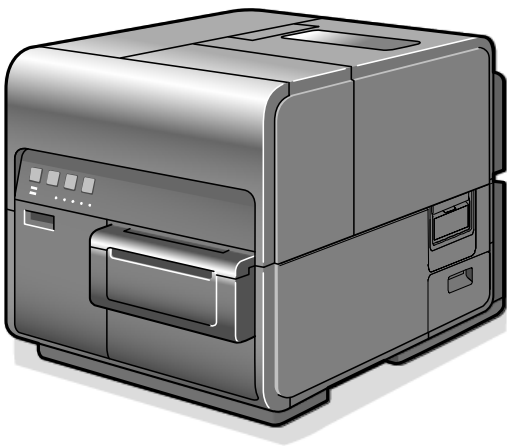
CPX4D / CPX4P Series

COLOR INKJET LABEL PRINTER

Installation Procedure



Printed in Japan

Installation

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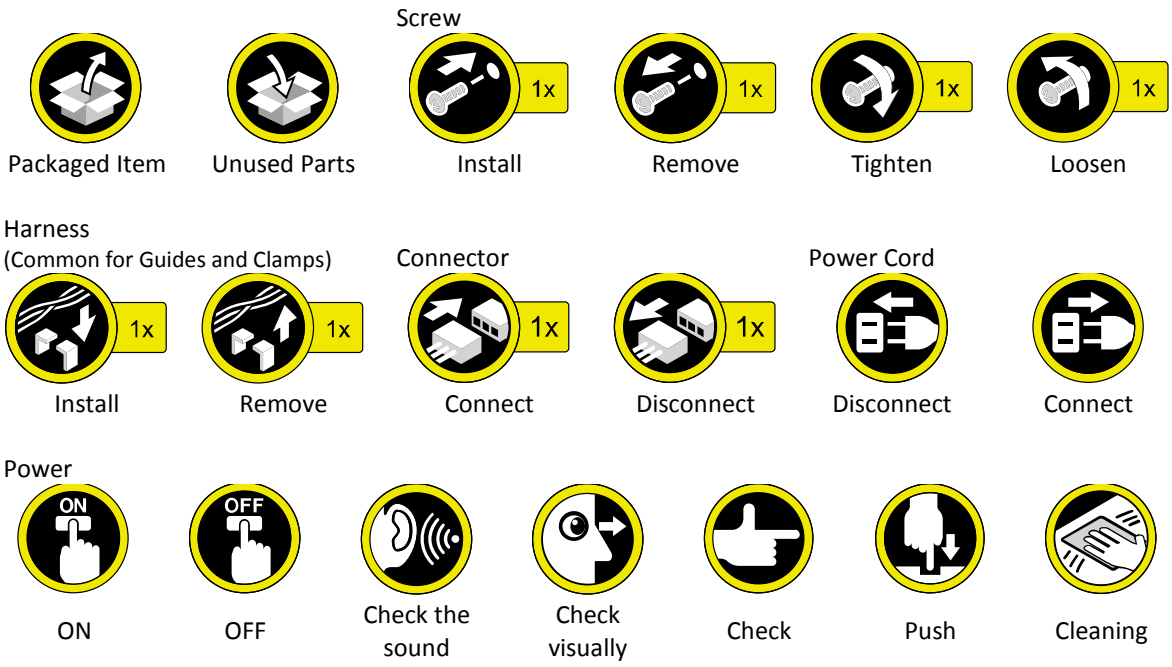
How to Utilize this Installation

Symbols in the Illustration

The frequently-performed operations are described with symbols in this procedure.



Checking before Installation

Following shows requirements for the installation site. Therefore, it is desirable to see the installation site in advance before bringing in this Printer to the user's site.

● Checking the Power Supply

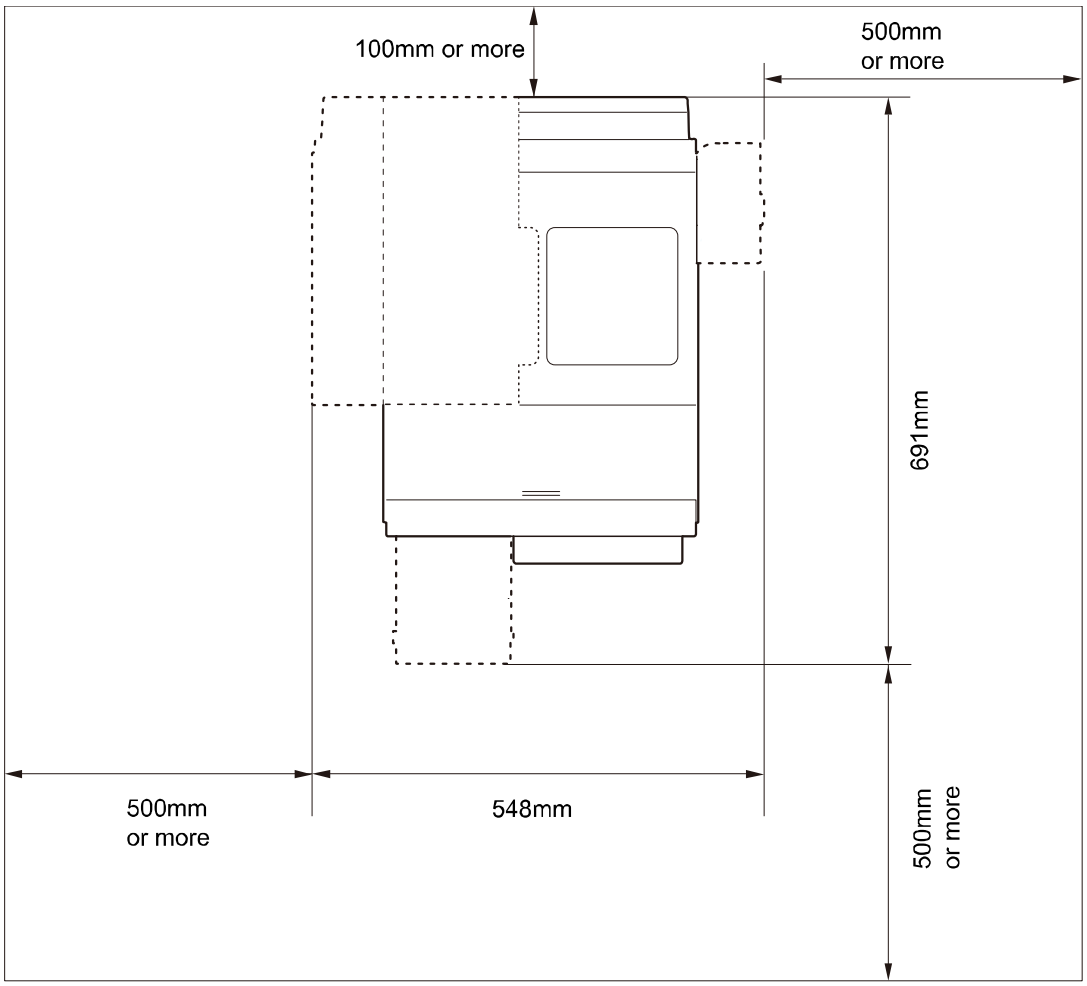
1. Printer must be connectable to the outlet that can supply the rated voltage +10/-15% at the specified ampere or higher.
2. Install this Printer near the power outlet and leave sufficient space around the power plug so that it can be unplugged easily in an emergency.

● Checking the Installation Environment

1. The installation environment must be as described below. Avoid installing Printer near the faucet, water heater, humidifier, or refrigerator.
   - Operating temperature range: 15 to 30 degrees Celsius
   - Operating humidity range: 10%RH to 80%RH
2. Avoid placing Printer in place exposed to high temperature and humidity, extremely low temperature, severe temperature changes, and direct sunlight. Especially, avoid placing Printer near fire, out of doors, in distribution warehouse, or in refrigerator.
3. Avoid installing Printer in an area subject to dust.
4. The room must be well-ventilated properly.
5. None of Printer feet should float. The machine must be held level constantly.
6. When placing Printer on desk, table or the like, it must be sturdy and stable enough to support weight of Printer.

Checking the Installation Space

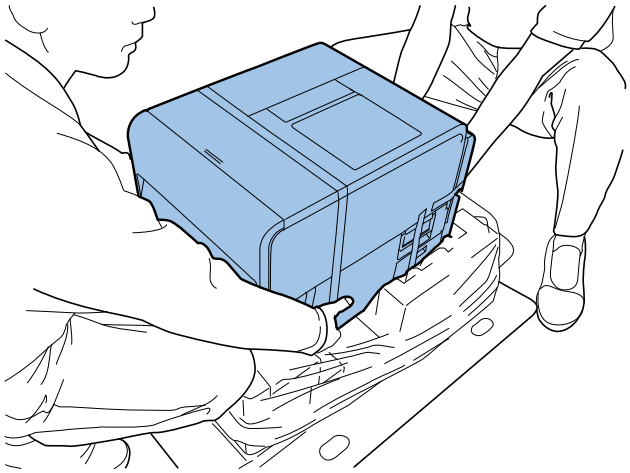
The minimum space required for installation is shown below.



Installation Precautions

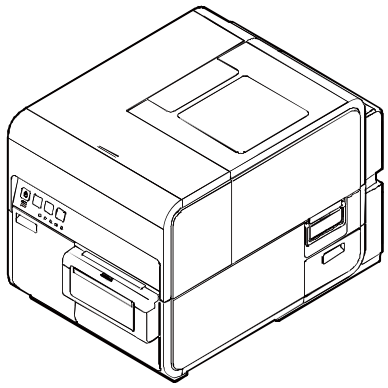
When installing Printer, observe the following precautions.

- Imaging faults can result due to dew condensation that occurs when the machine is moved from a cold place to a warm place. Leave the machine kept packed for at least 2 hours before installing it.
  (Dew condensation: When a metallic object is brought from a low-temperature place to a high-temperature place, water vapor around it is cooled abruptly and consequently water drops stick to the surface of the metallic object.)
- Printer weighs about 24 kg. At least two persons are required to install it. In addition, be sure to keep the machine leveled when lifting it.

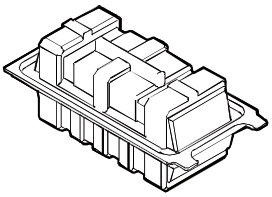


- Be sure to wear a grounding wrist strap prior to the service work to prevent electrostatic destruction of the printheads, PCB's, etc.

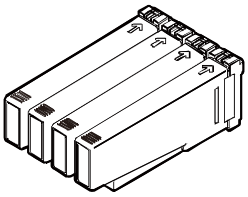
Checking the Contents



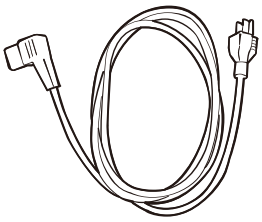
1x
Label Printer



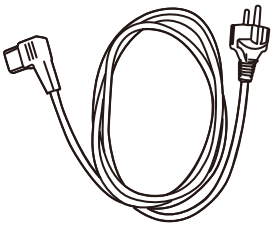
1x
Printhead Unit



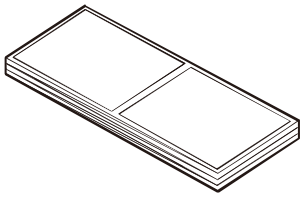
4x
Ink Tank (1 Ink Tank for each color)



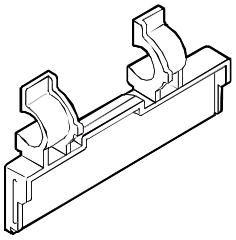
1x
Power Cord (for 120V series)



1x
Power Cord (for 230V series)



20x
Test Label



1x
Scraper (for CPX4P only)

<Others>

- Including guides
- Printer Software CD-ROM

CAUTION:

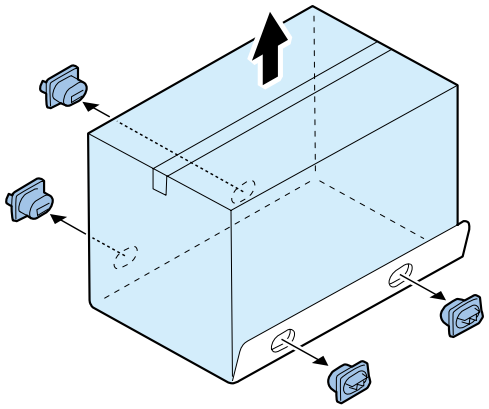
Several types of Power Cords come with Printer. Use appropriate Power Cord for the power supply used at the installation site.

Unpacking Procedure

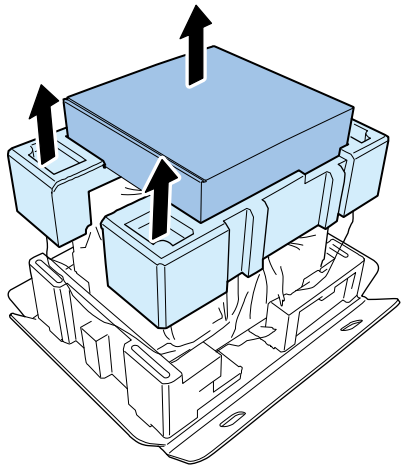
NOTE:

Printer is secured using shipping tapes and cushioning materials to protect it against the vibrations and shocks applied during transportation. By following the procedure described below, remove all pieces of shipping tapes and cushioning materials before installing Printer. Keep the removed cushioning materials for future transportation for relocation or repair of Printer.

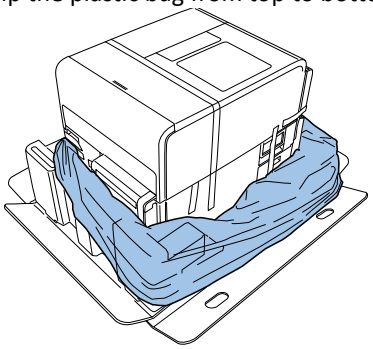
1. Remove 4 grips from the packing carton, and then remove the outer casing.



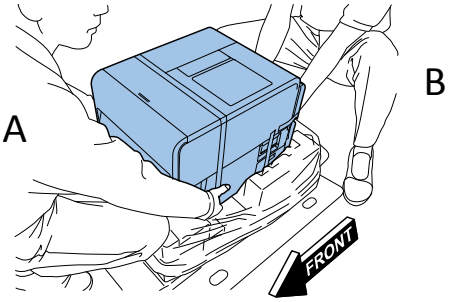
2. Remove Accessory Box, and then remove Upper Pads.

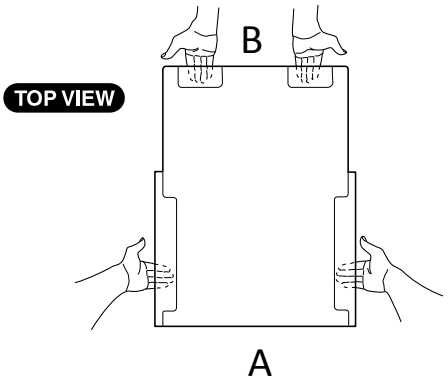


3. Strip the plastic bag from top to bottom.



4. Holding the handles at the bottom of Printer, lift Printer to take it out from the package base.



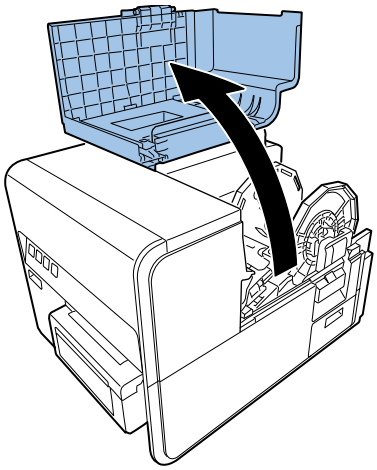


CAUTION:

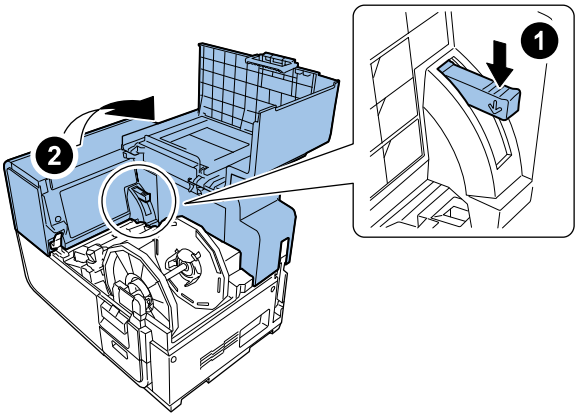
- Printer weights about 24 kg. At least, two persons are required to lift it up.
- Do not hold the front side of Printer.

5. Place Printer on a horizontal table, and then remove all pieces of shipping tape and cushioning materials visible on the exterior of Printer.

6. Open Roll Cover.



7. Remove all pieces of the tape securing Roll Holder.
8. Push down Upper Unit Open Lever, and then open Upper Unit.

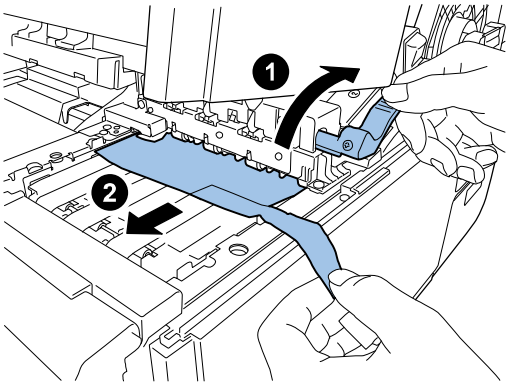


9. Remove shipping tapes and cushioning materials from inside of Printer.

NOTE:

Save and store the removed cushioning materials for future transportation in relocation, repairing of Printer, etc.

10. Turn Pinch Roller Release Lever, and then remove the protection sheet.



Installation Procedure

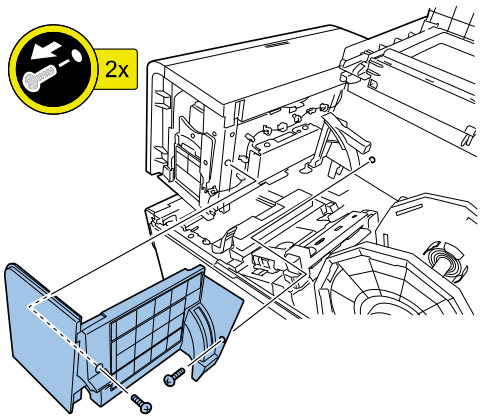
Mounting Printhead Unit

CAUTION:

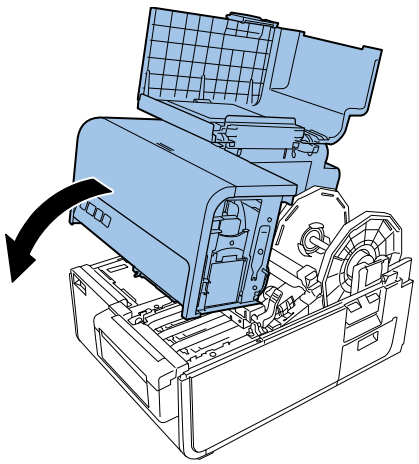
Semiconductive components are used in the printhead.
As careless handling of the printhead under low humidity may cause electrostatic destruction in it, be sure to wear a grounding wrist strap prior to the handling.

1. Remove 2 screws to remove Maintenance Cover from Upper Unit.

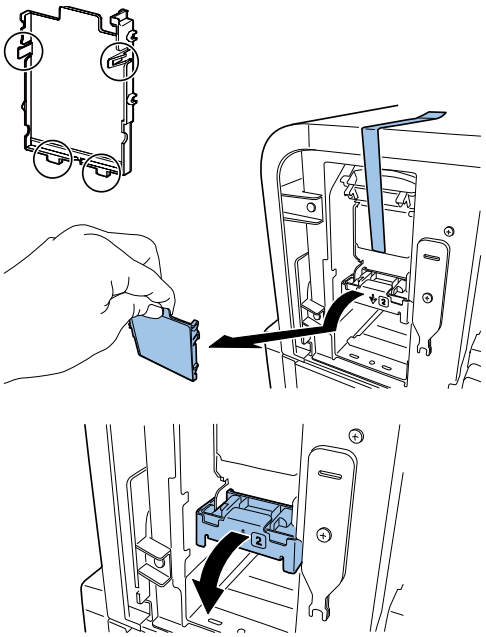
   - 2 screws



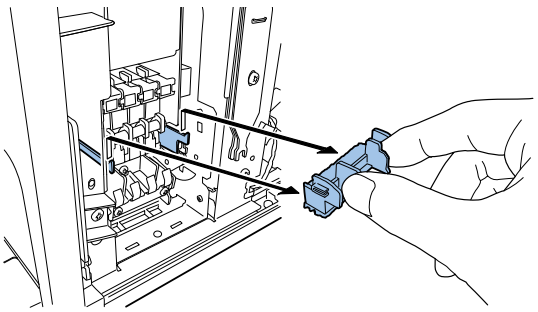
2. Close Upper Unit.



3. Remove the shipping tape, remove Print Module Cover, and then open Lower Printhead Release Lever.



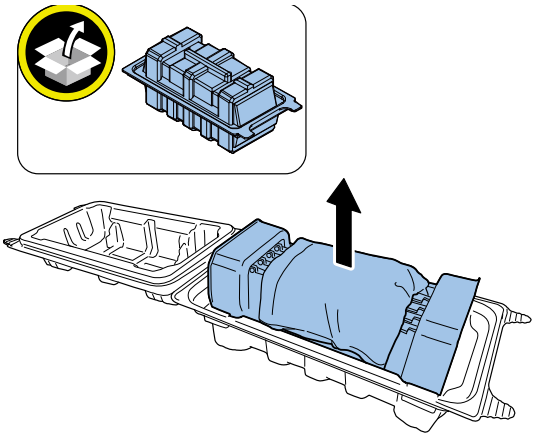
4. Remove Blade Cleaner.



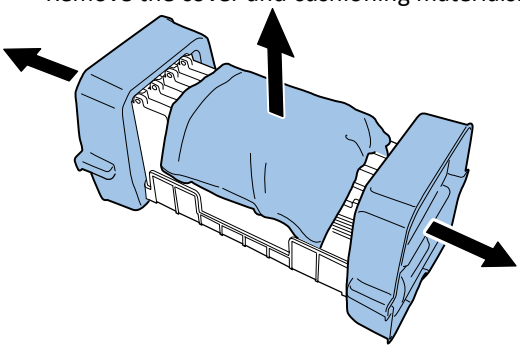
5. Take out included Printhead from the package.

CAUTION:

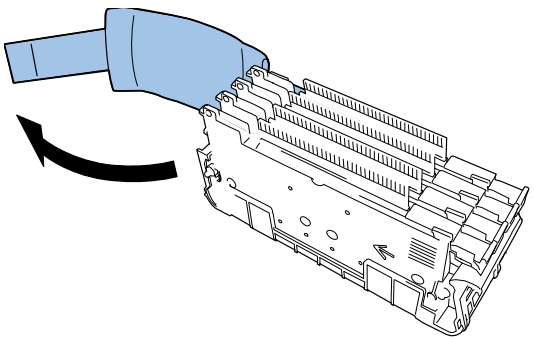
Semiconductive components are used in the printhead.
As careless handling of the printhead under low humidity may cause electrostatic destruction in it, be sure to wear a grounding wrist strap prior to the handling.



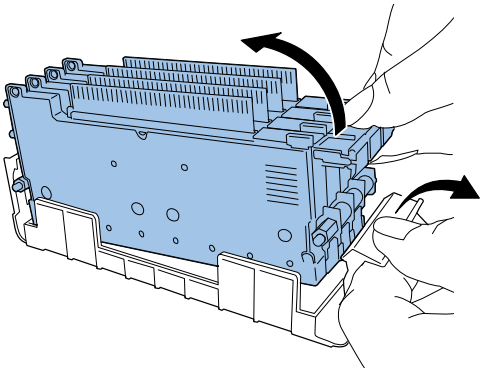
6. Remove the cover and cushioning materials.



7. Remove the protection.

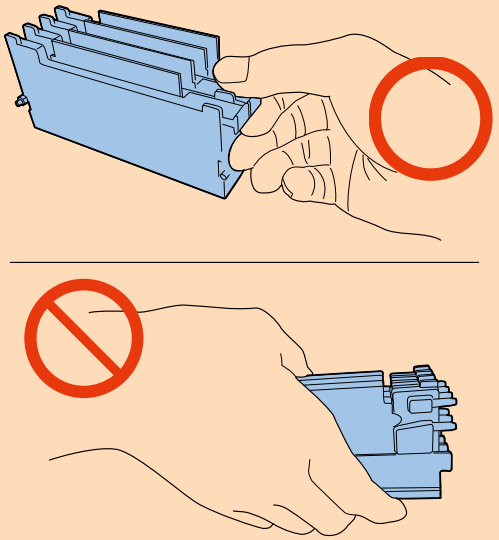


8. Take Printhead Unit out of the case.



CAUTION:

Do not touch the circuit boards and Printhead face. An ink injection problem can occur.

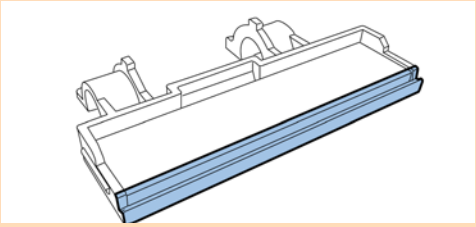


For CPX4P model ONLY [For CPX4D model, please go to next page (Step 11) to install the Printhead Unit.]

9. **For CPX4P,** peel the release paper from bundled Scraper.

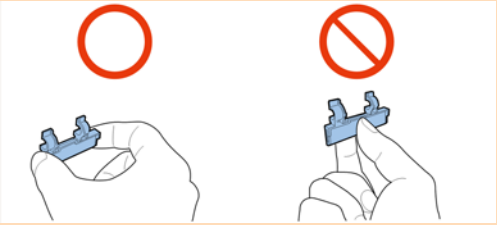
CAUTION:

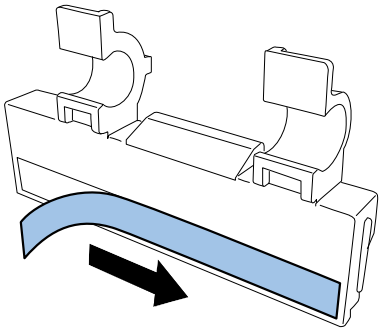
Do not touch the area indicated in the following figure.



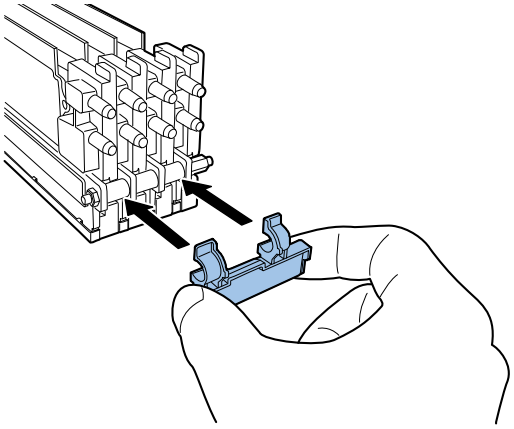
CAUTION:

Handle scraper as following figure.

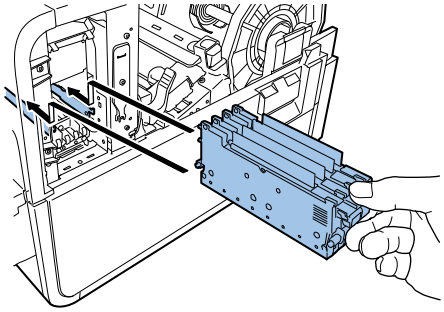


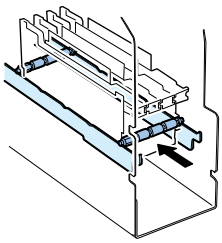


10. **For CPX4P,** attach Scraper to Printhead.



11. Put Printhead Unit on the rail guide, and then insert it into Printer until it stops.



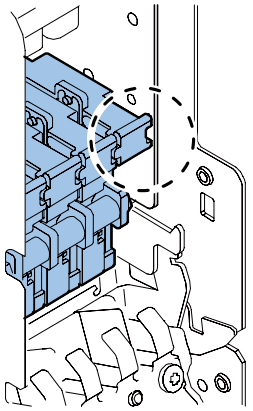


NOTE:

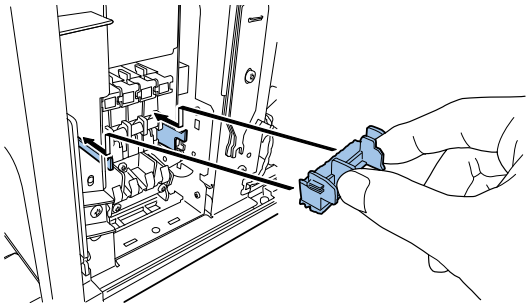
Skewering Shaft must be on Printhead Guide Rails.

CAUTION:

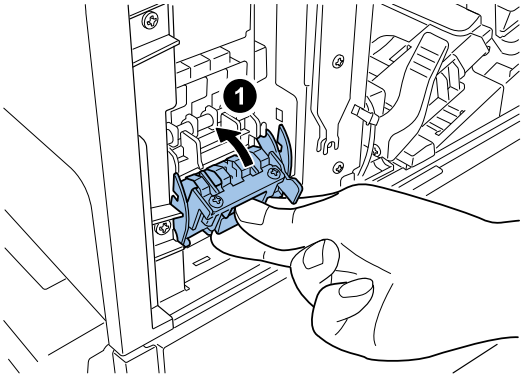
- To confirm Printhead Unit is in the correct position, see if the end of Printhead Unit grip and the edge of the inner metal plate are in the same plane as shown in the figure.
- If Printhead Unit is insufficiently inserted, Lower Printhead Release Lever cannot be closed.

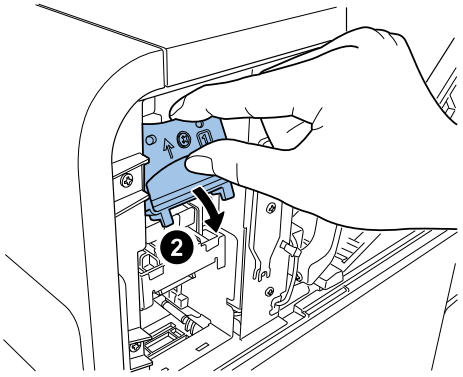


12. Mount Blade Cleaner.

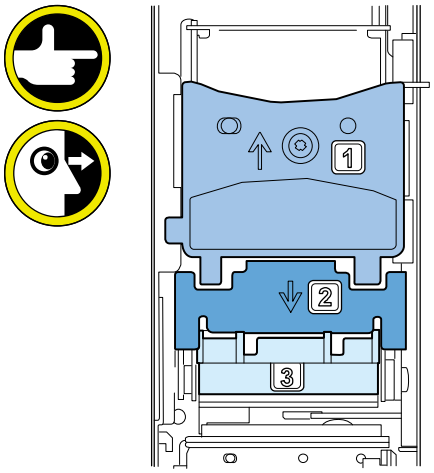


13. Close Lower Printhead Release Lever and Upper Printhead Release Lever.





14. Check that numbers [1] , [2], and [3] indicated on Print Module are visible.

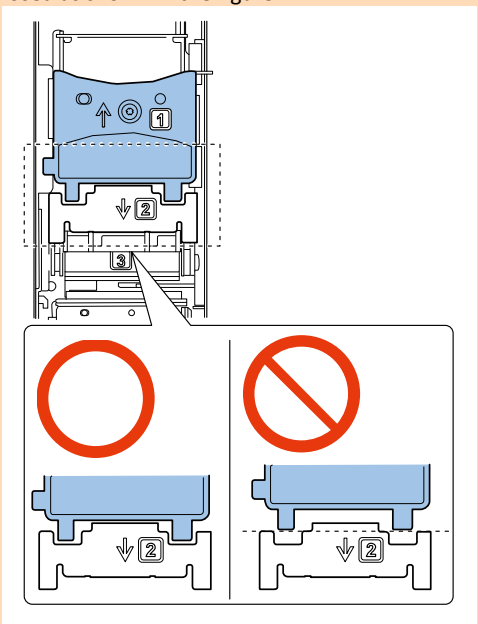


NOTE:

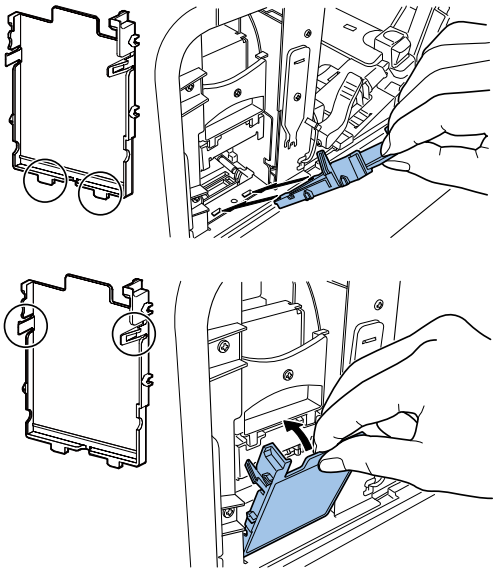
If any one of numbers [1] , [2], and [3] is invisible, Printhead Release Lever ([1] ,[2]) has not been closed or Blade Cleaner ([3]) has not been mounted. Follow the steps 11 and 11 again.

CAUTION:

After removing the shipping tapes, Upper/Lower Printhead Release Levers could slightly be opened and therefore confirm these levers are firmly closed as shown in the figure.



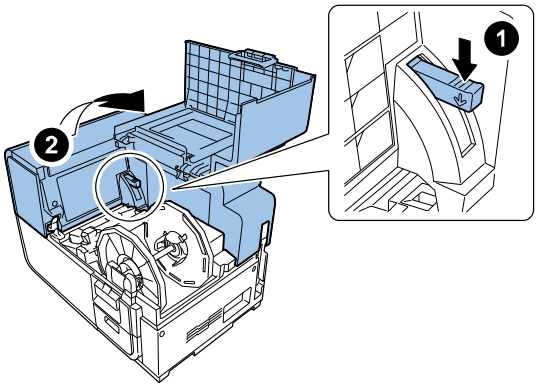
15. Attach Print Module Cover to Print Module.



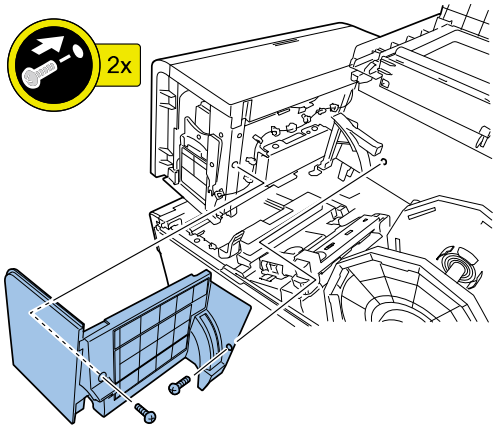
CAUTION:

- Set Print Module Cover surely.
- Confirm that claws are in the rectangular apertures.

16. Push down Upper Unit Open Lever, and then open Upper Unit.



17. Mount Maintenance Cover on Upper Unit.

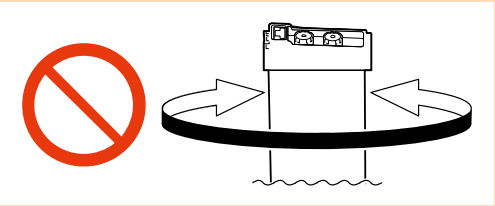


18. Close Upper Unit, and then close Roll Cover.

● Loading Ink Tanks

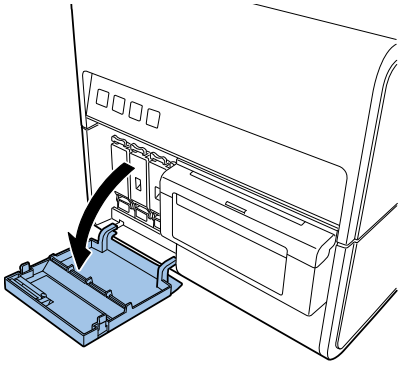
CAUTION:

Do not shake the Ink Tank (Dye Ink/ For CPX4D). Shaking Ink Tank makes bubbles in Ink Tank. The bubbles cause misdetection of ink remaining, and operator call error (XXXX Ink Empty/error code: 20XX) might be occur.

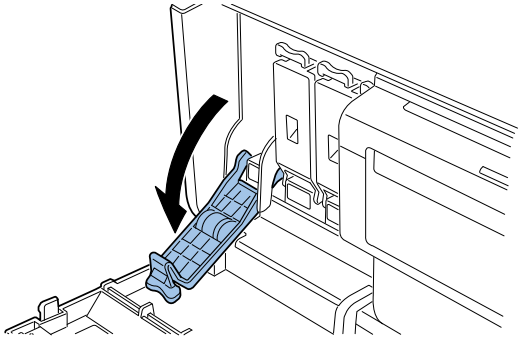


In the case shaking Ink Tank by mistake, remove it from Printer and reinstall it.

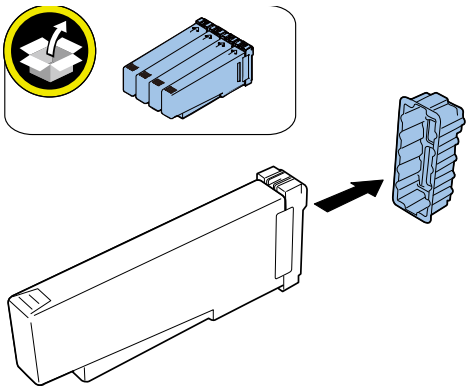
1. Open Ink Tank Door.



2. Open Ink Tank Lever for each color while pushing it downward.



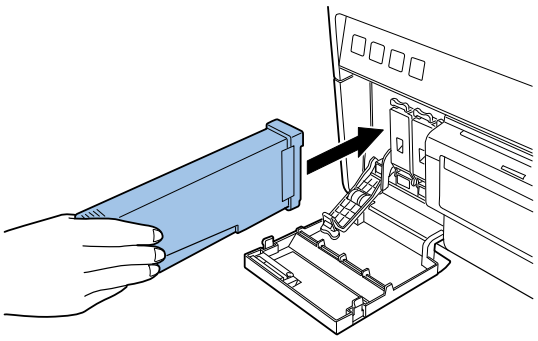
3. Take out included Ink Tanks from the packages, and then remove the cushioning materials.



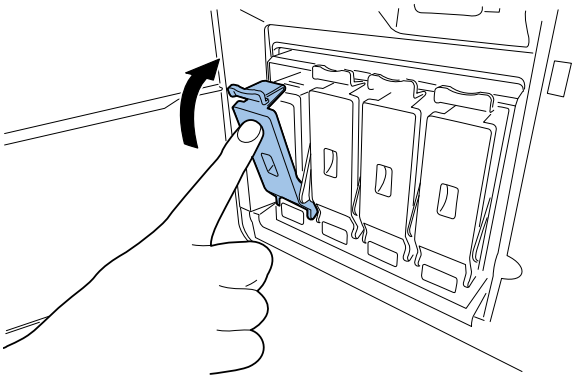
4. Slowly insert Ink Tank as far as it will go.

CAUTION:

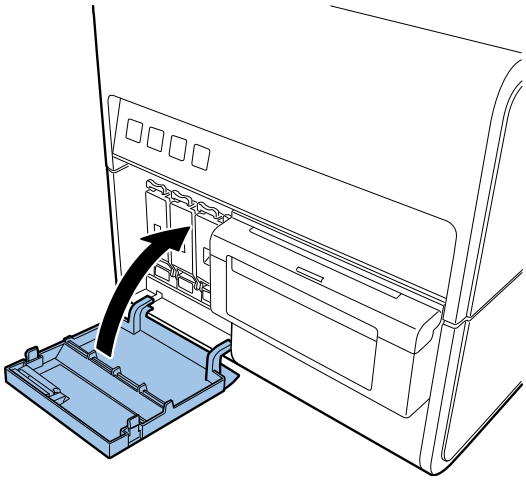
Ink Tank cannot be loaded properly if it is inserted in a wrong Ink Tank Slot.



5. Close Ink Tank Lever.



6. Set the rest of Ink Tanks and close Ink Tank Door.



● Installing Cutter Unit

In the case installing Optional Cutter Unit, follow the installation procedure of Optional Cutter Unit.

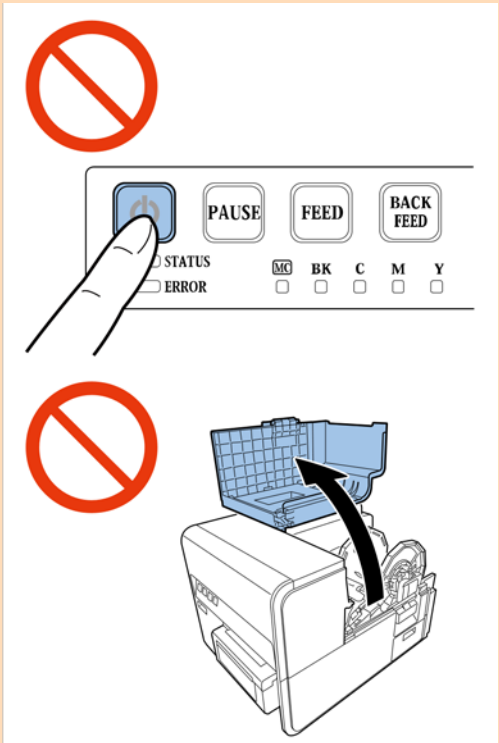
Initial Ink Loading

Note:

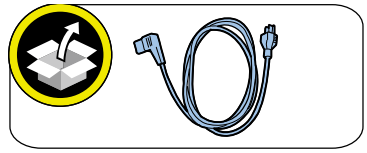
- Initial ink loading takes about 25 minutes.
- Ink loading time might be changed due to the design change.

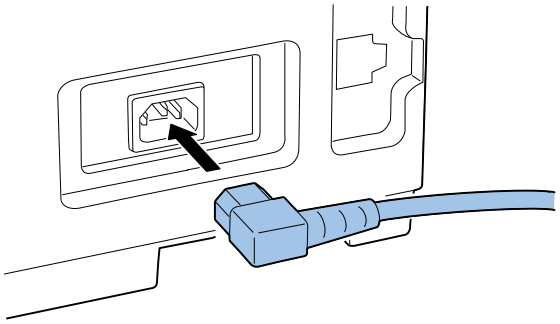
CAUTION:

- Do not turn the power OFF or open covers and doors such as Roll Cover during ink loading.
- Should Power key be switched OFF or covers be opened during ink loading, its operation will be terminated and has to be started from the beginning. In such a case, turn on the power to start ink loading again.
- Restarting the ink loading results in more ink consumption.



1. Connect Power Cord to Printer.





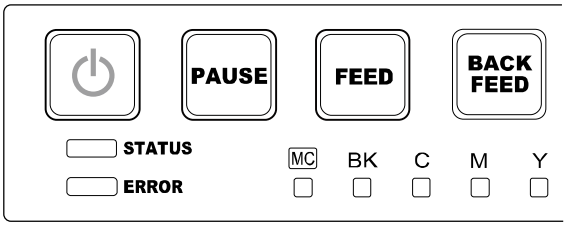
2. Connect Power Cord to the outlet.
3. Press Power key to turn the main power ON.

Note:

When [STATUS] Lamp changes from lighting to flashing, initial ink loading starts automatically. When the ink loading has completed, the lamp goes back to lighting and a buzzer sounds.

CAUTION:

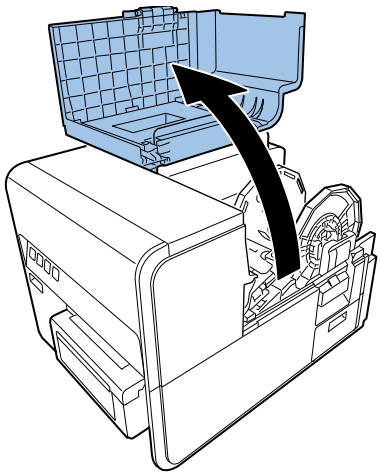
Ensure that [STATUS] Lamp went lighting before moving to the next step.

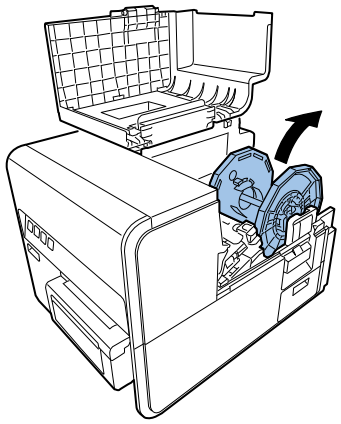


Checking after Installation

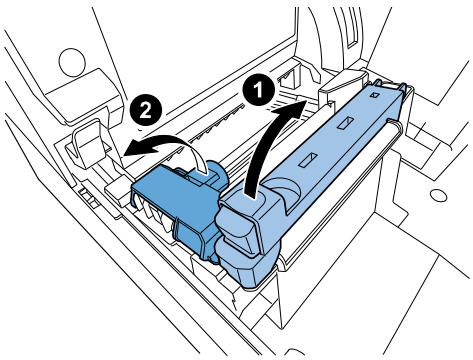
● Setting of Test Label

1. Open Roll Cover and take out Roll Holder.

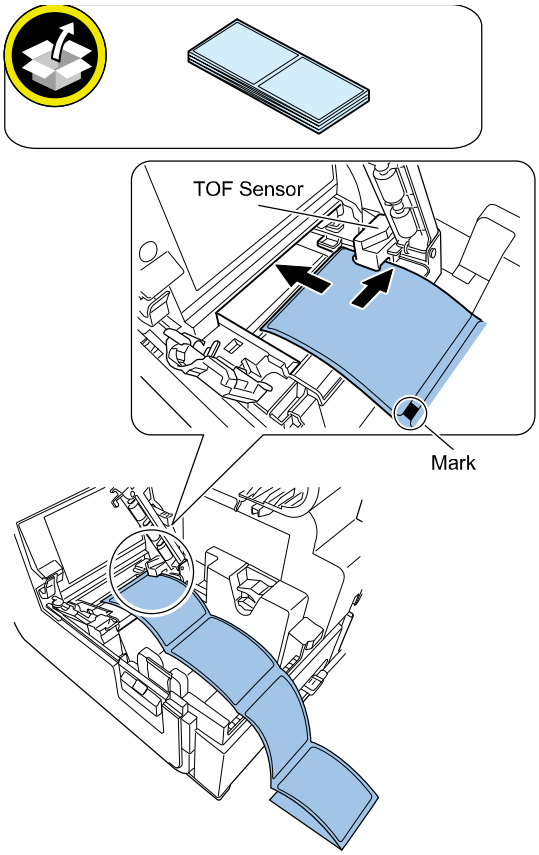




2. Open Paper Guide and Transport Guide.

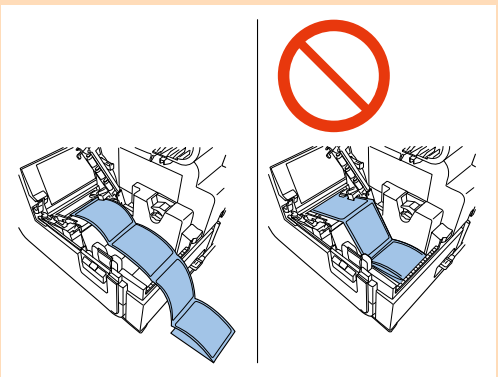


3. Insert Test Label along the left-side guide under TOF Sensor until it stops at the roller in the feeder slot.



Attention:

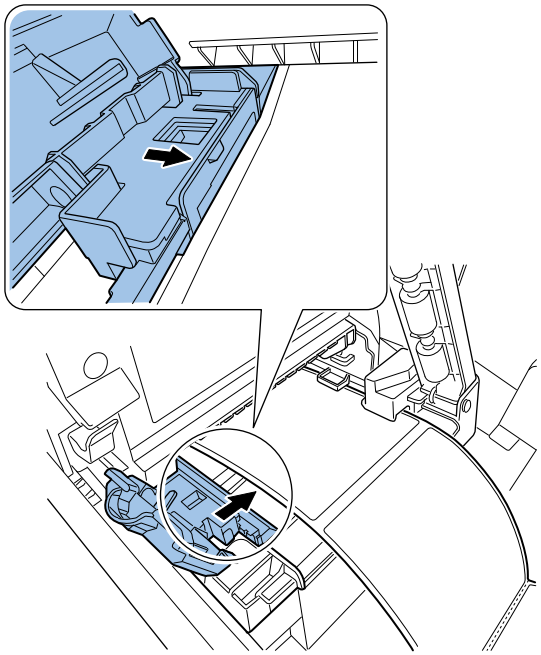
Do not put Test Label inside Printer.



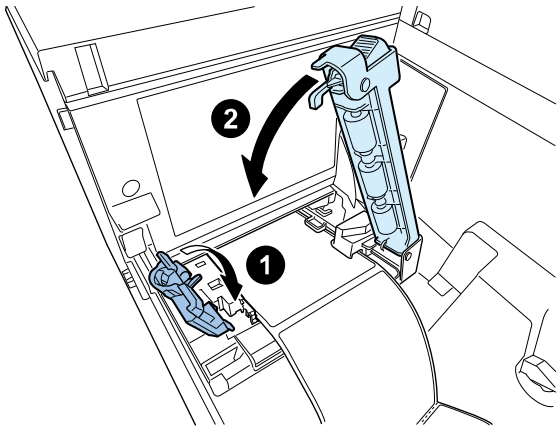
4. Slide and align Transport Guide with the paper.

Note:

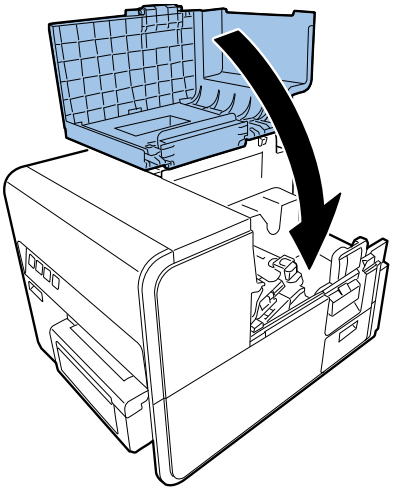
Do not give too much stress on the paper to avoid a paper jam.



5. Slowly close Transport Guide and Paper Guide.



6. Close Roll Cover.

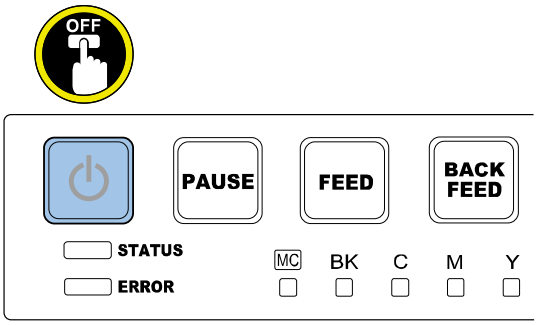


Printing and Checking a Nozzle Check Pattern

Note:

Nozzle Check Pattern can be printed using Service Utility.

1. Shutdown Printer as follows:
   * Press and hold Power key down.
   * Release Power key after a sound of the beep.



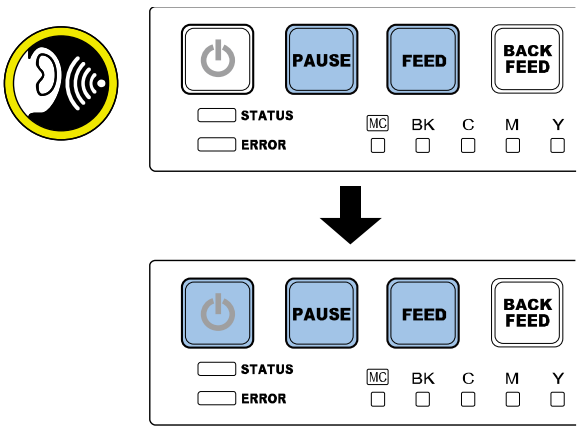
Note:

It takes approx. 30 sec. for the power off sequence to shutdown Printer.

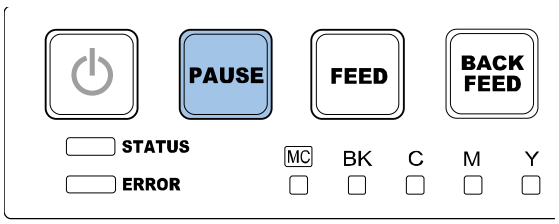
2. Press Power key while holding [PAUSE] and [FEED] Keys ON at a time. Release all keys when the second buzzer sounds.

Note:

- Keep pressing 3 keys down until the second buzzer sounds.
  <Timing when the buzzer sounds>
  1st time: Immediately after pressing 3 Keys.
  2nd time: 7 seconds after the first
- Check that power lamp is repeating 3-time flash.



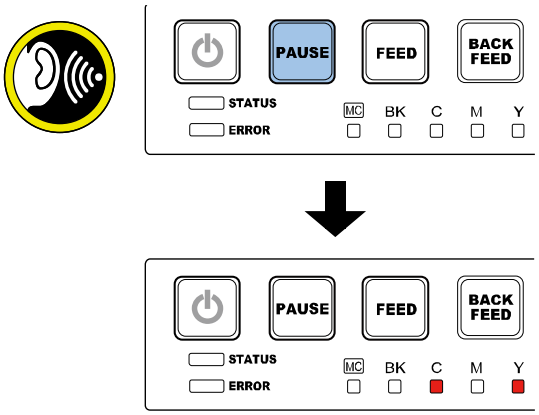
3. Press [PAUSE] Key once to enter Maintenance Mode.



Note:

When Printer enters Maintenance Mode, power lamp is repeating 4-time flash. If power lamp is lit, hold Power key for 1 second or longer to shutdown and try again.

4. Hold [PAUSE] Key down again. Release [PAUSE] Key when the buzzer sounds 5 times. After releasing [PAUSE] Key, confirm Ink Warning Lamps of cyan (C) and yellow (Y) are lit.



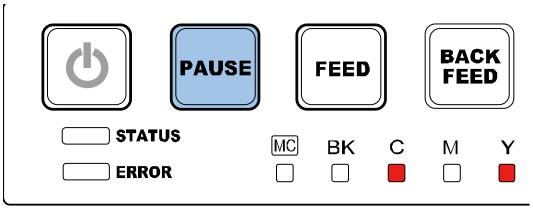
Note:

- Buzzer beeps every 1 sec. When [PAUSE] Key is holding pressed at Maintenance Mode.
- If a wrong function has mistakenly been selected, try again to select the Nozzle Check Pattern Printing by simply pressing [PAUSE] Key down and wait for 5 buzzer sounds.
- When Printer is left untouched for 15 sec. or more after selecting the function, the current selection is canceled and the function should be selected again with [PAUSE] Key.

<Table 1>

[PAUSE] Key release timing	Function to execute
Buzzer sounds once (1 second later)	Strong cleaning
Buzzer sounds twice (2 seconds later)	Initial ink loading
Buzzer sounds 3 times (3 seconds later)	Shipping the printer
Buzzer sounds 4 times (4 seconds later)	Printhead replacement
Buzzer sounds 5 times (5 seconds later)	Nozzle check pattern printing
Buzzer sounds 6 times (6 seconds later)	Setting value printing
Buzzer sounds 7 times (7 seconds later)	Printhead moving to print position
Buzzer sounds 8 times (8 seconds later)	Not to execute
9 seconds or more later (no buzzer)	Not to execute (no buzzer)

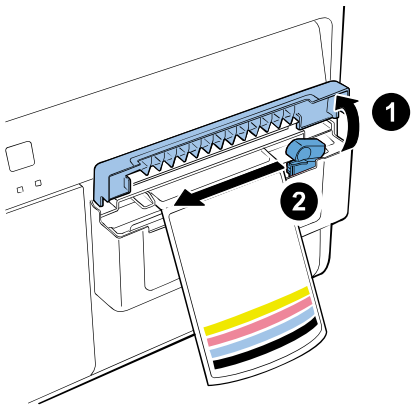
5. Press [PAUSE] Key once. A Nozzle Check Pattern is printed.



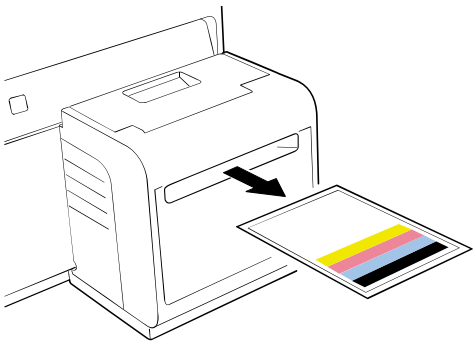
Note:

- To cancel the operation after executing some function, press Power key for 1 sec. or more to shutdown.
- If "Shipping the printer" or "Printhead replacement" is mistakenly executed, ink drainage is executed. In such the cases, turn off the power and enter Maintenance Mode again. Then load ink manually and execute Nozzle Check Pattern printing.

6. When the Optional Cutter Unit is not installed, open Cutter Cover and slide the cutter to cut the paper.



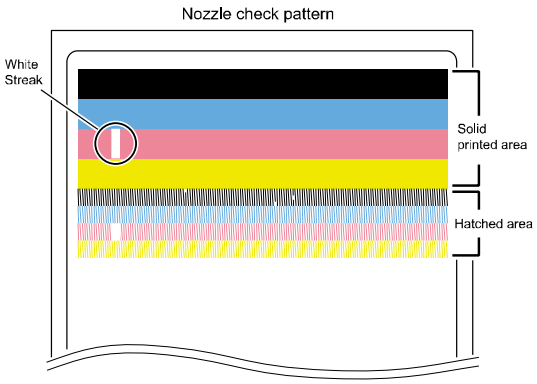
When Optional Cutter Unit is installed, the paper is automatically cut.



7. Observe printed Nozzle Check Pattern. In the case that white streak is in solid printed area, execute strong cleaning once. Refer to the table 1 in step 4.

Note:

- Strong cleaning takes approx. 8 min.
- In the case that the white streak is only in the hatched area, not in the solid printed area, strong cleaning is not required.
- Strong cleaning can also be executed using Service Utility.

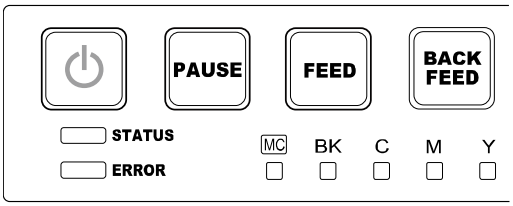


8. Confirm that the white streak has been eliminated.

Note:

If there is still white streak remaining after the strong cleaning, clean the printhead face referring to "Cleaning Procedure of Printhead Face."

9. Shutdown Printer as follows:
   * Press and hold Power key down.
   * Release Power key after a sound of the beep.

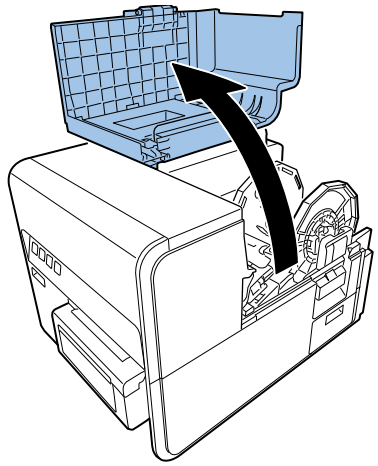


Note:

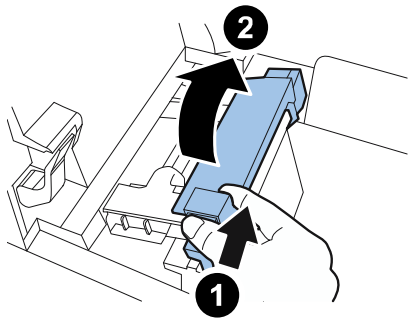
It takes approx. 30 sec. for the power off sequence to shutdown Printer.

Cleaning Procedure of Printhead Face

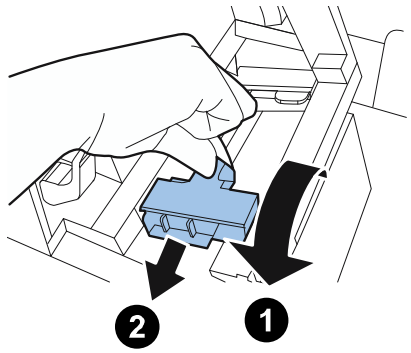
1. Open Roll Cover.



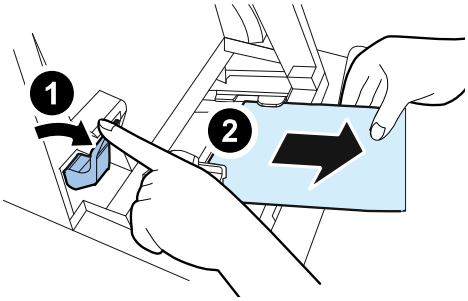
2. Open Paper Guide.



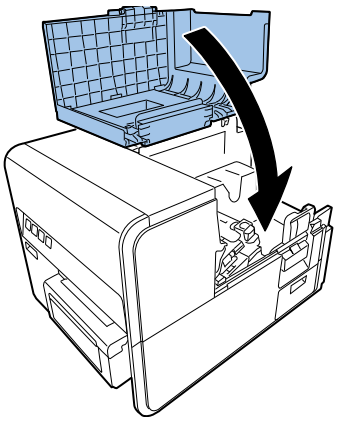
3. Open Transport Guide and slide it in the arrow direction.



4. While pressing Jam Release Lever down, pull out paper.



5. Close Roll Cover.



6. Refer to the table 1 in step 4 of "Printing and Checking a Nozzle Check Pattern" to move Printhead to the print position.

CAUTION:

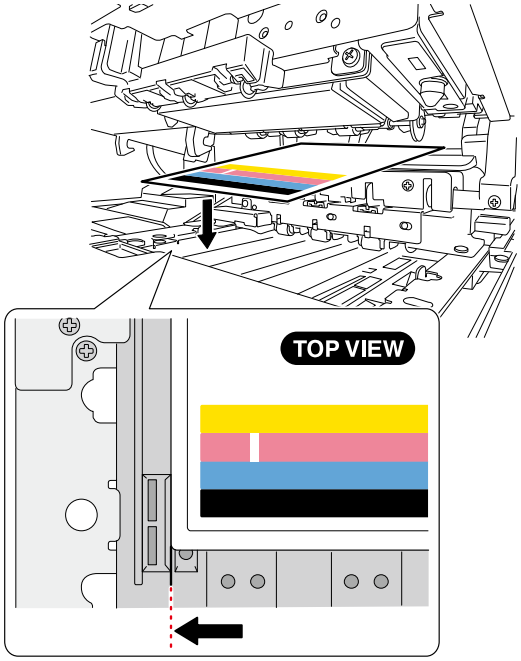
Do not keep Printhead at print position for a long time.

Note:

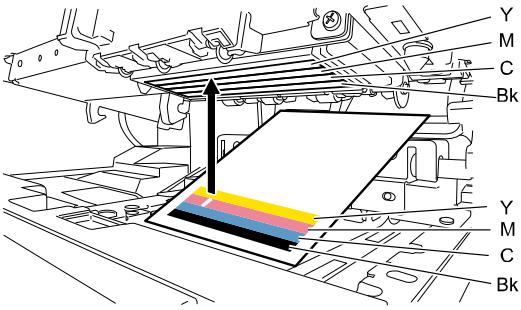
It takes approx. 5 sec. that Printhead comes to the print position.

7. Open Upper Unit.

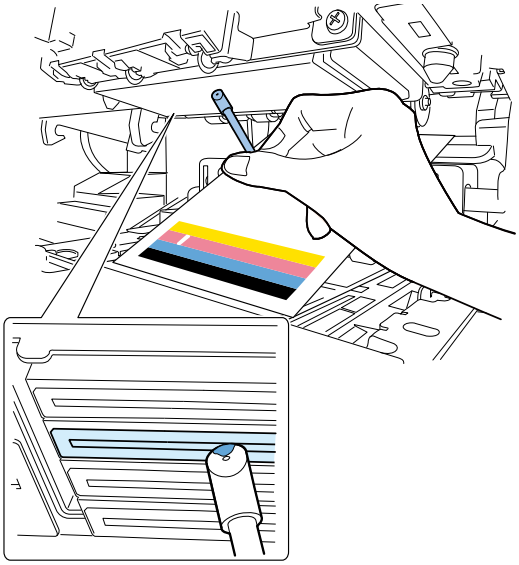
8. Place the Nozzle Check Pattern as shown in the figure.



9. Identify the position of non-discharging nozzle(s) depending on the corresponding position of the white streak(s).

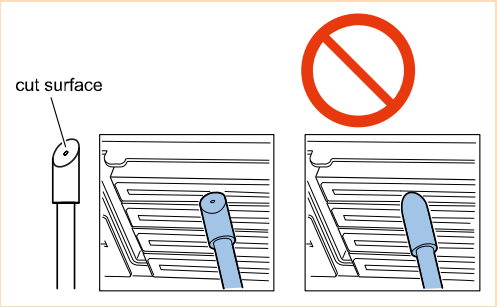


10. Put the cleaning stick on the nozzles for approx. 5 sec. to have it soaked with ink.



CAUTION:

Do not have the cut surface contact the Printhead face.



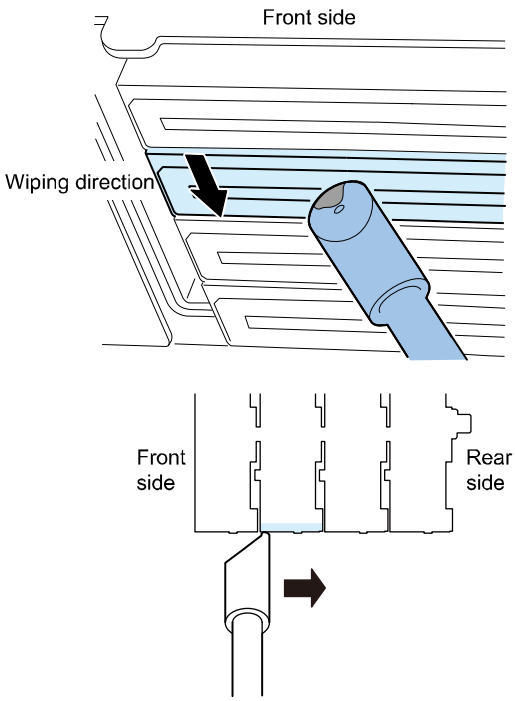
Note:

1 Cleaning Stick covers all the 4 colors of Printhead for the cleaning. Cleaning Printheads for different colors with the same Cleaning Stick does not affect the quality of printed colors.

11. Confirm that ink is absorbed in the tip of Cleaning Stick. Then wipe off Printhead surface from front to rear several times.

CAUTION:

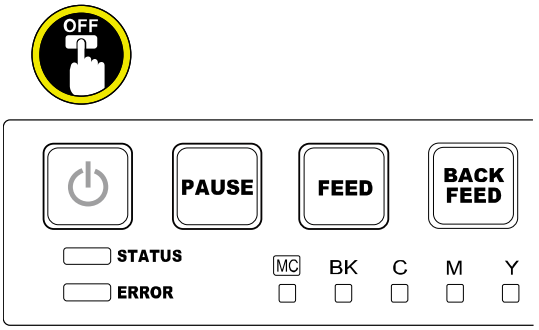
- Do not wipe the face of Printhead too hard. Wiping the surface too hard may cause damage on the printhead.
- Never touch the Printhead surface. Fatal damage may result on it.



12. Remove Nozzle Check Pattern.

13. Close Upper Unit and print the Nozzle Check Pattern again to check if the white streak is eliminated.

14. Shutdown Printer as follows:
    * Press and hold Power key down.
    * Release Power key after a sound of the beep.



Note:

It may take 30 sec. or more for shutdown sequence after releasing the Power key.

Confirmation of Printhead Position

Confirm that the relative mis-registrations among different colors are not observed in printed image. If there should be the mis-registration, adjust Printhead positions via Service Utility or Printer Driver.

TSC
The Smarter Choice.

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