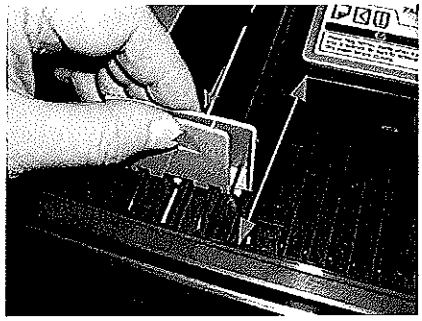
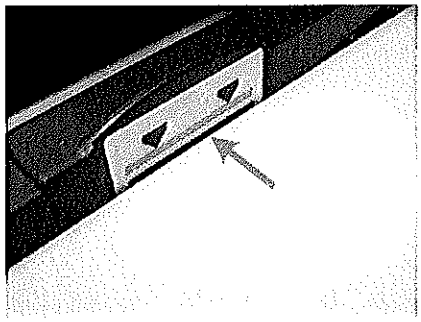


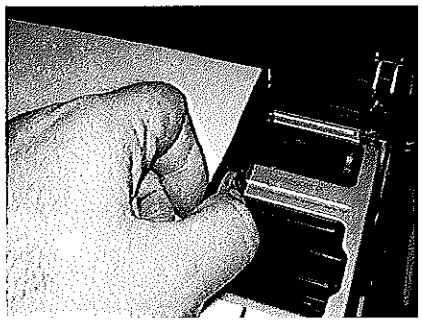
j016i935d

4. Squeeze the paper guide release and slide the bottom fence to a position slightly wider than the paper size.
5. Fan the stack to remove static cling.
6. Load the stack with the print side facing down.



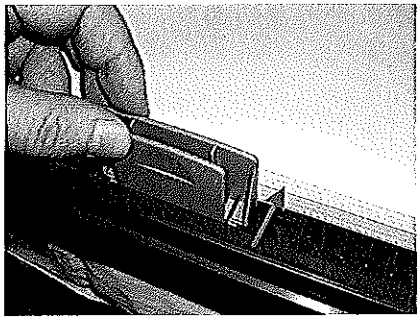
j016i935e

7. Make sure the top of the stack does not exceed the load limit mark.



j016i935f

8. Squeeze the paper guide and move the side fences to the sides of the stack.

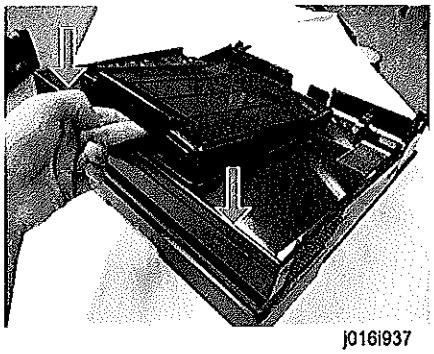


j016i935g

9. Squeeze the paper guide and move the bottom fence to the bottom of the stack.

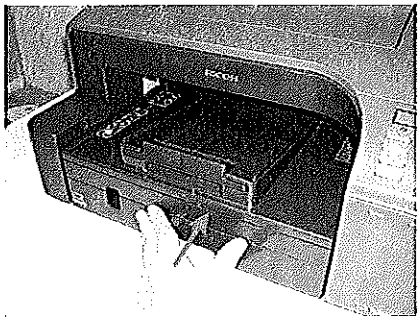
Note

- The width side fences and bottom fence should not be too tight against the sides and bottom of the stack. If the stack bows upward, the fences are too tight.



j016i937

10. Place the paper tray cover on the paper tray.



j016i935i

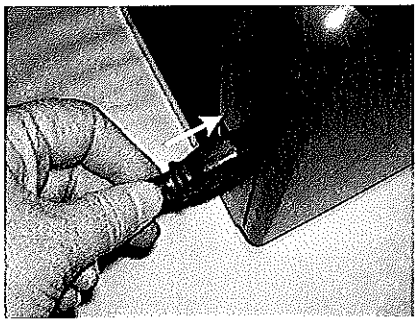
11. Install the paper tray into the printer.

1.3.6 CONNECT THE POWER CORD

⚠WARNING

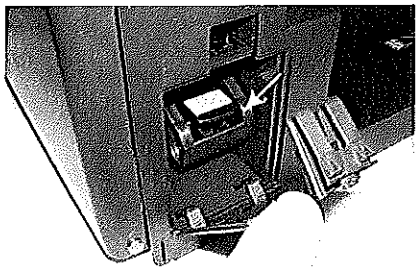
- Always connect the printer to a proper power source.
- Do not share the printer power source with another electrical device or appliance.
- Connect the power cord directly into the power source. Never use an extension cord.
- Never attempt to modify the power cord in any way.
- Never put heavy objects on the power cord.
- Make sure that the area around the power source is free of unwanted obstacles so you can disconnect the power cord quickly in case of an emergency.
- Make sure the power cord is not coiled or wrapped around any object such as a table or desk leg.
- Never coil the power cord around itself to make it shorter. This can cause the cord to overheat and cause a fire.
- Never handle the power cord with wet hands.

1. Remove packing material from the power cord.



J016I940

2. Connect the power cord to the printer.
3. Plug the power cord into the power source.



j016i945

4. At the right, rear corner of the printer open the small cover and confirm that the ink collector unit is installed.
5. Make sure the ink collector unit is push into the printer completely then close the cover.
6. Press the [Power] key.

- The printer starts feeding ink into the ink tanks and the "Online" LED starts flashing.
- Two alternating messages keep you informed about the progress of ink filling.
- Filling the ink tanks requires about 5 minutes.
- Do not use the printer or touch any key on the operation panel until you see the "Ready" message on the operation panel display.

Important

- Never switch off the printer or disconnect the power cord while the tanks in the print head are filling.
- If you accidentally turn the printer, off while the ink tanks are filling or if there is a power failure, the printer will dump the ink and empty the tanks. The next time the printer is turned on; it will display the 'ink out' alert.
- You might hear a clicking sound while the ink tanks are filling. This is normal and the noise will stop after a few minutes.

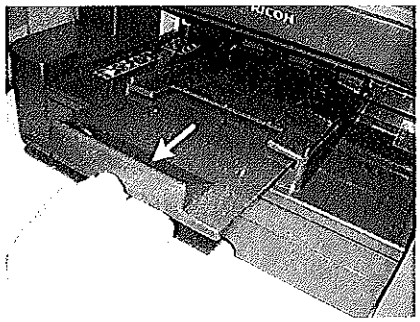
1.3.7 SELECT PAPER SIZE, PAPER TYPE

This printer has no mechanism to automatically detect tray paper size and type. The paper size and type must be set with the menu on the operation panel.

1. [Menu]> Select "Paper Input"> [#Enter].
2. Select "Tray Paper Size"> [#Enter].
3. Select "Tray 1"> [#Enter].
4. Select the size of the paper loaded in the tray> [#Enter].
5. Press [Escape] once.
6. Select "Tray 1"> [#Enter].
7. Select "Paper Type"> [#Enter].
8. Select the type of paper loaded in the printer> [#Enter].
9. [Online]> "Ready" (Standby)

1.3.8 PRINT THE SYSTEM SUMMARY.

Print a System Summary to confirm that the printer has been installed correctly.



j016i950

1. Pull out the extension of the output tray.
2. [Menu]> "List/Test Print"> [#Enter].
3. Select "Config. Page"> [#Enter]. The System Summary prints (2 pages).
4. Push [Online] to return to standby mode.

1.3.9 USB CONNECTION

The printer driver and USB driver are on the installer CD-ROM provided with the printer.

Important

- You cannot use the USB cable to connect the printer and PC if you use Windows 95 or Windows NT 4.0. You must use a network connection.
- You can only use the USB cable with Windows 98, Windows Me, Windows 2000, Windows XP, or Windows Server 2003.
- You must use USB 1.1 if you use Windows 98 or Windows Me. The printer is set for "Auto Detection" by default. In this mode the printer can use either USB 1.1 or USB 2.0.

1. Mount the installer CD-ROM in the CD-ROM drive of the computer.
2. Follow the instructions on the screen to install the printer driver and USB driver.

Important

- Do not connect the USB cable until you are instructed to do so by the installer.

j016i955

1. Connect the Type B (hexagonal) connector of the USB cable [A] to the connection point on the back of the printer.
2. Connect the Type A (rectangular) connector of the USB cable into the PC.

1.3.10 CLEAN THE PRINT HEADS AND DO A TEST PRINT

1. [Menu]> "Maintenance"> [#Enter].
2. "Head-cleaning"> [#Enter]> "All Heads"> [#Enter].
3. [#Enter] to start cleaning all the print heads. Cleaning requires about 90 sec.
4. "Maintenance in progress" is displayed while the print heads are being cleaned.
5. Select "Nozzle Check"> [#Enter].
6. Select "Nozzle Check" and push[#Enter]. The Nozzle Check Pattern prints.
7. Check the four colored ladder patterns of the Nozzle Check Pattern.
8. Push [Online] to return to standby mode.

1.4 OPTIONS

1.4.1 BEFORE YOU INSTALL OPTIONS

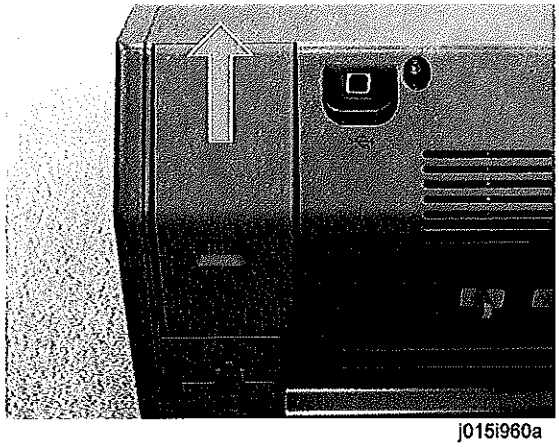
Only one option (NIB J517) is available for the J015. The other options described in this section can be installed on the J016 only.

Option	J015	J016
Network Interface Board (J517)	**Yes**	No
Network Interface Board (J512)	No	**Yes**
Multi Bypass Tray (J514)	No	**Yes**
Paper Feed Unit (J516)	No	**Yes**
Duplex Unit (J515)	No	**Yes**

1.4.2 NETWORK INTERFACE BOARD

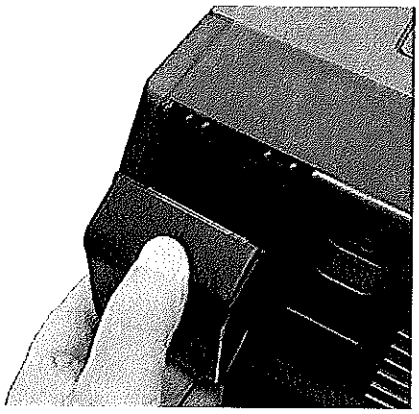
NIB J517 for J015

1. Make sure that the printer is switched off and disconnected from its power source.



j015i960a

2. Remove the rear cover.
3. Before you touch the network interface board, touch a metal surface to ground any static charge.



j015i962

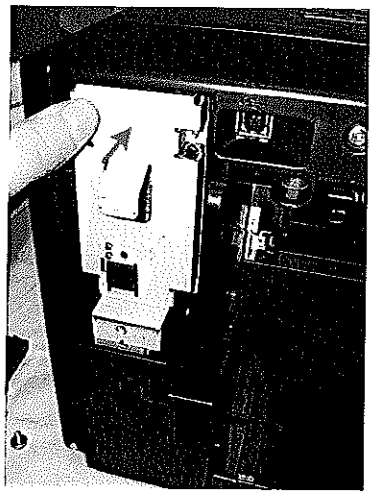
4. Reattach the cover (x1).

NIB J512 for J016

1. Make sure that the printer is switched off and disconnected from its power source.

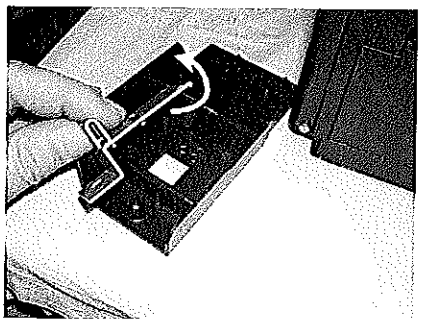
j016i960a

2. Turn the rear cover screw counter-clockwise and remove the cover.



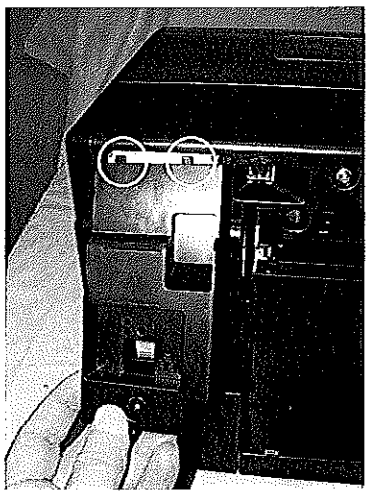
j016i960b

3. Before you touch the network interface board, touch a metal surface to ground any static charge.
4. Insert the NIB as shown. Push the part marked "PUSH" to set the network interface board. Make sure the board is inserted completely.



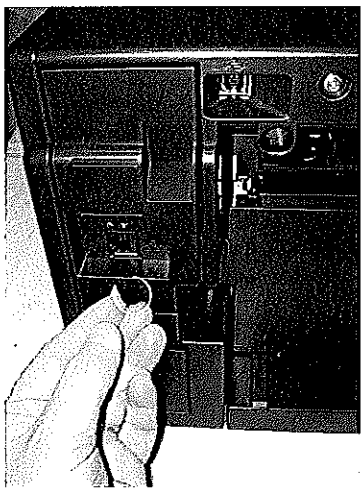
j016i960c

5. Remove the connector hole cover plate and discard it.



j016i960d

6. Align the tabs at the top and attach the cover to the back of the printer.

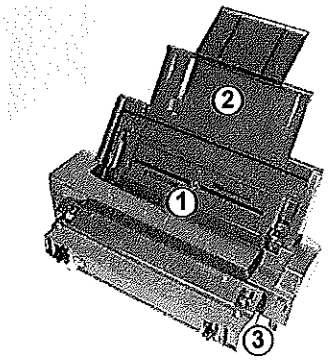


j016i960e

7. Fasten the screw with the black-head screw provided with the NIB. (You can discard the original silver screw.)

1.4.3 MULTI BYPASS TRAY J514

The multi-bypass tray can be installed on the j016 only.



j016i970e

①	Bypass Tray	Holds up to 100 sheets of paper.
②	Extension Tray	Pull out for long paper
③	Jam Dial	Rotate to feed out jammed paper.

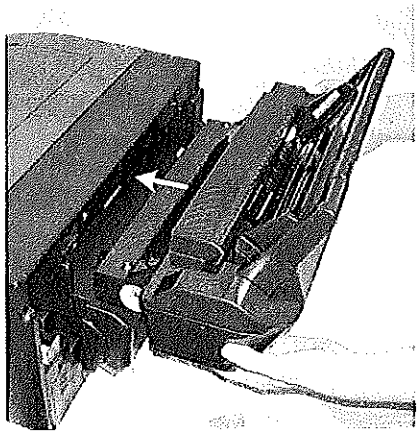
Installing the Multi Bypass Tray

1. Make sure that the printer is switched off and disconnected from its power source.
2. Remove the multi-bypass tray from its box.

j016i972

3. Remove all the orange shipping tape and plastic from the bypass tray.

4. Push the multi-bypass tray onto the back of the printer as shown unit it clicks.



j016i970g

5. Pull out the extension of the multi-bypass tray.
6. Load paper in the tray with the print side facing up.

Selecting the Paper Size/Type for the Multi Bypass Tray

This printer has no mechanism to automatically detect tray paper size and type.

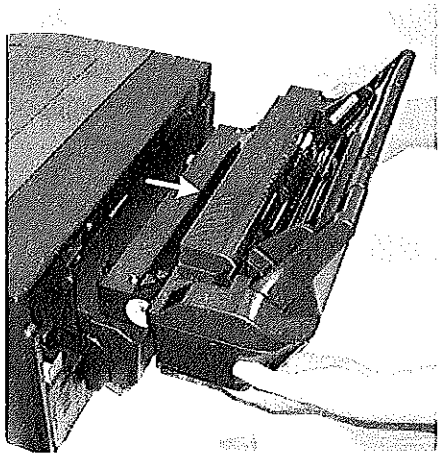
- The paper size and type must be set with the menu on the operation panel every time a different size/type of paper is loaded in the Multi Bypass Tray.
- In the procedure below, the "Bypass" item does not appear in the menu until the Multi Bypass Tray has been installed correctly.
- If you do not see "Bypass" in the menu, confirm that the Multi Bypass Tray is installed correctly.

1. [Menu]> Select "Paper Input"> [#Enter].
2. Select "Tray Paper Size"> [#Enter].
3. Select "Bypass"> [#Enter].
4. Select the size of the paper> [#Enter].
5. Press [Escape] once.
6. Select "Bypass"> [#Enter].
7. Select "Paper Type"> [#Enter].
8. Select the type of paper> [#Enter].
9. [Online]> "Ready" (Standby)

Removing the Multi Bypass Tray

Occasionally the Multi Bypass Tray must be removed in order to remove jammed paper.

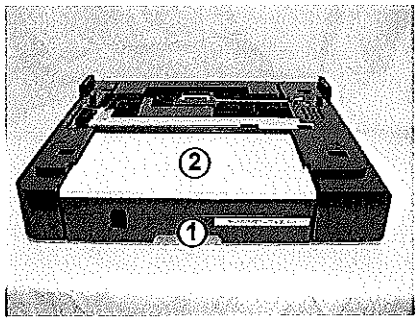
1. If there is paper in the tray, remove it.
2. If the extension tray is pulled out, push it in.



j016i970f

3. Pull the tray off the back of the printer.

1.4.4 PAPER FEED UNIT J516



j016i970a

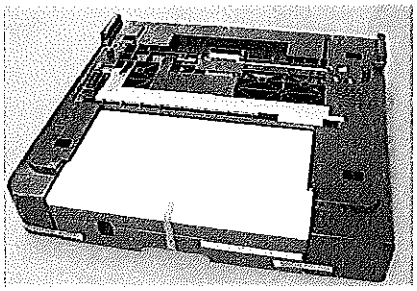
①	Tray	Holds up to 250 sheets of paper.
②	Tray Cover	Attached to the tray.

- The tray cover must be removed in order to load paper in the tray.
- The tray cover has an extension tray that can be pulled out to accommodate large paper sizes (A3 for example).

Installing the Paper Feed Unit

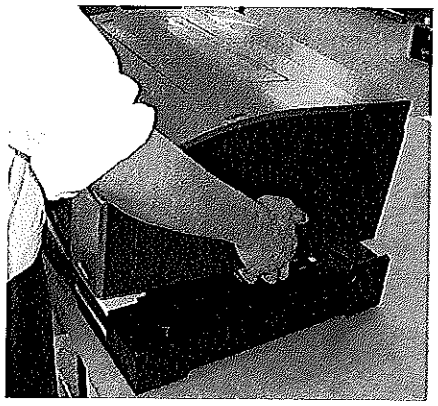
The Paper Feed Unit J516 is installed on the J016 only

1. Make sure that the printer power cord is not connected to the power source.
2. Remove the paper tray from its box.



j016i971b

3. Remove all orange tape and other shipping material from the paper feed unit and paper cassette.
4. Position the paper feed unit where the printer will be set up.

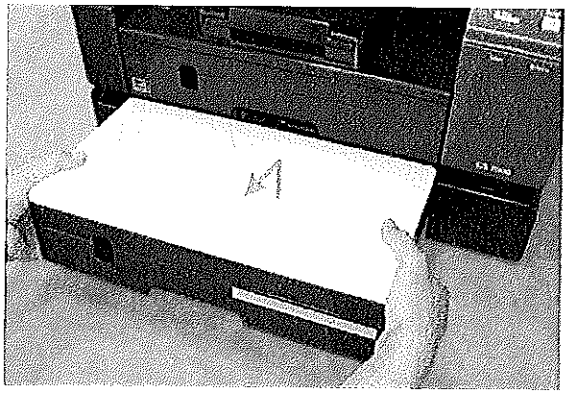


j016i971c

5. Lift the printer and hold it over the paper feed unit.
6. Align the connection points on the bottom of the printer with the pegs on the paper feed unit.
7. Set the printer on top of the paper feed unit.
8. Confirm that the pegs of the paper feed unit are inserted in the holes on the bottom of the printer.

Loading Paper in the Paper Feed Unit

1. Pull the tray out of the paper feed unit until it stops.



j016i971d

2. Lift it slightly and pull it out of the paper feed unit.
3. Remove the cover.
4. Move the side and bottom fences to a position slightly wider and longer than the paper to be loaded.
5. Fan a stack of paper to remove static cling.
6. Load the paper in the printer. Confirm that the top of the stack is not higher than the load limit mark on the side of the tray.

7. Move the side and end fences to the sides and bottom of the stack. The top of the stack should be perfectly flat.
8. Attach the cover to the tray unit.

Selecting the Paper Size and Paper Type for the Paper Feed Unit

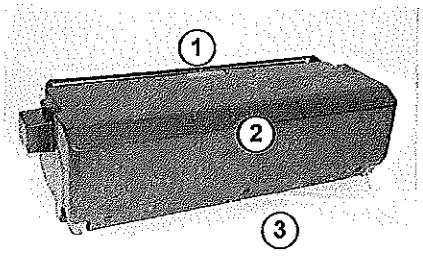
This printer has no mechanism to automatically detect tray paper size and type.

- The paper size and type must be set with the menu on the operation panel every time a different size/type of paper is loaded in the paper feed unit.
- In the procedure below, the "Tray 2" item does not appear in the menu until the Paper Feed Unit has been installed correctly.
- If you do not see "Tray 2" in the menu, confirm that the Paper Feed Unit is installed correctly.

1. [Menu]> Select "Paper Input"> [#Enter].
2. Select "Tray Paper Size"> [#Enter].
3. Select "Tray 2"> [#Enter].
4. Select the size of the paper> [#Enter].
5. Press [Escape] once.
6. Select "Paper Type"> [#Enter].
7. Select "Tray 2"> [#Enter].
8. Select the type of paper loaded in the printer> [#Enter].
9. [Online]> "Ready" (Standby)

1.4.5 DUPLEX UNIT J515

The Duplex Unit J515 is installed on the J016 only

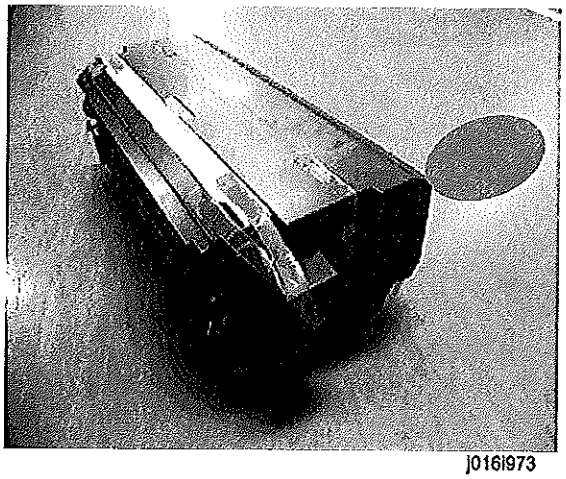


j016i970b

①	Cover Button	Press to open the duplex unit cover.
②	Cover	Released by pressing the cover button. Open the cover to remove paper jammed in the duplex unit.
③	Lock Levers	Press to remove the unit from the printer.

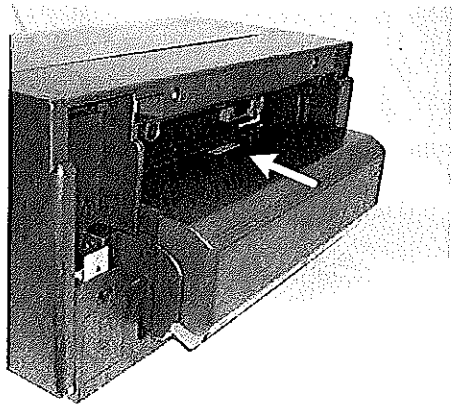
Installing the Duplex Unit

1. Switch the printer off.
2. If the Multi Bypass Tray is installed, remove it.



j016i973

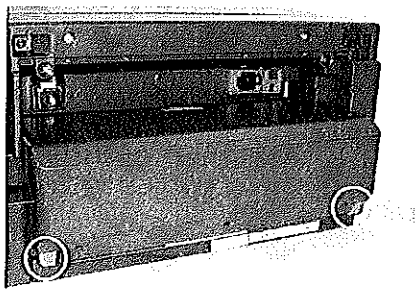
3. Remove the duplex unit from its box and remove the orange tape.



j016i970d

4. Hold the duplex at the back of the printer as shown.
5. Push it onto the back of the printer until it locks in place.
6. Reattach the Multi Bypass Tray.

Removing the Duplex Unit



j016i970c

1. Switch the printer off.
2. If the Multi Bypass Tray is installed, remove it.
3. On both sides of the duplex unit, raise the lock levers at the same time to release the duplex unit from the back of the printer.
4. Pull the duplex unit off the back of the printer.

1.5 IMPORTANT INFORMATION

Make sure that the customers understand the following points about moving, storing, and using the printer.

1.5.1 CHECKLIST BEFORE MOVING THE PRINTER

- Turn the printer off. Disconnect the power cord.

  Important

  - Never disconnect the power cord without first turning off the printer.
- To lift the printer, grip it at the center of each side by the hand recesses provided.
- Never grip the Duplex Unit on the back of the printer if it is installed.
- Make sure the covers and trays are closed. Secure them with shipping tape. Attach the tape at the same area you removed at the time of installation.
- Disconnect the power cord. Tape the power cord to the back of the printer.
- Remove all paper in the feed trays.
- Do a test print to confirm that the printer operates correctly after you move it to another location. Do the cleaning procedures with the printer driver, if necessary.
- The ink cartridges should remain in the printer. It is not necessary to remove the before transporting the printer. However, ink must be purged from the print head tanks before the printer is transported. (See procedure below.)

Important

- To avoid ink spillage, always hold the printer level when you move it. Work carefully to avoid dropping it or colliding with other objects in the work area.

1.5.2 IF THE PRINTER IS NOT USED FREQUENTLY...

1. Turn the power off, disconnect the USB cable, and unplug the power cord.
2. To prevent the print nozzles from drying out, periodically print something.
3. Turn the printer on for a few minutes once a month.
4. After storage or a long period of disuse, use the printer driver to print a nozzle check text pattern and clean the print head nozzles if necessary.

PREVENTIVE MAINTENANCE

SECTION 2 PREVENTIVE MAINTENANCE REVISION HISTORY		
Page	**Date**	**Added/Updated/New**
		None

2. PREVENTIVE MAINTENANCE

2.1 PM TABLE

There are no PM Parts in this machine.

2.1.1 SERVICE CALL PROCEDURES

The "Service Call Procedures" listed below should be done by the service technician. For more details about how to do these procedures, please refer to "Cleaning Procedures" in Section 3.

Description	At Service Call, or As Required
External Covers	Damp cloth.
Feed Roller	Damp cloth. Release the feed clutch lock. Rotate the roller freely as you clean it.
Flushing Unit Gate	Dry cloth. Always remove the ink that has hardened around the flushing gate when you replace the waste ink tank. To remove hardened ink, you may need to use a small screwdriver or similar tool.
Friction Pad	Damp cloth. This is the cork friction pad on the front edge of the standard paper cassette.
Maintenance Unit	Damp cloth. Always use a tightly wrapped damp cloth to remove the ink that has hardened around the suction cap and wiper blade when you replace the waste ink tank.
Printer Operation, Print Quality	Print a Nozzle Check Pattern and check the results. Clean the print heads if necessary. For more, see "Image Adjustment" in section "3. Replacement and Adjustment."
Transport Belt	Slightly damp cloth. Then dry cloth. **Important**: To protect the surface of the transport belt, never use alcohol or any other type of organic solvent.

REPLACEMENT AND ADJUSTMENT

SECTION 3 REPLACEMENT AND ADJUSTMENT REVISION HISTORY		
Page	**Date**	**Added/Updated/New**
36 ~ 40	09/02/2009	Controller replacement procedure

3. REPLACEMENT AND ADJUSTMENT

3.1 BEFORE REPLACING PARTS

3.1.1 REMOVAL TABLE

A swap-and-repair system is used for this printer. The table below lists the level of difficulty for replacement of each item.

Level 1: Replaced by User

	Component	Comments
1	Duplex Unit	Installed on back of machine
2	End Fence	Inside paper cassette
3	End Fence	Inside PFU
4	Firmware Update	Through USB Connection
5	Ink Cartridge	
6	Ink Collector Unit	
7	Ink Tank Cover	Top
8	Paper Cassette	Standard
9	Paper Cassette (PFU)	Option. J016 only
10	Paper Output Tray	On top of paper cassette
11	Right Front Cover	Ink Cartridge Cover
12	Tray Upper Cover (PFU)	Option. J016 only

Level 2: Replaced by Service Technician

	Component	Comments
1	2nd Registration Sensor	Difficult
2	Air Release Solenoid	Easy
3	Carriage Position Sensor	Easy
4	Carriage Unit	Easy
5	Controller Board (J015)	Easy
6	Controller Board (J016)	Easy
7	Cooling Fan	Difficult
8	Cover: Rear	Easy
9	Covers: Front, Left, Right	Easy
10	Duplex Unit Detection Board	Difficult. J016 only.
11	Feed Roller	Easy
12	Flushing Unit	Easy
13	Friction Pad	Difficult
14	High Voltage Power Supply (HVPS)	Easy
15	Horizontal Motor	Difficult
16	Maintenance Unit	Easy
17	NIB (J015)	Easy
18	NIB (J016)	Easy
20	PSU	Easy
21	Transport Belt	Easy
22	Vertical Encoder Sensor	Easy

	Component	Comments
23	Vertical Encoder Wheel	Easy
24	Vertical Motor	Easy

Easy:

- Removal of left, right, and front cover may be required.
- Removal of the back cover is not required.

Difficult:

- Removal of all covers and the back cover are required.

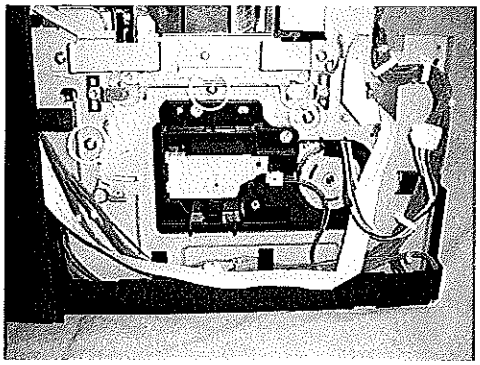
Level 3: Require precision adjustment at factory (Not Replaced in this Field)

	Component	Comments
1	Carriage Unit	
2	Ink Supply Pump Unit	
3	Transport Belt	
4	Charge Roller	
5	Temperature/Humidity Sensor	
6	Paper End Sensor	
7	Paper Feed Roller	

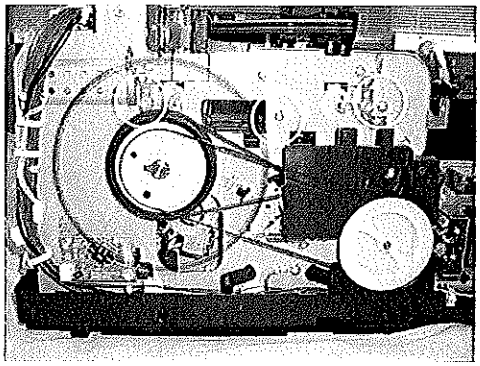
3.1.2 IMPORTANT NOTICE

During parts removal never remove any of the screws shown below.

Right Back Cover Removed



Left Covers Removed



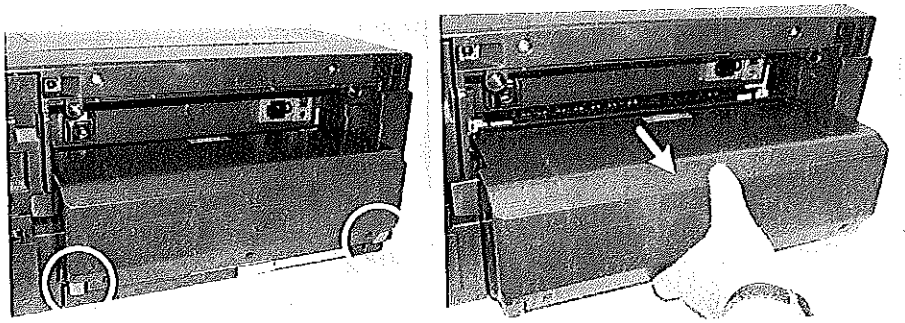
j016r001

These screws fasten the carriage brackets that keep the carriage unit correctly aligned. If these screws are loosened or removed, this could throw the carriage mechanism out of alignment.

3.2 COMMON PROCEDURES

3.2.1 EASY REMOVALS

Duplex Unit (J016 Only)

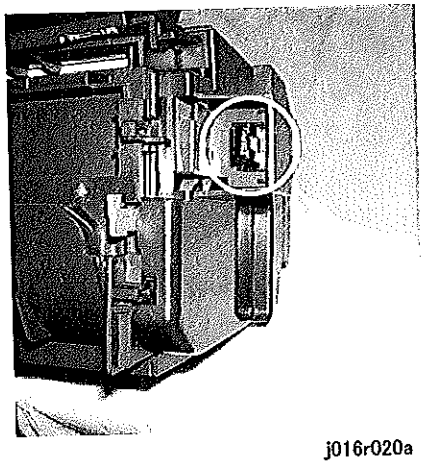


j016r020

1. Raise the left and right release tabs together to unlock the duplex unit.
2. Pull the duplex unit out of the machine.

Reinstallation

- The duplex unit must be installed in the machine at all times. The machine will not operate without the duplex unit installed.



j016r020a

- Reinstall the duplex unit carefully to avoid bending the contact pins.

Ink Collector Unit

Before you begin:

Never remove the ink collector unit unless it requires replacement. A message will appear and tell you that the ink collector needs to be replaced.

- You will need a self-sealing plastic bag to hold the ink collector unit.
- When you dispose of the used ink collector unit always obey the local laws and regulations regarding the disposal of such items.

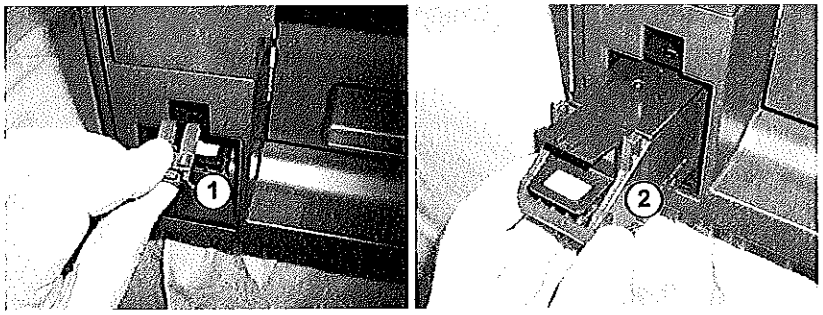
At any time you can determine if the ink collector unit needs to be replaced.

1. [Menu]> [▲] or [▼]> "System"> [#Enter]
2. [▲] or [▼]> "Ink CU Replace"> "Ink Collector Change Not Yet Required"> [#Enter].
3. [Menu]> Standby

⚠CAUTION

- Never attempt to clean and re-use an ink collector unit.

To remove the ink collector unit:



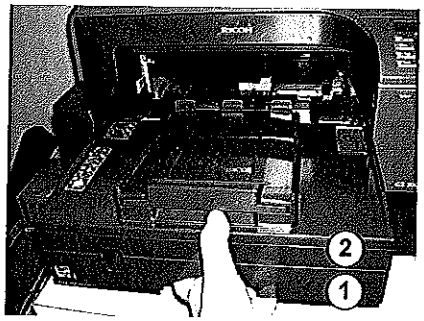
j015r030

1. Press the lock release ① and remove the cover.
2. Pull the ink collector unit ② out of the machine.
3. If you are replacing the ink collector tank, insert the new tank.
4. Reattach the cover.
5. Do SP5003 to reset the ink collector tank counter.
6. Discard the used ink collector tank.

Important

- Obey the local laws and regulations regarding disposal of items such as the full ink collector tank. Never attempt to clean a full ink collector tank and use it again.

Paper Cassette, Output Tray



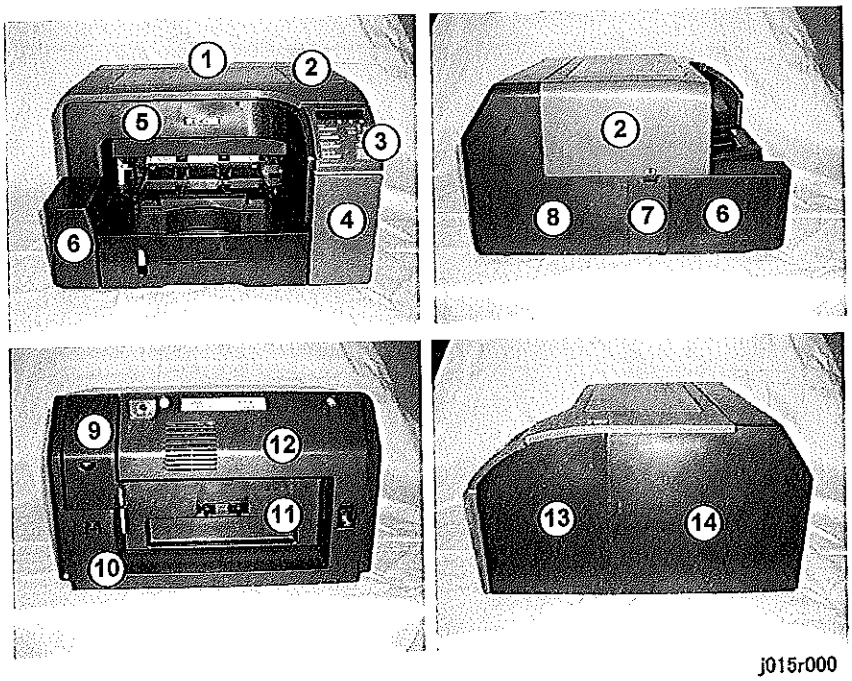
j015r094

1. Always remove the paper tray ① and output tray ② together.

Reinstallation

- The paper output tray is placed on top of the paper tray before reinstallation.
- If the output tray is not installed or installed incorrectly, the paper tray sensor switch ③ will signal and error.

3.2.2 COVERS AND DOORS



j015r000

The body of the printer has 11 covers and three small doors. Duplicated numbers above show different view of the same cover.

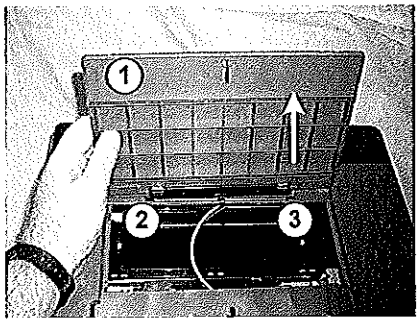
①	Top Cover	
②	Canopy Cover	Covers the top of the machine.
③	Operation Panel	Attached to ④.
④	Right Front Cover	Ink cartridge cover.
⑤	Front Cover (Logo)	
⑥	Left Front Cover	Covers the PSU
⑦	Jam Feed Door	Open to use the jam feed wheel.
⑧	Left Rear Cover	
⑨	NIB Cover	Covers the NIB (NIC).
⑩	Ink Collector Unit Cover	

⑪	Rear Jam Removal Door	Opens for jam removal at the rear
⑫	Rear Cover	
⑬	Right Front Cover	
⑭	Right Rear Cover	

Before You Begin

- The tabs of the covers are fragile. Work carefully to avoid breaking the tabs during cover removal and reinstallation.
- For extensive maintenance you may need to remove all the covers. The descriptions below are in the correct order of removal. When reinstalling the covers be sure to follow the procedures below in reverse order.
- The illustrations were made using the J015. Where significant differences exist between the J015 (the small machine) and J016 (the large machine) you will see the notations "**J015**" and "**J016**" in the illustrations. In all other cases assume that the procedures apply to both machines.
- It is very important that you understand how to remove and reinstall these covers before doing any replacement procedures.

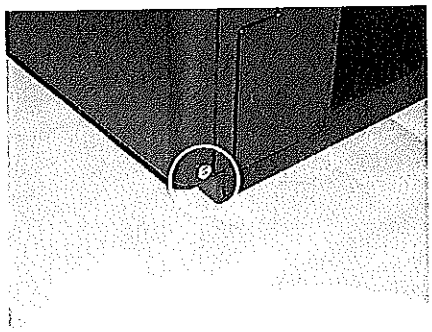
Top Cover



j015r001

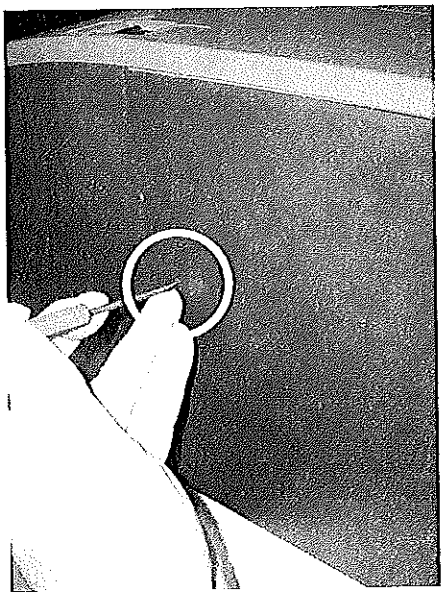
1. Raise the top cover ① to the vertical.
2. Disengage tabs ② and ③.
3. Pull straight up to remove.

Right Back Cover



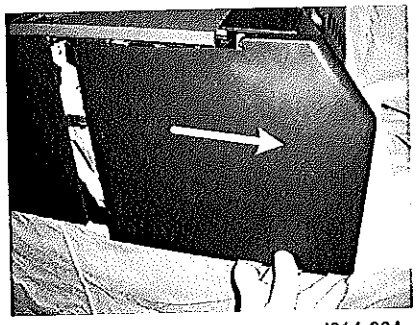
j014r002

1. Remove screw (☞x1).



j015r003

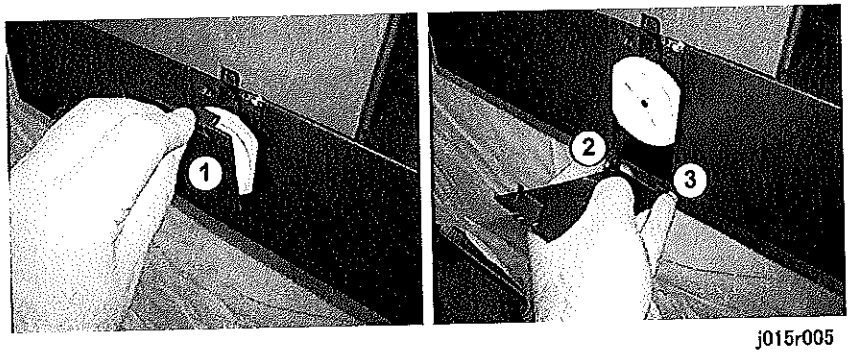
2. While pulling the cover toward the rear, insert the tip of a small flat-head screwdriver into the hole to release the tab behind the cover.



j014r004

3. Slide the cover to the rear and remove it.

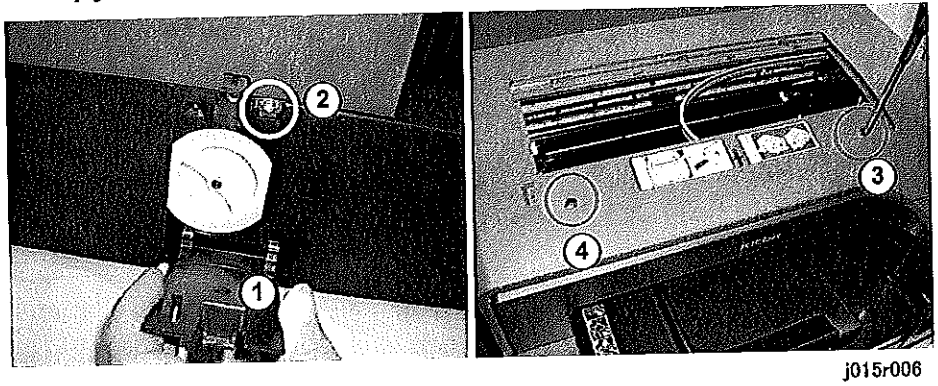
Jam Feed Door



j015r005

1. On the left side of the printer, open the jam feed door ①.
2. Disengage the hinges ②, ③ and remove the door.

Canopy Cover

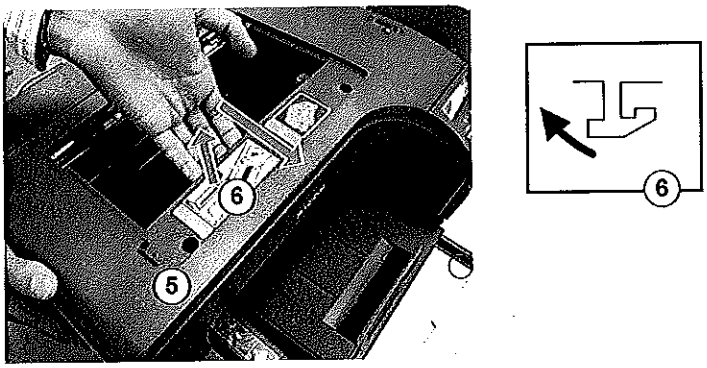


j015r006

Recommended

- Remove the top cover. It can fall out easily if you are not careful.

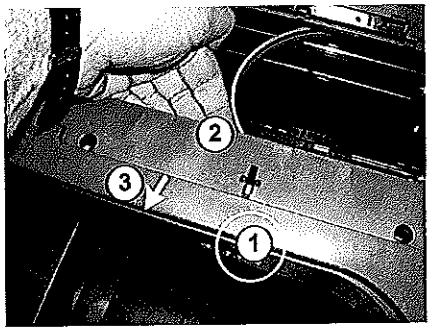
1. Open the jam feed door ①.
2. Remove screw ②.
3. Loosen (do not remove) the front cover screws ③ and ④. This loosens the front cover for easier removal of the canopy cover.



j016r006a

4. Remove the canopy cover ⑤ with releasing the tab ⑥
   There is a tab under the canopy cover (indicated by the red circle). If the canopy cover is difficult to remove:
   - Under the canopy cover pull the front cover forward slightly to disengage the tab.
   - Slide the canopy cover toward you to remove it.

Reinstallation



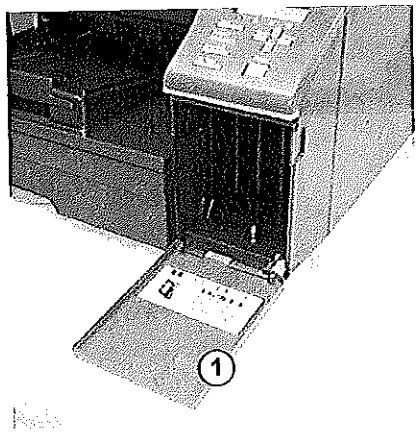
j015r007

- If you see a gap between the canopy cover and front cover at ①, or if the right side of the canopy cover is "floating" slightly above the operation panel, this means the tab under the canopy cover at ② is not engaged.
- Pull the front cover ③ forward slightly until the tab snaps into place.
- Be sure to retighten the front cover screws.

Important

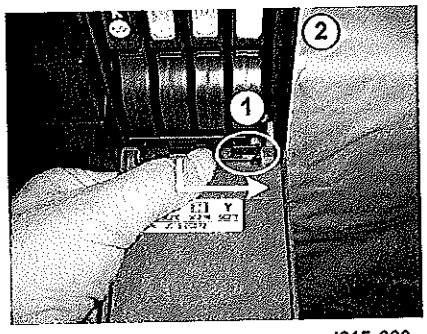
- If the canopy cover is not perfectly flat this will cause a cover open error. If the canopy cover is bowed upward slightly, this will prevent the actuator on the bottom of the top cover from depressing the top cover sensor below.

Right Front Door



j015r009

1. Open the right front door ①.



j015r008

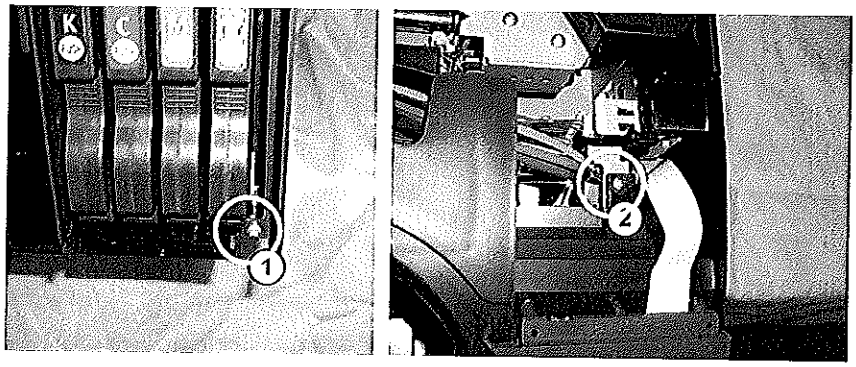
2. Pull the clip ① out slightly then slide the door and hinge to the right.
3. Disengage the tab and base ② under the printer and remove the door and hinge.

Right Front Cover, Operation Panel

Preparation

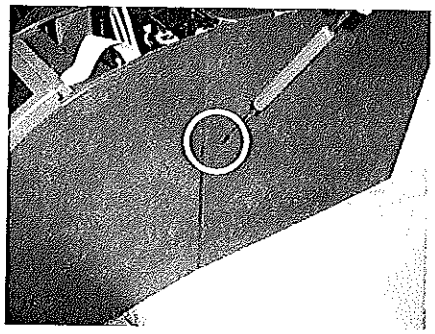
Remove:

- Top cover
- Canopy cover
- Right front door



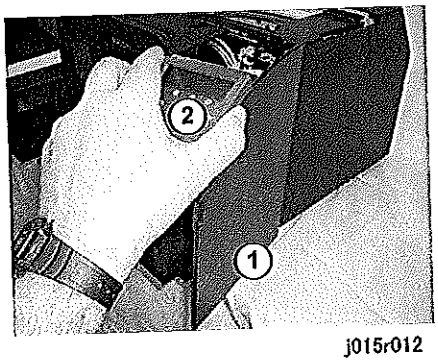
j015r010

1. At the bottom right corner of the cartridge unit, remove screw ①.
2. Near the top edge of the operation panel remove screw ②.



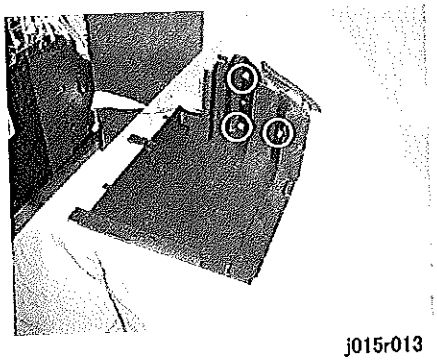
j015r011

3. If the right back cover has not been removed yet, insert the head of a small screwdriver into the hole to disengage the tab behind the cover.



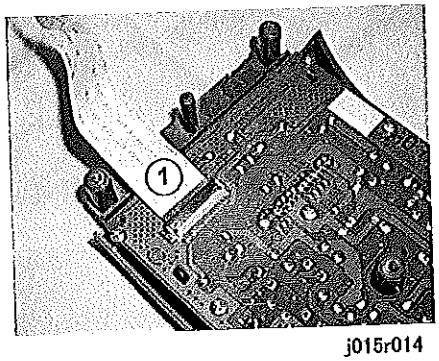
j015r012

4. Pull the pull of the cover away from the tab at ① then remove the right front cover and operation panel ②.



j015r013

5. Set the cover and operation panel on its side and remove the screws (x3).



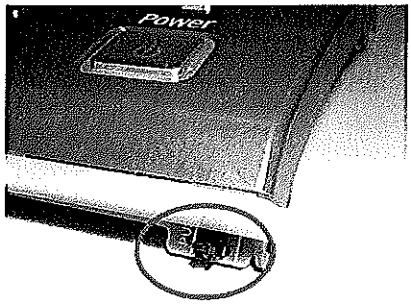
j015r014

6. Raise the latch of the FFC connector and disconnect the FFC ①.

Reinstallation

- When reattaching the FFC ① make sure that the green side is facing up.

Note:



j015r015

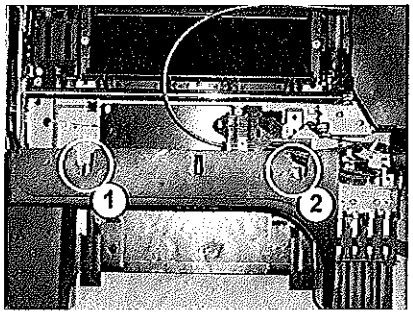
- The right front door sensor switch is permanently attached to the operation panel PCB. It cannot be detached and replaced separately.
- The operation panel PCB and sensor switch must be replaced as a unit.

Front Cover (Logo)

Preparation

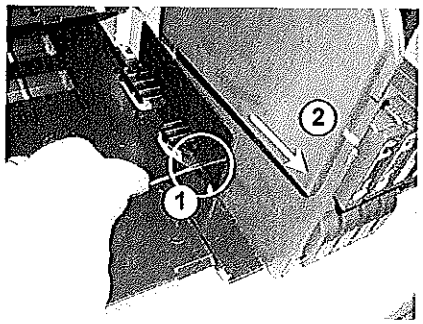
Remove:

- Paper cassette and output tray
- Canopy cover
- Right front cover



j015r016

1. Remove screws ① and ②.

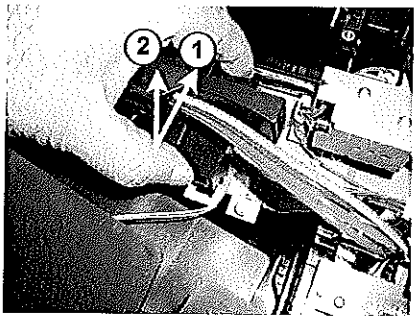


j015r017

2. Insert the tip of a small screwdriver into the hole ① and press down to disengage the latch behind the cover.
3. Pull the cover ② forward about 5 cm after the latch releases.

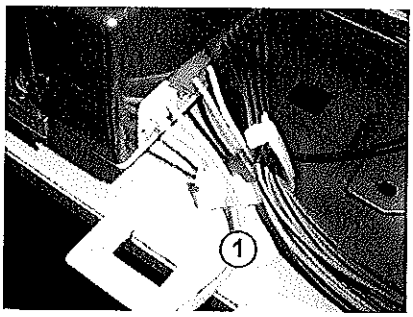
Important

- The top cover sensor switch is still attached to the front cover. If you remove the cover it will break the sensor harness.



j015r018

4. First, push the connector cover toward the back of the machine ① then raise its front edge ② to remove it.



j015r019

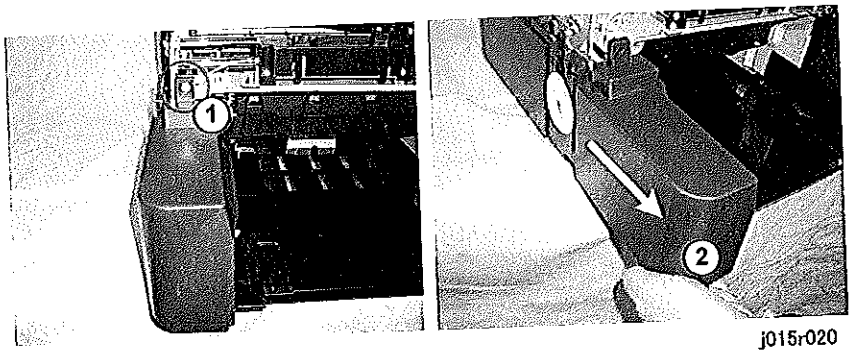
5. Disconnect connector ① (x1, x1).
6. Remove the front cover.

Left Front Cover

Preparation

Remove:

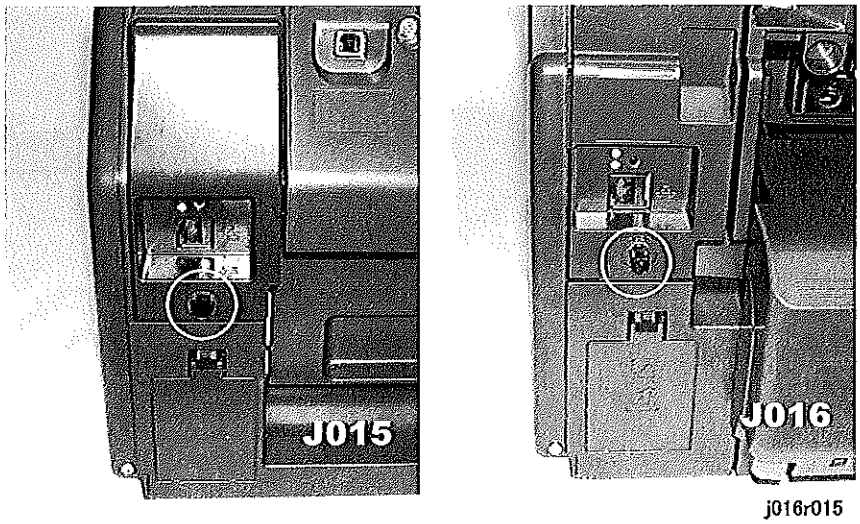
- Canopy cover
- Right front door
- Right front cover
- Front cover



j015r020

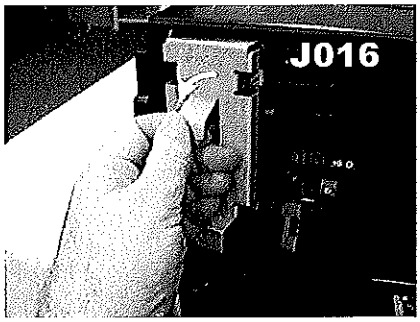
1. Remove screw ①.
2. Separate the front edge ② of the left front cover from its tabs and pull forward to remove it.

NIB Cover, NIB



j016r015

1. The NIB cover is fastened by one screw on both machines. Remove this screw and pull the cover away from the back of the printer.



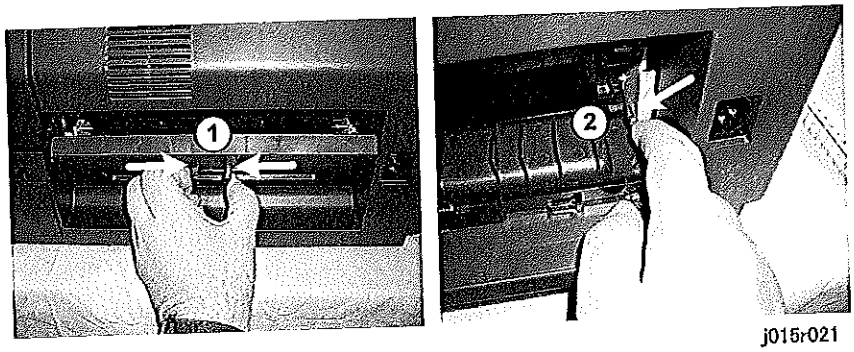
j016r016

2. After removing the plastic cover of the J016, pull the small handle to remove the board.
   The NIB of the J015 is attached to the cover by four screws.

Important

- Always remove the NIB before removing the back cover of the printer.

Rear Jam Removal Door (J015 Only)



j015r021

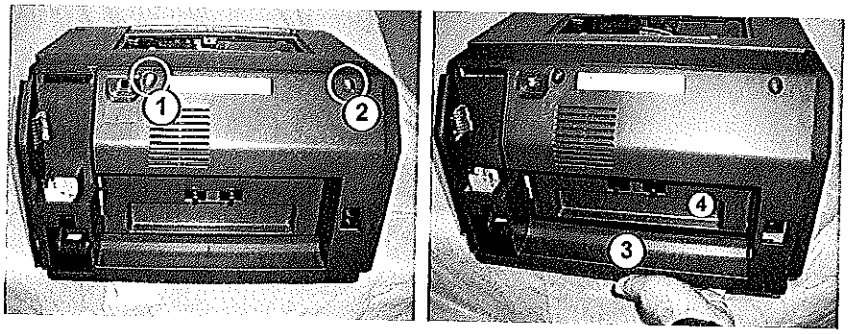
1. Press in the levers ① to unlock the door then pull it toward you to open it.
2. Press in on the right (or left tab) ② to release one end then remove the door.

Rear Cover

Preparation

Remove:

- Right rear cover
- NIB cover and NIB (if installed)
- Ink collector unit cover (do not remove ink collector unit)



j015r022

1. Remove the screws ① and ②.
2. At the bottom edge of the back cover ③ use your hand to disengage three tabs (two tabs on the J016).
3. Pull the back cover away from the printer. Note that the back cover can be removed without removing the rear jam removal door ④.

Important

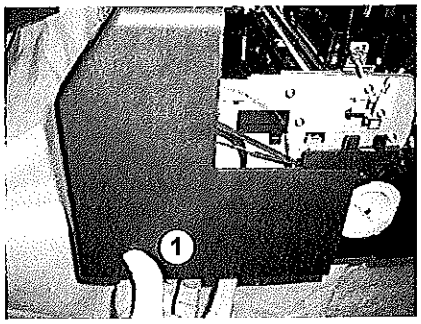
- Do not remove the ink collector unit.
- To prevent ink spillage from the print head tanks, never turn the machine on its side or on its front edge.

Left Rear Cover

Preparation

Remove:

- Right rear cover
- NIB cover and NIB (if installed)
- Ink collector unit cover (do not remove ink collector unit)
- Rear cover



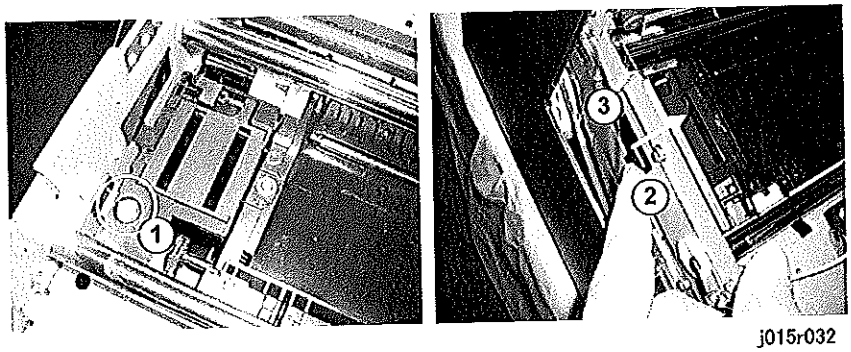
j015r023

1. At ① pull the cover away from the side of the printer (there are no screws).

3.3 FLUSHING UNIT

Preparation:

- Top cover
- Canopy over

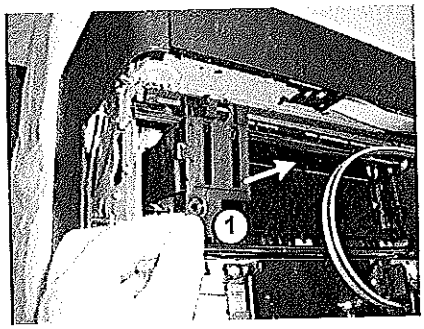


j015r032

1. Remove screw ①.
2. Lift the hook ② behind the vertical encoder wheel ③.

Important

- Never touch the surface vertical encoder wheel around its edges.



j015r032

3. Lift the flushing unit ① out of the machine.

3.4 MAINTENANCE UNIT

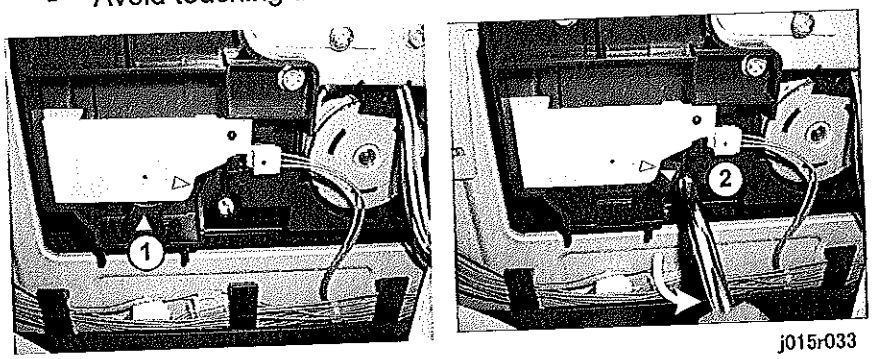
Preparation:

Remove:

- Right back cover

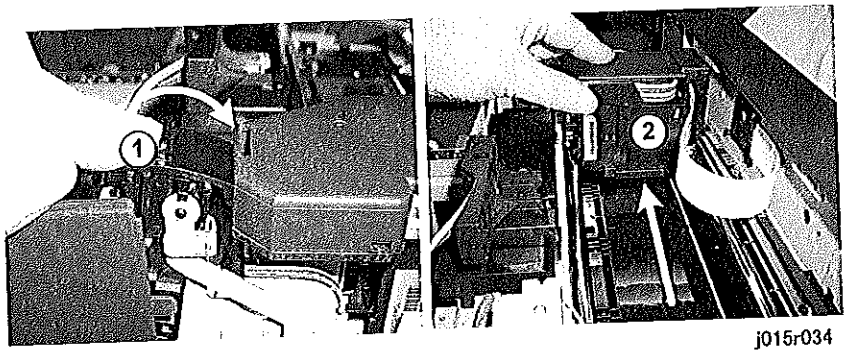
Important

- The bottom edges of the maintenance unit are covered with ink.
- Spread a sheet of paper (not cloth) to place the unit after it is removed.
- Avoid touching the bottom of the maintenance unit.



j015r033

1. To unlock the carriage use a plus (+) screwdriver to turn the screw ① counter-clockwise until the tips of the triangles ② align.

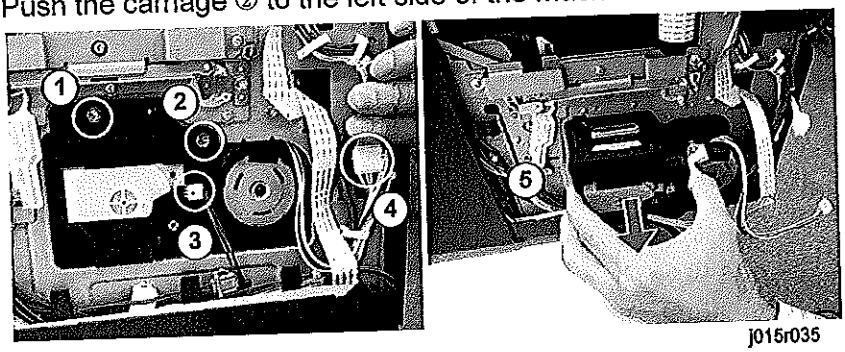


j015r034

2. Push the envelope selector ① to the rear.
   - Always push the envelope selector to the rear before you move the carriage manually.
   - Pushing the envelope selector to the rear raises the print head unit. This prevents damaging the print head unit when the carriage is moved manually.

- Moving the envelope selector to the rear also makes it easier to remove the maintenance unit.

3. Push the carriage ② to the left side of the machine.

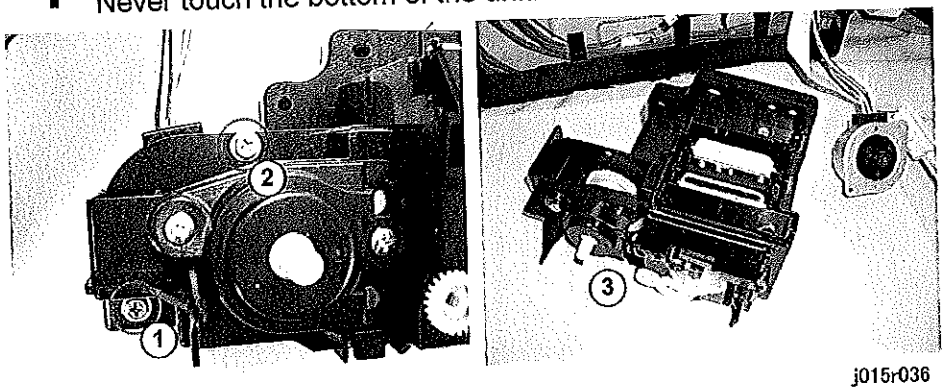


j015r035

4. Remove screws ① and ②.
5. Disconnect the connectors ③ and ④ (x2, x1).
6. Pull the unit ⑤ out of the unit as shown. If the maintenance unit is difficult to remove, make sure that the envelope selector is pushed completely to the rear position.

Important

- Handle the maintenance unit carefully.
- The bottom of the unit is covered with ink. Place it on a piece of clean paper (not cloth).
- Never touch the bottom of the unit.



j015r036

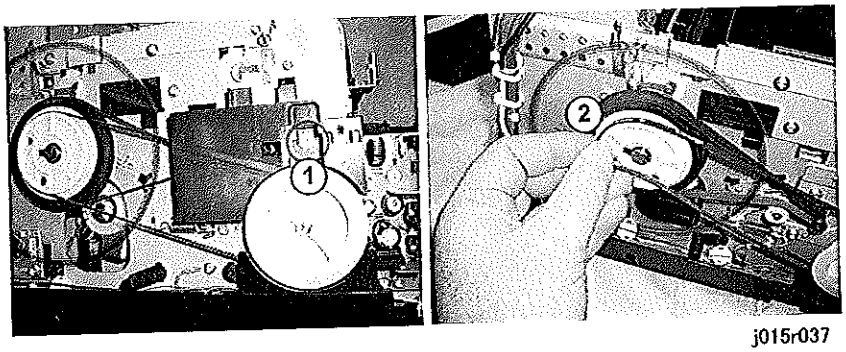
7. Remove screws ① and ②, to disconnect the maintenance unit motor from the maintenance unit (x2)
8. Set the maintenance unit ③ on a sheet of paper.

3.5 ENCODERS

3.5.1 VERTICAL ENCODER WHEEL

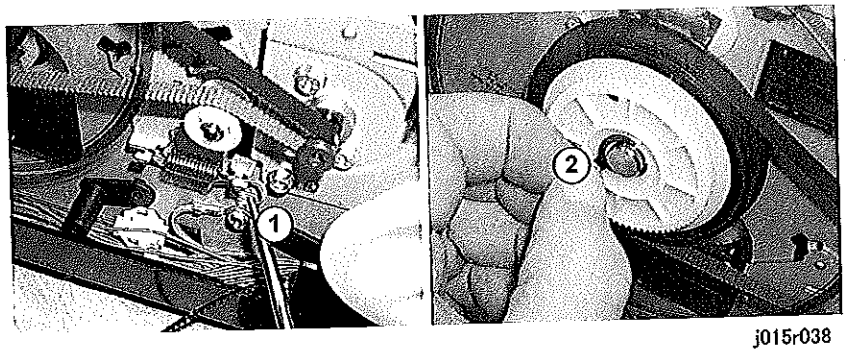
Preparation

- Remove:
- Right rear cover
- Canopy Cover
- Right front cover
- Front cover
- Left front cover
- Rear cover
- Left rear cover



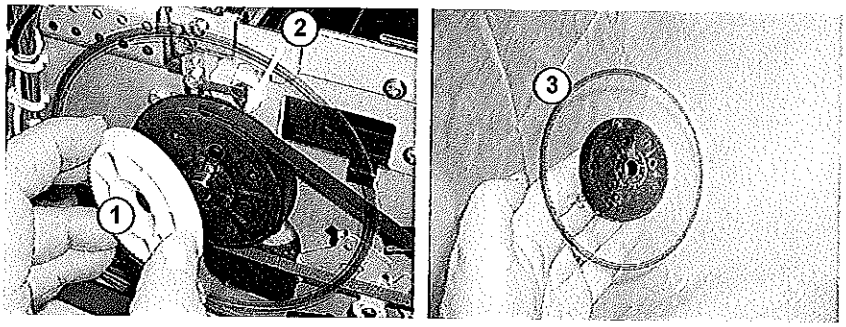
j015r037

1. Remove sensor plate ① (x1).
2. Remove the manual feed belt ②.



j015r038

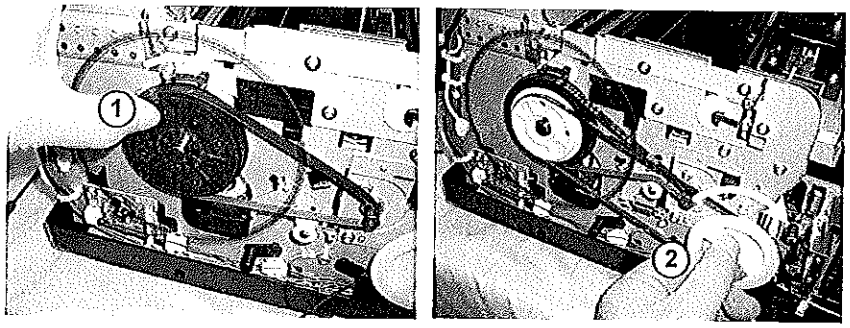
3. Use a pair of needle-nose pliers to remove the tension spring ①.
4. Remove C-clip ② to release the tension on the timing belt.



j015r039

5. Remove gear-wheel ①.
6. Carefully insert the tip of a long, thin screwdriver behind the drive-wheel ② and nudge the wheel slight to the front, then remove the wheel with the vertical encoder attached.
7. Handle the vertical encoder carefully. Never touch the edges ③.

Reinstallation



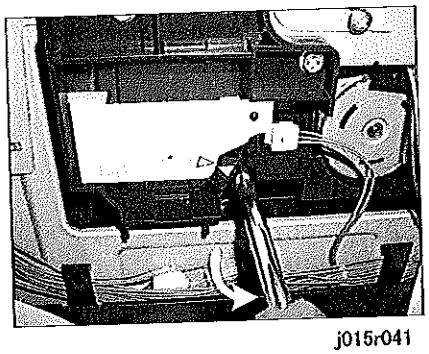
j015r040

- When reinstalling the vertical encoder wheel ①, turn it slowly while pressing in slightly until it snaps into the correct position.
- After attaching the manual feed belt, turn the jam feed wheel ② to make sure that the wheel and belt rotate smoothly.

3.5.2 HORIZONTAL ENCODER STRIP

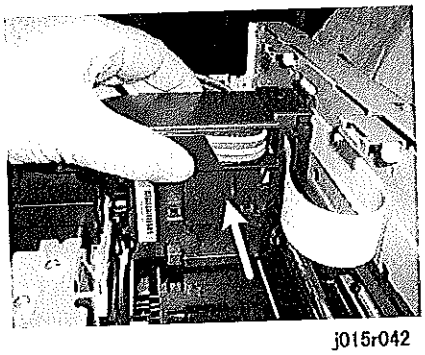
Preparation

- Top cover
- Right back cover
- Canopy cover



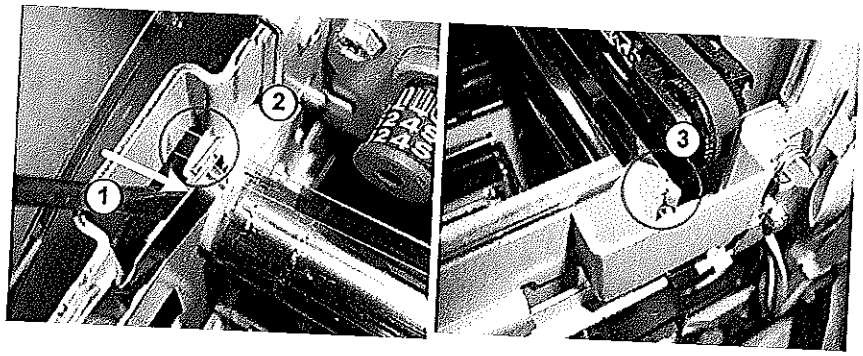
j015r041

1. After removing the right back cover, use a plus-screwdriver to align the triangles.
2. Push the envelope selector to the back position.



j015r042

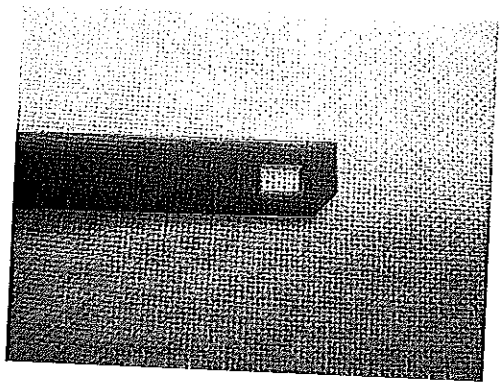
3. Push the carriage to the center.



j015r043

4. On the left side:
   - Use the tip of a small flat-head screwdriver to press in the leaf-spring ① to release tension on the encoder strip.
   - Disconnect the end of the strip ② from the spring.
5. On the right side, disconnect the other end of the strip ③.

Reinstallation



j014r221

When you reinstall the horizontal encoder film:

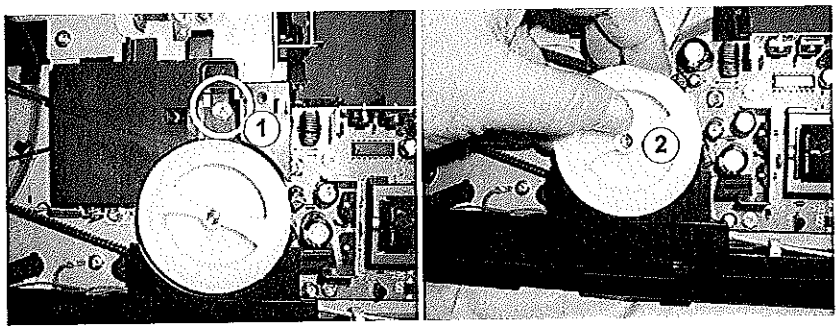
- First, on the right side attach the end of the strip with its beveled corner down as shown above.
- Next, attach the other end of the strip to the leaf-spring on the left.
- The machine will malfunction of the horizontal encoder strop is installed incorrectly.

3.6 BOARDS

3.6.1 PSU

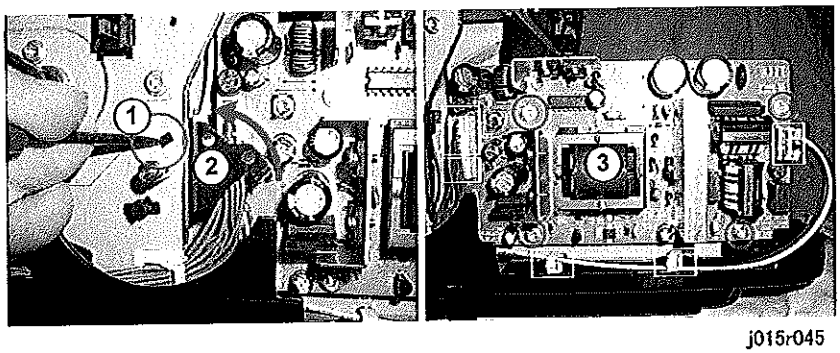
Preparation:

- Top cover
- Right back cover
- Canopy cover
- Front cover
- Left front cover
- Rear cover
- Left rear cover



j015r044

1. Remove the jam feed door sensor plate ① (x1).
2. Remove the jam feed wheel and timing belt ②.

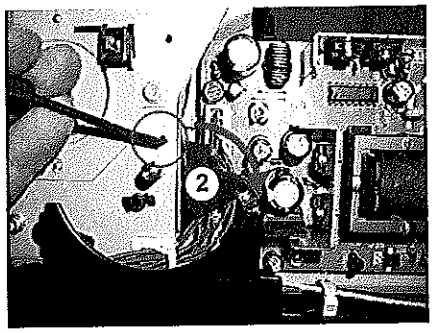


j015r045

Note: In the J015 a restraint plate keeps the connector harnesses on the left side of the PSU pushed into the machine where they will not interfere with other components. The J016 does not have this restraint plate (skip Steps 3 and 4 below).

3. Insert the tip of a small screwdriver into the hole ① to unlock the arm of the restraint plate ②.
4. Rotate the plate ② up until it locks.
5. Remove the PSU (x4, x3).

Reinstallation



j015r046

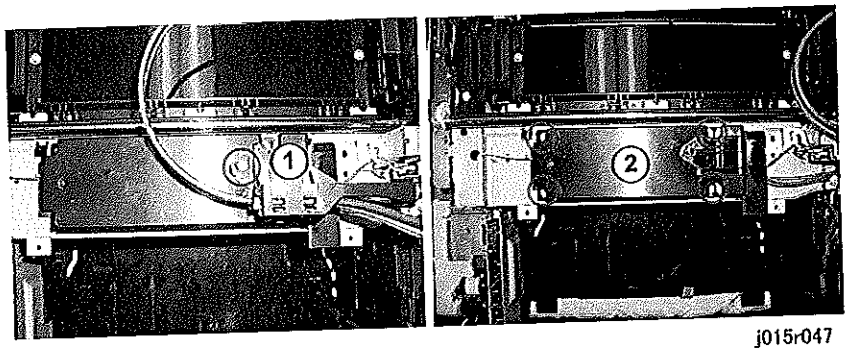
- Be sure to return the restraint plate to its original position in the J015.
- This plate keeps the harnesses pushed into the printer where they will not interfere with other components.

3.6.2 HVPS

Preparation:

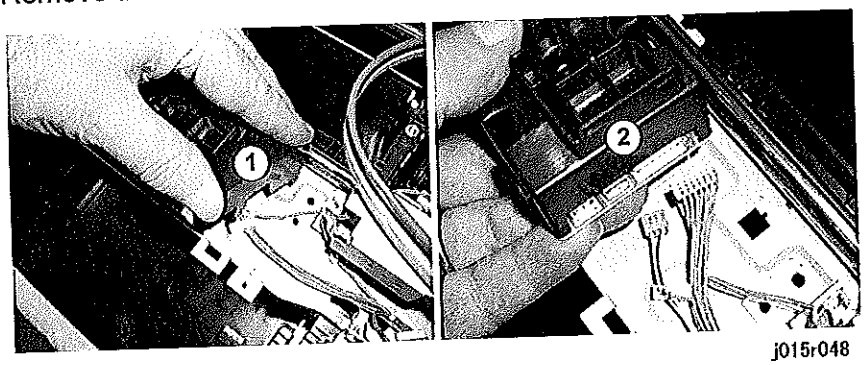
Remove:

- Canopy cover
- Right front cover
- Front cover



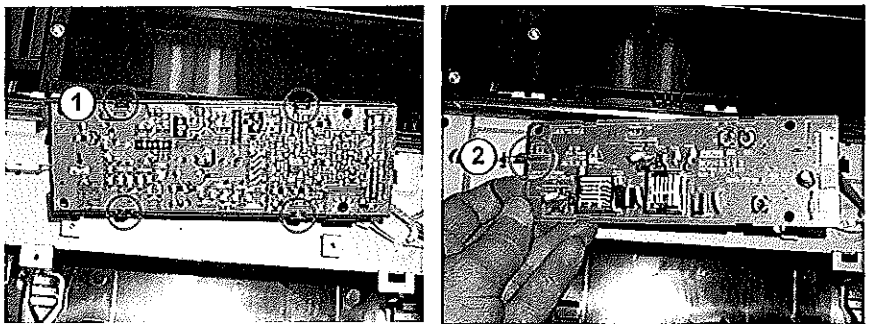
j015r047

1. Remove the ink tube housing (x1).
2. Remove the HVPS cover (x1).



j015r048

3. Remove the connector cover ①.
4. Disconnect the HVPS ② (x2)



j015r049

5. Separate the HVPS and cover ① (Hooks x4).
6. Disconnect the bayonet connector ②.

⇒ 3.6.3 PRINTER ENGINE CTL BOARD

There are some differences between the J015 and J016 CTL board replacement.

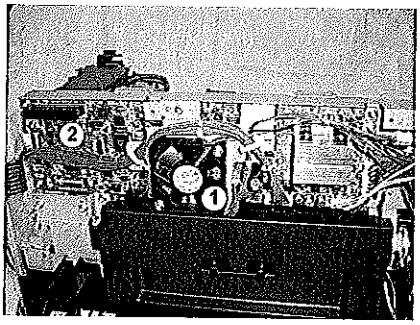
- The CTL board of the J015 is mounted vertically on edge. The fan must be removed before the control board can be removed.
- The CTL board of the J016 is mounted horizontal and flat. Removal of the fan is not required before control board removal.

CTL Board Replacement: J015

Preparation:

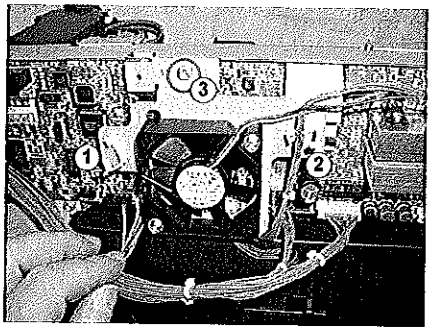
Remove:

- Right back cover
- Canopy cover
- Back cover
- Left Rear cover



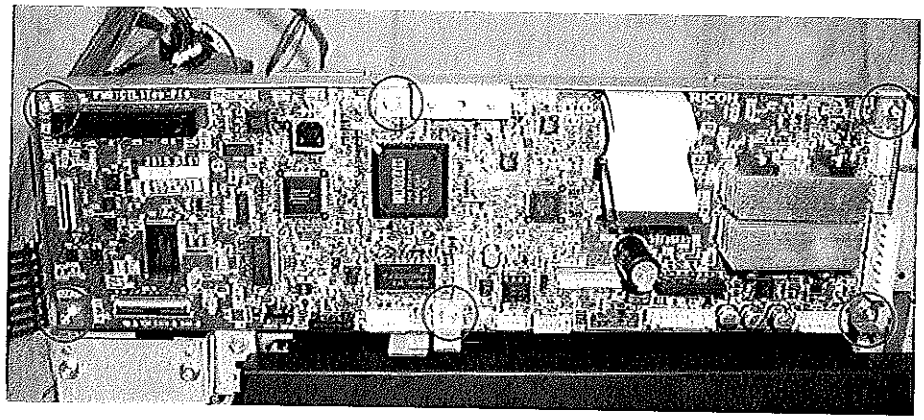
j015r050

1. The fan ① is mounted in front of the CTL board ② mounted vertically on its edge.



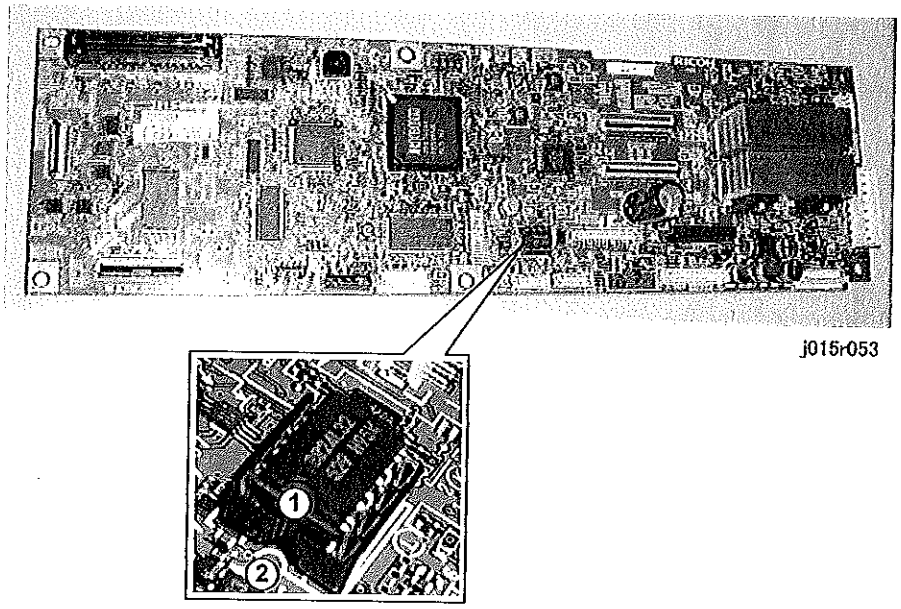
j015r051

2. Open harness clamps ① and ② then remove the fan bracket ③ (with fan attached) (x1).



j015r052

3. Remove the CTL board (x 10, FFC x3, x6).
4. Pull the NVRAM from the control board removed from the printer.
5. Install the old NVRAM on the new control board. **NOTE**: The NVRAM can not be replaced with a new one, see Technical Service Bulletin J015/J016 – 012 NVRAM CAN NOT BE REPLACED.



j015r053

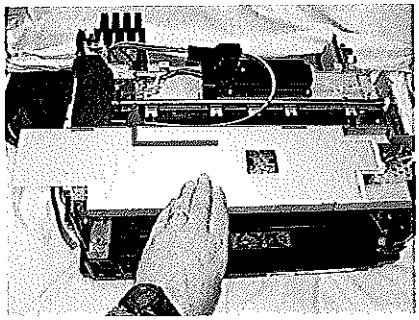
6. Attach the NVRAM so the curvature of the white line on the board ① matches the curvature of the indentation ② on the NVRAM chip.

CTL Board Replacement: J016

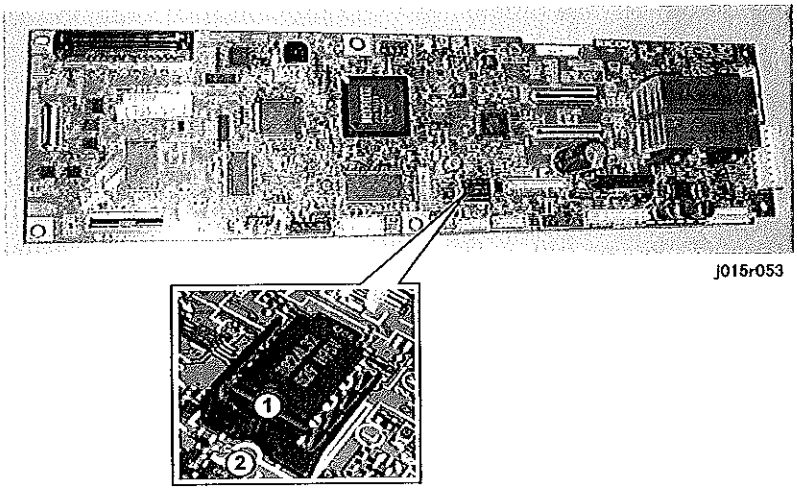
Preparation:

Remove:

- Right back cover
- Canopy cover
- Back cover
- Left Rear cover



1. The CTL board in the J016 is flat-mounted.
2. Slide the cover to the left until it stops then lift to remove it.
3. Remove the CTL board (x 10, FFC x3, x6).
4. Pull the NVRAM from the control board removed from the printer.
5. Install the old NVRAM on the new control board. **NOTE**: The NVRAM can not be replaced with a new one, see Technical Service Bulletin J015/J016 – 012 NVRAM CAN NOT BE REPLACED.



6. Attach the NVRAM so the curvature of the white line on the board ① matches the curvature of the indentation ② on the NVRAM chip.

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3.7 MOTORS

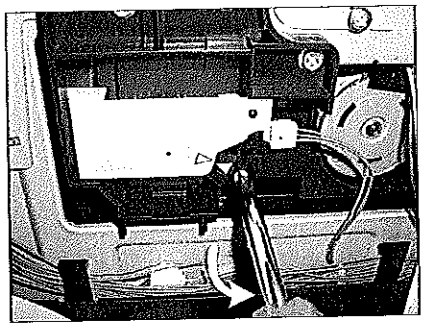
3.7.1 HORIZONTAL MOTOR

Preparation:

- Right back cover
- Canopy cover

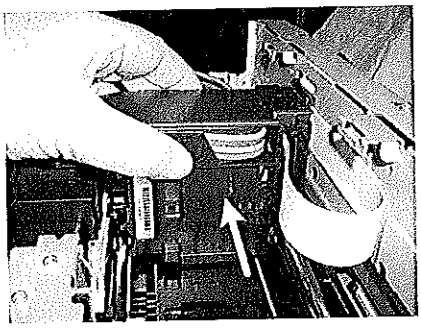
Preparation

- Top cover
- Right back cover
- Canopy cover



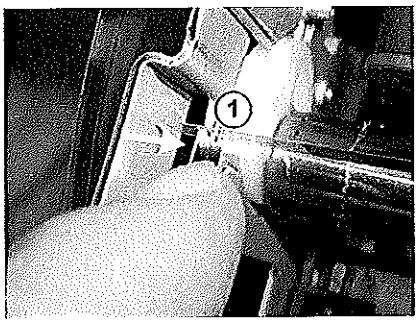
j015r041

1. After removing the right back cover, use a plus-screwdriver to align the triangles.
2. Push the envelope selector to the back position.



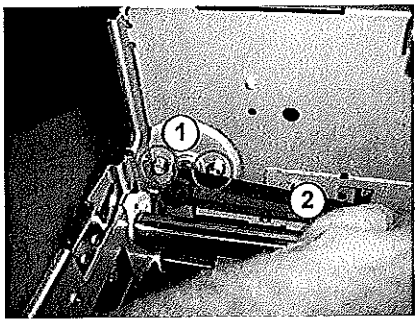
j015r042

3. Push the carriage to the center.



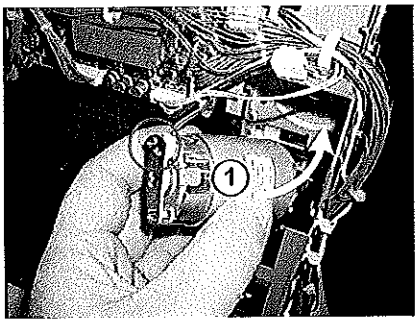
j015r055

4. Gently (to avoid bending) push the leaf spring ① to the right to release pressure on the horizontal encoder strip, then disconnect both ends of the strip and remove it.



j015r056

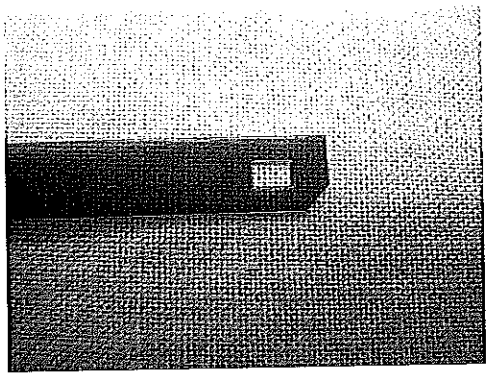
5. Inside the printer remove the screws ① (x2) and disconnect the timing belt ② from the motor.



j015r057

6. At the rear corner of the printer, remove the horizontal motor ① (x1).

Reassembly



j014r221

On the right side reattach the right notched end of the encoder strip first, with the beveled corner facing down.

Important

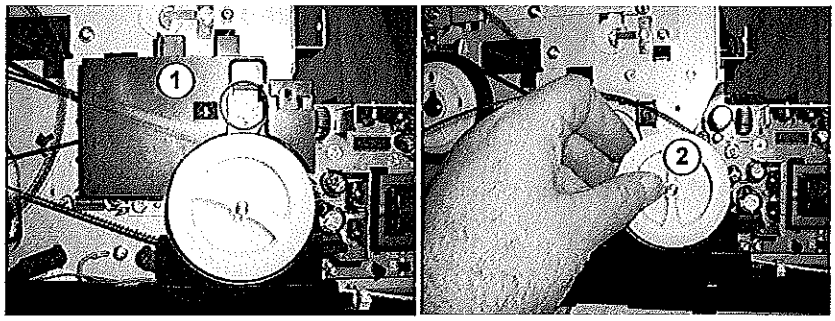
- Attaching the film encoder strip incorrectly causes the machine to operate incorrectly.

3.7.2 VERTICAL MOTOR

Preparation:

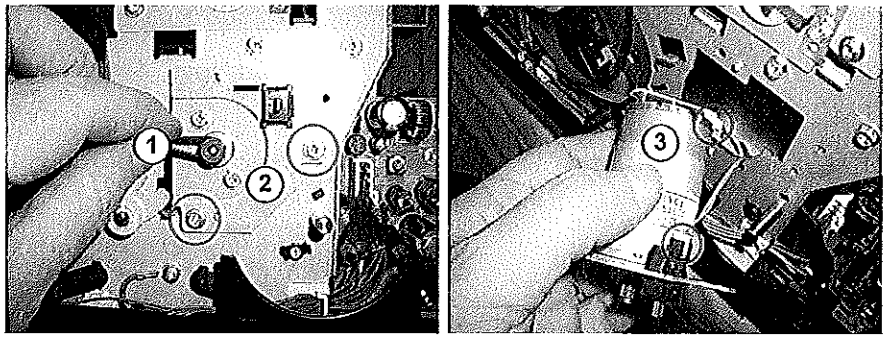
Remove:

- Canopy cover
- Right back cover
- Right front cover
- Front cover
- Back cover
- Left back cover
- Left front cover



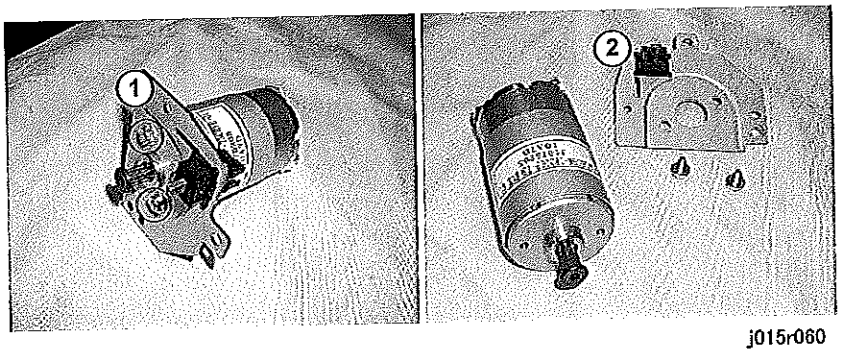
j015r058

1. Remove the jam feed wheel sensor cover ① (x1).
2. Remove the jam feed wheel ② and timing belt.



j015r059

3. Disconnect the timing belt ①.
4. Remove the vertical motor plate screws ② (x2).
5. Pull the vertical motor ③ out and disconnect it (x2).



j015r060

6. Separate the motor and its faceplate ① (② is the jam feed door sensor) (x2).

3.7.3 MAINTENANCE UNIT MOTOR

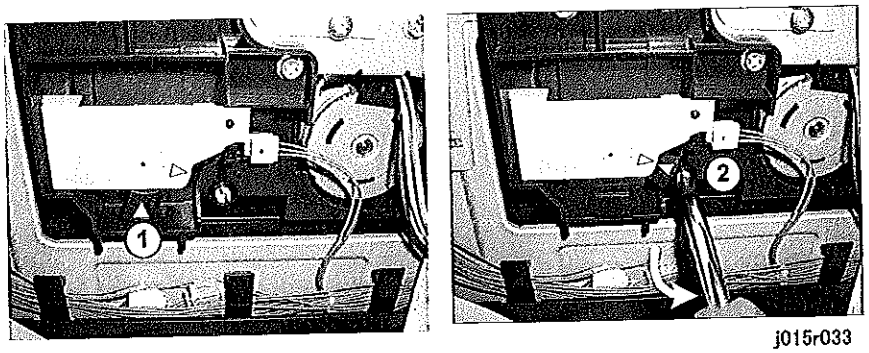
Preparation:

Remove:

- Right back cover

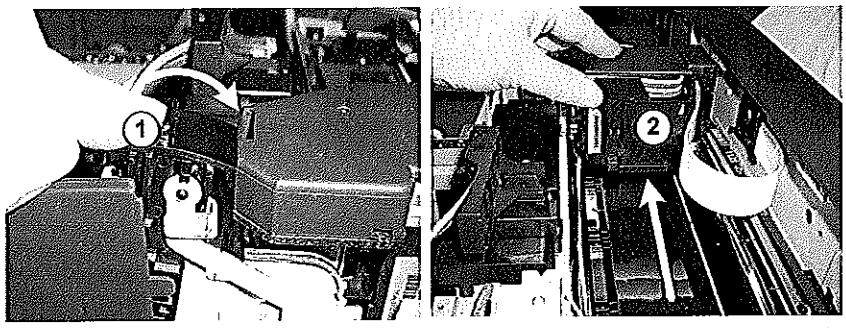
Important

- The bottom edges of the maintenance unit are covered with ink.
- Spread a sheet of paper (not cloth) to place the unit after it is removed.
- Avoid touching the bottom of the maintenance unit.



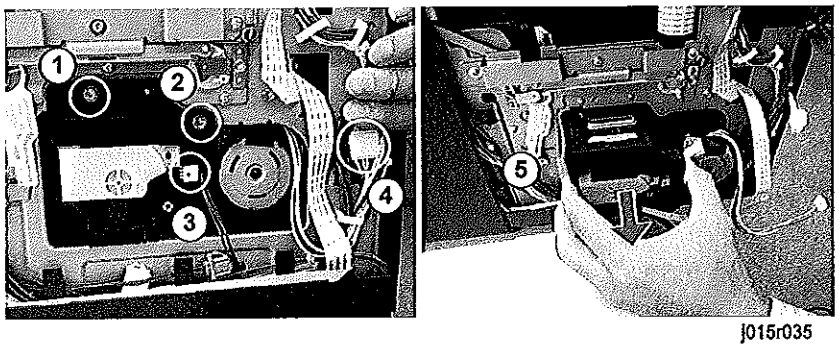
j015r033

1. To unlock the carriage use a plus (+) screwdriver to turn the screw ① counter-clockwise until the tips of the triangles ② align.



j015r034

2. Push the envelope selector ① to the rear.
   - Always push the envelope selector to the rear before you move the carriage manually.
   - Pushing the envelope selector to the rear raises the print head unit. This prevents damaging the print head unit when the carriage is moved manually.
   - Moving the envelope selector to the rear also makes it easier to remove the maintenance unit.
3. Push the carriage ② to the left side of the machine.

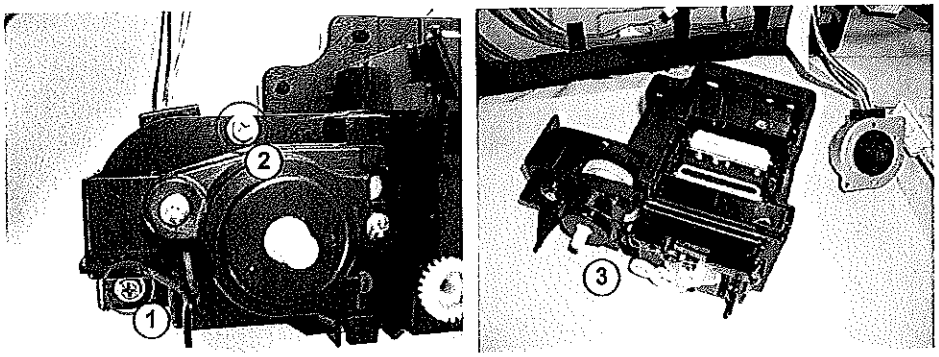


j015r035

4. Remove screws ① and ②.
5. Disconnect the unit ③ (x1).
6. Pull the unit ④ out of the unit as shown. If the maintenance is difficult to remove, make sure that the envelope selector is pushed completely to the rear position.

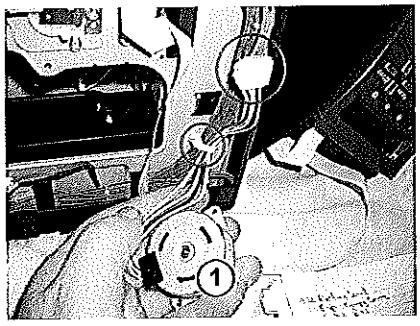
Important

- Handle the maintenance unit carefully.
- The bottom of the unit is covered with ink. Place it on a piece of clean paper (not cloth).
- Never touch the bottom of the unit.



j015r036

7. Remove screws ① and ②, to disconnect the maintenance unit motor from the maintenance unit (x2)
8. Set the maintenance unit ③ on a sheet of paper.



j015r061

9. Disconnect and remove the maintenance motor ① (x1, x1)

3.7.4 FAN

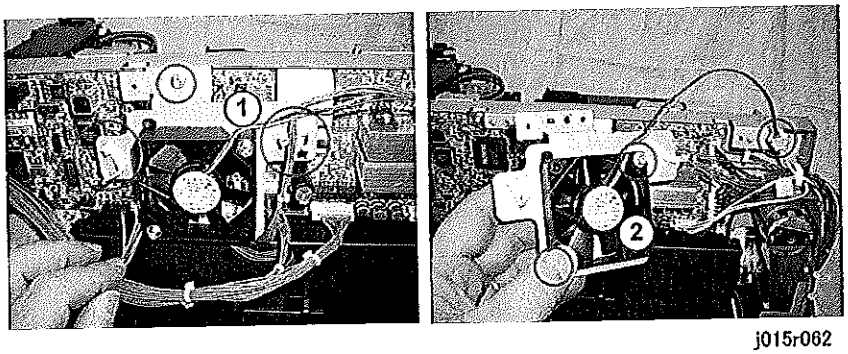
The fans in the J015 and J016 are mounted at different positions.

- The J015 fan is center mounted over the CTL board.
- The J016 fan is mounted at the left rear corner.

Preparation

- Right back cover
- Canopy Cover
- Rear cover
- Left back cover

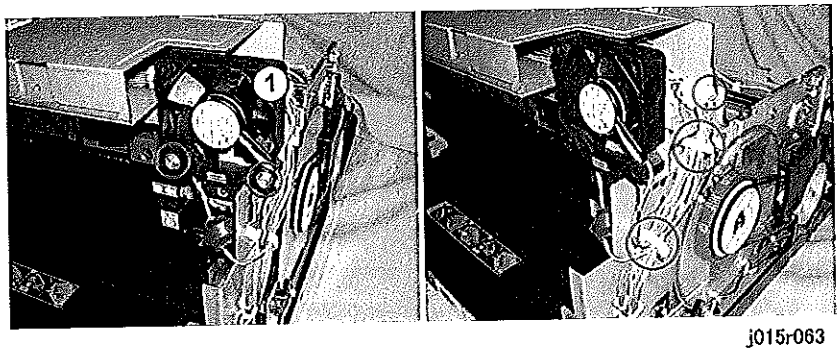
J015 Fan



j015r062

1. Remove the fan motor bracket ① (x2, x1).
2. Remove the fan ② (x2, x1)

J016 Fan



j015r063

1. Remove the fan ① (x2, x2, x1).

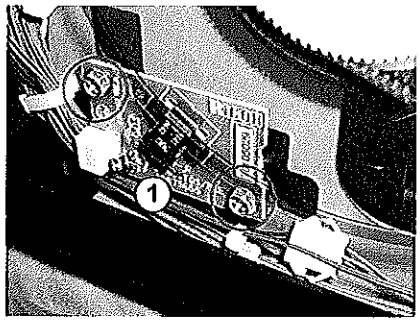
3.8 SENSORS

3.8.1 VERTICAL ENCODER SENSOR

Preparation:

Remove:

- Right back cover
- Canopy cover
- Right front cover
- Front cover
- Rear cover
- Left rear cover



j015r064

1. Remove the vertical encoder sensor ① (x2, x1).

Important

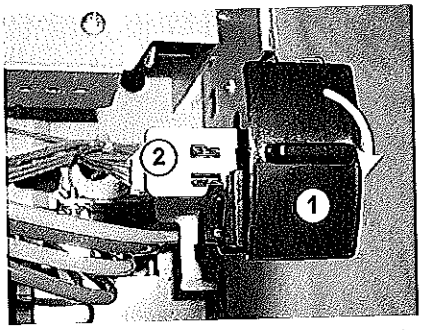
- Work carefully to avoid bending or scratching the edge of the vertical encoder wheel.

3.8.2 CARRIAGE POSITION SENSOR

Preparation:

Remove:

- Canopy cover



j015r065

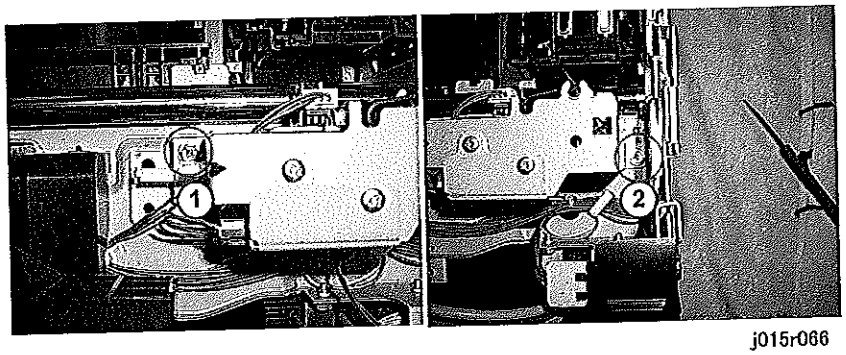
1. Move the envelope selector ① forward.
2. Remove the sensor from under the air release solenoid bracket (Hooks x3)
3. Disconnect the sensor (x1)

3.8.3 INK LEVEL SENSOR

Preparation:

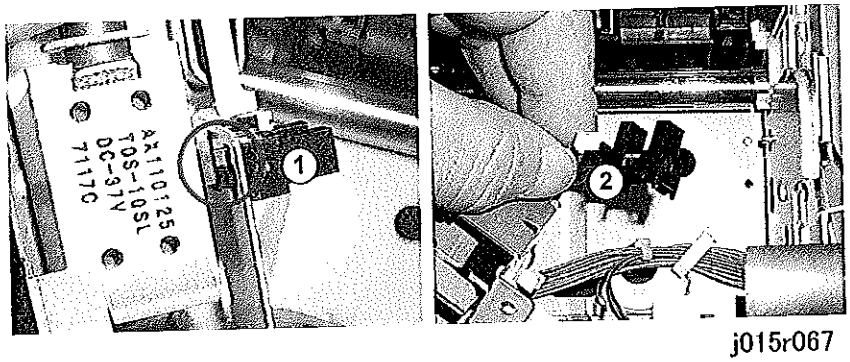
Remove:

- Right front cover
- Canopy cover



j015r066

1. Remove the solenoid bracket screws ① and ② (x2).
2. Lift the solenoid bracket.



j015r067

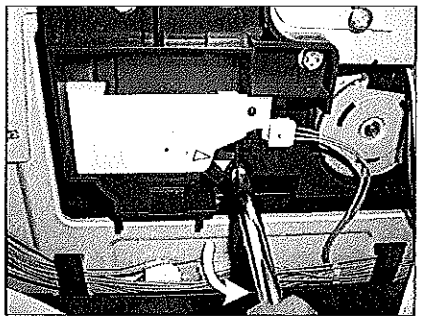
3. Use the tip of a small screwdriver to release the sensor hooks ③ (Hooks x3).
4. Remove the sensor ② (x1).

3.8.4 1ST REGISTRATION SENSOR

Preparation:

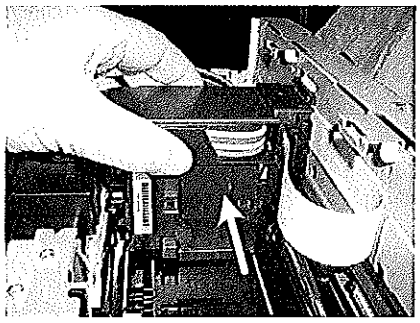
Remove:

- Right back cover
- Canopy cover



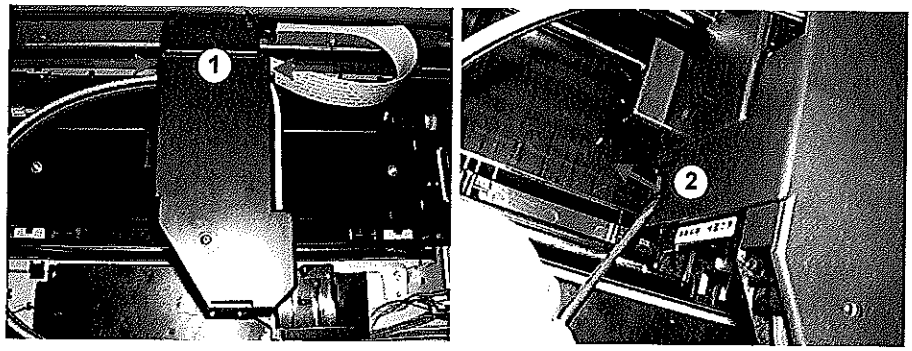
j015r041

1. After removing the right back cover, use a plus-screwdriver to align the triangles.
2. Push the envelope selector to the back position.



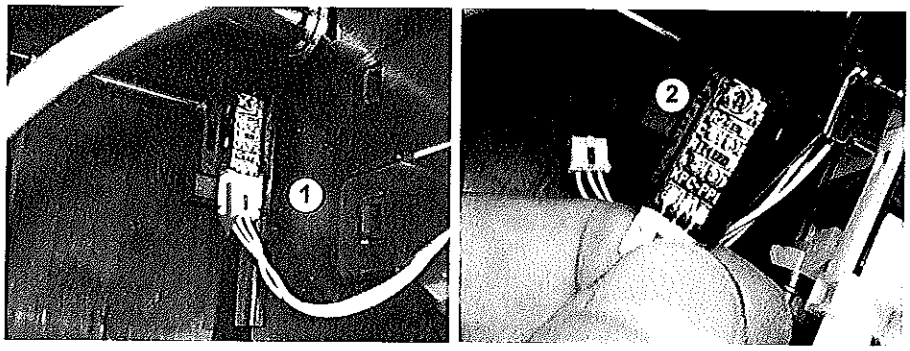
j015r042

3. Push the carriage to the center.



j015r068

1. Press in on both sides ① of the carriage unit cover to release the side hooks.
2. Use the tip of your finger or a small screwdriver to separate the tab from its hole on the side of the cover ②, then lift the cover off.



j015r069

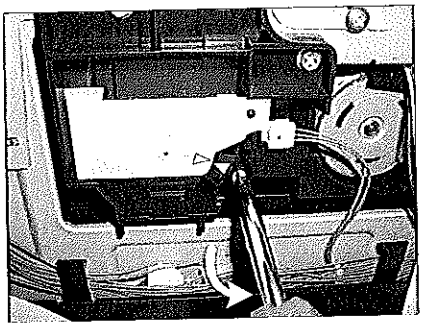
3. Pull the connector off of the 1st registration sensor ①.
4. Remove the 1st registration sensor ②.

3.8.5 2ND REGISTRATION SENSOR

Preparation:

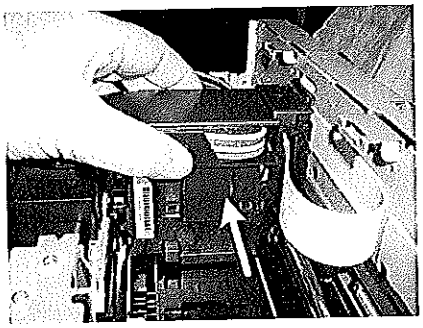
Remove:

- Right back cover
- Canopy cover
- Rear cover



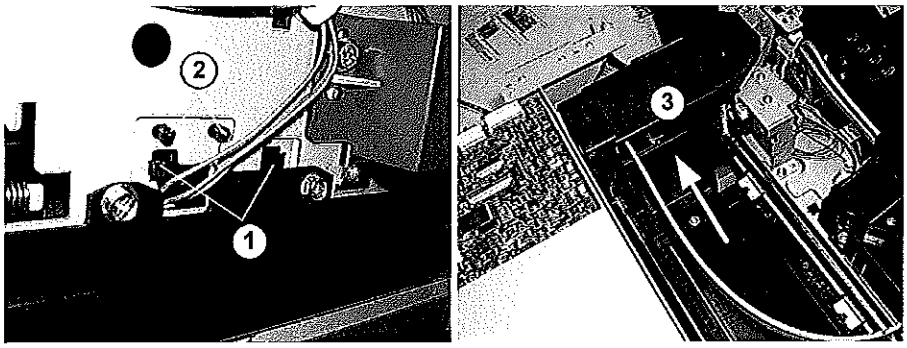
j015r041

1. After removing the right back cover, use a plus-screwdriver to align the triangles.
2. Push the envelope selector to the back position.



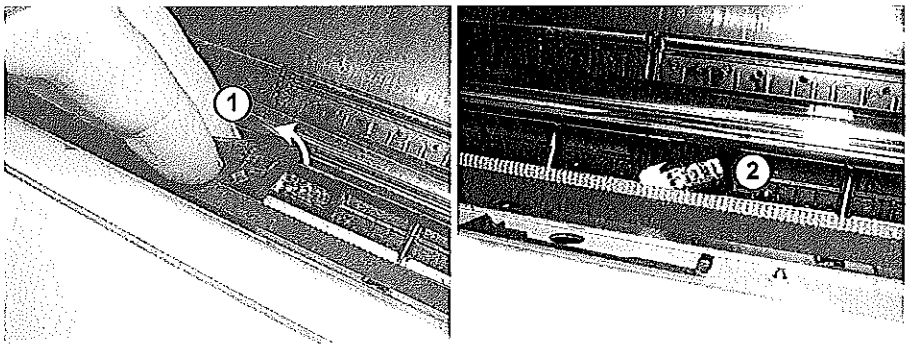
j015r042

3. Push the carriage to the center.



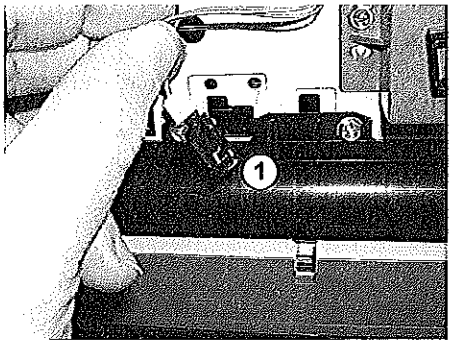
j015r070

4. To dislodge the sensor cover pinch the hooks inward ① to release them as you push on the boss pins ②.
5. Push the carriage ③ to the right side of the machine.



j015r071

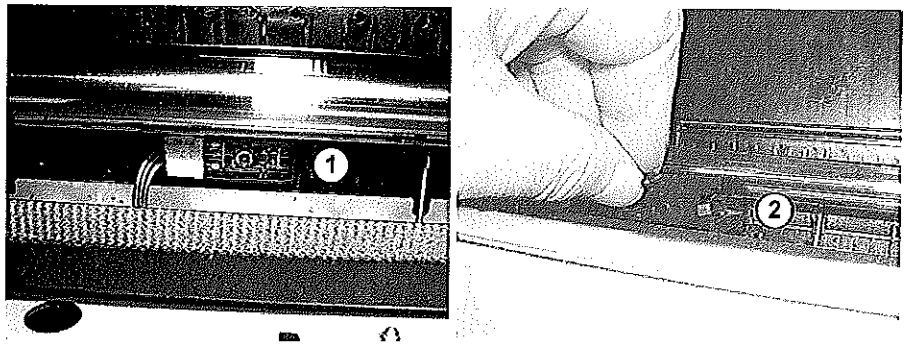
6. Remove the dislodged sensor cover ①.
7. Remove the sensor ②.



j015r072

8. Pull out the sensor ① and disconnect it (x1).

Reassembly

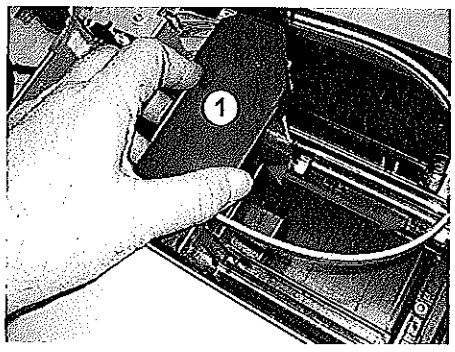


j015r073

1. Push the sensor ① through the hole on the back of the machine.
2. Push the sensor down to lock it in place.
3. Reattach the cover ②.

Note

- The cover cannot pass below the steel shaft. With its front edge down, lower the cover between shaft and the timing belt.



j015r074

4. Slowly move the carriage ① left and right to confirm that the carriage does not hit the sensor cover.

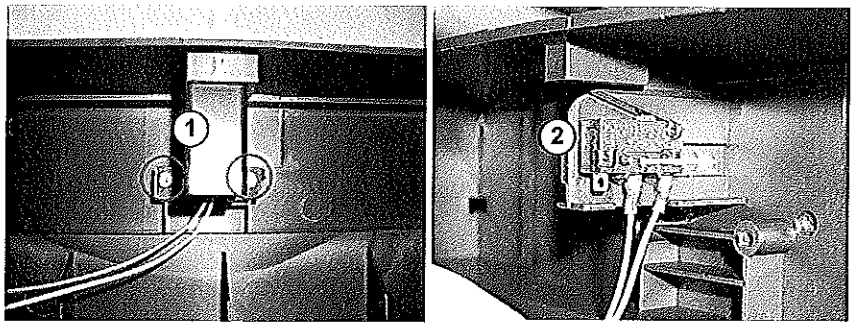
3.8.6 TOP COVER SENSOR

Preparation:

Remove:

- Right front cover
- Canopy cover
- Front cover

The top cover sensor is inside the front cover.



j015r075

1. Remove the screws of the sensor cover ① (x2).
2. Pull the sensor ② to slide it off its pegs (x2).

Reassembly

- Make sure the sensor is mounted on both pegs before you try to reattach the cover.
- The cover will not fit over the sensor until the sensor is set correctly on both pegs.