

FORMAX[®]

FD 500

Table Top Burster

OPERATOR MANUAL
FIRST EDITION

FD500 BURSTER

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SECTION 1

Installation Instructions

SECTION 1 INSTALLATION INSTRUCTIONS

1.1 Unpack machine.

1.2 Visually inspect machine for damage, eg. all external surfaces, perspex cover, paper trays etc.

Ensure that covers are not damaged or displaced. Check action of opening covers to confirm correct operation, and that safety microswitches function correctly. Check that all warning labels are legible (see section 1.9 for locations).

1.3 Check that loose or removable parts are supplied and/or in place:

- i) Mains Lead
- ii) Operating Instructions
- iii) Paper Output Tray
- iv) Magnetic Stops (4)
- v) Paper Guide Input Bracket

1.4 Remove covers and check that:

- i) Chain is in place and properly adjusted.
- ii) Brackets bearings etc. are securely fixed and that no obvious parts are loose.
- iii) Toothed belt is correctly adjusted
- iv) All electrical connectors are secure.

Ensure that mains cord and its connectors are sound and undamaged.

1.5 Plug in machine and switch on.

1.6 Run machine with no paper to ensure it runs without excessive or unexplained noise.

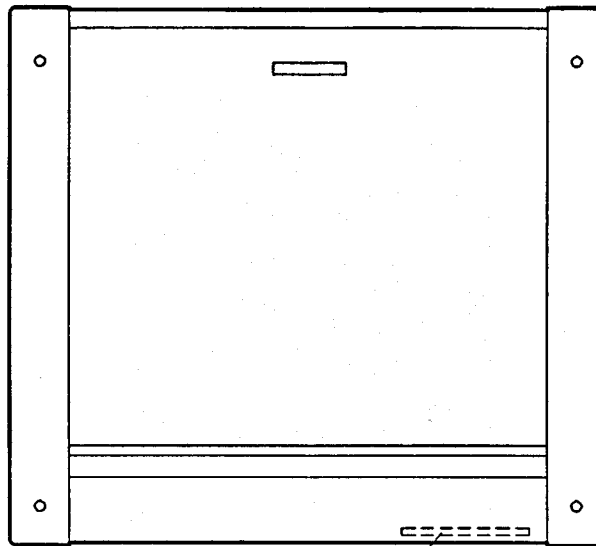
Ensure that cover safety microswitches operate correctly and that machine stops if top cover is opened.

1.7 Switch off and set up machine for customer's stationery (see Operating Instructions). Load and run machine to check that all functions are correct to the customer's requirements.

1.8 Replace covers and assuming machine has run to specification, commence operator training.

1.9 Location of Labels

Shown below are the locations of all warning labels, and the machine rating plate. These must be in place and legible.



Rating Plate

INSULATION TEST.

This test applies 500 volts d.c between live/neutral & earth then determines the insulation resistance.

- a: Press and hold down the RED button; the display should give a reading greater than 19.9 M Ω which will be displayed as "1" on the L.C.D display. This is considered a pass condition and should be documented on the work sheet. If a lower resistance is recorded the machine has failed and the reason should be discovered.

REASON FOR FAILURE.

The wire insulation in some place along the mains cable will be faulty (either burnt or cut) and breaking down against another wire or earth.

ALL FAULTS SHOULD BE DOCUMENTED ON THE WORK SHEET SHOWING FAULT, CURE AND PASS TEST RESULTS. A SAFETY TEST PASS LABEL SHOULD BE SIGNED, DATED AND STUCK ONTO THE MACHINE.

IN A FAIL SITUATION.

IF THE FAULT CANNOT BE FIXED, A FAIL LABEL SHOULD BE ATTACHED TO THE MACHINE AND THE CUSTOMER ADVISED NOT TO USE IT UNTIL THE FAULT IS CORRECTED.

SECTION 2

Description
of
Operation

DESCRIPTION OF OPERATION

The function of the 500¹ burster is to receive continuous (fanfold) stationery, trim off the tractor holes from each side and 'burst' the paper at the perforations to separate it into individual sheets. The separated sheets are output onto a receiving tray for subsequent removal by hand.

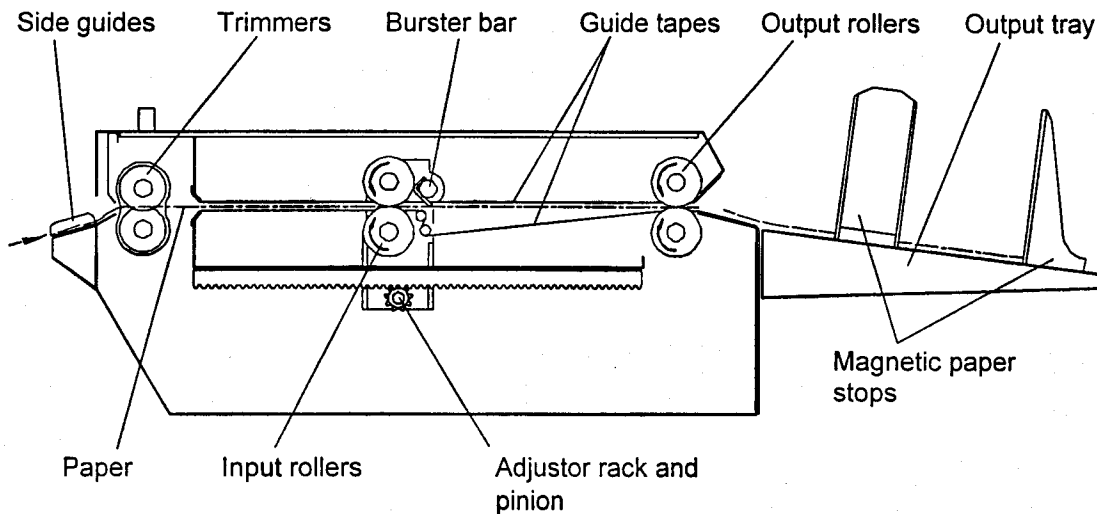


FIG. 1

Referring to Fig. 1 above, the side guides and trimmers are set to suit the width of the stationery (see Operating Instructions). The machine is switched on, causing trimmers and all rollers to rotate. The paper is fed into the trimmers which cut off the tractor holes. It then travels between an upper and lower set of nylon tapes until it reaches the input rollers, at which point it feeds automatically into the output rollers. As these are rotating faster than the input rollers (by a ratio of 1.67:1), the paper is stretched, causing it to separate (burst) at the perforated line. The separated sheets then pass onto the output tray. The bursting action is assisted by means of the burster bar which forces a strip of rounded metal tips into the paper surface, so causing a strain point for the perforation to rip against.

The input rollers are adjustable along the length of the machine by means of an external knob which acts on a rack and pinion. This is set by a scale to ensure that the distance between the tip of the burster bar and the nip of the output rollers is equal to the length of a separated sheet. After adjustment, the pinion locks the feed rollers into position.

contd.

The upper and lower sets of rollers are contacting, and there is a flat portion across the width of each of the input rollers. This is to briefly interrupt feed at every rotation so that the paper cannot begin to veer over to one side.

There are two versions of the machine; fixed speed and variable speed, the only outward difference being a control knob on the side cover for the variable speed model. Safety protection is provided by means of a microswitch which cuts power to the motor when the cover is raised. Additionally, a barrier is attached to the inside of the cover to prevent entry of fingers in the small distance before the microswitch operates.

The Burster is usually used with all normal widths of continuous stationery for separation into single sheets, but for 'two-up' stationery, a centre trimmer option is available for slitting wide paper along its centre line.

Several optional items are available for use with the Burster, most commonly a Tractor Feed Unit and a powered Output Conveyor. The Tractor Feed attaches to the input end of the machine and allows easier loading of the stationery. It also ensures accurate registration of multi-part forms, preventing form drift. The Output Conveyor replaces the static output tray and gives controlled sequential stacking of the burst forms.

FD500 BURSTER

OPERATING INSTRUCTIONS

- | | |
|-----------|--|
| SECTION 1 | TECHNICAL SPECIFICATION
Machine Specification Sheet |
| SECTION 2 | SETTING UP THE MACHINE |
| SECTION 3 | OPERATOR ADJUSTMENTS |

MACHINE SPECIFICATION SHEET

1. **CAUTION:** In order to ensure correct safety and operation, this machine must be installed and maintained by a FORMAX Authorized dealer.
2. **CAUTION:** Should any cover or safety interlock be damaged, the machine must not be used until service repairs have been completed.
3. **CAUTION:** **This machine must be earthed.** The wire colours in the mains cord are:
(Green 110v) (Green/Yellow 220/240v) which must be connected to Earth (Ground).
(White 110v) (Blue 220/240v) which must be connected to Neutral.
(Black 110v) (Brown 220/240v) which must be connected to Live (Line).
4. **CAUTION:** This machine must not be used if the mains cord becomes damaged. It must be replaced with a similar mains cord:
Part No. 162-321 U.S. Part No. 162-210 U.K.
Part No. 162-311 EURO
5. **CAUTION:** For continued protection against risk of fire, replace with same type and rating of fuse. The fuse rating and type for this machine is:
6.3A T Amps 220/240Volts Part No. 135-106
6.3A T Amps 110/120Volts Part No. 135-106

6. **Model Details:**

Model Name: Burster Fixed Speed

Model Number: FD500

Input Voltage: 220/240 Volts @50 Hz Input Voltage: 110/120 Volts@60Hz

Input current: 1.68 Amps Input current: 3.36 Amps

Input Power: 403 Watts Input Power: 403 Watts

Sound Reading: 84 dBA

(Measured at a distance of 1 metre from the nearest cover and 1.6 metres from the ground).

7. The use for this machine is separating continuous forms.
8. The weight of this machine is: 50 kgs. (unpacked, with accessories)
56.5 kgs. (packaged, with accessories)

MACHINE SPECIFICATION SHEET

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6.3A T Amps 220/240Volts Part No. 135-106
12.5A T Amps 110/120Volts Part No. 135-112

6. **Model Details:**
Model Name: Burster Variable Speed
Model Number: FD500

Input Voltage: 220/240 Volts @50 Hz Input Voltage: 110/120 Volts@60Hz
Input current: 1.93 Amps Input current: 3.86 Amps
Input Power: 463 Watts Input Power: 463 Watts

Sound Reading: 84 dBA
(Measured at a distance of 1 metre from the nearest cover and 1.6 metres from the ground).

7. The use for this machine is separating continuous forms.

8. The weight of this machine is: 50 kgs. (unpacked, with accessories)
 56.5 kgs. (packaged, with accessories)

SECTION 1**TECHNICAL SPECIFICATION****Paper Size:**

Width: Min. 76mm (3"), Max. 407mm (16") after trimming.
Min. 76mm (3"), Max. 455mm (17¾") before trimming.
Max. 440mm (17¼") can be accommodated between tractors

Length: Min. 76mm (3"), Max. 305mm (12")

Weight: All standard commercially available stock, from flimsy papers to card and up to 4-part sets, including carbon interleaved and self-copying papers. (Dependent upon perforation quality and type).

Operating Speed: Fixed speed version set at 28 metres (90 feet) per minute
Variable speed infinitely variable from 0 to 92 metres (0 to 300 feet) per minute.

Physical Dimensions:

Length: 585mm (23") excluding output tray.
920mm (36¼") including output tray.

Width: 640mm (25¼")

Height: 980mm (38½")

Weight: 50kg (110lbs)

Electrical (Fixed Speed):

Voltage:	240v @ 50Hz	120v @ 60Hz
Current:	1.68A	3.36A
Power:	403W	403W
Fuse:	6.3A	6.3A

Electrical (Variable Speed):

Voltage:	240v @ 50Hz	120v @ 60Hz
Current:	1.68A	3.36A
Power:	463W	463W
Fuse:	6.3A	12.5A

OPERATING PROCEDURE

SECTION 2 SETTING UP THE MACHINE

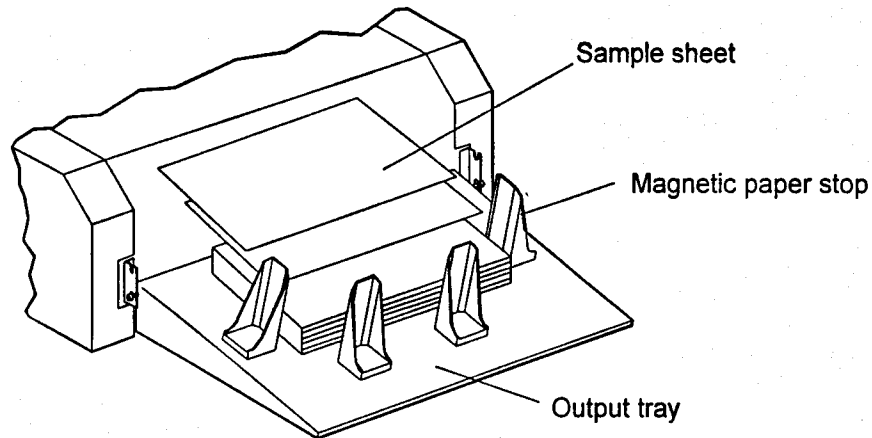


FIG. 1

- 2.1 Make a sample sheet of finished size by tearing a piece off the continuous stationery and removing the tractor holes. Referring to Fig. 1 above, move the magnetic stops on the output tray so that they will comfortably accommodate the sample sheet. This will initially retain the paper stack when the machine is operating. Final adjustments can be carried out while the machine is running.

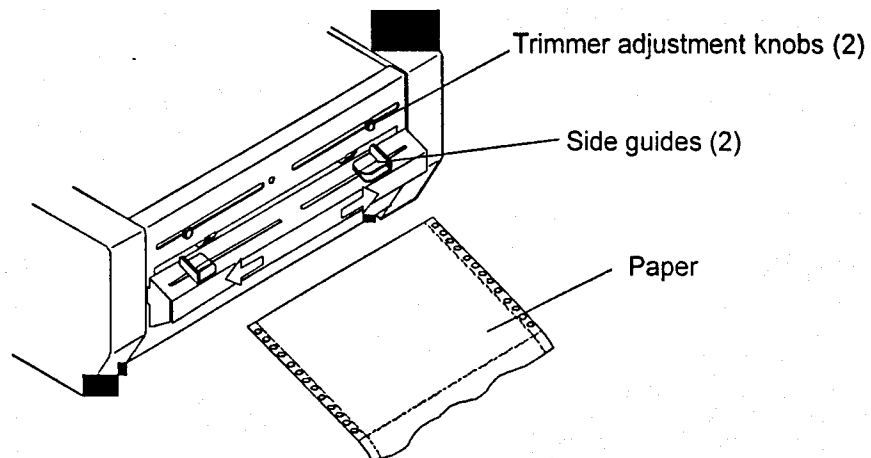


FIG. 2

- 2.2 Referring to Fig. 2 above, adjust the side guides to suit the width of the paper, feed paper into the guides and adjust the trimmers so the trim indicator is slightly inboard of the tractor hole perforations. Ensure that the adjustment knobs are tight when setting is complete.

- 2.3 Switch on at the mains source. Referring to Fig. 3 below, push in the form length adjuster knob and turn it so that the length of the finished paper accords with the setting on the scale (in inches). The centre line of the shaft should align with the scale setting; in the example shown below, the length is set to 8½ inches. Ensure that the knob has fully returned when setting is complete. This will then lock it in place.

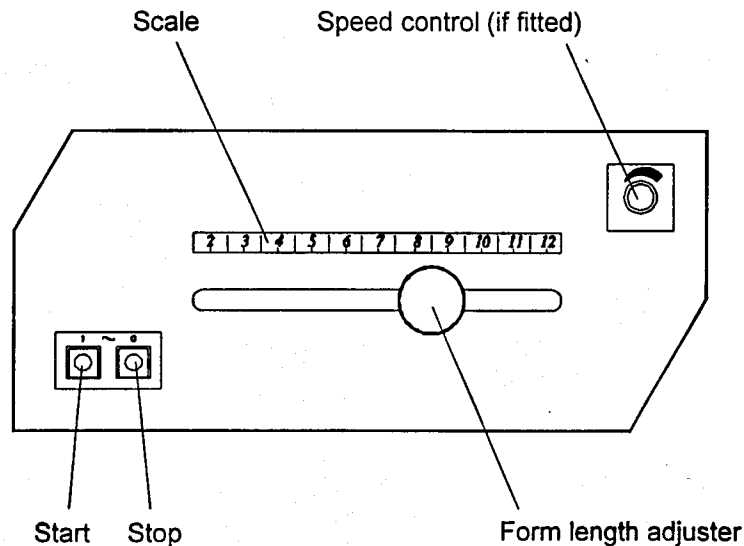


FIG. 3

- 2.4 Start the machine by pressing the 'Start' button. If a speed control is fitted, set it to approximately mid-way. Feed paper into the guides and through the trimmers until it is picked up by the machine. Bursting will then begin and will continue until the 'Stop' button is pressed. If a speed control is fitted, turn clockwise to increase speed, and vice-versa.

Note: *If the top cover is raised while the machine is running, the motor will stop. To re-start, close the top cover and press the 'Start' button. Where a speed control is fitted, the knob must be turned anti-clockwise until the switch clicks off, then turned clockwise again.*

contd.

SECTION 3 OPERATOR ADJUSTMENTS

- 3.1 If heavy grade paper is being processed, or the rollers appear to be slipping, the burster bar may need adjustment. Open the top cover, and referring to Fig. 4 below, slacken the burster bar adjustment knob. Lower the bar slightly so that the burster tips press more firmly into the paper, then tighten the knob. Run the machine and make further adjustments if necessary.

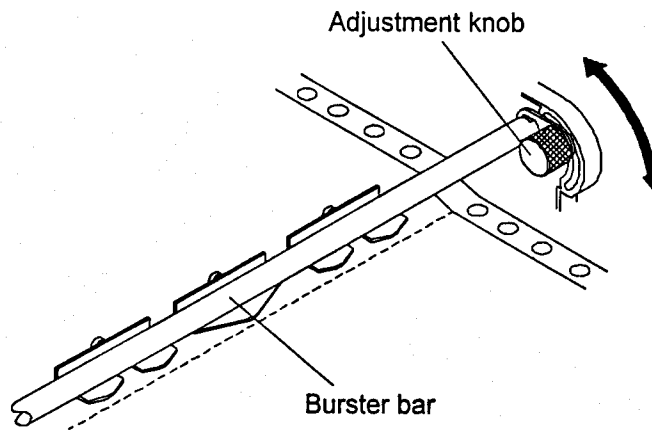


FIG. 4

Similarly, if the paper is failing to feed properly, or if a paper jam occurs inside, the burster bar may be set too low and allowing the paper to burst at the wrong time. Raise the bar slightly to remedy this. For most applications, the burster tips should be pointing downwards at an angle of approximately 45°.