Martin Yale™

Quality Delivered, Service Guaranteed.

# 1811

**Before operating, please read the Operating Manual!**

## IMPORTANT SAFETY NOTES

**<< The machine may not be operated by more than one person at any given time!** The machine was designed for safe operation by "one person only".

**<< During the folding process no other work may be performed on the machine (for example cleaning, etc.)!**

**<< The machine is <u>not a toy</u>, and is <u>not suitable for use by children</u>!**
The overall technical safety concept of this machine (dimensions, feed openings, emergency shutdown devices etc.) does not provide for any guarantee regarding hazard-free operation by children.

**<< Repairs may only be performed by trained personnel!**

**<< <u>Danger of injury</u>! Keep all loose articles of clothing, ties, jewelery, long hair or other loose objects away from rotating shafts, rollers, and moving belts!**

**<< <u>Danger of injury!</u> Never touch fingers onto rotating shafts, rollers and moving belts!**

**<< <u>Danger of injury!</u> Do not spray any flammable liquids or gases into the folder!**

**<< In case of danger, switch the machine off with the mains switch, or unplug the machine!**

**<< Always unplug the machine from the mains power supply before servicing the machine!**

## DESCRIPTION

# 1 Description

### 1.1 Nomenclature

1. Extension Tray
2. Feed Table
3. Top Cover
4. First Fold Table
5. Exit Conveyor
6. Exit Ramp
7. Stack Wheels
8. Dejamming Port
9. Button Panel
10. Feed Wheel
11. Multi-Sheet Bypass
12. Feed Pressure Adjustment
13. Power Switch
14. Second Fold Table
15. Power Cord
16. Sheet Separator Adjustment
17. Skew Adjustment

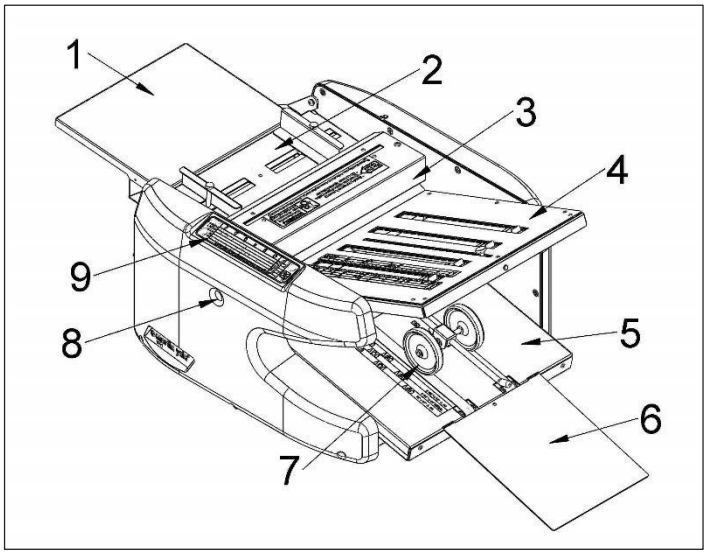


**Fig. 1**

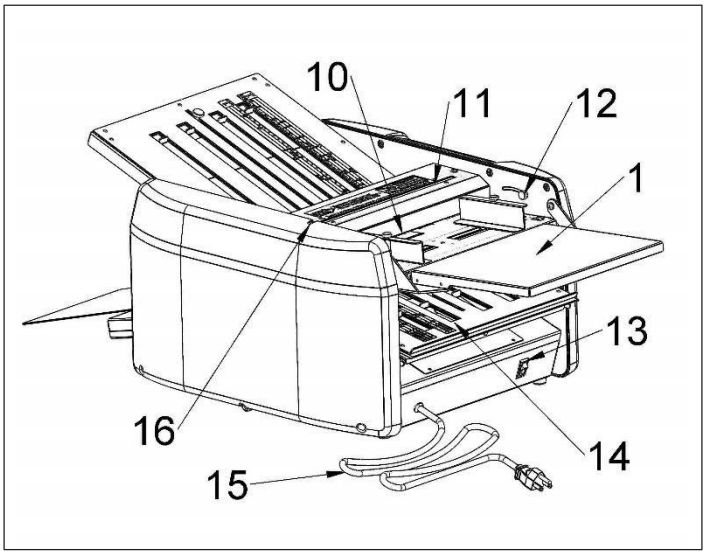


**Fig. 2**

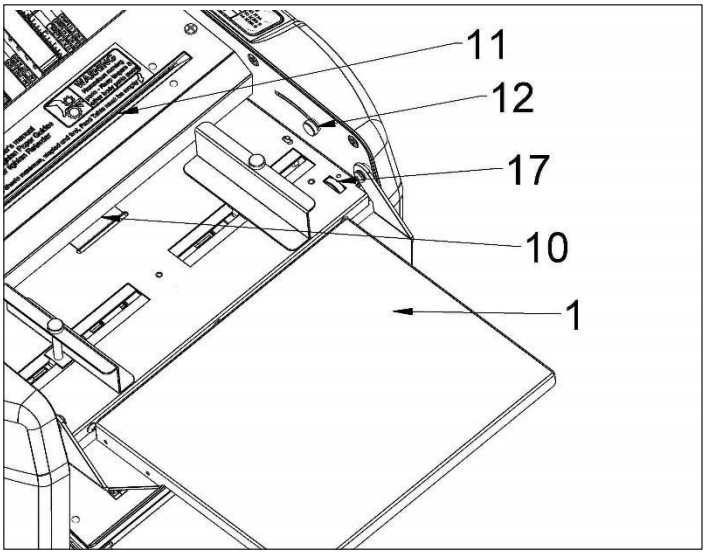


**Fig. 3**

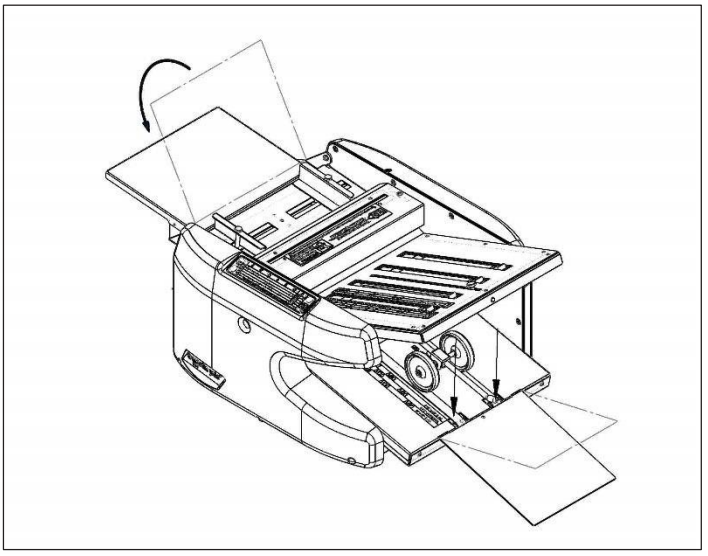

**Fig. 4**

## 2 Installation

### 2.1 Unpacking

Carefully unpack the Model 1811 folder and accessories. Place the Model 1811 on a flat, level surface where it is to be used. It is necessary to have a clear area at the exit end of the folder to place the exit ramp. Place all of the packing material back in the shipping box and store the box for any future shipment of the Model 1811. Inspect the Model 1811 and all accessories for shipping damage. If any damage is found, contact the carrier immediately.

### 2.2 Feed Table

The Model 1811 is equipped with a variable-position, non-removable feed table and extension tray. When not in operation the extension tray can be folded on top of the machine for easy storage. The Feed Table should never be run with the extension tray in the storage position.

### 2.3 Exit Conveyor

Align the tabs on the exit ramp with the corresponding slots on the conveyor and drop the exit ramp into place (See Figure 4).

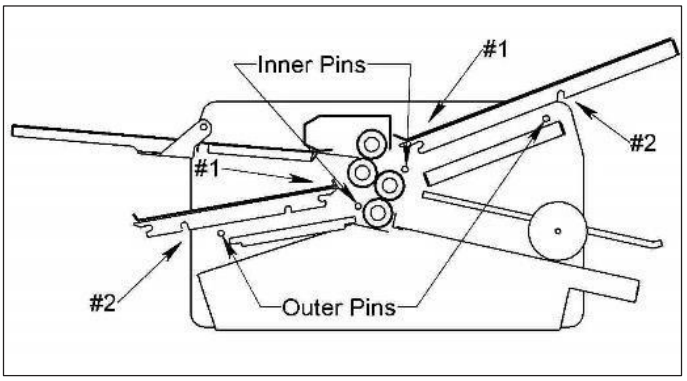


Fig. 5

### 2.4 Fold Tables

Step #1: Slide the front slot opening of the fold table onto the inner set of pins (closest to the folding rollers). See Figure 5, and Figures 11 for details.

Step #2: Lower the fold table onto the outer set of pins. The pins must be fully set in the slots. Repeat Steps 1 & 2 for the 2nd Fold Table installation.

Note: 2nd Fold Table Assembly can be installed in two directions. The open end towards the rollers will produce a double - fold and the closed end (with silver deflector) will produce a single fold.

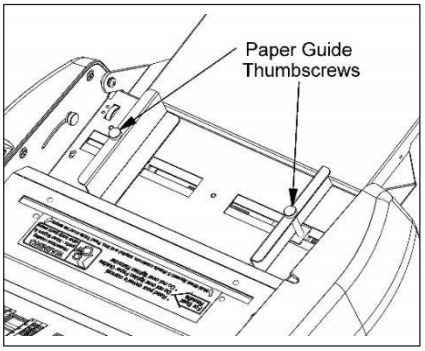


Fig. 6

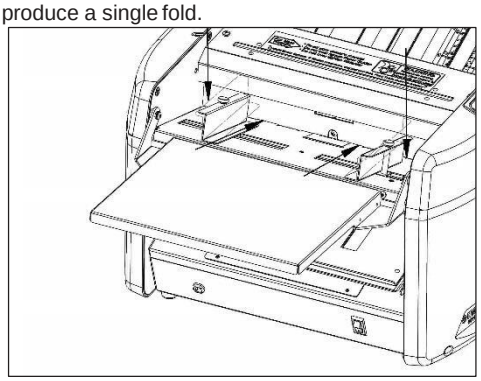

Fig. 7

### 2.5 Paper Guides

The Paper Guides for the 1811 are self-centering. To adjust the Paper Guides, loosen both thumbscrews slightly and slide the Paper Guides to the desired position. For best results, load a stack of paper and adjust the Paper Guides up to the paper. Once the Paper Guides are in the correct position, snug the thumbscrews down to prevent the paper Guides from moving.

Snug the thumbscrews down to prevent the paper Guides from moving. **DO NOT** over tighten the thumbscrews (See Figure 6).

The paper stack should be able to slide between the Paper Guides without binding, and at the same time, there should be very little play between the Paper Guides and the paper stack.

### 2.6 Setting Fold Styles

Before attempting to set-up a fold, you should familiarize yourself with the seven designated fold style icons provided on the rulers located on each fold table (Figure 10). These icons are arranged in columns on the feed table rulers that represent the seven most common paper sizes (Figure 8 and Figure 9).

The icons in each column are color coded for clarity. NOTE: 8 1/2 X 11" = Green, 8 1/2 X 14" = Purple, 11 x 17" = Gold, A3 (297 x 420mm) = Pink, A4 (210 x 297) = Blue.

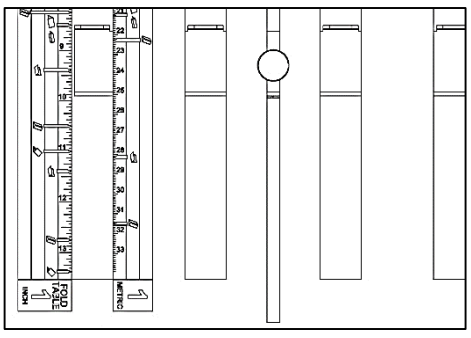

Fig. 8

### 2.7 Skew Adjustment

The Skew Adjustment controls the angle at which the paper is fed into the rollers. Skew adjustment is factory set to be square with the rollers and should not need adjusting. Skew adjustment is only necessary when the paper is not cut squarely or has irregular edges.

If the paper is not folded square (corners of the paper stick out once folded), rotate the Skew Adjustment Thumb Wheel a **small** amount clockwise or counter-clockwise. The direction the wheel is rotated is dependent on the skew direction. See Figure 1 for the location of the Skew Adjustment Wheel.

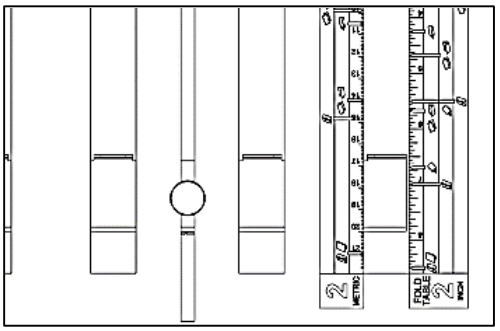

Fig. 9

### 2.8 Loading Paper

Depress down and hold the Feed Table by pushing down on the top of one of the Paper Guides. Place a maximum of 300 sheets of 20# paper (lesser amounts of thicker paper) between the Paper Guides, and push the stack of paper under the Feed Wheel. The paper stack must rest straight and square against the Feed Bridge (See Figure 7). Once the paper stack is correctly positioned, release the Feed Table and allow Feed Table to lift the paper stack up against the Feed Wheel.

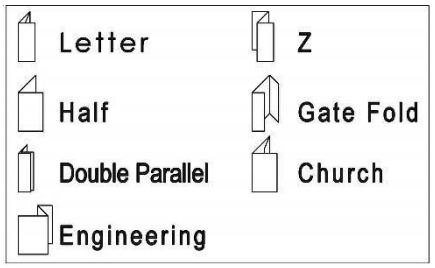


Fig. 10

### 2.9 Moving the Fold Table Paper Stops

In order to successfully set the fold tables, you must know both the size of the paper being folded and the type of fold desired. After you've determined the type of fold desired, identify its icon on each fold table (Figure 8 and Figure 9).

Loosen the fold stop thumbscrew on either fold table, and using the rulers to gauge the fold length, move the fold stop until it aligns with the desired fold style icon or measurement, and then retighten the thumbscrew.

Repeat the process for the other fold table. Make sure the proper colored icon is used for the appropriate paper size.

Special Notes - The second fold table must be removed, rotated 180°, and reinserted for Half Fold regardless of paper size.

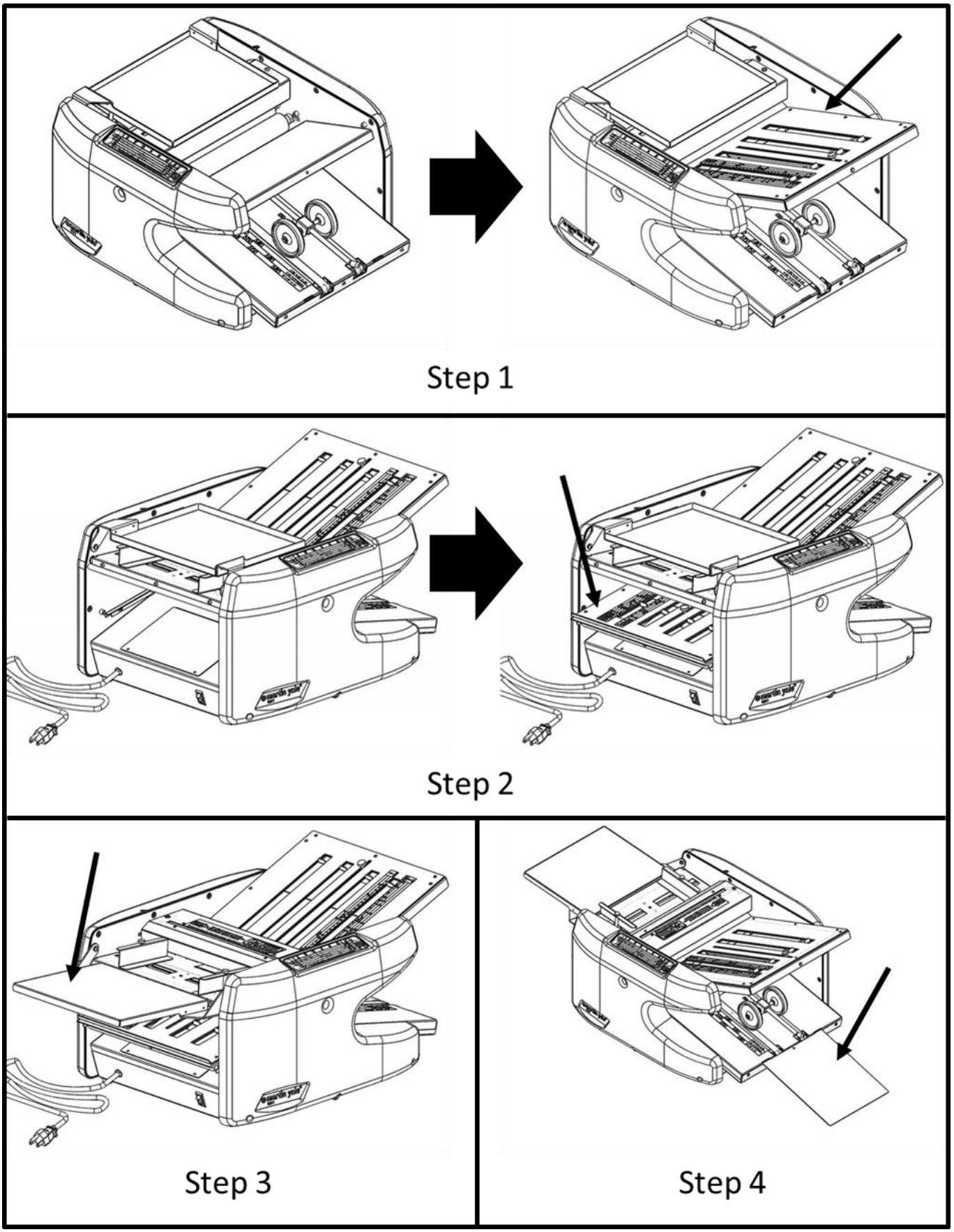


**Fig. 11**

## 2 Installation (Continuance)

**2.10 Custom Folds**

To make custom folds, simply use the rulers to gauge the fold length measured from the paper stop edge to the fold.

**2.11 Stacking Wheels**

The Model 1811 is equipped with an Exit Conveyor and Stacking Wheels for trouble free document stacking. The Stacking Wheels must be set to the correct position for the paper type and fold style in order for the paper to stack correctly. A chart with correct stacking wheel placement for various paper sizes and folds is located on the Exit Conveyor (see Figure 12).

The Stacking Wheels are held in-place by friction. To move the Stacking Wheels, simply slide the Stacking Wheels along the shaft to the desired position. To determine the correct stacking wheel position for custom folds, begin with the Stacking Wheels set in a position equal to the second fold table paper stop location. For example, if the Second paper Stop is set for 5 ½ inches, then set the Stacking Wheels to 5 ½ Inches. If stacking problems are encountered, adjust the position of the Stacking Wheels so that the folded paper drops completely onto the Exit Conveyor just before the paper makes contact with the Stacking Wheels.

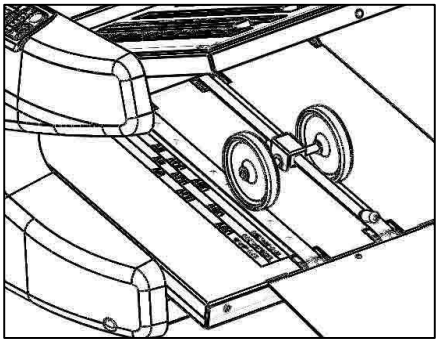

**Fig. 12**

## 3 Operation

**3.1 Automatic Feed Operation**

1. Set up the folder as described in section 2 of these instructions.
2. Turn the power On by depressing the "I" portion of the Off/On power switch. The green "Power" LED, located near the Run/Stop button, will be illuminated.
3. Square the stack of paper to be folded by using a Martin Yale Model 400 Jogger or by tapping 2 sides of the paper stack against a table or other hard object.
4. Load paper as specified in Section 2.6.
5. Adjust the Paper Guides as necessary per section 2.5.
6. Press and release the Run icon (green button) to initiate folding. The folder will now start running and process the stack of paper. The folder will automatically turn off when the paper runs out. The Run button is located in the lower-right corner of the Button Panel (See Figure 13).
7. Folder may be stopped at anytime during folding by pressing the Run/Stop button. NOTE: You may find it easier to run only a few sheets before running an entire stack.

This way, adjustments can be made before running a large quantity of paper.

**3.2 Feed Adjustments**

If the edges of the folded paper do not line up, adjust the skew by turning the Skew Adjustment Wheel slightly. Retest with a few sheets and adjust as necessary to square up the fold.

If hesitation occurs when automatically feeding paper, double check the position of the Paper Guides as described in section 2.5 of this manual. However, if hesitation continues, the problem could be the type of paper you are folding, or that the Sheet Separator is adjusted too tightly.

If you are attempting to fold coated or gloss stock, switching from a light paper stock to a heavy paper stock, or switching to a longer paper length, it may be necessary to increase the pressure of the paper stack against the Feed Wheel. The Feed Table lift-spring tension is factory set to give the best overall performance. However, this spring tension is user adjustable. The Feed Table pressure adjustment lever is located on the inside frame of the 1811, above the Feed Table (See Figure 3). Pushing the adjustment lever forward will increase the feeding force. Note: Too much pressure will lead to slight paper crumpling on the leading edge of the paper.

**3.3 Manual Feed Operation**

The Model 1811 is capable of folding single sheets or sets of sheets up to 5 pages of #20 Bond manually (one at a time). To do so, set up the machine as described earlier in section 2. With the Feed Table empty of paper, insert the paper all the way into the Multi Sheet Bypass until the paper stops. Press and release the Run/Stop button. Do not hold onto the paper while the machine is running or the sheet will be pulled out of your hand. Instead, gently support the paper.

**3.4 Folding Stapled Multiple Sets**

The Model 1611 is capable of folding stapled sets of paper up to 5 sheets of #20 Bond in the manual method described in section 3.3. **Warning:** To prevent jams or roller damage, always attach the staple parallel to the fold rollers, always feed the paper stapled edge first, and avoid using loose fitting staples or inserting them too close to the edge (less than 5/16", 8mm).

## 4 Maintenance

**1. Fold Roller Cleaning**

During normal operation, the fold rollers will become contaminated with paper dust, ink, copy toner and other performance inhibiting materials. At some point this will cause problems such as wrinkling or marking the paper and even miss-folds or paper jams. At which time, cleaning the rollers will be necessary. Follow these steps to gain access to the rollers:

1. Disconnect the power cord from the outlet
2. Remove both Fold Tables
3. Remove 2 Phillips screws from the Top Cover, and remove the TopCover.

Clean the exposed rollers by spraying Martin Yale Roller Cleaner and Rejuvenator onto a clean cloth and wiping until all contaminates are removed. While wiping the rollers, rotate the rollers to insure that the entire surface of the roller is cleaned. Mild soap and water solution may also be used. Avoid getting cleaning solutions into the bearing surfaces. If the fold rollers become glazed or shiny, it may be necessary to return them to a dull luster by using a lightly abrasive non-metallic scouring pad. Never use metal pads such as steel wool or sand paper, as the shavings or grit will damage the roller and bearing surfaces.

**2. Clearing Paper Jams**

Use the following steps to clear a paper jam:

**1. Disconnect power to the folder**

2. Remove the First and Second Fold Tables
3. Pull the jammed paper out from any area where it is accessible. The paper may be pulled from either Fold Table or Exit Conveyor

If the jam cannot be cleared using the above steps, perform the following:

1. With a large flat bladed screwdriver, insert and engage the rollers through the Dejamming Port located in the Front Cover.
2. While pulling on any exposed paper, rotate the screwdriver in either direction to clear the paper jam.

**4.3 Feed Wheel Cleaning**

As with the Fold Rollers, contamination of the Feed Wheel will result in poor performance. When feeding becomes inconsistent, clean only the outer surface of the Feed Wheel with a clean dry cloth and alcohol or a mild soap and water solution. Avoid getting cleaning solutions into the bearing surfaces. **DO NOT** use Martin Yale Roller Cleaner and Rejuvenator or other solvent-based cleaner on the Feed Wheel, as damage to the rubber will result.

**4.4 Oiling**

The Model 1811 has 8 oil impregnated, bronze bearings; 2 for each of the four rubber fold rollers. Generally, these bronze bearings **DO NOT** require oiling, except in cases of extreme use.

If needed, apply a single drop of light machine oil to each end of the above mentioned shafts, where the bronze bearing and shaft meet. **DO NOT** over oil the bronze bearings as the oil will eventually transfer to your paper.

To gain access to all 8 bronze bearings, remove both Fold Tables and the Top Cover per the steps in section 4.2 - Clearing Paper Jams.

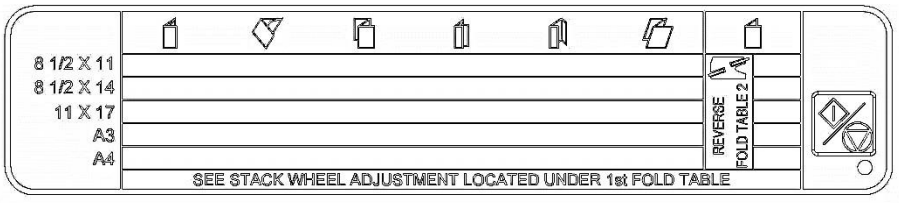


**Fig. 13**

## TROUBLESHOOTING

# 5 Troubleshooting

| | | | |
|---|---|---|---|
| **5.1** | **Folder will not turn on** | Circuit breaker has tripped | If the folder has jammed while folding, turn it off for about 10 minutes to allow the thermal breaker to cool and reset. **WARNING! Motor will start automatically once it cools.** Always turn machine off to allow cooling so as to avoid automatic starts. |
| | | Dead receptacle | Try folder in known good receptacle. |
| | | Electrical Malfunction | Have the folder serviced by a qualified technician. |
| **5.2** | **Paper will not feed** | Paper Guides are too tight | Adjust the paper guides so that the paper slides freely between them. Review section 2.5. |
| | | Feed Wheel is contaminated | Clean the feed wheel as specified in section 4.3. |
| | | Static electricity buildup | Fan or jog the paper to loosen the stack. Martin Yale Static Eliminator Spray may be used. Liberally spray over paper edges, feed tables, fold tables, and exit ramp. |
| | | Sheet Separator is worn | Replace Sheet Separator. |
| | | Paper has a curl in it | Paper will sometimes develop a curl that makes automatic feeding difficult. This is especially common in paper just printed from a laser jet printer. Stacking it and placing a large heavy object such as a large book on it for a couple hours can straighten paper. |
| **5.3** | **Crooked Folds** | Excessive paper guide side play | Readjust the Paper Guides to eliminate excessive side play of the paper between the guides. Review section 2.5. |
| | | Paper guide skew adjustment off | Adjust skew as outlined in section 2.7. Paper must enter the rollers straight, or a crooked fold will result. |
| **5.4** | **Ink smudges on paper** | Ink not dry | Allow additional ink drying time before folding. Some inks do not dry, they only set (dry to the touch). Because of the physical nature of friction feeding, you may notice a mark on the leading edge of the paper. |
| | | Excessive toner on photocopied stock | Check copy machine. |
| **5.5** | **Wrinkled paper** | Skew out of adjustment | Adjust skew as outlined in section 2.7. Paper must enter the rollers straight, or a crooked fold will result. |
| | | Paper Guides too tight | Readjust the Paper Guides so that sheets slide freely down between the guides without excessive side play. Review section 2.5. |
| | | Dirty Rollers | Clean the rollers as described in section 4.1. |

## SPECIFICATIONS

**Specifications**

**Functional**

| | |
|---|---|
| Paper Weight | 16# Bond to 90# Cover Stock (60gsm-240gsm) |
| Form Width | 5” (127 mm) min. to 11.69” (297 mm) max. |
| Form Length | 5” (127 mm) min. to 17” (432 mm) max. |
| Feed Table Capacity | 300 Sheets of 20# |
| Speed | 12000 sheets per hour 8.5” X 11” (216 mm x 280 mm) |
| Fold Styles | Letter, Half, Z, Double, Parallel, Gate Fold, Church, and Engineering |
| Stapled Documents | Five sheets 20# max, hand fed |

**Physical**

| | |
|---|---|
| Dimensions | 41” (1042 mm) Wide X 19.5” (495 mm) Deep X 14” (356mm) High |
| Machine Weight | 78 lbs. (35.4 kg) |
| Shipping Weight | 84 lbs. (38.2 kg) |

**Electrical**

| | |
|---|---|
| Power | 115 V.A.C., 2.0 Amp, Thermal Overload Protected, 60 Hz<br>230 V.A.C., 1.2 Amp, Thermal Overload Protected, 50 Hz |

## DISPOSING

**DISPOSING OF THE MACHINE:**

Dispose of the machine in an environmentally sound fashion at the end of its useful service life. Do not dispose of any of the parts included in the machine or its packaging with household trash.

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