Epson® SureColor® F7200

User's Guide

EPSON®
EXCEED YOUR VISION

Copyrights and Trademarks

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of Seiko Epson Corporation. The information contained herein is designed only for use with this Epson printer. Epson is not responsible for any use of this information as applied to other printers.

Neither Seiko Epson Corporation nor its affiliates shall be liable to the purchaser of this product or third parties for damages, losses, costs, or expenses incurred by the purchaser or third parties as a result of accident, misuse, or abuse of this product or unauthorized modifications, repairs, or alterations to this product, or (excluding the U.S.) failure to strictly comply with Seiko Epson Corporation's operating and maintenance instructions.

Seiko Epson Corporation shall not be liable for any damages or problems arising from the use of any options or any consumable products other than those designated as Original Epson Products or Epson Approved Products by Seiko Epson Corporation.

Seiko Epson Corporation shall not be held liable for any damage resulting from electromagnetic interference that occurs from the use of any interface cables other than those designated as Epson Approved Products by Seiko Epson Corporation.

EPSON and SureColor are registered trademarks and EPSON Exceed Your Vision is a registered logomark of Seiko Epson Corporation.

General Notice: Other product names used herein are for identification purposes only and may be trademarks of their respective owners. Epson disclaims any and all rights in those marks.

This information is subject to change without notice.

© 2014 Epson America, Inc., 3/14

CPD-40250

Contents

Chapter 1 **Introduction**

Important Safety Instructions 6
- When choosing a location for this product 6
- When setting up this product 6
- When using this product 7
- When handling the ink packs 7
- Warnings, Cautions, Important and Notes 8

Printer Parts 9
- Front 9
- Slider (chip holder) 12
- LAN port 13
- Interior 14
- Back 15
- Control Panel 16
- Understanding the Display 18

Features 21
- Realizing High Productivity 21
- Superior Ease of Use 21

Notes on Usage and Storage 23
- Installation Space 23
- Notes When Using the Printer 23
- Notes When Not Using the Printer 24
- Notes on Handling Ink Packs and Ink Tanks 26
- Handling Media 26

Using the Supplied Software 27
- Contents of the Software CD 27
- Starting EPSON LFP Remote Panel 2 28
- Exiting EPSON LFP Remote Panel 2 28

Uninstalling Software 29

Chapter 2 **Basic Operations**

Loading and Exchanging Media 30
- Loading Media 31
- Viewing and Changing Media Settings 43
- Exchanging Media 45

Using the Auto Take-up Reel Unit 48
- Media Loading and Take-Up 48
- Removing the Take-up Roll 62

Before Printing 64
Saving Optimal Settings for the Current Media (Print Media Settings) 64
Parameters Stored in Media Setting Banks 65
Saving Settings 66
Changing Heater Settings 72
Correcting Print Misalignment (Head Alignment) 73
Feed Adjustment 76
Using a Test Pattern 77
Performing Feed Adjustment During Printing 79
Printable area 80

Chapter 3 ***Maintenance***

Daily Maintenance 82
Cleaning the Platen, Pressure Rollers, and Media Holding Plates 82
Checking for Clogged Nozzles 84
Head Cleaning 86
Maintenance Around the Print Head 88
Cleaning: Preparation and Notes 88
Part Cleaning 89
Cleaning the Wiper Rail 95
Disposing of Waste Ink 97
Replacing the Wiper and Wiper Cleaner 101
Chip Unit Replacement and Ink Refills 104
Time Period for Chip Unit Replacements and Ink Refills 104
Procedure for Chip Unit Replacement and Ink Refills 105
Disposal of Used Consumables 112
Parts That Are Periodically Replaced 113

Chapter 4 ***Using the Control Panel Menu***

Menu Operations 114
Menu List 115
Details of the Menu 119
The Media Setup Menu 119
The Printer Setup Menu 124
The Maintenance Menu 126
The Print Logs Menu 127
The Printer Status Menu 127
The Network Setup Menu 128
The Preference Menu 128
The Reset All Settings Menu 129

Chapter 5 ***Problem Solver***

When a Message Is Displayed 130
When a Maintenance Call/Service Call Occurs 131
Troubleshooting 131
You cannot print (because the printer does not work) 131
The printer sounds like it is printing, but nothing prints 132
The prints are not what you expected 133
Media Problems 137
Other Problems 160

Chapter 6 ***Appendix***

Options and Consumable Products 162
Supported Media 163
Moving and Transporting the Printer 164
Moving the Printer 164
Removing and Attaching the Media Guide Bar 165
Removing the Media Guide Bar 165
Attaching the Media Guide Bar 170
Transport 174
System Requirements 174
Specifications Table 175
Standards and Approvals 177
FCC Compliance Statement 178

Appendix A ***Where To Get Help***

Contacting Epson Support 179

Appendix B ***Software License Terms***

Open Source Software Licenses 180
Bonjour 180
Other Software Licenses 187
Info-ZIP copyright and license 187

Chapter 1

Introduction

Important Safety Instructions

Read all of these instructions before using the printer. Also be sure to follow all warnings and instructions marked on the printer.

When choosing a location for this product

- ❏ Place this product on a flat, stable surface that is larger than this product. This product will not operate properly if it is tilted or at an angle.
- ❏ Avoid places subject to rapid changes in temperature and humidity. Also keep it away from direct sunlight, strong light, or heat sources.
- ❏ Avoid places subject to shocks and vibrations.
- ❏ Keep this product away from dusty areas.
- ❏ Place this product near a wall outlet where the plug can be easily unplugged.

When setting up this product

- ❏ This product's power cord is for use with this product only. Use with other equipment may result in fire or electric shock.
- ❏ Connect all equipment to properly grounded power outlets. Avoid using outlets on the same circuit as copiers or air control systems that regularly switch on and off.
- ❏ Avoid electrical outlets controlled by wall switches or automatic timers.
- ❏ Keep the entire computer system away from potential sources of electromagnetic interference, such as loudspeakers or the base units of cordless telephones.
- ❏ Use only the type of power source indicated on the product's label.
- ❏ Use only the power cord that comes with this product. Use of another cord may result in fire or electric shock.
- ❏ Do not use a damaged or frayed power cord.

- ❏ If you use an extension cord with this product, make sure the total ampere rating of the devices plugged into the extension cord does not exceed the cord's ampere rating. Also, make sure the total ampere rating of all devices plugged into the wall outlet does not exceed the wall outlet's ampere rating.

- ❏ If damage occurs to the plug, replace the cord set or consult a qualified electrician. If there are fuses in the plug, make sure you replace them with fuses of the correct size and rating.

When using this product

- ❏ Do not block or cover the openings in this product's case

- ❏ Do not insert objects through the slots. Take care not to spill liquid on this product.

- ❏ Do not attempt to service this product yourself.

- ❏ Unplug this product and refer servicing to qualified service personnel under the following conditions: The power cord or plug is damaged; liquid has entered the product; the product has been dropped or the cabinet damaged; the product does not operate normally or exhibits a distinct change in performance.

- ❏ Do not move the print head by hand; otherwise you may damage this product.

- ❏ Always turn the product off using the ⏻ power button on the control panel. When this button is pressed, the ⏻ power light flashes briefly then goes off. Do not unplug the power cord or turn off the product until the ⏻ power light stops flashing.

- ❏ This device has two power systems. There is a risk of electric shock unless the two power cables are unplugged during maintenance.

When handling the ink packs

- ❏ Keep ink packs out of the reach of children and do not drink the ink.

- ❏ Wear protective eyewear and gloves when refilling ink tanks or replacing the waste ink bottle.

  Should ink contact your skin or enter your eyes or mouth, immediately take the following actions:

  - ❏ If fluid adheres to your skin, immediately wash it off using large volumes of soapy water. Consult a physician if the skin appears irritated or is discolored.

- ❏ If fluid enters your eyes, rinse immediately with water. Failure to observe this precaution could result in bloodshot eyes or mild inflammation.
- ❏ If fluid enters your mouth, consult a physician immediately.
- ❏ If fluid is swallowed, do not force the person to vomit, and consult with a physician immediately. If the person is forced to vomit, fluid may get caught in the trachea, which can be dangerous.

The lithium batteries in this product contain Perchlorate Material - special handling may apply. See www.dtsc.ca.gov/hazardouswaste/perchlorate.

Warnings, Cautions, Important and Notes

 ***Warning:***	Warnings must be followed to avoid serious bodily injury.

 ***Caution:***	Cautions must be followed to avoid bodily injury.

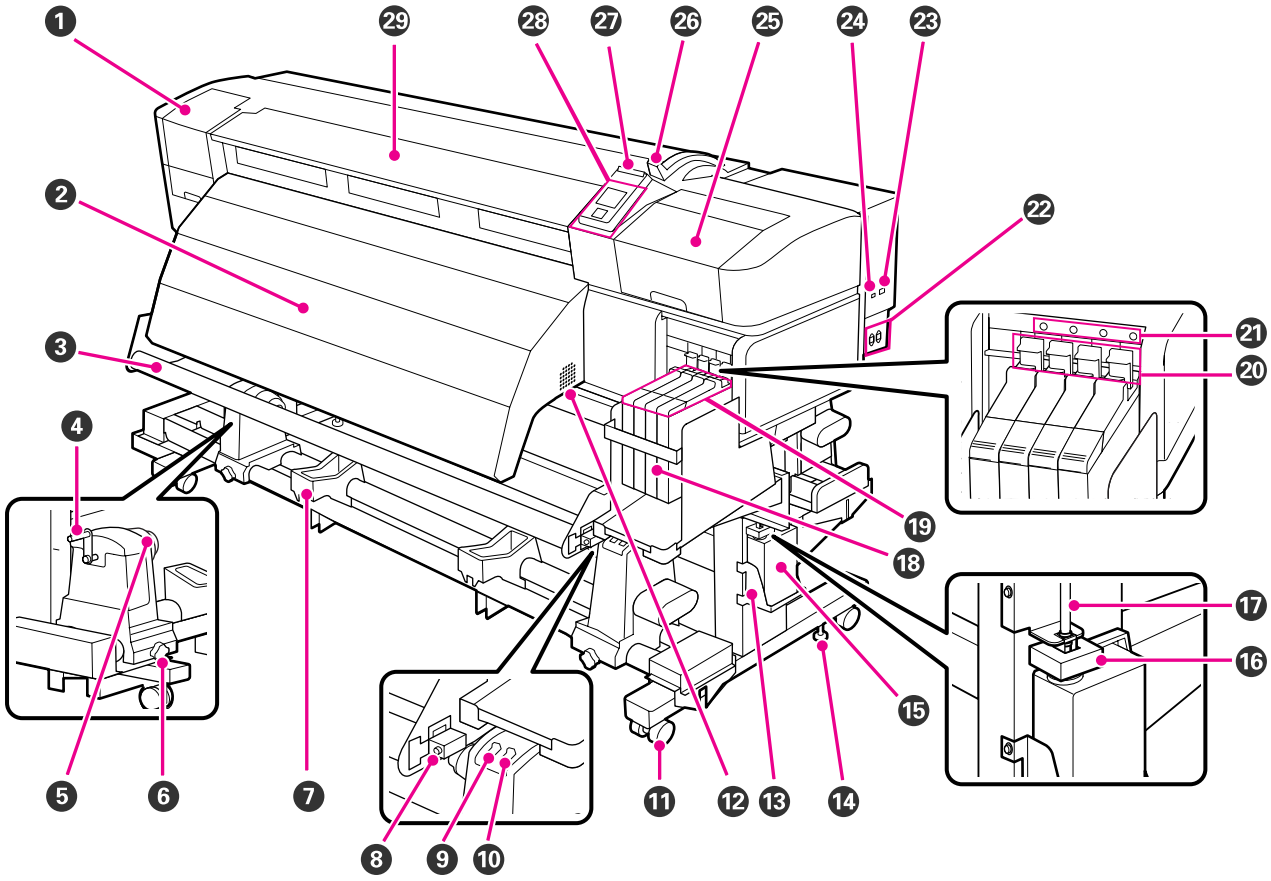
Important:	Important must be followed to avoid damage to this product.

Note:	Notes contain useful or additional information on the operation of this product.

Printer Parts

Your product may look different from the illustrations in this guide, but the instructions are the same.

Front



1 Maintenance cover (left)
Open this cover to clean the area around the print head. It is normally closed when the printer is in use.

See "Cleaning Around the Print Head" on page 91.

2 After heater
The after heater can be used to rapidly dry ink after printing.

See "Heating & Drying" on page 68.

3 Media guide bar
The media guide bar maintains tension to prevent the media from sagging as it is taken up.

4 Handle
After placing media on the left roll holder, rotate the handle to press the holder and apply pressure to the roll core.

5 Roll core holder
Place an empty roll core for media take-up on these holders. There are two holders: one on the left and one on the right.

See"Media Loading and Take-Up" on page 48.

6 Roll core holder locking screw
The locking screws keep the roll core holders in place once they have been attached to the roll core. There are two locking screws: one on the left and one on the right.

7 Roll support
Rest media temporarily on these supports when removing the take-up roll. There are two supports: one on the left and one on the right.

8 Adjustment screw
Use the adjustment screw when performing parallel adjustment.

9 Auto switch
Use this switch to select the auto take-up direction. Choose **Off** to disable auto take-up.

10 Manual switch
Use this switch to select the manual take-up direction. The selected option takes effect when the Auto switch is in the **Off** position.

11 Casters
There are two casters on each leg. Once installation is complete, the front casters should be kept locked while the printer is in use. If the stand fixing screw is lowered too much, the caster rises off the floor. Do not use the printer if a caster is off the floor.

12 Airflow vents
These vents release air from inside the printer. Do not obstruct the airflow vents.

13 Waste ink bottle (tank) holder
Place the waste ink bottle in this holder.

14 Stand fixing screw
In addition to locking the casters, the stand fixing screws also keep the printer securely in place. The stand fixing screws cannot be used for horizontal adjustment of the printer. After installation, keep the printer securely in place during use.

15 Waste ink bottle (tank)
Waste ink collects in this bottle.

Replace with a new waste ink bottle when the level approaches the line.

16 Stopper
The stopper prevents splatter when waste ink is ejected. Fit the stopper onto the mouth of the waste ink bottle.

17 Waste ink tube
Waste ink is discharged from this tube. Be sure the end of this tube is in the waste ink bottle while the printer is in use.

18 Ink tank
Holds ink used for printing.

19 Slider (chip holder)
See "Slider (chip holder)" on page 12.

20 Lock lever
Raise the levers to unlock the slider for removal when replacing the chip unit. Always lower the lock lever after inserting the slider.

21 Chip unit check lamp
This lamp turns on when a message related to the chip unit is displayed.

On: An error occurred. Check the message on the control panel's screen.

Off: No error.

22 AC inlets #1 and #2
Connect the power cables. Make sure you connect both cables.

23 LAN port
See "LAN port" on page 13.

24 USB port
Connects the USB cable.

25 Maintenance cover (right)
Open this cover to perform maintenance around the print head. Normally closed when using the printer.

See "Maintenance Around the Print Head" on page 88.

26 Media loading lever
After loading media, lower the media loading lever to keep the media in place. Raise the lever to release the media prior to removal.

27 Alert lamp
This lamp lights or flashes when an error occurs.

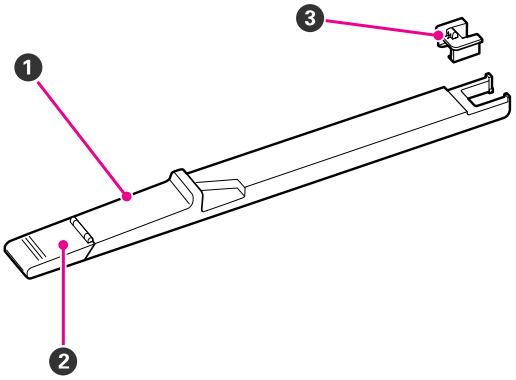
On/flashing: An error has occurred; the type of error is indicated by how the lamp lights or flashes. Check the message on the control panel's screen.

Off: No error.

28 Control panel
See "Control Panel" on page 16.

29 Front cover
Open when loading media, cleaning the inside of the printer, or removing jammed media. Normally closed when using the printer.

Slider (chip holder)



1 Slider
Attach the chip unit included with the ink pack before refilling the ink.

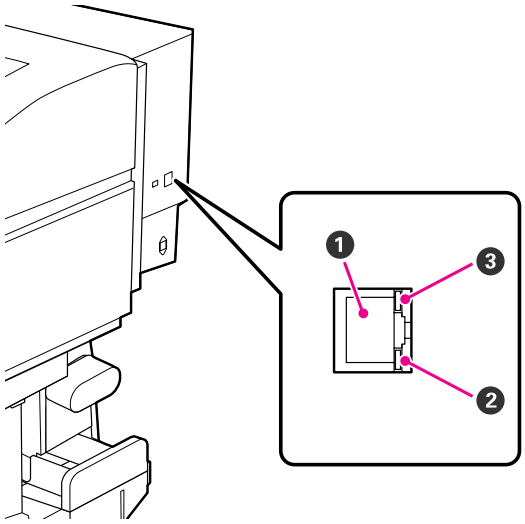
See "Chip Unit Replacement and Ink Refills" on page 104.

2 Ink inlet cover
Open this cover to refill the ink tank with ink.

3 Chip unit
A unit that includes an IC chip.

This is included with the ink pack.

LAN port



1 RJ-45 connector
Connects the LAN cable. Use a shielded twisted pair cable (category 5 or higher).

2 Data lamp (orange)
Indicates the network connection status and whether the printer is receiving data.

On: Connected

Flashing: Receiving data

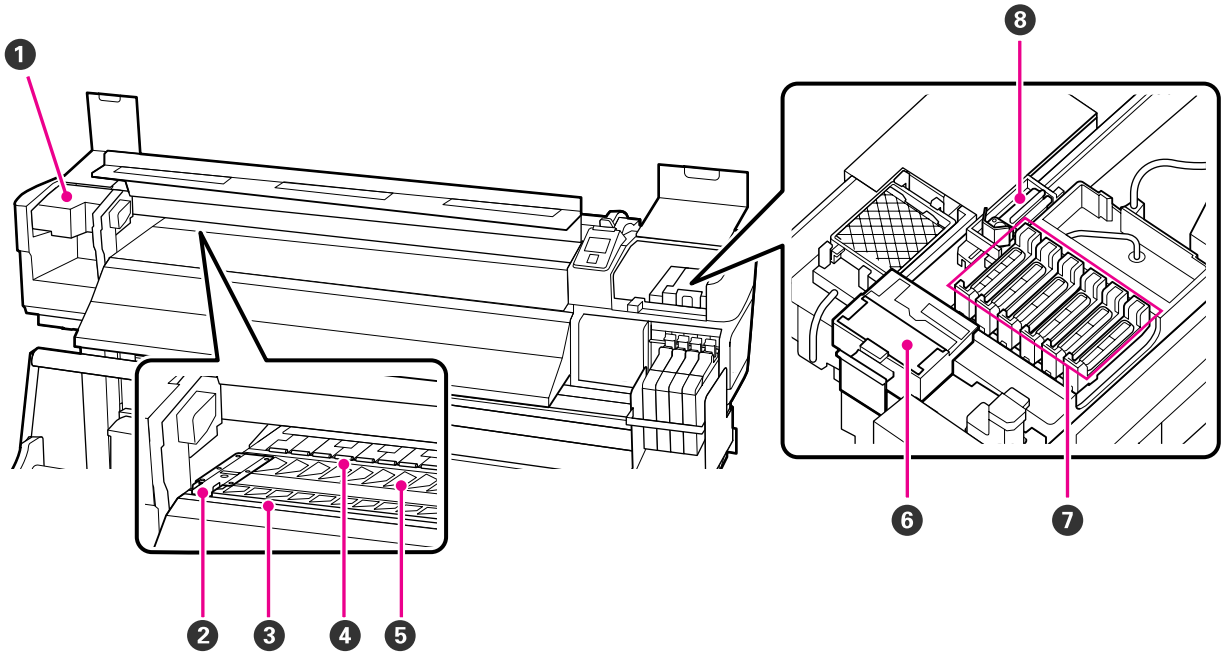
3 Status lamp (green/red)
The color indicates network connection speed.

Red: 100Base-TX

Green: 1000Base-T

Interior

Dirt on any of the following parts may reduce print quality. Regularly clean or replace these parts as described in the chapters listed in the reference sections below.



1 Print head
The print head prints by moving left and right while emitting ink. Cleaning may be required.

See “Cleaning Around the Print Head” on page 91.

2 Media holding plate
The media holding plates prevent the media from riding up and keep fuzz on the cut edge of the media from touching the print head. Position the plates at either side of the media before printing.

See “Loading Media” on page 31.

3 Cutter groove
Pass the blade of a cutter (not included) down this groove to cut media.

4 Pressure rollers
These rollers press down on the media during printing.

See “Cleaning the Platen, Pressure Rollers, and Media Holding Plates” on page 82.

5 Platen
The platen suctions the media for printing.

See “Cleaning the Platen, Pressure Rollers, and Media Holding Plates” on page 82.

6 Wiper cleaner
The wiper cleaner removes ink from the wiper. Replacement may be required.

See “Replacing the Wiper and Wiper Cleaner” on page 101.

7 Caps
Except during printing, these caps cover the print head nozzles to prevent them from drying out. Cleaning may be required.

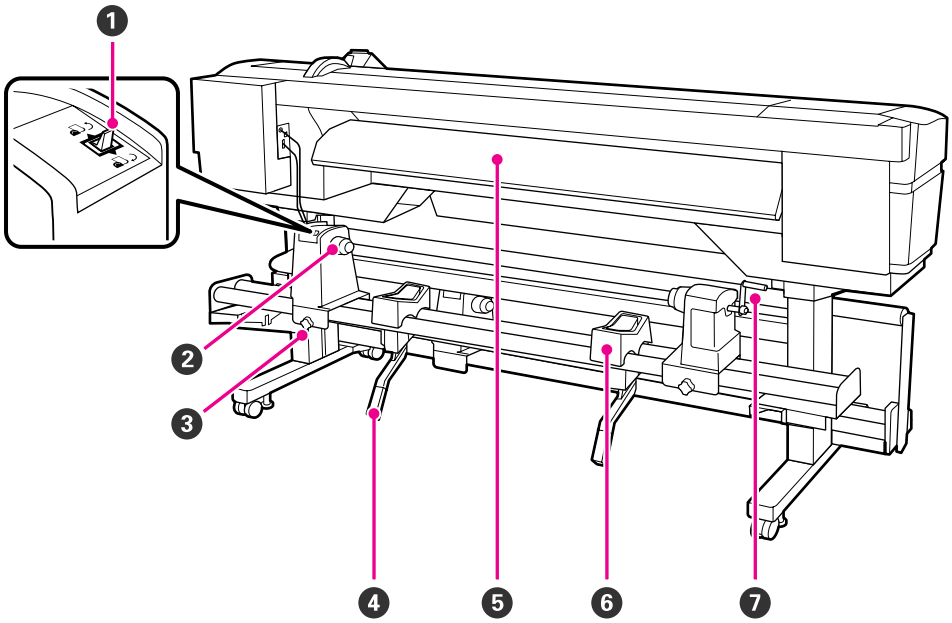
See “Part Cleaning” on page 89.

8 Wiper
The wiper removes ink from the print head nozzles. Cleaning or replacement may be required.

See “Part Cleaning” on page 89

See “Replacing the Wiper and Wiper Cleaner” on page 101.

Back



1 Drive switch
The drive switch is used to feed the media during loading and to rewind the media for replacement.

2 Roll holder
Place media on these holders. There are two holders: one on the left and one on the right.

3 Roll holder fixing screw
These screws fix the roll holders in place once the media has been installed. There are two screws: one on the left and one on the right.

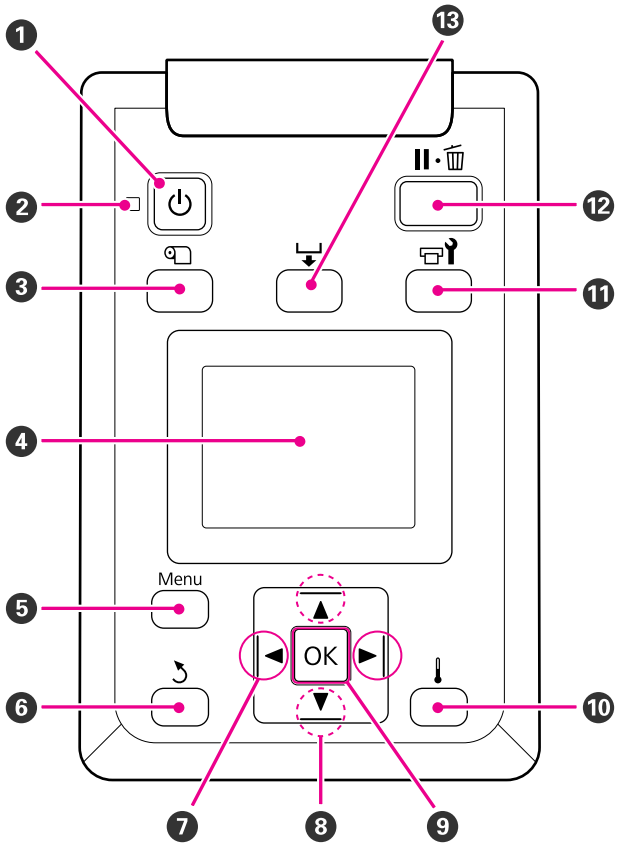
4 Roll holder lever
If the media to be mounted on the roll holders seems heavy, use these levers to raise the media effortlessly to the level of the roll holders. There are two levers: one on the left and one on the right.

5 Loading guide
Media is loaded along this guide.

6 Roll support
Rest media on these supports before placing it on the roll holders. There are two supports: one on the left and one on the right.

7 Handle
After placing media on the right roll holder, rotate the handle to apply pressure to the roll core.

Control Panel



1 ⏻ button (power button)

Turns the power on and off.

2 ⏻ light (power light)

The printer's operational status is indicated by a lit or flashing light.

On:	The power is on.
Flashing:	The printer is receiving data or performing head cleaning or other operations during shut-down.
Off:	The power is off.

3 button (media setup button)

Press this button to display the Media Setup menu, which contains such items as **Media Remaining**, **Select Media**, **Customize Settings**, and **Print Media List**. This button is disabled during printing.

See "The Media Setup Menu" on page 119.

4 Display

Displays the printer's status, menus, error messages, and so on. See "Understanding the Display" on page 18.

5 Menu button

Press this button to display menus. See "Using the Control Panel Menu" on page 114.

6 button (back button)

Press this button to exit to the previous menu when options are displayed. See "Menu Operations" on page 114.

7 ◀/▶ buttons (left and right arrow buttons)

Use to position the cursor when performing such tasks as entering a **Setting Name** or **IP Address** in the setup menu.

8 ▲/▼ buttons (media feed buttons)

When media is loaded, you can press the ▼ button to feed the media and the ▲ button to rewind. Keep the ▼ button pressed to feed the media up to 103 cm (40.6 inches). Keep the ▲ button pressed to rewind the media up to 25 cm (9.8 inches). Note that when the ▲ button is used to rewind, the media will stop when its edge reaches the starting print position. Rewind can be resumed by releasing the button and then pressing it again.

When the menus are displayed, these buttons can be used to select menu items and options. See "Menu Operations" on page 114.

9 OK button

Pressing this button when a menu item is highlighted displays options for the selected item.

Pressing this button when an option is highlighted selects the highlighted item or performs the selected operation.

When a warning alarm is sounding, press this button to stop the sound.

10 button

Pressing this button displays the Heating & Drying menu, where you can adjust the Heater Temperature.

11 button (maintenance button)

Pressing this button displays the Maintenance menu, which contains such items as **Nozzle Check**, **Cleaning**, **Head Washing**, **Head Maintenance**, and **Waste Ink Counter**. This button is disabled during printing.

See "The Maintenance Menu" on page 126.

12 II·🗑 button (pause/cancel button)

The printer enters pause status if this is pressed while printing. To release the pause status, press the II·🗑 button again, or select **Pause Cancel** on the screen and then press the OK button. To cancel print jobs being processed, select **Job Cancel** on the screen and then press the OK button.

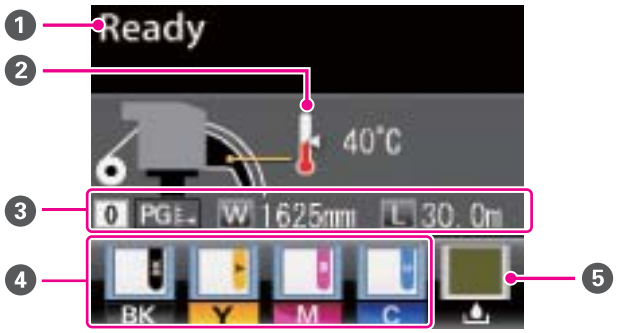
Pressing this button when menus are displayed closes the menus and returns the printer to ready status.

13 ⮓ button (media feed button)

When the printer is in the ready state, you can feed the media to the cut position by pressing this button and then OK.
See “Cutting Media” on page 46.

When printing is in progress, you can use this button to adjust media feed.
See “Feed Adjustment” on page 76.

Understanding the Display



1 Messages

Displays the printer's status, operation, and error messages.
See “When a Message Is Displayed” on page 130.

2 Heater temperature

This display shows the temperature settings for the after heater. The thermometer icons give a rough indication of the current temperatures of the heaters.



The heater has reached the selected temperature.



The heater has not reached the selected temperature.

3 Media info

From left to right, this display shows the selected media, platen gap, media width, and media remaining.

3 Media info

If a media setting bank number created with this printer is selected as the print media, the number (from 1 to 30) will be displayed. When **RIP Settings** is selected, 0 will be displayed.

The selected platen gap is shown as follows.

PG 1.5

PG 2.0

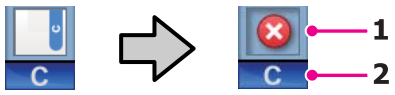
PG 2.5

The media remaining is not displayed if **Off** is selected for **Remaining Setup** in the **Media Remaining** menu.
See "The Media Setup Menu" on page 119.

4 Chip unit status

The display changes as shown below when an error is detected in the installed chip unit.

Normal Warning or error



1 Status indicators

The chip unit status is indicated as follows.



No error. Ready to print.



An error occurred. Check the message on the screen, and clear the error



The chip unit could not be recognized or it is not compatible with the printer. Or, the slider is not locked. Check the on-screen message.



The chip unit requires replacement. Replace the chip unit with one from a new ink pack. As it gets closer to time to replace the chip unit, ⚠ will begin to flash.

2 Ink color codes

BK: Black

Y: Yellow

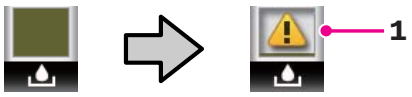
M: Magenta

C: Cyan

5 Waste ink bottle status

Displays the approximate amount of space available in the waste ink bottle. The display changes as shown below when the waste ink bottle is nearly full or an error occurs .

Normal Warning or error



1 Status indicators

The status of the waste ink bottle is shown as follows.



No error. The indicator changes to show the amount of space available.



The waste ink bottle is almost full. Ready a new waste ink bottle.



The waste ink bottle is full. Replace with a new waste ink bottle.

Features

This wide-format color ink jet printer supports roll media up to 1626 mm (64 inches) in width. The main features of this printer are described below.

Realizing High Productivity

Improved Drying Characteristics

The printer is equipped with an after heater that can be used to rapidly dry ink after printing.

Media Feeding Unit Accommodates High-Capacity Rolls

The standard media feeding unit can handle high-capacity rolls with external diameters of up to 250 mm (9.8 inches) and weights of up to 40 kg (88.2 lb), ensuring that media require less frequent replacement.

Auto Take-up Reel Unit Comes Standard

The auto take-up reel unit automatically takes up printed media cleanly, with no wrinkles. This is useful for large print jobs or continuous overnight printing, and supports the high-precision take-up necessary for continuous-type sublimation transfer printers.

High-Capacity Ink Tanks Included

The printer includes high-capacity ink tanks for high productivity. We also offer 1000 ml high-capacity ink packs for refill. This eliminates the need for frequent ink replacement.

Superior Ease of Use

Easy Media Installation and Take-up

The roll and roll core holders require no spindles, eliminating the need to attach spindles before installing media. Just bring the media to the printer and install it directly. Never having to juggle long spindles makes installing media a snap even where space is limited.

In addition to roll supports that give you a place to rest media during installation, the printer offers lift levers that allow heavy media to be effortlessly raised to the level of the roll holders.

Ease of Maintenance

Print quality can only be ensured through daily maintenance, and the printer is constructed with this in mind.

Lamp and Alarm Error Alerts

When an error occurs, an alarm will sound and the alert lamp will light. The large alert lamp is highly visible, even at a distance.

An alarm sounds simultaneously to prevent time wasted while stoppages due to errors go unnoticed.

High-Speed USB/Gigabit Ethernet

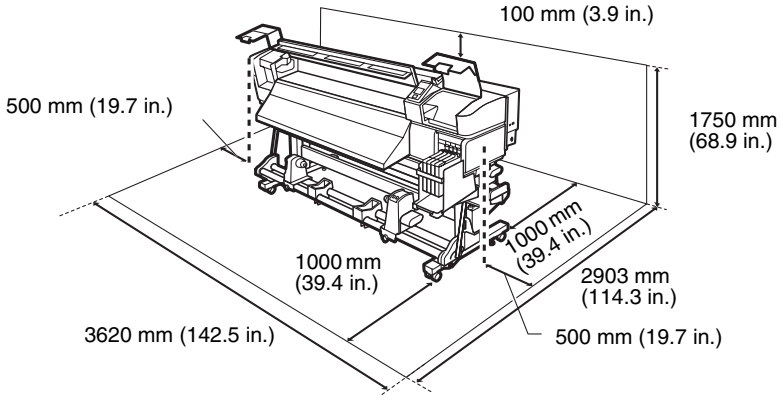
The printer comes equipped with high-speed USB and 100 Base-TX/1000 Base-T network interfaces.

Notes on Usage and Storage

Installation Space

Make sure that you secure the following space, clear of any other objects, so that paper ejection and consumable replacement are not obstructed.

For the external dimensions of the printer, see “Specifications Table” on page 175.



Notes When Using the Printer

Note the following points when using this printer to avoid breakdowns, malfunctions, and print quality decline.

❏ When using the printer, observe the operating temperature and humidity range described in the “Specifications Table” on page 175.

Note, however, that the desired results may not be achieved if the temperature and humidity are within the limits for the printer but not within those for the media. Be sure the operating conditions suit the media. For more information, see the documentation supplied with the media.

Also, when operating in dry areas, air-conditioned environment, or under direct sunlight, maintain the appropriate humidity.

❏ Avoid using the printer in locations with heat sources or locations that are exposed to direct drafts from ventilators or air conditioners. The print head nozzles could dry out and clog.

❏ Do not bend or tug the waste ink tube. Ink could spill inside or around the printer.

❏ We recommend performing maintenance on the following components as required. Failure to perform appropriate maintenance will shorten print head life.

See “Maintenance Around the Print Head” on page 88.

Component to be cleaned	Frequency
Print head	When colors in the printout are faint or missing even after head has been cleaned. When the printout is smudged or not clear.
Wiper	
Caps	
Wiper rail	

Component requiring replacement	Frequency
Wiper cleaner	If the printout is faint or smudged, or segments are missing even after cleaning
Wiper	

❏ The print head may not be capped (the print head may not return to the right side) if the printer is turned off when the media is jammed or an error has occurred. Capping is a function for automatically covering the print head with a cap (lid) to prevent the print head from drying out. In this case, turn on the power and wait until capping is performed automatically.

❏ When the power is on, do not remove the power plug or cut the power at the breaker. The print head may not be capped properly. In this case, turn on the power and wait until capping is performed automatically.

❏ The print head is automatically cleaned at a fixed interval after printing to keep the nozzles from clogging.

Be sure that the waste ink bottle is installed whenever the printer is on.

❏ As well as being expended during printing, ink is used during head cleaning and other maintenance required to keep the print head in working order.

Notes When Not Using the Printer

If you are not using it, note the following points when storing the printer. If it is not stored correctly, you may not be able to print properly the next time it is used.

❏ If you do not print for a long time, the print head nozzles may become clogged. Turn the printer on at least once a week to prevent the print head clogging.

Head cleaning will be performed automatically after the printer is turned on. Head cleaning helps maintain print quality. Do not turn the printer off until cleaning is complete.

Leaving the printer for too long without turning it on may result in a malfunction. Repair work for such malfunction will be charged.

❏ If you will not be using the printer for more than 2 weeks, maintenance must be performed by a service engineer before and after this period. This maintenance work will be charged.

Note that even if proper maintenance has been done before a long period of non-use, repair may be necessary when doing maintenance for reusing the printer, depending on the period and conditions of storage. In such a case, the repair work will also be charged.

Contact your dealer or Epson Support.

❏ The pressure rollers may crease media left in the printer. The media may also become wavy or curled, causing jams or resulting in the media coming into contact with the print head. Remove the media before storing the printer.

❏ Store the printer after confirming that the print head has been capped (the print head is positioned at the far right). If the print head is left uncapped for a long time, the print quality may decline.

> ***Note:***
> *If the print head is not capped, turn the printer on, wait until capping is performed automatically, and then turn it off.*

❏ Close all covers before placing the printer in storage. If you are not using the printer for a long time, put an anti-static cloth or cover on the printer to prevent dust build-up. The print head nozzles are very small, and they can become clogged easily if fine dust gets on the print head, and you may not be able to print properly.

❏ If you have not used the printer for a long time, check the print head for clogging before you start printing. Perform head cleaning if the print head is clogged.

See “Checking for Clogged Nozzles” on page 84.

❏ When storing the printer, be sure that it is level: do not store it on an angle, on end, or upside down.

Notes on Handling Ink Packs and Ink Tanks

Note the following points when handling ink packs and ink tanks.

- ❏ Do not remove the ink tanks

  Ink tanks are calibrated when installed. Removing them can harm quality and functionality.

- ❏ Store ink packs at room temperature out of direct sunlight.

- ❏ To ensure print quality, use all the ink in the ink pack before one of the following (whichever comes first):

  - ❏ The date printed on the ink pack

  - ❏ 25 days from the day the ink tank was refilled from the ink pack

- ❏ If the ink pack has been stored in a cold location for a long period of time, keep at room temperature for at least 4 hours before using.

- ❏ Be sure not to leave any ink in the ink pack when you refill an ink tank.

- ❏ Refill the ink tank as soon as possible after opening the ink pack.

- ❏ Do not place any objects on the ink tank or subject the tank to strong impacts. Otherwise, the tank could be detached.

Handling Media

Note the following when handling or storing media. Media that is in poor condition will not produce good quality prints.

Be sure to read the documentation provided with each type of media.

Notes on Handling

- ❏ Do not fold the media or damage the printable surface.

- ❏ Do not touch the printable surface. Moisture and oils from your hands can affect print quality.

- ❏ When handling media, hold it by both edges. We recommend wearing cotton gloves.

- ❏ Keep the media dry.

- ❏ Packaging materials can be used to store media and should not be thrown away.
- ❏ Avoid locations that are subject to direct sunlight, excessive heat, or humidity.
- ❏ When not in use, media should be removed from the printer, rewound, and inserted in its original packaging for storage. Leaving media in the printer for extended periods may cause it to deteriorate.

Handling Media After Printing

To maintain long lasting, high quality print results, note the following points.

- ❏ Do not rub or scratch the printed surface. If it is rubbed or scratched, the ink may peel off.
- ❏ Do not touch the printed surface, as this may remove the ink.
- ❏ Make sure printouts are completely dry before folding or stacking, as otherwise discoloration or other marks may appear where the prints touch. These marks will disappear if the prints are immediately separated and dried but will become permanent if the surfaces are not separated.
- ❏ Avoid direct sunlight.
- ❏ To prevent discoloration, display and store prints as instructed in the documentation supplied with the media.

Using the Supplied Software

Contents of the Software CD

The following applications are available on the supplied software CD. Install as required.

For information about these applications, see the on-line help for the application in question.

Note:

- ❏ *The supplied disk does not contain printer drivers. A software RIP is required for printing.*
- ❏ *The latest software utilities can be downloaded from the Epson website.*

Software Name	Summary
EPSON LFP Remote Panel 2	EPSON LFP Remote Panel 2 is used to update firmware from a computer and copy the media settings bank created in the printer's setup menu to a computer. See "Starting EPSON LFP Remote Panel 2" on page 28 and "Exiting EPSON LFP Remote Panel 2" on page 28.
Epson Drivers and utilities	Install the Epson communications driver (EPSON SC-F7100 Series Comm Driver). The Epson communications driver is required if the EPSON LFP Remote Panel 2 is to be used to copy media settings. It is not a printer driver. In addition, the software RIP may not display printer status if the Epson communications driver is not installed when the printer is connected to a computer via USB. See the software RIP documentation for more information on the status display.
EPSONNet Config	With this software, you can configure various network settings for the printer from your computer. This is useful as it allows you to enter addresses and names using the keyboard. The manual is also installed along with the software.

Starting EPSON LFP Remote Panel 2

Launch EPSON LFP Remote Panel 2 after confirming that the printer displays **Ready**.

1. The application can be launched using either of the following two methods.

   - ❏ Double-click the **EPSON LFP Remote Panel 2** icon on the desktop. The **EPSON LFP Remote Panel 2** icon is created when the application is installed.
   - ❏ Click **Start** > **All Programs** (or **Programs**) > **EPSON LFP Remote Panel 2** > **EPSON LFP Remote Panel 2**.

2. Click the desired item in the EPSON LFP Remote Panel 2 main window.

See EPSON LFP Remote Panel 2 help for more information.

Exiting EPSON LFP Remote Panel 2

Click **Finish** in the EPSON LFP Remote Panel 2 main window.

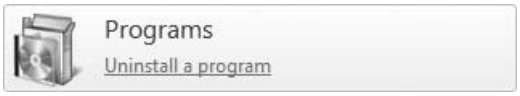
Uninstalling Software

Important:

- ❏ *Log in as an administrator.*
- ❏ *Enter the administrator password when prompted and then proceed with the remainder of the operation.*
- ❏ *Exit any other applications that may be running.*

This section describes how to uninstall EPSON LFP Remote Panel 2 and the Epson communications driver.

1. Turn off the printer, and unplug the interface cable.
2. Go to the **Control Panel** and click **Uninstall a program** from the **Programs** category.



3. Select the software you want to remove and then click **Uninstall/Change** (or **Change/Remove**).

   To uninstall the EPSON communications driver, select **EPSON SC-F7000 Series Comm Driver Printer Uninstall**.

   To uninstall EPSON LFP Remote Panel 2, select **EPSON LFP Remote Panel 2**.

4. Select the target printer icon, and then click **OK**.
5. Follow the on-screen instructions to continue.

   When the delete confirmation message appears, click **Yes**.

If you are reinstalling the Epson communications driver, restart the computer.

Chapter 2

Basic Operations

Loading and Exchanging Media

Caution:

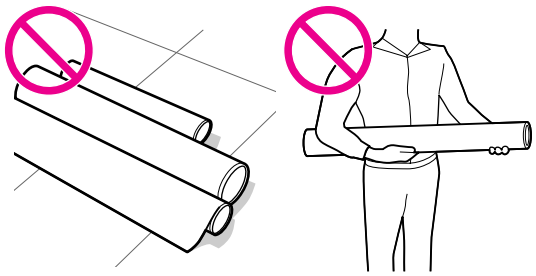
- ❏ *Be careful not to trap your hands or fingers when opening or closing the front cover. Failure to observe this precaution could result in injury.*
- ❏ *Secure the media in place by the following procedure. Injury may occur if the media falls.*
- ❏ *Do not rub your hands along the edges of the media. The edges are sharp and can cause injury.*

Note:

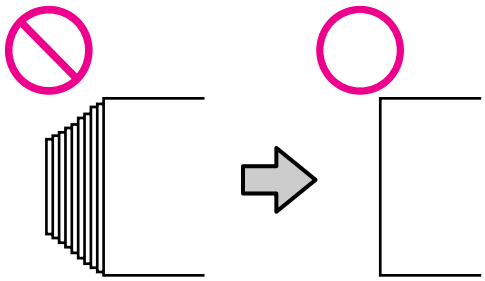
For information on the media that can be used in the printer, see “Supported Media” on page 163.

Important:

- ❏ *Load media immediately before printing. The pressure rollers may crease media left in the printer. The media may also become wavy or curled, causing jams or resulting in the media coming into contact with the print head.*
- ❏ *If the following points are not observed when handling media, small amounts of dust and lint may stick to the media surface and cause in ink drops in the prints.*
  - ❏ *Do not place exposed media directly on the floor. Media should be rewound and inserted in its original packaging for storage.*
  - ❏ *Do not carry media with the media surface pressed against clothing. Handle media in its individual packaging until just before loading the media in the printer.*



  - ❏ *If media is loaded and the right and left edges of the roll are uneven, media feeding problems may cause the media to move around during printing. Either rewind to align the edges or use a roll without any issues.*



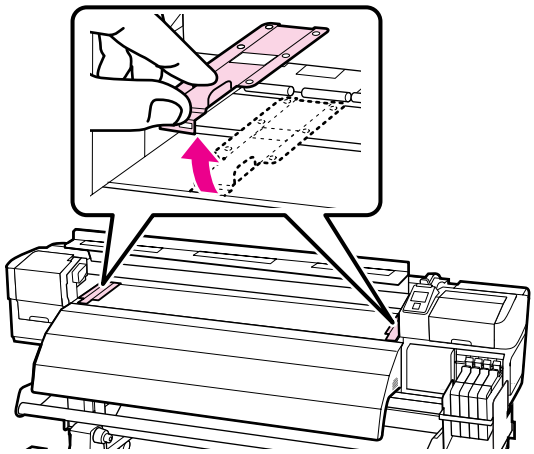
Loading Media

This section describes how to load media when the standard media feeding unit is installed. We recommend that you perform a parallel adjustment of the media feeding unit to ensure that media is fed straight and to avoid printing or take-up problems. For more information, see “Parallel adjustment of the media feeding unit” on page 141.

Caution:

- ❏ *The after heater may be hot; observe all necessary precautions. Failure to observe the necessary precautions could result in burns.*
- ❏ *Because the media is heavy, it should not be carried by one person. When loading or removing the media, use at least two persons.*

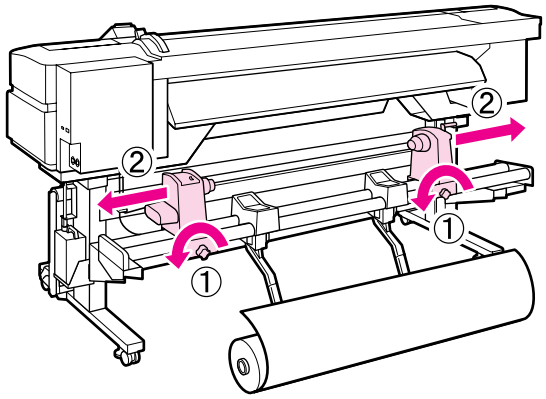
1. Remove the media holding plates, if installed.



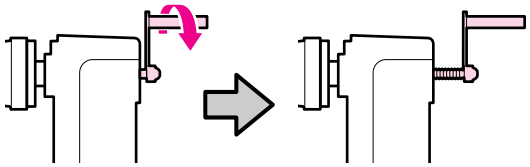
2. Turn on the printer by pressing the ⏻ button.

3. Loosen the roll holder fixing screws and adjust the roll holders so that the gap between the two is wider than the media.

   Center the roll supports between the roll holders.

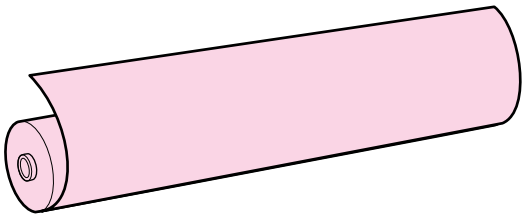


Important:
If the right holder handle shaft is not visible, rotate the handle forward until it stops. The media can not be properly loaded if the handle shaft is not visible.

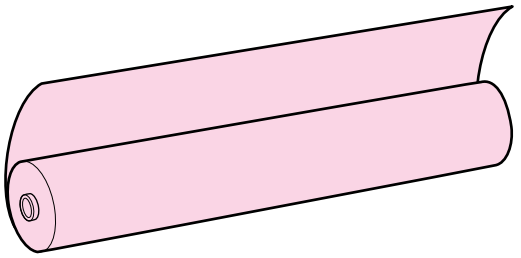


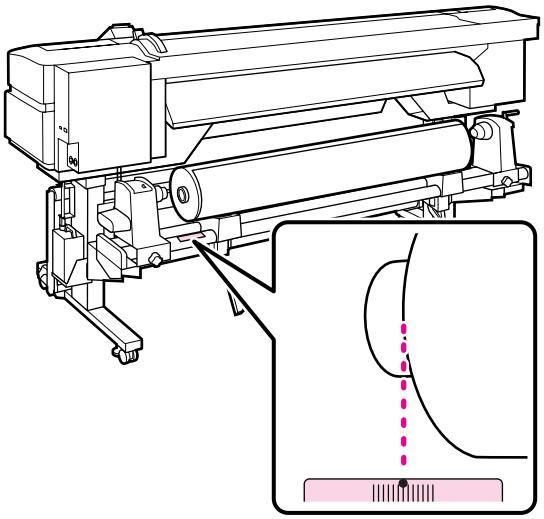
4. Place media on the roll support oriented according to how it is rolled (see below) and position it as indicated by the mark on the label.

Printable side out



Printable side in



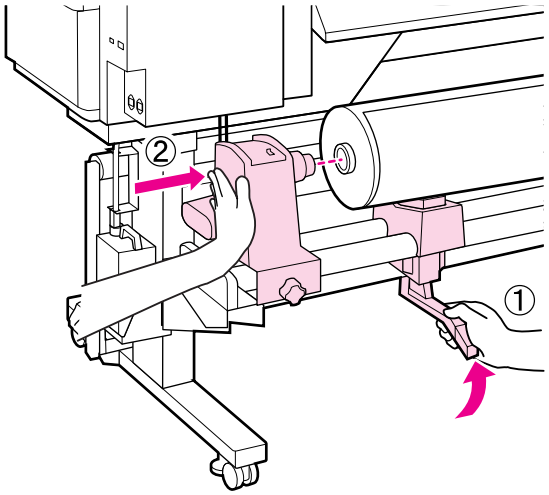


If the label does not have a loading position, mark it on the label as instructed in the *Setup Guide*.

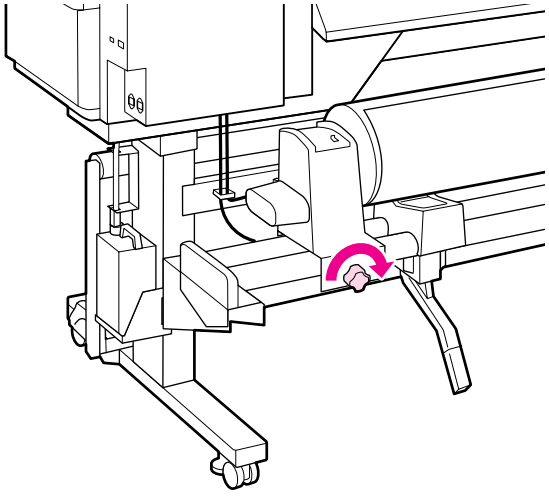
> ***Note:***
> *Be sure the option selected for **Roll Type** in the **Customize Settings** menu matches how the media is rolled. **Roll Type** defaults to **Printable Side Out**. Be sure to select **Printable Side In** after loading media rolled printable side in.*
>
> *For more information see "Roll Type" on page 70.*

5. Raise the roll holder lever on the left side of the printer to lift the media into position, then firmly insert the roll holder.

   If the roll of media has an outer diameter which is less than 140 mm (5.5 inches), lift it up by your hands, and place it on the roll holder. The roll core will not reach the holder when raised using the roll holder lever.

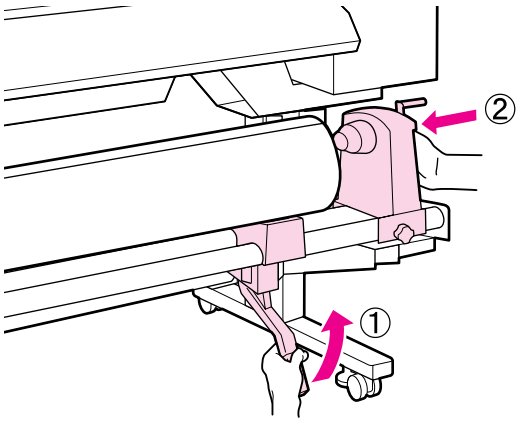


6. Tighten the roll holder screw to fix the roll holder in place.

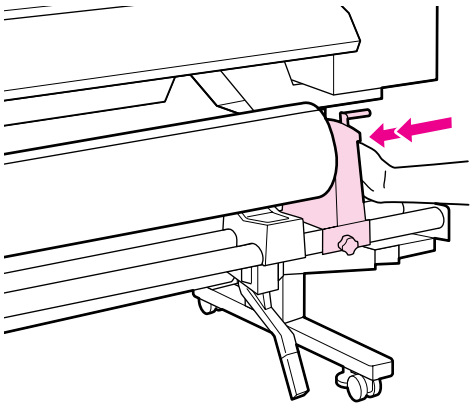


7. Raise the roll holder lever on the right side of the printer to lift the media into position, then firmly insert the roll holder.

   If the roll of media has an outer diameter which is less than 140 mm (5.5 inches), lift it up by your hands, and place it on the roll holder as described in step 5.



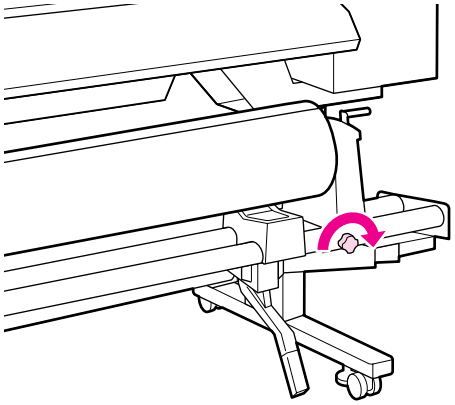
8. To ensure that the roll holder is inserted into the roll core sufficiently, push the center section on the side of the roll holder toward the roll end.



Important:
If the roll holder is not inserted far enough into the roll core, media will not be fed correctly because of slippage between the roll holder and roll core.

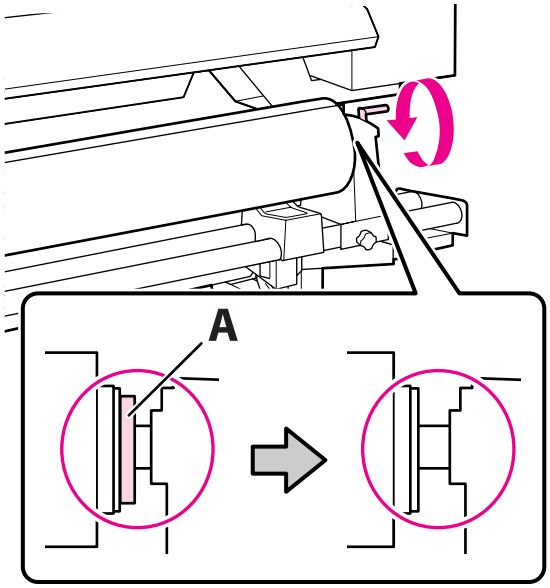
This may cause banding in the prints.

9. Tighten the roll holder screw to fix the roll holder in place.



> ***Important:***
> *If the roll holder fixing screw is loose, the roll holder may move during printing. This could cause stripes and unevenness in the prints.*

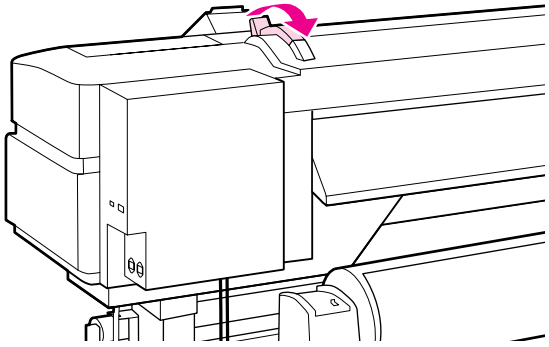
10. Rotate the handle until part A in the illustration below is fully inserted.



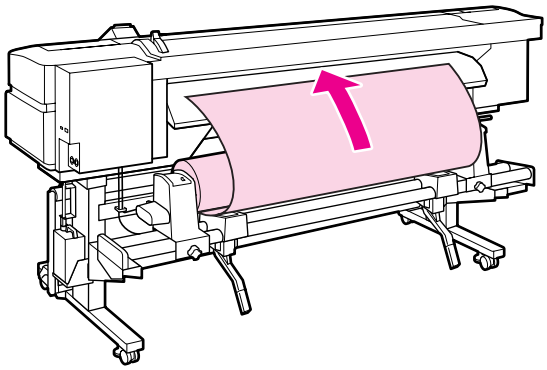
> ***Important:***
> *Once part A is hidden, do not turn the handle any further. Failure to observe this precaution could damage the roll holder.*
>
> *If part A is still visible even after the handle has been turned fully, rewind the handle. Loosen the roll holder fixing screw on the right side, and then restart from Step 8.*

11. Confirm that the right and left edges of the attached roll are aligned, and realign them if necessary.

12. Raise the media loading lever.



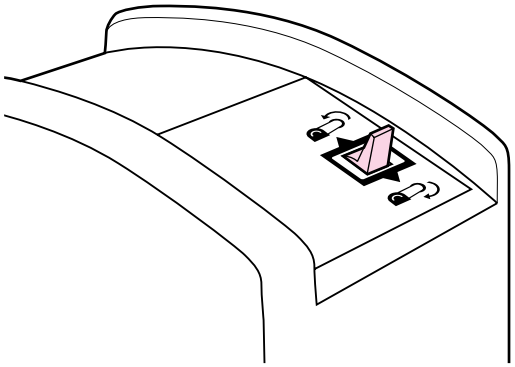
13. Pull out the edge of the media and insert it into the printer.



Note:
Media that is heavy and difficult to unroll can be fed by pressing the drive switch on the left roll holder.

Printable side out

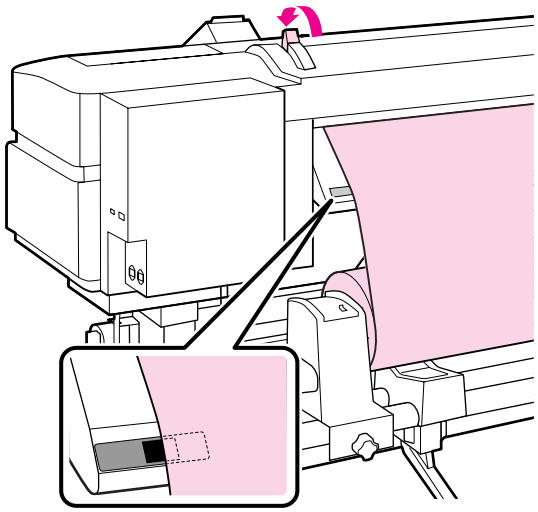
Printable side in



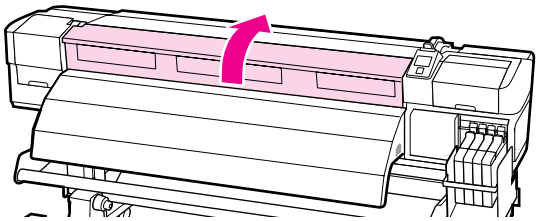
14. Insert the media past the pressure rollers and lower the media loading lever to hold it in place.

    Confirm that the left edge of the media passes over the center of the square in the label on the loading guide.

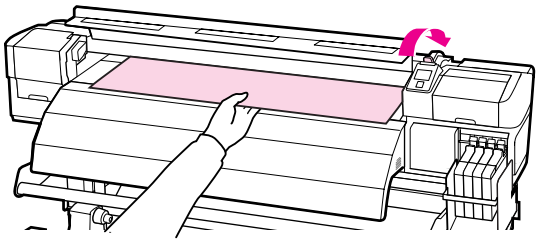
Important
Perform steps 14 to 4 in reverse order and repeat the loading process if the left edge of the media is not within the guides. Do not attempt to reposition the roll holders while they are inserted in the media.



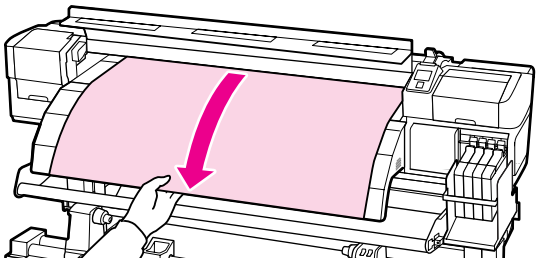
15. Go to the front of the printer and open the front cover.



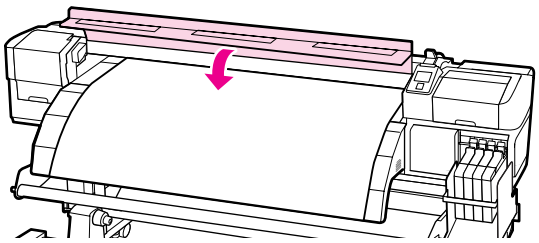
16. Hold the center of the media and raise the media loading lever.



17. Pull the media straight forward to the leading edge of the after heater.



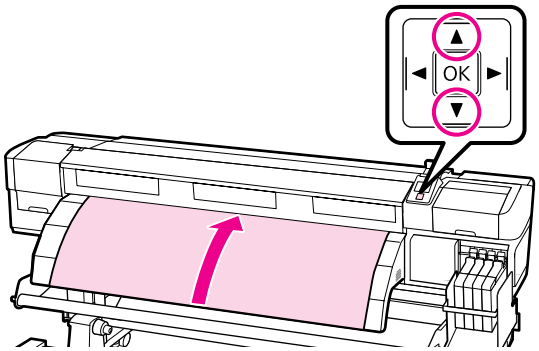
18. Close the front cover.



19. Rewind the leading edge of the media to the front cover.

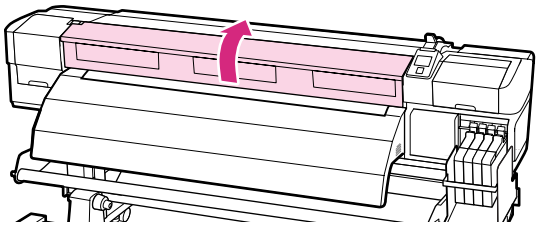
    For media with the printable side out, press the ▲ button. For media with the printable side in, press the ▼ button.

Confirm that the paper was fed straight with the media straight and taut.

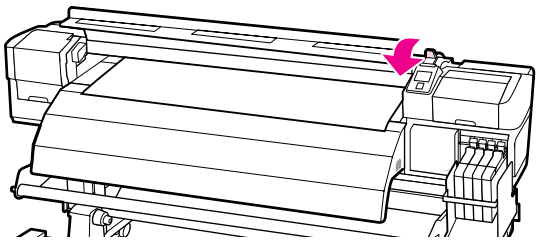


> ***Note:***
> *We recommend using the ▶ button on the control panel to set Media Suction to 2, which helps to ensure that the media is rewound straight.*

20. Open the front cover.

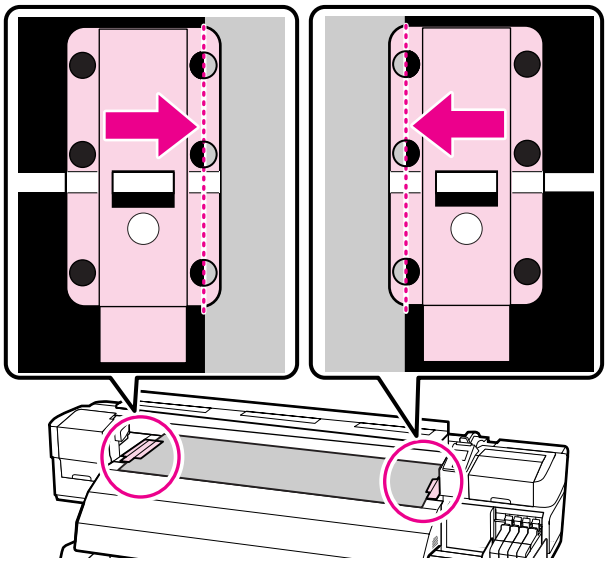


21. Lower the media loading lever to hold the media in place.



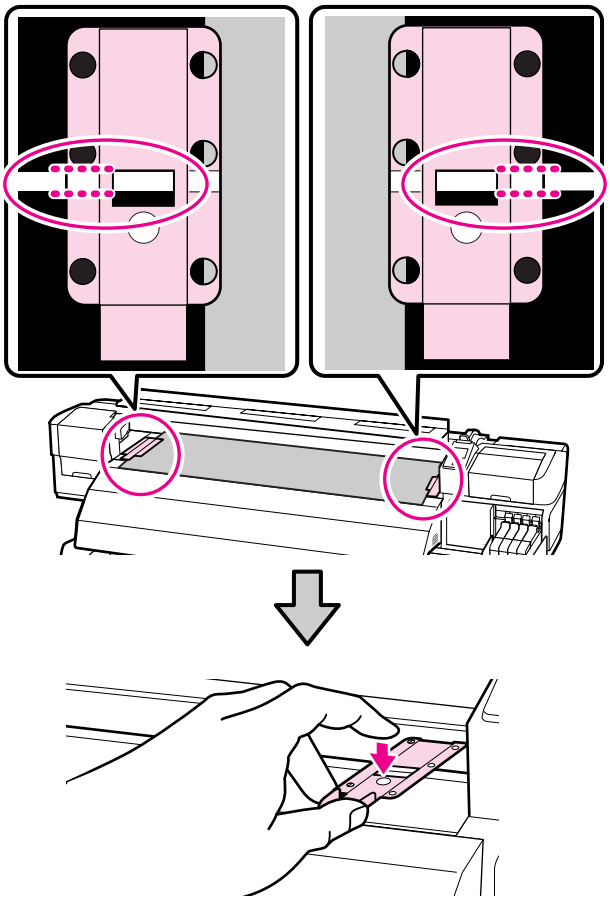
22. Attach the media holding plates.

First, position the plates so that the edges of the media are in the centers of the round holes.



Important:
Always position the plates so that the edges of the media are at the centers of the round holes. Incorrect positioning causes banding (horizontal banding, lines, or strips of uneven color) during printing.

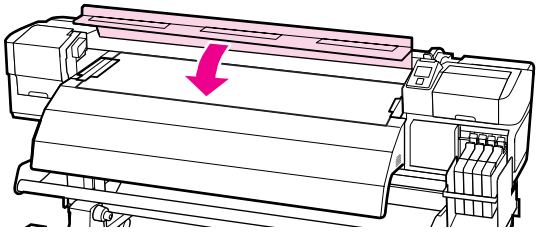
23. Align the white lines of the plates with the white lines of the platen and push the plates down to lock them in place and keep them from lifting.



Important:

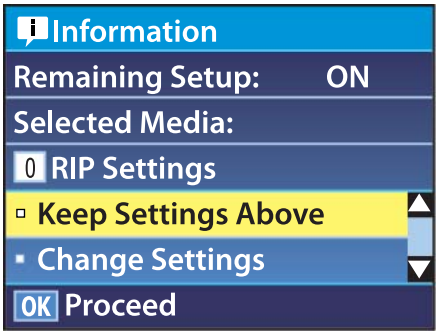
- ❏ *Do not use the media holding plates with media that is more than 0.4 mm (0.02 inch) thick. The media holding plates could touch and damage the print head.*
- ❏ *Move the media holding plates to the left and right edges of the platen when they are not in use.*
- ❏ *Do not use the media holding plates if the sides of the printed media are smudged or torn.*

24. Close the front cover.



Viewing and Changing Media Settings

The control panel displays the following information once the media is loaded.



This display can be used to view or change the following two options:

❏ Remaining Setup

On: The printer displays the amount of media remaining.

Off: The printer does not display the amount of media remaining.

When **Remaining Setup** is **On**, the printer will calculate the approximate amount of media remaining based on the length of the roll and the amount used for printing and display this information in the control panel. The display gives a rough idea of the amount of media available before printing, making it easier to know when media requires replacement.

In addition, a warning will be displayed when the amount of media remaining reaches a specified level.

❏ Selected Media

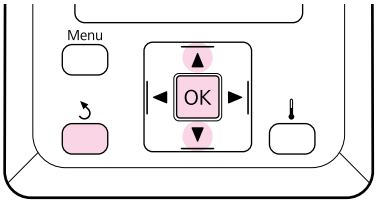
Displays the parameters on which media settings are based as shown below.

0 **RIP Settings**: Media settings are based on those in the RIP.

1 **XXXXXXXXXXXXXXXXX**: Media settings are based on those stored in the printer in media settings bank No. 1.

Media settings banks can store a variety of settings for different media based on the options selected in the Media Suction, Head Alignment, and other menus. Up to 30 combinations of settings can be stored by assigning them to banks No. 1 to 30. Using the printer's media settings is recommended.

See “Saving Settings” on page 66.



1. Select an option.

   To print with current settings:

   Use the ▼/▲ buttons to select **Keep Settings Above** and press the OK button.

   Proceed to step 6.

   To change settings:

   Use the ▼/▲ buttons to select **Change Settings** and press the OK button.

2. Select the items you want to change and press the OK button.

3. Select the desired option and press the OK button.

4. Press the ↻ button to display the dialog shown in step 2 and then press the ↻ button again.

5. After confirming that the settings are correct, use the ▼/▲ buttons to select **Keep Settings Above** and press the OK button.

6. The roll type selection screen appears.

   Use the ▼/▲ buttons to select the roll type that matches the loaded roll and press the OK button.

7. If **On** is selected for **Remaining Setup**, you will be prompted to enter the length of the current media. Use the ▼/▲ buttons to choose a length between 5.0 and 999.5 m (15 and 3000 feet) and press the OK button. You can set in 0.5 m increments. If the display is in feet, lengths are given in increments of 1 foot.

The printer will display **Ready** after a brief pause, showing that it is ready to print. Transmit the data to be printed from the computer.

Exchanging Media

To replace the media after printing, print the amount of media remaining, cut the media, and remove the roll.

Printing the Amount of Media Remaining

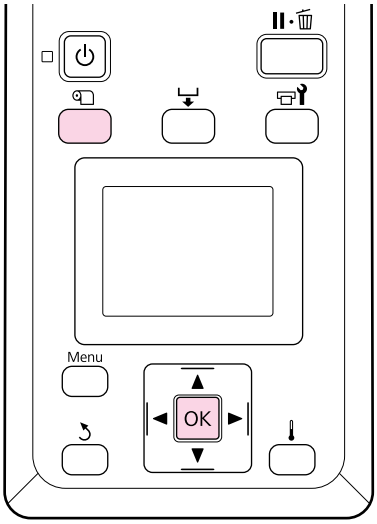
The printer displays the amount of media remaining and any media low warnings in the control panel. This makes it possible to determine whether the media requires replacement before printing.

The amount of media remaining can only be displayed if the correct length is entered when the media is loaded.

You can print the amount of media remaining on the leading edge of the roll before it is removed from the printer and then enter this number the next time the media is loaded for accurate information on the amount remaining.

> ***Note:***
> *The printer does not calculate or display the amount of media remaining when* ***Off*** *is selected for* ***Remaining Setup*** *in the setup menu. See "Viewing and Changing Media Settings" on page 43.*

The following section describes how to print the amount of media remaining.



1. Confirm that the printer is ready to print.
2. Press the button, select **Media Remaining** in the menu, and press the OK button.
3. Select **Print Remaining Length** and press the OK button.

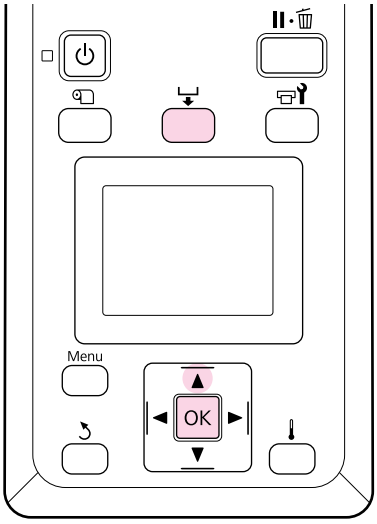
4. Press the OK button to print the amount of media remaining.

Cutting Media

Use a cutter (not included) to cut the media when printing is complete. This section described how to use a cutter to cut the media.

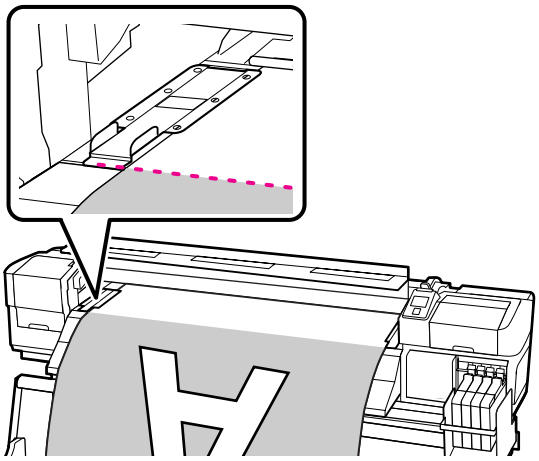
Caution:

- ❏ *The after heater may be hot; observe all necessary precautions. Failure to observe the necessary precautions could result in burns.*
- ❏ *When cutting media, be careful not to cut your fingers or hands with the cutter or other blades.*

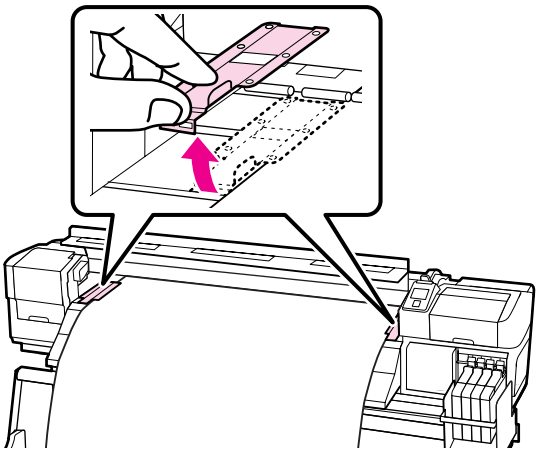


1. Confirm that the printer is ready to print.
2. Press the button and the OK button. The printer will feed the trailing edge of the printed media to a position over the cutter groove.

If you have printed the amount of media remaining, press the ▲ button to rewind the media so that this information will remain on the roll after the media is cut.

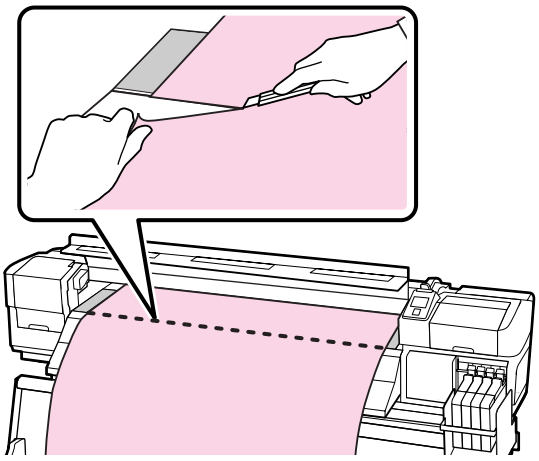


3. Remove the media holding plates.



4. Cut the media with the cutter.

   Pass the blade of the cutter down the cutting groove.



Important:
To continue printing after cutting, do not rewind the media past the cutter groove (on the pressure roller side).

If the leading edge of the media is curled, stop rewinding before the media reaches the inner side of the front cover.

Note:
If you are using the auto take-up reel unit, set the Auto switch on the auto take-up reel unit to Off before using the Manual switch to position the media over the cutting groove.

Removing Media

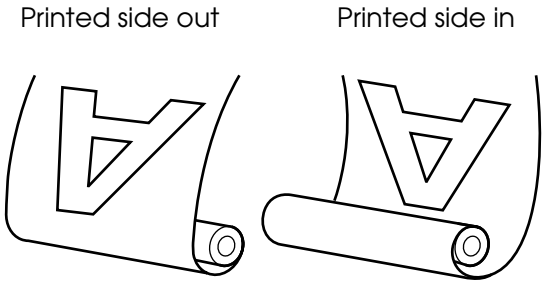
You can now remove the media from the roll holders. To remove the media, reverse the steps you followed to load it. See the section beginning with “Loading Media” on page 31.

Using the Auto Take-up Reel Unit

Media Loading and Take-Up

The auto take-up reel unit automatically takes up media as it is printed, improving the efficiency of unmanned operation.

The auto take-up reel unit for this printer can take-up media in either of the following directions.



Take-up with the printed side out places the printed surface on the outside of the roll.

Take-up with the printed side in places the printed surface on the inside of the roll.

Caution:

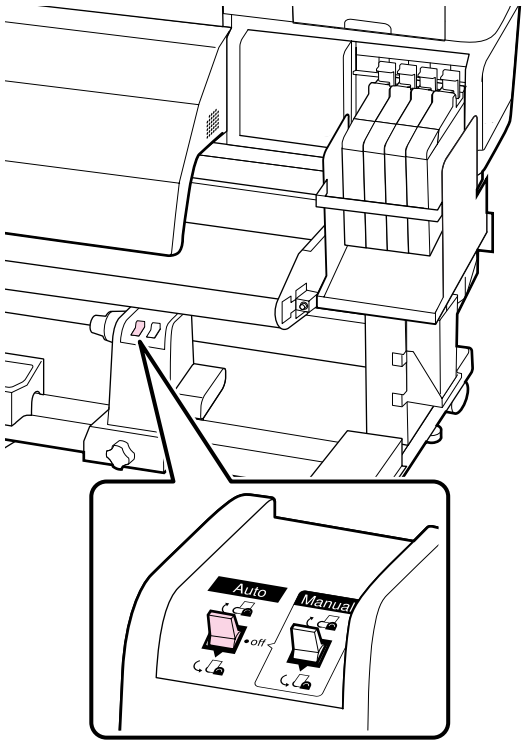
- ❏ *Be sure that your hands or hair do not get caught in the auto take-up reel unit while it is in operation. Failure to observe this precaution could result in injury.*
- ❏ *Perform the following procedure to correctly secure the roll core for the auto take-up reel unit into place. Injury may occur if the take-up roll falls.*

Important:

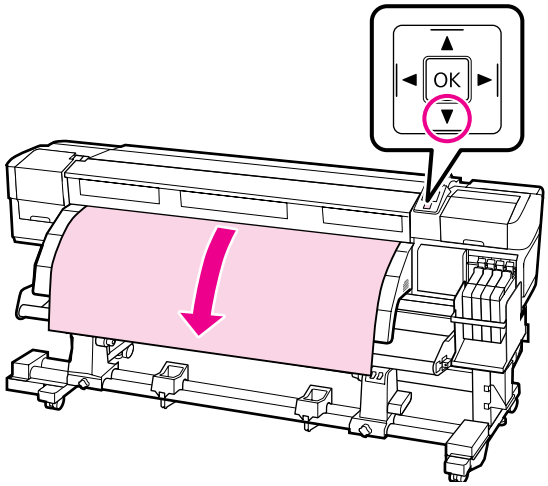
- ❏ *We recommend using a take-up roll core with the same width as the media. If a take-up roll core of a different width is used, the take-up roll core may bend, and the media will be taken up incorrectly.*
- ❏ *Do not use a roll core with a deformed interior. If the roll core holder slips, the media may be taken up incorrectly.*

Attaching the Roll Core

1. Set the Auto switch to Off.



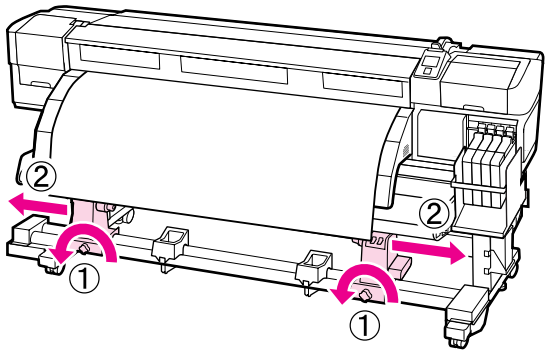
2. After confirming that the media is loaded correctly, press the ▼ button to feed the media as far as the auto take-up reel unit roll core holder.



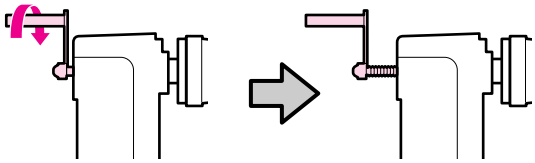
> ***Important:***
> *Always press the ▼ button to feed the media as far as the roll core holder. If the media is pulled by hand, the media may twist during take-up.*

3. Loosen the roll core holder locking screws and adjust the roll core holders so that the gap between the two is wider than the media.

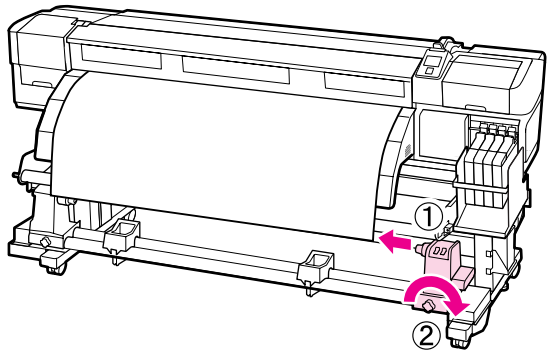
   Center the roll supports between the roll holders.



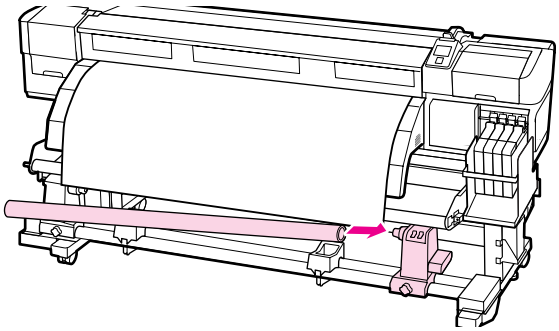
> ***Important:***
> *If the left roll core handle shaft is not visible, rotate the handle until it stops. The media can not be properly loaded if the handle shaft is not visible.*



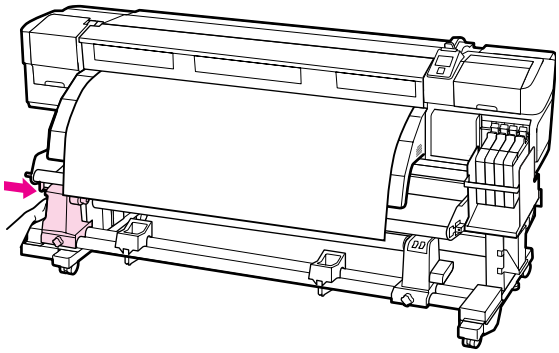
4. Align the right roll core holder with the right edge of the media and tighten the locking screw.



5. Insert the roll core onto the right holder.



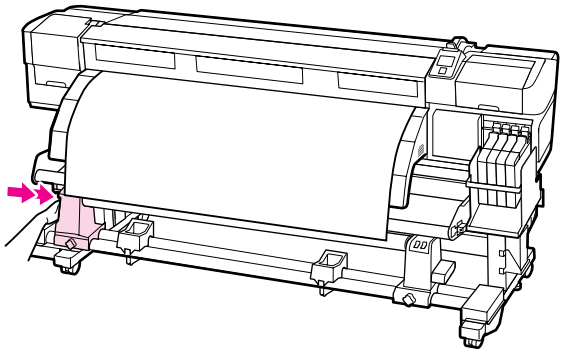
6. Confirm the following: the left roll core holder is fully inserted into the roll core, and the roll core and edges of the media are not misaligned.



> ***Important:***
> *If the edges of the media are misaligned, the media cannot be taken up correctly. To correct misalignment, loosen the right roll core holder locking screw, and then restart from Step 4.*

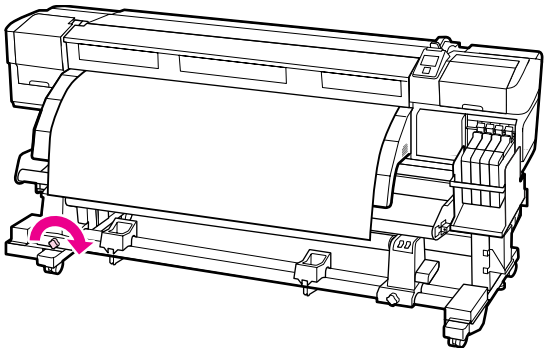
7. To ensure that the roll core holder is inserted sufficiently, push the center section on the side of the roll core holder towards the roll end.

Confirm that the roll core and edges of the media are not misaligned.

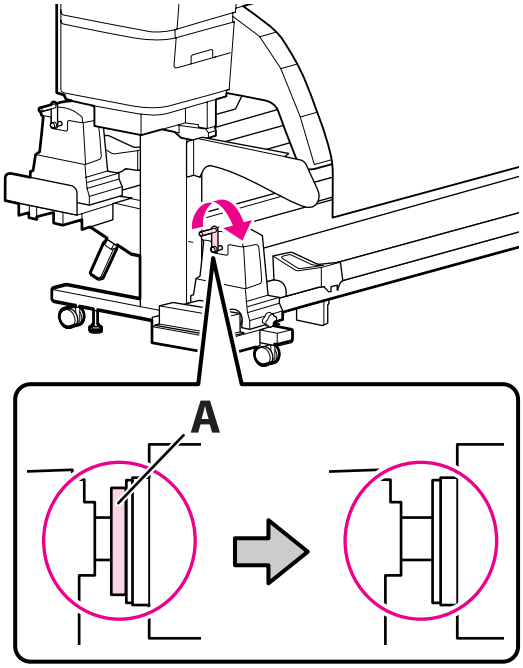


> ***Important:***
> *Stop when part A is no longer visible. The take-up reel unit may not function as expected if the holder is inserted too far.*

8. Tighten the roll core holder locking screw to fix the roll core holder in place.



9. Rotate the handle until part A in the illustration below is fully inserted.



> ***Important:***
> *Once part A is hidden, do not turn the handle any further. Failure to observe this precaution could damage the roll core holder.*
>
> *If part A is not hidden even after turning the handle until it can no longer be turned, the roll core holder may not be fully inserted. Return to step 6.*

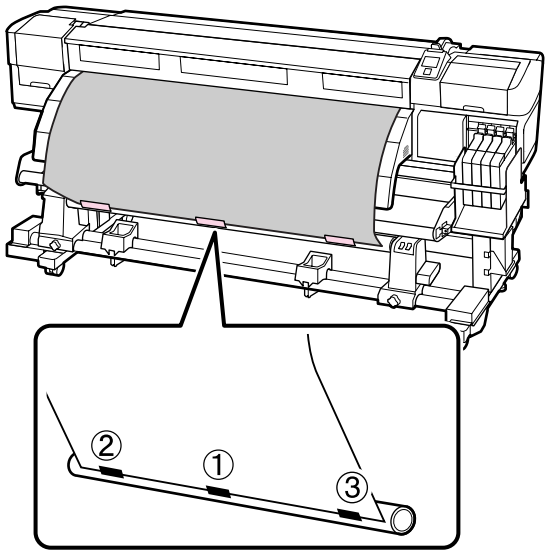
For information on take-up with the printed side out, see the following section.

For information on take-up with the printed side in, see “Take-Up With the Printed Side Facing In” on page 58.

Take-Up With the Printed Side Facing Out

1. Pass the media under the media guide bar, and then attach the media to the take-up roll core.

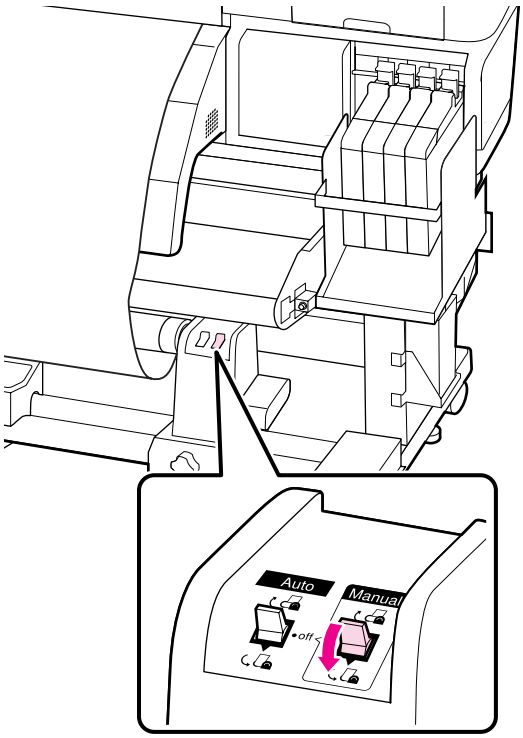
In the order shown in the illustration, tape the media to the take-up roll core. When attaching in the center, tape while pulling the center of the media straight. When attaching on the left and right, tape while pulling the media sideways.



Important:
If the media is lifted up between the attached pieces of tape, the media will not be taken up correctly. We recommend either adding tape and attaching it uniformly or fixing creases at the leading edge of the media.

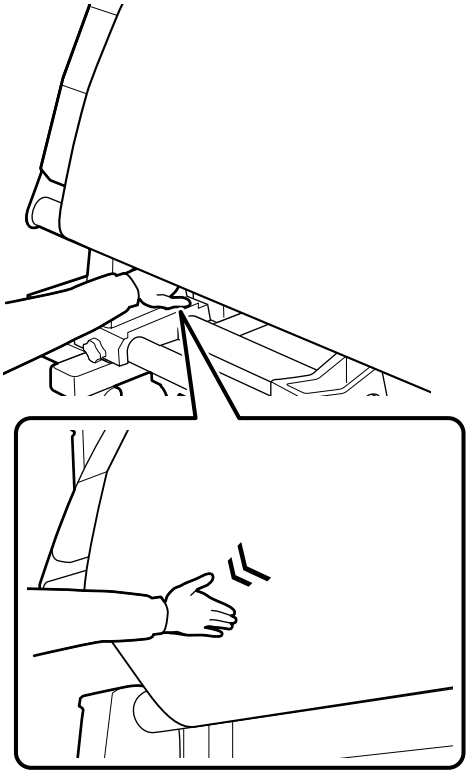
2. Press the ▼ button in the control panel to feed enough media for a single wrap around the roll core.

3. Flip the Manual switch to ↻ to wrap the media once around the roll core.

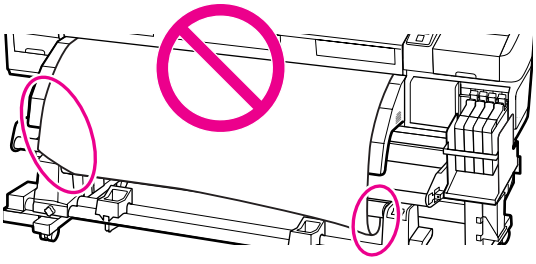


4. Confirm that the media is not loose.

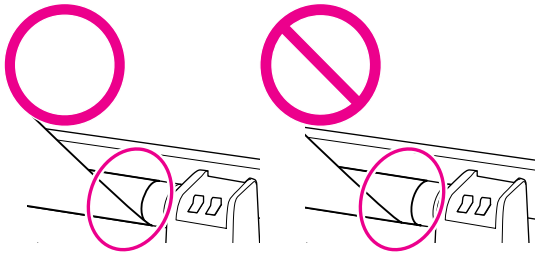
Confirm differences in tension on the right and left by lightly tapping on both edges of the media.



Important:
As shown in the identified sections in the illustration below, if the tension of the left and right edges of the media are different, the media that follows cannot be taken up correctly. If there is slack on one side, flip the Manual switch to to rewind the media, remove the tape, and then restart from Step 1.

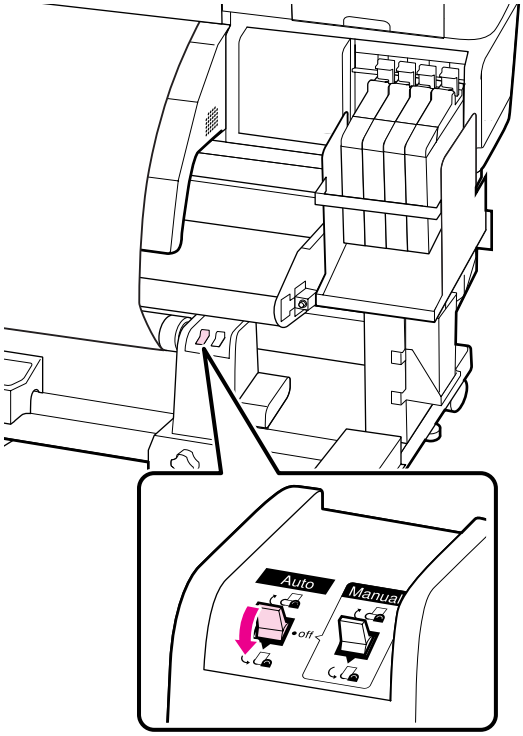


5. Confirm that the edges of media taken up on the roll core are not misaligned.



> ***Important:***
> *If the edges of media taken up on the roll core are misaligned, the media that follows cannot be taken up correctly. When misaligned, rewind the media, remove the tape, and then restart from Step 1.*

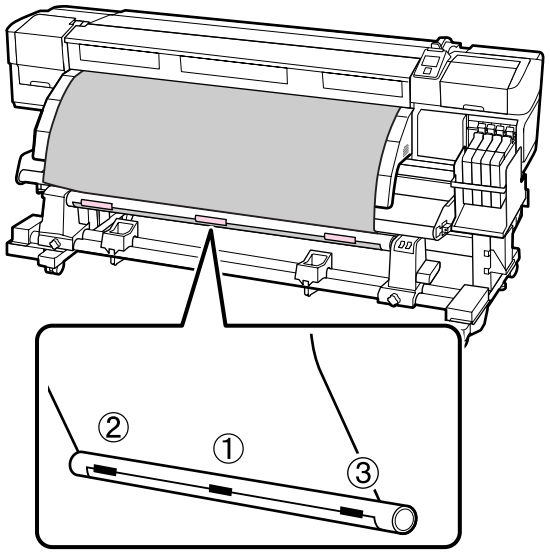
6. Flip the Auto switch to .



Take-Up With the Printed Side Facing In

1. Pass the media under the media guide bar, and then attach the media to the take-up roll core.

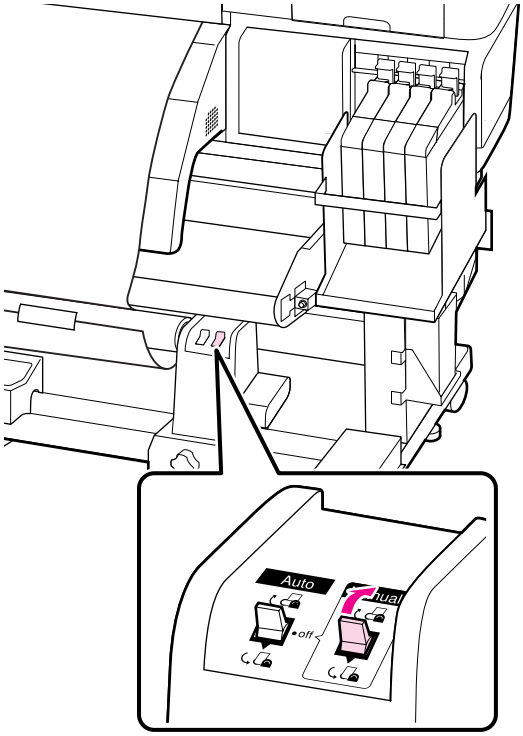
   In the order shown in the illustration, tape the media to the take-up roll core. When attaching in the center, tape while pulling the center of the media straight. When attaching on the left and right, tape while pulling the media sideways.



> ***Important:***
> *If the media is lifted up between the attached pieces of tape, the media will not be taken up correctly. We recommend either adding tape and attaching it uniformly or fixing creases at the leading edge of the media.*

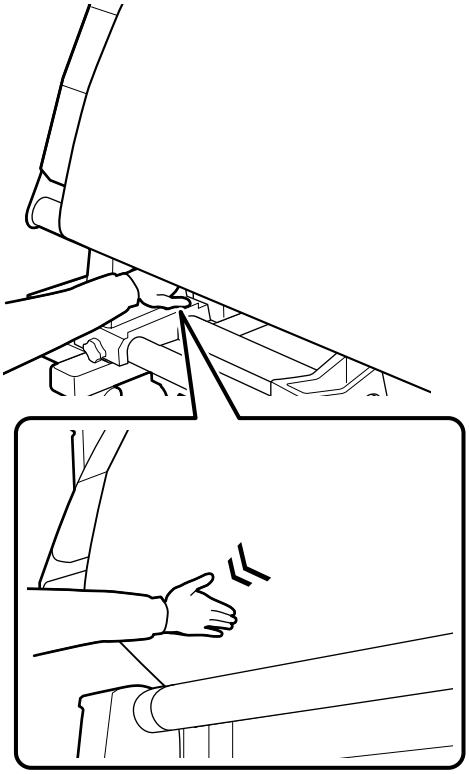
2. Press the ▼ button in the control panel to feed enough media for a single wrap around the roll core.

3. Flip the Manual switch to to wrap the media once around the roll core.

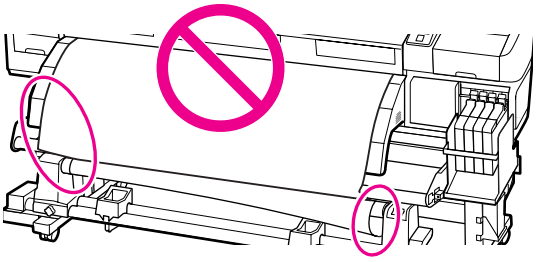


4. Confirm that the media is not loose.

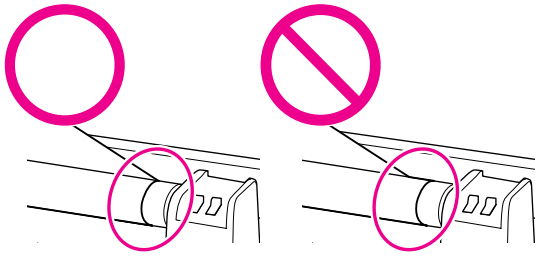
Confirm differences in tension on the right and left by lightly tapping on both edges of the media.



Important:
As shown in the identified sections in the illustration below, if the tensions of the left and right edges of the media are different, the media that follows cannot be taken up correctly. If there is slack on one side, flip the Manual switch to to rewind the media, remove the tape, and then restart from Step 1.

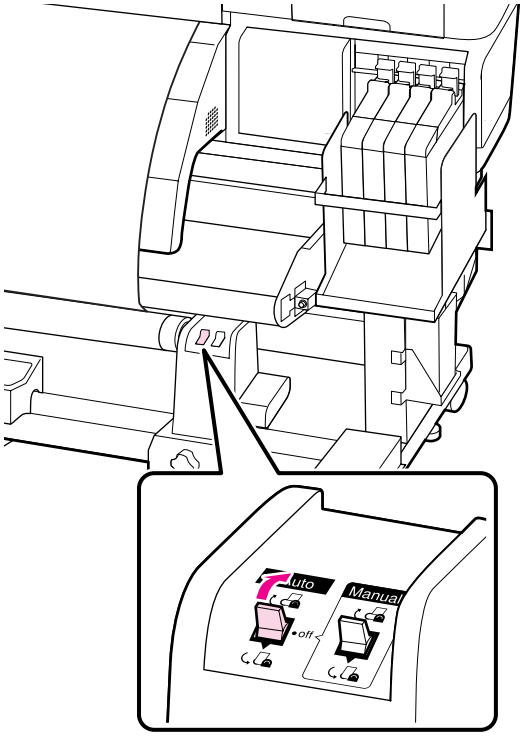


5. Confirm that the edges of media taken up on the roll core are not misaligned.



> ***Important:***
> *If the edges of media taken up on the roll core are misaligned, the media that follows cannot be taken up correctly. When misaligned, rewind the media, remove the tape, and then restart from Step 1.*

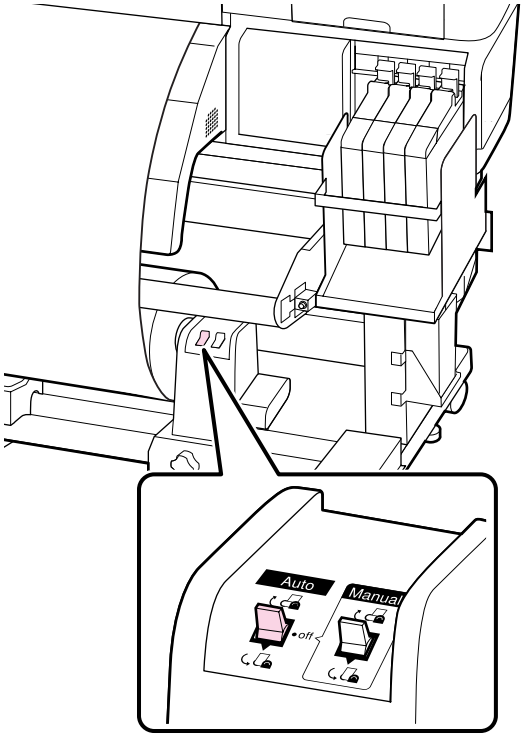
6. Flip the Auto switch to .



Removing the Take-up Roll

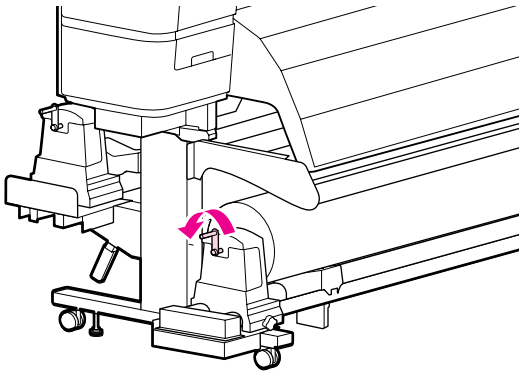
> ***Caution:***
> ❏ *Because the media is heavy, it should not be carried by one person. When loading or removing the media, use at least two persons.*
>
> ❏ *Perform the following procedure to properly remove the take-up roll. Injury may occur if the take-up roll falls.*

1. Set the Auto switch to **Off**.



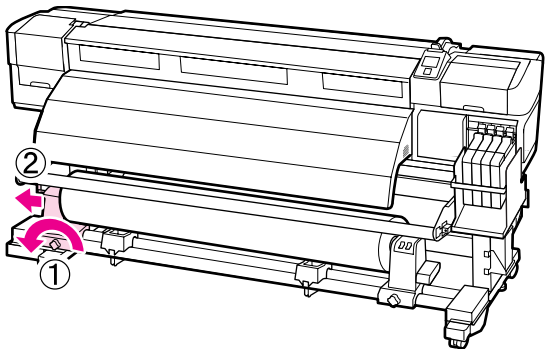
2. Cut the media and roll the cut end onto the take-up reel. See “Cutting Media” on page 46.

3. Rotate the handle of the left roll core holder.

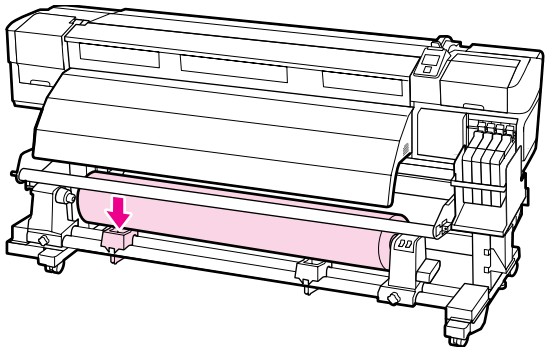


4. To prevent the media from sliding off the roll, support the roll at its left end.

5. Loosen the left roll core holder locking screw and remove the roll core holder from the roll.

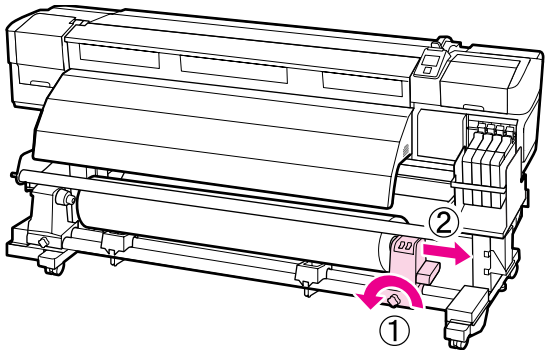


6. Lower the roll onto the roll support.

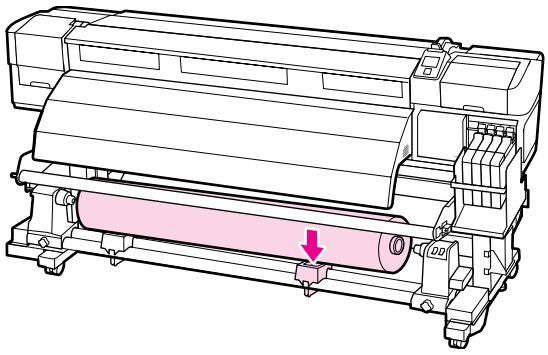


7. To prevent the media from sliding off the roll, support the roll at its right end.

8. Loosen the right roll core holder locking screw and remove the roll core holder from the roll.



9. Lower the roll onto the roll support.



Before Printing

To maintain print quality, perform the following inspection before starting work each day.

❏ Print a check pattern to check for clogged nozzles.

❏ Perform head cleaning if parts of the pattern are faint or missing.

See “Checking for Clogged Nozzles” on page 84.

See “Head Cleaning” on page 86.

Saving Optimal Settings for the Current Media (Print Media Settings)

A variety of media settings can be optimized for the current media and stored in the printer.

Once frequently used settings have been stored in a media setting bank, they can be recalled to instantly optimize multiple parameters.

The printer offers a total of 30 media setting banks.

This section describes how to create media setting banks and the settings that can be stored.

Parameters Stored in Media Setting Banks

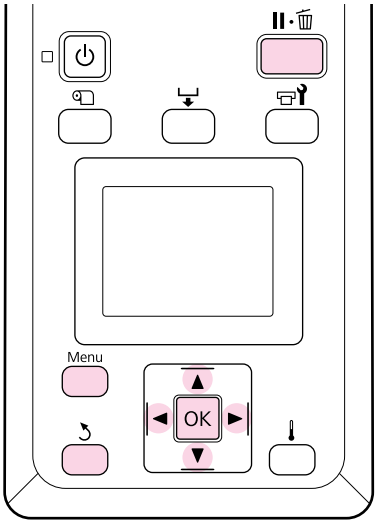
Media setting banks store the following:

- ❏ Setting Name
- ❏ Feed Adjustment
- ❏ Platen Gap
- ❏ Head Alignment
- ❏ Heating & Drying
- ❏ Media Suction
- ❏ Head Movement
- ❏ Multi-Strike Printing
- ❏ Roll Type
- ❏ Tension Measurement
- ❏ Feeding Tension
- ❏ Take-up Tension
- ❏ Feed Speed

For more information on these items, see “The Media Setup Menu” on page 119.

Saving Settings

Follow the steps below to save media settings.



Choosing a Media Setting Bank

1. After confirming that the printer is ready to print, press the **Menu** button.

   The settings menu will be displayed.

2. Select **Media Setup** and press the OK button.

3. Use the ▼/▲ buttons to select **Customize Settings** and press the OK button.

4. Use the ▼/▲ buttons to select a media setting bank number between 1 and 30 and then press the OK button.

   Note that any settings already saved to the printer will be overwritten.

Setting Name

Name the media setting bank. Using distinctive names makes it easier to select banks for use.

1. Select **Setting Name** and press the OK button.

2. Use the ▼/▲ buttons to display letters and symbols. When the desired character is displayed, press the ▶ button to select the next entry position.

   Mistakes can be erased by pressing the ◀ button to delete the previous character and move the cursor back one spot.

3. After entering the name, press the OK button.

Feed Adjustment (manual)

Feed Adjustment is used to correct banding (horizontal banding, lines, or strips of uneven color).

You need to visually inspect prints and enter a correction by hand.

For more information on feed adjustment, see “Feed Adjustment” on page 76.

Platen Gap

Adjust the platen gap (the gap between the print head and the media) if prints are smudged.

1. Use the ▼/▲ buttons to select **Platen Gap** and press the OK button.
2. Use the ▼/▲ buttons to select the desired setting and press the OK button.
3. Press the ↻ button to return to the customize settings menu.

> ***Important:***
> *Select **2.5** only if prints are still smudged when **2.0** is selected. Choosing a larger gap than required may result in ink stains inside the printer, reduced print quality, or shorter product life.*

Head Alignment (manual)

Select **Head Alignment** to correct print head misalignment when prints seem grainy or out of focus.

You need to check the pattern and enter the optimum adjustment value for alignment.

For more information on manual head alignment, see “Correcting Print Misalignment (Head Alignment)” on page 73.

Heating & Drying

Set the temperature of the after heater.

> ***Note:***
> *Adjust Heater Temperature as follows:*
>
> ❏ *Set the heater to the temperatures recommended in the documentation provided with the media, if available.*
>
> ❏ *Raise the temperature if the prints are blurred or smudged or the ink clots. Note, however, that raising the temperature too high can cause the media to shrink, wrinkle, or deteriorate.*

1. Use the ▼/▲ buttons to select **Heating & Drying** and press the OK button.
2. Use the ▼/▲ buttons to select the item you want to change.

Heater Temperature

(1) Select **Heater Temperature** and press the OK button.

(2) Use the ▼/▲ buttons to set the after heater temperature.

Drying Time Per Pass

(1) Use the ▼/▲ buttons to select **Drying Time Per Pass** and press the OK button.

(2) Use the ▼/▲ buttons to set the drying time.

When you want to maintain a constant drying time even when the print width changes, set the following value in accordance with the media width.

A: Drying time (seconds)

Drying Time Guidelines by Media Width

	64	52	44	42	36	24
Drying time in seconds	2.3	2	1.8	1.7	1.6	1.3

Blank Area Feed

(1) Use the ▼/▲ buttons to select **Blank Area Feed** and press the OK button.

(2) Use the ▼/▲ buttons to select the desired setting.

The following section shows the recommended setting values for **Blank Area Feed** according to the number of passes.

Recommended setting values for Blank Area Feed

Number of passes	Blank Area Feed
1	Mode 1
2 to 4	Mode 2
5 to 8	Mode 3

After Heater Feed

(1) Use the ▼/▲ buttons to select **After Heater Feed** and press the OK button.

(2) Use the ▼/▲ buttons to select whether to feed media to the after heater after printing (**On**/**Off**).

3. After finishing the configuration, press the OK button.

4. Press the ↄ button twice to return to the customize settings menu.

Media Suction

While printing, the printer uses suction to provide the pressure needed to maintain the correct distance between the media and the print head; the amount of pressure required varies with the type of media. Less suction is used for thin media that would not print or feed correctly at high levels of suction.

1. Use the ▼/▲ buttons to select **Media Suction** and press the OK button.

2. Use the ▼/ ▲ buttons to choose a value.

3. Select the desired option and press the OK button.

4. Press the ↄ button to return to the customize settings menu.

Head Movement

Choose the range in which the print head moves during printing.

1. Use the ▼/▲ buttons to select **Head Movement** and press the OK button.

2. Use the ▼/▲ buttons to select the desired setting and press the OK button.

   For faster printing, select **Data Width**.

   For even, high-quality printing, select **Printer Full Width**.

Multi-Strike Printing

Choose the number of times each line is printed.

1. Use the ▼/▲ buttons to select **Multi-Strike Printing** and press the OK button.
2. Use the ▼/▲ buttons to choose a value.
3. Select the desired option and press the OK button.
4. Press the ↩ button to return to the customize settings menu.

Roll Type

Choose **Printable Side Out** or **Printable Side In** according to how the media is rolled.

1. Use the ▼/▲ buttons to select **Roll Type** and press the OK button.
2. Use the ▼/▲ buttons to select the desired setting and press the OK button.
3. Select the desired option and press the OK button.

Tension Measurement

Periodically is recommended in most circumstances. Choose **Off** if slack develops in the media or other printing problems occur.

1. Use the ▼/▲ buttons to select **Tension Measurement** and press the OK button.
2. Use the ▼/▲ buttons to select the desired setting and press the OK button.
3. Select the desired option and press the OK button.

Feeding Tension

Feeding Tension has 2 settings: Auto and Manual.

The default setting of **Auto** is recommended in most situations. If creases appear during printing or black bands (dark stripes) appear in the prints, set **Feeding Tension** to **Manual**. We recommend setting **Feeding Tension** to the value below that complies the width of the loaded media.

If other values are used, banding (horizontal banding, lines, or strips of uneven color) or wrinkles may appear in the prints.

Recommended values for Feeding Tension by media width

	64	52	44	42	36	24
Value of Feeding Tension (when Tension Measurement is Periodically/Every Page)	Lv28	Lv23	Lv19	Lv19	Lv16	Lv11

If you have previously performed Feed Adjustment, you will need to perform it again after adjusting Media Tension. See “Feed Adjustment (manual)” on page 67.

1. Use the ▼/▲ buttons to select **Feeding Tension** and press the OK button.

2. Use the ▼/▲ buttons to select the item you want to change.

Selecting Auto

(1) Select **Auto** and press the OK button.

(2) Confirm that the checkbox has been selected and press the OK button.

(3) Press the ↄ button to return to the customize settings menu.

Selecting Manual

(1) Select **Manual** and press the OK button.

(2) Use the ▼/▲ buttons to set the recommended value.

(3) After finishing the configuration, press the OK button.

(4) Press the ↄ button twice to return to the customize settings menu.

Take-up Tension

Take-up Tension has 2 settings: Auto and Manual.

The default setting of **Auto** is recommended in most situations. If creases appear during printing or black bands (dark stripes) appear in the prints, set **Take-up Tension** to **Manual**. When Manual is set, we recommend setting Take-up Tension to Lv3.

If you have previously performed Feed Adjustment, you will need to perform it again after adjusting Take-up Tension. See “Feed Adjustment (manual)” on page 67.

1. Use the ▼/▲ buttons to select **Take-up Tension** and press the OK button.

2. Use the ▼/▲ buttons to select the item you want to change.

Selecting Auto

(1) Select **Auto** and press the OK button.

(2) Confirm that the checkbox has been selected and press the OK button.

(3) Press the ↄ button to return to the customize settings menu.

Selecting Manual

(1) Select **Manual** and press the OK button.

(2) Use the ▼/▲ buttons to set the recommended value.

(3) After finishing the configuration, press the OK button.

(4) Press the ↄ button twice to return to the customize settings menu.

Feed Speed

Choose a slower feed speed if media is creased or torn or sticks together during printing. The lower the value, the slower the speed.

1. Use the ▼/▲ buttons to select **Feed Speed** and press the OK button.
2. Use the ▼/▲ buttons to choose a value.
3. Select the desired option and press the OK button.
4. Press the ↄ button to return to the customize settings menu.

Exiting the Menus

Press ⏸·🗑 to exit the menus.

Changing Heater Settings

Adjust the temperature of the after heater during printing.

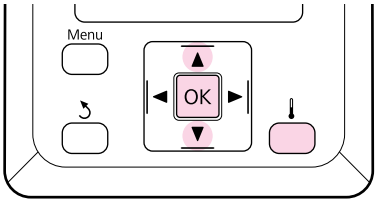
The default Heater Temperature is 55 °C (131 °F).

Heater status can be viewed on the control panel. See “Understanding the Display” on page 18.

Use the following procedure.

Note:

- ❏ *Temperature settings can be stored separately for each media type. See "Saving Optimal Settings for the Current Media (Print Media Settings)" on page 64.*
- ❏ *The time needed for the heaters to reach the specified temperatures varies with the ambient temperature.*



1. After checking that the printer is ready, press the button to display the Heating & Drying menu.
2. Use the ▼/▲ buttons to select the desired option and press the OK button.
3. Choose a value.

Heater Temperature

(1) Set the after heater temperature.

(2) Use the ▼/▲ buttons to choose a temperature.

(3) After finishing the configuration, press the OK button.

Correcting Print Misalignment (Head Alignment)

Given that there is a slight gap between the print head and the media, the landing sites for the different colors of ink may be affected by humidity, temperature, inertial forces imparted by the print head, or the direction of the print head as it moves from right to left or left to right. As a result, prints may appear grainy or out of focus. When this happens, perform **Head Alignment** to correct the print misalignment.

The thickness of the media determines the distance between the media and the print head. **Head Alignment** values can be stored separately for each type of media. Stored values can be recalled instantly the next time the media is used.

In Head Alignment, you can select the following adjustment methods.

❏ Manual(Uni-D)

Select for unidirectional printing.

❏ Manual(Bi-D)

Select for bidirectional printing.

For Head Alignment, you need to check the pattern and enter the optimum adjustment value for alignment.

Notes on correct adjustment:

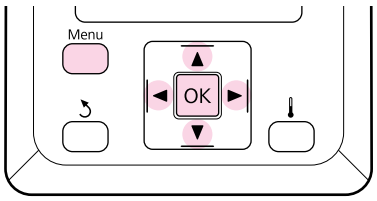
The condition of media is important for correct head alignment.

Observe the following points when loading media.

❏ Head Alignment varies with the media being used. Load and adjust the media that will be used in the actual print job.

❏ Pull the media to the prescribed position before performing Head Alignment. Correct adjustment may not be possible if the media is not pulled sufficiently because the condition of the leading edge of the media may worsen due to waves or other issues.

See “Loading and Exchanging Media” on page 30.



1. Confirm that the media has been pulled to the prescribed position.

   Correct adjustment may not be possible if the media is not pulled sufficiently. See “Loading and Exchanging Media” on page 30.

2. After confirming that the printer is ready to print, press the **Menu** button.

   The settings menu will be displayed.

3. Select **Media Setup** and press the OK button.

4. Use the ▼/▲ buttons to select **Customize Settings** and press the OK button.

5. Use the ▼/▲ buttons to select a media setting bank number between 1 and 30 and then press the OK button.

   Note that any settings already saved in the printer will be overwritten.

6. Use the ▼/▲ buttons to select **Head Alignment** and press the OK button.

7. Use the ▼/▲ buttons to select **Manual(Uni-D)** or **Manual(Bi-D)** and press the OK button.

8. An alignment pattern will be printed.

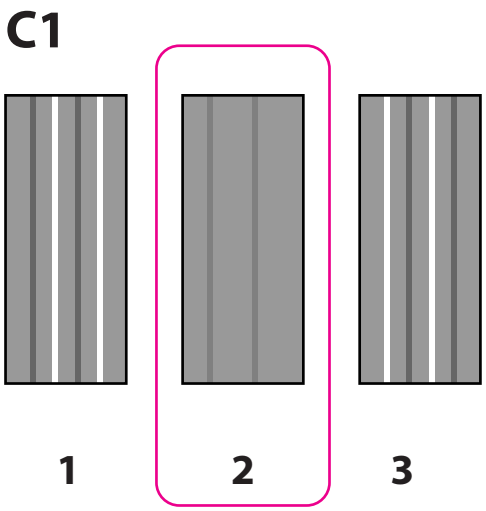
   When printing is complete, the media will automatically be fed to a position where the pattern is clearly visible.

   Cut the media if necessary. See “Cutting Media” on page 46.

> ***Note:***
> *To rewind the media, press the ▲ button. Stop rewinding before the media is past the cutter groove (on the pressure roller side).*
>
> *If the leading edge of the media is curled, stop rewinding before the media reaches the inner side of the front cover.*

9. Check the pattern and select the pattern number that has the least gaps.

   In the following example, this would be pattern number 2.



10. When **C1** is displayed in the control panel, use the ◄/► buttons to select the number recorded in step 9 and press the OK button.

11. Select the numbers for all colors and press the OK button.

> ***Note:***
> *To rewind the media, press the ▲ button. Stop rewinding before the media is past the cutter groove (on the pressure roller side).*
>
> *If the leading edge of the media is curled, stop rewinding before the media reaches the inner side of the front cover.*

12. When the final color has been configured, the printer returns to a ready state.

Feed Adjustment

Feed Adjustment is used to correct banding (horizontal banding, lines, or strips of uneven color).

Two methods are available:

- ❏ Visually inspect prints and enter a correction by hand.
- ❏ Enter a correction during printing and inspect the results.

Notes on correct adjustment:

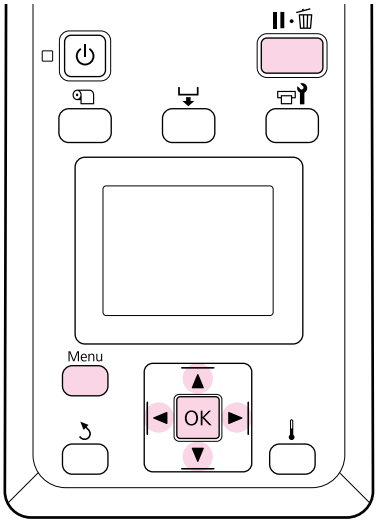
The condition of media is important for correct Feed Adjustment.

Observe the following points when loading media.

- ❏ **Feed Adjustment** varies with the media used. Load the media for which feed adjustment is required under the same conditions as the actual print job. For example, if you are using the Auto Take-up Reel Unit for printing, the Auto Take-up Reel Unit should also be used for feed adjustment.
- ❏ We recommend performing adjustment again in the following cases, even if the media has been adjusted.
  - ❏ When the media type is the same but the width is different.
  - ❏ When the Feeding Tension and Take-up Tension have been changed.
  - ❏ When Media Suction has been changed.
- ❏ Pull the media to the prescribed position before performing Feed Adjustment. Correct adjustment may not be possible if the media is not pulled sufficiently because the condition of the leading edge of the media may worsen due to waves or other issues.

  See “Loading and Exchanging Media” on page 30.

Using a Test Pattern



1. Confirm that the media has been pulled to the prescribed position.

   Correct adjustment may not be possible if the media is not pulled sufficiently. See “Loading and Exchanging Media” on page 30.

2. After confirming that the printer is ready to print, press the **Menu** button.

   The settings menu will be displayed.

3. Select **Media Setup** and press the OK button.

4. Use the ▼/▲ buttons to select **Customize Settings** and press the OK button.

5. Use the ▼/▲ buttons to select a media setting bank number between 1 and 30 and then press the OK button.

   Note that any settings already saved in the printer will be overwritten.

6. Use the ▼/▲ buttons to select **Feed Adjustment** and press the OK button.

7. Select **Manual** and press the OK button.

8. Use the ▼/▲ buttons to select a test pattern and press the OK button twice.

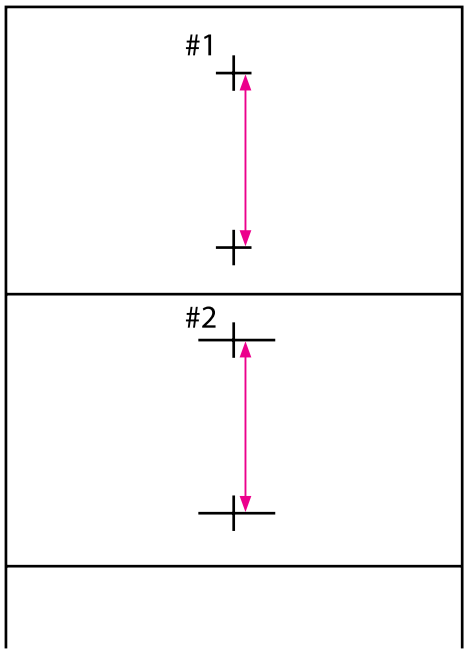
   The longer the pattern, the more accurate the adjustment.

9. The printer will print a test pattern.

   When printing is complete, the media will automatically be fed to a position where the pattern is clearly visible.

10. Using a ruler that shows millimeters, measure the distance between the “+” symbols.

    Use values measured at #1 and #2.

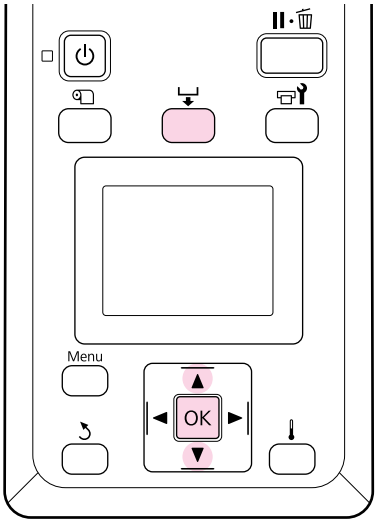


11. Pattern length is displayed on the control panel. Select the values measured in Step 10.

    Use the ◀/▶ buttons to select the number of #1 and press the OK button. Use the ◀/▶ buttons to select the number of #2 and press the OK button.

12. If configuration is finished, the printer returns to a ready state.

Performing Feed Adjustment During Printing



Feed adjustment during printing is recommended for minor banding issues.

1. Press the button during printing.

2. An adjustment value will be displayed. Use the ▼/▲ buttons to select a value.

   If the feed amount is too small, black bands (dark stripes) will appear; adjust the feed amount upwards.

   If, in contrast, the feed amount is too large, white bands (pale stripes) will appear; adjust the feed amount downwards.

3. If you are not satisfied with the results, use the ▼/▲ buttons to enter an adjustment value.

   The Feed Adjustment value of the currently selected media setting is overwritten.

4. Press the OK button when settings are complete.

Printable area

The gray area in the illustration below shows the printable area. The arrow indicates the feed direction.

The positions of items 1 to 2 are as follows:

1 (right edge of media)

On selected for **Media Size Check**: The right edge of the media.

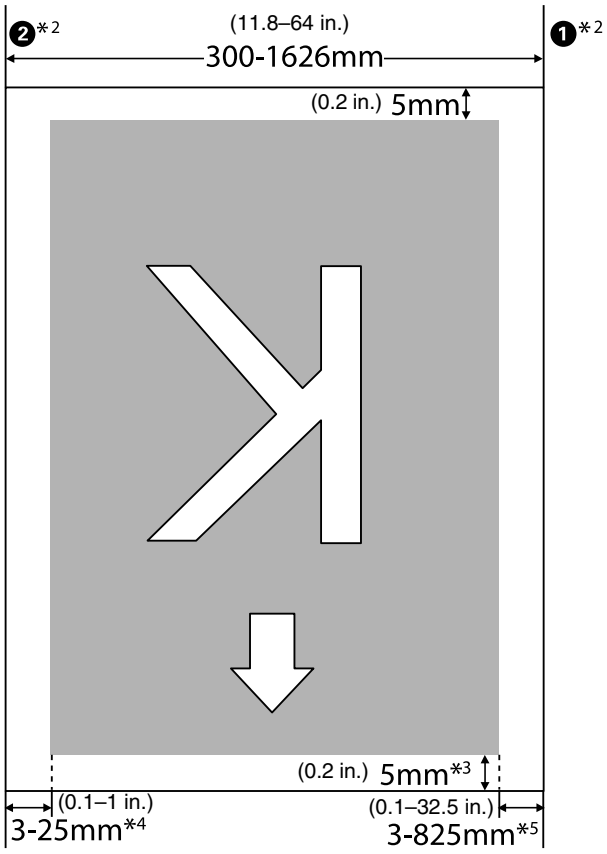
Off selected for **Media Size Check**: Right edge reference position *1

2 (left edge of media)

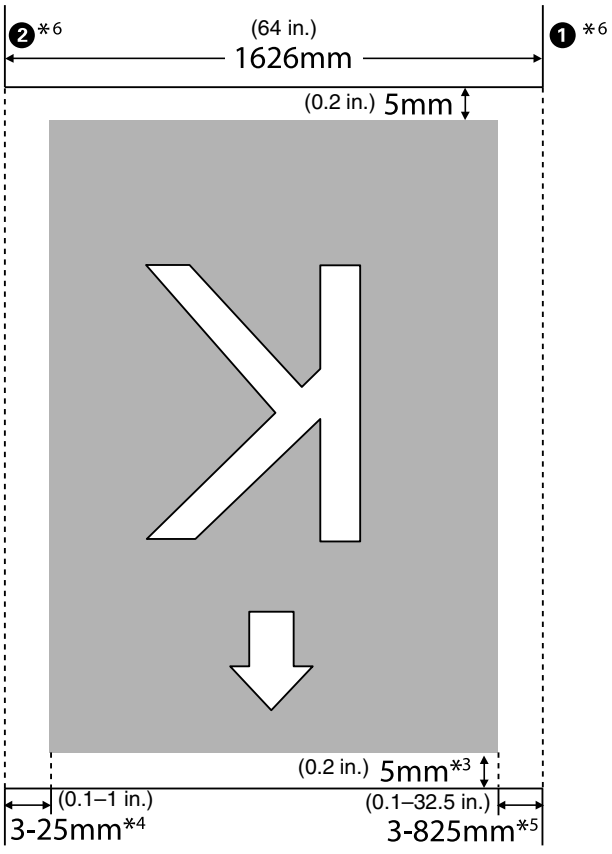
On selected for **Media Size Check**: The left edge of the media.

Off selected for **Media Size Check**: 1626 mm (64 inches) to the left from the right edge reference position

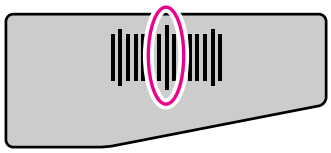
On selected for Media Size Check



Off selected for Media Size Check



*1 The guide for the right edge reference position is the after heater or the longest mark of the label on the eject guide.



*2 When media holding plates are attached, within 5 mm (0.2 inch) of the left and right edges of the media is recognized as the media edge.
For example, if the Side Margin is set to 5 mm (0.2 inch), the actual margin is 10 mm (0.4 inch). Note that if the media holding plates are attached incorrectly, this value fluctuates. See "Loading Media" on page 31.

*3 The value when jobs are printed continuously. Differs by the length the media was pulled when the media is loaded.

*4 The value selected for **Side Margin(Left)** in the setup menu. The default value is 5 mm (0.2 inch).

*5 The total of the values selected for **Print Start Position** and **Side Margin(Right)** in the setup menu. The default settings for **Print Start Position** and **Side Margin(Right)** are 0 mm and 5 mm (0.2 inch).

*6 Leave left and right margins of 10 mm (0.4 inch) or more when using media holding plates. Narrower margins could result in printing over the plates.

Note:

- ❏ *When side margins are configured on both the printer and RIP, this becomes the combined value.*
- ❏ *If the total of the print data width and side margin exceeds the printable area, a portion of the data will not be printed.*
- ❏ *If the following points are not observed when **Media Size Check** is **Off**, printing may occur outside the left and right edges of the media. Ink used outside the edges of the media will stain the inside of the printer.*
  - ❏ *Ensure that the print data width does not exceed the loaded media width.*
  - ❏ *When media is loaded to the left of the right side reference position, align the **Print Start Position** setting with the position where the media set. See "The Printer Setup Menu" on page 124.*

Chapter 3

Maintenance

Daily Maintenance

To maintain print quality, perform the following inspection and cleaning before starting work each day.

Cleaning the Platen, Pressure Rollers, and Media Holding Plates

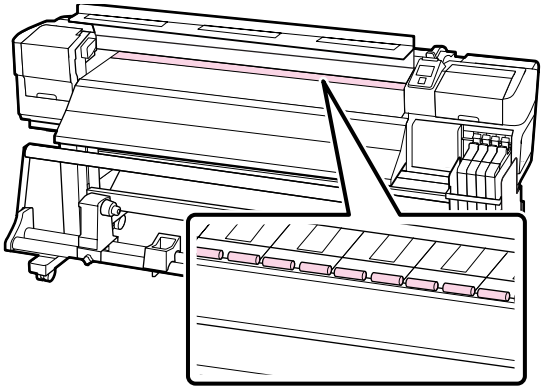
> ***Caution:***
> ❏ *The after heater may be hot; observe all necessary precautions. Failure to observe the necessary precautions could result in burns.*
>
> ❏ *Be careful not to trap your hands or fingers when opening or closing the front cover. Failure to observe this precaution could result in injury.*

Ink and particles of paper and lint from the media accumulate on the platen, pressure rollers, and media holding plates. Ink on these surfaces may be transferred to the media. Clean them thoroughly.

> ***Important:***
> *Continued use with lint, dust, or ink adhering to these surfaces could damage the print head or clog the nozzles.*

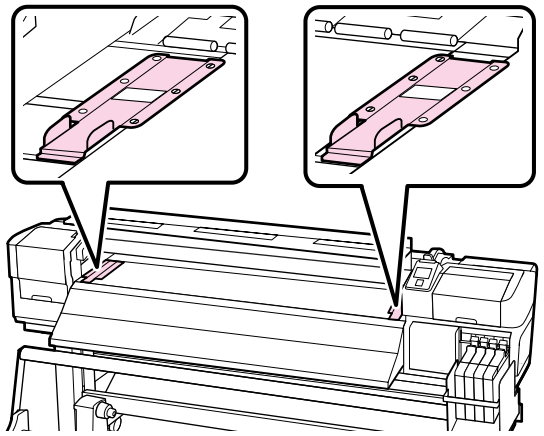
1. Make sure the printer is turned off and the screen has turned off, and then unplug the power cable from the outlet.
2. Wait one minute.
3. Open the front cover.
4. Raise the media loading lever.
5. Clean the pressure rollers.

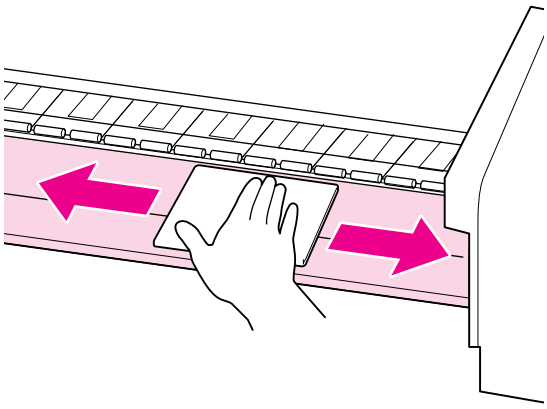
Remove particles of paper and dust from the pressure rollers using a soft-bristled brush.



6. Clean the media holding plates and platen.

   Dampen a soft cloth in water, wring it out thoroughly, and use it to remove lint and dust from the media holding plates on both the left and right sides and from the platen.





Checking for Clogged Nozzles

We recommend that you check the nozzles for clogs each time you print to ensure quality results.

Ways to Check for Clogs

There are two ways to check for clogs.

❏ Print Nozzle Pattern

At specified intervals, the printer prints a test pattern at the start of normal printing. When printing is complete, you can visually inspect the pattern to determine whether there may be faint or missing colors in the preceding or following printout.

See “The Printer Setup Menu” on page 124.

❏ On-Demand Nozzle Pattern

Nozzle patterns can be printed as required and inspected visually to determine whether the nozzles are clogged.

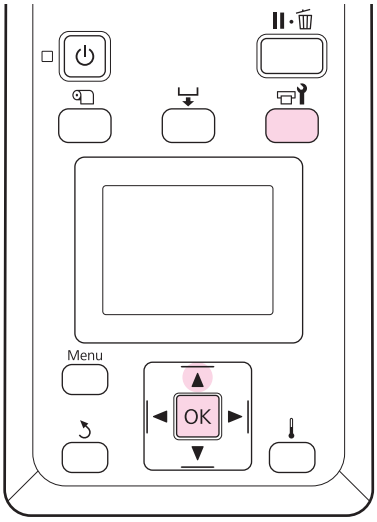
Depending on the width of the loaded media, you can conserve the amount of media used by printing patterns side by side in the margins of a printed pattern.

❏ From 51 inches to less than 64 inches: it is possible to print side by side up to 3 times at the right side, center, and left side.

❏ From 34 inches to less than 51 inches: it is possible to print side by side up to 2 times at the right side and left side.

Note that when the media width is less than 34 inches and Media Size Check is set to Off, it is not possible to print side by side.

This section explains how to print and inspect a check pattern.



1. After confirming that the printer is ready, press the button.

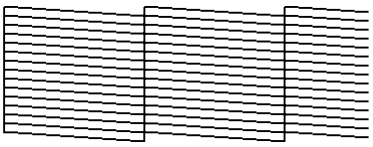
   The Maintenance menu will be displayed.

2. Select **Nozzle Check,** select a print position, and press the OK button.

3. A nozzle pattern will be printed.

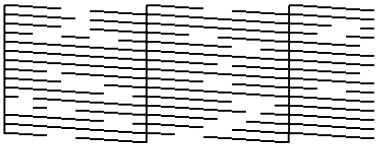
4. Inspect the nozzle pattern.

   Example of clean nozzles:



   The pattern contains no gaps.

   Example of clogged nozzles:



   Perform head cleaning if any segments are missing from the pattern. See “Head Cleaning” on page 86.

Always remove clogs from the nozzles of all colors before resuming use. If clogged nozzles (including clogged nozzles for colors that are not used) remain after resuming use, the clogs can no longer be removed.

5. The menus close when printing is complete.

   If you will use the margin of media on which a check pattern has been printed, use the ▲ button to rewind the media until the Print Start Position reaches the position of the pressure roller.

Head Cleaning

Should the nozzle pattern contain faint or missing segments, you may be able to unclog the nozzles by cleaning the print head as described below.

There is no need to clean the head if the print result does not contain faint areas or other color problems.

You can also clean the head while printing is paused. Note, however, that hues in the printout may change when printing is resumed.

Head Cleaning Level

Choose from three levels of head cleaning.

Select **Execute (Light)** first. If the pattern still contains faint or missing segments after head cleaning has been performed once, try again using **Execute (Medium)** or **Execute (Heavy)**.

> ***Note:***
> *If colors are faint or missing even after head cleaning, perform regular part cleaning. See "Part Cleaning" on page 89.*

Auto Maintenance Options

The printer features handy auto maintenance options for performing regular head cleaning at an interval selected as described below.

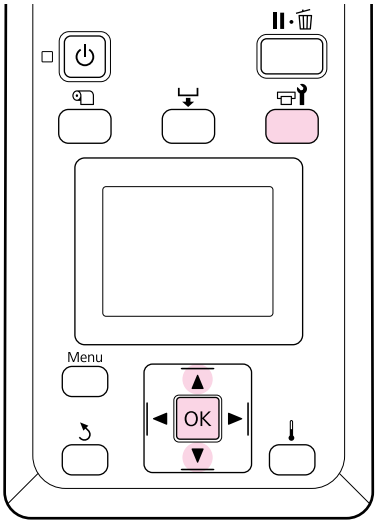
❏ Periodical Cleaning

Head cleaning is performed automatically at selected intervals of 1 to 240 hours. See "The Printer Setup Menu" on page 124.

❏ Cleaning Cycle

Head cleaning is performed automatically at selected intervals of 1 to 10 pages. See “The Printer Setup Menu” on page 124.

This section explains how to clean the head if you find that the nozzles are clogged on printing a test pattern.



1. Pressing the button when the printer is ready to print displays the Maintenance menu.

   Pressing the button when printing is paused takes you to step 3.

2. Use the ▼/▲ buttons to select **Cleaning** and press the OK button.

3. Choose the nozzles to be cleaned.

   All Nozzles

   Choose this option if all patterns in the printed nozzle check results contain faint or missing segments. If you select **All Nozzles**, proceed to step 5.

   Selected Nozzles

   Choose this option if only some of the numbered patterns (nozzle arrays) in the printed nozzle check results contained faint or missing segments. You can select multiple nozzle arrays.

4. Choose the nozzle arrays to be cleaned.

❏ Use the ▼/▲ buttons to choose the nozzle arrays with faint or missing segments in the nozzle check pattern and press the OK button.

❏ After selecting the arrays you wish to clean, select **Proceed** and press the OK button.

5. Select a cleaning level and press the OK button.

   Select Execute (Light) first.

   The menu will close when cleaning is complete. Print a nozzle pattern and inspect the results to determine whether the problem has been resolved. See “Checking for Clogged Nozzles” on page 84.

   If you paused the printer in step 1, printing will resume when head cleaning is complete; check the printout to confirm whether the problem has been resolved.

Maintenance Around the Print Head

The printer requires cleaning and part replacement around the print head to maintain print quality; the maintenance schedule depends on the frequency with which the printer is used.

Failure to perform appropriate maintenance will shorten product life.

Cleaning: Preparation and Notes

What You’ll Need

Ready the following items before beginning part cleaning.

❏ Protective eyeware (not included)

Protects your eyes from ink.

❏ A maintenance kit (supplied with printer)

Contains gloves, cleaning sticks, a wiper, and a wiper cleaner.

Order new maintenance kits once the contents of the supplied maintenance kit are exhausted. See “Options and Consumable Products” on page 162.

❏ A clean room wipe (not included)

A lint-free (non-woven) cleaning cloth. Use to clean around the print head.

❏ A metal or plastic tray made from polypropylene (PP) or polyethylene (PE) (not included)

Used cleaning sticks, wipers, and wiper cleaners taken from the printer can be placed here.

Notes on Cleaning

❏ Remove the media from the printer before proceeding.

❏ Complete the task within 10 minutes to prevent the print head drying out.

An alarm will sound after 10 minutes.

❏ Never touch the belts, circuit boards, or any parts that do not require cleaning.

Failure to observe this precaution could result in malfunction or reduced print quality.

❏ Do not use anything other than a consumable cleaning stick from Epson. Other types of sticks that produce lint will damage the print head.

❏ Always use fresh cleaning sticks. Re-using sticks can make stains even harder to remove.

❏ Do not touch the ends of the sticks. Oil from your hands could damage the print head.

❏ Do not use any liquid. Do not add any cleaning solution, water, or alcohol to the cleaning stick. If water, alcohol, or cleaning solution gets on the nozzle surface, cap, or wiper, this can damage the printer.

❏ Touch a metallic object before starting work to discharge any static electricity.

Part Cleaning

To preserve print quality and ensure good results, clean around the print head as suggested below.

❏ When colors in the printout are faint or missing even after the head has been cleaned.

❏ When the printout is smudged.

Clean the parts in the following order:

(1) Print head

(2) Wiper

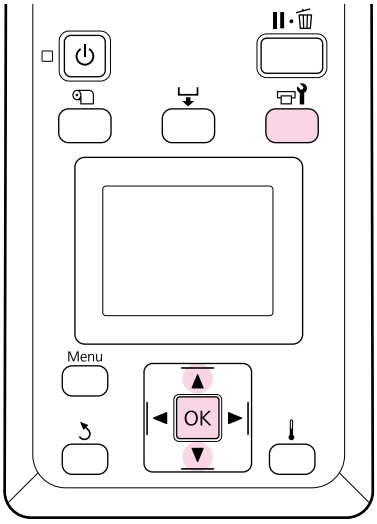
(3) Caps

(4) Wiper rail

Moving the Print Head

This section describes how to position the print head for part cleaning.

> ***Important:***
> *Be sure to follow the steps below when positioning the print head. Moving the print head manually could cause malfunction.*



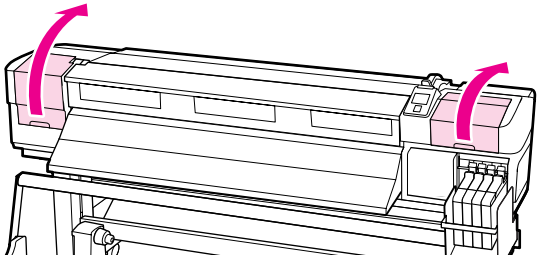
1. Confirm that the printer is on and press ☞.

   The Maintenance menu will be displayed.

2. Use the ▼/▲ buttons to select **Head Maintenance** and press the OK button.

3. Press the OK button to move the print head to the part cleaning position.

4. Open the maintenance covers at each end.



Cleaning Around the Print Head

Inspect the area around the print head and remove any ink stains as described below.

1. Use a cleaning stick to wipe areas 1 and 2.

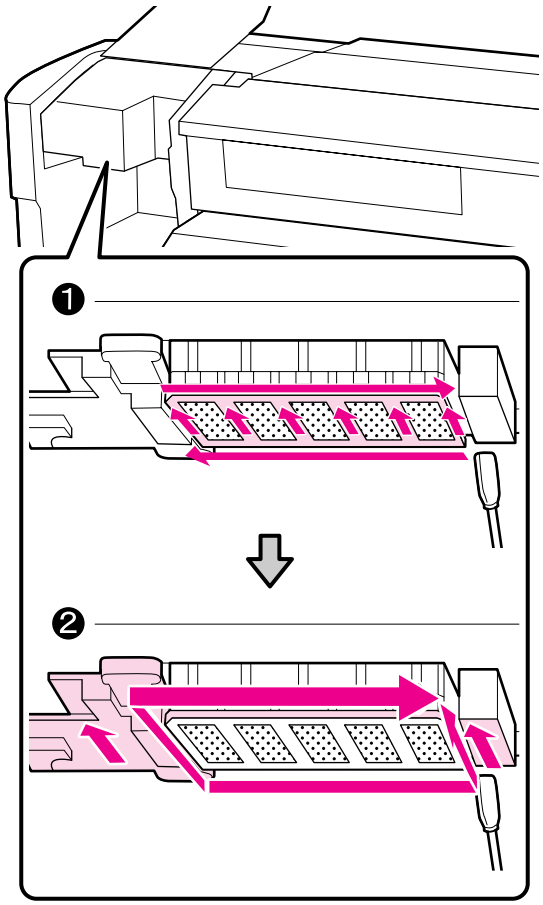
> ***Important:***
> *Be sure to use a narrow cleaning stick to clean between the nozzles (the areas shown in the illustration).* ***Do not touch the nozzle surface. Touching the nozzle surface with the cleaning stick could damage the print head.***

1 Nozzle area:

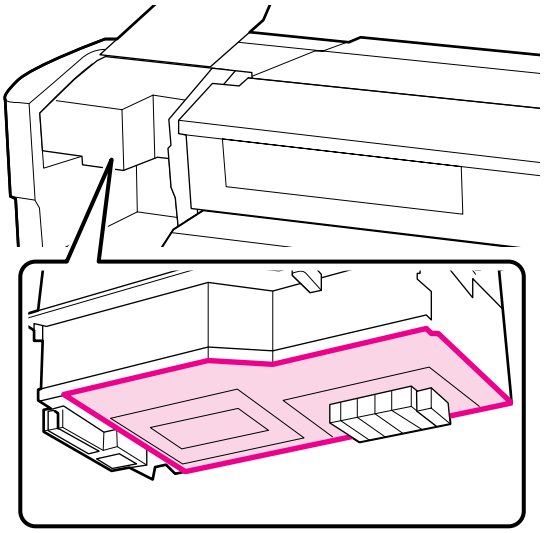
Clean as shown in the illustration.

2 Other areas:

Wipe adhered ink, lint, and dust. When lint or dust is caught, hook it with the tip of a cleaning stick.



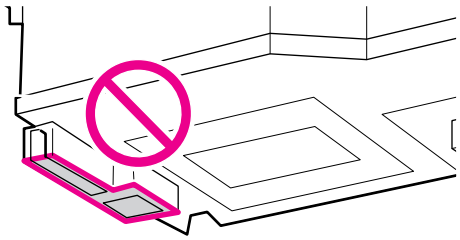
2. Ink spatters on the base of the print head can be removed using a clean room wipe (not included).



Important:

❏ *Be sure not to touch the nozzle surface during cleaning. Failure to observe this precaution could damage the print head.*

❏ *The parts shown below are sensors. Be careful not to touch this area with your hands or clean room wipes. Failure to observe this precaution could affect print quality.*

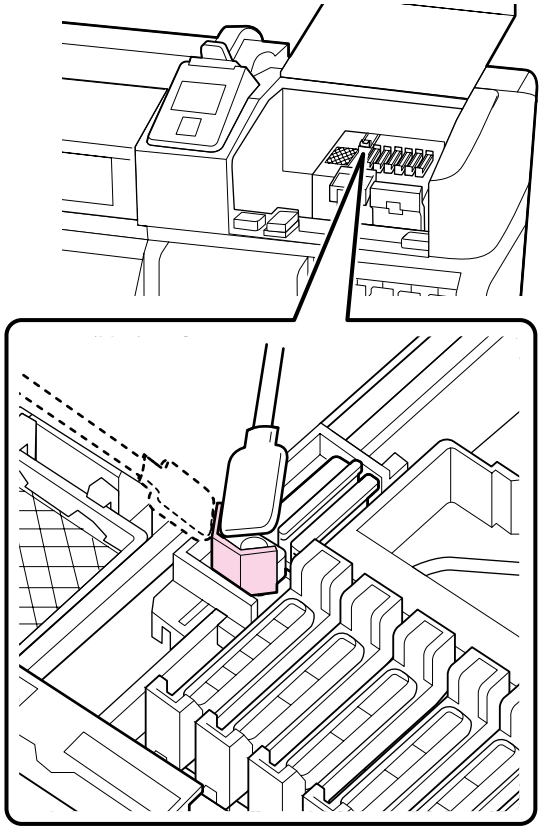


Cleaning the Wiper and Caps

1. Clean the front and back of the wiper with a cleaning stick.

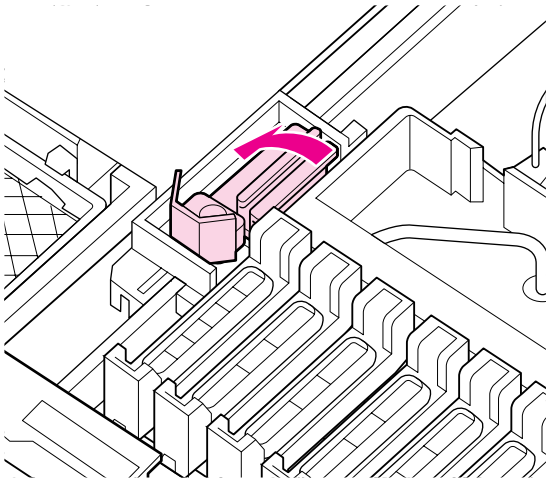
   If the attachment points do not require cleaning, clean the wiper as shown below and proceed to step 7.

If there is ink on the attachment points, remove the wiper for cleaning. Proceed to step 2.

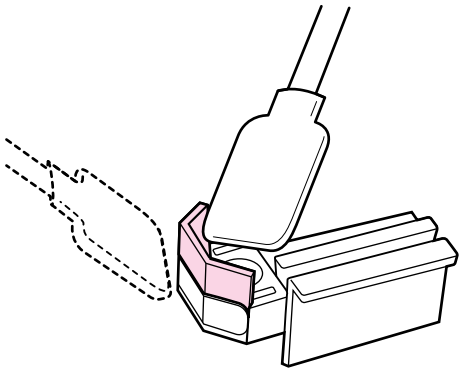


2. Remove the wiper.

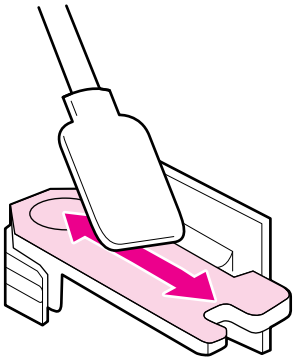
   Holding the wiper by the attachment point, tilt it to the left and lift it out.



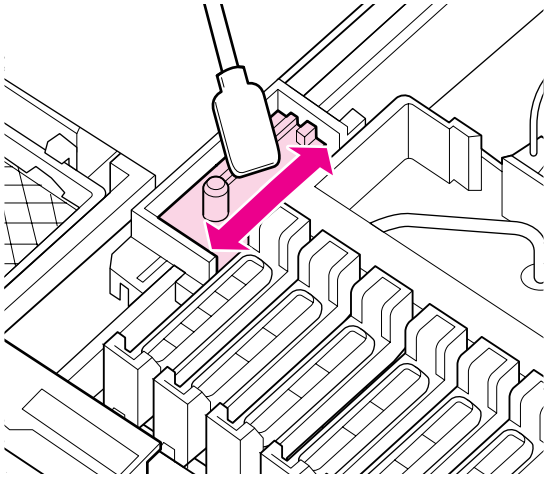
3. Clean the front and back of the wiper with a cleaning stick.



4. Clean the bottom of the wiper with a cleaning stick.

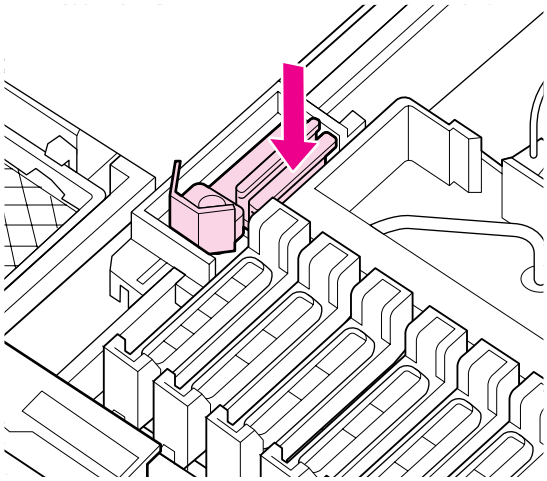


5. Clean the attachment points with a cleaning stick.



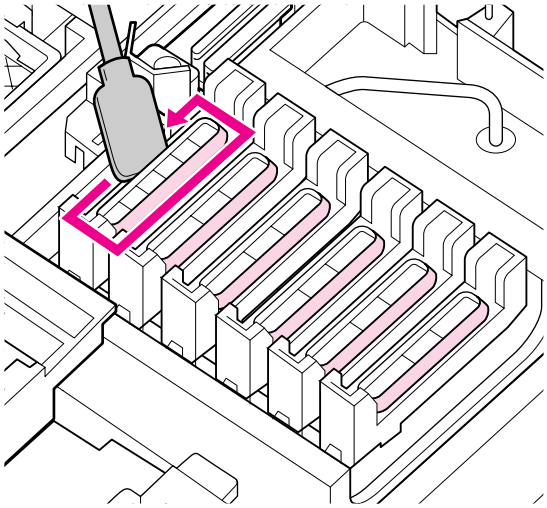
6. Return the wiper when cleaning is complete.

Place the wiper on the attachment point and press it down until it clicks into place.



7. Clean the area around the outside of the caps with a cleaning stick.

> ***Important:***
> *Do not touch the insides of the caps. Failure to observe this precaution could deform the affected parts.*



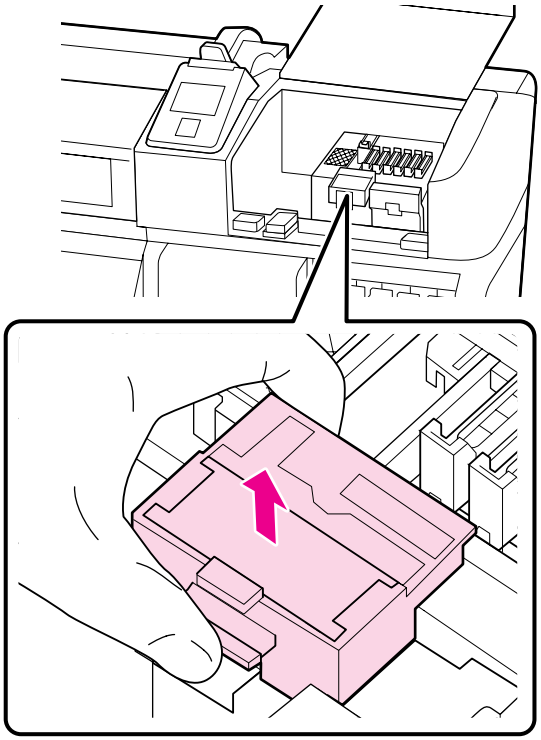
Cleaning the Wiper Rail

> ***Important:***
> *Neglecting to clean the wiper rail can impair the performance of the wiper, causing product malfunction.*

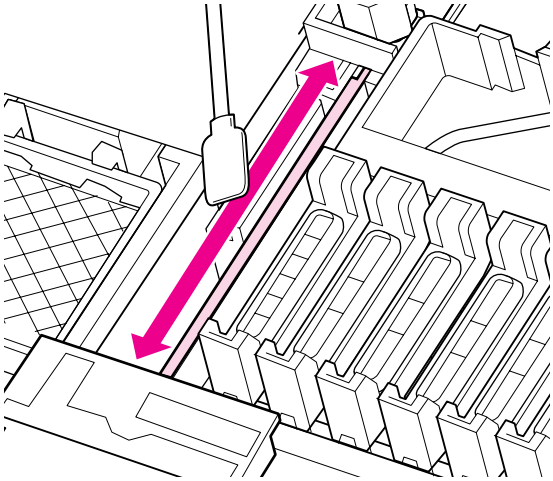
1. When **Press OK after cleaning** is displayed on the control panel, press the OK button to move the wiper to the back.

2. Remove the wiper cleaner.

   Grasp the cleaner as shown and lift it from the printer.

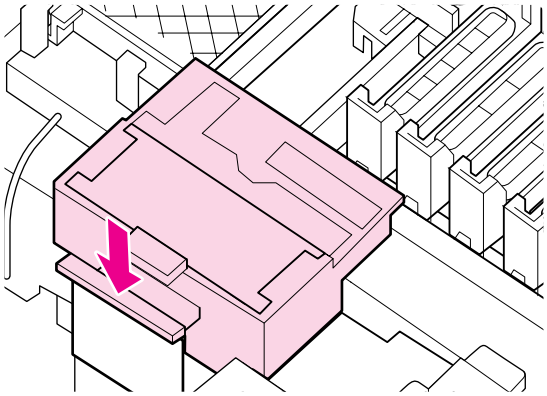


3. Clean the area shown in the illustration.



4. Return the wiper cleaner that was removed in Step 2 to its original position.

Place it on the attachment point and press down until you hear a click.



5. Close both maintenance covers and press the OK button.

   The menus will close when the print head returns to its normal position.

Disposing of Waste Ink

When to Dispose of Waste Ink

Be sure to replace the waste ink bottle when the following message is displayed on the control panel.

❏ Prepare empty waste ink bottle.

❏ Replace waste ink bottle and press OK.

Leave the waste ink in the waste ink bottle for disposal; do not transfer it to another container.

Be sure to read the Safety Data Sheet before a replacement procedure. You can download it from your local Epson Web site.

Caution:

- ❏ *Store waste ink in a location out of reach of children.*
- ❏ *Wear protective eyewear and gloves when replacing waste ink bottle.*
- ❏ *Should waste ink contact your skin or enter your eyes or mouth, immediately take the following actions:*
- ❏ *If fluid adheres to your skin, immediately wash it off using large volumes of soapy water. Consult a physician if the skin appears irritated or is discolored.*
- ❏ *If fluid enters your eyes, rinse immediately with water. Failure to observe this precaution could result in bloodshot eyes or mild inflammation. If problems persist, consult with a physician.*
- ❏ *If fluid enters your mouth, consult with a physician as soon as possible.*
- ❏ *If swallowed, do not induce vomiting. Consult with a physician as soon as possible. If vomiting is induced, vomited material may enter the windpipe, which is dangerous.*

Important:

- ❏ *Never remove the waste ink bottle while the head is being cleaned or a head cleaning operation is in progress. Failure to observe this precaution could cause ink to leak.*
- ❏ *The waste ink from the printer is industrial waste. Proper waste ink disposal in compliance with the industrial waste disposal laws and ordinances of your local government is required. Consign disposal of waste inks to an industrial waste disposer. At this point, please provide the Material Safety Data Sheet (MSDS) to the industrial waste disposer. You can download it from your local Epson website.*

The Waste Ink counter

The printer tracks waste ink and displays a message when the counter reaches the warning level. If you follow the message instructions and replace the waste ink bottle, the waste ink counter is cleared automatically.

If you replace the waste ink bottle before being prompted by a message, run the Waste Ink Counter option in the Maintenance menu after replacement.

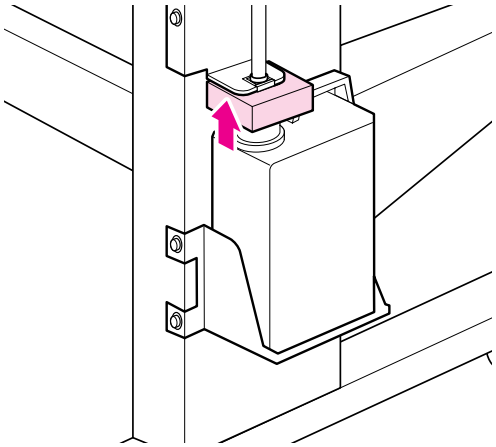
See “The Maintenance Menu” on page 126.

Important:

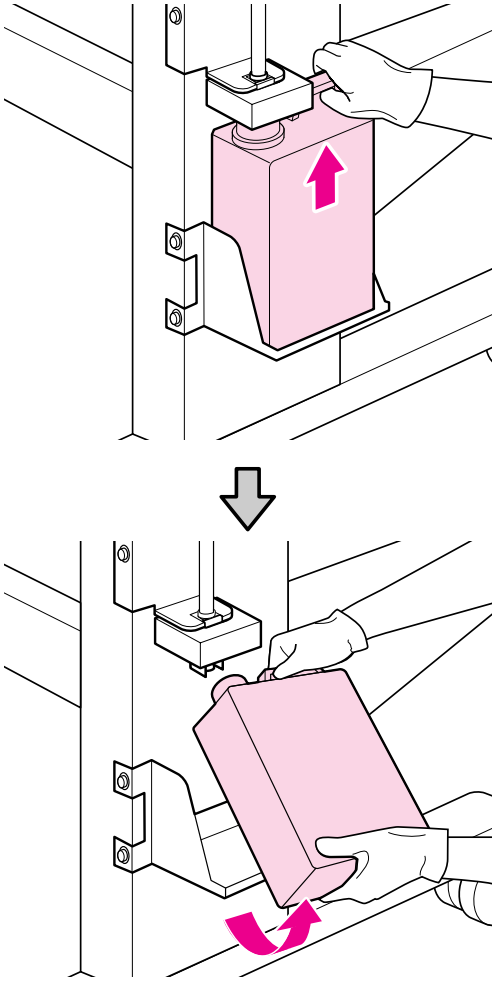
If you replace the waste ink bottle before being prompted by a message, always clear the waste ink counter. Otherwise, the printer will not be able to accurately track the waste ink level.

Replacing the Waste Ink Bottle

1. Raise the stopper.



2. Remove the waste ink bottle from the waste ink bottle holder.



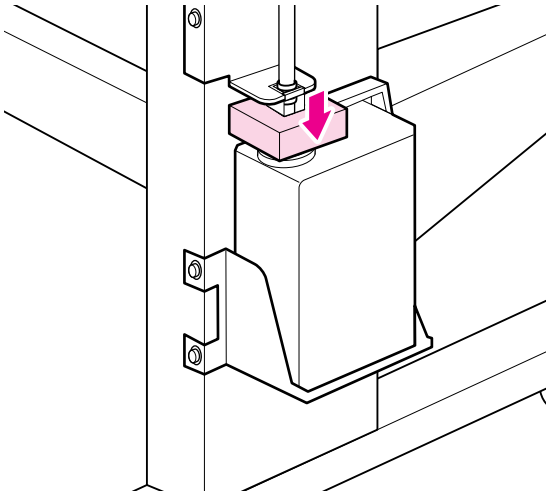
> ***Note:***
> *If the underside of the stopper is stained, wipe it.*

3. Insert the waste ink tube into the mouth of the new waste ink bottle and place the waste ink bottle in the holder.

   Tightly seal the lid on the used waste ink bottle.

> ***Important:***
> ❏ *Be sure to confirm that the waste ink tube is inserted in the mouth of the waste ink bottle. Ink will spill onto the surrounding area if the tube is not inserted in the bottle.*
>
> ❏ *You will need the lid for the waste ink bottle when disposing of waste ink. Keep the lid in a safe place; do not throw it out.*

4. Lower the stopper.



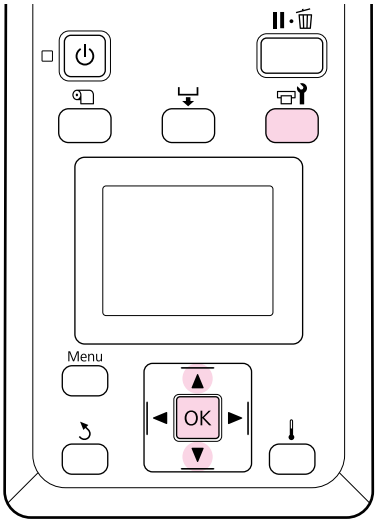
> ***Important:***
> *Confirm that the stopper adheres closely to the mouth of the bottle. If there is a gap, waste ink may splatter and stain the surrounding area.*

5. Press the OK button.

6. Check again to confirm that a fresh waste ink bottle is correctly placed and then press the OK button to reset the waste ink counter.

Replacing the Wiper and Wiper Cleaner

Replace the wiper and wiper cleaner if the printout is faint or smudged or segments are missing even after cleaning.



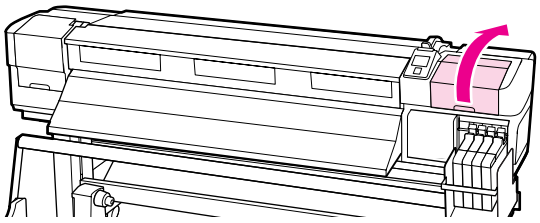
1. Confirm that the printer is on and press .

   The Maintenance menu will be displayed.

2. Use the ▼/▲ buttons to select **Head Maintenance** and press the OK button.

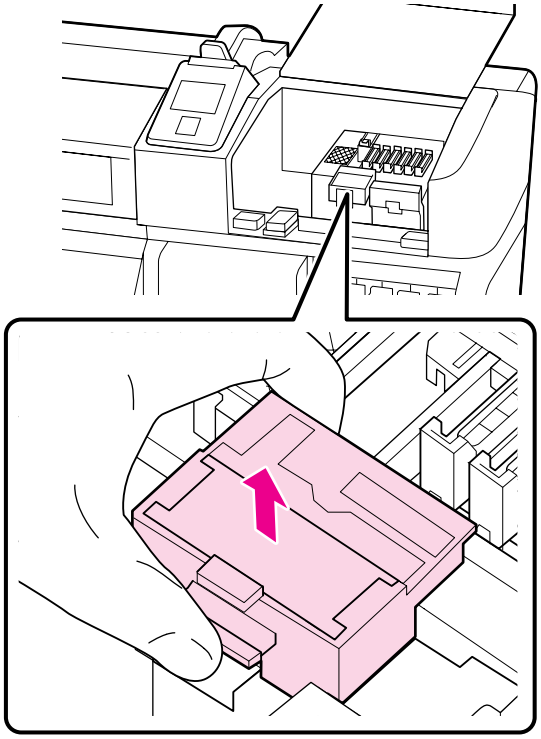
3. Press the OK button to move the print head to the cleaning position.

4. Open the right maintenance cover.



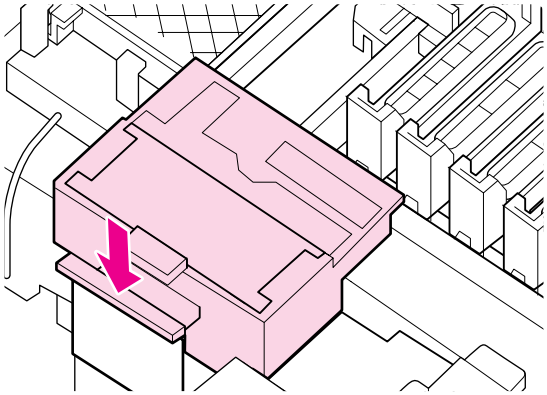
5. Remove the wiper cleaner.

Grasp the cleaner as shown and lift it from the printer.



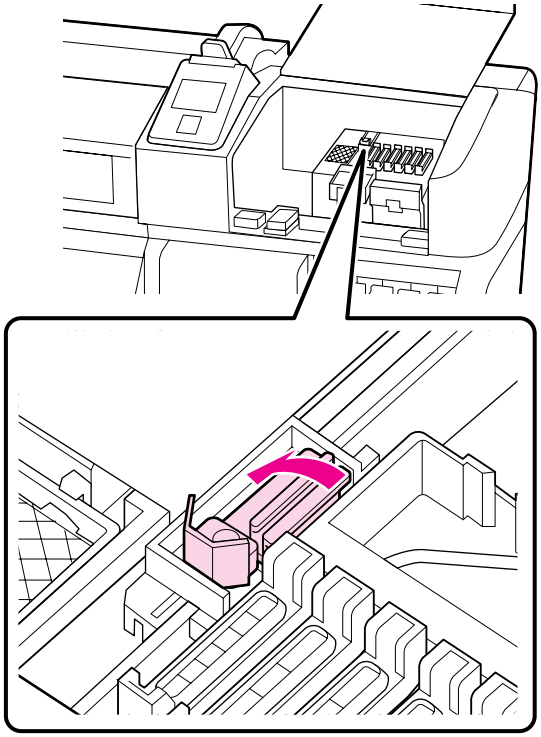
6. Insert a new wiper cleaner.

   Place the wiper cleaner on the attachment point and press down until you hear a click.



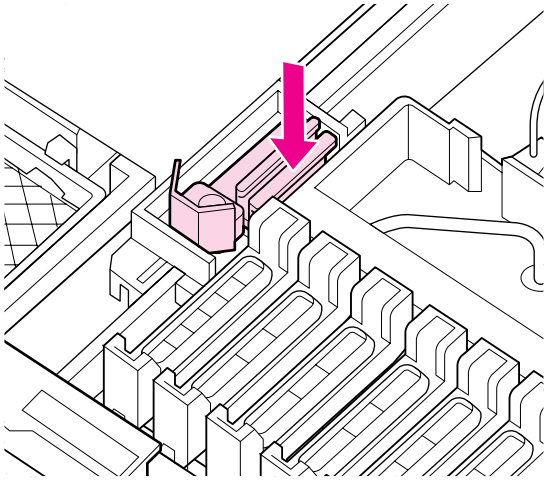
7. Remove the wiper.

Holding the wiper by the attachment point, tilt it left and lift it out.



8. Insert new wiper.

   Remove the cap on the wiping part of the wiper, then place the wiper on the attachment point and press down until you hear a click.



9. Press the OK button when the replacement procedure is complete.

10. Close the maintenance cover and press the OK button.

    The menus will close when the print head returns to its normal position.

Chip Unit Replacement and Ink Refills

Time Period for Chip Unit Replacements and Ink Refills

If the message **Chip unit expended** is displayed on the control panel, this means that the chip unit needs to be replaced soon. Obtain an ink pack of the appropriate color as soon as possible.

You will be unable to print if the chip unit for even one color needs to be replaced. If the **Chip unit expended** message is displayed during a print job, you can replace the chip unit and refill the ink while printing continues.

For information on compatible ink packs, see “Options and Consumable Products” on page 162.

Be sure to read the Safety Data Sheet before a replacement procedure. You can download it at your local Epson website.

Important:
This printer has a remaining ink warning system. Use the following procedure for replacement and ink refills to replace the chip unit and refill the ink correctly.

After the service engineer attaches the ink tank, replace the chip unit and refill the ink when remaining ink is about 70 mm (2.8 inches) from the bottom of the ink tank.

This system does not directly detect the amount of ink remaining in the ink tank. Instead, the amount of ink remaining is estimated based on the ink usage conditions and displayed as a message. To maintain the accuracy of this system, you must replace the chip unit and refill the ink as soon as possible once the remaining ink is 70 mm (2.8 inches) or less from the bottom of the ink tank.

Procedure for Chip Unit Replacement and Ink Refills

You can use the same procedure to replace chip units for all colors.

Caution:

- ❏ *Store ink packs in a location out of reach of children.*
- ❏ *Wear protective eyewear and gloves when refilling ink.*

  Be sure to read the Material Safety Data Sheet (MSDS) before using ink packs. You can download it at your local Epson Web site.

  Should ink contact your skin or enter your eyes or mouth, immediately take the following actions:

  - ❏ *If fluid adheres to your skin, immediately wash it off using large volumes of soapy water. Consult a physician if the skin appears irritated or is discolored.*
  - ❏ *If fluid enters your eyes, rinse immediately with water. Failure to observe this precaution could result in bloodshot eyes or mild inflammation. If problems persist, consult with a physician.*
  - ❏ *If fluid enters your mouth, consult with a physician as soon as possible.*
  - ❏ *If swallowed, do not induce vomiting. Consult with a physician as soon as possible. If vomiting is induced, vomited material may enter the windpipe, which is dangerous.*
- ❏ *Note the following points when refilling ink.*
  - ❏ *Gently cut or tear off the ink pack spout opening.*

    If you cut the ink pack spout too quickly, ink may splatter.
  - ❏ *Do not squeeze open ink packs. Ink may spill.*
  - ❏ *Gently tilt the ink pack when pouring ink into the ink tank.*

Important:

❏ *Epson recommends the use of genuine Epson ink packs.*

Epson cannot guarantee the quality or reliability of non-genuine ink. The use of non-genuine ink may cause damage that is not covered by Epson's warranties, and under certain circumstances, may cause erratic printer behavior.

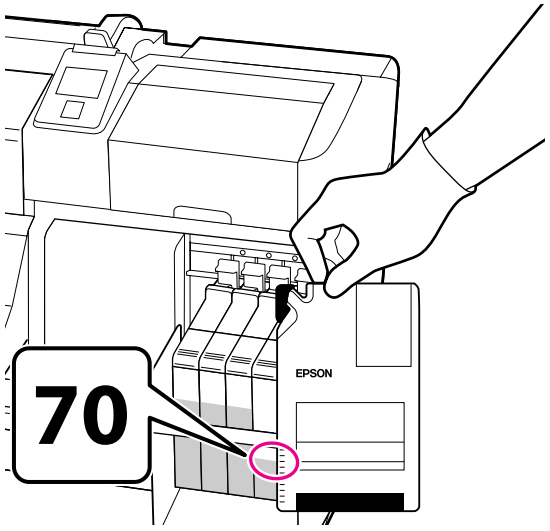
Information about non-genuine chip unit status may not be displayed, and use of non-genuine ink is recorded for possible use in service support.

❏ *Genuine Epson ink packs, other than those specified in this manual, could cause damage that is not covered by Epson's warranties.*

See "Options and Consumable Products" on page 162

❏ *Do not place items on the ink tank or subject the ink tank to strong impacts. Otherwise, the ink tank could become detached.*

1. If the message **Chip unit expended** is displayed on the control panel screen, check the remaining ink in the ink tank using the scale on the ink pack.



If the remaining ink level is greater than 70 mm (2.8 inches) from the base of the ink tank:

We recommend continuing to use the printer until the remaining ink level is 70 mm (2.8 inches) from the base of the ink tank so that you can use all the ink in a new ink pack to refill the ink tank.

If the remaining ink level is 70 mm (2.8 inches) or less:

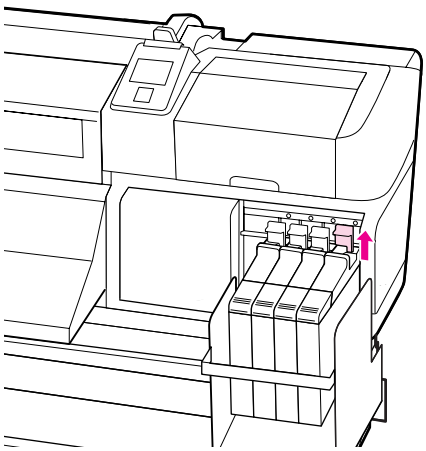
Proceed to step 2.

Important:
When the remaining ink is 70 mm (2.8 inches) or more from the bottom of the ink tank and a message appears stating, ***Refill Ink Tank****, it is time to replace the ink tank. We recommend replacing the ink tank at this time. Replacements and repairs will be provided for a fee.*

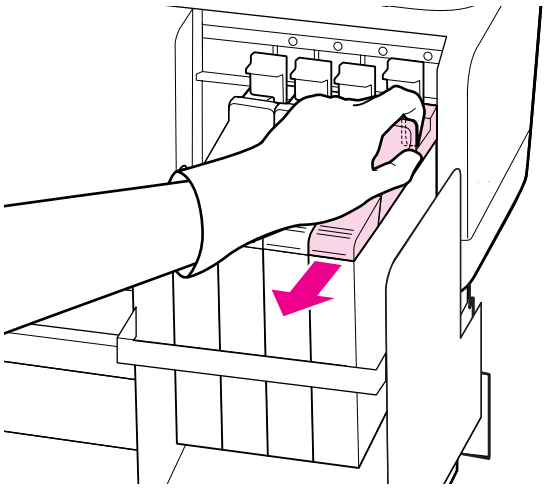
During replacements and repairs, the ink in the ink tank is discarded. This is necessary because fine dirt, dust, and other foreign bodies in the ink cause the ink tank to malfunction.

The ink tank replacement interval depends on the usage environment and conditions.

2. Lift the lock lever for the slider of the chip unit you intend to replace.

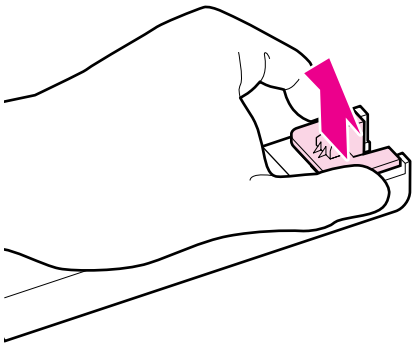


3. Insert a finger into the groove on the top of the slider and pull straight outward.



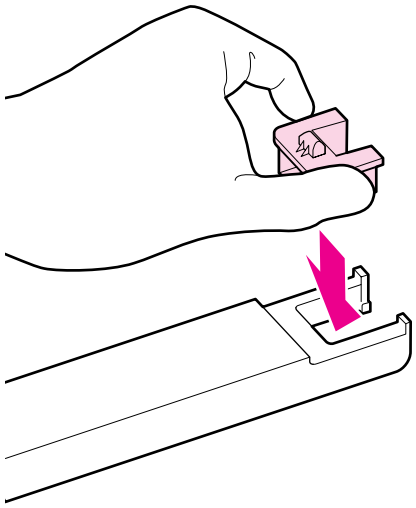
Important:
Do not tilt the slider. If the chip unit is dropped it may break.

4. Remove the chip unit from the slider.

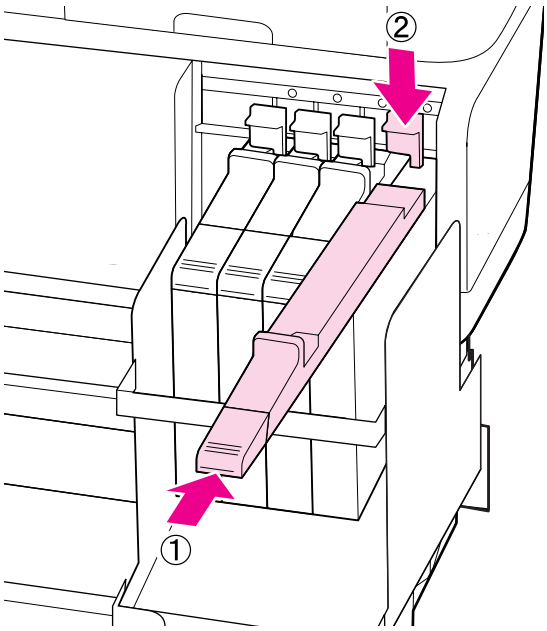


5. Attach the chip unit supplied with the new ink pack to the slider.

   Check to confirm that the color of the label on the slider matches the color of the label on the chip unit when installing.

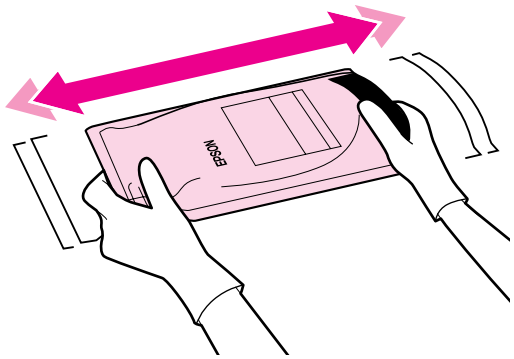


6. Hold the slider level and insert it, then lower the lock lever.

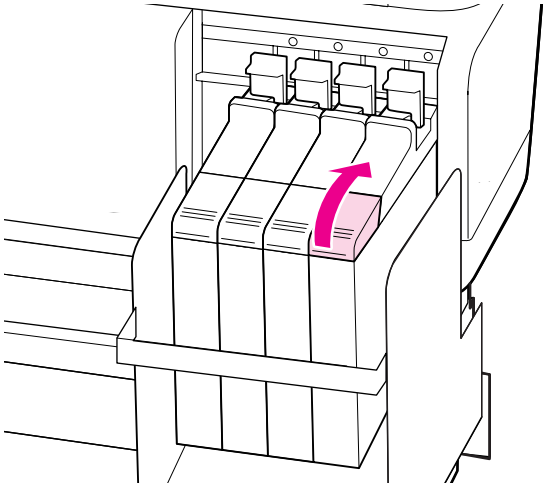


> ***Important:***
> *Do not push the slider in with too much force. Failure to observe this precaution could damage the printer.*

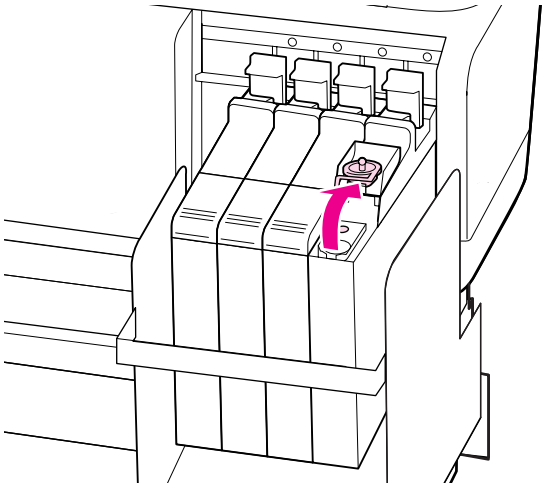
7. Shake the new ink pack horizontally for approximately 5 cm (2 inches) left and right for 5 seconds (approximately 15 times).



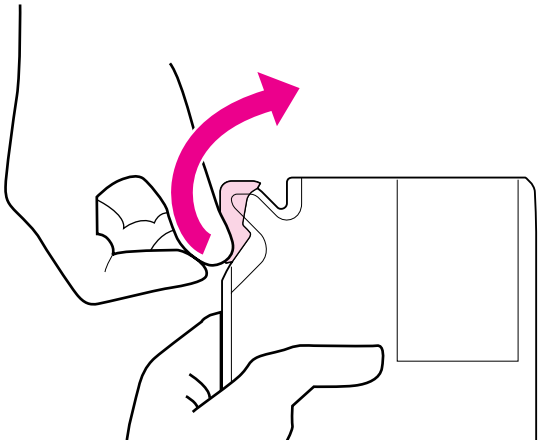
8. Open the slider ink inlet cover.



9. Remove the ink inlet cap from the ink tank.

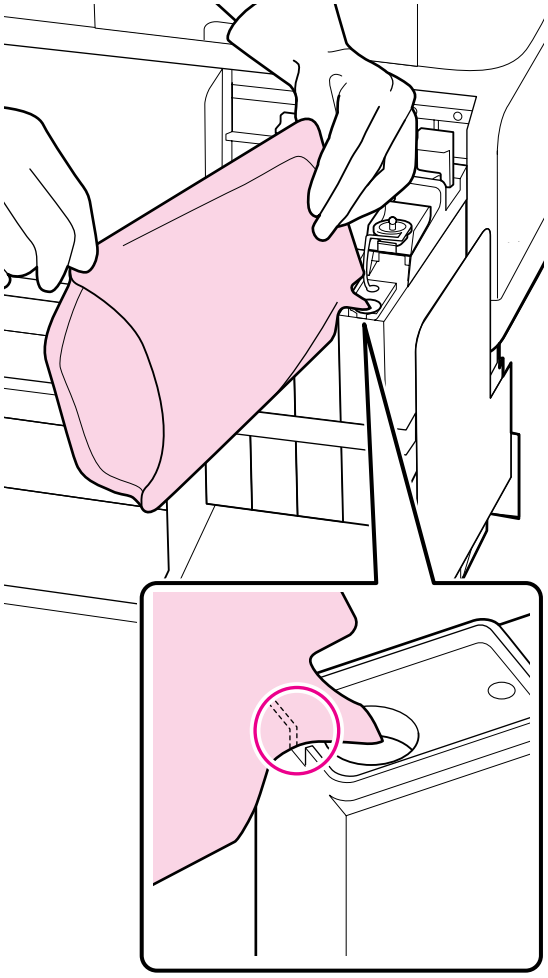


10. Cut or tear off the ink pack spout opening.



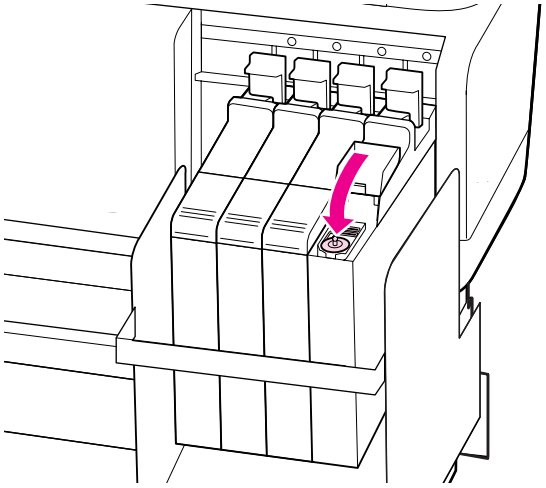
11. Fill the ink tank with the ink from the ink pack.

Insert the spout of the ink pack into the ink tank ink inlet groove and slowly tilt to pour out the ink.

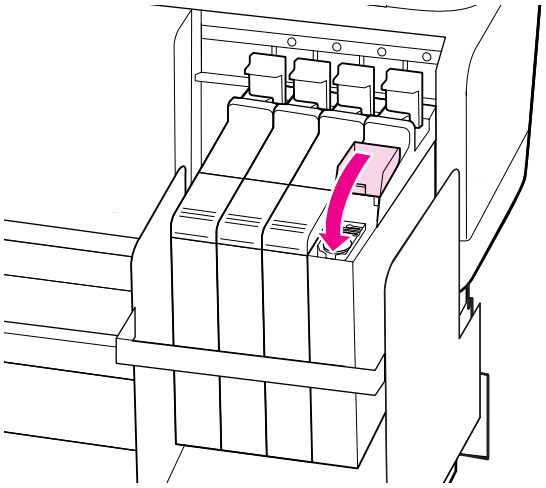


Important:
Get all the ink out of the ink pack so that there is none remaining. Do not use the ink in an ink pack to refill multiple ink tanks. This can prevent the proper display of messages from the remaining ink warning system.

12. Put the ink inlet cap back on the ink tank.



13. Close the slider ink inlet cover.



Disposal of Used Consumables

Dispose of used ink packs and chip units, as well as printed media following local laws and regulations, for example by consigning waste to industrial waste disposer.

Parts That Are Periodically Replaced

The following parts require periodic replacement.

The time until the following parts need to be replaced depends on the conditions of use:

- ❏ Print head
- ❏ Ink holder
- ❏ Damper kit
- ❏ Pump cap
- ❏ Ink supply tank

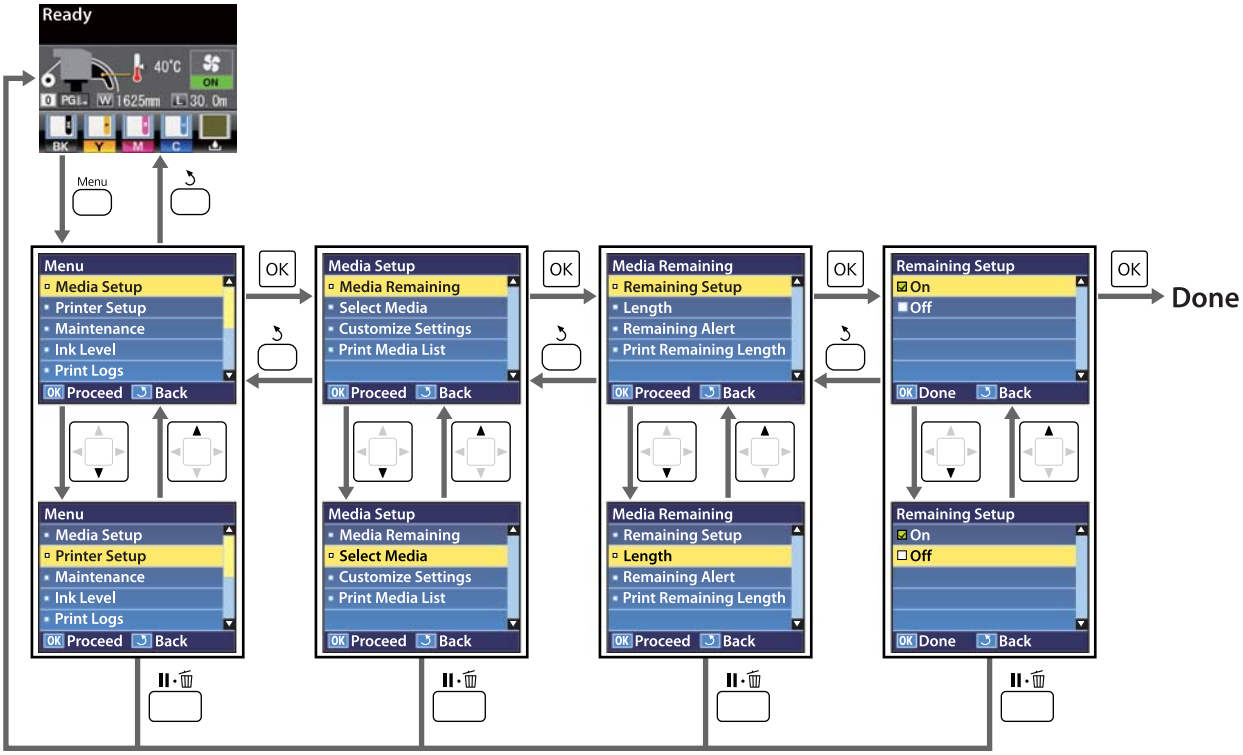
The part life varies with operating conditions. Base the decision to replace the print head on the quality of the prints.

Chapter 4

Using the Control Panel Menu

Menu Operations

The menus are used as shown below.



Menu List

The following items and parameters can be set and executed in the Menu. See the reference pages for more details on each item.

Menu	Item	Parameter
Media Setup See "The Media Setup Menu" on page 119.	Media Remaining	
	Remaining Setup	On, Off
	Length	5.0 to 99.5 m (15 to 300 ft)
	Remaining Alert	1 to 15 m (4 to 50 ft)
	Print Remaining Length	Print
	Select Media	RIP Settings, 1 to 30 (media setting bank number)
	Customize Settings	
	Current Settings	Change settings for currently selected media. The options available depend on whether **RIP Settings** or a media setting bank is selected. More information on the options available can be found below in the entries for RIP settings and media setting banks 1 to 30.
	RIP Settings	
	Platen Gap	1.5, 2.0, 2.5
	Head Alignment	
	Input thickness.	Manual(Uni-D), Manual(Bi-D)
	Roll Type	Printable Side Out, Printable Side In
	Tension Measurement	Periodically, Every Page, Off
	Feeding Tension	
	Auto	-
	Manual	0 to 40
	Take-up Tension	
	Auto	-
	Manual	1 to 6
	Restore Settings	Yes, No

Menu	Item			Parameter
	1 to 30 (media setting bank number)			
		Setting Name		Up to 22 half-size characters
		Feed Adjustment		Manual
		Platen Gap		1.5, 2.0, 2.5
		Head Alignment		Manual(Uni-D), Manual(Bi-D)
		Heating & Drying		
			Heater Temperature	Off, 30 to 55 °C (86 to 131 °F)
			Drying Time Per Pass	0 to 10 sec
			Blank Area Feed	Mode 1, Mode 2, Mode 3
			After Heater Feed	On, Off
		Media Suction		0 to 10
		Head Movement		Data Width, Printer Full Width
		Multi-Strike Printing		Off, 2 to 8
		Roll Type		Printable Side Out, Printable Side In
		Tension Measurement		Periodically, Every page, Off
		Feeding Tension		
			Auto	-
			Manual	0 to 40
		Take-up Tension		
			Auto	-
			Manual	1 to 6
		Feed Speed		1 to 2
		Restore Settings		Yes, No
	Print Media List			Print

Menu	Item	Parameter
Printer Setup See "The Printer Setup Menu" on page 124.	Side Margin(Right)	3 to 25 mm (0.12 to 1.00 inch)
	Side Margin(Left)	3 to 25 mm (0.12 to 1.00 inch)
	Print Start Position	0 to 800 mm (0.00 to 32.00 inches)
	Media Size Check	On, Off
	Media End Check	On, Off
	Media Skew Check	On, Off
	Print Nozzle Pattern	Off, 1 to 10 pages
	Periodical Cleaning	
	Light	Off, 1 to 240 hours
	Medium	
	Heavy	
	Power	
	Cleaning Cycle	Off, 1 to 10 pages
	Heat Off Timer	15 to 240 minutes
	Sleep Mode	15 to 240 minutes
	Restore Settings	Yes, No
Maintenance See "The Maintenance Menu" on page 126.	Nozzle Check	Print (The menu displayed depends on the Media Size Check setting and the width of the loaded media.)
	Print At Right	
	Print At Center	
	Print At Left	
	Cleaning	
	All Nozzles	Execute (Light), Execute (Medium), Execute (Heavy)
	Selected Nozzles	Execute (Light), Execute (Medium), Execute (Heavy)
	Head Maintenance	Move Head
	Waste Ink Counter	-
Print Logs See "The Print Logs Menu" on page 127.	Print Job Log Sheet	Print
	Show Total Prints	XXXXXXm^2 (XXXXXX ft^2)
Printer Status See "The Printer Status Menu" on page 127.	Print Status Sheet	Print
	Firmware Version	XXXXXXX,X_XX,XXXX

Menu	Item	Parameter
Network Setup See "The Network Setup Menu" on page 128.	IP Address Setting	
	Auto	-
	Panel	IP: 000.000.000.000 – 255.255.255.255 SM: 000.000.000.000 – 255.255.255.255 DG: 000.000.000.000 – 255.255.255.255
	Print Status Sheet	Print
	Restore Settings	Yes, No
Preference See "The Preference Menu" on page 128.	Date And Time	MM/DD/YY HH:MM
	Language	Japanese, English, French, Italian, German, Portuguese, Spanish, Dutch, Russian, Korean, Chinese
	Unit: Length	m, ft/in
	Unit: Temperature	°C, °F
	Alert Sound Setting	On, Off
	Alert Lamp Setting	On, Off
Reset All Settings See "The Reset All Settings Menu" on page 129.		Yes, No

Details of the Menu

The Media Setup Menu

The Media Setup menu can be accessed directly by pressing the ⍰ button.

indicates default settings.

Media Remaining

Item	Parameter	Explanation
Remaining Setup	On	Choose **On** to display and record, or **Off** to not display and not record, the amount of media remaining. **Length**, **Remaining Alert**, and **Print Remaining Length** options are available when **On** is selected. The display panel shows the amount of media remaining based on the value selected for **Length** and the amount of media used during printing.
	Off	
Length	1.0 to 999.5 m (3 to 3000 ft)	Enter a value for overall roll length between 1.0 and 999.5 m (3 to 3000 ft). You can set in 0.5 m (1 ft) increments.
Remaining Alert	1 to 15 m (4 to 50 ft)	An alert will be displayed if the amount of media remaining reaches this length. Choose from values between 1 and 15 m (4 and 50 ft). You can set in 0.5 m (1 ft) increments.
Print Remaining Length	Print	Use **Print Remaining Length** to print the amount of media remaining on the current roll before replacing it with another type of media. You can then enter this number as the media length the next time the roll is used.

Select Media

Parameter	Explanation
RIP Settings	Choose the media settings used for printing. If **RIP Settings** is selected, the media settings selected in the software RIP will be used.
1 to 30 (media setting bank number)	Select a number between 1 and 30 to use the settings in the corresponding media setting bank. Use **Customize Settings** to create media setting banks.

Customize Settings

Item	Parameter	Explanation
Current Settings		Change settings for currently selected media. The options available depend on whether **RIP Settings** or a media setting bank is selected. More information on the options available can be found below in the entries for RIP Settings and media setting banks 1 to 30.

RIP Settings

Item	Parameter	Explanation
Platen Gap	1.5 2.0 2.5	Change **Platen Gap** (the gap between the print head and the media) for the media setting bank selected in the software RIP. The default setting of **2.0** is recommended in most situations. Choose **1.5** if print quality is unsatisfactory. Choose **2.5** if printout is scratched or smudged. Choosing a larger gap than required may result in ink stains inside the printer, reduced print quality, or shorter product life.
Head Alignment		
Input thickness	0.1 to 1.0 mm (4 to 40 mil)	Enter a value for media thickness of from 0.1 to 1.0 mm (4 to 40 mil).
Roll Type	Printable Side Out Printable Side In	Choose **Printable Side Out** or **Printable Side In** according to how the media is rolled.
Tension Measurement	Periodically Every page	Choose **Periodically** or **Every page** to have the printer automatically monitor and adjust media tension during printing for optimal results. **Periodically** is recommended in most circumstances. Do not print at the end of a roll. Do not select **Off** for Media End Check. Select **Every page** for more precise tensioning, but note that print times will increase.
Feeding Tension		
Auto	-	**Auto** is recommended in most situations. If **Media Size Check** is not **On** when **Auto** is set, the appropriate tension is not applied because the media width cannot be detected. If **Media Size Check** is **Off**, set **Feeding Tension** to **Manual** and then set the recommended value for the media width. If **Feeding Tension** is set to **Auto** and creases appear during printing or black bands (dark stripes) appear in the prints, set **Feeding Tension** to **Manual**. When **Manual** is set, we recommend setting Feeding Tension to a value that complies with the width of the loaded media. See "Feeding Tension" on page 70 for more information. If other values are used, banding (horizontal banding, lines, or strips of uneven color) or wrinkles may appear in the prints.
Manual	0 to 40	
Take-up Tension		
Auto	-	**Auto** is recommended in most situations. If **Media Size Check** is not **On** when **Auto** is set, the appropriate tension is not applied because the media width cannot be detected. If **Media Size Check** is **Off**, set **Take-up Tension** to **Manual** and then set the recommended value for the media width. If **Take-up Tension** is set to **Auto** and creases appear during printing or black bands (dark stripes) appear in the prints, set **Take-up Tension** to **Manual**. When **Manual** is set, we recommend setting Take-up Tension to Lv3. If other values are used, banding (horizontal banding, lines, or strips of uneven color) or wrinkles may appear in the prints.
Manual	1 to 6	

Item	Parameter	Explanation
Restore Settings	Yes	If **Yes** is selected, the configured RIP Settings are returned to the default settings.
	No	

1 to 30 (media setting bank number)

Item	Parameter	Explanation
Setting Name		Assign the media setting bank a name up to 22 half-size characters long. Using distinctive names makes it easier to select banks for use.
Feed Adjustment	Manual	Use this option if banding (horizontal banding, lines, or strips of uneven color) persists after head cleaning and head alignment have been performed. Visually inspect the printed pattern and enter the adjustment value by hand. See "Feed Adjustment" on page 76.
Platen Gap	1.5	Choose the platen gap (the distance between the print head and the media). The default setting of **2.0** is recommended in most situations. Choose **1.5** if print quality is unsatisfactory. Choose **2.5** if printout is scratched or smudged. Choosing a larger gap than required may result in ink stains inside the printer, reduced print quality, or shorter product life.
	2.0	
	2.5	
Head Alignment	Manual(Uni-D)	Select **Head Alignment** to align print head when prints seem grainy or out of focus. You need to check the pattern and enter the optimum adjustment value for alignment. See "Correcting Print Misalignment (Head Alignment)" on page 73.
	Manual(Bi-D)	
Heating & Drying		
Heater Temperature	Off	The default Heater Temperature is 55 °C (131 °F)
	30 to 55 °C (86 to 131 °F)	
Drying Time Per Pass	0 to 10 sec	Select the time the print head pauses to allow drying after each pass. Choose from values between 0.0 and 10.0 seconds. When you want to maintain a constant drying time even when the print width changes, set the drying time according to the media width. See "Heating & Drying" on page 68 for more information. The time needed for the ink to dry varies with ink density and the media used. If the ink blurs on the media, set a longer time than the recommended value for drying the ink. Increasing the drying time increases the time needed to print.
After Heater Feed	On	Select whether to feed media to the after heater after printing (**On**/**Off**). Select **On** if the media will be cut before the next job starts. Note, however, that the margin will increase.
	Off	
Blank Area Feed	Mode 1	If there is a section without print data (a blank area) during a job, the media is fed quickly. If this mode does not allow the ink to dry sufficiently, see "Heating & Drying" on page 68 and change the mode.
	Mode 2	
	Mode 3	

Item	Parameter	Explanation
Media Suction	0 to 10	Suction is required to maintain the correct distance between the media and the print head; the amount needed varies with the type of media. Excessive suction can increase the gap between the print head and thin or flexible media, potentially reducing print quality or preventing the media feeding normally. In such cases, you will need to lower media suction. The suction power is weakened when the parameter is lowered.
Head Movement	Data Width	Choose the range in which the print head moves during printing. **Data Width** restricts print head movement to the printed area. Restricting the extent of print head movement increases print speed. If **Printer Full Width** is selected, the print head will move the full width of the largest media supported by the printer. Select this option for more even prints with less variation.
	Printer Full Width	
Multi-Strike Printing	Off	Choose the number of times each line is printed.
	2 to 8	
Roll Type	Printable Side Out	Choose **Printable Side Out** or **Printable Side In** according to how the media is rolled.
	Printable Side In	
Tension Measurement	Periodically	Choose **Periodically** or **Every page** to have the printer automatically monitor and adjust media tension during printing for optimal results. **Periodically** is recommended in most circumstances. Do not print at the end of a roll Select **Every page** for more precise tensioning, but note that print times will increase.
	Every page	
Feeding Tension		
Auto	-	**Auto** is recommended in most situations. If **Media Size Check** is not **On** when **Auto** is set, the appropriate tension is not applied because the media width cannot be detected. If **Media Size Check** is **Off**, set **Feeding Tension** to **Manual** and then set the recommended value for the media width. If **Feeding Tension** is set to **Auto** and creases appear during printing or black bands (dark stripes) appear in the prints, set **Feeding Tension** to **Manual**. When **Manual** is set, we recommend setting Feeding Tension to a value that complies with the width of the loaded media. See "Feeding Tension" on page 70 for more information. If other values are used, banding (horizontal banding, lines, or strips of uneven color) or wrinkles may appear in the prints.
Manual	0 to 40	
Take-up Tension		

Item		Parameter	Explanation
	Auto	-	**Auto** is recommended in most situations. If **Media Size Check** is not **On** when **Auto** is set, the appropriate tension is not applied because the media width cannot be detected. If **Media Size Check** is **Off**, set **Take-up Tension** to **Manual** and then set the recommended value for the media width. If **Take-up Tension** is set to **Auto** and creases appear during printing or black bands (dark stripes) appear in the prints, set **Take-up Tension** to **Manual**. When **Manual** is set, we recommend setting Take-up Tension to Lv3. If other values are used, banding (horizontal banding, lines, or strips of uneven color) or wrinkles may appear in the prints.
	Manual	1 to 6	
Feed Speed		1 to 2	Choose a slower feed speed if thin media is creased or torn or sticks together during printing. The lower the value, the slower the speed.
Restore Settings		Yes	If **Yes** is selected, media settings are returned to their default settings.
		No	

Print Media List

Parameter	Explanation
Print	Print the contents of media setting banks 1 to 30.

The Printer Setup Menu

indicates default settings.

Item	Parameter	Explanation
Side Margin(Right)	3 to 25 mm (0.12 to 1.00 inch)	Choose the width of the right margin when media is loaded in the printer. For more information, see "Printable area" on page 80
Side Margin(Left)	3 to 25 mm (0.12 to 1.00 inch)	Choose the width of the left margin when media is loaded in the printer. For more information, see "Printable area" on page 80
Print Start Position	0 to 800 mm (0.00 to 32.00 inch)	Adjust this parameter if you want to print from the near center of the media or if you want to shift the printed area left from the **Side Margin(Right)** setting. The area between the right edge of the media and **Print Start Position** is left blank. If a value is selected for **Side Margin(Right)**, an additional area corresponding to the width selected for **Side Margin(Right)** will be left blank. For more information, see "Printable area" on page 80
Media Size Check	On Off	Choose whether the printer automatically detects (**On**), or does not automatically detect (**Off**), the edges of the media. Try **Off** if the printer displays a **Media Size Error** when the media is correctly loaded. Note, however, that the printer may print beyond the edges of the media when **Off** is selected. Ink used outside the edges of the media will stain the inside of the printer. We generally recommend to operate with this setting set to **On**.
Media End Check	On Off	Choose whether the printer automatically detects (**On**) or does not automatically detect (**Off**), the end of the media. Try **Off** if the printer displays **Media Out** when the media is correctly loaded. We generally recommend to operate with this setting set to **On**.
Media Skew Check	On Off	When skewed media is detected, the printer will either stop printing and display an error (**On**) or continue printing (**Off**). **On** is recommended in most circumstances, as skewed media may cause the printer to jam.
Print Nozzle Pattern	Off 1 to 10 pages	Choose the frequency with which the printer prints a nozzle test pattern: never (**Off**) or once every **1** to **10** pages. Periodic test patterns will not be printed while **Off** is selected. To print a test pattern at the top of every 1 to 10 pages, select an option between **1** and **10**. When printing is complete, you can visually inspect the pattern to determine whether there may be faint or missing colors in the preceding or following printout.
Periodical Cleaning		

Item	Parameter	Explanation
Light Medium Heavy Power	Off/1 to 240 hours	Choose the frequency—never (**Off**) or after **1** to **240** hours—and strength with which the printer performs head cleaning. Periodic head cleaning will not be performed while **Off** is selected. If a value between **1** and **240** hours is selected, auto head cleaning will be performed after the specified number of hours. If printing is in progress or the printer is in sleep mode when the specified time has elapsed, Periodical Cleaning will only be performed after printing is complete or the printer is reactivated. The following reset the timer: Turning the printer on. Choosing another option for this item. Manually performing head cleaning using All Nozzles. Note that even when **Off** is selected for Periodical Cleaning, the printer will automatically clean the print head at a fixed interval after printing to keep the nozzle from clogging.
Cleaning Cycle	Off 1 to 10 pages	Choose the frequency with which the printer performs auto head cleaning: never (**Off**) or once every **1** to **10** pages. The cleaning cycle will not be performed while **Off** is selected. Select **1** to **10** to perform head cleaning before the specified number of pages is printed.
Heat Off Timer	15 to 240 minutes	You can turn off the after heater automatically when no errors are detected and no print jobs are in progress. This option is used to choose the interval before the after heater turns off automatically. The printer will enter sleep mode when the Heat Off Timer expires. In sleep mode, the control panel turns off and the internal motors and other components consume less power. To reactivate the control panel display, press any button in the control panel except the ⏻ button. The control panel display will, however, turn off again if no operations are performed for another 30 seconds under these conditions. The printer and heaters are only fully reactivated when a print job is received, the media loading lever is used, or another operation involving printer hardware is performed.
Sleep Mode	15 to 240 minutes	The printer will enter sleep mode if no errors have occurred, no print jobs have been received, and no actions are performed on the control panel for an extended period of time. This setting selects the amount o time until the printer enters sleep mode.
Restore Settings	Yes No	Select **Yes** to restore all items in the **Printer Setup** menu to their default settings.

The Maintenance Menu

The Maintenance menu can be accessed directly by pressing the ☞ button.

Item	Parameter	Explanation
Nozzle Check	Print	A nozzle pattern will be printed. Inspect the pattern visually and perform head cleaning if you detect faint or missing colors. See "Checking for Clogged Nozzles" on page 84. The menu displayed depends on the Media Size Check setting and the width of the loaded media.
Print At Right		
Print At Center		
Print At Left		
Cleaning		
All Nozzles	Execute (Light)/ Execute (Medium)/ Execute (Heavy)	Note the numbers of patterns that contain faint or missing colors and clean all or selected nozzles. Select **All Nozzles** to clean all nozzles. Choose **Selected Nozzles** to clean only the nozzles in selected arrays. The level of cleaning can be selected from **Execute (Light)**, **Execute (Medium)**, and **Execute (Heavy)**. Select **Execute (Light)** first. If the problem persists after you have used **Execute (Light)**, choose **Execute (Medium)**. If the problem persists after you have used **Execute (Medium)**, choose **Execute (Heavy)**. See "Head Cleaning" on page 86.
Selected Nozzles	Execute (Light)/ Execute (Medium)/ Execute (Heavy)	
Head Maintenance	Move Head	Position the print head for maintenance. Perform such maintenance as cleaning the wiper, caps, and the area around print head only after using this option to position the head for cleaning. Moving the print head manually could cause malfunction. See "Maintenance Around the Print Head" on page 88.
Waste Ink Counter	-	Use this item to reset the waste ink counter after placing a new waste ink bottle. Only reset the counter when replacing the waste ink bottle. Resetting the counter before the waste ink bottle is replaced will result in the printer being unable to accurately track the waste ink level.

The Print Logs Menu

These items are used to track consumables.

Item	Parameter	Explanation
Print Job Log Sheet	Print	You can print the job information saved in the printer (up to 10 jobs). The information includes the media and ink used in each job, making it easier to track the use of consumables. Notes on ink consumption: This is a simple tool for estimating ink consumption for a given print job. EPSON DOES NOT WARRANT ACCURACY. Actual ink consumption varies considerably depending on such factors as software used, firmware version, image printed, print settings, substrate types, frequency of use, temperature, and variations in printer performance and user preferences and practices. Estimates do not account for ink used over the life of the cartridge for ink remaining in the cartridge after the replace cartridge signal. Some Epson printers have multiple tools for estimating cost or ink consumption and not all tools work the same way.
Show Total Prints	XXXXXX m^2 (XXXXXX ft^2)	Select **Show Total Prints** to view the total area of media printed (to a maximum of six figures).

The Printer Status Menu

These items track printer use and settings.

Item	Parameter	Explanation
Print Status Sheet	Print	Print a status sheet showing current printer settings. Use this option to view a variety of information about the printer on a single sheet. Notes on ink consumption: This is a simple tool for estimating the total ink consumption. EPSON DOES NOT WARRANT ACCURACY. Actual ink consumption varies considerably depending on such factors as software used, firmware version, image printed, print settings, substrate types, frequency of use, temperature, and variations in printer performance and user preferences and practices. Estimates do not account for ink used over the life of the cartridge for ink remaining in the cartridge after the replace cartridge signal. Some Epson printers have multiple tools for estimating cost or ink consumption and not all tools work the same way.
Firmware Version	XXXXXXX,X_XX,XXXX	View the printer Firmware Version.

The Network Setup Menu

indicates default settings.

Item	Parameter	Explanation
IP Address Setting		
Auto	-	Choose whether IP addresses are obtained automatically (**Auto**) or manually (**Panel**) using DHCP. If **Panel** is selected, enter an IP address, subnet mask, and default gateway address. Contact your system administrator for detailed information.
Panel	IP: XXX.XXX.XXX.XXX	
	SM: XXX.XXX.XXX.XXX	
	DG: XXX.XXX.XXX.XXX	
Print Status Sheet	Print	Use Print Status Sheet to print the current network status. Use this information for a complete overview of network settings.
Restore Settings	Yes	Select **Yes** to restore all items in the Network Setup menu to their default settings.
	No	

The Preference Menu

indicates default settings.

Item	Parameter	Explanation
Date And Time	MM/DD/YY HH:MM	Set the printer's built-in clock. The time provided by the clock is used when printing logs and status sheets.
Language	Japanese	Select the language used in the control panel display.
	English	
	French	
	Italian	
	German	
	Portuguese	
	Spanish	
	Dutch	
	Russian	
	Korean	
	Chinese	
Unit: Length	m	Choose the units of length used in the control panel display and when printing test patterns.
	ft/in	
Unit: Temperature	°C	Choose the temperature units used in the control panel display.
	°F	

Item	Parameter	Explanation
Alert Sound Setting	On	Enable (**On**) or disable (**Off**) the alarm that sounds when an error occurs. If the alarm is sounding, press the **OK** button to turn it off.
	Off	
Alert Lamp Setting	On	Enable (**On**) or disable (**Off**) the alert lamp that lights when an error occurs.
	Off	

The Reset All Settings Menu

Parameter	Explanation
Yes	Select **Yes** to reset all settings in the Preference menu except **Date And Time**, **Language**, **Unit: Length**, and **Unit: Temperature**.
No	

Chapter 5

Problem Solver

When a Message Is Displayed

If one of the following messages is displayed, read and follow the instructions below.

Messages	What to do
Prepare empty waste ink bottle.	The waste ink bottle is getting full. Ready a new waste ink bottle. See "Options and Consumable Products" on page 162.
Chip Unit Error Chip unit not recognized. Reattach or replace.	Remove and reinsert the chip unit. If the same error still occurs, replace with a new chip unit. See "Chip Unit Replacement and Ink Refills" on page 104. Condensation may have formed inside the tank. Keep at room temperature for at least four hours. See "Notes on Handling Ink Packs and Ink Tanks" on page 26.
Chip Unit Error Chip unit cannot be recognized. Refill after matching ink pack with label?	Use only the chip units from specified Epson ink packs. You cannot use unspecified Epson ink packs. See "Options and Consumable Products" on page 162.
Chip unit expended.	The chip unit is nearing the end of its service life. Obtain an ink pack of the appropriate color as soon as possible. See "Options and Consumable Products" on page 162 and "Notes on Handling Ink Packs and Ink Tanks" on page 26.
Command Error Check print settings on RIP.	Press II·🗑 and select **Job Cancel**. Check that the installed software RIP is compatible with the printer.
F/W Install Error Firmware update failed. Restart the printer.	Turn the printer off, wait for a few minutes, and then turn on the printer again. Use EPSON LFP Remote Panel 2 to update the firmware again. If this message appears on the LCD panel again, contact your dealer or Epson Support.
Take-up Error Flip Auto switch to off and reattach media to roll core. Refer to manual for details.	Media is not correctly attached to the auto take-up reel unit. Flip the Auto switch on the auto take-up reel unit to Off, then flip it back and reattach the media to the auto take-up reel unit. See "Media Loading and Take-Up" on page 48.
Media Size Error Load correct size media.	The media currently loaded is not the correct width. Raise the media loading lever and remove the media. The narrowest width supported by the printer is 300 mm (11.8 inches). Be sure the media is at least 300 mm (11.8 inches) wide. If this message is displayed even though the media is the correct width, the printer may print if **Off** is selected for **Media Size Check**. See "The Printer Setup Menu" on page 124.

When a Maintenance Call/Service Call Occurs

Error messages	What to do
Maintenance Request	A part used in the printer is nearing the end of its service life. Contact your dealer or Epson Support and tell them the maintenance request code. You cannot clear the maintenance request until the part is replaced. A service call occurs if you continue to use the printer.
Call For Service XXXX Error XXXX Power off and then on. If this doesn't work, note the code and call for service.	A call for service occurs when: The power cable is not connected securely An error that cannot be cleared occurs When a call for service has occurred, the printer automatically stops printing. Turn off the printer, disconnect the power cable from the outlet and from the AC inlet on the printer, and then reconnect. Turn on the printer again multiple times. If the same call for service is displayed on the LCD panel, contact Epson Support for assistance. Tell them the call for service code is "XXXX".

Troubleshooting

You cannot print (because the printer does not work)

The printer does not turn on.

■ **Is the power cable plugged into the electrical outlet or the printer?**
Make sure the power cable is securely plugged into the printer.

■ **Is there any problem with the electrical outlet?**
Make sure your outlet works by connecting the power cable for another electric product.

The printer is not communicating with the computer.

■ **Is the cable plugged in properly?**
Make sure the printer's interface cable is securely plugged into the correct terminal of the computer and the printer. Also, make sure the cable is not broken nor bent. If you have a spare cable, try connecting with the spare cable.

■ **Does the interface cable specification match the specifications for the computer?**
Make sure the interface cable specifications match the specifications for the printer and the computer.

See "Specifications Table" on page 175.

■ **When using a USB hub, is it being used correctly?**
In the USB specification, daisy-chains of up to five USB hubs are possible. However, we recommend that you connect the printer to the first hub connected directly to the computer. Depending on the hub you are using, the operation of the printer may become unstable. If this should occur, plug the USB cable directly into your computer's USB port.

■ **Is the USB hub recognized correctly?**
Make sure the USB hub is recognized correctly on the computer. If it has, disconnect the USB hub from the computer and connect the computer directly to the printer. Ask the USB hub manufacturer about USB hub operation.

You cannot print under the network environment.

■ **Are the network settings correct?**
Ask your network administrator for the network settings.

■ **Connect the printer directly to the computer using a USB cable, and then try to print.**
If you can print via USB, there are some problems on the network environment. Ask your system administrator, or refer to the manual for your network system. If you cannot print via USB, see the appropriate section in this *User's Guide*.

The printer has an error.

■ **Confirm if errors have occurred in the printer by checking the lights and messages on the printer's control panel.**
See "Control Panel" on page 16 and "When a Message Is Displayed" on page 130.

The printer sounds like it is printing, but nothing prints

The print head moves, but nothing prints.

■ **Confirm the printer operation.**
Print a test pattern. Test patterns can be printed without connecting the printer to a computer and hence can be used to check printer function and status. See "Checking for Clogged Nozzles" on page 84.

Refer to the following section for information on what to do if the pattern does not print correctly.

■ **Is the message Motor Self Adjustment displayed on the control panel's screen?**
The printer adjusts the internal motor. Wait for a while without turning off the printer.

Test pattern does not print correctly

■ **Perform head cleaning.**
The nozzles may be clogged. Print a test pattern again after performing head cleaning.

See "Head Cleaning" on page 86.

■ **Has the printer been left unused for a long time?**
If the printer has not been used for a long time, the nozzles may have dried up and have been clogged. Steps to take when the printer has not been used for a long time. See "Notes When Not Using the Printer" on page 24.

The prints are not what you expected

Print quality is poor, uneven, too light, or too dark.

■ **Are the print head nozzles clogged?**
If the nozzles are clogged, specific nozzles do not fire ink and the print quality declines. Try printing a test pattern.

See "Checking for Clogged Nozzles" on page 84.

■ **Was Head Alignment performed?**
Select **Head Alignment** to realign the print head when print results seem grainy or out of focus.

See "Correcting Print Misalignment (Head Alignment)" on page 73.

■ **Have you tried Feed Adjustment?**
Large discrepancies in the feed amount cause banding (horizontal banding, lines, or strips of uneven color). Perform Feed Adjustment according to the media used.

See "Feed Adjustment (manual)" on page 67.

■ **Is the after heater temperature appropriate?**
Raise the temperature if the print results are blurred or smudged or the ink clots. Note, however, that raising the temperature too high can cause the media to shrink, wrinkle, or deteriorate.

In addition, the heaters may require some time to reach the desired temperature if the ambient temperature is low. The after heater may also not have the desired effect after reaching the selected temperature if the media is too cold. Allow the media to warm to room temperature before use.

■ **Are you using a genuine Epson ink pack?**
This printer is designed for use with the genuine Epson ink packs specified in this manual. Using any other type of ink pack may result in reduced print quality.

We recommend using only the genuine ink packs specified in this manual.

■ **Are you using an old ink pack?**
The print quality declines when an old ink pack is used. Use a new ink pack. Use all the ink in the ink pack before the date printed on the ink pack.

■ **Are media settings correct?**
Confirm that the media settings in the software RIP or on the printer match the media actually in use.

■ **Is Data Width selected for Head Movement?**
Selecting **Data Width** for **Head Movement** in the setup menu increases print speed but may slightly reduce print quality. For better quality results, select **Printer Full Width** for **Head Movement**. See "The Printer Setup Menu" on page 124.

■ **Have you compared the printing result with the image on the display monitor?**
Since monitors and printers produce colors differently, printed colors will not always match on-screen colors perfectly.

■ **Was a printer cover opened during printing?**
Opening covers during printing causes the print head to stop abruptly, resulting in uneven colors. Do not open the covers while printing is in progress.

The print is not positioned properly on the media.

■ **Is the media loaded correctly and are the margins correct?**
If the media is not loaded correctly, the results may be off center or part of the data may not be printed. Make sure the loading method suits your setup.

You should also check whether the correct options are selected for **Side Margin** and **Print Start Position** in the setup menu.

See "Loading Media" on page 31 and "The Printer Setup Menu" on page 124.

■ **Is the media skewed?**
If **Off** is selected for **Media Skew Check** in the setup menu, printing will continue when the media is skewed and data will appear outside the print area. Set **Media Skew Check** to **On** in the Menu.

See "The Printer Setup Menu" on page 124.

■ **Is the media wide enough for the print data?**
Although printing normally stops if the print image is wider than the media, data will be printed beyond the edges of the media if **Off** is selected for **Media Size Check** in the setup menu. Choose **On** for **Media Size Check** in the setup menu.

See "The Printer Setup Menu" on page 124.

Vertical ruled lines are misaligned.

■ **Is the print head misaligned? (in bidirectional printing)**
With bidirectional printing, the print head prints while moving left and right. If the print head is misaligned, ruled lines may be misaligned accordingly. If vertical ruled lines are misaligned with bidirectional printing, perform a Head Alignment.

See "Correcting Print Misalignment (Head Alignment)" on page 73.

The printed surface is scuffed or soiled.

■ **Is the media too thick or too thin?**
Check media specifications to confirm that it is compatible with the printer. If you are using a software RIP, contact the manufacturer for information on the settings and media that can be used.

■ **Is the media wavy?**
Certain types of media may develop waves under some conditions (humidity and temperature) while installed in the printer. If a wave has developed, press the ▼ button in the control panel to feed the media and avoid the affected area. We recommend that you lower the temperature and humidity to prevent waves developing.

■ **Is the media creased or folded?**
Media that is creased or folded may rise from the platen and contact the print head, resulting in smudges or uneven colors.

■ **Are the wiper, caps, or print head stained?**
Ink clots or lint around the wiper, caps, or print head may result in stains caused by a build-up of ink. Clean the affected area.

See "Maintenance Around the Print Head" on page 88.

■ **Is the print head striking the printed surface?**
Smear caused by the print head striking the media can be prevented by adjusting the **Platen Gap** to suit the media.

See "Platen Gap" on page 67 or "Feeding Tension" on page 70.

Ink drops



■ **Is media being handled appropriately?**
If the following points are not observed when handling media, small amounts of dust and lint may stick to the media surface and cause in ink drops in the print results.

Do not place exposed media directly on the floor.

Media should be rewound and inserted in its original packaging for storage.

Do not carry media with the media surface pressed against clothing.

Handle media in its indivdual packaging until just before loading the media in the printer.

Horizontal lines or strips of uneven color (banding)



Multiple causes are possible.

Perform the following sequence until the print results have improved.

Before starting work, always perform a nozzle check and Head Alignment. If nozzles are clogged or the head is misaligned, no measures will result in improvements. See “Checking for Clogged Nozzles” on page 84 and “Correcting Print Misalignment (Head Alignment)” on page 73.

1. Check the attachment of the media holding plates.

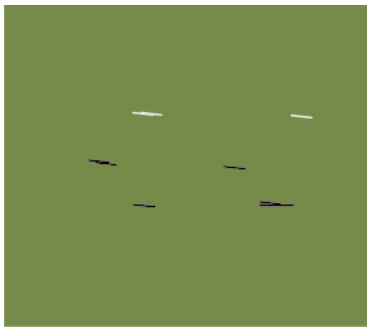
   If a media holding plate is not installed correctly, media feeding may be disturbed. See the following reference and reattach the media holding plates. See “Loading and Exchanging Media” on page 30.

   If installing the media holding plate correctly still does not resolve the problem, perform the following measure.

2. Perform Feed Adjustment.

   Feed adjustment may be required independently depending on the media used. If the roll width is different, independent adjustment is required even with the same media. For more accurate adjustment, print a test pattern using the following settings: **Manual - 500mm Pattern**. See “Feed Adjustment” on page 76.

Stains due to head striking



The media and print head are contacting during printing.

Perform the following sequence until the print results have improved.

1. Cut sections of media with wrinkles or waviness.

   If media is stored inappropriately or left loaded in the printer, wrinkles and waviness may occur. If media is used in this state, the print head and the raised surface of the media may contact and cause staining. Cut sections with wrinkles or waviness before using media.

   Furthermore, store media as described in the manual accompanying the printer and load media in the printer just before printing.

   If the problem is not resolved even when printing on sections without wrinkles or waviness, perform the following measure.

2. Load the media in the printer correctly and configuring the media settings appropriately

   If the media loading method, heating temperature, tension, suction and other settings are inappropriate, wrinkles and waviness occur on the media. Make sure the loading method and settings are correct. See “Loading and Exchanging Media” on page 30.

   If the measures above do not resolve the problem, perform the following measure.

3. Check that the media is loaded correctly in the auto take-up reel unit

   If the method to attach the media to the take up roll core is inappropriate, media may move around during take-up, which may cause wrinkles and raised sections.

   Make sure media is being loaded on the auto take-up reel unit correctly. “Using the Auto Take-up Reel Unit” on page 48.

Media Problems

Media is creased

■	**Are the Feeding Tension and Feed Speed options in the setup menu correct for the current media?** If these options are not correctly adjusted for the current media, the media may be creased or torn during printing. See “Feeding Tension” on page 70 and “Feed Speed” on page 72.

■	**Is the after heater temperature too high?** Adjust the after heater temperature to suit the media.

■ **Try selecting Off for Tension Measurement in the setup menus.**
Automatic tensioning may fail to maintain some types of media at the appropriate tension, resulting in excessive slack or other tensioning problems that interfere with printing.

See "Tension Measurement" on page 70.

Media jams

■ **Is the media creased or folded?**
Media with a strong curl or that is folded back on its leading edge or creased may cause jams or other media feed problems. Do not use media affected by these types of problems.

■ **Is the media too thick or too thin?**
Check the media specifications to determine whether it can be used in the printer. If you are using a software RIP, contact the manufacturer for information on the settings and media that can be used.

■ **Is Media Suction set too high?**
Reduce Media Suction. See "Media Suction" on page 69.

Printing does not stop when the roll ends

■ **Is Off selected for Tension Measurement?**
Periodically is recommended in most circumstances.

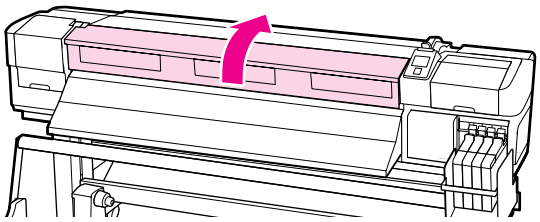
See "Tension Measurement" on page 70.

Removing jammed media

Follow the steps below to remove jammed media.

Caution:
Be careful not to trap your hands or fingers when opening or closing the front cover. Failure to observe this precaution could result in injury.

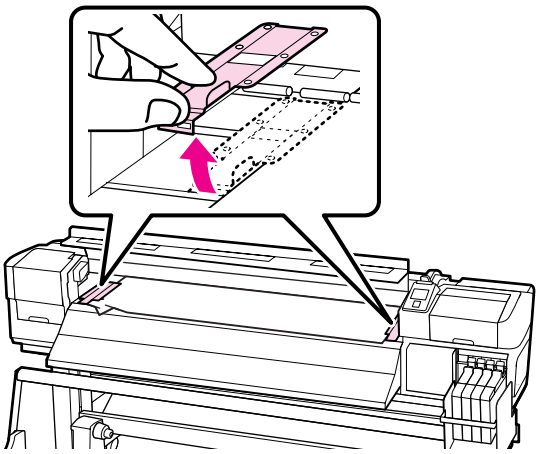
1. Open the front cover.



2. Turn off the printer.

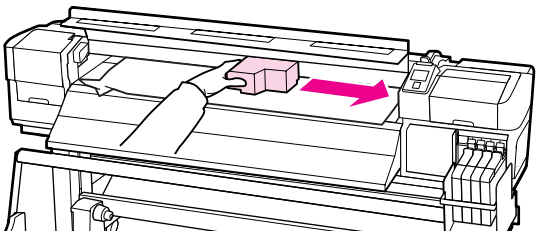
   If a message is displayed and the printer will not turn off, unplug the power cable.

3. Remove the media holding plates, if installed.



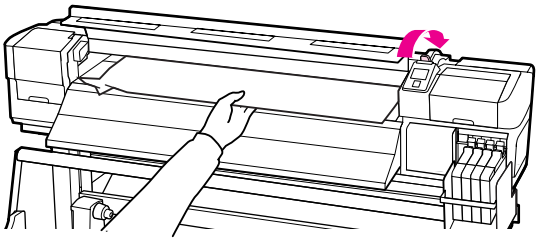
> ***Important:***
> *Cease use of the printer if the media holding plates are deformed. Continued use could damage the pressure rollers or print head.*
>
> *Contact Epson Support. See “Contacting Epson Support” on page 179.*

4. If the print head is over the media, move it away from the jam.

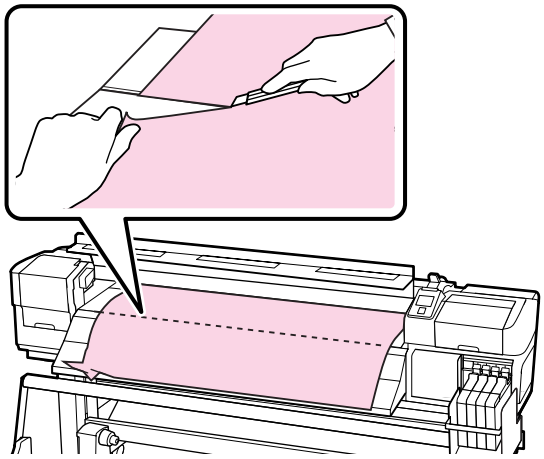


> ***Important:***
> *Move the print head only after removing the media holding plates. Contact with deformed media holding plates could damage the print head.*

5. Raise the media loading lever.



6. Pull the media to the cutter groove and use a cutter to remove torn or creased portions.



7. Manually rewind the cut media.

8. Remove any media that remains inside the printer.

9. Turn on the power to the printer and perform a nozzle check.

   Check the printed pattern, and if there are any clogs, perform head cleaning. See “Checking for Clogged Nozzles” on page 84.

> ***Important:***
> *If the printer is left off for an extended period, the print head will be left uncapped and dry out, and will not print properly when printing resumes.*
>
> *Turning the printer on automatically caps the print head.*

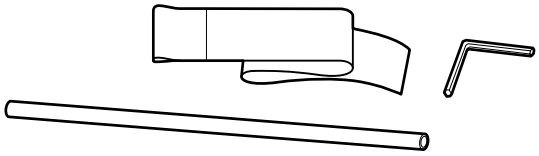
Reload the media and resume printing. See “Loading Media” on page 31.

Media is not fed straight or not taken up well

If media is not fed straight and printing or take-up problems occur, use a roll core with a width of 64 inches and adjustment paper to perform parallel adjustment for the media feeding unit and auto take-up reel unit.

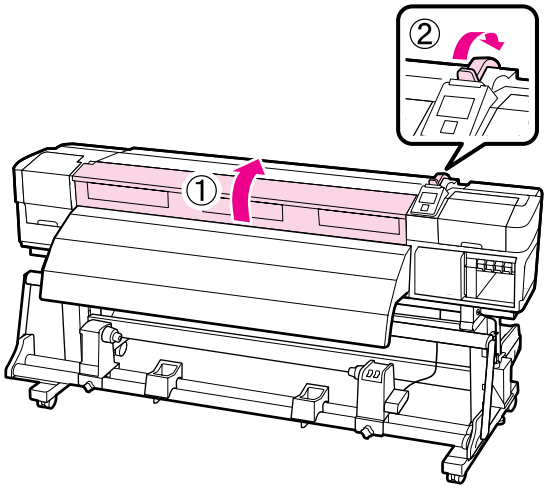
This adjustment requires two persons because the front and rear side of the printer must be checked and adjusted simultaneously.

Two hexagon wrenches are included with the printer. For parallel adjustment of the media feeding unit, use the large hexagon wrench.

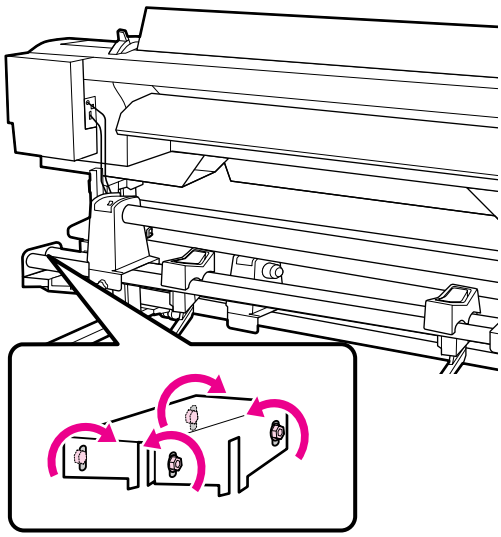


Parallel adjustment of the media feeding unit

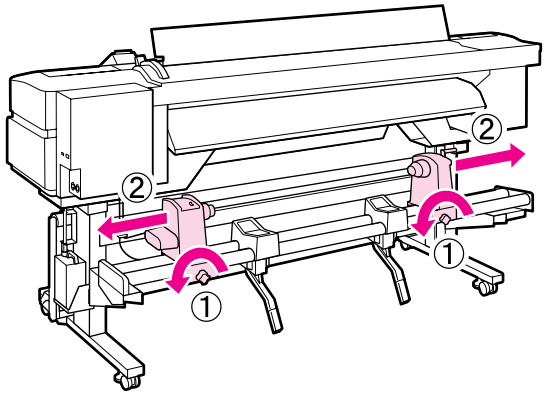
1. Open the front cover and raise the media loading lever.



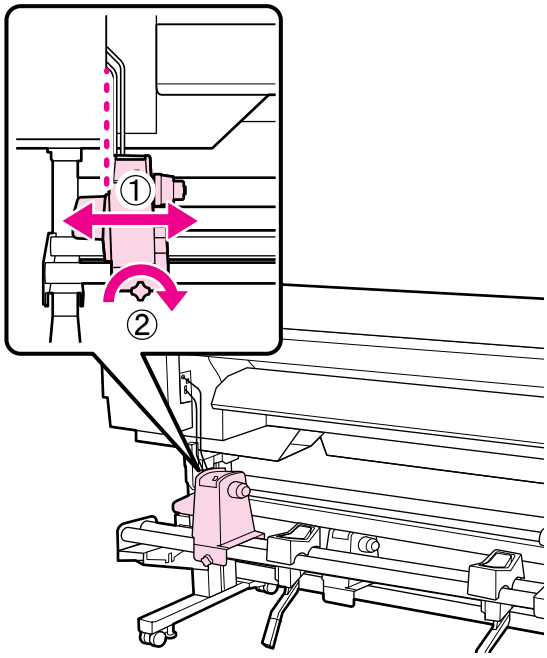
2. Face the rear side of the printer and loosen the 4 screws using the hexagon wrench.



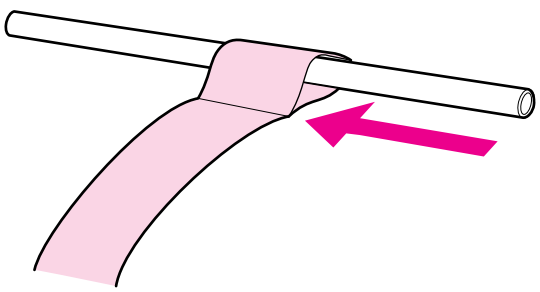
3. Loosen the roll holder fixing screws and adjust the roll holders so that the distance between the two is wider than the roll core.



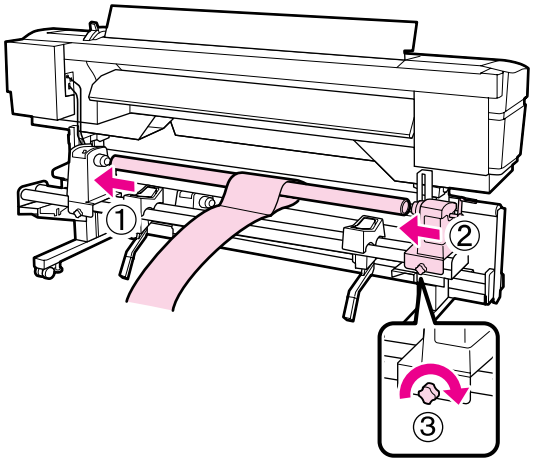
4. Tighten the roll holder fixing screw to align the left roll holder with the position of dotted line.



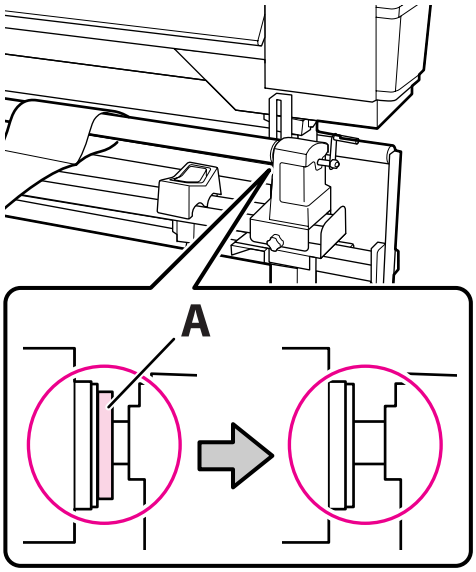
5. Insert the adjustment paper into the roll core.



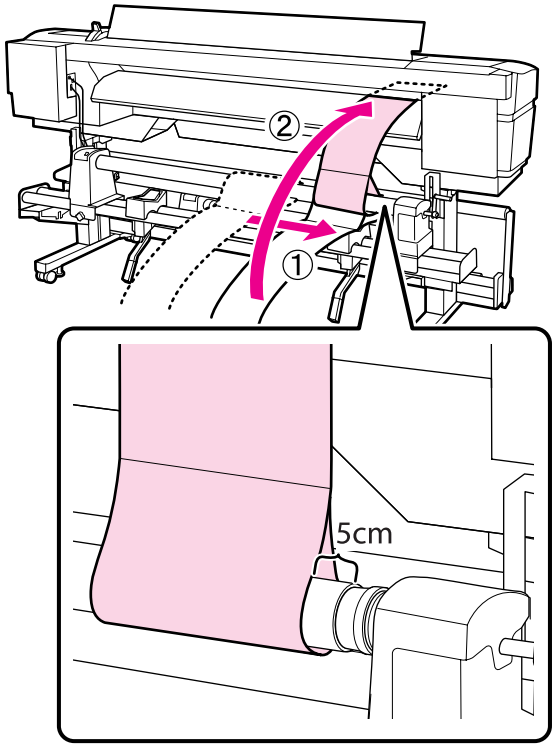
6. Insert the roll core into the left roll holder. Insert the right roll holder into the roll core, and then tighten the roll holder fixing screw.



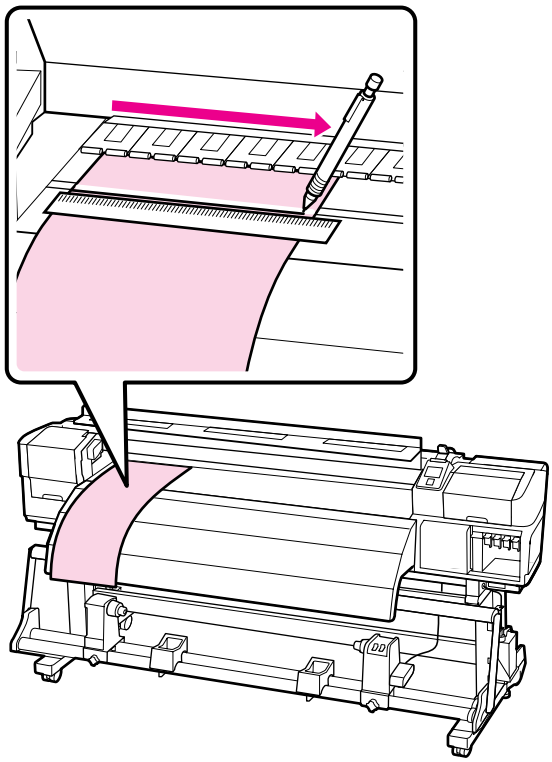
Important:
Insert the right roll holder into the roll core until part A in the illustration below cannot be seen.



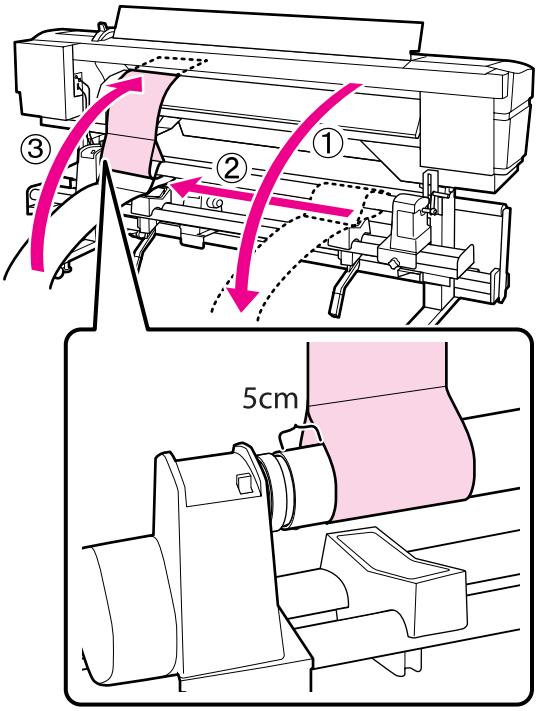
7. Bring the adjustment paper to a position 5 cm (2 inches) from the right edge of the roll core, and then insert it into the printer.



8. At the front side of the printer, keep the adjustment paper taut, place a ruler on the front side of the white line on the platen, and then draw a line with a pen or other writing instrument.

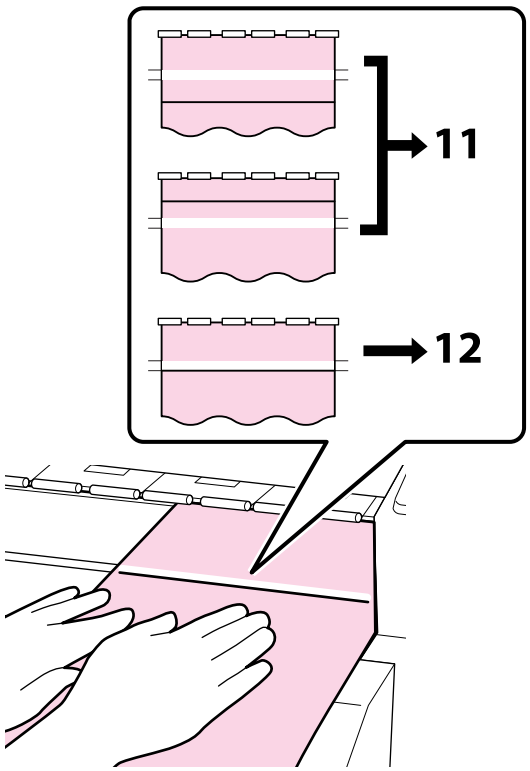


9. Pull out the adjustment paper from the rear side, move it to a position 5 cm (2 inches) from the left edge of the roll core, and then insert it into the printer.



10. At the front side of the printer, keep the adjustment paper taut and check the positions of the white line on the platen and the line drawn in Step 8.

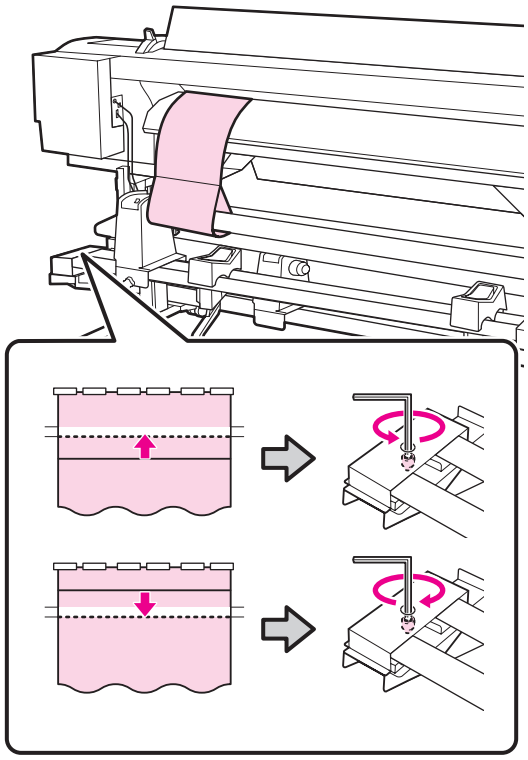
    If the drawn line and white line are misaligned as shown in the illustration below, proceed to Step 11. If they are aligned, proceed to Step 12.



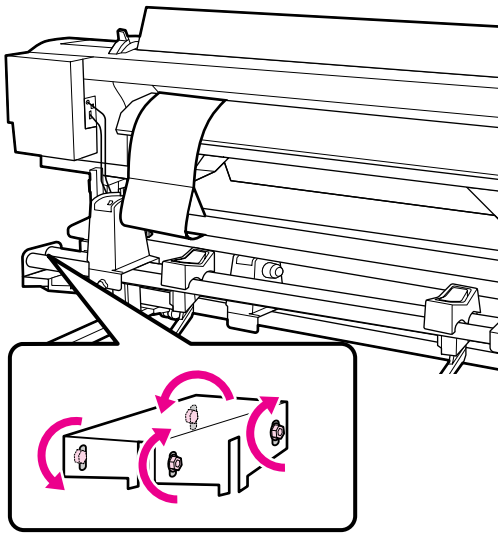
11. While checking the state of the two lines on the front side of the printer, use the hexagon wrench to adjust the screw on the rear side of the printer so that the drawn line aligns with the position of the dotted line.

    If the drawn line is below the white line, rotate the adjustment screw counterclockwise. If the drawn line is above the white line, rotate the adjustment screw clockwise. One turn of the screw moves the line about 1 mm (0.04 inch).

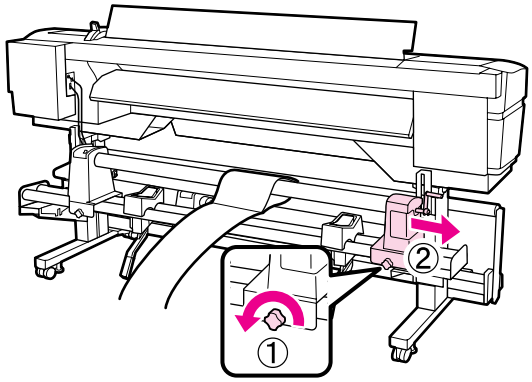
The adjustment is complete when the drawn line reaches the position of the dotted line.



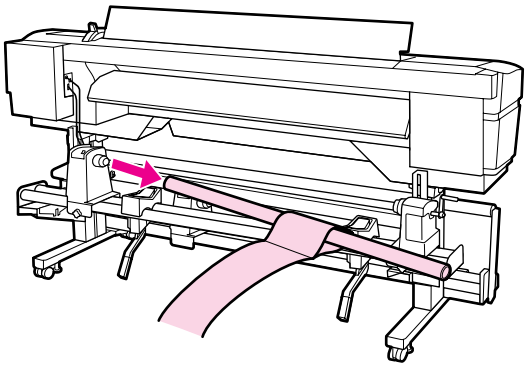
12. Use the hexagon wrench to tighten and firmly secure the 4 screws.



13. Pull out the adjustment paper from the printer, loosen the right roll holder fixing screw, and move away the roll holder.

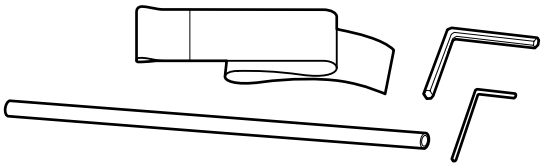


14. Pull out the roll core.

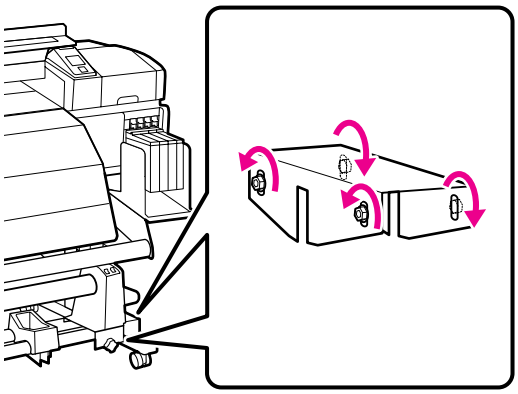


Parallel adjustment of the auto take-up reel unit

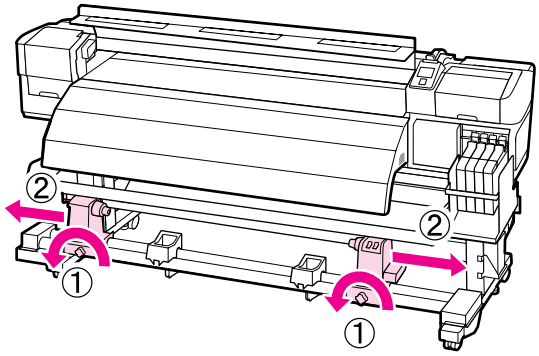
Use the parts shown below for this adjustment:



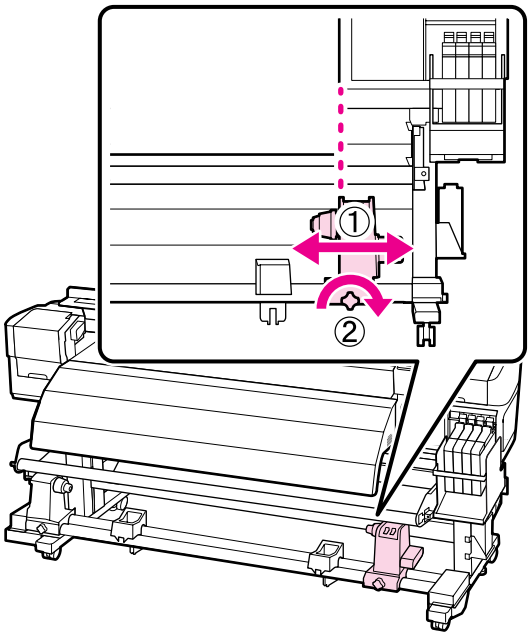
1. Use a hexagon wrench (large) to loosen the 4 screws.



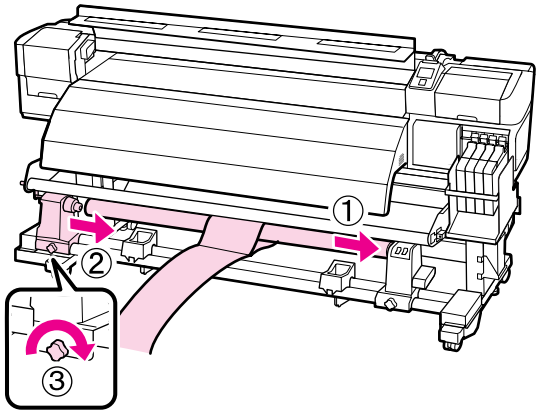
2. Loosen the roll core holder locking screws and adjust the roll core holders so that the distance between the two is wider than the roll core.



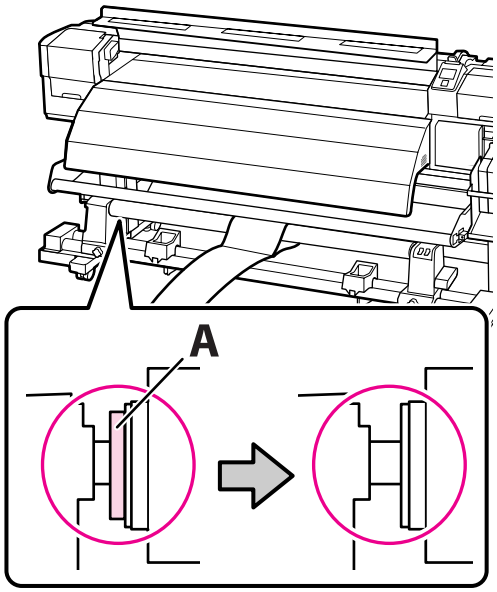
3. Tighten the roll core holder locking screw to align the right roll core holder with the position of dotted line.



4. Insert the roll core into the right roll holder. Insert the left roll core holder into the roll core, and then tighten the roll core holder locking screw.

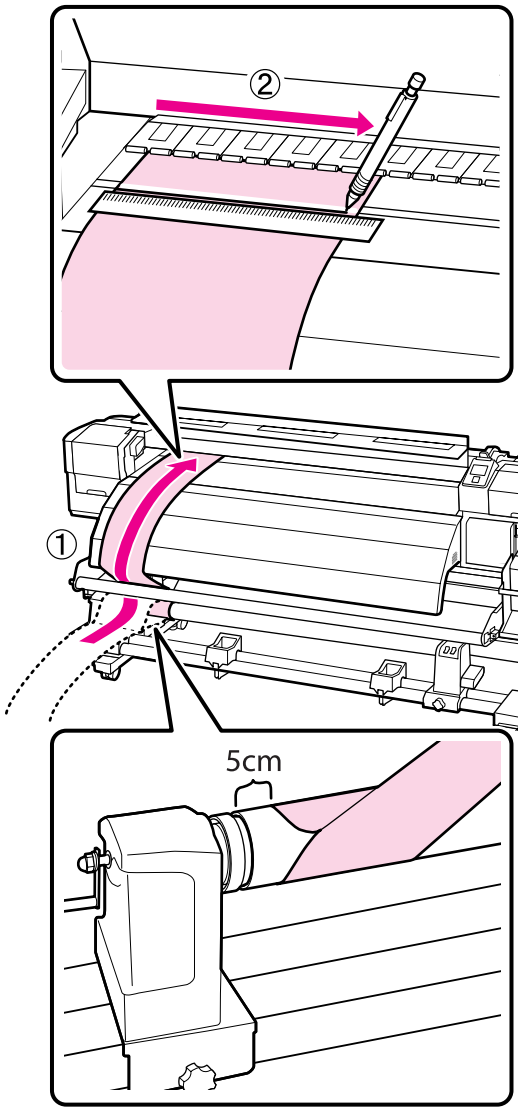


Important:
Insert the left roll holder into the roll core until part A in the illustration below cannot be seen, and then tighten the roll holder locking screw.



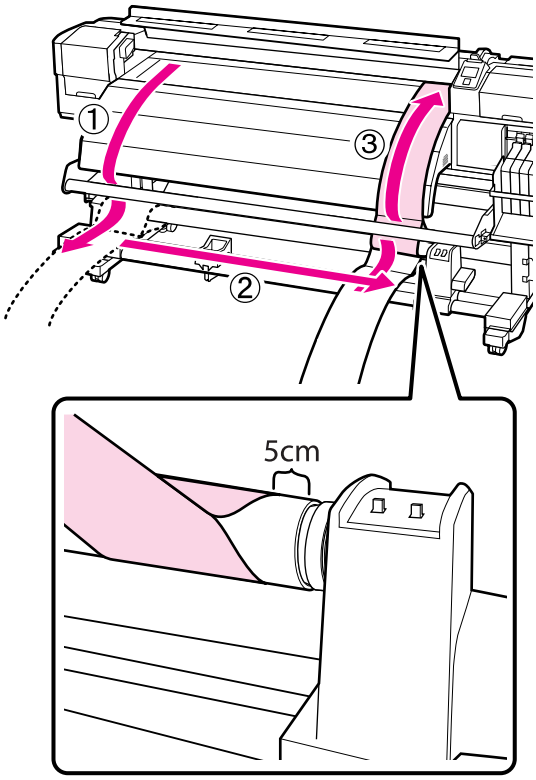
5. Move the adjustment paper to a position 5 cm (2 inches) from the left edge of the roll core, and then insert it into the printer. Keep the adjustment paper taut, place a ruler on the front side of the white line on the platen, and then draw a line with a pen or other writing instrument.

Pass the adjustment paper behind the rear side of the media guide bar, and then insert it into the printer.



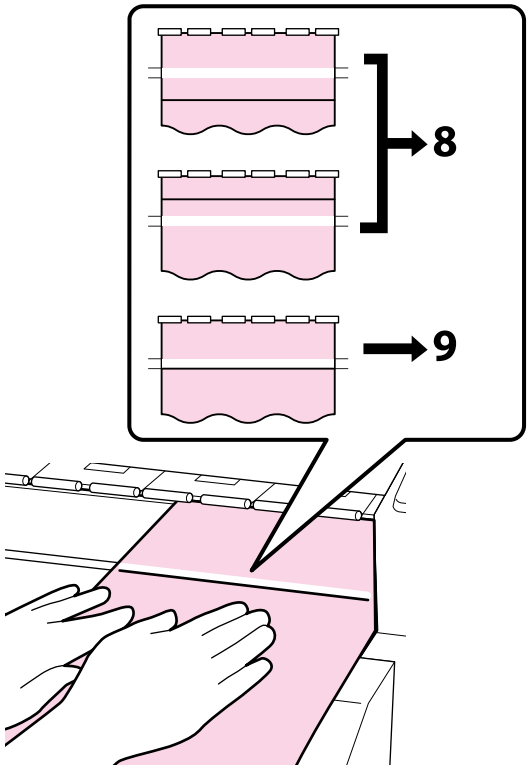
6. Pull out the adjustment paper, move it to a position 5 cm (2 inches) from the right edge of the roll core, and then insert it into the printer.

Pass the adjustment paper behind the rear side of the media guide bar, and then insert it into the printer.



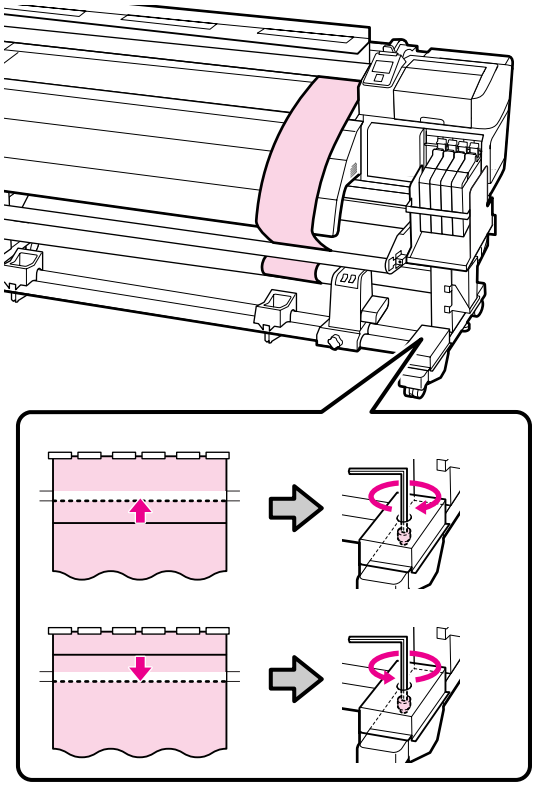
7. Keep the adjustment paper taut and check the positions of the white line on the platen and the line drawn in Step 5.

If the drawn line and white line are misaligned as shown in the illustration below, proceed to Step 8. If they are aligned, proceed to Step 9.

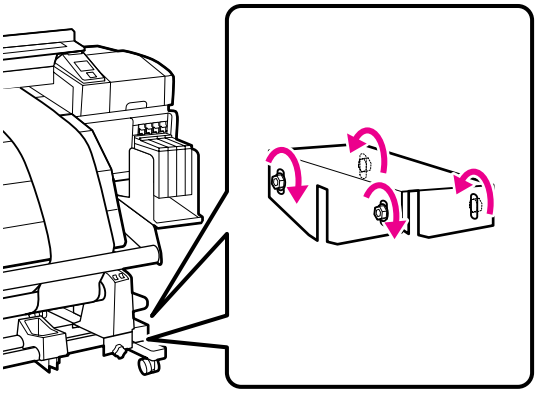


8. While checking the state of the two lines on the front side of the printer, use the hexagon wrench (large) to adjust the screw so that the drawn line aligns with the position of the dotted line.

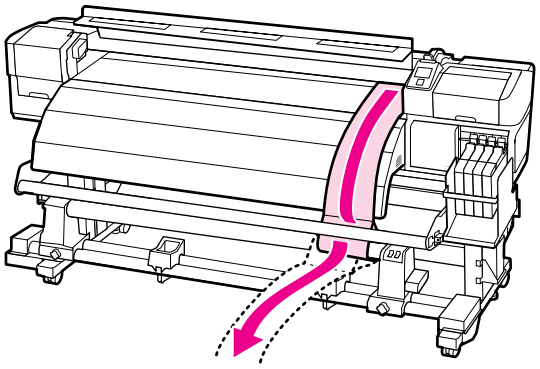
If the drawn line is below the white line, rotate the adjustment screw clockwise. If the drawn line is above the white line, rotate the adjustment screw counterclockwise. One turn of the screw moves the line about 1 mm.



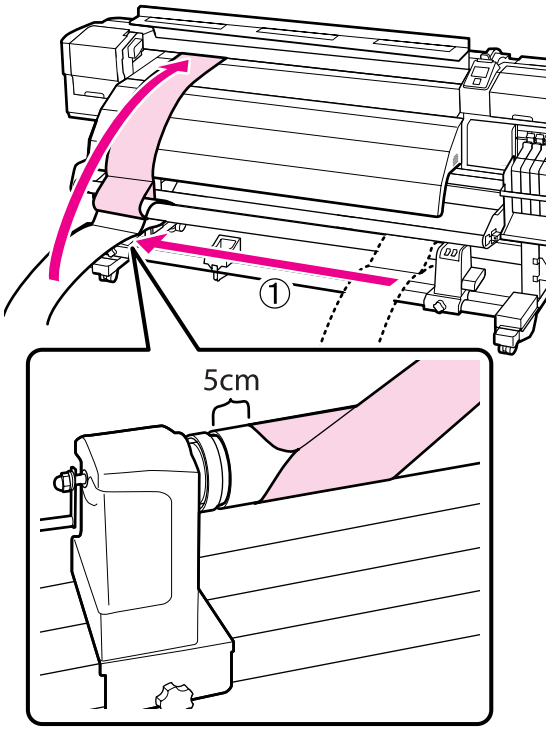
9. Use the hexagon wrench (large) to tighten and firmly secure the 4 screws.



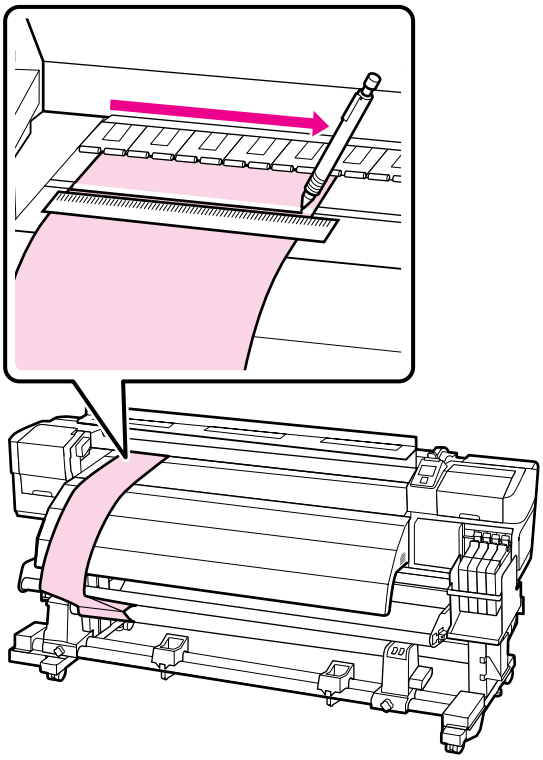
10. Pull out the adjustment paper from the printer.



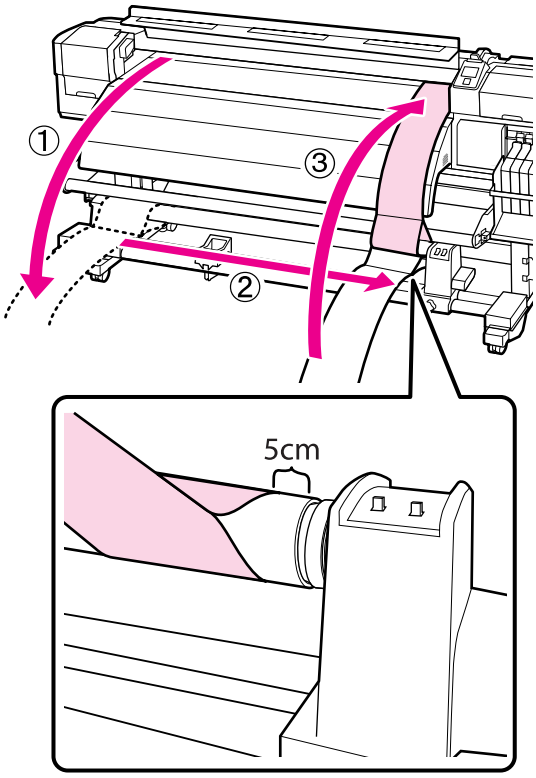
11. Move the adjustment paper to a position 5 cm (2 inches) from the left edge of the roll core, pass it through the media guide bar, and then insert it into the printer.



12. Keep the adjustment paper taut, place a ruler on the front side of the white line on the platen, and then draw a line with a pen or other writing instrument.

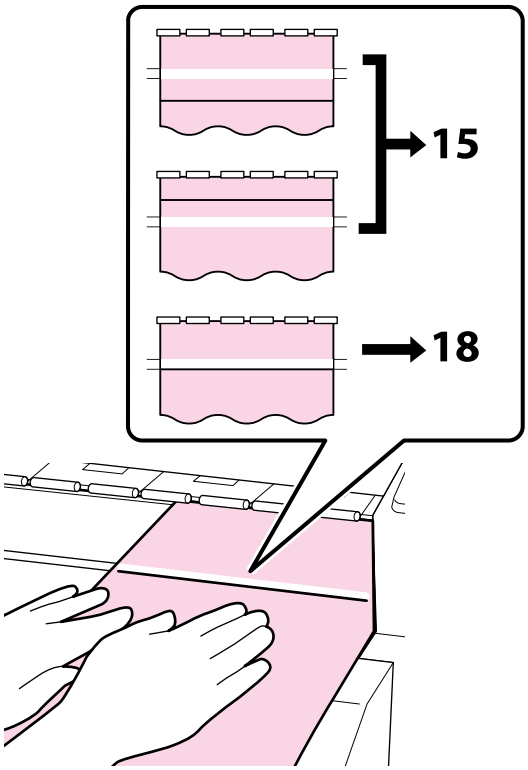


13. Pull out the adjustment paper. Bring the adjustment paper to a position 5 cm from the right edge of the roll core, and then insert it into the printer.

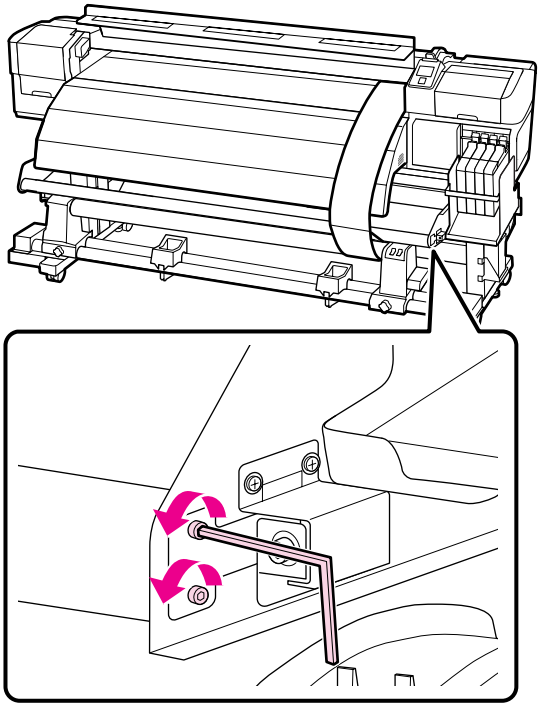


14. Keep the adjustment paper taut and check the positions of the white line on the platen and the line drawn in Step 12.

If the drawn line and white line are misaligned as shown in the illustration to the right, proceed to Step 15. If they are aligned, proceed to Step 18.

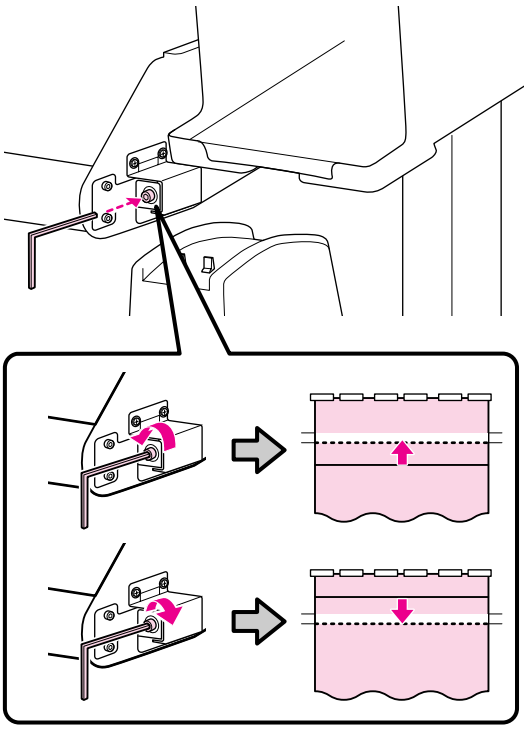


15. Use a hexagon wrench (small) to loosen the 2 screws.

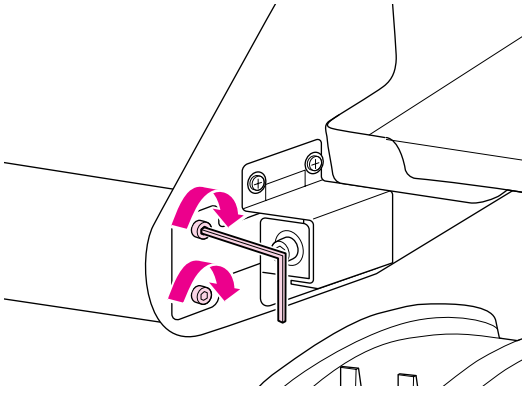


16. While checking the state of the two lines, use the hexagon wrench (large) to adjust the screw so that the drawn line aligns with the position of the dotted line.

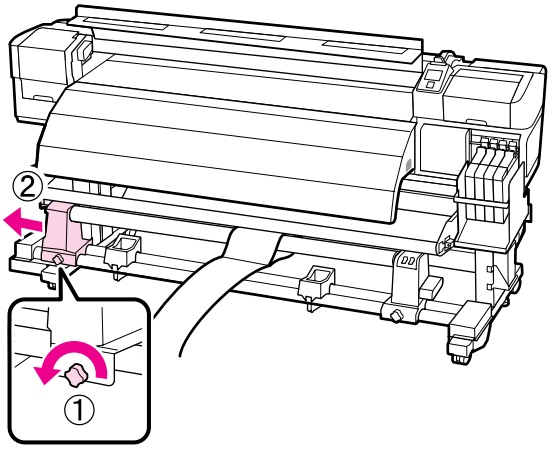
    While pressing on the media guide bar with your hand, align the lines by rotating the adjustment screw. If the drawn line is below the white line, rotate the adjustment screw counterclockwise. If the drawn line is above the white line, rotate the adjustment screw clockwise. One turn of the screw moves the line about 1 mm.



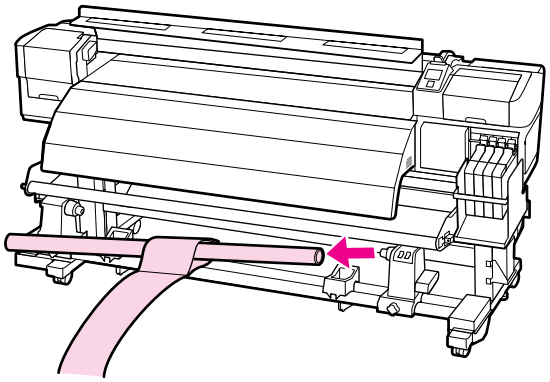
17. Use a hexagon wrench (small) to tighten the 2 screws.



18. Pull out the adjustment paper from the printer, loosen the left roll core holder locking screw, and remove the roll core holder.



19. Pull out the roll core.



Other Problems

The after heater switches off automatically.

■	The after heater will turn off if no print job is received for some time and no error occurs. The time before the after heater turns off automatically can be selected using the **Heat Off Timer** option in the setup menu. See "The Printer Setup Menu" on page 124. The after heater will be reactivated when a print job is received, the media loading lever is used, or another operation involving printer hardware is performed.

The control panel display keeps turning off.

■	**Is the printer in sleep mode?** The printer enters sleep mode when the **Heat Off Timer** expires and the heaters turn off. The time before the after heater turns off can be selected using the Printer Setup menu. See "The Printer Setup Menu" on page 124. The after heater will be reactivated and sleep mode will end when a print job is received, the media loading lever is used, or another operation involving printer hardware is performed.

The red light is on inside the printer.

■	**This is not a failure.** The red light normally stays on inside the printer.

The administrator password has been forgotten.

■	**Reset the password.** At the Network Setup menu of the control panel, run **Restore Settings**, and then set a new password. See "The Network Setup Menu" on page 128.

Chapter 6

Appendix

Options and Consumable Products

The following options and consumable products are available for use with your printer.

For the latest information, see the Epson website.

> ***Important:***
> *Refilling the ink tank with an ink pack not specified in this manual can damage the printer. Epson is not responsible for any damages or injuries incurred through the use of non-Epson ink packs, even if the printer is still within warranty.*

Product		Part number	Explanation
Ink packs	Black	T741100	Epson recommends the use of genuine Epson ink packs. Epson cannot guarantee the quality or reliability of non-genuine ink. The use of non-genuine ink may cause damage that is not covered by Epson's warranties, and under certain circumstances, may cause erratic printer behavior. Information about non-genuine chip unit status may not be displayed,and use of non-genuine ink is recorded for possible use in service support. See "Chip Unit Replacement and Ink Refills" on page 104.
	Cyan	T741200	
	Magenta	T741300	
	Yellow	T741400	
Maintenance kit		T724200	Contains the cleaning sticks, gloves, wiper, and wiper cleaner required for printer maintenance. See "Maintenance Around the Print Head" on page 88.
Waste ink bottle		T724000	Identical to the waste ink bottle supplied with the printer.
Media holding plate		C12C890891	Identical to the media holding plates supplied with the printer.

Supported Media

Print quality is greatly affected by the type and quality of media used. Choose a media suited to the task at hand. For information on use, refer to the documentation supplied with the media or contact the manufacturer. We recommend that you print a test run and check the results before purchasing media in large quantities.

> ***Important:***
> *Do not use media that is wrinkled, scuffed, torn, or dirty.*

Roll core size	2 or 3 inch
Roll outer diameter	Up to 250 mm (9.8 inches)
Media width	300 to 1626 mm (11.8 to 64 inches)
Media thickness	Up to 1 mm (0.04 inch)
Roll weight	Up to 40 kg (88.2 lb)

Moving and Transporting the Printer

This section describes how to move and transport the product.

Moving the Printer

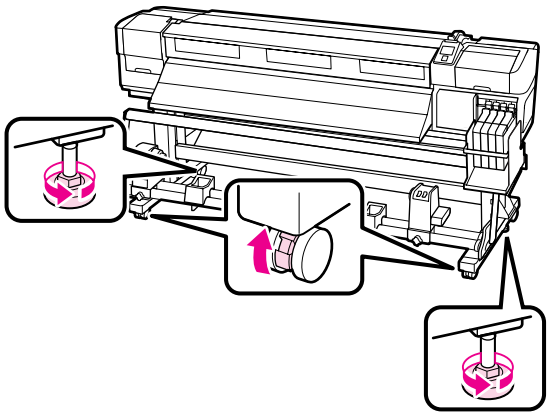
This section assumes that the product is being moved to another location on the same floor without traversing stairs, ramps, or lifts. See “Transport” on page 174 for information on moving the printer between floors or to another building.

> ***Caution:***
> *Do not tilt the product more than 10 degrees forward or back while moving it. Failure to observe this precaution could result in the printer falling over, causing accidents.*

Getting ready

1. Confirm that the printer is off.
2. Remove the waste ink bottle. See “Replacing the Waste Ink Bottle” on page 99.
3. Disconnect the power cords and all other cables.
4. Remove media from the media feeding unit and auto take-up reel unit.
5. Unlock the stand.

   Release the caster locks on the left and right legs and fully raise the adjusters.



6. Move the printer.

Important:
Use the casters on the dedicated printer stand to move the printer indoors a short distance over a level floor. They cannot be used for transport.

Post-move setup

After moving the printer, follow the steps below to ready it for use.

1. Check that the new location is appropriate.

   See the *Setup Guide.*

2. If the media guide bar was removed, reattach it. See “Removing and Attaching the Media Guide Bar” on page 165.

3. Plug in the power cables and turn the printer on.

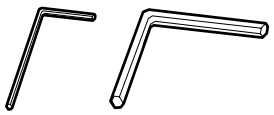
   See the *Setup Guide.*

4. Perform a nozzle check to check for clogged nozzles. See “Checking for Clogged Nozzles” on page 84.

5. Perform Head Alignment and check print quality. See “Head Alignment (manual)” on page 67.

Removing and Attaching the Media Guide Bar

Use these parts to remove and reattach the media guide bar:



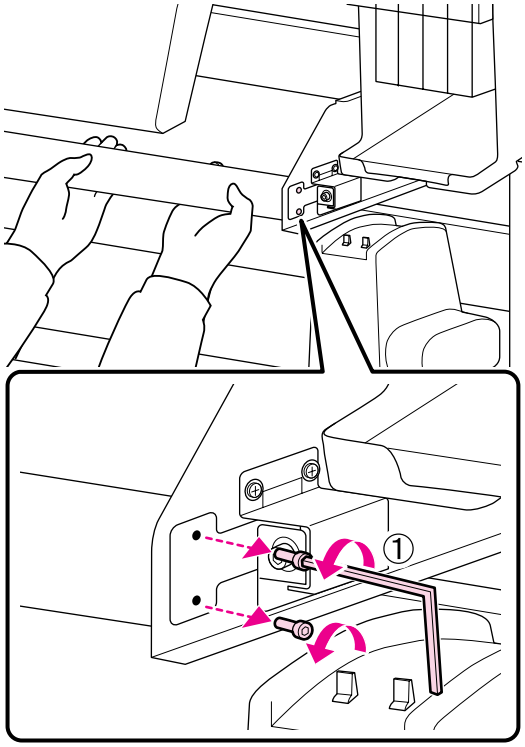
Removing the Media Guide Bar

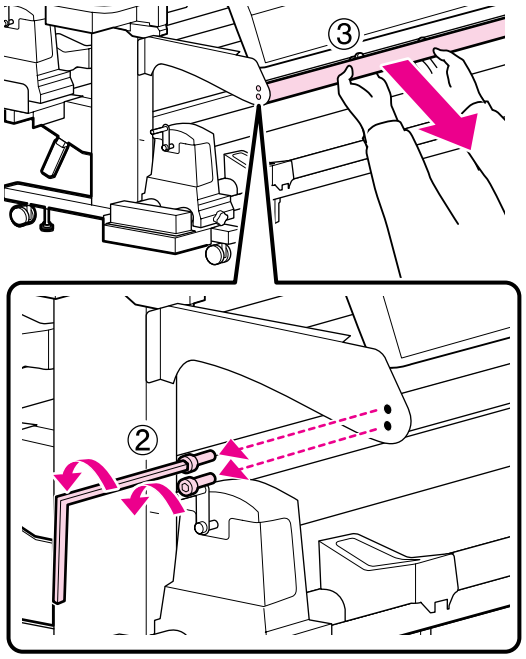
1. Remove the media guide bar.

   Use the included hexagon wrench (small) to completely loosen the 4 screws securing the media guide bar, and then remove the media guide bar.

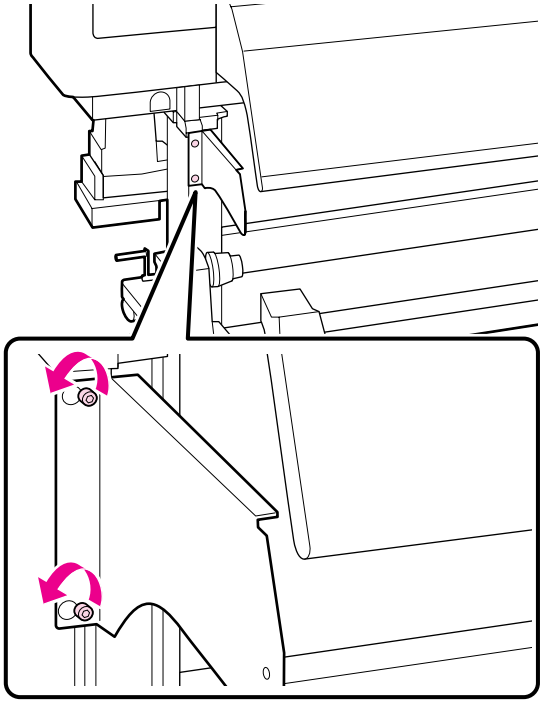
Important:
Remove the bar using two or more people. If the media guide bar locking screws are removed, the media guide bar will fall. Have one person hold the media guide bar while the screws are being removed.

If the media guide bar falls, it may be deformed.

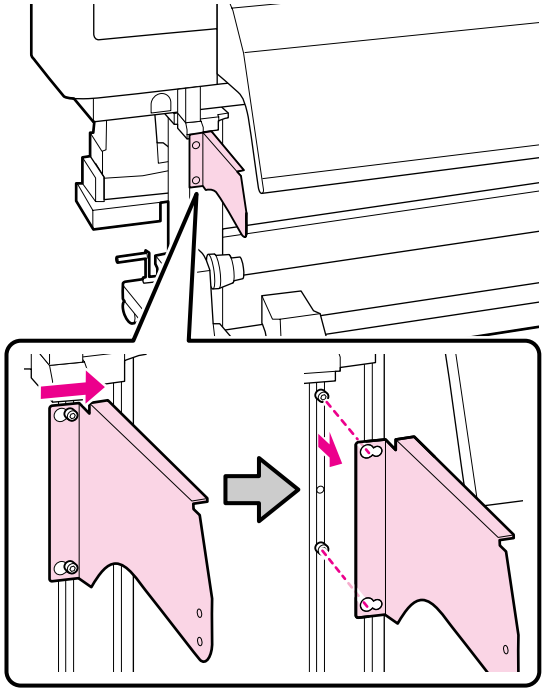




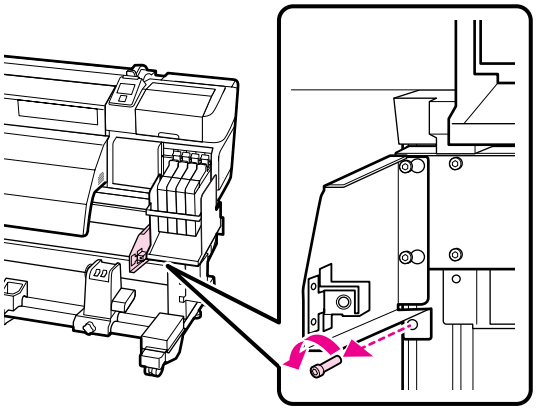
2. Use a hexagon wrench (large) to rotate the two screws a couple of turns to loosen them.



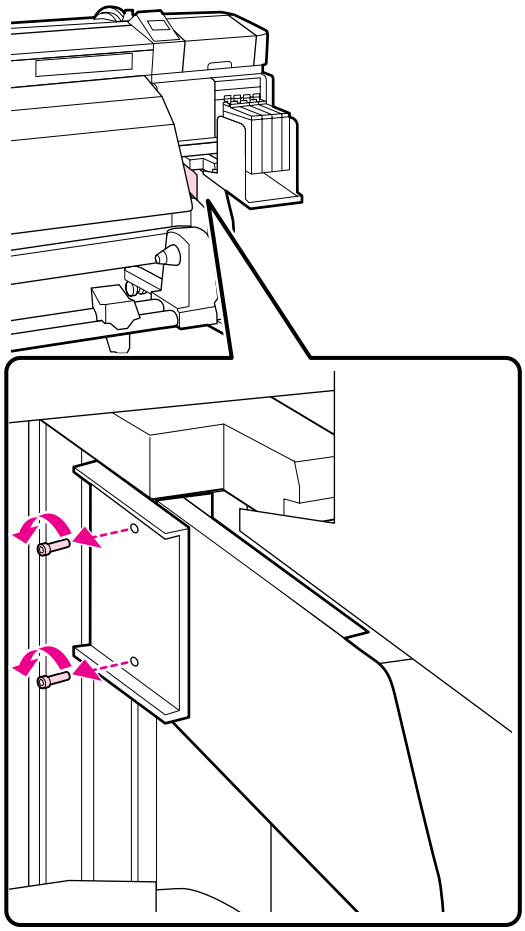
3. Remove the left bracket.



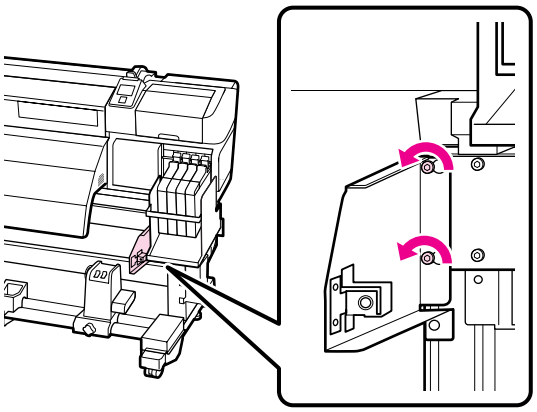
4. Use a hexagon wrench (large) to remove the screw.



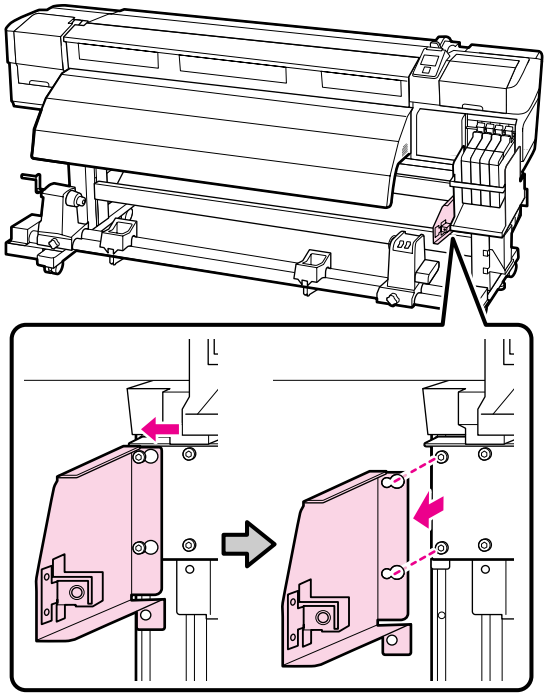
5. Use a hexagon wrench (large) to remove two screws.



6. Use a hexagon wrench (large) to rotate the two screws a couple of turns to loosen them.

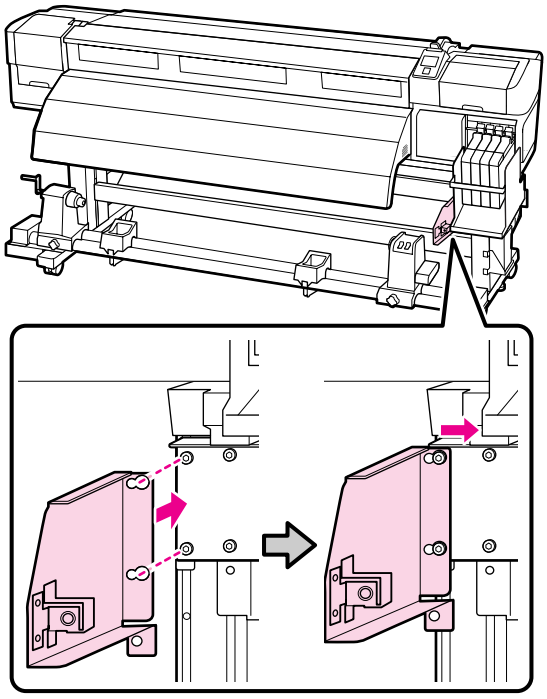


7. Remove the right bracket.

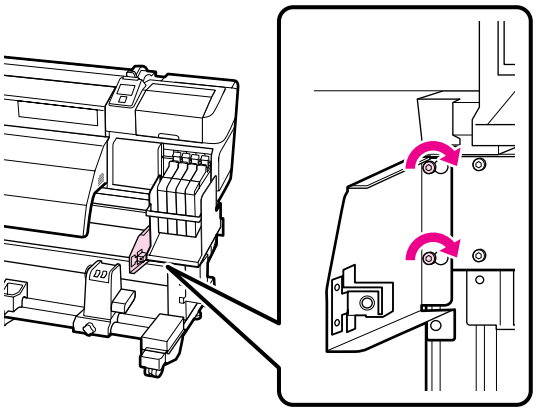


Attaching the Media Guide Bar

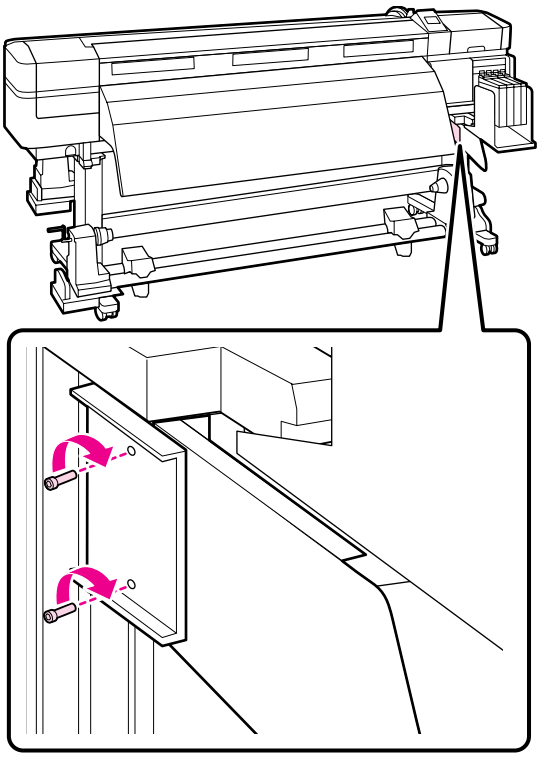
1. Attach the right bracket.



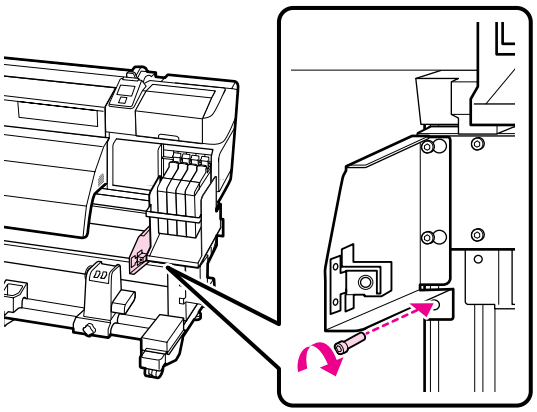
2. Use the hexagon wrench (large) to tighten and firmly secure the two screws that were provisionally secured.



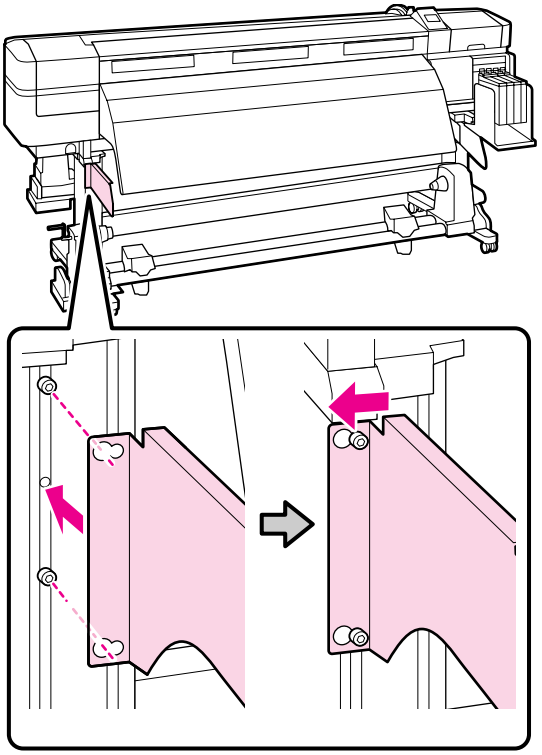
3. Use the hexagon wrench (large) to tighten and firmly secure the two screws.



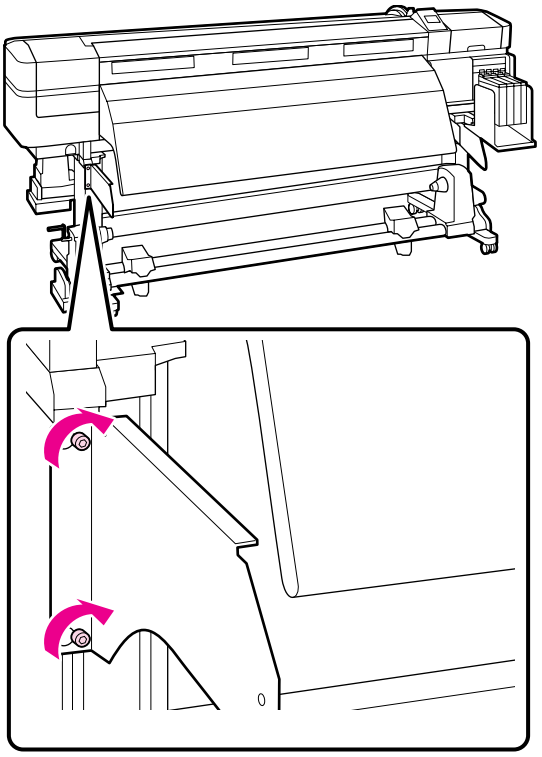
4. Use the hexagon wrench (large) to tighten and firmly secure the screw.



5. Attach the left bracket.

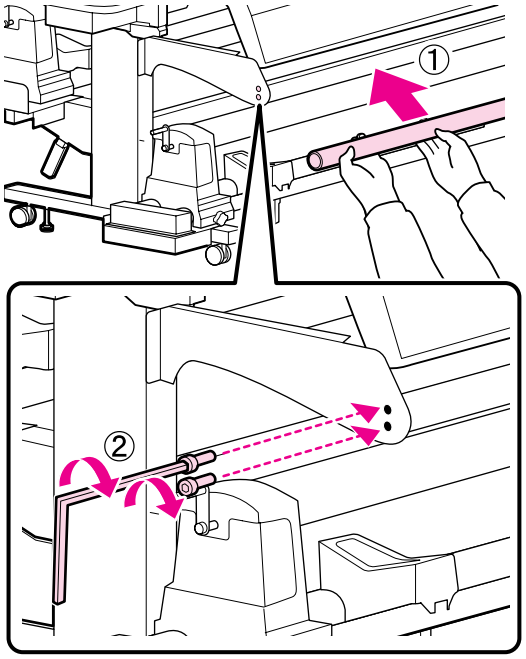


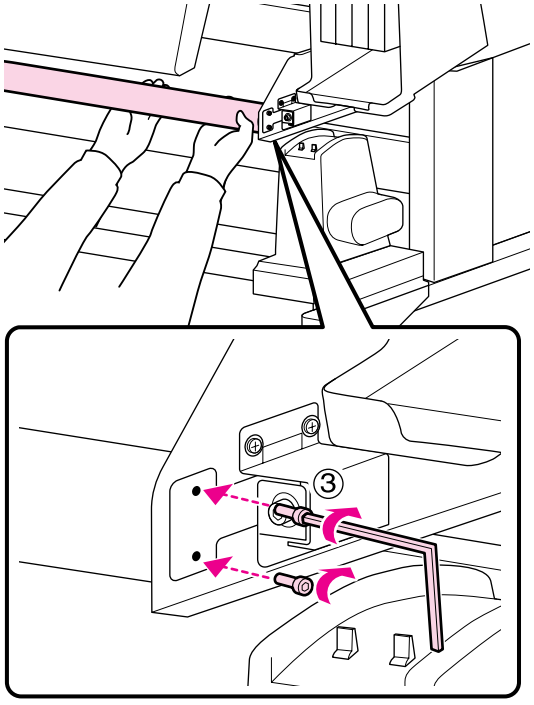
6. Use the hexagon wrench (large) to tighten and firmly secure the two screws that were provisionally secured.



7. Use the hexagon wrench (small) to tighten the four screws and secure the media guide bar.

> ***Important:***
> *Attach the bar using 2 or more people. If the media guide bar falls, it may be deformed. Have 1 person hold the media guide bar when the screws are being secured.*





8. Perform parallel adjustment.

For the parallel adjustment, see “Parallel adjustment of the auto take-up reel unit” on page 148 and perform Steps 1 through 4, and Step 11 and later.

Transport

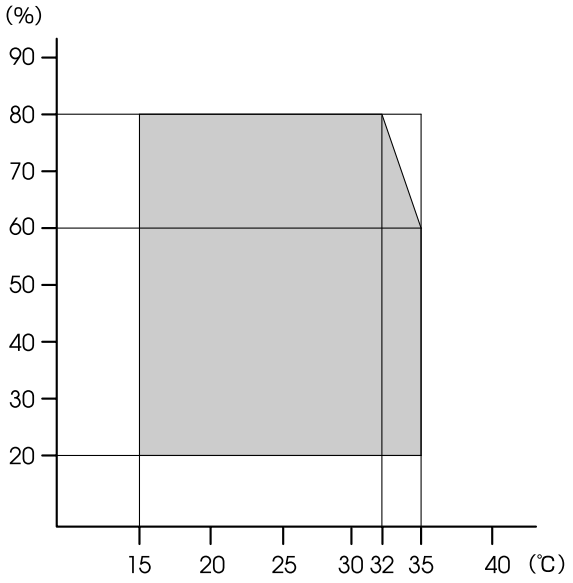
Before transporting the printer, contact your dealer or Epson Support.

System Requirements

Consult the documentation for your software RIP.

Specifications Table

Printer Specifications	
Printing method	On-demand ink jet
Nozzle configuration	360 nozzles × 2 rows × 4 colors (black, cyan, magenta, yellow)
Resolution (maximum)	720 × 1440 dpi
Control code	ESC/P raster (undisclosed command)
Media feed method	Friction feed
Built-in memory	512 MB for Main 128 MB for Network
Interface	Hi-Speed USB-Compatible with the USB 2.0 Specification. 100BASE-TX/1000Base-T*1
Rated voltage	AC 100 to 120V AC 200 to 240V
Rated frequency	50 to 60Hz
Rated current	10A (AC100-120V) 5A (AC200-240V)
Power consumption	Printing: Approx. 460 W Ready mode: Approx. 330 W Sleep mode: Approx. 10 W Power off: 0.6 W or less
Temperature	Operating: 15 to 35 °C/59 to 95°F (15 to 25°C/59 to 77°F recommended) Storage (before unpacking): -20 to 60°C or -4 to 140°F (no more than 120 hours at 60°C or 140°F, within a month at 40°C or 104°F) Storage (after unpacking): -20 to 40°C or -4 to 104°F (within a month at 40°C or 104°F)
Humidity	Operating: 20 to 80% (40 to 60% recommended) (without condensation) Storage (before and after unpacking): 5 to 85% (without condensation)

Printer Specifications	
Operating Temperature/Humidity Range  	
Dimension	Storage (minimum) dimensions: 2620 (W) × 1013 (D) × 1311 (H) mm or 103.2 (W) × 39.9 (D) × 51.6 (H) inches Maximum dimensions: 2620 (W) × 1198 (D) × 1650 (H) mm or 103.2 (W) × 47.2 (D) × 65.0 (H) inches
Weight *2	Approx. 269 kg (593.1 lb)

*1 Use a shielded twisted pair cable (category 5 or better).

*2 With supplied media system installed; ink not included.

Ink Specifications	
Type	Dedicated ink pack
Sublimation transfer ink	Black, Cyan, Magenta, Yellow
Use by date	See the date printed on the ink pack (at normal temperature)
Print quality guarantee expiry	25 days (from the day the ink tank was refilled from the ink pack)
Storage temperature	Uninstalled: -20 to 40°C or -4 to 104°F (within a month at 40°C or 104°F) Installed: -20 to 35°C or -4 to 95°F (within a month at 40°C or 104°F) Transporting: -20 to 60°C or -4 to 140°F (within a month at 40°C or 104°F, within 72 hours at 60°C or 140°F)
Capacity	1000 ml

Important:
The ink will freeze if stored for a long period of time at -20°C/ -4°F or below. If the ink is frozen, store for at least 4 hours at room temperature (25°C/77°F with no condensation) before using.

Standards and Approvals

Safety	UL 60950-1	
	CSA C22.2 No.60950-1	
	Low Voltage Directive 2006/95/EC	EN 60950-1
EMC	FCC part 15 subpart B Class A	
	CAN/CSA-CEI/IEC CISPR 22 Class A	
	AS/NZS CISPR 22 Class A	
	EMC Directive 2004/108/EC	EN 55022 Class A
		EN 55024
		EN 61000-3-2
		EN 61000-3-3

Warning:
This is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

FCC Compliance Statement

For United States Users

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

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) this device may not cause harmful interference, and

(2) this device must accept any interference received, including interference that may cause undesired operation.

WARNING

The connection of a non-shielded equipment interface cable to this equipment will invalidate the FCC Certification of this device and may cause interference levels which exceed the limits established by the FCC for this equipment. It is the responsibility of the user to obtain and use a shielded equipment interface cable with this device. If this equipment has more than one interface connector, do not leave cables connected to unused interfaces. Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.

For Canadian Users

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

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

WARNING

This is a Class A product. In a domestic environment this product may cause radio interference, in which case the user may be required to take adequate measures.

Appendix A

Where To Get Help

Contacting Epson Support

Epson provides technical support and information on the installation, configuration, and operation of professional printing products through the Epson Preferred Limited Warranty Plan. Dial (888) 377-6611, 6 AM to 6 PM, Pacific Time, Monday through Friday. Days and hours of support are subject to change without notice.

Before you call, make sure you have your Unit ID number, which is included with the Epson Preferred Limited Warranty Plan information that came with your printer. You'll also need your printer serial number and proof of purchase.

Visit Epson's U.S. support website (www.epson.com/support) or Canadian website (www.epson.ca/support) and select your product for solutions to common problems. You can download drivers, firmware, and documentation, get FAQs and troubleshooting advice, or e-mail Epson with your questions.

Note:
For help using any other software on your system, see the documentation for that software for technical support information.

Purchase Supplies and Accessories

You can purchase genuine Epson ink packs, paper, and accessories from an EPSON authorized reseller. To find the nearest reseller, call 800-GO-EPSON (800-463-7766).

Appendix B

Software License Terms

Open Source Software Licenses

Bonjour

This printer product includes the open source software programs which apply the Apple Public Source License Version1.2 or its latest version ("Bonjour Programs").
We provide the source code of the Bonjour Programs pursuant to the Apple Public Source License Version1.2 or its latest version until five (5) years after the discontinuation of same model of this printer product. If you desire to receive the source code of the Bonjour Programs, please see the "Contacting Customer Support" in Appendix or Printing Guide of this User's Guide, and contact the customer support of your region.

You can redistribute Bonjour Programs and/or modify it under the terms of the Apple Public Source License Version1.2 or its latest version.

These Bonjour Programs are WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

The Apple Public Source License Version1.2 is as follows. You also can see the Apple Public Source License Version1.2 at http://www.opensource.apple.com/apsl/.
APPLE PUBLIC SOURCE LICENSE
Version 2.0 - August 6, 2003

1. General; Definitions. This License applies to any program or other work which Apple Computer, Inc. ("Apple") makes publicly available and which contains a notice placed by Apple identifying such program or work as "Original Code" and stating that it is subject to the terms of this Apple Public Source License version 2.0 ("License"). As used in this License:

1.1 "Applicable Patent Rights" mean: (a) in the case where Apple is the grantor of rights, (i) claims of patents that are now or hereafter acquired, owned by or assigned to Apple and (ii) that cover subject matter contained in the Original Code, but only to the extent necessary to use, reproduce and/or distribute the Original Code without infringement; and (b) in the case where You are the grantor of rights, (i) claims of patents that are now or hereafter acquired, owned by or assigned to You and (ii) that cover subject matter in Your Modifications, taken alone or in combination with Original Code.

1.2 "Contributor" means any person or entity that creates or contributes to the creation of Modifications.

1.3 "Covered Code" means the Original Code, Modifications, the combination of Original Code and any Modifications, and/or any respective portions thereof.

1.4 "Externally Deploy" means: (a) to sublicense, distribute or otherwise make Covered Code available, directly or indirectly, to anyone other than You; and/or (b) to use Covered Code, alone or as part of a Larger Work, in any way to provide a service, including but not limited to delivery of content, through electronic communication with a client other than You.

1.5 "Larger Work" means a work which combines Covered Code or portions thereof with code not governed by the terms of this License.

1.6 "Modifications" mean any addition to, deletion from, and/or change to, the substance and/or structure of the Original Code, any previous Modifications, the combination of Original Code and any previous Modifications, and/or any respective portions thereof. When code is released as a series of files, a Modification is: (a) any addition to or deletion from the contents of a file containing Covered Code; and/or (b) any new file or other representation of computer program statements that contains any part of Covered Code.

1.7 "Original Code" means (a) the Source Code of a program or other work as originally made available by Apple under this License, including the Source Code of any updates or upgrades to such programs or works made available by Apple under this License, and that has been expressly identified by Apple as such in the header file(s) of such work; and (b) the object code compiled from such Source Code and originally made available by Apple under this License

1.8 "Source Code" means the human readable form of a program or other work that is suitable for making modifications to it, including all modules it contains, plus any associated interface definition files, scripts used to control compilation and installation of an executable (object code).

1.9 "You" or "Your" means an individual or a legal entity exercising rights under this License. For legal entities, "You" or "Your" includes any entity which controls, is controlled by, or is under common control with, You, where "control" means (a) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (b) ownership of fifty percent (50%) or more of the outstanding shares or beneficial ownership of such entity.

2. Permitted Uses; Conditions & Restrictions. Subject to the terms and conditions of this License, Apple hereby grants You, effective on the date You accept this License and download the Original Code, a world-wide, royalty-free, non-exclusive license, to the extent of Apple's Applicable Patent Rights and copyrights covering the Original Code, to do the following:

2.1 Unmodified Code. You may use, reproduce, display, perform, internally distribute within Your organization, and Externally Deploy verbatim, unmodified copies of the Original Code, for commercial or non-commercial purposes, provided that in each instance:

(a) You must retain and reproduce in all copies of Original Code the copyright and other proprietary notices and disclaimers of Apple as they appear in the Original Code, and keep intact all notices in the Original Code that refer to this License; and

(b) You must include a copy of this License with every copy of Source Code of Covered Code and documentation You distribute or Externally Deploy, and You may not offer or impose any terms on such Source Code that alter or restrict this License or the recipients' rights hereunder, except as permitted under Section 6.

2.2 Modified Code. You may modify Covered Code and use, reproduce, display, perform, internally distribute within Your organization, and Externally Deploy Your Modifications and Covered Code, for commercial or non-commercial purposes, provided that in each instance You also meet all of these conditions:

(a) You must satisfy all the conditions of Section 2.1 with respect to the Source Code of the Covered Code;

(b) You must duplicate, to the extent it does not already exist, the notice in Exhibit A in each file of the Source Code of all Your Modifications, and cause the modified files to carry prominent notices stating that You changed the files and the date of any change; and

(c) If You Externally Deploy Your Modifications, You must make Source Code of all Your Externally Deployed Modifications either available to those to whom You have Externally Deployed Your Modifications, or publicly available. Source Code of Your Externally Deployed Modifications must be released under the terms set forth in this License, including the license grants set forth in Section 3 below, for as long as you Externally Deploy the Covered Code or twelve (12) months from the date of initial External Deployment, whichever is longer. You should preferably distribute the Source Code of Your Externally Deployed Modifications electronically (e.g. download from a web site).

2.3 Distribution of Executable Versions. In addition, if You Externally Deploy Covered Code (Original Code and/or Modifications) in object code, executable form only, You must include a prominent notice, in the code itself as well as in related documentation, stating that Source Code of the Covered Code is available under the terms of this License with information on how and where to obtain such Source Code.

2.4 Third Party Rights. You expressly acknowledge and agree that although Apple and each Contributor grants the licenses to their respective portions of the Covered Code set forth herein, no assurances are provided by Apple or any Contributor that the Covered Code does not infringe the patent or other intellectual property rights of any other entity. Apple and each Contributor disclaim any liability to You for claims brought by any other entity based on infringement of intellectual property rights or otherwise. As a condition to exercising the rights and licenses granted hereunder, You hereby assume sole responsibility to secure any other intellectual property rights needed, if any. For example, if a third party patent license is required to allow You to distribute the Covered Code, it is Your responsibility to acquire that license before distributing the Covered Code.

3. Your Grants. In consideration of, and as a condition to, the licenses granted to You under this License, You hereby grant to any person or entity receiving or distributing Covered Code under this License a non-exclusive, royalty-free, perpetual, irrevocable license, under Your Applicable Patent Rights and other intellectual property rights (other than patent) owned or controlled by You, to use, reproduce, display, perform, modify, sublicense, distribute and Externally Deploy Your Modifications of the same scope and extent as Apple's licenses under Sections 2.1 and 2.2 above.

4. Larger Works. You may create a Larger Work by combining Covered Code with other code not governed by the terms of this License and distribute the Larger Work as a single product. In each such instance, You must make sure the requirements of this License are fulfilled for the Covered Code or any portion thereof.

5. Limitations on Patent License. Except as expressly stated in Section 2, no other patent rights, express or implied, are granted by Apple herein. Modifications and/or Larger Works may require additional patent licenses from Apple which Apple may grant in its sole discretion.

6. Additional Terms. You may choose to offer, and to charge a fee for, warranty, support, indemnity or liability obligations and/or other rights consistent with the scope of the license granted herein ("Additional Terms") to one or more recipients of Covered Code. However, You may do so only on Your own behalf and as Your sole responsibility, and not on behalf of Apple or any Contributor. You must obtain the recipient's agreement that any such Additional Terms are offered by You alone, and You hereby agree to indemnify, defend and hold Apple and every Contributor harmless for any liability incurred by or claims asserted against Apple or such Contributor by reason of any such Additional Terms.

7. Versions of the License. Apple may publish revised and/or new versions of this License from time to time. Each version will be given a distinguishing version number. Once Original Code has been published under a particular version of this License, You may continue to use it under the terms of that version. You may also choose to use such Original Code under the terms of any subsequent version of this License published by Apple. No one other than Apple has the right to modify the terms applicable to Covered Code created under this License.

8. NO WARRANTY OR SUPPORT. The Covered Code may contain in whole or in part pre-release, untested, or not fully tested works. The Covered Code may contain errors that could cause failures or loss of data, and may be incomplete or contain inaccuracies. You expressly acknowledge and agree that use of the Covered Code, or any portion thereof, is at Your sole and entire risk. THE COVERED CODE IS PROVIDED "AS IS" AND WITHOUT WARRANTY, UPGRADES OR SUPPORT OF ANY KIND AND APPLE AND APPLE'S LICENSOR(S) (COLLECTIVELY REFERRED TO AS "APPLE" FOR THE PURPOSES OF SECTIONS 8 AND 9) AND ALL CONTRIBUTORS EXPRESSLY DISCLAIM ALL WARRANTIES AND/OR CONDITIONS, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES AND/OR CONDITIONS OF MERCHANTABILITY, OF SATISFACTORY QUALITY, OF FITNESS FOR A PARTICULAR PURPOSE, OF ACCURACY, OF QUIET ENJOYMENT, AND NONINFRINGEMENT OF THIRD PARTY RIGHTS. APPLE AND EACH CONTRIBUTOR DOES NOT WARRANT AGAINST INTERFERENCE WITH YOUR ENJOYMENT OF THE COVERED CODE, THAT THE FUNCTIONS CONTAINED IN THE COVERED CODE WILL MEET YOUR REQUIREMENTS, THAT THE OPERATION OF THE COVERED CODE WILL BE UNINTERRUPTED OR ERROR-FREE, OR THAT DEFECTS IN THE COVERED CODE WILL BE CORRECTED. NO ORAL OR WRITTEN INFORMATION OR ADVICE GIVEN BY APPLE, AN APPLE AUTHORIZED REPRESENTATIVE OR ANY CONTRIBUTOR SHALL CREATE A WARRANTY. You acknowledge that the Covered Code is not intended for use in the operation of nuclear facilities, aircraft navigation, communication systems, or air traffic control machines in which case the failure of the Covered Code could lead to death, personal injury, or severe physical or environmental damage.

9. LIMITATION OF LIABILITY. TO THE EXTENT NOT PROHIBITED BY LAW, IN NO EVENT SHALL APPLE OR ANY CONTRIBUTOR BE LIABLE FOR ANY INCIDENTAL, SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES ARISING OUT OF OR RELATING TO THIS LICENSE OR YOUR USE OR INABILITY TO USE THE COVERED CODE, OR ANY PORTION THEREOF, WHETHER UNDER A THEORY OF CONTRACT, WARRANTY, TORT (INCLUDING NEGLIGENCE), PRODUCTS LIABILITY OR OTHERWISE, EVEN IF APPLE OR SUCH CONTRIBUTOR HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES AND NOTWITHSTANDING THE FAILURE OF ESSENTIAL PURPOSE OF ANY REMEDY. SOME JURISDICTIONS DO NOT ALLOW THE LIMITATION OF LIABILITY OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THIS LIMITATION MAY NOT APPLY TO YOU. In no event shall Apple's total liability to You for all damages (other than as may be required by applicable law) under this License exceed the amount of fifty dollars ($50.00).

10. Trademarks. This License does not grant any rights to use the trademarks or trade names "Apple", "Apple Computer", "Mac", "Mac OS", "QuickTime", "QuickTime Streaming Server" or any other trademarks, service marks, logos or trade names belonging to Apple (collectively "Apple Marks") or to any trademark, service mark, logo or trade name belonging to any Contributor. You agree not to use any Apple Marks in or as part of the name of products derived from the Original Code or to endorse or promote products derived from the Original Code other than as expressly permitted by and in strict compliance at all times with Apple's third party trademark usage guidelines which are posted at http://www.apple.com/legal/guidelinesfor3rdparties.html.

11. Ownership. Subject to the licenses granted under this License, each Contributor retains all rights, title and interest in and to any Modifications made by such Contributor. Apple retains all rights, title and interest in and to the Original Code and any Modifications made by or on behalf of Apple ("Apple Modifications"), and such Apple Modifications will not be automatically subject to this License. Apple may, at its sole discretion, choose to license such Apple Modifications under this License, or on different terms from those contained in this License or may choose not to license them at all.

12. Termination.

12.1 Termination. This License and the rights granted hereunder will terminate:

(a) automatically without notice from Apple if You fail to comply with any term(s) of this License and fail to cure such breach within 30 days of becoming aware of such breach;

(b) immediately in the event of the circumstances described in Section 13.5(b); or

(c) automatically without notice from Apple if You, at any time during the term of this License, commence an action for patent infringement against Apple; provided that Apple did not first commence an action for patent infringement against You in that instance.

12.2 Effect of Termination. Upon termination, You agree to immediately stop any further use, reproduction, modification, sublicensing and distribution of the Covered Code. All sublicenses to the Covered Code which have been properly granted prior to termination shall survive any termination of this License. Provisions which, by their nature, should remain in effect beyond the termination of this License shall survive, including but not limited to Sections 3, 5, 8, 9, 10, 11, 12.2 and 13. No party will be liable to any other for compensation, indemnity or damages of any sort solely as a result of terminating this License in accordance with its terms, and termination of this License will be without prejudice to any other right or remedy of any party.

13. Miscellaneous.

13.1 Government End Users. The Covered Code is a "commercial item" as defined in FAR 2.101. Government software and technical data rights in the Covered Code include only those rights customarily provided to the public as defined in this License. This customary commercial license in technical data and software is provided in accordance with FAR 12.211 (Technical Data) and 12.212 (Computer Software) and, for Department of Defense purchases, DFAR 252.227-7015 (Technical Data -- Commercial Items) and 227.7202-3 (Rights in Commercial Computer Software or Computer Software Documentation). Accordingly, all U.S. Government End Users acquire Covered Code with only those rights set forth herein.

13.2 Relationship of Parties. This License will not be construed as creating an agency, partnership, joint venture or any other form of legal association between or among You, Apple or any Contributor, and You will not represent to the contrary, whether expressly, by implication, appearance or otherwise.

13.3 Independent Development. Nothing in this License will impair Apple's right to acquire, license, develop, have others develop for it, market and/or distribute technology or products that perform the same or similar functions as, or otherwise compete with, Modifications, Larger Works, technology or products that You may develop, produce, market or distribute.

13.4 Waiver; Construction. Failure by Apple or any Contributor to enforce any provision of this License will not be deemed a waiver of future enforcement of that or any other provision. Any law or regulation which provides that the language of a contract shall be construed against the drafter will not apply to this License.

13.5 Severability. (a) If for any reason a court of competent jurisdiction finds any provision of this License, or portion thereof, to be unenforceable, that provision of the License will be enforced to the maximum extent permissible so as to effect the economic benefits and intent of the parties, and the remainder of this License will continue in full force and effect. (b) Notwithstanding the foregoing, if applicable law prohibits or restricts You from fully and/or specifically complying with Sections 2 and/or 3 or prevents the enforceability of either of those Sections, this License will immediately terminate and You must immediately discontinue any use of the Covered Code and destroy all copies of it that are in your possession or control.

13.6 Dispute Resolution. Any litigation or other dispute resolution between You and Apple relating to this License shall take place in the Northern District of California, and You and Apple hereby consent to the personal jurisdiction of, and venue in, the state and federal courts within that District with respect to this License. The application of the United Nations Convention on Contracts for the International Sale of Goods is expressly excluded.

13.7 Entire Agreement; Governing Law. This License constitutes the entire agreement between the parties with respect to the subject matter hereof. This License shall be governed by the laws of the United States and the State of California, except that body of California law concerning conflicts of law.

Where You are located in the province of Quebec, Canada, the following clause applies: The parties hereby confirm that they have requested that this License and all related documents be drafted in English.

Les parties ont exigé que le présent contrat et tous les documents connexes soient rédigés en anglais.

EXHIBIT A.

"Portions Copyright (c) 1999-2003 Apple Computer, Inc. All Rights Reserved.

This file contains Original Code and/or Modifications of Original Code as defined in and that are subject to the Apple Public Source License Version 2.0 (the 'License'). You may not use this file except in compliance with the License. Please obtain a copy of the License at http://www.opensource.apple.com/apsl/ and read it before using this file.

The Original Code and all software distributed under the License are distributed on an 'AS IS' basis, WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, AND APPLE HEREBY DISCLAIMS ALL SUCH WARRANTIES, INCLUDING WITHOUT LIMITATION, ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, QUIET ENJOYMENT OR NON-INFRINGEMENT. Please see the License for the specific language governing rights and limitations under the License."

Other Software Licenses

Info-ZIP copyright and license

This is version 2007-Mar-4 of the Info-ZIP license. The definitive version of this document should be available at ftp://ftp.info-zip.org/pub/infozip/license.html indefinitely and a copy at http://www.info-zip.org/pub/infozip/license.html.

Copyright © 1990-2007 Info-ZIP. All rights reserved.

For the purposes of this copyright and license, “Info-ZIP” is defined as the following set of individuals:

Mark Adler, John Bush, Karl Davis, Harald Denker, Jean-Michel Dubois, Jean-loup Gailly, Hunter Goatley, Ed Gordon, Ian Gorman, Chris Herborth, Dirk Haase, Greg Hartwig, Robert Heath, Jonathan Hudson, Paul Kienitz, David Kirschbaum, Johnny Lee, Onno van der Linden, Igor Mandrichenko, Steve P. Miller, Sergio Monesi, Keith Owens, George Petrov, Greg Roelofs, Kai Uwe Rommel, Steve Salisbury, Dave Smith, Steven M. Schweda, Christian Spieler, Cosmin Truta, Antoine Verheijen, Paul von Behren, Rich Wales, Mike White.

Permission is granted to anyone to use this software for any purpose, including commercial applications, and to alter it and redistribute it freely, subject to the above disclaimer and the following restrictions:

1. Redistributions of source code (in whole or in part) must retain the above copyright notice, definition, disclaimer, and this list of conditions.

2. Redistributions in binary form (compiled executables and libraries) must reproduce the above copyright notice, definition, disclaimer, and this list of conditions in documentation and/or other materials provided with the distribution. The sole exception to this condition is redistribution of a standard UnZipSFX binary (including SFXWiz) as part of a self-extracting archive; that is permitted without inclusion of this license, as long as the normal SFX banner has not been removed from the binary or disabled.

3. Altered versions--including, but not limited to, ports to new operating systems, existing ports with new graphical interfaces, versions with modified or added functionality, and dynamic, shared, or static library versions not from Info-ZIP--must be plainly marked as such and must not be misrepresented as being the original source or, if binaries, compiled from the original source. Such altered versions also must not be misrepresented as being Info-ZIP releases--including, but not limited to, labeling of the altered versions with the names "Info-ZIP" (or any variation thereof, including, but not limited to, different capitalizations), "Pocket UnZip," "WiZ" or "MacZip" without the explicit permission of Info-ZIP. Such altered versions are further prohibited from misrepresentative use of the Zip-Bugs or Info-ZIP e-mail addresses or the Info-ZIP URL(s), such as to imply Info-ZIP will provide support for the altered versions.

4. Info-ZIP retains the right to use the names "Info-ZIP," "Zip," "UnZip," "UnZipSFX," "WiZ," "Pocket UnZip," "Pocket Zip," and "MacZip" for its own source and binary releases.