Standard PC-P430 Electric 17" Desktop Paper Cutter

Instruction Manual



Call Us at 1-800-944-4573





Important Information

This manual is designed to help you to install, operate and maintain the PC-P430 Paper Cutter. Please read and understand this manual, and keep it in a safe and convenient place.

Do not operate the PC-P430 until you read and understand the instructions in this manual.

Horizon International Inc. shall not be liable for incidental consequential damages resulting from: improper or inadequate maintenance by the customer, unauthorized modification or misuse, or operation outside of the environmental specifications for the product.

Horizon International Inc. pursues a policy of continuing improvement in design and performance of the product. Therefore, the product design and specifications are subject to change without prior notice and without our legal obligation.

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Safety Precautions

Safety precautions are indicated in this manual as follows:

The term WARNING indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

The term CAUTION indicates a potentially hazardous situation which, if not avoided, may result in serious injury, or damage to the machine.

This symbol indicates a note which includes important information. Follow the note to operate the machine safely.

 \bigcirc

This symbol indicates a prohibited action. Do not perform any prohibited action.



This symbol indicates an essential procedure. Follow the procedure to operate the machine safely.

| Important | This will help you to avoid an incorrect operation which may cause problems with the machine, or make it necessary to go back to a previous step. | |
|------------|---|--|
| Attention | This explains functional limitations and restrictions on the operation of the machine. | |
| ply Note | This indicates a helpful hint. | |
| Additional | This indicates additional information which will help you to operate the machine efficiently. | |

Operating Safety Precautions

| | WARNINGS for Operation |
|---|--|
| | The machine is protected by safety covers, and while the covers are open the machine will not run. Do not operate the machine when the safety features are disabled or a cover is removed. This can cause a severe accident. |
| | The machine must be operated by just one person at a time. |
| | Do not place your hands or fingers under the knife or the clamp. |
| | Select one person to supervise use of the machine. Only that person should have access to the key. |
| 0 | When you lift or lower the backgauge, do not place your hands or fingers between the back-gauge and the table. |
| | Do not operate the machine with any of the covers removed. There are rotating mechanical parts and electrical parts with extremely high voltage inside the machine. These can cause severe personal injury or an electrical shock. |
| 0 | Each operator should be familiar with the safety instructions, be aware of the poten- tial dangers, and have sufficient knowledge of how to manage an accident. Anyone who does not have this training should not operate the machine. |
| | Perform the safety checks listed in "Checks Before Operating" before you do the first operation of each day. Do not place your hands or fingers under the knife or the clamp. |
| | |

CAUTIONS for Operation

| \bigcirc | Do not cut anything besides paper. This may damage the machine. |
|------------|--|
| (| Do not cut staples or paper clips, because this will damage the knife. This may also damage the rest of the machine. |
| 0 | If you turn off the key switch, wait about ten seconds before turning it on again. |

MWARNINGS for Installation



Do not overload the electrical outlet. This can cause a fire or an electrical shock.

Do not install the machine on an unstable floor surface. This may allow the machine to fall over, and this can cause severe personal injury. If the floor is not level, this can affect the performance of the machine.

▲ CAUTIONS for Installation

Do not install the machine in a location where it will be exposed to direct sunlight, high temperature or humidity.

Do not install the machine near any device which produces strong magnetic fields.

Do not install the machine in a location which is dusty. This can cause a fire or damage the machine.

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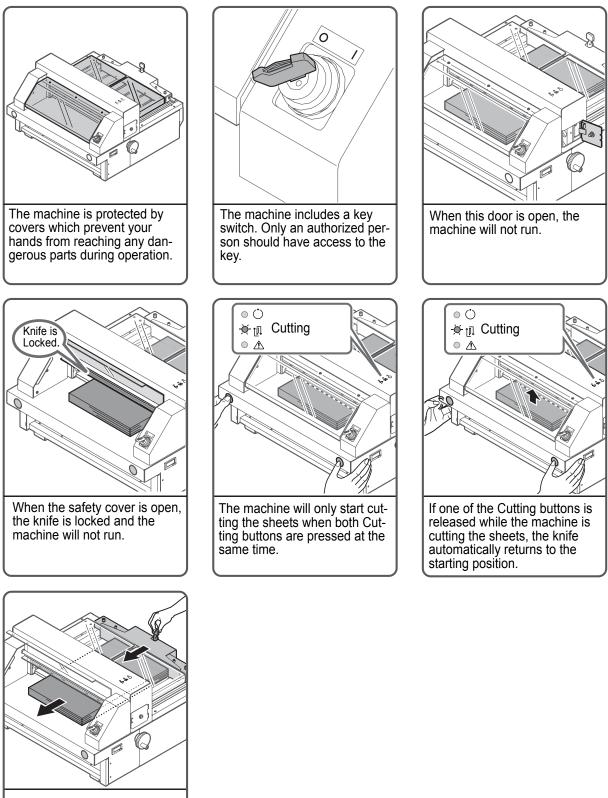
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Installation

| Installation of the Machine | |
|-----------------------------|--|
|-----------------------------|--|

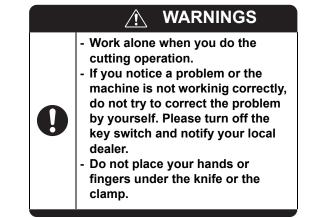
Machine Safety Features

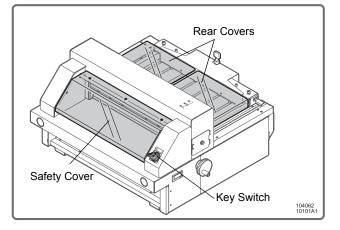
This machine has been designed with safety in mind. Please understand these features, and use them when operating the machine.

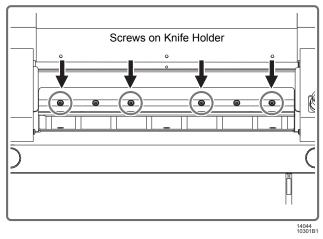


Checks Before Operating

This machine has been designed to be as safe as possible. However, if an accident occurs, it can cause severe personal injury. Before using the machine, always perform the safety checks listed in this section.

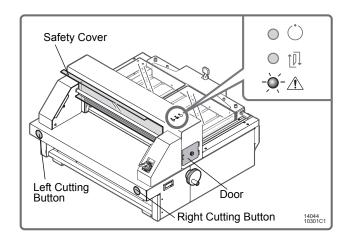






Exterior Check

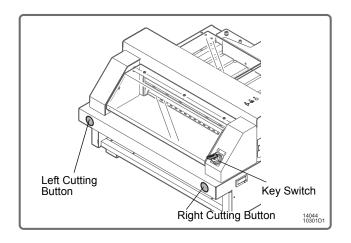
- 1 Check that the key switch are off.
- 2 Check that the safety cover and both of the rear covers are not broken, removed or the screws are not loosened.
- **3** Check that the screws on the knife holder are not loosened.
- **4** Check that there is nothing on the table.



Emergency Stop Function Check

Check that the knife does not operate if the safety cover or the door is open.

- **1** Turn on the key switch.
- 2 Open the safety cover.
- 3 Check that the <u>LED blinks</u>.
- **4** Press and hold the Right and Left Cutting buttons at the same time. Check that the machine will not run.
- **5** Close the safety cover and open the door.
- **6** Check that the $\cancel{1}$ LED blinks.
- **7** Press and hold the Right and Left Cutting buttons at the same time. Check that the machine will not run.
- 8 Close the door.



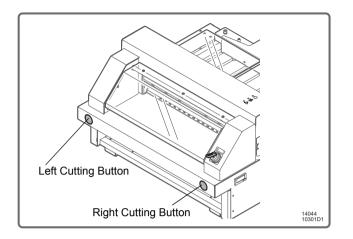
Non-Operation Check When One Cutting Button is Pressed

Check that the knife does not operate if either Cutting button is pressed.

- 1 Check that the Power switch and the key switch are both turned on.
- 2 Check that the safety cover and door are closed.
- **3** Check that () LED on the monitor lights.
- **4** Press and hold the Left Cutting button. Check that the machine will not run.
- **5** Keep pressing the Left Cutting button, and then press the Right Cutting button. Check that the machine will not run.

A Additional Information The machine will run only when both Cutting buttons are pressed at the same time (within 0.5 seconds).

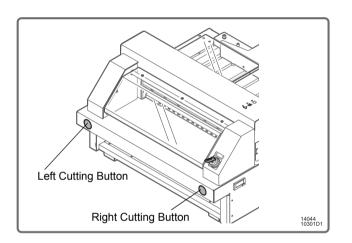
- 6 Release the both Cutting buttons.
- 7 Exchange the Right and Left Cutting buttons, and follow the Steps 1 to 6 in the same way.

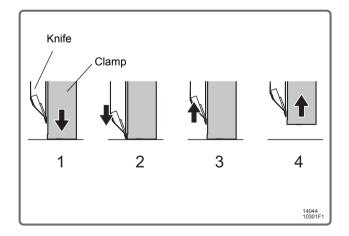


Shortest Return Check

Check that the knife returns to the start position automatically and stops before the knife reaches the lower limit.

- **1** Press and hold the Right and Left Cutting buttons at the same time.
- **2** Release one of them as soon as the cutting cycle is started.
- **3** Check that the knife lifts, returns to the start position, and stops as soon as either button is released.





Auto-Return Check

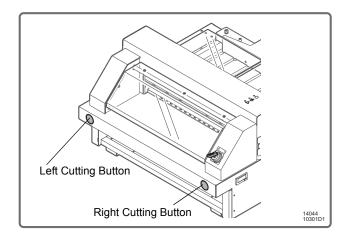
Check that the knife returns to the start position automatically and stops after the knife reaches the lower limit.

- **1** Press and hold the Right and Left Cutting buttons at the same time.
- **2** Release one or both of them when the knife is raising after the knife reaches the lower limit.
- **3** Check that the knife moves up without stopping, returns to the start position, and stops.
- **4** Exchange the Right and Left Cutting buttons and follow the steps from 1 to 3 in the same way.

Cutting Cycle Check

Check the operations of the knife and the clamp.

- **1** Press and hold the Right and Left Cutting buttons at the same time.
- **2** Check the knife and the clamp operate as the following orders.
 - 1. The clamp lowers.
 - 2. The knife lowers.
 - 3. The knife lifts.
 - 4. The clamp lifts.



Check for One-stop by One-step

Check that the second cutting cycle will not start even if you keep pressing the Cutting buttons after the first cutting cycle.

- Press and hold the Right and Left Cutting buttons at the same time to do one cutting cycle. Keep pressing for about five seconds after the knife returns to the start position.
- 2 Check that the second cutting cycle will not start continuously. Then, check the knife do not move again unless you release the both Cutting buttons once.
- **3** Keep pressing the both Cutting bottons, then release only the Right button.
- **4** Press the Right Cutting button again.
- **5** Check that the knife will not move.
- **6** Exchange the right and left cutting buttons and follow the Steps 1 to 5 in the same way.

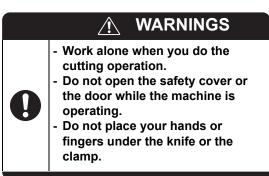
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Let's Start Cutting

This section explains how to prepare the cutter and do some basic operations.

Preparing to Cut the Sheets

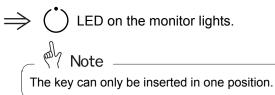
This section explains how to prepare the cutter before beginning the cutting operation.

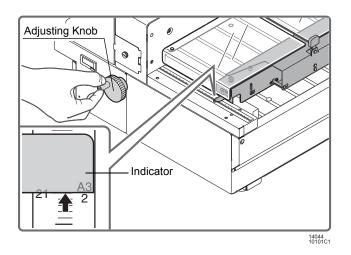


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Turn on the key switch.

- Insert the key and turn it clockwise.

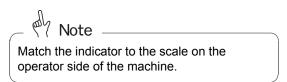




Cutting the sheets to a desired length

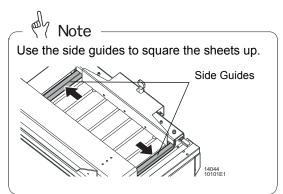
Set the backgauge to the cutting length.

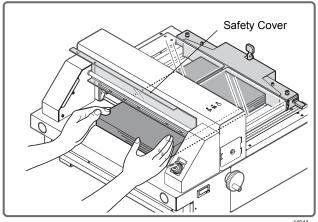
- The backgauge can be moved forward or back using the adjusting knob. Set the backgauge using the scale. In the drawing to the left, the indicator indicates 210 mm.



Place the sheets.

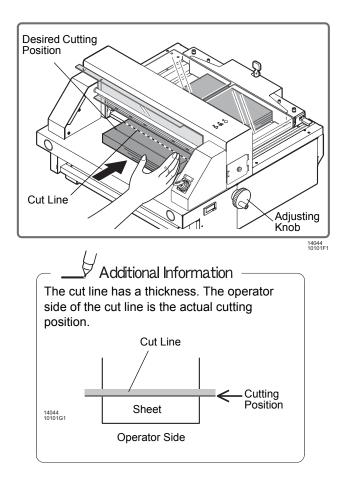
- Open the safety cover. Stack the sheets evenly, and place the sheets so that the back of the stack touches the backgauge.

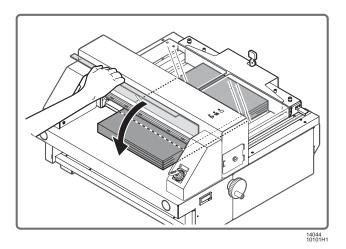




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Preparing to Cut the Sheets





Cutting the sheets using the cut line

Make a mark on the desired cutting position on the top sheet. Open the safety cover.

Move the backgauge so that the desired cutting position is on the operator side of the cut line.

Stack the sheets evenly, and push the back of the stack against the backgauge.

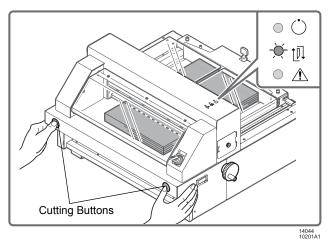
Continue to push the stack against the backgauge, and turn the adjusting knob until the desired cutting position matches the cut line.

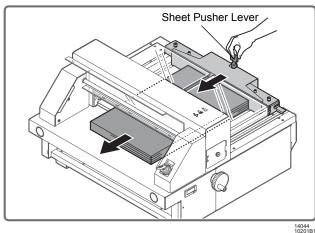
Close the safety cover.

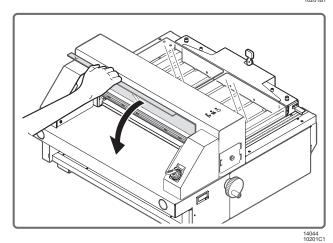
Additional Information If the cover remains open, the machine will not run.

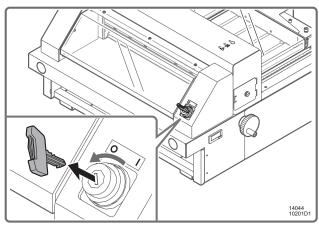
Cutting Operation

This section explains how to do some basic operations.

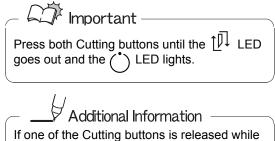








Press both Cutting buttons at the same time and keep pressing until the cutting action is finished.



the machine is cutting buttons is released while the machine is cutting, the cutting action will stop and the knife will automatically return to the starting position.

Open the safety cover and remove the cut sheets.

- Open the safety cover, and pull the sheet pusher lever toward the operator position until the lever stops moving.

The cut sheets will move forward by 25 mm (1").

- Remove the trim.
- Remove the cut sheets.



After the cutting operation is finished,

Close the safety cover. Turn off the key switch.

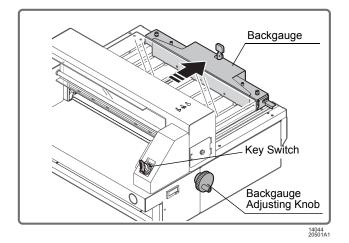
- Turn the key switch to the left and remove the key.

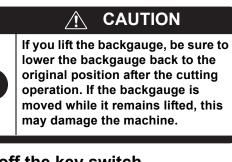
. 🛱 Important _

- Only the authorized person should have access to the key.

Cutting Long Sheets

The maximum cutting length (distance from the backgauge to the knife) on this machine is 320 mm (12.6"). If you want to cut the sheets which are longer than this, lift the backgauge and allow the sheets to extend out the back of the machine.





Turn off the key switch.



- Because the backgauge is lifted, you cannot use it to align the back of the stack. Align the edges of the sheets before you place the sheets on the table.
- The maximum thickness of the stack which can be cut in this way is 15 mm (0.6").

Move the backgauge back as far as possible.

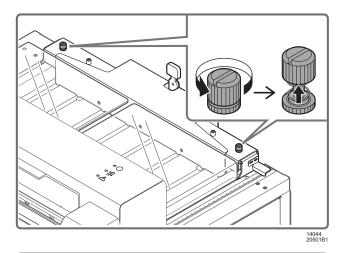
- Move the backgauge to the rear by turning the adjusting knob.
- The backgauge can be lifted only if it is in the rear position.

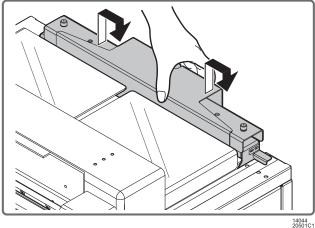
Loosen the locking screws on the backgauge.

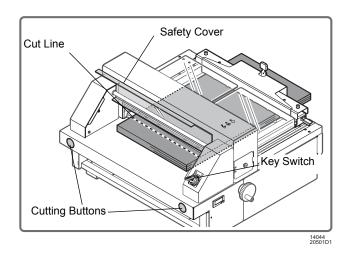
- Turn the locking screws counterclockwise until they can be lifted.

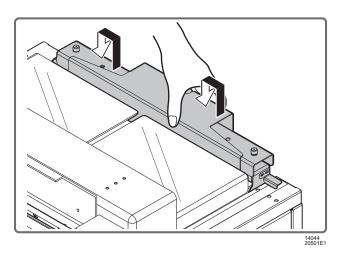
Lift the backgauge until it stops, and then move it to the right until it stops.

- Lower the backgauge slowly.
- The backgauge will be supported in the lifted position. It is not necessary to hold it up.









Turn on the key switch.

Place the sheets on the table.

- Match the cut line to the desired cutting position.

Close the safety cover, and press both Cutting buttons to cut the sheets.

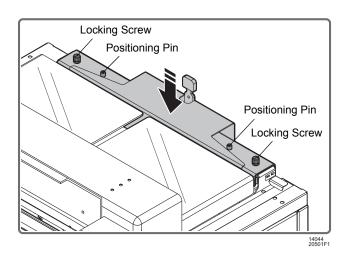
Turn off the key switch.

Lower the backgauge.

How to lower the backgauge

Lift the backgauge by hand and move it to the left until it stops.

Lower the backgauge slowly.



Push the backgauge down so that the end of each positioning pin fits into a hole in the backgauge.

- There are two positioning pins.

Hold the backgauge, and push each locking screw in and tighten it (turn clockwise).

- There are two locking screws.

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Troubleshooting

This section shows how to correct some simple problems.

The Last Few Sheets Are Not Cut

| Check Points | | Cause and Solution |
|---|--|--|
| The cutting stick is worn. | Independent of the second seco | Replace the cutting stick. (See page 14 for details.) |
| The edge of the knife is worn. | linet | Please call your local dealer to replace the knife. |
| One of the Cutting buttons was released while the machine was cutting. | HO44 20101C1 | Press and hold both Cutting buttons until the \dot{P} LED goes out and the \dot{P} LED lights. |

The Machine Will Not Cut

| Check Points | | Cause and Solution |
|---|------------------|--|
| The safety cover is open. | Idea 2020C1 | Close the safety cover. |
| The door is open. | 14044 2020TC1 | Close the door. |
| The screws on the knife holder are loose. | 14044 20201F1 | Please call your local dealer to tighten the screws on the knife holder. |

| Check Points | Cause and Solution | |
|--|--|--|
| The circuit breaker has tripped. (The switch has popped out.) | HAME AND | The motor was overloaded. Reset the motor. 1.Turn off the key switch. 2.Wait for one minute. 3.Push in the button on the circuit breaker. If the machine had been running for a long time, wait several minutes before trying to operate again. If the knife is worn, the machine may need excessive force to cut the sheets. If the breaker trips repeatedly, please call your local dealer to replace the knife. |

When Power is Turned On, the 印 "Cutting" LED Lights

| Check Points | Cause and Solution | |
|--|--------------------|---|
| The knife is not at the starting position. | | The knife has not returned to the starting position. Press and hold both Cutting buttons. The knife will automatically return to the starting position. If the knife does not return to the starting position, please call your local dealer. |

The <u>A</u> LED Blinks and the Machine Beeps

| Check Points | Cause and Solution | |
|--|--|--|
| There is a problem inside the machine. | Turn off the key switch immediately. Disconnect the power cable. Please call your local dealer. Do not try to correct the problem by yourself. | |

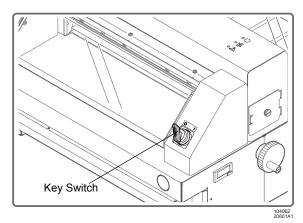
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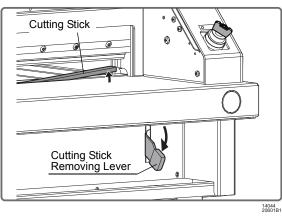
Maintenance

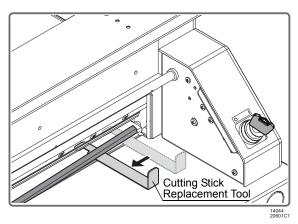
This section shows how to do the regular maintenance on the machine.

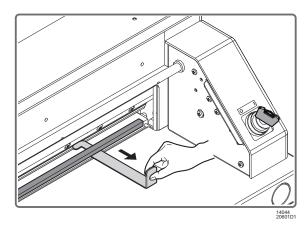
Replacing the Cutting Stick

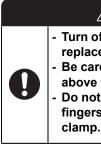
When the groove in the cutting stick gets too deep, the last few sheets in the stack may not be cut, or may not separate completely. Rotate the cutting stick or replace the stick.











MARNINGS

Turn off the key switch before you replace the cutting stick.
Be careful not to touch the knife above the stick.
Do not place your hands or fingers under the knife or the

Removing the Cutting Stick

Turn off the key switch.

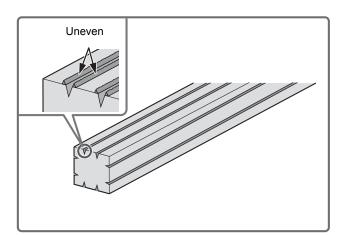
Lower the cutting stick removing lever.

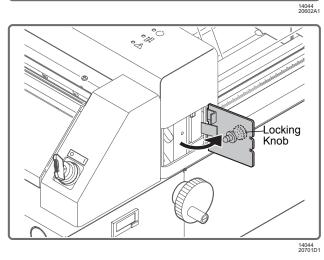
The right end of the cutting stick will be lifted.

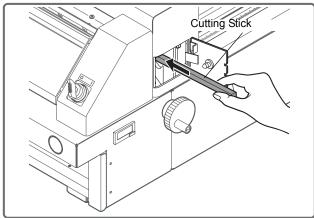
Insert the cutting stick replacement tool under the lifted cutting stick.

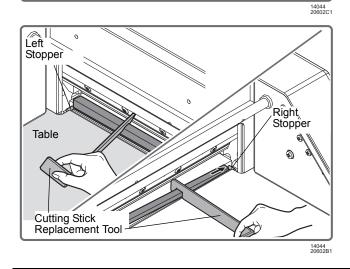
Move the cutting stick replacement tool to the left to remove the cutting stick from the groove.

- Pull the cutting stick replacement tool forward to pull the cutting stick out of the machine, and away from the knife.
- Remove any trim or dust in the groove.









Attaching the Cutting Stick

Hold the cutting stick with side you want to use facing up.

- One side of a cutting stick can provide two working lines. One cutting stick can provide eight working lines on the four sides.
- If a side which was already used is uneven, smooth out the uneven surface.
- If the surface is stained, wipe the surface.

Loosen the locking knob using the supplied Allen wrench (4mm) and open the door.

Insert the cutting stick in the groove through the door.

- **1** Insert the cutting stick in the groove through the door.
- 2 When the cutting stick has been inserted halfway into the groove, fit the cutout of the cutting stick replacement tool over the cutting stick.
- **3** Turn the cutting stick replacement tool counterclockwise to hold the cutting stick.
- **4** Move the cutting stick up against the left stopper using the cutting stick replacement tool.
- **5** Release the cutting stick so the right end of the cutting stick is touching the right stopper.
- 6 Check that the new face of the cutting stick is level with the top of the table. If it is not, remove the cutting stick again and smooth out the uneven surface, or use a new cutting stick.

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Appendix

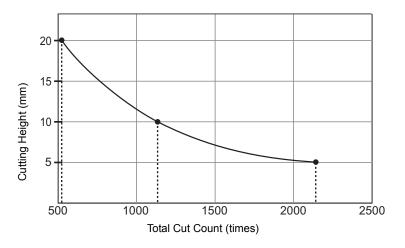
This chapter describes the parts of the machine and also lists the specifications and accessories.

Specifications

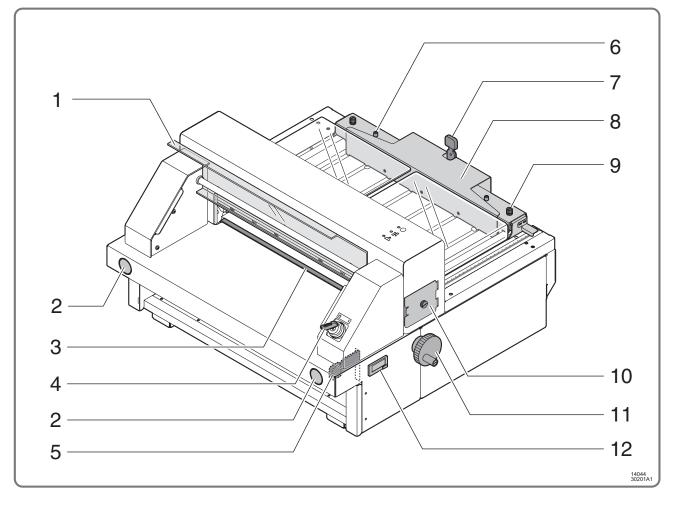
| Model | PC-P430 | | |
|--------------------|---|---------------|--|
| Cutting Width | Max. 434 mm / 17.08" | | |
| Cutting Height | Max. 23 mm / 0.9" | | |
| Cutting Depth | Max. 320 mm / 12.59" Min. 50 mm / 1.97" | CLITTING MUCH | |
| Clamp System | Spring-Operated | | |
| Push-out Length | Max. 25 mm / 0.98" | | |
| Cutting Speed | About 4 seconds per cycle (100 V, 60 Hz) About 4.8 seconds per cycle (100 V, 50 Hz) | | |
| Voltage/Frequency | Single Phase 110 to 120 V, 60 Hz Single Phase 220 to 240 V, 50 / 60 Hz | | |
| Rated Current | Single Phase 110 to 120 V, 60 Hz, 3.9 A Single Phase 220 to 240 V, 50 Hz, 1.6 A | | |
| Leak Current | Single Phase 110 to 120 V, 60 Hz, 0.3 mA Single Phase 220 to 240 V, 50 / 60 Hz, 0.3 mA | | |
| Heat Output | 140 kJ / 30 kcal | | |
| Motor | 90 W x 1 | | |
| Machine Dimensions | W675 x D600 x H375 mm / W26.6" x D23.7" x H14.8" | | |
| Machine Weight | 66 kg / 145.4 lb | | |
| Noise Level | Laeq: 70.4dB | | |

The machine design and specifications are subject to change without notice.

Relation between the Cutting Height and the Service Life of the Knife



Machine Description



1 Safety Cover

When the safety cover is open, the machine will not run.

2 Cutting Buttons

Press both Cutting buttons at the same time to cut the sheets.

3 Cutting Stick

The knife lowers against this stick. If the last few sheets in a stack are not cut, rotate the stick and use another face.

4 Key Switch

When the machine is not in use, remove this key. An authorized person should keep the key so that other people can not run the machine.

5 Cutting Stick Removing Lever

When you replace the cutting stick, lower this lever to push the cutting stick up.

6 Positioning Pins

These pins are used to position the backgauge when you lower it. See page 7 for details.

7 Sheet Pusher Lever

Use this lever to push out the cut sheets forward.

8 Backgauge

This scale is used to align the sheets and set the cutting position.

9 Locking Screw for the Backgauge

Loosen this when you lift the backgauge. See page 6 for details.

10 Door

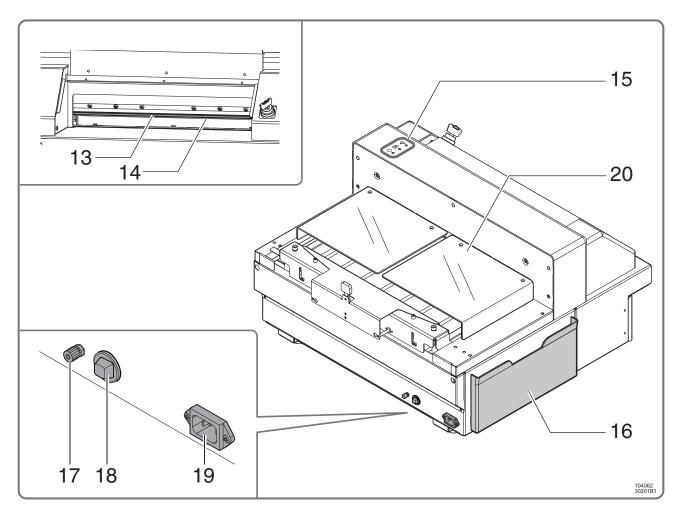
When you replace the cutting stick, open this door. When this door is open, the machine will not run.

11 Backgauge Adjusting Knob

Use this knob to move the backgauge. Turn the knob clockwise to move the backgauge to the rear.

12 Counter

The counter indicates the number of cuts made by the machine since it was last reset.



13 Knife

This knife cuts the sheets. If the knife becomes dull, it must be replaced. Please call your local dealer to replace it.

14 Clamp

This clamps the sheets to prevent them from moving during cutting.

15 Monitor



Ready

Cutting

This blinks when the safety cover or the door is open. If a problem occurs inside the machine, this LED will also blinks and you will hear a beeping sound.

16 Holder for User's Manual

Store the User's Manual in this holder.

17 Ground Terminal

18 Circuit Breaker

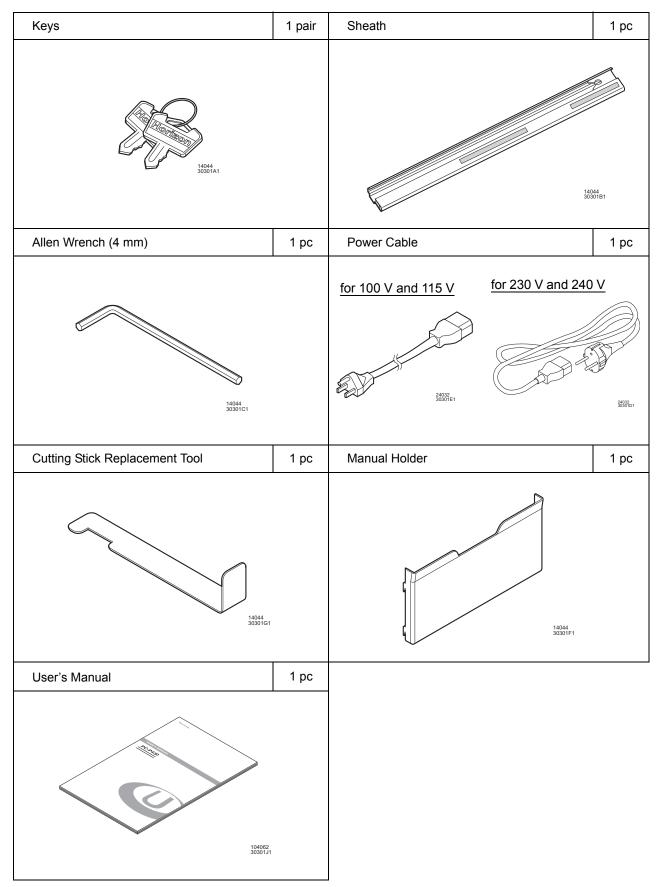
If the knife motor is overloaded, the switch will pop out. See page 11 for details.

19 Power Connector

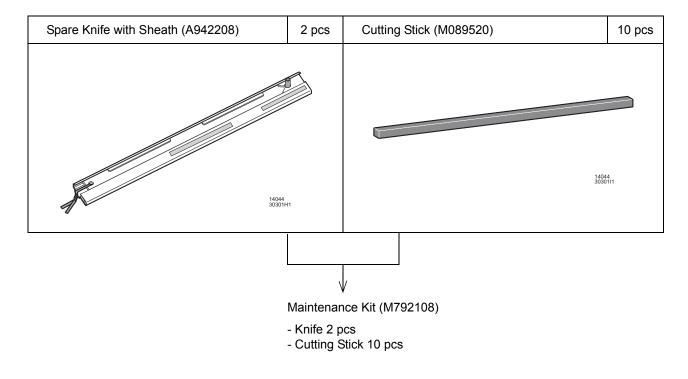
20 Rear Covers

Standard Accessories, Consumables

Standard Accessories



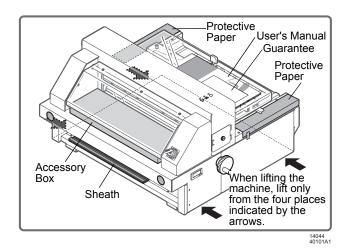
Consumables (Maintenance Kit)

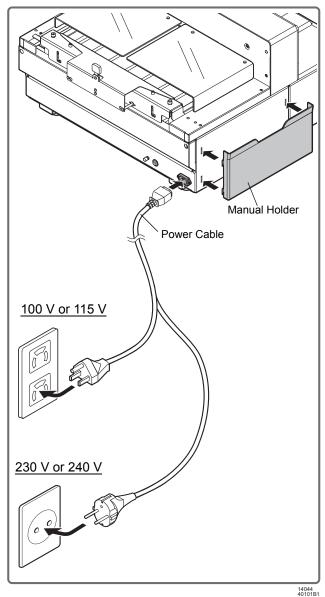


Installation

This chapter explains how to install the machine. This chapter should only be used by trained service technicians.

Installation of the Machine





WARNING Do not install the machine on an unstable floor surface. The machine may fall over. The frame of the machine may be twisted, and this could affect the performance of the machine. The machine weighs 66 kg (145.5 lb). Install the machine on a table which can support this weight. Be careful when you lift or move the machine.

Open the package and take the machine out of the box.

- Remove the accessories, User's Manual, the guarantee, and the sheets of protective paper.

Place the machine on the table.

Install the manual holder.

Plug the power cable into the machine.

Plug the power cable into an outlet.