

Service Manual

iPF800 series

Canon

Application

This manual has been issued by Canon Inc. for qualified persons 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 may contain technical inaccuracies or typographical errors due to improvements or changes in products. When changes occur in applicable products or in the contents 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 edition of this manual.

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Caution

Use of this manual should be strictly supervised to avoid disclosure of confidential information.



Symbols Used

This documentation uses the following symbols to indicate special information:

Symbol	Description
	Indicates an item of a non-specific nature, possibly classified as Note, Caution, or Warning.
	Indicates an item requiring care to avoid electric shocks.
	Indicates an item requiring care to avoid combustion (fire).
	Indicates an item prohibiting disassembly to avoid electric shocks or problems.
	Indicates an item requiring disconnection of the power plug from the electric outlet.
 Memo	Indicates an item intended to provide notes assisting the understanding of the topic in question.
 REF.	Indicates an item of reference assisting the understanding of the topic in question.
	Provides a description of a service mode.
	Provides a description of the nature of an error indication.

The following rules apply throughout this Service Manual:

1. Each chapter contains sections explaining the purpose of specific functions and the relationship between electrical and mechanical systems with reference to the timing of operation.

In the diagrams,  represents the path of mechanical drive; where a signal name accompanies the symbol, the arrow  indicates the direction of the electric signal.

The expression "turn on the power" means flipping on the power switch, closing the front door, and closing the delivery unit door, which results in supplying the machine with power.

2. In the digital circuits, '1' is used to indicate that the voltage level of a given signal is "High", while '0' is used to indicate "Low". (The voltage value, however, differs from circuit to circuit.) In addition, the asterisk (*) as in "DRMD*" indicates that the DRMD signal goes on when '0'.

In practically all cases, the internal mechanisms of a microprocessor cannot be checked in the field. Therefore, the operations of the microprocessors used in the machines are not discussed: they are explained in terms of from sensors to the input of the DC controller PCB and from the output of the DC controller PCB to the loads.

The descriptions in this Service Manual are subject to change without notice for product improvement or other purposes, and major changes will be communicated in the form of Service Information bulletins.

All service persons are expected to have a good understanding of the contents of this Service Manual and all relevant Service Information bulletins and be able to identify and isolate faults in the machine."

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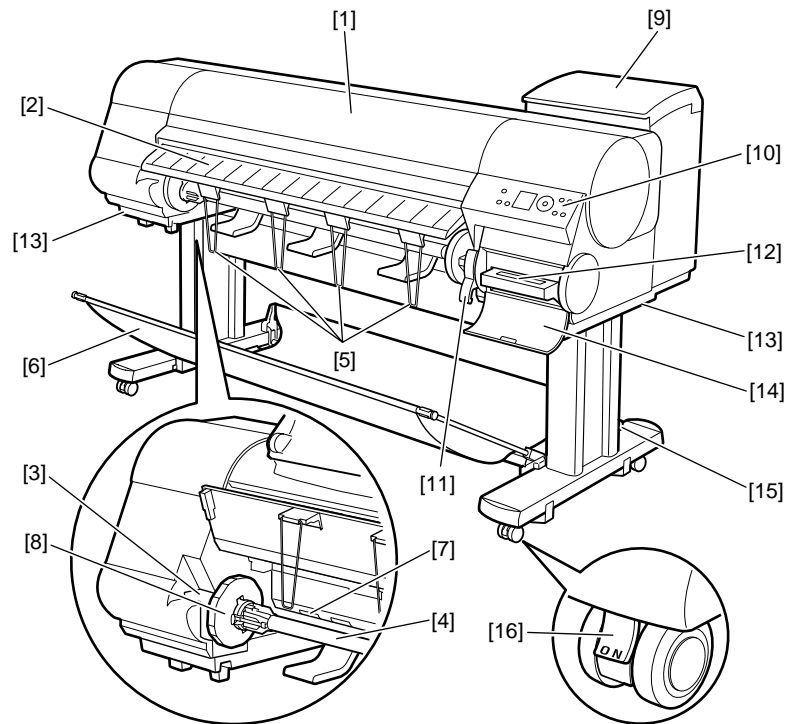
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1.1 Product Overview

1.1.1 Product Overview

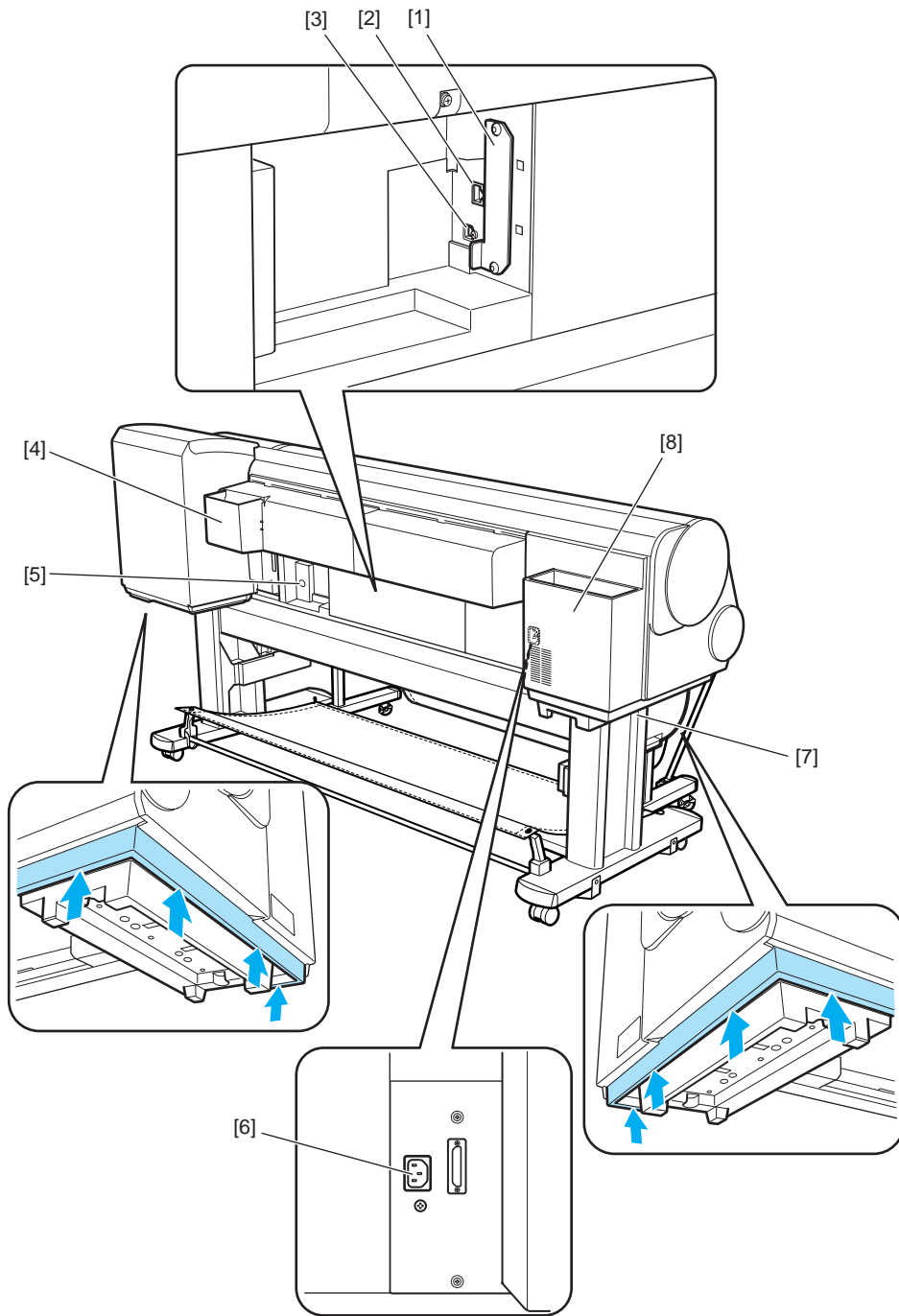
iPF810

This printer is a large-format printer that prints in a maximum width of 44 inches with high-speed photographic picture quality. This printer is a stand-mounted type printer and is capable of output to either roll media or cut sheet.



F-1-1
T-1-1

[1]	Upper Cover	[9]	Ink Tank Cover
[2]	Ejection Guide	[10]	Operation Panel
[3]	Roll Holder Slot	[11]	Release Lever
[4]	Roll Holder	[12]	Maintenance Cartridge
[5]	Ejection Support	[13]	Carrying Handles
[6]	Output Stacker	[14]	Maintenance Cartridge Cover
[7]	Paper Feed Slot	[15]	Stand
[8]	Holder Stopper	[16]	Stopper



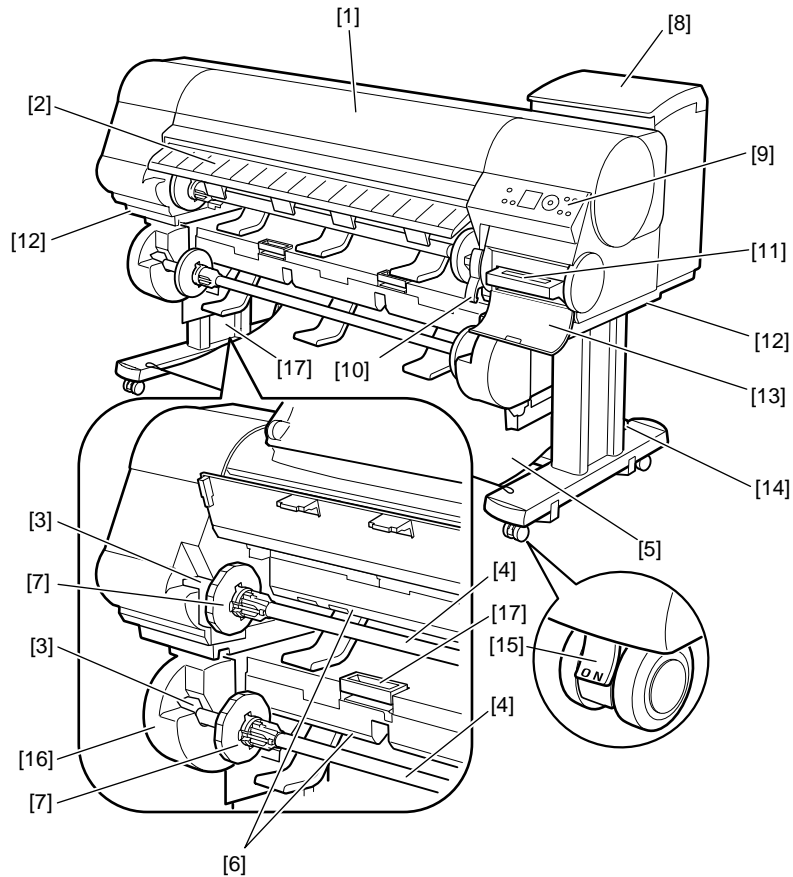
F-1-2
T-1-2

- | | | | |
|-----|----------------------|-----|------------------------------|
| [1] | Expansion Board Slot | [5] | Media Take-up Unit Connector |
| [2] | Ethernet Connector | [6] | Power Supply Connector |
| [3] | USB Port | [7] | Carrying Handles |
| [4] | Manual Pocket | [8] | Accessory Handles |

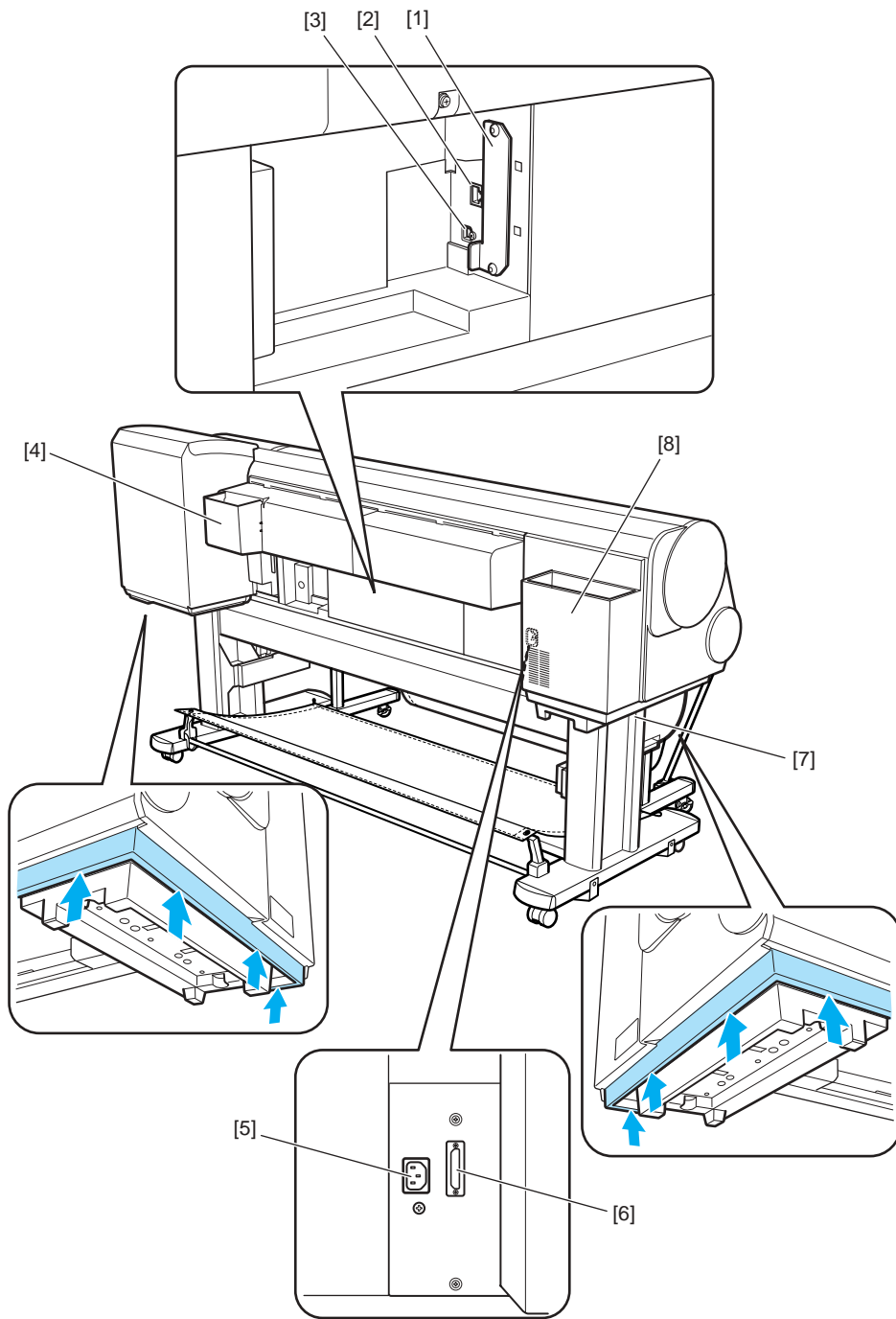
1.1.2 Product Overview

iPF820

This printer is a large-format printer that prints in a maximum width of 44 inches with high-speed photographic picture quality. This printer is a stand-mounted type printer and is capable of output to either roll media or cut sheet.



[1]	Upper Cover	F-1-3	
[2]	Ejection Guide	T-1-3	
[3]	Roll Holder Slot	[10]	Release Lever
[4]	Roll Holder	[11]	Maintenance Cartridge
[5]	Cut Sheet Protective Cloth	[12]	Carrying Handles
[6]	Paper Feed Slot	[13]	Maintenance Cartridge Cover
[7]	Holder Stopper	[14]	Stand
[8]	Ink Tank Cover	[15]	Stopper
[9]	Operation Panel	[16]	Lower Roll Unit
		[17]	Lower Roll Unit Lever



F-1-4
T-1-4

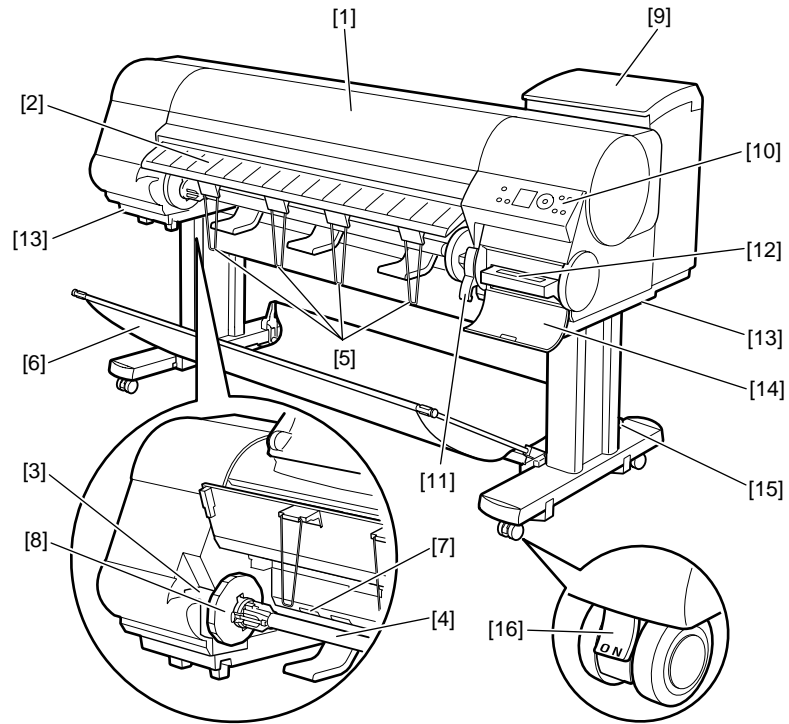
- [1] Expansion Board Slot
- [2] Ethernet Connector
- [3] USB Port
- [4] Manual Pocket

- [5] Power Supply Connector
- [6] Lower Roll Unit Connector
- [7] Carrying Handles
- [8] Accessory Box

1.1.3 Product Overview

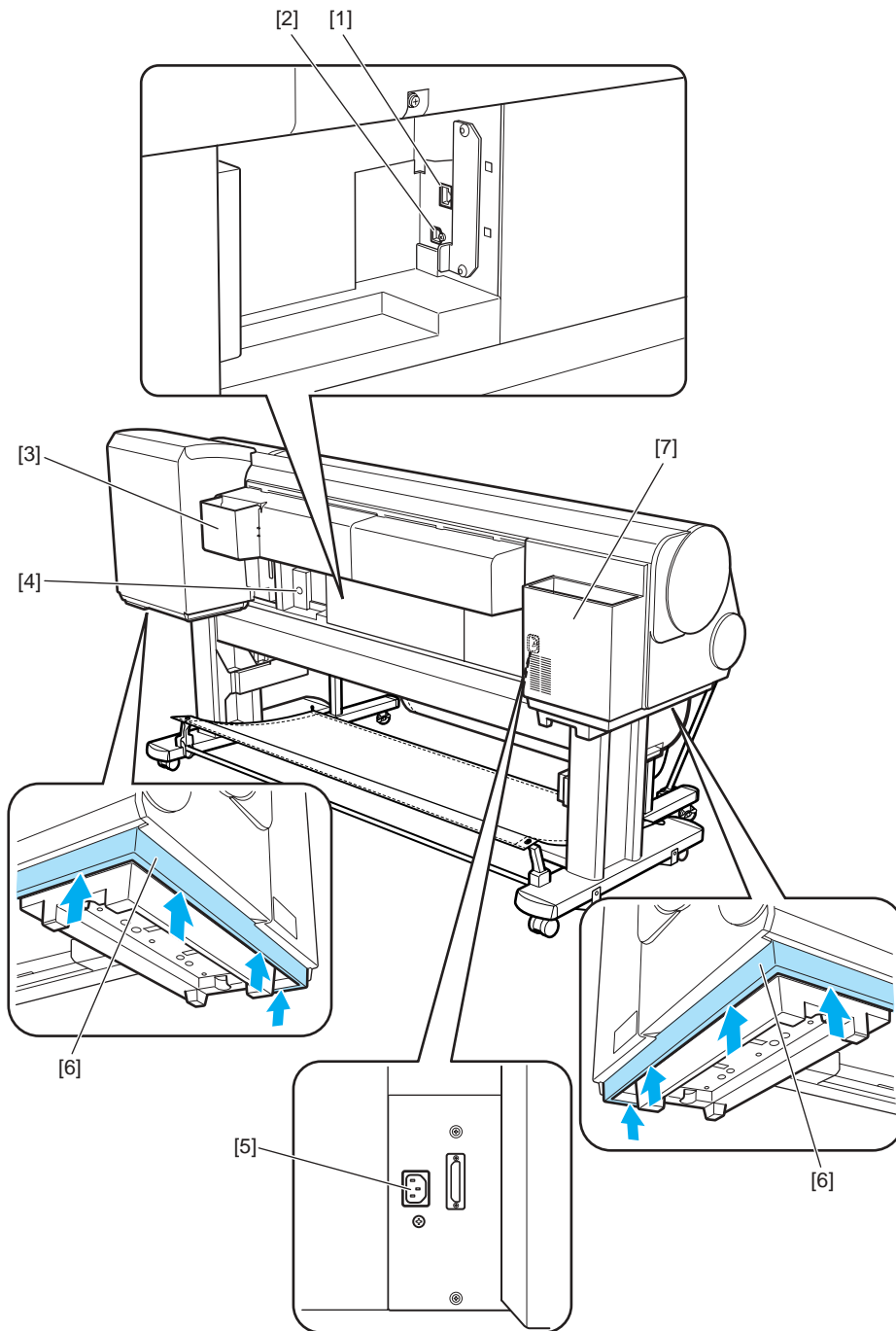
iPF815

This printer is a large-format printer that prints in a maximum width of 44 inches with high-speed photographic picture quality. This printer is a stand-mounted type printer and is capable of output to either roll media or cut sheet.



F-1-5
T-1-5

- | | | | |
|-----|------------------|------|-----------------------------|
| [1] | Upper Cover | [9] | Ink Tank Cover |
| [2] | Ejection Guide | [10] | Operation Panel |
| [3] | Roll Holder Slot | [11] | Release Lever |
| [4] | Roll Holder | [12] | Maintenance Cartridge |
| [5] | Ejection Support | [13] | Carrying Handles |
| [6] | Output Stacker | [14] | Maintenance Cartridge Cover |
| [7] | Paper Feed Slot | [15] | Stand |
| [8] | Holder Stopper | [16] | Stopper |



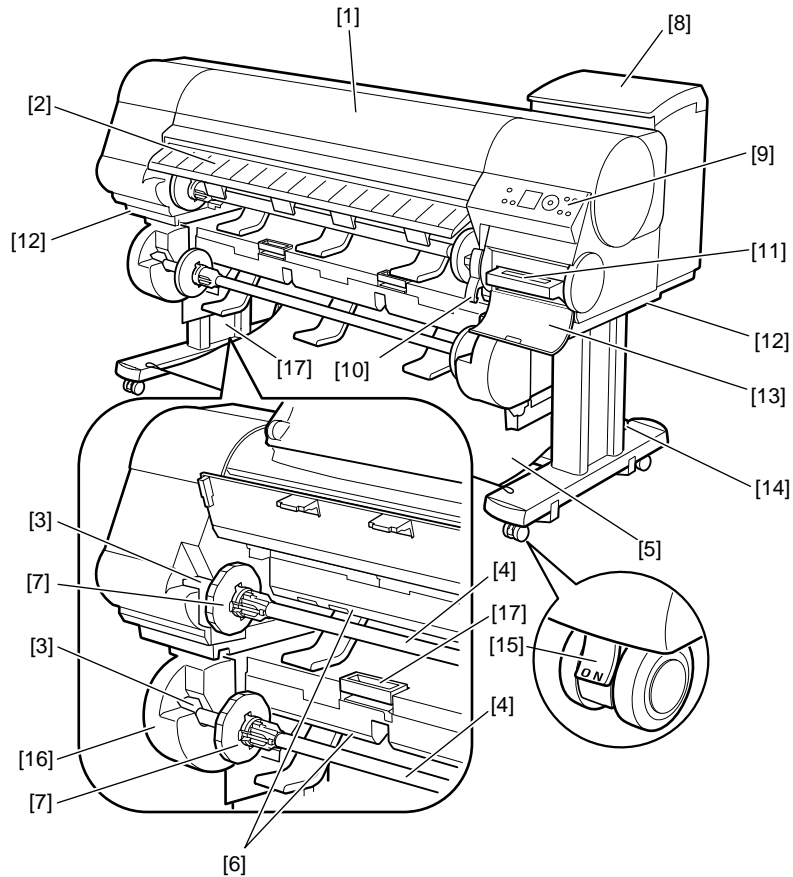
F-1-6
T-1-6

- | | |
|----------------------------------|----------------------------|
| [1] Ethernet Connector | [5] Power Supply Connector |
| [2] USB Port | [6] Carrying Handles |
| [3] Manual Pocket | [7] Accessory Handles |
| [4] Madia Take-up Unit Connector | |

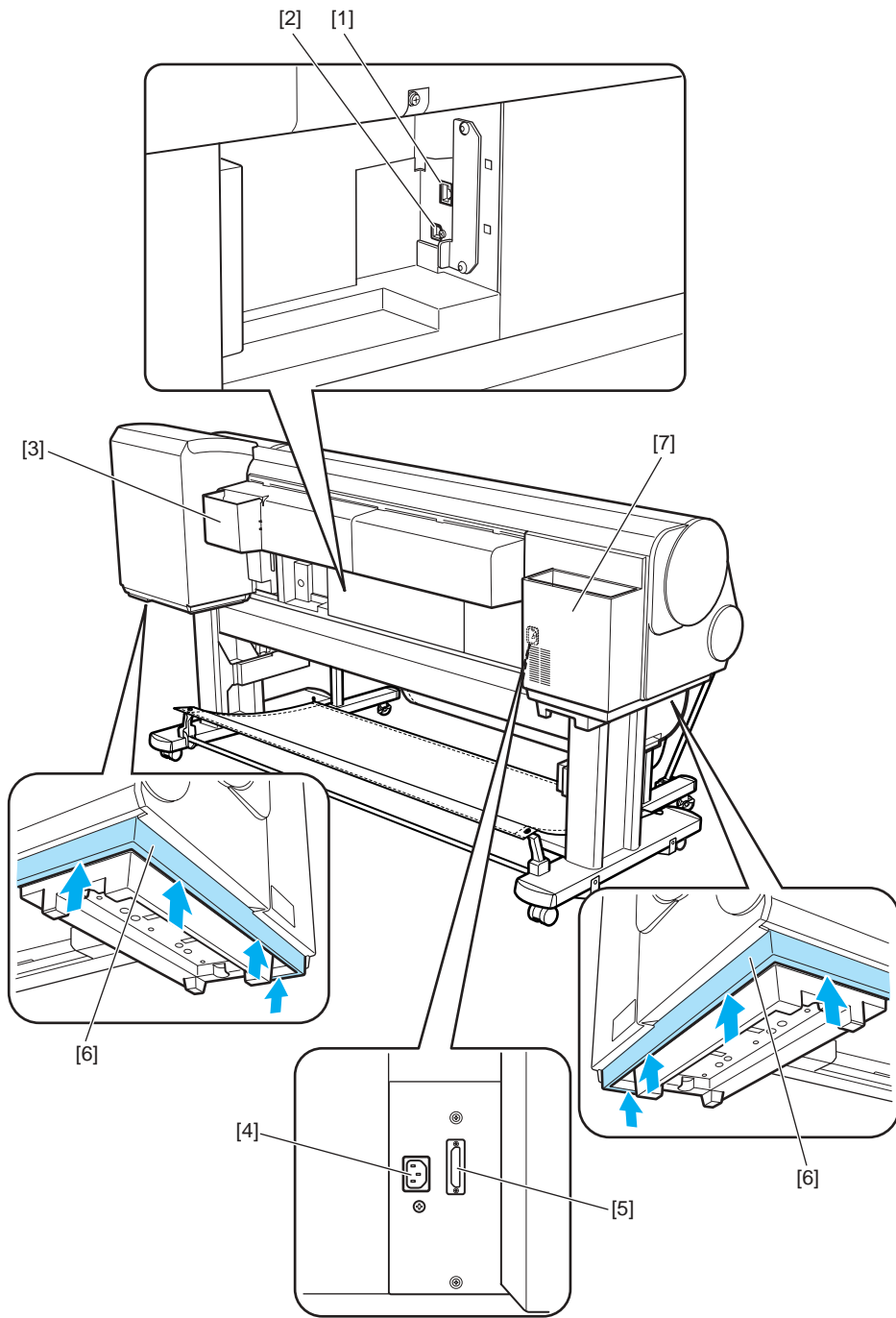
1.1.4 Product Overview

iPF825

This printer is a large-format printer that prints in a maximum width of 44 inches with high-speed photographic picture quality. This printer is a stand-mounted type printer and is capable of output to either roll media or cut sheet.



[1]	Upper Cover	F-1-7	
[2]	Ejection Guide	T-1-7	
[3]	Roll Holder Slot	[10]	Release Lever
[4]	Roll Holder	[11]	Maintenance Cartridge
[5]	Cut Sheet Protective Cloth	[12]	Carrying Handles
[6]	Paper Feed Slot	[13]	Maintenance Cartridge Cover
[7]	Holder Stopper	[14]	Stand
[8]	Ink Tank Cover	[15]	Stopper
[9]	Operation Panel	[16]	Lower Roll Unit
		[17]	Lower Roll Unit Lever



F-1-8
T-1-8

- [1] Ethernet Connector
- [2] USB Port
- [3] Manual Pocket
- [4] Power Supply Connector

- [5] Lower Roll Unit Connector
- [6] Carrying Handles
- [7] Accessory Box

1.2 Features

1.2.1 Features

iPF820

- Media pass in widths up to 44 inches (1117.6 mm).
- Large ink tanks save the need for their replacement.
- Uninterrupted printing from sub tanks.
- BK and MBK inks are loaded concurrently to eliminate the need for their replacement.
- Durability will be added by maintenance kit.
- Large LCD panel displays more information and makes operations easier.
- High resolutions of 2400 x 1200 dpi maximum, coupled with the exceptionally light-fast, water-proof and ozone-proof five-color inks of Y, M, C, BK and MBK, deliver high-quality photographic picture quality.
- USB2.0 Hi-speed interface and 10Base-T/100Base-TX in standard support of a TCP/IP network, plus optional support of IEEE1394.
- Barcodes printed on roll media make remaining roll media management possible.
- Borderless four-side printing support (roll media) removes laborious cutting work, easing the job of creating posters to a significant degree.
- High-speed printing with a 1-inch head for each color (1,280 nozzles), under bidirectional print control.
- Ink supply through tubing to a completely independent printhead and large-capacity ink tanks.
- Hard disk drive mounted for greater ease of job management and for driving on night time.

Functional enhancements new to this model include:

- Enhanced productivity
 - The product allows two roll medias to be loaded simultaneously, making it possible to mix different sizes or types of paper in a single print job or use two roll medias of the same paper size to fulfill bulk print needs.
 - Enhanced ease of operation
 - Ready for CAD drawings output on the HP-GL/2 and HP-RTL.
- The product comes with a wheeled output stacker to print lengthy materials or load bulk print jobs.

1.2.2 Features

iPF810

- Media pass in widths up to 44 inches (1117.6 mm).
- Large ink tanks save the need for their replacement.
- Uninterrupted printing from sub tanks.
- BK and MBK inks are loaded concurrently to eliminate the need for their replacement.
- Media take-up unit (option) is supported.
- Media take-up unit (option) can be mounted concurrently with a basket.
- Durability will be added by maintenance kit.
- Large LCD panel displays more information and makes operations easier.
- High resolutions of 2400 x 1200 dpi maximum, coupled with the exceptionally light-fast, water-proof and ozone-proof five-color inks of MBK, BK, C, M, and Y, deliver high-quality photographic picture quality.
- USB2.0 Hi-speed interface and 10Base-T/100Base-TX in standard support of a TCP/IP network, plus optional support of IEEE1394.
- Barcodes printed on roll media make remaining roll media management possible.
- Borderless four-side printing support (roll media) removes laborious cutting work, easing the job of creating posters to a significant degree.
- High-speed printing with a 1-inch head for each color (1,280 nozzles), under bidirectional print control.
- Ink supply through tubing to a completely independent printhead and large-capacity ink tanks.
- Hard disk drive mounted for greater ease of job management and for driving on night time.

Functional enhancements new to this model include:

- Enhanced ease of operation
 - Ready for CAD drawings output on the HP-GL/2 and HP-RTL.
- The product can be fitted with a wheeled output stacker as an option to print lengthy materials or load bulk print jobs.

1.2.3 Features

iPF825

- Media pass in widths up to 44 inches (1117.6 mm).
- Large ink tanks save the need for their replacement.
- Uninterrupted printing from sub tanks.
- BK and MBK inks are loaded concurrently to eliminate the need for their replacement.
- Durability will be added by maintenance kit.
- Large LCD panel displays more information and makes operations easier.
- High resolutions of 2400 x 1200 dpi maximum, coupled with the exceptionally light-fast, water-proof and ozone-proof five-color inks of Y, M, C, BK and MBK, deliver high-quality photographic picture quality.
- USB2.0 Hi-speed interface and 10Base-T/100Base-TX in standard support of a TCP/IP network.
- Barcodes printed on roll media make remaining roll media management possible.
- Borderless four-side printing support (roll media) removes laborious cutting work, easing the job of creating posters to a significant degree.
- High-speed printing with a 1-inch head for each color (1,280 nozzles), under bidirectional print control.
- Ink supply through tubing to a completely independent printhead and large-capacity ink tanks.
- Hard disk drive mounted for greater ease of job management and for driving on night time.
- The product allows two roll medias to be loaded simultaneously, making it possible to mix different sizes or types of paper in a single print job or use two roll medias of the same paper size to fulfill bulk print needs.
- Ready for CAD drawings output on the HP-GL/2 and HP-RTL.
- The product comes with a wheeled output stacker to print lengthy materials or load bulk print jobs.

Functional enhancements new to this model include:

- The processing ability of the printed data will enhance by increase of hard disk drive and memory capacity.

1.2.4 Features

iPF815

- Media pass in widths up to 44 inches (1117.6 mm).
- Large ink tanks save the need for their replacement.
- Uninterrupted printing from sub tanks.
- BK and MBK inks are loaded concurrently to eliminate the need for their replacement.

- Media take-up unit (option) is supported.
- Media take-up unit (option) can be mounted concurrently with a basket.
- Durability will be added by maintenance kit.
- Large LCD panel displays more information and makes operations easier.
- High resolutions of 2400 x 1200 dpi maximum, coupled with the exceptionally light-fast, water-proof and ozone-proof five-color inks of MBK, BK, C, M, and Y, deliver high-quality photographic picture quality.
- USB2.0 Hi-speed interface and 10Base-T/100Base-TX in standard support of a TCP/IP network.
- Barcodes printed on roll media make remaining roll media management possible.
- Borderless four-side printing support (roll media) removes laborious cutting work, easing the job of creating posters to a significant degree.
- High-speed printing with a 1-inch head for each color (1,280 nozzles), under bidirectional print control.
- Ink supply through tubing to a completely independent printhead and large-capacity ink tanks.
- Hard disk drive mounted for greater ease of job management and for driving on night time.
- Ready for CAD drawings output on the HP-GL/2 and HP-RTL.
- The product can be fitted with a wheeled output stacker as an option to print lengthy materials or load bulk print jobs.

Functional enhancements new to this model include:

The processing ability of the printed data will enhance by increase of hard disk drive and memory capacity.

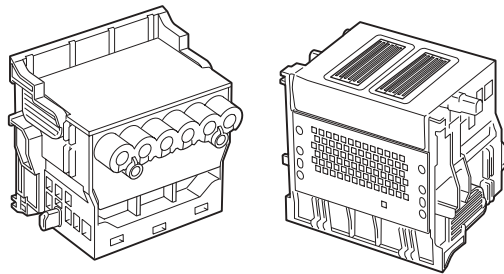
1.2.5 Printhead

iPF810 / iPF820 / iPF815 / iPF825

The printhead that mounts on the carriage is an integrated six-color disposable printhead.

It has 2,560 nozzles for each color, comprising two trays of 1,280 nozzles each arranged in a zigzag pattern.

If print quality remains unimproved even after a specified cleaning operation, replace the printhead. Replacement about one year after the date of initial unpacking is also recommended.



F-1-9

1.2.6 Ink Tank

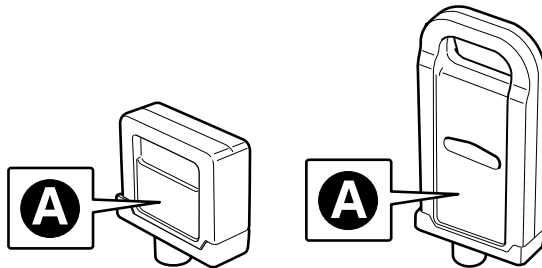
iPF810 / iPF820 / iPF815 / iPF825

Ink tanks are disposable.

An ink tank should be replaced when an ink tank replacement prompt message appears or when six months expire after the date of initial unpacking, whichever occurs earlier.

To install ink tanks, open the right cover of the printer. Ink tanks are furnished with a notch for preventing incorrect installation, which will allow the tanks to be installed at the position marked in the right color and nowhere else.

Ink tanks are available in the four dye ink colors of black, cyan, magenta and yellow and the pigment ink color of mat black.

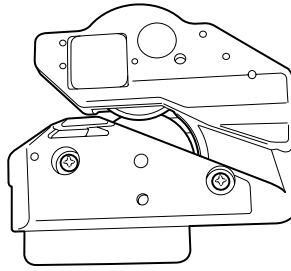


F-1-10

1.2.7 Cutter

iPF810 / iPF820 / iPF815 / iPF825

The cutter attached to the cutter unit is a round cutter.

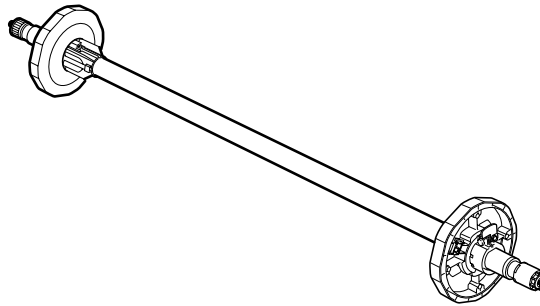


F-1-11

1.2.8 Roll Holder

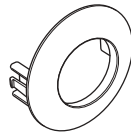
iPF810 / iPF820 / iPF815 / iPF825

The roller holder accepts paper tubes having inside diameters of both 2 and 3 inches. It is furnished with attachments for 2- and 3-inch diameter paper tubes. The roll holder clamps the paper tube of a roll not exceeding 150 mm in outside diameter from the inside.



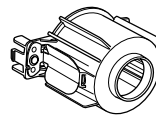
F-1-12

[2-inch paper tube attachment]



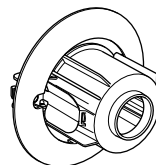
F-1-13

[3-inch paper tube attachment 1]



F-1-14

[3-inch paper tube attachment 2]

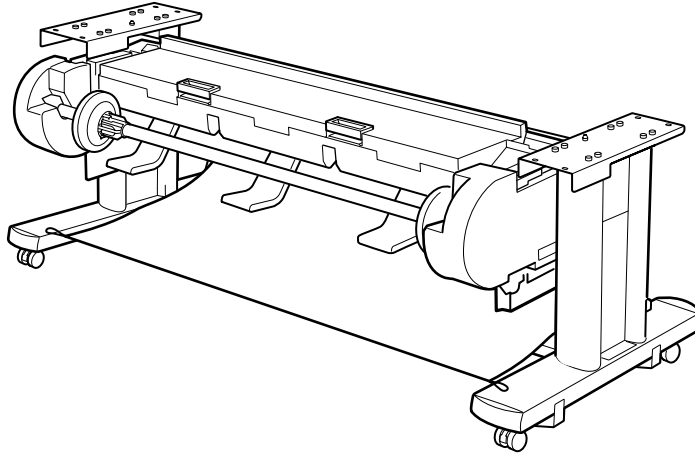


F-1-15

1.2.9 Stand

iPF820 / iPF825

It is a stand that puts the printer. Equipped with casters so that the printer can be easily moved.

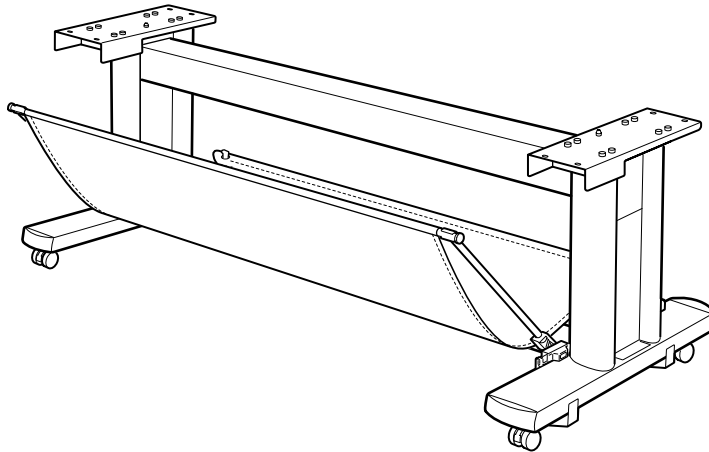


F-1-16

1.2.10 Stand

iPF810 / iPF815

It is a stand that puts the printer. Equipped with casters so that the printer can be easily moved.

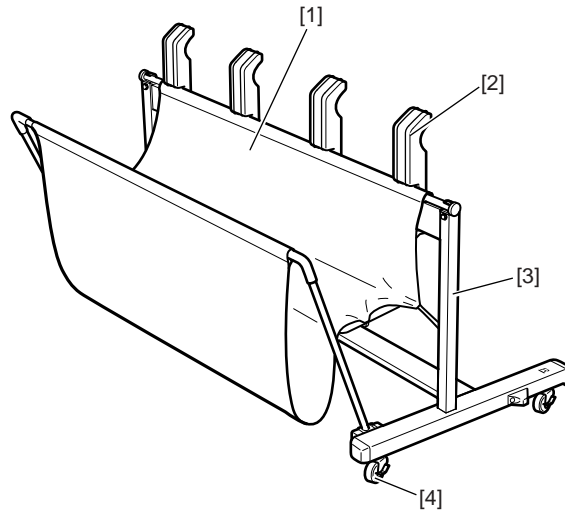


F-1-17

1.2.11 Wheeled Output Stacker

iPF810 / iPF820 / iPF815 / iPF825

This is an output stacker on wheels that is attached to the front of the printer.



F-1-18

T-1-9

- | | | | |
|-----|--------------------|-----|-------------------|
| [1] | Basket | [3] | Basket foot stand |
| [2] | Basket eject guide | [4] | Stopper |

1.2.12 Media Take-up Unit

iPF810 / iPF815

Media take-up unit

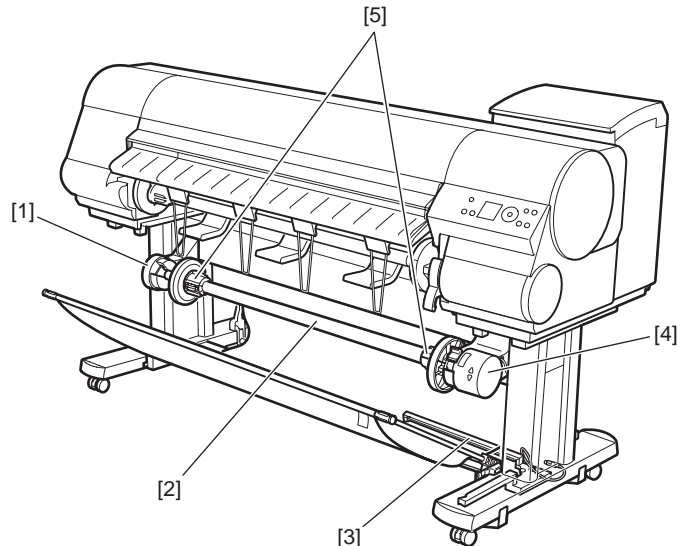
The media take-up unit takes up roll media, ranging in width from 17 to 44 inches, on a 2 or 3-inch paper tube in roll form after they are printed by the host computer. Taking up begins automatically when a sensor attached to the bottom of the stand detects a roll delivered after printing falling down due to the weight of a weight roller.

Rolls may also be manually taken up by using a button on the media take-up unit.

The media take-up unit has an overload protection feature to prevent accidents while taking up rolls. (The feature will shut down the motor automatically when an overload occurs while taking up a roll.)

Additional features of the media take-up unit include:

- An adapter may be installed to support a 3-inch paper tube.
- Rolls can be rewound by feeding them backward to visually check images.
- Weight rollers varying in length to suit specific roll widths ensure added take-up efficiency.
- The printer detects errors in the media take-up unit by itself.
- Linked with the printer's sleep mode.



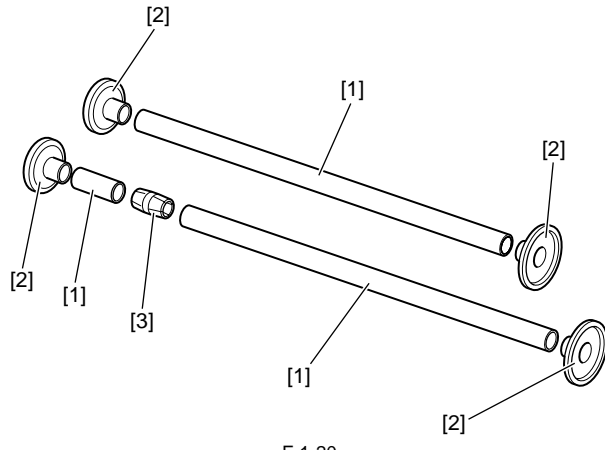
F-1-19

T-1-10

- | | | | |
|-----|-------------------------|-----|--------------------|
| [1] | Left media take-up unit | [4] | Media take-up unit |
| [2] | Rewind spool | [5] | 3-inch adapter |
| [3] | Media take-up sensor | | |

Weight

This weight consists of weight roll(7 pcs.)[1], weight flange(2 sets)[2] and weight joint[3].



F-1-20

1.2.13 Hard Disk Drive

iPF810 / iPF820

Each print job received from the host computer is saved to the 80GB hard disk drive(serial ATA connection) attached to the printer, so the printer can print the job repeatedly as needed, without having to wait for its retransmission from the host computer.

Saving print jobs will offer the following benefits:

- Eased computer workload

A print job may be automatically preserved to the hard disk when printing or may be preserved to the hard disk without printing. A print job preserved can be printed in as many copies as needed without having to use the host computer.

- Reprinting after error occurrence

If the printer encounters errors, such as paper out, while printing a print job, it can resume the print operation as soon as the errors are cleared, without needing its retransmission from the host computer.

- Higher print work efficiency

Print jobs can be printed selectively or in a specified number of copies without using a host computer. Multiple print jobs can be printed batched. Unattended print operations in the nighttime are also possible.

1.2.14 Hard Disk Drive

iPF815 / iPF825

Each print job received from the host computer is saved to the 160GB hard disk drive(serial ATA connection) attached to the printer, so the printer can print the job repeatedly as needed, without having to wait for its retransmission from the host computer.

Saving print jobs will offer the following benefits:

- Eased computer workload

A print job may be automatically preserved to the hard disk when printing or may be preserved to the hard disk without printing. A print job preserved can be printed in as many copies as needed without having to use the host computer.

- Reprinting after error occurrence

If the printer encounters errors, such as paper out, while printing a print job, it can resume the print operation as soon as the errors are cleared, without needing its retransmission from the host computer.

- Higher print work efficiency

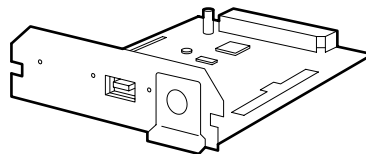
Print jobs can be printed selectively or in a specified number of copies without using a host computer. Multiple print jobs can be printed batched. Unattended print operations in the nighttime are also possible.

1.2.15 IEEE1394 (FireWire) Board

iPF810 / iPF820

IEEE1394 (FireWire) expansion board (option)

An interface board that provides an additional IEEE1394 (FireWire) port.



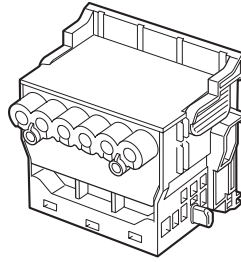
F-1-21

1.2.16 Consumables

iPF810 / iPF820 / iPF815 / iPF825

Printhead

The expendable printhead is the same as the one that comes with the printer.



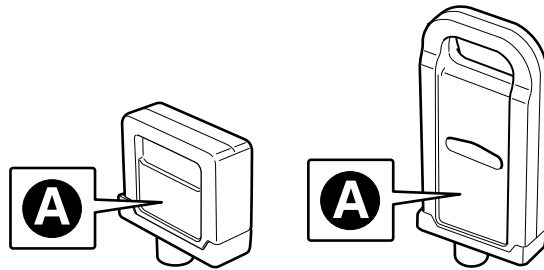
F-1-22

Ink tanks

Expendable ink tanks are available in five colors: mat black, black, cyan, magenta and yellow. Each is further available in two capacities: 300ml and 700ml.

All ink tanks are usable for six months after unpacking.

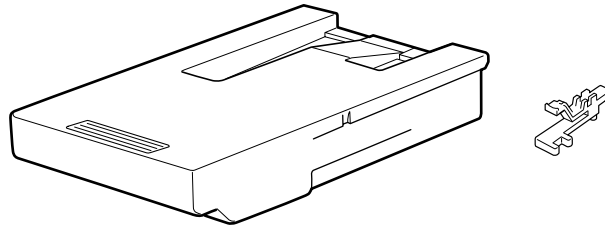
Ink tanks that can be used with this printer are labeled "A" on their side.



F-1-23

Maintenance cartridge

The expendable maintenance cartridge is the same as the one that comes with the printer.



F-1-24

1.3 Product Specifications

1.3.1 Product Specifications

iPF820

Type	Bubble jet large-sized paper printer (stand model)
Feeding system	Roll media: Upper roll/Lower roll (front loading) Cut sheet: Paper tray (front loading)
Feeding capacity	- Roll media 2 roll media Outer diameter of roll: 150 mm or less - Cut sheet 1 sheet
Delivery method	Forward delivery, face up
Sheet delivery capability	1 sheet (using the wheeled outout stacker of the stand) However, 20 sheets can be stacked according to the condition (A0/B0 size plain paper).
Cutter	Automatic cross-cutter (round blade)
Type of media	Plain Paper, Plain Paper (High Quality), Plain Paper (High Grade), Coated Paper, Heavyweight Coated Paper, Premium Matte Paper, Glossy Photo Paper, Semi-Glossy Photo Paper, Backlit Film, Backprint Film, Flame-Resistant Cloth, Fine Art Photo, Fine Art Heavyweight Photo, Fine Art Textured, Canvas Matte, Premium Coated Paper, Graphic Canvas, Durable Backlit Film, Durable Banner, Matt Coated Paper, Extra Matt Coated Paper, Opaque Paper, Hi Res Graphic Paper, Prem Art Paper Embossed, Prem Art Paper Smooth, Hi Res Barrier Paper, Scrim Banner, Uni Opaque Backlit Film, Roll-Up Film, Water Res Art Canvas, Adhesive Matt Vinyl Stretch
Supported thickness	0.07mm to 0.8mm
Media size (Roll media)	Width: 254mm (10") to 1118mm (44") Length: 203mm (8") to 18m (709") * Outer diameter of roll :150mm or less * The maximum amount of length may vary by the using operating system or the applications.
Media size (Cut sheet)	Width: 203mm (8") to 1118mm (44") Length: 203mm (8") to 1600mm (63")
Printable area (Roll media)	Internal area, excluding a 3-mm top, bottom and left and right margins. * The printable area may vary with each type of paper media used.
Printable area (Cut sheet)	Internal area, excluding a 3-mm top margin, a 23-mm bottom margin and 3-mm left and right margins. * The printable area may vary with each type of paper media used.
Printing recommendation area (Roll media)	Internal area, excluding a 20-mm top margin, a 5-mm bottom margin and 5-mm left and right margins.
Printing recommendation area (Cut sheet)	Internal area, excluding a 20-mm top margin, a 23-mm bottom margin and 5-mm left and right margins.
Borderless printing	* Roll media only width: 254mm(10"), 355.6mm(14"), 431.8mm(17"), 515mm, 594mm, 609.6mm(24"), 841mm, 914.4mm(36"), 1030mm, 1066.8mm(42")
Memory	384MB Increase of memory: none
Firmware	Flash ROM (update from USB or Ethernet, IEEE1394) - Printer description language GARO (Graphic Arts language with Raster Operation), HP-GL/2, HP-RTL
Hard disk drive	80GB (2.5inch, 5400rpm, S-ATA I/F)
Emulation	None
Interface	USB 2.0 Hi-Speed Network (10BASE-T/100BASE-TX) IEEE1394 (option)
Operation panel	LCD (160 X 128 dots), 12 keys, 5 LEDs - Panel language English - Message language English, German, French, Italian, Spanish, Chinese, Korean, Russian and Japanese
Printhead/Ink Tank type	Printhead and separate ink tanks
Printhead	PF-03 Structure: Integrated six-color assembly Number of nozzles: 2,560 for each color
Ink tank	PFI-301 BK/MBK/C/M/Y PFI-701 BK/MBK/C/M/Y Ink tank capacity: PFI-303 330 ml, PFI-703 700 ml
Detection functions (Cover system)	Cover open/closed detection: Yes Ink tank cover open/closed detection: Yes

Detection functions (Ink passage system)	Ink tank presence/absence detection: Yes Remaining ink level detection: Yes Maintenance cartridge presence/absence detection: Yes Used ink tank full detection: Yes Valve open/closed detection: Yes
Detection functions (Carriage system)	Printhead presence/absence detection: Yes Carriage position detection: Yes Carriage home position detection: Yes Printhead fixer lever open/closed detection: Yes Carriage temperature detection: Yes Printhead height detection: Yes Non-discharging nozzle detection: Yes Non-discharging nozzle backup feature: Yes Ambient temperature/humidity detection: Yes
Detection functions (Paper path system)	Paper presence/absence detection: Yes Paper width detection: Yes Skew detection: Yes Paper release lever position detection: Yes Remaining roll media detection: Yes Feed roller rotation detection: Yes Cutter position detection: Yes
Operating noise	Operating: Approx. 52dB (A) or less Standby: Approx. 35dB (A) or less
Operating environment	Temperature: 5 to 35 degrees centigrade Humidity: 10% to 90%RH
Print quality guaranteed environment	Temperature: 15 to 30 degrees centigrade Humidity: 10% to 80%RH
Power supply	100-240 VAC (50/60 Hz)
Power consumption (Maximum)	During printing: Max. 190 W
Power consumption	In power save (sleep) mode: 100-120 VAC : 5W or less (When IEEE1394 board installed, 10W or less) 220-240 VAC : 6W or less (When IEEE1394 board installed, 11W or less) During standby: 1 W or less
Printer unit dimensions (WxDxH)	1893mm x 1269mm x 1144mm (with stand and wheeled output stacker)
Weight	Approx. 147 kg (with stand and wheeled output stacker)

1.3.2 Product Specifications

iPF810

Type	Bubble jet large-sized paper printer (stand model)
Feeding system	Roll media: Manual (front loading) Cut sheet: Paper tray (front loading)
Feeding capacity	- Roll media 1 roll media/Outer diameter of roll: 150 mm or less - Cut sheet 1 sheet
Delivery method	Forward delivery, face up
Sheet delivery capability	1 sheet (using the output stacker of the stand)
Cutter	Automatic cross-cutter (round blade)
Type of media	Plain Paper, Plain Paper (High Quality), Plain Paper (High Grade), Coated Paper, Heavyweight Coated Paper, Premium Matte Paper, Glossy Photo Paper, Semi-Glossy Photo Paper, Backlit Film, Backprint Film, Flame-Resistant Cloth, Fine Art Photo, Fine Art Heavyweight Photo, Fine Art Textured, Canvas Matte, Premium Coated Paper, Graphic Canvas, Durable Backlit Film, Durable Banner, Matt Coated Paper, Extra Matt Coated Paper, Opaque Paper, Hi Res Graphic Paper, Prem Art Paper Embossed, Prem Art Paper Smooth, Hi Res Barrier Paper, Scrim Banner, Uni Opaque Backlit Film, Roll-Up Film, Water Res Art Canvas, Adhesive Matt Vinyl Stretch
Supported thickness	0.07mm to 0.8mm
Media size (Roll media)	Width: 254mm (10") to 1118mm (44") Length: 203mm (8") to 18m (709") * Outer diameter of roll :150mm or less * The maximum amount of length may vary by the using operating system or the applications.
Media size (Cut sheet)	Width: 203mm (8") to 1118mm (44") Length: 203mm (8") to 1600mm (63")
Printable area (Roll media)	Internal area, excluding a 3-mm top, bottom and left and right margins. * The printable area may vary with each type of paper media used.
Printable area (Cut sheet)	Internal area, excluding a 3-mm top margin, a 23-mm bottom margin and 3-mm left and right margins. * The printable area may vary with each type of paper media used.
Printing recommendation area (Roll media)	Internal area, excluding a 20-mm top margin, a 5-mm bottom margin and 5-mm left and right margins.

Printing recommendation area (Cut sheet)	Internal area, excluding a 20-mm top margin, a 23-mm bottom margin and 5-mm left and right margins.
Borderless printing	* Roll media only width: 254mm(10"), 355.6mm(14"), 431.8mm(17"), 515mm, 594mm, 609.6mm(24"), 841mm, 914.4mm(36"), 1030mm, 1066.8mm(42")
Memory	384MB Increase of memory: none
Firmware	Flash ROM (update from USB or Ethernet, IEEE1394) - Printer description language GARO (Graphic Arts language with Raster Operation), HP-GL/2, HP-RTL
Hard disk drive	80GB (2.5inch, 5400rpm, S-ATA I/F)
Emulation	None
Interface	USB 2.0 Hi-Speed Network (10BASE-T/100BASE-TX) IEEE1394 (option)
Operation panel	LCD (160 X 128 dots), 12 keys, 5 LEDs - Panel language English - Message language English, German, French, Italian, Spanish, Chinese, Korean, Russian and Japanese
Printhead/Ink Tank type	Printhead and separate ink tanks
Printhead	PF-03 Structure: Integrated six-color assembly Number of nozzles: 2,560 for each color
Ink tank	PFI-301 BK/MBK/C/M/Y PFI-701 BK/MBK/C/M/Y Ink tank capacity: PFI-303 330 ml, PFI-703 700 ml
Detection functions (Cover system)	Cover open/closed detection: Yes Ink tank cover open/closed detection: Yes
Detection functions (Ink passage system)	Ink tank presence/absence detection: Yes Remaining ink level detection: Yes Maintenance cartridge presence/absence detection: Yes Used ink tank full detection: Yes Valve open/closed detection: Yes
Detection functions (Carriage system)	Printhead presence/absence detection: Yes Carriage position detection: Yes Carriage home position detection: Yes Printhead fixer lever open/closed detection: Yes Carriage temperature detection: Yes Printhead height detection: Yes Non-discharging nozzle detection: Yes Non-discharging nozzle backup feature: Yes Ambient temperature/humidity detection: Yes
Detection functions (Paper path system)	Paper presence/absence detection: Yes Paper width detection: Yes Skew detection: Yes Paper release lever position detection: Yes Remaining roll media detection: Yes Feed roller rotation detection: Yes Cutter position detection: Yes
Operating noise	Operating: Approx. 52dB (A) or less Standby: Approx. 35dB (A) or less
Operating environment	Temperature: 5 to 35 degrees centigrade Humidity: 10% to 90%RH
Print quality guaranteed environment	Temperature: 15 to 30 degrees centigrade Humidity: 10% to 80%RH
Power supply	100-240 VAC (50/60 Hz)
Power consumption (Maximum)	During printing: Max. 190 W
Power consumption	In power save (sleep) mode: 100-120 VAC : 5W or less (When IEEE1394 board installed, 10W or less) 220-240 VAC : 6W or less (When IEEE1394 board installed, 11W or less) During standby: 1 W or less
Printer unit dimensions (WxDxH)	1893mm x 975mm x 1144mm (with stand and output stacker)
Weight	Approx. 120 kg (with stand and output stacker)

1.3.3 Product Specifications

iPF825

Type	Bubble jet large-sized paper printer (stand model)
Feeding system	Roll media: Upper roll/Lower roll (front loading) Cut sheet: Paper tray (front loading)

Feeding capacity	- Roll media 2 roll media Outer diameter of roll: 150 mm or less - Cut sheet 1 sheet
Delivery method	Forward delivery, face up
Sheet delivery capability	1 sheet (using the wheeled outout stacker of the stand) However, 20 sheets can be stacked according to the condition (A0/B0 size plain paper).
Cutter	Automatic cross-cutter (round blade)
Type of media	Plain Paper, Plain Paper (High Quality), Plain Paper (High Grade), Coated Paper, Heavyweight Coated Paper, Premium Matte Paper, Glossy Photo Paper, Semi-Glossy Photo Paper, Backlit Film, Backprint Film, Flame-Resistant Cloth, Fine Art Photo, Fine Art Heavyweight Photo, Fine Art Textured, Canvas Matte, Premium Coated Paper, Graphic Canvas, Durable Backlit Film, Durable Banner, Matt Coated Paper, Extra Matt Coated Paper, Opaque Paper, Hi Res Graphic Paper, Prem Art Paper Embossed, Prem Art Paper Smooth, Hi Res Barrier Paper, Scrim Banner, Uni Opaque Backlit Film, Roll-Up Film, Water Res Art Canvas, Adhesive Matt Vinyl Stretch
Supported thickness	0.07mm to 0.8mm
Media size (Roll media)	Width: 254mm (10") to 1118mm (44") Length: 203mm (8") to 18m (709") * Outer diameter of roll :150mm or less * The maximum amount of length may vary by the using operating system or the applications.
Media size (Cut sheet)	Width: 203mm (8") to 1118mm (44") Length: 203mm (8") to 1600mm (63")
Printable area (Roll media)	Internal area, excluding a 3-mm top, bottom and left and right margins. * The printable area may vary with each type of paper media used.
Printable area (Cut sheet)	Internal area, excluding a 3-mm top margin, a 23-mm bottom margin and 3-mm left and right margins. * The printable area may vary with each type of paper media used.
Printing recommendation area (Roll media)	Internal area, excluding a 20-mm top margin, a 5-mm bottom margin and 5-mm left and right margins.
Printing recommendation area (Cut sheet)	Internal area, excluding a 20-mm top margin, a 23-mm bottom margin and 5-mm left and right margins.
Borderless printing	* Roll media only width: 254mm(10"), 355.6mm(14"), 431.8mm(17"), 515mm, 594mm, 609.6mm(24"), 841mm, 914.4mm(36"), 1030mm, 1066.8mm(42")
Memory	32GB Increase of memory: none
Firmware	Flash ROM (update from USB or Ethernet) - Printer description language GARO (Graphic Arts language with Raster Operation), HP-GL/2, HP-RTL
Hard disk drive	160GB (2.5inch, 5400rpm, S-ATA I/F)
Emulation	None
Interface	USB 2.0 Hi-Speed Network (10BASE-T/100BASE-TX)
Operation panel	LCD (160 X 128 dots), 12 keys, 5 LEDs - Panel language English - Message language English, German, French, Italian, Spanish, Chinese, Korean, Russian and Japanese
Printhead/Ink Tank type	Printhead and separate ink tanks
Printhead	PF-03 Structure: Integrated six-color assembly Number of nozzles: 2,560 for each color
Ink tank	PFI-301 BK/MBK/C/M/Y PFI-701 BK/MBK/C/M/Y Ink tank capacity: PFI-303 330 ml, PFI-703 700 ml
Detection functions (Cover system)	Cover open/closed detection: Yes Ink tank cover open/closed detection: Yes
Detection functions (Ink passage system)	Ink tank presence/absence detection: Yes Remaining ink level detection: Yes Maintenance cartridge presence/absence detection: Yes Used ink tank full detection: Yes Valve open/closed detection: Yes
Detection functions (Carriage system)	Printhead presence/absence detection: Yes Carriage position detection: Yes Carriage home position detection: Yes Printhead fixer lever open/closed detection: Yes Carriage temperature detection: Yes Printhead height detection: Yes Non-discharging nozzle detection: Yes Non-discharging nozzle backup feature: Yes Ambient temperature/humidity detection: Yes

Detection functions (Paper path system)	Paper presence/absence detection: Yes Paper width detection: Yes Skew detection: Yes Paper release lever position detection: Yes Remaining roll media detection: Yes Feed roller rotation detection: Yes Cutter position detection: Yes
Operating noise	Operating: Approx. 52dB (A) or less Standby: Approx. 35dB (A) or less
Operating environment	Temperature: 5 to 35 degrees centigrade Humidity: 10% to 90%RH
Print quality guaranteed environment	Temperature: 15 to 30 degrees centigrade Humidity: 10% to 80%RH
Power supply	100-240 VAC (50/60 Hz)
Power consumption (Maximum)	During printing: Max. 190 W
Power consumption	In power save (sleep) mode: 100-120 VAC : 5W or less 220-240 VAC : 6W or less During standby: 1 W or less
Printer unit dimensions (WxDxH)	1893mm x 1269mm x 1144mm (with stand and wheeled output stacker)
Weight	Approx. 147 kg (with stand and wheeled output stacker)

1.3.4 Product Specifications

iPF815

Type	Bubble jet large-sized paper printer (stand model)
Feeding system	Roll media: Manual (front loading) Cut sheet: Paper tray (front loading)
Feeding capacity	- Roll media 1 roll media/Outer diameter of roll: 150 mm or less - Cut sheet 1 sheet
Delivery method	Forward delivery, face up
Sheet delivery capability	1 sheet (using the output stacker of the stand)
Cutter	Automatic cross-cutter (round blade)
Type of media	Plain Paper, Plain Paper (High Quality), Plain Paper (High Grade), Coated Paper, Heavyweight Coated Paper, Premium Matte Paper, Glossy Photo Paper, Semi-Glossy Photo Paper, Backlit Film, Backprint Film, Flame-Resistant Cloth, Fine Art Photo, Fine Art Heavyweight Photo, Fine Art Textured, Canvas Matte, Premium Coated Paper, Graphic Canvas, Durable Backlit Film, Durable Banner, Matt Coated Paper, Extra Matt Coated Paper, Opaque Paper, Hi Res Graphic Paper, Prem Art Paper Embossed, Prem Art Paper Smooth, Hi Res Barrier Paper, Scrim Banner, Uni Opaque Backlit Film, Roll-Up Film, Water Res Art Canvas, Adhesive Matt Vinyl Stretch
Supported thickness	0.07mm to 0.8mm
Media size (Roll media)	Width: 254mm (10") to 1118mm (44") Length: 203mm (8") to 18m (709") * Outer diameter of roll :150mm or less * The maximum amount of length may vary by the using operating system or the applications.
Media size (Cut sheet)	Width: 203mm (8") to 1118mm (44") Length: 203mm (8") to 1600mm (63")
Printable area (Roll media)	Internal area, excluding a 3-mm top, bottom and left and right margins. * The printable area may vary with each type of paper media used.
Printable area (Cut sheet)	Internal area, excluding a 3-mm top margin, a 23-mm bottom margin and 3-mm left and right margins. * The printable area may vary with each type of paper media used.
Printing recommendation area (Roll media)	Internal area, excluding a 20-mm top margin, a 5-mm bottom margin and 5-mm left and right margins.
Printing recommendation area (Cut sheet)	Internal area, excluding a 20-mm top margin, a 23-mm bottom margin and 5-mm left and right margins.
Borderless printing	* Roll media only width: 254mm(10"), 355.6mm(14"), 431.8mm(17"), 515mm, 594mm, 609.6mm(24"), 841mm, 914.4mm(36"), 1030mm, 1066.8mm(42")
Memory	32GB Increase of memory: none
Firmware	Flash ROM (update from USB or Ethernet) - Printer description language GARO (Graphic Arts language with Raster Operation), HP-GL/2, HP-RTL
Hard disk drive	160GB (2.5inch, 5400rpm, S-ATA I/F)
Emulation	None

Interface	USB 2.0 Hi-Speed Network (10BASE-T/100BASE-TX)
Operation panel	LCD (160 X 128 dots), 12 keys, 5 LEDs - Panel language English - Message language English, German, French, Italian, Spanish, Chinese, Korean, Russian and Japanese
Printhead/Ink Tank type	Printhead and separate ink tanks
Printhead	PF-03 Structure: Integrated six-color assembly Number of nozzles: 2,560 for each color
Ink tank	PFI-301 BK/MBK/C/M/Y PFI-701 BK/MBK/C/M/Y Ink tank capacity: PFI-303 330 ml, PFI-703 700 ml
Detection functions (Cover system)	Cover open/closed detection: Yes Ink tank cover open/closed detection: Yes
Detection functions (Ink passage system)	Ink tank presence/absence detection: Yes Remaining ink level detection: Yes Maintenance cartridge presence/absence detection: Yes Used ink tank full detection: Yes Valve open/closed detection: Yes
Detection functions (Carriage system)	Printhead presence/absence detection: Yes Carriage position detection: Yes Carriage home position detection: Yes Printhead fixer lever open/closed detection: Yes Carriage temperature detection: Yes Printhead height detection: Yes Non-discharging nozzle detection: Yes Non-discharging nozzle backup feature: Yes Ambient temperature/humidity detection: Yes
Detection functions (Paper path system)	Paper presence/absence detection: Yes Paper width detection: Yes Skew detection: Yes Paper release lever position detection: Yes Remaining roll media detection: Yes Feed roller rotation detection: Yes Cutter position detection: Yes
Operating noise	Operating: Approx. 52dB (A) or less Standby: Approx. 35dB (A) or less
Operating environment	Temperature: 5 to 35 degrees centigrade Humidity: 10% to 90%RH
Print quality guaranteed environment	Temperature: 15 to 30 degrees centigrade Humidity: 10% to 80%RH
Power supply	100-240 VAC (50/60 Hz)
Power consumption (Maximum)	During printing: Max. 190 W
Power consumption	In power save (sleep) mode: 100-120 VAC : 5W or less 220-240 VAC : 6W or less During standby: 1 W or less
Printer unit dimensions (WxDxH)	1893mm x 975mm x 1144mm (with stand and output stacker)
Weight	Approx. 120 kg (with stand and output stacker)

1.4 Detailed Specifications

1.4.1 Print Speed and Direction

iPF810 / iPF820 / iPF815 / iPF825

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Media Type		Print Priority	Print Quality	Print-Pass	Printing Direction	Print Resolution (dpi)	Used BK ink
Plain Paper/ Recycled Paper	Plain Paper/Recycled Paper	Office Document	Standard	4	Bi-directional	1200x1200	MBK
		Line Document/ Text	Draft	2	Bi-directional	1200x1200	MBK
			Standard	4	Bi-directional	1200x1200	MBK
		Image	Draft	2	Bi-directional	1200x1200	MBK
			Standard	4	Bi-directional	1200x1200	MBK
			High	8	Bi-directional	2400x1200	MBK
	Plain Paper (High Quality)	Office Document	Standard	4	Bi-directional	1200x1200	MBK
		Line Document/ Text	Draft	2	Bi-directional	1200x1200	MBK
			Standard	4	Bi-directional	1200x1200	MBK
		Image	Draft	2	Bi-directional	1200x1200	MBK
			Standard	4	Bi-directional	1200x1200	MBK
			High	8	Bi-directional	2400x1200	MBK
	Plain Paper (High Grade)	Office Document	Standard	4	Bi-directional	1200x1200	MBK
		Line Document/ Text	Draft	2	Bi-directional	1200x1200	MBK
			Standard	4	Bi-directional	1200x1200	MBK
		Image	Draft	2	Bi-directional	1200x1200	MBK
			Standard	4	Bi-directional	1200x1200	MBK
			High	8	Bi-directional	2400x1200	MBK
	Economy Bond Paper	Office Document	Standard	4	Bi-directional	1200x1200	MBK
		Line Document/ Text	Draft	2	Bi-directional	1200x1200	MBK
			Standard	4	Bi-directional	1200x1200	MBK
		Image	Draft	2	Bi-directional	1200x1200	MBK
			Standard	4	Bi-directional	1200x1200	MBK
			High	8	Bi-directional	2400x1200	MBK
Universal Bond Paper	Office Document	Standard	4	Bi-directional	1200x1200	MBK	
	Line Document/ Text	Draft	2	Bi-directional	1200x1200	MBK	
		Standard	4	Bi-directional	1200x1200	MBK	
	Image	Draft	2	Bi-directional	1200x1200	MBK	
		Standard	4	Bi-directional	1200x1200	MBK	
		High	8	Bi-directional	2400x1200	MBK	
Standard Paper 1569B 80g	Office Document	Standard	4	Bi-directional	1200x1200	MBK	
	Line Document/ Text	Draft	2	Bi-directional	1200x1200	MBK	
		Standard	4	Bi-directional	1200x1200	MBK	
	Image	Draft	2	Bi-directional	1200x1200	MBK	
		Standard	4	Bi-directional	1200x1200	MBK	
		High	8	Bi-directional	2400x1200	MBK	
Standard Paper 1570B 90g	Office Document	Standard	4	Bi-directional	1200x1200	MBK	
	Line Document/ Text	Draft	2	Bi-directional	1200x1200	MBK	
		Standard	4	Bi-directional	1200x1200	MBK	
	Image	Draft	2	Bi-directional	1200x1200	MBK	
		Standard	4	Bi-directional	1200x1200	MBK	
		High	8	Bi-directional	2400x1200	MBK	

Media Type		Print Priority	Print Quality	Print-Pass	Printing Direction	Print Resolution (dpi)	Used BK ink
Coated Paper	Coated Paper	Image	Standard	4	Bi-directional	1200x1200	MBK
			High	8	Bi-directional	2400x1200	MBK
			Highest	12	Bi-directional	2400x1200	MBK
	Heavyweight Coated Paper	Image	Standard	4	Bi-directional	1200x1200	MBK
			High	8	Bi-directional	2400x1200	MBK
			Highest	12	Bi-directional	2400x1200	MBK
	Premium Matte Paper	Image	Standard	6	Bi-directional	1200x1200	MBK
			High	8	Bi-directional	2400x1200	MBK
			Highest	16	Bi-directional	2400x1200	MBK
	Extra Heavyweight Coated Paper	Image	Standard	4	Bi-directional	1200x1200	MBK
			High	8	Bi-directional	2400x1200	MBK
			Highest	12	Bi-directional	2400x1200	MBK
	Recycled Coated Paper	Image	Standard	4	Bi-directional	1200x1200	MBK
			High	8	Bi-directional	2400x1200	MBK
			Highest	12	Bi-directional	2400x1200	MBK
	Colored Coated Paper	Image	Standard	4	Bi-directional	1200x1200	MBK
			High	8	Bi-directional	2400x1200	MBK
	Premium Coated Paper	Image	Standard	4	Bi-directional	1200x1200	MBK
			High	8	Bi-directional	2400x1200	MBK
			Highest	12	Bi-directional	2400x1200	MBK
	LightWeight Coated Paper J80270 90g	Image	Standard	4	Bi-directional	1200x1200	MBK
			High	8	Bi-directional	2400x1200	MBK
			Highest	12	Bi-directional	2400x1200	MBK
	High Resolution Barrier Paper 180g	Image	Standard	4	Bi-directional	1200x1200	MBK
			High	8	Bi-directional	2400x1200	MBK
			Highest	12	Bi-directional	2400x1200	MBK
	Matt Coated Paper 9171 120g	Image	Standard	4	Bi-directional	1200x1200	MBK
			High	8	Bi-directional	2400x1200	MBK
			Highest	12	Bi-directional	2400x1200	MBK
	Extra Matt Coated Paper 7215 180g	Image	Standard	4	Bi-directional	1200x1200	MBK
High			8	Bi-directional	2400x1200	MBK	
Highest			12	Bi-directional	2400x1200	MBK	
Opaque Paper White 120g	Image	Standard	4	Bi-directional	1200x1200	MBK	
		High	8	Bi-directional	2400x1200	MBK	
		Highest	12	Bi-directional	2400x1200	MBK	
Matt Coated Paper 140g	Image	Standard	4	Bi-directional	1200x1200	MBK	
		High	8	Bi-directional	2400x1200	MBK	
		Highest	12	Bi-directional	2400x1200	MBK	
Photo Realistic Paper 210g	Image	Standard	4	Bi-directional	1200x1200	MBK	
		High	8	Bi-directional	2400x1200	MBK	
		Highest	12	Bi-directional	2400x1200	MBK	
LightWeight Coated Paper J80270 90g	Image	Standard	4	Bi-directional	1200x1200	MBK	
		High	8	Bi-directional	2400x1200	MBK	
		Highest	12	Bi-directional	2400x1200	MBK	

Media Type		Print Priority	Print Quality	Print-Pass	Printing Direction	Print Resolution (dpi)	Used BK ink
Photo Paper	Glossy Photo Paper	Image	Standard	6	Bi-directional	1200x1200	PBK
			High	8	Bi-directional	2400x1200	PBK
			Highest	16	Bi-directional	2400x1200	PBK
	Semi-Glossy Photo Paper	Image	Standard	6	Bi-directional	1200x1200	PBK
			High	8	Bi-directional	2400x1200	PBK
			Highest	16	Bi-directional	2400x1200	PBK
	Heavyweight Glossy Photo Paper 2	Image	Standard	6	Bi-directional	1200x1200	PBK
			High	8	Bi-directional	2400x1200	PBK
			Highest	16	Bi-directional	2400x1200	PBK
	Heavywght SemiGlos Photo Paper 2	Image	Standard	6	Bi-directional	1200x1200	PBK
			High	8	Bi-directional	2400x1200	PBK
			Highest	16	Bi-directional	2400x1200	PBK
	Poster Semi-Glossy Photo Paper	Image	Standard	6	Bi-directional	1200x1200	PBK
			High	8	Bi-directional	2400x1200	PBK
			Highest	16	Bi-directional	2400x1200	PBK
	Premium RC Photo Luster , 10 mil	Image	Standard	6	Bi-directional	1200x1200	PBK
			High	8	Bi-directional	2400x1200	PBK
			Highest	16	Bi-directional	2400x1200	PBK
	Instant Dry Papers Glossy 200g	Image	Standard	6	Bi-directional	1200x1200	PBK
			High	8	Bi-directional	2400x1200	PBK
			Highest	16	Bi-directional	2400x1200	PBK
	Instant Dry Papers Satin 200g	Image	Standard	6	Bi-directional	1200x1200	PBK
			High	8	Bi-directional	2400x1200	PBK
			Highest	16	Bi-directional	2400x1200	PBK
	Photo Paper High Glossy 250g	Image	Standard	6	Bi-directional	1200x1200	PBK
			High	8	Bi-directional	2400x1200	PBK
			Highest	16	Bi-directional	2400x1200	PBK
Photo Paper Semi Matt 250g	Image	Standard	6	Bi-directional	1200x1200	PBK	
		High	8	Bi-directional	2400x1200	PBK	
		Highest	16	Bi-directional	2400x1200	PBK	
Photo Paper Satin 240g	Image	Standard	6	Bi-directional	1200x1200	PBK	
		High	8	Bi-directional	2400x1200	PBK	
		Highest	16	Bi-directional	2400x1200	PBK	
Photo Paper Pearl 260g	Image	Standard	6	Bi-directional	1200x1200	PBK	
		High	8	Bi-directional	2400x1200	PBK	
		Highest	16	Bi-directional	2400x1200	PBK	

Media Type		Print Priority	Print Quality	Print-Pass	Printing Direction	Print Resolution (dpi)	Used BK ink
Art Paper	Fine Art Photo	Image	Standard	6	Bi-directional	1200x1200	MBK
			High	8	Bi-directional	2400x1200	MBK
			Highest	16	Bi-directional	2400x1200	MBK
	Fine Art Heavyweight Photo	Image	Standard	6	Bi-directional	1200x1200	MBK
			High	8	Bi-directional	2400x1200	MBK
			Highest	16	Bi-directional	2400x1200	MBK
	Fine Art Textured	Image	Standard	6	Bi-directional	1200x1200	MBK
			High	8	Bi-directional	2400x1200	MBK
			Highest	16	Bi-directional	2400x1200	MBK
	Canvas Matte	Image	Standard	6	Bi-directional	1200x1200	MBK
			High	8	Bi-directional	2400x1200	MBK
			Highest	16	Bi-directional	2400x1200	MBK
	Fine Art Block Print	Image	Standard	6	Bi-directional	1200x1200	MBK
			High	8	Bi-directional	2400x1200	MBK
			Highest	16	Bi-directional	2400x1200	MBK
	Fine Art Watercolor	Image	Standard	6	Bi-directional	1200x1200	MBK
			High	8	Bi-directional	2400x1200	MBK
			Highest	16	Bi-directional	2400x1200	MBK
	Japanese Paper Washi	Image	Standard	6	Bi-directional	1200x1200	MBK
			High	8	Bi-directional	2400x1200	MBK
			Highest	16	Bi-directional	2400x1200	MBK
	Graphic Matte Canvas	Image	Standard	6	Bi-directional	1200x1200	MBK
			High	8	Bi-directional	2400x1200	MBK
			Highest	16	Bi-directional	2400x1200	MBK
Art Paper Smooth 225g	Image	Standard	6	Bi-directional	1200x1200	MBK	
		High	8	Bi-directional	2400x1200	MBK	
		Highest	16	Bi-directional	2400x1200	MBK	
Art Paper Embossed 225g	Image	Standard	6	Bi-directional	1200x1200	MBK	
		High	8	Bi-directional	2400x1200	MBK	
		Highest	16	Bi-directional	2400x1200	MBK	
Art Paper Extra Smooth 250g	Image	Standard	6	Bi-directional	1200x1200	MBK	
		High	8	Bi-directional	2400x1200	MBK	
		Highest	16	Bi-directional	2400x1200	MBK	
Water Resistant Paper Art Canvas	Image	Standard	6	Bi-directional	1200x1200	MBK	
		High	8	Bi-directional	2400x1200	MBK	
		Highest	16	Bi-directional	2400x1200	MBK	
Proofing Paper	Proofing Paper	Image	Standard	6	Bi-directional	1200x1200	PBK
			High	8	Bi-directional	2400x1200	PBK
			Highest	16	Bi-directional	2400x1200	PBK
	Professional Proof and Photo Glossy 195g	Image	Standard	6	Bi-directional	1200x1200	PBK
			High	8	Bi-directional	2400x1200	PBK
			Highest	16	Bi-directional	2400x1200	PBK
	Professional Proof and Photo Semiglossy 195g	Image	Standard	6	Bi-directional	1200x1200	PBK
			High	8	Bi-directional	2400x1200	PBK
			Highest	16	Bi-directional	2400x1200	PBK
	Professional Proof and Photo Semigloss 255g	Image	Standard	6	Bi-directional	1200x1200	PBK
			High	8	Bi-directional	2400x1200	PBK
			Highest	16	Bi-directional	2400x1200	PBK
Film Paper	Backlit Film	Image	Standard	8	Bi-directional	1200x1200	MBK
			High	12	Bi-directional	2400x1200	MBK
			Highest	16	Bi-directional	2400x1200	MBK
	Backprint Film	Image	Standard	8	Bi-directional	1200x1200	PBK
			High	12	Bi-directional	2400x1200	PBK
			Highest	16	Bi-directional	2400x1200	PBK
	Outdoor Backlit (Durable Backlit Film/ 9578)	Image	Standard	8	Bi-directional	1200x1200	MBK
			High	12	Bi-directional	2400x1200	MBK
			Highest	16	Bi-directional	2400x1200	MBK
	Pop-up Gloss Film	Image	Standard	8	Bi-directional	2400x1200	PBK
			High	16	Bi-directional	2400x1200	PBK
	Universal Opaque White Film	Image	Standard	8	Bi-directional	2400x1200	PBK
			High	16	Bi-directional	2400x1200	PBK

Media Type		Print Priority	Print Quality	Print-Pass	Printing Direction	Print Resolution (dpi)	Used BK ink
Matt Film Paper	Scrim Banner 370g	Image	Standard	6	Bi-directional	1200x1200	MBK
			High	8	Bi-directional	2400x1200	MBK
			Highest	16	Bi-directional	2400x1200	MBK
	Adhesive Matt Stretch Vinyl	Image	Standard	6	Bi-directional	1200x1200	MBK
			High	8	Bi-directional	2400x1200	MBK
			Highest	16	Bi-directional	2400x1200	MBK
Thin Fabric Banner	Flame-Resistant Cloth	Image	Standard	6	Bi-directional	1200x1200	MBK
			High	8	Bi-directional	2400x1200	MBK
			Highest	16	Bi-directional	2400x1200	MBK
	Fabric Banner	Image	Standard	6	Bi-directional	1200x1200	MBK
			High	8	Bi-directional	2400x1200	MBK
			Highest	16	Bi-directional	2400x1200	MBK
	Thin Fabric Banner	Image	Standard	6	Bi-directional	1200x1200	MBK
			High	8	Bi-directional	2400x1200	MBK
			Highest	16	Bi-directional	2400x1200	MBK
Synthetic Paper	Synthetic Paper	Image	Standard	6	Bi-directional	1200x1200	MBK
			High	8	Bi-directional	2400x1200	MBK
			Highest	16	Bi-directional	2400x1200	MBK
	Adhesive Synthetic Paper	Image	Standard	6	Bi-directional	1200x1200	MBK
			High	8	Bi-directional	2400x1200	MBK
			Highest	16	Bi-directional	2400x1200	MBK
	Outdoor Polypropylene (Durable Banner)	Image	Standard	6	Bi-directional	1200x1200	MBK
			High	8	Bi-directional	2400x1200	MBK
			Highest	16	Bi-directional	2400x1200	MBK
Adhesive Matt Paper	High Resolution Graphic Paper Self ADH	Image	Standard	6	Bi-directional	1200x1200	MBK
			High	8	Bi-directional	2400x1200	MBK
			Highest	16	Bi-directional	2400x1200	MBK
CAD	CAD Tracing Paper	Line Document/ Text	Draft	2	Bi-directional	1200x1200	MBK
			Standard	4	Bi-directional	1200x1200	MBK
			High	8	Bi-directional	2400x1200	MBK
	CAD Clear Film	Line Document/ Text	Draft	2	Bi-directional	1200x1200	PBK
			Standard	4	Bi-directional	1200x1200	PBK
			High	8	Bi-directional	2400x1200	PBK
	CAD Translucent Matte Film	Line Document/ Text	Draft	2	Bi-directional	1200x1200	MBK
			Standard	4	Bi-directional	1200x1200	MBK
			High	8	Bi-directional	2400x1200	MBK

Media Type		Print Priority	Print Quality	Print-Pass	Printing Direction	Print Resolution (dpi)	Used BK ink
SPECIAL	SPECIAL 1	Image	Standard	6	Bi-directional	1200x1200	PBK
			High	8	Bi-directional	2400x1200	PBK
			Highest	16	Bi-directional	2400x1200	PBK
	SPECIAL 2	Image	Standard	6	Bi-directional	1200x1200	PBK
			High	8	Bi-directional	2400x1200	PBK
			Highest	16	Bi-directional	2400x1200	PBK
	SPECIAL 3	Image	Standard	6	Bi-directional	1200x1200	PBK
			High	8	Bi-directional	2400x1200	PBK
			Highest	16	Bi-directional	2400x1200	PBK
	SPECIAL 4	Image	Standard	6	Bi-directional	1200x1200	PBK
			High	8	Bi-directional	2400x1200	PBK
			Highest	16	Bi-directional	2400x1200	PBK
	SPECIAL 5	Image	Standard	6	Bi-directional	1200x1200	PBK
			High	8	Bi-directional	2400x1200	PBK
			Highest	16	Bi-directional	2400x1200	PBK
	SPECIAL 6	Image	Standard	6	Bi-directional	1200x1200	MBK
			High	8	Bi-directional	2400x1200	MBK
			Highest	16	Bi-directional	2400x1200	MBK
	SPECIAL 7	Image	Standard	6	Bi-directional	1200x1200	MBK
			High	8	Bi-directional	2400x1200	MBK
			Highest	16	Bi-directional	2400x1200	MBK
	SPECIAL 8	Image	Standard	6	Bi-directional	1200x1200	MBK
			High	8	Bi-directional	2400x1200	MBK
			Highest	16	Bi-directional	2400x1200	MBK
	SPECIAL 9	Image	Standard	6	Bi-directional	1200x1200	MBK
			High	8	Bi-directional	2400x1200	MBK
			Highest	16	Bi-directional	2400x1200	MBK
	SPECIAL 10	Image	Standard	6	Bi-directional	1200x1200	MBK
			High	8	Bi-directional	2400x1200	MBK
			Highest	16	Bi-directional	2400x1200	MBK

1.4.2 Interface Specifications

iPF815 / iPF825

a. USB (standard)

- (1) Interface type
USB 2.0 Hi-Speed (Full speed (12 Mbits/sec), High speed (480 Mbits/sec))
- (2) Data transfer system
Control transfer
Bulk transfer
- (3) Signal level
Compliant with the USB standard.
- (4) Interface cable
Twisted-pair shielded cable, 5.0 m max.
Compliant with the USB standard.
Wire materials: AWG No.28, data wire pair (AWF: American Wire Gauge)
AWG No.20 to No.28, power distribution wire pair
- (5) Interface connector
Printer side: Series B receptacle compliant with USB standard
Cable side: Series B plug compliant with USB standard

b. Network (standard)

- (1) Interface type
Interface compliant with IEEE802.3
- (2) Data transfer system
IEEE802.0 10Base-T, IEEE802.3u 100Base-TX/Auto-Negotiation, IEEE802.3ab 1000Base-T/Auto-Negotiation, IEEE802.3x Full Duplex
- (3) Interface cable
Category 5 (UTP or FTP) cable, 100 m or shorter
Compliant with ANSI/EIA/TIA-568A or ANSI/EIA/TIA-568B
- (4) Interface connector
Printer side: Compliant with IEEE802.3, ANSI X3.263, ISO/IEC60603-7
- (5) Protocol
IPX/SPX (Netware4.2(J), 5.1(J), 6.0(J)), SNMP, TCP/IP, AppleTalk, HTTP

1.4.3 Interface Specifications

iPF810 / iPF820

a. USB (standard)

- (1) Interface type
USB 2.0, Full speed (12 Mbits/sec), Hi-speed (480 Mbits/sec)
- (2) Data transfer system
Control transfer
Bulk transfer
- (3) Signal level
Compliant with the USB standard.
- (4) Interface cable
Twisted-pair shielded cable, 5.0 m max.
Compliant with the USB standard.
Wire materials: AWG No.28, data wire pair (AWF: American Wire Gauge)
AWG No.20 to No.28, power distribution wire pair
- (5) Interface connector
Printer side: Series B receptacle compliant with USB standard
Cable side: Series B plug compliant with USB standard

b. Network (standard)

- (1) Interface type
Interface compliant with IEEE802.3
- (2) Data transfer system
10Base-T/100Base-TX
- (3) Signal level
Input: Threshold
10Base-T: Max. +585 mV, Min. +300 mV
100Base-TX: Turn-on +1000 mV diff pk-pk, Turn-off +200 mV diff pk-pk
Output:
10Base-T: +2.2 V to +2.8 V
100Base-TX: +0.95 to +1.05 V
- (4) Interface cable
Category 5 (UTP or FTP) cable, 100 m or shorter
Compliant with ANSI/EIA/TIA-568A or ANSI/EIA/TIA-568B
- (5) Interface connector
Printer side: Compliant with IEEE802.3, ANSI X3.263, ISO/IEC60603-7

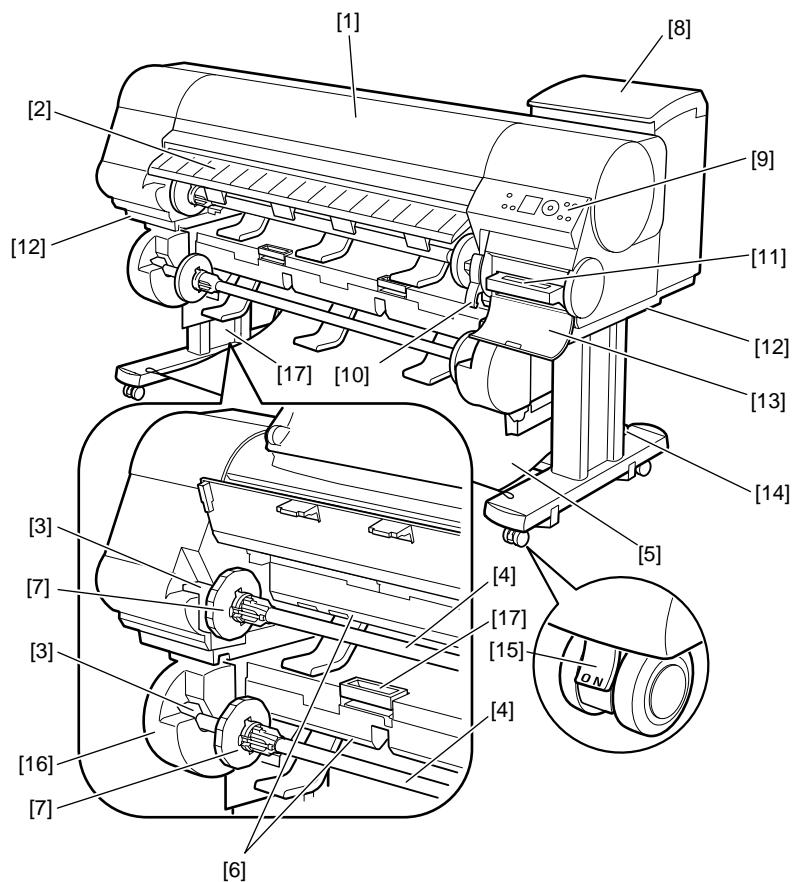
c. IEEE1394 (option)

- (1) Interface type
Interface compliant with IEEE1394-1995, P1394a (Version 2.0)
- (2) Data transfer system
Asynchronous transfer
- (3) Signal level
Input:
Differential input voltage:
During S100 settlement: +173 mV to +260 mV
During data reception: +142 mV to +260 mV
During S200 settlement: +171 mV to +262 mV
During data reception: +132 mV to +260 mV
During S400 settlement: +168 mV to +265 mV
During data reception: +118 mV to +260 mV
Output:
Differential output voltage: +172 mV to +265 mV
- (4) Interface cable
Twisted-pair shielded cable, 4.5 m max.
Compliant with IEEE1394-1995 standard or P1394a (Version 2.0) standard
- (5) Interface connector
Printer side: 6-pin connector (socket) compliant with IEEE1394 standard
Cable side: 6-pin connector (plug) compliant with IEEE1394 standard
Cable side: RJ-45 type compliant with ANSI/EIA/TIA-568A or ANSI/EIA/TIA-568B

1.5 Names and Functions of Components

1.5.1 Front

iPF820 / iPF825

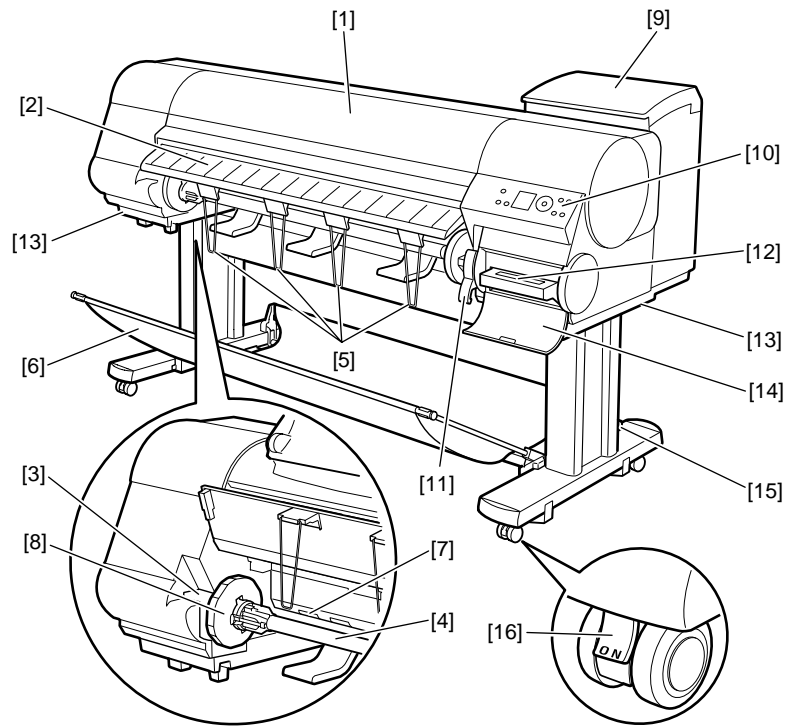


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- [1] Upper cover
Open this cover to mount a printhead, load paper or remove per jammed jams inside the printer.
- [2] Ejection guides
Allow printed material to be ejected. Open these guides to load rolls.
- [3] Roll Holder slot
Set the roll holder into this guide slot.
- [4] Roll holder
Set a roll on this holder.
- [5] Cut sheet protective cloth
A cloth tray that receives cut sheet as they are ejected.
- [6] Paper loading port
Insert a roll into this port to load.
- [7] Holder stopper
Use this part to secure a roll to the roll holder.
- [8] Ink tank cover
Open this cover to replace ink tanks.
- [9] Operation panel
Operate the printer or view its status from this panel.
- [10] Release lever
Releases the paper retainer. Pull up this lever to front to load paper.
- [11] Maintenance cartridge
Collects inks that have been used for maintenance services, such as head cleaning.
- [12] Carrying handle
The carrying handle is located on both left and right sides of the bottom. Allow a team of six persons to carry the printer.
- [13] Maintenance cartridge cover
Open this cover to replace the maintenance cartridge.
- [14] Stand
The base on which the printer mounts. The stand on wheels is easy to relocate.
- [15] Stoppers
Clamp the wheels of the stands. Be sure to release the stoppers when relocating the printer. Moving the printer with the stoppers locked could shave the wheels, leaving scratches on the floor surface.
- [16] Lower roll unit
The unit on which a second roll media is loaded.
- [17] Lower roll unit lever
Hold this lever to pull out the lower roll unit.

1.5.2 Front

iPF810 / iPF815

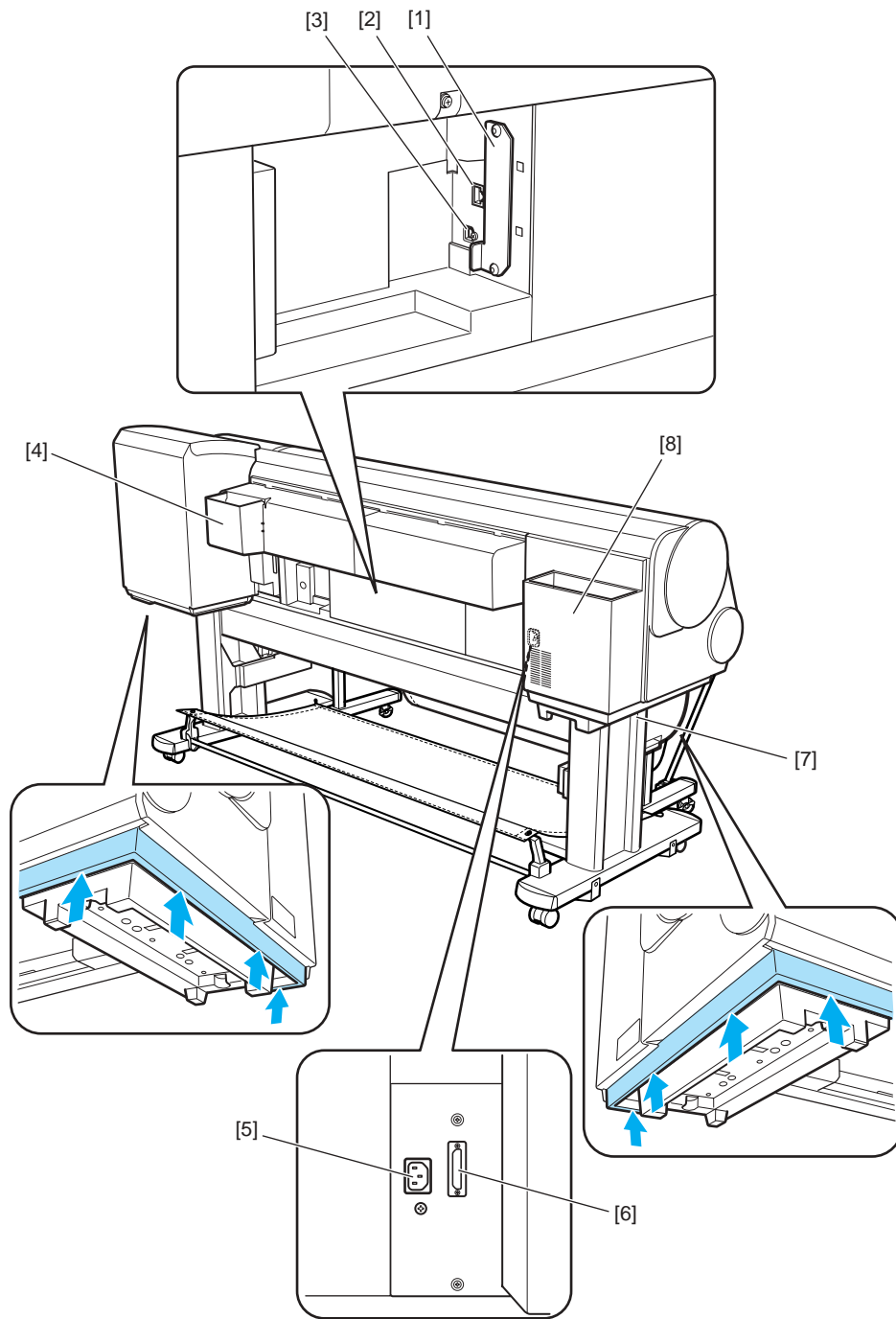


F-1-26

- [1] Upper cover
Open this cover to mount a printhead, load paper or remove per jammed jams inside the printer.
- [2] Ejection guides
Allow printed material to be ejected. Open these guides to load rolls.
- [3] Roll Holder slot
Set the roll holder into this guide slot.
- [4] Roll holder
Set a roll on this holder.
- [5] Ejection support
Prevents printed material from being caught on the roller holder or in the paper loading port.
- [6] Output stacker
A cloth tray that receives paper as it is ejected.
- [7] Paper loading port
Insert a roll into this port to load.
- [8] Holder stopper
Use this part to secure a roll to the roll holder.
- [9] Ink tank cover
Open this cover to replace ink tanks.
- [10] Operation panel
Operate the printer or view its status from this panel.
- [11] Release lever
Releases the paper retainer. Pull up this lever to front to load paper.
- [12] Maintenance cartridge
Collects inks that have been used for maintenance services, such as head cleaning.
- [13] Carrying handle
The carrying handle is located on both left and right sides of the bottom. Allow a team of six persons to carry the printer.
- [14] Maintenance cartridge cover
Open this cover to replace the maintenance cartridge.
- [15] Stand
The base on which the printer mounts. The stand on wheels is easy to relocate.
- [16] Stoppers
Clamp the wheels of the stands. Be sure to release the stoppers when relocating the printer. Moving the printer with the stoppers locked could shave the wheels, leaving scratches on the floor surface.

1.5.3 Rear

iPF820

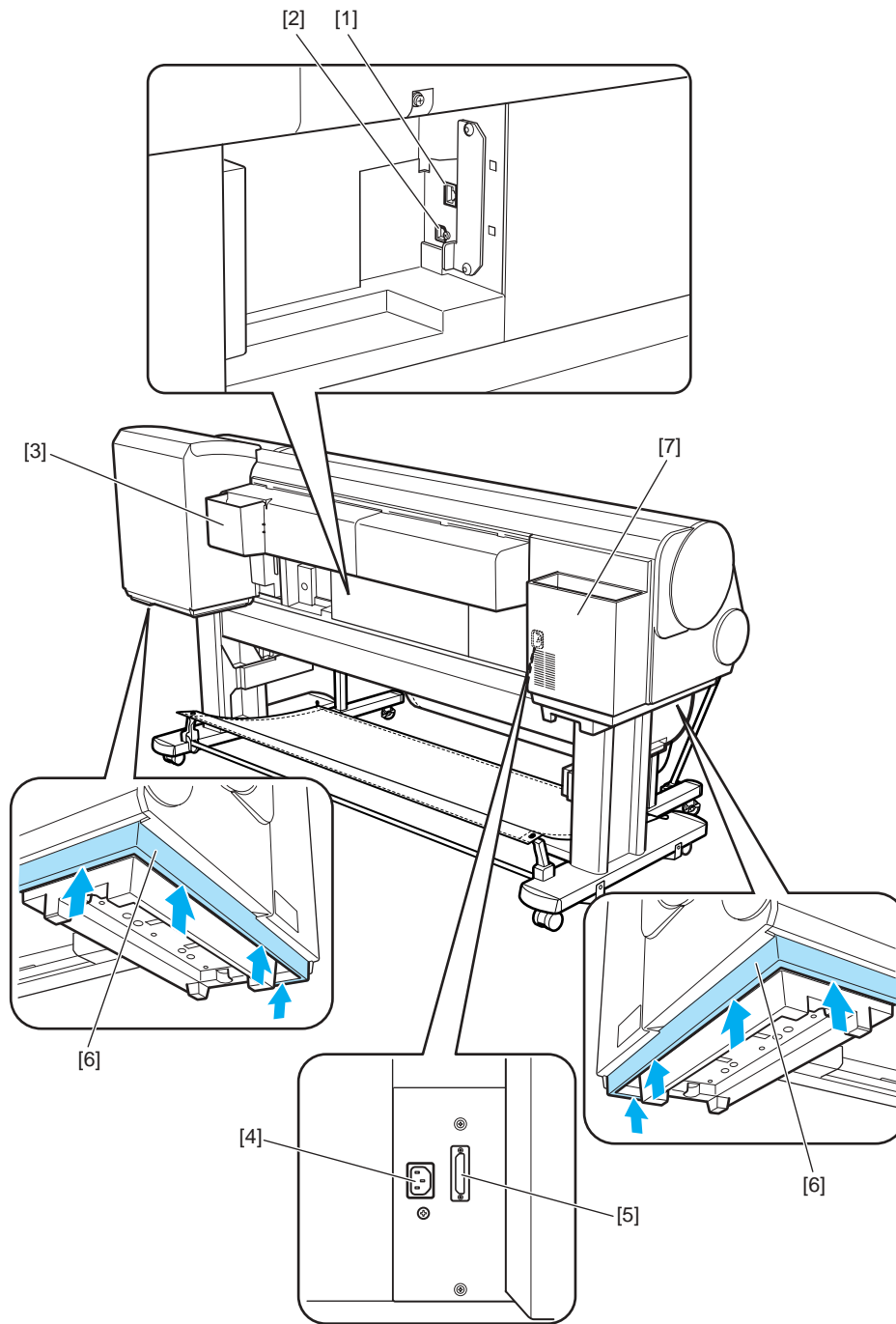


F-1-27

- [1] Expansion board slot
Mount an IEEE1394 (FireWire) Expansion board (option) into this slot.
- [2] Ethernet connector
Insert an Ethernet cable into this connector. A lamp will turn on if the Ethernet cable is connected properly and the printer is ready to communicate.
- [3] USB port
Insert a USB cable into this port. Hi-Speed USB-ready.
- [4] Manual pocket
Have the printer manual stowed in this pocket.
- [5] Power connector
Insert the power cord into this connector.
- [6] Lower roll unit connector
Insert the lower roll unit cable into this connector.
- [7] Carrying handle
The carrying handle is located on both left and right sides of the bottom. Allow a team of six persons to carry the printer.
- [8] Accessory pocket
Have assembly tools, roller holder attachments and so on stowed in this pocket.

1.5.4 Rear

iPF825

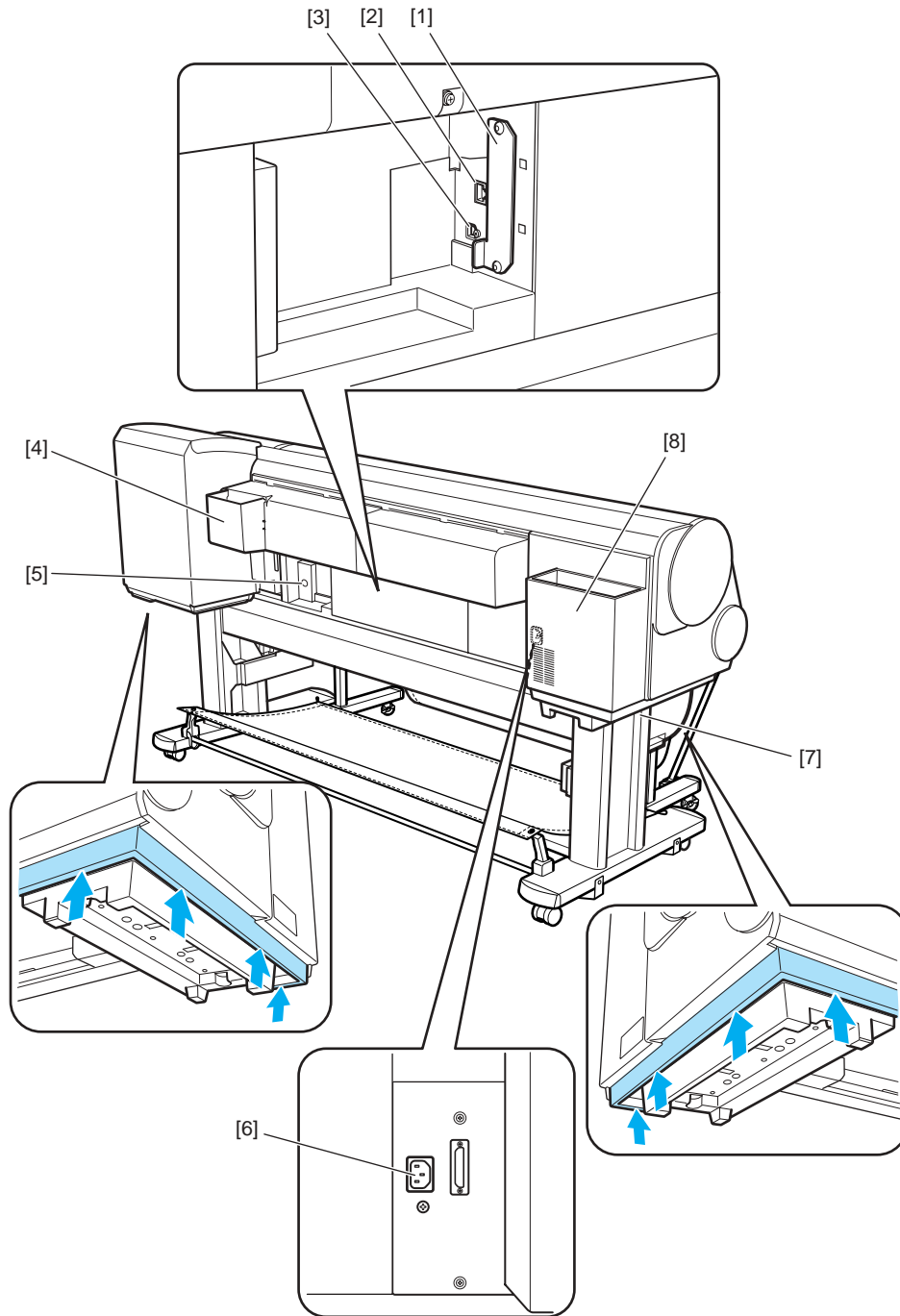


F-1-28

- [1] Ethernet connector
Insert an Ethernet cable into this connector. A lamp will turn on if the Ethernet cable is connected properly and the printer is ready to communicate.
- [2] USB port
Insert a USB cable into this port. Hi-Speed USB-ready.
- [3] Manual pocket
Have the printer manual stowed in this pocket.
- [4] Power connector
Insert the power cord into this connector.
- [5] Lower roll unit connector
Insert the lower roll unit cable into this connector.
- [6] Carrying handle
The carrying handle is located on both left and right sides of the bottom. Allow a team of six persons to carry the printer.
- [7] Accessory pocket
Have assembly tools, roller holder attachments and so on stowed in this pocket.

1.5.5 Rear

iPF810



F-1-29

[1] Expansion board slot

Mount an IEEE1394 (FireWire) Expansion board (option) into this slot.

[2] Ethernet connector

Insert an Ethernet cable into this connector. A lamp will turn on if the Ethernet cable is connected properly and the printer is ready to communicate.

[3] USB port

Insert a USB cable into this port. Hi-Speed USB-ready.

[4] Manual pocket

Have the printer manual stowed in this pocket.

[5] Media take-up unit connector

Insert the cable a media take-up unit (option) into this connector.

[6] Power Supply Connector

Connect the power cord to this connector.

[7] Carrying handle

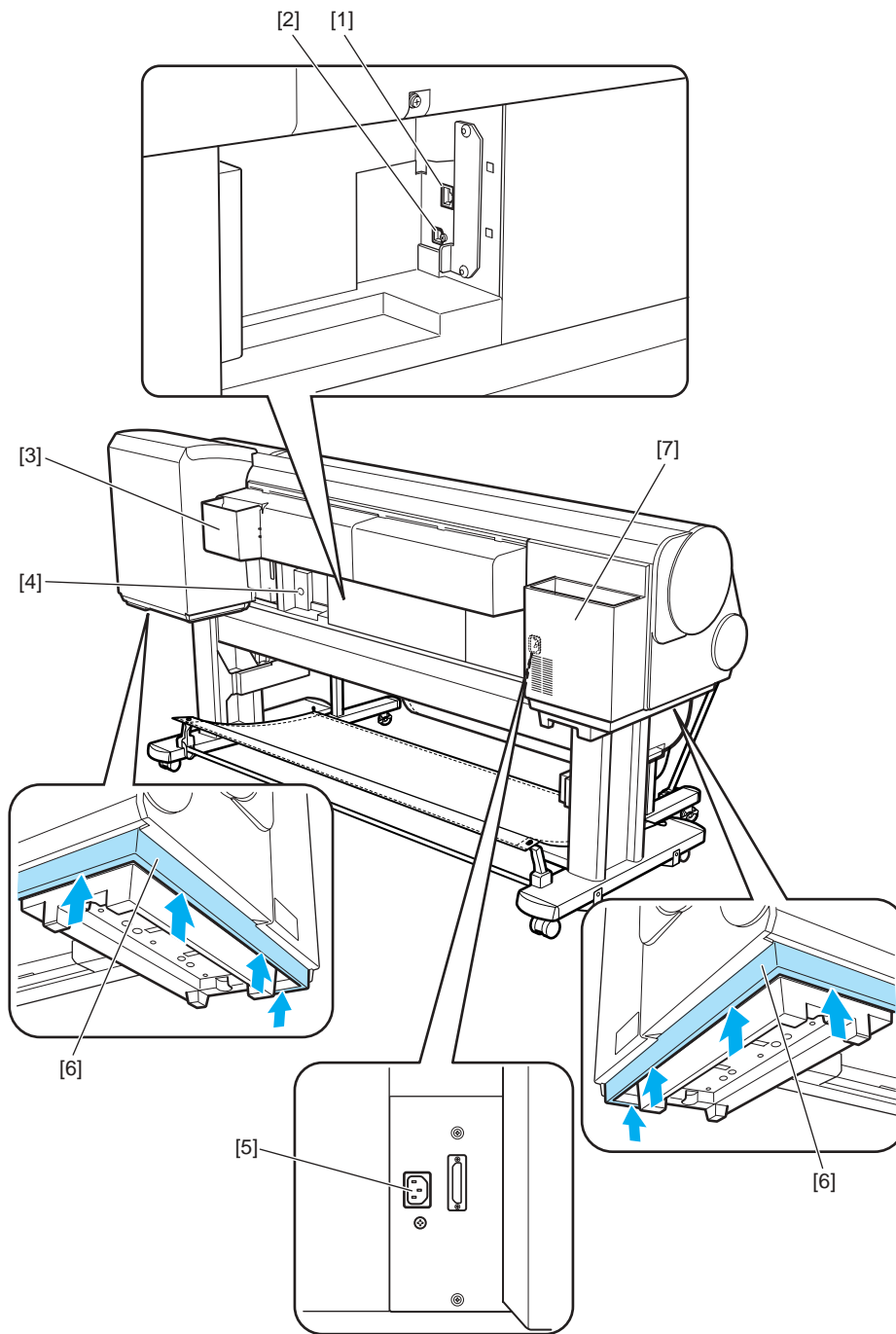
The carrying handle is located on both left and right sides of the bottom. Allow a team of six persons to carry the printer.

[8] Accessory pocket

Have assembly tools, roller holder attachments and so on stowed in this pocket.

1.5.6 Rear

iPF815

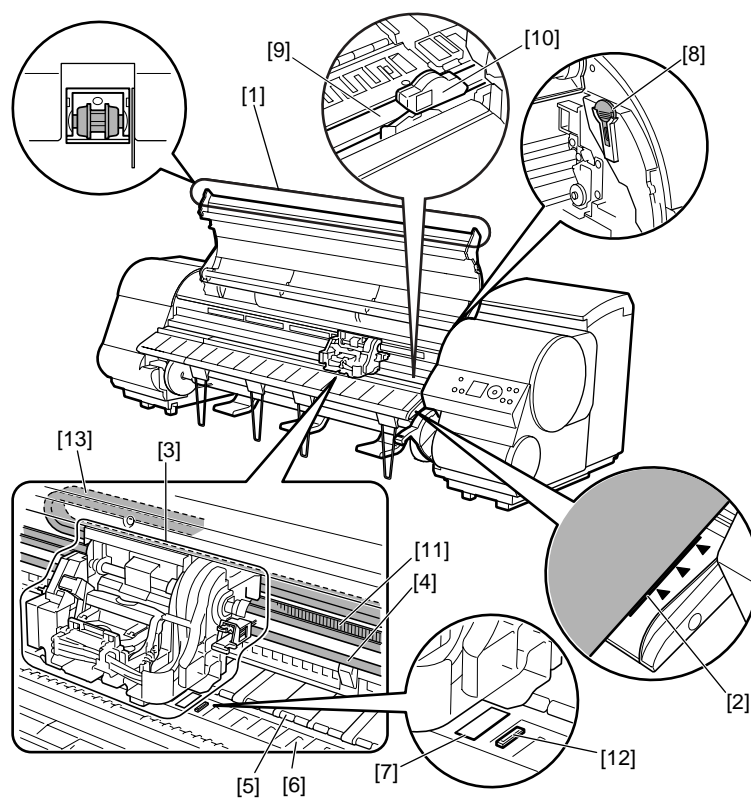


F-1-30

- [1] Ethernet connector
Insert an Ethernet cable into this connector. A lamp will turn on if the Ethernet cable is connected properly and the printer is ready to communicate.
- [2] USB port
Insert a USB cable into this port. Hi-Speed USB-ready.
- [3] Manual pocket
Have the printer manual stowed in this pocket.
- [4] Media take-up unit connector
Insert the cable a media take-up unit (option) into this connector.
- [5] Power Supply Connector
Connect the power cord to this connector.
- [6] Carrying handle
The carrying handle is located on both left and right sides of the bottom. Allow a team of six persons to carry the printer.
- [7] Accessory pocket
Have assembly tools, roller holder attachments and so on stowed in this pocket.

1.5.7 Top Cover (Inside)

iPF810 / iPF820 / iPF815 / iPF825

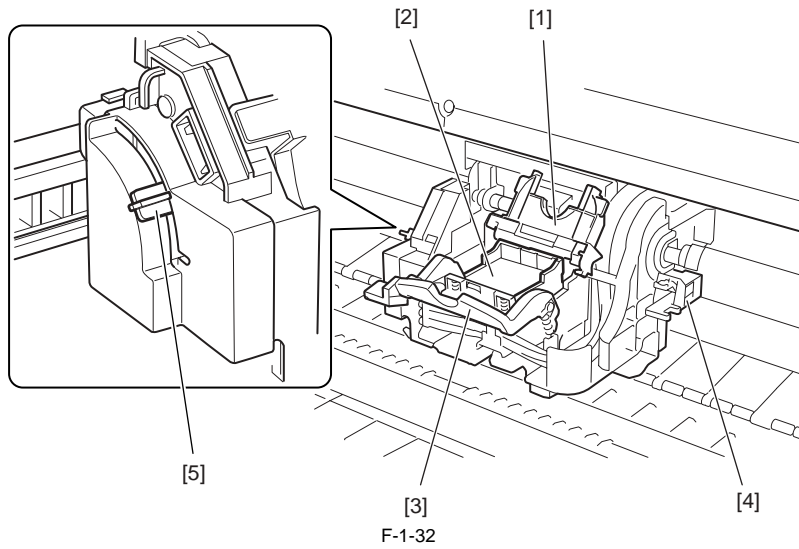


F-1-31

- [1] Spur
Allows paper to be ejected by suppressing its loosening.
- [2] Registration line
Load paper to fit to this line.
- [3] Carriage
Drives the printhead.
- [4] Carriage shaft
The part through which the carriage travels.
- [5] Pinch roller
A principal part for feeding paper, the paper retainer holds paper in position.
- [6] Platen
The part on which the printhead travels to perform printing. Suction holes on its surface keep the paper from loosening during travel.
- [7] Borderless printing ink reservoir
Receives inks overflowing the outside of the paper during borderless printing.
- [8] Cleaner brush
Sweeps off paper dust from the platen surface when cleaning the inside of the upper cover.
- [9] Cutter rail
The part the cutter unit traverses to cut paper.
- [10] Cutter unit
A round cutter for cutting paper automatically.
- [11] Linear scale
A principal part for detecting the location of the carriage. Be careful never to touch the linear scale when cleaning the inside of the upper cover or removing paper dust.
- [12] Switch
Set this switch to the circle position to perform borderless printing.
- [13] Ink tube stabilizer
Secures the ink tubes.

1.5.8 Carriage

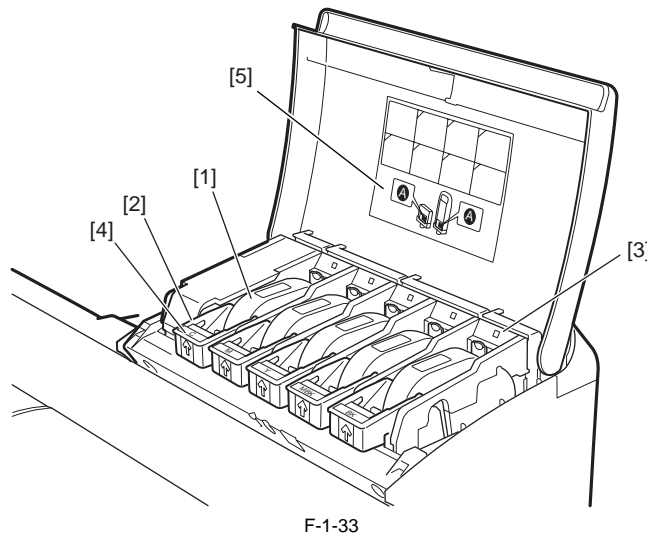
iPF810 / iPF820 / iPF815 / iPF825



- [1] Printhead fixer cover
Clamps the printhead.
- [2] Printhead
A principal part that houses nozzles.
- [3] Printhead fixer lever
Locks the printhead fixer cover.
- [4] Shaft cleaner
Keeps the carriage shaft clean.
- [5] Slant adjustment lever
Makes fine-adjustments with the misregistration of ruled lines printed.

1.5.9 Ink Tank Cover (Inside)

iPF810 / iPF820 / iPF815 / iPF825



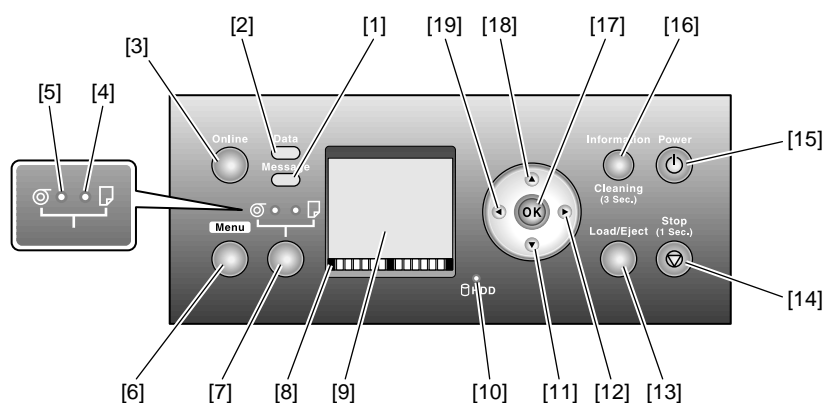
- [1] Ink tank
Ink-specific cartridge.
- [2] Ink tank lock lever
Locks and thus protects the ink tank. Move this lever up and down to replace the ink tank. To open, raise the stopper of the lever until it won't go farther and then push it to the front. To close, depress the stopper until it clicks.
- [3] Ink lamp (red)
Indicates the status of the ink tank when the ink tank cover is opened, as follows:
 - On
An ink tank is properly loaded.
 - Off
No ink tank is loaded, or the remaining ink sensor is disabled.
 - Slow blinking
Low on the inks.
 - Fast blinking
Inks are out.
- [4] Ink color label
Load an ink tank to meet the color and name of the label.
- [5] Ink set
Ink tanks that can be used with this printer are labeled [A] on their side, which is printed in a white letter enclosed in a black circle.

1.6 Basic Operation

1.6.1 Operation Panel

iPF810 / iPF820 / iPF815 / iPF825

This section explains the functions of the buttons and the meanings of the LEDs on the operation panel.



F-1-34

- [1] Message lamp
 - On: Indicates that a warning message is on display.
 - Blinking: Indicates that an error message is on display.
 - Off: The printer is normal or is turned off.
- [2] Data lamp
 - Blinking: Indicates that a print job is being received or processed if the printer is printing, or that a print job has paused or firmware data is being if the printer is not printing.
 - Off: No print job is available.
- [3] Online button
 - Toggles the printer mode between online and offline.
 - On: Online mode.
 - Blinking: Emerging from sleep mode.
 - Off: Offline mode.
- [4] Cut sheet lamp (green)
 - On: Either the paper tray or paper tray front loading port is selected as a paper source.
 - Off: Roll media are selected as a paper source.
- [5] Roll media lamp (green)
 - On: Roll media are selected as a paper source.
 - Off: Either the paper tray or paper tray front loading port is selected as a paper source.
- [6] Menu button
 - Displays the printer main menu.
- [7] Paper source button
 - Selects a paper source. Each time this button is pressed, the paper source toggles between roll media (roll media source) and cut sheet (paper tray or paper tray front loading port), with the paper source selector lamp illuminating.
- [8] Color labels
 - Represent ink tank colors in association with the remaining ink levels shown in the display.
- [9] Display
 - Displays the printer menu, status or messages.
- [10] HDD lamp (Green)
 - On: Indicates the printer is accessing the hard disk.
 - Off: Indicates the printer is not accessing the hard disk.
- [11] ▼ button
 - Press this button when the printer is in offline mode to manually feed roll media.
 - Press this button when the printer is in menu mode to view the next item or setting.
- [12] ► button
 - Press this button when the printer is in menu mode to view the menu at the lower level.
 - If [NEXT -->] on display, the guidance screen can be moved forward.
- [13] Load/Eject button
 - Guidance offers a visual clue to loading (replacing)/removing paper. Press this button when no paper is loaded to view instructions on how to load (replace) paper in the display; press the button when paper is loaded to view instructions on how to remove the paper.
- [14] Stop button
 - Press for longer than 1 second to cancel the job or ink drying process in progress.
 - If cut sheet loading guidance or the like is on display, hold this button for longer than 1 second to stop the guidance.
- [15] Power button
 - Turns the printer on and off.
- [16] Information button
 - Displays the printer submenu. Each time this button is pressed, information about the inks and paper is displayed.
 - Hold this button depressed for 3 seconds to execute printhead cleaning ([Head Cleaning A]).
- [17] OK button
 - Press to set or set or execute a menu choice when the printer is in menu mode.
 - Press this button in any other situation to transition to the next screen as directed by a message appearing in the display.
- [18] ▲ button
 - Press this button when the printer is in offline mode to manually feed roll media in the direction opposite to that of ejection.
 - Press this button when the printer is in menu mode to view the last item or setting.
- [19] ◀ button
 - Press this button when the printer is in menu mode to view the menu at the upper level.
 - The button is also used from one position to the next when entering a numeric value.
 - If [← STOP] is on display, the guidance screen can be paused.
 - If [← BACK] on display, the guidance screen can be moved backward.

1.6.2 Main Menu

iPF810

The printer has a Main menu which includes a menu related to maintenance such as adjustment of ink ejection position of each nozzle and head cleaning, a menu related to printing settings such as auto cutting and ink drying time, and a menu related to parameters such as a message language.

1. Main menu operations

a) How to enter the Main menu

To enter the Main menu, press the [Menu] button on the operation panel.

b) How to exit the Main menu

To exit the Main menu, press the [Online] button.

c) Buttons used with the Main menu

- Selecting menus and parameters: [◀] or [▶] button
- Going to the next lower-level menu: [▼] button
- Going to the next higher-level menu: [▲] button
- Determining a selected menu or parameter: [OK] button

2. Main Menu

The structure of the main menu is as follows.

T-1-12

First Level	Second Level	Third Level	Fourth Level	Fifth Level
[Paper Cut>(*1)	[No]*			
	[Yes]			
[Rep. Ink Tank]	[No]*			
	[Yes]			
[Head Cleaning]	[Head Cleaning A]*			
	[Head Cleaning B]			
[Auto Feed>(*13)	[No]*			
	[Yes]			
[Take-up Reel>(*10)	[Disable]*			
	[Enable]			
[Media Menu]	[Cut Sheet Type]	[Plain Paper>(*5)		
		[Plain Paper HQ>(*5)		
		[Plain Paper HG>(*5)		
		[Recycled Coated>(*5)		
		[Coated Paper>(*5)		
		[HW Coated>(*5)		
		[Ex HW Coated>(*5)		
		[Premium MatteP>(*5)		
		[Glossy Photo>(*5)		
		[Semi-Gl Photo>(*5)		
		[HW SemiGl Photo>(*5)		
		[HW SemiGl Photo2>(*5)		
		[Poster Semi-Gl>(*5)		
		[Syn. Paper>(*5)		
		[Adh. Syn. Paper>(*5)		
		[Backlit Film>(*5)		
		[Backprint Film>(*5)		
		[Flame-Res.Cloth>(*5)		
		[Fabric Banner>(*5)		
		[ThinFab.Banner2>(*5)		
		[Proofing Paper>(*5)		
		[News Proof 1>(*5)		
		[News Proof 2>(*5)		
		[FineArt Photo>(*5)		
		[FneArt HW Photo>(*5)		

First Level	Second Level	Third Level	Fourth Level	Fifth Level
[Media Menu]	[Cas Paper Type]	[FineArt Txtr](*5)		
		[FineArt Wrclr](*5)		
		[FineArtBlockP](*5)		
		[Canvas Matte2](*5)		
		[JPN Paper Washi](*5)		
		[Colored Coated](*5)		
		[CAD Trace Paper](*5)		
		[CAD Matte Film](*5)		
		[CAD Clear Film](*5)		
		[Special #] # Here, the number is 1 to 10 (*5)		
	[Roll Media Type]	[Plain Paper](*5)		
		[Plain Paper HQ](*5)		
		[Plain Paper HG](*5)		
		[Recycled Coated](*5)		
		[Coated Paper](*5)		
		[HW Coated](*5)		
		[Ex HW Coated](*5)		
		[Premium MatteP](*5)		
		[Glossy Photo](*5)		
		[Semi-Gl Photo](*5)		
		[HW Glossy Photo2](*5)		
		[HW SemiGl Photo2](*5)		
		[Poster Semi-Gl](*5)		
		[Syn. Paper](*5)		
		[Adh. Syn. Paper](*5)		
		[Backlit Film](*5)		
		[Backprint Film](*5)		
		[Flame-Res.Cloth](*5)		
		[Fabric Banner](*5)		
		[ThinFab.Banner2](*5)		

T-1-14

First Level	Second Level	Third Level	Fourth Level	Fifth Level
[Media Menu]	[Roll Media Type]	[Proofing Paper>(*5)		
		[News Proof 1>(*5)		
		[News Proof 2>(*5)		
		[FineArt Photo>(*5)		
		[FineArt HW Photo>(*5)		
		[FineArt Txtr>(*5)		
		[FineArt Wtrclr>(*5)		
		[FineArtBlockP>(*5)		
		[Canvas Matte2>(*5)		
		[JPN Paper Washi>(*5)		
		[Colored Coated>(*5)		
		[CAD Trace Paper>(*5)		
		[CAD Matte Film>(*5)		
		[CAD Clear Film>(*5)		
	[Special #] # Here, the number is 1 to 10 (*5)			
	[Roll Length Set>(*1, *2)	[### m>(*16)		
[### feet>(*16)				
[Chk Remain.Roll]	[Off]*			
	[On]			
[Paper Details]	(The paper type is displayed here.) (*5)	[Roll DryingTime]	[Off]	
			[30 sec.]	
			[1 min.]	
			[3 min.]	
			[5 min.]	
			[10 min.]	
			[30 min.]	
			[60 min.]	
		[Scan Wait Time]	[Off]	
			[1 sec.]	
			[3 sec.]	
			[5 sec.]	
			[7 sec.]	
			[9 sec.]	
		[Feed Priority]	[Automatic]*	
			[Band Joint]	
			[Print Length]	
		[Adjust Length A]	-0.70% - 0.00%* - 0.70%	
		[Adjust Length B]	-0.70% - 0.00%* - 0.70%	
		[Head Height]	[Automatic]*	
			[Highest]	
			[High]	
			[Standard]	
			[Low]	
		[Lowest]		

First Level	Second Level	Third Level	Fourth Level	Fifth Level	Sixth Level	
[Paper Details]	(The paper type is displayed here.) (*5)	[Skew Check Lv.]	[Standard]			
			[Loose]			
			[Off]			
		[VacuumStrngth]	[Automatic]*			
			[Strongest]			
			[Strong]			
			[Standard]			
			[Weak]			
			[Weakest]			
		[Width Detection]	[Off]			
			[On]			
		[NearEnd RollMrgn]	[3mm]			
			[20mm]			
		[Cut Speed]	[Fast]			
			[Standard]			
			[Slow]			
		[Trim Edge First]	[Automatic]			
			[Off]			
			[On]			
		[Cutting Mode]	[Automatic]			
[Eject]						
[Manual]						
[Bordless Margin]	[Automatic]					
	[Fixed]					
[CutDustReduct.]	[Off]					
	[On]					
[NearEnd Sht Mrgn]	[3mm]					
	[20mm]					
[Return Defaults]	[No]					
	[Yes]					
[Job Management]	[Print Job]	[Job List]	(Choose a print job)	[Delete]		
			[Preempt Jobs]			
	[Stored Job]	[Mailbox List]	(Enter a password if one has been set.)	[Job List]		[Print]
				[Delete]		
				[Print Job List]		[No]
	[Job Log]	(Choose from information about the latest three print jobs.)		[Document Name]		
				[User Name]		
				[Page Count]		
				[Job Status]		[OK]
						[CANCELED]
[Print Start Time]				[yyyy/mm/dd hh:mm]		
[Print End Time]				[yyyy/mm/dd hh:mm]		
[Print Time]				[xxx sec.]		
[Print Size]				[xxxxxxxxsq.mm]		
[Media Type]						
[Interface]	[USB]					
	[Network]					
	[IEEE1394]					
[Ink Consumed]	[xx.x ml]					
[HDD Information]	[HDDSpace]: xx.xGB					

T-1-16

First Level	Second Level	Third Level	Fourth Level	Fifth Level
[GL2 Settings]	[Color Mode]	[Monochrome]		
		[Color(CAD)1]		
		[Color(CAD)2]		
		[Color(CAD)3]		
		[Color(CAD)4]		
		[Color(CAD)5]		
		[Color(CAD)6]		
	[Print Quality]	[Draft]		
		[Standard]*		
		[High]		
	[Print (Economy)]	[Off]*		
		[On]		
	[Input Resolution]	[600dpi]*		
		[300dpi]		
	[Paper Source]	[Automatic]*		
		[Roll Paper]		
		[Cut Sheet]		
	[Conserve Paper]	[Off]*		
		[On]		
	[Line Cap]	[Software]*		
		[Rounded]		
	[Smoothing]	[Software]*		
		[Smooth]		
	[Line Width]	[1dot]		
		[2dot]		
		[3dot]		
		[4dot]*		
		[5dot]		
		[6dot]		
		[7dot]		
	[ThickenFineLines]	[Off]*		
		[On]		
	[AdjustFaintLines]	[Off]		
		[On]*		
	[Auto Rotate]	[Off]		
		[On]*		
	[Nesting]	[Use Nesting]		[Off]*
				[On]
		[Nesting WaitTime]		1-11min.
		[Cut Lines]		[Off]*
			[On]	
[On-the-Fly]	[Off]*			
	[On]			

First Level	Second Level	Third Level	Fourth Level	Fifth Level
[Adjust Printer]	[Auto Head Adj.]	[Standard Adj.]	[No]	
			[Yes]	
		[Advanced Adj.]	[No]	
			[Yes]	
		[Auto Print]	[Off]	
			[On]*	
	[Manual Head Adj.)(*12)	[No]		
		[Yes]		
	[Auto Band Adj.]	[Standard Adj.]	[No]	
			[Yes]	
		[Advanced Adj.]	[No]	
			[Yes]	
	[Manual Band Adj]	[No]		
		[Yes]		
[Adjust Length](*3)	[A:High]	[No]		
		[Yes]		
	[B:Standard/Draft]	[No]		
		[Yes]		
[Head Inc. Adj.]	[No]			
	[Yes]			
[Interface Setup]	[EOP Timer]	[10 sec.]		
		[30 sec.]		
		[1 min.]		
		[2 min.]		
		[5 min.]		
		[10 min.]*		
		[30 min.]		
		[60 min.]		
		[TCP/IP]	[IP Mode]	[Automatic]
			[Manual]*	
	[Protocol](*4)		[DHCP]	
			[On]	
			[Off]*	

T-1-18

First Level	Second Level	Third Level	Fourth Level	Fifth Level
[Interface Setup]	[TCP/IP]	[Protocol](*4)	[BOOTP]	[On]
				[Off]*
			[RARP]	[On]
				[Off]*
		[IP Setting](*14)	[IP Address]	0.0.0.0 to 255.255.255.255
			[Subnet Mask]	0.0.0.0 to 255.255.255.255
			[Default G/W]	0.0.0.0 to 255.255.255.255
	[NetWare]	[NetWare]		[On]
				[Off]*
		[Frame Type](*6)	[Auto Detect]	
			[Ethernet 2]	
			[Ethernet 802.2]*	
			[Ethernet 802.3]	
			[Ethernet SNAP]	
		[Print Service](*6)	[BinderyPServer]	
			[RPrinter]	
			[NDSPServer]*	
			[NPrinter]	
		[AppleTalk]		[On]
				[Off]*
	[Ethernet Driver]	[Auto Detect]		[On]*
				[Off]
		[Comm.Mode](*7)		[Half Duplex]*
			[Full Duplex]	
[Ethernet Type](*7)			[10 Base-T]*	
			[100 Base-TX]	
[Spanning Tree]			[Not Use]*	
		[Use]		
	[MAC Address]	000085XXXXXX		
[Ext.Interface]		[No]*		
		[IEEE1394]		
[Init. Settings]		[No]*		
		[Yes]		
[Maintenance]	[Maint. cart.]		[No]	
			[Yes]	

First Level	Second Level	Third Level	Fourth Level	Fifth Level	
[Maintenance]	[Replace P.head]	[No]			
		[Yes]			
	[Repl. S. Cleaner]	[No]			
		[Yes]			
	[Move Printer]	[Level 1]*			
		[Level 2]			
		[Level 3]			
	[System Setup]	[Warning]	[Buzzer]	[Off]	
				[On]*	
[Detect Mismatch]			[Pause]		
			[Warning]		
			[None]*		
[Skip Take-Up Err(*10)]			[Off]*		
		[On]			
[Keep Media Size]		[Off]*			
		[On]			
[Paper Size Basis]		[Sht Selection 1]	[ISO A3+]*		
			[13"x19"(Super B)]		
		[Sht Selection 2]	[ISO B1]*		
			[28"x40"(ANSI F)]		
[Noz. Check Freq.]		[Off]			
		[1 page]			
		[10 pages]			
		[Automatic]*			
[CarriageScanWdth]		[Automatic]*			
		[Fixed]			
[Sleep Timer]		[5 min.]*			
		[10 min.]			
		[15 min.]			
		[20 min.]			
		[30 min.]			
		[40 min.]			
		[50 min.]			
		[60 min.]			
	[240 min.]				

T-1-20

First Level	Second Level	Third Level	Fourth Level	Fifth Level
[System Setup]	[Length Unit]	[meter]*		
		[feet/inch]		
	[Time Zone]	[0: London (GMT)]		
		[+1: Paris, Rome]		
		[+2: Athens, Cairo]		
		[+3: Moscow]		
		[+4: Eerevan, Baku]		
		[+5: Islamabad]		
		[+6: Dacca]		
		[+7: Bangkok]		
		[+8: Hong Kong]		
		[+9: Tokyo, Seoul]		
		[+10: Canberra]		
		[+11: NewCaledonia]		
		[+12: Wellington]		
		[-12: Eniwetok]		
		[-11: Midway is.]		
		[-10: Hawaii (AHST)]		
		[-9: Alaska (AKST)]		
		[-8: Oregon (PST)]		
		[-7: Arizona (MST)]		
		[-6: Texas (CST)]		
	[-5: NewYork (EST)]			
	[-4: Santiago]			
	[-3: Buenos Aires]			
	[-2:]			
	[-1: Cape Verde]			
[Date Format]	[yyyy/mm/dd]*			
	[dd/mm/yyyy]			
	[mm/dd/yyyy]			
[Date & Time]	[Date]	[yyyy/mm/dd](#8)		
	[Time]	[hh:mm]		

First Level	Second Level	Third Level	Fourth Level	Fifth Level	
[System Setup]	[Language]	[Japanese]*			
		[English]			
		[Francais]			
		[Italiano]			
		[Deutsch]			
		[Espanol]			
		[Pyccknn]			
		[Chinese]			
		[Korea]			
		[Contrast Adj.]	-4 to 4		
		[Reset PaprSetngs]	[No]		
			[Yes]		
		[Erase HDD Data]	[High Speed]	[No]	
				[Yes]	
			[Secure High Spd.]	[No]	
				[Yes]	
		[Secure]	[No]		
			[Yes]		
	[Output Method]	[Print]*			
			[Print(auto delete)]		
			[Save in mail box]		
	[Save beforePrint]	[Off]*			
			[On]		
	[Save in Comm.Box]	[Off]			
			[On]*		
[Test Print]	[Status Print]	[No]			
			[Yes]		
	[Media Details]	[No]			
			[Yes]		
	[Print Job Log]	[No]			
			[Yes]		
	[Menu Map]	[No]			
			[Yes]		
[Nozzle Check]	[No]				
		[Yes]			
[Information]	[System Info]				
	[Error Log]	1.xxxxxxx-xxxx			
		2.xxxxxxx-xxxx			

*1: Available only if a roll is loaded.

*2: Available only if ManageRemainRoll is On.

*3: Available only if Feed Priority is Print Length.

*4: Available only if IP Mode is Automatic.

*5: For information on the types of paper the printer supports, refer to the Media Guide. The media type setting in the printer driver and related software (as well as on the Control Panel) is updated when you install Media Configuration Tool from the User Software CD-ROM or if you change paper information by using Media Configuration Tool.

*6: Available only if NetWare is On.

*7: Available only if Auto Detect is off.

*8: Follows the setting in Date Format.

*10: Displayed if the Media Take-up Unit is attached.

*12: Available after you have used Advanced Adj. in Auto Head Adj. once.

*13: Available if Take-up Reel is Enable, roll paper is loaded, and you have not executed Auto Feed for the loaded roll.

*14: Not displayed if IP Mode is Automatic.

*16: Follows the setting in Length Unit.

3. Main menu during printing

The structure of the main menu during printing is as follows.

T-1-22

First Level	Second Level	Third Level	Fourth Level	Fifth Level	
[Menu Durng Prtng]	[Head Cleaning]	[Head Cleaning A]			
		[Head Cleaning B]			
	[Fine Band Adj.]	-5 to 5			
	[Information]	[System Info]			
		[Error Log]			1.xxxxxxxxx-xxxx
					2.xxxxxxxxx-xxxx

4. Main Menu Settings

Main menu items are described in the following tables.

T-1-23

Setting Item	Description/Instructions
[Paper Cut]	Displayed if a roll is loaded. Choose Yes to cut the roll at the current position. The paper will be fed, if necessary, so that the sheet is at least 10 cm (39.4 in.) long after the cut. The paper will not be cut if there is not enough paper left to feed the paper this much.
[Rep. Ink Tank]	When replacing the Ink Tank, choose Yes and follow the instructions on the screen.
[Head Cleaning]	Specify Printhead cleaning options. Choose Head Cleaning A if printing is faint, oddly colored, or contains foreign substances. Choose Head Cleaning B if no ink is printed at all, or if printing is not improved by Head Cleaning A.
[Auto Feed]	This command is available only if Take-up Reel is set to Enable. Choose Yes to advance roll paper automatically on the Rewind Spool, up to the fastening position.
[Take-up Reel]	Choose Enable to use the Media Take-up Unit.
[Media Menu]	Specify the type and size of paper.
[Paper Details]	Specify detailed paper-related settings, including the ink drying time and borderless printing options.
[Job Management]	Manage print jobs on the printer's hard disk.
[GL2 Settings]	Make settings for making prints using GL2.
[Adjust Printer]	Adjust the Printhead alignment or amount of feed by printing a test pattern.
[Interface Setup]	Configure the EOP timer and network settings.
[Maintenance]	Access maintenance settings when replacing the Printhead or preparing to move the printer.
[System Setup]	Specify the printer system settings, including the date format and display language.
[Test Print]	Choose Status Print to print information about the printer. Choose Media Details to print the paper settings as specified in Paper Details. Choose Print Job Log to print a record of print jobs, including the paper type and size, amount of ink used, and so on. (Information on ink consumption is general, not specific in nature.) Choose Menu Map to print a list of the main menu options. Choose Nozzle Check to print a test pattern for checking the nozzles.
[Information]	Displays information about the printer and record of print jobs.

[Media Menu]

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Setting Item	Description/Instructions
[Cut Sheet Type]	Choose the type of sheets.
[Roll Media Type]	Choose the type of roll.
[Roll Length Set]	Displayed if Chk Remain.Roll is On. If a barcode is not printed on rolls, specify the roll length. The roll length is displayed in meters or feet, depending on the setting in Length Unit.
[Chk Remain.Roll]	Choose On to print a barcode at the end of a roll before you remove it. The printed barcode can be used in managing the amount of roll paper left. Choose Off if you prefer not to print the barcode.

[Paper Details]

T-1-25

Setting Item	Description/Instructions	
(The paper type is displayed here.)	[Roll DryingTime]	Specify the time to wait for the ink to dry for each sheet.
	[Scan Wait Time]	Specify the time to wait for the ink to dry between each scan in bidirectional printing, in consideration of how quickly the ink dries. Note that printing will take longer if you specify a wait time.
	[Feed Priority]	Specify exact paper feeding, if desired. Normally, select Automatic. Choose Print Length if you prefer to feed the paper an exact amount. However, note that choosing Print Length may result in slight banding in the direction of Carriage scanning.
	[Adjust Length]	Displayed if Feed Priority is Print Length. Adjustment relative to the amount of stretching or shrinkage of the current paper. Enter either the adjustment results from Print Pattern or the discrepancy that you measured (as a percentage). For paper that tends to stretch, increase the feed amount by setting the adjustment value toward +. For paper that tends to shrink, decrease the feed amount by setting the adjustment value toward -.
	[Head Height]	Adjust the Printhead height.
	[Skew Check Lv.]	If you print on Japanese paper (washi) or other handmade paper that has an irregular width, choose Loose for a higher skew detection threshold, or choose Off to disable skew detection. However, if paper is loaded askew when detection is Off, note that paper jams or Platen soiling may occur.
	[VacuumStrngth]	Specify the level of suction that holds paper against the Platen.
	[Width Detection]	Make this setting when the print size is different from the media size, for example, when you want to make a print within a frame. When you select [Off], the paper width is not detected.
	[NearEnd RollMrgn]	Specify the minimum margin at the leading edge of roll paper to ensure better printing quality at the leading edge. Note that if you choose 5mm, it may lower the printing quality at the leading edge and affect feeding accuracy. The printed surface may be scratched, and ink may adhere to the leading edge. It may also cause the Platen to become soiled.
	[Cut Speed]	Choose the cutting speed. If you use adhesive paper, choosing Slow helps prevent adhesive from sticking to the cutter and keeps the cutter sharp.
	[Trim Edge First]	If a roll is loaded, the end of the paper will be cut.
	[Cutting Mode]	Specify whether or not to cut with the standard round-bladed cutter. Choose Automatic to have the roll cut automatically after printing. If you choose Manual, the paper will not be cut after printing. Instead, a line will be printed at the cut position. Choose Eject if you prefer not to have documents dropped immediately after printing, as when waiting for ink to dry.
	[Bordless Margin]	Adjust the margin during borderless printing. Choose Automatic to have the printer automatically detect the paper width and configure the margin settings for borderless printing. If margins are mistakenly created when Automatic is selected, choose Fixed. In this case, the paper width is not detected automatically, and the document is printed without borders, using the margin settings required by the printer.
	[CutDustReduct.]	Choose On to reduce the amount of debris generated when cutting film and similar media by printing a line at the cut position. This option reduces the amount of debris given off after cutting. It also helps prevent adhesive from sticking to the cutter and keeps the cutter sharp if you use adhesive paper.
[NearEnd Sht Mrgn]	Specify a margin at the leading edge of sheets to ensure better printing quality at the leading edge. Note that if you choose 5mm, it may lower the printing quality at the leading edge and affect feeding accuracy. The printed surface may be scratched, and ink may adhere to the leading edge.	
[Return Defaults]	Choose Yes to restore Paper Details to the factory default values.	

Setting Item			Description/Instructions	
[Print Job]	[Job List]	(Choose a print job)	[Delete]	Delete the current job or queued jobs.
			[Preempt Jobs]	Print the job first after the current print job is finished printing.
[Stored Job]	[Mailbox List]	(Enter a password if one has been set.)	[Job List]-[Print]	Prints a saved job.
			[Job List]-[Delete]	Deletes a saved job.
			[Job List]-[Print]	Prints a list of saved jobs.
[Job Log]	(Choose from information about the latest three print jobs.)	[Document Name]		Displays the name of the document in the most recently printed job.
		[User Name]		Displays the name of the user who has transmitted the job.
		[Page Count]		Displays the number of sheets of the job.
		[Job Status]		Displays the result of processing of the job.
		[Print Start Time]		Displays the time at which the job started printing.
		[Print End Time]		Displays the time at which the job finished printing.
		[Print Time]		Displays the time spent printing the job.
		[Print Size]		Displays the size of the paper used for printing the job.
		[Media Type]		Displays the type of the paper used for printing the job.
		[Interface]		Displays the interface of the job.
[Ink Consumed]		Displays the amount of ink consumed for printing the job.		
[HDD Information]	[HDDSpace]			Displays the size of free hard disk space on the printer.

[GL2 Settings]

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Setting Item		Description/Instructions
[Color Mode]	[Monochrome]	Print by the monochrome.
	[Color(CAD)1]	Print by the standard color.
	[Color(CAD)2]	Print by the bright color.
	[Color(CAD)3]	Print by the color emulated the Canon BJ-W3000/W3050.
	[Color(CAD)4]	Print by the color emulated the HP Designjet 500/800.
	[Color(CAD)5]	Print by the color emulated the HP Designjet 1000.
	[Color(CAD)6]	Print by the color emulated the HP Designjet 4000/4050.
[Print Quality]		Select the print quality.
[Print (Economy)]		Prints with a lower grade of print than normal, but with less ink consumption. Select [ON] to economize on inks.
[Input Resolution]		Choose the printer input resolution from between [600dpi] and [300dpi].
[Paper Source]		Select how to feed paper for printing on the HP-GL/2.
[Conserve Paper]		Prints by economizing on paper.
[Line Cap]		Choose the shape of the end of a line from between [Software] and [Rounded].
[Smoothing]		Choose whether to draw an arc with a smooth curve or with a polygon.
[Line Width]		Select the width of each line to print for data that does not have a line width specified. The line width is expressed in increments of 300 dpi.
[ThickenFineLines]		Select [On] to print thin lines clearly.
[AdjustFaintLines]		If thin lines print in a tint of color varied from other patterns, selecting [Off] may provide the print result as intended, though the thin lines may print, interrupted, depending on the color.
[Auto Rotate]		If a document has its long side shorter than the roll width, the page rotates by 90 degrees automatically to economize on paper. If a document contains horizontally long data such that it has its long side longer than the roll width and its short side shorter than the roll width, the page rotates 90 degrees to print within the boundaries of the paper. HP RTL cannot rotate.
[Nesting]	[Use Nesting]	Select [On] to print pages when they are tiled fully to the roll width, instead of printing them one by one.
	[Nesting WaitTime]	Set the time to elapse before printing.
	[Cut Lines]	Select [On] to print perforated lines between pages.
[On-the-Fly]		In printing data consisting solely of HP RTL, if the data is slow to print, select [On] to expedite the time at which the data starts printing. Verify the print result to make sure that images are not chipped in this case.

Setting Item		Description/Instructions
[Auto Head Adj.]	[Standard Adj.]	Choose Yes to have the printer print and read a test pattern for the automatic adjustment of Printhead alignment relative to the printing direction.
	[Advanced Adj.]	Choose Yes to have the printer print and read a test pattern for the automatic adjustment of Printhead alignment relative to the nozzle and printing direction.
	[Auto Print]	Choose On to have the printer automatically execute the Advanced Adj. operations after you replace the Printhead.
[Manual Head Ad]		Choose Yes to print a test pattern for adjustment of Printhead alignment relative to the printing direction. Enter the adjustment value manually based on the resulting pattern.
[Auto Band Adj.]	[Standard Adj.]	Choose Yes to have the printer print and read a band adjustment test pattern for automatic adjustment of the feed amount.
	[Advanced Adj.]	Choose this option when using paper other than genuine Canon paper, or paper for purposes other than checking output. Choose Yes to have the printer print and read a band adjustment test pattern for automatic adjustment of the feed amount. Note that this function takes more time and requires more ink than Standard Adj.
[Manual Head Adj]		Choose Yes to print a test pattern for adjustment of Printhead alignment relative to the printing direction. Enter the adjustment value manually based on the resulting pattern.
[Adjust Length]	[A:High]	Choose Yes to print a test pattern for adjustment relative to paper stretching or shrinkage, after which you can enter the amount of adjustment.
	[B:Standard/Draft]	
[Head Inc. Adj.]		Select [Yes] to print an adjustment pattern for adjusting the inclination of the printhead.

[Interface Setup]

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Setting Item		Description/Instructions	
[EOP Timer]		Specify the timeout period before cancellation of print jobs that cannot be received by the printer.	
[TCP/IP]	[TCP/IP]	Specify the TCP/IP protocol settings. To apply your changes, choose Register Setting.	
	[IP Mode]	Choose whether the printer IP address is configured automatically or a static IP address is entered manually.	
	[Protocol]	[DHCP]	Specify the protocol used to configure the IP address automatically.
		[BOOTP]	
[RARP]			
[IP Setting]	[IP Address]	Specify the printer network information when using a static IP address. Enter the IP address assigned to the printer, as well as the network subnet mask and default gateway.	
	[Subnet Mask]		
	[Default G/W]		
[NetWare]	[NetWare]	Specify the NetWare protocol. To apply your changes, choose Register Setting.	
	[Frame Type]	Specify the frame type to use.	
	[Print Service]	Choose the print service.	
[AppleTalk]		Specify whether to use the AppleTalk protocol. To apply your changes, choose Register Setting.	
[Ethernet Driver]	[Auto Detect]	Specify the communication method. To apply your changes, choose Register Setting. Choose On for automatic configuration of the LAN communication protocol. Choose Off to use settings values of Comm.Mode and Ethernet Type.	
	[Comm.Mode]	Choose the LAN communication method.	
	[Ethernet Type]	Choose the LAN transfer rate.	
	[Spanning Tree]	Choose whether spanning-tree packets are supported over the LAN.	
	[MAC Address]	Displays the MAC address.	
[Ext.Interface]		When installing the expansion interface board, choose whether the expansion interface board is used.	
[Init. Settings]		A confirmation message is displayed if you press the button. Choose [OK] to restore the network settings to the default values.	

[Maintenance]

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Setting Item	Description/Instructions
[Maint. cart.]	When exchanging the maintenance cartridge, choose Yes and follow the instructions on the screen.
[Replace P.head]	Not displayed during a warning message that the remaining Maintenance Cartridge capacity is low. When replacing the Printhead, choose Yes and follow the instructions on the screen.
[Repl. S. Cleaner]	When replacing the Shaft Cleaner, choose Yes and follow the instructions on the screen.
[Move Printer]	When transferring the printer to another location, choose the level of transfer and follow the instructions on the screen.

Setting Item		Description/Instructions
[Warning]	[Buzzer]	Set the buzzer. Choose On for the buzzer to sound once for warnings and three times for errors.
	[Detect Mismatch]	Choose Warning for notification (display of a warning message) during printing if the paper type specified in the printer menu does not match the paper type in the printer driver. Choose None to continue print without notification. Choose Pause to have printing paused under these circumstances. In this case, you can continue printing by pressing the Online button.
	[Skip Take-Up Err]	Choose On to continue with printing even if an error occurs with the Media Take-up Unit. Choose Off to have the printer pause before printing if a rewinding error occurs.
[Keep Media Size]		Choose On to use the paper size setting as the basis for printing instead of other settings. The margin setting of the printer menu will be used instead of the margin setting of the printer driver if the latter is smaller, which may prevent text or images in the margin from being printed. Choose Off to use the printer driver settings instead. Even if the margin setting of the printer driver is smaller than that of the printer driver, text or images will not be cut off. However, this requires longer paper because the actual margin will be equal to the margin setting of the printer driver plus the margin setting of the printer menu.
[Paper Size Basis]	[Sht Selection 1]	Select which size is to be recognized, [ISO A3+] or [13"x19"(Super B)], when the detected size of the cut sheet is between these sizes.
	[Sht Selection 2]	Select which size is to be recognized, [ISO B1] or [28"x40"(ANSI F)], when the detected size of the cut sheet is between these sizes.
[Noz. Check Freq.]		Specify the timing for automatic checks of nozzle clogging. Choose 1 page to check once per printed page. Choose 10 pages to check once per ten printed pages. Choose Automatic to have the printer automatically adjust the timing for checks based on the frequency of nozzle use.
[CarriageScanWdth]		Set the scan width of the carriage for printing. Select [Automatic] to move the carriage to meet the width of the loaded paper. Selecting [Fixed] will reduce stains on the back of the paper but at the cost of a somewhat longer print time.
[Sleep Timer]		Specify the period before the printer enters Sleep mode.
[Length Unit]		Choose the unit of measurement when roll length is displayed. You can switch the unit displayed for Roll Length Set and the remaining paper amount displayed in the submenu.
[Time Zone]		Specify the time zone. Time zone options indicate a main city in this time zone and the difference from Greenwich Mean Time.
[Date Format]		Specify the date format.
[Date & Time]	[Date]	Set the current date.
	[Time]	Set the current time.
[Language]		Specify the language used on the Display Screen.
[Contrast Adj.]		Adjust the Display Screen contrast level.
[Reset PaprSetngs]		Restores settings that you have changed with Media Configuration Tool to the factory default values.
[Erase HDD Data]	[High Speed]	Delete the file management information of the saved data in the HDD.
	[Secure High Spd.]	Overwrite the random data in the whole of the hard disk drive.
	[Secure]	Overwrite 00 and FF and random data in the whole of the hard disk drive once at a time. Execute the verify check whether the data has written correctly to the hard disk drive.
[Output Method]	[Print]	Choose how to print.
	[Print(auto delete)]	Select [Print] to perform normal printing. Select [Print (Auto delete)], print data and remove it from the hard disk. Select [Save in mail box] to only save data to the box, without printing it.
	[Save in mail box]	
[Save beforePrint]		Select [On] to start printing data when its save is complete.
[Save in Comm.Box]		Select [Off] to print data without saving it to the common box.

[Information]

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Setting Item		Description/Instructions	
[System Info]	[Version]	[Firmware]	Displays the version of the printer and firmware.
		[Boot]	Displays the version of the boot ROM.
		[MIT]	Displays the version of the MIT database format.
	[s/n]	Displays the printer's serial number.	
	[MAC]	Displays the MAC address of the printer.	
	[IP]	Displays the printer IP address.	
[Error Log]	[##### #####]	Displays the most recent error messages (up to two).	

1.6.3 Main Menu

iPF820

The printer has a Main menu which includes a menu related to maintenance such as adjustment of ink ejection position of each nozzle and head cleaning, a menu related to printing settings such as auto cutting and ink drying time, and a menu related to parameters such as a message language.

1. Main menu operations

a) How to enter the Main menu

To enter the Main menu, press the [Menu] button on the operation panel.

b) How to exit the Main menu

To exit the Main menu, press the [Online] button.

c) Buttons used with the Main menu

- Selecting menus and parameters: [◀] or [▶] button
- Going to the next lower-level menu: [▼] button
- Going to the next higher-level menu: [▲] button
- Determining a selected menu or parameter: [OK] button

2. Main Menu

The structure of the main menu is as follows.

T-1-33

First Level	Second Level	Third Level	Fourth Level	Fifth Level
[Paper Cut>(*1)	[No]*			
	[Yes]			
[Rep. Ink Tank]	[No]*			
	[Yes]			
[Head Cleaning]	[Head Cleaning A]*			
	[Head Cleaning B]			
[Media Menu]	[Cut Sheet Type]	[Plain Paper>(*5)		
		[Plain Paper HQ>(*5)		
		[Plain Paper HG>(*5)		
		[Recycled Coated>(*5)		
		[Coated Paper>(*5)		
		[HW Coated>(*5)		
		[Ex HW Coated>(*5)		
		[Premium MatteP>(*5)		
		[Glossy Photo>(*5)		
		[Semi-Gl Photo>(*5)		
		[HW SemiGl Photo>(*5)		
		[HW SemiGl Photo2>(*5)		
		[Poster Semi-Gl>(*5)		
		[Syn. Paper>(*5)		
		[Adh. Syn. Paper>(*5)		
		[Backlit Film>(*5)		
		[Backprint Film>(*5)		
		[Flame-Res.Cloth>(*5)		
		[Fabric Banner>(*5)		
		[ThinFab.Banner2>(*5)		
		[Proofing Paper>(*5)		
		[News Proof 1>(*5)		
		[News Proof 2>(*5)		
[FineArt Photo>(*5)				
[FneArt HW Photo>(*5)				

First Level	Second Level	Third Level	Fourth Level	Fifth Level
[Media Menu]	[Cas Paper Type]	[FineArt Txtr](*5)		
		[FineArt Wrclr](*5)		
		[FineArtBlockP](*5)		
		[Canvas Matte2](*5)		
		[JPN Paper Washi](*5)		
		[Colored Coated](*5)		
		[CAD Trace Paper](*5)		
		[CAD Matte Film](*5)		
		[CAD Clear Film](*5)		
		[Special #] # Here, the number is 1 to 10 (*5)		
		[Roll1(Uppr) Type]/[Roll2 (Lwr) Type](*1, *2)	[Plain Paper](*5)	
	[Plain Paper HQ](*5)			
	[Plain Paper HG](*5)			
	[Recycled Coated](*5)			
	[Coated Paper](*5)			
	[HW Coated](*5)			
	[Ex HW Coated](*5)			
	[Premium MatteP](*5)			
	[Glossy Photo](*5)			
	[Semi-Gl Photo](*5)			
	[HW Glossy Photo2](*5)			
	[HW SemiGl Photo2](*5)			
	[Poster Semi-Gl](*5)			
	[Syn. Paper](*5)			
	[Adh. Syn. Paper](*5)			
	[Backlit Film](*5)			
	[Backprint Film](*5)			
[Flame-Res.Cloth](*5)				
[Fabric Banner](*5)				
[ThinFab.Banner2](*5)				

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First Level	Second Level	Third Level	Fourth Level	Fifth Level
[Media Menu]	[Roll1(Uppr) Type]/[Roll2(Lwr) Type>(*1, *2)]	[Proofing Paper>(*5)]		
		[News Proof 1>(*5)]		
		[News Proof 2>(*5)]		
		[FineArt Photo>(*5)]		
		[FneArt HW Photo>(*5)]		
		[FineArt Txtr>(*5)]		
		[FineArt Wtrclr>(*5)]		
		[FineArtBlockP>(*5)]		
		[Canvas Matte2>(*5)]		
		[JPN Paper Washi>(*5)]		
		[Colored Coated>(*5)]		
		[CAD Trace Paper>(*5)]		
		[CAD Matte Film>(*5)]		
		[CAD Clear Film>(*5)]		
	[Special #] # Here, the number is 1 to 10 (*5)			
[Roll1(Uppr)Lngth]/ [Roll2(Lwr) Lngth>(*1, *2)]	[### m>(*16)]			
	[### feet>(*16)]			
[Chk Remain.Roll]	[Off]*			
	[On]			
[Paper Details]	(The paper type is displayed here.) (*5)	[Roll DryingTime]	[Off]	
			[30 sec.]	
			[1 min.]	
			[3 min.]	
			[5 min.]	
			[10 min.]	
			[30 min.]	
			[60 min.]	
		[Scan Wait Time]	[Off]	
			[1 sec.]	
			[3 sec.]	
			[5 sec.]	
			[7 sec.]	
			[9 sec.]	
		[Feed Priority]	[Automatic]*	
			[Band Joint]	
			[Print Length]	
		[Adjust Length A]	-0.70% - 0.00%* - 0.70%	
		[Adjust Length B]	-0.70% - 0.00%* - 0.70%	
		[Head Height]	[Automatic]*	
			[Highest]	
			[High]	
			[Standard]	
			[Low]	
	[Lowest]			

First Level	Second Level	Third Level	Fourth Level	Fifth Level	Sixth Level	
[Paper Details]	(The paper type is displayed here.) (*5)	[Skew Check Lv.]	[Standard]			
			[Loose]			
			[Off]			
		[VacuumStrngth]	[Automatic]*			
			[Strongest]			
			[Strong]			
			[Standard]			
			[Weak]			
			[Weakest]			
		[Width Detection]	[Off]			
			[On]			
		[NearEnd RollMrgn]	[3mm]			
			[20mm]			
		[Cut Speed]	[Fast]			
			[Standard]			
			[Slow]			
		[Trim Edge First]	[Automatic]			
			[Off]			
			[On]			
		[Cutting Mode]	[Automatic]			
[Eject]						
[Manual]						
[Bordless Margin]	[Automatic]					
	[Fixed]					
[CutDustReduct.]	[Off]					
	[On]					
[NearEnd Sht Mrgn]	[3mm]					
	[20mm]					
[Return Defaults]	[No]					
	[Yes]					
[Job Management]	[Print Job]	[Job List]	(Choose a print job)	[Delete]		
			[Preempt Jobs]			
	[Stored Job]	[Mailbox List]	(Enter a password if one has been set.)	[Job List]		[Print]
				[Delete]		
				[Print Job List]		[No]
	[Job Log]	(Choose from information about the latest three print jobs.)		[Document Name]		
				[User Name]		
				[Page Count]		
				[Job Status]		[OK]
						[CANCELED]
				[Print Start Time]		[yyyy/mm/dd hh:mm]
				[Print End Time]		[yyyy/mm/dd hh:mm]
[Print Time]				[xxx sec.]		
[Print Size]				[xxxxxxxxsq.mm]		
[Media Type]						
[Interface]	[USB]					
	[Network]					
	[IEEE1394]					
[Ink Consumed]	[xx.x ml]					
[HDD Information]	[HDDSpace]: xx.xGB					

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First Level	Second Level	Third Level	Fourth Level	Fifth Level
[GL2 Settings]	[Color Mode]	[Monochrome]		
		[Color(CAD)1]		
		[Color(CAD)2]		
		[Color(CAD)3]		
		[Color(CAD)4]		
		[Color(CAD)5]		
		[Color(CAD)6]		
	[Print Quality]	[Draft]		
		[Standard]*		
		[High]		
	[Print (Economy)]	[Off]*		
		[On]		
	[Input Resolution]	[600dpi]*		
		[300dpi]		
	[Paper Source]	[Automatic]*		
		[Roll Paper]		
		[Cut Sheet]		
	[Conserve Paper]	[Off]*		
		[On]		
	[Line Cap]	[Software]*		
		[Rounded]		
	[Smoothing]	[Software]*		
		[Smooth]		
	[Line Width]	[1dot]		
		[2dot]		
		[3dot]		
		[4dot]*		
		[5dot]		
		[6dot]		
		[7dot]		
	[ThickenFineLines]	[Off]*		
		[On]		
	[AdjustFaintLines]	[Off]		
		[On]*		
	[Auto Rotate]	[Off]		
		[On]*		
	[Nesting]	[Use Nesting]		[Off]*
				[On]
		[Nesting WaitTime]		1-11min.
		[Cut Lines]		[Off]*
	[On]			
[On-the-Fly]	[Off]*			
	[On]			

First Level	Second Level	Third Level	Fourth Level	Fifth Level
[Adjust Printer]	[Auto Head Adj.]	[Standard Adj.]	[No]	
			[Yes]	
		[Advanced Adj.]	[No]	
			[Yes]	
		[Auto Print]	[Off]	
			[On]*	
		[Manual Head Adj.)(*12)	[No]	
			[Yes]	
		[Auto Band Adj.]	[Standard Adj.]	
		[Yes]		
		[Advanced Adj.]	[No]	
		[Yes]		
	[Manual Band Adj]	[No]		
		[Yes]		
	[Adjust Length](*3)	[A:High]	[No]	
		[Yes]		
	[B:Standard/Draft]	[No]		
		[Yes]		
	[Head Inc. Adj.]	[No]		
		[Yes]		
[Interface Setup]	[EOP Timer]	[10 sec.]		
		[30 sec.]		
		[1 min.]		
		[2 min.]		
		[5 min.]		
		[10 min.]*		
		[30 min.]		
		[60 min.]		
	[TCP/IP]	[IP Mode]	[Automatic]	
			[Manual]*	
		[Protocol](*4)	[DHCP]	[On]
			[Off]*	

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First Level	Second Level	Third Level	Fourth Level	Fifth Level
[Interface Setup]	[TCP/IP]	[Protocol](*4)	[BOOTP]	[On]
				[Off]*
			[RARP]	[On]
				[Off]*
		[IP Setting](*14)	[IP Address]	0.0.0.0 to 255.255.255.255
			[Subnet Mask]	0.0.0.0 to 255.255.255.255
			[Default G/W]	0.0.0.0 to 255.255.255.255
	[NetWare]	[NetWare]		[On]
				[Off]*
		[Frame Type](*6)	[Auto Detect]	
			[Ethernet 2]	
			[Ethernet 802.2]*	
			[Ethernet 802.3]	
		[Print Service](*6)	[BinderyPServer]	
			[RPrinter]	
			[NDSPServer]*	
			[NPrinter]	
	[AppleTalk]		[On]	
			[Off]*	
	[Ethernet Driver]	[Auto Detect]		[On]*
				[Off]
		[Comm.Mode](*7)		[Half Duplex]*
				[Full Duplex]
[Ethernet Type](*7)			[10 Base-T]*	
			[100 Base-TX]	
[Spanning Tree]			[Not Use]*	
		[Use]		
	[MAC Address]	000085XXXXXX		
[Ext.Interface]		[No]*		
		[IEEE1394]		
[Init. Settings]		[No]*		
		[Yes]		
[Maintenance]	[Maint. cart.]		[No]	
			[Yes]	

First Level	Second Level	Third Level	Fourth Level	Fifth Level	
[Maintenance]	[Replace P.head]	[No]			
		[Yes]			
	[Repl. S. Cleaner]	[No]			
		[Yes]			
	[Move Printer]	[Level 1]*			
		[Level 2]			
		[Level 3]			
	[System Setup]	[Warning]	[Buzzer]	[Off]	
				[On]*	
[Detect Mismatch]			[Pause]		
			[Warning]		
		[None]*			
[Keep Media Size]		[Off]*			
		[On]			
[Paper Size Basis]		[Sht Selection 1]	[ISO A3+]*		
			[13"x19"(Super B)]		
		[Sht Selection 2]	[ISO B1]*		
			[28"x40"(ANSI F)]		
[Roll Switching]		[Size Optimized]*			
		[No SizeOptimized]			
[TrimEdge Reload]		[Automatic]			
		[Off]*			
		[On]			
[Noz. Check Freq.]		[Off]			
		[1 page]			
		[10 pages]			
		[Automatic]*			
[CarriageScanWdth]		[Automatic]*			
		[Fixed]			
[Sleep Timer]		[5 min.]*			
		[10 min.]			
		[15 min.]			
		[20 min.]			
		[30 min.]			
	[40 min.]				
	[50 min.]				
	[60 min.]				
	[240 min.]				

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First Level	Second Level	Third Level	Fourth Level	Fifth Level
[System Setup]	[Length Unit]	[meter]*		
		[feet/inch]		
	[Time Zone]	[0: London (GMT)]		
		[+1: Paris, Rome]		
		[+2: Athens, Cairo]		
		[+3: Moscow]		
		[+4: Eerevan, Baku]		
		[+5: Islamabad]		
		[+6: Dacca]		
		[+7: Bangkok]		
		[+8: Hong Kong]		
		[+9: Tokyo, Seoul]		
		[+10: Canberra]		
		[+11: NewCaledonia]		
		[+12: Wellington]		
		[-12: Eniwetok]		
		[-11: Midway is.]		
		[-10: Hawaii (AHST)]		
		[-9: Alaska (AKST)]		
		[-8: Oregon (PST)]		
		[-7: Arizona (MST)]		
		[-6: Texas (CST)]		
	[-5: NewYork (EST)]			
	[-4: Santiago]			
	[-3: Buenos Aires]			
	[-2:]			
	[-1: Cape Verde]			
[Date Format]	[yyyy/mm/dd]*			
	[dd/mm/yyyy]			
	[mm/dd/yyyy]			
[Date & Time]	[Date]		[yyyy/mm/dd](*8)	
	[Time]		[hh:mm]	

First Level	Second Level	Third Level	Fourth Level	Fifth Level
[System Setup]	[Language]	[Japanese]*		
		[English]		
		[Francais]		
		[Italiano]		
		[Deutsch]		
		[Espanol]		
		[Pyccknn]		
		[Chinese]		
	[Korea]			
	[Contrast Adj.]	-4 to 4		
	[Reset PaprSetngs]	[No]		
		[Yes]		
	[Erase HDD Data]	[High Speed]	[No]	[No]
			[Yes]	[Yes]
		[Secure High Spd.]	[No]	[No]
			[Yes]	[Yes]
		[Secure]	[No]	[No]
			[Yes]	[Yes]
	[Output Method]	[Print]*		
[Print(auto delete)]				
[Save in mail box]				
[Save beforePrint]		[Off]*		
		[On]		
[Save in Comm.Box]		[Off]		
	[On]*			
[Test Print]	[Status Print]	[No]		
		[Yes]		
	[Media Details]	[No]		
		[Yes]		
	[Print Job Log]	[No]		
		[Yes]		
	[Menu Map]	[No]		
		[Yes]		
	[Nozzle Check]	[No]		
		[Yes]		
[Information]	[System Info]			
	[Error Log]	1.xxxxxxxx-xxxx		
		2.xxxxxxxx-xxxx		

*1: Available only if a roll is loaded.

*2: Available only if ManageRemainRoll is On.

*3: Available only if Feed Priority is Print Length.

*4: Available only if IP Mode is Automatic.

*5: For information on the types of paper the printer supports, refer to the Media Guide. The media type setting in the printer driver and related software (as well as on the Control Panel) is updated when you install Media Configuration Tool from the User Software CD-ROM or if you change paper information by using Media Configuration Tool.

*6: Available only if NetWare is On.

*7: Available only if Auto Detect is off.

*8: Follows the setting in Date Format.

*12: Available after you have used Advanced Adj. in Auto Head Adj. once.

*14: Not displayed if IP Mode is Automatic.

*16: Follows the setting in Length Unit.

3. Main menu during printing

The structure of the main menu during printing is as follows.

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First Level	Second Level	Third Level	Fourth Level	Fifth Level	
[Menu Durng Prtng]	[Head Cleaning]	[Head Cleaning A]			
		[Head Cleaning B]			
	[Fine Band Adj.]	-5 to 5			
	[Information]	[System Info]			
		[Error Log]			1.xxxxxxxx-xxxx
					2.xxxxxxxx-xxxx

4. Main Menu Settings

Main menu items are described in the following tables.

T-1-44

Setting Item	Description/Instructions
[Paper Cut]	Displayed if a roll is loaded. Choose Yes to cut the roll at the current position. The paper will be fed, if necessary, so that the sheet is at least 10 cm (39.4 in.) long after the cut. The paper will not be cut if there is not enough paper left to feed the paper this much.
[Rep. Ink Tank]	When replacing the Ink Tank, choose Yes and follow the instructions on the screen.
[Head Cleaning]	Specify Printhead cleaning options. Choose Head Cleaning A if printing is faint, oddly colored, or contains foreign substances. Choose Head Cleaning B if no ink is printed at all, or if printing is not improved by Head Cleaning A.
[Media Menu]	Specify the type and size of paper.
[Paper Details]	Specify detailed paper-related settings, including the ink drying time and borderless printing options.
[Job Management]	Manage print jobs on the printer's hard disk.
[GL2 Settings]	Make settings for making prints using GL2.
[Adjust Printer]	Adjust the Printhead alignment or amount of feed by printing a test pattern.
[Interface Setup]	Configure the EOP timer and network settings.
[Maintenance]	Access maintenance settings when replacing the Printhead or preparing to move the printer.
[System Setup]	Specify the printer system settings, including the date format and display language.
[Test Print]	Choose Status Print to print information about the printer. Choose Media Details to print the paper settings as specified in Paper Details. Choose Print Job Log to print a record of print jobs, including the paper type and size, amount of ink used, and so on. (Information on ink consumption is general, not specific in nature.) Choose Menu Map to print a list of the main menu options. Choose Nozzle Check to print a test pattern for checking the nozzles.
[Information]	Displays information about the printer and record of print jobs.

[Media Menu]

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Setting Item	Description/Instructions
[Cut Sheet Type]	Choose the type of sheets.
[Roll Media Type]	Choose the type of roll.
[Roll Length Set]	Displayed if Chk Remain.Roll is On. If a barcode is not printed on rolls, specify the roll length. The roll length is displayed in meters or feet, depending on the setting in Length Unit.
[Chk Remain.Roll]	Choose On to print a barcode at the end of a roll before you remove it. The printed barcode can be used in managing the amount of roll paper left. Choose Off if you prefer not to print the barcode.

[Paper Details]

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Setting Item	Description/Instructions	
(The paper type is displayed here.)	[Roll DryingTime]	Specify the time to wait for the ink to dry for each sheet.
	[Scan Wait Time]	Specify the time to wait for the ink to dry between each scan in bidirectional printing, in consideration of how quickly the ink dries. Note that printing will take longer if you specify a wait time.
	[Feed Priority]	Specify exact paper feeding, if desired. Normally, select Automatic. Choose Print Length if you prefer to feed the paper an exact amount. However, note that choosing Print Length may result in slight banding in the direction of Carriage scanning.
	[Adjust Length]	Displayed if Feed Priority is Print Length. Adjustment relative to the amount of stretching or shrinkage of the current paper. Enter either the adjustment results from Print Pattern or the discrepancy that you measured (as a percentage). For paper that tends to stretch, increase the feed amount by setting the adjustment value toward +. For paper that tends to shrink, decrease the feed amount by setting the adjustment value toward -.
	[Head Height]	Adjust the Printhead height.
	[Skew Check Lv.]	If you print on Japanese paper (washi) or other handmade paper that has an irregular width, choose Loose for a higher skew detection threshold, or choose Off to disable skew detection. However, if paper is loaded askew when detection is Off, note that paper jams or Platen soiling may occur.
	[VacuumStrngth]	Specify the level of suction that holds paper against the Platen.
	[Width Detection]	Make this setting when the print size is different from the media size, for example, when you want to make a print within a frame. When you select [Off], the paper width is not detected.
	[NearEnd RollMrgn]	Specify the minimum margin at the leading edge of roll paper to ensure better printing quality at the leading edge. Note that if you choose 5mm, it may lower the printing quality at the leading edge and affect feeding accuracy. The printed surface may be scratched, and ink may adhere to the leading edge. It may also cause the Platen to become soiled.
	[Cut Speed]	Choose the cutting speed. If you use adhesive paper, choosing Slow helps prevent adhesive from sticking to the cutter and keeps the cutter sharp.
	[Trim Edge First]	If a roll is loaded, the end of the paper will be cut.
	[Cutting Mode]	Specify whether or not to cut with the standard round-bladed cutter. Choose Automatic to have the roll cut automatically after printing. If you choose Manual, the paper will not be cut after printing. Instead, a line will be printed at the cut position. Choose Eject if you prefer not to have documents dropped immediately after printing, as when waiting for ink to dry.
	[Bordless Margin]	Adjust the margin during borderless printing. Choose Automatic to have the printer automatically detect the paper width and configure the margin settings for borderless printing. If margins are mistakenly created when Automatic is selected, choose Fixed. In this case, the paper width is not detected automatically, and the document is printed without borders, using the margin settings required by the printer.
	[CutDustReduct.]	Choose On to reduce the amount of debris generated when cutting film and similar media by printing a line at the cut position. This option reduces the amount of debris given off after cutting. It also helps prevent adhesive from sticking to the cutter and keeps the cutter sharp if you use adhesive paper.
	[NearEnd Sht Mrgn]	Specify a margin at the leading edge of sheets to ensure better printing quality at the leading edge. Note that if you choose 5mm, it may lower the printing quality at the leading edge and affect feeding accuracy. The printed surface may be scratched, and ink may adhere to the leading edge.
[Return Defaults]	Choose Yes to restore Paper Details to the factory default values.	

Setting Item			Description/Instructions	
[Print Job]	[Job List]	(Choose a print job)	[Delete]	Delete the current job or queued jobs.
			[Preempt Jobs]	Print the job first after the current print job is finished printing.
[Stored Job]	[Mailbox List]	(Enter a password if one has been set.)	[Job List]-[Print]	Prints a saved job.
			[Job List]-[Delete]	Deletes a saved job.
			[Job List]-[Print]	Prints a list of saved jobs.
[Job Log]	(Choose from information about the latest three print jobs.)	[Document Name]		Displays the name of the document in the most recently printed job.
		[User Name]		Displays the name of the user who has transmitted the job.
		[Page Count]		Displays the number of sheets of the job.
		[Job Status]		Displays the result of processing of the job.
		[Print Start Time]		Displays the time at which the job started printing.
		[Print End Time]		Displays the time at which the job finished printing.
		[Print Time]		Displays the time spent printing the job.
		[Print Size]		Displays the size of the paper used for printing the job.
		[Media Type]		Displays the type of the paper used for printing the job.
		[Interface]		Displays the interface of the job.
[Ink Consumed]		Displays the amount of ink consumed for printing the job.		
[HDD Information]	[HDDSpace]			Displays the size of free hard disk space on the printer.

[GL2 Settings]

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Setting Item		Description/Instructions
[Color Mode]	[Monochrome]	Print by the monochrome.
	[Color(CAD)1]	Print by the standard color.
	[Color(CAD)2]	Print by the bright color.
	[Color(CAD)3]	Print by the color emulated the Canon BJ-W3000/W3050.
	[Color(CAD)4]	Print by the color emulated the HP Designjet 500/800.
	[Color(CAD)5]	Print by the color emulated the HP Designjet 1000.
	[Color(CAD)6]	Print by the color emulated the HP Designjet 4000/4050.
[Print Quality]		Select the print quality.
[Print (Economy)]		Prints with a lower grade of print than normal, but with less ink consumption. Select [ON] to economize on inks.
[Input Resolution]		Choose the printer input resolution from between [600dpi] and [300dpi].
[Paper Source]		Select how to feed paper for printing on the HP-GL/2.
[Conserve Paper]		Prints by economizing on paper.
[Line Cap]		Choose the shape of the end of a line from between [Software] and [Rounded].
[Smoothing]		Choose whether to draw an arc with a smooth curve or with a polygon.
[Line Width]		Select the width of each line to print for data that does not have a line width specified. The line width is expressed in increments of 300 dpi.
[ThickenFineLines]		Select [On] to print thin lines clearly.
[AdjustFaintLines]		If thin lines print in a tint of color varied from other patterns, selecting [Off] may provide the print result as intended, though the thin lines may print, interrupted, depending on the color.
[Auto Rotate]		If a document has its long side shorter than the roll width, the page rotates by 90 degrees automatically to economize on paper. If a document contains horizontally long data such that it has its long side longer than the roll width and its short side shorter than the roll width, the page rotates 90 degrees to print within the boundaries of the paper. HP RTL cannot rotate.
[Nesting]	[Use Nesting]	Select [On] to print pages when they are tiled fully to the roll width, instead of printing them one by one.
	[Nesting WaitTime]	Set the time to elapse before printing.
	[Cut Lines]	Select [On] to print perforated lines between pages.
[On-the-Fly]		In printing data consisting solely of HP RTL, if the data is slow to print, select [On] to expedite the time at which the data starts printing. Verify the print result to make sure that images are not chipped in this case.

Setting Item		Description/Instructions
[Auto Head Adj.]	[Standard Adj.]	Choose Yes to have the printer print and read a test pattern for the automatic adjustment of Printhead alignment relative to the printing direction.
	[Advanced Adj.]	Choose Yes to have the printer print and read a test pattern for the automatic adjustment of Printhead alignment relative to the nozzle and printing direction.
	[Auto Print]	Choose On to have the printer automatically execute the Advanced Adj. operations after you replace the Printhead.
[Manual Head Ad]		Choose Yes to print a test pattern for adjustment of Printhead alignment relative to the printing direction. Enter the adjustment value manually based on the resulting pattern.
[Auto Band Adj.]	[Standard Adj.]	Choose Yes to have the printer print and read a band adjustment test pattern for automatic adjustment of the feed amount.
	[Advanced Adj.]	Choose this option when using paper other than genuine Canon paper, or paper for purposes other than checking output. Choose Yes to have the printer print and read a band adjustment test pattern for automatic adjustment of the feed amount. Note that this function takes more time and requires more ink than Standard Adj.
[Manual Head Adj]		Choose Yes to print a test pattern for adjustment of Printhead alignment relative to the printing direction. Enter the adjustment value manually based on the resulting pattern.
[Adjust Length]	[A:High]	Choose Yes to print a test pattern for adjustment relative to paper stretching or shrinkage, after which you can enter the amount of adjustment.
	[B:Standard/Draft]	
[Head Inc. Adj.]		Select [Yes] to print an adjustment pattern for adjusting the inclination of the printhead.

[Interface Setup]

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Setting Item		Description/Instructions	
[EOP Timer]		Specify the timeout period before cancellation of print jobs that cannot be received by the printer.	
[TCP/IP]	[TCP/IP]	Specify the TCP/IP protocol settings. To apply your changes, choose Register Setting.	
	[IP Mode]	Choose whether the printer IP address is configured automatically or a static IP address is entered manually.	
	[Protocol]	[DHCP]	Specify the protocol used to configure the IP address automatically.
		[BOOTP]	
[RARP]			
[IP Setting]	[IP Address]	Specify the printer network information when using a static IP address. Enter the IP address assigned to the printer, as well as the network subnet mask and default gateway.	
	[Subnet Mask]		
	[Default G/W]		
[NetWare]	[NetWare]	Specify the NetWare protocol. To apply your changes, choose Register Setting.	
	[Frame Type]	Specify the frame type to use.	
	[Print Service]	Choose the print service.	
[AppleTalk]		Specify whether to use the AppleTalk protocol. To apply your changes, choose Register Setting.	
[Ethernet Driver]	[Auto Detect]	Specify the communication method. To apply your changes, choose Register Setting. Choose On for automatic configuration of the LAN communication protocol. Choose Off to use settings values of Comm.Mode and Ethernet Type.	
	[Comm.Mode]	Choose the LAN communication method.	
	[Ethernet Type]	Choose the LAN transfer rate.	
	[Spanning Tree]	Choose whether spanning-tree packets are supported over the LAN.	
	[MAC Address]	Displays the MAC address.	
[Ext.Interface]		When installing the expansion interface board, choose whether the expansion interface board is used.	
[Init. Settings]		A confirmation message is displayed if you press the button. Choose [OK] to restore the network settings to the default values.	

[Maintenance]

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Setting Item	Description/Instructions
[Maint. cart.]	When exchanging the maintenance cartridge, choose Yes and follow the instructions on the screen.
[Replace P.head]	Not displayed during a warning message that the remaining Maintenance Cartridge capacity is low. When replacing the Printhead, choose Yes and follow the instructions on the screen.
[Repl. S. Cleaner]	When replacing the Shaft Cleaner, choose Yes and follow the instructions on the screen.
[Move Printer]	When transferring the printer to another location, choose the level of transfer and follow the instructions on the screen.

Setting Item		Description/Instructions
[Warning]	[Buzzer]	Set the buzzer. Choose On for the buzzer to sound once for warnings and three times for errors.
	[Detect Mismatch]	Choose Warning for notification (display of a warning message) during printing if the paper type specified in the printer menu does not match the paper type in the printer driver. Choose None to continue print without notification. Choose Pause to have printing paused under these circumstances. In this case, you can continue printing by pressing the Online button.
[Keep Media Size]		Choose On to use the paper size setting as the basis for printing instead of other settings. The margin setting of the printer menu will be used instead of the margin setting of the printer driver if the latter is smaller, which may prevent text or images in the margin from being printed. Choose Off to use the printer driver settings instead. Even if the margin setting of the printer driver is smaller than that of the printer driver, text or images will not be cut off. However, this requires longer paper because the actual margin will be equal to the margin setting of the printer driver plus the margin setting of the printer menu.
[Paper Size Basis]	[Sht Selection 1]	Select which size is to be recognized, [ISO A3+] or [13"x19"(Super B)], when the detected size of the cut sheet is between these sizes.
	[Sht Selection 2]	Select which size is to be recognized, [ISO B1] or [28"x40"(ANSI F)], when the detected size of the cut sheet is between these sizes.
[Roll Switching]	[Size Optimized]	Choose the paper size that can minimize margin of the paper.
	[No SizeOptimized]	Print from paper loaded on the platen.
[TrimEdge Reload]		Select whether cut the leading edge of the paper when the paper at the standby position has loaded. Cut it when the roller trace at the standby position attract attention. Choose On to cut it everytime when the paper at the standby position has loaded. Choose Automatic to cut it when the paper at the standby position during two days or more has loaded.
[Noz. Check Freq.]		Specify the timing for automatic checks of nozzle clogging. Choose 1 page to check once per printed page. Choose 10 pages to check once per ten printed pages. Choose Automatic to have the printer automatically adjust the timing for checks based on the frequency of nozzle use.
[CarriageScanWdth]		Set the scan width of the carriage for printing. Select [Automatic] to move the carriage to meet the width of the loaded paper. Selecting [Fixed] will reduce stains on the back of the paper but at the cost of a somewhat longer print time.
[Sleep Timer]		Specify the period before the printer enters Sleep mode.
[Length Unit]		Choose the unit of measurement when roll length is displayed. You can switch the unit displayed for Roll Length Set and the remaining paper amount displayed in the submenu.
[Time Zone]		Specify the time zone. Time zone options indicate a main city in this time zone and the difference from Greenwich Mean Time.
[Date Format]		Specify the date format.
[Date & Time]	[Date]	Set the current date.
	[Time]	Set the current time.
[Language]		Specify the language used on the Display Screen.
[Contrast Adj.]		Adjust the Display Screen contrast level.
[Reset PaprSetngs]		Restores settings that you have changed with Media Configuration Tool to the factory default values.
[Erase HDD Data]	[High Speed]	Delete the file management information of the saved data in the HDD.
	[Secure High Spd.]	Overwrite the random data in the whole of the hard disk drive.
	[Secure]	Overwrite 00 and FF and random data in the whole of the hard disk drive once at a time. Execute the verify check whether the data has written correctly to the hard disk drive.
[Output Method]	[Print]	Choose how to print.
	[Print(auto delete)]	Select [Print] to perform normal printing. Select [Print (Auto delete)], print data and remove it from the hard disk. Select [Save in mail box] to only save data to the box, without printing it.
	[Save in mail box]	
[Save beforePrint]		Select [On] to start printing data when its save is complete.
[Save in Comm.Box]		Select [Off] to print data without saving it to the common box.

[Information]

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Setting Item		Description/Instructions	
[System Info]	[Version]	[Firmware]	Displays the version of the printer and firmware.
		[Boot]	Displays the version of the boot ROM.
		[MIT]	Displays the version of the MIT database format.
	[s/n]	Displays the printer's serial number.	
	[MAC]	Displays the MAC address of the printer.	
	[IP]	Displays the printer IP address.	
[Error Log]	[##### #####]	Displays the most recent error messages (up to two).	

1.6.4 Main Menu

iPF815

The printer has a Main menu which includes a menu related to maintenance such as adjustment of ink ejection position of each nozzle and head cleaning, a menu related to printing settings such as auto cutting and ink drying time, and a menu related to parameters such as a message language.

1. Main menu operations

a) How to enter the Main menu

To enter the Main menu, press the [Menu] button on the operation panel.

b) How to exit the Main menu

To exit the Main menu, press the [Online] button.

c) Buttons used with the Main menu

- Selecting menus and parameters: [◀] or [▶] button
- Going to the next lower-level menu: [▼] button
- Going to the next higher-level menu: [▲] button
- Determining a selected menu or parameter: [OK] button

2. Main Menu

The structure of the main menu is as follows.

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First Level	Second Level	Third Level	Fourth Level	Fifth Level
[Paper Cut>(*1)	[No]*			
	[Yes]			
[Rep. Ink Tank]	[No]*			
	[Yes]			
[Head Cleaning]	[Head Cleaning A]*			
	[Head Cleaning B]			
[Auto Feed>(*13)	[No]*			
	[Yes]			
[Take-up Reel>(*10)	[Disable]*			
	[Enable]			
[Media Menu]	[Cut Sheet Type]	[Plain Paper>(*5)		
		[Plain Paper HQ>(*5)		
		[Plain Paper HG>(*5)		
		[Recycled Coated>(*5)		
		[Coated Paper>(*5)		
		[HW Coated>(*5)		
		[Ex HW Coated>(*5)		
		[Premium MatteP>(*5)		
		[Glossy Photo>(*5)		
		[Semi-Gl Photo>(*5)		
		[HW SemiGl Photo>(*5)		
		[HW SemiGl Photo2>(*5)		
		[Poster Semi-Gl>(*5)		
		[Syn. Paper>(*5)		
		[Adh. Syn. Paper>(*5)		
		[Backlit Film>(*5)		
		[Backprint Film>(*5)		
		[Flame-Res.Cloth>(*5)		
		[Fabric Banner>(*5)		
		[ThinFab.Banner2>(*5)		
		[Proofing Paper>(*5)		
		[News Proof 1>(*5)		
		[News Proof 2>(*5)		
		[FineArt Photo>(*5)		
		[FneArt HW Photo>(*5)		

First Level	Second Level	Third Level	Fourth Level	Fifth Level
[Media Menu]	[Cas Paper Type]	[FineArt Txtr](*5)		
		[FineArt Wrclr](*5)		
		[FineArtBlockP](*5)		
		[Canvas Matte2](*5)		
		[JPN Paper Washi](*5)		
		[Colored Coated](*5)		
		[CAD Trace Paper](*5)		
		[CAD Matte Film](*5)		
		[CAD Clear Film](*5)		
		[Special #] # Here, the number is 1 to 10 (*5)		
	[Roll Media Type]	[Plain Paper](*5)		
		[Plain Paper HQ](*5)		
		[Plain Paper HG](*5)		
		[Recycled Coated](*5)		
		[Coated Paper](*5)		
		[HW Coated](*5)		
		[Ex HW Coated](*5)		
		[Premium MatteP](*5)		
		[Glossy Photo](*5)		
		[Semi-Gl Photo](*5)		
		[HW Glossy Photo2](*5)		
		[HW SemiGl Photo2](*5)		
		[Poster Semi-Gl](*5)		
		[Syn. Paper](*5)		
		[Adh. Syn. Paper](*5)		
		[Backlit Film](*5)		
		[Backprint Film](*5)		
		[Flame-Res.Cloth](*5)		
		[Fabric Banner](*5)		
		[ThinFab.Banner2](*5)		

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First Level	Second Level	Third Level	Fourth Level	Fifth Level	
[Media Menu]	[Roll Media Type]	[Proofing Paper>(*5)			
		[News Proof 1>(*5)			
		[News Proof 2>(*5)			
		[FineArt Photo>(*5)			
		[FineArt HW Photo>(*5)			
		[FineArt Txtr>(*5)			
		[FineArt Wtrclr>(*5)			
		[FineArtBlockP>(*5)			
		[Canvas Matte2>(*5)			
		[JPN Paper Washi>(*5)			
		[Colored Coated>(*5)			
		[CAD Trace Paper>(*5)			
		[CAD Matte Film>(*5)			
		[CAD Clear Film>(*5)			
	[Special #] # Here, the number is 1 to 10 (*5)				
[Roll Length Set>(*1, *2)	[### m>(*16)				
	[### feet>(*16)				
[ManageRemainRoll]	[Off]*				
	[On]				
[Paper Details]	(The paper type is displayed here.) (*5)	[Roll DryingTime]	[Off]		
			[30 sec.]		
			[1 min.]		
			[3 min.]		
			[5 min.]		
			[10 min.]		
			[30 min.]		
			[60 min.]		
		[Scan Wait Time]	[Dry time]		[Off]
					[1 sec.]
					[3 sec.]
					[5 sec.]
					[7 sec.]
			[9 sec.]		
			[Area>(*17)		[Entire area]*
					[Leading edge]
		[Feed Priority]	[Automatic]*		
			[Band Joint]		
			[Print Length]		
		[Adjust Length A]	-0.70% - 0.00%* - 0.70%		
		[Adjust Length B]	-0.70% - 0.00%* - 0.70%		
[Head Height]	[Automatic]*				
	[Highest]				
	[High]				
	[Standard]				
	[Low]				
	[Lowest]				

First Level	Second Level	Third Level	Fourth Level	Fifth Level	Sixth Level	
[Paper Details]	(The paper type is displayed here.) (*5)	[Skew Check Lv.]	[Standard]			
			[Loose]			
			[Off]			
		[VacuumStrngth]	[Automatic]*			
			[Strongest]			
			[Strong]			
			[Standard]			
			[Weak]			
			[Weakest]			
		[Width Detection]	[Off]			
			[On]			
		[NearEnd RollMrgn]	[3mm]			
			[20mm]			
		[Cut Speed]	[Fast]			
			[Standard]			
			[Slow]			
		[Trim Edge First]	[Automatic]			
			[Off]			
			[On]			
		[Cutting Mode]	[Automatic]			
[Eject]						
[Manual]						
[Bordless Margin]	[Automatic]					
	[Fixed]					
[CutDustReduct.]	[Off]					
	[On]					
[NearEnd Sht Mrgn]	[3mm]					
	[20mm]					
[Return Defaults]	[No]					
	[Yes]					
[Job Management]	[Print Job]	[Job List]	(Choose a print job)	[Delete]		
			[Preempt Jobs]			
	[Stored Job]	[Mailbox List]	(Enter a password if one has been set.)	[Job List]		[Print]
				[Delete]		
				[Print Job List]		[No]
						[Yes]
	[Job Log]	(Choose from information about the latest three print jobs.)		[Document Name]		
				[User Name]		
				[Page Count]		
				[Job Status]		
				[CANCELED]		
[Print Start Time]				[yyyy/mm/dd hh:mm:ss]		
[Print End Time]				[yyyy/mm/dd hh:mm:ss]		
[Print Time]				[xxx sec.]		
[Print Size]				[xxxxxxxxsq.mm]		
[Media Type]						
[Interface]	[USB]					
	[Network]					
		[Ink Consumed]	(Indicates the ink color.)	[xx.x ml]		
[HDD Information]	[HDDSpace]: xx.xGB					

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First Level	Second Level	Third Level	Fourth Level	Fifth Level	Sixth Level
[GL2 Settings]	[Quality Manager]	[Color Mode]	[Monochrome]		
			[Color (CAD) 1]*		
			[Color (CAD) 2]		
			[Color (CAD) 3]		
			[Color (CAD) 4]		
			[Color (CAD) 5]		
			[Color (CAD) 6]		
		[Print Quality]	[Fast]		
			[Standard]*		
			[High]		
		[Input Resolution]	[600dpi]*		
			[300dpi]		
		[Print (Economy)]	[Off]*		
			[On]		
	[Paper Manager]	[Paper Source]	[Automatic]*		
			[Roll Paper]		
			[Cut Sheet]		
		[Margin]	[3mm(Standard)]*		
			[5mm]		
		[Conserve Paper]	[Off]*		
			[On]		
		[Auto Rotate]	[Off]*		
			[On]		
		[Nesting]	[Use Nesting]	[Off]*	
				[On]	
			[Nesting WaitTime]	[xx min.]	
			[Cut Lines]	[Off]*	
			[On]		

First Level	Second Level	Third Level	Fourth Level	Fifth Level	Sixth Level		
[GL2 Settings]	[Line & Pen Manager]	[Enable merge]	[Off]*				
			[On]				
		[Pen Setup]	[Select Palette]	[Software]*			
				[Palette A]			
				[Palette B]			
				[Factory]			
			[Define Palette]	[Palette A] (Choose a pen number.)	[Width] (Indicates the Width value.)		
					[Color] 0-255		
				[Line Attributes]-[No Setting]/[Circle Setting]			
			[Palette B] (Choose a pen number.) (Indicates Width, Color, and Line Attributes.)	(Specify the values of Width, Color, and Line Attributes.)			
			[Factory] (Choose a pen number.) (Indicates Width, Color, and Line Attributes.)				
		[Reset Palette]	[All Palette]				
			[Palette A]				
			[Palette B]				
		[Smoothing]	[Software]*				
			[Smooth]				
		[ThickenFineLines]	[Off]*				
			[On]				
	[AdjustFaintLines]	[Off]					
		[On]*					
	[ProcessingOption]	[Warning]	[Off]*				
			[On]				
		[On-the-Fly]	[Off]*				
			[On]				
[PageSizeProcess1]		[Off]*					
		[On]					
[PageSizeProcess2]	[Off]*						
	[On]						

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First Level	Second Level	Third Level	Fourth Level	Fifth Level
[Adjust Printer]	[Auto Head Adj.]	[Standard Adj.]	[No]	
			[Yes]	
		[Advanced Adj.]	[No]	
			[Yes]	
		[Auto Print]	[Off]	
			[On]*	
	[Manual Head Adj>(*12)	[No]		
		[Yes]		
	[Auto Band Adj.]	[Standard Adj.]	[No]	
			[Yes]	
		[Advanced Adj.]	[No]	
			[Yes]	
	[Manual Band Adj]	[No]		
		[Yes]		
[Adjust Length>(*3)	[A:High]	[No]		
		[Yes]		
	[B:Standard/Draft]	[No]		
		[Yes]		
[Head Inc. Adj.]	[No]			
	[Yes]			
[Interface Setup]	[EOP Timer>(*18)	[10 sec.]		
		[30 sec.]		
		[1 min.]		
		[2 min.]		
		[5 min.]		
		[10 min.]*		
		[30 min.]		
		[60 min.]		
		[TCP/IP>(*18)	[IP Mode]	[Automatic]
			[Manual]*	
	[Protocol>(*4)		[DHCP]	
			[On]	
			[Off]*	

First Level	Second Level	Third Level	Fourth Level	Fifth Level	
[Interface Setup]	[TCP/IP>(*18)	[Protocol>(*4)	[BOOTP]	[On]	
				[Off]*	
			[RARP]	[On]	
					[Off]*
		[IP Setting>(*14)	[IP Address]	0.0.0.0 to 255.255.255.255	
			[Subnet Mask]	0.0.0.0 to 255.255.255.255	
			[Default G/W]	0.0.0.0 to 255.255.255.255	
	[NetWare>(*18)	[NetWare]		[On]	
				[Off]*	
		[Frame Type>(*6)	[Auto Detect]		
			[Ethernet 2]		
			[Ethernet 802.2]*		
			[Ethernet 802.3]		
			[Ethernet SNAP]		
		[Print Service>(*6)	[BinderyPServer]		
			[RPrinter]		
			[NDSPServer]*		
	[NPrinter]				
	[AppleTalk>(*18)		[On]		
			[Off]*		
	[Ethernet Driver>(*18)	[Auto Detect]		[On]*	
				[Off]	
		[Comm.Mode>(*7)	[Half Duplex]*		
[Full Duplex]					
[Ethernet Type>(*7)		[10 Base-T]*			
		[100 Base-TX]			
[Spanning Tree]		[Not Use]*			
	[Use]				
	[MAC Address]	000085XXXXXX			
[Init. Settings>(*18)		[No]*			
		[Yes]			
[Maintenance]	[Maint. cart.]	[No]			
		[Yes]			

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First Level	Second Level	Third Level	Fourth Level	Fifth Level	
[Maintenance]	[Replace P.head]	[No]			
		[Yes]			
	[Repl. S. Cleaner]	[No]			
		[Yes]			
	[Move Printer]	[Level 1]*			
		[Level 2]			
[Level 3]					
[System Setup]	[Warning]	[Buzzer]	[Off]		
			[On]*		
		[Detect Mismatch]	[Pause]		
			[Warning]		
			[None]*		
		[Skip Take-Up Err(*10)]	[Off]*		
		[On]			
	[Keep Media Size]	[Off]*			
		[On]			
	[Paper Size Basis]	[Sht Selection 1]	[ISO A3+]*		
			[13"x19"(Super B)]		
		[Sht Selection 2]	[ISO B1]*		
			[28"x40"(ANSI F)]		
	[Noz. Check Freq.]	[Off]			
		[1 page]			
		[10 pages]			
		[Automatic]*			
	[CarriageScanWdth]	[Automatic]*			
		[Fixed]			
	[Sleep Timer]	[5 min.]*			
		[10 min.]			
		[15 min.]			
		[20 min.]			
[30 min.]					
[40 min.]					
[50 min.]					
[60 min.]					
	[240 min.]				

First Level	Second Level	Third Level	Fourth Level	Fifth Level
[System Setup]	[Length Unit]	[meter]*		
		[feet/inch]		
	[Time Zone>(*18)	[0: London (GMT)]		
		[+1: Paris, Rome]		
		[+2: Athens, Cairo]		
		[+3: Moscow]		
		[+4: Eerevan, Baku]		
		[+5: Islamabad]		
		[+6: Dacca]		
		[+7: Bangkok]		
		[+8: Hong Kong]		
		[+9: Tokyo, Seoul]		
		[+10: Canberra]		
		[+11: NewCaledonia]		
		[+12: Wellington]		
		[-12: Eniwetok]		
		[-11: Midway is.]		
		[-10: Hawaii (AHST)]		
		[-9: Alaska (AKST)]		
		[-8: Oregon (PST)]		
		[-7: Arizona (MST)]		
	[-6: Texas (CST)]			
	[-5: New York (EST)]			
[-4: Santiago]				
[-3: Buenos Aires]				
[-2:]				
[-1: Cape Verde]				
[Date Format>(*18)	[yyyy/mm/dd]*			
	[dd/mm/yyyy]			
	[mm/dd/yyyy]			
[Date & Time>(*18)	[Date]		[yyyy/mm/dd>(*8)	
	[Time]		[hh:mm]	

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First Level	Second Level	Third Level	Fourth Level	Fifth Level	
[System Setup]	[Language]	[Japanese]			
		[English]			
		[Francais]			
		[Italiano]			
		[Deutsch]			
		[Espanol]			
		[Pyccknn]			
		[Chinese]			
		[Korea]			
		[Contrast Adj.]	-4 to 4		
		[Reset PaprSetngs>(*18)]	[No]		
			[Yes]		
		[Erase HDD Data]	[High Speed>(*18)]	[No]	
				[Yes]	
			[Secure High Spd.)(*18)]	[No]	
				[Yes]	
			[Secure>(*18)]	[No]	
				[Yes]	
		[Output Method]	[Print]*		
			[Print(auto delete)]		
	[Save in mail box]				
	[Save and Print]	[Off]*			
		[On]			
	[Save: Common Box>(*18)]	[Off]			
		[On]*			
	[Show Job Log>(*18)]	[Off]			
		[On]			
[Admin. Menu>(*18)]	[Change Password>(*19)]				
	[Init.Admin.Pswd>(*19)]				
[Test Print]	[Status Print]	[No]			
		[Yes]			
	[Media Details]	[No]			
		[Yes]			
	[Print Job Log]	[No]			
		[Yes]			
	[Menu Map]	[No]			
		[Yes]			
	[Nozzle Check]	[No]			
		[Yes]			
[Color Palette]	[No]				
	[Yes]				
[Information]	[System Info]				
	[Error Log]	1.xxxxxxxxx-xxxx			
		2.xxxxxxxxx-xxxx			

*1: Available only if a roll is loaded.

*2: Available only if ManageRemainRoll is On.

*3: Available only if Feed Priority is Print Length.

*4: Available only if IP Mode is Automatic.

*5: For information on the types of paper the printer supports, refer to the Media Guide. The media type setting in the printer driver and related software (as well as on the Control Panel) is updated when you install Media Configuration Tool from the User Software CD-ROM or if you change paper information by using Media Configuration Tool.

*6: Available only if NetWare is On.

*7: Available only if Auto Detect is off.

*8: Follows the setting in Date Format.

*10: Displayed if the Media Take-up Unit is attached.

*12: Available after you have used Advanced Adj. in Auto Head Adj. once.

*13: Available if Take-up Reel is Enable, roll paper is loaded, and you have not executed Auto Feed for the loaded roll.

*14: Not displayed if IP Mode is Automatic.

*16: Follows the setting in Length Unit.

*17: Leading edge is not available as a setting option in the Paper Detailed Settings dialog box of the printer driver.

*18: Viewing and configuration is possible for administrators, and only viewing for other users.

*19: Viewing and configuration is possible for administrators only.

3. Main menu during printing

The structure of the main menu during printing is as follows.

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First Level	Second Level	Third Level	Fourth Level	Fifth Level
[Menu Durng Prtng]	[Head Cleaning]	[Head Cleaning A]		
		[Head Cleaning B]		
	[Fine Band Adj.]	-5 to 5		
	[Information]	[System Info]		
		[Error Log]	1.xxxxxxxxx-xxxx 2.xxxxxxxxx-xxxx	
		[Job Log]	(Choose from information about the latest three print jobs.)	[Document Name]
				[User Name]
				[Page Count]
				[Job Status]
			[Print Start Time]	
			[Print End Time]	
			[Print Time]	
		[Print Size]		
		[Media Type]		
		[Interface]		
		[Ink Consumed]		
		[HDD Information]		

4. Main Menu Settings

Main menu items are described in the following tables.

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Setting Item	Description/Instructions
[Paper Cut]	Displayed if a roll is loaded. Choose Yes to cut the roll at the current position. The paper will be fed, if necessary, so that the sheet is at least 10 cm (39.4 in.) long after the cut. The paper will not be cut if there is not enough paper left to feed the paper this much.
[Rep. Ink Tank]	When replacing the Ink Tank, choose Yes and follow the instructions on the screen.
[Head Cleaning]	Specify Printhead cleaning options. Choose Head Cleaning A if printing is faint, oddly colored, or contains foreign substances. Choose Head Cleaning B if no ink is printed at all, or if printing is not improved by Head Cleaning A.
[Auto Feed]	This command is available only if Take-up Reel is set to Enable. Choose Yes to advance roll paper automatically on the Rewind Spool, up to the fastening position.
[Take-up Reel]	Choose Enable to use the Media Take-up Unit.
[Media Menu]	Specify the type and size of paper.
[Paper Details]	Specify detailed paper-related settings, including the ink drying time and borderless printing options.
[Job Management]	Manage print jobs on the printer's hard disk.
[GL2 Settings]	Make settings for making prints using GL2.
[Adjust Printer]	Adjust the Printhead alignment or amount of feed by printing a test pattern.
[Interface Setup]	Configure the EOP timer and network settings.
[Maintenance]	Access maintenance settings when replacing the Printhead or preparing to move the printer.
[System Setup]	Specify the printer system settings, including the date format and display language.
[Admin. Menu]	Limits the indication/setting of the menu.
[Test Print]	Choose Status Print to print information about the printer. Choose Media Details to print the paper settings as specified in Paper Details. Choose Print Job Log to print a record of print jobs, including the paper type and size, amount of ink used, and so on. (Information on ink consumption is general, not specific in nature.) Choose Menu Map to print a list of the main menu options. Choose Nozzle Check to print a test pattern for checking the nozzles.
[Information]	Displays information about the printer and record of print jobs.

[Media Menu]

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Setting Item	Description/Instructions
[Cut Sheet Type]	Choose the type of sheets.
[Roll Media Type]	Choose the type of roll.
[Roll Length Set]	Displayed if Chk Remain.Roll is On. If a barcode is not printed on rolls, specify the roll length. The roll length is displayed in meters or feet, depending on the setting in Length Unit.
[Chk Remain.Roll]	Choose On to print a barcode at the end of a roll before you remove it. The printed barcode can be used in managing the amount of roll paper left. Choose Off if you prefer not to print the barcode.

[Paper Details]

Setting Item	Description/Instructions
(The paper type is displayed here.)	
[Roll DryingTime]	Specify the time to wait for the ink to dry for each sheet.
[Scan Wait Time]	Specify the time to wait for the ink to dry between each scan in bidirectional printing, in consideration of how quickly the ink dries. Note that printing will take longer if you specify a wait time.
[Feed Priority]	Specify exact paper feeding, if desired. Normally, select Automatic. Choose Print Length if you prefer to feed the paper an exact amount. However, note that choosing Print Length may result in slight banding in the direction of Carriage scanning.
[Adjust Length]	Displayed if Feed Priority is Print Length. Adjustment relative to the amount of stretching or shrinkage of the current paper. Enter either the adjustment results from Print Pattern or the discrepancy that you measured (as a percentage). For paper that tends to stretch, increase the feed amount by setting the adjustment value toward +. For paper that tends to shrink, decrease the feed amount by setting the adjustment value toward -.
[Head Height]	Adjust the Printhead height.
[Skew Check Lv.]	If you print on Japanese paper (washi) or other handmade paper that has an irregular width, choose Loose for a higher skew detection threshold, or choose Off to disable skew detection. However, if paper is loaded askew when detection is Off, note that paper jams or Platen soiling may occur.
[VacuumStrngth]	Specify the level of suction that holds paper against the Platen.
[Width Detection]	Make this setting when the print size is different from the media size, for example, when you want to make a print within a frame. When you select [Off], the paper width is not detected.
[NearEnd RollMrgn]	Specify the minimum margin at the leading edge of roll paper to ensure better printing quality at the leading edge. Note that if you choose 5mm, it may lower the printing quality at the leading edge and affect feeding accuracy. The printed surface may be scratched, and ink may adhere to the leading edge. It may also cause the Platen to become soiled.
[Cut Speed]	Choose the cutting speed. If you use adhesive paper, choosing Slow helps prevent adhesive from sticking to the cutter and keeps the cutter sharp.
[Trim Edge First]	If a roll is loaded, the end of the paper will be cut.
[Cutting Mode]	Specify whether or not to cut with the standard round-bladed cutter. Choose Automatic to have the roll cut automatically after printing. If you choose Manual, the paper will not be cut after printing. Instead, a line will be printed at the cut position. Choose Eject if you prefer not to have documents dropped immediately after printing, as when waiting for ink to dry.
[Bordless Margin]	Adjust the margin during borderless printing. Choose Automatic to have the printer automatically detect the paper width and configure the margin settings for borderless printing. If margins are mistakenly created when Automatic is selected, choose Fixed. In this case, the paper width is not detected automatically, and the document is printed without borders, using the margin settings required by the printer.
[CutDustReduct.]	Choose On to reduce the amount of debris generated when cutting film and similar media by printing a line at the cut position. This option reduces the amount of debris given off after cutting. It also helps prevent adhesive from sticking to the cutter and keeps the cutter sharp if you use adhesive paper.
[NearEnd Sht Mrgn]	Specify a margin at the leading edge of sheets to ensure better printing quality at the leading edge. Note that if you choose 5mm, it may lower the printing quality at the leading edge and affect feeding accuracy. The printed surface may be scratched, and ink may adhere to the leading edge.
[Return Defaults]	Choose Yes to restore Paper Details to the factory default values.

[Job Management]

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Setting Item			Description/Instructions	
[Print Job]	[Job List]	(Choose a print job)	[Delete]	Delete the current job or queued jobs.
			[Preempt Jobs]	Print the job first after the current print job is finished printing.
[Stored Job]	[Mailbox List]	(Enter a password if one has been set.)	[Job List]-[Print]	Prints a saved job.
			[Job List]-[Delete]	Deletes a saved job.
			[Job List]-[Print]	Prints a list of saved jobs.
[Job Log]	(Choose from information about the latest three print jobs.)	[Document Name]		Displays the name of the document in the most recently printed job.
		[User Name]		Displays the name of the user who has transmitted the job.
		[Page Count]		Displays the number of sheets of the job.
		[Job Status]		Displays the result of processing of the job.
		[Print Start Time]		Displays the time at which the job started printing.
		[Print End Time]		Displays the time at which the job finished printing.
		[Print Time]		Displays the time spent printing the job.
		[Print Size]		Displays the size of the paper used for printing the job.
		[Media Type]		Displays the type of the paper used for printing the job.
		[Interface]		Displays the interface of the job.
		[Ink Consumed]		Displays the amount of ink consumed for printing the job.
[HDD Information]	[HDDSpace]			Displays the size of free hard disk space on the printer.

Setting Item		Description/Instructions	
[Quality Manager]	[Color Mode]	[Monochrome]	Print by the monochrome.
		[Color (CAD) 1]	Print by the standard color.
		[Color (CAD) 2]	Print by the bright color.
		[Color (CAD) 3]	Print by the color emulated the Canon iPF500/iPF600/iPF700/iPF510/iPF610/iPF710/iPF605/iPF720/iPF810/iPF820.
		[Color (CAD) 4]	Print by the color emulated the HP Designjet 500/800.
		[Color (CAD) 5]	Print by the color emulated the HP Designjet 1000.
	[Color (CAD) 6]	Print by the color emulated the HP Designjet 4000/4050.	
	[Print Quality]	Select the print quality.	
[Input Resolution]	Choose the printer input resolution from between [600dpi] and [300dpi].		
[Print (Economy)]	Prints with a lower grade of print than normal, but with less ink consumption. Select [ON] to economize on inks.		
[Paper Manager]	[Paper Source]	Select how to feed paper for printing on the HP-GL/2.	
	[Margin]	Set the top/bottom and left/right margins of the paper. For cut-sheet, the trailing edge margin is 23mm. However, if the leading edge margin is set with [Paper Details], that value has priority.	
	[Conserve Paper]	Prints by economizing on paper.	
	[Auto Rotate]	If a document has its long side shorter than the roll width, the page rotates by 90 degrees automatically to economize on paper. If a document contains horizontally long data such that it has its long side longer than the roll width and its short side shorter than the roll width, the page rotates 90 degrees to print within the boundaries of the paper. HP RTL cannot rotate. In case of HP RTL image, the image may be truncated or a blank paper may be ejected because the image cannot be rotated even if the paper size is rotated by 90 degrees. In that case, set [Auto Rotate] to [Off].	
	[Nesting]	[Use Nesting]	Select [On] to print pages when they are tiled fully to the roll width, instead of printing them one by one.
		[Nesting WaitTime]	Set the time to elapse before printing.
[Cut Lines]	Select [On] to print perforated lines between pages.		
[Line & Pen Manager]	[Enable merge]	When lines overlap, set whether to merge or overwrite the colors of the overlapping lines. Select [Off] to overwrite with the line printed later. Select [On] to merge all overlapping colors.	
	[Pen Setup]	[Select Palette]	Select the value related to pen from [Software], [Palette A], [Palette B], or [Factory]. Select [Software] to print according to the application side instruction. Select [Palette A] or [Palette B] to print with value set by [Define Palette].
		[Define Palette]	Set [Width], [Color], and [Line Attributes] for the palette's [Pen Number]. Select [Factory] to check the value when [Factory] is selected for [Select Palette]. For [Line Attributes], select the shape of line end and joint between lines as [No Setting] or [Circle Setting].
		[Reset Palette]	Return the [Define Palette] settings to factory settings.
	[Smoothing]	Choose whether to draw an arc with a smooth curve or with a polygon.	
	[ThickenFineLines]	Select [On] to print thin lines clearly.	
	[AdjustFaintLines]	If thin lines print in a tint of color varied from other patterns, selecting [Off] may provide the print result as intended, though the thin lines may print, interrupted, depending on the color.	
[ProcessingOption]	[Warning]	Select [On] to display warnings during GL2.	
	[On-the-Fly]	In printing data consisting solely of HP RTL, if the data is slow to print, select [On] to expedite the time at which the data starts printing. Verify the print result to make sure that images are not chipped in this case.	
	[PageSizeProcess1]	Normally, an image is printed inside margins necessary for printing, but if the image data itself has margins, the print position will not be offset when this is set [On].	
	[PageSizeProcess2]	Select [On] to determine the paper size based on the drawing area.	

[Adjust Printer]

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Setting Item		Description/Instructions
[Auto Head Adj.]	[Standard Adj.]	Choose Yes to have the printer print and read a test pattern for the automatic adjustment of Printhead alignment relative to the printing direction.
	[Advanced Adj.]	Choose Yes to have the printer print and read a test pattern for the automatic adjustment of Printhead alignment relative to the nozzle and printing direction.
	[Auto Print]	Choose On to have the printer automatically execute the Advanced Adj. operations after you replace the Printhead.
[Manual Head Ad]		Choose Yes to print a test pattern for adjustment of Printhead alignment relative to the printing direction. Enter the adjustment value manually based on the resulting pattern.
[Auto Band Adj.]	[Standard Adj.]	Choose Yes to have the printer print and read a band adjustment test pattern for automatic adjustment of the feed amount.
	[Advanced Adj.]	Choose this option when using paper other than genuine Canon paper, or paper for purposes other than checking output. Choose Yes to have the printer print and read a band adjustment test pattern for automatic adjustment of the feed amount. Note that this function takes more time and requires more ink than Standard Adj.
[Manual Head Adj]		Choose Yes to print a test pattern for adjustment of Printhead alignment relative to the printing direction. Enter the adjustment value manually based on the resulting pattern.
[Adjust Length]	[A:High]	Choose Yes to print a test pattern for adjustment relative to paper stretching or shrinkage, after which you can enter the amount of adjustment.
	[B:Standard/Draft]	
[Head Inc. Adj.]		Select [Yes] to print an adjustment pattern for adjusting the inclination of the printhead.

[Interface Setup]

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Setting Item		Description/Instructions	
[EOP Timer]		Specify the timeout period before cancellation of print jobs that cannot be received by the printer.	
[TCP/IP]	[TCP/IP]	Specify the TCP/IP protocol settings. To apply your changes, choose Register Setting.	
	[IP Mode]	Choose whether the printer IP address is configured automatically or a static IP address is entered manually.	
	[Protocol]	[DHCP]	Specify the protocol used to configure the IP address automatically.
		[BOOTP]	
[RARP]			
[IP Setting]	[IP Address]	Specify the printer network information when using a static IP address. Enter the IP address assigned to the printer, as well as the network subnet mask and default gateway.	
	[Subnet Mask]		
	[Default G/W]		
[NetWare]	[NetWare]	Specify the NetWare protocol. To apply your changes, choose Register Setting.	
	[Frame Type]	Specify the frame type to use.	
	[Print Service]	Choose the print service.	
[AppleTalk]		Specify whether to use the AppleTalk protocol. To apply your changes, choose Register Setting.	
[Ethernet Driver]	[Auto Detect]	Specify the communication method. To apply your changes, choose Register Setting. Choose On for automatic configuration of the LAN communication protocol. Choose Off to use settings values of Comm.Mode and Ethernet Type.	
	[Comm.Mode]	Choose the LAN communication method.	
	[Ethernet Type]	Choose the LAN transfer rate.	
	[Spanning Tree]	Choose whether spanning-tree packets are supported over the LAN.	
	[MAC Address]	Displays the MAC address.	
[Init. Settings]		A confirmation message is displayed if you press the button. Choose [OK] to restore the network settings to the default values.	

[Maintenance]

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Setting Item	Description/Instructions
[Maint. cart.]	When exchanging the maintenance cartridge, choose Yes and follow the instructions on the screen.
[Replace P.head]	Not displayed during a warning message that the remaining Maintenance Cartridge capacity is low. When replacing the Printhead, choose Yes and follow the instructions on the screen.
[Repl. S. Cleaner]	When replacing the Shaft Cleaner, choose Yes and follow the instructions on the screen.
[Move Printer]	When transferring the printer to another location, choose the level of transfer and follow the instructions on the screen.

[System Setup]

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Setting Item		Description/Instructions
[Warning]	[Buzzer]	Set the buzzer. Choose On for the buzzer to sound once for warnings and three times for errors.
	[Detect Mismatch]	Choose Warning for notification (display of a warning message) during printing if the paper type specified in the printer menu does not match the paper type in the printer driver. Choose None to continue print without notification. Choose Pause to have printing paused under these circumstances. In this case, you can continue printing by pressing the Online button.
	[Skip Take-Up Err]	Choose On to continue with printing even if an error occurs with the Media Take-up Unit. Choose Off to have the printer pause before printing if a rewinding error occurs.
[Keep Media Size]		Choose On to use the paper size setting as the basis for printing instead of other settings. The margin setting of the printer menu will be used instead of the margin setting of the printer driver if the latter is smaller, which may prevent text or images in the margin from being printed. Choose Off to use the printer driver settings instead. Even if the margin setting of the printer driver is smaller than that of the printer driver, text or images will not be cut off. However, this requires longer paper because the actual margin will be equal to the margin setting of the printer driver plus the margin setting of the printer menu.
[Paper Size Basis]	[Sht Selection 1]	Select which size is to be recognized, [ISO A3+] or [13"x19"(Super B)], when the detected size of the cut sheet is between these sizes.
	[Sht Selection 2]	Select which size is to be recognized, [ISO B1] or [28"x40"(ANSI F)], when the detected size of the cut sheet is between these sizes.
[Noz. Check Freq.]		Specify the timing for automatic checks of nozzle clogging. Choose 1 page to check once per printed page. Choose 10 pages to check once per ten printed pages. Choose Automatic to have the printer automatically adjust the timing for checks based on the frequency of nozzle use.
[CarriageScanWdth]		Set the scan width of the carriage for printing. Select [Automatic] to move the carriage to meet the width of the loaded paper. Selecting [Fixed] will reduce stains on the back of the paper but at the cost of a somewhat longer print time.
[Sleep Timer]		Specify the period before the printer enters Sleep mode.
[Length Unit]		Choose the unit of measurement when roll length is displayed. You can switch the unit displayed for Roll Length Set and the remaining paper amount displayed in the submenu.
[Time Zone]		Specify the time zone. Time zone options indicate a main city in this time zone and the difference from Greenwich Mean Time.
[Date Format]		Specify the date format.
[Date & Time]	[Date]	Set the current date.
	[Time]	Set the current time.
[Language]		Specify the language used on the Display Screen.
[Contrast Adj.]		Adjust the Display Screen contrast level.
[Reset PaprSetngs]		Restores settings that you have changed with Media Configuration Tool to the factory default values.
[Erase HDD Data]	[High Speed]	Delete the file management information of the saved data in the HDD.
	[Secure High Spd.]	Overwrite the random data in the whole of the hard disk drive.
	[Secure]	Overwrite 00 and FF and random data in the whole of the hard disk drive once at a time. Execute the verify check whether the data has written correctly to the hard disk drive.
[Output Method]	[Print]	Choose how to print.
	[Print(auto delete)]	Select [Print] to perform normal printing. Select [Print (Auto delete)], print data and remove it from the hard disk. Select [Save in mail box] to only save data to the box, without printing it.
	[Save in mail box]	
[Save and Print]		Select [On] to start printing data when its save is complete.
[Save: Common Box]		Select [Off] to print data without saving it to the common box.
[Show Job Log]		Indicates the job information that choose from the last three print jobs.

Setting Item	Description/Instructions
[Change Password]	By setting a password, you can restrict menu display and configuration as follows. You can input between 0 and 9999999. - Viewing and configuration by administrators only IPv4 Settings Change Password Init.Admin.Pswd - Viewing and configuration by administrators, and only viewing by other users Interface Setup settings (except IPv4 Settings) Date & Time Date Format Time Zone Use RemoteUI Reset PaprSetngs
[Init.Admin.Pswd]	Choose OK to restore the Admin. Menu password to the default values.

[Information]

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Setting Item		Description/Instructions	
[System Info]	[Version]	[Firmware]	Displays the version of the printer and firmware.
		[Boot]	Displays the version of the boot ROM.
		[MIT]	Displays the version of the MIT database format.
	[s/n]	Displays the printer's serial number.	
	[MAC]	Displays the MAC address of the printer.	
	[IP]	Displays the printer IP address.	
[Error Log]	[##### #####]	Displays the most recent error messages (up to two).	

1.6.5 Main Menu

iPF825

The printer has a Main menu which includes a menu related to maintenance such as adjustment of ink ejection position of each nozzle and head cleaning, a menu related to printing settings such as auto cutting and ink drying time, and a menu related to parameters such as a message language.

1. Main menu operations

a) How to enter the Main menu

To enter the Main menu, press the [Menu] button on the operation panel.

b) How to exit the Main menu

To exit the Main menu, press the [Online] button.

c) Buttons used with the Main menu

- Selecting menus and parameters: [◀] or [▶] button
- Going to the next lower-level menu: [▼] button
- Going to the next higher-level menu: [▲] button
- Determining a selected menu or parameter: [OK] button

2. Main Menu

The structure of the main menu is as follows.

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First Level	Second Level	Third Level	Fourth Level	Fifth Level
[Paper Cut>(*1)	[No]*			
	[Yes]			
[Rep. Ink Tank]	[No]*			
	[Yes]			
[Head Cleaning]	[Head Cleaning A]*			
	[Head Cleaning B]			
[Media Menu]	[Cut Sheet Type]	[Plain Paper>(*5)		
		[Plain Paper HQ>(*5)		
		[Plain Paper HG>(*5)		
		[Recycled Coated>(*5)		
		[Coated Paper>(*5)		
		[HW Coated>(*5)		
		[Ex HW Coated>(*5)		
		[Premium MatteP>(*5)		
		[Glossy Photo>(*5)		
		[Semi-Gl Photo>(*5)		
		[HW SemiGl Photo>(*5)		
		[HW SemiGl Photo2>(*5)		
		[Poster Semi-Gl>(*5)		
		[Syn. Paper>(*5)		
		[Adh. Syn. Paper>(*5)		
		[Backlit Film>(*5)		
		[Backprint Film>(*5)		
		[Flame-Res.Cloth>(*5)		
		[Fabric Banner>(*5)		
		[ThinFab.Banner2>(*5)		
		[Proofing Paper>(*5)		
[News Proof 1>(*5)				
[News Proof 2>(*5)				
[FineArt Photo>(*5)				
[FneArt HW Photo>(*5)				

First Level	Second Level	Third Level	Fourth Level	Fifth Level
[Media Menu]	[Cas Paper Type]	[FineArt Txtr](*5)		
		[FineArt Wrclr](*5)		
		[FineArtBlockP](*5)		
		[Canvas Matte2](*5)		
		[JPN Paper Washi](*5)		
		[Colored Coated](*5)		
		[CAD Trace Paper](*5)		
		[CAD Matte Film](*5)		
		[CAD Clear Film](*5)		
		[Special #] # Here, the number is 1 to 10 (*5)		
		[Roll1(Uppr) Type]/[Roll2 (Lwr) Type](*1, *2)	[Plain Paper](*5)	
	[Plain Paper HQ](*5)			
	[Plain Paper HG](*5)			
	[Recycled Coated](*5)			
	[Coated Paper](*5)			
	[HW Coated](*5)			
	[Ex HW Coated](*5)			
	[Premium MatteP](*5)			
	[Glossy Photo](*5)			
	[Semi-Gl Photo](*5)			
	[HW Glossy Photo2](*5)			
	[HW SemiGl Photo2](*5)			
	[Poster Semi-Gl](*5)			
	[Syn. Paper](*5)			
	[Adh. Syn. Paper](*5)			
	[Backlit Film](*5)			
	[Backprint Film](*5)			
[Flame-Res.Cloth](*5)				
[Fabric Banner](*5)				
[ThinFab.Banner2](*5)				

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First Level	Second Level	Third Level	Fourth Level	Fifth Level
[Media Menu]	[Roll1(Uppr) Type]/[Roll2(Lwr) Type>(*1, *2)]	[Proofing Paper>(*5)]		
		[News Proof 1>(*5)]		
		[News Proof 2>(*5)]		
		[FineArt Photo>(*5)]		
		[FneArt HW Photo>(*5)]		
		[FineArt Txtr>(*5)]		
		[FineArt Wtrclr>(*5)]		
		[FineArtBlockP>(*5)]		
		[Canvas Matte2>(*5)]		
		[JPN Paper Washi>(*5)]		
		[Colored Coated>(*5)]		
		[CAD Trace Paper>(*5)]		
		[CAD Matte Film>(*5)]		
		[CAD Clear Film>(*5)]		
	[Special #] # Here, the number is 1 to 10 (*5)			
[Roll1(Uppr)Lngth]/[Roll2(Lwr) Lngth>(*1, *2)]	[### m>(*16)]			
	[### feet>(*16)]			
[ManageRemainRoll]	[Off]*			
	[On]			
[Paper Details]	(The paper type is displayed here.) (*5)	[Roll DryingTime]	[Off]	
			[30 sec.]	
			[1 min.]	
			[3 min.]	
			[5 min.]	
			[10 min.]	
			[30 min.]	
			[60 min.]	
		[Scan Wait Time]	[Dry time]	[Off]
				[1 sec.]
				[3 sec.]
				[5 sec.]
				[7 sec.]
				[9 sec.]
			[Area>(*17)]	[Entire area]*
				[Leading edge]
		[Feed Priority]	[Automatic]*	
			[Band Joint]	
			[Print Length]	
		[Adjust Length A]	-0.70% - 0.00%* - 0.70%	
		[Adjust Length B]	-0.70% - 0.00%* - 0.70%	
[Head Height]	[Automatic]*			
	[Highest]			
	[High]			
	[Standard]			
	[Low]			
	[Lowest]			

First Level	Second Level	Third Level	Fourth Level	Fifth Level	Sixth Level	
[Paper Details]	(The paper type is displayed here.) (*5)	[Skew Check Lv.]	[Standard]			
			[Loose]			
			[Off]			
		[VacuumStrngth]	[Automatic]*			
			[Strongest]			
			[Strong]			
			[Standard]			
			[Weak]			
			[Weakest]			
		[Width Detection]	[Off]			
			[On]			
		[NearEnd RollMrgn]	[3mm]			
			[20mm]			
		[Cut Speed]	[Fast]			
			[Standard]			
			[Slow]			
		[Trim Edge First]	[Automatic]			
			[Off]			
			[On]			
		[Cutting Mode]	[Automatic]			
[Eject]						
[Manual]						
[Bordless Margin]	[Automatic]					
	[Fixed]					
[CutDustReduct.]	[Off]					
	[On]					
[NearEnd Sht Mrgn]	[3mm]					
	[20mm]					
[Return Defaults]	[No]					
	[Yes]					
[Job Management]	[Print Job]	[Job List]	(Choose a print job)	[Delete]		
			[Preempt Jobs]			
	[Stored Job]	[Mailbox List]	(Enter a password if one has been set.)	[Job List]		[Print]
				[Delete]		
				[Print Job List]		[No]
	[Job Log]	(Choose from information about the latest three print jobs.)	[Document Name]			
			[User Name]			
			[Page Count]			
			[Job Status]	[OK]		
				[CANCELED]		
			[Print Start Time]	[yyyy/mm/dd hh:mm:ss]		
			[Print End Time]	[yyyy/mm/dd hh:mm:ss]		
[Print Time]			[xxx sec.]			
[Print Size]			[xxxxxxxxsq.mm]			
[Media Type]						
	[USB]					
	[Network]					
[HDD Information]	[HDDSpace]: xx.xGB		[Ink Consumed]	(Indicates the ink color.) [xx.x ml]		

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First Level	Second Level	Third Level	Fourth Level	Fifth Level	Sixth Level	
[GL2 Settings]	[Quality Manager]	[Color Mode]	[Monochrome]			
			[Color (CAD) 1]*			
			[Color (CAD) 2]			
			[Color (CAD) 3]			
			[Color (CAD) 4]			
			[Color (CAD) 5]			
		[Color (CAD) 6]				
		[Print Quality]	[Fast]			
			[Standard]*			
			[High]			
		[Input Resolution]	[600dpi]*			
			[300dpi]			
		[Print (Economy)]	[Off]*			
			[On]			
		[Paper Manager]	[Paper Source]			[Automatic]*
						[Roll Paper]
	[Roll 1 (Upper)]					
	[Roll 2 (Lower)]					
	[Cut Sheet]					
	[Margin]		[3mm(Standard)]*			
			[5mm]			
	[Conserve Paper]		[Off]*			
			[On]			
	[Auto Rotate]		[Off]*			
			[On]			
	[Nesting]		[Use Nesting]	[Off]*		
				[On]		
			[Nesting WaitTime]	[xx min.]		
			[Cut Lines]	[Off]*		
	[On]					

First Level	Second Level	Third Level	Fourth Level	Fifth Level	Sixth Level		
[GL2 Settings]	[Line & Pen Manager]	[Enable merge]	[Off]*				
			[On]				
		[Pen Setup]	[Select Palette]	[Software]*			
				[Palette A]			
				[Palette B]			
				[Factory]			
			[Define Palette]	[Palette A] (Choose a pen number.)	[Width] (Indicates the Width value.)		
					[Color] 0-255		
					[Line Attributes]-[No Setting]/[Circle Setting]		
				[Palette B] (Choose a pen number.) (Indicates Width, Color, and Line Attributes.)	(Specify the values of Width, Color, and Line Attributes.)		
				[Factory] (Choose a pen number.) (Indicates Width, Color, and Line Attributes.)			
				[Reset Palette]	[All Palette]		
			[Palette A]				
			[Palette B]				
		[Smoothing]	[Software]*				
			[Smooth]				
		[ThickenFineLines]	[Off]*				
			[On]				
		[AdjustFaintLines]	[Off]				
			[On]*				
		[ProcessingOption]	[Warning]	[Off]*			
				[On]			
			[On-the-Fly]	[Off]*			
				[On]			
			[PageSizeProcess1]	[Off]*			
				[On]			
			[PageSizeProcess2]	[Off]*			
[On]							

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First Level	Second Level	Third Level	Fourth Level	Fifth Level
[Adjust Printer]	[Auto Head Adj.]	[Standard Adj.]	[No]	
			[Yes]	
		[Advanced Adj.]	[No]	
			[Yes]	
		[Auto Print]	[Off]	
			[On]*	
	[Manual Head Adj>(*12)	[No]		
		[Yes]		
	[Auto Band Adj.]	[Standard Adj.]	[No]	
			[Yes]	
		[Advanced Adj.]	[No]	
			[Yes]	
	[Manual Band Adj]	[No]		
		[Yes]		
[Adjust Length>(*3)	[A:High]	[No]		
		[Yes]		
	[B:Standard/Draft]	[No]		
		[Yes]		
[Head Inc. Adj.]	[No]			
	[Yes]			
[Interface Setup]	[EOP Timer>(*18)	[10 sec.]		
		[30 sec.]		
		[1 min.]		
		[2 min.]		
		[5 min.]		
		[10 min.]*		
		[30 min.]		
		[60 min.]		
		[TCP/IP>(*18)	[IP Mode]	[Automatic]
			[Manual]*	
	[Protocol>(*4)		[DHCP]	
			[On]	
			[Off]*	

First Level	Second Level	Third Level	Fourth Level	Fifth Level	
[Interface Setup]	[TCP/IP>(*18)	[Protocol>(*4)	[BOOTP]	[On]	
				[Off]*	
			[RARP]	[On]	
					[Off]*
		[IP Setting>(*14)	[IP Address]	0.0.0.0 to 255.255.255.255	
			[Subnet Mask]	0.0.0.0 to 255.255.255.255	
			[Default G/W]	0.0.0.0 to 255.255.255.255	
	[NetWare>(*18)	[NetWare]		[On]	
				[Off]*	
		[Frame Type>(*6)	[Auto Detect]		
			[Ethernet 2]		
			[Ethernet 802.2]*		
			[Ethernet 802.3]		
			[Ethernet SNAP]		
		[Print Service>(*6)	[BinderyPServer]		
			[RPrinter]		
			[NDSPServer]*		
	[NPrinter]				
	[AppleTalk>(*18)		[On]		
			[Off]*		
	[Ethernet Driver>(*18)	[Auto Detect]		[On]*	
				[Off]	
		[Comm.Mode>(*7)	[Half Duplex]*		
[Full Duplex]					
[Ethernet Type>(*7)		[10 Base-T]*			
		[100 Base-TX]			
[Spanning Tree]		[Not Use]*			
	[Use]				
	[MAC Address]	000085XXXXXX			
[Init. Settings>(*18)		[No]*			
		[Yes]			
[Maintenance]	[Maint. cart.]	[No]			
		[Yes]			

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First Level	Second Level	Third Level	Fourth Level	Fifth Level	
[Maintenance]	[Replace P.head]	[No]			
		[Yes]			
	[Repl. S. Cleaner]	[No]			
		[Yes]			
	[Move Printer]	[Level 1]*			
		[Level 2]			
		[Level 3]			
	[System Setup]	[Warning]	[Buzzer]	[Off]	
				[On]*	
[Detect Mismatch]			[Pause]		
			[Warning]		
		[None]*			
[Keep Media Size]		[Off]*			
		[On]			
[Paper Size Basis]		[Sht Selection 1]	[ISO A3+]*		
			[13"x19"(Super B)]		
		[Sht Selection 2]	[ISO B1]*		
			[28"x40"(ANSI F)]		
[Roll Switching]		[Size Optimized]*			
		[No SizeOptimized]			
[TrimEdge Reload]		[Automatic]			
		[Off]*			
		[On]			
[Noz. Check Freq.]		[Off]			
			[1 page]		
			[10 pages]		
			[Automatic]*		
[CarriageScanWdth]		[Automatic]*			
		[Fixed]			
[Sleep Timer]		[5 min.]*			
		[10 min.]			
		[15 min.]			
		[20 min.]			
		[30 min.]			
	[40 min.]				
	[50 min.]				
	[60 min.]				
	[240 min.]				

First Level	Second Level	Third Level	Fourth Level	Fifth Level	
[System Setup]	[Length Unit]	[meter]*			
		[feet/inch]			
	[Time Zone>(*18)	[0: London (GMT)]			
		[+1: Paris, Rome]			
		[+2: Athens, Cairo]			
		[+3: Moscow]			
		[+4: Eerevan, Baku]			
		[+5: Islamabad]			
		[+6: Dacca]			
		[+7: Bangkok]			
		[+8: Hong Kong]			
		[+9: Tokyo, Seoul]			
		[+10: Canberra]			
		[+11: NewCaledonia]			
		[+12: Wellington]			
		[-12: Eniwetok]			
		[-11: Midway is.]			
		[-10: Hawaii (AHST)]			
		[-9: Alaska (AKST)]			
		[-8: Oregon (PST)]			
[-7: Arizona (MST)]					
[-6: Texas (CST)]					
[-5: New York (EST)]					
[-4: Santiago]					
[-3: Buenos Aires]					
[-2:]					
[-1: Cape Verde]					
[Date Format>(*18)	[yyyy/mm/dd]*				
	[dd/mm/yyyy]				
	[mm/dd/yyyy]				
[Date & Time>(*18)	[Date]		[yyyy/mm/dd>(*8)		
	[Time]		[hh:mm]		

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First Level	Second Level	Third Level	Fourth Level	Fifth Level
[System Setup]	[Language]	[Japanese]		
		[English]		
		[Francais]		
		[Italiano]		
		[Deutsch]		
		[Espanol]		
		[Pyccknn]		
		[Chinese]		
		[Korea]		
	[Contrast Adj.]	-4 to 4		
	[Reset PaprSetngs>(*18)	[No]		
		[Yes]		
	[Erase HDD Data]	[High Speed>(*18)	[No]	
			[Yes]	
		[Secure High Spd.)(*18)	[No]	
			[Yes]	
	[Secure>(*18)	[No]		
		[Yes]		
	[Output Method]	[Print]*		
		[Print(auto delete)]		
		[Save in mail box]		
[Save and Print]	[Off]*			
	[On]			
[Save: Common Box>(*18)	[Off]			
	[On]*			
[Show Job Log>(*18)	[Off]			
	[On]			
[Admin. Menu>(*18)	[Change Password>(*19)			
	[Init.Admin.Pswd>(*19)			
[Test Print]	[Status Print]	[No]		
		[Yes]		
	[Media Details]	[No]		
		[Yes]		
	[Print Job Log]	[No]		
		[Yes]		
	[Menu Map]	[No]		
		[Yes]		
	[Nozzle Check]	[No]		
		[Yes]		
	[Color Palette]	[No]		
		[Yes]		
[Information]	[System Info]			
	[Error Log]	1.xxxxxxxxx-xxxx		
		2.xxxxxxxxx-xxxx		

*1: Available only if a roll is loaded.

*2: Available only if ManageRemainRoll is On.

*3: Available only if Feed Priority is Print Length.

*4: Available only if IP Mode is Automatic.

*5: For information on the types of paper the printer supports, refer to the Media Guide. The media type setting in the printer driver and related software (as well as on the Control Panel) is updated when you install Media Configuration Tool from the User Software CD-ROM or if you change paper information by using Media Configuration Tool.

*6: Available only if NetWare is On.

*7: Available only if Auto Detect is off.

*8: Follows the setting in Date Format.

*12: Available after you have used Advanced Adj. in Auto Head Adj. once.

*14: Not displayed if IP Mode is Automatic.

*16: Follows the setting in Length Unit.

*17: Leading edge is not available as a setting option in the Paper Detailed Settings dialog box of the printer driver.

*18: Viewing and configuration is possible for administrators, and only viewing for other users.

*19: Viewing and configuration is possible for administrators only.

3. Main menu during printing

The structure of the main menu during printing is as follows.

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First Level	Second Level	Third Level	Fourth Level	Fifth Level	
[Menu Durng Prtng]	[Head Cleaning]	[Head Cleaning A]			
		[Head Cleaning B]			
	[Fine Band Adj.]	-5 to 5			
	[Information]	[System Info]			
		[Error Log]			1.xxxxxxxxx-xxxx
			2.xxxxxxxxx-xxxx		
		[Job Log]	(Choose from information about the latest three print jobs.)		
		[HDD Information]			[Document Name]
					[User Name]
					[Page Count]
					[Job Status]
				[Print Start Time]	
				[Print End Time]	
				[Print Time]	
				[Print Size]	
				[Media Type]	
				[Interface]	
				[Ink Consumed]	

4. Main Menu Settings

Main menu items are described in the following tables.

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Setting Item	Description/Instructions
[Paper Cut]	Displayed if a roll is loaded. Choose Yes to cut the roll at the current position. The paper will be fed, if necessary, so that the sheet is at least 10 cm (39.4 in.) long after the cut. The paper will not be cut if there is not enough paper left to feed the paper this much.
[Rep. Ink Tank]	When replacing the Ink Tank, choose Yes and follow the instructions on the screen.
[Head Cleaning]	Specify Printhead cleaning options. Choose Head Cleaning A if printing is faint, oddly colored, or contains foreign substances. Choose Head Cleaning B if no ink is printed at all, or if printing is not improved by Head Cleaning A.
[Media Menu]	Specify the type and size of paper.
[Paper Details]	Specify detailed paper-related settings, including the ink drying time and borderless printing options.
[Job Management]	Manage print jobs on the printer's hard disk.
[GL2 Settings]	Make settings for making prints using GL2.
[Adjust Printer]	Adjust the Printhead alignment or amount of feed by printing a test pattern.
[Interface Setup]	Configure the EOP timer and network settings.
[Maintenance]	Access maintenance settings when replacing the Printhead or preparing to move the printer.
[System Setup]	Specify the printer system settings, including the date format and display language.
[Admin. Menu]	Limits the indication/setting of the menu.
[Test Print]	Choose Status Print to print information about the printer. Choose Media Details to print the paper settings as specified in Paper Details. Choose Print Job Log to print a record of print jobs, including the paper type and size, amount of ink used, and so on. (Information on ink consumption is general, not specific in nature.) Choose Menu Map to print a list of the main menu options. Choose Nozzle Check to print a test pattern for checking the nozzles.
[Information]	Displays information about the printer and record of print jobs.

[Media Menu]

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Setting Item	Description/Instructions
[Cut Sheet Type]	Choose the type of sheets.
[Roll Media Type]	Choose the type of roll.
[Roll Length Set]	Displayed if Chk Remain.Roll is On. If a barcode is not printed on rolls, specify the roll length. The roll length is displayed in meters or feet, depending on the setting in Length Unit.
[Chk Remain.Roll]	Choose On to print a barcode at the end of a roll before you remove it. The printed barcode can be used in managing the amount of roll paper left. Choose Off if you prefer not to print the barcode.

Setting Item	Description/Instructions	
(The paper type is displayed here.)	[Roll DryingTime]	Specify the time to wait for the ink to dry for each sheet.
	[Scan Wait Time]	Specify the time to wait for the ink to dry between each scan in bidirectional printing, in consideration of how quickly the ink dries. Note that printing will take longer if you specify a wait time.
	[Feed Priority]	Specify exact paper feeding, if desired. Normally, select Automatic. Choose Print Length if you prefer to feed the paper an exact amount. However, note that choosing Print Length may result in slight banding in the direction of Carriage scanning.
	[Adjust Length]	Displayed if Feed Priority is Print Length. Adjustment relative to the amount of stretching or shrinkage of the current paper. Enter either the adjustment results from Print Pattern or the discrepancy that you measured (as a percentage). For paper that tends to stretch, increase the feed amount by setting the adjustment value toward +. For paper that tends to shrink, decrease the feed amount by setting the adjustment value toward -.
	[Head Height]	Adjust the Printhead height.
	[Skew Check Lv.]	If you print on Japanese paper (washi) or other handmade paper that has an irregular width, choose Loose for a higher skew detection threshold, or choose Off to disable skew detection. However, if paper is loaded askew when detection is Off, note that paper jams or Platen soiling may occur.
	[VacuumStrngth]	Specify the level of suction that holds paper against the Platen.
	[Width Detection]	Make this setting when the print size is different from the media size, for example, when you want to make a print within a frame. When you select [Off], the paper width is not detected.
	[NearEnd RollMrgn]	Specify the minimum margin at the leading edge of roll paper to ensure better printing quality at the leading edge. Note that if you choose 5mm, it may lower the printing quality at the leading edge and affect feeding accuracy. The printed surface may be scratched, and ink may adhere to the leading edge. It may also cause the Platen to become soiled.
	[Cut Speed]	Choose the cutting speed. If you use adhesive paper, choosing Slow helps prevent adhesive from sticking to the cutter and keeps the cutter sharp.
	[Trim Edge First]	If a roll is loaded, the end of the paper will be cut.
	[Cutting Mode]	Specify whether or not to cut with the standard round-bladed cutter. Choose Automatic to have the roll cut automatically after printing. If you choose Manual, the paper will not be cut after printing. Instead, a line will be printed at the cut position. Choose Eject if you prefer not to have documents dropped immediately after printing, as when waiting for ink to dry.
	[Bordless Margin]	Adjust the margin during borderless printing. Choose Automatic to have the printer automatically detect the paper width and configure the margin settings for borderless printing. If margins are mistakenly created when Automatic is selected, choose Fixed. In this case, the paper width is not detected automatically, and the document is printed without borders, using the margin settings required by the printer.
	[CutDustReduct.]	Choose On to reduce the amount of debris generated when cutting film and similar media by printing a line at the cut position. This option reduces the amount of debris given off after cutting. It also helps prevent adhesive from sticking to the cutter and keeps the cutter sharp if you use adhesive paper.
	[NearEnd Sht Mrgn]	Specify a margin at the leading edge of sheets to ensure better printing quality at the leading edge. Note that if you choose 5mm, it may lower the printing quality at the leading edge and affect feeding accuracy. The printed surface may be scratched, and ink may adhere to the leading edge.
[Return Defaults]	Choose Yes to restore Paper Details to the factory default values.	

[Job Management]

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Setting Item			Description/Instructions	
[Print Job]	[Job List]	(Choose a print job)	[Delete]	Delete the current job or queued jobs.
			[Preempt Jobs]	Print the job first after the current print job is finished printing.
[Stored Job]	[Mailbox List]	(Enter a password if one has been set.)	[Job List]-[Print]	Prints a saved job.
			[Job List]-[Delete]	Deletes a saved job.
			[Job List]-[Print]	Prints a list of saved jobs.
[Job Log]	(Choose from information about the latest three print jobs.)	[Document Name]		Displays the name of the document in the most recently printed job.
		[User Name]		Displays the name of the user who has transmitted the job.
		[Page Count]		Displays the number of sheets of the job.
		[Job Status]		Displays the result of processing of the job.
		[Print Start Time]		Displays the time at which the job started printing.
		[Print End Time]		Displays the time at which the job finished printing.
		[Print Time]		Displays the time spent printing the job.
		[Print Size]		Displays the size of the paper used for printing the job.
		[Media Type]		Displays the type of the paper used for printing the job.
		[Interface]		Displays the interface of the job.
		[Ink Consumed]		Displays the amount of ink consumed for printing the job.
[HDD Information]	[HDDSpace]			Displays the size of free hard disk space on the printer.

Setting Item		Description/Instructions	
[Quality Manager]	[Color Mode]	[Monochrome]	Print by the monochrome.
		[Color (CAD) 1]	Print by the standard color.
		[Color (CAD) 2]	Print by the bright color.
		[Color (CAD) 3]	Print by the color emulated the Canon iPF500/iPF600/iPF700/iPF510/iPF610/iPF710/iPF605/iPF720/iPF810/iPF820.
		[Color (CAD) 4]	Print by the color emulated the HP Designjet 500/800.
		[Color (CAD) 5]	Print by the color emulated the HP Designjet 1000.
	[Color (CAD) 6]	Print by the color emulated the HP Designjet 4000/4050.	
	[Print Quality]	Select the print quality.	
[Input Resolution]	Choose the printer input resolution from between [600dpi] and [300dpi].		
[Print (Economy)]	Prints with a lower grade of print than normal, but with less ink consumption. Select [ON] to economize on inks.		
[Paper Manager]	[Paper Source]	Select how to feed paper for printing on the HP-GL/2.	
	[Margin]	Set the top/bottom and left/right margins of the paper. For cut-sheet, the trailing edge margin is 23mm. However, if the leading edge margin is set with [Paper Details], that value has priority.	
	[Conserve Paper]	Prints by economizing on paper.	
	[Auto Rotate]	If a document has its long side shorter than the roll width, the page rotates by 90 degrees automatically to economize on paper. If a document contains horizontally long data such that it has its long side longer than the roll width and its short side shorter than the roll width, the page rotates 90 degrees to print within the boundaries of the paper. HP RTL cannot rotate. In case of HP RTL image, the image may be truncated or a blank paper may be ejected because the image cannot be rotated even if the paper size is rotated by 90 degrees. In that case, set [Auto Rotate] to [Off].	
	[Nesting]	[Use Nesting] Select [On] to print pages when they are tiled fully to the roll width, instead of printing them one by one. [Nesting WaitTime] Set the time to elapse before printing. [Cut Lines] Select [On] to print perforated lines between pages.	
[Line & Pen Manager]	[Enable merge]	When lines overlap, set whether to merge or overwrite the colors of the overlapping lines. Select [Off] to overwrite with the line printed later. Select [On] to merge all overlapping colors.	
	[Pen Setup]	[Select Palette]	Select the value related to pen from [Software], [Palette A], [Palette B], or [Factory]. Select [Software] to print according to the application side instruction. Select [Palette A] or [Palette B] to print with value set by [Define Palette].
		[Define Palette]	Set [Width], [Color], and [Line Attributes] for the palette's [Pen Number]. Select [Factory] to check the value when [Factory] is selected for [Select Palette]. For [Line Attributes], select the shape of line end and joint between lines as [No Setting] or [Circle Setting].
		[Reset Palette]	Return the [Define Palette] settings to factory settings.
	[Smoothing]	Choose whether to draw an arc with a smooth curve or with a polygon.	
	[ThickenFineLines]	Select [On] to print thin lines clearly.	
[AdjustFaintLines]	If thin lines print in a tint of color varied from other patterns, selecting [Off] may provide the print result as intended, though the thin lines may print, interrupted, depending on the color.		
[ProcessingOption]	[Warning]	Select [On] to display warnings during GL2.	
	[On-the-Fly]	In printing data consisting solely of HP RTL, if the data is slow to print, select [On] to expedite the time at which the data starts printing. Verify the print result to make sure that images are not chipped in this case.	
	[PageSizeProcess1]	Normally, an image is printed inside margins necessary for printing, but if the image data itself has margins, the print position will not be offset when this is set [On].	
	[PageSizeProcess2]	Select [On] to determine the paper size based on the drawing area.	

[Adjust Printer]

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Setting Item		Description/Instructions
[Auto Head Adj.]	[Standard Adj.]	Choose Yes to have the printer print and read a test pattern for the automatic adjustment of Printhead alignment relative to the printing direction.
	[Advanced Adj.]	Choose Yes to have the printer print and read a test pattern for the automatic adjustment of Printhead alignment relative to the nozzle and printing direction.
	[Auto Print]	Choose On to have the printer automatically execute the Advanced Adj. operations after you replace the Printhead.
[Manual Head Ad]		Choose Yes to print a test pattern for adjustment of Printhead alignment relative to the printing direction. Enter the adjustment value manually based on the resulting pattern.
[Auto Band Adj.]	[Standard Adj.]	Choose Yes to have the printer print and read a band adjustment test pattern for automatic adjustment of the feed amount.
	[Advanced Adj.]	Choose this option when using paper other than genuine Canon paper, or paper for purposes other than checking output. Choose Yes to have the printer print and read a band adjustment test pattern for automatic adjustment of the feed amount. Note that this function takes more time and requires more ink than Standard Adj.
[Manual Head Adj]		Choose Yes to print a test pattern for adjustment of Printhead alignment relative to the printing direction. Enter the adjustment value manually based on the resulting pattern.
[Adjust Length]	[A:High]	Choose Yes to print a test pattern for adjustment relative to paper stretching or shrinkage, after which you can enter the amount of adjustment.
	[B:Standard/Draft]	
[Head Inc. Adj.]		Select [Yes] to print an adjustment pattern for adjusting the inclination of the printhead.

[Interface Setup]

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Setting Item		Description/Instructions	
[EOP Timer]		Specify the timeout period before cancellation of print jobs that cannot be received by the printer.	
[TCP/IP]	[IP Mode]	Choose whether the printer IP address is configured automatically or a static IP address is entered manually.	
	[Protocol]	[DHCP]	Specify the protocol used to configure the IP address automatically.
		[BOOTP]	
		[RARP]	
	[IP Setting]	[IP Address]	Specify the printer network information when using a static IP address.
[Subnet Mask]		Enter the IP address assigned to the printer, as well as the network subnet mask and default gateway.	
[Default G/W]			
[NetWare]	[NetWare]	Specify the NetWare protocol. To apply your changes, choose Register Setting.	
	[Frame Type]	Specify the frame type to use.	
	[Print Service]	Choose the print service.	
[AppleTalk]		Specify whether to use the AppleTalk protocol. To apply your changes, choose Register Setting.	
[Ethernet Driver]	[Auto Detect]	Specify the communication method. To apply your changes, choose Register Setting. Choose On for automatic configuration of the LAN communication protocol. Choose Off to use settings values of Comm.Mode and Ethernet Type.	
	[Comm.Mode]	Choose the LAN communication method.	
	[Ethernet Type]	Choose the LAN transfer rate.	
	[Spanning Tree]	Choose whether spanning-tree packets are supported over the LAN.	
	[MAC Address]	Displays the MAC address.	
[Return Defaults]		A confirmation message is displayed if you press the button. Choose [OK] to restore the network settings to the default values.	

[Maintenance]

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Setting Item	Description/Instructions
[Maint. cart.]	When exchanging the maintenance cartridge, choose Yes and follow the instructions on the screen.
[Replace P.head]	Not displayed during a warning message that the remaining Maintenance Cartridge capacity is low. When replacing the Printhead, choose Yes and follow the instructions on the screen.
[Repl. S. Cleaner]	When replacing the Shaft Cleaner, choose Yes and follow the instructions on the screen.
[Move Printer]	When transferring the printer to another location, choose the level of transfer and follow the instructions on the screen.

[System Setup]

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Setting Item		Description/Instructions
[Warning]	[Buzzer]	Set the buzzer. Choose On for the buzzer to sound once for warnings and three times for errors.
	[Detect Mismatch]	Choose Warning for notification (display of a warning message) during printing if the paper type specified in the printer menu does not match the paper type in the printer driver. Choose None to continue print without notification. Choose Pause to have printing paused under these circumstances. In this case, you can continue printing by pressing the Online button.
[Keep Paper Size]		Choose On to use the paper size setting as the basis for printing instead of other settings. The margin setting of the printer menu will be used instead of the margin setting of the printer driver if the latter is smaller, which may prevent text or images in the margin from being printed. Choose Off to use the printer driver settings instead. Even if the margin setting of the printer driver is smaller than that of the printer driver, text or images will not be cut off. However, this requires longer paper because the actual margin will be equal to the margin setting of the printer driver plus the margin setting of the printer menu.
[Paper Size Basis]	[Sht Selection 1]	Select which size is to be recognized, [ISO A3+] or [13"x19"(Super B)], when the detected size of the cut sheet is between these sizes.
	[Sht Selection 2]	Select which size is to be recognized, [ISO B1] or [28"x40"(ANSI F)], when the detected size of the cut sheet is between these sizes.
[Roll Switching]	[Use Optional Size]	Choose the paper size that can minimize margin of the paper.
	[No RollSwitching]	Print from paper loaded on the platen.
[TrimEdge Reload]		Select whether cut the leading edge of the paper when the paper at the standby position has loaded. Cut it when the roller trace at the standby position attract attention. Choose On to cut it everytime when the paper at the standby position has loaded. Choose Automatic to cut it when the paper at the standby position during two days or more has loaded.
[Noz. Check Freq.]		Specify the timing for automatic checks of nozzle clogging. Choose 1 page to check once per printed page. Choose 10 pages to check once per ten printed pages. Choose Automatic to have the printer automatically adjust the timing for checks based on the frequency of nozzle use.
[CarriageScanWdth]		Set the scan width of the carriage for printing. Select [Automatic] to move the carriage to meet the width of the loaded paper. Selecting [Fixed] will reduce stains on the back of the paper but at the cost of a somewhat longer print time.
[Sleep Timer]		Specify the period before the printer enters Sleep mode.
[Length Unit]		Choose the unit of measurement when roll length is displayed. You can switch the unit displayed for Roll Length Set and the remaining paper amount displayed in the submenu.
[Time Zone]		Specify the time zone. Time zone options indicate a main city in this time zone and the difference from Greenwich Mean Time.
[Date Format]		Specify the date format.
[Date & Time]	[Date]	Set the current date.
	[Time]	Set the current time.
[Language]		Specify the language used on the Display Screen.
[Contrast Adj.]		Adjust the Display Screen contrast level.
[Reset PaprSetngs]		Restores settings that you have changed with Media Configuration Tool to the factory default values.
[Erase HDD Data]	[High Speed]	Delete the file management information of the saved data in the HDD.
	[Secure High Spd.]	Overwrite the random data in the whole of the hard disk drive.
	[Secure]	Overwrite 00 and FF and random data in the whole of the hard disk drive once at a time. Execute the verify check whether the data has written correctly to the hard disk drive.
[Output Method]	[Print]	Choose how to print.
	[Print(auto delete)]	Select [Print] to perform normal printing. Select [Print (Auto delete)], print data and remove it from the hard disk. Select [Save in mail box] to only save data to the box, without printing it.
	[Save in mail box]	
[Save and Print]		Select [On] to start printing data when its save is complete.
[Save: Common Box]		Select [Off] to print data without saving it to the common box.
[Show Job Log]		Indicates the job information that choose from the last three print jobs.

[Admin Menu]

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Setting Item	Description/Instructions
[Change Password]	By setting a password, you can restrict menu display and configuration as follows. You can input between 0 and 9999999. - Viewing and configuration by administrators only IPv4 Settings Change Password Init.Admin.Pswd - Viewing and configuration by administrators, and only viewing by other users Interface Setup settings (except IPv4 Settings) Date & Time Date Format Time Zone Use RemoteUI Reset PaprSetngs
[Init.Admin.Pswd]	Choose OK to restore the Admin. Menu password to the default values.

[Information]

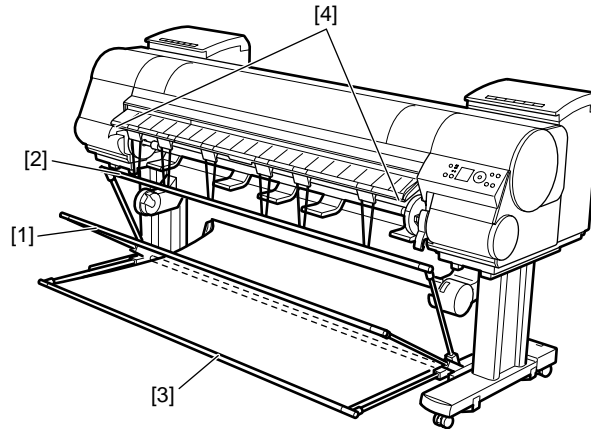
T-1-99

Setting Item		Description/Instructions	
[System Info]	[Version]	[Firmware]	Displays the version of the printer and firmware.
		[Boot]	Displays the version of the boot ROM.
		[MIT]	Displays the version of the MIT database format.
	[s/n]	Displays the printer's serial number.	
	[MAC]	Displays the MAC address of the printer.	
	[IP]	Displays the printer IP address.	
[Error Log]	[##### #####]	Displays the most recent error messages (up to two).	

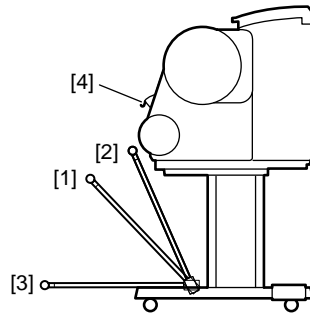
1.6.6 Basket Unit

iPF810 / iPF815

The Basket Unit(output stacker) can be installed at four positions, as shown.



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[1] When storing printed documents on the Output Stacker, set it to this position.

[2] When the Output Stacker is not used, set it to this position.

[3] When printing on large and stiff sheets, or when the Media Take-up Unit is used, or when the Output Stacker is stored for long periods, lower it to this position for storage.

When using the Output Stacker again after storage, reattach the Basket Rod on the front of the Output Stacker to the tips of the left and right Basket Rods and pull the side rods out completely.

[4] When printing banners or when printing on delicate paper, set it to this position.



- When storing printed documents on the Output Stacker, always use it in position [1]. If you do not, printed documents may not be dropped into the Output Stacker, and the printed surface may become soiled.

- The Output Stacker can hold one sheet. When printing multiple pages, remove each sheet after it is printed.

- Before using the Output Stacker, remove the Rewind Spool. If you do not, it may prevent printed documents from being held correctly, and it they may be scratched.

a. Using the Output Stacker in the position for ejection in the front of the printer

You can also set the Output Stacker to the following position when printing banners or when printing on delicate paper.

MEMO:

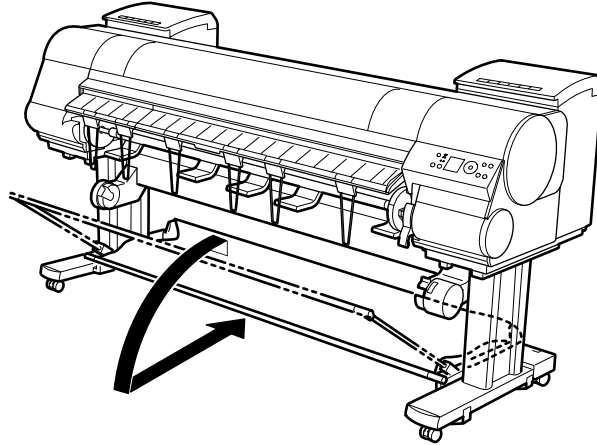
- Always choose [Cutting Mode] > [Eject] in the main menu when the Output Stacker is in the position for ejection in the front of the printer. If you choose [Automatic], printed documents may be damaged.

- During ejection in the front of the printer, be especially careful when using delicate paper or paper that curls easily.

- With some types of paper, the leading edge may curl or bend during ejection. In this case, straighten out the paper. Printed documents may be damaged if the paper is curled or bent.

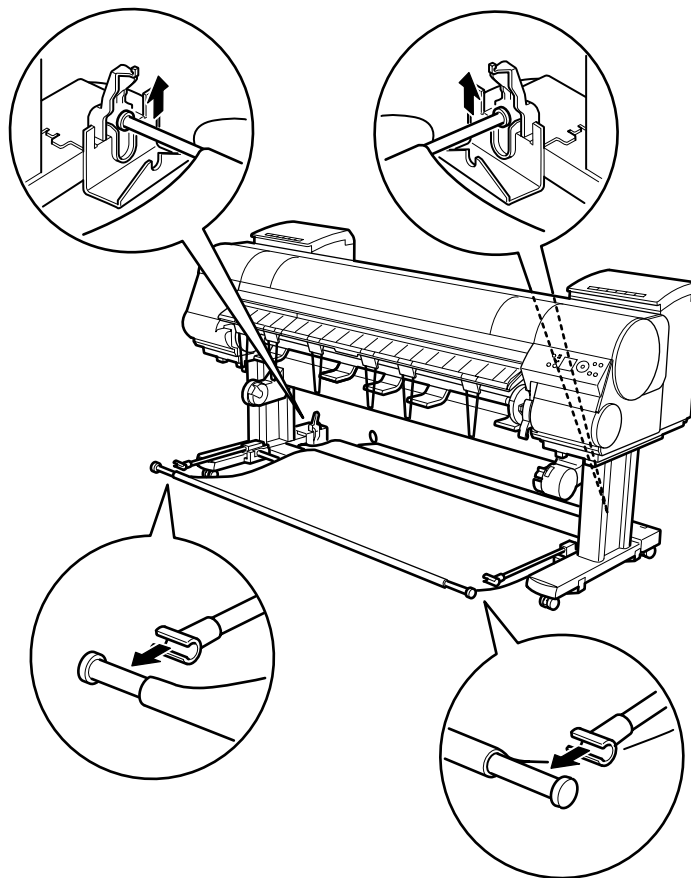
- Some types of paper may get caught between the Ejection Guide and Output Stacker during ejection. In this case, free the paper from where it is caught. Printed documents may be damaged if the paper gets caught.

1) Lift the Basket Rod gently to release the lock, lower the stacker toward the front, and push it all the way back.



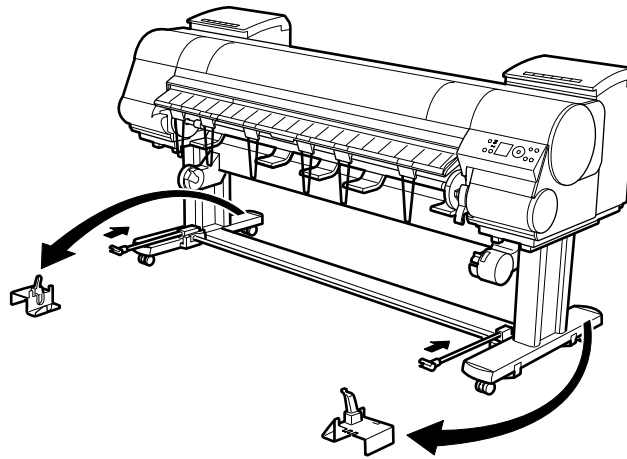
F-1-37

2) Remove the front Basket Rod from the left and right Basket Rods, and remove the back Basket Rod and the black cord from the Rod Holder.



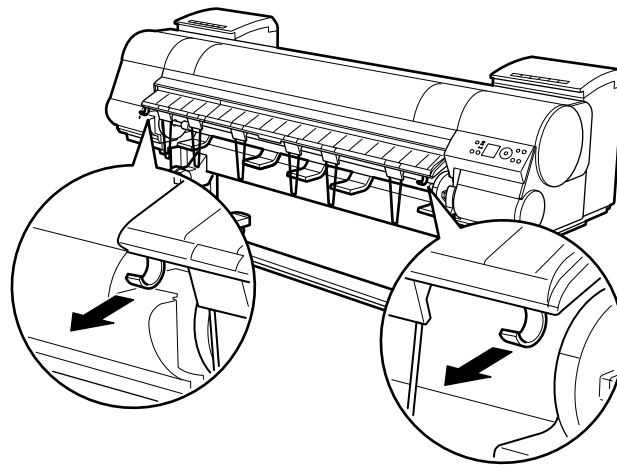
F-1-38

3) Store the left and right Basket Rods. Next, remove the Rod Holder Adapter, leaving the Rod Holder attached, and put it in front of the printer.



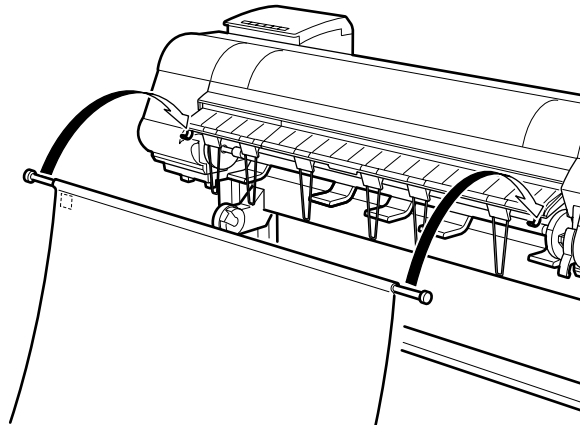
F-1-39

4) Pull out the Basket Hooks from the left and right side of the Ejection Guide.



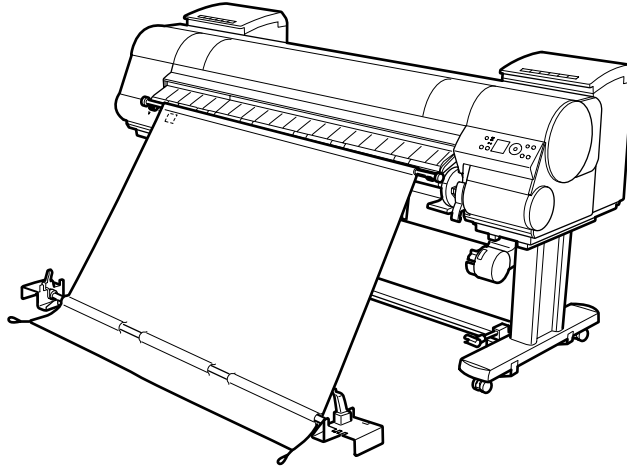
F-1-40

5) Attach the Basket Rod to the Basket Hooks so that the white tag of the Basket Cloth is on the left side.



F-1-41

6) Form the Basket Cloth into a sloping shape to make it taut, and attach the middle Basket Rod to the Rod Holder.

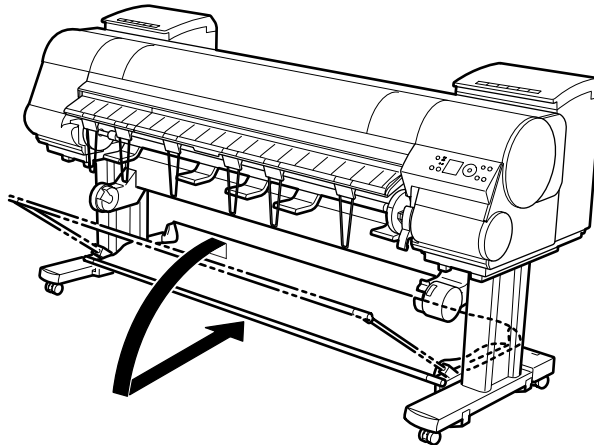


F-1-42

b. Stowing the Output Stacker

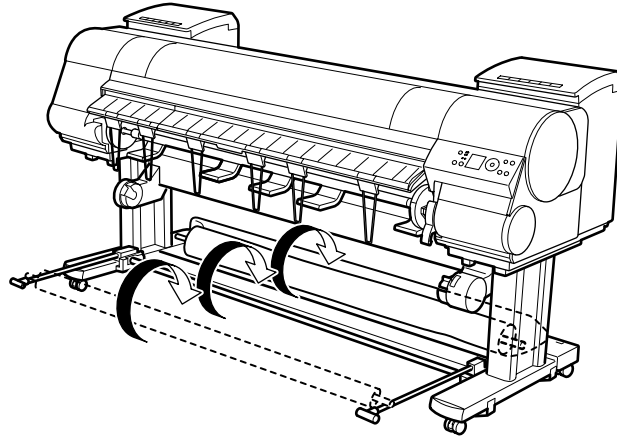
Stow the Output Stacker if you will use the Media Take-up Unit or if you will not use the Output Stacker for an extended period.

1) Lift the front Basket Rod gently to release the lock, lower the stacker toward the front, and push it all the way back.

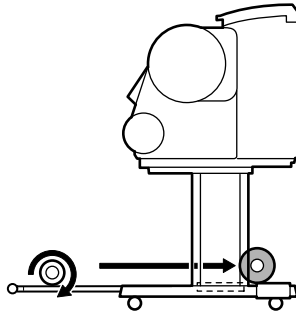


F-1-43

2) Remove the front Basket Rod from the left and right Basket Rods. Roll up the Basket Cloth and put it at the back of the Bottom Stand Stay.



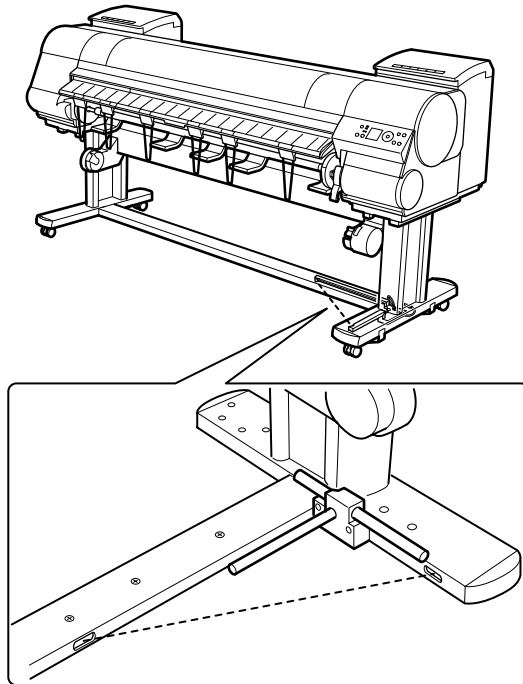
F-1-44



F-1-45

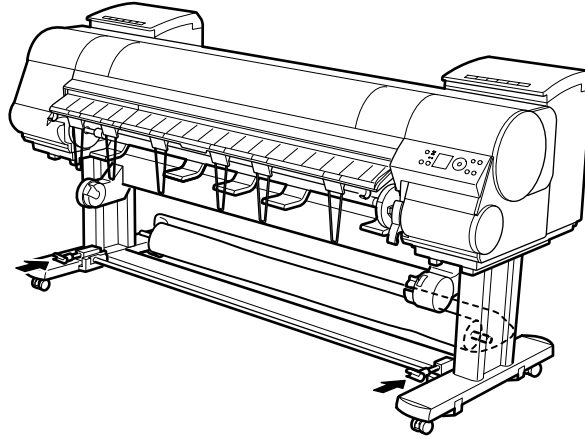


Arrange the Basket Cloth and Basket Rod so they do not interfere with the Media Take-up Sensor.



F-1-46

3) Push in the left and right Basket Rods toward the back all the way, until they stop.



F-1-47

1.7 Safety and Precautions

1.7.1 Safety Precautions

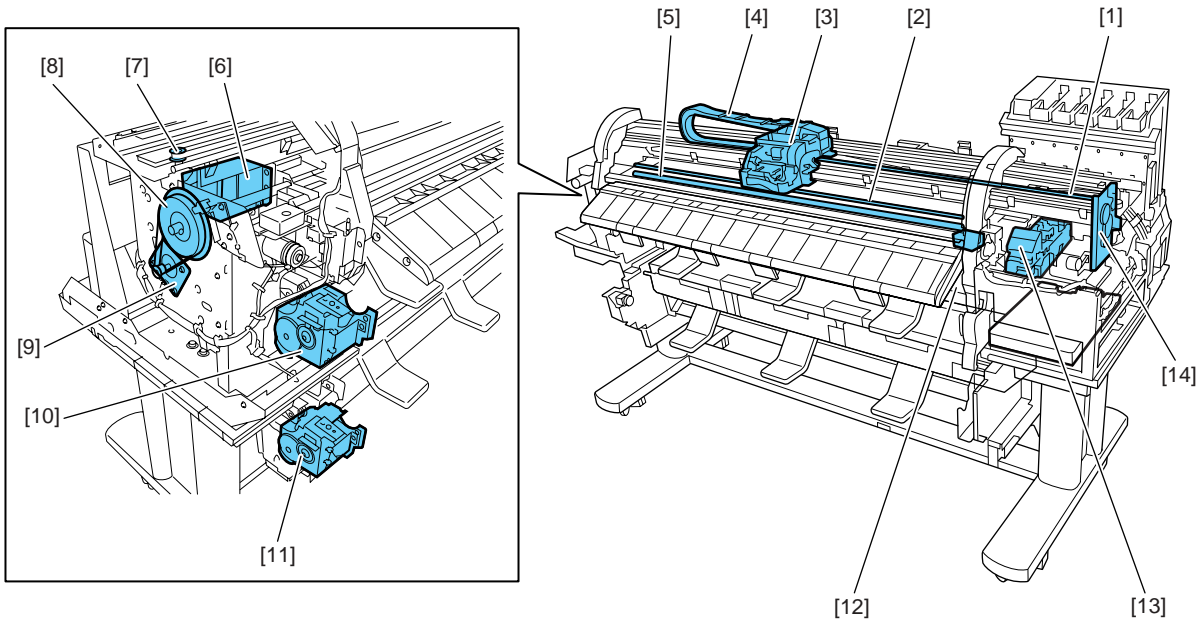
1.7.1.1 Moving Parts

iPF810 / iPF820 / iPF815 / iPF825

Be careful not to get your hair, clothes, or accessories caught in the moving parts of the printer.

These include the carriage unit activated by the carriage motor, carriage belt, ink tube and flexible cable; feed motor-driven feed roller and pinch roller; and purge motor-driven purge unit.

To prevent accidents, the upper cover of the printer is locked during printing so that it does not open. If the upper cover is opened in the online/offline mode, the carriage motor, feed motor, and other driving power supplies are turned off.



F-1-48

T-1-100

- | | | | |
|-----|----------------------------------|------|---|
| [1] | Carriage belt | [8] | Feed assembly |
| [2] | Pinch roller | [9] | Feed motor |
| [3] | Carriage | [10] | Roll media pick-up drive unit |
| [4] | Ink tube unit | [11] | Lower roll media pick-up drive unit(iPF825/820) |
| [5] | Feed roller | [12] | Cutter unit |
| [6] | Pinch roller pressure drive unit | [13] | Purge unit |
| [7] | Carriage motor | [14] | Lift drive unit |

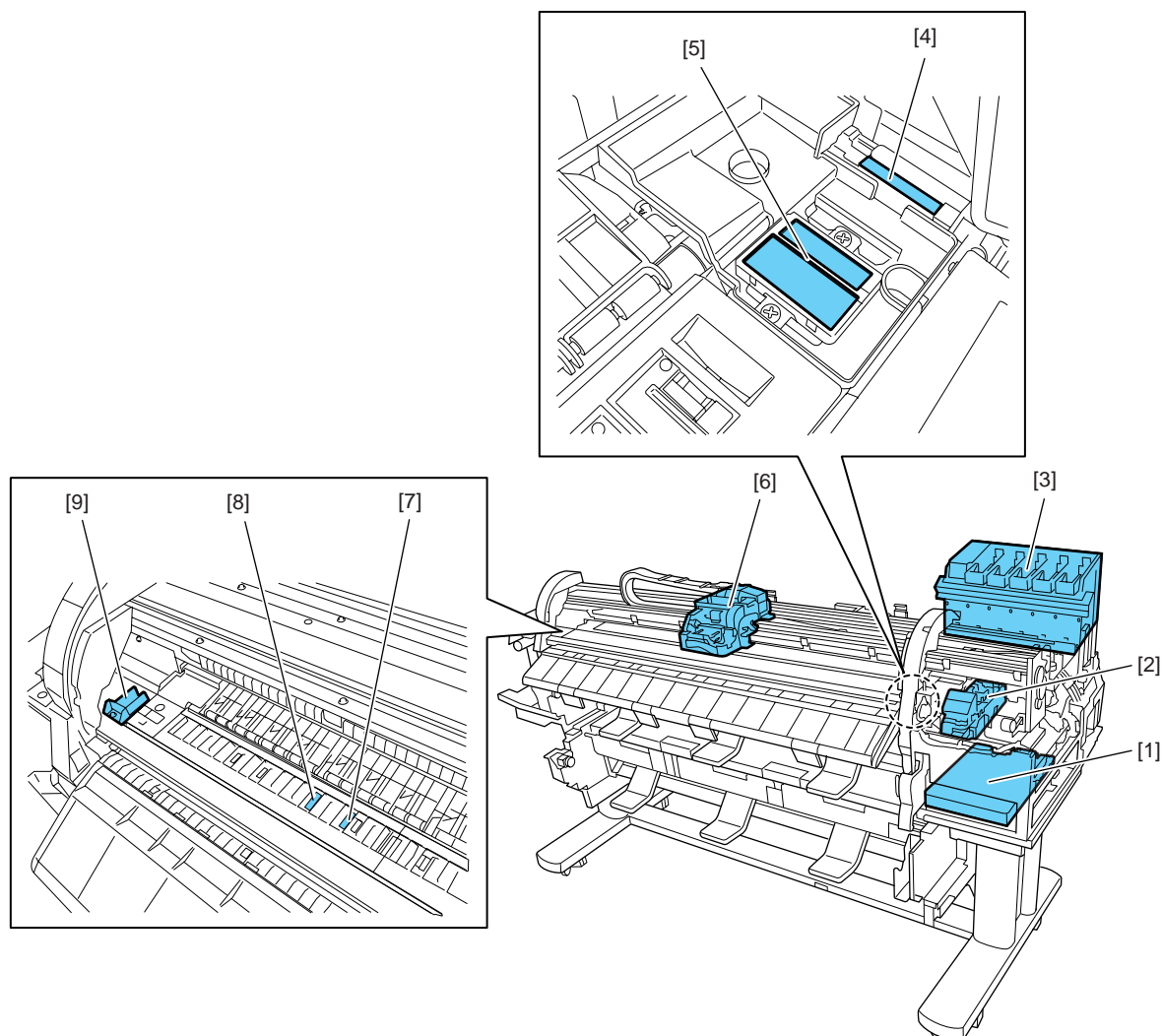
1.7.1.2 Adhesion of Ink

iPF810 / iPF820 / iPF815 / iPF825

1. Ink passages

Be careful not to touch the ink passages of the printer or to allow ink to stain the workbench, hands, clothes or the printer under repair.

The ink flows through the ink tank unit, carriage unit, purge unit, maintenance jet tray, borderless print ink groove, maintenance cartridge and the ink tubes that relay ink to each unit.



F-1-49

T-1-101

- | | | | |
|-----|---------------------------------|-----|--------------------------------|
| [1] | Maintenance cartridge | [6] | Carriage |
| [2] | Purge unit | [7] | Borderless printing ink groove |
| [3] | Ink tank unit | [8] | Platen maintenance jet groove |
| [4] | Head management sensor ink tray | [9] | BP maintenance jet tray |
| [5] | HP maintenance jet tray | | |



Although the ink is not harmful to the human body, it contains organic solvents.

Avoid getting the ink in your mouth or eyes.

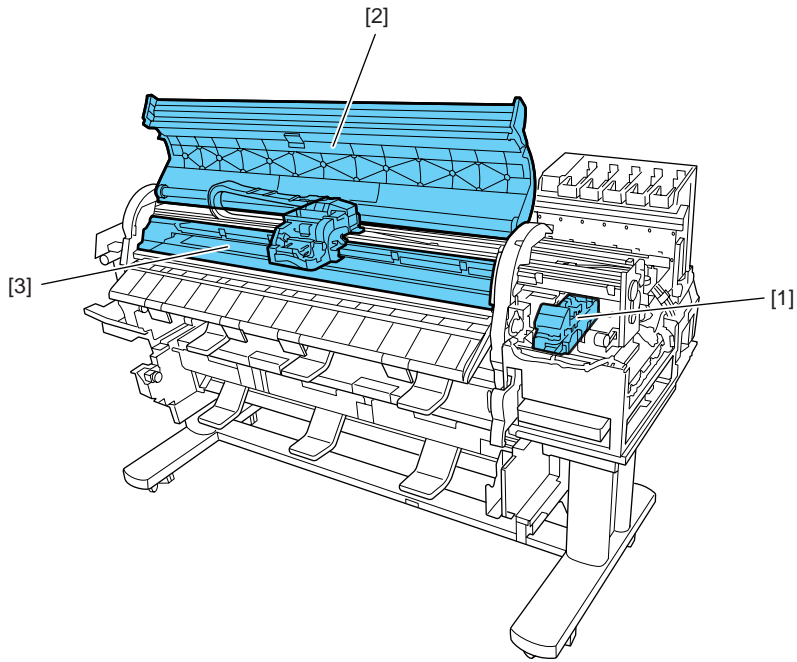
Flush well with water and see a doctor if contact occurs.

In case of accidental ingestion of a large quantity, call a doctor immediately.

Since this ink contains pigment, stains will not come out of clothing.

2. Ink mist

Since the printhead prints by squirting ink onto the media, a minute amount of ink mist is generated in the printing unit during printing. The ink mist is collected in the printer by the airflow. However, uncollected ink mist may stain the platen unit, carriage unit, main rail unit, external unit, or purge unit. These stains may soil the print media or hands and clothes when servicing the printer, wipe them off carefully with a soft, well-wrung damp cloth.



F-1-50

T-1-102

- [1] Purge unit
- [2] Upper cover

- [3] Platen unit/Carriage unit/Main rail unit

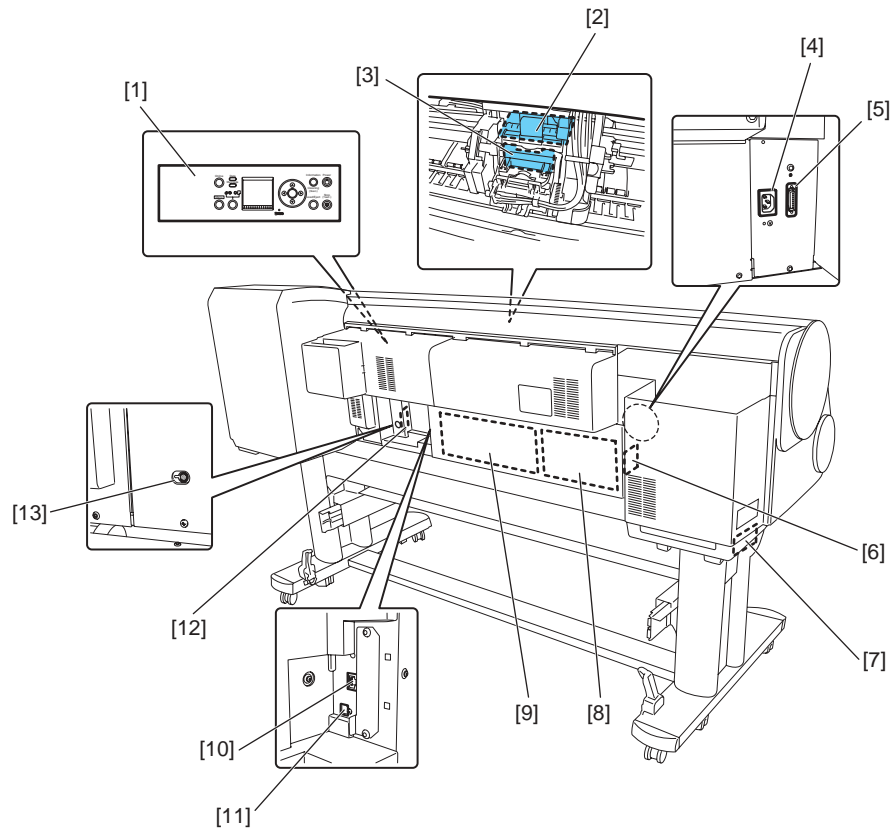
1.7.1.3 Electric Parts

iPF810 / iPF820 / iPF815 / iPF825

The electrical unit of the printer is activated when connected to the AC power supply.

At the rear of the printer are the main controller, power supply, interface connector, and optional media take-up unit connector. The head relay PCB and carriage relay PCB are incorporated in the carriage unit, and the operation panel is located on the upper right cover.

When servicing the printer with the cover removed, be extremely careful to avoid electric shock and shorting contacts.



F-1-51

T-1-103

- | | | | |
|-----|---------------------------------------|------|--|
| [1] | Operation panel | [8] | Power supply PCB |
| [2] | Carriage relay PCB | [9] | Main controller PCB |
| [3] | Head relay PCB | [10] | Ethernet connector |
| [4] | AC inlet | [11] | USB port |
| [5] | Lower roll unit connector(iPF825/820) | [12] | Media take-up relay PCB(iPF815/810) |
| [6] | Lower roll unit relay PCB(iPF825/820) | [13] | Media take-up unit connector(iPF815/810) |
| [7] | lower roll unit PCB(iPF825/820) | | |

1.7.2 Other Precautions

1.7.2.1 Printhead

iPF810 / iPF820 / iPF815 / iPF825

1. How to Handle the Printhead

Do not open the printhead package until you are ready to install the head.

When installing the printhead in the printer, hold the knob[1] and then remove the protective cap 1[2] and protective cap 2[3] in that order.

Do not reattach the protective cap 2[3] to the printhead because the cap may damage the nozzles[4].

To prevent the nozzles from getting clogged with foreign matter or dried ink, install the printhead immediately after you remove the protective caps.

Also make sure to press down the locking lever of the printhead until you feel a click.

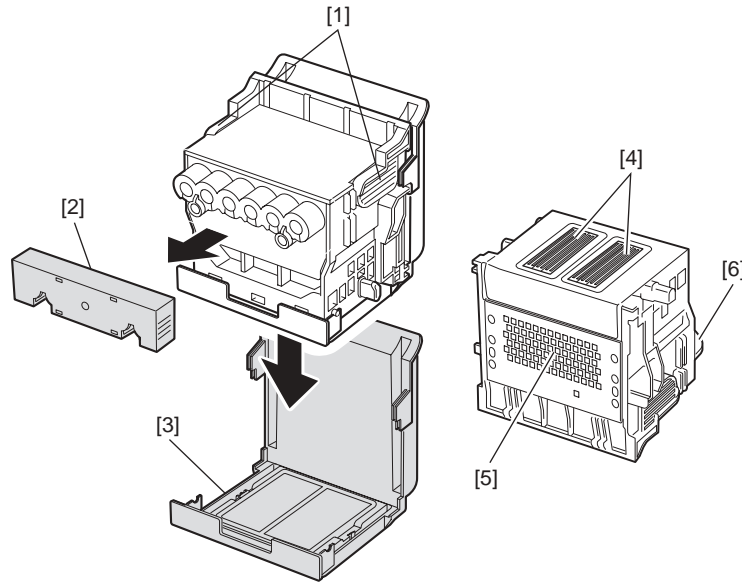
In addition, to prevent clogging of the nozzles with foreign matter and improper supply of ink, never touch the nozzles[4] or ink port[6], or wipe it with tissue paper or anything else.

Do not touch Electrical contact[5].

Also, never attempt to disassemble/reassemble the printhead or wash it with water.

MEMO:

If the nozzles are clogged or an ink suction problem occurs, white lines can appear on the printout a constant frequency or color dulling can occur. If this problem is not resolved by cleaning operations, replace the printhead with a new one.



F-1-52
T-1-104

- | | |
|----------------------|------------------------|
| [1] knob | [4] nozzles |
| [2] protective cap 1 | [5] Electrical contact |
| [3] protective cap 2 | [6] ink port |

2. Capping

The printer will perform the capping operation when printing has ended or during standby due to an error, in order to protect the printhead and avoid ink leakage.

If the power cord is accidentally unplugged, turn off the Power button, reconnect the power cord, and then turn on the Power button. Confirm that the printer starts up properly and enters to the "Online" or "Offline" status, and then power off the printer using the Power button.



Improper "capping operation" may cause clogged nozzles due to dried ink or ink leakage from the printhead.

3. When the printer is not used for a long time

Keep the printhead installed in the printer even when it is not used for an extended period of time.



If the printhead is left uninstalled, a printing failure may arise from closed nozzles due to depositing of foreign matter or dried ink when it is reinstalled. Even if the head remains installed, the nozzle may dry out and cause a printing failure if the ink is drained for transport.

4. Conductivity of Ink

The ink used in this printer is electrically conductive. If ink leaks into the mechanical unit, wipe clean with a soft, well-wrung damp cloth. If ink leaks onto electrical units, wipe them completely using tissue paper. If you cannot remove ink completely, replace the electrical units with new ones.



If electrical units are powered with ink leaked onto them, the units may damage.
Never connect the power cord when ink has leaked onto the electrical units.

1.7.2.2 Ink Tank

iPF810 / iPF820 / iPF815 / iPF825

1. Unpacking the Ink Tank

Do not unpack the ink tank until you are ready to install it.

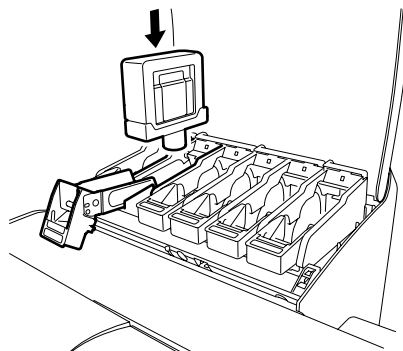
When installing the ink tank, be sure to shake it slowly 7 to 8 times before unpacking it. Otherwise, the ink ingredients may precipitate and degrade the print quality. To prevent foreign matter from entering the ink port, install the unpacked ink tank in the printer immediately.

2. Handling the Ink Tank

To prevent foreign matter from entering the ink flow path and causing ink suction and printing problems, never touch the ink port and contacts of the ink tank.

When you press down the ink tank cover, the needle enters the ink port, allowing ink to flow between the printer and ink tank.

Do not raise or lower the ink tank cover except when replacing the ink tank.



F-1-53

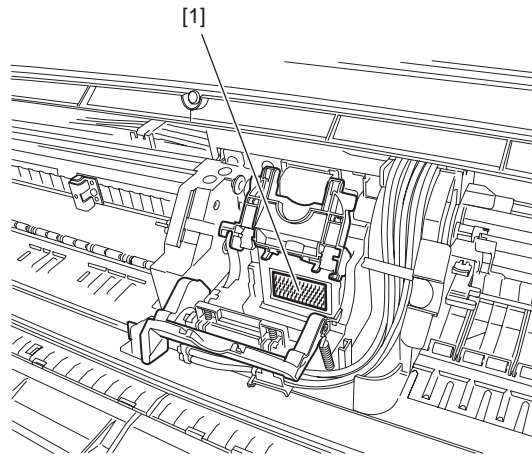
1.7.2.3 Handling the Printer

iPF810 / iPF820 / iPF815 / iPF825

1. Precautions against Static Electricity

Certain clothing may generate static electricity, causing an electrical charge to build up on your body. Such a charge can damage electrical devices or change their electrical characteristics.

In particular, never touch the printhead contacts[1].

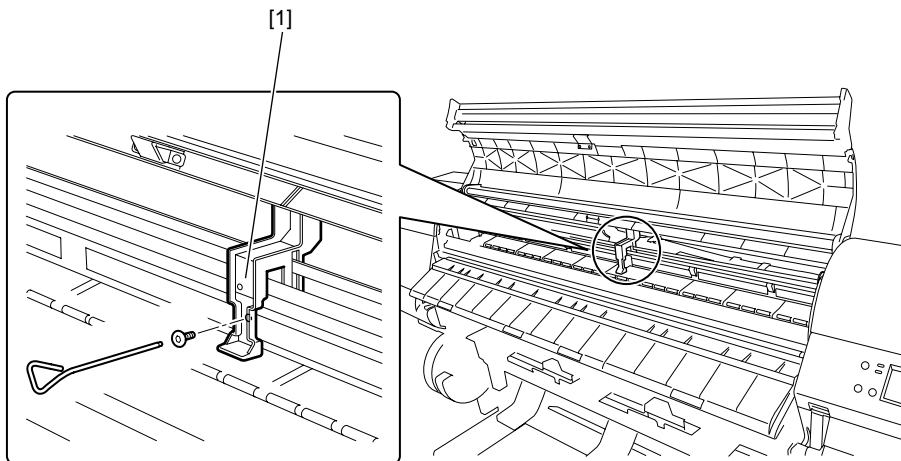


F-1-54

2. Fixing the Carriage

After completion of printing, the carriage is mechanically locked by the lock arm in the purge unit at the same moment the printhead is capped.

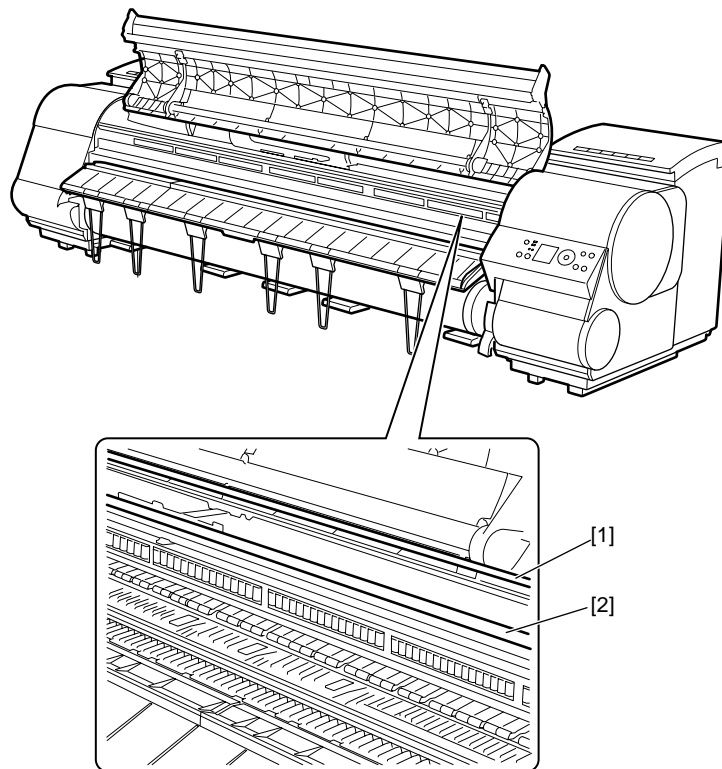
Before transporting the printer, secure the carriage at its home position using belt stoppers[1] so that the carriage does not become separated from the lock arm and damage or ink does not leak.



F-1-55

3. Contact of Linear Scale/Carriage Shaft

Please do not touch a linear scale and the carriage shaft when the inside of the top cover is opened, and execute maintenance. When touching a linear scale and the carriage shaft, it might cause defective movement of the carriage and a defective print.



F-1-56

- [1] Linear Scale
- [2] Carriage Shaft

4. Replacing the maintenance cartridge

When the maintenance cartridge detects that tank is full, the "Repl. Maint. C" error appears. In this case the maintenance cartridge must be replaced.

The printer will not operate until the error is cancelled.

Be careful that the waste ink does not splash when you remove the used maintenance cartridge from the printer.

MEMO:

This printer has an EEPROM in the maintenance cartridge and the maintenance cartridge status is controlled by the main controller PCB which reads and writes the content of that EEPROM. Therefore, initializing the counter information will not be needed when the maintenance cartridge is replaced.

5. Refilling the ink

After removing the ink in the printer according to the automatic or manual ink draining procedure to disassemble, reassemble, or transport/ship the printer, refill the ink as soon as possible upon completion of those tasks.

If the ink remaining in the printer after the removal has dried up, the ink deposits on the surfaces of the components may cause damage or abnormal operation.

1.7.3 Precautions When Servicing Printer

1.7.3.1 Notes on the Data Stored in the Printer

iPF810 / iPF820 / iPF815 / iPF825

This printer counts the print length, number of ink tank replacements, carriage driving time, number of cleaning operations, number of cutter operations, and so on and stores them in the main controller's EEPROM as a COUNTER in Service mode.

COUNTER provides important information about the printer usage status.

You can check this information by printing it in the service mode or displaying it on the display.

Following the precautions below when servicing the printer.

(1) Repairing/replacing the PCB

When replacing the main controller, follow the specified replacement procedure.

For the main controller replacement procedure, see "Disassembly/Reassembly" > "Points to Note on Disassembly and Reassembly" > "Boards".

(2) After replacing the carriage unit

The information about the carriage driving time arises in the carriage unit. After replacing the carriage unit, select INITIALIZE > CARRIAGE in the service mode to initialize the information about the carriage driving time.

(3) After replacing the purge unit

The information about the number of cleanings arises in the purge unit. After replacing the purge unit, select [INITIALIZE] > [PURGE] in the service mode to initialize (clear) the information about the number of cleanings.

(4) On replacement of supplies

After supplies have been replaced, execute [INITIALIZE] > [PARTS COUNTER] > [PARTS xx] in service mode to initialize (clear) the parts counter information. For the consumable parts, see "Maintenance" > "Consumable Parts".



You cannot check the counter information once it is initialized (cleared). Be careful not to initialize the counter information before checking it.
You cannot modify the counter information from the operation panel.

1.7.3.2 Confirming the Firmware Version

iPF810 / iPF820 / iPF815 / iPF825

Firmware has been downloaded to the main controller.

When you have replaced the main controller, check that the firmware is the latest version. If not, update it to the latest version.

Reference:

For how to up update the main controller, refer to "TROUBLESHOOTING" > "Update".

1.7.3.3 Precautions against Static Electricity

iPF810 / iPF820 / iPF815 / iPF825

Certain clothing may generate static electricity, causing an electrical charge to build up on your body. Such a charge can damage electrical devices. To prevent this, discharge any static buildup by touching a grounded metal fitting before you start disassembling the printer.

1.7.3.4 Precautions for Disassembly/Reassembly

iPF810 / iPF820 / iPF815 / iPF825

The precautions for disassembly/reassembly are described in "Disassembly/Reassembly".

1.7.3.5 Self-diagnostic Feature

iPF810 / iPF820 / iPF815 / iPF825

The printer has a self-diagnostic feature to analyze hardware problems.

The self-diagnosis result is shown on the display and indicated by lamps.

For detailed information, see "Error Codes".

1.7.3.6 Disposing of the Lithium Battery

iPF810 / iPF820 / iPF815 / iPF825

The main controller PCB of this printer is equipped with a lithium battery to back up various data.



Risk of explosion if battery is replaced by an incorrect type.
Dispose of used batteries according to the instructions.

"For CA, USA Only

Included battery contains Perchlorate Material-special handling may apply. See

<http://www.dtsc.ca.gov/hazardouswaste/perchlorate/> for detail."

Achtung:

Die Lithiumbatterie darf nur durch das Originalersatzteil (Parts Katalog) ersetzt werden;
ansonsten besteht Brand-/Explosionsgefahr.

Lithiumbatterien niemals aufladen, demontieren oder durch Verbrennen entsorgen;
bei der Entsorgung die örtlichen Entsorgungsvorschriften beachten (Schadstoffe; Sondermüll).

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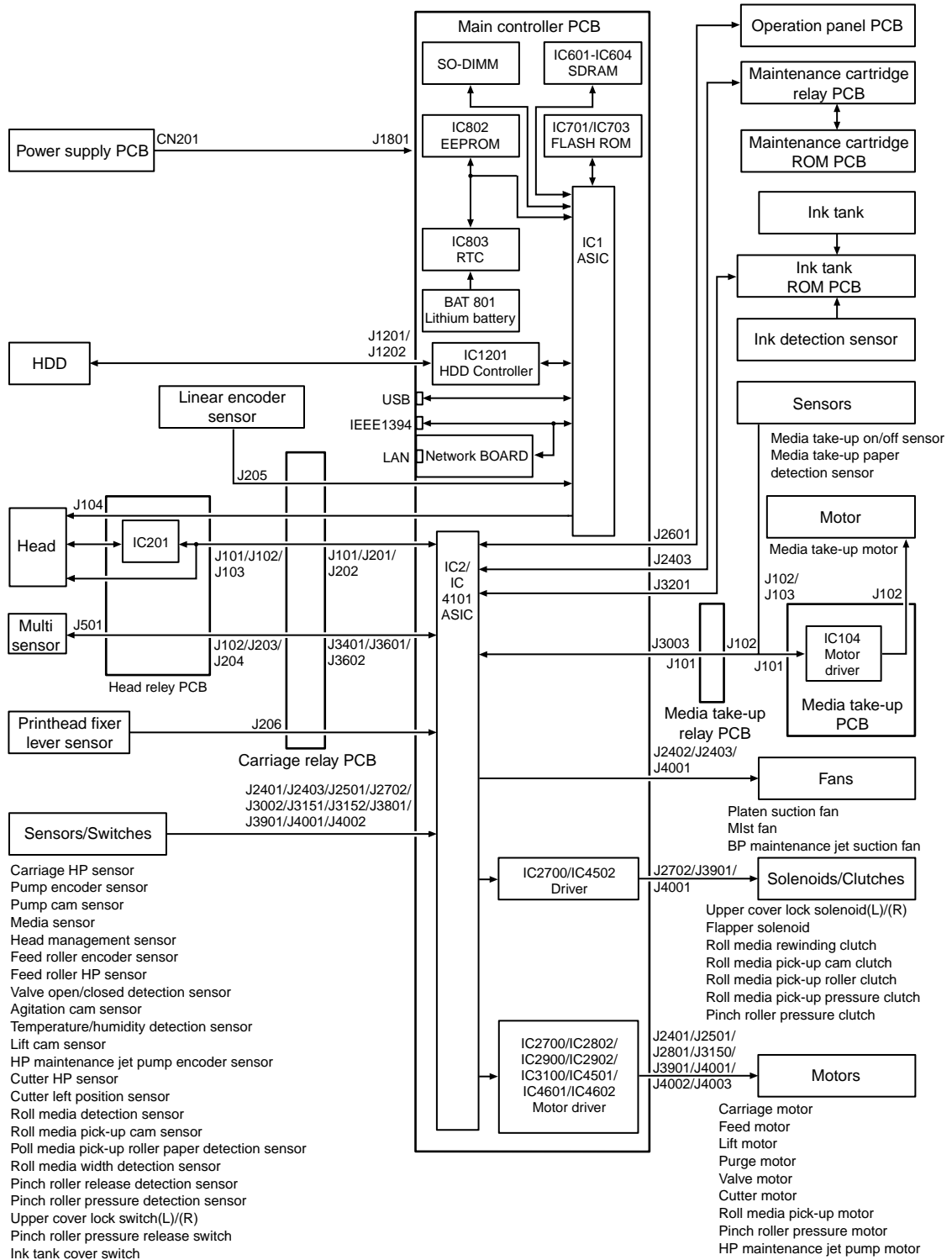
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2.1 Basic Operation Outline

2.1.1 Printer Diagram

iPF810

A printer diagram is shown below.

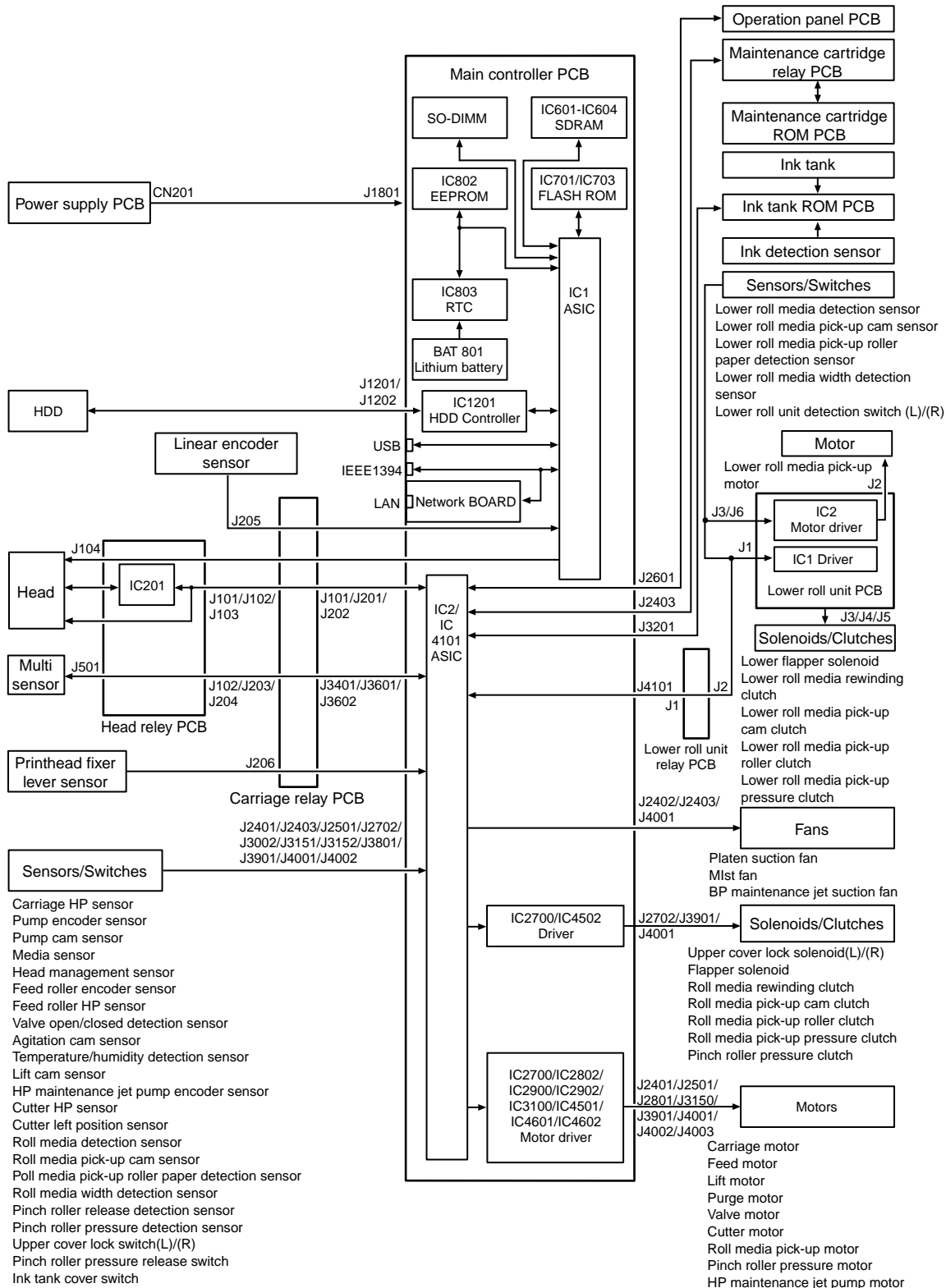


F-2-1

2.1.2 Printer Diagram

iPF820

A printer diagram is shown below.

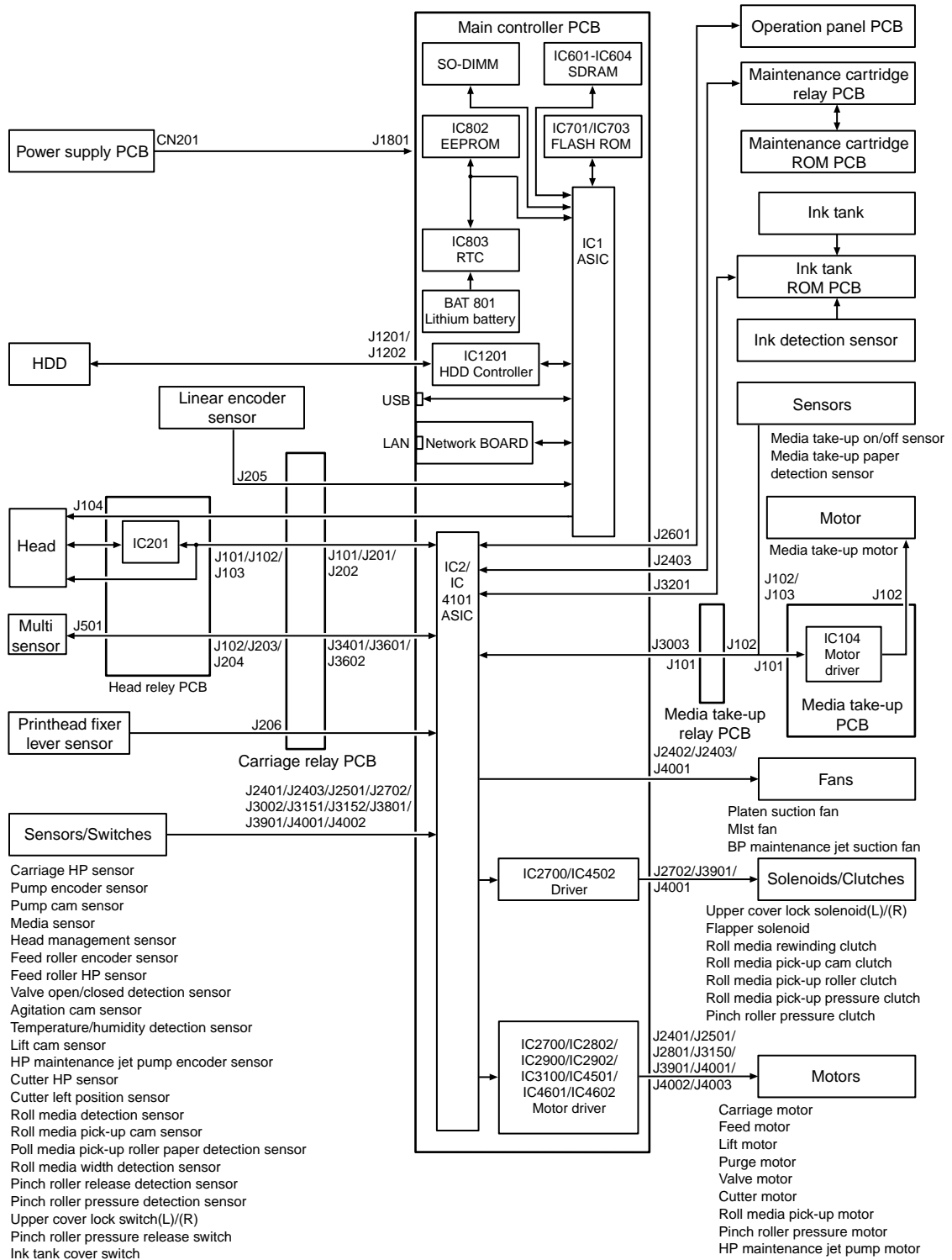


F-2-2

2.1.3 Printer Diagram

iPF815

A printer diagram is shown below.

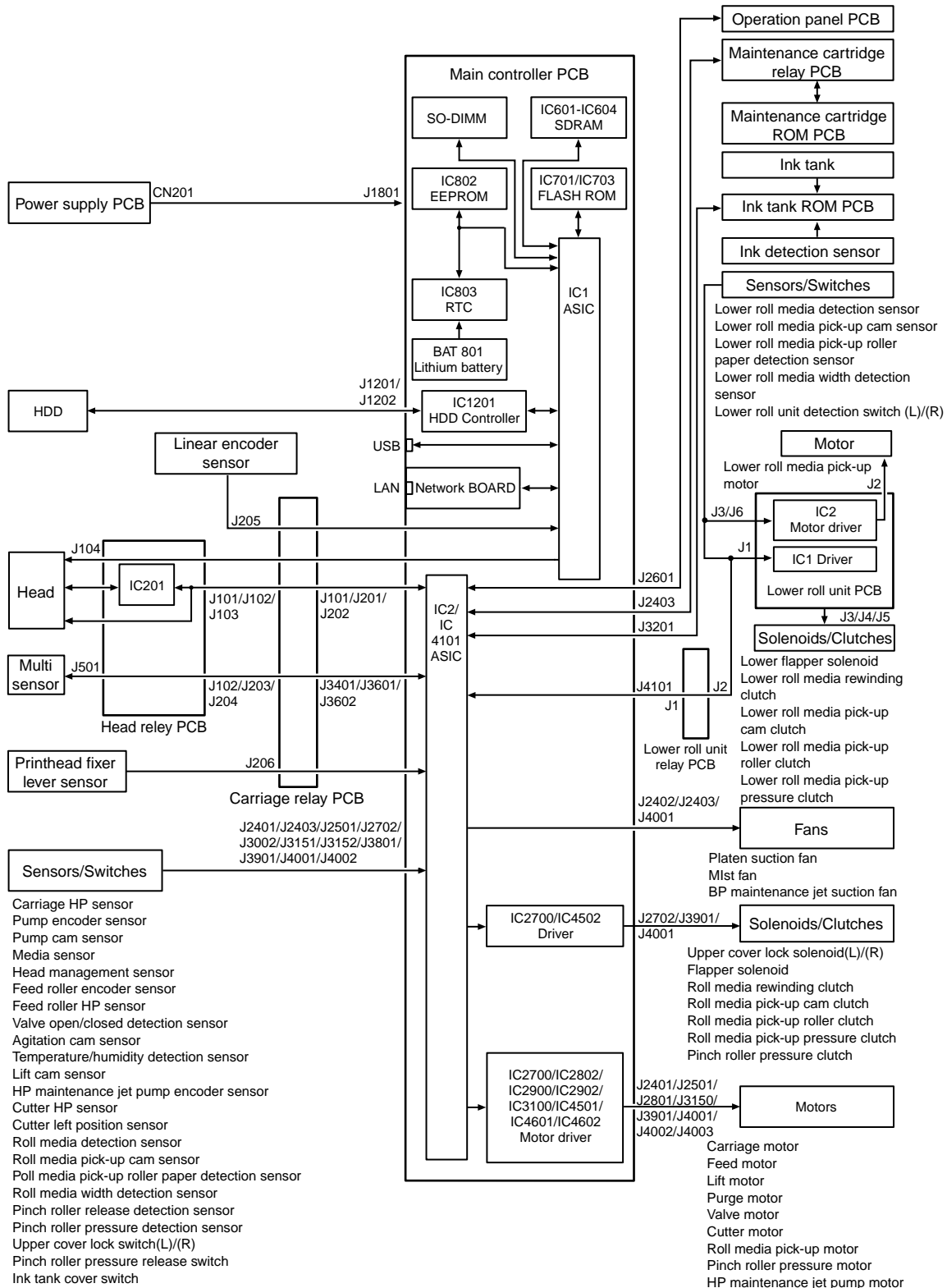


F-2-3

2.1.4 Printer Diagram

iPF825

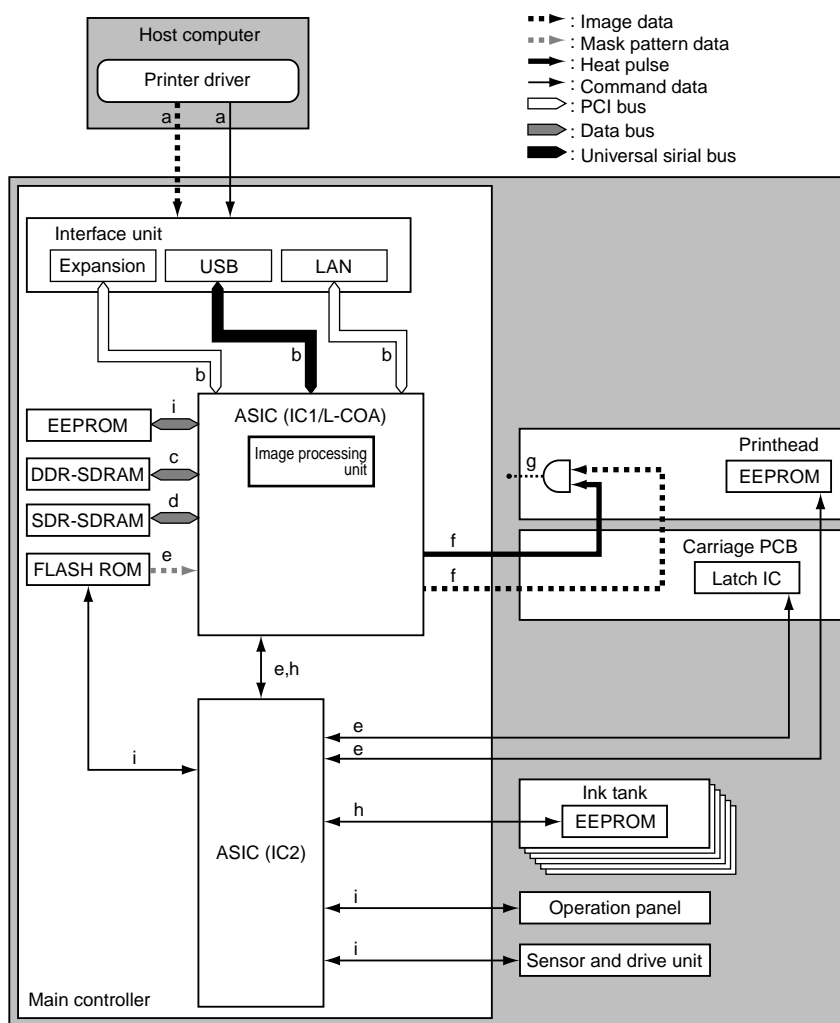
A printer diagram is shown below.



2.1.5 Print Signal Sequence

iPF810 / iPF820

The signal sequence from when the printer receives the print signals until printing starts is shown in Figure.



F-2-5

a) The printer driver on the host computer transmits print data, including command data, to the printer after compressing the image data, without resolution, color and 12-color binarization conversion.

To achieve high-quality image output, the image processing table data used for image data color conversion and binarization conversion are generated as command data to meet the Media Type and other specifications of the printer driver.

b) This printer receives print data from the individual interfaces on the main controller, transmitting the received print data to ASIC (IC1).

c) The main controller decompresses the print data transmitted to the ASIC and gets it through resolution, color and 5-color binarization conversion while loading the data into DDR-SDRAM from time to time.

It also converts the print data to 5-color binary equivalents of image and command data.

d) The ASIC (IC1) generates image data synthesized with mask data within the ASIC in sync with the discharge time while loading the data into DDR-SDRAM from time to time.

e) The ASIC (IC2) collects printhead information from EEPROM mounted on the printheads and the printer temperature from the latch IC on the carriage board and transmit them to the ASIC (IC1).

The ASIC (IC1) also receives mask pattern data from the firmware installed in flash ROM.

f) The ASIC (IC1) converts the image data synthesized with the mask pattern to data associated with the printhead information and the printer temperature, transmitting the data to the printheads as a print signal. It transmits heat pulses to the printheads at the same time to optimize head driving.

g) The printheads convert the received print signal from a serial signal to a parallel signal for each row of nozzles and ANDs it with the heat pulses for perform printing.

h) The ASIC (IC1) controls the general aspects of image processing and print drive control by detecting the status of the individual printer components with reference to the adjustment values stored in EEPROM. SDR-SDRAM is used as work memory.

i) The ASIC (IC2) controls the general aspects of drive control by controlling button actuations and message displays on the basis of the firmware installed in flash ROM.

2.1.7 Print Driving

iPF810 / iPF820 / iPF815 / iPF825

Print and control signals are transferred via the carriage relay PCB and head relay PCB to the printheads to discharge inks from the nozzle assembly at printing. Each printhead has 12 trains of nozzles arranged in a zigzag pattern.

This printer uses one printhead.

(In installed state, from left to right, C, M, Y, MBK, MBK, BK)

Print signals directed at each nozzle train are even-numbered nozzle data (Hx-x-DATA-x-EV) and odd-numbered nozzle data (Hx-x-DATA-x-OD). These are transferred in timing with a data transfer clock (Hx-CLK) and data latch pulses (Hx-LT).

The Heat Enable (Hx-x-HE-x) drive control signal enables inks to be discharged from the nozzles.

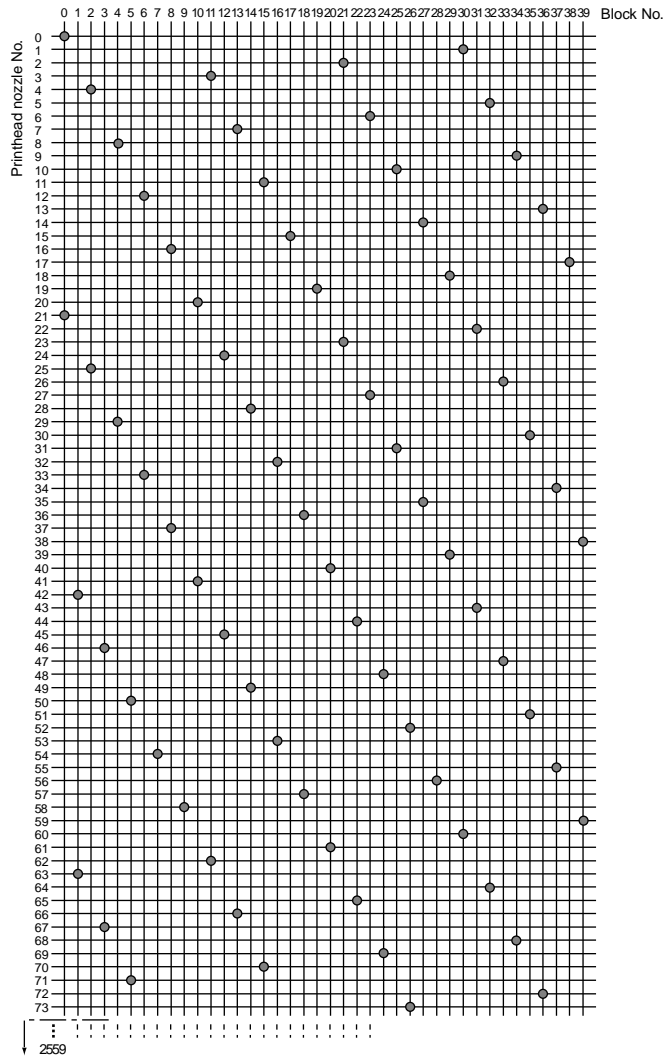
1. Print drive control

Each train of nozzles in a printhead has 2,560 nozzles.

Ink discharge nozzles are selected split in 40-, 20- or 10-nozzle blocks according to the Block Enable information in the even-numbered nozzle data and odd-numbered nozzle data.

Each selected block of nozzles is impressed with a Heat Enable signal generated with variable pulse widths according to the head rank, head temperature and printer temperature for optimized ink discharges. The nozzles are driven by heater boards in the nozzles to discharge inks. Optimal nozzle blocks are selected according to the print path.

The diagram below illustrates the relationship between a 40-block nozzle and nozzles driven.



F-2-7

2. Print drive timing

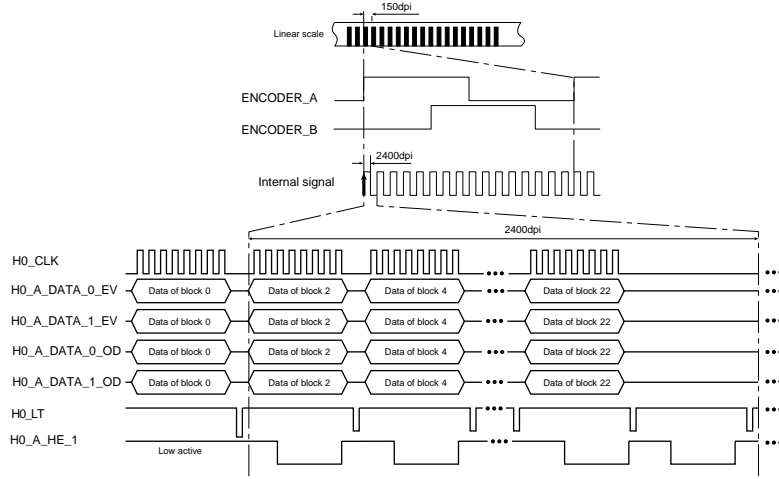
Each printhead houses 12 trains of nozzles, which share the same data transfer clock (Hx-CLK) and data latch pulses (Hx-LT). Even-numbered nozzle data (Hx-x-DATA-x-EV), odd-numbered nozzle data (Hx-x-DATA-x-OD) and the Heat Enable (Hx-x-HE-x) signal are generated for each nozzle train and controlled individually.

Printing is carried out in two ways through reciprocating motion of the carriage.

An encoder sensor mounted on the carriage generates a 150-dpi-pitched linear scale detection signal (ENCODER_A) and a signal (ENCODER_B) shifted 120 degrees in phase. The direction of carriage motion is detected from the status of the ENCODER_B signal relative to the leading edge of the ENCODER_A signal. The printhead is driven using a 2400-dpi timing signal (internal signal), which is generated by dividing the ENCODER_A signal detected at the 150 dpi timing into 16 equal sections.

Printing in the forward direction is triggered at the leading edge of the detection signal (ENCODER_A).

Printing in the backward direction is carried out the same way as printing in the forward direction but at the trailing edge of the detection signal (ENCODER_A), when the order of heated nozzles is reversed depending on the sequence of transfer of even-numbered nozzle data and odd-numbered nozzle data.



F-2-8

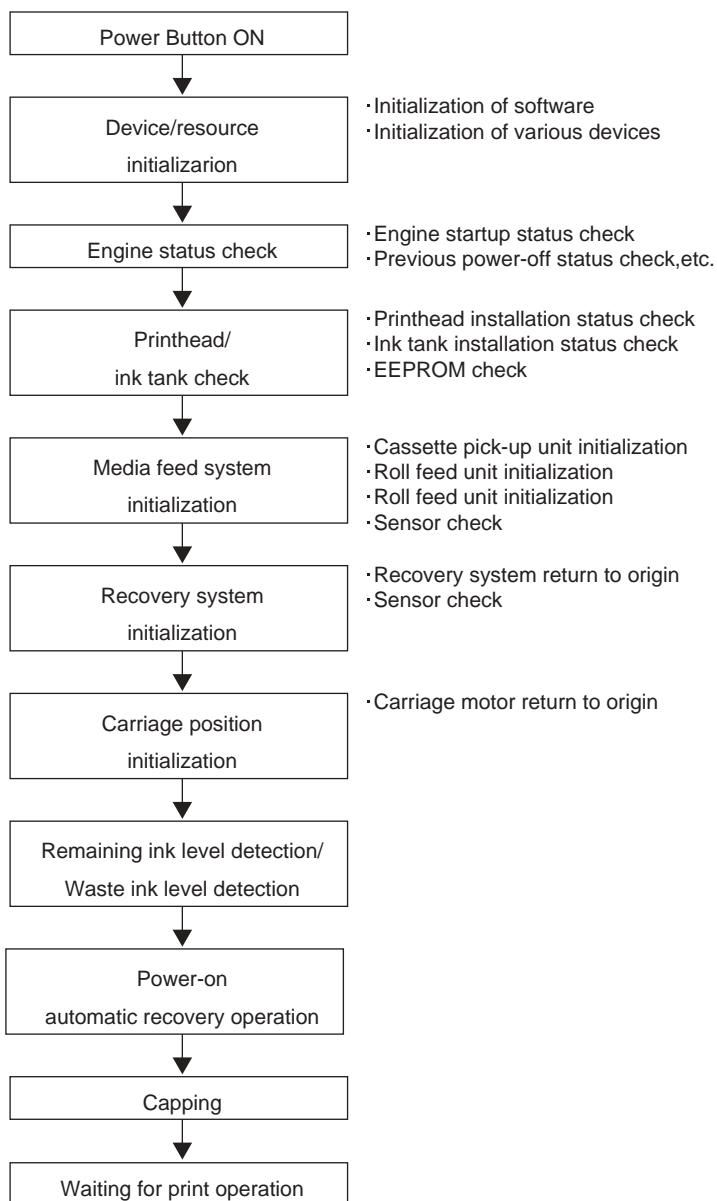
2.2 Firmware

2.2.1 Operation Sequence at Power-on

iPF810 / iPF820 / iPF815 / iPF825

The sequence of printer operations, from power-on to transition to online mode, is flowcharted below. The printer takes less than 1 minute to initialize itself(*).

* Excluding the times spent supplying inks and cleaning the printhead after leaving the printer for extended periods of time.



F-2-9

2.2.2 Operation Sequence at Power-off

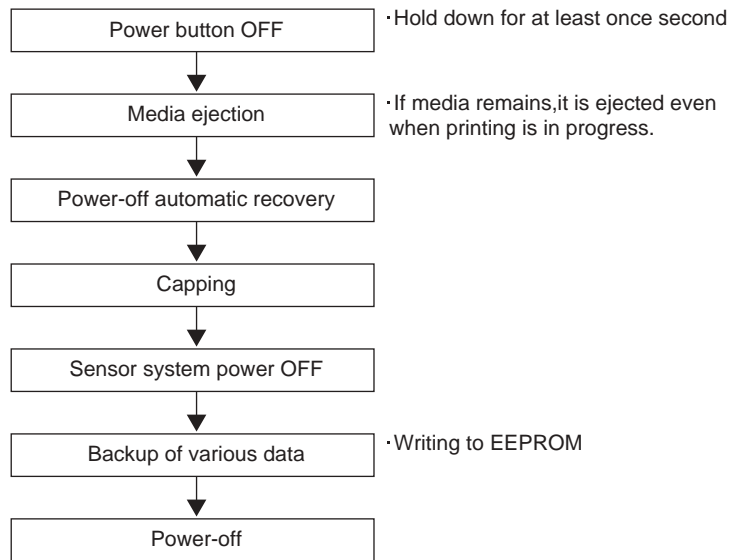
iPF810 / iPF820 / iPF815 / iPF825

Turning off the power switch cuts off the drive voltage supply, launching a firmware power-off sequence as shown below.



If the power cord is disconnected from the wall outlet or the upper cover or any other cover is opened, the printer cancels the ongoing operation and shuts down immediately. Since printhead capping may or may not have been carried out properly, reconnect the power cord to the wall outlet and turn on the power switch. Making sure that the printer has entered online mode, turn off the power switch.

1. Power-off sequence



F-2-10

2.2.3 Print Control

iPF810 / iPF820 / iPF815 / iPF825

1. Print mode

This printer is capable of fast, high-quality printing without blur and non-uniform density by changing the carriage operation, media feeding, other printing methods according to the selected media type, print quality, print data and so on.

Printing is performed for each color using a maximum of 16 paths in each print mode according to the selected print quality.

This reduces density irregularities caused by the variation in the amounts of ink discharged from individual nozzles. In addition, it shifts the printing timing so that the current ink layer is nearly fixed before the next ink layer is applied, thus minimizing bleeding.

Even in the same mode, the printer operates in a different way depending on the media setting made using the printer driver.

a) Draft mode

In the draft mode, image data is thinned out and a single band (equivalent to the width of a nozzle array) is printed using two paths.

To use this mode, select "Draft" under "Print Quality" in the printer driver.

b) Standard mode

In the standard mode, a single band (equivalent to the width of a nozzle array) is printed using 4-8 (4, 6, or 8) paths.

To use this mode, select "Standard" under "Print Quality" in the printer driver.

c) High quality mode

In the high quality mode, a single band is printed using 8 or 12 paths.

To use this mode, select "High" under "Print Quality" in the printer driver.

d) Highest quality mode

In the high quality mode, a single band is printed using 12 or 16 paths.

To use this mode, select "Highest" under "Print Quality" in the printer driver.

T-2-1

Printing Modes

Media Type		Print Priority	Print Quality	Print-Pass	Printing Direction	Print Resolution (dpi)	Used BK ink
Plain Paper/ Recycled Paper	Plain Paper/Recycled Paper	Office Document	Standard	4	Bi-directional	1200x1200	MBK
		Line Document/ Text	Draft	2	Bi-directional	1200x1200	MBK
			Standard	4	Bi-directional	1200x1200	MBK
		Image	Draft	2	Bi-directional	1200x1200	MBK
			Standard	4	Bi-directional	1200x1200	MBK
			High	8	Bi-directional	2400x1200	MBK
	Plain Paper (High Quality)	Office Document	Standard	4	Bi-directional	1200x1200	MBK
		Line Document/ Text	Draft	2	Bi-directional	1200x1200	MBK
			Standard	4	Bi-directional	1200x1200	MBK
		Image	Draft	2	Bi-directional	1200x1200	MBK
			Standard	4	Bi-directional	1200x1200	MBK
			High	8	Bi-directional	2400x1200	MBK
	Plain Paper (High Grade)	Office Document	Standard	4	Bi-directional	1200x1200	MBK
		Line Document/ Text	Draft	2	Bi-directional	1200x1200	MBK
			Standard	4	Bi-directional	1200x1200	MBK
		Image	Draft	2	Bi-directional	1200x1200	MBK
			Standard	4	Bi-directional	1200x1200	MBK
			High	8	Bi-directional	2400x1200	MBK
	Economy Bond Paper	Office Document	Standard	4	Bi-directional	1200x1200	MBK
		Line Document/ Text	Draft	2	Bi-directional	1200x1200	MBK
			Standard	4	Bi-directional	1200x1200	MBK
		Image	Draft	2	Bi-directional	1200x1200	MBK
			Standard	4	Bi-directional	1200x1200	MBK
			High	8	Bi-directional	2400x1200	MBK
	Universal Bond Paper	Office Document	Standard	4	Bi-directional	1200x1200	MBK
		Line Document/ Text	Draft	2	Bi-directional	1200x1200	MBK
			Standard	4	Bi-directional	1200x1200	MBK
Image		Draft	2	Bi-directional	1200x1200	MBK	
		Standard	4	Bi-directional	1200x1200	MBK	
		High	8	Bi-directional	2400x1200	MBK	
Standard Paper 1569B 80g	Office Document	Standard	4	Bi-directional	1200x1200	MBK	
	Line Document/ Text	Draft	2	Bi-directional	1200x1200	MBK	
		Standard	4	Bi-directional	1200x1200	MBK	
	Image	Draft	2	Bi-directional	1200x1200	MBK	
		Standard	4	Bi-directional	1200x1200	MBK	
		High	8	Bi-directional	2400x1200	MBK	
Standard Paper 1570B 90g	Office Document	Standard	4	Bi-directional	1200x1200	MBK	
	Line Document/ Text	Draft	2	Bi-directional	1200x1200	MBK	
		Standard	4	Bi-directional	1200x1200	MBK	
	Image	Draft	2	Bi-directional	1200x1200	MBK	
		Standard	4	Bi-directional	1200x1200	MBK	
		High	8	Bi-directional	2400x1200	MBK	

Media Type		Print Priority	Print Quality	Print-Pass	Printing Direction	Print Resolution (dpi)	Used BK ink
Coated Paper	Coated Paper	Image	Standard	4	Bi-directional	1200x1200	MBK
			High	8	Bi-directional	2400x1200	MBK
			Highest	12	Bi-directional	2400x1200	MBK
	Heavyweight Coated Paper	Image	Standard	4	Bi-directional	1200x1200	MBK
			High	8	Bi-directional	2400x1200	MBK
			Highest	12	Bi-directional	2400x1200	MBK
	Premium Matte Paper	Image	Standard	6	Bi-directional	1200x1200	MBK
			High	8	Bi-directional	2400x1200	MBK
			Highest	16	Bi-directional	2400x1200	MBK
	Extra Heavyweight Coated Paper	Image	Standard	4	Bi-directional	1200x1200	MBK
			High	8	Bi-directional	2400x1200	MBK
			Highest	12	Bi-directional	2400x1200	MBK
	Recycled Coated Paper	Image	Standard	4	Bi-directional	1200x1200	MBK
			High	8	Bi-directional	2400x1200	MBK
			Highest	12	Bi-directional	2400x1200	MBK
	Colored Coated Paper	Image	Standard	4	Bi-directional	1200x1200	MBK
			High	8	Bi-directional	2400x1200	MBK
	Premium Coated Paper	Image	Standard	4	Bi-directional	1200x1200	MBK
			High	8	Bi-directional	2400x1200	MBK
			Highest	12	Bi-directional	2400x1200	MBK
	LightWeight Coated Paper J80270 90g	Image	Standard	4	Bi-directional	1200x1200	MBK
			High	8	Bi-directional	2400x1200	MBK
			Highest	12	Bi-directional	2400x1200	MBK
	High Resolution Barrier Paper 180g	Image	Standard	4	Bi-directional	1200x1200	MBK
			High	8	Bi-directional	2400x1200	MBK
			Highest	12	Bi-directional	2400x1200	MBK
	Matt Coated Paper 9171 120g	Image	Standard	4	Bi-directional	1200x1200	MBK
			High	8	Bi-directional	2400x1200	MBK
			Highest	12	Bi-directional	2400x1200	MBK
	Extra Matt Coated Paper 7215 180g	Image	Standard	4	Bi-directional	1200x1200	MBK
			High	8	Bi-directional	2400x1200	MBK
			Highest	12	Bi-directional	2400x1200	MBK
	Opaque Paper White 120g	Image	Standard	4	Bi-directional	1200x1200	MBK
			High	8	Bi-directional	2400x1200	MBK
			Highest	12	Bi-directional	2400x1200	MBK
	Matt Coated Paper 140g	Image	Standard	4	Bi-directional	1200x1200	MBK
			High	8	Bi-directional	2400x1200	MBK
			Highest	12	Bi-directional	2400x1200	MBK
	Photo Realistic Paper 210g	Image	Standard	4	Bi-directional	1200x1200	MBK
			High	8	Bi-directional	2400x1200	MBK
			Highest	12	Bi-directional	2400x1200	MBK
	LightWeight Coated Paper J80270 90g	Image	Standard	4	Bi-directional	1200x1200	MBK
			High	8	Bi-directional	2400x1200	MBK
			Highest	12	Bi-directional	2400x1200	MBK

Media Type		Print Priority	Print Quality	Print-Pass	Printing Direction	Print Resolution (dpi)	Used BK ink
Photo Paper	Glossy Photo Paper	Image	Standard	6	Bi-directional	1200x1200	PBK
			High	8	Bi-directional	2400x1200	PBK
			Highest	16	Bi-directional	2400x1200	PBK
	Semi-Glossy Photo Paper	Image	Standard	6	Bi-directional	1200x1200	PBK
			High	8	Bi-directional	2400x1200	PBK
			Highest	16	Bi-directional	2400x1200	PBK
	Heavyweight Glossy Photo Paper 2	Image	Standard	6	Bi-directional	1200x1200	PBK
			High	8	Bi-directional	2400x1200	PBK
			Highest	16	Bi-directional	2400x1200	PBK
	Heavywght SemiGlos Photo Paper 2	Image	Standard	6	Bi-directional	1200x1200	PBK
			High	8	Bi-directional	2400x1200	PBK
			Highest	16	Bi-directional	2400x1200	PBK
	Poster Semi-Glossy Photo Paper	Image	Standard	6	Bi-directional	1200x1200	PBK
			High	8	Bi-directional	2400x1200	PBK
			Highest	16	Bi-directional	2400x1200	PBK
	Premium RC Photo Luster , 10 mil	Image	Standard	6	Bi-directional	1200x1200	PBK
			High	8	Bi-directional	2400x1200	PBK
			Highest	16	Bi-directional	2400x1200	PBK
	Instant Dry Papers Glossy 200g	Image	Standard	6	Bi-directional	1200x1200	PBK
			High	8	Bi-directional	2400x1200	PBK
			Highest	16	Bi-directional	2400x1200	PBK
	Instant Dry Papers Satin 200g	Image	Standard	6	Bi-directional	1200x1200	PBK
			High	8	Bi-directional	2400x1200	PBK
			Highest	16	Bi-directional	2400x1200	PBK
	Photo Paper High Glossy 250g	Image	Standard	6	Bi-directional	1200x1200	PBK
			High	8	Bi-directional	2400x1200	PBK
			Highest	16	Bi-directional	2400x1200	PBK
Photo Paper Semi Matt 250g	Image	Standard	6	Bi-directional	1200x1200	PBK	
		High	8	Bi-directional	2400x1200	PBK	
		Highest	16	Bi-directional	2400x1200	PBK	
Photo Paper Satin 240g	Image	Standard	6	Bi-directional	1200x1200	PBK	
		High	8	Bi-directional	2400x1200	PBK	
		Highest	16	Bi-directional	2400x1200	PBK	
Photo Paper Pearl 260g	Image	Standard	6	Bi-directional	1200x1200	PBK	
		High	8	Bi-directional	2400x1200	PBK	
		Highest	16	Bi-directional	2400x1200	PBK	

Media Type		Print Priority	Print Quality	Print-Pass	Printing Direction	Print Resolution (dpi)	Used BK ink
Art Paper	Fine Art Photo	Image	Standard	6	Bi-directional	1200x1200	MBK
			High	8	Bi-directional	2400x1200	MBK
			Highest	16	Bi-directional	2400x1200	MBK
	Fine Art Heavyweight Photo	Image	Standard	6	Bi-directional	1200x1200	MBK
			High	8	Bi-directional	2400x1200	MBK
			Highest	16	Bi-directional	2400x1200	MBK
	Fine Art Textured	Image	Standard	6	Bi-directional	1200x1200	MBK
			High	8	Bi-directional	2400x1200	MBK
			Highest	16	Bi-directional	2400x1200	MBK
	Canvas Matte	Image	Standard	6	Bi-directional	1200x1200	MBK
			High	8	Bi-directional	2400x1200	MBK
			Highest	16	Bi-directional	2400x1200	MBK
	Fine Art Block Print	Image	Standard	6	Bi-directional	1200x1200	MBK
			High	8	Bi-directional	2400x1200	MBK
			Highest	16	Bi-directional	2400x1200	MBK
	Fine Art Watercolor	Image	Standard	6	Bi-directional	1200x1200	MBK
			High	8	Bi-directional	2400x1200	MBK
			Highest	16	Bi-directional	2400x1200	MBK
	Japanese Paper Washi	Image	Standard	6	Bi-directional	1200x1200	MBK
			High	8	Bi-directional	2400x1200	MBK
			Highest	16	Bi-directional	2400x1200	MBK
	Graphic Matte Canvas	Image	Standard	6	Bi-directional	1200x1200	MBK
			High	8	Bi-directional	2400x1200	MBK
			Highest	16	Bi-directional	2400x1200	MBK
	Art Paper Smooth 225g	Image	Standard	6	Bi-directional	1200x1200	MBK
			High	8	Bi-directional	2400x1200	MBK
			Highest	16	Bi-directional	2400x1200	MBK
	Art Paper Embossed 225g	Image	Standard	6	Bi-directional	1200x1200	MBK
			High	8	Bi-directional	2400x1200	MBK
			Highest	16	Bi-directional	2400x1200	MBK
	Art Paper Extra Smooth 250g	Image	Standard	6	Bi-directional	1200x1200	MBK
			High	8	Bi-directional	2400x1200	MBK
			Highest	16	Bi-directional	2400x1200	MBK
	Water Resistant Paper Art Canvas	Image	Standard	6	Bi-directional	1200x1200	MBK
			High	8	Bi-directional	2400x1200	MBK
			Highest	16	Bi-directional	2400x1200	MBK
Proofing Paper	Proofing Paper	Image	Standard	6	Bi-directional	1200x1200	PBK
			High	8	Bi-directional	2400x1200	PBK
			Highest	16	Bi-directional	2400x1200	PBK
	Professional Proof and Photo Glossy 195g	Image	Standard	6	Bi-directional	1200x1200	PBK
			High	8	Bi-directional	2400x1200	PBK
			Highest	16	Bi-directional	2400x1200	PBK
	Professional Proof and Photo Semiglossy 195g	Image	Standard	6	Bi-directional	1200x1200	PBK
			High	8	Bi-directional	2400x1200	PBK
			Highest	16	Bi-directional	2400x1200	PBK
	Professional Proof and Photo Semigloss 255g	Image	Standard	6	Bi-directional	1200x1200	PBK
			High	8	Bi-directional	2400x1200	PBK
			Highest	16	Bi-directional	2400x1200	PBK
Film Paper	Backlit Film	Image	Standard	8	Bi-directional	1200x1200	MBK
			High	12	Bi-directional	2400x1200	MBK
			Highest	16	Bi-directional	2400x1200	MBK
	Backprint Film	Image	Standard	8	Bi-directional	1200x1200	PBK
			High	12	Bi-directional	2400x1200	PBK
			Highest	16	Bi-directional	2400x1200	PBK
	Outdoor Backlit (Durable Backlit Film/ 9578)	Image	Standard	8	Bi-directional	1200x1200	MBK
			High	12	Bi-directional	2400x1200	MBK
			Highest	16	Bi-directional	2400x1200	MBK
	Pop-up Gloss Film	Image	Standard	8	Bi-directional	2400x1200	PBK
			High	16	Bi-directional	2400x1200	PBK
	Universal Opaque White Film	Image	Standard	8	Bi-directional	2400x1200	PBK
			High	16	Bi-directional	2400x1200	PBK

Media Type		Print Priority	Print Quality	Print-Pass	Printing Direction	Print Resolution (dpi)	Used BK ink
Matt Film Paper	Scrim Banner 370g	Image	Standard	6	Bi-directional	1200x1200	MBK
			High	8	Bi-directional	2400x1200	MBK
			Highest	16	Bi-directional	2400x1200	MBK
	Adhesive Matt Stretch Vinyl	Image	Standard	6	Bi-directional	1200x1200	MBK
			High	8	Bi-directional	2400x1200	MBK
			Highest	16	Bi-directional	2400x1200	MBK
Thin Fabric Banner	Flame-Resistant Cloth	Image	Standard	6	Bi-directional	1200x1200	MBK
			High	8	Bi-directional	2400x1200	MBK
			Highest	16	Bi-directional	2400x1200	MBK
	Fabric Banner	Image	Standard	6	Bi-directional	1200x1200	MBK
			High	8	Bi-directional	2400x1200	MBK
			Highest	16	Bi-directional	2400x1200	MBK
	Thin Fabric Banner	Image	Standard	6	Bi-directional	1200x1200	MBK
			High	8	Bi-directional	2400x1200	MBK
			Highest	16	Bi-directional	2400x1200	MBK
Synthetic Paper	Synthetic Paper	Image	Standard	6	Bi-directional	1200x1200	MBK
			High	8	Bi-directional	2400x1200	MBK
			Highest	16	Bi-directional	2400x1200	MBK
	Adhesive Synthetic Paper	Image	Standard	6	Bi-directional	1200x1200	MBK
			High	8	Bi-directional	2400x1200	MBK
			Highest	16	Bi-directional	2400x1200	MBK
	Outdoor Polypropylene (Durable Banner)	Image	Standard	6	Bi-directional	1200x1200	MBK
			High	8	Bi-directional	2400x1200	MBK
			Highest	16	Bi-directional	2400x1200	MBK
Adhesive Matt Paper	High Resolution Graphic Paper Self ADH	Image	Standard	6	Bi-directional	1200x1200	MBK
			High	8	Bi-directional	2400x1200	MBK
			Highest	16	Bi-directional	2400x1200	MBK
CAD	CAD Tracing Paper	Line Document/ Text	Draft	2	Bi-directional	1200x1200	MBK
			Standard	4	Bi-directional	1200x1200	MBK
			High	8	Bi-directional	2400x1200	MBK
	CAD Clear Film	Line Document/ Text	Draft	2	Bi-directional	1200x1200	PBK
			Standard	4	Bi-directional	1200x1200	PBK
			High	8	Bi-directional	2400x1200	PBK
	CAD Translucent Matte Film	Line Document/ Text	Draft	2	Bi-directional	1200x1200	MBK
			Standard	4	Bi-directional	1200x1200	MBK
			High	8	Bi-directional	2400x1200	MBK

Media Type		Print Priority	Print Quality	Print-Pass	Printing Direction	Print Resolution (dpi)	Used BK ink
SPECIAL	SPECIAL 1	Image	Standard	6	Bi-directional	1200x1200	PBK
			High	8	Bi-directional	2400x1200	PBK
			Highest	16	Bi-directional	2400x1200	PBK
	SPECIAL 2	Image	Standard	6	Bi-directional	1200x1200	PBK
			High	8	Bi-directional	2400x1200	PBK
			Highest	16	Bi-directional	2400x1200	PBK
	SPECIAL 3	Image	Standard	6	Bi-directional	1200x1200	PBK
			High	8	Bi-directional	2400x1200	PBK
			Highest	16	Bi-directional	2400x1200	PBK
	SPECIAL 4	Image	Standard	6	Bi-directional	1200x1200	PBK
			High	8	Bi-directional	2400x1200	PBK
			Highest	16	Bi-directional	2400x1200	PBK
	SPECIAL 5	Image	Standard	6	Bi-directional	1200x1200	PBK
			High	8	Bi-directional	2400x1200	PBK
			Highest	16	Bi-directional	2400x1200	PBK
	SPECIAL 6	Image	Standard	6	Bi-directional	1200x1200	MBK
			High	8	Bi-directional	2400x1200	MBK
			Highest	16	Bi-directional	2400x1200	MBK
	SPECIAL 7	Image	Standard	6	Bi-directional	1200x1200	MBK
			High	8	Bi-directional	2400x1200	MBK
			Highest	16	Bi-directional	2400x1200	MBK
	SPECIAL 8	Image	Standard	6	Bi-directional	1200x1200	MBK
			High	8	Bi-directional	2400x1200	MBK
			Highest	16	Bi-directional	2400x1200	MBK
	SPECIAL 9	Image	Standard	6	Bi-directional	1200x1200	MBK
			High	8	Bi-directional	2400x1200	MBK
			Highest	16	Bi-directional	2400x1200	MBK
	SPECIAL 10	Image	Standard	6	Bi-directional	1200x1200	MBK
			High	8	Bi-directional	2400x1200	MBK
			Highest	16	Bi-directional	2400x1200	MBK

2.2.4 Print Position Adjustment Function

iPF810 / iPF820 / iPF815 / iPF825

This printer supports a print position adjust the vertical and horizontal print position and the bidirectional print position of the printhead mounted on the carriage and the feedrate.

Print position adjustment work in two modes: automatic adjustment, in which print position adjustment patterns printed are detected by a multi sensor attached to the lower left part of the carriage, and manual adjustment, in which print position adjustment patterns that are slightly modified from one another are printed, so that visually verified adjustment values can be set from the operation panel.

To make print position adjustment, A3-or-larger-sized roll media or cut media are needed.

2.2.5 Head Management

iPF810 / iPF820 / iPF815 / iPF825

This printer supports a nozzle check function to spot non-discharging nozzles in the printhead.

When the printer detects a non-discharging nozzle, it starts cleaning the printhead automatically to correct its discharge failure. If cleaning does not work, the printer backs up the non-discharging nozzle with an alternative nozzle automatically to ensure unflinching print performance.

Detection timings (automatic):

Power-on, carriage cover open detection, print start (check timing variable by selecting Nozzle Check from the system menu).

2.2.6 Printhead Overheating Protection Control

iPF810 / iPF820 / iPF815 / iPF825

When an abnormal temperature rise in the printhead is detected, overheating protection control launches.

Overheating could occur in the printhead after a spell of print operations without the nozzles being filled with inks.

Overheating protection control is implemented on the basis of the temperature detected by the head temperature sensor for each nozzle. When an abnormal temperature is detected in any nozzle train, overheating protection control is exerted at one of two levels according to that temperature.

Protection level 1:

If the head temperature sensor (DI sensor) detects a temperature higher than the protection temperature, it halts the carriage temporarily at the scan end position in the direction of travel according to the carriage scan status.

Printing resumes when the printhead radiates naturally to cool down to below a predetermined temperature or when 30 seconds or longer have elapsed since the detection of the temperature higher than the protection temperature.

Protection level 2:

If the head temperature sensor (DI sensor) detects a temperature higher than the abnormal temperature, the printer shuts down the print operation immediately, moving the carriage to the home position for capping, with an error indication on the display.

2.2.7 Pause between Pages

iPF810 / iPF820 / iPF815 / iPF825

An inter-page function is available to prevent ink rubbing, which keeps paper just printed hanging above the platen and waiting for a predetermined period of time before delivery.

The wait time is user-programmable from the print driver. This feature is particularly useful on paper that takes time to dry after printing, such as films.

2.2.8 White Raster Skip

iPF810 / iPF820 / iPF815 / iPF825

This printer supports a white raster skip function to bypass carriage scanning in a consecutive sequence of voids in print data for added throughput.

2.2.9 Sleep Mode

iPF810 / iPF820 / iPF815 / iPF825

The printer has sleep mode to save on its standby power requirement.

The printer transitions to sleep mode automatically when it has been left idle or no print data has been received for a predetermined period of time while the printer is online or offline.

The printer exits sleep mode when any operation panel key is activated or print data is received from the host computer.

The time to transition to sleep mode is variable from the operation panel (Default: 5minutes).

2.2.10 Hard Disk Drive

iPF810 / iPF820 / iPF815 / iPF825

This printer features a hard disk drive, which provides the following functions.

- Early release of the host computer
- Error recovery
- Job preservation
- Preserved job print
- Job queue handling

1) Early release of the host computer

Each print job received from the host computer is preserved to the hard disk drive attached to the printer, so the printer can proceed with independent printing, releasing the host computer before the print job completes.

2) Error recovery

If a print job aborts as a result of any print problem, such as a paper jam or insufficient paper, the printer reloads the print job stored on the hard disk so it can resume the print job without having to retransmit the job from the host computer to it.

3) Job preservation

Print jobs are in the common box, a place of temporary data storage, and in the personal box, a place of permanent data storage.

Normal print jobs are stored in the common box as they are received. Due to the limited hard disk space available, jobs stored in the common box are deleted from the oldest one in sequence.

Print jobs can be simply stored in the personal box without printing. Print jobs stored in the common box can be moved to the personal box.

4) Preserved job handling

Print jobs stored in the personal box or common box can be printed from the operation panel.

5) Job queue handling

Multiple jobs queued for print can be handled, including the raising priority order of selected jobs in the queue or canceling selected print jobs.

2.3 Printer Mechanical System

2.3.1 Outline

2.3.1.1 Outline

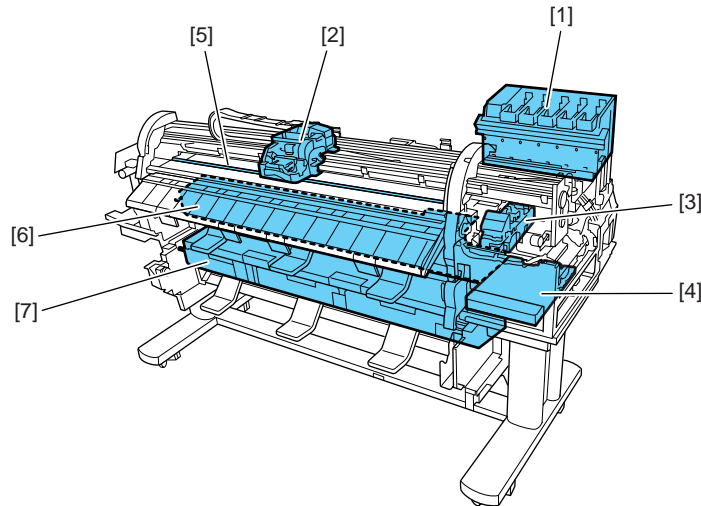
iPF810 / iPF820 / iPF815 / iPF825

The mechanical components of the printer can be broadly divided into an ink passage and a paper pass.

The ink passage consists mainly of ink tank assembly [1] and a printhead mounted on carriage unit [2], purge assembly [3] and maintenance cartridge [4]. Its functions are to supply, circulate and suck inks and more.

The paper pass comprises an feed assembly [5], upper roll media pick-up assembly [6], a lower roll media pick-up assembly [7] and more to feed paper in three different ways, and transport and eject the paper.
(lower roll unit is iPF825/820 only.)

A summary description of each mechanical component is given below.



F-2-11

2.3.2 Ink Passage

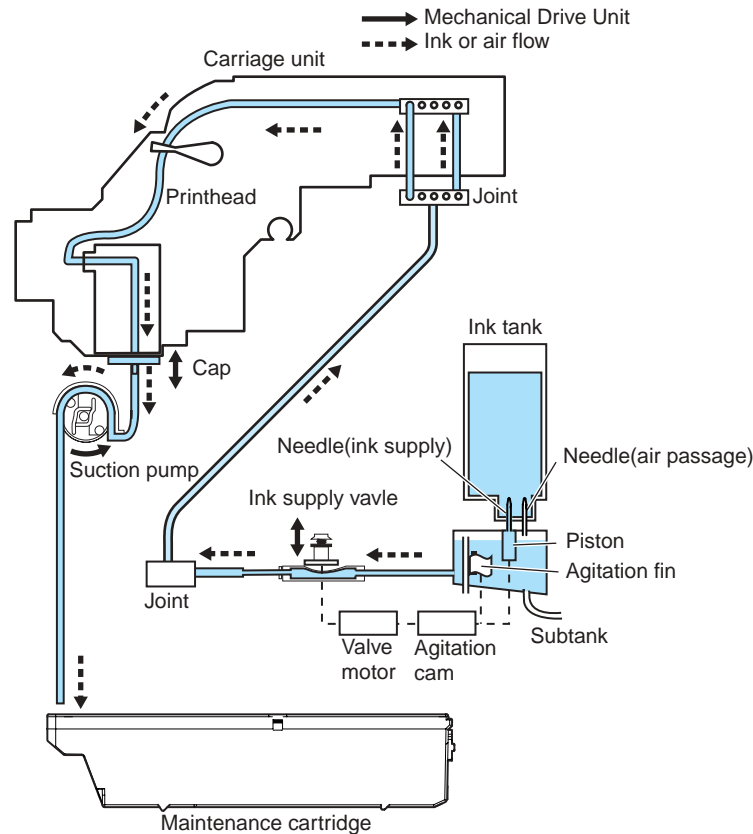
2.3.2.1 Ink Passage

2.3.2.1.1 Overview of Ink Passage

iPF810 / iPF820 / iPF815 / iPF825

The ink passage houses the ink tank, printhead, caps, maintenance jet tray, maintenance cartridge, waste ink collector, ink tubes interconnecting the mechanical units, suction pump driven mainly for sucking inks and so on. Its functions include supplying, circulating and sucking inks.

The ink passage (per color) is schematically shown below, along with the ink flow.



F-2-12

a) Supplying inks from the ink tanks to the ink supply valve assembly

The ink tanks each contain an ink to feed the printhead.

Head differences allow the inks to flow from the ink tanks to the subtanks first, then to the ink supply valves.

Air is discharged through the air passage of the subtanks to keep the internal pressure of the ink tanks constant.

b) Supplying inks from the ink supply valves to the printhead

The ink stored in an ink tank flows to the printhead when the suction pipe is driven with the ink supply valve opened and the head capped.

c) Supplying inks while printing

The ink supply valves are kept open while printing, so that inks are constantly feeding to the printhead under the negative pressure of the nozzle assembly caused by discharging inks.

Further, waste inks sucked in a cleaning operation and inks from the maintenance jet tray flow into the maintenance cartridge.



Opening all the ink passages (by opening both the ink supply valve and the printhead fixer lever with an ink tank yet to be installed) while an ink tube is filled with an ink could cause the ink in the ink tube to flow backward due to a head difference, leaking through the hollow needle in the ink tank.

As a precaution, never open all the ink passages at the same time while the ink tubes are filled with inks.

d) Ink agitating

Ink will be agitated to prevent the element of the pigment ink from subsiding in the ink tank and the sub-tank.

The drive of valve motor is transmitted to the agitation cam, the agitation fin in a sub-tank rotates and ink in a sub-tank will be agitated. In addition, ink flows backward by moving the piston under the needle(ink supply) up and down in the ink tank, and ink in the ink tank will be agitated.

2.3.2.2 Ink Tank Unit

2.3.2.2.1 Structure of Ink Tank Unit

iPF810 / iPF820 / iPF815 / iPF825

a) Ink tanks

The ink level in each ink tank is memorized in EEPROM attached to the tank and is detected as a dot count on the basis of the EEPROM information. When an electrode attached to a hollow needle detects no continuity, it displays a message reporting that the ink tank is nearly empty. If the dot count reaches a predesigned value in this state, an ink out condition is assumed.

b) Ink port

Depressing the ink tank fixer lever on the printer would cause a hollow needle to pierce the ink tank port sealed by a rubber plug, linking the ink passage of the ink to the printer.

c) Air passage

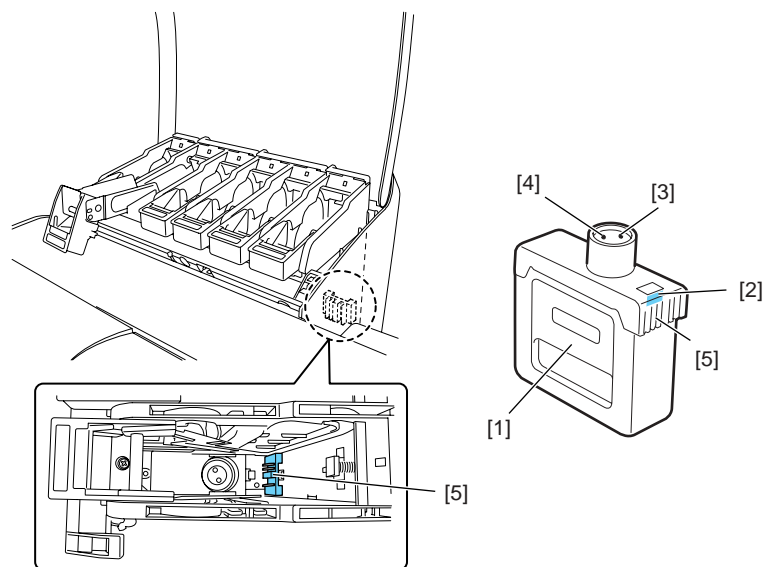
Depressing the ink tank fixer lever on the printer would cause an open hollow needle to pierce the air passage sealed by a rubber plug releasing the internal pressure of the ink tank to keep it constant.

d) Notches for preventing incorrect installation

Ink tanks are furnished with a notch for preventing incorrect installation.

If the installation of an ink tank in incorrect position is attempted, the notch would interfere with it, preventing its installation.

The ink tank fixer lever won't lower without the ink tank fully inserted to reach the mounting position, so the ink cannot be supplied.



F-2-13

T-2-3

- [1] Ink tank
- [2] EEPROM
- [3] Ink port

- [4] Air passage
- [5] Notch for preventing incorrect installation

e) Subtank

The subtank installed under each ink tank complements the work of the ink tank, agitating the ink in the tank.

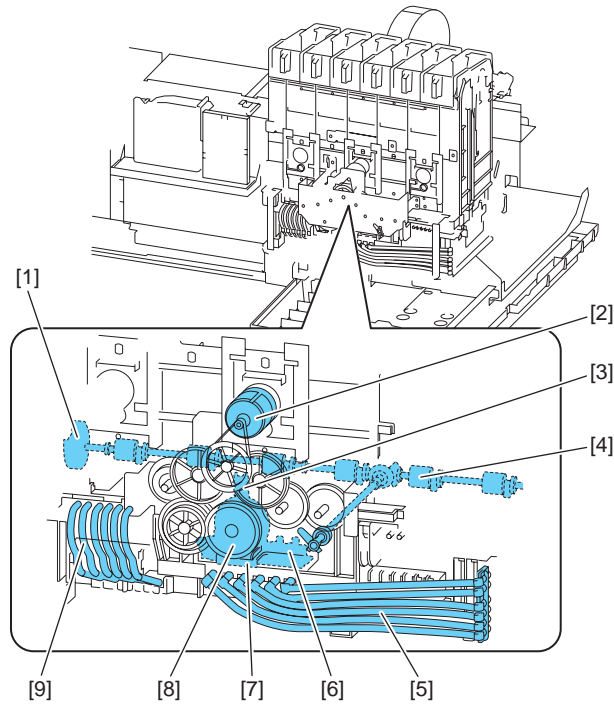
If the ink tank runs out of the ink while printing, the ink stored in the subtank is available, allowing the ink tank to be replaced without having to stop printing.

f) Ink supply valves

Located halfway between each subtank and the ink tube, the ink supply valve prevents ink leaks that may occur when the ink tube on the ink tank is released during replacement of the ink tank.

The ink supply valve is opened and closed by a valve open/close mechanism.

The ink tank unit consists of a tank base into which five-color ink tanks are assembled, and ink tubes for six colors (two occupied by MBK). Each color-specific ink supply valve is linked to the action of a valve cam so the ink supply valves will open and close simultaneously for all the colors.



F-2-14

T-2-4

- | | |
|--|------------------------|
| [1] Agitation cam sensor | [6] Ink supply valve |
| [2] Valve motor | [7] Link |
| [3] Valve open/closed detection sensor | [8] Valve cam |
| [4] Agitation cam | [9] Ink discharge tube |
| [5] Ink tube | |

2.3.2.3 Carriage Unit

2.3.2.3.1 Functions of Carriage Unit

iPF810 / iPF820 / iPF815 / iPF825

a) Printhead mounting function

The carriage, which fixes the printhead in position mechanically, is connected to the contact of the head relay PCB.

b) Control function

The carriage carries a carriage relay PCB, which relays drive signals from the main controller PCB, a head relay PCB, which relay printhead drive signals to printhead, a linear encoder, which generates print timing signals, and a multi sensor, which detects the width of paper and skews in it, adjusts its registration and head height.

The carriage relay PCB is connected to the main controller PCB by a flexible cable.

c) Carriage drive function

The carriage is caused to reciprocate level on the platen by means of the carriage belt that is driven by the power imparted from the carriage motor.

d) Printhead maintenance function

This printer performs cleaning operations, such as wiping the printhead and sucking inks, with the carriage halted at its home position.

e) Nozzle check function

This printer carries out an ink discharge operation with the carriage halted at the head management sensor, locating a non-discharging nozzle in the printhead.

f) Carriage height adjustment function

If the separation between the face of the printhead and the paper (carriage height) is varied as a result of differing paper thicknesses, cockled or curled paper or other problems, the printer is liable to mist generation as the carriage height increases or to head rubbing as the carriage height decreases.

To maintain an acceptable carriage height, the lift motor is driven according to the selected paper type, feeding method, print conditions (borderless printing/prioritized picture quality), environmental condition (temperature/humidity) and multi sensor measurements to automatically adjust the separation between the face of the printhead and the paper.

The table below shows the relation between the form kind and the height of the head.

T-2-5

Height of printhead (mm)	Media type	Remarks
1.3 (Lowest)	Photopaper, Synthetic paper, Film, Plain paper(Line drawing)	Capping position
1.8 (Low)	Coated paper(Line drawing)	
2.0 (Standard)	Plain paper, Coated paper, Fabric banner	
2.2 (High)	Premium matte paper, Fine art(watercolor,block print)	
2.6 (Highest)	Canvas	

g) Paper leading edge detection function/paper width detection function/skew detection function

The multi sensor attached to the lower left part of the carriage detects the leading edge and width of paper feeding on the platen and skews in it.

h) Automatic printhead position adjustment function

The multi sensor attached to the lower left part of the carriage reads an adjustment pattern printed on a form and adjusts the print timing of each printhead automatically.

i) Remaining roll media detection function

The printer prints a bar code on roll media upon delivery. The multi sensor attached to the lower left part of the carriage indicates the remaining volume of roll media.

j) Internal unit temperature sensor

A thermistor installed on the head relay PCB detects the internal unit temperature near the printhead.

2.3.2.3.2 Structure of Carriage Unit

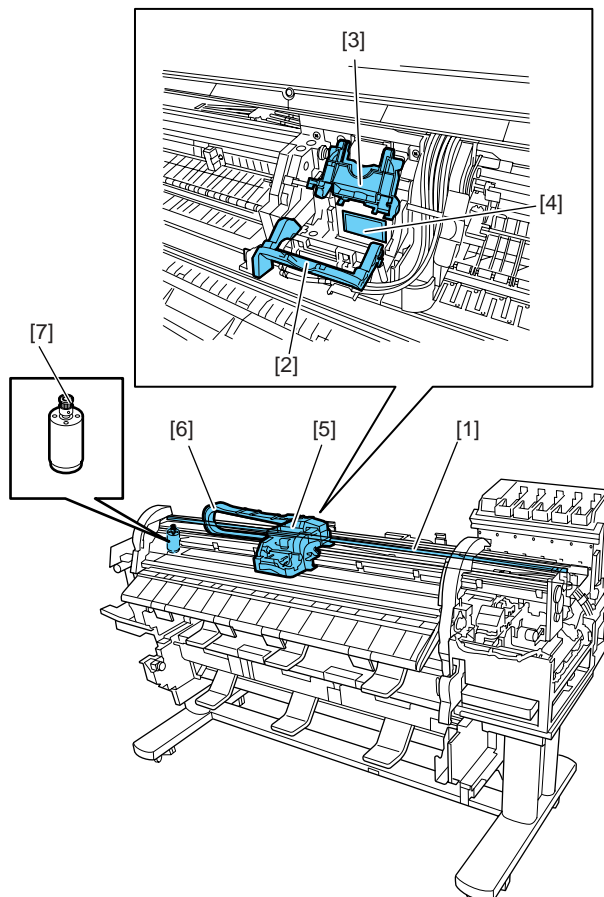
iPF810 / iPF820 / iPF815 / iPF825

a) Printhead mount

The printhead is secured to the carriage by the printhead fixer cover and the printhead fixer lever. When the printhead is secured to the carriage, the signal contact of the head relay PCB is pressed against that of the printhead to convey print signals. Further, the ink passage from the ink tanks is connected to the printhead via the ink tubes.

b) Ink port

Ink is supplied to the printhead via an ink tube, which runs between the tube guides via joints to reach the carriage and follow its movement.



F-2-15

T-2-6

- | | |
|---------------------------|--------------------|
| [1] Linear scale | [5] Carriage |
| [2] Printhead fixer lever | [6] Ink tube unit |
| [3] Printhead fixer cover | [7] Carriage motor |
| [4] Electrical contact | |

c) Controller

The Carriage relay PCB is connected to the head relay PCB by means of a short flexible cable. The flexible cable between the main controller and the carriage relay PCB follows up the motion of the carriage together with the tube guide. A photocoupler encoder mounted in the lower part of the back of the carriage detects a linear scale reading as the carriage moves.

d) Carriage drive

Mechanical misregistrations in the vertical/horizontal and bidirectional print positions of the printhead mounted can be corrected by selecting Adjust Printer from the main menu to shift the print timing.

A DC-operated carriage motor drives the carriage reciprocally on the platen by way of the carriage belt.

The carriage home position, or the capping position, is detected by the sensor flag on the right side of the carriage and the photointerrupter-based carriage HP sensor on the right side of the printer. When the linear scale position is set as a reference home position for use in subsequent position control operations, the carriage motor is driven by a control signal generated from the main controller PCB.

e) Printhead maintenance unit

This printer cleans the printhead with the carriage halted at its home position.

Wiping takes through the rotation of the motor.

Wiper blades mounted on the carriage wipe the printhead while the carriage is halted at its home position.

Wet wiping is carried out for added wiping removal performance, whereby the wiper blades are moistened with glycerin as they are pressed against an absorber impregnated with glycerin.

Maintenance jet ejection is carried out on the cap, at the maintenance jet tray, borderless printing ink tray and on the paper surface.

A suction operation is carried out by a suction cap in the purge unit.

f) Carriage height adjustment unit

The head height is adjusted with the carriage halted at its home position.

The lift motor is driven to rotate the lift shaft within the carriage, in sync with which the lift cams on both sides of the carriage move the head holder up and down,

thereby varying the separation between the face of the printhead and the paper.
The printhead height is detected from the lift cam sensor within the carriage and the distance of rotation of the lift motor.

g) Multi sensor

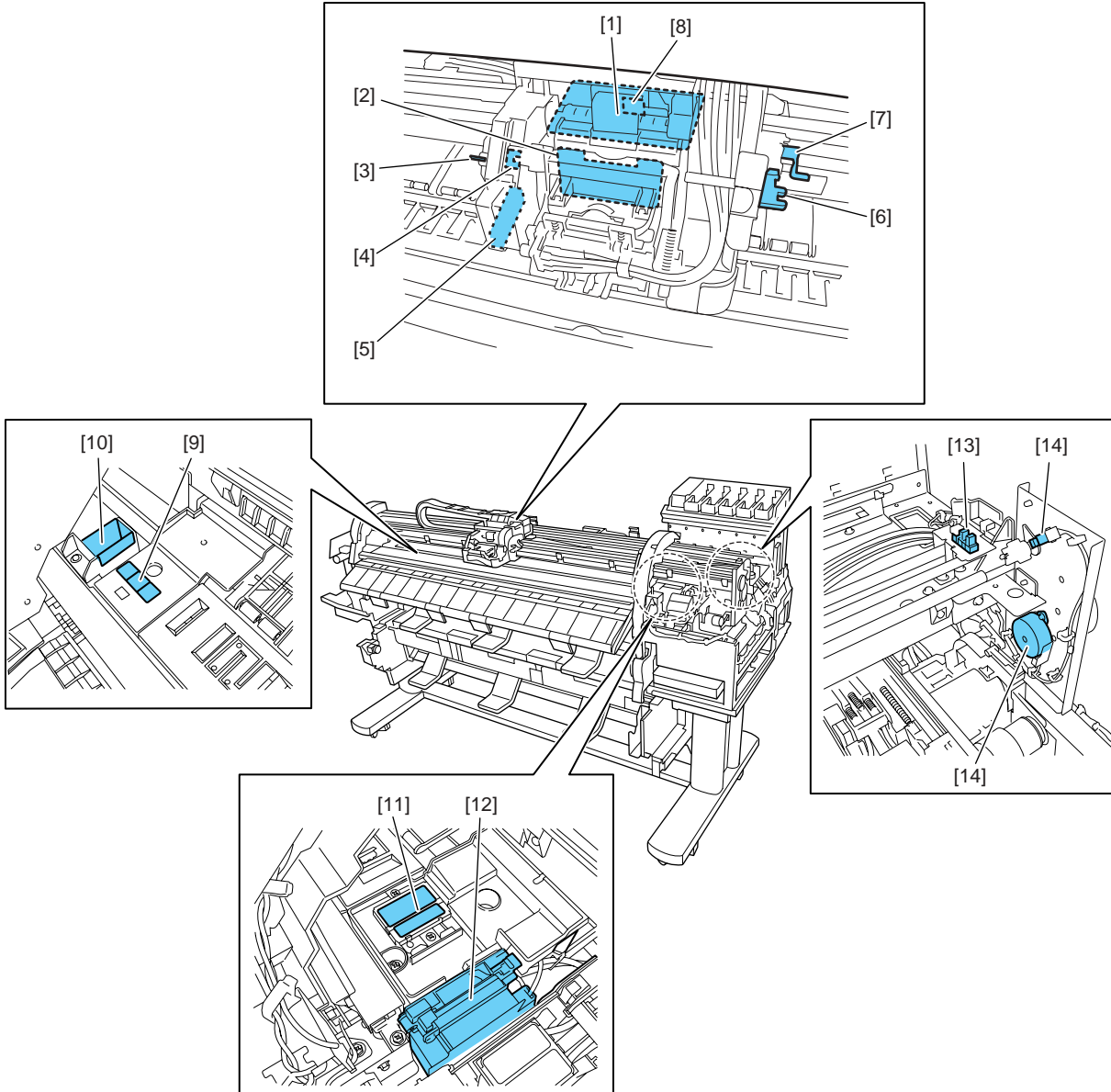
The multi sensor attached to the lower left part of the carriage consists of four LEDs (red, blue, green, infrared) and two light-receiving sensors to detect the leading edges and width of paper and skews in it, and to adjust its registration and head height.
The multi sensor reference has a white plate attached to it, so that a reference value can be calculated during carriage height measurement by measuring the intensity of light reflected upon the white plate.
(Service mode: SERVICE MODE>ADJUST>GAP CALIB.)

h) Rail cleaner

The shaft cleaner located in the right side of the carriage helps keep the main rail clean.

i) Internal unit temperature sensor

One thermistor is installed on the head relay PCB on the back of the head holder to detect the internal unit temperature.



F-2-16

T-2-7

- | | |
|----------------------------------|----------------------------------|
| [1] Carriage relay PCB | [9] Multi sensor reference plate |
| [2] Head relay PCB | [10] BP maintenance jet tray |
| [3] Slant adjustment lever | [11] HP maintenance jet tray |
| [4] Printhead fixer lever sensor | [12] Head management sensor |
| [5] Multi sensor | [13] Carriage HP sensor |
| [6] Shaft cleaner | [14] Lift cam sensor |
| [7] Lift cam | [15] Lift motor |
| [8] Linear encoder | |

2.3.2.4 Printhead

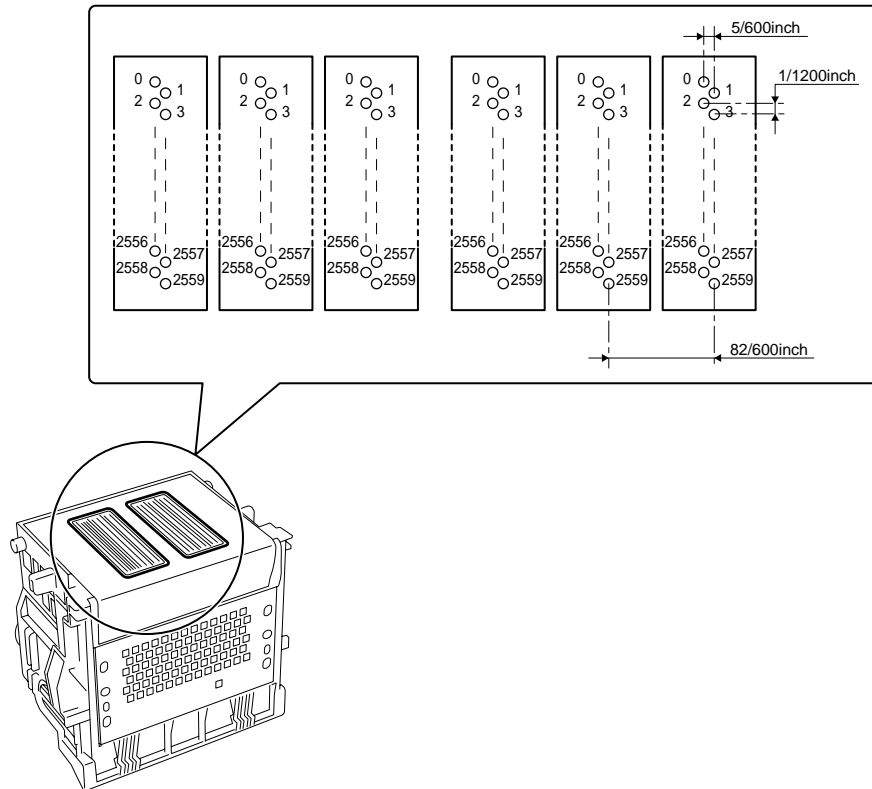
2.3.2.4.1 Structure of Printhead

iPF810 / iPF820 / iPF815 / iPF825

Each printhead is an integrated assembly of six trains of nozzles. Capable of controlling each nozzle individually, each printhead implements discharge control for six colors by itself.

a) Nozzle arrangement

The nozzle assembly is formed of 1,280 nozzles arranged at 600-dpi intervals in a zigzag pattern, offering a total of 2,560 nozzles 1,200-dpi intervals.



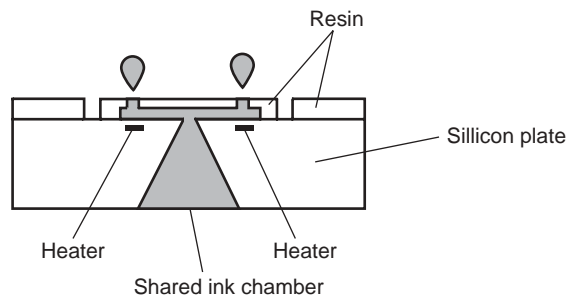
F-2-17

b) Nozzle assembly structure

Inks supplied from the ink tanks are filtered through a mesh ink filter before being sent to the nozzle assembly.

Each nozzle train is supplied with an ink from the common nozzle chamber.

A head drive current subsequently flowing through the nozzle heater boils the ink, generating bubbles to discharge ink drops from the nozzle assembly.



F-2-18

2.3.2.5 Purge Unit

2.3.2.5.1 Functions of Purge Unit

iPF810 / iPF820 / iPF815 / iPF825

To maintain high print quality, the purge unit performs maintenance of the nozzles of the printhead. The purge unit supports a capping function, cleaning function, and ink supply function.

a) Capping function

The capping function presses the cap of the purge unit against the face plate on the nozzle section of the printhead to prevent nozzle drying and dust adhesion. Capping is performed when printing is complete, at the start of the suction operation, and when switching to the standby state due to an error. The capping function also establishes the ink passage between the printhead and purge unit.

b) Cleaning function

The cleaning function restores the printhead to the state where ink can be easily discharged from nozzles. This function includes the following three types of operations.

- Wiping operation

This operation is performed to remove paper fibers and dried ink from the face plate.

- Pumping operation

This operation is performed to remove ink from the nozzles and fill the nozzles with fresh ink.

- Maintenance jet operation

This operation is performed to spray ink from the nozzles to the cap, HP maintenance jet tray, BP maintenance jet tray, maintenance jet ink groove of the platen to remove bubbles in the nozzles and dust and other foreign particles.

c) Ink supply function

The suction pump of the purge unit operates together with the ink supply valve to supply ink to the printhead during the initial filling and ink level adjustment. Details of the cleaning function are shown in the table below.

T-2-8

Cleaning mode	Name of Service mode or PRINT INF (Name of Main Menu)	Operation	Description of cleaning
Cleaning 1	CLN-A-1/CLN-M-1 (Head Cleaning A)	Normal cleaning	Removes dried ink from nozzles, thick ink accumulated on the face, and paper particles.
Cleaning 2	CLN-A-2	Ink level adjustment and cleaning	Adjust the ink level in the head by suction, and then performs normal cleaning.
Cleaning 3	CLN-A-3	Initial filling ink	Fills the empty tube (during initial installation) with ink, and then performs normal cleaning.
Cleaning 4	CLN-M-4 (Replace P.head)	Ink drainage for head replacement	Drains ink to replace the head (drains only the ink in the head).
Cleaning 5	CLN-M-5 (Move Printer)	Ink drainage for secondary transport	Drains ink from the head and tube for secondary transport.
Cleaning 6	CLN-A-6/CLN-M-6 (Head Cleaning B)	Normal (strong) cleaning	Performs suction stronger than when adjusting the ink filling amount in the head or normal cleaning to unclog nozzles.
Cleaning 7	CLN-A-7	Aging	Performs idle ejection after replacement of the head.
Cleaning 10	CLN-A-10 (Move Printer)	Ink filling after secondary transport	Fills the empty tube (during installation after secondary transport) with ink, and performs normal cleaning.
Cleaning 11	CLN-A-11	Ink filling after head replacement	Performs normal cleaning after head replacement and ink filling.
Cleaning 15	CLN-A-15	Dot count suction	Performs suction to remove ink adhered to dried nozzles and thick ink accumulated on the face when the dot count reaches the prescribed value.
Cleaning 16	CLN-A-16	Precipitated ink agitation	Performs the agitation (ink supply valve open/close) operation to prevent the ink ingredient from precipitating.
Cleaning 17	CLN-A-17	Cleaning (weak)	Performs cleaning weaker than normal cleaning to unclog nozzles.

Cleaning operation timings are as follows.

Printer status		Cleaning operation	Consumption (typ.)*1		
Standby	168 hours elapsed capped		Cleaning 1 (Normal Cleaning)	1g	
	At least 720 to 960 hours elapsed since the last session of Cleaning 2, 3, 6 or 10 (480 hours after initial installation)		Cleaning 6 (Normal (strong) Cleaning)	5g	
	At initial installation and 96 hours elapsed since the last session of Cleaning 16		Cleaning 16 (Precipitated ink agitation)	-	
	1 hour elapsed capped with a specified number of dots discharged per chip completed after last wiping		Wiping + Idle ejection	0.013g	
Power-on	At initial installation		Cleaning 3 (initial filling ink)	40g	
	Both heads and inks available	The print operation has completed.	168 to 720 hours elapsed capped	Cleaning 1 (Normal Cleaning)	1g
			At least 720 to 960 hours elapsed since the last session of Cleaning 2, 3, 6 or 10 (360 to 480 hours after initial installation)	Cleaning 6 (Normal (strong) Cleaning)	5g
			At least 960 to 2160 hours elapsed since the last session of Cleaning 2, 3, 6 or 10 (480 hours after initial installation)	Cleaning 2 (Ink level adjustment and cleaning)	10g
			At least 96 hours elapsed since the last session of Cleaning 16	Cleaning 16 (Precipitated ink agitation)	-
		At least 1 hour elapsed capped with a specified number of dots discharged per chip completed after last wiping	Wiping + Idle ejection	0.013g	
		Print operation aborted (uncapped) and CR error occurring	Up to 72 hours elapsed after an abort	Cleaning 1 (Normal Cleaning)	1g
	Over 72 hours elapsed after an abort		Cleaning 6 (Normal (strong) Cleaning)	5g	
	Print operation aborted (uncapped) and no CR error occurring		Cleaning 11 (ink filling after head replacement)	10g	
	No heads are available		Cleaning 10 (ink filling on secondary transport)	40g	
Power off	Specified number of dots discharged per chip completed since the last session of wiping		Wiping + Idle ejection	0.013g	
Before the start of printing	Less than 168 hours elapsed capped		Idle ejection	0.013g	
	At least 168 hours elapsed capped		Cleaning 1 (Normal Cleaning)	1g	
	Before printing in the wake of an error occurrence		Cleaning 1 (Normal Cleaning)	1g	
Printing	Before scanning while printing		Idle ejection (+Wiping)	-(0.013g)	
After the end of printing	A specified number of dots (color) discharged per chip since the last session of Cleaning 2, 3, 6 or 10		Cleaning 6 (Normal (strong) Cleaning)	5g	
	A specified number of dots discharged per chip after the last session of wiping		Wiping + Idle ejection	0.013g	
	3 minutes elapsed since the last session of capping		Wiping + Idle ejection	0.013g	
	Total 2 hours elapsed uncapped since the last session of Cleaning 1, 2, 3, 6 or 10		Cleaning 1 (Normal Cleaning)	1g	
When the Head Cleaning menu choice is executed	Manual Cleaning (Head Cleaning A)		Cleaning 1 (Normal Cleaning)	1g	
	Manual cleaning (Head cleaning B)		Cleaning 6 (Normal (strong) Cleaning)	5g	
When the Replace Print Head menu choice is executed	After head replacement		Cleaning 2 (ink level adjustment and cleaning) + Cleaning 4 (ink drainage for head replacement)	10g	
When the Move Printer menu choice is executed	After the Move Printer menu choice is executed		Cleaning 5 (ink drainage for secondary transport)	10g	
	After power-on at secondary installation		After power-on at secondary installation	15g	

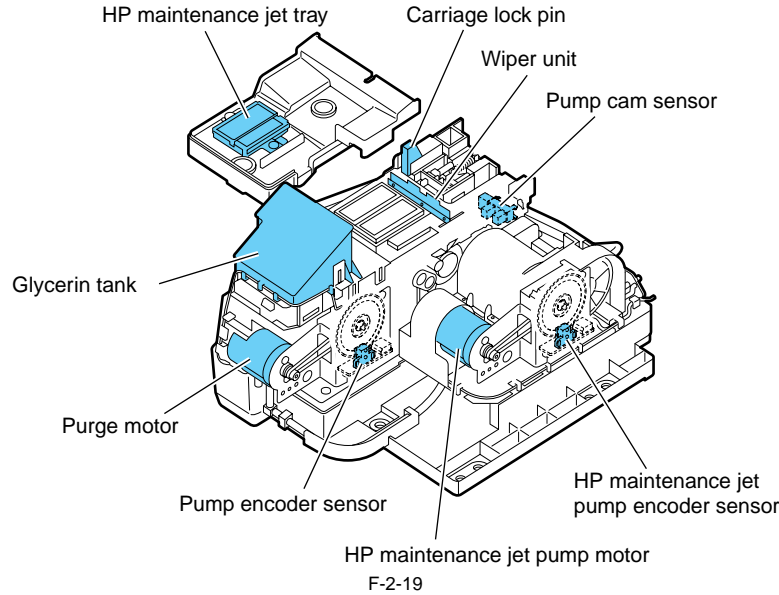
*1: Quantities of ink consumption by nozzle train

2.3.2.5.2 Structure of Purge Unit

iPF810 / iPF820 / iPF815 / iPF825

a) Caps
 The caps cap the nozzle assembly in the left printhead during capping and cleaning. The part of the caps that comes into contact with the face plate of the nozzle assembly is made of rubber. Two caps are in position to meet each of the printheads mounted on the carriage (six trains of nozzles). The caps are activated to protect the nozzle assembly on capping. When the carriage moves to the home position, the caps are elevated by the cap can that is driven by the capping motor, capping the nozzle assembly to protect it. These caps cap the nozzle assembly to suck inks from the printhead by means of the suction pump.

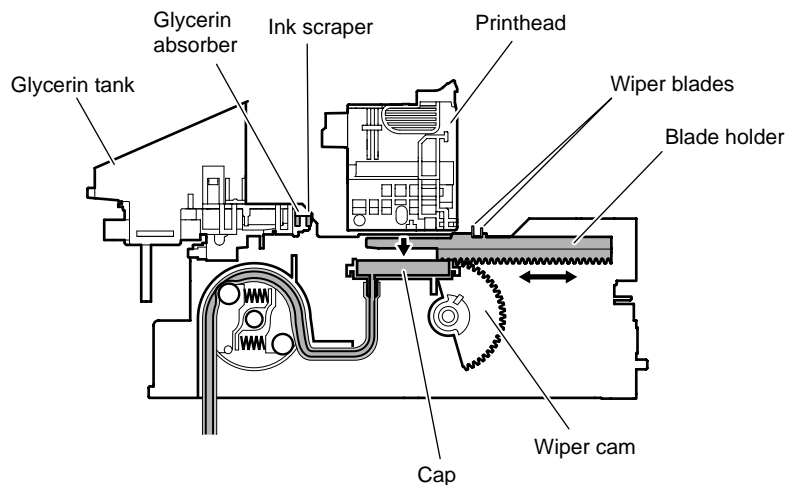
b) HP maintenance jet tray
 An HP maintenance jet tray is located at the home position of the platen, transporting idle discharges of the pigment and dye inks through their respective tubes to the pump unit in the purge unit.



c) Wipers
 The wipers are driven by the purge motor to wipe the six trains of nozzles in the nozzle assembly in the printhead simultaneously. A pair of wiper blades are in position to ensure wiping performance. The wiping operation operates on a slide wiping basis, sliding the wiper blades via wiper cams through the normal rotation normal of the purge motor. Wiping is executed by the wiper blades moving at a constant speed to the front of the printer after the end of a print or suction operation. A wiper blade set perpendicularly to the head wipes the entire face of the printhead, followed by a narrower blade wiping the nozzle assembly. The wiper blades are cleaned before they are replaced at the wiping position after wiping to preserve wiping performance. Wiper blade cleaning is carried out by scraping off the inks that have been wiped off from the head with an ink scraper linked to the maintenance cartridge, then wiping the blades with a blade cleaner. Wet wiping is carried out for added wiping removal performance, whereby the wiper blades are moistened with glycerin as they are pressed against an absorber impregnated with glycerin. The quantity of glycerin used is managed by counting the number of times the wiper blades have been pressed against the absorber. When this count falls to equal any of the following values, either a replacement warning (continued print available) or replacement required indication (service call error) is issued.

T-2-9

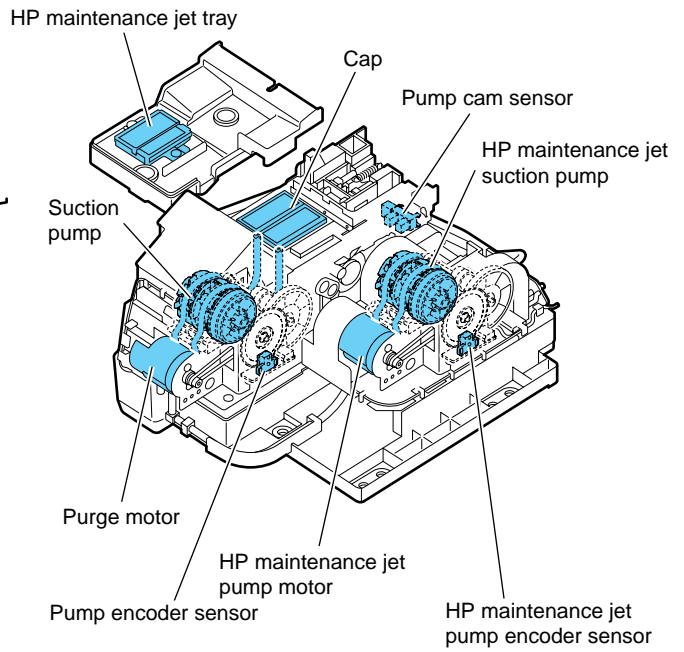
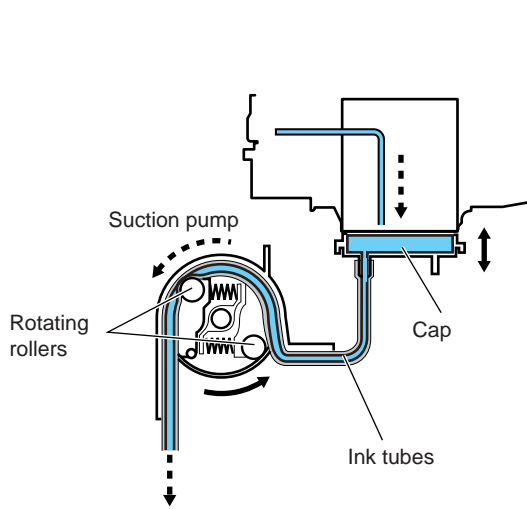
Display	Times
Replacement warning indication	71,250 times
Service calls	75,000 times



F-2-20

d) Pump

The pump is a tube pump that pressurizes the ink tubes with rotating rollers to produce a negative pressure for sucking inks. Each individual tube is sequentially pressurized by two rotating rollers to control the rate of ink suction by a wide margin. The rate of rotation of the rotating pumps is controlled by driving the purge motor or the HP maintenance jet pump motor as the timing at which the rotating pumps rotate is detected by a pump cam sensor.



F-2-21

2.3.2.6 Maintenance Cartridge

2.3.2.6.1 Maintenance Cartridge

iPF810 / iPF820 / iPF815 / iPF825

a) Maintenance cartridge

The maintenance cartridge holds as much about 1000 mL of used inks.

b) Used maintenance cartridge ink detection

Used maintenance cartridge ink detection is monitored with regard to a dot count.

When the quantity of the used ink reaches about 800 mL (80% of the cartridge capacity), the warning message "Check maint cartridge capacity" is displayed to tell that the maintenance cartridge is nearly full.

Printing may continue even when the warning message is displayed.

When the quantity of the used ink reaches about 1200 mL (about 1280 g, 100% of the cartridge capacity), a replacement prompt error message is displayed, telling that the maintenance cartridge is full.

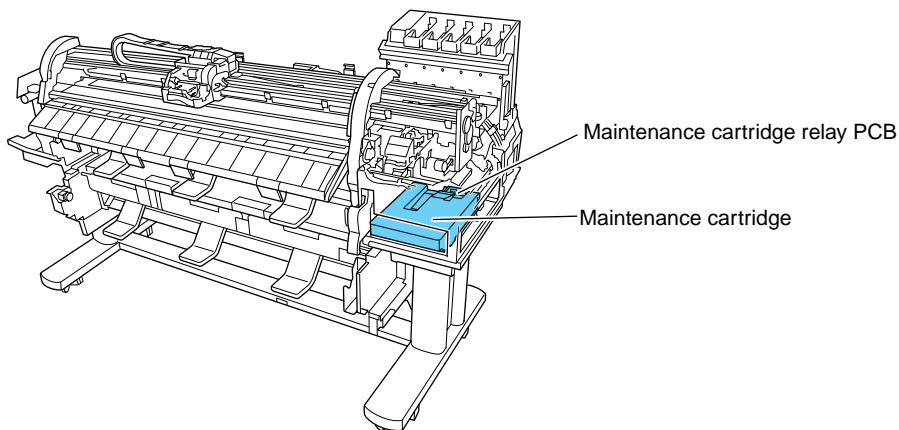
When the printer determines that the maintenance cartridge is full, it shuts down even while it is printing.

The printer will remain inoperable until the maintenance cartridge is replaced.

Memo:

The maintenance cartridge houses EEPROM, so that main controller PCB can control the status of the maintenance cartridge by writing to and reading from the EEPROM content.

There is no need to initialize the counter information, therefore, when the maintenance cartridge is replaced.



F-2-22

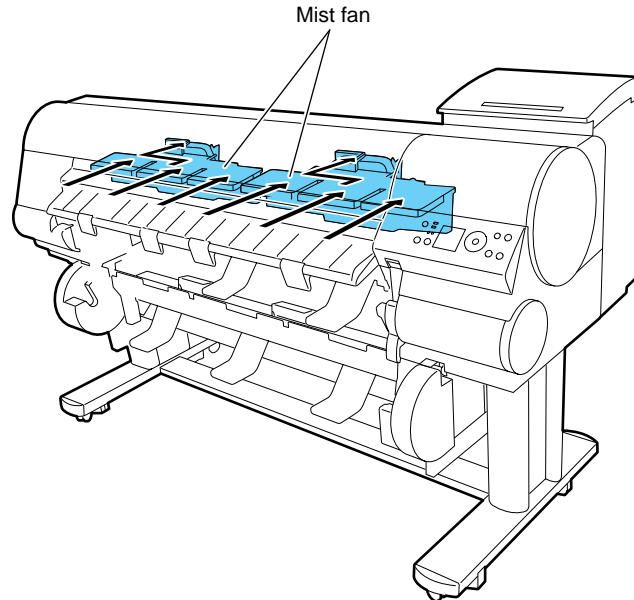
2.3.2.7 Air Flow

2.3.2.7.1 Air Flow

iPF810 / iPF820 / iPF815 / iPF825

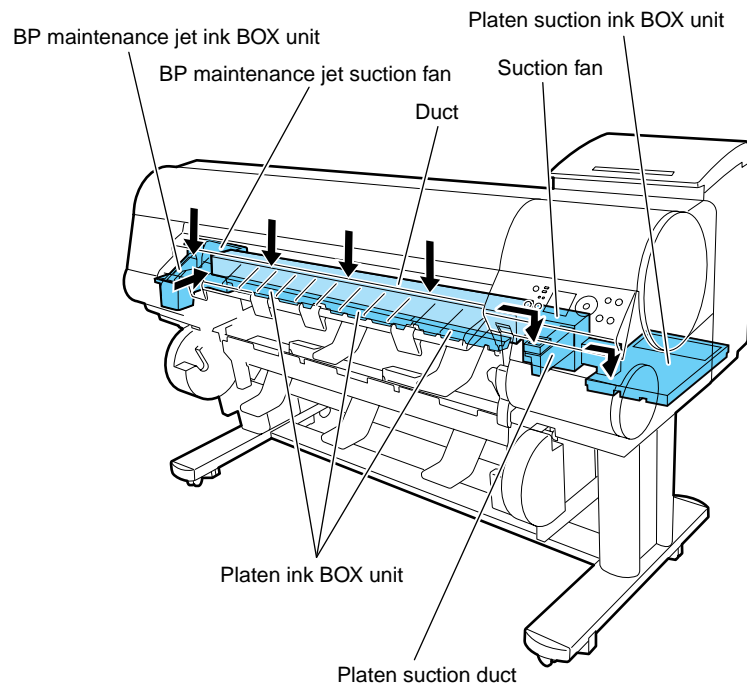
This printer is provided with four fans: two mist fans for collecting ink mist, a suction fan for allowing paper to be sucked onto the platen and a BP maintenance jet suction fan for collecting idle discharges.

Ink mist floating during printing or springing back from the paper is collected by internal air flow in the printer into the mist fan unit through a mist suction opening. The mist fan on the back of the printer produces the airflow that carries the ink mist to the mist fan unit.



F-2-23

A duct is located under the platen, along with a platen ink BOX unit used for collecting waste ink during borderless printing and idle discharges. The suction fan collects the ink mist in the duct through a platen suction duct into the platen suction ink BOX unit. Idle discharges to the BP maintenance jet tray are collected into the BP maintenance jet ink BOX unit and the filter by the BP maintenance jet suction fan.



F-2-24

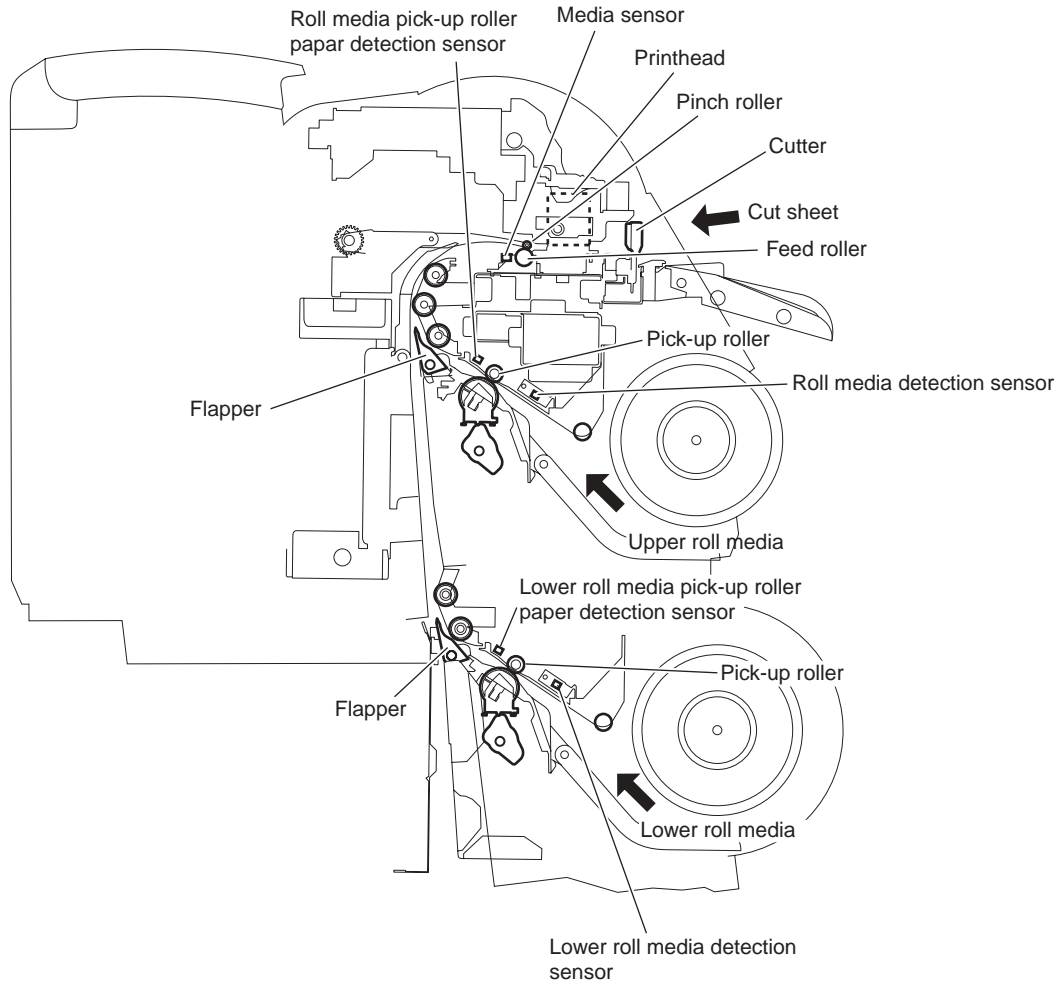
2.3.3 Paper Path

2.3.3.1 Outline

2.3.3.1.1 Overview of Paper Path

iPF810 / iPF820 / iPF815 / iPF825

The paper pass comprises an upper roll media pick-up drive unit, a lower roll media pick-up drive unit, a feed roller, a pinch roller pressure drive unit that pressurizes and depressurizes the pinch roller, a roll holder drive unit that drives the roll holder and sensors that detect the transport status of paper to feed paper in three different ways, and transport and eject the paper.
(lower roll unit is iPF825/820 only.)



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2.3.3.2 Paper Path

2.3.3.2.1 Structure of Pick-up/Feed Unit

iPF810 / iPF820 / iPF815 / iPF825

a) Roll media pick-up

The components of the roll media pick-up consists include a pick-up roller driven by a roll media pick-up motor, a roller that follows the motion of the pick-up roller, a roll media pick-up roller clutch that controls the driving of the pick-up roller and a roll media pick-up cam clutch that controls the rise and fall of the roller. When the roll media detection sensor detects a roll media being loaded at the paper loading port, the roll media pick-up motor (rotating in the normal direction), the roll media pick-up roller clutch and the roll media pick-up cam clutch turn on respectively to rotate the pick-up roller. When the roll media thus fed is detected by the roll media pick-up roller sensor, it is moved 5 mm before it comes to a standby position.

Pressing the [OK] button on the operator console turns on the flapper solenoid, with the pick-up roller and the feed roller carrying the paper to the platen for paper sag correction, leading paper end detection, skew detection/correction, paper width detection and more. When the paper is carried to the feed roller, the roll media pick-up motor, roll media pick-up roller clutch and roll media pick-up cam clutch turn off to release the pick-up roller.

b) Switching between upper and lower roll media pick-up (iPF825/815 only)

While a roll media has been carried to the platen, if the transport of a roll media from another roll media pick-up is specified, the roll media pick-up motor (rotating in the reverse direction), the roll media pick-up roller clutch, the roll media pick-up cam clutch and the roll media rewinding clutch turn on respectively, driving the pick-up roller, the feed roller and the roller holder to rewind the roll media from the platen to the standby position before the transport of a roller from the other roll media pick-up specified starts.

c) Rewinding rolls

While a roll media has been carried to the platen, if the transport of a cut form is specified, the roll media pick-up motor (rotating in the reverse direction), the roll media pick-up roller clutch, the roll media pick-up cam clutch and the roll media rewinding clutch turn on respectively, driving the pick-up roller, the feed roller and the roller holder to rewind the roll media from the platen to the standby position.

d) Pick-up roller sag/skew correction

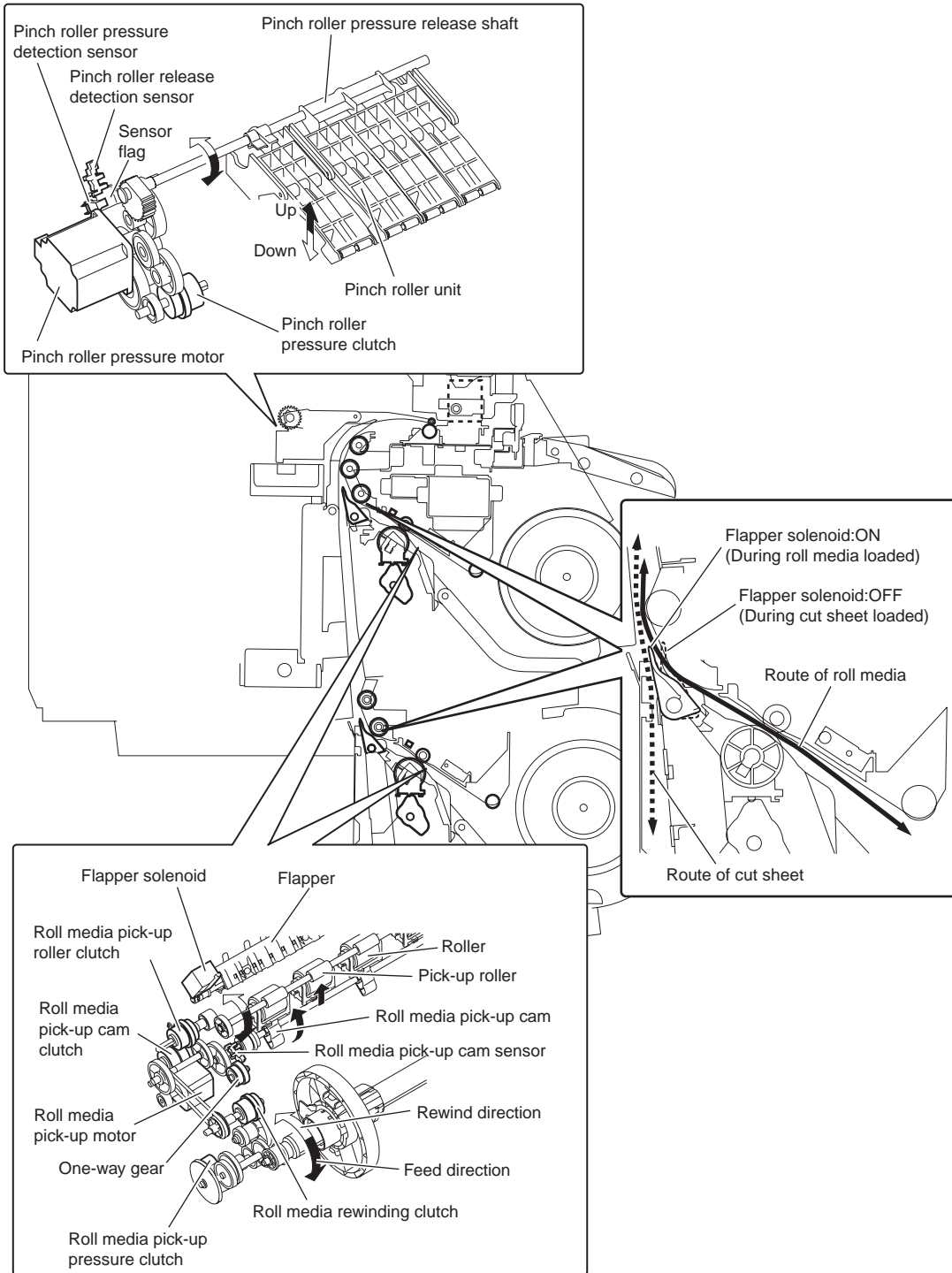
When a roll media feeds, it is iteratively driven and spooled about 75mm by the pick-up roller to correct sags and skews in the roll media. If the roll media width detection sensor detects paper (media width: about 24 inches), the roll media pick-up pressure clutch turns on to actuate the torque limiter in the roll holder drive unit, with the result of increased back tension (about 2.6 times higher than before). The increased back tension augments the effects of sag/skew correction on wide media.

e) Skew correction on the platen

When a roll media feeds to the platen, it is carried in the direction of paper ejection for skew detection and correction. At this time, the pinch roller pressure motor and the pinch roller pressure clutch turn on respectively to place the pinch roller in a weakly pressurized state (under about one third of the normal pressure), thereby reducing paper nip force acting on the feed roller for enhanced skew correction.

The status of pinch roller pressure/release is detected by the pinch roller pressure detection sensor and the pinch roller release detection sensor, with the rate of pressurization being controlled by drives from the pinch roller pressure motor.

Skew correction on the platen is run up to three times. If skews in the roller remain uncorrected after three runs of skew correction, the roll is subjected to user skew correction (by releasing the release lever).

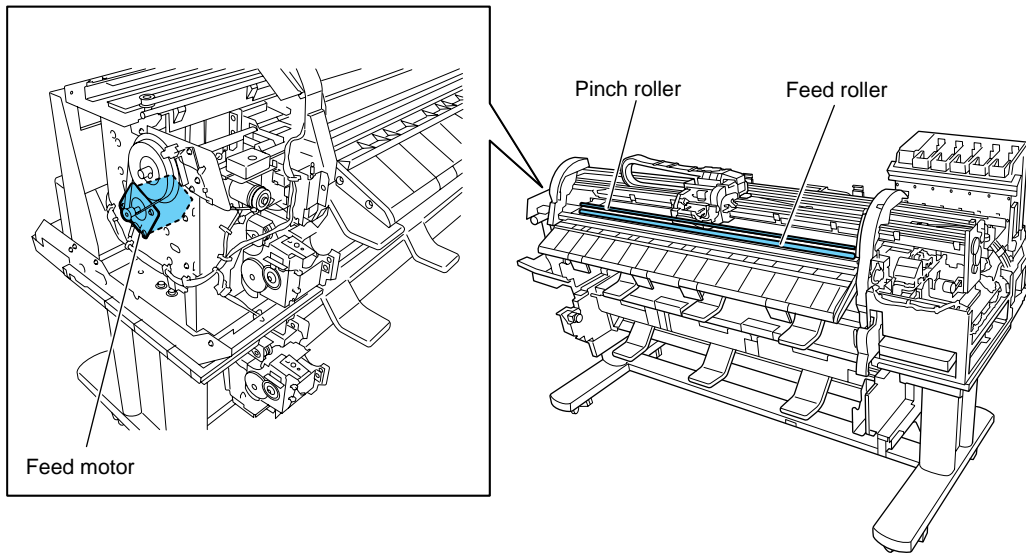


F-2-26

f) Paper feed assembly

The paper feed assembly consists of paper feeding mechanisms, such as a feed roller that is driven by the feed motor and a pinch roller unit that follows up the motion of the feed roller.

Paper feeds horizontally under the printheads on the carriage as it is kept level on the platen to prevent cockling.



F-2-27

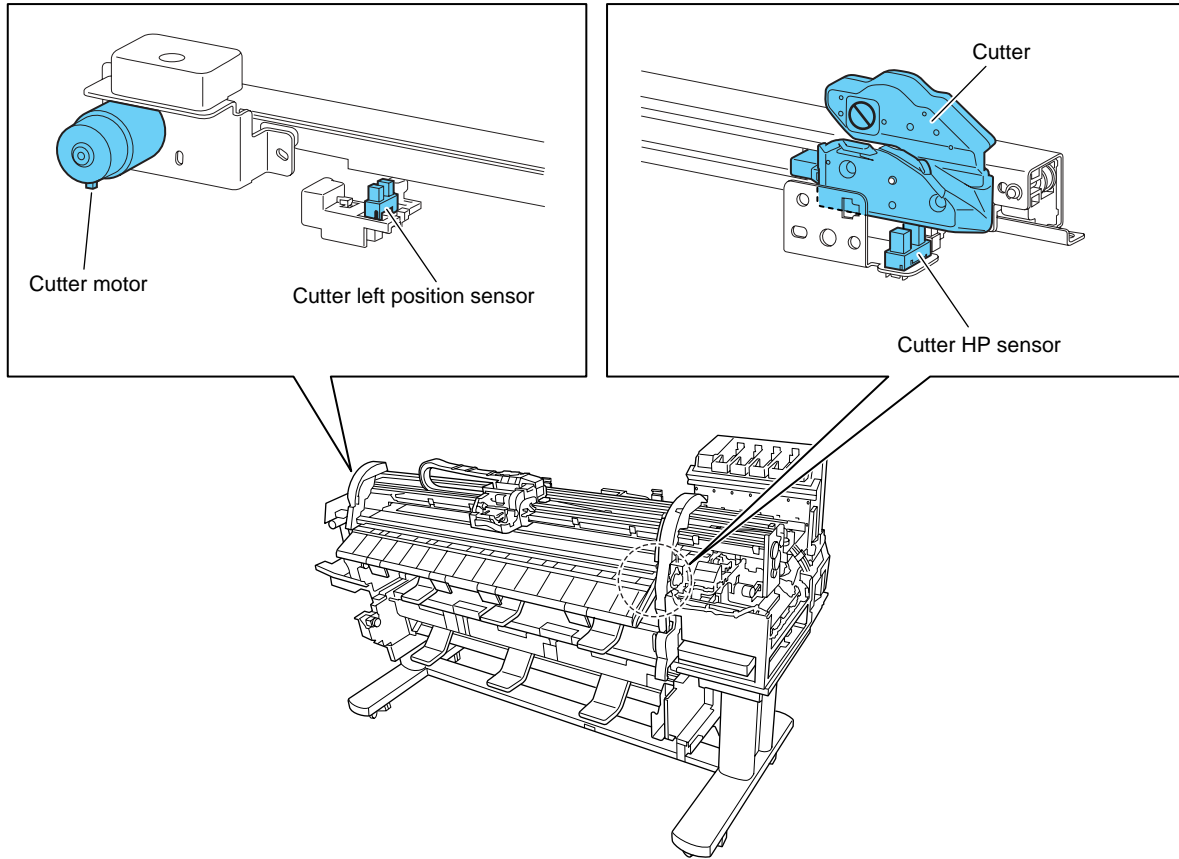
2.3.3.3 Cutter Unit

2.3.3.3.1 Structure of Cutter Unit

iPF810 / iPF820 / iPF815 / iPF825

When a roll media is used, the cutter unit cuts the leading end of the roll on loading and also cuts the roller on paper ejection. Whether cutting takes place or not depends on the relevant printer driver setting in the main menu.

The cutter in the cutter unit stands by at the cutter home position, except when a roll media is cut. Power imparted from the cutter motor to the cutter via a circular belt drives it to travel from right to left for cutting.



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2.4 Printer Electrical System

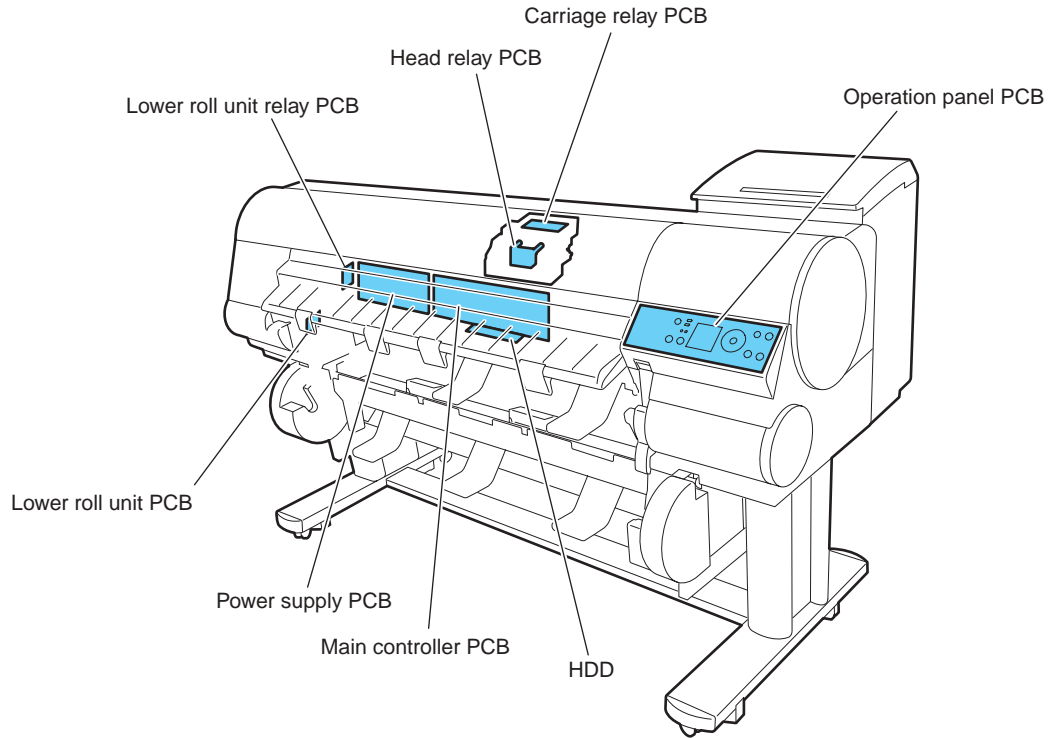
2.4.1 Outline

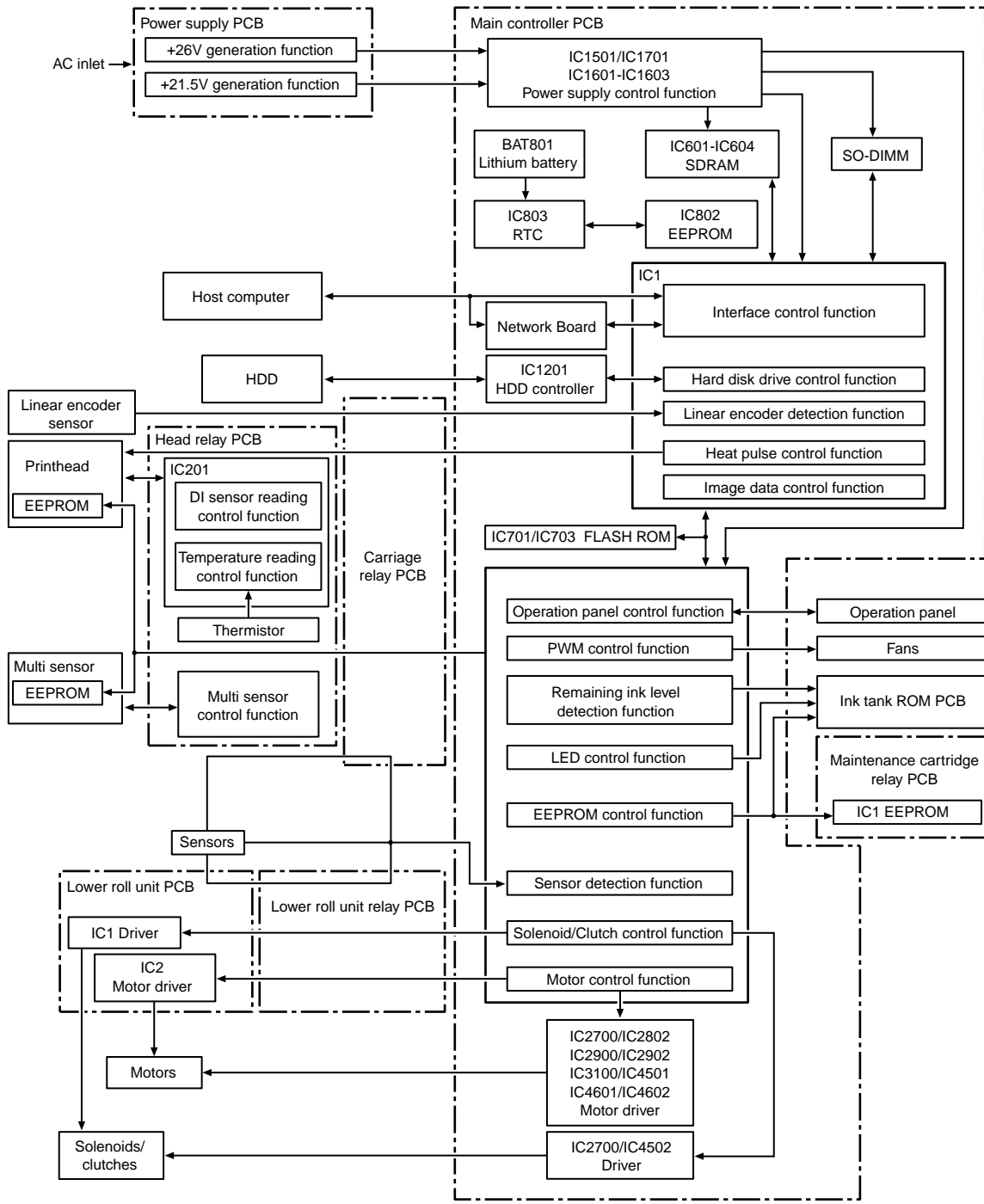
2.4.1.1 Overview

iPF820 / iPF825

The printer electrical system consists of the main controller PCB and lower roll unit PCB and power supply PCB and hard disk drive which are mounted on the back side of the printer, the carriage relay PCB, the head relay PCB, and printhead which are mounted in the carriage, the operation panel on the right upper cover and other electrical components such as sensors, and motors.

The main controller PCB manages the image data processing and the entire electrical system, and controls relay PCBs and driver functions.





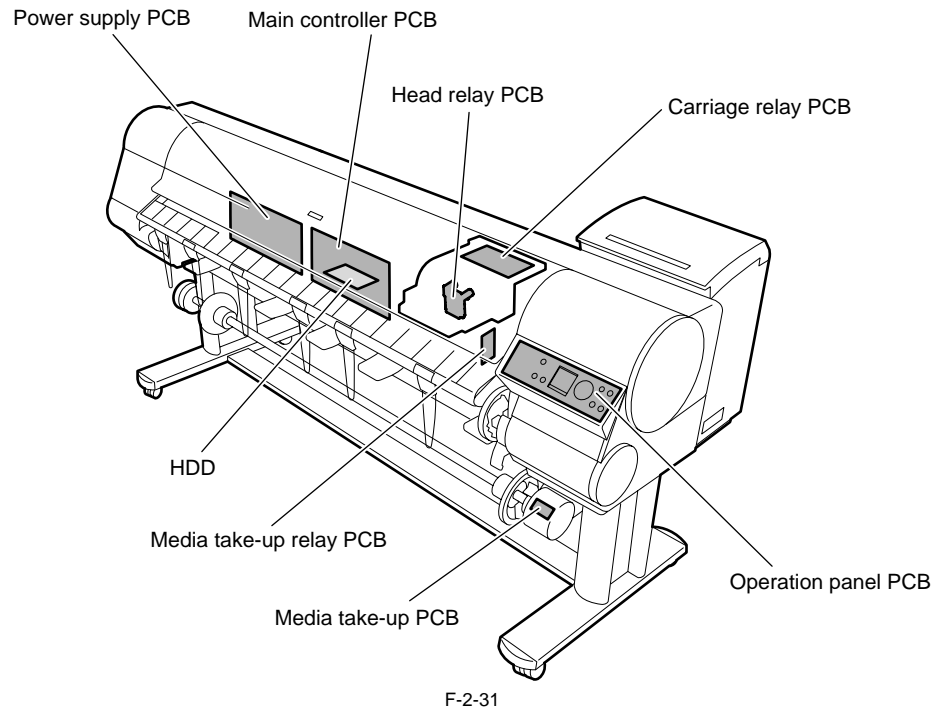
F-2-30

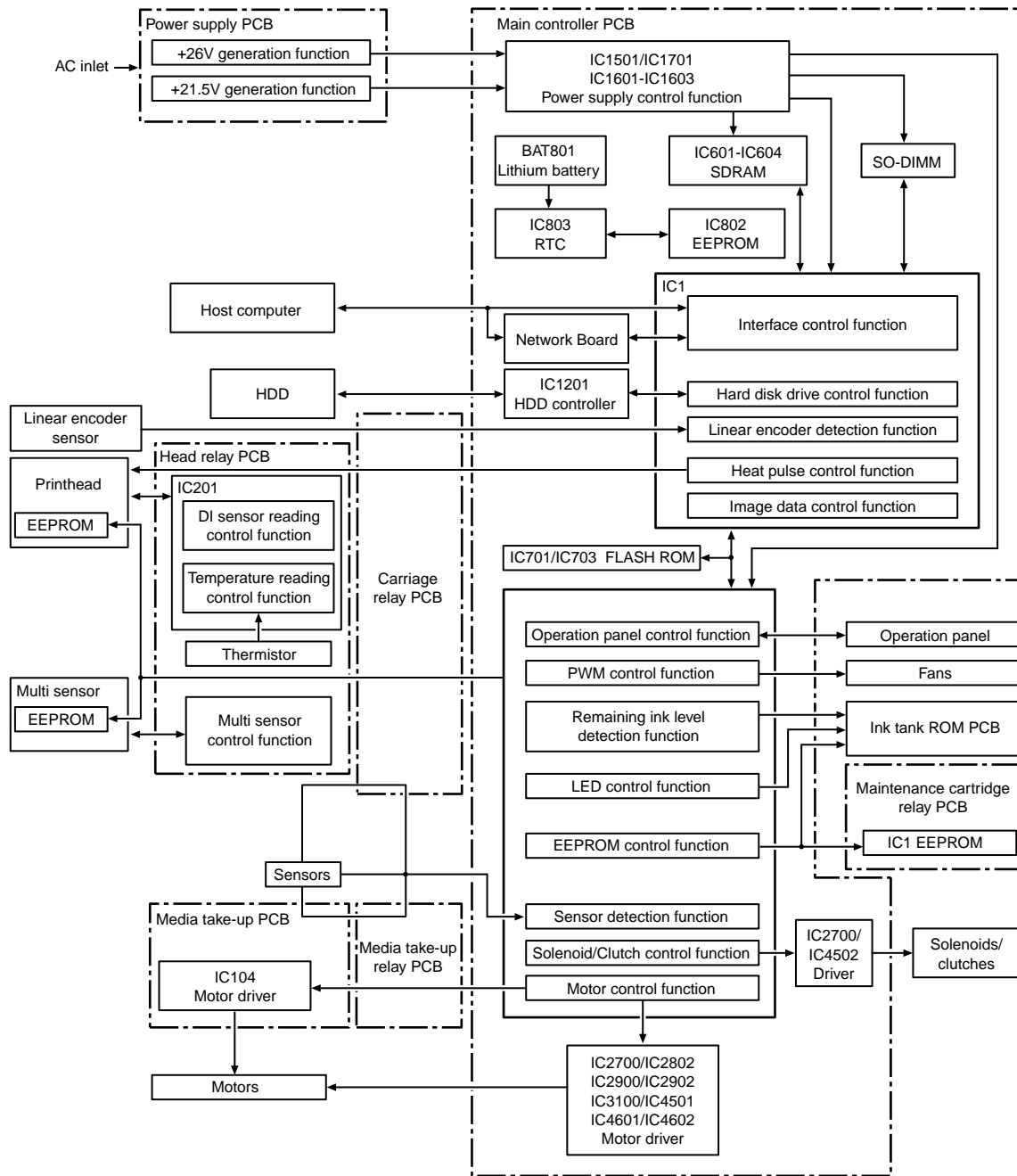
2.4.1.2 Overview

iPF810 / iPF815

The printer electrical system consists of the main controller PCB and media take-up relay PCB and power supply PCB and hard disk drive which are mounted on the back side of the printer, the carriage relay PCB, the head relay PCB, and printhead which are mounted in the carriage, the operation panel on the right upper cover and other electrical components such as sensors, and motors.

The main controller PCB manages the image data processing and the entire electrical system, and controls relay PCBs and driver functions.



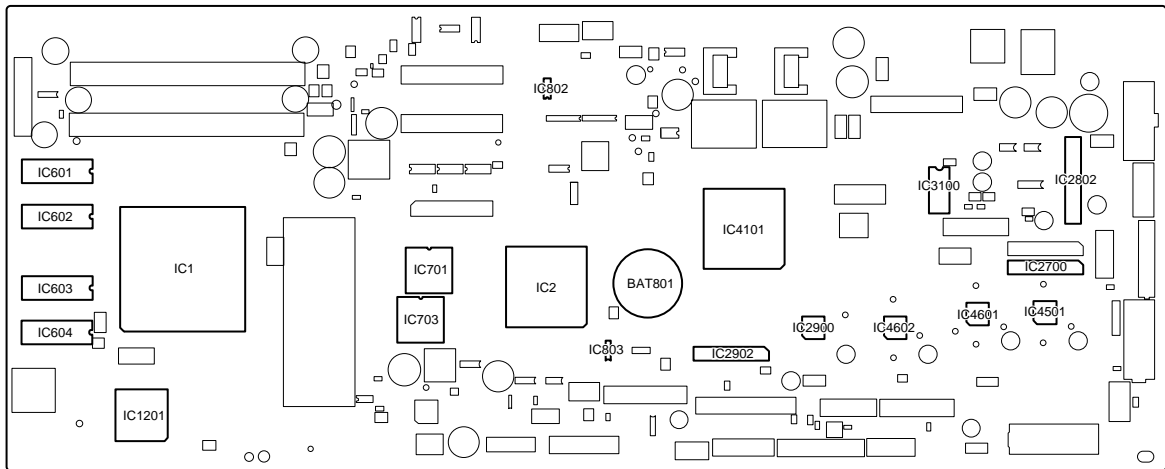


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2.4.2 Main Controller

2.4.2.1 Main controller PCB components

iPF810 / iPF820 / iPF815 / iPF825



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a) ASIC (IC1/IC2/IC401)

The ASIC(IC1/IC2/IC401) with a 32/16-bit internal bus is driven in sync with the 132/66 MHz external clock. It supports the following functions:

Image processing unit

This unit converts the RGB multi-value image data or CMYK multi-value data received from the host computer through the interface connector to the binary image data for the ink colors used.

DMA controller

This controller control DMA transfer of the data transferred through the input interfaces as well as DMA transfer of the data stored in the DIMM.

Image data generation/output function

This function generates image data for color printing from the received image data and the mask pattern (corresponding to print mode) stored in the FLASH ROM, and stored the generated image data in DIMM. It also outputs the generated image data to the carriage PCB.

Interrupt controller

This controller receives and processes internal interrupts and external interrupts from the USB, image processing unit, and expansion card slot.

Timer function

Even when the printer is turned off, the timer function is held on using the RTC(IC803) and lithium battery(BAT801) to assist the cleaning function. When the power cord is plugged to the outlet, power is supplied to the RTC and therefore the lithium battery power is not consumed.

Heat Enable signal control function

This function uses the pulse width to perform variable control of the time of application of the Heat Enable signal to the nozzle heater board for each printhead nozzle array.

Linear scale count function

This function reads the linear scale when the carriage moves, thus generating the ink discharge timing. It also counts the linear scale timing cycle using the reference clock to measure the carriage moving speed.

Dot count function

This function controls the discharge dots used as the information for Heat Enable signal control, maintenance jet control, cleaning control, and remaining ink level for each nozzle array.

Operation panel control function

This function controls serial communication with the operation panel.

PWM control function

This function controls driving of the suction fan and mist fan as well as the temperature of the printhead.

Remaining ink level detection function

This function detects the remaining level of each color of ink based on the signal received from the hollow needle mounted in the ink tank unit.

LED control function

This function controls the LEDs on the ink tank unit.

I/O port function

This function controls input signals from sensors.

Power ON/OFF control function

This function controls turning on/off of the drive power (26 V and 21.5 V) supplied from the power supply PCB.

Head DI sensor read control function

This function controls read operation by the head DI sensor.

Multi sensor control function

This function controls the LED, adjusts the gain, and controls obtainment of the reading for the multi sensor.

EEPROM control function

This function controls the EEPROMs of individual ink tanks, the maintenance cartridge EEPROM, the EEPROM on the maintenance cartridge relay PCB, and the head EEPROM in addition to the on-board EEPROM.

Clutch/Solenoid control function

This function controls the clutches and solenoids based on the control signal from the ASIC.

Motor control function

This function controls the carriage motor, feed motor, valve motor, purge motor and lift motor based on the input signals from sensors.

b) Driver IC (IC2700)

This IC generates a HP maintenance jet pump motor control signal based on the control signal from the ASIC.

c) Driver IC (IC2802)

This IC generates a feed motor control signal based on the control signal from the ASIC.

d) Driver IC (IC2900)

This IC generates purge motor and valve motor control signals based on the control signal from the ASIC.

e) Driver IC (IC2902)

This IC generates a lift motor control signal based on the control signal from the ASIC.

f) Driver IC (IC3100)

This IC generates a carriage motor control signal based on the control signal from the ASIC.

g) Driver IC (IC4501)

This IC generates a pinch roller pressure motor control signal based on the control signal from the ASIC.

h) Driver IC (IC4601)

This IC generates a roll media pick-up motor control signal based on the control signal from the ASIC.

i) Driver IC (IC4602)

This IC generates a cutter motor control signal based on the control signal from the ASIC.

j) DIMMs (IC601,IC602,IC603,IC604)

The DIMM comprising a 128-MB SDR-SDRAM is connected to the 32-bit data bus to be used as a work area. During print data reception, it is also used as an image buffer. It cannot be expanded.

k) FLASH ROM (IC701/IC703)

A 128-MB flash ROM is connected to the 8-bit data bus to store the printer control program.

l) EEPROM (IC802)

The 128-KB EEPROM stores various setting values, adjustment values, log data, counter values related to the user/servicing.

m) SO-DIMM

The 256-MB SO-DIMM (J401) is connected to the 32-bit data bus to be used as a work area. During print data reception, it is also used as an image buffer. It cannot be expanded.

n) HDD controller (IC1201)

This controller control the hard disk drive.

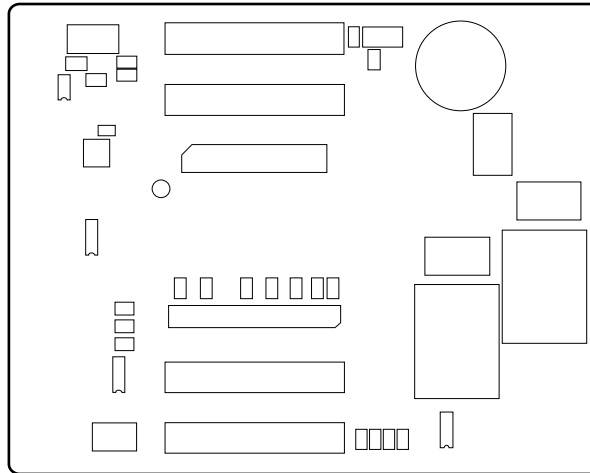
MEMO:

After replacement of the main controller PCB, the printer must be started up in the service mode to take over the setting and adjustment values to the new PCB properly (the service mode will be switched to the PCB replacement mode automatically).

2.4.3 Carriage Relay PCB

2.4.3.1 Carriage relay PCB components

iPF810 / iPF820 / iPF815 / iPF825



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a) Image data relay function

This function relays the image data from the main controller PCB to the printhead. The function for processing image data is not supported.

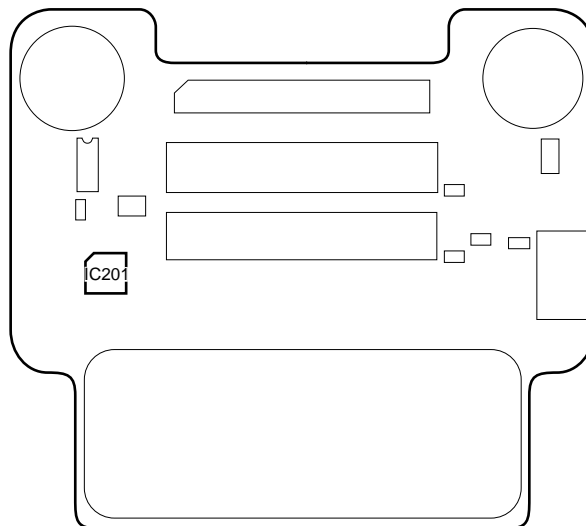
b) Sensor relay function

This function relays the input signals from the multi sensor, printhead fixer lever sensor, and linear encoder to the main controller PCB.

2.4.4 Head Relay PCB

2.4.4.1 Head relay PCB components

iPF810 / iPF820 / iPF815 / iPF825



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a) Latch IC (IC201)

DI sensor read control function

Obtains reading value of the DI sensor in the printhead and the head rank value for each color and outputs them to the main controller based on the control commands from the main controller.

Environment temperature read control function

Outputs the environment temperature detected by the thermistor on the head relay PCB to the main controller based on the control commands from the main controller.

Relay function of the power to the logic components in the printhead

Supplies the power to the logic components in the printhead based on the control commands from the main controller.

b) Multi sensor control

These IC's generates the LED control signals and makes gain adjustment for the multi sensor.

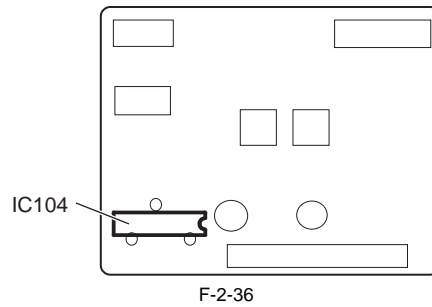
c) Image data relay function

This function relays the image data from the main controller PCB to the printhead.

2.4.5 Motor Driver

2.4.5.1 Media take-up PCB components

iPF810 / iPF815



a) Driver IC (IC104)

Media take-up motor drive function

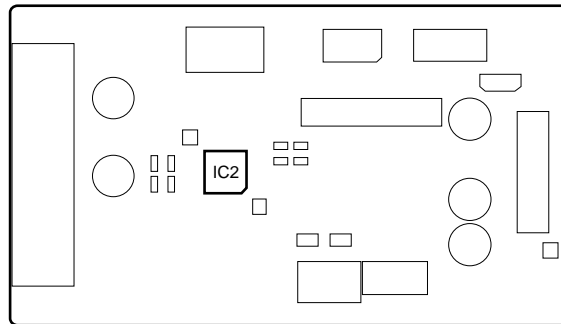
This function controls the Media take-up motor based on the control signals from the main controller.

Sensor relay function

This function relays the input signals from the Media take-up paper detection sensor and Media take-up on/off sensor to the main controller PCB.

2.4.5.2 Lower roll unit PCB components

iPF820 / iPF825



a) Driver IC (IC2)

The lower roll media pick-up motor is controlled on the basis of a control signal generated from the main controller PCB.

b) Clutch/solenoid control function

The clutch and solenoid are controlled on the basis of a control signal generated from the main controller PCB.

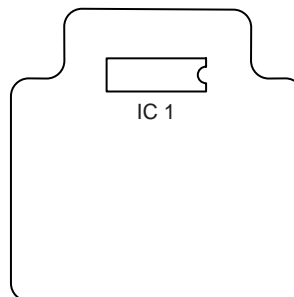
c) Sensor relay function

The sensor relay function transfers input signals from the sensors and switches to the main controller PCB.

2.4.6 Maintenance Cartridge Relay PCB

2.4.6.1 Maintenance cartridge relay PCB components

iPF810 / iPF820 / iPF815 / iPF825



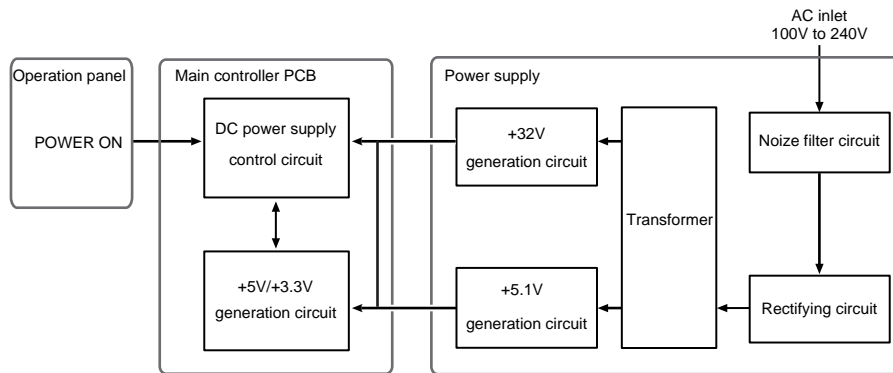
a) EEPROM (IC1)

The 2-KB EEPROM stores all information written in the EEPROM on the main controller PCB.

2.4.7 Power Supply

2.4.7.1 Power supply block diagram

iPF810 / iPF820 / iPF815 / iPF825



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The power supply converts AC voltages ranging from 100V to 240V from the AC inlet to DC voltages for driving the ICs, motor, and others.

The voltage generator circuits include the +32V generation circuit for driving motors, fans, and the +5.1V generation circuit for driving sensors, logic circuits.

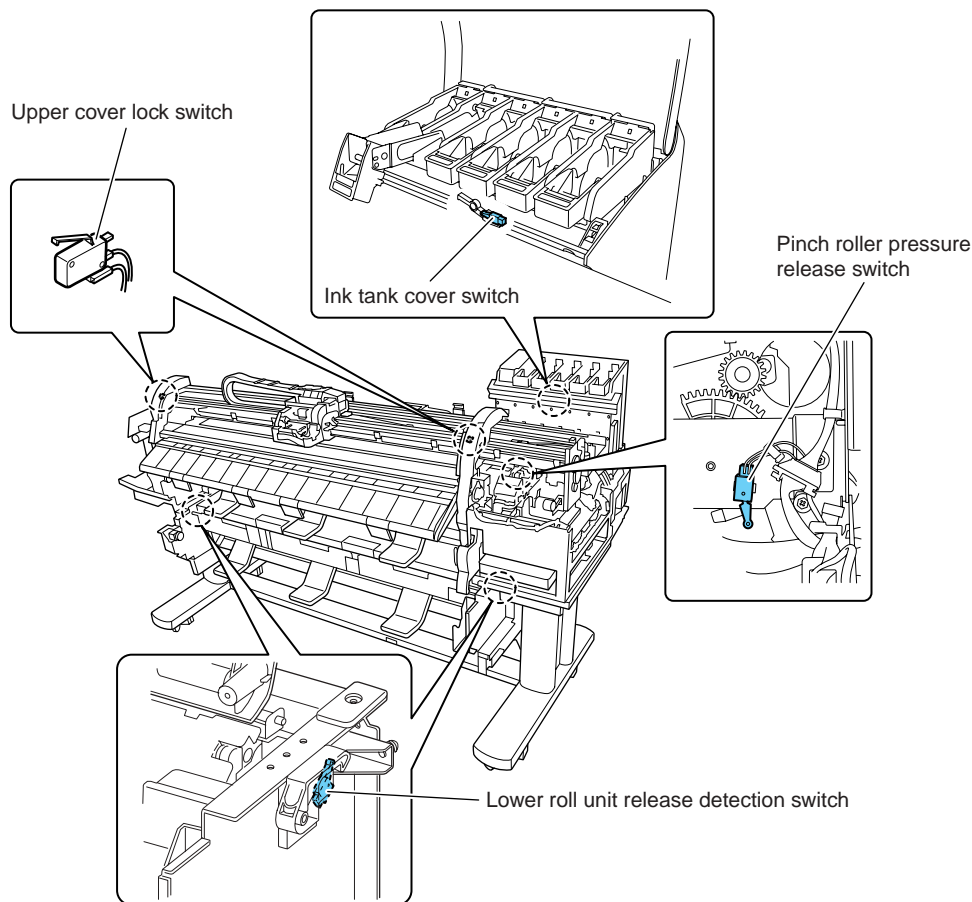
When in the power saving mode, the power supply cut out the +32V and the +5.1V.

Power ON/OFF operation is controlled by the main controller PCB. When the upper cover is open, the power supply cut out only the +32V power to the carriage.

2.5 Detection Functions with Sensors

2.5.1 Sensors for covers

iPF810 / iPF820 / iPF815 / iPF825



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Upper cover lock switch (L) / (R)

The microswitch-based upper cover lock switches detect the open/closed states of the upper cover. When the upper cover closes, the switches are pressed to detect the closed state of the upper cover. The printer has one switch installed on the left and right sides each to prevent one-sided closure of the upper cover.

Ink tank cover switch

The microswitch-based ink tank cover switch detects the open/closed states of ink tank cover. When an ink tank cover closes, the switch is pressed to detect the closed state of the ink tank cover.

Pinch roller pressure release switch

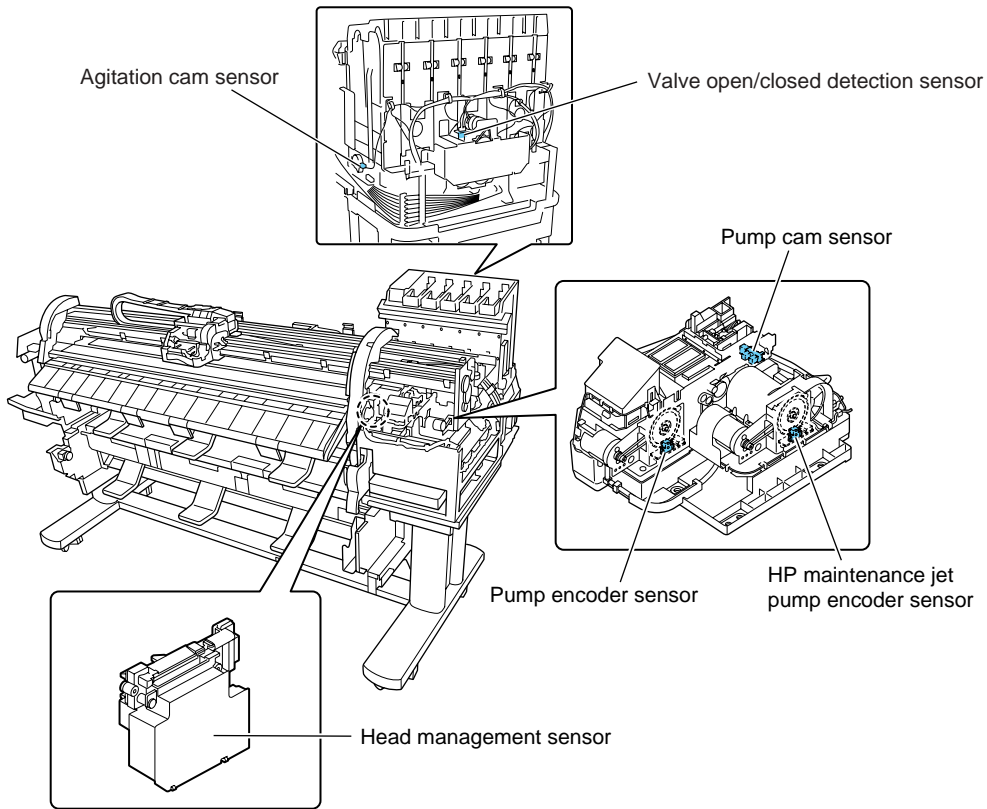
The microswitch-based pinch roller pressure release switch detects the status of the paper release lever. When the paper release lever closes, the switch is pressed to detect the closed state of the paper release lever.

Lower roll unit release detection switch (L)/ (R) (iPF825/820 only)

The microswitch-type lower roll unit release detection switches detect the mounting of a lower roll unit in the printer. Mounting a lower roll unit in the printer depresses the switches, causing them to detect the mounting of a lower roll unit. The printer has one switch located on the left and right side each to detect with confidence that a lower roller unit is mounted in position.

2.5.2 Ink passage system

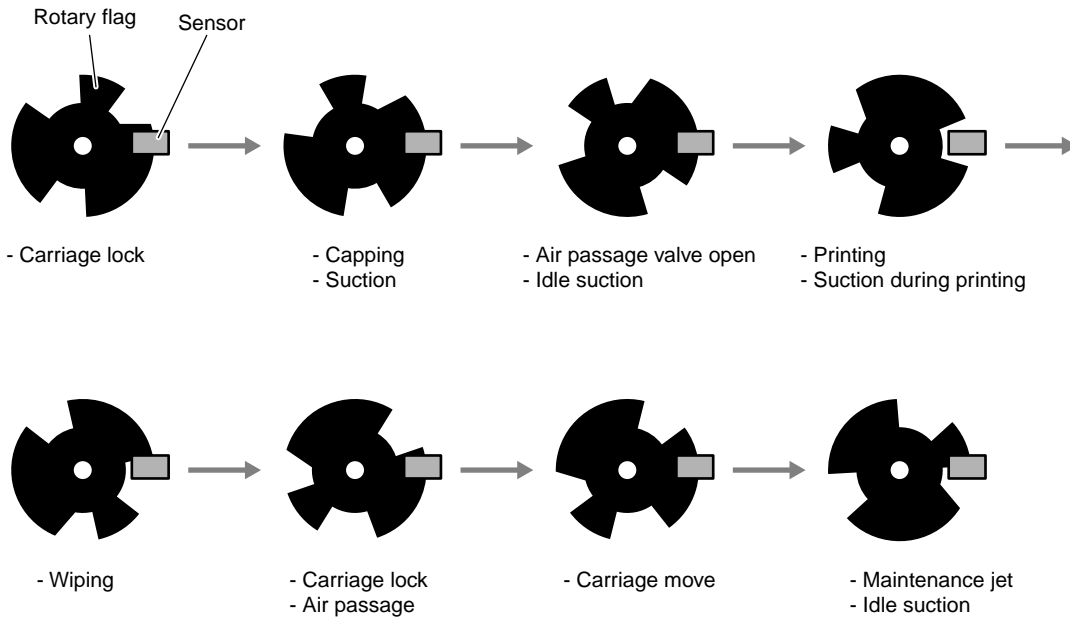
iPF810 / iPF820 / iPF815 / iPF825



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Pump cam sensor

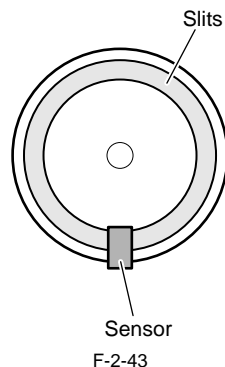
As the cam rotates, it shields the sensor light of the photointerrupter-based pump cam sensor or allows it to be transmitted. The status of the purge unit, such as capped, suction and wiping, is detected by the combination of the pump cam sensor detection and the control of pump motor rotation by the pump encoder sensor.



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Pump encoder sensor/HP maintenance jet pump encoder sensor

The photointerrupter-based sensor reads slits in the encoder film of the Purge motor/HP maintenance jet pump motor and controls the amount of its rotation accordingly.

**Valve open/closed detection sensor**

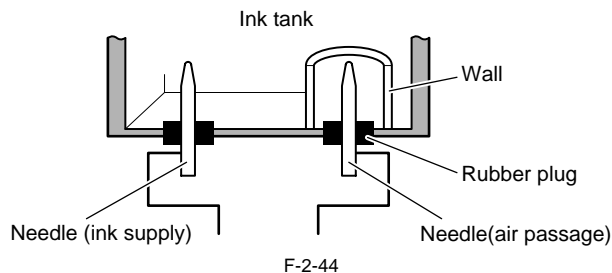
The photointerrupter-based valve open/closed detection sensor detects the status of the valve. The sensor detects that the ink supply valve is open when the sensor light is shielded by a flag linked with the valve cam.

Agitation cam sensor

The photointerrupter-based agitation cam sensor detects the status of the agitation cam. The sensor detects the agitation cam home position when the sensor light allows it to be transmitted.

Ink detection sensor

The ink detection sensor detects the presence or absence of the ink in an ink tank with respect to the status of continuity between two hollow needles. When the ink level in the tank falls to a point below the wall surrounding the hollow needles in the air passage, continuity with the hollow needle on the ink supply side is disrupted, causing the sensor to detect that the ink is out.

**Head management sensor**

The photo-transmission-type sensor detects that the printhead is discharging ink. The carriage moves to and stops at the detection positions for individual nozzle arrays. When the carriage is at a stop, nozzles discharge ink one after another. The sensor detects each nozzle due to the voltage change caused when ink discharged from the nozzle blocks the sensor light.

Non-discharging nozzle detection is carried out at the following timings:

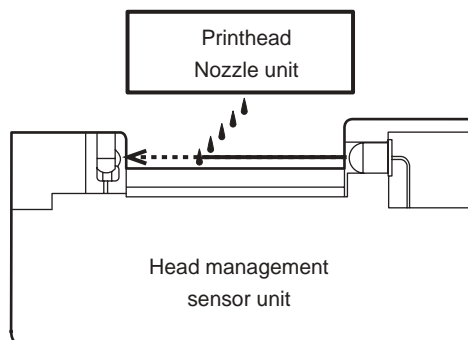
- After the execution of Cleaning 1, Cleaning 2, Cleaning 3, Cleaning 6 or Cleaning 10
- After the number of copies that has been set by the user menu choice Nozzle Check Frequency have been printed

If more than a specified number of non-discharging nozzles have been located in one session of non-discharging nozzle detection, the normal cleaning sequence is launched before a second session of non-discharging nozzle detection is conducted. If more than a specified number of non-discharging nozzles are located in the second session of non-discharging nozzle detection, the normal (High) cleaning session is launched before a third session of non-discharging nozzle detection is conducted.

If there are at least 320 non-discharging nozzles out of 2560 nozzles as the result of non-discharging nozzle detection, printing is canceled after displaying a message to replace the head.

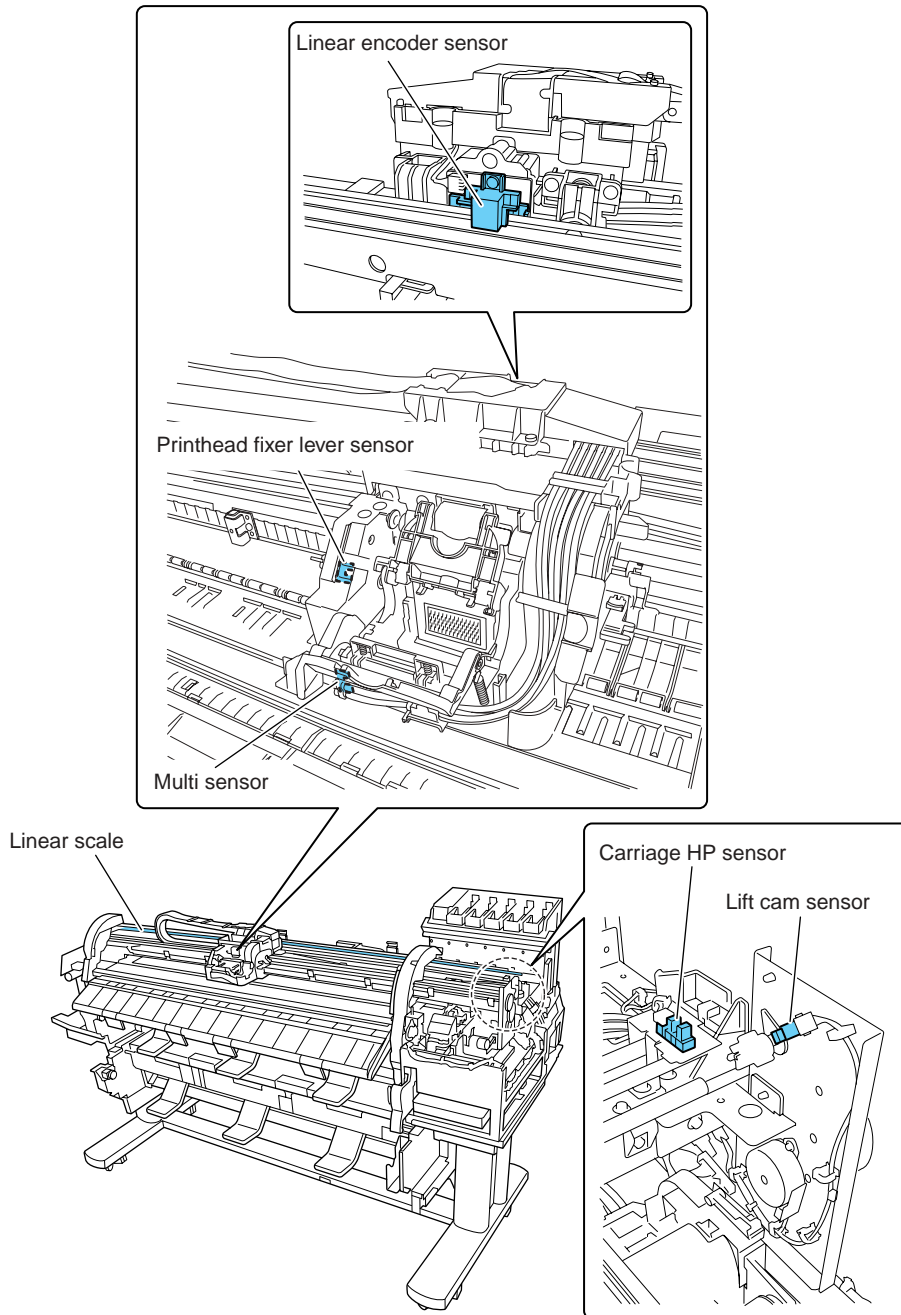
However, if service mode: [SERVICE MODE] > [SETTING] > [HEAD DOT INF] is [ON], the following message appears.

If there are at least 30 nozzles unable to correct the non-discharging state and the number of non-discharging nozzles is less than 100 out of 2,560 nozzles as the result of non-discharging nozzle detection, printing can continue after displaying a message to check the printing. Also, if the number of non-discharging nozzles is at least 100 but less than 320 nozzles, printing can continue after displaying a message to check the head. And if there are at least 320 non-discharging nozzles, printing is canceled after displaying a message to replace the head.



2.5.3 Carriage system

iPF810 / iPF820 / iPF815 / iPF825



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Printhead fixer lever sensor

The photointerrupter-type printhead fixer lever sensor detects the opening and closing of the printhead fixer lever. When the printhead fixer lever is closed, the sensor arm shields the sensor light, causing the sensor to detect the closed state of the printhead fixer lever.

Carriage HP sensor

The photointerrupter-based carriage HP sensor detects the home position of the carriage. Installed on the right side plate of the printer, the sensor detects an edge of the carriage home position on the carriage unit under carriage unit under carriage movement control. The printer establishes the carriage home position from the position at which its edge is detected as a reference position.

Linear encoder sensor

Mounted on the back of the carriage, the linear encoder detects the position of the carriage from a slit in the linear scale during its movement.

Lift cam sensor

A photointerrupter-based sensor. After the sensor light is shielded by the flag, the lift motor is driven by a predetermined number of pulses to regulate the separation between the printheads and platen automatically.

Ambient temperature sensor

The thermostat-based ambient temperature sensor mounted on the head relay PCB detects the ambient temperature to which the carriage is exposed. The resistance of the thermistor that varies as a function of temperature changes in the printer is transmitted to the main controller via the carriage relay PCB. The ambient temperature is used to help calibrate the head temperature sensor and detect abnormal ambient temperatures.

Head temperature sensor

The head temperature sensor detects the temperature of the printhead.

The printhead temperature is transmitted to the main controller via the carriage relay PCB.

The printhead temperature is used to help control the head drive and detect abnormal printhead temperatures.

Printhead contact detection

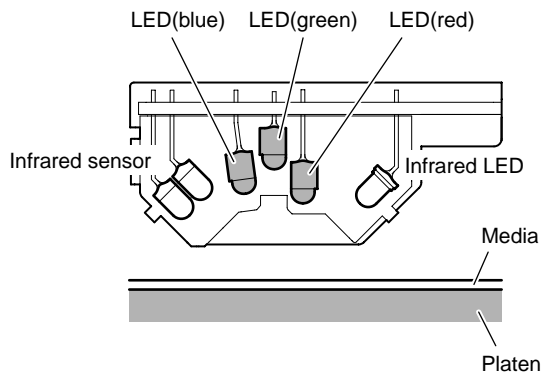
The printhead contact detects the status of printhead installation by electrical means.

The contact detects the status of contact from voltage changes in the flexible cables on the carriage side that come into contact with two terminals of the printhead with remote contact surfaces, the power terminals and GND terminal.

Multi sensor

The photo-reflection-type multi sensor is composed of four LEDs (red, blue, green and infrared) and two light-sensitive sensors. It detects the leading edge, skewing, and width of media and is used for adjustment of the registration, head height, and color calibration.

During head adjustment, the light reflected by the infrared LED and green LED is detected by two light-sensitive sensors to calculate the head height from the difference between the measurements.



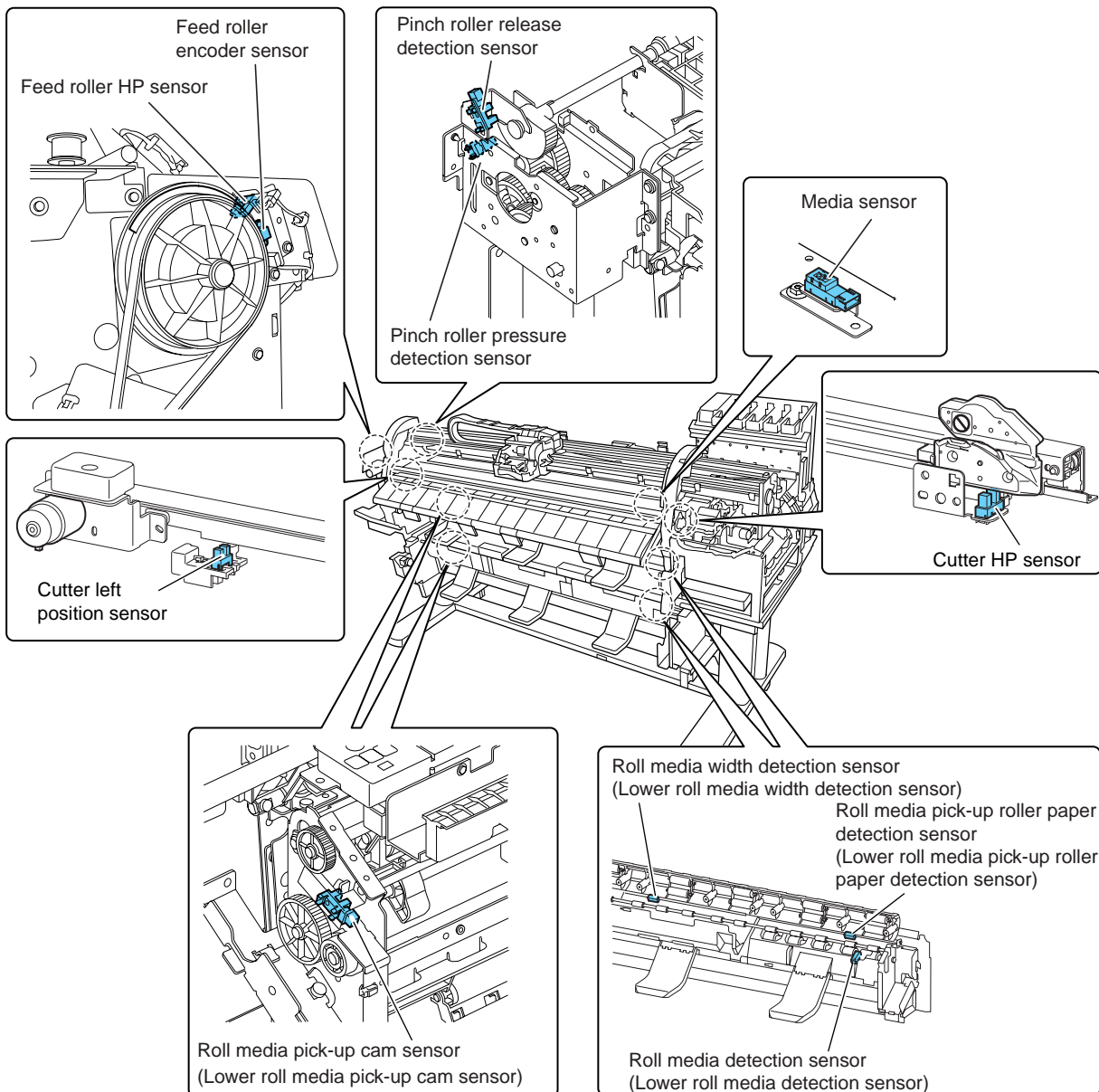
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- Service mode: After SERVICE MODE > ADJUST > GAP CALIB. has been carried out, pass paper to make sure that it is detected properly.

2.5.4 Paper path system

iPF810 / iPF820 / iPF815 / iPF825



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Media sensor

The photoreflector-type media sensor detects the presence or absence of paper on the platen. The sensor detects the presence of paper on the platen if it receives sensor light reflected upon the paper.

Roll media detection sensor

Lower roll media detection sensor (iPF825/820 only)

The photoreflector-type roll media detection sensor and the lower roll media detection sensor detect the presence or absence of paper at the roll loading port. The sensors detect the presence of paper if they receive sensor light reflected upon the paper.

Roll media pick-up roller paper detection sensor

Lower roll media pick-up roller paper detection sensor (iPF825/820 only)

The photoreflector-type roll media pick-up roller paper detection sensor and the lower roll media pick-up roller paper detection sensor detect the presence or absence of paper on the pick-up roller. The sensors detect the presence of paper if they receive sensor light reflected upon the paper.

Roll media width detection sensor

Lower media width detection sensor (iPF825/820 only)

The photoreflector-type roll media width detection sensor and the lower roll media width detection sensor detect the presence of a wide roll. The sensors detect the presence of a wide roll fed if they receive sensor light reflected upon the paper.

Roll media pick-up cam sensor

Lower roll media pick-up cam sensor (iPF825/820 only)

The photointerrupter-type roll media pick-up cam sensor and the lower roll media pick-up cam sensor detect the pressurization of the pick-up roller when the pick-up cam rotates to shield the sensor light.

Feed roller HP sensor

The feed roller HP sensor detects a reference white (transmitted) to black (shielded) transition from the encoder at power on and sets a home position for correcting the eccentricity of the feed roller.

Feed roller encoder sensor

The feed roller encoder sensor detects the rate of paper transport per revolution of the feed roller from slits in the encoder during driving.

Pinch roller pressure detection sensor

The photointerrupter-type pinch roller pressure detection sensor detects the pressurization of the pinch roller if the pinch roller pressure cam rotates to shield the sensor light.

Pinch roller release detection sensor

The photointerrupter-type pinch roller release detection sensor detects the depressurization of the pinch roller if the pinch roller pressure cam rotates to shield the sensor light.

Cutter HP sensor

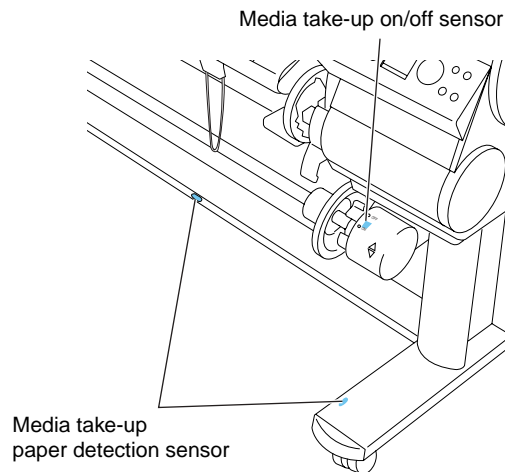
The photointerrupter-type sensor detects the presence of the cutter at the home (rightmost) position.

Cutter left position sensor

The photointerrupter-type sensor detects the presence of the cutter at the leftmost position.

2.5.5 Media take-up Unit

iPF810 / iPF815



F-2-49

Media take-up on/off sensor

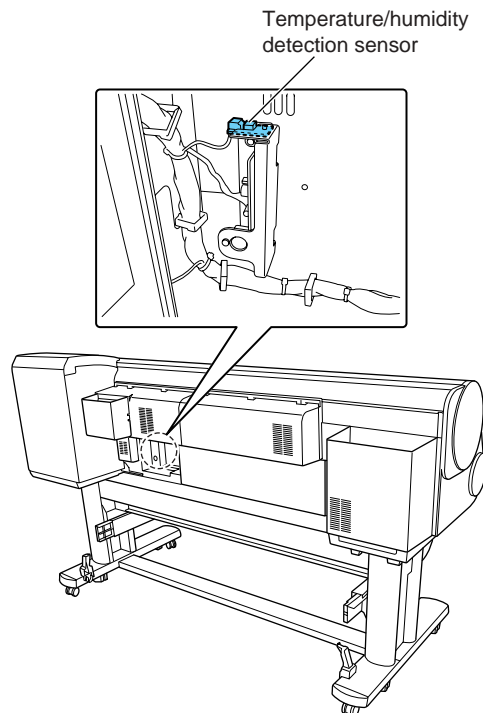
The photointerrupter-based media take-up on/off sensor detects the switch status of the media take-up unit. When the media take-up switch is set to ON, the sensor arm transmits the sensor light, power-on the media take-up unit. When the media take-up switch is set to OFF, the sensor arm shields the sensor light, shutting down the media take-up unit.

Media take-up paper detection sensor

When the sensor light is shielded by a loop of printed paper, the media take-up motor rotates to take up the paper.

2.5.6 Others

iPF810 / iPF820 / iPF815 / iPF825



F-2-50

Temperature/humidity detection sensor

The temperature/humidity detection sensor detects the temperature and relative humidity around the printer to implement head height adjustment, maintenance jet control, waste ink evaporation calculation and suction fan control on the basis of the temperature and relative humidity thus measured.

Chapter 3 INSTALLATION

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3.1 Transporting the Printer

3.1.1 Transporting the Printer

3.1.1.1 Transporting the Printer

iPF810 / iPF820 / iPF815 / iPF825



When transporting the printer, the printhead must be capped and stay in the carriage. In spite of this precaution, shocks incurred during transportation can damage the printhead. Print the nozzle check pattern before making preparations for transporting the printer, print the nozzle check pattern again after installing the printer at the new location, and then compare the two printouts. If any problem such as nozzle clogging cannot be resolved by printhead cleaning, replace the printhead with a new one.

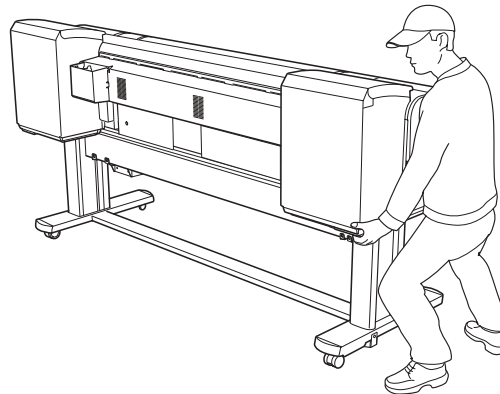
This section describes how to transport the printer. The procedure depends on the mode of transportation. Select the appropriate transportation level from the following transportation modes.

1. Transportation mode

- Moving the printer on the same floor with no difference in grade (without tilting the printer): LEVEL 0
- Moving the printer on floor where there is difference in grade or by truck (by tilting the printer): LEVEL 1
- Moving the printer by plane or ship (tilting direction of printer is unpredictable): LEVEL 2
- Moving the printer in low temperature environment such as sub zero: LEVEL 2
- Moving the printer on its end: LEVEL 3



When lifting or moving the printer, be sure to hold the handle at bottom left and right of the printer. Holding the printer by its cover can deform the cover.

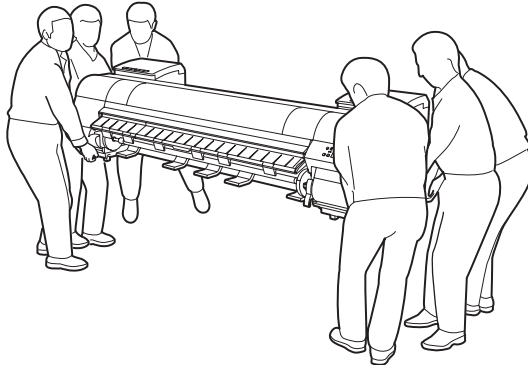


F-3-1



F-3-2

The printer main unit weights approximately 110 kg. When moving the printer, have at least six people hold it from both sides taking care not to hurt their back.



F-3-3

Do not place or transport the printer with load placed only at the center of the printer. Otherwise the printer can be deformed or damaged.



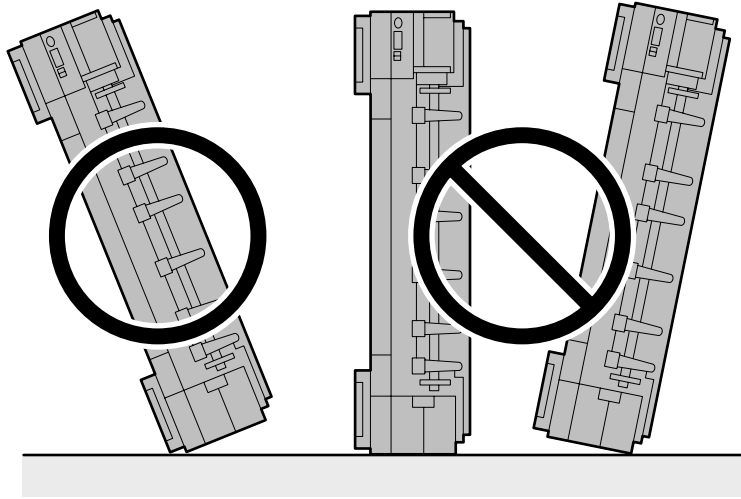
F-3-4

When tilting the printer, place a cardboard or blanket on the floor to prevent damage to the printer.



F-3-5

When tilting the printer, support the printer at bottom left and right side of the printer.
If the printer is supported at any other location, the printer may be damaged or deformed.



F-3-6

a. LEVEL 0

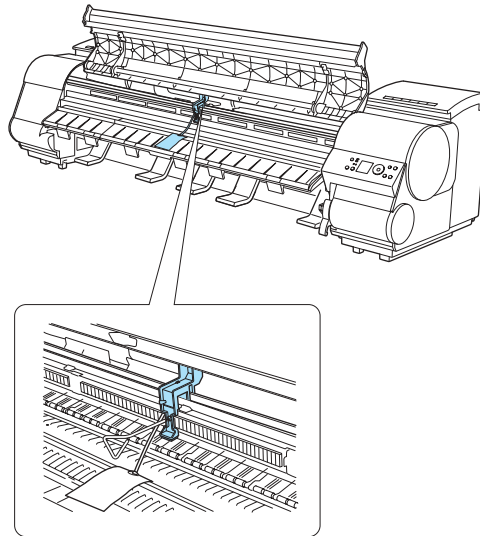
Moving the printer on the same floor without difference in grade

T-3-1

Item	Description
[MOVE PRINTER] on the Main menu	This need not be performed.
Allowed tilting angle	Do not tilt.
Ink consumption	No ink is consumed.
Ink tank	It may be installed or removed.
Separation of main unit and stand	They do not need to be separated.
Maintenance cartridge	Install. There is no need to open a new maintenance cartridge.
Replacement of consumable parts	There is no need to replace consumable parts.
Service support	No service support is necessary.

Transportation procedure

- 1) Turn off the power and check that the heads are capped.
- 2) Open the upper cover and mount the belt stopper.



F-3-7



When mounting the belt stopper, be careful not to move the carriage by applying too much pressure. If the carriage moves when the heads are capped, the rubber part of the cap may touch the nozzles on the heads and damage the print head.

- 3) Close the upper cover.
- 4) Remove the paper and roll holder.
- 5) Remove power cord and interface cable.
- 6) Unlock the casters on the stand and move the printer slowly.

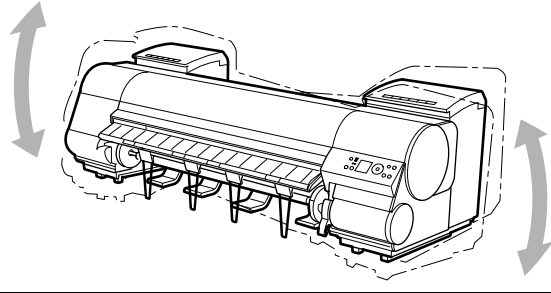
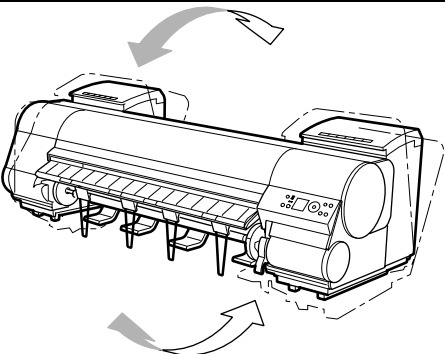


If the printer is subjected to strong vibrations when it is moved, it can cause ink leakage or damage to the print head. Be sure to move the printer slowly and carefully.

b. LEVEL 1

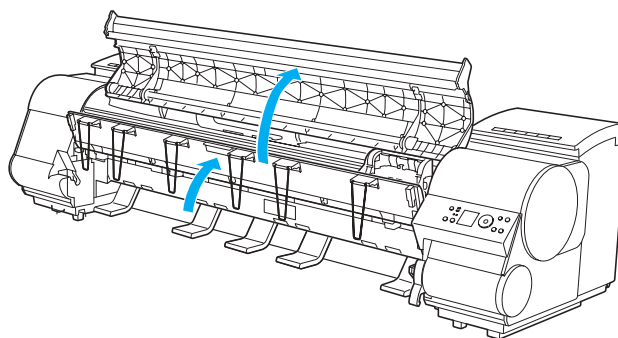
Moving the printer on a floor with difference in grade or by truck

T-3-2

Item	Description
[MOVE PRINTER] on the Main menu	Perform [LEVEL 1].
Allowed tilting angle	Lengthwise: -30 to +30 degrees
	
	Rotation: -10 to +10 degrees
	
Ink consumption	No ink is consumed.
Ink tank	It may be installed or removed.
Separation of main unit and stand	They do not need to be separated.
Maintenance cartridge	Install. There is no need to open a new maintenance cartridge. However, if there is a message instructing to replace the maintenance cartridge or check the remaining ink, replace with new maintenance cartridge before transporting.
Replacement of consumable parts	Replacement of consumable parts and resetting of counter may be necessary.
Service support	If consumable parts must be replaced, service support is necessary.

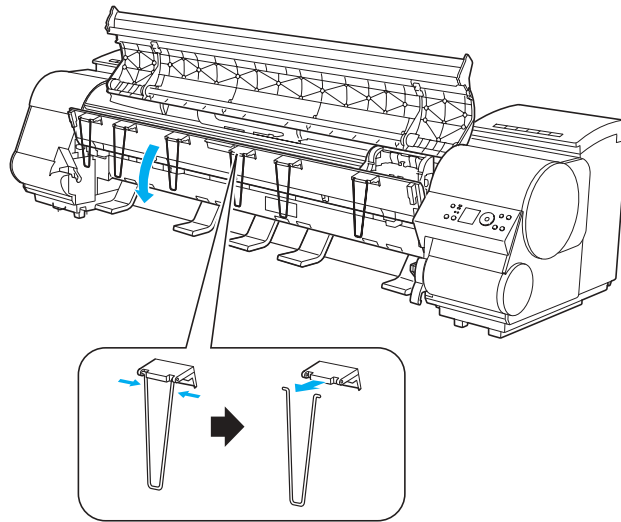
Transportation procedure

- 1) If there is a message instructing to replace the maintenance cartridge or check the remaining ink, replace the maintenance cartridge.
- 2) Remove the paper and roll holder.
- 3) From [Main menu] > [Maintenance] > [MOVE PRINTER], select [LEVEL 1].
- 4) Press the [OK] key and perform [LEVEL 1] MOVE PRINTER.
- 5) If the consumable parts counter is checked and a message to replace consumable parts appear, check the consumable parts counter from service mode and replace the necessary consumable part.
See "d. Replacing consumable parts during transportation."
Repeat [LEVEL 1] after replacing consumable parts and resetting the counter.
- 6) When MOVE PRINTER completed message appears, turn off the power, and remove the power cord and interface cable.
- 7) Open the upper cover and raise the ejection guide.



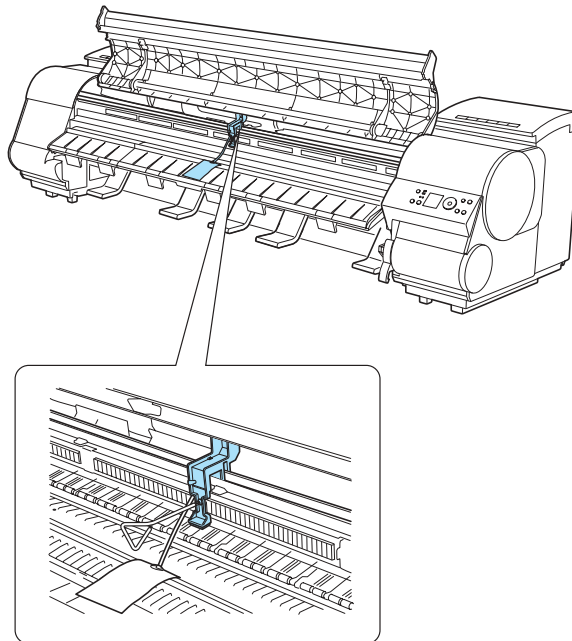
F-3-8

8) Remove the ejection support and lower the ejection guide.



F-3-9

9) Install the belt stopper.



F-3-10



When mounting the belt stopper, be careful not to move the carriage by applying too much pressure. If the carriage moves when the heads are capped, the rubber part of the cap may touch the nozzles on the heads and damage the print head.

- 10) Close the upper cover.
- 11) Attach the cushioning materials and tape.
- 12) Unlock the casters on the stand and move the printer slowly.



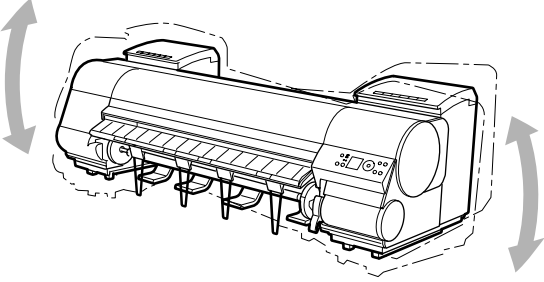
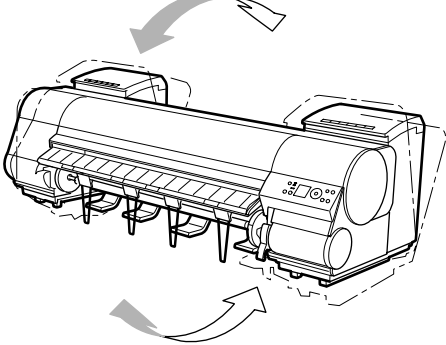
If the printer is subjected to strong vibrations when it is moved, it can cause ink leakage or damage to the print head. Be sure to move the printer slowly and carefully.

c-1. LEVEL 2

Transporting by plane or ship

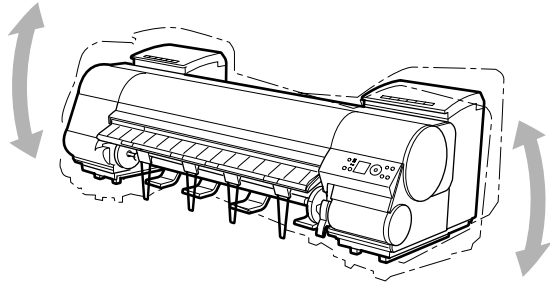
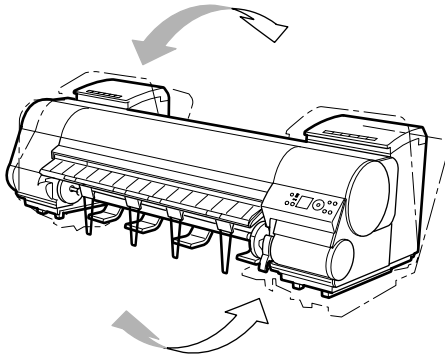
Transporting in low temperature environment such as sub zero

T-3-3

Item	Description
[MOVE PRINTER] on the Main menu	Perform [LEVEL 2].
Allowed tilting angle	Lengthwise: -30 to +30 degrees
	
	Rotation: -30 to +30 degrees
	
Ink consumption	Approximately 200ml of ink is consumed.
Ink tank	Remove all ink tanks.
Separation of main unit and stand	Separate.
Maintenance cartridge	Install. Have one new maintenance cartridge ready.
Replacement of consumable parts	Replacement of consumable parts and resetting of counter may be necessary.
Service support	If consumable parts must be replaced, service support is necessary.

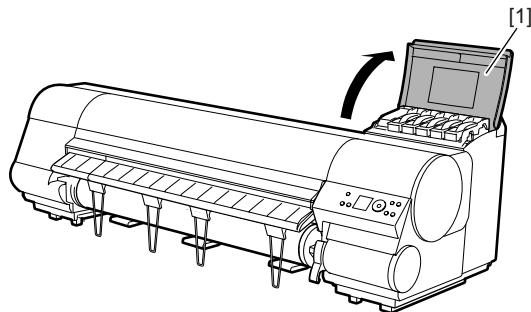
c-2. LEVEL 3
Moving the printer on its end

T-3-4

Item	Description
[MOVE PRINTER] on the Main menu	Perform [LEVEL 3].
Allowed tilting angle	Lengthwise: -90 to +90 degrees
	
	Rotation: -30 to +30 degrees
	
Ink consumption	Approximately 700ml of ink is consumed.
Ink tank	Remove all ink tanks.
Separation of main unit and stand	Separate.
Maintenance cartridge	Replace with new maintenance cartridge before performing transporting procedure. Three new maintenance cartridges must be provided. (Two for disposing waste ink and one to be installed during transportation)
Replacement of consumable parts	Replacement of consumable parts and resetting of counter may be necessary.
Service support	If consumable parts must be replaced, service support is necessary.

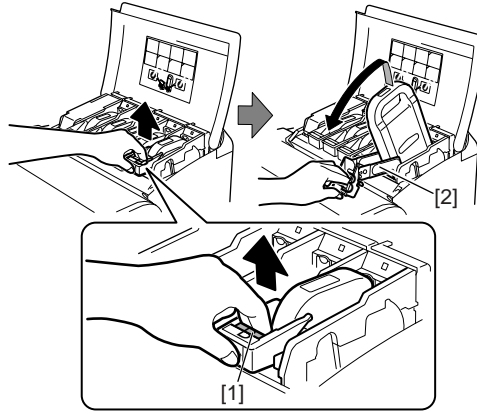
Transportation procedure

- 1) If there is a message instructing to replace the maintenance cartridge or check the remaining ink, replace the maintenance cartridge.
- 2) Remove the paper and roll holder.
- 3) From [Main menu] > [Maintenance] > [MOVE PRINTER], select [LEVEL 2] or [LEVEL 3].
- 4) Press the [OK] key and perform [LEVEL 2] or [LEVEL 3] MOVE PRINTER.
- 5) If the counter is checked and a message to replace consumable parts appear, check the consumable parts counter from service mode and replace the necessary consumable part.
See "d. Replacing consumable parts during transportation."
Repeat [LEVEL 2] or [LEVEL 3] after replacing consumable parts and resetting the counter.
- 6) Follow the displayed message and open the left and right ink tank covers.



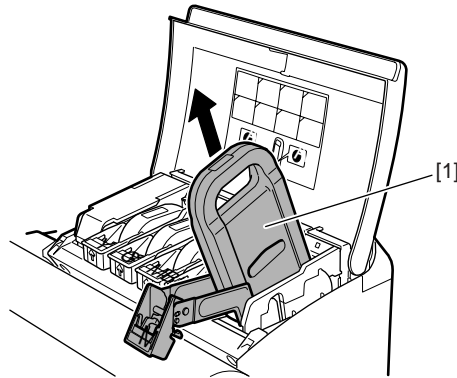
F-3-11

7) Lift stopper [1] in the ink tank lock lever and raise ink tank lock lever [2] until it won't go farther and then push it to the front.



F-3-12

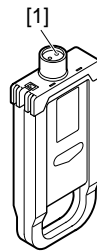
8) Remove all ink tanks.



F-3-13

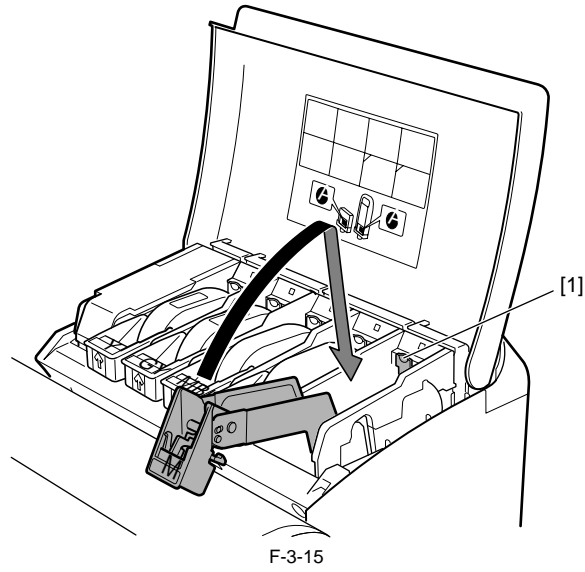


Put the removed ink tanks in the plastic bag with the ink supply part [1] upward and close the opening.



F-3-14

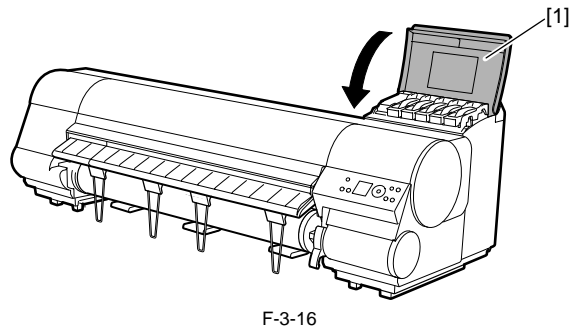
9) Depressing unlock lever [1], replace all ink tank lock levers softly in original position.



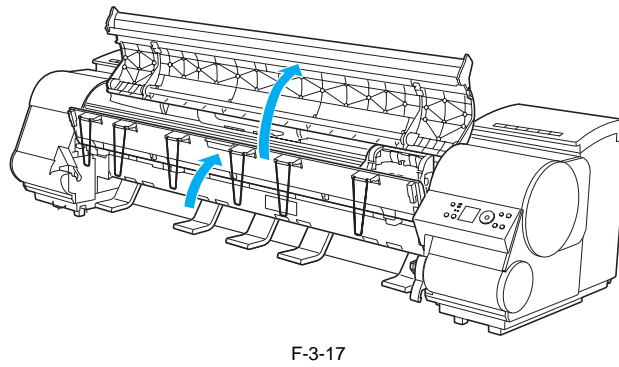
10) Close the ink tank cover.

Ink drainage is performed automatically. Replace the maintenance cartridge when the cartridge replacement message appears.

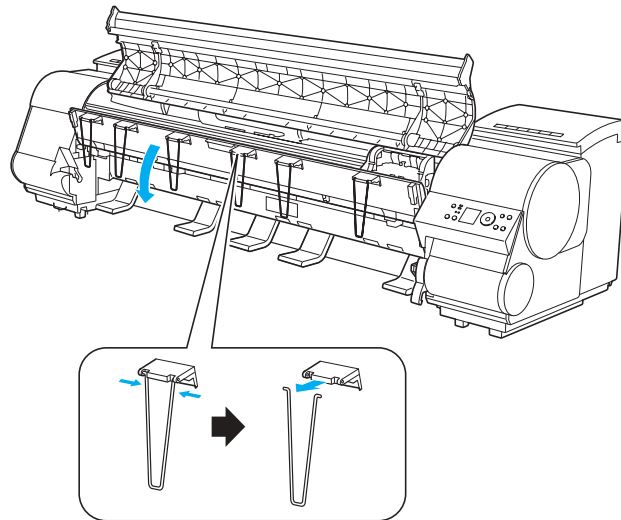
11) When MOVE PRINTER completed message appears, turn off the power, and remove the power cord and interface cable.



12) Open the upper cover and raise the ejection guide.

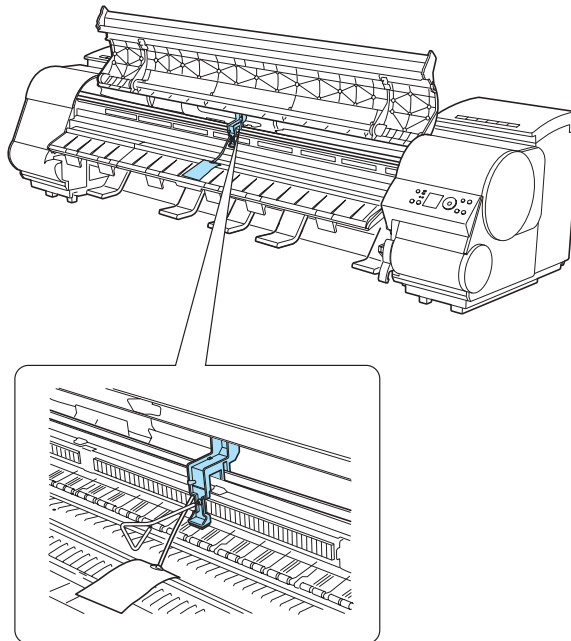


13) Remove the ejection support and lower the ejection guide.



F-3-18

14) Install the belt stopper.



F-3-19



When mounting the belt stopper, be careful not to move the carriage by applying too much pressure. If the carriage moves when the heads are capped, the rubber part of the cap may touch the nozzles on the heads and damage the print head.

15) Close the upper cover.

16) Attach the cushioning materials and tape.

17) If a basket is installed, remove the basket.

18) Remove the printer from the stand.

Hold the transporting handles at left and right bottom of the printer with three persons on each side and separate the printer from the stand.

19) Reverse the assembly procedure to disassemble the stand and media take-up unit as necessary and pack them.

20) Pack the printer and transport.



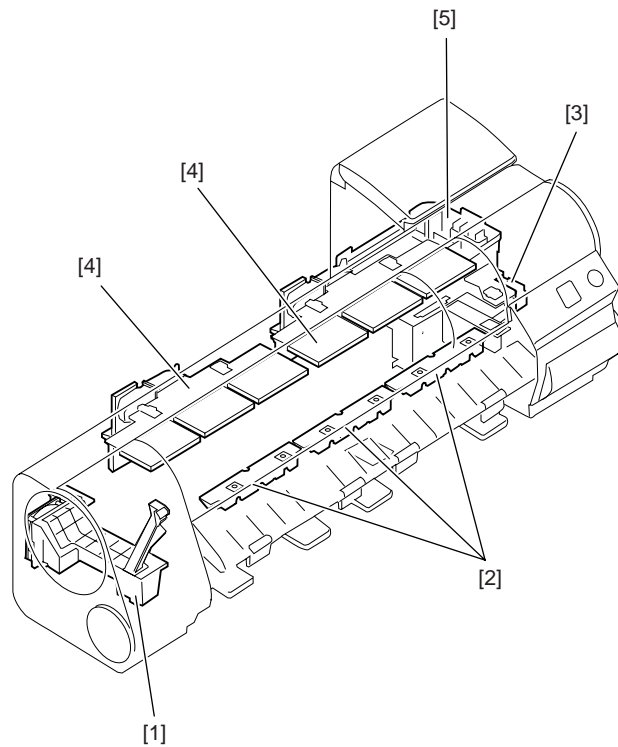
If the printer is subjected to strong vibrations when it is moved, it can cause ink leakage or damage to the print head. Be sure to move the printer slowly and carefully.

d. Replacing consumable parts during transportation

During [MOVE PRINTER], if a message to replace consumable parts appear, check the consumable parts counter from service mode and replace the necessary consumable parts.

See "Service mode."

The consumable parts to be replaced and counter to be reset depends on the [LEVEL].



F-3-20
T-3-5

No	Part number	Name	Q'ty	Service Mode		Level x (Main menu)
				PARTS xx	COUNTER x	
[1]	QM3-4814	WASTE INK BOX UNIT (L)	1	A1	A	1, 2, 3
[2]	QL2-2822	WASTE INK ABSORBER UNIT	3	A2/A3/A4		
[3]	QM3-4844	HEAD MANAGEMENT SENSOR UNIT	1	K1	K	
[4]	QM3-4846	MIST FAN UNIT	2	V1	V	2, 3
[5]	QM3-4911	INK SUPPLY MOUNT UNIT	1	If there is waste ink, perform waste ink disposal or parts replacement.		

3.1.2 Reinstalling the Printer

3.1.2.1 Reinstalling the Printer

iPF810 / iPF820 / iPF815 / iPF825

1. Installing after transporting by LEVEL 0 or LEVEL 1.

If ink drainage was not performed when transporting by LEVEL 0 or 1, remove the belt stopper and attach the power cord and interface cable after moving the printer to the installation location, and then check the operation of the printer (with test pattern).

2. Installing after transporting by LEVEL 2 or LEVEL 3.

If ink drainage was performed when transporting by LEVEL 2 or LEVEL 3, follow the installation procedure which is nearly identical to the procedure when installing for the first time.

Chapter 4 DISASSEMBLY/REASSEMBLY

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4.1 Service Parts

4.1.1 Service Parts

iPF810 / iPF820 / iPF815 / iPF825

The service parts indicated below require careful handling.

1. Keep all packages with the warning not to turn over.

Pay careful attention to all individually packaged service part (carriage unit, purge unit, ink tank unit, and other parts) boxes marked "This side up" and handle appropriately.



F-4-1

2. Feed roller

The feed roller is a functionally important part. Therefore, be careful that the roller is not scratched or marked during storage or transport of the service parts, when removing them from the individual boxes, when assembling, or performing any other operations.

4.2 Disassembly/Reassembly

4.2.1 Disassembly/Reassembly

iPF810 / iPF820 / iPF815 / iPF825

For the procedure for disassembly/reassembly of the components excluding the major components, refer to the parts catalog. Illustrations in the parts catalog are assigned illustration numbers according to the order in which parts are disassembled.

4.3 Points to Note on Disassembly and Reassembly

4.3.1 Note on locations prohibited from disassembly

iPF810 / iPF820 / iPF815 / iPF825



Assemblies that are prohibited from disassembly and their adjustment outside the factory cannot be conducted are indicated by red screws. Don't never loosen or remove the red screw, because normal operation and print can't be done if it is loosened or removed.



F-4-2

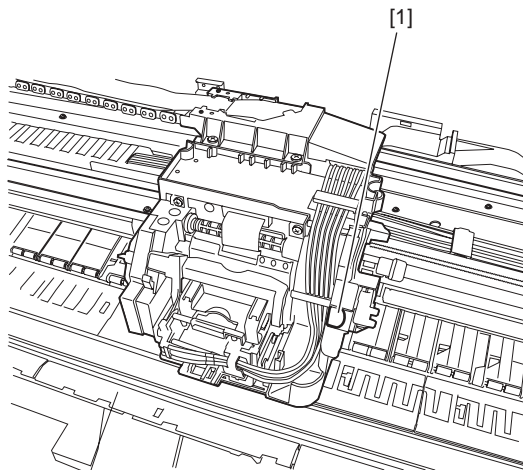
4.3.2 Moving the carriage manually

iPF810 / iPF820 / iPF815 / iPF825

When moving the carriage, hold it by handle [1] shown below.



Move the carriage as required during assembly and disassembly to prevent the carriage from contacting the parts to be removed. You cannot move the carriage when capping has been performed. Refer to **DISASSEMBLY/REASSEMBLY > Points to Notes on Disassembly and Reassembly > Opening the caps and moving the wiper unit to remove the caps**, and then move the carriage.



F-4-3

4.3.3 Units requiring draining of ink

iPF810 / iPF820 / iPF815 / iPF825

When disassembling the following units of the ink passage, drain the filled ink completely to prevent ink leakage. For how to drain the ink, refer to **DISASSEMBLY/REASSEMBLY > Points to Notes on Disassembly and Reassembly > Draining the ink**.

[1] Carriage unit

Refer to **DISASSEMBLY/REASSEMBLY > Points to Notes on Disassembly and Reassembly > Carriage unit**.

[2] Ink tube unit

Refer to **DISASSEMBLY/REASSEMBLY > Points to Notes on Disassembly and Reassembly > Ink tube unit**.

[3] Ink tank unit

Refer to DISASSEMBLY/REASSEMBLY > Points to Notes on Disassembly and Reassembly > Ink tank unit.

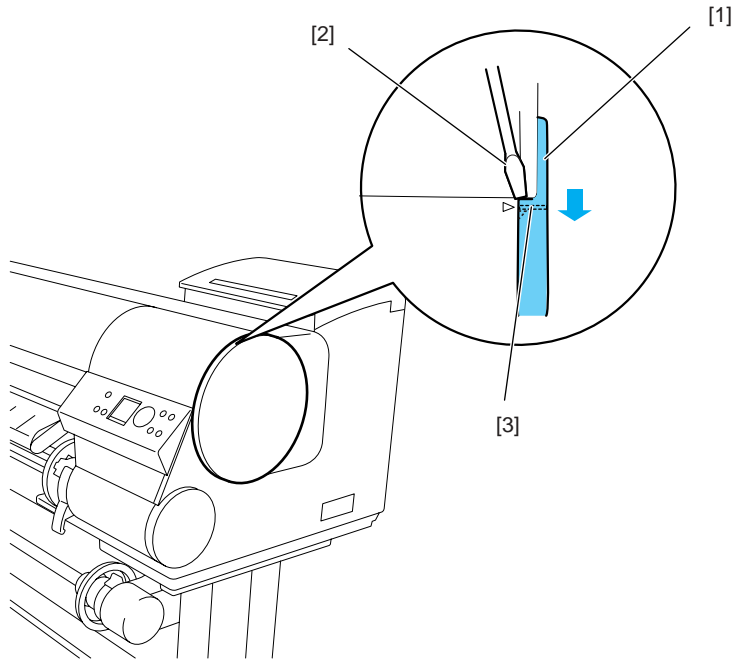
4.3.4 External Covers

iPF810 / iPF820 / iPF815 / iPF825

a) Left circle cover (L)/Right circle cover (L)

Removing left circle cover (L)/right circle cover (L)

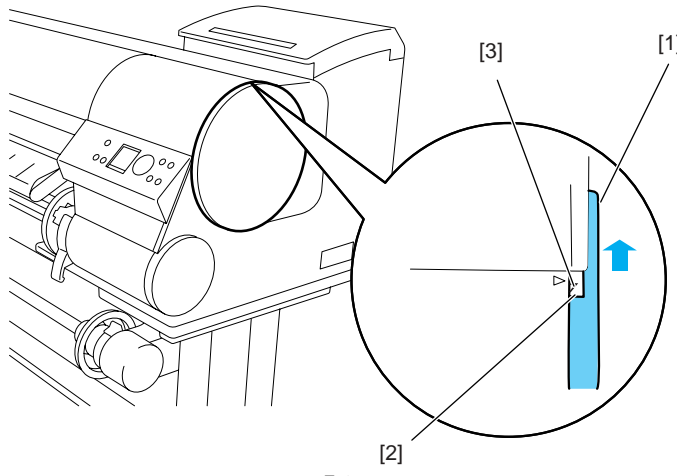
1) To remove circle cover (L) [1], insert flathead screwdriver [2] at the position indicated to remove claw [3] and turn the cover forward to remove.



F-4-4

Installing left circle cover (L)/right circle cover (L)

1) Install circle cover (L) [1] with its part [2] inserted in arrow mark [3] of the right side cover and turn the cover backward to install.

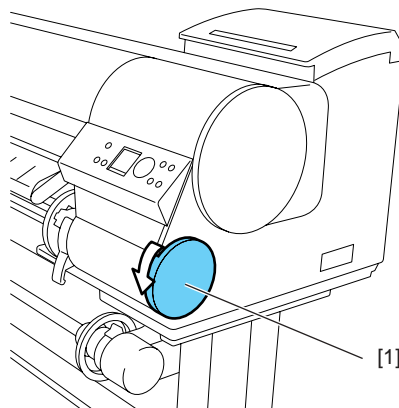


F-4-5

b) Left circle cover (S)/Right circle cover (S)

Removing the left circle cover (S)/right circle cover (S)

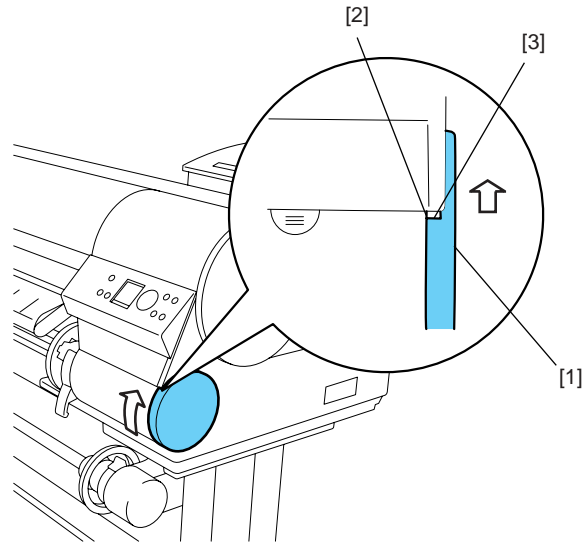
1) Remove circle cover (S) [1] by turning it forward to remove the hook



F-4-6

Installing left circle cover (S)/right circle cover (S)

1) Install circle cover (S) [1] with its part [2] inserted in part [3] of the right side cover and turn the cover rearward to install.

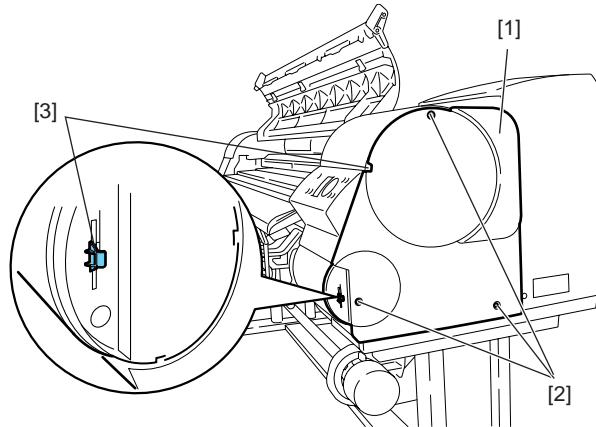


F-4-7

c) Left/ right side covers

Removing the left/ right side covers

- 1) To remove left/ right side covers [1], remove left/ right circle cover (L) and left/ right circle cover (S).
- 2) Remove three screws [2] and two hooks [3], and remove the cover by their bottom side.

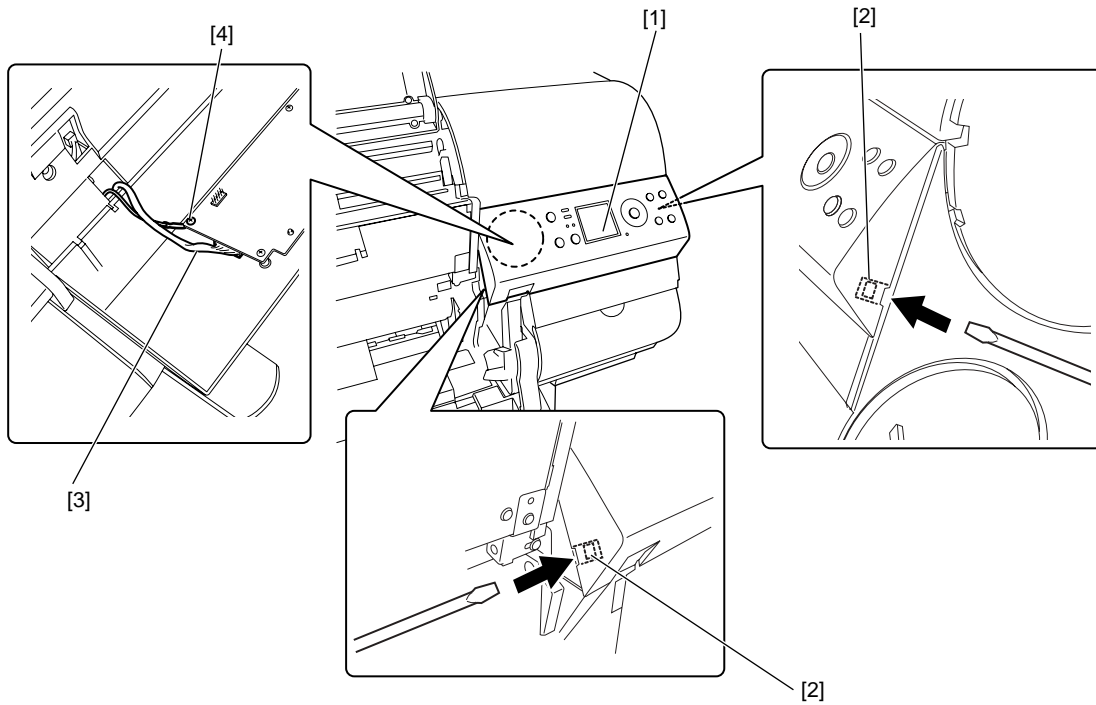


F-4-8

d) Operation panel

Removing the operation panel

- 1) To remove operation panel [1], open the upper cover and raise the ejection guides. Remove two claws [2] using a flat head screwdriver and release connector [3] and ground wire [4].

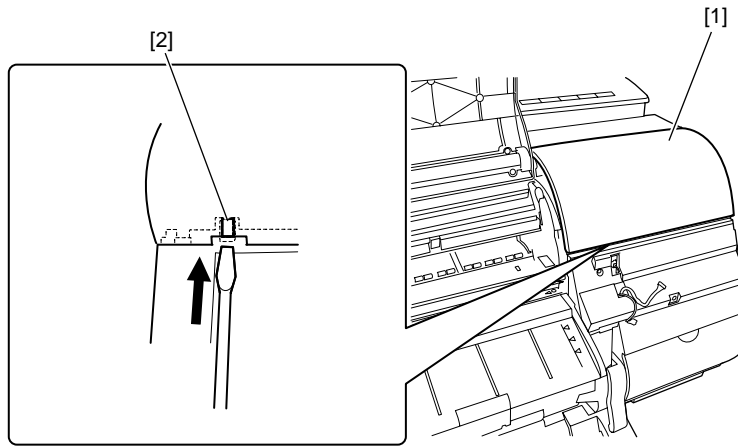


F-4-9

e) Upper left cover/upper right cover

Removing the upper left cover/upper right cover

- 1) To remove upper left/upper right cover [1], remove left/ right circle cover (L), left/ right circle cover (S) and left/ right side covers.
- 2) Insert a flathead screwdriver at the indicated position to remove hook [2].

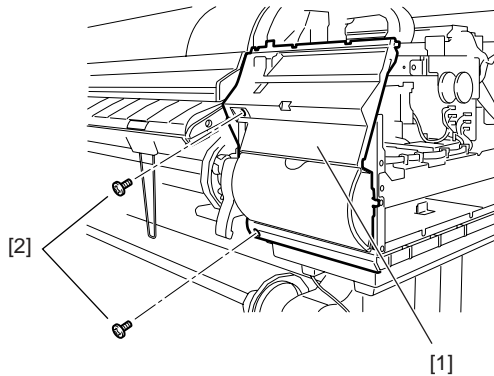


F-4-10

f) Right front cover

Removing the right front cover

- 1) To remove right front cover [1], remove right circle cover (L), right circle cover (S), right side covers, upper right cover the operation panel.
- 2) Remove two screws [2].

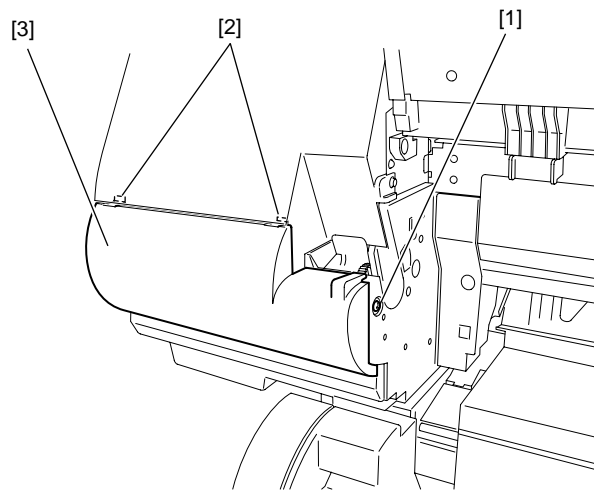


F-4-11

g) Left front cover

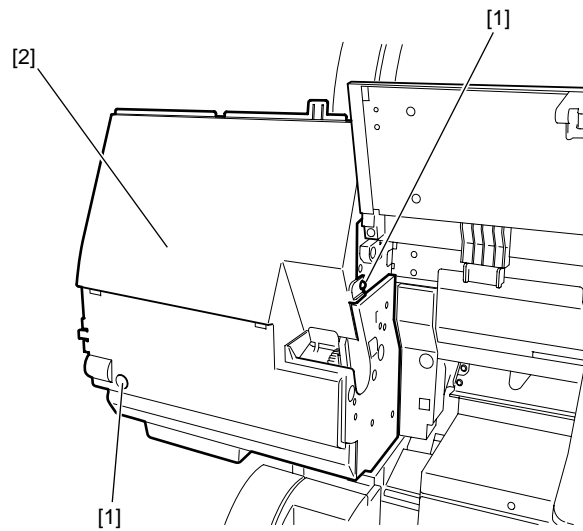
Removing the left front cover

- 1) Raise the ejection guides.
- 2) Remove screw [1] and hook [2] to detach left front lower cover [3].



F-4-12

- 3) Remove two screws [1] to detach left front cover [2].

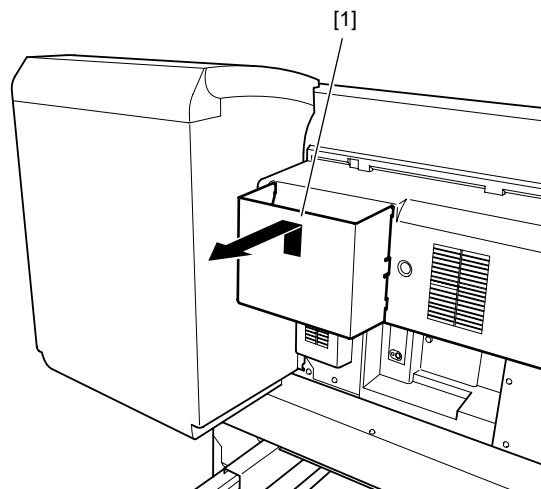


F-4-13

h) Rear cover right/Rear cover left

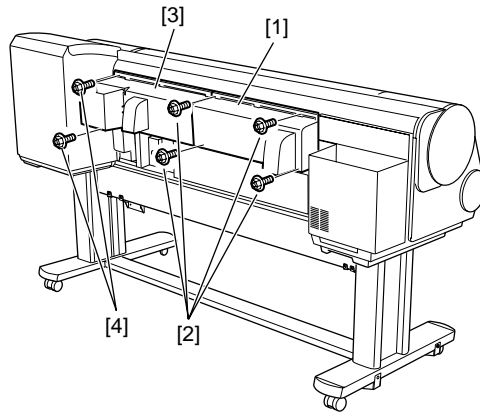
Removing the rear cover right/rear cover left

- 1) Remove the hook to remove accessory box [1].



F-4-14

- 2) To remove rear cover right [1], remove four screws [2].
- 3) To remove rear cover, left [3], remove the rear cover right and two screws [4].

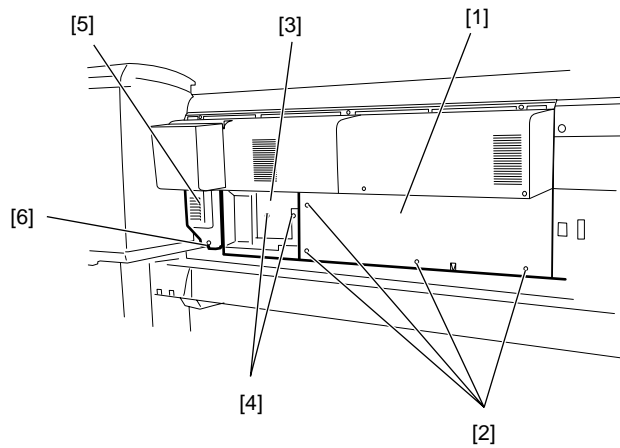


F-4-15

i) Lower rear cover, right/ left, filter cover

Removing the lower rear cover, right/ left, filter cover

- 1) To remove lower rear cover, right [1], remove four screws [2].
- 2) To remove lower rear cover, left [3], remove two screws [4].
- 3) To remove filter cover [5], remove screw [6].

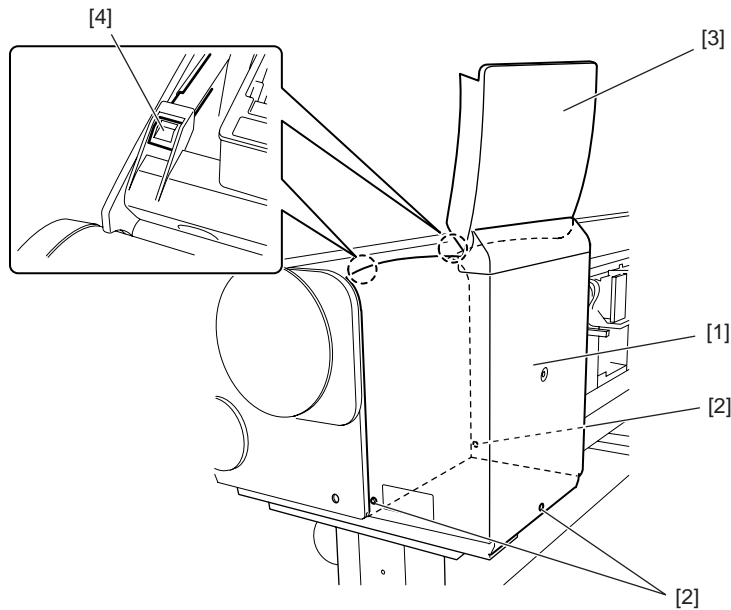


F-4-16

j) Ink tank cover units

Removing the ink tank cover units

- 1) To remove ink tank cover unit [1], remove three screws [2], open tank cover [3] and remove two hooks [4].

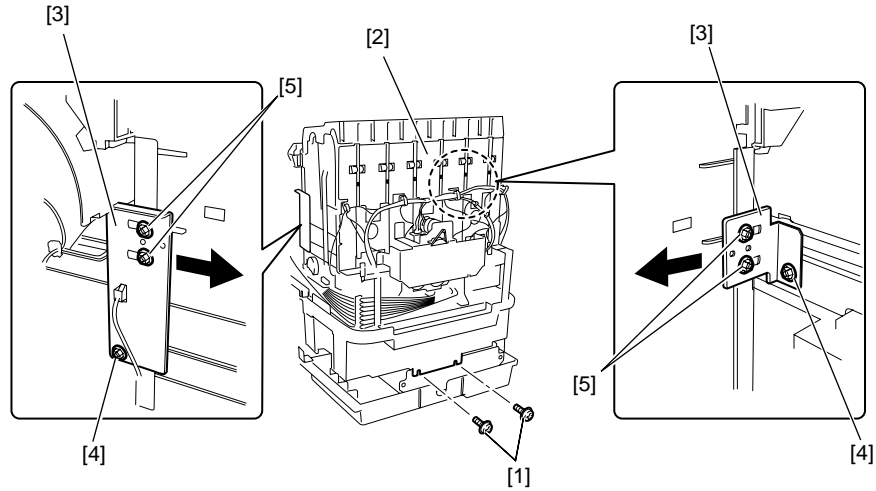


F-4-17

k) Ink tank units

Opening the ink tank units

- 1) To open the ink tank units, remove right circle cover (L), right circle cover (S), right side covers, upper right cover and right ink tank cover unit.
- 2) Remove two screws [1].
- 3) Remove two screws [4] from the support plate [3], and then loosen four screws [5] and slide the support plate to open the ink tank unit.

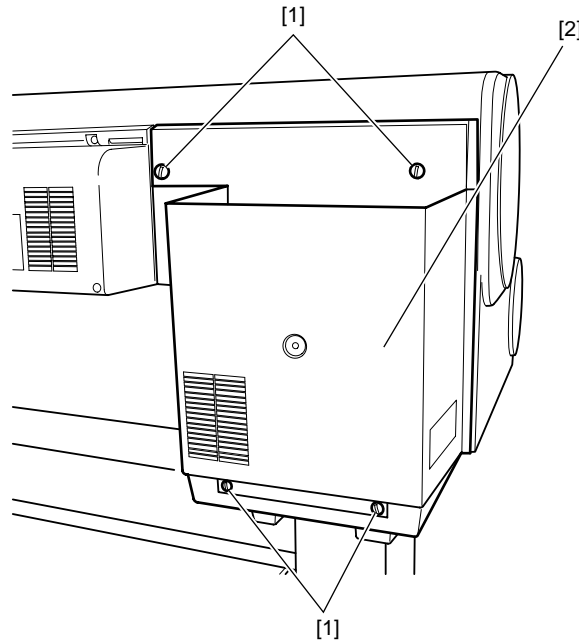


F-4-18

1) Left rear cover

Removing the left rear cover

- 1) Remove four screws [1] to remove left rear cover [2].

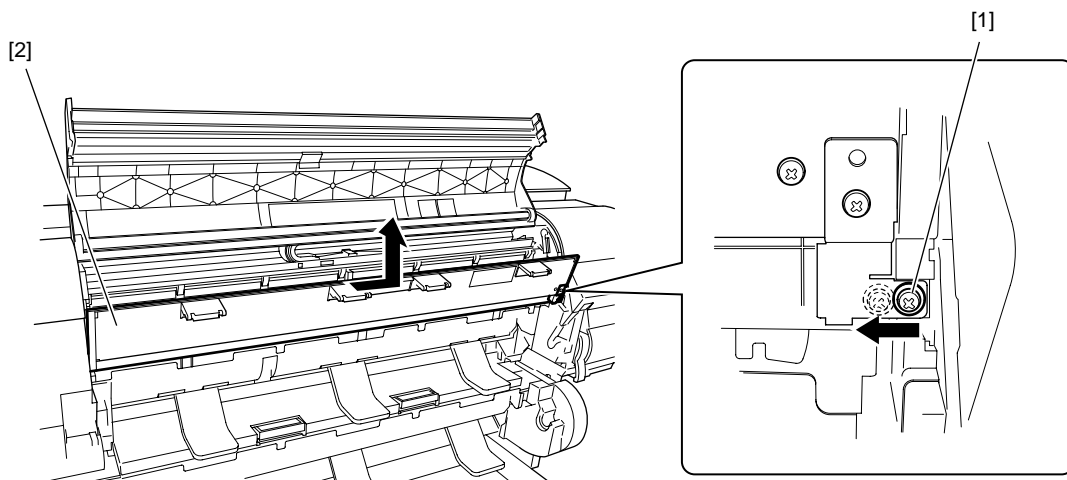


F-4-19

m) Ejection guides

Removing ejection guides

- 1) Raise the ejection guides.
- 2) Loosen screw [1] and slide it to left to tighten.
- 3) Remove ejection guide [2].

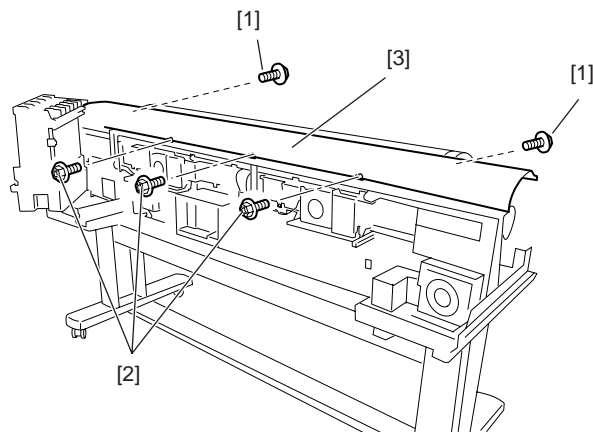


F-4-20

n) Upper rear cover

Removing the upper rear cover

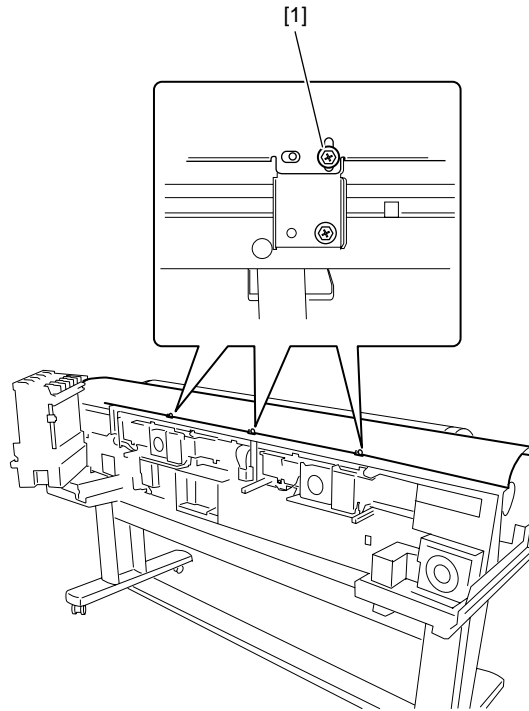
- 1) To remove the upper rear cover, remove left/ right circle cover (L), left/ right circle cover (S), left/ right side covers , upper left/upper right cover, rear cover, right/ left , and ink tank cover units and then open the ink tanks.
- 2) Remove two screws [1] on front side of the printer and three screws [2] on the rear side, and then remove upper rear cover [3].



F-4-21

Note on installing the upper rear cover

1) Fit three rear-panel screws [1] into screw holes on the right side.



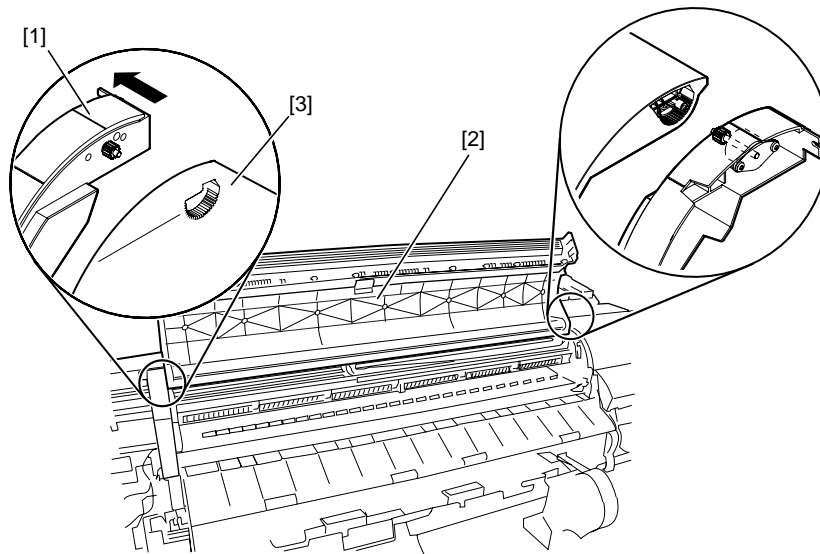
F-4-22

o) Upper cover

Removing the upper cover

1) To remove the upper cover, remove left/ right circle covers (L), left/ right circle covers (S), left/ right side covers , upper left/upper right covers, rear cover left/ right , right cover unit and upper rear cover.

2) Remove upper cover [2] while opening left/right arm stays [1] outward one by one.

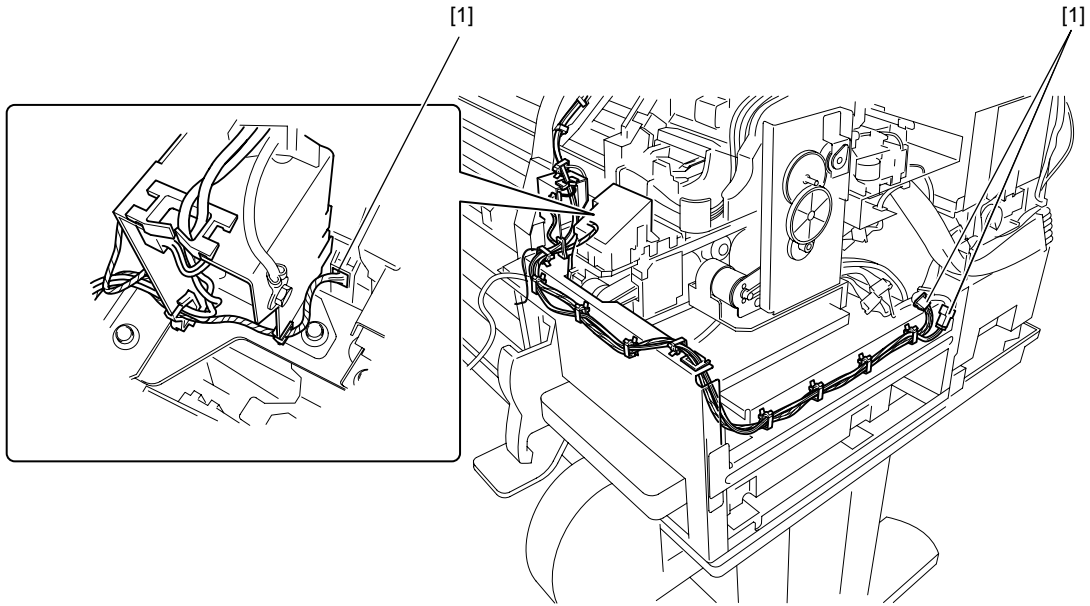


F-4-23

p) Cover stay unit (R)

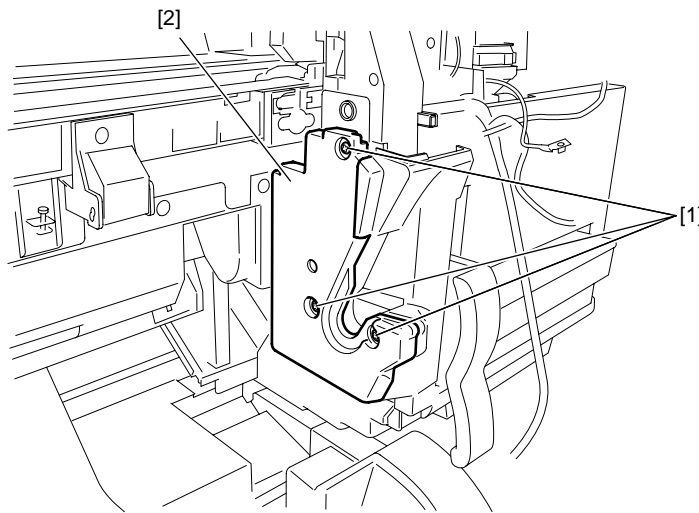
Removing the cover stay unit (R)

1) Remove three connectors [1] to release the harness from the harness guide.



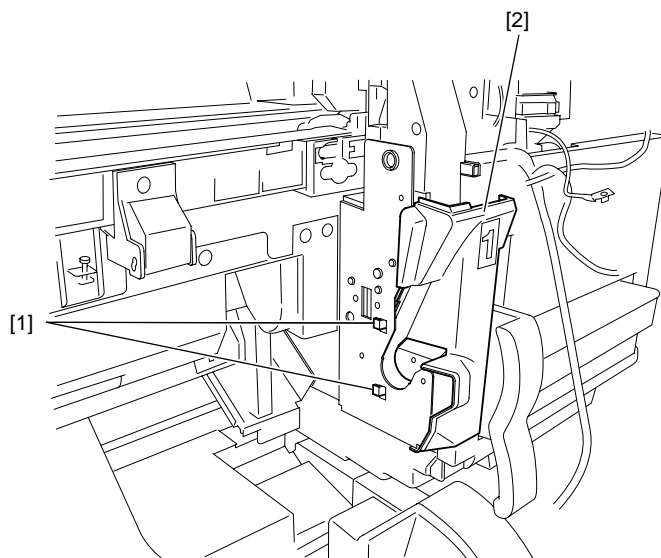
F-4-24

2) Remove three screws [1] to remove spool holder (R) [2].



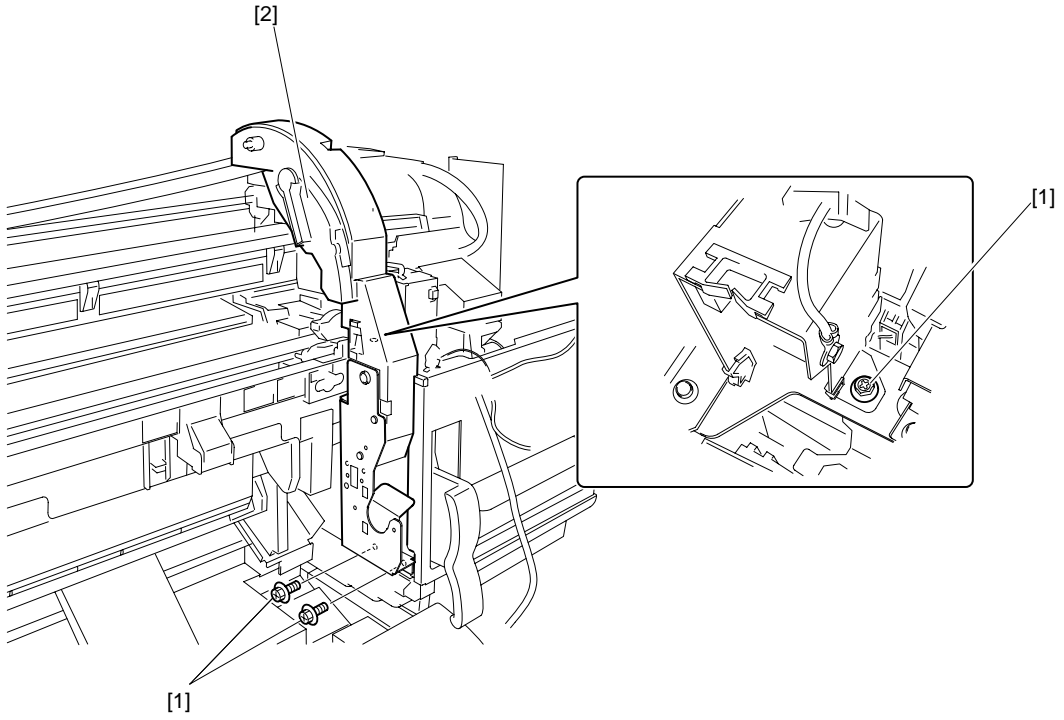
F-4-25

3) Remove two hooks [1] to remove spool holder from cover [2].



F-4-26

4) Remove three screws [1] to remove cover stay unit (R) [2].

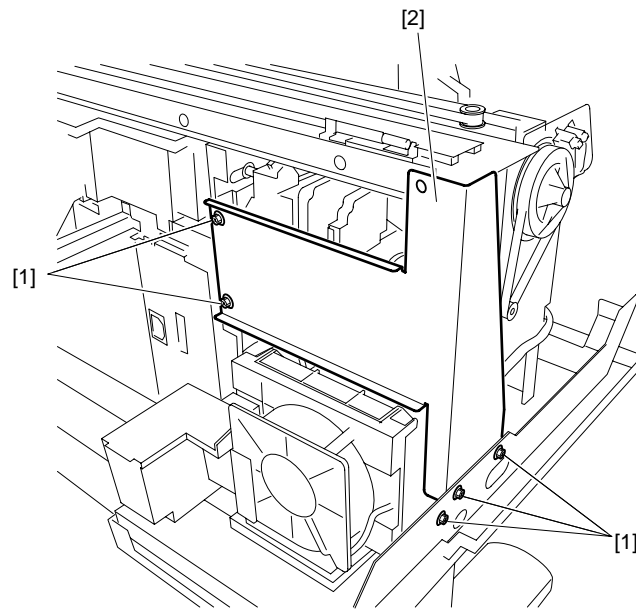


F-4-27

q) Cover stay unit (L)

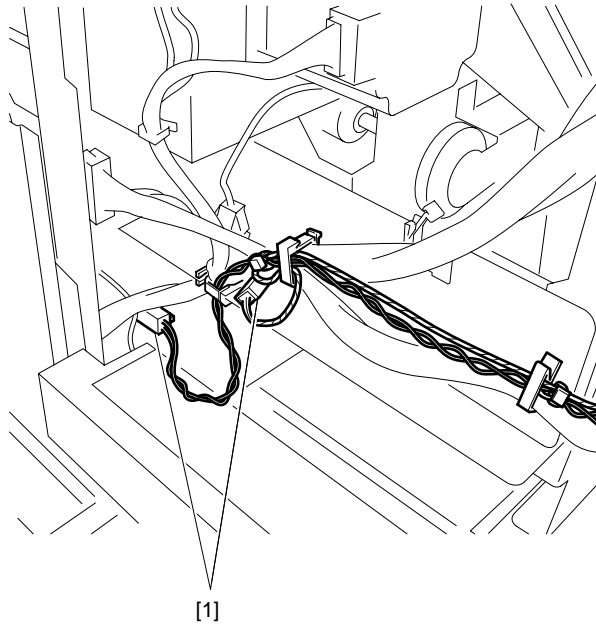
Removing the cover stay unit (L)

1) Remove five screws [1] to remove left rear support plate [2].



F-4-28

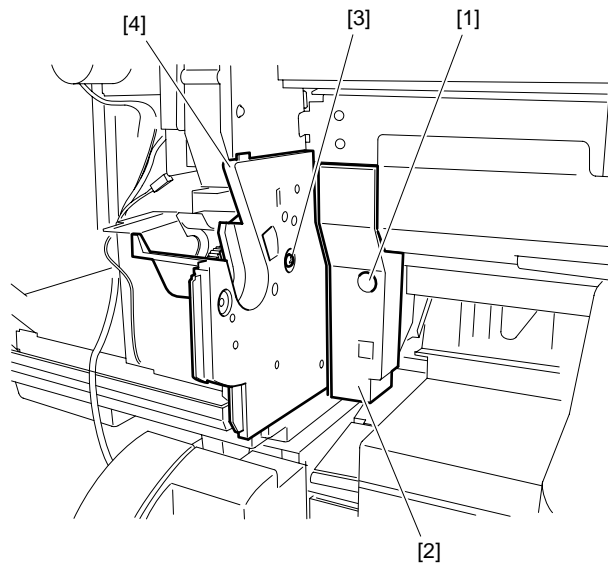
2) Remove two connectors [1] from the back of the printer to release the harness from the harness guide.



F-4-29

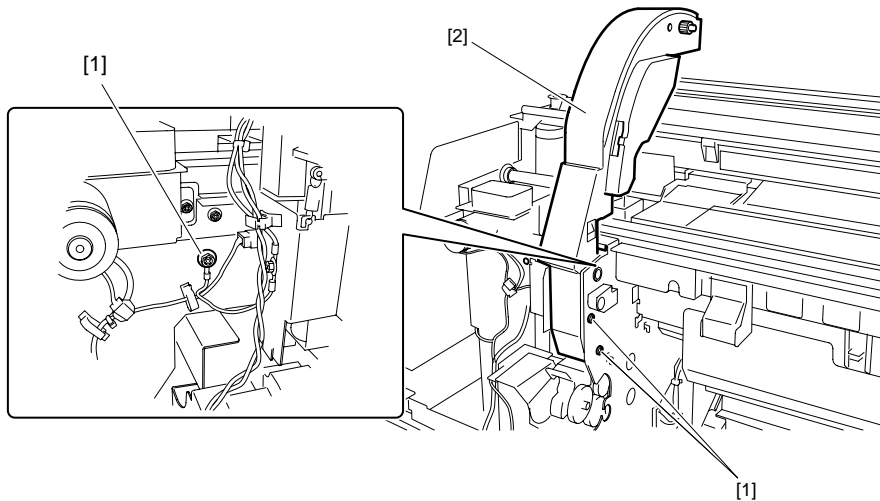
3) Remove screw [1] to remove left front inner cover [2].

4) Remove screw [3] to remove spool holder [4].



F-4-30

5) Remove screw [1] to remove cover stay unit [2].



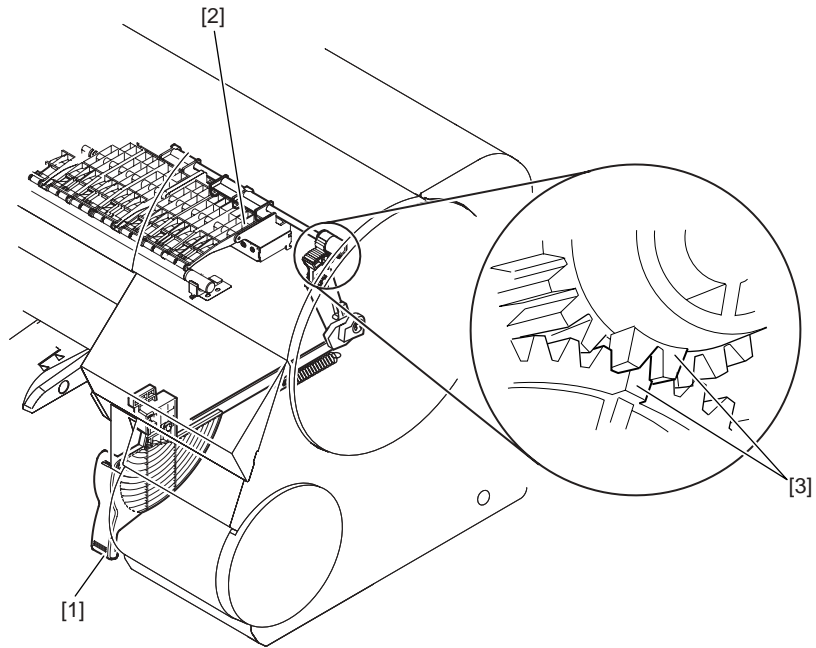
F-4-31

r) Release lever**Removing the release lever**

1) To remove release lever [1], remove the purge unit and then remove the release lever. To do so, keep pinch roller [2] pressurized to ease to work of phase alignment during gear installation.

Installing the release lever

1) Install the release lever with its gear being engaged with boss [3] (phase) of the recipient gear.



F-4-32

4.3.5 Drive Unit

iPF810 / iPF820 / iPF815 / iPF825

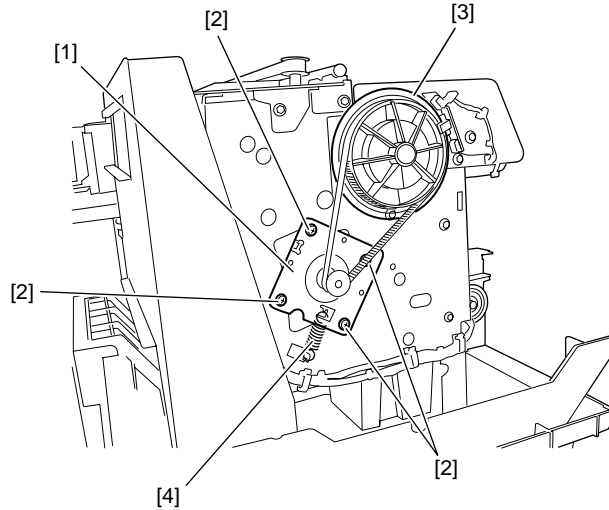
a) Feed motor

Removing the feed motor

- 1) To remove feed motor [1], loosen four screws [2] and remove timing belt [3] and spring [4].
- 2) Remove four loosened screws [2] to release feed motor [1] and remove the connector.

Reinstalling the feed motor

To reassemble the feed roller drive timing belt [3] into position, set the tension of timing belt [3] by adjusting the pressure of spring [4]. Then, fix feed motor [1].



F-4-33

b) Action to take after replacing the feed roller encoder and feed roller

This printer as shipped has the feed roller eccentricity (that is, variations in the rate of paper feed from rotation to rotation) corrected for enhanced media feed accuracy. When the feed roller HP sensor or feed roller encoder and feed roller pertaining to the correction of eccentricity variations has been replaced, therefore, they should require adjustment.

Execute service mode under the following conditions to launch automatic adjustment:

Service mode: SERVICE MODE > ADJUST > PRINT PATTERN > LF TUNING

Media type: Glossy photo paper

If adjustment cannot be done properly by selecting "SERVICE MODE > ADJUST > PRINT PATTERN > LF TUNING" (auto adjustment), carry out manual adjustment.

Service mode SERVICE MODE > ADJUST > PRINT PATTERN > LF TUNING2

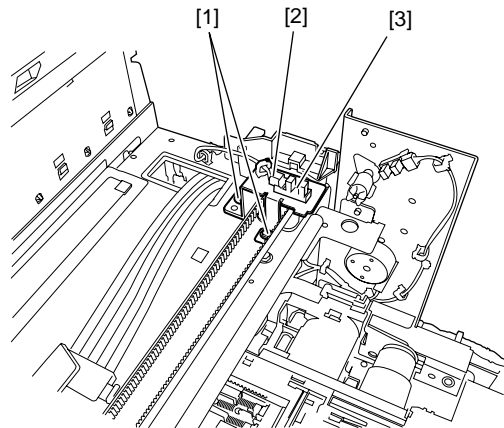
Media type: Gloss photo paper

Check the printed pattern and enter values for adjustment.

c) Carriage motor

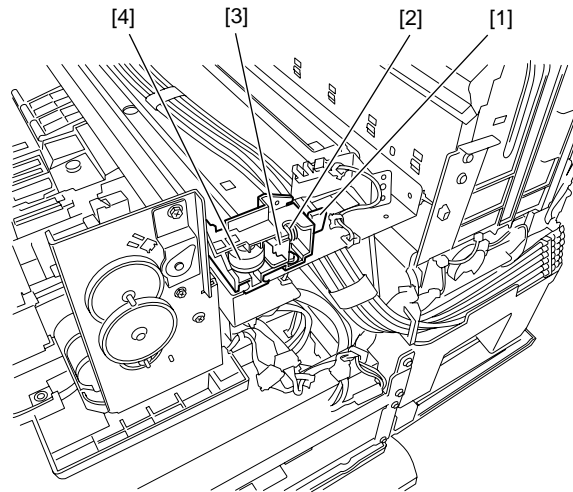
Removing the carriage motor

- 1) Move the carriage onto the platen. "See Disassembly/Reassembly > Disassembly/Reassembly Precautions > Opening the Cap and Moving the Wiper Unit."
- 2) Remove two screws [1] and connector [2] to remove carriage HP sensor assembly [3].



F-4-34

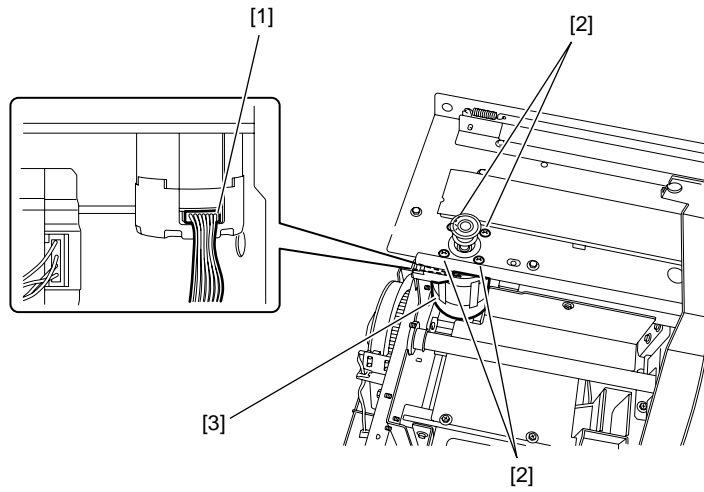
3) Twist off belt fixer knob [1] to loosen the carriage belt. Remove spring [2], guide [3] and pulley [4].



F-4-35

4) Release the carriage belt from the carriage motor pulley.

5) Remove connector [1] and four screws [2] to remove carriage motor [3].



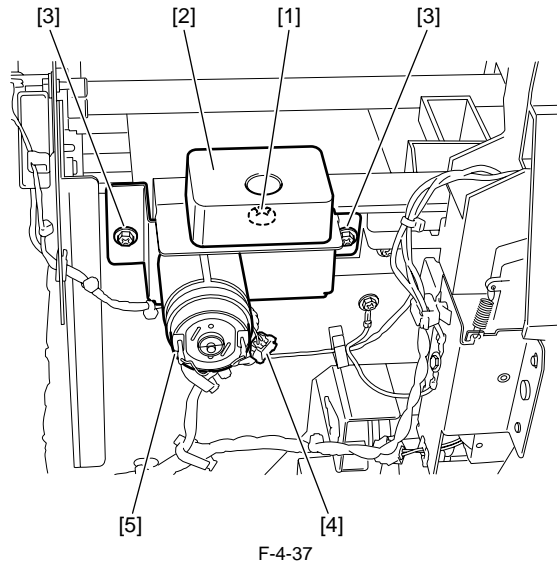
F-4-36

4.3.6 Cutter

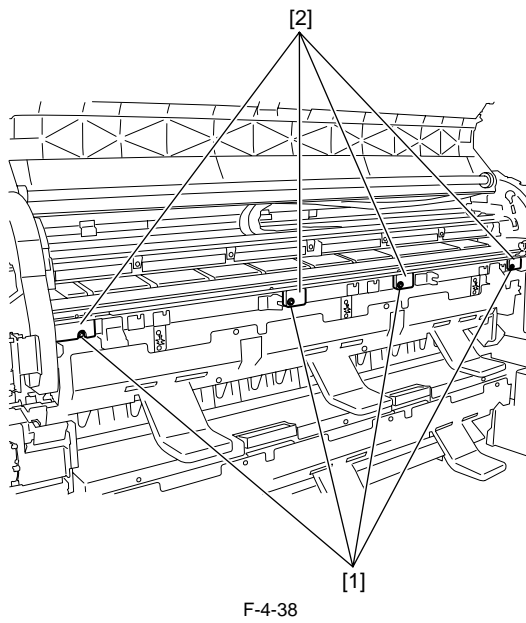
iPF810 / iPF820 / iPF815 / iPF825

a) Removing the cutter

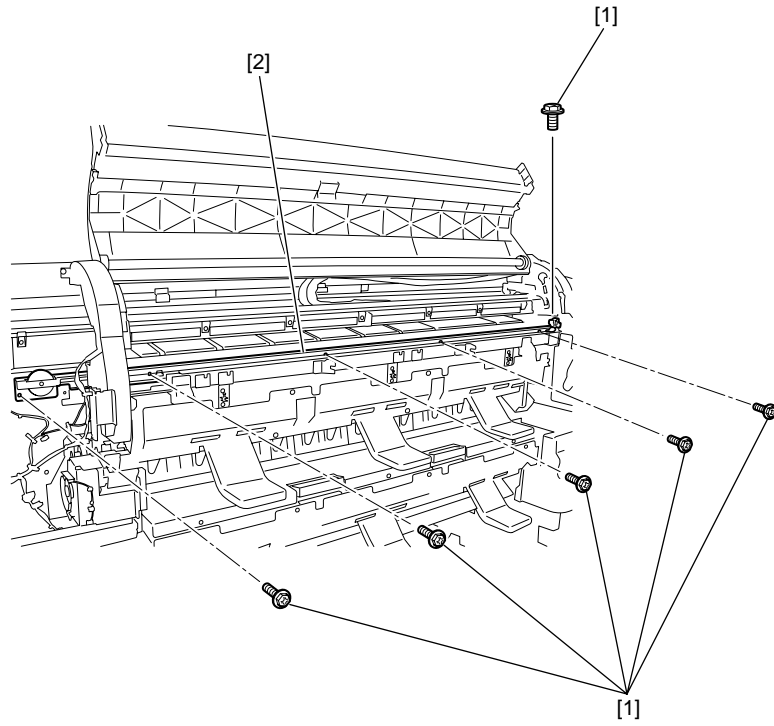
- 1) Remove the ejection guides.
- 2) Remove screw [1] to remove gear cover [2]. Then, remove two screws [3] and connector [4] to remove cutter motor unit [5].



- 3) Remove four screws [4] to remove four guides [2].

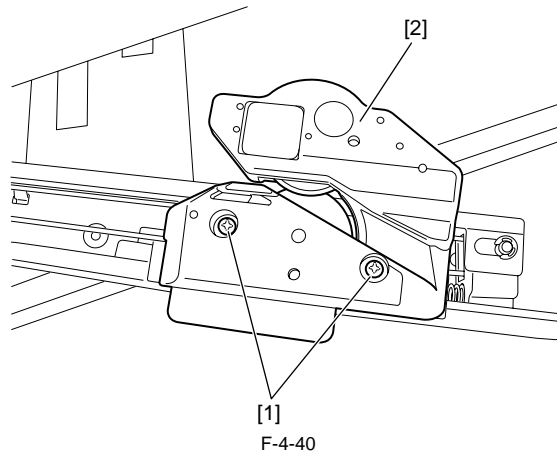


4) Remove six screws [1] to remove cutter unit [2].



F-4-39

5) Remove two screws [1] to remove cutter [2].



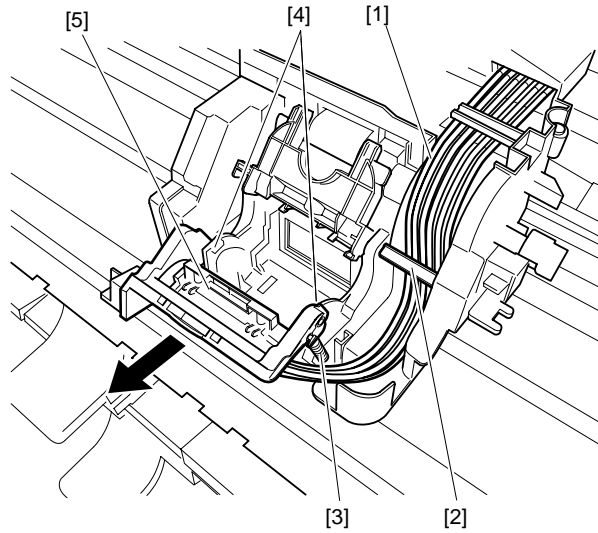
F-4-40

4.3.7 Carriage Unit

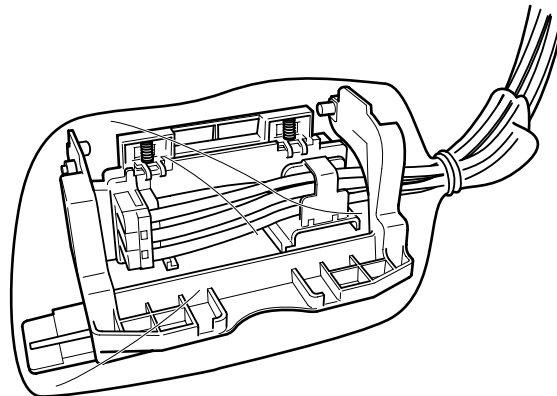
iPF810 / iPF820 / iPF815 / iPF825

a) Removing the carriage unit

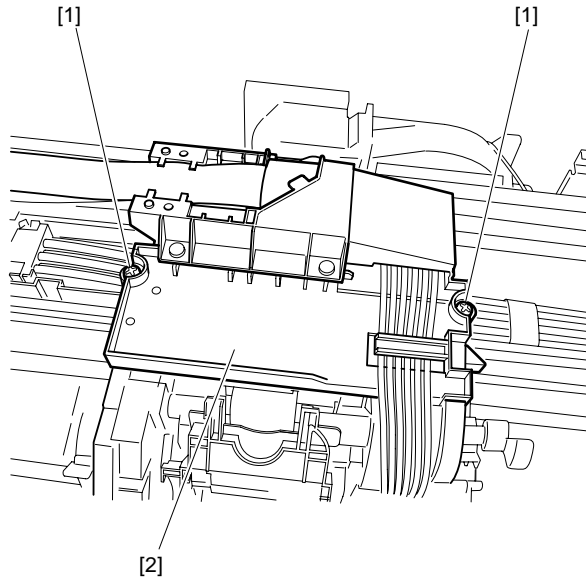
- 1) Perform ink drainage. "See Disassembly/Reassembly > Disassembly/Reassembly Precautions > Ink Drainage."
- 2) Turn off the power to move the carriage onto the platen. "See Disassembly/Reassembly > Disassembly/Reassembly Precautions > Opening the Cap and Moving the Wiper Unit."
- 3) Remove the printhead.
- 4) Disconnect ink tube [1] from guide [2], release spring [3] from two hooks [4] and remove joint base [5] together with the printhead fixer lever.



Cover the joints in the ink tube, as with a PVC bag, to keep inks from splashing from them.

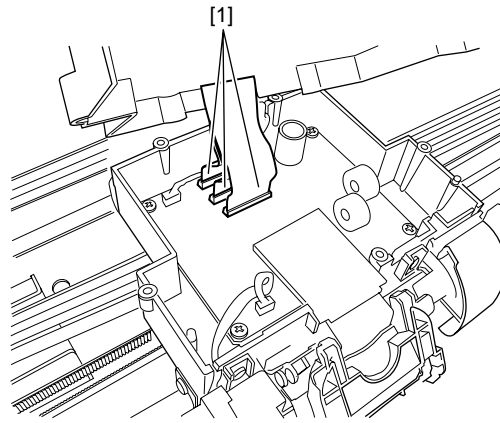


5) Remove two screws [1] to remove carriage upper cover [2].



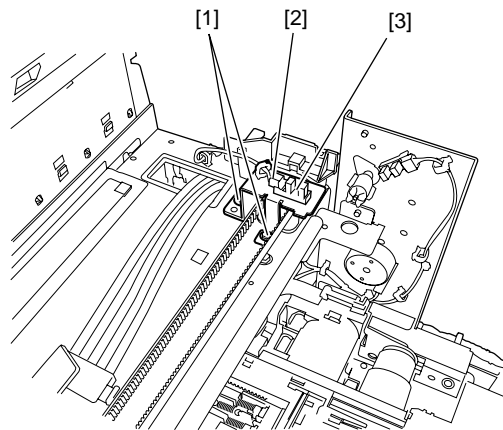
F-4-43

6) Remove three connectors [1].



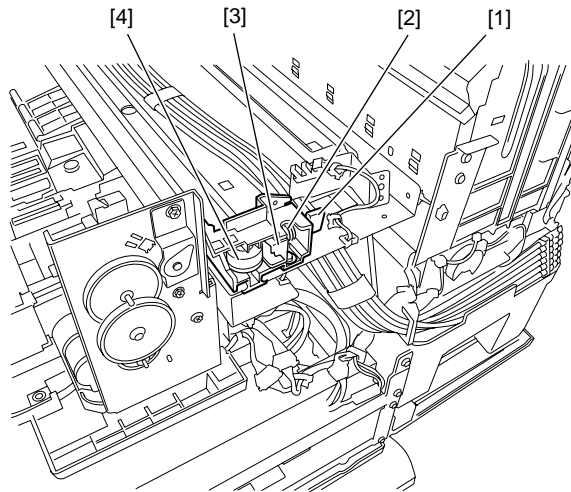
F-4-44

7) Remove two screws [1] and connector [2] to remove carriage HP sensor assembly [3].



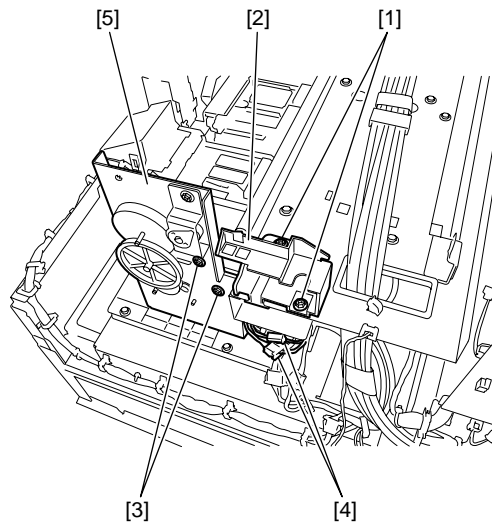
F-4-45

8) Twist off belt fixer knob [1] to loosen the carriage belt. Remove spring [2], guide [3] and pulley [4].



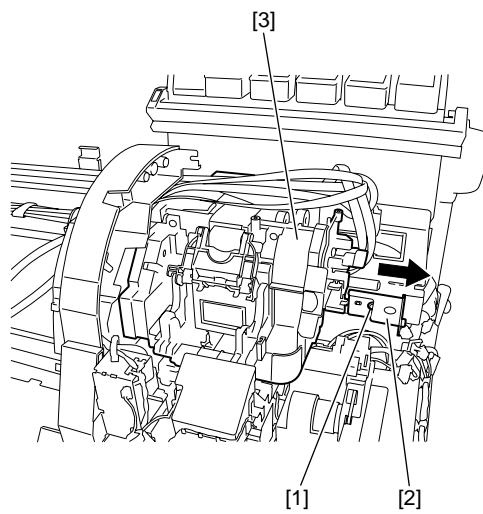
F-4-46

- 9) Release the carriage belt from the carriage motor pulley.
- 10) Remove two screws [1] to remove pulley base [2].
- 11) Remove two screws [3] and two connectors [4] to remove lift drive unit [5].



F-4-47

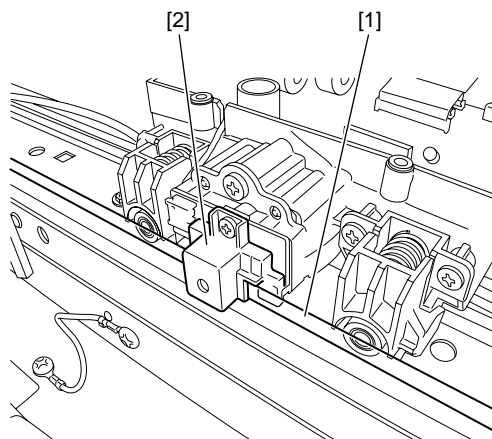
12) Remove screw [1] to remove stopper [2] and then release carriage unit [3] from the printer right side.



F-4-48

b) Precaution in mounting the carriage unit

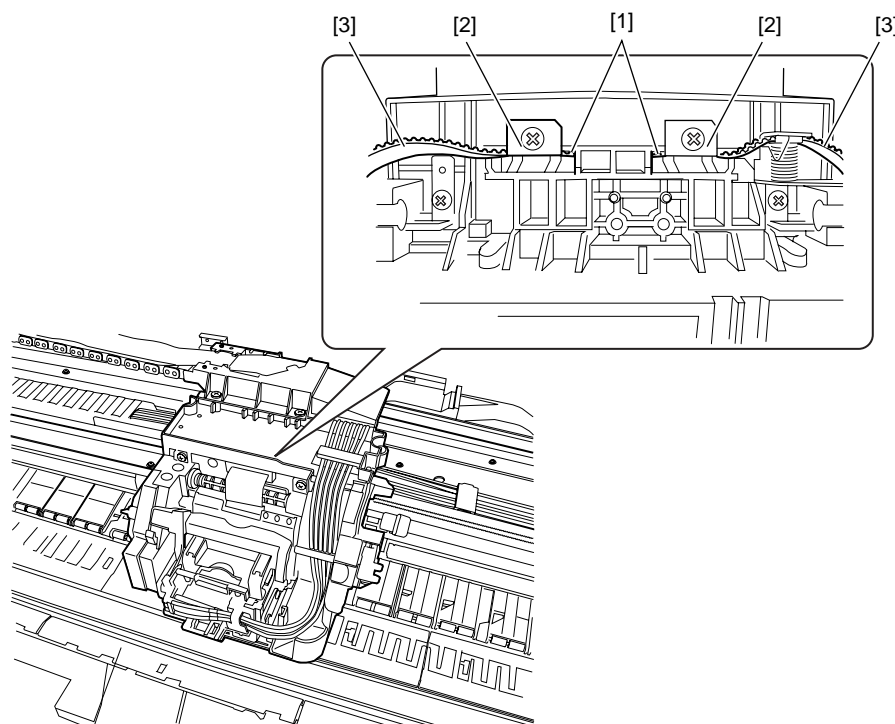
Make sure that linear scale [1] is seated in linear encoder sensor [2].



F-4-49

c) Mounting the carriage belt

To install the carriage belt, put in the point of the belt to the interior of the groove [1], and have all the cogs of carriage belt [3] engaged with belt stopper [2].



F-4-50

d) Note on replacing the carriage unit and the multi sensor

When either carriage unit or multi sensor has been replaced, be sure to replace the multi sensor reference plate (QL2-2840-000:MOUNT, MULTI SENSOR REFERENCE) as well.

e) Action to take after replacing the carriage unit and the multi sensor

Because the distance between the multi sensor (in the carriage unit) and the nozzles (in each printhead) is varied from one unit to another, the printer has its optical axis corrected and paper gap adjustment sensor gain and sensor calibration adjusted prior to shipment. When the carriage unit or multi sensor has been replaced, they should require adjustment.

Execute service mode under the following conditions to launch automatic adjustment:

1) Optical axis correction

- Service mode: SERVICE MODE > ADJUST > PRINT PATTERN > OPTICAL AXIS

Media type: Gloss photo paper

2) Paper gap adjustment

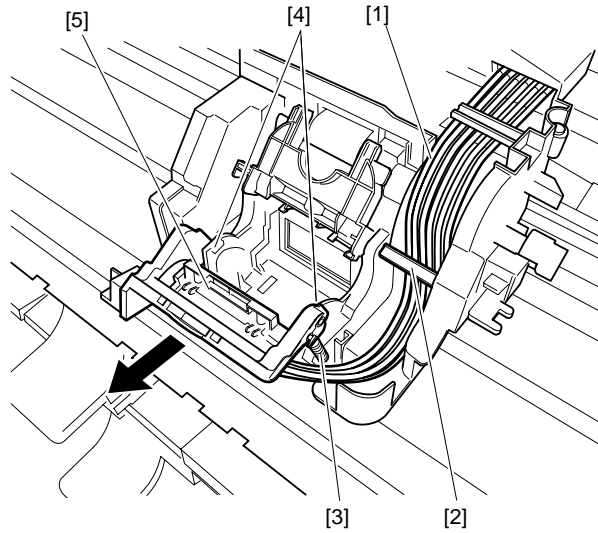
- Service mode: SERVICE MODE > ADJUST > GAP CALIB.

4.3.8 Ink Tube Unit

iPF810 / iPF820 / iPF815 / iPF825

a) Removing the ink tube unit

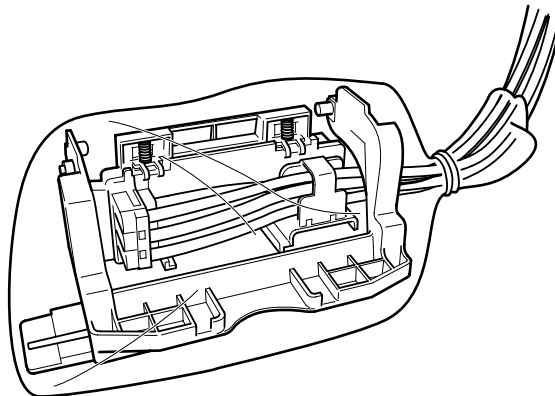
- 1) Perform ink drainage. "See Disassembly/Reassembly > Disassembly/Reassembly Precautions > Ink Drainage."
- 2) Turn off the power to move the carriage onto the platen. "See Disassembly/Reassembly > Disassembly/Reassembly Precautions > Opening the Cap and Moving the Wiper Unit."
- 3) Remove the printhead.
- 4) Disconnect ink tube [1] from guide [2], release spring [3] from two hooks [4] and remove joint base [5] together with the printhead fixer lever.



F-4-51

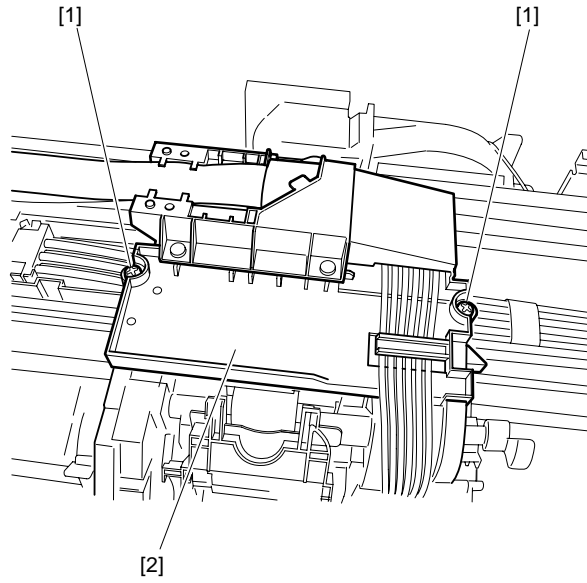


Cover the joints in the ink tube with a PVC bag or the like to keep inks from splashing.



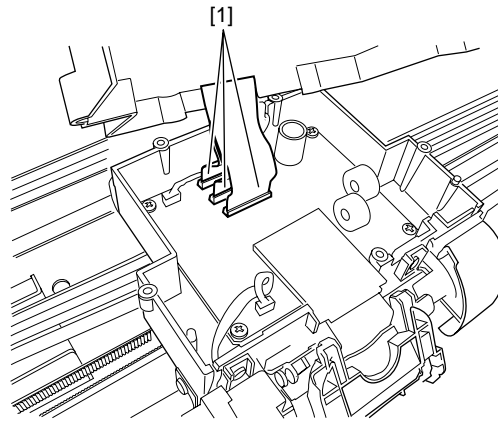
F-4-52

5) Remove two screws [1] to remove carriage upper cover [2].



F-4-53

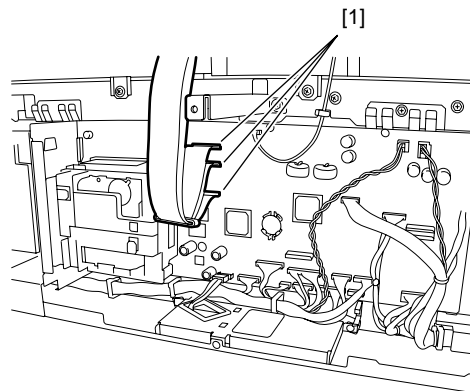
6) Remove three connectors [1].



F-4-54

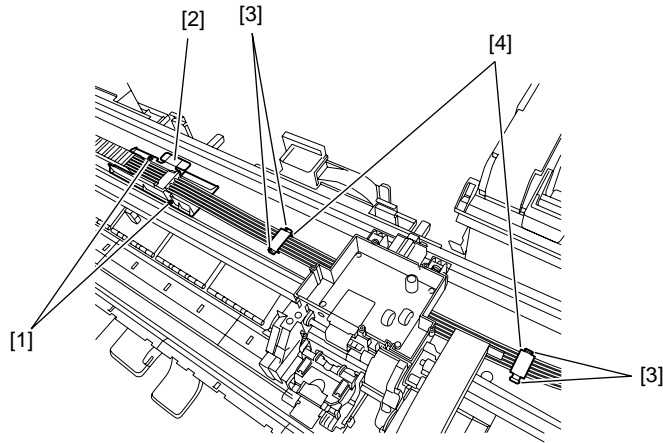
7) Remove the PCB cover.

8) Remove three connectors [3] from the main controller PCB.



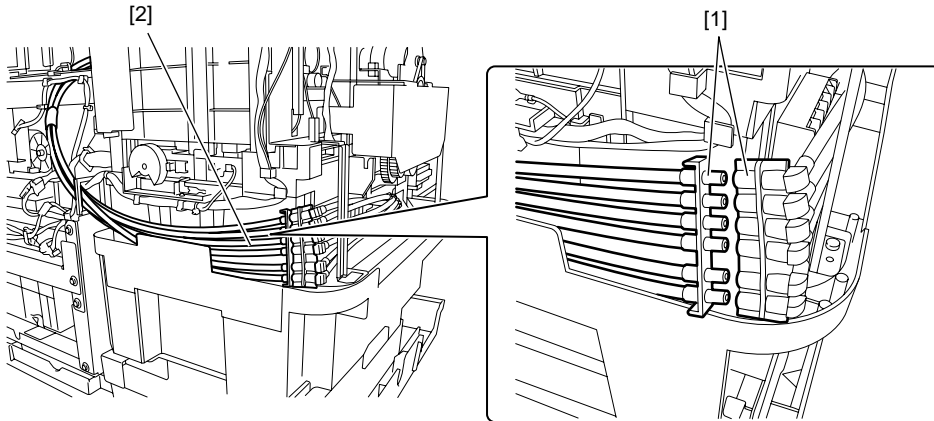
F-4-55

9) Remove two screws [1] to remove ink tube mount [2]. Then, remove four hooks [3] to remove two ink tube guides [4].



F-4-56

10) Remove joint [1] of the ink tube unit to remove ink tube unit [2].

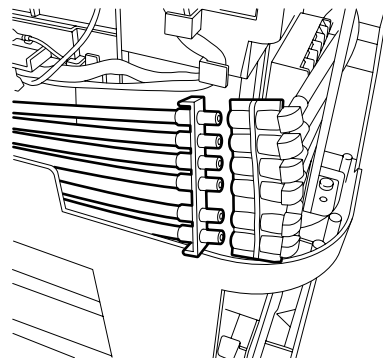


F-4-57

b) Reassembling ink tube units

When the ink tube unit has been replaced, turn on the power without mounting the printhead and the ink tanks. Then, mount the printhead and ink tanks as directed by message guidance.

⚠ After detaching the joint of the ink tube unit, the joint might become easy to come off by the ink that has adhered to it. In that case, please wash the joint by alcohol and remove the adhering ink.



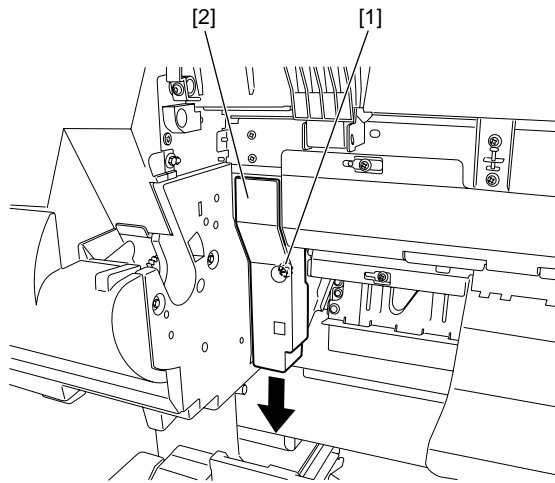
F-4-58

4.3.9 Pick-up/Feed Unit

iPF810 / iPF815

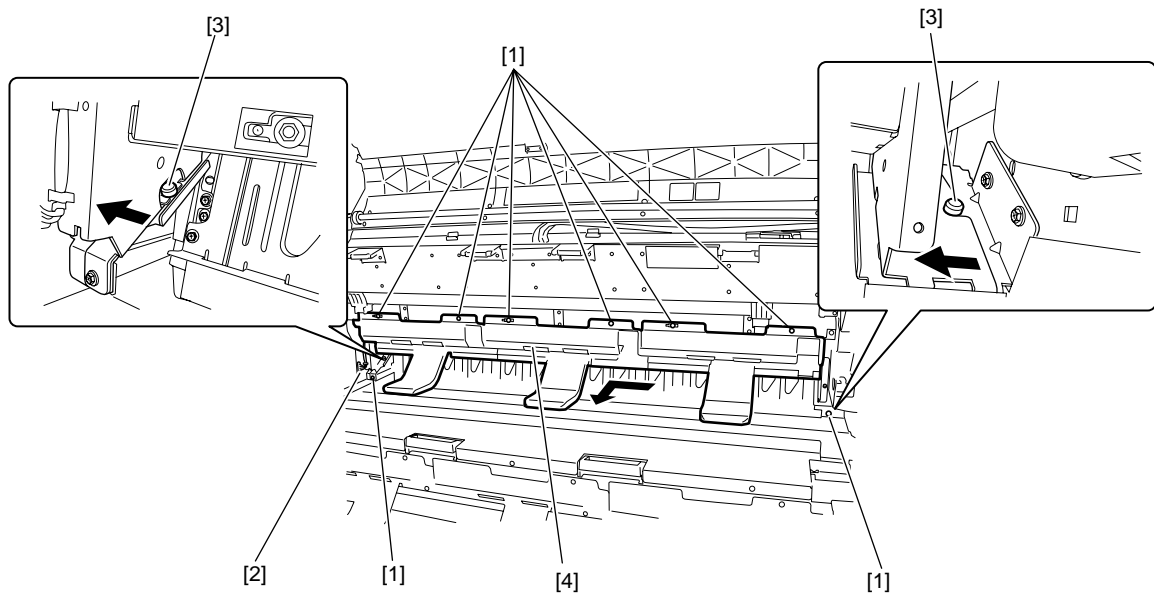
a) Removing the pick-up unit

- 1) Open the upper cover.
- 2) Raise the ejection guides.
- 3) Remove screw [1] to remove left front inner cover [2].



F-4-59

- 4) Remove eight screws [1] and connector [2] and remove slide pick-up unit [4] by sliding it to the left to release the groove from two pins [3].



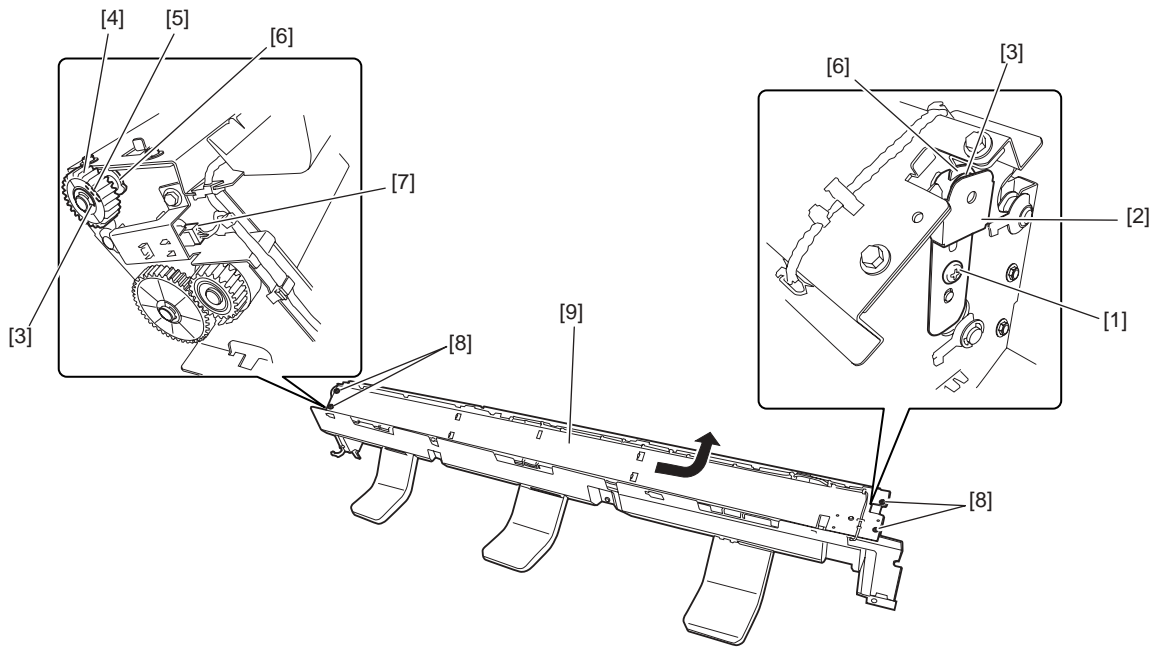
F-4-60



The pick-up unit weighs about 27kg. Use maximum care not to drop it or let it hit other objects.

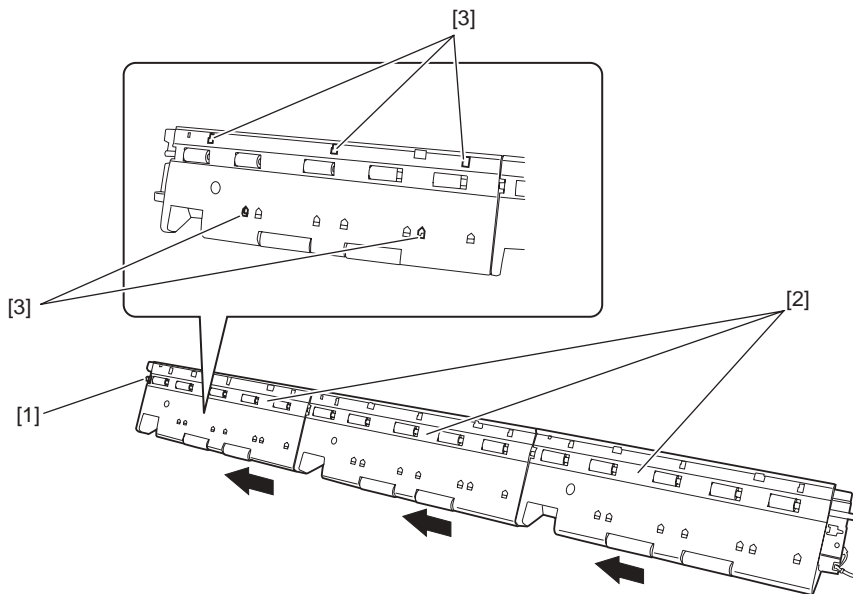
b) Removing the pick-up roller

- 1) Remove the pick-up unit.
- 2) Remove screw [1], guide [2], two E-rings [3], gear [4], parallel pin [5], two bushings [6] and connector [7] to release harness from the harness guide.
- 3) Remove four screws [8] to remove upper unit [9] of the pick-up unit.



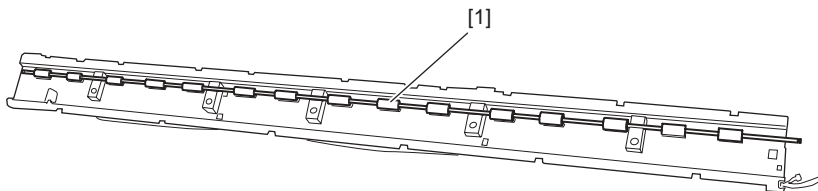
F-4-61

- 4) Remove E-ring [1] and slide three upper pick-up guides [2] to the left to release from five hooks [3] each, removing them from the leftmost one in sequence.



F-4-62

- 5) Remove pick-up roller [1].



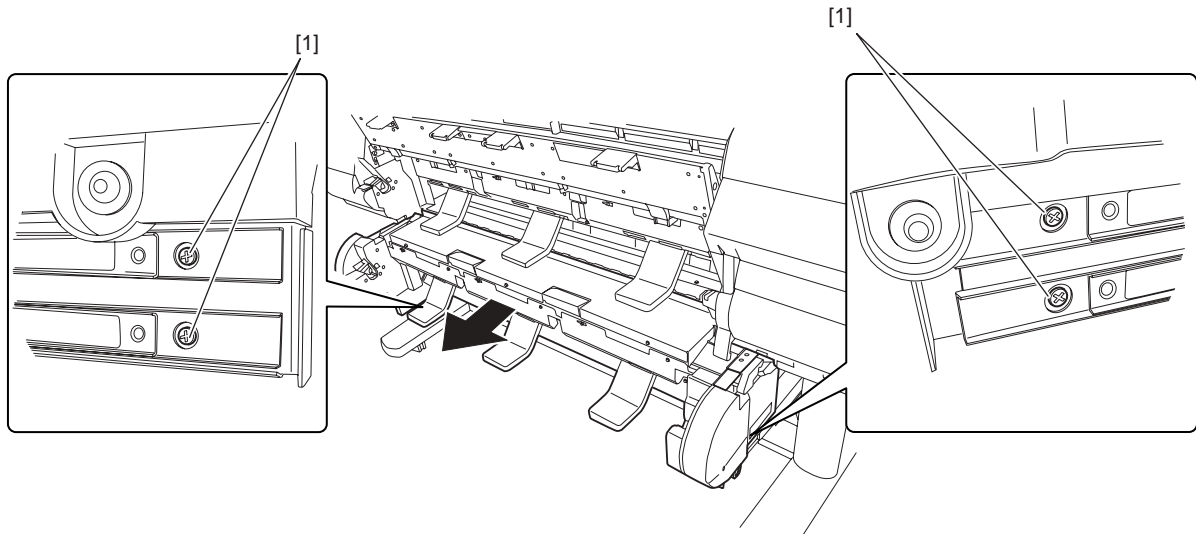
F-4-63

4.3.10 Pick-up/Feed Unit

iPF820 / iPF825

a) Changing the pullout length of the lower roll unit

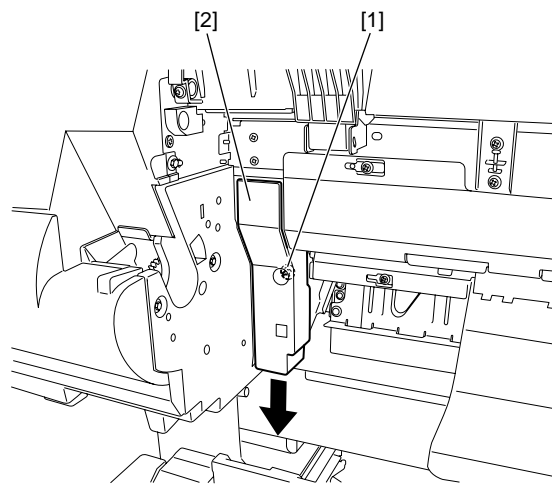
In servicing the printer, remove two screws [1] (both left and right) to increase the pullout length of the lower roll unit as needed.



F-4-64

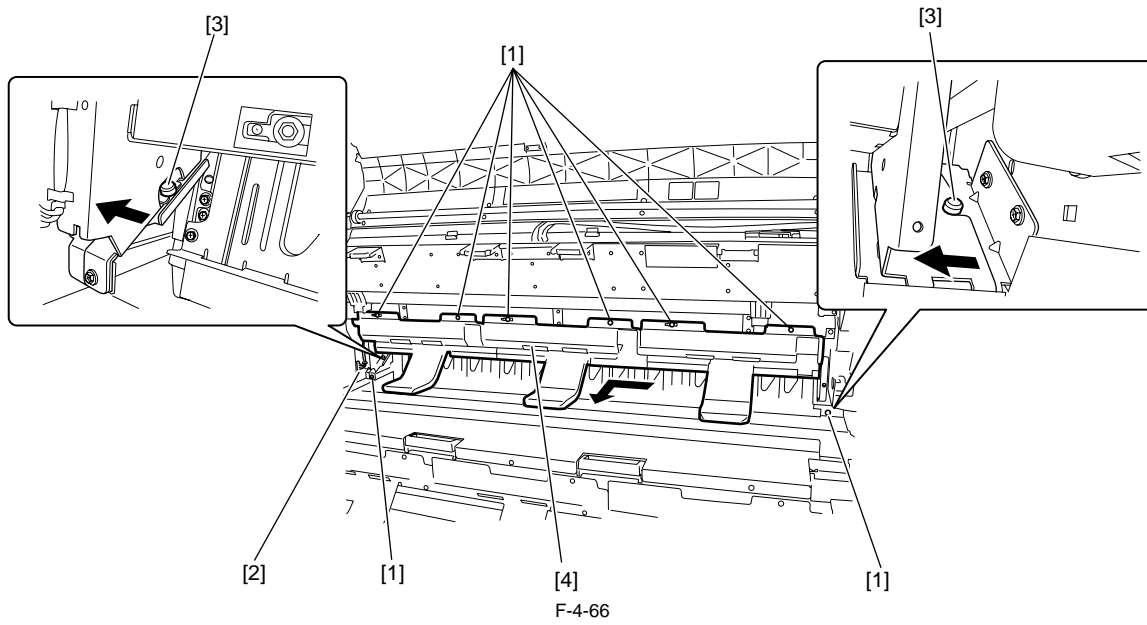
b) Removing the pick-up unit

- 1) Open the upper cover.
- 2) Raise the ejection guides.
- 3) Pull out the lower roll unit as far as possible.
- 4) Remove screw [1] to remove left front inner cover [2].



F-4-65

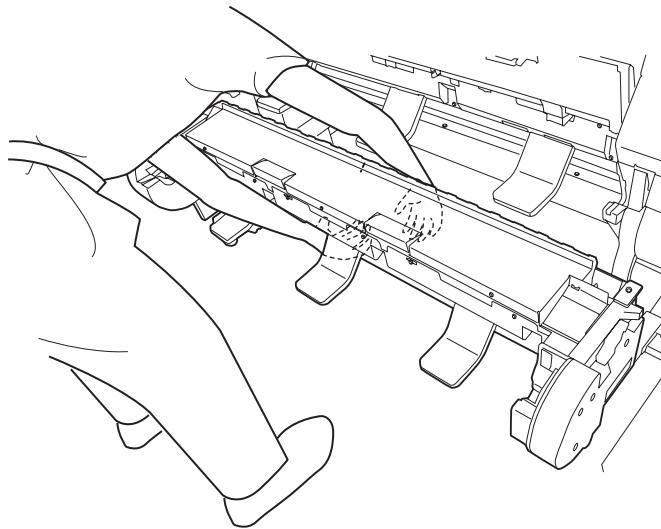
5) Remove eight screws [1] and connector [2] and remove slide pick-up unit [4] by sliding it to the left to release the groove from two pins [3].



⚠ The pick-up unit weighs about 27kg. Use maximum care not to drop it or let it hit other objects.

c) Precaution in removing the lower roll unit

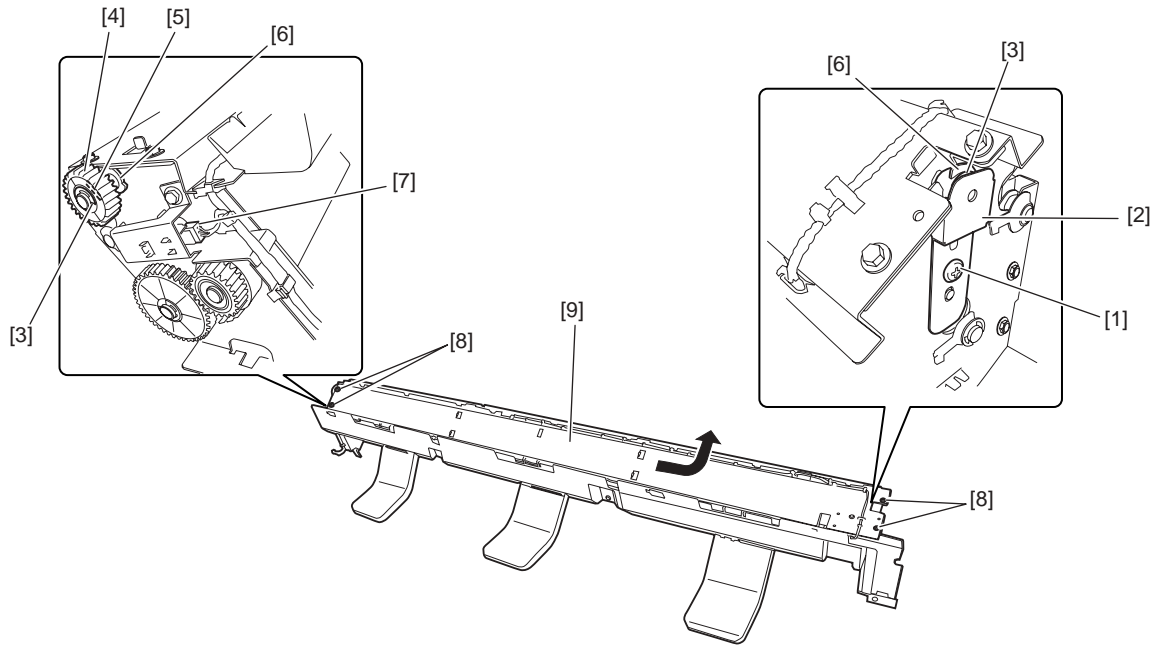
In removing the lower roll unit from the printer body, hold the middle parts (front/rear) of the unit firmly.



⚠ Be careful in placing the lower roll unit on the floor temporarily not to get your fingers pinched between the floor and unit.

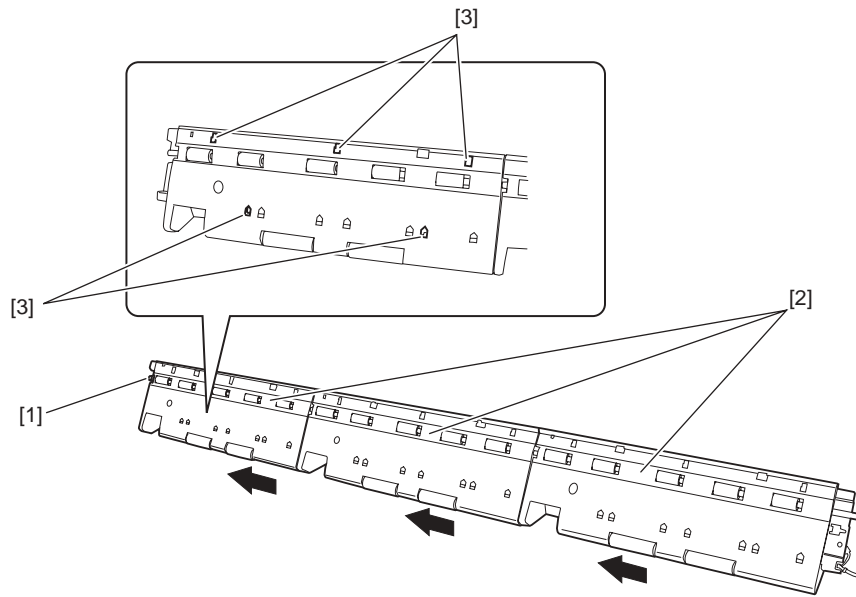
d) Removing the pick-up roller

- 1) Remove the pick-up unit.
- 2) Remove screw [1], guide [2], two E-rings [3], gear [4], parallel pin [5], two bushings [6] and connector [7] to release harness from the harness guide.
- 3) Remove four screws [8] to remove upper unit [9] of the pick-up unit.



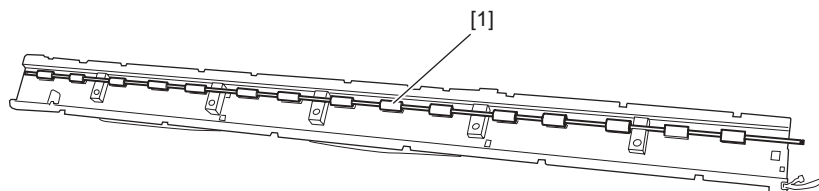
F-4-68

- 4) Remove E-ring [1] and slide three upper pick-up guides [2] to the left to release from five hooks [3] each, removing them from the leftmost one in sequence.



F-4-69

- 5) Remove pick-up roller [1].



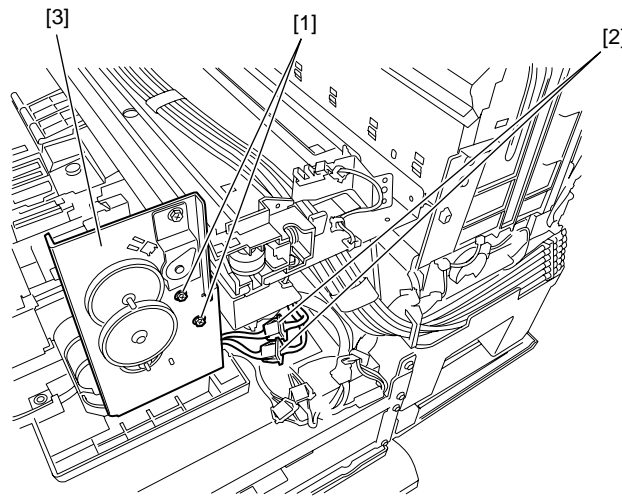
F-4-70

4.3.11 Purge Unit

iPF810 / iPF820 / iPF815 / iPF825

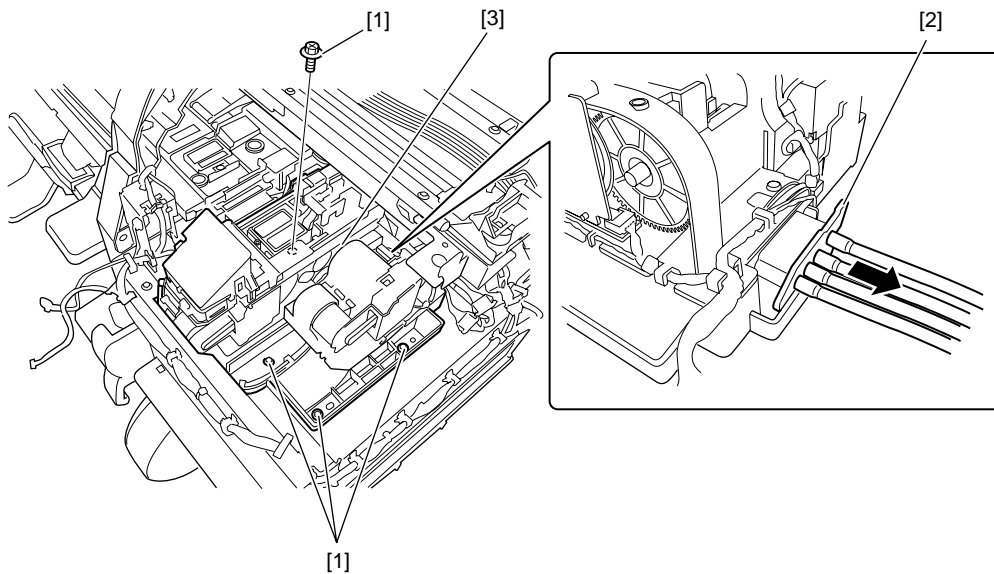
a) Removing the purge unit

- 1) Turn off the power to move the carriage onto the platen. "See Disassembly/Reassembly > Disassembly/Reassembly Precautions > Opening the Cap and Moving the Wiper Unit."
- 2) Remove two screws [1] and two connectors [2] to remove lift drive unit [3].



F-4-71

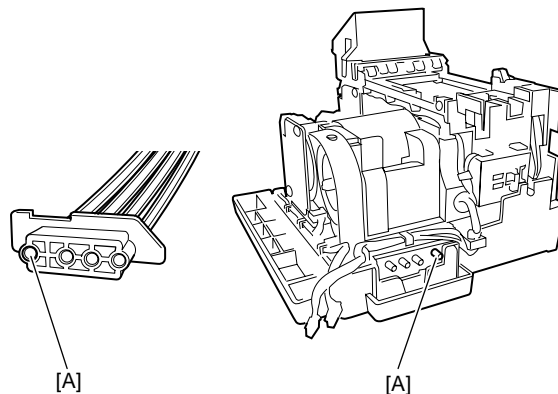
- 3) Remove four screws [1] and waste ink tube joint [2] to remove purge unit [3].



F-4-72

b) Precaution in mounting the purge unit

In mounting the waste ink tube joint, insert it fully into position to make sure that it is not loose or the tube is not buckled. Mount also the joint to fit into the hole in [A].



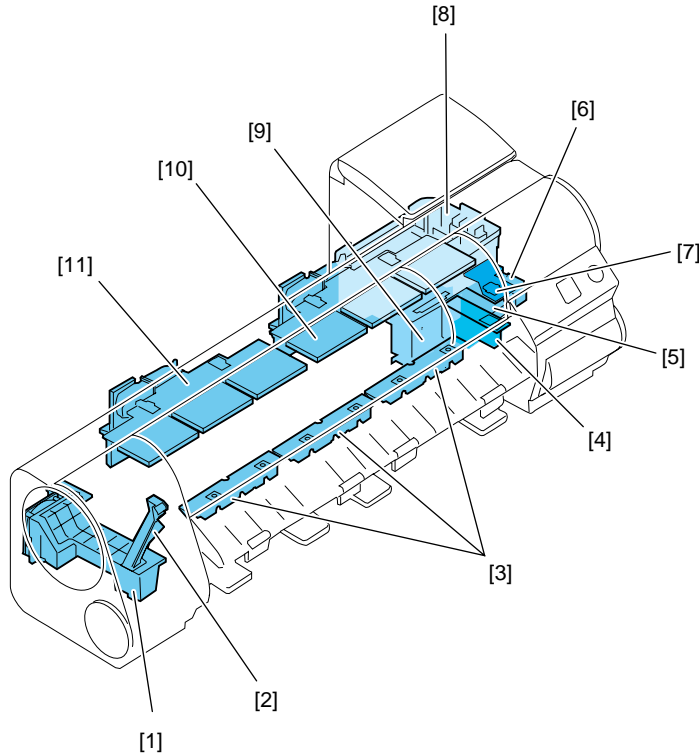
F-4-73

4.3.12 Waste Ink Collection Unit

iPF810 / iPF820 / iPF815 / iPF825

In disassembling the waste ink collector, watch for ink leaks from the parts removed. When components are removed, put them in a PVC bag or the like to prevent ink leaks from part [A] enclosed.

Expandable parts of the waste ink collector come bundled with PVC bags in which to package replaced parts in the service parts package.

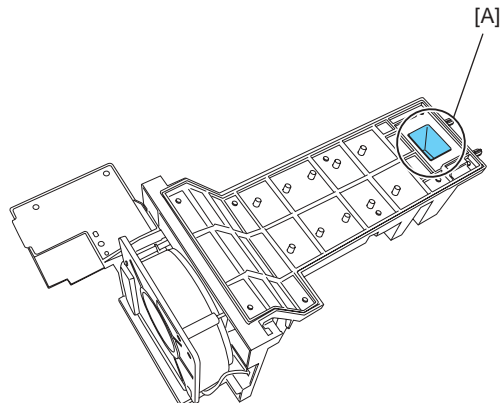


F-4-74

T-4-1

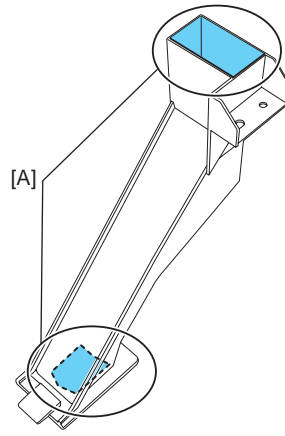
No	Name	Q'ty	Part number	Consumables	Service Mode (Counter)	
					PARTS xx	COUNTER x
[1]	BP maintenance jet ink BOX unit	1	QM3-4814	Yes	A1	A
[2]	BP maintenance jet duct	1	QL2-2831	-	-	-
[3]	Platen ink BOX unit	3	QL2-2822	Yes	A2/A3/A4	A
[4]	Platen suction duct	1	QM3-4816	Yes	A5	A
[5]	Platen suction ink BOX unit	1	QM3-4828	Yes		
[6]	Head management sensor unit	2	QM3-4844	Yes	K1	V
[7]	HP maintenance jet tray unit	1	QM3-4912	Yes	H2	H
[8]	Ink tank unit waste ink tray	1	QM3-4911	-	-	-
[9]	Platen suction fan unit	1	QM3-4827	Yes	A5	A
[10]	Mist fan unit	1	QM3-4846	Yes	V1	V
[11]	Mist fan unit	1	QM3-4846	Yes		

[1] BP maintenance jet ink BOX unit



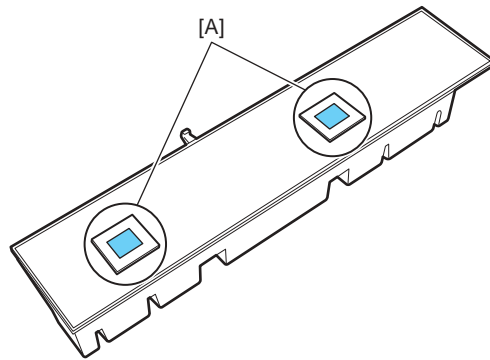
F-4-75

[2] BP maintenace jet duct



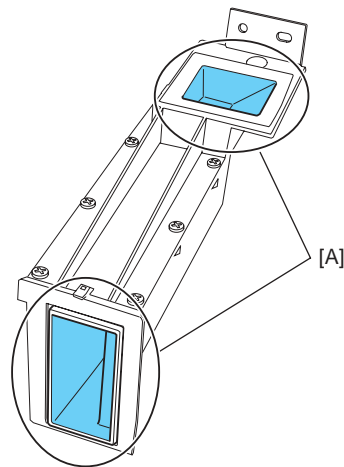
F-4-76

[3] Platen ink BOX unit



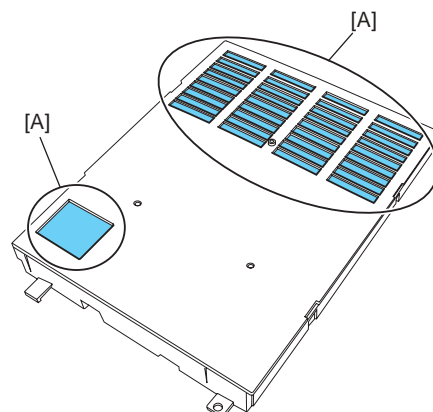
F-4-77

[4] Platen suction duct



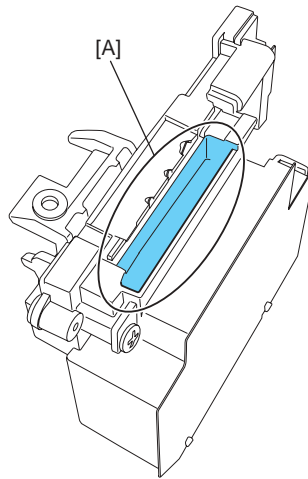
F-4-78

[5] Platen sunction ink BOX unit



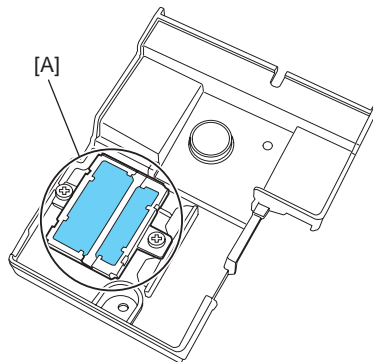
F-4-79

[6] Head management sensor unit



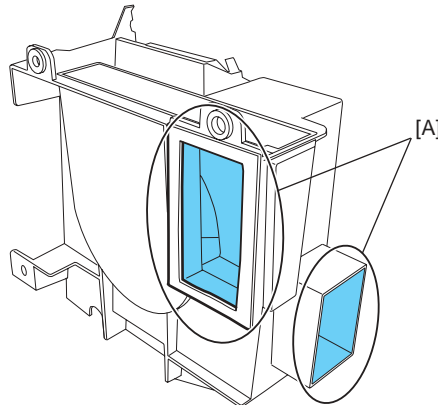
F-4-80

[7] HP maintenace jet tray unit



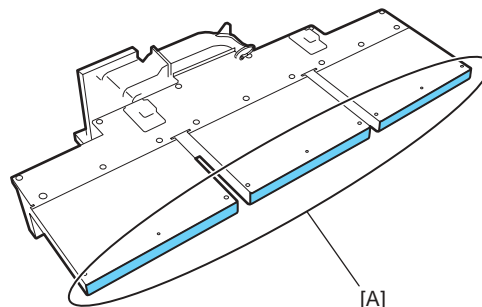
F-4-81

[9] Platen suction fan unit



F-4-82

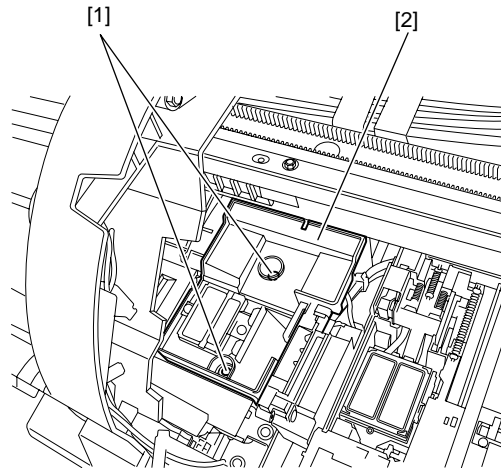
[10]/[11] Mist fan unit



F-4-83

a) Removing the HP maintenance jet tray unit

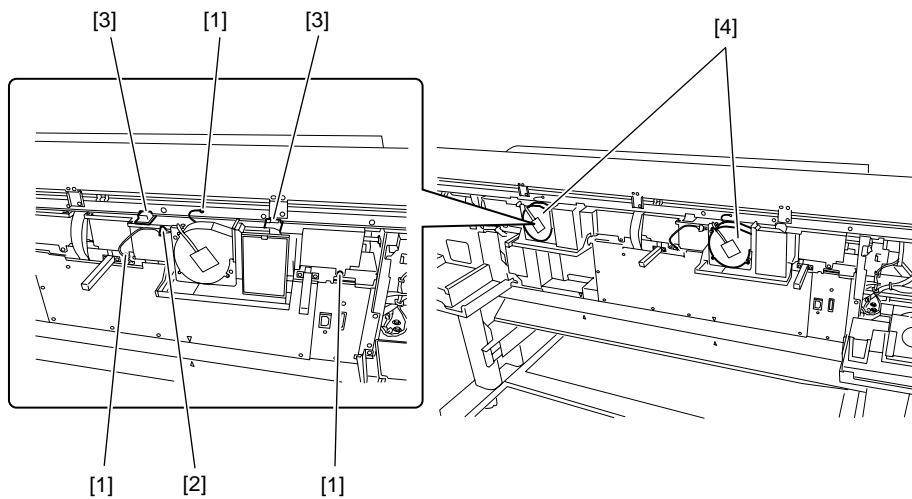
- 1) Move the carriage onto the platen.
- 2) Remove two screws [1] to remove HP maintenance jet tray unit [2].



F-4-84

b) Removing the mist fan unit

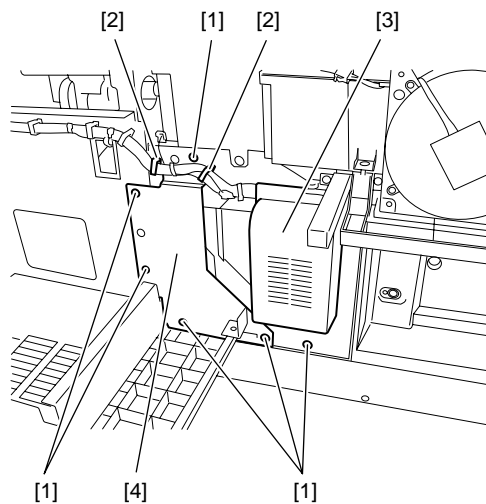
- 1) Open the ink tank unit wide until it stops.
- 2) Remove three screws [1], connector [2] and two hooks [3] to remove mist fan unit [4].



F-4-85

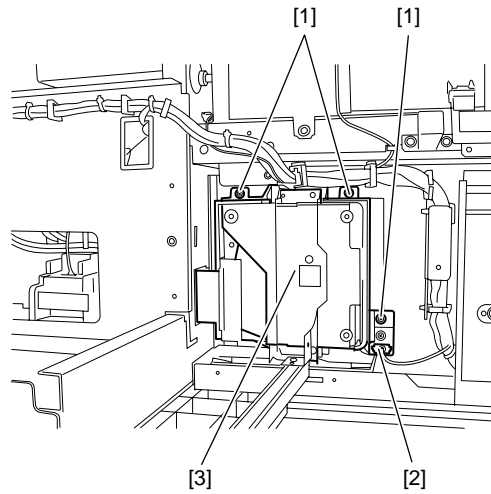
c) Removing the platen suction fan unit

- 1) Open the ink tank unit wide until it stops.
- 2) Remove six screws [1], release the harnesses from harness guide [3] and remove exhaust cover [3] and support plate [4].



F-4-86

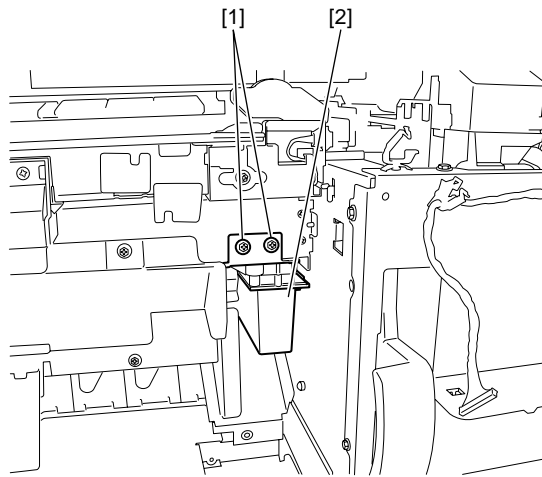
3) Remove three screws [1] and connector [2] to remove platen suction fan unit [3].



F-4-87

d) Removing the platen suction duct

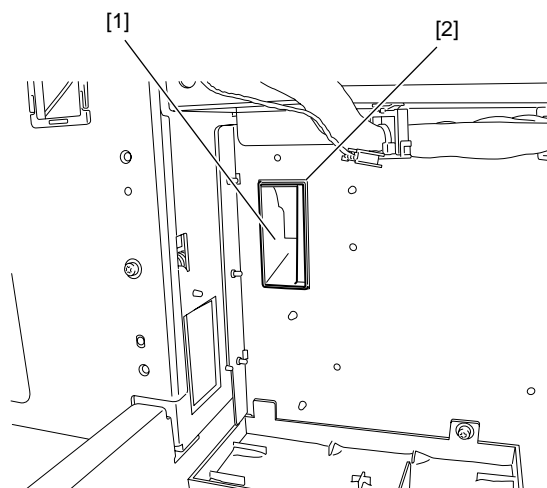
- 1) Removed the cover stay unit (R).
- 2) Remove two screws [1] to remove platen suction duct [2].



F-4-88

e) Precaution in mounting the platen suction duct

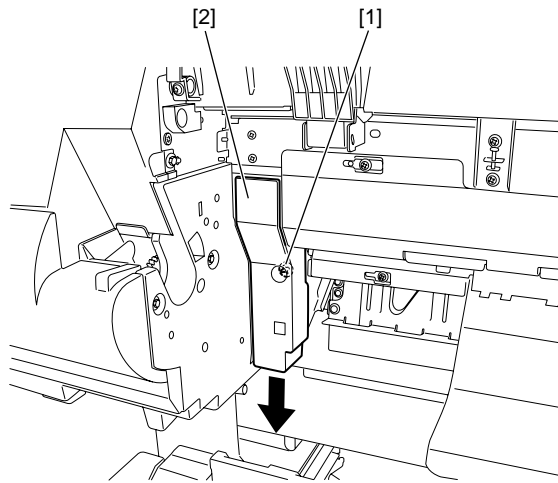
Check that platen suction duct [1] is firmly seated in hole [2] in the rear side plate.



F-4-89

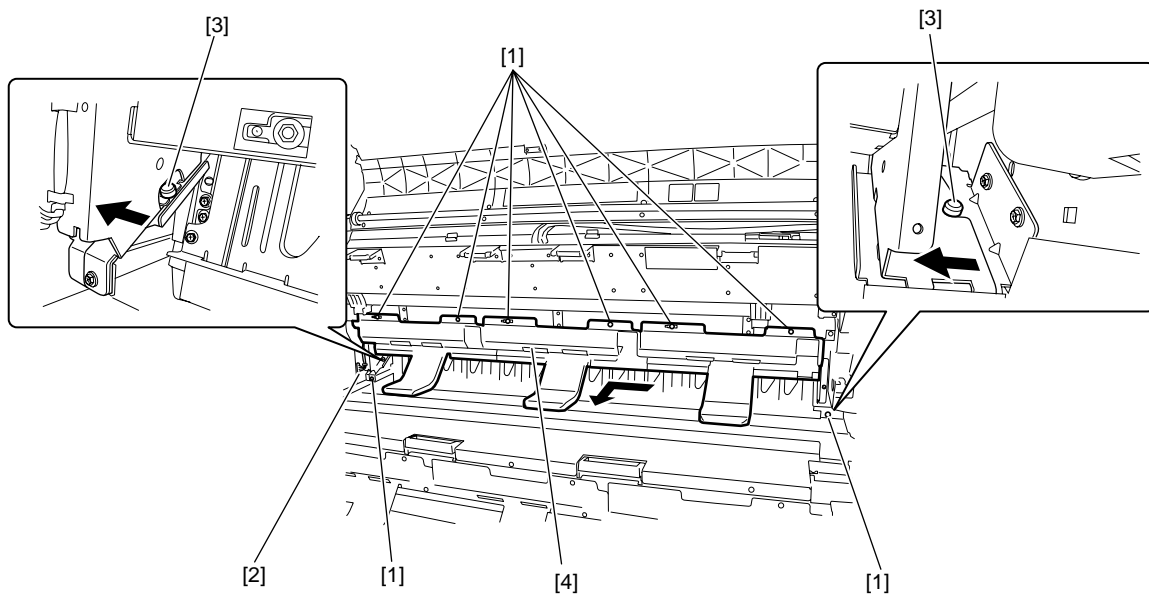
f) Removing the platen ink BOX unit

- 1) Open the upper cover.
- 2) Raise the ejection guides.
- 3) Pull out the lower roll unit as far as possible.
- 4) Remove screw [1] to remove left front inner cover [2].



F-4-90

- 5) Remove eight screws [1] and connector [2] and remove slide pick-up unit [4] by sliding it to the left to release the groove from two pins [3].

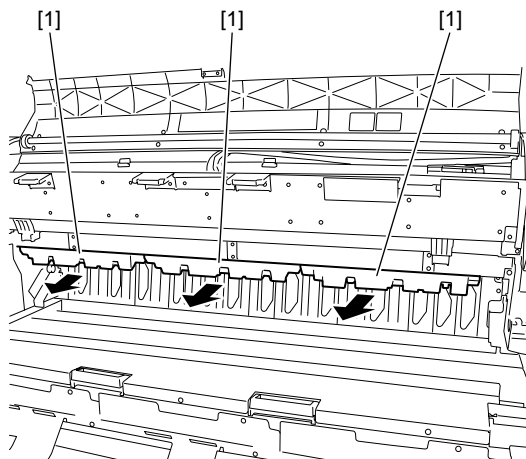


F-4-91



The pick-up unit weighs about 27kg. Use maximum care not to drop it or let it hit other objects.

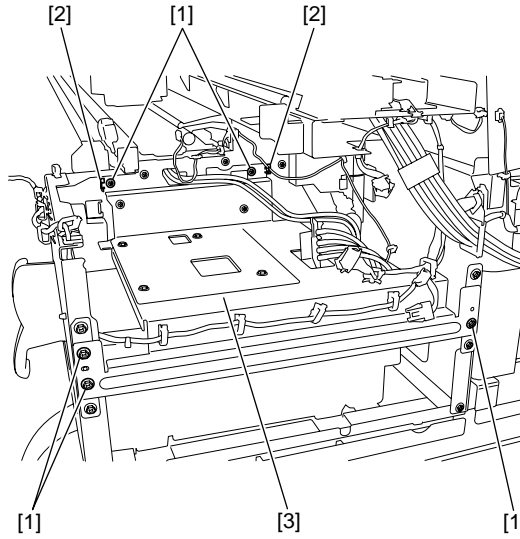
- 6) Slide platen ink BOX unit [1] to the front out of position.



F-4-92

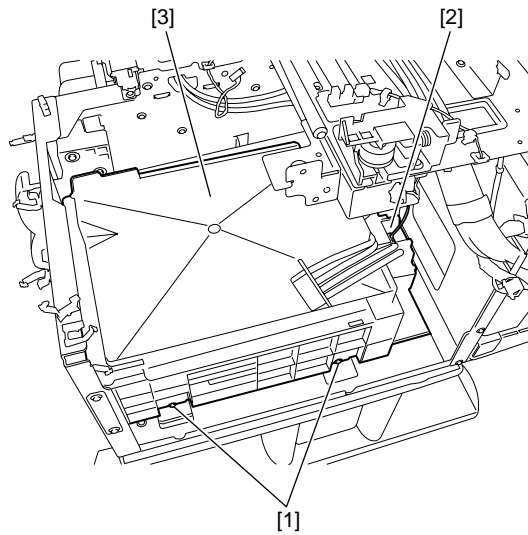
g) Removing the platen suction ink BOX unit

- 1) Remove the purge unit.
- 2) Remove the maintenance cartridge.
- 3) Remove the HP maintenance jet tray unit.
- 4) Remove the head management sensor.
- 5) Remove five screws [1] and two hooks [2] and then release harness from the harness guide to remove support plate [3].



F-4-93

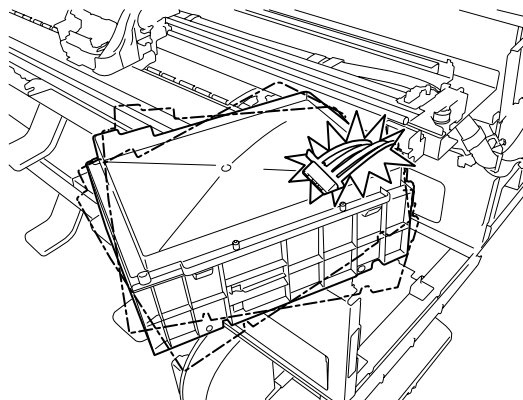
- 6) Remove two screws [1] and connector [2], and remove maintenance cartridge base unit [3] and place it at another position temporarily.



F-4-94

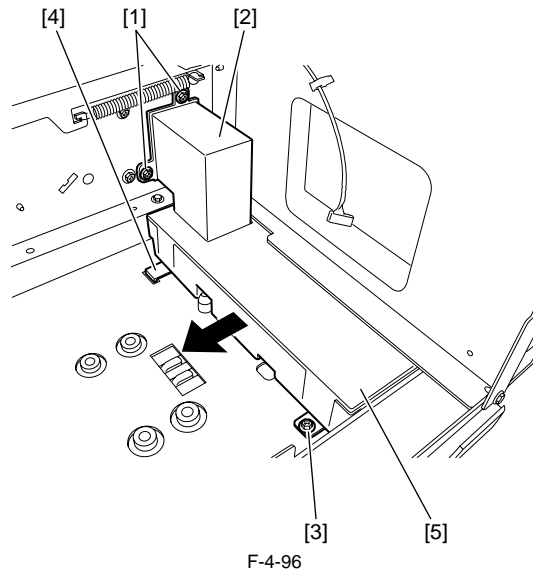


In placing the maintenance cartridge base unit elsewhere temporarily, be careful not to get the ink tubes scratched or dropped.

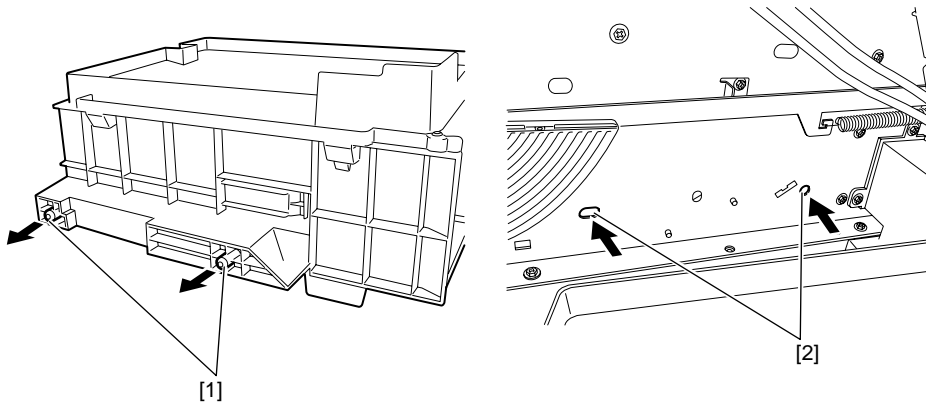


F-4-95

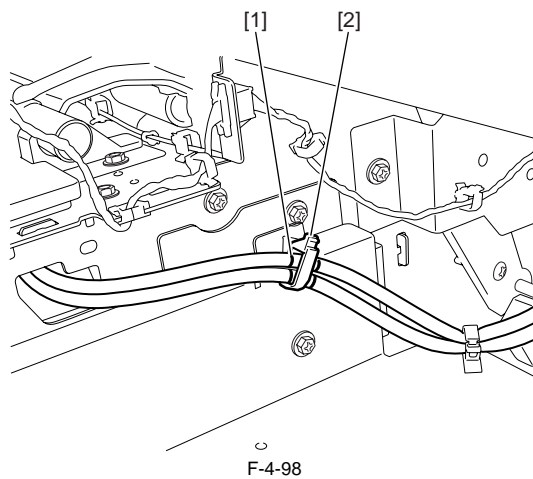
- 7) Remove two screws [2] to remove duct [2].
- 8) Remove screw [3] and hook [4] to remove platen suction ink BOX unit [5] from the front.



- h) Precaution in mounting the platen suction ink BOX unit**
- Mount the maintenance cartridge base unit to ensure that two bosses [1] are inserted in hole [2] in the side plate.

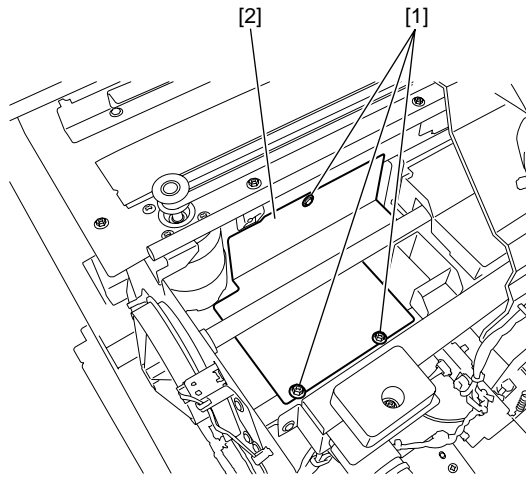


- Clamp the ink tube so its mark [1] will come at the position of harness guide [2].



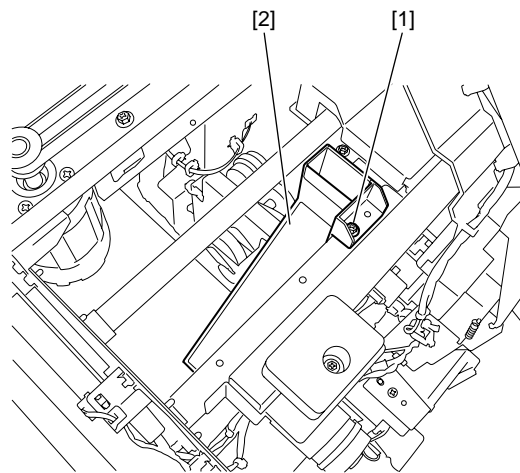
i) Removing the BP maintenance jet ink BOX unit

1) Remove three screw [1] to remove support plate [2].



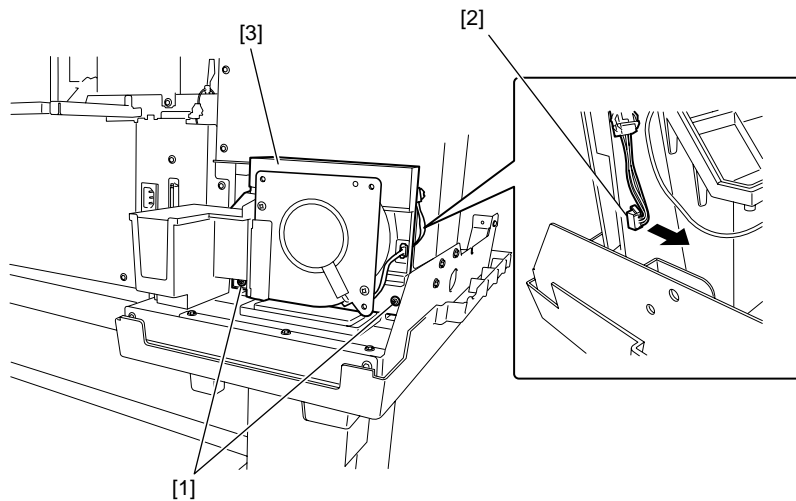
F-4-99

2) Remove screw [1] to remove duct [2].



F-4-100

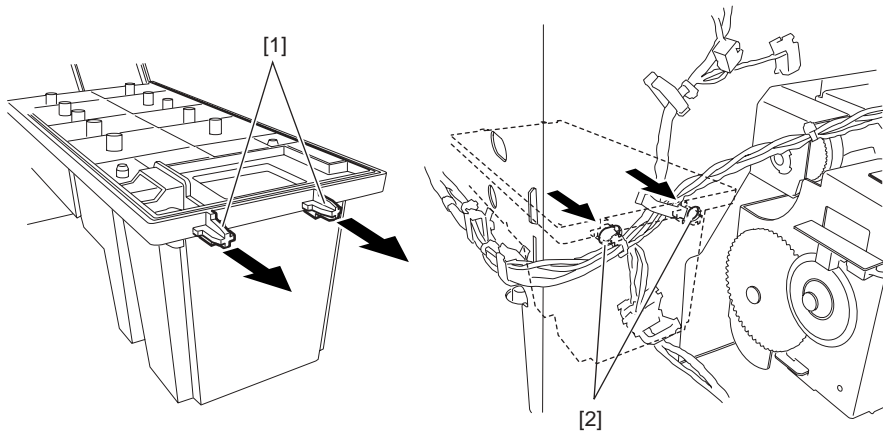
3) Remove two screws [1] and connector [2] to remove BP maintenance jet ink BOX unit [3].



F-4-101

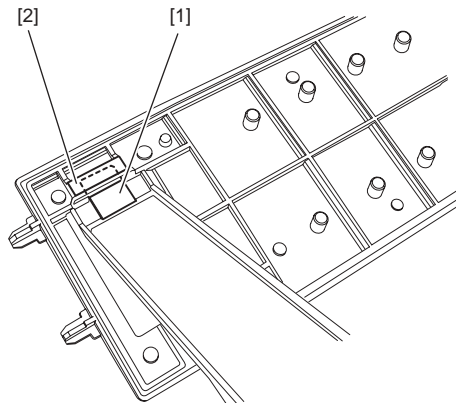
j) Precaution in mounting the BP maintenance jet ink BOX unit

- Check that bosses [1] on the BP maintenance jet ink BOX unit are inserted in hole [2] in the side plate.



F-4-102

- Check that boss [1] on the duct is inserted in the groove [2] in the BP maintenance jet ink BOX unit.



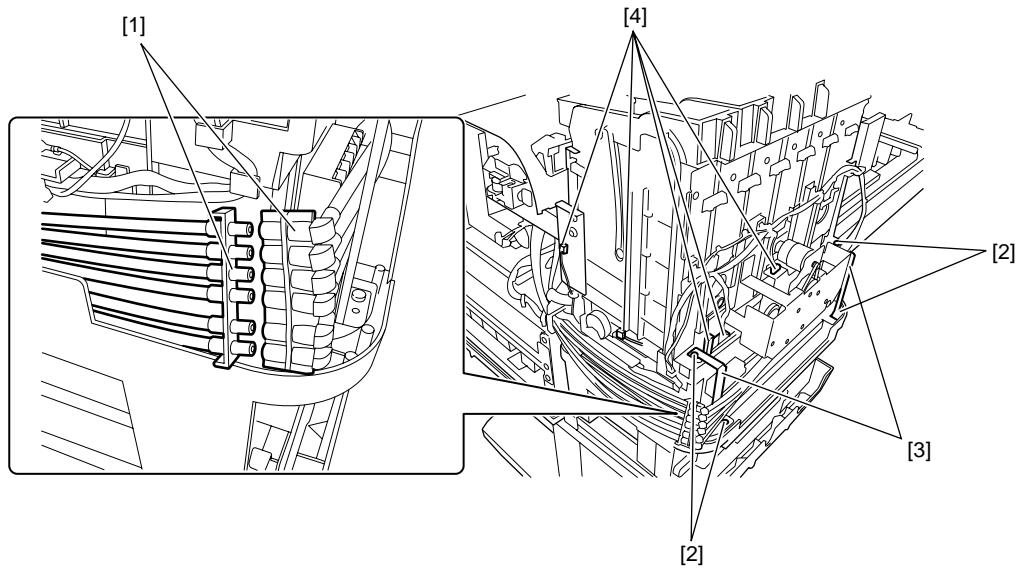
F-4-103

4.3.13 Ink Tank Unit

iPF810 / iPF820 / iPF815 / iPF825

a) Removing ink tank unit

- 1) Perform ink drainage. "See Disassembly/Reassembly > Disassembly/Reassembly Precautions > Ink Drainage."
- 2) Remove the joint [1] interconnecting the ink tube unit and the ink tank unit to each other.
- 3) Remove four screws [2] to remove two ground plates [3].
- 4) Remove five connectors [4] to release the bundled wires and ink tube from the guide.

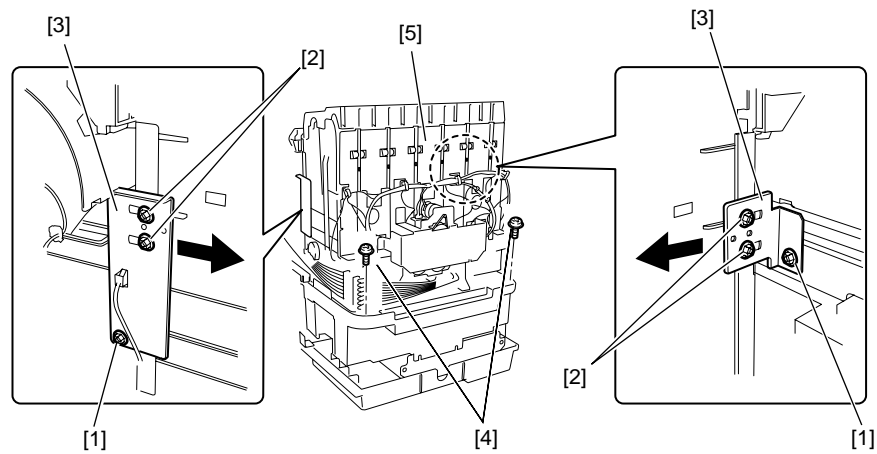


F-4-104



Cover the joint in the ink tube, as with a PVC bag, to keep inks from splashing from them.

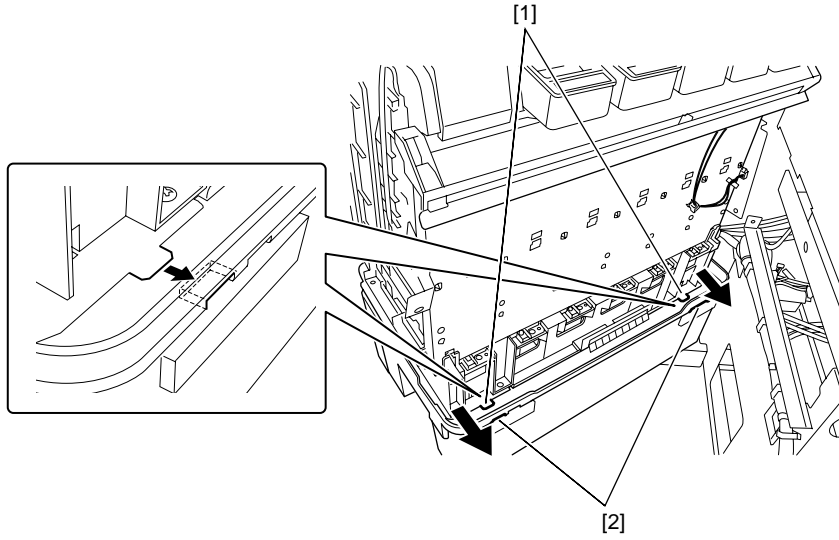
- 5) Remove two screws [1] and loosen four screws [2] to slide support [3]. Remove two screws [4] to remove ink tank unit [5].



F-4-105

b) Precaution in mounting the ink tank unit

Check that two hooks [1] on the ink tank unit are inserted into notches [2] in the ink tank unit waste ink tray.

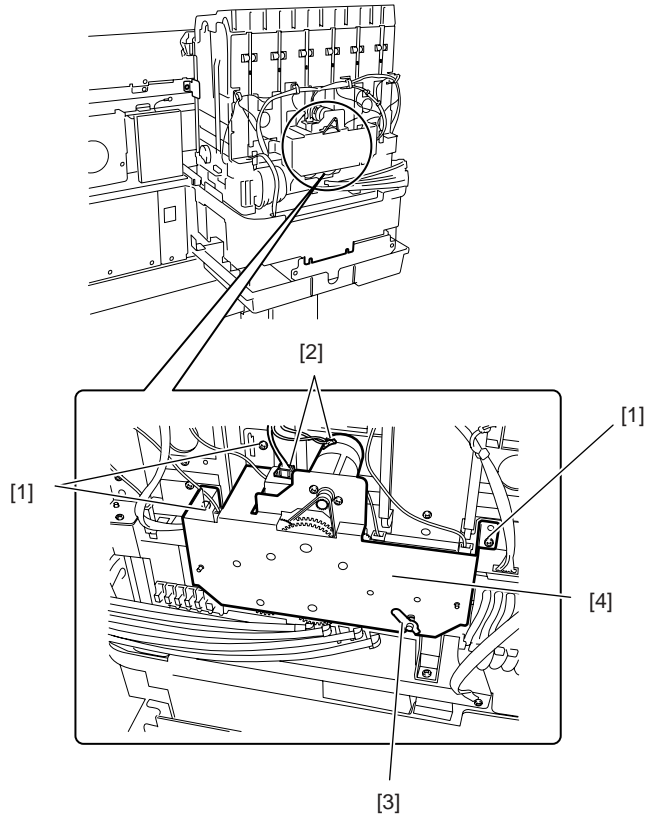


F-4-106

c) Removing the valve motor unit

1) To remove the valve motor unit, remove the ink tank cover unit.

2) Remove three screws [1], two connectors [2] and bearing [3], and then remove valve motor unit [4].



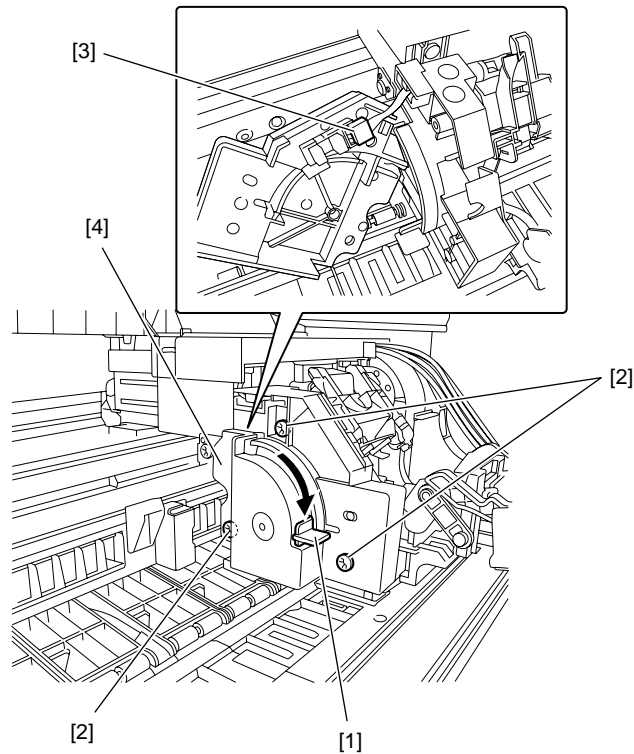
F-4-107

4.3.14 Multi Sensor

iPF810 / iPF820 / iPF815 / iPF825

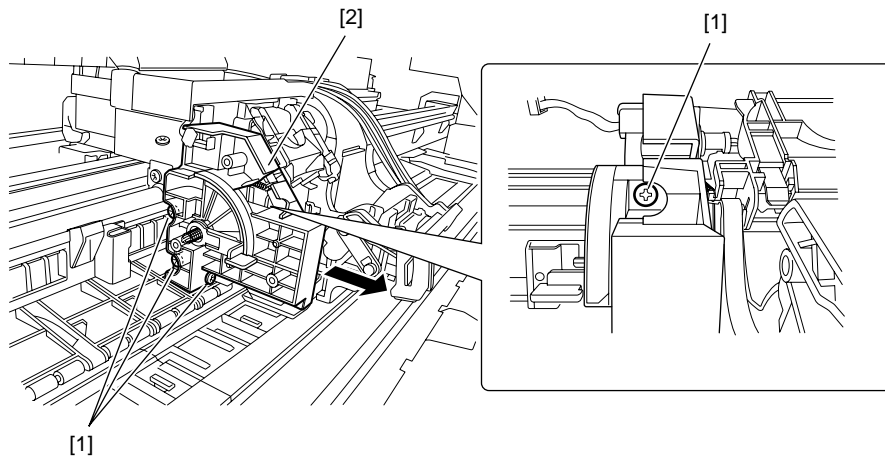
a) Removing the multi sensor

- 1) Turn off the power to move the carriage onto the platen. "See Disassembly/Reassembly > Disassembly/Reassembly Precautions > Opening the Cap and Moving the Wiper Unit."
- 2) Remove the printhead.
- 3) With slant adjustment lever [1] being set at the bottom position, remove three screws [2] and connector [3] to remove carriage left cover [4].



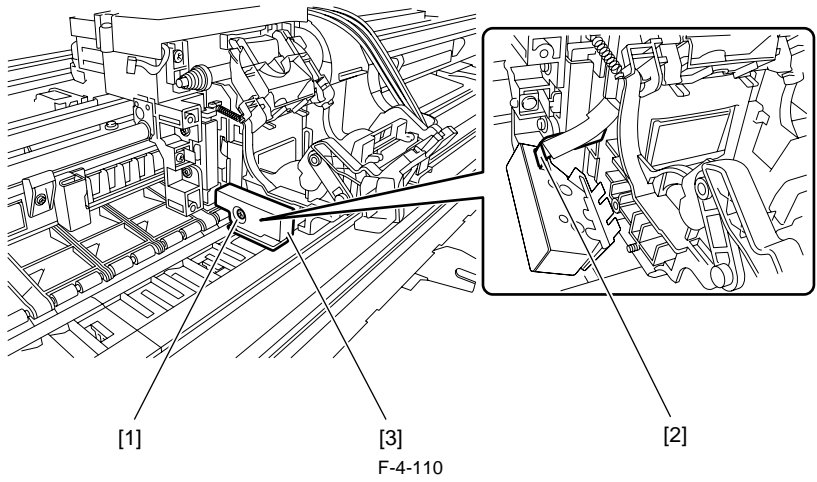
F-4-108

- 4) Remove four screws [1] and remove carriage left inner cover [2] by moving it to the front, together with the spring and lever.



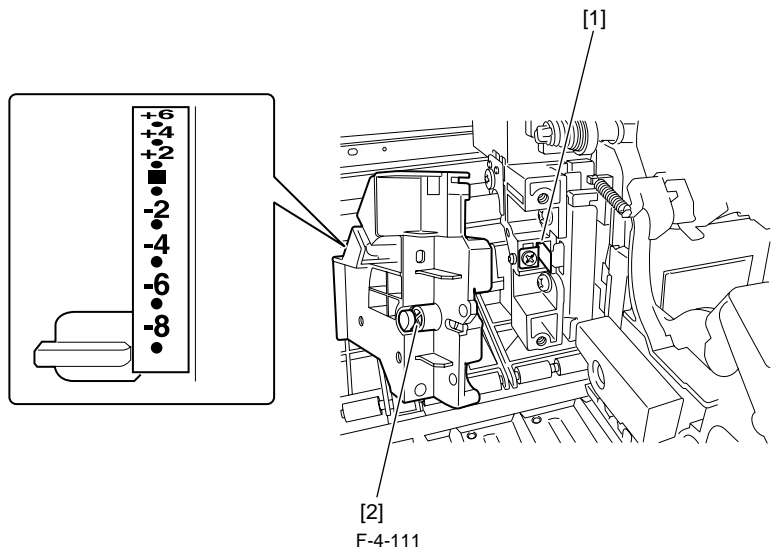
F-4-109

5) Remove screw [1] and connector [2] to remove multi sensor [3].



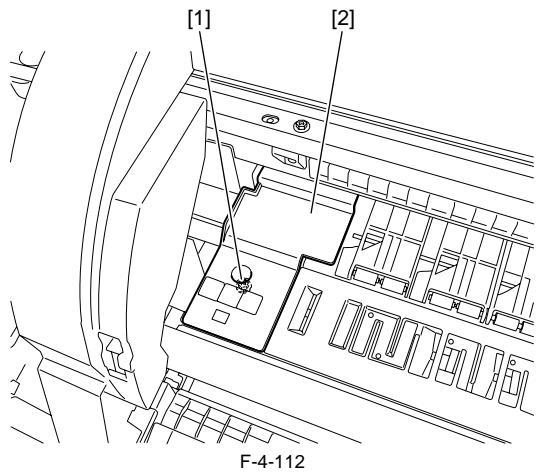
b) Precaution in mounting the multi sensor

To attach the carriage left inner cover, mount the multi sensor to allow leaf spring [1] in the carriage into notch [2] in the lever with the slant adjustment lever being set at the bottom position.



c) Removing the multi sensor reference plate

1) Remove screw [1] to remove the multi sensor reference plate [2].



d) Note on replacing the multi sensor

When the multi sensor has been replaced, be sure to replace the multi sensor reference plate(QL2-2840-000:MOUNT, MULTI SENSOR REFERENCE) as well.

f) Action to take after replacing the multi sensor

Because the distance between the multi sensor (in the carriage unit) and the nozzles (in each printhead) is varied from one unit to another, the printer has its optical axis corrected and paper gap adjustment sensor gain and sensor calibration adjusted prior to shipment. When the multi sensor has been replaced, they should require adjustment.

Execute service mode under the following conditions to launch automatic adjustment:

- 1) Optical axis correction
- Service mode: SERVICE MODE > ADJUST > PRINT PATTERN > OPTICAL AXIS

Media type: Gloss photo paper

2) Paper gap adjustment

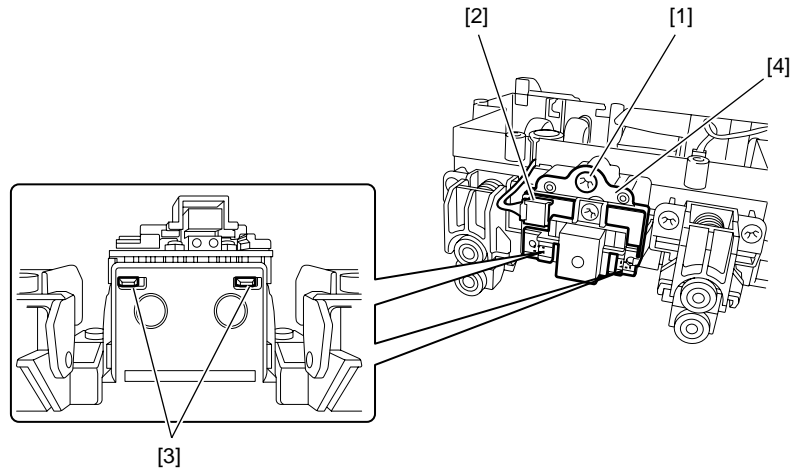
- Service mode: SERVICE MODE > ADJUST > GAP CALIB.

4.3.15 Linear Encoder Sensor

iPF810 / iPF820 / iPF815 / iPF825

a) Removing the linear encoder sensor

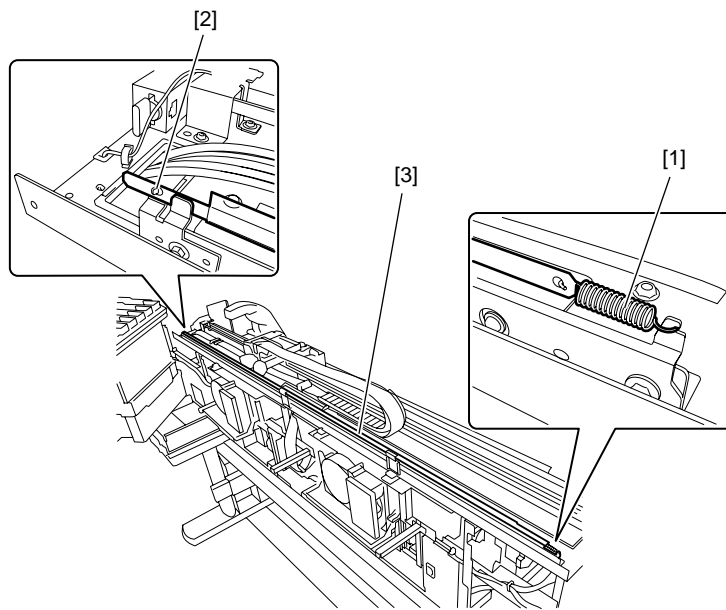
- 1) Remove the carriage unit.
- 2) Remove screw [1] and connector [2] and remove linear encoder sensor [4] by moving it slantwise upward to release from two bosses [3].



F-4-113

b) Removing the linear scale

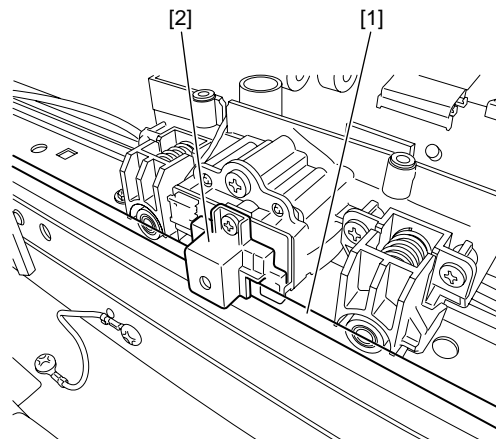
- 1) Open the ink tank unit wide until it stops.
- 2) Remove the spring [1] and the hook [2] to remove the linear scale [3].



F-4-114

c) Precaution in mounting the linear encoder sensor/linear scale

Check that linear scale [1] is seated within linear encoder sensor [2].



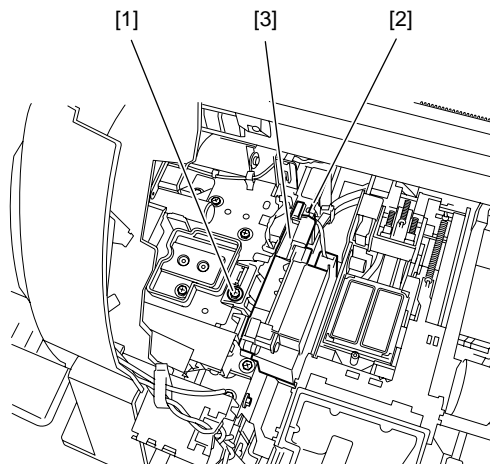
F-4-115

4.3.16 Head Management Sensor

iPF810 / iPF820 / iPF815 / iPF825

a) Removing the head management sensor

- 1) Remove the HP maintenance jet tray unit.
- 2) Remove the screw [1] and connector [2] to remove head management sensor [3].



F-4-116

b) Action to take after replacing the head management sensor

Because the distance between the head management sensor and the carriage unit is varied from one unit to another, the printer has its optical axis corrected to adjust the non-discharging nozzle detection position prior to shipment. When the head management sensor carriage unit has been replaced, it should require adjustment. Execute service mode under the following conditions:
SERVICE MODE > ADJUST > NOZZLE CHK POS.

4.3.17 PCBs

iPF810 / iPF820 / iPF815 / iPF825

Do not replace the main controller PCB and the maintenance cartridge relay PCB (ROM board) at the same time.

Both PCBs hold vital information, such as settings and a carriage drive time. Before either PCB is replaced, such information is temporarily saved through internal communication with the other PCB and is automatically written to the new PCB when it is installed. For this reason, the two PCBs cannot be replaced at the same time. To replace both PCBs, work in order of (a) > (b).

When the main controller PCB and maintenance cartridge relay PCB have been replaced with service parts, check that the latest version of firmware is installed in them.

If not, upgrade the firmware to the latest version.

a) Replacing the maintenance cartridge relay PCB (ROM board)

- 1) Turn off the power and disconnect the power plug.
- 2) Replace the maintenance cartridge relay PCB.
- 3) Reconnect the power plug and turn on the power while pressing the [Paper Source] and [Information] keys. (Start the printer in PCB replacement mode.)
- 4) Release the key, but not before making sure that "Initializing" appears on the display. (The message lamp lights when printer enters PCB replacement mode.)
- 5) Wait until "REPLACE MODE" appears on the display.
- 6) Select MC BOARD and press the [OK] key.
- 7) Turn off the power, but not before making sure that "Power off" appears on the display.
- 8) Turn on the power.
- 9) Check the firmware version. If the firmware is not the latest version, upgrade the firmware to the latest version.

b) Replacing the main controller PCB

- 1) Turn off the power and disconnect the power plug.
- 2) Replace the main controller PCB.
- 3) Reconnect the power plug and turn on the power while pressing the [Paper Source] and [Information] keys. (Start the printer in PCB replacement mode.)
- 4) Release the key, but not before making sure that "Initializing" appears on the display. (The message lamp lights when printer enters PCB replacement mode.)
- 5) Wait until "REPLACE MODE" appears on the display.
- 6) Select CPU BOARD and press the [OK] key.
- 7) Turn off the power, but not before making sure that "Power off" appears on the display.
- 8) Turn on the power.
- 9) Check the firmware version. If the firmware is not the latest version, upgrade the firmware to the latest version.

4.3.18 Opening the Cap/Moving the Wiper Unit

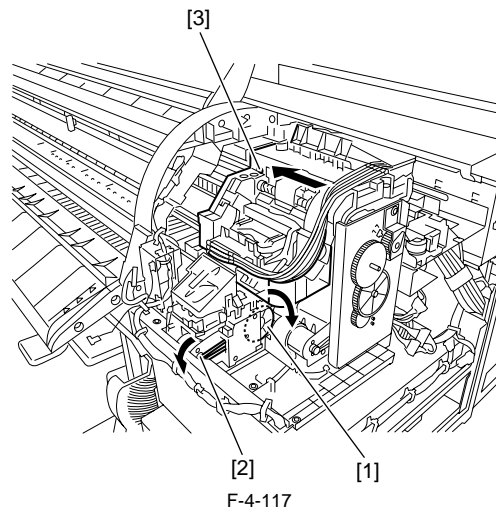
iPF810 / iPF820 / iPF815 / iPF825

This section explains how to move the cap, carriage lock pin and wiper unit manually.

Moving carriage when the power of the printer is off, releasing carriage lock pin and uncapping must be done manually.

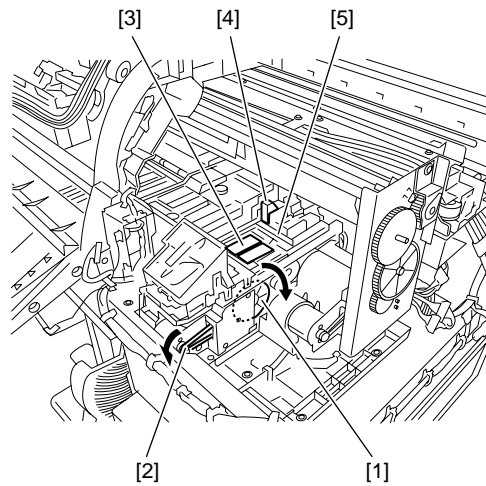
1. Uncapping, releasing the carriage lock pin

- 1) Open the upper cover and remove the right circle cover (L), right circle cover (S), right side covers, rear right cover and upper right cover.
- 2) Turn the gear [1] or motor pulley [2] of the purge unit toward the direction of the arrow. This will lower cap and lock pin, allowing the carriage [3] to be moved.



2. Moving the wiper unit

- 1) Open the upper cover and remove the right circle cover (L), right circle cover (S), right side covers, rear right cover and upper right cover.
- 2) To move the cap [3], lock pin [4] and wiper unit [5], turn the gear [1] or motor pulley [2] of the purge unit toward the direction of the arrow.

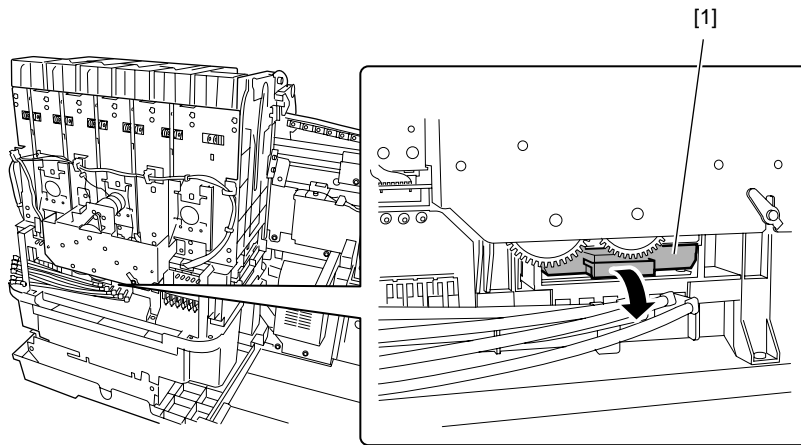


4.3.19 Opening and closing ink supply valves

iPF810 / iPF820 / iPF815 / iPF825

a) Opening and closing ink supply valves

- 1) Remove the ink tank cover unit.
- 2) Press valve lever [1] with a finger to open the ink supply valve.



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- If the printhead fixer lever is released with the ink supply valve to an ink tube open while the tube is filled with an ink, the ink in the tube could flow backward to the ink tank unit, leaking through the hollow needle in the ink tank.
- If an ink supply valve remains open, as on occurrence of an ink supply valve open/close error, remove the valve motor unit and (see Disassembly/Reassembly > Points to Note on Disassembly/Reassembly > Ink Tank Units) and close the ink supply valve.

4.3.20 Draining the ink

iPF810 / iPF820 / iPF815 / iPF825

There are two ways to drain the ink passage of inks: automatic and manual.



Be sure to drain the ink from the ink passage to prevent ink leakage before disassembling any component of the ink passage or reshipping the printer.

1. Automatic Ink Drain

Execute Automatic Ink Drain by selecting Maintenance > Move Printer from the main menu.



Execute Automatic Ink Drain once again if the printer shuts down due to a power failure or any other trouble before the operation completes.

2. Manual Ink Drain

Drain the ink passage of inks manually if any electrical component in the printer fails or firmware malfunctions or if the printer fails to be powered on.

- 1) Remove right circle cover (L), right circle cover (S), right side covers, ink tank cover units. See Disassembly/Reassembly > Points to Note on Disassembly/Reassembly > External Covers.
- 2) Remove the ink tanks.
- 3) Move the carriage to above the platen. See Disassembly/Reassembly > Points to Note on Disassembly/Reassembly > Opening the caps and moving the wiper unit.
- 4) Release the printhead fixer lever.
- 5) Open the ink supply valves to allow the inks to flow into the subtanks.

4.4 Applying the Grease

4.4.1 Applying the Grease

iPF810 / iPF820 / iPF815 / iPF825

Apply the grease at the location shown below.
Smear the grease lightly and evenly with a flat brush.

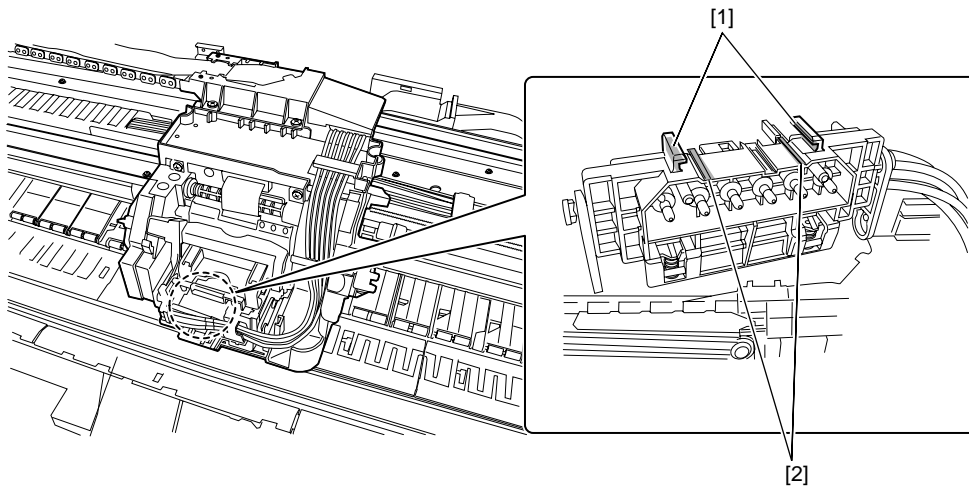


Don't apply the grease to locations other than those designated. Unwanted grease may cause poor print quality, take particular care that grease does not get onto the wiper, cap, or the linear scale.

T-4-2

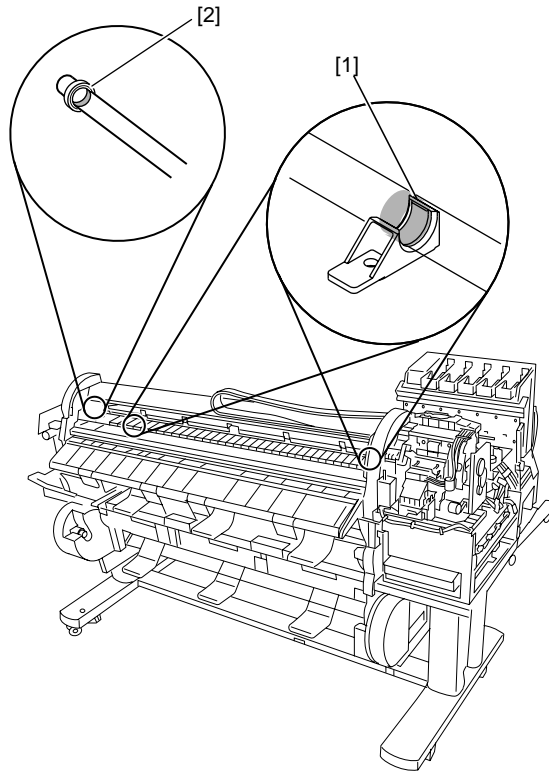
No.	Place	Kind	Quantity	Note
1	The joint base rib of carriage unit	Molykote PG-641	Smear the grease lightly	
2	Feed roller backup x 2 parts	Permalub G No.2	approx.12mg	Don't apply to central backup with bearing.
	Feed roller bearing	Permalub G No.2	approx.24mg	Apply if remove bearing from a feed roller.
3	Pinch roller release bushing x 5 parts	Permalub G No.2	Smear the grease lightly	
	Pinch roller pressure release gear	Permalub G No.2	Smear the grease lightly	
	The concave of the pinch roller arm x 28 parts	Permalub G No.2	Smear the grease lightly	
4	Upper cover stay shaft hole	Permalub G No.2	approx.24mg	
	The gear shaft of the upper cover stay gear	Permalub G No.2	approx.24mg	
	Upper cover stay shaft end	Permalub G No.2	approx.24mg	
	The gear tooth face of upper cover stay	Permalub G No.2	Smear the grease lightly	

1. The joint base rib of carriage unit [1]



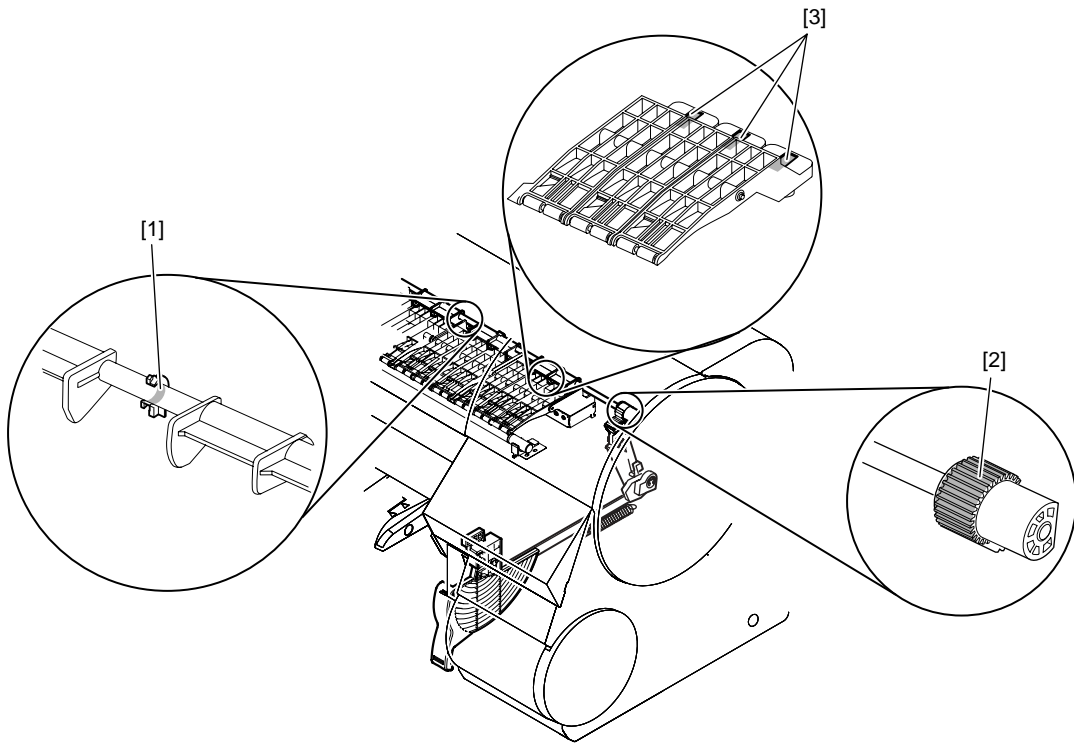
F-4-120

2. Feed roller backup [1](2 parts)/Feed roller bearing [2]



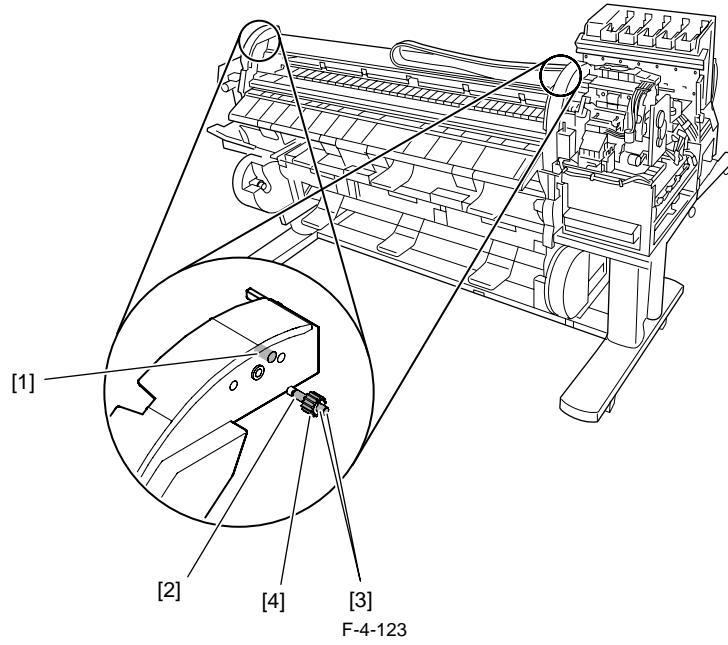
F-4-121

3. Pinch roller release bushing [1](5 parts)/Pinch roller pressure release gear [2]/The concave of the pinch roller arm [3](28 parts)



F-4-122

4. Upper cover stay shaft hole [1]/The gear shaft of the upper cover stay gear [2]/Upper cover stay shaft end [3]/The gear tooth face of upper cover stay [4]



F-4-123

4.5 Adjustment and Setup Items

4.5.1 Adjustment Item List

iPF810 / iPF820 / iPF815 / iPF825

The following adjustment procedures need to be performed when parts have been replaced or remove and then reinstalled:

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Adjustment item	Adjustment timing
Multi sensor recalibration	Multi sensor replacement/removal
	Carriage unit replacement/removal
Adjusting feed roller eccentricity	Feed roller
	Feed roller encoder
Head management sensor recalibration	Head management sensor replacement/removal
	Carriage unit replacement/removal

4.5.2 Procedure after Replacing the Carriage Unit or Multi Sensor

iPF810 / iPF820 / iPF815 / iPF825

a) Note on replacing the carriage unit and the multi sensor

The multi sensor reference plate(QL2-2840:MOUNT, MULTI SENSOR REFERENCE) must be replaced at the same time whenever the carriage or the multi sensor is being replaced.

b) Multi Sensor Recalibration

Because the distance between the multi sensor (in the carriage unit) and the nozzles (in each printhead) is varied from one unit to another, the printer has its optical axis corrected and paper gap adjustment sensor gain and calibration adjusted prior to shipment. When the carriage unit or multi sensor has been replaced, they should require adjustment.

Execute service mode under the following conditions to launch automatic adjustment:

1) Optical axis correction

- Service mode: SERVICE MODE > ADJUST > PRINT PATTERN > OPTICAL AXIS

Media type: Gloss photo paper

2) Paper gap adjustment

- Service mode: SERVICE MODE > ADJUST > GAP CALIB.

4.5.3 Procedure after Replacing the Feed Roller or Feed Roller Encoder

iPF810 / iPF820 / iPF815 / iPF825

Feed roller eccentricity is factory-adjusted (correction of variation in the paper feed amount per rotation). It is necessary to adjust feed roller eccentricity after replacing the feed roller encoder or feed roller.

In the service mode, perform automatic adjustment of feed roller eccentricity.

Service mode : SERVICE MODE > ADJUST > PRINT PATTERN > LF TUNING

Media type : Photo glossy paper

If adjustment cannot be done properly by selecting "SERVICE MODE > ADJUST > PRINT PATTERN > LF TUNING" (auto adjustment), carry out manual adjustment.

Service mode SERVICE MODE > ADJUST > PRINT PATTERN > LF TUNING2

Media type: Gloss photo paper

Check the printed pattern and enter values for adjustment.

4.5.4 Procedure after Replacing the Head Management Sensor

iPF810 / iPF820 / iPF815 / iPF825

Since the distance between the head management sensor and the carriage unit varies among printers, the optical axis is factory-adjusted to adjust the non-discharging detection position. When you have replaced the head management sensor or performed assembly/reassembly of surrounding parts that can change the distance between the head management sensor and the carriage unit, readjustment is required

Perform the readjustment in the service mode.

Service mode : SERVICE MODE > ADJUST > NOZZLE CHK POS.

Chapter 5 MAINTENANCE

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5.1 Periodic Replacement Parts

5.1.1 Periodic Replacement Parts

iPF810 / iPF820 / iPF815 / iPF825

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Level	Periodic Replacement part
User	None
Service Personnel	None

5.2 Consumable Parts

5.2.1 Consumable Parts

iPF810 / iPF820 / iPF815 / iPF825

T-5-2

	Consumables				Service Mode		
	Name	Part number	Q'ty	Life sheets/A0	PARTS xx	COUNTER x	States (Error Code)
Service	WASTE INK BOX UNIT (L)	QM3-4814	1	25000	A1	A	OK/W1/E146-4001
	WASTE INK ABSORBER UNIT	QL2-2822	3	25000	A2/A3/A4		
	PLATEN FAN DUCT UNIT	QM3-4816	1	25000	A5		
	PLATEN SUCTION FAN UNIT	QM3-4827	1				
	WASTE INK BOX UNIT	QM3-4828	1				
	CARRIAGE UNIT	QM3-4835	1	25000	D1/D2/D3	D	OK/W1/W2
	MOUNT, MULTI SENSOR REFERENCE	QL2-2840	1	25000	D1/D2/D3/D5		
	SCALE, LINEAR	QC3-1889	1	25000	D2		
	TUBE UNIT	QM3-4834	1	25000	D4		
	MULTI SENSOR UNIT	QM3-5240	1	25000	D5		
	PURGE UNIT	QM3-4847	1	25000	H1/H2	H	OK/W1/E141-4046
	WASTE INK RECEPTACLE UNIT	QM3-4912	1	25000	H2		OK/W1/E144-404F
	HEAD MANAGEMENT SENSOR UNIT	QM3-4844	1	25000	K1	K	OK/W1/E194-404A
	MOTOR, DC BRUSHLESS	QK1-5211	1	25000	M1	M	OK/W1/W2
	FEED MOTOR ASS'Y	QM3-5246	1	25000	P1	P	OK/W1/W2
	ROLLER, PICK-UP	QC3-0208	1	25000	S1	S	OK/W1/W2
	MIST FAN UNIT	QM3-4846	2	25000	V1	V	OK/W1/E146-4001
CUTTER	QM3-4873	1	25000	Y1	Y	OK/W1/W2	
User	See "Product Overview>> Features>> Consumables"						



After supplies have been replaced, execute [INITIALIZE] > [PARTS COUNTER] > [PARTS xx] in service mode to initialize (clear) the parts counter information.

5.3 Periodic Maintenance

5.3.1 Periodic Maintenance

iPF810 / iPF820 / iPF815 / iPF825

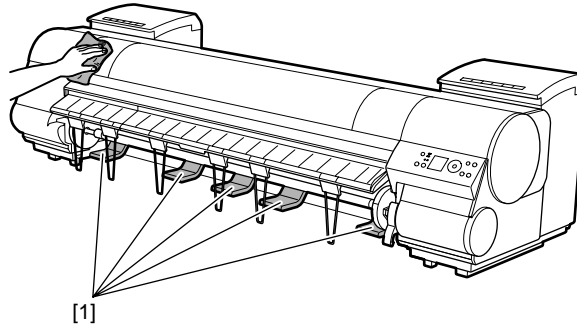
T-5-3

Level	Periodic maintenance
User	Cleaning of ink mist and other substances(about once each month)
Service personnel	None

a) Printer cleaning

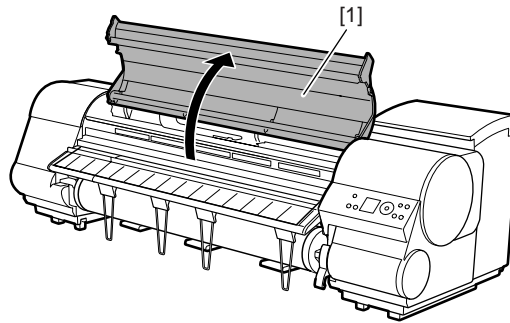
To keep up with print quality and prevent troubles, clean the printer about once each month.

1) Using a damp cloth that you have wrung out completely, wipe away any dirt or paper dust from the Paper Feed Slot [1], power cord plug, and so on. Dry these parts with a dry cloth.



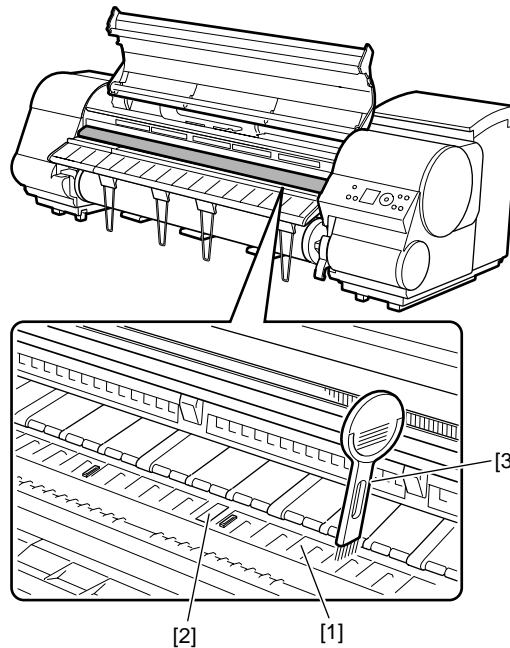
F-5-1

2) Open the Top Cover.



F-5-2

3) If paper dust has accumulated in the Vacuum holes [1] on the Platen, the Borderless Printing Ink Grooves [2], use the included Cleaning Brush [3] to wipe it away.

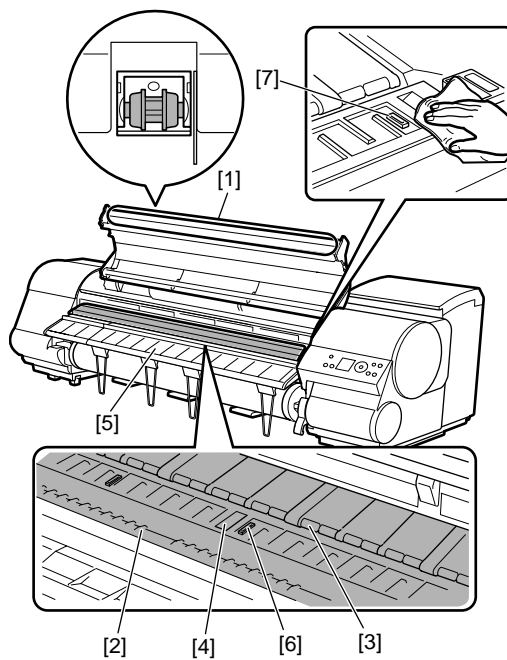


F-5-3

MEMO:

If the Cleaning Brush is dirty, rinse it in water.

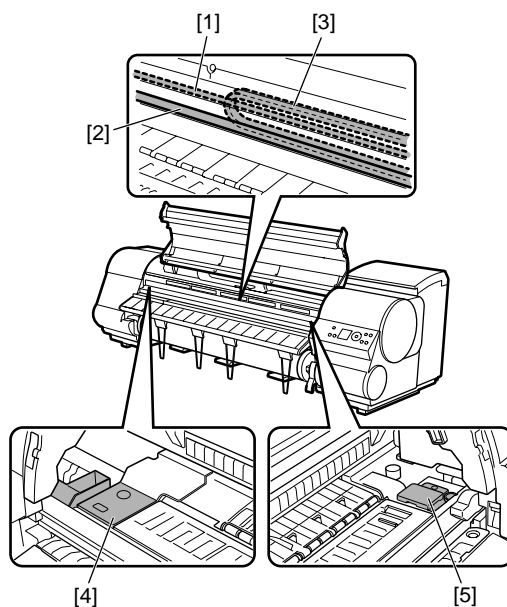
4) Using a damp cloth that you have wrung out completely, wipe inside the Top Cover to clean it. Wipe away any ink residue on the Top Cover Roller [1], all over the Platen [2], the Pinch Roller Unit [3], the Borderless Printing Ink Grooves [4], the Ejection Guide [5], the switch [6], the Borderless Printing Ink Groove of the right side [7], and so on.



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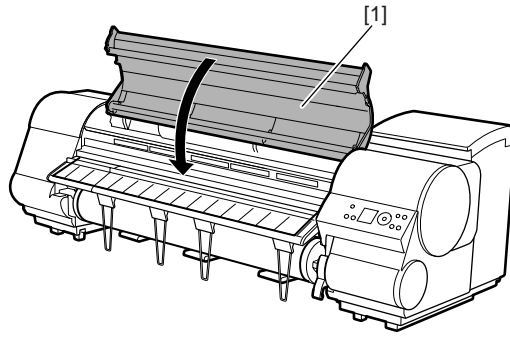


- Do not dry the interiors of the top cover with a dry cloth. Electrostatic charges could make the internal components susceptible to dirt, resulting in degraded print quality.
- Do not use flammable solvents, such as thinner and benzene, on the printer. Solvents coming into contact with any electrical parts inside the printer could result in fires or electrical shock hazards.
- Do not touch the transparent sheet adjacent to the upper cover roller. Damages could result.
- Further, do not touch linear scale [1], carriage shaft [2] and ink tube unit [3]. Do not clean multi sensor reference plate/BP maintenance jet duct [4] and HP maintenance jet tray unit [5]. Printer failures could result.



F-5-5

5) Close upper cover [1].



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Chapter 6 TROUBLESHOOTING

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6.1 Troubleshooting

6.1.1 Outline

6.1.1.1 Outline of Troubleshooting

iPF810 / iPF820 / iPF815 / iPF825

1. Outline

Troubles subject to troubleshooting are classified into those shown on the display (warning, error, and service call) and those not shown on the display. The code of warning and error is shown by combining alphanumeric characters of eight digits and four digits. The code of service call error is shown by the initial character of "E" and combining alphanumeric characters of three digits and four digits. No code number is displayed when a warning occurs. Selecting [SERVICE MODE] > [DISPLAY] > [WARNING] allows you to check the warning log.

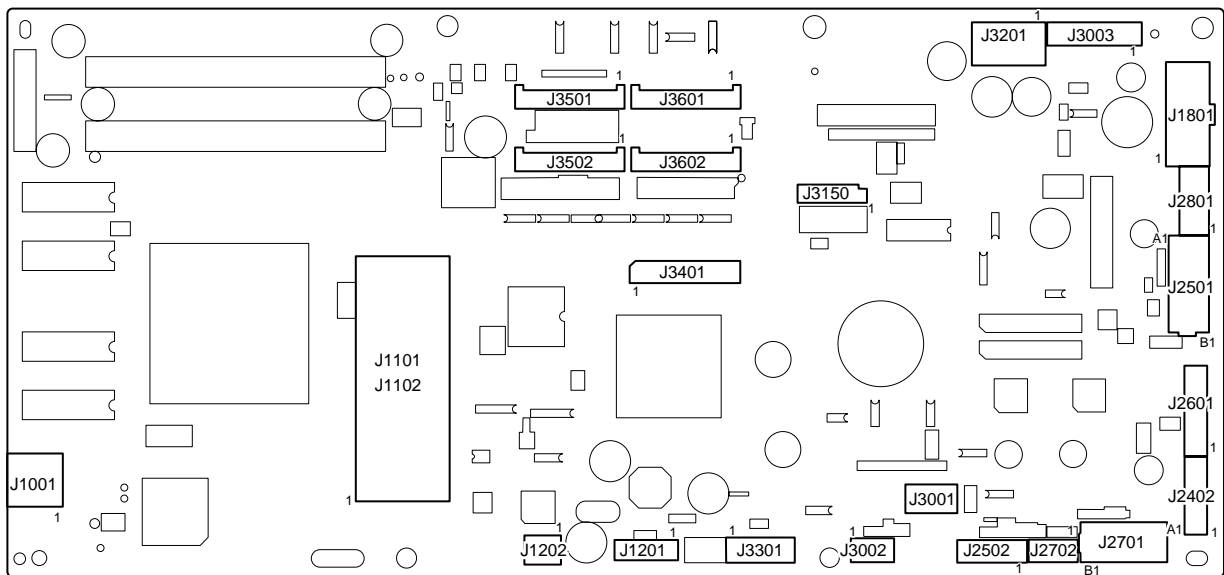
2. Precautions for Troubleshooting

- 1) Check the environmental conditions and the media used for printing.
 - 2) Before performing troubleshooting, make sure that all connectors and cables are connected properly.
 - 3) When servicing the printer with the external cover removed and the AC power supplied, be extremely careful to avoid electric shock and shorting electrical devices.
 - 4) In the following sections, the troubleshooting steps are described such that the component related to the most probable cause of the problem will be repaired or replaced first, being followed by components with less problem probability. If multiple components have the same problem probability, the steps are described beginning with the easiest one.
- After performing each step, check to see if the problem has been resolved by making test prints. If the problem persists, proceed to the next step.
- 5) After completion of the troubleshooting, check that all connectors and cables have been reconnected and screws have been tightened firmly.
 - 6) Whenever you have performed replacement or repair services, make test prints to check whether the problem has been resolved.

6.2 Location of Connectors and Pin Arrangement

6.2.1 Main controller PCB

iPF810 / iPF820 / iPF815 / iPF825



F-6-1
T-6-1

J1101/J1102			
Pin Number	Signal name	IN/OUT	Function
1	GND	-	GND
2	GND	-	GND
3	GND	-	GND
4	+3.3V	OUT	Power supply(+3.3V)
5	+3.3V	OUT	Power supply(+3.3V)
6	+3.3V	OUT	Power supply(+3.3V)
7	+3.3V	OUT	Power supply(+3.3V)
8	+3.3V	OUT	Power supply(+3.3V)
9	+3.3V	OUT	Power supply(+3.3V)
10	N.C.	-	N.C.
11	GND	-	GND
12	/PME	IN	Power management enable signal
13	/INTA	IN	Interrupt signal
14	GND	-	GND
15	/RST	OUT	PCI Reset signal
16	CLK	OUT	PCI Clock signal
17	/GNT	OUT	Ground signal

J1101/J1102			
Pin Number	Signal name	IN/OUT	Function
18	GND	-	GND
19	/REQ	IN	Request signal
20	AD31	IN/OUT	Address and data signal
21	AD30	IN/OUT	Address and data signal
22	AD29	IN/OUT	Address and data signal
23	AD28	IN/OUT	Address and data signal
24	GND	-	GND
25	AD27	IN/OUT	Address and data signal
26	AD26	IN/OUT	Address and data signal
27	AD25	IN/OUT	Address and data signal
28	AD24	IN/OUT	Address and data signal
29	/CBE3	IN/OUT	Bus command and byte enable signal
30	IDSEL	OUT	Inisharaization device select signal
31	GND	-	GND
32	GND	-	GND
33	AD23	IN/OUT	Address and data signal
34	AD22	IN/OUT	Address and data signal
35	AD21	IN/OUT	Address and data signal
36	AD20	IN/OUT	Address and data signal
37	GND	-	GND
38	AD19	IN/OUT	Address and data signal
39	AD18	IN/OUT	Address and data signal
40	AD17	IN/OUT	Address and data signal
41	AD16	IN/OUT	Address and data signal
42	/CBE2	OUT	Bus command and byte enable signal
43	GND	-	GND
44	/FRAME	IN/OUT	Cycle frame signal
45	/IRDY	IN/OUT	Initiator ready signal
46	/TRDY	IN/OUT	Target ready signal
47	/DEVSEL	IN/OUT	Device select signal
48	GND	-	GND
49	/STOP	IN/OUT	Stop signal
50	/LOCK	IN/OUT	Lock signal
51	/PERP	IN/OUT	Parity error signal
52	/SERR	IN/OUT	System error signal
53	PAR	IN/OUT	Parity signal
54	/CBE1	IN/OUT	Bus command and byte enable signal
55	GND	-	GND
56	GND	-	GND
57	AD15	IN/OUT	Address and data signal
58	AD14	IN/OUT	Address and data signal
59	AD13	IN/OUT	Address and data signal
60	AD12	IN/OUT	Address and data signal
61	GND	-	GND
62	AD11	IN/OUT	Address and data signal
63	AD10	IN/OUT	Address and data signal
64	AD9	IN/OUT	Address and data signal
65	AD8	IN/OUT	Address and data signal
66	/CBE0	IN/OUT	Bus command and byte enable signal
67	GND	-	GND
68	AD7	IN/OUT	Address and data signal
69	AD6	IN/OUT	Address and data signal
70	AD5	IN/OUT	Address and data signal
71	AD4	IN/OUT	Address and data signal
72	GND	-	GND
73	AD3	IN/OUT	Address and data signal
74	AD2	IN/OUT	Address and data signal
75	AD1	IN/OUT	Address and data signal
76	AD0	IN/OUT	Address and data signal
77	GND	-	GND
78	HDD_LED	-	N.C.
79	+5V	OUT	Power supply(+5V)
80	+5V	OUT	Power supply(+5V)
81	+5V	OUT	Power supply(+5V)
82	+3.3V	OUT	Power supply(+3.3V)

J1101/J1102			
Pin Number	Signal name	IN/OUT	Function
83	+3.3V	OUT	Power supply(+3.3V)
84	+3.3V	OUT	Power supply(+3.3V)
85	GND	-	GND
86	GND	-	GND
87	GND	-	GND
88	GND	-	GND

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J1201			
Pin Number	Signal name	IN/OUT	Function
1	AGND2	-	GND
2	TXP	OUT	Transmission Data
3	TXN	OUT	Transmission Data
4	AGND2	-	GND
5	RXN	IN	Receive Data
6	RXP	IN	Receive Data
7	AGND2	-	GND

T-6-3

J1202			
Pin Number	Signal name	IN/OUT	Function
1	HDD_LED	IN	Access signal
2	+5V	IN	Power supply(+5V)
3	GND	-	GND

T-6-4

J1801			
Pin Number	Signal name	IN/OUT	Function
1	AFCONT	OUT	Normal/Power saving switch signal
2	VM_ENB	OUT	VM enable signal
3	VMGND	-	GND
4	VMGND	-	GND
5	VM	IN	Power supply(+32V)
6	VM	IN	Power supply(+32V)
7	GND	-	GND
8	GND	-	GND
9	GND	-	GND
10	RGV20(+5V)	IN	Power supply(+5V)
11	RGV20(+5V)	IN	Power supply(+5V)
12	RGV20(+5V)	IN	Power supply(+5V)

T-6-5

J2402			
Pin Number	Signal name	IN/OUT	Function
1	VM_26V	OUT	Power supply(+26V)
2	MISTFAN_L_ALARM	OUT	Mist fan(L) alarm signal
3	MISTFAN_L_PWM	OUT	Mist fan(L) duty control signal
4	GND	-	GND

T-6-6

J2501			
Pin Number	Signal name	IN/OUT	Function
1	PUMPMI_AM	OUT	Purge motor drive signal AM
2	PUMPMI_AP	OUT	Purge motor drive signal AP
3	GND	-	GND
4	PUMPR_ENCA	IN	Pump encoder output signal A
5	RGV31(SNS5V_FU)	OUT	Power supply(+5V)
6	PUMPR_ENCB	IN	Pump encoder output signal B
7	RGV8(SNS3V)	OUT	Power supply(+3.3V)
8	GND	-	GND
9	/CONTROL_CAM_R	IN	Pump cam sensor output signal
10	RGV8(SNS3V)	OUT	Power supply(+3.3V)
11	GND	-	GND

J2501			
Pin Number	Signal name	IN/OUT	Function
12	/LIFT_CAM	IN	Lift cam sensor output signal
13	RGV8(SNS3V)	OUT	Power supply(+3.3V)
14	GND	-	GND
15	/CR_HP	IN	Carriage HP sensor output signal
16	OUT_LIFTM_VM	OUT	Power supply
17	OUT_LIFTM0_A	OUT	Lift motor drive signal A
18	OUT_LIFTM2_AX_N0	OUT	Lift motor drive signal AX
19	OUT_LIFTM1_B	OUT	Lift motor drive signal B
20	OUT_LIFTM3_BX_N1	OUT	Lift motor drive signal BX

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J2601			
Pin Number	Signal name	IN/OUT	Function
1	POWER_ON	IN	Power switch signal
2	GND	-	GND
3	RGV20(+5V)	OUT	Power supply(+5V)
4	BUZZER	OUT	Buzzer control signal
5	PDO	OUT	Panel IC control signal
6	+3.3V	OUT	Power supply(+3.3V)
7	PDI	OUT	Panel IC data signal
8	HDD_LED	OUT	HDD lamp control signal
9	/PRESET	OUT	Panel reset signal
10	GND	-	GND
11	PCK	OUT	Panel IC clock signal
12	PANEL_5V	OUT	Power supply(+5V)
13	/PCS	OUT	Panel IC chip select signal

T-6-8

J2403			
Pin Number	Signal name	IN/OUT	Function
1	GND	-	GND
2	/MEDIA_R	IN	Media sensor output signal
3	RGV10(MEDIA5V)	OUT	Power supply(+5V)
4	/ATUKAIJO_IN	IN	Pinch roller pressure release swiych output signal
5	GND	-	GND
6	MENT_SDA	IN/OUT	Maintenance cartridge ROM control signal (data)
7	MENT_SCL	IN/OUT	Maintenance cartridge ROM control signal (clock)
8	GND	-	GND
9	RGV28(UMF3V)	OUT	Power supply (+3.3V)
10	RVG17(VM_26V)	OUT	Power supply(+26V)
11	KYUINFAN_ALARM_IN	IN	Suction fan alarm signal
12	KYUINFAN_PWM_ON	OUT	Suction fan duty control signal
13	GND	-	GND
14	RGV17(VM_26V)	OUT	Power supply(+26V)
15	MISTFAN_R_ALARM	IN	Mist fan(R) alarm signal
16	MISTFAN_PWM	OUT	Mist fan duty control signal
17	GND	-	GND

T-6-9

J3003			
Pin Number	Signal name	IN/OUT	Function
1	/MAKITORI_UNIT	IN	Media take-up paper detection sensor
2	/MAKITORI_LOCK_SENS	IN	Media take-up on/off sensor output signal
3	/MAKITORI_VCC_ON	OUT	Power supply ON signal
4	MAKITORI_VM_ON	OUT	Power supply(+26V)
5	/MAKITORI_ENB	OUT	Media take-up drive enable signal
6	PHOTO_SENS_OUT	IN	Media take-up paper detection sensor output signal
7	RGV17(VM_26V)	OUT	Power supply(+26V)
8	RGV17(VM_26V)	OUT	Power supply(+26V)
9	GND	-	GND
10	GND	-	GND
11	RGV29(UMF5V)	OUT	Power supply(+5V)

T-6-10

J2401			
Pin Number	Signal name	IN/OUT	Function
1	INKBENMI_AM	OUT	Valve motor drive signal AM
2	INKBENMI_AP	OUT	Valve motor drive signal AP
3	RGV8(SNS3V)	OUT	Power supply(+3V)
4	GND	-	GND
5	/INKBEN_OPEN_R	IN	Valve open/close detection sensor output signal
6	/TANK_COVER_R	IN	Ink tank cover switch output signal
7	GND	-	GND
8	RGV8(SNS3V)	OUT	Power supply(+3V)
9	GND	-	GND
10	/INKBEN_CAM_R	IN	Agitation cam sensor output signal

T-6-11

J3201			
Pin Number	Signal name	IN/OUT	Function
1	TANK_CLK	OUT	Ink tank clock signal
2	GND	-	GND
3	OUT_TANK_DAT8	IN/OUT	Ink tank data signal 8
4	TANK_+3.3V	OUT	Power supply(+3.3V)
5	OUT_TANK_DAT7	IN/OUT	Ink tank data signal 7
6	OUT_TANK_DAT6	IN/OUT	Ink tank data signal 6
7	GND	-	GND
8	OUT_INK_DETECT6	IN	Ink detection sensor output signal 6
9	OUT_INK_DETECT7	IN	Ink detection sensor output signal 7
10	OUT_INK_DETECT8	IN	Ink detection sensor output signal 8
11	OUT_TANK_DAT11	IN/OUT	Ink tank data signal 11
12	OUT_TANK_DAT10	IN/OUT	Ink tank data signal 10
13	OUT_TANK_DAT9	IN/OUT	Ink tank data signal 9
14	OUT_INK_DETECT9	IN	Ink detection sensor output signal 9
15	OUT_INK_DETECT10	IN	Ink detection sensor output signal 10
16	OUT_INK_DETECT11	IN	Ink detection sensor output signal 11

T-6-12

J4002			
Pin Number	Signal name	IN/OUT	Function
1	GND	-	GND
2	YOBITOM_ENC_1A	IN	HP maintenance jet pump encoder output signal A
3	RGV7(SNS5V2)	OUT	Power supply(+5V)
4	YOBITOM_ENC_1B	IN	HP maintenance jet pump encoder output signal B
5	YOBITOKYUINMM_AM	OUT	HP maintenance jet purge motor drive signal AM
6	N.C	-	N.C
7	N.C	-	N.C
8	YOBITOKYUINMM_AP		HP maintenance jet purge motor drive signal AP

T-6-13

J3152			
Pin Number	Signal name	IN/OUT	Function
1	RGV16(VM32V)	OUT	Power supply(+32V)
2	RGV16(VM32V)	IN	Upper cover lock switch output signal

T-6-14

J2702			
Pin Number	Signal name	IN/OUT	Function
1	RGN17(VM_26V)	OUT	Power supply(+26V)
2	DCOVER_R	OUT	Upper cover lock solenoid(R) drive signal
3	RGV8(SNS3V)	OUT	Power supply (+3.3V)
4	GND	-	GND
5	/CUTTERM_SNS_R	IN	Cutter HP sensor output signal
6	GND	-	GND
7	/FUTO_CLMP	OUT	Head management sensor clamp signal
8	/FUTO_ON	OUT	Head management sensor ON signal
9	RGV31(SNS5V_FU)	OUT	Power supply(+5V)

J2702			
Pin Number	Signal name	IN/OUT	Function
10	/FUTO_CMP	IN	Head management sensor ink detection signal
11	N.C	-	N.C
12	N.C	-	N.C
13	N.C	-	N.C
14	N.C	-	N.C

T-6-15

J3002			
Pin Number	Signal name	IN/OUT	Function
1	TH2_OUT	IN	Thermister output signal
2	GND	-	GND
3	RH2_OUT	IN	Temperature/humidity sensor output signal
4	RGV29(UMF5V)	OUT	Power supply(+5v)

T-6-16

J3801			
Pin Number	Signal name	IN/OUT	Function
1	RGV8(SNS3V)	OUT	Power supply(+3V)
2	GND	-	GND
3	/PICKUP_ATUKAIJO_SNS_1	IN	Roll media pick-up cam sensor output signal
4	RGV7(SNS5V2)	OUT	Power supply(+5V)
5	/KYUUSHI_SNS_F	IN	Roll media detection sensor output signal
6	GND	-	GND
7	RGV7(SNS5V2)	OUT	Power supply(+5V)
8	/KYUUSHI_SNS_R1		Roll media pick-up roller paper detection sensor output signal
9	GND	-	GND
10	RGV7(SNS5V2)	OUT	Power supply(+5V)
11	/YOUSHIHABA_SNS		Roll media width detection sensor output signal
12	GND	-	GND

T-6-17

J4003			
Pin Number	Signal name	IN/OUT	Function
1	OUT_ZENMENM_B	OUT	Roll media pick-up motor drive signal B
2	OUT_ZENMENM_A	OUT	Roll media pick-up motor drive signal A
3	OUT_ZENMENM_BB	OUT	Roll media pick-up motor drive signal BB
4	OUT_ZENMENM_AB	OUT	Roll media pick-up motor drive signal AB

T-6-18

J3901			
Pin Number	Signal name	IN/OUT	Function
1	RGN19(VM_26V_2)	OUT	Power supply(+26V)
2	PICKUP_CL_OUT	OUT	Roll media pick-up cam clutch drive signal
3	RGN19(VM_26V_2)	OUT	Power supply(+26V)
4	KYUUSHI_CL_OUT	OUT	Roll media pick-up roller clutch drive signal
5	RGN19(VM_26V_2)	OUT	Power supply(+26V)
6	FLAPPER_SOL_OUT	OUT	Flapper solenoid drive signal
7	RGN19(VM_26V_2)	OUT	Power supply(+26V)
8	PINCH_CL_OUT	OUT	Pinch roller pressure clutch drive signal
9	RGV8(SNS3V)	OUT	Power supply(+3V)
10	GND	-	GND
11	/PINCH_CLOSE_SNS	IN	Pinch roller pressure detection sensor output signal
12	RGV8(SNS3V)	OUT	Power supply(+3V)
13	GND	-	GND
14	/PINCH_OPEN_SNS	IN	Pinch roller release detection sensor output signal
15	N.C	-	N.C

T-6-19

J3902			
Pin Number	Signal name	IN/OUT	Function
1	OUT_LENIP_BB	OUT	Pinch roller pressure motor drive signal BB
2	OUT_LENIP_B	OUT	Roll media pick-up motor drive signal B
3	OUT_LENIP_AB	OUT	Roll media pick-up motor drive signal AB

J3902			
Pin Number	Signal name	IN/OUT	Function
4	OUT_LENIP_A	OUT	Roll media pick-up motor drive signal A

T-6-20

J3151			
Pin Number	Signal name	IN/OUT	Function
1	RGV16(VM32V)	OUT	Power supply(+32V)
2	RGV16(VM32V)	IN	Upper cover lock switch output signal
3	N.C	-	N.C

T-6-21

J4001			
Pin Number	Signal name	IN/OUT	Function
A1	GND	-	GND
A2	LF_FNCA	IN	Feed roller encoder output signal A
A3	RGV29(UMF5V)	OUT	Power supply(+5V)
A4	LF_FNCB	IN	Feed roller encoder output signal B
A5	SNS3V(RGV18)	OUT	Power supply(+3.3V)
A6	GND	-	GND
A7	/LF_HP	IN	Feed roller HP sensor output signal
A8	GND	-	GND
A9	SPOOL_ENCA	-	N.C
A10	RGV29(UMF5V)	-	N.C
A11	SPOOL_ENCB	-	N.C
A12	N.C	-	N.C
A13	N.C	-	N.C
A14	N.C	-	N.C
B1	RGV19(VM_26V_2)	OUT	Power supply(+26V)
B2	YOBITOKYUUIIN_FAN_ALA RM_2		BP maintenance jet suction fan alarm signal
B3	GND	-	GND
B4	RGV8(SNS3V)	OUT	Power supply(+3.3V)
B5	GND	-	GND
B6	/CUTTERM_SNS_L	IN	Cutter left position sensor output signal
B7	CUTTERM_AM	OUT	Cutter motor drive signal AM
B8	CUTTERM_AP	OUT	Cutter motor drive signal AP
B9	RGV17(VM26V)	OUT	Power supply(+26V)
B10	DCOVER_L	OUT	Upper cover lock solenoid (L) drive signal
B11	RGV17(VM26V)	OUT	Power supply(+26V)
B12	SPOOL_CL_1OUT	OUT	Roll media rewinding clutch drive signal
B13	RGV17(VM26V)	OUT	Power supply(+26V)
B14	SPOOL_CL_2_OUT	OUT	Roll media pick-up roller clutch drive signal

T-6-22

J3150			
Pin Number	Signal name	IN/OUT	Function
1	IN 3-	IN	Hole sensor input signal 3-
2	IN 3+	IN	Hole sensor input signal 3+
3	IN 1+	IN	Hole sensor input signal 1+
4	IN 2-	IN	Hole sensor input signal 2-
5	IN 1-	IN	Hole sensor input signal 1-
6	IN 2+	IN	Hole sensor input signal 2+
7	VM_GND	-	GND
8	+5V	OUT	Power supply (+5V)
9	OUT B	OUT	Motor output signal B
10	OUT B	OUT	Motor output signal B
11	OUT A	OUT	Motor output signal A
12	OUT A	OUT	Motor output signal A
13	OUT C	OUT	Motor output signal C
14	OUT C	OUT	Motor output signal C

T-6-23

J2801			
Pin Number	Signal name	IN/OUT	Function
1	OUT_LFSP_A	OUT	Feed motor drive signal A
2	OUT_LFSP_VM	OUT	Power supply(+32V)
3	OUT_LFSP_AB	OUT	Feed motor drive signal AB
4	OUT_LFSP_BB	OUT	Feed motor drive signal BB
5	OUT_LFSP_VM	OUT	Power supply(+32V)
6	OUT_LFSP_B	OUT	Feed motor drive signal B

T-6-24

J4101			
Pin Number	Signal name	IN/OUT	Function
A1	/OP_DACCHAKU_R_IN	IN	Lower roll unit release detection switch (R) output signal
A2	/OP_DACCHAKU_L_IN	IN	Lower roll unit release detection switch (L) output signal
A3	OP_KYUUSHI_UNIT	-	GND
A4	OP_FLAPPER_SOL	OUT	Lower flapper solenoid drive signal
A5	OP_PICKUP_CL	OUT	Lower roll media pick-up cam clutch drive signal
A6	OP_KYUUSHI_CL	OUT	Lower roll media pick-up roller clutch drive signal
A7	GND	-	GND
A8	GND	-	GND
A9	RGV19(VM_26V_2)	OUT	Power supply(+26V)
A10	RGV19(VM_26V_2)	OUT	Power supply(+26V)
A11	GND	-	GND
A12	RGV29(UMF5V)	OUT	Power supply(+26V)
A13	OP_SPOOL_ENCA_IN	-	N.C
A14	OP_KYUUSHI_VM_ON_OUT	OUT	Power supply(+26V)
A15	OP_KYUUSHI_VM_ENB_IN	-	GND
A16	KADANM_ENCA_IN	-	GND
B1	KADANM_ENCB_IN	-	GND
B2	OP_KYUUSHI_3V_ON	OUT	Power supply(+3.3V)
B3	OP_KYUUSHI_5V_ON	OUT	Power supply(+5V)
B4	GND	-	GND
B5	RGV28(UMF3V)	OUT	Power supply(+3.3V)
B6	OP_SPOOL_ENCB_IN	-	N.C
B7	OP_SPOOL_CL_2_OUT	OUT	Lower roll media pick-up pressure clutch
B8	OP_SPOOL_CL_1_OUT	OUT	Lower roll media rewinding clutch drive signal
B9	/TMDV_SLEEP6	OUT	Lower roll media pick-up motor control signal
B10	KADANM_CLK_PHS	OUT	Lower roll media pick-up motor control signal
B11	KADANM_DATA	OUT	Lower roll media pick-up motor control signal
B12	KADANM_STB_ENB	OUT	Lower roll media pick-up motor control signal
B13	/OP_PICHUP_ATSUKAI_SNS_1	IN	Lower roll media pick-up cam sensor output signal
B14	/OP_YOUSHIHABA_SNS	IN	Lower roll media width detection sensor output signal
B15	/OP_KYUUSHI_SNS_R1	IN	Lower roll media pick-up roller paper detection sensor output signal
B16	/OP_KYUUSHI_SNS_F	IN	Lower roll media detection sensor output signal

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J3601			
Pin Number	Signal name	IN/OUT	Function
1	FFC	IN	FFC disconnection detection signal
2	ENCODER_B	IN	Linear encoder output signal B
3	ENCODER_A	IN	Linear encoder output signal A
4	/CR_COVER	IN	Printhead fixer lever sensor output signal
5	/OUT_ENB	OUT	Head data enable signal
6	H-DASH_LICC2_B	OUT	Head analogue switch A/D trigger signal
7	GND	-	GND
8	H1-D-DATA-7-OD_B	OUT	Odd head(R) data signal 7(D)
9	GND	-	GND
10	H1-E-HE-8_B	OUT	Head(R) heat enable signal 8(E)
11	GND	-	GND
12	H1-E-DATA-8-OD_B	OUT	Odd head(R) data signal 8(E)
13	GND	-	GND
14	H1-F-DATA-10-OD_B	OUT	Odd head(R) data signal 10(F)

J3601			
Pin Number	Signal name	IN/OUT	Function
15	GND	-	GND
16	H1-E-DATA-9-OD_B	OUT	Odd head(R) data signal 9(E)
17	GND	-	GND
18	H1-F-HE-10_B	OUT	Head(R) heat enable signal 10(F)
19	GND	-	GND
20	H1-F-DATA-11-OD_B	OUT	Odd head(R) data signal 11(F)
21	GND	-	GND
22	H1-F-HE-11_B	OUT	Head(R) heat enable signal 11(F)
23	GND	-	GND
24	H1-F-DATA-11-EV_B	OUT	Even head(R) data signal 11(F)
25	GND	-	GND
26	H1-F-DATA-10-EV_B	OUT	Even head(R) data signal 10(F)
27	GND	-	GND
28	H1-E-HE-9_B	OUT	Head(R) heat enable signal 9(E)
29	GND	-	GND
30	H1-E-DATA-9-EV_B	OUT	Even head(R) data signal 9(E)
31	GND	-	GND
32	VH_DIS	OUT	VH selection signal
33	H1-DASLK_LICC2	OUT	Head(R) analogue switch clock signal
34	H1-DLD_LICC2	OUT	Head(R) analogue switch latch signal
35	H1-DATA_LICC2	OUT	Head(R) analogue switch data signal
36	PWLED2_ON	OUT	Multi sensor LED2 drive signal
37	PWLED1_ON	OUT	Multi sensor LED1 drive signal
38	PWLED3_ON	OUT	Multi sensor LED3 drive signal
39	H3V_ON	OUT	Power supply
40	MLT_SENS_1IN	IN	Multi sensor signal 1
41	MLT_SENS_2IN	IN	Multi sensor signal 2
42	PWLED4_ON	OUT	Multi sensor LED4 drive signal
43	GND	-	GND
44	H1-B-DATA-2-OD_B	OUT	Odd head(R) data signal 2(B)
45	GND	-	GND
46	H1-B-DATA-3-OD_B	OUT	Odd head(R) data signal 1(B)
47	GND	-	GND
48	H1-C-HE-4_B	OUT	Head(R) heat enable signal 4(C)
49	GND	-	GND
50	H1-C-DATA-4-OD_B	OUT	Odd head(R) data signal 4(C)

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J3602			
Pin Number	Signal name	IN/OUT	Function
1	IO_ASIC_SDA	IN/OUT	Head ROM controll signal(data)
2	IO_ASIC_SCL	IN/OUT	Head ROM controll signal(clock)
3	GND	-	GND
4	H1-E-DATA-8-EV_B	OUT	Even head(L) data signal 8(E)
5	OUT ENB	OUT	Head data enable signal
6	H1-D-HE-7_B	OUT	Head(L) heat enable signal 7(D)
7	GND	-	GND
8	H1-D-DATA-7-EV_B	OUT	Even head(L) data signal 7(D)
9	GND	-	GND
10	H1-D-DATA-6-EV_B	OUT	Even head(L) data signal 6(D)
11	GND	-	GND
12	H1-D-DATA-6-OD_B	OUT	Odd head(L) data signal 6(D)
13	GND	-	GND
14	H1-D-HE-6_B	OUT	Head(L) heat enable signal 6(D)
15	GND	-	GND
16	H1-C-HE-5_B	OUT	Head(L) heat enable signal 5(C)
17	GND	-	GND
18	H1-C-DATA-5-OD_B	OUT	Odd head(L) data signal 5(C)
19	GND	-	GND
20	H1-DSOUT2	OUT	Head temperature output signal 2
21	H1-DSOUT1	OUT	Head temperature output signal 1
22	GND	-	GND
23	GND	-	GND
24	H1_CLK_B	OUT	Head(L) clock signal
25	GND	-	GND

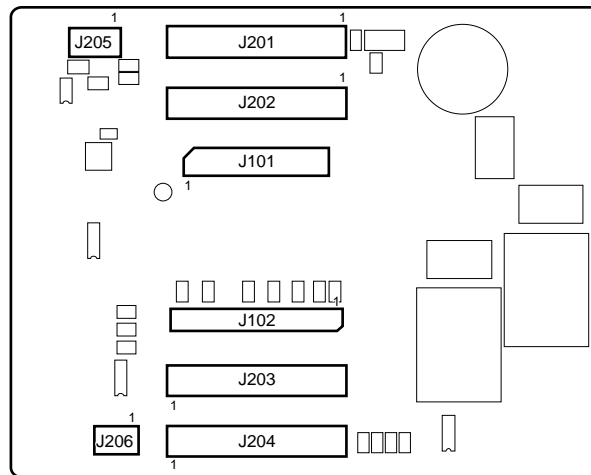
J3602			
Pin Number	Signal name	IN/OUT	Function
26	H1_LT_B	OUT	Head(L) latch signal
27	GND	-	GND
28	H1-C-DATA-5-EV_B	OUT	Even head(L) data signal 5(C)
29	GND	-	GND
30	H1-B-HE-3_B	OUT	Head(L) heat enable signal 3(B)
31	GND	-	GND
32	H1-C-DATA-4-EV_B	OUT	Even head(L) data signal 4(C)
33	GND	-	GND
34	H1-B-DATA-3-EV_B	OUT	Even head(L) data signal 3(B)
35	GND	-	GND
36	H1-B-DATA-2-EV_B	OUT	Even head(L) data signal 2(B)
37	GND	-	GND
38	H1-A-DATA-1-EV_B	OUT	Even head(L) data signal 1(A)
39	GND	-	GND
40	H1-A-HE-1_B	OUT	Head(L) heat enable signal 1(A)
41	GND	-	GND
42	H1-A-DATA-0-EV_B	OUT	Even head(L) data signal 0(A)
43	GND	-	GND
44	H1-A-HE-0_B	OUT	Head(L) heat enable signal 0(A)
45	GND	-	GND
46	H1-A-DATA-0-OD_B	OUT	Odd head(L) data signal 0(A)
47	GND	-	GND
48	H1-A-DATA-1-OD_B	OUT	Odd head(L) data signal 1(A)
49	GND	-	GND
50	H1-B-HE-2_B	OUT	Head(L) heat enable signal 2(B)

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J3401			
Pin Number	Signal name	IN/OUT	Function
1	VMGND	-	GND
2	VMGND	-	GND
3	VMGND	-	GND
4	VMGND	-	GND
5	VH_MONI1	IN	VH controll signal 1
6	VH_ENB	OUT	VH power supply ON/OFF signal
7	VH_MONI2	IN	VH controll signal 2
8	GND	-	GND
9	+3.3V	OUT	Power supply(+3.3V)
10	+3.3V	OUT	Power supply(+3.3V)
11	GND	-	GND
12	SNS5V	OUT	Power supply(+5V)
13	SNS5V	OUT	Power supply(+5V)
14	VM	OUT	Power supply(+32V)
15	VM	OUT	Power supply(+32V)
16	VM	OUT	Power supply(+32V)
17	VM	OUT	Power supply(+32V)
18	VM	OUT	Power supply(+32V)
19	VM	OUT	Power supply(+32V)
20	VM	OUT	Power supply(+32V)
21	VM	OUT	Power supply(+32V)
22	VMGND	-	GND
23	VMGND	-	GND
24	VMGND	-	GND
25	VMGND	-	GND

6.2.2 Carriage relay PCB

iPF810 / iPF820 / iPF815 / iPF825

F-6-2
T-6-28

J101			
Pin Number	Signal name	IN/OUT	Function
1	VMGND	-	GND
2	VMGND	-	GND
3	VMGND	-	GND
4	VMGND	-	GND
5	VM	IN	Power supply(+32V)
6	VM	IN	Power supply(+32V)
7	VM	IN	Power supply(+32V)
8	VM	IN	Power supply(+32V)
9	VM	IN	Power supply(+32V)
10	VM	IN	Power supply(+32V)
11	VM	IN	Power supply(+32V)
12	VM	IN	Power supply(+32V)
13	SNS5V	IN	Power supply(+5V)
14	SNS5V	IN	Power supply(+5V)
15	GND	-	GND
16	+3.3V	IN	Power supply(+3.3V)
17	+3.3V	IN	Power supply(+3.3V)
18	GND	-	GND
19	VH_MONI2	OUT	VH control signal 2
20	VH_ENB	IN	VH power ON/OFF signal
21	VH_MONI1	OUT	VH control signal 1
22	VMGND	-	GND
23	VMGND	-	GND
24	VMGND	-	GND
25	VMGND	-	GND

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J201			
Pin Number	Signal name	IN/OUT	Function
1	H1-C-DATA-4-OD_B	IN	Odd head(L) data signal 4(C)
2	GND	-	GND
3	/H1-C-HE-4_B	IN	Head(L) heat enable signal 4(C)
4	GND	-	GND
5	H1-B-DATA-3-OD_B	IN	Odd head(L) data signal 1(B)
6	GND	-	GND
7	H1-B-DATA-2-OD_B	IN	Odd head(L) data signal 2(B)
8	GND	-	GND
9	PWLED4_ON	IN	Multi sensor LED4 drive control
10	MLT_SENS_2IN	OUT	Multi sensor signal 2
11	MLT_SENS_IIN	OUT	Multi sensor signal 1
12	/H3V_ON	IN	Power supply
13	PWLED3_ON	IN	Multi sensor LED3 drive control

J201			
Pin Number	Signal name	IN/OUT	Function
14	PWLED1_ON	IN	Multi sensor LED1 drive control
15	PWLED2_ON	IN	Multi sensor LED2 drive control
16	H1-DATA_LICCC2	IN	Head(L) analogue switch data signal
17	H1-DLD_LICCC2	IN	Head(L) analogue switch latch signal
18	H1-DASLK_LICCC2	IN	Head(L) analogue switch clock signal
19	VH_DIS	IN	VH selection single
20	GND	-	GND
21	H1-E-DATA-9-EV_B	IN	Even head(L) data signal 9(E)
22	GND	-	GND
23	/H1-E-HE-9_B	IN	Head(L) heat enable signal 9(E)
24	GND	-	GND
25	H1-F-DATA-10-EV_B	IN	Even head(L) data signal 10(F)
26	GND	-	GND
27	H1-F-DATA-11-EV_B	IN	Even head(L) data signal 11(F)
28	GND	-	GND
29	/H1-F-HE-11_B	IN	Head(L) heat enable signal 11(F)
30	GND	-	GND
31	H1-F-DATA-11-OD_B	IN	Odd head(L) data signal 11(F)
32	GND	-	GND
33	/H1-F-HE-10_B	IN	Head(L) heat enable signal 10(F)
34	GND	-	GND
35	H1-E-DATA-9-OD_B	IN	Odd head(L) data signal 9(E)
36	GND	-	GND
37	H1-F-DATA-10-OD_B	IN	Odd head(L) data signal 10(F)
38	GND	-	GND
39	H1-E-DATA-8-OD_B	IN	Odd head(L) data signal 8(E)
40	GND	-	GND
41	/H1-E-HE-8_B	IN	Head(L) heat enable signal 8(E)
42	GND	-	GND
43	H1-D-DATA-7-OD_B	IN	Odd head(L) data signal 7(D)
44	GND	-	GND
45	H-DASH_LICCC2	IN	Head analogue switch A/D trigger signal
46	/OUT_ENB	IN	Head data enable signal
47	/CRCOVER	OUT	Printhead fixer lever sensor output signal
48	ENCODER_A	OUT	Linear encoder output signal A
49	ENCODER_B	OUT	Linear encoder output signal B
50	FFC	OUT	FFC disconnection detection signal

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J202			
Pin Number	Signal name	IN/OUT	Function
1	/H1-B-HE-2_B	IN	Head(L) heat enable signal 2(B)
2	GND	-	GND
3	H1-A-DATA-1-OD_B	IN	Odd head(L) data signal 1(A)
4	GND	-	GND
5	H1-A-DATA-0-OD_B	IN	Odd head(L) data signal 0(A)
6	GND	-	GND
7	/H1-A-HE-0_B	IN	Head(L) heat enable signal 0(A)
8	GND	-	GND
9	H1-A-DATA-0-EV_B	IN	Even head(L) data signal 0(A)
10	GND	-	GND
11	/H1-A-HE-1_B	IN	Head(L) heat enable signal 1(A)
12	GND	-	GND
13	H1-A-DATA-1-EV_B	IN	Even head(L) data signal 1(A)
14	GND	-	GND
15	H1-B-DATA-2-EV_B	IN	Even head(L) data signal 2(B)
16	GND	-	GND
17	H1-B-DATA-3-EV_B	IN	Even head(L) data signal 3(B)
18	GND	-	GND
19	H1-C-DATA-4-EV_B	IN	Even head(L) data signal 4(C)
20	GND	-	GND
21	/H1-B-HE-3_B	IN	Head(L) heat enable signal 3(B)
22	GND	-	GND
23	H1-C-DATA-5-EV_B	IN	Even head(L) data signal 5(C)
24	GND	-	GND

J202			
Pin Number	Signal name	IN/OUT	Function
25	/H1_LT_B	IN	Head(L) latch signal
26	GND	-	GND
27	LV_H1_CLKP	IN	Head(L) clock signal P
28	LV_H1_CLKN	IN	Head(L) clock signal N
29	GND	-	GND
30	H1-DSOUT1	OUT	Head(L) temperature output signal 1
31	H1-DSOUT2	OUT	Head(L) temperature output signal 2
32	GND	-	GND
33	H1-C-DATA-5-OD_B	IN	Odd head(L) data signal 5(C)
34	GND	-	GND
35	/H1-C-HE-5_B	IN	Head(L) heat enable signal 5(C)
36	GND	-	GND
37	/H1-D-HE-6_B	IN	Head(L) heat enable signal 6(D)
38	GND	-	GND
39	H1-D-DATA-6-OD_B	IN	Odd head(L) data signal 6(D)
40	GND	-	GND
41	H1-D-DATA-6-EV_B	IN	Even head(L) data signal 6(D)
42	GND	-	GND
43	H1-D-DATA-7-EV_B	IN	Even head(L) data signal 7(D)
44	GND	-	GND
45	/H1-D-HE-7_B	IN	Head(L) heat enable signal 7(D)
46	GND	-	GND
47	H1-E-DATA-8-EV_B	IN	Even head(L) data signal 8(E)
48	GND	-	GND
49	IO_ASIC_SCL	IN/OUT	Head ROM control signal(clock)
50	IO_ASIC_SDA	IN/OUT	Head ROM control signal(data)

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J205			
Pin Number	Signal name	IN/OUT	Function
1	ENCODER_B	IN	Linear encoder output signal B
2	GND	-	GND
3	ENCODER_A	IN	Linear encoder output signal A
4	SNS_5V	OUT	Power supply(+5V)

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J206			
Pin Number	Signal name	IN/OUT	Function
1	SNS_5V	OUT	Power supply(+5V)
2	GND	-	GND
3	/CRCOVER	IN	Printhead fixer lever sensor output signal

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J204			
Pin Number	Signal name	IN/OUT	Function
1	GND	-	GND
2	SNS5V	OUT	Power supply(+5V)
3	GND	-	GND
4	MLT_SENS_2IN	IN	Multi sensor signal 2
5	GND	-	GND
6	MLT_SENS_IIN	IN	Multi sensor signal 1
7	GND	-	GND
8	H1-C-DATA-4-OD	OUT	Odd head(L) data signal 4(C)
9	GND	-	GND
10	/H1-C-HE-4	OUT	Head(L) heat enable signal 4(C)
11	GND	-	GND
12	H1-B-DATA-3-OD	OUT	Odd head(L) data signal 3(B)
13	GND	-	GND
14	H1-B-DATA-2-OD	OUT	Odd head(L) data signal 2(B)
15	GND	-	GND
16	/H1-B-HE-2	OUT	Head(L) heat enable signal 2(B)
17	GND	-	GND
18	H1-A-DATA-1-OD	OUT	Odd head(L) data signal 1(A)
19	GND	-	GND

J204			
Pin Number	Signal name	IN/OUT	Function
20	H1-A-DATA-0-OD	OUT	Odd head(L) data signal 0(A)
21	GND	-	GND
22	/H1-A-HE-0	OUT	Head(L) heat enable signal 0(A)
23	GND	-	GND
24	H1-A-DATA-0-EV	OUT	Even head(L) data signal 0(A)
25	GND	-	GND
26	H1-A-DATA-1-EV	OUT	Even head(L) data signal 1(A)
27	GND	-	GND
28	/H1-A-HE-1	OUT	Head(L) heat enable signal 1(A)
29	GND	-	GND
30	H1-B-DATA-2-EV	OUT	Even head(L) data signal 2(B)
31	GND	-	GND
32	IO_ASIC_SDA	IN/OUT	Head ROM control signal(data)
33	GND	-	GND
34	IO_ASIC_SCL	OUT	Head ROM control signal(clock)
35	GND	-	GND
36	/H1_LT	OUT	Head(L) latch signal
37	GND	-	GND
38	H1_CLK	OUT	Head(L) clock signal
39	GND	-	GND
40	H1-DSOUT1	IN	Head(L) temperature output signal 1
41	GND	-	GND
42	H1-DSOUT2	IN	Head(L) temperature output signal 2
43	GND	-	GND
44	H1-DLD_LICC2	OUT	Head(L) analogue switch latch signal
45	GND	-	GND
46	H1-DATA_LICC2	OUT	Head(L) analogue switch data signal
47	GND	-	GND
48	H1-DASLK_LICC2	OUT	Head(L) analogue switch clock signal
49	GND	-	GND
50	H-DASH_LICC2	OUT	Head analogue switch A/D trigger signal

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J203			
Pin Number	Signal name	IN/OUT	Function
1	GND	-	GND
2	/LIFT CAM IN	-	GND
3	GND	-	GND
4	H1-B-DATA-3-EV	OUT	Even head(L) data signal 3(B)
5	GND	-	GND
6	/H1-B-HE-3	OUT	Head(L) heat enable signal 3(B)
7	GND	-	GND
8	H1-C-DATA-4-EV	OUT	Even head(L) data signal 4(C)
9	GND	-	GND
10	H1-C-DATA-5-EV	OUT	Even head(L) data signal 5(C)
11	GND	-	GND
12	/H1-C-HE-5	OUT	Head(L) heat enable signal 5(C)
13	GND	-	GND
14	H1-C-DATA-5-OD	OUT	Odd head(L) data signal 5(C)
15	GND	-	GND
16	H1-D-DATA-7-OD	OUT	Odd head(L) data signal 7(D)
17	GND	-	GND
18	H1-D-DATA-6-OD	OUT	Odd head(L) data signal 6(D)
19	GND	-	GND
20	/H1-D-HE-6	OUT	Head(L) heat enable signal 6(D)
21	GND	-	GND
22	H1-D-DATA-6-EV	OUT	Even head(L) data signal 6(D)
23	GND	-	GND
24	H1-D-DATA-7-EV	OUT	Even head(L) data signal 7(D)
25	GND	-	GND
26	/H1-D-HE-7	OUT	Head(L) heat enable signal 7(D)
27	GND	-	GND
28	H1-E-DATA-8-EV	OUT	Even head(L) data signal 8(E)
29	GND	-	GND
30	H1-E-DATA-9-EV		Even head(L) data signal 9(E)

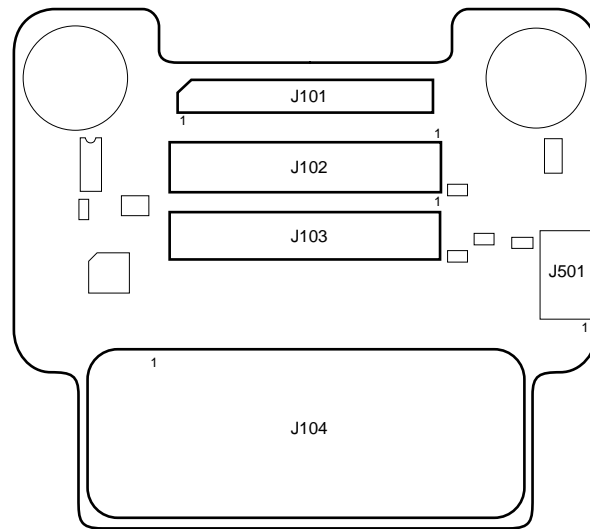
J203			
Pin Number	Signal name	IN/OUT	Function
31	GND	-	GND
32	/H1-E-HE-9	OUT	Head(L) heat enable signal 9(E)
33	GND	-	GND
34	H1-F-DATA-10-EV	OUT	Even head(L) data signal 10(F)
35	GND	-	GND
36	H1-F-DATA-11-EV	OUT	Even head(L) data signal 11(F)
37	GND	-	GND
38	/H1-F-HE-11	OUT	Head(L) heat enable signal 11(F)
39	GND	-	GND
40	H1-F-DATA-11-OD	OUT	Odd head(L) data signal 11(F)
41	GND	-	GND
42	H1-F-DATA-10-OD	OUT	Odd head(L) data signal 10(F)
43	GND	-	GND
44	/H1-F-HE-10	OUT	Head(L) heat enable signal 10(F)
45	GND	-	GND
46	H1-E-DATA-9-OD	OUT	Odd head(L) data signal 9(E)
47	GND	-	GND
48	H1-E-DATA-8-OD	OUT	Odd head(L) data signal 8(E)
49	GND	-	GND
50	/H1-E-HE-8	OUT	Head(L) heat enable signal 8(E)

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J102			
Pin Number	Signal name	IN/OUT	Function
1	GND	-	GND
2	VH1 2	OUT	Power supply
3	VH2 (Feedback)	IN	VH2 feed back voltage
4	VH2	OUT	Power supply
5	VH2	OUT	Power supply
6	VH2	OUT	Power supply
7	VH2	OUT	Power supply
8	VH2	OUT	Power supply
9	VH2	OUT	Power supply
10	GND	-	GND
11	GND	-	GND
12	GND	-	GND
13	GND	-	GND
14	GND	-	GND
15	VH1	OUT	Power supply
16	VH1	OUT	Power supply
17	VH1	OUT	Power supply
18	VH1	OUT	Power supply
19	VH1	OUT	Power supply
20	VH1	OUT	Power supply
21	VH1 (Feedback)	IN	VH2 feed back voltage
22	GND	-	GND
23	GND	-	GND
24	H3V 1		Power supply
25	GND	-	GND
26	PWLED4	OUT	Multi sensor LED4 drive signal
27	PWLED3	OUT	Multi sensor LED3 drive signal
28	PWLED2	OUT	Multi sensor LED2 drive signal
29	PWLED1	OUT	Multi sensor LED1 drive signal
30	GND	-	

6.2.3 Head relay PCB

iPF810 / iPF820 / iPF815 / iPF825

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J103			
Pin Number	Signal name	IN/OUT	Function
1	H-DASH_LICC2	OUT	Head analogue switch A/D trigger signal
2	GND	-	GND
3	H1-DASLK_LICC2	OUT	Head(L) analogue switch clock signal
4	GND	-	GND
5	H1-DATA_LICC2	OUT	Head(L) analogue switch data signal
6	GND	-	GND
7	H1-DLD_LICC2	OUT	Head(L) analogue switch latch signal
8	GND	-	GND
9	H1-DSOUT2	IN	Head(L) temperature output signal 2
10	GND	-	GND
11	H1-DSOUT1	IN	Head(L) temperature output signal 1
12	GND	-	GND
13	H1_CLK	OUT	Head(L) clock signal
14	GND	-	GND
15	/H1_LT	OUT	Head(L) latch signal
16	GND	-	GND
17	IO_ASIC_SCL	OUT	Head ROM control signal(clock)
18	GND	-	GND
19	IO_ASIC_SDA	IN/OUT	Head ROM control signal(data)
20	GND	-	GND
21	H1-B-DATA-2-EV	OUT	Even head(L) data signal 2(B)
22	GND	-	GND
23	/H1-A-HE-1	OUT	Head(L) heat enable signal 1(A)
24	GND	-	GND
25	H1-A-DATA-1-EV	OUT	Even head(L) data signal 1(A)
26	GND	-	GND
27	H1-A-DATA-0-EV	OUT	Even head(L) data signal 0(A)
28	GND	-	GND
29	/H1-A-HE-0	OUT	Head(L) heat enable signal 0(A)
30	GND	-	GND
31	H1-A-DATA-0-OD	OUT	Odd head(L) data signal 0(A)
32	GND	-	GND
33	H1-A-DATA-1-OD	OUT	Odd head(L) data signal 1(A)
34	GND	-	GND
35	/H1-B-HE-2	OUT	Head(L) heat enable signal 2(B)
36	GND	-	GND
37	H1-B-DATA-2-OD	OUT	Odd head(L) data signal 2(B)
38	GND	-	GND
39	H1-B-DATA-3-OD	OUT	Odd head(L) data signal 3(B)
40	GND	-	GND

J103			
Pin Number	Signal name	IN/OUT	Function
41	/H1-C-HE-4	OUT	Head(L) heat enable signal 4(C)
42	GND	-	GND
43	H1-C-DATA-4-OD	OUT	Odd head(L) data signal 4(C)
44	GND	-	GND
45	MLT_SENS_1IN	IN	Multi sensor signal 1
46	GND	-	GND
47	MLT_SENS_2IN	IN	Multi sensor signal 2
48	GND	-	GND
49	SNS5V	OUT	Power supply(+5V)
50	GND	-	GND

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J102			
Pin Number	Signal name	IN/OUT	Function
1	/H1-E-HE-8	OUT	Head(L) heat enable signal 8(E)
2	GND	-	GND
3	H1-E-DATA-8-OD	OUT	Odd head(L) data signal 8(E)
4	GND	-	GND
5	H1-E-DATA-9-OD	OUT	Odd head(L) data signal 9(E)
6	GND	-	GND
7	/H1-F-HE-10	OUT	Head(L) heat enable signal 10(F)
8	GND	-	GND
9	H1-F-DATA-10-OD	OUT	Odd head(L) data signal 10(F)
10	GND	-	GND
11	H1-F-DATA-11-OD	OUT	Odd head(L) data signal 11(F)
12	GND	-	GND
13	/H1-F-HE-11	OUT	Head(L) heat enable signal 11(F)
14	GND	-	GND
15	H1-F-DATA-11-EV	OUT	Even head(L) data signal 11(F)
16	GND	-	GND
17	H1-F-DATA-10-EV	OUT	Even head(L) data signal 10(F)
18	GND	-	GND
19	/H1-E-HE-9	OUT	Head(L) heat enable signal 9(E)
20	GND	-	GND
21	H1-E-DATA-9-EV		Even head(L) data signal 9(E)
22	GND	-	GND
23	H1-E-DATA-8-EV	OUT	Even head(L) data signal 8(E)
24	GND	-	GND
25	/H1-D-HE-7	OUT	Head(L) heat enable signal 7(D)
26	GND	-	GND
27	H1-D-DATA-7-EV	OUT	Even head(L) data signal 7(D)
28	GND	-	GND
29	H1-D-DATA-6-EV	OUT	Even head(L) data signal 6(D)
30	GND	-	GND
31	/H1-D-HE-6	OUT	Head(L) heat enable signal 6(D)
32	GND	-	GND
33	H1-D-DATA-6-OD	OUT	Odd head(L) data signal 6(D)
34	GND	-	GND
35	H1-D-DATA-7-OD	OUT	Odd head(L) data signal 7(D)
36	GND	-	GND
37	H1-C-DATA-5-OD	OUT	Odd head(L) data signal 5(C)
38	GND	-	GND
39	/H1-C-HE-5	OUT	Head(L) heat enable signal 5(C)
40	GND	-	GND
41	H1-C-DATA-5-EV	OUT	Even head(L) data signal 5(C)
42	GND	-	GND
43	H1-C-DATA-4-EV	OUT	Even head(L) data signal 4(C)
44	GND	-	GND
45	/H1-B-HE-3	OUT	Head(L) heat enable signal 3(B)
46	GND	-	GND
47	H1-B-DATA-3-EV	OUT	Even head(L) data signal 3(B)
48	GND	-	GND
49	/LIFT CAM IN	-	GND
50	GND	-	GND

J101			
Pin Number	Signal name	IN/OUT	Function
1	GND	-	
2	PWLED1	OUT	Multi sensor LED1 drive signal
3	PWLED2	OUT	Multi sensor LED2 drive signal
4	PWLED3	OUT	Multi sensor LED3 drive signal
5	PWLED4	OUT	Multi sensor LED4 drive signal
6	GND	-	GND
7	H3V 1		Power supply
8	GND	-	GND
9	GND	-	GND
10	VH1 (Feedback)	IN	VH2 feed back voltage
11	VH1	OUT	Power supply
12	VH1	OUT	Power supply
13	VH1	OUT	Power supply
14	VH1	OUT	Power supply
15	VH1	OUT	Power supply
16	VH1	OUT	Power supply
17	GND	-	GND
18	GND	-	GND
19	GND	-	GND
20	GND	-	GND
21	GND	-	GND
22	VH2	OUT	Power supply
23	VH2	OUT	Power supply
24	VH2	OUT	Power supply
25	VH2	OUT	Power supply
26	VH2	OUT	Power supply
27	VH2	OUT	Power supply
28	VH2 (Feedback)	IN	VH2 feed back voltage
29	VH1 2	OUT	Power supply
30	GND	-	GND

J104			
Pin Number	Signal name	IN/OUT	Function
1	VH3	OUT	Power supply
2	VH3	OUT	Power supply
3	VH3	OUT	Power supply
4	VHT34	OUT	Power supply
5	H0-F-DATA-10-EV	OUT	Even head(R) data signal 10(F)
6	IO_ASIC_SDA	IN/OUT	Head ROM control signal(data)
7	IO_ASIC_SCL	OUT	Head ROM control signal(clock)
8	VH2	OUT	Power supply
9	H0-C-DIA1	IN	Head(R) DI sensor signal 1(C)
10	H0-A-HE-1	OUT	Head(R) heat enable signal 1(A)
11	VH3	OUT	Power supply
12	VH3	OUT	Power supply
13	VH3	OUT	Power supply
14	VH4	OUT	Power supply
15	VH4	OUT	Power supply
16	H0-E-DATA-9-OD	OUT	Odd head(R) data signal 9(E)
17	H0-F-HE-11	OUT	Head(R) heat enable signal 11(F)
18	H0-E-DIA1	IN	Head(R) DI sensor signal 1(E)
19	H0-D-DIA1	IN	Head(R) DI sensor signal 1(D)
20	H3V_0	OUT	Power supply
21	H3V_0	OUT	Power supply
22	H0-B-DATA-3-EV	OUT	Even head(R) data signal 3(B)
23	H0-A-DATA-0-EV	OUT	Even head(R) data signal 0(A)
24	H0-B-HE-2	OUT	Head(R) heat enable signal 2(B)
25	VH3	OUT	Power supply
26	VH3	OUT	Power supply
27	H0-D-DIA2	IN	Head(R) DI sensor signal 2(D)
28	H0-E-HE-8	OUT	Head(R) heat enable signal 8(E)
29	H0-E-DIA2	IN	Head(R) DI sensor signal 2(E)

J104			
Pin Number	Signal name	IN/OUT	Function
30	H0-F-DIA2	IN	Head(R) DI sensor signal 2(E)
31	H0-E-HE-9	OUT	Head(R) heat enable signal 9(E)
32	H0-D-DATA-7-EV	OUT	Even head(R) data signal 7(D)
33	H0-D-HE-6	OUT	Head(R) heat enable signal 6(D)
34	H0-C-DATA-5-OD	OUT	Odd head(R) data signal 5(C)
35	H0-C-DATA-4-EV	OUT	Even head(R) data signal 4(C)
36	H0-A-DATA-1-EV	OUT	Even head(R) data signal 1(A)
37	H0-A-DIA2	IN	Head(R) DI sensor signal 2(A)
38	H0-B-DIA2	IN	Head(R) DI sensor signal 2(B)
39	H0-C-HE-4	OUT	Head(R) heat enable signal 4(C)
40	H0-D-DATA-7-OD	OUT	Odd head(R) data signal 7(D)
41	H0-E-DATA-8-OD	OUT	Odd head(R) data signal 8(E)
42	H0-F-HE-10	OUT	Head(R) heat enable signal 10(F)
43	H0-F-DATA-11-EV	OUT	Even head(R) data signal 11(F)
44	H0-E-DATA-8-EV	OUT	Even head(R) data signal 8(E)
45	H0-D-DATA-6-EV	OUT	Even head(R) data signal 6(D)
46	H0-C-DIA2	IN	Head(R) DI sensor signal 2(C)
47	H0-C-DATA-5-EV	OUT	Even head(R) data signal 5(C)
48	H0-B-DIA1	IN	Head(R) DI sensor signal 1(B)
49	H0-A-HE-0	OUT	Head(R) heat enable signal 0(A)
50	H0-B-DATA-2-OD	OUT	Odd head(R) data signal 2(B)
51	H0-B-DATA-3-OD	OUT	Odd head(R) data signal 3(B)
52	H0-C-DATA-4-OD	OUT	Odd head(R) data signal 4(C)
53	GND	-	GND
54	GND	-	GND
55	GND	-	GND
56	H0-F-DATA-11-OD	OUT	Odd head(R) data signal 11(F)
57	H0-E-DATA-9-EV	OUT	Even head(R) data signal 9(E)
58	GND	-	GND
59	H0-D-DATA-6-OD	OUT	Odd head(R) data signal 6(D)
60	H0-C-HE-5	OUT	Head(R) heat enable signal 5(C)
61	H0-B-HE-3	OUT	Head(R) heat enable signal 3(B)
62	H0-A-DIA1	IN	Head(R) DI sensor signal 1(A)
63	H0-A-DATA-1-OD	OUT	Odd head(R) data signal 1(A)
64	GND	-	GND
65	GND	-	GND
66	GND	-	GND
67	GND	-	GND
68	H0-F-DATA-10-OD	OUT	Odd head(R) data signal 10(F)
69	H0-F-DIA1	IN	Head(R) DI sensor signal 1(F)
70	H0-D-HE-7	OUT	Head(R) heat enable signal 7(D)
71	GND	-	GND
72	H0_CLK	OUT	Head(R) clock signal
73	H0_LT	OUT	Head(R) latch signal
74	H0-B-DATA-2-EV	OUT	Even head(R) data signal 2(B)
75	H0-A-DATA-0-OD	OUT	Odd head(R) data signal 0(A)
76	GND	-	GND
77	GND	-	GND
78	GND	-	GND

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J201			
Pin Number	Signal name	IN/OUT	Function
1	PWLED1	OUT	Multi sensor LED1 drive signal
2	PWLED2	OUT	Multi sensor LED2 drive signal
3	PWLED3	OUT	Multi sensor LED3 drive signal
4	PWLED4	OUT	Multi sensor LED4 drive signal
5	GND	-	GND
6	MLT_SNS_1	IN	Multi sensor signal 1
7	MLT_SNS_2	IN	Multi sensor signal 2
8	Vcc(5V)	OUT	Power supply (+5V)

6.3 Version Up

6.3.1 Firmware Update Tool

iPF810 / iPF820

Use of the following tools allows you to update the firmware of the main controller incorporated in the printer.

- imagePROGRAF Firmware Update Tool
- L Printer Service Tool

1. imagePROGRAF Firmware Update Tool

imagePROGRAF Firmware Update Tool is the same as that for user.

Procedure:

- 1) Start imagePROGRAF Firmware Update Tool.
- 2) Place the printer in the online mode.
- 3) Transfer the firmware data to the printer according to the instructions shown on the display.
- 4) The data shown on the LCD on the operation panel changes and the firmware is updated automatically.
- 5) When firmware update is completed, the printer will start again.

File transfer route:

USB, network, IEEE1394

2. L Printer Service Tool

Procedure:

- 1) Start L Printer Service Tool.
- 2) Place the printer in the online mode.
- 3) Specify the firmware file(.jdl) and then transfer it.
- 4) The data shown on the LCD on the operation panel changes and the firmware is updated automatically.
- 5) When firmware update is completed, the printer will start again.

File transfer route:

USB, network, IEEE1394

6.3.2 Firmware Update Tool

iPF815 / iPF825

Use of the following tools allows you to update the firmware of the main controller incorporated in the printer.

- imagePROGRAF Firmware Update Tool
- L Printer Service Tool

1. imagePROGRAF Firmware Update Tool

imagePROGRAF Firmware Update Tool is the same as that for user.

Procedure:

- 1) Start imagePROGRAF Firmware Update Tool.
- 2) Place the printer in the online mode.
- 3) Transfer the firmware data to the printer according to the instructions shown on the display.
- 4) The data shown on the LCD on the operation panel changes and the firmware is updated automatically.
- 5) When firmware update is completed, the printer will start again.

File transfer route:

USB, network

2. L Printer Service Tool

Procedure:

- 1) Start L Printer Service Tool.
- 2) Place the printer in the online mode.
- 3) Specify the firmware file(.jdl) and then transfer it.
- 4) The data shown on the LCD on the operation panel changes and the firmware is updated automatically.
- 5) When firmware update is completed, the printer will start again.

File transfer route:

USB, network

6.4 Service Tools

6.4.1 Tool List

iPF810 / iPF820 / iPF815 / iPF825

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General-purpose tools	Application
Long phillips scerewdriver	Inserting and removing screw
Phillips scerewdriver	Inserting and removing screw
Flat-head scerewdriver	Removing the E-ring
Needle-nose pliers	Inserting and removing the spring parts
Hex key wrench	Inserting and removing hexagonal screws
Flat brush	Applying grease
Lint free paper	Wiping off ink
Rubber gloves	Preventing ink stains

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Special-purpose tools	Application
Grease MOLYKOTE PG-641 (CK-0562-000)	Applying to specified locations
Grease PERMALUBE G-2 (CK-0551-020)	Applying to specified locations
Cover switch tool (QY9-0103-000)	Pressing the cover switch

Chapter 7 SERVICE MODE

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7.1 Service Mode

7.1.1 Service Mode Operation

iPF810 / iPF820 / iPF815 / iPF825

a. How to enter the Service mode

Enter the Service mode following the procedure below.

- 1) Turn off the printer.
- 2) Turn on the printer while holding down the [Paper Source]key and [Information]key.
- 3) "S" will be displayed in the upper right corner of the display showing the firmware version of the printer.
- 4) After display of "Online", pressing the [Menu] key displays the SERVICE MODE top menu and the MESSAGE LED flashes.

* The Service mode is added to the options in the Main menu. The Service mode can be entered even in the error status(when an error message is shown on the display)by turning the power off and then using the above key operation.

b. How to exit the Service mode

Turn off the printer.

c. Key operation in the service mode

- Selecting menus and parameters:[◀] or [▶] key
- Going to the next lower-level menu:[▼] key
- Going to the previous higher-level menu:[▲] key
- Determining a selected menu or parameter:[OK] key

7.1.2 Map of the Service Mode

iPF810 / iPF820 / iPF815 / iPF825

The hierarchy of menus and parameters in the Service Mode is as shown below.

T-7-1

First Level	Second Level	Third Level	Fourth Level	Fifth Level	Sixth Level		
DISPLAY	PRINTINF	YES/NO	: Select YES to execute print				
		SYSTEM	S/N				
	TYPE						
	LF TYPE						
	TMP						
	SIZE LF						
	SIZE LF						
	SIZE CR						
	SIZE CR						
	HEAD	S/N					
		LOT					
	INK	C					

		BK					
	WARNING	1					

20							
ERROR	1						

	20						
INK CHECK	0 0 0 0 0						
I/O DISPLAY	I/O DISPLAY 1						
	I/O DISPLAY 2						
ADJUST	PRINT PATTERN	NOZZLE 1	: Press the [OK] button to execute				
		OPTICAL AXIS	: Press the [OK] button to execute				
		LF TUNING					
		LF TUNING 2					
	HEAD ADJ.	MANUAL HEAD ADJ	DETAIL		: Press the [OK] button to execute		
			BASIC		: Press the [OK] button to execute		
		ADJ. SETTING	A	A-1		: Adjustment value entry	

				A-48		: Adjustment value entry	
			F	F-1		: Adjustment value entry	
				F-2		: Adjustment value entry	
				SAVE SETTINGS	YES/NO		
	RESET SETTINGS	YES/NO					
	NOZZLE CHK POS.	YES/NO					
	GAP CALIB.	YES/NO					
CHANGE LF TYPE	0/1						
CR REG	EXECUTE	YES/NO					
	RESET	YES/NO					
REPLACE	CUTTER	YES/NO					

T-7-2

First Level	Second Level	Third Level	Fourth Level	Fifth Level	
COUNTER	PRINTER	LIFE TTL			
		LIFE ROLL UPPER			
		LIFE ROLL LOWER			
		LIFE CUTSHEET			
		LIFE A			

		LIFE F			
		POWER ON			
		W-INK			
		CUTTER			
		WIPE			
		CARRIAGE			PRINT
					DRIVE
					CR COUNT
	CR DIST.				
	PRINT COUNT				
	PURGE	CLN-A-1			
		CLN-A-2			
		CLN-A-3			
		CLN-A-6			
		CLN-A-7			
		CLN-A-10			
		CLN-A-11			
		CLN-A-15			
		CLN-A-16			
		CLN-A-17			
		CLN-A-TTL			
		CLN-M-1			
		CLN-M-4			
		CLN-M-5			
		CLN-M-6			
		CLN-M-TTL			
		CLEAR			CLR-INK CONSUME
					CLR-MTC EXC.
	CLR-HEAD EXC.				
	CLR-UNIT A EXC.				CLR A-1 EXC.

					CLR A-5 EXC.
	CLR-UNIT D EXC.				CLR D-1 EXC.

					CLR D-5 EXC.
	CLR-UNIT H EXC.				CLR H-1 EXC.
					CLR H-2 EXC.
	CLR-UNIT K EXC.				
	CLR-UNIT M EXC.				
	CLR-UNIT P EXC.				
	CLR-UNIT S EXC.				
	CLR-UNIT T EXC.				
	CLR-UNIT V EXC.				
	CLR-UNIT Y EXC.				
	CLR-FACTORY CNT.				

First Level	Second Level	Third Level	Fourth Level	Fifth Level
COUNTER	EXCHANGE	MTC EXC.		
		HEAD EXC.		
		BOARD EXC.(M/B)		
		UNIT A EXC.	A-1 EXC.	

			A-5 EXC.	
		UNIT D EXC.	D-1 EXC.	

			D-5 EXC.	
		UNIT H EXC.	H-1 EXC.	
			H-2 EXC.	
		UNIT K EXC.		
		UNIT M EXC.		
		UNIT P EXC.		
		UNIT V EXC.		
		UNIT Y EXC.		
		DETAIL-CNT	MOVE PRINTER	
	N-INK CHK(C)			

	N-INK CHK(BK)			
	MEDIACONFIG-CNT			
	INK-USE1	INK-USE1(C)		

		INK-USE1(BK)		
		INK-USE1(TTL)		
		N-INK-USE1(C)		

		N-INK-USE1(BK)		
		N-INK-USE1(TTL)		
	INK-USE2	INK-USE2(C)		

		INK-USE2(BK)		
		INK-USE2(TTL)		
		N-INK-USE2(C)		

		N-INK-USE2(BK)		
		N-INK-USE2(TTL)		
	INK-EXC	INK-EXC(C)		

		INK-EXC(BK)		
		INK-EXC(TTL)		
		N-INK-EXC(C)		

		N-INK-EXC(BK)		
		N-INK-EXC(TTL)		

T-7-4

First Level	Second Level	Third Level	Fourth Level	Fifth Level
COUNTER	MEDIA 1	NAME		
		TTL		
		TTL		
		ROLL UPPER		
		ROLL UPPER		
		ROLL LOWER		
		ROLL LOWER		
		CUTSHEET		
		CUTSHEET		

	MEDIA 7	NAME		
		TTL		
		TTL		
		ROLL UPPER		
		ROLL UPPER		
		ROLL LOWER		
		ROLL LOWER		
		CUTSHEET		
		CUTSHEET		
		MEDIA OTHER	NAME	
	TTL			
	TTL			
	ROLL UPPER			
	ROLL UPPER			
	ROLL LOWER			
	ROLL LOWER			
	CUTSHEET			
	CUTSHEET			
	MEDIASIZE1 ROLL		P-SQ 44-60	
		P-SQ 44-60		
		P-SQ 36-44		
		P-SQ 36-44		
		P-SQ 24-36		
		P-SQ 24-36		
		P-SQ 17-24		
		P-SQ 17-24		
		P-SQ -17		
		P-SQ -17		
		P-CNT 44-60		
		P-CNT 36-44		
		P-CNT 24-36		
		P-CNT 17-24		
		P-CNT -17		

First Level	Second Level	Third Level	Fourth Level	Fifth Level	
COUNTER	MEDIASIZE2 ROLL	D-SQ 44-60			
		D-SQ 44-60			
		D-SQ 36-44			
		D-SQ 36-44			
		D-SQ 24-36			
		D-SQ 24-36			
		D-SQ 17-24			
		D-SQ 17-24			
		D-SQ -17			
		D-SQ -17			
		D-CNT 44-60			
		D-CNT 36-44			
		D-CNT 24-36			
		D-CNT 17-24			
		D-CNT -17			
		MEDIASIZE1 CUT	P-SQ 44-60		
			P-SQ 44-60		
			P-SQ 36-44		
	P-SQ 36-44				
	P-SQ 24-36				
	P-SQ 24-36				
	P-SQ 17-24				
	P-SQ 17-24				
	P-SQ -17				
	P-SQ -17				
	P-CNT 44-60				
	P-CNT 36-44				
	P-CNT 24-36				
	P-CNT 17-24				
	P-CNT -17				
	MEDIASIZE2 CUT		D-SQ 44-60		
			D-SQ 44-60		
			D-SQ 36-44		
		D-SQ 36-44			
		D-SQ 24-36			
		D-SQ 24-36			
		D-SQ 17-24			
		D-SQ 17-24			
		D-SQ -17			
		D-SQ -17			
		D-CNT 44-60			
		D-CNT 36-44			
		D-CNT 24-36			
		D-CNT 17-24			
		D-CNT -17			

T-7-6

First Level	Second Level	Third Level	Fourth Level	Fifth Level	
COUNTER	HEAD DOT CNT. 1	C			

		BK			
		TTL			
	HEAD DOT CNT. 2	C			

		BK			
		TTL			
	PARTS CNT.	COUNTER A	OK/W1/W2/E	PARTS A1	1:00
					2:00
					3:00
					4:00

		COUNTER Y	OK/W1/W2/E	PARTS Y1	1:00
				2:00	
				3:00	
			4:00		
SETTING	Pth	ON/OFF			
	RTC	DATE	XXXX/XX/XX	: Date entry	
		TIME	XX:XX	: Time entry	
	PV AUTO JUDGE	ON/OFF			
HEAD DOT INF	ON/OFF				
INITIALIZE	WARNIG	: Press the [OK] button to clear			
	ERROR	: Press the [OK] button to clear			
	ADJUST	: Press the [OK] button to clear			
	W-INK	: Press the [OK] button to clear			
	CARRIAGE	: Press the [OK] button to clear			
	PURGE	: Press the [OK] button to clear			
	INK-USE CNT	: Press the [OK] button to clear			
	W-INK-CHG CNT	: Press the [OK] button to clear			
	HEAD-CHG CNT	: Press the [OK] button to clear			
	HDD BOX PASS.	ALL FOLDERS		: Press the [OK] button to clear	
		FOLDER 1		: Press the [OK] button to clear	

	FOLDER 29			: Press the [OK] button to clear	
	PARTS-CHG CNT	PARTS A	PARTS A1	: Press the [OK] button to clear	

	PARTS Y1			: Press the [OK] button to clear	
PARTS COUNTER	PARTS A	PARTS A1	: Press the [OK] button to clear		

PARTS Y1			: Press the [OK] button to clear		

7.1.3 Details of Service Mode

iPF810 / iPF820 / iPF815 / iPF825

This section provides details of the Service mode menu.

a) DISPLAY

Displays and prints the printer information.

1) PRINF INF

Prints adjustment values in the User menu, [DISPLAY] and [COUNTER] parameters on A4-size or larger paper. When a roll media is used, the layout is optimized according to the media width.

2) SYSTEM

Displays the printer information shown below.

T-7-7

Display	Description	Unit
S/N	Serial number of printer	-
TYPE	Type setting on main controller PCB * iPF8300/8100/8000S/8000/825/820/815/810 is represented by 44.	-
LF TYPE	Feed roller type: 0 or 1	-
TMP	Ambient temperature	degrees C
SIZE LF	Detected size of loaded media (feed direction) 0 is always detected for the roll media.	mm
SIZE LF	Detected size of loaded media (feed direction) 0 is always detected for the roll media.	inch
SIZE CR	Detected size of loaded media (carriage scan direction)	mm
SIZE CR	Detected size of loaded media (carriage scan direction)	inch

3) HEAD

Displays the following EEPROM information of the printhead.

T-7-8

Display	Description
S/N	Serial number of printhead
LOT	Lot number of printhead

4) INK

Displays the numbers of days passed since installation of the following ink tanks.

T-7-9

Display	Description	Unit
BK	Number of days passed since the BK ink tank was installed	Day(s)
MBK	Number of days passed since the MBK ink tank was installed	Day(s)
C	Number of days passed since the C ink tank was installed	Day(s)
M	Number of days passed since the M ink tank was installed	Day(s)
Y	Number of days passed since the Y ink tank was installed	Day(s)

5) WARNING

Displays the warning history (up to 20 events). The newest event has the smallest history number.

6) ERROR

Displays the error history (up to 20 events). The newest event has the smallest history number.

7) INK CHECK

Displays the history of execution of turning off the remaining ink level detection (by using the refilled ink tank) in the order of C, M, Y, MBK, and BK.

0: No execution

1: Executed at least once

c) **ADJUST**

Performs adjustments and prints the adjustment and check patterns necessary for adjusting the printer parts.

1) PRINT PATTERN

T-7-13

Display	Description
NOZZLE 1	Prints the nozzle check pattern by single direction/ single pass without using the non-discharging back up. It is used to check for the non-discharging nozzles. - Media size: A4 - Media type: any
OPTICAL AXIS	Prints the pattern and adjusts the optical axis of the multi sensor. For details, refer to "Disassembly/Reassembly" > "Adjustment and Setup Items" > "Procedure after replacing the carriage unit or multi sensor". - Media type: photo glossy paper
LF TUNING	Carry out automatic correction of eccentricity of the feed roller. For more details, refer to "Disassembly/Reassembly" > "Adjustment and Setup Items" > "Procedure after replacing the feed roller and reed roller encoder". - The media type is "gloss photo paper".
LF TUNING 2	Carry out manual correction of eccentricity of the feed roller. For more details, refer to "Disassembly/Reassembly" > "Adjustment and Setup Items" > "Procedure after replacing the feed roller and reed roller encoder". - The media type is "gloss photo paper".



SENSOR CHECK are intended for factory adjustment purposes.
No adjustment by service personnel is required.

2) HEAD ADJ.

Set or initialize the registration adjustment values of each printheads.

T-7-14

Display		Description
MANUAL HEAD ADJ	DETAIL	Prints the detail patterns for the manual head adjustment. After printing, the mode will change to [ADJ. SETTING]. Check the printed patterns and input the set values.
	BASIC	Prints the basic patterns for the manual head adjustment. After printing, the mode will change to [ADJ. SETTING]. Check the printed patterns and input the set values.
ADJ. SETTING	A to F A-1 to F-2	This mode is to input the registration adjustment values. It is possible to return the values to the former one by printing the status print before changing the value.
	SAVE SETTINGS	Save the registration adjustment values that has been input.
RESET SETTINGS		Initialize the registration adjustment values (to 0).

3) NOZZLE CHK POS.

This mode for adjusting the optical axis of the head management sensor. For details, refer to "Disassembly/Reassembly" > "Adjustment and Setup Items" > "Procedure after replacing the head management sensor".

4) GAP CLIB.

This mode measures the gap between the printhead and media by multi sensor and corrects the calibration value.

5) CHANGE LF TYPE

Change the type of the feed roller.

- 0: Old feed roller
- 1: New feed roller

6) CR REG

Executes automatic head adjustment.

Make this adjustment if the resistration remains partially misregistered after user-mode head adjustment.

EXECUTE: Execute automatic head adjustment.

RESET: Reset the resistration adjustment value (0).

- Applicable media size is A2 (17inch) or larger.
- Applicable media type is photo glossy paper

If an error message appears when performing CR REG, check the following.

Replace the multi sensor if the error reoccurs after checking and performing CR REG again.

<CHECK>

1. Check for non-discharging of the printhead and dirty media, and replace the printhead and/or media if necessary.
2. Perform [Head Cleaning A].
3. Perform [Head Posi. Adj.]-[Auto].

d) COUNTER

Displays the life (operation frequency and time) of each unit, print counts for each media type, and else.
The count values can be printed from [PRINT INF].

1) PRINTER: Counters related to product life

T-7-15

Display	Description	Unit
LIFE TTL	Cumulative number of printed media (equivalent of A4)	sheets
LIFE ROLL UPPER	Cumulative number of printed upper roll media (equivalent of A4)	sheets
LIFE ROLL LOWER	Cumulative number of printed lower roll media (equivalent of A4)	sheets
LIFE CUTSHEET	Cumulative number of printed cut sheets (equivalent to A4)	sheets
LIFE A-F	Cumulative number of printed media for environments A to F	sheets
POWER ON	Cumulative power-on time (excluding the sleep time)	Hours
W-INK	Remaining capacity of the maintenance cartridge	%
CUTTER	Number of cutting operations (count as 1 by moving back and forth)	Times
WIPE	Number of wiping operations	Times

2) CARRIAGE: Counters related to carriage unit

T-7-16

Display	Description	Unit
PRINT	Cumulative printing time	Hours
DRIVE	Cumulative carriage moving time	Hours
CR COUNT	Cumulative carriage scan count (count as 1 by moving back and forth)	Times
CR DIST.	Cumulative carriage scan distance (count as 1 by moving 210mm)	Times
PRINT COUNT	Cumulative print end count (count as 1 by capping)	Times

3) PURGE: Counters related to purge unit

T-7-17

Display	Description	Unit
CLN-A-1	Cumulative number of automatic cleaning 1 (normal suction) operations	Times
CLN-A-2	Cumulative number of automatic cleaning 2 (ink level adjusting) operations	Times
CLN-A-3	Cumulative number of automatic cleaning 3 (initial filling) operations	Times
CLN-A-6	Cumulative number of automatic cleaning 6 (strong normal suction) operations	Times
CLN-A-7	Cumulative number of automatic cleaning 7 (aging) operations	
CLN-A-10	Cumulative number of automatic cleaning 10 (ink filling after secondary transportation) operations	Times
CLN-A-11	Cumulative number of automatic cleaning 11 (ink filling after head replacement) operations	Times
CLN-A-15	Cumulative number of automatic cleaning 15 (dot count small suction) operations	Times
CLN-A-16	Cumulative number of automatic cleaning 16 (sedimented ink agitation) operations	Times
CLN-A-17	Cumulative number of automatic cleaning 17 (small suction) operations	Times
CLN-A-TTL	Total number of automatic cleaning operations	Times
CLN-M-1	Cumulative number of manual cleaning 1 (normal suction) operations	Times
CLN-M-4	Cumulative number of manual cleaning 4 (ink draining from head after head replacement) operations	Times
CLN-M-5	Cumulative number of manual cleaning 5 (ink draining from head and tube before transportation) operations	Times
CLN-M-6	Cumulative number of manual cleaning 6 (normal strong suction) operations	Times
CLN-M-TTL	Total number of manual cleaning operations	Times

4) CLEAR: Counters related to counter initialization

T-7-18

Display	Description	Unit
CLR-INK CONSUME	Cumulative count of ink section consumption amount clearing	Times
CLR-MTC EXC.	Cumulative count of maintenance cartridge replacement count clearing	Times
CLR-HEAD EXC.	Cumulative count of printhead replacement count clearing	Times
CLR-UNIT A EXC.	Cumulative count of unit A(waste ink system) replacement count clearing	Times
CLR-UNIT D EXC.	Cumulative count of unit D(carriage unit) replacement count clearing	Times
CLR-UNIT H EXC.	Cumulative count of unit H(purge unit) replacement count clearing	Times
CLR-UNIT K EXC.	Cumulative count of unit K(head management sensor) replacement count clearing	Times
CLR-UNIT M EXC.	Cumulative count of unit M(carriage motor) replacement count clearing	Times
CLR-UNIT P EXC.	Cumulative count of unit P(feed motor) replacement count clearing	Times
CLR-UNIT S EXC.	Cumulative count of unit S(upper pick-up roller) replacement count clearing	Times
CLR-UNIT T EXC.	Cumulative count of unit T(lower pick-up roller) replacement count clearing	Times
CLR-UNIT V EXC.	Cumulative count of unit V(mist fan unit) replacement count clearing	Times
CLR-UNIT Y EXC.	Cumulative count of unit Y(cutter) replacement count clearing	Times
CLR-FACTORY CNT.	For factory	Times

5) EXCHANGE: Counters related to parts replacement

T-7-19

Display	Description	Unit
MTC EXC.	Maintenance cartridge replacement count	Times
HEAD EXC.	Printhead replacement count	Times
BOARD EXC.(M/B)	Main controller PCB replacement count	Times
UNIT A EXC.	Unit A (waste ink system) replacement count (Count of executing [INITIALIZE] > [PARTS COUNTER] > [PARTS A])	Times
UNIT D EXC.	Unit D (carriage unit) replacement count (Count of executing [INITIALIZE] > [PARTS COUNTER] > [PARTS D])	Times
UNIT H EXC.	Unit H (purge unit) replacement count (Count of executing [INITIALIZE] > [PARTS COUNTER] > [PARTS H1])	Times
UNIT K EXC.	Unit K (head management sensor) replacement count (Count of executing [INITIALIZE] > [PARTS COUNTER] > [PARTS K1])	Times
UNIT M EXC.	Unit M (carriage unit) replacement count (Count of executing [INITIALIZE] > [PARTS COUNTER] > [PARTS M1])	Times
UNIT P EXC.	Unit P (feed motor) replacement count (Count of executing [INITIALIZE] > [PARTS COUNTER] > [PARTS P1])	Times
UNIT S EXC.	Unit S (upper pick-up roller) replacement count (Count of executing [INITIALIZE] > [PARTS COUNTER] > [PARTS S1])	Times
UNIT T EXC.	Unit P (lower pick-up roller) replacement count (Count of executing [INITIALIZE] > [PARTS COUNTER] > [PARTS T1])	Times
UNIT V EXC.	Unit V (mist fan unit) replacement count (Count of executing [INITIALIZE] > [PARTS COUNTER] > [PARTS V1])	Times
UNIT Y EXC.	Unit Y (cutter) replacement count (Count of executing [INITIALIZE] > [PARTS COUNTER] > [PARTS Y1])	Times

6) DETAIL-CNT: Other counters

T-7-20

Display		Description	Unit
MOVE PRINTER	A(B,C,D,E)	A: Number of times "MOVE PRINTER" on Main menu is executed B: Number of times "LEVEL 1" is executed C: Number of times "LEVEL 2" is executed D: Number of times "LEVEL 3" is executed E: "LEVEL" of previously executed "MOVE PRINTER"	Times
N-INKCHK(XX)		XX: Ink color Count of turning off the ink remaining level detection for each color	Times
MEDIACONFIG-CNT		Count of media registered by media editor	Times

7) INK-USE1: Counters related to ink consumption

T-7-21

Display	Description	Unit
INK-USE1(XX)	XX: Ink color Cumulative consumption amount of generic ink	ml
INK-USE1(TTL)	Total amount of cumulative consumption of generic ink	ml
N-INK-USE1(XX)	XX: Ink color Cumulative consumption amount of refilled ink	ml
N-INK-USE1(TTL)	Total amount of cumulative consumption of refilled ink	ml

8) INK-USE2: Counters related to ink consumption

T-7-22

Display	Description	Unit
INK-USE2(XX)	XX: Ink color Consumption amount of generic ink of the currently installed ink tank.	ml
INK-USE2(TTL)	Total consumption amount of generic ink of the currently installed ink tanks	ml
N-INK-USE2(XX)	XX: Ink color Consumption amount of refilled ink of the currently installed ink tank	ml
N-INK-USE2(TTL)	Total consumption amount of refilled ink of the currently installed ink tanks	ml

9) INK-EXC: Counters related to ink tank replacement

T-7-23

Display	Description	Unit
INK-EXC(XX)	XX: Ink color Cumulative count of generic ink tank replacement	ml
INK-EXC(TTL)	Total amount of cumulative count of generic ink tank replacement	ml
N-INK-EXC(XX)	XX: Ink color Cumulative count of refilled ink tank replacement	ml
N-INK-EXC(TTL)	Total amount of cumulative count of refilled ink tank replacement	ml

10) MEDIA x (x: 1 to 7): Counters related to media

One to seven media types are displayed individually in order with large cumulative print area.

T-7-24

Display	Description	Unit
NAME	Media type	-
TTL	Total amount of cumulative print area of roll media and cut sheet (metric)	m2
TTL	Total amount of cumulative print area of roll media and cut sheet (inch)	Sq.f
ROLL UPPER	Cumulative print area of upper roll media (metric)	m2
ROLL UPPER	Cumulative print area of upper roll media (inch)	Sq.f
ROLL LOWER	Cumulative print area of lower roll media (metric)	m2
ROLL LOWER	Cumulative print area of lower roll media (inch)	Sq.f
CUT SHEET	Cumulative print area of cut sheet (metric)	m2
CUT SHEET	Cumulative print area of cut sheet (inch)	Sq.f

11) MEDIA OTHER: Counters related to media

Displays the total amount of cumulative print area of the other media type than the above-mentioned

T-7-25

Display	Description	Unit
NAME	Media type	-
TTL	Total amount of cumulative print area of roll media and cut sheet (metric)	m2
TTL	Total amount of cumulative print area of roll media and cut sheet (inch)	Sq.f
ROLL UPPER	Cumulative print area of upper roll media (metric)	m2
ROLL UPPER	Cumulative print area of upper roll media (inch)	Sq.f
ROLL LOWER	Cumulative print area of lower roll media (metric)	m2
ROLL LOWER	Cumulative print area of lower roll media (inch)	Sq.f
CUT SHEET	Cumulative print area of cut sheet (metric)	m2
CUT SHEET	Cumulative print area of cut sheet (inch)	Sq.f

12) MEDIASIZE1 ROLL: Counters related to roll media printing

T-7-26

Display	Description	Unit
P-SQ 44-60	Cumulative print area of paper equal to or larger than 44 inches but less than 60 inches (physical size)	m2/Sq.f
P-SQ 36-44	Cumulative print area of paper equal to or larger than 36 inches but less than 44 inches (physical size)	m2/Sq.f
P-SQ 24-36	Cumulative print area of paper equal to or larger than 24 inches but less than 36 inches (physical size)	m2/Sq.f
P-SQ 17-24	Cumulative print area of paper equal to or larger than 17 inches but less than 24 inches (physical size)	m2/Sq.f
P-SQ -17	Cumulative print area of paper less than 17 inches (physical size)	m2/Sq.f
P-CNT 44-60	Cumulative number of sheets of A4-equivalent paper equal to or larger than 44 inches but less than 60 inches (physical size)	sheets
P-CNT 36-44	Cumulative number of sheets of A4-equivalent paper equal to or larger than 36 inches but less than 44 inches (physical size)	sheets
P-CNT 24-36	Cumulative number of sheets of A4-equivalent paper equal to or larger than 24 inches but less than 36 inches (physical size)	sheets
P-CNT 17-24	Cumulative number of sheets of A4-equivalent paper equal to or larger than 17 inches but less than 24 inches (physical size)	sheets
P-CNT -17	Cumulative number of sheets of A4-equivalent paper less than 17 inches (physical size)	sheets

13) MEDIASIZE2 ROLL: Counters related to roll media printing

T-7-27

Display	Description	Unit
D-SQ 44-60	Cumulative print area of paper equal to or larger than 44 inches but less than 60 inches (data size)	m2/Sq.f
D-SQ 36-44	Cumulative print area of paper equal to or larger than 36 inches but less than 44 inches (data size)	m2/Sq.f
D-SQ 24-36	Cumulative print area of paper equal to or larger than 24 inches but less than 36 inches (data size)	m2/Sq.f
D-SQ 17-24	Cumulative print area of paper equal to or larger than 17 inches but less than 24 inches (data size)	m2/Sq.f
D-SQ -17	Cumulative print area of paper less than 17 inches (data size)	m2/Sq.f
D-CNT 44-60	Cumulative number of sheets of A4-equivalent paper equal to or larger than 44 inches but less than 60 inches (data size)	sheets
D-CNT 36-44	Cumulative number of sheets of A4-equivalent paper equal to or larger than 36 inches but less than 44 inches (data size)	sheets
D-CNT 24-36	Cumulative number of sheets of A4-equivalent paper equal to or larger than 24 inches but less than 36 inches (data size)	sheets
D-CNT 17-24	Cumulative number of sheets of A4-equivalent paper equal to or larger than 17 inches but less than 24 inches (data size)	sheets
D-CNT -17	Cumulative number of sheets of A4-equivalent paper less than 17 inches (data size)	sheets

14) MEDIASIZE1 CUT: Counters related to cut sheet printing

T-7-28

Display	Description	Unit
P-SQ 44-60	Cumulative print area of paper equal to or larger than 44 inches but less than 60 inches (physical size)	m2/Sq.f
P-SQ 36-44	Cumulative print area of paper equal to or larger than 36 inches but less than 44 inches (physical size)	m2/Sq.f
P-SQ 24-36	Cumulative print area of paper equal to or larger than 24 inches but less than 36 inches (physical size)	m2/Sq.f
P-SQ 17-24	Cumulative print area of paper equal to or larger than 17 inches but less than 24 inches (physical size)	m2/Sq.f
P-SQ -17	Cumulative print area of paper less than 17 inches (physical size)	m2/Sq.f
P-CNT 44-60	Cumulative number of sheets of A4-equivalent paper equal to or larger than 44 inches but less than 60 inches (physical size)	sheets
P-CNT 36-44	Cumulative number of sheets of A4-equivalent paper equal to or larger than 36 inches but less than 44 inches (physical size)	sheets
P-CNT 24-36	Cumulative number of sheets of A4-equivalent paper equal to or larger than 24 inches but less than 36 inches (physical size)	sheets
P-CNT 17-24	Cumulative number of sheets of A4-equivalent paper equal to or larger than 17 inches but less than 24 inches (physical size)	sheets
P-CNT -17	Cumulative number of sheets of A4-equivalent paper less than 17 inches (physical size)	sheets

15) MEDIASIZE2 CUT: Counters related to cut sheet printing

T-7-29

Display	Description	Unit
D-SQ 44-60	Cumulative print area of paper equal to or larger than 44 inches but less than 60 inches (data size)	m2/Sq.f
D-SQ 36-44	Cumulative print area of paper equal to or larger than 36 inches but less than 44 inches (data size)	m2/Sq.f
D-SQ 24-36	Cumulative print area of paper equal to or larger than 24 inches but less than 36 inches (data size)	m2/Sq.f
D-SQ 17-24	Cumulative print area of paper equal to or larger than 17 inches but less than 24 inches (data size)	m2/Sq.f
D-SQ -17	Cumulative print area of paper less than 17 inches (data size)	m2/Sq.f
D-CNT 44-60	Cumulative number of sheets of A4-equivalent paper equal to or larger than 44 inches but less than 60 inches (data size)	sheets
D-CNT 36-44	Cumulative number of sheets of A4-equivalent paper equal to or larger than 36 inches but less than 44 inches (data size)	sheets
D-CNT 24-36	Cumulative number of sheets of A4-equivalent paper equal to or larger than 24 inches but less than 36 inches (data size)	sheets
D-CNT 17-24	Cumulative number of sheets of A4-equivalent paper equal to or larger than 17 inches but less than 24 inches (data size)	sheets
D-CNT -17	Cumulative number of sheets of A4-equivalent paper less than 17 inches (data size)	sheets

16) HEAD DOT CNT.1: Counter related to dot count

T-7-30

Display	Description	Unit
XX	XX: Ink color Dot counts of each colors of the currently installed printhead	(x 1,000,000) dots
TTL	Total dot counts of each colors of the currently installed printhead	(x 1,000,000) dots

17) HEAD DOT CNT.2: Counter related to dot count

T-7-31

Display	Description	Unit
XX	XX: Ink color Cumulative dot counts of each colors	(x 1,000,000) dots
TTL	Total cumulative dot counts of each colors	(x 1,000,000) dots

18) PARTS CNT. : Counter related to consumable parts

T-7-32

Display		Description	Unit	
COUNTER x		x: Unit number of consumable parts (For detail, refer to "Maintenance and Inspection" > "Consumable Parts") Display the status and the days passed since the counter resetting. - Status OK: Use rate (until part replacement) of all consumable parts included in each unit are below 90%. W1: Use rate (until part replacement) of either of the consumable parts included in each unit has reached 90% or more. W2: Use rate (until part replacement) of either of the consumable parts included in each unit has reached 100%, but no need to stop the printer. E : Use rate (until part replacement) of either of the consumable parts included in each unit has reached 100%, and the printer needs to be stopped.	Day(s)	
	PARTS yy	1:	yy: Unit number of consumable parts (For detail, refer to "Maintenance and Inspection" > "Consumable Parts") Counter of the consumable part (current)	
		2:	Life of the consumable part	
		3:	Use rate until part replacement	%
		4:	Counter of the consumable part (accumulate)	

f) SETTING

Make various settings.

1) Pth

Turn on or off the head pulse rank control function.

Default: OFF

2) RTC

Set RTC (real time clock) after replacing the lithium battery on the main controller PCB.

T-7-33

Display		Description
DATE	yyyy/mm/dd	Set date
TIME	hh:mm	Set time

3) PV AUTO JUDGE

Sets ink saver mode.

Default: OFF

4) HEAD DOT INF

Set whether to turn ON/OFF displaying of message as the result of non-discharging nozzle detection.

Default: OFF

g) INITIALIZE

Clear the [DISPLAY] histories, [ADJUST] settings, [COUNTER] values, and other parameters.

T-7-34

Display		Description
WARNING		Initialize the history of WARNING. (All displayed contents of [DISPLAY] > [WARNING] will be initialized.)
ERROR		Initialize the history of ERROR. (All displayed contents of [DISPLAY] > [ERROR] will be initialized.)
ADJUST		Initialize the value of band adjustment (by user) and head adjustment. The automatically adjusted value will not be initialized.
W-INK		Initialize the remaining capacity (%) of the maintenance cartridge. (Clear [COUNTER] > [PRINTER] > [W-INK])
CARRIAGE		Initialize the counter related to carriage unit. (Clear [COUNTER] > [CARRIAGE])
PURGE		Initialize the counter related to purge unit. (Clear [COUNTER] > [PURGE])
INK-USE CNT		Initialize the consumption amount of ink. (Clear [COUNTER] > [INK-USE2], and count up [COUNTER] > [CLEAR] > [CLR-INK CONSUME])
W-INK-CHG CNT		Initialize the maintenance cartridge replacement frequency. (Clear [COUNTER] > [EXCHANGE] > [MTC EXC.], and count up [COUNTER] > [CLEAR] > [CLR-MTC EXC.]
HEAD-CHG CNT		Initialize the printhead replacement frequency. (Clear [COUNTER] > [EXCHANGE] > [HEAD EXC.], and count up [COUNTER] > [CLEAR] > [CLR-HEAD EXC.]
HDD BOX PASS.		Initialize the BOX password of the hard disk drive to factory default.
PARTS-CHG CNT	PARTS xx	xx: Unit number of consumable parts (For details, refer to "Maintenance and Inspection" > "Consumable Parts") Initialize the consumable part replacement frequency. (Clear [COUNTER] > [EXCHANGE] > [UNIT x EXC], and count up [COUNTER] > [CLEAR] > [CLR-UNIT x EXC.]
PARTS COUNTER	PARTS xx	xx: Unit number of consumable parts (For details, refer to "Maintenance and Inspection" > "Consumable Parts") Initialize the counter amount of the consumable parts. (Clear [COUNTER] > [PARTS CNT.] > [PARTS x]) * After replacing the consumable part, be sure to execute this menu.

7.1.4 Sample Printout

iPF810 / iPF820 / iPF815 / iPF825

a) PRINTINF

A sample printout that is produced by executing [SERVICE MODE] > [DISPLAY] > [PRINTINF] is shown below, along with instructions about how to interpret it.

```

(1) xxxx PRINT INF
    Firm:00.49 Boot:00.31 MIT(DBF):9303 MIT(DB):1.02 S/N:DF029090
(2) SYSTEM
    TYPE:DF029090 24 0 TMP:26 SIZE_LF: 0.0 SIZE_CR: 514.3
    HEAD S/N:39410000
    HEAD LOT:166L09A0
    INK
    C :0 M :0 Y :0 MBK :0MBK2 :0 BK :0
    WARNING
    01:0000 02:0000 03:0000 04:0000 05:0000
    06:0000 07:0000 08:0000 09:0000 10:0000
    11:0000 12:0000 13:0000 14:0000 15:0000
    16:0000 17:0000 18:0000 19:0000 20:0000
    ERROR
    01:03060A00-2E01 02:0000 03:0000 04:0000 05:0000
    06:0000 07:0000 08:0000 09:0000 10:0000
    11:0000 12:0000 13:0000 14:0000 15:0000
    16:0000 17:0000 18:0000 19:0000 20:0000
    INK CHK: C:0 M:0 Y:0 MBK:0 MBK2:0 BK:0

(3) COUNTER
    PRINTER
    LIFE TTL:0
    LIFE ROLL:0 LIFE CUTSHEET:0
    LIFE
    MEDIA 7 MEDIA OTHER
    NAME : NAME : OTHER
    TTL : 0.0 m2 0.0 sq.f TTL : 0.0 m2 0.0 sq.f
    ROLL : 0.0 m2 0.0 sq.f ROLL : 0.0 m2 0.0 sq.f
    CUTSHEET : 0.0 m2 0.0 sq.f CUTSHEET : 0.0 m2 0.0 sq.f

    PARTS COUNTER (a) (b) (c) (d) (e) (f)
    COUNTER A : OK 36 0.0 36.1 0% 0.0
    PARTS A1 : 0.0 0.0 36.1 0% 0.0
    PARTS A2 :
    COUNTER D : OK 36 1362 13028571 0% 1362
    PARTS D1 : 377 6700000 0% 377
    PARTS D2 : 2238 16500000 0% 2238
    PARTS D3 :
    COUNTER F : OK 36 377 4000000 0% 377
    PARTS F1 :
    COUNTER H : OK 36 15 50000 0% 15
    PARTS H1 :
    COUNTER K : OK 36 4 12500 0% 4
    PARTS K1 :
    COUNTER M : OK 36 0 750 0% 0
    PARTS M1 :

(4) PV AUTO JUDGE ON(NORMAL) 1
    (a) (b)
  
```

F-7-1

(1) Version numbers of the firmware installed in the printer, boot ROM, and MIT DB format

(2) Printer information

For more item details, see "Detail of Service Mode" > "a) Display".

(3) Counter information

For more item details, see "Detail of Service Mode" > "e) Counter".

(a) Consumables status

(b) Number of days elapsed since the counter was last reset

(c) Counter value

(d) Value with which consumables reach their replacement timing

(e) Ratio of the current count to the replacement timing

(f) Cumulative counter value

(4) Ink saver mode setting

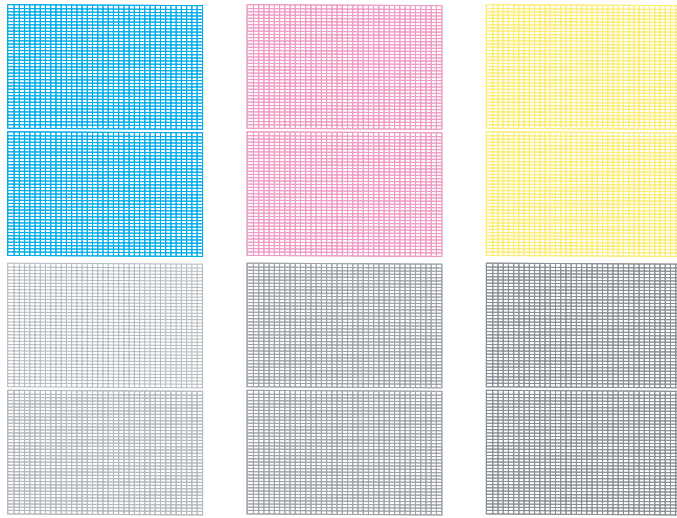
(a) Ink saver mode status

(b) Number of times ink save mode has been executed (unit: times).

b) NOZZLE 1

A sample printout that is produced by executing [SERVICE MODE]> [ADJUST]> [PRINT PATTERN]> [NOZZLE 1] is shown below.

Nozzle Check Pattern SERVICE



F-7-2

c) OPTICAL AXIS

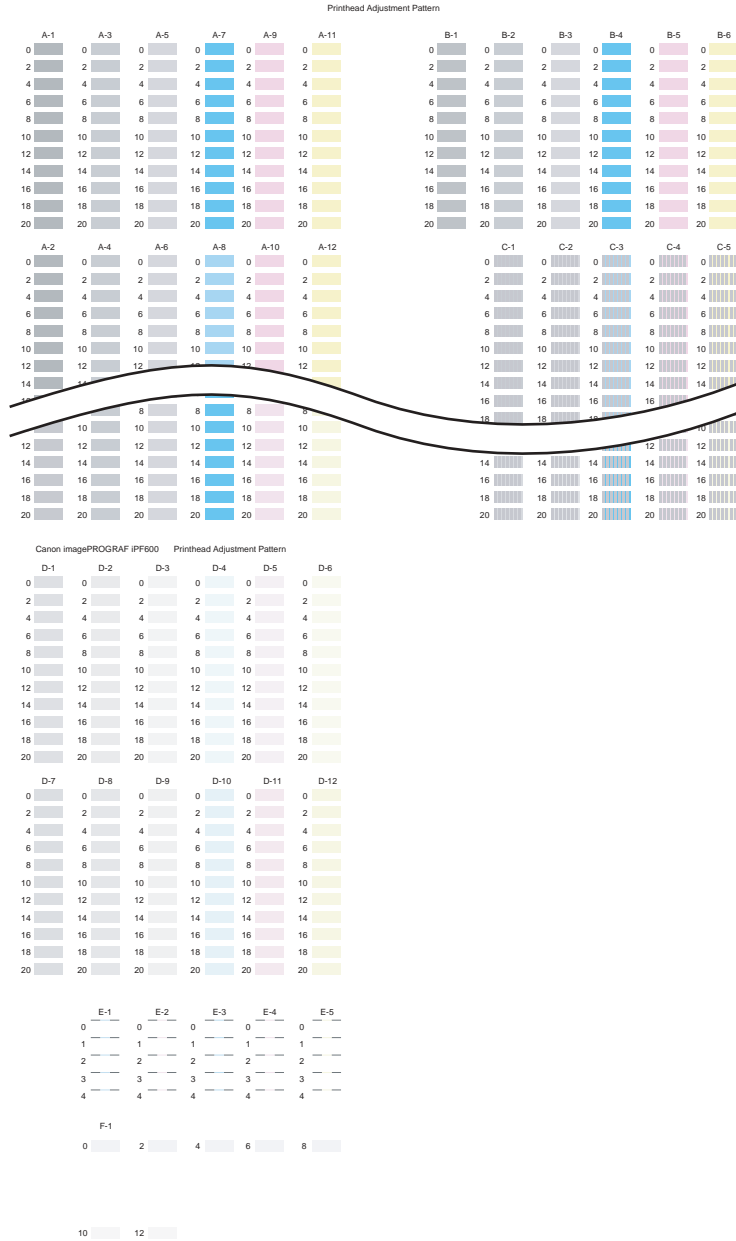
A sample printout that is produced by executing [SERVICE MODE]> [ADJUST]> [PRINT PATTERN]> [OPTICAL AXIS] is shown below.



F-7-3

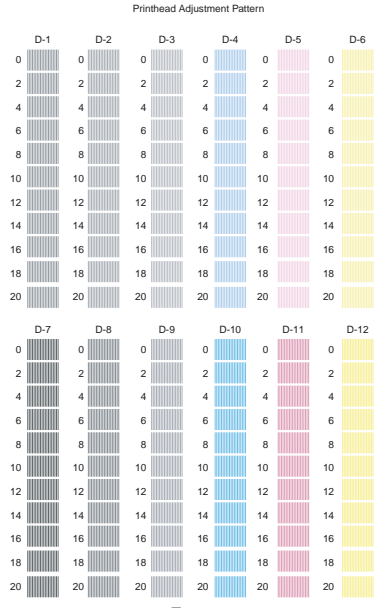
d) DETAIL

A sample printout that is produced by executing [SERVICE MODE]> [ADJUST]> [HEAD ADJ.] > [MANUAL HEAD ADJ]> [DETAIL] is shown below.



e) BASIC

A sample printout that is produced by executing [SERVICE MODE]> [ADJUST]> [HEAD ADJ.] > [MANUAL HEAD ADJ]> [BASIC] is shown below.



7.2 Special Mode

7.2.1 Special Modes for Servicing

iPF810 / iPF820 / iPF815 / iPF825

This printer supports the following special modes in addition to the service mode:

- **PCB replacement mode**
- **Download mode**
- **Counter display mode**

1. PCB replacement mode

This mode is used when replacing the main PCB or MC relay PCB.

By executing this mode,

- Backup data of the settings and counter values stored in the MC relay PCB are moved to the new main PCB.
- The data such as the settings and counter values are copied to the MC relay PCB.

a) Entering the PCB replacement mode

Follow the same procedure as that for entering the service mode.

(With the "Paper Source" button and "Information" button pressed down, turn on the "Power" button.)

When the printer starts up, compare the serial number memorized in the main PCB's EEPROM with that memorized in the MC relay PCB's EEPROM. If they do not match, or no serial number is memorized in either EEPROM, enter the PCB replacement mode.

While you are in the PCB replacement mode, the MESSAGE LED, roll media LED, and ONLINE LED are lit.

b) Procedure

Select "CPU BOARD" or "MC BOARD" using the [◀] and [▶] buttons, and then press the [OK] button to determine it.

- CPU BOARD

Select this after replacing the main PCB.

The data in the MC relay PCB is copied to the main PCB.

- MC BOARD

Select this before replacing the MC relay PCB.

The data in the main controller PCB is copied to the MC relay PCB.

c) Exiting the PCB replacement mode

Turning off the Power button of the printer allows you to exit the PCB replacement mode.

For details on how to replace the PCB, see Parts Replacement Procedure > Disassembly/Reassembly > Points to Note on Disassembly and Reassembly > Boards.

2. Download mode

Use this mode only when updating the firmware without performing initialization.

a) Entering the download mode

1) Turning off the Power button of the printer.

2) With the "Stop" and "Information" buttons pressed down, turn on the Power button of the printer.

* Keep pressing the above buttons until "Initializing" appears on the display.

b) Procedure

When "Download Mode/Send Firmware" is shown on the display, transfer the firmware.

When downloading of the firmware is completed, the printer is turned off automatically.

3. Counter display mode

Use this mode to view only printer counter information.

a) Invoking counter display mode

1) Press the [MENU] button to keep [Information] > [System Info] selected.

2) Press the [▲] button while holding down the [MENU] button + [OK] button to invoke counter display mode.

b) How to view counter display mode

- S/N: Unit serial number

- CNT: Number of copies printed in A4 terms (unit: copies)

Chapter 8 ERROR CODE

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8.1 Outline

8.1.1 Outline

iPF810 / iPF820 / iPF815 / iPF825

The printer indicates errors using the display and LEDs.

If an error occurs during printing, the printer status is also displayed on the status monitor of the printer driver.

The following three types of errors are displayed on the display:

- Warning

Status where the print operation can be continued without remedying the cause of the problem. This can, however, adversely affect the printing results.

- Error

Status where the print operation is stopped, and the regular operation cannot be recovered until the cause of the problem is remedied.

- Service call error

When a service call error occurs, the error is not cleared and the error indication remains on the operation panel even if the printer is powered off and on again. (Occurrence of the service call error is indicated again at power-on.)

This measure is taken to prevent user's recovery of the service call error and damages to the printer.

Service call errors can be cleared, however, by starting up the printer in the service mode.

Note that some of the warnings, errors, and service call error described in the following tables may not appear in this printer.

In addition, the message appears on the screen may not be the same as what is described in the table.

Overview of warnings and error codes

The codes of warnings and errors are shown below according to the system.

T-8-1

Code	Diagnosis
0181xxx-xxxx	Ink warning
0180xxx-xxxx	Printhead warning
0184xxx-xxxx	Maintenance cartridge warning
0134xxx-xxxx	GARO warning
0303xxx-xxxx	Cover error
0301xxx-xxxx 0306xxx-xxxx 0386xxx-xxxx	Media error
0313xxx-xxxx	Sensors, fans, motors error
0380xxx-xxxx	Printhead error
0381xxx-xxxx 0383xxx-xxxx	Ink error
0384xxx-xxxx	Maintenance cartridge error
0387xxx-xxxx	Cutter unit error
0389xxx-xxxx	Media take-up unit error
0390xxx-xxxx	Firmware error
Exxx-xxxx	Service call error

* "x" stands for a numeric or letter.

8.2 Warning Table

8.2.1 Warnings

iPF810 / iPF820 / iPF815 / iPF825

* Codes represent the numbers that are displayed in DISPLAY in service mode and that are recorded in PRINTINF. Messages that are not accompanied by a code indication are not logged.

T-8-2

Display message	Code*	Condition detected	Action
Ink Level: Check	0180104-1000	BK ink tank near-empty	Renew the ink tanks.
Ink Level: Check	0180101-1001	Y ink tank near-empty	
Ink Level: Check	0180102-1002	M ink tank near-empty	
Ink Level: Check	0180103-1003	C ink tank near-empty	
Ink Level: Check	0180106-1006	MBK ink tank near-empty	
Ink Level: Check	0180106-1007	MBK2 ink tank near-empty	
Problem with Printhead. Chk printing results	01800500-1010	Number of non-discharging nozzles in printhead: Warning level	
Prepare for maint cart replacement.	01841001-281A	Maintenance cartridge near-full	Replace the maintenance cartridge.
Prepare for parts replacement. Call for service.		Parts counter W1 level	Check the parts counter in service mode.
Parts replacement time has passed. Call for service.		Parts counter W2 level	After checking the parts counter in service mode, replace any part whose counter is nearing the error value.
GARO W1221	01341221-1030	GARO (image mode): Unknown command	Verify the transmitted data before reprinting.
GARO W1222	01341222-1031	GARO (image mode): Invalid parameter count (no parameters)	
GARO W1223	01341223-1032	GARO (image mode): Required parameter missing	
GARO W1225	01341225-1034	GARO (image mode): Other warning	
GARO W1226	01341226-103A	GARO (image mode): Image processing table error	
GARO W1231	01341231-1035	GARO (setup): Unknown command	
GARO W1232	01341232-1036	GARO (setup): Invalid parameter count	
GARO W1233	01341233-1037	GARO (setup): Required parameter missing	
GARO W1234	01341234-1038	GARO (setup): Data out of bounds	
GARO W1235	01341235-1039	GARO (setup): Other warning	
End of paper feed. Cannot feed paper more.		Forced feed limit	Check the remaining quantity of roll media.
This type of paper is not compatible with HP-GL/2.	01860006-1015	Non-support paper of HP-GL/2	Exchange for the compatible paper to HP-GL/2.
GL2:W0501 The memory is full.	01340501-1040	Memory full (HP-GL/2)	Check if there is the non-image area of the print. Verify the transmitted data before reprinting.
GL2:W0904 The memory is full.	01340904-1048	Overflow of Polygon buffer (HP-GL/2)	
GL2:W0903 The memory is full.	01340903-1047	Overflow of replot buffer (HP-GL/2)	
GL2:W0502 The parameter is out of range.	01340502-1041	Invalid parameter (HP-GL/2)	Verify the transmitted data before reprinting.
GL2:W0504 This command is not supported.	01340504-1043	Invalid command (HP-GL/2)	
Mail box nearly full. Delete unwanted data	011A1001-2901	The free hard disk space left for Personal Boxes in the printer's hard disk does not have more than 1 GB, combined.	Delete unneeded jobs stored in Personal Boxes.
Mail box full. Now printing without saving data.	01861003-2902	100 jobs are stored in the Personal Box.	Delete unneeded jobs stored in Personal Boxes.
Before borderless printing, move the blue platen switch.	01861004-1049	The platen shutter is closed at the borderless printing.	Open the corresponding platen shutter.
Blue platen switch is dirty. Please clean the switch.	01861004-1050	Platen shutter cleaning warning	Clean the platen shutter.
Not much ink is left. Prepare to replace the ink.	01810103-1003	C ink tank near-empty	Renew the C ink tank.
Not much ink is left. Prepare to replace the ink.	01810102-1002	M ink tank near-empty	Renew the M ink tank.
Not much ink is left. Prepare to replace the ink.	01810101-1001	Y ink tank near-empty	Renew the Y ink tank.
Not much ink is left. Prepare to replace the ink.	01810106-1006	MBK ink tank near-empty	Renew the MBK ink tank.
Not much ink is left. Prepare to replace the ink.	01810104-1000	BK ink tank near-empty	Renew the BK ink tank.

Display message	Code*	Condition detected	Action
Ink tank is empty. Replace the ink tank.	01810303-1403	C ink tank empty	Renew the C ink tank.
Ink tank is empty. Replace the ink tank.	01810302-1402	M ink tank empty	Renew the M ink tank.
Ink tank is empty. Replace the ink tank.	01810301-1401	Y ink tank empty	Renew the Y ink tank.
Ink tank is empty. Replace the ink tank.	01810306-1406	MBK ink tank empty	Renew the MBK ink tank.
Ink tank is empty. Replace the ink tank.	01810304-1400	BK ink tank empty	Renew the BK ink tank.
No ink tank loaded. Check ink tank.	01810103-1413	C ink tank removal	Attach the C ink tank.
No ink tank loaded. Check ink tank.	01810102-1412	M ink tank removal	Attach the M ink tank.
No ink tank loaded. Check ink tank.	01810101-1411	Y ink tank removal	Attach the Y ink tank.
No ink tank loaded. Check ink tank.	01810106-1416	MBK ink tank removal	Attach the MBK ink tank.
No ink tank loaded. Check ink tank.	01810104-1410	BK ink tank removal	Attach the BK ink tank.
The paper is too small.	013200D2-1051	Size clip error	Check the media size check. Change the media size.
Maximum jobs stored. Delete unwanted data.	011A1006-2907	Saved jobs exceed the Personal Box capacity.	Press the stop button to cancel the print job. Delete print jobs from the queue. Delete unneeded jobs stored on the hard disk.

8.3 Error Table

8.3.1 Errors

iPF810 / iPF820 / iPF815 / iPF825

* Codes represent the numbers that are displayed in DISPLAY in service mode.

If the same message is displayed when the printer is turned off, then back on, take action as recommended in the Action column.

T-8-3

Display message	Code*	Condition detected	Action
PHead needs cleaning. Press Online to clear error.	03800500-280C	Printhead found to have many non-discharging nozzles during a non-discharging inspection (printing paused)	Clean the printhead. Identify the nozzles in a nozzle check pattern. Replace the printhead.
Paper size not detected. Lift the release lever and reload the paper.	03010000-200C	Unable to detect the leading end of paper	Check the leading end of paper. Reload the paper.
Leading edge detection error. Lift the release lever and align leading edge with orange line.	03010000-200D	Unable to detect the trailing end of cut sheet	Check the sheet length. Check to see if paper has not jammed.
Paper size not detected. Lift the release lever and reload the paper.	03010000-2017	Paper (right) edge detection error	Check the right edge of paper. Check the paper type.
Paper size not detected. Lift the release lever and reload the paper.	03010000-2018	Paper (left) edge detection error	Check the left edge of paper. Check the paper type.
Cannot adjust printhead. Press Online to clear the error and readjust printhead.	03863000-2820	Printhead registration unadjustable	Check the paper on which a pattern is printed for smears. Check the environment for interferences from outside light. Clean the printhead.
Cannot adjust printhead. Press Online to clear the error and readjust printhead.	03863000-2821	LF unadjustable	Check the paper on which a pattern is printed for smears. Check the environment for interferences from outside light. Clean the printhead.
Cannot print as specified. Lift the release lever and replace paper with A4/LTR (vertical) or larger.	03010000-2E1F	Undersized paper loaded for internal printing (A4 or larger)	Replace with A4/Letter or any larger-sized paper.
Cannot print as specified. Lift the release lever and replace paper with A3/Ledger (vertical) or larger.	03010000-2E1F	Undersized paper loaded for internal printing (A3 or larger)	Replace with A3/11"x17" or any larger-sized paper.
Cannot print as specified. Lift the release lever and replace roll with 10 in. wide or larger roll.	03010000-2E1F	Undersized paper loaded for internal printing (roll media)	Replace with roll media at least 10 inches in width.
Cannot detect paper Remove paper and press Load/Eject.	03010000-2E25	Paper jam while feeding/ejecting/printing	Remove the paper jam and reload the paper.
Cannot feed paper Lift the release lever and reload paper.	03010000-2E27	Paper jam during feeding/printing/ejection	Reload the paper.
This paper cannot be used. Check supported paper sizes.	03010000-200E	Undersized paper (cut sheets/roll media)	Replace with larger-sized paper.
This paper cannot be used. Check supported paper sizes.	03010000-200F	Oversized paper (cut sheets/roll media)	Replace with smaller-sized paper.
Use another paper. Press Online to clear the error.	03010000-2F33	Unadjustable because of transparent media	Replace with adjustable media.
Paper loaded askew. Lift the release lever.	03016000-2010	Skew	Correct the skew in the paper and reload it.

Display message	Code*	Condition detected	Action
Hardware error. 03130000-2E21 Turn off printer, wait, then turn on again.	03130000-2E21	IEEE1394 interface error	Check that the optional IEEE1394 board is mounted. Check the cable connection.
Paper size not detected. Reload paper.	03010000-200A	Unable to detect the paper width (Paper loaded at an improper position)	Reload the paper
Paper jam. Press Load/Eject and reload the paper.	03010000-2E27	Paper jam during feeding/printing/ejection	Reload the paper
Paper size not detected. Lift the release lever and reload the paper.	03010000-200C	Roll media loading size detection failure	Reload the roll media.
Cannot adjust eccentric. Press Online to clear the error.	03863000-2822	Eccentricity correction disabled	Check to see if paper has not jammed.
Sheet printing is selected. Press Load/Eject and load sheets.	03860002-2E02	Data with a cut sheet specification has been received but no cut sheets are loaded.	Load cut sheets at the paper tray port.
Roll printing is selected, but sheets are loaded. Press OK, remove the sheets, and load a roll.	03860002-2E0A	Data with a roll media specification has been received when a cut sheet tray is loaded.	Replace with roll media.
Roll printing is selected. Press Load/Eject and load a roll.	03060A00-2E00	Data with a roll media specification has been received but no roll media are loaded.	Load roll media.
No Roll Feed Unit. Turn printer off and install roll feed unit.	03060A00-2E0E	Roll media unit not installed	Install the roll media unit.
The roll is empty. Lift the release lever and replace the roll.	03060A00-2E1B	Roll media end	Renew the supply of roll media.
Wrong paper feed slot for this paper type. Press Load/Eject and reload the paper.	03061000-2E15	Paper type mismatch	Check the type of paper that can be fed and reload the paper.
Manual printing is selected, but a roll is loaded. Press Load/Eject and remove the roll.	03860001-2E0C	Data with a cut sheet specification has been received when roll media are loaded.	Load cut sheets at the paper tray port.
Hardware error. 03130031-291D Turn off printer, wait, then turn on again.	03130031-291D	Spur cam sensor detection failure	Check the spur cam sensor.
Hardware error. 03130031-2E23 Turn off printer, wait, then turn on again.	03130031-2E23	Cutter unit failure	Check the cutter unit.
Hardware error. 03130031-2E14 Turn off printer, wait, then turn on again.	03130031-2F14	Writing to the ASIC register disabled	Replace the main controller PCB
Hardware error. 03130031-2E16 Turn off printer, wait, then turn on again.	03130031-2F16	Mist fan error	Check the mist fan.
Hardware error. 03130031-2E17 Turn off printer, wait, then turn on again.	03130031-2F17	Suction fan lock detection error	Check the suction fan.
Hardware error. 03130031-2E20 Turn off printer, wait, then turn on again.	03130031-2F20	Purge motor cam position error	Check the purge unit.

Display message	Code*	Condition detected	Action
Hardware error. 03130031-2E22 Turn off printer, wait, then turn on again.	03130031-2F22	Pump travel timeout	Check the purge unit.
Hardware error. 03130031-2E23 Turn off printer, wait, then turn on again.	03130031-2F23	Purge motor error Pump inoperable	Check the purge unit.
Hardware error. 03130031-2E25 Turn off printer, wait, then turn on again.	03130031-2F25	Unable to detect the carriage motor home position	Check the carriage unit. Check the linear encoder for smears.
Hardware error. 03130031-2E26 Turn off printer, wait, then turn on again.	03130031-2F26	Carriage inoperable	Check the carriage unit and surrounding parts.
Hardware error. 03130031-2E27 Turn off printer, wait, then turn on again.	03130031-2F27	Carriage travel timeout	Check the carriage unit and surrounding parts.
Hardware error. 03130031-2E1F Turn off printer, wait, then turn on again.	03130031-2F1F	Pump cam sensor error	Check the purge unit.
Hardware error. 03130031-2E2A Turn off printer, wait, then turn on again.	03130031-2F2A	Unable to detect the feed roller home position	Check the feed roller encoder and surrounding part. Check to see if paper has not jammed.
Hardware error. 03130031-2E29 Turn off printer, wait, then turn on again.	03010000-2F29	Feed motor timeout (Roll media)	Check the roll feed unit. Check roll media. Check to see if paper has not jammed in the printer.
Hardware error. 03130031-2E2E Turn off printer, wait, then turn on again.	03130031-2F2E	Roll travel timeout	Check the roll feed unit.
Hardware error. 03130031-4027 Turn off printer, wait, then turn on again.	03130031-4027	Lift travel timeout error	Check the carriage unit and surrounding parts.
Hardware error. 03130031-2E13 Turn off printer, wait, then turn on again.	03130031-2F13	A/D converter external trigger output stop detection hardware error 1	Replace the new printhead.
Hardware error. 03130031-2F32 Turn off printer, wait, then turn on again.	03130031-2F32	Multi sensor error	Check the environment for interferences from outside light. Replace the multi sensor unit.
Hardware error. 03130031-2F3A Turn off printer, wait, then turn on again.	03130031-2F3A	Valve motor error	Check the ink supply unit.
Hardware error. 03130031-2F3B Turn off printer, wait, then turn on again.	03130031-2F3B	CS communication error	Remove the ink tanks and then reload them. Check the main controller PCB.
Hardware error. 03130031-260E Turn off printer, wait, then turn on again.	03130031-260E	Gap detection error	Check the carriage unit and surrounding parts. Replace the main controller PCB.
Hardware error. 03130031-2618 Turn off printer, wait, then turn on again.	03130031-2618	VH voltage error	Check the power supply unit.
Hardware error. 03130031-260F Turn off printer, wait, then turn on again.	03130031-260F	Gap reference surface error	Replace the reference surface sheet.

Display message	Code*	Condition detected	Action
Roll feed unit err Turn off printer and check roll feed unit	03060B00-2E24	Roll feed unit failure	Replace the roll feed unit.
Unknown file. Check file format. Turn off printer, wait a while, then turn it on again.	03900001-4049	ROM data for another model has been transferred.	Transmit valid ROM data.
Unknown file. Check file format. Turn off printer, wait a while, then turn it on again.	03900001-4042	MIT data transfer failure	Verify the validity of MID data before transferring it.
Hardware error. 03130031-2F2B Turn off printer, wait, then turn on again.	03130031-2F2B	LF operation failure	Check to see if paper has not jammed. Check the feed motor and feed roller.
Printhead error Open top cover and replace the printhead.	03800200-2802	Invalid printhead installed	Replace printhead
Printhead error Open top cover and replace the right printhead.	03800300-2801	Printhead DI compensation failure	Replace printhead
Printhead error Open top cover and replace the right printhead.	03800400-2803	Printhead EEPROM error	Replace printhead
Hardware error. 03800500-2F2F Turn off printer, wait, then turn on again.	03800500-2F2F	Non-discharging error	Identify the head management sensor unit Replace the head management sensor unit Replace the printhead
Hardware error. 03800500-2F30 Turn off printer, wait, then turn on again.	03800500-2F30	Non-discharging position adjustment error	Identify the head management sensor unit Replace the head management sensor unit Replace the printhead
Ink tank is empty. Press OK and replace ink tank.	03810104-2500	Bk ink tank empty	Renew the Bk ink tank
Ink tank is empty. Press OK and replace ink tank.	03810101-2501	Y ink tank empty	Renew the Y ink tank
Ink tank is empty. Press OK and replace ink tank.	03810102-2502	M ink tank empty	Renew the M ink tank
Ink tank is empty. Press OK and replace ink tank.	03810103-2503	C ink tank empty	Renew the C ink tank
Ink tank is empty. Press OK and replace ink tank.	03810106-2506	MBk ink tank empty	Renew the MBk ink tank
Ink tank is empty. Press OK and replace ink tank.	03810106-2507	MBk2 ink tank empty	Renew the MBk ink tank
Ink insufficient. Press OK and replace ink tank.	03810204-2580	Low on the Bk ink tank (as during cleaning)	Replace with a fully replenished Bk ink tank
Ink insufficient. Press OK and replace ink tank.	03810201-2581	Low on the Y ink tank (as during cleaning)	Replace with a fully replenished Y ink tank
Ink insufficient. Press OK and replace ink tank.	03810202-2582	Low on the M ink tank (as during cleaning)	Replace with a fully replenished M ink tank
Ink insufficient. Press OK and replace ink tank.	03810203-2583	Low on the C ink tank (as during cleaning)	Replace with a fully replenished C ink tank
Ink insufficient. Press OK and replace ink tank.	03810206-2586	Low on the MBk ink tank (as during cleaning)	Replace with a fully replenished MBk ink tank
Ink insufficient. Press OK and replace ink tank.	03810204-2590	Low on the Bk ink tank (during pre-printing checks)	Replace with a fully replenished Bk ink tank

Display message	Code*	Condition detected	Action
Ink insufficient. Press OK and replace ink tank.	03810201-2591	Low on the Y ink tank (during pre-printing checks)	Replace with a fully replenished Y ink tank
Ink insufficient. Press OK and replace ink tank.	03810202-2592	Low on the M ink tank (during pre-printing checks)	Replace with a fully replenished M ink tank
Ink insufficient. Press OK and replace ink tank.	03810203-2593	Low on the C ink tank (during pre-printing checks)	Replace with a fully replenished C ink tank
Ink insufficient. Press OK and replace ink tank.	03810206-2596	Low on the MBk ink tank (during pre-printing checks)	Replace with a fully replenished MBk ink tank
Ink tank error. Press OK and replace ink tank.	03830204-2540	Bk ink tank ID error	Replace with a valid Bk ink tank
Ink tank error. Press OK and replace ink tank.	03830201-2541	Y ink tank ID error	Replace with a valid Y ink tank
Ink tank error. Press OK and replace ink tank.	03830202-2542	M ink tank ID error	Replace with a valid M ink tank
Ink tank error. Press OK and replace ink tank.	03830203-2543	C ink tank ID error	Replace with a valid C ink tank
Ink tank error. Press OK and replace ink tank.	03830206-2546	MBk ink tank ID error	Replace with a valid MBk ink tank
Ink tank error. Press OK and replace ink tank.	03830206-2547	MBk2 ink tank ID error	Replace with a valid MBk ink tank
No ink tank loaded. Press OK and check ink tank.	03830104-2520	BK ink tank not installed	Install a Bk ink tank
No ink tank loaded. Press OK and check ink tank.	03830101-2521	Y ink tank not installed	Install a Y ink tank
No ink tank loaded. Press OK and check ink tank.	03830102-2522	M ink tank not installed	Install a M ink tank
No ink tank loaded. Press OK and check ink tank.	03830103-2523	C ink tank not installed	Install a C ink tank
No ink tank loaded. Press OK and check ink tank.	03830106-2526	MBK ink tank not installed	Install a MBk ink tank
No ink tank loaded. Press OK and check ink tank.	03830106-2527	MBK2 ink tank not installed	Install a MBk ink tank
Top cover is open. Turn off printer, wait a while, and turn it on again.	03031000-2F38	Top cover abnormally open	Close the top cover and turn on the printer again.
Ink tank cover is open. Turn off printer, wait a while, and turn it on again.	03031000-2E10	Ink tank cover abnormally open	Close the ink tank cover and turn on the printer again.
Maintenance cartridge full. Replace the maintenance cartridge.	03841001-2819	Maintenance cartridge full	Renew the maintenance cartridge.
No Maintenance Cartridge capacity. Replace the maintenance cartridge.	03841001-281B	Not enough space in the maintenance cartridge prior to cleaning	Replace the maintenance cartridge.
Maintenance cartridge problem. Replace the maintenance cartridge.	03841201-2816	Maintenance cartridge EEPROM error	Renew the maintenance cartridge.

Display message	Code*	Condition detected	Action
Maintenance cartridge problem. Replace the maintenance cartridge.	03841201-2817	Maintenance cartridge ID error	Renew the maintenance cartridge.
Borderless printing not possible. Check roll position. Online: Print Load/Eject: Change Paper	03861001-2405	Paper loaded at a position inaccessible for borderless printing	Check to see if a borderless printing spacer is installed. Reload the paper.
Borderless printing not possible. Check paper size setting. Online: Print Load/Eject: Change Paper	03861001-2406	Data unfit for borderless printing	Check the paper size. Change the paper size.
Insufficient paper for job Online: Print Stop: Stop Printing Load/Eject: Change Paper	03862000-2E09	Not enough roll media on remaining roll media quantity detection	Renew the supply of roll media.
Cannot cut paper. Lift the release lever and reload the paper.	03870001-2015	Cutting failure	Cut paper manually. Check the cutter.
Cannot adjust optic axis. Press Online to clear the error.	03863000-2824	Optical axis error	Check the multi sensor. Check the head management sensor.
This type of paper is not compatible with HP-GL/2. Online: Print Stop: Stop Printing Load/Eject: Change Paper	03061000-2E15	Non-support media of HP-GL/2	Exchange for the compatible paper to HP-GL/2 before reprinting.
Mail box full. Delete unwanted data on your computer to resume printing. Press Stop to cancel printing.	031A1001-2905	The job store executed when the free hard disk space left for Personal Boxes in the printer's hard disk is full.	Delete unneeded jobs stored in Personal Boxes.
Mail box full. Cannot save. Delete unwanted data on your computer to resume printing. Press Stop to cancel printing.	031A1006-2906	The store executed when 32 jobs are stored in the Personal Box.	Delete unneeded jobs stored in Personal Boxes.
Hard disk error. Press OK to reformat	031A1002-2908	Hard disk format error	Press the [OK] button to start reformatting the hard disk. When formatting is finished, the printer automatically restarts.
File read error. Turn off printer, wait a while, and turn it on again. Invalid files will be deleted.	031A1002-2909	Hard disk file error	Restart the printer. Only the corrupted files will be deleted, and the printer will restart.
Hardware error. 03800500-2F31 Turn off printer, wait, then turn on again.	03800500-2F31	Non-discharge detection optical axis error	Check the head management sensor. Replace the head management sensor. Replace the printhead.
Hardware error. 03130031-2F3C Turn off printer, wait, then turn on again.	03130031-2F3C	LF pressure error	Check the pinch roller and surrounding part. Replace the pinch roller pressure drive unit.
Media Take-up error. Check the paper. Press Online to clear error.	03890000-2920	Media take-up unit cannot take up the media	Check to see if paper has not jammed.
Rewinding error. Check for jam at indicated position. Press Online to clear error.	03890000-2921	Media take-up take up the media continuously	Check the media take-up paper detection sensor and surrounding part. Replace the media take-up paper detection sensor.
Hardware error. 03130031-2F3F Turn off printer, wait, then turn on again.	03130031-2F3F	HP maintenance jet pump motor error	Check the purge unit.

Display message	Code*	Condition detected	Action
Hardware error. 03130031-2F3D Turn off printer, wait, then turn on again.	03130031-2F3D	HP maintenance jet pump motor overload error	Check the purge unit.
Hardware error. 03130031-2F3E Turn off printer, wait, then turn on again.	03130031-2F3E	HP maintenance jet pump motor move timeout error	Check the purge unit.
No printhead Install printhead.	03800100-2800	Printhead not installed	Install the printhead.
Wrong printhead. Open top cover and replace the printhead.	03800200-2811	Printhead version error	Replace the printhead.
No maintenance cartridge. Check the maintenance cartridge.	03841101-2818	Maintenance cartridge not installed	Install the maintenance cartridge.
This type of media is not compatible with HP-GL/ 2.	03860006-2825	Paper type mismatch at HP-GL/2 printing	Exchange for the compatible paper to HP-GL/2 before reprinting.
Cannot cut paper. Lift the release lever and reload the paper.	03870001-2019	Cut failure (during jam occur)	Check the cutter unit and surrounding part. Replace the cutter.
Insufficient paper for job	03862001-2E31	Not enough roll media (upper roll)	Renew the supply of roll media.
Insufficient paper for job	03862002-2E32	Not enough roll media (lower roll)	Renew the supply of roll media.
Paper jam. Manually rewind roll all the way and press OK.	03010000-2E3A	Media load failure (upper roll)	Check the pick-up unit and roll media. Check to see if paper has not jammed.
Paper jam. Manually rewind roll all the way and press OK.	03010000-2E3B	Media load failure (lower roll)	Check the pick-up unit and roll media. Check to see if paper has not jammed.
Sheet printing is selected. Press Load/Eject and load sheets.	03060100-2E02	Cut sheet in not set	Load cut sheets at the paper tray port.
Borderless printng not possible. Check supported paper.	03861001-2408	Borderless printing disabled (unsupported size)	Check the media size. Change the media size.
Borderless printng not possible. Paper stretched or shrank. Confirm usage cond. of the paper.	03861001-2407	Borderless printing disabled (engine detection)	Reload the paper.
Roll printing is selected. Press Load/Eject and load a roll.	03060A00-2E35	Roll media is not loaded for internal printing.	Reload the roll media.
Media Take-up error. Check the paper. Press Online to clear error.	03890000-2920	Use of the media take-up unit disabled	Set [Take-up Reel] of main menu to [Enable].
Borderless printng not possible. Check supported paper.	03861001-2408	Borderless printing disabled during take up (unsupported size)	Check the media size. Change the media size.
Borderless printng not possible. Paper stretched or shrank. Confirm usage cond. of the paper.	03861001-2407	Borderless printing disabled during take up (engine detection)	Reload the roll media.

8.4 Service Call Table

8.4.1 Service Call Errors

iPF810 / iPF820 / iPF815 / iPF825

*Codes correspond to the numbers shown on the DISPLAY in the service mode.

T-8-4

Code	Description	Action
E141-4046	Number of recovery rotations reaching 50,000 or more	Replace the purge kit, and then clear the parts counter in the service mode.
E146-4001	Borderless/flow idle ejection/mist recovery count error	Replace the waste ink tank unit or mist fan or waste ink absorber or multi sensor reference, and then clear the parts counter in the service mode.
E161-403E	Abnormal temperature rise in printhead	Replace the printhead.
E194-404A	Non-discharging nozzle count error	Replace the head management sensor unit, and then clear the parts counter in the service mode.
E196-4040	Checksum error	Replace the main controller PCB.
E196-4041	Flash memory erase error	Replace the main controller PCB.
E196-4042	Flash memory write error	Replace the main controller PCB.
E196-4045	EEPROM write error	Replace the main controller PCB.
E196-404C	Serial number mismatch between boards	Execute PCB replacement mode or replace the main controller PCB.
E196-404D	Machine ID mismatch between boards	Replace the main controller PCB.
E196-404E	EEPROM read error	Replace the main controller PCB.
E198-401C	RTC error	Replace the lithium battery or replace the main controller PCB.
E198-401D	RTC low battery error	Replace the lithium battery or replace the main controller PCB.
E198-401E	RTC clock stop	Replace the lithium battery or replace the main controller PCB.
E199-404B	Temperature/humidity sensor board connector out of position	Check the temperature/humidity sensor board connector or replace the board.
E602-401A	HDD failure	Replace the HDD unit.
E602-401B	HDD connection error	Check the HDD connector/Replace the HDD unit.
E144-4047	Number of carriage scan operation is full	Replace the tube unit, and then clear the parts counter in the service mode.
E144-4048	Printhead ink filling failure	Replace the printhead.
E144-404F	Number of pump rotation is full	Replace the HP maintenance jet tray unit, and then clear the parts counter in the service mode.
E196-4043	Memory error	Execute firmware update or replace the main controller PCB.
E196-4044	Firmware size error	Execute firmware update or replace the main controller PCB.

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