PIXMA iP5300

Service Manual

Revision 0

QY8-13BB-000

Scope

This manual has been issued by Canon Inc., to provide the service technicians of this product with the information necessary for qualified persons to learn technical theory, installation, maintenance, and repair of products. The manual covers information applicable in all regions where the product is sold. For this reason, it may contain information that is not applicable to your region.

Revision

This manual could include technical inaccuracies or typographical errors due to improvements or changes made to the product. When changes are made to the contents of the manual, Canon will release technical information when necessary. When substantial changes are made to the contents of the manual, Canon will issue a revised edition.

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I. MANUAL OUTLINE

This manual consists of the following three parts to provide information necessary to service the PIXMA iP5300:

Part 1: Maintenance

Information on maintenance and troubleshooting of the PIXMA iP5300

Part 2: Technical Reference

New technology and technical information such as FAQ's (Frequently Asked Questions) of the PIXMA iP5300

Part 3: Appendix

Block diagrams and pin layouts of the PIXMA iP5300

Reference

This manual does not provide sufficient information for disassembly and reassembly procedures.
Refer to the graphics in the separate Parts Catalog.

II. TABLE OF CONTENTS

1. MAINTENANCE

1-1. Adjustment, Periodic Maintenance, Periodic Replacement Parts, and Replacement Consumables by Service Engineer

(1) Adjustment

	Adjustment	Timing	Purpose	Tool	Approx. time
	Destination settings (EEPROM settings)	- At logic board replacement	To set destination.	None. Perform in the service mode.	1 min.
	Ink absorber counter resetting (EEPROM settings)	- At logic board replacement - At ink absorber replacement	To reset the ink absorber counter.	None. Perform in the service mode.	1 min.
	Paper feed motor position adjustment	- At paper feed motor replacement	To adjust the belt tension.(Position the paper feed motor so that the belt is stretched tight.)	None.	5 min.
	CD / DVD detection sensor light volume correction	- At logic board replacement - At carriage unit replacement	To correct the light volume for the CD / DVD detection sensor.	None. Perform in the service mode.	2 min.
	Grease application	- At carriage unit replacement - At lift cam replacement - To gears	To maintain sliding properties of the following items: - Carriage shaft - Lift cam bushing - Printer sliding portions (gears)	FLOIL KG-107A	1 min.
	Ink system function check	- At logic board replacement - At platen unit replacement - At carriage unit replacement	To maintain detection functionality for presence of the ink tanks and each ink tank position.	None. Perform in the service mode.	1 min.
	LF correction	- At logic board replacement - At feed roller ass'y replacement	To correct line feeding.	None. Perform in the service mode.	5 min.*
New	Eject correction	- At logic board replacement - At platen unit replacement	To maintain the paper eject accuracy	None.	

* LF and eject corrections are performed at the same time.

Caution: DO NOT loosen the red screws at both ends of the carriage shaft, securing the print head position, as they are not re-adjustable.
The red screws securing the paper feed motor may be loosened only at replacement of the paper feed motor unit.

(2) Periodic maintenance

No periodic maintenance is necessary.

(3) Periodic replacement parts

There are no parts in this printer that require periodic replacement by a service engineer.

(4) Replacement consumables

There are no consumables that require replacement by a service engineer.

1-2. Customer Maintenance

Adjustment	Timing	Purpose	Tool	Approx. time
Automatic print head alignment	- At print head replacement - When print quality is not satisfying, and not improved by print head cleaning.	To secure the dot placement accuracy.	- 2 sheets of Matte Photo Paper (MP-101) - Printer buttons - Computer (automatic alignment via printer driver)	13 min.
Manual print head alignment	- At print head replacement - When print quality is not satisfying, and not improved by print head cleaning.	To secure the dot placement accuracy.	- 5 sheets of plain paper - Printer buttons - Computer (printer driver with the manual print head alignment selected)	15 min.
Print head cleaning	When print quality is not satisfying.	To improve nozzle conditions.	- Printer buttons - Computer (printer driver)	1 min.
Print head deep cleaning	When print quality is not satisfying, and not improved by print head cleaning.	To improve nozzle conditions.	- Computer (printer driver)	2 min.
Ink tank replacement	When an ink tank becomes empty. ("No ink error" displayed on the monitor, or short flashing of an ink tank LED)	—	—	2 min.
Paper feed roller cleaning	When paper does not feed properly.	To clean the paper feed rollers.	- Printer buttons	2 min.
CD / DVD print position adjustment	At CD / DVD printing, when necessary.	To correct CD / DVD print position.	- Computer (application software)	5 min.
Bottom plate cleaning	When the back side of the paper is smeared.	To clean the platen ribs.	- Plain paper - Computer (printer driver)	1 min.
ASF sub- roller cleaning	When the paper fed from the ASF is smeared due to ink mist attached to the ASF sub-rollers.	To clean the ASF sub-rollers.	- Plain paper- Printer buttons See Part 2, 4. FAQ, How to make and set the ASF sub-roller cleaning sheet, for details.	1 min.

1-3. Product Life

(1) Printer

Specified print volume (I) or the years of use (II), whichever comes first.

(I) Print volume: 21,000 pages

Black	1500 character pattern	8,400 pages
Color	7.5% duty per color pattern	6,300 pages
	A4, photo, borderless printing	400 pages
	4 x 6, photo, borderless printing	4,400 pages
	Postcard, photo, borderless printing	1,500 pages

(II) Years of use: 5 years of use

(2) Print head

Print volume: 28,560 pages

(3) Ink tank (target value)

Average yield ( ): Estimated supplemental yield	**PGI-5BK**	**CLI-8BK**	**CLI-8C**	**CLI-8M**	**CLI-8Y**
Color document (ISO/IEC FCD24712)*1	530 pages	(5,395 pages)	890 pages	695 pages	710 pages
Photo (4" x 6")*2	(4,340 pages)	(1,600 pages)	436 pages	290 pages	331 pages

*1: Declared yield value in accordance with ISO/IEC FCD24711. Values obtained by continuous printing.

*2: When printing Canon standard patterns on 4" x 6" Photo Paper Plus Glossy continuously with the default settings of Photo Paper Plus Glossy using Windows XP printer driver in borderless printing mode and Windows XP Photo Printing Wizard. Declared yield value determined based on Canon standard method referring to ISO/IEC FCD24712.

Note: Ink yield may vary depending on texts/photos printed, applications software used, print mode and type of paper used.

1-4. Special Tools

Name	**Tool No.**	**Price (JPY)**	**Application**	**Remarks**
FLOIL KG-107A	QY9-0057-000	210	To the carriage shaft sliding portions, and lift cam bushing	In common with the S520.

1-5. Serial Number Location

On the carriage flexible cable holder (visible on the right of the carriage after the printer is turned on, the top cover is opened, and the carriage moves to the center).

<Part 1: 1. MAINTENANCE>

2. LIST OF ERROR DISPLAY / INDICATION

Errors are indicated by the LED, and warnings are displayed on the monitor of the computer connected to the printer.

2-1. Operator Call Errors (by Alarm LED Blinking in Orange)

LED blinking	Error [Error code]	Solution	Remarks
2 times	No paper in the ASF. [1000]	Set the paper in the ASF, and press the Resume/Cancel button.	
	No CD / DVD tray. [1001]	Set the CD / DVD tray, and press the Resume/Cancel button.	
	No paper in the cassette. [1003]	Set the paper in the cassette, and press the Resume/Cancel button.	
	No CD or DVD. [1002]	Set a CD or DVD in the CD / DVD tray (which is ejected at error occurrence), and inset the CD / DVD tray in the proper position. Then, press the Resume/Cancel button.	
3 times	Paper jam. [1300]	Remove the jammed paper, and press the Resume/Cancel button.	Error during paper feeding from the ASF
	Paper jam in the rear guide. [1303]		Error in the duplexing transport unit
	Paper jam in the under guide. [1304]		Error during paper feeding from the cassette
	Front door close error. [1250]	Open the paper output tray.	The error is indicated if the paper output tray is closed at start of a print job, or while a print job is being performed.
4 times	Ink may have run out. [1600]	Replace the applicable ink tank, or press the Resume/Cancel button to clear the error without ink tank replacement.	When the error is cleared by pressing the Resume/Cancel button, ink may run out during printing.
	Ink tank not installed. [1660]	Install the applicable ink tank(s) properly, and confirm that the LED's of all the ink tanks light red.	
5 times	- Print head not installed, or not properly installed. [1401] - Print head temperature sensor error. [1403] - Faulty EEPROM data of the print head. [1405] - Print head hardware error. [1682]	Install the print head properly.	
6 times	Inner cover open during printing on paper (print continuable). [1851]	Close the inner cover, and press the Resume/Cancel button.	
	Inner cover open during printing on paper (print NOT continuable). [1856]	Close the inner cover, and press the Resume/Cancel button to clear the error. The paper being printed at error occurrence will be ejected without printing the remaining data for the ejected paper, then printing will resume from the next page.	
	Inner cover closed before start of CD / DVD printing (print continuable). [1850]	Open the inner cover which functions as the CD / DVD tray feeder, set the CD / DVD tray in the feeder, and press the Resume/Cancel button.	
	Inner cover closed during CD / DVD printing (print NOT continuable). [1855]	Open the inner cover, and press the Resume/Cancel button to clear the error. The CD or DVD being printed at error occurrence will be ejected without	

		printing the remaining data for the ejected CD or DVD, then the next print job will be performed.	
7 times	Multiple ink tanks of the same color installed. [1681]	Replace the wrong ink tank(s) with the correct one (s).	
	Ink tank in a wrong position. [1680]	Install the ink tank(s) in the correct position.	
8 times	Warning: The ink absorber becomes almost full. [1700]	Press the Resume/Cancel button.	The service call error, indicating the ink absorber is full, is likely to occur soon.
9 times	The connected digital camera or digital video camera does not support Camera Direct Printing. [2001]	Remove the cable between the camera and the printer.	
10 times	Automatic duplex printing cannot be performed. [1310]	Press the Resume/Cancel button to eject the paper being used at error occurrence. Printing will resume from on the front side of the next page.	Data which was to be printed on the back side of paper at error occurrence is skipped (not printed).
11 times	Failed in automatic print head alignment. [2500]	Press the Resume/Cancel button. - If paper is being fed at error occurrence, the error is indicated after the paper is ejected. - If the error occurs, the print head alignment values are not changed. - After exit from the error by the Resume/Cancel button, the automatic print head alignment will not be re-done.	The error will occur (a) when the print head alignment pattern is not printed due to no ink or non-ejection of ink, (b) when the sensor's AD value is incorrect, or (c) when the paper is shorter than the specified length.
13 times	The remaining ink amount unknown. [1683]	Replace the applicable ink tank with a new one, and close the scanning unit (printer cover). Printing with a once-empty ink tank can damage the printer. To continue printing without replacing the ink tank (s), press the Resume/Cancel button for 5 sec. or longer to disable the function to detect the remaining ink amount. After the operation, it is recorded in the printer EEPROM that the function to detect the remaining ink amount was disabled.	The error is indicated when raw ink is detected but the dot count number exceeds the threshold of complete exhaustion of ink.
14 times	Ink tank not recognized. [1684]	A non-supported ink tank is installed (the ink tank LED is turned off). Install the supported ink tanks.	
15 times	Ink tank not recognized. [1410 to 1414]	A hardware error occurred in an ink tank (the ink tank LED is turned off). Replace the ink tank(s). Each error code corresponds to each ink tank, from left (the opposite side of the home position) to right, respectively. Error code 1410 is for the leftmost ink tank (PGI-5BK).	Ink tank positioning (from left to right): BK, PigBK, Y, M, C
16 times	No ink. [1688]	Replace the empty ink tank(s), and close the scanning unit (printer cover). Printing with an empty ink tank can damage the printer. To continue printing without replacing the ink tank (s), press the Resume/Cancel button for 5 sec. or longer to disable the function to detect the remaining ink amount. After the operation, it is recorded in the printer that the function to detect the remaining ink amount was disabled.	The error is indicated when "no raw ink" is detected and when the dot count number exceeds the threshold of complete exhaustion of ink.

2-2. Service Call Errors (by Cyclic Blinking in Orange (Alarm LED) and Green (Power LED), or Alarm LED Lit in Orange)

Cycles of blinking in orange (Alarm LED) and green (Power LED)	Error	Solution (Replacement of listed parts, which are likely to be faulty)
2 times	Carriage error [5100]	- Carriage unit (QM2-3999) - Timing slit strip film (QC1-6526) - Logic board ass'y (QM3-0833)*1 - Carriage motor (QK1-1500)
3 times	Line feed error [6000]	- Timing sensor unit (QM3-1271) - Timing slit disk film (QC2-0475) - Feed roller ass'y (QL2-1490) - Logic board ass'y (QM3-0833)*1 - Paper feed motor (QK1-1502)
4 times	Purge cam sensor error [5C00]	- Purge unit (QM3-0007) - Logic board ass'y (QM3-0833)*1
5 times	ASF (cam) sensor error [5700]	- Sheet feed unit (QM2-3902)
6 times	Internal temperature error [5400]	- Logic board ass'y (QM3-0833)*1 - Carriage unit (QM2-3999)
7 times	Ink absorber full [5B00]	- Ink absorber kit (QY5-0179)
8 times	Print head temperature rise error [5200]	- Print head (QY6-0067) - Logic board ass'y (QM3-0833)*1
9 times	EEPROM / NVRAM error [6800]	- Logic board ass'y (QM3-0833)*1
10 times	VH monitor error [B200]	- Logic board ass'y (QM3-0833)*1 - Print head (QY6-0067)
11 times	Carriage lift mechanism error [5110]	- PR lift shaft ass'y (QL2-1450) - Sheet feed unit (QM2-3902) - Logic board ass'y (QM3-0833)*1 - Carriage lift sensor unit (QM3-1273)
12 times	AP position error [6A00]	- Sheet feed unit (QM2-3902) - Logic board ass'y (QM3-0833)*1 - Purge unit (QM3-0007)
13 times	Paper feed position error [6B00]	- Sheet feed unit (QM2-3902) - Logic board ass'y (QM3-0833)*1
14 times	Paper feed cam sensor error [6B10]	- Sheet feed unit (QM2-3902) - Logic board ass'y (QM3-0833)*1
15 times	USB Host VBUS overcurrent [9000]	- Logic board ass'y (QM3-0833)*1
16 times	Pump roller sensor error [5C20]	- Logic board ass'y (QM3-0833)*1 - Purge unit (QM3-0007)
17 times	Paper eject encoder error [6010]	- Timing sensor unit (QM3-1271) - Timing slit disk eject film (QC2-0476) - Logic board ass'y (QM3-0833)*1 - Paper feed motor (QK1-1502) - Platen unit (QM3-0001)
19 times	Ink tank position sensor error [6502]	- Platen unit (QM3-0001) - Logic board ass'y (QM3-0833)*1
20 times	Other hardware error [6500]	- Logic board ass'y (QM3-0833)*1
Power LED turned off, and Alarm LED lit	ROM / RAM error	- Logic board ass'y (QM3-0833)*1

*1: Before replacement of the logic board ass'y, check the ink absorber counter value (by service test print or EEPROM information print). If the counter value is 7% or more, also replace the Ink absorber kit (QY5-0179) when replacing the logic board ass'y. [See 3-3. Adjustment / Settings, (5) Service mode, for details.]

2-3. Warnings

Displayed warning	Remarks
Low ink	Status indication only.
Print head temperature rise	If the print head temperature is high when the top cover is opened, the warning is displayed*1. When the print head temperature falls, the warning is released.
Protection of excess rise of the print head temperature	If the print head temperature exceeds the specified limit, a Wait is inserted during printing,

*1: If the warning is displayed, the carriage does not move to the ink tank replacement position when the top cover is opened.

2-4. Troubleshooting by Symptom

	Symptom	Solution
Faulty operation	The power does not turn on. The power turns off immediately after power-on.	- Replace the - AC adapter, or - logic board ass'y*1.
	A strange noise occurs.	- Remove foreign material. - Attach a removed part if any.
	Printing stops mid-way.	- Replace the logic board ass'y*1.
Paper feed problems	Multiple sheets feed.	- Replace the - sheet feed unit, or - cassette.
	Paper does not feed.	- Remove foreign material. - Replace the - sheet feed unit, or - cassette.
	Paper feeds at an angle.	- Remove foreign material. - Adjust the paper guide. - Replace the - sheet feed unit, or - cassette.
Unsatisfactory print quality	No printing, or no color ejected.	- Replace the - ink tank, - print head*2, or - logic board ass'y*1. - Remove foreign material from the purge unit caps, if any. - Replace the purge unit.
	Printing is faint, or white lines appear on printouts even after print head cleaning. Line(s) not included in the print data appears on printouts.	- Remove and re-install the print head. - Replace the - ink tank, or - print head*2. - Perform print head alignment*3. - Replace the - purge unit, or - logic board ass'y*1.
	Paper gets smeared.	- Feed several sheets of paper.

		- Perform bottom plate cleaning. - Clean the paper path with cotton swab or cloth. - Clean the ASF sub-rollers.
	A part of a line is missing on printouts.	- Replace the - ink tank, or - print head*2.
	Color hue is incorrect.	- Replace the - ink tank, or - print head*2. - Perform print head alignment*3.
	Printing is incorrect.	Replace the logic board ass'y*1.
	No ejection of black ink.	- Replace the - ink tank, or - print head*2. - Remove foreign material from the purge unit caps, if any. - Replace the purge unit.
	Graphic or text is enlarged on printouts.	**When enlarged in the carriage movement direction:** - Clean grease or oil off the timing slit strip film - Replace the - timing slit strip film, - carriage unit, or - logic board ass'y*1. **When enlarged in the paper feed direction:** - Clean grease or oil off the timing slit disk film and timing slit disk eject film. - Replace the - timing slit disk film, - timing slit disk eject film, - timing sensor unit, or - logic board ass'y*1.

*1: Before replacement of the logic board ass'y, check the ink absorber counter value (by service test print or EEPROM information print). If the counter value is 7% or more, also replace the ink absorber kit (QY5-0179) when replacing the logic board ass'y. [See 3-3. Adjustment / Settings, (5) Service mode, for details.]

*2: Replace the print head only after the print head deep cleaning is performed 2 times, and when the problem persists.

*3: For automatic print head alignment, use Matte Photo Paper (MP-101). For manual print head alignment, plain paper can be used.

<Part 1: 2. LIST OF ERROR DISPLAY / INDICATION>

3. REPAIR

3-1. Notes on Service Part Replacement (and Disassembling / Reassembling)

Service part	Notes on replacement*1	Adjustment / settings	Operation check
Logic board ass'y QM3-0833	- Before removal of the logic board ass'y, remove the power cord, and allow for approx. 1 minute (for discharge of capacitor's accumulated charges), to prevent damages to the logic board ass'y. - Before replacement, check the ink absorber counter value (by service test print or EEPROM information print). If the value is 7% or more, also replace the ink absorber kit when replacing the logic board ass'y. [See 3-3. Adjustment / Settings, (5) Service mode, for details.]	**After replacement:** 1. Initialize the EEPROM. 2. Reset the ink absorber counter. 3. Set the destination in the EEPROM. 4. Correct the CD / DVD and automatic print head alignment sensors. 5. Check the ink system function. [See 3-3. Adjustment / Settings, (5) Service mode, for details of 1 to 5.] 6. Perform LF / Eject correction. 7. Perform the print head alignment in the user mode*1.	- EEPROM information print - Service test print - Printing via USB connection - Direct printing from a digital camera
Ink absorber kit QY5-0179		**After replacement:** 1. Reset the ink absorber counter. [See 3-3. Adjustment / Settings, (5) Service mode, for details.]	- Service test print - EEPROM information print
Carriage unit QM2-3999		**At replacement:** 1. Apply grease to the sliding portions. [See 3-3. Adjustment / Settings, (2) Grease application.] **After replacement:** 1. Correct the CD / DVD and automatic print head alignment sensors. [See 3-3. Adjustment / Settings, (5) Service mode, for details.] 2. Check the ink system function. [See 3-3. Adjustment / Settings, (5) Service mode, for details.] 3. Perform the print head alignment in the user mode*1.	- Service test print (Confirm CD / DVD and automatic print head alignment sensor correction, and ink system function.)
Paper feed motor QK1-1502	- The red screws securing the paper feed motor are allowed to be loosened. (DO NOT loosen any other red screws.)	**At replacement:** 1. Adjust the paper feed motor. [See 3-3. Adjustment / Settings, (1) Paper feed motor adjustment.]	
Platen unit QM3-0001		**After replacement:** 1. Check the ink system function. [See 3-3. Adjustment / Settings, (5) Service mode,	- Service test print

		for details.]	
PR lift shaft ass'y QL2-1450 Input carriage lift gear QC2-1873		**At replacement:** 1. Apply grease to the sliding portions. [See 3.3. Adjustment / Settings, (2) Grease application.]	- Service test print
Timing slit strip film QC1-6526 Timing slit disk film QC2-0475 Timing slit disk eject film QC2-0476	- Wipe off any grease from the film with ethanol. - Confirm no grease is on the film. (Wipe off any grease thoroughly with ethanol.) - Do not bend the film.	**After replacement:** 1. Perform the print head alignment in the user mode*1.	- Service test print
Print head QY6-0067		**After replacement:** 1. Perform the print head alignment in the user mode*1.	- Service test print

*1: For automatic print head alignment, use Matte Photo Paper (MP-101). For manual print head alignment, plain paper can be used.

General notes:

- Make sure that the flexible cables and wires in the harness are in the proper position and connected correctly.
  [See 3-2. Special Notes on Repair Servicing, (5) Flexible cable and harness wiring, connection, for details.]
- Do not drop the ferrite core, which may cause damage.
- Protect electrical parts from damage due to static electricity.
- Before removing a unit, after removing the power cord, allow the printer to sit for approx. 1 minute (for capacitor discharging to protect the logic board ass'y from damages).
- Do not touch the timing slit strip film, timing slit disk film, and timing slit disk eject film. No grease or abrasion is allowed.
- Protect the units from soiled with ink.
- Protect the housing from scratches.
- Exercise caution with the red screws, as follows:
  i. The red screws of the paper feed motor may be loosened only at replacement of the paper feed motor unit (DO NOT loosen them in other cases).
  ii. DO NOT loosen the red screws on both sides of the main chassis, securing the carriage shaft positioning (they are not adjustable in servicing)

<Part 1: 3-1. Notes on Service Part Replacement>

3-2. Special Notes on Repair Servicing

(1) External cover removal

(i) Remove the paper support unit (left photo) and the main case cover (right photo).

(ii) Remove the access cover.

(iii) Remove the side covers L and R.

(iv) Remove the main case by inserting tool like precision screw driver into the 2 holes (at red marked) at the rear side.

(v) 1) Open the front door and the inner cover.(1)

2) Push the (2) arrow-indicated portions to release the locks, then lift the main case upward to remove it.

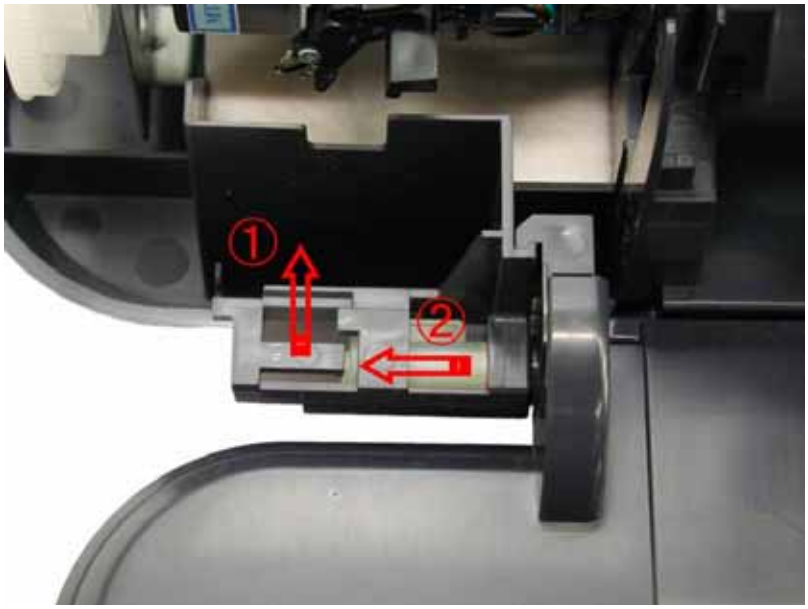
3) Remove the interface cover.

(2) Door damper removal

Door damper location:

Removal:

While pulling the claw upward to release the lock ((1) in the photo below), slide the damper to the left ((2) in the photo below) to remove it.



(3) Front door removal

Open the paper output tray, and extend the output tray extension.

By bending the front door on both sides as shown in the photo below, the front door can be removed easily.

(4) Printer unit removal

The printer unit is fastened to the bottom case with 5 screws.

To remove the screw beneath the carriage unit in the home position, unlock the carriage unit first as follows:

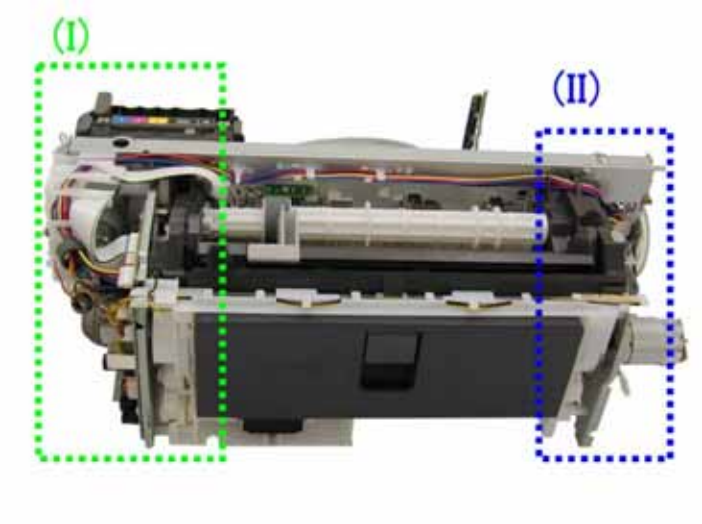
(i) Unlock the carriage unit.

Rotate the gear (indicated by the red square) toward the rear side of the printer 2 or 3 times. The carriage will be unlocked.

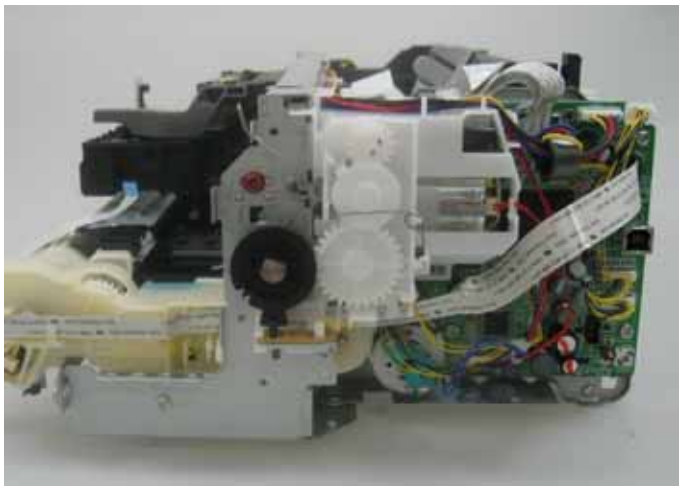
(ii) Slide the carriage to the opposite of the home position, and remove the screw.

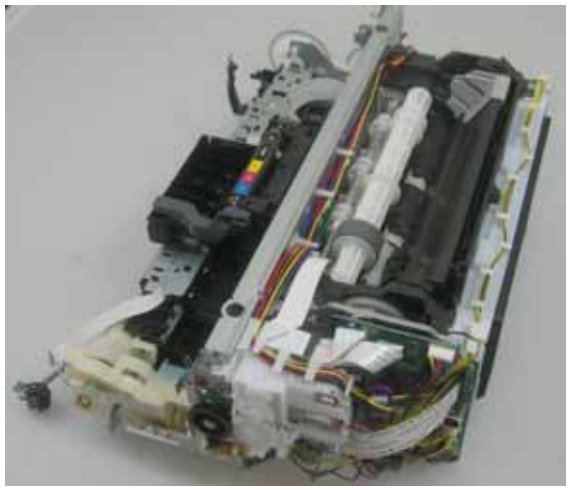
(5) Flexible cable and harness wiring, connection

Be cautious of wiring of the flexible cables and harness. Improper wiring or connection may cause breakage of a line, leading to ignition or emission of smoke.

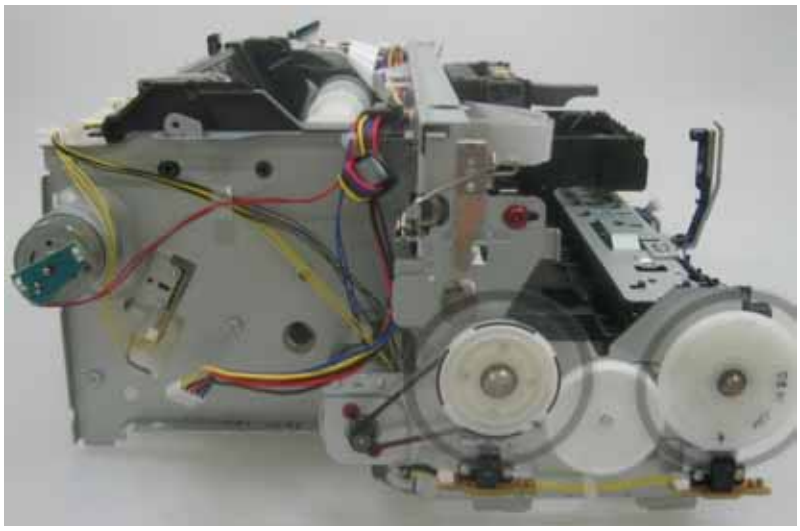


(i) Logic board ass'y wiring





(ii) Paper feed motor side wiring



<Part1: 3-2. Special Notes on Repair Servicing>

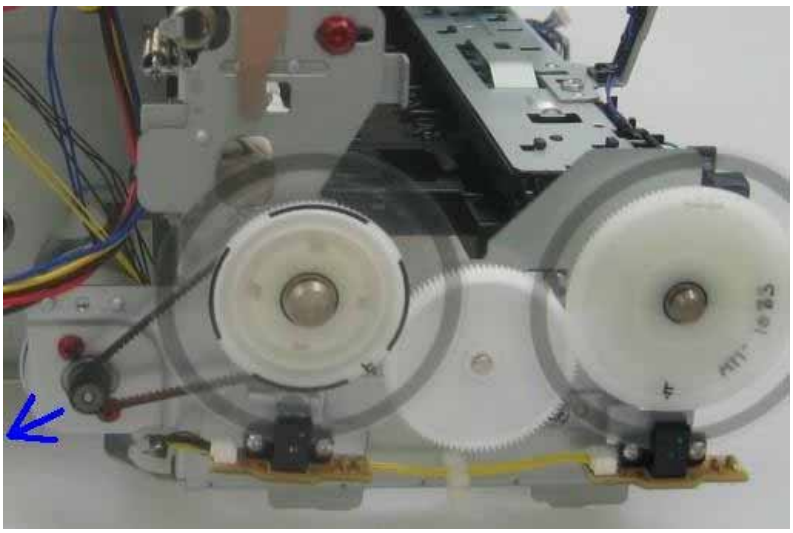
3-3. Adjustment / Settings

(1) Paper feed motor adjustment

Perform the following adjustments when the paper feed motor unit is replaced:

1) When attaching the motor, fasten the screws so that the belt is properly stretched (in the direction indicated by the blue arrow in the figure below).

2) After replacement, be sure to perform the service test print, and confirm that no strange noise or faulty print operation (due to dislocation of the belt or gear, or out-of-phase motor, etc.) occurs.



Caution:

The red screws securing the paper feed motor may be loosened only at replacement of the paper feed motor unit. DO NOT loosen them in other cases.

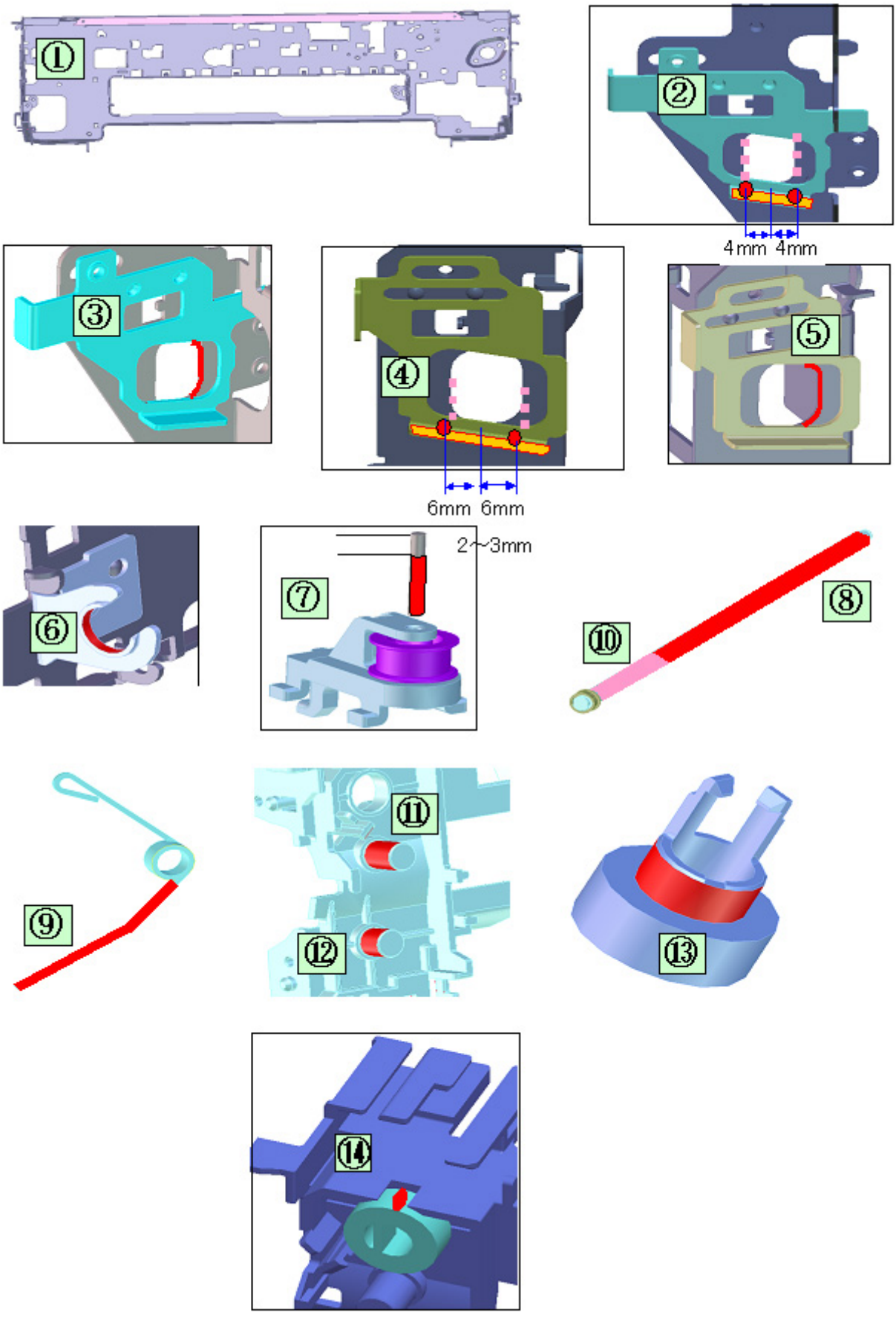
(2) Grease application

<Printer Unit>

No	Part name	Where to apply grease / oil	Drawing No.	Grease / oil	Grease / oil amount (mg)	Number of drops* x locations
1	Chassis ass'y	Entire surface the carriage slider contacts	(1)	Floil KG107A	27 to 54	3 x 1
2	Adjust plate L	Carriage shaft cam L sliding portion	(2)	Floil KG107A	18 to 36	2 x 1
3	Chassis ass'y	Carriage shaft sliding portion on the left side of the chassis (1 location)	(3)	Floil KG107A	9 to 18	1 x 1
4	Adjust plate R	Carriage shaft cam R sliding portion	(4)	Floil KG107A	18 to 36	2 x 1
5	Chassis ass'y	Carriage shaft sliding portion on the right side of the chassis (1 location)	(5)	Floil KG107A	9 to 18	1 x 1
6	Chassis ass'y	PR lift shaft cam contact portion (3 locations)	(6)	Floil KG107A	18 to 27	1.5 x 3
7	Idler pulley	The shaft surface which contacts the idler pulley hole	(7)	Floil KG107A	9 to 18	1 x 1
8	Carriage shaft	Entire surface of the carriage shaft where the carriage unit slides	(8)	Floil KG107A	200 to 400	
9	Carriage shaft spring L	Carriage shaft sliding portion (to the end of the spring)	(9)	Floil KG107A	9 to 18	1 x 1
10	Carriage shaft	Carriage shaft surface where the carriage unit slides (and where the machine-application of the grease is not feasible)	(10)	Floil KG107A	9 to 18	1 x 1
11	CL gear base	Outer surface of the CL idle gear R cylinder	(11)	Floil KG107A	9 to 18	1 x 1
12	CL gear base	Outer surface of the CL output gear cylinder	(12)	Floil KG107A	9 to 18	1 x 1

13	CL input gear	Joint of the CL gear base	(13)	Floil KG107A	9 to 18	1 x 1
14	CL input gear	CL input gear teeth	(14)	Floil KG107A	9 to 18	1 x 1

* 1 drop = 9 to 18 mg



(3) Ink absorber counter setting

When the logic board ass'y is replaced, reset the ink absorber counter.

In addition, according to the ink absorber counter value, replace the ink absorber (ink absorber kit). The standard counter value for ink absorber replacement is given in the table below.

Ink absorber counter value*1	Ink absorber kit replacement
Less than 7%	Not required.
7% or more	Required.

*1: Check the ink absorber counter value by service test print or EEPROM information print.
[See 3-3. Adjustment / Settings, (5) Service mode, for details.]

(4) User mode

Function	Procedures	Remarks
Print head manual cleaning	- Cleaning both Black and Color: See "Standalone printer operation" below. - Cleaning Black or Color separately, or both Black and Color: Perform from the printer driver's Maintenance tab.	
Print head deep cleaning	- Cleaning Black or Color separately, or both Black and Color: Perform from the printer driver's Maintenance tab.	
Paper feed roller cleaning	See "Standalone printer operation" below.	
Nozzle check pattern printing	See "Standalone printer operation" below.	Also available from the printer driver's Maintenance tab.
Print head alignment (automatic / manual)	See "Standalone printer operation" below.	Automatic alignment: Use MP-101.
		Manual alignment: In Custom Settings of the printer driver's Maintenance tab, manual print head alignment (by selecting the optimum values) as with the conventional models can be performed.
Bottom plate cleaning	See "Standalone printer operation" below, or perform from the printer driver's Maintenance tab.	Cleaning of the platen ribs when the back side of paper gets smeared.
Print head replacement	The print head is replaceable at the same position as for ink tank replacement. (Open the top cover. When the carriage stops at the center, the print head can be replaced.)	

<Standalone printer operation>

1) Turn on the printer.
2) Press and hold the Resume/Cancel button until the LED blinks the specified number of times listed in the table below, and release it. The operation starts.

LED blinking	Operation	Remarks
1 time	Print head manual cleaning	
2 times	Nozzle check pattern printing	Set a sheet of plain paper (A4 or Letter) in the ASF or the cassette (according to the Paper Feed Switch button setting).
3 times	Paper feed roller cleaning	
4 times	Automatic print head alignment	Set 2 sheets of Matte Photo Paper MP-101 (A4 or Letter) in the ASF.
5 times	Bottom plate cleaning	Fold a sheet of plain paper (A4 or Letter) in half crosswise, then unfold and set it in the ASF with the folded ridge facing down.
6 times	Unspecified	
7 times	Head-to-paper distance setting to the widest	
8 times or more	Unspecified	

(5) Service mode

Function	Procedures	Remarks
Service test print - Model name - Destination - ROM version - USB serial number - Ink absorber counter value (ink amount in the ink absorber) - LF / Eject correction value - CD / DVD sensor correction value - Ink system function check result - CD / DVD sensor correction result	See "Service mode operation procedures" below.	Set a sheet of A4 or Letter size paper in the ASF (cassette not usable). For print sample, see 3-4. Verification Items, (1) Service test print, <Service test print sample>.
EEPROM initialization	See "Service mode operation procedures" below.	The following items are NOT initialized, and the shipment arrival flag is not on: - USB serial number - Destination settings - Ink absorber counter value (ink amount in the ink absorber) - CD / DVD correction value - LF / Eject correction value - Left margin correction value - Record of disabling the function to detect the remaining ink amount
Ink absorber counter reset	See "Service mode operation procedures" below.	If the ink absorber counter value is 7% or more, replace the ink absorber kit.
LF / Eject correction	See "Service mode operation procedures" below.	
Left margin correction	See "Service mode operation procedures" below.	
Destination settings	See "Service mode operation procedures" below.	

Note: At the end of the service mode, press the Power button. The paper lifting plate of the sheet feed unit will be raised.

<Service mode operation procedures>

1) With the printer power turned off, while pressing the Resume/Cancel button, press and hold the Power button. (DO NOT release the buttons). The Power LED lights in green to indicate that a function is selectable.
2) While holding the Power button, release the Resume/Cancel button. (DO NOT release the Power button.)
3) While holding the Power button, press the Resume/Cancel button 2 times, and then release both the Power and Resume/Cancel buttons. (Each time the Resume/Cancel button is pressed, the Alarm and Power LEDs light alternately, Alarm in orange and Power in green, starting with Alarm LED.)
4) When the Power LED lights in green, press the Resume/Cancel button the specified number of time(s) according to the function listed in the table below. (Each time the Resume/Cancel button is pressed, the Alarm and Power LEDs light alternately, Alarm in orange and Power in green, starting with Alarm LED.)

Time(s)	LED indication	Function	Remarks
0 times	Green (Power)	Power off	When the print head is not installed, the carriage returns and locks in the home position capped.
1 time	Orange (Alarm)	Service test print	See 3-4. Verification Items, (1) Service test print.
2 times	Green (Power)	EEPROM information print	See 3-4. Verification Items, (2) EEPROM information print.
3 times	Orange (Alarm)	EEPROM initialization	
4 times	Green (Power)	Ink absorber counter resetting	
5 times	Orange (Alarm)	Destination settings	Press the Resume/Cancel button the specified number of time(s) according to the destination.
6 times	Green (Power)	Print head deep cleaning	Cleaning of both Black and Color
7 times	Orange (Alarm)	CD / DVD check pattern print	Not used in servicing.
8 times	Green (Power)	CD / DVD print position correction (horizontal: X direction)	Not used in servicing.
9 times	Orange (Alarm)	CD / DVD print position correction (vertical: Y direction)	Not used in servicing.
10 times	Green (Power)	LF / Eject correction	
11 times	Orange (Alarm)	Left margin correction	
12 to 15 times	Green (Power), Orange (Alarm)	Return to the menu selection	
16 times or more	Orange (Alarm)	Return to the menu selection	

Note: If the Resume/Cancel button is pressed 16 or more times, the Alarm LED (orange) lights steadily without any changes.

<Destination settings>

In the destination settings mode, press the Resume/Cancel button the specified number of time(s) according to the destination listed in the table below, and press the Power button.

Time(s)	LED indication	Destination	CD / DVD print
0 times	Green (Power)	No change of the destination	
1 time	Orange (Alarm)	Japan	Supported
2 times	Green (Power)	Korea	Not supported
3 times	Orange (Alarm)	US	Not supported
4 times	Green (Power)	Europe	Supported
5 times	Orange (Alarm)	Australia	Supported
6 times	Green (Power)	Asia	Supported
7 times	Orange (Alarm)	China	Supported
8 times	Green (Power)	Taiwan	Supported
9 times	Orange (Alarm)	Canada, LAM	Supported
10 times or more	Green (Power)	Return to the menu selection	

Note: After setting the destination, confirm the model name and destination in service test print or EEPROM information print.

See 3-4. Verification Items, (1) Service test print, or (2) EEPROM information print.]

<LF / Eject correction>

After replacement of the feed roller ass'y, the logic board ass'y or platen unit in repair servicing or in refurbishment operation, perform the adjustment.

Details: Print the LF / Eject correction pattern on a sheet of paper. Select the Pattern No. (0 to 2) in which streaks or lines are the least noticeable, press the Resume/Cancel button the same number of time(s) as the selected Pattern No., then press the Power button. (See the flowchart below.)

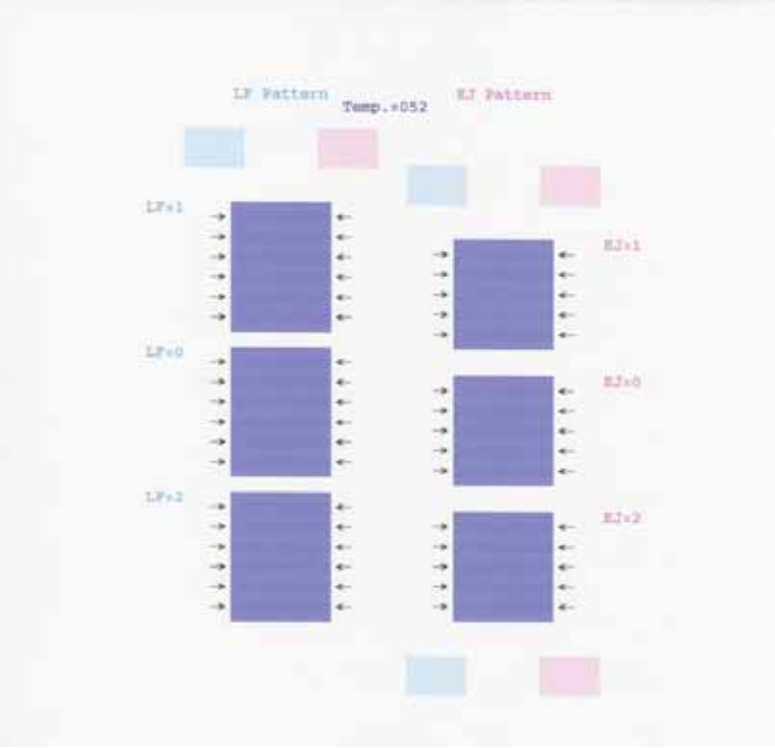
1) In the LF /Eject correction mode, press the Resume/Cancel button the specified number of time(s) according to the paper to be used in LF / Eject correction listed in the table below, then press the Power button. (Set a sheet of selected paper in the ASF.)

Time(s) (L)	Paper
1 time	HR-101
2 times	GF-500, Office Planner
3 times	HP BrightWhite
4 times	Canon Extra, STEINBEIS

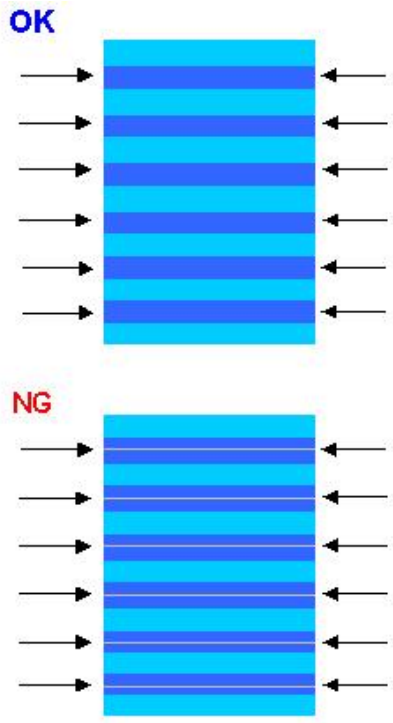
Note: - Each time the Resume/Cancel button is pressed, the Alarm and Power LEDs light alternately, Alarm in orange and Power in green.

- If the Resume/Cancel button is NOT pressed, and only the Power button is pressed, the printer remains in the LF / Eject correction mode.
- If the Resume/Cancel button is pressed 5 times or more, then the Power button is pressed, the printer returns to the service mode menu selection.

2) The LF / Eject correction pattern for the selected paper is printed. (LF correction values from 0 to 2, Eject correction values from 0 to 2)



3) In the printout, select the Pattern No. in which streaks or lines are the least noticeable, press the Resume/Cancel button the same number of time(s) as the selected Pattern No., then press the Power button.



3-1) LF correction value

Selected pattern number	Number of times the Resume/Cancel button is pressed (M)
1	1 time
0	0 times
2	2 times

Note: - Each time the Resume/Cancel button is pressed, the Alarm and Power LEDs light alternately, Alarm in orange and Power in green.

- If the Resume/Cancel button is pressed 3 times or more, then the Power button is pressed, the printer returns to the service mode menu selection.

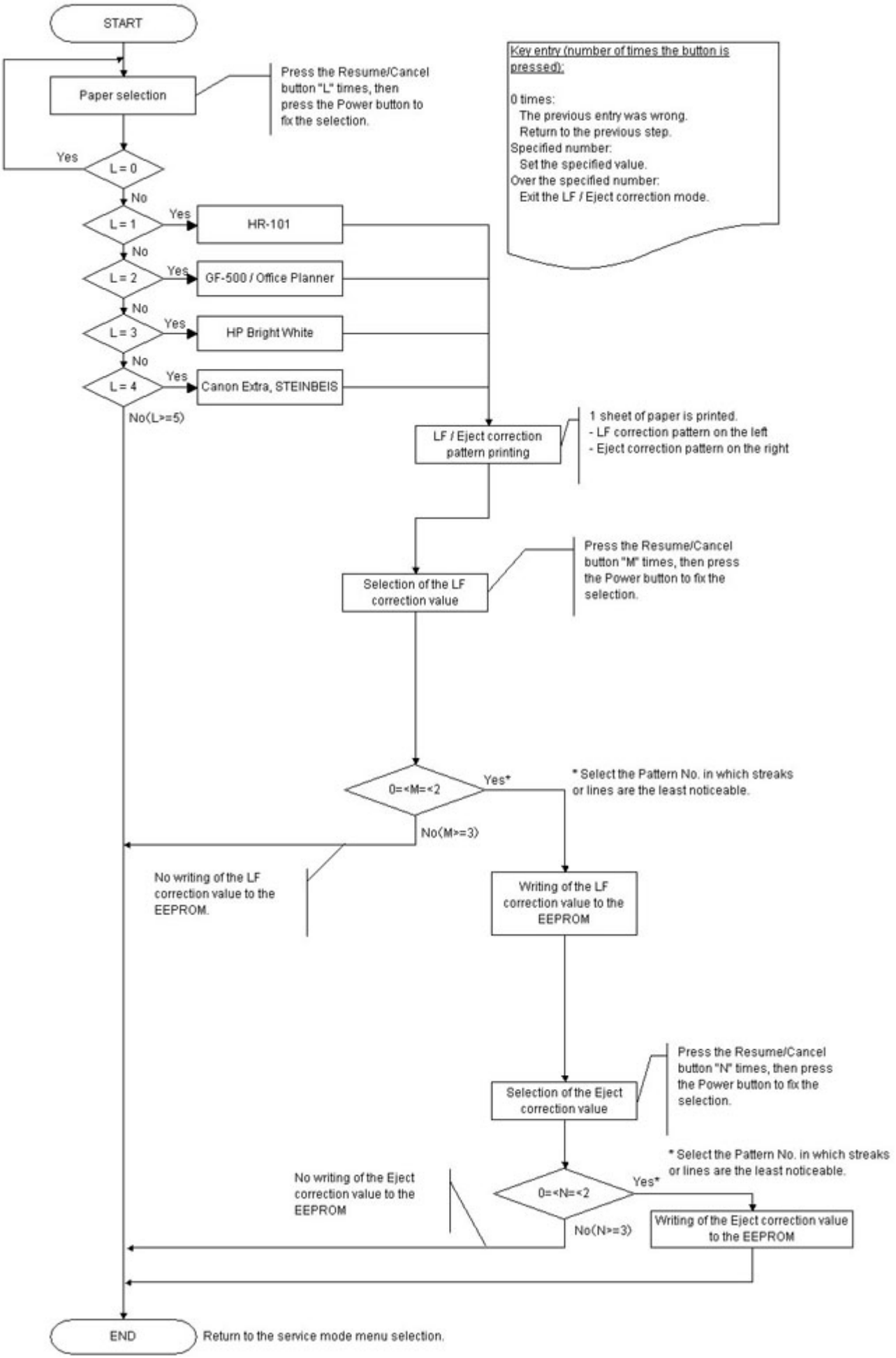
3-2) Eject correction value

Selected pattern number	Number of times the Resume/Cancel button is pressed (N)
1	1 time
0	0 times
2	2 times

Note: - Each time the Resume/Cancel button is pressed, the Alarm and Power LEDs light alternately, Alarm in orange and Power in green.

- If the Resume/Cancel button is pressed 3 times or more, then the Power button is pressed, the printer returns to the service mode menu selection.

4) The selected LF correction value or Eject correction value is written to the EEPROM. The printer returns to the service mode menu selection after the correction values are written to the EEPROM.



<Left margin correction>

Adjust the left margin for duplex printing from the cassette.

1) Duplex printing from the ASF and cassette

In the left margin correction mode, press the Resume/Cancel button 1 time, then press the Power button 1 time. Duplex printing is performed from the ASF and cassette.

Number of times the Resume/Cancel button is pressed (L)	Operation
0 times	No operation
1 time	Duplex printing from the ASF and cassette
2 times	Return to the service mode menu selection (no writing to the EEPROM)

From each paper source (ASF and cassette), 2 sheets of paper are ejected. The first sheet is blank, and the left margin correction pattern is printed on the second sheet.

<Printing sequence>

For detail, see the flowcharts below.

i) A sheet of paper feeds from the ASF, and ejected blank (single-sided printing).

ii) A sheet of paper feeds from the ASF. Nothing is printed on the front side, and the pattern is printed on the back side (duplex printing).

iii) A sheet of paper feeds from the cassette, and ejected blank (single-sided printing).

iv) A sheet of paper feeds from the cassette. The pattern is printed on both sides of paper (duplex printing).

A total of 4 sheets are ejected.

After this, set the correction value to the EEPROM in the steps below.

2) Selection of the parameter mode for left margin correction

Press the Resume/Cancel button the specified number of time(s) according to the parameter mode listed in the table below, then press the Power button.

Each time the Resume/Cancel button is pressed, the Alarm and Power LEDs light alternately, Alarm in orange and Power in green.

Number of times the Resume/Cancel button is pressed (M)	Parameter mode
0 times	Duplex printing from the ASF and cassette
1 time	Back side of paper fed from the ASF
2 times	Front side of paper fed from the cassette
3 times	Back side of paper fed from the cassette
4 times or more	Return to the service mode menu selection (after writing to the EEPROM)

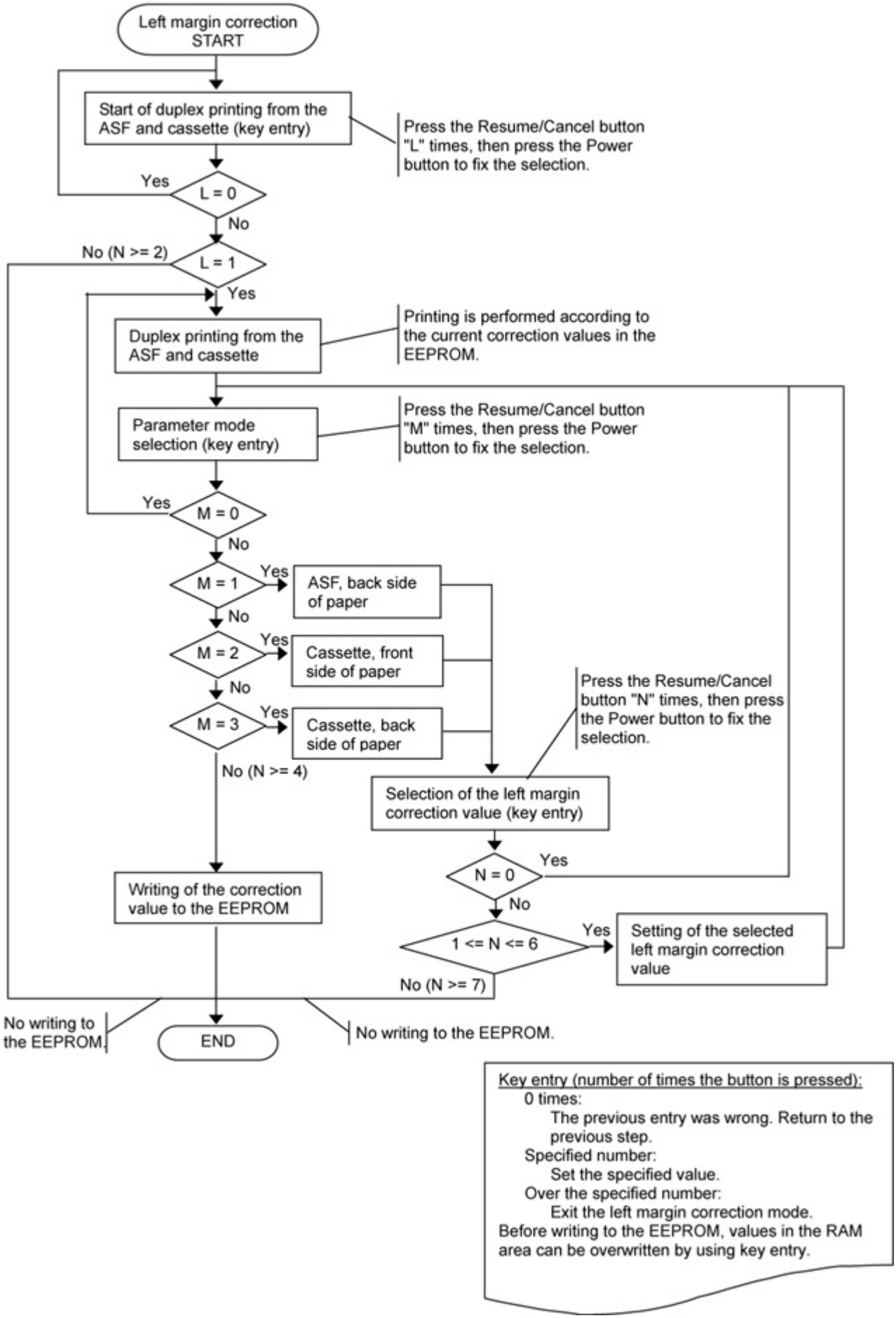
3) Setting of the left margin correction value ("+" means to increase the left margin)

Press the Resume/Cancel button the specified number of time(s) according to the correction value listed in the table below, then press the Power button.

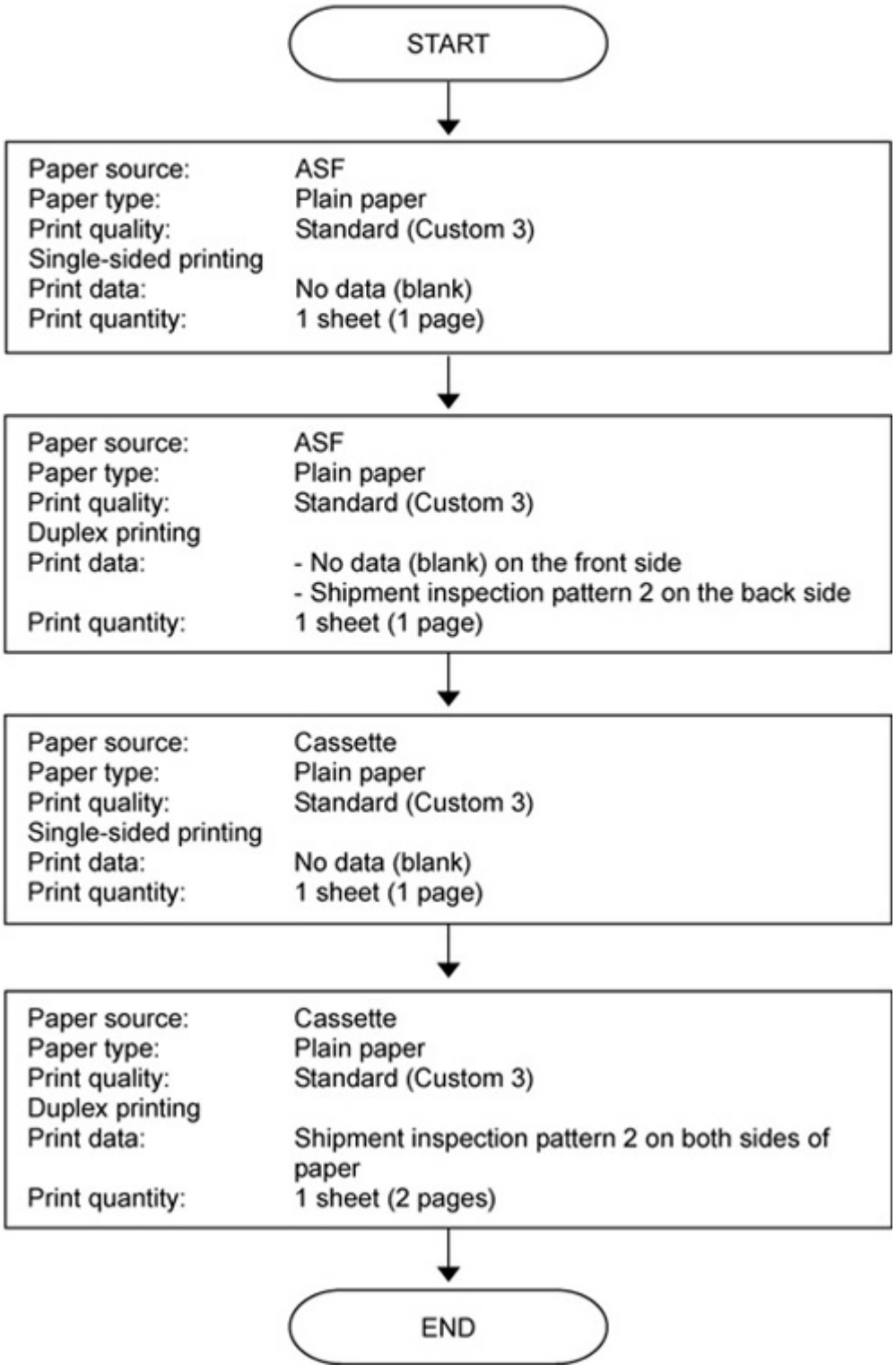
Number of times the Resume/Cancel button is pressed (N)	Left margin correction value
0 times	Return to the parameter mode selection for left margin correction
1 time	+1 pitch
2 times	+2 pitches
3 times	+3 pitches
4 times	-1 pitch
5 times	-2 pitches
6 times	-3 pitches
7 times or more	Return to the service mode menu selection (no writing to the EEPROM)

After the value is set, the printer returns to the parameter mode selection. Repeat steps 2) and 3) to adjust the left margin in each parameter mode: "back side of paper fed from the ASF," "front side of paper fed from the cassette," and "back side of paper fed from the cassette."

4) After the left margin correction in all the parameter modes is completed, press the Resume/Cancel button 4 times or more in the parameter mode selection, then press the Power button to return to the service mode menu selection.


Left margin correction START
Start of duplex printing from the ASF and cassette (key entry)
Press the Resume/Cancel button "L" times, then press the Power button to fix the selection.
Yes
L = 0
No
No (N >= 2)
L = 1
Yes
Duplex printing from the ASF and cassette
Printing is performed according to the current correction values in the EEPROM.
Parameter mode selection (key entry)
Press the Resume/Cancel button "M" times, then press the Power button to fix the selection.
Yes
M = 0
No
M = 1
Yes
ASF, back side of paper
No
M = 2
Yes
Cassette, front side of paper
No
M = 3
Yes
Cassette, back side of paper
No (N >= 4)
Press the Resume/Cancel button "N" times, then press the Power button to fix the selection.
Selection of the left margin correction value (key entry)
N = 0
Yes
No
1 <= N <= 6
Yes
Setting of the selected left margin correction value
No (N >= 7)
Writing of the correction value to the EEPROM
No writing to the EEPROM.
END
No writing to the EEPROM.
Key entry (number of times the button is pressed):
0 times:
The previous entry was wrong. Return to the previous step.
Specified number:
Set the specified value.
Over the specified number:
Exit the left margin correction mode.
Before writing to the EEPROM, values in the RAM area can be overwritten by using key entry.

Duplex printing from the ASF and cassette



<Part 1: 3-3. Adjustment / Settings, (3) to (5)>

3-4. Verification Items

(1) Service test print

<EEPROM information contents>

On the service test print (sample below), confirm the EEPROM information as shown below.

- Top area:

  iP5300: Model name

  Vx.xx: ROM version

  D = xxx.x: Ink absorber counter value (%)

  USB (xxxxxx): USB serial number

- Middle area:

  CND: Destination

- Bottom area:

  FA=xx xx xx: Reserved for plant use

  CDRP(+xxxxxx, +yyyyy): CD / DVD print position correction value

  CDRS=(xxxx): CDR sensor correction value

  Temp.=xxx: Internal temperature

  AB(K=OK Y=....): Ink system function check result

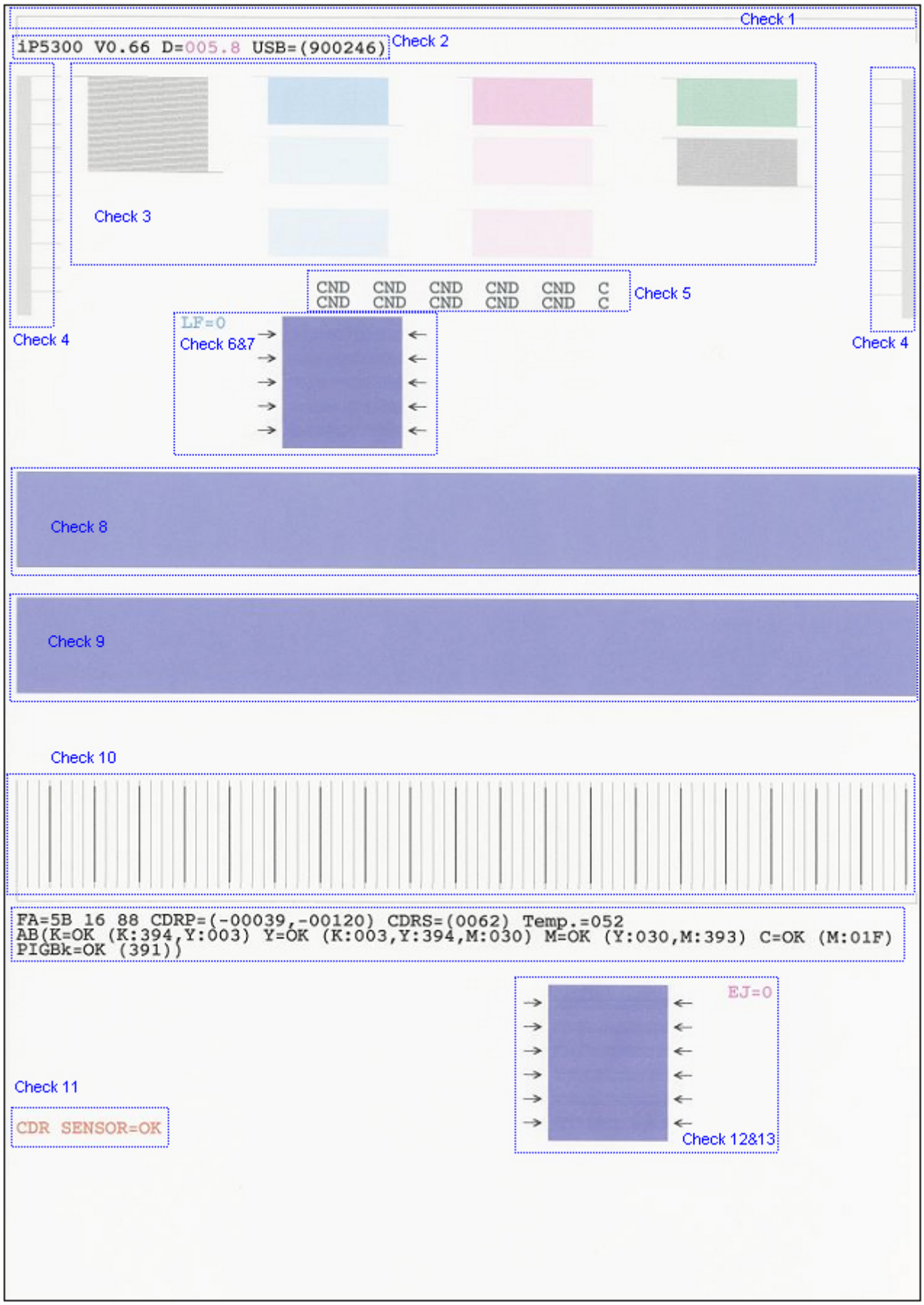
Note: For the ink amount in the ink absorber, confirm it in the EEPROM information print.

<Print check items>

On the service test print (sample below), confirm the following items:

- Check 1, check pattern for top of form accuracy, skewed paper feeding, left margin, and carriage (outermost) accuracy
- Check 2, EEPROM information
- Check 3, check pattern for horizontal dot mis-alignment: Ink shall be ejected from all nozzles.
- Check 4, check pattern for irregular line feeding: There shall be no remarkable streaks or unevenness.
- Check 5, destination
- Check 6, LF correction value (The value selected in the LF correction is printed in cyan)
- Check 7, check pattern for LF correction (the check pattern selected in the LF correction)
- Check 8, check pattern for uneven printing due to carriage movement (9600 dpi mode): There shall be no remarkable unevenness.
- Check 9, check pattern for uneven printing due to carriage movement (1200 dpi mode): There shall be no remarkable unevenness.
- Check 10, check pattern for straight line accuracy: There shall be no remarkable dot mis-alignment on a line.
- Check 11, CD / DVD sensor and automatic print head alignment sensor correction: The results shall be OK.
- Check 12, Eject correction value (The value selected in the Eject correction is printed in magenta)
- Check 13, check pattern for Eject correction (the check pattern selected in the Eject correction)

<Service test sample>



(2) EEPROM information print

<How to read EEPROM information print>

Print sample:

iP5300 EUR V1.00 ST=2006/05/27-18:30 LPT=2006/06/09-09:09

ER(ER0=1000 ER1=5100) P_ON(S=00009) MSD(015)

IF(USB1=0) PC(M=002 R=000 T=001 D=009 C=009)

D=004.5

TPAGE=00216

CLT(BK=2006/05/29-18:30 CL=2006/05/30-18:30)

CH=002 CT(PBK=001 BK=001 Y=002 M=001 C=001)

IS(PBK=1 BK=0 Y=1 M=1 C=1)

A_REG=1

M_REG=0

UR(A(BKoe)=000 B(Coe)=000 C(MCoe)=000 D(SCoe)=000

E(Cbi)=000 F(MCbi)=000 G(SCbi)=000 H(SCb-MCfOffOw)=000 I(SCb-MCfOffHo)=000

J(BK-CLPP)=000 K(BKbiPP)=000 L(CbiPP)=000 M(MCbiPP)=000 N(SCbiPP)=000

O(NZcctr)=000 P(NZedge)=000 Q(CbiHiReso)=000 R(MCbiHiReso)=000 S(SCbiCHiReso)=000

T(SCb-MCfHiResoOffOw)=000 U(SCb-MCfHiResoOffHo)=000

a(SCf-MCbOffOw)=000 b(SCf-MCbOffHo)=000 c(SCb-CfOffOw)=000 d(SCb-CfOffHo)=000

e(SCf-CbOffOw)=000 f(SCf-CbOffHo)=000

g(SCf-MCbHiResoOffOw)=000 h(SCf-MCbHiResoOffHo)=000

i(SCb-CfHiResoOffOw)=000 j(SCb-CfHiResoOffHo)=000

k(SCf-CbHiResoOffOw)=000 l(SCf-CbHiResoOffHo)=000

CDIN(PB=000 OPB=000)

PAGE(All=00083 PP=00035 HR+MP=00003 PR+SP+SG =00000 GP =00000 PC=00000 EV=00000)

UCPAGE(All=00083 PP=00035 HR+MP=00003 PR+SP+SG =00000 GP =00000 PC=00000 EV=00000)

BPPAGE(All=00083 BSSP=00003 PC=00000)

CDPAGE(All=00000)

EDGE=00083 L=00000 CDR=00000

CDRP=(-00005,-00029) CDRS=(0101) LF=0 EJ=0 LM=(ASF_R:00 UT_F:00 UT_R:00)

INK_OFF(PBK=0 BK=0 Y=0 M=0 C=0)

Head TempBK=34.5 Head TempC=30.5 Env Temp=27.0

Printed items:

1. Model name 2. Destination 3. ROM version 4. Installation date 5. Last printing time

6. Operator call/service call error record 7. Power-on count (soft) 8. Longest period where printing stops

9. Connected I/F (USB1) 10. Purging count (manual/deep cleaning/timer/dot count/ink tank replacement)

11. Ink amount in the ink absorber

12. Total print pages (TPAGE=Total Page)

13. Cleaning time (BK/CL)

14. Print head replacement count 15. Ink tank replacement count (PhotoBK/PigBK/Y/M/C)

16. Ink status (PhotoBK/PigBK/Y/M/C) => 0 (High) / 1 (Middle) / 2 (Low) / 3 (Empty)

17. Automatic print head alignment by user

18. Manual print head alignment by user

19. User print head alignment values（A to U, a to l）

20. Camera Direct Print-supported device connection record (PB=Canon PictBridge-supported camera, OPB=Other PictBridge-supported camera)

21. ASF feed pages (PAGE) (total, plain paper, High Resolution Paper & Matte Photo Paper, Photo Paper Pro & Photo Paper Plus Glossy & Photo Paper Plus Semi-gloss, Glossy Photo Paper, postcard, envelope)

22. U-turn cassette feed pages (total, plain paper, High Resolution Paper & Matte Photo Paper, Photo Paper Pro & Photo Paper Plus Glossy & Photo Paper Plus Semi-gloss, Glossy Photo Paper, postcard, envelope)

23. Auto duplex print pages (total, Photo Paper Plus Double Sided, postcard)

24. Camera Direct print pages (Total)

25. Borderless print pages 26. 4x6 print pages 27. Number of CDs and DVDs printed

28. CD / DVD print position correction value 29. CD / DVD sensor correction value 30. LF correction value 31. Eject correction value 32. Left margin correction value (Back side of paper fed from the ASF, front side of paper fed from the cassette, back side of paper fed from the cassette)

33. Disabling of the remaining ink amount detection function (0 = never disabled, 1 = disabled)

34. Print head temperature (BK/CL) 35. Internal temperature

<Part 1: 3-4. Verification Items>

4. PRINTER TRANSPORTATION

This section describes the procedures for transporting the printer for returning after repair, etc.

1) In the service mode, press the Power button to finish the mode, and confirm that the paper lifting plate of the sheet feed unit is raised.
2) Keep the print head and ink tanks installed in the carriage.

See Caution 1 below.

3) Turn off the printer to securely lock the carriage in the home position. (When the printer is turned off, the carriage is automatically locked in place.)

See Caution 2 below.

Caution:

(1) If the print head is removed from the printer and left alone by itself, ink (the pigment-based black ink in particular) is likely to dry. For this reason, keep the print head installed in the printer even during transportation.

(2) Securely lock the carriage in the home position, to prevent the carriage from moving and applying stress to the carriage flexible cable, or causing ink leakage, during transportation.

Memo:

If the print head must be removed from the printer and transported alone, attach the protective cap (used when the packing was opened) to the print head (to protect the print head face from damage due to shocks).

<1-4. PRINTER TRANSPORTATION>

1. NEW TECHNOLOGIES

1) Print speed

With the new print head (total 4,608 nozzles, 3 sizes of ink droplet), higher photo print speed on 4x6 size paper has been achieved.

- 4 x 6 photo (PP-101, standard, borderless)*1: Approx. 21 sec.

- Camera Direct printing (4 x 6, borderless)*2: Approx. 69 sec.

Reference:

	Max speed (Custom 5)	Standard
Black text (plain paper, FINE pattern)	31ppm	14.8ppm
Color (plain paper, FINE pattern)	24ppm	11.6ppm

*1: Based on Canon standard pattern. Print speed may vary depending on system configuration, interface, software, document complexity, print mode, page coverage, type of paper used and does not take into account data processing time on host computer.

*2: When printing a 6 megapixel image taken by certain Canon digital camera from PictBridge on default settings using Photo Paper Plus Glossy without border. Actual print speed may vary depending on image data, print mode, type of paper used and device that the printer is connected to.

2) Design

With the silver frame holding the main body from the bottom, the iP5300 wears a stately look in a fresh design. The square form makes the printer look more compact and shorter in height.

3) New support of DVD / CD print function in Canada model

DVD / CD print function is now available in the Canada model as well as other models.

4) Remaining ink amount indication sequence in 2006 products

In previous models, indication of the remaining ink amount differs between the individual ink tank system and the FINE cartridge system.

In the 2006 models, the unified specifications have been adopted.

Major changes from the 2005 models:

- In Direct printing, printing will not be suspended at "Low Ink" indication. (Printing will start without a click by a user at the "Low Ink" message.)
- The remaining ink status will be indicated by the following 4 levels:

Low:	No raw ink is detected by the optical method. (From this point, the remaining ink amount will be determined by the dot count.)
Out:	No ink remains according to the dot count. A warning will be displayed to indicate that ink may have run out.
Empty:	No raw ink is detected by the optical method, and the dot count value exceeds the threshold of complete exhaustion of ink. A warning will be displayed to indicate that ink has run out. By pressing and holding the Resume/Cancel button for 5 seconds or longer, the function to detect the remaining ink amount can be disabled.
Unknown:	Raw ink remains, but the dot count value exceeds the threshold of complete exhaustion of ink. By pressing and holding the Resume/Cancel button for 5 seconds or longer, the function to detect the remaining ink amount can be disabled.

The remaining ink amount will be checked at any of the following timings:

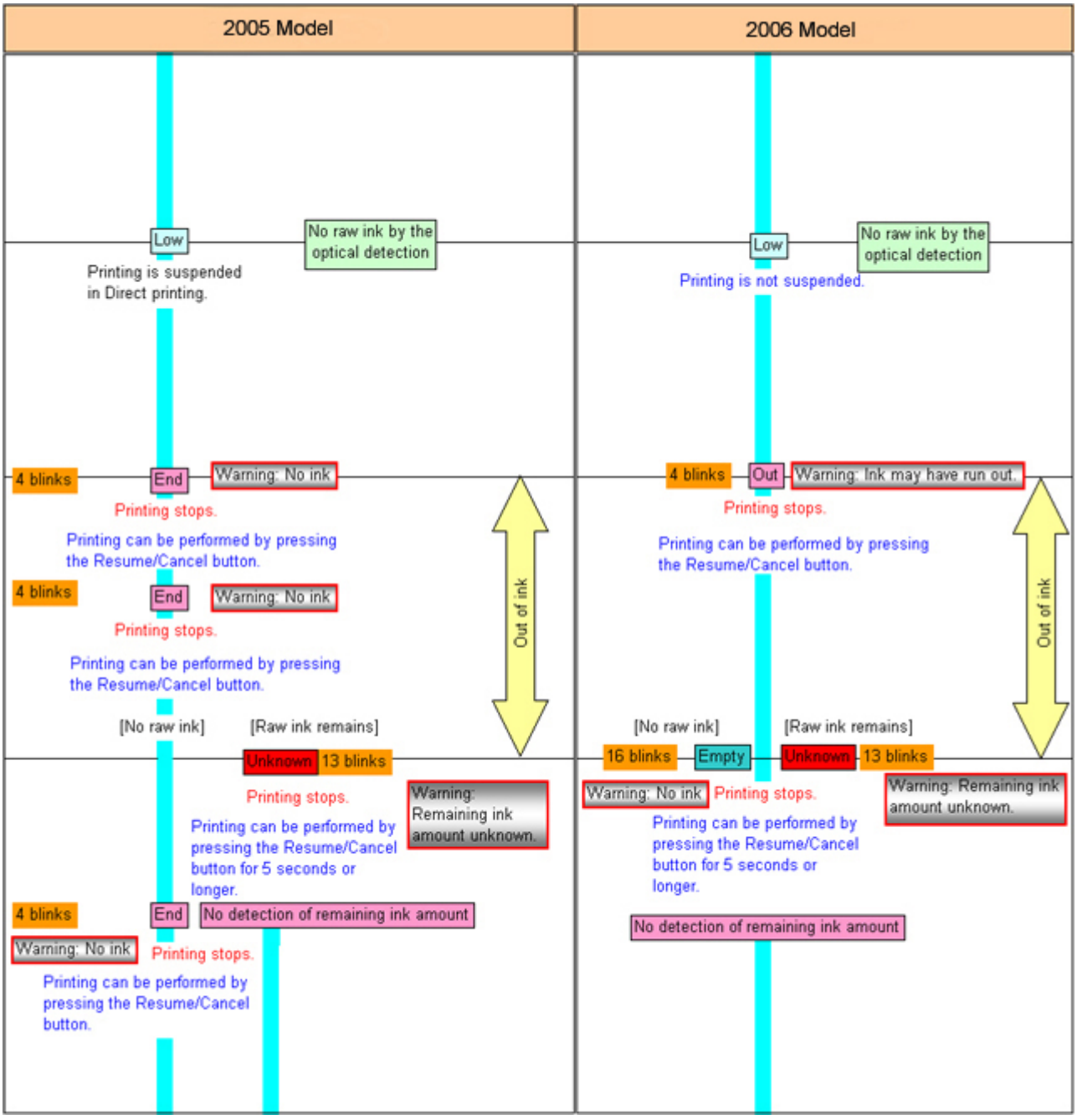
- At the end of paper ejection*1
- At the end of print head cleaning

- At the end of initialization
- At the end of the following operation:

  Cover open => Ink tank removal and installation => Cover close

- In duplex printing, at the end of paper ejection after printing on the back side of paper[*1]

*1: Not every paper ejection. Only after the dot count exceeds the specified value.



<Part 2: 1. NEW TECHNOLOGIES>

2. CLEANING MODE AND AMOUNT OF INK PURGED

2-1. Cleaning

To prevent printing problems due to bubbles, dust, or ink clogging, print head cleaning is performed before the start of printing (when the cleaning flag is on), except in the following cases:

- Cleaning on arrival:

  1st: Performed when the top cover is closed after the print head and ink tanks are installed.

  2nd: Performed before automatic print head alignment.

  3rd: Performed before start of printing after automatic print head alignment.

- Manual cleaning / deep cleaning: Performed manually.

<Cleaning mode list>

Black: Pigment-based black

Color: Dye-based black, cyan, magenta, yellow

Condition	Details	Amount of ink used (g) (in the normal temperature/humidity environment)	Est. required time (sec.) (not including the time of opening the caps)
On arrival of the printer (All in sequence, except that black only for the 3rd cleaning)	First to third cleaning after shipped from the plant*1.	0.53 (Black) 2.223 (Color)	90 for the 1st and 2nd cleaning (All in sequence) 45 for the 3rd cleaning (Black only)
Dot count cleaning (Black)	When the specified number of dots are printed since the previous Black cleaning.	0.20 (Black)	40 (Black)
Timer cleaning - 0*2 (Black only)	If 24 to 504 hours have elapsed since the previous Black cleaning till the start of the next printing.	0.20 (Black)	40 (Black)
Timer cleaning - 1 (Black/Color)	If 504 to 720 hours have elapsed since the previous Black/Color cleaning till the start of the next printing.	0.20 (Black) 0.53 (Color)	40 (Black) 45 (Color)
Timer cleaning - 2 (All in sequence)	If 720 to 1,080 hours have elapsed since the previous Black/Color cleaning till the start of the next printing.	0.53 (Black) 1.04 (Color)	75
Timer cleaning - 3 (All in sequence)	If 1,080 to 2,160 hours have elapsed since the previous Black/Color cleaning till the start of the next printing.	1.27 (Black) 1.04 (Color)	80
Timer cleaning - 4 (All in sequence)	If 2,160 to 4,320 hours have elapsed since the previous Black/Color cleaning till the start of the next printing.	1.95 (Black) 1.04 (Color)	80
Timer cleaning - 5 (All in sequence)	If 4,320 or longer hours have elapsed since the previous Black/Color cleaning till the start of the next printing.	1.95 (Black) 1.04 (Color)	80
At print head replacement (All in sequence)	When the print head is removed and installed.	0.53 (Black) 2.223 (Color)	90
At ink tank replacement*3 (Black/Color/All in sequence)	When an ink tank is replaced (without the print head removal or re-installation)	0.375 (Black) 1.04 (Color)	75 (All in sequence) 40 (Black) 60 (Color)
Manual cleaning	- Via the printer button (All at the same time only)	0.20 (Black)	45 (All at the same

(Black/Color/All at the same time)	- Via the printer driver (Selectable from Black, Color, or All at the same time)	0.53 (Color)	time) 40 (Black) 45 (Color)
Deep cleaning (Black/Color/All at the same time)	Via the printer driver (Selectable from Black, Color, or All at the same time)	0.375 (Black) 1.04 (Color)	75 (All at the same time) 40 (Black) 60 (Color)
If the print head has not been capped before soft-power-on (All in sequence)		0.375 (Black) 1.04 (Color)	75 (All in sequence)

*1: The counter for the on-arrival cleaning is checked at opening and closing of the top cover (the first opening and closing only), before start of printing, at dot-count cleaning (at paper ejection), and at manual cleaning, and the on-arrival cleaning is performed according to the counter value. After each on-arrival cleaning, the counter value is reduced by 1.
When the counter value is 3, 2, or 1: On-arrival cleaning is performed.
When the counter value is 0: On-arrival cleaning is not performed.

*2: When 24 to 504 hours have elapsed since the previous Black cleaning, timer cleaning - 0 is performed. However, this cleaning will be conducted up to 5 times from the printer installation, and no further timer cleaning - 0 will be performed.

*3: When only the black ink tank is replaced, Black cleaning is performed. One of the color ink tanks is replaced, Color cleaning is performed. Both the black and color ink tanks are replaced, All-in-sequence cleaning is performed.

2-2. Moisturizing Timer Sequence

If the top cover is opened for a long time, the print head is left uncapped and pre-printing ink ejection is not performed for that duration. After that, ink may not be ejected at start of printing or at pre-printing ink ejection operation.

To prevent the print head nozzles from getting dried, each opening of the top cover is counted as well as its duration, and capping or purging is performed according to the counted value to moisturize the nozzles.

During the capping operation, the message is displayed on the monitor indicating printer maintenance is being performed.

The moisturizing timer calculates a total amount of the following:

(1) A period of time the print head moves from the standby position to the print head replacement position.

(2) A period of time the print head stays in the print head replacement position.

(3) A period of time the print head returns from the print head replacement position to the standby position.

Timer counter value	Less than 300 sec.	300 sec. or more
Capping time	30 sec.	60 sec.

<2-2. CLEANING MODE AND AMOUNT OF INK PURGED>

3. PRINT MODE

	Default setting	
	Selectable in the printer driver Main tab	
	Custom setting	
Ink used	PigBK:	PGI-5BK
	C:	CLI-8C (large droplet)
	M:	CLI-8M (large droplet)
	C':	CLI-8C (middle droplet)
	M':	CLI-8M (middle droplet)
	Y:	CLI-8Y
	k:	CLI-8BK
	c:	CLI-8C (small droplet)
	m:	CLI-8M (small droplet)
Print control	Bi:	Bi-directional
	Uni:	Uni-directional

3-1. Normal Color Printing via Computer

Paper type	Printer driver Custom setting	5 Fast	4	3	2	1 Fine
Plain paper	Print quality Resolution HxV(dpi) Print control Ink used	Custom PigBK:300X300, C/M/Y:300X300 1 pass, Bi PigBk/C/M/Y	Fast PigBK:300X300, C/M/Y:300X300 1 pass, Bi PigBk/C/M/Y	Standard PigBK/Y:600X600, C/M/Y:600X1200 1 pass, Bi PigBk/C/M/Y	High PigBK:600X600, C/M/Y/c/m:1200X1200 4 passes, Bi PigBk/C/M/Y/c/m	
Photo Paper Pro (PR-101)	Print quality Resolution HxV(dpi) Print control Ink used			Standard C/M/Y/k:1200X1200 C'/M'/c/m:600X1200 3 (5)passes, Bi* C/M/C'/M'/Y/k/c/m	High C/M/Y/k:1200X1200 C'/M'/c/m:600X1200 7 passes, Bi C/M/C'/M'/Y/k/c/m	Custom C/M/C'/M'/Y/c/m/k: :9600X2400 16 passes, Bi C/M/C'/M'/Y/k/c/m
Photo Paper Plus Glossy Photo Paper Plus Semi-gloss (PP-101/SG-101)	Print quality Resolution HxV(dpi) Print control Ink used			Standard C/M/Y/k:1200X1200 C'/M'/c/m:600X1200 3 (5)passes, Bi* C/M/C'/M'/Y/k/c/m	High C/M/Y/k:1200X1200 C'/M'/c/m:600X1200 7 passes, Bi C/M/C'/M'/Y/k/c/m	
Matte Photo Paper (MP-101)	Print quality Resolution HxV(dpi) Print control Ink used			Standard C/M/Y/c/m/k:1200X1200 5 passes, Bi C/M/Y/c/m/k	High C/M/Y/c/m/k:1200X1200 7 passes, Bi C/M/Y/c/m/k	
Glossy Photo Paper (GP-401/501)	Print quality Resolution HxV(dpi) Print control Ink used			Standard C/M/Y/k:1200X1200 C'/M'/c/m:600X1200 5 passes, Bi C/M/C'/M'/Y/k/c/m	High C/M/Y/k:1200X1200 C'/M'/c/m:600X1200 7 passes, Bi C/M/C'/M'/Y/k/c/m	
Photo Paper Plus Double Sided (PP-101D)	Print quality Resolution HxV(dpi) Print control Ink used			Standard C/M/Y/k:1200X1200 C'/M'/c/m:600X1200 5 passes, Bi C/M/C'/M'/Y/k/c/m	High C/M/Y/k:1200X1200 C'/M'/c/m:600X1200 7 passes, Bi C/M/C'/M'/Y/k/c/m	
High Resolution Paper (HR-101)	Print quality Resolution HxV(dpi) Print control Ink used			Standard C/M/Y/c/m/k:1200X1200 5 passes, Bi C/M/Y/c/m/k	High C/M/Y/c/m/k:1200X1200 7 passes, Bi C/M/Y/c/m/k	
Envelope	Print quality Resolution HxV(dpi) Print control Ink used			Standard PigBK:600X600, C/M/Y/k:1200X1200 2 passes, Bi PigBk/C/M/Y/k	High PigBK:600X600, C/M/Y/k:1200X1200 4 passes, Bi PigBk/C/M/Y/k	
T-shirt Transfer (TR-301)	Print quality Resolution HxV(dpi) Print control Ink used			High C/M//Y/k1200X1200 7 passes, Bi C/M/Y/k		
Printable disk (recommended)	Print quality Resolution HxV(dpi) Print control Ink used		Fast C/M/Y/c/m/k:1200X1200 5 passes, Bi C/M/Y/c/m/k	Standard C/M/Y/c/m/k:1200X1200 7 passes, Bi C/M/Y/c/m/k	High C/M/Y/c/m/k:1200X1200 8 passes, Bi C/M/Y/c/m/k	
Printable disk (others)	Print quality Resolution HxV(dpi) Print control Ink used		Fast C/M/Y/c/m/k:1200X1200 5 passes, Bi C/M/Y/c/m/k	Standard C/M/Y/c/m/k:1200X1200 7 passes, Bi C/M/Y/c/m/k	High C/M/Y/c/m/k:1200X1200 8 passes, Bi C/M/Y/c/m/k	

Other photo paper	Print quality Resolution HxV(dpi) Print control Ink used			Standard C/M/Y/k:1200X1200 C'/M'/c/m:600X1200 8 passes, Bi C/M/C'/M'/Y/k/c/m		

* 4x6 sized: 3 passes, Others: 5 passes

3-2. Normal Grayscale Printing via Computer

Paper type	Printer driver Custom setting	5 Fast	4	3	2	1 Fine
Plain paper	Print quality Resolution HxV(dpi) Print control Ink used	Custom PigBk:300X300 1 pass, Bi PigBk	Fast PigBk:300X300 1 pass, Bi PigBk	Standard PigBk:600X600 1 pass, Bi PigBk	High PigBk:600x600 4 passes, Bi PigBk	
Envelope	Print quality Resolution HxV(dpi) Print control Ink used			Standard PigBk:600X600 2 passes, Uni PigBk	High PigBk:600X600 4 passes, Uni PigBk	

3-3. Borderless Printing via Computer

Paper type	Printer driver Custom setting	5 Fast	4	3	2	1 Fine
Plain paper	Print quality Resolution HxV(dpi) Print control Ink used			Standard C/M/Y/k:600X1200 2 passes, Bi C/M/Y/k		
Photo Paper Pro (PR-101)	Print quality Resolution HxV(dpi) Print control Ink used			Standard C/M/Y/k:1200X1200 C'/M'/c/m:600X1200 3 (5)passes, Bi* C/M/C'/M'/Y/k/c/m	High C/M/Y/k:1200X1200 C'/M'/c/m:600X1200 7 passes, Bi C/M/C'/M'/Y/k/c/m	Custom C/M/Y/c/m/k/C'/M' :9600X2400 16 passes, Bi C/M/C'/M'/Y/k/c/m
Photo Paper Plus Glossy Photo Paper Plus Semi-gloss (PP-101/SG-101)	Print quality Resolution HxV(dpi) Print control Ink used			Standard C/M/Y/k:1200X1200 C'/M'/c/m:600X1200 3 (5)passes, Bi* C/M/C'/M'/Y/k/c/m	High C/M/Y/k:1200X1200 C'/M'/c/m:600X1200 7 passes, Bi C/M/C'/M'/Y/k/c/m	
Matte Photo Paper (MP-101)	Print quality Resolution HxV(dpi) Print control Ink used			Standard C/M/Y/c/m/k:1200X1200 5 passes, Bi C/M/Y/c/m/k	High C/M/Y/c/m/k:1200X1200 7 passes, Bi C/M/Y/c/m/k	
Glossy Photo Paper (GP-401/501)	Print quality Resolution HxV(dpi) Print control Ink used			Standard C/M/Y/k:1200X1200 C'/M'/c/m:600X1200 5 passes, Bi C/M/C'/M'/Y/k/c/m	High C/M/Y/k:1200X1200 C'/M'/c/m:600X1200 7 passes, Bi C/M/C'/M'/Y/k/c/m	
Photo Paper Plus Double Sided (PP-101D)	Print quality Resolution HxV(dpi) Print control Ink used			Standard C/M/Y/k:1200X1200 C'/M'/c/m:600X1200 5 passes, Bi C/M/C'/M'/Y/k/c/m	High C/M/Y/k:1200X1200 C'/M'/c/m:600X1200 7 passes, Bi C/M/C'/M'/Y/k/c/m	
Other photo paper	Print quality Resolution HxV(dpi) Print control Ink used			Standard C/M/Y/k:1200X1200 C'/M'/c/m:600X1200 8 passes, Bi C/M/C'/M'/Y/k/c/m		

* 4x6 sized: 3 passes, Others: 5 passes

3-4. Duplex Printing via Computer

Paper type	Printer driver Custom setting	5 Fast	4	3	2	1 Fine
Plain paper	Print quality Resolution HxV(dpi) Print control Ink used	Custom PigBK:300X300, C/M/Y:300X300 1 pass, Bi PigBk/C/M/Y	Fast PigBK:300X300, C/M/Y:300X300 1 pass, Bi PigBk/C/M/Y	Standard PigBK/Y:600X600, C/M:600X1200 1 pass, Bi PigBk/C/M/Y	High PigBk:600X600, C/M/Y:1200X1200 4 passes, Bi PigBk/C/M/Y	
Photo Paper Plus Double Sided (PP-101D)	Print quality Resolution HxV(dpi) Print control Ink used			Standard C/M/Y/k:1200X1200 C'/M'/c/m:600X1200 5 passes, Bi C/M/C'/M'/Y/k/c/m	High C/M/Y/k:1200X1200 C'/M'/c/m:600X1200 7 passes, Bi C/M/C'/M'/Y/k/c/m	

3-5. Camera Direct Printing

Paper type	Printer driver Custom setting	5 Fast	4	3	2	1 Fine
Plain paper	Print quality Resolution HxV(dpi) Print control Ink used			High PigBK:600X600, C/M/Y/c/m:1200X1200 4 passes, Bi PigBk/C/M/Y/c/m		
Photo Paper Pro (PR-101)	Print quality Resolution HxV(dpi) Print control Ink used			High C/M/Y/k:1200X1200 C'/M'/c/m:600X1200 7 passes, Bi C/M/C'/M'/Y/c/m/k		
Photo Paper Plus Glossy Photo Paper Plus Semi-gloss (PP-101/SG-101)	Print quality Resolution HxV(dpi) Print control Ink used			High C/M/Y/k:1200X1200 C'/M'/c/m:600X1200 7 passes, Bi C/M/C'/M'/Y/c/m/k		

<2-3. PRINT MODE>

4. FAQ (Problems Specific to the iP5300 and Corrective Actions)

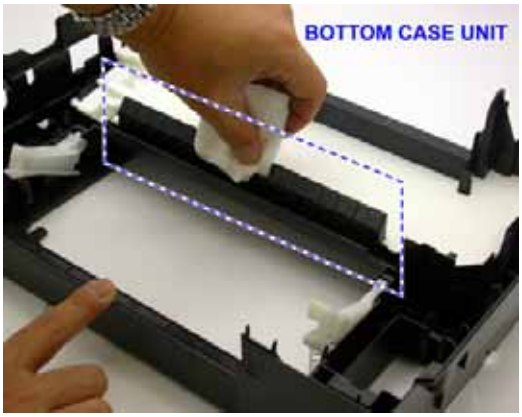
No.	*	Function	Phenomenon	Condition	Cause	Corrective action	Possible call or complaint
1	C	Paper feeding	Paper feeding problems - Jam - Skewed paper feeding	- Low temperature and low humidity environment - Paper feeding from the cassette - Round-trip postcard	Due to curl of a round-trip postcard in the low temperature and low humidity environment, the paper return tab of the U-turn path opposite to the home position may not completely return to the original position before the postcard is picked up. In this way, the postcard is skewed at the home position side, resulting in skewed paper feeding or jam.	- Eliminate the curl of the round-trip postcard. - Set the round-trip postcard in the ASF.	- Paper jams. - Paper feeds at an angle.
2	C	Print results	Skewed paper feeding (at the level of +/- 1%)	- Paper feeding from the ASF - Credit Card size	Since coaxial tolerance between the pinch roller and the LF roller, which determines the paper feed alignment, is 0.2mm, skewed paper feeding can occur. However, according to the field data of current models, the skewness level caused by the coaxial tolerance of 0.2mm is within the criteria of +/- 1%, thus the phenomenon is left as is.	- Align the paper guide to the paper edge tighter than usual.	- Paper feeds at an angle. - A margin appears on printouts.
3	A	Print results	Soiling on the back side of paper (lines or streaks parallel to the paper feed direction)	- After continuous borderless printing of small sized paper (such as 4 x 6), when a larger sized paper (such as A4) is printed. - With Photo Paper Plus Double Sided or postcards, the phenomenon is likely to be noticeable and to be complained of by users, as printing is performed on both sides of such paper.	In borderless printing, printing is performed to the size slightly larger than the paper size, and ink off the paper is absorbed by the platen's ink absorber. Absorbed ink may attach to the platen rib(s) after several dozen sheets are printed, causing soiling at the leading edge of paper or on the back side of paper.	1. Perform Bottom plate cleaning (from the printer driver) up to 3 times*1. 2. If soiling on the paper still remains after 3 times of Bottom plate cleaning, wipe the platen rib(s) and their surroundings with a cotton swab.	- Paper gets smeared. - The back side of paper gets smeared.
			Soiling on paper in automatic duplex printing (lines or streaks perpendicular to the paper feed direction)	- Automatic duplex printing (Photo Paper Plus Double Sided, postcards, plain paper)	On the rib(s) inside the sheet feed unit used for duplex printing, ink mist may accumulate, smearing paper.	**Temporary operational solution:** Cancel automatic duplex printing, and manually print each side of paper. **Cleaning by user:**	- Paper gets smeared. - The back side of paper gets smeared. - Even after Bottom plate cleaning was

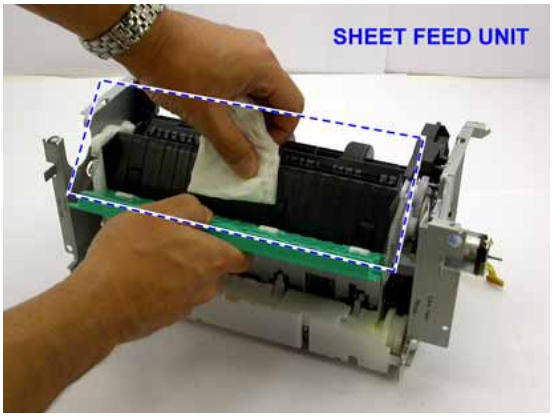
						1. Perform Bottom plate cleaning (from the printer driver) up to 3 times[*1]. 2. If soiling on the paper still remains after 3 times of Bottom plate cleaning, wipe the platen rib(s) and their surroundings with a cotton swab. If the phenomenon persists after conducting 1 and 2, servicing is required. **Service:** Wipe any soiling or dirt off from the sheet feed unit and the bottom case unit ribs[*2].	performed, and the platen ribs were cleaned with cotton swab, paper gets smeared.
4	B	Print results					
5	C	Print results	Scratches on paper	- PP-101D, PP-101, PR-101, SG-101, etc. - Paper feeding from the cassette - Paper feeding from the ASF - Multiple number of sheets loaded	- Scratches on the PF return lever due to paper feeding from the cassette, and duplex printing path. - When multiple sheets of paper are set, the back side of paper being picked up scratches the front side of paper beneath (especially where the paper feed rollers contact when picking up the paper).	- Change the paper feeding method from the cassette to the auto sheet feeder. - If automatic duplex printing is performed, cancel it, and, by setting only a single sheet of paper in the auto sheet feeder, manually print each side of paper. - Set only a single sheet of paper in the auto sheet feeder.	- Paper is scratched. - Marks appear on printed paper.
6	C	Print results	Soiling on paper	The printer has been used for a long period of time with the ASF cover closed before printing is performed using the ASF.	Due to ink mist attached to the ASF sub-pick-up rollers. If printing is done from the cassette with the ASF cover closed, ink mist is kept inside the printer, attaching to the ASF sub-pick-up rollers. Since the sub-rollers usually do not contact the paper, ink mist can easily accumulate, especially during printing on small-sized paper which never contacts the sub-rollers.	Clean the ASF sub-rollers (see *3 for details).	
7	B	Print results	Skewed paper feeding	- SG-101 - Paper feeding from the ASF - 10 sheets (max.) set in the ASF	When 10 sheets of paper are set in the ASF, and if they curl significantly, the curled portions of paper get over the cover guide, not being aligned along	- Straighten the paper. - Set 5 or less sheets of paper in the ASF.	- Paper feeds at an angle. - A margin appears on printouts.

					the guide properly.		
8	A	Operation	Cannot install an ink tank	The print head is not installed properly.	If the print head lock lever is lowered and the print head is locked in a wrong position, preventing ink tank installation.	Remove and set the print head again. While pushing the print head against the carriage contact direction with a finger, lower the print head lock lever.	- An ink tank cannot be installed.
9	A	Print results	Uneven color	Print head alignment has not been performed properly.	Print head alignment has not been performed properly. (e.g. Automatic print head alignment on arrival has been skipped, or it was performed using plain paper.)	- Perform Automatic print head alignment using MP-101. - Perform Manual print head alignment (plain paper usable).	- Color is uneven on printouts. - Streaks appear on printouts.
10	B	Print results	Uneven color	Print head alignment is not effective to solve the problem.	Beyond the printer's ability.	- Try a higher print quality setting (though the print speed will become lower).	- Color is uneven on printouts. - Streaks appear on printouts. - Even after Print head alignment is performed, color is still uneven on printouts.

*1: Change the paper in each Bottom plate cleaning. The cleaning can end when paper does not get any soiling.

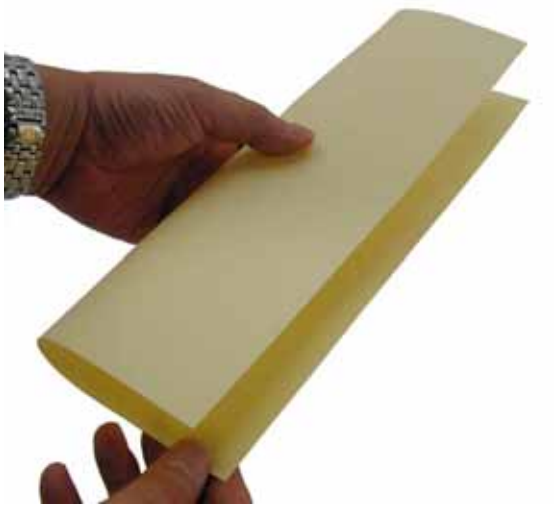
*2: Locations to clean in servicing when soiling on paper in automatic duplex printing persists:





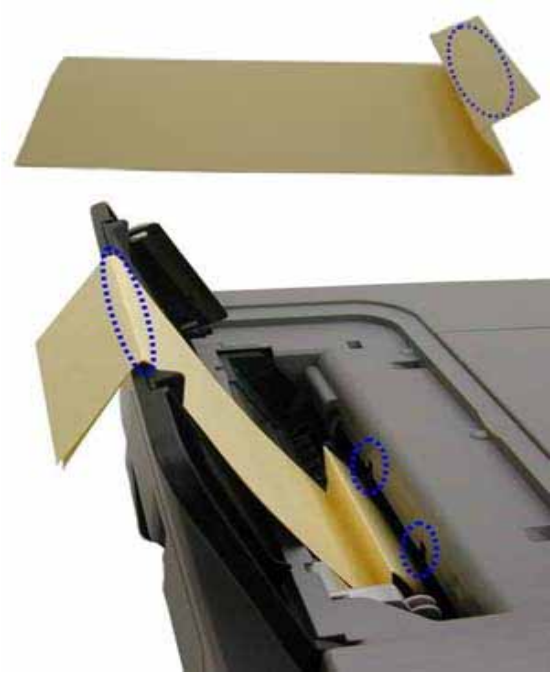
*3: How to make and set the ASF sub-roller cleaning sheet:

1) Fold a sheet of plain paper lengthwise in half.



2) Fold the paper at approx. 60 mm from the end, and fold the folded end in half backward, as shown below.

3) Moisten the folded end portion (indicated by the blue circle in the figure below) using a wipe, and set the paper in the ASF so that the moistened edge of the paper contacts the 2 sub-rollers. Then, fold the other end of the paper along the ASF cover edge to hook the paper to the ASF cover, as shown below.



4) Press and hold the Resume/Cancel button until the Power LED blinks 3 times, then release the button to perform the paper feed roller cleaning. For details, see "Standalone printer operation."

* Occurrence level:

A: The symptom is likely to occur frequently. (Caution required)

B: The symptom may occur under certain conditions, but likeliness is assumed very low in practical usage.

C: The symptom is unlikely to be recognized by the user, and no practical issues are assumed.

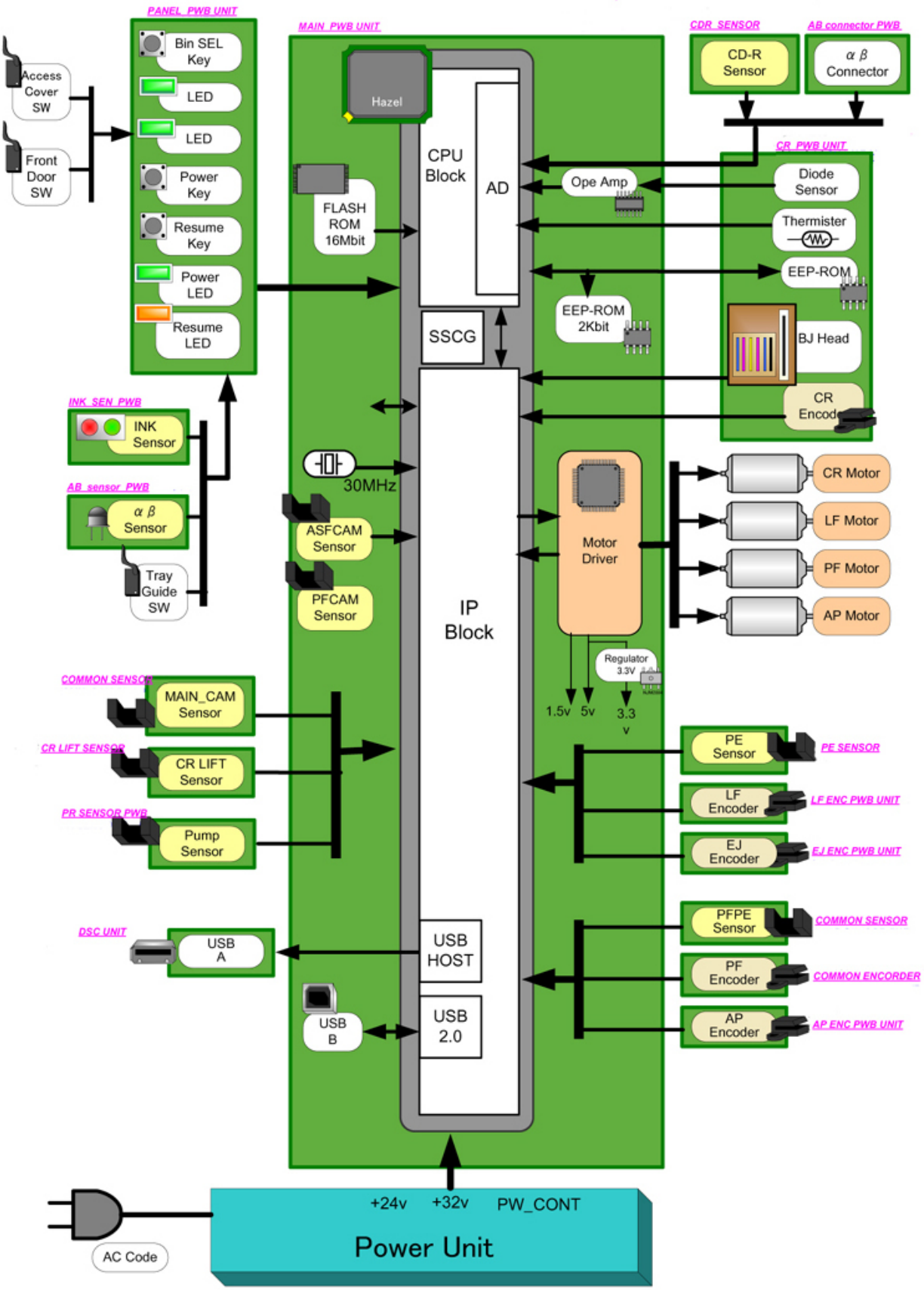
<2-4. FAQ>

1. BLOCK DIAGRAM

1-1. iP5300

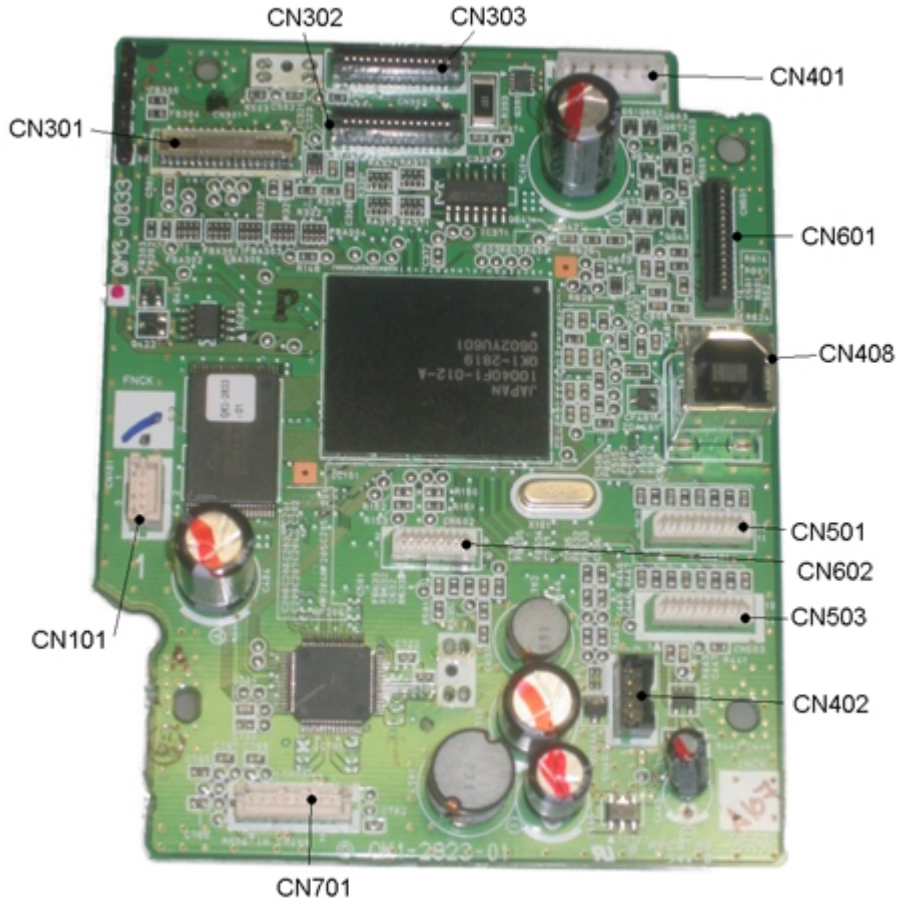
PDF file (for print)

iP5300 Block Diagram



2. CONNECTOR LOCATION AND PIN LAYOUT

2-1. Logic Board



CN101 Not used.

CN301 (Print head 1/3 [Carriage unit])

No.	Signal Name	Function	Input / Output
1	AB_PWR	AB power supply	-
2	AB_DATA	AB data signal	BUS
3	AB_PWR	AB power supply	-
4	AB_CLK	AB clock signal	BUS
5	VSEN_CDRS	Power supply for CDR sensor	OUT
6	SNS_CDR_P	CDR position sensor signal	IN
7	THERMO	CR temperature sensor signal	IN
8	H_ENB2	Head heat enable signal 2 (Col-2)	OUT
9	H_D9	Head data (Y2)	OUT
10	H_D6	Head data (M1)	OUT
11	H_D13	Head data (C2)	OUT
12	H_D11	Head data (M2)	OUT
13	H_D5	Head data (SC2)	OUT
14	H_D8	Head data (Y1)	OUT

15	H_D10	Head data (SM1)	OUT
16	H_EEPROM_DIO	Head EEPROM data signal	OUT
17	H_ENB4	Head heat enable signal 4 (MCol)	OUT
18	H_EEPROM_SK	Head EEPROM serial clock signal	OUT
19	H_EEPROM_CS	Head EEPROM chip select signal	OUT
20	H_LATCH	Head data latch signal	OUT
21	H_ENB1	Head heat enable signal 1 (Col-1)	OUT
22	H_ENB3	Head heat enable signal 3 (SCol)	OUT
23	H_D4	Head data (C1)	OUT
24	H_D2	Head data (PBK1)	OUT
25	H_D3	Head data (PBK2)	OUT
26	H_ENB0	Head heat enable signal 0 (BK)	OUT
27	H_D5	Head data (SC1)	OUT
28	H_D7	Head data (SM2)	OUT
29	H_D1	Head data (BK2)	OUT
30	H_D0	Head data (BK1)	OUT
31	LOGIC_GND	Logic ground	-
32	H_CLK	Head data transfer clock signal	OUT

CN302 (Print head 2/3 [Carriage unit])

No.	Signal name	Function	Input / Output
1	H_GND	Head ground	-
2 to 3	HVH_24V	Head drive power supply 24V	OUT
4	VSEN_3.3V	Head logic drive power supply 3.3V	OUT
5	CR_ENCB	CR encoder phase B	IN
6	H_GND	Head ground	-
7	CR_ENCA	CR encoder phase A	IN
8	H_GND	Head ground	-
9	DIA0	Diode sensor anode 0	IN
10	H_GND	Head ground	-
11	DIA1	Diode sensor anode 1	IN
12	H_GND	Head ground	-
13 to 14	HVDD_3.3V	Head logic drive power supply 3.3V	OUT
15	HVH_24V	Head drive power supply 24V	OUT

CN303 (Print head 3/3 [Carriage unit])

No.	Signal name	Function	Input / Output
1	H_GND	Head ground	-
2	HVH_24V	Head drive power supply 24V	OUT
3	H_GND	Head ground	-
4 to 10	HVH_24V	Head drive power supply 24V	OUT
11 to15	H_GND	Head ground	-

CN401 (AC adapter)

No.	Signal name	Function	Input / Output
1	PW_CONT	Power supply control signal	OUT
2	VH_GND	Head ground	-
3	VH	Head power supply	IN
4	VM_GND	Motor ground	-
5	VM	Motor power supply	IN

CN408 (USB I/F)

No.	Signal name	Function	Input / Output
1	SNS_USB	USB: VBUS power supply sense	IN
2	D-	USB: D- signal	BUS
3	D+	USB: D+ signal	BUS
4	GND	Ground	-
5 to 9	GND	Ground	-

CN402 (PictBridge)

No.	Signal name	Function	Input / Output
1	GND	Ground	-
2	GND	Ground	-
3	D+	DSC-USB: D+ signal	BUS
4	D-	DSC-USB: D- signal	BUS
5	PWR	DSC-USB: VBUS	OUT

CN602 (Main cam sensor / CR lift sensor / Pump roller sensor multi)

No.	Signal name	Function	Input / Output
1	VSEN_3.3V	Power supply for sensor	OUT
2	GND	Ground	-
3	SNS_CR_LIFT	CR lift sensor	IN
4	VSEN_3.3V	Power supply for sensor	OUT
5	GND	Ground	-
6	SNS_MAIN_CAM	Main cam sensor	IN
7	VSEN_3.3V	Power supply for sensor	OUT
8	GND	Ground	-
9	SNS_PUNP_R	Pump R sensor	IN

CN501 (PE Sensor / LF encoder / Eject encoder)

No.	Signal name	Function	Input / Output
1	VSEN_3.3V	Power supply for sensor 3.3V	OUT
2	GND	Ground	-
3	SNS_PE	PE sensor	IN
4	LF_ENC_B	LF encoder phase B	IN
5	VSEN_3.3V	Power supply for sensor 3.3V	OUT
6	LF_ENC_A	LF encoder phase A	IN
7	GND	Ground	-
8	EJ_ENC_B	EJ encoder phase B	IN
9	VSEN_3.3V	Power supply for sensor 3.3V	OUT
10	EJ_ENC_A	EJ encoder phase A	IN
11	GND	Ground	-

CN601 (Operation panel ass'y)

No.	Signal name	Function	Input / Output
1	LED_BIN2	BIN2 LED display	OUT
2	LED_BIN1	BIN1 LED display	OUT
3	DOOR	Door sensor	IN
4	BIN_SW	Bin switch	IN
5	SNS_FRONT_CVR	Front cover sensor	IN
6	SNS_CDR_G	Inner cover sensor signal	IN
7	GND	Ground	-
8	INK_CDRS_PWM	CD-R LED control signal	OUT
9	POW_SW	Power key switch	IN
10	INKS	Ink sensor	IN
11	LED_POWER(GREEN)	Power LED display	OUT
12	AB_SNS	AB sensor	IN
13	LED_RESUME(ORANGE)	Resume LED display	OUT
14	VSEN_3.3V	Power supply for sensor 3.3V	OUT
15	RESUME_SW	Resume key switch	IN

CN503 (PE sensor / PE encoder / APCL encoder)

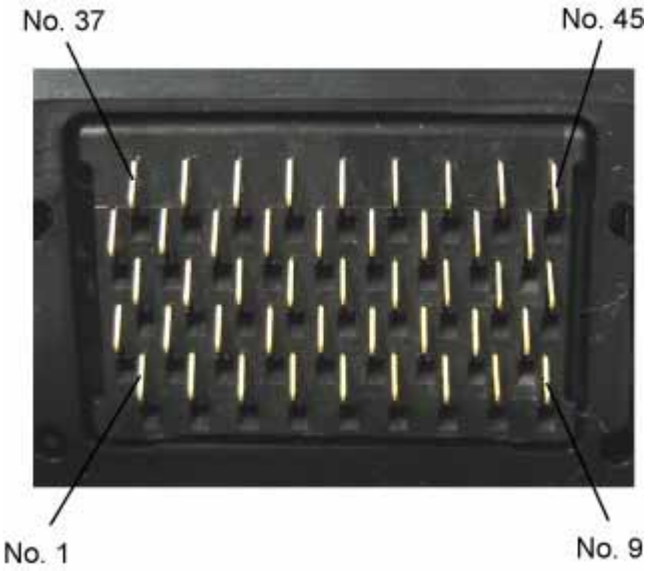
No.	Signal name	Function	Input / Output
1	VSEN_3.3V	Power supply for sensor 3.3V	OUT
2	GND	Ground	-
3	SNS_PE_PF	PE / PF sensor	IN
4	GND	Ground	-
5	VSEN_3.3V	Power supply for sensor 3.3V	OUT
6	APCL_ENC_A	APCL encoder phase A	IN
7	APCL_ENC_B	APCL encoder phase B	IN
8	GND	Ground	-
9	VSEN_3.3V	Power supply for sensor 3.3V	OUT
10	PF_ENC_A	PF encoder phase A	IN
11	PF_ENC_B	PF encoder phase B	IN

CN701 (Printer motor multi)

No.	Signal name	Function	Input / Output
1	CR_M	CR motor +	OUT
2	CR_MN	CR motor -	OUT
3	AP_M	AP motor +	OUT
4	AP_MN	AP motor -	OUT
5	PF_MN	PF motor -	OUT
6	PF_M	PF motor +	OUT
7	LF_M	LF motor +	OUT
8	LF_MN	LF motor -	OUT

<Part 3: 2-1. Logic Board>

2-2. Carriage Board (Print Head Connector)



No.	Signal Name	Function	Input / Output
1, 2	A_GNDH	Head ground	-
3	HD2_PBk1	Head data PBk1	OUT
4	HD4_C	Head data C	OUT
5	HD10_SM1	Head data SM1	OUT
6	VSS	Logic ground	-
7 to 9	B_GNDH	Head ground	-
10	HD0_K1	Head data BK1	OUT
11	HD1_K2	Head data BK2	OUT
12	HD3_PBk2	Head data PBk2	OUT
13	HENB1	Head heat enable signal 1	OUT
14	HD6_M2	Head data M2	OUT
15	HD12_SC2	Head data SC2	OUT
16	VSS	Logic ground	-
17, 18	B_GNDH	Head ground	-
19	HD5_SC1	Head data SC1	OUT
20	HENB0	Head heat enable signal 0	OUT
21	HENB3	Head heat enable signal 3	OUT
22	HLAT	Head data latch signal	OUT
23	HD8_Y1	Head data Y1	OUT
24	HD13_C2	Head data C2	OUT
25	HD9_Y2	Head data Y2	OUT
26	HENB2	Head heat enable signal 2	OUT
27	DIA1	Diode sensor anode 1	IN
28	HD7_SM2	Head data SM2	OUT
29	DIA0	Diode sensor anode 0	IN
30	HVDD_3.3V	Head logic power supply 3.3V	OUT
31	ROM_CS	Head EEPROM chip select signal	OUT

32	HCLK	Head clock signal	OUT
33	ROM_DIO (O)	Head EEPROM data signal	IN
34	HD11_M1	Head data M1	OUT
35, 36	B_VH1_24V	Head drive power supply 24V	OUT
37, 38	A_VH_24V	Head drive power supply 24V	OUT
39	HVDD_3.3V	Head logic power supply 3.3V	OUT
40	ROM_SK	Head EEPROM serial clock signal	OUT
41	B_DIA1	Diode sensor anode 1	IN
42	ROM_DIO (I)	Head EEPROM data signal	OUT
43	VHT	Head drive power supply 24V	OUT
44, 45	B_VH2_24V	Head drive power supply 24V	OUT

<Part 3: 2-2. Carriage Board>

3. PIXMA iP5300 SPECIFICATIONS

<Printer>

Type	Desktop serial color inkjet printer
Paper feeding method	Auto sheet feed (ASF, cassette, automatic duplex printing, CD / DVD printing)
Resolution	9,600 x 2,400dpi (Max.)
Throughput (target value)	4 x 6 photo (PP-101, standard, borderless)*1: Approx. 21 sec. Camera Direct printing (4 x 6, borderless)*2: Approx. 69 sec. For reference: Max speed (Custom 5) / Standard Black text (plain paper, FINE pattern): 31ppm / 14.8ppm Color (plain paper, FINE pattern): 24ppm / 11.6ppm *1: Based on Canon standard pattern. Print speed may vary depending on system configuration, interface, software, document complexity, print mode, page coverage, type of paper used and does not take into account data processing time on host computer. *2: When printing a 6 megapixel image taken by certain Canon digital camera from PictBridge on default settings using Photo Paper Plus Glossy without border. Actual print speed may vary depending on image data, print mode, type of paper used and device that the printer is connected to.
Printing direction	Bi-directional, uni-directional
Print width	Max. 203.2mm (216mm in borderless printing)
Interface	- Computer: USB 2.0 Hi-Speed - Camera Direct: PictBridge with a PictBridge-supported digital camera, digital video camera, or camera-equipped mobile phone
ASF stacking capacity	Plain paper: Max. 13mm (Approx. 150 sheets of 64g/m^2 paper)
Paper weight	64 to 105 g/m^2, Canon specialty paper 273 g/m^2 at the maximum
Detection functions	- Opening / Closing of top cover - Presence of print head / ink tanks - Opening / Closing of front door - Remaining ink amount (optical / dot count) - Printing position - Paper presence - Paper end sensor - Ink amount in the ink absorber - Internal temperature - Pick-up roller - Paper feed roller position - Paper eject roller position - Carriage position - Head-to-paper distance - Supported camera direct printing device - Presence of CD / DVD
Acoustic noise	Highest print quality settings: Approx. 34.0dB (Photo Paper Pro, Custom 1, paper feeding from the ASF)
Environmental requirements	During operation — Temperature: 5C to 35C (41F to 95F); Humidity: 10%RH to 90%RH (no condensation) Non operation — Temperature: 0C to 40C (32F to 104F); Humidity: 5%RH to 95%RH (no condensation)
	Power supply voltage, frequency / Power consumption: Standby / Power-off

Power supply	AC 100 to 240V, 50/60Hz Approx. 12W (max.) Approx. 1.0W Approx. 0.5W
External dimensions	With the trays retracted: Approx. 444 (W) x 303 (D) x 160 (H)mm
Weight	Approx. 6.8kg, including print head and ink tanks
Related standards (Printer, Adapter)	Electromagnetic radiance: VCCI, FCC, IC, CE Mark, Taiwan EMC, C-Tick, CCC (EMC), Korea MIC, Gost-R Electrical safety: Electrical Appliance and Material Safety Law (DENAN), UL, C-UL, CB Report, CE Mark, GS, Gost-R, FT, SASO, CCC, SPRING, Korea EK, IRAM (Argentine) Environmental regulations: RoHS (EU), WEEE (EU), Korea Package Recycle Law, Green Point (Germany), Energy Star, Eco Mark, Law on Promoting Green Purchasing
Serial number location	On the carriage flexible cable holder (visible on the right of the carriage after the printer is turned on, the top cover is opened, and the carriage moves to the center).
Remaining ink amount detection	Available (detection by optical method and dot count, enabled at default)
Paper type detection	Not available
Print head alignment	Available (automatic or manual alignment via the printer driver Maintenance tab, or via the printer button in Direct Printing, automatic alignment at default) (*Automatic print head alignment must be performed with using 2 sheets of matt photo paper "MP101")

<Print head>

Type	Single head with 5 removable ink tanks (each color)
Print head	Pigment-based BK: 512 nozzles, 600 dpi, 30 pl Dye-based BK / Y: 512 nozzles each, 1,200 dpi, 5 pl Dye-based C / M: Three 512 nozzles for C and M respectively, 2,400 dpi, 5 pl / 2 pl / 1 pl
Ink color	Pigment-based black Dye-based black, cyan, magenta, yellow
Ink tank	PGI-5BK (pigment-based), CLI-8BK / C / M / Y (dye-based)
Weight (Net)	Print head, approx. 58.4g
Supply method	As a service part (not including ink tanks)
Part number	QY6-0067

<3-3. PIXMA iP5300 SPECIFICATIONS >

PIXMA iP5300

PARTS CATALOG

REVISION 0

1439B003AA PIXMA iP5300 / 120V(CA)
1439B008AA PIXMA iP5300 / 220V-240V(GB)
1439B009AA PIXMA iP5300 / 220V-240V(EUM / EMB)
1439B011AA PIXMA iP5300 / 220V-240V(AU)
1439B012AA PIXMA iP5300 / 220V-240V(ASA)
1439B014AA PIXMA iP5300 / 220V-240V(CN)

Canon

AUG. 2006

QY8-31CY-000

Application

This manual has been issued by Canon Inc. for qualified person to learn technical theory, installation, maintenance, and repair of products. This manual covers all localities where the products are sold. For this reason, there may be information in this manual that does not apply to your locality.

Corrections

This manual could include technical inaccuracies or typographical errors due to improvements or changes in the products. When changes occur in applicable products or in the content of this manual, Canon will release technical information as the need arises. In the event of major changes in the contents of this manual over a long or short period. Canon will issue a new editions of this manual. The following paragraph does not apply to any countries where such provisions are inconsistent with local low.

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HTML files were created using Microsoft® FrontPage® 2000.

ABOUT THIS MANUAL

A. ILLUSTRATION INDEX

For illustration index, the parts layout illustrations in this parts catalog are listed in abbreviated form in order of illustration number to identify the pages they appear on. To find an illustration of a part, see the ILLUSTRATION INDEX.

B. PARTS LAYOUT & PARTS LIST

Parts layout illustration

a) Parts search

Find a part from the parts layout illustration and find its key number from the parts list to identify the part number and name. For screws, nuts, washers, lock washers, pins, spacers, see SCREWS &WASHERS LIST.

Note: If parts have the same or similar shape but different specifications, their key number is assigned to several part numbers and names in the parts list.

b) Parts replacement procedure

To replace parts, the parts layout illustrations have figure numbers according to the disassembly procedure of the product. The parts that require careful work are shown the illustration.

Parts list

a) FIGURE & KEY No.

The FIGURE & KEY No. column corresponds to the key numbers assigned to the parts in the parts layout illustration.

b) PART NUMBER

The PART NUMBER column gives the part numbers corresponding to the key numbers. To order a part, indicate the part number clearly.

Note: Parts marked NPN are not service parts.

c) RANK

The service parts with N in the RANK column are order parts.

d) QTY

The QTY column gives the number of parts in the corresponding components layout illustration.

e) DESCRIPTION

The DESCRIPTION column gives the part names in English.
To order a part, indicate the part name, too.

C. OPTIONS & CONSUMABLES

These are illustrations and a list of units that can be used as optional consumable equipments.

D. SCREWS & WASHERS LIST

This is a list of screws, nuts, washers, lock washers, pins, and spacers.
The QTY column does not give the number of parts used.

E. TOOL LIST

This is a list of tools used for servicing products.

F. NUMERICAL INDEX

All the parts listed in this parts catalog are arranged in order of part number. You can identify part locations and names from the NUMERICAL INDEX.

Contents

A. ILLUSTRATION INDEX

Contents NUMERICAL INDEX

FIGURE 1 PRINTER & CASSETTE UNIT & PRINT HEAD

FIGURE 2 AC ADAPTER

FIGURE 3 OPERATION PANEL UNIT & MAIN CASE UNIT

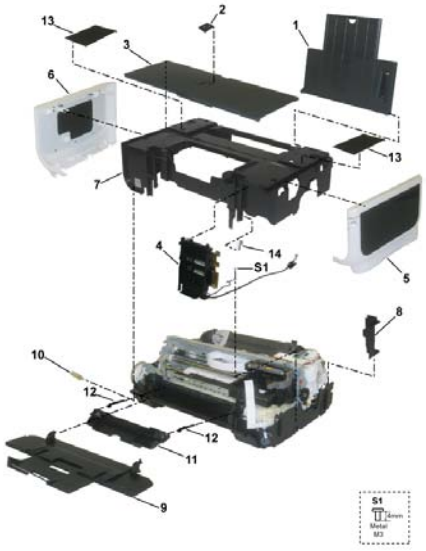


FIGURE 4 BOTTOM CASE UNIT & INK ABSORBER

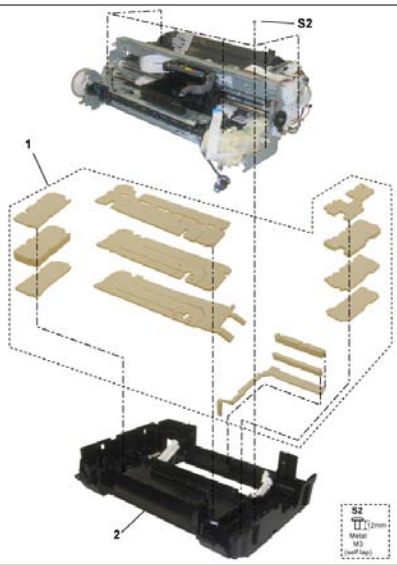


FIGURE 5 LOGIC BOARD ASS'Y

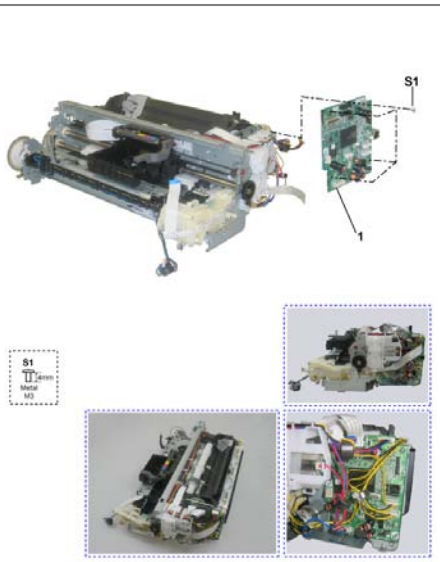


FIGURE 6 SHEET FEED UNIT

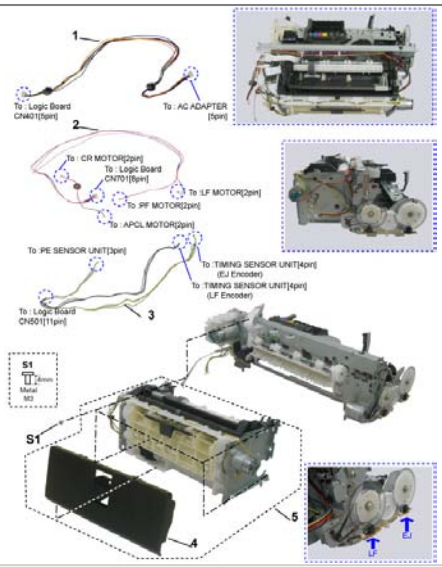


FIGURE 7 CARRIAGE UNIT

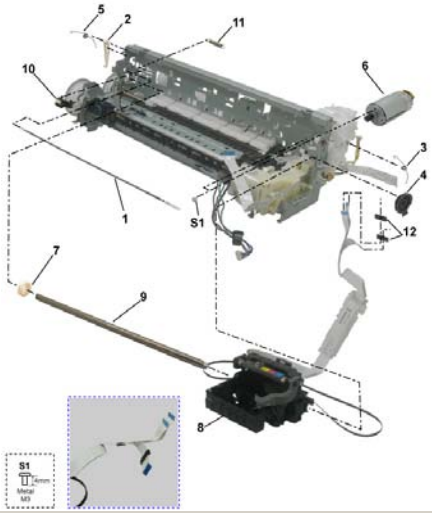


FIGURE 8 PLATEN UNIT

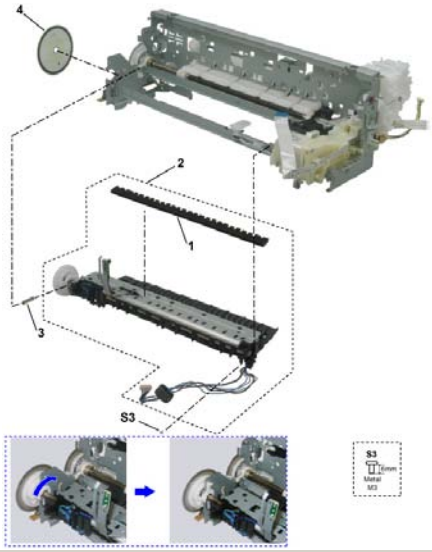


FIGURE 9 PURGE UNIT

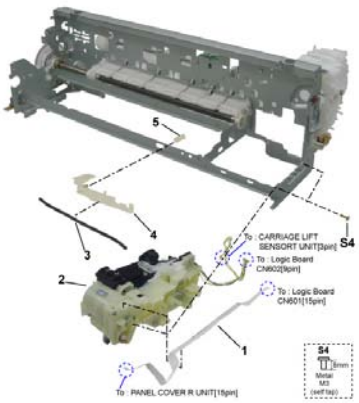


FIGURE 10 PAPER FEED & CARRIAGE LIFT PART

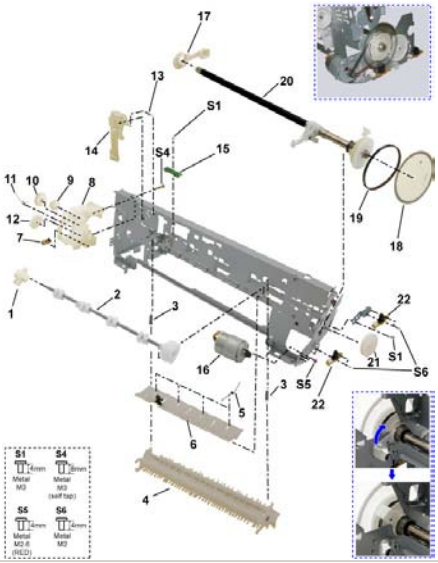


FIGURE 11 OPTION & CONSUMABLES

FIGURE 12 TOOL

B. PARTS LAYOUT & PARTS LIST

FIGURE 1 PRINTER & PRINT HEAD

FIGURE & KEY No.		PART NUMBER	RANK	QTY	DESCRIPTION	REMARKS
1-	1	QM3-0465-000		1	CASSETTE UNIT	
	2	QC2-1925-000		1	COVER, CASSETTE	
	3	QA4-1117-000		1	TRAY, CD SUB	W/ CDR PRINTING
	4	QL2-1449-000		1	CDR TRAY ASS'Y	W/ CDR PRINTING
	5	QY6-0067-000		1	PRINT HEAD	
	6	QK1-0278-000		1	CORD, POWER	100V-120V(CA)
		QK1-0279-000		1	CORD, POWER	220V-240V(EUM, EMB, ASA)
		QK1-1061-000		1	CORD, POWER	220V-240V(AU)
		WT3-5156-000		1	CORD, POWER	220V-240V(GB)
		WT3-5182-000		1	CORD, POWER	220V-240V(CN)

FIGURE 2 AC ADAPTER

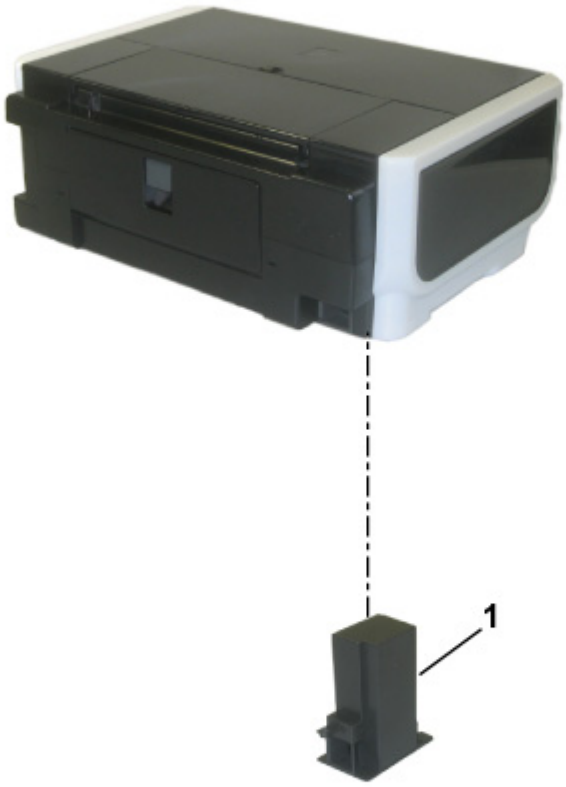


FIGURE & KEY No.		PART NUMBER	RANK	QTY	DESCRIPTION	REMARKS
2-	1	QK1-3031-000		1	AC ADAPTER: 100V-240V 50/60HZ	

FIGURE 3 OPERATION PANEL UNIT & MAIN CASE UNIT

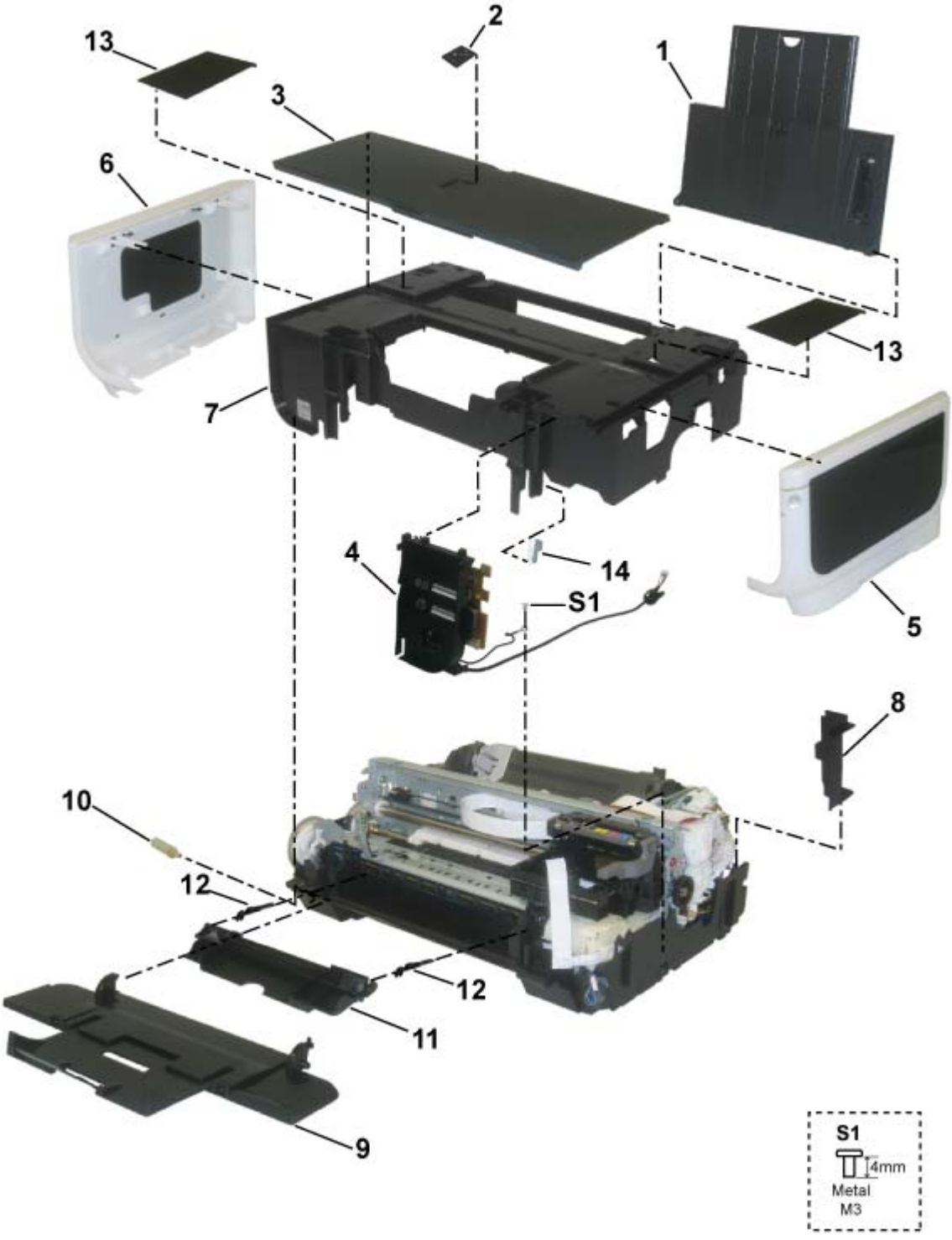


FIGURE & KEY No.		PART NUMBER	RANK	QTY	DESCRIPTION	REMARKS
3-	1	QM3-0012-000		1	PAPER SUPPORT UNIT	
	2	QC1-9024-000		1	EMBLEM, PIXMA	
	3	QM3-0011-000		1	ACCESS COVER UNIT	
	4	QM3-0016-000		1	PANEL COVER R UNIT	
	5	QM3-0014-000		1	SIDE COVER R UNIT	
	6	QM3-0015-000		1	SIDE COVER L UNIT	
	7	QC2-1887-000		1	MAIN CASE	
	8	QC2-1886-000		1	COVER, I/F	
	9	QM3-0013-000		1	FRONT DOOR UNIT	
	10	QC1-6573-000		1	DAMPER, DOOR	
	11	QM3-0017-000		1	INNER COVER UNIT	
	12	QC2-0424-000		2	ARM, RELEASE	
	13	QC2-1911-000		2	COVER, MAIN CASE	
	14	QC2-1877-000		1	COVER, INK MIST	

FIGURE 4 BOTTOM CASE UNIT & INK ABSORBER

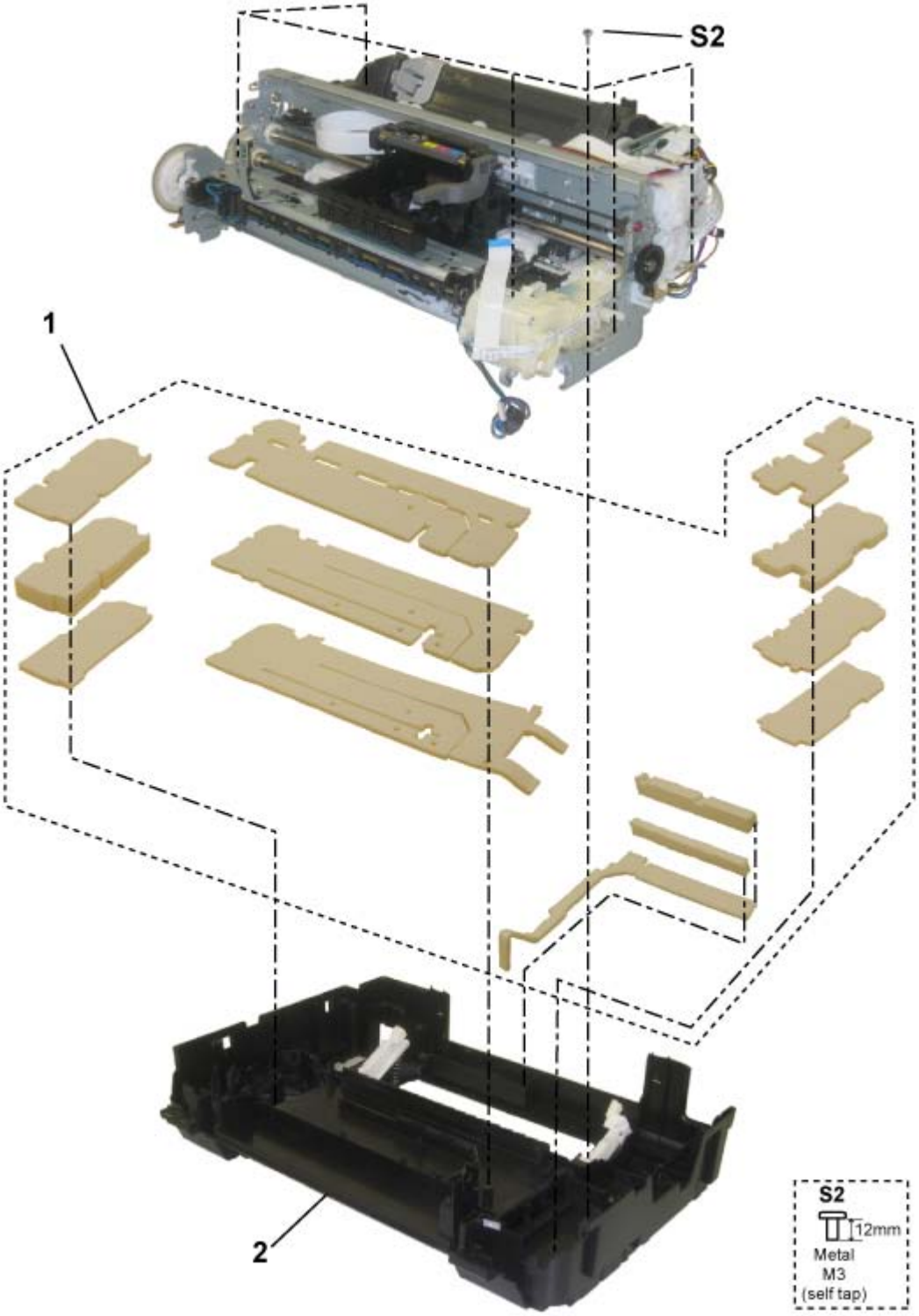
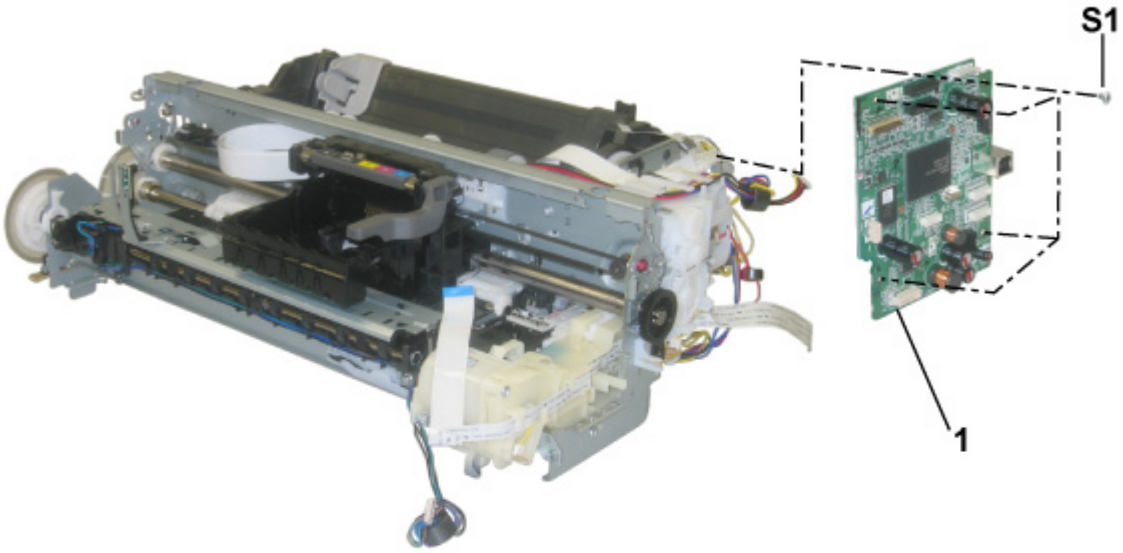


FIGURE & KEY No.		PART NUMBER	RANK	QTY	DESCRIPTION	REMARKS
4-	1	QY5-0179-000		1	ABSORBER KIT	
	2	QM3-0010-000		1	BOTTOM CASE UNIT	

FIGURE 5 LOGIC BOARD ASS'Y



S1
4mm
Metal
M3

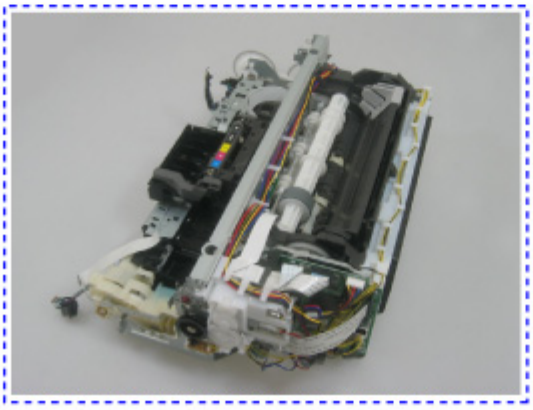


FIGURE & KEY No.		PART NUMBER	RANK	QTY	DESCRIPTION	REMARKS
5-	1	QM3-0833-000		1	LOGIC BOARD ASS'Y	

FIGURE 6 SHEET FEED UNIT

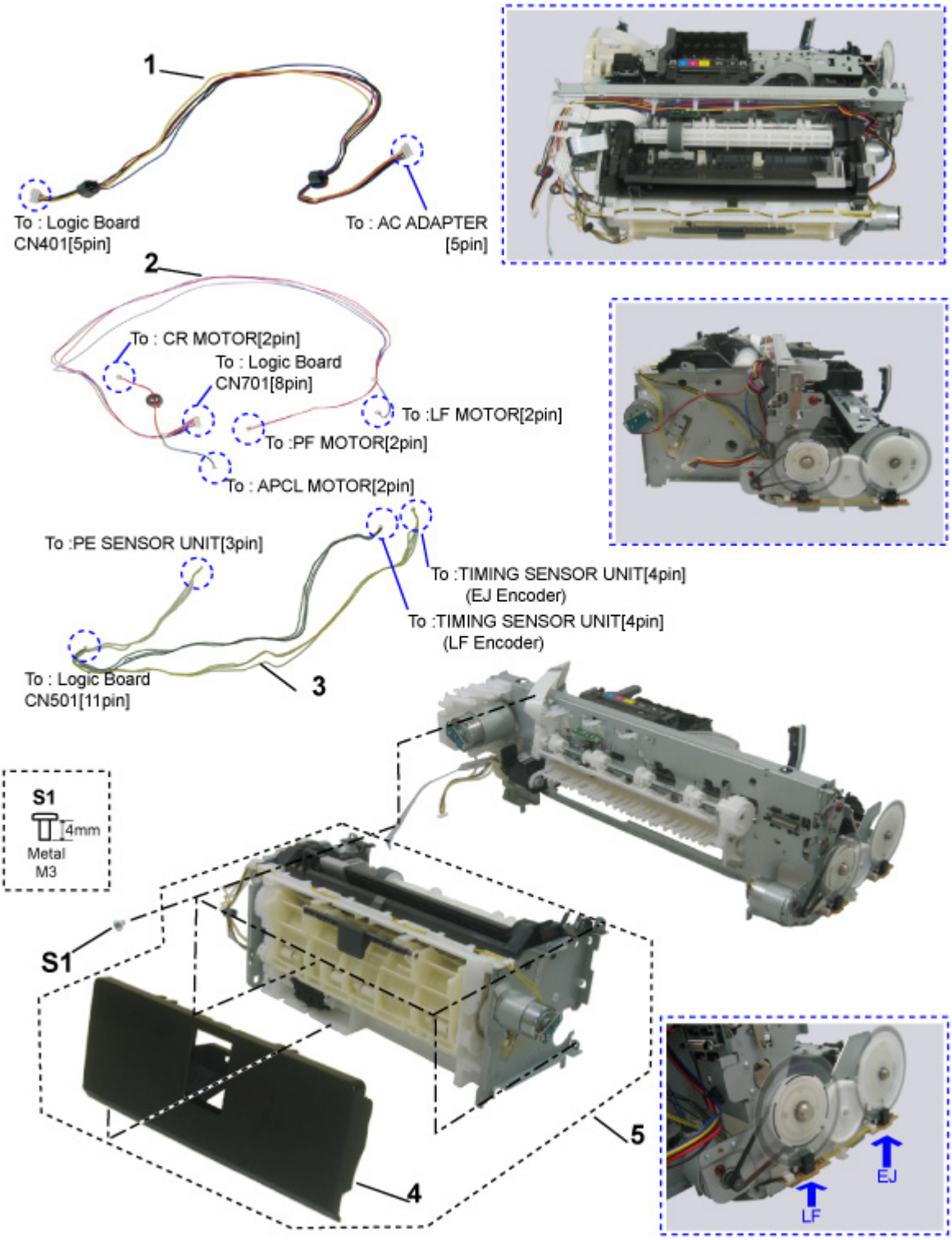


FIGURE & KEY No.		PART NUMBER	RANK	QTY	DESCRIPTION	REMARKS
6-	1	QM3-1292-000		1	DC CONNECTOR ASS'Y	
	2	QM3-1287-000		1	MOTOR MULTI HARNESS ASS'Y	
	3	QM3-0842-000		1	ENCORDER MULTI HARNESS ASS'Y	
	4	QC2-2063-000		1	COVER, PAPER FEED GUIDE	
	5	QM2-3902-000		1	SHEET FEEDER UNIT	

FIGURE 7 CARRIAGE UNIT

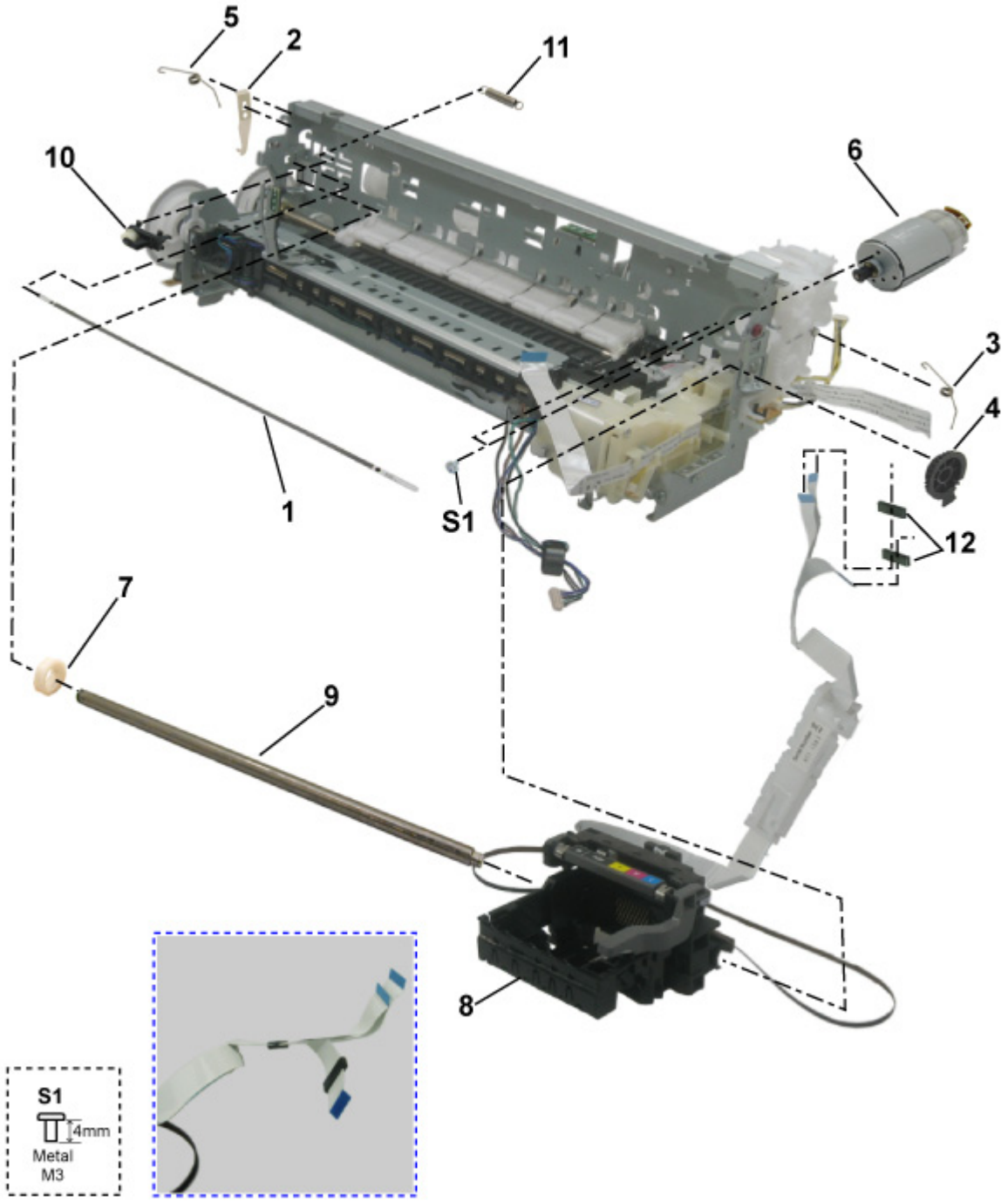


FIGURE & KEY No.		PART NUMBER	RANK	QTY	DESCRIPTION	REMARKS
7-	1	QC1-6526-000		1	FILM, TIMING SLIT STRIP	
	2	QC1-6201-000		1	SPRING, LEAF	
	3	QC2-0080-000		1	CLIP, SHAFT R	
	4	QC2-0010-000		1	CAM, CARRIAGE SHAFT R	
	5	QC2-0083-000		1	CLIP, SHAFT L	
	6	QK1-1500-000		1	MOTOR, CARRIAGE	
	7	QC2-0009-000		1	CAM, CARRIAGE SHAFT L	
	8	QM2-3999-000		1	CARRIAGE UNIT	
	9	QC2-0414-000	N	1	SHAFT, CARRIAGE	
	10	QL2-0938-000		1	IDLER PULLEY ASS'Y	
	11	QC1-6202-000		1	SPRING, COIL	
	12	WE8-6427-000		2	CORE, RING	

FIGURE 8 PLATEN UNIT

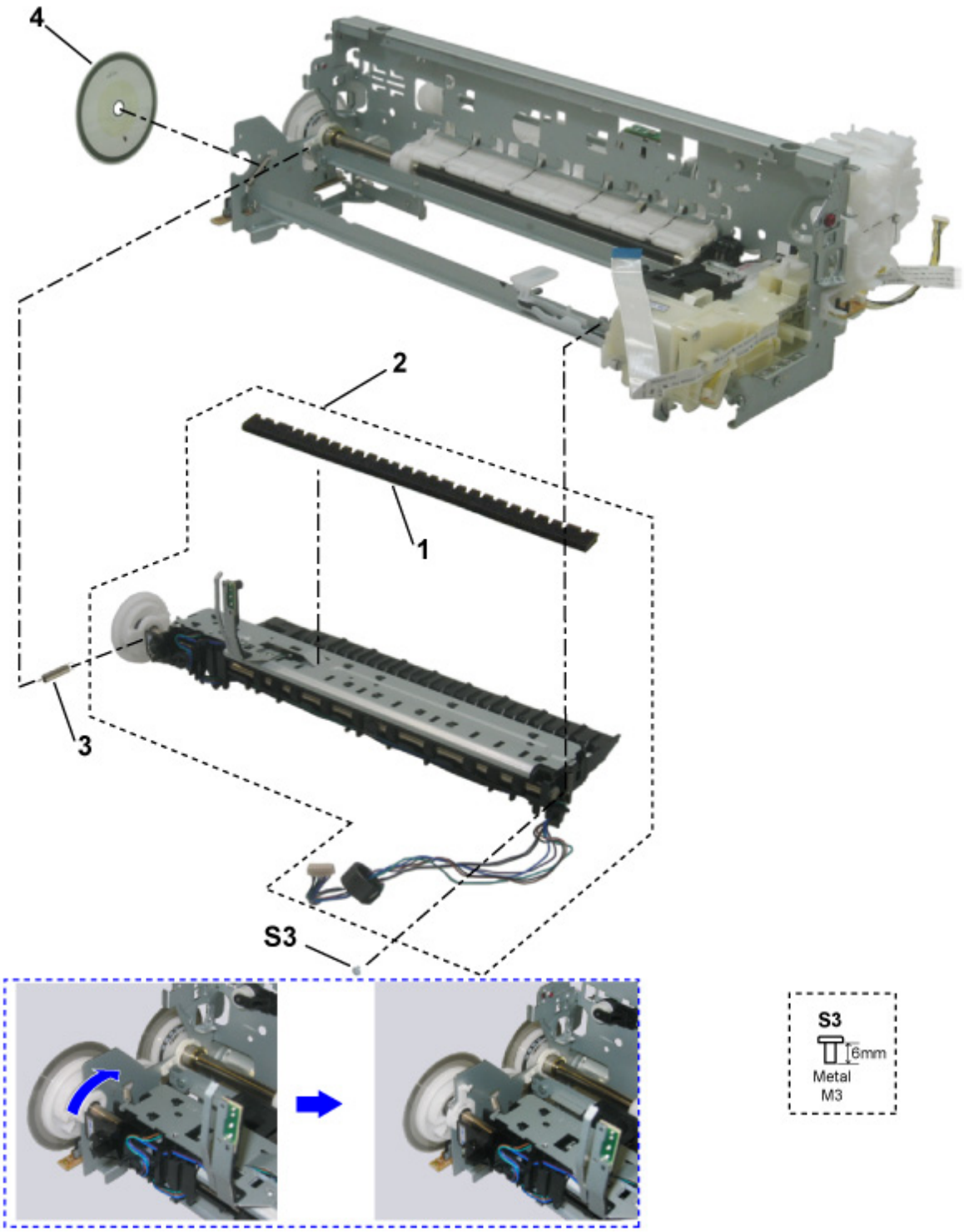


FIGURE & KEY No.		PART NUMBER	RANK	QTY	DESCRIPTION	REMARKS
8-	1	QC2-0435-000		1	ABSORBER, INK	
	2	QM3-0001-000		1	PLATEN UNIT	
	3	QC1-6619-000		1	SPRING, TORSION	
	4	QC2-0476-000		1	FILM, TIMING SLIT DISK EJECT	

FIGURE 9 PURGE UNIT

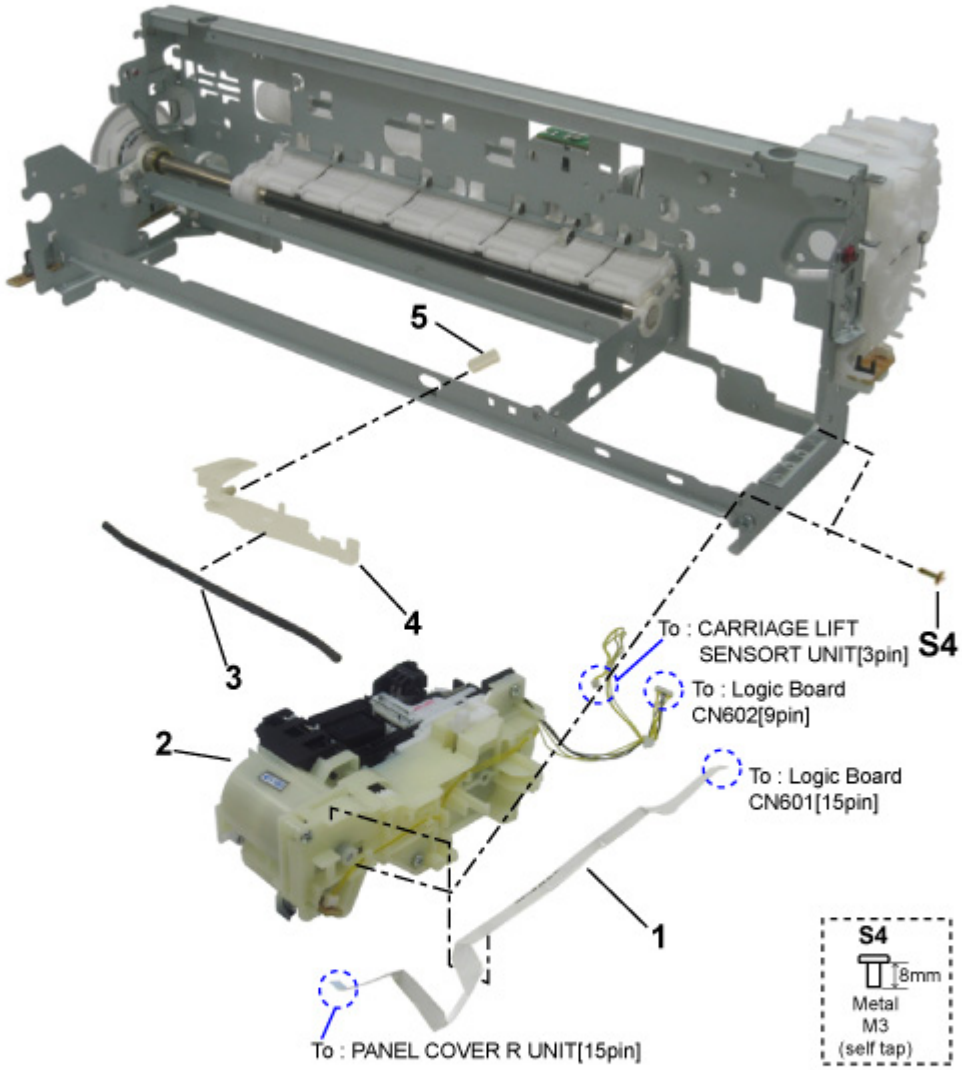


FIGURE & KEY No.		PART NUMBER	RANK	QTY	DESCRIPTION	REMARKS
9-	1	QK1-2830-000		1	CABLE, PANEL	
	2	QM3-0007-000		1	PURGE UNIT	
	3	QC2-0032-000		1	TUBE, INK	
	4	QC2-0030-000		1	COVER, INK TUBE	
	5	QC2-0085-000		1	TUBE, INK JOINT	

FIGURE 10 PAPER FEED & CARRIAGE LIFT PART

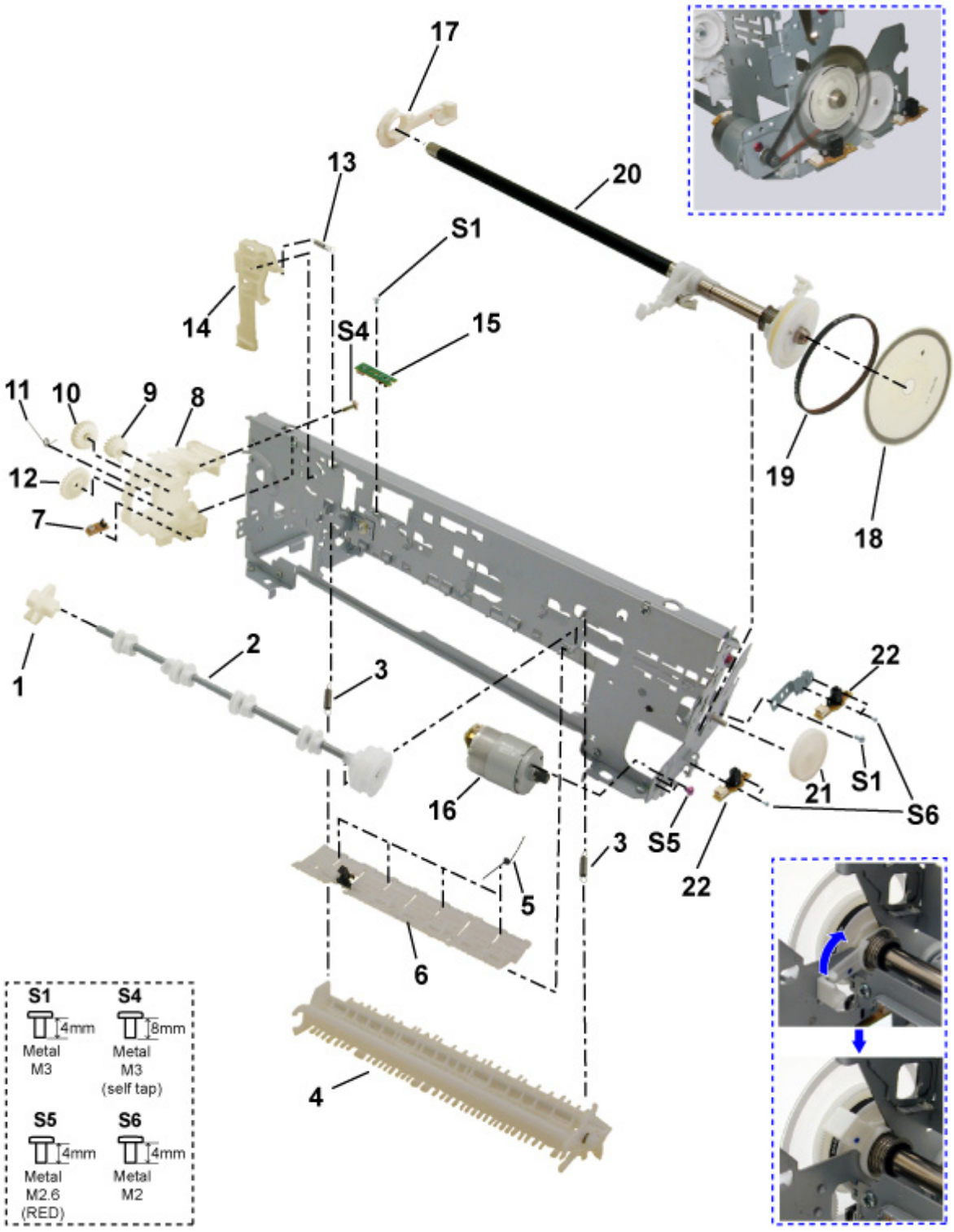


FIGURE & KEY No.		PART NUMBER	RANK	QTY	DESCRIPTION	REMARKS
10-	1	QC1-9941-000		1	CAM, SWING ARM LOCK	
	2	QL2-1450-000		1	PR LIFT SHAFT ASS'Y	
	3	QC1-6232-000		2	SPRING, TENSION	
	4	QM2-3890-000		1	PAPER GUIDE UNIT	
	5	QC1-9937-000		4	SPRING, TORSION	
	6	QM2-3886-000		1	PRESSURE ROLLER ASS'Y	
	7	QM3-1273-000		1	CARRIAGE LIFT SENSOR UNIT	
	8	QC2-0037-000		1	CARRIAGE LIFT GEAR BASE UNIT	
	9	QC2-1873-000		1	GEAR, INPUT CARRIAGE LIFT	
	10	QC1-6212-000		1	GEAR, IDLER CARRIAGE LIFT	
	11	QC2-0039-000		1	SPRING, TORSION	
	12	QC2-0038-000		1	GEAR, OUTPUT CARRIAGE LIFT	
	13	QC2-0052-000		1	SPRING, TENSION	
	14	QC2-0040-000		1	LEVER, SWING ARM LOCK	
	15	QM3-1274-000		1	PE SENSOR UNIT	
	16	QK1-1502-000		1	MOTOR, PAPER FEED	
	17	QC1-9939-000		1	BUSHING	
	18	QC2-0475-000		1	FILM, TIMING SLIT DISK	
	19	QC1-6230-000		1	BELT, PAPER FEED	
	20	QL2-1490-000		1	FEED ROLLER ASS'Y	
	21	QC1-6225-000		1	GEAR, EJECT	
	22	QM3-1271-000		2	TIMING SENSOR UNIT	

C. OPTION & CONSUMABLES

FIGURE 11 OPTION & CONSUMABLES

FIGURE & KEY No.		PART NUMBER	RANK	QTY	DESCRIPTION	REMARKS
11-	1	NPN		1	BLACK INK TANK PGI-5BK	CONSUMABLES
		NPN		1	BLACK INK TANK CLI-8BK	CONSUMABLES
		NPN		1	YELLOW INK TANK CLI-8Y	CONSUMABLES
		NPN		1	MAGENTA INK TANK CLI-8M	CONSUMABLES
		NPN		1	CYAN INK TANK CLI-8C	CONSUMABLES

D. SCREW & WASHER LIST

Contents NUMERICAL INDEX

FIGURE & KEY No.		PART NUMBER	RANK	QTY	DESCRIPTION	REMARKS
S -	1	XB1-2300-405			SCREW, MACH.BH, M3X4	
	2	XA9-1258-000			SCREW, TAP, WASHER HEAD, M3X12	
	3	XB2-4300-605			SCREW, W/WASHER, M3X6	
	4	XB4-7300-805			SCREW, TP, BH3X8	
	5	XA9-1437-000			SCREW, BIND, M2.6X4(RED)	
	6	XB1-2200-405			SCREW, M2X4	

E. TOOL

FIGURE 12 TOOL

FIGURE & KEY No.		PART NUMBER	RANK	QTY	DESCRIPTION	REMARKS
T -	1	QY9-0057-000		1	LUBE, FLOIL KG107A, OIL	

F. NUMERICAL INDEX

Contents ILLUSTRATION INDEX

PART NUMBER	FIGURE & KEY No.		DESCRIPTION
QA4-1117-000	1-	3	TRAY, CD SUB
QC1-6201-000	7-	2	SPRING, LEAF
QC1-6202-000	7-	11	SPRING, COIL
QC1-6212-000	10-	10	GEAR, IDLER CARRIAGE LIFT
QC1-6225-000	10-	21	GEAR, EJECT
QC1-6230-000	10-	19	BELT, PAPER FEED
QC1-6232-000	10-	3	SPRING, TENSION
QC1-6526-000	7-	1	FILM, TIMING SLIT STRIP
QC1-6573-000	3-	10	DAMPER, DOOR
QC1-6619-000	8-	3	SPRING, TORSION
QC1-9024-000	3-	2	EMBLEM, PIXMA
QC1-9937-000	10-	5	SPRING, TORSION
QC1-9939-000	10-	17	BUSHING
QC1-9941-000	10-	1	CAM, SWING ARM LOCK
QC2-0009-000	7-	7	CAM, CARRIAGE SHAFT L
QC2-0010-000	7-	4	CAM, CARRIAGE SHAFT R
QC2-0030-000	9-	4	COVER, INK TUBE
QC2-0032-000	9-	3	TUBE, INK
QC2-0037-000	10-	8	CARRIAGE LIFT GEAR BASE UNIT
QC2-0038-000	10-	12	GEAR, OUTPUT CARRIAGE LIFT
QC2-0039-000	10-	11	SPRING, TORSION
QC2-0040-000	10-	14	LEVER, SWING ARM LOCK
QC2-0052-000	10-	13	SPRING, TENSION
QC2-0080-000	7-	3	CLIP, SHAFT R
QC2-0083-000	7-	5	CLIP, SHAFT L
QC2-0085-000	9-	5	TUBE, INK JOINT
QC2-0414-000	7-	9	SHAFT, CARRIAGE
QC2-0424-000	3-	12	ARM, RELEASE
QC2-0435-000	8-	1	ABSORBER, INK
QC2-0475-000	10-	18	FILM, TIMING SLIT DISK
QC2-0476-000	8-	4	FILM, TIMING SLIT DISK EJECT
QC2-1873-000	10-	9	GEAR, INPUT CARRIAGE LIFT
QC2-1877-000	3-	14	COVER, INK MIST
QC2-1886-000	3-	8	COVER, I/F
QC2-1887-000	3-	7	MAIN CASE
QC2-1911-000	3-	13	COVER, MAIN CASE
QC2-1925-000	1-	2	COVER, CASSETTE
QC2-2063-000	6-	4	COVER, PAPER FEED GUIDE
QK1-0278-000	1-	6	CORD, POWER
QK1-0279-000	1-	6	CORD, POWER
QK1-1061-000	1-	6	CORD, POWER
QK1-1500-000	7-	6	MOTOR, CARRIAGE
QK1-1502-000	10-	16	MOTOR, PAPER FEED
QK1-2830-000	9-	1	CABLE, PANEL
QK1-3031-000	2-	1	AC ADAPTER: 100V-240V 50/60HZ
QL2-0938-000	7-	10	IDLER PULLEY ASS'Y
QL2-1449-000	1-	4	CDR TRAY ASS'Y
QL2-1450-000	10-	2	PR LIFT SHAFT ASS'Y
QL2-1490-000	10-	20	FEED ROLLER ASS'Y
QM2-3886-000	10-	6	PRESSURE ROLLER ASS'Y
QM2-3890-000	10-	4	PAPER GUIDE UNIT
QM2-3902-000	6-	5	SHEET FEEDER UNIT
QM2-3999-000	7-	8	CARRIAGE UNIT
QM3-0001-000	8-	2	PLATEN UNIT
QM3-0007-000	9-	2	PURGE UNIT
QM3-0010-000	4-	2	BOTTOM CASE UNIT
QM3-0011-000	3-	3	ACCESS COVER UNIT
QM3-0012-000	3-	1	PAPER SUPPORT UNIT
QM3-0013-000	3-	9	FRONT DOOR UNIT
QM3-0014-000	3-	5	SIDE COVER R UNIT
QM3-0015-000	3-	6	SIDE COVER L UNIT
QM3-0016-000	3-	4	PANEL COVER R UNIT
QM3-0017-000	3-	11	INNER COVER UNIT
QM3-0465-000	1-	1	CASSETTE UNIT
QM3-0833-000	5-	1	LOGIC BOARD ASS'Y
QM3-0842-000	6-	3	ENCORDER MULTI HARNESS ASS'Y
QM3-1271-000	10-	22	TIMING SENSOR UNIT
QM3-1273-000	10-	7	CARRIAGE LIFT SENSOR UNIT
QM3-1274-000	10-	15	PE SENSOR UNIT
QM3-1287-000	6-	2	MOTOR MULTI HARNESS ASS'Y
QM3-1292-000	6-	1	DC CONNECTOR ASS'Y
QY5-0179-000	4-	1	ABSORBER KIT
QY6-0067-000	1-	5	PRINT HEAD
QY9-0057-000	T-	1	LUBE, FLOIL KG107A, OIL
WE8-6427-000	7-	12	CORE, RING
WT3-5156-000	1-	6	CORD, POWER
WT3-5182-000	1-	6	CORD, POWER
XA9-1258-000	S-	2	SCREW, TAP, WASHER HEAD, M3X12
XA9-1437-000	S-	5	SCREW, BIND, M2.6X4(RED)
XB1-2200-405	S-	6	SCREW, M2X4
XB1-2300-405	S-	1	SCREW, MACH.BH, M3X4
XB2-4300-605	S-	3	SCREW, W/WASHER, M3X6
XB4-7300-805	S-	4	SCREW, TP, BH3X8