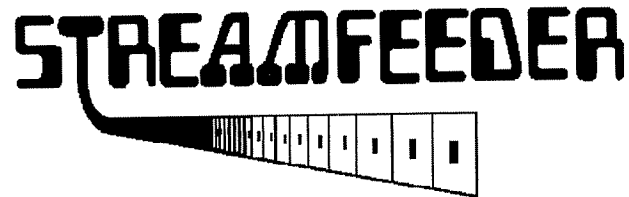


Part Number 235-00-900  
version 1.0  
Price: \$25.00



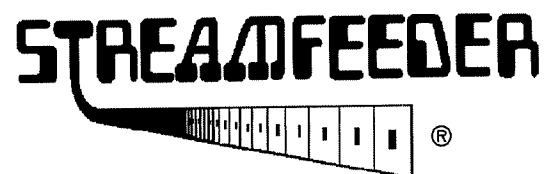
# **Streamfeeder Universal Friction Feeder**

## ***Mailing Series***

### **Operating Manual**

### **Troubleshooting Manual**

### **Maintenance Manual**



## **Table of Contents**

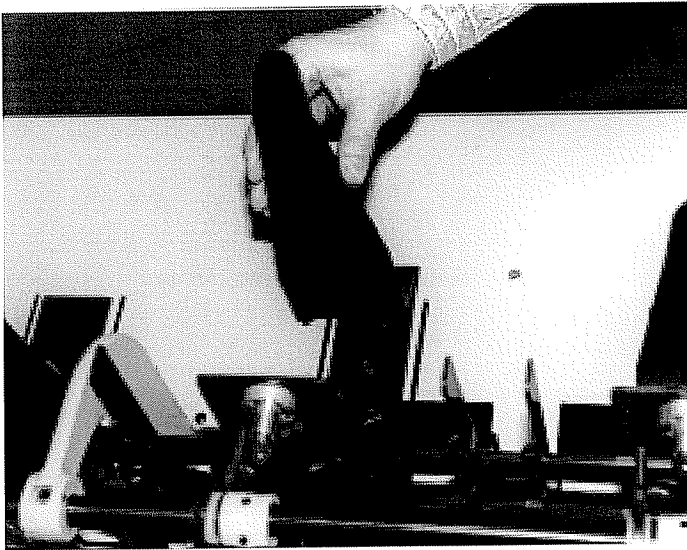
**Section 1 - Operating Manual**

**Section 2 - Parts Manual**

**Section 3 - Electrical Schematic.**

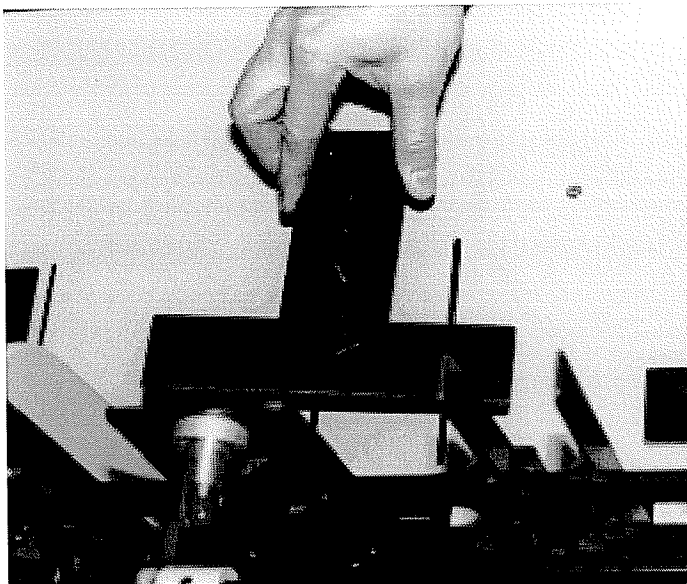
## Operating the Streamfeeder® Universal Friction Feeder

Thank you for investing in the Streamfeeder® Friction Feeder. You will find installation simple to accomplish. These easy step-by-step instructions will “walk you through” the installation and set-up procedures to successfully get your Streamfeeder up and running.

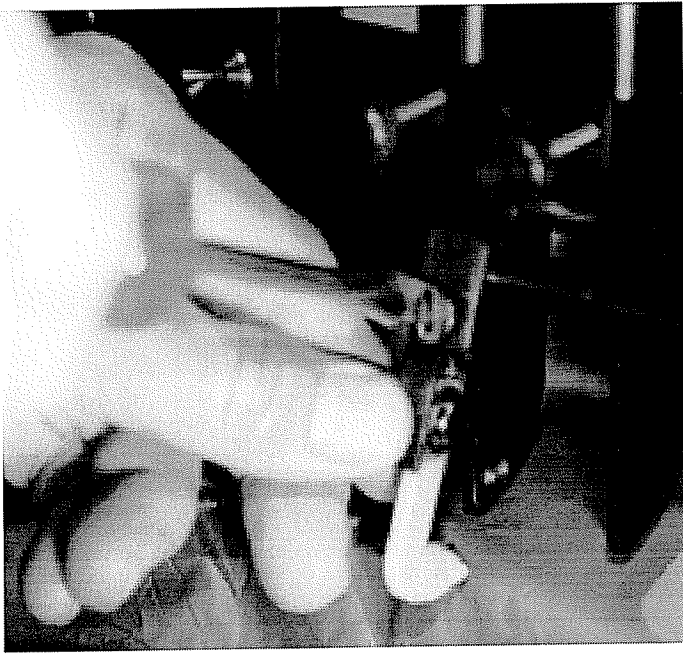


Preparing the inserter for the feeder.

Step 1. Remove the guide assembly rear.



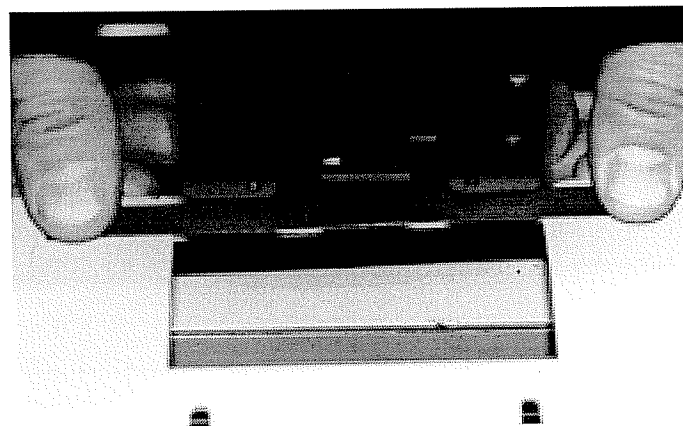
Step 2. Remove the plate insert box feed adjustment (“T” Plate).



Step 3. Loosen the separator foot and tilt it away from the insert station so the foot does not interfere with the material being run.



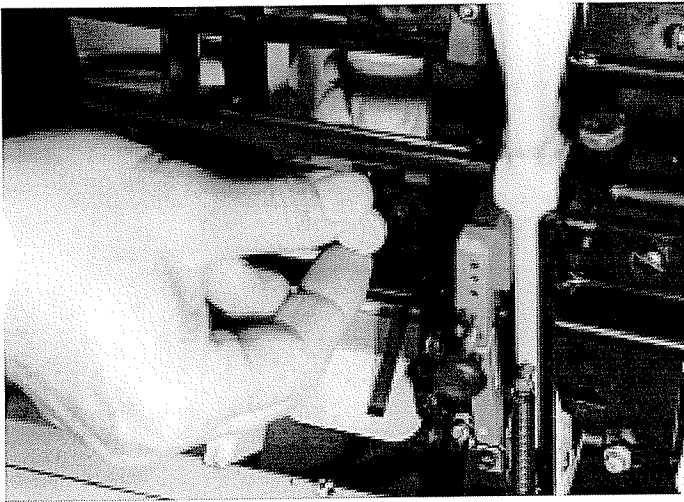
Step 4. Remove the insert suction cup. Lower and tilt the adjustable sucker assembly forward. Plug the sucker hose. The sucker assembly may be moved down and to one side if it interferes with the material being fed.



Step 5. Cycle the inserter until the insert gripper arm jaw is approximately 1/2" from the insert front plate. Locate the two material guide tabs that protrude from the front of the inserter rear table. Pull these guide tabs upward until their top surface is slightly above the bottom of the gripper arm jaw. The material that will be run rests on these guides. The bottom of the gripper arm jaw must pass under the material without making contact with it.

Note: Insecrco machines only: Remove the two material guide tabs that protrude from the front of the rear table. Bend these guides approximately 1 3/8" from the tip and reinstall. Place the guide tab approximately 1 3/8" into the rear table



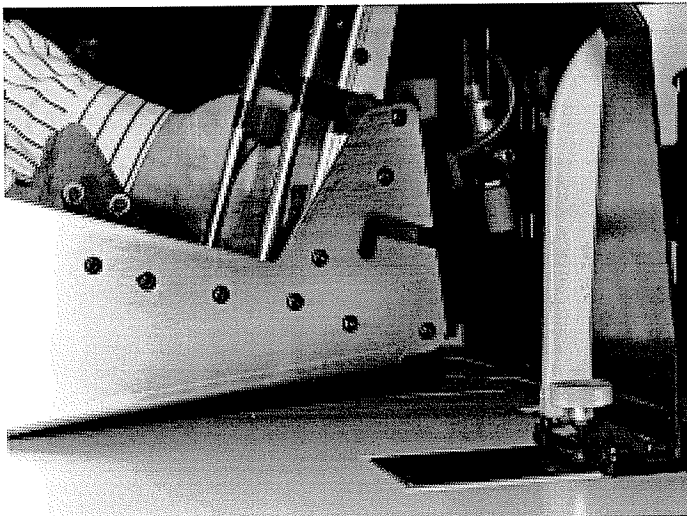


back guide adjusting slot and bend the guide.  
Installing the Streamfeeder on the inserter.

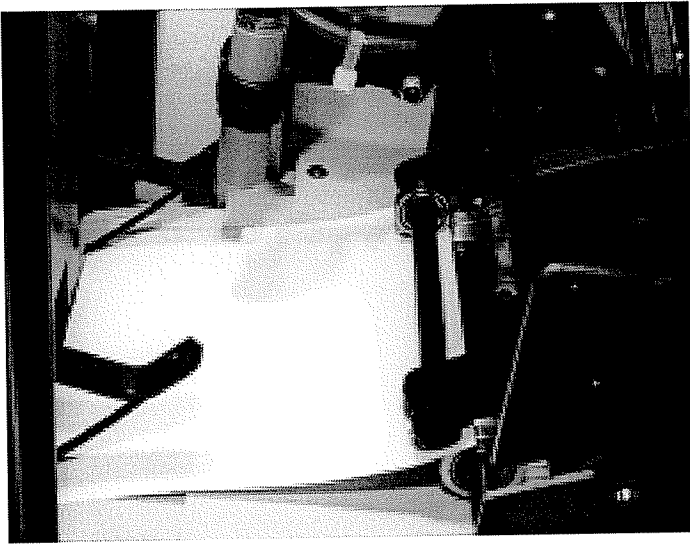
Step 6. Place the Streamfeeder guides on the left and right side of the front insert plate and tighten to the lower support rail.



Check the position of the Streamfeeder spring guides you just installed with a piece of the material you will be running. Adjust the springs to a light tension and locations near the inside edges of the piece. Leave this piece of material in place for further adjustments.



Step 7. Place the feeder on the rear insert table with the two screws that protrude from the bottom of the feeder aligned into the rear guide slots. Secure the feeder with the two "T" Handle nuts provided.



Step 8. Feeder positioning. Place a piece of material to be run under the spring steel guides. Have the front edge of the material aligned with the front of the insert plate. Slide the feeder toward the gripper arm until the trailing edge of the material held by the guides fits between the feeder's exit rollers.



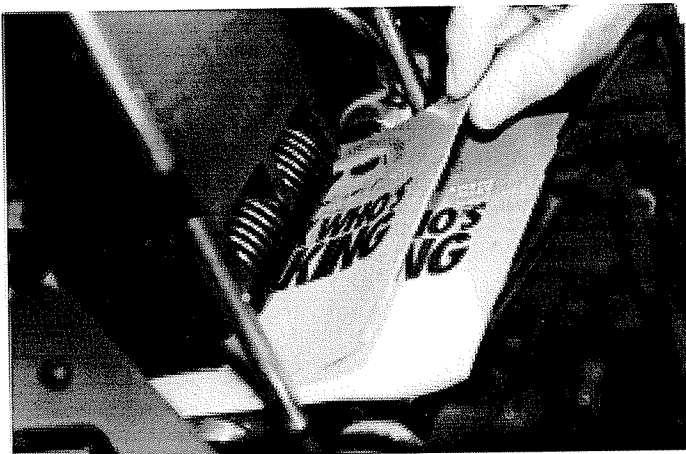
Then tighten the two "T" handle nuts to lock the feeder in place.



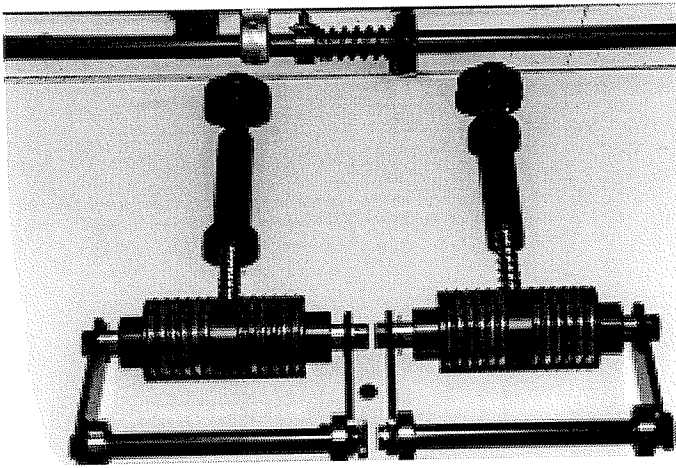
## Adjusting the Streamfeeder.

Step 9. Aligning the photocell. Position the photocell by sighting along the tubular barrel. The photocell should “point” exactly at the leading edge of the piece of material that is held under the spring steel guides. The final photocell adjustment will align slightly to the rear of the leading edge. This is because when the photocell signals the feeder’s motor to stop, the motor will over travel slightly.

Step 10. Gate adjustment. Place two pieces of material to be run under the gate. To do this, pull up on the gate adjustment knob enough to slip the two pieces under the gate “O”-rings. Grasp the top piece of material and slide it back and forward under the gate. The proper adjustment is a slight amount of drag on the top piece. Use the gate cylinder adjust knob to set the amount of drag.



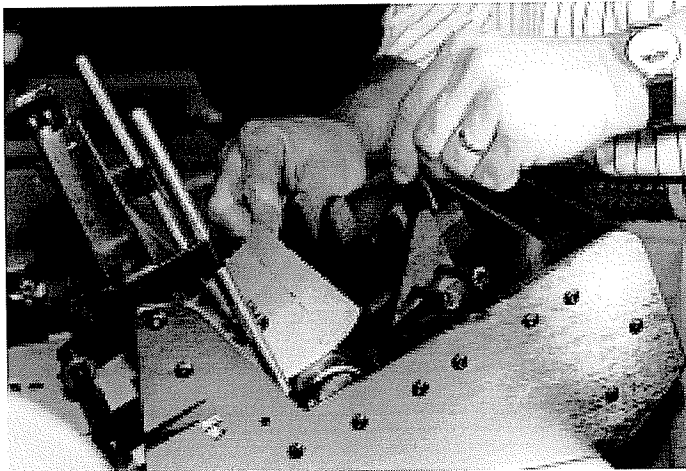
It is desirable to adjust the gate to the maximum opening without feeding doubles. This will allow the maximum tolerance for curled or bent edges, etc. If the feeder feeds doubles after feeding several pieces, you need to close the gate cylinder gap a little. Do this by turning the gate cylinder knob about 1/8 turn counter-clockwise. Retest and repeat the adjustment if necessary. If the gate cylinder is too tight, the material will have difficulty pulling through the gate and you will get missed feeds.



You can also adjust the amount of spring tension holding the gate cylinder in position. The gate can move upwards slightly against the spring while material is being fed. This is useful in feeding irregular materials. The normal setting for the gate cylinder spring tension is with the collar on the barrel in the "down" position. This is shown in the left position in the photograph. This setting will work well for most materials and allows the greatest stack heights. It also gives the best performance in preventing doubles.

*CAUTION: Before running the feeder, be sure that the gate cylinder is adjusted upwards enough that the "O"-rings are not contacting the feed rollers and belts. If the gate cylinder "O"-rings are in contact with the belts and rollers and the feeder is run with no material in it, you will damage the belts, rollers and "O"-rings.*

The cylinder can be turned to the "up", or low tension position for special feeding requirements. This would be especially useful in feeding irregular thickness materials that requires the gate to "float" more during the feeding process. The low tension setting can be used to minimize marking of the product by the gate cylinder or to prevent peeling back the top sheet of a booklet, for example.

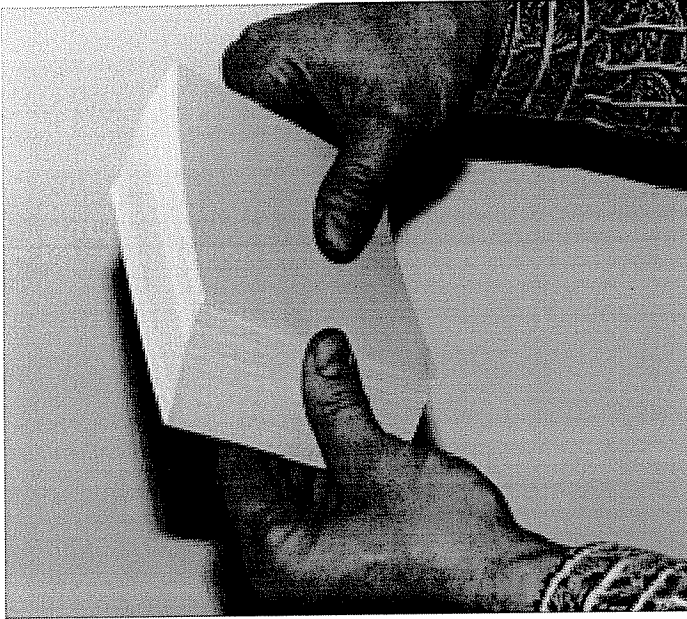


Step 11. Material Support Wedge Adjustment. The trailing edge of the material to be run *must* be supported by the material support wedges.

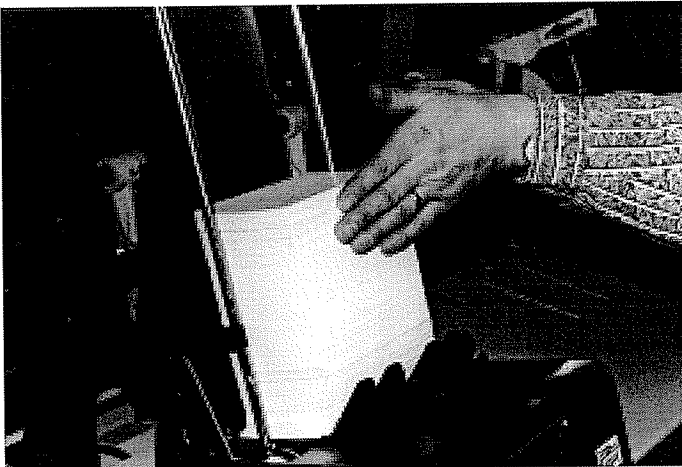
This adjustment is made by loosening the wedge assembly adjusting knob and sliding the wedge assembly under the trailing edge of the material to be run. Each individual wedge may be moved from side to side on its retaining shaft. This allows an adjustable spacing of the wedges to evenly support the material to be run. It should be understood that this feeder feeds in a shingled manner. As the bottom piece exits the gate area, the following piece of material starts to feed. It overlaps the first piece. The amount of

overlap can be adjusted by sliding the wedge assembly toward the gate for less overlap, or away from the gate for more overlap.

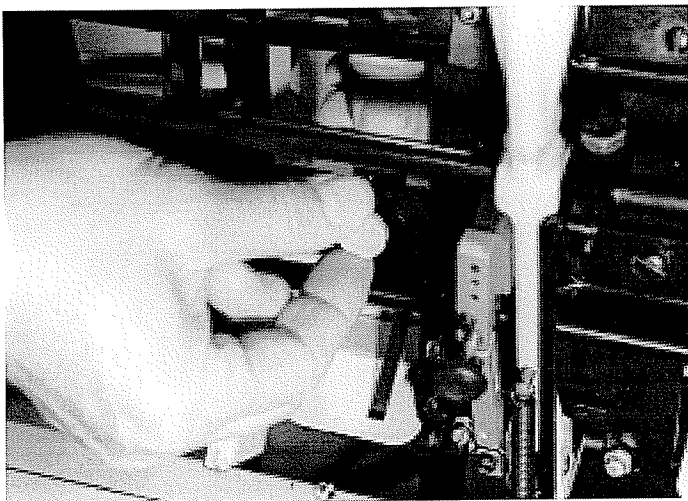
Function of overlap. More overlap allows the feeder to feed a greater amount of paper per revolution. This will serve better in high speed applications. The wedge assembly can be turned to the left or right to help compensate for skewed (twisted) feeding of the material. You can experiment with turning the wedge assembly one way or the other and observing the straightness of the material feeding.



Step 12. Loading the material to be run. The first handful of material should be fanned into a wedge and placed in the feeder to allow the bottom pieces of paper to conform to the curvature of the gate cylinder. By helping the first stack of material to form itself around the gate cylinder, you will help get the separation process started correctly. You only need to do this with the first stack going into the machine. From then on, the feeder will continue to form the material around the gate cylinder for proper feeding automatically.



As you add more material to the stack in the feeder hopper, pat the back edge of the material stack so that all of the material is pushed tightly up to the front plate. This helps to prevent miss feeds.



*CAUTION: Electrical extension cords should be at least 16 Gauge wire. They MUST be 3 wire grounding type. You MUST use a 3 hole grounded outlet.*

## **Feeder Start-up.**

Turn the feeder on and adjust the spring tension of the material guides. This is done by sliding the guide bracket up or down on the support bar and then tightening the set screw. The spring tension on the material guides should not be so great as to distort the material as the gripper jaw of the inserter pulls the material through the springs.

Adjust the insert arm gripper jaw and detector to the material being run. The procedure for this is the same as for regular stations that are not equipped with the Streamfeeder. See your inserter owners manual for instructions about these adjustments.



Adjust the photocell to stop the material in line with the insert station front plate. This is done by aiming the photocell forward or backward to change the stopping point. See step 9 for more information about adjusting the photocell.

Run several pieces of material from the feeder before making your final gate adjustments to the Streamfeeder, if necessary. When adjusting the gate cylinder knob, make the movements in small amounts. Usually it is best to move the outside edge of the knob 1/8" or less with each adjustment.

## Troubleshooting and Maintenance of the Streamfeeder

### Problem

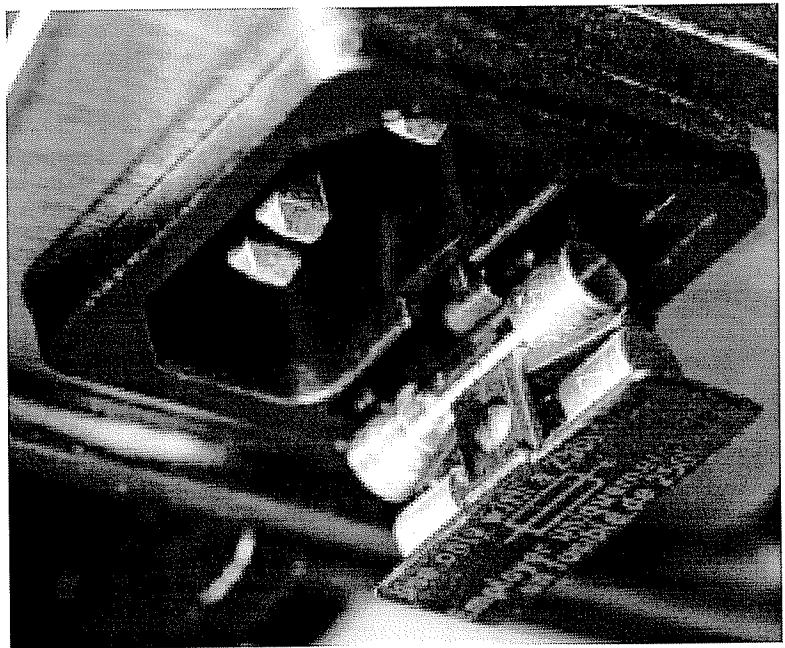
### Cause and Solution

Feeder does not run, switch is turned on.

Is the main power switch light on (120 V models only)? If not, check the electrical supply by plugging in another device into the plug you are using to be sure there is power to the outlet.

The photocell may be detecting a background surface and does not turn the motor on. Realign the photocell to be sure it is not detecting a background.

Check to see if the machine fuse is blown. If so, replace the fuse with the spare one in the fuse holder. Use only the proper size and type of fuse.

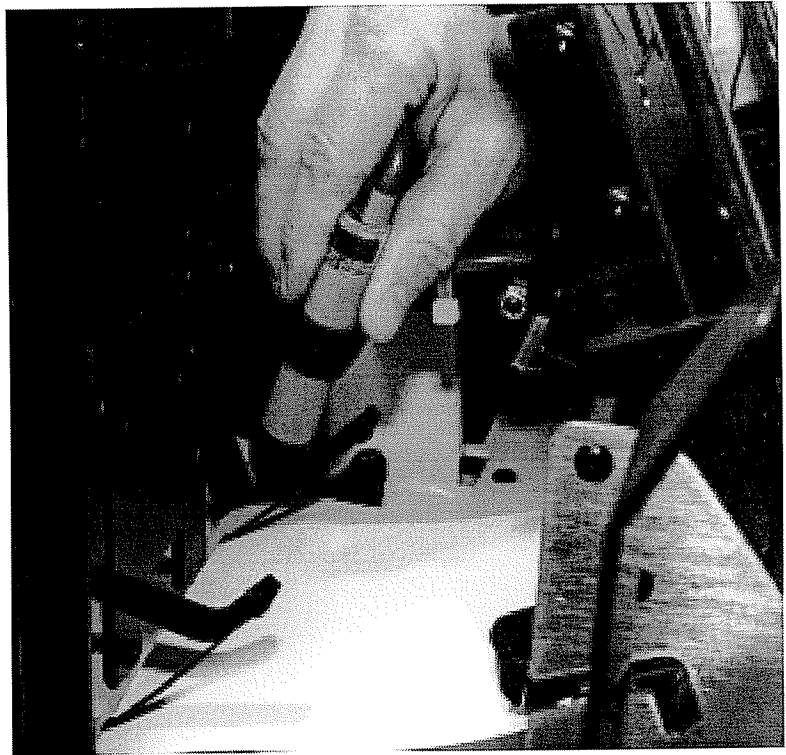


If the gate cylinder is set too tight, it will jam the machine and stall the motor. Also check for a paper jam in the machine. A stalled motor can blow the fuse.



Feeder will not stop (continuous feeding).

The photocell is not detecting the material being fed. Realign the photocell as discussed in step #9 of the set up instructions.



The photocell used on the Streamfeeder was chosen for its very broad range of sensing capabilities and ease of set-up. Occasionally, when running very black pieces, the standard photocell will not be able to sense the pieces. In this situation, contact Streamfeeder for technical support. Streamfeeder has optional, specialized photocells available for difficult sensing applications.

The material being fed does not advance far enough for the gripper jaw to pick up.

The photocell is not properly aligned. Realign the photocell to a focal point farther from the feeder. The feeder may not be the proper distance from the gripper jaw. Repeat the adjustment for proper feeder distance from the gripper jaw covered in Step #8 of the set-up instructions.

The material overshoots the guide springs and is too deep in the gripper arm jaw.

The photocell is misaligned and/or the feeder is not installed with the correct distance from the gripper jaw. The spring tension on the guide springs may be too low.

Move the photocell toward the feeder. Position the feeder the proper distance from the guide springs. Set the correct spring tension on the guide springs.

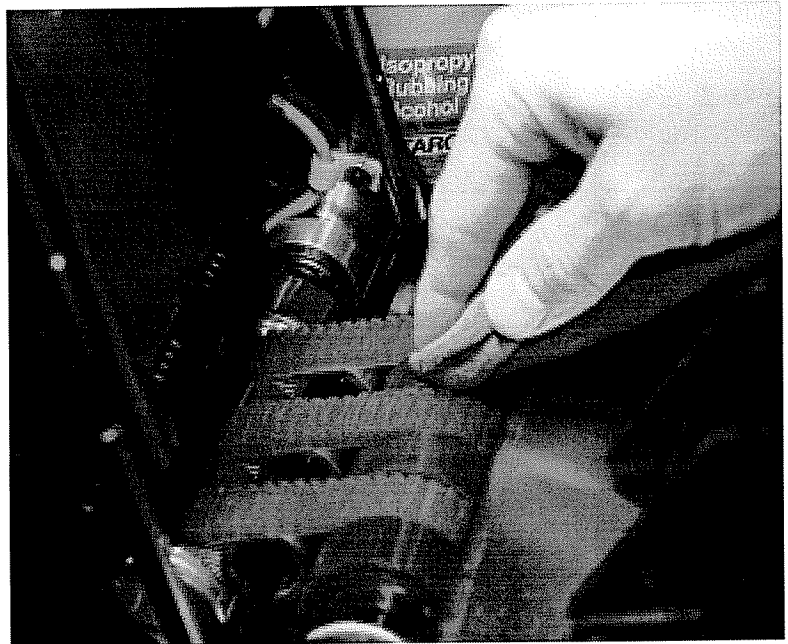


The feeder runs, but material does not feed.  
Erratic feeding, roller slip.

The gate is set too tight. Loosen the gate.  
The wedge assembly is too far toward gate. Move the wedge assembly away from the gate to allow more material contact with the drive belts and rollers.  
The paper may be jammed. Clear the jam.  
Material stack may be too high or heavy. Try removing part of the stack.  
Rollers and belts may be dirty and glazed, causing the rollers and belts to slip on the material. Clean the rollers with rubbing alcohol.

**CAUTION:**

*Isopropyl rubbing alcohol is FLAMMABLE! Unplug the machine before cleaning the rollers. Do NOT use near an open flame, sparks or any other source of ignition. Do NOT smoke in the vicinity of the alcohol fumes. Air dry the cleaning rag. Dispose of used rags properly. Only purchase consumer packaged rubbing alcohol. Only keep small quantities of alcohol on the job site (16 oz., 500 ml or less). Store alcohol properly.*



*Clean rollers and belts are VERY IMPORTANT to the proper operation and feeding of the Streamfeeder!*

Clean the rollers using a clean rag or towel and alcohol.

**Use ONLY Isopropyl Rubbing Alcohol, 70% by volume.**

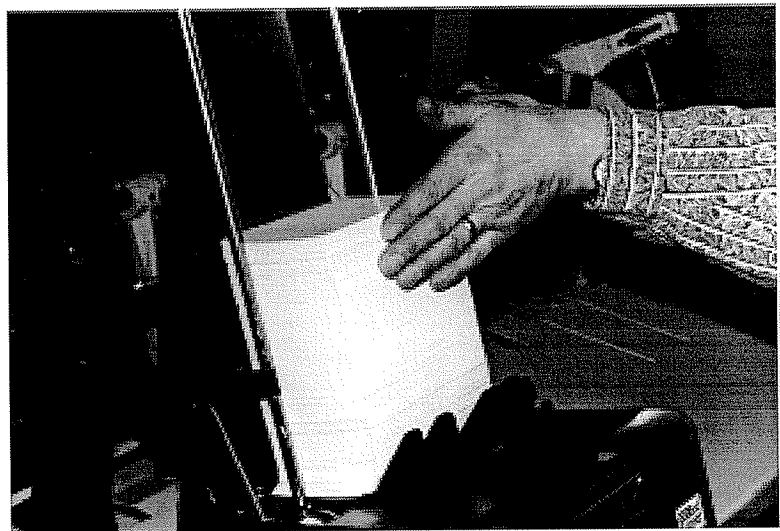
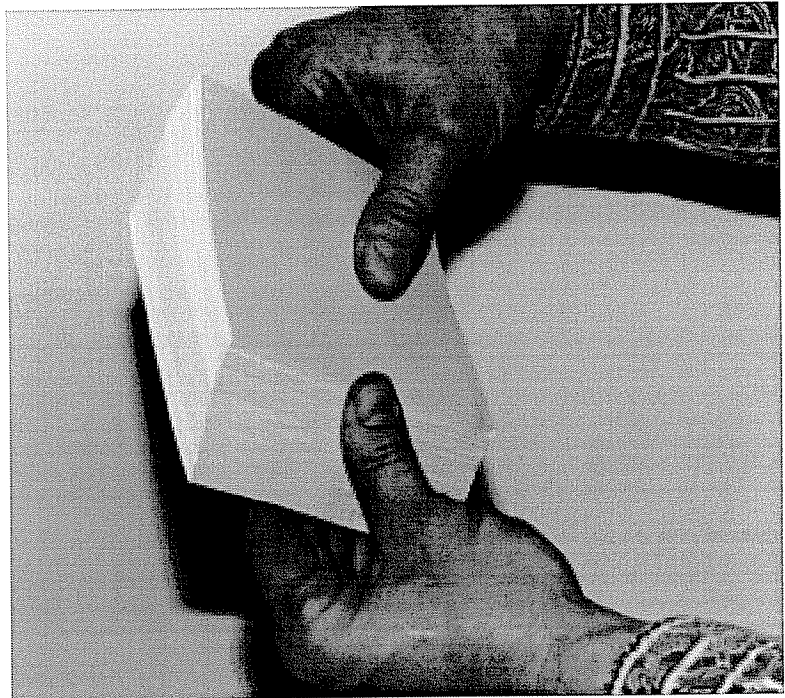
This is the type of rubbing alcohol that is sold at drug stores. Do NOT use any other type of cleaners, such as Blanket Wash or other solvents. These may coat the rollers with plasticizers or destroy the rubber compound of the rollers.

DO NOT use any type of abrasive cleaner or cleaning cloth, such as Scotchbrite or sand paper on the rollers.

This will destroy the sealed high friction surface and make the rollers useless.

The feeder runs, but material does not feed.  
Erratic feeding, roller slip.  
(continued)

Material not loaded properly in feeder hopper. Make sure the first stack of material is loaded with a fanned lead edge to conform to the gate cylinder. Make sure material is patted forward until it contacts the front guide.

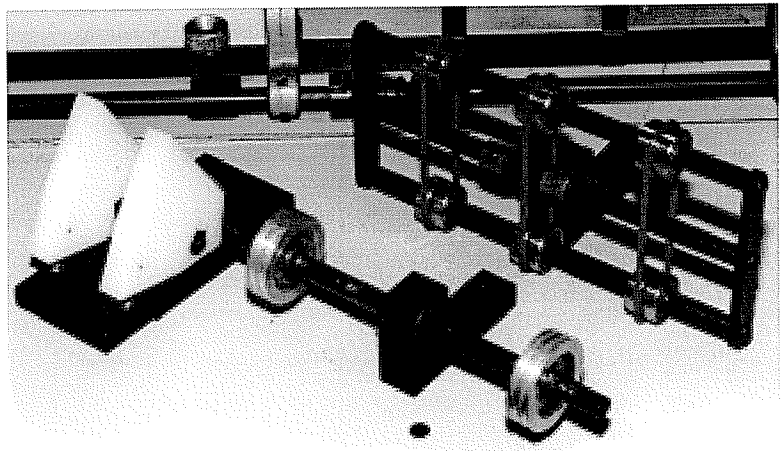


Pieces interlock. Make sure there is no embossing, staples or other physical features of the product that cause the product to interlock one piece to the next. An example of a material with serious interlock would be credit cards with the same data embossed on every card.

The feeder runs, but material does not feed.  
Erratic feeding, roller slip.  
(continued)

On unusual or irregular material, experiment with different directions of material feed. Some materials will feed better in one direction than the others.

If you are feeding some difficult materials, the standard wedge assembly may not provide sufficient support for the material, or it may cause the material to bind together. Streamfeeder has special, optional wedge assemblies for meeting these special requirements. Contact Streamfeeder for technical assistance. Some of the special wedges are shown in the photograph below.

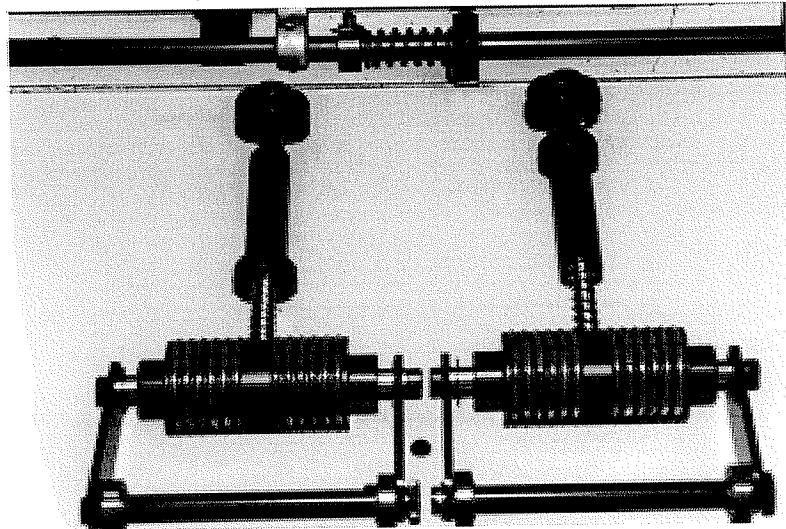


Paper skews when exiting the feeder  
(does not feed straight).

One side of the material being fed is contacting the feed belts before the other side. Turn the wedge assembly to offer more support under the leading edge of the material. The side of the material that is leaving the feeder first needs more support, or less belt contact. Turn the wedge on this side toward the gate cylinder to hold the material up from the belts. Experiment with different amounts of wedge twist to minimize or eliminate the skewing of the material feed.

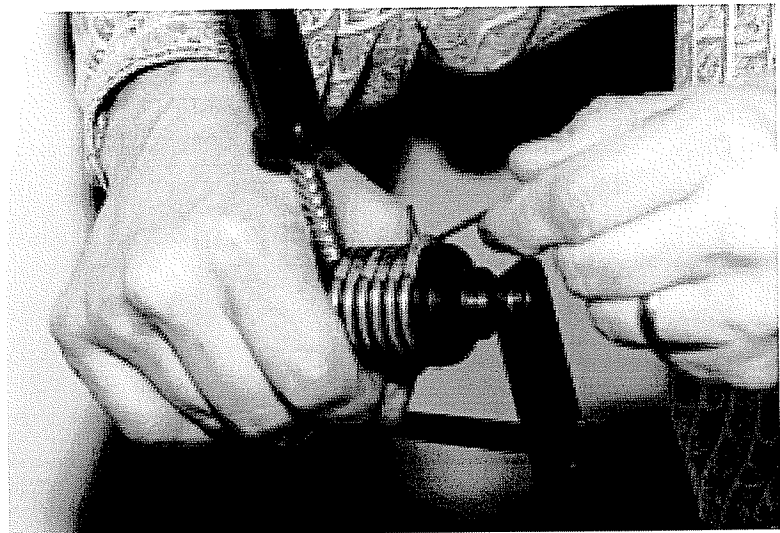
With the feeder hopper full, the feeder cannot control doubles.

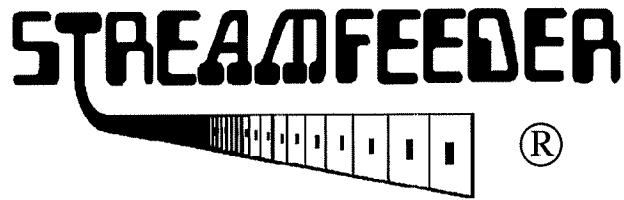
The spring tensioning cylinder may be turned for low stack height. Turn the cylinder over for higher spring tension and higher stack heights. In the high tension, the collar on the cylinder is down, or closest to the cylinder.



The "O"-rings are worn to the same height as the gate cylinder. Turn or replace all "O"-rings if they are worn.

Turning the "O"-rings on the gate retard cylinder may be done by inserting a small, 90° Allen hex wrench in the horizontal groove in the gate cylinder. With the hex wrench in the groove and the "O"-ring in the bend of the wrench, rotate the wrench one complete circle around the "O"-ring groove while pulling the wrench away from the cylinder. This lifts the "O"-ring out of its groove. Turning the wrench one complete turn will rotate the "O"-ring in the groove to a new wear position on the gate cylinder. Rotate all of the "O"-rings the same amount for an even retard surface on the bottom of the cylinder.





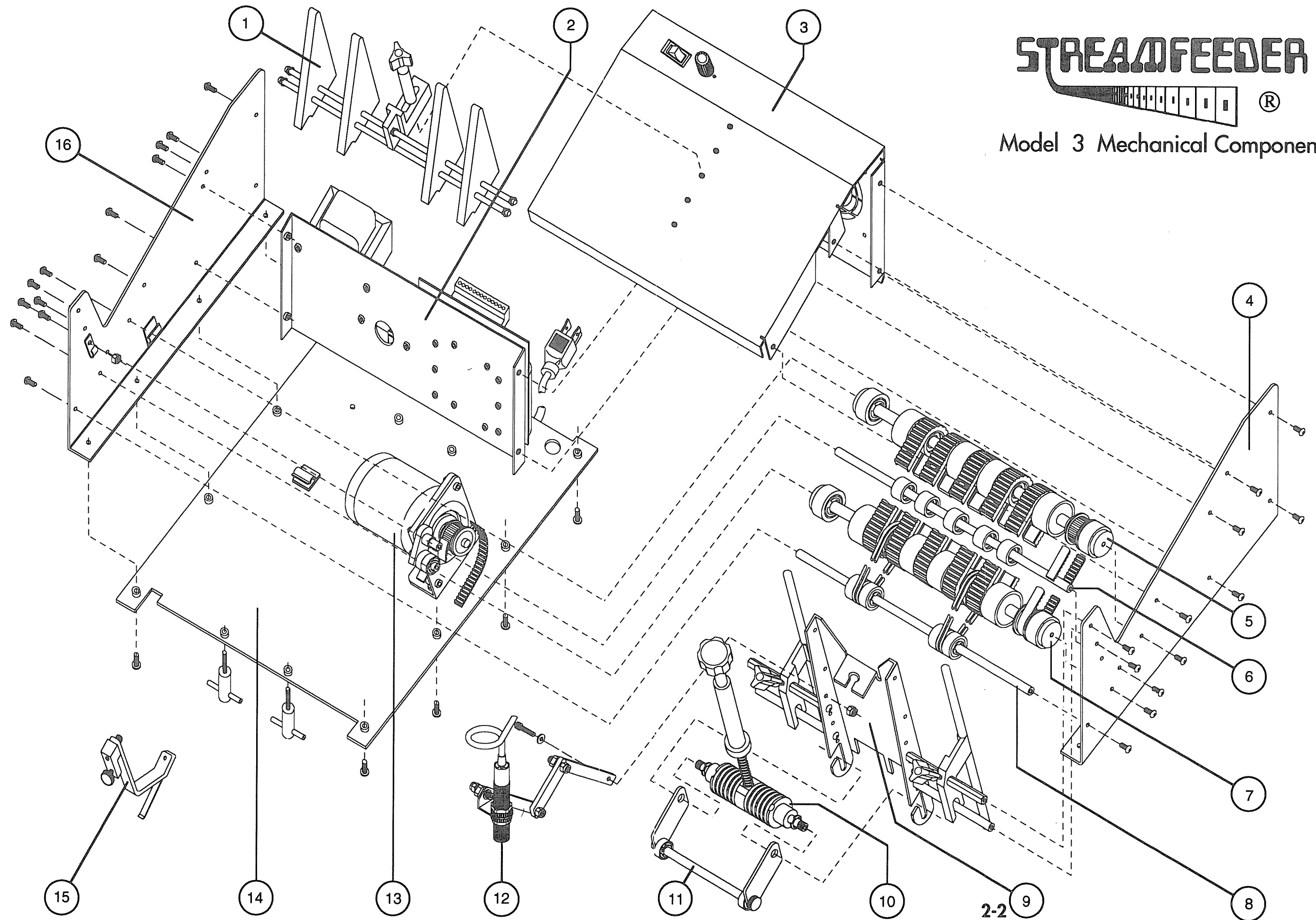
## Model 3 Mechanical Components

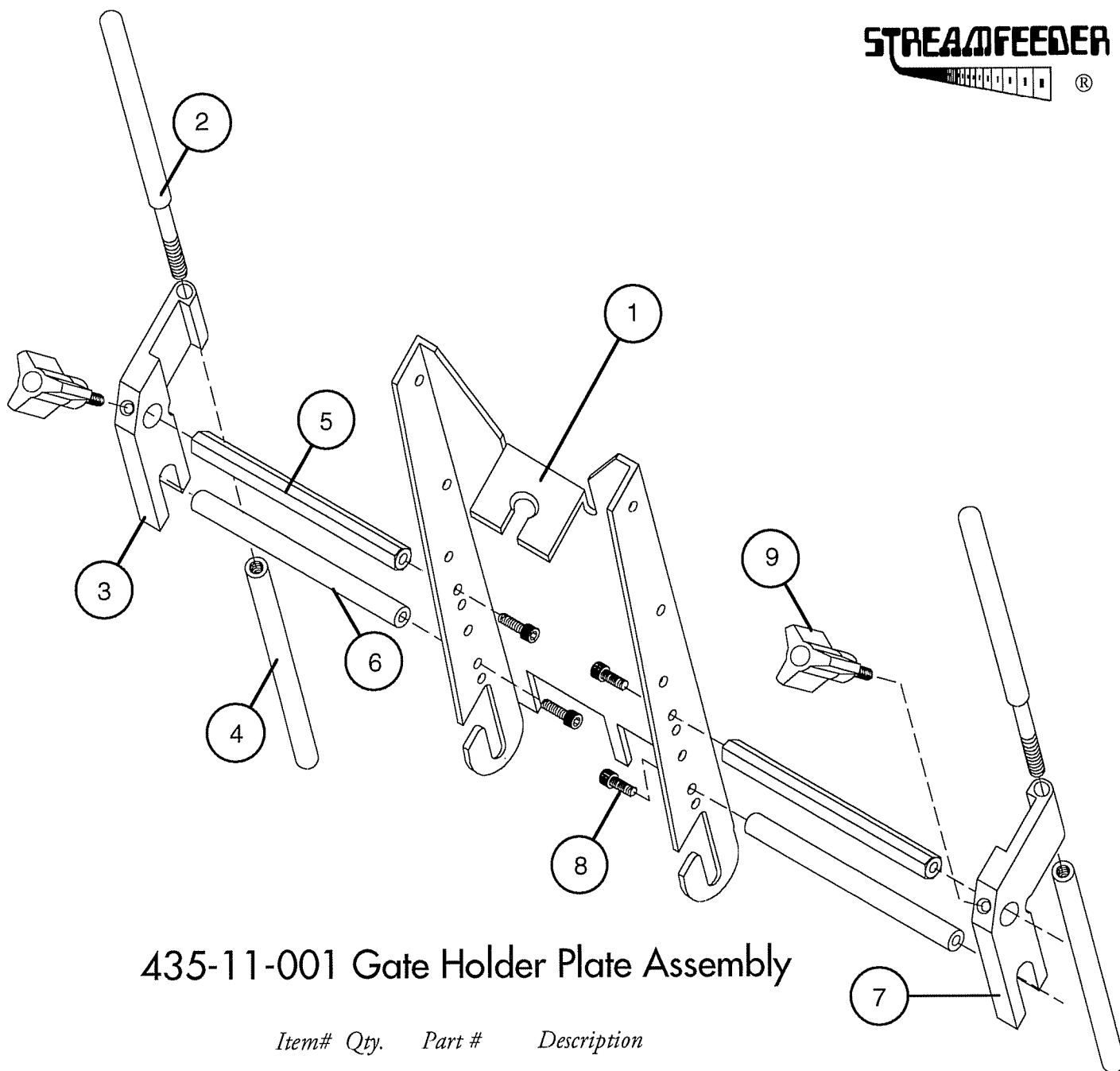
<i>Item #</i>	<i>Page #</i>	<i>Assembly #</i>	<i>Description</i>
1	2-11	435-11-018	Wedge Guide Assembly
2	2-19	535-11-097	Driver Pack Assembly
3	2-6	435-11-004	Table Top Assembly (110V)
	2-6	435-22-004	Table Top Assembly (220V)
4	2-5	435-00-003	Left-Hand Side Plate
5	2-13	435-11-026	Feed Driven Shaft Assembly
6	2-15	435-11-030	Belt Support Bearing Assembly
7	2-17	435-11-041	Feed Drive Shaft Assembly
8	2-14	435-11-029	O-Ring Discharge Assembly
9	2-3	435-11-001	Gate Holder Plate Assembly
10	2-12	235-11-020	Gate Cylinder Assembly
11	2-16	235-11-034	Discharge Assist Assembly
12	2-10	435-11-016	Sensor & Extension Assembly
13	2-18	435-11-099	Drive Motor Assembly (110V)
	2-18	435-22-099	Drive Motor Assembly (220V)
14	2-8	435-11-007	Base Plate Assembly
15	2-9	235-11-008	Standard Material Hold Down Assembly
16	2-4	435-00-002	Right-Hand Side Plate
17	2-7	235-11-006	*Tall Insert Guide Assembly
18	2-20	435-11-200	*Support Stand Assembly

\*Not Shown in Drawing on Page 2-2



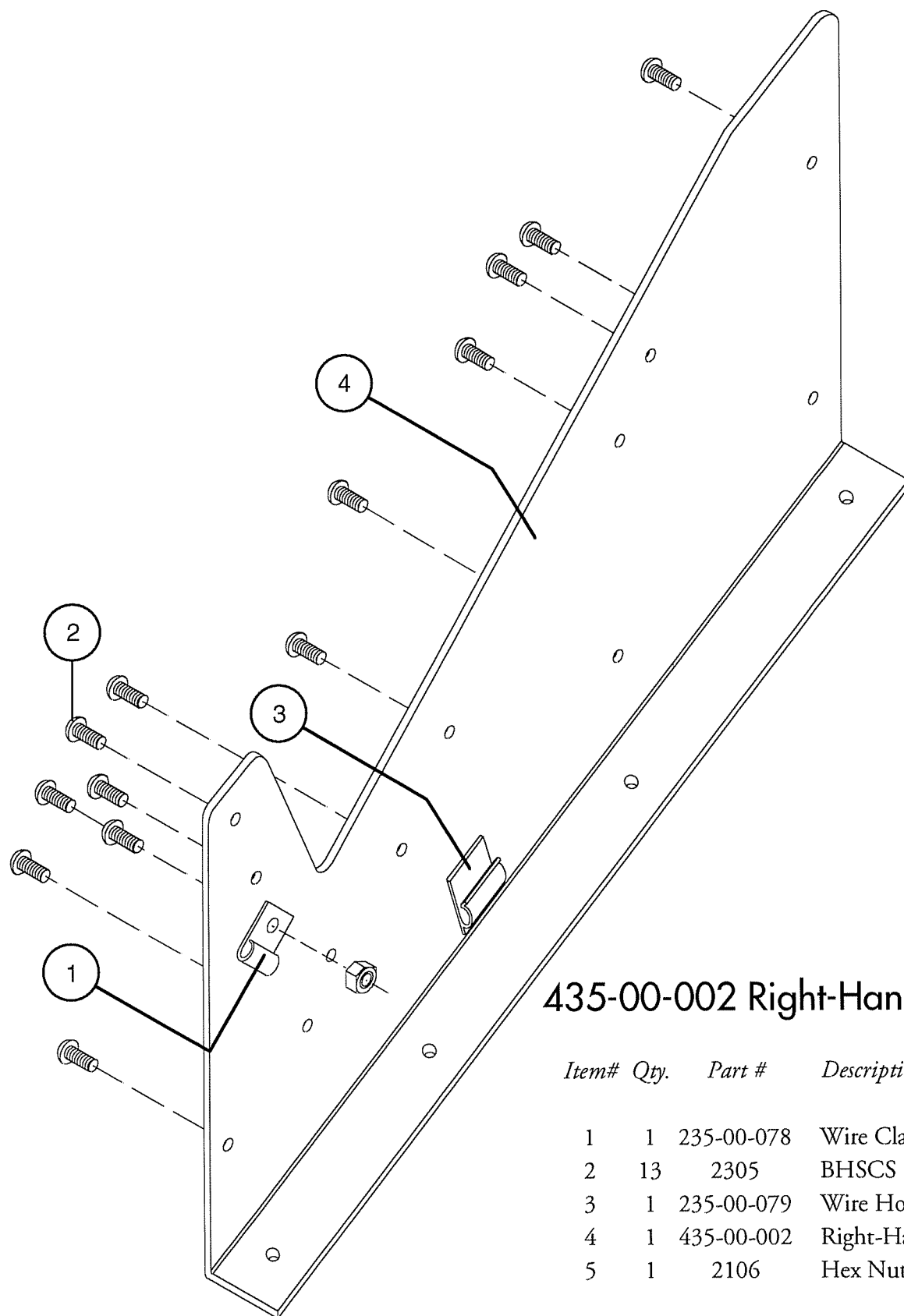
## Model 3 Mechanical Components





## 435-11-001 Gate Holder Plate Assembly

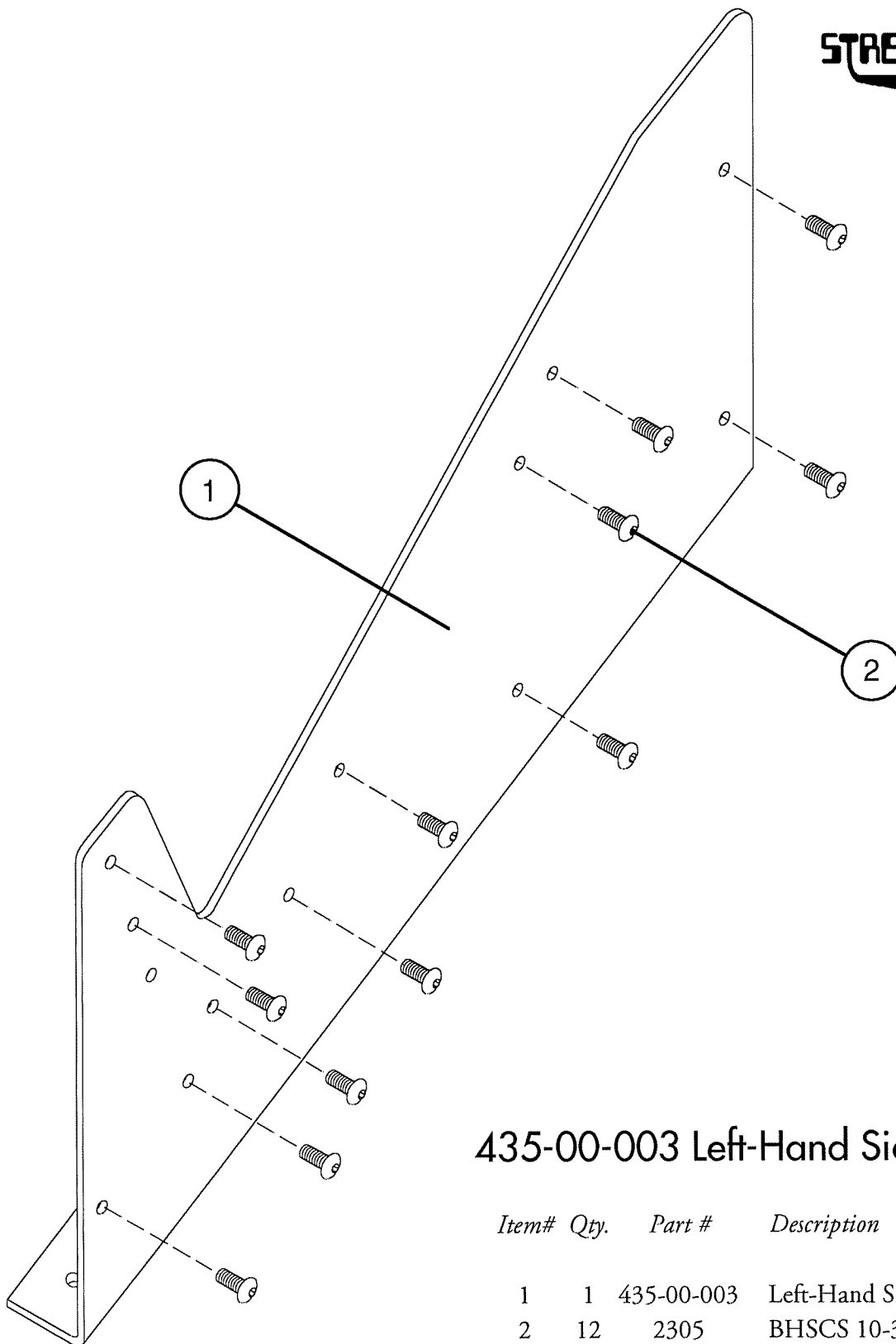
Item#	Qty.	Part #	Description
1	1	235-00-001	Gate Holder Plate
2	2	235-00-045	Short Side Guide Shaft
3	1	235-00-047	Left-Hand Side Guide Bracket
4	2	435-00-044	Lower Side Guide Shaft
5	2	435-00-043	Gate Support Shaft
6	2	435-00-049	Lower Gate Support Shaft
7	1	235-00-048	Right-Hand Side Guide Bracket
8	4	2310	SHCS 10-32 x 3/8"
9	2	235-00-092	Medium Knob



## 435-00-002 Right-Hand Side Plate

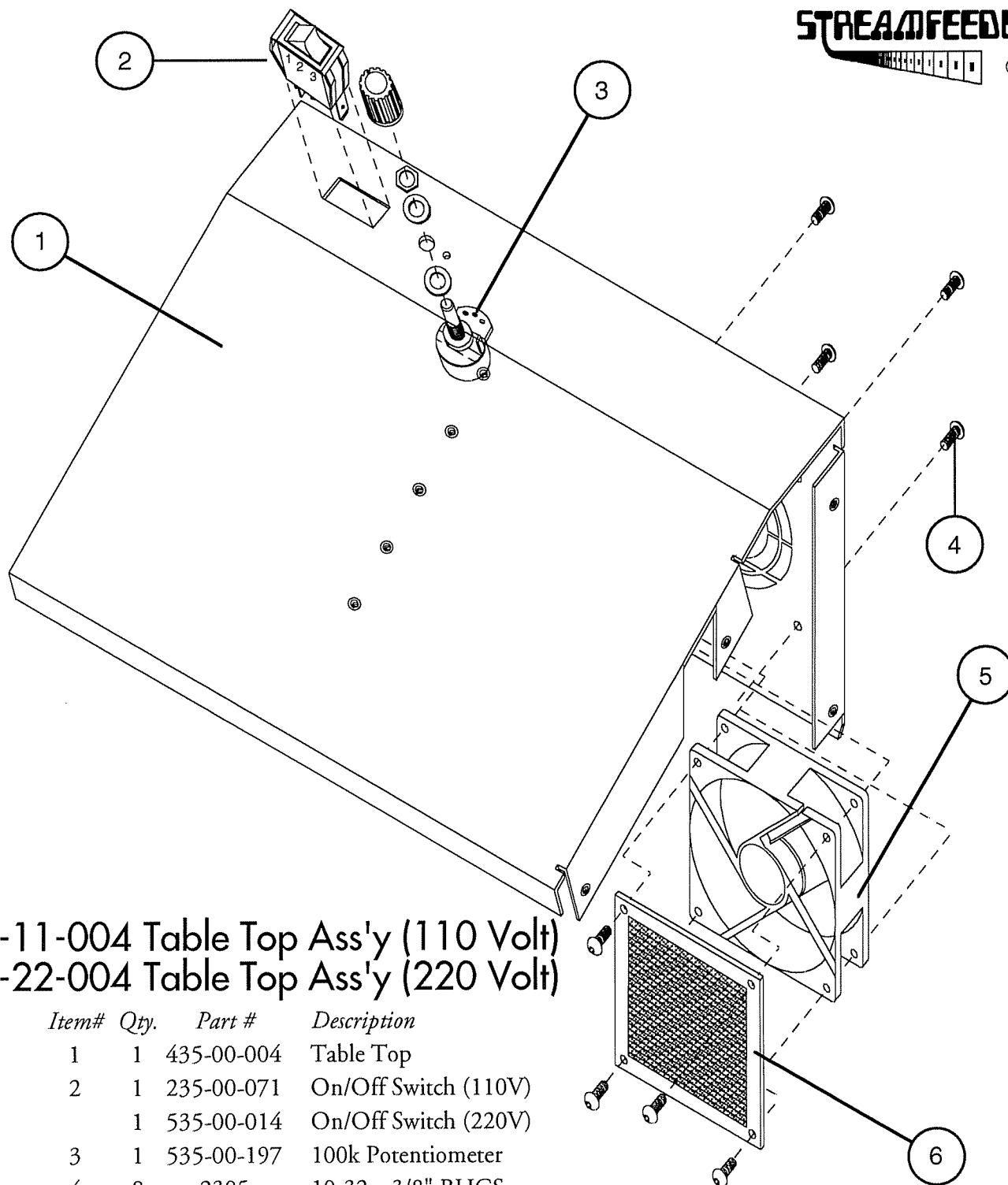
Item#	Qty.	Part #	Description
1	1	235-00-078	Wire Clamp
2	13	2305	BHSCS 10-32 x 3/8"
3	1	235-00-079	Wire Holder
4	1	435-00-002	Right-Hand Side Plate
5	1	2106	Hex Nut, 10-32





## 435-00-003 Left-Hand Side Plate

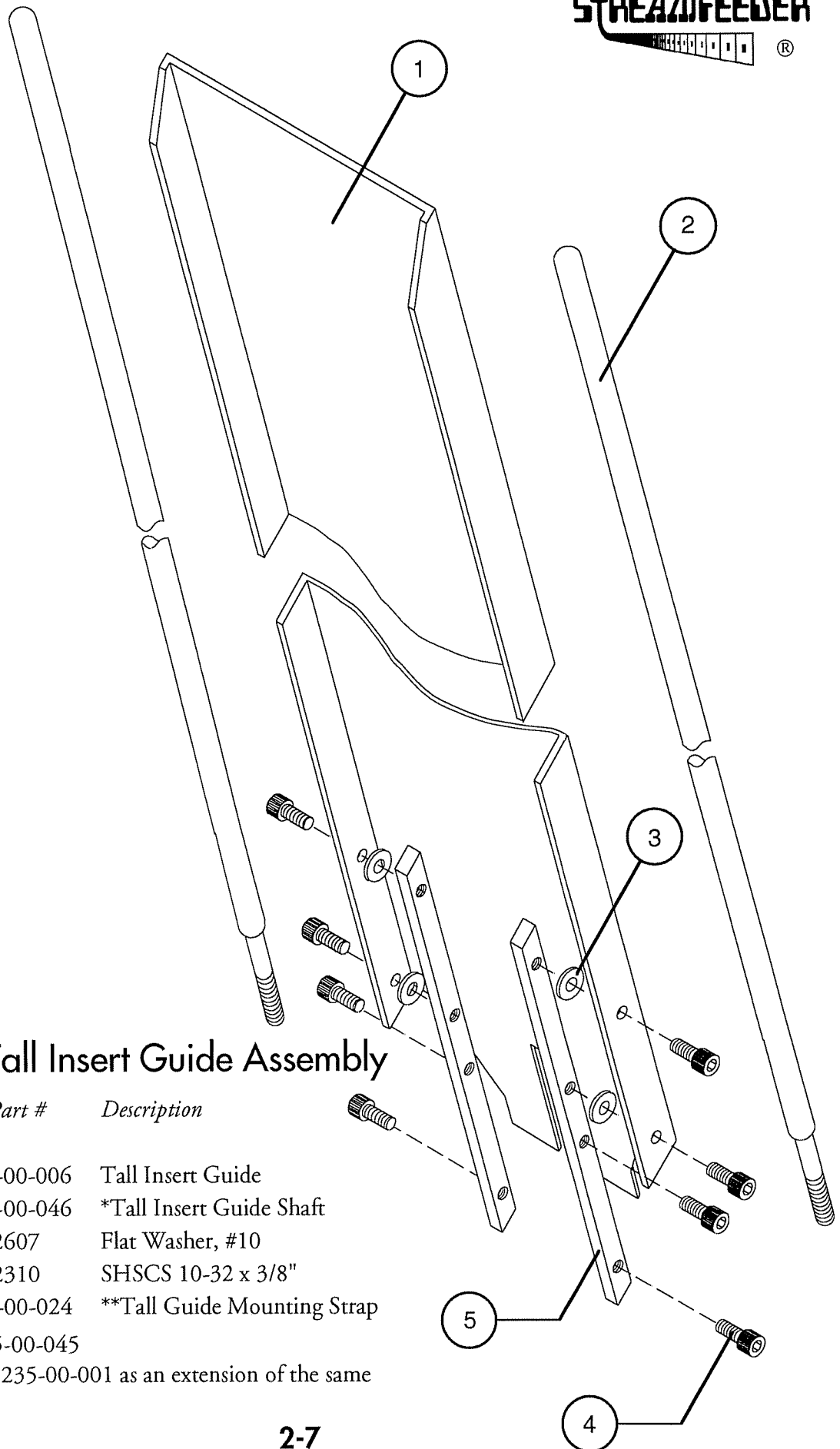
<i>Item#</i>	<i>Qty.</i>	<i>Part #</i>	<i>Description</i>
1	1	435-00-003	Left-Hand Side Plate
2	12	2305	BHSCS 10-32 x 3/8"



**435-11-004 Table Top Ass'y (110 Volt)**  
**435-22-004 Table Top Ass'y (220 Volt)**

Item#	Qty.	Part #	Description
1	1	435-00-004	Table Top
2	1	235-00-071	On/Off Switch (110V)
	1	535-00-014	On/Off Switch (220V)
3	1	535-00-197	100k Potentiometer
4	8	2305	10-32 x 3/8" BHCS
5	1	535-00-004	Fan
6	1	535-00-105	Fan Filter Screen
NS	1	435-00-065	2.5 AMP Mylar Label
NS	1	535-00-121	240V Decal
NS	1	235-00-064	USA Label
NS	1	235-00-066	Nameplate
NS	4	1101	Drive Screw

NS Items Not Shown On Drawing

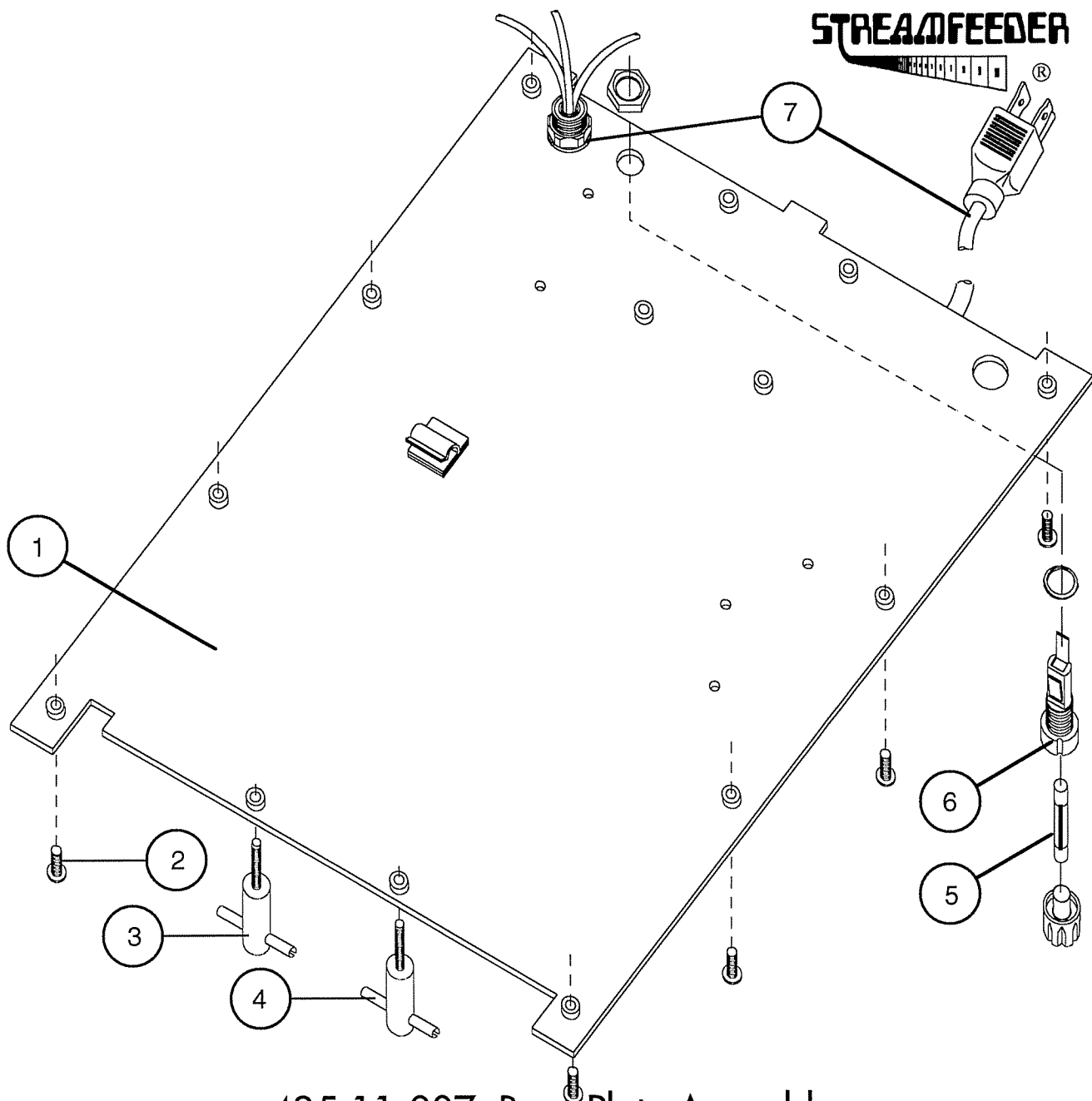


## 235-11-006 Tall Insert Guide Assembly

Item#	Qty.	Part #	Description
1	1	235-00-006	Tall Insert Guide
2	2	235-00-046	*Tall Insert Guide Shaft
3	4	2607	Flat Washer, #10
4	8	2310	SHSCS 10-32 x 3/8"
5	2	235-00-024	**Tall Guide Mounting Strap

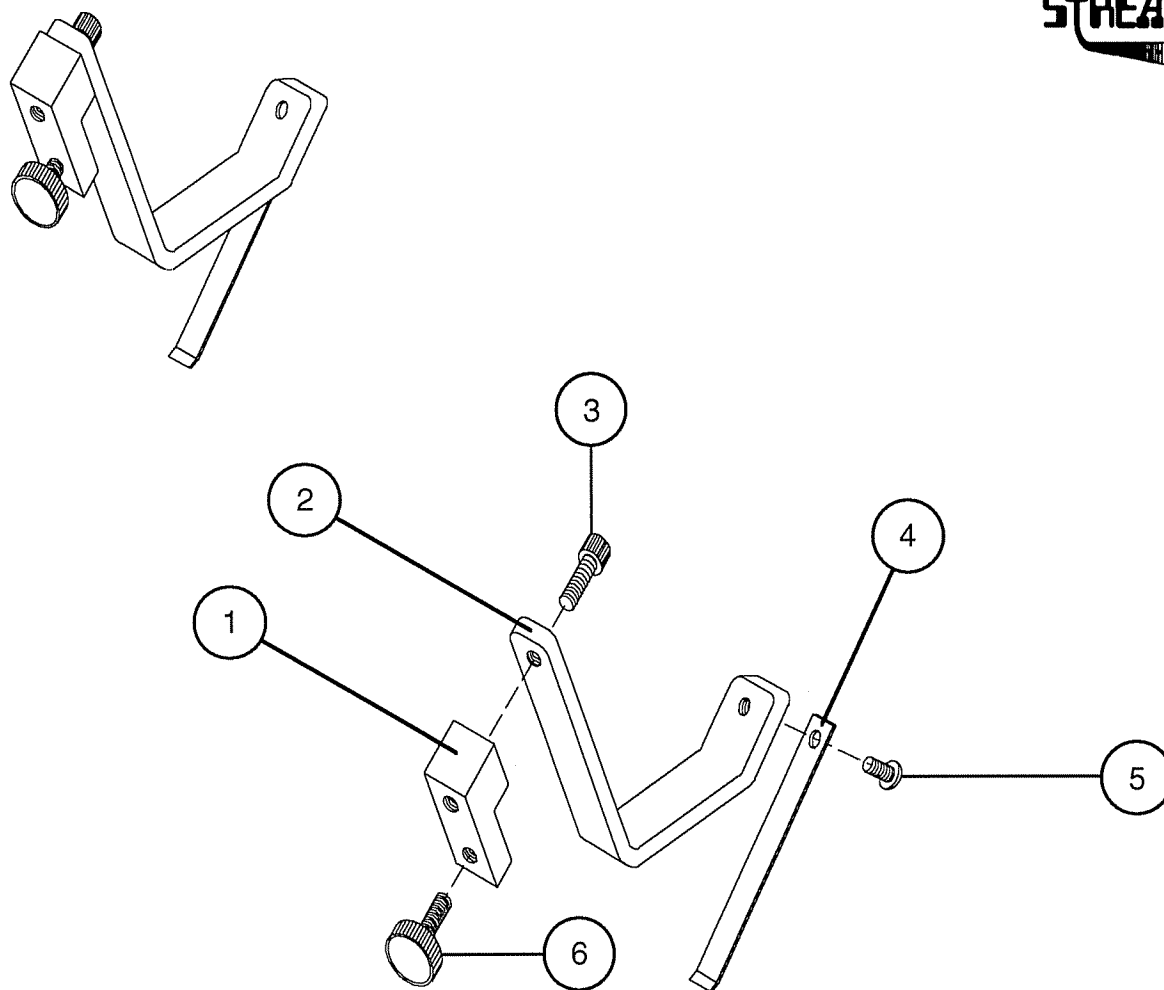
\* Replaces 235-00-045

\*\* Attaches to 235-00-001 as an extension of the same



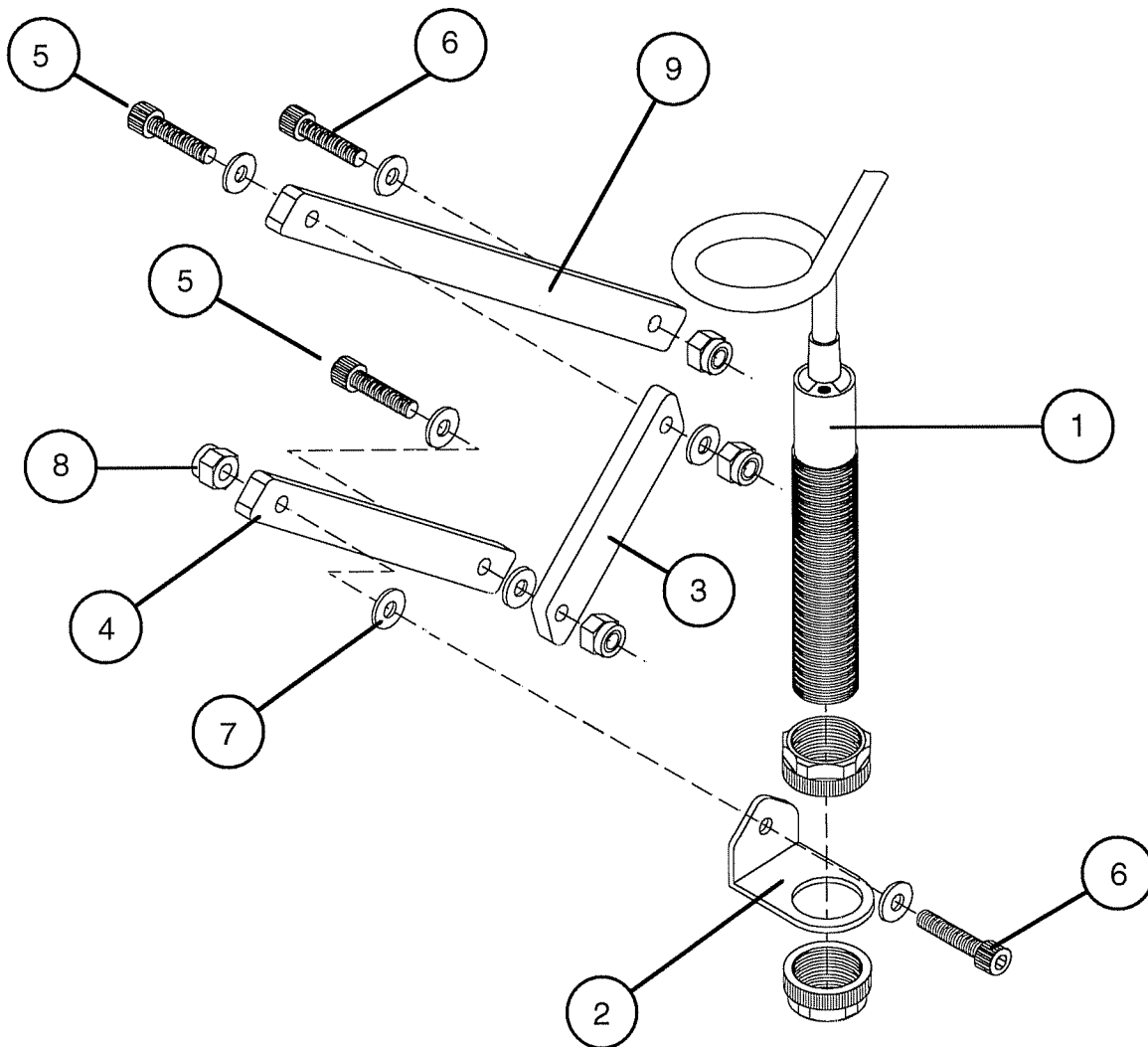
## 435-11-007 Base Plate Assembly

Item#	Qty.	Part #	Description
1	1	435-00-007	Base Plate
2	8	2305	10-32 x 3/8" BHCS
3	2	435-00-022	Locking Screw
4	2	1100	Spring Pin
5	1	435-00-084	Fuse, 2.5 AMP
6	1	335-00-085	Fuse Holder
7	1	435-11-087	Power Cord Assembly
8	1	235-00-079	Wire Holder
NS	1	435-11-076	Wire Lead
NS	Items Not Shown On Drawing		



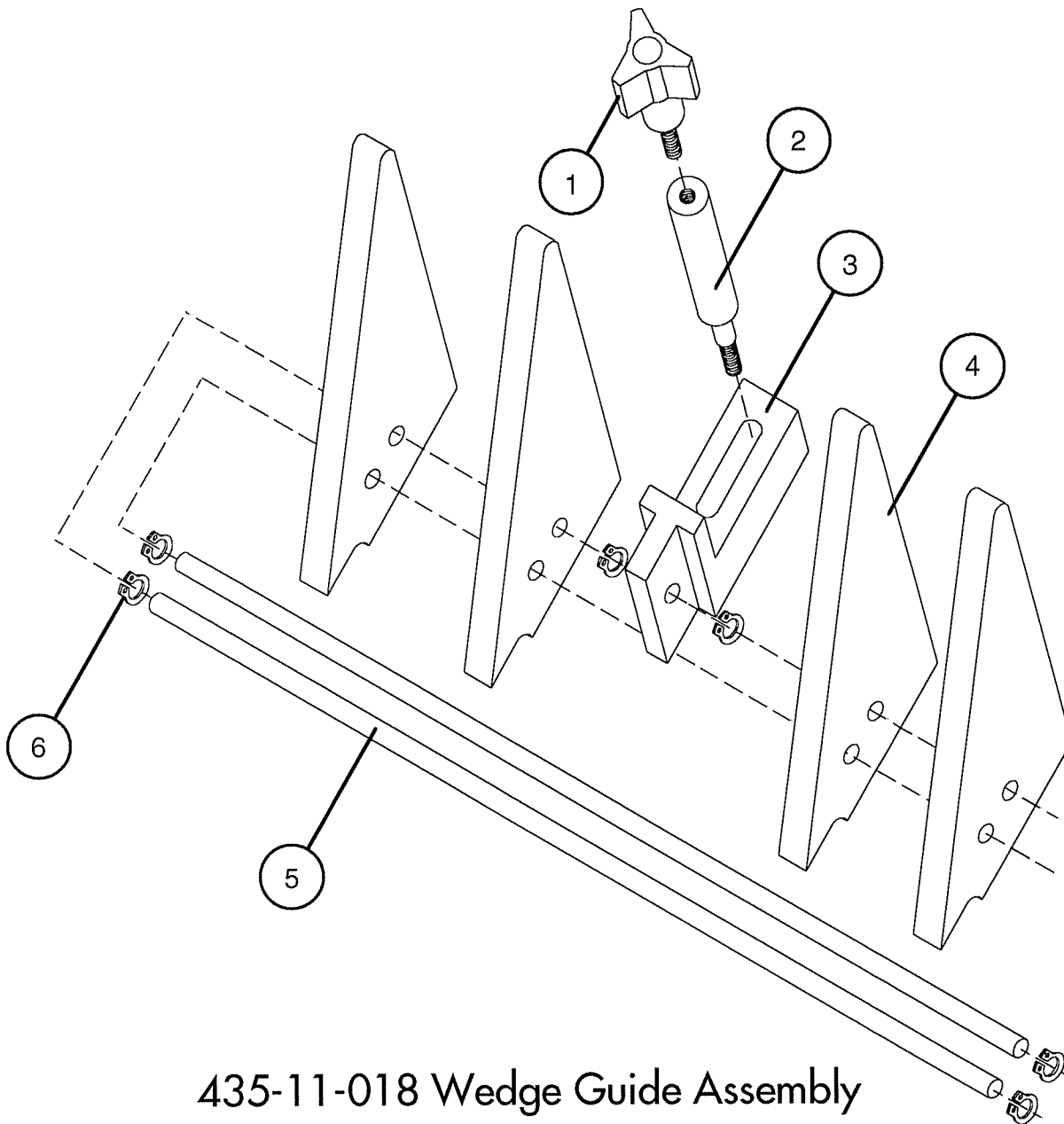
## 235-11-008 Standard Material Hold Down Assembly (Two Full Assemblies Required per Machine)

<i>Item#</i>	<i>Qty.</i>	<i>Part #</i>	<i>Description</i>
1	1	235-00-008	Material Guide Bracket
2	1	235-00-009	Material Guide Bar
3	1	2315	BHSCS 10-32 x 1/2"
4	1	235-00-010	Material Hold Down Spring
5	1	2210	BHSCS 8-32 x 1/4"
6	1	235-00-091	Small Thumb Screw
		2315	SHCS 10-32 x 1/2"



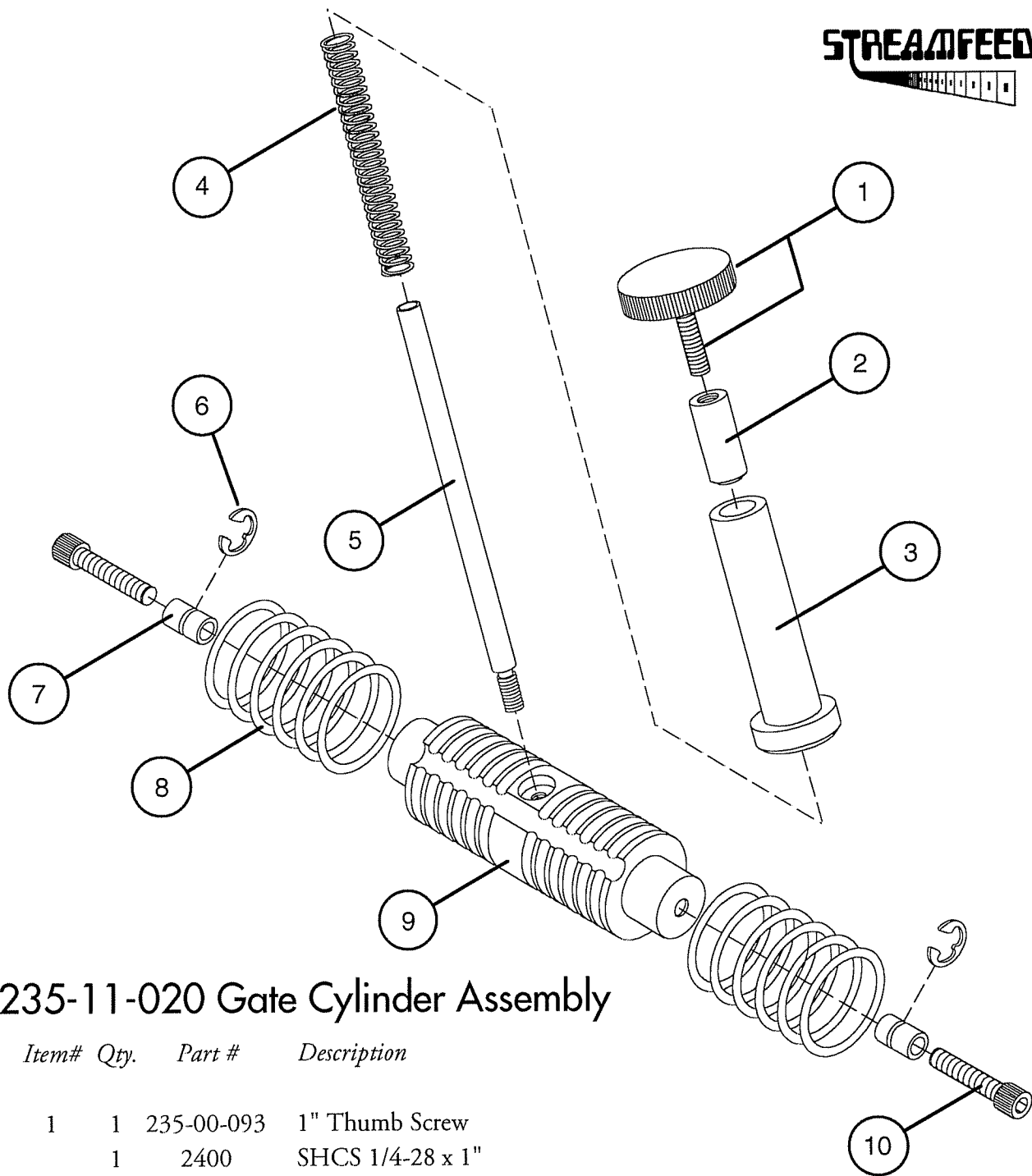
## 435-11-016 Sensor Extension Assembly

Item#	Qty.	Part #	Description
<del>1</del>	<del>1</del>	<del>535-00-038</del>	<del>Proximity Sensor w/ Nuts &amp; Washers</del>
2	1	235-00-007	Sensor Bracket
3	1	235-00-015	Sensor Extension Bracket "A"
4	1	235-00-016	Sensor Extension Bracket "B"
5	2	2325	SHCS 10-32 x 3/4"
6	2	2320	SHCS 10-32 x 5/8"
7	8	2607	Flat Washer #10
8	4	2110	Nylock Nut 10-32
9	1	435-00-016	Sensor Extension
<del>NS</del>	<del>2</del>	<del>235-00-080</del>	<del>Cable Tie</del>
NS Items Not Shown On Drawing			



## 435-11-018 Wedge Guide Assembly

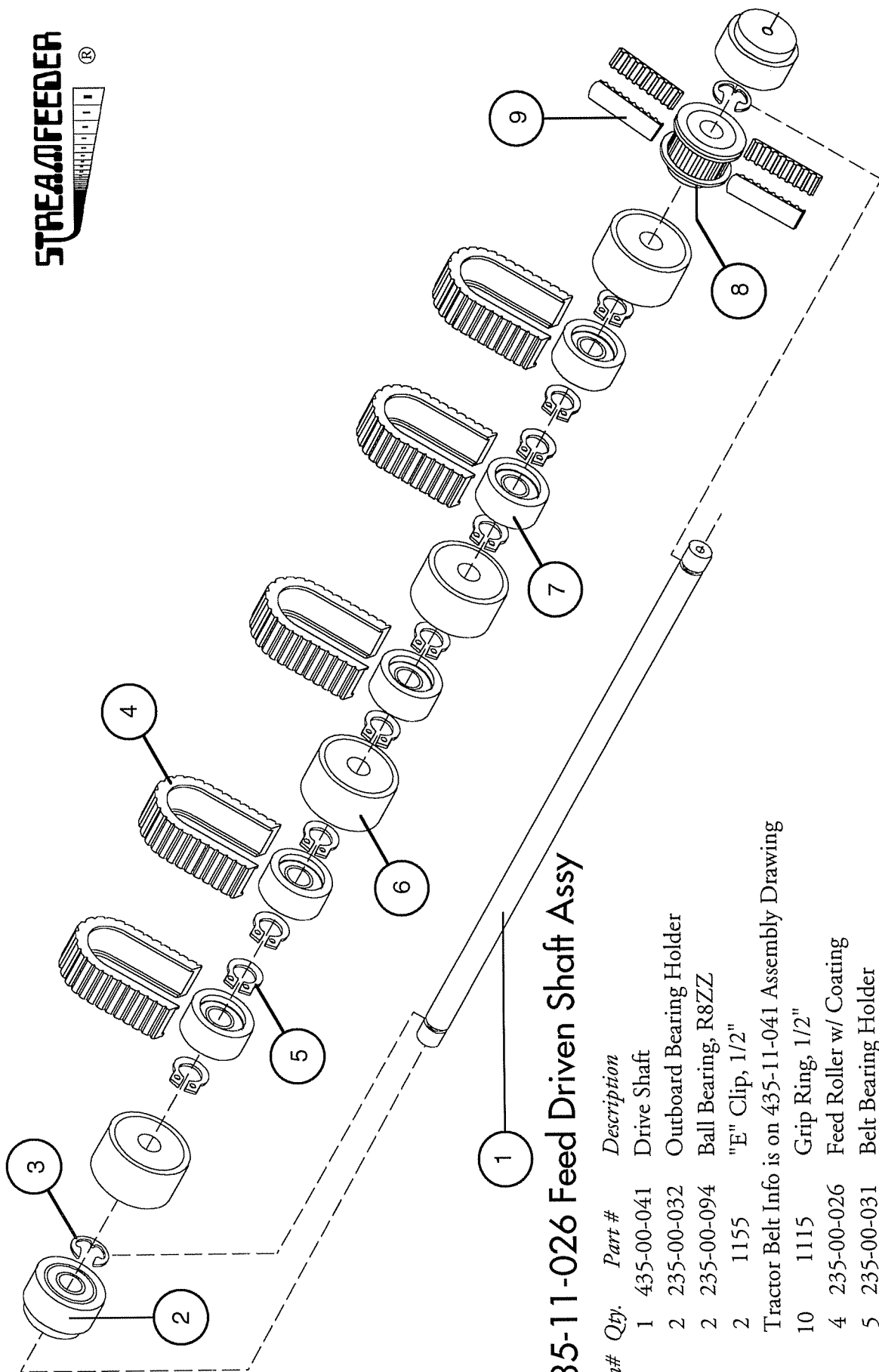
Item#	Qty.	Part #	Description
1	1	235-00-092	Medium Knob
2	1	235-00-023	Knob Extension
3	1	235-00-017	Wedge Hold Down Bracket
4	4	435-00-018	Material Support Wedge
5	2	435-00-033	Wedge Guide Shaft
6	6	1105	Grip Ring 1/4"



## 235-11-020 Gate Cylinder Assembly

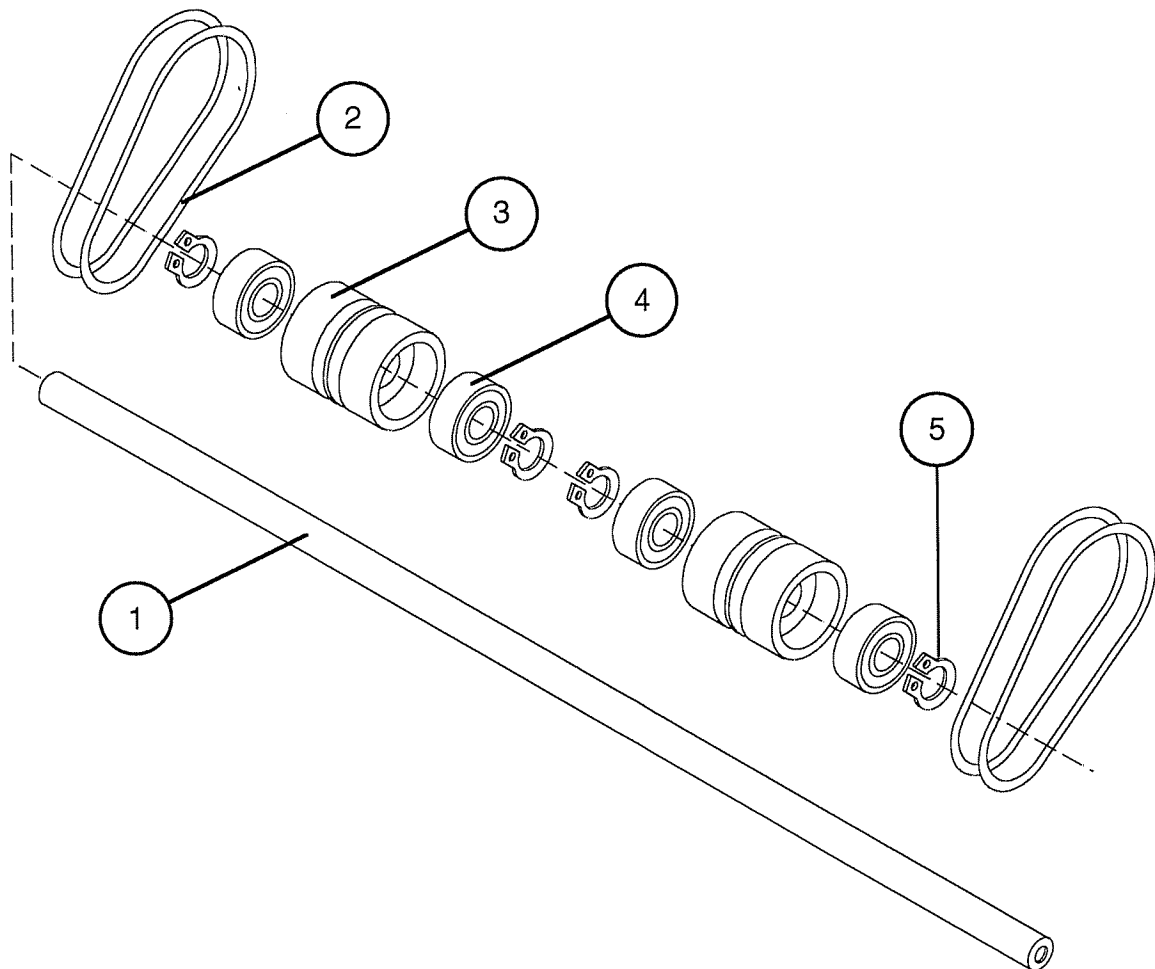
Item#	Qty.	Part #	Description
1	1	235-00-093	1" Thumb Screw
	1	2400	SHCS 1/4-28 x 1"
2	1	235-00-037	Adjustment Knob Sleeve
3	1	235-00-019	Gate Spring Tension Cylinder
4	1	235-00-083	Gate Compression Spring
5	1	235-00-035	Gate Lift Shaft
6	2	1150	"E" Clip 3/8"
7	2	235-00-082	Spacer, 1/2"
8	12	235-00-089	Gate Cylinder O-Ring
9	1	235-00-020	Gate Cylinder
10	2	2390	SHCS 1/4 x 20 x 1"





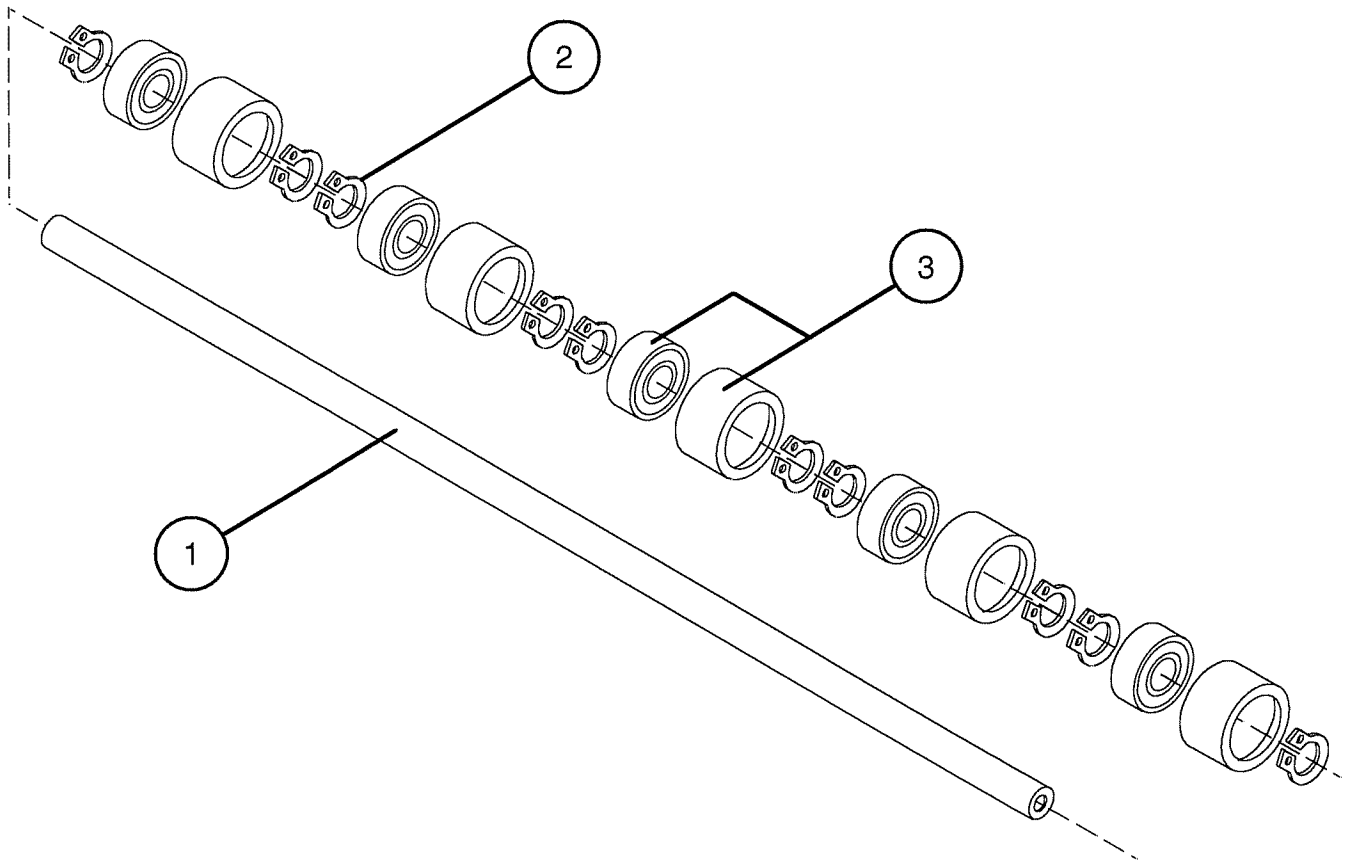
## 435-11-026 Feed Driven Shaft Assy

Item#	Qty.	Part #	Description
1	1	435-00-041	Drive Shaft
2	2	235-00-032	Outboard Bearing Holder
2	2	235-00-094	Ball Bearing, R8ZZ
3	2	1155	"E" Clip, 1/2"
Tractor Belt Info is on 435-11-041 Assembly Drawing			
5	10	1115	Grip Ring, 1/2"
6	4	235-00-026	Feed Roller w/ Coating
7	5	235-00-031	Belt Bearing Holder
5	5	235-00-094	Ball Bearing, R8ZZ
8	1	235-00-097	Driven Timing Pulley
Drive Belt Info is on 435-11-041 Assembly Drawing			
NS	6	2217	Set Screw, 10-32 x 1/4"



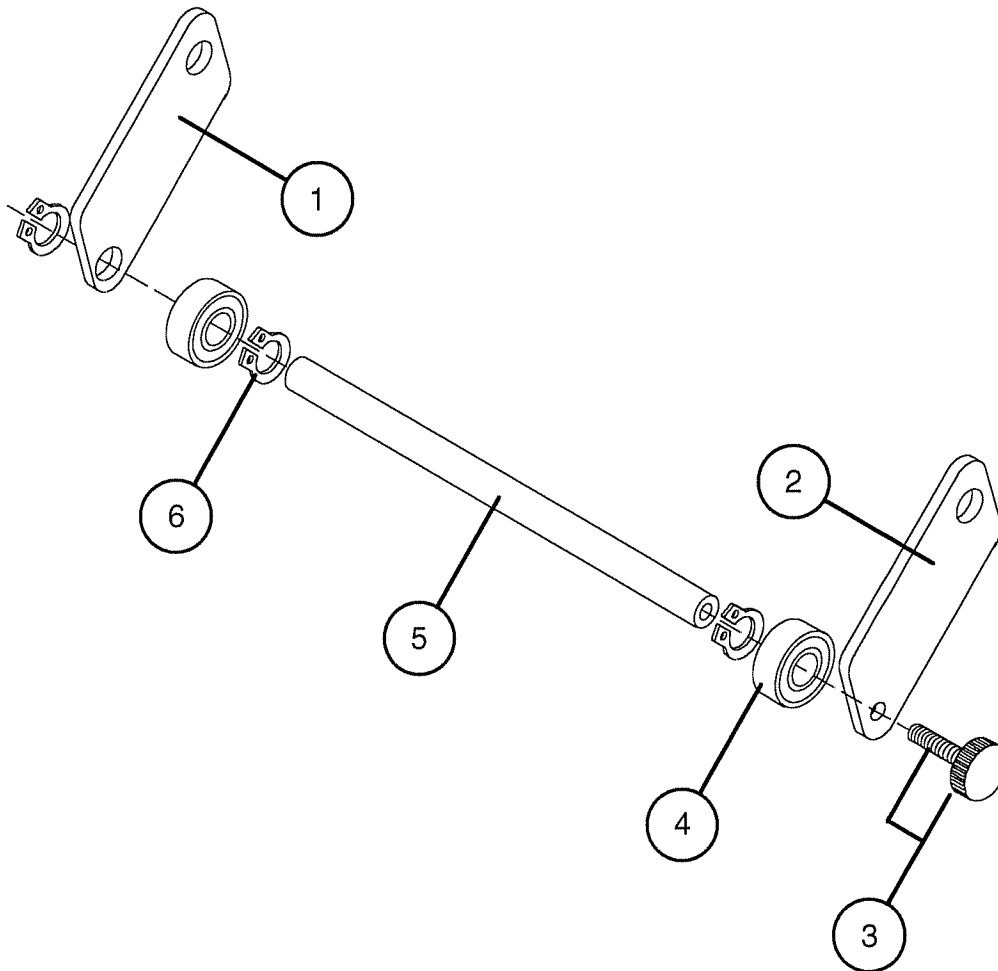
## 435-11-029 O-Ring Discharge Assembly

<i>Item#</i>	<i>Qty.</i>	<i>Part #</i>	<i>Description</i>
1	1	435-00-036	Discharge Shaft
2	4	235-00-090	Discharge O-Ring
3	2	235-00-029	O-Ring Bearing Pulley
4	4	235-00-095	Ball Bearing, R6ZZ
5	4	1110	Grip Ring, 3/8"



## 435-11-030 Belt Support Bearing Assembly

<i>Item#</i>	<i>Qty.</i>	<i>Part #</i>	<i>Description</i>
1	1	435-00-036	Belt Support Bearing Shaft
2	10	1110	Grip Ring, 3/8"
3	5	235-00-030	Belt Support Bearing Holder
	5	235-00-095	Ball Bearing, R6ZZ

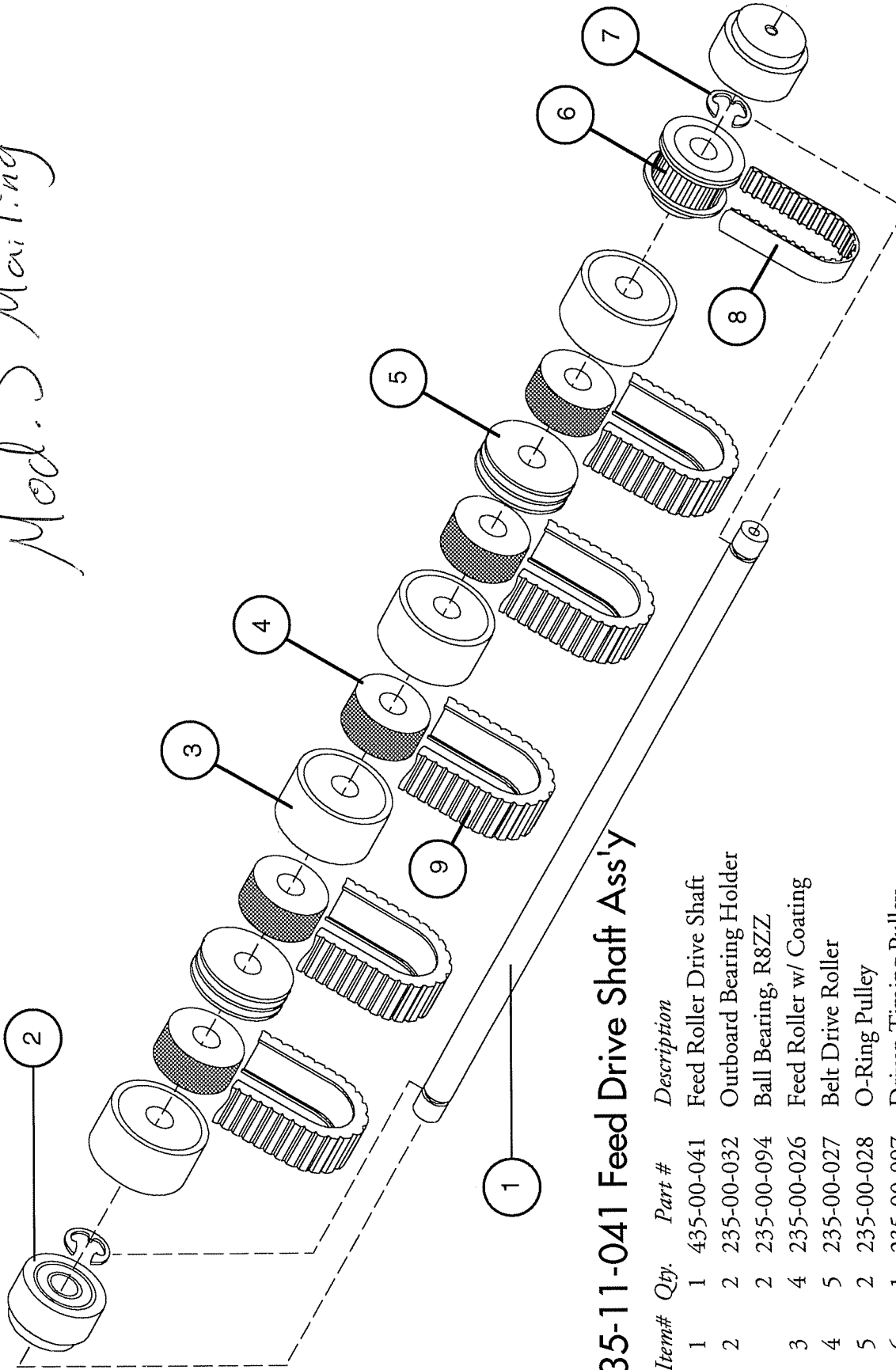


## 235-11-034 Discharge Assist Assembly

<i>Item#</i>	<i>Qty.</i>	<i>Part #</i>	<i>Description</i>
1	1	235-00-014	Left-Hand Discharge Bracket
2	1	235-00-013	Right-Hand Discharge Bracket
3	1	235-00-091	Small Thumb Screw Knob
	1	2315	SHCS 10-32 x 1/2"
4	2	235-00-095	Ball Bearing R6ZZ
5	1	235-00-034	Discharge Bracket Shaft
6	3	1110	Grip Ring 3/8"

~~Revised~~

Mod. 3 Mailing



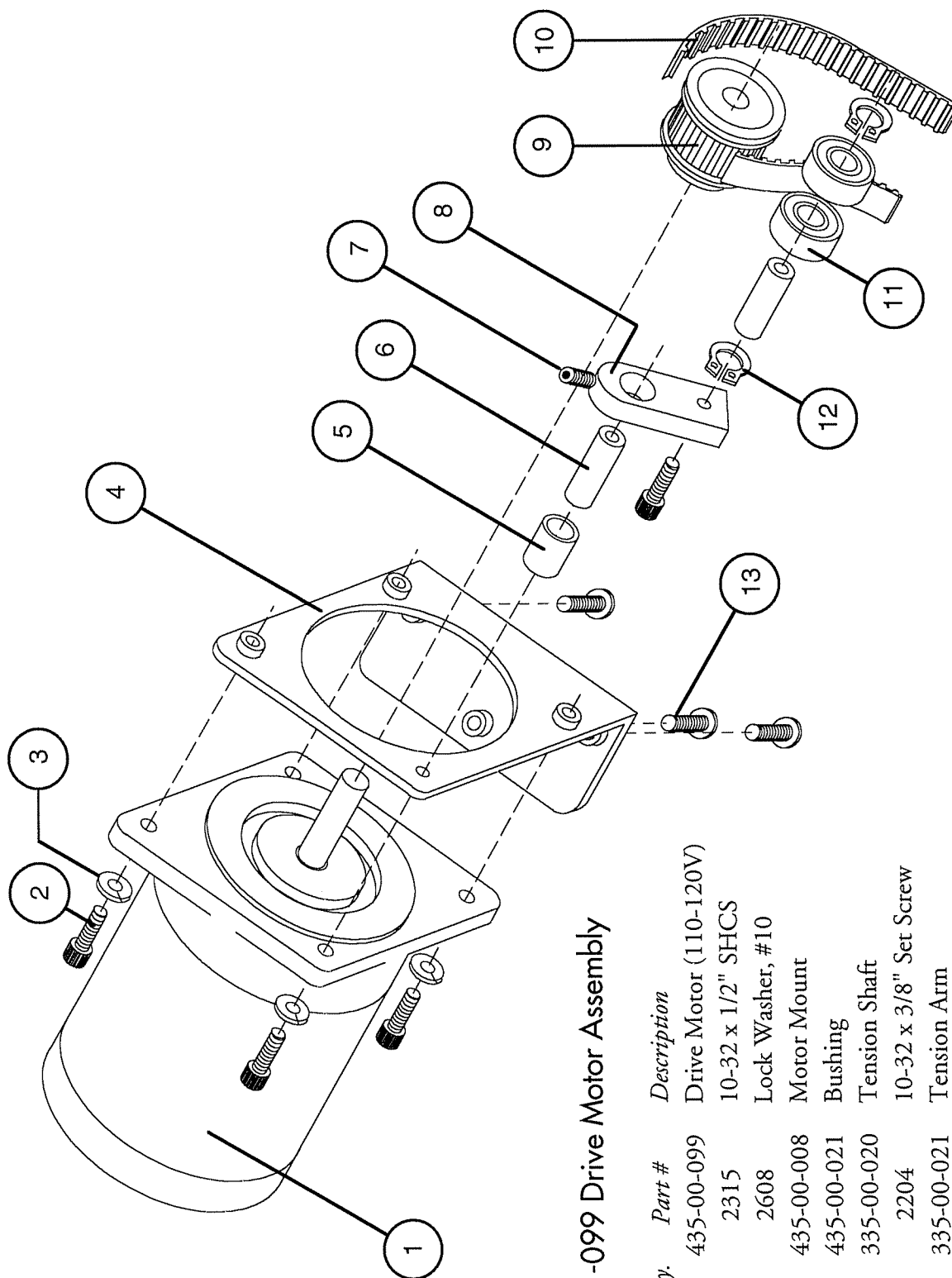
### 435-11-041 Feed Drive Shaft Ass'y

Item#	Qty.	Part #	Description
1	1	435-00-041	Feed Roller Drive Shaft
2	2	235-00-032	Outboard Bearing Holder
	2	235-00-094	Ball Bearing, R8ZZ
3	4	235-00-026	Feed Roller w/ Coating
4	5	235-00-027	Belt Drive Roller
5	2	235-00-028	O-Ring Pulley
6	1	235-00-097	Driven Timing Pulley
7	2	1155	"E" Clip, 1/2"
8	1	435-00-096	Drive Belt
9	5	235-00-088	Tractor Belt

NS 13 2217 Set Screw, 10-32 x 1/4"

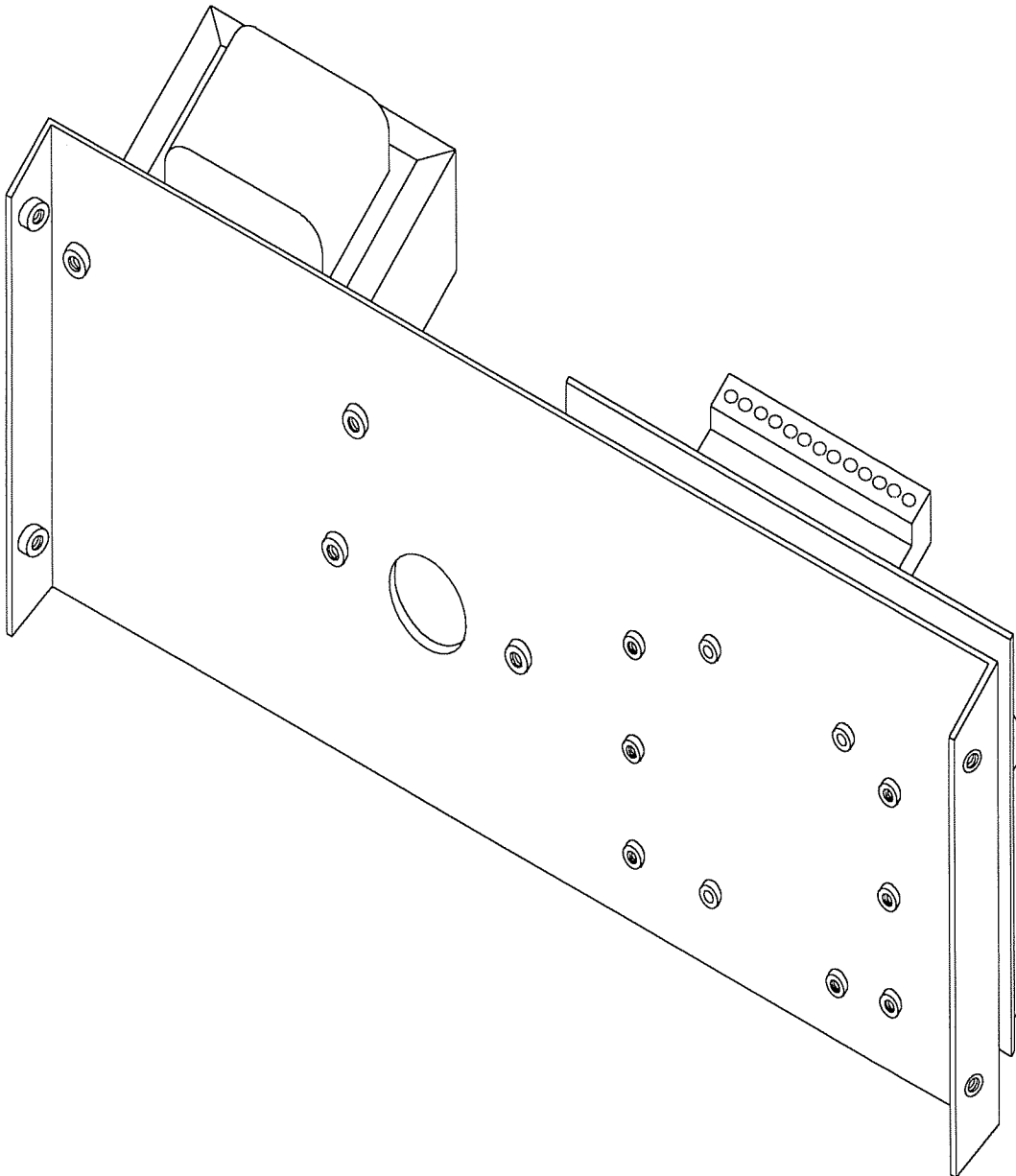
NS Items Not Shown On Drawing

**STREAMFEEDER**  
®



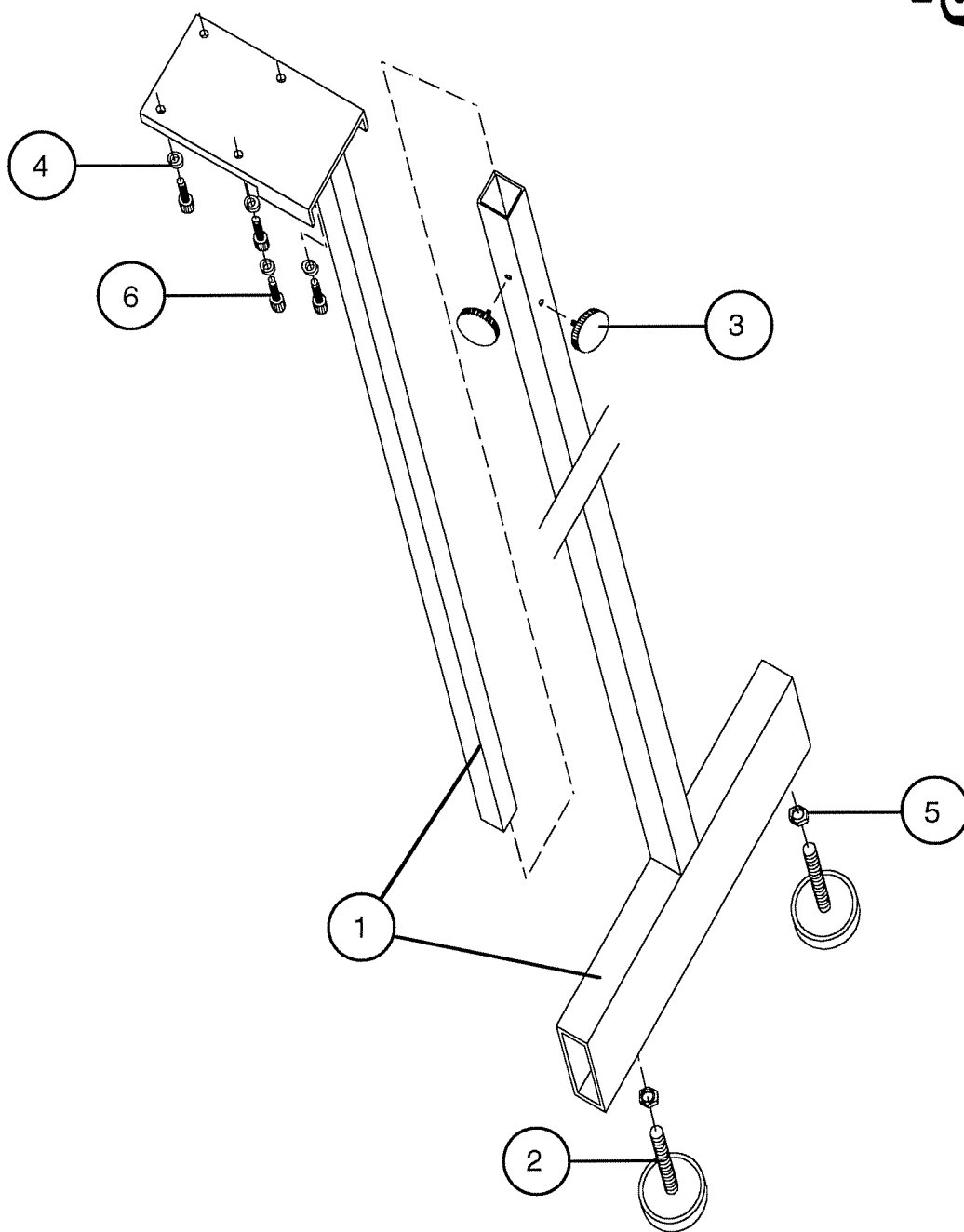
### 435-11-099 Drive Motor Assembly

Item#	Qty.	Part #	Description
1	1	435-00-099	Drive Motor (110-120V)
2	5	2315	10-32 x 1/2" SHCS
3	4	2608	Lock Washer, #10
4	1	435-00-008	Motor Mount
5	1	435-00-021	Bushing
6	2	335-00-020	Tension Shaft
7	1	2204	10-32 x 3/8" Set Screw
8	1	335-00-021	Tension Arm
9	1	435-00-098	Drive Timing Pulley
10	Drive Belt Info. is on 435-11-041 Assembly Drawing		
11	2	235-00-095	Ball Bearing, R6ZZ
12	2	1110	Grip Ring, 3/8"
13	3	2305	10-32 x 3/8" BHSCS



## 535-11-097 Driver Pack Assembly

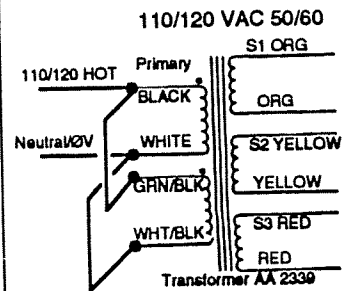
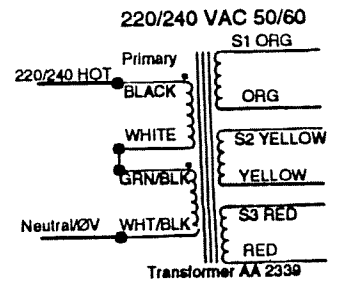
<i>Item#</i>	<i>Qty.</i>	<i>Part #</i>	<i>Description</i>
NS	1	535-00-115	Chase Nipple
NS	1	535-00-116	Lock Nut



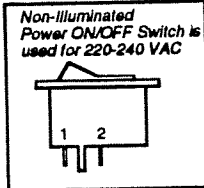
## 435-11-200 Support Stand Assembly

Item#	Qty.	Part #	Description
1	1	435-00-200	Support Stand
2	2		Support Feet (Included With Stand)
3	2	235-00-093	Large Thumb Screw
	2	2360	SHCS 1/4-20 x 1/2
4	4	2607	Flat Washer #10
5	2	2104	Hex Nut 3/8
6	4	2315	SHCS 10-32 x 1/2





Illuminated  
Power ON/OFF Switch  
(Note: 115 VAC ONLY)



Fuse  
Amp 2.5  
Buss MDL 2.5  
GMD3 or  
equivalent

Line Cord  
115 VAC, 50/60 Hz  
2.5 amp maximum

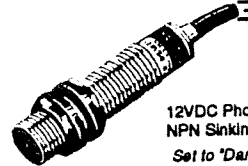
### Safety Warnings

1. Replace fuse **ONLY** with 2.5 amp fuse
2. You **MUST** use a 3-hole, properly grounded outlet.  
DO NOT remove or otherwise disable the grounding  
lug on the plug!
3. Use only exact replacement parts when servicing  
the Streamfeeder™ machine.

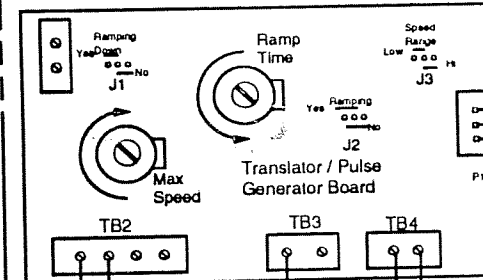
12 VDC Cooling Fan



12VDC Photo Detector  
NPN Sinking Output  
Set to "Dark ON" mode



### Stepper Drive Package



Operator Speed  
Adjust Pot  
100 KΩ

Stepper Motor  
Driver

Motor  
Step Motor  
Main Drive

1	Motor Ø1
2	Motor Ø3
3	1&3 COMM
4	VLV
5	D/C-CCW
6	CLK-CW
7	ØVDC
8	MODE
9	ON/OFF
10	VHV
11	2&4 COMM
12	Motor Ø2
13	Motor Ø4

Power  
Terminal  
Strip

L. BLUE

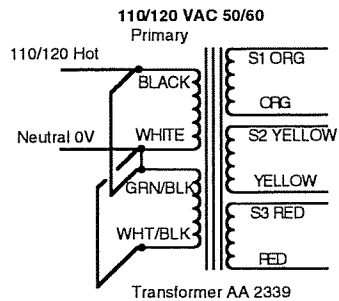
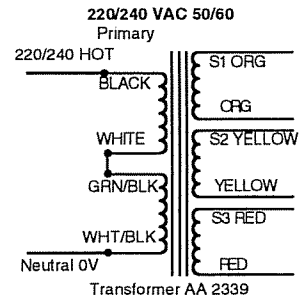
BROWN

GRN-Yel/Ground

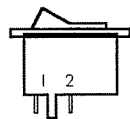
By:	KN		Title:	Model III Electrical Connection Diagram
Date:	4 DEC 92		Drg. No.	Engineering Bulletin 003.3

### Safety Warnings

1. Replace fuse **ONLY** with Buss MDL 2.5 amp.
2. You **MUST** use a 3-hole, properly grounded outlet. **DO NOT** remove or otherwise disable the grounding lug on the plug!
3. Use only exact replacement parts when servicing the Streamfeeder™ machine.



Non-Illuminated  
Power ON/Off Switch  
used for 220-240VAC



Illuminated  
Power ON/Off Switch  
(note: 115VAC ONLY)

Fuse MDL  
2.5 Amp  
Buss GMD 3 or  
equivalent

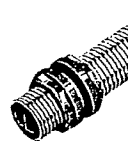
Brown/Hot

Line Cord  
115VAC, 50/60 Hz  
2.5 amp maximum

Cooling Fan  
12VDC  
(See attached  
Specification  
sheet)



Red  
Black  
Brown

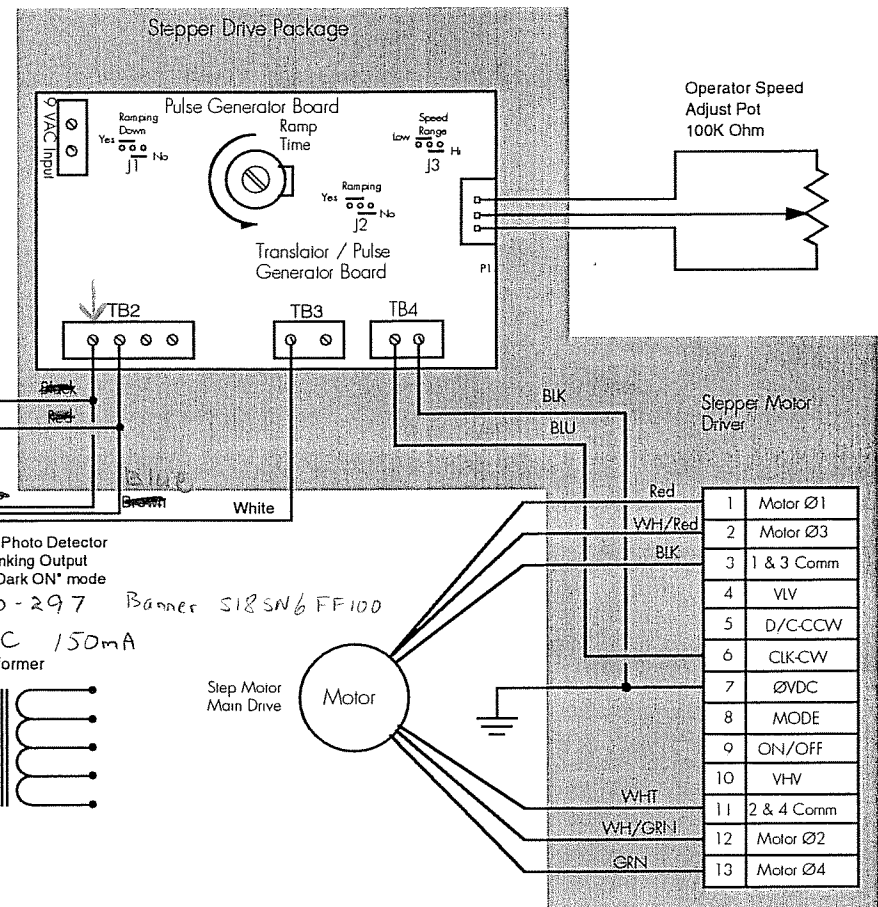


12VDC Photo Detector  
NPN Sinking Output  
set to "Dark ON" mode

535-00-297 Banner S18SN6 FF100  
10-30VDC 150mA  
Transformer

Li Blue Neutral  
Brown Hot

GRN/Yel/Ground



Rev #4 6-12-95 PB Omitted Max Speed Pot Refer To ECO #114

Rev #3 6-7-95 PB Changed Colors Of Wires To Photocell Refer To ECO #114

Rev #4 1-17-95 MK Added ground lead to pin 7 on driver terminal Refer To ECO #114

Rev #9 9-28-94 MK Added transformer symbol and changed wire markings to Neutral and Hot Refer To ECO #114

Drawn:

KN

Date:

4 Dec 92

**Streamfeeder**

© 1993

Title: Model III & III Ex Electrical  
Connection Diagram

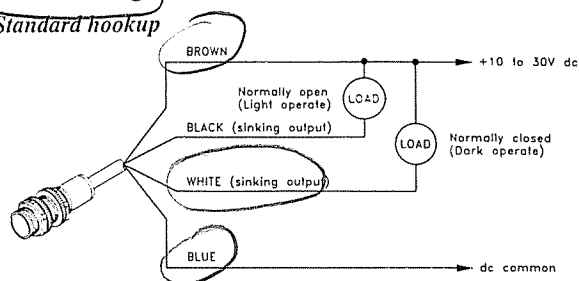
Drg. No.

Engineering Bulletin 104 R4

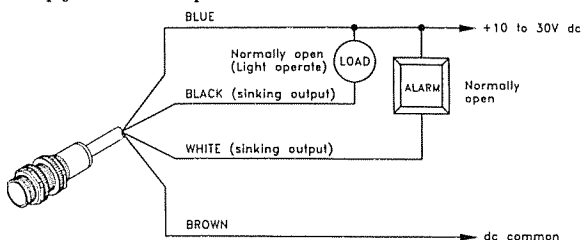
## Hookup, S18 Series dc fixed-field sensors

**NPN (sinking) models S18SN6FF50(Q) and S18SN6FF100(Q)**

### Standard hookup

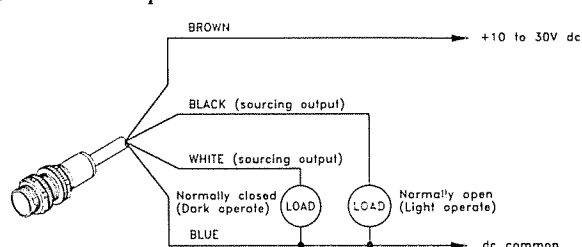


### Hookup for alarm output

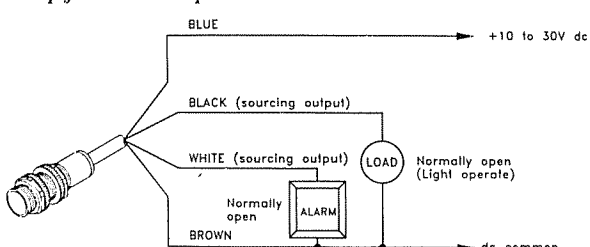


**PNP (sourcing) models S18SP6FF50(Q) and S18SP6FF100(Q)**

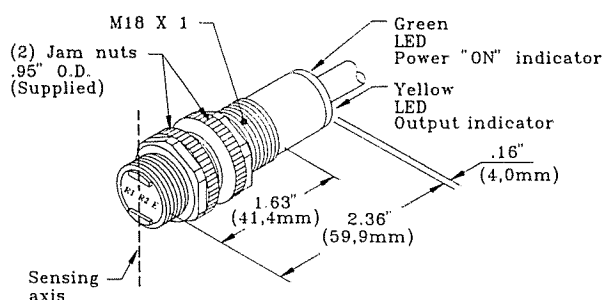
### Standard hookup



### Hookup for alarm output



## Dimensions, S18 Series dc fixed-field sensors



QD models are 3.27" (83.1 mm) long overall.

## Mounting Options for S18 Series Sensors

The model SMB18A two axis mounting bracket (not shown) has a curved mounting slot for versatility and orientation. The S18 Series sensor mounts to the bracket using jam nuts (2 are supplied with the sensor). The curved mounting slot allows  $\pm 15^\circ$  of movement. Bracket material is 11-gauge stainless steel.

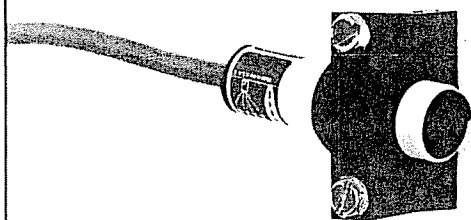
The model SMB18S swivel-mount bracket (below left) offers the ultimate in flexibility and convenience.

The bracket mounts to a flat surface. The S18 threads into the captive "ball" of the bracket, which locks snugly in position when two bolts are tightened. Bracket material is black VALOX®. Stainless steel mounting bolts are included.

The model SMB18C split clamp bracket (not shown) mounts to a flat surface and grips the S18 sensor by its threaded barrel. Stainless steel mounting hardware is included.

S18 Series sensors may also be mounted in an 18-mm clearance hole, using the supplied jam nuts.

### SMB18S Swivel bracket



**WARNING** These photoelectric presence sensors do NOT include the self-checking redundant circuitry necessary to allow their use in personnel safety applications. A sensor failure or malfunction can result in *either* an energized or a de-energized sensor output condition.

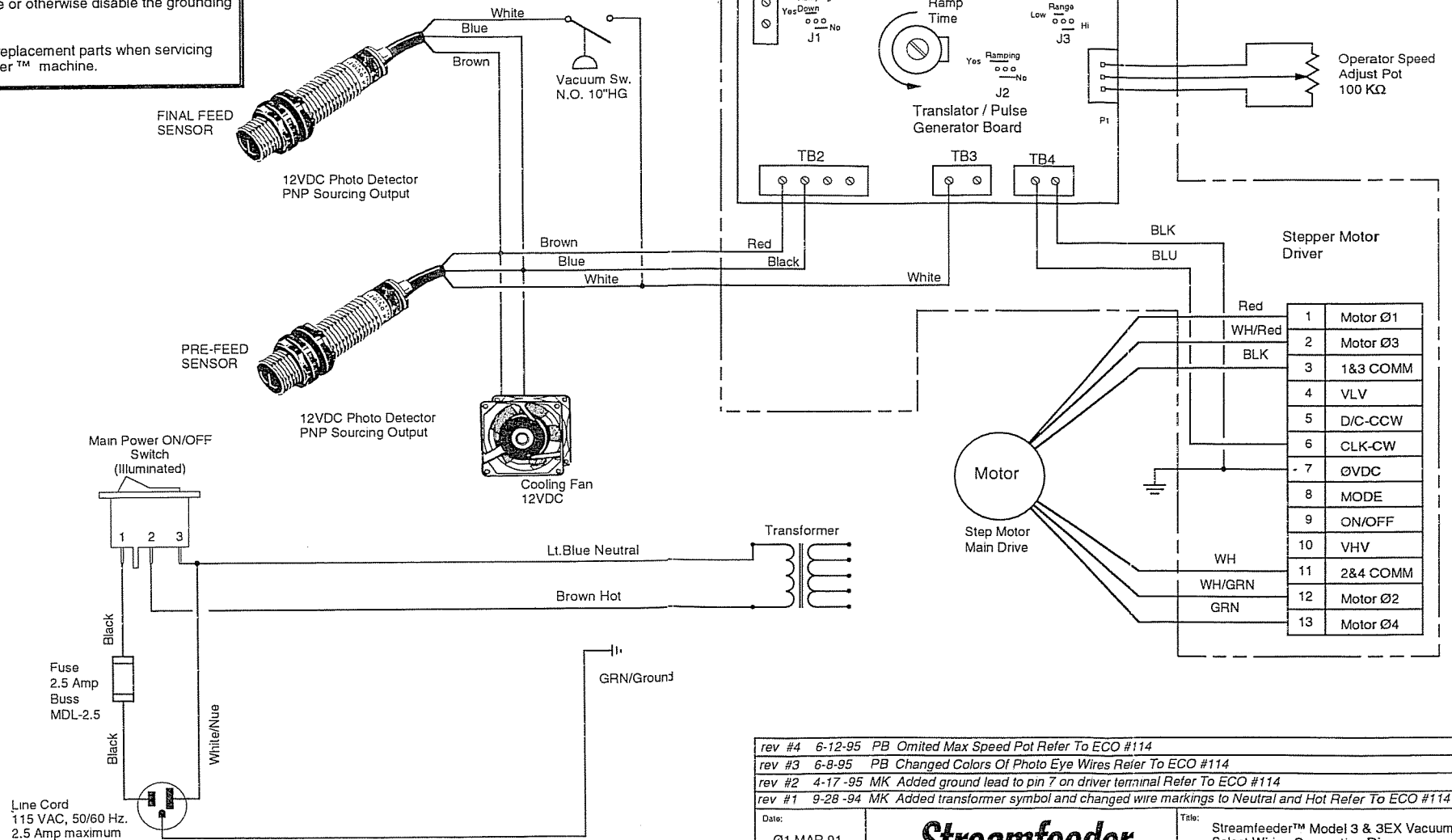
Never use these products as sensing devices for personnel protection. Their use as safety devices may create an unsafe condition which could lead to serious injury or death.

Only MACHINE-GUARD and PERIMETER-GUARD Systems, and other systems so designated, are designed to meet OSHA and ANSI machine safety standards for point-of-operation guarding devices. No other Banner sensors or controls are designed to meet these standards, and they must NOT be used as sensing devices for personnel protection.

**WARRANTY:** Banner Engineering Corporation warrants its products to be free from defects for one year. Banner Engineering Corporation will repair or replace, free of charge, any product of its manufacture found to be defective at the time it is returned to the factory during the warranty period. This warranty does not cover damage or liability for the improper application of Banner products. This warranty is in lieu of any other warranty either expressed or implied.

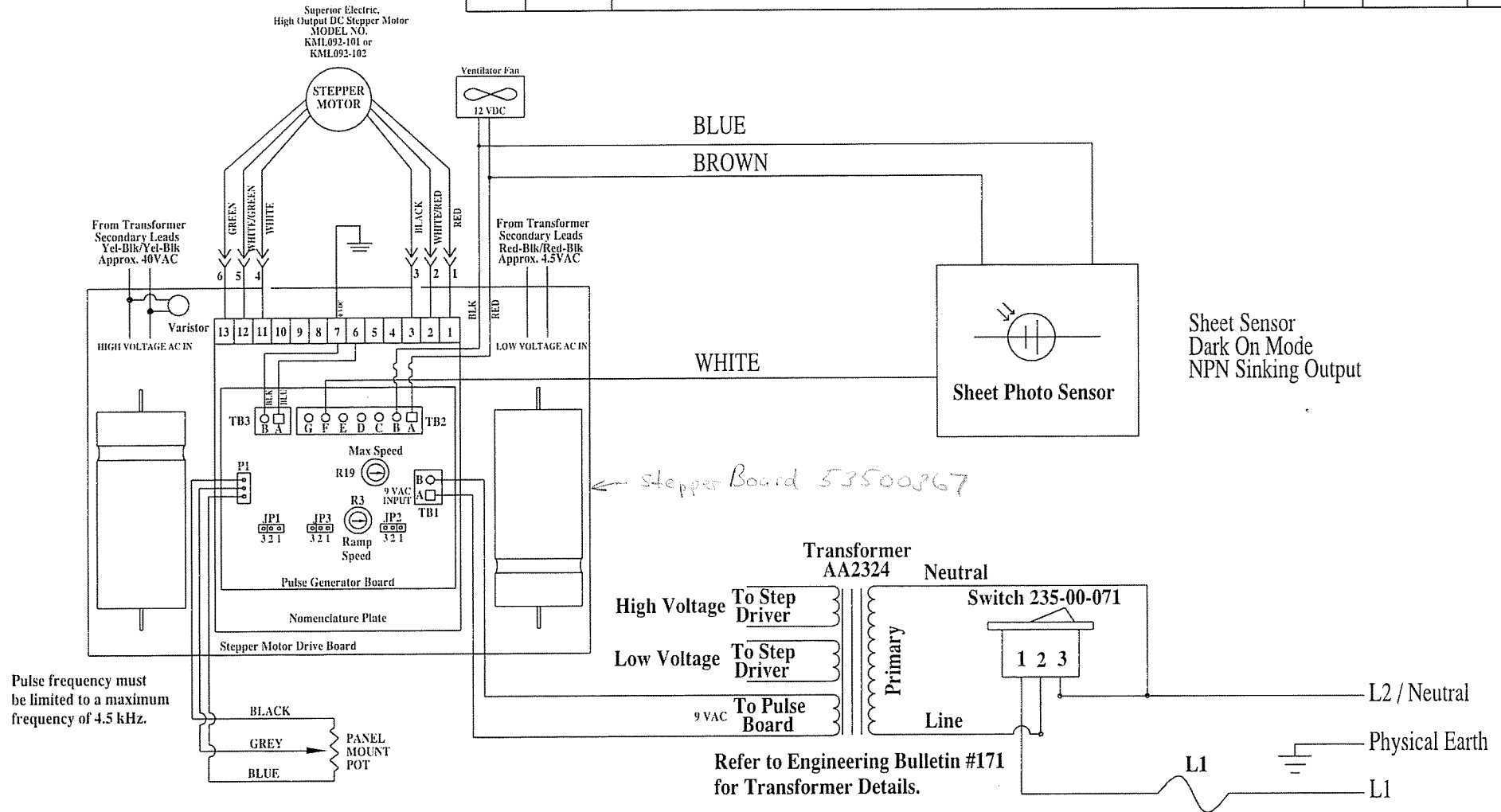
### Safety Warnings

1. Replace fuse *ONLY* with Buss MDL 2.5 amp.
2. You *MUST* use a 3-hole, properly grounded outlet. DO NOT remove or otherwise disable the grounding lug on the plug!
3. Use only exact replacement parts when servicing the Streamfeeder™ machine.



rev #4	6-12-95	PB	Omitted Max Speed Pot Refer To ECO #114
rev #3	6-8-95	PB	Changed Colors Of Photo Eye Wires Refer To ECO #114
rev #2	4-17-95	MK	Added ground lead to pin 7 on driver terminal Refer To ECO #114
rev #1	9-28-94	MK	Added transformer symbol and changed wire markings to Neutral and Hot Refer To ECO #114
Date:	01 MAR 91		
Drawn:	KMN		
© 1991			Streamfeeder
Title:			Streamfeeder™ Model 3 & 3EX Vacuum Select Wiring Connection Diagram
Eng. No.			Engineering Bulletin 105 R4

Rev. #	ECO #	Revision Description	Initials	Date	Approved



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Title:

Model 3 Wiring Detail

Rev. #

Drawn By:

Date:

GM

12/9/99

Size:

Project No.

Drg. No.

Checked By:

Date:

A

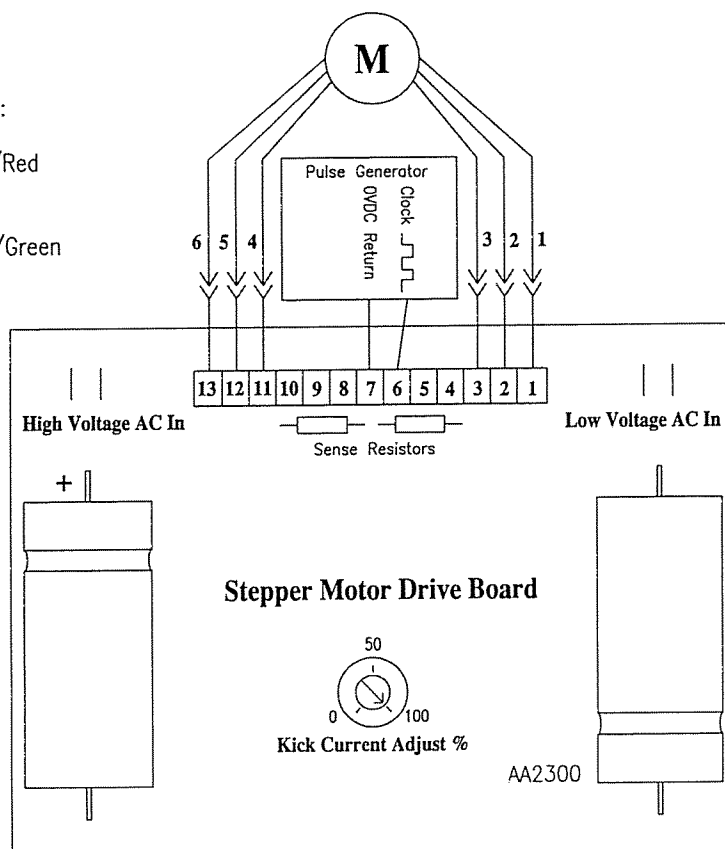
**Streamfeeder**

Minneapolis, MN USA (612)-502-0000 Fax (612)-502-0100

Rev. #	ECO #	Revision Description	Initials	Date	Approved

## Unipolar DC Stepping Motor Drive Board #535-00-167 *oBS use 535-00-367*

Motor Wires:  
 1 - Red  
 2 - White/Red  
 3 - Black  
 4 - White  
 5 - White/Green  
 6 - Green



### 13 Pin Motor Coupler Pin Assignments

- 1 - Motor Phase 1
- 2 - Motor Phase 3
- 3 - Phases 1 & 3 Common
- 4 - Not Used
- 5 - Not Used
- 6 - Clock Input
- 7 - 0 VDC/Ground
- 8 - Not Used
- 9 - Not Used
- 10 - Not Used
- 11 - Phases 2 & 4 Common
- 12 - Motor Phase 2
- 13 - Motor Phase 4

**NOTES** - Drive is rated at 10 amps DC current max.  
 Jumpers JP1 & JP2 are always set on pins 2 & 3.  
 Standard Motor Kick Current Adjustment set at 65%.  
 High Output Motor Kick Current Adjustment set at 85%.  
 Reference Eng. Bul. 160 and/or 212 for Pulse Generator information.

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Title: <b>Part #535-00-167 Stepping Motor Drive Board</b>		
Size: A	Project No.	Org. No. <b>Engineering Bulletin #257</b>

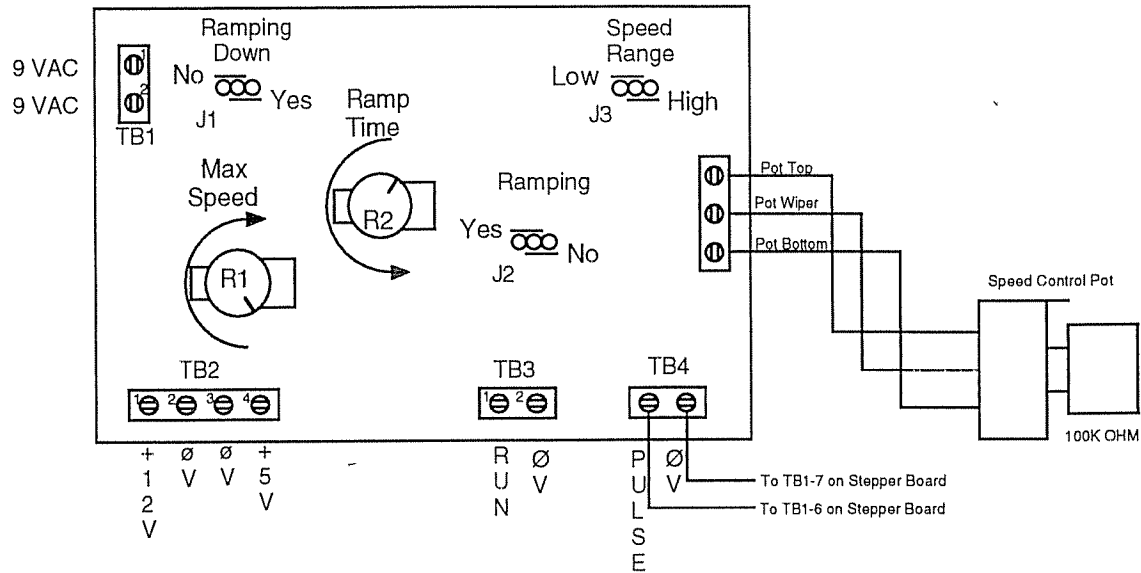
Drawn By: GM	Date: 4/13/98
Checked By: MG	Date: 4/13/98

**Streamfeeder**

Minneapolis, MN USA (612)-502-0000 Fax (612)-502-0100



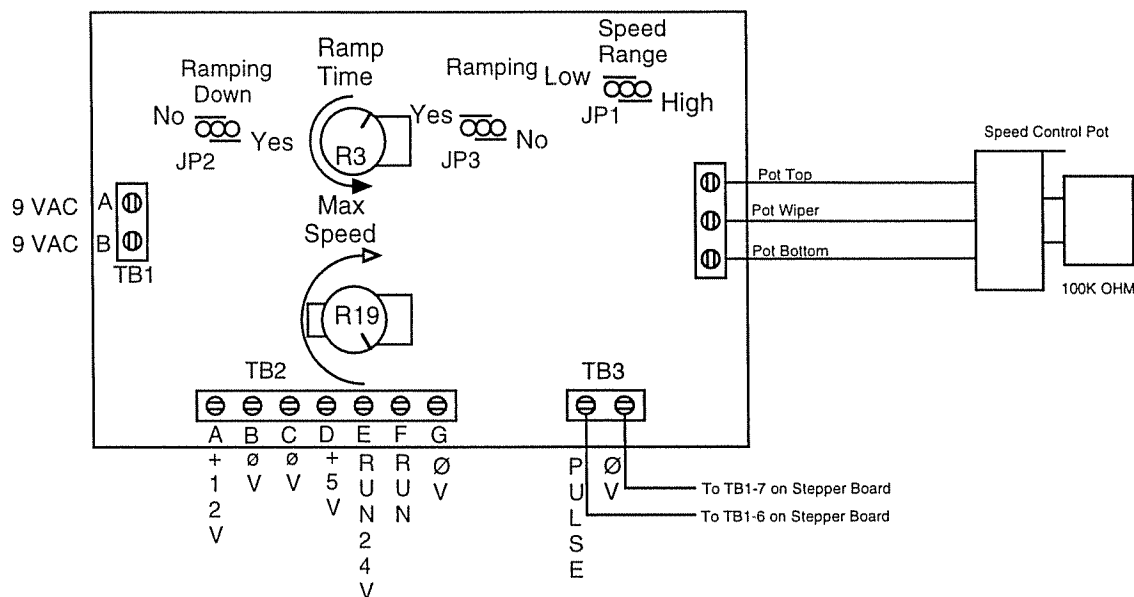
## Pulse Generator Board



### Terminal Description

TB1 - 1&2	9VAC	logic winding from transformer 9VAC min. 12VAC Max.
TB2 - 1	+12V	Unregulated Voltage (Value depends on value of 9VAC used)
TB2 - 2 & 3	0V	Power supply return or ground
TB2 - 4	+5V	Regulated +5V power .09 Amp maximum
TB3 - 1	Run	This line when tied to 0Vdc (TB#-2) will start the pulse generator.
TB4 - 1	Pulse	The output of the pulse generator
P1 - 1	Pot Top	High side of the speed adjust potentiometer (100K)
P1 - 2	Pot Wiper	Middle of the speed potentiometer
P1 - 3	Pot Bottom	Low side of the speed potentiometer
Jumper Use		
J3	Speed	Fixed selection for maximum speed Low range - 400hz at min, to 4500hz at max. High range - 800hz at min, to 9000hz at max.
J2	Ramping	Enable or disable ramp function
J1	Ramping Down	Enable or disable the downslope function
Adjustment Pots		
R1	Max Speed	Used to set the maximum Speed of the manual speed control potentiometer
R2	Ramp Time	Used to set the rate of upslope

## Pulse Generator Board



Terminal Description		
TB1 - A&B	9VAC	Logic winding from transformer 9VAC min. 12VAC Max.
TB2 - A	+12V	Unregulated Voltage (Value depends on value of 9VAC used)
TB2 - B&C	0V	Power supply return or ground
TB2 - D	+5V	Regulated +5V power .09 Amp maximum
TB2 - E	Run 24V	Optional run line when tied to +24VDC will start pulse generator
TB2-F	Run	This line when tied to 0Vdc (TB2-G) will start the pulse generator
TB2-G	0V	Return or ground for run signal at TB2-F
TB3 -A	Pulse	The output of the pulse generator
TB3-B	0V	Return or ground for pulse
P1 - 1	Pot Top	High side of the speed adjust potentiometer (100K)
P1 - 2	Pot Wiper	Middle of the speed potentiometer
P1 - 3	Pot Bottom	Low side of the speed potentiometer
Jumper Use		
JP1	Speed	Fixed selection for maximum speed Low range - 400hz at min, to 5000hz at max. High range - 400hz at min, to 10000hz at max.
JP3	Ramping	Enable or disable ramp function
JP2	Ramping Down	Enable or disable the downslope function
Adjustment Pots		
R19	Max Speed	Used to set the maximum speed of the manual speed control potentiometer
R3	Ramp Time	Used to set the rate of upslope

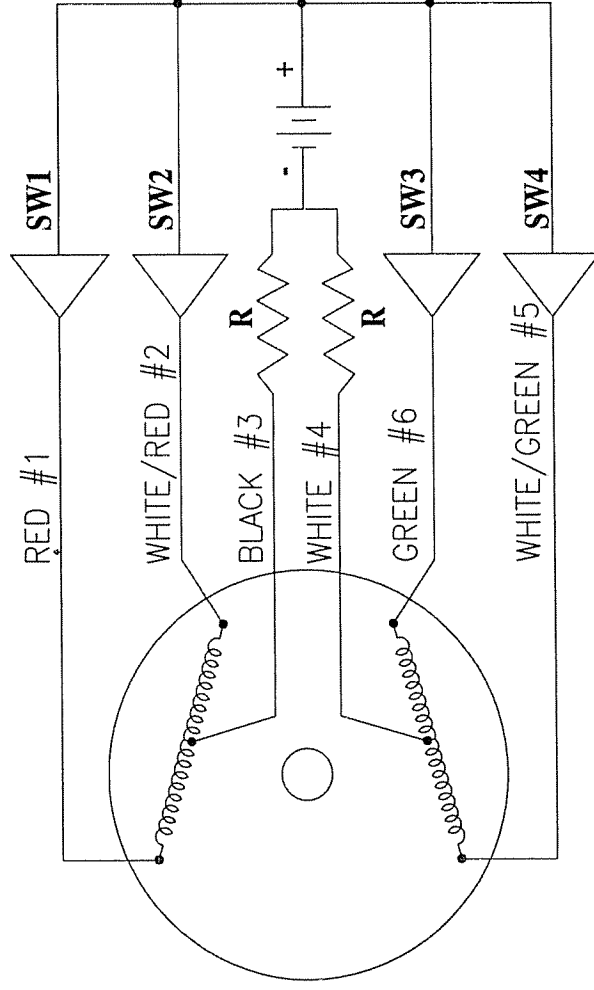


# Older Model Wire Colors

- 1 - Red
- 2 - Yellow
- 3 - White/Red/Yellow
- 4 - White/Black/Orange
- 5 - Black
- 6 - Orange

Rev. #	ECO #	Revision Description	Initials	Approved
1		Added older motor wire color cross reference.	GM	JRL

## WIRING DIAGRAM 6-LEAD DC STEPPING MOTOR

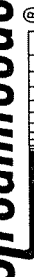


### ONE-HALF STEP OPERATION EIGHT-STEP INPUT SEQUENCE

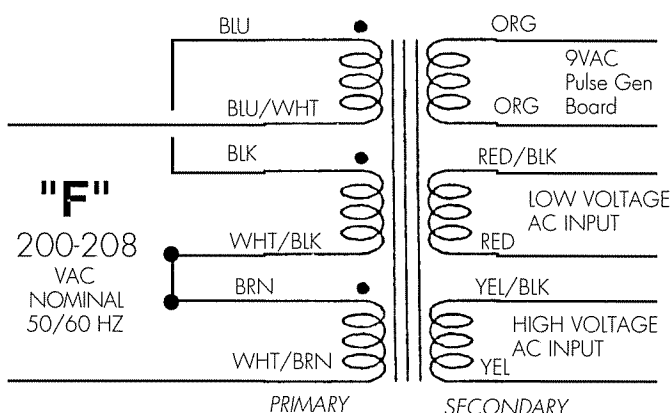
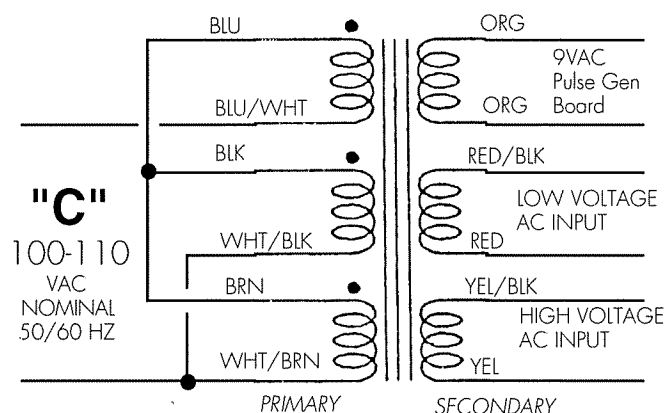
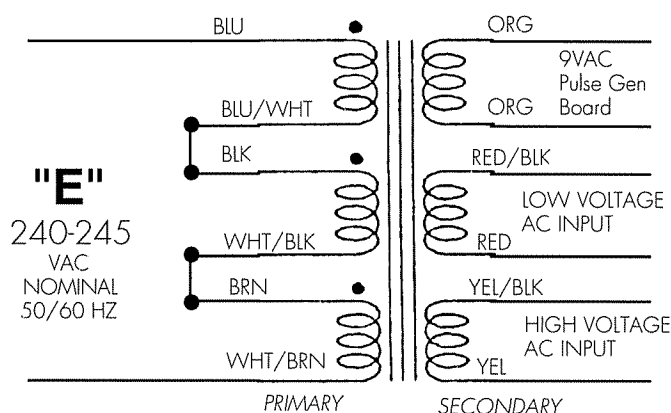
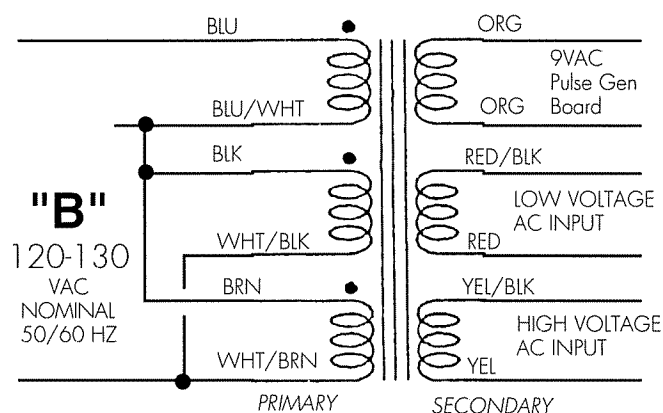
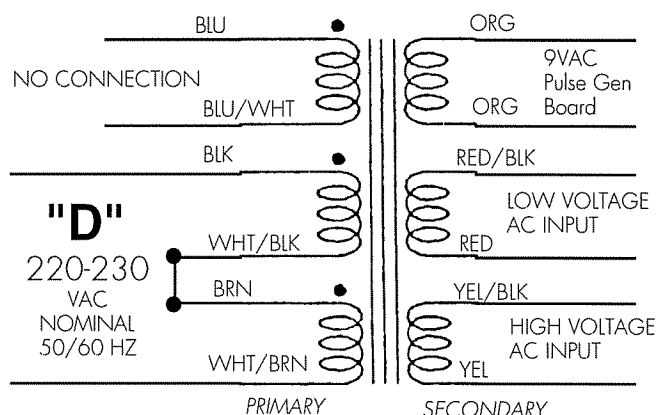
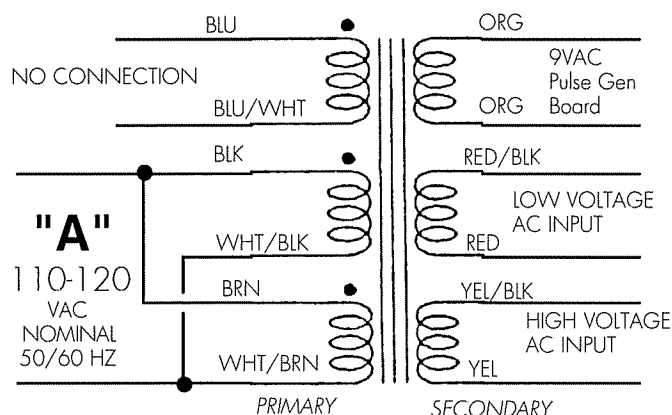
STEP	SW1	SW2	SW3	SW4
1	ON	OFF	ON	OFF
2	ON	OFF	OFF	OFF
3	ON	OFF	OFF	ON
4	OFF	OFF	OFF	ON
5	OFF	ON	OFF	ON
6	OFF	ON	OFF	OFF
7	OFF	ON	ON	OFF
8	OFF	OFF	ON	OFF
1	ON	OFF	ON	OFF

**CAUTION!** - The motor must not be taken apart. Opening the motor will void the warranty. Removing the rotor will reduce output torque 5% or more. It is possible that reassembly will introduce very small steel particles into the interior of the motor which will contaminate it.

**NOTES** - The motor has shielded bearings which do not require lubrication for the life of the motor.  
Half steps are obtained by using an eight-step input sequence shown by the chart above.

Title:		6-Lead DC Stepping Motor		Drawn By:	GM	Date:	4/13/98
				Checked By:	MG	Date:	4/13/98
Size:		Project No.	Drg. No.	Engineering Bulletin #255R1			
A							
<div>CONFIDENTIALITY NOTICE: THIS DRAWING AND THE IDEAS SHOWN ARE THE EXCLUSIVE PROPERTY OF STREAMFEEDER LLC. AND ARE NOT TO BE USED OR REPRODUCED WITHOUT THE WRITTEN CONSENT OF STREAMFEEDER LLC.</div>							
<div>Streamfeeder®</div>				<div>Minneapolis, MN USA (612)-502-0000 Fax (612)-502-0100</div>			

### Transformer Primary Multi-voltage Tap Connections



The AA2324 power supply transformer for the stepper driver pack can be tapped to accommodate a variety of mains power supply voltages. Connect the primaries of the transformer as indicated in the above diagram for the nominal mains supply voltage the Streamfeeder will operate from. Do not exceed the highest stated voltage for any particular winding configuration. For example, if you have 121 volt supply, use the 120-130 volt winding configuration. Incorrect tapping will cause component failure in the step driver pack.

- |   |          |   |
|---|----------|---|
| A | 110-120V | Standard wiring for most North American applications              |
| B | 120-130V | North America where voltage is over 120V                          |
| C | 100-110V | Standard wiring for Japan   |
| D | 220-230V | Standard wiring for Continental Europe, some 230V US applications |
| E | 240-250V | Standard wiring for U.K., Australia, New Zealand                  |
| F | 200-208V | Some Japanese (200V) applications, some US applications for 208V  |

4

3

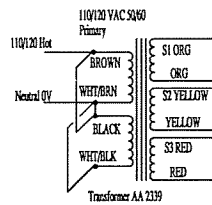
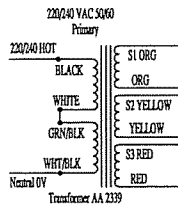
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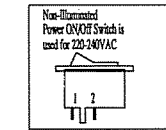
Rev. #	ECO #	Revision Description	Initials	Date	Approved

### Safety Warnings

1. Replace fuse ONLY with Busb MDL 2.5 amp.
2. You MUST use a 3-hole, properly grounded outlet. DO NOT remove or otherwise disable the grounding leg on the plug!
3. Use only exact replacement parts when servicing the Streamfeeder machine.



Line Cord  
115VAC, S460 Hz  
2.5 amp maximum



Illuminated  
Power ON/OFF Switch  
(note: 115VAC ONLY)

Fuse MDL  
2.5 Amp

Brown/Hot

Cooling Fan  
12VDC

Red  
Black

WHITE  
BLACK  
RED

BLACK  
BLUE

Red  
WHT/Red  
BLK

White

WHT  
WHT/GRN  
GRN

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13

Motor

Step Motor  
Main Drive

White

Red  
Black  
Blue

WHT/Red  
BLK

White

WHT  
WHT/GRN  
GRN

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Motor

Step Motor  
Main Drive

White

Red  
Black  
Blue

WHT/Red  
BLK

White

WHT  
WHT/GRN  
GRN

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Motor

Step Motor  
Main Drive

White

Red  
Black  
Blue

WHT/Red  
BLK

White

WHT  
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GRN

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Motor

Step Motor  
Main Drive

White

Red  
Black  
Blue

WHT/Red  
BLK

White

WHT  
WHT/GRN  
GRN

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Motor

Step Motor  
Main Drive

White

Red  
Black  
Blue

WHT/Red  
BLK

White

WHT  
WHT/GRN  
GRN

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Motor

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Main Drive

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WHT/Red  
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Motor

Step Motor  
Main Drive

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GRN

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Motor

Step Motor  
Main Drive

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Motor

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Main Drive

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WHT/Red  
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Motor

Step Motor  
Main Drive

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WHT/Red  
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Motor

Step Motor  
Main Drive

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Motor

Step Motor  
Main Drive

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WHT/Red  
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Motor

Step Motor  
Main Drive

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Motor

Step Motor  
Main Drive

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Motor

Step Motor  
Main Drive

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Motor

Step Motor  
Main Drive

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Red  
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WHT/Red  
BLK

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Motor

Step Motor  
Main Drive

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Motor

Step Motor  
Main Drive

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Motor

Step Motor  
Main Drive

White

Red  
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WHT/Red  
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White

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GRN

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Motor

Step Motor  
Main Drive

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WHT/Red  
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Motor

Step Motor  
Main Drive

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WHT/Red  
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Motor

Step Motor  
Main Drive

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WHT/Red  
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Motor

Step Motor  
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Motor

Step Motor  
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Motor

Step Motor  
Main Drive

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BLK

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Motor

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WHT/Red  
BLK

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Motor

Step Motor  
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WHT/Red  
BLK

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WHT/GRN  
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Motor

Step Motor  
Main Drive

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WHT/Red  
BLK

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WHT/GRN  
GRN

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Motor

Step Motor  
Main Drive

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Red  
Black  
Blue

WHT/Red  
BLK

White

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WHT/GRN  
GRN

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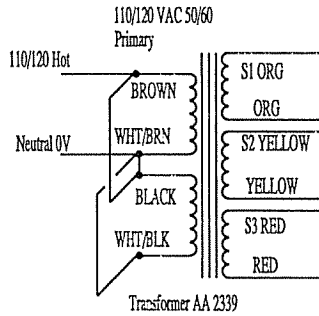
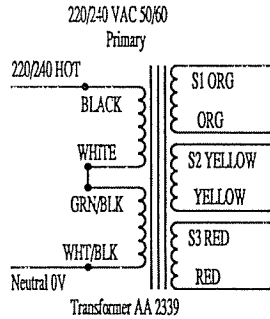
Motor

Step Motor  
Main Drive

Rev. #	ECO #	Revision Description	Initials	Date	Approved

Safety Warnings

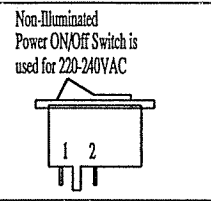
1. Replace fuse ONLY with Buss MDL 2.5 amp.
2. You MUST use a 3-hole, properly grounded outlet. DO NOT remove or otherwise disable the grounding lug on the plug!
3. Use only exact replacement parts when Servicing the Streamfeeder machine.



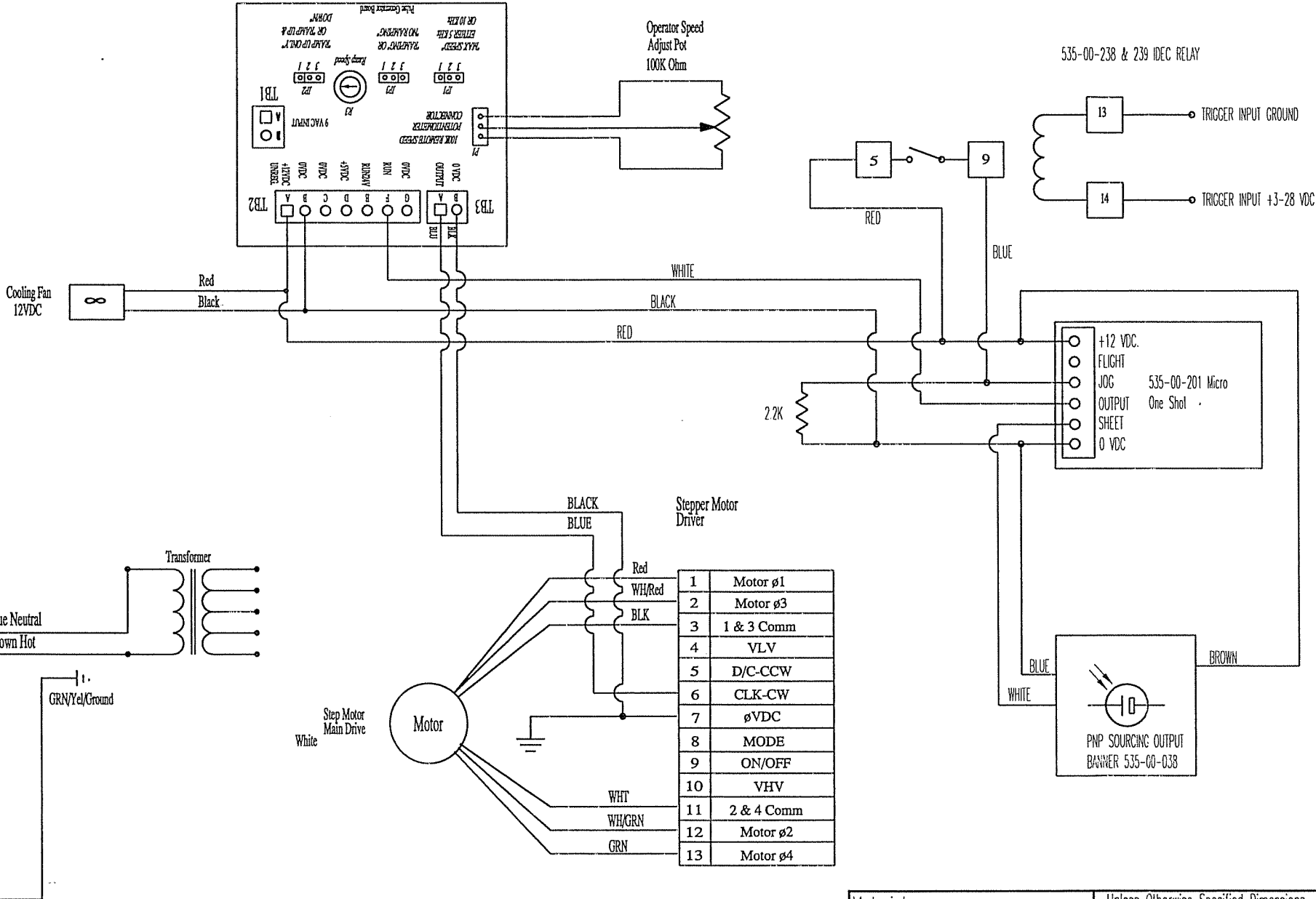
Line Cord  
115VAC, 50/60 Hz  
2.5 amp maximum


Fuse MDL  
2.5 Amp

Illuminated  
Power ON/OFF Switch  
(note: 115VAC ONLY)

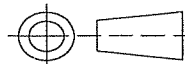


Cooling Fan  
12VDC



Material:		Unless Otherwise Specified Dimensions Are In Inches. Tolerances Are: English [Metric]		 Minneapolis, MN USA (612)-784-7305 Fax (612)-784-1356	
Project: 605		.xx ± .01	x ± .25		
		.xxx ± .005	.xx ± .15		
		.xxxx ± .002	.xxx ± .05		
		Angular ± .5°			
Drawn By: MEA		Date: 5-1-97	Title: Model Three Trigger (24 VDC. INPUT)		Scale: 1 : 1
Checked By:		Date:	Drg. No. Engineering Bulletin #254		Qty:
Project No.			Size: B		Rev: #

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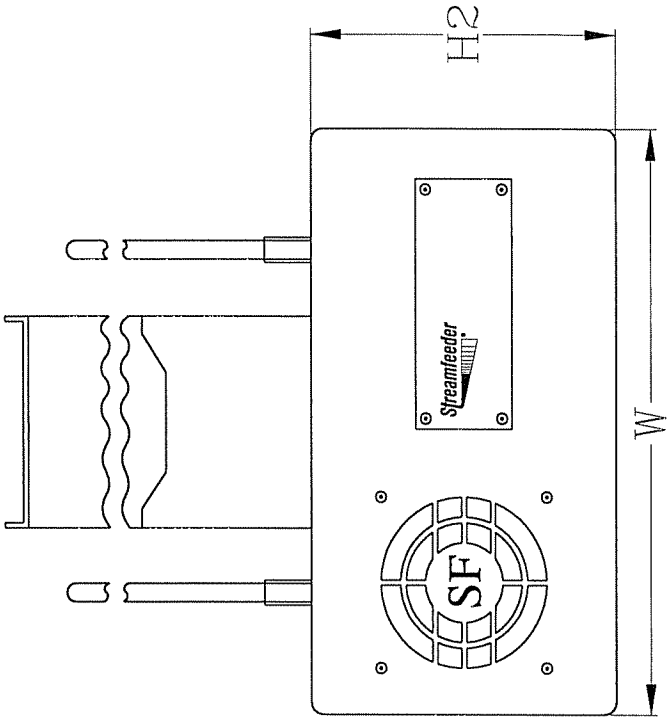
Project No.



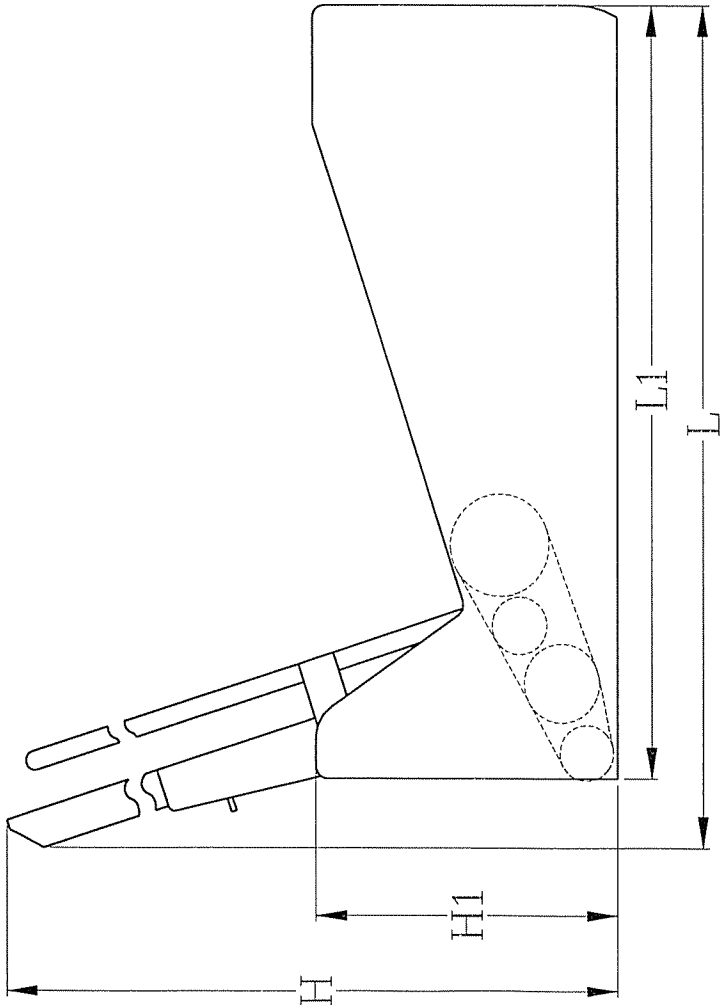
# Model 3 Dimensions

Rev -

BACK VIEW



SIDE VIEW



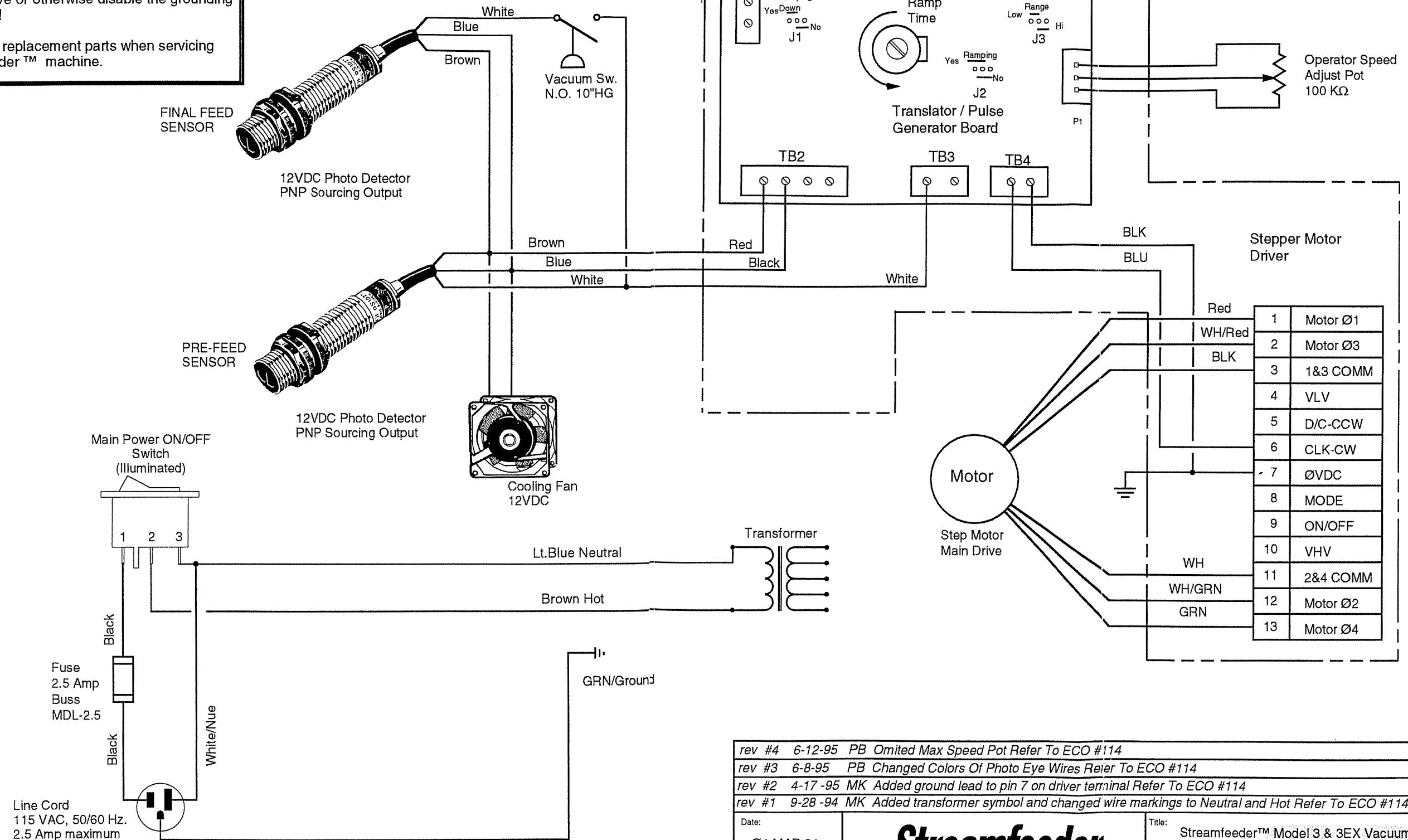
LETTER	DIMENSIONS	
	INCHES	[MILLIMETERS]
L	21 1/8	[536.6]
L1	15 1/2	[393.7]
H	28 5/8	[727.1]
H1	6 1/4	[158.8]
H2	6 5/16	[160.3]
W	12	[304.8]

@ Streamfeeder 1997.  
Specifications subject to  
change without notification.

### Safety Warnings

1. Replace fuse *ONLY* with Buss MDL 2.5 amp.
2. You *MUST* use a 3-hole, properly grounded outlet.  
DO NOT remove or otherwise disable the grounding  
lug on the plug!
3. Use only exact replacement parts when servicing  
the Streamfeeder™ machine.

- ### Safety Warnings
1. Replace fuse *ONLY* with Buss MDL 2.5 amp.
  2. You *MUST* use a 3-hole, properly grounded outlet.  
DO NOT remove or otherwise disable the grounding  
lug on the plug!
  3. Use only exact replacement parts when servicing  
the Streamfeeder™ machine.



1	Motor Ø1
2	Motor Ø3
3	1&3 COMM
4	VLV
5	D/C-CCW
6	CLK-CW
7	ØVDC
8	MODE
9	ON/OFF
10	VHV
11	2&4 COMM
12	Motor Ø2
13	Motor Ø4

rev #4	6-12-95	PB	Omitted Max Speed Pot Refer To ECO #114
rev #3	6-8-95	PB	Changed Colors Of Photo Eye Wires Reier To ECO #114
rev #2	4-17 -95	MK	Added ground lead to pin 7 on driver terminal Refer To ECO #114
rev #1	9-28 -94	MK	Added transformer symbol and changed wire markings to Neutral and Hot Refer To ECO #114

Date: 01 MAR 91

Drawn:  
KMN

© 1991

# Streamfeeder®

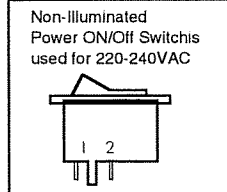
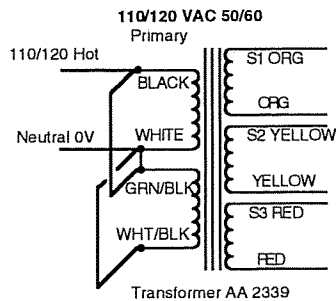
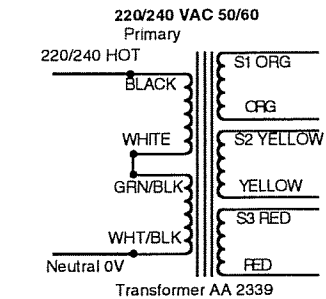
Title: Streamfeeder™ Model 3 & 3EX Vacuum  
Select Wiring Connection Diagram

Dr. No

Engineering Bulletin 105 R4

### Safety Warnings

1. Replace fuse **ONLY** with Buss MDL 2.5 amp.
2. You **MUST** use a 3-hole, properly grounded outlet. **DO NOT** remove or otherwise disable the grounding lug on the plug!
3. Use only exact replacement parts when servicing the Streamfeeder™ machine.



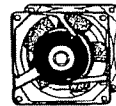
Illuminated Power ON/OFF Switch  
(note: 115VAC ONLY)

Fuse MDL  
2.5 Amp  
Buss GMD 3 or  
equivalent

Brown/Hot

Line Cord  
115VAC, 50/60 Hz  
2.5 amp maximum

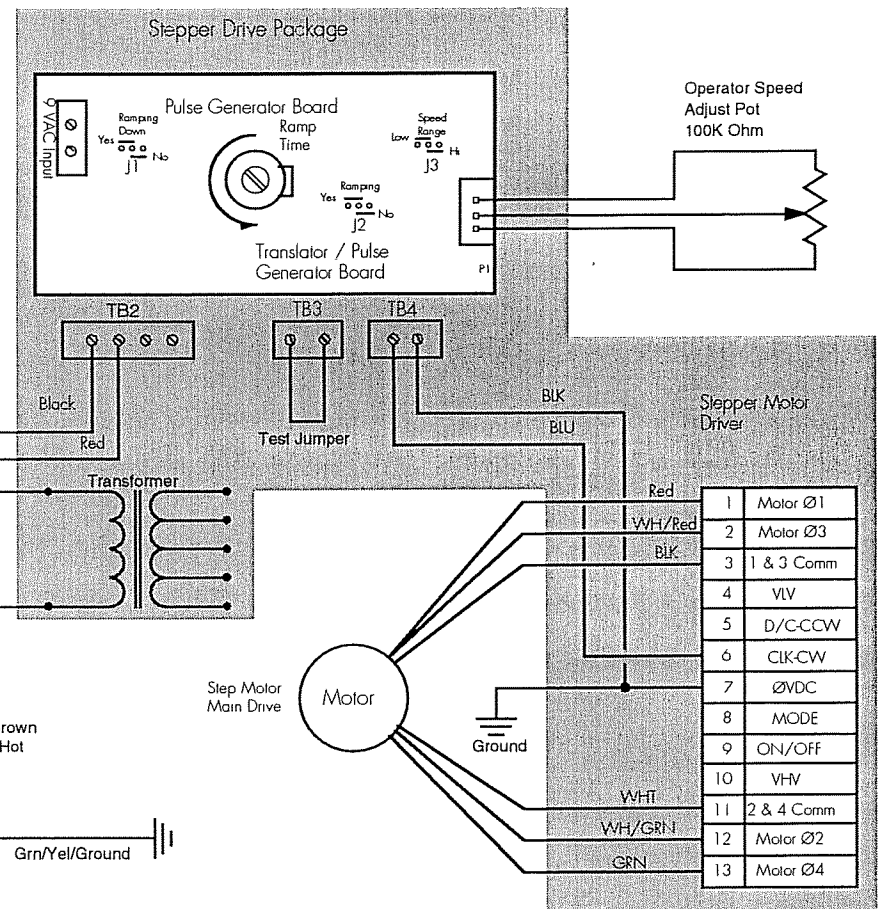
Cooling Fan  
12VDC  
(See attached  
Specification  
sheet)



Lt. Blue  
Neutral

Brown  
Hot

Grn/Yel/Ground



### Reference Streamfeeder Build Order #37

Rev #3 6-12-95 PB Omitted Max Speed Pot Refer To ECO #114

Rev 2, 6-6-95 BP Added Transformer Refer To ECO #114

Rev 1, 4-17-95 MK Added ground lead to pin 7 on driver terminal Refer To ECO #114

Date:  
10 Feb 93

Drawn:  
KMN

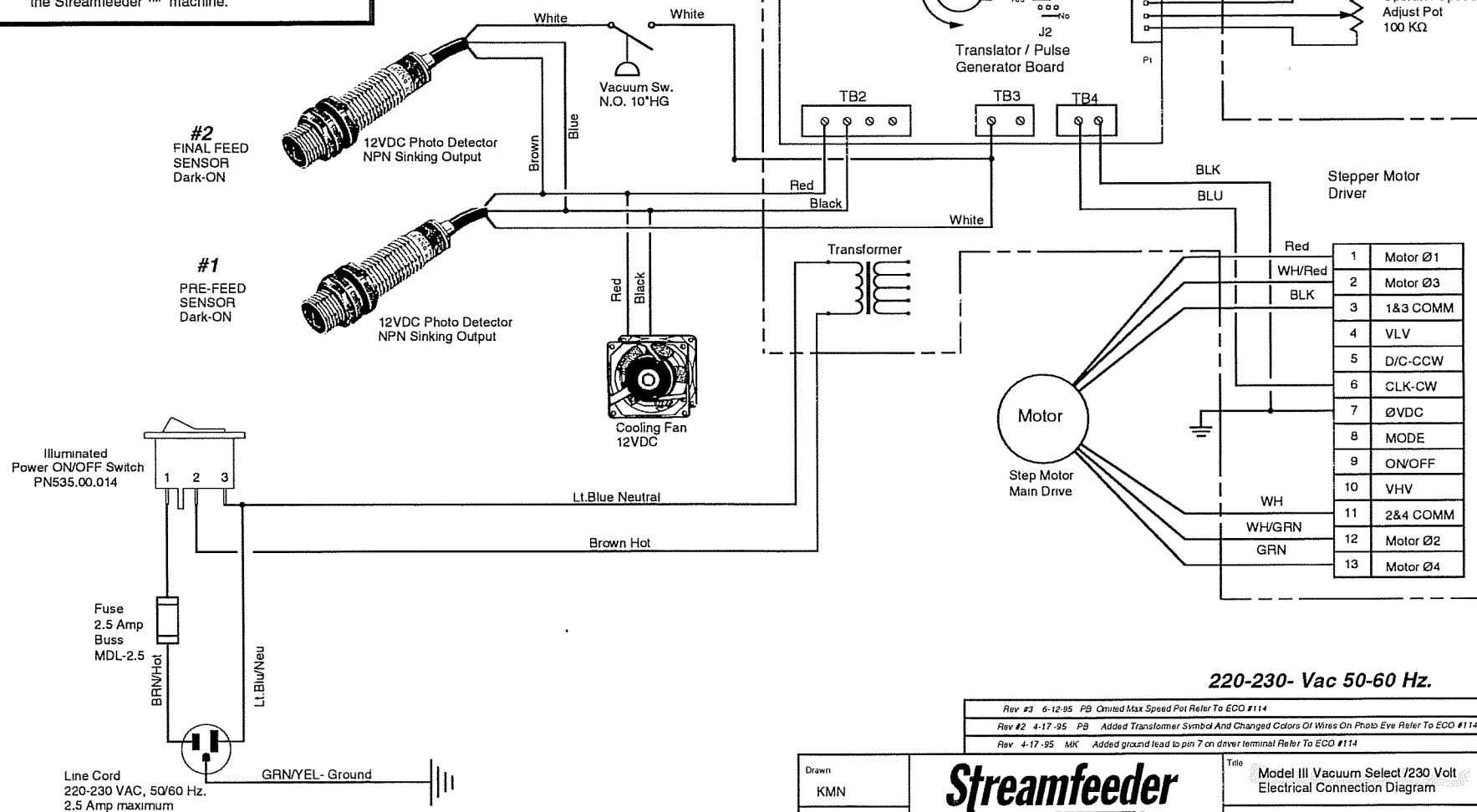
**Streamfeeder**

Title: Streamfeeder™ Model III Electrical  
Connection Diagram/Scan Optics

Drg. No.  
Engineering Bulletin 107 R3

### Safety Warnings

1. Replace fuse *ONLY* with Buss MDL 2.5 amp.
2. You *MUST* use a 3-hole, properly grounded outlet. DO NOT remove or otherwise disable the grounding lug on the plug!
3. Use only exact replacement parts when servicing the Streamfeeder™ machine.



220-230- Vac 50-60 Hz.

Rev #3 6-12-95 PB Omitted Max Speed Pot Refer To ECO #114

Rev #2 4-17-95 PB Added Transformer Symbol And Changed Colors Of Wires On Photo Eye Refer To ECO #114

Rev 4-17-95 MK Added ground lead to pin 7 on driver terminal Refer To ECO #114

Drawn  
KMN

Date  
Ø8 Jul 93

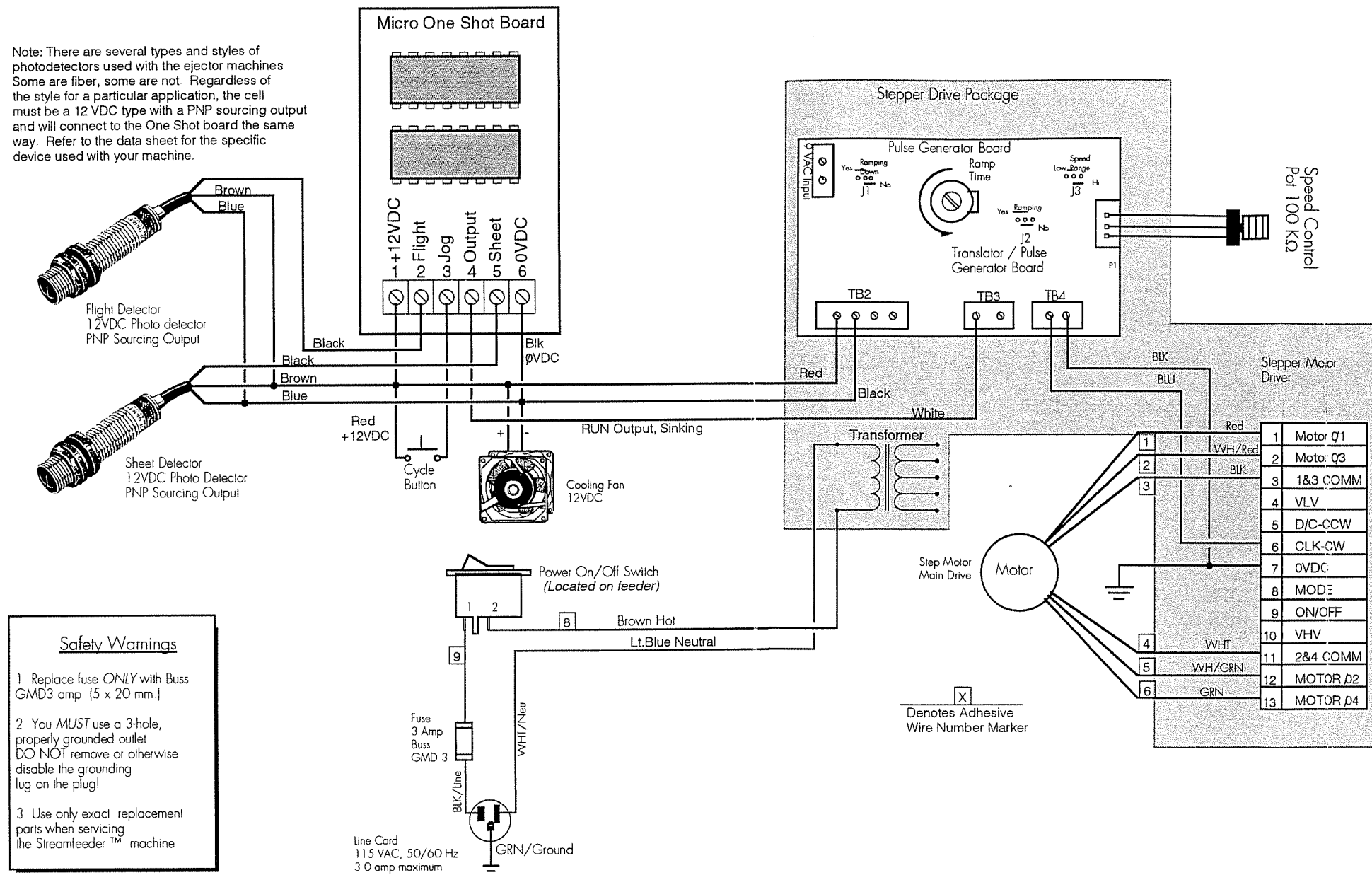
**Streamfeeder**

Title  
Model III Vacuum Select /230 Volt  
Electrical Connection Diagram

Dwg No  
Engineering Bulletin 108 R3



Note: There are several types and styles of photodetectors used with the ejector machines. Some are fiber, some are not. Regardless of the style for a particular application, the cell must be a 12 VDC type with a PNP sourcing output and will connect to the One Shot board the same way. Refer to the data sheet for the specific device used with your machine.



#### Safety Warnings

1. Replace fuse *ONLY* with Buss GMD3 amp [5 x 20 mm.]
2. You *MUST* use a 3-hole, properly grounded outlet. DO NOT remove or otherwise disable the grounding lug on the plug!
3. Use only exact replacement parts when servicing the Streamfeeder™ machine.

Rev #5 6-12-95 PB Omitted Max Speed Pot Refer To ECO #114

Rev #4 6-8-95 PB Added Transformer Symbol And Changed Colors Of Wires On Photo Eye Refer To ECO #114

Rev 4-17-95 MK Added ground lead to pin 7 on driver terminal Refer To ECO #114

rev: version 3, 22 JUL 91 Elimiate power terminal strip for line power

rev: version 2 18 JUN 91 Fan to 12 VDC model, photodetectors to various types. One shot board to Rev A or B

By:  
KN

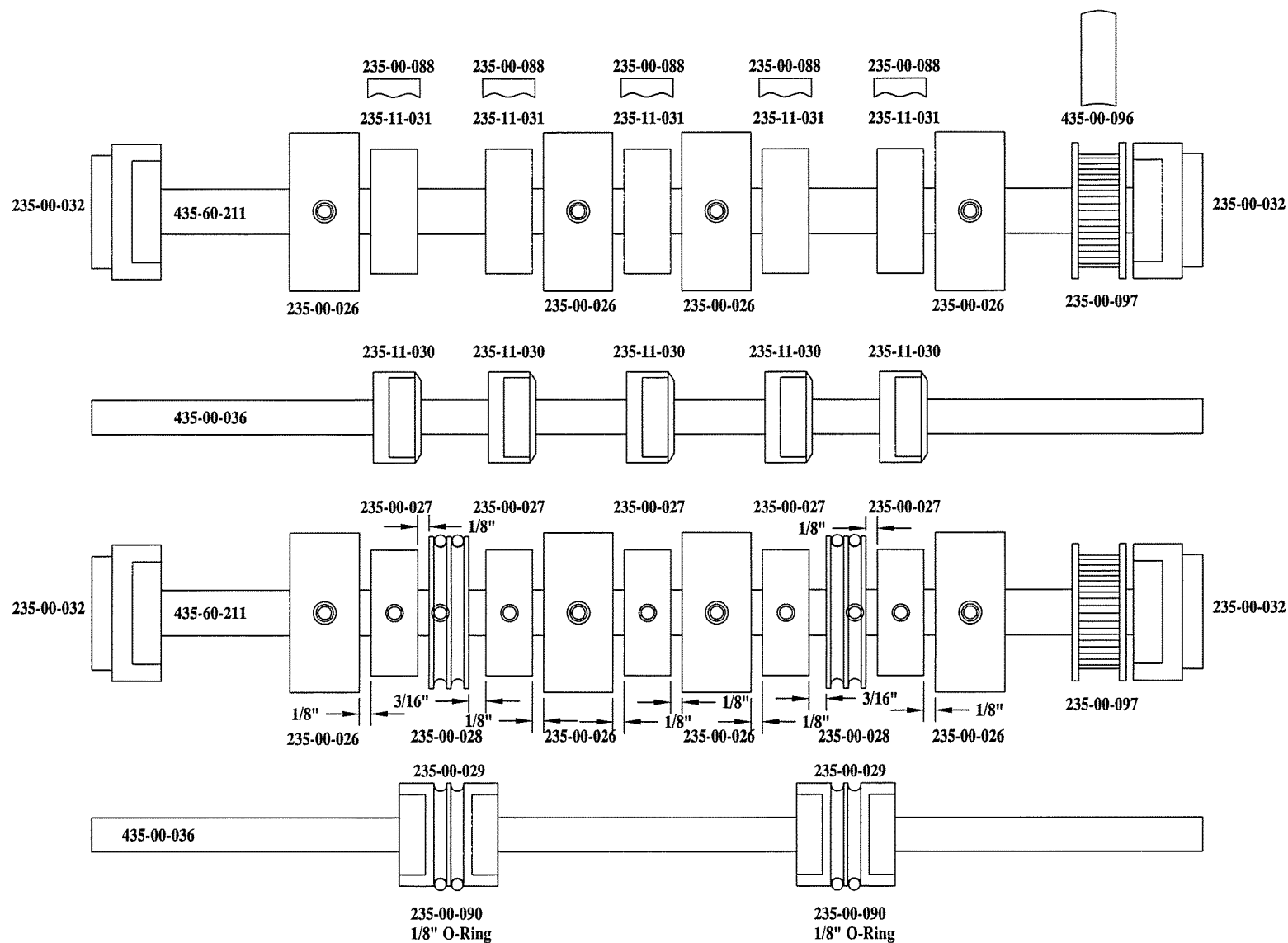
Date:  
30 JAN 91

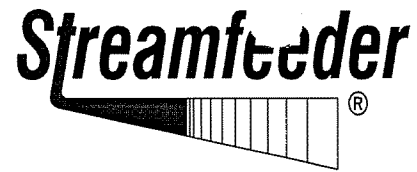
**Streamfeeder**

Title  
Model III And 1250 Internal One-Shot  
Schematic/Connection Diagram

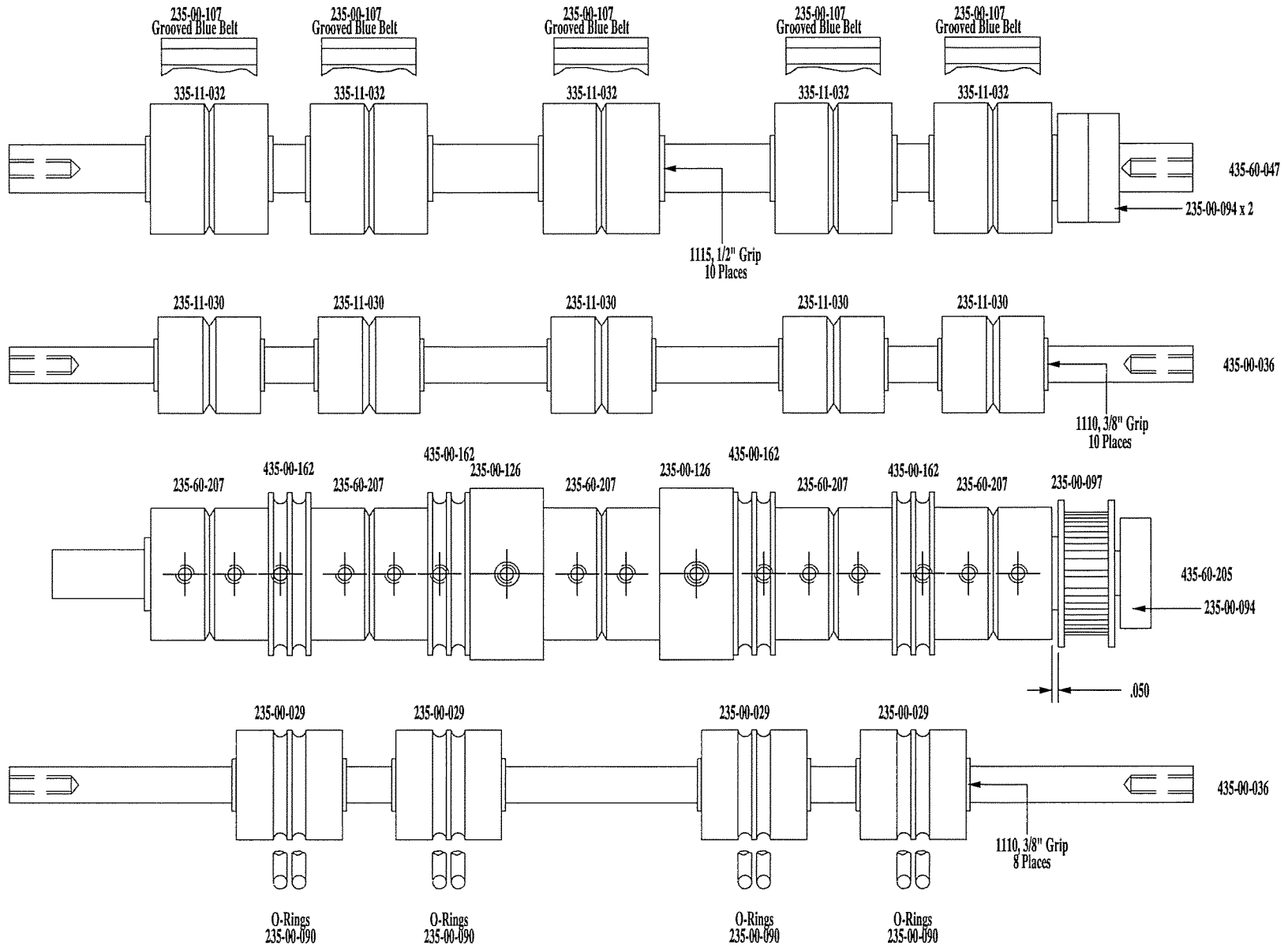
Drg. No.  
Engineering Bulletin 110 R5

**30001000**



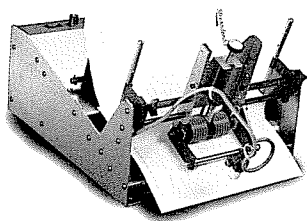


## MOD III Belt Configuration



# MODEL 3 / MODEL 3X

Universal Friction Feeders™



It's a fact, lettershops demand maximum net throughput from their large and "jumbo" format inserters. Whatever the brand on your shop floor - Phillipsburg, Inscerco 1200 Series, or another similar type - with a Model 3 or Model 3X aboard you'll run jobs at a higher level of productivity.

Experience ultra-flexible performance that begins with patented Differential Friction Technology™. This innovative approach to feeding precisely separates, singulates and presents virtually any type and size of material, including European A4, to the inserter's gripper jaw.

Designed for maximum operator productivity, job setups and changeovers are easily and quickly accomplished with the turn of a knob. A large 24-inch (60.96 cm) capacity hopper reduces station reloading. Variable speed control allows operators to tailor feeding performance to their fast runs. The rugged Model 3 and 3X are built to last with quality precision components and are backed with a two-year limited warranty.

## STANDARD FEATURES

- Ideal for large and "jumbo" format Phillipsburg, Inscerco 1200 Series, and similar type inserters
- Patented Differential Friction Technology™ for precise sheet separation and singulation
- 24-inch (60.96 cm) capacity hopper
- Handles most insert types, sizes, and thicknesses
- Accommodates European A4 sized sheets (Model 3X only)
- Single knob adjustment makes setups and changeovers fast and easy
- Variable speed control
- Dependable stepper motor drive
- Sealed precision ball bearings never require lubrication
- Fewer moving parts reduces maintenance downtime

## OPTIONS

- Selectivity interface for inserters with on-board intelligence
- Slotted side plates for material up to one inch (2.54 cm) thick
- Fully adjustable stand for roll-up flexibility

## SPECIFICATIONS

<b>Maximum Insert Size:</b>	Model 3: 9 in. W x 12 in. L (22.86 cm x 30.48 cm) Model 3X: 9 in. W x 13 in. L (22.86 cm x 33.02 cm)
<b>Minimum Insert Size:</b>	3 1/2 in. W x 4 7/8 in. L (8.89 cm x 12.38 cm)
<b>Thickness Range:</b>	.002 in. to .250 in. (.05 mm to 6.35 mm) .002 in. to 1 in. (.05 mm to 25.40 mm) - (optional)
<b>Insert Types:</b>	Z-folds, gatefolds, payment booklets, coated and slick stocks, laminated stock, overwrapped products, and standard products when greater capacity is needed
<b>Speed:</b>	10,000 pieces per hour
<b>Hopper Capacity:</b>	24 in. (60.96 cm)
<b>Drive:</b>	Stepper motor
<b>Power Input (typical):</b>	120V at 180 watts at 60 Hz (1.5 amps) 240V at 180 watts at 50 Hz (.75 amps)
<b>Sensor:</b>	Diffuse reflective
<b>Switches &amp; Controls:</b>	Power On/Off Variable speed control dial
<b>Enclosure:</b>	Nickel plated cold rolled steel
<b>Overall Dimensions:</b>	Model 3: 15 1/2 in. L (39.37 cm) 12 1/4 in. W (31.16 cm) 28 3/4 in. H (73.03 cm) Model 3X: 15 1/2 in. L (39.37 cm) 13 1/2 in. W (34.29 cm) 28 3/4 in. H (73.03 cm)
<b>Weight:</b>	Model 3: Approx. 45 lb. (20.36 kg) Model 3X: Approx. 46 lb. (20.82 kg)
<b>Warranty:</b>	Two-year limited warranty

Your Authorized Streamfeeder Reseller is:

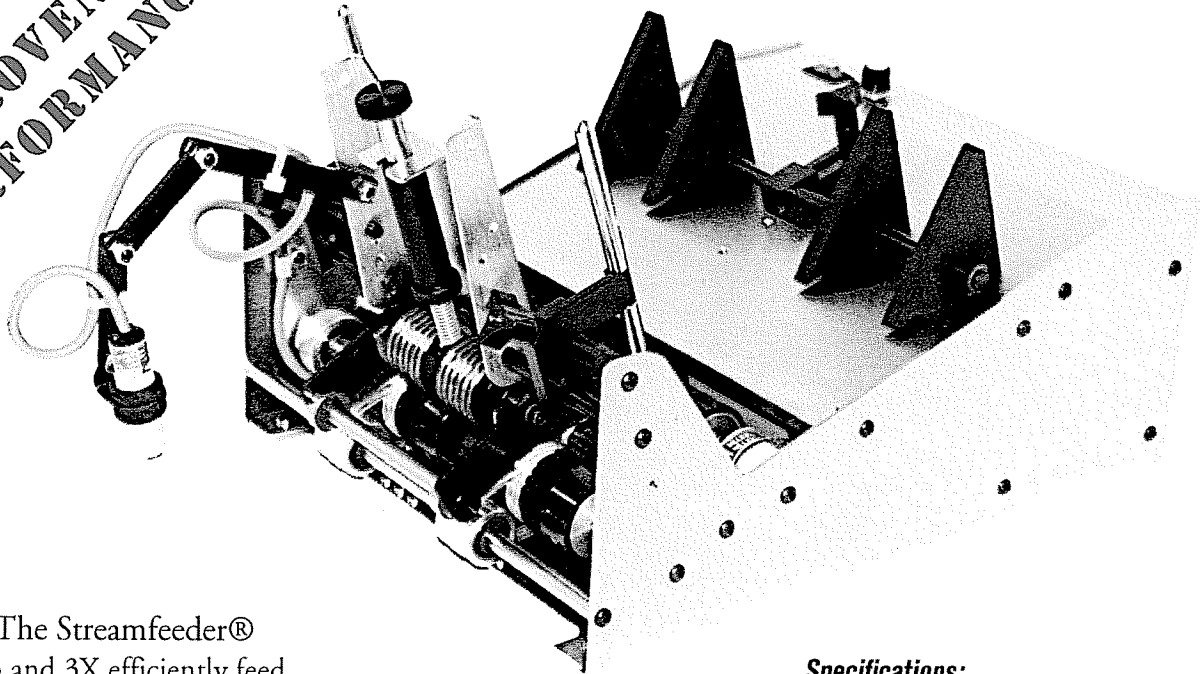
**Streamfeeder**

103 Osborne Road  
Minneapolis, Minnesota 55432-3120 USA  
TEL: 612.502.0000

# **Streamfeeder®** Model 3 & 3X Mailing Series

**Universal Friction Feeder**

**PROVEN  
PERFORMANCE**



The Streamfeeder® Model 3 and 3X efficiently feed insert stock directly to the gripper jaw of your inserter. The patented gate design allows it to positively separate and feed almost any material and every imaginable type or direction of fold. The Streamfeeder eliminates miss and double problems often associated with difficult-to-feed inserts, too. Setup is fast and easy. The Streamfeeder attaches to most Bell + Howell Phillipsburg and Inserco 1200 Series and similar 9x12 large format inserters. The 3X version is available for envelope feed stations as well as feeding of European A4 paper stock.

Put the proven reliability of a Streamfeeder on your inserter today to handle your tough feeding jobs and increase your productivity!

#### **Features:**

- Compact design allows side-by-side mounting on your inserter.
- Versatile - Handles all types of inserts, in a wide range of sizes and thicknesses.
- Fast - High speed step motor drive with variable speed allows you to tailor feeding performance for your fastest runs.
- High Capacity - The material hopper holds up to 24" and 39 pounds of material.
- Low Maintenance-Sealed ball bearings, and Streamfeeder's legendary ruggedness provide trouble free operation, year after year.
- Two Year Limited Warranty. Fast, efficient service and support are available from local authorized distributors or factory direct.

#### **Specifications:**

- Electrical  
115 Volt AC, 60 Hz, 3.0 A  
220-240 Volt AC, 50 Hz, 2.0 A
- Gate Adjustment  
Single knob adjustment
- Insert Size  
Minimum - 3 1/2" x 4 7/8"  
Maximum- 9" x 12" (Mod 3)  
9" x 13" (Mod 3X)
- Insert Types  
Booklets, annual reports, coated and slick stocks, Z-folds, gate-folds, fan-folds, etc.
- Insert Thickness  
Minimum: Single sheet .003"  
Maximum: 1/4"

**Your Authorized Streamfeeder Distributor is:**



103 Osborne Road  
Minneapolis, MN 55432-3120 USA

TEL: 612.502.0000  
FAX: 612.502.0100  
E-MAIL: [service@streamfeeder.com](mailto:service@streamfeeder.com)  
WEB: [www.streamfeeder.com](http://www.streamfeeder.com)

## Fax

<b>TO:</b>	Claude VALLE	<b>FROM:</b>	Greg Marx
<b>AT:</b>	PHARTECH	<b>PAGES:</b>	7
<b>FAX:</b>	(33) 3 20 20 04 42	<b>DATE:</b>	December 10, 1999
<b>RE:</b>	Model 3GEX Electrical Documents		

Claude,

Following you will find information regarding the electronic hardware inside your Model 3 GEX. Included is one page describing the overall wiring; Model 3 Wiring Detail.

The white output wire of the Sheet Photo Sensor (Dark-On/Normally Closed) turns on the Pulse Generator Board (Engineering Bulletin #160 R3) when there is no material in its view. When the Pulse Generator turns on, a square wave form pulse is present on TB3. This pulse train is sent to the Stepper Motor Drive Board (Engineering Bulletin #257) and enters the board at pins 6 and 7. Each pulse indexes the shaft of the stepper motor (Engineering Bulletin #255R1) one half step. The speed of the motor is determined by the frequency of the pulse train. The pulse train/motor speed is adjusted by the external potentiometer mounted on the feeder deck. The speed is limited internally by the jumper JP1 on the Pulse Generator Board (Engineering Bulletin #160 R3) and the trimmer potentiometer R19 if equipped. The maximum pulse should not exceed 4.5 kHz.

The replacement part numbers are as follows:

Power Switch	235-00-071
Fuse	435-00-084
Motor Pulley (must be replaced with new motor)	<del>435-60-024</del> 44350053 & (2) 3352
Pulse Generator Board	535-00-166
Speed Control Panel Mount Pot	535-00-197
Sheet Photo Sensor:	535-00-297
Stepper Motor Drive Board	535-00-367
Transformer	44-683-025
Motor	535-00-390

Regards,

Greg

# Model III Universal Friction Feeder

For Phillipsburg and Inscerco Inserters

The Streamfeeder Model III efficiently feeds insert stock directly to the gripper jaw of your inserter. Its patented gate design allows it to positively separate and feed almost any material and every imaginable type or direction of fold. The Streamfeeder eliminates miss-double problems often associated with difficult-to-feed inserts. Its large hopper capacity reduces your labor costs on standard inserts, too. Setup is fast and easy. Attaches to most Phillipsburg Master Mailers, Inscerco 1200 Series and similar 9 x 12 format inserters. Wider version available for envelope feed stations.

## Features

- Compact—12" feeder width allows side-by-side mounting on inserter.
- Low maintenance—Sealed ball bearings on all rotating shafts. Bearings lubricated for life. No lubrication needed.

- Fast—Variable speed feeds up to 3294" per minute at 60 Hz.
- Versatile—Handles all types of inserts, in a wide range of sizes and thicknesses.
- Guaranteed—Limited 90-day warranty on parts and service. Fast and efficient service support available from local authorized dealers or factory direct.

## Specifications

### Electrical:

120 Volt AC, 1 amp,  
50/60 Hz.

### Gate Adjustment:

Single knob adjustment.

### Insert Size:

Minimum: 3½" x 4⅞"  
Maximum: 9" x 11¼"

### Insert Thickness:

Minimum: Single sheet  
Maximum: ¼" (can be modified for greater insert thickness)

### Insert Type:

Booklets, annual reports, coated and slick stocks, Z-folds, gatefolds, fan-folds, etc.

### Maximum Feeder

#### Insert Capacity:

Folded edge leading:

24" stack height

20# bond letter fold: 1,800

Single-sheet coated stock

(50#): 5,000+

Business reply cards

(.007" thick): 3,400

Envelopes: 1,200

Open edge leading

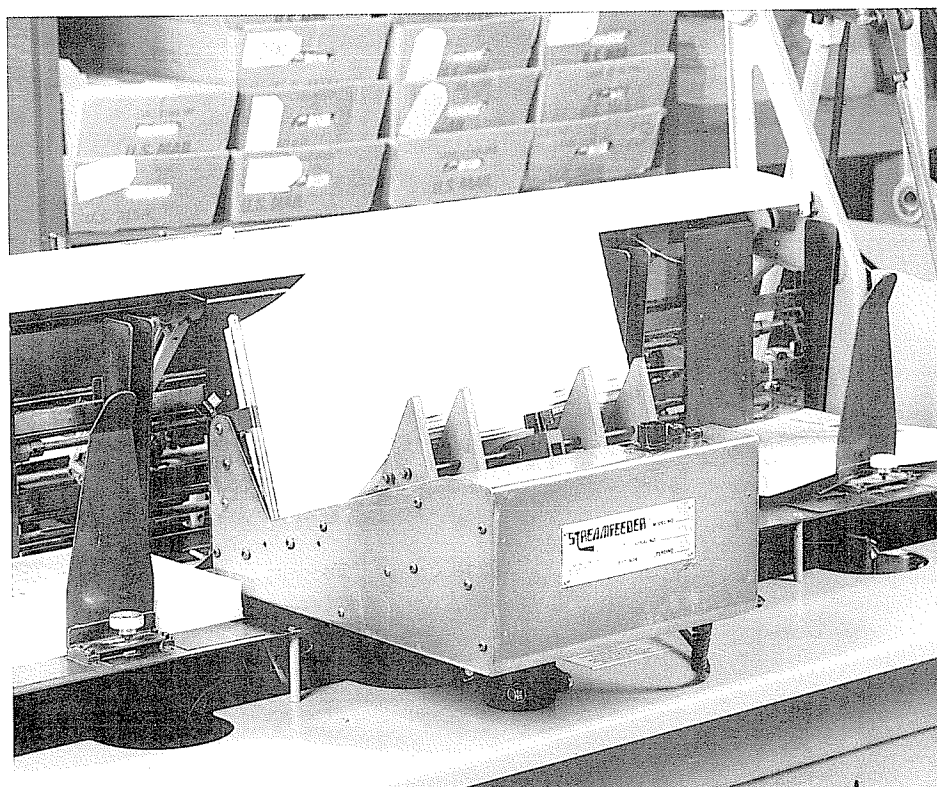
(most stocks): 12"

### Feeder Width:

12"

### Limited Warranty:

90 days, parts and service.



Your authorized Streamfeeder dealer is:

**STREAMFEEDER®**

**Streamfeeder, Inc.**

9150 Springbrook Drive

Minneapolis, MN 55433

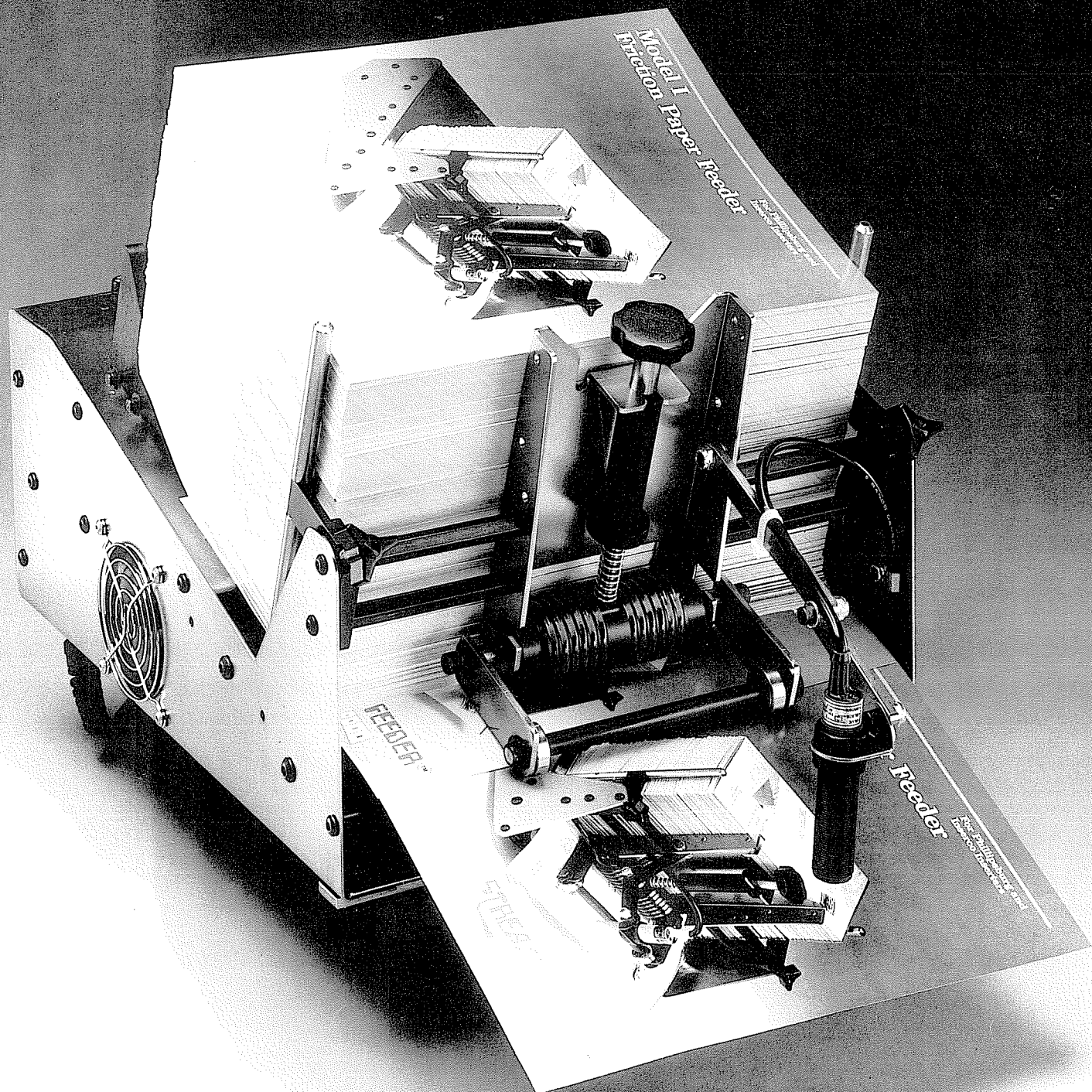
(612) 784-7305

Fax (612) 784-1356



# Model III Universal Friction Feeder

For Phillipsburg and  
Inserco Inserters



STREAMFEEDER®