

# FORMAX<sup>®</sup>

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FD 280-10

Heavy Duty Feeder for FD 280 Tabbings System



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# 1. INTRODUCTION

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## 1.1 Feeder Description

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The FD 280-10 Feeder is designed to be used with a variety of printing and forms processing devices. It is most commonly used with tabbing and printing machines. The FD 280-10 feeds a wide variety of materials, and can be controlled by the processing device, creating a truly integrated system.

## 1.2 Items Included

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- FD 280-10 Feeder
- Power Cord
- Output Wheel assembly
- Tail Support Bar
- Interconnect Cable
- (4) Risers / Feet
- Paper Stop assembly
- (3) Output Bridges
- (6) sets of magnetic Output Guides
- Hardware
- Operating Manual

## 1.3 Operating Manual Safety Terms

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The following highlighted blocks are used throughout this manual to emphasize important information. **Pay careful attention to this information.**

**WARNING**  
**ALERTS YOU TO ACTIONS OR CONDITIONS**  
**WHICH MAY PRESENT HAZARDS OR CAUSE**  
**INJURY TO PERSONNEL.**

**CAUTION**

**ALERTS YOU TO ACTIONS WHICH MAY CAUSE DAMAGE TO EQUIPMENT OR WORK FLOW INTERRUPTION.**

**NOTE**

**Draws your attention to an important statement or action.**

**1.4 Safety  
Precautions**

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The manufacturer assumes no liability for your failure to comply with these requirements.

**WARNING**

**NEVER CLEAN, CLEAR OR DISASSEMBLE THE FEEDER WITHOUT FIRST UNPLUGGING THE POWER CORD.**

**WARNING**

**KEEP LOOSE CLOTHING, TIES, SCARVES AND HAIR AWAY FROM ALL MOVING PARTS.**

**WARNING**

**DO NOT PLACE FINGERS OR TOOLS BETWEEN OR NEAR MOVING PARTS**

## **2. SPECIFICATIONS & REQUIREMENTS**

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### **2.1 Specifications**

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**Size**

FD 280-10 - 24" l x 24" h x 19" w

**Weight**

65 lb.

**Production (Speed)**

Adjustable

**Power**

Possible line voltages are 240V, 230V, 220V, 120V, and 100V at 50-60 Hz

Use a grounded outlet.

### **2.2 Operating Requirements**

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**Document Size**

Length: 14.33 in. (B4)

Width: 3 – 12.5 in.

Thickness: 2 sheets – .375 in.

## 3. POWER CONNECTION

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**WARNING**  
**BEFORE PLUGGING THE FEEDER INTO AN OUTLET, CAREFULLY READ THE FOLLOWING INFORMATION ABOUT VOLTAGES AND THE POWER CORD.**

### 3.1 Safety

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The FD 280-10 can connect to any power distribution system, including the European IT Power System. Because the European IT Power System does not have a grounded neutral leg, the FD 280-10 uses protective fusing in both the neutral and hot supply lines of power.

**WARNING**  
**A BLOWN FUSE IN THE NEUTRAL LEG COULD MEAN INTERIOR PARTS OF THE FEEDER REMAIN AT A HAZARDOUS VOLTAGE. ALWAYS UNPLUG THE POWER CORD BEFORE REMOVING COVERS FROM THE FEEDER.**

### 3.2 Line Voltage

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The FD 280-10 is rated for continuous operation using a variety of supply voltages. The manufacturer configures the FD 280-10 to operate with the voltage requested by the customer. Power connects to the entry end of the FD 280-10.

### 3.3 Power Cord

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1. Plug the POWER CORD into the APPLIANCE INLET on the entry end of the FD 280-10.

**WARNING**  
**TO PREVENT ELECTRICAL SHOCK, ONLY PLUG THE POWER CORD INTO A GROUNDED OUTLET.**



## 4. SET-UP

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**WARNING**  
KEEP LOOSE CLOTHING, TIES, SCARVES AND HAIR AWAY FROM ALL MOVING PARTS. DO NOT PLACE FINGERS OR TOOLS BETWEEN OR NEAR MOVING PARTS.

**WARNING**  
THE FD 280-10 IS A HEAVY MACHINE. USE PROPER LIFTING TECHNIQUES

### 4.1 Feeder Assembly

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The Feeder is shipped disassembled. Carefully remove all components from its shipping container. Save the container until you are satisfied that the Feeder is operating correctly. Report any shipping damages to the carrier.

1. Screw 4 aluminum risers (feet) to the machine by inserting the long 10-32 screws through the feet and the risers, then into the machine. Tighten evenly until the heads of the screws are fully inside the feet.
2. Remove the screws from the ends of the paper stop assembly and slide the assembly into the mounting grooves between the side frames. Line the holes in the side frame up with the holes in the paper stop and screw them together.
3. Attach the Tail Support bar to the cross bracket in the feed hopper.
4. Attach the Output Roll assembly by inserting the spring loaded end of the rod in the hole closest to the operator and carefully rotating the flatted end of the shaft until it lines up with the flats and inserts into the opposite end. The spring tension holds the roller in place.

## 5. OPERATION

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**CAUTION**  
**ALWAYS TURN ON THE FEEDER AFTER**  
**OTHER MACHINES IN THE SYSTEM.**

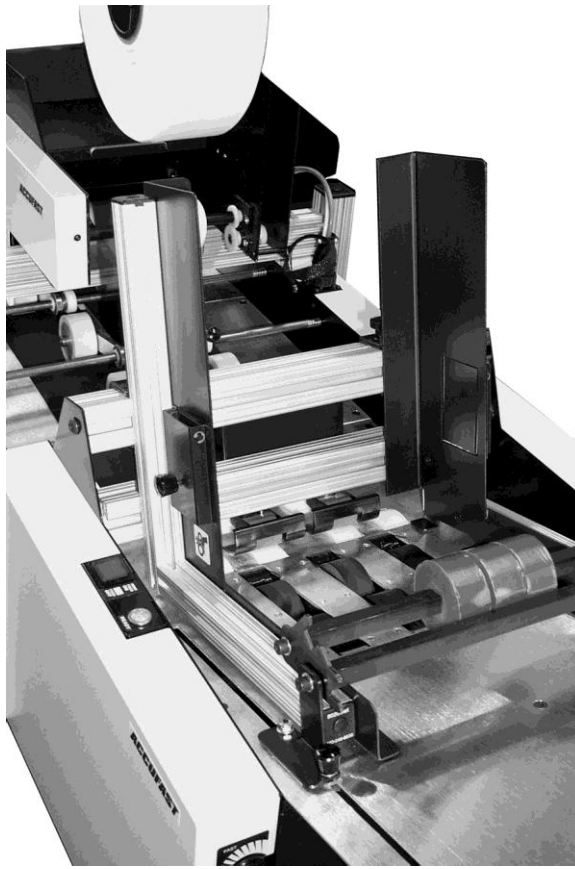
1. Plug the Feeder in to a grounded outlet
2. Turn POWER SWITCH on.
3. Adjust the speed of the FEED ROLLERS using the SPEED CONTROL KNOB. Turn the knob clockwise (CW) toward **FAST** to increase the speed, or counterclockwise (CCW) to decrease the speed. Increasing the speed decreases the space between successive pieces.

**Note**  
**Be careful to match the speed of the Feeder to the processing device. The FD 280-10 is a high speed machine that can easily over feed slower devices, causing a jam.**

### 5.1 Feeding Pieces

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1. Set the width of the Product side guides in the Feed Hopper. Try to center the piece between the guides, and allow a slight bit of play between the guides and the pieces. (Refer to **Figure 5.1**)
2. If thick pieces are being fed, place a sample piece under the Separator rolls and tighten the Separators so that there is just a bit of drag on the piece on each side. This sets the gap for a single piece to feed between the feed rolls and the separator. Thin pieces usually work well with the Separator resting on the feed rolls.
3. Center the leading edge of the mail piece against the PAPER STOP. Rest the mail piece in the FEED TRAY. (Refer to **Figure 5.1**)
4. Slide the Tail support bar under the rear of the piece. Select the appropriate setting of the tail support roll to achieve best results.



**Figure 5.1 Feed Hopper**

5. Place a stack of pieces between the PAPER GUIDES.
  - a. Remove as much paper curl as possible from the pieces.
  - b. The leading edge of the stack should be straight or shingle slightly into the SEPARATORS and FEED ROLLS.
  - c. The sides of the stack should have straight, even edges and slide easily between the PAPER GUIDES.

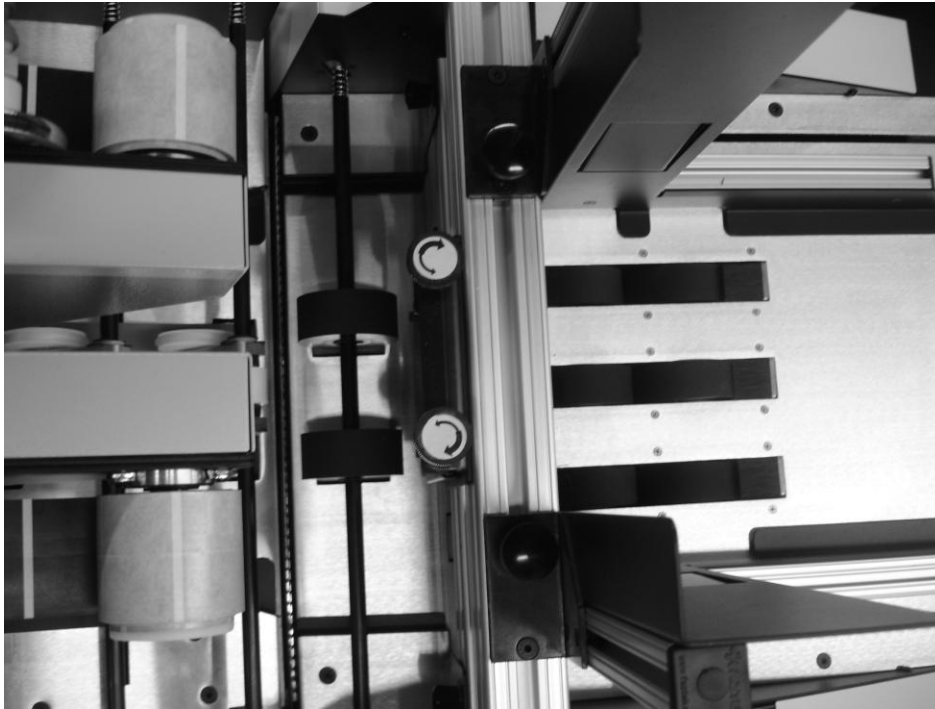


**Figure 5.2 Correctly Loaded Hopper**

**CAUTION**  
**IMPROPER STACKING WILL CAUSE JAMS.**

6. Turn the **POWER SWITCH ON**. Amber LED lights on Feeder. If Feeder is attached to a processing machine with the gray control cord, turn the processing machine on and press **FEED**.
7. Rotate the **SPEED CONTROL** fully **CCW**.
8. Toggle **FEED ON**.
9. Turn on Emergency Stop.
10. Rotate **SPEED CONTROL** to any speed.
11. Watch the feeding pieces. If they are not feeding smoothly or one at a time, adjust the Separator and/or the **SPEED** until they feed smoothly.

## 5.2 Feed Separator



**Figure 5.3 Feed Separator Adjustments**

Feed Separators are individually adjustable. The decals on top of the adjustment screws indicate the direction to turn to increase the gap between the feed roller and the separator (Thick Arrow, Thick Pieces – clockwise) (Thin Arrow, Thin Pieces – Counter clockwise). Feed Separators do two things: they apply pressure to the feed rolls increasing friction between the piece and the roller to generate feeding, and they set a gap between the roller and the separator that keeps only one piece feeding at a time.

Use a corner of the piece that goes under a particular separator to adjust the gap so as to just “grab” the piece. Do this for each separator, using the appropriate section of the piece.

Often pieces will not be the same thickness across their width. It is necessary to set the gaps independently.

To test the feeder, set the separator gaps and load a few pieces into the hopper. Turn on the feeder and increase the feed speed until the pieces move through the feeder. If the gap is too small, the piece will stall at first then the

lead edge of the piece will raise up as it feeds. If the gap is too large, the piece will probably feed along with another, double feeding. The gap must be set just right.

To fine tune the gap setting, feed pieces slowly and observe them as they cross the output edge of the feed tray. If the piece is skewed, adjust one or the other separator to straighten it out. As a rule, the lead edge of the skew will be caused by a tighter separator. To straighten the piece, either loosen the lead edge separator or tighten the other separator to bring the system into balance.

Higher stacks will compress the pieces at the bottom of the stack requiring a tighter separator setting.

### **5.3 Advanced Feeding Techniques**

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There are two press pads, one on each side of the Feed Hopper. To reduce vertical pressure from thin pieces on the Feed Roll, tighten one or both of these pads against the stack.

If the feeder is to be controlled by the processing machine, set the speeds as above, and plug the Control Cable into the Feeder and processing machine. Turn the speed down and as pieces are processed, set an operating speed. The processing machine will send a signal turning the feeder off and on again.

To feed long, narrow pieces such as self mailers, offset the paper guides off center and feed with a single separator.

## 6. TROUBLESHOOTING

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### 6.1 Troubleshooting Chart

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Trouble	Cause	Solution
<b>1. Feeder not running.</b>	<ul style="list-style-type: none"><li>• POWER SWITCH is off.</li></ul>	<ul style="list-style-type: none"><li>• Turn POWER SWITCH on.</li></ul>
	<ul style="list-style-type: none"><li>• POWER CORD is not plugged in.</li></ul>	<ul style="list-style-type: none"><li>• Plug POWER CORD in.</li></ul>
	<ul style="list-style-type: none"><li>• No power in outlet.</li></ul>	<ul style="list-style-type: none"><li>• Check circuit source for blown fuse or circuit breaker.</li></ul>
	<ul style="list-style-type: none"><li>• LINE FUSE is blown.</li></ul>	<ul style="list-style-type: none"><li>• Contact authorized Formax dealer.</li></ul>
<b>2. Product does not feed properly.</b>	<ul style="list-style-type: none"><li>• Side guides do not fit the product size, causing skew.</li></ul>	<ul style="list-style-type: none"><li>• Adjust side guides to product size and fine tune to produce good feeding. (<b>Section 5.1</b>)</li></ul>
	<ul style="list-style-type: none"><li>• Separators are not set to correct product thickness, causing jams, curling, doubles, skew etc.</li></ul>	<ul style="list-style-type: none"><li>• Adjust the product separator. Be sure to make consistent contact across the piece. Set each separator separately.</li></ul>
	<ul style="list-style-type: none"><li>• Speed Control too fast, pieces double and jam on processing device</li></ul>	<ul style="list-style-type: none"><li>• Slow down feed speed. Match speeds so that the feeder is just a bit slower than the next device in line.</li></ul>

## **7. MAINTENANCE & SERVICE**

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### **7.1 Cleaning**

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Wipe dust, debris or contaminants from the Feeder as they accumulate. Use a damp cloth. Keeping the Feeder clean helps to ensure long-term performance.

Wipe debris and build-up from the Feed Rolls with an alcohol soaked cloth.

### **7.2 Service**

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If any problems occur with this equipment or if you need assistance installing or operating your Feeder, contact your Formax dealer.

When calling for service, have your Feeder's serial number handy.