DNP Photo Imaging America Corp.

DS-40, DS-80 Printer Basics

ACKNOWLEDGEMENTS

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1

PRINTER BASICS

This chapter provides you with basic information on how to maintain and troubleshoot your printer.

GENERAL MAINTENANCE

Part of the normal maintenance cycle for printers includes removing dust buildup fro the printer vents. This is done to free ventilation holes from dust and foreign matter and to imporve printer longevity. the following instructions are writen in a generic fashion to include all printers for the systems:

1. Power OFF the system at the main power source.
2. Using a small hand vacuum with a non-metallic extension and nozzle, vacuum all of the printers ventilation ports.
3. Vacuum the base of the system and external ventilation ports.
4. Power ON the system and remaining components.

You have now performed basic maintenance on the printer.

DS-40 and DS-80 Printers

Distinguishing Your DS-40 and DS-80 Printer Model

The DS series are versatile photo printers for use in photo labs by professional photographers, or in other commercial situations which demand high speed and exceptional quality. Other information on the printers can be found in the printer's field service manual or your system's documentation suite.

Figure 1. The DS-40 or DS-80 printer

Attention

prior to moving the printer, the ink ribbon cassette and paper roll should be removed from the printer. Always take care when lifting the printer so as not to cause physical injury.
When reinstalling, check that the ribbon and paper are properly positioned before resuming printing. If either is positioned incorrectly, paper jams, print position errors, or other unexpected problems can occur.

The DS-40 and DS-80 printers are quite similar. The instructions written for one will work for the other. The main difference is in paper size; DS-40 printers print 4x6 size prints, and DS-80 printers print 8x10 size prints.

Note

If your printer is configured for use in a tower system, the printer will have small rubber feet. These feet are essential to aligning the output for the printer with the tower conveyor system and keeping the printer from moving inside the unit. Do not remove the feet.

2

INSTALLING MEDIA

DS-40 AND DS-80 PRINTERS

Use the following procedures with your DS40 and DS80:

Installing the Paper Roll

Note

Its is a good idea to check that there is enough paper in the printer to meet anticipated demand. Avoid touching the surface of the paper. Excessive fingerprints or smudges can lead to poor print quality.

1. Pull out the mechanism unit by lifting the blue handle beneath the scrap box, and pulling gently.

Figure 2. Pulling the Mechanism Unit

2. Free the paper release lever.

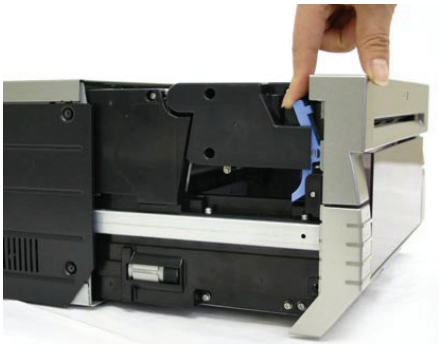


Figure 3. Paper Release Lever

3. Remove the scrap box, empty scraps into the trash.
   Set aside.

Figure 4. Removing the Scrap Box

4. Remove the spool ends from the printer.
5. Set the spools into the paper, ensuring there is no gap between the paper and the spool.

Attention

Failure to set the paper correctly can result in print jams. Do not get dirt or fingerprints on the paper, as they will adversely affect print quality.

Figure 5.

6. Set the paper holder into the paper cassette in the printer. Make sure you set the paper in firmly.

7. Set the paper so that it is in the direction shown.

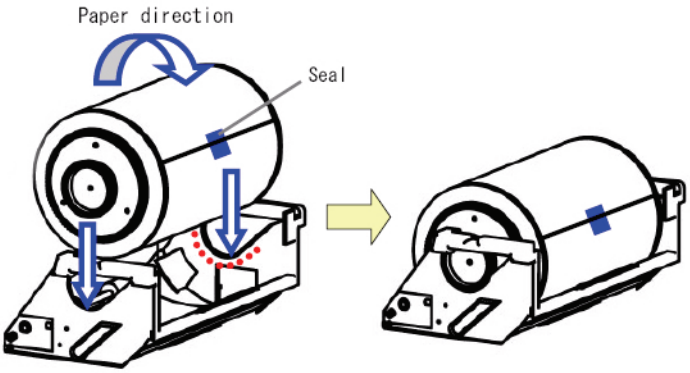


Figure 6. inserting paper into cassette

8. Remove the seal

9. Advance the paper in the direction indicated. When it is inserted far enough, the buzzer will beep and the paper LED (orange) will stop blinking.

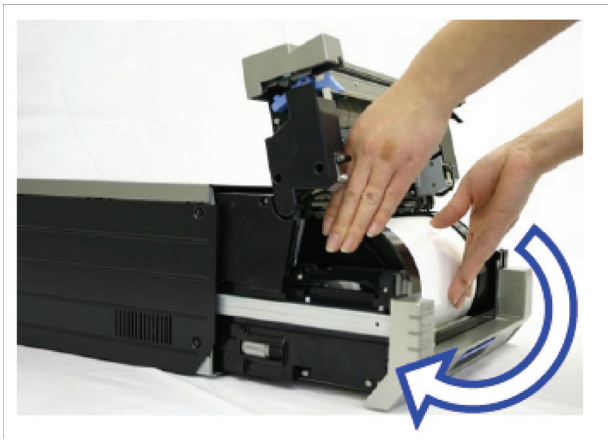


Figure 7. Advancing the paper

Note

It is easier to set if you press down on the spool lightly while advancing the paper.

10. Set a new ribbon into the ribbon cassette.
Advance the ribbon in the direction shown and take up any slack in the ribbon.

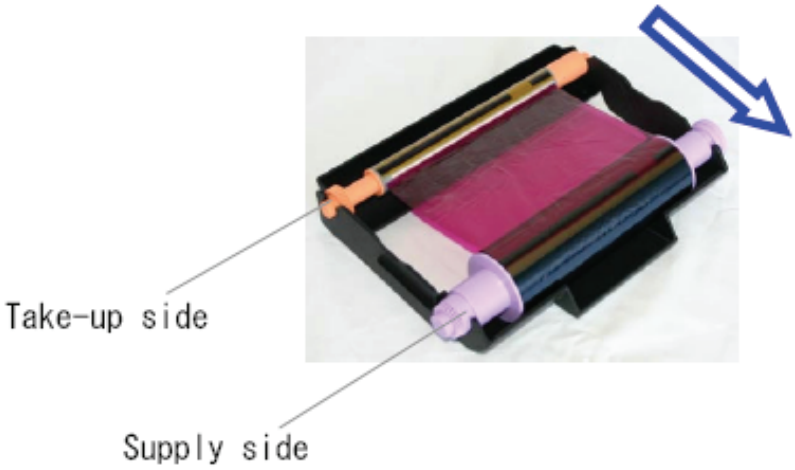


Figure 8.

11. Set it with the supply side in the front.

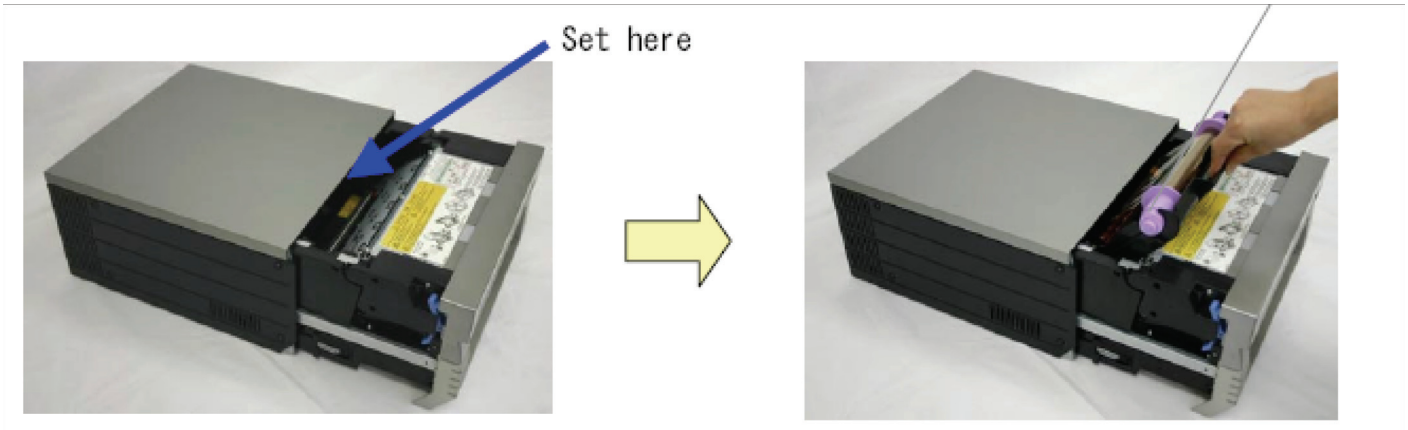


Figure 9.

12. Set the scrap box.

Attention

The printer will not operate without the scrap box attached. Closing the mechanism unit without the scrap box attached will cause a “No Scrap Box Error.” Clean any excess scraps from the printer.

You have now installed the media in the printer.

3

MAINTAINING THE PRINTERS

EMPTYING THE PAPER SCRAP BIN

Attention

When the scrap box is removed, do not touch the cutter, as there is a danger of injury.

Before replacing the printer media, remove the paper's scrap bin.

1. Pull out the mechanism unit by lifting the blue handle beneath the scrap box, and pulling gently.

Figure 10. Pulling the Mechanism Unit

2. Free the paper release lever.

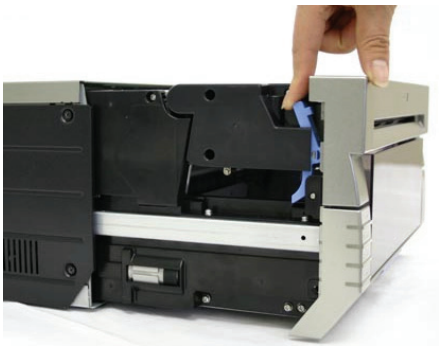


Figure 11. Paper Release Lever

3. Remove the scrap box, empty scraps into a proper receptacle...

4. Replace the scrap bin.

Attention

The printer will not operate without the scrap box.
Closing the mechanism unit without the scrap box attached will cause a “No Scrap Box Error,” and the red error LED will blink.

5. Close the top of the mechanism unit, and push unit back in place.

Note

Closing the mechanism unit starts initialization (4 blank sheets are fed out).

You have now performed basic maintenance on the printer.

Cleaning the Ventilation Area

Periodically, you should check the ventilation or exhaust for the printer, as it can become clogged with dust.

Attention

If the ventilation for the printer becomes clogged or blocked, the inside temperature of the housing becomes higher and can cause the thermal head to overheat.
When the thermal head overheats, printing halts and the power LED will blink. Printing resumes automatically when the head temperature cools. The thermal head can also overheat due to inputting continuous high-power such as printing all black images.

1. Turn the printer OFF.
   Access the rear of the printer.

Note

You may need to unplug the power or network cables to completely access the back of the printer.
If you will have to disconnect power, make sure you power down the unit previous to unplugging the unit.

2. The exhaust for the printer is located near the top of the back plate, as indicated in the illustration below:

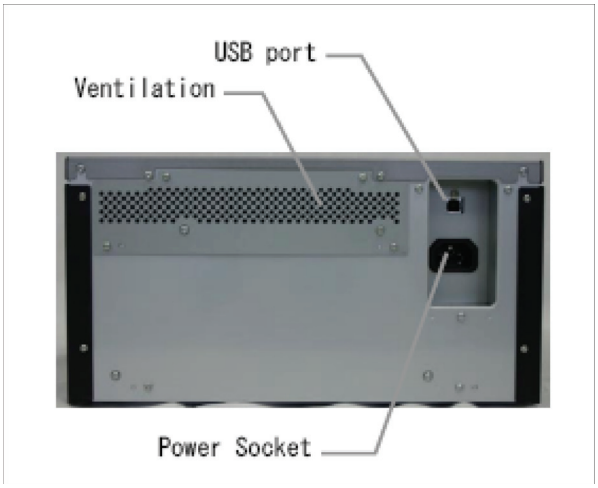


Figure 12. Ventilation Port

3. Wipe the dust from the unit using a cloth designed for dusting electronics, or use canned air to blow the dust from the back of the unit.
4. Replace any cables you may have had to disconnect to access the back of the printer, and put the printer back in place.
5. Power the unit ON.

You have now cleaned the dust from the ventilation unit.

Cleaning the Platen Roller

If any impressions appear regularly in the same place on the prints, on either the front or back, you will need to clean the platen roller. There could be powder, paper scraps, or other debris stuck to the roller.

1. Pull out the mechanism unit by lifting the blue handle beneath the scrap box, and pulling gently.

Figure 13. Pulling the Mechanism Unit

2. Free the paper release lever.

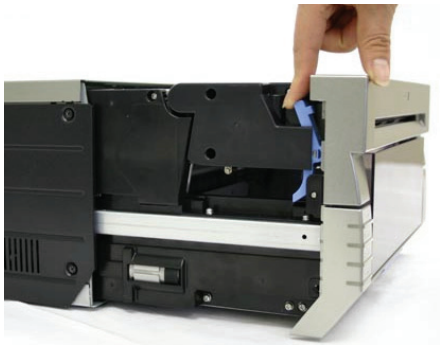


Figure 14. Paper Release Lever

3. Remove the scrap box, empty scraps into a proper receptacle...

Figure 15. Removing the Scrap Bin

4. Remove the paper cassette.

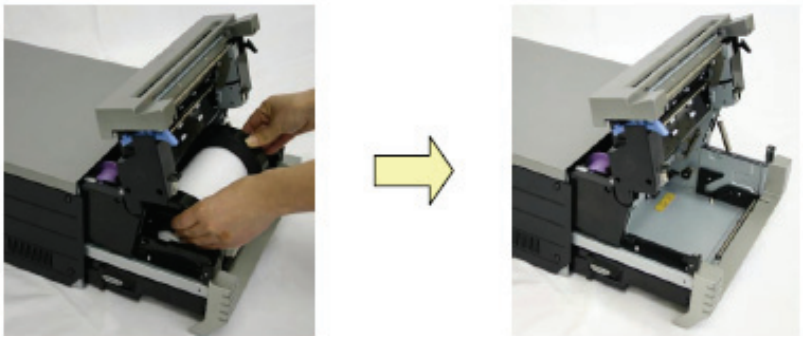
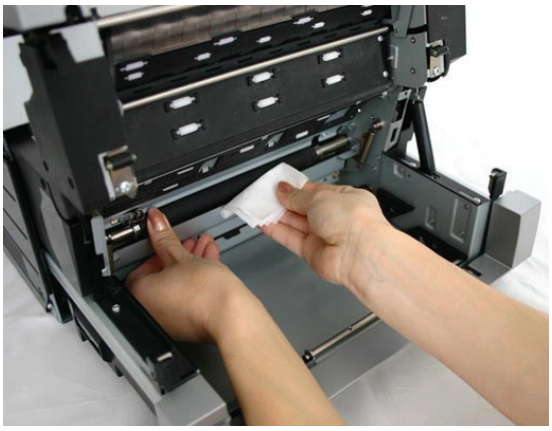


Figure 16. Removing the Paper Cassette

5. Using the alcohol pads provided, wipe any dirt off the platen roller while rotating the roller slightly.

Attention

Only use the alcohol pads provided in the cleaning kit.
Take care to avoid injury and damage due to the sharp edges.



Note

If there is debris that will not come off using the alcohol pad, run the sandpaper provided in the cleaning kit over the area lightly until the debris is removed. Clean the area again with an alcohol pad.

6. Replace the paper cassette. Make sure the casette is firmly seated.

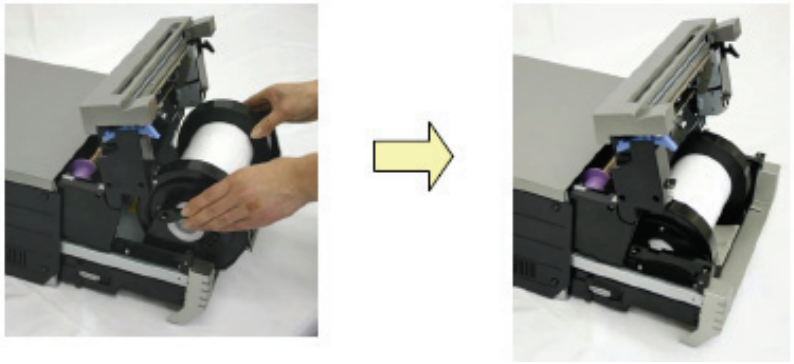


Figure 17. replacing the paper cassette.

7. Advance the paper in the direction indicated until the buzzer beeps, and orange Paper LED stops blinking.

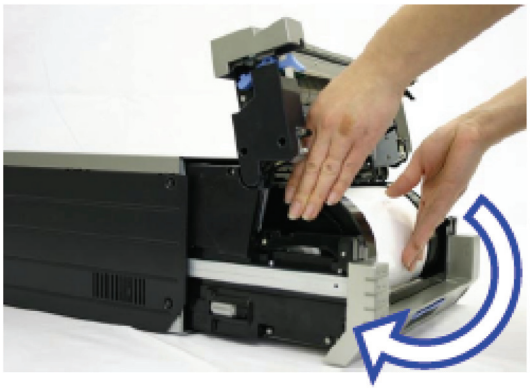


Figure 18. Advancing the paper

8. Replace the scrap bin and close the top of the mechanism.
9. Gently slide the mechanism back in place. The printer will re-initialize.

You have now cleaned the platen roller.

4

TROUBLESHOOTING

ERROR MESSAGES

The blinking of the LED indicates the Printer Status.

Status	LED Display				Solution	See
	Power	Ribbon	Paper	Error		
Out of Paper *1	●		✲		Put in a new roll of paper	P. 11
Out of Ribbon *1	●	✲			Put in a new roll of ribbon	P. 13
Door is open (No paper)	●		✲	✲	Set the paper properly and close the mechanism unit	P. 12
Door is open	●			✲	Close the mechanism unit	P. 14
No scrap box	●			✲	Set the scrap box	P. 13
Paper error	●		●	●	Reset the paper correctly	P. 19
Ribbon error	●	●		●	Reset the ribbon correctly	P. 21
System error *2	●			●	Turn the power OFF, then back ON	—
Over-heated	✲				The head is cooling off (auto-recovery)	—

*● indicates lit, ✲ indicates blinking, and an empty box indicates the LED is off.

*1 Replace the paper and ribbon as a set.

*2 If you can't resolve the system error, contact the service representative.

Resolving Media Errors

If there is a Paper Jam:

1. Pull out the mechanism unit by lifting the blue handle beneath the scrap box, and pulling gently.

Figure 21. Pulling the Mechanism Unit

2. Remove the ribbon cassette by pulling the cassette up and out.

Figure 22. Removing the Ribbon Cassette

3. Pull any paper remaining in the printer in the direction indicated, and cut off any wrinkled or partially printed areas evenly with scissors.

Figure 23. Pulling and Trimming the Paper

4. Remove the scrap box and rewind the paper.

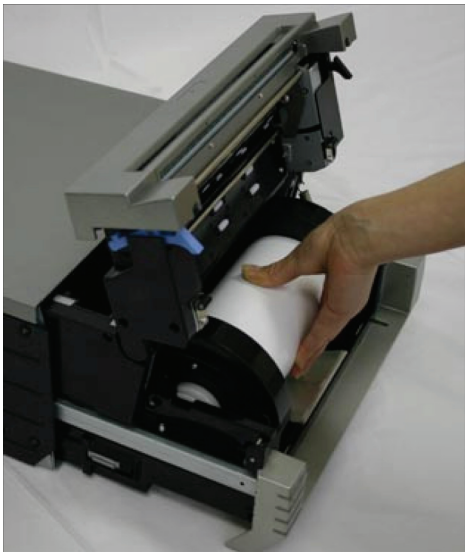


Figure 24. Rewinding the Paper

5. Cut off any partially printed, wrinkled, or otherwise inferior paper evenly with scissors and reset the paper.

Note

If wrinkles or partially printed areas are left, it could cause the paper to jam again.

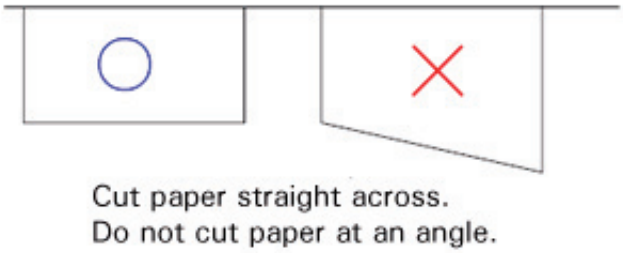


Figure 25. Cutting the Paper

6. Advance the paper in the direction indicated. When it is inserted far enough the buzzer will beep, and the orange Paper LED light will stop blinking.

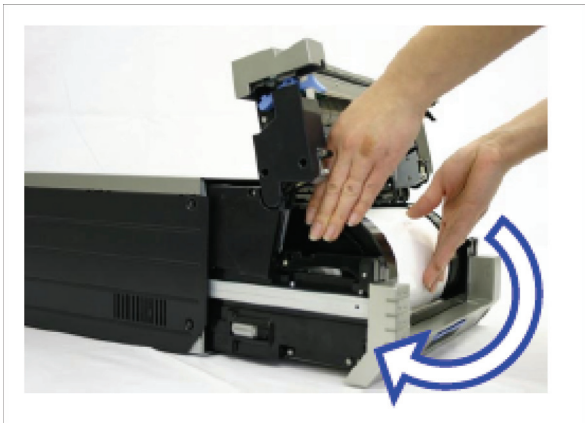


Figure 26. Advancing the paper

Close the top of the mechanism, and push the mechanism back in place. The printer will re-initialize.

You have now cleared a paper jam.

If the ribbon is torn or has been pulled into the mechanism:

1. Pull out the mechanism unit by lifting the blue handle beneath the scrap box, and pulling gently.

Figure 27. Pulling the Mechanism Unit

2. Carefully remove the ribbon cassette by pulling up and out.

Figure 28. Removing the Ribbon Cassette

3. Cut the ribbon.

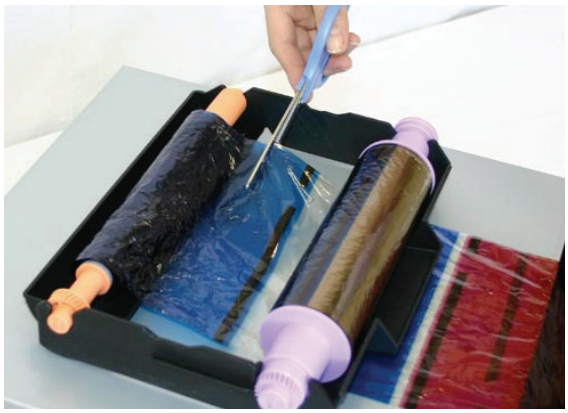


Figure 29. Cutting the ribbon

4. Carefully remove the remaining ribbon from inside the mechanism.

Attention

If the ribbon is torn or left in the printer, it could affect print quality.
You may need to clean the platen roller (see *Cleaning the Platen Roller*).

Figure 30. Removing the Ribbon

5. Reattach the ribbon using clear or cellophane tape.

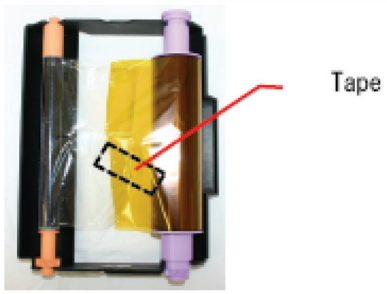


Figure 31. Placing the tape

6. Advance the ribbon several times as shown, until the tape is out of sight.

Attention

Make sure there is NO slack in the ribbon.
Always wind ribbon onto the orange take-up spool.

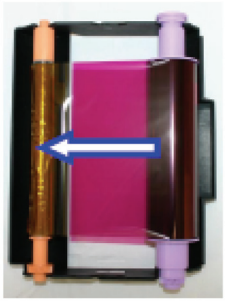


Figure 32. Advancing the ribbon

7. replace the cassette.

Attention

Make sure the ribbon is placed in the printer correctly, inserting the take-up side first. If the cassette is inserted improperly, the mechanism will not close.

Figure 33. Replacing the Cassette.

8. Close the mechanism. The printer will re-initialize.

You have now repaired a torn ribbon.

If the Printer is Stopped Mid-action:

Figure 34. Printer Stopped

1. Turn the power OFF, and then back ON. The jammed paper should be released, and the cutter should return to its ready position

> **Attention**
>
> The mechanism will not open until the cutter has been returned to the ready position.

2. Remove any partially printed paper from inside the mechanism, following the instructions for “if there is a paper jam.”

You have reset a printer stopped in mid-action.

If the Power is Cut During Printing:

> **Attention**
>
> If the power is cut during printing, the mechanism unit cannot be pulled out. The mechanism will not open until the cutter has been returned to the ready position.

1. Turn the power back ON. The partial print will be cut into scrap lengths and discarded in the scrap bin.
2. Once the cutter has returned to the ready position, the mechanism can be pulled out.
3. Check that there is no partially printed paper in the mechanism unit. If there is, see: “if there is a paper jam.”

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