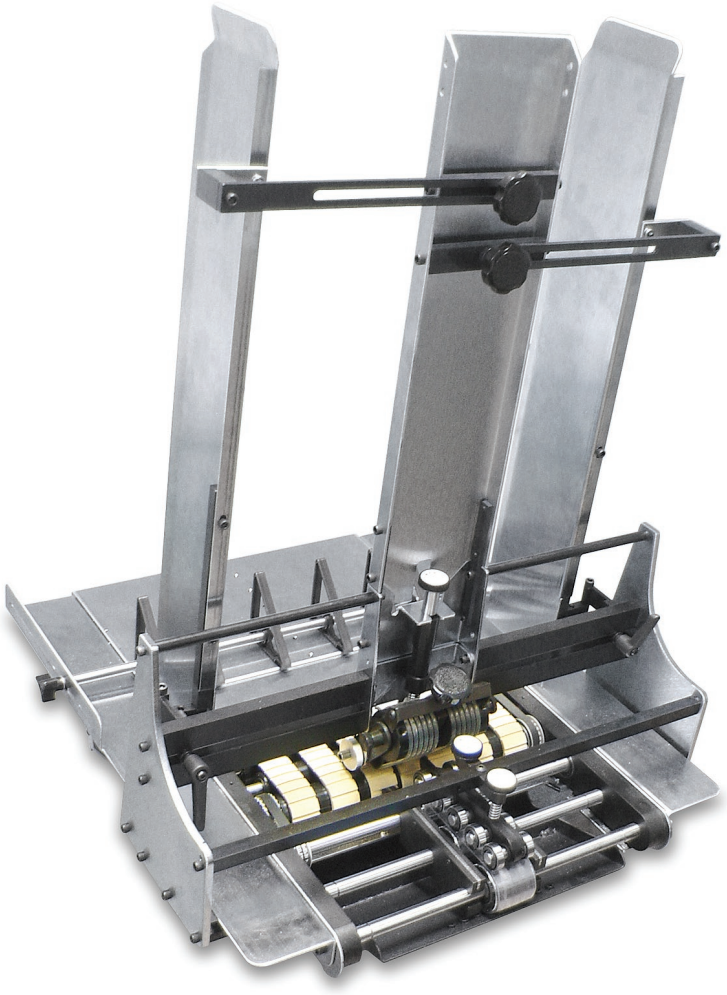
# S-1750IJ

## Product Guide



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Streamfeeder®

Part Number: 00900529



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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 feeder.


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


CHECK signifies an action that should be reviewed by the operator before proceeding.


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

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.

# Before You Begin

## Message Conventions

Avoid injury. Do not reach around guards.

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.

Pinch point. Keep hands and fingers clear.

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 every effort has been made to incorporate safety features in the design of this product, 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.* This product is built with the highest quality materials. However, damage can occur if not operated and cared for within design guidelines as recommended.

## Danger

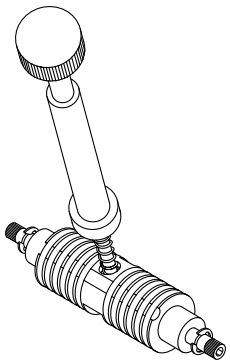
- **Equipment interior contains incoming 115 or 230VAC electrical power. Bodily contact with these high voltages can cause electrocution, which can result in serious injury or death.**

# 1 About Your Machine

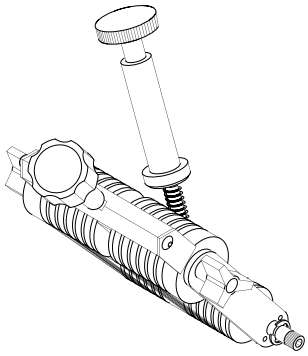
The S-1750IJ is designed to separate, singulate, and feed a variety of cut sheets and non-nested products.

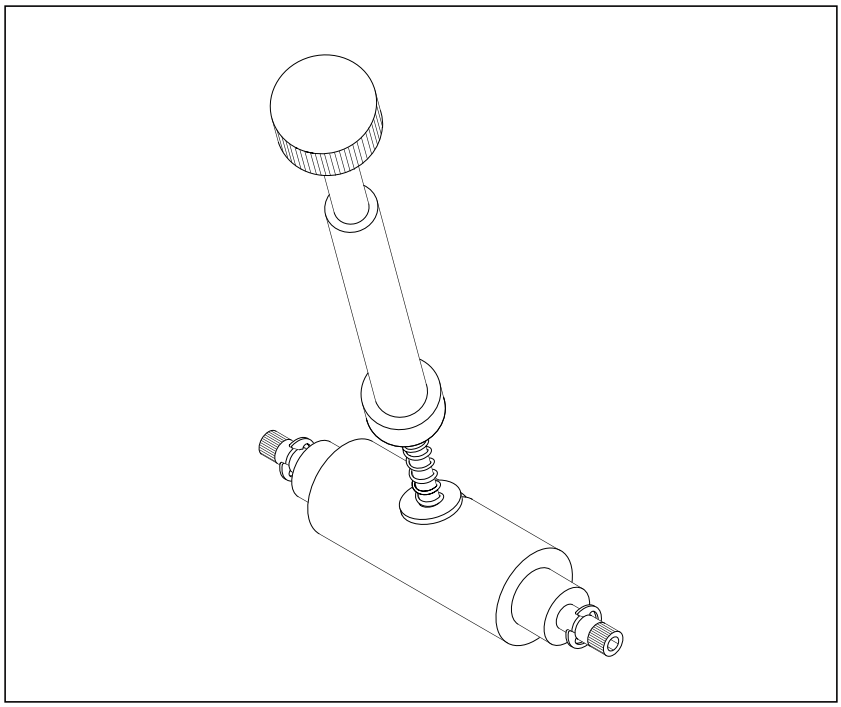
The design feature that makes the S-1750IJ unique is a part called the *gate assembly*. This patented technology is the main reason the feeder can separate, singulate, and feed individual sheets with accuracy and reliability — even at high speeds. A single-knob adjustment allows you to easily setup the feeder for many different types of product.

Standard O-Ring Gate



Advancing O-Ring Gate



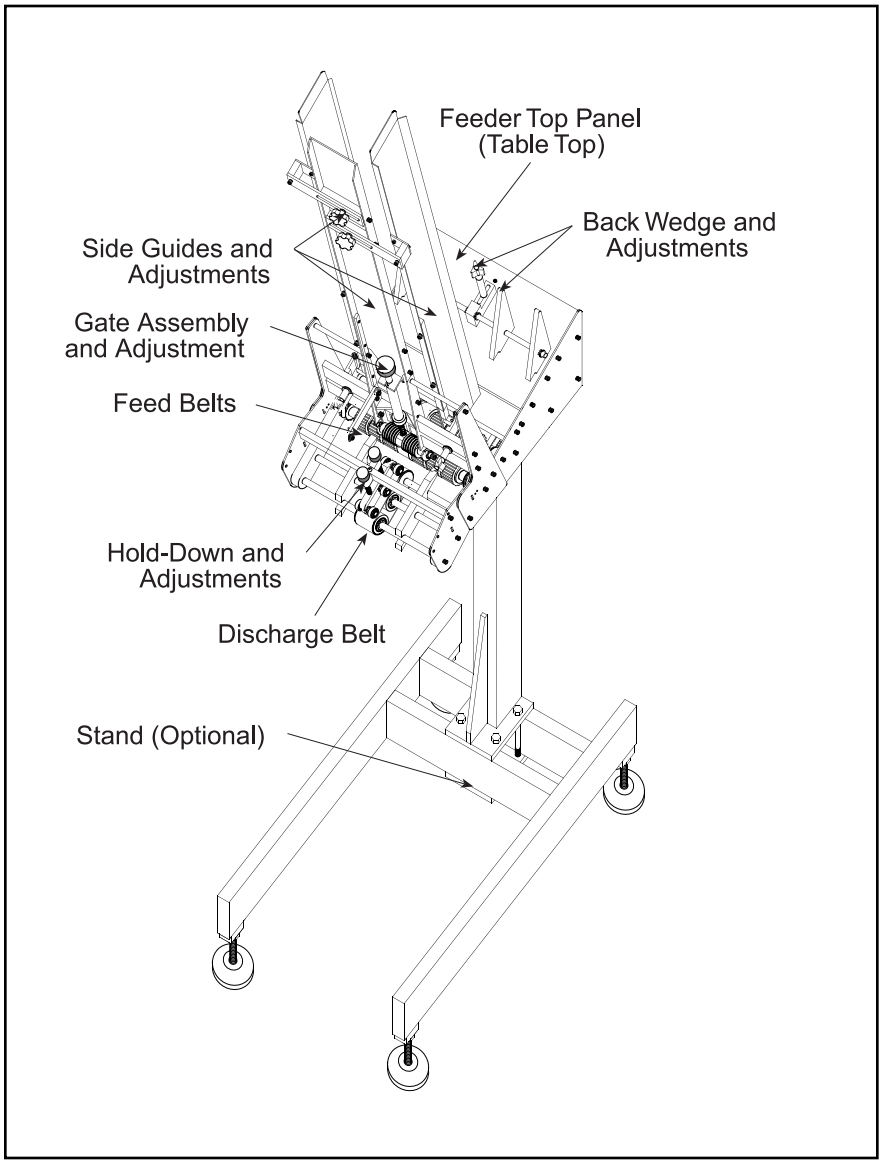


**Bar Gate Assembly**

# Main Features

The machine is entirely powered by a single DC motor that runs on either a 120- or 240-VAC electrical power source. Once the machine is prepared for operation, the power-up and operation of the feeder is relatively easy.

But to get the most out of your machine, you should first become familiar with all of the features.



## Feature Descriptions of S-1750IJ

| FEEDER | Contains the all hardware, drive motor, and belts for singulating and feeding product from a stack. |
|---|---|
| **Gate assembly and adjustment** | *Mounted on a gate plate directly above the feed belts, this device provides a curvature to help preshingle stacked product. When properly adjusted, a one-thickness gap is created to help singulate and eject product. Three types of gate assemblies are available, depending on which model you order: bar gate, standard O-ring gate, and advancing O-ring gate (standard).* |
| **Top panel (table top)** | *Used to support the back wedge. Also provides access to interior of feeder.* |
| **Side guides and adjustments** | *Holds a stack of product to be fed and helps keep it straight for proper entry through the gate assembly area.* |
| **Back wedge and adjustments** | *Lifts the product to keep it off the table top, reduces excessive contact with the feed belts, and helps push the product against the curvature of the gate assembly. Three types of wedge assemblies are available, depending on which model you order: triangle wedge, low-profile, and articulating roller.* |
| **Hold-down and adjustments** | *This series of rollers provides a varying pressure on top of product to force it down on the discharge belt, thus helping to eject a single product after it exits the gate assembly area.* |
| **Feed belts** | *Provides the friction and motion necessary to pull individual product from the bottom of the stack and through the gate assembly area.* |
| **Discharge belts** | *Combined with the hold-down rollers, provides the friction and motion necessary to pull product away from the gate assembly area. Rotates 50% faster than feed belts to separate and eject the bottom product away from next product entering the gate assembly area.* |

# 2 Preparing for Operation

**When performing initial adjustments prior to operation, always make sure you turn Off the main power switch from the electrical power source. Failure to do so can expose you to a potential start-up, and therefore moving parts which can cause serious injury.**

**Do not attempt to make any adjustments while the machine is running. Failure to do so can expose you to moving parts which can cause serious injury. Do not wear loose clothing when operating the feeder.**

**Avoid making adjustments with loose or unsecured parts. This can potentially damage parts.**

Once the S-1750IJ is installed, you are then ready to prepare the machine for operation. To do so, you must perform several adjustments with the product you are going to be feeding. And, you must do a test run with this product to verify that it is set correctly before going online. *You will have to perform this procedure for each product that you plan to feed.*

The adjustments you must make (in order) are as follows:

1: Gate assembly adjustment

2: Side guides setting

3: Back wedge setting

4: Hold-down setting

## STEP 1: Gate Assembly Adjustment

NOTE

*Hopper refers to the space where the product is stacked (made up of the side guides and gate plate).*

NOTE

*Keep in mind that the gate assembly works with the wedge to provide the proper lift, curvature of the product, and proper belt/product contact to separate and feed one sheet at a time.*

### Review

The gate assembly provides the curvature to help preshingle product and provides the proper gap to help the feed belts pull product through the gate assembly area — one at a time. The downward pressure (or weight) of the stack in the hopper will provide the force to help push the product against the curvature of the gate assembly, and help it contact the feed belts. This preshingling will allow the gate assembly to separate (and singulate) product as it moves toward the gap.

To achieve the optimum separation, you have to use the adjustment knob to either increase (clockwise) or decrease (counter-clockwise) the gap between gate assembly and the feed belts. Depending on the characteristics of the product you are using, you may have to change the gate assembly from the factory-set *high* spring tension to a *low* spring tension. See “Changing from Factory Set High-Tension to Low-Tension” to follow.

### Objective

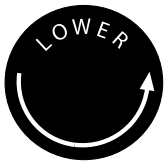
Adjust the gate assembly for minimum gap, with minimum pressure on the product. Feeding problems will occur with either too much pressure on the product, or too large a gap between the gate assembly and the product.

## Procedure

To adjust the gate assembly for proper gap, follow these steps:

1. Slide a single sheet of sample product under the gate assembly. You may have to pull up on the adjustment knob to allow the product to be inserted.
2. Grasp the product with two hands and slide front-to-back under the gate assembly. A proper adjustment allows a “slight” drag on one-piece thickness of product.
3. Turn the gate assembly adjustment knob until the product has the desired drag: clockwise to increase gap, counter-clockwise to decrease gap.

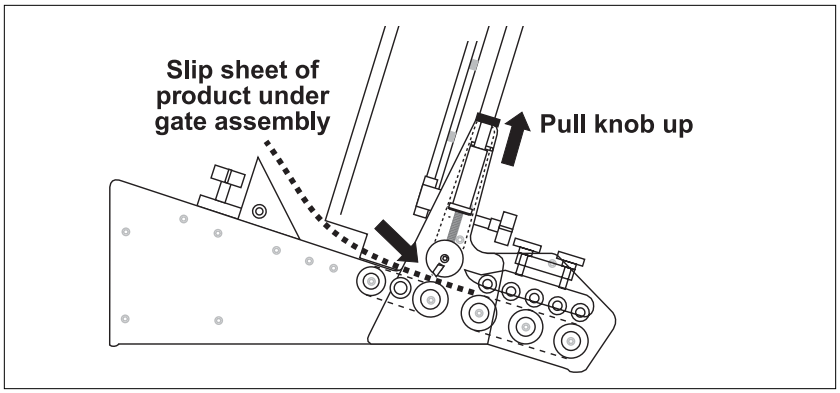
Excessive lowering of the gate assembly can damage product or lead to premature wear of the O-rings or feed belts.



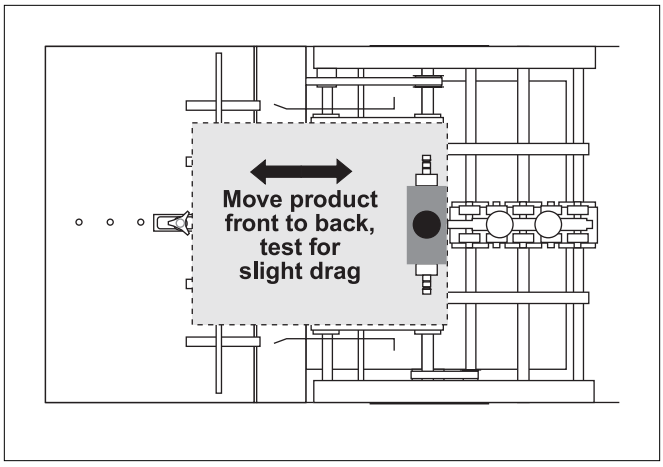

Due to the discharge belt and hold-down assembly spinning 50% faster than the feed belts, excessive gate assembly pressure can cause premature wear to O-rings or feed belts.

TIP

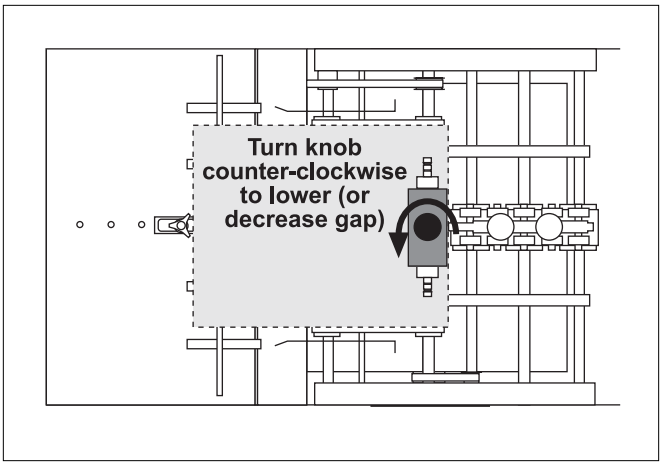
*A wider gap between product and belt provides the highest tolerance for curled and bent edges.*




**Lifting Gate Assembly Upward to Insert Product**




**Using One-Piece Thickness of Product to Set Gap**




**Adjusting Gate Assembly for Correct Gap**

# Changing From Factory Set High-Tension to Low-Tension

Excessive lowering of the gate assembly can damage product or lead to premature wear of the O-rings or feed belts.

## Review

The feeder is shipped to you with a high-tension spring in the gate assembly. Certain types of product may demand that you change the gate assembly from a *high-tension* setting to a *low-tension* setting (for example, irregular shaped product). *This works well for most materials, allows for tall stack height, and helps provide the best performance in preventing doubles.*

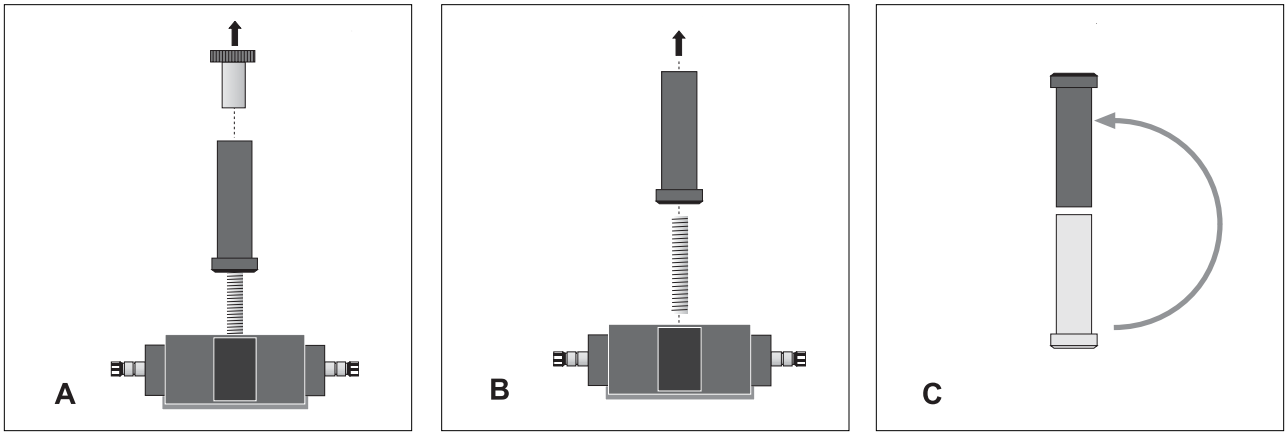
If you are feeding a product of irregular thickness, you should change to low-tension. This provides the following benefits:

- Allows the gate assembly to adjust to the irregular thickness among product pieces.
- Prevents marking on the product by the gate assembly.
- Prevents peeling back the top sheet of a multi-page product.

## Procedure

To change the spring from a *high* to a *low* spring tension, follow these steps:

1. Remove the gate assembly from gate plate (lift up on knob and tip at slight angle to remove).
2. Remove the adjustment knob by turning counter-clockwise.
3. Lift the cylinder off of top of spring.
4. Turn the cylinder around so that the cylinder collar faces up.
5. Place the cylinder on top of the spring.
6. Replace the adjustment knob (make about 8 revolutions of the knob before reinstalling gate assembly on gate plate).




**Adjusting Gate Assembly for Low-Tension**

# STEP 2:
# Side Guides Setting

## Review

The side guides hold the stack of product being fed, and they guide the product through the feeder in a straight line of movement. You can adjust the side guides to accommodate different sizes of product.

## Objective

Adjust the side guides so that the product stack maintains uniformity from top to bottom, with no drifting or binding. Adjustments are made *vertically* and *horizontally*.

For vertical adjustment, make sure the bottom of the side guides cannot touch the feed belts.

For horizontal adjustment, make sure the space between the side guides can accommodate the size of the product being fed. Consider the following as you adjust the guides horizontally:

- An initial starting point should always be that each guide is of equal distance from the center point of the machine.
- Each edge of the product should rest equally on belts either side of gate assembly. *However, there can be certain instances where guides do not need to be centered due to product characteristics.*
- Adjust both side guides to be as close as possible to either sides of the product, without causing binding, curling of edges, or resistance to movement.

NOTE

*The bottom of the side guides cannot touch the feed belt. If the side guides are touching the product edges, skewing may occur as the product is fed through the gate.*

TIP

*A good "rule-of-thumb" measurement to use is about 1/16 in. (1.6 mm) between product edge and side guide (1/8 in. or 3.1 mm overall).*

## Procedure

To adjust each side guide for proper *vertical* positioning, follow these steps:

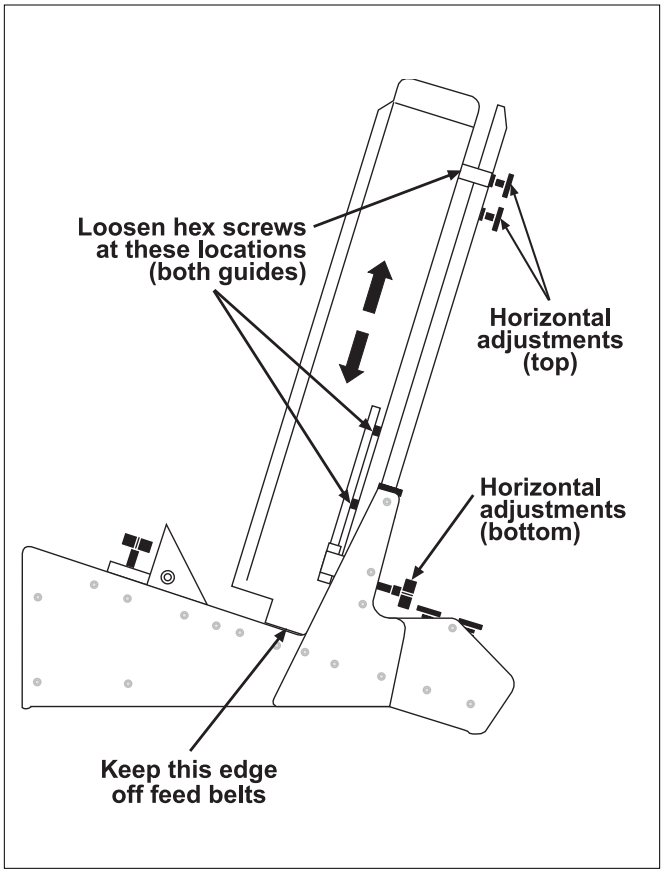
1. For the first guide, loosen the top hex screw that holds the upper part of the guide in place. Notice the slotted hole.
2. Do the same with the bottom two hex screws.
3. Slide the side guides up or down so that it is as low as possible *without touching the feed belt*.
4. Tighten all hex screws. Check clearance again.
5. Repeat steps 1 – 4 for second guide.

If the bottom edges of the side guides are too close to the feed belts, then contact between the two may occur while the machine is running, thus causing damage to the belts.

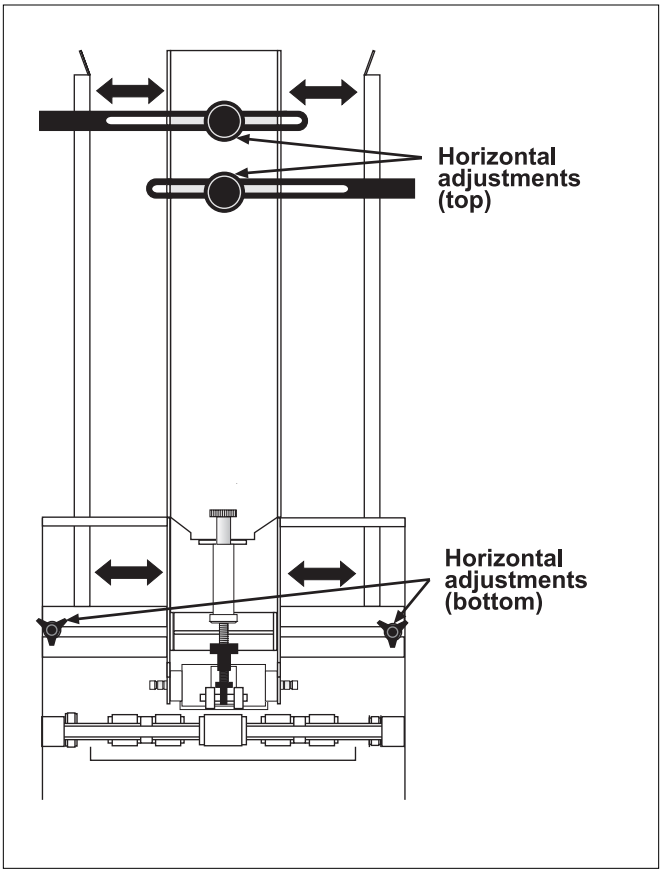
To adjust each side guide for proper *horizontal* spacing, follow these steps:

1. With a small stack of material in the hopper, start by loosening the bottom adjustment knob (counter-clockwise).
2. Grasp the lower part of each guide and move to the recommended distance from the product: 1/16 in. (1.6 mm) for each edge, 1/8 in. (3.1 mm) overall. Tighten the lower adjustment knob after you do this for each guide.
4. At the upper part of each guide, loosen the top adjustment knob (counter-clockwise).
5. Grasp the upper part of each guide and move to the recommended distance from the product: 1/16 in. (1.6 mm) for each edge, 1/8 in. (3.1 mm) overall. Tighten the upper adjustment knob after you do this for each guide.
6. Visually check both guides for parallel.

Avoid adjusting the side guides too close to the feed belts. Even slight contact with the belts can cause premature wear or even belt failure.




**Vertical Adjustment of Side Guides**




**Horizontal Adjustment of Side Guides**

# STEP 3: Back Wedge Adjustment

NOTE

*Keep in mind that the back wedge works with the gate assembly to provide the proper lift, curvature of the product, and proper belt/product contact to separate and feed one sheet at a time.*

TIP

*There are a number of feeding problems which can be solved by simply adjusting the back wedge to different positions. Some of these problems include double feeds, skewing, twisting, poor singulation, ink or varnish buildup on the belts, and jamming at the gate assembly area.*

NOTE

*For more information about optional wedges and their use with various products, see Appendix A.*

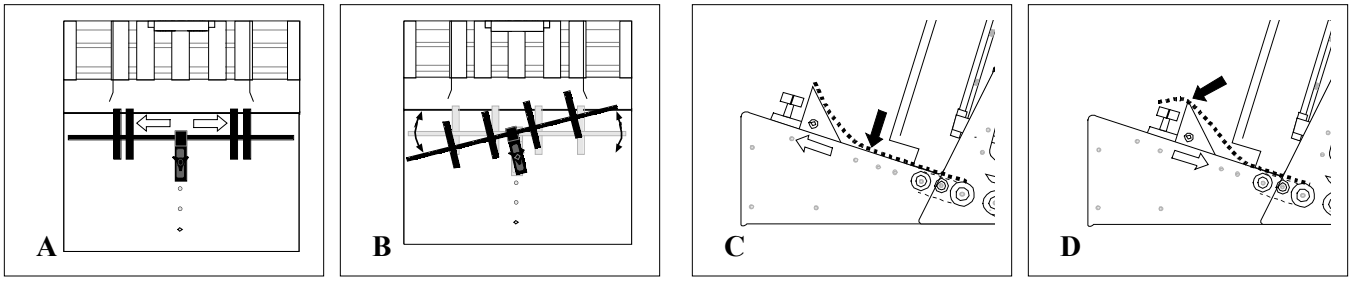
## Review

The back wedge provides proper lift to the product to help keep it off the table top and feed belts, and it creates the force necessary to push product against the gate assembly. By adjusting it back and forth from the gate assembly or pivoting side to side, you can create the lift and force necessary to preshingle product against the curvature of the gate assembly. Also, it keeps other sheets off the feed belts until proper separation of the bottom sheet at the gate assembly has occurred.

Here are some general guidelines that should help you determine how the back wedge should be positioned for your particular product:

- *Moving the individual triangle wedges to the outside* of the back wedge shaft will create a bow in the center. The bow will stiffen the product to promote better singulation of thinner product.
- *Pivoting the back wedge from its perpendicular to the gate assembly* will increase or decrease the amount of drag of contact (or traction) on the feed belts for a given side. This can also be used to control twisting or skewing of product as it leaves the gate assembly area.
- *If the back wedge is positioned too far backward* from the gate assembly, then the belts are driving the product before the bottom sheet has separated and left the gate assembly area. This pushes the gate assembly up, creating more pressure on the product, O-rings, and feed belts. The result can be premature buildup of ink or varnish on the belt surfaces. It can also cause more than one product at a time to be forced under the gate assembly, creating a double feed.

  By moving the back wedge forward, only the bottom product can make contact with the belt surface. Slippage is reduced, minimizing buildup on the belt surface. Double feeding is also reduced.
- *If the back wedge is positioned too far forward* to the gate assembly, then a pinch point can be created between the top corner of the individual wedges and the product. Moving the back wedge even closer towards the gate assembly can allow product to overhang the corner of the wedge, creating too much lift of the product off the feed belts.




**Tips for Proper Back Wedge Adjustment**

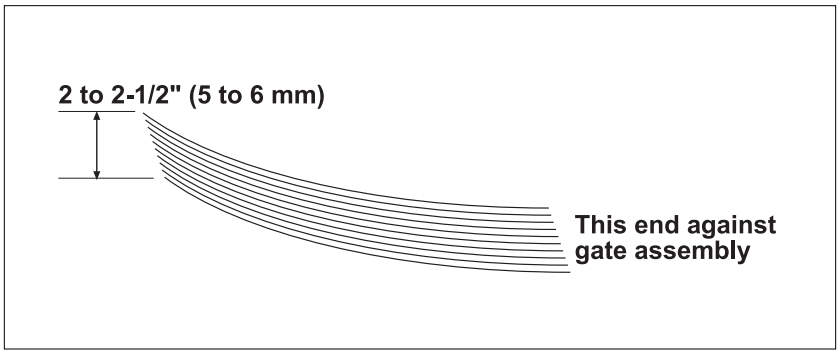
## Objective

Adjust the back wedge for proper support of the product off the table top, without creating any pinch or stress points.

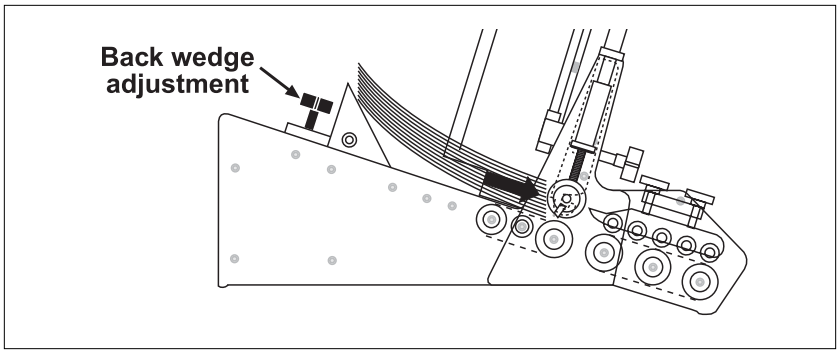
## Procedure

To adjust the back wedge for initial proper positioning, follow these steps:

1. Grasp a handful of product, approximately 2 to 2-1/2 in. (5 to 6 cm) thick, and preshingle the edges with your thumb.
2. Place the preshingled material in the hopper so that the edges rest against the curvature of the gate assembly.
3. Turn the back wedge knob counter-clockwise to loosen the wedge.
4. Move the back wedge forwards and backwards until the bottom sheet is not touching the table top. A good starting point is to measure about 5/8 in. (16 mm) from the bottom sheet to front edge of table top. Then as you test, you can "fine tune" from this point. *Refer back to the previous page for other helpful guidelines.*



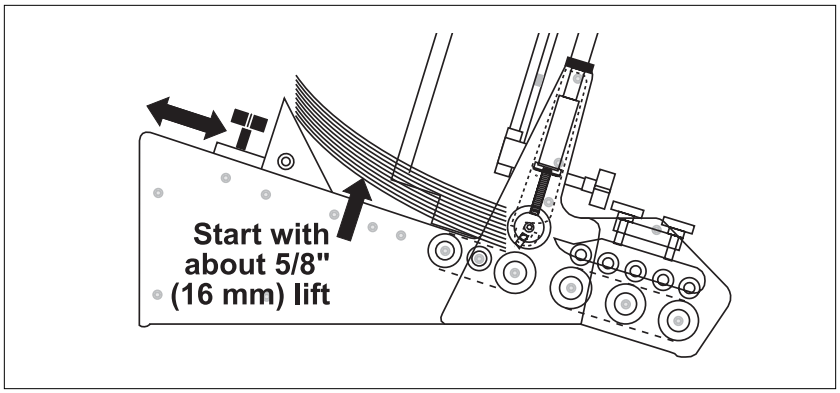

**Preshingling a Small Stack of Material By Hand**




**Positioning Product Prior to Loosening Back Wedge**

NOTE

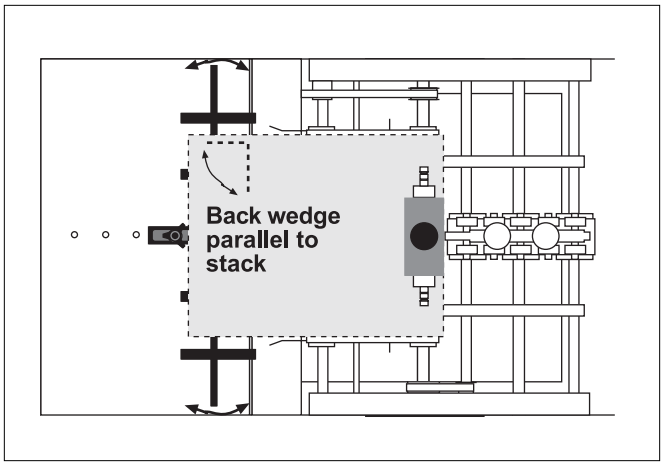
*Moving the back wedge too far forward to the gate assembly can create a pinch point between the tip of the triangle wedges and the product. If moving the back wedge in is not effective, then an optional wedge may be required.*



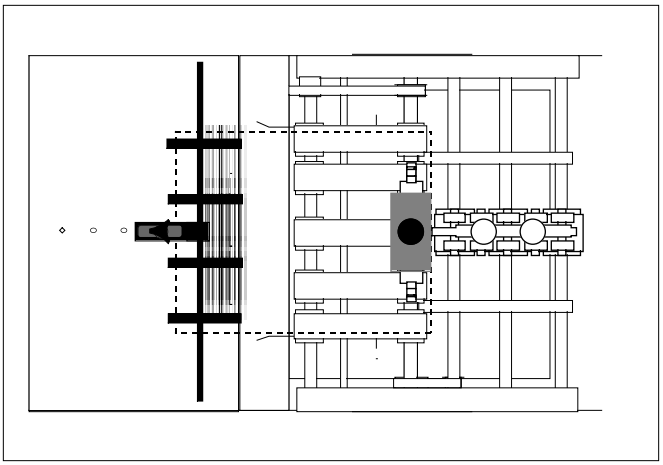

**Adjusting Back Wedge for Proper Lift**

5 Make sure the edge of the back wedge assembly is parallel with the edge of the product stack. Adjust as required and then tighten knob.

6. Check that individual triangle wedges are evenly spaced to provide enough support to lift the product off the table top and feed belts, without any bowing or twisting.




**Adjusting Back Wedge for Parallel**



**Evenly Adjusting Individual Wedges**

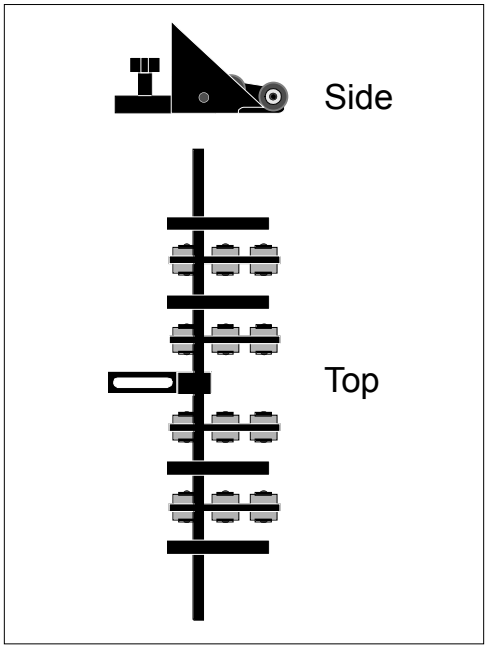
# Optional Wedges

Now that you are familiar with the basic principles of using a wedge, it is simply a matter of combining these principles to optional wedges.

The following optional wedges are covered:

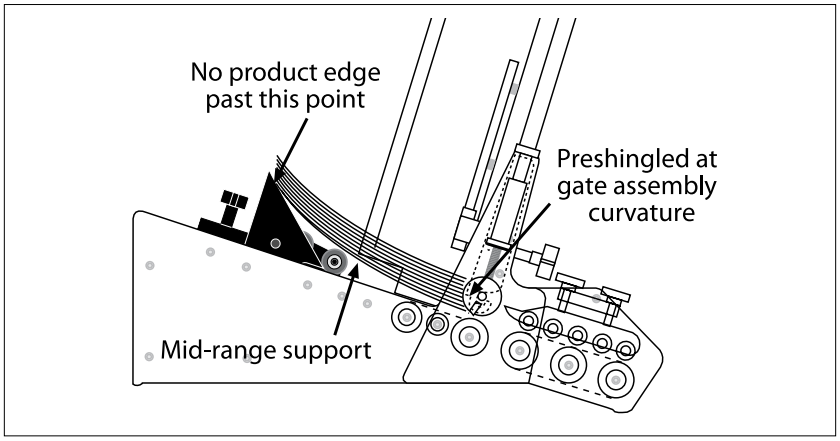
- Combination triangle/low-profile
- Separate triangle and low-profile
- Separate articulating roller and low-profile
- Articulating roller

## Combination Triangle/ Low-Profile




**When to use:** For thin product with minimal body, thus requiring minimal mid-range support.

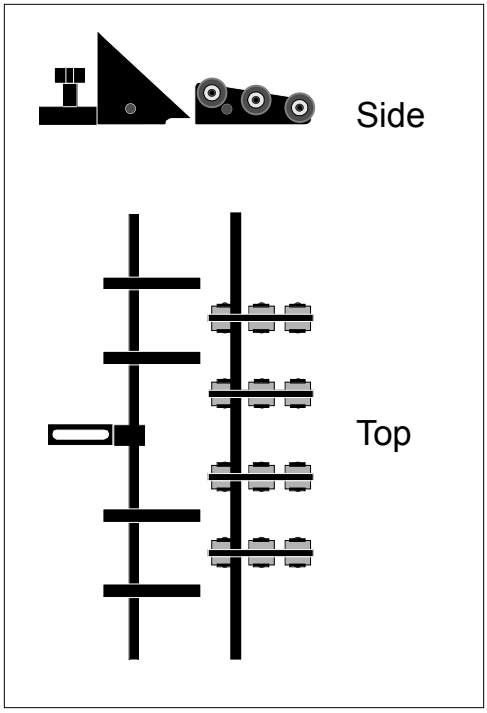
**Setup guidelines:** Adjust so that bottom of stack preshingles against the curvature of gate assembly; make sure edges of product do not touch or overhang tip of triangle wedges, as this creates pressure points. Roller(s) should lift bottom of stack off table top to eliminate friction and create body.




**Combination Triangle/Low-Profile Wedge Setup**

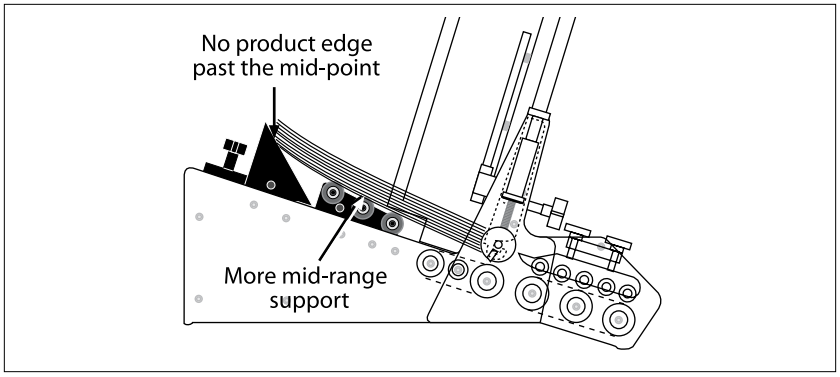
# Optional Wedges (continued)

## Separate Triangle and Low-Profile



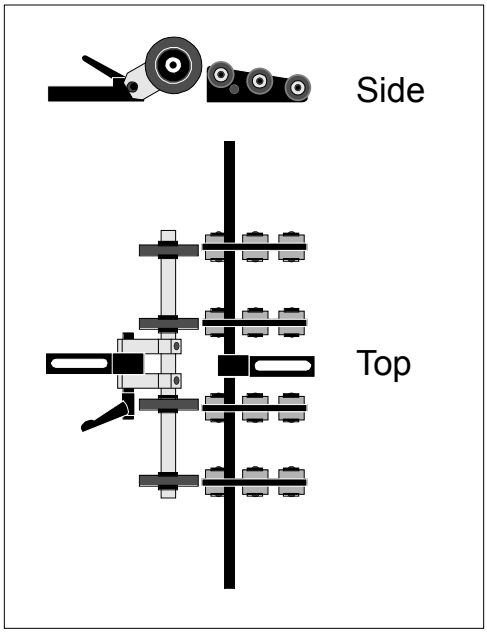

**When to use:** If moving combination triangle/low-profile wedge assembly back from the gate assembly, bottom of stack still touches table top. This means you need even more mid-range support.

**Setup guidelines:** Adjust the triangle wedge the same way that you would the combined triangle/low-profile wedge assembly (see previous page). Set the low-profile wedge relative to the triangle wedge so that it lifts bottom of the stack off the table top to eliminate friction and create body. Again, make sure edges of product do not touch or overhang tips of triangle wedges.



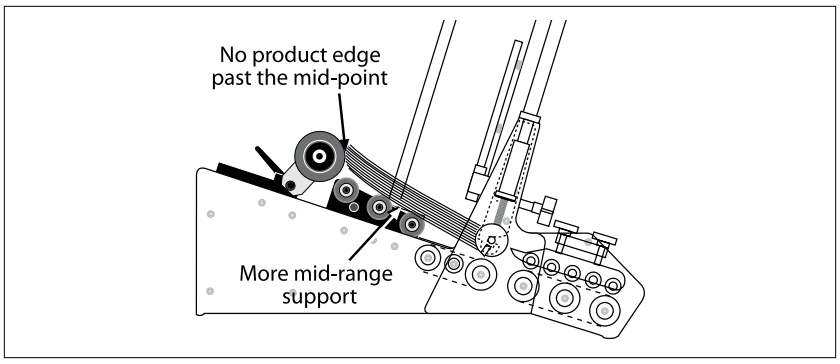

**Separate Triangle and Low-Profile Wedge Setup**

## Separate Articulating Roller and Low-Profile




**When to use:** For thicker product with more body, thus requiring medium mid-range support. Longer product may also benefit.

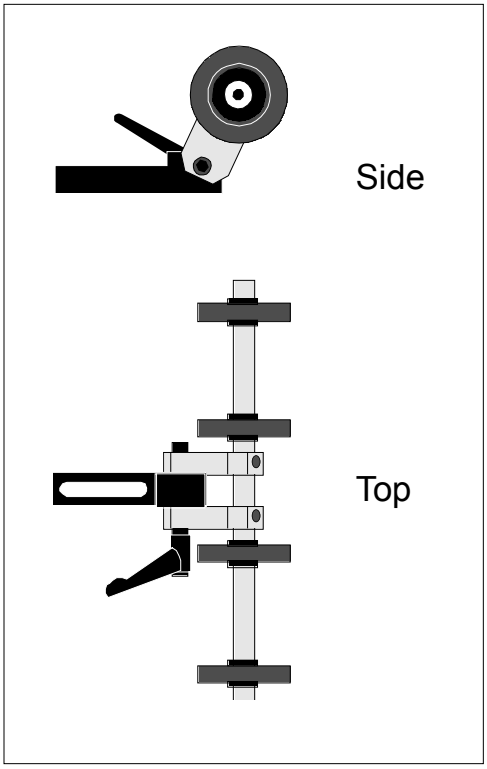
**Setup guidelines:** Initially adjust articulating wedge so that roller edges preshingle the bottom of the stack against the curvature of gate assembly. Make sure edges of product do not extend back more than mid-point of rollers. Set the low-profile wedge so that roller(s) lift bottom of stack off the table top to eliminate friction and create body.




**Separate Articulating Roller and Low-Profile Wedge Setup**

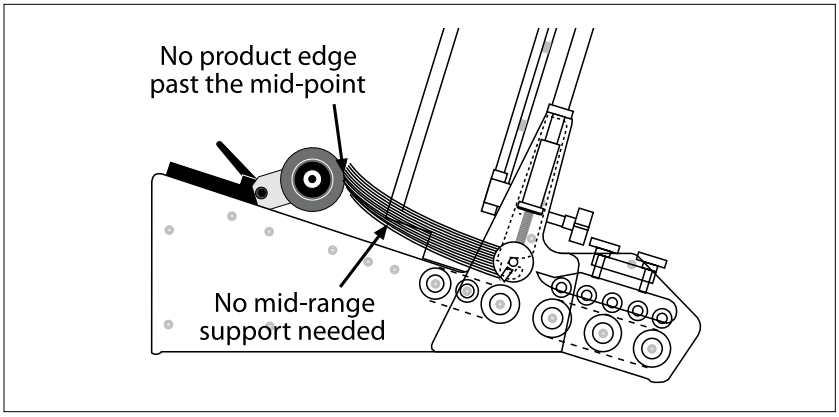
# Optional Wedges (continued)

## Articulating Roller




**When to use:** Effective for very thick and/or ridged product requiring virtually no mid-range support.

**Setup guidelines:** Adjust so that roller edges preshingle the stack against the curvature of gate assembly. Again, make sure edges of product do not extend back more than the mid-point of roller. *NOTE: With some product that tends to bind together (for example, perforated product), it may be beneficial to separate 4 to 5 sheets of product at the bottom to provide some air space.*




**Articulating Roller Wedge Setup**

# STEP 4:
# Hold-Down Setting

## Review

The hold-down assembly consists of several adjustable rollers which rest on top of the product as it exits the gate assembly area. With the correct amount of pressure applied to the product, the discharge belt will have the proper amount of contact and friction needed to pull product away from the gate assembly area. Incorrect hold-down pressure can cause overlap or insufficient gap between one product and the next.

## Objective

Adjust the hold-down rollers to the proper amount of pressure to allow the discharge belt to pull and separate the bottom sheet as it exits the gate assembly area.

## Procedure

To adjust the hold-down assembly for proper pressure, follow these steps:

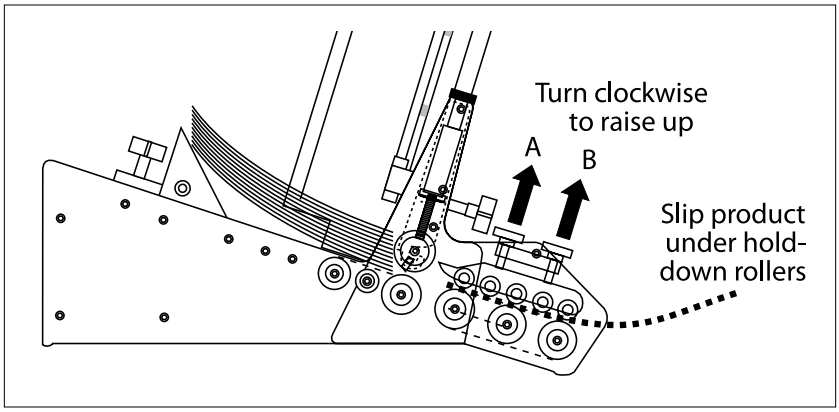
1. Insert one piece of product to be fed under the hold-down assembly. To facilitate this, turn all knobs clockwise several turns.
2. Turn knobs A and B counter-clockwise to lower the hold-down assembly so that a slight drag exists between the product and the hold-down rollers. Verify slight drag by sliding product side-to-side.
3. Turn knob A clockwise 1/8-turn so that slightly less drag exists on the roller closest to gate assembly. Again, verify drag by sliding product side-to-side.
4. Recheck knob B for proper drag on roller farthest from gate assembly (drag may have changed while adjusting knob A).


**IMPORTANT**

*If the roller furthest from the gate assembly is tighter than the roller closest to the gate assembly, jamming may occur.*

*If either adjustment is too tight, product damage may occur.*

Due to the discharge belt and hold-down assembly spinning 50% faster than the feed belts, excessive gate assembly pressure can cause premature wear to O-rings or feed belts. Review "Step 1, Gate Assembly Adjustment".

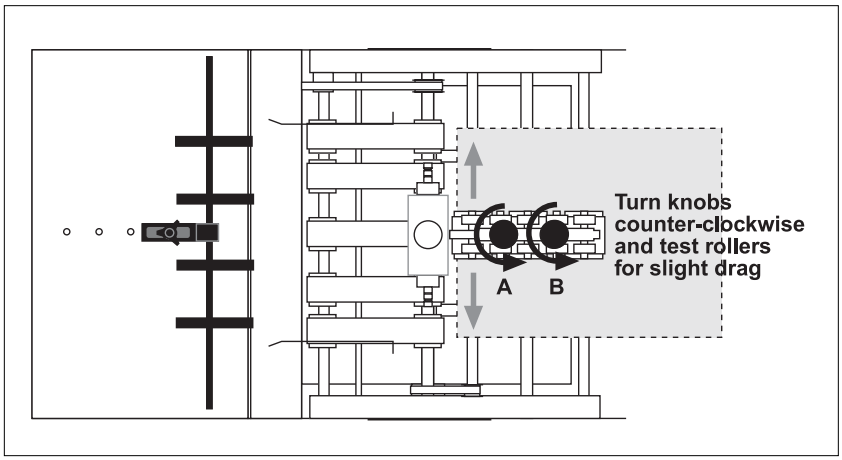



**Inserting One Piece of Product Under Hold-down**

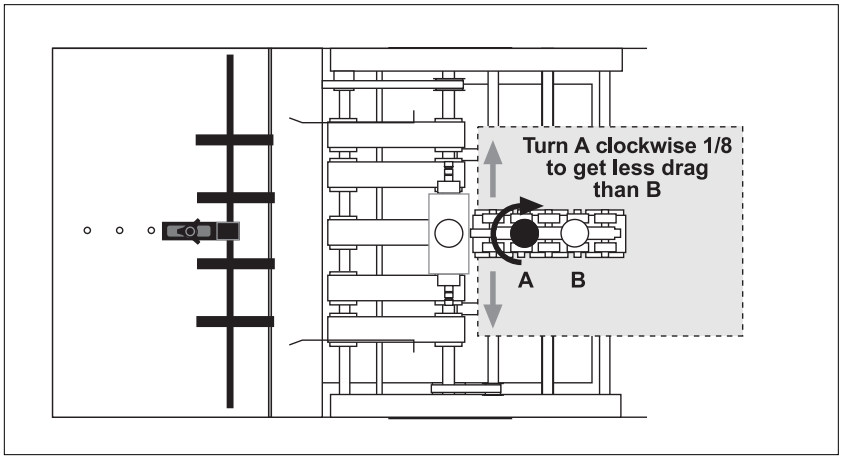
# STEP 4:
# Hold-Down Setting (continued)

NOTE

*Often after you adjust the first roller you have to go back and readjust the second roller to make sure that the drag is correct.*




**Turning Knobs Counter-Clockwise to Insert Product**




**Turning Knob "A" Clockwise to Get Slight Drag**

# Manual Test To Verify

Now that you have made all the necessary adjustments for operation, it is recommended that you verify the singulation and separation of product through the gate assembly area. Before you power-up and run your machine with a full hopper, manually feed several sheets of product through the gate assembly area.

Prepare your test by loading the hopper with approximately 2 to 2-1/2 in. (5 to 6 cm) of product. Make sure you preshingle the stack so that product rests against the curvature of the gate assembly.

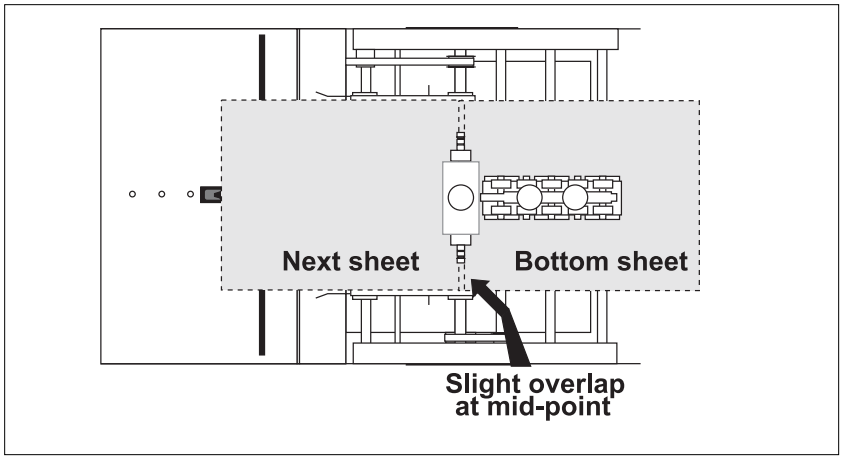
1. Manually feed several sheets of product slowly through the gate assembly area. Move the drive belts by pressing your thumb against the discharge belt.
2. Observe how individual product enters and exits the gate assembly area. Remember, a properly set gap will allow each new sheet to enter at about the center line of the cylinder while the bottom sheet is exiting the gate assembly area. Ideally, this means a slight overlap of both the first sheet and the second sheet (1/8 in., or 3 mm) at the gate assembly area. The overlap occurs as the bottom sheet is exiting, and the next sheet is entering.
3. If feeding doubles, then move the wedge in towards the gate assembly. Test again.
4. If sheets are overlapping excessively or, if the machine is feeding doubles, then reduce the gap slightly by moving the knob about 1/8 turn counter-clockwise. Test again.
5. As product moves through the hold-down area, check for any skewing or jamming. Also check for damage to the product.
6. If this or other feeding problems still persist (slipping, skewing, jamming), then review all the adjustment procedures in Section 2, “Preparing for Operation”.

NOTE

*If the gate assembly is too tight, the feeder will have difficulty pulling the product through the gate assembly area.*

NOTE

*Moving the back wedge too far forward to the gate assembly can create a pinch point between the tip of the triangle wedges and the product. If moving the back wedge in is not effective, then an optional wedge may be required.*



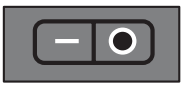

**Optimum Overlap and Separation of Product**

# 3 How to Operate

## Sequence of Operation

Successful power-up and operation is assured if you apply the following sequence of steps.

### STEP 1: Powering On Machine



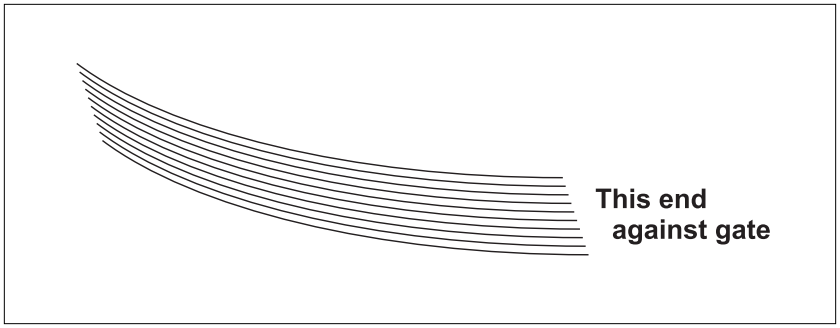
- At the **Power** On/Off switch, turn the machine On by pushing on the horizontal line (—). Verify power On by checking for working controller box fan, and/or lit green indicators on photo sensors.

### STEP 2: Loading Product

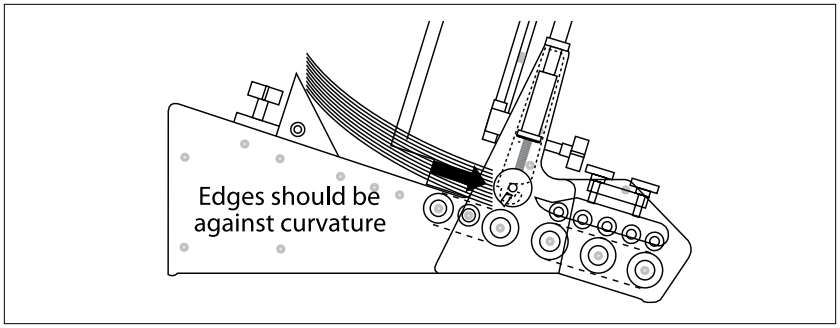
NOTE

*Preshingling prevents multiple sheets from jamming under the gate assembly at start-up.*

- Start by preshingling by hand a small stack of material so that it conforms to the curvature of the gate assembly. Push in gently to make sure edges are touching the gate plate and gate assembly. This ensures that stack is even all the way to the top.
- With one end of the stack resting against gate assembly, the other end will be resting on the back wedge. Notice how the back wedge helps lift product off the table top and feed belts. Also notice how the lifting helps push the preshingled edges against the curvature of the gate assembly.




**Preshingling and Loading**



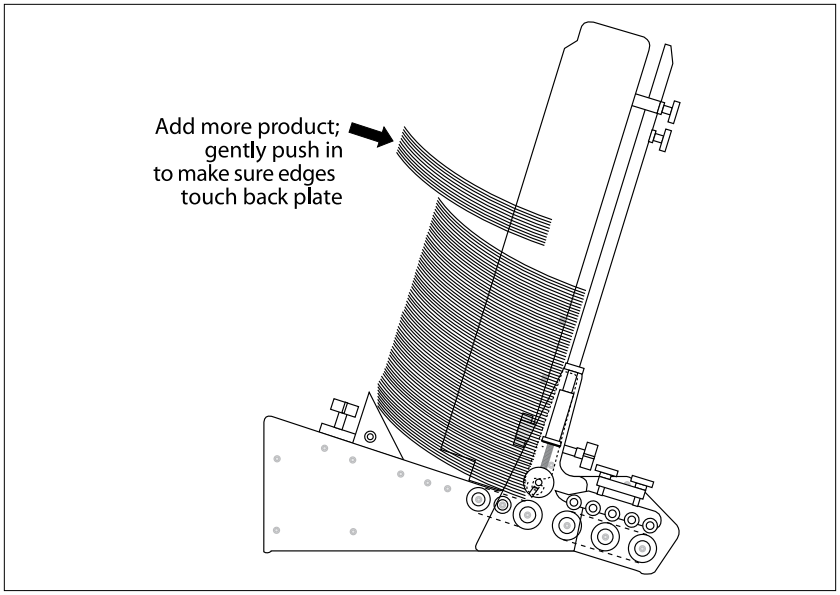

**Placing Product Against Gate Assembly**

## STEP 3: Determining Stack Height

- Gradually add more product to the hopper after the initial stack is formed around the gate assembly. As stack height will have a preferred minimum and a maximum, you will have to experiment to determine the effective range of height.
- Make sure the product is loaded in the hopper as straight as possible. As you add product, tamp each hand-full of product with your hand to make sure it rests evenly against the back plate.

TIP

*Stack height affects the downward pressure on the feed belts. Greater downward pressure can increase the chances for misfeeds, double feeds, or motor stallouts.*




**Adding More Product to Fill Hopper**

## STEP 4: Setting/Adjusting Speed

- Use the variable **Speed** control to adjust the speed of the feeder to coincide with your production line requirements.

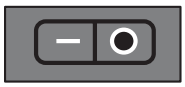
## STEP 5: Final Check

CHECK

Make sure:

- Feeder is secured and will not move during operation.
- Product fed during test is not being damaged in any way.
- Cable connections are tight.
- Cables or wires are not in the vicinity of moving parts.

# Shutdown



Should you not be using a the feeder for long periods of time, follow these steps to ensure a safe and secure storage:

1. At the **Power** rocker switch, turn the feeder Off by pushing the circle (**O**).
2. Disconnect the feeder from the AC power source.
3. Cover the feeder with a cloth or plastic tarp to prevent dust and debris from accumulating.

# 4 Troubleshooting

This table will provide you with quick solutions to the more common day-to-day problems you may encounter.

**Quick-Look Troubleshooting**

| Problem | Cause | Solution |
|---|---|---|
| **No AC power to feeder** | 1. On/Off switch in “Off” (or “0” position). | Check that switch pressed to “On” (or “—” position). |
| | 2. Power cord loose or not plugged into outlet (or AC power source). | Check and secure power cord at AC outlet. |
| | 3. Female end of power cable loose or not plugged into AC power inlet at rear of feeder. | Check and secure cord at AC power inlet (rear of feeder). |
| **Feeding doubles** | 1. Gate assembly improperly adjusted (possibly more than one sheet thickness). | Review gate assembly adjustment in Section 2, “Preparation for Operation”. |
| | 2. Back wedge improperly adjusted. | Review back wedge adjustment in Section 2, “Preparation for Operation”. |
| | 3. Worn angled edge (or if applicable, O-rings). | Replace angled edge. Or if applicable, rotate O-rings. (see Section 5, “Inspection and Care”, for procedure). If wear is excessive, consult with a qualified technician.* |
| | 4. Product interlocking. | Check product and source. |
| | 5. Static buildup. | Check product and source. |
| **Continuous feeding, no gap** | 1. Possible overlapping. | See “Feeding Doubles” above. |
| | 2. Incorrect hold-down pressure adjustment. | Review hold-down setting in Section 2, “Preparation for Operation”. |

**Quick-Look Troubleshooting (continued)**

| Problem | Cause | Solution |
|---|---|---|
| **Feed belts are operating, but material not feeding** | 1. Material stack weight is too low when stack height is down, resulting in reduction of down pressure. | Review loading the product in Section 3, "How To Operate". |
| | 2. Binding in side guides. | Adjust the side guides further apart to allow freedom of movement between sheets. |
| | 3. Slippery feed belts due to buildup of material. | Consult with a qualified technician. |
| | 4. Sheet adhesion or interlocking between the bottom and next sheet. | Review loading the product in Section 3, "How To Operate", or review back wedge adjustment in Section 2, "Preparation for Operation". |
| | 5. Gate assembly may be down too tight. | Review gate assembly adjustment in Section 2, "Preparation for Operation". |
| | 6. Too much weight in hopper. | Remove product from stack. Test again. |
| **Feed belt(s) not tracking on rollers** | 1. Excessive weight in hopper. | Reduce weight. Test again. |
| | 2. Excessive down pressure on gate assembly. | Rotate clockwise 1/8 turn to increase gap and manually test. Also, review gate assembly adjustment in Section 2, "Preparation for Operation". |
| | 3. Off-centered product from gate plate. | Review side guides setting in Section 2, "Preparation for Operation". |
| | 4. Stack is bearing down on edge of belt. | Move stack away from belt, even if this causes stack to be aligned off center from center line of feeder. |
| | 5 Belt wear. | Review gate assembly adjustment and back wedge adjustment in Section 2, "Preparation for Operation". Also, see Section 5, "Inspection and Care". If wear is excessive, consult with a qualified technician.* |
| | 6. Rollers out of adjustment. | Consult with a qualified technician. |
| **Jamming occurs during operation** | 1. Improper adjustment of any of the following areas:<br>• gate assembly<br>• back wedge<br>• hold-down assembly | 1. Turn the Power switch to Off by pushing the circle (O).<br>2. Remove jammed product from feeder. While doing so, try to determine the cause of the jam.<br>3. Verify each adjustment by reviewing Section 2, "Preparation for Operation". |

# 5 Inspection and Care

**When performing initial adjustments prior to operation, always make sure you turn Off the main power switch and disconnect controller from the electrical power source. Failure to do so can expose you to a potential start-up, and therefore moving parts which can cause serious injury.**

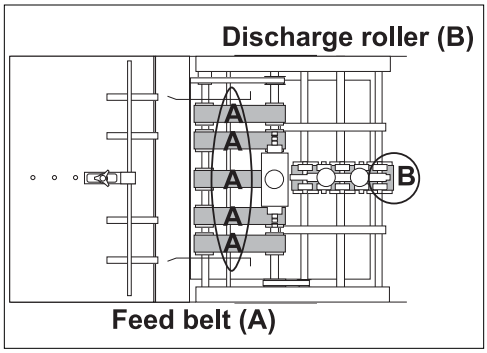
**Do not attempt to make any adjustments while the machine is running. Failure to do so can expose you to moving parts which can cause serious injury. Do not wear loose clothing when operating the feeder.**

**Avoid making adjustments with loose or unsecured parts. This can potentially damage parts.**

Please read this Section to learn how to:

- Visually inspect your machine to detect part problems which may require adjustment or replacement.
- Periodically care for your machine to prevent any operational problems.

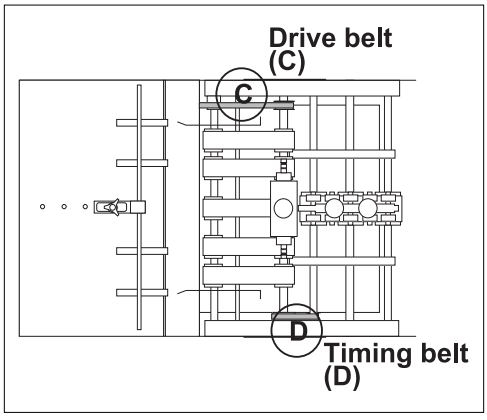
## Visual Inspection




### Checking for Feed and Discharge Belt Wear

Check for visual signs of:

- Walking. Replace as required.
- Cracking. Replace as required.
- Thinning. Replace as required.




### Checking for Timing and Drive Belt Wear

Check for visual signs of:

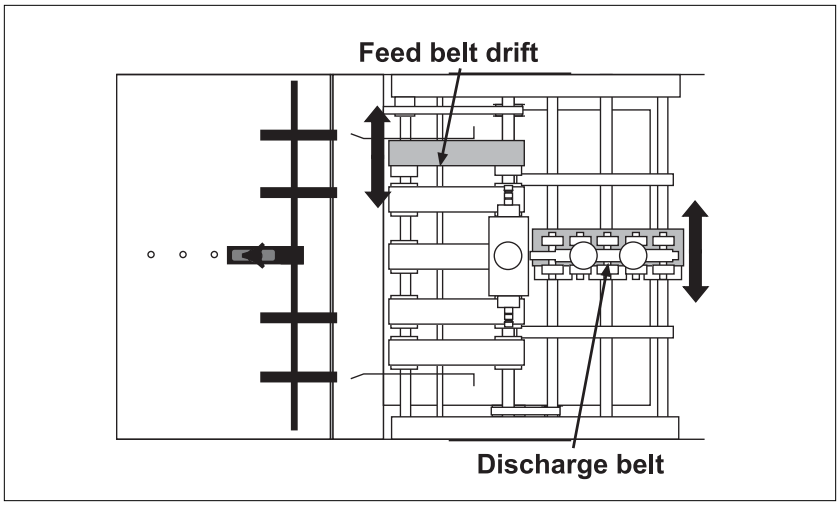
- Fraying. Replace as required.
- Missing teeth. Replace as required.
- Cracking. Replace as required.

# Visual Inspection (continued)

## Ensuring Proper Feed and Discharge Belt Tracking

Check for visual sign of:

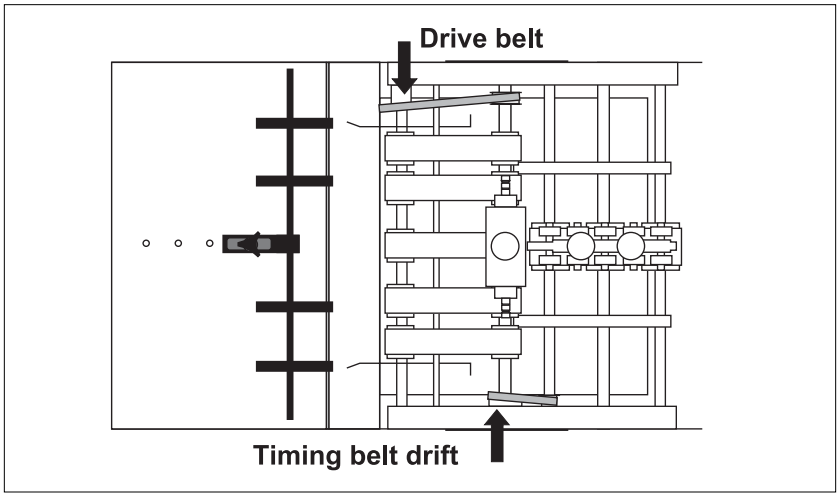
- Stretching.
- Improper roller adjustment.




## Ensuring Proper Timing and Drive Belt Tracking

Check for visual signs of:

- Misaligned timing pulleys.



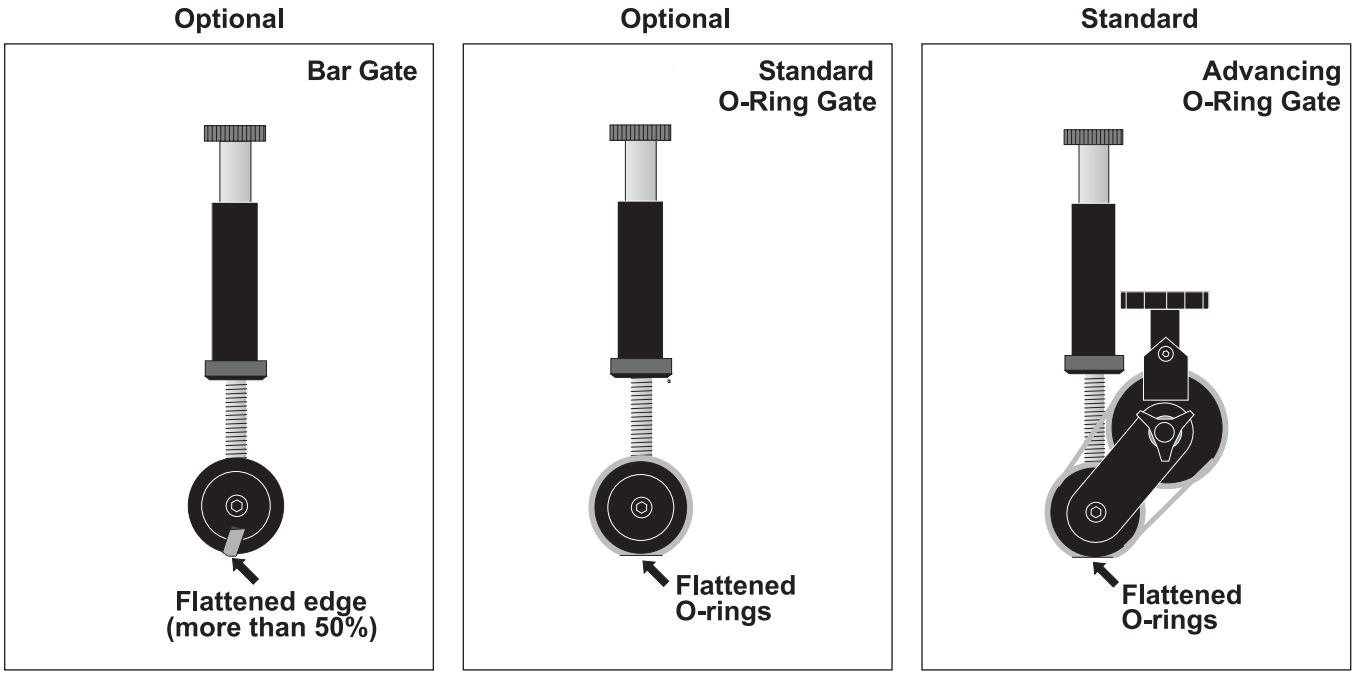
# Visual Inspection (continued)

## Checking for Gate Assembly Wear

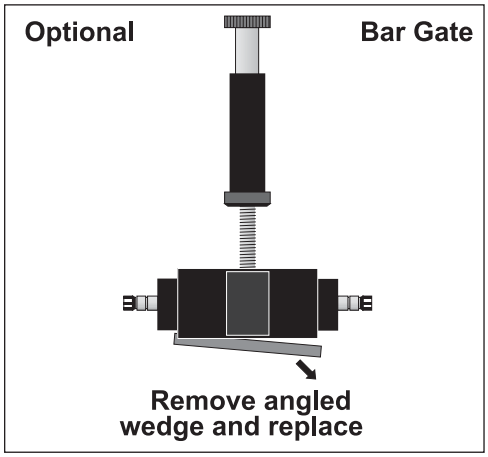
Check for visual signs of wear:

- Bar gate: Angled wedge begins to flatten excessively.
- Standard O-ring or advancing O-ring (if applicable): Flat areas along the O-rings.

See “Preventative Care” to follow.



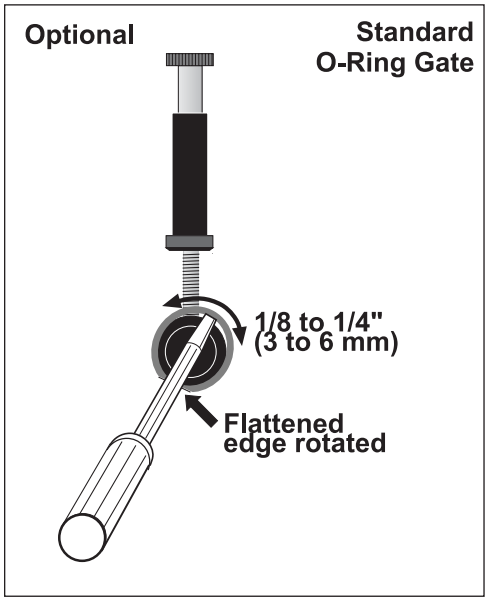
# Visual Inspection (continued)




## Replacing Worn Angled Wedge

To replace a worn angled wedge:

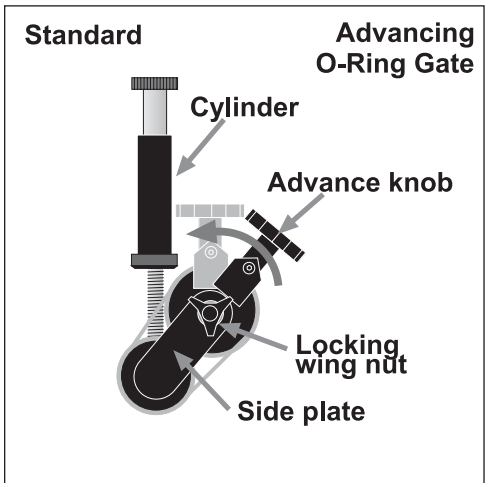
1. Turn Off feeder and remove power cord from outlet.
2. Remove gate assembly from gate plate.
3. Use a pliers to grip and remove angled wedge.
4. Install new wedge by inserting one end and then pushing in until centered. *Do not grip new wedge with pliers as this may cause damage to the edge.*
5. Reinstall gate assembly and restore power.




## Standard O-Ring Gate: Adjusting Worn O-Rings

To adjust worn O-rings on standard O-ring gate:

1. Turn Off feeder and remove power cord from outlet.
2. Remove gate assembly from gate plate.
3. Insert a screwdriver in slot on top of gate assembly and rotate screwdriver clockwise or counter-clockwise 360° so as to move worn area of O-ring about 1/8 to 1/4 in. (3 to 6 mm).
4. Remove screwdriver and repeat for each ring as necessary.
5. Reinstall gate assembly and restore power.




## Advancing O-Ring Gate: Adjusting Worn O-Rings

To adjust worn O-rings on advancing O-ring gate:

1. Turn Off feeder and remove power cord from outlet.
2. Make sure advance knob is in-line with the side plate and secure. Then loosen left and right locking wing nuts.
3. Rotate O-rings by grasping advance knob and pushing towards gate cylinder about 1/8 to 1/4 in. (3 to 6 mm).
4. Retighten locking wing nuts. Then loosen advance knob and move to original position (in-line with side plate). Retighten.
5. Reinstall gate assembly and restore power.

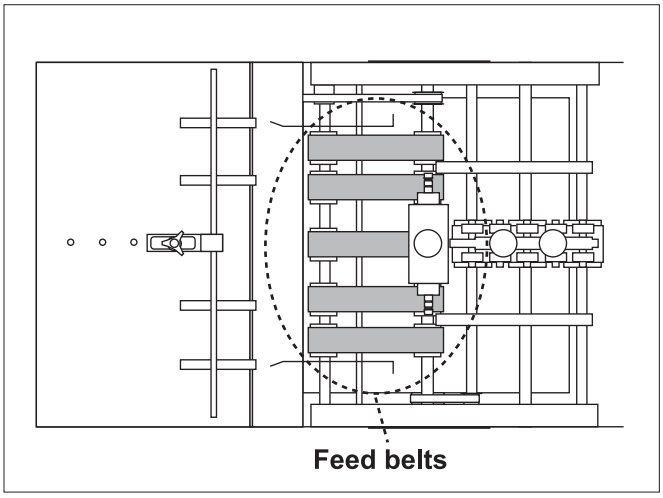
# Preventative Care

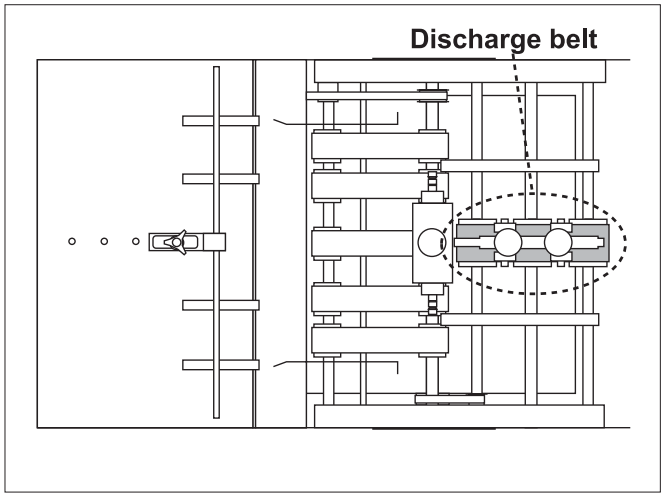
Use only isopropyl alcohol (98% concentration). Other solvents can cause belts to wear prematurely, and even total breakdown of material.

## Cleaning Feed and Discharge Belts

To clean feed and discharge belts:

1. Turn Off feeder and remove power cord from outlet.
2. Remove gate assembly from gate plate for easier access to belts.
3. Apply a small amount of isopropyl alcohol to a soft cloth.
4. Use your hand to move the discharge belt, start with one feed belt at a time and carefully press the moistened area of the cloth to the belt. As you rotate the belt, use moderate pressure to wipe across the belt, making sure to wipe in direction of grooves also. After several rotations of the belt, repeat for each belt.
5. Taking a dry portion of the cloth, go back to the first feed belt cleaned and use moderate pressure against the belt for several revolutions to ensure the belt is dried. Repeat for each belt.
6. Repeat steps 3 – 5 for the discharge belt also.
7. Reinstall gate assembly and restore power.



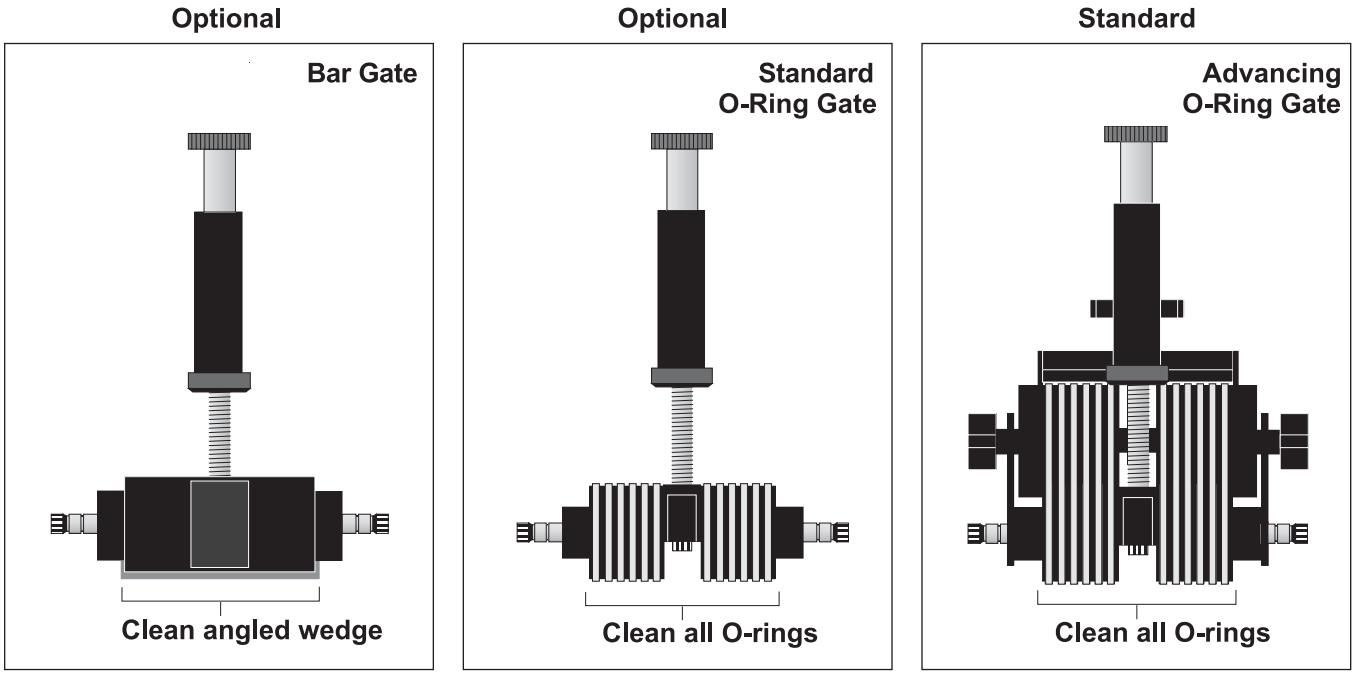
# Preventative Care (continued)

## Cleaning Gate Assembly

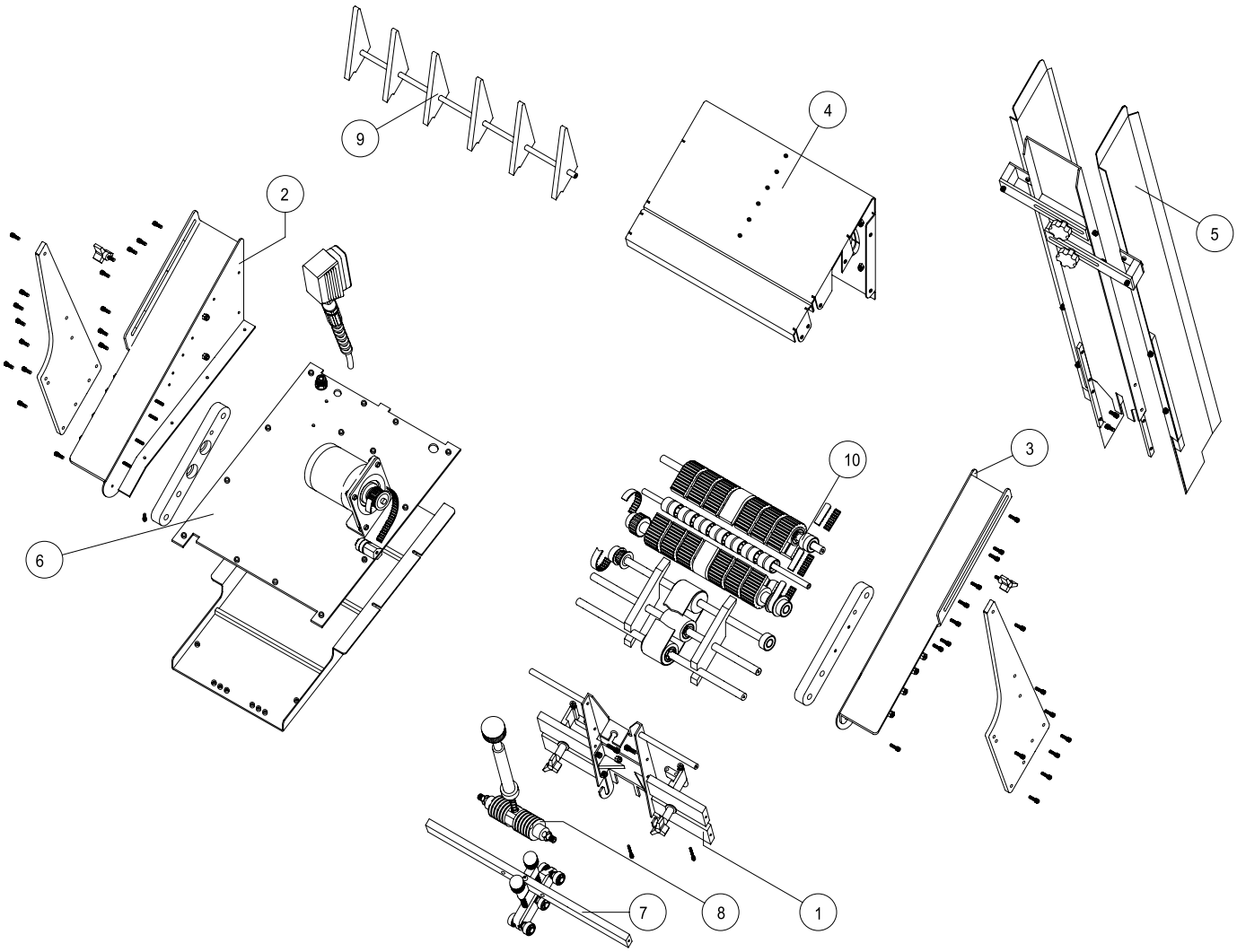
**Use only isopropyl alcohol (minimum 98% concentration). Do not use any other types of solvents. They can cause premature wear of the belts, or even total breakdown of the material.**

To clean gate assemblies:

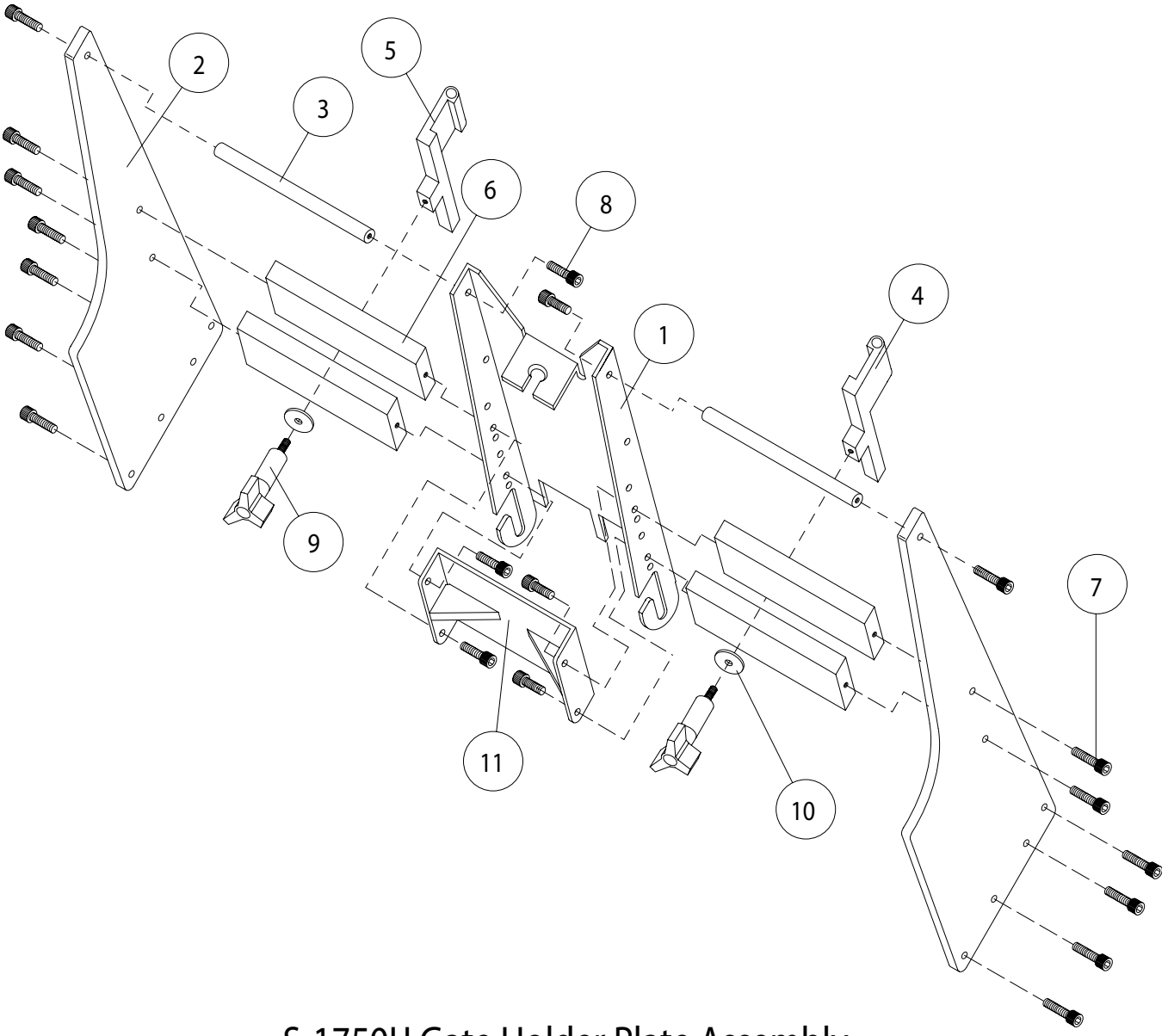
1. Turn Off feeder and remove power cord from outlet.
2. Remove gate assembly from gate plate.
3. Apply a small amount of isopropyl alcohol to a soft cloth.
4. Wipe across angled wedge (or O-rings if applicable), first in one direction, then the other.
5. Taking a dry portion of the cloth, go back and wipe all surfaces to ensure they are dried.
6. Reinstall gate assembly and restore power.



# 6 Mechanical Components

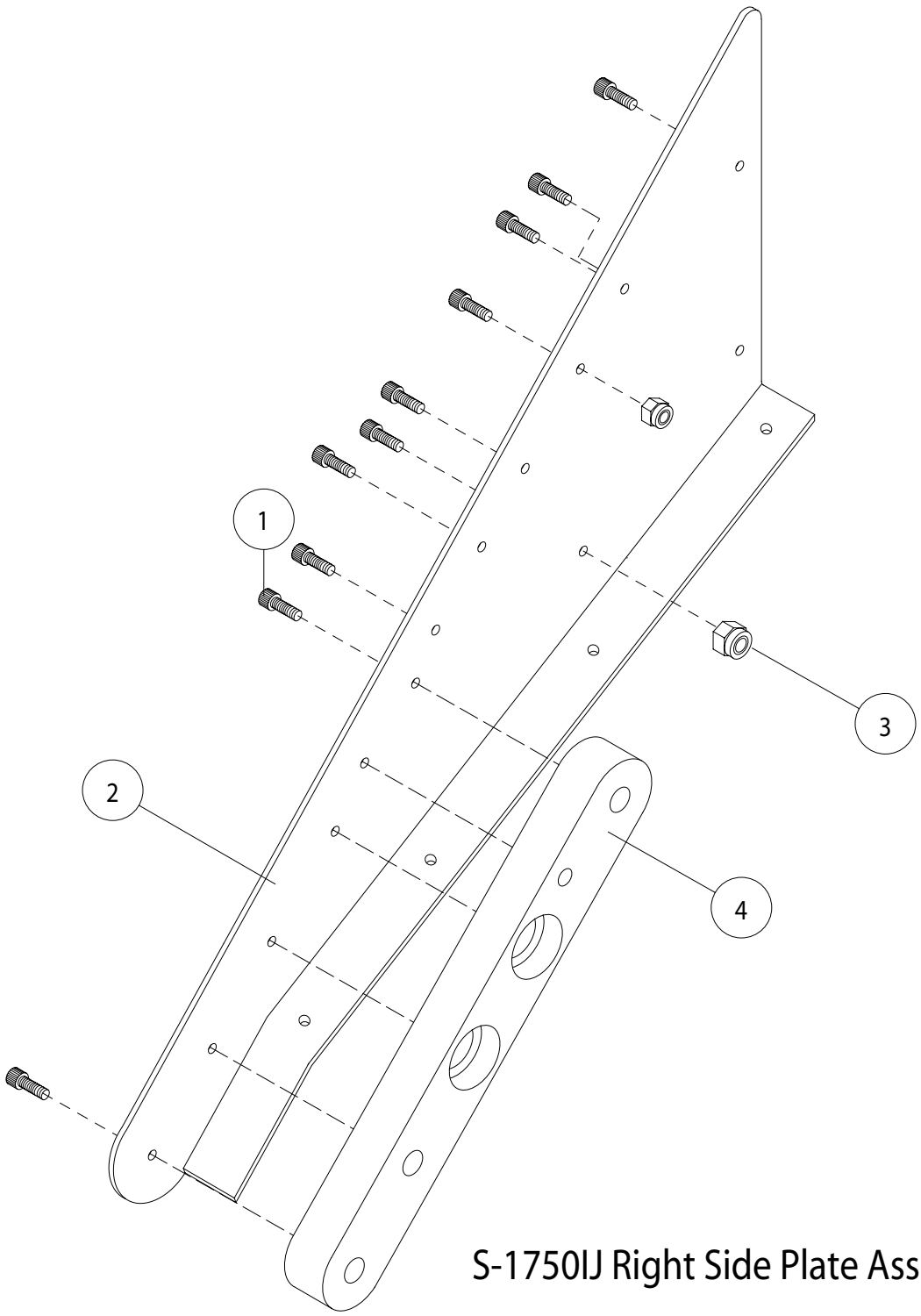



| Item # | Description |
|---|---|
| 1 | Gate Holder Plate Assembly |
| 2 | Right Side Plate Assembly |
| 3 | Left Side Plate Assembly |
| 4 | Table Top Assembly |
| 5 | Tall Insert Guide Assembly |
| 6 | Base Plate Assembly |
| 7 | Hold Down Assembly |
| 8 | Gate Cylinder Assembly |
| 9 | Wedge Guide Assembly |
| 10 | Grooved Gum Rubber Belt Carriage |



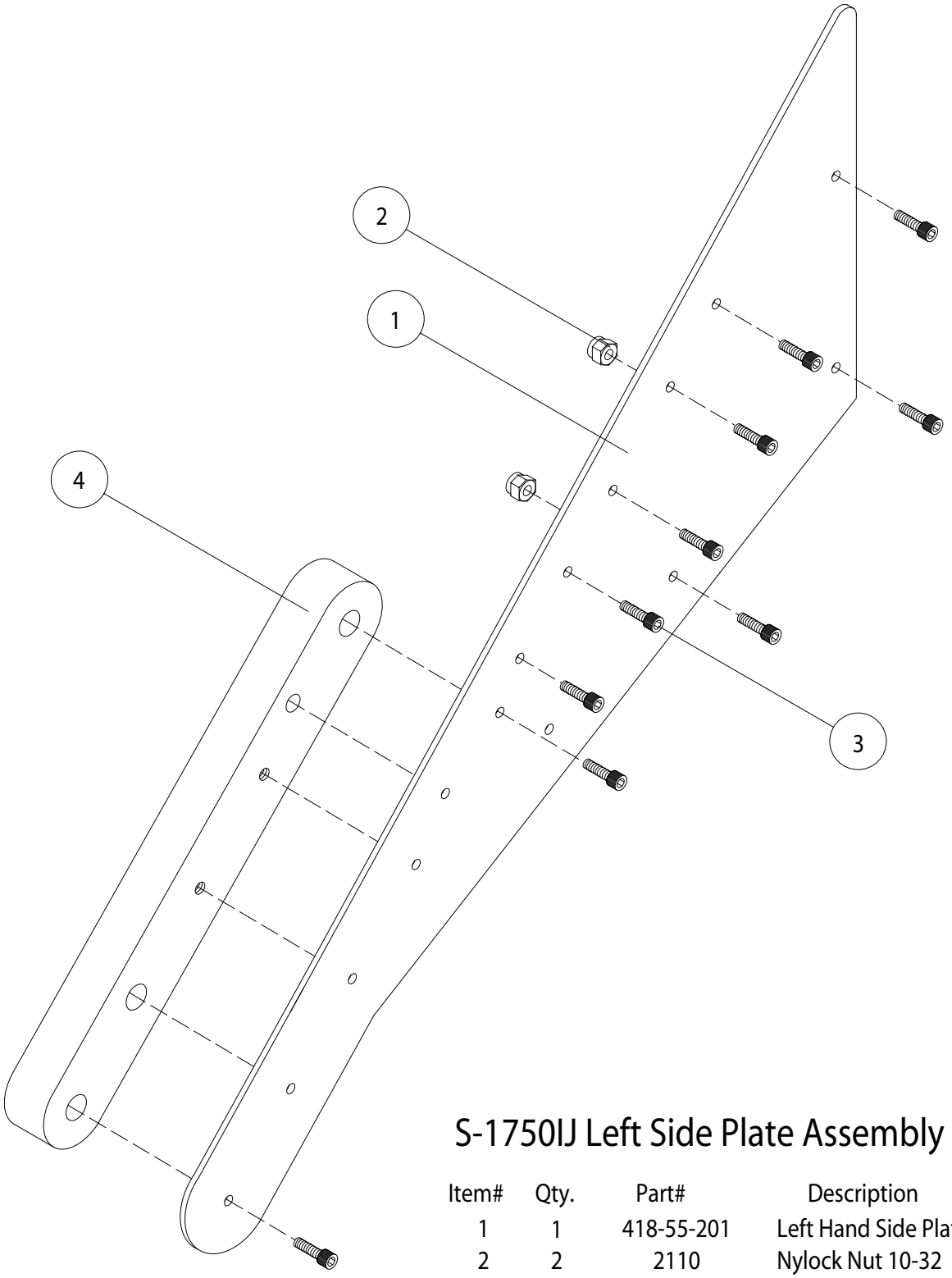

# S-1750IJ Gate Holder Plate Assembly

| Item# | Qty. | Part# | Description |
|---|---|---|---|
| 1 | 1 | 235-00-001 | Gate Holder Plate |
| 2 | 2 | 418-55-017 | Insert Guide Stabilizing Bracket |
| 3 | 2 | 418-55-010 | Gate Support Shaft |
| 4 | 1 | 418-55-014 | Left Hand Side Guide Bracket |
| 5 | 1 | 418-55-013 | Right Hand Side Guide Bracket |
| 6 | 4 | 418-55-016 | Gate Support Bar |
| 7 | 14 | 2315 | SHCS 10-32 x 1/2" |
| 8 | 6 | 2310 | SHCS 10-32 x 3/8" |
| 9 | 2 | 335-11-092 | Medium Knob w/Extension |
| 10 | 2 | 418-55-015 | Oversized Washer |
| 11 | 1 | 418-55-012 | Back Up Plate |



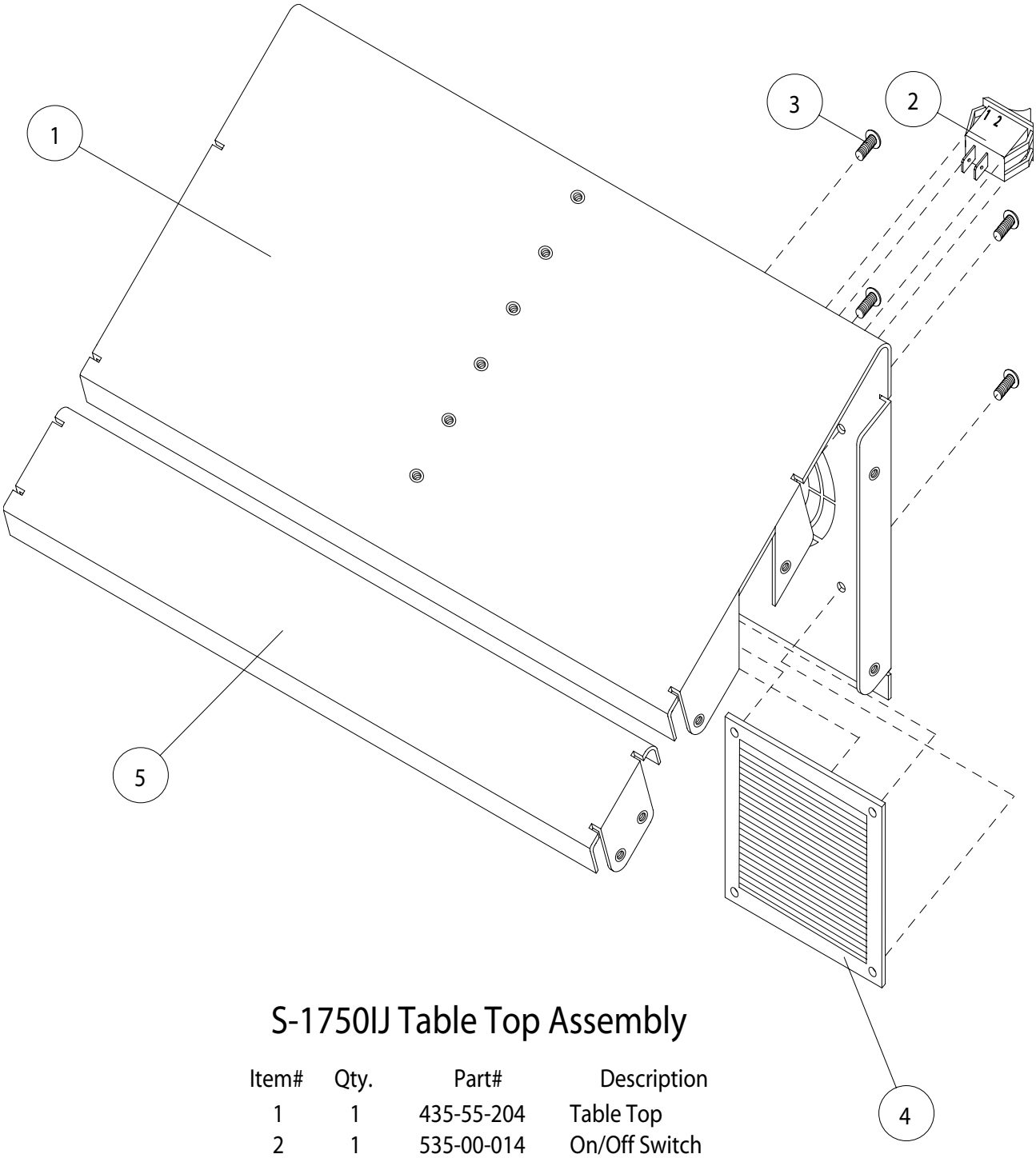

## S-1750IJ Right Side Plate Assembly

| Item# | Qty. | Part# | Description |
|---|---|---|---|
| 1 | 10 | 2310 | SHCS 10-32 x 3/8" |
| 2 | 1 | 418-55-200 | Right Hand Side Plate |
| 3 | 2 | 2110 | Nylock Nut 10-32 |
| 4 | 1 | 235-60-202 | Carriage Holder |



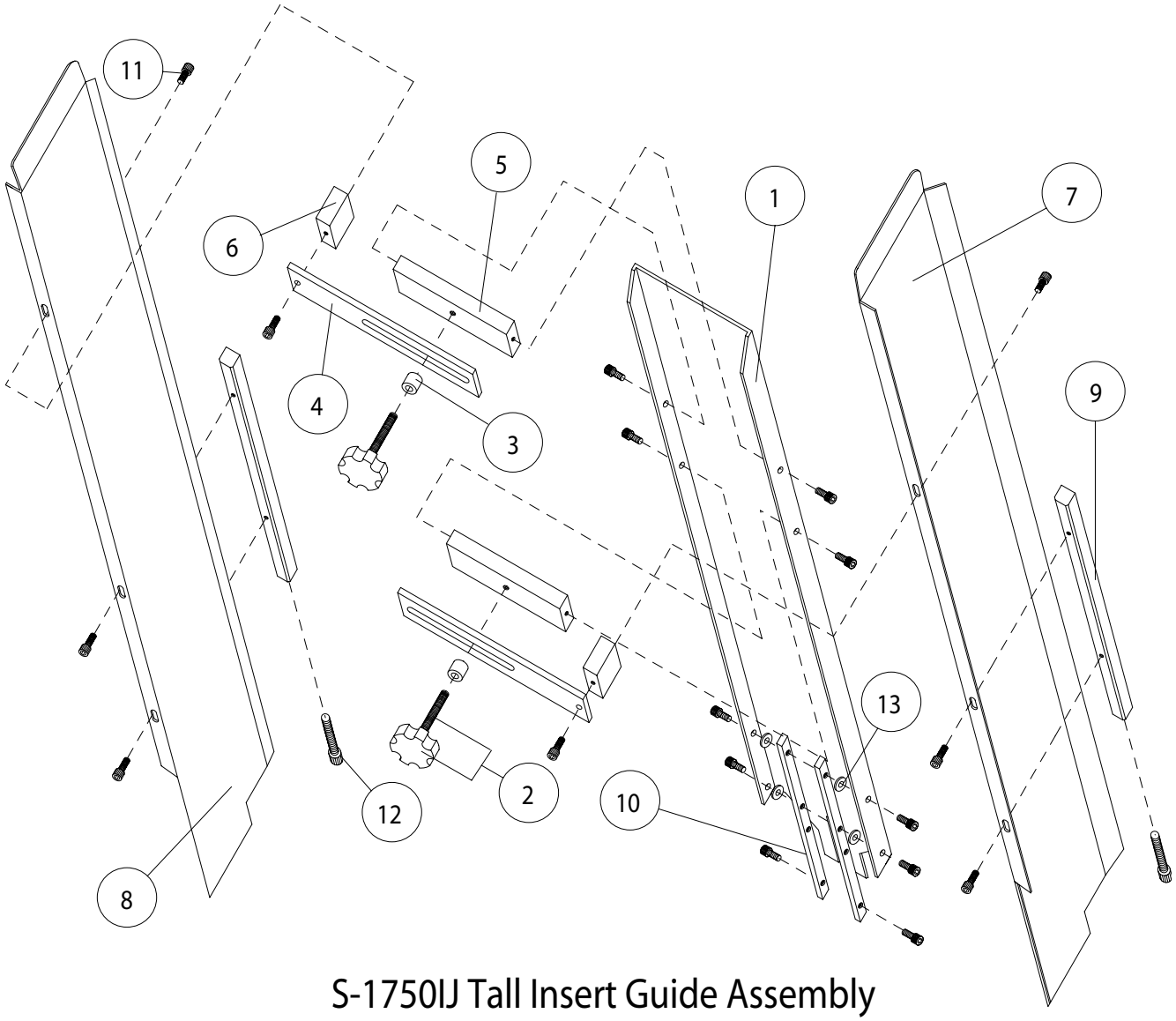

## S-1750IJ Left Side Plate Assembly

| Item# | Qty. | Part# | Description |
|---|---|---|---|
| 1 | 1 | 418-55-201 | Left Hand Side Plate |
| 2 | 2 | 2110 | Nylock Nut 10-32 |
| 3 | 10 | 2310 | SHCS 10-32 x 3/8" |
| 4 | 1 | 235-60-203 | Carriage Holder |



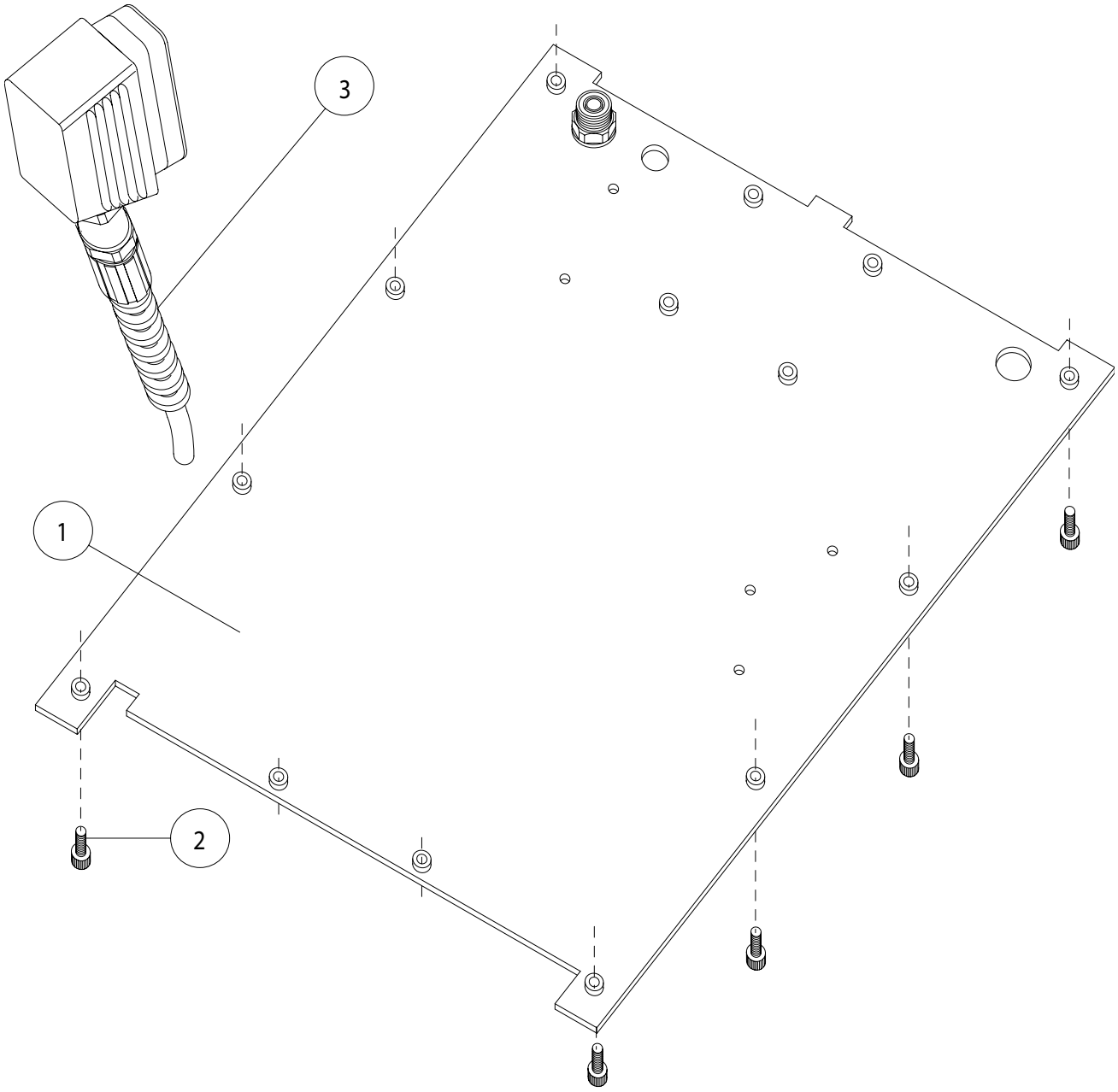

# S-1750IJ Table Top Assembly

| Item# | Qty. | Part# | Description |
|---|---|---|---|
| 1 | 1 | 435-55-204 | Table Top |
| 2 | 1 | 535-00-014 | On/Off Switch |
| 3 | 4 | 2305 | BHCS 10-32 x 3/8" |
| 4 | 1 | 535-00-105 | Filter Screen |
| 5 | 1 | 435-55-203 | Timing Belt Acess Cover |
| NS | 1 | 235-00-064 | USA Label |
| NS | 1 | 235-00-066 | Nameplate |
| NS | 4 | 1101 | Blind Rivet |
| NS | 1 | 535-00-023 | Legend "Power" |
| NS | | Items Not Shown On Drawing | |



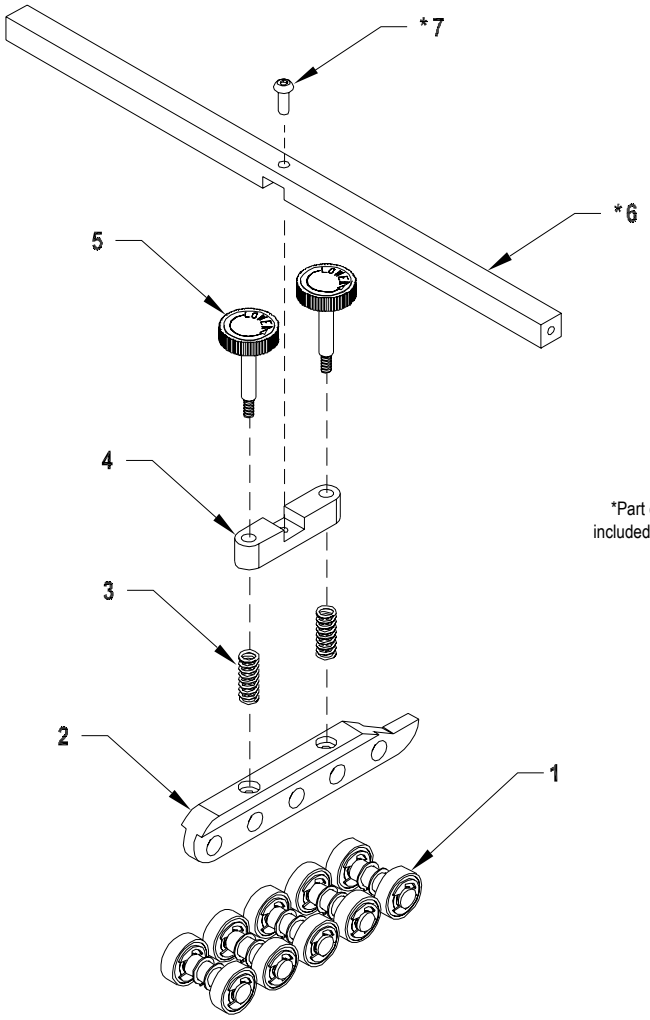

# S-1750IJ Tall Insert Guide Assembly

| Item# | Qty. | Part# | Description |
|---|---|---|---|
| 1 | 1 | 235-00-006 | Tall Insert Guide |
| 2 | 2 | 235-00-093 | Large Thumb Screw |
| | 2 | 2390 | SHCS 1/4-20 x 1" |
| 3 | 2 | 335-00-018 | Sensor Extension Spacer |
| 4 | 2 | 435-00-150 | Adjusting Stabilizer Bracket |
| 5 | 2 | 435-00-151 | Center Stabilizer Mounting Bracket |
| 6 | 2 | 435-00-152 | Stabilizer Side Guide Spacer |
| 7 | 1 | 435-60-208 | Left Side Guide Extension |
| 8 | 1 | 435-60-209 | Right Side Guide Extension |
| 9 | 2 | 435-00-157 | Right/Left Side Guide Mounting Bracket |
| 10 | 2 | 235-00-024 | Tall Mounting Strap |
| 11 | 18 | 2310 | SHCS 10-32 x 3/8" |
| 12 | 2 | 2396 | SHCS 1/4-20 x 1-1/2" |
| 13 | 4 | 2607 | Flat Washer #10 |




# S-1750IJ Base Plate Assembly

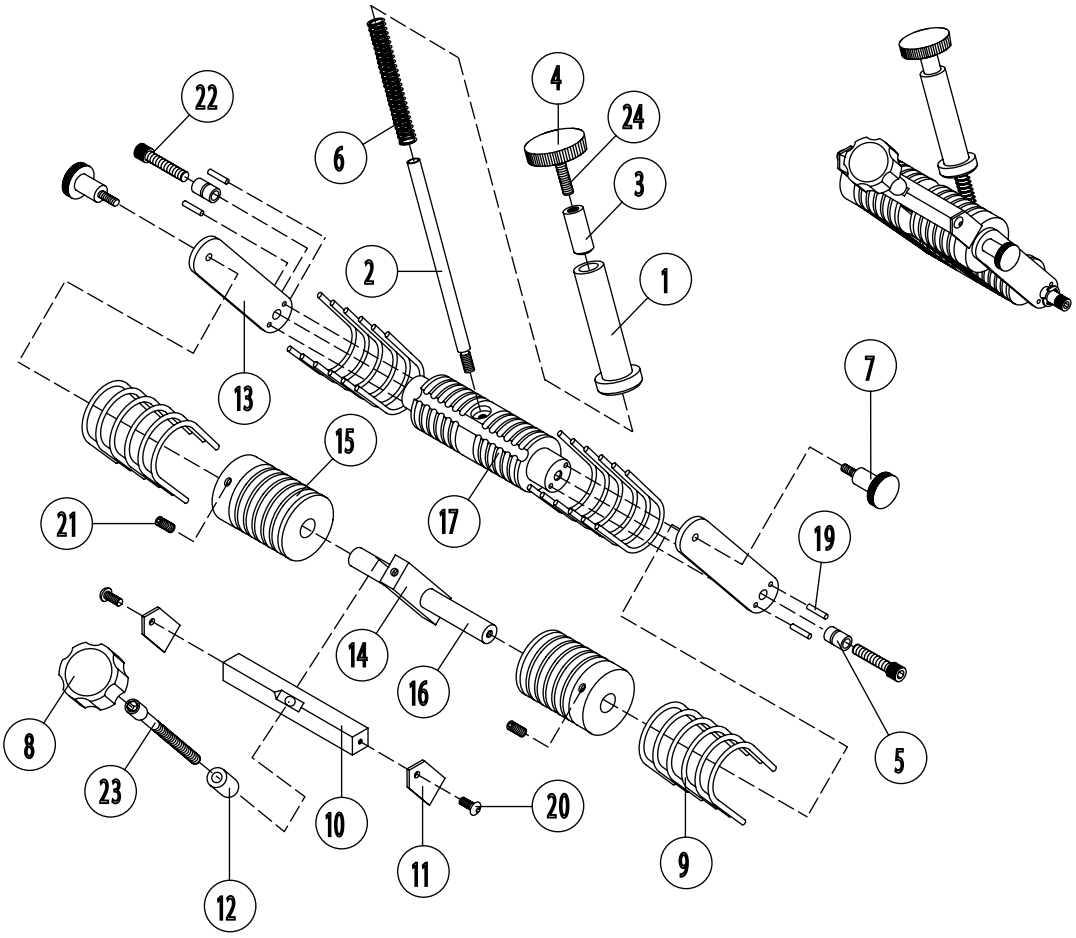
| Item# | Qty. | Part# | Description |
|---|---|---|---|
| 1 | 1 | 435-50-007 | Base Plate |
| 2 | 8 | 2310 | SHCS 10-32 x 3/8" |
| 3 | 1 | 535-11-005 | 2 Meter Power Cord |




*Part exists in diagram for reference only and is not included with this assembly. Must be ordered separately.

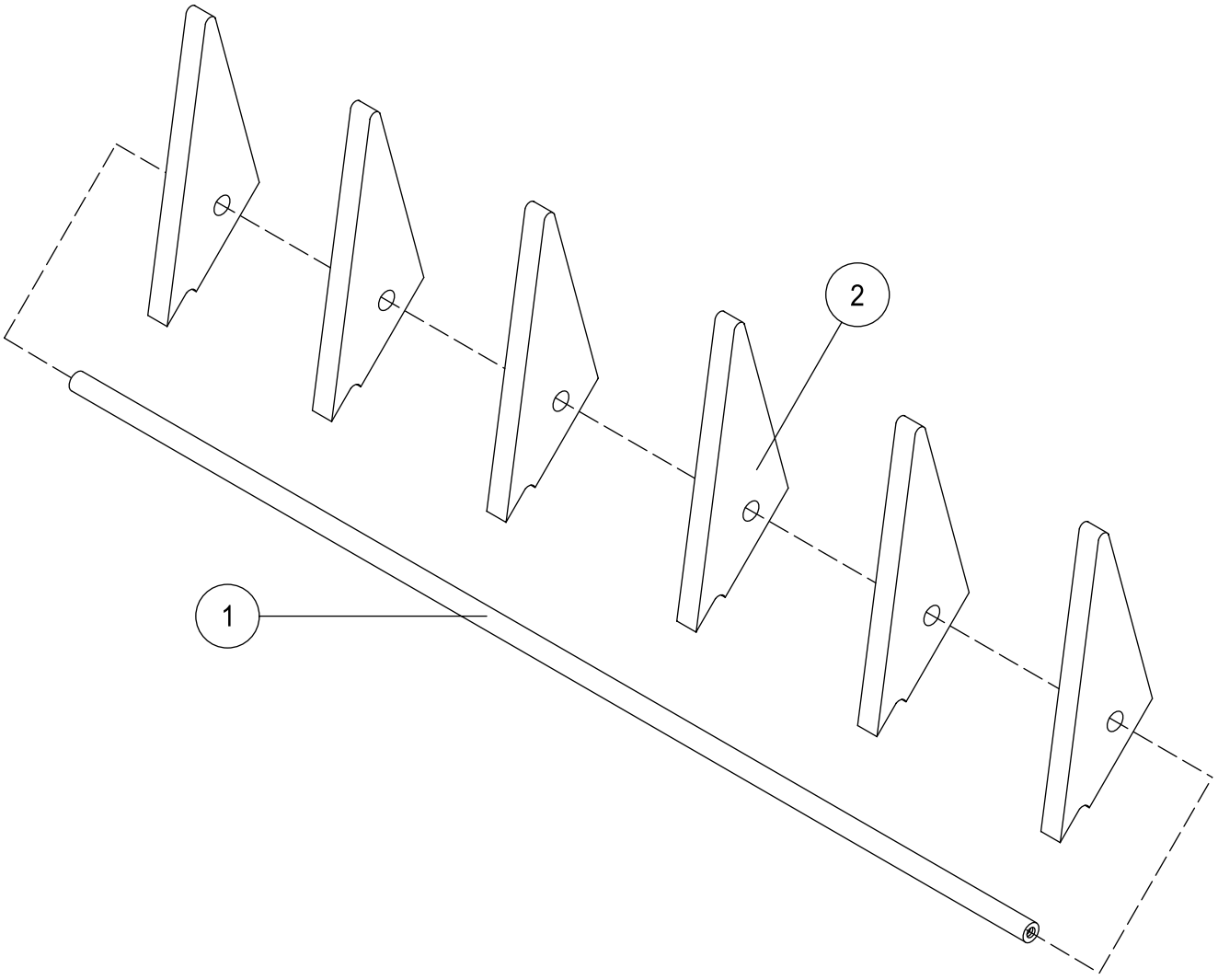
## 5 AXLE HOLD DOWN ASSEMBLY #43511310

| DIAGRAM NUMBER | QTY | DESCRIPTION | PART NUMBER |
|---|---|---|---|
| 1 | 5 | Bearing Holder Shaft | 43560008 |
| | 10 | Bearing Ball R6 | 23500095 |
| | 10 | Ring Grip 3/8 Waldes | 00001110 |
| | 20 | Clip E 3/8 Waldes | 00001150 |
| 2 | 1 | Holder Bearing 5 Axle | 43560310 |
| 3 | 2 | Spring Compression | 23560083 |
| 4 | 1 | Bar Hold Down Adjustment | 23560086 |
| 5 | 2 | Screw Cross Bar Hold Down Adjustment | 23560087 |
| | 2 | Hold Down Knob 1 | 23560077 |
| | 2 | Grommet Rubber | 00001130 |
| | 2 | Label Gate Adjustment Knob | 23500084 |
| 6* | 1 | Cross Support Bar | 41855223 |
| 7* | 1 | BHCS 10-32 x 1/2” LG | 00002334 |



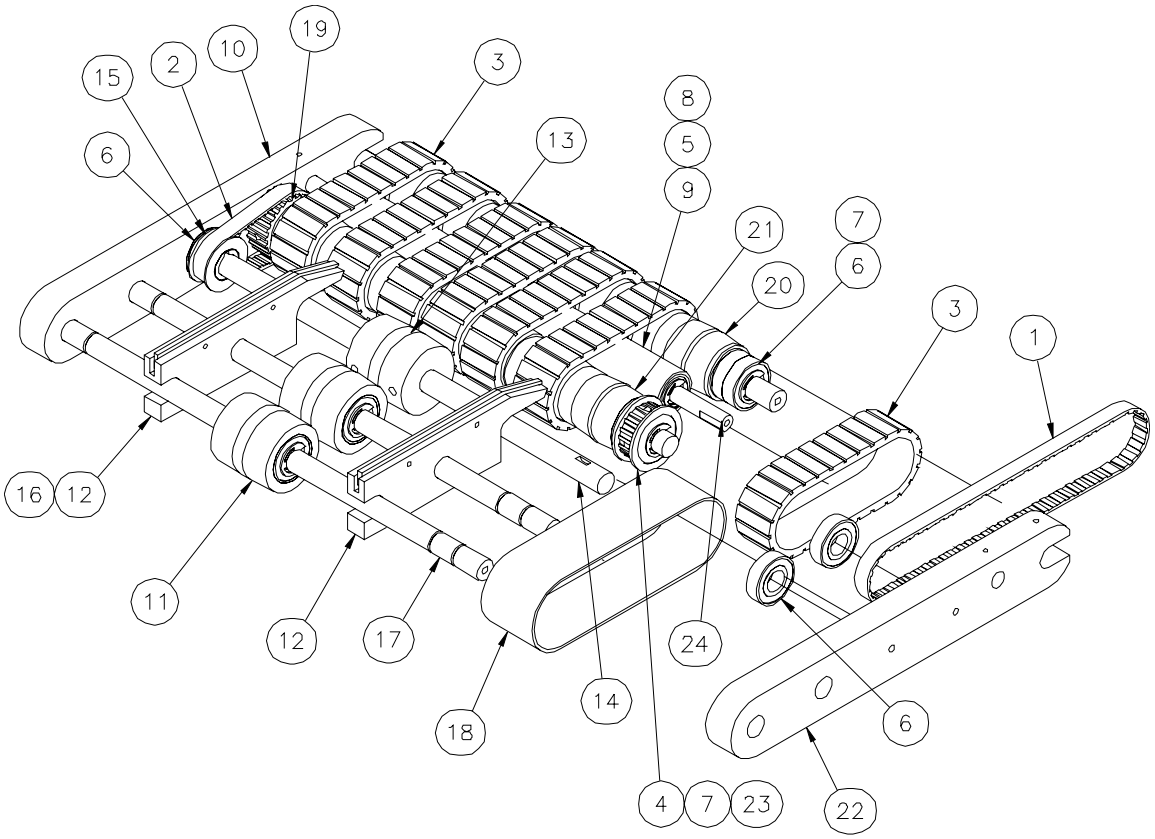

Advancing O-Ring Assembly #23511189

| Item# | Qty | Part# | Description |
|---|---|---|---|
| 1 | 1 | 235-00-019 | Gate Spring Tension Cylinder |
| 2 | 1 | 235-60-084 | Gate Lift Shaft |
| 3 | 1 | 235-00-037 | Adjusting Knob Sleeve w/235-00-240 O-Ring |
| 4 | 1 | 235-00-077 | 1" Thumb Screw |
| 5 | 2 | 235-00-082 | 1/2" Spacer |
| 6 | 1 | 235-00-083 | Gate Compression Spring |
| 7 | 2 | 235-11-228 | Knob Extension Assy |
| 8 | 1 | 235-00-093 | Large Thumb Screw |
| 9 | 12 | 235-00-189 | Advancing Gate Cylinder O-Ring |
| 10 | 1 | 235-00-190 | O-Ring Lock Bar |
| 11 | 2 | 235-00-191 | Lock Bar Side Plate |
| 12 | 1 | 235-00-192 | Knob Spacer |
| 13 | 2 | 235-00-193 | Adjuster Side Plate |
| 14 | 1 | 235-00-194 | Clamp Tie Rod |
| 15 | 2 | 235-00-195 | O-Ring Take Up Roller |
| 16 | 1 | 235-00-196 | Take Up Roller Shaft |
| 17 | 1 | 235-60-400 | Gate Cylinder |
| 19 | 4 | 1161 | Roll Pin 1/8" x 1/2" |
| 20 | 2 | 2210 | BHCS 8-32 x 1/4" |
| 21 | 2 | 2327 | Set Screw 1/4"-20 x 3/8" |
| 22 | 2 | 2390 | SHCS 1/4"-20 x 1 |
| 23 | 1 | 2396 | SHCS 1/4"-20 x 1-1/2" |
| 24 | 1 | 2400 | SHCS 1/4"-28 x 1" |




Wedge Guide Assembly #41811007

| Item# | Qty. | Part# | Description |
|---|---|---|---|
| 1 | 1 | 418-55-007 | Wedge Guide Shaft |
| 2 | 6 | 435-60-212 | Material Support Wedge |
| | 4 | 2607 | Washer, Flat, #10 |
| | 2 | 235-00-092 | Knob, 3 Lobe, 1”dia., 10-32x7/16 |

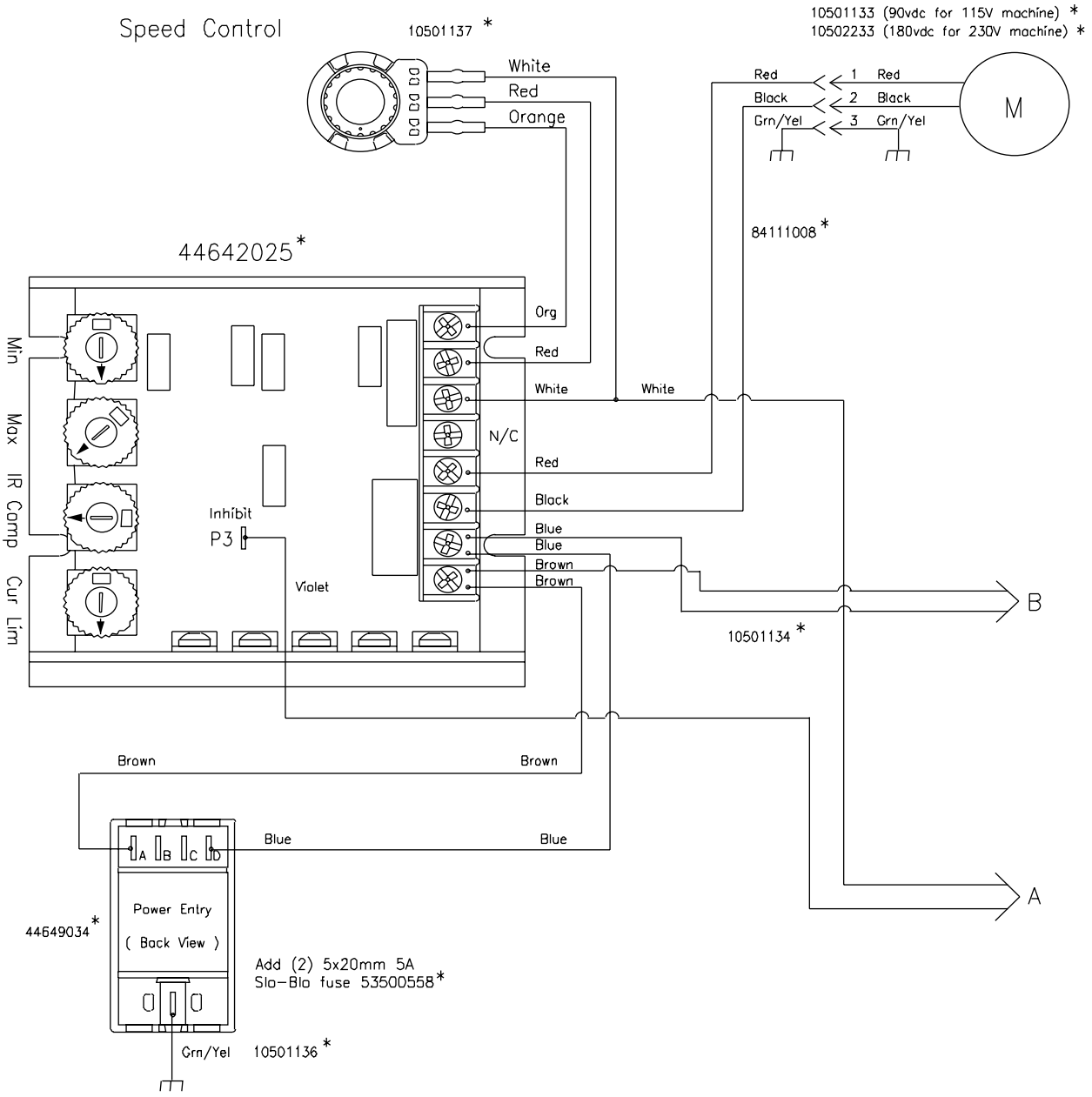



## GROOVED GUM RUBBER BELT CARRIAGE

| DIAGRAM NUMBER | QTY | DESCRIPTION | PART NUMBER |
|---|---|---|---|
| 1 | 1 | Drive Belt 180 XL 037 | 43555094 |
| 2 | 1 | Timing Belt | 23560078 |
| 3 | 7 | Belt Tractor | 23500162 |
| 4 | 1 | Pulley 20T | 23500162 |
| 5 | 2 | Bearing R6-2RS | 23500095 |
| 6 | 8 | Bearing R8-2RS | 23500094 |
| 7 | 9 | E Clip 1_2 | 1155 |
| 8 | 2 | E Clip 3_8 | 1150 |
| 9 | 1 | Support Tube | 44630003 |
| 10 | 1 | RS Carr Hold | 23560202 |
| 11 | 2 | Crown Pul Cup Wbear | 23511105 |
| 12 | 2 | Mat Support Side Rail | 23560082 |
| 13 | 1 | Crown Pulley W_SS | 23560106 |
| 14 | 1 | Drive Shaft | 43555211 |
| 15 | 1 | Pulley 16T | 43560097 |
| 16 | 2 | Slide | 44970006 |
| 17 | 3 | Idler Shaft | 43555047 |
| 18 | 1 | Clear Discharge Belt | 23560088 |
| 19 | 1 | Pulley 24T | 43560098 |
| 20 | 1 | Driven Tube | 44630004 |
| 21 | 1 | Drive shaft | 44630019 |
| 22 | 1 | LS Carr Hold | 23560203 |
| 23 | 2 | Woodruff KEy 1/8 x 3/8 | 3351 |
| 24 | 1 | Vac Carriage Shaft | 44841056 |

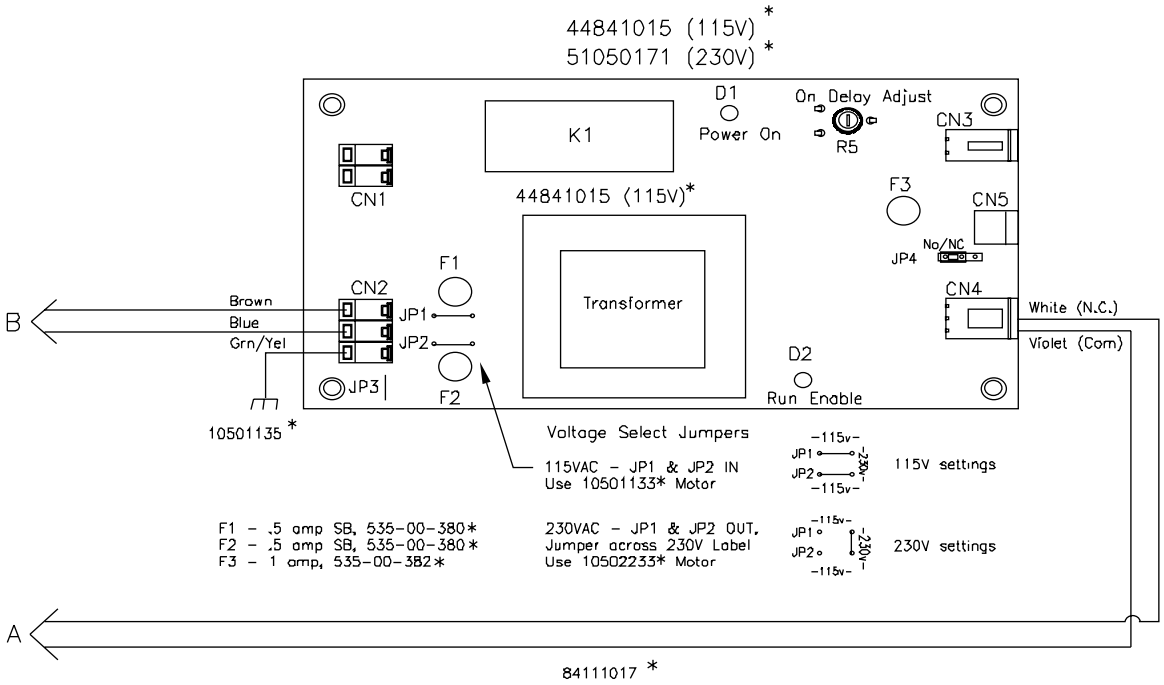
# 7 Electrical Components

| QTY | DESCRIPTION | PART NUMBER |
|---|---|---|
| 1 | SCR Board w/36 Inch Pot Leads | 44642025 |
| 1 | Board S-1750IJ Control (115V Models Only) | 44841015 |
| 1 | Board S-1750IJ Control (230V Models Only) | 51050171 |
| 1 | Motor 90VDC Assembly (115V Models Only) | 44642023 |
| 1 | Motor 180VDC Assembly (230V Models Only) | 44642024 |
| 1 | Base Plate | 51280003 |
| 1 | Belt Tensioner Assembly | 23511290 |
| 2 | Screw Socket Set 10-32 X 1/8” LG | 00003352 |
| 2 | Terminal Disc Female .020 22-18 AWG | 53500254 |
| 1 | Power Cord (115V Models Only) | 53500002 |
| 1 | Power Cord & Allen Wrench Kit (230V Models) | 53522210 |
| 1 | Harness SCR Enable | 84111017 |
| 1 | Pulley, Timing 24 XL 037 .500 KDFA | 43560024 |
| 1 | Harness Power Distribution | 12801103 |
| 2 | Fuse, 5A 250V Slo-blo 5x20mm | 53500558 |
| 1 | Assy. Hrn Rn override/mode sel/switch | 84111009 |
| 1 | Assy. Cable 5’ Flt V710/R3700 | 84111011 |
| 1 | Assy. Harness Dry Cont. Input | 84111015 |
| 1 | Bracket Mounting IJ Board | 900685 |




Caution: for continued protection against risk of fire, replace only with same type and rating of fuse.

* Streamfeeder part number.




D1 – Power on LED is illuminated any time power is applied to CN2.

D2 – Run Enable LED is illuminated any time the CN3 is jumpered or K1 is energized. The LED will also be on during the timing cycle. The timing cycle is adjustable via R5 for a period of 0–12 seconds. The timing cycle is an 'ON' Delay timing period.

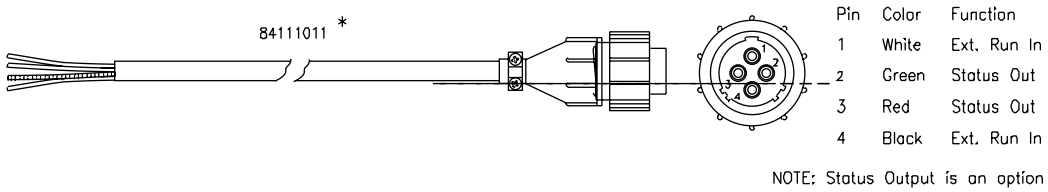
After delay time expires the SCR inhibit lines (CN4) are opened, allowing the motor to run.

* Streamfeeder part number.

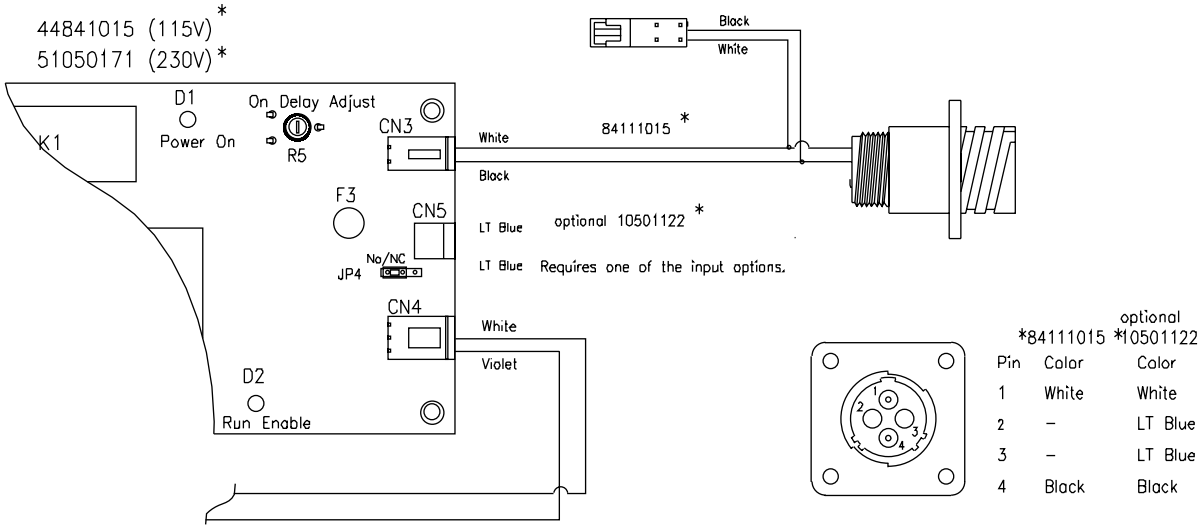
– IMPORTANT –

115V models use:
*10501133 Motor (90vdc)
*44841015 Control Board

230V models use:
*10502233 Motor (180vdc)
*51050171 Control Board



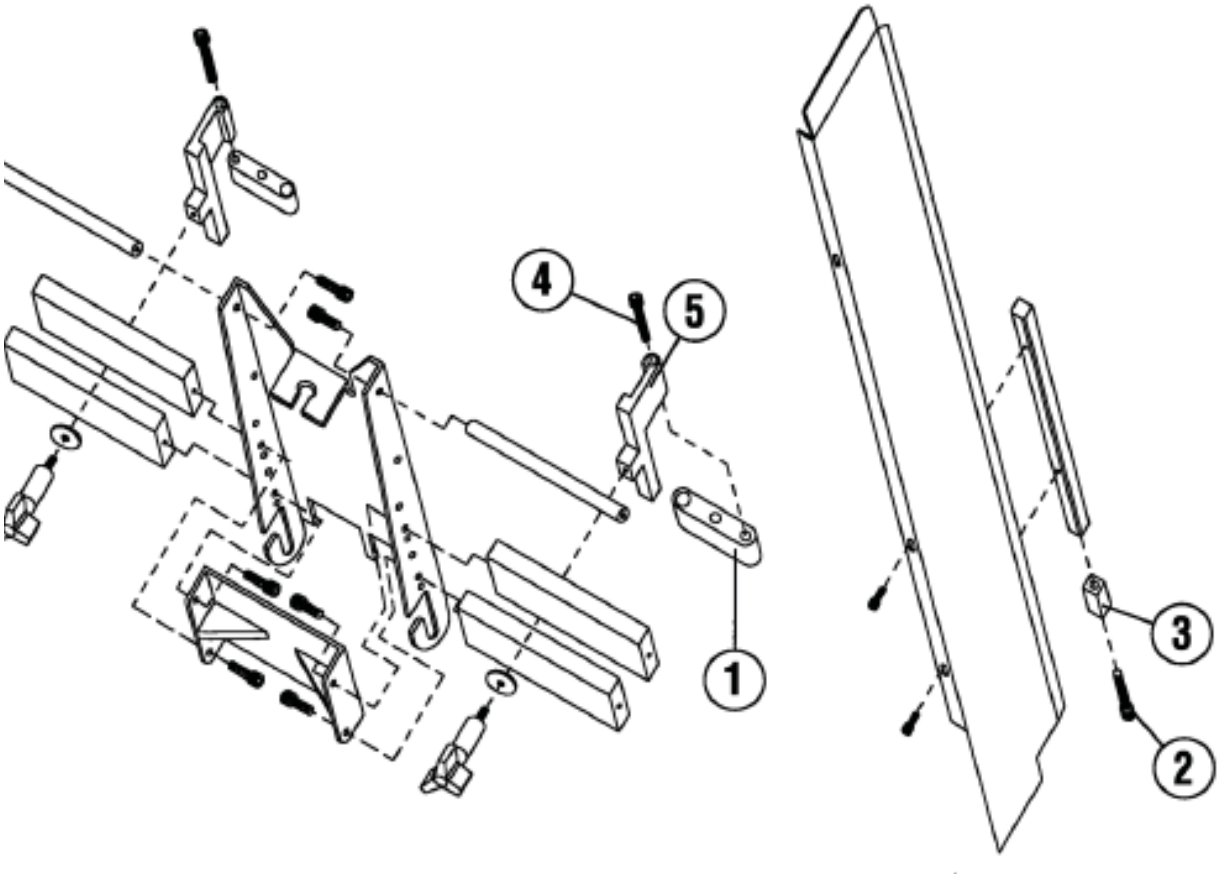

External Run Input Option 10501121* – Dry Contact




* Streamfeeder part number.

Requires one of the external run input options
*10501122 Status Output

# Small Product Narrowing Kit




| Diagram Number | Qty | Description | Part Number |
|---|---|---|---|
| 1 | 2 | Side Guide Extension Bracket | 33500040 |
| 2 | 2 | SHCS 1/4–20 x 1 1/2 | 00002396 |
| 3 | 2 | Side Guide Mounting Spacer | 43500158 |

Items 4 and 5 are S-1750/S-1750IJ components and not included in Side Guide Narrowing Kit. Inclusion is for instruction purposes only.

To Install:
Remove screw (4) from side guide mounting. Install extension (1) to bottom side of adjuster (5) using screw (4).

Install screw (2) through non-threaded hole on extension (1), through spacer (3), and into side guide mounting.

Note: The upper mounting supports (not shown) must be disconnected to allow the side guides to close down to 2 inches.

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