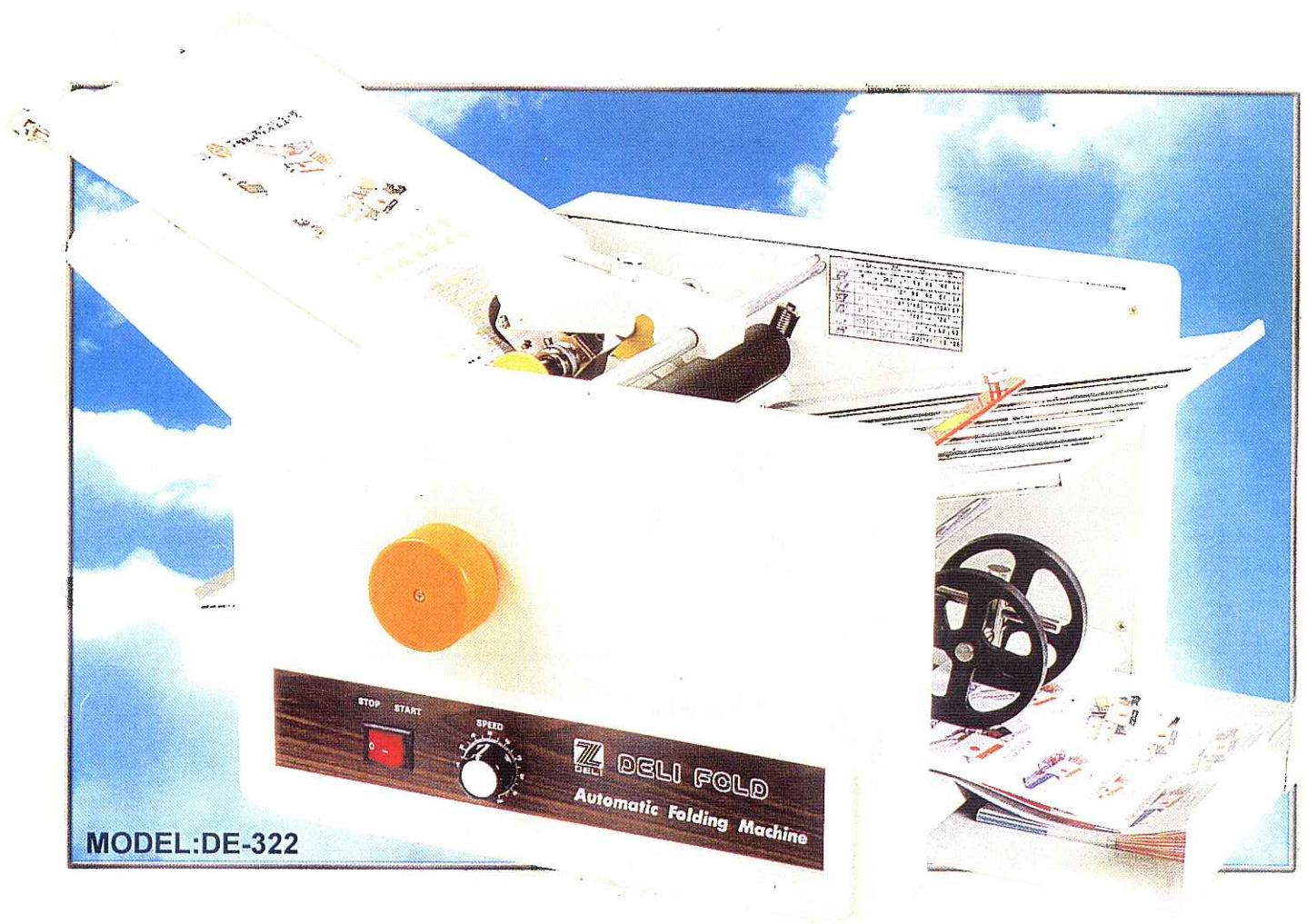




DYNAFOLD USA, INC.

Operating Instructions For  
Model DE-32/2 Folder



- Commercial Grade
- Heavy Duty
- Easy Operation

## 1. Introduction

Your new **DYNA Folder** is a small automatic folding machine which will efficiently solve all your folding problems over many years if you handle it expertly and with care. Thanks to new advances in production technology. The machine offers you outstanding capacity at reasonable cost.

This manual provides a permanent record for ready reference, covering the function of the separate units and the preparatory work for the various folding applications.

## 2. Installing and assembling the machine

### 2.1 Check completeness of the accompanying accessories:

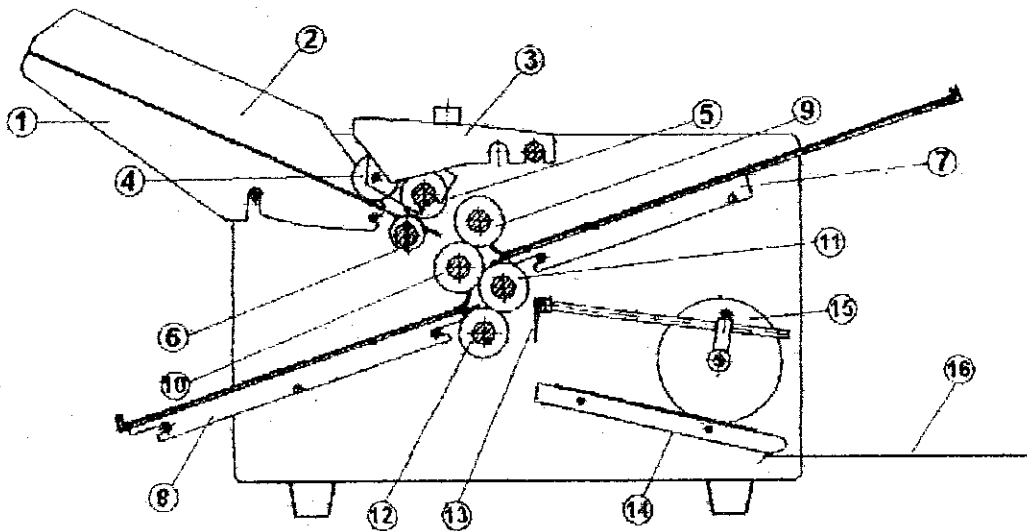
<b>Listing \ Model</b>	<b>DE-32/2</b>
Feed table complete	1
Guide bracket	2
Folding plate	2
Hold-Down roller (set)	1
Infeed roller rubber	1
Belt (PU) 250mm	1
Hexagon-Head screw driver	1
Dust cover	1
Operating manual	1

Mount the machine on a sufficiently **strong table** or similar base.

2.2 First, fit the **Hold-Down rollers**. Push the spindle end carrying the spring into its bore in the right-hand side panel ( operating side, i.e. side of hand wheel and switches ). In the opposite bore, the spindle is held by spring pressure.

2.3 Hook in the **Feed table**. First place it on the cross spindle, slide it down at an angle until the lower slots engage with the pins on the side panels. The upper slots must engage with the cross spindle.

The two paper guides are easily set to paper size.



- |                         |                     |                       |
|-------------------------|---------------------|-----------------------|
| 1. Feed table           | 2. Feed guide       | 3. Feeder             |
| 4. Infeed roller rubber | 5. Feed roller      | 6. Retarder roller    |
| 7. Folding plate (1)    | 8. Folding plate(2) | 9. Fold roller(1)     |
| 10. Fold roller(2)      | 11. Fold roller(3)  | 12. Fold roller(4)    |
| 13. Static brush        | 14. Delivery table  | 15. Hold-Down rollers |
| 16. Collecting table    |                     |                       |

2.4 Both **Folding plates** are of identical design and are hooked into position like the feed table. You will note that the plate has a continuous guide bar on one side, while the other is formed as an open "pocket". Hook in the plates as dictated by the desired type of fold. To do so, place the plate on the two-front pins in the side panels, then slide it towards the folding rollers until you can clearly hear all four pins clicking into engagement.

Your **DYNA Folder** is now fully assembled, but to obtain the desired folds, you must set it up correctly. Please study and observe the following instructions and descriptions carefully, before you start working with the machine.

### 3. Description of machine operation and setting instructions

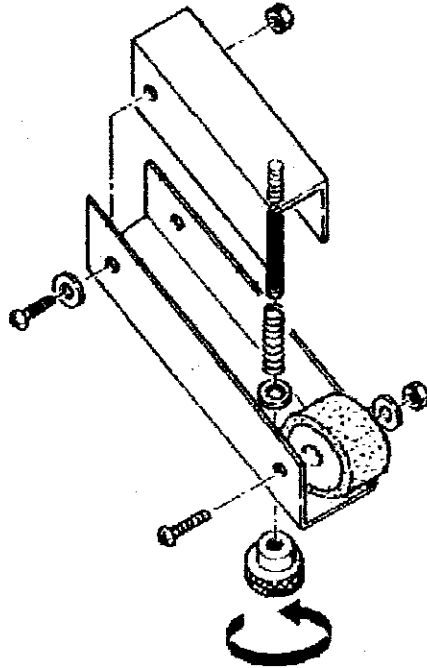
#### 3.1 Paper feed

On the **DYNA Folder** the paper is taken from the feed stack by a "wiping" movement for which the paper stack must be **fanned**.

These roller's should be positioned at the outer edges of the paper,

approximately 1/4" to 3/8" from each edge. When removing or installing the feed table, slide rollers toward center of machine.

### 3.2 Feed Adjustment



The paper retarder mechanism is under the feed table. This mechanism and its adjustment allow the Feed roller to feed single or multiple sheets of paper.

The Retarder roller is raised and lowered by the use of a thumb screw under the feed Table. Turn the thumb screw several turns back and forth and observe the space between the black Retarder roller on the bottom and the Feed roller until you feel a slight drag when you attempt to pull the paper out of the machine. Too loose, or too much space between the rolls could cause more than one sheet to be feed, possibly causing the machine to jam.

Note that eventually, through use, the red Retarder roller may develop a deep groove. To correct this condition, simply loosen the screw which locks the Retarder roller in place on its holder. Rotate the roller to expose a new surface and lock the screw assembly.

For most paper of approx. 60-90 g/sq.m in general use, this is the normal working position. To increase the pressure, slacken the nut and shift it towards the stack. This may be necessary for papers above 90 g/sq.m. For lighter grades ( under 60 g/sq.m ), shift the nut in the opposite direction.

To sum up, set paper feed in the following steps:

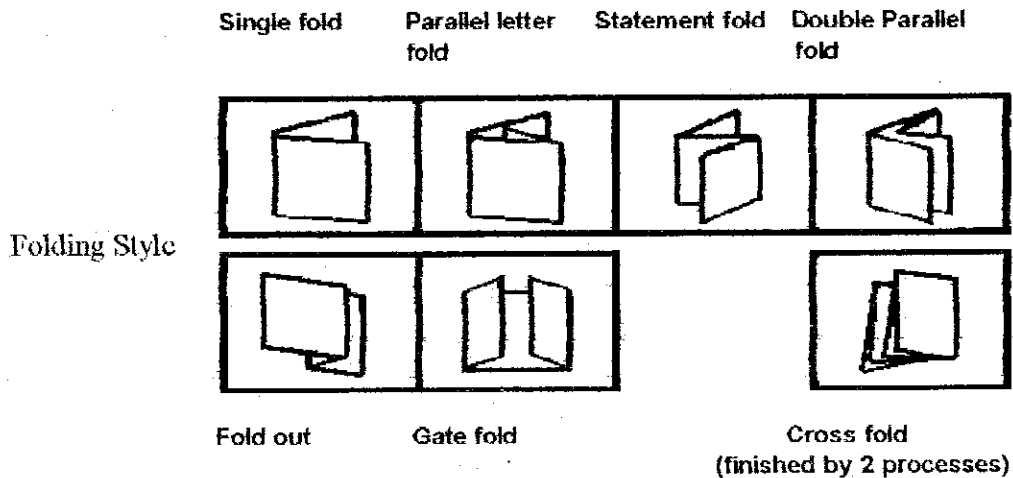
- 3.2.1. Set gap between Feed roller and Retarder roller approximately to paper thickness.
- 3.2.2. Align the right guide can then be set parallel to the left one by aligning it on a sheet placed between them.

aligning it on a sheet placed between them.

3.2.3. Set Infeed roller contact pressure with the knurled nut on the feeder.

### 3.3 Fold settings

You can obtain a simple understanding of the chart and the fold scales by experimenting with the hand knob with the Power Off. The fold chart on the side of the side of the machine gives the approximate settings for marking various types of folds.



### 3.4 Folding styles

The **DYNA Folder** is arranged to apply the desired style of fold by simple re-setting of the plate stop stops. The first and second pocket are both set to one third of the sheet length. The result is an accordion fold.

For a **parallel letter fold**, the first pocket is set to 2/3rds sheet length and the second to 1/3rd.

To Produce a **single fold** - say, at sheet center-set the first plate to half the paper length. Here, you do not need the second plate, so take it out and fit it reversed - i.e. guide bar leading - into the machine. The bar now guides the paper to the next pair of fold rollers. The sheet is folded once only ( at center in our example ) and then ejected.

To produce **double parallel fold** set the first plate to half sheet length, the second to half of the first setting, i.e. 1/4 of overall length in our example.

In addition to these four **basic types of fold**, you can apply other fold variations on the **DYNA Folder**.







For example, you can fold a sheet along a preprinted or perforated line, or fold a letter sheet to show the address in the envelope window.

In such cases, it is advisable to fold a specimen sheet by hand first and transfer the fold dimensions to the plate stops in setting up. You can do this by simply placing the sheet against them, or use the scales on the plates.

Each time you have set up a machine for a folding operation, first run through on or more trial sheets and carry out minor corrections, as required, with the fine-setting screws on the plates.

#### Setting of fold plate stops

Type of fold	Fold plate	Sheet length	DIN A4 210x297mm	DIN A3 297x420mm
<b>Single fold</b>	1	1/2	148.5	210
	2	-	-	-
<b>Parallel letter fold</b>	1	2/3	198	280
	2	1/3	99	140
<b>Statement fold</b>	1	1/3	99	140
	2	1/3	99	140
<b>Double parallel fold</b>	1	1/2	148.5	210
	2	1/4	74	105

PAPER SIZE	11 * 17"		8.5 * 14"		8.5 * 11"		6 * 9"	
TABLE	I	II	I	II	I	II	I	II
	16	—	13	—	9	—	7	—
	16	G	13	D	9	B	7	A
	19	P	17	K	14	E	11	C
	10	P	8	K	5	E	3	C
	20	T	18	S	15	M	12	H
	6	G	4	D	2	B	1	A

**Note:**

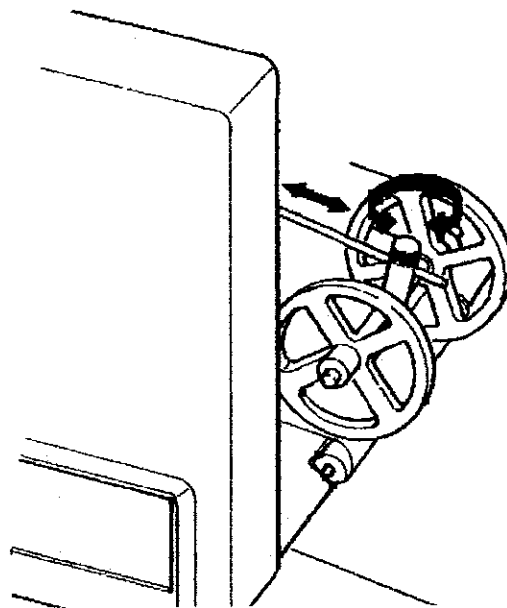
**Once you have completed the plate setting, you should not alter machine speed again, as this may change the length.**

**If you want to increase or reduce speed during the folding run, check the sheets for correct fold and adjust the setting as necessary.**

### **3.5 Paper delivery**

The folded sheets are carried by the running belt to the delivery table. At high speed, the belt alone could not ensure uniformly spaced fanning of the ejected sheets, as the delivery rollers might eject them at varying distances even wedge them together.

That is why the hold-down rollers are fitted to provide extra guidance. Set the clearance between lower contact point of these rollers and the ejector rollers to equal roughly the width of the folded sheet.

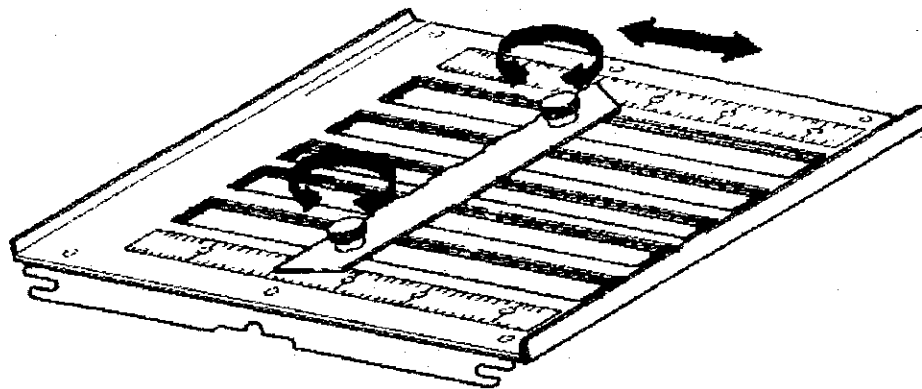


In this way, the finished sheet is then immediately seized by the hold-down rollers, pressed down on the belt and conveyed at even spacing.

The sheets now leave the machine evenly fanned and can easily be taken from the collecting table.

### **4. Receiving plate**

To adjust the space for receiving the folding paper. Simple slide the receiving plate in or out of the machine. The plate should be adjusted so as to allow folding paper to stack neatly in the compartment. Too little space could cause the machine to jam. Too much space could cause the paper stack to form unevenly.



## 5. Operation of machine

By now, you should have a good understanding of the basic adjustments and functions of the AutoFolder's components. To operate the machine, simply fan out 100 to 150 sheets of paper as shown figure. Place the fanned stack on the feed table between the paper guides, with the top of the fanned paper against the feed roll.

Check your fold alignment and stacking order. Once confident they are what you desire, switch machine ON and run.

During the folding operation, it may become necessary to remove an accumulated stack of paper from the Receiving Plate. The machine can be switched OFF at any time during the folding operation and it will resume folding when switched back on. If a jam occurs, switch the machine OFF immediately! Remove the paper from the feed Plate, and rotate the Hand fold knob to clear jammed paper's from the machine.

## 6. Maintenance

**6.1 Feed Roller:** Rubber become glazed over during use. To clean, simply run machine and lightly sand outer surface with medium grit sand paper.

**6.2 Folding Rollers:** Clean rollers regularly, this increases roller life by removing glaze can build up and cause folding problems.

**6.3 Retarder Rubber:** After several hours of use, the Retarder rubber may develop a flat spot which will inhibit its ability to feed properly. Correct this by loosening the nut and bolt on the Retarder mechanism and rotating Retarder rollerer to expose a new surface.



## 7. Faults, Cause and Remedy

Fault	Cause	Remedy
Intermittent and irregular feed	<ol style="list-style-type: none"> <li>1. Feed bracket set too narrow</li> <li>2. Gap between feed and pressure roller too narrow</li> <li>3. Infeed roller pressure insufficient or roller worn</li> <li>4. Feeder set too tight</li> <li>5. Feeder spindle drive belt worn</li> </ol>	<ol style="list-style-type: none"> <li>1. Set with a little more play</li> <li>2. Increase gap with setting disk</li> <li>3. Increase pressure with knurled nut on feeder or replace roller</li> <li>4. Shift bearing rings outwards a little way</li> <li>5. Replace belt</li> </ol>
Very light-weight paper grade becomes creased	<ol style="list-style-type: none"> <li>1. Infeed roller pressure too strong</li> <li>2. Gap between feed and pressure roller too narrow</li> <li>3. Speed too high</li> <li>4. Paper runs at an angle</li> <li>5. Pressure of first pair of fold rollers too strong or uneven</li> </ol>	<ol style="list-style-type: none"> <li>1. Reduce with knurled nut</li> <li>2. Increase gap with setting disk</li> <li>3. Reduce speed</li> <li>4. Correct with guides</li> <li>5. Have pressure and parallel fold roller alignment set by our service engineer ( fold roller arrangement is suitable for all paper grades in general use, but for some very thin papers, fold roller pressure can be altered )</li> </ol>
Two or more sheets drawn in together The folding machine has stopped	<ol style="list-style-type: none"> <li>1. Gap between feed and pressure roller too wide</li> <li>2. Paper jam, the blocking prevention has switched off the folder</li> </ol>	<ol style="list-style-type: none"> <li>1. Narrow gap with setting disk</li> <li>2. Clear paper jam. To restart the machine, it has to be switched off and then switched on again.</li> </ol>
Folded sheets slide one inside the other or jam between ejector fold rollers and hold-down rollers	Gap between ejector fold roller and hold-down rollers too wide or too short	Correct gap. If clearance is too wide, the fold may open up, especially for the heavier qualities, so that the following sheets sides into the fold. If clearance is too narrow, the ejected sheet does not immediately lie flat on the table and the following sheet may again become interleaved.

Sheets not evenly fanned on delivery	1. Paper feed irregular 2. Ejector rollers worn or not evenly set 3. Delivery belt is slack 4. Drive belt of delivery belt worn	1. Correct setting ( see section on "paper feed" ) 2. Replace or re-set rollers 3. Tension belt or replace it, if necessary 4. Fit new drive belt
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## WARNING

During operation and maintenance,  
KEEP HANDS HAIR, AND LOOSE  
CLOTHING CLEAR OF MOVING  
PARTS.

Service or disassemble of side covers should  
 only be done WITH POWER CORD  
DISCONNECTED.

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