

# FORMAX<sup>®</sup>

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Cut-True 29A S/N: 0592 and above

Cut-True 29H S/N: 0626 and above

Guillotine Cutters

PROGRAMMING MANUAL  
Second Edition



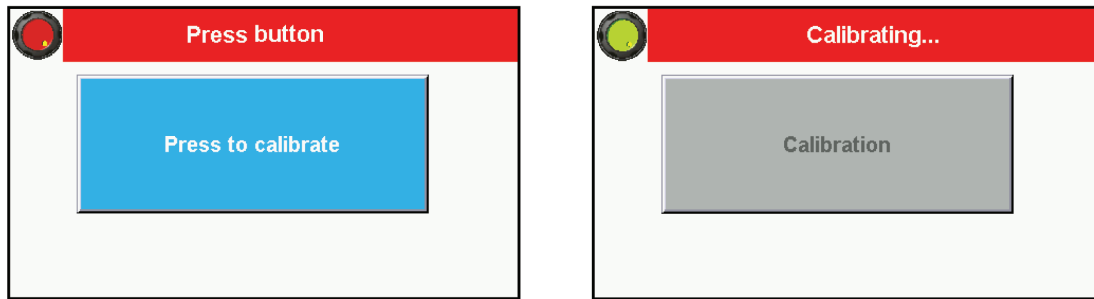
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# 1. Preparing for Programming

After turning on the cutter, the start screen appears:

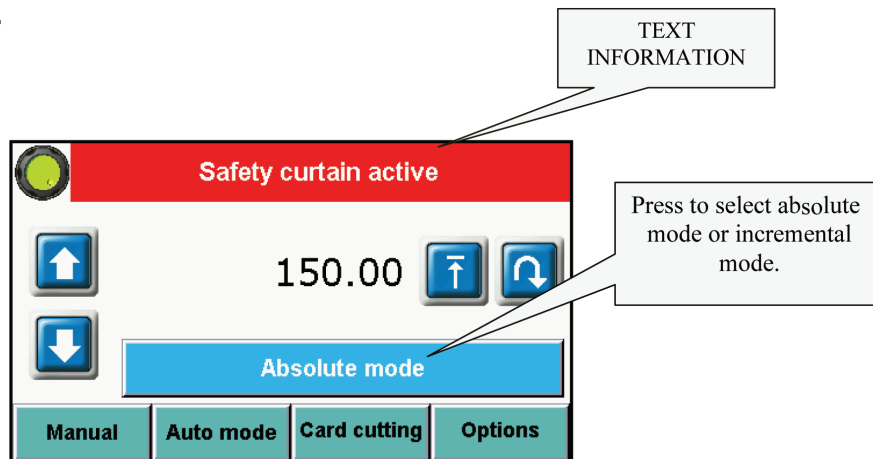


Press the blue button on the screen to start the machine control system

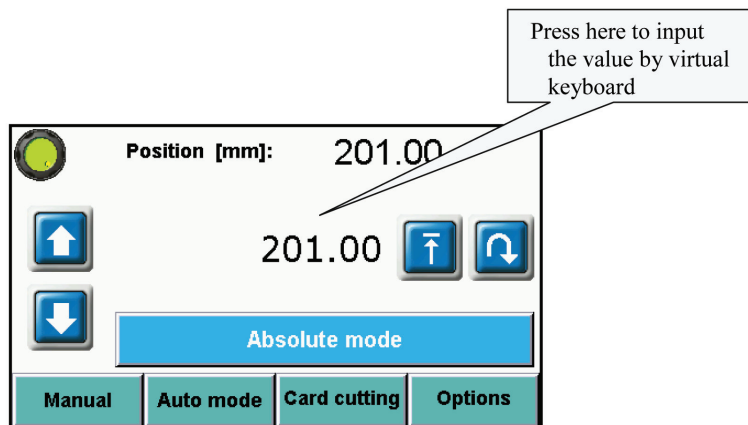
After pressing "Press to Calibrate" the cutter begins calibration

During calibration, the back gauge moves to maximum back position, then forward until the calibration sensor is detected. When calibration is finished, the screen displays Manual Mode.

## 2. Manual Mode



### 2.1 Absolute Mode - Automatically Moves to the Dimension Based on Sheet Size

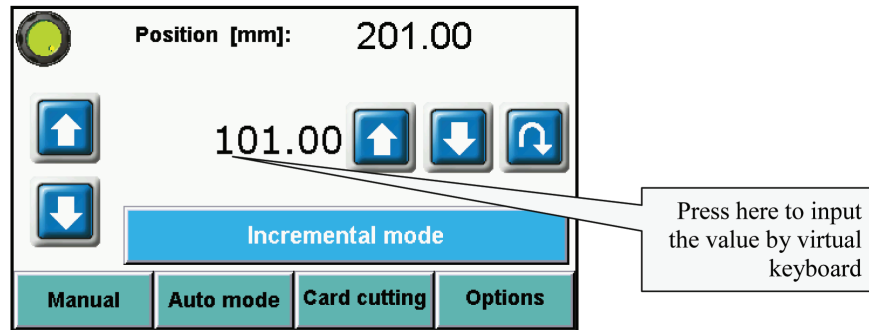


To input the required dimension, press the dimension on the screen and input the value via the on-screen keyboard.


Confirm by pressing the **ENTER** button and press . The back gauge will move to the requested position.

## 2.2 Incremental Mode - Repeating Same Dimension on Subsequent Steps

Incremental Mode is used for manipulating the total finished cut size, not the sheet size



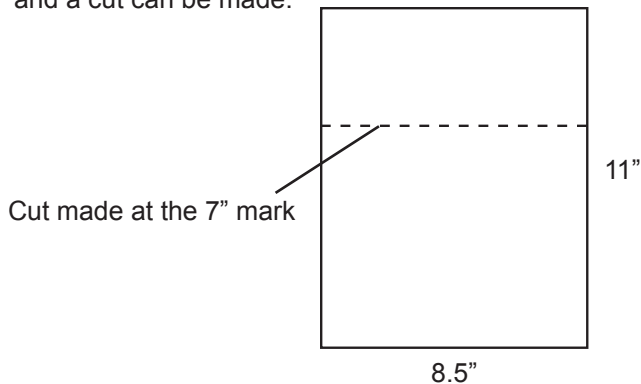
To move the back gauge in increments by the same dimension multiple times (forward or back), input this dimension by pressing it on the screen and using the on-screen keyboard.

Confirm by pressing **ENTER** then press . The back gauge will automatically move into the chosen position.

It is possible to repeat the move by pressing . This process can be repeated multiple times.

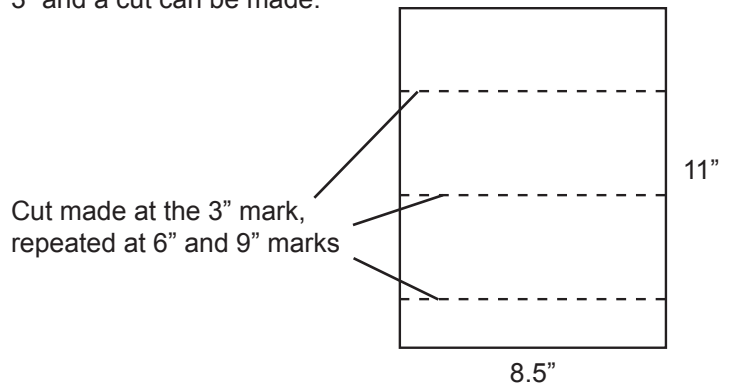
### **Example: Absolute Mode**

Using an 8.5" x 11" sheet, to make a cut at the 7" mark, enter 7 on the touchscreen. The back gauge will move to 7" and a cut can be made.



### **Example: Incremental Mode**

Using an 8.5" x 11" sheet, to make a cut at the 3" mark, enter 3 on the touchscreen. The back gauge will move to 3" and a cut can be made.




## 2.3 Manual Back Gauge Movement

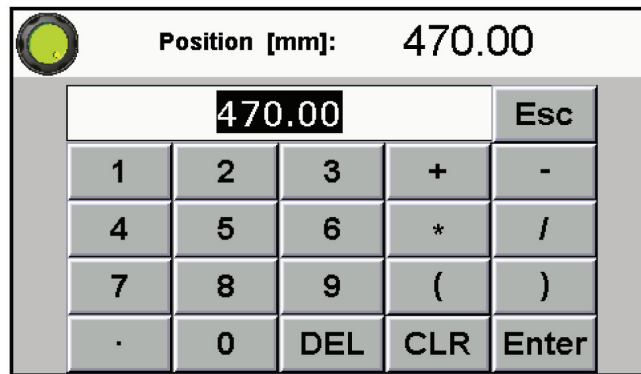
The back gauge can be moved manually forward or backwards by pressing the arrows on the left of the screen:



## 2.4 Paper Eject

By pressing the  button, the operator can easily remove the paper stack. The back gauge automatically moves the paper forward by the given value then returns to its initial position.

## 2.5 On-Screen Keyboard

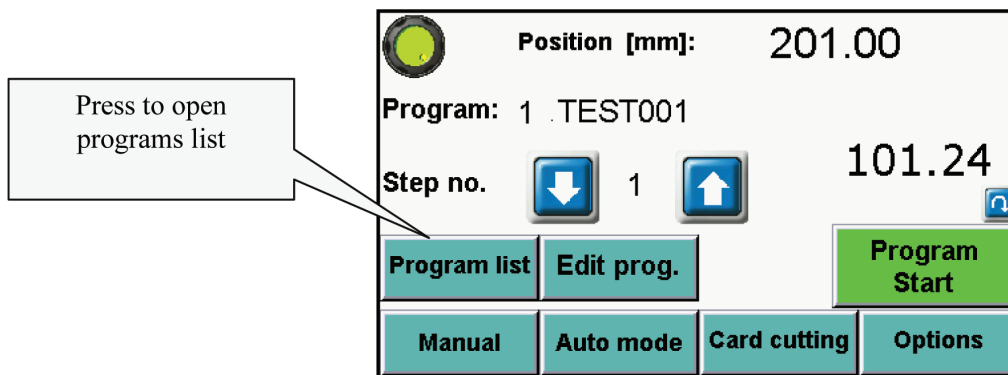


Programming module also includes a calculator function: multiplication, division, addition and subtraction.

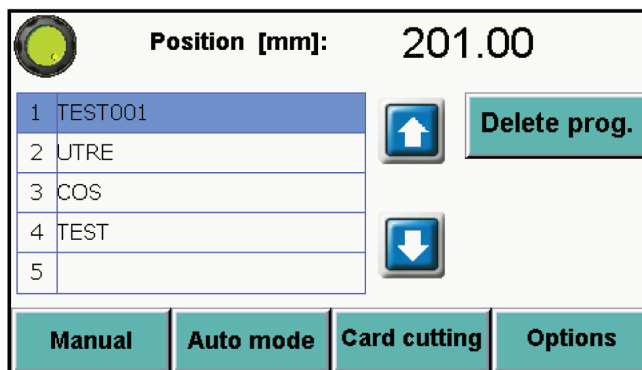
## 3. Auto Mode - Programming

This menu allows operators to select a programmed job, edit, and begin the program mode. Up to 100 programmed jobs can be stored in memory, with up to 100 steps (dimensions) in each program. For each step, the operator can program Eject and Paper Rotation Left or Right.

### 3.1 Program Selection



Select the program to edit or start. Programs can be selected from the list which appears on-screen after pressing the program name. Programmed jobs can also be selected by scrolling through the up/down arrows or by entering the program number.



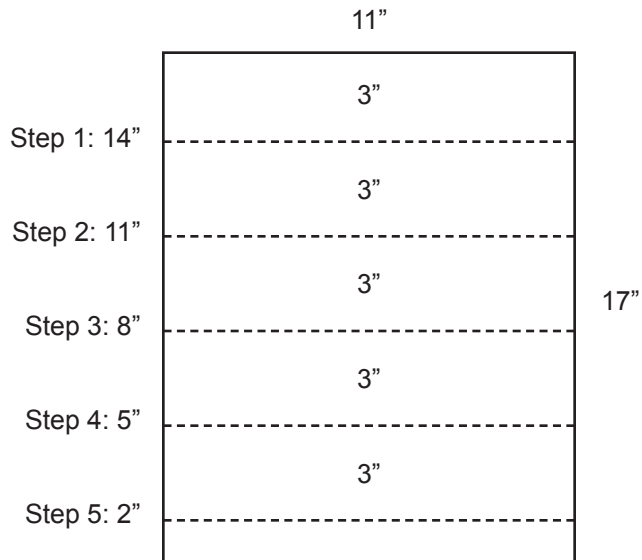
When selecting a saved program, it's possible to check the steps and dimensions written in the program (using the up/down arrows), and if the step has active functions (eject, paper rotation, etc.).

Delete Program: Press this button to delete all the steps in a program.

## Example: Creating a Program

Using an 11" x 17" sheet, to make five 3" cuts, program the cuts as follows using the touchscreen:

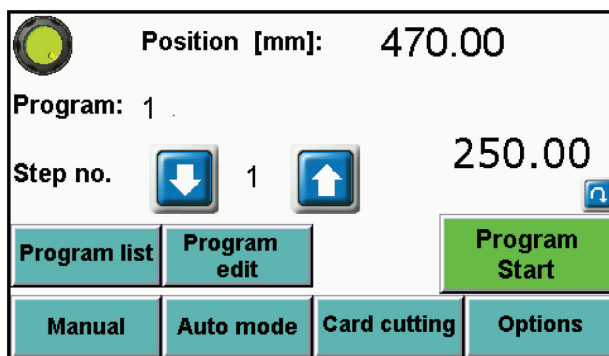
- Step 1: enter 14
- Step 2: enter 11
- Step 3: enter 8
- Step 4: enter 5
- Step 5: enter 2




## 3.2 Launching a Program from Memory


To launch a program, select the program and press **PROGRAM START**.

After pressing Program Start, the back gauge moves to the dimension saved in step 1 and a new screen appears:

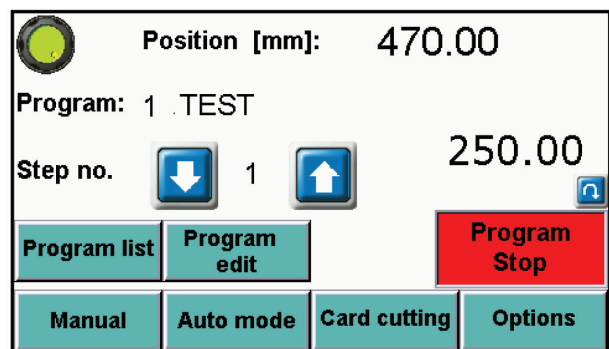


After each cut, the back gauge moves to the next step. When the last cut is made in the selected program, the back gauge automatically returns to Step 1 and the program can be repeated.

It is possible to skip a cut in a program. Press  to move the back gauge to the next step without making a cut.

Press  to return the back gauge to the previous step without making a cut.

To stop the program, press **PROGRAM STOP**.

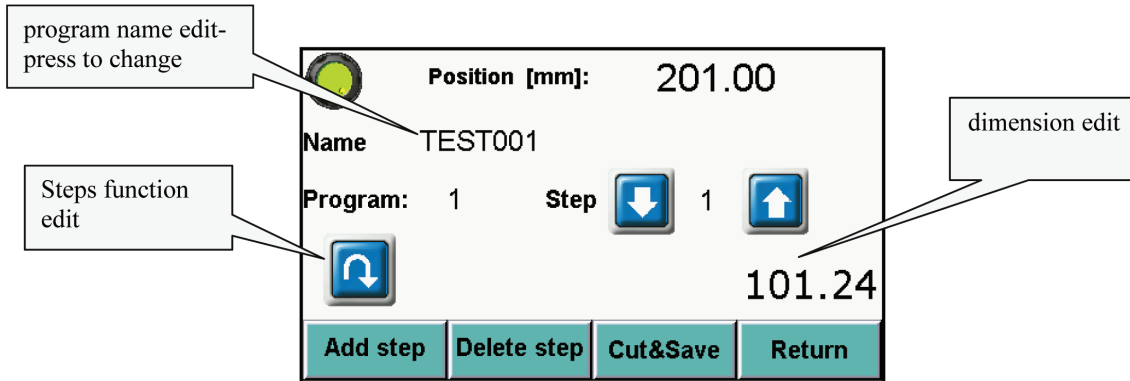


### 3.3 Program Editing and Saving

By pressing Edit, the operator can edit a saved program. The following elements can be edited: dimension, name, removing steps, turning Eject on/off.



After selecting program number 1, press **PROGRAM EDIT** and new screen appears:



To enter a new program name or change the existing name, press the Name window. The on-screen keyboard will open.

To add a special function to each step, press the Function icons, then press Dimension Edit to enter the dimension value. Press **ENTER** to confirm and move to the next step.

To save the program, press **RETURN** which will exit Program Mode.

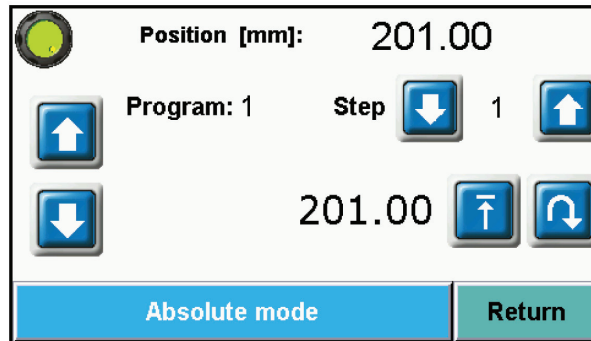
**Delete Step** - deletes one (current) step

**Program Reset** - deletes all the steps in a program

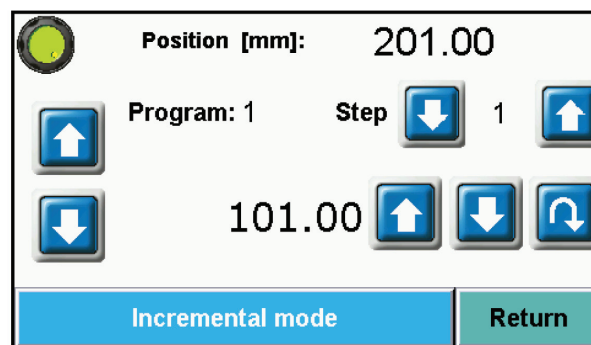
### 3.4 Cut and Save

This function allows the user to edit the program by making the back gauge move and cut.

Pressing the **Cut & Save** button activates the screen allowing the user to move into Absolute, Incremental or Manual Mode.



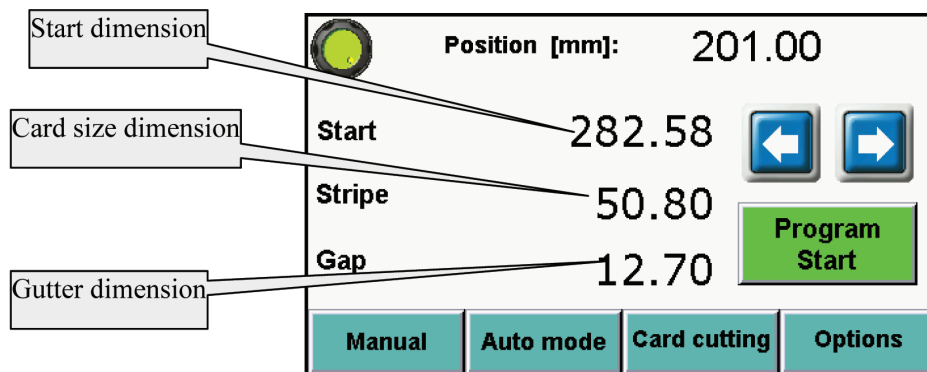
The dimension where the cut was made is saved automatically as a step dimension in the current program. After each cut, program automatically moves to the next step.



To exit **PROGRAM MODE**, press **RETURN** to return to the Main Menu.

### 4. CARD CUTTING

This program allows users to make a sequence of cuts with the same dimension (card size) or 2 alternating dimensions (card size and gutter/gap).



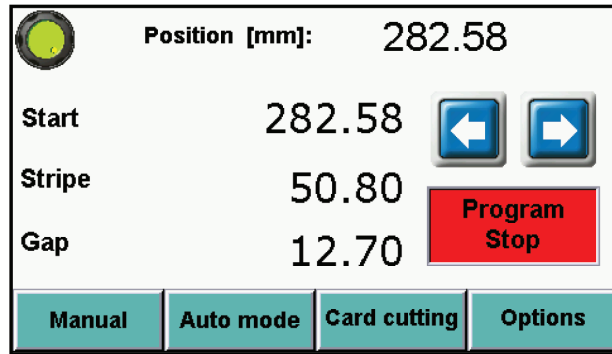
**START DIMENSION** - the first cut dimension in the card cutting sequence

**CARD SIZE DIMENSION** - dimension of card (stripe)

**GUTTER/GAP DIMENSION** - dimension of the gutter between cards (if used). If there is no gutter, enter the card dimension again.


**IMPORTANT NOTE:** Remember to confirm each value by pressing ENT

After the dimensions are entered, press **PROGRAM START**: the program starts automatically.

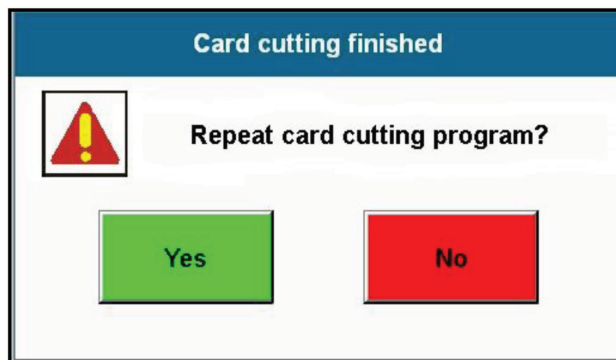


The back gauge moves into the starting position for the first dimension and after each cut, it moves automatically to the next step.

It is possible to skip programmed cuts. Press  to move the back gauge to the next step without cutting.

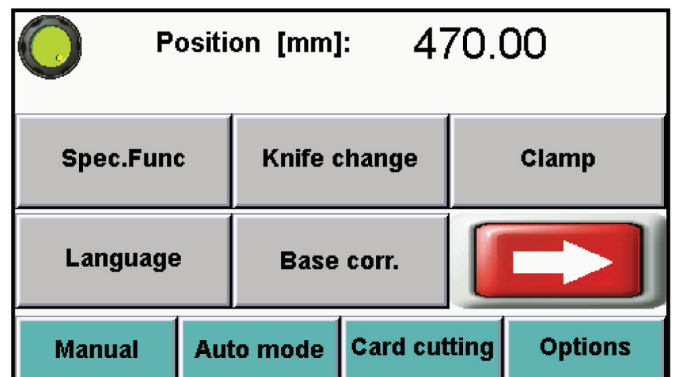
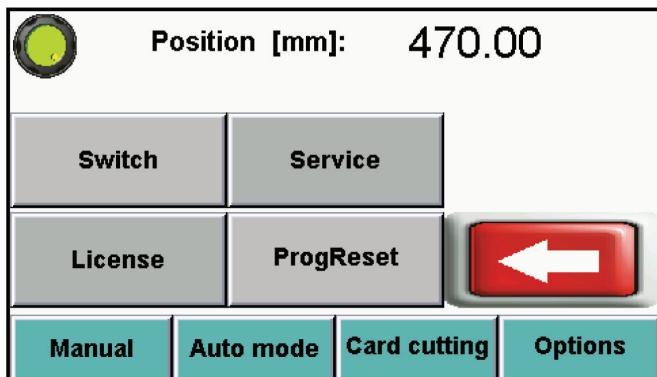
Press  to return the back gauge to the previous step.

Pressing **PROGRAM STOP** stops the card cutting program.



Pressing **YES** moves the back gauge automatically into the first dimension to repeat the same program.  
Pressing **NO** exits the program.

## 5. OPTIONS MENU



## 5.1 Options - Special Functions

Eject can be set in inches or mm. It is the value by which the paper stack moves forward at the end of a cycle. After each cycle, the back gauge returns to the previous position. Enter the value, then press **RETURN**.

The screenshot shows the 'Special Functions' menu with the following fields and buttons:

- Position [mm]:** 282.58
- Counter:** 83
- Eject:** 101.60 [mm]
- Units:** mm (selected), inch
- Buttons:** Delete, Return

Callout boxes provide instructions:

- A box pointing to the **Delete** button says: "Press to reset current counter".
- A box pointing to the **Eject** value says: "Press to change value".

The screenshot shows the 'Special Functions' menu with the following fields and buttons:

- Position [inch]:** 18.504
- Counter:** 0
- Eject:** 3.937 [inch]
- Units:** mm, inch (selected)
- Buttons:** Delete, Return

## 5.2 Options - Language

To set, choose a language, then press **RETURN**.

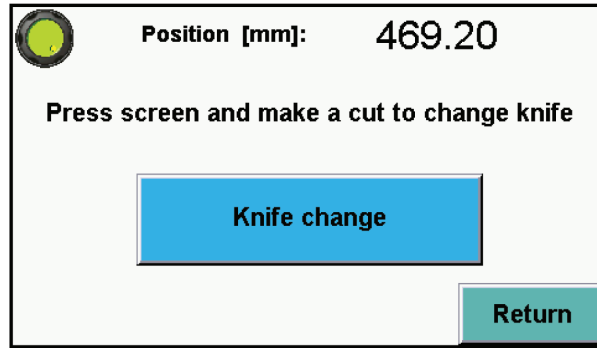
The screenshot shows the 'Language' selection menu with the following fields and buttons:

- Position [mm]:** 470.00
- Language Selection Grid:**

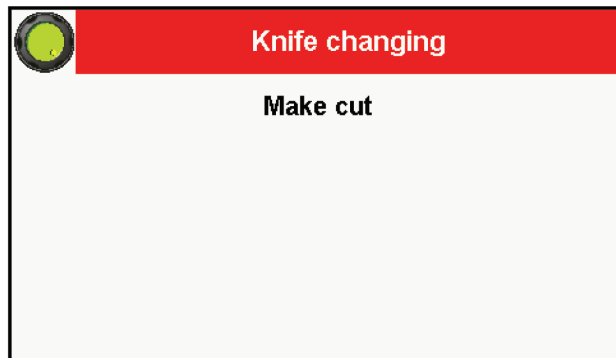
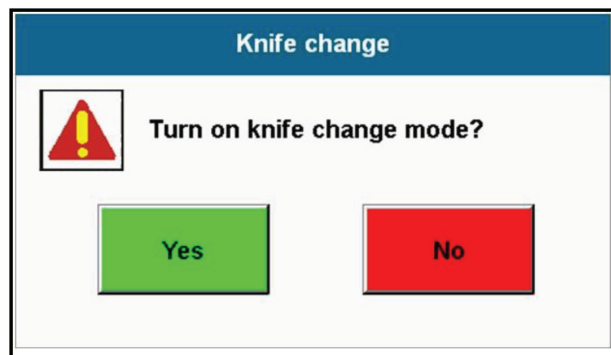
Polish	English	Italian
Portuguese	French	Finnish
German	Spanish	Russian
- Buttons:** Return

### 5.3 Options - Knife Change

To enter Knife Change mode, press **Knife Change** on the screen:

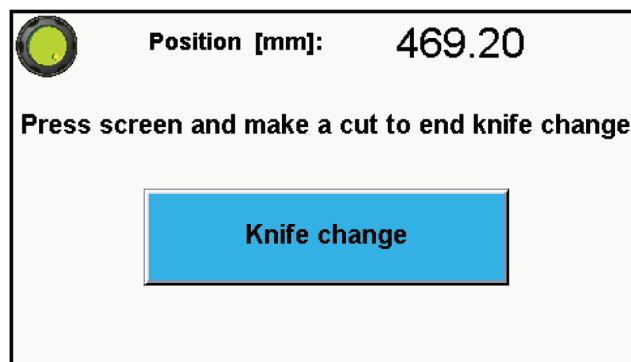


After pressing, the following screen appears:



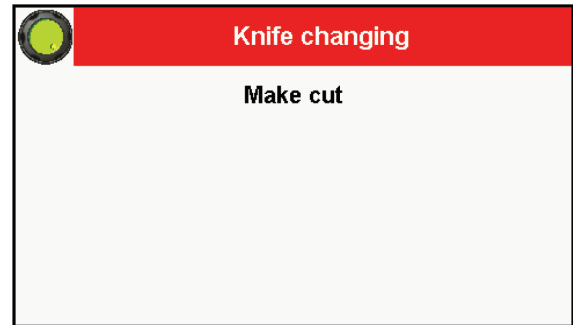
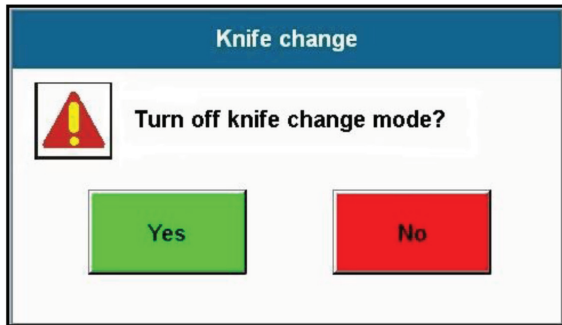
Press **YES** and make a cut by pressing the two cut buttons on the front of the cutter. This will put the knife in the lowered position, ready to be changed. Change the knife according to instructions in Operator/Maintenance Manual.

Once the knife change is complete, once again press **Knife Change**.



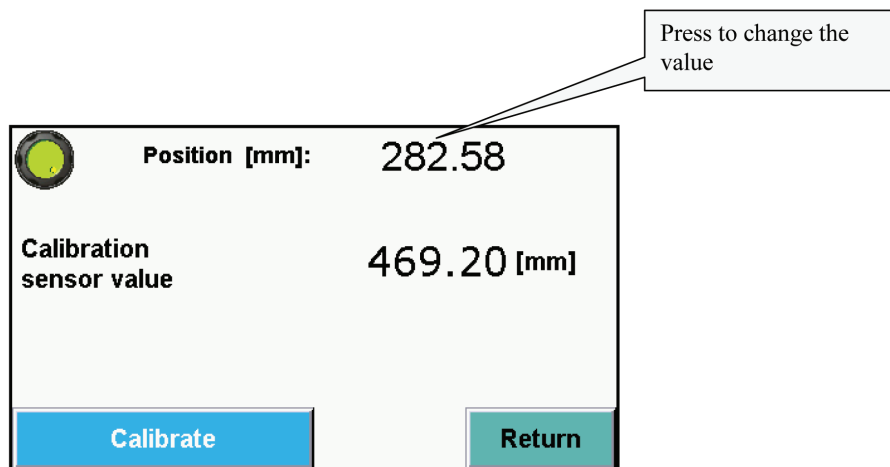
### 5.3 Options - Knife Change, continued

The following screen will appear. Press YES and make a cut to exit knife change mode.



### 5.4 Options - Base Dimension Correction

Base Dimension Correction allows for re-calibration without turning off the power, and optional correction of dimension (if displayed dimension does not correspond to real, measured dimension).



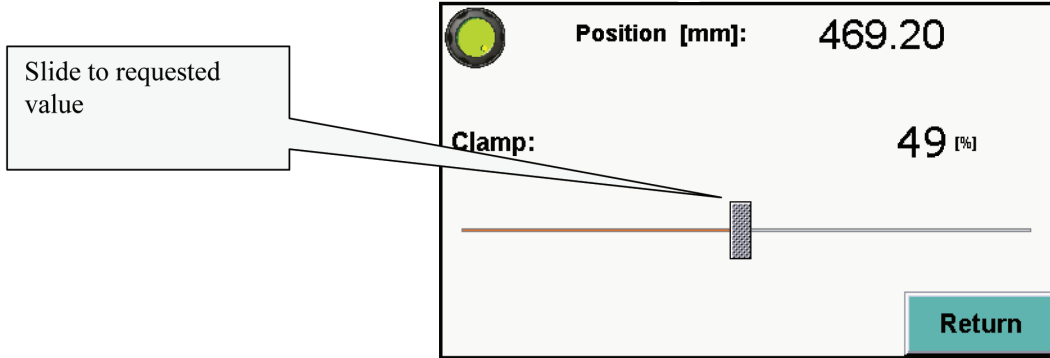
When starting the cutter, measure the cut paper and compare that measurement with the on-screen display. If both dimensions do not match, the operator must adjust the base dimension, following these steps:

- |  |
|--|
| • Move the back gauge into position (for example, 11")   |
| • Cut the paper  |
| • Measure the size of the cut sheet  |
| • If the measured size is 10.5", the operator should change the dimension by increasing the value (difference between screen size and "real" measured size), which would be .5" in this example. |
| • If the measured size is 11.25", the operator should change the dimension by decreasing the value, which would be .25" in this example.   |

After correcting the base dimension, press CALIBRATE button to save adjustment.

### 5.5 Options - Clamp Adjustment on Touchscreen (Cut-True 29A only)

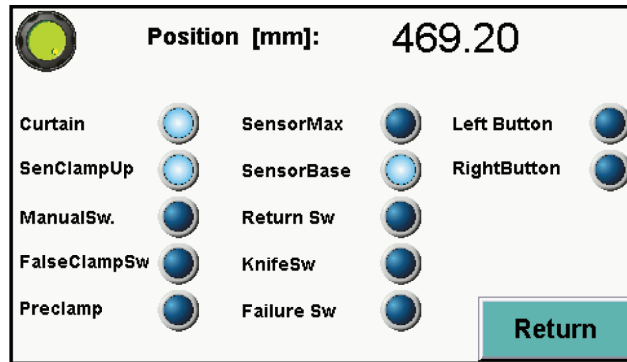
This option allows users to adjust the clamp bar pressure electronically based on the weight of the material to be cut. To change the value, use the slider on the touchscreen to select a value between **0 (min)** and **100 (max) pressure**.



### 5.6 Options - Switch (Diagnostics)

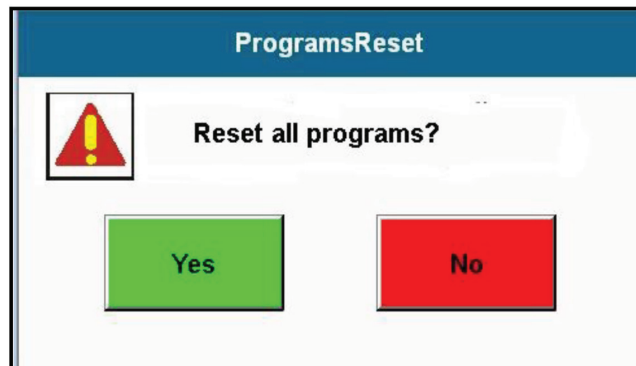
Switch Mode allows the operator to check control system elements such as optical sensors, limit switches, buttons, micro switches, etc.

A dark button means that this element is active.



### 5.7 Options - Program Reset/Cancel

This option resets/cancels all saved programs.



## 5.8 Options - Service Mode

Service Mode is to be used only by a qualified service technician.  
To enter Service Mode, input the 4 digit code and press **ENT**.

*****				Esc
0	1	2	3	CLR
4	5	6	7	DEL
8	9	A	B	Enter
C	D	E	F	

**SERVICE**

Counter: 0

Dimensions	Test
Encoder	Calibration
Factory	License
<span style="border: 1px solid black; padding: 5px 15px;">Return</span>	

### 5.8.1 Options - Service Mode - Dimensions

Min dim.1	22.00	mm	
Min dim.2	40.00	mm	
Max dim.	520.00	mm	
<span style="border: 1px solid black; padding: 5px 15px;">Return</span>			

Min. dim. 1	Minimum value for back gauge automatic move in program mode (with false clamp)
Min. dim. 1	Minimum value for back gauge automatic move in program mode (without false clamp)
Max. dim.	Maximum value for back gauge automatic move in program mode
Move	Distance where fast back gauge movement is off before reaching position (how long the back gauge moves slowly into position)

### 5.8.2 Options - Service Mode - Encoder

**Screw rot.**                    5.00 mm/rot

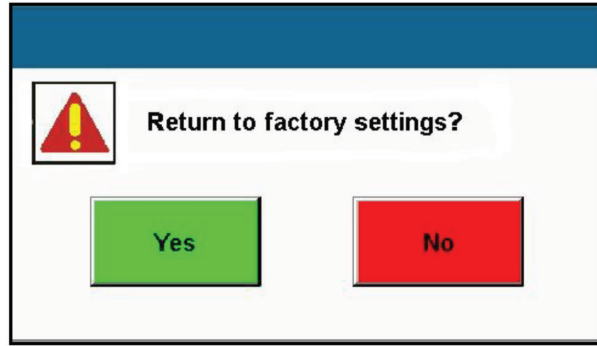
**Encoder type**                600.00 pls/rot

Return

Screw rot.	mm by lead screw rotation (back gauge)
Encoder type	impulses per rotation of encoder

### 5.8.3 Options - Service Mode - Factory Settings

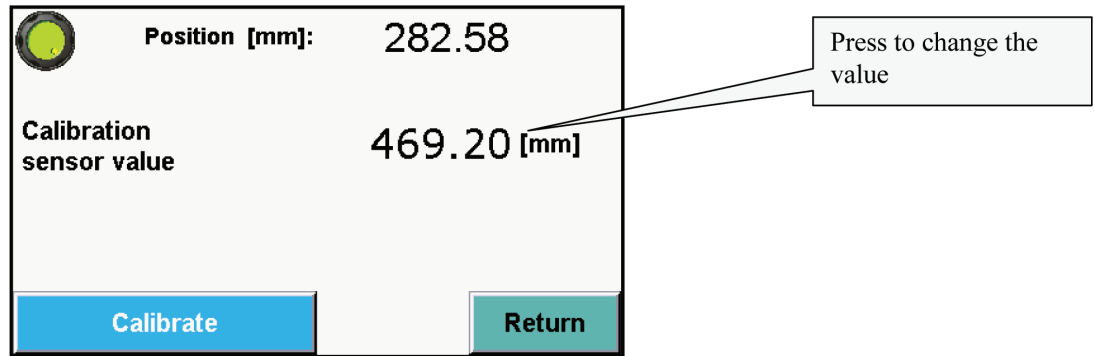
All parameters on screens Dimension and Encoder can be cancelled by returning to Factory Settings.



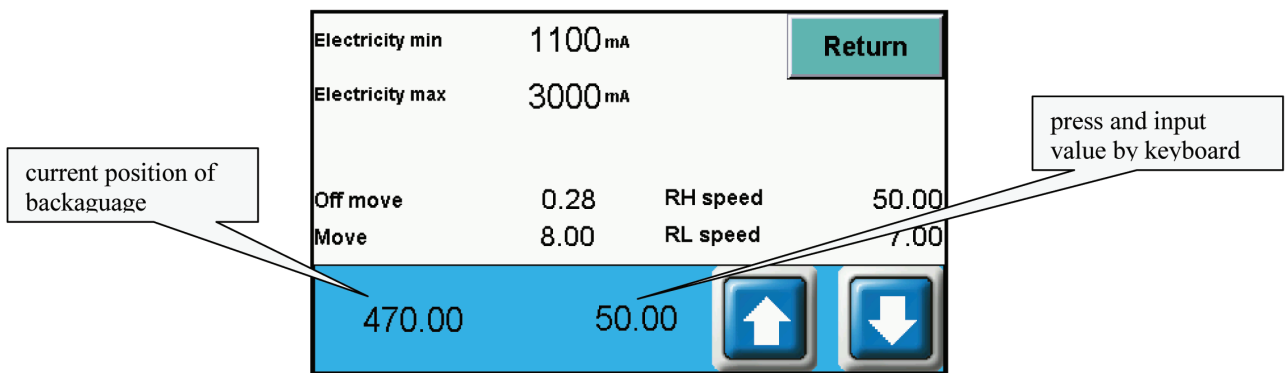
Press **YES** to return to factory settings.

### 5.8.4 Options - Service Mode - Calibration

This feature allows the operator to repeat the calibration without turning off the cutter, and to correct dimensions if needed. (See 5.4 Base Correction.)



### 5.8.4 Options - Service Mode - Test



Off move	Distance before dimension when back gauge drive is off
Move	Distance where fast back gauge movement is off before reaching position (how long the back gauge moves slowly into position)
Speed RH	Frequency of the back gauge speed while moving
Speed RL	Frequency of the back gauge speed while moving to the programmed position

In table **POSITION**, the first dimension is the actual dimension of the paper. The second dimension is close to actual.