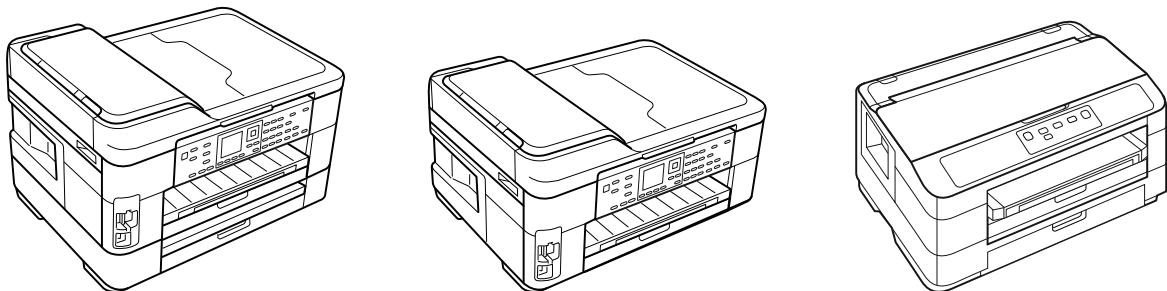


SERVICE MANUAL



Color Inkjet Printer

**Epson WF-7525/Epson WF-7521/Epson WF-7520/
Epson WF-7515/Epson WF-7511/Epson WF-7510/
Epson WF-7018/Epson WF-7015/Epson WF-7012/
Epson WF-7011/Epson WF-7010**

EPSON
EXCEED YOUR VISION

SEMF10-012

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Safety Precautions

All safety procedures described here shall be strictly adhered to by all parties servicing and maintaining this product.

DANGER

Strictly observe the following cautions. Failure to comply could result in serious bodily injury or loss of life.

1. Always disconnect the product from the power source and peripheral devices when servicing the product or performing maintenance.
2. When performing works described in this manual, do not connect to a power source until instructed to do so. Connecting to a power source causes high voltage in the power supply unit and some electronic components even if the product power switch is off. If you need to perform the work with the power cable connected to a power source, use extreme caution to avoid electrical shock.

WARNING

Strictly observe the following cautions. Failure to comply may lead to personal injury or loss of life.

1. Always wear protective goggles for disassembly and reassembly to protect your eyes from ink in working. If any ink gets in your eyes, wash your eyes with clean water and consult a doctor immediately.
2. When using compressed air products; such as air duster, for cleaning during repair and maintenance, the use of such products containing flammable gas is prohibited.

PRECAUTIONS

Strictly observe the following cautions. Failure to comply may lead to personal injury or damage of the product.

1. Repairs on Epson product should be performed only by an Epson certified repair technician.
2. No work should be performed on this product by persons unfamiliar with basic safety knowledge required for electrician.
3. The power rating of this product is indicated on the serial number/rating plate. Never connect this product to the power source whose voltages is different from the rated voltage.
4. Replace malfunctioning components only with those components provided or approved by Epson; introduction of second-source ICs or other non-approved components may damage the product and void any applicable Epson warranty.
5. The capacitors on the Main Board may be electrically charged right after the power turns off or after driving motors which generates counter electromotive force such as when rotating the PF Roller or when moving the CR Unit. There is a risk to damage the Main Board if the Head FFC is short-circuited with the capacitors on the Main Board electrically charged, therefore, after the power turns off or after motors are driven, leave the printer untouched for approximately 30 seconds to discharge the capacitors before starting disassembly/reassembly.

6. To prevent the circuit boards from short-circuiting, be careful about the following when handling FFC or cables.
 - When handling FFC, take care not to let the terminal section of FFC touch metal parts.
 - When connecting cables/FFC to the connectors on circuit boards, connect them straight to the connectors to avoid slant insertion.
7. In order to protect sensitive microprocessors and circuitry, use static discharge equipment, such as anti-static wrist straps, when accessing internal components.
8. Do not tilt this product immediately after initial ink charge, especially after performing the ink charge several times. Doing so may cause ink to leak from the product because it may take some time for the waste ink pads to completely absorb ink wasted due to the ink charge.
9. Never touch the ink or wasted ink with bare hands. If ink comes into contact with your skin, wash it off with soap and water immediately. If you have a skin irritation, consult a doctor immediately.
10. When disassembling or assembling this product, make sure to wear gloves to avoid injuries from metal parts with sharp edges.
11. Use only recommended tools for disassembling, assembling or adjusting the printer.
12. Observe the specified torque when tightening screws.
13. Be extremely careful not to scratch or contaminate the following parts.
 - Nozzle plate of the printhead
 - CR Scale
 - PF Scale
 - Coated surface of the PF Roller
 - Gears
 - Rollers
 - LCD
 - Scanner Sensor
 - Exterior parts
14. Never use oil or grease other than those specified in this manual. Use of different types of oil or grease may damage the component or give bad influence on the printer function.
15. Apply the specified amount of grease described in this manual.
16. Make the specified adjustments when you disassemble the printer.
17. When cleaning this product, follow the procedure described in this manual.
18. When transporting this product after filling the ink in the printhead, pack the printer without removing the ink cartridges in order to prevent the printhead from drying out.
19. Make sure to install antivirus software in the computers used for the service support activities.
20. Keep the virus pattern file of antivirus software up-to-date.
21. When disassembling/reassembling this product, if you find adhesive power of the double-sided tape which secure the parts or FFC is not enough, replace the tape with new one and attach it correctly to the specified points where the parts or FFC should be secured.
22. Unless otherwise specified in this manual, the labels attached on the returned product should be transferred to the corresponding attachment positions on the new one referring to the labels on the returned product.

About This Manual

This manual, consists of the following chapters, is intended for repair service personnel and includes information necessary for properly performing maintenance and servicing the product.

CHAPTER 1. PRODUCT DESCRIPTIONS

Provides a general overview and specifications of the product.

CHAPTER 2. OPERATING PRINCIPLES

Describes the theory of mechanical operations of the product.

CHAPTER 3. TROUBLESHOOTING

Describes the step-by-step procedures for the troubleshooting.

CHAPTER 4. DISASSEMBLY/ REASSEMBLY

Describes the disassembly/reassembly procedures for main parts/units of the product.

CHAPTER 5. ADJUSTMENT

Describes the required adjustments for servicing the product.

CHAPTER 6. MAINTENANCE

Describes maintenance items and procedures for servicing the product.

Symbols Used in this Manual

Various symbols are used throughout this manual either to provide additional information on a specific topic or to warn of possible danger present during a procedure or an action. Pay attention to all symbols when they are used, and always read explanation thoroughly and follow the instructions.



Indicates an operating or maintenance procedure, practice or condition that, if not strictly observed, could result in serious injury or loss of life.



Indicates an operating or maintenance procedure, practice, or condition that, if not strictly observed, could result in bodily injury, damage or malfunction of equipment.



May indicate an operating or maintenance procedure, practice or condition that is necessary to accomplish a task efficiently. It may also provide additional information that is related to a specific subject, or comment on the results achieved through a previous action.

For Chapter 4 "Disassembly/Reassembly", symbols other than indicated above are used to show additional information for disassembly/reassembly. For the details on those symbols, see "4.2 Disassembly/Reassembly Procedures (p46)".

Revision Status

Revision	Date of Issue	Description
A	Aug. 24, 2011	First Release

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CHAPTER 1

PRODUCT DESCRIPTION

1.1 Features



In this chapter, the product names are called as follows:

- **WF-7520 series:** Epson WF-7525/Epson WF-7521/Epson WF-7520
- **WF-7510 series:** Epson WF-7515/Epson WF-7511/Epson WF-7510
- **WF-7010 series:** Epson WF-7018/Epson WF-7015/Epson WF-7012/Epson WF-7011/
Epson WF-7010

WF-7520/7510/7010 series are an A3 color inkjet printer based on Epson WorkForce 840/Epson Stylus Office BX925FWD. Major features are as follows.

Common futures

- Printer
 - Maximum print speed: 15 ppm (A4, monochrome, draft printing mode)
 - O6-Chip Turbo 2 Printhead (Black: 128 nozzles x 3, Color: 128 nozzles x 1 per color)
 - Maximum print resolution: 5760 x 1440 dpi
 - Auto duplex printing up to A3 paper with the Duplex Unit (WF-7520/7010 series only)
 - Four independent ink cartridges are installed (pigment inks)
 - Interface
 - In addition to USB connection, wired/wireless LAN connection are available
- Scanner (WF-7520/7510 series only)
 - CIS type sensor (scanning resolution: 1200 x 2400 dpi)
 - ADF up to A3 paper scanning*

Note": Auto duplex scanning is available only for WF-7520 series. (A4 or letter sized paper only)

Differences between the models

WF-7520/7510/7010 series are different as shown below.

Table 1-1. Differences between the Models

Item	WF-7520 series	WF-7510 series	WF-7010 series
LCD display size	2.5 inch	2.5 inch	No
Auto duplex printing	Yes	No	Yes
Scanner / ADF	Yes	Yes	No
USB host (for PictBridge / Backup of an external storage device)	Yes	Yes	No
FAX	Yes	Yes	No
Wi-Fi	Yes	Yes	Yes*
2nd cassette	Yes	No	Yes

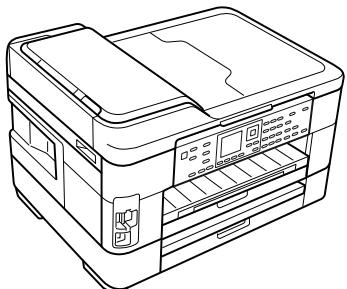
Note *: The availability of the WiFi varies depending on the destinations.

Available: EHC/Euro/CISMEA/ESP/ETT/EKL

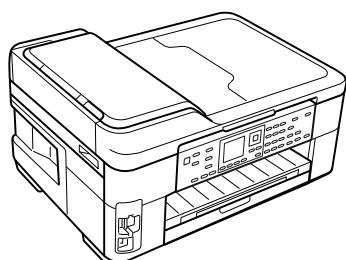
Not available: EAL/Latin/EAL/ECC/EHK

External view

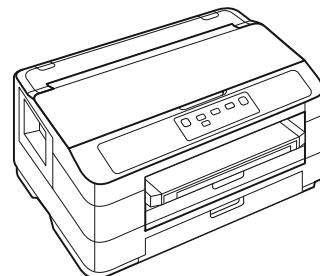
WF-7520 series



WF-7510 series



WF-7010 series

**Figure 1-1. External View****Table 1-2. Dimensions**

Model	Dimensions (W x D x H) ^{*1}	Weight ^{*2}
WF-7520 series	559 mm x 418 mm x 365 mm	18.9 kg
WF-7510 series	559 mm x 418 mm x 287 mm	15.6 kg
WF-7010 series	558 mm x 414 mm x 264 mm	12.3 kg

Note *1: Paper support for rear ASF and stacker are closed. Rubber feet are included.

*2: Excluding the weight of ink cartridges and power cable.

1.2 Printing Specifications

1.2.1 Basic Specifications

Table 1-3. Printer Specifications

Item	Specification
Print method	On-demand ink jet
Nozzle configuration	Black: 384 nozzles (128 nozzles x 3) Color: 384 nozzles (128 nozzles x 1 per color)
Color	Black, Cyan, Magenta, Yellow
Print direction	Bi-directional minimum distance printing, Unidirectional printing
Print resolution	Horizontal x Vertical (dpi) <ul style="list-style-type: none"> • 360 x 120 • 360 x 360 • 360 x 720 • 720 x 720 • 1440 x 720 • 5760 x 1440
Control code	• ESC/P Raster command • ESC/P-R (RGB) command
Input buffer size	Printing from PC: 64 KBytes Stand-alone printing: 132 KBytes
Paper feed method	Friction feed
Paper feed amount	250 pages (plain paper*), 20 pages (photo paper), 50 pages (postcard)
Paper path	Front feed, front out
PF interval	0.01764 mm (1/1440 inch)

Note *: For paper thickness: 0.11 mm, 80 g/m².

1.3 Scanner Specifications (WF-7520/7510 series only)

1.3.1 Basic Specifications

Table 1-4. Basic Specifications

Item	Specification
Scanner type	Flatbed, color
Scanning method	Moving carriage, stationary document
Home position	The rear left corner
Photoelectric device	CIS
Light source	LED
Maximum document sizes	A3 or US B (tabloid)
Scanning range	11.7" x 17" (297 mm x 431.8 mm)
Maximum resolution	Main scan: 1,200 dpi Sub scan: 2,400 dpi
Maximum effective pixels	14,040 x 20,400 pixels
Pixel depth	16 bit per pixel (input) and 1 bit or 8 bit per pixel (output)

Table 1-5. ADF Specifications

Item	Specification
Document loading	Face-up
Maximum document sizes	A4 to A3/tabloid
Supported paper type	Plain paper only
Paper thickness	64 to 95 g/m ²
Maximum number of documents which can be set	30 sheets or 3 mm at maximum
Document path	Feeds from upper tray and ejects to lower tray
Document set position	Center
Auto duplex scanning*	A4 or US Letter only

Note *: WF-7520 series only

1.4 Control Panel

1.4.1 Operation Buttons

The operation buttons, LEDs, and LCD are shown below. See Table 1-6 and Table 1-7 for the functions.

WF-7520/7510 series

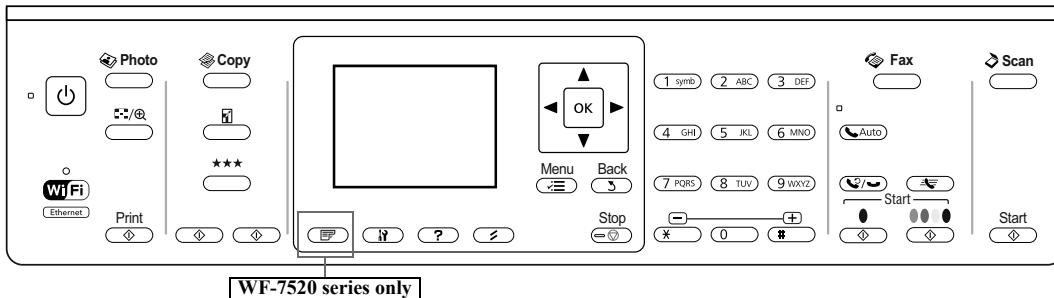


Figure 1-2. Control Panel (WF-7520/7510 series)

Table 1-6. Operation Buttons, LEDs and LCD (WF-7520/7510 series)

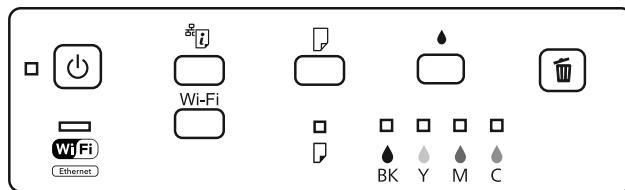
Item	Icon	Name	Function	
LCD		Indicates the printer status, error, and menu screen.		
Button/ touch panel	⊕	Power	Turns the power on/off.	
	❖	Photo	Enters photo mode.	
	❖/⊖	Display/Crop	<ul style="list-style-type: none"> Enters zoom setting screen for selected image. Switches preview screens on LCD. 	
	❖	Copy	Enters copy mode.	
	☒	Reduce/Enlarge	Specifies copy magnification.	
	★★★	Quality	Specifies print quality.	
	☒	2-Sided	Specifies auto duplex print setting. (WF-7520 series only)	
	☛	Setup	Enters setup mode.	
	?	Help	Displays help for solutions to problems.	
	≠	Reset	Resets the current setting and displays the home screen.	
	◀▲▼▶	Arrows	<ul style="list-style-type: none"> Selects menus. Specifies the number of copies. Moves the cursor in fax mode. 	
	OK	OK	Activates the setting you have selected.	
	≡	Menu	Displays detailed settings for each mode.	
	↶	Back	Cancels/returns to the previous menu.	
	ⓧ	Stop	Stops printing.	
	1-9, *, #	Ten key	<ul style="list-style-type: none"> Specifies the date/time Specifies the number of copies Specifies fax numbers 	
	❖	Fax	Enters fax mode.	
	📞 Auto	Auto Answer	Turns on/off auto answer mode.	
	📞/▬	Redial/Pause	<ul style="list-style-type: none"> Displays the last number dialed. Inserts a pause symbol (-) when entering numbers in fax mode. 	
	✉	Speed Dial	Displays speed dial list in fax mode.	
	❖	Scan	Enters scan mode.	
	◊	Start	Starts copying in each mode.	

Table 1-6. Operation Buttons, LEDs and LCD (WF-7520/7510 series)

Item	Icon	Name	Function
LED	⊕	Power	<ul style="list-style-type: none"> Lights when the printer is on. Flashes when the printer is in process.
		Network	Indicates the network connection status.
	Auto	Auto Answer	On when the fax is in auto answer mode.

Note : See "1.4.2 LEDs and LCD Indications (p16)" for more details about the LCD.

WF-7010 series



Note : The WiFi logo and button on the control panel vary depending on the destinations. (See Table 1-1.)

Figure 1-3. Control Panel (WF-7010 series)**Table 1-7. Operation Buttons and LEDs (WF-7010 series)**

Item	Icon	Name	Function
Button	⊕	Power	Turns the power on/off.
	printStats	Network status sheet	Prints a network status sheet.
	---	Wi-Fi	Configures the wireless network.
	paper	Paper feed/eject	<ul style="list-style-type: none"> Loads or ejects paper. Resumes printing after a paper out error, multiple page feed error.
	ink	Ink	<ul style="list-style-type: none"> Starts ink replacement. Starts head cleaning.
	cancel	Cancel	Cancels printing during a print job.
LED	⊕	Power	<ul style="list-style-type: none"> Lights when the printer is on. Flashes when the printer is in process.
		Network	Indicates the network connection status.
	paper	Paper	Indicates error status for paper.
	BK Y M C	Ink*	Indicates error status for ink.

Note : See "1.4.2 LEDs and LCD Indications (p16)" for more details about the LEDs.

Note *: The corresponding color LED is indicated.

1.4.2 LEDs and LCD Indications

Table 1-8. LEDs and LCD Indications

Status	WF-7010 series				WF-7520/7510 series	
	LED				LCD Message	
	Power	Network	Paper	Ink		
Operating	Printer fatal error	Flash at high speed	Printer error. Turn power off and then on again. For details, see your documentation or visit Epson.com.			
	Printer fatal error (paper jam)	Flash at high speed	Paper jam inside, in back, or in ADF. Press OK to see how to remove jammed paper.			
	Scanner fatal error ^{*1}	---	---	---	---	Scanner error. Turn power off and then on again. In the error is not fixed, visit Epson.com for technical support.
	ADF fatal error ^{*1}	---	---	---	---	Automatic Document Feeder (ADF) error.
	ADF paper jam error ^{*1}	---	---	---	---	Paper jam in the Automatic Document Feeder (ADF).
	Waste ink pad end error	Flash ^{*2}	---	Alternate flash 1	Alternate flash 2	A printer's ink pad is at the end of its service life. Please contact Epson Support.
	Waste ink pad near end error	Flash ^{*2}	---	Alternate flash 1	Alternate flash 2	A printer's ink pad is nearing the end of its service life. Please contact Epson Support.
	Paper jam error	Flash ^{*2}	---	Flash	---	Paper jam. Press OK to see how to remove jammed paper.
	No paper cassette error	Flash ^{*2}	---	ON	---	Load Cassette correctly and press or .
	Paper out error	Flash ^{*2}	---	ON	---	Paper out or paper jam. Check paper size and load paper in paper cassette.
	Multi-feed error	Flash ^{*2}	---	ON	---	Multi-page feed error. Remove and reload the paper, then press or .
	Paper length mismatch error for duplex printing ^{*3}	Flash ^{*2}	---	ON	---	Incorrect paper size detected. Load correct paper size and press or .
	Paper size mismatch error	Flash ^{*2}	---	ON	---	No paper source matches paper size setting. Load appropriate paper in Cassette 1. Press or .
	Incorrect paper size error ^{*1}	---	---	---	---	Paper size is incorrect. Load US B 11x17in size plain paper in Cassette.
	Printer/printer driver mismatch error	Flash ^{*2}	---	Flash at high speed	Flash at high speed	Error Press .
	Cover open error	Flash	---	Flash 2	Flash 2	Close the scanner unit.
	Ink end error	Flash ^{*2}	---	---	ON ^{*4}	You need to replace the following ink cartridge(s). <Ink Cartridges>XXXXXXX ^{*5}
	Ink cartridge detection error	Flash ^{*2}	---	---	ON ^{*4}	Cannot recognize the following cartridge(s). Try installing them again. <Ink Cartridges>XXXXXXX ^{*5}
	Ink cartridge detection error (non-Epson cartridge)	Flash ^{*2}	---	---	ON ^{*4}	Ink cartridge is not recognized. Please replace the cartridge. <Ink Cartridges>XXXXXXX ^{*5}
	No ink cartridge error	Flash ^{*2}	---	---	ON ^{*4}	The cartridge is installed incorrectly. Press it down until it clicks. <Ink Cartridges>XXXXXXX ^{*5}

Table 1-8. LEDs and LCD Indications

Status	WF-7010 series				WF-7520/7510 series
	LED				LCD Message
	Power	Network	Paper	Ink	
Operating	Starting filling of ink (after carriage moves)	Flash	---	---	Replace the cartridge(s) and close the scanner unit. <Ink Cartridges>XXXXXXX*5
	Ink cartridge cover open error	Flash*2	---	---	The ink cartridge cover is open. Close the ink cartridge cover.
	Starting initialization	Flash	---	---	Install the ink cartridges. See the setup sheet for details.
	Initializing	Flash	---	---	Initializing...Please wait. Do not turn off until initialization is complete. This takes about 7 minutes.
	Filling of ink	Flash	---	---	Charging ink...Please wait.
	Checking ink cartridges	Flash	---	---	Checking the ink cartridges...
	Drying 1st side (printing from PC)	Flash	---	---	Printing 2-sided document. Do not touch the paper in the output tray until printing is complete.
	Printing (PC)	Flash	---	---	Printing...
	Printing nozzle check pattern	Flash	---	---	Printing...
	Printing printer status sheet	Flash	---	---	Printing...
	Printing (UPNP)	Flash	Flash	---	Printing...
	Receiving data	Flash	Flash	---	Receiving data...
	Canceling (PC)*6	Flash	---	---	Canceling...
	Cleaning (PC)	Flash	---	---	Cleaning print head...Please wait.
	Print head cleaning	Flash	---	---	Cleaning print head...Please wait.
	Canceling nozzle check pattern print	Flash	---	---	Canceling...
	Canceling printer status sheet print	Flash	---	---	Canceling...
	Initializing network	Flash*2	Flash	---	---
	Waiting for network initialization	Flash*2	---	---	---
	Network initialization (LED ON)	OFF*2	ON	---	---
	Network initialization (LED OFF)	OFF*2	OFF	---	---
	Preparing to update firmware (cancel OK)	ON*2	Flash at high speed	---	Preparing to update...
	Updating firmware	Flash*7	OFF	OFF	Updating firmware...Do not turn power off. It turns off and on automatically when complete.
	Preparing to update firmware	ON*2	Flash at high speed	---	Preparing to update...
	Canceling firmware update	ON*2	Flash at high speed	---	Canceling...

Table 1-8. LEDs and LCD Indications

Status		WF-7010 series				WF-7520/7510 series
		LED				LCD Message
		Power	Network	Paper	Ink	
Operating	Powering OFF	Flash at high speed	---	---	---	Turning off...
	Powering ON	Flash	Flash	---	---	Starting up...Please wait.
	Feeding a paper (load/eject)	Flash	---	---	---	Printing...
Standby	No error	ON	---	---	---	---
	Ink level low	ON ^{*2}	---	---	Flash ^{*4}	Ink low.
	Waste ink pad near end error	ON ^{*2}	---	Alternate flash 1	Alternate flash 2	A printer's ink pad is nearing the end of its service life. Please contact Epson Support.
	Requiring ink cartridges (carriage is at the replacement position)	Flash	---	---	---	Replace the cartridge(s) and close the scanner unit. <Ink Cartridges>XXXXXXX ^{*5}
	Ink end error (during Bk mode)	ON ^{*2}	---	---	ON ^{*4}	You can temporarily copy, print and fax in B&W on plain paper on the next job.
	Ink end error (out of Bk mode)	ON ^{*2}	---	---	ON ^{*4}	You need to replace the following ink cartridge(s). <Ink Cartridges>XXXXXXX ^{*5}
	No ink cartridge error	ON ^{*2}	---	---	ON ^{*4}	The cartridge is installed incorrectly. Press it down until it clicks. <Ink Cartridges>XXXXXXX ^{*5}
	Ink cartridge detection error	ON ^{*2}	---	---	ON ^{*4}	Cannot recognize the following cartridge(s). Try installing them again. <Ink Cartridges>XXXXXXX ^{*5}
	Ink cartridge detection error (non-Epson cartridge)	ON ^{*2}	---	---	ON ^{*4}	Ink cartridge is not recognized. Please replace the cartridge. <Ink Cartridges>XXXXXXX ^{*5}
Operating/ Standby ^{*8}	When starting up	---	Flash	---	---	---
	Not connected	---	---	---	---	---
	Connected via wired LAN (with IP)	---	ON	---	---	---

Note : Flash Turns on and off at intervals of 1.25 seconds.
 Flash 2 On for 0.5 sec., Off for 0.5 sec., On for 0.5 sec. and Off for 1.0 sec.
 Flash at high speed Turns on and off at intervals of 0.5 seconds.
 Alternate flash 1 Same as "Flash"
 Alternate flash 2 Turns on and off at intervals of 1.25 seconds.

Note *1: WF-7520/7510 series only

*2: Flashes if the status arises when printing starts or when the printer starts up, but lights if the status arises when printing is complete.

*3: WF-7520/7010 series only

*4: The corresponding ink LED flashes/lights.

*5: The corresponding ink cartridge product number is indicated.

*6: Occurs when cancelling printing from PC, UPNP printing.

*7: Lights and then flashes.

*8: This does not occur independently. Occurs together with operating or standby state.

1.5 Various Settings

1.5.1 Panel Operation

1.5.1.1 Setup Menu Configuration (WF-7520/7510 series only)

The following explains the setup menu structure and the outline of the menu functions.

Table 1-9. Setup Menu Configuration (WF-7520/7510 series only)

Menu		Description
Setup	Ink Levels	---
Maintenance	Print Head Nozzle Check	Prints a nozzle check pattern.
	Print Head Cleaning	Runs a print head cleaning.
	Print Head Alignment	Prints a gap adjustment pattern.
	Ink Cartridge Replacement	Starts ink cartridge replacement.
Printer Setup	Paper Size Loaded* ¹	Selects the paper size.
	Sound	Turns the sound on/off.
	Screen Saver* ²	Configures the screen saver setting.
	Display Format	Specifies display format for the images in the memory card.
	Date/Time	Selects display format for data/time.
	Daylight Saving Time	Selects daylight saving time.
	Country/Region	Selects country/region.
	Language	Selects the language displayed on the LCD.
	Paper Size Notice* ¹	Checks the paper size and selects whether to alert users when an error occurs (Off/On).
Wi-Fi/Network Settings	Wi-Fi Setup	Selects a connection method for wireless LAN.
	General Network Setup	Configures the general setting for network.
	Wi-Fi/Network Connection Check	<ul style="list-style-type: none"> • Checks the network connection status. • Prints the connection check result.
	Confirm Network Settings	<ul style="list-style-type: none"> • Displays the network information. • Prints a network status sheet.
File Sharing Setup	USB	Sets the access priority when accessing the storage device connected to the USB host port to USB or Wi-Fi/Network.
	Wi-Fi/Network	
External Device Setup	Print Settings	Configures the print and paper settings when printing an image in external device.
	Photo Adjustments	Configures the color correction for photo.
Print Status Sheet	---	Prints a printer status sheet.
Restore Default Settings	Reset Fax Send/Receive Settings	Initializes the fax send/receive settings.
	Reset Fax Data Settings	Deletes the fax data settings.
	Reset Wi-Fi/Network Settings	Initializes the Wi-Fi/network settings.
	Reset All except Wi-Fi/Network & Fax Settings	Initializes the settings except Wi-Fi/network/fax settings.
	Reset All Settings	Initializes the all settings.

Note *1: WF-7520 series only

*2: Not available for some destinations.

1.5.1.2 Forced Power OFF (WF-7010 series only)

For WF-7010 series, the power can be turned off forcibly by the following panel operation. If the power is turned off forcibly, the same process of the normal power-off is executed.

Operation method

1. Press the power button and then stop button, and hold down the buttons for seven seconds or more.
2. When the Power LED starts flashing, release the buttons.

1.5.1.3 Printer Status Sheet

WF-7520/7510/7010 series print the printer status sheet by the following operation.

Table 1-10. Status Sheet

Model	Procedure
WF-7520/7510 series	<ol style="list-style-type: none"> 1. Press the setup button. 2. Select “Print Status Sheet” from the setup menu. 3. Press the OK button.
WF-7010 series	Turn the power on while pressing the paper feed/eject button.

Note : When printing the network status sheet to check the network information, follow the procedure below.

WF-7520/7510 series: Select “Wi-Fi/Network Settings” - “Confirm Wi-Fi/Network Settings”, and press the OK button.
(See "1.5.1.1 Setup Menu Configuration (WF-7520/7510 series only) (p19)".)

WF-7010 series: Press the “network status sheet” button. (See "1.4.1 Operation Buttons (p14)".)

CHAPTER 2

OPERATING PRINCIPLES

2.1 Overview



In this chapter, the product names are called as follows:

- **WF-7520 series:** Epson WF-7525/Epson WF-7521/Epson WF-7520
- **WF-7510 series:** Epson WF-7515/Epson WF-7511/Epson WF-7510
- **WF-7010 series:** Epson WF-7018/Epson WF-7015/Epson WF-7012/Epson WF-7011/Epson WF-7010

This chapter describes the operating principles of WF-7520/7510/7010 series printer mechanism.

2.2 Motors and Sensors

The following table lists the motors and sensors of WF-7520/7510/7010 series.

Printer Mechanism

Table 2-1. List of Motors & Sensors (Printer Mechanism)

Mechanism	Motor or Sensor	No.
Printhead		---
Carriage mechanism	CR Motor	A
	CR Encoder	1
	PW Sensor	2
	Cover Open Sensor	3
Paper loading/feed mechanism	PF Motor	B
	PF Encoder	4
	PE Sensor	5
	Pre-PE Sensor	6
	Paper Stopper Lever Sensor 1st	7

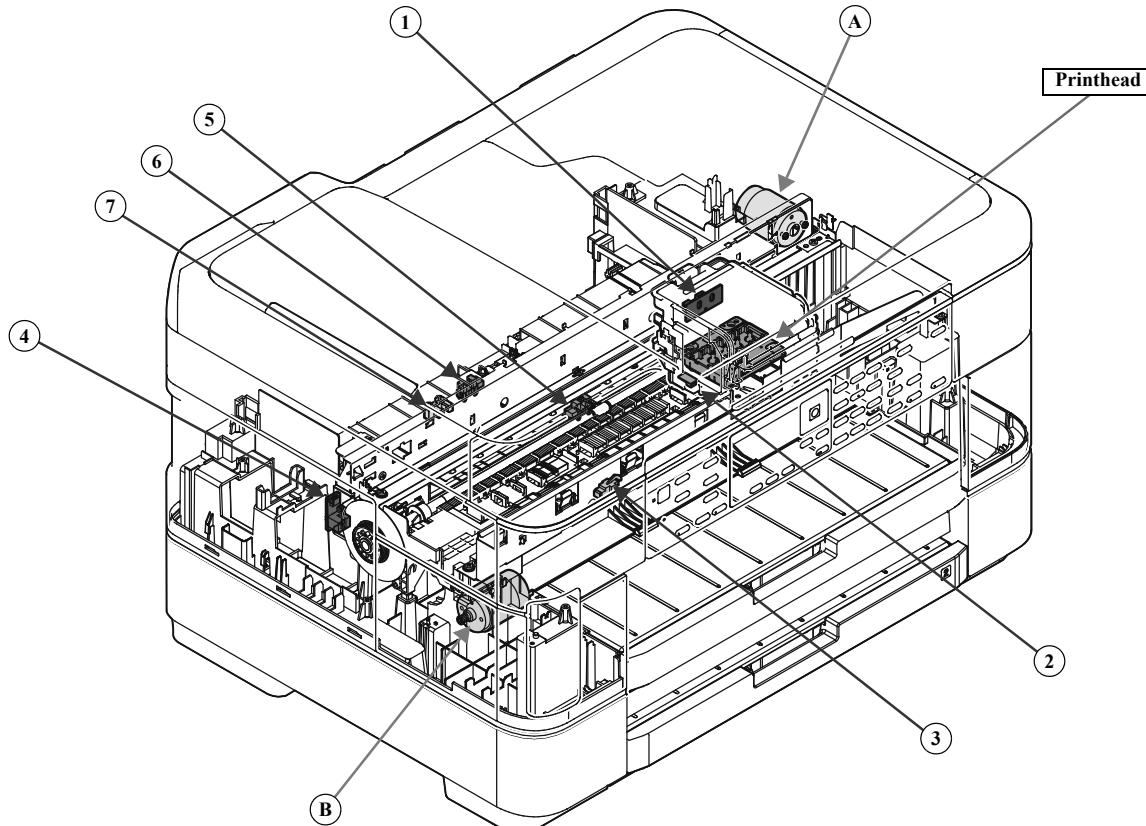


Figure 2-1. Motors & Sensors (Printer Mechanism)

2nd cassette (WF-7520/7010 series only)

Table 2-2. List of Motors & Sensors (2nd Cassette)

Mechanism	Motor or Sensor	No.
Paper loading/feed mechanism	Pickup Motor	A
	Pickup Encoder	1
	Paper Stopper Lever Sensor 2nd	2

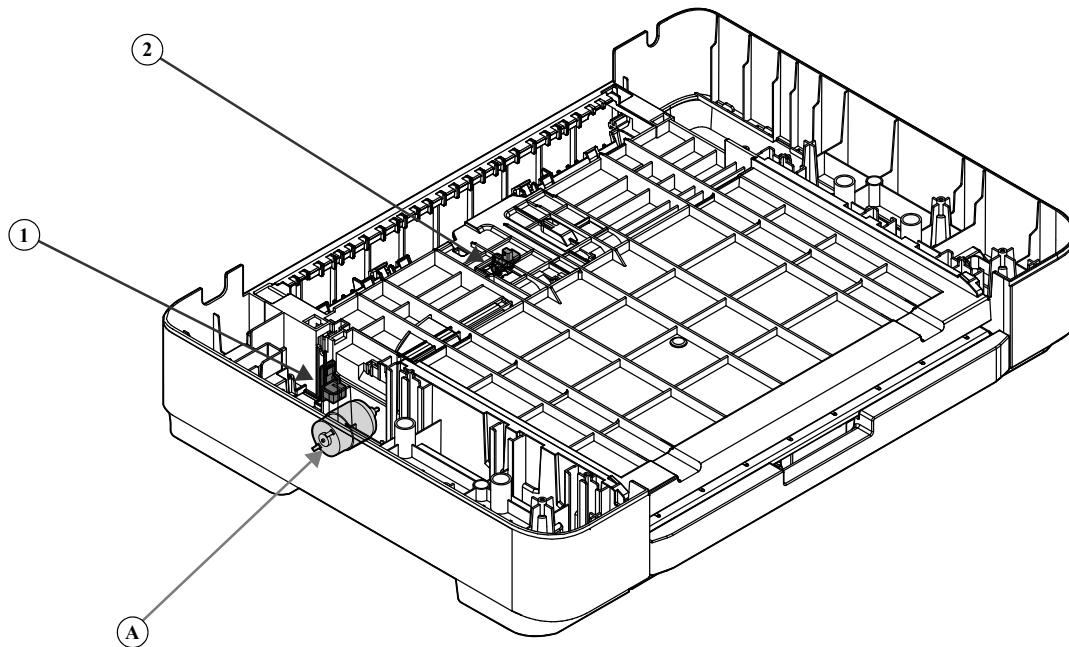
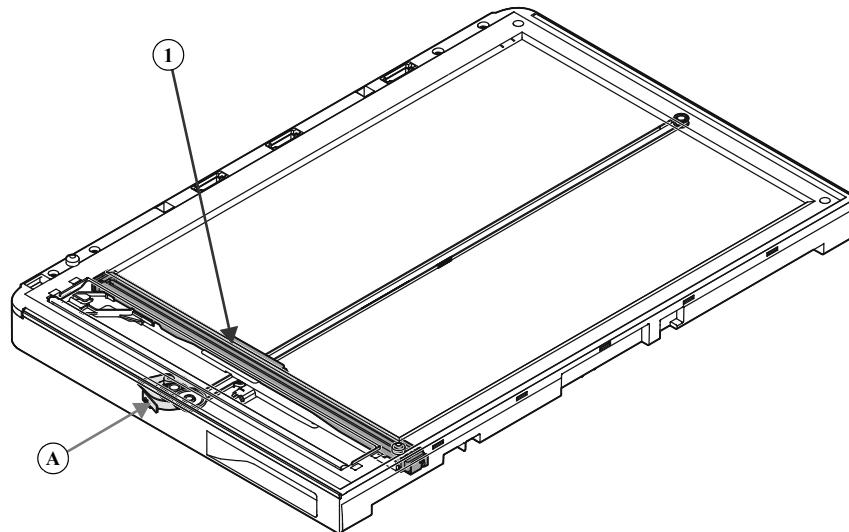


Figure 2-2. Motors & Sensors (2nd Cassette)

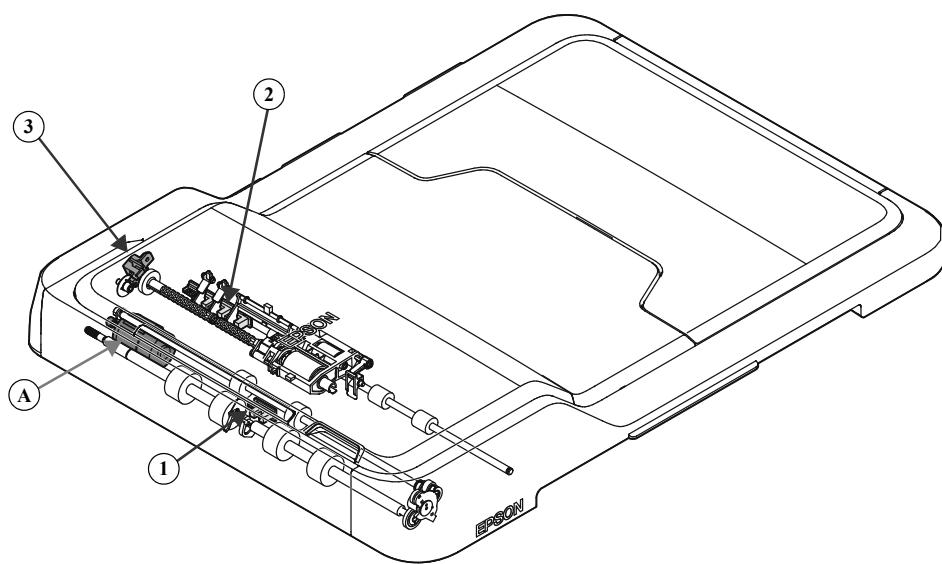
- Scanner (WF-7520/7510 series only)

Table 2-3. List of Motors & Sensors (Scanner)

Mechanism	Motor or Sensor	No.
Scanner mechanism	Scanner Motor Assy	A
	CIS Unit	1

**Figure 2-3. Motors & Sensors (Scanner)****Table 2-4. List of Motors & Sensors (ADF)**

Mechanism	Motor or Sensor	No.
ADF mechanism	ADF Motor	A
	ADF PE Sensor	1
	ADF DOC Sensor	2
	ADF Encoder	3

**Figure 2-4. Motors & Sensors (ADF)**

2.3 Optical Sensor Control

WF-7520/7510/7010 series uses the optical sensor to control itself. The following describes the operating principles of optical sensor control.

Control method

To ensure accurate printing, each part must be controlled to make an adequate amount (time) of movement. The optical sensors read the amount (time) of movements as follows to printer to control it for achieving accurate printing.

1. Rotates the motors for control of the printer, and transmits drive force to the each part via the gear or the timing belt.
2. The encoder reads the drive amount of each part from the scale one by one to printer to monitor that the part drives for an adequate amount (time).

Controlled parts

The following table lists where the optical sensor control is used.

Table 2-5. Controlled Parts^{*1}

Item	Motor	Scale	Encoder	Transmission method
PF/ASF (1st cassette)	PF Motor	PF Scale	PF Encoder	PF Timing Belt
CR	CR Motor	CR Scale	CR Encoder	CR Timing Belt
ASF (2nd cassette ^{*2})	Pickup Motor	Pickup Scale	Pickup Encoder	Gear
ADF ^{*3}	ADF Motor	ADF Scale	ADF Encoder	Gear

Note *1: See Fig. 2-1 (p22) and Fig. 2-2 (p23) for the positions of the parts.

*2: WF-7520/7010 series only

*3: WF-7520/7510 series only

Operating principles

The following describes the PF drive control as an example of the actual operation for the optical sensor.

The PF scale consists of light-passing and light-blocking portions on its surface, and runs through the slit between the encoder's light-emitting and light-receiving devices. While the printer is operating, the encoder always emits light from light-emitting device toward the light-receiving device, and the light-receiving device detects light when the light is transmitted through the light-passing portion of the scale, and does not detect light when the light is blocked by the light-blocking portion of the scale. According to the counts of light-detected and non detected times, the printer controls paper feed direction and amount.

When the encoder cannot read light-emitting/blocking counts correctly due to the misalignment, broken or contaminated scale, paper jam, foreign object and increasing a load, the fatal error occurs and the printer stops.

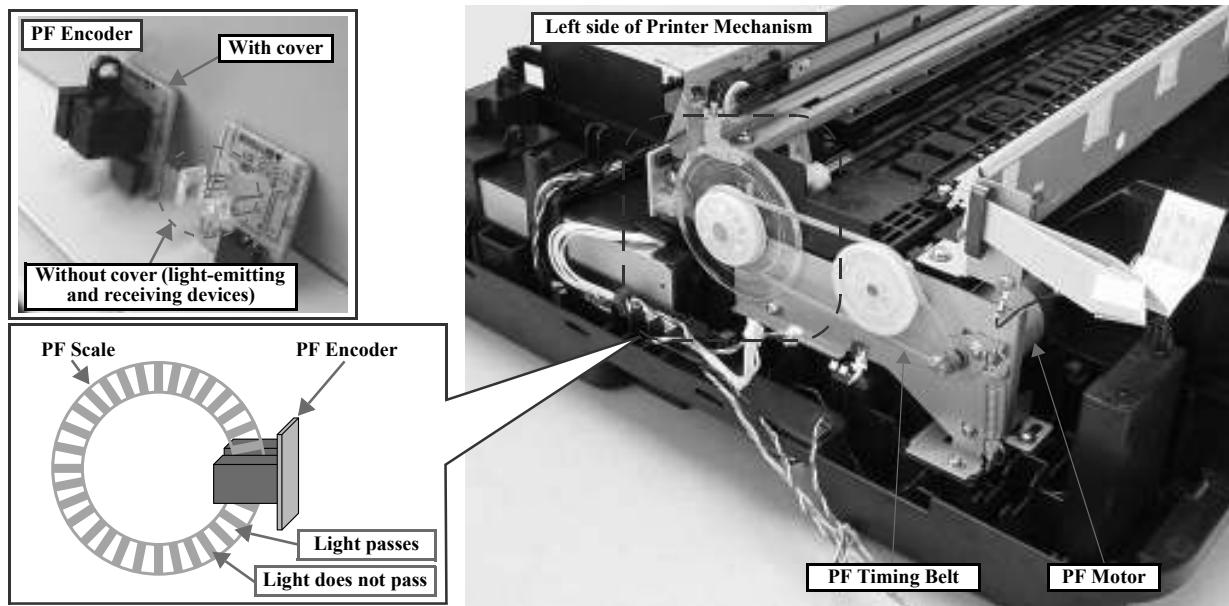


Figure 2-5. PF Drive Control Section

2.4 Power-On Sequence

This section describes the power-on sequences for this product. The preconditions are as follows.

- Condition 1: Normal power-on sequence (See Table 2-6.)
 - Turning on the printer after turning it off without an error.
 - Initial ink charge has finished and every cartridge has sufficient ink.
 - No paper on the paper path.
 - The Printhead is capped with the Cap of the Ink System Assy.
 - The Carriage is normally fixed by the CR Lock.
- Condition 2: Power-on sequence after recovering from a paper jam error (See Table 2-7.)
 - Turning on the printer after turning it off with a paper jam error.
 - There still remains paper on the paper path out of the detecting area of the PE sensor.

Table 2-6. Condition 1: Normal Power-on Sequence ^{*1}

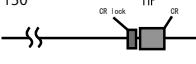
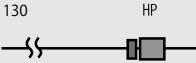
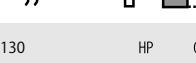
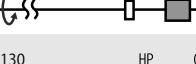
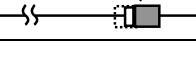
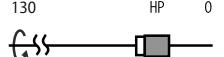
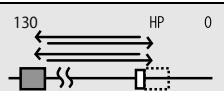
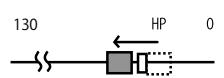
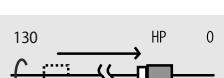
Operation ^{*2}	Carriage/PF Roller movement and position ^{*3}
1. Printhead initialization 1-1.Initializes the Printhead, and checks for the fuse on the board in the Printhead. ^{*4}	130 HP 0 
2. Checking for waste ink overflow 2-1.Checks the waste ink counter if the waste ink overflow is occurring.	130 HP 0 
3. Avoiding deadlock sequence ^{*5} 3-1.The carriage moves to the 0-digit side slowly and confirms it touches the Right Frame. 3-2.The carriage slightly moves to the 130-digit side slowly. 3-3.The PF Motor rotates clockwise, and releases the CR lock.	130 HP 0  130 HP 0  130 HP 0 
4. Seeking the home position 4-1.The carriage moves to the 0-digit side slowly and confirms it touches the Right Frame. The position when it touches the Right Frame is set as the origin position temporarily. 4-2.The carriage slowly moves to the CR lock set position. 4-3.The PF Motor rotates counterclockwise, and sets the CR lock. 4-4.The carriage moves to the 130-digit side slowly and confirms it touches the CR lock. 4-5.The carriage slowly moves toward the 0-digit side and reaches the CR lock set position.	130 HP 0  130 HP 0  130 HP 0  130 HP 0  130 HP 0  130 HP 0  130 HP 0 
4-6.The PF Motor rotates clockwise, and releases the CR lock. 4-7.The carriage moves to the 130-digit side slowly and confirms it does not touch the CR lock. 4-8.The carriage slowly moves to its home position, and the origin position is fixed. Afterward, the carriage position is monitored according to the signals from the CR Encoder.	130 HP 0  130 HP 0  130 HP 0  130 HP 0 

Table 2-6. Condition 1: Normal Power-on Sequence^{*1}

Operation ^{*2}	Carriage/PF Roller movement and position ^{*3}
5. PF initialization 5-1.The PF Motor rotates clockwise for approximately one second.	130 HP 0 
5-2.The PE sensor detects if paper exists ^{*6} and the PF Motor rotates clockwise for approximately 0.5 second.	130 HP 0 
6. Low temperature operation sequence^{*7} 6-1.The carriage moves back and forth between the CR lock and the 130-digit side for two times.	130 HP 0 
7. PF measurement and PW sensor initialization 7-1.The carriage slowly moves to the 130-digit side.	130 HP 0 
7-2.The carriage moves to the VHCheck position quickly and stops; meanwhile the voltage values detected by the PW sensor at the specified three points are recorded. At the same time, the PF Motor rotates clockwise and its load is measured.	130 HP 0 
7-3.The carriage detects the voltage of the PW sensor at the carriage stop position (the black area at the Paper Guide Front).	130 HP 0 
7-4.The carriage returns near its home position. At the same time, the PF Motor rotates clockwise and its load is measured.	130 HP 0 
8. Detecting ink cartridge and initializing ink system^{*8} 8-1.After the carriage slightly moves to the 130-digit side and checks the ink end sensor, detects the ink remaining.	130 HP 0 
8-2.The carriage slowly returns to its home position.	130 HP 0 
8-3.The carriage slowly moves to the 0-digit side to the CR lock set position.	130 HP 0 
8-4.The PF Motor rotates counterclockwise and sets the CR lock.	130 HP 0 
8-5.The carriage slowly returns to its home position.	130 HP 0 

Note *1: The PF motor drive is not transmitted to the Pickup Roller during this power-on sequence.

*2: The rotation directions of the PF Motor are as follows.

Clockwise: Paper is fed normally

Counterclockwise: Paper is fed backward

*3: The conditions of the CR lock are as follows.

Red CR lock is set

White CR lock is released

*4: The fatal error occurs if there is a problem such as the fuse blew.

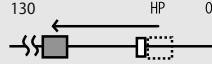
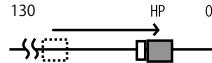
*5: Confirm that the CR lock is not get stuck in the gap of the carriage or any other parts preventing the carriage from moving.

*6: Eject paper if any.

*7: Executed when the detected temperature is under 5 °C (41°F) by the thermistor on the Printhead.

*8: The empty suction operation may occur depending on situations.

Table 2-7. Condition 2: Power-on Sequence after Recovering from a Paper Jam Error

Operation	Carriage/PF Roller movement and position
Executes No.1 to No.5 on the normal power-on sequence (Table 2-6).	
6. Detecting remaining paper	
6-1.The carriage moves to the 130-digit side and confirms there is no paper.*1	
6-2.The carriage quickly returns to its home position, and the paper jam error occurs again.	
When the user removes the paper and releases the paper jam error by panel operation, the normal power-on sequence from No.1 (Table 2-6) is executed again.*2	

Note *1: "Paper exists" is detected when the carriage touches the paper. When "paper does not exist" is detected, the power-on sequence of condition 1 (Table 2-6) is executed from No.6.

*2: If the paper jam error cannot be solved after repeating the power-on sequence on condition 2 (Table 2-7) twice, the printer turns into the paper jam fatal error for the third time.

CHAPTER 3

TROUBLESHOOTING

3.1 Troubleshooting



In this chapter, the product names are called as follows:

- **WF-7520 series:** Epson WF-7525/Epson WF-7521/Epson WF-7520
- **WF-7510 series:** Epson WF-7515/Epson WF-7511/Epson WF-7510
- **WF-7010 series:** Epson WF-7018/Epson WF-7015/Epson WF-7012/Epson WF-7011/
Epson WF-7010

This section describes the error message list, troubleshooting workflow, fatal error code and FAX Troubleshooting.

3.1.1 Error Message List

Table 3-1. Error Message List

Status	WF-7010 series				WF-7520/7510 series LCD Message	
	LED					
	Power	Network	Paper	Ink		
Printer fatal error	Flash at high speed	Printer error. Turn power off and then on again. For details, see your documentation or visit Epson.com.				
Printer fatal error (paper jam)	Flash at high speed	Paper jam inside, in back, or in ADF. Press OK to see how to remove jammed paper.				
Scanner fatal error ^{*1}	---	---	---	---	Scanner error. Turn power off and then on again. If the error is not fixed, visit Epson.com for technical support.	
ADF fatal error ^{*1}	---	---	---	---	Automatic Document Feeder (ADF) error.	
ADF paper jam error ^{*1}	---	---	---	---	Paper jam in the Automatic Document Feeder (ADF).	
Waste ink pad end error	Flash ^{*2}	---	Alternate flash 1	Alternate flash 2	A printer's ink pad is at the end of its service life. Please contact Epson Support.	
Waste ink pad near end error	Flash ^{*2}	---	Alternate flash 1	Alternate flash 2	A printer's ink pad is nearing the end of its service life. Please contact Epson Support.	
Paper jam error	Flash ^{*2}	---	Flash	---	Paper jam. Press OK to see how to remove jammed paper.	
No paper cassette error	Flash ^{*2}	---	ON	---	Load Cassette correctly and press or .	
Paper out error	Flash ^{*2}	---	ON	---	Paper out or paper jam. Check paper size and load paper in paper cassette.	
Multi-feed error	Flash ^{*2}	---	ON	---	Multi-page feed error. Remove and reload the paper, then press or .	
Paper length mismatch error for duplex printing ^{*3}	Flash ^{*2}	---	ON	---	Incorrect paper size detected. Load correct paper size and press or .	
Paper size mismatch error	Flash ^{*2}	---	ON	---	No paper source matches paper size setting. Load appropriate paper in Cassette 1. Press or .	
Incorrect paper size error ^{*1}	---	---	---	---	Paper size is incorrect. Load US B11x17in size plain paper in Cassette.	
Printer/printer driver mismatch error	Flash ^{*2}	---	Flash at high speed	Flash at high speed	Error Press .	
Cover open error	Flash	---	Flash 2	Flash 2	Close the scanner unit.	
Ink end error	Flash ^{*2}	---	---	ON ^{*4}	You need to replace the following ink cartridge(s). <Ink Cartridges>XXXXXXX ^{*5}	
Ink cartridge detection error	Flash ^{*2}	---	---	ON ^{*4}	Cannot recognize the following cartridge(s). Try installing them again. <Ink Cartridges>XXXXXXX ^{*5}	

Table 3-1. Error Message List

Status	WF-7010 series				WF-7520/7510 series
	LED				LCD Message
	Power	Network	Paper	Ink	
Ink cartridge detection error (non-Epson cartridge)	Flash*2	---	---	ON*4	Ink cartridge is not recognized. Please replace the cartridge. <Ink Cartridges>XXXXXXX*5
No ink cartridge error	Flash*2	---	---	ON*4	The cartridge is installed incorrectly. Press it down until it clicks. <Ink Cartridges>XXXXXXX*5
Ink cartridge cover open error	Flash*2	---	---	---	The ink cartridge cover is open. Close the ink cartridge cover.

Note : Flash Turns on and off at intervals of 1.25 seconds.
 Flash 2 On for 0.5 sec., Off for 0.5 sec., On for 0.5 sec. and Off for 1.0 sec.
 Flash at high speed Turns on and off at intervals of 0.5 seconds.
 Alternate flash 1 Same as "Flash"
 Alternate flash 2 Turns on and off at intervals of 1.25 seconds.

Note *1: WF-7520/7510 series only

*2: Flashes if the status arises when printing starts or when the printer starts up, but lights if the status arises when printing is complete.

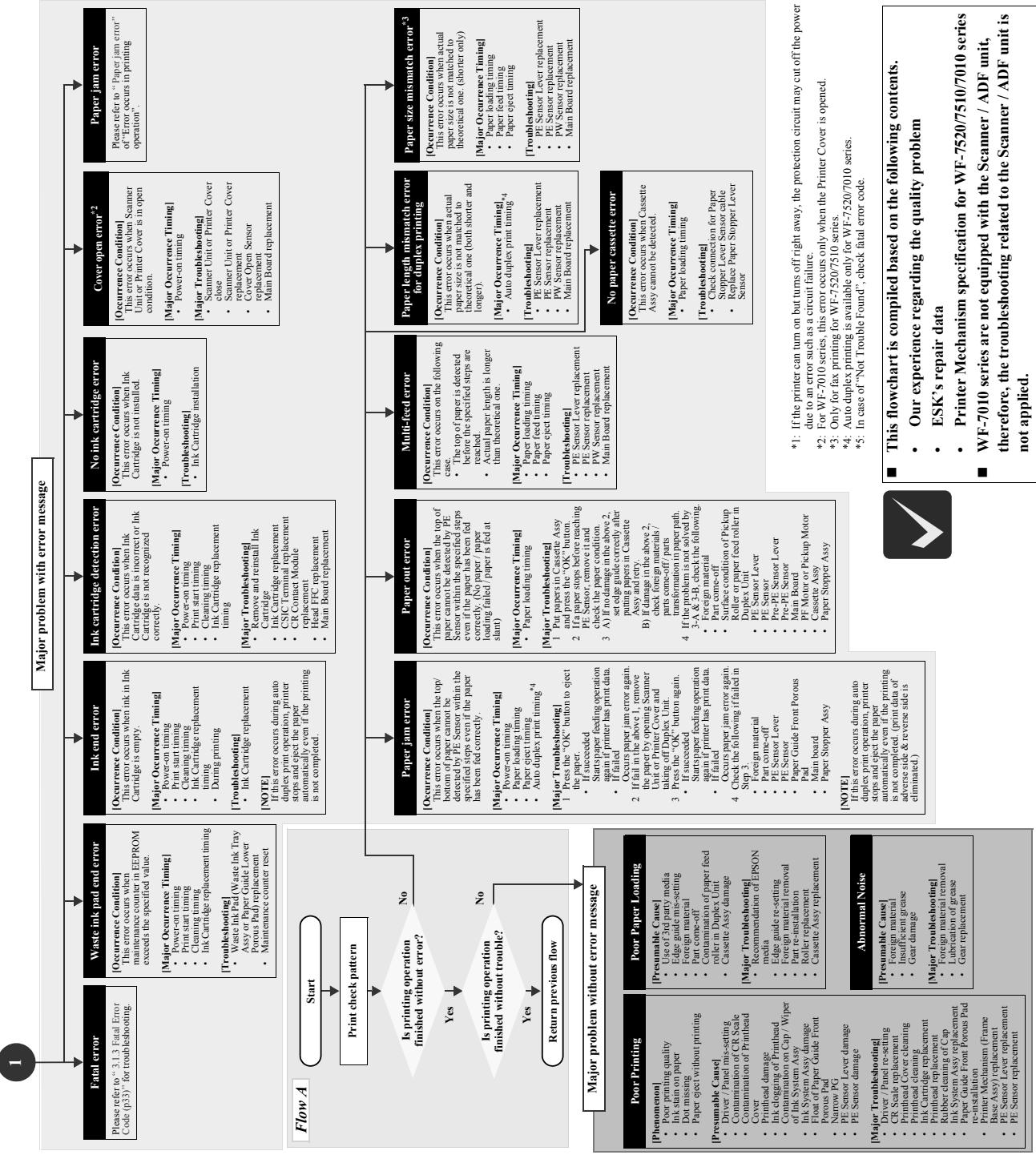
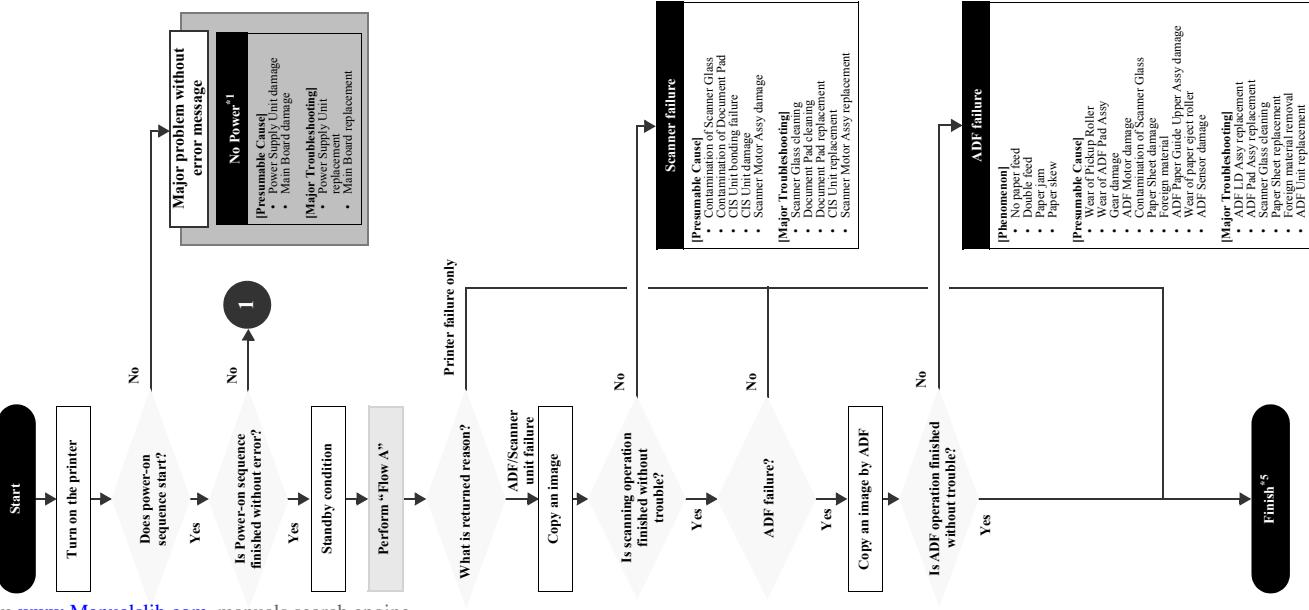
*3: WF-7520/7010 series only

*4: The corresponding ink LED flashes/lights.

*5: The corresponding ink cartridge product number is indicated.

3.1.2 Troubleshooting Workflow

The following page describes the troubleshooting workflow. Follow the flow when troubleshooting problems.



- This flowchart is compiled based on the following contents.
- Our experience regarding the quality problem
- ESK's repair data
- Printer Mechanism specification for WF-7520/7510/7010 series
- WF-7010 series are not equipped with the Scanner / ADF unit, therefore, the troubleshooting related to the Scanner / ADF unit is not applied.



3.1.3 Fatal Error Code

This section describes the fatal error code and the possible cause for this product.

Printer fatal error list

Table 3-2. Fatal Error List (Printer)

Error type	Error code	Error name	Possible cause
DC motor error	01H	CR PID excess load error	<ul style="list-style-type: none"> • CR Encoder failure (contaminated/detached scale, Encoder Board failure) • CR Motor failure • Carriage overload error (paper jam/foreign object) • Cable disconnection
	02H	CR PID excess speed error	<ul style="list-style-type: none"> • CR Encoder failure (contaminated/detached scale, Encoder Board failure) • Motor driver failure (Main Board failure) • Tooth skip of the CR Timing Belt • Improper tension of the CR Timing Belt
	03H	CR PID reverse error	<ul style="list-style-type: none"> • CR Encoder failure (contaminated/detached scale, Encoder Board failure) • Tooth skip of the CR Timing Belt • Improper tension of the CR Timing Belt • Paper jam
	04H	CR PID lock error	<ul style="list-style-type: none"> • CR Encoder failure (contaminated/detached scale, Encoder Board failure) • CR Motor failure • Carriage overload error (paper jam/foreign object) • Cable disconnection
	05H	CR PID speed degradation error	<ul style="list-style-type: none"> • CR Encoder failure (contaminated/detached scale, Encoder Board failure) • Motor driver failure (Main Board failure) • Tooth skip of the CR Timing Belt • Improper tension of the CR Timing Belt • Paper jam
	08H	CR load position reverse error	<ul style="list-style-type: none"> • CR Encoder failure (contaminated/detached scale, Encoder Board failure) • Tooth skip of the CR Timing Belt • Improper tension of the CR Timing Belt • Paper jam
	09H	CR load position excess speed error	<ul style="list-style-type: none"> • CR Encoder failure (contaminated/detached scale, Encoder Board failure) • Motor driver failure (Main Board failure) • Tooth skip of the CR Timing Belt • Improper tension of the CR Timing Belt
	0AH	CR load position excess load error	<ul style="list-style-type: none"> • CR Encoder failure (contaminated/detached scale, Encoder Board failure) • CR Motor failure • Carriage overload error (paper jam/foreign object) • Cable disconnection
	F1H	PF PID excess load error	<ul style="list-style-type: none"> • PF Encoder failure (contaminated/detached scale, Encoder Board failure) • PF Motor failure • PF drive mechanism overload (paper jam/foreign object) • Cable disconnection
	F2H	PF PID excess speed error	<ul style="list-style-type: none"> • PF Encoder failure (contaminated/detached scale, Encoder Board failure) • Motor driver failure (Main Board failure) • Tooth skip of the PF Timing Belt • Improper tension of the PF Timing Belt
	F3H	PF PID reverse error	<ul style="list-style-type: none"> • PF Encoder failure (contaminated/detached scale, Encoder Board failure) • Tooth skip of the PF Timing Belt • Improper tension of the PF Timing Belt • Paper jam
	F4H	PF PID lock error	<ul style="list-style-type: none"> • PF Encoder failure (contaminated/detached scale, Encoder Board failure) • PF Motor failure • PF drive mechanism overload (paper jam/foreign object) • Cable disconnection
	F6H	PF PID excess torque limitation error	<ul style="list-style-type: none"> • PF drive mechanism overload (paper jam/foreign object)

Table 3-2. Fatal Error List (Printer)

Error type	Error code	Error name	Possible cause
DC motor error	F8H	PF load position reverse error	<ul style="list-style-type: none"> PF Encoder failure (contaminated/detached scale, Encoder Board failure) Tooth skip of the PF Timing Belt Improper tension of the PF Timing Belt
	F9H	PF load position excess speed error	<ul style="list-style-type: none"> PF Encoder failure (contaminated/detached scale, Encoder Board failure) Motor driver failure (Main Board failure) Tooth skip of the PF Timing Belt Improper tension of the PF Timing Belt
	FAH	PF load position excess load error	<ul style="list-style-type: none"> PF Encoder failure (contaminated/detached scale, Encoder Board failure) PF Motor failure
	FCH	PF load position error	<ul style="list-style-type: none"> PF drive mechanism overload (paper jam/foreign object) Cable disconnection
	11H	ASF PID excess load error*	<ul style="list-style-type: none"> Pickup Encoder failure (contaminated/detached scale, Encoder Board failure) Pickup Motor failure Pickup drive mechanism (2nd cassette) overload (paper jam/foreign object) Cable disconnection
	12H	ASF PID excess speed error*	<ul style="list-style-type: none"> Pickup Encoder failure (contaminated/detached scale, Encoder Board failure) Pickup Motor driver failure (Main Board failure)
	13H	ASF PID reverse error*	<ul style="list-style-type: none"> Pickup Encoder failure (contaminated/detached scale, Encoder Board failure) Paper jam
	14H	ASF PID lock error*	<ul style="list-style-type: none"> Pickup Encoder failure (contaminated/detached scale, Encoder Board failure) Pickup Motor failure Pickup drive mechanism (2nd cassette) overload (paper jam/foreign object) Cable disconnection
	16H	ASF PID excess torque limitation error*	<ul style="list-style-type: none"> Pickup Roller (2nd cassette) overload (paper jam/foreign object)
	18H	ASF load position reverse error*	<ul style="list-style-type: none"> Pickup Encoder failure (contaminated/detached scale, Encoder Board failure) Paper jam
Motor drive time error	19H	ASF load position excess speed error*	<ul style="list-style-type: none"> Pickup Encoder failure (contaminated/detached scale, Encoder Board failure) Motor driver failure (Main Board failure)
	1AH	ASF load position excess load error*	<ul style="list-style-type: none"> Pickup Encoder failure (contaminated/detached scale, Encoder Board failure) Pickup Motor failure Pickup drive mechanism (2nd cassette) overload (paper jam/foreign object) Cable disconnection
	D1H	CR (PID) driving time error	<ul style="list-style-type: none"> Main Board failure
	D2H	CR (load position) driving time error	
	D3H	PF (PID) driving time error	
	D4H	PF (BS) driving time error	
Printhead system error	D5H	ASF (PID) driving time error*	<ul style="list-style-type: none"> Main Board failure
	D6H	ASF (BS) driving time error*	
	40H	Transistor temperature error	
	41H	X-Hot detect error (pre printing)	
	42H	X-Hot detect error (after flushing)	<ul style="list-style-type: none"> Printhead failure Main Board failure
	43H	Head temperature error	

Table 3-2. Fatal Error List (Printer)

Error type	Error code	Error name	Possible cause
Sequence error	50H	Home position error	<ul style="list-style-type: none"> • Paper jam • Foreign object • Deformation of the Main Frame
	51H	Deadlock avoidance error	
	52H	Impossible contact detection error	
	56H	Contact error at ink replacement timing (Power-off)	
	5BH	Insoluble paper jam error	<ul style="list-style-type: none"> • Paper jam • Foreign object
Sensor error	60H	PW detector error	<ul style="list-style-type: none"> • PW Sensor failure • Main Board failure
	61H	PW detector confusion error	<ul style="list-style-type: none"> • PW Sensor failure • Main Board failure • A piece of paper remaining • Ink contamination on the Paper Guide Front Assy
	63H	PE detector error	<ul style="list-style-type: none"> • PE Sensor failure • Main Board failure
Ink device error	B0H - CFH	Ink device error	<ul style="list-style-type: none"> • Ink Cartridge failure • CSIC Terminal failure • CR Contact Module failure • Main Board failure
Circuit error	80H	Circuit error (include blowout of a fuse)	<ul style="list-style-type: none"> • Main Board failure

Note *: WF-7520/7010 series only

- Scanner/ADF fatal error list (WF-7520/7510 series only)

Table 3-3. Fatal Error List (Scanner/ADF)

Error code	Error name	Possible cause
01H	ADF PID excess speed error	<ul style="list-style-type: none"> • ADF Encoder failure (contaminated/detached scale, Encoder Board failure) • Motor driver failure (Main Board failure)
02H	ADF PID reverse error	<ul style="list-style-type: none"> • ADF Encoder failure (contaminated/detached scale, Encoder Board failure) • Paper jam
03H	ADF PID lock error	<ul style="list-style-type: none"> • ADF Encoder failure (contaminated/detached scale, Encoder Board failure) • ADF Motor failure
04H	ADF PID acceleration lock detection error	<ul style="list-style-type: none"> • ADF drive overload (paper jam/foreign object) • Cable disconnection
05H	ADF PID excess load error	<ul style="list-style-type: none"> • Main Board failure
06H	ADF PID driving time error	<ul style="list-style-type: none"> • ADF Encoder failure (contaminated/detached scale, Encoder Board failure) • Motor driver failure (Main Board failure)
09H	ADF BS+ excess speed error	<ul style="list-style-type: none"> • ADF Encoder failure (contaminated/detached scale, Encoder Board failure) • Paper jam
0AH	ADF BS+ reverse error	<ul style="list-style-type: none"> • ADF Encoder failure (contaminated/detached scale, Encoder Board failure) • ADF Motor failure
0BH	ADF BS+ lock error	<ul style="list-style-type: none"> • ADF Encoder failure (contaminated/detached scale, Encoder Board failure) • ADF drive overload (paper jam/foreign object) • Cable disconnection
0DH	ADF BS+ excess load error	<ul style="list-style-type: none"> • Main Board failure
0EH	ADF BS+ driving time error	<ul style="list-style-type: none"> • CIS Unit failure • Scanner Housing failure • Main Board failure
10H	Scanner HP detection error	<ul style="list-style-type: none"> • CIS Unit failure • Main Board failure
20H	Scanner LED light error	<ul style="list-style-type: none"> • Main Board failure
30H	ADF option error	<ul style="list-style-type: none"> • Paper jam
36H	ADF paper jam error	

3.1.4 FAX Troubleshooting (WF-7520/7510 series only)

3.1.4.1 FAX Log

When an error related to fax occurs, it is not only indicated on the LCD but also saved as a log file. The error code is recorded in it, and according to this log, the contents of the error can be confirmed.

Table 3-4. FAX Log (1)

Log Name	Description		Save Destination														
Latest log *1 (Last Transaction)	The latest communication log of sending / polling reception		Nonvolatile memory														
Communication log (Fax Log)	<p>The following information is stored.</p> <table border="1"> <thead> <tr> <th>Item</th> <th>Information</th> </tr> </thead> <tbody> <tr> <td>Communication start date / time</td> <td>Year/month/day/hour/minute</td> </tr> <tr> <td>Communication type</td> <td>Sending/receiving/polling reception</td> </tr> <tr> <td>Communication ID</td> <td> Sending/polling reception: <ul style="list-style-type: none"> Destination name of speed dial (first 20 characters) Telephone number (last 20 characters) Destination fax ID (20 characters) Receiving: <ul style="list-style-type: none"> Destination fax ID (20 characters) </td> </tr> <tr> <td>Airtime</td> <td>Hour/minute/second</td> </tr> <tr> <td>Communication pages</td> <td>0 to 100</td> </tr> <tr> <td>Communication result</td> <td> Common: Normal/cancel/error code * Sending/polling reception: No dial tone detected/No fax signal detected/Busy tone detected </td> </tr> </tbody> </table>		Item	Information	Communication start date / time	Year/month/day/hour/minute	Communication type	Sending/receiving/polling reception	Communication ID	Sending/polling reception: <ul style="list-style-type: none"> Destination name of speed dial (first 20 characters) Telephone number (last 20 characters) Destination fax ID (20 characters) Receiving: <ul style="list-style-type: none"> Destination fax ID (20 characters) 	Airtime	Hour/minute/second	Communication pages	0 to 100	Communication result	Common: Normal/cancel/error code * Sending/polling reception: No dial tone detected/No fax signal detected/Busy tone detected	Nonvolatile memory
Item	Information																
Communication start date / time	Year/month/day/hour/minute																
Communication type	Sending/receiving/polling reception																
Communication ID	Sending/polling reception: <ul style="list-style-type: none"> Destination name of speed dial (first 20 characters) Telephone number (last 20 characters) Destination fax ID (20 characters) Receiving: <ul style="list-style-type: none"> Destination fax ID (20 characters) 																
Airtime	Hour/minute/second																
Communication pages	0 to 100																
Communication result	Common: Normal/cancel/error code * Sending/polling reception: No dial tone detected/No fax signal detected/Busy tone detected																
Power failure log *2 (Fax Log)	The information stored in this log is the same as the communication log. However, since the airtime is "Unknown" in this case, the result of it is recorded as "power failure".		Nonvolatile memory														

Note *1: The latest communication log for all destinations are printed in a list form when the sequential broadcast is executed. Cancellation is treated as a normal termination, therefore, if it is cancelled, the latest log is printed when the auto print setting is "always print", and not printed when the setting is "only when an error occurs". If "only when an error occurs" is selected, the log is printed even when an error occurs for just one destination.

*2: The power failure log when the sequential broadcast is being executed is not printed for the destinations to which the transmission log is already complete then. If the power failure occurs before the scheduled sending time when a broadcast is scheduled, the scheduled sending time is recorded.



The communication log is not stored under the following conditions:

- When the sending operation is canceled while storing B&W image or waiting for redialing.
- In the case of a power failure during the operation of sending/polling reception including waiting status for redial, or during receive operation.
- When the receiving operation is canceled before the fax signal is detected.
- If the fax signal is not detected during receiving operation.
- If cancelled during the sequential broadcast.
(The log for the destinations of "not dialed yet" or "waiting for re-dial" is not saved except for those of which the communication is complete.)

Table 3-5. FAX Log (2)

Log Name	Description		Save Destination																					
Protocol trace	The following information of the latest communication is stored.		Volatile memory																					
	<table border="1"> <thead> <tr> <th>Item</th> <th>Information</th> </tr> </thead> <tbody> <tr> <td>Communication start date / time</td> <td>Year/month/day/hour/minute</td> </tr> <tr> <td>Communication type</td> <td>Sending/receiving/polling reception</td> </tr> <tr> <td colspan="2"> Communication ID Sending/polling reception: <ul style="list-style-type: none"> Destination name of speed dial (first 20 characters) Telephone number (last 20 characters) Destination fax ID (20 characters) Receiving: <ul style="list-style-type: none"> Destination fax ID (20 characters) </td></tr> <tr> <td>Airtime</td> <td>Hour/minute/second</td></tr> <tr> <td>Communication pages</td> <td>0 to 100</td></tr> <tr> <td colspan="3"> Communication result Common: Normal/cancel/error code Sending/polling reception: No dial tone detected/No fax signal detected/Busy tone detected </td></tr> <tr> <td>Diagnosing code</td> <td>10 bytes</td></tr> <tr> <td colspan="3"> Protocol data The latest 43 commands/responses* <ul style="list-style-type: none"> Time stamp Sending / receiving Command /response code (See Table 3-7. Command/Response Code (p.40)) FCF/FIF (first 33 octets). </td></tr> <tr> <td colspan="3">Note *: If a large amount of FIF is received, the recorded command/response may be less than 40.</td></tr> </tbody> </table>		Item	Information	Communication start date / time	Year/month/day/hour/minute	Communication type	Sending/receiving/polling reception	Communication ID Sending/polling reception: <ul style="list-style-type: none"> Destination name of speed dial (first 20 characters) Telephone number (last 20 characters) Destination fax ID (20 characters) Receiving: <ul style="list-style-type: none"> Destination fax ID (20 characters) 		Airtime	Hour/minute/second	Communication pages	0 to 100	Communication result Common: Normal/cancel/error code Sending/polling reception: No dial tone detected/No fax signal detected/Busy tone detected			Diagnosing code	10 bytes	Protocol data The latest 43 commands/responses* <ul style="list-style-type: none"> Time stamp Sending / receiving Command /response code (See Table 3-7. Command/Response Code (p.40)) FCF/FIF (first 33 octets). 			Note *: If a large amount of FIF is received, the recorded command/response may be less than 40.	
Item	Information																							
Communication start date / time	Year/month/day/hour/minute																							
Communication type	Sending/receiving/polling reception																							
Communication ID Sending/polling reception: <ul style="list-style-type: none"> Destination name of speed dial (first 20 characters) Telephone number (last 20 characters) Destination fax ID (20 characters) Receiving: <ul style="list-style-type: none"> Destination fax ID (20 characters) 																								
Airtime	Hour/minute/second																							
Communication pages	0 to 100																							
Communication result Common: Normal/cancel/error code Sending/polling reception: No dial tone detected/No fax signal detected/Busy tone detected																								
Diagnosing code	10 bytes																							
Protocol data The latest 43 commands/responses* <ul style="list-style-type: none"> Time stamp Sending / receiving Command /response code (See Table 3-7. Command/Response Code (p.40)) FCF/FIF (first 33 octets). 																								
Note *: If a large amount of FIF is received, the recorded command/response may be less than 40.																								

Error codes

Table 3-6. Error Code List

Error Code (HEX)	Phenomenon	LCD Display	Print Example
000	Successful completion (Monochrome)	Complete	OK
C000	Successful completion (Color)	Complete	OK Color
400	Communication error	Communication error	Error code
401	Communication error	Communication error	Error code
402	Communication error	Communication error	Error code
403	Communication error	Communication error	Error code
404	Communication error	Communication error	Error code
405	Communication error	Communication error	Error code
407	Communication error	Communication error	Error code
408	Communication error	Communication error	Error code
409	Communication error	Communication error	Error code
410	Communication error	Communication error	Error code
412	Communication error	Communication error	Error code
416	Communication error	Communication error	Error code
417	Communication error	Communication error	Error code
418	Communication error	Communication error	Error code
420	Fax signal was not detected during receive operation. (The call was a telephone call)	Not displayed	---
421	Communication error	Communication error	Error code
422	Communication error	Communication error	Error code
427	Communication error	Communication error	Error code
433	Communication error	Communication error	Error code

Table 3-6. Error Code List

Error Code (HEX)	Phenomenon	LCD Display	Print Example
434	Communication error	Communication error	Error code
436	Communication error	Communication error	Error code
459	Communication error	Communication error	Error code
490	Communication error	Communication error	Error code
494	Communication error	Communication error	Error code
495	Communication error	Communication error	Error code
496	Communication error	Communication error	Error code
501	Communication error	Communication error	Error code
502	Communication error	Communication error	Error code
503	Communication error	Communication error	Error code
504	Communication error	Communication error	Error code
505	Communication error	Communication error	Error code
540	Communication error	Communication error	Error code
541	Communication error	Communication error	Error code
542	Communication error	Communication error	Error code
543	Communication error	Communication error	Error code
544	Communication error	Communication error	Error code
550	Communication error	Communication error	Error code
554	Communication error	Communication error	Error code
620	Communication error	Communication error	Error code
621	Communication error	Communication error	Error code
623	Communication error	Communication error	Error code
624	Communication error	Communication error	Error code
630	A busy tone was detected after dialing	Talking (Line Busy)	Talking (Line Busy)
631	Communication error	Communication error	Error code
632	Communication error	Communication error	Error code
633	Communication error	Communication error	Error code
634	A fax signal was not detected for a given length of time after dialing	No Answer	No Answer
637	A dial tone was not detected before dialing	No Dial Tone	No Dial Tone
638	A power failure occurred during communication	Not displayed	Power Fail
700	The communication was canceled by an operation	Canceled	Canceled
706	System error	System Error	Error code
709	Communication error	Communication error	Error code
815	Communication error	Communication error	Error code
870	The image memory is full	Memory Full	Memory Full
871	The maximum number of files was exceeded	Error code	Error code
873	Communication error	Communication error	Error code
874	Communication error	Communication error	Error code
875	Communication error	Communication error	Error code
880	System error	System Error	Error code
881	System error	System Error	Error code
882	System error	System Error	Error code
883	System error	System Error	Error code
884	System error	System Error	Error code
928	Collision (A call signal was detected when shifting to dial operation)	Not displayed	---
F0B	Communication error	Communication error	Error code
F1E	Communication error	Communication error	Error code
F20	Communication error	Communication error	Error code
F21	System error	System Error	Error code

Table 3-6. Error Code List

Error Code (HEX)	Phenomenon	LCD Display	Print Example
F23	Communication error	Communication error	Error code
F24	Communication error	Communication error	Error code
F25	Communication error	Communication error	Error code
F27	System error	System Error	Error code
F28	System error	System Error	Error code
F29	Communication error	Communication error	Error code
F2A	Communication error	Communication error	Error code
F2B	No image data for reprint exists	No Image	---
F2F	System error	System Error	Error code
F3A	Communication error	Communication error	Error code
F51	System error	System Error	Error code
F57	Communication error	Communication error	Error code
F58	Communication error	Communication error	Error code
F59	System error	System Error	Error code
F60	A scanner fatal error occurs	Same message when a scanner fatal error occurred*	Error code
F61	A printer fatal error occurs	Same message when a printer fatal error occurred*	Error code
F62	Reserved	---	Error code
F63	ADF misfeed or paper jam occurred	Same message when an ADF fatal error occurred*	ADF Jam
F64	The memory for printing received image is full	Error code	Error code

Note *: Confirm the fatal error code with the Adjustment Program to check which error occurred. (See " 3.1.3 Fatal Error Code (p33)".)

Command/response code

Table 3-7. Command/Response Code

Command/response code	FCF value (HEX) (LSB first: X=0)		Content
	First	Second	
DIS	80	-	Digital Identification Signal
CSI	40	-	Called Subscriber Identification
NSF	20	-	Non-Standard Facilities
DTC	81	-	Digital Transmit Command
CIG	41	-	CallInG subscriber identification
NSC	21	-	Non-Standard facilities Command
PWD	C1	-	PassWorD
SEP	A1	-	Selective Polling
Reserved (PSA)	61	-	Polled SubAddress
Reserved (CIA)	E1	-	Calling subscriber Internet Address
Reserved (ISP)	11	-	Internet Selective Polling address
DCS	82	-	Digital Command Signal
TSI	42	-	Transmitting Subscriber Identification
NSS	22	-	Non-Standard facilities Set-up
SUB	C2	-	SUBaddress
SID	A2	-	Sender IDentification
TRN	E6	-	Training
TCF	F0	-	Training Check
CTC	12	-	Continue To Correct
Reserved (TSA)	62	-	Transmitting Subscriber internet Address
Reserved (IRA)	E2	-	Internet Routing Address
CFR	84	-	ConFirmation to Receive

Table 3-7. Command/Response Code

Command/response code	FCF value (HEX) (LSB first: X=0)		Content
	First	Second	
FTT	44	-	Failure To Train
CTR	C4	-	Response for Continue To correct
Reserved (CSA)	24	-	Called Subscriber internet Address
EOM	8E	-	End Of Message
MPS	4E	-	MultiPage Signal
EOP	2E	-	End Of Procedure
PRI-EOM	9E	-	Procedure Interrupt-End Of Message
PRI-MPS	5E	-	Procedure Interrupt-MultiPage Signal
PRI-EOP	3E	-	Procedure Interrupt-End Of Procedure
Reserved (EOS)	1E	-	End Of Selection
PPS-EOM	BE	8E	Partial Page Signal-End Of Message
PPS-MPS	BE	4E	Partial Page Signal-MultiPage Signal
PPS-EOP	BE	2E	Partial Page Signal-End Of Procedure
PPS-PRI-EOM	BE	9E	Partial Page Signal-Procedure Interrupt- End Of Message
PPS-PRI-MPS	BE	5E	Partial Page Signal-Procedure Interrupt- MultiPage Signal
PPS-PRI-EOP	BE	3E	Partial Page Signal-Procedure Interrupt- End Of Procedure
PPS-EOS	BE	1E	Partial Page Signal-End Of Selection
PPS-NULL	BE	00	Partial Page Signal-partial page boundary
EOR-EOM	CE	8E	End Of Retransmission-End Of Message
EOR-MPS	CE	4E	End Of Retransmission-MultiPage Signal
EOR-EOP	CE	2E	End Of Retransmission-End Of Procedure
EOR-PRI-EOM	CE	9E	End Of Retransmission-Procedure Interrupt-End Of Message
EOR-PRI-MPS	CE	5E	End Of Retransmission-Procedure Interrupt-MultiPage Signal
EOR-PRI-EOP	CE	3E	End Of Retransmission-Procedure Interrupt-End Of Procedure
EOR-EOS	CE	1E	End Of Retransmission-End Of Selection
EOR-NULL	CE	00	End Of Retransmission- partial page boundary
RR	6E	-	Receive Ready
MCF	8C	-	Message ConFirmation
RTP	CC	-	ReTrain Positive
RTN	4C	-	ReTrain Negative
PIP	AC	-	Procedure Interrupt Positive
PIN	2C	-	Procedure Interrupt Negative
PPR	BC	-	Partial Page Request
RNR	EC	-	Receive Not Ready
ERR	1C	-	Response for End of Retransmission
Reserved (FDM)	FC	-	File Diagnostic Message
DCN	FA	-	DisCoNnect
CRP	1A	-	Command RePeat
Reserved (FNV)	CA	-	Field Not Valid
PIX	FF	-	PIXel image
Space	Other combinations		Unknown command/response

3.1.4.2 Error Code/Superficial Phenomenon-Based Troubleshooting

This section explains the troubleshooting procedures based on the error codes and superficial phenomenon.



- When an error occurs, it may be displayed on the LCD panel with a message instead of an error code. To check the error code, print out a fax log.
- If the problem is not solved even after carrying out the remedy shown in the Table 3-8, print out a protocol trace to analyze the cause of the error.

Table 3-8. Troubleshooting Based on the Error Code/Superficial Phenomenon

Error code (LCD Message)/Phenomenon	Description	Remedy
Communication Error (The error is indicated with error code on the fax log.)	Communication error	Turn off v.34 and try again. Turn off ECM and try again. When using xDSL, check the connection from "Line" jack to the fax via the xDSL splitter. When using TAM, check the connection from "Line" jack to the TAM via the fax. Check if the telephone line makes any sounds.
Line Busy	The line is busy.	Try again later.
No answer	The other end of the line does not answer.	Check the number and dial again.
	The other end of the line answered but no answer tone is detected.	
Power fail	Power failure occurred during sending/receiving/printing/redialing.	Confirm the P/S Board Connector Cable or P/S Board is not damaged, and retry.
706,880-884,F21,F27-F28,F2F,F51,F59	A system error (fax circuit failure) occurs	Replace the FAX board with a new one.
Memory full	Out of Memory	Ask the sender to resend the fax in several batches.
871	Maximum number of files is exceeded	
F60	A scanner fatal error occurred	• See Table 3-2 "Fatal Error List (Printer)" (p.33).
F61	A printer fatal error occurred	• See Table 3-3 "Fatal Error List (Scanner/ADF)" (p.36).
F62	Reserved	---
F63	ADF document mis-feed or paper jam occurs	• Set the documents and try again. • If a paper jam error occurs, remove the jammed paper and try again.
F64	The memory for printing received image is full	Ask the sender to resend the fax in several batches.
Cannot receive faxes	The telephone cable is not connected properly.	Connect the telephone cable properly.
	The telephone line is not working.	Verify if the phone line works by connecting to a phone to it.
	Auto answer is set to "N".	Set to "Y".
	DRD setting is incorrect.	Set the setting to "ALL" and try again. Should other ring patterns be selected, contact the telephone company.
	Calling signal cannot be detected.	Contact the telephone company or obtain the fax log for more analysis.
Cannot dial	The telephone cable is not connected properly.	Connect the telephone cable properly.
	The telephone line is not working.	Verify if the phone line works by connecting to a phone to it.
	Pulse/Tone dial setting error	Turn the setting to the other one and try again.
Cannot receive/send faxes in color	ECM is set to off.	Set to on and try again.
	Fax mode is set to "B&W only".	Set to "B&W/Color".

Table 3-8. Troubleshooting Based on the Error Code/Superficial Phenomenon

Error code (LCD Message)/Phenomenon	Description	Remedy
Cannot print all the received data when printing data stored in memory	The size of the memory is 2.0 Mbyte. If the data becomes over the set threshold, oldest data are deleted to make room for new ones.	Ask the sender to resend the data if necessary because the data deleted from the memory can not be restored.
Images run off the paper	Auto reduction is set to off.	Set auto reduction to on and reprint the data.
	Paper size setting does not match the size of the received data.	Choose the correct setting and reprint the data.
	Paper size setting does not match the size of papers in the tray.	Choose the correct setting or load correct sized papers in the tray and reprint the data.

CHAPTER 4

DISASSEMBLY/REASSEMBLY

4.1 Overview



In this chapter, the product names are called as follows:

- **WF-7520 series: Epson WF-7525/Epson WF-7521/Epson WF-7520**
- **WF-7510 series: Epson WF-7515/Epson WF-7511/Epson WF-7510**
- **WF-7010 series: Epson WF-7018/Epson WF-7015/Epson WF-7012/Epson WF-7011/Epson WF-7010**

This chapter describes procedures for disassembling the main parts/units of WF-7520/7510/7010 series. Unless otherwise specified, disassembled parts/units can be reassembled by reversing the disassembly procedure. See the cautions or tips for disassembly/reassembly described in "4.3 Detailed Disassembly/Reassembly Procedure for each Part/Unit (p55)".

Read the "Safety Precautions (p3)" before disassembling and reassembling.

When you have to remove units or parts that are not described in this chapter, see the exploded diagrams of SPI (Service Parts Information).

4.1.1 Tools

Use only specified tools to avoid damaging the printer.

Name	Availability	EPSON Part Code
(+) Phillips screwdriver #1	O	1080530
(+) Phillips screwdriver #2	O	---
Flathead screwdriver	O	---
Flathead Precision screwdriver #1	O	---
Tweezers	O	---
Longnose pliers	O	---
Acetate tape	---	1003963
Nippers	O	---

Note 1: Some of the tools listed above are commercially available.

2: EPSON provides the tools listed with EPSON part code.

4.1.2 Jigs

Name	Quantity	EPSON Part Code
Thickness gauge (1.5 mm)	2	Commercially available
Thickness gauge (1.9 mm)	2	Commercially available
Sonic tension gauge	1	1294120

4.2 Disassembly/Reassembly Procedures

4.2.1 Parts/Units Need to be Removed in Advance

In "4.2.2 Disassembling Flowchart (p48)", the procedures are indicated on the premise that some parts/units are removed in advance. Make sure to remove the following parts/units before starting disassembly.

- Cassette Assy 1st / 2nd

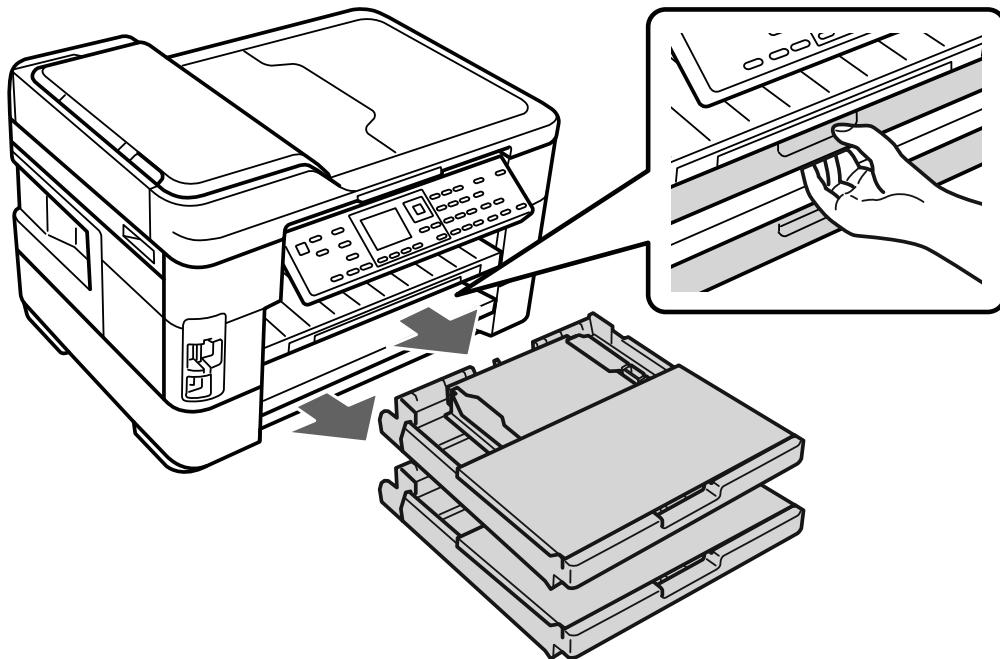


Figure 4-1. Removing the Cassette Assy 1st/2nd

- Duplex Unit

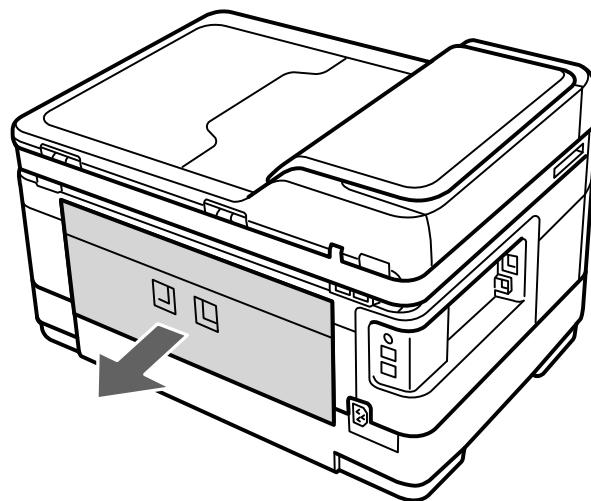
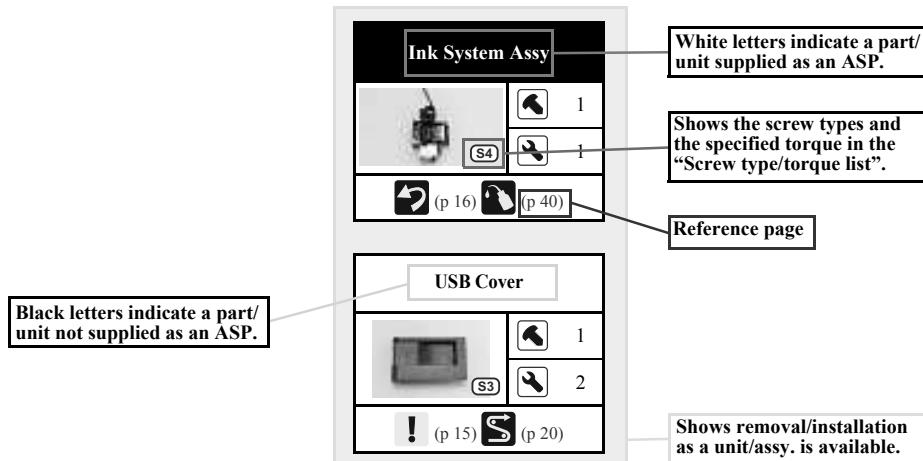


Figure 4-2. Removing the Duplex Unit

This section describes procedures for disassembling the parts/units in a flowchart format. For some parts/units, detailed procedures or precautions are provided (accordingly indicated by icons and cell's color). Refer to the explanations in the example chart below and perform an appropriate disassembling and assembling procedure. (See "4.3 Detailed Disassembly/Reassembly Procedure for each Part/Unit (p55)".) For routing cables, see "4.4 Routing FFCs/cables (p63)".



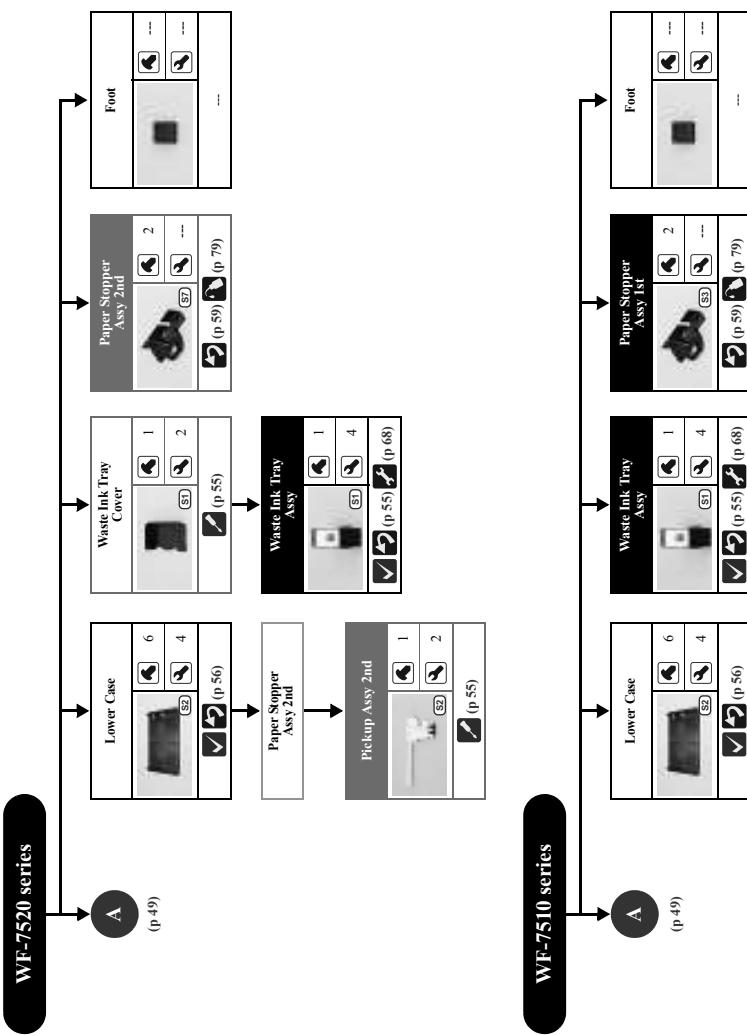
The example below shows how to see the charts on the following pages.



	Item	Description	Reference
Parts/unit name	White-letter	Part/unit supplied as an ASP	---
	Black-letter	Part/unit not supplied as an ASP	---
Icon		Indicates a practice or condition that could result in injury or loss of life if not strictly observed.	Indicates the reference page in blue-letter
		Indicates a practice or condition that could result in damage to, or destruction of equipment if not strictly observed.	Indicates the reference page in blue-letter
		Indicates the parts that are inevitably broken in the disassembling procedure, and should be replaced with a new one for reassembly.	Indicates the reference page in blue-letter
		Indicates necessary check items in the disassembling/assembling procedure.	Indicates the reference page in blue-letter
		Indicates supplementary explanation for disassembly is given.	Indicates the reference page in blue-letter
		Indicates particular tasks to keep quality of the units are required.	Indicates the reference page in blue-letter
		Indicates particular routing of cables is required.	Indicates the reference page in blue-letter
		Indicates particular adjustment(s) is/are required.	Chapter 5 "Adjustment (p68)"
		Indicates lubrication is required.	Chapter 6 "Maintenance (p79)"
		Indicates the number of screws securing the parts/units.	---
		Indicates the points secured with other than a screw such as a hook, rib, dowel or the like.	---

4.2.2 Disassembling Flowchart

4.2.2.1 Exterior Parts



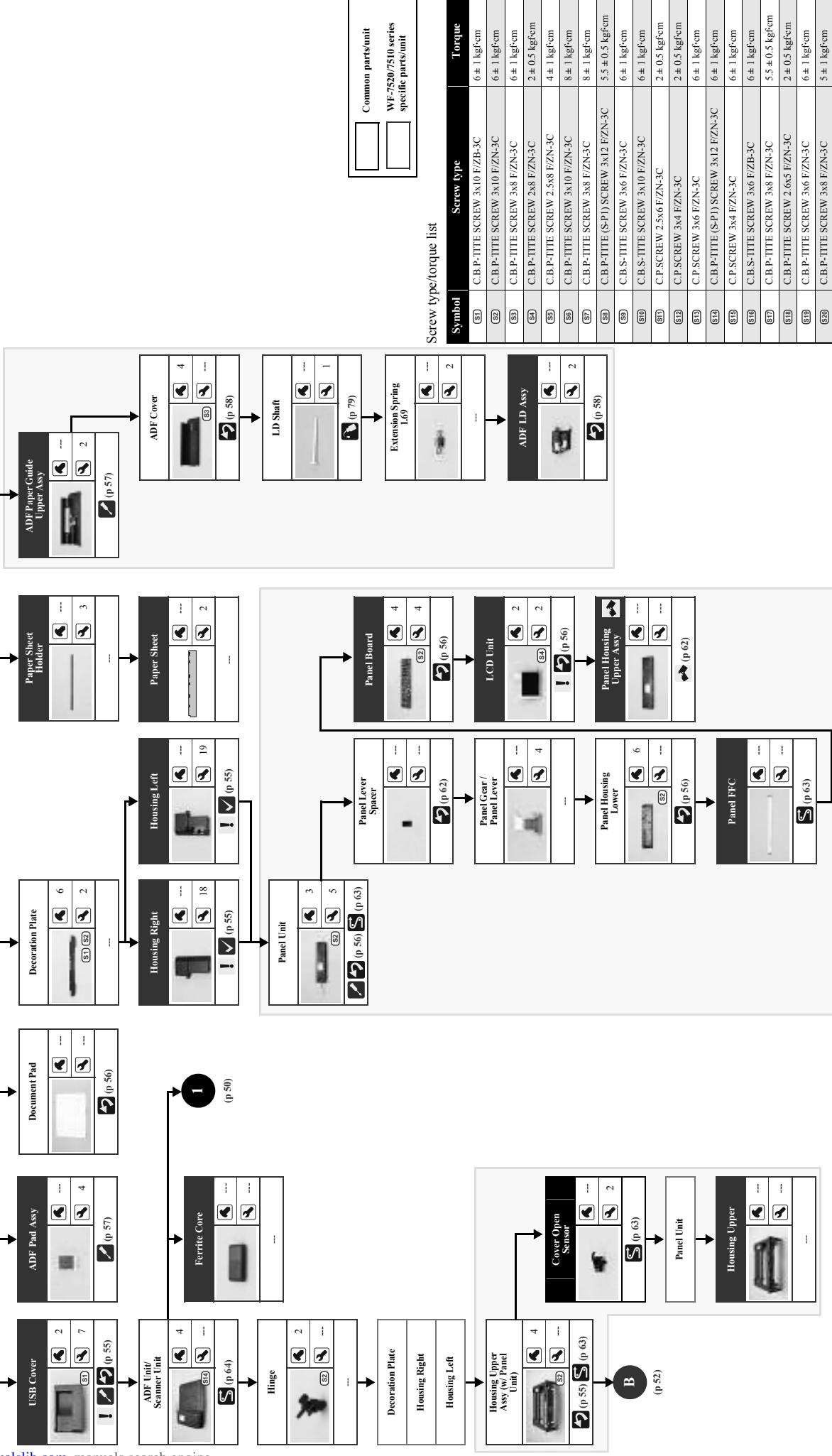
	Common parts/unit	WF-7520/7010 series specific parts/unit
Symbol	Screw type	Torque
	C.B.P-TITE SCREW 3x10 F/ZN-3C	6±1 kgf·cm
	C.B.P-TITE SCREW 3x10 F/ZN-3C	6±1 kgf·cm
	C.B.P-TITE SCREW 3x8 F/ZN-3C	6±1 kgf·cm
	C.B.P-TITE SCREW 2x8 F/ZN-3C	2±0.5 kgf·cm
	C.B.P-TITE SCREW 2.5x8 F/ZN-3C	4±1 kgf·cm
	C.B.P-TITE SCREW 3x10 F/ZN-3C	8±1 kgf·cm
	C.B.P-TITE SCREW 3x8 F/ZN-3C	8±1 kgf·cm
	C.B.P-TITE (S-P) SCREW 3x12 F/ZN-3C	5.5±0.5 kgf·cm
	C.B.S-TITE SCREW 3x6 F/ZN-3C	6±1 kgf·cm
	C.B.S-TITE SCREW 3x10 F/ZN-3C	6±1 kgf·cm
	C.P SCREW 2.5x6 F/ZN-3C	2±0.5 kgf·cm
	C.P SCREW 3x4 F/ZN-3C	2±0.5 kgf·cm
	C.P SCREW 3x6 F/ZN-3C	6±1 kgf·cm
	C.B.P-TITE (S-P) SCREW 3x12 F/ZN-3C	6±1 kgf·cm
	C.P SCREW 3x4 F/ZN-3C	2±0.5 kgf·cm
	C.B.S-TITE SCREW 3x6 F/ZB-3C	6±1 kgf·cm
	C.B.P-TITE SCREW 3x8 F/ZN-3C	5.5±0.5 kgf·cm
	C.B.P-TITE SCREW 2.0x8 F/ZN-3C	2±0.5 kgf·cm
	C.B.P-TITE SCREW 3x6 F/ZN-3C	6±1 kgf·cm
	C.B.P-TITE SCREW 3x8 F/ZN-3C	5±1 kgf·cm

Flowchart 4-1. Disassembling Flowchart (1)

Disassembling Flowchart

A

(p 48)

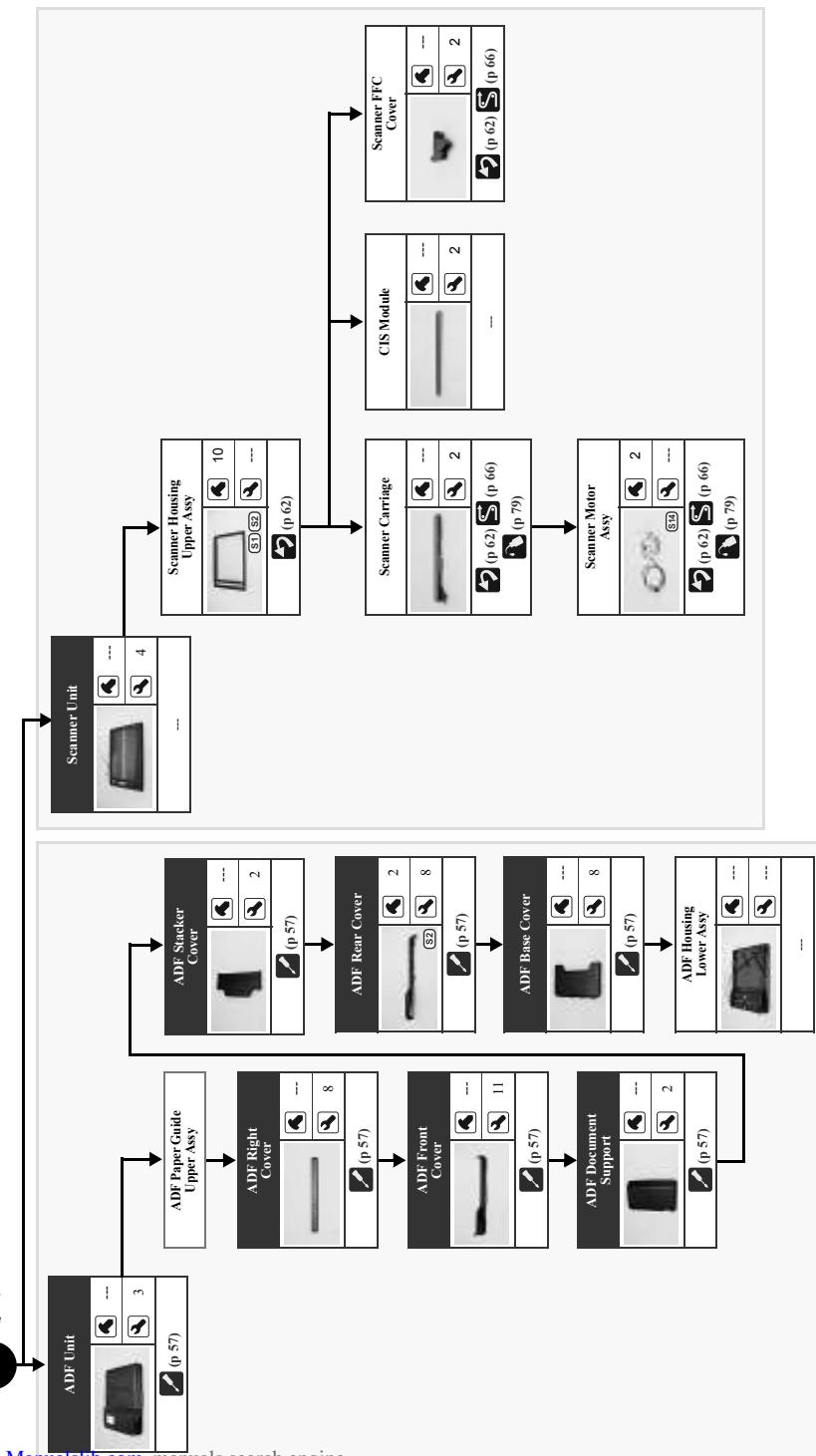
**B**

(p 52)

Flowchart 4-2. Disassembling Flowchart (2)

Disassembling Flowchart

WF-7520/7510 series
(p.49)

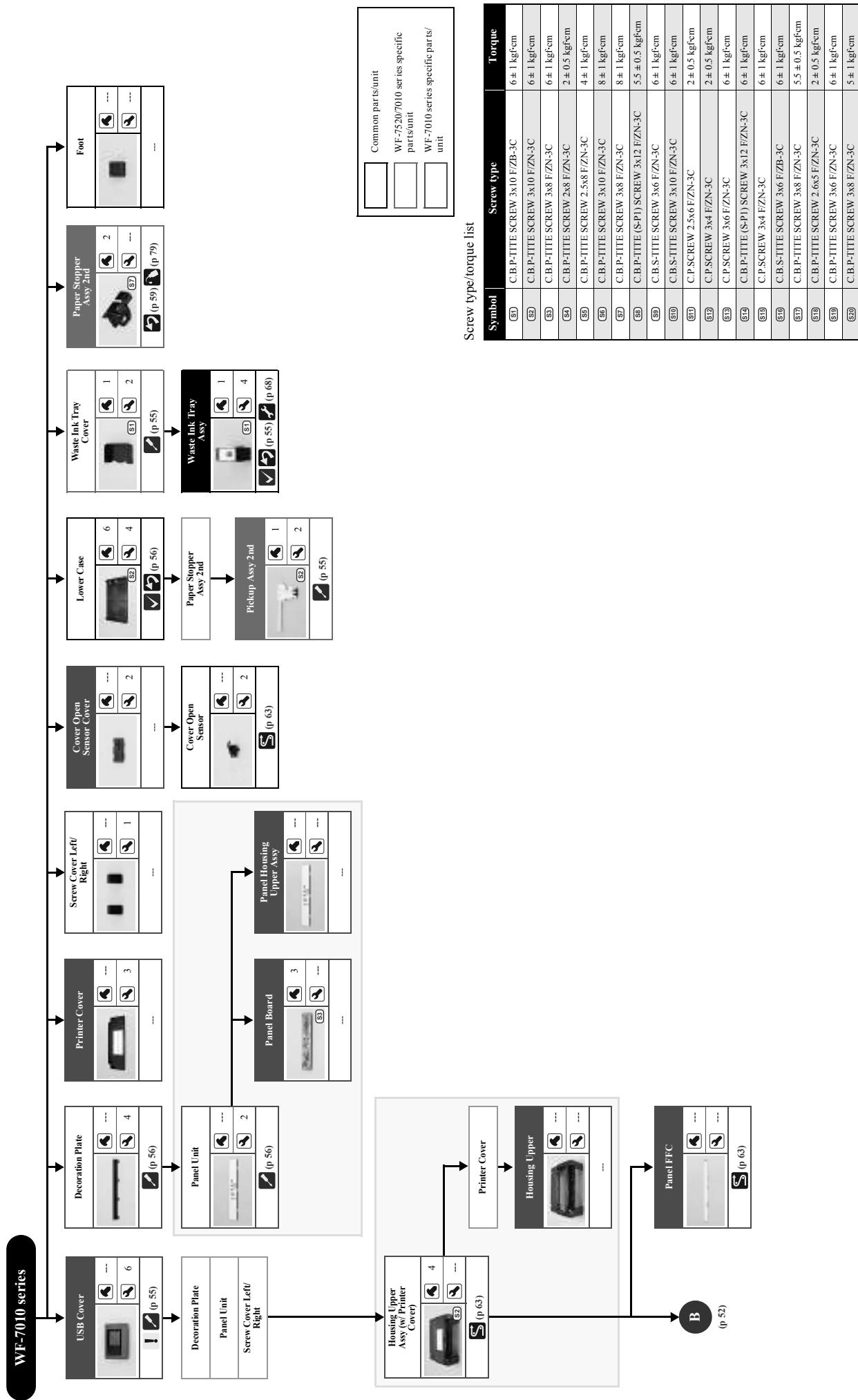


Screw type/torque list

Symbol	Screw type	Torque
④	C.B.P-TITE SCREW 3x10 F/ZB-3C	6±1 kgf·cm
⑤	C.B.P-TITE SCREW 3x10 F/ZN-3C	6±1 kgf·cm
⑥	C.B.P-TITE SCREW 3x8 F/ZN-3C	6±1 kgf·cm
⑦	C.B.P-TITE SCREW 2x8 F/ZN-3C	2±0.5 kgf·cm
⑧	C.B.P-TITE SCREW 2.5x8 F/ZN-3C	4±1 kgf·cm
⑨	C.B.P-TITE SCREW 3x10 F/ZN-3C	8±1 kgf·cm
⑩	C.B.P-TITE SCREW 3x8 F/ZN-3C	8±1 kgf·cm
⑪	C.B.P-TITE SCREW 3x12 F/ZN-3C	5.5±1.5 kgf·cm
⑫	C.B.S-TITE SCREW 3x10 F/ZN-3C	6±1 kgf·cm
⑬	C.B.S-TITE SCREW 3x10 F/ZN-3C	6±1 kgf·cm
⑭	C.PSCREW 2.5x6 F/ZN-3C	2±0.5 kgf·cm
⑮	C.PSCREW 3x4 F/ZN-3C	2±0.5 kgf·cm
⑯	C.PSCREW 3x6 F/ZN-3C	6±1 kgf·cm
⑰	C.B.P-TITE (S-P) SCREW 3x12 F/ZN-3C	6±1 kgf·cm
⑱	C.PSCREW 3x4 F/ZN-3C	6±1 kgf·cm
⑲	C.B.S-TITE SCREW 3x6 F/ZB-3C	6±1 kgf·cm
⑳	C.B.P-TITE SCREW 3x8 F/ZN-3C	5.5±1.5 kgf·cm
㉑	C.B.P-TITE SCREW 2.6x5 F/ZN-3C	2±0.5 kgf·cm
㉒	C.B.P-TITE SCREW 3x6 F/ZN-3C	6±1 kgf·cm
㉓	C.B.P-TITE SCREW 3x8 F/ZN-3C	5±1 kgf·cm

Flowchart 4-3. Disassembling Flowchart (3)

Disassembling Flowchart

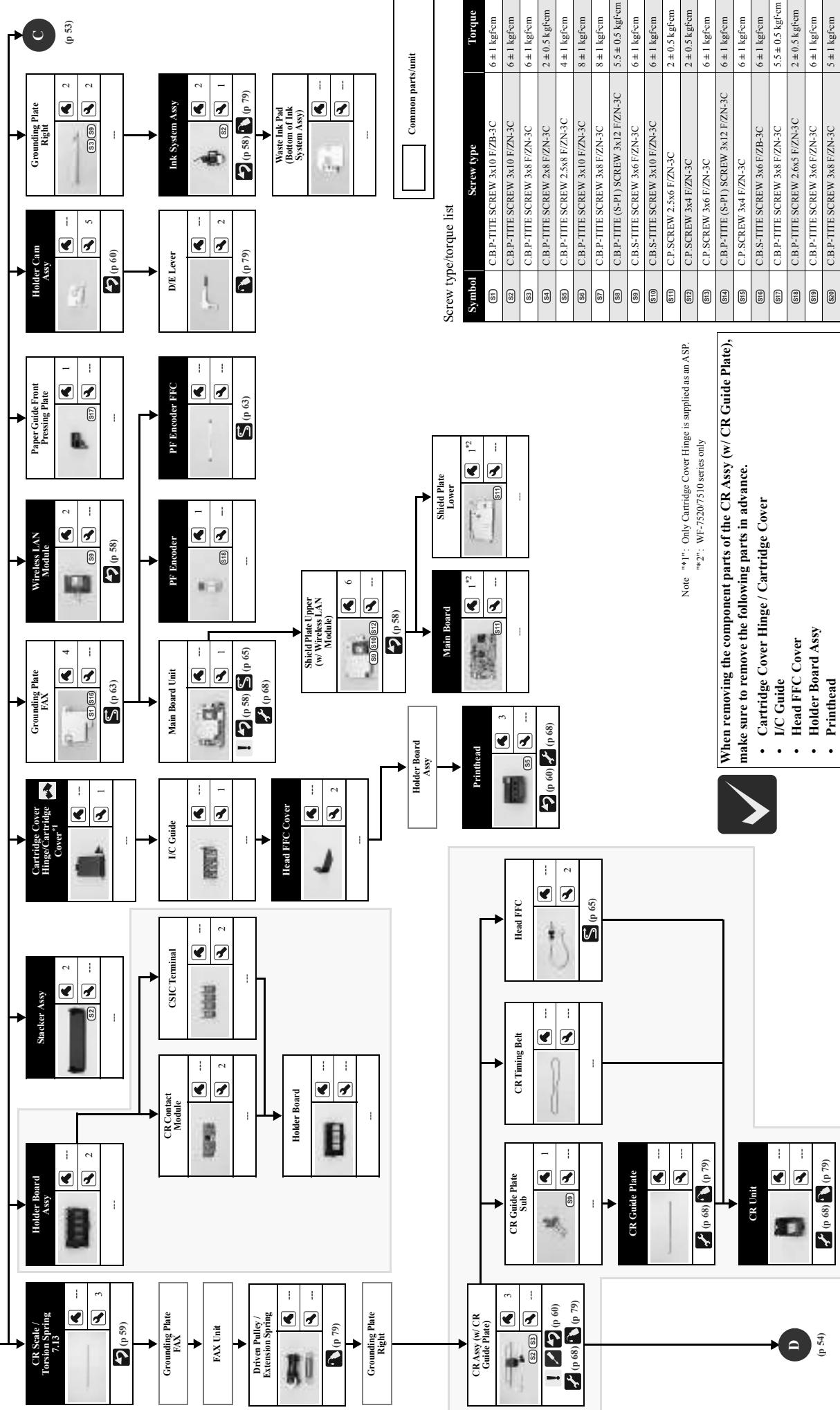


Flowchart 4-4: Disassembling Flowchart (4)

Dinner Line Flashback

4.2.2.2 Printer Mechanism

(p. 51, p. 49)



Experiment 15 Dissociating Element of Protein Mechanism (1)

Note “*” : Only Cartridge Cover Hinge is supplied as an ASP.
“ng_2” : WF-7520/7510 series only

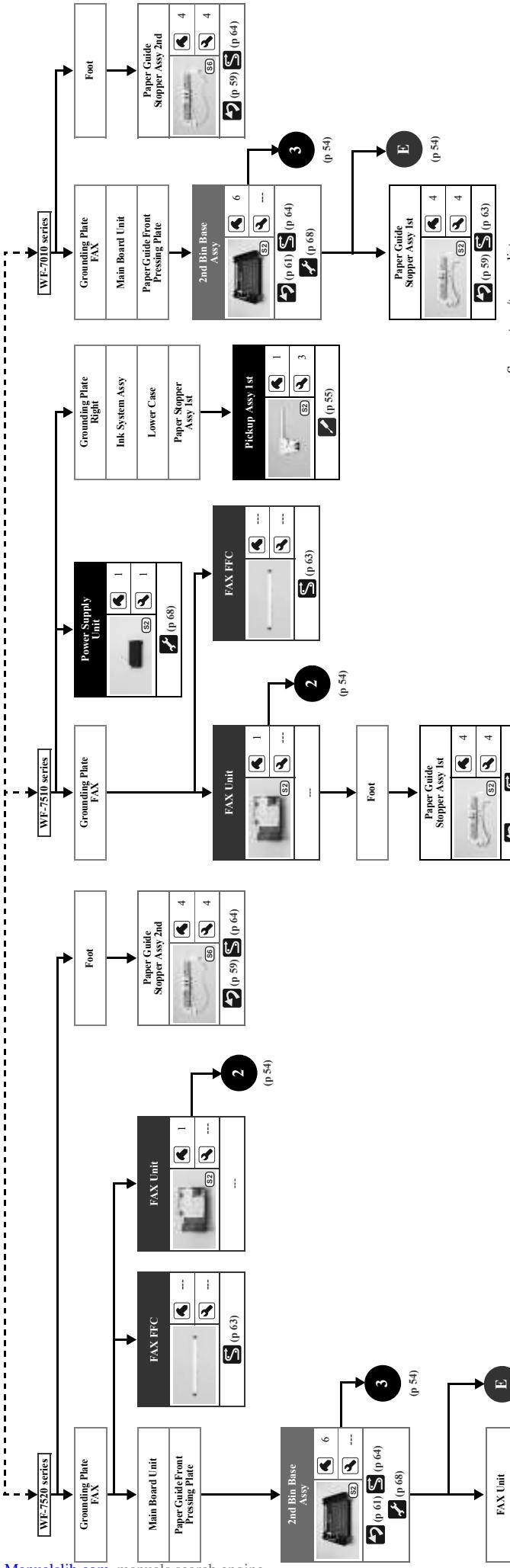
Symbol	Screw type	Torque	
		(SD)	(S2)
C.B.P-TITE SCREW 3x10 F/ZN-3C	6 ± 1 kgf·cm	6 ± 1 kgf·cm	6 ± 1 kgf·cm
C.B.P-TITE SCREW 3x10 F/ZN-3C	6 ± 1 kgf·cm	6 ± 1 kgf·cm	6 ± 1 kgf·cm
C.B.P-TITE SCREW 3x8 F/ZN-3C	6 ± 1 kgf·cm	6 ± 1 kgf·cm	6 ± 1 kgf·cm
C.B.P-TITE SCREW 2x8 F/ZN-3C	2 ± 0.5 kgf·cm	2 ± 0.5 kgf·cm	2 ± 0.5 kgf·cm
C.B.P-TITE SCREW 2.5x8 F/ZN-3C	4 ± 1 kgf·cm	4 ± 1 kgf·cm	4 ± 1 kgf·cm
C.B.P-TITE SCREW 3x10 F/ZN-3C	8 ± 1 kgf·cm	8 ± 1 kgf·cm	8 ± 1 kgf·cm
C.B.P-TITE SCREW 3x8 F/ZN-3C	8 ± 1 kgf·cm	8 ± 1 kgf·cm	8 ± 1 kgf·cm
C.B.P-TITE (S/P) SCREW 3x12 F/ZN-3C	5.5 ± 0.5 kgf·cm	5.5 ± 0.5 kgf·cm	5.5 ± 0.5 kgf·cm
C.B.S-TITE SCREW 3x6 F/ZN-3C	6 ± 1 kgf·cm	6 ± 1 kgf·cm	6 ± 1 kgf·cm
C.B.S-TITE SCREW 3x10 F/ZN-3C	6 ± 1 kgf·cm	6 ± 1 kgf·cm	6 ± 1 kgf·cm
C.P SCREW 2.5x6 F/ZN-3C	2 ± 0.5 kgf·cm	2 ± 0.5 kgf·cm	2 ± 0.5 kgf·cm
C.P SCREW 3x4 F/ZN-3C	2 ± 0.5 kgf·cm	2 ± 0.5 kgf·cm	2 ± 0.5 kgf·cm
C.P SCREW 3x6 F/ZN-3C	6 ± 1 kgf·cm	6 ± 1 kgf·cm	6 ± 1 kgf·cm
C.B.P-TITE (S/P) SCREW 3x12 F/ZN-3C	6 ± 1 kgf·cm	6 ± 1 kgf·cm	6 ± 1 kgf·cm
C.P SCREW 3x4 F/ZN-3C	6 ± 1 kgf·cm	6 ± 1 kgf·cm	6 ± 1 kgf·cm
C.B.S-TITE SCREW 3x6 F/ZN-3C	6 ± 1 kgf·cm	6 ± 1 kgf·cm	6 ± 1 kgf·cm
C.B.P-TITE SCREW 3x8 F/ZN-3C	5.5 ± 0.5 kgf·cm	5.5 ± 0.5 kgf·cm	5.5 ± 0.5 kgf·cm
C.B.P-TITE SCREW 2.6x5 F/ZN-3C	2 ± 0.5 kgf·cm	2 ± 0.5 kgf·cm	2 ± 0.5 kgf·cm
C.B.P-TITE SCREW 3x10 F/ZN-3C	6 ± 1 kgf·cm	6 ± 1 kgf·cm	6 ± 1 kgf·cm
C.B.P-TITE SCREW 3x8 F/ZN-3C	5 ± 1 kgf·cm	5 ± 1 kgf·cm	5 ± 1 kgf·cm

Note “*” : Only Cartridge Cover Hinge is supplied as an ASP.
“ng_2” : WF-7520/7510 series only

- Cartridge Cover Hinge / Cartridge Cover

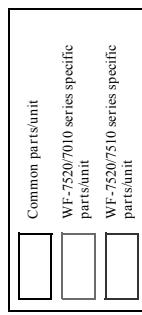
- I/C Guide
- Head FFC Cover
- Holder Board Assy

Disassessing Flowchart of Primate

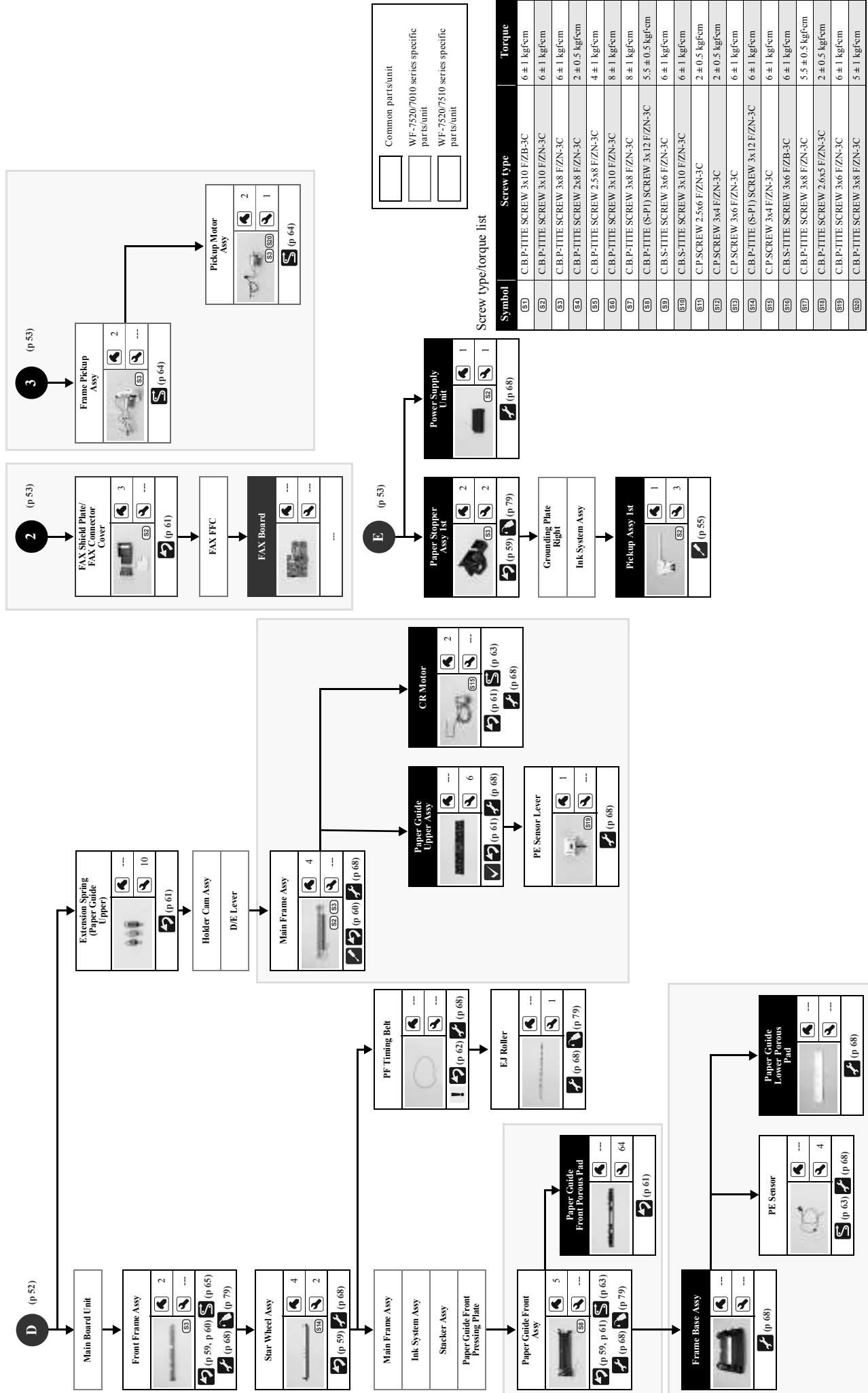
C
(p.52)

Screw type/torque list

Symbol	Screw type	Torque
①	C.B.P-TITE SCREW 3x10 F/ZN-3C	6 ± 1 kgf·cm
②	C.B.P-TITE SCREW 3x10 F/ZN-3C	6 ± 1 kgf·cm
③	C.B.P-TITE SCREW 3x8 F/ZN-3C	6 ± 1 kgf·cm
④	C.B.P-TITE SCREW 2x8 F/ZN-3C	2 ± 0.5 kgf·cm
⑤	C.B.P-TITE SCREW 2.5x8 F/ZN-3C	4 ± 1 kgf·cm
⑥	C.B.P-TITE SCREW 3x10 F/ZN-3C	8 ± 1 kgf·cm
⑦	C.B.P-TITE SCREW 3x8 F/ZN-3C	8 ± 1 kgf·cm
⑧	C.B.P-TITE (S-P) SCREW 3x12 F/ZN-3C	5.5 ± 0.5 kgf·cm
⑨	C.B.S-TITE SCREW 3.6 F/ZN-3C	6 ± 1 kgf·cm
⑩	C.B.S-TITE SCREW 3x10 F/ZN-3C	6 ± 1 kgf·cm
⑪	C.P-SCREW 2.5x6 F/ZN-3C	2 ± 0.5 kgf·cm
⑫	C.P-SCREW 3x4 F/ZN-3C	2 ± 0.5 kgf·cm
⑬	C.P-SCREW 3x6 F/ZN-3C	6 ± 1 kgf·cm
⑭	C.B.P-TITE (S-P) SCREW 3x12 F/ZN-3C	6 ± 1 kgf·cm
⑮	C.P-SCREW 3x4 F/ZN-3C	6 ± 1 kgf·cm
⑯	C.B.S-TITE SCREW 3x6 F/ZB-3C	6 ± 1 kgf·cm
⑰	C.B.P-TITE SCREW 3x8 F/ZN-3C	5.5 ± 0.5 kgf·cm
⑱	C.B.P-TITE SCREW 2.6x5 F/ZN-3C	2 ± 0.5 kgf·cm
⑲	C.B.P-TITE SCREW 3x6 F/ZN-3C	6 ± 1 kgf·cm
⑳	C.B.D-TITE SCREW 3x8 F/ZN-3C	5 ± 1 kgf·cm



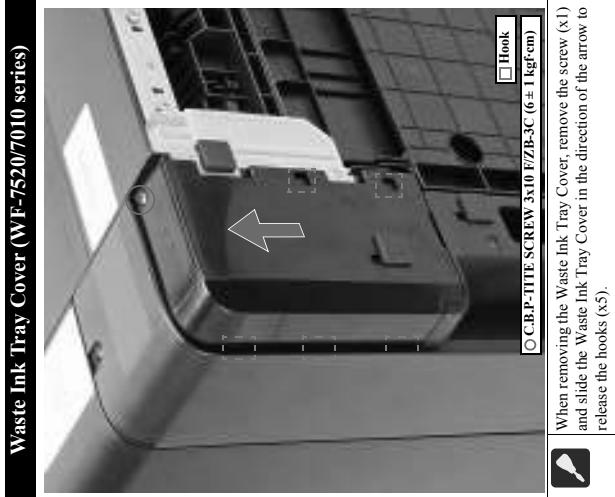
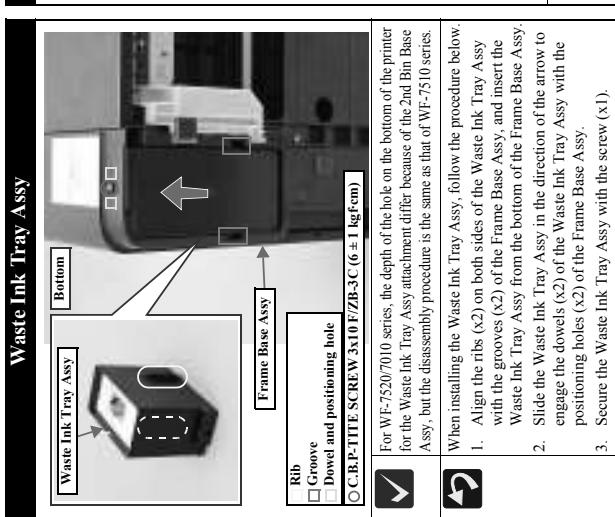
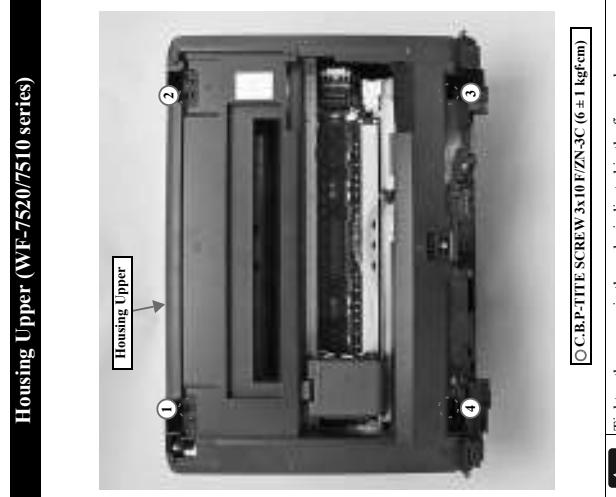
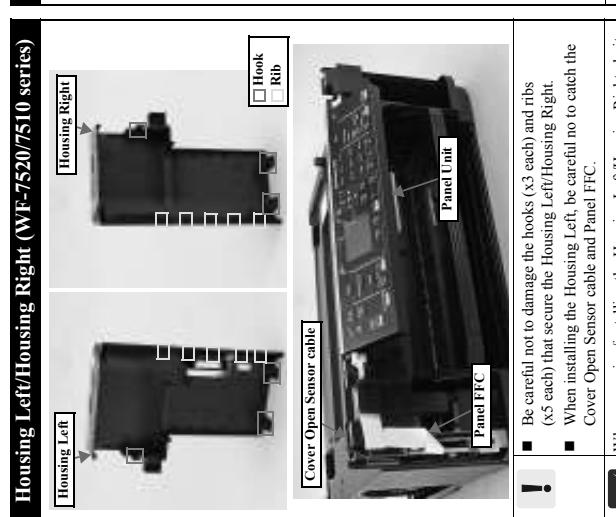
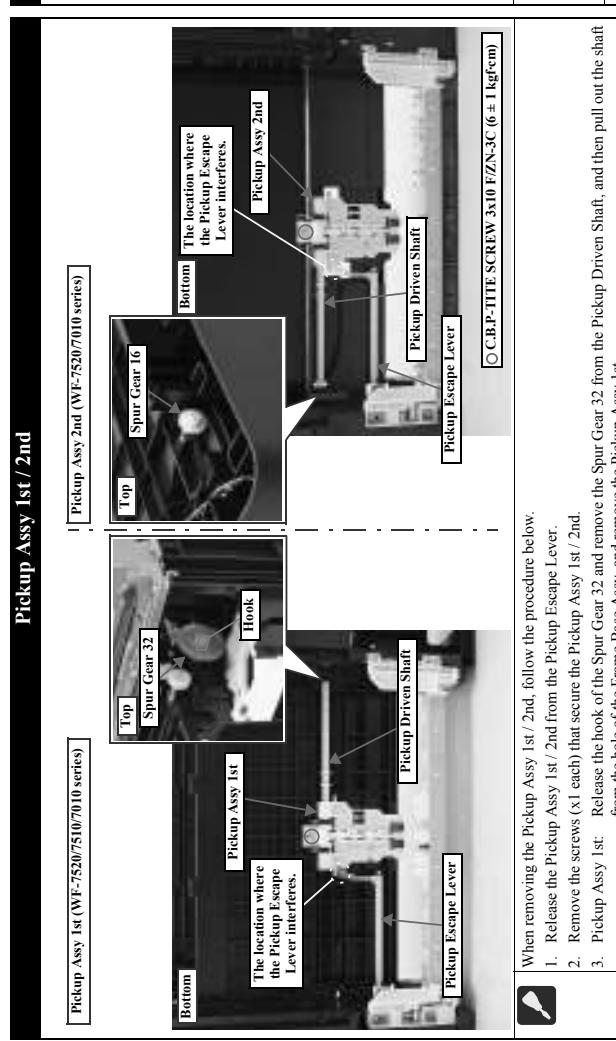
Flowchart 4-6. Disassembling Flowchart of Printer Mechanism (2)

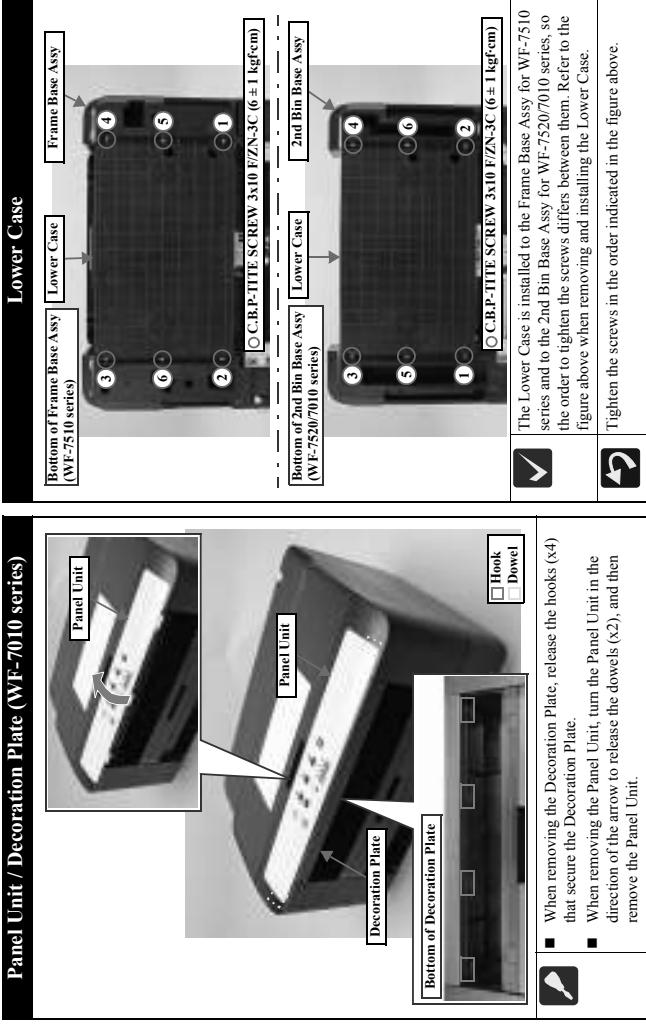
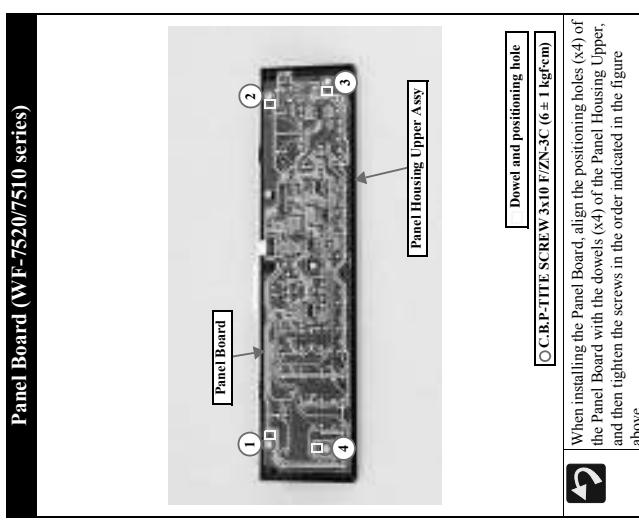
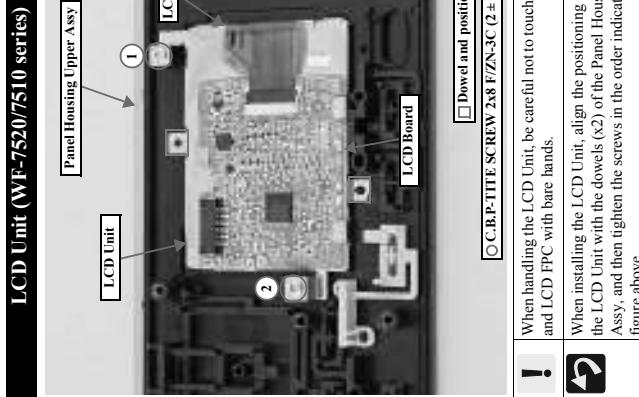
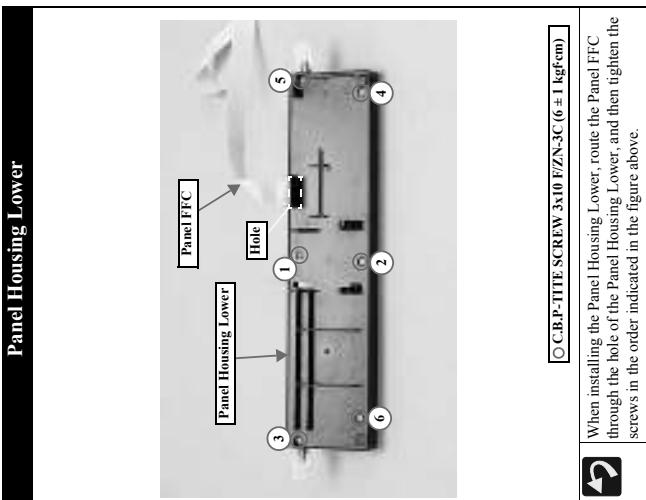
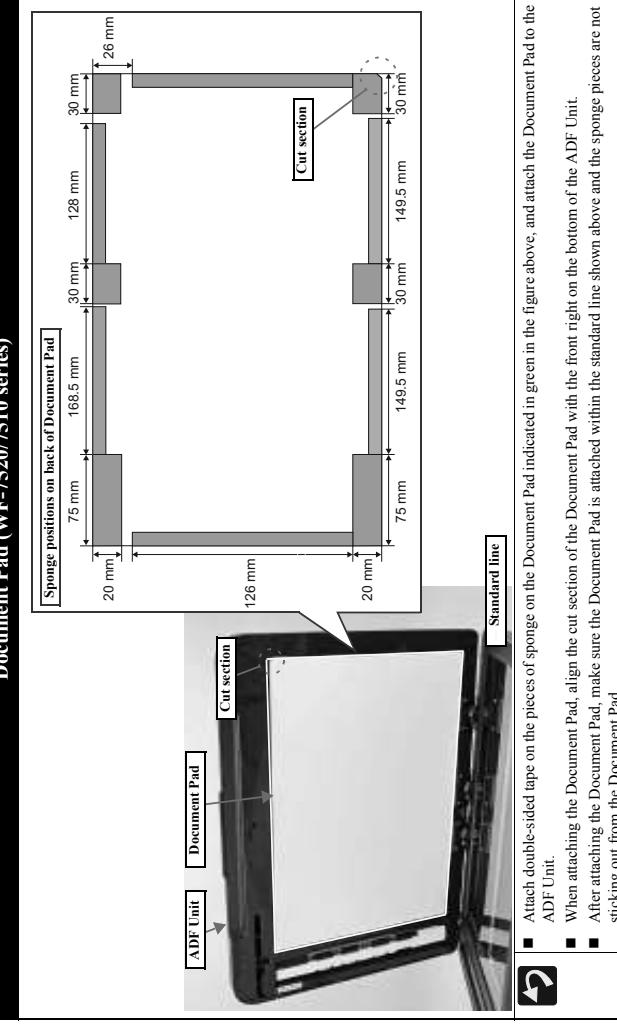


Flowchart 4.7: Disassembling Flowchart of Printer Mechanism (3)

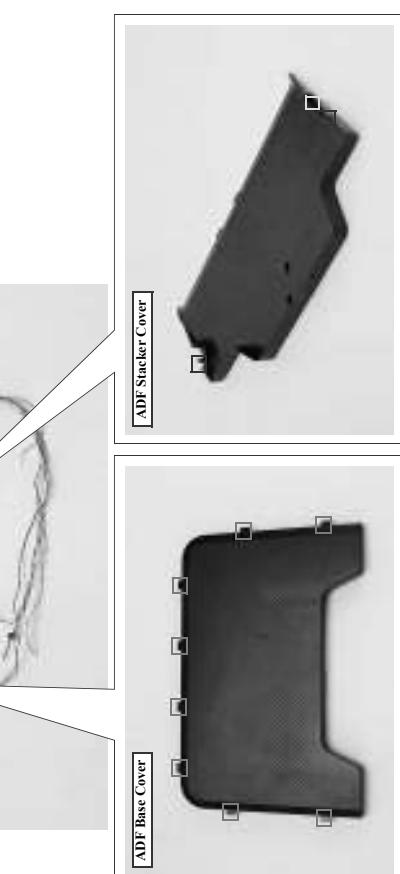
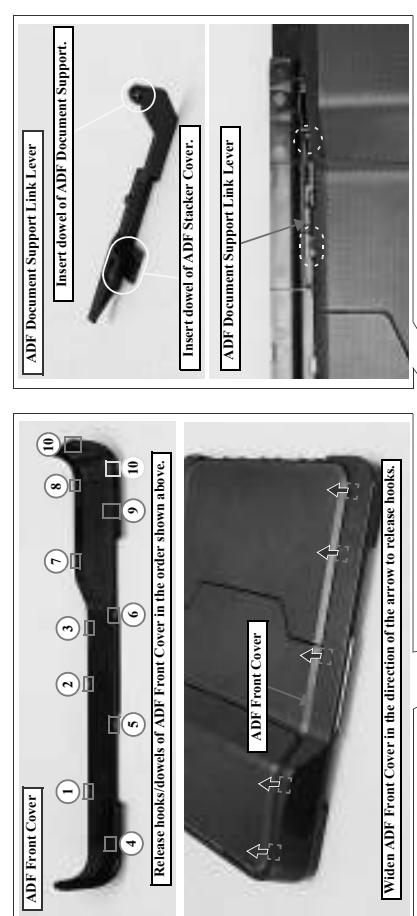
DRAFT: 11: EPI

4.3 Detailed Disassembly/Reassembly Procedure for each Part/Unit

USB Cover (WF-7520/7510 series)	Waste Ink Cover (WF-7520/7010 series)	Housing Upper (WF-7520/7510 series)	Housing Left/Housing Right (WF-7520/7510 series)	Pickup Assy 1st / 2nd
 <p>USB Cover (WF-7520/7510 series)</p> <p>! Be careful not to damage the hooks (x6) that secure the USB Cover.</p> <p>When removing the USB Cover, follow the procedure below.</p> <ol style="list-style-type: none"> 1. Remove the screws (x2) that secure the USB Cover. 2. Release the hooks (x6) of the USB Cover by sliding it in the direction of the arrow shown above, and then remove the USB Cover. <p>! Tighten the screws in the order indicated in the figure above.</p>	 <p>Waste Ink Cover (WF-7520/7010 series)</p> <p>! Be careful not to damage the hooks (x6) that secure the USB Cover.</p> <p>When removing the Waste Ink Cover, follow the procedure below.</p> <ol style="list-style-type: none"> 1. Align the ribs (x2) on both sides of the Waste Ink Assy with the grooves (x2) of the Frame Base Assy, and insert the Waste Ink Tray Assy from the bottom of the Frame Base Assy. 2. Slide the Waste Ink Tray Assy in the direction of the arrow to engage the dowels (x2) of the Waste Ink Tray Assy with the positioning holes (x2) of the Frame Base Assy. 3. Secure the Waste Ink Tray Assy with the screw (x1). <p>! When installing the Waste Ink Tray Assy, follow the procedure below.</p> <p>For WF-7520/7010 series, the depth of the hole on the bottom of the printer for the Waste Ink Tray Assy attachment differ because of the 2nd Bin Base Assy, but the disassembly procedure is the same as that of WF-7510 series.</p> <p>! When removing the Waste Ink Tray Cover, remove the screw (x1) and slide the Waste Ink Tray Cover in the direction of the arrow to release the hooks (x5).</p>	 <p>Housing Upper (WF-7520/7010 series)</p> <p>! Be careful not to damage the hooks (x5) that secure the Housing Upper.</p> <p>When installing the Housing Upper, follow the procedure below.</p> <ol style="list-style-type: none"> 1. Lift the section A of the USB Cover using a flathead screwdriver or a similar tool. 2. Slide the Waste Ink Tray Assy in the direction of the arrow to engage the dowels (x2) of the Waste Ink Tray Assy with the positioning holes (x2) of the Frame Base Assy. 3. Secure the Waste Ink Tray Assy with the screw (x1). <p>! When removing the the Waste Ink Cover, remove the screw (x1) and slide the Waste Ink Cover in the direction of the arrow to release the hooks (x5).</p>	 <p>Housing Left/Housing Right (WF-7520/7510 series)</p> <p>! Be careful not to damage the hooks (x5 each) that secure the Housing Left/Housing Right.</p> <p>When installing the Housing Left, be careful not to catch the Cover Open Sensor cable and Panel FFC.</p> <p>! Tighten the screws in the order indicated in the figure above.</p>	 <p>Pickup Assy 1st / 2nd</p> <p>! Be careful not to damage the hooks (x3 each) and ribs (x5 each) that secure the Housing Left/Housing Right.</p> <p>When installing the Pickup Assy 1st / 2nd, follow the procedure below.</p> <ol style="list-style-type: none"> 1. Release the Pickup Assy 1st / 2nd from the Pickup Escape Lever. 2. Remove the screws (x1 each) that secure the Pickup Assy 1st / 2nd. 3. Pickup Assy 1st: Release the hook of the Spur Gear 32 and remove the Spur Gear 32 from the Pickup Driven Shaft, and then pull out the shaft from the hole of the Frame Base Assy, and remove the Pickup Assy 1st. 4. Pickup Assy 2nd: Remove the Pickup Driven Shaft from the Spur Gear 16, and remove the Pickup Assy 2nd from the 2nd Bin Base Assy.

**Document Pad (WF-7520/7510 series)**

ADF Unit (1) (WF-7520/7510 series)

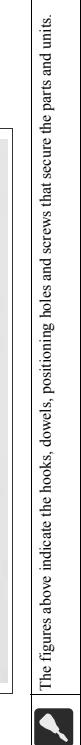


The figures above indicate the hooks, dowels and cutouts that secure the parts and units.

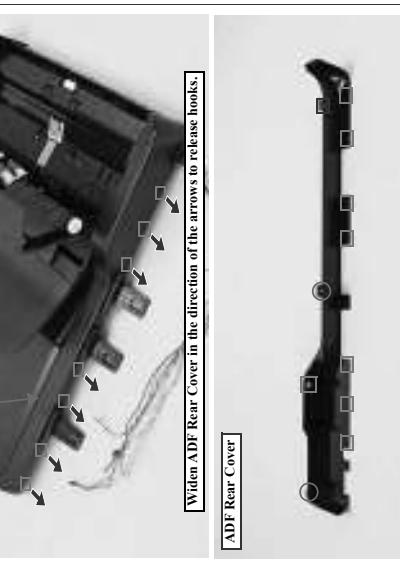
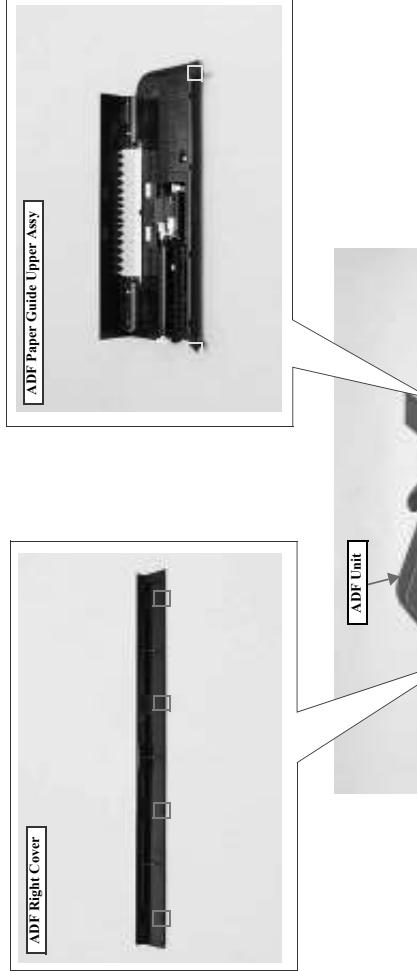
Disassembly/Reassembly

Detailed Disassembly/Reassembly Procedure for each Part/Unit

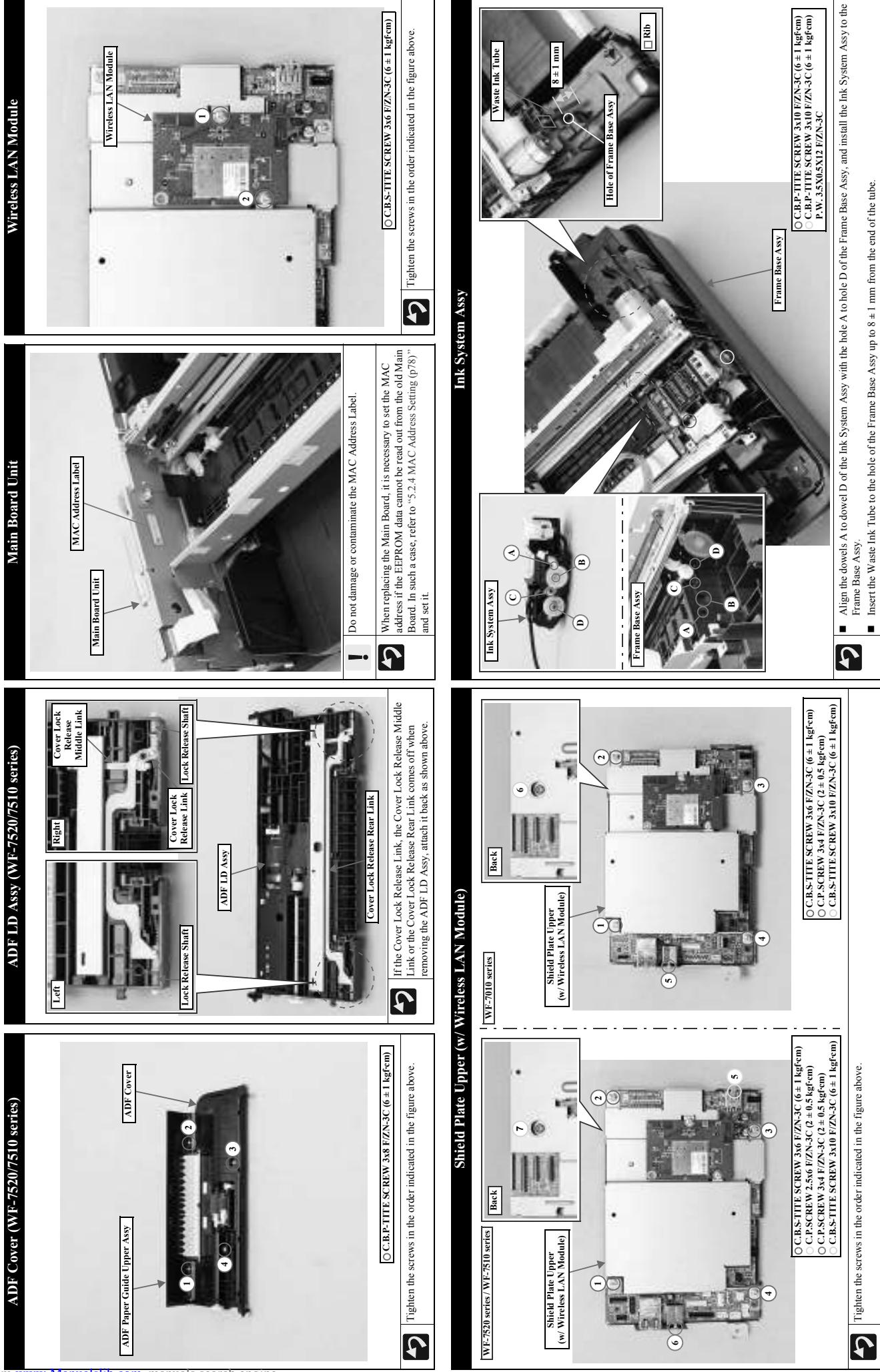
The figures above indicate the hooks, dowels positioning holes and screws that secure the parts and units.

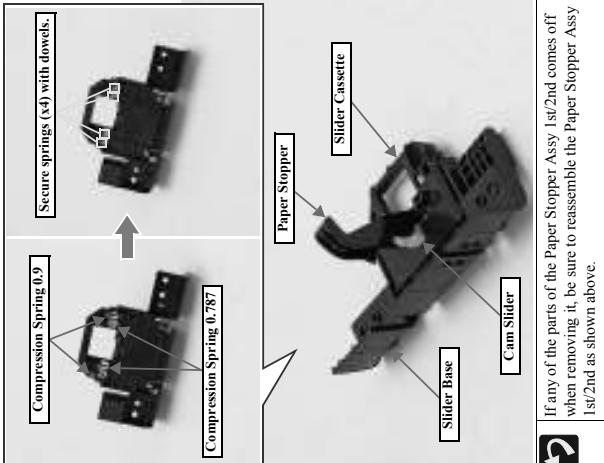
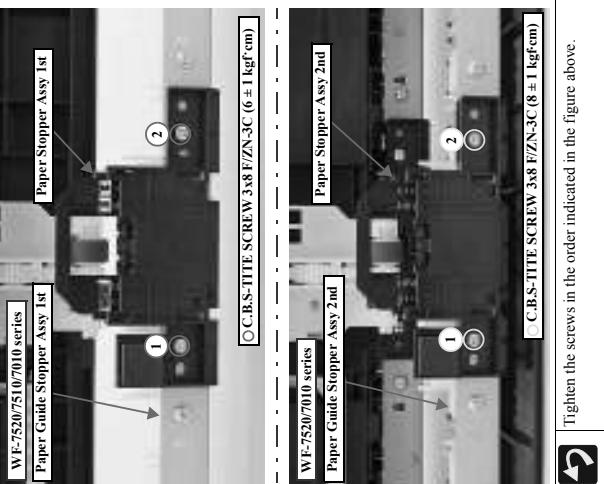
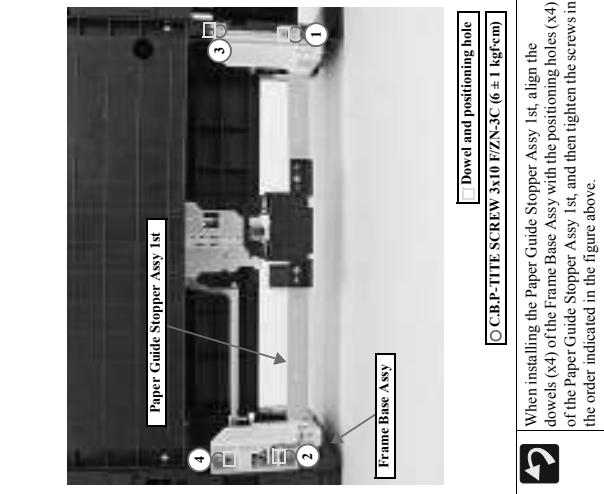
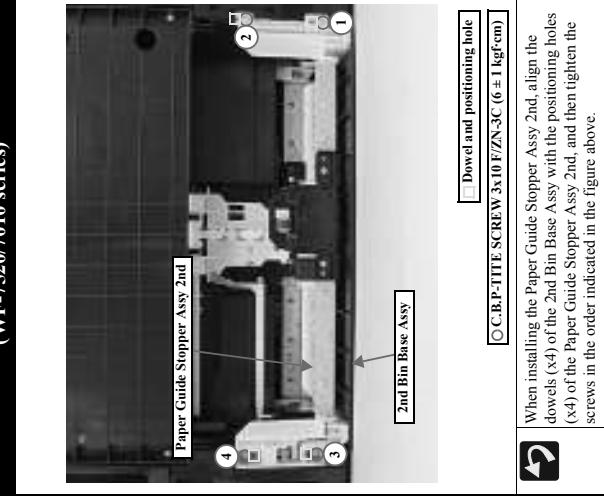
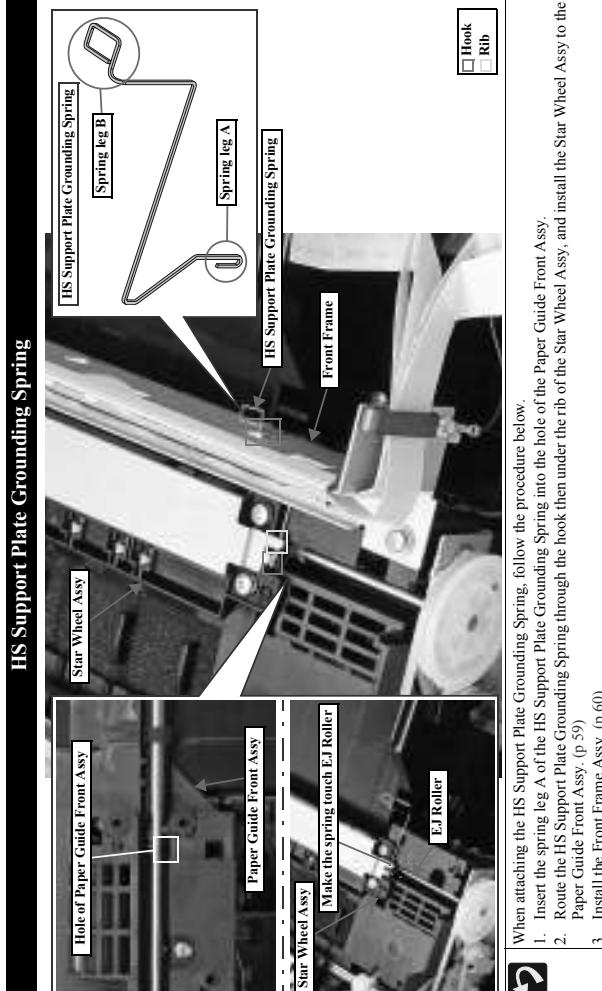


ADF Unit (2) (WF-7520/7510 series)



The figures above indicate the hooks, dowels positioning holes and screws that secure the parts and units.



Paper Stopper Assy 1st / 2nd (1)**Paper Stopper Assy 1st / 2nd (2)****Paper Guide Stopper Assy 1st****Paper Guide Stopper Assy 2nd
(WF-7520/7010 series)****HS Support Plate Grounding Spring**

Disassembly/Reassembly

Detailed Disassembly/Reassembly Procedure for each Part/Unit

Paper Stopper Assy 1st / 2nd (1)

WF-7520/7510/7010 series

Paper Stopper Assy 1st / 2nd (2)

WF-7520/7510/7010 series

Paper Guide Stopper Assy 1st

**Paper Guide Stopper Assy 2nd
(WF-7520/7010 series)**

Paper Guide Stopper Assy 1st

**Paper Guide Stopper Assy 2nd
(WF-7520/7010 series)**

CR Scale / Torsion Spring 7.13

Star Wheel Assy

HS Support Plate Grounding Spring

Paper Stopper Assy 1st / 2nd (1)

WF-7520/7510/7010 series

Paper Stopper Assy 1st / 2nd (2)

WF-7520/7010 series

Paper Guide Stopper Assy 1st

**Paper Guide Stopper Assy 2nd
(WF-7520/7010 series)**

Paper Guide Stopper Assy 1st

**Paper Guide Stopper Assy 2nd
(WF-7520/7010 series)**

CR Scale / Torsion Spring 7.13

Star Wheel Assy

HS Support Plate Grounding Spring

Paper Stopper Assy 1st / 2nd (1)

WF-7520/7510/7010 series

Paper Stopper Assy 1st / 2nd (2)

WF-7520/7010 series

Paper Guide Stopper Assy 1st

**Paper Guide Stopper Assy 2nd
(WF-7520/7010 series)**

Paper Guide Stopper Assy 1st

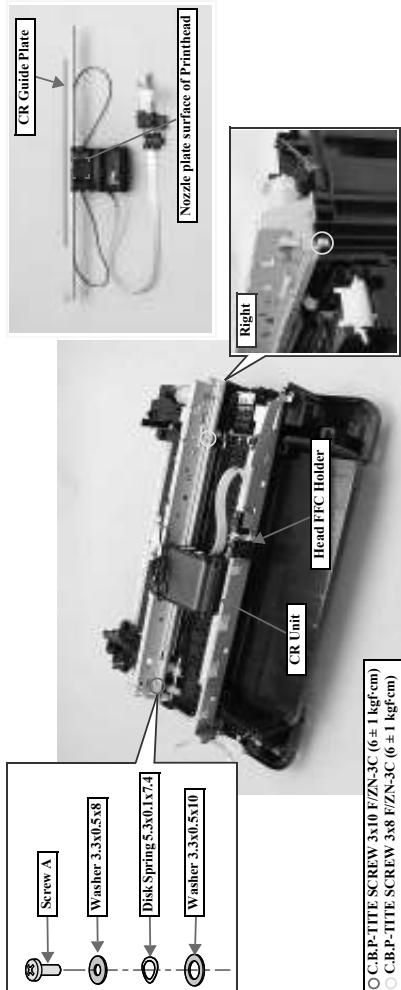
**Paper Guide Stopper Assy 2nd
(WF-7520/7010 series)**

CR Scale / Torsion Spring 7.13

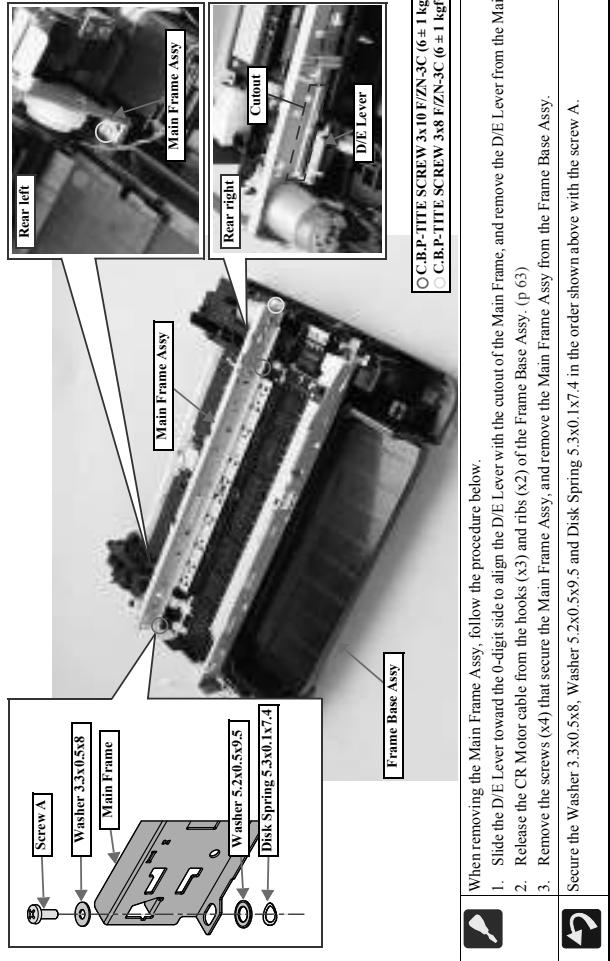
Star Wheel Assy

HS Support Plate Grounding Spring

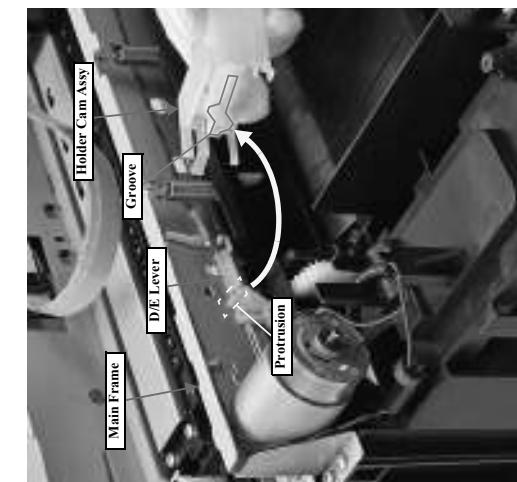
CR Assy (w/ CR Guide Plate)



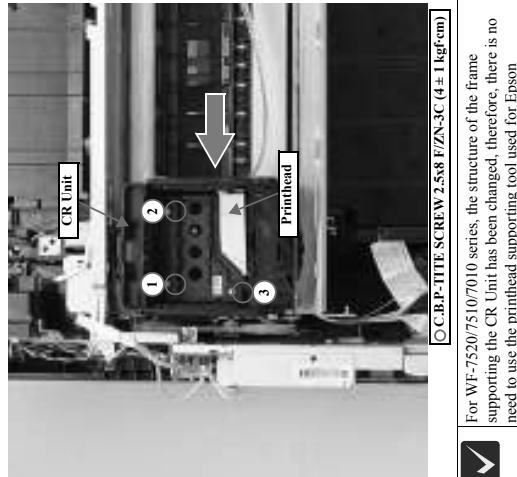
Main Frame Assy



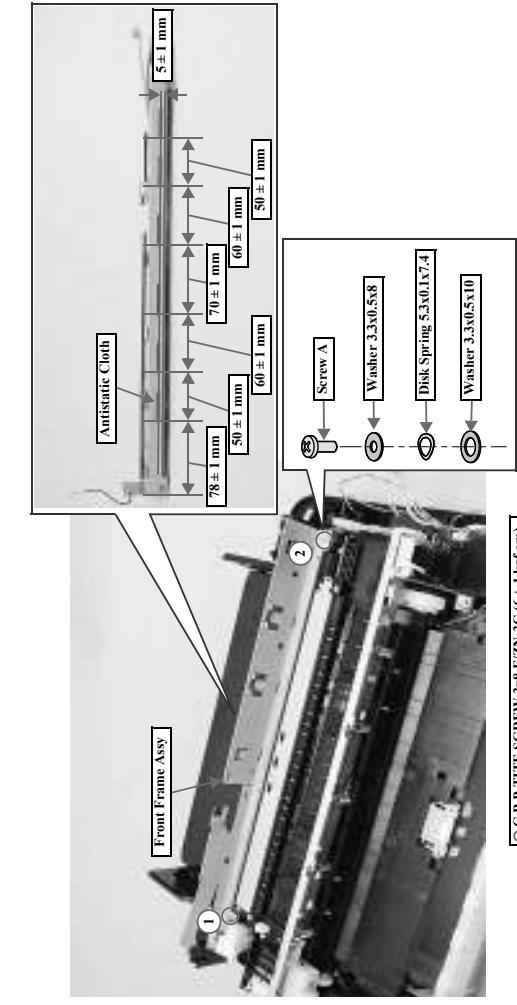
Holder Cam Assy

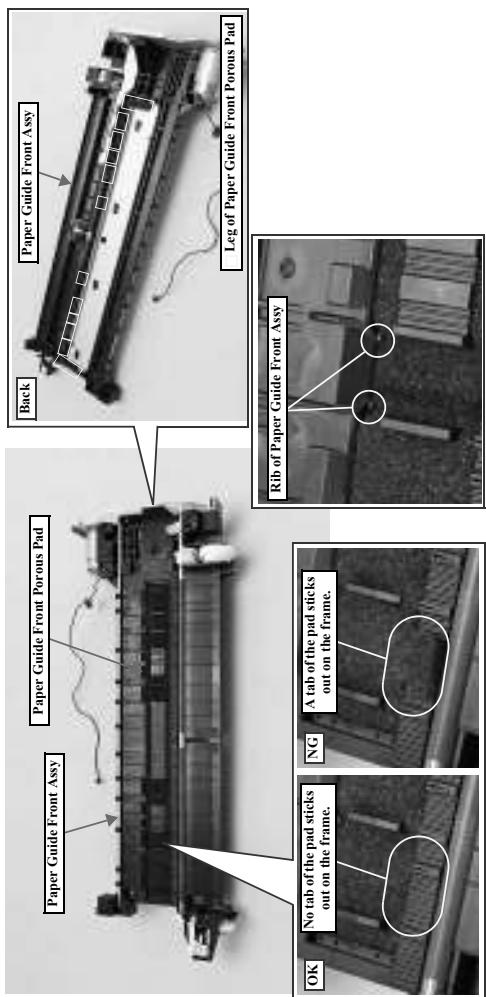


Printthead

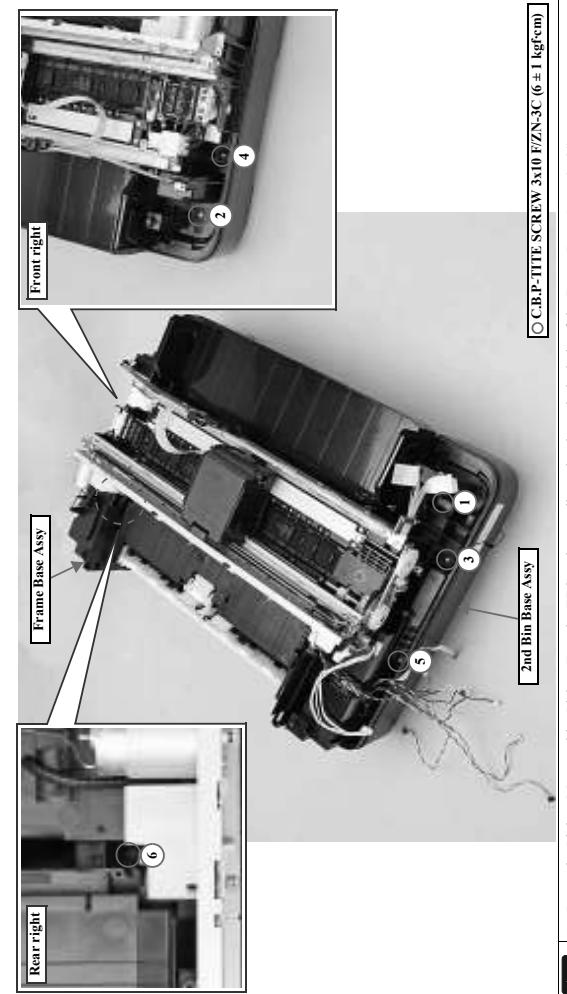


Front Frame Assy



Paper Guide Front Porous Pad

- When installing the Paper Guide Front Porous Pad, make sure of the following.
- The legs (x12) of the Paper Guide Front Porous Pad should come out completely from the holes of the Paper Guide Front Assy.
 - The tabs (x52) of the Paper Guide Front Porous Pad should be inserted into the grooves of the Paper Guide Front Assy, and no tabs must be lifting above the platen surface of the Paper Guide Front Assy.
 - Insert the Paper Guide Front Porous Pad under the ribs (x24) of the Paper Guide Front Assy.

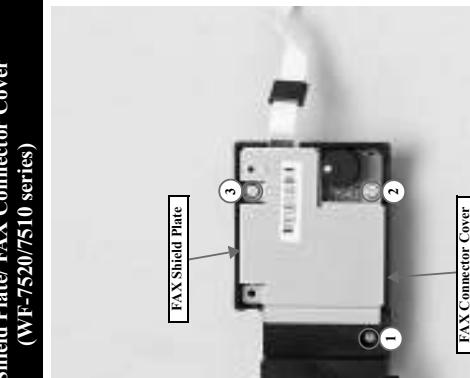
2nd Bin Base Assy (WF-7520/7010 series)

○ C.B.P-TITE SCREW 3x10 F/ZN-3C (6 ± 1 kgf·cm)

(p 64)

■ Route the Pickup Motor cable, Pickup Encoder FFC and grounding wire through the hole of the Frame Base Assy. (p 64)

■ Tighten the screws in the order indicated in the figure above.

FAX Shield Plate/ FAX Connector Cover (WF-7520/7510 series)

○ C.B.P-TITE SCREW 3x10 F/ZN-3C (6 ± 1 kgf·cm)

C.P SCREW 3x6 F/ZN-3C (6 ± 1 kgf·cm)

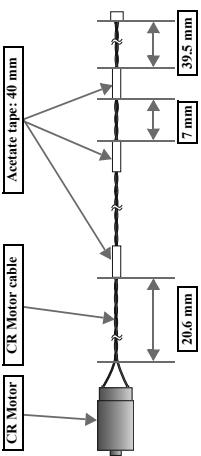
(p 64)

■ In this manual, the Paper Guide Upper Center Assy, Paper Guide Upper Left Assy and Paper Guide Upper Right Assy are collectively called "Paper Guide Upper Assy".

■ Attach the Extension Spring 4.43 (x2), Extension Spring 8.78 (x2) and Extension Spring 1.47 (x1) on the positions shown above.

■ Attach acetate tape on the positions shown above on the CR Motor cable.

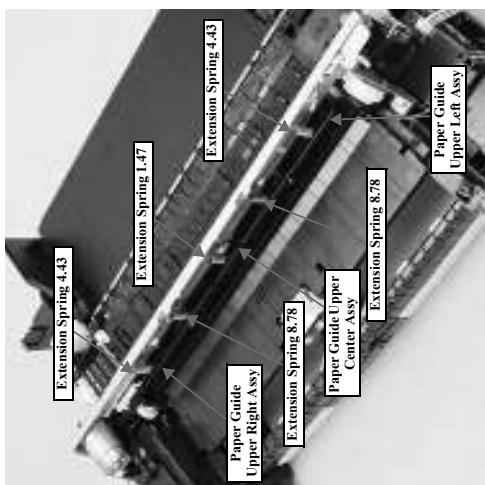
■ Attach acetate tape on the positions shown above on the CR Motor cable.

Disassembly/Reassembly**Detailed Disassembly/Reassembly Procedure for each Part/Unit****2nd Bin Base Assy (WF-7520/7010 series)****CR Motor**

■ Attach acetate tape on the positions shown above on the CR Motor cable.

■ Attach acetate tape on the positions shown above on the CR Motor cable.

■ Attach acetate tape on the positions shown above on the CR Motor cable.

Paper Guide Upper Assy

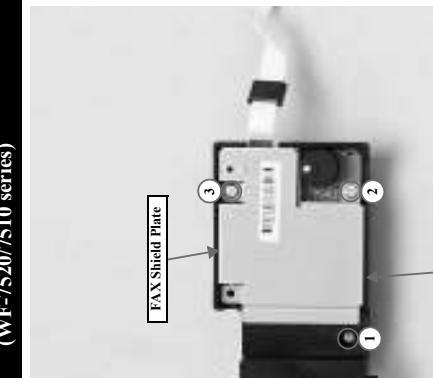
■ In this manual, the Paper Guide Upper Center Assy, Paper Guide Upper Left Assy and Paper Guide Upper Right Assy are collectively called "Paper Guide Upper Assy".

■ Attach the Extension Spring 4.43 (x2), Extension Spring 8.78 (x2) and Extension Spring 1.47 (x1) on the positions shown above.

■ Attach acetate tape on the positions shown above on the CR Motor cable.

■ Attach acetate tape on the positions shown above on the CR Motor cable.

■ Attach acetate tape on the positions shown above on the CR Motor cable.

2nd Bin Base Assy (WF-7520/7010 series)**Paper Guide Front Assy**

○ C.B.P-TITE SCREW 3x10 F/ZN-3C (6 ± 1 kgf·cm)

C.P SCREW 3x6 F/ZN-3C (6 ± 1 kgf·cm)

(p 64)

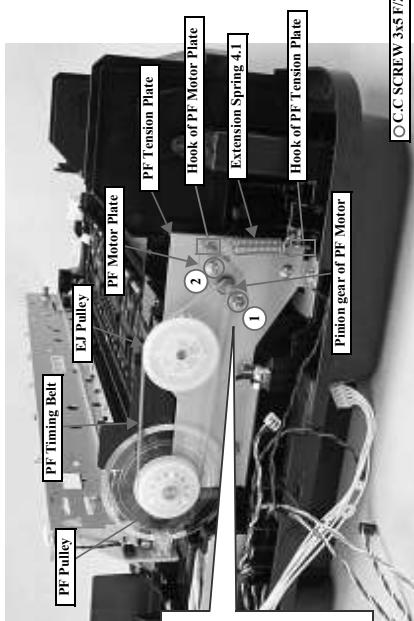
■ When reassembling the Paper Guide Front Assy with the Lower Case and 2nd Bin Base Assy (WF-7520/7010 series only) installed to the Frame Base Assy, it is not necessary to use the paper guide front supporting tools used for Epson WorkForce 635/WorkForce Office TX-20WD/Epson Stylus Office BX625FW/D/M/E 960FW/D.

■ Tighten the screws in the order indicated in the figure above.

■ Attach acetate tape on the positions shown above on the CR Motor cable.

■ Attach acetate tape on the positions shown above on the CR Motor cable.

PF Timing Belt



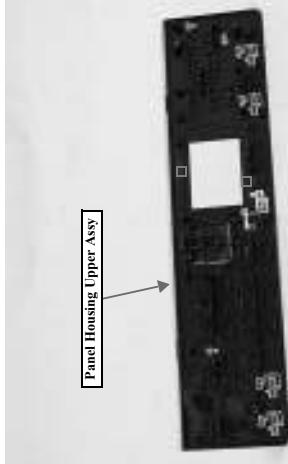
! To prevent improper tension applied to the PF Timing Belt, do not hold the PF Motor, PF Tension Plate or PF Motor Plate when tightening the screws of the PF Motor.

When installing the PF Timing Belt, follow the procedure below.

1. Loosen the screws (x2) of the PF Motor slightly.
2. Rotate the PF Motor Plate in the direction of the arrow as far as it will go, and attach the PF Timing Belt in the order of the PF Pulley, EJ Pulley, and the pinion gear of the PF Motor.
3. Attach the Extension Spring 4.1 in the order of the hook of the PF Tension Plate and the hook of the PF Motor Plate.
4. Tighten the screws (x2) in the order shown above to secure the PF Motor Plate.

○ C.C SCREW 3x5 F/ZN-3C (6 ± 1 kgf/cm)

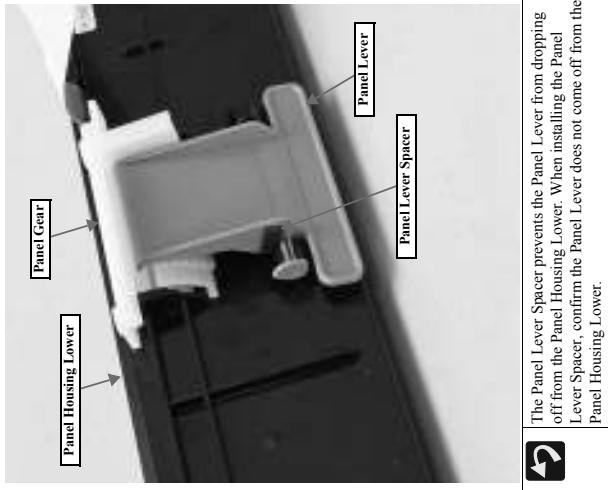
Panel Housing Upper Assy (WF-7520/7510 series)



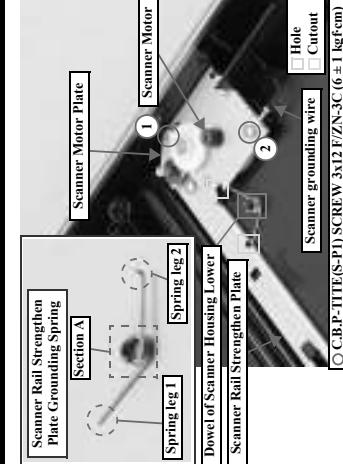
□ Hook

When attaching the LCD Unit to the Panel Housing Upper Assy, the LCD Unit is secured with the ribs of the Panel Housing Upper Assy which are ground by the positioning holes on the Shield Plate of the LCD Unit. Therefore, the ribs become smaller than the positioning holes when removing the LCD Unit and can not hold the LCD Unit securely. Once the LCD Unit is removed from the Panel Housing Upper Assy, be sure to replace the Panel Housing Upper Assy with a new one.

Panel Lever Spacer



Scanner Motor Assy



○ C.B.P-TITE(S-P) SCREW 3x12 F/ZN-3C (6 ± 1 kgf/cm)

■ Tighten the screws in the order indicated in the figure above.
Secure the scanner grounding wire and the Scanner Motor Assy together with the screw 2 shown above.
When attaching the Scanner Rail Strengthen Plate Grounding Spring, follow the procedure below.

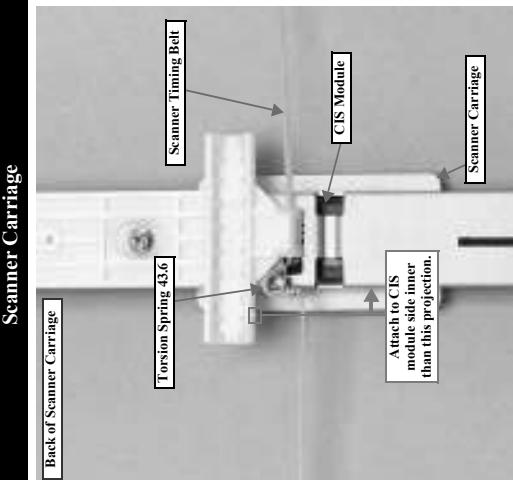
1. Insert the spring leg 1 of the Scanner Rail Strengthen Plate Grounding Spring into the hole of the Scanner Rail Strengthen Plate.
2. Attach the section A of the Scanner Rail Strengthen Plate Grounding Spring to the bowel of the Scanner Housing Lower.
3. Attach the spring leg 2 of the Scanner Rail Strengthen Plate Grounding Spring to the cutout of the Scanner Motor Plate.

○ C.B.P-TITE(S-P) SCREW 3x10 F/ZN-3C (6 ± 1 kgf/cm)

○ C.B.P-TITE SCREW 3x10 F/ZB-3C (6 ± 1 kgf/cm)

■ When installing the Scanner FFC Cover, install it with the hook A of the cover to the rear of the printer, and secure the cover to the Scanner Housing Lower in the order of hook B and hook A.

Scanner Carriage

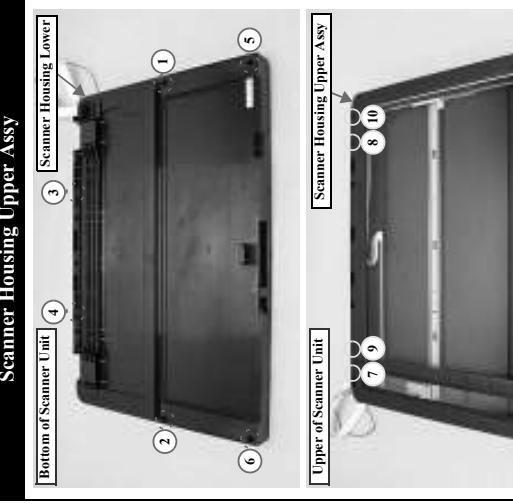


Attach to CIS module side inner than this projection.

□ Protrusion

■ If the Torsion Spring 436 has come off from the Scanner Timing Belt, attach it to the CIS module side inner than this projection on the Scanner Carriage.

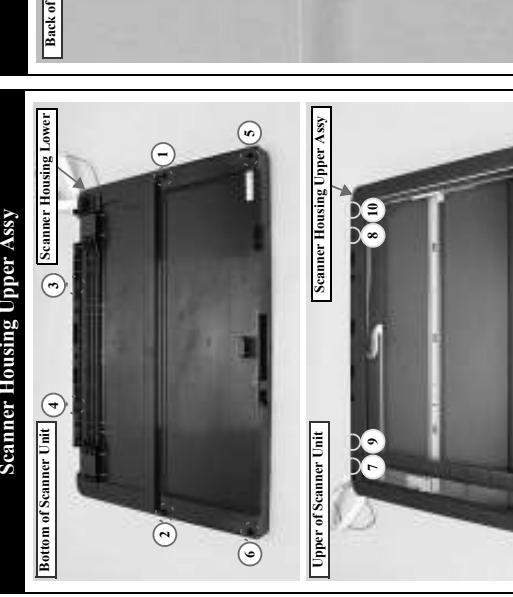
Scanner Housing Upper Assy



○ C.B.P-TITE SCREW 3x10 F/ZN-3C (6 ± 1 kgf/cm)

○ C.B.P-TITE SCREW 3x10 F/ZB-3C (6 ± 1 kgf/cm)

Scanner Housing Lower



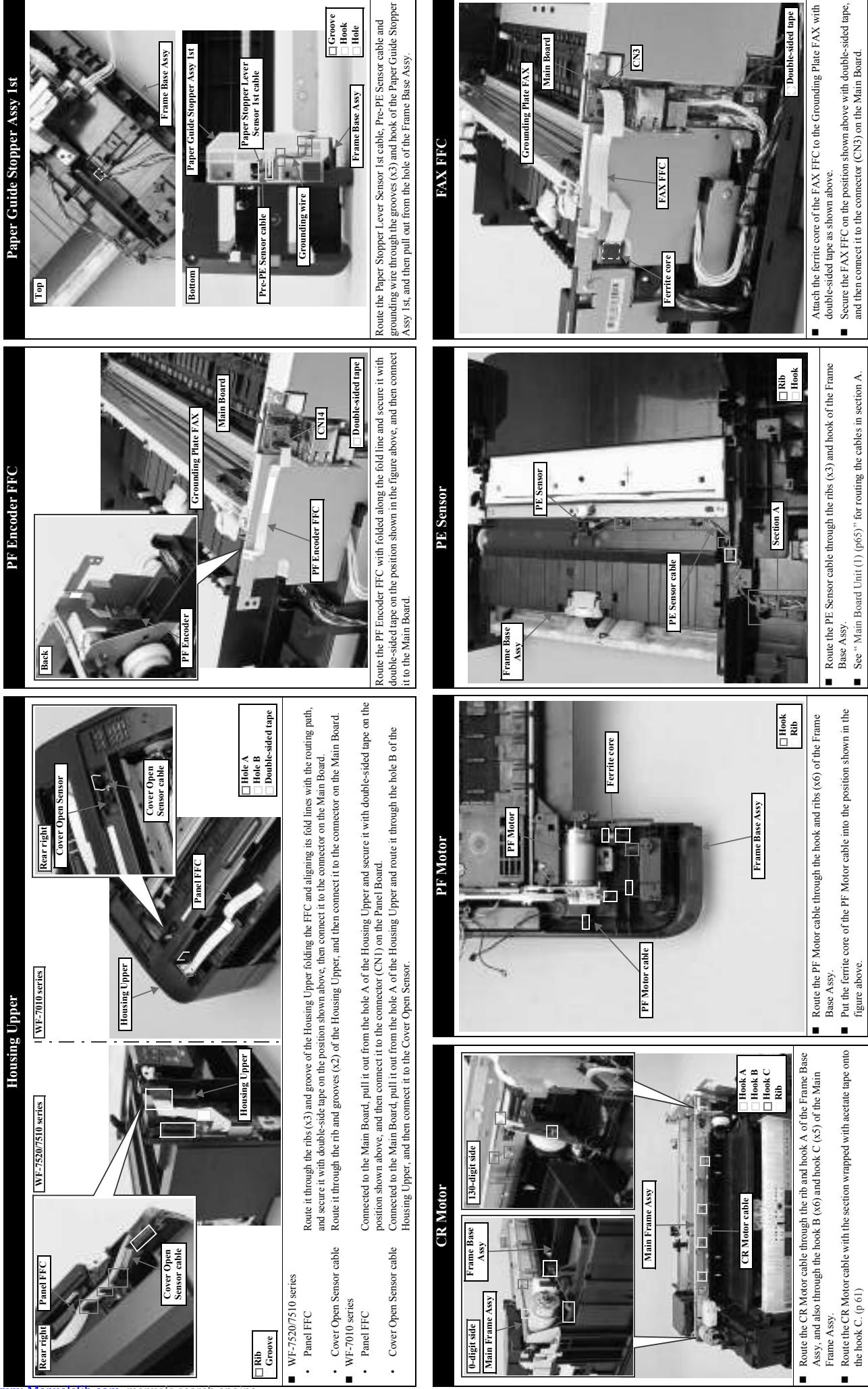
○ C.B.P-TITE SCREW 3x10 F/ZN-3C (6 ± 1 kgf/cm)

○ C.B.P-TITE SCREW 3x10 F/ZB-3C (6 ± 1 kgf/cm)

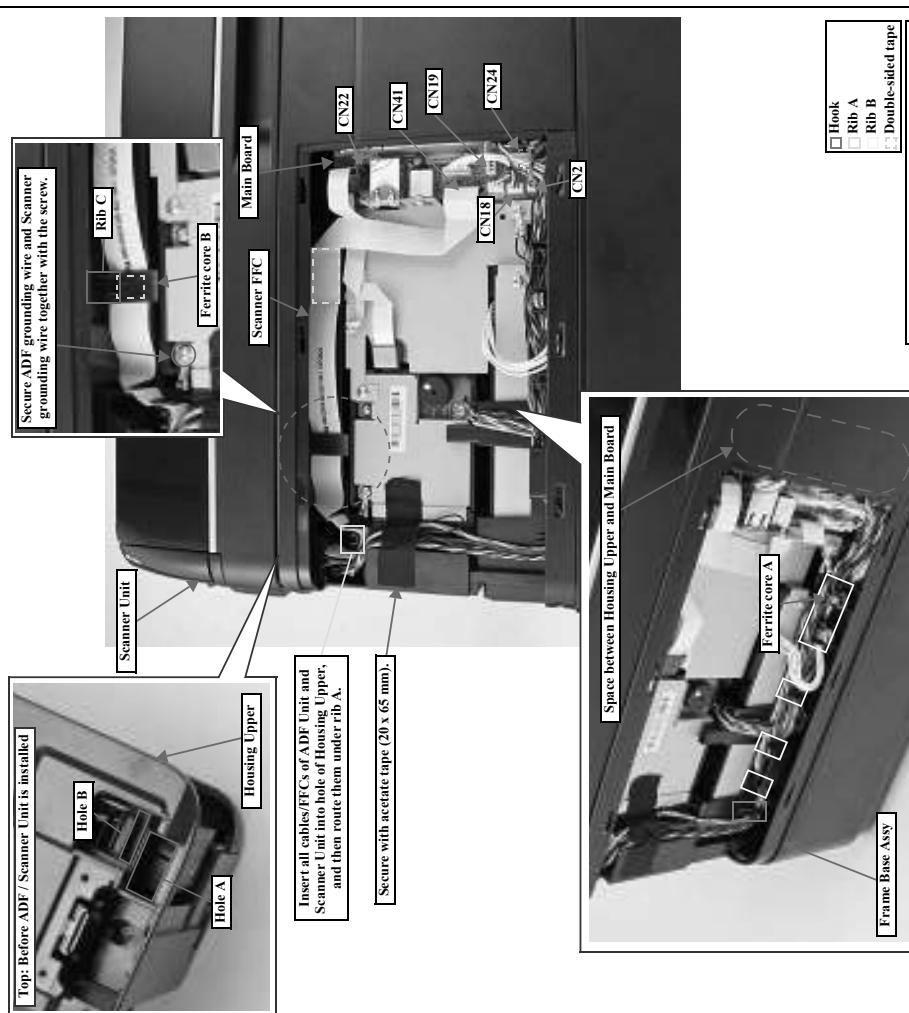
Disassembly/Reassembly

Detailed Disassembly/Reassembly Procedure for each Part/Unit

4.4 Routing FFCs/cables

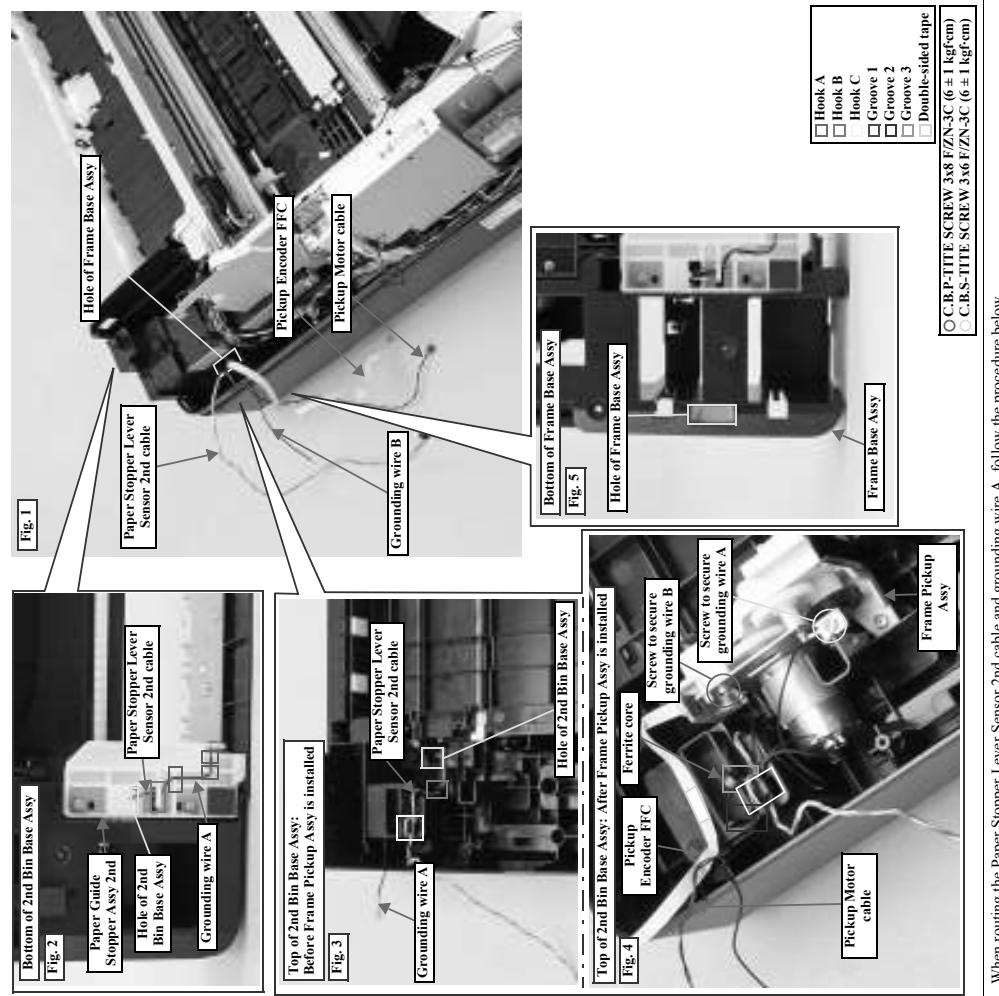


Inside the USB Cover (ADF Unit/Scanner Unit related cables: WF-7520/7510 series)



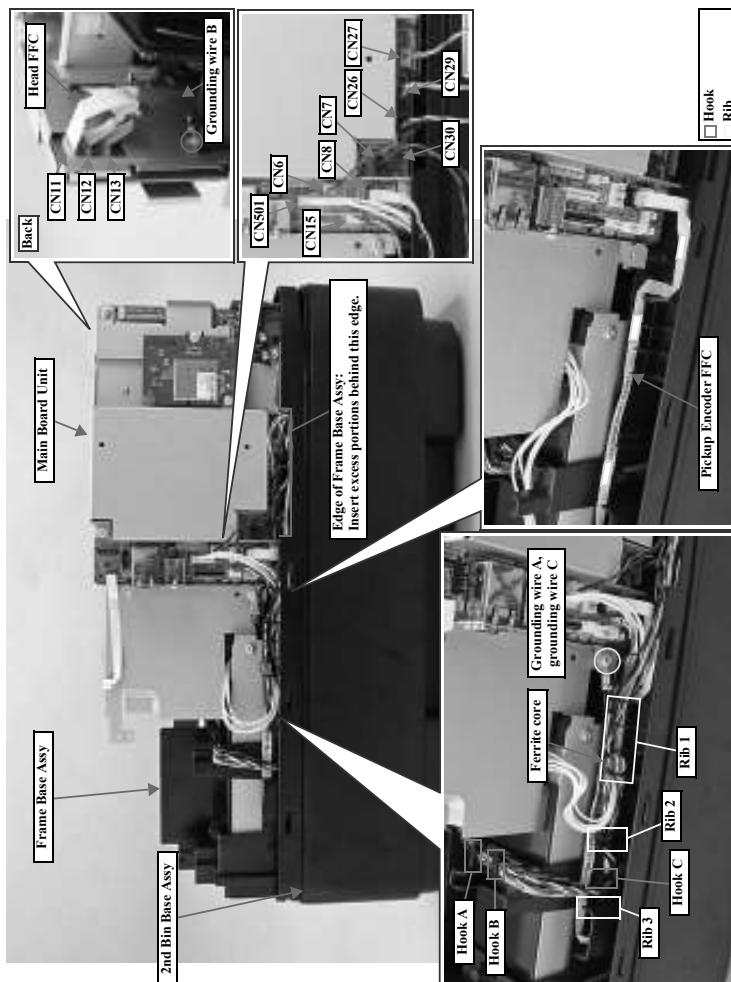
Disassembly/Reassembly

2nd Bin Base Assy (WF-7520/7010 series)



- CBP-TITE SCREW 3.8 F/ZN-3C (6 ± 1kg/cm)
○CBS-TITE SCREW 3.6 F/ZN-3C (6 ± 1kg/cm)
- When routing the Paper Stopper Lever Sensor 2nd cable and grounding wire A, follow the procedure below.
 - 1. Route the Paper Stopper Lever Sensor 2nd cable and grounding wire A through the groove 1 (x3) of the Paper Guide Stopper Assy 2nd and through the hook A, and then insert them into the hole on the bottom of the 2nd Bin Base Assy. (See Fig. 2.)
 - 2. Pull out the Paper Stopper Lever Sensor 2nd cable and grounding wire A from the hole on the upper side of the 2nd Bin Base Assy, and route them as follows. (See Fig. 3.)
 - 3. Route the Paper Stopper Lever Sensor 2nd cable, Pickup Encoder FFC and grounding wire B as follows. (See Fig. 4.)
 - 4. Insert the Paper Stopper Lever Sensor 2nd cable, Pickup Encoder FFC and grounding wire B as follows. (See Fig. 5.)
 - 5. Route the Paper Stopper Lever Sensor 2nd cable, Pickup Motor cable, Pickup Encoder FFC and grounding wire B through the groove 3 (x3) of the Paper Guide Stopper Assy 2nd and through the hook C, and then make one turn around the hook C. (See Fig. 6.)
 - 6. Route the Paper Stopper Lever Sensor 2nd cable and grounding wire B as follows. (See Fig. 7.)
 - 7. Insert the Paper Stopper Lever Sensor 2nd cable, Pickup Encoder FFC and grounding wire B into the hole on the bottom of the Frame Base Assy, and pull them out from the upper side of the Frame Base Assy. (See Fig. 1, Fig. 5.)

Routing FFCs/cables

Main Board Unit (1)

□ Hook
Rib
□ Double-sided tape

○ C.B.P-TITE SCREW M3x10 F/ZN-3C (6 ± 1 kgf/cm)

○ C.B.S-TITE SCREW M3x10 F/ZN-3C (6 ± 1 kgf/cm)

- Route the following cables as follows.

(For the correspondence between the cables, FFCs and the connectors on the Main Board, see "Main Board Unit (2) (p65).")

- Power Supply Unit cable (CN501)
- Paper Stopper Lever Sensor 1st cable (CN26) Route them through the hook A, hook B and hook C of the Frame Base Assy and route them inside the rib 2 and rib 1, and then connect them to the connectors on the Main Board.
- Pre-PE Sensor cable (CN27)
- PE Sensor cable (CN15)
- CR Motor cable (CN6)
- PF Motor cable (CN7)
- Grounding wire A
- Grounding wire B

For WF-7520/7010 series, route the cables/FFCs from the 2nd Bin Base Assy as follows.

- Paper Stopper Lever Sensor 2nd cable (CN29) Route them inside the rib 3 of the Frame Base Assy and route them through the hook C and route it inside the rib 2 and rib 1, and then connect them to the connectors on the Main Board.
- Pickup Motor cable (CN30)
- Pickup Encoder FFC (CN8)

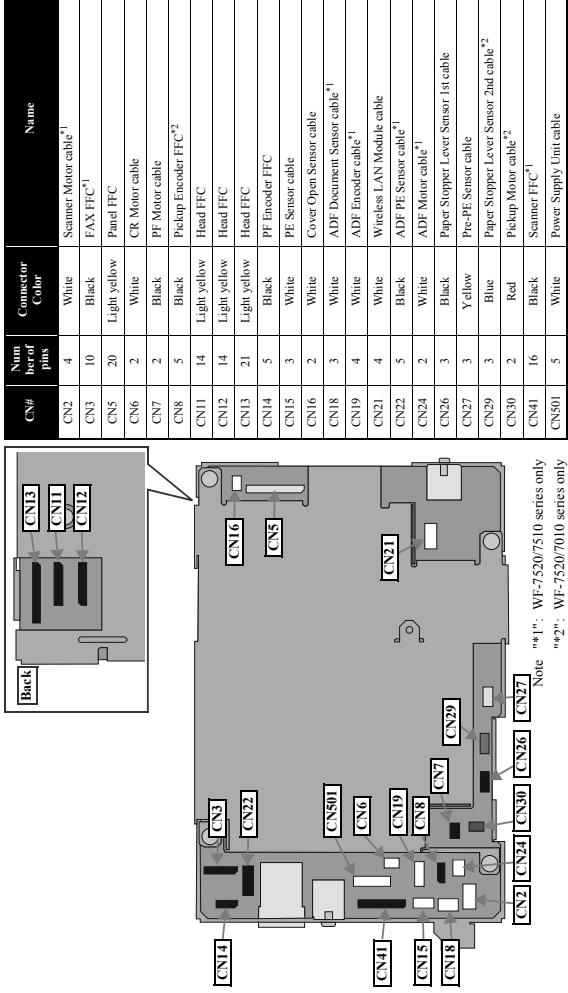
Route it inside the rib 3 of the Frame Base Assy and the hook C and route it inside the rib 2 and rib 1 of the Frame Base Assy, and then secure it together with the grounding wire A and Main Board Unit with the screw.

Secure it together with the Frame Base Assy and Main Board Unit with the screw.

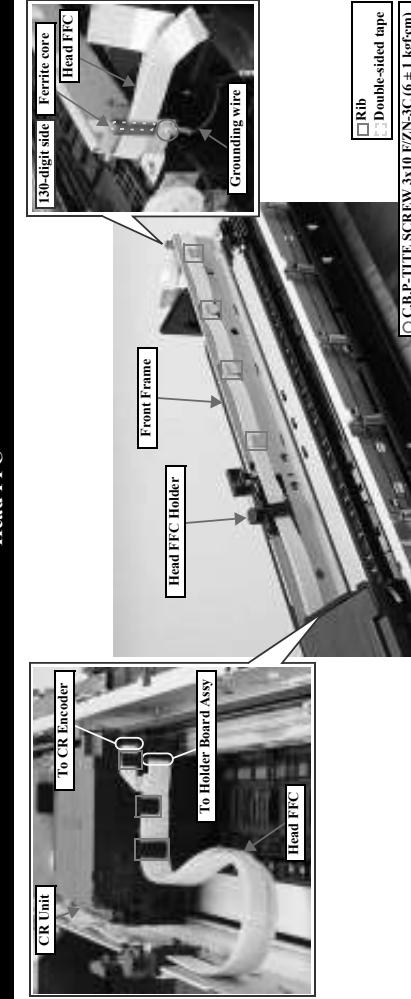
Route it inside the rib 3 of the Frame Base Assy and the hook C and route it inside the rib 2 and rib 1 of the Frame Base Assy, and then secure it together with the grounding wire A and Main Board Unit with the screw.

After connecting the Paper Stopper Lever Sensor 1st cable, Pickup Motor cable, PF Motor cable, Pickup Encoder FFC on the CR Unit and Front Frame Assy on the position shown above with

cable to the connectors on the Main Board, insert the excess portions into the space behind the edge of the Frame Base Assy shown above.

Disassembly/Reassembly**Main Board Unit (2)**

The correspondence between Main Board and cables/FFCs is given above.

Head FFC

When you do not need to replace the Head FFC, be careful not to disconnect it from the connector on the CR Encoder. Once it is disconnected, you must disassemble the CR Unit to reconnect it to the CR Encoder.

Confirm that the Head FFC is connected to the Holder Board Assy and CR Encoder.

When routing the Head FFC on the side of the CR Unit, make sure to route it through the ribs (x3) of the CR Unit shown above.

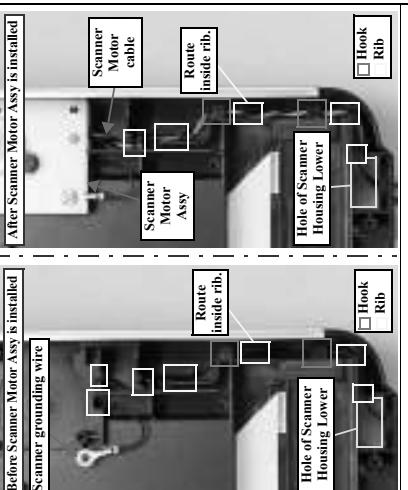
When routing the Head FFC on the Front Frame, first install the Head FFC Holder to the Front Frame Assy, and then route the Head FFC through the ribs (x4) of the Front Frame.

After routing the Head FFC on the CR Unit and Front Frame Assy, secure the ferrite core to the Front Frame Assy on the position shown above with double-sided tape.

Secure the grounding wire to the Front Frame Assy with the screw.

Routing FFCs/cables

Scanner Motor Assy



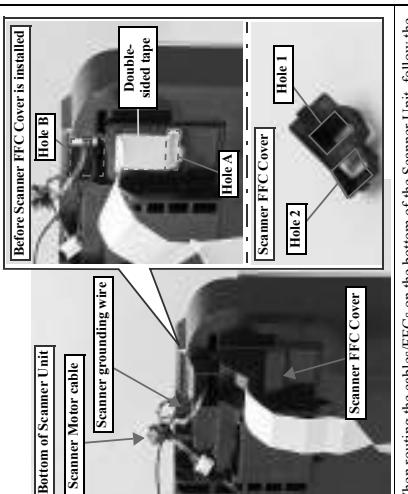
When routing Scanner Motor cable and scanner grounding wire, follow the procedure below.

1. Route the scanner grounding wire through the hooks and ribs, and insert it into the hole of the Scanner Housing Lower.
 2. Install the Scanner Motor Assy. (P.62)
 3. Route the Scanner Motor cable through the hooks and ribs, and insert it into the hole of the Scanner Housing Lower.

After inserting the Scanner Motor cable and scanner grounding wire into the hole of the Scanner Housing Lower, confirm the Scanner Motor cable is over the scanner grounding wire.

אָמַר רְבִבָּי בֶּן-עֲזֵירָה: מִתְּנִשְׁאָלָה שֶׁבְּבָבְרָאָה וְבְבָבְרָאָה.

Bottom of the Scanner Unit

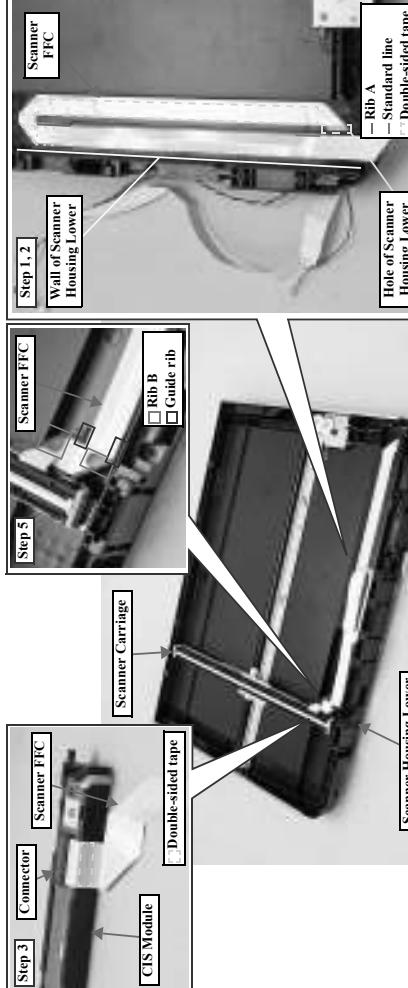


then route cables/RRCs on the bottom of the Scanner Unit, follow the procedure below.

- Pull the Scanner FFC OUT from the hole A of the Scanner Housing Lower, and secure it on the position shown above with double-sided tape.
 - Pull the Scanner Motor cable and scanner grounding wire out from the hole B of the Scanner Housing Lower.
 - Insert the Scanner FFC into the hole 1 of the Scanner FFC Cover, and insert the Scanner Motor cable and scanner grounding wire into the hole 2 of the Scanner FFC.
 - Install the Scanner FFC Cover to the Scanner Housing Lower (p.62).

miss an entire page or cover to the scanner housing lower. (P 02)

Scanner FFC



Deanne Housing Lawyer

- Follow the Scanner FFC, follow the procedure below.
 - Fold the Scanner FFC along the fold lines and route the FFC through the Rib A and along the standard line so as not to let the FFC touch the wall of the Scanner Housing Lower, and then insert the FFC into the hole of the Scanner Housing Lower.
 - Secure the Scanner FFC on the position shown above on the Scanner Housing Lower with double-sided tape (x4).
 - Connect the Scanner FFC to the connector on the CIS Module, and secure the Scanner FFC on the position shown above on the CIS Module with double-sided tape.

ROUTE ONE: DECODE THE EEC UNDER THE NO D (A&Z) OR THE SCANNER CHANNEL 104, AND COMMUNICATE THE EEC DOES NOT COME OVER THE BURNTWOOD CHANNEL.

4.5 Connector Summary

Cable connections of this printer are shown below.

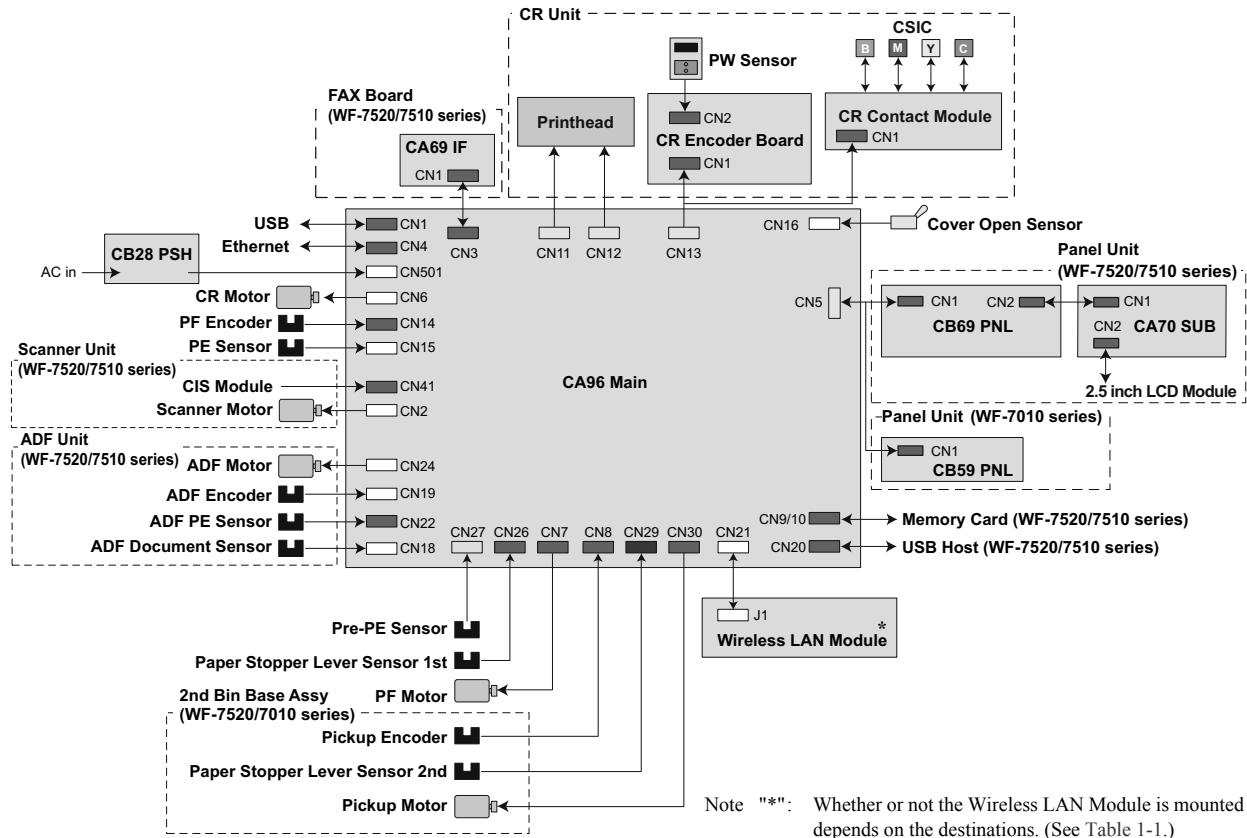


Figure 4-3. Connector Diagram

CHAPTER 5

ADJUSTMENT

5.1 Required Adjustments

The table from the following page lists the required adjustments depending upon the parts being repaired or replaced. Find the part(s) you removed or replaced, and check which adjustment(s) must be carried out.



- If the EEPROM data cannot be read out from the old Main Board using the Adjustment Program when replacing the Main Board is required, the Waste Ink Tray Assy must be replaced with the Main Board at the same time.
- After all required adjustments are complete, use the “Final check pattern print” function to print all adjustment patterns for final check. If you find a problem with the printout patterns, carry out the adjustment again.
- When replacing the Main Board and the Printer Mechanism (Frame Base Assy) at the same time, the adjustment should be made after performing the initial setting.



- In this chapter, the product names are called as follows:
 - WF-7520 series: Epson WF-7525/Epson WF-7521/Epson WF-7520
 - WF-7510 series: Epson WF-7515/Epson WF-7511/Epson WF-7510
 - WF-7010 series: Epson WF-7018/Epson WF-7015/Epson WF-7012/Epson WF-7011/Epson WF-7010
- The table items and marks used in the “Required Adjustment List” provided on the following pages have the following meanings.
 - “O” indicates that the adjustment must be carried out.
 - “--” indicates that the adjustment is not required.
 - The “Mechanism Adjustment” should be performed just after reinstalling or reassembling the part or unit. (See “Table 5-1 Required Adjustment List (Mechanism Adjustment) (p70)”).
 - The “Adjustments using the Adjustment Program” need to be performed after reassembling the printer completely. (See “Table 5-2 Required Adjustment List (Adjustment using the Adjustment Program) (p71)”).
- If you have removed or replaced multiple parts, make sure to check the required adjustments for the all parts. And when multiple adjustments must be carried out, be sure to carry them out in the order given in the “Priority” row.

Table 5-1. Required Adjustment List (Mechanism Adjustment)

Adjustment Type		Mechanism adjustment		
Priority		1	2	3
Adjustment Item		PF Timing Belt tension check	Checking the platen gap	Scanner Timing Belt tension check
Purpose		Check if the tension of the PF Timing Belt is within the standard.	Check if the PG is within the standard.	Check if the tension of the Scanner Timing Belt is within the standard.
Part Name	CR Guide Plate	Remove ---	---	---
	Replace	---	O	---
	Printhead	Remove ---	---	---
	Replace	---	O	---
	Frame Base Assy	Remove ---	---	---
	Replace	O	O	---
	2nd Bin Base Assy	Remove ---	---	---
	Replace	O	O	---
	PF Motor	Remove O	---	---
	Replace	O	---	---
	Paper Guide Front Assy	Remove O	---	---
	Replace	O	O	---
	EJ Roller	Remove O	---	---
	Replace	O	---	---
	PF Timing Belt	Remove O	---	---
	Replace	O	---	---
	EJ Pulley	Remove ---	---	---
	Replace	O	---	---
	Scanner Carriage	Remove ---	---	O
	Replace	---	---	O
	Scanner Motor Assy	Remove ---	---	O
	Replace	---	---	O
How to judge		See "5.2.1 PF Timing Belt Tension Check (p75)" for the details.	See "5.2.2 Checking the Platen Gap (p76)" for the details.	See "5.2.3 Scanner Timing Belt Tension Check (p77)" for the details.
Adjustment program		---	---	---
Tool		(p 75)	(p 76)	(p 77)

Note 1: The mechanism adjustment is not necessary for the parts which are not mentioned above.

2: After the mechanism adjustment is performed, make sure to execute the adjustment using the Adjustment Program.
(See "Table 5-2 Required Adjustment List (Adjustment using the Adjustment Program) (p71)".)

Table 5-2. Required Adjustment List (Adjustment using the Adjustment Program)

Adjustment using the Adjustment Program																			
Priority	1	2	4	5	6	3	7	8	9	10	11	12	13	14	15	16	17	18	19
Adjustment Item	FEPROM data copy	Initialize Setting (including MAC address setting)	Ink charge	Head ID input	Maintenance counter	PE Detector confirmation	PF / EJ adjustment	First dot position / PW adjustment	Bi-D adjustment	Head angular adjustment	PF band adjustment	PE adjustment	1st cassette	2nd cassette ^{a1}	Paper skew adjustment	PV / EJ deterioration offset	PF motor heat protection control	ASH motor heat protection control	Scanner motor heat protection control ^{b2}
Purpose	To copy values or the like stored on the old Main Board to the new board when the Main Board needs to be replaced.	To write sale-destination-specific settings and the serial number into the Main Board after replacing it.	To fill ink throughout the ink path to make all the nozzles ready for printing.	To correct the characteristic variation of the replaced Printhead by entering its Printhead ID (Head ID).	To reset the waste ink counter after replacing the Waste Ink Pad.	To correct variations in paper feed accuracy to achieve higher print quality.	To correct the print start position in the carriage moving direction through software control.	To correct the print start position in the carriage moving direction through software control.	To correct tilt of the Printhead caused at the installation through software control.	To correct tilt of the Printhead caused at the installation through software control.	To align print position and the mounting positions of the PE Sensor by software control.	To correct the paper detection position at 0-digit side with that at 80-digit side in bidirectional band printing, timing of fusing ink droplet is adjusted through software control.	To reset the counter or set maximum according to the replaced parts.	To align print position at 0-digit side with that at 80-digit side in bidirectional band printing, timing of fusing ink droplet is adjusted through software control.	To measure and correct the electrical variation of the PF Motor and the Power Supply Board.	To measure and correct the electrical variation of the CR Motor and the Power Supply Board.	To measure and correct the electrical variation of the Pickup Motor and the Power Supply Board.		
Part Name	Main Board Unit	Replace (Read OK) Replace (Read NG)	O	O	O ³	O	O	O	O	O	O	O	O	O	O	O	O	O	
	Power Supply Unit	Remove Replace	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
	CR Unit	Remove Replace	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
	CR Guide Plate	Remove Replace	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
	Paper Guide Lower Porous Pad	Remove Replace	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
	Printout pattern	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
How to judge	See "5.2.4 MAC Address Setting(p78)" for the details of the MAC address setting.																		
Tool	Adjustment program Tool	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	

Adjustment

Note ^{a1}: WF-7520/7010 series only
^{a2}: WF-7520/7510 series only
^{a3}: Replacement of the Waste Ink Tray Assy/Paper Guide Lower Porous Pad is necessary

Required Adjustments

Table 5-2. Required Adjustment List (Adjustment using the Adjustment Program)

Note ^{**1}: WF-7520/7010 series only
^{**2}: WF-7520/7510 series only

Reunited Adjustments

Table 5-2. Required Adjustment List (Adjustment using the Adjustment Program)

Priority	Adjustment Type	Adjustment using the Adjustment Program																	
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Adjustment Item	EEPROM data copy	Initial Setting (including MAC address setting)	Ink charge	Head ID input	Maintenance counter	PE Detector confirmation	PF / EJ adjustment	PF / EJ adjustment	First dot position / PW adjustment	1st cassette	2nd cassette ^{*1}	Bi-D adjustment	PF adjustment	PF motor heat protection control	PF motor heat protection control	CR motor heat protection control	PF motor heat protection control	ASF motor heat protection control	Scanner motor heat protection control ^{*2}
Purpose	To copy adjustment values or the like stored on the old Main Board to the new board when the Main Board after replacing it, be replaced.	To write sale-destination-specific settings and the serial number into the Main Board after replacing it.	To correct the characteristic variation of the ink path to make all the nozzles ready for printing.	To correct the waste ink counter after replacing the Printhead by entering its Printhead ID (Head ID).	To reset the PE sensor's chattering after replacing the Waste Ink Pad.	To correct the variations in paper feed accuracy to achieve higher print quality.	To correct the print start timing in the carriage moving direction through software control.	To correct the print start timing in the carriage moving direction through software control.	To correct the print start timing in the carriage moving direction through software control.	1st cassette	2nd cassette ^{*1}	Head angular adjustment	PF band adjustment	1st cassette	2nd cassette	PF / EJ deterioration offset	PF / EJ deterioration offset	PF / EJ deterioration offset	PF / EJ deterioration offset
Part Name	Main Frame Assy	Remove Replace	***	***	***	***	O	O	***	***	***	***	O	O	O	O	***	***	
	Paper Guide	Remove Replace	***	***	***	***	O	O	***	***	***	***	O	O	O	O	***	***	
	Upper Assy	Remove Replace	***	***	***	***	O	O	***	***	***	***	O	O	O	O	***	***	
	PE Sensor Lever	Remove Replace	***	***	***	***	O	O	***	***	***	***	O	O	O	O	***	***	
	PE Sensor	Remove Replace	***	***	***	***	O	O	***	***	***	***	O	O	O	O	***	***	
	CR Motor	Remove Replace	***	***	***	***	O	O	***	***	***	***	O	O	O	O	***	***	
	PF Motor	Remove Replace	***	***	***	***	O	O	***	***	***	***	O	O	O	O	***	***	
	Front Frame Assy	Remove Replace	***	***	***	***	O	O	***	***	***	***	O	O	O	O	***	***	
How to judge	Printout pattern	***	***	***	***	***	***	***	***	***	***	***	OK NG	OK NG	OK NG	OK NG	***	***	
Tool	Adjustment program Tool	---	---	---	---	---	---	---	---	---	---	---	Ruler	Ruler	---	---	---	---	

Note *1*: WF-7520/7530 series only
 Note *2*: WF-7520/7530 series only
 Note *3*: Replacement of the Waste Ink Tray Assy/Paper Guide Lower Porous Pad is necessary

Adjustment

Required Adjustments

Table 5-2. Required Adjustment List (Adjustment using the Adjustment Program)

Note: -1: Wi-Fi 320/7510

*2: Wi-Fi® 7520/7510 series only

"*3": Replacement of the Waste I

5.2 Details of Adjustments

This section provides adjustment procedures for which explanation in details is necessary. See “5.1 Required Adjustments (p69)” for the adjustments not explained here.

5.2.1 PF Timing Belt Tension Check

This section describes PF Timing Belt tension check.



- This printer is designed so that each tension of the PF Timing Belt falls within the expected range if you correctly reassemble the unit according to this manual. If the result does not fall within the standard range when measuring the belt tension in this section, adjust it according to the instructions in this section.
- The standard tension range of the PF Timing Belt is as follows:
 - Standard: 13.5 ± 1.5 N

Tools

- Sonic tension gauge
- Plastic tweezers

Adjustment procedure



When performing the PF Timing Belt tension measurement, make sure of the following.

- Perform PF Timing Belt tension measurement before installing the Main Board.
- Bring the microphone of the sonic tension gauge within 5 mm from the PF Timing Belt but do not let it touch the belt.
- Flip the PF Timing Belt as weak as the sonic tension gauge can measure it.
- Be careful not to damage the PF Timing belt when flipping it with the plastic tweezers.

1. After installing the PF Timing Belt (p 62), rotate the PF Roller one turn.
2. Set the following parameters to the sonic tension gauge:
 - Weight: 1.1 g/m
 - Width: 3.0 mm
 - Span: 73 mm
3. Bring the microphone of the sonic tension gauge close to the upper center of the PF Timing Belt as shown in Figure 5-1.
4. Press the “MEASURE” button of the sonic tension gauge and flip the PF Timing Belt with plastic tweezers and measure the tension of the belt three times.
5. Check if all measured values fall within the standard range.
 - Within the standard range:
PF Timing Belt tension check is complete.
 - If any of the measured value is out of the standard range:
 1. Loosen the screws (x2) of the PF Motor Plate, and adjust the position referring to Figure 5-1.
 2. Tighten the screws of the PF Motor Plate, and measure the tension again.

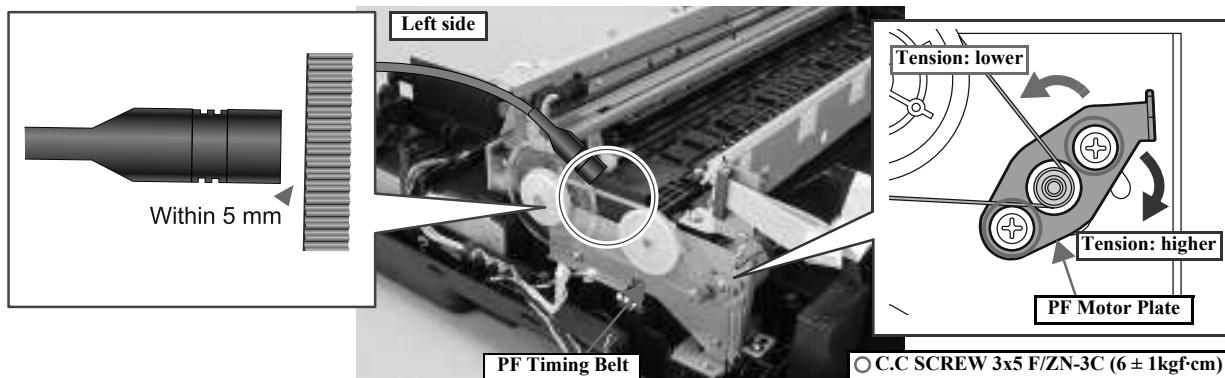


Figure 5-1. PF Timing Belt Tension Check

5.2.2 Checking the Platen Gap

This section describes the procedure for checking the platen gap (PG) necessary when removing the Printhead or in a similar case.



- This printer does not have any PG adjustment mechanism, however, it is designed so that the platen gap can fall within the expected range if you correctly reassemble the unit according to this manual. If the PG does not fall within the standard range after performing the platen gap check described in this section, first check if the unit is correctly reassembled following the instructions in this manual. Even if the unit is correctly reassembled but the PG still cannot fall within the standard range, replace the unit with a new one.
- The standard range of the PG is as follows:
 - Standard: 1.7 ± 0.2 mm

- Tools
 - Thickness gauge: 1.5 mm (x2), 1.9 mm (x2)
- Checking procedure



When checking the PG, make sure of the following.

- Check the PG with the ink cartridges installed and the Housing Upper removed.
- Move the Carriage Assy by pulling the Timing Belt.
- Be careful not to damage the nozzle surface of the Printhead with the thickness gauge.

1. Move the Carriage Assy to the center of the printer.
2. Place the thickness gauges (1.5 mm) on the positions shown below.

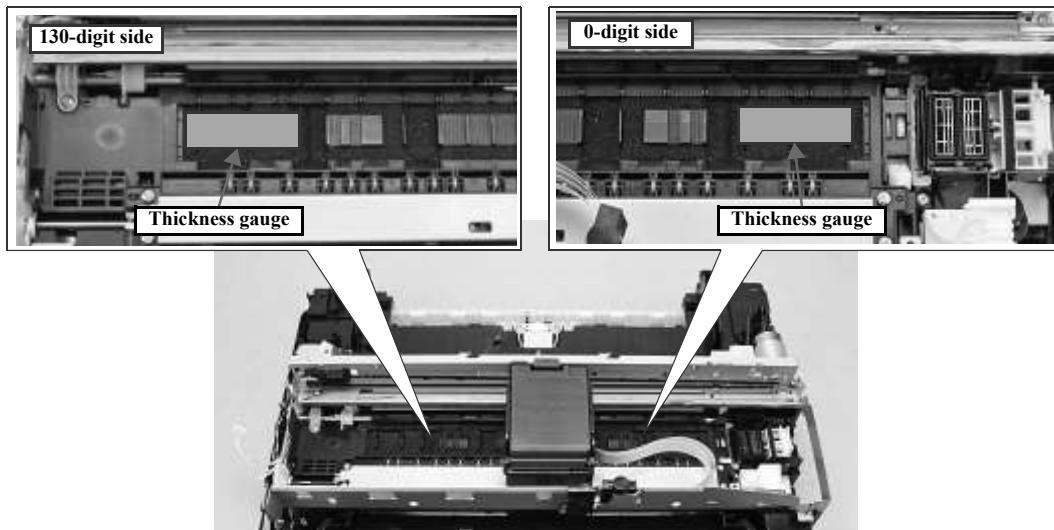


Figure 5-2. Position of the Thickness Gauge

3. Pull the CR Timing Belt to move the CR Unit to both ends and confirm the CR Unit does not touch the thickness gauges. If the CR Unit comes in contact with the thickness gauges, the PG is smaller than the standard value, therefore, check if the unit is correctly reassembled. If not, reassemble the unit and perform PG check again. (If the unit is correctly reassembled, replace the unit with a new one.)
4. Move the CR Unit to the center, and replace the thickness gauges (1.5 mm) with the thickness gauges (1.9 mm) on the same positions as Step 2.
5. Pull the CR Timing Belt to move the CR Unit to both ends and confirm the CR Unit touches the thickness gauges. If the CR Unit does not come in contact with the thickness gauges, the PG is greater than the standard value, therefore, check if the unit is correctly reassembled. If not, reassemble the unit and perform PG check again. (If the unit is correctly reassembled, replace the unit with a new one.)

5.2.3 Scanner Timing Belt Tension Check

This section describes Scanner Timing Belt tension check.



- This product is designed so that each tension of the Scanner Timing Belt falls within the expected range if you correctly reassemble the unit according to this manual. If the result does not fall within the standard range when measuring the belt tension in this section, reinstall or replace the related parts according to the instructions in this section.
- The standard tension range of the Scanner Timing Belt is as follows:
 - Standard: 3.95 ± 1.15 N

Tools

- Sonic tension gauge
- Plastic tweezers

Measurement procedure



When performing the Scanner Timing Belt tension measurement, make sure of the following.

- Perform Scanner Timing Belt tension measurement before installing the Scanner Housing Upper Assy.
- Bring the microphone of the sonic tension gauge within 5 mm from the Scanner Timing Belt but do not let it touch the belt.
- Flip the Scanner Timing Belt as weak as the sonic tension gauge can measure it.
- Be careful not to damage the Scanner Timing belt when flipping it with the plastic tweezers.
- When flipping the Scanner Timing Belt, be careful not to let the grease attach to it.

1. Move the Scanner Carriage to the 0-digit side.
2. Set the following parameters to the sonic tension gauge:
 - Weight: 1.0 g/m
 - Width: 2.5 mm
 - Span: 527 mm
3. Bring the microphone of the sonic tension gauge close to the center of the Scanner Timing Belt as shown in Figure 5-3.
4. Press the “MEASURE” button of the sonic tension gauge and flip the Scanner Timing Belt with plastic tweezers and measure the tension of the belt three times.
5. Check if the average of the measured three values falls within the standard range.
 - Within the standard range:
Scanner Timing Belt tension check is complete.
 - Out of the standard range:
 1. Reinstall the Scanner Carriage, and measure the tension again.
 2. If the result does not fall within the standard range, replace the torsion spring 43.6 with a new one and measure the tension again. (p 62)

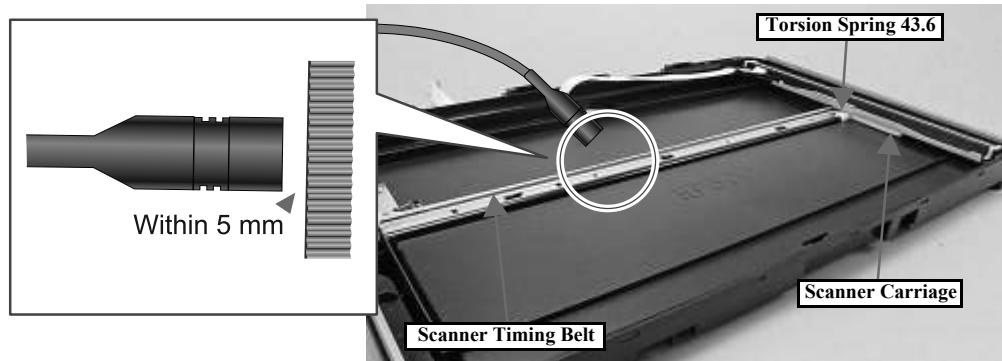


Figure 5-3. Scanner Timing Belt Tension Check

5.2.4 MAC Address Setting



- This setting is not necessary when the data in EEPROM on the Main Board can be read out.
- To avoid a conflict of MAC address on a network, make sure to correctly follow the MAC address setting flowchart given on the following.
- The user should be notified of the change of MAC address because of the following reasons.
 - If the user has set the printer's MAC address on a router, the repaired printer with a new MAC address cannot be connected to the network.
 - The default printer name on a network consists of "EPSON" and the last six digits of the MAC address. Therefore, the printer name becomes different from the previous one.
- You are required to enter the last six digits of the MAC address (xx:yy:zz) on the Adjustment Program.

MAC address example: 00:00:48:xx:yy:zz

("xx, yy, zz" represents a value unique to each printer)

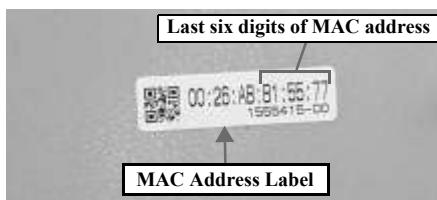


Figure 5-4. MAC Address Label

Setting procedure

1. After replacing the Main Board, note down the MAC address written on a label on the Shield Plate Lower.
2. Reassemble the printer, and connect the printer and the PC with the USB cable.
3. Start the Adjustment Program.
4. Select the "Initial Setting" from the menu. The initial setting screen appears.
5. Enter the last six digits of MAC address into the MAC address entry field, and click the MAC Address input button. (Enter the address again into the second entry field to confirm it.)
6. Select the network status sheet from the printer's control panel, and print the sheet. Check the MAC address printed on the sheet to see if it is correct.

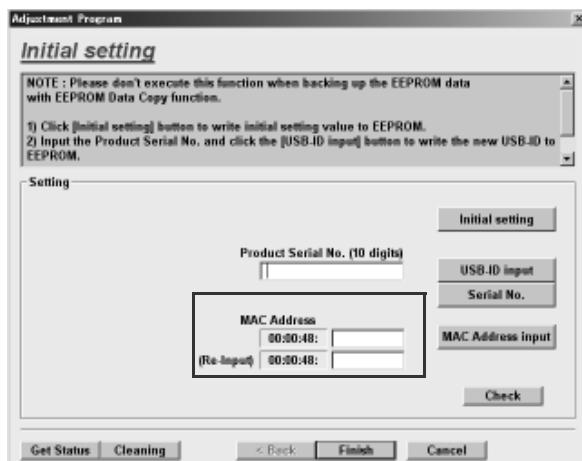


Figure 5-5. MAC Address Setting Screen

CHAPTER 6

MAINTENANCE

6.1 Overview

This section provides information to maintain the printer in its optimum condition.

6.1.1 Cleaning

Except for the printhead, there are no other mechanical parts or units that require periodic cleaning. However, if need arises, clean the component observing the following instructions.

Instructions for cleaning

- Exterior parts such as housing
Wipe dirt off with a soft clean cloth moistened with water. For glossy or transparent parts, use of unwoven cloth is recommended to avoid scratching those parts.
- Inside of the printer
Remove paper dust with a vacuum cleaner.
- Rubber or plastic rollers such as an Pickup Roller used to feed paper
If paper dust adhered to the rollers decreases the frictional force of the rollers and the rollers cannot properly feed paper, wipe off the paper dust with a soft cloth moistened with diluted alcohol.

Instructions for cleaning ink stains

Wipe the stains off with a cloth wrung out of diluted alcohol.



- **Do not use alcohol for cleaning the transparent parts. Doing so may cause them to get cloudy.**
- **When wiping paper dust off the Pickup Roller/Middle Roller, be careful not to rub against the surface asperity.**
- **To minimize the effect on the parts, use diluted alcohol such as 70% diluted ether.**
- **After using alcohol for cleaning, make sure to wipe the part off with a soft dry dust-free cloth to remove alcohol traces fully.**

6.1.2 Lubrication

The type and amount of the grease used to lubricate the printer parts are determined based on the results of the internal evaluations. Therefore, refer to "6.2 Lubrication Points and Instructions (p81)" for the repairing procedures below, and apply the specified type and amount of the grease to the specified part of the printer mechanism.

Grease

Type	Name	EPSON Part Code	Supplier
Grease	G-26	1080614	EPSON
Grease	G-45	1033657	EPSON
Grease	G-71	1480655	EPSON
Grease	G-72	1409258	EPSON
Grease	G-74	1409257	EPSON

Tools

Name	Availability	EPSON Part Code
Injector	O *	---
Brush	O *	---

Note *: Use tools whose specifications are specified in "6.2 Lubrication Points and Instructions (p81)".

6.2 Lubrication Points and Instructions

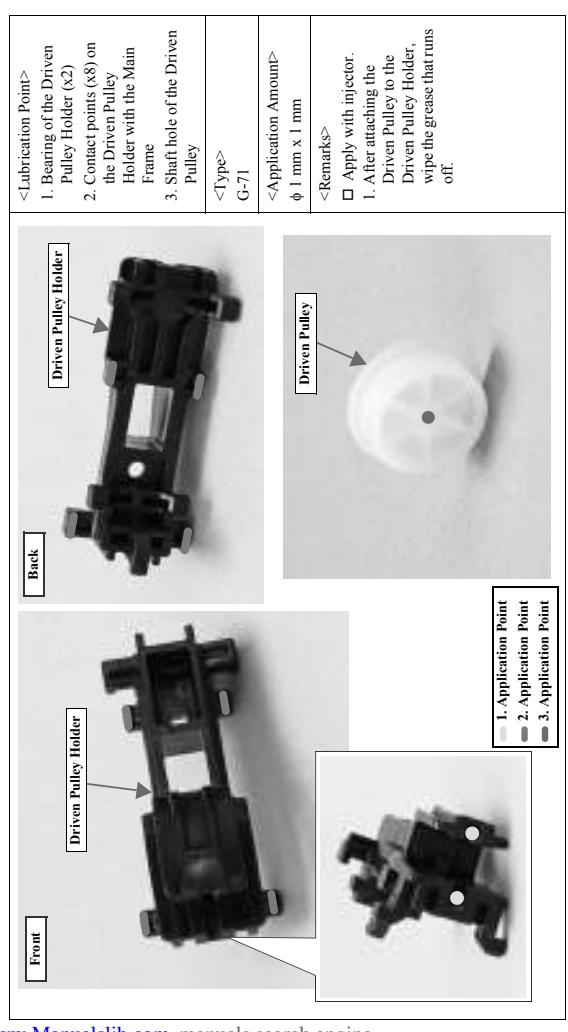


Figure 6-1. Lubrication of the Driven Pulley / Driven Pulley Holder

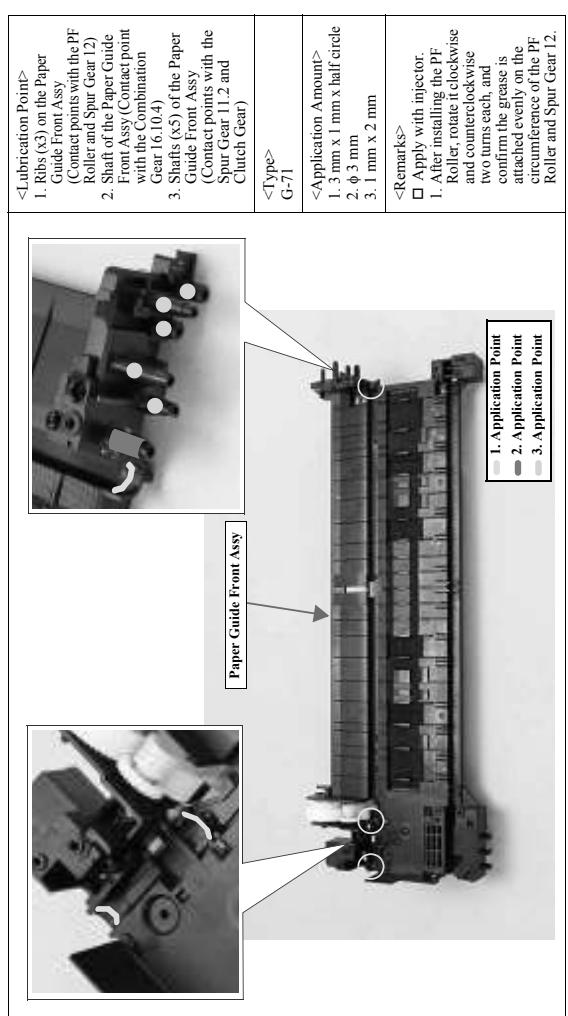


Figure 6-2. Lubrication of the Paper Guide Front Assy

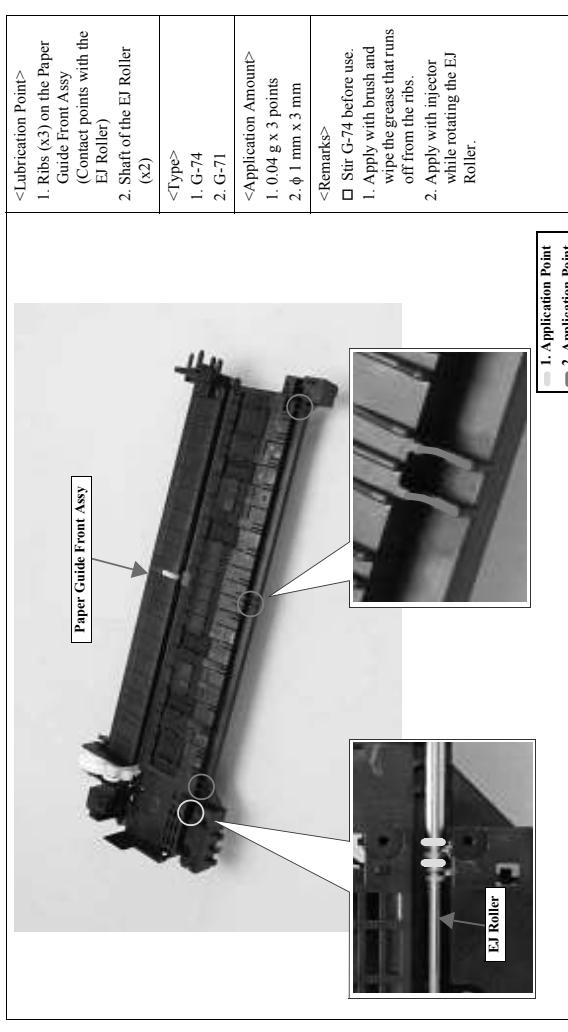


Figure 6-3. Lubrication of the Paper Guide Front Assy (EJ Roller)

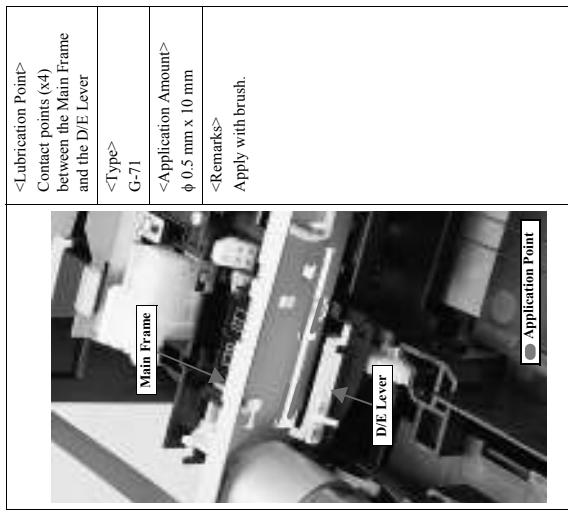


Figure 6-4. Lubrication of the PF Roller Grounding Spring
Lubrication Points and Instructions

Figure 6-5. Lubrication of the Main Frame

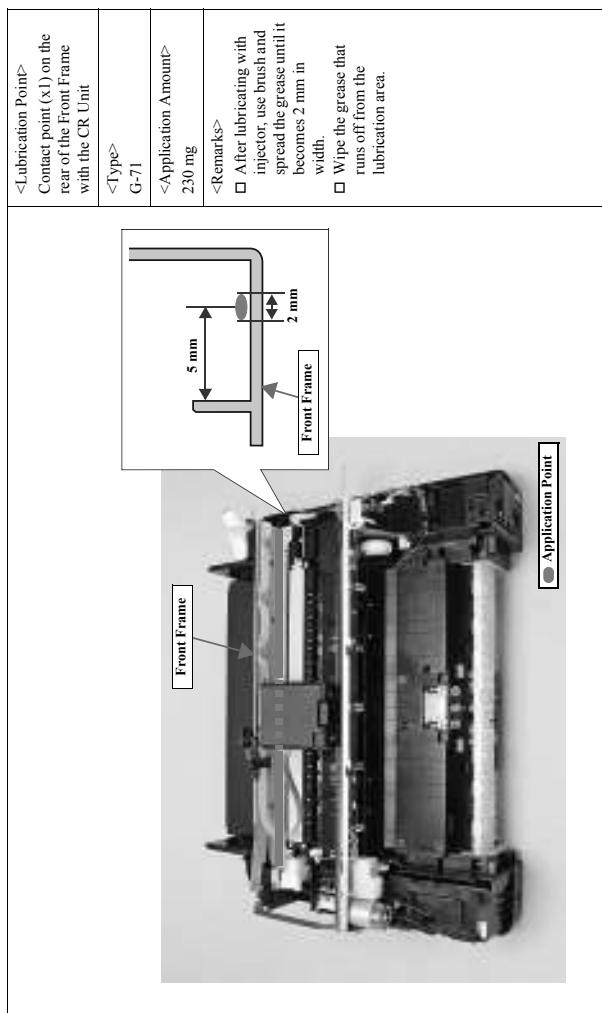


Figure 6-6. Lubrication of the Front Frame

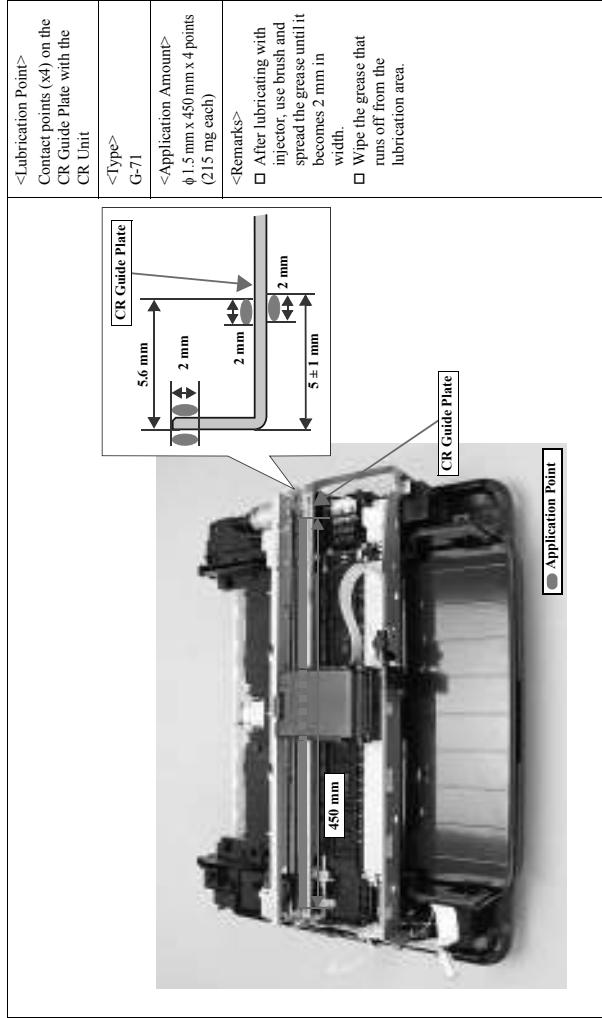


Figure 6-7. Lubrication of the CR Guide Plate

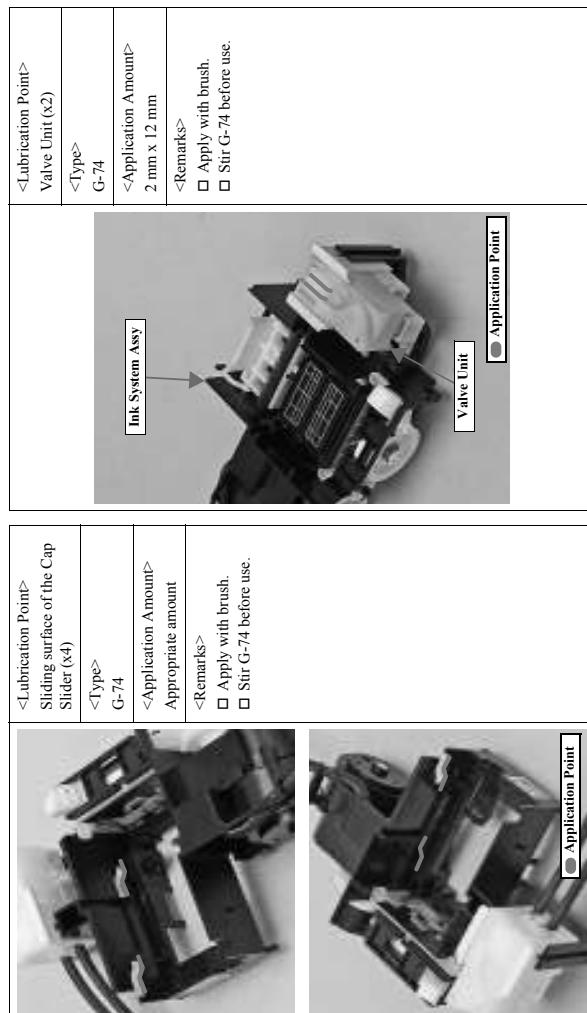


Figure 6-8. Lubrication of the Ink System Assy (1)

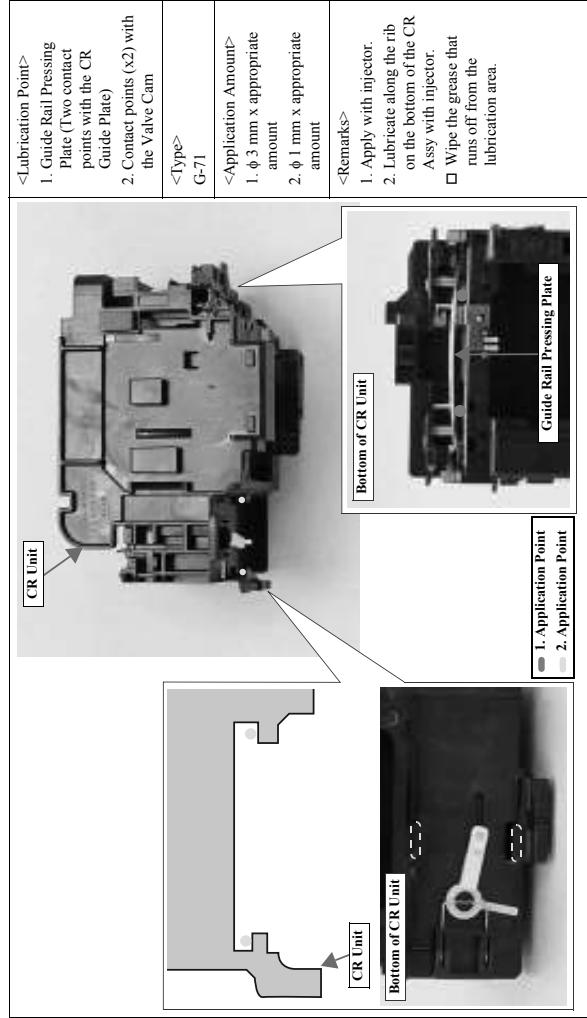


Figure 6-9. Lubrication of the Ink System Assy (2)

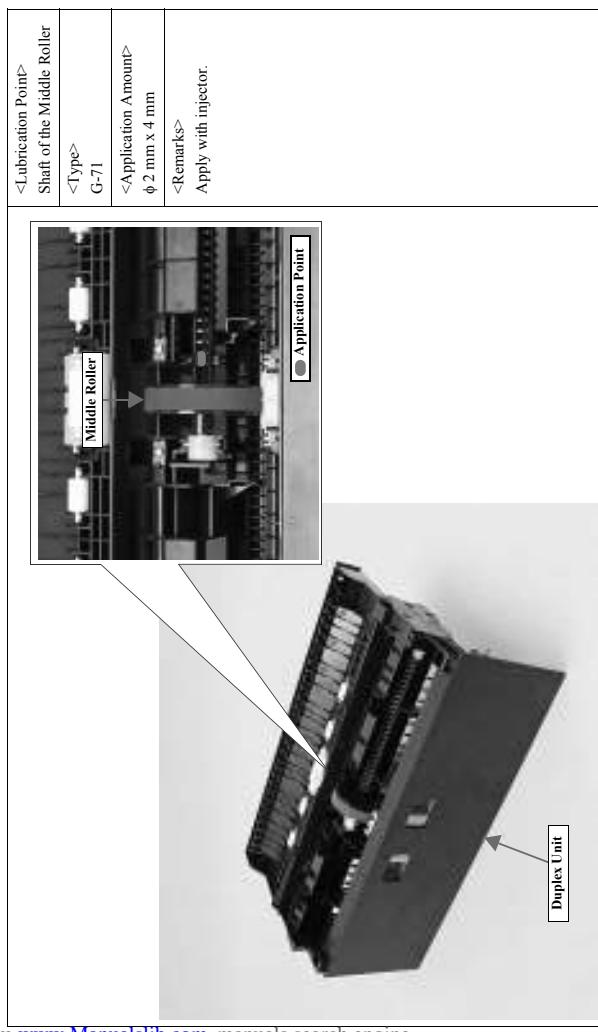


Figure 6-11. Lubrication of the Duplex Unit

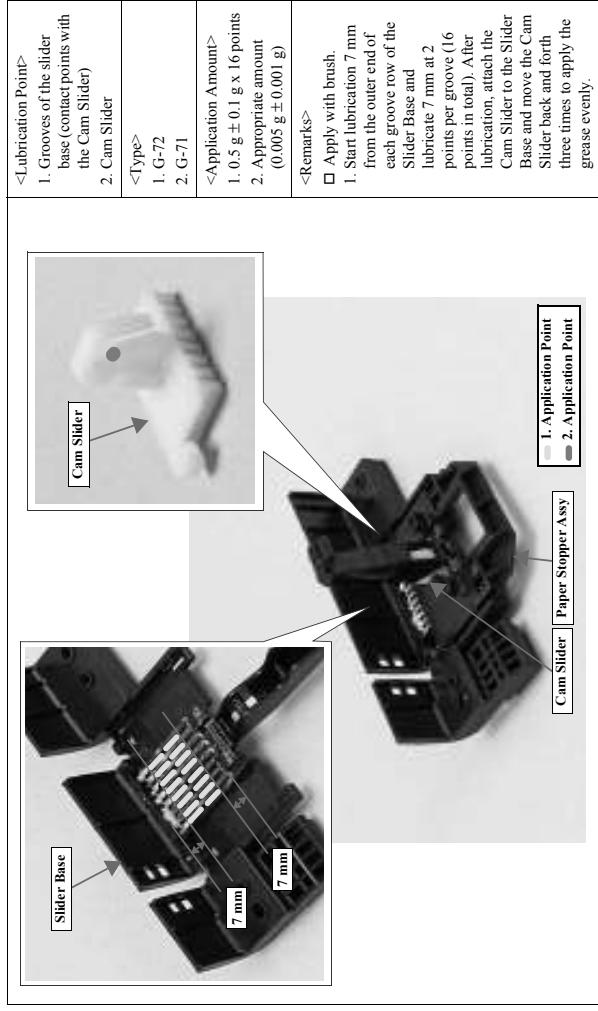


Figure 6-12. Lubrication of the Paper Stopper Assy 1st/2nd

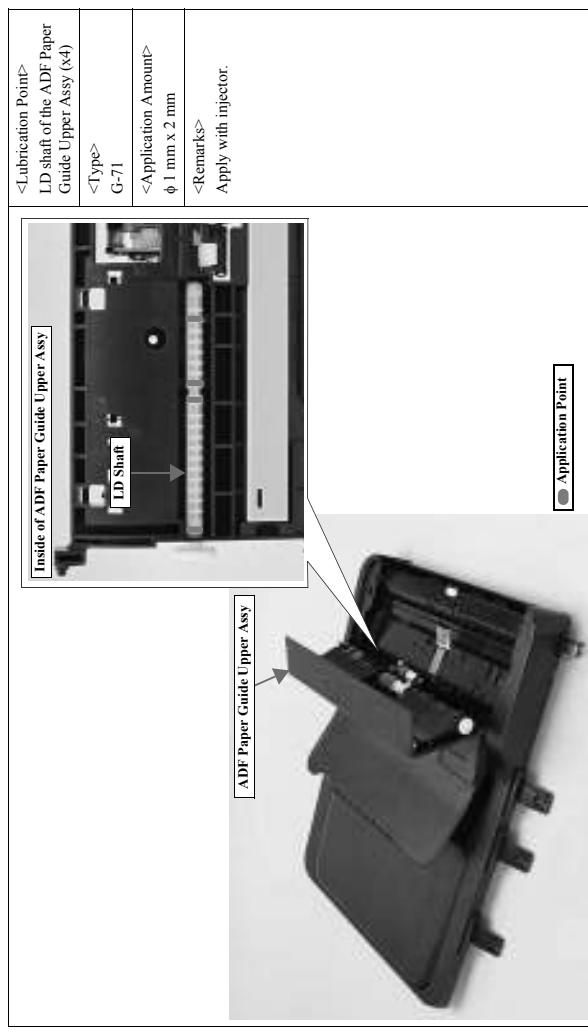


Figure 6-13. Lubrication of the ADF Paper Guide Upper Assy

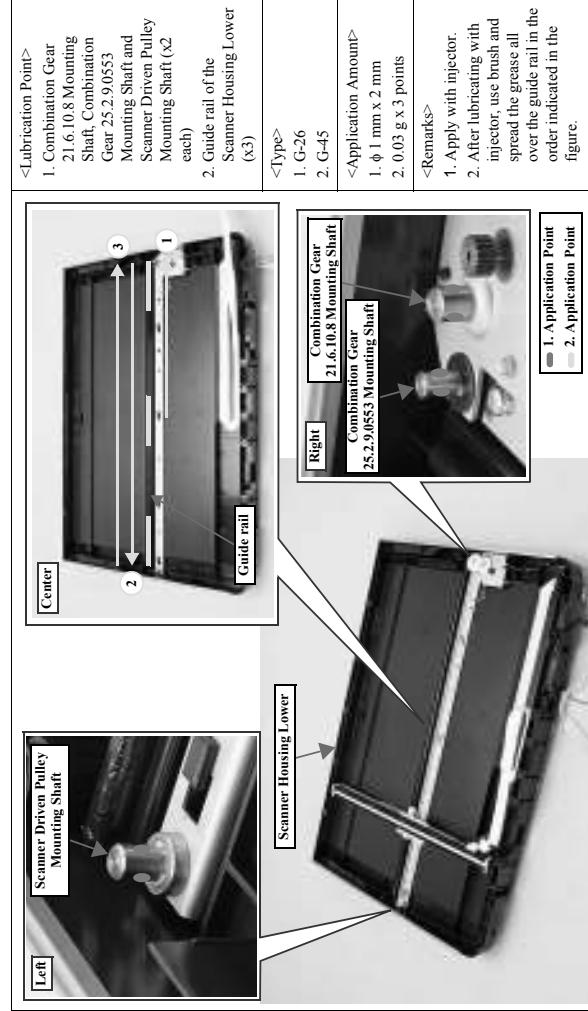


Figure 6-14. Lubrication of the Scanner Unit

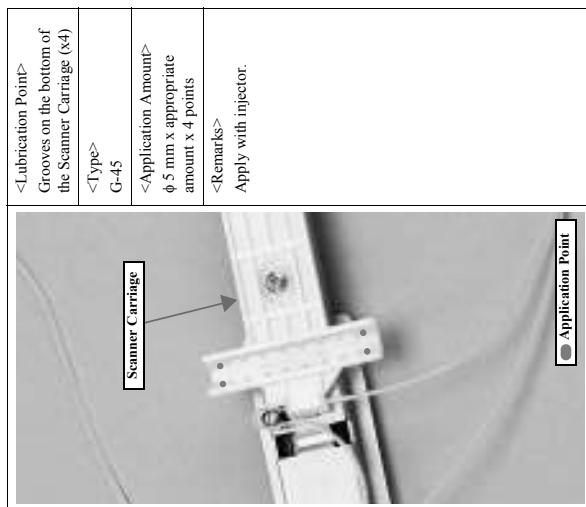


Figure 6-15. Lubrication of the Scanner Carriage