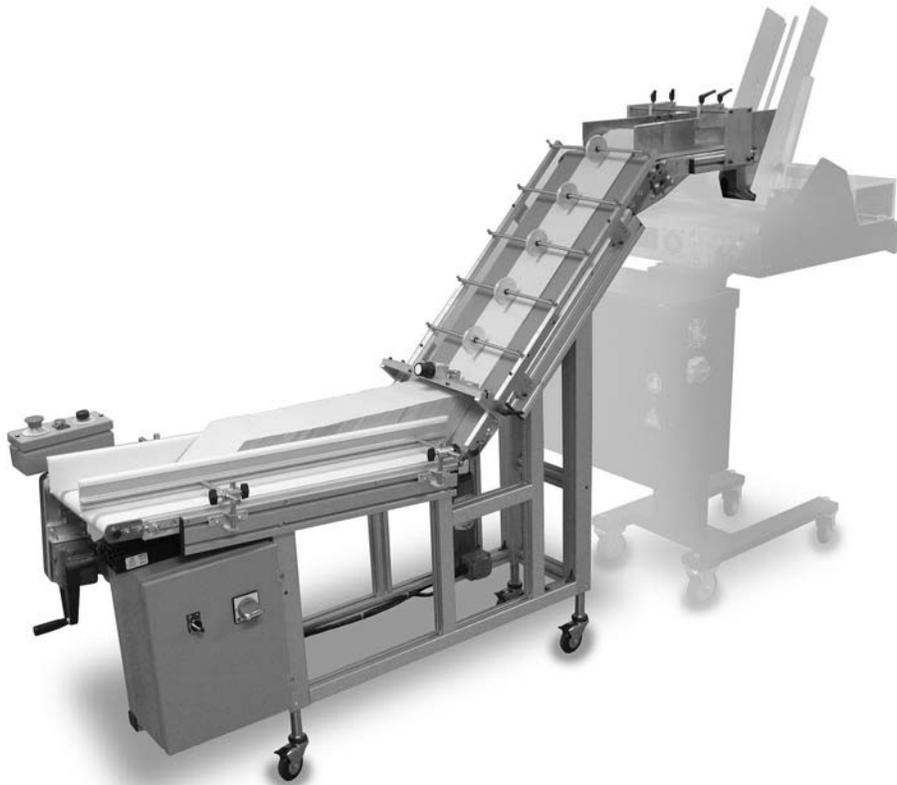


AutoStream - Model HV

Manual



Thiele
Technologies
A Barry-Wehmler Company

Streamfeeder
®

Part Number: 901546

This Product Guide supports autoloader part number 311-0314 with serial numbers beginning with B1011Axxx

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BEFORE YOU BEGIN

Message Conventions



DANGER signifies an action or specific equipment area that can result in serious injury or death if proper precautions are not taken.



WARNING signifies an action or specific equipment area that can result in personal injury if proper precautions are not taken.



CAUTION signifies an action or specific equipment area that can result in equipment damage if proper precautions are not taken.



ELECTRICAL DANGER signifies an action or specific equipment area that can result in personal injury or death from an electrical hazard if proper precautions are not taken.



TIP signifies information that is provided to help minimize problems in the installation or operation of the equipment.



NOTE provides useful additional information that the installer or operator should be aware of to perform a certain task.



IMPORTANT alerts the installer or operator to actions that can potentially lead to problems or equipment damage if instructions are not followed properly.

Warning Label Descriptions

WARNING LABELS affixed to this product signify an action or specific equipment area that can result in serious injury or death if proper precautions are not taken.



Hazardous voltage. Contact will cause electric shock or burn. Turn off and lock out power before servicing.



Moving parts can crush and cut. Keep guards in place. Lock out power before servicing.

SAFETY

Make sure you thoroughly read this section to become familiar with all the safety issues relating to the safe operation of this product.

Please read all of the warnings that follow to avoid possible injury. Although Streamfeeder has made every effort to incorporate safety features in the design of this equipment, there are residual risks that an installer or operator should be aware of to prevent personal injury.

Please read all of the cautions that follow to prevent damage to this product. This product is built with the highest quality materials. However, damage can occur if the system is not operated and cared for within design guidelines as recommended by Streamfeeder.

Danger



To insure proper machine operation make sure that all the safety devices are installed properly and functioning. Do not attempt to defeat a safety interlock or safety feature.

Equipment interior contains incoming 115VAC electrical power. Bodily contact with these high voltages can cause electrocution, which can result in serious injury or death.

Electrical Noise

Electromagnetic interference (EMI) and radio frequency interference (RFI), also known as electrical noise, do not usually cause problems. If intense enough, however, it can cause problems for other electrical equipment.

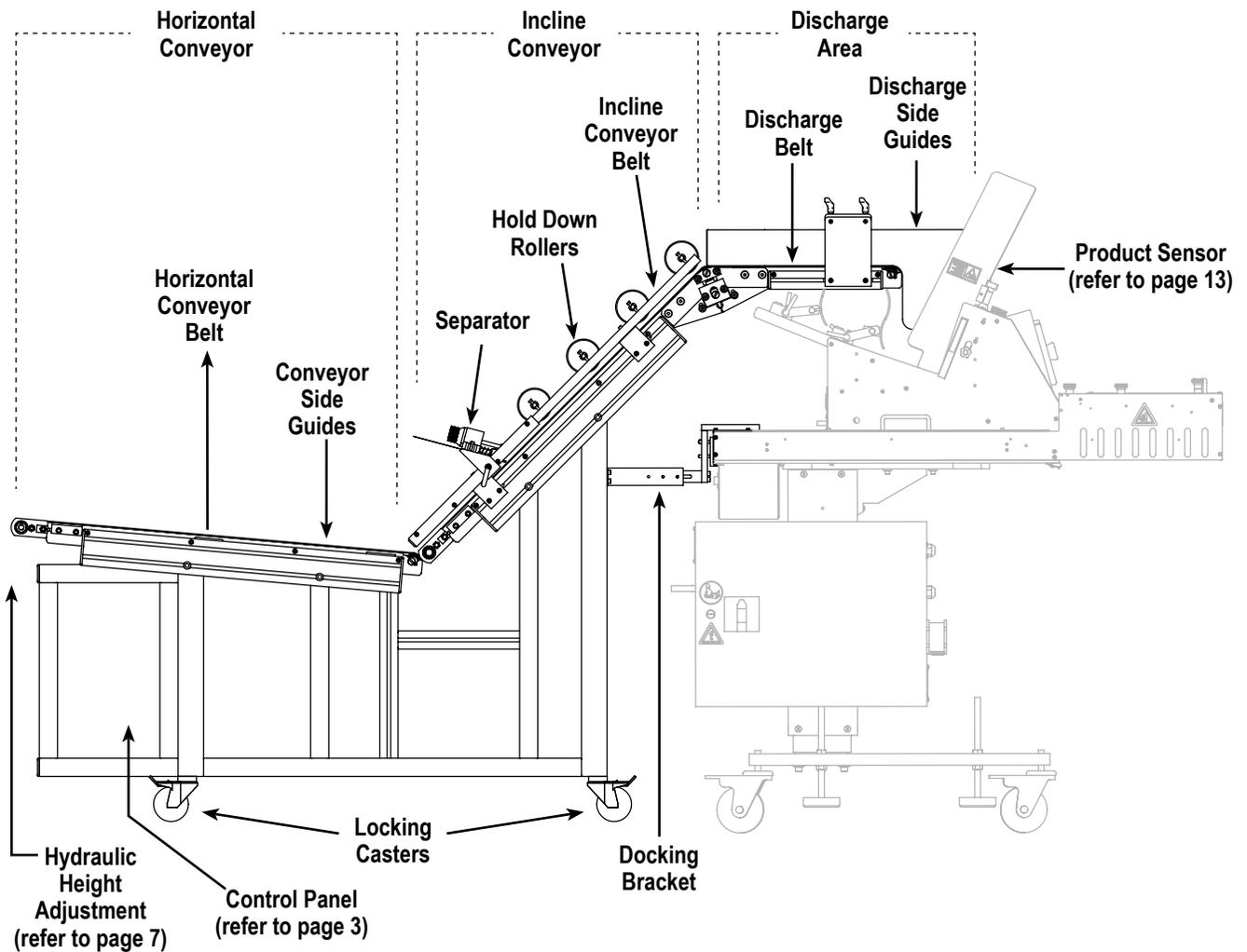
SPECIFICATIONS

Maximum Product Size:	12 in. W x 12 in. L (305 mm x 305 mm)
Minimum Product Size:	3 in. W x 5 in. L (76 mm x 127 mm)
Min/Max Product Thickness:	.003 in to .3125 in. (.076 mm - 8 mm)
Feed Belt Speed:	0-120 fpm (0-36,576 mm/min)
Load Belt Speed:	0-10 fpm (0-3,048 mm/min)
Load Belt Capacity:	300 lbs. (136 kg)
Electrical Requirements:	115vac, 60Hz, 7A
Weight:	225 lbs. (102 kg.)
Warranty:	One-year limited

1 About the Machine

Review the diagrams in this section to become familiar with names and locations of the parts and adjustments. This will help to prepare you for initial setup.

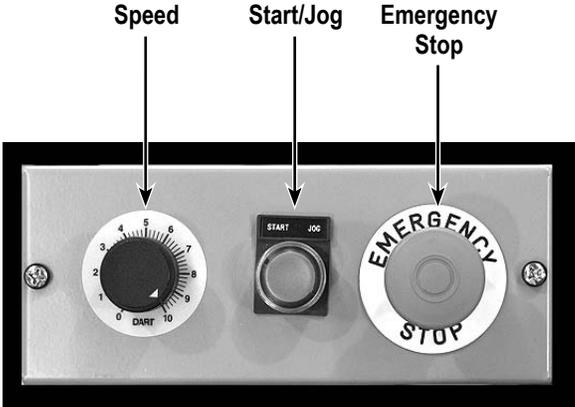
Overview



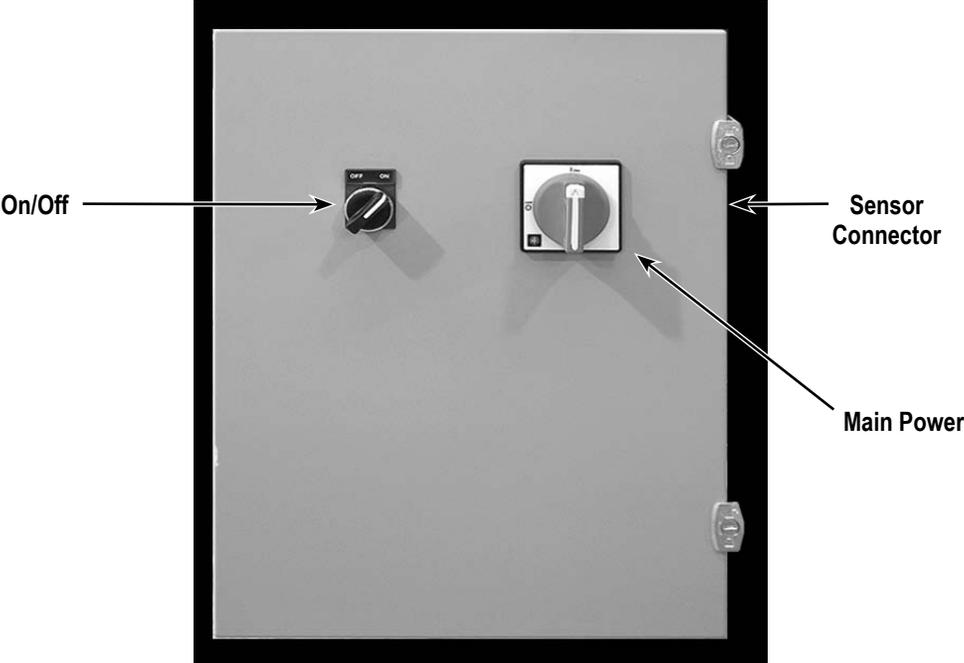
Main Assemblies Feature Descriptions

Feature	Description
Conveyor Side Guides	The conveyor side guides help direct the product in a straight line of movement on the horizontal conveyor.
Discharge Belt	
Discharge Side Guides	The discharge side guides help direct the product in a straight line of movement in the discharge area.
Docking Bracket	The docking bracket keeps the autoloader and feeder connected at the desired distance.
Hold Down Rollers	The hold down rollers float along the top surface of the shingled stream of product to help control it as it is moved upward on the incline conveyor belt to the discharge area.
Horizontal Conveyor Belt	The horizontal conveyor belt moves the loaded product toward the separator gate.
Incline Conveyor Belt	The incline conveyor belt lifts product from the horizontal conveyor and delivers it to the discharge belt.
Locking Casters	Four locking casters keep the autoloader in place next to the feeder
Separator	The separator shingles the loaded product for its upward travel on the incline conveyor belt.
Control Panel (not shown, refer to page 3)	The control panel contains the electrical connection and breaker for the unit.
Operator Station (not shown, refer to page 3)	Houses controls to operate autoloader.
Hydraulic Height Adjustment (not shown, refer to page 7)	The hydraulic height adjustment is used to change the vertical height of the autoloader.
Product Sensor (not shown, refer to page 13)	The product sensor detects when the product in the feeder hopper is low. When detected, the autoloader will advance to feed more product.

Controls Overview



Operator Station



Control Panel

Controls Feature Descriptions

Feature	Description
Speed	Increases and decreases both belt speeds while maintaining the set ratio.
Start/Jog	Starts or jogs conveyor belts.
Emergency Stop	Emergency stop cuts power to unit.
On/Off	
Main Power	
Sensor Connector	

2 Preparing for Operation

Overview

IMPORTANT

CONDITION OF INSTALLMENT:

Warning decals must be visible to equipment operator.



DO NOT attempt to make any adjustments while the equipment is running. Serious injury can be caused by exposure to moving parts.

DO NOT wear loose clothing when operating the equipment.

When performing adjustments, always make sure to turn off the main power switch and disconnect the equipment from the power source. Failure to do so can cause the risk of an unintentional start-up and therefore exposure to moving parts which can cause serious injury.

Any attempt to make adjustments while the equipment is in operation could potentially damage to equipment or parts.

To prepare the autoloader for operation, the following setups should be made in order:

1. Positioning with the Feeder
2. Discharge Side Guide Assembly and Setup
3. Docking
4. Conveyor Side Guide Setup
5. Separator Setup
6. Hold Down Rollers Setup
7. Product Sensor Setup
8. Connect Power
9. Test to Verify Proper Setup

Step 1: Positioning with the Feeder



Swivel the height adjustment handle.



Turn the height adjustment handle.



Position side guides inside feeder hopper.

Review

The discharge belt on the autoloader must be set slightly higher than the feeder hopper. The correct height depends on the product being fed and the clearance of the wedge being used.

Objective

Correctly adjust the height of the autoloader so the product being fed falls evenly and freely, without skew, into the feeder hopper.

Procedure

1. Swivel the hydraulic height adjustment handle out to the extended position.
2. Turn the handle to raise or lower the autoloader to the desired height.
3. Swivel the handle back into place.
4. Position the side guides between the feeder side guides.

Step 2: Discharge Side Guide Assembly and Setup

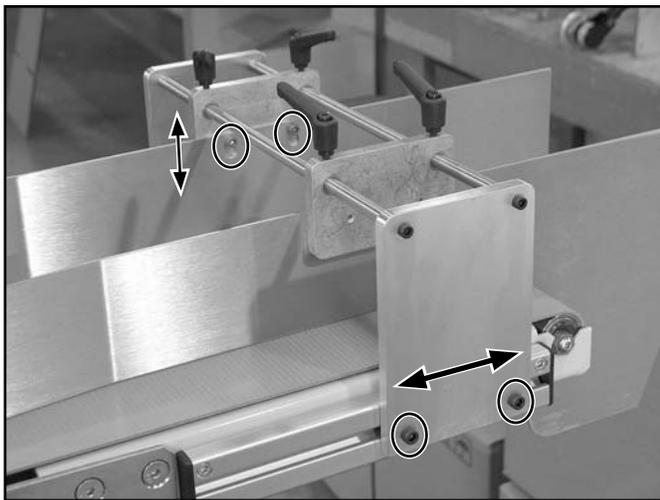
Review

The discharge side guides help direct the product in a straight line of movement along the discharge belt. Each side guide is independently adjustable, both horizontally and vertically, to accommodate different product widths. There are two locking levers on each side guide.

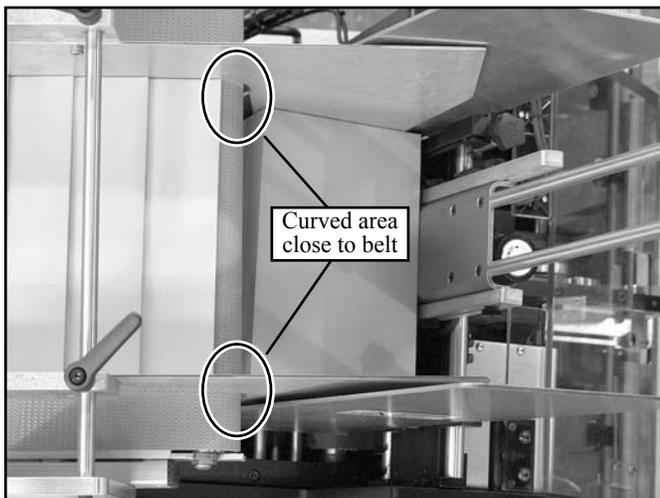
Objective

Adjust the discharge side guides to maintain uniformity in the loaded product with no drifting or binding.

Procedure



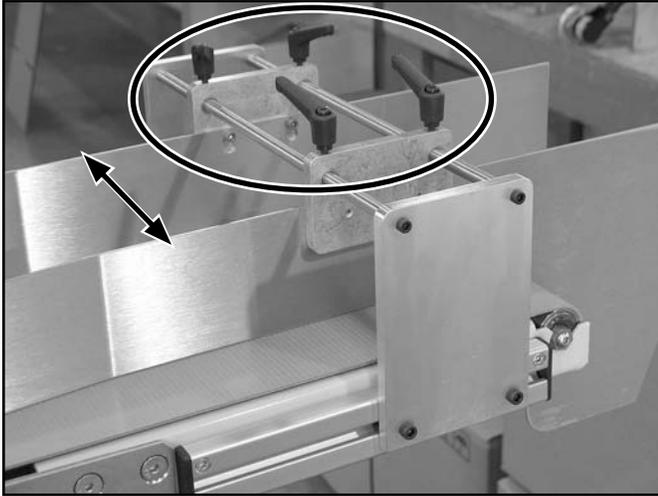
Vertical and horizontal adjustment points.



Side guides spacing with discharge belt.

1. Attach each side guide by sliding the mounting holes onto the socket head cap screws on the inside of the mounting blocks.
2. While holding the side guide in place adjust to the desired height above the belt and tighten the screws.
3. The curved area of the side guide should fit closely to the discharge belt without making contact. If the curved area does not fit well, adjust the side guide assembly mounting block forward or back by loosening the four socket head cap screws on the outside of each mounting block, sliding the assembly to the desired position and retightening the socket head cap screws.
4. Tighten socket head cap screws.

Step 2: Discharge Side Guide Assembly and Setup (continued)



Horizontal lock levers.

5. Loosen the lock levers on each side guide.
6. To adjust the side guides for width, independently adjust each side guide to within approximately 1/8" of the product positioned as it will be received from the incline conveyor belt. The side guides should be equidistant from the center of the conveyor belt.
7. Tighten the locking levers.

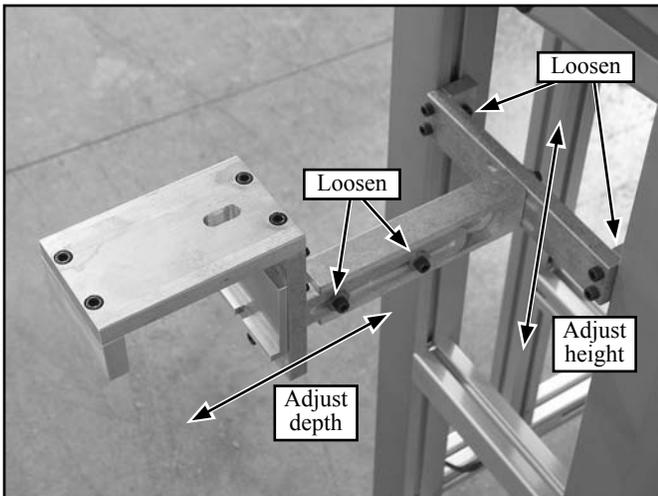


Proper horizontal side guide adjustment.

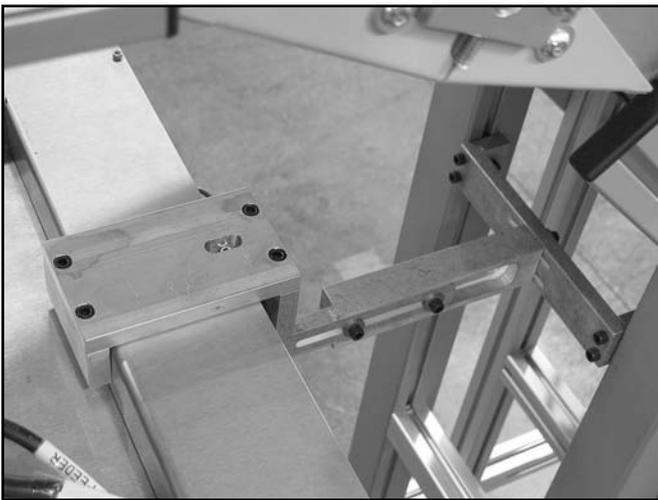
Step 3: Docking

NOTE

To reduce overall setup time and issues, it is important to set up and test the feeder before beginning setup of the autoloader.



Docking bracket.



Docking bracket re-assembled on feeder.

Review

The autoloader and feeder are connected together by a docking bracket, adjustable for the distance between the feeder and the autoloader. The proper extension of the bracket will allow the proper amount of clearance for the product to fall, evenly and aligned, from the autoloader discharge belt into the hopper on the feeder. The autoloader discharge belt should be tangent to the product stack and the returning side of the discharge belt should slightly clear the wedge on the feeder.

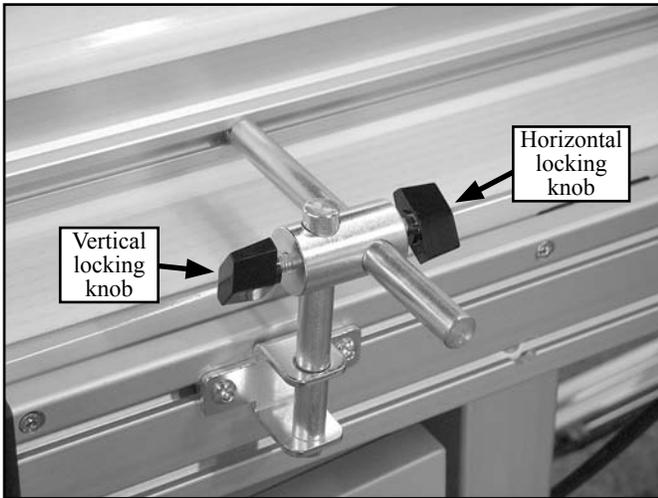
Objective

Properly connect the autoloader and feeder together using the adjustable docking bracket.

Procedure

1. Disassemble the feeder end of the docking bracket by loosening the socket head cap screws as shown.
2. Place docking bracket over the frame of the feeder.
3. Tighten the socket head cap screws to secure it in place.
4. Lock the four casters on the autoloader.

Step 4: Conveyor Side Guide Setup



Review

The side guides help direct the product in a straight line of movement along the horizontal conveyor belt. Each side guide is independently adjustable, both horizontally and vertically, to accommodate different products. There are two locking knobs on each side guide for each adjustment.

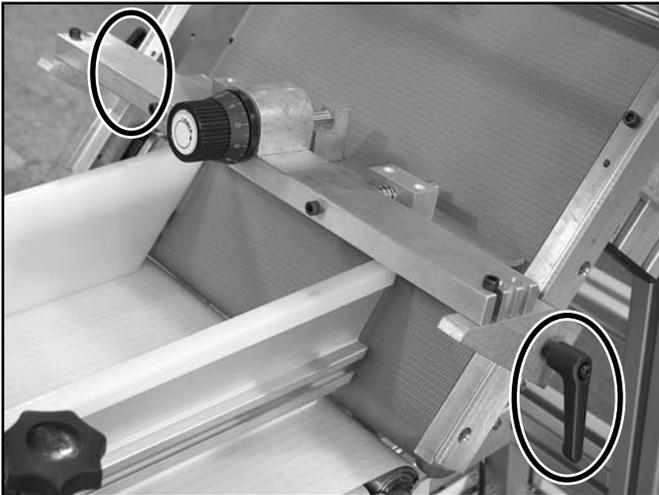
Objective

Adjust the horizontal conveyor side guides to maintain uniformity in the loaded product with no drifting or binding.

Procedure

1. On each horizontal conveyor side guide, loosen the two horizontal locking knobs.
2. Move each conveyor side guide to a width greater than the product width and equal distance from the center point of the feeder.
3. Place one piece of product on the conveyor in the desired feeding orientation. The edges of the product should rest equally on both sides of the belt.
4. Move each guide as close as possible to the sides of the product without causing binding, curling of edges or resistance of movement. A good starting point is 1/8" (1.6mm) from each edge.
5. Tighten the locking knobs.
6. Loosen the two vertical locking knobs.
7. Stand the piece of product on its end on the conveyor in the desired feeding orientation.
8. Raise or lower each side guide to support the vertical height and weight of the product.
9. Tighten the locking knobs.

Step 5: Separator Setup



Locking levers.

Review

The separator shingles the product for its upward travel on the incline conveyor belt. By moving the separator up and down along the hold down frame, the height of the separator is adjusted for the height of the product as it has been loaded along the horizontal belt. To adjust the separator for the thickness of the product, choose one of the three slot sets. Finely adjust for the thickness of the product by raising or lowering the gate by turning the adjustment knob.

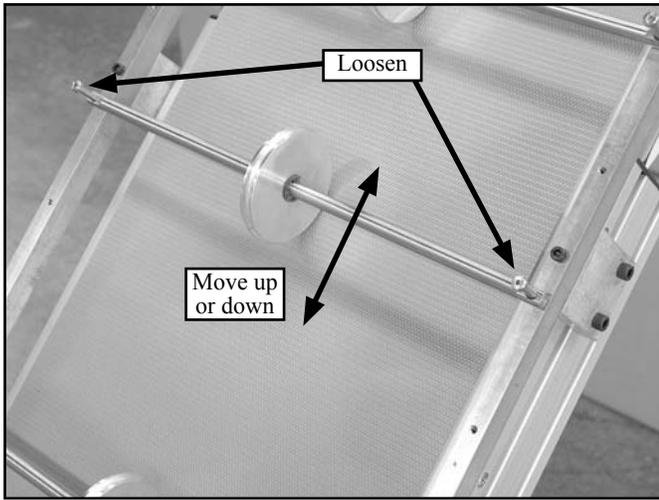
Objective

Adjust the separator for height and thickness of product.

Procedure

1. Loosen the locking levers on each side of the separator.
2. Slide the separator up and down along the hold down frame to approximately $\frac{1}{2}$ " above the height of the product as it is loaded on the horizontal belt.
3. Tighten the locking levers.
4. If the shingling gate is not in the desired slot set to accommodate the product thickness, loosen the socket head cap screws on each side.
5. Position the shingling in the desired slot set.
6. Tighten the socket head cap screws.
7. Turn the knob to fine adjust the shingling by lowering it toward or raising it away from the incline conveyor belt.

Step 6: Hold Down Rollers Setup



Adjusting hold down rollers.

Review

The hold down rollers float along the top surface of the shingled stream of product to help control it as it is moved upward on the incline conveyor belt to the discharge area. The hold down rollers can be spaced as close as 3 inches along the hold down frame. The ideal set up would use the least rollers necessary to manage the product.

Objective

Set the spacing of the hold down rollers.

Procedure

1. For each hold down roller assembly, loosen the shoulder head cap screw on each side.
2. Move each hold down roller assembly to the desired position.
3. Tighten the shoulder head cap screws.

Step 7: Product Sensor Setup

Review

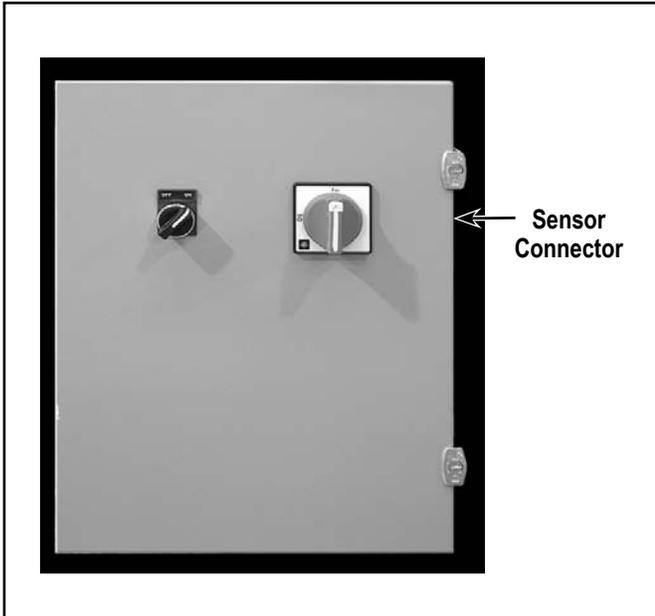
The product sensor detects when the product in the feeder hopper is low. When detected, the autoloader will advance to feed more product.

Objective

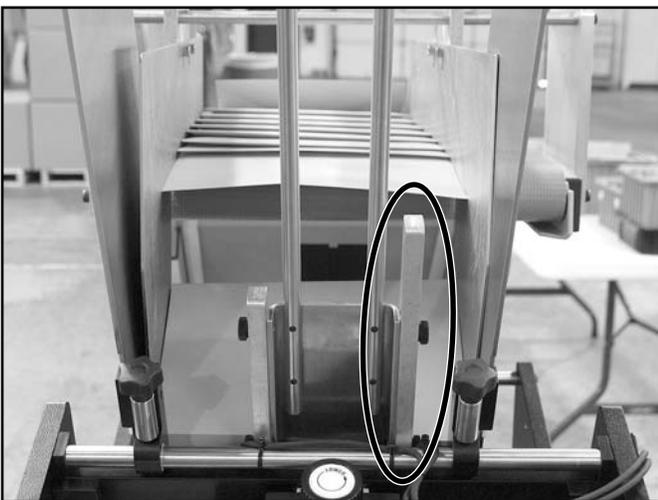
Properly install and adjust the autoloader product sensor.

Procedure

1. Connect the sensor to the sensor output receptacle on the external upper right side of the control box.



2. Install the sensor mounting hardware onto the feeder.
3. Direct the sensor at the stack of product in the feeder hopper and adjust to the desired height.



Attach to feeder and adjust height.

Step 8: Connect Power



Step 9: Test to Verify Proper Setup

Review

The autoloader must be connected to a 115VAC power source and is protected by a 15A circuit breaker.

Objective

Connect power and verify the circuit breaker is in the on (–) position.

Procedure

1. Open the control panel door by turning the disconnect to the off position and turning the latch/slotted screws with a screwdriver.
2. Verify the circuit breaker is in the on (–) position.
3. Close the control panel door, relatch the slotted screws and secure the door by turning the disconnect latch into the on position.
4. Verify both power knobs on the control panel door are set to the off (o) position.
5. Connect the power cord to a grounded 115VAC outlet.

Review

Perform a test to verify all of the settings with a small stack of product before beginning regular operation.

Objective

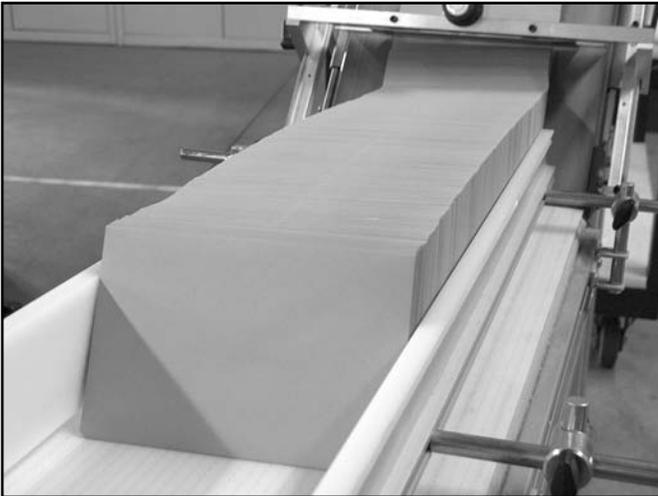
Verify all adjustments and settings are correct for the product being loaded.

3 Operation

Operational Sequence

Successful power-up and operation of the unit is assured if you apply each of following sets of procedures where needed:

1. Loading product
2. Starting/Running Product
3. Ratio Setting



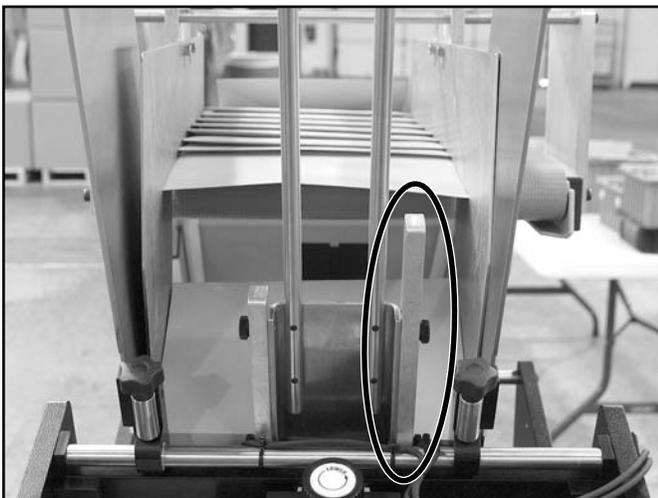
Load product on horizontal conveyor.

Loading Product

1. Load product uniformly between the side guides of the horizontal conveyor.
2. Adjust side guides to allow free movement of product, about 1/8" clearance on each side.



If sensor is not covered and the start button is pressed, the autoloader will run until the sensor is satisfied.



Load product into feeder hopper.

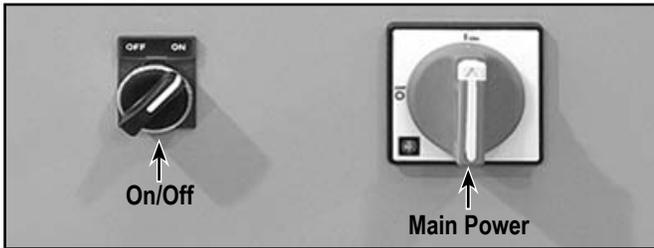
3. Load product into the hopper of the feeder.
Adjust the product sensor to a height just below the top of the stack of product.



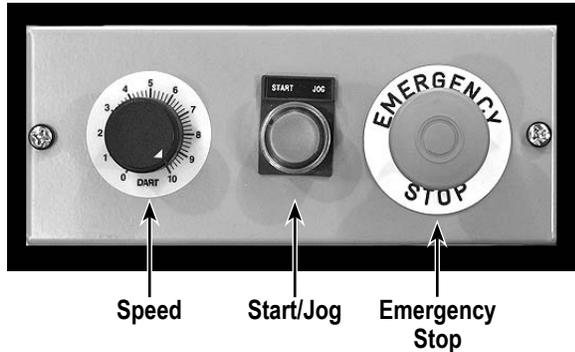
After loading product, it may be necessary to adjust the entire autoloader left or right, up or down in order to have product fall properly into the hopper of the feeder.

Operation (continued)

Control Panel

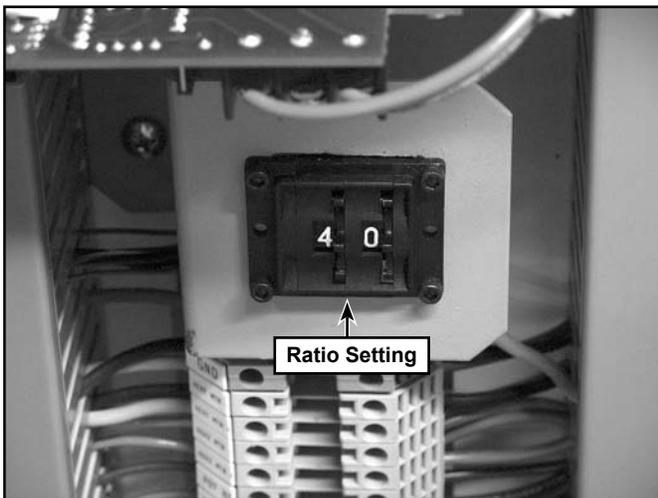


Operator Station



TIP

If the product goes up the incline skewed make sure product is:
- loaded square to the incline conveyor
- square to the side guides in the horizontal conveyor.
Resetting the vertical & horizontal adjustments may be required.



NOTE

The speed knob on the operator station increases & decreases both belt speeds while maintaining the set ratio. Also note that the incline belt speed is solely dependent on the speed knob setting.

Starting/Running Product

1. Once setup is complete, turn the main power switch to the (-) position and the On/Off switch to the ON position.
2. On the operator station pull out the emergency stop button. The green Start/Jog button should light up.
2. Press the "Start/Jog" button to activate the autoloader. The autoloader will start/stop as necessary to keep the hopper full of product.
3. Adjust the speed knob as needed.
4. To jog product, press and hold the "Start/Jog" button

Ratio Setting

1. This setting is located inside of the control panel, which can only be opened when the main power switch is in the "off" position.
2. Ratio settings will have to be adjusted after running product through over a short period of time.
 - a. If product thins out near the separator section the ratio is set too high.
Solution: Decrease Ratio
 - b. If product bunches up and falls back on itself the ratio is set too low.
Solution: Increase Ratio
3. Rule of Thumb: As the ratio increase, the horizontal belt speed decreases.

4 Inspection and Care



Do not attempt to make any adjustments while the equipment is running. Serious injury can be caused by exposure to moving parts.

Do not wear loose clothing when operating the equipment.

When performing inspection and maintenance, always make sure to turn off the main power switch and disconnect the equipment from the power source. Failure to do so can cause the risk of an unintentional start-up and therefore moving parts which can cause serious injury.

Any attempt to make adjustments while equipment is in operation could cause serious injury and potentially damage equipment or parts.

Read this section to learn how to:

- Visually inspect and maintain the equipment to prevent any operational problems or to detect part problems which may require adjustment, replacement or cleaning.
- Perform cleaning of belts, o-rings and sensors.
- Advance or replace o-rings.
- Replace belts.

Inspection

Check for Damaged Feed or Discharge Belts

Check for visual signs of:

- Stretching. Replace as required.
- Thinning or cracking. Replace as required.
- Worn. Replace as required.

Advance or Replace Damaged O-Rings

Check for visual signs of:

- Stretching. Advance or replace as required.
- Thinning or cracking. Advance or replace as required.
- Worn. Advance or replace as required.

Ensure Proper Feed and Discharge Belt Tracking

Check for visual sign of:

- Walking. Adjust as required.
- Improper roller alignment. Adjust as required.

Preventive Maintenance



Use only isopropyl alcohol (98% concentration) to clean belts and rollers. Other solvents can cause damage.



Do not use any solvents or cleaning agents when cleaning the sheet sensor lenses.

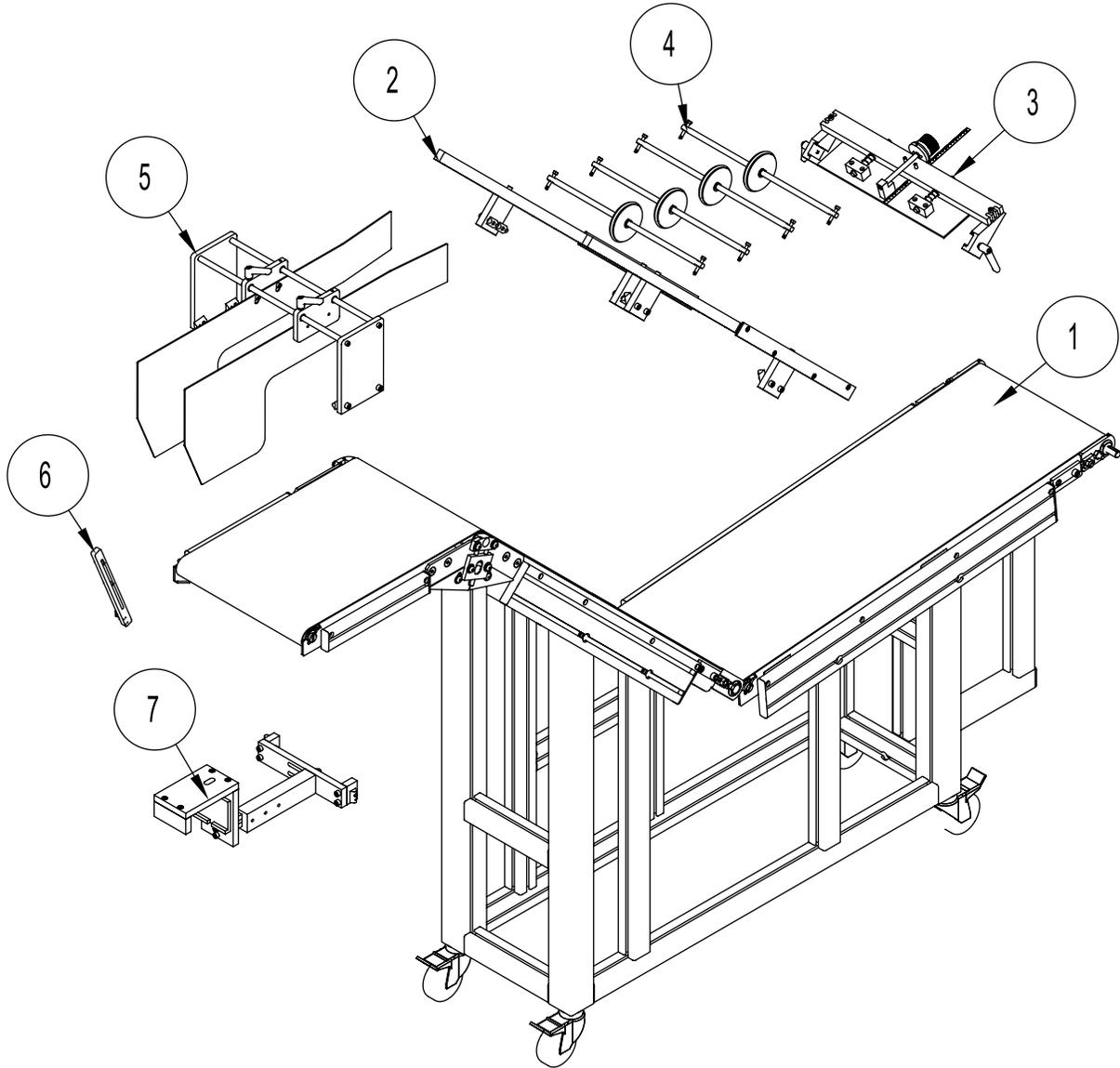
Cleaning Feed Belts, Discharge Belts and O-Rings

1. Turn the power switch to O (off) and remove the power cord from the power source.
2. Apply a small amount of isopropyl alcohol to a soft cloth.
3. For belts, use moderate pressure to wipe across one belt at a time while manually rotating it. Repeat for several rotations of each belt.
4. For o-rings, remove the gate assembly from the gate plate first and then wipe in each direction.

Cleaning Sensor Lenses

1. Turn the power knob to O (off) and remove the power cord from the power source.
2. Use a soft, dry cloth to wipe gently across the face of each lens.

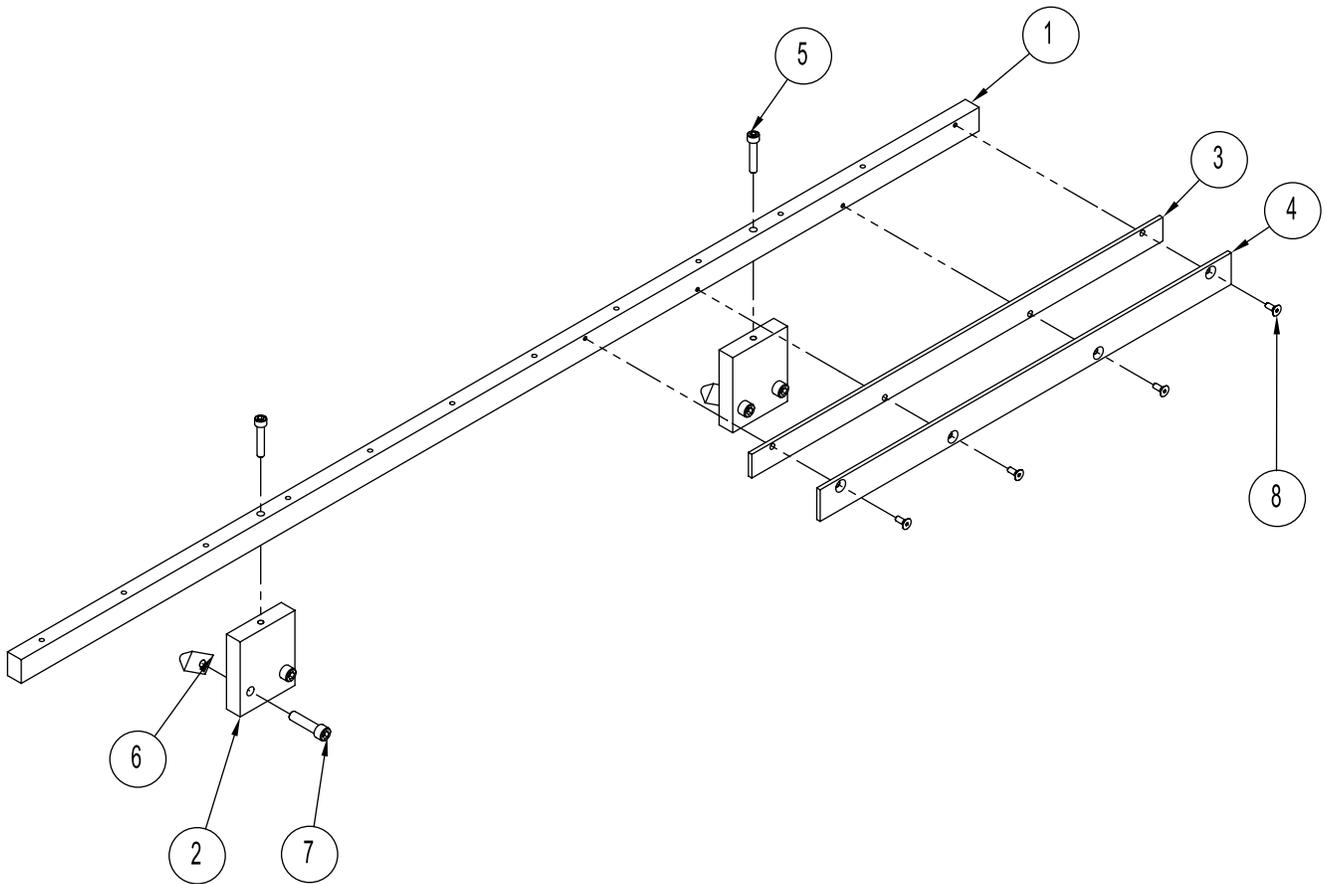
5 Mechanical Components



ASSEMBLIES

ITEM	QTY.	PART NUMBER	DESCRIPTION
1	1	901013	AUTOLOADER, LLFH
2	1	311-0330	ASSY, AUTOLOADER RAIL
3	1	311-0313	ASSY, SEPARATOR
4	4	311-0329	ASSY, HOLD DOWN WHEEL
5	1	311-0324	ASSY, AUTOLOADER PRODUCT
6	1	311-0326	ASSY, AUTOLOADER SENSOR
7	1	311-0387	ASSY, DOCKING BRKT

AUTOLOADER RAIL ASSEMBLY
Assembly # : 311-0330



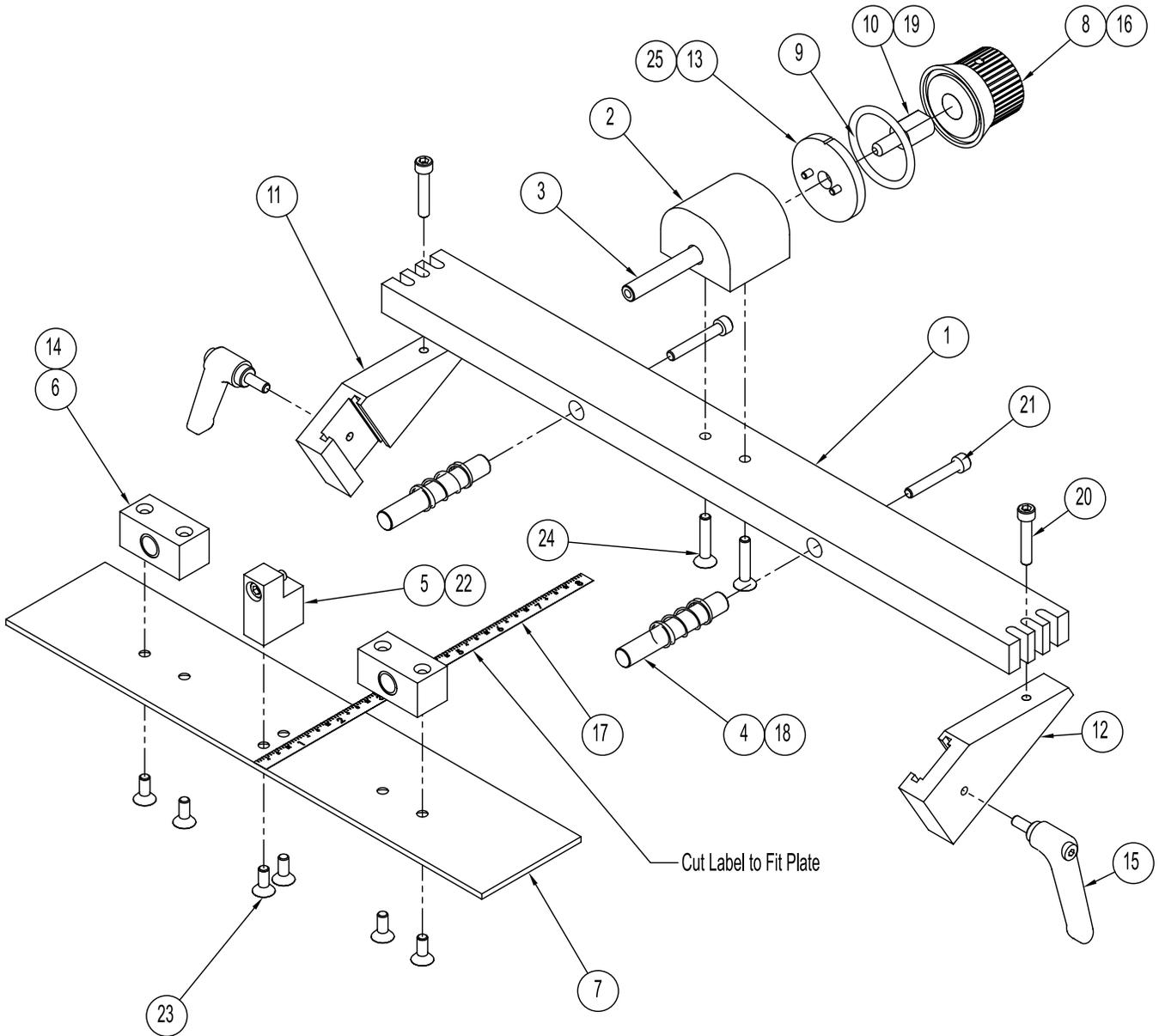
AUTOLOADER RAIL ASSEMBLY

Assembly # : 311-0330

ITEM	QTY.	PART NUMBER	DESCRIPTION
1	2	901114	RAIL, AUTOLOADER HOLD DOWN
2	4	901115	SUPPORT, AUTOLOADER RAIL
3	2	51277016	BAR, TRACK SPACER
4	2	51277017	BAR, TRACK
5	4	102688B07	SHCS #10-32 X 1
6	8	51208214	NUT, T-SLTDROP 1/4-20
7	8	102689B07	SHCS 1/4-20 X 1.00
8	8	102634B02	FHCS 6-32NC X 0.38

SEPARATOR ASSEMBLY

Assembly # : 311-0313

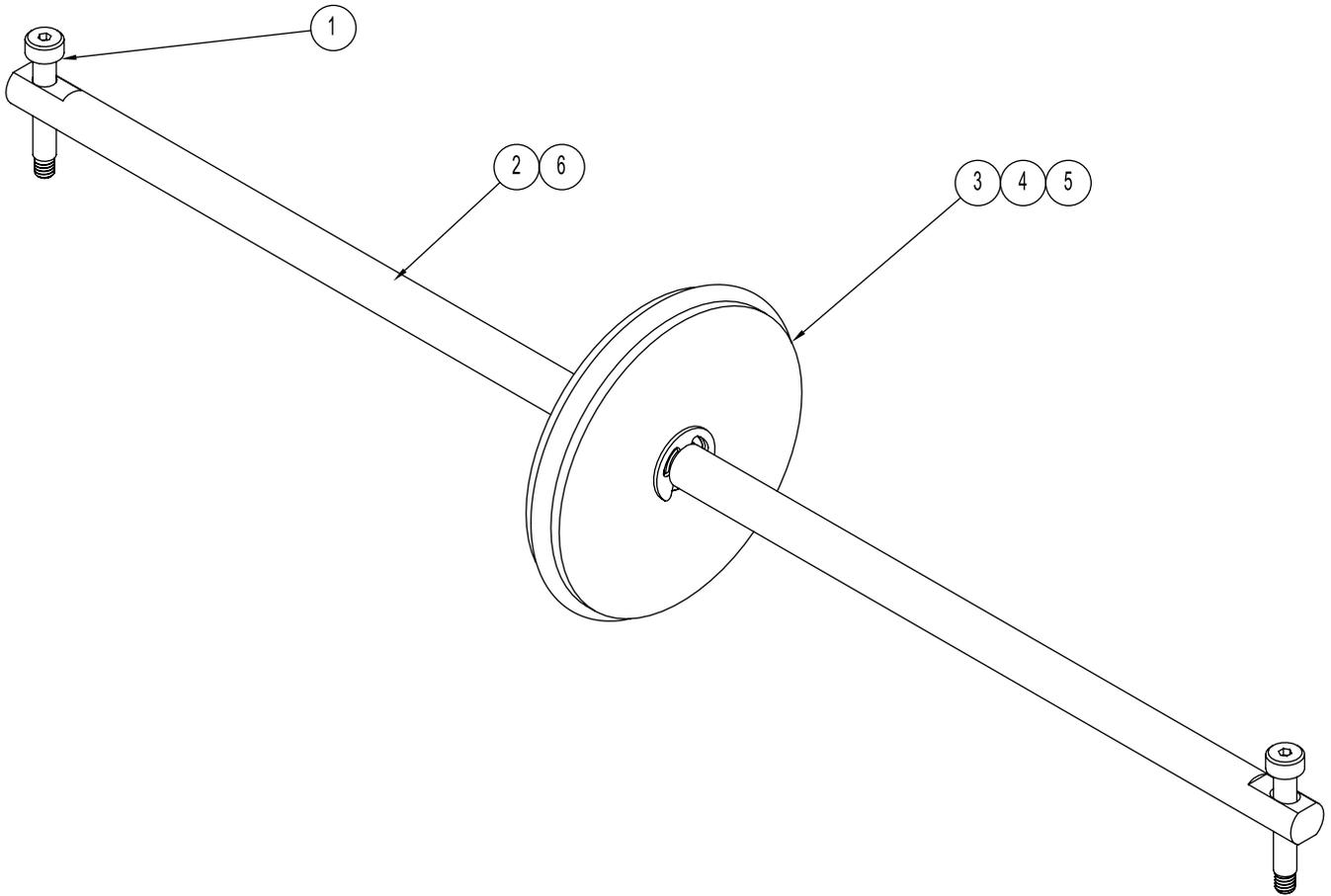


SEPARATOR ASSEMBLY

Assembly # : 311-0313

ITEM	QTY.	PART NUMBER	DESCRIPTION
1	1	901101	PLATE, SEPARATOR
2	1	901104	BLOCK, SEPARATOR
3	1	901106	SHAFT, SEPARATOR Ø.3125
4	2	901105	SHAFT, .375 DIA X 2
5	1	901103	BLOCK, SEPARATOR ADJUST
6	2	901102	BLOCK, SEPARATOR GUIDE
7	1	901099	BLADE, ADJUSTABLE SEPARATOR
8	1	51277083	KNOB
9	1	23500104	O RING, STANDARD
10	1	51277081	KNOB INSERT
11	1	901116	SUPPORT, ADJUSTABLE
12	1	901100	SUPPORT, ADJUSTABLE
13	1	51277082	MOUNTING FLANGE KNOB
14	2	51632070	IGUS BEARING
15	2	43555097	HANDEL 10-32
16	1	23500084	GATE ADJUSTMENT
17	1	44500060	SR 1250 RULER LABEL
18	2	901107	SPRING, SEPARATOR
19	1	102733B12	SET, SCREW 1/4-28 X 1-1/4
20	2	102688B07	SHCS #10-32 X 1
21	2	102688B08	SHCS 10-32 X 1.25
22	1	102688B03	SHCS #10-32 X 1/2
23	6	102637B03	FHCS #10-32 X 1/2
24	2	102637B06	FHCS 10-32 X 1
25	2	102912B01	SHCS #5-40 X 1/4

HOLD DOWN WHEEL ASSEMBLY
Assembly # : 311-0329

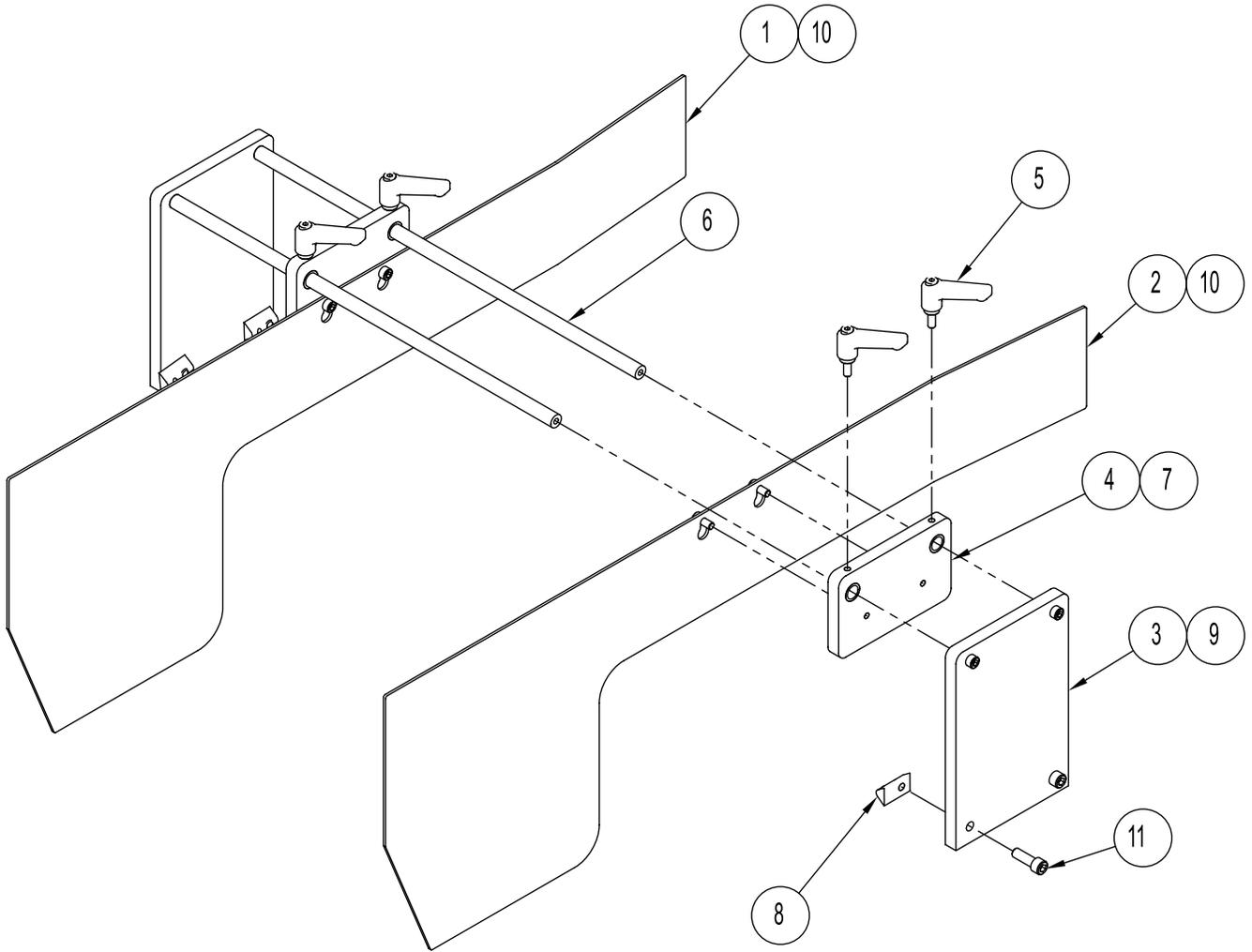


HOLD DOWN WHEEL ASSEMBLY

Assembly # : 311-0329

ITEM	QTY.	PART NUMBER	DESCRIPTION
1	2	901168	SCREW, SHOULDER 3/16 OD X 1.00
2	1	901117	SHAFT, HOLD DOWN Ø.375
3	1	901118	ROLLER, AUTOLOADER
4	1	51460090	O-RING, ENCODER
5	1	23500251	BEARING, OILIT 3/8 X 1/2 X 3/8
6	2	104308B04	E CLIP 3/8

AUTOLOADER PRODUCT ASSEMBLY
Assembly # : 311-0324

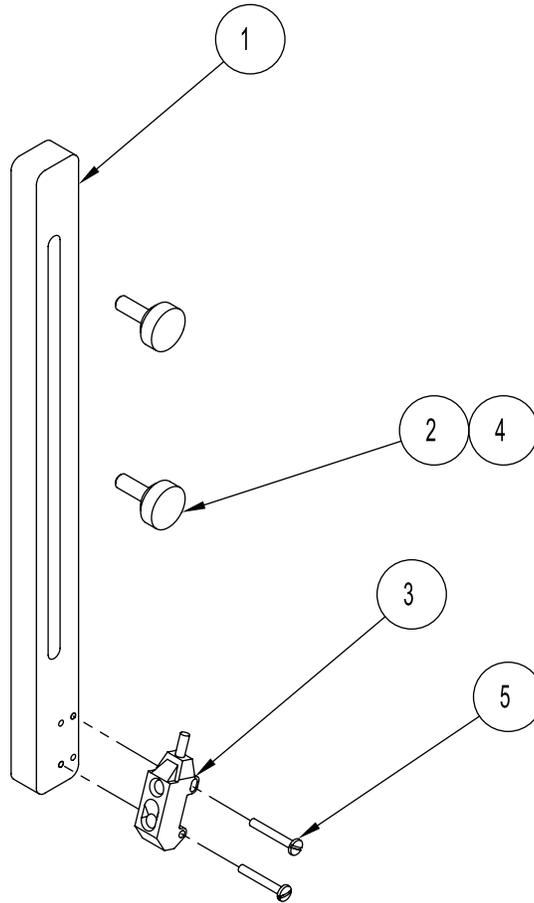


AUTOLOADER PRODUCT ASSEMBLY

Assembly # : 311-0324

ITEM	QTY.	PART NUMBER	DESCRIPTION
1	1	901174	GUIDE, MATERIAL RIGHT
2	1	901173	GUIDE, MATERIAL LEFT
3	2	901177	BLOCK, SUPPORT GUIDE
4	2	901175	BLOCK, MATERIAL GUIDE
5	4	43555097	HANDEL 10-32
6	2	901176	SHAFT, MATERIAL GUIDE
7	4	23500251	BEARING, OILIT 3/8 X 1/2 X 3/8
8	4	51208214	NUT, T-SLTDROP 1/4-20
9	4	102688B04	SHCS #10-32 X 5/8
10	4	102688B02	SHCS #10-32 X 3/8
11	4	102689B05	SHCS 1/4-20 X 3/4

AUTOLOADER SENSOR ASSEMBLY
Assembly # : 311-0326

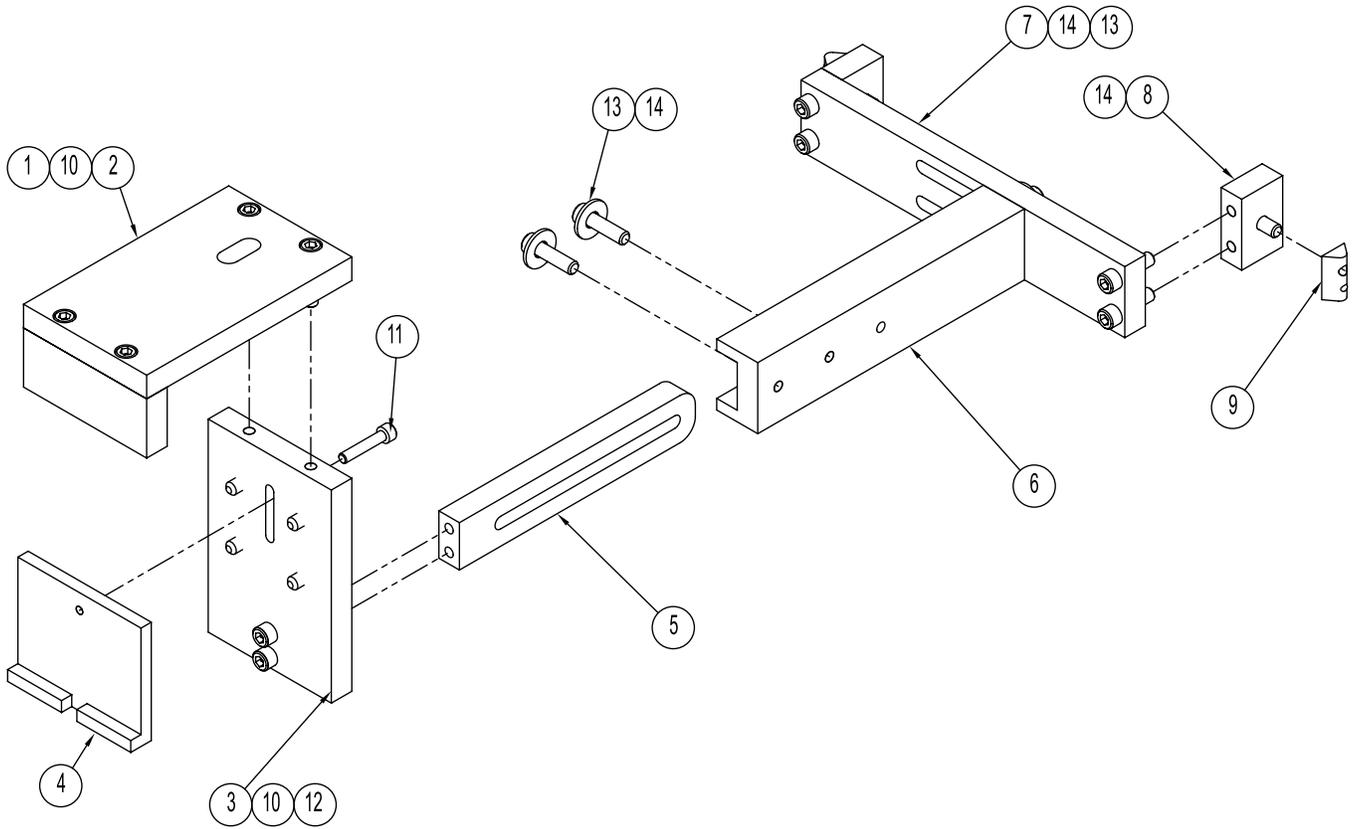


AUTOLOADER SENSOR ASSEMBLY

Assembly # : 311-0326

ITEM	QTY.	PART NUMBER	DESCRIPTION
1	1	901207	BAR, SENSOR MOUNT
2	2	435SO270	KNOB, 1/2 DIA. #8 W/O SCREW
3	1	611-0108	HARNESS, AUTOLOAD
4	2	102685B03	SHCS 8-32 X .50
5	2	600624B07	MSSH #2-56UNC X .63
6	1	611-0109	CABLE, EXTENSION STACK SENSOR

DOCKING BRKT ASSEMBLY
Assembly # : 311-0387

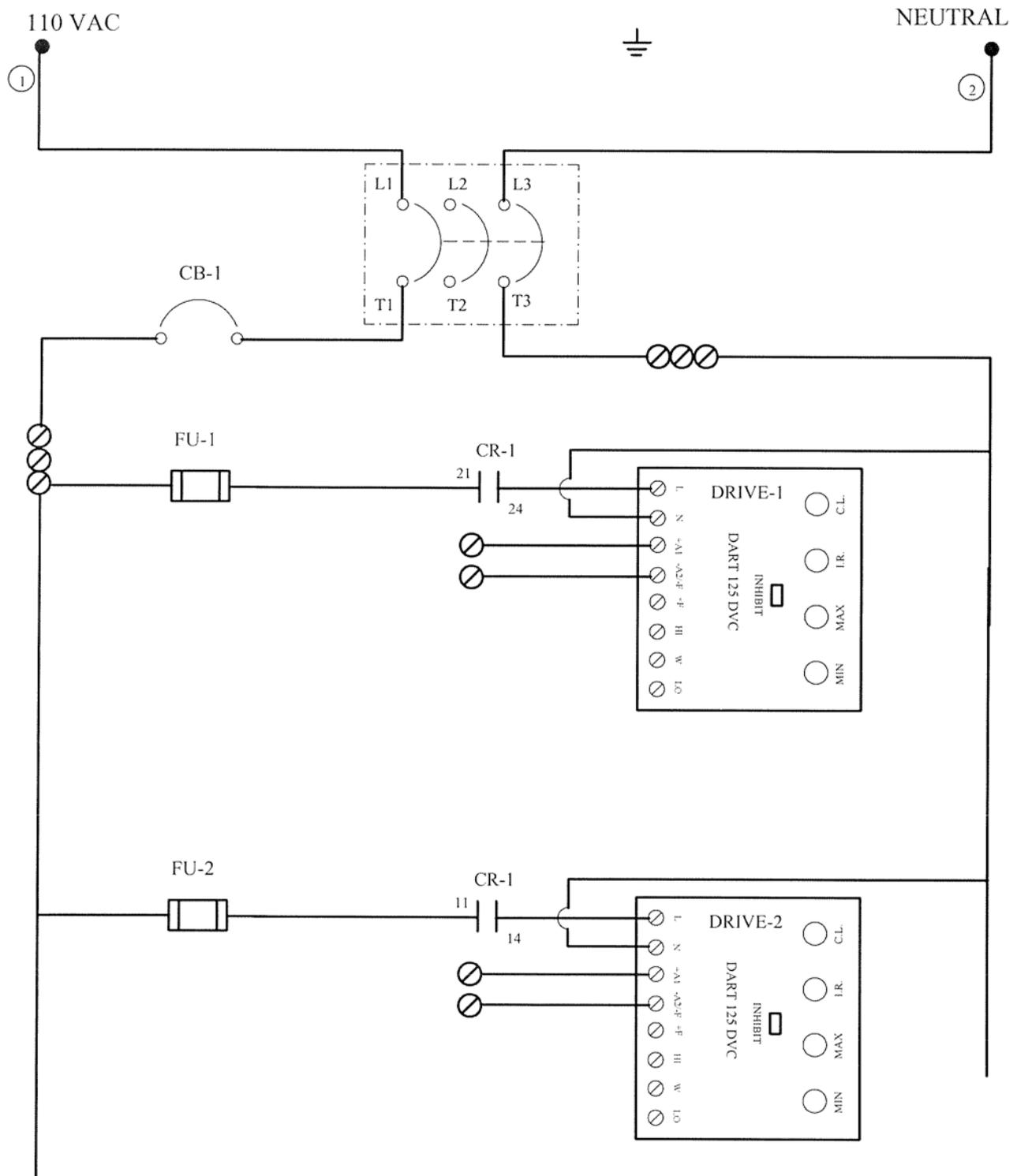


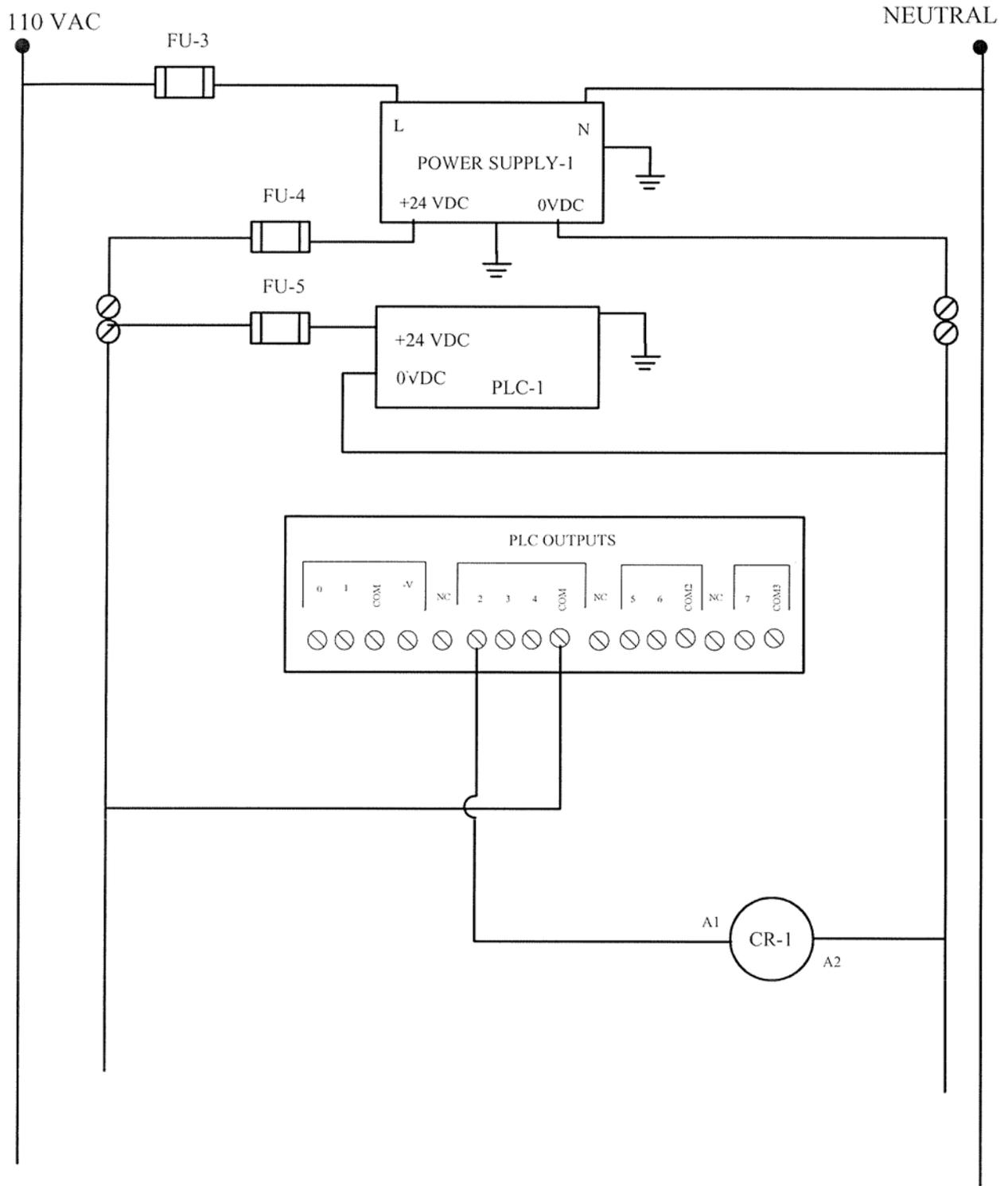
DOCKING BRKT ASSEMBLY

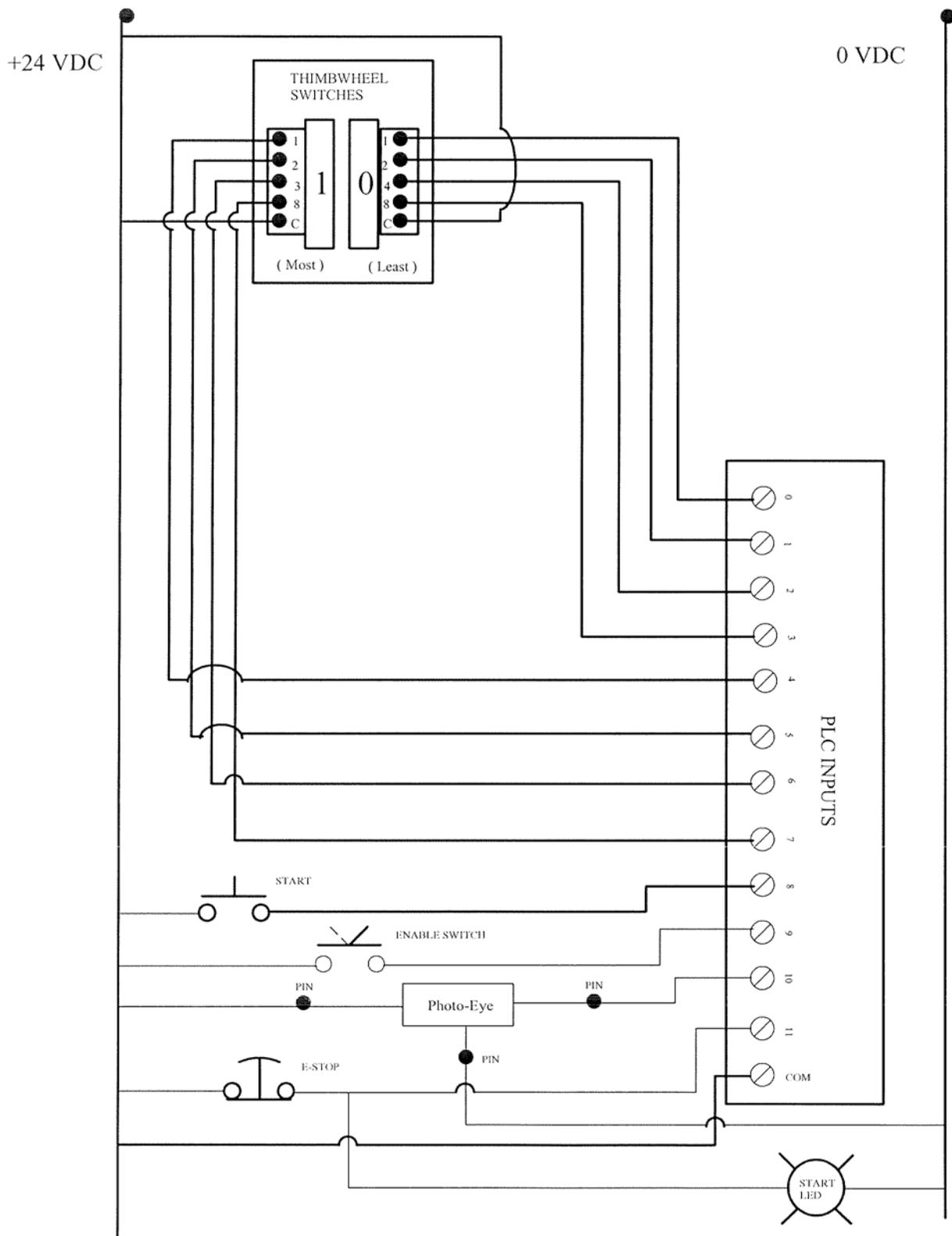
Assembly # : 311-0387

ITEM	QTY.	PART NUMBER	DESCRIPTION
1	1	901192	DOCKING BRACKET, LIP
2	1	901193	DOCKING BRACKET, TOP
3	1	901317	BLOCK, DOCKING
4	1	901195	DOCKING BRACKET, LATCH
5	1	901318	BLOCK, SLIDE RAIL
6	1	901319	BLOCK, U-CHANNEL
7	1	901291	BLOCK, U-CHANNEL SUPPORT
8	2	901292	BLOCK, SUPPORT
9	2	51208214	NUT, T-SLTDROP 1/4-20
10	6	102689B07	SHCS 1/4-20 X 1.00
11	1	102688B07	SHCS #10-32 X 1
12	4	102733B11	SSSCPT 1/4-20 X 1.00
13	4	103241B01	FLAT WASHER 1/4
14	10	102689B06	SHCS 1/4-20 X 7/8

6 Electrical Diagrams

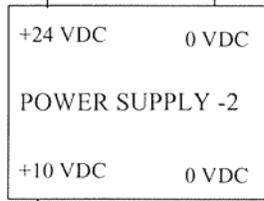






+24 VDC

0 VDC

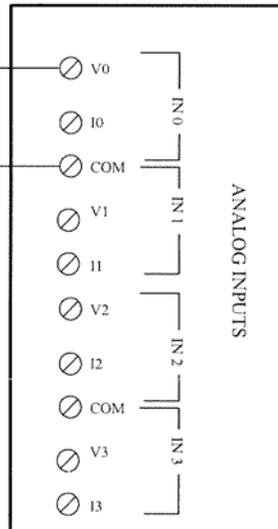


POTENTIOMETER
"HI"

POTENTIOMETER
"LO"

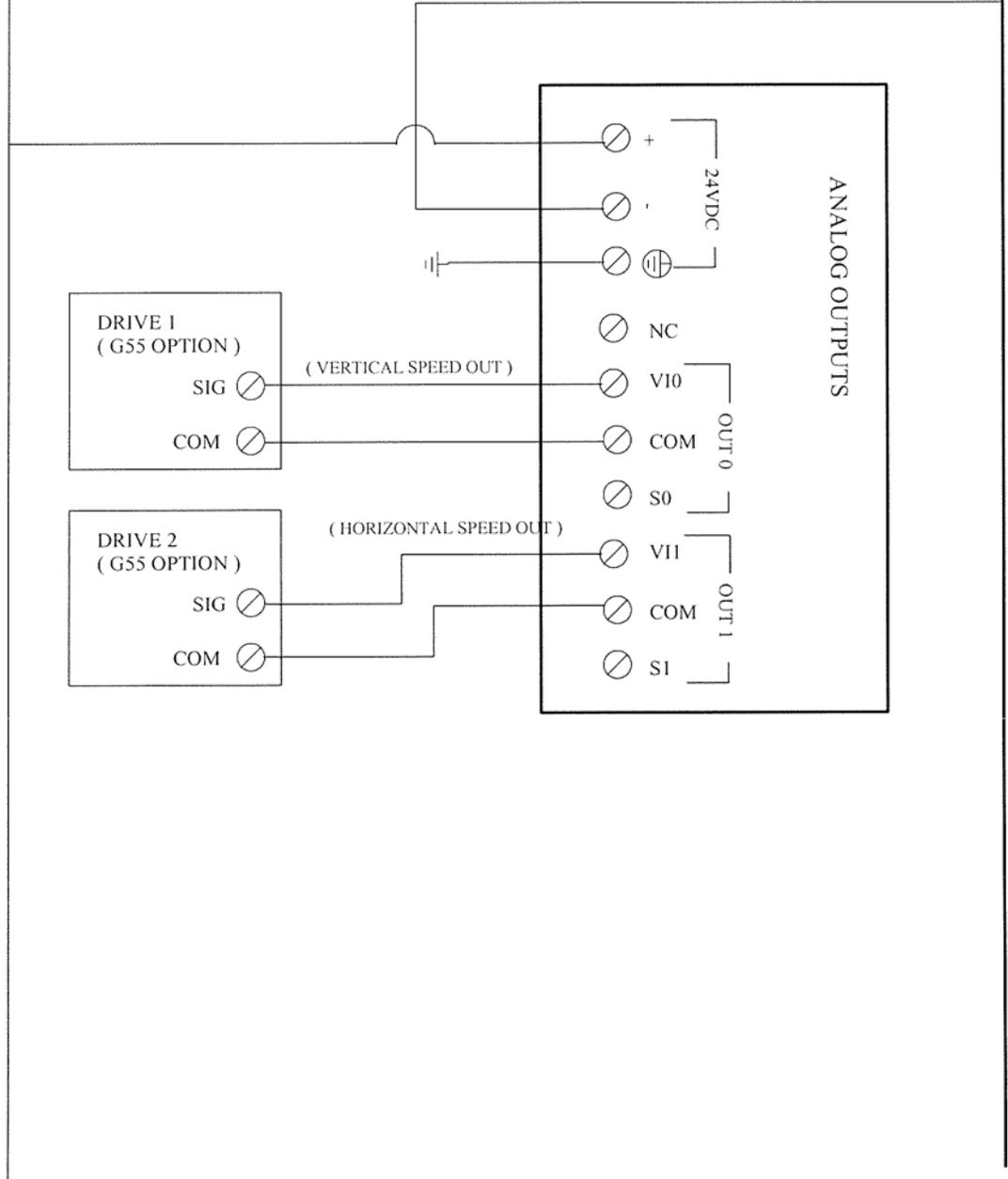


POTENTIOMETER
"W" - Wiper



+24 VDC

0 VDC



Thiele
Technologies
A Barry-Wehmler Company

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