

FORMAX®

FD 1202 AutoSeal®
Tabletop Pressure Sealer

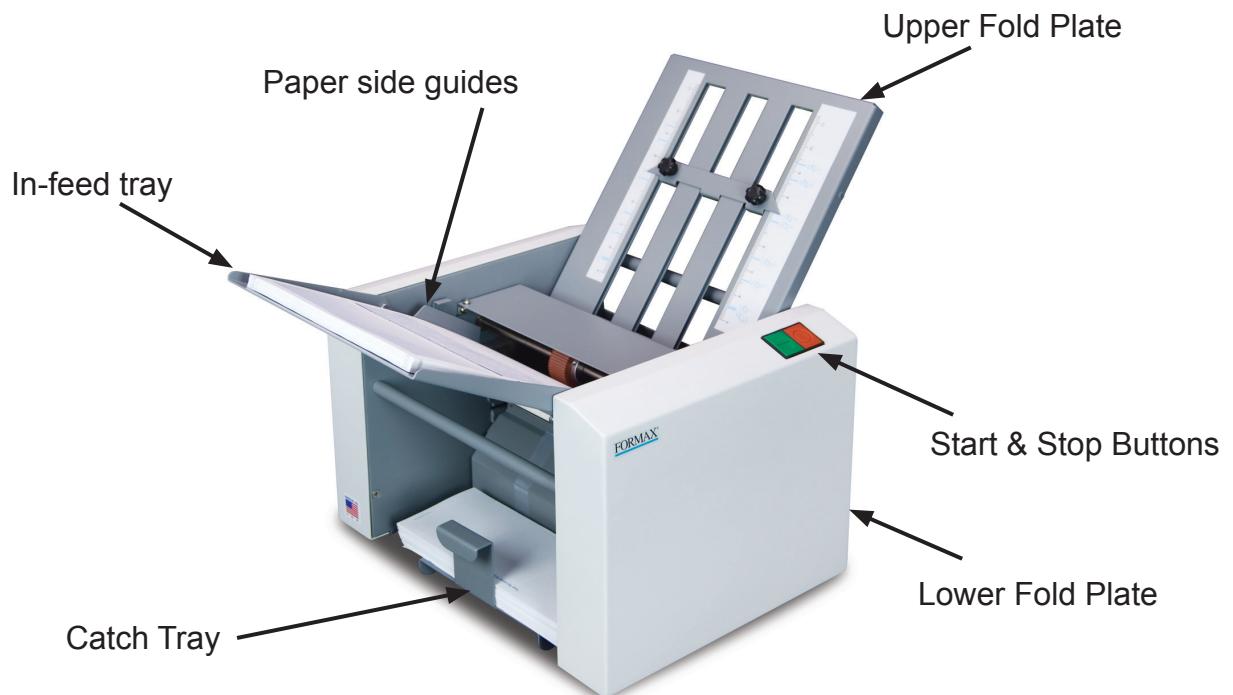
MAINTENANCE MANUAL
FIRST EDITION

TABLE OF CONTENTS



TOPIC	PAGE
SPECIFICATIONS	1
UNPACKING, COMPONENTS	2
SET-UP	3 - 4
OPERATION	5
DETERMINING FOLD TYPE	6
ADJUSTING FOLDS	7
SETTING CUSTOM FOLDS	8
CLEARING PAPER PATH, ADJUSTING INFEED TENSION	9
RECOMMENDED MONTHLY MAINTENANCE	10
TROUBLE-SHOOTING	11
REPLACING INFEED TIRE	12
REPLACING SINGULATOR PAD	12
REPLACING RUBBER INFEED TRAY PAD	13
REPLACING START/STOP SWITCHES	13
TIMING BELT ADJUSTMENT AND REPLACEMENT	14
ADJUSTING SEAL ROLLERS	14
PARTS / ELECTRICAL SCHEMATIC	15 - 30

SPECIFICATIONS



FUNCTION:

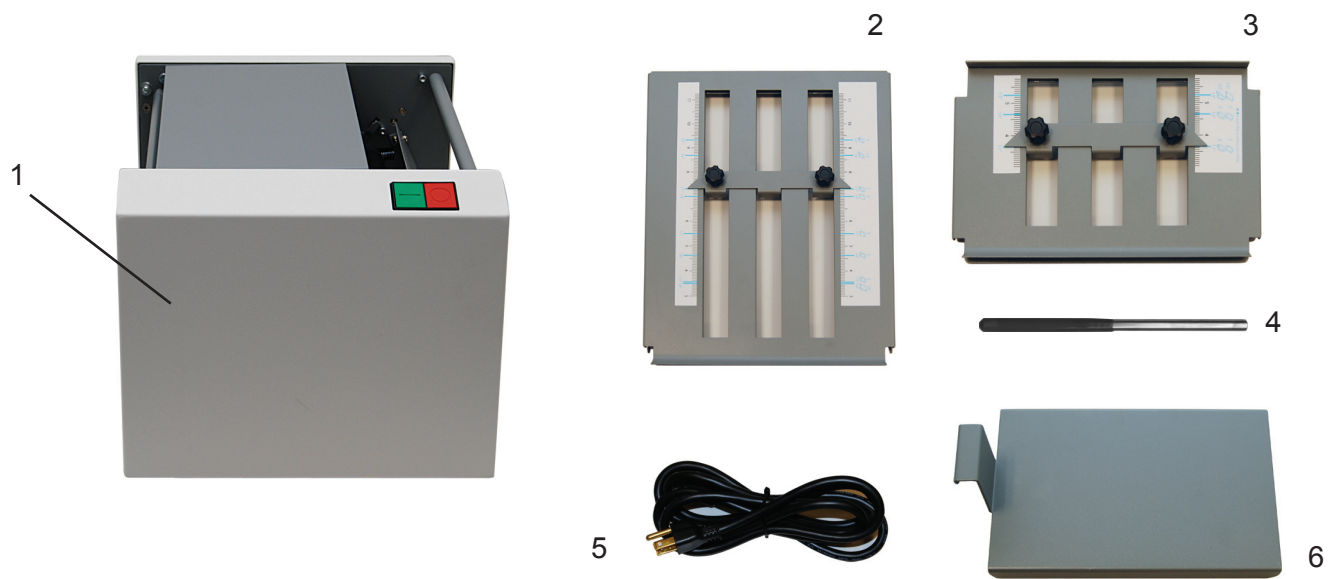
The low volume 1202 pressure sealer folds and seals one-piece pressure sensitive mailers. It can fold many different configurations including Standard C, Z, Half, Uneven C & Z and custom folds. It can also process several different sizes of forms up to 14" in length. For configuration and/or paper sizes, see listing below.

Maximum form size:	8.5" W x 14" L (216 W x 356 L mm)
Fold styles:	C, Z, Half, Uneven C & Z and custom folds
Fixed speed:	Up to 38 forms per minute
Infeed hopper capacity:	Up to 160 sheets 20# (75 gsm)
Machine weight:	55 lbs. (25 kg)
Power supply:	FD model: 120V, 50/60 Hz FE model: 220V, 50/60 Hz

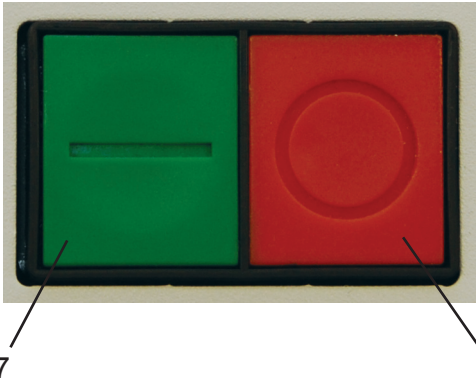
UNPACKING

- 1. Check package for shipping damage. If there is shipping damage, do not discard the box.
- 2. CAUTION: Two people are required to lift the machine out of the box.
- 3. Set the 1202 on a sturdy level surface.
- 4. Refer to set-up instructions on page 3 & 4 after reviewing components for proper installation.

COMPONENTS



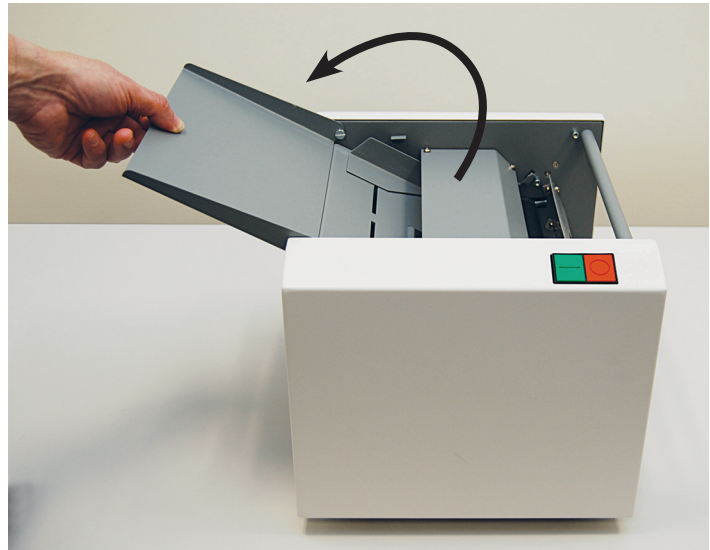
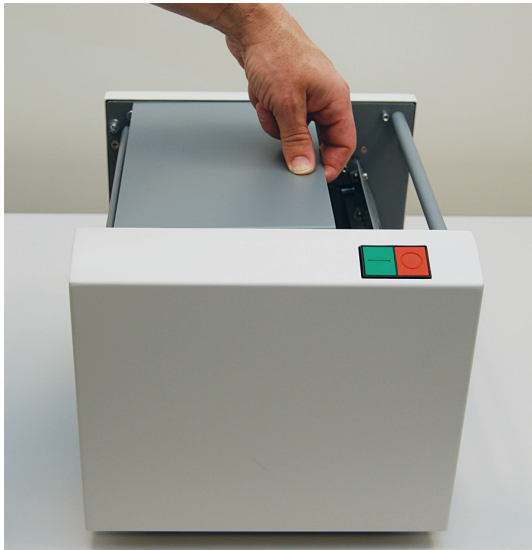
1	1202	4	Jam Clearing Tool
2	Upper Fold Plate	5	Power Cord
3	Lower Fold Plate	6	Catch Tray



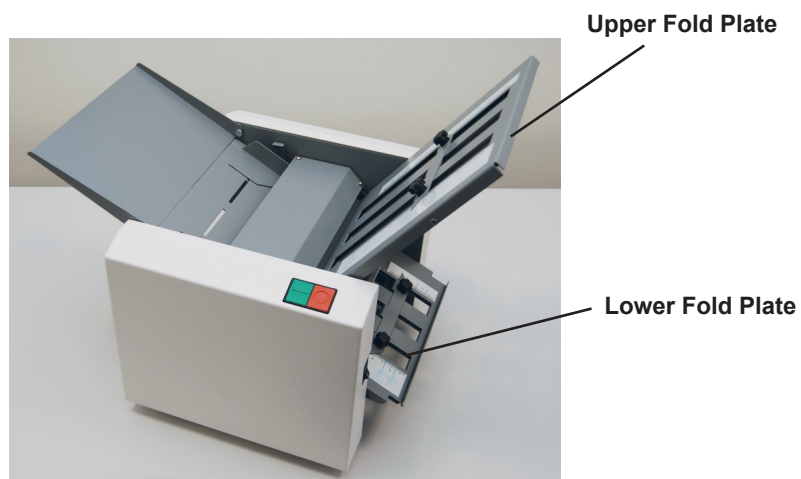
7	Green Start Button	Press to start operation
8	Red Stop Button	Press to stop operation

SET-UP

1. Open the infeed tray

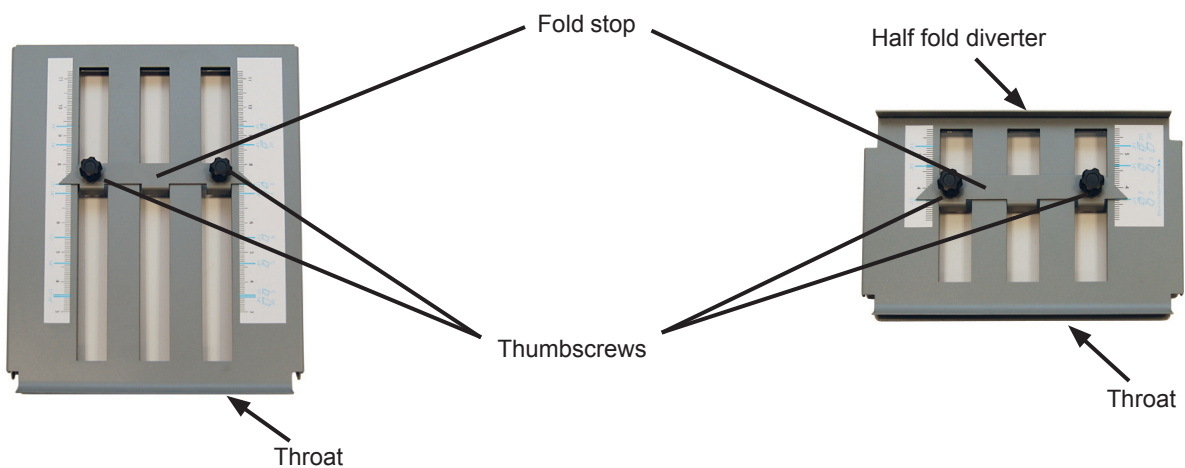


2. Insert Fold Plates



Upper Fold Plate

Lower Fold Plate



To install fold plates, slide the plate into position with thumbscrews facing up and the throat toward the inside of the machine. Line up the notches on the underside of the plate with the four pins on the machine and set into place (figure 1a upper fold plate & 1b lower fold plate).

Upper Fold Plate

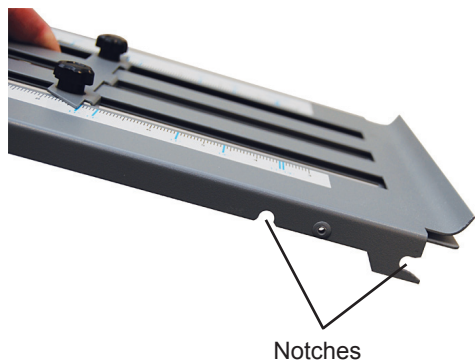


Figure 1a

Lower Fold Plate

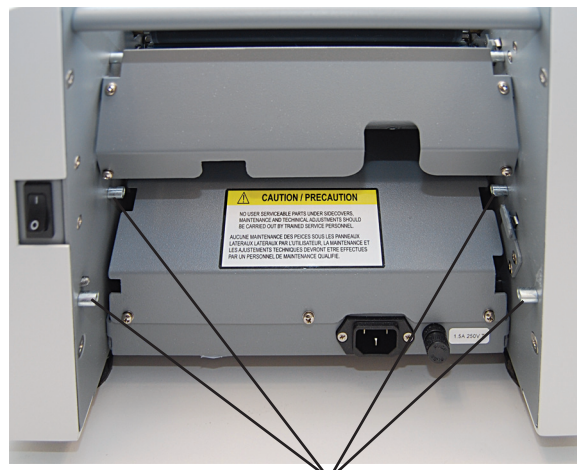
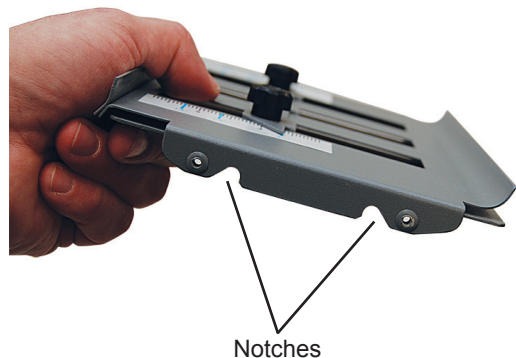


Figure 1b

Catch Tray

To install the catch tray, slide it underneath (1c) along the guides on the infeed/outfeed side of the machine.

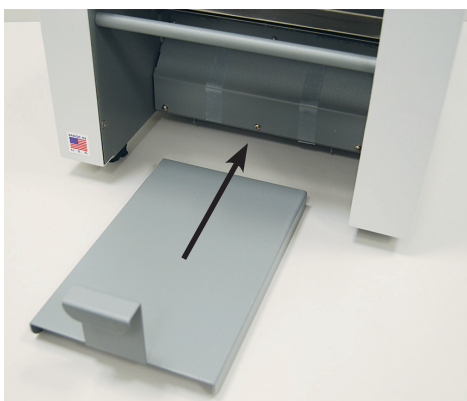


Figure 1c

OPERATION

1. Setting the fold type

Note: The fold plates are pre-marked for standard 11" and 14" Z, C & Half folds and 14" Uneven Z & C folds for quick setup (refer to page 6 to help determine fold type and page 8 to measure for custom folds.).

Adjust fold plates to the correct fold type and paper size. Leaving the fold plates in position, loosen the two thumbscrews (Fig 2a & 2b) that hold the fold stop in place. Align the arrows at each end of the fold stop with the marks on the fold plate, be sure each side matches up (Fig 2c) and tighten the thumbscrews. **Note:** For "Half" folds remove the lower fold plate, turn it around 180° and reinstall with diverter edge leading (see page 3).



Fig. 2a Adjusting upper fold plate



Fig. 2b Adjusting lower fold plate



Fig. 2c Setting fold stop

2. Test fold settings and catch tray adjustment

Test fold settings: Turn the power on (Fig 3) push the paper feed lever (Fig 4) down, place one form onto the in-feed tray under the infeed tire and press the start button. Examine document and adjust fold plates if necessary.

Catch tray adjustment: Set the test fold into the catch tray (Fig 5) and slide the catch tray in or out so that the folded form lies flat in the tray. The catch tray can be further adjusted as forms are running, for best stacking results.



Fig. 3 Power switch

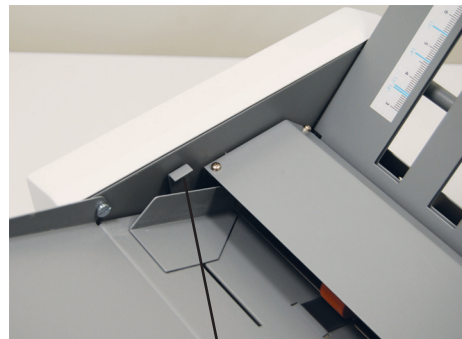


Fig. 4 Paper feed lever



Fig. 5 Catch tray

3. Loading Forms

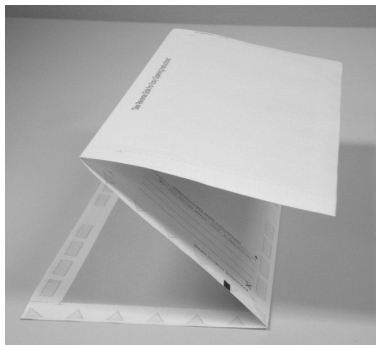
To load forms, push the paper feed lever down and load forms neatly stacked and squared onto the infeed tray, under the infeed tire. Forms can be loaded up to 160 sheets (20# bond).

Note: Standard "Z" fold forms can be loaded face up or down with the glue edge trailing. All "C" fold forms must be loaded face up with glue edge trailing.

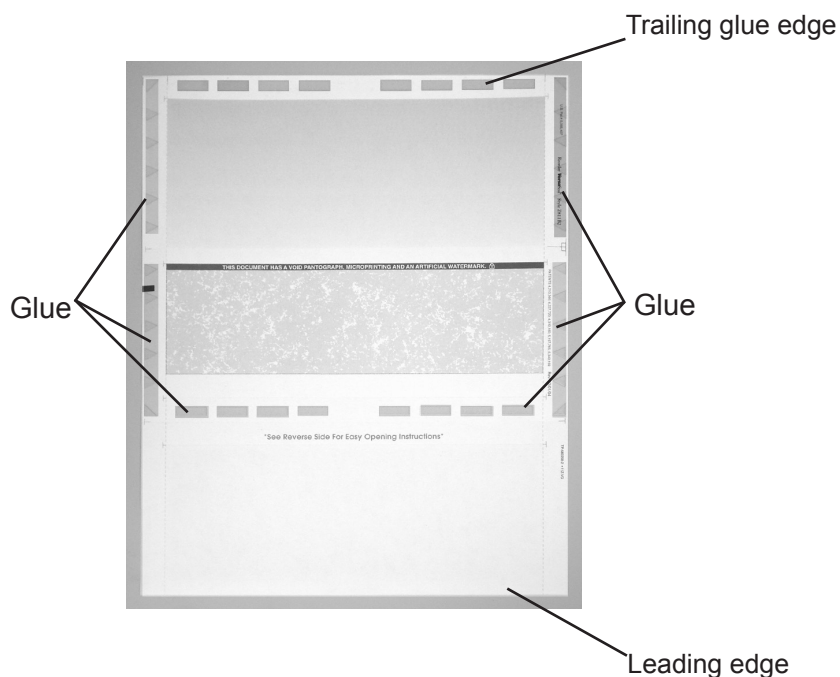
Tip: It is recommended to let forms cool for one-half hour, from the laser printer, before folding and sealing. This allows toner to set on the forms, and static electricity to discharge.

DETERMINING FOLD TYPE

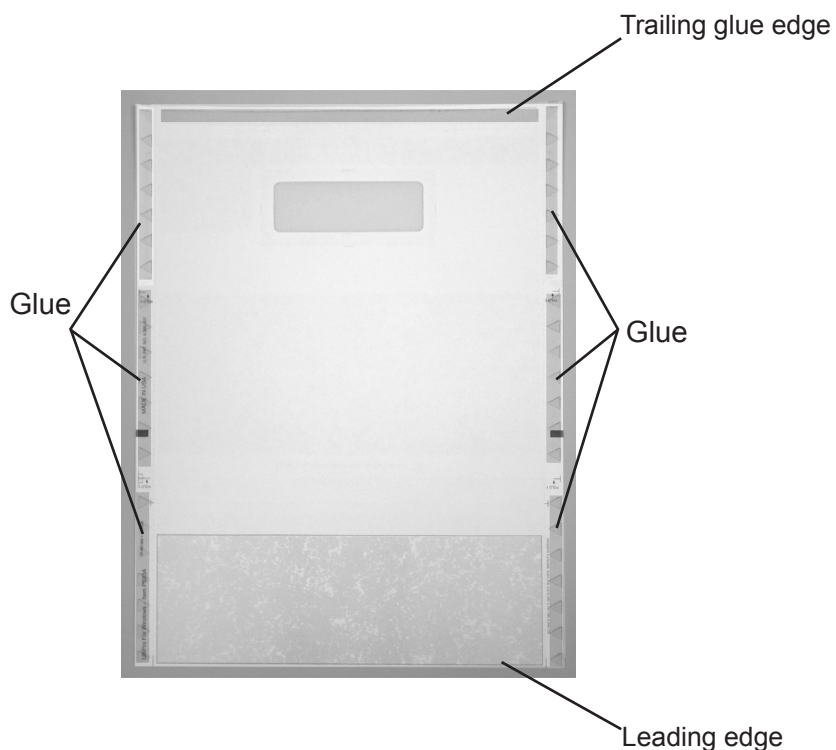
Fold types can be determined by fold and glue patterns, a “Z” fold looks like the letter “Z” and a “C” fold looks like the letter “C”. The panel lengths are equal for standard folds, uneven folds have two panels that are the same size and the third panel is short. Half folds simply fold in half. Below are samples of a standard 11” “Z” and “C” style forms.



11” “Z” Fold



11” “C” Fold



ADJUSTING FOLDS

The fold plate stops may need to be adjusted up or down to fine tune the fold. **Note:** The 1st and 2nd folds are different for “Z” and “C” folded forms, see the diagrams to determine the fold sequence.

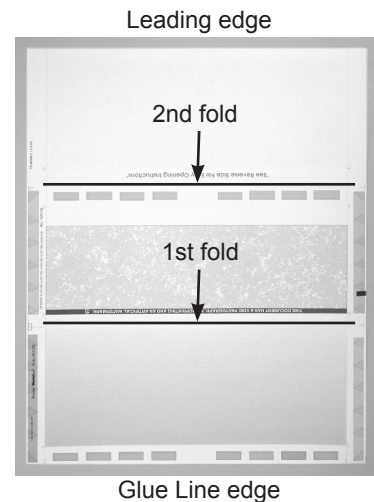
1st fold adjustment, Upper fold plate

To adjust the first fold loosen the two thumbscrews on the upper fold plate. If the fold is too long slide the bar down to decrease the fold length. If the fold is too short slide the bar up to increase the fold length.

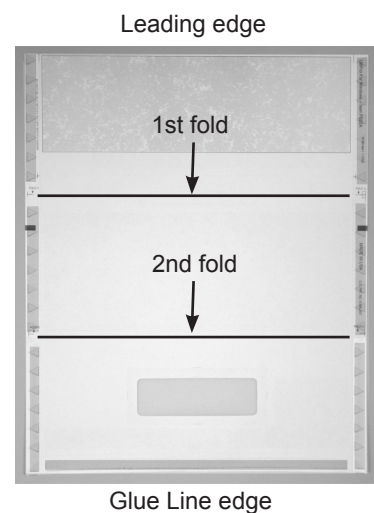
2nd fold adjustment, Lower fold plate

To adjust the second fold loosen the two thumbscrews on the lower fold plate. If the fold is too long slide the bar up to decrease the fold length. If the fold is too short slide the bar down to increase the fold length.

“Z” Fold



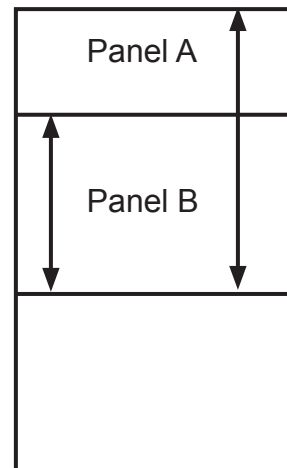
“C” Fold



SETTING CUSTOM FOLDS

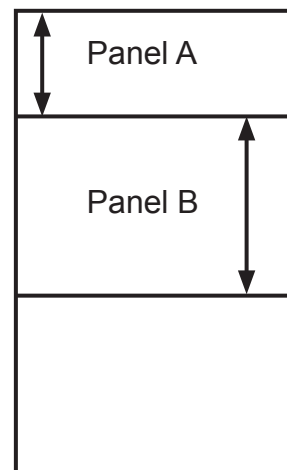
“Z” Type folds

1. Measure the length of panel “A” & “B”.
2. Adjust the upper fold plate so that the bar lines up with the measurements of panel “A” & “B”, for example: if panel “A” + “B” is 8 1/2” long move the bar up or down so that it lines up with the 8 1/2” mark on the fold plate.
3. Measure the length of panel “B”.
4. Adjust the lower fold plate so that the bar lines up with the measurements of panel “B”.
5. Load forms and press start (refer to OPERATION on page 5).



“C” Type Folds

1. Measure the length of panel “A”.
2. Adjust the upper fold plate so that the bar lines up with the measurements of panel “A”, for example: if panel “A” is 3 1/2” long move the bar up or down so that it lines up with the 3 1/2” mark on the fold plate.
3. Measure the length of panel “B”.
4. Adjust the lower fold plate so that the bar lines up with the measurements of panel “B”.
5. Load forms and press start (refer to OPERATION on page 5).



CLEARING THE PAPER PATH

WARNING: Turn machine off and unplug cord from its receptacle.

Jam in a fold plate

1. If a jam occurs in the fold plates, remove fold plate and remove paper.
2. Reinstall fold plate.

Jam between rollers

1. If a jam occurs between the rollers remove any remaining forms from the hopper.
2. Remove the lower fold plate.
3. Take the jam clearing handle and insert it into one of the holes in the lower metal roller (Fig 6) and turn until the paper jam is clear.
4. Remove the damaged form and reinstall the lower fold plate.



Fig. 6

ADJUSTING THE GATE TIP IN-FEED TENSION

If misfeeding occurs, the gate tip (Fig 7a) in-feed tension may need to be increased or decreased for proper feeding. If forms are hesitating at the infeed, the tension may need to be decreased. If multiple sheets are being pulled, the tension may need to be increased. A gate tip adjustment spring (Fig 7b) is located beneath the infeed tray. To increase the tension on the gate tip use needle nose pliers to reposition the spring one hole at a time toward the right. To decrease the tension, reposition the spring one hole at a time toward the left. Continue process until forms are feeding correctly.

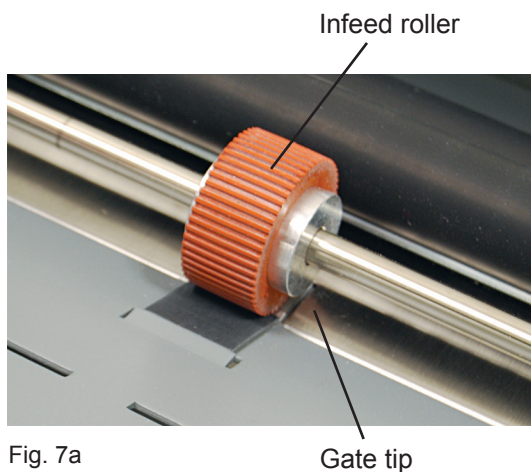


Fig. 7a

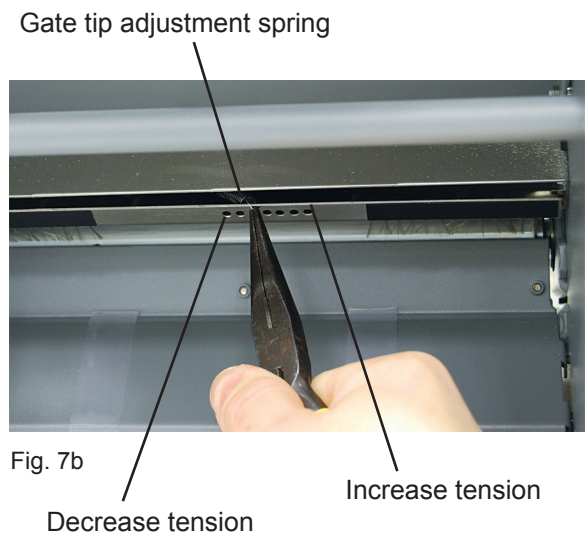


Fig. 7b

RECOMMENDED MONTHLY MAINTENANCE

WARNING: Turn machine off and unplug cord from its receptacle.

1. If toner builds up on the metal sealer rollers, clean the rollers with a lint-free cloth dampened sparingly with a mild household cleaner. To access the rollers remove the upper and lower fold plates and top and rear covers, a Phillips head screwdriver is needed to remove covers (Fig 8).
2. Clean in-feed tire and fold rollers with recommended roller cleaner & rejuvenator to remove paper dust and toner. A damp cloth with water is the best alternative. **CAUTION:** Do not use any chemicals other than the roller cleaner & rejuvenator or water. To access the feed tire and fold rollers remove the upper and lower fold plates and top and rear covers, a Phillips head screwdriver is needed to remove covers.

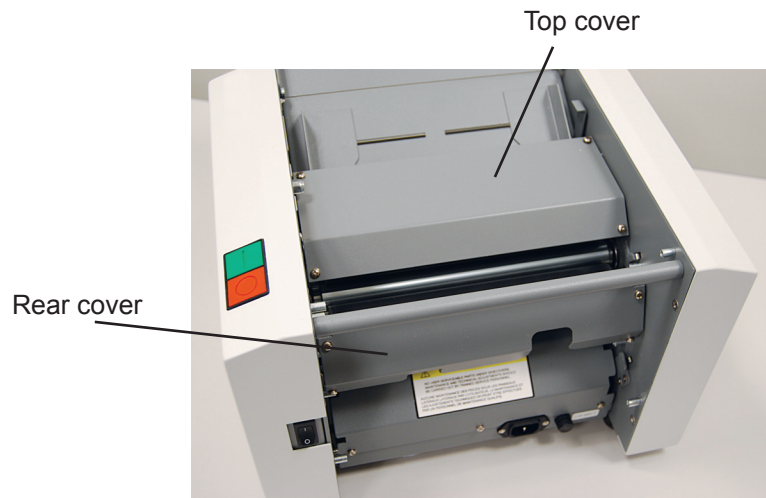


Fig. 8

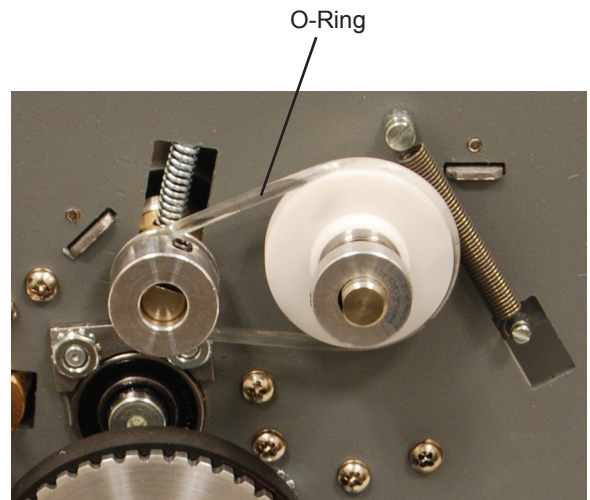
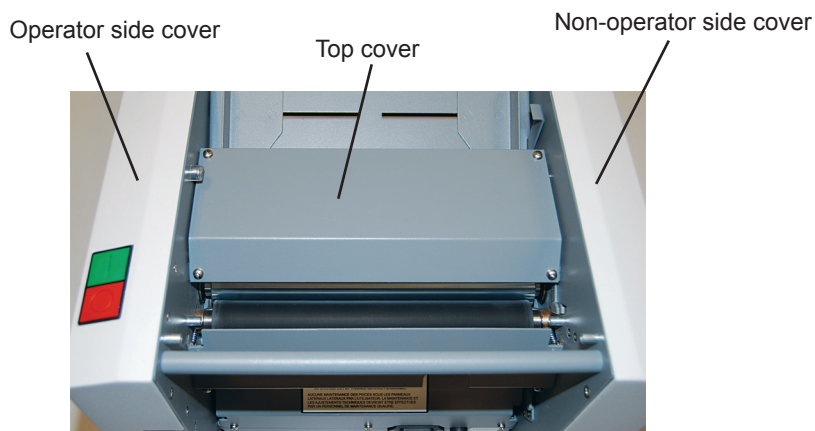
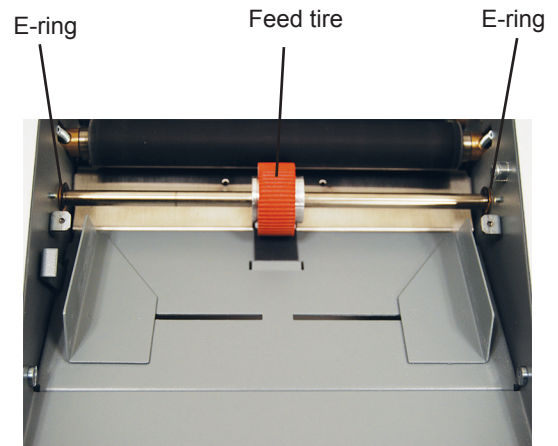
TROUBLESHOOTING

TROUBLE	POSSIBLE CAUSE	REMEDY
Machine plugged in, no power	Machine is off. Fold plate sensors are not engaged No power to the machine inlet. Internal electrical failure.	Turn machine on Reset the fold plates into position Check the wall outlet Check power cord for frayed/broken wires. Check the fuse below the lower fold plate. Check all electrical connections Call for service
Black marks on the folded paper	In-feed tires, separator, and/or fold rollers are dirty. Sealer rollers are dirty.	Clean the parts with approved roller cleaner and rejuvenator. Clean the rollers with approved cleaner
Fold is skewed	Forms are not set squarely on the in-feed tray. Forms are not centered on the in-feed tray. Fold plate stops are not square.	Reset the forms on the in-feed tray. Adjust side guides so that forms are centered on the feed tire Adjust fold stops to square
Documents are wrinkled or crunched	Fold plates are not inserted correctly. Piece of paper or other material is stuck in the fold plate.	Remove and reinstall fold plates. Be sure they're properly positioned. Remove object from the fold plate.
In-feed tray lever does not work	Broken spring	Replace spring
Double feeding forms	Documents stuck together Feed tire or separator pad worn	Jog forms to remove static electricity. Adjust infeed separator Replace feed tire and/or separator pad
Documents not feeding	Feed tire dirty Feed tire or separator worn	Clean feed tire Adjust infeed separator Replace feed tire and/or separator pad

MAINTENANCE

REPLACING INFEEED TIRE

1. Turn power off and unplug the power cord.
2. Remove top cover and non-operator side cover.
3. Loosen the setscrew in the feed tire so that it moves freely.
4. Remove the two e-clips on either end of the shaft.
5. Remove o-ring from the end of the shaft, under the non-operator cover.
6. Slide the feed wheel off and replace with new feed wheel.
7. Slide the rod back into position replace e-clips and o-ring.
8. Center the feed tire and tighten the setscrew.



REPLACING SINGULATOR PAD

1. Remove infeed tire (see above).
2. Remove rubber singulator pad (Fig. 9). A screwdriver or knife may be need to pry the pad off.
3. Clean singulator mount.
4. Peel the backing off the singulator mount pad.
5. Apply singulator pad to singulator mount, let sit for at least five minutes before reinstalling in-feed tire.
6. Reinstall infeed tire (see above).

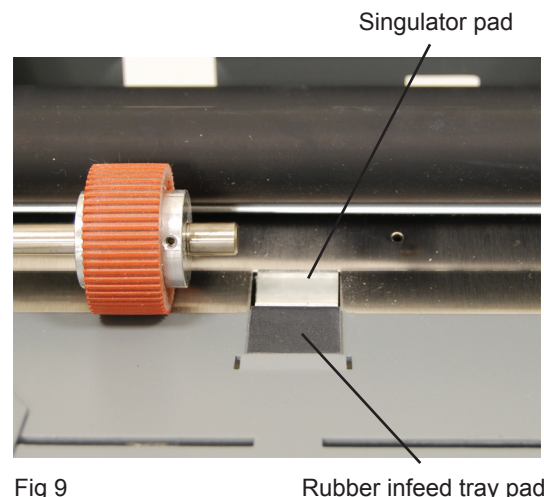


Fig 9

REPLACING RUBBER IN-FEED TRAY PAD

1. Turn main power off and unplug from the wall.
2. Remove the top cover.
3. Loosen the feed tire set screw and slide the tire to the side.
4. Remove old pad (fig. 9). A screwdriver or knife may be needed to pry the pad off.
5. Clean area of removed pad.
6. Peel the backing off the singulator mount pad.
7. Apply pad to infeed tray. Let sit for at least five minutes before operating the machine.

REPLACING START/STOP SWITCH

1. Turn main power off and unplug from the wall.
2. Remove operator side cover.
3. Grasp and hold lower part of switch (fig. 10a). Twist the button part of switch counter-clockwise to remove (fig. 10b).
4. With a Phillips head screwdriver remove the wiring from the old switch. Note wire positions and attach these to the new switch.
5. Align the lower part of the new switch with the mounting plate. Twist the button part of switch clockwise until it clicks into place (fig. 10c).
6. Replace the side cover.

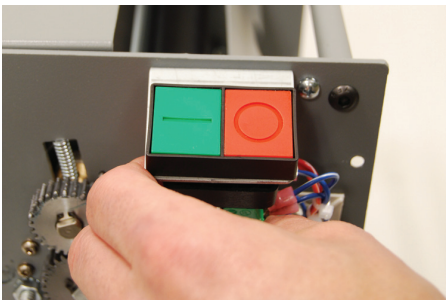


Fig. 10a

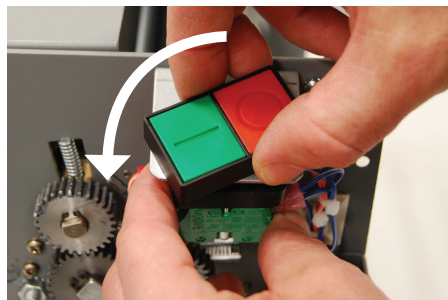


Fig. 10b

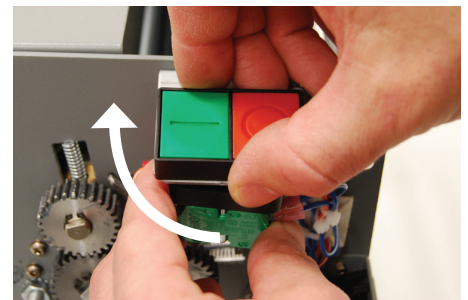
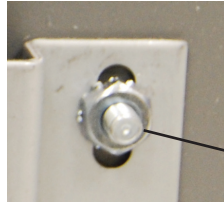


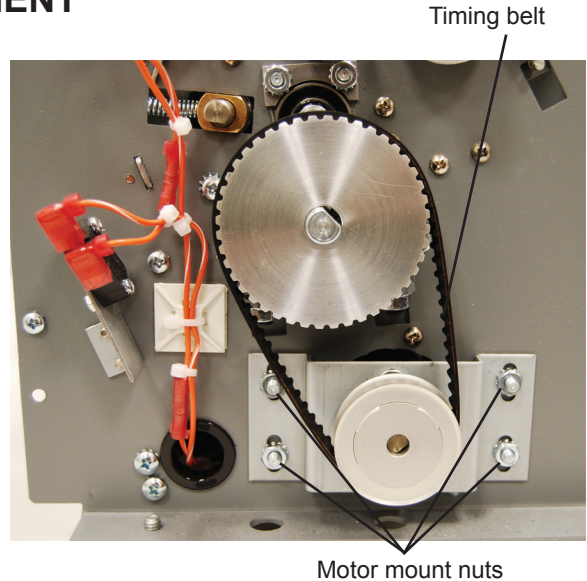
Fig. 10c

TIMING BELT ADJUSTMENT AND REPLACEMENT

1. Turn main power off and unplug from the wall.
2. Remove non-operator side cover.
3. Using a 3/8" socket loosen the four motor mount nuts.
4. If needed, install new belt.
5. Push down on the motor mount to tighten the belt, the nuts should sit approx at the mid point of the slot.
6. Tighten the nuts in position.

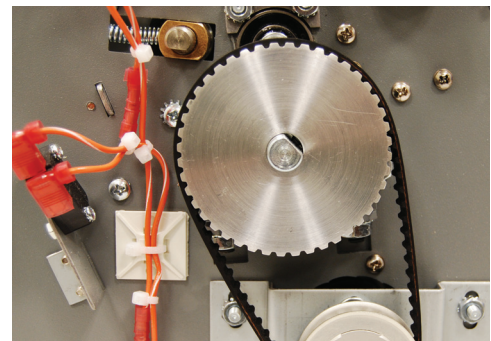


Motor mount nut at mid point of slot



ADJUSTING SEAL ROLLERS

1. Turn main power off and unplug from the wall.
2. Remove both operator and non-operator side covers.
3. On the non-operator side, loosen the 4 nuts behind the drive pulley with a 7/16 open end wrench (fig. 11a and 11 b).
4. Loosen the 2 nuts under the pulley with a 7/16 wrench (fig. 11c). Adjust the Allen screws for tension with 1/8 Allen wrench.
5. On the operator side, loosen the 4 nuts with a 7/16 open end wrench (fig. 11d). Loosen the 2 nuts under the adjustment plate. Adjust the Allen screws for seal pressure with 1/8 Allen wrench.
6. Replace both operator and non-operator covers.



Non-operator side

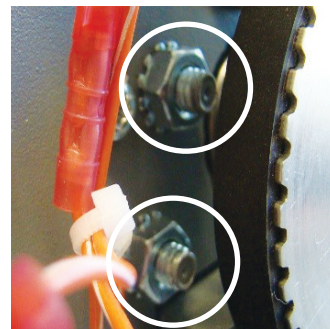


Fig 11a

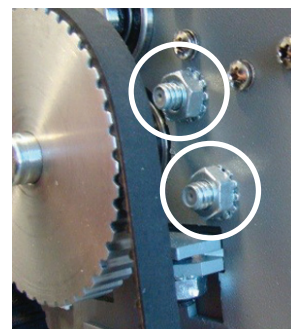


Fig 11b



Fig 11c

Allen screws

- Loosen 4 nuts
- Adjustment plate
- Allen screws

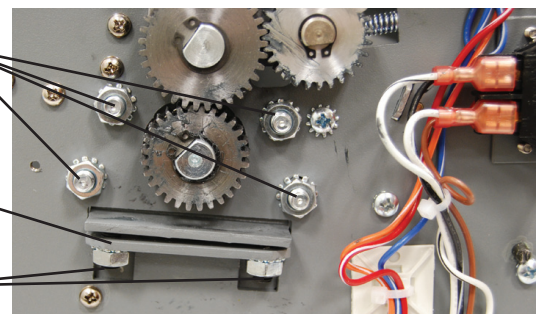
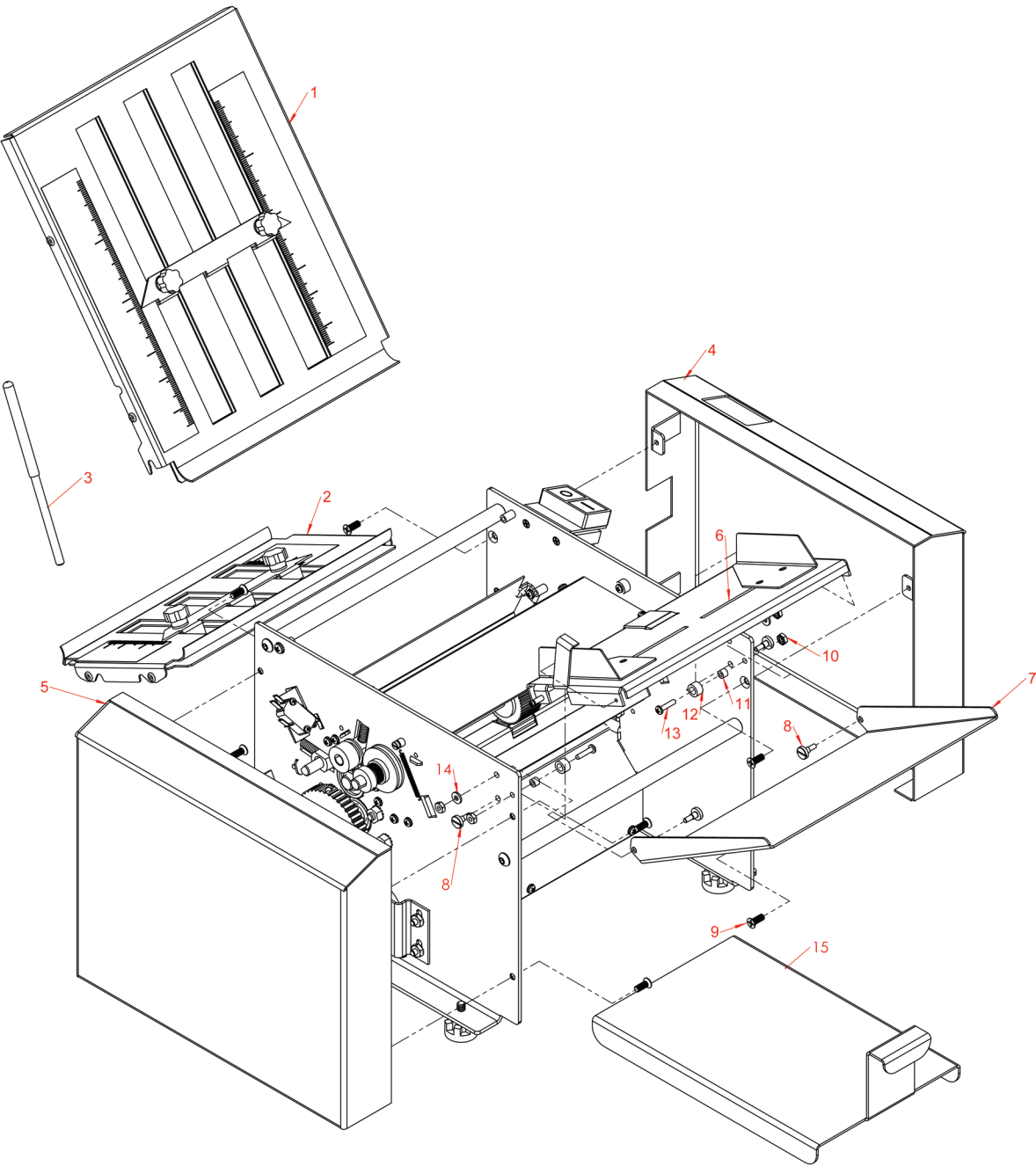


Fig 11d

Operator side

PARTS

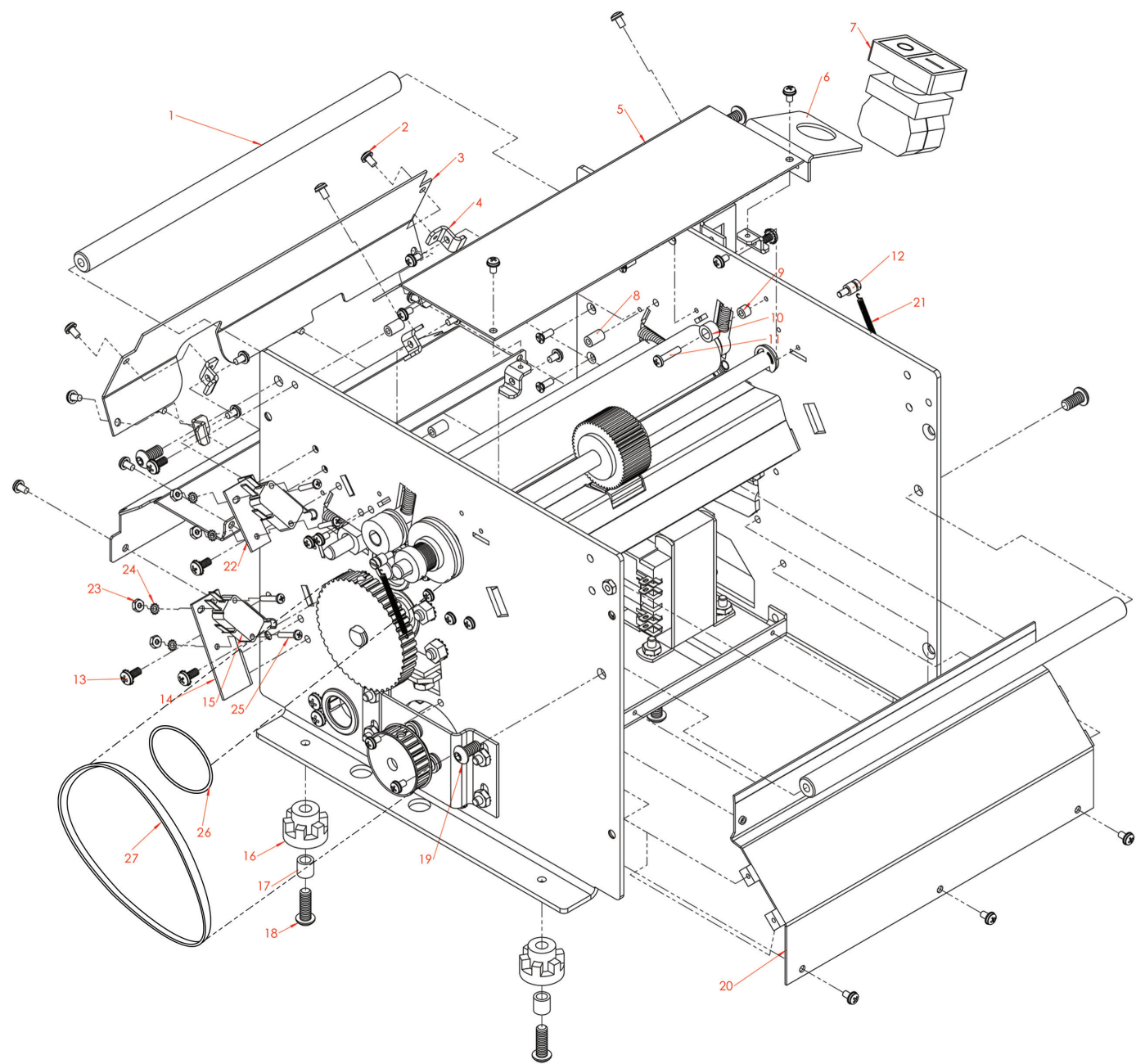
EXPLODED VIEW #1



EXPLODED VIEW #1

ITEM #	PART #	DESCRIPTION	QTY
1	395-1318	UPPER FOLD PLATE 1202	1
2	395-1319	LOWER FOLD PLATE 1202	1
3	332-0176	ROD, JAM REMOVAL	1
4	360-2977	OPERATOR COVER, 1202	1
5	360-2978	REAR COVER, 1202	1
6	N/A	SEE PAPER TRAY ASSEMBLY	
7	360-2974	INFEED TRAY EXTENSION, 1202	1
8	375-0146	SHOULDER SCREW INFEED TRAY EXTENSION, 1202	4
9	375-0110	10-32 X 1/2 FLAT HD UNDERCUT	8
10	378-9500	6-32 NUT WITH STAR WASHER	4
11	381-0116	# 8-32 SPACER	2
12	350-0102	TUBING MIH	2
13	373-2842	SCREW PPH 6-32 x 5/8 LG.	2
14	377-2811	# 6 WASHER	2
15	360-2976	CATCH TRAY, 1202	1

EXPLODED VIEW #2



EXPLODED VIEW #2

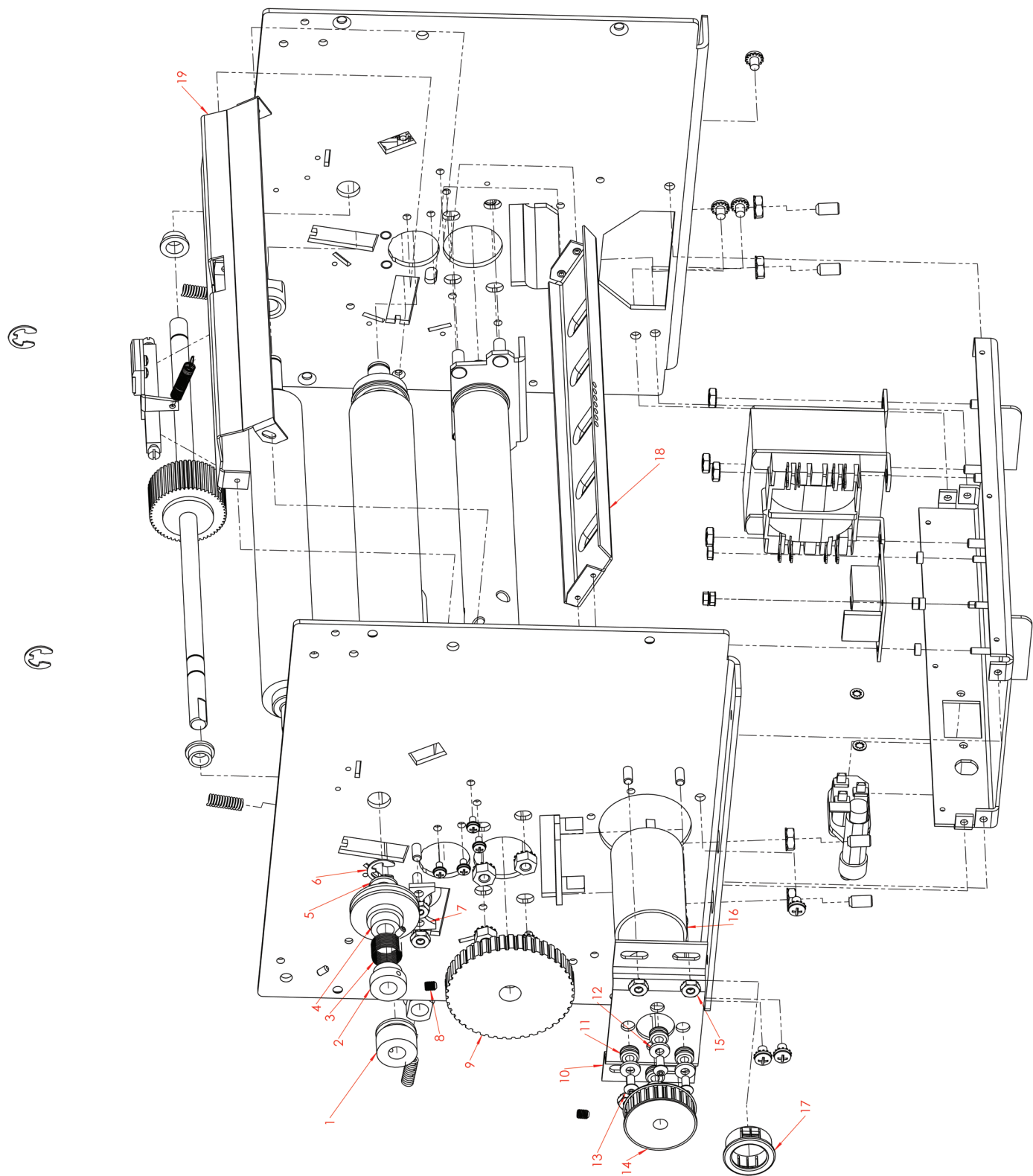
ITEM #	PART #	DESCRIPTION	QTY
1	332-0179	SUPPORT CROSS ROD, 1202	2
2	373-5869	SCREW PPH 6-32 X 1/4 LG. INT STAR	44
3	360-2983	REAR MOTOR COVER, 1202	1
4	360-2699	BRACKET COVER, 1200 EG	8
5	360-2982	INFEED UPPER COVER, 1202	1
6	360-2990	START / STOP SWITCH BRKT, 1202	1
7	311-0123	START - STOP SWITCH (GREEN N.O.) (RED N.C.)	1
8	381-0132	THREADED STUD	8
9	381-0116	# 8-32 SPACER	1
10	350-0102	TUBING MIH	1
11	373-2842	SCREW PPH 6-32 x 5/8 LG.	1
12	381-0160	SHOULDER SCREW, INFEED TRAY SPRING, 1202	2
13	373-0095	PPH SCREW W/EXT STAR 8-32 X .3	8
14	360-1862	INTERLOCK SWITCH MOUNT EG	1
15	311-0108	INTERLOCK SWITCH	2
16	372-0116	RUBBER BUMPER	4
17	371-0061	BUSHING 1/4 X 3/8 X 3/8	4
18	375-0145	1/4-20x3/4 BTHD CAP SCREW	4
19	375-0023	1/4-20x1/2 SCREW	4
20	360-2970	FRONT MOTOR COVER, 1202	1
21	342-0110	SPRING, INFEED TRAY	2
22	360-2710	INTERLOCK BRACKET UPPER FOLD PLATE, 1202 EG	1
23	378-0001	4-40 HEX NUT	4
24	377-5855	# 3 INT STAR WASHER	4
25	373-0098	PPH SCREW W/EXT STAR 4.40 X .6	4
26	365-0226	PICK OFF 'O' RING, 1200	1
27	365-0230	TIMING BELT 134XLO37	1

This technical drawing is an exploded view of a mechanical assembly, likely a timing mechanism or a small engine component. It shows the relationship between various parts, which are numbered 1 through 31. The main components include a large rectangular housing (11), a central shaft assembly (10), a timing gear (5), a camshaft (6), and a distributor (24). The diagram uses dashed lines to indicate the assembly path and alignment of the parts. The parts are distributed around the main housing, showing their relative positions and how they fit together.

EXPLODED VIEW #3

ITEM #	PART #	DESCRIPTION	QTY
1	379-0014	E-RING FOR 3/8 SHAFT	2
2	360-2993	INFEED RAMP, 1202	1
3		SEE SINGULATOR ASSY	
4	334-0421	PICK OFF HUB, 1202	1
5	350-0106	PICK OFF TIRE, 1202	1
6	331-0215	PICK OFF SHAFT, 1202	1
7	371-0013	OILITE 3/8 X 1/2 X 1/4 FLANGED	2
8	342-0082	COMPRESSION SPRING "O" RING SIDE	4
9	371-0084	BUSHING, FOLDER ROLLER	4
10	350-0105	RUBBER ROLLER, 1202	2
11	395-1220	UPPER STEEL ROLLER, 1202	1
12	395-1221	LOWER STEEL ROLLER, 1202	1
13	360-2967	FRONT FRAME, 1202	1
14	360-2968	REAR FRAME, 1202	1
15	379-1073	3/8" RET. RING TRUARC #5100-37	2
16	379-0035	12mm EXTERNAL RETAINING RING	2
17	368-0082	SPUR GEAR 28T/24P 3/8" 'D' BORE (ALUM)	2
18	368-0083	SPUR GEAR 28T/24P 12mm 'D' BORE	1
19	368-0084	SPUR GEAR 33T/24P 12mm 'D' BORE	1
20	378-6549	1/4"x20 KEP NUT	4
21	373-0124	#10-32X1/4" PPH W/EXT LK WSHR	6
22	376-0085	1/4-20 x 1/2 SET SCREW	4
23	378-0132	1/4-28 KEPNUT	4
24	319-0286	24 VAC TRANSFORMER (120/240 VOLT INPUT)	1
25	378-0004	10-32 KEP NUT	4
26	378-0104	6-32X1/4 HEXAGON	4
27	490-0038	PRINTED CIRCUIT BOARD (JAM DETECT), 1202	1
28	381-0101	NYLON SPACER	4
29	360-2969	BOTTOM FRAME, 1202	1
30	319-0096	IEC POWER INLET	1
31	317-0006	SHOCK-SAFE FUSEHOLDER	1
	317-0061	FUSE, 1.5A TIME DELAY 1/4" X 1-1/4"	1

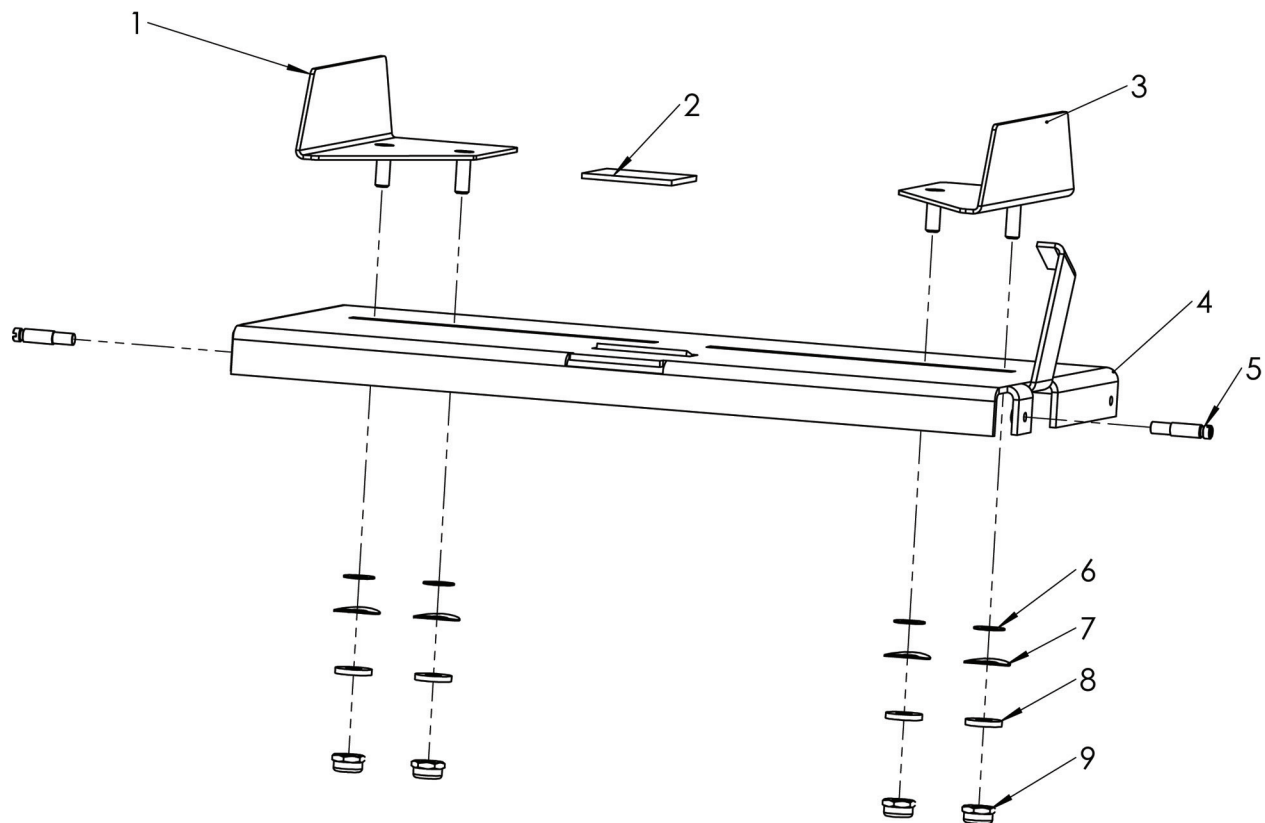
EXPLODED VIEW #4



EXPLODED VIEW #4

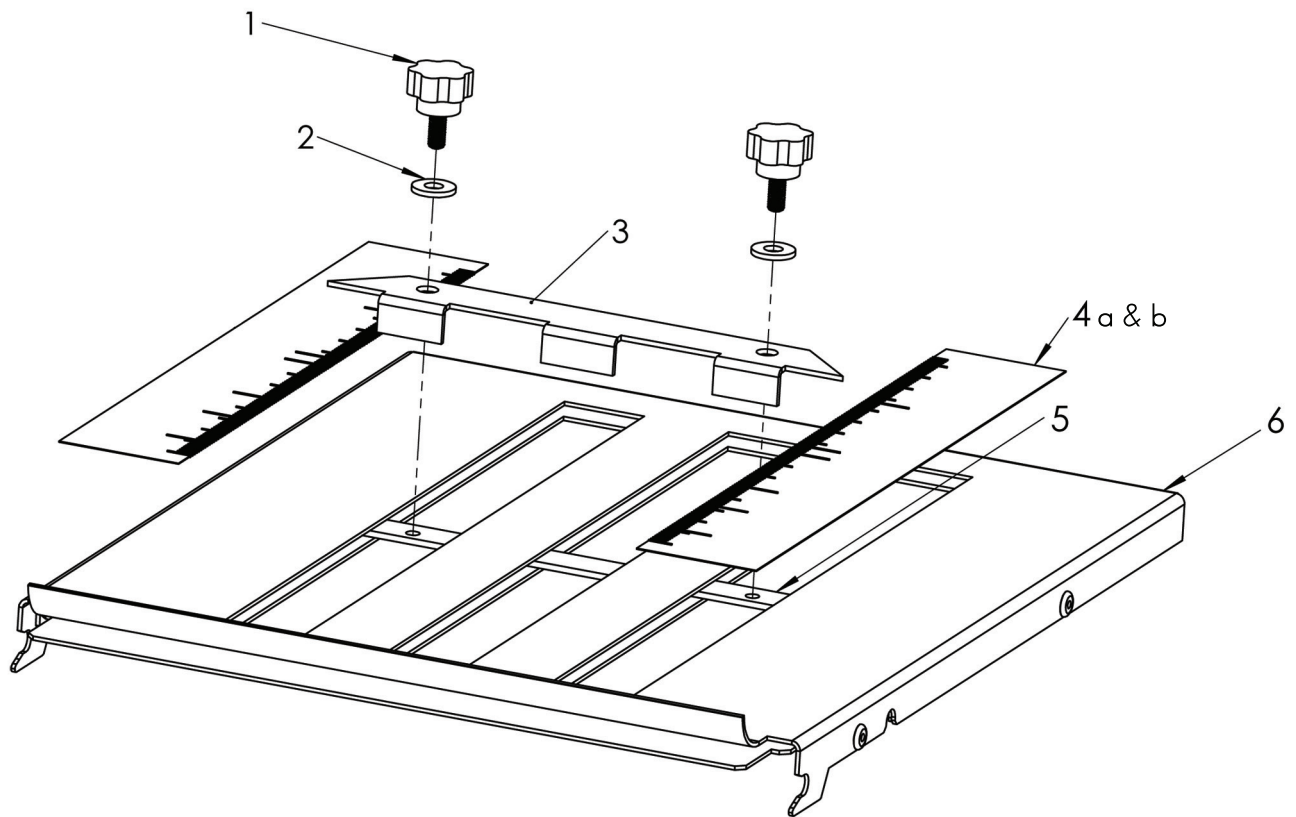
ITEM #	PART #	DESCRIPTION	QTY
1	365-0227	PICK OFF DRIVE ('O' RING) PULLEY, 1202	1
2	334-0422	PICK OFF SPRING COLLAR, 1202	1
3	342-0111	CLUTCH SPRING, PICK OFF	1
4	365-0225	PICK OFF DRIVEN ('O' RING) PULLEY, 1202	1
5	371-0027	THRUST BEARING 3/8 X 5/8	1
6	379-0014	E-RING FOR 3/8 SHAFT	1
7	360-2712	PLATE, BEARING	2
8	376-0006	10-32 SETSCREW	2
9	365-0244	TIMING PULLEY 44XL037, 12mm BORE	1
10	360-2696	MOTOR MOUNT BRACKET, 1202	1
11	352-0019	ISOLATION GROMMET #8 SCREW	4
12	377-0001	# 8 FLAT WASHER	4
13	375-0014	8-32 x 3/8 BUTTON HEAD SCREW	4
14	365-0245	TIMING PULLEY 24XL037, 8mm BORE	1
15	378-0004	10-32 KEP NUT	13
16	313-0069	MOTOR, 12 TO 24 VDC	1
17	315-8329	HEYCO THRU BUSHING	1
18	360-2702	EXIT GUIDE, 1202	1
19	360-2993	INFEED RAMP, 1202	1

PAPER TRAY



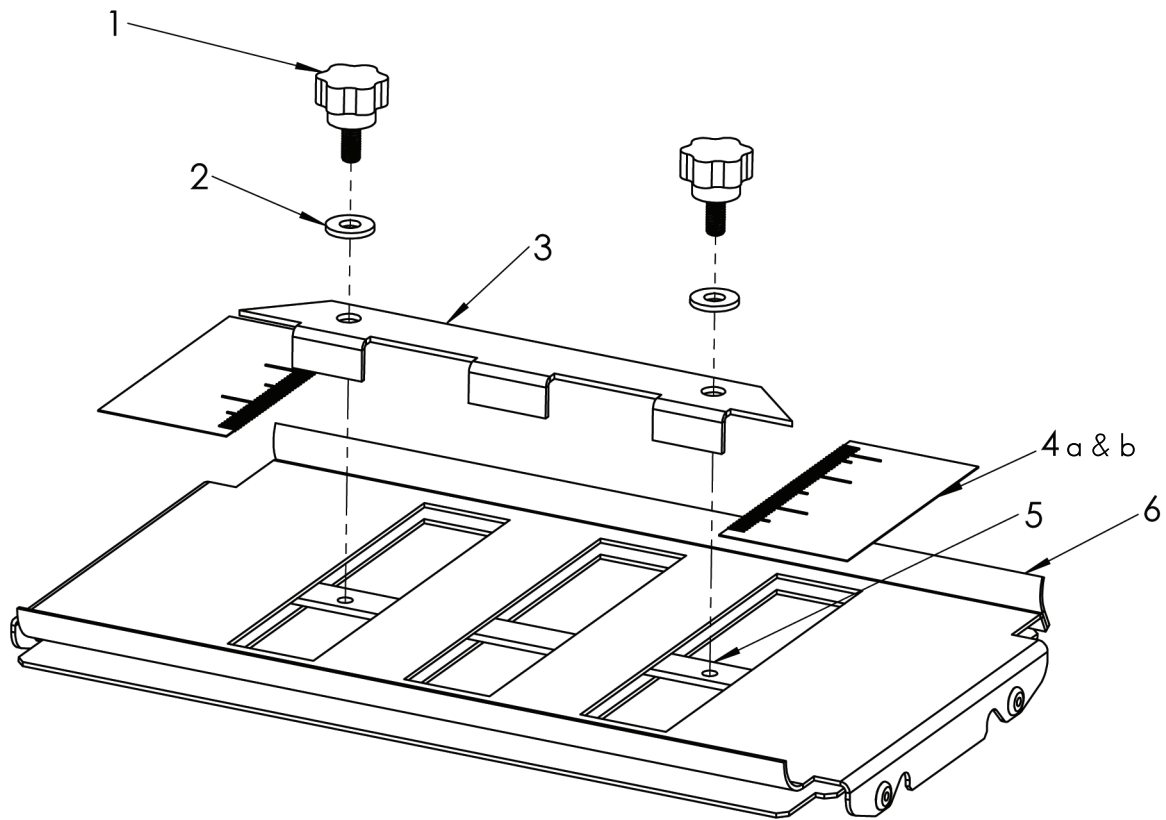
ITEM #	PART #	DESCRIPTION	QTY
1	395-1322	RIGHT PAPER GUIDE, 1202	1
2	351-0016	PICK OFF PAD, 1200	1
3	395-1323	LEFT PAPER GUIDE, 1202	1
4	360-2971	INFEED TRAY, 1202	1
5	381-0159	STUD, INFEED TRAY SPRING, 1200	2
6	377-0049	.192 ID NYLON FLAT WASHER	4
7	377-0057	CURVED WASHER 0.265 X 0.551	4
8	377-0001	# 8 FLAT WASHER	4
9	378-0115	NUT SELF LOCK 8-32	4

UPPER FOLD PLATE



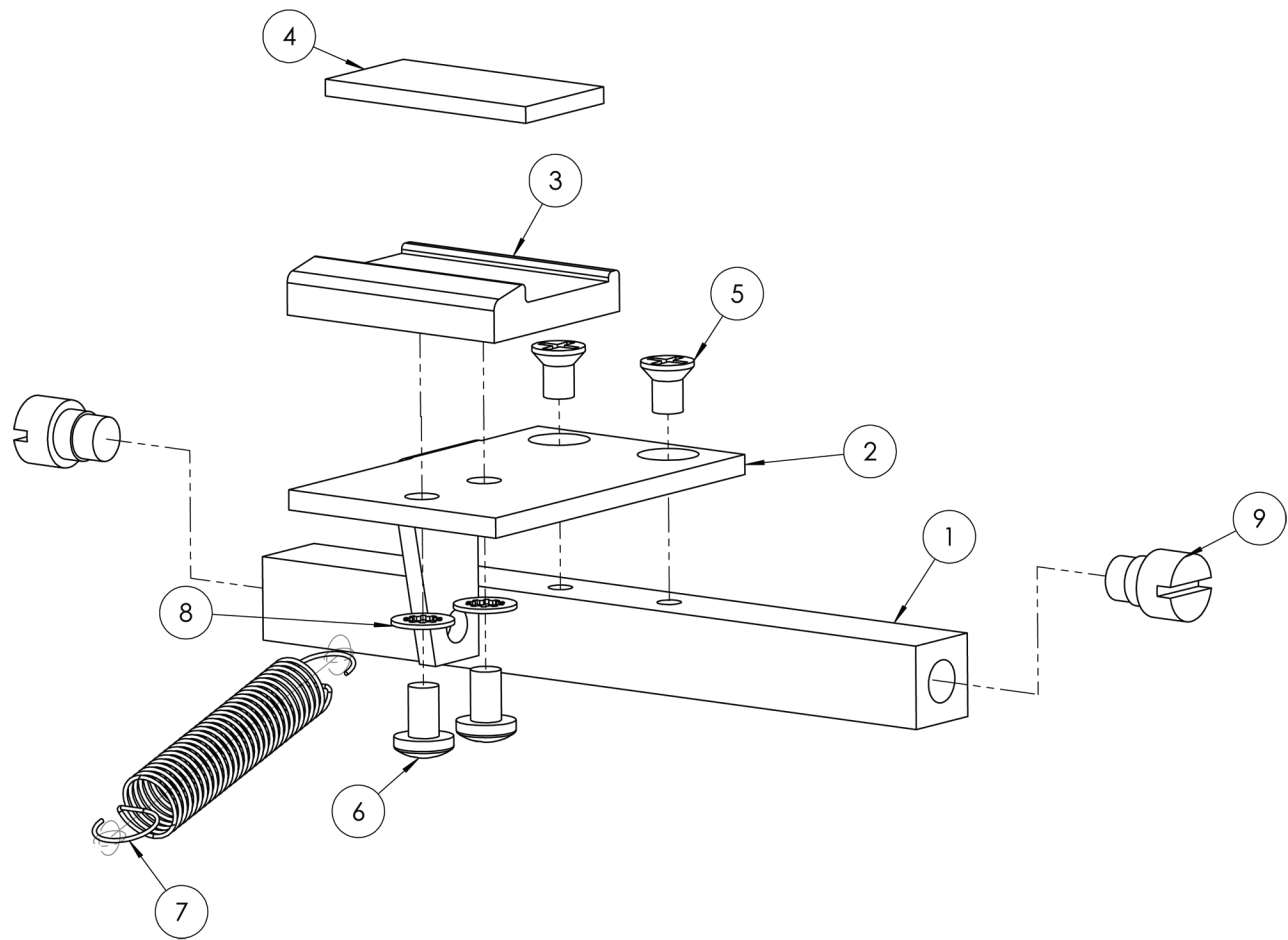
ITEM #	PART #	DESCRIPTION	QTY
1	372-0124	HAND KNOB 10-32	2
2	377-5298	#10 FLAT WASHER	2
3	360-2943	UPPER-LOWER ADJUST PLATE	1
4a	325-0613	FOLD PLATE DECAL SET - INCHES	1
4b	325-0614	FOLD PLATE DECAL SET - METRIC	1
5	360-2946	LOWER ADJ PLATE	1
6	395-1318	UPPER FOLD PLATE ASSY	

LOWER FOLD PLATE



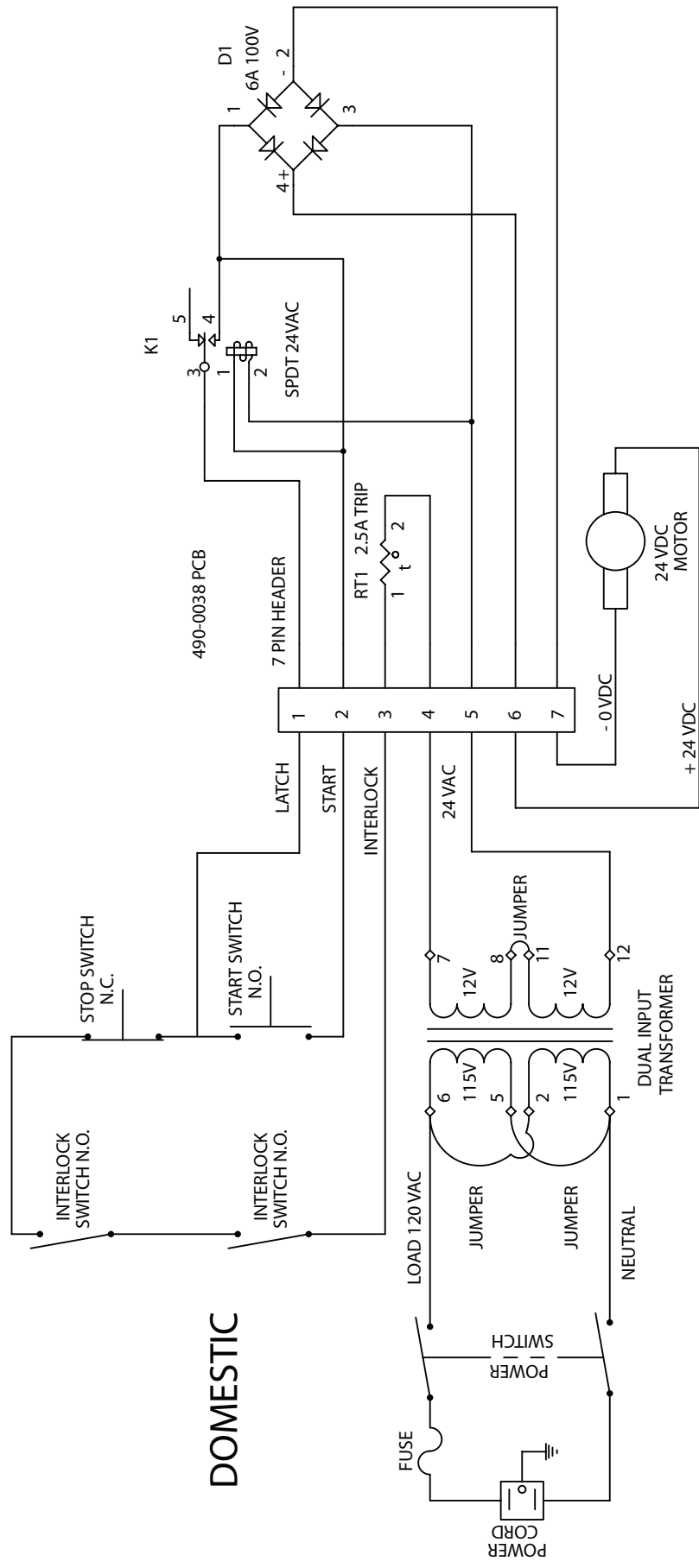
ITEM #	PART #	DESCRIPTION	QTY
1	372-0124	HAND KNOB 10-32	2
2	377-5298	#10 FLAT WASHER	2
3	360-2943	UPPER-LOWER ADJUST PLATE	1
4a	325-0613	FOLD PLATE DECAL SET - INCHES	1
4b	325-0614	FOLD PLATE DECAL SET - METRIC	1
5	360-2946	LOWER ADJ PLATE	1
6	395-1319	LOWER FOLD PLATE ASSEMBLY	

SINGULATOR ASSEMBLY

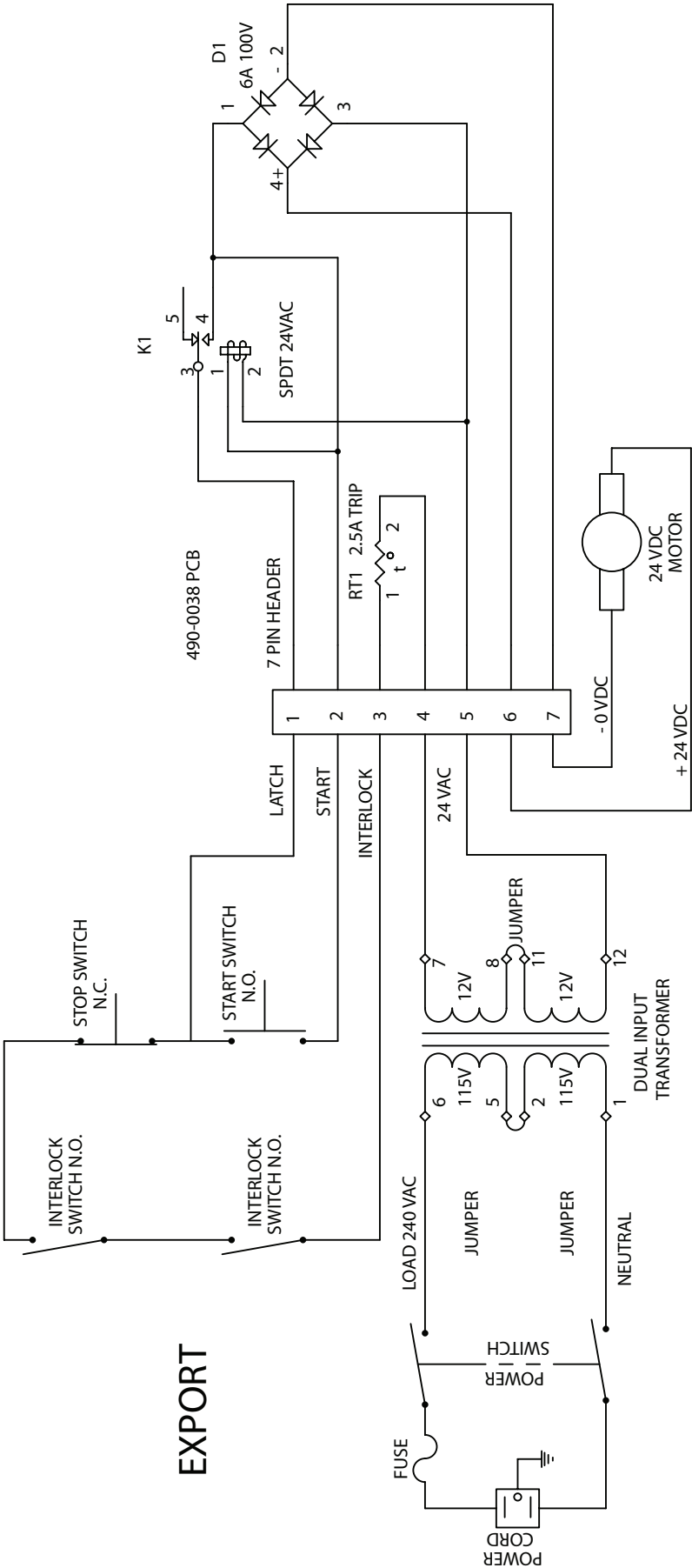


ITEM #	PART #	DESCRIPTION	QTY
1	332-0197	SINGULATOR SQUARE SHAFT	1
2	360-2994	SINGULATOR MOUNT	1
3	334-0377	SINGULATOR BLOCK	1
4	352-0008	SINGULATOR PAD	1
5	373-0119	4-40 x 3/16 FTHD SCREW	2
6	373-0126	4-40 x 3/16 PPH SCREW	2
7	342-0092	EXTENSION SPRING 1/4 x 1	1
8	377-5855	#3 INT STAR WASHER	2
9	375-0044	SHOULDER SCREW 8-32	2

110 V SCHEMATIC



220 V SCHEMATIC



EXPORT

NOT SHOWN

PART #	DESCRIPTION	QTY
310-0189	POWER CORD, STD 10' DETACHABLE	1
310-0224	EURO 220 VOLT POWER CORD	1
310-0225	U.K. 220 VOLT POWER CORD	1
310-0284	WIRE HARNESS, LOW VOLT	1
310-0285	WIRE HARNESS, 120 VOLT LINE VOLTAGE	1
325-0041	MAINTENANCE DECAL W/FRENCH	1