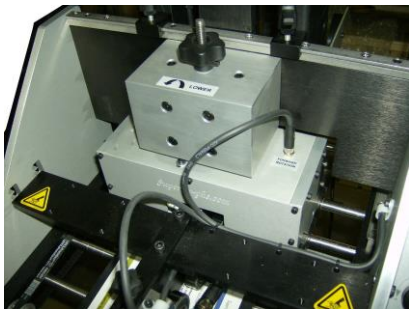
**** POWER OFF THE FEEDER BEFORE REMOVING POWER TO THE SEPARATOR****

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 it. 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: I/O PIN OUTS

XM-900 External I/O Connectors

11/1/22; Updated 8/1/24

4 Pin EXT Trigger Connector

* PNP sensor required

- ① + 24 VDC
- ② 0 VDC
- ③ EXT Trigger signal

9 Pin I/O Connector

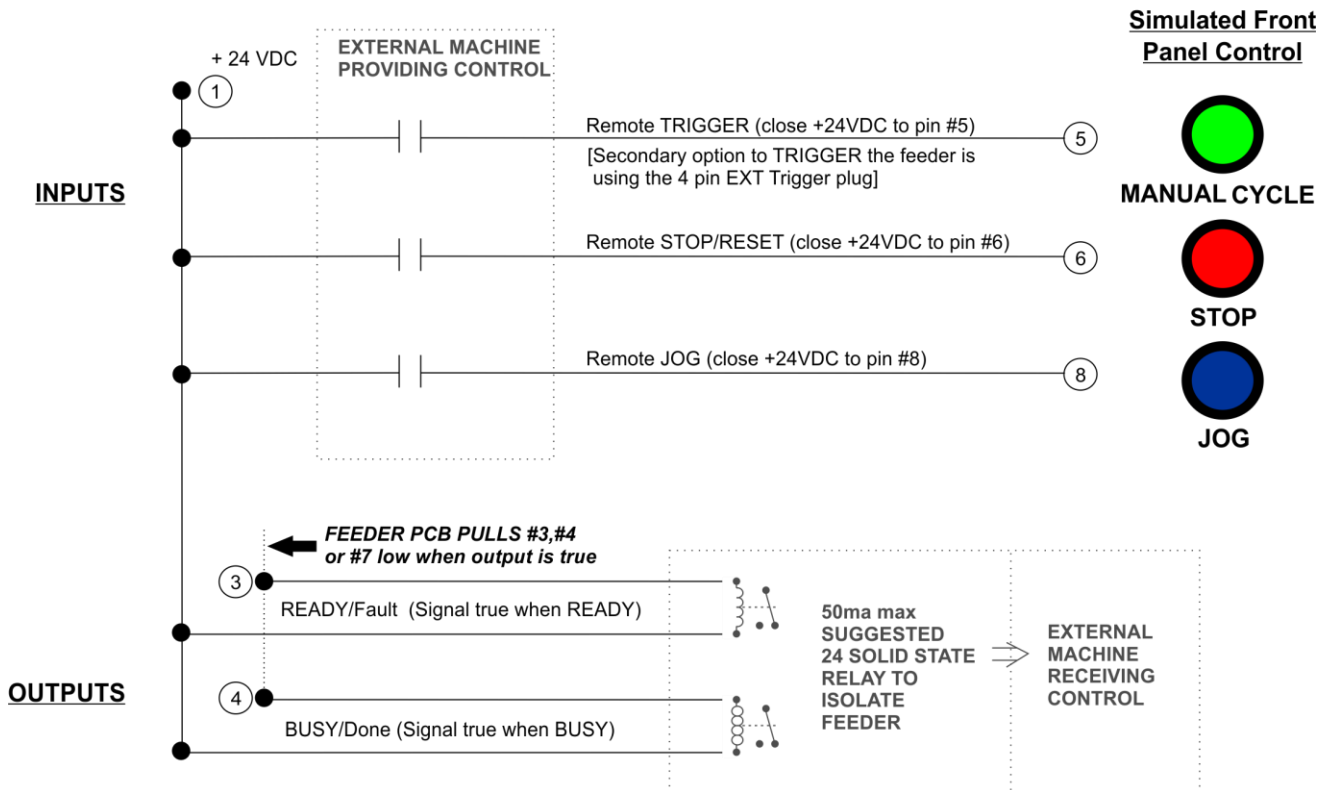
1 - Inputs

2 - Outputs

* **WARNING - NO external voltages can be applied to I/O pins.**

Please see diagram below for example hook-ups.

- ① + 24 VDC
- ② 0 VDC
- ③ READY/Fault²
- ④ BUSY/Done²
- ⑤ Remote TRIGGER¹
- ⑥ Remote STOP/RESET¹
- ⑦ LOW STACK² (Sensor pass thru)
- ⑧ Remote JOG¹
- ⑨ Not used



SECTION 5: COMPONENTS / PARTS LIST

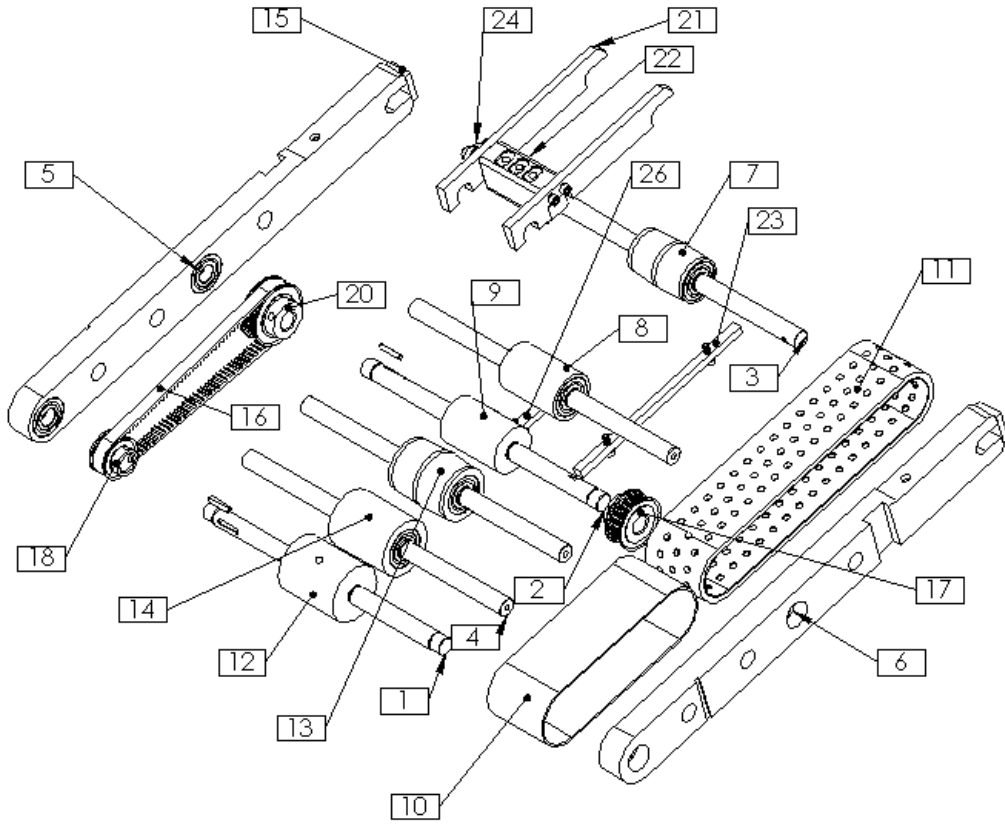
XME-900D

ITEM	PART	DESCRIPTION	QTY
1	400604	CARRIAGE	1
2	400668	HOLD DOWN ASSEMBLY	1
3	400669	CHASSIS	1
4	400671	HOPPER ASSEMBLY	1
5	400642	SEPARATOR POWERED ASSEMBLY	1

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Assembly Number:
500107B

CARRIAGE



ITEM	PART	DESCRIPTION	QTY
1	302975	DISCHARGE SHAFT	1
2	302976	DRIVE SHAFT	1
3	302977	TENSIONER SHAFT	1
4	302978	SUPPORT SHAFT	3
5	302979	CARRIAGE RT RAIL	1
6	400348	CARRIAGE LH ASSEMBLY	1
7	302988	FEED BELT CROWN IDLER ROLLER	1
8	302981	FEED BELT FLAT IDLER ROLLER	1
9	302982	FEED BELT DRIVE ROLLER	1
10	302983	DISCHARGE BELT	1
11	302984	2" FEED BELT	1
12	302985	DISCHARGE DRIVE ROLLER	1

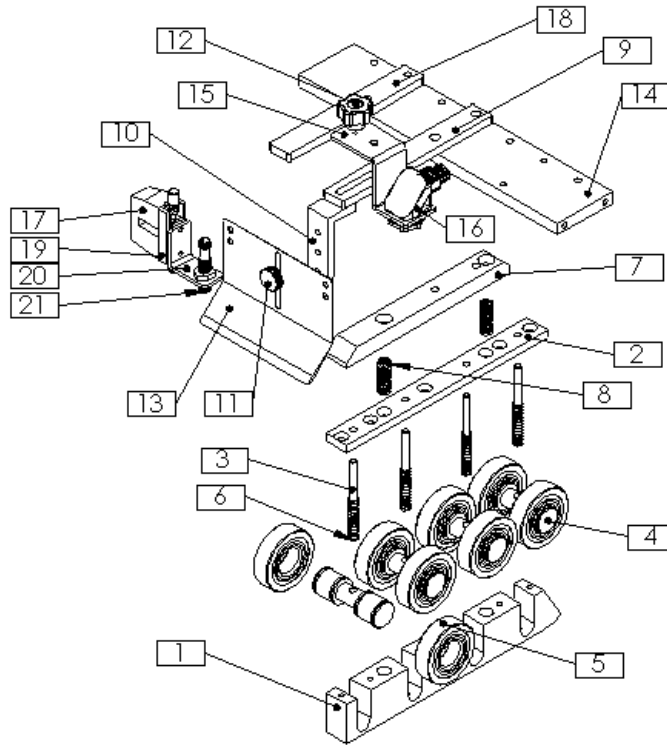
ITEM	PART	DESCRIPTION	QTY
13	302986	DISCHARGE CROWN IDLER ROLLER	1
14	302987	DISCHARGE FLAT IDLER ROLLER	1
15	100161	TENSION PLATE	2
16	100196	TIMING BELT	1
17	350167	TIMING PULLEY	1
18	100543	TIMING PULLEY	1
20	100195	TIMING PULLEY	1
21	302989	VACUUM TOP MOUNT	2
22	302999	2" VACUUM BLOCK	1
23	302990	VACUUM BOTTOM MOUNT	1
24	350098	PUSH-IN L-FITTING	1
26	100609	KEEPER RAIL VACUUM MANIFOLD	1

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Assembly Number:
400604

HOLD DOWN ASSEMBLY



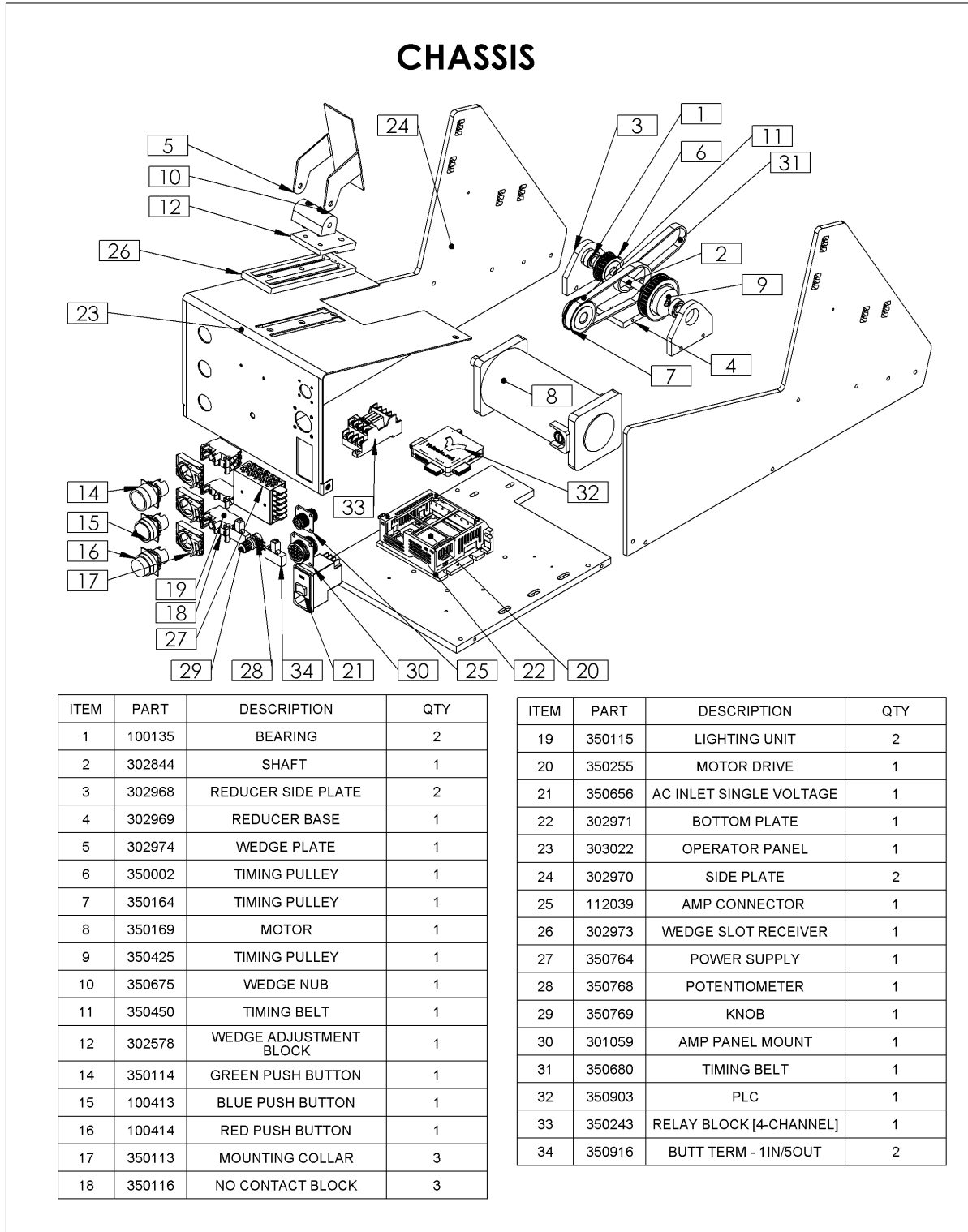
ITEM	PART	DESCRIPTION	QTY
1	100208C	BOTTOM SECTION	1
2	100216C	HOLDDOWN	1
3	100688	DOWEL PIN	4
4	100209	HOLD DOWN AXEL	4
5	100214	BEARING	8
6	100212	SPRING	4
7	100208D	HOLD DOWN TOP	1
8	350081	SPRING	2
9	100259	MOUNTED SHEET SENSOR BRACKET	1
10	301875	SENSOR MOUNT	1
11	350082	THUMB SCREW	1

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

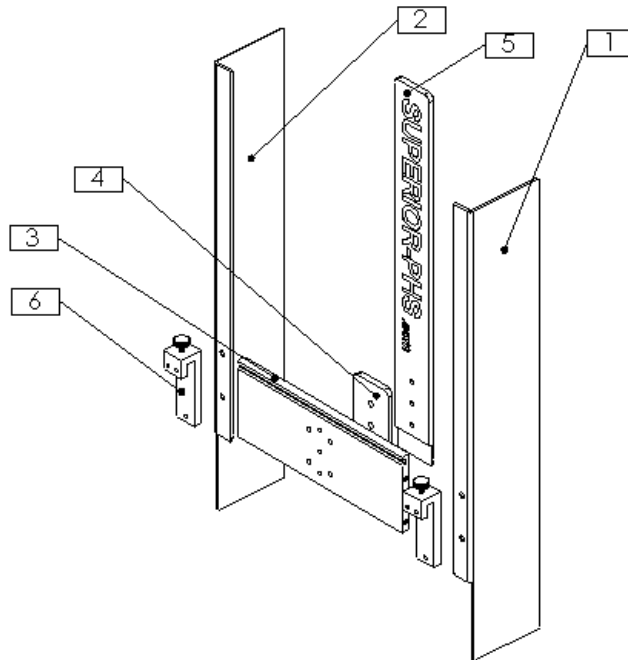


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Assembly Number:
400669

HOPPER



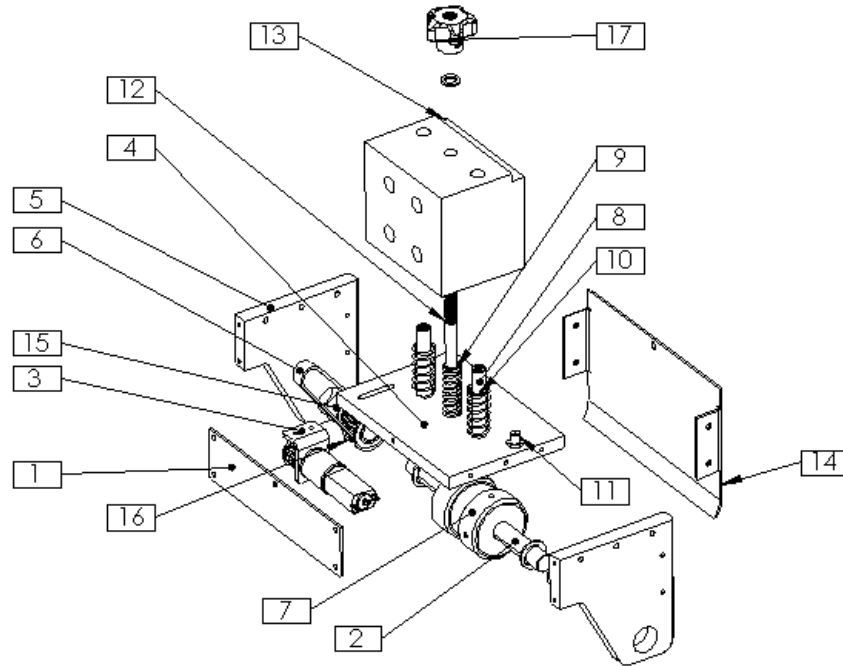
ITEM	PART	DESCRIPTION	QTY
1	302848	SIDE GUIDE LEFT	1
2	302849	SIDE GUIDE RIGHT	1
3	302998	HOPPER CROSS BAR	1
4	302855	HOPPER CENTER BAR SPACER	1
5	302859	HOPPER CENTER BAR	1
6	400513	HOPPER ADJUSTMENT ASSEMBLY	2

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Assembly Number:
400671

POWERED SEPARATOR ASSEMBLY



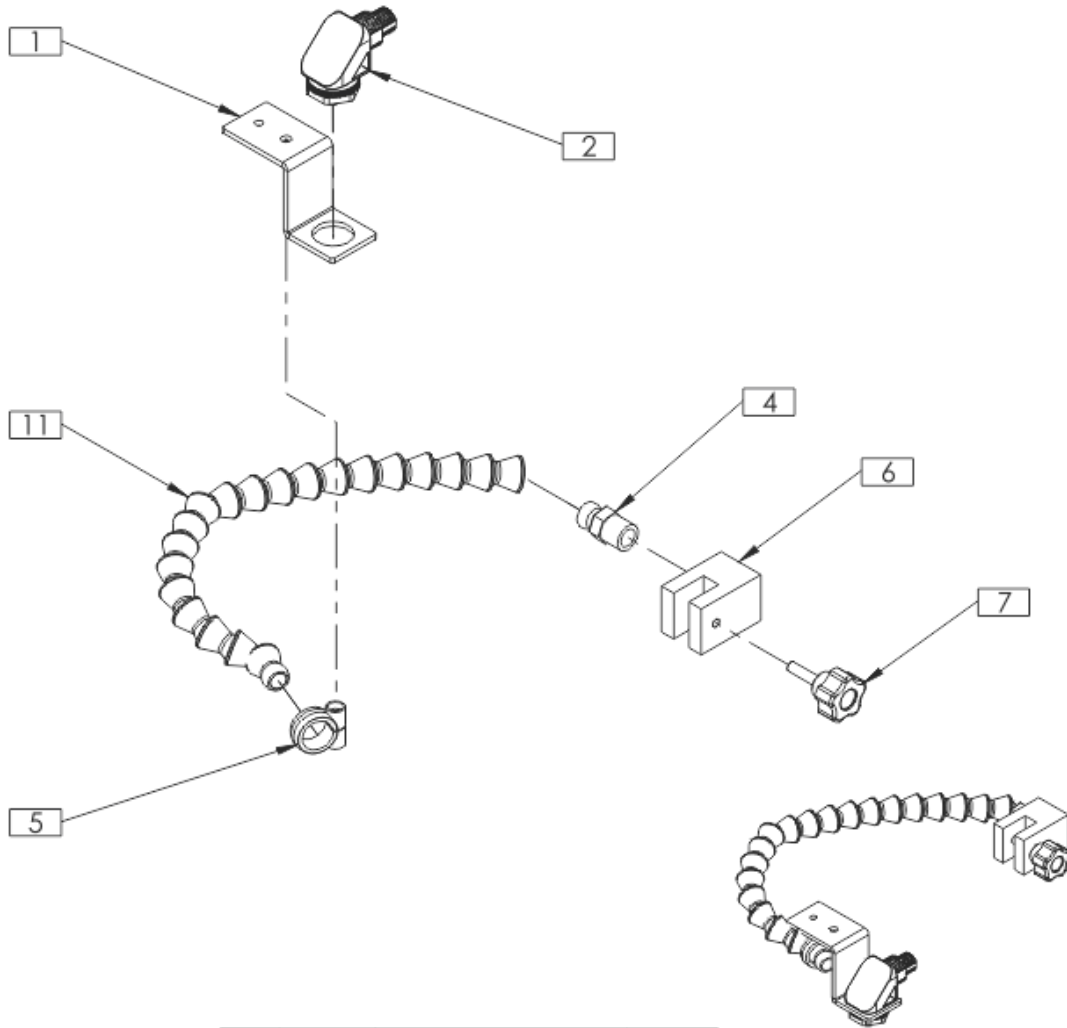
ITEM	PART	DESCRIPTION	QTY
1	302579	SEPARATOR FACE PLATE	1
2	302593	SEPARATOR ROLLER SHAFT	1
3	400573	SEPARATOR MOTOR ASSY	1
4	302595	SEPARATOR TOP PLATE	1
5	302596	SEPARATOR SIDE PLATE	2
6	350725	TIMING BELT	1
7	100172	SEPARATOR ROLLER	2
8	100177	DOWEL PIN	2
9	100184	COMPRESSION SPRING	1
10	100372	COMPRESSION 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

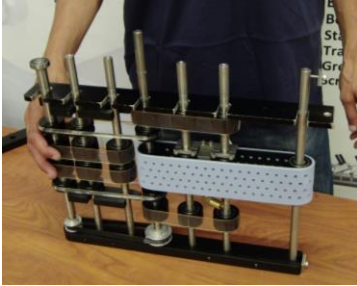
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Superior
 PAPER HANDLING SOLUTIONS

Assembly Number:
100390

SECTION 6: ACCESSORIES AND AFTERMARKET OPTIONS

Carriage Jig



The Carriage Jig is a tool designed to help you change the 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. The product is accurately and consistently fed with a secure hold

Vacuum Pump



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

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

Adjustable Mounting Stand



Designed with locking swivel casters and a 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 the batching and stacking of products 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 7: 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
2. Calling/emailing service department at Superior Product Handling Solutions.

Technical assistance:

763-546-9140

service@superior-phs.com

SECTION 8: TROUBLESHOOTING

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

SECTION 9: 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.

