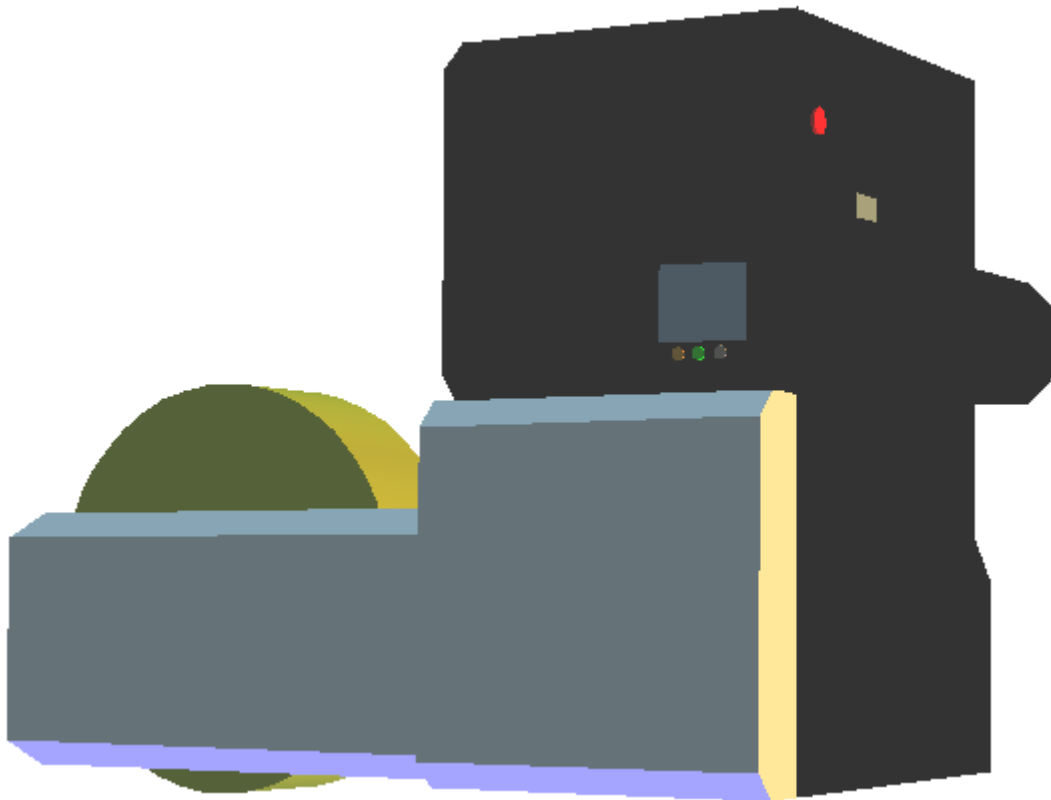


OLYMPUS

OLYMPUS Industrial Web Printer

OP1 SERIES OPERATION GUIDE



OLYMPUS CORPORATION

Revision History

No.	Date	Rev.	Description	Note
1	2008/07/18	DRAFT		
2	2008/09/10	DRAFT		Add Caution, Replace the Machine Figure
3	2008/09/18	Rev.001		
4	2008/10/01	Rev.002		
5	2008/10/02	Rev.003		
6	2008/10/03	Rev.004		
7	2008/10/11	Rev.005		

The following signal words are used throughout this manual



Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.



Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.



Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices or potential equipment damage.

Note:

Indicates additional helpful information.



This product contains RFID (Radio Frequency Identification) system.

The user is cautioned that unauthorized changes or modifications not approved could void the user's authority to operate the equipment.

Model: 444 - 59005

Contains FCC ID: WK3RFAAA00

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

The user is cautioned that unauthorized changes or modifications not approved could void the user's authority to operate the equipment.

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules.

These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

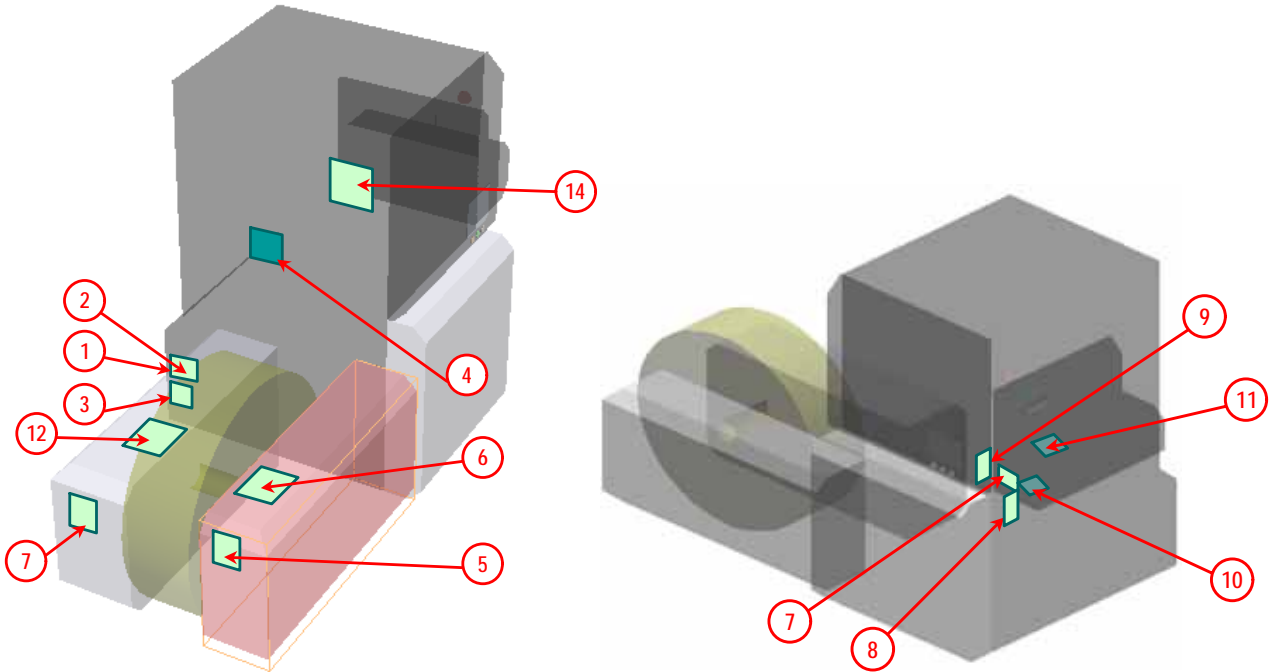
Contains Canada IC: 4763B-RFAAA00




Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.







This Class A digital apparatus complies with Canadian ICES-003.




Cet appareil numérique de la classe A est conforme à la norme NMB-003 du Canada.

Label



No.	Description	Label	Note
1	Rating Name Plate	<p>MODEL: OP1-CS 200-230V 50/60Hz 6A~</p> <p> US LISTED I.T.E. 1K96</p> <p>Contains FCC ID: WK3RFAAA00 This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.</p> <p>Contains Canada IC: 4763B-RFAAA00 This Class A digital apparatus complies with Canadian ICES-003. Cet appareil numérique de la classe A est conforme à la norme NMB-003 du Canada.</p> <p>S/N OLYMPUS CORPORATION MADE IN JAPAN </p>	
2	FCC ID Canada IC		Described in the name plate (#1)
3	WARNING Label Earth Leakage Current		

4	WARNING Label		Behind the Side Panel (Inside)
5	WARNING Label Weight Limitation		
6	WARNING		
7	WARNING Label Weight Limitation		
8	WARNING Label Do not Touch		
9	CAUTION		

10	WARNING Label : Watch your head		Behind the Side Cover
11	WARNING : Do not close the metal item		On the Cutter Drive Unit (Inside)
12	WARNING :		
13	Replacing INK Method	T.B.D.	
14	Remove Paper JAM Method	T.B.D.	
15	Unwinder	T.B.D.	

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GUIDE:

1. Chapter1 General

1.1. Overview

Figure

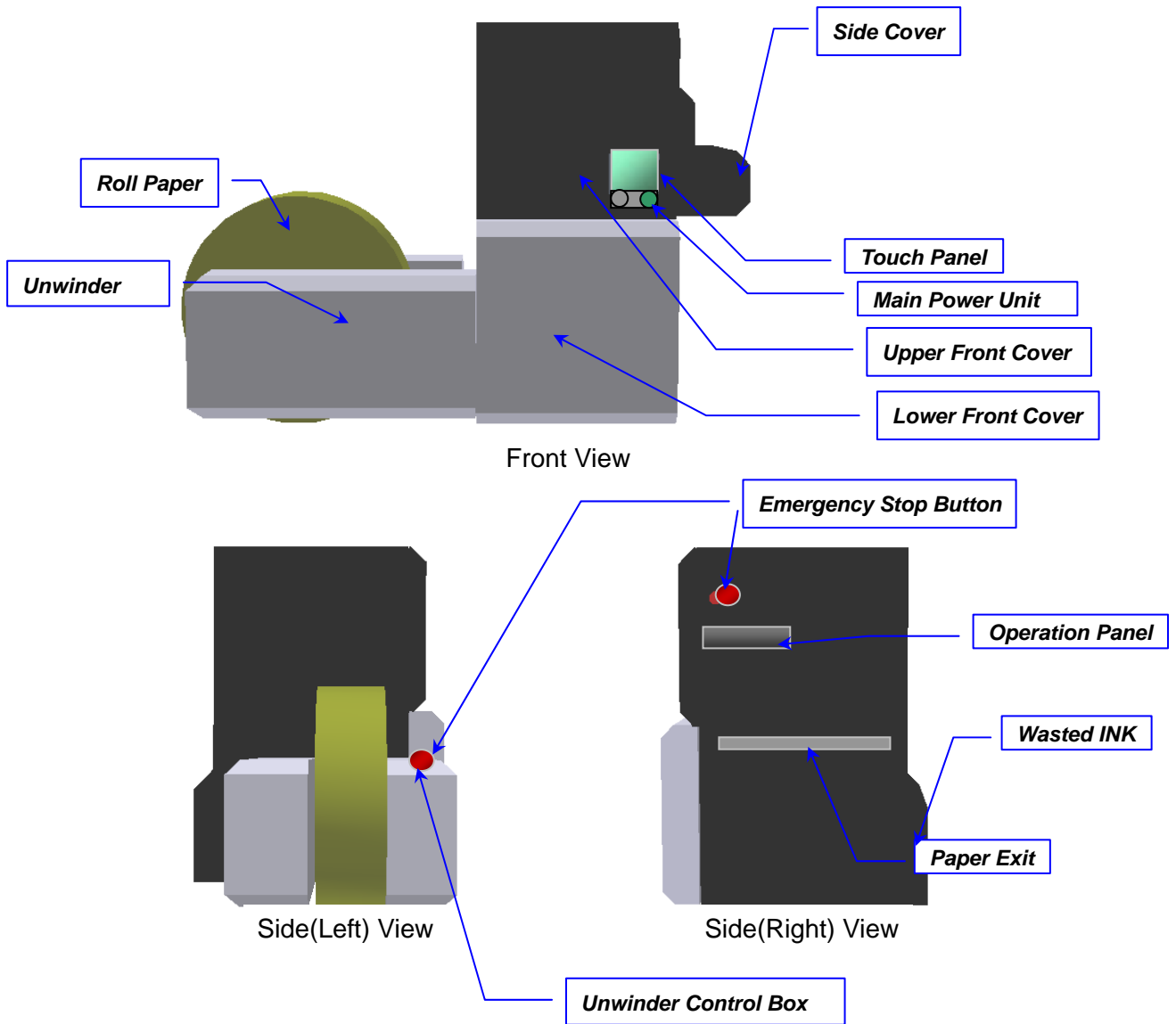


Figure-1

1.2.1. Structures of OP1 Printer System

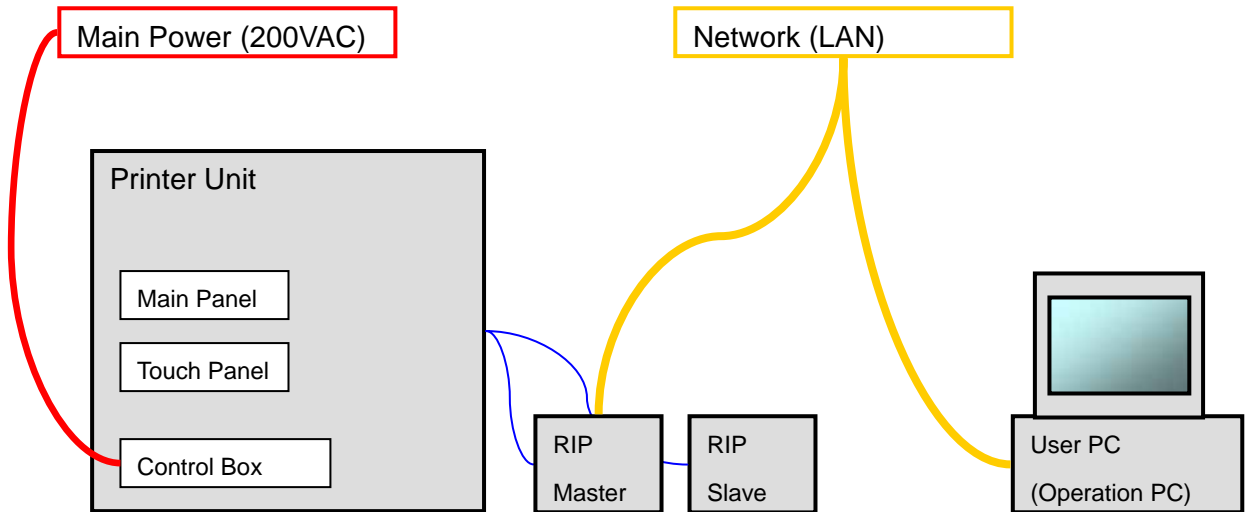
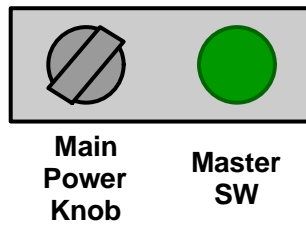


Figure-2

1.2.1. Operation Panel Figure

1) Main Power Unit



2) Operation Panel



Figure-3

NOTE: Refer to EXHIBIT A MAIN PANEL MENU GUIDE for the detail.

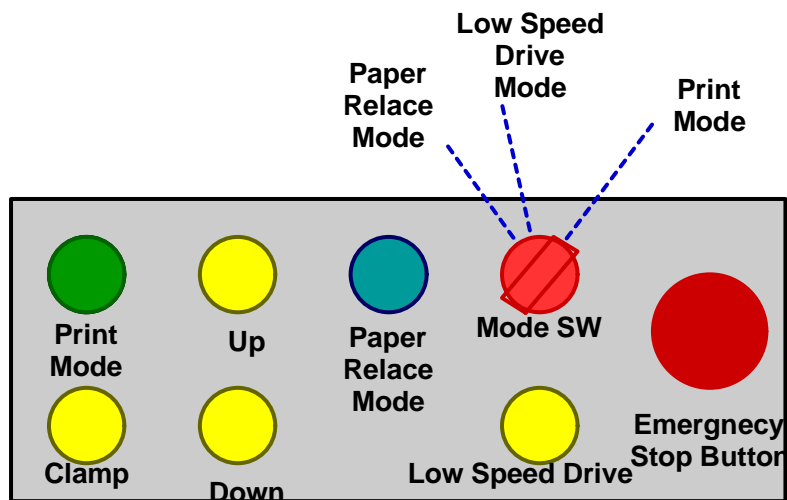
3) Touch Panel



Figure-4

NOTE: Refer to EXHIBIT B TOUCH PANEL MENU GUIDE for the detail.

4) Unwinder Control Box

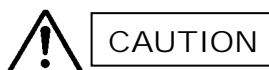




1.1. WARNING

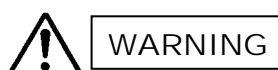
1.1.1. General

- 1) Prohibit any person to operate the unit except for designated operator given proper training. Wrong operation may cause unexpected accident.
- 2) Prohibit any person with a pacemaker to get close to the unit.
- 3) Do not insert a hand to the unit during operation. It may cause the serious injury if a part of sleeve or finger tip is caught by roller.
- 4) Be careful of any loose part getting caught and pulled into the unit. (I.e. tie, sleeve, hair, and strap)
- 5) Main power of the **Main Power Unit** must be down while on service. There is a danger of electric struck or injury.



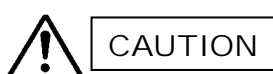
1.1.2. Machine Setting

- 1) The main unit must be fixed position by four levelers on each corner after set on the proper position.
- 2) Locate the unit with enough space on surrounding area.
- 3) Stop using the machine and contact Olympus immediately if any miss-operation observed on a device located near by.
- 4) Stop using the machine, turn off the power of the **Main Power Unit**, and contact Olympus immediately when ink leakages occur.
- 5) Not for use in a computer room as defined in the Standard for the Protection of Information Technology Equipment. ANSI/NFPA 75.



1.1.3. Unwinder (Warning)

- 1) Do not load the paper weight exceeding 300kg (660lbs). Otherwise there is a danger of the machine falling down and damage.
- 2) Do not print while bottom of paper roll is in contact with the ground. Otherwise, there is a concern of paper cut off and the machine damage.
- 3) Must stay within the location where **Emergency Stop Button** can be reached while replacing the roll paper.
- 4) Do not stand behind the roll paper while replacing. There is a danger of injury when paper roll down.
- 5) Do not place feet under the roll paper. There is a danger of injury when paper falls off.

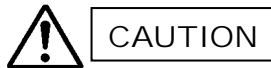


1.1.4. Unwinder (Caution)

- 1) Do not completely remove the paper from the machine. Connect leading edge of the new paper to the remaining old paper when replacing.
- 2) The print head must move up from the printing position by selecting the **Paper Replace Mode** change on

the **Unwinder Control Box**, when paper is changed.

- 3) The print head may be damaged by paper connection part hitting the print head if the print head is located at the print position.
- 4) Do not use the paper with dust on surface, especially at the first part of the new paper. The print head may be damaged if the dust stuck into the nozzle, and causes the head replacement.



1.1.5. Printer Unit

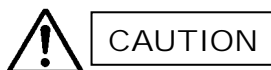
- 1) Do not touch the surface of the print head. The print head may be damaged, and causes the head replacement.
- 2) Must follow the operation manual at the replacing the print head, otherwise ink may damage the print head.



1.1.6. Cutter Driving Unit

- 1) Turn off the **Main Power Knob** at the **Main Power Unit** while replacing the cutter blade. Otherwise, there is a danger of injury by roller movement.
- 2) Do not get any watch or card with mag-stripe closer to the **Cutter Drive Unit**. Otherwise there is a danger of damage or data erased on the card.
- 3) Wear a pair of glove while cutter blade replacement. Otherwise there is a danger of injury.

NOTES: Refer to EXHIBIT D PINNACLE DIE CUTTER for the detail.



1.1.7. INK Handling

- 1) When the INK Bottle is empty, open the **Lower Front Cover** of the Machine.
- 2) Put out the empty bottle from folder, and put the new INK bottle into appropriate folder. Before put in, check that color is matched to this folder.
- 3) The empty bottle must be handled according to the local law.

1.2. Installation Method

Setting method. (Use a bubble level to make sure the unit frame position.)

T.B.D.

1.3. Operation Procedure

1.3.1. Power On (Printer Unit)

- 1) Turn the **Main Power Knob** on the **Main Power Unit**.
- 2) Push the **Master SW** (green button) on the **Main Power Unit**. The **Power Button** on the **Operation Panel** will be on (amber).
- 3) Push the **Power Button** on the **Operation Panel**. The amber light will be changed to green. "Please wait a moment" will be displayed on the **Operation Panel**.

- 4) Wait for a while, and push cancel button if it remains "Please wait a moment" display.

1.3.2. Power ON (RIP Controller)

- 1) Push the power button on Master and Slave Rip.
- 2) Connect to the Web Monitor from browser of the operation PC at your site.
- 3) When the both Master and Slave status become ready on the Web Monitor, the OP1 is ready to print.

NOTE: Refer to EXHIBIT E SR-1000 SOFTWARE GUIDE for the detail.

1.3.3. Shutting Down (Printer Unit)

- 1) Push the **Power Button** on the **Operation Panel**. This button light will be changed from green to amber.
- 2) Wait until blink of the "Please wait a moment" becomes faster, and then turn to **Main Power Knob** of the **Main Power Unit** off. (Lamp will be turned off)

1.3.4. Shutting Down (RIP Controller)

- 1) Push the power button of both Master and Slave RIP controller.
- 2) After Beep sounds, the green LED on the both of them will be turned off, then RIP controllers have shut down.

1.4. The method of changing roll paper



Follow the below steps to change the roll paper when the unit detect paper empty and error occur.

1.4.1. Preparation

- 1) Turn the **Mode SW** of the **Unwinder Control Box** to the **Paper Replace Mode** position. Make sure the print head moves away from the printing position.
- 2) Once the print head is moved away from the printing position, cut the roll paper and attach paper edge to the machine using weak adhesive tape. (I.e. splicing tape)

1.4.2. Set Roll Paper

- 1) Push the **Clamp** button of the **Unwinder Control Box**, then the roll paper will be unclamped.
- 2) Pull off slightly the roll paper from the clamp position.
- 3) Push the **Down** button of the **Unwinder Control Box** until roll paper is down at appropriate level.
- 4) Pull the roll paper of the arm and release the air-chuck. And pull off the shaft from the roll and put it in the new roll paper.
- 5) Close the new roll paper to the arm.
- 6) Push **Up** button of the **Unwinder Control Box** until **Paper Replace Mode** light on. The **Paper Replace Mode** will turn on when the arm locate at appropriate level to set the new roll paper.
- 7) Air into air-chuck to lock the paper roll to the shaft tightly.
- 8) Push the **Up** button of the **Unwinder Control Box** until the arm stop.
- 9) Push the **Clamp** button of the **Unwinder Control Box** then the new roll paper will be clamped.
- 10) Connect the edge of new roll paper to the edge of the current paper from the machine by the splicing

tape tightly.

- 11) Turn the **Mode SW** of the **Unwinder Control Box** to the **Low Speed Drive Mode**.
- 12) Push the **Low Speed Drive** button of the **Unwinder Control Box**, then roll paper will be driven slowly until the connected position will be exited from the **Paper Exit**.
- 13) Turn the Mode SW of the Unwinder Control Box to the Print Mode position, then the machine is ready to print.

NOTE: Data of incomplete job will be lost. It must be reprint.

1.4.3. Change of the Paper Cut Size

- 1) Set two blades when size of the desired output paper is LETTER/A4.
- 2) Set one blade when size of the desired output paper is LEDGER/A3.
- 3) Make sure to use the proper position of the blade for LEDGER/A3, otherwise output paper will not be cut properly.
- 4) Select the lever of **Paper Exit** unit for the proper paper size.
- 5) Select the proper paper size on the **Touch Panel**. (It is not necessary to set the **operation panel**.)

NOTE: Refer to EXHIBIT D PINNACLE DIE CUTTER for the detail.

- 2. Maintenance
- 2.1. Method of Test Print
- 2.2. Method of the Print Head Cleaning
- 2.3. Remove Jam

- 1) Check the **Operation Panel** for the jam position.
- 2) Open the **Side Cover**.
- 3) Turn levers to release two nipping roller.
- 4) Manually pulls loosen paper in the jam pocket.
- 5) Cut the paper follows the guide slit, using regular office use cutter.
- 6) Set the leading edge of the paper between rollers.
- 7) Manually rotates the nipping roller to eliminate loosen part. Make sure the paper is not slant.
- 8) Manually rotates the brush roller (counter clockwise looking from the front side), and remove the paper piece if any.
- 9) If there are some paper piece cannot be removed by the brush roller rotation, open the brush roller unit and remove it.
- 10) Close the brush roller unit.
- 11) Open the **Paper Exit** unit cover, and remove the paper pieces if any.
- 12) Close the **Paper Exit** unit cover.
- 13) Close the **Side Cover**.

2.4. Replacement of the ink Cartridge

- 1) When yellow light of the signal tower is on, and "Ink Empty" appears on the main panel, the ink cartridge must be replaced.
- 2) If the yellow light of the signal tower is on and before "Ink Empty" appears on the main panel, it is possible to change the ink cartridge without stopping the operation.
- 3) When yellow light of the signal tower is on and kept running the operation, "Ink Empty" appears soon and the unit will be stopped.
- 4) Approx. number of pages can be printed before "Ink Empty" error, after the yellow light turns on : 4,500 LETTER pages at 50% coverage(12.5% each color)

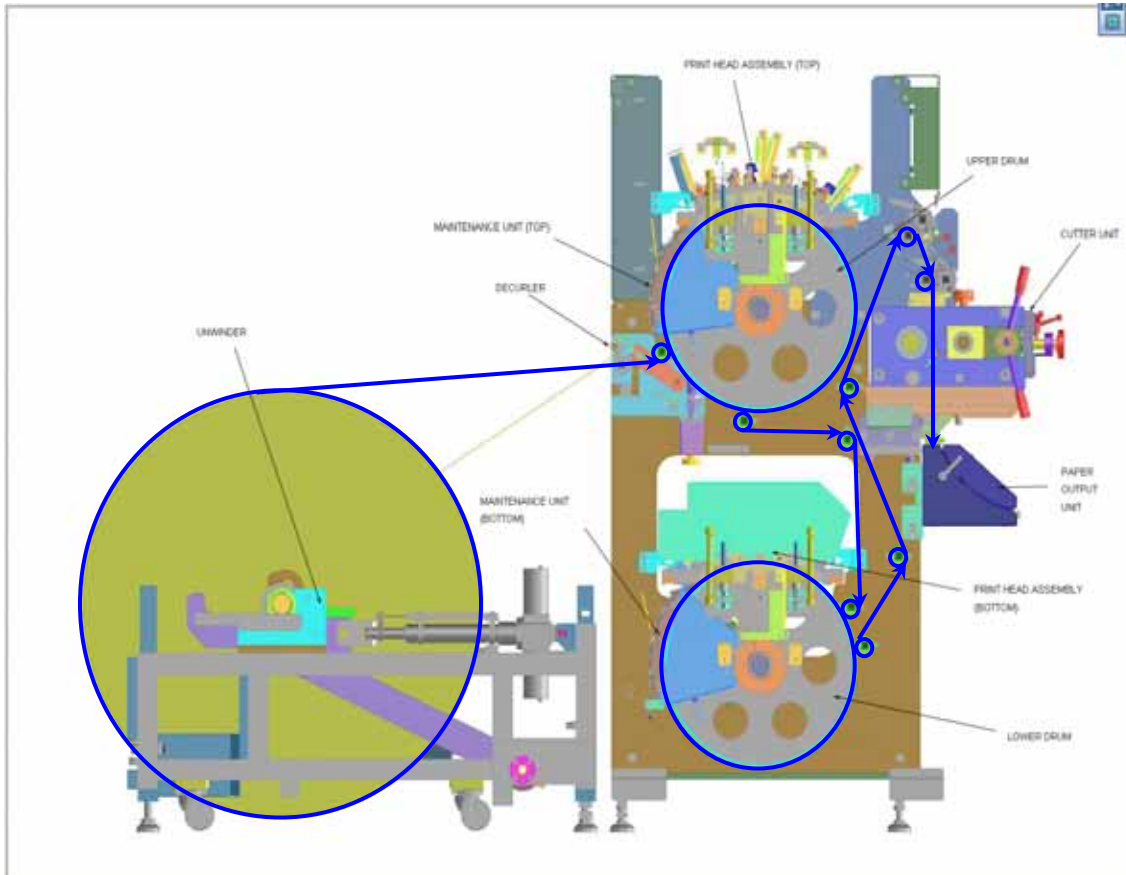


CAUTION

2.5. Replacement of Waste Ink Bottle

- 1) When the **Wasted INK** bottle is full, open the **Wasted INK** door.
- 2) Pull out the **Wasted INK** bottle from the machine.
- 3) Waste the INK in the bottle according to the local law.

2.6. Method of Initial Setting of Paper. (When all paper is removed from the unit.)



2.7. List and To Do when the Yellow Light of the signal tower is on.

- 1) Paper size is not matched. : Set PLC panel and Select Lever to same paper size (Letter or Ledger)
- 2) Near Empty (Paper) : Replace the Roll Paper, when it is empty.
- 3) INK (K, C, M, Y) Empty : Replace the INK bottle.

3. Specifications

NOTE: Refer to EXHIBIT F Specifications of the Inkjet Printer OP1-CS.

EXHIBIT:

EXHIBIT A Main Panel Menu Guide

See the Document; "OP1-CS Specification of the Operation Panel Menu."

EXHIBIT B Touch Panel Menu Guide

EXHIBIT C Error Message Table

EXHIBIT D Pinnacle Die Cutter

See the Document; "Procedure of Changing Pinnacle Die (Cutter Blade)"

EXHIBIT E SR-1000 Software Guide

EXHIBIT F Specifications of the Inkjet Printer OP1-CS