# FORMAX®

## FD 2000IL AutoSeal® System

OPERATOR MANUAL
FIRST EDITION

12/2007

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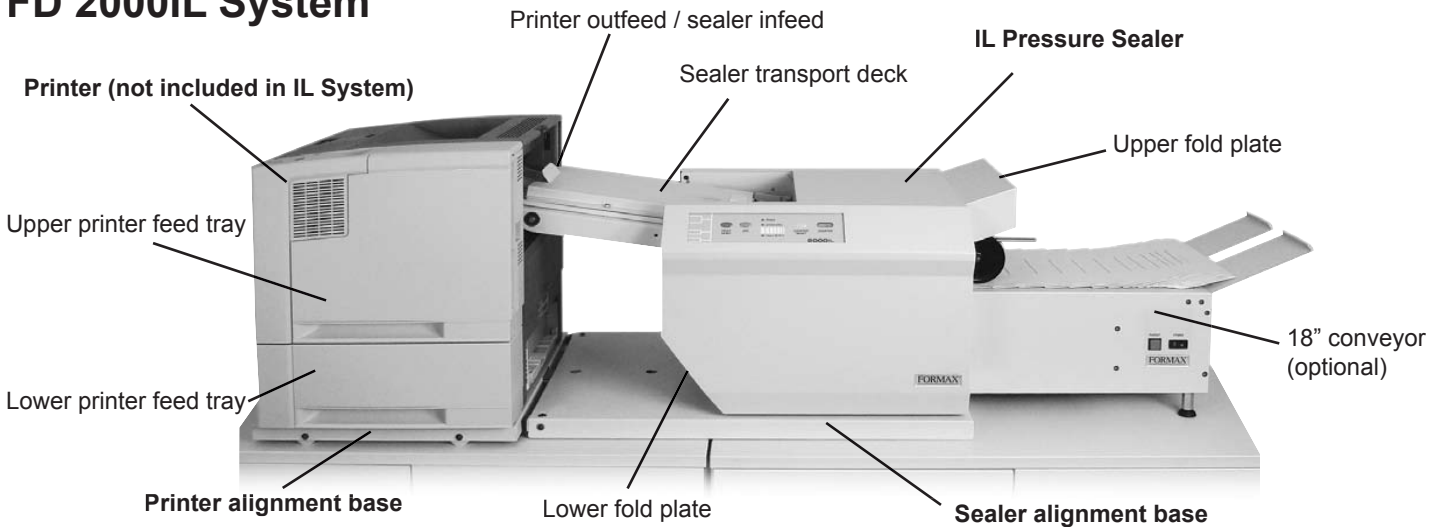
# DESCRIPTION

With the Formax FD 2000IL AutoSeal System operators can print, fold and seal all in one streamlined process. One-piece pressure sensitive forms are loaded into an existing laser printer where they're printed and fed directly into the IL Pressure Sealer where they're folded, sealed and output as a mail-ready piece.

## FD 2000IL System



Printer outfeed / sealer infeed

Sealer transport deck

**IL Pressure Sealer**

**Printer (not included in IL System)**

Upper fold plate

Upper printer feed tray

Lower printer feed tray

18" conveyor (optional)

**Printer alignment base**

Lower fold plate

**Sealer alignment base**

## SPECIFICATIONS

| | |
|---|---|
| Printer Compatibility: | HP & Troy P3005, only with two 500-sheet trays<br>HP & Troy P2015, only with two 250-sheet trays (requires FD 2000-46IL riser)<br>Lexmark & Source T640, only with two 250-sheet trays<br>                       (requires FD 2000-45IL riser)<br>Consult your Formax dealer for an updated list of additional laser printers which are compatible with the FD 2000IL System. |
| Speed: | Printer dependent |
| Paper Size: | Up to 8.5" W x 14" L |
| Duty Cycle: | Up to 50,000 pieces per month |
| Power Requirements: | FD Model: 120 Volts AC, 50/60 Hz<br>FE Model: 220 Volts AC, 50/60 Hz |
| Dimensions (closed) **: | 19" W x 46" L x 23" H |
| Dimensions w/18" Conveyor (closed): | 19" W x 65" L x 23" H |
| Tabletop Area Required: | 20" W x 43" L |
| Tabletop Area Required w/18" Conveyor: | 20" W x 69" L |
| Dimensions with Cabinets and 18" Conveyor: | 20" W x 74" L x 48" H |

** Dimensions include IL Pressure Sealer and IL Alignment Base.

## UNPACKING

1. Check package for shipping damage. If there is shipping damage do not discard the box.
2. CAUTION: Two people must lift the Pressure Sealer out of the box.
3. Package should contain the IL Pressure Sealer and two piece IL Alignment Base.

# SETUP

## Alignment Base Setup

1. Place two parts of alignment base face up. (Figure 1).

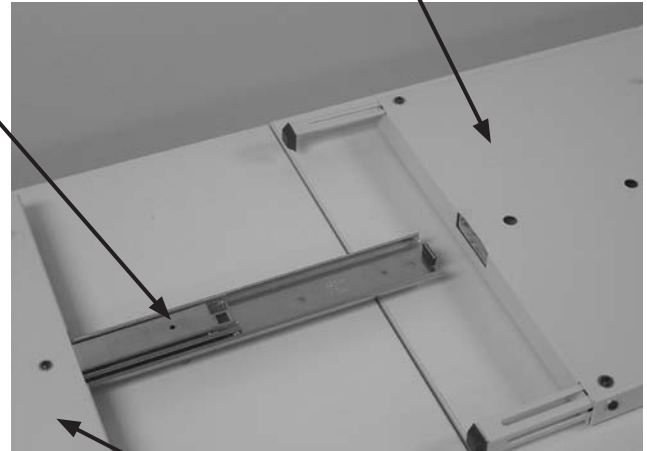Alignment Base, Pressure Sealer Section

Connecting slider

Fig. 1

Alignment Base, Printer Section

2. Extend connecting slider and slide into slot on sealer section of base, lining up the screw holes with the holes in the top of the base (Figure 2).

Insert the leading two screws first, do not tighten down at this point.

Align third screw hole in the slider with the top cover and insert screw.

Tighten all three screws into place.

Fig. 2

## Sealer Setup

1. Align the 2000IL with the pins located on the alignment base and lower into position. (Figure 3) **Caution:** Two people should lift and lower the 2000IL.

Fig. 3

2. Install lower fold plate into pressure sealer. Slide the fold plate (with the thumbscrews facing up and throat toward inside of machine, figure 4b), until it rests on the two silver bars (figure 4a) and locks into place.



Fig. 4a          Lower fold plate alignment bars



Fig. 4b

3. Install upper fold plate into pressure sealer. Match up alignment pins (figure 5) on the pressure sealer with grooves on the underside of the fold plate. Be sure to slide the plate *under* the shoulder screw.

**CAUTION:** Do not operate the machine without the fold plates installed.



Shoulder screw
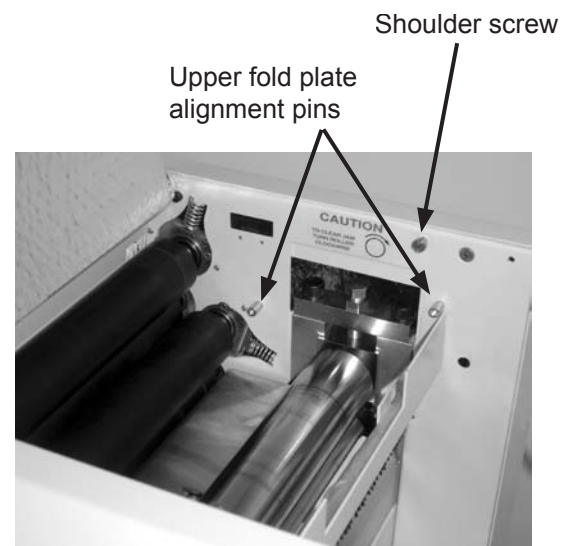
Upper fold plate alignment pins

Fig. 5

# PRINTER ALIGNMENT BASE SETUP

The Printer Alignment Base comes with two sets of alignment pins.

The pins at the top in the photo below are used with the FD 2000-46IL and FD 2000-45IL risers for HP/Troy P2015 and Lexmark/Source T640 printers. The printer is then set on top of the riser, using the pins located on the riser itself (see page 5, figure 8b).

The left pin can be adjusted to properly align the riser and printer with the sealer.

1. Loosen the left pin using an adjustable wrench to hold the pin while using a 7/16" socket to loosen the nut.

2. To move the front outfeed corner of the printer forward toward the front edge of the alignment base, slide the pin forward.

3. To move the front corner of the printer back away from the edge of the alignment base, slide the pin backward. The printer will pivot on the right alignment pin (Fig. 6).

The bottom pins shown in Fig. 6 are used with HP/Troy P3005 printers. In this application, the top pins should be removed.

Left pin

Right pin

Alignment pins for use with
FD 2000-45IL and FD 2000-46IL
risers

Edge facing pressure sealer

Alignment pins for use with
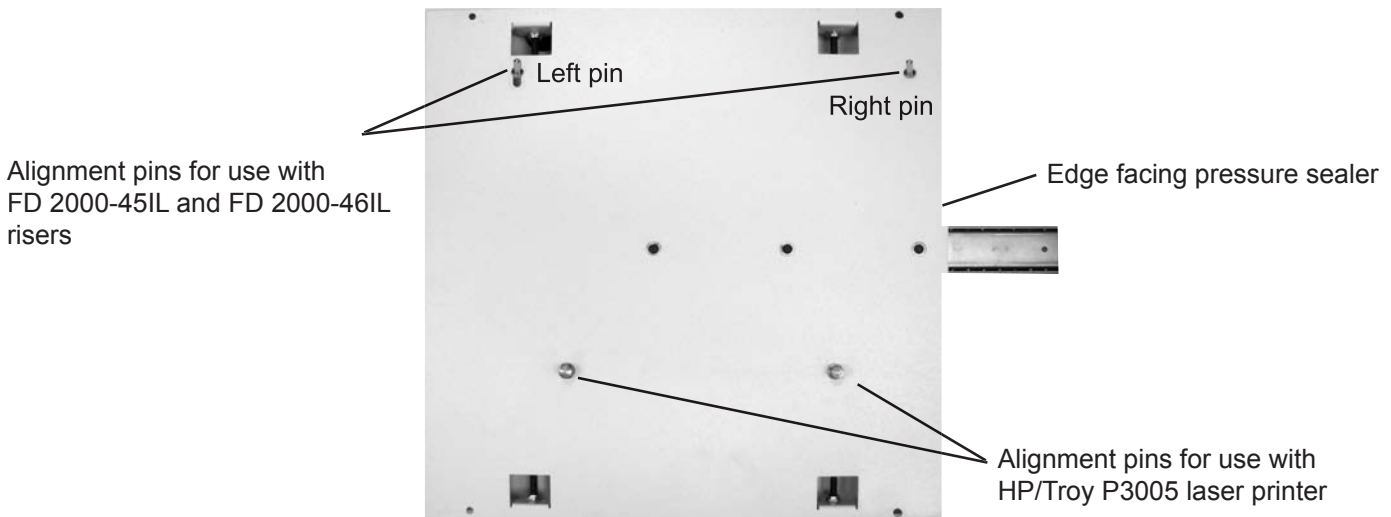HP/Troy P3005 laser printer

Fig. 6

Alignment pins for use with
FD 2000-45IL and FD 2000-46IL risers

Alignment pins for use with
HP/Troy P3005 laser printer

## Printer Setup

1. Remove back door from the printer.  Lower door, depress the side tabs to release and carefully pull the door out (Fig. 7).
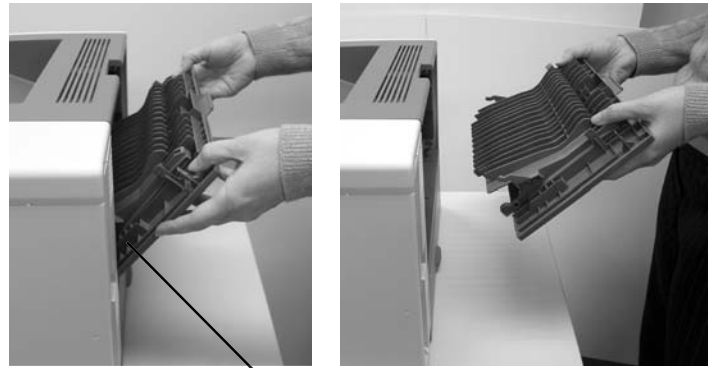
Fig. 7                    Side tabs

## Printer Setup: HP/Troy P3005

**NOTE:** Refer to page 4 for correct alignment pin placement based on your printer.

First align bottom feed tray with the pins on the printer alignment base and lower into position. Then align printer with the bottom feed tray pins and lower into place. (Fig. 8a)
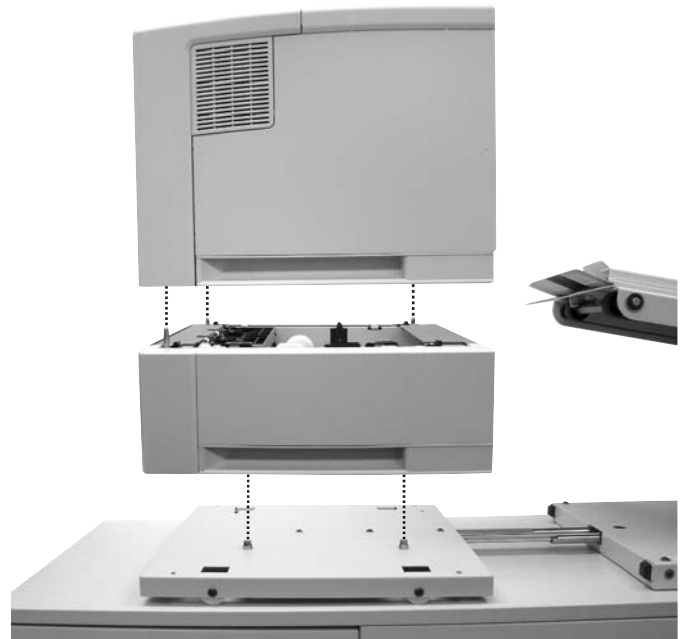
Fig. 8a

## Printer Setup with Riser:

HP/Troy P2015 (use riser FD 2000-45IL)
Lexmark/Source T640 (use riser FD 2000-46IL)

**NOTE:** Refer to page 4 for correct alignment pin placement based on your printer.

Place riser on printer alignment base, with side opening facing right toward pressure sealer, matching alignment pins. Place printer on riser, matching alignment pins. (Fig. 8b)
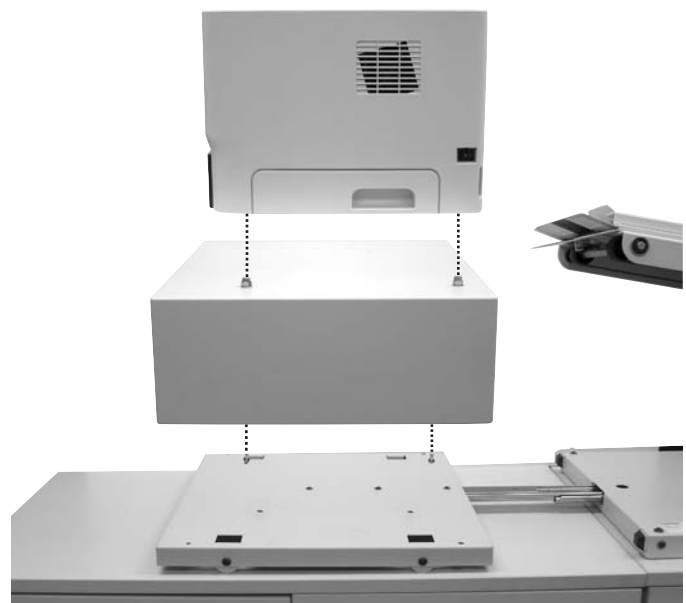
Fig. 8b (shown with HP/Troy P2015 laser printer)

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## Alignment Stoppers

The alignment base stoppers are used to keep the printer from making contact with the sealer infeed. The exit rollers of the printer and the sealer infeed throat should not come into contact during operation. There should be a gap of approximately 1/8" between the rollers and the sealer infeed throat.


Fig. 9

Alignment base stopper          Locking pins

1. Slide the printer up to the sealer infeed throat so that there is approximately a 1/8" gap between the printer outfeed and the sealer infeed throat.  Using a 1/8" standard allen wrench, loosen the locking pin of each alignment base stopper. (Fig. 9)

2. Pull the stopper out from the pressure seal alignment base until it meets the edge of the printer alignment base, being sure to maintain the gap between the printer outfeed and the sealer infeed. (Fig. 10a & 10b)


Fig. 10a


Fig. 10b

3. Using the allen wrench, tighten both locking pins to hold the stopper into place. Now it's possible to slide the printer away from the 2000IL infeed throat and back into place without having to reset the position. (Fig. 11)
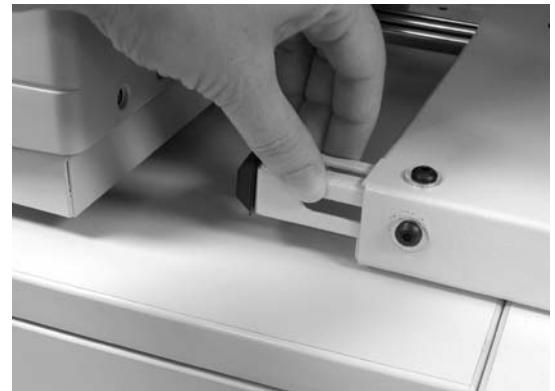
Repeat with the second stopper.


Fig. 11

# CONTROL PANEL



Fault Reset .............. Clears "fault" condition.
Jog ........................... Allows one piece of paper to feed at a time. Used for paper fold settings.
Power LED ............... Light comes on when power is on.
Cover Open LED ...... Light comes on if either top cover or side cover is open.
Fault Detect ............. Light comes on if there is a paper jam.
Counter Reset .......... Resets counter.
Counter.................... Shows forms count.

# OPERATION

1. Plug in cord and turn on power for both the pressure sealer and laser printer.

2. Place pressure seal forms in printer paper tray. Paper should be loaded into the approved printers face down with the glue edge trailing. Locate the paper orientation guide on the printer and load accordingly (Fig. 12). The print side glue edge is considered the top of the document. Once forms are loaded perform an offline print test (see pg. 9) to make sure the printer and sealer are aligned properly. If the print test is satisfactory begin online operation.

3. Adjust fold plates to desired fold for length of paper (see fold plate adjustment on page 8). To do this, first loosen two thumbscrews on each fold plate. Align center bar so the marks on each side match up. For "V" folds remove the lower fold plate, turn it around 180$^O$ and reinstall.

4. Make sure covers are closed properly.

5. Perform offline print test (page 9). Press jog switch to make sure folds are correct, adjust if necessary (see fold plate adjustment, page 8).



Fig. 12

Printer Paper
Orientation Guide

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# FOLD PLATE ADJUSTMENT



Thumbscrews

Bars

**Lower fold plate**
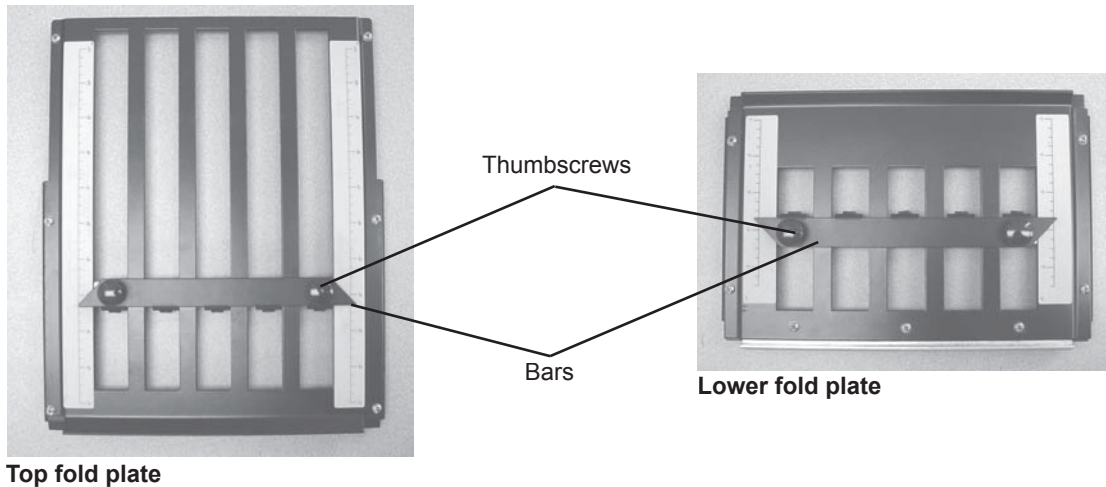
**Top fold plate**

1. To adjust the first fold, open the top cover to access the top fold plate. If the first fold is too long loosen the two thumbscrews and slide the bar down. If the fold is too short loosen the thumbscrews and slide the bar up.

**NOTE:** The bar should be on the same marks on each side.

2. To adjust the second fold remove the lower fold plate. If the second fold is too long loosen the two thumbscrews and slide the bar up. If the fold is too short loosen the thumbscrews and slide the bar down.

NOTE: The bar should be on the same marks on each side.

3. For quick setup of "C", "Z" and "V" folds look for the blue lines on the fold plate.

## Setting Custom Folds

### Example 1: Uneven "Z"

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" i.e. if panel "A" is 5 1/4" long move the bar up or down so that it lines up with the 5 1/4" 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. Refer to OPERATION on page 7.
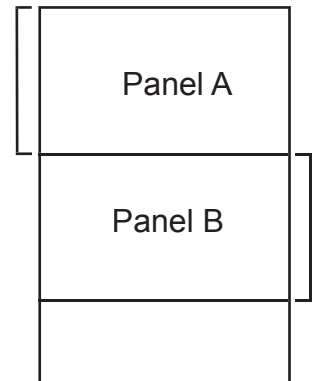
Panel A

Panel B

### Example 2: Uneven "C"

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" i.e. if panel "A" & "B" are 10 1/2" long move the bar up or down so that it lines up with the 10 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. Refer to OPERATION on page 7.

Panel A

Panel B
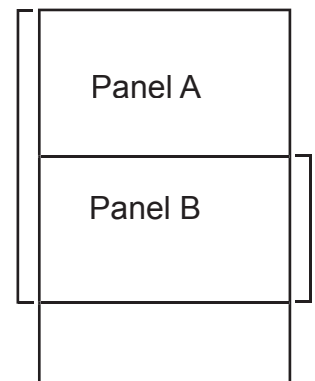
# OFFLINE PRINT TEST

In order to test the system offline follow the directions below to ensure proper alignment and fold setup.  For further printer test mode operation information, refer to the printer operator guide. **Note:** The sealer is activated when the form passes over the photo-eye located at the mouth of the sealer transport deck.

### Test Mode HP/Troy P3005

1. Power up the Printer and Sealer

2. Load forms into printer face down with glue trailing.

3. Press green  button once.

4. Press the  button twice, screen will say "Information".

5. Press the  button once to select this option.

6. Screen will say "Print Menu Map"

5. Press the  button once to select this option.

### Test Mode HP/Troy P2015

1. Power up the Printer and Sealer

2. Load forms into printer face down with glue trailing.

3. Press green  button once.

### Test Mode Lexmark/Source T640

1. Press the **Menu** button to enter the printer menu. The menu settings page is accessed under the **Reports** menu.

2. Press the down arrow button until the check mark is next to **Reports**.

3. Press the **Select** button once to enter the **Reports** menu.

4. Press the down arrow button until the check mark is beside **Menu Settings Page.**

5. Press the **Select** button once. The printer should read **Printing Menu Settings Page** and the menu settings page(s) should print out.



# NORMAL OPERATING CONDITIONS

1. *Steam may be present when the form comes out of the printer and enters the sealer transport deck.*  This is a normal operating condition if the transport deck is cool when operation begins. The steam should go away after 5 - 10 forms run through the system allowing the transport deck to warm up.

2. *Moisture present on the transport deck.* When forms are printed moisture is released from the forms.  Due to the enclosed IL system setup the moisture is present on the transport deck; it should lessen as the transport deck warms up. Environmental conditions may also affect the amount of moisture present.

# DETERMINING FOLD TYPE

Two Standard Folds: 11" "Z" & 11" "C"
Refer to page 8 for custom fold setup.

Leading glue edge

Glue

Glue

11" "Z" Fold

11" "Z" Fold

Leading glue edge

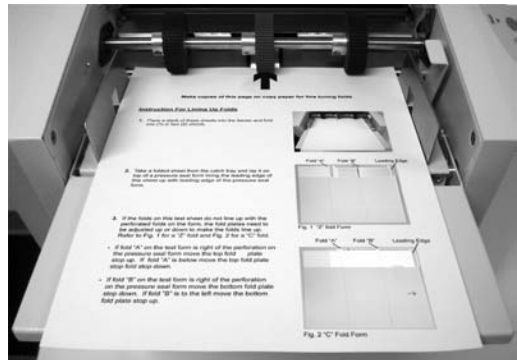Glue

Glue
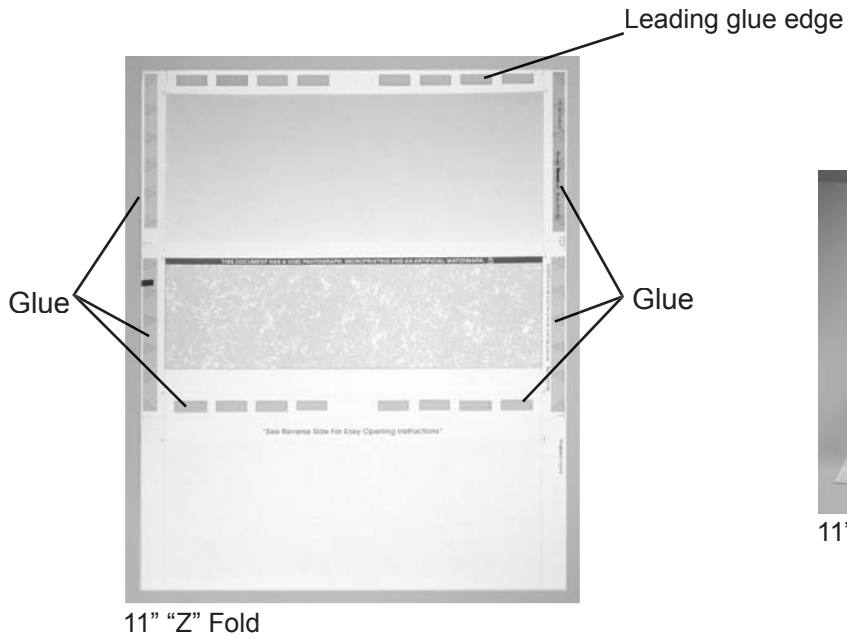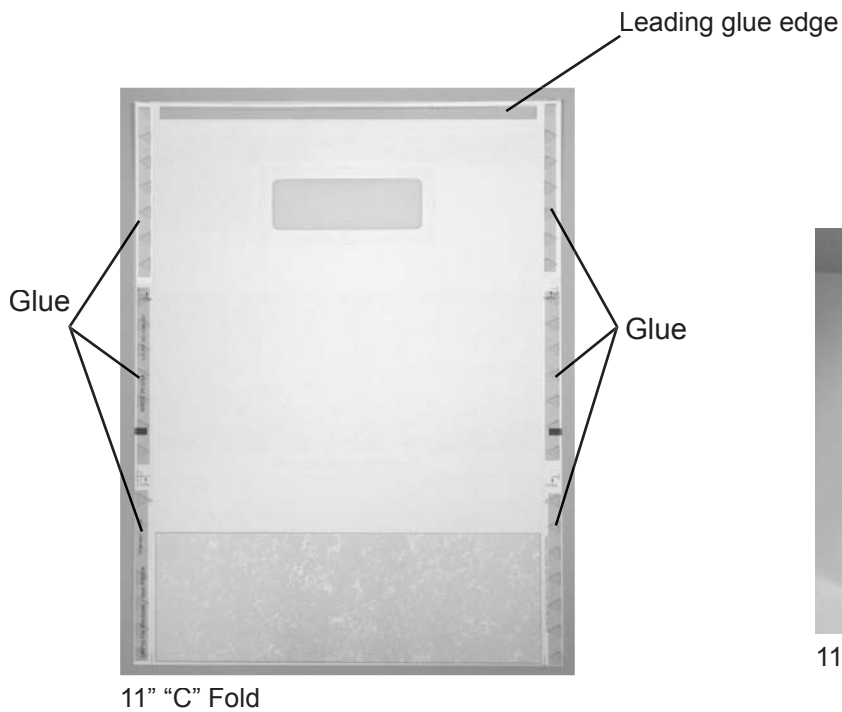
11" "C" Fold

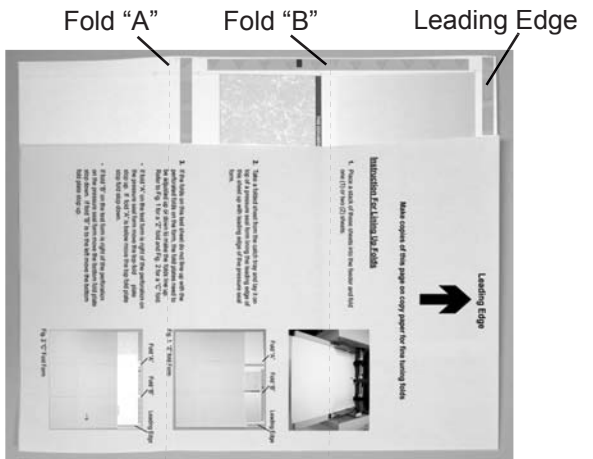11" "C" Fold

# Leading Edge



## Make copies of this page on copy paper for fine tuning folds

## Instruction For Lining Up Folds

1. Place a stack of these sheets into the feeder and fold one (1) or two (2) sheets.



2. Take a folded sheet from the catch tray and lay it on top of a pressure seal form lining the leading edge of this sheet up with leading edge of the pressure seal form.



Fig. 1  "Z" fold Form

3. If the folds on this test sheet do not line up with the perforated folds on the form, the fold plates need to be adjusted up or down to make the folds line up. Refer to Fig. 1 for a "Z" fold and Fig. 2 for a "C" fold.

   - If fold "A" on the test form is right of the perforation on the pressure seal form move the top fold plate stop up.  If  fold "A" is below move the top fold plate stop fold stop down.

   - If fold "B" on the test form is right of the perforation on the pressure seal form move the bottom fold plate stop down.  If fold "B" is to the left move the bottom fold plate stop up.
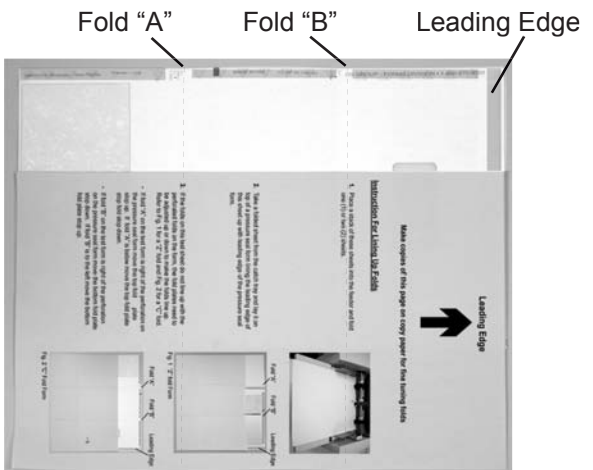


Fig. 2 "C" Fold Form

# TROUBLESHOOTING

| TROUBLE | POSSIBLE CAUSE | REMEDY |
|---|---|---|
| Control panel lights are not illuminated. | No power at the wall outlet. | Check wall outlet. |
| | No power to the machine inlet. | Check power cord for frayed/broken wires. |
| | No power to the control panel. | Press the black breaker reset button located on the backside of the sealer, (see page 14, Fig. 14). |
| | Internal electrical failure | Call for service |
| Sealer does not turn on when the form enters the throat of the sealer transport deck. | Sealer is not turned on | Check that the sealer is plugged in and turned to the on position. |
| | Sealer reset button has not been pressed after a paper jam | Press the "fault reset" button to reset the sealer |
| | Sealer breaker has popped | Press the black breaker reset button located on the backside of the sealer, (see page 14, Fig. 14). |
| | Photo eye is not detecting the form | Wipe sensor with dry cloth. |
| | | Call for service. |
| Forms are misfolding. | Fold plate is not set properly | Check to make sure the fold stop "bar" aligns with the correct fold setting on each fold plate. (See page 8.) |
| | | Fold plates may need to be moved up or down if the fold varies from the standard fold setting indicators. |
| | Fold plates are not inserted correctly. | Remove and reinstall fold plates. Be sure they're properly positioned. |
| | Piece of paper or other material is stuck in the fold plate | Remove object from the fold plate. |
| "Cover Open" LED is on. | Cover is open | Check that all covers are closed. |
| | Magnetic switch is broken. | Call for service. |

| | | |
|---|---|---|
| Custom fold is misfolding | Wrong fold is selected | Check to make sure the fold "bars" line up with the correct fold settings. See page 8 for Custom Fold Settings. |
| | Fold plates are not inserted correctly. | Remove and reinstall fold plates. Be sure they're properly positioned. |
| | Piece of paper or other material is stuck in the fold plate. | Remove object from the fold plate. |
| | Fold plate is not set properly | Check that the fold settings match the actual fold lengths, (see page 8). |
| Fault Detect LED is lit | Paper misfeed between printer outfeed and sealer infeed | Slide printer back to gain access to the printer outfeed and remove forms. Lift top cover of printer, remove toner cartridge and remove forms. Reinstall toner, close printer cover, slide printer back into position and press the "fault reset" button on sealer to reset sealer. |
| | Paper jammed in pressure sealer infeed deck | Slide printer back to gain access to sealer infeed. Lift transport deck cover and remove jammed document. With one hand hold transport deck, and with the other, release the transport deck release handle and slowly lower the cover back into place. (See page 14 for procedure.) |
| | Paper jammed at steel sealer rollers. | Remove paper and press "fault reset" button, see pg 14 for clearing instructions. |
| Black marks on the folded forms. | Fold rollers and/or steel sealer rollers are dirty. | Clean the rollers with approved roller cleaner and rejuvenator. |
| Fold is skewed. | Printer and sealer are out of alignment. | Check to be sure the printer and sealer are set properly on the alignment pins |
| | | Adjust rear pin on the printer alignment base, (see pg 4 for adjustment procedure) |
| | Transport deck belts are dirty | Clean belts with approved cleaner |
| Transport table belts do not turn. | Broken drive belt, worn drive gear. | Call for service |
| Documents are wrinkled or crunched. | Fold plates are not inserted correctly. | Remove and reinstall fold plates. Be sure they're properly positioned (see page 3). |
| | Piece of paper or other material is stuck in the fold plate. | Remove object from the fold plate. |

## A. Clearing paper jams from the steel pressure seal rollers:

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

If a jam occurs between the metal sealing rollers open the top cover and remove the upper fold plate. Remove the jam-clearing tool (located under the top fold plate), apply the tool to the upper metal roller (Fig. 13) and turn clockwise until the paper jam is clear. (**Caution:** Do not apply excessive force or rollers may be damaged.) (**Caution:** Do not turn counter-clockwise and force the form(s) to exit the machine or the rollers may be damaged.) Remove the jammed form, return tool to holder and reinstall the upper fold plate. Reinstall cover and press the reset button.

**Note:** Press the black button (Fig. 14) near the power cord inlet to reset the breaker if necessary.
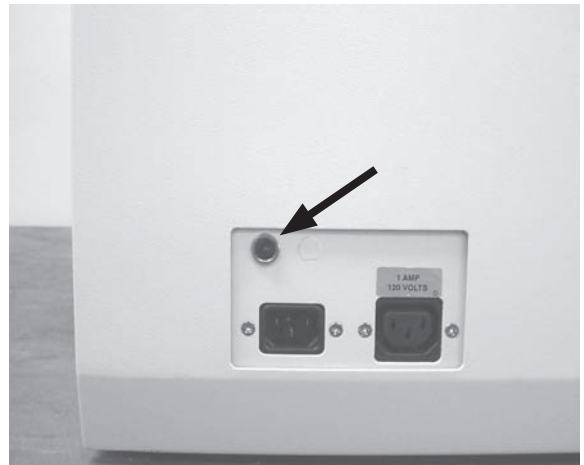


Fig. 13



Fig. 14

## B. Clearing paper jams from the pressure seal infeed deck:

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

If a jam occurs in the sealer infeed deck, slide printer back to gain access to infeed. Lift the transport deck cover (Fig. 15a) which will lock into place in the upright position. Remove jammed document.

To close, hold transport deck cover with one hand. With the other hand, slide the transport deck release handle (Fig. 15b) and slowly lower the cover back into place.

**Note:** Press the black button (Fig. 14) near the power cord inlet to reset the breaker if necessary.
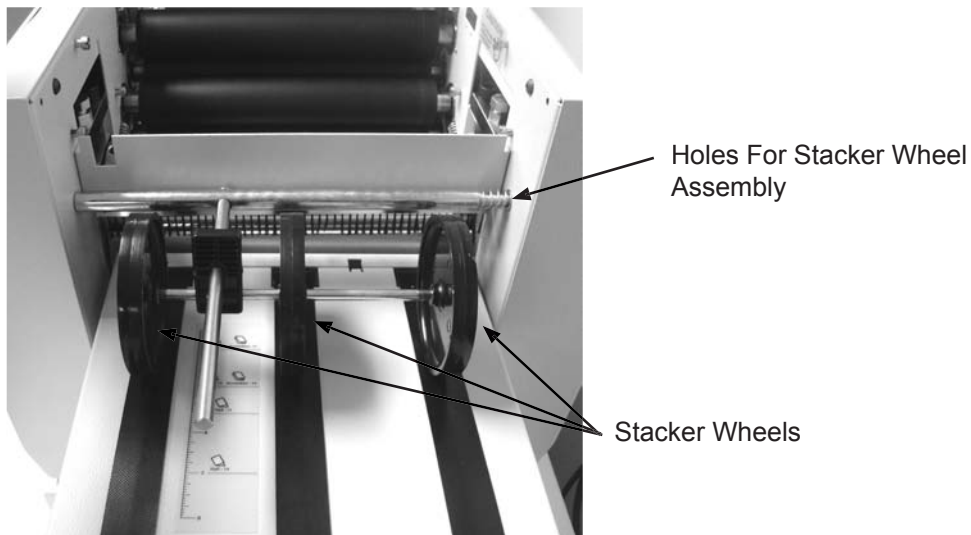


Fig. 15a



Fig. 15b

# OPTIONAL CONVEYOR INSTALLATION



2000IL         2000-30IL Conveyor



Holes For Stacker Wheel Assembly

Stacker Wheels

**To install the 18" conveyor, follow these steps:**

1. Unplug the 2000IL from the wall outlet.
2. Remove the catch tray from machine.
3. Remove the upper fold table.
4. Plug the power cord into the underside of the conveyor.
5. Attach the conveyor to the 2000IL.
6. Install the stacker wheel assembly into the holes indicated above.
7. Adjust the stacker wheels to conveyor decal.
8. Plug the conveyor power cord into the power outlet on the 2000IL.
9. Reinsert the upper fold table.
10. Plug the 2000IL into the wall outlet.