

FORMAX[®]

Atlas C102
Auto-Feed High-Speed Creaser

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INTRODUCTION

The Formax Atlas C102 is a fully automatic suction feeding creasing system designed for use with both conventional litho and digital printers.

The feed on the Atlas C102 can also be manually operated for use with heavy stock, very small or very large sheets, embossed or even irregular sheets.

The crease is programmed from the leading edge of the sheet using the controls on the front panel.

The blade and anvil are mechanically controlled over their entire length and can be adjusted to accommodate various weights of media.

IMPORTANT

The operating environment should be controlled to a temperature between 16° C and 27° C Maximum.

Specification

Feeding System	Bottom suction feed
Max. Sheet Size	900mm x 330mm (27.5" x 12.6")
Min. Sheet Size (in automatic mode).....	210mm x 140mm (8.5" x 5.5")
Max. Paper Thickness	0.4mm (varies according to hardness, type of fold, and substrate)
Max. No. Creases per Sheet	16
Min. Distance Between Creases	0.1mm
Max. No. Stored Programmes	Unlimited
Min. Crease Distance from Leading Edge	2.5mm
Min. Crease Distance from Tail Edge	35mm
In Hand Feed Mode up to 2499.9mm to Last Crease can be Programmed.	
Speed per Hour (A4 in half).....	8500
Speed per Hour (A5 in half).....	11000

Dimensions	L: 1450mm H: 1224mm W: 522mm
	L: (57") H: (48.2") W: (20.5")
Weight	121Kgs (+50Kgs packing)
Power Requirement	1 phase 230v 50Hz
	1 phase 220v 60Hz

Sound Power Level 78.0 decibels

*As part of our continued product improvement plan, specifications and information published in this manual are subject to change without notice.

All specifications are dependant on application, type of stock, temperature, RH and print engine used.

Specifications quoted were measured on uncoated and unprinted stock. E & OE.

Safety Do's & Don'ts

Safety Do's & Don'ts

REGLES DE SECURITE : « A FAIRE » ET « A NE PAS FAIRE »

Do - read this operator manual fully before operating the machine.

Lire ce mode d'emploi avant d'utiliser la machine.

Do - operate with the designated AC current only. Use an exclusive outlet, as overloading may cause fire or an electric shock.

Respecter l'alimentation électrique indiquée. Brancher sur une prise séparée car une surcharge peut entraîner un incendie ou un choc électrique.

Do - install the power cord out of the way to avoid a tripping hazard.

Installer le cordon d'alimentation de manière à ne pas pouvoir trébucher par dessus.

Do - make sure that the mains inlet connector is always easily accessible.

Ménager un accès libre à la prise de courant.

Do - Fit the yellow outrigger feet, (supplied in the Dispatch Kit), to the front and back of the machine as shown on Page 6; to comply with safety regulations.

Fixer les pieds stabilisateurs jaune, (fourni dans le kit d'expédition), à l'avant et l'arrière de la machine comme indiqué sur la page 6; pour se conformer aux règlements de sécurité.

Do not - install the machine in an unstable place such that it tilts or shakes.

Ne pas installer la machine sur une surface non plane, afin d'éviter qu'elle ne penche ou ne vibre.

Do not - unplug the plug or unplug the power cord from the outlet with a wet hand, this can cause an electric shock.

Ne pas installer la machine sur une surface non plane, afin d'éviter qu'elle ne penche ou ne vibre.

Do not - unscrew and remove any covers from the machine, as it can cause an electric shock or injury.

Ne démonter et enlever aucun carter de la machine, par crainte de décharge électrique ou de blessure.

Do not - place receptacles containing liquids on any surface.

Ne pas placer de récipient contenant un liquide sur la machine.

Do not - adjust any part of the machine whilst rollers are running

N'effectuer aucun réglage pendant que les rouleaux fonctionnent.

Do not - operate the machine with loose or trailing clothing or loose hair.

Ne pas porter de vêtements flottants et rassembler les cheveux longs lors de l'utilisation de la machine.

Do not - under any circumstances adjust the paper gate when the machine is switched on.

En aucune circonstance, régler le séparateur de papier lorsque la machine est branchée.

Warning Labels



Do - be aware of any finger traps and rotating parts when operating the machine.

Attention au risque de se coincer les doigts, et aux pièces en mouvement lors du fonctionnement de la machine.

Do - read this operator manual fully before operating the machine.

Lire ce mode d'emploi avant d'utiliser la machine.

Do not - operate the machine with loose or trailing clothing.

Ne pas porter de vêtements flottants lors de l'utilisation de la machine

Do not - operate the machine with loose hair.

Rassembler les cheveux longs lors de l'utilisation de la machine.



Do - be aware of any finger traps and rotating parts when operating the machine.

Attention au risque de se coincer les doigts, et aux pièces en mouvement lors du fonctionnement de la machine.

Do - be aware of sharp points and blades.

Attention aux éléments tranchants et aux couteaux.

Do - be aware of rotating rollers.

Attention aux rouleaux en fonctionnement

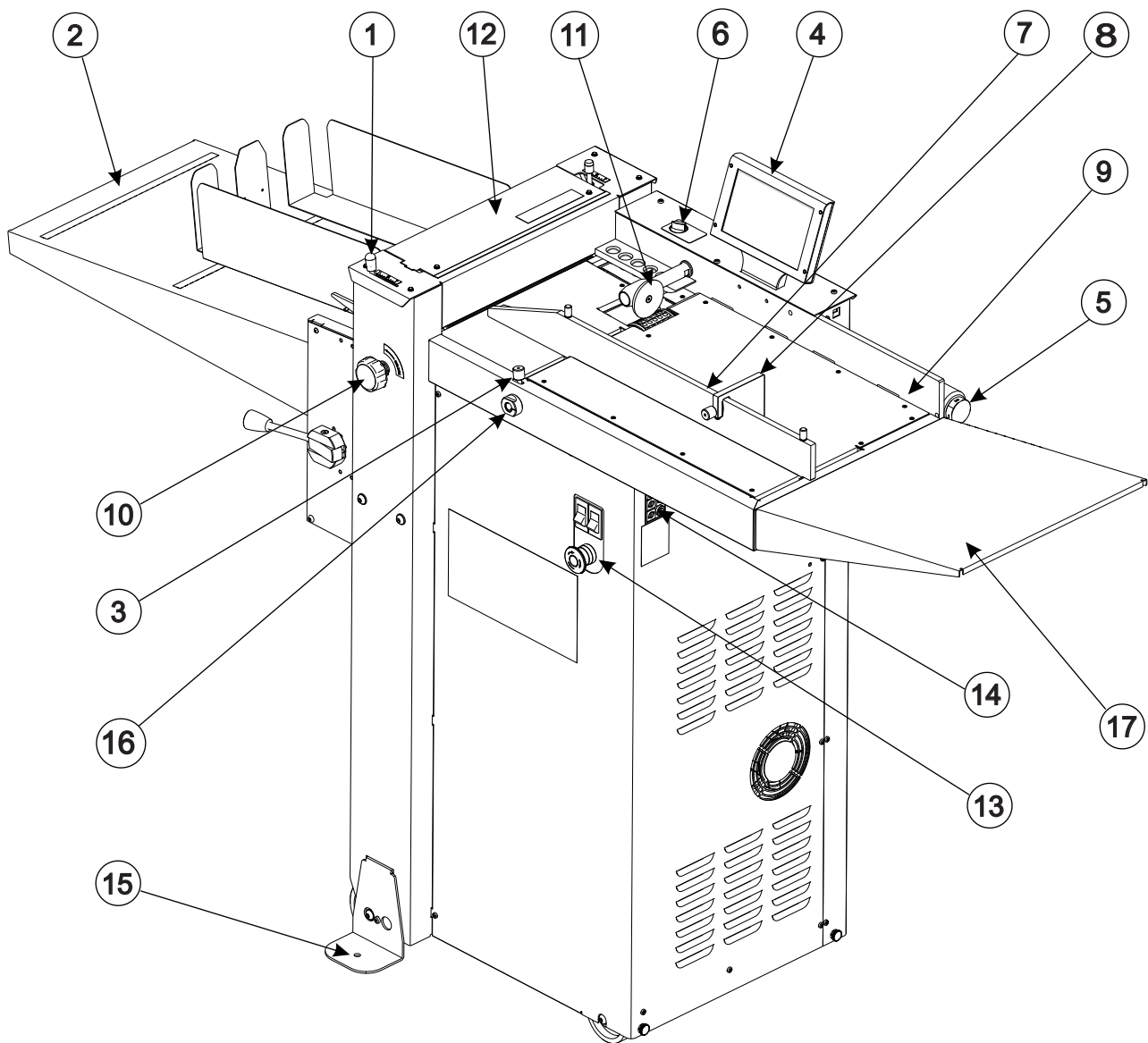
Do - be aware of low current anti-static shock.

Attention aux faibles chocs d'électricité statique

DOCUMENT CREASING MACHINE

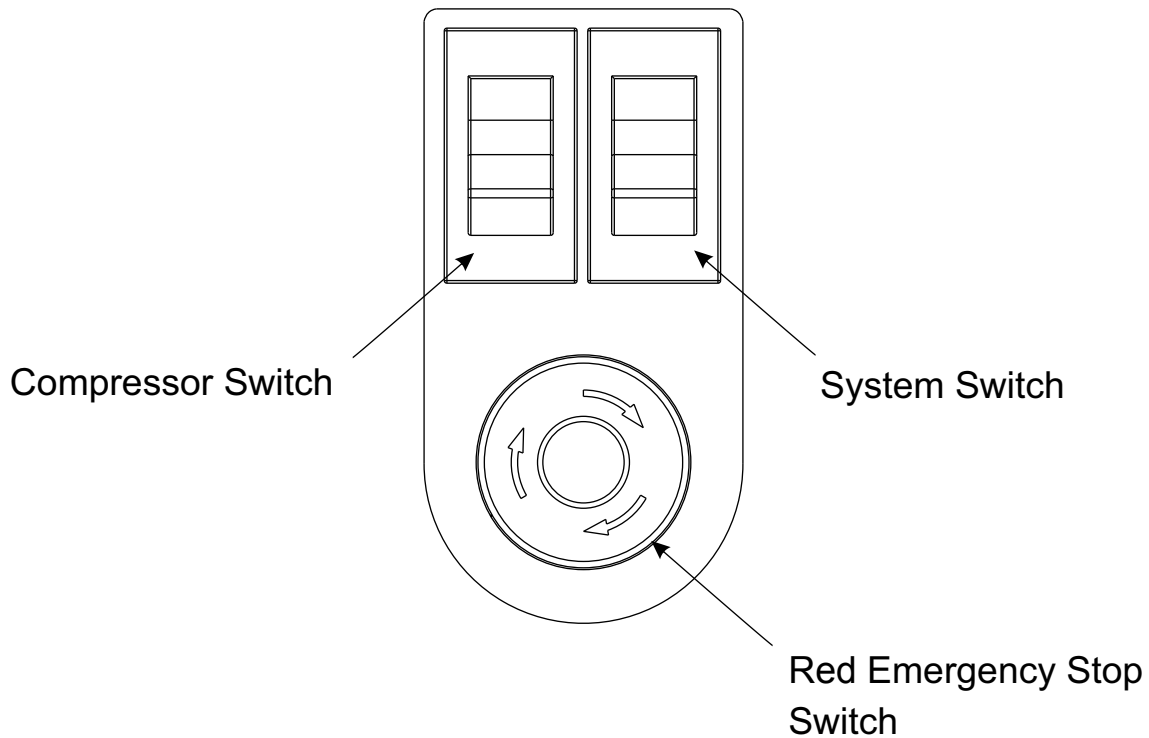
Key to photograph below

- | | | | | | |
|---|---------------------------|----|---------------------|----|-------------------------|
| 1 | Roller tilt handle | 7 | Adjustable side lay | 13 | Switch Panel |
| 2 | Height Adj. Stacker Assy. | 8 | Back stop | 14 | Fuses |
| 3 | Suction slot knob | 9 | Fixed side lay | 15 | Outrigger Foot |
| 4 | Touchscreen | 10 | Roller tilt knob | 16 | Vacuum bleed knob |
| 5 | Air distribution knob | 11 | Paper Gate | 17 | Loading Table Extension |
| 6 | Air separation knob | 12 | Exit Guard | | |



THE SWITCH PANEL

The Switch Panel houses the Compressor switch, System switch, and an industry standard Emergency Stop switch which will stop all power going to the machine when activated.



Features on the Switch Panel

System switch

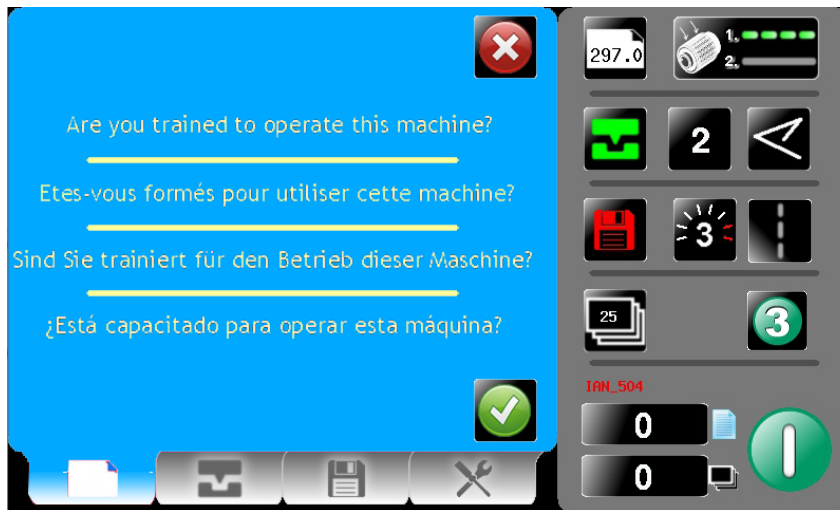
When activated the system switch will operate the motors in order to begin the creasing sequence.

Compressor switch

Allows the operator to switch off the compressor unit in order to utilise the machine to manually feed sheets.

Setting the machine to operate in automatic sheet feed mode

1. Set the gap between the paper gate and the vacuum roller to approximately twice the thickness of the stock to be creased.
2. Place the stock to be creased onto the loading table against the fixed side lay.
3. Release the clamps on the adjustable side lay and slide up to the paper stack allowing a gap of approximately 0.5mm (1/64 inch) between the paper and the side lay.
4. Position the backstop and slide it up to the paper stack, also allowing a gap (as stated in the above step).
5. Turn the Emergency Stop button clockwise to switch the power on. After the system start up procedure the touch screen will be displayed as shown below.



IMPORTANT.

If you have not been trained to operate this machine, we strongly advise that you select the red X icon.

We recommend that you either seek training or ask a trained operator to run the machine for you.

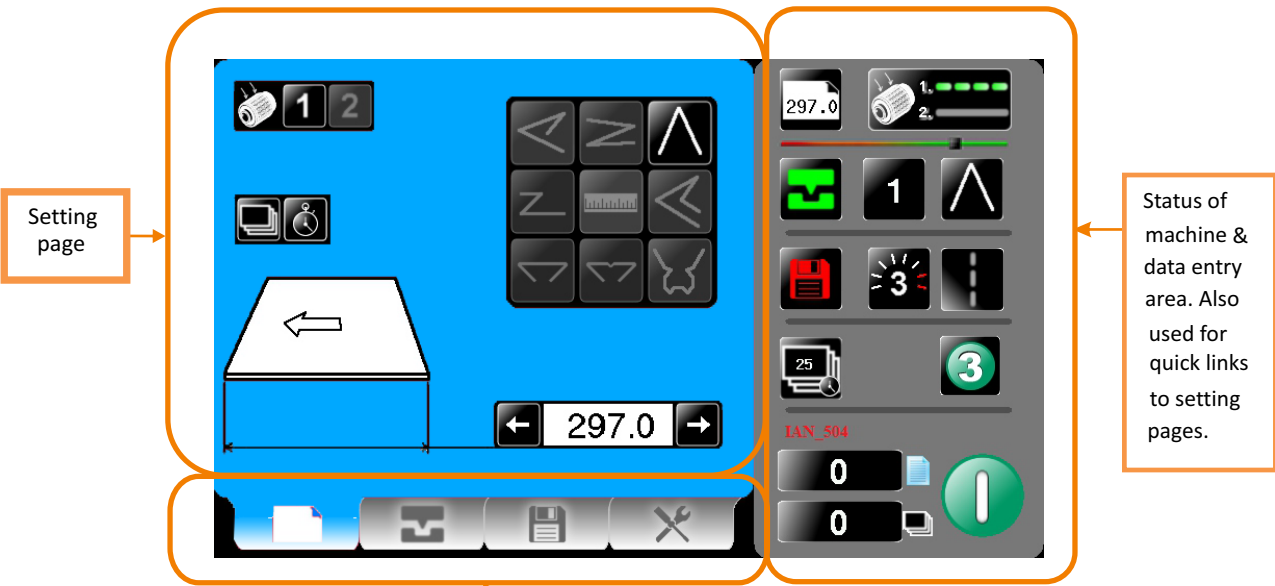
Select the green check mark icon only if you have been trained to operate this machine.

If you have not been trained to operate this machine and you select the green check mark icon, Formax accepts no responsibility for personal injury, damage to the machine or damage to materials being processed by the machine.

WARNING:-

Wait at least 10 seconds, after making any selection on the Touchscreen panel, before switching the machine OFF. Failure to do so could result in the data storage being corrupted, and the machine not operating.

The touch screen is laid out into 3 main areas as shown below:



Setting page

Status of machine & data entry area. Also used for quick links to setting pages.

Tabs to enable switching between setting pages - choose either Paper Settings, Crease Setting, Store or Tools

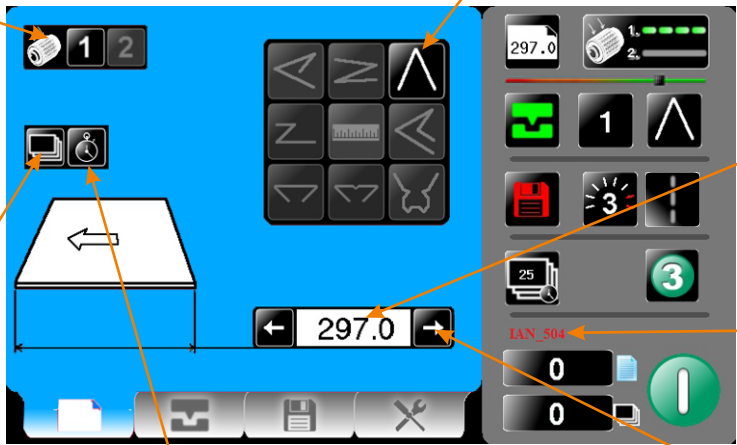
Settings Pages.

Paper Settings Page.

Vacuum Suck - There are two selections available - 1 short suck & 2 continuous for stream feeding. Highlighted number is type currently selected. The status area also shows currently selected suck.

Fold Selection - For quick setting of crease positions on standard size sheets. Highlighted fold is type currently selected, other folds may be selected. Currently selected fold is shown in the status area.

Batch Button - Image is identical to that shown in the status area. On selection the status area is replaced with a calculator for inputting new values. Batches of any numerical value.



Page Length - On selection the status area is replaced with a calculator for inputting new values. Min Length = 190mm



Current Job Name



Arrows may be selected to increase or decrease the page size in 0.1mm increments

Toggle between, Delay between batches and stop after batch

Quick Start Guide

Crease settings Pages.

To get to the crease setting page click the lower tab  or  from the status area.

If you have selected a predefined standard crease type from the paper settings page the crease positions will be set for you. These positions can be fine tuned by ± 0.1 mm increments by pressing side arrow buttons   for each crease.

Number of creases – if more than 6 creases are added a scroll bar will appear to enable viewing of all creases

Crease position - On selection the status area is replaced with a calculator for inputting new values.

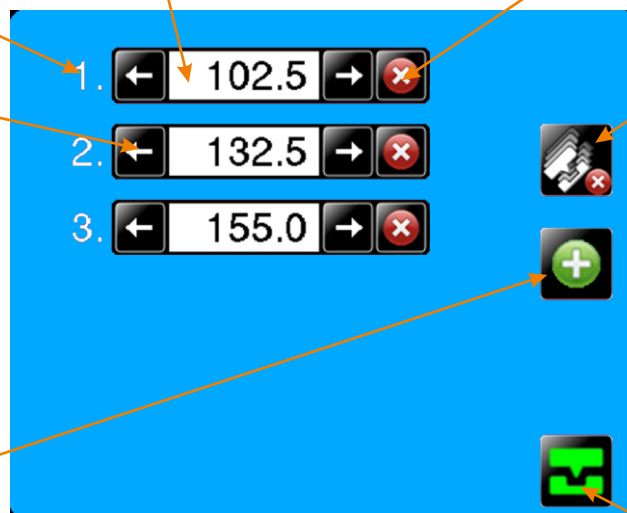
Cross box for deletion of crease. On deletion of crease following creases will move up by one place. You will be asked to confirm deletion of the crease.

Arrows may be selected to increase or decrease the crease position in 0.1mm increments

Plus box for inserting additional creases. On selection following creases will move down by one place a maximum number of 6 creases can be seen at any one time further creases can be accessed by use of the scroll bar.

Press to remove all creases – you will be asked to confirm deletion.

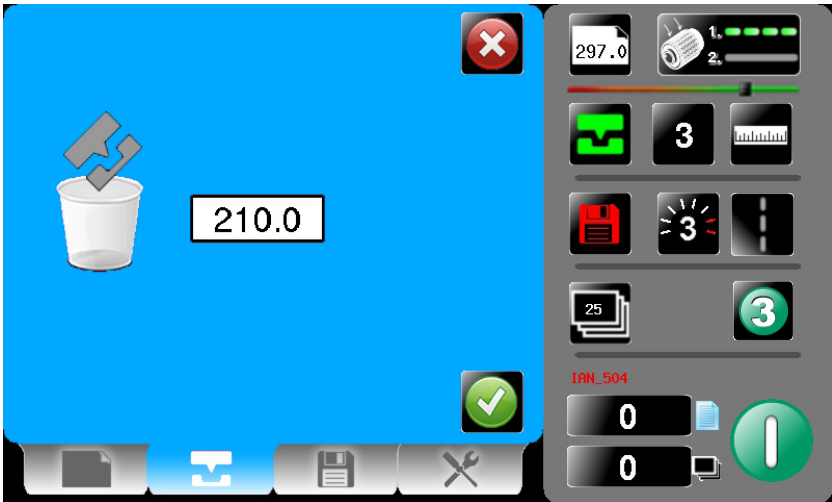
Crease on/off selector green is on & red is off. This is also indicated in the status area.



Additional creases added – scroll bar appears for more than six creases.

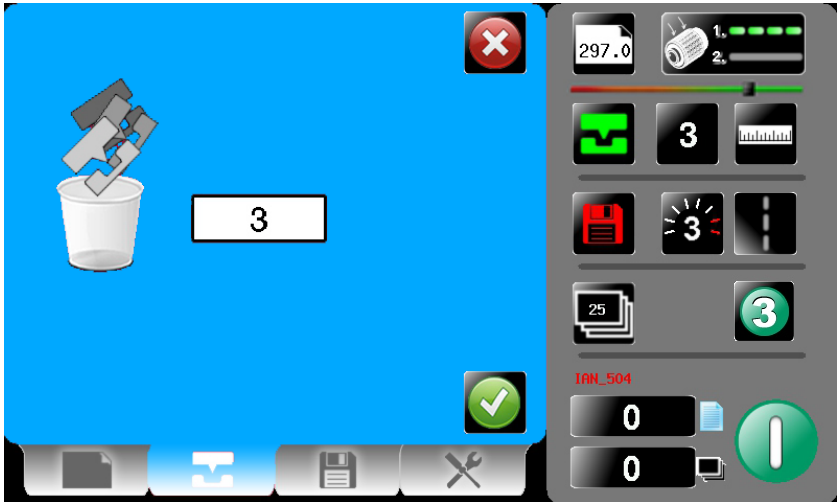


Individual deletion of crease confirmation screen

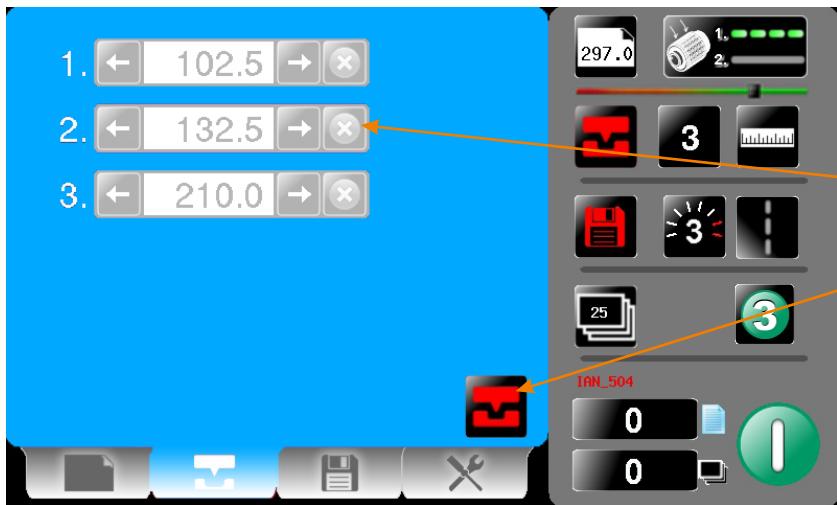


Select green tick icon to confirm deletion of crease.

Remove all creases confirmation screen.



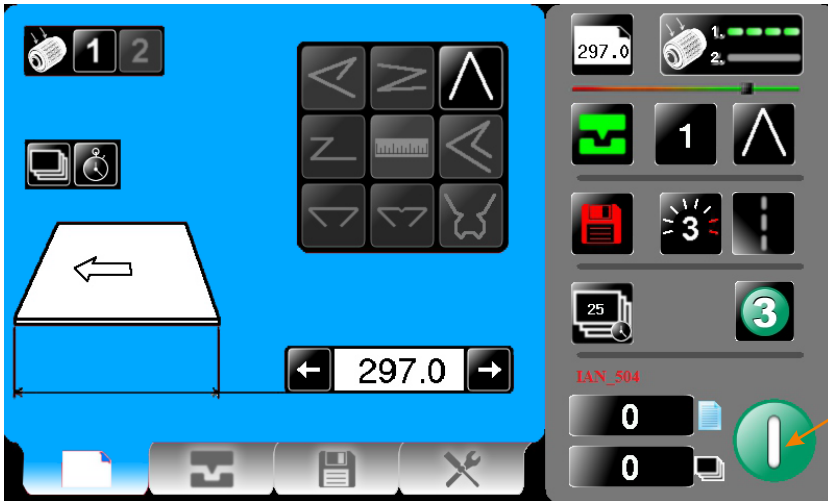
Turn Crease on/off.



Creasing turned off -
Greyed out areas are
unselectable. Status
area will show
creasing is off with
red icon

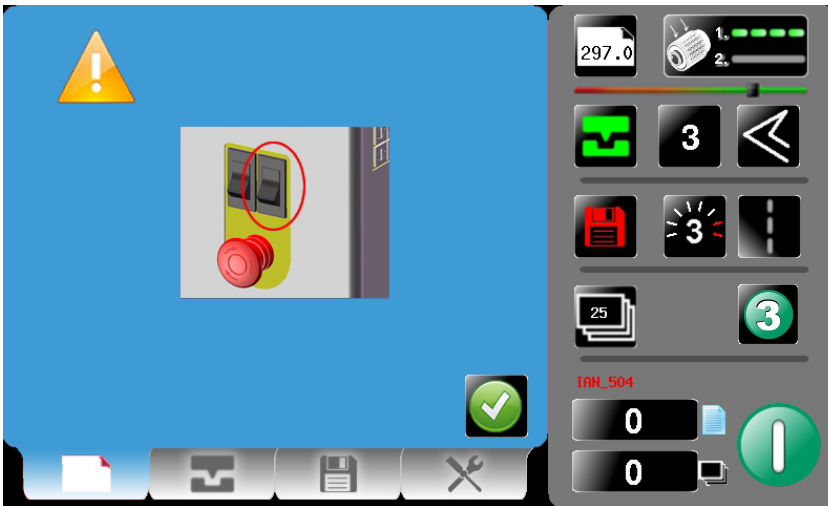
Quick Start Guide

Run Job



Click to start machine with settings currently shown - you will receive a notification if system switch is not on. Press again to stop Job

System Switch Not On



Push System Switch down to start the machine.

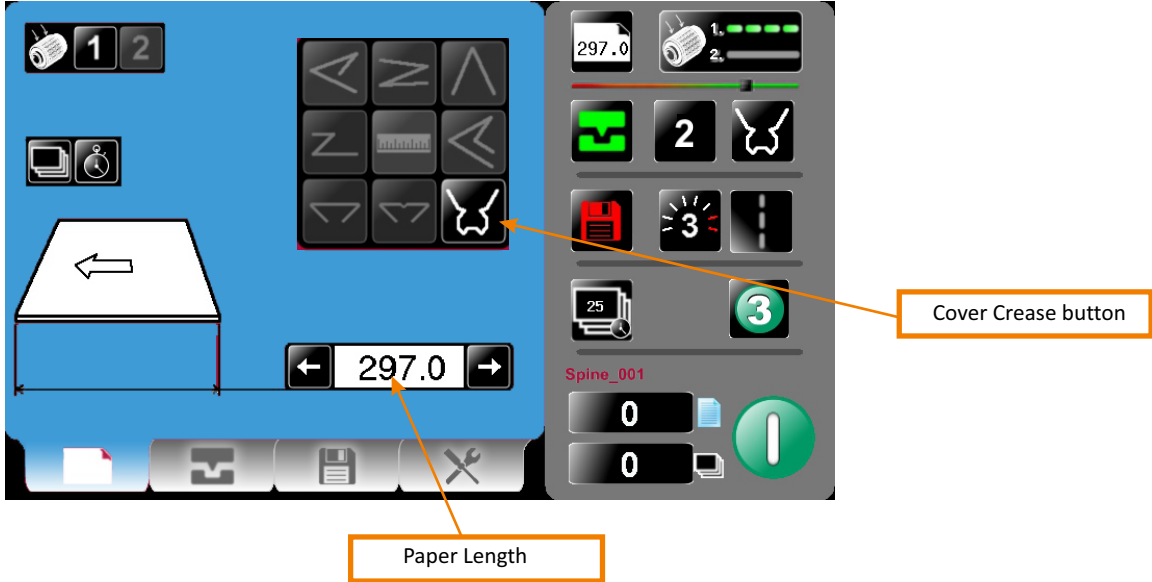
The machine running screen will appear.



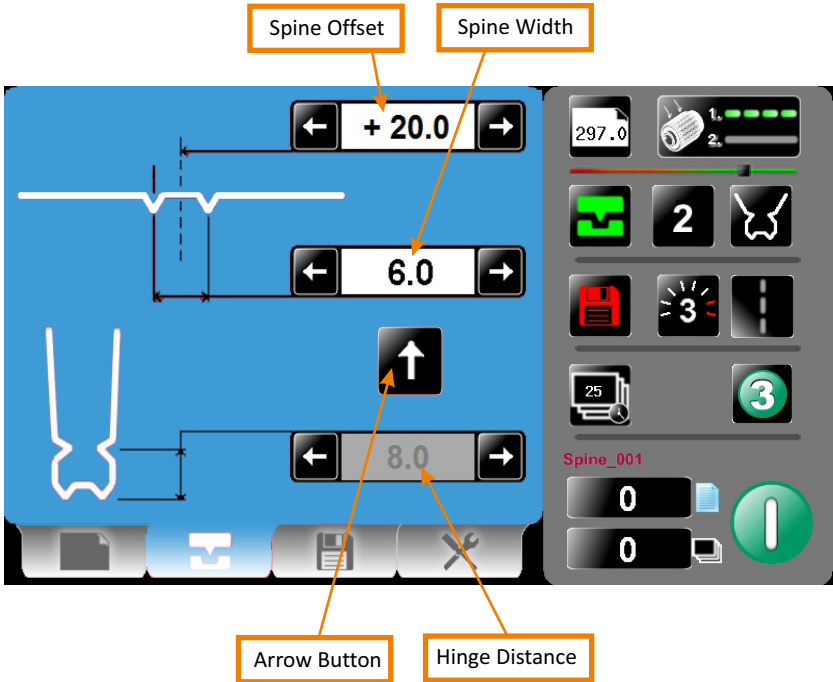
Click to stop machine

Cover Crease Mode.

- 1. Select the Paper Settings Tab.
- 2. Enter the Paper Length and then select the Cover Crease button.



- 3. Select the Crease Settings Tab.



- 4. Enter the Spine Width dimension. If necessary, adjust the Spine Offset from the centre of the sheet.
- 5. Select the arrow button to set the hinge Dimension.

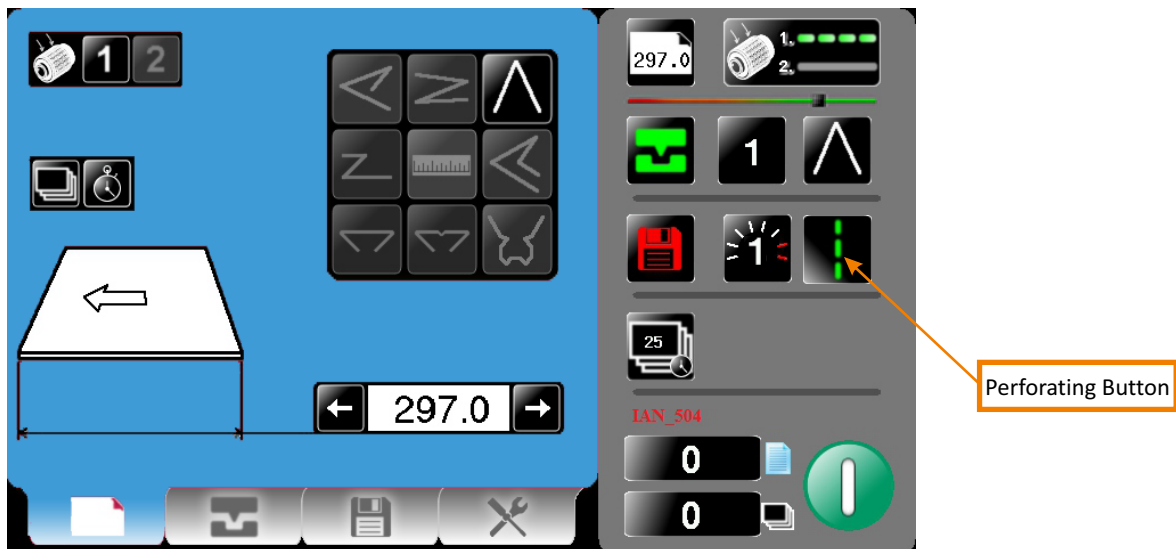
Quick Start Guide

Cross Perforating (Optional, part #AC-90)

1. A cross perforating kit is available as an optional part, the blades available are:
 - Full Width - Coarse
 - Full Width - Fine
 - 150mm - Coarse
 - 150mm - Fine
 - 100mm - Coarse
 - 100mm - Fine
 - 50mm - Coarse
 - 50mm - Fine

Refer to page 38 for fitting of the perforator blade set.

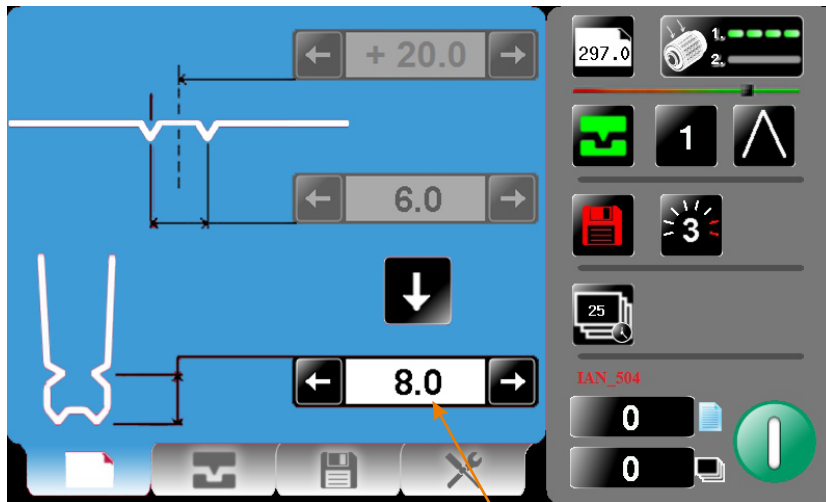
2. Select the Perforating Button to turn on the Perforating, this mode slows down the machine cycle to allow the ejectors on the perforation blade set release the paper from the blade.



3. The procedure for setting the perforation positions from the lead edge is identical to positioning creases on a sheet.

Quick Start Guide

6. Enter the Hinge Dimension.



Hinge Dimension

7. Select the arrow button to highlight the Spine Offset and the Spine Width dimensions.

8. Run the sheets of paper through the machine to make the Spine creases.

TO MAKE THE HINGE CREASES.

9. Remove the sheets of paper from the stacker tray. **TURN THE SHEETS OVER,** and put them back onto the loading table. **MAKE SURE THAT THE LEAD EDGE OF THE SHEETS POINTS IN THE SAME DIRECTION AS BEFORE.**

10. Select the arrow button to highlight the Hinge Dimension.

11. Run the sheets of paper through the machine to make the Hinge creases.

Operating The Machine

Setting the Adjustable Side Lay

Place the paper stack on to the loading table and slide up to the fixed side lay and paper gate. Release the clamps located at each end of the side lay and slide up towards the paper stack as demonstrated in Fig. 1. Allow a gap of approximately 0.5mm (1/64 inch) between the paper and the side lay.

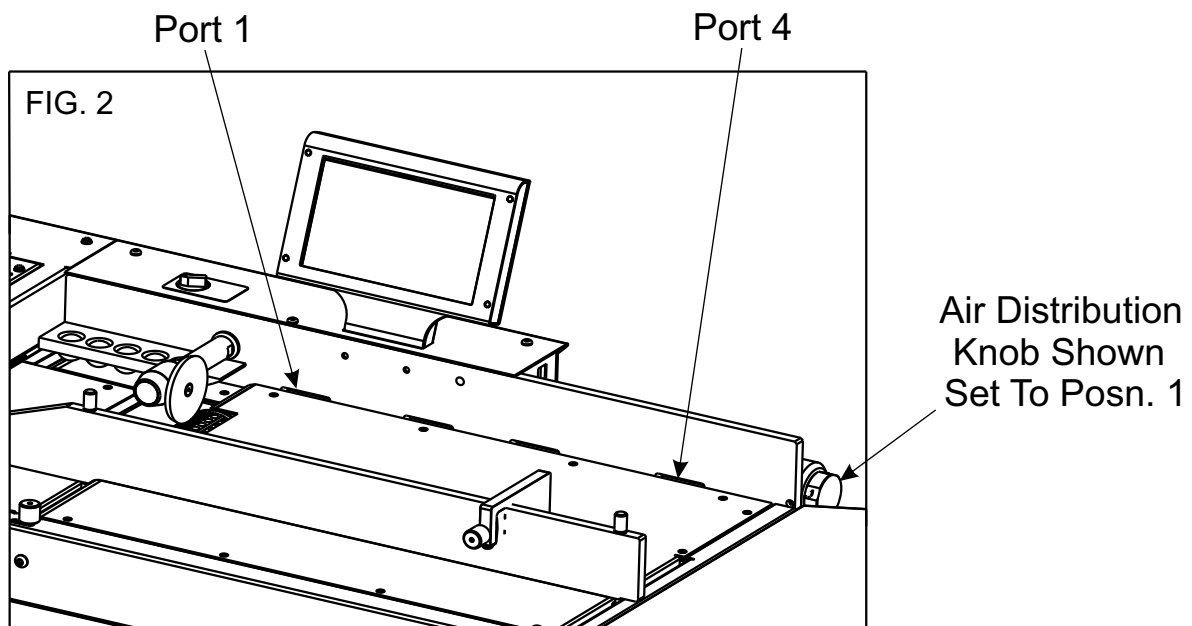
Setting the Back Stop

Position the backstop and slide up towards the paper stack allowing a gap (as specified in the above step).

Setting the Air Distribution

Depending on the length of the sheet to be creased, the air distribution knob (see Fig. 2) can be rotated to various positions in order to supply air to different ports. Position 2 is recommended for most sheet sizes. However, a better result may be obtained by using the settings below or by experimentation.

- Position 0** - For sheets longer than 17" (A3) in order to supply air to the center of the stack, ports 2 and 3 open.
- 1 - For A5 sheets or 8 inches long, ports 1 and 2 open.
 - 2 - For A4 sheets or 11 inches long, ports 1 and 3 open.
 - 3 - For sheets longer than 17" (A3) in order to supply air evenly along the stack, ports 1 and 4 open.



Setting the Air Separation Pressure

To control the amount of air supplied to the ports, the air separation knob can be rotated clockwise to decrease the pressure or anti-clockwise to increase the pressure.

Quick Start Guide

The Status Screen will on occasions be replaced with an Input Calculator Screen as shown below.

Pre - set Paper sizes for quick insertion – Standard sizes for country origin would be shown



Paper size
input calculator

Pre - set Batch sizes for quick insertion.



Batch size
input calculator



Crease position
input calculator

NOTE:

The green tick or the red cross must be selected on the Calculator Screen to make the left hand side of the touchscreen active again.

Tools Screen

Machine Speed Adjustment:-
Speed setting 3 will give the fastest throughput of stock through the machine.
Use speed setting 1 or 2 for troublesome stocks,

Inch paper in direction of arrow to clear jams

Clean Lead Edge Sensor

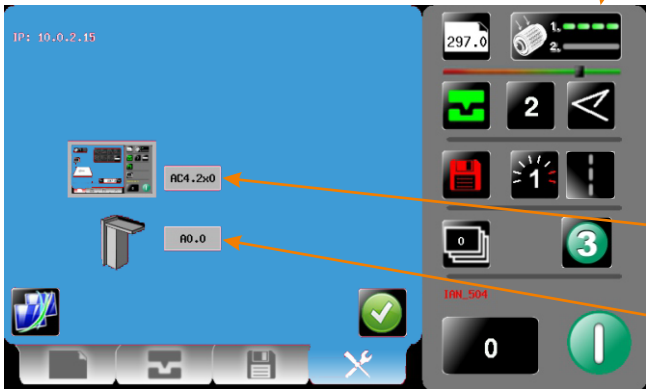
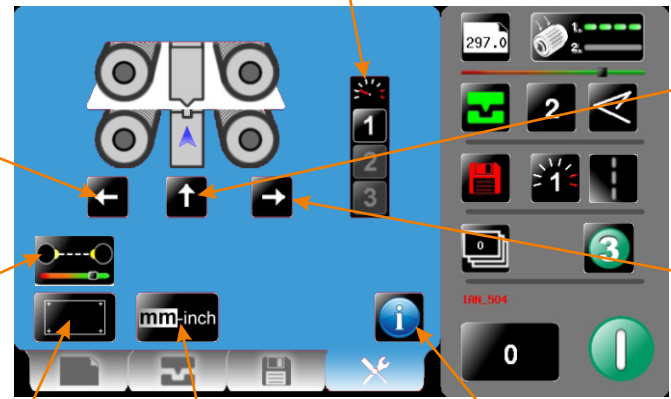
Touch Screen Calibration
See Page 19

Change Machine measurement settings, Imperial / Metric

Click on Up Arrow to put Anvil into Top Dead Centre position (TDC)

Inch paper in direction of arrow to clear jams

Clicking this icon will show Machine program revision & Touch Screen software revision.



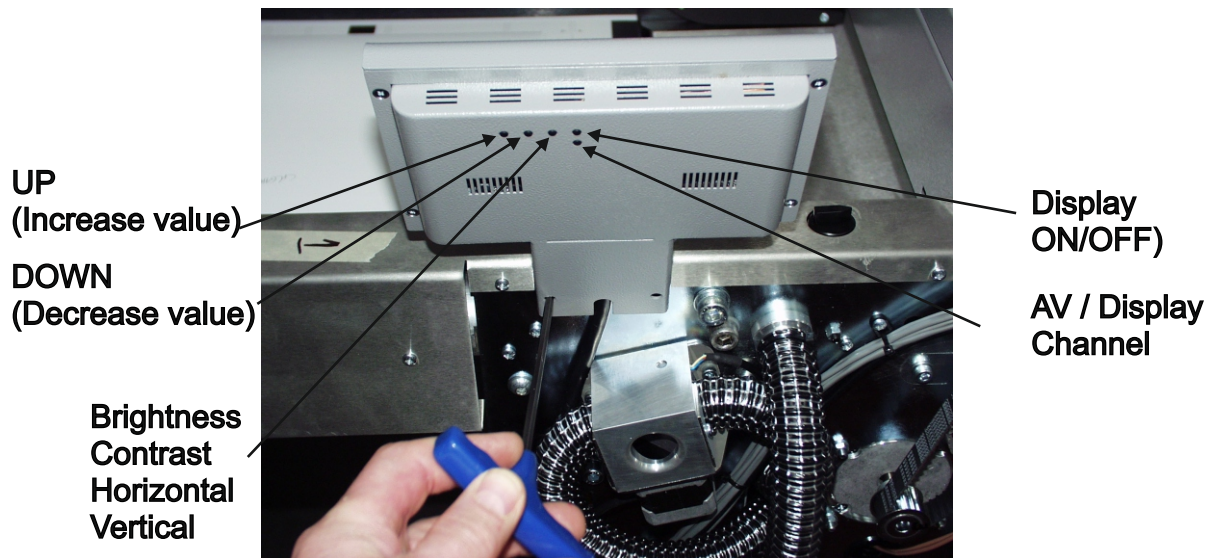
Touch screen software version

Main Processor Program version

Screen Calibration

Touch Screen Calibration.

1. Switch the mains power on and wait for the main screen to appear before commencing to check the horizontal and vertical position of the display. The position of the display within the surround is achieved by operating the button at the rear of the housing, press this a number of times to obtain the correct orientation required, move to the next button to move the position to centralize horizontal.



2. (i) Select the tools menu tab, and then Select the Touch Screen calibration icon.



- (ii) Using a plastic pointer, soft leaded pencil, pen cap etc. and with gentle pressure. Touch the centre of the cross in each corner of the Touch Screen, as prompted, by the hand graphics. This procedure will calibrate the Touch Screen.

Setting the Adjustable Side Lay

Place the paper stack on to the loading table and slide up to the fixed side lay and paper gate. Release the clamps located at each end of the side lay and slide up towards the paper stack as demonstrated in Fig. 1. Allow a gap of approximately 0.5mm (1/64 inch) between the paper and the side lay.

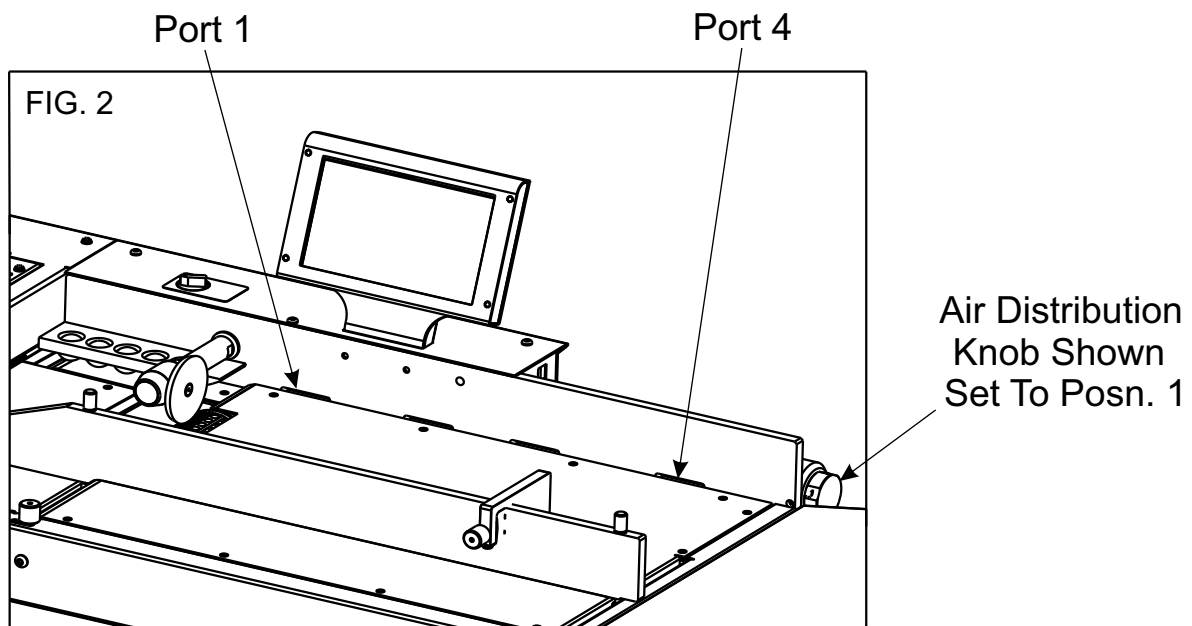
Setting the Back Stop

Position the backstop and slide up towards the paper stack allowing a gap (as specified in the above step).

Setting the Air Distribution

Depending on the length of the sheet to be creased, the air distribution knob (see Fig. 2) can be rotated to various positions in order to supply air to different ports. Position 2 is recommended for most sheet sizes. However, a better result may be obtained by using the settings below or by experimentation.

- Position 0** - For sheets longer than A3 (17") in order to supply air to the centre of the stack, ports 2 and 3 open.
- 1 - For A5 sheets or 8 inches long, ports 1 and 2 open.
 - 2 - For A4 sheets or 11 inches long, ports 1 and 3 open.
 - 3 - For sheets longer than A3 (17") in order to supply air evenly along the stack, ports 1 and 4 open.



Setting the Air Separation Pressure

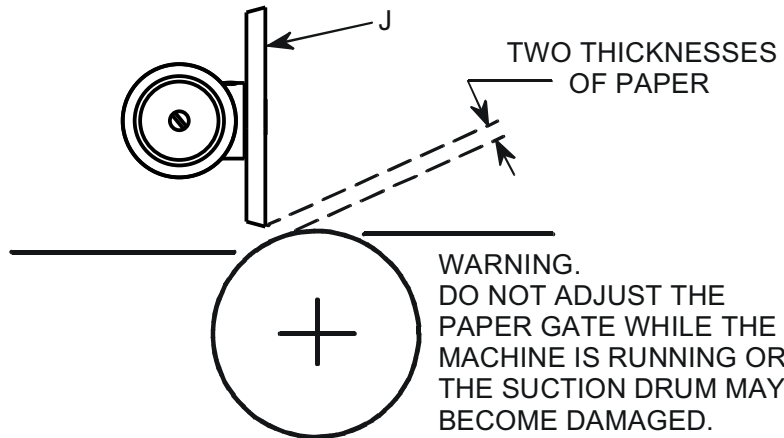
To control the amount of air supplied to the ports, the air separation knob can be rotated clockwise to decrease the pressure or anti-clockwise to increase the pressure.

Setting the Machine

Adjusting the Paper Gate

Set the height of the Paper Gate to approximately two thicknesses of paper, by turning the disc (J). An excessive gap is a most likely cause of double sheet feeding.

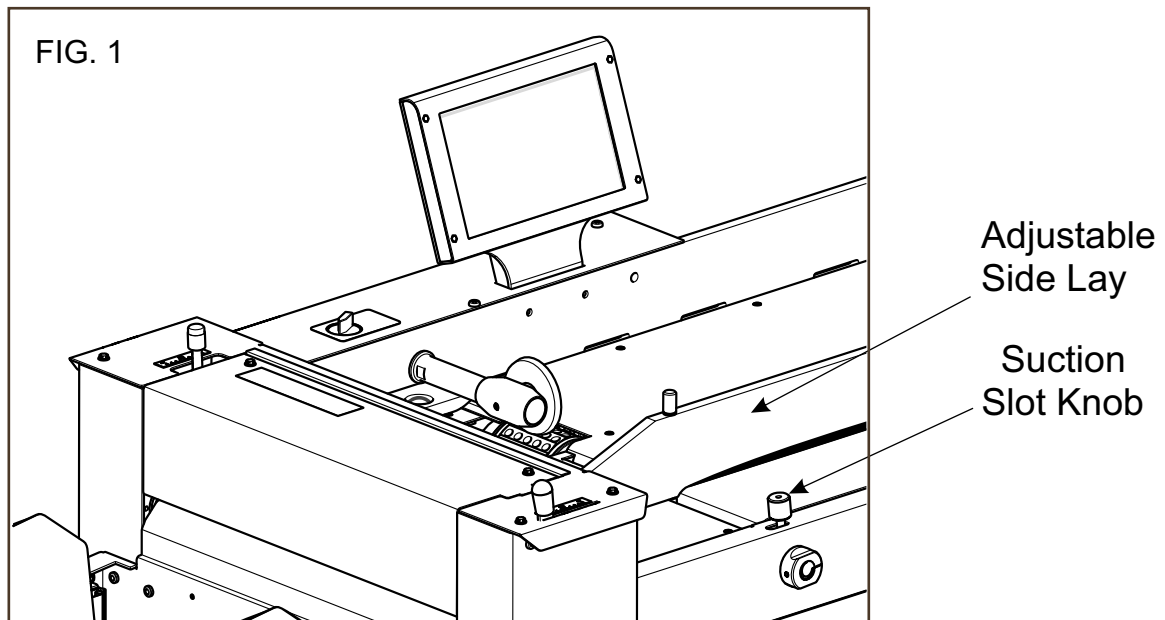
This setting is only intended as a guide, for instance, sheets with an upward curl will require this setting to be increased.



Setting the Suction Slot

The suction slot is located inside the vacuum roller and can be adjusted by releasing and moving the suction knob horizontally in either direction to the required position.

For light stocks set the knob to the left and for heavier stocks set the knob to the right.



Setting the Roller Tilt Mechanism

The roller tilt mechanism has been designed to compensate for when the creasing position on the sheet is not square. This could be due to an inaccuracy in the media or if the roller tilt mechanism has been incorrectly set. The mechanism will be set to zero (square) when the machine is supplied.

To set the mechanism, unlock the roller tilt knob located below the roller tilting handle by turning anti-clockwise. Move the roller tilt handle left or right in order to compensate for any inaccuracy. When the position is set, ensure to lock the roller tilt knob before operating the machine. Repeat the above procedure until the creasing position is square.


Setting the positions of drive wheels and hubs

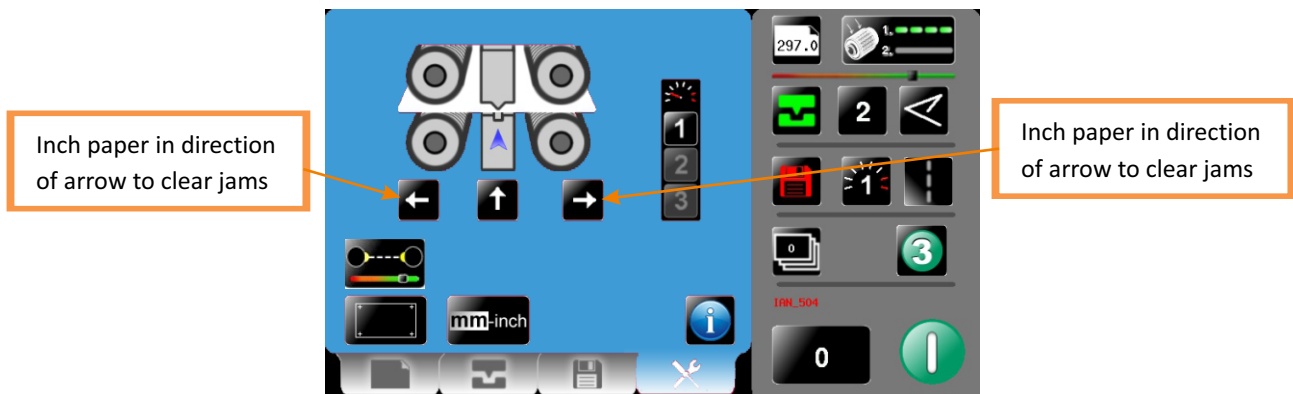
It is important that the drive wheels and drive hubs on the roller shafts are arranged evenly across the width of the media being creased. This is done to ensure that the media is accurately driven and supported through the rollers.

The drive wheels and hubs are fixed to the rollers by means of a grub screw. To locate this grub screw the rollers can be rotated by operating the motor manually.

DO NOT ROTATE THE DRIVE ROLLERS BY HAND.

To operate the motors manually, switch the machine 'on' at the Emergency Stop switch.

Select the Tools tab  at the bottom of the touch screen, the display will change to that shown below.

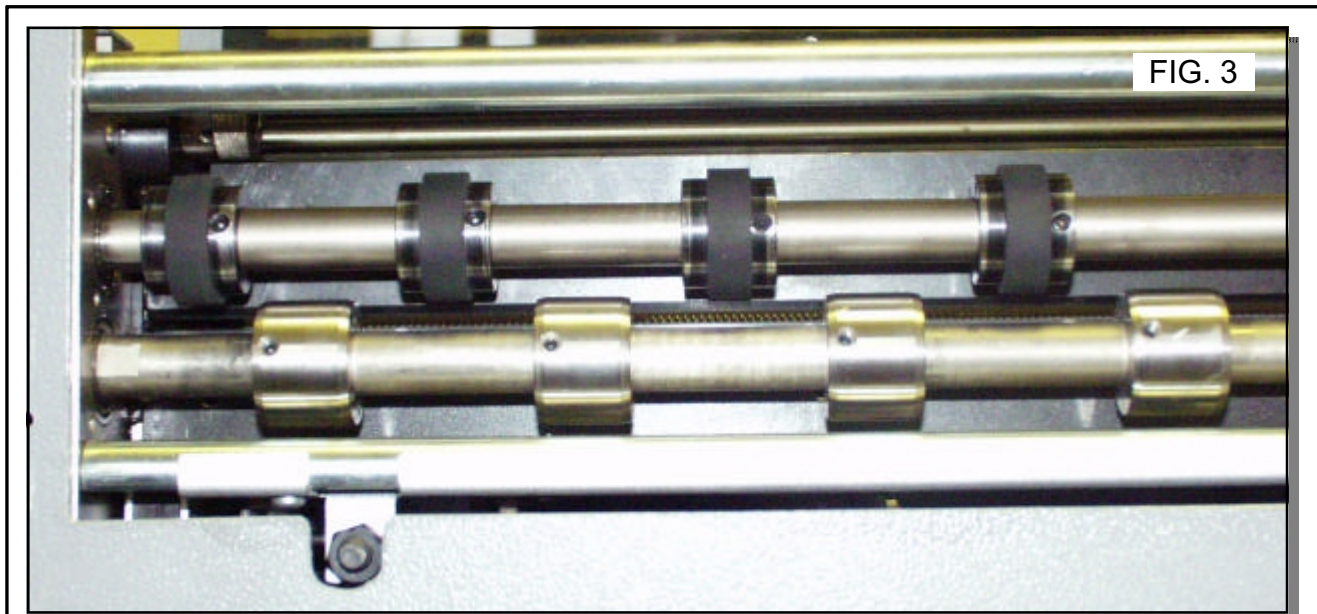


Press the system switch down and then select the right or left arrows, to rotate the rollers in short pulses.

Lift the exit guard to see if the grub screws in the drive wheels and hubs can be seen. If the grub screws cannot be seen, lower the exit guard and rotate the rollers by selecting the right or left arrows. Loosen the drive wheels and hubs with a 2mm allen key. Arrange the drive wheels and hubs as shown in FIG. 3. In order to avoid marking on some types of media ensure a gap between the drive wheels and hubs.

This procedure should be repeated when installing perforating blades and anvils onto the drive wheels and hubs.

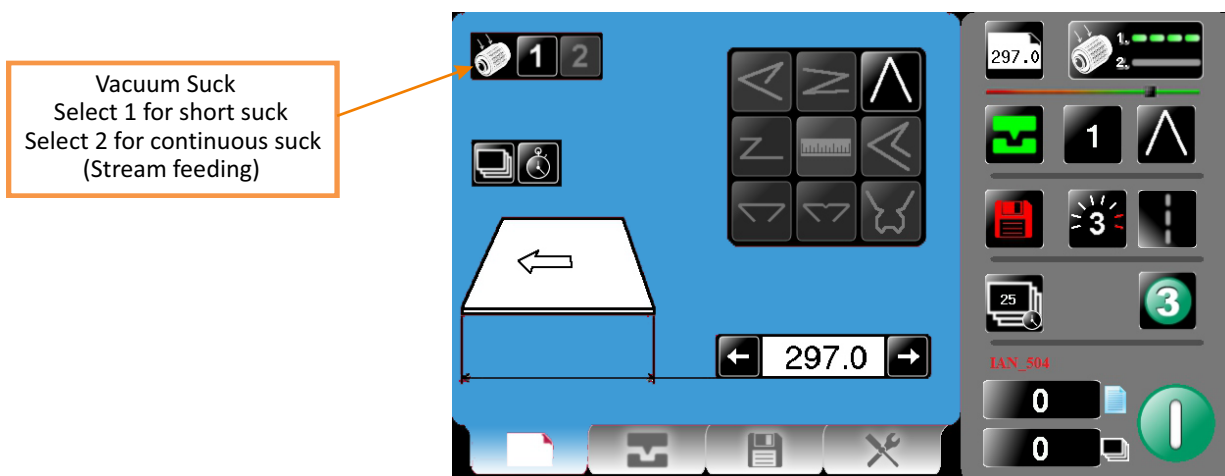
Operating The Machine



Set Feed

The length of suction on the sheet of paper being fed can be adjusted by setting the feed type as follows:-

Select 1 for short suck, select 2 for continuous suck (stream feeding).



NOTES.

1. **Stream Feed** will give the quickest throughput of stock through the machine.
2. When the first crease is less than 37mm from the leading edge of the paper the feed will be noticeably slower when using speeds 2 and 3.
3. When the first crease is less than 50mm from the leading edge of the paper the feed will be noticeably slower when using speed 3.

Setting up a job

1. Switch the power 'on' by turning the Emergency stop button clockwise to release the safety latch.


Setting the page length

2. Set the page length of the paper as described on page 10.



Setting the vacuum suck

3. Set the vacuum suck as described on page 10. Setting number 1 for short suck and setting number 2 for continuous suck (stream feed).

Setting the batch quantity



4. Select the  button. On selection the status area is replaced with a calculator for inputting new values.

Setting the crease positions

5. (i) Select the lower tab  or  from the status area to get to the Crease Settings Page.
(ii) Set the creases as described on pages 11 and 12.

Storing the Job

6. The job that has been set can now be stored as follows.

- (i) Select the lower tab  or  from the status area to get to the Store Settings Page.
- (ii) The job can be given a name and stored as described below. You can also retrieve previously saved jobs, modify them or delete jobs that are no longer required.

To create a new job name click in text area & keyboard will open to input job name.

Load existing job from store




Clicking to search currently stored jobs

Clicking to delete currently stored jobs

Current Job Name
Yellow Text Denotes Saved Job
Red Text Denotes Unsaved Job

Clicking to save job shown.



Jobs matching characters in text box will be shown in this area - selecting job from this area will show job settings in the right hand status area. Job selected will be shown in text box.


Toggle between search results & full list of jobs

Press to load job shown in text box.

SP
SP_1
SP_2
SP_3

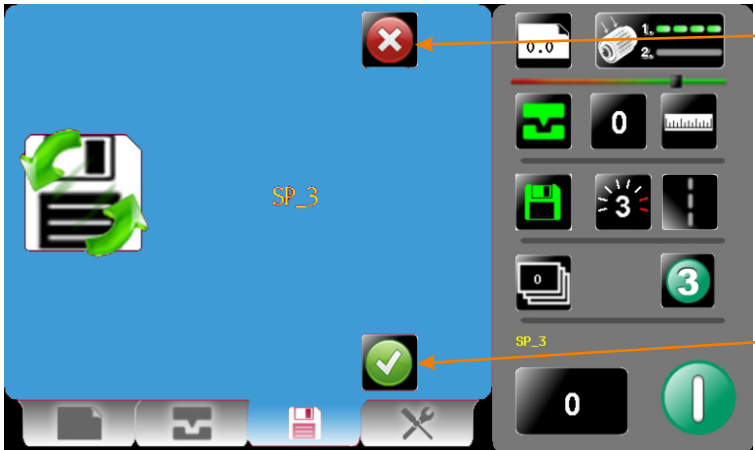
594.0
0
1
2
3
16CREASE3_SP1
0
0

Loading job confirmation screen.



The loaded job can be run or modified and saved as the same job name.

Overwrite job confirmation screen.



To cancel overwrite of Job press here.

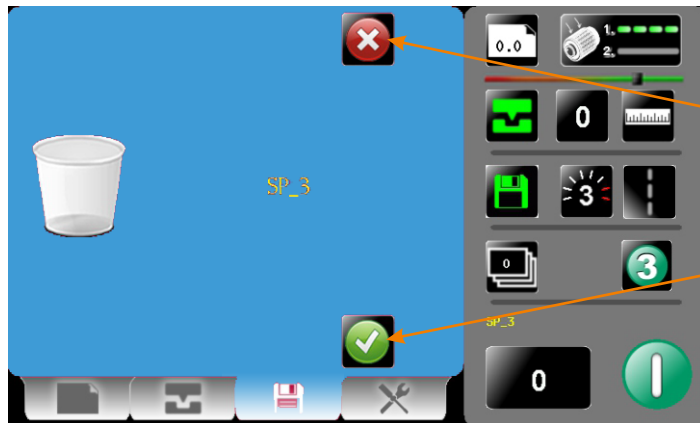
To confirm overwrite of Job press here.

SP_3

SP_3

Operating The Machine

Delete job confirmation screen.



To cancel deletion of Job press here.


To confirm deletion of Job press here.

Running the machine

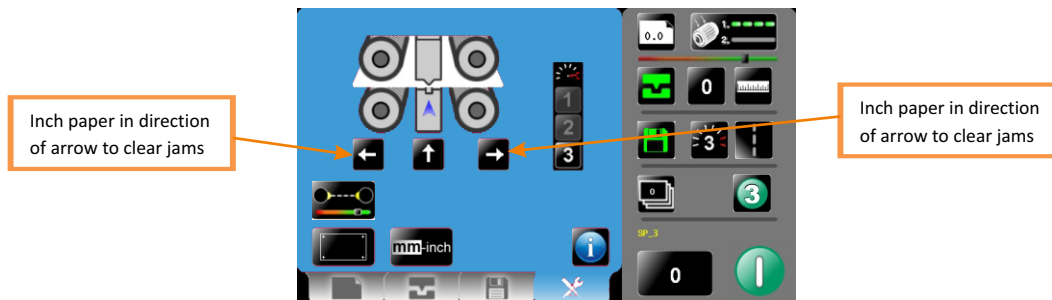
Run the job as described on page 12. The machine will complete its creasing operation if a sheet has already been fed through the paper gate.

Paper jamming

In the event of a paper jam occurring whilst the machine is operating, select the Tools

tab  at the bottom of the touch screen, the display will change to that shown


below. Press the system switch down and then select the right or left arrows, to inch the paper forwards or backwards.



Setting the machine to operate in manual sheet feed mode

In order to feed heavy stock, very small or very large sheets, embossed or even irregular shaped sheets, it may be necessary to feed the sheets manually. The machine can be programmed and set up in exactly the same way as explained when operating the machine automatically. However, the paper gate must be raised to its highest position for the sheets to be fed freely. Operating the machine in manual sheet feed mode will also require the suction length to be continuous in order to accommodate various types of stock. Therefore, the feed should be set to **Stream Feed** (Vacuum Drum position 2) see page 10.

The machine can now be started by activating the System switch to 'on'. **Do not activate the Compressor switch.**

Select the  icon on the touch screen and begin to slide the sheets individually through the paper gate until they are driven by the drive belts.

To stop feeding the sheets, select the  icon on the touch screen and switch the System Switch off.

The stacker unit on the machine is used to catch the sheets once they have been creased or perforated.

Setting the height adjustable stacker assembly

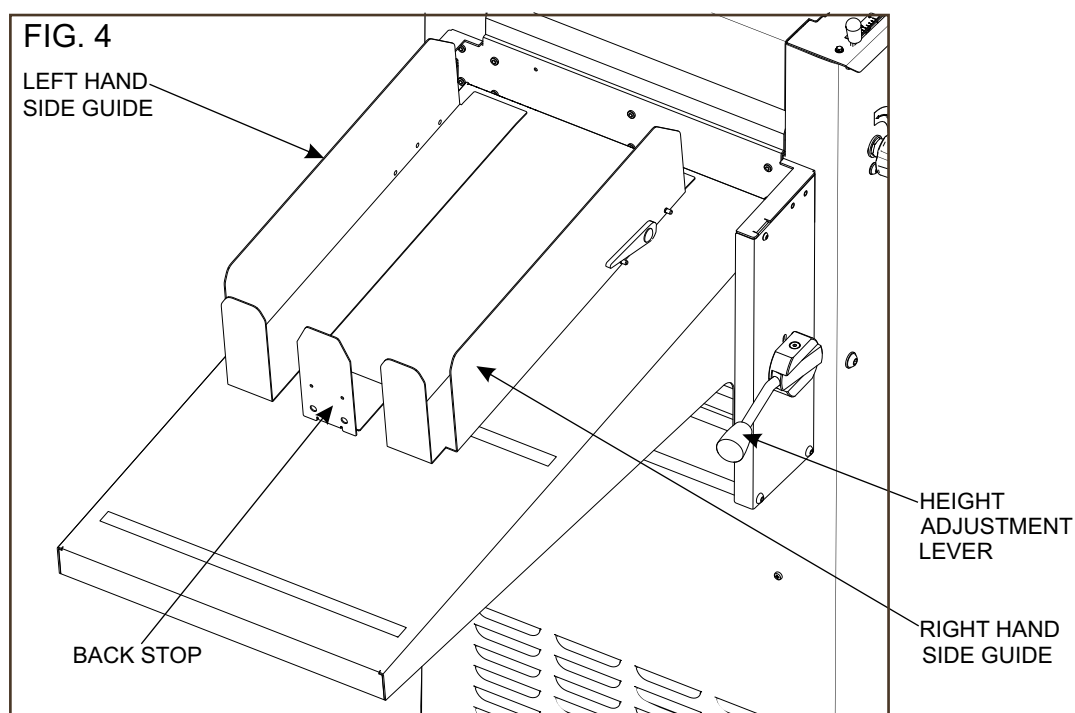
1. Assemble the stacker unit to the machine as shown in Fig. 4 below.

Important

Ensure that the stacker unit has been assembled to the machine properly. However, if it has not, the connection on the magnetic switch will be broken and the machine will not operate (see Trouble shooting pages for details).

There are two side guides on the stacker unit; a left handed guide and a right handed guide held on by a magnetic strip. There is also a back stop held on by a magnetic strip. The guides will control the way in which the paper is collated by setting their positions on the stacker bed.

2. Place a single sheet (from the stack to be creased / perforated) on to the stacker bed against the 'left hand' guide.
3. Position the 'right hand' side guide on to the stacker bed leaving a minimum clearance of approximately 1mm each side of the sheet.
4. While the sheet is between the two guides on the stacker bed, set the distance between the top of the sheet and the backstop flanges to approximately 5mm - the stacker height can be adjusted by using the handle on the operators side, the handle must be pushed in to unlock, rotated & then pulled and locked into one of the locating holes.



5. For shorter sheets, the back stop can be used (as shown in Fig. 4) to adjust the position of the paper stack.



TIPS

- The magnetic back stop supplied with the machine can also be used as a tool holder as demonstrated in the photograph (left).

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Perforating

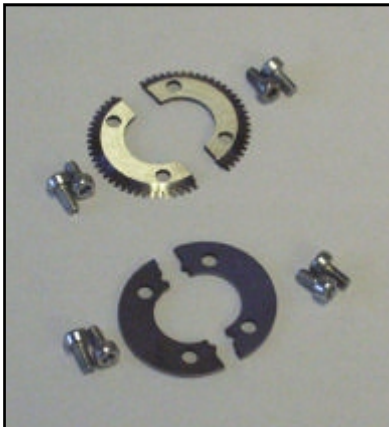
Once the machine is set-up, the Atlas C102 can be used to perforate or crease.

Note

1. **Perforating and creasing can be carried out simultaneously. However, if any adjustment is made to the roller tilt mechanism in order to compensate for the perforation line being 'out of square', this may effect the accuracy of the crease. If this occurs creasing and perforating must be carried out as separate operations.**
2. **By adjusting the outfeed drive tires relative to the drive hubs it is possible to steer the sheet, (i.e. By placing the tire on top of the hub one side of the paper will steer faster on that side).**

The components and tools required to install the perforator are contained in the despatch kit supplied with the machine, they are listed below.

- 1 off Set of standard perforation '56 tooth' blades.
- 1 off Set of standard hardened anvils.
- 1 off Perforator stripper.
- 1 off 3mm bondhus wrench / allen key
- 1 off 2mm bondhus wrench / allen key



The perforator blades are split into two matching halves and are fitted to the drive wheels as shown in the photograph using the four screws supplied.

A hardened anvil is fitted to the drive hub as shown in the photograph also using the four screws supplied. Again the anvils are made from matching halves.

Important: The perforator blades are very sharp and care must be taken whilst handling. Do not mix the matching pairs of blades or anvils.

Perforating 'Spares' kits

For perforating and other types of paper, various spares kits are available which can be assembled to the machine in the same fashion. They are listed below along with a range of scoring wheels,

Perforating blades	56 teeth	Part Number AC-77	- Standard stock / fine perforations.
	28 teeth	Part Number AC-76	- Medium stock / medium perforations.
	20 teeth	Part Number AC-75	- Heavy stock / coarse perforations.
Anvils	Standard	Part Number 1-99-35	- For all blade types

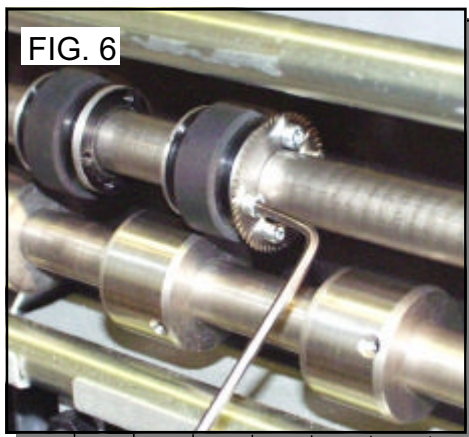
All of the blades and anvils are supplied with fixings.

***Perforator stripper** Standard Part Number **78-013**

*It is recommended that for multiple perforations, a separate perforator stripper is used for every perforating blade set fitted in the creasing unit.

Setting the perforator blade position

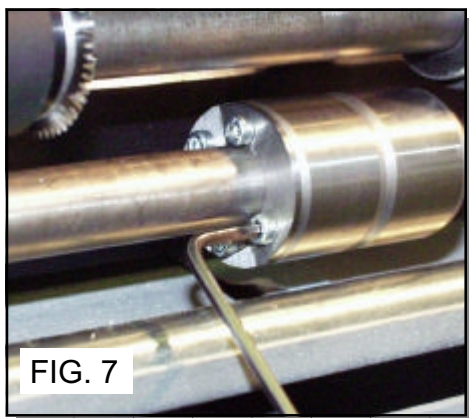
1. Turn the mains supply to the machine 'off'.
2. Remove the stacker unit and open the exit guard.
3. Locate and remove the blades / anvils from the despatch kit supplied with the machine.
4. Using the 2mm allen key (supplied), loosen the drive wheel that is to accommodate the blades.
5. Slide the drive wheel away from any obstructing drive wheels or hubs in order to mount the blades.



6. Using the 2.5mm allen key (supplied), take one of the matching pairs and mount on to the drive wheel. Do not secure the blade.

7. Mount the other matching pair to the drive wheel as shown (Fig. 6). Secure the blades to the wheel ensuring not to over tighten grub screw.

8. Mark on a single sheet the desired perforating position. Feed the sheet through the machine manually until the mark can be seen. Use this mark to assist in fixing the position of the perforating drive wheel to the roller drive shaft.



9. Using the 2mm allen key, loosen the drive hub nearest the perforating drive. Slide the drive hub away from any obstructing drive wheels or hubs in order to mount the anvils.

10. Using the 2.5mm allen key, take one of the matching pairs of anvils and mount to the drive hub. Do not secure the anvil.

Perforating

11. Mount the other anvil ensuring that they have matched on the drive hub. Secure the anvil to the hub ensuring not to over tighten grub screw as shown in Fig 7.
12. Slide the drive hub towards the perforating drive wheel until there is a clearance of 0.5mm.
13. To prevent damage to the blades or the anvils, do not force the drive wheel against the hub.
14. Fix the perforator stripper adjacent to the drive wheel and blade as shown.
15. Operate the machine and test the perforations for form.

It is important that the drive hubs are arranged evenly across the width of the paper in order to reduce the risk of jamming.

For multiple perforations repeat the above procedure.

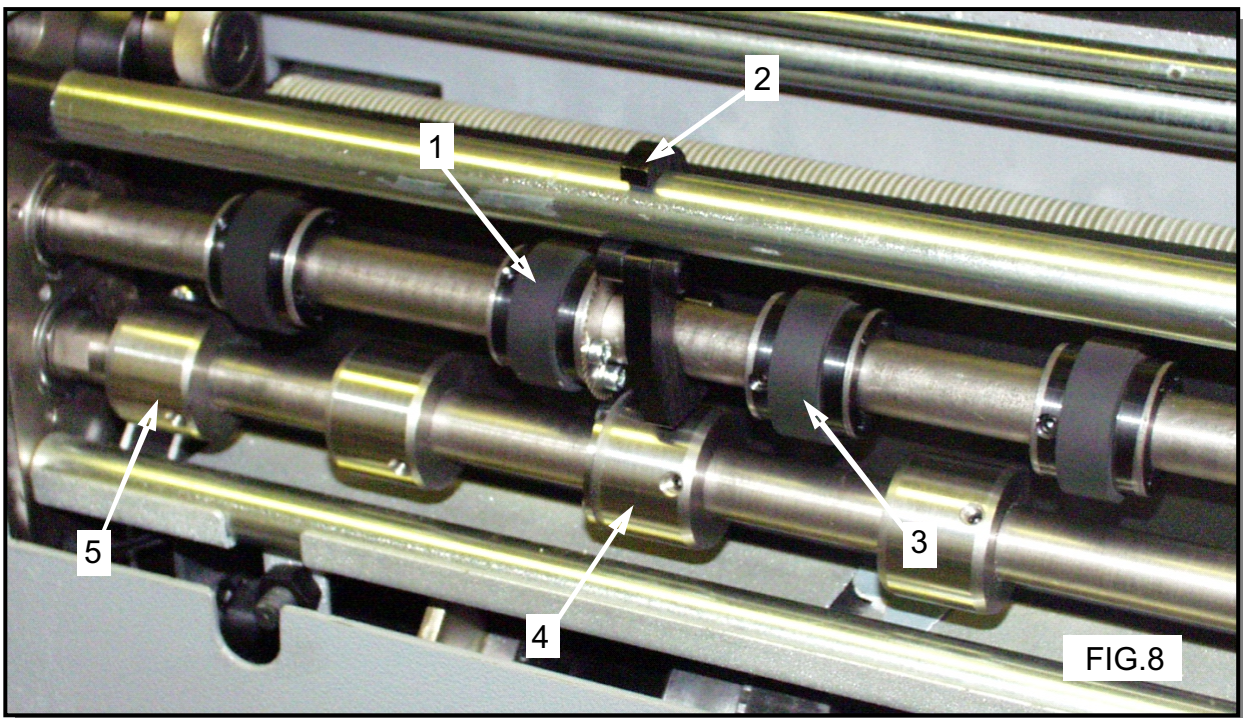



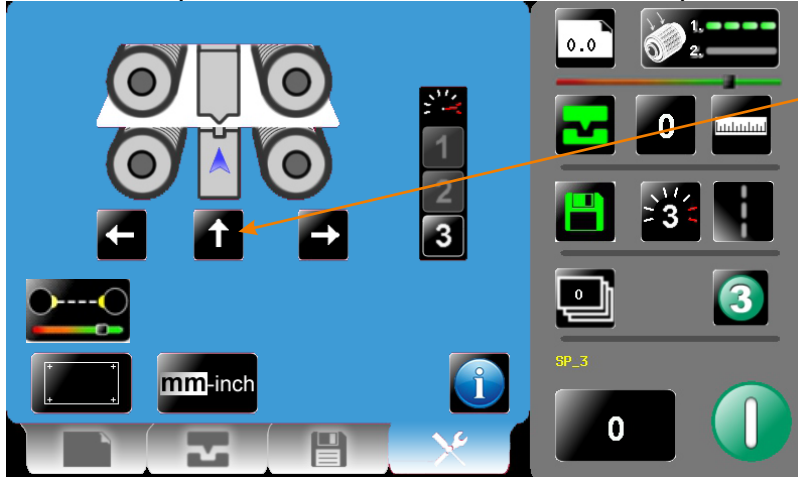
FIG. 8 Demonstrates a typical set-up for perforating sheets.

- | | |
|---|-----------------------------------|
| 1 - Perforating drive wheel with mounted blades | 4 - Drive hub with mounted anvils |
| 2 - Perforator stripper | 5 - Standard drive hub |
| 3 - Standard drive wheel | |

Always remove blades and anvils once the perforating operation has been completed to avoid marking on digital or delicate media.

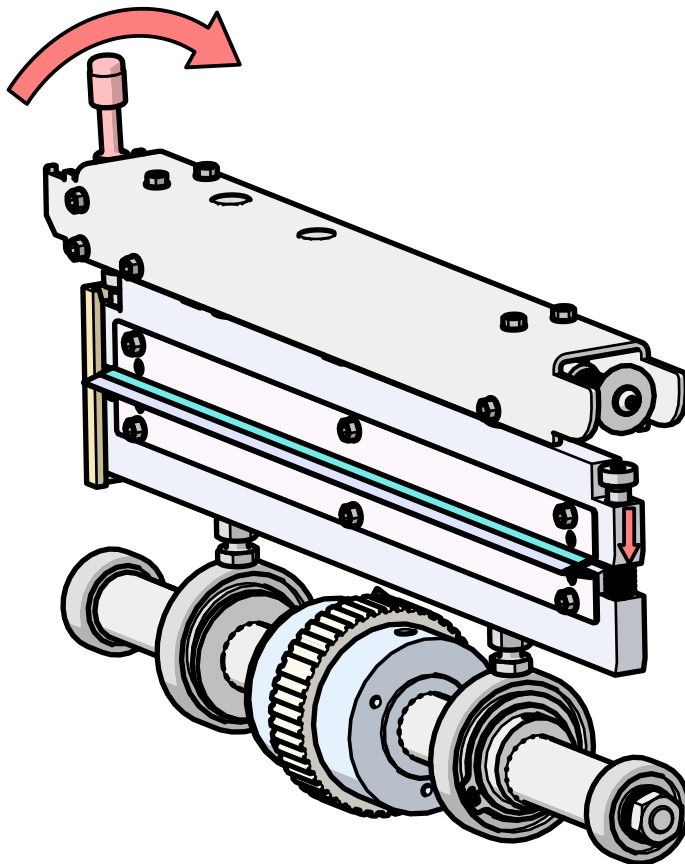
Adjusting the blade pressure (no paper required)

- Switch the power 'on' by turning the Emergency stop button clockwise to release the safety latch.
 - Select the Tools tab  at the bottom of the touch screen, the display will change to that shown below.
 - Select the up arrow to move the blade to the Top Dead Centre position.



Click on Up Arrow to put Anvil into Top Dead Centre position (TDC)

- Unlock the cam adjustment lever by turning counter-clockwise & then rotate the cam adjustment handle in the direction shown in the diagram below to adjust the blade pressure.



Replacing Creasing Blade Set

Installing blade sets.

1. Before removing the blade assembly, ensure that the lower blade / anvil is NOT at 'top dead center', Switch the machine off.
2. Remove the stacker unit and lift the exit guard (Fig. 9.)



3. Push down On the lay side of the bridge assembly (1) & the pull back towards the operators side (2) (Fig. 10)



Replacing Creasing Blade Set

4. Swing the bridge assembly up (3) & then Lift out (4) (Fig. 11)



3. Lift Out Blade Set (Fig.12)

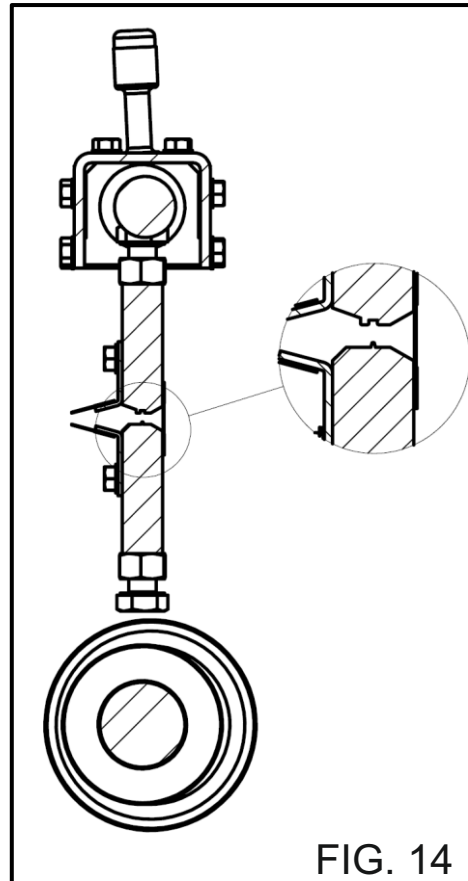
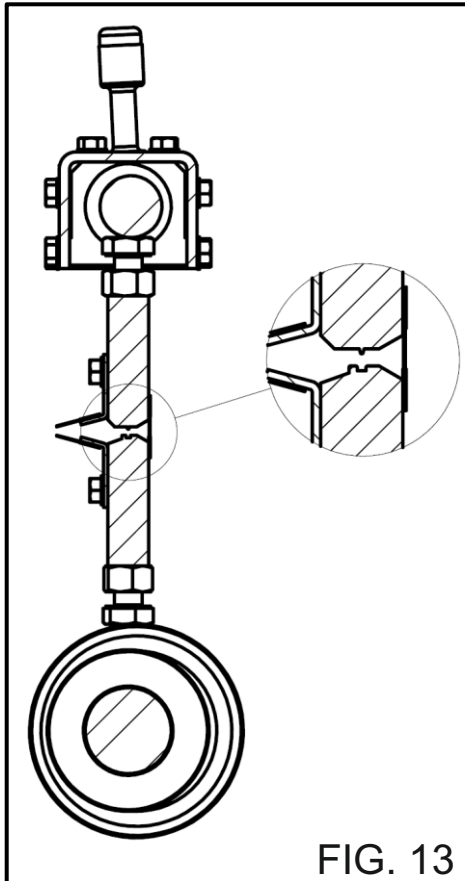


4. Slide the new blade set into the brass blade guides & refit the bridge assembly, this is a reverse of removing the blade.

The Blade Assembly

NOTE.

The blade set can be fitted with the ANVIL at the bottom or with the ANVIL at the top. The blade set is supplied from the factory with the ANVIL at the bottom as shown in Fig13. The blade set can be changed to have the ANVIL at the top (as shown in Fig. 14), this can improve the repeatability of the fold relative to the crease for certain fold types or when using lighter stocks.



11. Push the exit guard down and replace the stacker assembly before operating the machine.

12. Switch the machine on and test the crease for form, If the pressure and the alignment of the crease is not to a satisfactory level, see pages 33 to adjust the creasing line.

'Spares' kits

In the event of any damaged or lost components within the blade assembly, spares kits are available on request. However, components within the blade set can not be ordered separately ie single blade or anvil.

The following Blade sets are supplied with the Atlas C102 as standard.

Standard Blade set Part number 76-07-01

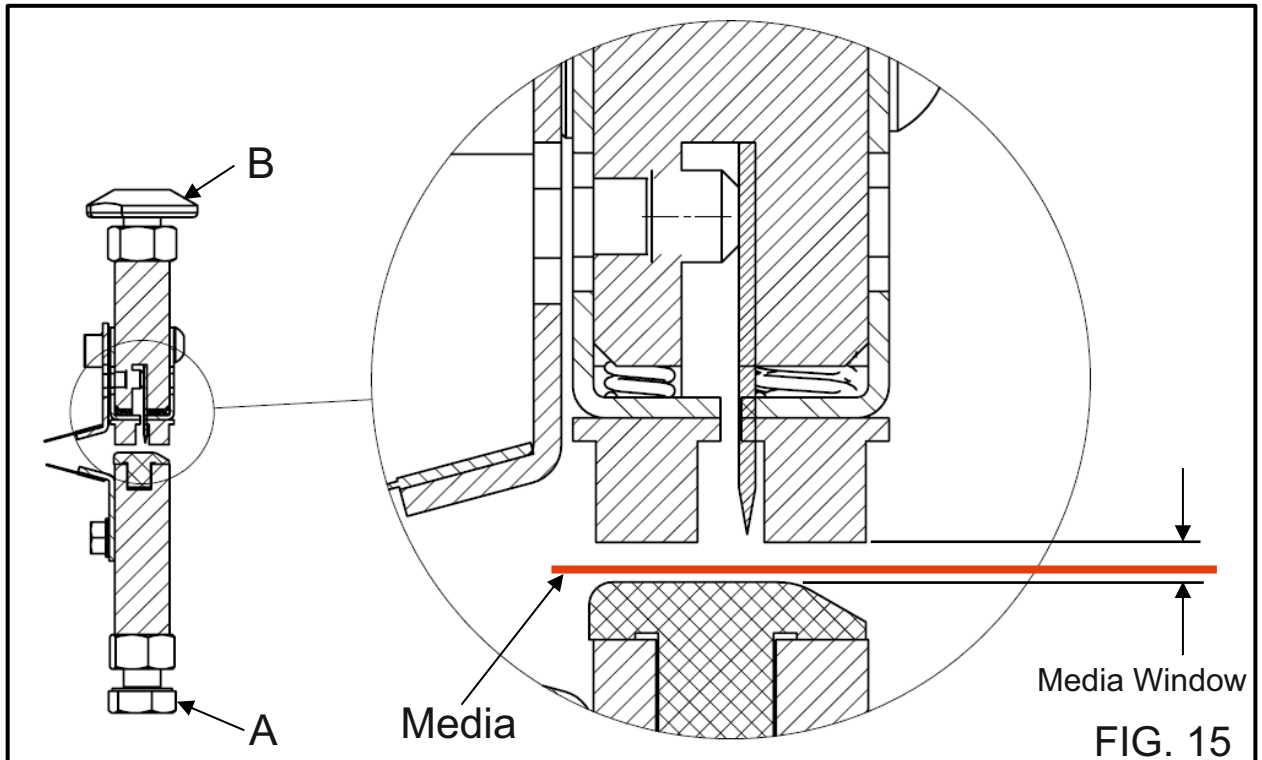
Consisting of a standard blade and anvil, blade brushes, blade links and alignment bolts.

When running lighter stocks it is recommended that a Narrow Blade Set is used, this can be purchased from Formax, Part number AC-45.

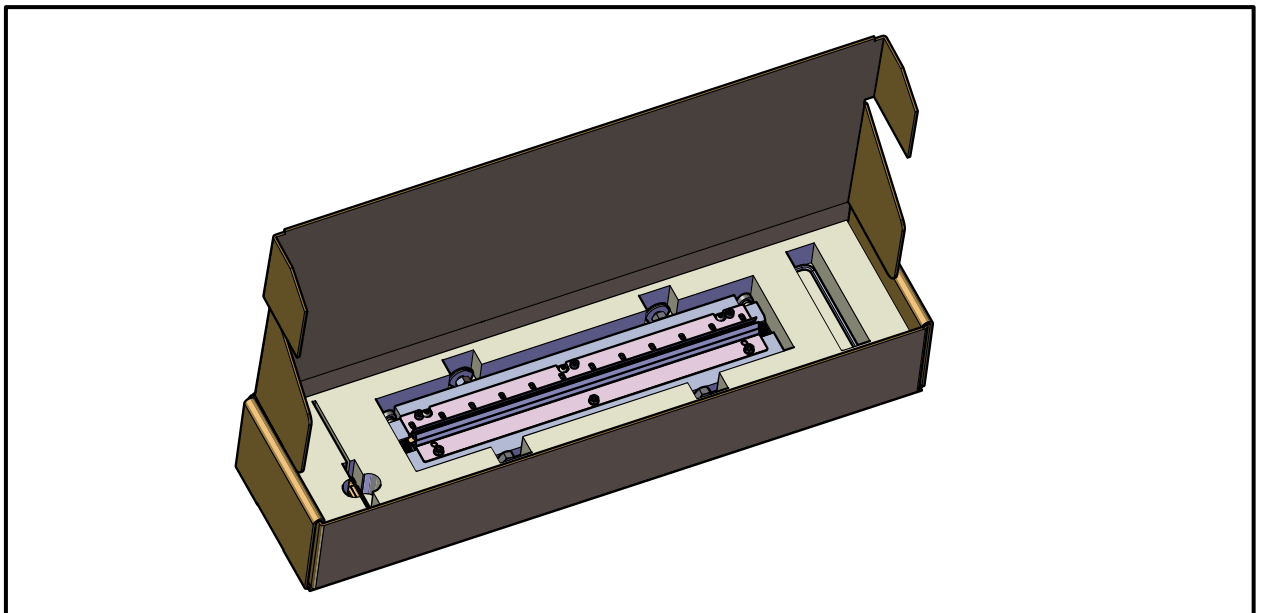
'Fitting The Cross Perforating Kit.

A cross perforating kit AC-90 is available which enables a full width 'Fine' or Coarse perforation, the kit also comes with 150mm, 100mm & 75mm length blades.

The media window can be adjusted using bolts 'A' & Pads 'B' this may have to be done to ensure there are no jams or if the media is curled (Fig. 15)



Cross Perforating Kit AC-90 (optional)



Trouble Shooting

Paper crease out of square

- Check that the sheets are all square and exactly the same size before loading the stack on to the table.
- Check that the roller tilt mechanism is correctly set and locked in position.
- Check that the adjustable side lay has been correctly positioned ie. No further than 0.5mm from the paper stack.

Paper jamming

- Check that the leading edge of the paper is not being damaged by the paper gate. If this is occurring, check that the suction slot and the paper gate have been correctly set.
- Check that the first crease position is not too close to the leading edge of the paper. A minimum distance of 32mm is recommended.

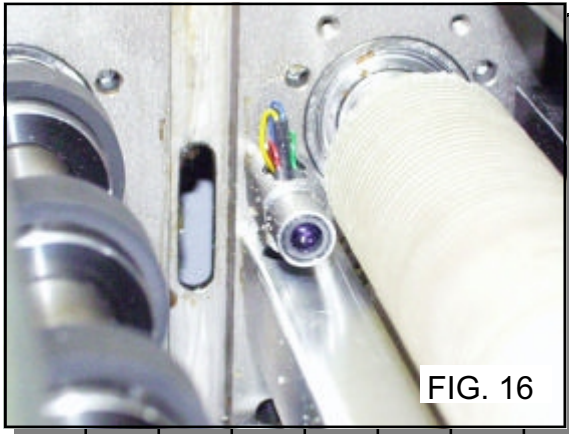
Machine will not start

- Check the power supply to the machine.
- Check that the emergency stop button has been released.
- Check that the exit guard is down.
- Check that the stacker unit is located correctly and has not been disconnected from the magnetic switch.
- Check that the lower blade / anvil is connecting to the home switch (mounted below the lower blade / anvil).

Paper not feeding

- Check that the paper stack is not too high or too heavy for the feeder. The height of the paper stack should be defined by the weight and the size of the stock being creased.
- Ensure that the adjustable side lay is not pressed against the paper stack. However, if the clearance between the adjustable side lay and the paper stack is too great, the air supply will escape instead of blowing through the paper thus making it difficult to feed.
- Check that the clearance between the paper gate and the suction roller is not set too low.
- On digital media, the feeding performance may be improved if the leading edge of the stack is trimmed before loading onto the Machine.

- Check that the air distribution has been correctly set.
- Check that the air separation has been set high enough to feed the sheets.
- For heavy stocks, very small or very large sheets, embossed or even irregular stock, it may be required to feed the sheets manually - see page 25 for instructions.



Machine not counting

Open the exit and remove the blade set (see pages 34-35) to access the dual sensor post located in between the drive rollers. Using a soft brush, clean the visible sensor on the end of the post. Use the brush to clean the sensors between the post and the bottom paper guide which are not visible. Fig.16 shows the dual sensor post containing the sensors.

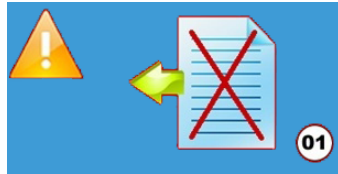
Paper jammed under paper gate.

If paper gets jammed under the paper gate the vacuum drum will stop rotating, this is a safety feature. Remove the paper and re-adjust the paper gate.

Error Screens

- **Sheet did not arrive.**

If the machine stops and error message 01 is displayed on the touch screen, this indicates that the paper did not arrive at the end of the suck process; so the machine timed out. Press the green tick button and then press the start button.

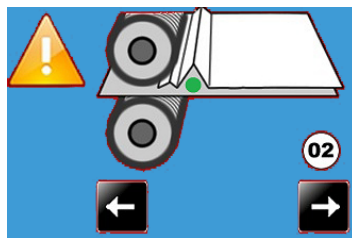


- **Paper Jam**

If the machine stops and error message 02 is displayed on the touch screen, this indicates that a paper jam has been detected.

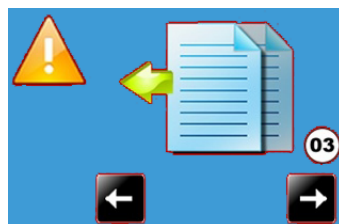
Press the system switch down and then select the right or left arrows, to inch the paper forwards or backwards. See page 27 that describes how to remove paper jams. Press the green tick button and then press the start button.

This error message could also mean that the jam sensors are faulty or need cleaning.



- **Double Sheet Feed**

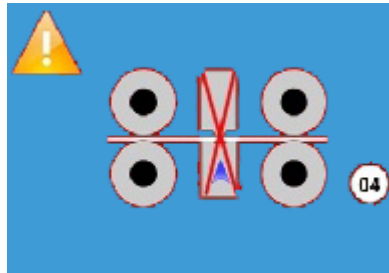
If the machine stops and error message 03 is displayed on the touch screen, this indicates that a double sheet feed has been detected. Check that the paper gate has been set correctly. Press the green tick button and then press the start button.



Error Screens (Continued)

● **Blade Not Home**

If the machine stops and error message 04 is displayed on the touch screen, this indicates that the lower blade / anvil has not made contact with the HOME switch. i.e. blade still in top position. Switch the machine off and remove the blade set and ensure that the area is free from obstructions. Return the blade set to the creasing unit and switch the machine on. Operate the machine in the normal sequence, if the display continues to read error message 04 it is advised to contact a Service Engineer immediately.



● **Overlap**

If the machine stops and error message 13 is displayed on the touch screen, this indicates that the 'Lead Edge Sensor' has seen a sheet subsequent to the first one as being longer. Again this could actually be a longer sheet, OR it could be a sensor problem (if it is a recurring problem). Check that the paper gate has been set correctly.



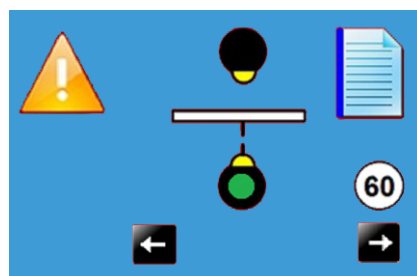
● **Lead Edge Sensor Blocked**

If the machine stops and error message 60 is displayed on the touch screen, this indicates that the lead edge sensor is blocked.

Press the system switch down and then select the right or left arrows, to inch the paper forwards or backwards.

Press the green tick button and then press the start button.

This error message could also mean that the lead edge sensors are faulty or need cleaning.

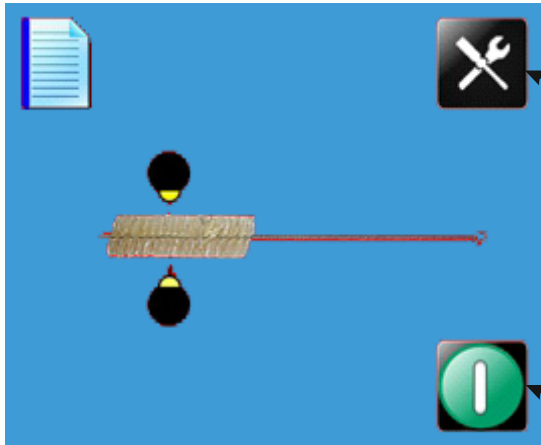


Error Screens (Continued)

● Clean Lead Edge Sensor - Warning Screens.

1. The Clean Lead Edge Sensor warning screen, shown below, will appear when the Run button is pressed and the strength of the Lead Edge Sensor Beam is at about 50% (i.e. the slider is at about the mid-point position along the Indicator Scale).

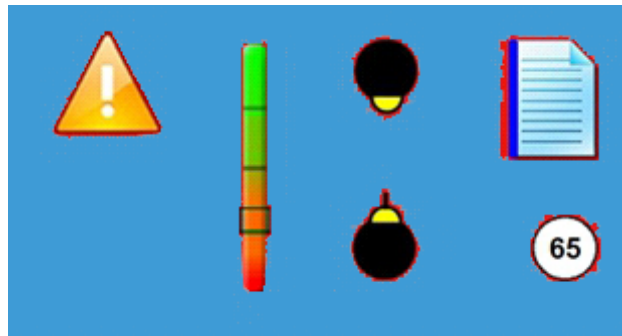
SENSOR CLEANING WARNING SCREEN




Press the Tools button to clean the Sensors, as described on Pages 43 & 44.

Press the Run button to ignore the Warning, and continue running the job.

2. The Clean Sensor, Error 65 warning screen, shown below, will appear if the strength of the Lead Edge Sensor Beam is allowed to get down to about 25%. The Lead Edge Sensors should ideally be cleaned before this warning screen appears.



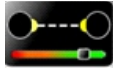
NOTE.

The Lead Edge Sensors can be cleaned at any time by selecting the Tools Tab  at the bottom of the Touchscreen and cleaning the Sensors as described on Pages 43 & 44.

Error Screens (Continued)

Lead Edge Sensor Cleaning.

Select the Tools menu on the Touchscreen Display, and then select the clean sensor icon

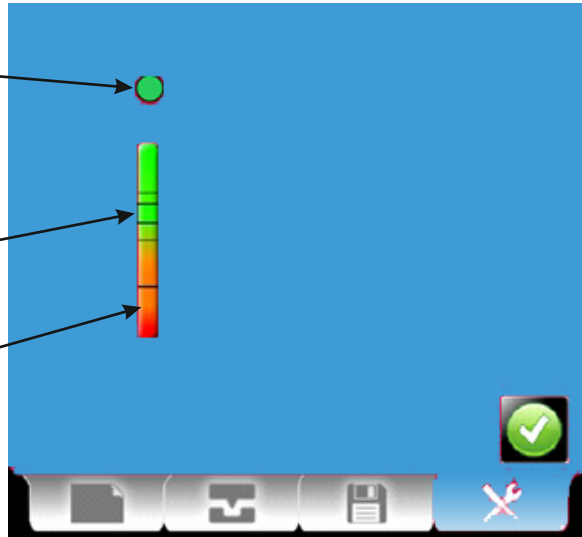


The screen now shown is a visual indication of the strength of the Lead Edge Sensor beam.

FLASHING (GREEN/BLACK) TO INDICATE THAT THE SOFTWARE IS INTERROGATING THE SENSOR BEAM

SLIDER

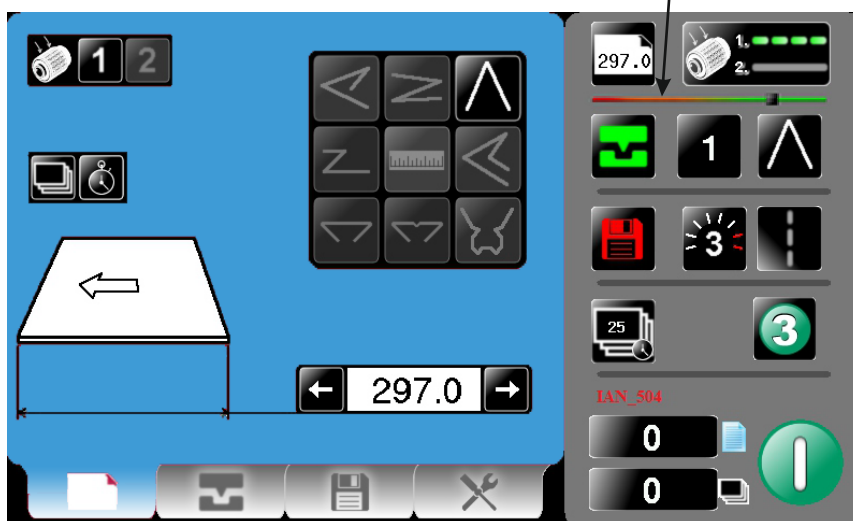
INDICATOR SCALE



The vertical indicator scale is divided into four sections, the position of the slider indicates the strength of the beam. The strength of the beam is at its strongest towards the top half of the indicator scale (green) and at its weakest towards the bottom half of the indicator scale (red). Note the position of the slider on the indicator scale and then clean the sensors as described on Page 44.

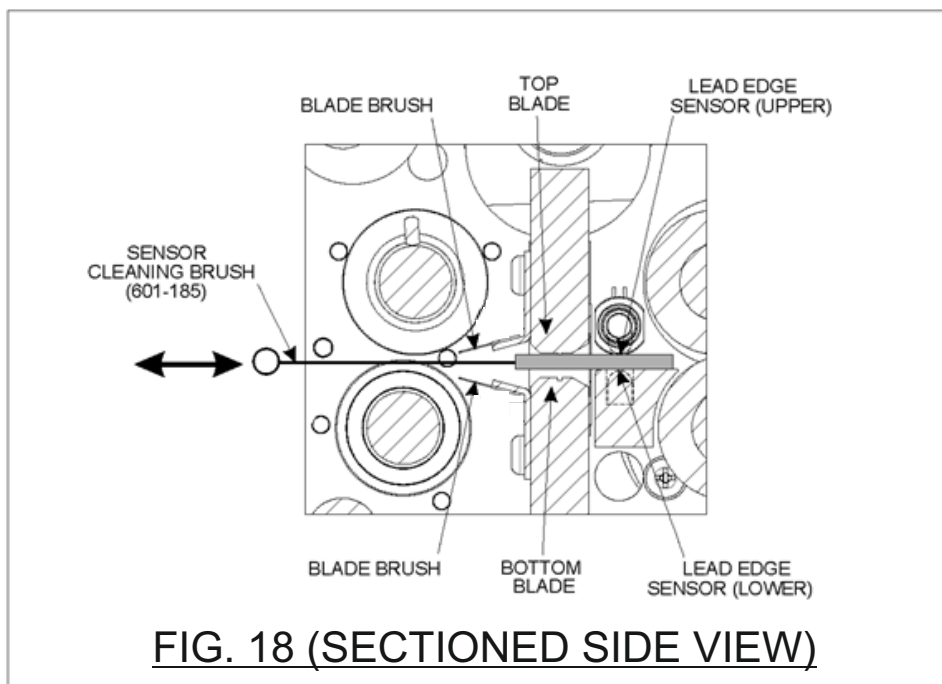
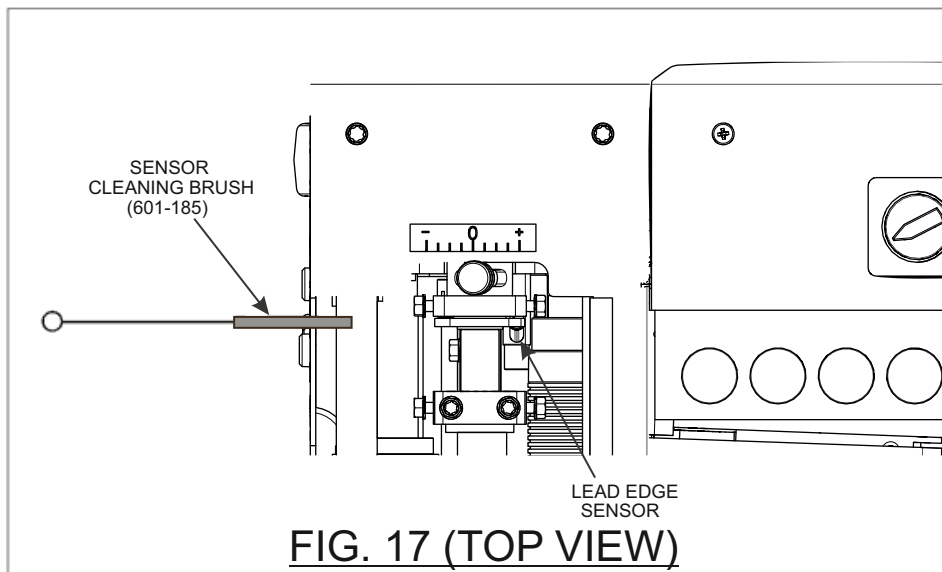
NOTE:- This vertical indicator scale is repeated as a horizontal indicator scale on the right hand side of the Touchscreen Display as shown below.

HORIZONTAL INDICATOR SCALE



Error Screens (Continued)

To clean the lead edge sensors open the exit guard to expose the blade set. Using the Sensor Cleaning Brush (part number 601-185), supplied in the dispatch kit, insert the brush between the blade brushes and the top and bottom blades to reach the upper and lower lead edge sensors. (See FIG. 17 and FIG. 18 below). Move the brush backwards and forwards several times across the sensors to clean them. Note the position of the slider on the indicator scale; the slider should have moved nearer to the top of the scale, indicating that dust has been removed from the sensors. This sensor cleaning operation can be repeated again to see if the sensor beam strength can be further improved. The Sensors can also be cleaned with a can of compressed air.



Recommended weekly operator maintenance

- Clean all sensors
- Clean in feed rollers and output drive hubs
- Remove and clean the blade assembly
- With the blade assembly removed, clean the slots and surrounding area within the creasing unit.

Technician Maintenance

It is recommended that your machine is fully serviced at least once every six months by a factory trained Service Engineer.

ACCESSORIES AND OPTIONS

ITEM	PART NUMBER	DESCRIPTION
1	AC-75	PERFORATING BLADE SET 20T (Card)
2	AC-76	PERFORATING BLADE SET 28T (Single sheets)
3	AC-77	PERFORATING BLADE SET 56T (Fine perforations)
4	AC-78	PERFORATING BLADE SET 96T
5	AC-45	NARROW CREASE BLADE SET
6	AC-90	CROSS/PART PERFORATING KIT
7	AC-40	ANTI-STATIC KIT
8	AC-79	ANVIL FOR PERF WHEEL
9	AC-80	SLITTING BLADE SET, TOP & BOTTOM

ACCESSORIES....

....May be obtained from your dealer and fitted to your machine using the instructions supplied, or by reading your operators manual.

OPTIONS....

....May also be obtained and fitted by your dealer. You should not attempt to fit options as specialist tools and knowledge are required.

RECOMMENDED SPARES

PART NUMBER	DESCRIPTION
93-021	FEED BELT
609-011	'O' RING Ø20
94-028	LOCK PIN ASSEMBLY - Side Lay
613-365	EMERGENCY STOP SWITCH
652-011	SWITCH - LOW CURRENT COIL - BLACK ROCKER
75-622-01	MINI ITX MOTHERBOARD - PRO MACHINES
75-377-01	CONTROL PCB ASSEMBLY - NO CHIP
174-06-01	SMALL STEPPER DRIVER - LOW POWER - PCB ASSY
174-19-01	RS232 ADAPTOR PCB ASSY
125-21-02	DUAL STEPPER DRIVE PCB ASSEMBLY
75-06-02	TOUCH SCREEN ASSEMBLY - 7"
76-272	PSU ASSEMBLY - ATX12V - 300W
655-015	PSU UNIT - SWITCH MODE - 24V
655-016	PSU UNIT - SWITCH MODE - 48V
76-166	PAPER JAM SENSOR ASSEMBLY
76-387-01	UPPER SENSOR ASSEMBLY
76-156	BLADE POSITION SENSOR-LEAD
76-255	LEAD - FOLD COMPENSATION SENSOR
76-230-04	LEAD - PAPER GUIDE SENSOR
98-013	ANTI-STATIC BRUSH
606-035	KNOB - Roller Tilt
7-06-01	BLADE SET - Standard
76-042	DRIVE BELT - FEED BED
607-017	TIMING BELT - 120XL 037
607-042	TIMING BELT 160XL
607-048	TIMING BELT TWIN GRIP - 200 DXL 050
76-082	PERFORATOR - DRIVE HUB ASSEMBLY
175-28-01	BUTTERFLY VALVE - STEPPER
76-240	STEPPER DRIVE MOTOR ASSEMBLY
76-241	STEPPER BLADE MOTOR ASSEMBLY
75-425	LEAD VACUUM DRUM ASSEMBLY
76-083	PERFORATOR - DRIVE WHEEL
76-55-01	INPUT ROLLER - Lower
76-56-01	INPUT ROLLER - Upper
76-372-03	OUTPUT SHAFT
78-013	PERFORATOR STRIPPER ASSEMBLY

FUSE POSITIONS & RATINGS

(POSITION ET CLASSIFICATION DES FUSIBLES)

