

FORMAX[®]

Cut-True 27A Automatic Programmable Electric Paper Cutter

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Cut-True 27A Guillotine Cutter



SPECIFICATIONS

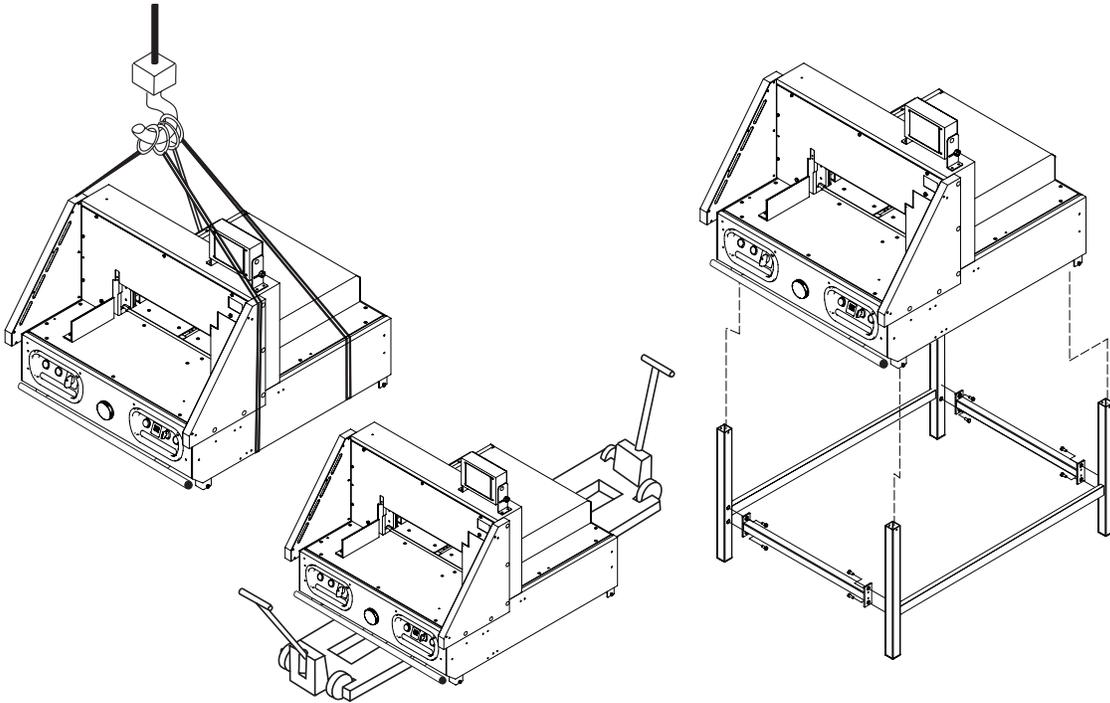
Cutting Action:	Dual-button electric
Maximum Cutting Width:	18.9" (480mm)
Maximum Paper Stack Height:	3.15" (80mm)
LED / Laser Cut Line:	Yes
Clamp Style:	Automatic
Back Gauge Adjustment:	Touchscreen or electronic hand wheel
Back Gauge Reading:	Digital readout, in both inches and metric
Programmable Jobs:	Up to 99, with up to 30 cuts
Blade Change Safety Tool:	Included
Dimensions:	60" H x 36" W x 40" D (1520mm H x 920mm W x 1000mm D)
Weight:	575 lbs. (260kg)
Power Supply:	110V, 20A dedicated line
Safety Certifications:	CE approved, UL pending
Metal Stand with Shelf:	Included, some assembly required

SAFETY GUIDELINES

- * Operators should read this manual prior to using the cutter.
- * The Cut-True 27A should only be used by one person at a time.
- * Keep hands away from the cutting area. The cutter is operated by pressing two "enable switches" simultaneously.
- * Do not disassemble Plexiglas safety covers, and never attempt to change the settings of any protective devices.
- * Do not grasp underneath the blade edge.
- * When changing the blade, carefully follow the instructions in this manual, and be sure to use the supplied Blade Change Safety Tool. Wear leather gloves to provide additional safety.
- * The Cut-True 27A is designed to cut only paper. DO NOT attempt to cut non-paper materials including metal sheets, wood, plastic or anything other than paper. Machine damage and/or personal injury may occur.
- * Be sure to check the safety devices before each operating session.

INSTALLATION

Please use caution when moving the cutter, and be sure to utilize appropriate lifting devices when attaching to the stand.



The cutter can be moved by using an overhead motorized lift, pallet jacks, or by hand.

NOTE: Four people are required to move the cutter by hand.

To move the cutter by hand, utilize the lifting handles located on the front and back of the machine. To adjust the handles, loosen the knobs on the underside and slide the handles to out to a comfortable position. Retighten the knobs.

When the cutter is in place and securely attached to the stand, loosen the knobs, adjust the handles to their storage position and tighten the knobs.



Lifting handle



Adjustment knob

Adjustment knob

Lifting handles

ASSEMBLY

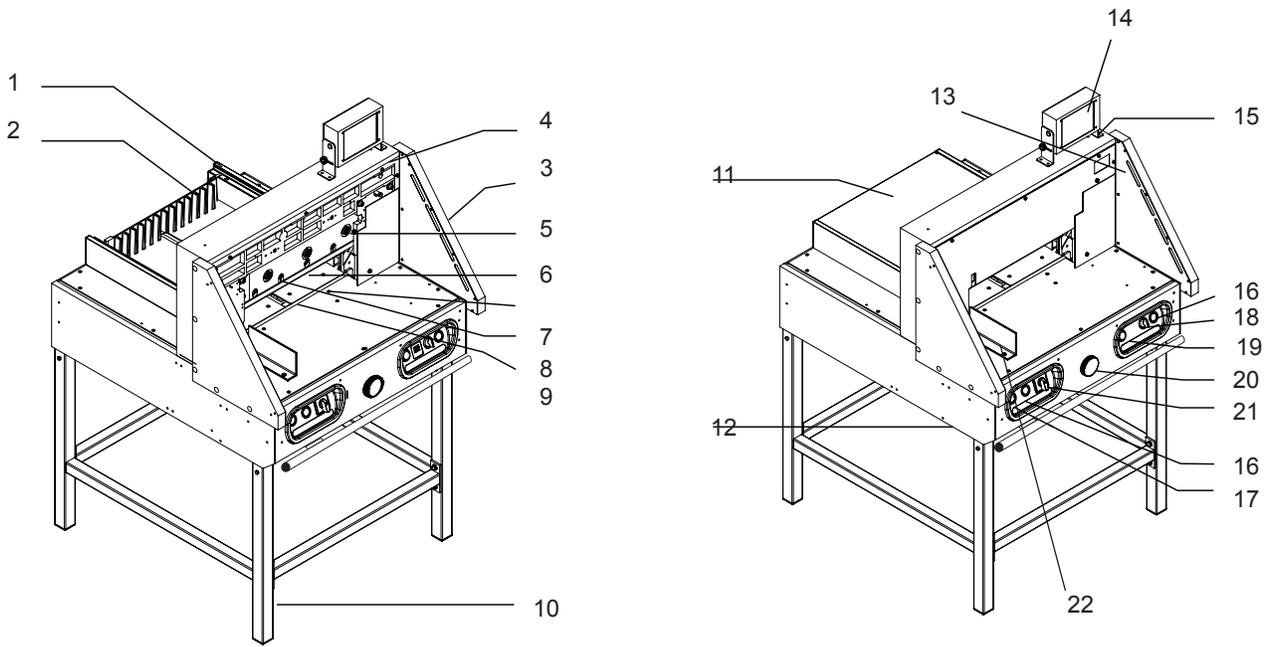
The wooden paper pusher and blade change tool are packed separately in the box with the machine. Please set these aside and install after connecting the cutter to the stand.

The cutter should be installed in a location with sufficient space to permit efficient assembly, operation and maintenance. Do not install in locations with direct sunlight or near a heat source.

The chassis and stand of the machine should be connected as follows:

1.	Set the legs so the 4 threaded pins point upward.
2.	Assemble the crossbars of the stand so the color labels on each match the corresponding legs. Fasten stand securely with hexagonal screws.
3.	Place the chassis correctly onto the assembled stand.
4.	Tighten the four hexagonal nuts.
5.	Position stand shelf in place and fasten securely with enclosed screws.

OVERVIEW



DESCRIPTION OF EQUIPMENT PARTS

1.	Side Gauge with Scale	In mm/cm and inches. The indicator on the back-gauge shows the measurement. Fine adjustment is done via the electronic hand wheel (20). Minimum adjustment is 0.5mm.
2.	Back Gauge	Operated by the touchscreen control panel or the electronic hand wheel. Moves the paper stack into the appropriate cutting position.
3.	Blade Adjustment Access	The blade height can be adjusted up to 2mm by using the adjustment screw. To lower the blade (+), turn to the left. To raise the blade (-), turn to the right. NOTE: If the blade is adjusted too low, it will cut deeply into the cutting stick, damaging not only the stick but the cutting blade. The optimal blade height is when the last sheet in a stack is cut accurately.
4.	Carrier (support)	Carries the blade holder and the entire mechanism of the machine.
5.	Three Socket Headless Screws	Adjustable screws to level the blade for even cutting.
6.	Cutting Blade	Made of high-quality carbon steel.
7.	Blade Holder	Holds blade in place. There are five screws for blade positioning, (which should be set up and released step-by-step following the blade replacement instructions) and adjusting the blade for even operation.
8.	Cutting Stick	Plastic stick which protects the edge of the blade during cutting. Can be repositioned and used on all four sides before being replaced.
9.	Cutting Stick Access Slot	Insert screwdriver here in order to lift and remove cutting stick.
10.	Stand	Steel stand with shelf, assembly required.
11.	Rear Safety Cover	Clear plexi cover is provided for operator safety and helps to prevent dust buildup.
12.	Fuse Panel	There are six fuses, as follows:

FU1	FU2	FU3	FU4	FU5	FU6	FU7	FU8
10A	10A	10A	10A			2A	2A

13.	Infrared Light Beam Safety Curtain	The infrared light beam safety curtain will be activated automatically once the cutter is powered on. Green LED indicators show when it is activated. Red LED indicators show when the beam has been broken.
14.	Touchscreen Control Panel	Use the LCD touchscreen to program up to 99 jobs, up to 30 cuts each.
15.	Cover	Attached to the cutter with eight screws. Disassemble only in case of blade change or maintenance.
16.	Clamp Enable Switches	Press and hold the two clamp enable switches to clamp the paper securely in place. The clamp switches are indicated by this icon  The right switch is used for both clamp and blade activation.
17.	Cutting Blade Enable Switch	Press and hold the two blade enable switches to activate the blade and cut paper. The blade switches are indicated by this icon  The right switch is used for both clamp and blade activation, in conjunction with this green button.
18.	Key-Activated Mode Select Switch	Turn to right for cutting. Turn to left for blade replacement. Turn to middle to stop all operations.
19.	Power Light	Shows when machine is powered on.
20.	Electronic Hand Wheel	Used to adjust back gauge to appropriate paper size and cut length. To move the back gauge toward the operator, turn clockwise. To move the back gauge away from the operator, turn counterclockwise.
21.	Power Switch	Used to turn on and off power to the cutter.
22.	Paper Alignment Bar	Steel side bar helps to align the paper prior to cutting.
	LED Laser Cutting Line (not shown)	Shows operator exactly where the blade will cut the paper stack.
	Wooden Push Block (not shown)	Used to help align paper stacks for precise cutting.
	Blade Change Safety Tool (not shown)	This device is used to safely remove the blade when it needs to be sharpened or replaced.
	Tool Kit (not shown)	Includes T-wrench and interchangeable bits for use in adjustments and blade replacement.

OPERATION - Basic Cut

1. Plug in the cutter to an appropriate power outlet (110V 20 Amp dedicated). Turn on red power switch.
2. Choose metric or inch measurements by pressing either the “cm” or “inch” box on the touchscreen (Fig. 1). Then touch the back gauge block, and a keypad will appear (Fig. 2)
3. Be sure the key-activated mode select switch (page 4, part #18) is turned to the right on Cut mode “1” .

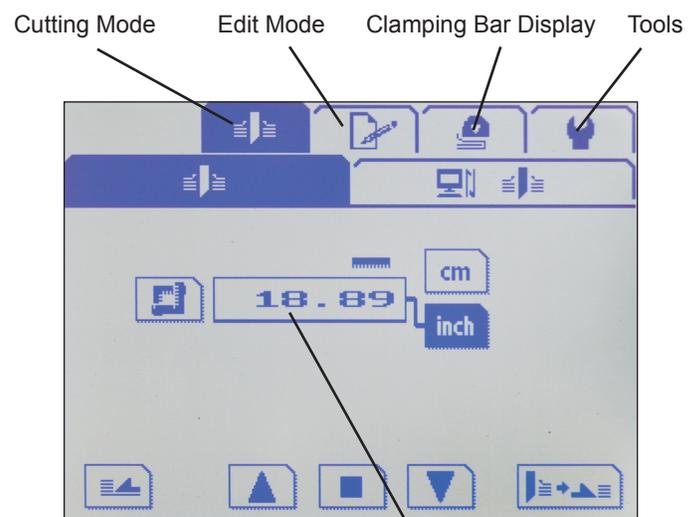
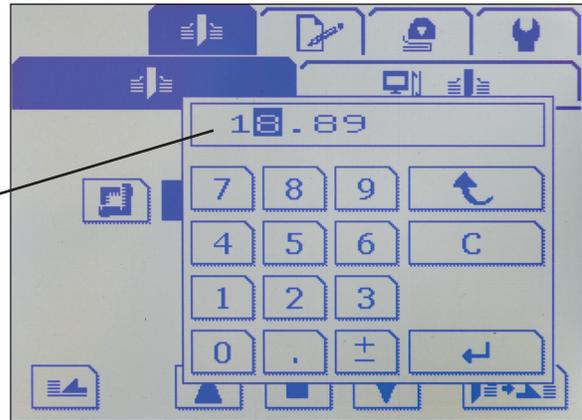


Fig. 1 Back gauge block

- Press the Back Gauge position block (Fig. 2) on the keypad to set the back gauge position for desired cut size. Press Enter. 



Back Gauge Position Block

- Load paper.
- Press green enable buttons (Page 4, #17) to activate paper clamp and cutting blade.

Fig. 2

Programming a Standard Job

- Press the Edit button on the touchscreen to enter programming mode (Fig. 3). Select a Job Number by pressing that block on the screen. Then press Enter. **NOTE:** Jobs that are already programmed are outlined.

The Cut-True 27A has the capacity for up to 99 saved jobs.

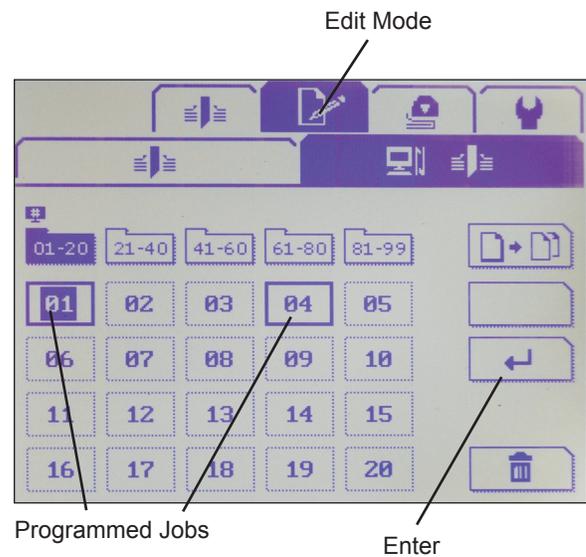


Fig. 3

- Press the enter button  to access the first cut. Press the back gauge block of cut 1 to set the first cut (Fig. 4).

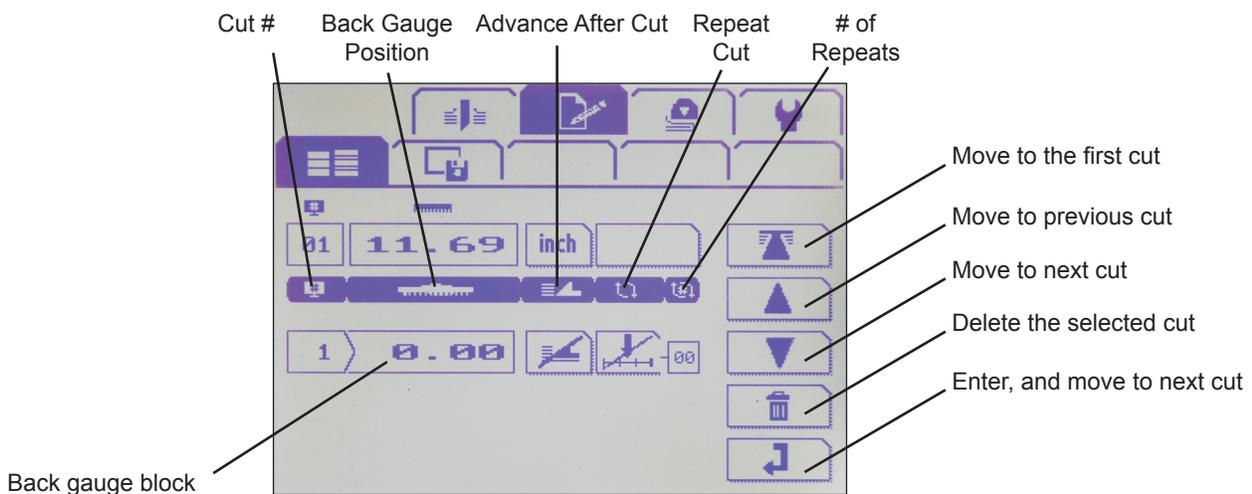


Fig. 4

3. Enter position of back gauge for first cut, then press Enter. 

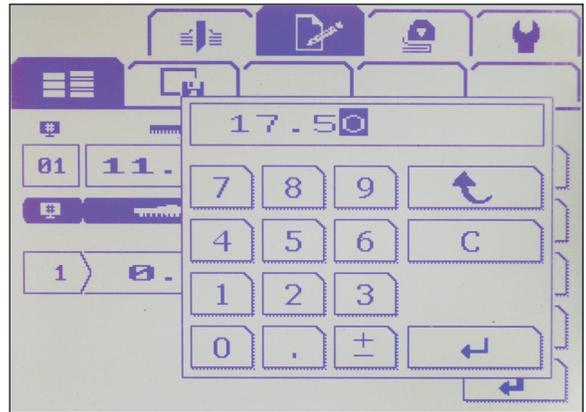


Fig. 5

4. If you would like the back gauge to slide the paper stack forward after making the cut, press the Advance icon (Fig. 6). 

5. To repeat a cut length, press the Repeat Cut icon (Fig. 6). 

Press the back gauge block of the cut number to be repeated enter the **length of the cut and then** press the # of Repeats icon  to key in the number of repeats.

Then press the Enter icon  to move to the next cut.

6. Repeat steps 2 - 5 for any additional cuts. Remember to press the Enter icon  to move to the next setting.

7. When all cuts and settings are complete, press the Save icon (Fig. 6), and choose "Save."

8. To exit Edit mode and return to Cut mode, press the Cut Mode icon (Fig. 7).

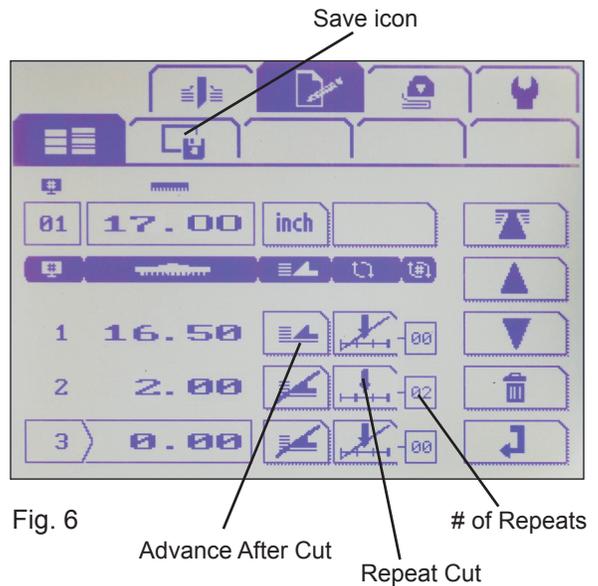


Fig. 6

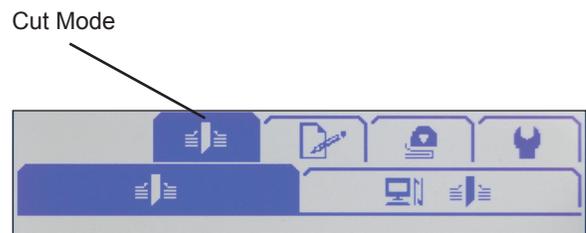


Fig. 7

Programming a Divided Cut

If all cuts on a sheet are the same length (i.e. no border or full bleed and no gutter between cuts), simply program a Divided Cut (Fig. 8).

1. Go to the Edit mode (Fig. 3) and select a job to be programmed.
2. Press the enter button  to access the first cut. Press the back gauge block of cut 1 to set the first cut (Fig. 4).
3. Enter the back gauge position for the first cut (Fig. 8a). 15" will be used for this example.
4. Press the Divided Cut icon and enter the total paper length, and the # of sections and press the Save button  (Fig. 8b).

NOTE: The number must be divisible. For example, $15/5=3$ and $10/4=2.50$ are both divisible, but $14/6=2.333333333$ is not divisible.

5. The measurements will be automatically calculated for the job (Fig. 8c). Press the Save icon  to store the job.

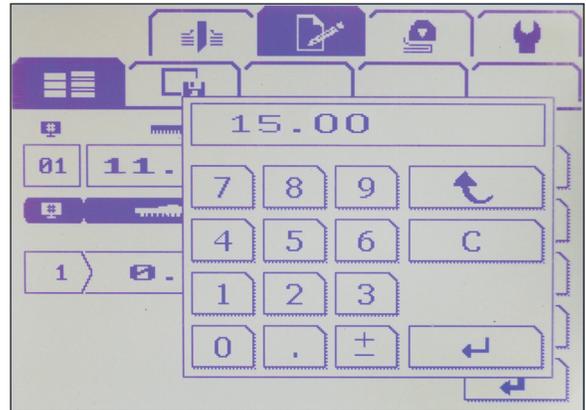


Fig. 8a

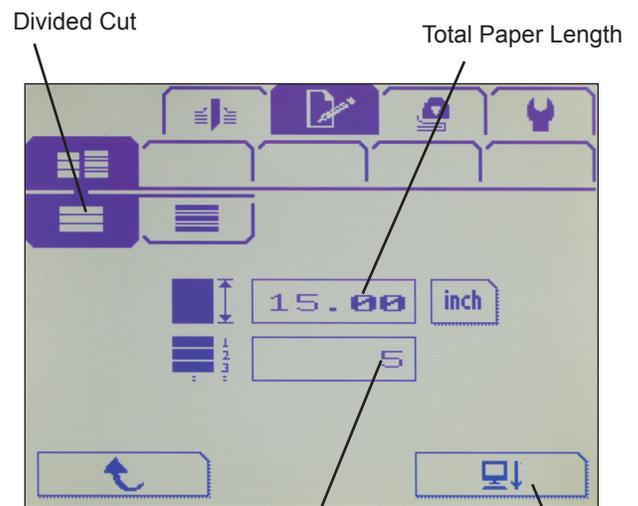


Fig. 8b

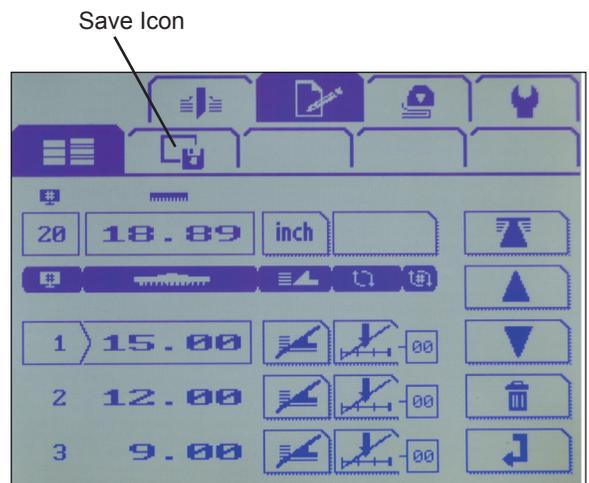


Fig. 8c

Programming an Advanced Divided Cut

If there are top/bottom borders and/or gutters to be cut between sections, use the Advanced Divided Cut Mode (Fig. 9b).

1. Go to Edit mode (Fig. 3) and select a job to be programmed.
2. Press the enter button  to access the first cut. Press the back gauge block of cut 1 to set the first cut (Fig. 4).
3. Enter the back gauge position for the first cut (Fig. 8a). 15" will be used for this example.
4. Press the Advanced Divided Cut icon and enter the following (Fig. 9b):

- * The size of the large section(s)
- * The size of the small section(s) (i.e. border or gutter)
- * The number of sections, including large and small

NOTE: The number must be divisible. For example, $15/5=3$ and $10/4=2.50$ are both divisible, but $14/6=2.333333333$ is not divisible.

5. Press the Save icon  (Fig. 9b) to store these settings.

6. The measurements will automatically be calculated for the job (Fig. 9c). Press the Save icon  to store the job.

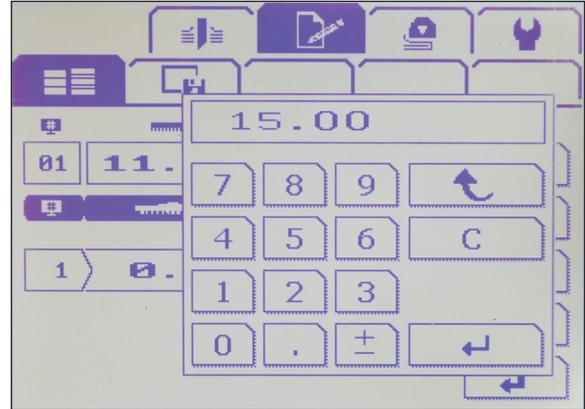


Fig. 9a

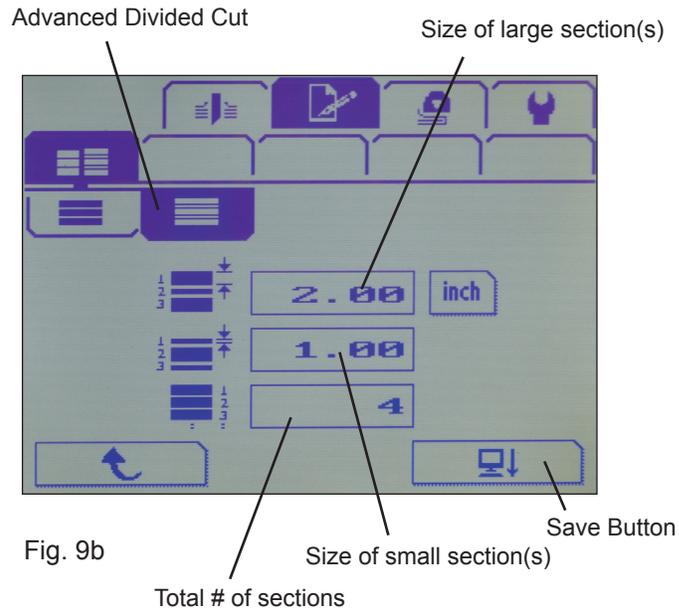


Fig. 9b



Fig. 9c

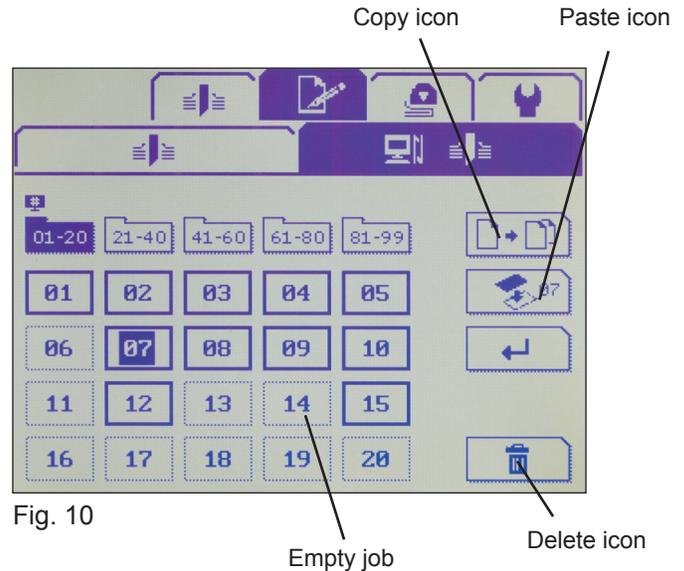
To Copy or Delete a Programmed Job

Copy a job

1. To copy a programmed job, go to Edit Mode.
2. Press the number of the selected job.
3. Press the copy icon (Fig. 10).
4. Select an empty job location.
5. Press the paste icon to paste the job information.

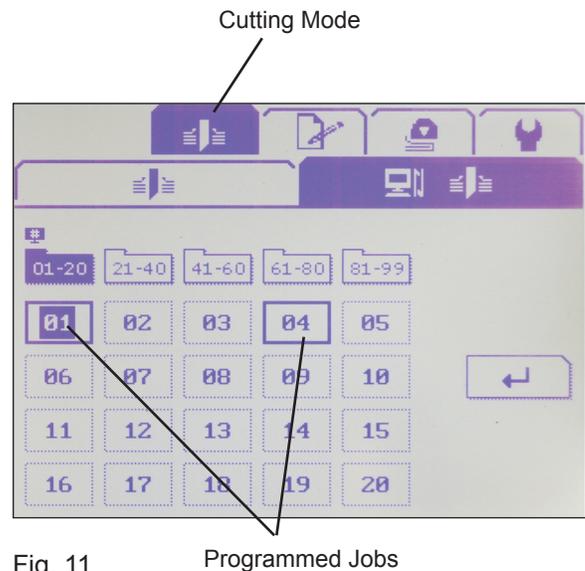
Delete a job

1. To delete a programmed job, go to Edit Mode.
2. Press the number of the job you wish to delete.
3. Press the Delete icon (Fig. 10).
4. The screen will read "Do you want to delete this job?"
5. Press Save to save delete the job or Cancel to cancel the action and keep the selected job.

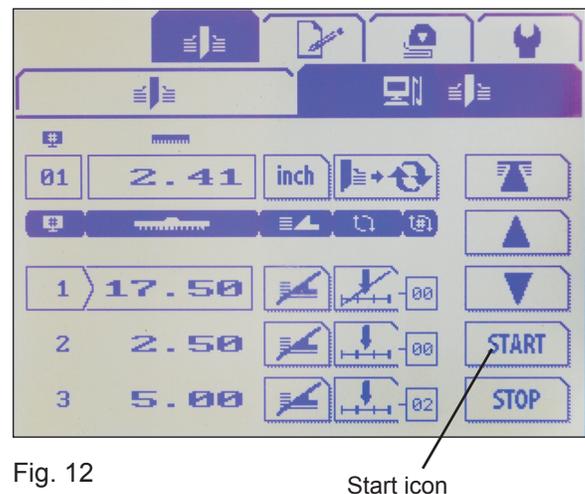


OPERATION - Accessing a Programmed Job

1. To cut using a programmed job, be sure you are in Cutting Mode (Fig. 11), and select a job by pressing the Job # and press Enter.
NOTE: Programmed jobs have a dark border.



2. Load paper, and align to back gauge and side guide using the wooden push block. Once it's aligned, press the Start icon (Fig. 12).
3. Press the two green enable buttons to engage the clamp and blade. The cutter will then advance to the next cut in the list. You must press the enable buttons for each cut.
4. To stop the cutting process, press the Stop icon, below the Start icon.



Adjustment of Cut

If you set the initial cut at 18" but only insert paper that is 17", you need to enter 17" in this space indicated (Fig. 13) and press the calibrate back gauge icon to confirm the adjustment.

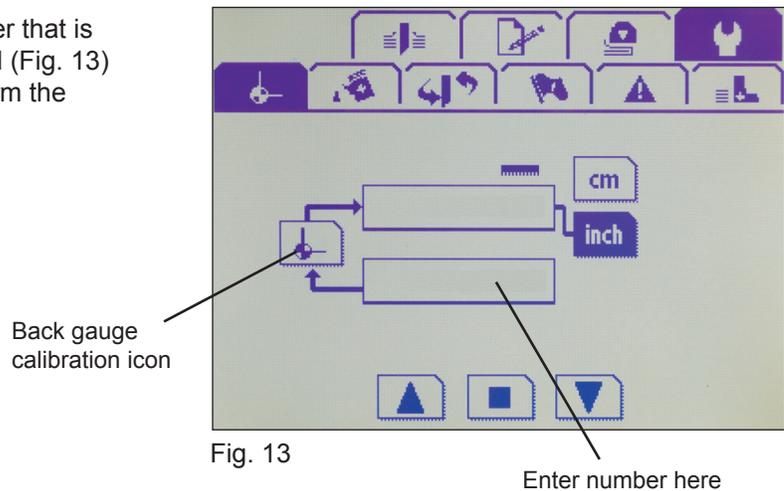


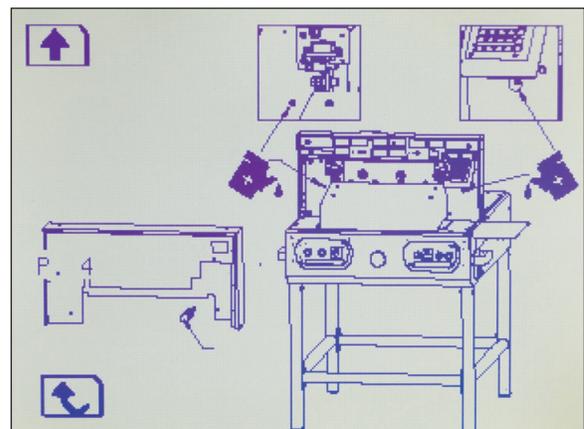
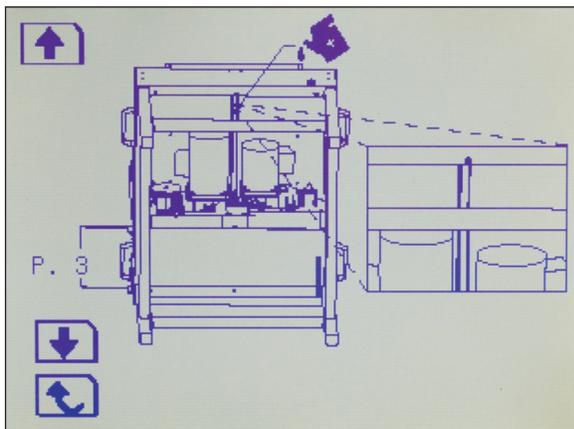
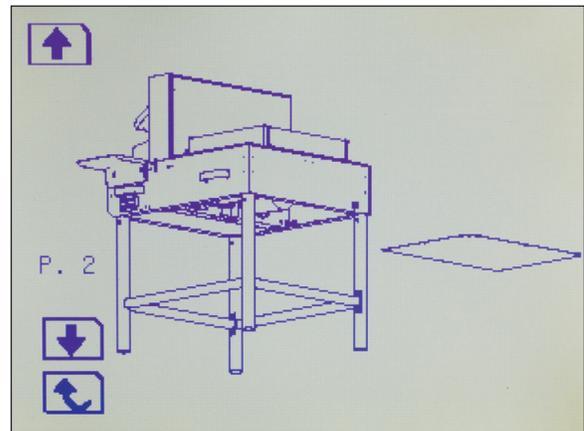
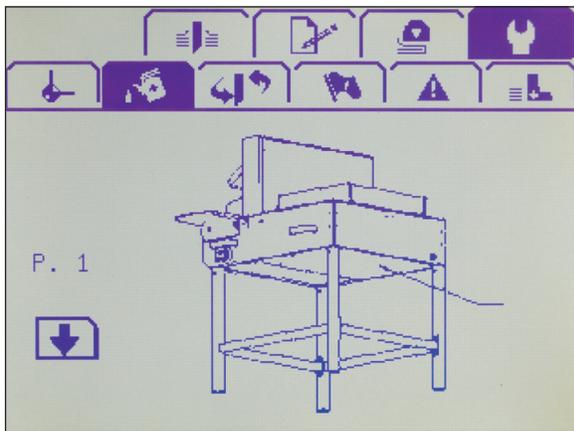
Fig. 13

OILING

All moving parts with screws should be checked periodically to be sure the screws are tight. They may become loose in the process of transportation. Users should also check and tighten the screws after more than 200 cutting cycles.

All moving parts should be lubricated and oiled periodically to maintain performance and equipment life. Before lubricating, these parts should be cleaned to remove paper dust and old deposits of oil and grease.

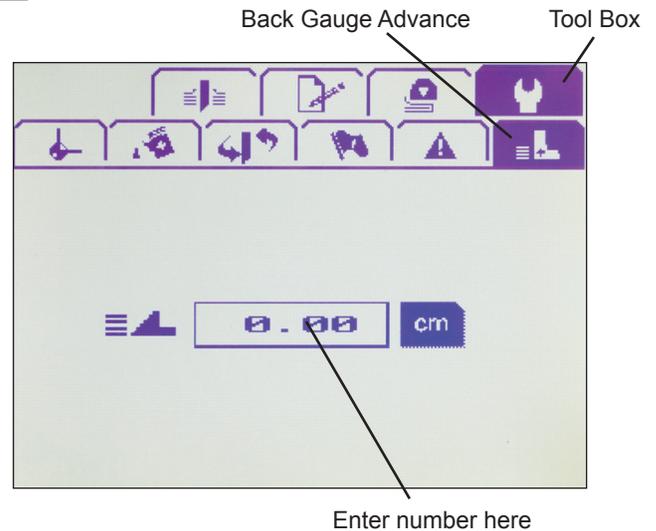
Press the Tool Box icon, then the lubrication icon and follow the steps outlined on the screen.



Adjusting the Back Gauge Advance Distance

To program the distance the back gauge slides the paper stack forward after making a cut, press the Tool Box icon, then the Back Gauge Advance icon.

Enter the desired distance in the window, and choose between inches or cm.



Signals

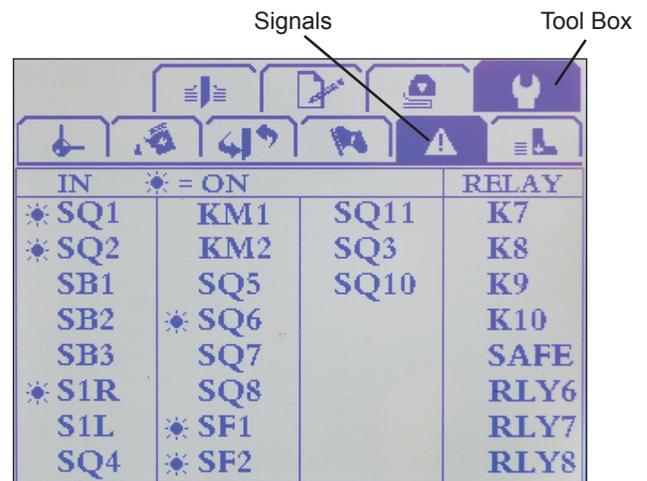
To check which systems are currently functioning, press the Tool Box icon, then the Signals icon.

When the machine is in Idle status, the following signals will be * ON:

SQ1 SQ2 S1R SQ6 SF1 SF2

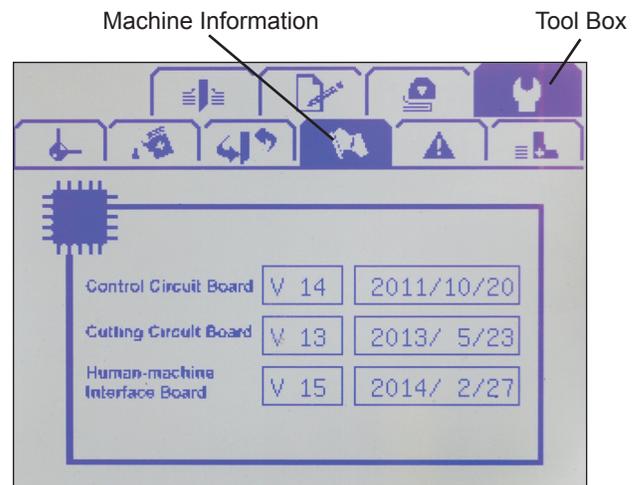
When the infrared laser safety guard is active, the following signals will be on or off:

S1R SQ6 (*ON)
 SQ1 SQ2 SF1 SF2 (OFF)



Version of Cutter

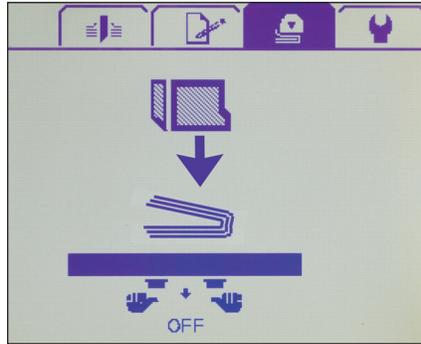
To check the version of the machine, press the Tool Box icon, then the Machine Information icon.



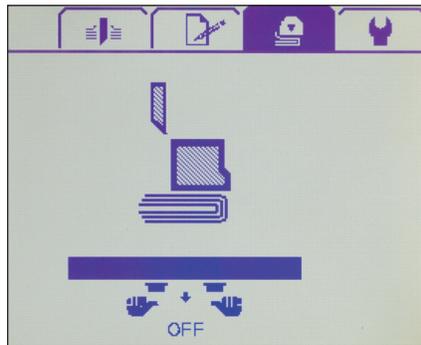
Display of the Clamping System

This function allows you to see the movements of the paper clamping system. Press the Clamp Status icon.

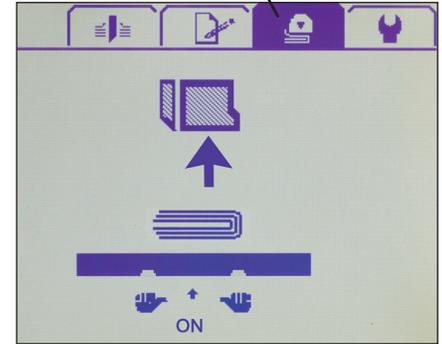
Stage 1:
The clamping bar lowers when you press both of the green clamp enable buttons.



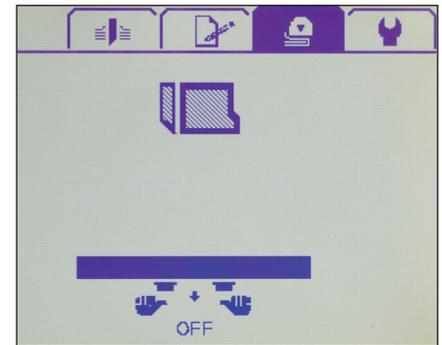
Stage 2:
The clamping bar is holding the stack of paper securely.



Stage 3:
The clamping bar is going up when you push either of the clamp enable buttons.



Stage 4:
The clamping bar is in its original position.



ROTATING / REPLACING THE CUTTING STICK

The cutting stick is the surface the blade contacts during the cutting process. It can be rotated and used on each side, 4 times altogether.

If the last piece of paper in the stack is not cut through cleanly, and the blade depth has been adjusted properly, the cutting stick should be rotated or replaced.

The cutting stick sits in a channel in the base of the cutter, just below the blade carrier. To remove it, first turn off the power. Then insert the 5mm screwdriver into the cutting stick access slot (see photo below left) and lift up. Grasp the cutting stick and remove (see photo below right). Rotate the cutting stick to a new side and re-install.

NOTE: When the cutting stick is rotated or replaced, the blade height must be readjusted. See the next page for blade height adjustment instructions.



ADJUSTING BLADE HEIGHT / CUTTING DEPTH

When the cutting stick is rotated or replaced, or the blade is replaced, the blade height must be readjusted. A blade which cuts too deeply damages not only the cutting stick but the blade itself. The optimal blade height is when the last sheet in a stack is cut accurately. The blade height can be adjusted up to 2mm.

1. The blade adjustment access is on the right side of the cutter, just behind the fuse panel (see picture, below left).
2. Slide the finger knob down and hold in place to open the access door.
3. Insert the the T-wrench from the tool kit into the adjustment slot. To lower the blade (+), turn to the left. To raise the blade (-), turn to the right.
4. NOTE: You must remove the T-wrench before restoring power to avoid injury or damage to the cutter.

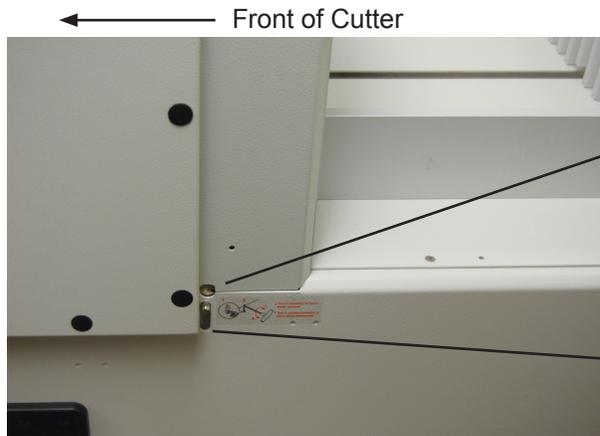


Fig. 14a

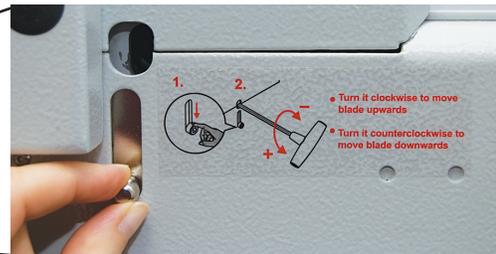


Fig. 14b

CUTTING BLADE MAINTENANCE

The cutting blade is made of heat-treated high-carbon steel and is designed for repeated use. However, over time the blade will become dull, and not perform to the highest standards. Cutting heavy paper or cardboard will dull the blade more quickly than thinner paper stock. A dull blade will not cut accurately. Blade lifetime with normal paper is approximately 1,600 cuts (tested in maximum capacity).

NOTE: If the blade jams in the paper stack or leaves a groove in the paper, it should be changed immediately.

If the blade is not making clean, accurate cuts, check the following:

- * Have you rotated or replaced the cutting stick?
- * Have you correctly adjusted the height of the blade?

If so, the blade will need to be replaced. The blade can either be re-sharpened by a professional, or it can be replaced with a new blade. To avoid injury, follow the Blade Changing Procedure and use the Blade Change Safety Tool, included with the cutter.

TROUBLESHOOTING

Blade doesn't move	Check if the main motor magnetic contact is activated.
No power	Check power source and all control circuit fuses.
Overload	Wait until the breaker automatically resets, which takes around 30-60 seconds. The indicator light will be off. Reduce size of paper stack or change blade.
Cutter won't operate	Press the two "enable switches" again, and be sure nothing is blocking the infrared safety light beam curtain.
Other issues	Please contact your Formax dealer for service.

Resetting the Blade Change Notification Message

When the Cut-True 27A has reached 1,500 cuts, a message will appear on the control panel "CUT1500." When this happens, check the blade to see if it is dull or still sharp enough to cut through one sheet of copy paper. If it is dull, replace the blade using the procedure on the following pages.

If the blade is still sharp, reset the control panel message using these steps:

Step 1: Press "HOME" to move the backgauge to the start position before resetting the counter.



Step 4: Press the number on the screen until the it reads "Do you want to delete it?"



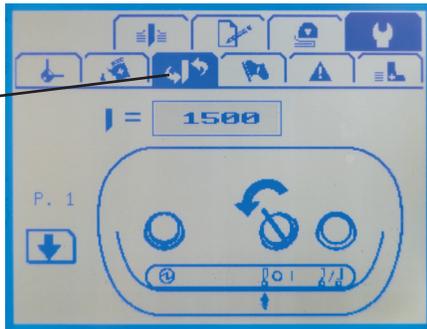
This message will appear on the screen.



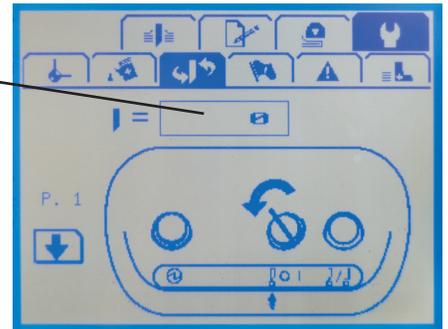
Step 5: Select "SAVE" to reset the counter to zero



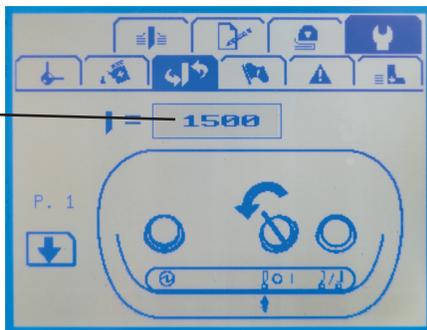
Step 2: Select the blade change icon, shown here.



Counter is reset to zero.

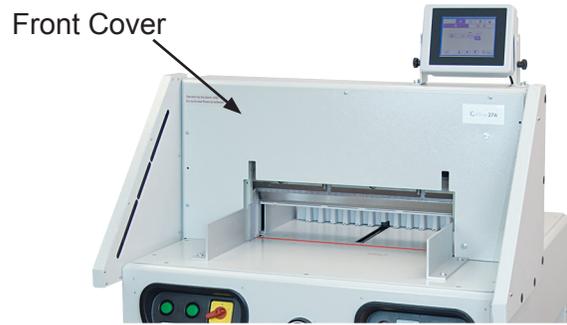


Step 3: The number on the screen will show 1500.



Blade Replacement Procedure

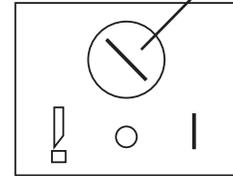
1. Loosen and remove (8) screws from the cover. Remove cover.



2. Turn the power switch ON, and turn the select switch to the left.



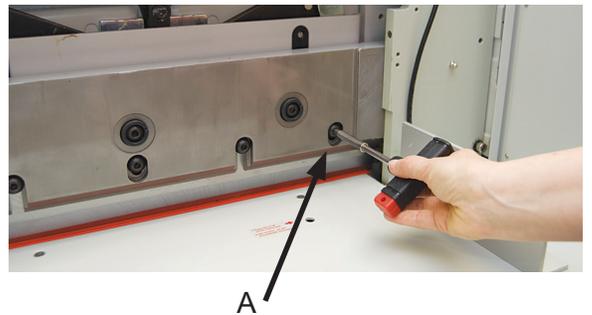
Select switch in blade change position



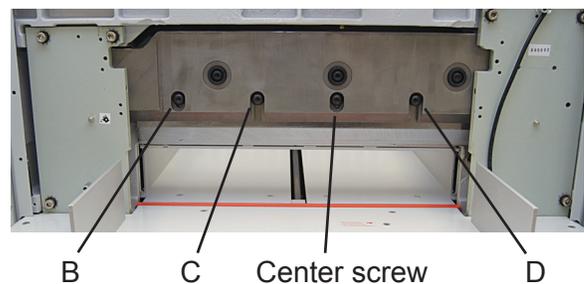
3. Press two enable switches simultaneously to move the blade down to the bottom position.



4. Turn the select switch to the center (OFF) position. Using the T-wrench, remove the far right blade screw (A).

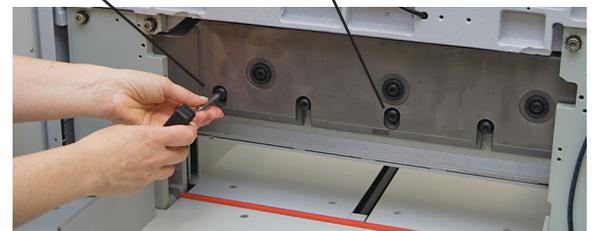


5. Turn the select switch to the right. The blade will move up automatically. Once fully retracted, turn the select switch to the center (OFF) position and turn the power OFF.



6. Remove the far left screw (B). Remove the screws to the left and right of center (C & D), but leave the center screw in place.

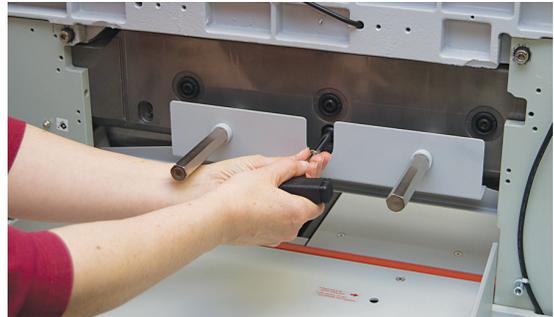
NOTE: Do not remove the center screw.



6. Remove the blade change safety tool from the tool box and screw the handles into the two holes to the left and right of center (see photos). Screw them in tightly, to prevent the blade from falling out of the holder.



7. With the blade change safety tool in place, use the T-wrench to remove the center screw.

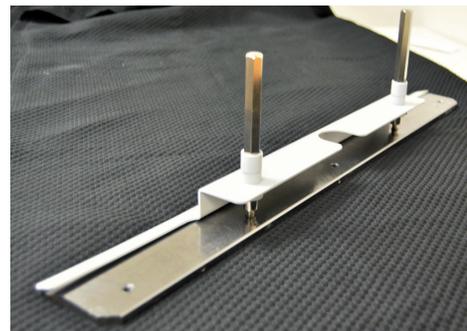


8. Grip and loosen both of the blade change tool handles by turning just a half reverse turn to remove the blade from the machine.

Carefully move the blade and holder downward in order to remove it safely from the machine.
NOTE: Be careful to avoid injury from the very sharp blade.



9. Carefully remove the old blade from the blade change safety tool. Set it on a flat surface and unscrew the handles. Cap the old blade with a protective pad to prevent injury.



10. Use the T-wrench to turn the three socket headless adjustable screws, and set to “0” point. Turn the blade fine adjustment device clockwise, at the right side of the machine.

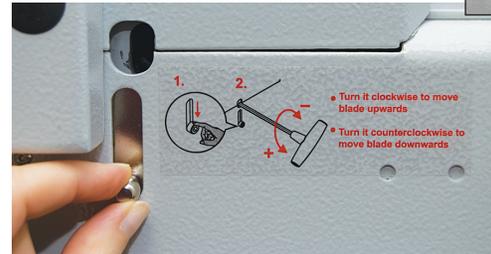
This ensures the new blade does not cut too deeply into the cutting stick.

To access the Blade Adjustment Device, located on the right side of the cutter (Fig. 14a), press down on the silver finger knob, and insert the T-wrench into the adjustment slot.

To move the blade up, turn clockwise.

To move the blade down, turn counterclockwise.

NOTE: Be sure to remove the T-wrench before turning on the power.



11. Place the new blade with the beveled cutting edge facing up, and the screw holes at the top, as shown here. Remove the protective pad from the new blade.

To attach the blade change tool, place it over the blade and screw the handles into the lower set of screw holes.

Reverse the procedure to install the new blade.



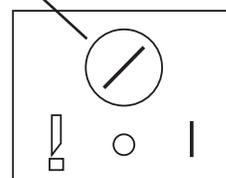
Beveled cutting edge

12. Once the blade screws are all securely in place, check to see if the blade touches the cutting stick evenly. If it is tilted or uneven, adjust the three socket headless screws until the blade and cutting stick match.

Check the cutting depth by turning the Select Switch to the right and cutting a single sheet of paper. If the blade does not cut accurately, adjust the three socket headless screws and the Blade Adjustment Device.



Select switch in cutting position



13. Once the blade is properly adjusted, reposition the cover and tighten all screws into place.