

FD 1606 AutoSeal[®] FE 1606 AutoSeal[®] Pressure Sealer

> MAINTENANCE MANUAL FIRST EDITION

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DESCRIPTION



The FD 1606 AutoSeal[®] Pressure Sealer is designed to process a variety of form sizes and weights. The fold tables adjust automatically for standard folds and custom folds in 8.5" x 11", 8.5" x 14", and A4 (metric mode) forms. Three standard folds are pre-programmed for 11" forms, and 5 standard folds for 14" forms including uneven C and Z folds. Up to 3 custom folds can be programmed into memory. The sealer will stop automatically after the last document has been processed.

SPECIFICATIONS

Speed:	Up to 100 forms per minute– based on 11" (279mm) Z-Fold
Hopper Capacity:	Up to 200 forms 20# (75gsm)
Pre-Set Folds:	Pre-programmed for C, V, Z in 11" and 14" forms, plus uneven C & Z in 14" forms
Pre-Set Paper Sizes:	FD Model: 11", 14" FE Model: A4
Custom Folds:	Stores up to 3 custom folds into memory
Form Size:	Up to 8.5" W x 14" L
Dimensions:	30" L x 18" W x 13.5" H (76 L x 45 W x 34 H cm)
Weight:	85 lbs (39kg)
Power:	110-240VAC 50/60 Hz
Safety Certifications:	UL & CE

UNPACKING & SETUP

- 1. Check package for shipping damage. If there is shipping damage, do not discard the box.
- 2. Carefully lift the machine out of the box and place it on a solid surface. CAUTION: Two people are required to lift the machine out of the box.
- 3. Install fold tables (refer to page 3 for proper installation).
- 4. Plug cord into machine and into wall outlet.

Contents





Power Cord

FD 1606 Base



Upper Fold Table

Lower Fold Table



Install Upper Fold Table

1. Remove the top cover, lift the cover up and pull out (Fig. 1a).

Remove Top Cover



Fig. 1a

Mounting Notches



Fig. 1b

Mounting Pins



Fig. 1c

Upper Fold Table Receptacle Location



Fig. 1d

Plug in Receptacle

Locate mounting notches on the fold table (Fig. 1b) and 2. the fold mounting pins on the unit (circled in red, Fig. 1c).

3. Slide the fold table into position guiding it under the cover support pins (circled in green, Fig 1c). When the fold table meets the pins press down firmly on the fold table to lock it into position.



Insert the fold table plug into the receptacle on the 4 unit (Fig. 1d). Then replace the top cover to complete installation.

3

Install Lower Fold Table

1. Lift the feed tray extension and lock into position under the alignment pins (Fig. 2a).



2. Locate mounting notches on the fold table (Fig. 2b) and the fold mounting pins on the unit (circled in Fig. 2c).

Lift Feed Tray Extension



Fig. 2a

Mounting Notches





Mounting Pins



Lower Fold Table Receptacle Location





Plug in Receptacle

3. Slide the fold plate into position. When the fold table meets the pins press down firmly on the fold table to lock it into position.

4 Insert the fold table plug into the receptacle on the unit (Fig. 2d). Then replace the top cover to complete installation.

4

CONTROL PANEL - Home Screen Interface



No.	NAME	FUNCTION
1	Form Size Display	Shows the size of the forms loaded in the pressure sealer
2	Resettable Counter	Displays the number of forms processed, can be reset between each job
3	Counter Reset Icon	Resets the counter to "0"
4	Fold Selection Icon	Press to advance to fold selection screen
5	Custom Fold Access	Press to select or edit previously saved custom folds
6	Operator Settings Icon	Press to enter to the operator settings screen
7	Start / Stop Icon	Press to start the pressure sealer. Press to stop the pressure sealer.

Any icon with a blue frame around it (i.e. #4 above) can be adjusted by pressing the icon. Icons without a blue frame (i.e. #1 above) provide status, and cannot be pressed.

In any other screen, use the

-

icon after choosing a setting or entering information.

To return to the home screen from any other screen, press the home icon.

OPERATION

2.

freely. (Fig. 4)

Press power switch to the ON / "I" position. The power 1. switch is located under the lower fold table (Fig. 3).

Set the side guides for the width of the forms. Slide

each guide inward or outward to allow the forms to slide



Fig. 3





Side guides

Select the type of fold desired by pressing the fold 3. selection icon 🚫 (Fig. 5a). Note: *If the fold selection* icon shows the desired fold press the "Start/Stop" icon to begin processing forms.

If the fold required is not available in the standard fold settings, a custom fold set up is needed. See page 8.

Select the standard fold type (Fig. 5b) needed and 4. press the "Enter" icon to set the fold stop positions.

When the fold stops are set, the control panel will return to the home screen. The selected fold icon will be displayed.

Fold selection icon





5. Push down on the infeed tray lever to lower the infeed tray (Fig. 6).

Place one form onto the feeder and press the "Start/ Stop" icon to process one test form.



Fig. 6



Skew adjustment knob



 If the fold is skewed, remove forms and turn the skew adjustment knob under the infeed tray left or right slightly to make corrections (Fig. 7).
 Test another form and make additional corrections as needed.

 Adjust the outfeed catch tray to accommodate the form size being processed. Slide it in or out until to align the mark matching the form size (Fig. 8).

 When satisfied with the test fold, load a stack of forms and press the "Start/Stop" icon of to begin processing forms. Press the same icon to stop. *Note: The forms should be neatly stacked and squared for best results.*

CUSTOM FOLDS SETUP

Three (3) custom fold settings can be stored into memory for recurring jobs with fold settings that vary from the standard fold settings. To create a custom fold, from the Home Screen press the fold selection icon to access the fold selection screen (Fig. 9). From the fold selection screen press the Custom Fold icon (Fig. 10). See page 10 to help determine the new fold measurements.





 Select the upper fold table icon (Fig. 11) to set the fold stop position for the first fold (the icon will flash dark gray when selected). Using the touch pad, key in the measurement for the first fold stop position. (Note: the minimum position is 1.75" and the max. position is 11").

Press the enter key discrete the measurement . The white box under the icon will show the measurement entered (Fig. 12).

Select the lower fold plate icon (Fig. 12) to set the fold stop position for the second fold (the icon will flash dark gray when selected). Using the touch pad, key in the measurement for the second fold stop position.
 (Note: the minimum position is 1.49" and the max. position is 8.40").

Press the enter key to enter the measurement . The white box under the icon will show the measurement entered.

For a Half Fold, leave the lower fold stop position at Zero.

	0)	×
1	2	3	
4	5	6	
7	8	9	•
+	0	-	C

Fig. 11



Fig. 12

CUSTOM FOLDS SETUP, cont.

With one form loaded in the feeder press the "Start/Stop" icon (Fig. 13) to check that the fold settings are correct. To adjust the settings repeat steps 1 - 3.

When the folds and stacker wheels are set correctly, press the save icon P and \checkmark to name and save the custom fold.

Select the job number the fold will be saved as by toughing the screen (Fig. 14). Press the letter icon Abc.. to bring up the keypad to name the custom fold.

5. Key in the name of the job (Fig. 15) and press the save icon in the bottom right corner.

 Select the custom job and press the blue enter icon to confirm the fold stops (Fig. 16).

When the fold stops are set, the folder will return to the Home Screen with the custom job selected.

Press the start icon

🖄 🧑 to begin folding.









Fig. 16

Enter Icon

Measuring Fold Lengths

Use the examples below to help determine the fold lengths for custom fold settings.

Example 1: "Z" Fold

- 1. Measure the length of panel "A", enter this number as the upper fold table measurement.
- 2. Measure the length of panel "B", enter this number as the lower fold table measurement.



Example 2: "C" Fold

- 1. Measure the length of panel "A" + "B", enter this number as the upper fold table measurement.
- 2. Measure the length of panel "B", enter this number as the lower fold table measurement.

Panel A	
Panel B	

RECALLING, EDITING & DELETING SAVED CUSTOM FOLDS SETUP

 To recall, edit, or delete a saved custom fold from the home screen press the saved job icon (Fig. 17).



2. From the saved custom job screen you can recall a job, edit, rename, or delete a stored custom fold.

To recall, select the job from the list and press the blue enter button (Fig. 18). The fold tables will be set and the control panel will return to the home screen to start processing the job.

 To rename a job, select the job from the list and press the letter icon Abc.. (Fig. 18). Use the keypad to change the name and press the save icon in the lower right corner (Fig. 19).

4. To delete a job, select the job from the list and press the delete icon (Fig. 20). On the confirmation screen press the green box with the check to confirm the deletion or press the red box with the X to cancel the deletion (Fig. 20).



Fig. 20

RECALLING, EDITING & DELETING SAVED CUSTOM FOLDS SETUP

 To edit a previously saved job, select the job from the list and press the edit icon (Fig. 18). From the fold setup screen use the same process as setting a custom fold (page 9) to edit the job settings (Fig. 21). See page 10 for measuring guidelines.



Fig. 21

OPERATOR SETTINGS

A number of operator settings can be adjusted to personalize the FD 1606. This includes changing between standard and metric settings, Standard Fold Override, and restoring to Default Settings.

This section will review each setting and how to adjust them. If needed, there is a Default Settings option that will restore to factory settings. To advance to the Operator Settings Screen press the Tool icon (K) on the Home screen (Fig. 22).



Operator Settings Screen



Fig. 23

Standard / Metric Settings

 From the Operator Settings screen (Fig. 23) press the measurement setting icon mm inch (Fig. 24) to change between settings. The icon highlighted in blue is the selected setting. By changing this setting the paper sizes will change from standard to metric or vice versa.

Press the home icon to return to the Home Screen.



Standard Fold Override

- It may be necessary to adjust the factory set standard fold settings for a particular fold type and paper size. This can be done in the Standard Fold Override Mode. From the Operator Settings menu select the Standard Fold Override icon (Fig. 25) and press the enter icon to select.
- "Standard Fold Override" warning will be displayed (Fig. 26).

Press the green box with the check to continue or the red box with the X to exit and return to the operator screen.

 From the Standard Fold Override Screen select the paper size and fold type that you would like to override (Fig. 27). Then press the enter icon.

4. Follow the same procedures as the custom fold settings to adjust the folds (Fig. 28). Load one form and press the "Start/Stop" icon to confirm the change is correct. If the settings are good press the Save Icon to save the new settings. A save confirmation screen will be displayed.

Press the green box with the check to continue or the red box with the X to return to the fold setup screen (Fig. 29).





Fig. 25











Default Settings - Return to Factory Settings

1. From the Operator Settings screen press the Default Settings icon 🕥 (Fig. 30). A confirmation screen will come up (Fig. 31). Press the green box with the check to confirm or the red box with the X to cancel the setting.



Default setting Icon

Default Reset: Resets standard folds to factory settings

Restablecimiento predeterminado: restablece los pliegues estándar a la configuración de fábrica

Standard Reset: Setzt den Standard-Falz auf die Werkseinstellungen zurück



Fig. 31

Default setting confirmation screen

Software Information

Press the Software Information Icon (Fig. 32a) to verify 1. the current software revision. The software version information will be displayed (Fig. 32b). To return to the previous screen, press the 🛃 icon.



Fig. 32b

DAILY MAINTENANCE

- 1. It is recommended to let forms cool for one-half hour after being removed from the laser printer, before processing. This allows toner to set on the forms and static electricity to discharge. The FD 402 Jogger is recommended for best results. The Jogger squares the forms and dissipates heat and static electricity created by laser printers.
- 2. Clean infeed tires and fold rollers with Formax recommended roller cleaner & rejuvenator to remove paper dust and toner. A Formax Cleaner Kit is available from your dealer. A damp cloth with water is the best alternative.

CAUTION: Do not use any chemicals other than the roller cleaner & rejuvenator or water.

CLEANING PROCEDURES:

- 1. Make sure machine is turned off and unplugged. All folder/sealers have three infeed tires, four rubber fold rollers and two metal seal rollers (Fig. 33).
- 2. Remove the top cover and remove the upper and lower fold tables.
- 3. Using Formax roller cleaner, spray a new cotton cloth until the cloth is saturated. Wipe the wet cloth in a back and forth motion making sure to clean the entire surface of the infeed tires, fold and seal rollers. Next, use a dry cloth to wipe off excess toner. The cloth should be covered with black toner surplus from cleaning the rollers.
- 4. Run 10-15 sheets of blank copy paper to ensure all cleaner has been removed from the tires, fold and seal rollers. Running blank sheets will remove any excess residue of cleaner on the rollers.

NOTE: If the fold rollers are very dirty, you may use a green scrubbing sponge, i.e. Scotch Brite, with the roller cleaning solution.

DO NOT use a scrubbing sponge on the metal seal rollers. It will damage the surface. Use ONLY a new cotton cloth and roller cleaning solution on the seal rollers (Fig. 33).



Fig. 33

ERROR SCREENS

Paper Out / Paper Misfeed / Paper Jam



1. The feeder is empty. Load paper into the feeder and press the **cont** icon to resume operation.

2. A misfeed has occurred. Reset the stack of paper in the infeed and press the **context** icon to resume operation.

3. A paper jam has occurred in one of the areas indicated. Switch off the power and unplug the power cable.

Check the area indicated for paper and remove. You may need to remove the fold tables.

Replace and plug in the fold tables, plug in the power cable and switch on the power.

Cover Open



The top cover is open. Close the top cover and press the cover is operation.

SERVICE MODE - RUNNING DIAGNOSTIC TESTS

The Service Mode diagnostic software runs tests on the mechanical and electrical functions of the folder to make sure they are functioning properly. The diagnostic mode is also used to set and/or verify fold offsets.

To access the Service Mode Follow the steps below:

Service Mode Home Screen



Accessing the Service Mode

 To access the service mode start by pressing the Operator Tools icon not be home screen (Fig. 34).

Home Screen



 From the Operator Tools screen press the Software Information icon () (Fig. 35).



3. Press and hold the center of the Version Information, circled in red, for 5 seconds (Fig. 36).



Fig. 36

1. Test Motor

This mode is used to verify that the motor and clutch are working.

- From the Service Mode Home Screen select the motor icon (Fig. 37).
- Press the Start/Stop icon to test that the motor is working properly (Fig. 38).
- To exit, press the Service Mode Home icon (Fig. 38).







Fig. 38

Service Mode Home Icon

2. Upper Fold Table Test

This mode checks to see that the fold stop worm gear is operating smoothly and that the fold table sensors are working properly for the Upper Fold Table.

- Press the Start/Stop icon . The fold stop will move to the highest position and a number will appear in the white box (Fig. 39). Press the Start/ Stop icon again to move the fold stop to the lowest position. A new number will appear in the white box for the lower position. Run the test a couple more times. If the numbers remain within 1 to 2 of the original numbers the fold table is working properly.
- 3. To Exit press the Service Mode Home icon





3. Lower Fold Table Test

This mode checks to see that the fold stop worm gear is operating smoothly and that the fold table sensors are working properly for the Lower Fold Table.

- From the Service Mode Home Screen select the Lower Fold Table icon (Fig. 37).
- 2. Press the Start/Stop icon . The fold stop will move to the highest position and a number will appear in the white box (Fig. 40). Press the Start/ Stop icon again to move the fold stop to the lowest position. A new number will appear in the white box for the lower position. Run the test a couple more times. If the numbers remain within 1 to 2 of the original numbers the fold table is working properly.
- 3. To Exit press the Service Mode Home icon.



4. Fold Table Offset Adjustment

This function is used to make small adjustments to the standard fold settings on the fold tables. NOTE: The adjustment made will affect all fold types and sizes.

- From the Service Mode Home Screen select the Fold Offset icon (Fig. 37).
- 2. Select the upper fold table icon for adjust the fold stop position for the first fold (the icon will turn a dark gray when selected). Using the touch pad, key in the number or use the "+" and "-" keys to make the adjustment for the first fold stop position (Fig. 41). Press the enter key " and " to enter the measurement . The white box under the icon will show the measurement entered. Select the bottom fold plate icon fold plate icon adjust the second fold and repeat the same steps to adjust.
- Press the save icon to save the adjustments. A confirmation screen will appear (Fig. 42). Press the green check box to accept the change or the red X box to cancel the change.
- 4. To exit, press the Service Mode Home Icon () at any time (Fig. 41)



Fig. 41





5. Life Count

Shows the total number of sheets of paper run through the machine.

- 1. From the Service Mode Home Screen select the Life Count Icon 123.......
- 2. The life count will be displayed (Fig. 43).
- 3. To exit, press the Service Mode Home icon.





6. Test Sensors

This mode is used to verify the input of the top cover and exit beam sensors.

- From the Service Mode Home Screen select the Sensor Test Icon

 The Sensor Test Screen will be displayed (Fig. 44).
- To test the Cover Open sensor, lift the top cover. If the sensor is working properly, the red box with "N" will turn into a green box with "Y" (Fig. 44).



Fig. 44

3. To test the Exit Sensor Photo Eye, remove the top cover, then unplug and remove the upper fold table. Place a piece of white paper over the photo eye (Fig. 45). If the sensor is working properly, the red box with "N" will turn to a green box with "Y" and the number next to it should increase (Fig. 44).

3. To Exit press the Enter icon (Fig. 44).





Exit sensor photo eye

REPLACING SEALER ROLLERS

- 1. Turn power off and unplug power cord.
- 2. Remove side covers and upper fold plate.
- 3. Remove the sealer belt. (See sealer belt replacement, pg. 23).
- 4. Remove large roller pulley on non-operator side.
- 5. Remove the top plates by unscrewing four plate screws (Fig 46b).
- 6. Loosen or remove the four lower screws on each side.
- 7. Remove first roller by lifting up and out of machine.
- 8. Remove the two springs.
- 9. To remove second roller, tilt stainless steel center away from roller.
- 10. Remove second roller the same way as the first roller.
- 11. To reassemble, repeat above steps in reverse.
- 12. Adjust belt tension. (See belt replacement, page 23.)



Fig. 46a Sealer Roller Components

Roller Pulley



Top plate

Plate screws



Fig. 46b

SEALER BELT ADJUSTMENT AND REPLACEMENT

NOTE: Roller clearance must be set before adjusting belt tension.

- 1. Make sure machine is turned off and unplugged.
- 2. Remove the operator side cover.
- 3. Loosen lever screw and belt tensioner screw (Fig. 47) until belt is loose enough to remove belt.
- 4. Install new belt.
- 5. To adjust belt first determine if belt is too tight or too loose (belt should have no more than 5/16" play). Tighten or loosen the belt tensioner screw to adjust tension.
- 6. Reverse procedure to install.

NOTE: Be sure not to over tighten belt, it will affect roller clearance.



Fig. 47

Belt tensioner screw

ADJUSTING ROLLER CLEARANCE

1.	Turn power off and unplug power cord.
2.	Loosen locking nuts on the top plates (fig. 48).
3.	Insert a feeler gauge (0.001") into space between the rollers.
4.	Turn adjusting bolts while checking clearance with the feeler gauge.
5.	Tighten the locking nuts in place after proper clearance has been set.

NOTE: Double-check spacing with feeler gauge. Left to right fine-tuning is required.



Fig. 48

REPLACING FOLDER ROLLERS

- 1. Turn power off and unplug power cord.
- 2. Remove the top cover, both fold tables and both side covers.
- 3. Remove control panel.
- 4. On Operator side using an Allen wrench remove sealer belt and pulley (Fig. 49). (See sealer belt replacement, pg. 23).
- 5. On the Non-operator side using an Allen wrench remove the top fold roller sprocket and chain (fig. 44b).
- 6. Remove bearing springs on both ends of rollers bearing plate (Fig. 50).
- 7. Remove old rollers.
- 8. To reassemble, repeat above steps in reverse.

Remove sealer belt and pulley



Fig. 49

Fig. 50

Bearing Springs

Top fold roller sprocket and chain



Bearing Springs

REPLACING IN-FEED TIRES

- Turn power off and unplug the power cord. 1.
- 2. Remove top cover and non-operator cover.
- 3. Loosen the lock screw that holds the shaft clamp in position.
- 4. Pull up shaft clamp.

17

- Remove retaining "e" ring on gear (Fig. 51). 5.
- Remove gear and chain (Fig. 52). 6.
- 7. Loosen outer feed tire mounting screws and remove center feed tire mounting screw (one screw each).
- Pull roller bar through each feed tire in the direction of 8. the removed gear.
- 9. To reassemble, repeat above steps in reverse.

Shaft Lock Bolt Shaft Clamp

Fig. 51

Feed Tires



Fig. 52

Gear

REPLACING SINGULATOR PAD

1.	Remove Allen screw from center in-feed tire (Fig. 53) and slide tire to the side to access the singulator pad.
2.	Remove rubber singulator pad (Fig. 54). A screwdriver or knife may be need to pry off the pad.
3.	Clean singulator mount.
4.	Apply super glue to singulator pad and singulator mount.
5.	Apply singulator pad to singulator mount, let sit for at least five minutes before reinstalling in-feed tire.

Center feed tire Allen screw.



Fig. 53



REPLACING CORK PAD

1.	Remove Allen screw from center in-feed tire (Fig. 53) and slide tire to the side to access the singulator pad.
2.	Remove old cork pad (Fig. 54). A screwdriver or knife may be need to pry off the pad.
3.	Clean area of removed pad.
4.	Apply super glue to cork pad and in-feed tray.
5.	Apply cork pad to in-feed table. Let sit for at least five minutes before operating the machine.



Fig. 54

Cork Pad

REPLACING CONTROL PANEL BOARD

- 1. Make sure machine is turned off and unplugged.
- 2. Remove the operator side cover.
- 2. Remove the side bracket mounting screws from either side of the Control Panel assembly (Fig. 55).
- 3. Remove the two mounting screws holding the control panel assembly to the side frame (Fig. 56).
- 5. Remove the control panel from the control panel mount.
- 6. Unplug the electrical connectors. Note their location.
- 7. Remove the six $\frac{1}{4}$ " nuts holding the board to the panel. Do not lose any of the eight white plastic spacers.
- 8. Reverse procedure to install.

Bracket mounting screws



Fig. 55



Fig. 56

Side frame mounting screws

REPLACING SENSOR HARNESS ASSEMBLIES

A single photo eye (Fig. 57), located just before the pressure rollers, is used for counting, last form time out and fault/double feed detection.

- 1. Loosen the screw on the guide plate.
- 2. Carefully remove the screw and the photo eye. Take note of the angled position of the sensor.
- 3. Unplug the wires and discard old photo eye.
- 4. Reverse the previous step to install the new photo eye.
- 5. Adjust the photo eye to 1/8" below the guide plate.
- 6. Tighten the screw to ensure the photo eye does not move.







Fig. 57

Mounting Screw

TROUBLESHOOTING

TROUBLE	POSSIBLE CAUSE	REMEDY
Control panel is not	Power switch turned off.	Turn on power switch.
	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 button on the circuit breaker, located on the rear, near the power cord inlet.
	Internal electrical failure	Call for service.
Fold table stop not moving	Fold table is not plugged in.	Plug in fold table.
when "Test"/ "Start" is pressed.	Electrical or mechanical failure	Call for service.
"Cover Open" image is	Cover open	Close cover.
displayed.	Magnatic switch is broken	
"Deper quit" image is	Inford travia amonty	Call for service.
displayed.	inteed tray is empty.	Place documents on the inleed tray.
"Paper Jam / Misfeed"	Paper misfeed	Reload paper and press the 🔁 icon.
image is displayed.		Remove paper and press the I icon.
	Paper jammed at exit of folder	
Black marks on the folded paper.	Infeed tires, separator, and/or fold rollers are dirty.	Clean the parts with approved roller cleaner and rejuvenator.
Fold is skewed.	Infeed tray is out of alignment.	Turn skew adjuster knob to remove the skew.
Documents are wrinkled or crunched.	Fold tables are not inserted correctly.	Remove and reinstall fold tables. Be sure they're properly positioned.
	Piece of paper or other material is stuck in the fold table.	Power off, unplug and remove fold table. Remove jammed material. Reinstall table.
Infeed tray lever does not work	Broken spring	Call for service.
Double feeding forms	Documents stuck together	Jog forms to remove static electricity.
	More tension is needed	Adjust the infeed tension lever
	Feed tire or separator worn	Call for service
Not feeding documents	Feed tires are dirty	Clean feed tires
	Feed tires or separator worn	Call for Service
Power loss	Circuit Breaker tripped	Press black reset button next to power inlet.
	Under adverse conditions,	When power is restored, turn off machine, then
	power input level may drop below acceptable limits	turn on again to restore normal operations.

TROUBLESHOOTING

Using the Jam Clearing Tool

Clearing Paper Jams

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

If a jam occurs between the metal seal rollers, open the top cover, unplug and remove the upper fold table.

Remove the jam clearing tool (located under the upper fold table), insert the tool into the cutout on the upper metal roller, and turn clockwise until the paper jam is clear (Fig. 58). Refer to the label inside the machine for the correct turning direction (Fig. 59)

NOTE: Do not turn counter-clockwise and force the forms to exit machine as rollers may be damaged. Remove the jammed form, return tool to holder and reinstall upper fold table. Reinstall cover and press reset button.



Fig. 58

Fig. 59

DETERMINING FOLD TYPE

Two Standard Folds 11" "Z" & 11" "C" Refer to Operator Manual for custom fold setup.



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.
- 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. 60 for a "Z" fold and Fig. 61 for a "C" fold.
 - If fold "A" on the test form is to the right of the perforation on the pressure seal form move the top fold plate stop position up. If fold "A" is to the left move the top fold plate stop position down.
 - If fold "B" on the test form is to the right of the perforation on the pressure seal form move the bottom fold plate stop position down. If fold "B" is to the left move the bottom fold plate stop position up.









Fig. 61 "C" Fold Form

PARTS

OPERATOR SIDE COMPONENTS



OPERATOR SIDE COMPONENTS

ITEM	PART	DESCRIPTION	QTY
1	490-0044	386-2056 FOLD PLATE DRIVE PCB	1
2	373-5869	6-32 x 1/4 PPH SCREW	4
3	319-0309	POWER SUPPLY 24 VDC	1
4	373-0014	PPH 4-40 x 1/4	4
5	375-0044	SHOULDER SCREW	2
6	360-1649	SINGULATOR ARM	2
7	342-0077	EXTENSION SPRING	2
8	373-5868	6-32 x 1/4 PPH SCREW PPH	14
9	360-1659	SPRING BRACKET OP SIDE	2
10	342-0078	EXTENSION SPRING	2
11	360-1645	SPRING BRACKET NON-OP SIDE	2
12	330-0084	ROLLER SPRING PIN	2
13	365-0201	DRIVE PULLEY .38 PITCH, MOD.	1
14	334-0447	DIVERTER, 1506	1
15	360-3194	DIVERTER END PLATE DR SIDE, 1606	1
16	373-0119	4-40 x 3/16 FTHD SCREW	4
17	373-0088	PPH SCREW W/EXT STAR 8-32X.25	11
18	360-3187	1606 BEARING PLATE	1
19	378-9500	6-32 NUT WITH STAR WASHER	3
20	378-0115	NUT SELF LOCK 8-32	17
21	365-0145	PULLEY, 13T .38 PITCH	2
22	395-0872	IDLER PULLEY 11T	1
23	371-0027	THRUST BEARING 3/8 X 5/8	1
24	334-0371	BRACKET IDLER ADJ.	1
25	375-0070	6-32 x 1/4 PFH SCREW	2
26	373-5868	6-32 x 1/4 WITH EXTERNAL STAR WASHER	2
27	374-5832	1/4-20X1 SOC HD CAP SCREW	2
28	377-2611	WASHER 1/4" SPLIT	1
29	378-6549	1/4"x20 KEP NUT	1
30	360-2802	CATCH TRAY, 2002 / 2032 (GRAY)	1
31	360-3190	ROLLER GUARD, 1606 AUTO FOLD	1
32	316-0011	STATIC WAND, 1500, 2000, 2030, 2052	1
33	375-5699	10-32 x 1/4 BTHD SCREW	6
34	342-0081	COMPRESSION SPRING 0.240 X 1.00	6
		NOT SHOWN	
	365-0146	TIMING BELT DOUBLE SIDED	1
	310-0273	COMM. LINK HARNESS <	1
	310-0340	HARNESS 24 VDC, 386-2056	1
	314-0131	PLUG, 2 POS. 5mm TERM. BLOCK	1

DRIVE SIDE COMPONENTS



DRIVE SIDE COMPONENTS

ITEM	PART	DESCRIPTION	QTY
32	311-0087	POWER SWITCH	1
33	360-1645	SPRING BRACKET NON-OP SIDE	2
34	342-0078	EXTENSION SPRING	2
35	360-1659	SPRING BRACKET OP SIDE	2
36	342-0077	EXTENSION SPRING	2
37	330-0084	ROLLER SPRING PIN	2
38	375-0044	SHOULDER SCREW	2
39	332-0121	BRACE SHAFT	1
40	385-0060	VINYL BUSHING	2
41	375-0040	1/4-20 x 1/2 SCREW	2
42	377-2611	1/4 SPLIT WASHER	2
43	334-0447	DIVERTER, 1506	1
44	360-3194	DIVERTER END PLATE DR SIDE, 1606	1
45	373-0119	4-40 × 3/16 FTHD SCREW	4
46	319-0078	LINE FILTER	1
47	378-6549	1/4"x20 KEP NUT	4
48	317-0051	CIRCUIT BREAKER 2.5 AMP	1
49	319-0096	IEC POWER INLET	1
50	375-6625	6-32x3/8" PHIL DRIVE FLAT HD	2
51	378-0115	NUT SELF LOCK 8-32	17
		NOT SHOWN	
	365-0180	GEAR BELT, 210 L050	1
	310-0331	WIRE HARNESS, TOP COVER 1406-2036	1
	310-0332	WIRE HARNESS, 1406-2036	1
	310-0039	110 VOLT POWER CORD	1

ITEM	PART	DESCRIPTION	QTY
-	360-2948	TOP COVER	-
2	373-0014	PPH 4-40 × 1/4	2
З	319-0159	MAGNET, ACTUATOR	1
4	360-3190	ROLLER GUARD, 1606 AUTO FOLD	Ť
5	316-0011	STATIC WAND,	+
9	373-5869	6-32 × 1/4 WITH INTERNAL STAR WASHER	9
7	319-0213	PROXIMITY SENSOR	+
8	310-0270	FOLD PLATE CABLE,	2
6	378-0122	4-40 LOCKNUT>	10
10	375-0070	6-32 x 1/4 PFH SCREW	2
11	373-5868	6-32 x 1/4 WITH EXTERNAL STAR WASHER	2
12	376-1874	SET SCREW 1/4-20 x 3/16	4
13	365-0178	PULLEY, 28LO50 3/8 BORE	1
14	367-0029	CHAIN 1/4 PITCH 15 1/4 LONG	2
15	367-4073	10 TOOTH SPROCKET	1
16	379-0014	ERING	2
17	395-0877	35 TOOTH SPROCKET ASSY.	1
18	379-2839	RETAINING RING	1
19	395-0879	COMBO SPROCKET ASSY.	+
20	360-3110	PAPER TRAY EXTENSION	1
21	360-1649	SINGULATOR ARM	2
22	330-5394	IDLER STUD	-
23	365-0163	TIMING PULLEY 9LO50	1
24	313-8835	90 VDC 1/6 HP MOTOR	1
25	372-6544	GLIDE	4
26	378-9500	6-32 NUT WITH STAR WASHER >	2
77	395-1377	DC MOTOR CONTROL 120V	
17	395-1378	DC MOTOR CONTROL 240V	-
28	360-1886	BOTTOM COVER	1
29	360-1656	RAIL, CATCH TRAY	2
30	378-6549	1/4-20 HEX NUT WITH STAR WASHER	4
31	375-5699	10-32 x 1/4 BTHD SCREW	9
32	311-0087	POWER SWITCH	-

BASE COMPONENTS



BASE COMPONENTS

ITEM	PART	DESCRIPTION	QTY
1	360-3192	FRAME, DRV SIDE 1606	1
2	373-0120	PH PHILLIPS 8-32 X 1/2"	8
3	381-0185	.250 X #8 X 3/16 ALUM SPACER	8
4	378-0115	NUT SELF LOCK 8-32	17
5	377-5298	#10 FLAT WASHER	10
6	375-0057	10-24 3/8 HEX HD CAP SCR	1
7	360-3194	DIVERTER END PLATE DR SIDE, 1606	1
8	373-0119	#4-40 X 3/16", FLT HD UNDERCUT	4
9	378-0123	6-32 LOCKNUT (NYLON) > DO NOT BUY	2
10	342-0077	EXTENSION SPRING .188 O.D. SINGLE	2
11	319-0213	PROXIMITY SENSOR	1
12	378-0122	4-40 LOCKNUT	10
13	375-0044	CLEAR ZINC SHOULDER SCREW	2
14	360-1649	SINGULATOR ARM	2
15	374-0006	6-32x3/8 BUT HD HEX SCREW	2
16	378-0123	6-32 LOCKNUT (NYLON)	2
17	342-0081	COMPRESSION SPRING 0.240 X 1.00	6
18	371-0084	BUSHING, FOLDER ROLLER	7
19	334-0447	DIVERTER, 1606	1
20	350-0092	FOLDER ROLLER	3
21	350-0093	DRIVE FOLDER ROLLER	1
22	360-3188	DIVERTER END PLATE OP SIDE, 1606	1
23	360-3187	1606 BEARING PLATE	1
24	334-0371	BRACKET IDLER ADJ.	1
25	395-0872	IDLER PULLEY 11T	1
26	365-0145	PULLEY, 13T .38 PITCH	2
27	365-0201	DRIVE PULLEY .38 PITCH, MOD.	1
28	375-5699	SCREW 10-32 X 1/4 BUTTON HD CA	25
29	360-3191	FRAME, OP SIDE 1606	1

COVERS / FOLD PLATES / CONTROL PANEL



COVERS / FOLD PLATES / CONTROL PANEL

ITEM	PART	DESCRIPTION	QTY
1	360-3198	COVER, DRIVE 1606	1
2	395-1442	1606 UPPER FOLD PLATE	1
3	360-3084	1406-1506 OP COVER, TOUCH SCREEN	1
4	373-5868	6-32 x 1/4 PPH SCREW PPH	2
5	395-1445	1606 CONTROL PANEL 120V	1
	395-1446	1606 CONTROL PANEL 240V	
6	375-0070	6-32 X 1/4 FLAT HD SCREW	2
7	360-3092	BRACE, PCB BRACKET 1406-1506	2
8	360-2952	INNER PLATE OP COVER 1402-1502	1
9	378-9500	6-32 NUT WITH STAR WASHER >	3
10	375-0110	10-32 X 1/2 FLAT HD UNDERCUT	8
11	395-1443	1606 LOWER FOLD PLATE	1

INFEED COMPONENTS



INFEED COMPONENTS

ITEM	PART	DESCRIPTION	QTY
1	379-0014	E RING	4
2	395-0877	35 TOOTH SPROCKET ASSY.	1
3	371-0082	OILITE 3/8 x 7/16 x 5/8	1
4	371-0076	SELF ALIGN PRESS BUSHING	2
5	375-5699	BUTTON HEAD SCREW	4
6	350-0081	FEEDER WHEEL 60T	3
7	376-2805	8-32 x 3/16 SET SCREW	2
8	375-0107	8-32 x 3/8 SOC HD CAP>	1
9	360-1846	RETAINER BRACKET > <	1
10	395-0885	PAPER GUIDE DRIVE SIDE	1
11	395-0884	PAPER GUIDE OPERATOR SIDE	1
12	360-1684	FEEDER PAPER RAMP	1
13	352-0009	CORK PAD	1
14	330-0084	ROLLER SPRING PIN	2
15	352-0008	SINGULATOR PAD	1
16	334-0358	SINGULATOR MOUNT	1
17	373-5893	6-32 X 3/8 PPH SCREW WITH STAR WASHER	2
18	395-0876	THUMBSCREW ASSY, SINGULATOR	1
19	378-0127	#10 NYLON GROMMET NUT>	1
20	360-1648	SINGULATOR BRACKET	1
21	360-2929	PAPER TRAY <see notes=""></see>	1
22	360-3110	PAPER TRAY EXTENSION	1
23	332-0140	PAPER TRAY SHAFT	1
24	330-0087	SPRING, PAPER GUIDE	2
25	332-0131	SKEW ADJUST SHAFT	1
26	334-0359	SKEW PIVOT	1
27	378-0115	NUT SELF LOCK 8-32	1
28	360-1728	PIVOT BRACKET	1
29	360-3015	PIVOT BRACKET	1
30	395-0886	SKEW ADJUST THUMBSCREW	1
31	330-0090	COLLAR .250	1
32	377-0057	CURVED WASHER 0.265 X 0.551	1
33	378-0119	NUT, HEX 1/4-28	4
34	373-0027	SCREW PPH 8-32 x 3/8	2
35	373-0088	PPH SCREW W/EXT STAR 8-32X.25	2
36	379-0014	E RING	2
37	373-5893	SCREW PPH 6-32 x 3/8	1
38	377-2811	#6 WASHER	1
39	331-0145	ROLLER ROD, FEED	1

SEAL ROLLER & BASE COMPONENTS



SEAL ROLLER & BASE COMPONENTS

ITEM	PART	DESCRIPTION	QTY
1	365-0163	TIMING PULLEY 9LO50	1
2	376-1874	SET SCREW 1/4-20 x 3/16	6
3	313-8835	1/6 HP MOTOR	1
4	378-6549	1/4-20 HEX NUT	4
5	375-6625	6-32 x 3/8 PHFTHD SCREW	2
6	319-0096	IEC POWER INLET	1
7	378-9500	6-32 NUT WITH STAR WASHER	2
8	317-0051	CIRCUIT BREAKER 2.5 AMP	1
9	319-0078	LINE FILTER P/B	1
10	373-5868	6-32 x 1/4 PPH SCREW	2
11	375-5983	10-32 x 3/8 BTHD SOC SCREW	4
12	360-3088	BASE	1
13	365-0178	PULLEY, 3/8 PITCH, 28 L050	1
14	334-0356	SIDE PLATE	2
15	395-0761	DRIVE ROLLER ASSY	1
16	395-0760	UPPER ROLLER ASSY	1
17	342-0063	COMPRESSION SPRING,0.480 X .75	2
18	360-1686	CROSSMEMBER, REAR	1
19	375-0102	BOLT 3/8x1 1/4" SOC. HD. SCREW	4
20	375-0152	3/8"-24 X 1 1/4" HEX HD	2
21	378-0141	3/8"-24 HEX JAM NUT	2
22	365-0145	PULLEY, 13T .38 PITCH	2
23	334-0430	BRACKET SIDE, FRAME CAP	2
24	374-0096	#10-32 x 1.00, SOCKET HEAD SCREW	8
25	376-2807	1/4-20 x 1/4 SET SCREW	6
26	360-1687	CROSSMEMBER, FRONT	1
27	375-6625	6-32 x 3/8 PHFTHD SCREW	1
28	360-3172	BRACKET, SENSOR ANGLED	1
29	310-0338	SENSOR HARNESS, WITH ADAPTOR	1
		NOT SHOWN	
	365-0146	TIMING BELT DOUBLE SIDED	1
	365-0180	GEAR BELT, 210 L050	1

UPPER FOLD TABLE 395-1442



UPPER FOLD TABLE 395-1442

ITEM	PART #	DESCRIPTION	α τΥ
33	360-3134	SENSOR PCB BRKT, FOLD PLATE	+
34	360-3202	MOTOR BRKT, FOLD PLATE	1
35	395-1206	24V MOTOR ASSY, FOLD PLATE	1
36	365-0252	PULLEY 16 MXL	1
37	365-0210	TIMING BELT 70 MXL	2
38	373-0116	#4 x 3/16 SELF TAPPING SCREW	2
39	360-3179	1606 BOTTOM COVER, FOLD PLATE	1
40	360-3181	1606 EXTENSION COVER UPPER PLATE	1
41	373-5869	6-32 × 1/4 WITH INTERNAL STAR WASHER	8
42	360-3204	INNER COVER	2
43	360-3206	SENSOR COVER, UPPER	1
		NOT SHOWN	
	390-1805	FOLD PLATE HARNESS	1
	352-0020	ISOLATION GROMMET	1

ITEM	PART #	DESCRIPTION	QTY
1	360-3182	1606 BASE, UPPER FOLD PLATE	7
2	360-3178	1606 REAR SPACER, FOLD PLATE	2
3	360-1969	LONG SPACER, FOLD PLATE	2
4	360-3185	1606 TOP SHEET, UPPER FOLD PLATE	-
5	352-0014	GROMMET, FLANGED RUBBER	7
6	371-0093	SLEEVE BUSHING	7
7	371-0092	FLANGED BUSHING	1
8	379-0009	RETAINING RING 3/16	2
6	395-1440	UPPER LEAD SCREW ASSY, 1606	7
10	360-2473	3 FLAG, FOLD PLATE	7
11	378-0133	M8 HEX NUT	2
12	373-0126	4-40 x 3/16 PPH SCREW	14
13	490-0035	ENCODER BOARD ASSY	7
14	395-1441	FOLLOWER BLOCK WITH BUSHINGS	1
15	320-0060	RELEASE NUT	7
16	381-0123	SPRING PIN 3/32 x 3/4	-
17	342-0091	COMPRESSION SPRING	1
18	360-3176	1606 PAPER STOP, FOLD PLATE	-
19	381-0114	NYLON RIVET	2
20	360-2475	ACTUATOR HOME, UPPER	1
21	352-0016	PAD, PAPER STOP	5
22	377-0072	WASHER, NYLON 3/8"	1
23	373-5893	6-32 × 3/8 PPH SCREW WITH STAR WASHER	2
24	315-0047	WIRE CLAMP	+
25	377-5855	#3 INT STAR WASHER	3
26	373-0014	PPH SCREW 4-40 × 1/4	1
27	373-0131	4-40 × 1/4 PPH SCREW	14
28	376-0102	SET SCREW 4-40 x 1/8	-
29	360-3200	FRONT IDLER BRKT, UPPER FOLD PLATE	-
30	360-3201	REAR IDLER, FOLD PLATE	-
31	332-0151	SHAFT REDUCER	-
32	395-0963	REDUCER PULLEY	-

LOWER FOLD TABLE 395-1443



LOWER FOLD TABLE 395-1443

ITEM	PART #	DESCRIPTION	ατγ	ITEM	PART #	DESCRIPTION	ατγ
-	360-3174	1606 BASE, LOWER FOLD PLATE	-	33	371-0108	BUSHING 3/16 x 1/4 x 3/4	-
2	360-3175	1606 LOWER PLATE, TOP SHEET	-	34	360-3202	MOTOR BRKT, FOLD PLATE	-
3	360-3178	1606 REAR SPACER, FOLD PLATE	2	35	360-3134	SENSOR PCB BRKT, FOLD PLATE	-
4	360-1967	SPACER LOWER FOLD PLATE	2	36	365-0252	16 MXL PULLEY	-
5	371-0092	FLANGED BUSHING	-	37	373-0131	4-40 x 1/4 PPH SCREW	12
9	395-1207	LOWER LEAD SCREW ASSY	-	38	377-5366	#4 INT STAR WASHER	-
7	371-0093	SLEEVE BUSHING	-	39	373-0014	PPH 4-40 × 1/4	-
ω	352-0014	GROMMET, FLANGED RUBBER	~	40	377-5855	#3 INT STAR WASHER	2
6	373-0126	4-40 x 3/16 PPH SCREW	17	41	373-0116	# 4x3/16 SELF TAPPING SCREW	2
10	379-0009	RETAINING RING 3/16	2	42	360-3180	1606 EXTENSION COVER LOWER PLATE	ب
1	360-2473	3 FLAG, FOLD PLATE	-	43	360-3179	1606 BOTTOM COVER, FOLD PLATE	+
12	395-1206	24V MOTOR ASSY, FOLD PLATE	~	44	373-5869	6-32 × 1/4 WITH INTERNAL STAR WASHER	8
13	378-0133	M8 HEX NUT	2	45	360-3204	INNER COVER	2
14	490-0035	ENCODER PC BOARD	-	46	360-3205	SENSOR COVER, LOWER PLATE	1
15	395-1441	FOLLOWER BLOCK WITH BUSHINGS	1			NOT SHOWN	
16	320-0060	RELEASE NUT	1		390-1805	FOLD PLATE HARNESS	1
17	381-0123	SPRING PIN 3/32 x 3/4	-		352-0020	ISOLATION GROMMET	1
18	360-3176	1506 PAPER STOP, FOLD PLATE	-				
19	360-2635	HOME SENSOR, LOWER FOLD PLATE	-				
20	360-3177	1606 DIVERTER ACTUATOR	-				
21	352-0016	PAD, PAPER STOP	5				
22	315-0047	WIRE CLAMP	+				
23	395-0963	REDUCER PULLEY	-				
24	365-0210	TIMING BELT 70MXL	2				
25	342-0091	COMPRESSION SPRING	-				
26	377-0072	WASHER, NYLON 3/8"	1				
27	376-0102	SET SCREW 4-40 x 1/8	1				
28	381-0114	NYLON RIVET	2				
29	360-3203	FRONT IDLER BRKT, LOWER FOLD PLATE	~				

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REAR IDLER BRKT, FOLD PLATE SHAFT, REDUCER

360-3201 332-0151

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ELECTRICAL SCHEMATIC



490-0044 FOLD PLATE DRIVE PCB (Top) & 319-0309 POWER SUPPLY 24 VDC (Bottom)



DC MOTOR CONTROL BOARD 120V (395-1377) 220V (395-1378)



CONTROL PANEL BOARD (PART OF ASSY. 395-1445 120V & 395-1446 220V)

