

SPRINT 3000
BOOKLETMAKER
OPERATION MANUAL

CONTENTS

1.	Introduction.	2
2.	Specification.	2
3.	Initial setting up.	3
4.	Operation.	4
	4.1 Loading staples.	5
	4.2 Staple out system.	6
	4.3 Staple jam.	6
	4.4 Paper width settings.	7
	4.3 Stapling / folding positions.	8
	4.6 Changing stapling head positions.	10
5.	Booklet making.	11
6.	Corner and edge stapling	13
7.	Counter.	14
8.	Replacing stapling heads.	14
9.	Aligning of stapling heads.	14
10.	Problem solving.	15

Appendix A: Parts lists and drawings.

MBM Corporation
Michael Business Machines
3134 Industry Drive
North Charleston
South Carolina 29418

Customer Service - Tel: (800) 223 2508

Fax: (803) 552 2974
Parts & Service - Tel: (800) 223 2508
Fax: (803) 760 3814

1 INTRODUCTION

- The Sprint 3000 Bookletmaker is a heavy duty machine for centre stapling and folding to make booklets between 4¼" x 5½" and 8½" x 11" with up to 100 pages. On each cycle of the machine one set of sheets is stapled and the preceding set is folded and stacked on the conveyor belt.
- It is also possible to edge and corner staple up to 30 sheets of 20 lb bond 8½" x 11" paper.
- The machine can either be hand fed or placed on-line to one of the various desktop vertical collators, using a KAS conveyor/ jogger link. A stand is also supplied to carry the collator so that it is the correct height for feeding into the Bookletmaker.
- The Sprint 3000 is a floor standing machine fitted with sturdy castors and an integral conveyor which can be folded up in order to occupy minimal floor space when not in use.
- This model has three stapling heads as standard and five stapling positions. The centre stapler is fixed, whereas the outside heads may be moved to alternative positions depending upon the size of paper.
- A low staple detector is fitted to one of the stapling heads, and the Bookletmaker will stop before the stapling head runs out of staples.

2 SPECIFICATION

INPUT CAPACITY:	25 sheets of 20 lb bond
SHEET SIZES:	5½" x 8" to 11½" x 17½"
STAPLE LENGTH	6mm or 8mm
DIMENSIONS	Width 23" Height 36" Length 20" (Conveyor stored). Length 46" (Conveyor in use).
WEIGHT	205 lbs
POWER	115V 60Hz Consumption approx. 180 Watts

Fuse: 10 amp 115v.

3. INITIAL SETTING UP

1. Remove the bolts holding the machine to the pallet.
2. Castors are already fitted to the machine, lift from the pallet on to an even surface.
3. Remove packing from stapling section and from under fold stop beneath the conveyor.
4. Lower output conveyor, allowing the slotted ends on the support bars (part no. 6.06) to locate on the protruding bolts provided. These bolts are located at the base of the machine.
5. Fit the conveyor wheels.

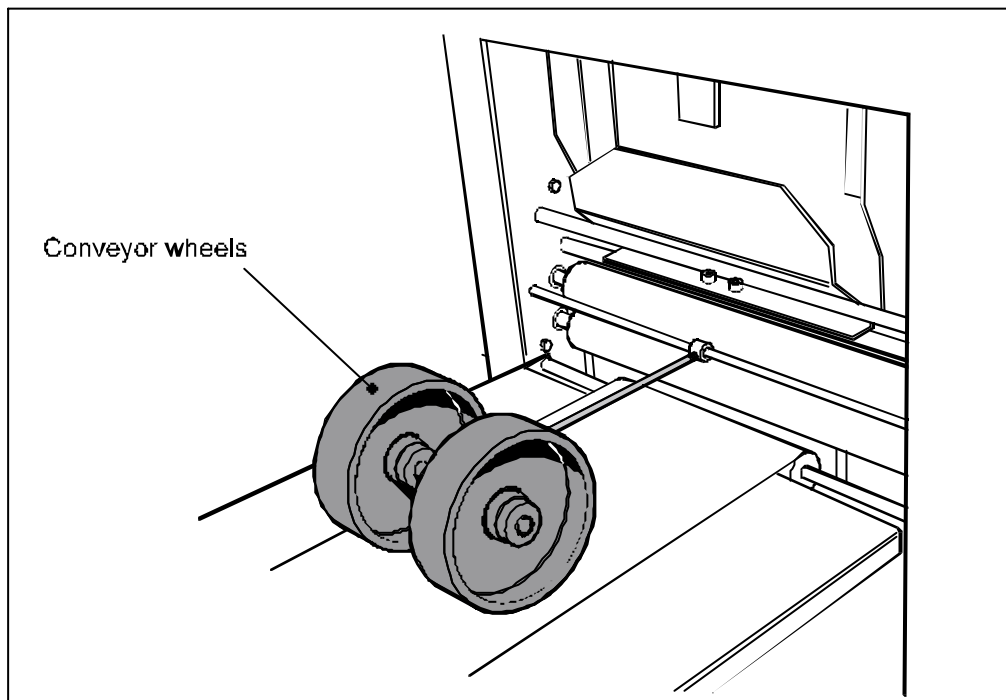


Figure 2 - Conveyor setup.

6. Insert the conveyor end stop (part no. 6.11) at the far end of the conveyor, making sure it does not infringe the belt. It is held in position by a flat magnet.
7. Position the machine near to a suitable socket outlet and ensure outlet is not covered and is easily accessible.

8. Check that the power supply is of the correct voltage for the machine. Once connected, the machine is ready for use.
-

4. OPERATION

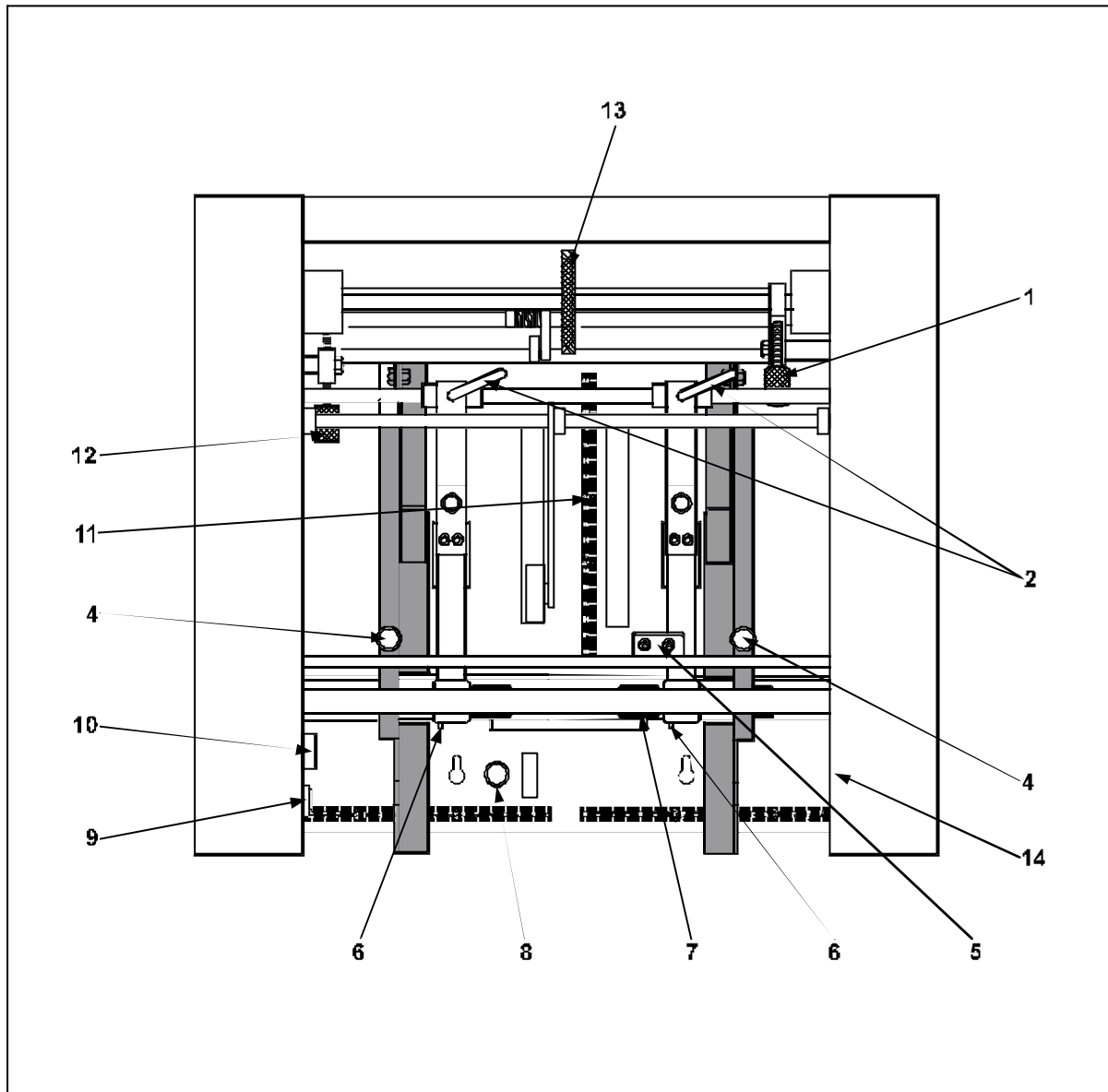


Figure 1 - Control layout (centre head removed for clarity)

- | | | | |
|---|--------------------------------|----|---------------------------------------|
| 1 | Fold stop lock thumbscrew | 8 | Staple position fine adjustment screw |
| 2 | Stapling head locking levers | 9 | On / off button |
| 3 | Side guide clamping thumbscrew | 10 | Staple delay knob |
| 4 | Side guide clamping thumbscrew | 11 | Staple/fold stop indicator |
| 5 | Staple low indicator / reset | 12 | Fold stop tilt adjustment thumbscrew |
| 6 | Stapling head cartridge eject | 13 | Staple & fold stops adjustment wheel |
| 7 | Anvil | 14 | Counter |

4.1 Loading Staples :

1. Only those staples sold or recommended by your supplier should be used in the Sprint 3000 Bookletmaker. Use of non recommended staples may damage the stapling heads and they are not covered by any warranty.
2. Raise the top cover and depress the small blue lever at the front of each stapling head and pull out the cassette. Staple type 66/6 will be suitable for most thin books. Type 66/8 should be used for thicker sets of paper, over 16 sheets of 20 lb bond.
3. Push the filled staple cassettes back after reloading until they click into position.

WARNING - Never operate the machine when the staple cassettes are extended for loading. This will cause serious irreparable damage to the stapling heads and they are not covered by any warranty.

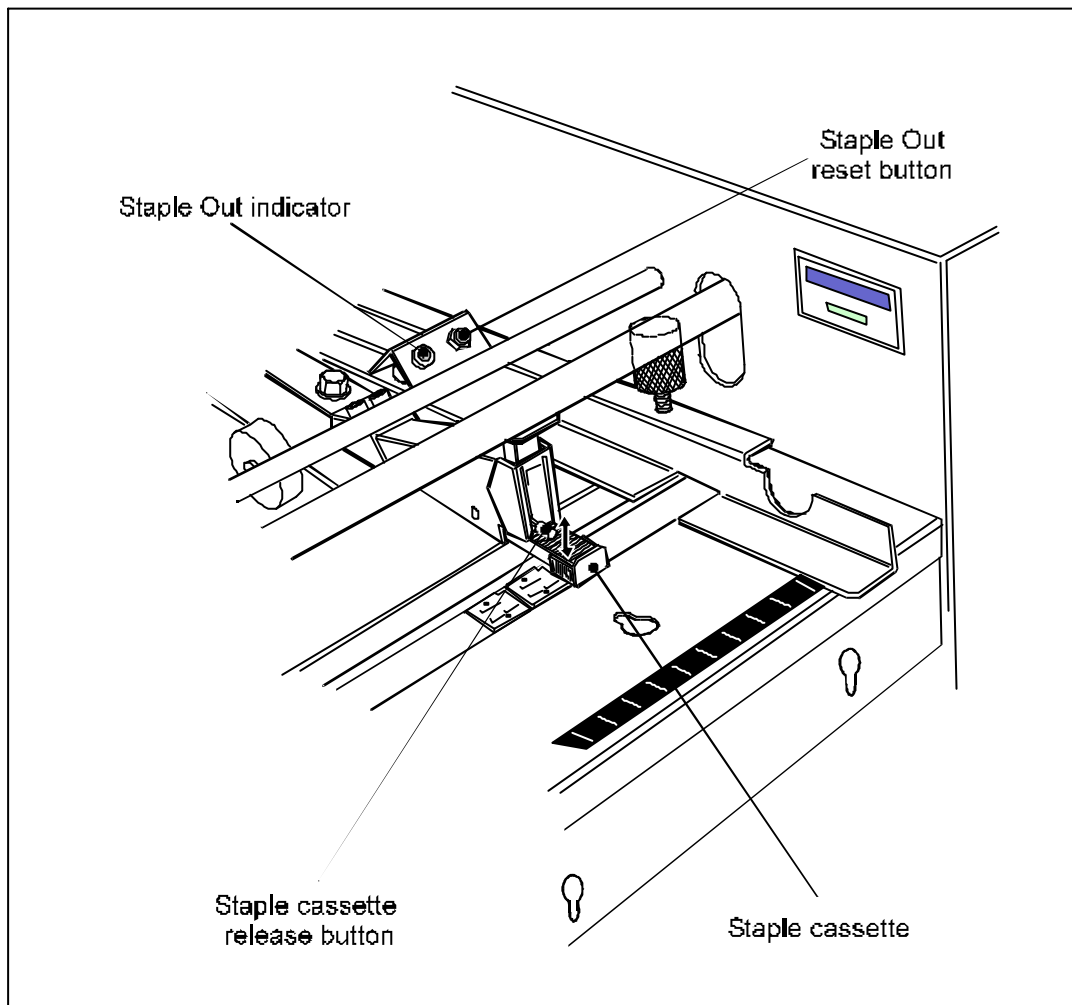


Figure 3 - Staple refill

4. When the staple out system is in use, the staple count reset button should be pressed each time the stapling heads are reloaded.

4.2 Staple Out System (option):

Each staple cassette should be charged with a complete stick of staples, approximately 210. If not, ensure that a similar number of staples is placed in each head. For the Staple Out System to operate a minimum of 35 staples must be loaded.

1. Ensure the Staple Out Detection Switch is set to ON.
2. The Bookletmaker is now ready for use.
3. During operation the Bookletmaker will continue to run until two or three staples are left, and then the Staple Out Indicator, figure 3, will illuminate and the Bookletmaker will stop.
4. Leaving the remaining three staples in the cassette, the operator must now refill both staple cassettes. Close both cassettes securely and press the reset button before continuing the job.

Note: If the Bookletmaker is switched off with less than 30 staples in the cassette, the count is lost, i.e. when switched back on, the machine will not detect that staples are low. To avoid this, do not switch the machine off for short periods of non-operation. The Bookletmaker motor will automatically shut down if left unattended for more than 3 minutes, however in this case the staple count is retained.

4.3 Staple Jam :

To clear jammed staples from heads, pull up on bottom of the stapling head near the front to eject any damaged staples. Repeat this step two or three times to make sure that staples are being ejected correctly and are not damaged.

WARNING - When clearing jammed staples, do not put fingers under front-most portion of stapling head, so avoiding injury to fingers from staples being ejected from the head.

Make sure that the anvils are clear of all loose and/or damaged staples.

4.4 Paper Width Settings:

1. Both side guides should be adjusted for a given size of paper. Loosen the thumbscrews and move the side guides until their outside edges are level with the marking on the scale corresponding to the width of the paper, and then re-tighten the thumbscrews so that the guides are held in place.

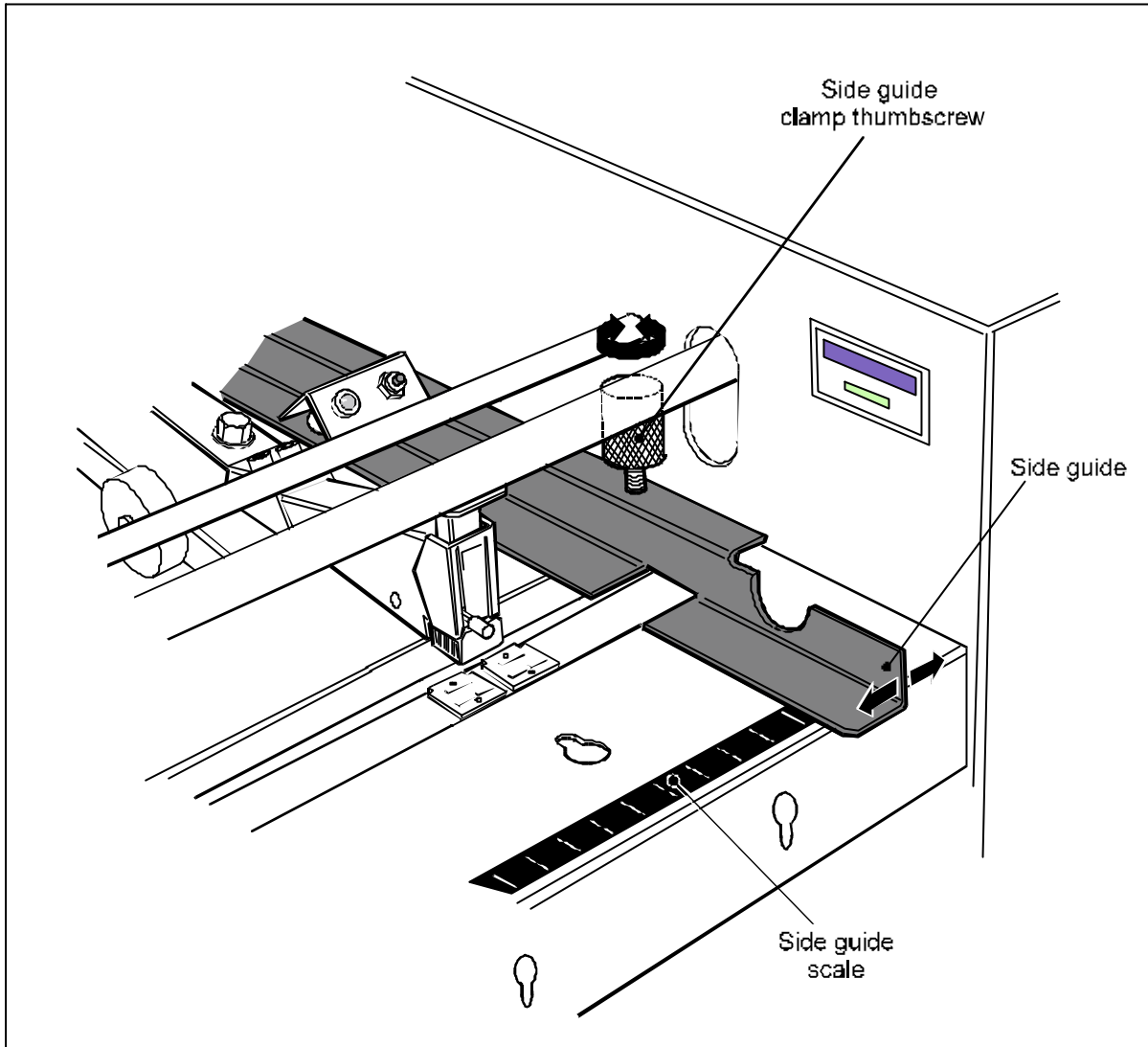


Figure 4 - Side guides.

2. Note that the marked settings are meant to be wider than the paper, to allow for side jog. Both guides move inwards on each cycle to the correct width to ensure that the sheets are aligned before stapling occurs.

4.5 Stapling / Folding Positions :

1. The Stapling and the Folding positions are adjusted as one. Loosen fold stop lock thumbscrew, figure 5.
2. Turn the fold stop adjustment wheel until the staple stop aligns with the appropriate calibration on the scale, for the size of paper being used.

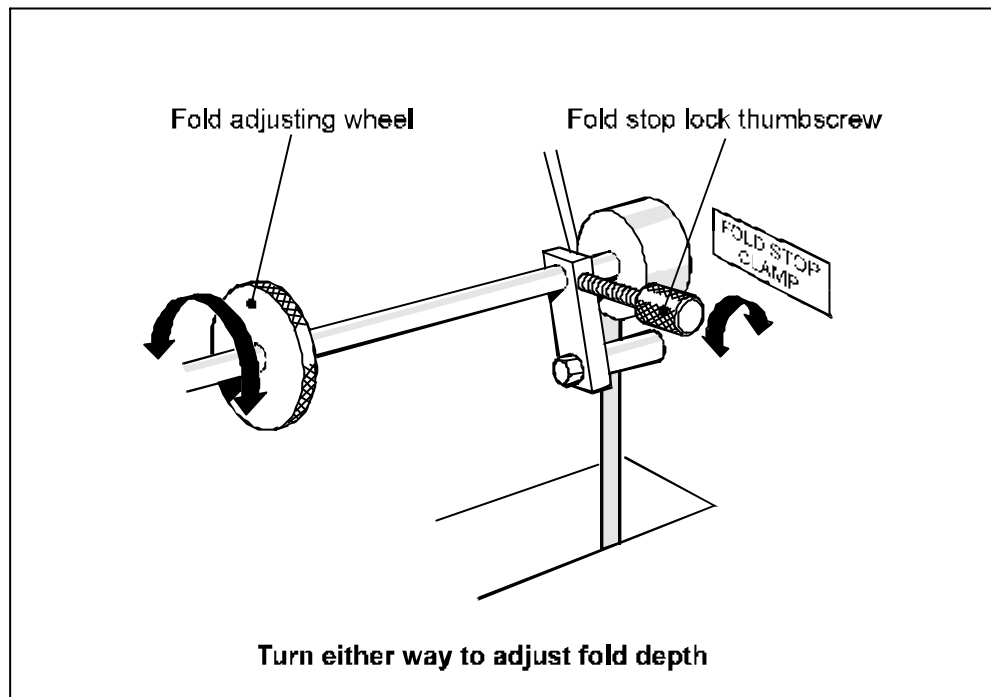


Figure 5 - Fold stop

3. Re-tighten fold stop lock thumbscrew when the stop has been correctly positioned.

4. If fold line is not perpendicular to booklet edges, this can be corrected by adjusting the fold stop tilt thumbscrew, figure 6, on the left-hand side of the fold stop adjusting shaft. Loosen the locking nut and turn the thumbscrew clockwise to raise the left-hand end of the fold stop, or anti-clockwise to lower. Tighten locking nut.

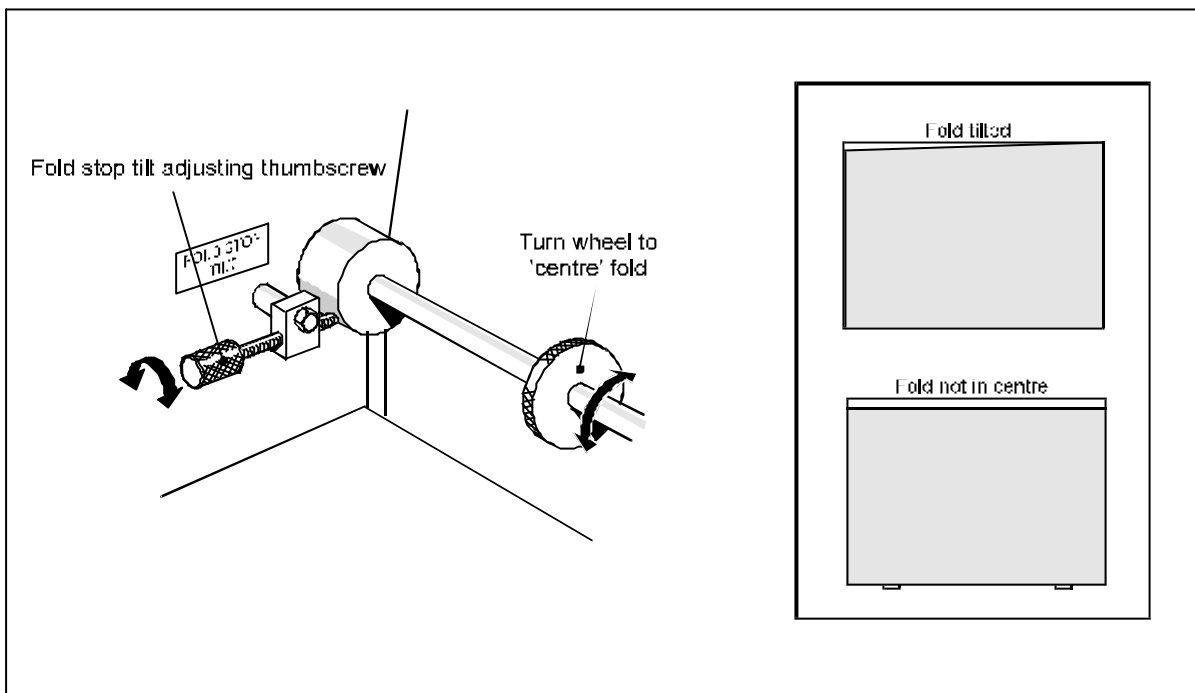


Figure 6 - Fold stop tilt.

4.6 Changing stapling head positions.

1. To move the stapling heads to the alternative positions, loosen the stapling head locking levers, figure 7, several turns and then slide the entire stapling unit to the new position.
2. When moving the stapling head, hold the bracket and retaining plate end, as side pressure on the front end of the stapling head will cause misalignment between stapling head and anvil.
3. Re-tighten the locking levers into the tapered hole, which will align the stapling head in the new position.

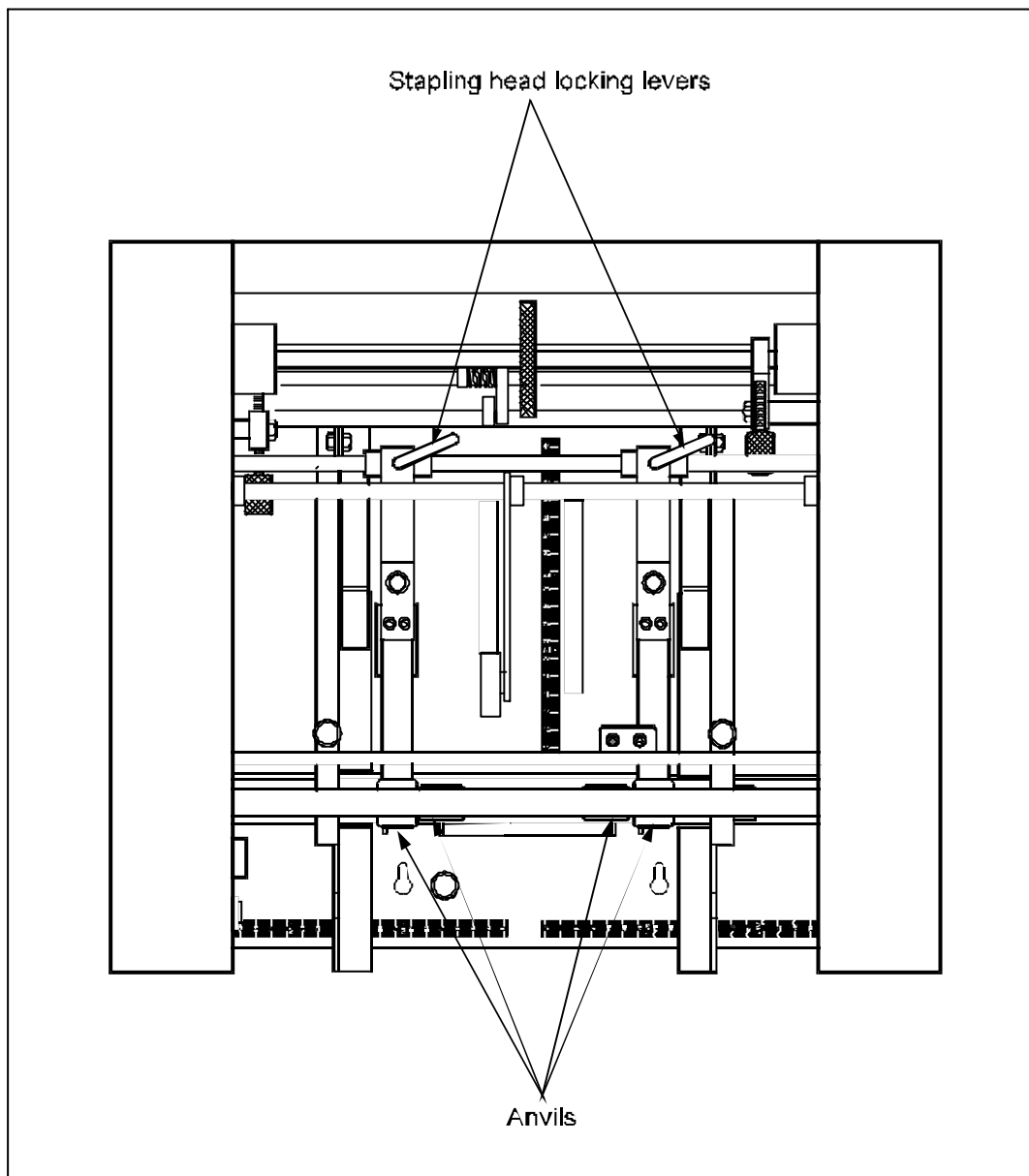


Figure 7 - Stapling head adjustment and anvil positions (centre head not shown).

4. Four positions are provided for the various sized books between 4¼" x 5½" and 8½" x 11", with an additional fixed centre position.

5. BOOKLET MAKING.

1. The machine will not operate with the top safety cover in the raised position. After closing the top safety cover it is necessary to press the circuit reset button (if fitted), located in the left hand inside side wall. This is an added safety feature and the machine will not cycle until the button is pressed.

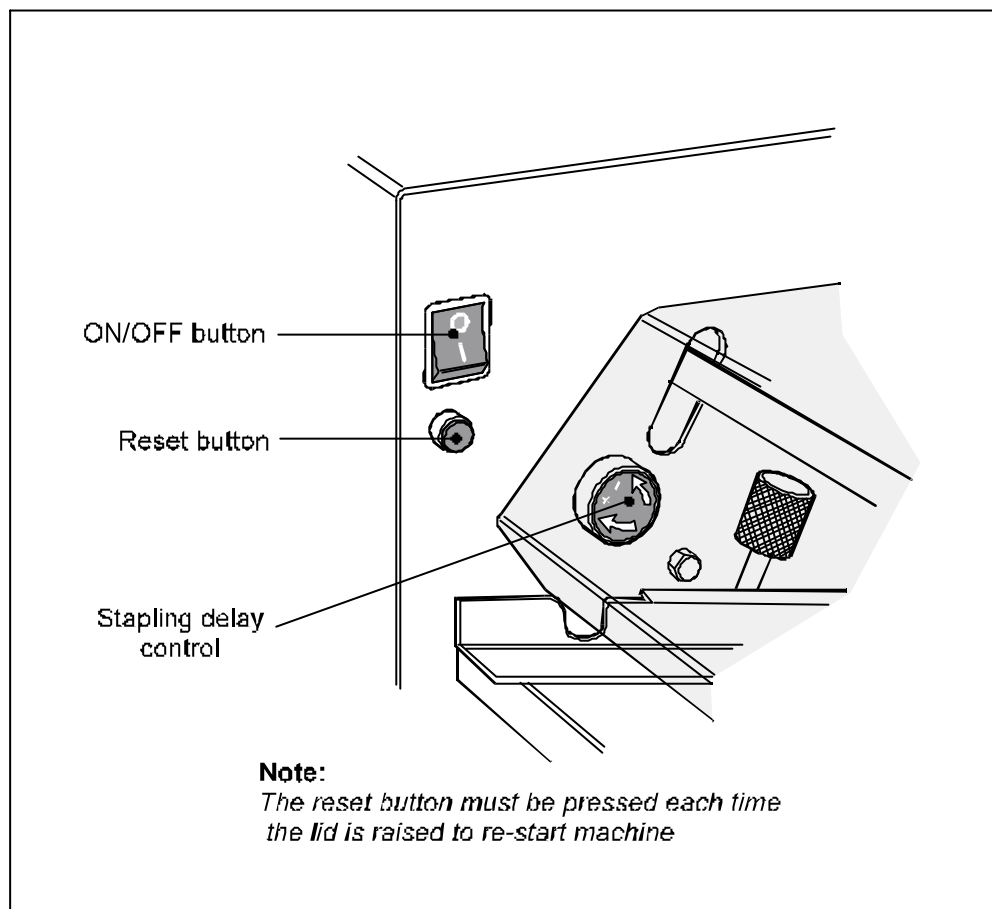


Figure 8 - Operating controls

2. When the machine is switched on the motor will not start until the first set of paper is placed in the machine. If it is left running and not used for a period of more than three minutes the motor will automatically switch off. The motor will re-start when paper is placed in the machine.
3. The stapling / folding operation is started when sensors detect the paper in the machine. The time between the paper entering the machine and the stapling action can be varied. This is achieved by turning the Stapling Delay Control shown in figure 8 clockwise for more time and anti-clockwise for less. When first using the machine, give the Stapling Delay Control a quarter turn clockwise. This will give time for the operator to settle the paper between the guides before the machine cycles.

4. When paper is placed in the machine it breaks the light beam between the photocell emitter (part no. 2.83) and the photocell receiver (part no. 2.71). On the interruption of the beam the time set by the timer expires and the machine will operate for one cycle.
5. If the stapled set fails to drop into the folding position the guides may be set too closely and must be set slightly wider. The first set placed in the machine will not fold and exit to the conveyor until the second set is being stapled. To release the last set from the machine, hold a scrap of paper under the stapling heads for one cycle and then remove it.
6. The conveyor wheels shown in figure 11 should be adjusted so that the wheels are just over a book's distance from the fold rollers. Too close and they will interfere with subsequent booklets coming out of the fold rollers. If the wheels are too far away the booklets will have the tendency to insert themselves inside previously ejected booklets.
7. Staple Position Fine Adjustment. If, after correctly setting the fold stop adjustment wheel, it is found that the staples are not exactly on the fold line, this can be corrected by turning the staple position fine adjustment screw, figure 9.

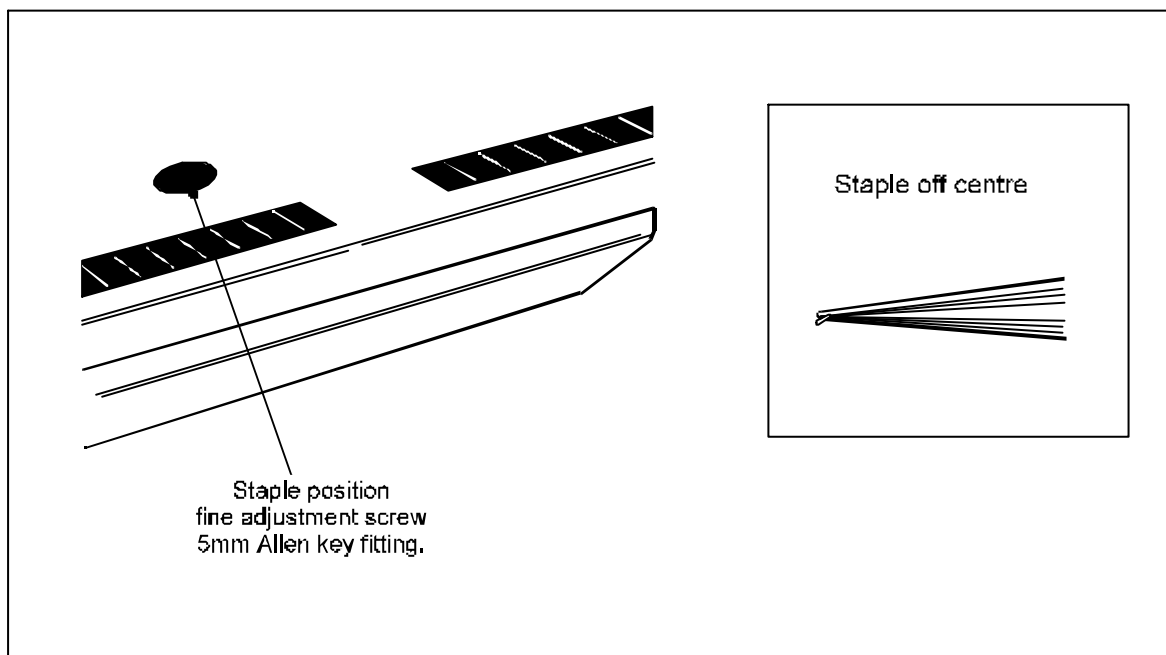


Figure 9 - Staple position fine adjustment

Looking at the finished booklets laying on the stacker table after ejection from the fold rollers, if the staples are visible above the fold, turn adjusting screw anti-clockwise. If the staples are below the fold, turn adjusting screw clockwise.

6. CORNER AND EDGE STAPLING

The two paper stops are to aid edge stapling along the long side of 8½" x 11 paper. Refer to figure 10.

1. Open the top perspex cover. Move the paper width guides to the position where they will side jog the set of paper without impeding its path through the machine. For 8½" x 11 paper, set the guides to the 11 X 17 markings, when edge stapling along the long side.
2. For edge stapling, select the desired pair of anvil positions. When corner stapling move the right hand stapling head to the furthest right position, and remove the staples from the left hand stapling head. One could also remove the left hand stapling head by loosening the two screws provided. Read section 8 on replacing heads.
3. Locate the paper stops on the emitter carrier tube (part no. 2.84) between the outer anvils. The foot of the stop locates between the anvil bar (2.67) and the second paper table (2.64).
4. The sheets must be inserted into the bookletmaker until they reach the new paper stop. Then, without releasing the paper, allow the machine to cycle, before withdrawing the stapled set.

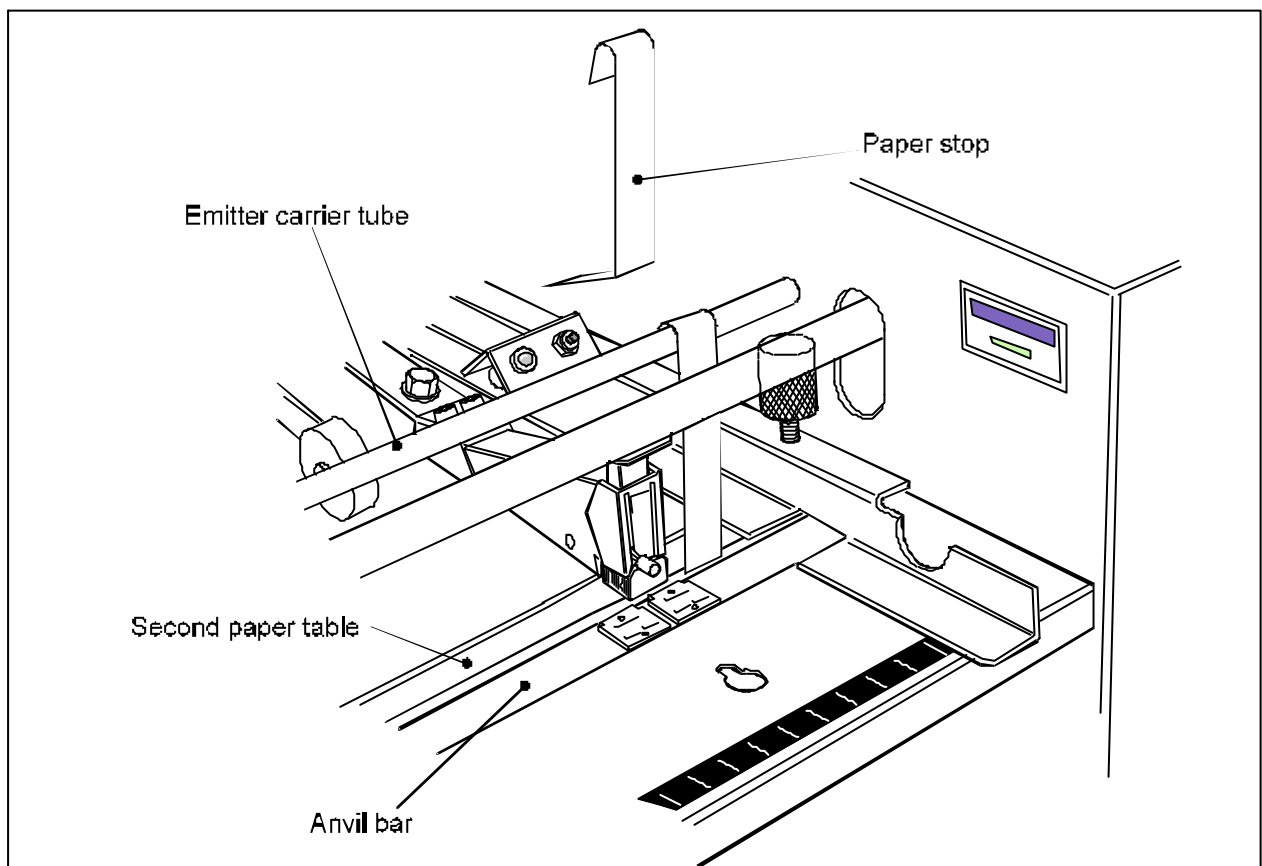


Figure 10 - Corner/Edge stops.

7. COUNTER

The counter can be reset to '0000' by pressing the rectangular black button below the number window.

8. REPLACING STAPLING HEADS

Should it become necessary to replace either or both of the stapling heads release the heads from the stapling head retaining plate (part no. 2.73) by loosening the Allen screws. When fitting a replacement head ensure that the locating dimples on the head are located correctly in the retaining bracket.

9. ALIGNING OF STAPLING HEADS

Replacement heads should fit into the Bookletmaker without the need for side to side or backwards and forwards adjustment. However, should this be necessary, such adjustment is obtained as follows:

1. Loosen the hexagon head nut fixing the retaining plate to the stapling head universal bar (part no. 2.74).
 2. Unlock and pull out the staple cassette.
 3. Insert the stapling head alignment tool from the bottom into the staple output slot with the numbers facing the front of the machine.
 4. Close and lock the cassette with tool in place.
 5. Push head and tool down and align head until the bottom of the tool fits into and is centred in the rear slot of the anvil.
 6. Re-tighten hex head nut, re-check alignment and if correct open cassette and remove alignment tool.
 7. On the face of the cassette there is a vertical guide line. There is also a line on the anvil. Always ensure that the two are in line.
-

10. PROBLEM SOLVING.

PROBLEM	POSSIBLE CAUSES	REMEDY
Motor will not start	Blown Fuse	Switch off and unplug machine. Check and replace fuses as necessary
Machine will not start when paper is inserted	Powerful light source from above	Shield safety cover from light or move machine
Machine will not cycle	Machine in jam mode	Remove paper from machine in stapling section to allow photo-cell to reset
Paper jams in stapling section	Wrong length of staple leg for paper thickness	Use 66/6 staples for up to 15 sheets Use 66/8 staples for over 15 sheets
Stapling head jammed	Incorrect staples	Switch off machine, lift safety cover, remove staples from cassette, clear jammed staples with tool provided.
Repeated jamming of stapling head.	Miss aligned head with anvil	Check that guide lines on stapling head and anvil match.
Staple legs breaking.	Miss aligned head with anvil	Check that guide lines on stapling head and anvil match.
One staple not on fold line	Fold stop out of line	Adjust tilt screw
Book does not travel through machine after stapling	Side guides too tight	Open right hand side guide
Pinching around staples	Residue being left on rollers	Clean rollers