EPSON SureColor®
S30670
S50670
S70670

User's Guide

EPSON®
EXCEED YOUR VISION

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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 place 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.

- ❏ The printer requires two power cables with a combined capacity of 20 A at 100 V or 10 A at 240 V. If the combined capacity can not be supplied by a single outlet, connect the cables to different outlets with independent power sources.

- ❏ If you plan to use the printer in Germany, observe the following:

  To provide adequate short-circuit protection and over-current protection for this printer, the building installation must be protected by a 10 or 16 amp circuit breaker.

- ❏ 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 cabinet.

- ❏ 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.

- ❏ 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 cartridges

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

- ❏ Do not touch the green IC chip on the side of the cartridge. This may affect normal operation and printing.

- ❏ The IC chip on this ink cartridge retains a variety of cartridge-related information, such as the ink cartridge status, so that the cartridge may be removed and reinserted freely.

❏ If you remove an ink cartridge for later use, protect the ink supply area from dirt and dust, and store it in the same environment as this product. Note that there is a valve in the ink supply port, making covers or plugs unnecessary, but care is needed to prevent the ink from staining items that the cartridge touches. Do not touch the ink supply port or surrounding area.

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.

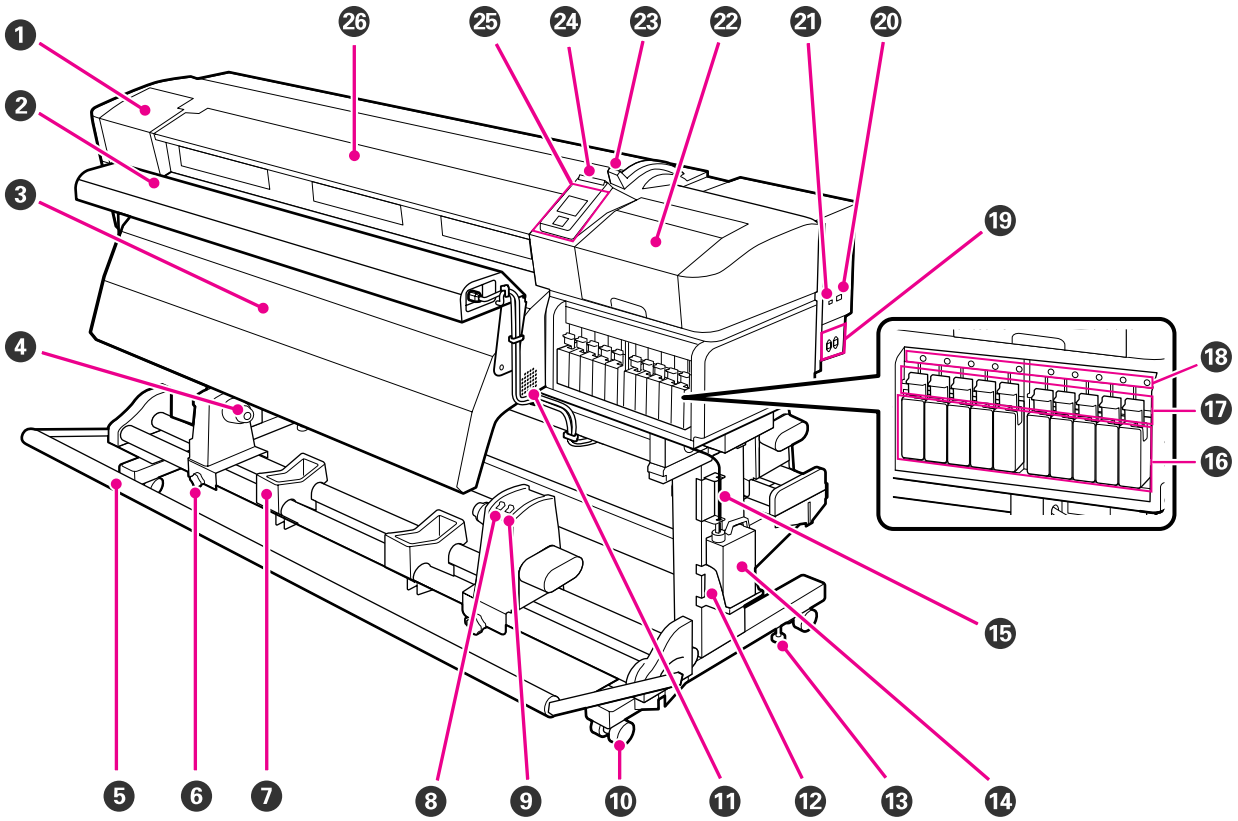
Note:	Notes contain useful or additional information on the operation of this product.

Illustrations

Unless otherwise noted, the illustrations show the S30670, but the instructions in this manual apply to all three models.

Printer Parts

Front section - S50670 and S70670



1 **Maintenance cover (left)**
Open this cover to clean the area around the print head. Normally closed when using the printer.

See "Cleaning Around the Print Head" on page 126.

2 **Additional print drying system**
The additional print drying system can be used to rapidly dry ink after printing. Available separately for the S70670.

See the *Additional Print Drying System Setup Guide*.

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

See "Heating & Drying" on page 97.

4 **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.

See "Media Loading and Take Up" on page 82.

5 **Tensioner**
The tensioner maintains tension to prevent the media sagging as it is taken up.

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 lift levers: one on the left and one on the right.

7 Roll support
Place the used roll core for media take-up on these holders. There are two supports: one on the left and one on the right.

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

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

10 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.

11 Airflow vents
These vents vent air from inside the printer. Do not obstruct these vents.

12 Waste ink bottle holder
Place the waste ink bottle in this holder.

13 Adjuster
The adjusters keep the printer in place. After installing the printer, keep it securely in place during use.

14 Waste ink bottle
Waste ink collects in this bottle.

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

15 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.

16 Ink cartridge/replacement cartridge
The number of each type of cartridge installed varies with the option selected for color mode.

S70670: 8 colors/10 colors

S50670: 4 colors/5 colors

In 8 or 4 color mode, you need to use “replacement cartridges” to fill all slots. These are included with your printer.

17 Lock levers
Raise the levers to unlock the ink cartridges prior to removal. Lower the levers to lock the cartridges in place after insertion.

18 Cartridge check lamp
This lamp lights when an ink cartridge error occurs.

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

Off : No error.

19 AC inlet #1/AC inlet #2
Connects the power cable. Be sure to connect both cables.

20 LAN port
See “LAN port” on page 19.

21 USB port
Connects the USB cable.

22 Maintenance cover (right)
Open this cover when performing regular maintenance. Normally closed when using the printer.

See “Regular Maintenance” on page 121.

23 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.

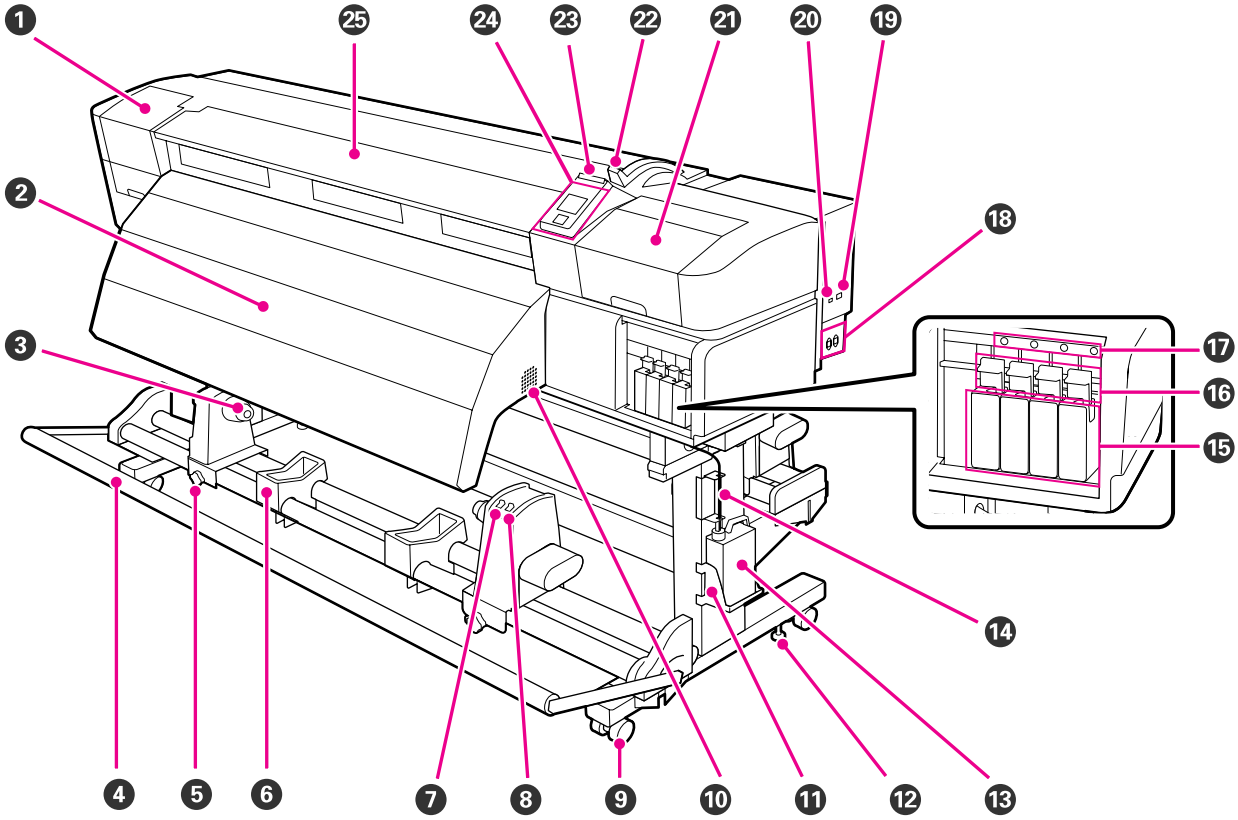
24 Alert lamp
This lamp lights or flashes when an error occurs.

On/Flashing	:	An error occurred; the type of error is indicated by how the lamp lights or flashes. Check the contents of the error on the control panel's screen.
Off	:	No error.

25 Control panel
See “Control panel” on page 20.

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

Front section - S30670



1 Maintenance cover (left)
Open this cover to clean the area around the print head. Normally closed when using the printer.

See "Cleaning Around the Print Head" on page 126.

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

See "Heating & Drying" on page 97.

3 Roll core holder
Place the used 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 82.

4 Tensioner
The tensioner maintains tension to prevent the media sagging as it is taken up.

5 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.

6 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.

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

8 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.

9 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.

10 Airflow vents
These vents vent air from inside the printer. Do not obstruct these vents.

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

12 Adjuster
The adjusters keep the printer in place. After installing the printer, keep it securely in place during use.

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

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

14 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.

15 Ink cartridges
Install all ink cartridges into each slot.

16 Lock levers
Raise the levers to unlock the ink cartridges prior to removal. Lower the levers to lock the cartridges in place after insertion.

17 Cartridge check lamp
This lamp lights when an ink cartridge error occurs.

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

Off : No error.

18 AC inlet #1/AC inlet #2
Connects the power cable. Be sure to connect both cables.

19 LAN port
Connects the LAN cable.

20 USB port
Connects the USB cable.

21 Maintenance cover (right)
Open this cover when performing regular maintenance. Normally closed when using the printer.

See "Regular Maintenance" on page 121.

22 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.

23 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.

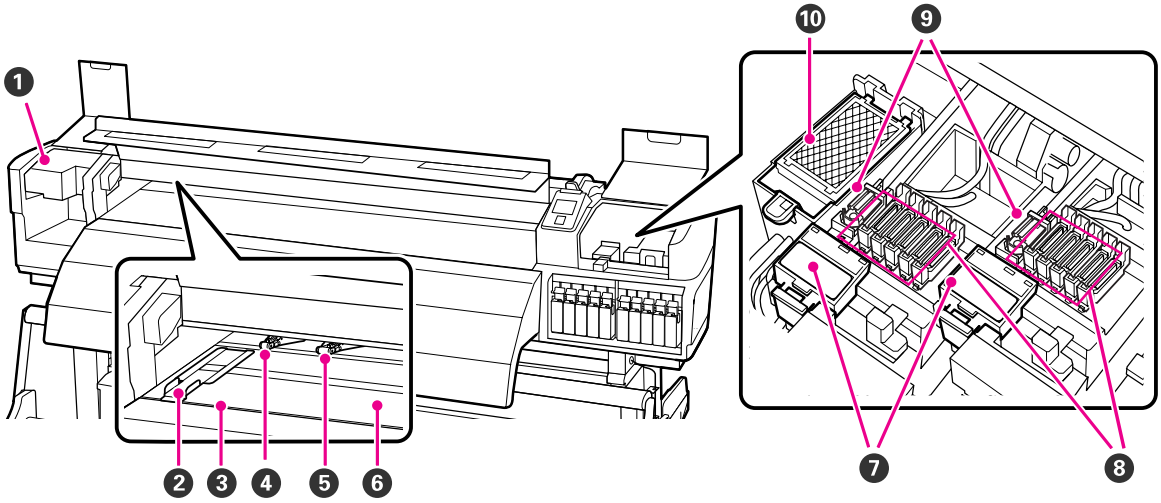
Off : No error.

24 Control panel
See "Control panel" on page 20.

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

Inside - S70670, S50670

Dirt on any of the following parts may reduce print quality. Regularly clean or exchange these parts as described in the chapters listed in the reference sections below. The illustration shows the S70670.



1 Print head
The print head prints by moving left and right while emitting ink. The print head on the left is Head 1, the print head on the right Head 2. We recommend that you clean the area around this unit once a week.

See "Cleaning Around the Print Head" on page 126.

2 Media holding plate
The media holding plates prevent the media riding up and keeps 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 - S70670/S50670" on page 39 and "Loading Media - S30670" on page 58.

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

4 Pressure rollers (high)

There are ten rollers in total; the high pressure rollers are the two on the outside edges. They press down on the edges of the media during ink layering.

See "Cleaning the Platen Heater, Pressure Rollers, and Media Holding Plates" on page 112.

See "High Print Quality" on page 27.

5 Pressure rollers (low)

There are ten rollers in total; all of which are low pressure rollers apart from the two on the outside edges. They press down on the media during normal (non-layer) printing. The number used varies with the width of the media.

See "Cleaning the Platen Heater, Pressure Rollers, and Media Holding Plates" on page 112.

6 Platen heater

The platen heater ensures that the ink adheres evenly.

See "Heating & Drying" on page 97.

See "Cleaning the Platen Heater, Pressure Rollers, and Media Holding Plates" on page 112.

7 Wiper cleaner

The wiper cleaner removes ink from the wiper. It is included in the maintenance kit and needs to be replaced about once every six months.

See "Replacing the Wiper and Wiper Cleaner" on page 135.

8 Caps

Except during printing, these caps cover the print head nozzles to prevent them drying out. We recommend that this unit be cleaned once a week.

See "Regular Part Cleaning" on page 124.

9 Wiper

The wiper removes ink from the print head nozzles. We recommend that this unit be cleaned once a week. It is included in the maintenance kit and needs to be replaced about once every six months.

See "Regular Part Cleaning" on page 124.

See "Replacing the Wiper and Wiper Cleaner" on page 135.

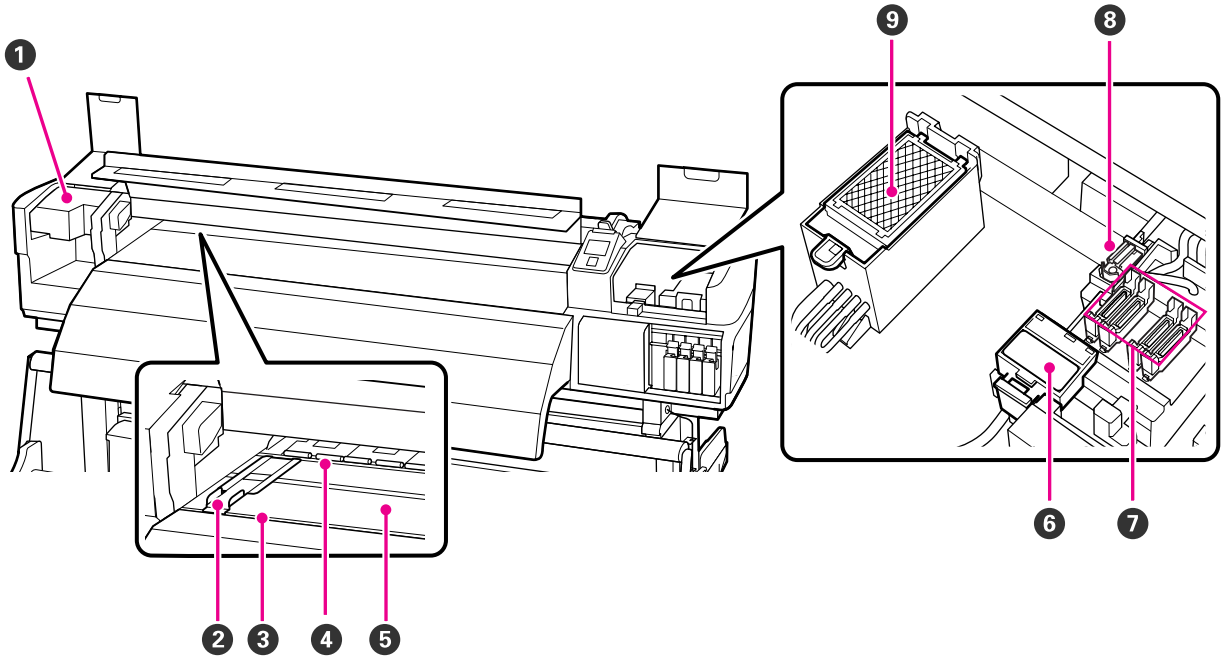
10 Flushing pad

Ink is discharged onto this pad during flushing. It is It is included in the maintenance kit and needs to be replaced about once every six months.

See "Replacing the Flushing Pad" on page 138.

Inside - S30670

Dirt on any of the following parts may reduce print quality. Regularly clean or exchange 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. We recommend that you clean the area around this unit once a week. Make sure the print head is at the far left side of the printer before cleaning.

See “Cleaning Around the Print Head” on page 126.

2 Media holding plate
The media holding plates prevent the media riding up and keeps 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 - S30670” on page 58.

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 Heater, Pressure Rollers, and Media Holding Plates” on page 112.

5 Platen heater
The platen heater ensures that the ink adheres evenly.

See “Heating & Drying” on page 97

See “Cleaning the Platen Heater, Pressure Rollers, and Media Holding Plates” on page 112.

6 Wiper cleaner
The wiper cleaner removes ink from the wiper. It is included in the maintenance kit and needs to be replaced about once every six months (or more often, depending on usage).

See “Replacing the Wiper and Wiper Cleaner” on page 135.

7 Caps
Except during printing, these caps cover the print head nozzles to prevent them from drying out. We recommend that the caps be cleaned once a week.

See “Regular Part Cleaning” on page 124.

8 Wiper
The wiper removes ink from the print head nozzles. We recommend that this unit be cleaned once a week. It is included in the maintenance kit and needs to be replaced about once every six months (or more often, depending on usage).

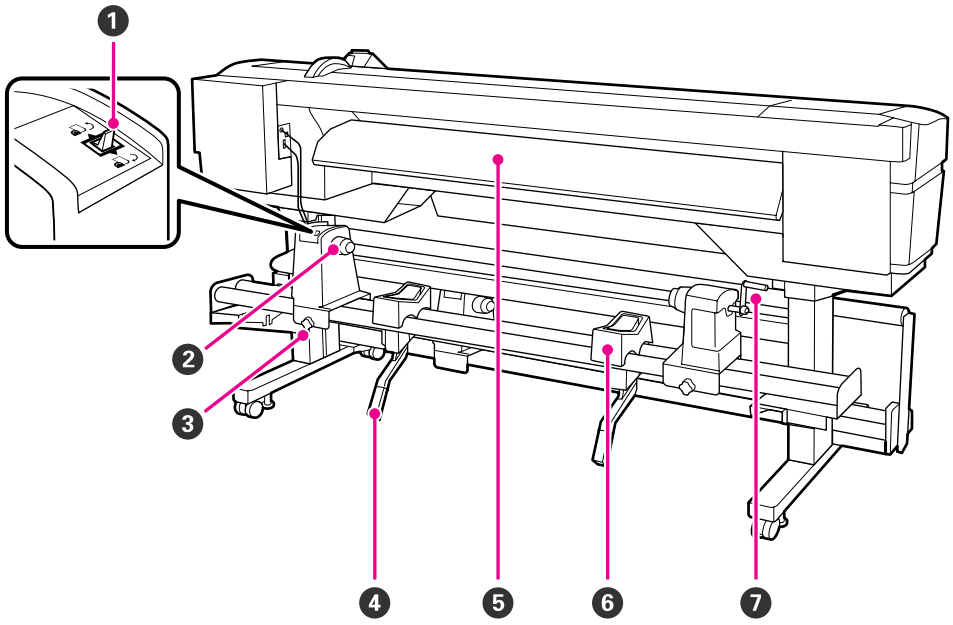
See “Regular Part Cleaning” on page 124

See “Replacing the Wiper and Wiper Cleaner” on page 135.

9 Flushing pad
Ink is discharged onto this pad during flushing. It is included in the maintenance kit and needs to be replaced about once every six months (or more often, depending on usage).

See “Replacing the Flushing Pad” on page 138.

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.

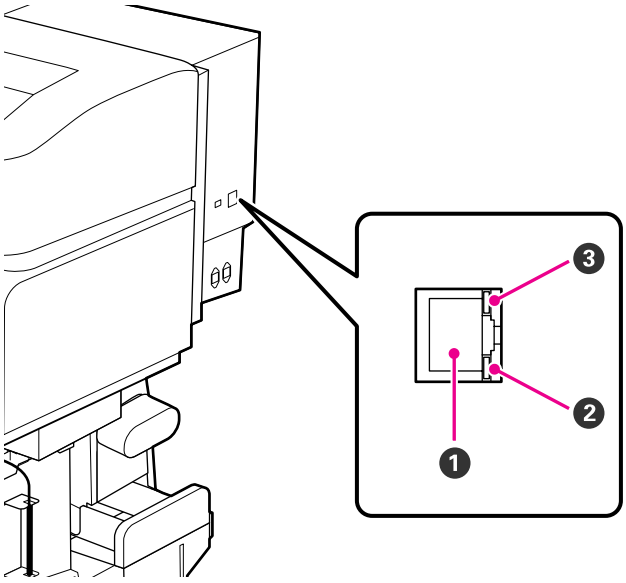
4 EPSON LiftAssist lever
If the media to be mounted on the roll holders seems heavy, use these levers to raise the media effortlessly to the level of the roll holders. There are two LiftAssist levers: one on the left and one on the right.

5 Pre-heater
Heats the media before printing so that the print area is not subject to sudden changes in temperature.

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 press the holder and apply pressure to the roll core.

LAN port



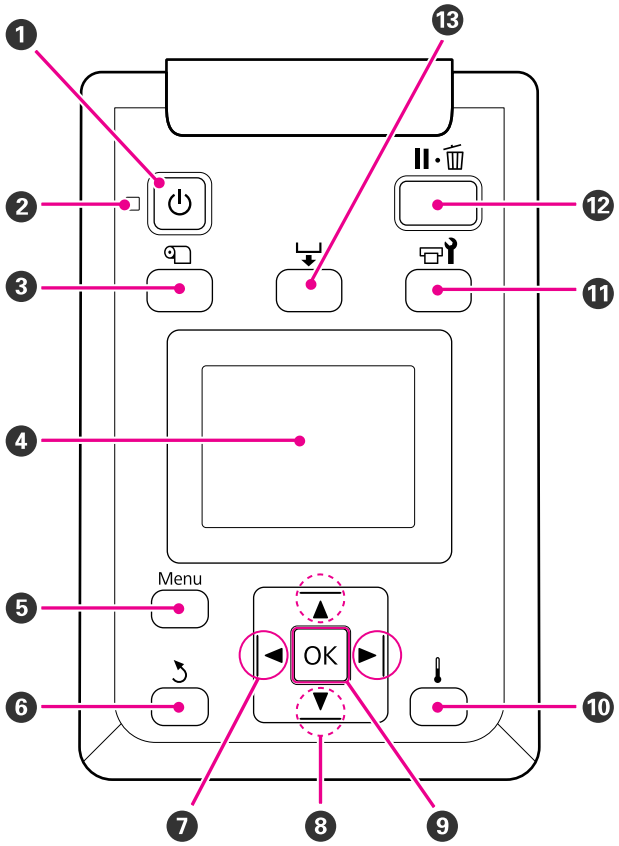
1 RJ-45 connector
Connects the LAN cable. Use a shielded twisted pair cable (category 5 or higher).

2 Data lamp
The data lamp shows connection status and indicates whether the printer is receiving data.

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

Data lamp	Status lamp (green/red)	Status
On	On (green)	The printer is connected using a 1000base-T connection.
Flashing		The printer is receiving data over a 1000base-T connection.
On	On (red)	The printer is connected using a 100base-TX connection.
Flashing		The printer is receiving data over a 100base-TX connection.

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 152.

4 Display

Displays the printer's status, menus, error messages, and so on. See “Understanding the Display” on page 22.

5 Menu button

Press this button to display menus. See “Using the Control Panel Menu” on page 147.

6 ↩ button (back button)

Press this button to exit to the previous menu when options are displayed. See “Menu Operations” on page 147.

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 ▼ to feed the media and ▲ to rewind. Keep the ▼ button pressed to feed the media. Keep the ▲ button pressed to rewind the media. 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 147.

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.

10 button (heating and drying button)

Pressing this button displays the Heating & Drying menu, where you can adjust the **Heater Temperature**. If the optional additional print drying system is attached, you can also adjust **Additional Dryer** settings. These options can be adjusted during printing.

See “The Media Setup Menu” on page 152.

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 159.

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.

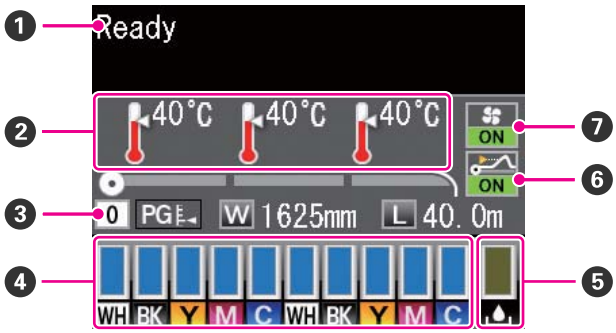
13 ↵ button (media feed button)

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 80.

When printing is in progress, you can use this button to adjust media feed.
See “Feed Adjustment (Manual Feed Adjustment)” on page 103.

Understanding the Display

The following illustration shows the display for the S50670.



1 Messages

Displays the printer's status, operation, and error messages.
See “When a Message is Displayed” on page 164.

2 Heater temperature

From left to right, this display shows the temperature settings for the pre-heater, platen heater, and 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.

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.

: 1.5

: 2.0

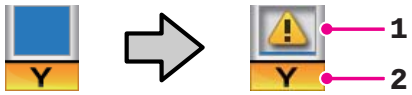
: 2.5

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 152.

4 Ink cartridge status

Displays the approximate level of remaining ink and the current status. When ink runs low or an error occurs, the display changes as shown below.

Normal Warning or error



1 Status indicators

The ink cartridge status is indicated as follows.

: Ready to print. The height of the indicator changes with the level of ink remaining.

: Ink is low. You need to prepare a new ink cartridge.

: The level of ink remaining has reached the limit; replace with a new cartridge.

: The ink cartridge is not locked. Lower the lock lever to engage the lock.

: No ink cartridge is inserted. Insert the ink cartridge and lower the lock lever to engage the lock.

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

: A cleaning cartridge is installed. The height of the indicator shows the amount of cleaning liquid remaining in the cartridge in three levels.

Note:
*You can also check the level of ink remaining using the **Ink Level** option in the menus. See "The Ink Level Menu" on page 160.*

2 Ink color codes

BK : Black

Y : Yellow

M : Magenta

C : Cyan

MS Metallic Silver

LK Light Black

OR Orange

LC Light Cyan

LM Light Magenta

WH White

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

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.

6 Head strike detection status

This is displayed by the S50670 only.

: The printer checks whether the media lifts during printing.

: The printer does not check whether the media lifts during printing.

See the “The Maintenance Menu” on page 159.

7 Additional print drying system status (system included with the S50670 and optional for other models)

This display shows settings for the optional additional print drying system.

No icon : Not installed, or it is not installed correctly.

: The drying fan is enabled.

: The drying fan is not enabled. To start the fan, select **Additional Dryer** for **On** in the setup menu.

See “The Media Setup Menu” on page 152.

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

Triple Heaters

The three heaters listed below support improved productivity and print quality.

The pre-heater: Warms media before printing to protect the print area from sudden changes in temperature.

The platen heater: Ensures that the ink adheres evenly.

The after heater: 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.

With the optional heavy roll media system, the printer can handle even larger 80 kg (176.4 lb) rolls with external diameters of 300 mm (11.8 inches).

Auto Take-up Reel Unit Comes Standard

The auto take-up reel unit automatically takes up printed media cleanly, with no wrinkles. You'll find it comes in handy for banner printing, high-volume print jobs, and continuous overnight printing.

High-Capacity Ink Cartridges

The printer uses high-capacity, 700 ml ink cartridges (white cartridges 600 ml, metallic silver cartridges 350 ml) to ensure productivity, reducing the nuisance of frequent ink replacements.

High-Speed Printing

The S-Series printers all use the EPSON MicroPiezo® TFT print head(s) for extreme print speeds.

Additional Print Drying System Available

The additional print drying system (included with the S50670; optional with other models) can be used for increased drying performance and improved productivity. It is recommended when using the S70670 in 10 color mode, as the white and metallic silver inks are slow to dry.

High Print Quality

Smooth Tone Gradations, High-Fidelity Color Reproduction

The S70670 is equipped for light-colored inks (light black, light cyan and light magenta), reducing grain for continuous tone gradation, while the use of orange ink increases the color gamut for high-fidelity color reproduction. It is capable of print quality of a level sufficient for car wraps and indoor display advertising that can be inspected at close range.

Support for White and Metallic Silver Inks

A variety of print effects are available when using the S70670 with white and metallic silver inks or the S50670 with white ink. The white ink is high opacity, making it suitable for masking on transparent media (window graphics). Other inks can be printed over white or metallic silver inks (ink layering), preventing color inks showing through and allowing for a variety of metallic colors.

Note:
Note the following when using ink layering.

- ❏ *Use media at least 2% longer than specified in document print settings.*
- ❏ *Note that the auto take-up reel unit may not function as expected, causing a decline in print quality.*
- ❏ *Some media types, such as banner and canvas, are not supported. Before buying media in large quantities, try printing on a smaller sample and check the results.*

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.

Virtually Odorless Solvent Ink

The distinctive odor of solvent-based inks has been reduced with our solvent inks. This not only improves the work environment during printing but ensures that items intended for indoor display can be exhibited in any venue.

Head Strike Detection

The S50670 is equipped with a system for detecting media lift during printing. If the media lifts during printing, printing will stop to prevent the media coming into contact with the print head. Stopping printing avoids printing errors and prevents waste of ink and media.

Ease of Maintenance

Print quality can only be ensured through daily maintenance, and the design of this printer leaves plenty of space for maintenance.

E-Mail Error/Warning Notification

The EpsonNet Config with Web Browser system built into the printer's network interface offers e-mail notification. Once configured for e-mail notification, the printer will send errors and warnings to selected e-mail addresses, ensuring peace of mind when the printer is left unmanned during overnight operation and in other similar situations.

Lamp and Alarm Error Alerts

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

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

High-Speed USB/Gigabit Ethernet

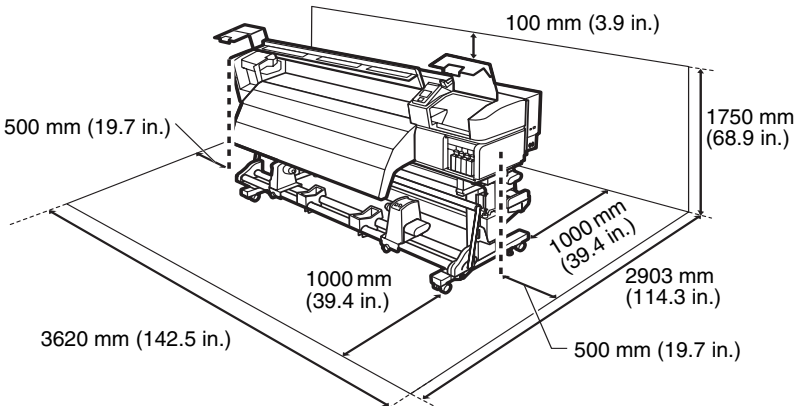
The printer comes equipped with high-speed USB and 100 Base-TX/1000 Base-T network interfaces.

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 180.



Notes when using the printer

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

Additional precautions are required for white and metallic silver inks. See “Specialty Inks” on page 35.

❏ When using the printer, observe the operating temperature and humidity range described in the “Specifications Table” on page 180.

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.

❏ The following components require regular maintenance at recommended intervals or according to the frequency with which the printer is used. Failure to perform regular maintenance could result in loss of print quality. In the absence of the appropriate maintenance, continued use could damage the print head.

See “Regular Maintenance” on page 121.

Component to be cleaned	Frequency
Print head	Once a week When colors in the printout are faint or missing even after head has been cleaned.
Wiper	
Caps	
Wiper rail	

Component requiring replacement	Frequency
Flushing pad	Once every six months (or more often, depending on usage)
Wiper cleaner	
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 nozzle 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.

Additional precautions are required for white and metallic silver inks. See “Specialty Inks” on page 35.

- ❏ 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 putting the printer in storage.

- ❏ 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, 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 114.

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

Using the S30670 or Printers Without Specialty Inks

> ***Note:***
> *The term “specialty inks” is used for white and metallic silver inks.*

- ❏ If you do not print for a long time, the print head nozzles may become clogged. Turn the printer on at least once every seven days 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.

- ❏ If the printer will not be used for an extended period, use a cleaning cartridge (available separately) to wash the heads. Leaving the heads unwashed causes permanent clogs.

Whether head washing is required depends on the length of time the printer will be left unused.

- ❏ S70670 (8 color mode): 2 weeks or more
- ❏ S50670 (4 color mode): 3 weeks or more
- ❏ S30670: 1 month or more

See the “The Maintenance Menu” on page 159 for more information.

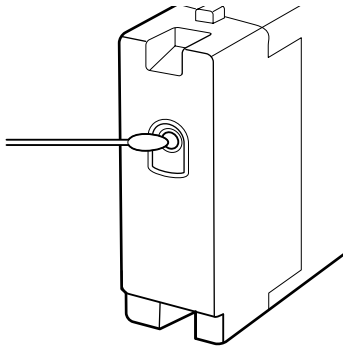
Notes on handling ink cartridges

Note the following points when handling ink cartridges to maintain good print quality.

Additional precautions are required for white and metallic silver inks. See “Specialty Inks” on page 35.

- ❏ Extra ink is required to fully charge the print head nozzles the first time the printer is used.
- ❏ Store ink cartridges at room temperature in a location that is not exposed to direct sunlight.
- ❏ To ensure print quality, use all the ink in the cartridge before the earlier of the following dates:
  - ❏ The expiration date shown on the ink cartridge packaging
  - ❏ Six months after opening the ink cartridge package
- ❏ If you move ink cartridges from a cold place to a warm place, leave it at room temperature for more than four hours before using the ink cartridge.
- ❏ Do not touch the ink cartridge IC chip.
- ❏ Fill all slots using ink or replacement cartridges (replacement cartridges are required in 8 and 4 color modes). You cannot print if any of the slots are empty.
- ❏ Do not leave the printer without ink cartridges installed. The ink in the printer will dry out and the printer will not function as expected. Leave ink cartridges or replacement cartridges in all slots even while you are not using the printer.
- ❏ Because the green IC chip contains the cartridge’s own information such as the remaining ink level, you can still reinstall and use the ink cartridge after removing it from the printer.

❏ Use a cleaning stick from the supplied maintenance kit to wipe ink from the ink supply port of cartridges that have been removed from the printer before all the ink is used. Dried ink on the supply port may cause ink leaks when the cartridge is reinserted and used.



While cartridges are in storage, keep the ink supply ports free of dust. The ink supply port has a valve in it so it does not need to be capped.

❏ Removed ink cartridges may have ink around the ink supply port, so be careful not to get any ink on the surrounding area when removing the cartridges.

❏ To maintain the quality of the print head, this printer stops printing before ink cartridges are completely expended.

❏ Although the ink cartridges may contain recycled materials, this does not affect printer function or performance.

❏ Do not dismantle or remodel ink cartridges. You may not be able to print properly.

❏ Do not drop or knock cartridges against hard objects; otherwise, the ink may leak.

❏ With the exception of white and metallic silver, ink cartridges must be removed and shaken thoroughly once every three weeks.

See “How to replace” on page 143.

❏ Do not insert or remove replacement cartridges during printing.

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 they are 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.

Specialty Inks

The term “specialty inks” is used for white and metallic silver inks. White and metallic silver inks are prone to settling (components settling to the bottom of the liquid). Using the ink in this state can cause a decline in print quality and printer malfunction. This section describes precautions for handling white and metallic silver inks. The S30670 does not support specialty inks.

Cautions

- ❏ When specialty inks are installed, maintenance will be performed automatically to prevent ink accumulating in the printer and causing clogs. Because turning the printer off prevents maintenance being performed, leading to printer malfunction, we recommend that the printer not be turned off.

- ❏ White and metallic silver ink cartridges must be stored flat (i.e., laid on their sides). If the cartridges are stored on end, agitating the cartridges before use may fail to dissolve the materials that have precipitated from the ink (i.e., settled to the bottom of the liquid) during storage.

- ❏ If the printer will not be used for seven days or more, use a cleaning cartridge (available separately) to wash the heads. You will have to drain all channels, not just the white and metallic silver. Leaving the heads unwashed causes permanent clogs. See “The Maintenance Menu” on page 159 for more information.

Maintenance

The maintenance required to keep the printer in good working order can be divided into routine maintenance and tasks that the printer performs automatically.

Auto Maintenance

To prevent malfunctions caused by settling of the white and metallic silver inks, the printer automatically cycles the ink if no operations are performed for some time after printing or after the printer is turned on.

Automatic maintenance is performed if the printer is on; no user intervention is required.

Daily Maintenance

- ❏ White and metallic silver ink cartridges must be removed and thoroughly shaken once every 24 hours. See “How to replace” on page 143.

❏ If print results are uneven, circulate or refresh the ink. See “Maintenance Procedures for Specialty Inks” on page 117.

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 applications 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 36 and “Exiting EPSON LFP Remote Panel 2” on page 37.
Drivers and utilities	Install the EPSON communications driver (EPSON SC-S30600 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.
Network utility	Install and launch a wizard that will help you enter IP addresses for a simple network connection.
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.

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

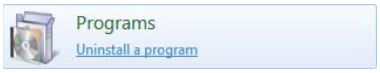
Important:

- ❏ *Log in to an "Computer administrator" account (an account with Administrators group privileges).*
- ❏ *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.

   In Windows XP, go to the **Control Panel** and click **Add or Remove Programs**.



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

   Selecting the following deletes the Epson communications drivers:

   - ❏ EPSON SC-S70670 Series Comm Driver Printer Uninstall
   - ❏ EPSON SC-S50670 Series Comm Driver Printer Uninstall
   - ❏ EPSON SC-S30670 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

The process for loading media varies with the model of printer or type of media feeding unit used. Choose the method suited to your particular setup.

Caution:

- ❏ *The heaters and media holding plates 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.*
- ❏ *Do not rub your hands along the edges of the media. The edges of the media are sharp and can cause injury.*

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.

Note:
For information on the media that can be used in the printer, see “Supported Media” on page 177.

Loading Media - S70670/S50670

The procedure for loading media varies depending on whether you are using the installed media feeding unit or the optional heavy roll media system.

Follow the steps below when using the supplied media feeding unit.

When the Heavy Roll Media Feeding Unit is installed, see “Using the Optional Heavy Roll Media Feeding Unit” on page 68.

When the Standard Media Feeding Unit Is Installed

This section uses the S70670 to illustrate the process of loading media when the supplied media feeding unit is installed.

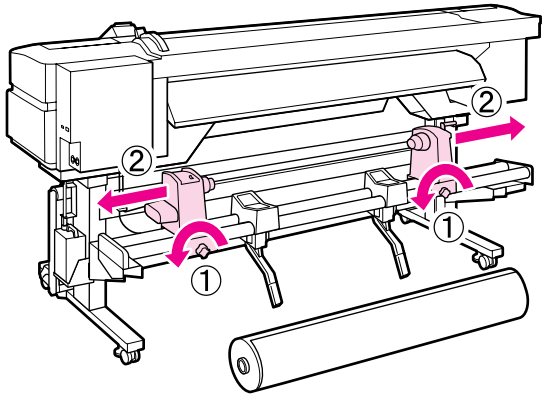
> ***Caution:***
> *Because the media is heavy, it should not be carried by one person. When loading or removing the media, use at least two persons.*

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

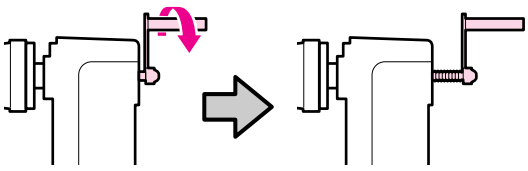
> ***Important:***
> *When white and metallic silver inks are installed, maintenance will be performed automatically to prevent ink accumulating in the printer and causing clogs. Because turning the printer off prevents maintenance being performed, leading to printer malfunction, we recommend that the printer not be turned off.*

2. 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.

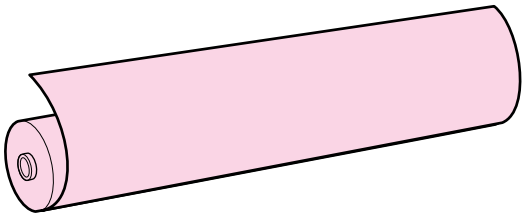


> ***Important:***
> *If the right holder handle shaft is not visible, rotate the holder forward until it stops. The media can not be properly loaded if the handle shaft is not visible.*

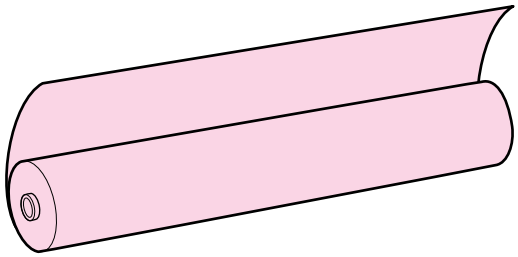


3. Place media on the roll supports oriented according to how it is rolled (see below) and position it as indicated by the mark on the label.

Printable side out



Printable side in

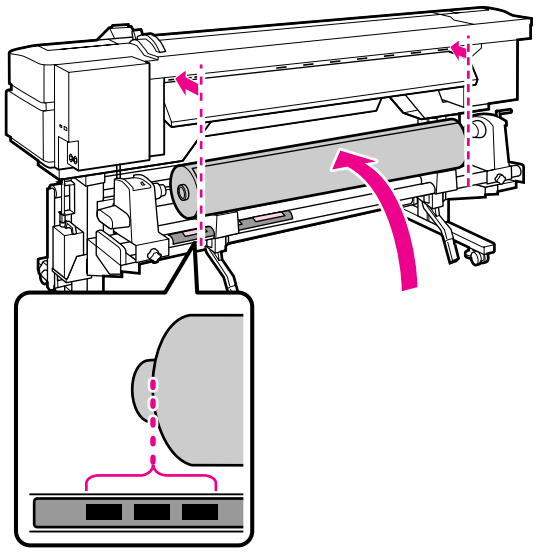


> ***Note:***
> *Be sure the option selected for **Roll Type** in the **Customize Settings** menu matches how the media is rolled. **Roll Type** defaults to **Printable Side Out**. Be sure to select **Printable Side In** after loading media rolled printable side in. For more information see “Roll Type” on page 98.*

4. Place the left edge of the media in any of the black squares on the bar in back of the printer and the right edge on any of the holes on the back of the printer.

   The recommended positions for media of different widths are shown below.

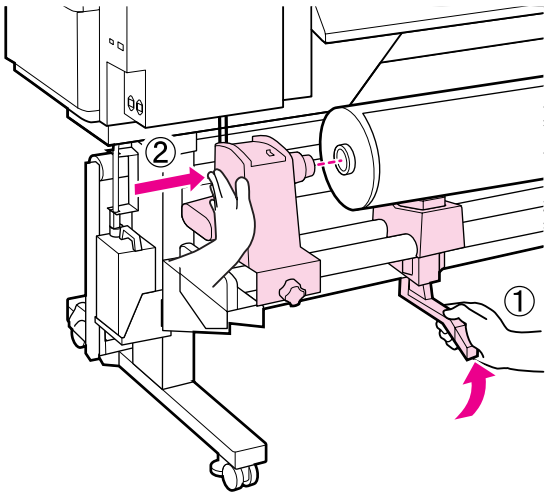
   See “Positioning Media of Different Widths” on page 107.



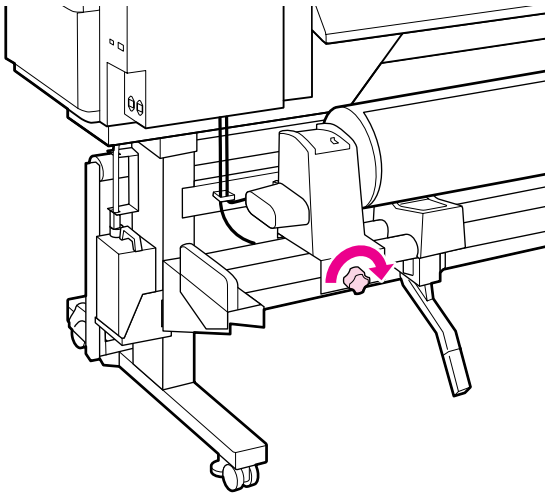
> ***Note:***
> *If the label with black squares is not in place, affix the label as described in the Setup Guide.*

5. Raise the lift 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 140mm (5.5 inches), lift it up by your hands, and set it to the roll holder. The roll core will not reach the holder when raised using the lift lever.

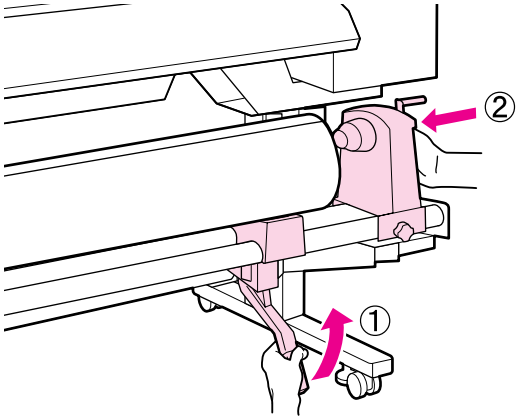


6. Tighten the roll holder screw to fix the roll holder in place.

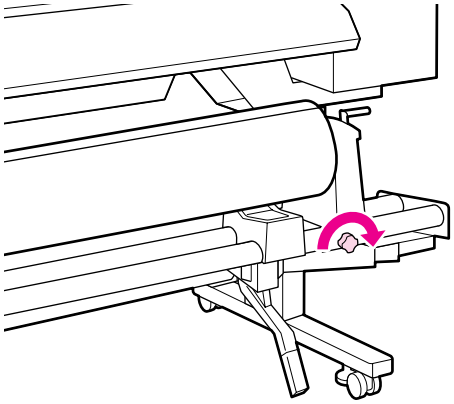


7. Raise the lift lever on the right side of the printer to lift the media into position, then firmly insert the roll holder.

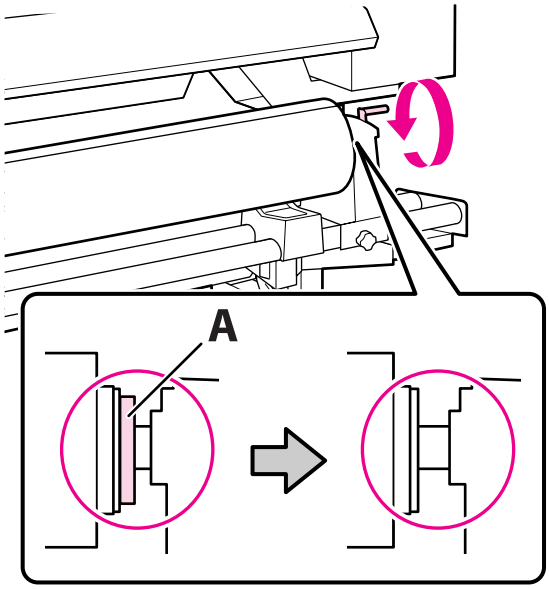
If the roll of media has the outer diameter which is less than 140mm (5.5 inches), lift it up by your hands, and set it to the roll holder as described in Step 5.



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

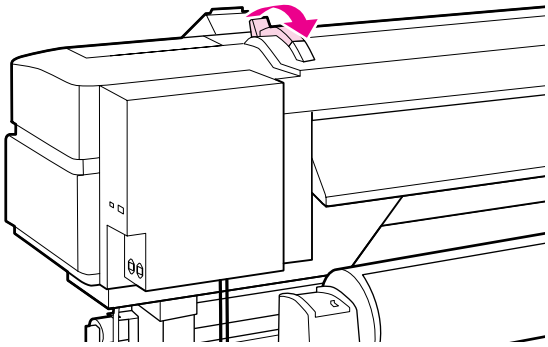


9. Rotate the handle until part A in the illustration below is fully inserted.

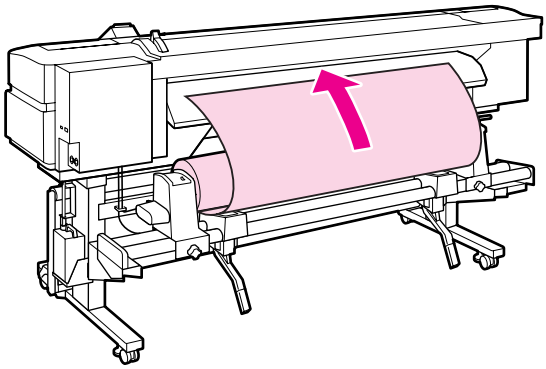


> ***Important:***
> *Once part A is hidden, do not turn the handle any further. Failure to observe this precaution could damage the roll holder.*

10. Raise the media loading lever.



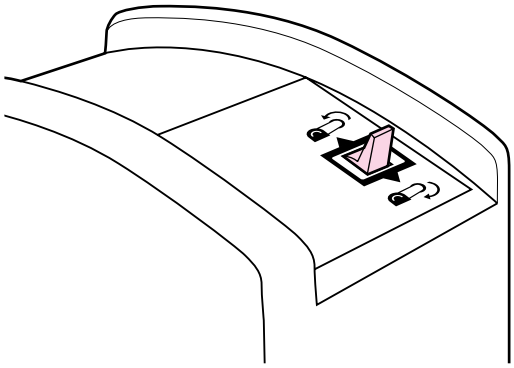
11. Pull out the media and insert it into the printer.



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

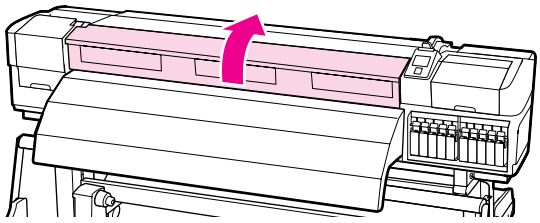
Printable Side Out

Printable Side In

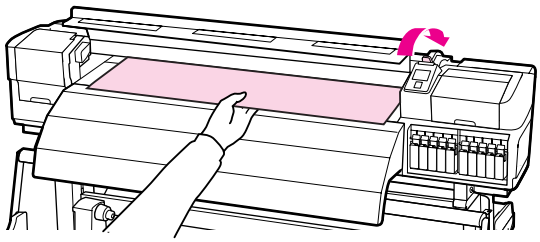


12. Insert the media past the pressure rollers and lower the media loading lever to hold it in place.

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



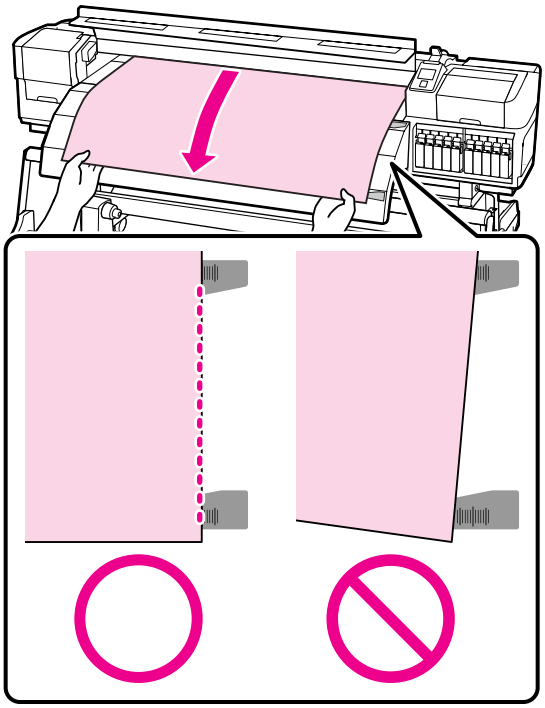
14. Hold the center of the media and raise the media loading lever.



15. Pull the media straight forward until the edge is past the label on the left side of the after heater.

    Keep the right edge of the media parallel with the scale markings on the two labels on the right side of the after heater.

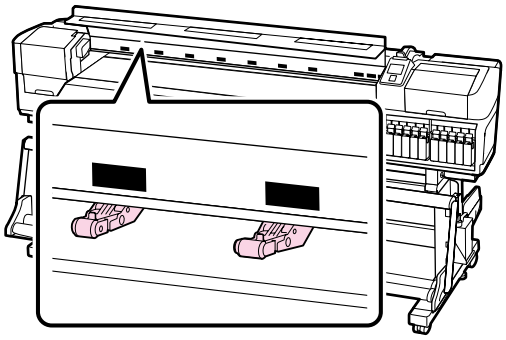
> ***Important:***
> *Perform Steps 14 to 3 in reverse order and repeat the loading process if the right edge of the media is not within the scale markings. Do not attempt to reposition the roll holders while they are inserted in the media.*



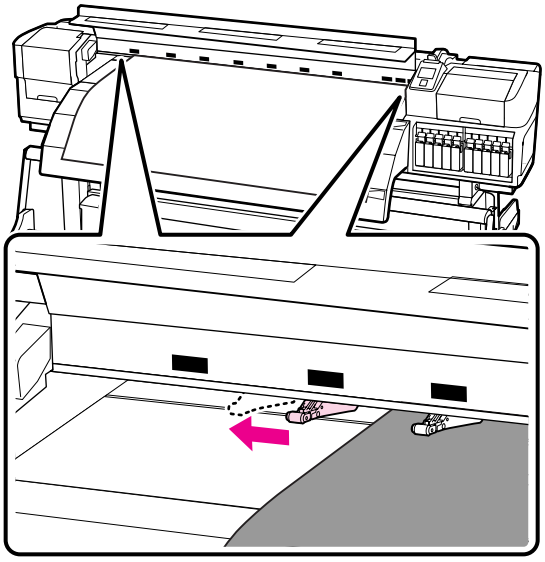
16. Adjust the position of the pressure rollers.

    The low pressure rollers are used for normal printing, the high pressure rollers for ink layering. Their positions vary with the width of the media and the rollers used.

Position the low pressure rollers 5 mm (0.20 inch) and the high pressure rollers 10 mm (0.39 inch) from the edges of the media, keeping them in the bounds shown by the black labels (see “Printable area - S70670/S50670” on page 107, “Printable Area - S30670” on page 110, and “High Print Quality” on page 27).



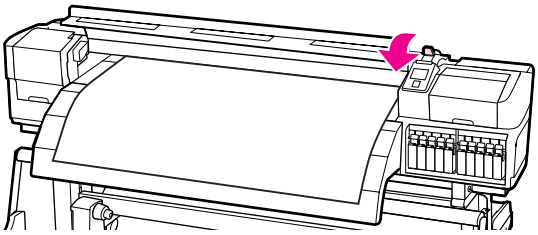
17. Move unused rollers and rollers that can not be positioned over the media to the sides of the black labels.



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

To print immediately, proceed to Step 19.

For information on loading the media into the auto take-up reel unit, see “Using the Auto Take-up Reel Unit” on page 82.

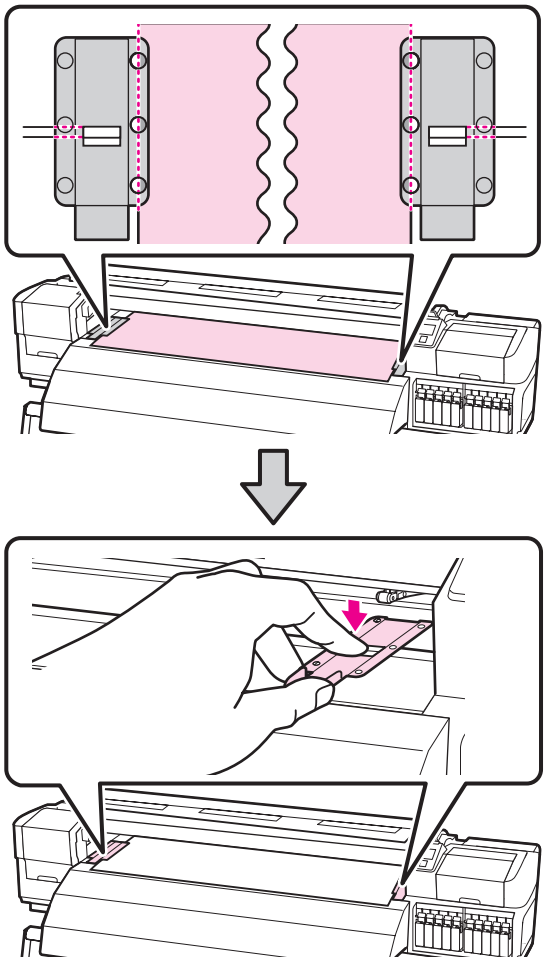


Note:
If you would prefer to print from the very start of the roll, press the ▲ button in the control panel to rewind the media slightly.

Be sure, however, to stop rewinding before the leading edge of the media is over the cutter groove (on the pressure roller side).

19. Attach the media holding plates at either side of the media.

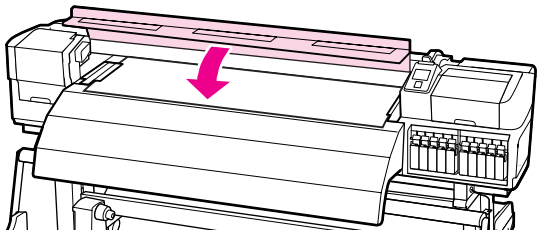
First, position the plates so that the edges of the media are in the centers of the round holes. Next, adjust the position until the white line is visible in the square window and push the plates down to lock them in place and keep them from lifting.



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.*
- ❏ *Leave left and right margins of over 10 mm (0.39 inch) when using the media holding plates. Narrower margins could result in printer printing over the plates (this does not apply when ink layering is used).*

20. Close the front cover.



Using the Optional Heavy Roll Media Feeding Unit

This section uses the S70670 to illustrate how to load media when the optional heavy roll media feeding unit is installed.

We recommend using a lifter for media over 40 kg (88.2 lb).

The explanation that follows assumes that a lifter is used.

The following types of lifter can be used.

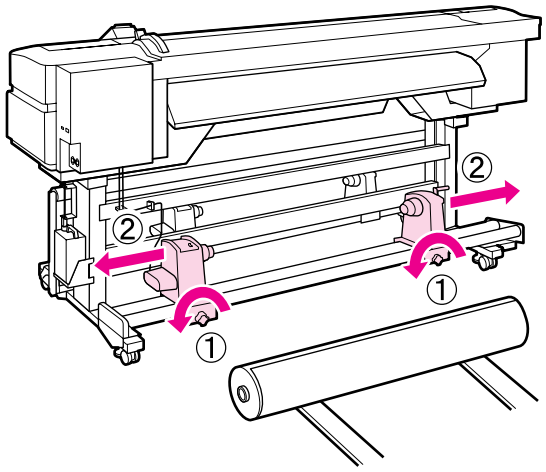
- ❏ Fork or platform thickness: 28 mm (1.10 inches) or less
- ❏ The fork or platform can be lowered to approx. 190 mm (7.5 inches) from the floor.

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. Using a lifter is recommended when handling a media that is 40 kg (88.3 lb) or heavier.

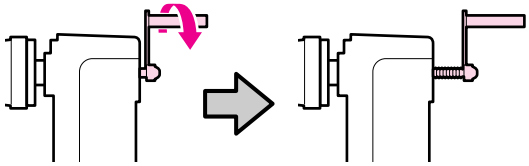
1. Turn on the printer by pressing the ⏻ button.

Important:
When white and metallic silver inks are installed, maintenance will be performed automatically to prevent ink accumulating in the printer and causing clogs. Because turning the printer off prevents maintenance being performed, leading to printer malfunction, we recommend that the printer not be turned off.

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

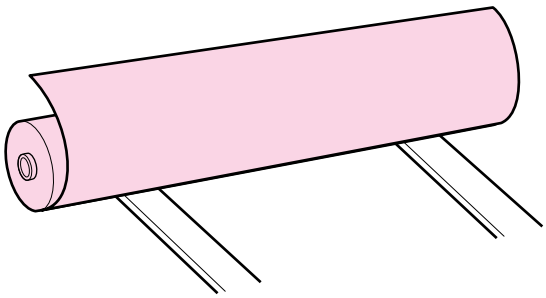


Important:
If the right holder handle shaft is not visible, rotate the holder forward until it stops. The media can not be properly loaded if the handle shaft is not visible.

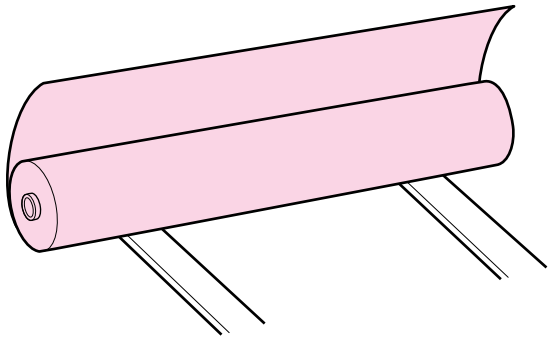


3. Temporarily place media on the lifter oriented according to how it is rolled (see below)

Printable side out



Printable side in

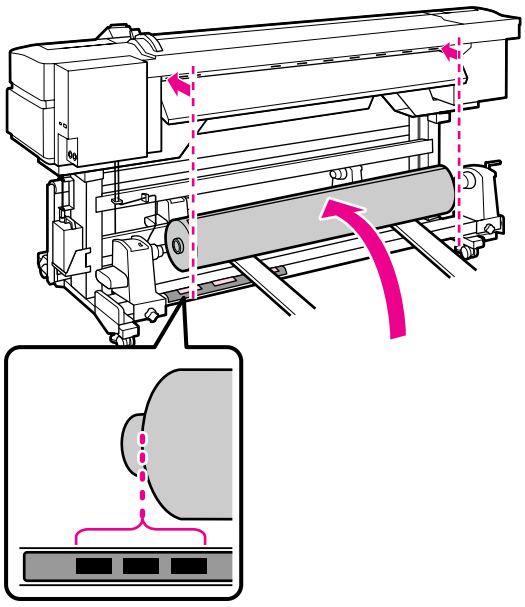


> ***Note:***
> *Be sure the option selected for **Roll Type** in the **Customize Settings** menu matches how the media is rolled. **Roll Type** defaults to **Printable Side Out**. Be sure to select **Printable Side In** after loading media rolled printable side in.*
>
> *For more information, see “Roll Type” on page 98.*

4. Place the left edge of the media in any of the black squares on the bar in back of the printer and the right edge on any of the holes on the back of the printer.

   The recommended positions for media of different widths are shown below.

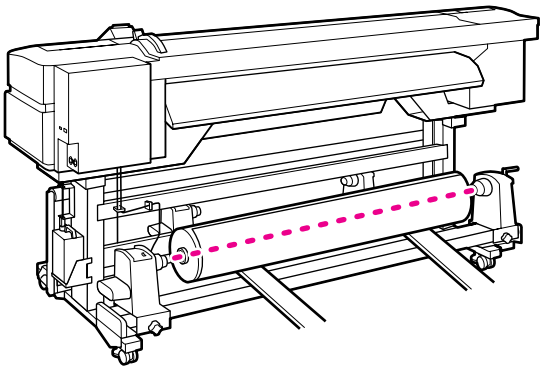
   See “Positioning Media of Different Widths” on page 107.



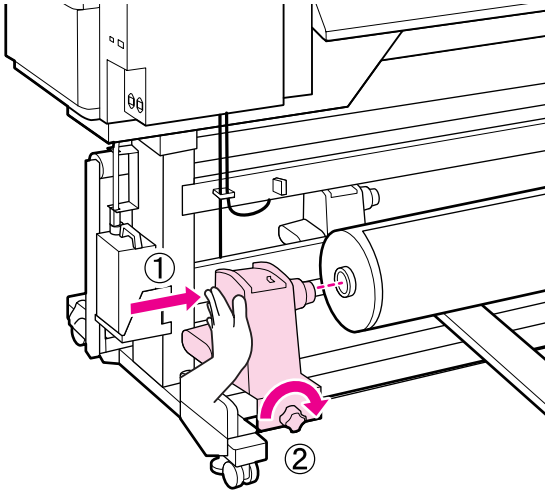
> ***Note:***
> *If the label with black squares is not in place, affix the label as described in the Setup Guide.*

5. Align the media and the roll holders.

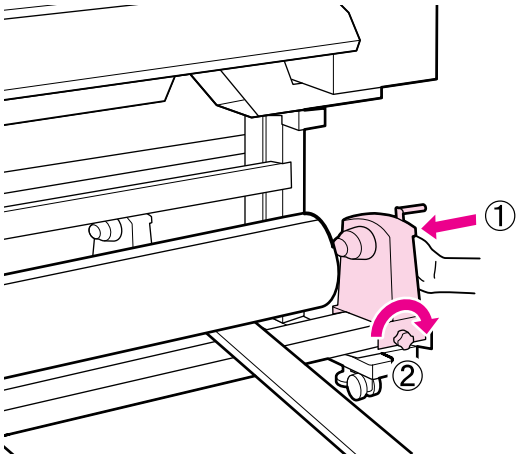
   Raise or lower the lifter until the media roll core is level with the roll holders.



6. Fully insert the left roll holder. Next, tighten the roll holder screw to fix the roll holder in place.

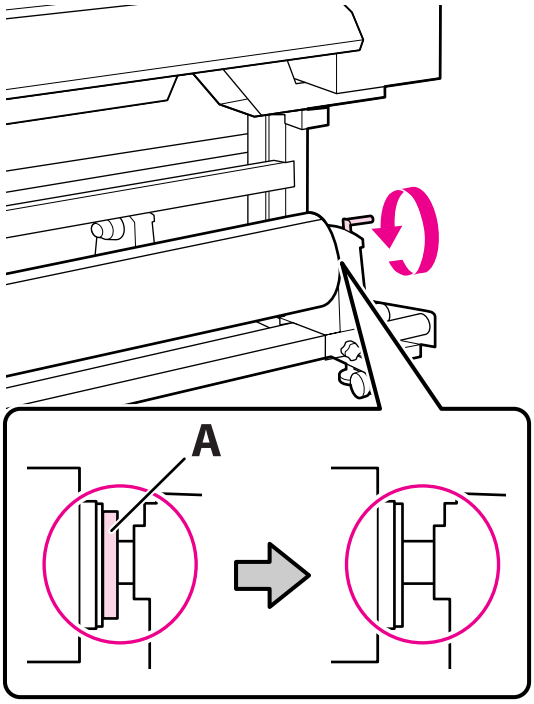


7. Fully insert the right roll holder. Next, tighten the roll holder screw to fix the roll holder in place.



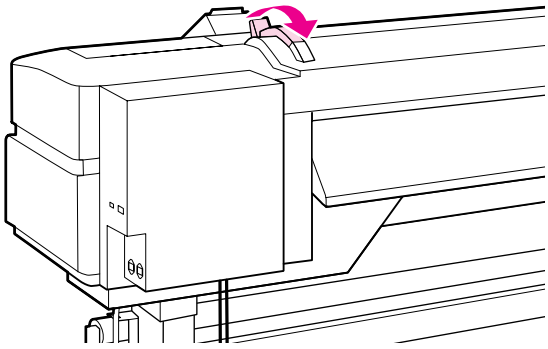
8. Remove the lifter.

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

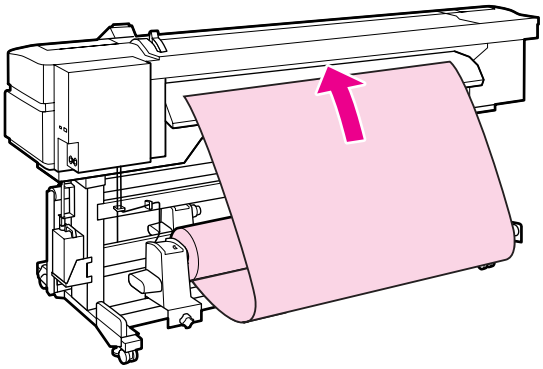


> ***Important:***
> *Once part A is hidden, do not turn the handle any further. Failure to observe this precaution could damage the roll holder.*
>
> *If part A is not hidden even after turning the handle until it can no longer be turned, return to step 7 and fully press the right unit into the roll core.*

10. Raise the media loading lever.



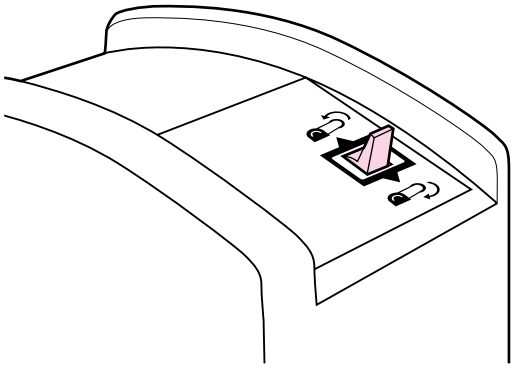
11. Pull out the media and insert it into the printer.



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

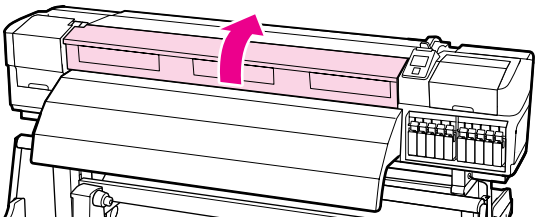
Printable Side Out

Printable Side In

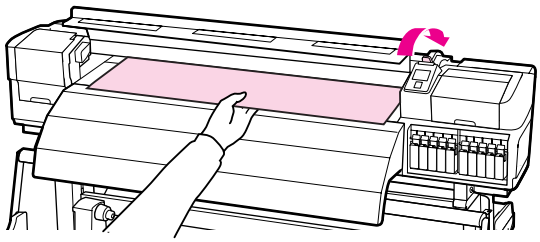


12. Insert the media past the pressure rollers and lower the media loading lever to hold it in place.

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



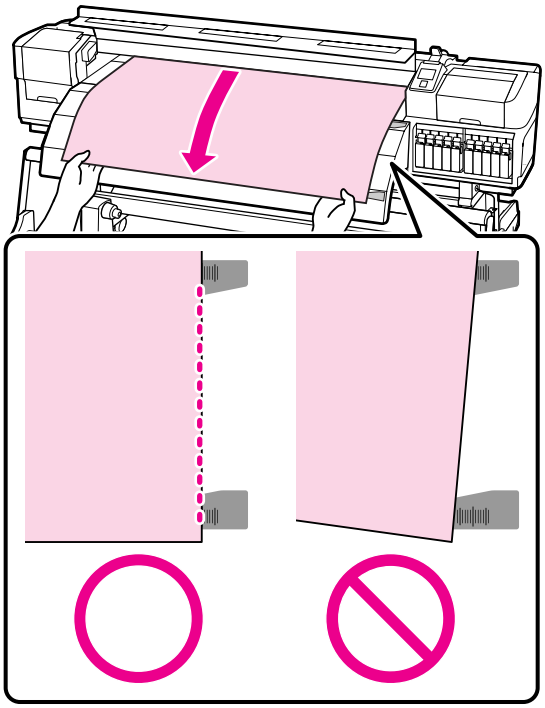
14. Hold the center of the media and raise the media loading lever.



15. Pull the media straight forward until the edge has past the label on the left side of the after heater.

    Keep the right edge of the media parallel with the scale markings on the two labels on the right side of the after heater.

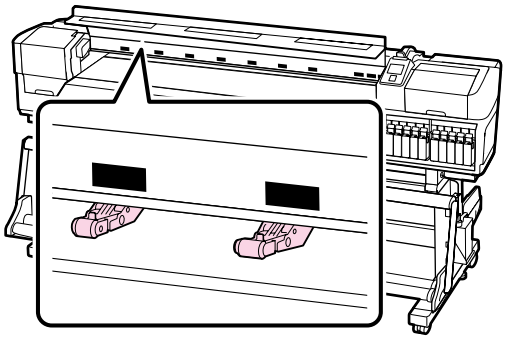
> ***Important:***
> *Perform Steps 14 to 3 in reverse order and repeat the loading process if the right edge of the media is not within the scale markings. Do not attempt to reposition the roll holders while they are inserted in the media.*



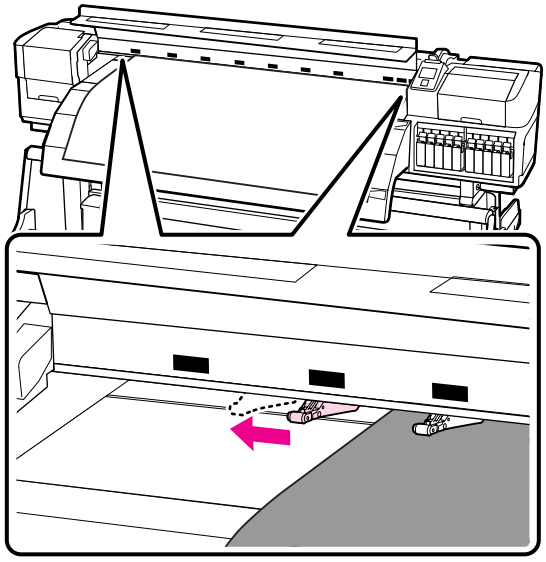
16. Adjust the position of the pressure rollers.

    The low pressure rollers are used for normal printing, the high pressure rollers for ink layering. Their positions vary with the width of the media and the rollers used.

Position the low pressure rollers 5 mm (0.20 inch) and the high pressure rollers 10 mm (0.39 inch) from the edges of the media, keeping them in the bounds shown by the black labels (see “Printable area - S70670/S50670” on page 107, “Printable Area - S30670” on page 110, and “High Print Quality” on page 27).



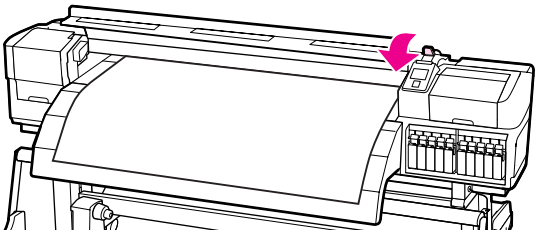
17. Move unused rollers and rollers that can not be positioned over the media to the sides of the black labels.



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

To print immediately, proceed to Step 19.

For information on loading the media into the auto take-up reel unit, see “Using the Auto Take-up Reel Unit” on page 82.

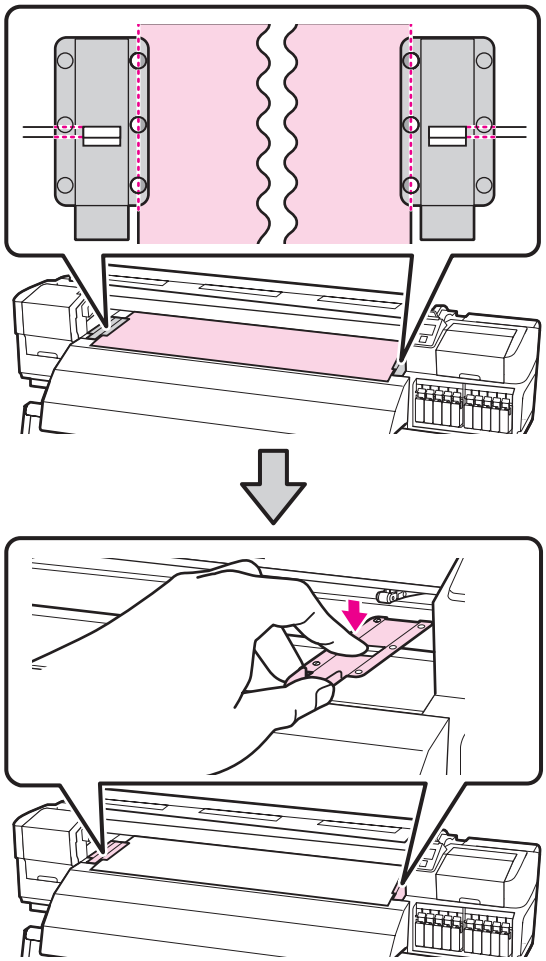


Note:
If you would prefer to print from the very start of the roll, press the ▲ button in the control panel to rewind the media slightly.

Be sure, however, to stop rewinding before the leading edge of the media is over the cutter groove (on the pressure roller side).

19. Attach the media holding plates at either side of the media.

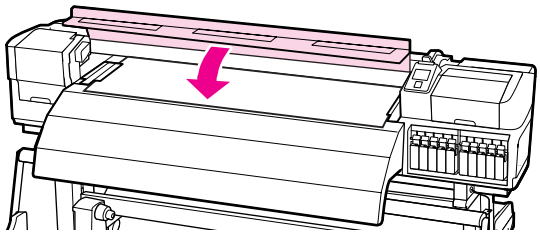
First, position the plates so that the edges of the media are in the centers of the round holes. Next, adjust the position until the white line is visible in the square window and push the plates down to lock them in place and keep them from lifting.



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.*
- ❏ *Leave left and right margins of over 10 mm (0.39 inch) when using the media holding plates. Narrower margins could result in printer printing over the plates (this does not apply when ink layering is used).*

20. Close the front cover.



Loading Media - S30670

The procedure for loading media varies depending on whether you are using the installed media feeding unit or the optional heavy roll media system.

Follow the steps below when using the supplied media feeding unit.

When the Heavy Roll Media Feeding Unit is installed, see “Using the Optional Heavy Roll Media Feeding Unit” on page 68.

When the Standard Media Feeding Unit Is Installed

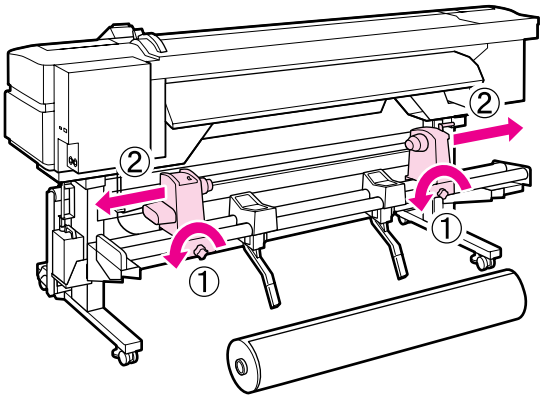
This section describes how to load media when the standard media feeding unit is installed.

Caution:

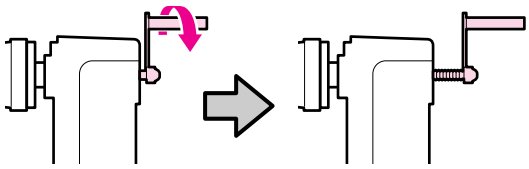
- ❏ *Because the media is heavy, it should not be carried by one person. When loading or removing the media, use at least two persons.*

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

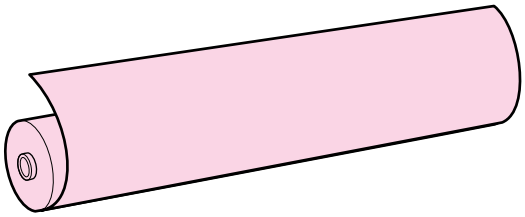


Important:
If the right holder handle shaft is not visible, rotate the holder forward until it stops. The media can not be properly loaded if the handle shaft is not visible.

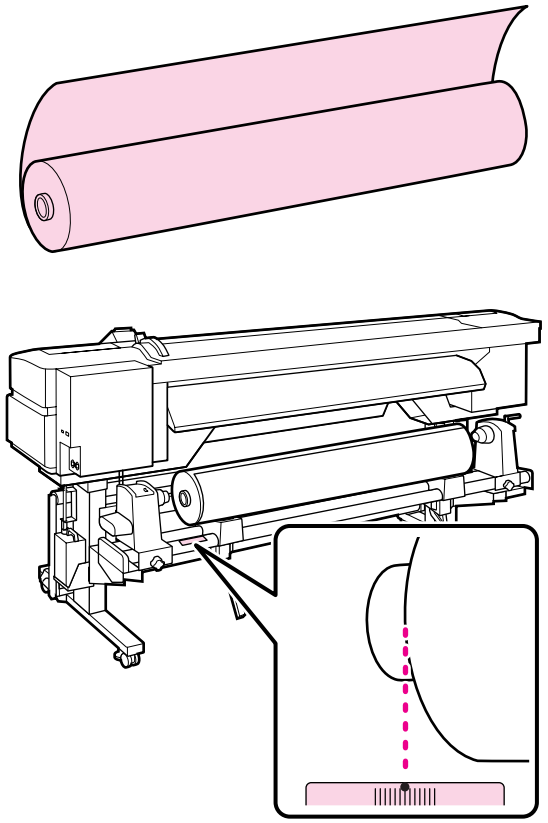


3. Place media on the roll support oriented according to how it is rolled (see below) and position it as indicated by the mark on the label.

Printable side out



Printable side in

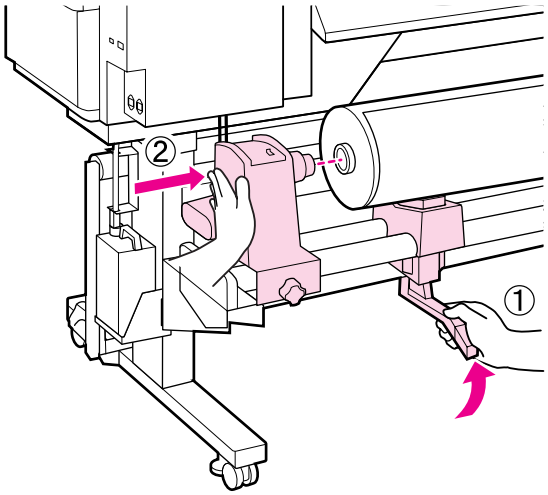


If the label does not have the loading position, mark it on the label as instructed in the *Setup Guide*.

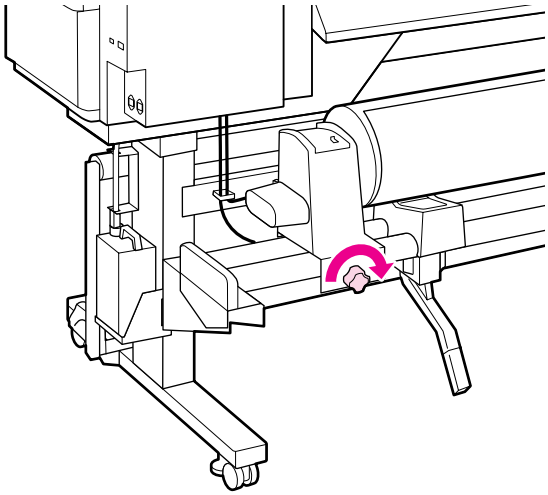
> ***Note:***
> *Be sure the option selected for **Roll Type** in the **Customize Settings** menu matches how the media is rolled. **Roll Type** defaults to **Printable Side Out**. Be sure to select **Printable Side In** after loading media rolled printable side in.*
>
> *For more information see “Roll Type” on page 98.*

4. Raise the lift 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 lift lever.

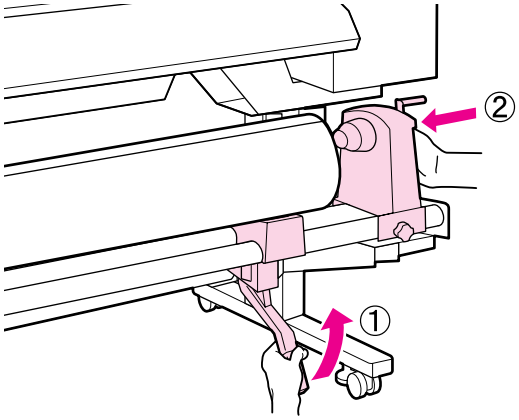


5. Tighten the roll holder screw to fix the roll holder in place.

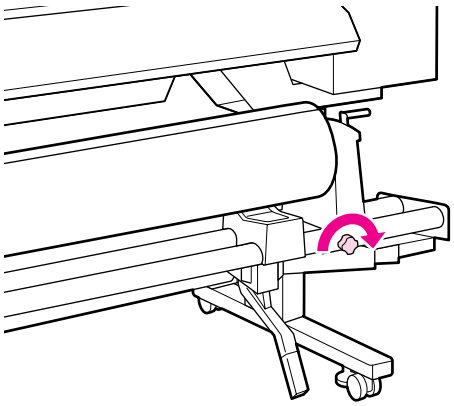


6. Raise the lift lever on the right side of the printer to lift the media into position, then firmly insert the roll holder.

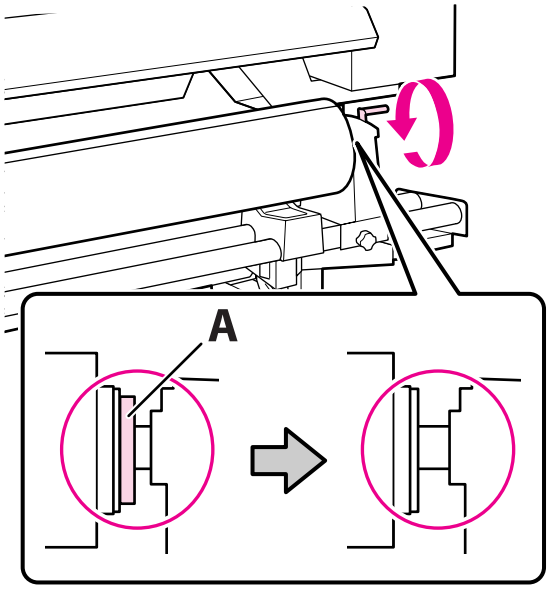
If the roll of media has an outer diameter which is less than 140 mm (5.5 inches), lift it up by your hands, and place it on the roll holder as described in Step 4.



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

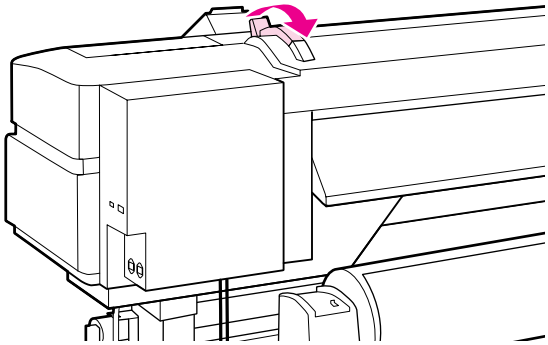


8. Rotate the handle until part A in the illustration below is fully inserted.

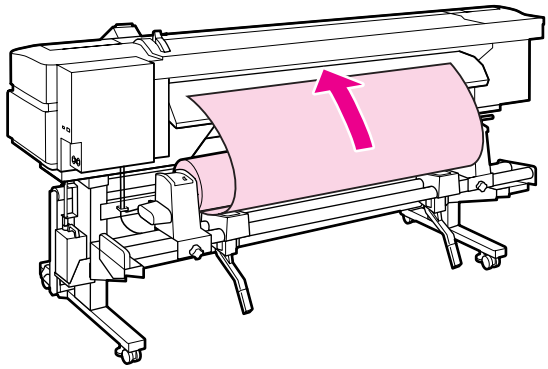


> ***Important:***
> *Once part A is hidden, do not turn the handle any further. Failure to observe this precaution could damage the roll holder.*

9. Raise the media loading lever.



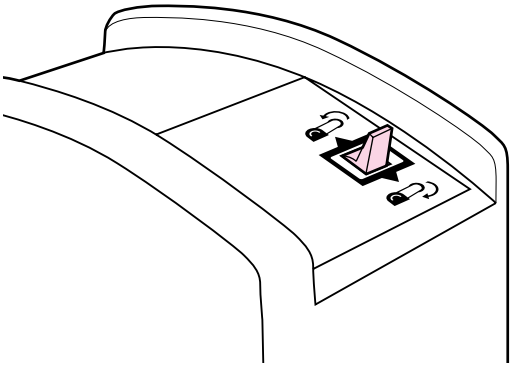
10. Pull out the media and insert it into the printer.



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

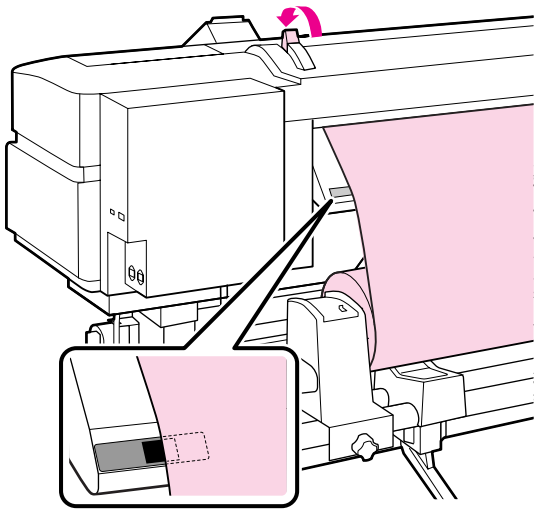
Printable side in



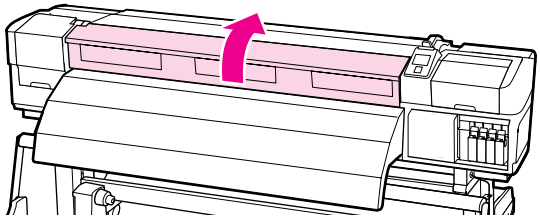
11. Insert the media past the pressure rollers and lower the media loading lever to hold it in place.

    Confirm that the left edge of the media passes over the center of the square in the label on the pre-heater.

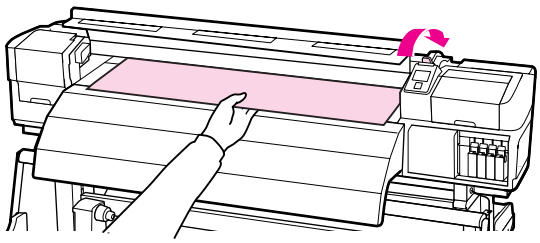
Important:
Perform Steps 11 to 3 in reverse order and repeat the loading process if the left edge of the media is not within the guides. Do not attempt to reposition the roll holders while they are inserted in the media.



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

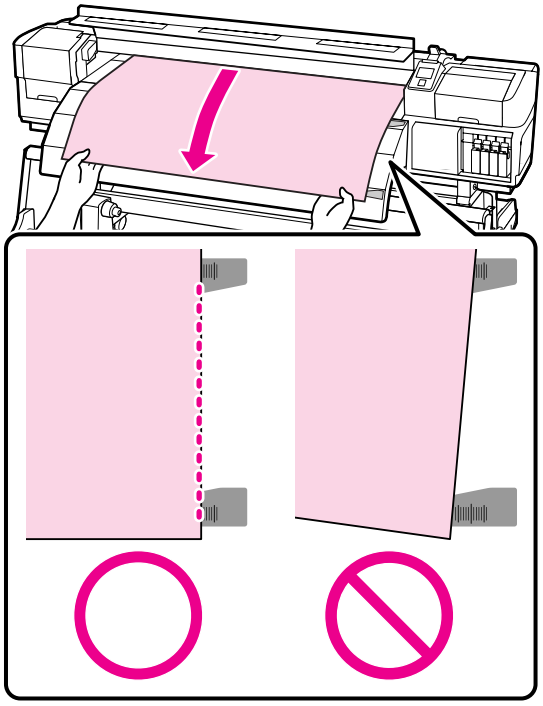


13. Hold the center of the media and raise the media loading lever.



14. Pull the media straight forward until the edge is past the label on the left side of the after heater.

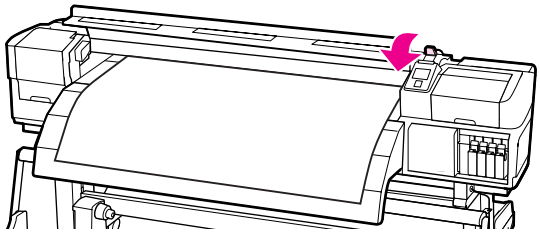
Keep the right edge of the media parallel to the scale markings on the two labels on the right side of the after heater.



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

To print immediately, proceed to Step 16.

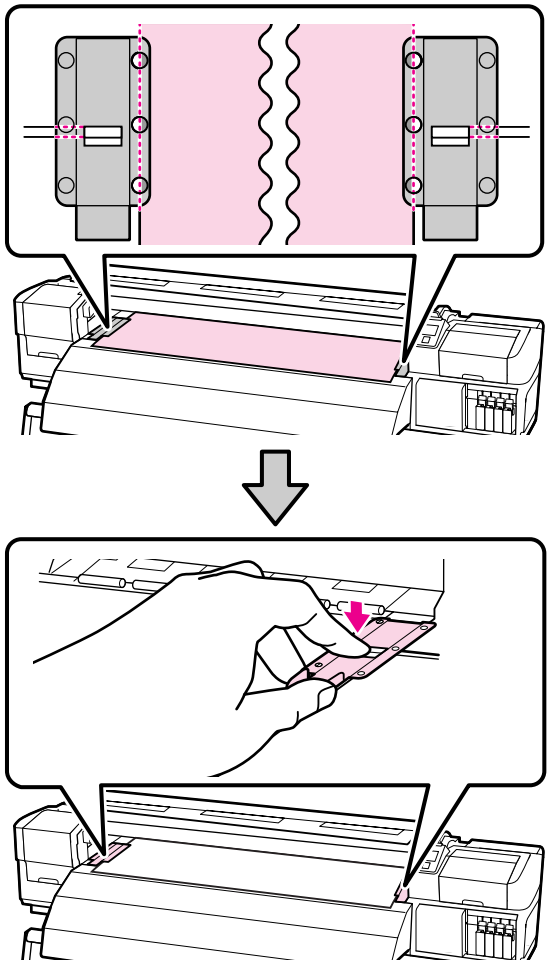
For information on loading the media into the auto take-up reel unit, see “Using the Auto Take-up Reel Unit” on page 82.



> ***Note:***
> *If you would prefer to print from the very start of the roll, press the ▲ button in the control panel to rewind the media slightly.*
>
> *Be sure, however, to stop rewinding before the leading edge of the media is over the cutter groove (on the pressure roller side).*

16. Attach the media holding plates at either side of the media.

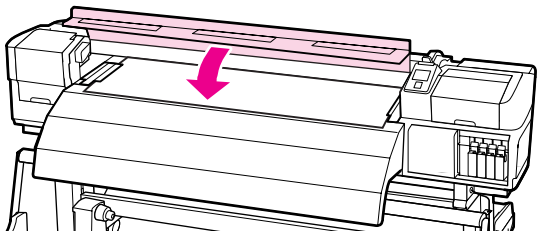
First, position the plates so that the edges of the media are in the centers of the round holes. Next, adjust the position so that the white line is visible in the square window and push the plates down to lock them in place and keep them from lifting.



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.*
- ❏ *Leave left and right margins of over 10 mm (0.39 inch) when using the media holding plates. Narrower margins could result in printing over the plates.*

17. Close the front cover.



Using the Optional Heavy Roll Media Feeding Unit

This section describes how to load media when the optional heavy roll media feeding unit is installed.

We recommend using a lifter for media over 40 kg (88.2 lb).

The explanation that follows assumes that a lifter is used.

The following types of lifter can be used.

❏ Fork or platform thickness: 28 mm (1.10 inches) or less

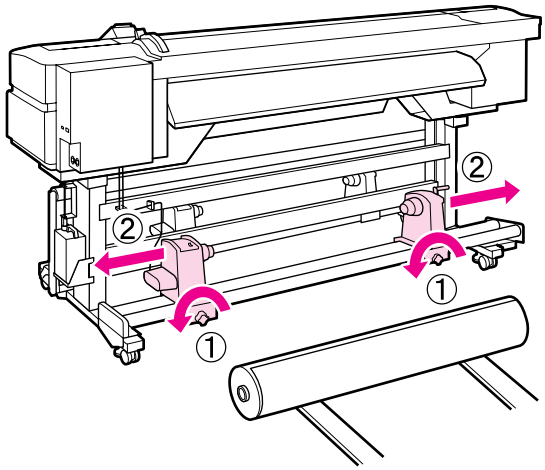
❏ Fork or platform can be lowered to approx.190 mm (7.5 inches) from the floor.

Caution:

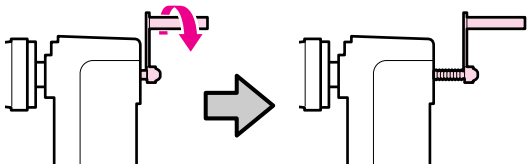
❏ *Because the media is heavy, it should not be carried by one person. When loading or removing the media, use at least two persons. Using a lifter is recommended when handling a media that is 40 kg (88.2 lb) or heavier.*

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

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

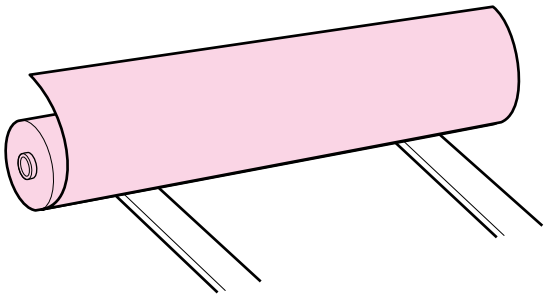


Important:
If the right holder handle shaft is not visible, rotate the holder forward until it stops. The media can not be properly loaded if the handle shaft is not visible.

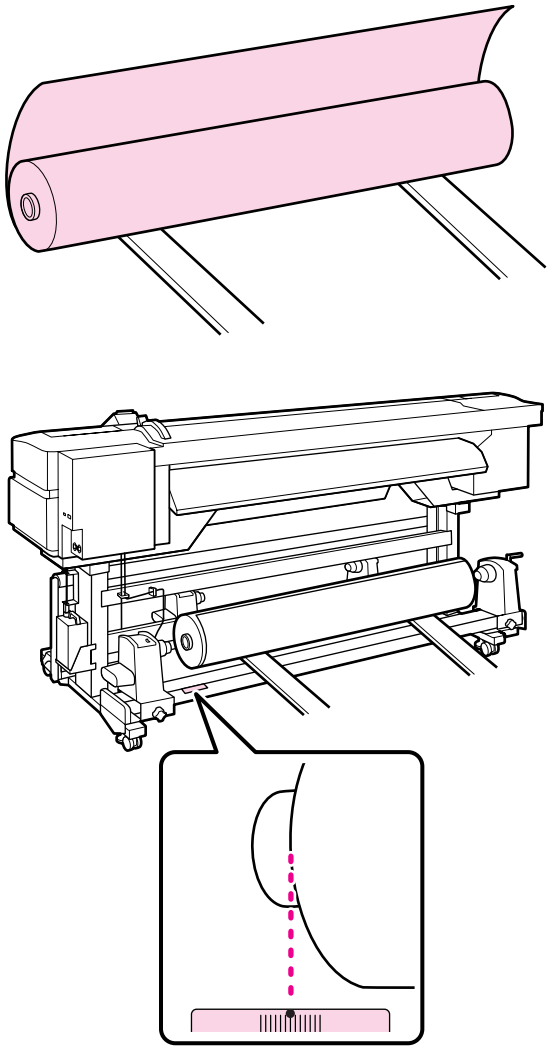


3. Place the media on a lifter oriented according to how it is rolled (see below) and move the lift to position the media as indicated by the mark on the label.

Printable side out



Printable side in

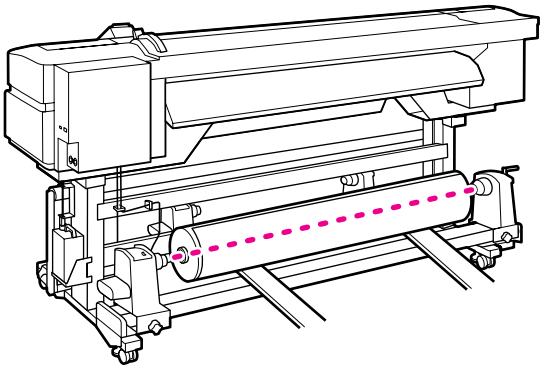


If the label does not have the loading position, mark it on the label as instructed in the *Setup Guide* supplied with the optional heavy roll media system.

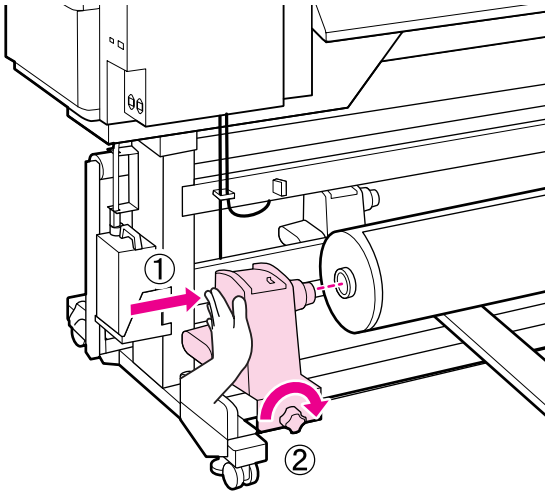
> ***Note:***
> *Be sure the option selected for* ***Roll Type*** *in the* ***Customize Settings*** *menu matches how the media is rolled.* ***Roll Type*** *defaults to* ***Printable Side Out****. Be sure to select* ***Printable Side In*** *after loading media rolled printable side in.*
>
> *For more information see “Roll Type” on page 98.*

4. Align the media and the roll holders.

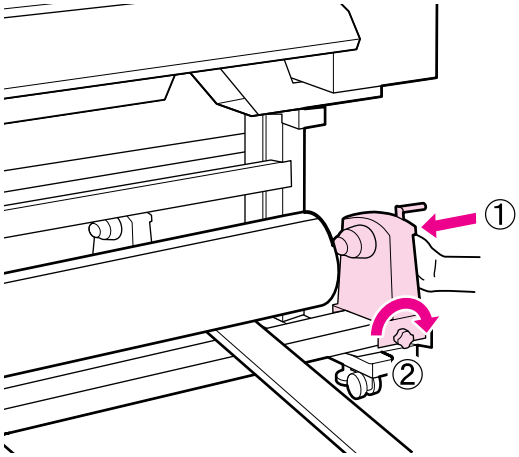
Raise or lower the lifter until the media roll core is level with the roll holders.



5. Fully insert the left roll holder. Next, tighten the roll holder screw to fix the roll holder in place.

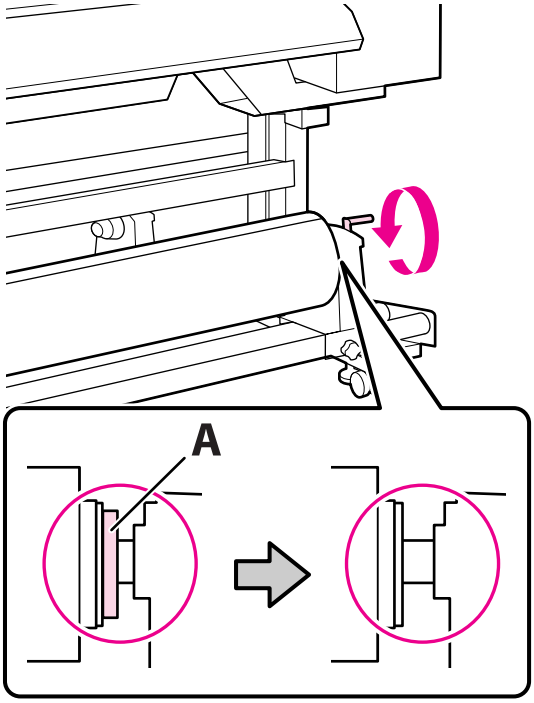


6. Fully insert the right roll holder. Next, tighten the roll holder screw to fix the roll holder in place.



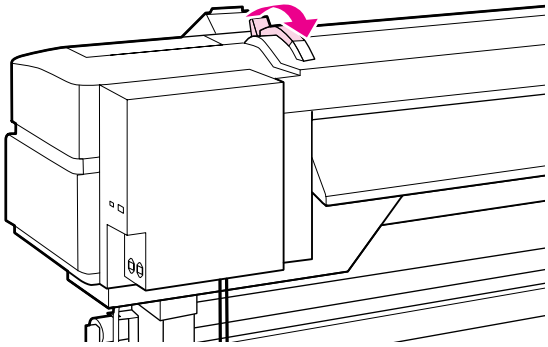
7. Remove the lifter.

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

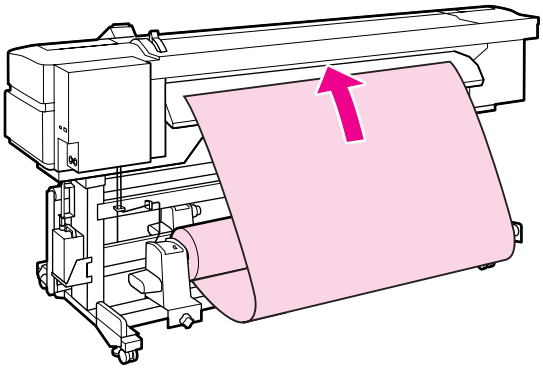


> ***Important:***
> *Once part A is hidden, do not turn the handle any further. Failure to observe this precaution could damage the roll holder.*
>
> *If part A is not hidden even after turning the handle until it can no longer be turned, return to step 6 and fully press the right unit into the roll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

9. Raise the media loading lever.



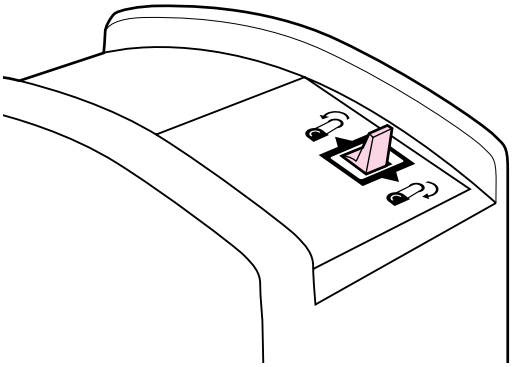
10. Pull out the media and insert it into the printer.



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

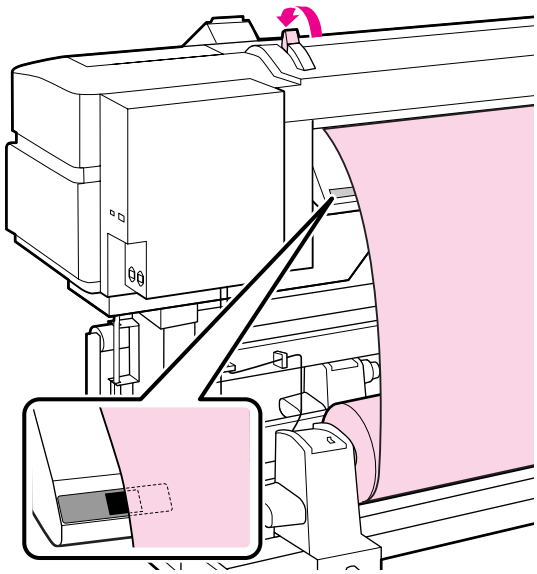
Printable side in



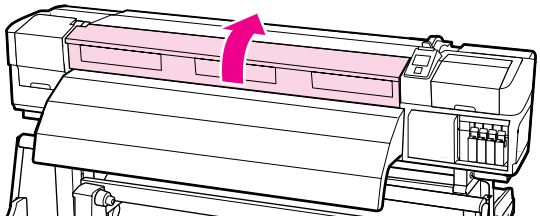
11. Insert the media past the pressure rollers and lower the media loading lever to hold it in place.

    Confirm that the left edge of the media passes over the center of the square in the label on the pre-heater.

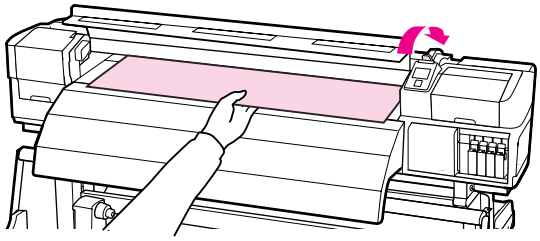
Important:
Perform Steps 11 to 3 in reverse order and repeat the loading process if the left edge of the media is not within the guides. Do not attempt to reposition the roll holders while they are inserted in the media.



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

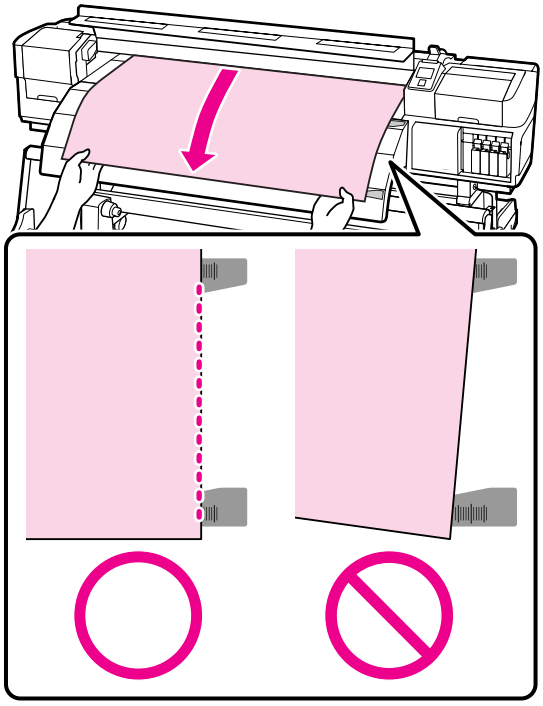


13. Hold the center of the media and raise the media loading lever.



14. Pull the media straight forward until the edge has past the label on the left side of the after heater.

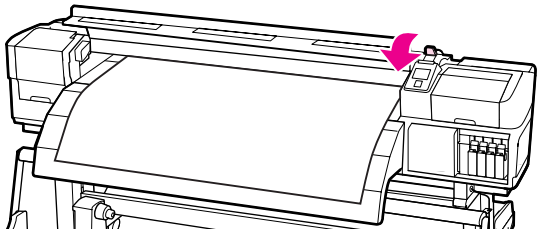
Keep the right edge of the media parallel with the scale markings on the two labels on the right side of the after heater.



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

To print immediately, proceed to Step 16.

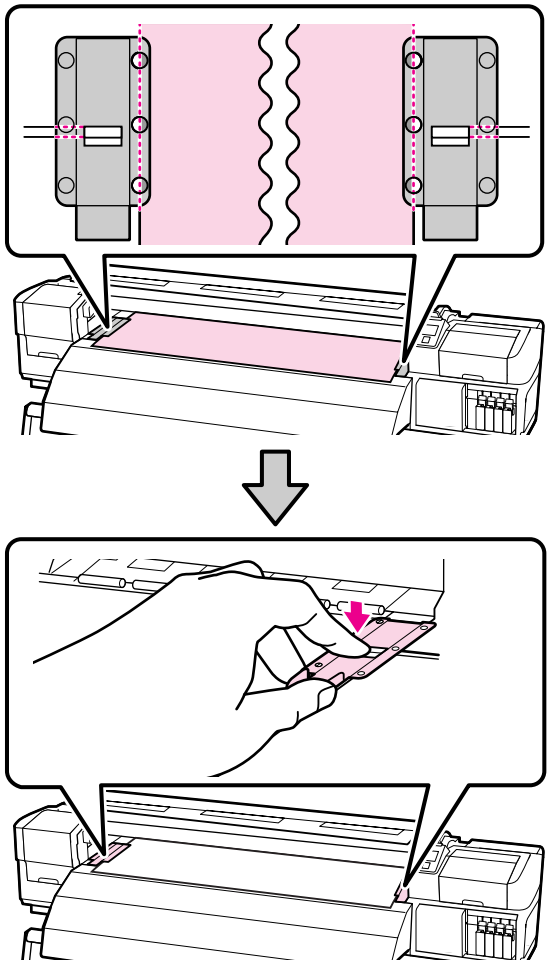
For information on loading the media into the auto take-up reel unit, see “Using the Auto Take-up Reel Unit” on page 82.



> ***Note:***
> *If you would prefer to print from the very start of the roll, press the ▲ button in the control panel to rewind the media slightly.*
>
> *Be sure, however, to stop rewinding before the leading edge of the media is over the cutter groove (on the pressure roller side).*

16. Attach the media holding plates at either side of the media.

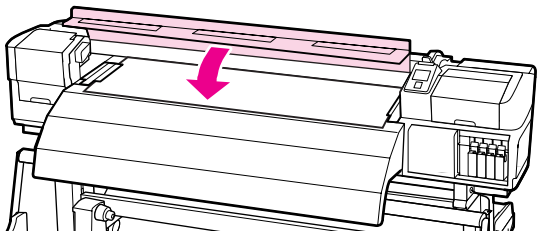
First, position the plates so that the edges of the media are in the centers of the round holes. Next, adjust the position until the white line is visible in the square window and push the plates down to lock them in place and keep them from lifting.



Important:

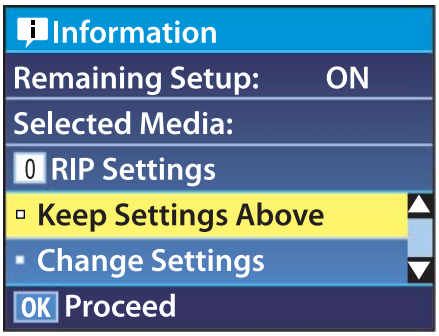
- ❏ *Do not use the media holding plates with media that is more than 0.4 mm (0.02 inch) thick. The media holding plates could touch and damage the print head.*
- ❏ *Move the media holding plates to the left and right edges of the platen when they are not in use.*
- ❏ *Do not use the media holding plates if the sides of the printed media are smudged or torn.*
- ❏ *Leave left and right margins of over 10 mm (0.39 inch) when using the media holding plates. Narrower margins could result in printer printing over the plates.*

17. Close the front cover.



Viewing and Changing Media Settings

The control panel displays the following information once the media lever is lowered.



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.

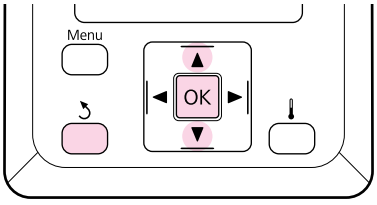
0 **RIP Settings**: Media settings are based on those in the RIP.

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 Heater Temperature, 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 custom settings is strongly recommended to assure that the platen gap, media feed adjustment, and head alignment are consistent and correct for each type of media.

See “Saving Settings” on page 93.



1. Select an option.

   To print at 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. 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 99.5 m (15 and 300 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

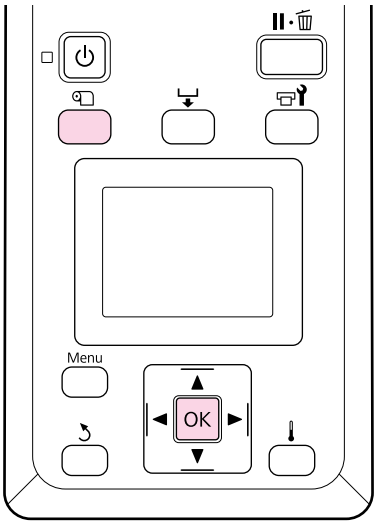
The printer displays the amount of media remaining and any media low warnings in the control panel. This makes it possible to determine whether the media requires replacement before printing.

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 77.*

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.

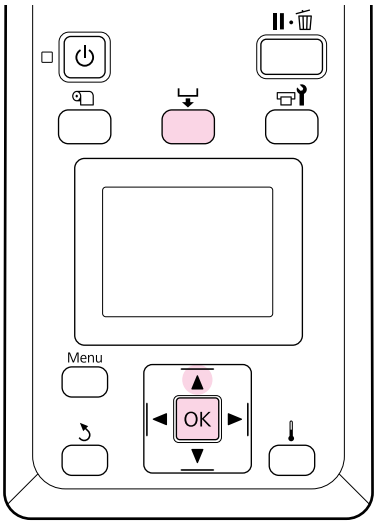
3. Select **Print Remaining Length** and press the OK button.

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.

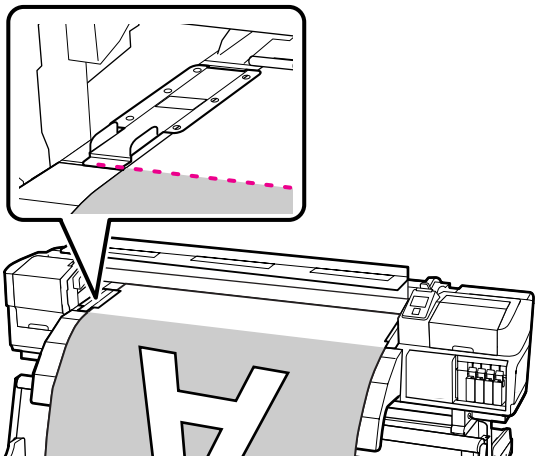
> ***Caution:***
> *The heaters and media holding plate may be hot; observe all necessary precautions. Failure to observe the necessary precautions could result in burns.*
>
> *When cutting media, be careful not to cut your fingers or hands with the cutter or other blades.*



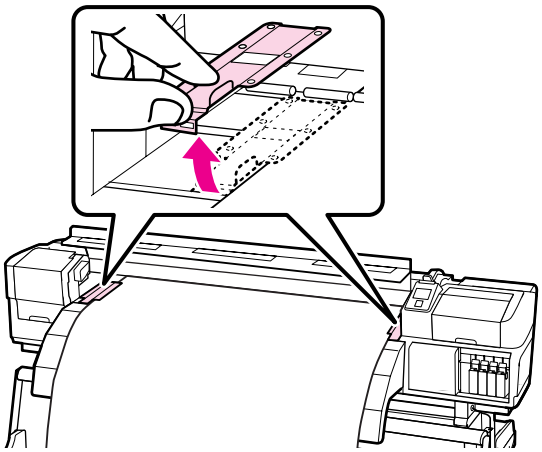
1. Confirm that the printer is ready to print.

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.

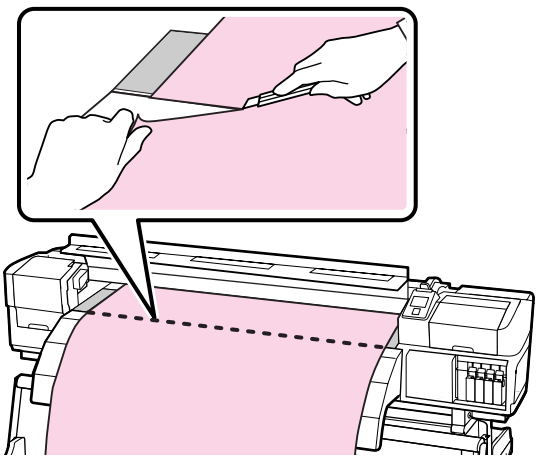


3. Remove the media holding plates.



4. Cut the media with the cutter.

   Pass the blade of the cutter down the cutting groove.



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.

If you are using the S70670 or S50670 and do not intend to make additional prints, raise the media loading lever to prevent deformation of the pressure rollers.

Removing Media

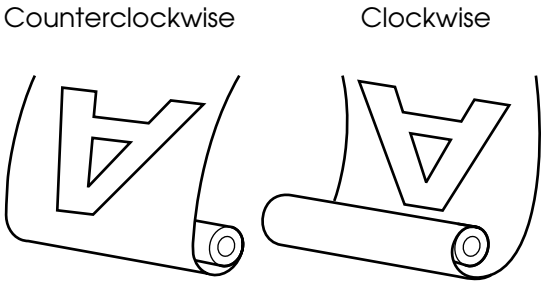
You can now remove the media from the roll holders. To remove the media, reverse the steps you followed to load it.

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.



Counterclockwise take up places the printed surface on the outside of the roll.

Clockwise take up places the printed surface on the inside of the roll.

The explanation that follows uses the supplied auto take-up reel unit for illustrative purposes, but the same procedure can be followed when using the optional auto take-up reel unit for heavy media.

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.

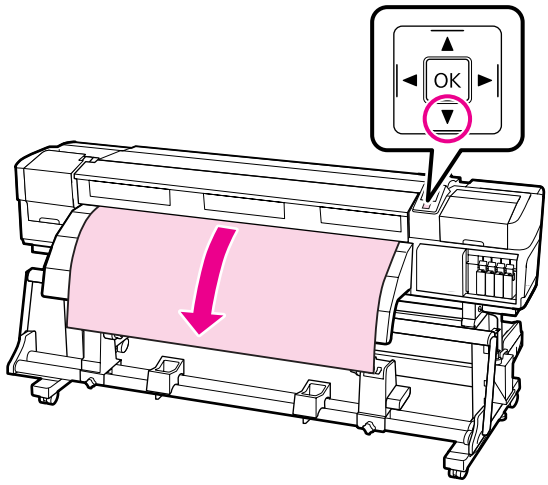
Follow the instructions in the manual when loading media or roll cores or removing media from the take-up roll.

Dropping media, roll cores, or take-up rolls could result in injury.

Important:
Note that the auto take-up reel unit may not function as expected when ink layering is performed with the S70670 or S50670, causing a decline in print quality. See “High Print Quality” on page 27.

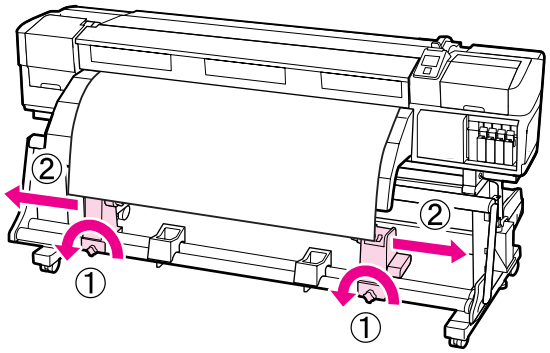
Attaching the Roll Core

1. 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.

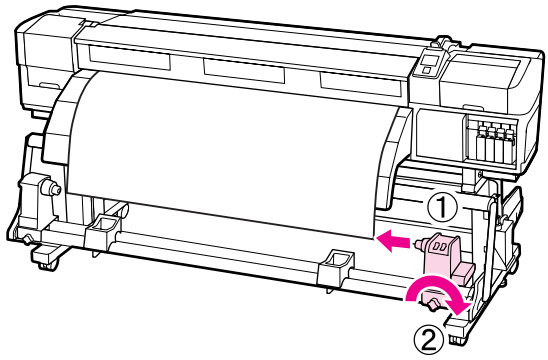


2. Loosen the roll core holder fixing screws and adjust the roll core holders so that the gap between the two is wider than the media.

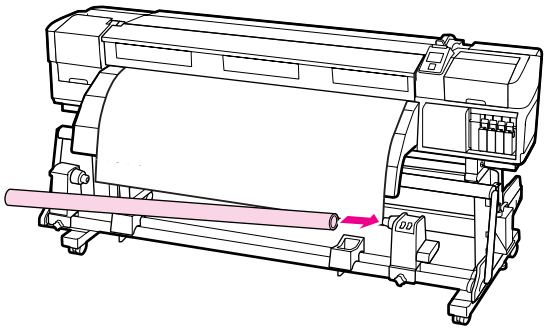
Center the roll supports between the roll holders.



3. Align the right roll core holder with the right edge of the media and tighten the fixing screw.

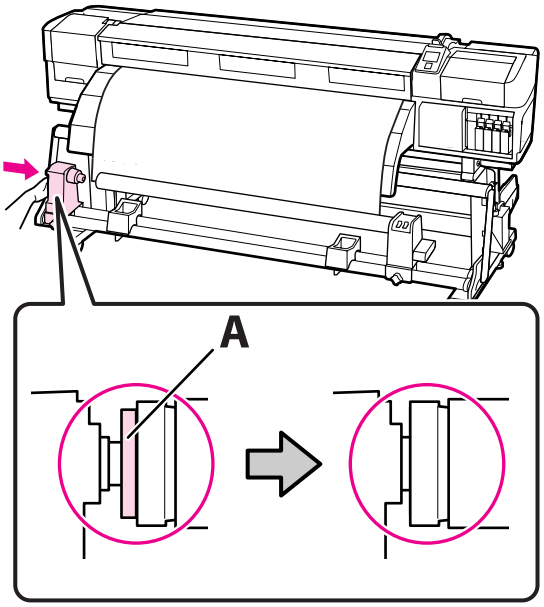


4. Insert the roll core onto the right holder.



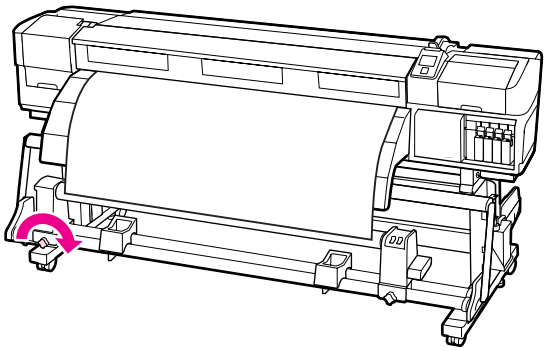
5. Insert the left holder into the roll core.

Slide the holder in until part A in the illustration below is fully inserted.



> ***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.*

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



See the following for further instructions.

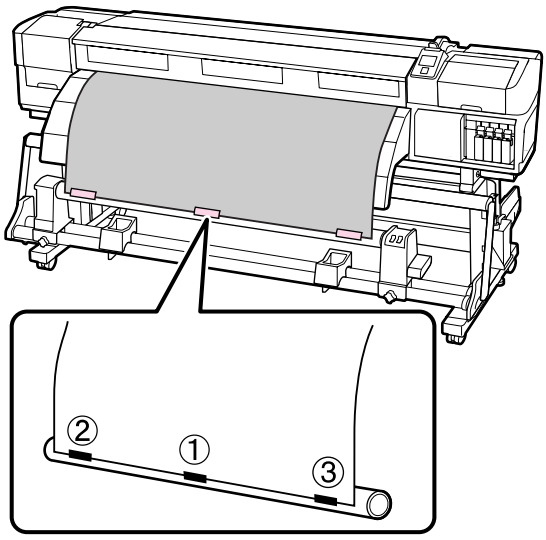
For information on counterclockwise take up, see the following section.

For information on clockwise take up, see “Clockwise Take Up” on page 88.

Counterclockwise Take Up

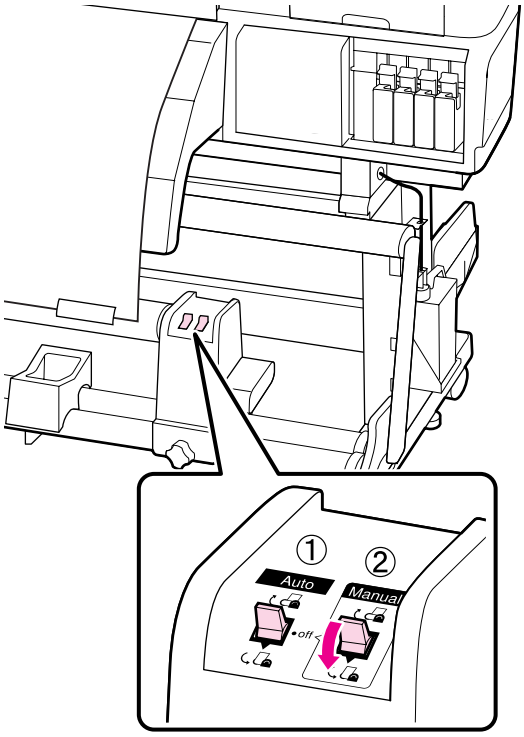
1. Attach the media to the take up roll core.

   Tape the media to the take up roll core in the center and then at the left and right edges.

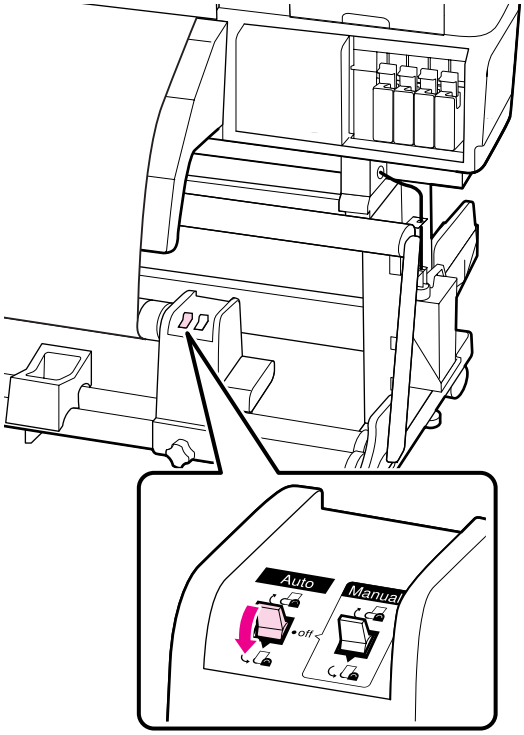


2. Press the ▼ button in the control panel to feed enough media for a single wrap around the roll core.

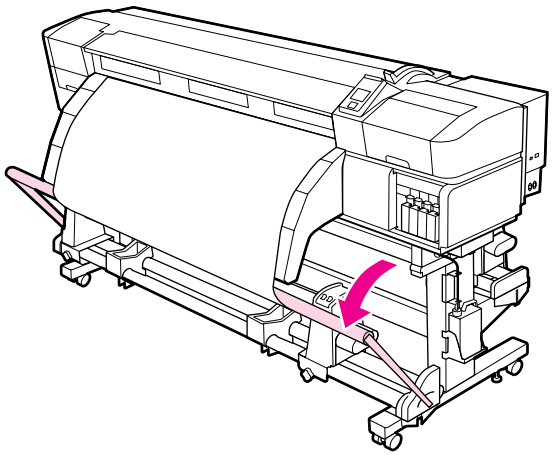
3. Flip the Auto switch to Off and press the Manual switch to ↺ to wrap the media once around the roll core.



4. Flip the Auto switch to ↻ .



5. Lower the tension bar.



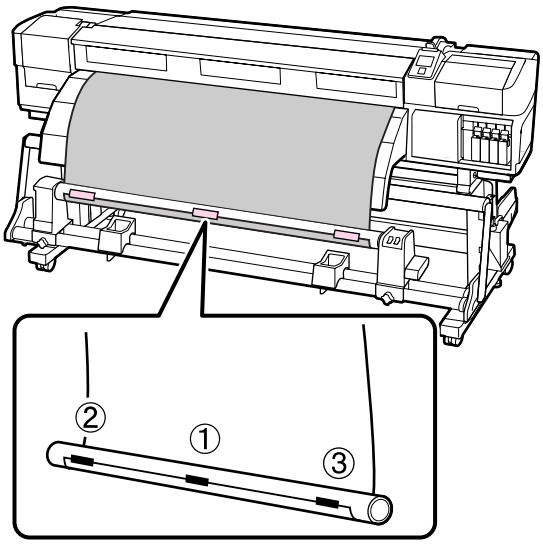
6. Press the ▼ button to feed the media until the take up roll core begins to turn.

> ***Important:***
> *The auto take-up reel unit will not work if the tension bar is raised.*

Clockwise Take Up

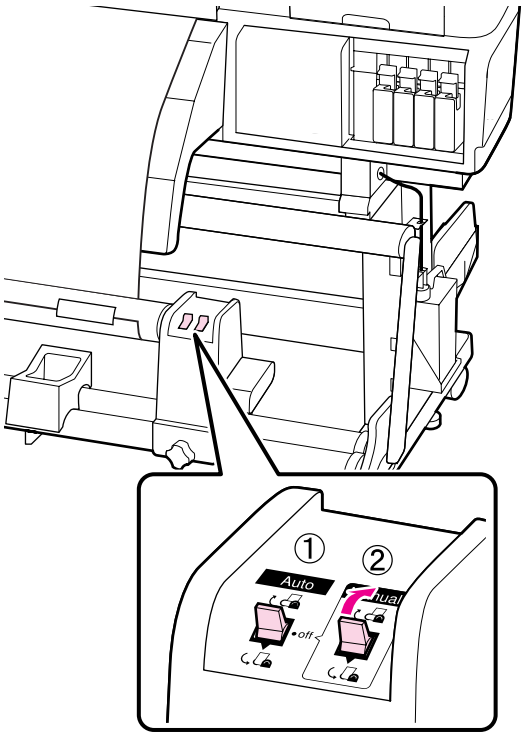
1. Attach the media to the take up roll core.

   Tape the media to the take up roll core in the center and then at the left and right edges.

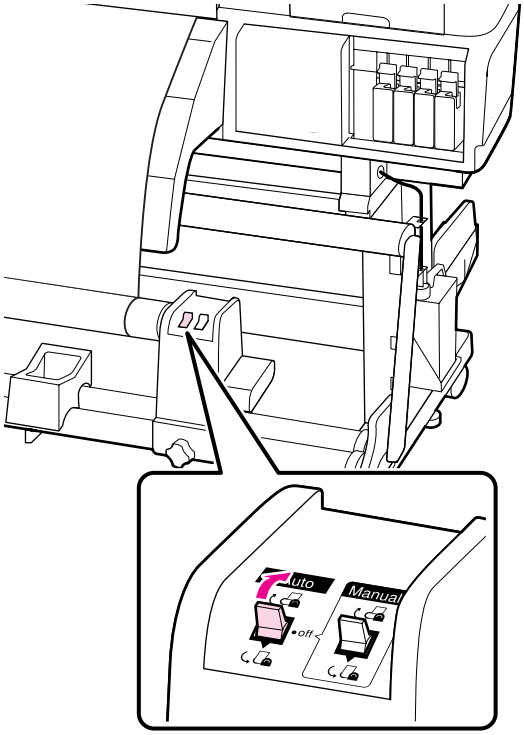


2. Press the ▼ button in the control panel to feed enough media for a single wrap around the roll core.

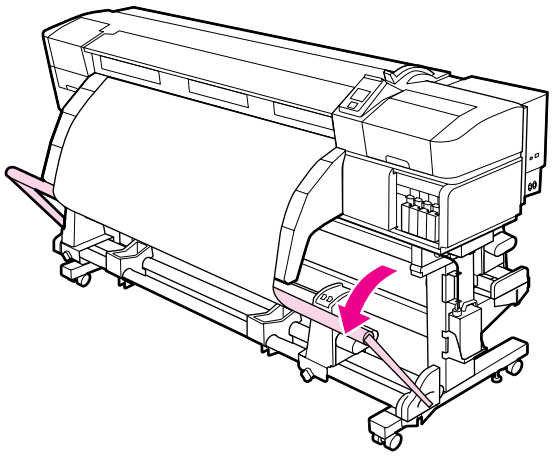
3. Flip the Auto switch to Off and press the Manual switch to ↻ to wrap the media once around the roll core.



4. Flip the Auto switch to .



5. Lower the tension bar.



6. Press the ▼ button to feed the media until the take up roll core begins to turn.

> ***Important:***
> *The auto take-up reel unit will not work if the tension bar is raised.*

Removing the Take-up Roll

The procedure for removing media varies depending on whether you are using the installed auto take-up reel unit or the optional auto take-up reel unit for heavy media.

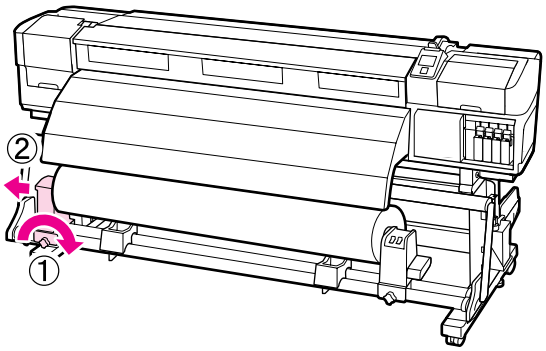
Follow the steps below when using the supplied auto take-up reel unit.

> ***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.*
>
> *Follow the instructions in the manual when loading media or roll cores or removing media from the take-up roll.*
>
> *Dropping media, roll cores, or take-up rolls could result in injury.*

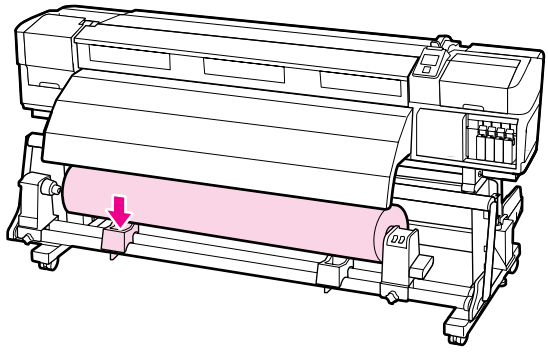
1. Cut the media and roll the cut end onto the take-up reel. See “Cutting Media” on page 80.

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

3. Loosen the left roll core holder fixing screw and remove the roll core holder from the roll.

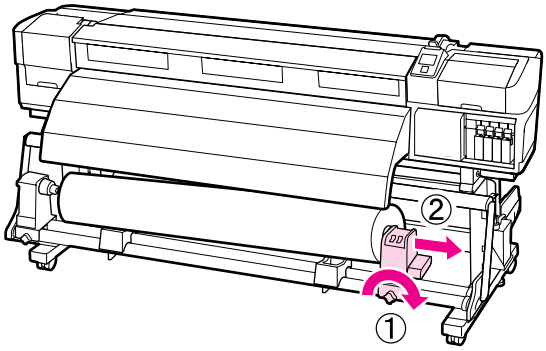


4. Lower the roll onto the roll support.

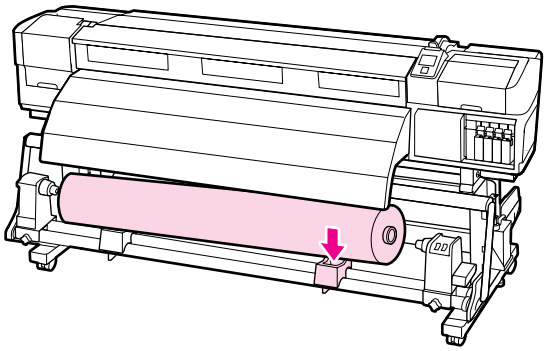


5. To prevent the media from sliding off the roll, support the roll at its right end.

6. Loosen the right roll core holder fixing screw and remove the roll core holder from the roll.



7. Lower the roll onto the roll support.



Before Printing

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

❏ Check the amount of ink remaining.

If ink is expended during printing, printing can be resumed once the affected cartridge has been replaced. Note, however, that depending on how much the ink has dried, replacing ink during printing may cause apparent changes in hue. If you know that the print job will be a large one, we recommend that you use new cartridges to replace those that are running low before you start. The old cartridges can be reinserted and used at a later date.

Ink level is shown by an icon. See “Understanding the Display” on page 22.

If you need to replace cartridges, see “How to replace” on page 143.

❏ Agitate white and metallic silver inks.

White and metallic silver inks must be removed and shaken once every 24 hours. Although a message is displayed in the control panel 24 hours after the inks were last removed, we recommend that they be removed and shaken before the start of work.

See “How to replace” on page 143.

❏ Print check pattern.

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 114.

See “Head Cleaning” on page 119.

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, it 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

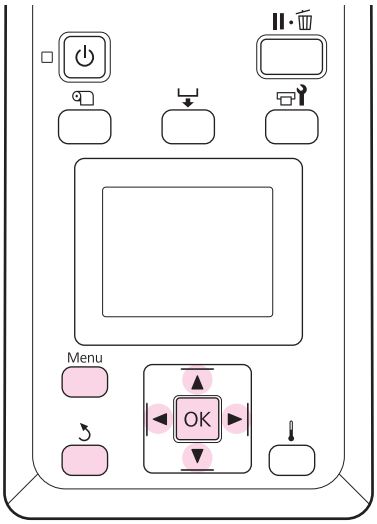
❏ Media Tension

❏ Feed Speed

For more information on these items, see “The Media Setup Menu” on page 152.

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

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

The **Feed Adjustment** menu contains two options: **Auto** and **Manual**.

Auto feed adjustment adjusts the feed automatically using data collected by a sensor while a test pattern is printed.

In manual feed adjustment, the user visually inspects print results and enters a correction by hand.

This section details the steps involved in auto feed adjustment.

Adjust the feed manually if you feel that auto feed adjustment has not completely resolved the problem.

For more information on manual feed adjustment, see “Feed Adjustment (Manual Feed Adjustment)” on page 103.

Note:
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.*

Furthermore the media must be loaded and feed adjustment performed again after the heavy roll media system is installed even if feed adjustment has already been performed using standard roll media system.

Feed adjustment is not available under the following conditions:

- ❏ *The media is transparent or colored.*
- ❏ *The printer is exposed to direct sunlight or interference from other ambient light sources.*

  Shade the printer from sources of interference.
- ❏ ***2.5*** *is selected for* ***Platen Gap*** *in the setup menu.*

  Choose another option for ***Platen Gap****.*

Auto feed adjustment may also fail to produce the expected results if the nozzles are clogged. Perform head cleaning to remove any clogs.

1. Use the ▼/▲ buttons to select **Feed Adjustment** and press the OK button.
2. Select **Auto** and press the OK button.
3. Press the OK button to print a test pattern and perform auto feed adjustment.

Platen Gap

Adjust the platen gap (the gap between the print head and the media) if print results 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 print results 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

Select **Head Alignment** to correct print head mis-alignment when print results seem grainy or out of focus.

The **Head Alignment** menu contains two options: **Auto** and **Manual**.

Auto head alignment aligns the head automatically using data collected by a sensor while a test pattern is printed.

In manual adjustment, you need to check the pattern and enter the optimum adjustment value for alignment.

This section details the steps involved in auto head alignment.

Align the head manually if you feel that auto head alignment has not completely resolved the problem.

For more information on manual head alignment, see “Correcting Print Misalignment (Head Alignment)” on page 101.

The Auto(Dual Head) option for the S70670 and S50670 can be used if performing a Auto(Bi-D) followed by a Manual(Bi-D) alignment fails to produce satisfactory results.

Note:
Head Alignment *varies with the media used. Load the media that will be used in the actual print job. Head alignment is not available under the following conditions:*

- ❏ *The media is transparent or colored.*
- ❏ *The printer is exposed to direct sunlight or interference from other ambient light sources.*

  Shade the printer from sources of interference.
- ❏ ***2.5*** *is selected for* ***Platen Gap*** *in the setup menu.*

  Choose another option for ***Platen Gap****.*

Head Alignment *may also fail to produce the expected results if the nozzles are clogged. Perform head cleaning to remove any clogs.*

Auto Head Alignment may not be available when 2.0 is selected for Platen Gap in the setup menu. If auto gap adjustment is not available, perform gap adjustment manually.

1. Use the ▼/▲ buttons to select **Head Alignment** and press the OK button.
2. Use the ▼/▲ buttons to select **Auto(Bi-D)** and press the OK button.
3. Press the OK button to print a test pattern and perform auto head alignment.

Heating & Drying

Set the temperature of the heaters or turn the fan for the additional print drying system on or off (included with the S50670 and optional with other models).

> ***Note:***
> *Adjust heater temperature as follows:*
>
> ❏ *Set the heaters to the temperatures recommended in the documentation provided with the media, if available.*
>
> ❏ *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.*

This section details the steps involved in setting the temperature for the heaters.

1. Use the ▼/▲ buttons to select **Heating & Drying** and press the OK button.
2. Select **Heater Temperature** and press the OK button.
3. You can set the temperatures of the pre-heater, platen heater, and after heater.

   Use the ▶/◀ buttons to select a heater. From left, the options are pre-heater, platen heater, and after heater.

   After selecting the desired heater, use the ▼/▲ buttons to choose the temperature.
4. Select the desired option and press the OK button.
5. Press the ↻ 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 ↻ 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. This setting is important when you use reverse-wound media.

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.

Media Tension

Increase tension if creases appear in the media during printing. The higher the value, the greater the tension.

If you have previously performed Feed Adjustment, you will need to perform it again after adjusting Media Tension.

See “Feed Adjustment” on page 94.

1. Use the ▼/▲ buttons to select **Media Tension** 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.

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 ↻ button to return to the customize settings menu.

Exiting the Menus

Press ⏸·🗑 to exit the menus.

Changing Heater and Fan Settings

You can adjust heater temperature or turn the fan for the additional print drying system on or off during printing (system included with the S50670 and optional with other models).

The default heater temperatures are as follows.

Pre-heater: 40 °C (104 °F)

Platen heater: 40 °C (104 °F)

After heater: 50 °C (122 °F)

Heater status can be viewed in the control panel. See “Understanding the Display” on page 22.

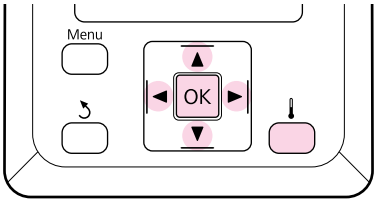
Additional Dryer defaults to **On**; at this setting, the fan turns on automatically when printing starts.

Additional Dryer is available only when an additional print drying system is connected (system included with the S50670 and optional with other models).

The following gives the procedure used when the optional additional print drying system is installed.

Note:

- ❏ *Temperature and Additional Dryer settings can be stored separately for each media type. See “Saving Optimal Settings for the Current Media (Print Media Settings)” on page 92.*
- ❏ *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) You can set the temperatures of the pre-heater, platen heater, and after heater.

(2) Use the ▶/◀ buttons to select a heater. From left, the options are pre-heater, platen heater, and after heater.

(3) After selecting the desired heater, use the ▼/▲ buttons to choose the temperature.

(4) Select the desired option and press the OK button.

Additional Dryer

(1) Use the ▼/▲ buttons to select **On** or **Off**.

(2) 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, or the use of two print heads (all models except S30670). As a result, print results may appear grainy or out of focus. When this happens, perform **Head Alignment** to correct the print misalignment.

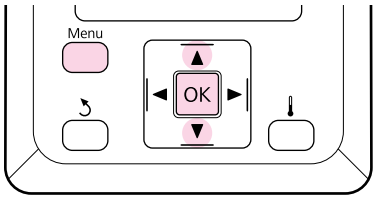
The thickness of the media determines the distance between the media and the print head. **Head Alignment** values can be stored separately for each type of media. Stored values can be recalled instantly the next time the media is used.

Head Alignment can be performed automatically or manually.

For more information on automatic head alignment, see “Head Alignment” on page 96.

In manual adjustment, you need to check the pattern and enter the optimum adjustment value for alignment.

Align the head manually if you feel that auto head alignment has not completely resolved the problem.



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 in the printer will be overwritten.

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

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

7. An alignment pattern will be printed.

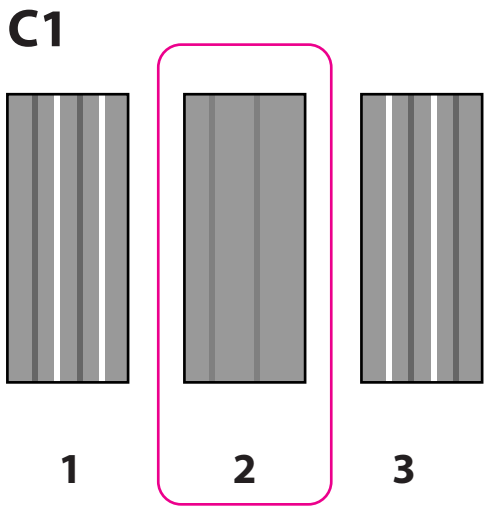
   When printing is complete, the media will automatically be fed to a position where the pattern is clearly visible.

   Cut the media if necessary. See “Cutting Media” on page 80.

> ***Note:***
> *To rewind the media, press the ▲ button.*

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

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



9. When **C1** is displayed in the control panel, use the ▼/▲ buttons to select the number recorded in Step 8 and press the OK button.

10. Select a pattern number for each color, from **C1** to **BK2**, and press the OK button.

11. The media setup menu will be displayed when you enter the pattern number for the last color.

Feed Adjustment (Manual Feed Adjustment)

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

Feed Adjustment can be performed automatically or manually.

For more information on automatic feed adjustment, see “Feed Adjustment” on page 94.

This section explains how to perform manual feed adjustment.

Two methods are available:

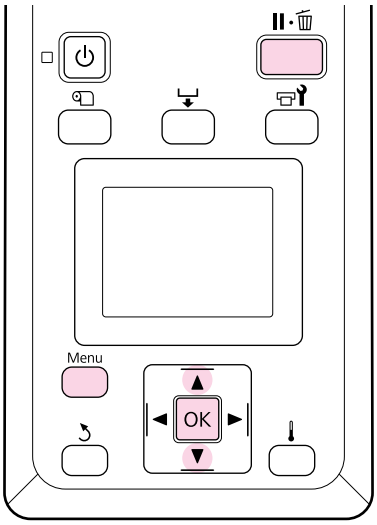
- ❏ Visually inspect print results and enter a correction by hand.
- ❏ Enter a correction during printing and inspect the results.

> ***Note:***
> ***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.*
>
> *Furthermore, when installing the heavy roll media system, the media must be loaded and feed adjustment performed again, even if once you adjust with the standard roll media system.*

Adjust the feed manually if you feel that auto feed adjustment has not completely resolved the problem.

Using a Test Pattern

Primary and **Secondary** adjustments are required. Normally the **Secondary** adjustment is performed after the **Primary** adjustment. **Primary** adjustment alone may be sufficient if you only wish to accurately print the length of a design.



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 in the printer will be overwritten.

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

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

   Primary Adjustment

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

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

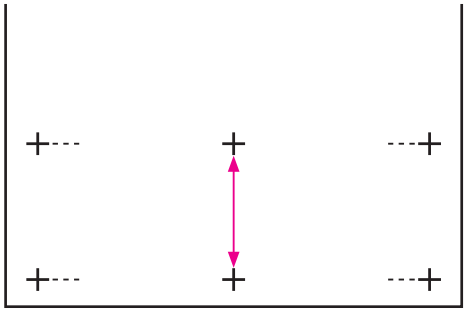
   The longer the pattern, the more accurate the adjustment.

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. Measure the distance between the “+” symbols.

    Record either the distance between the two center symbols or the average of the distances between the left, center, and right symbols.



11. Pattern length is displayed in the control panel. Using the ▼/▲ buttons, enter the value recorded in Step 10 and press the OK button.

> ***Note:***
> *To rewind the media, press the ▲ button.*

Secondary Adjustment

12. Perform Steps 1 to 6.

13. Use the ▼/▲ buttons to select **Secondary** and press the OK button twice.

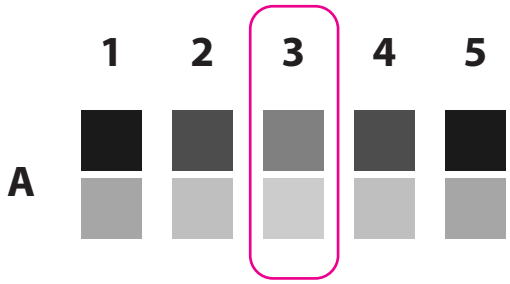
14. The printer will print a test pattern.

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

    Cut the media if necessary. See “Cutting Media” on page 80.

15. Check the pattern and note the pattern number with the lightest colors.

In the following example, this would be pattern number 3.



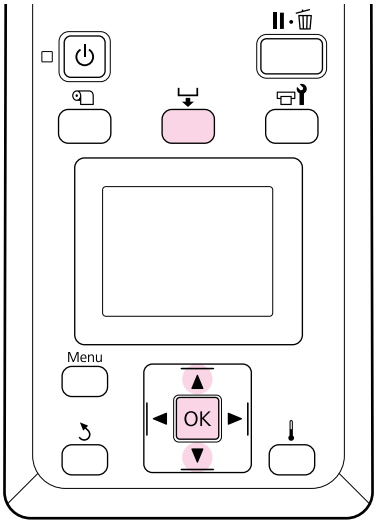
16. The pattern number is displayed in the control panel. Using the ▼/▲ buttons, enter the pattern number recorded in Step 15 and press the OK button.

17. Enter the number for each line, from A to F, and press the OK button.

18. The menus will close after you enter the pattern number for the last line.

> ***Note:***
> *To rewind the media, press the ▲ button.*

Performing Feed Adjustment During Printing



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.

4. Press the OK button when settings are complete.

   Once the feed amount has been adjusted, printing will continue at the new value.

> ***Note:***
> *The new value is erased when:*
>
> ❏ *The media loading lever is raised*
>
> ❏ *The printer is turned off*
>
> ❏ *Changes are made to* ***Feed Adjustment*** *in the* ***Media Setup*** *menu.*

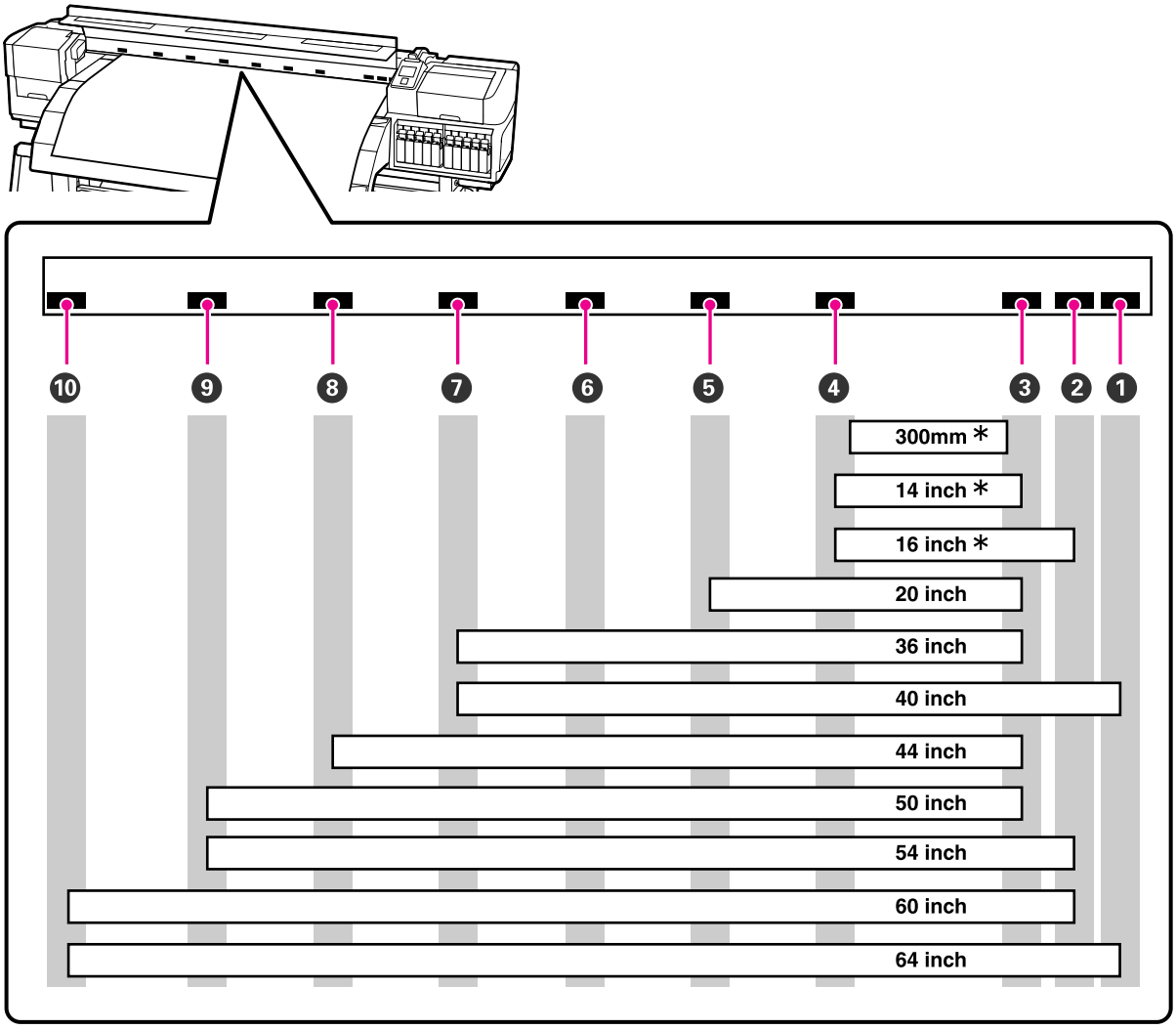
Printable area - S70670/S50670

The printable area varies with the position of the media and the pressure rollers used.

Positioning Media of Different Widths

Position the media with reference to the positions of the pressure rollers.

The positions of the pressure rollers are indicated by the black labels that are visible when the front cover is open and by the holes on the back of the printer. There are ten positions in total. In the following guides for loading media, the label on the extreme right facing the printer from the front is Label 1, the leftmost label Label 10.

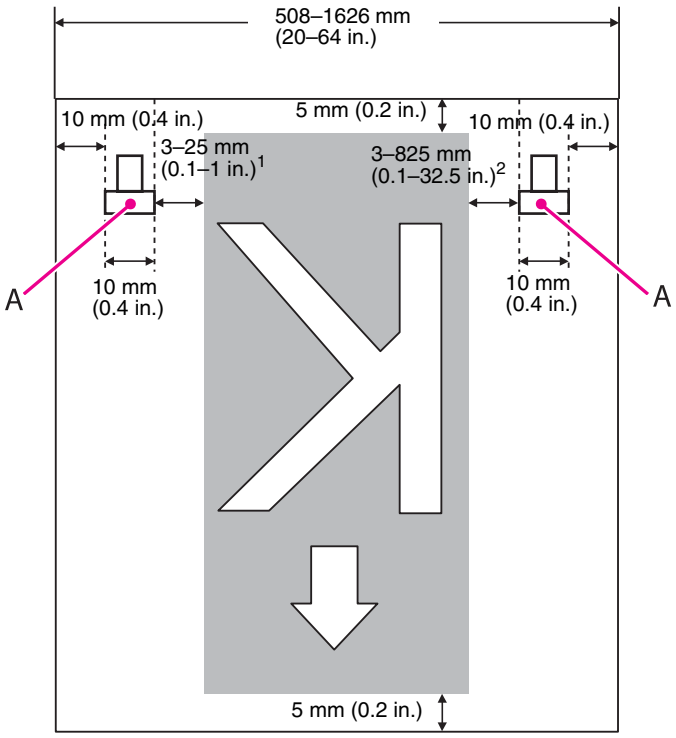


* Ink layering not available with media of this width. See “High Print Quality” on page 27.

Note:
Pressure rollers not within the bounds indicated by the black labels do not apply pressure to the media when the media loading lever is lowered. Pressure rollers that are within a black label but not over the media will cause friction during printing; be sure to position rollers that are not over the media outside the black labels.

Using the High Pressure Rollers

Position the high pressure rollers within 10 mm (0.4 inch) of the edges of the media inside any of the black labels from 1 to 10 in the “Positioning Media of Different Widths” illustration. The gray area in the illustration below shows the printable area. The arrow indicates the feed direction.



A: Pressure rollers (high)

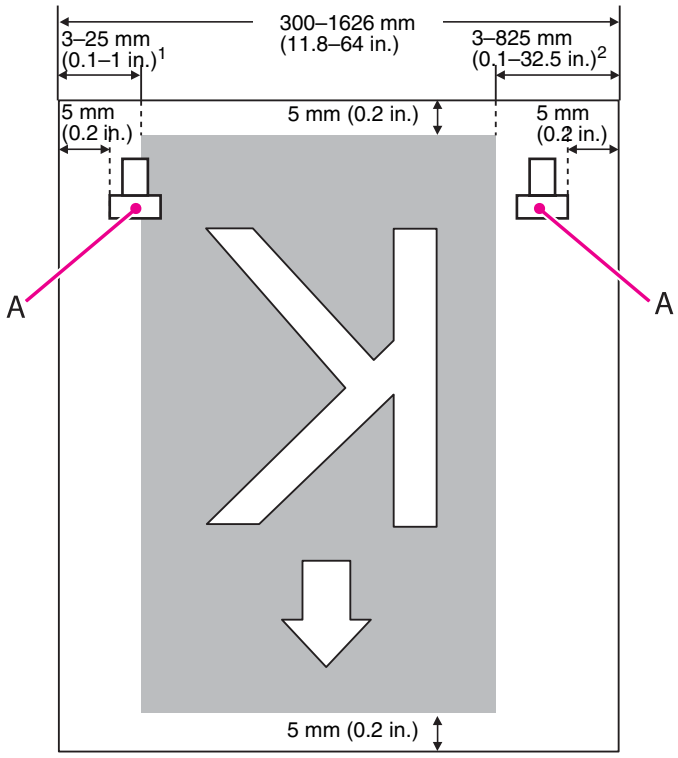
*1 The value selected for **Side Margin(Left)** in the setup menu. The default value is 5 mm (0.2 inch).

*2 The total of the values selected for **Print Start Position** and **Side Margin(Right)** in the setup menu. The default value is 5 mm.

> ***Note:***
> *The margins may not conform to the values selected in the document (or application). If the value selected for Side Margin or Print Start Position is changed, documents that fill the printable area will not be printed to the full width of the media.*

Using the Low Pressure Rollers

Position the low pressure rollers within 5 mm (0.2 inch) of the edges of the media inside any of the black labels from 1 to 10 in the “Positioning Media of Different Widths” illustration. The gray area in the illustration below shows the printable area. The arrow indicates the feed direction.



A: Pressure rollers (low)

*1 The value selected for **Side Margin(Left)** in the setup menu. The default value is 5 mm (0.2 inch). Choose a **Side Margin(Left)** over 10 mm (0.4 inch) when using media holding plates.

*2 The total of the values selected for **Print Start Position** and **Side Margin(Right)** in the setup menu. The default value is 5 mm (0.2 inch).
Choose a **Print Start Position** or **Side Margin(Right)** over 10 mm (0.4 inch) when using media holding plates.

Note:
The margins may not conform to the values selected in the document (or application). If the value selected for Side Margin or Print Start Position is changed, documents that fill the printable area will not be printed to the full width of the media.

Printable Area - S30670

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)

Varies with the option selected for **Media Size Check**.

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

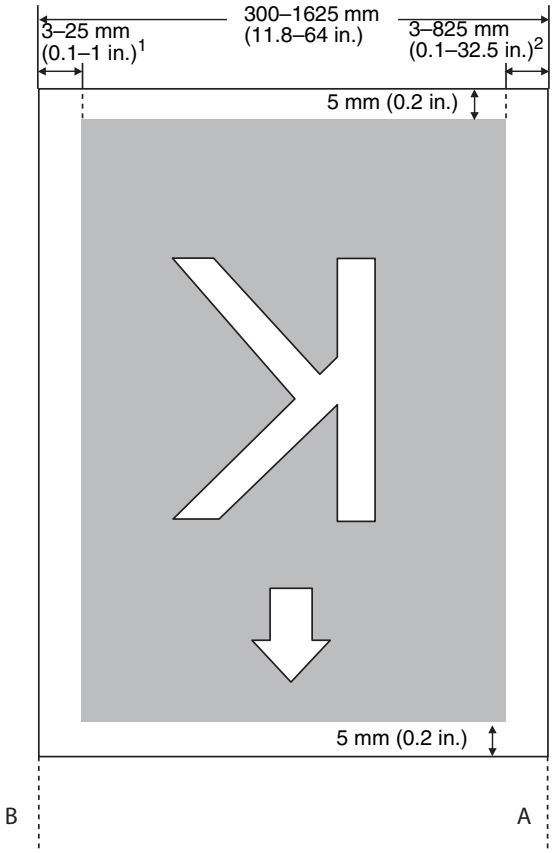
Off selected for **Media Size Check**: The default right edge position (as far as the platen past the center of the label on the pre-heater).

2 (left edge of media)

Varies with the option selected for **Media Size Check**.

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

Off selected for **Media Size Check**: 64 inches from the default right edge.



*1 The value selected for **Side Margin(Left)** in the setup menu. The default value is 5 mm (0.2 inch). Choose a **Side Margin(Left)** over 10 mm (0.4 inch) when using media holding plates.

*2 The total of the values selected for **Print Start Position** and **Side Margin(Right)** in the setup menu. The default value is 5 mm (0.2 inch). Choose a **Print Start Position** or **Side Margin(Right)** over 10 mm (0.4 inch) when using media holding plates.

Note:
The margins may not conform to the values selected in the document (or application). If the value selected for Side Margin or Print Start Position is changed, documents that fill the printable area will not be printed to the full width of the media.

Chapter 3

Maintenance

Daily Maintenance

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

Cleaning the Platen Heater, Pressure Rollers, and Media Holding Plates

Caution:

- *The heaters and media holding plate 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.*

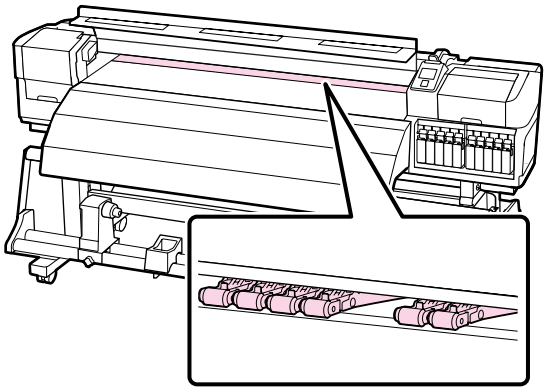
Ink and particles of paper and lint from the media accumulate on the platen heater, pressure rollers, and media holding plates. Ink on these surfaces may be transferred to the media. Clean them thoroughly.

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

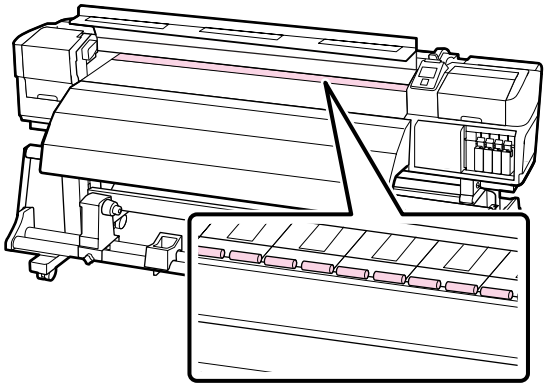
1. Make sure the printer is turned off and the screen has turned off, and then unplug the power cable from the outlet.
2. Leave the printer for a minute.
3. Open the front cover.
4. Clean the pressure rollers.

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

S70670, S50670:

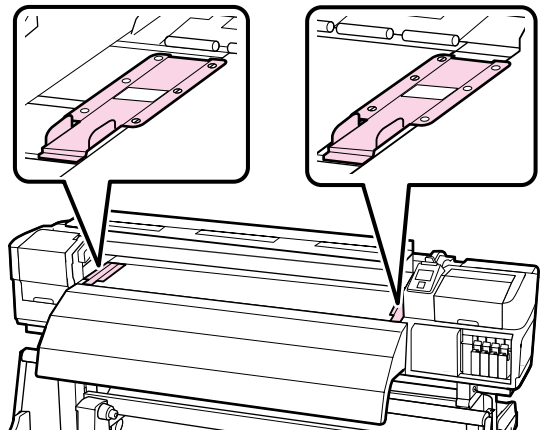


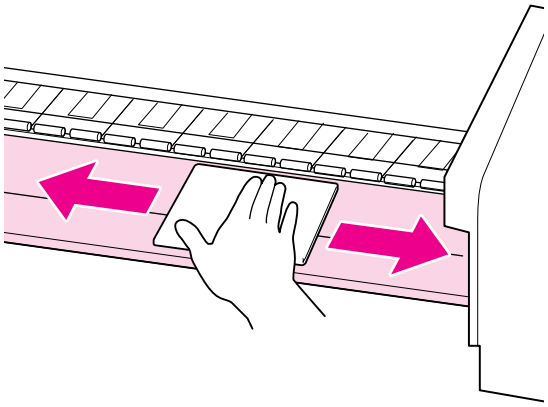
S30670:



5. Clean the media holding plates and platen heater.

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 three ways to check for clogs.

❏ Auto Nozzle Check

The printer automatically checks for clogs at specified intervals by scanning a test pattern with a sensor as it is being printed. If a clog is detected, the printer will perform a pre-selected option, either **Stop Printing** or **Continue Printing**.

See “Printer Setup Menu” on page 156.

Note:
Auto Nozzle Check *is not available under the following conditions:*

- ❏ *White ink is used in10 color mode (S70670) or 5 color mode (S50670). The check can still be performed with other colors.*
- ❏ *The media is transparent or colored.*
- ❏ *The printer is exposed to direct sunlight or interference from other ambient light sources.*

  Shade the printer from sources of interference.
- ❏ ***2.5*** *is selected for* ***Platen Gap*** *in the setup menu.*

  Choose another option for ***Platen Gap****.*

❏ 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.

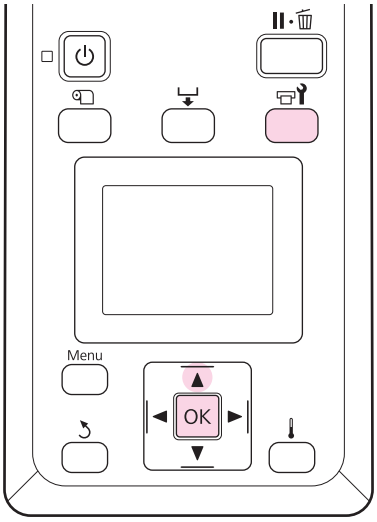
Use **Print Nozzle Pattern** with media not suited to **Auto Nozzle Check** or if you feel that **Auto Nozzle Check** would take too long.

See “Printer Setup Menu” on page 156.

❏ On-Demand Nozzle Pattern

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

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** and press the OK button.

3. A nozzle pattern will be printed.

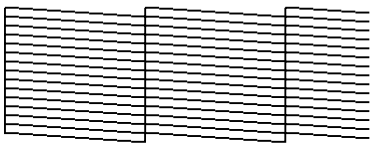
   When printing is complete, the media will automatically be fed to a position where the pattern is clearly visible.

   Cut the media if necessary. See “Cutting Media” on page 80.

> ***Note:***
> *To rewind the media, press ▲.*

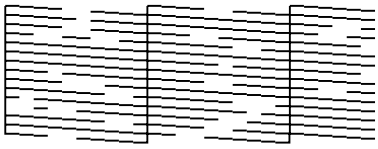
4. Inspect the nozzle pattern.

   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 119.

5. The menus close when printing is complete.

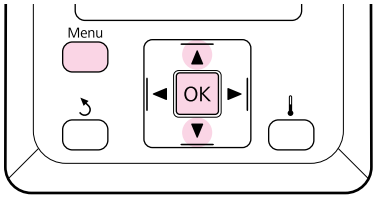
Head Mode Adjustment

The S70670 and S50670 each have two print heads, meaning that if either clogs, printing can continue using the other.

The head that will be used can be determined by printing a nozzle check pattern as part of a nozzle clog test.

See “Checking for clogged nozzles” on page 114.

This section describes how to configure the printer to print using only one print head.



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

   The settings menu will be displayed.

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

3. Use the ▼/▲ buttons to select Head Mode and press OK.

4. Use the ▼/▲ buttons to select the desired print head and press OK.

Maintenance Procedures for Specialty Inks

White and metallic silver inks are prone to precipitation (components settling to the bottom of the liquid). Perform the following maintenance to maintain print quality.

❏ Once every 24 hours, agitate the white and metallic silver ink cartridges. This prevents settling inside the cartridge. See “How to replace” on page 143.

❏ When white and metallic silver inks are installed, maintenance will be performed automatically to prevent ink accumulating in the printer and causing clogs. Because turning the printer off prevents maintenance being performed, leading to printer malfunction, we recommend that the printer not be turned off.

When Messages Are Displayed

The following message will be displayed in the control panel when white and metallic silver inks require agitating.

❏ Remove and shake MS/WH ink cartridges.

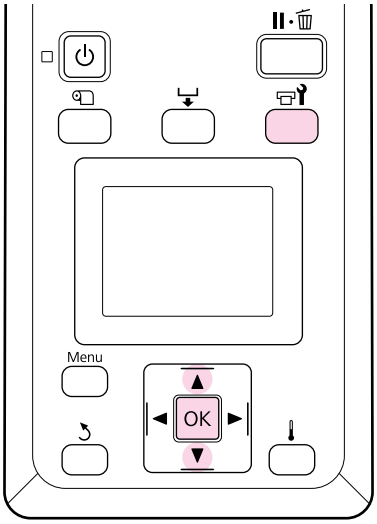
❏ Remove and shake WH ink cartridge(s).

Although the printer can be used while the above messages are displayed, the cartridges indicated in the message must be agitated to preserve print quality. See “How to replace” on page 143.

Refresh

Should uneven colors (areas of uneven density) be noted in materials printed using white or metallic silver ink, select **Ink Circulation** in the control panel. If the printer has been turned off for some time and uneven colors are noted after it is turned on, select **WH,MS Ink Refresh** or **WH,WH Ink Refresh**.

The following section describes how these operations are performed.



1. Press the button when the printer is ready to display the Maintenance menu.

2. Using the ▼/▲ buttons, highlight **Ink Circulation**, **WH,MS Ink Refresh**, or **WH,WH Ink Refresh** and press OK.

   The printer will circulate or refresh the ink.

Head Washing

S70670

If the printer is to be stored for *more than 1 week* and powered off, it is recommended to perform a head washing on all colors.

If the printer has been powered on, but has *not printed for 2 weeks*, it is recommended to perform a head washing on all colors.

S50670

If the printer is to be stored for *more than 1 week* and powered off, it is recommended to perform a head washing on all colors.

If the printer has been powered on, but has *not printed for 3 weeks,* it is recommended to perform a head washing on all colors.

See “The Maintenance Menu” on page 159 more information.

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 "Regular Part Cleaning" on page 124.

Auto Maintenance Options

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

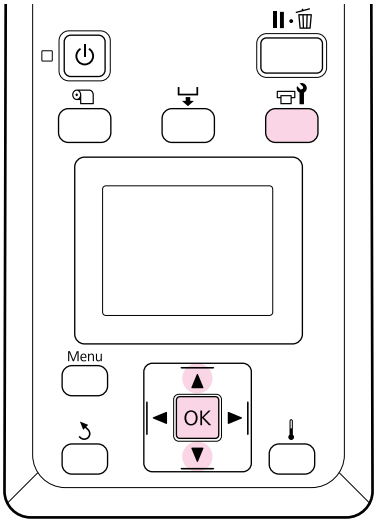
❏ Periodical Cleaning

Head cleaning is performed automatically at selected intervals of 1 to 240 hours. See "Printer Setup Menu" on page 156.

❏ Cleaning Cycle

Head cleaning is performed automatically at selected intervals of 1 to 10 pages. See "Printer Setup Menu" on page 156.

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



1. Press the button when the printer is ready to display 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.

   Head cleaning will be performed.

   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 114.

   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.

Regular Maintenance

The printer requires regular part cleaning and part replacement 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.

This guide comes with a check sheet so that you can tell at a glance when maintenance was last performed. Print the check sheet to help schedule maintenance.

See “Cleaning Check Sheet” on page 141 and “Regular Replacement Check Sheet” on page 142.

Regular Part Cleaning: Preparation and Notes

What You'll Need

Ready the following items before beginning regular part cleaning.

❏ Protective eyeware (not included)

Protects your eyes from ink and ink cleaner.

❏ A maintenance kit (supplied with printer)

Contains gloves, cleaning sticks, wiper, wiper cleaner, and flushing pad.

Order new maintenance kits once the contents of the supplied maintenance kit are exhausted. See "Options and Consumable Products" on page 176.

❏ Ink cleaner (consumable)

Used for ink stains that can not otherwise be removed when the area around the wipers, caps, and print head is cleaned. See "Options and Consumable Products" on page 176.

❏ A clean room wipe (not included)

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

❏ The metal tray that came with the printer

Used cleaning sticks and wiper, wiper cleaner, and flushing pads taken from the printer can be placed here.

> ***Important:***
> *If placed on the printer, used cleaning sticks and other cleaning materials may leave stains that, owing to the characteristics of the ink, may be difficult to remove.*

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.

- ❏ Use only the supplied cleaning sticks or sticks contained in maintenance kit (consumable kits, available separately). Other types of stick 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 get alcohol or water on the caps or the nozzle surface. Ink congeals when mixed with water or alcohol.
- ❏ Touch a metallic object before starting work to discharge any static electricity.

Using Ink Cleaner

To clean ink stains that can not be removed with cleaning stick alone, apply ink cleaner to a cleaning stick and clean the product as described below.

Caution:

- ❏ *Store ink cleaner in a location out of reach of children.*
- ❏ *Wear protective eyewear and gloves when handling Ink Cleaner.*

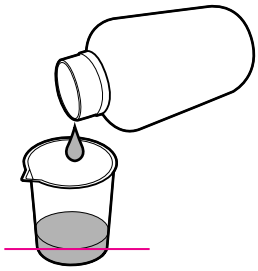
  Should Ink Cleaner contact your skin or enter your eyes or mouth, immediately take the following actions:

  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.

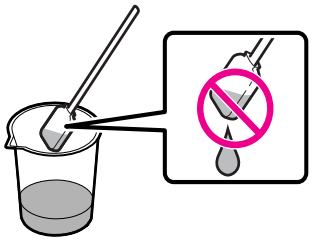
  If fluid is swallowed, consult a physician immediately; do not induce vomiting.
- ❏ *After handling Ink Cleaner, wash your hands and gargle thoroughly.*

1. Pour about 10 ml of ink cleaner into the cup supplied with the ink cleaner.



2. Dampen the cleaning stick with ink cleaner.

   Do not allow ink cleaner to drip from the cleaning stick.



3. Wipe the spot you wish to clean.

Important:

❏ *Ink cleaner should be used only to clean the area around the wiper, caps, and print head. Using ink cleaner on other parts of the printer could damage the product.*

❏ *Used ink cleaner is classified as industrial waste and should be disposed of in the same way as used ink.*

❏ *Store ink cleaner at room temperature out of direct sunlight.*

Regular Part Cleaning

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

❏ We recommend that part cleaning be performed at least once a week.

❏ Cleaning should also be performed if colors in the printout are faint or missing even after head cleaning has been performed.

Clean the parts in the following order:

(1) Print head

(2) Wiper

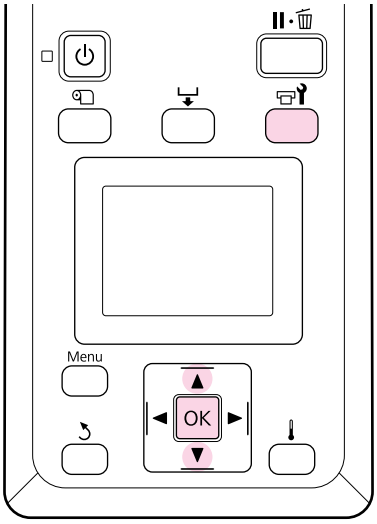
(3) Caps

(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.*



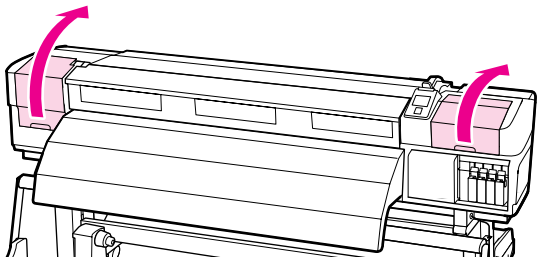
1. Confirm that the printer is on and press ☞.

   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.



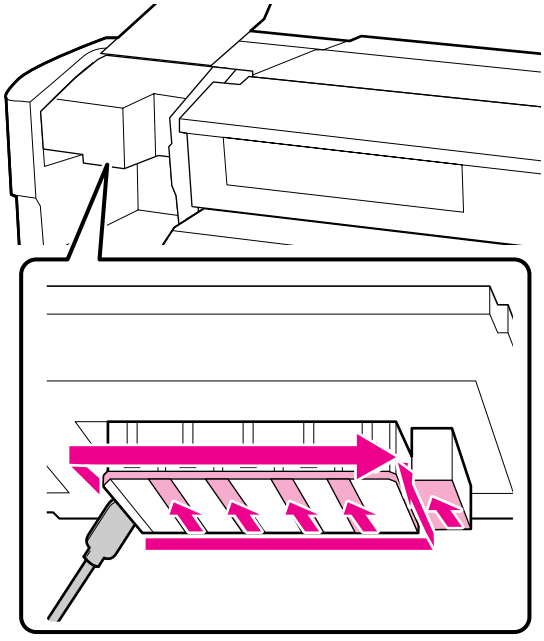
Cleaning Around the Print Head

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

Note that the S70670 and S50670 have two print heads; be sure to inspect both.

1. Use a cleaning stick to wipe the areas of the print head shown in the illustration.

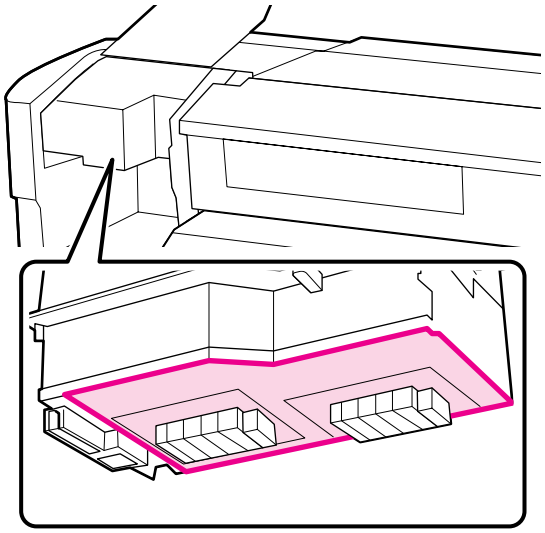
> ***Important:***
> *Be sure to use a narrow cleaning stick to clean between the nozzles (the four colored areas shown in the illustration).* ***Do not touch the nozzle surface. Touching the nozzle surface with the cleaning stick could damage the print head.***
>
> *The S70670 and S50670 have two print heads that need to be cleaned.*



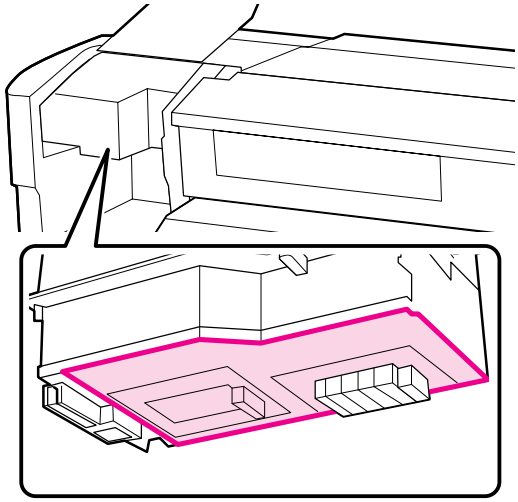
2. Ink spatters on the base of the print head can be removed using an extremely small amount of ink cleaner applied to a clean room wipe (not included).

S70670/S50670

The print head on the left is Head 1, and the print head on the right is Head 2.

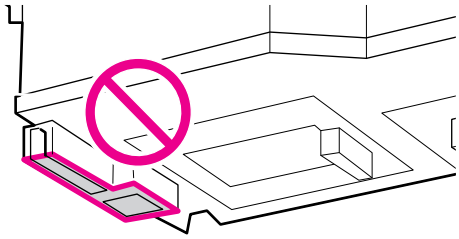


S30670



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.*

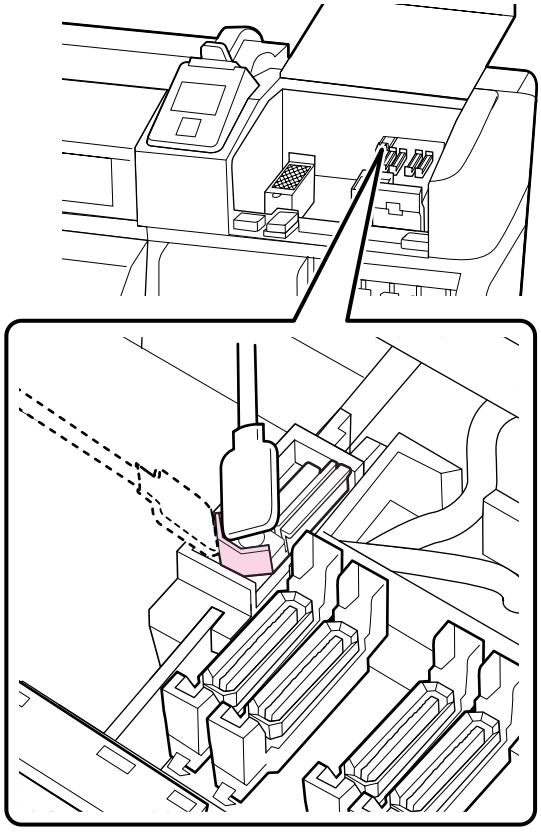


Cleaning Wiper and Caps

The S70670 and S50670 have two wipers and ten caps.

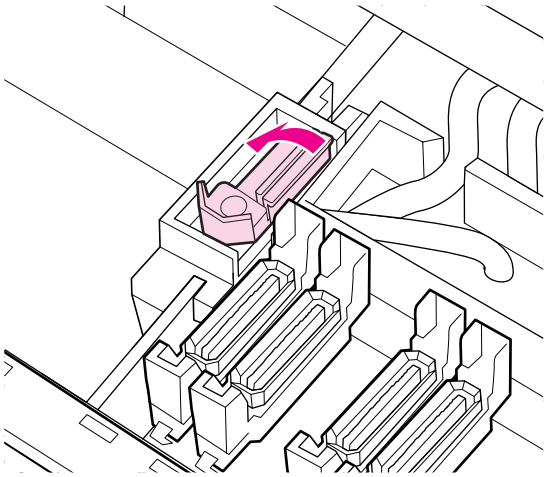
1. Clean the front and back of the wiper with a cleaning stick.

   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.

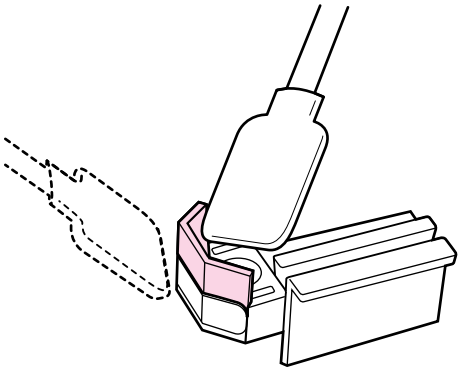


2. Remove the wiper.

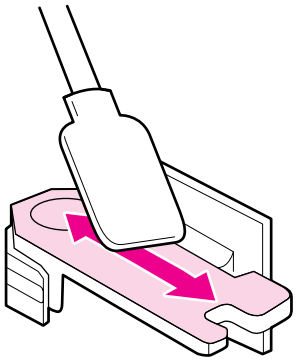
   Holding the wiper by the attachment point, tilt it to the left and lift it out.



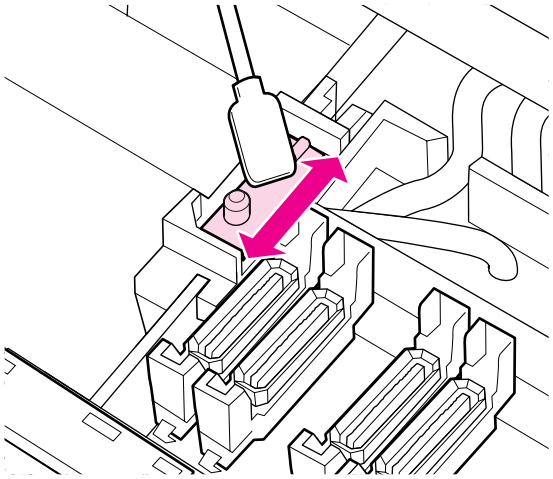
3. Clean the front and back of the wiper with a cleaning stick.



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

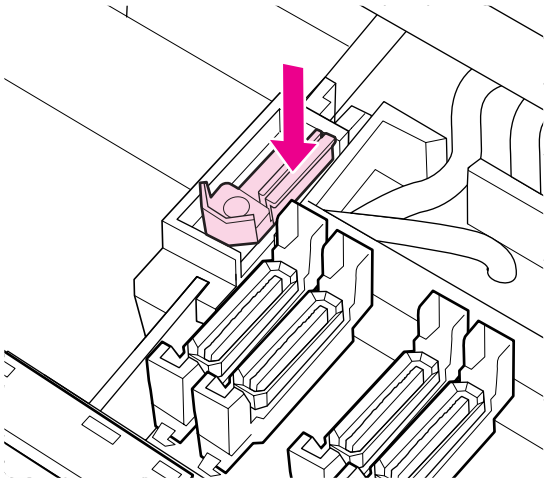


5. Clean the attachment points with a cleaning stick.



6. Return the wiper when cleaning is complete.

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

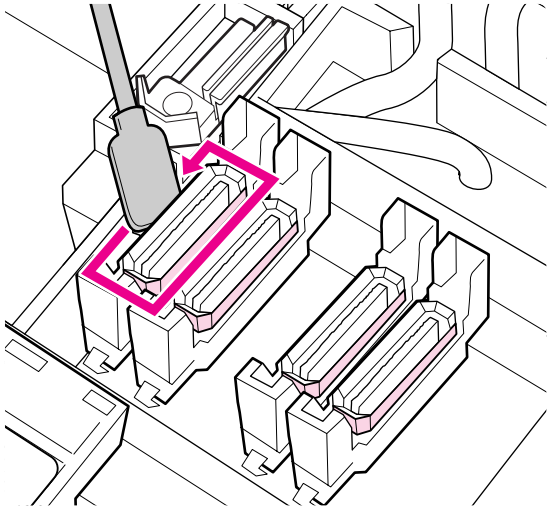


   If the remaining wiper for the S70670 or S50670 is stained, repeat the process from Step 1.

7. Clean the edges of the wiper with a cleaning stick.

   The S70670 and S50670 have ten caps, the S30670 four.

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

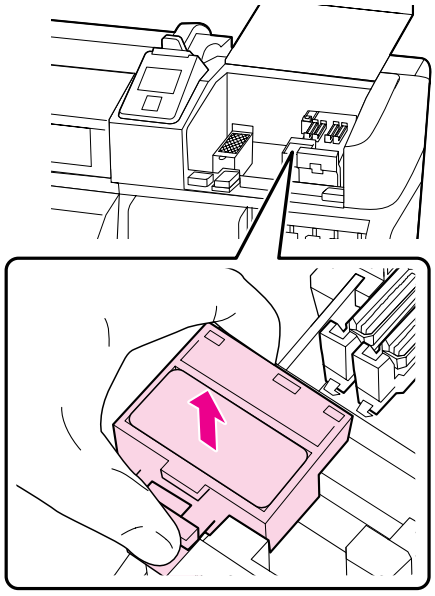


Cleaning the Wiper Rail

> ***Important:***
> *Failure to regularly clean the wiper rail could result in product malfunction.*

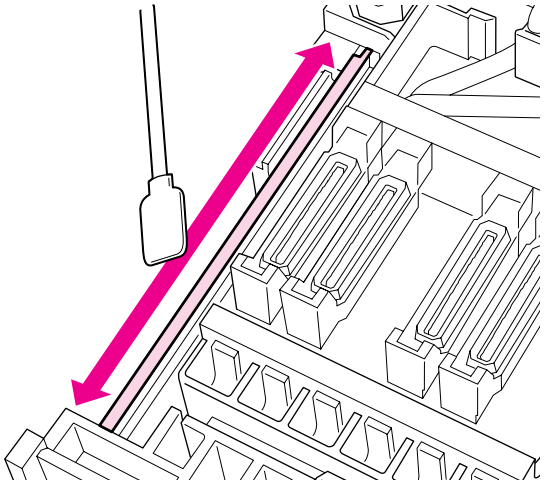
1. Press the OK button to move the wiper to the rear.
2. Remove the wiper cleaner.

   Press the release lever as shown, then lift the wiper cleaner from the printer.



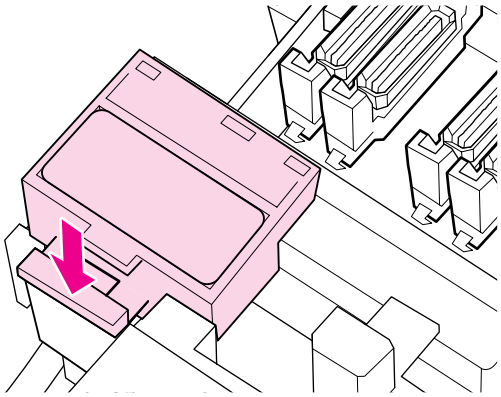
3. Dampen a cleaning stick with ink cleaner (available separately). See “Using Ink Cleaner” on page 123.

4. Clean the area shown.



5. 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.



   Users of the S70670 or S50670 will need to return to Step 2 and clean the remaining rail.

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

Disposing of Waste Ink

When to Dispose of Waste Ink

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

❏ Prepare empty waste ink bottle.

❏ Replace waste ink bottle and press OK.

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 fluid is swallowed, consult a physician immediately; do not induce vomiting.

❏ *After replacing the waste ink bottle, wash your hands thoroughly.*

Important:

❏ *Never remove the waste ink bottle while the head is being cleaning 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 Waste Ink Data Sheet to the industrial waste disposer. You can download it from the EPSON website.*

The printer tracks waste ink and displays a message when the counter reaches the warning level. Reset the waste ink counter after replacing the waste ink bottle.

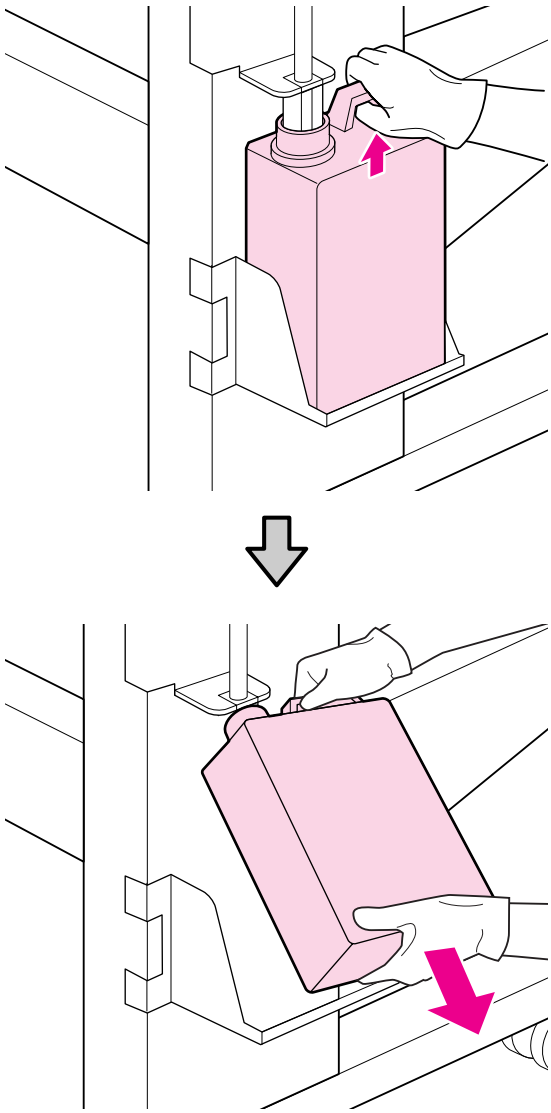
Note:

If you replace the waste ink bottle before being prompted by a message in the control panel, reset the waste ink counter using the ***Waste Ink Counter*** *option in the Maintenance menu. See "The Maintenance Menu" on page 159.*

Important:
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.

Replacing the Waste Ink Bottle

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



2. 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.*

3. Press the OK button.

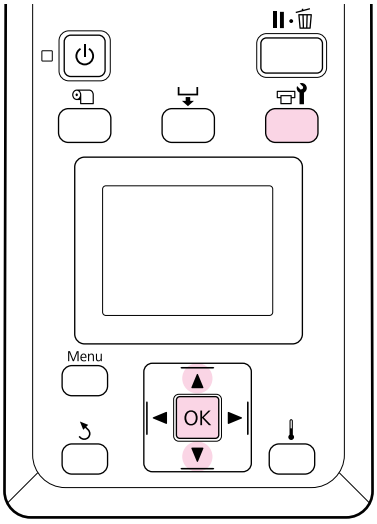
4. Check again to confirm that a fresh waste ink bottle is correctly placed and then press the OK button to reset the waste ink counter.

Replacing the Wiper and Wiper Cleaner

Replace the wiper and wiper cleaner as directed below:

❏ Once every six months

❏ When the front of the wiper cleaner (the absorbent parts) start to get stained with ink



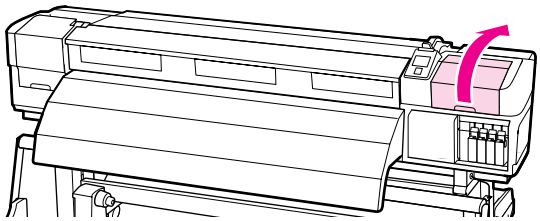
1. Confirm that the printer is on and press .

   The Maintenance menu will be displayed.

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

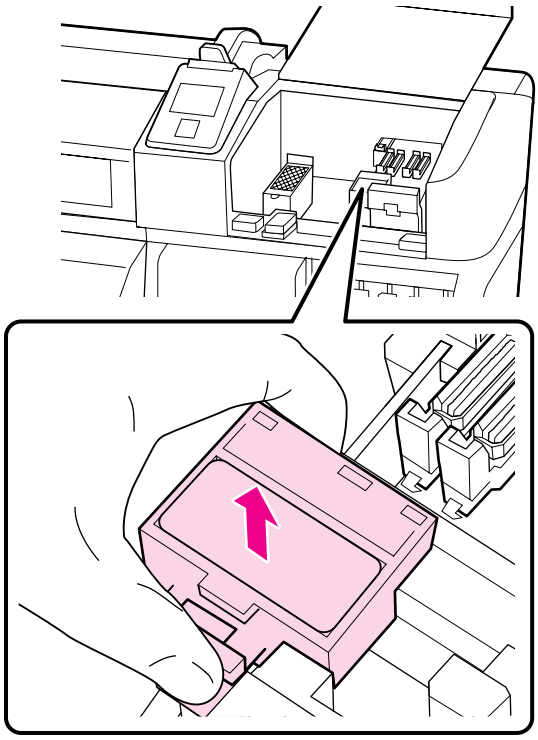
3. Press the OK button to move the print head to the cleaning position.

4. Open the right maintenance cover.



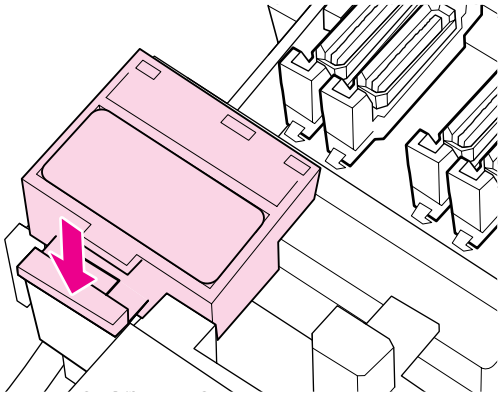
5. Remove the wiper cleaner.

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



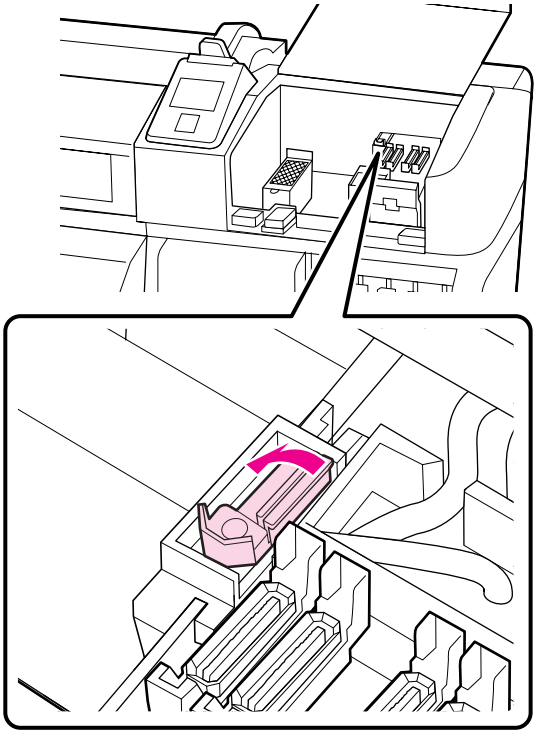
6. Insert a new wiper cleaner.

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



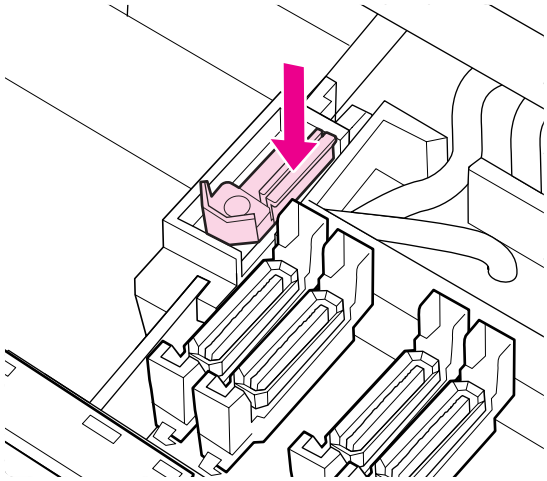
7. Remove the wiper.

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



8. Insert the new wiper.

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



Users of the S70670 or S50670 will need to return to Step 5 and replace the remaining wiper.

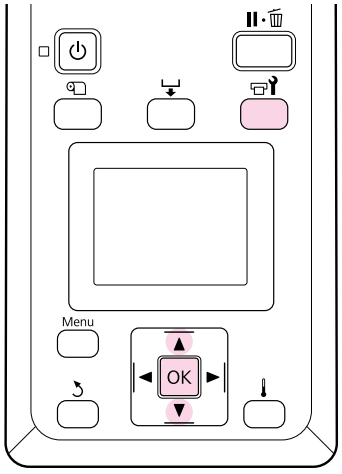
9. Close the maintenance cover and press the OK button.

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

Replacing the Flushing Pad

Replace the flushing pad as directed below:

- ❏ Once every six months
- ❏ When ink stains appear on the media
- ❏ When dust or lint from the media appears on the front of the flushing pad



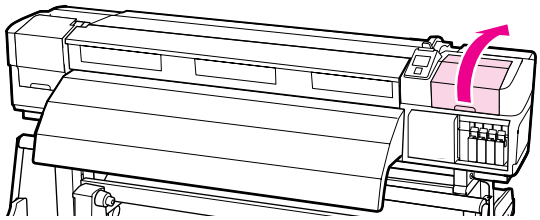
1. Confirm that the printer is on and press ☞.

   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.

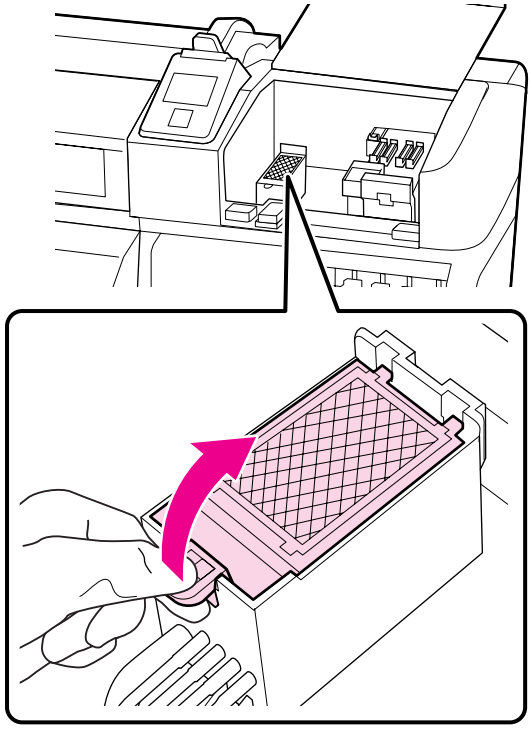
4. Open the right maintenance cover.



5. Remove the flushing pad.

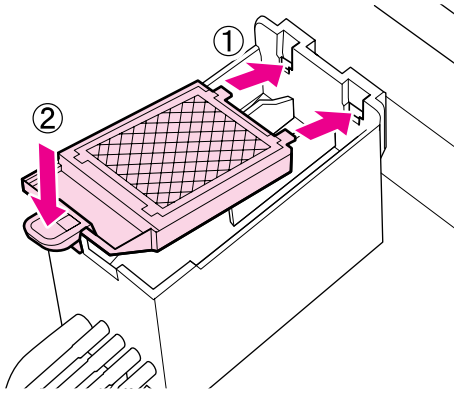
   Grasp the tab as shown below and lift the pad out of the printer.

   Immediately transfer the used flushing pad to a tray. Ink may leak from the pad.



6. Insert a new flushing pad.

Insert the two hooks on the flushing pad into the slots as shown and press the tab down until the pad clicks into place.

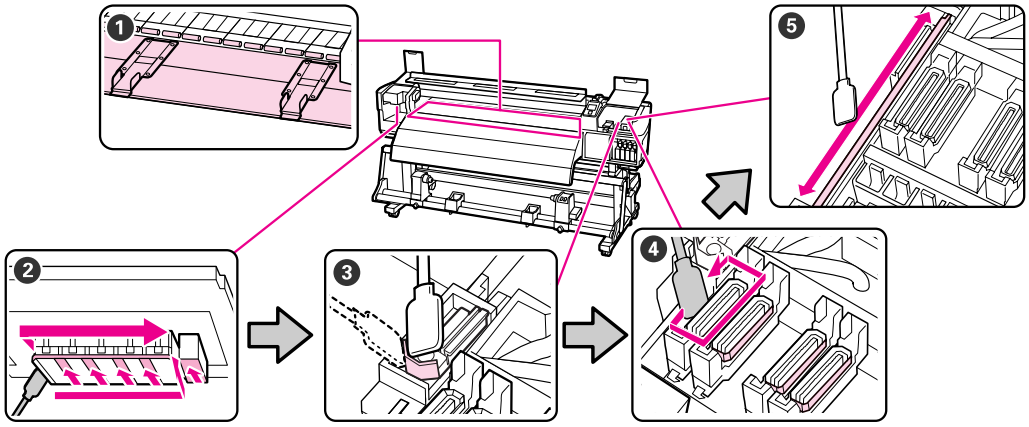


7. Close the maintenance cover and press the OK button.

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

Cleaning Check Sheet

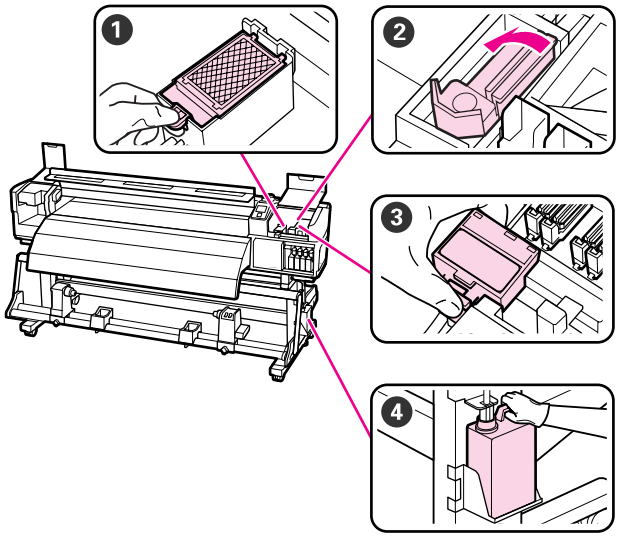
Print these pages to track maintenance tasks.



Component to be cleaned	Cleaned on date					Explanation
1 Platen heater, pressure rollers, media holding plates	/	/	/	/	/	Clean if you notice lint from print media, dust, or ink stains.
	/	/	/	/	/	
	/	/	/	/	/	
	/	/	/	/	/	
2 Print head	/	/	/	/	/	We recommend that cleaning be performed once a week. Cleaning should also be performed if colors in the printout are faint or missing even after head cleaning has been performed. Complete the task within 10 minutes to prevent the print head drying out. Be sure to use a narrow cleaning stick to clean between the nozzles (the four areas shown in Figure 2). Touching the nozzle surface with the cleaning stick could damage the print head. Use consumable ink cleaner (T699300) for stains that cannot otherwise be removed.
	/	/	/	/	/	
	/	/	/	/	/	
	/	/	/	/	/	
3 Wiper	/	/	/	/	/	
	/	/	/	/	/	
	/	/	/	/	/	
4 Caps	/	/	/	/	/	
	/	/	/	/	/	
	/	/	/	/	/	
	/	/	/	/	/	
5 Wiper rail	/	/	/	/	/	
	/	/	/	/	/	
	/	/	/	/	/	
	/	/	/	/	/	

Regular Replacement Check Sheet

Print these pages to track maintenance tasks.



Component to be replaced	Cleaned on date					Explanation
1 Flushing pad	/	/	/	/	/	We recommend that this component be replaced once every six months. Replace when ink stains appear on the media or when dust or lint from the media appear on the front of the flushing pad.
	/	/	/	/	/	
	/	/	/	/	/	
	/	/	/	/	/	
2 Wiper	/	/	/	/	/	We recommend that this component be replaced once every six months. Replace when the front of the wiper cleaner (the absorbent parts) start to get stained with ink. Replace the wiper when replacing the wiper cleaner.
	/	/	/	/	/	
	/	/	/	/	/	
	/	/	/	/	/	
3 Wiper cleaner	/	/	/	/	/	
	/	/	/	/	/	
	/	/	/	/	/	
	/	/	/	/	/	
4 Waste ink bottle	/	/	/	/	/	Place a new waste ink bottle when waste ink reaches the line on the current waste ink bottle. After replacing the bottle, reset the waste ink counter.
	/	/	/	/	/	
	/	/	/	/	/	
	/	/	/	/	/	

Note: Order maintenance kits (T724100) once the contents of the supplied maintenance kit are exhausted. Leave waste ink in the waste ink bottle for disposal; do not transfer it to another container. Replace waste ink bottles with consumable waste ink bottles (T724000).

Replacing Ink Cartridges

If one of the installed ink cartridges is expended, printing cannot be performed. If an ink low warning is displayed, we recommend replacing the ink cartridge(s) as soon as possible.

If an ink cartridge runs out while printing, you can continue printing after replacing the ink cartridge. However, when replacing ink during a print job, you may see a difference in color depending on the drying conditions.

For a list of supported ink cartridges, see “Options and Consumable Products” on page 176.

The procedure below can also be used to replace cleaning cartridges for print head washing.

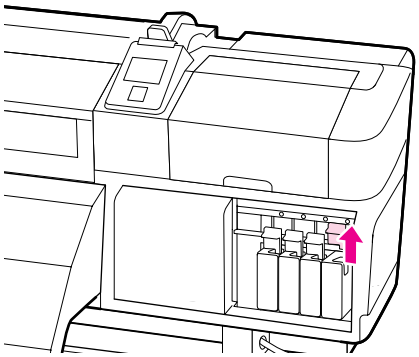
How to replace

You can use the same procedure to replace all ink cartridges.

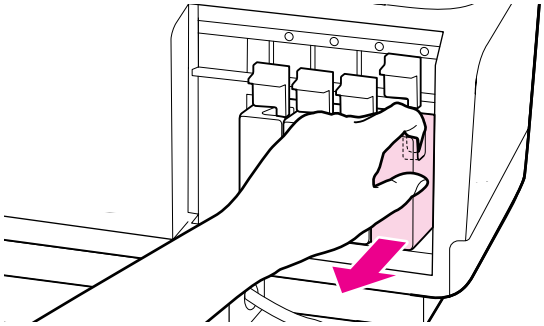
> ***Important:***
> *Epson recommends the use of genuine EPSON ink cartridges. Epson cannot guarantee the quality or reliability of non-genuine ink. The use of non-genuine ink may cause damage that is not covered by Epson’s warranties, and under certain circumstances, may cause erratic printer behavior. Information about non-genuine ink levels may not be displayed, and use of non-genuine ink is recorded for possible use in service support.*

1. Make sure the printer is on.

2. Lift the lock lever for the cartridge you intend to replace.



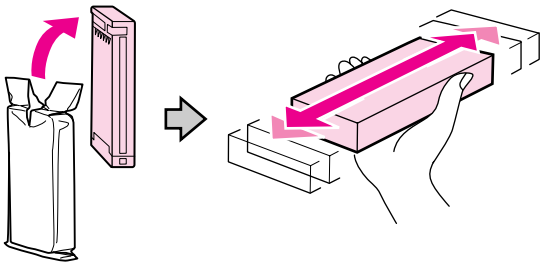
3. Insert a finger into the depression on the top of the cartridge and pull the cartridge straight toward you.



> ***Important:***
> *Removed ink cartridges may have ink around the ink supply port, so be careful not to get any ink on the surrounding area when removing the cartridges.*

4. Remove the new ink cartridge from its bag. Shake the ink cartridge horizontally about 5 cm (2-inch) to either side, making 50 passes over 15 seconds for the white, metallic silver, and orange inks. Make 15 passes over 5 seconds for the other inks.

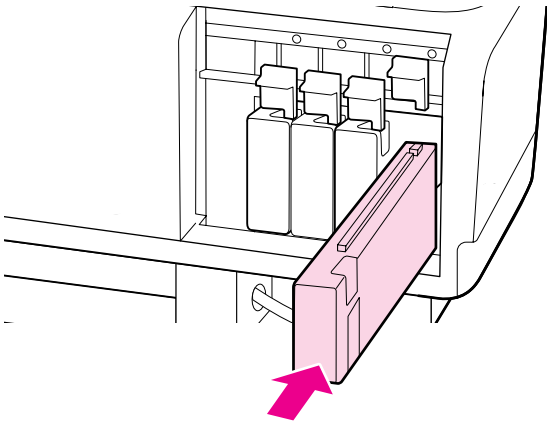
   During maintenance, each color needs to be shaken only 15 times over 5 seconds.



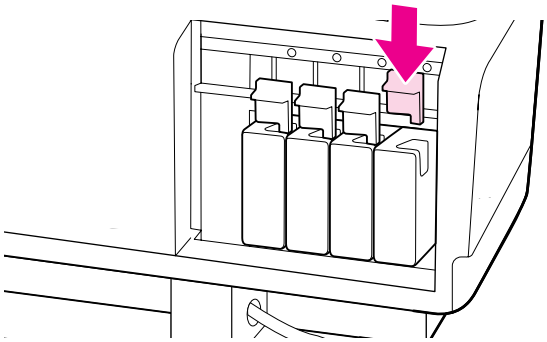
> ***Important:***
> *Do not touch the ink cartridge IC chip. Otherwise, you may not be able to print properly.*

5. Fully insert the cartridge, keeping the color label to the front.

Match the color of the cartridge to the color of the label on the printer.



6. Lower the lock lever to engage the lock.



Repeat steps 2 to 6 to replace other ink cartridges.

Important:

- ❏ *Fill all slots using ink or replacement cartridges (replacement cartridges are required in 8 and 4 color modes). You cannot print if any of the slots are empty.*
- ❏ *White and metallic silver installed in the printer should be taken out and shaken as described in Step 4 once every 24 hours, other inks once every 3 weeks.*

Parts That Are Periodically Replaced

The following parts require periodic replacement.

Print head: The time until the print head needs to be replaced varies with the conditions of use.

When replacing the print head, you will also need to replace the damper kit and carriage encoder.

The message **Print head is nearing end of service life.** is displayed in the control panel as the time for replacement draws near. The printer can still be used while this message is displayed.

> ***Note:***
> *The message might not be displayed depending on your area.*

Print head life varies with operating conditions. Base the decision to replace the print head on the quality of the print results.

Contact your dealer or EPSON Support for information on replacing components.

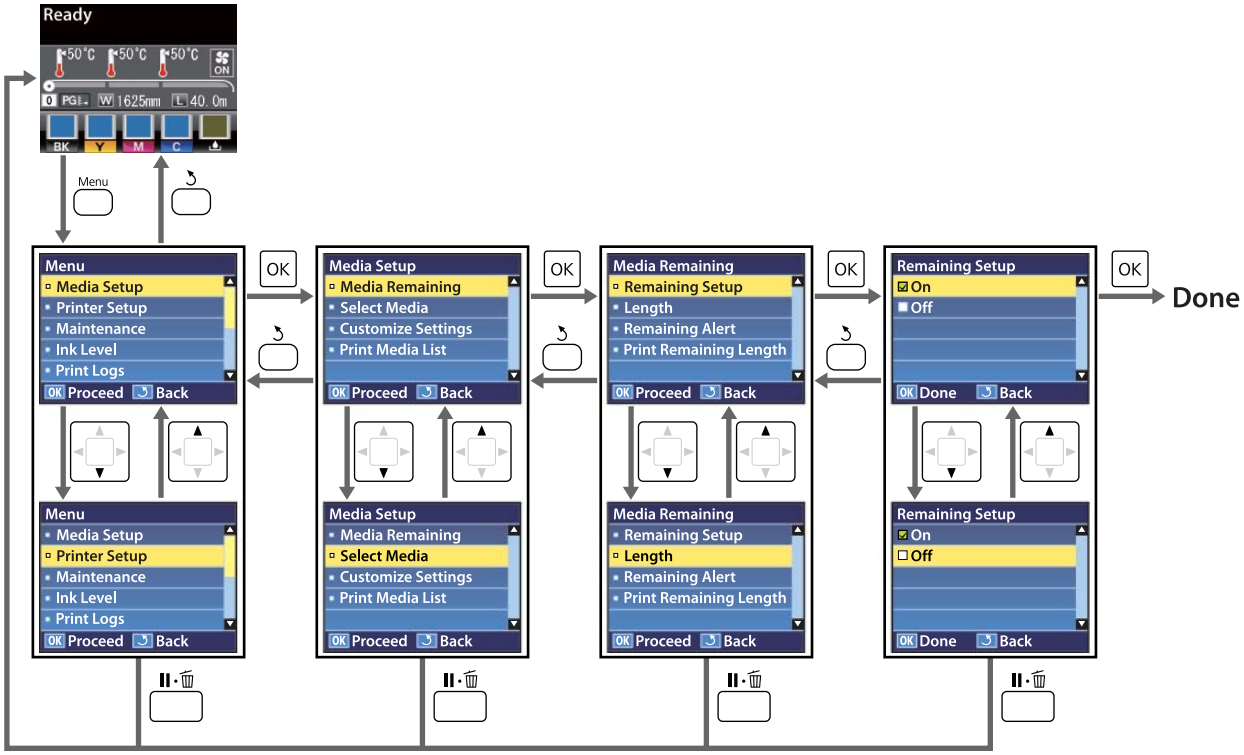
Component status can be printed by selecting **Print Status Sheet** in the setup menu. See “The Printer Status Menu” on page 161.

Chapter 4

Using the Control Panel Menu

Menu Operations

The menus are used as shown below.



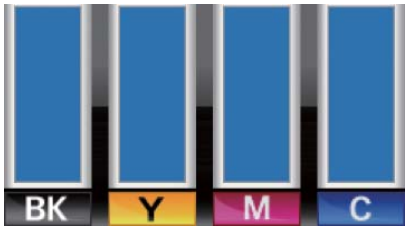
Menu List

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

Items or values marked with a superscript “1” apply to the S70670 and S50670; items marked with a superscript “2” apply only to the S50670; items marked with a superscript “3” are not supported on the S70670.

Menu	Item	Parameter
Media Setup See "The Media Setup Menu" on page 152.	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. The options available for RIP settings and media setting banks 1 to 30 are listed below.
	RIP Settings	
	Platen Gap	1.5, 2.0, 2.5
	Head Alignment	
	Input thickness.	Auto(Uni-D), Auto(Bi-D), Auto(Dual Head)[1], Manual(Uni-D), Manual(Bi-D), Manual (Dual Head)[1]
	Roll Type	Printable Side Out, Printable Side In
	Tension Measurement	Periodically, Every Page, Off
	Media Tension	0 to 40
	1 to 30 (media setting bank)	
	Setting Name	Up to 22 half-size characters
	Feed Adjustment	Auto, Manual
	Platen Gap	1.5, 2.0, 2.5
	Head Alignment	Auto(Uni-D), Auto(Bi-D), Auto(Dual Head)[1], Manual(Uni-D), Manual(Bi-D), Manual (Dual Head)[1]
	Heating & Drying	
	Heater Temperature	Pre-heater/platen heater: 30 °C to 50 °C (86 °F to 122 °F) After heater: 30 °C to 55 °C (86 °F to 131 °F)
	Drying Time Per Pass	0 to 10 sec
	After Heater Feed	Mode 1, Mode 2, Off
	Additional Dryer	On, Off

Menu	Item	Parameter
	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
	Media Tension	0 to 40
	Feed Speed	1 to 2
	Print Media List	Print
Printer Setup See "Printer Setup Menu" on page 156.	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 inch)
	Media Size Check	On, Off
	Media End Check	On, Off
	Media Skew Check	On, Off
	Head Strike Warning[2]	
	Warning Options	On, Off
	Warning Level Options	1 to 5
	Auto Nozzle Check	
	Nozzle Check Cycle	Off, 1 to 10 pages
	Options When Clogged	Continue Printing, Stop Printing
	Print Nozzle Pattern	Off, 1 to 10 pages
	Periodical Cleaning	
	Light	Off, 1 to 240 hours
	Medium	
	Heavy	
	Power[3]	
	Cleaning Cycle	Off, 1 to 10 pages
	Heat Off Timer	15 to 240 minutes
	Head Mode[1]	2 Heads Mode, Head 1, Head 2
	Restore Settings	Yes, No

Menu	Item	Parameter
Maintenance See "The Maintenance Menu" on page 159.	Nozzle Check	Print
	Cleaning	
	All Nozzles	Execute (Light), Execute (Medium), Execute (Heavy)
	Head 1/Head 2[1], Head 1[1], Head 2[1]	
	Selected Nozzles	Execute (Light), Execute (Medium), Execute (Heavy)
	Ink Circulation[1]	Execute
	WH, XX Ink Refresh[1]	Execute
	Head Washing	XX/XX, Head1 All Nozzles[1], Head2 All Nozzles[1], All Nozzles
	Head Maintenance	Move Head
	Waste Ink Counter	-
Ink Level See "The Ink Level Menu" on page 160.		
Print Logs See "The Print Logs Menu" on page 161.	Print Job Log Sheet	Print
	Show Total Prints	XXXXXXm^2 (XXXXXX ft^2)
Printer Status See "The Printer Status Menu" on page 161.	Print Status Sheet	Print
	myEpsonPrinter Status	Not Started, Disabled, Enabled Last_Uploaded:, (Not Uploaded), MM/DD/YY HH:MM GMT
	Firmware Version	XXXXXXX,X_XX,XXXX
Network Setup See "The Network Setup Menu" on page 161.	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
	Bonjour	On, Off
	Print Status Sheet	Print
	Restore Settings	Yes, No

Menu	Item	Parameter
Preference See "The Preference Menu" on page 162.	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 163.		Yes, No

Details of the Menu

Items or values marked with a superscript “1” apply to the S70670 and S50670, while items marked with a superscript “2” are available with the S50670 only. Items marked with a superscript “3” are not supported on the S70670.

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	5.0 to 99.5 m (15 to 300 ft)	Enter a value for overall roll length between 5.0 and 99.5 m (15 to 300 ft). You can set in 0.5m (1ft) 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 0.5m (1ft) 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	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 1.5 is recommended in most situations. Choose 2.0 if printout is scratched or smudged.Select 2.5 only if print results 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.
	2.0	
	2.5	
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 60 mil).
Auto(Uni-D)	Print	Select Head Alignment to align print head when print results seem grainy or out of focus. Auto adjustment aligns the head automatically using data collected by a sensor while a test pattern is printed. See "Head Alignment" on page 96. In manual adjustment, you need to check the pattern and enter the optimum adjustment value for alignment. See "Correcting Print Misalignment (Head Alignment)" on page 101.
Auto(Bi-D)		
Auto(Dual Head)[1]		
Manual(Uni-D)		
Manual(Bi-D)		
Manual(Dual head)[1]		
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, **Off** to disable automatic tension adjustment. **Periodically** is recommended in most circumstances. The printer may however be unable to adjust tension appropriately for some media, resulting in excessive slack or other maladjustments that cause printing problems, in which case you should select **Off**. Note, however, that **Off** may result in unusually large margin between pages. In addition, printing may not stop and the inside of the printer may become stained. Observe the following precautions: 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.
	Every page	
	Off	
Media Tension	0 to 40	Increase tension if creases appear in media during printing. The higher the value, the greater the tension.

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	Auto	Use this option if banding (horizontal banding, lines, or strips of uneven color) persists after head cleaning and head alignment have been performed. Auto feed adjustment adjusts the feed automatically using data collected by a sensor while a test pattern is printed. See "Feed Adjustment" on page 94. In manual feed adjustment, the user visually inspects print results and enters the adjustment value by hand. See "Feed Adjustment (Manual Feed Adjustment)" on page 103.
	Manual	
Platen Gap	1.5	Choose the platen gap (the distance between the print head and the media). The default setting of 1.5 is recommended in most situations. Choose 2.0 if printout is scratched or smudged. Select 2.5 only if print results 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.
	2.0	
	2.5	
Head Alignment	Auto(Uni-D)	Select Head Alignment to align print head when print results seem grainy or out of focus. Auto adjustment aligns the head automatically using data collected by a sensor while a test pattern is printed. See "Head Alignment" on page 96. In manual adjustment, you need to check the pattern and enter the optimum adjustment value for alignment. See "Correcting Print Misalignment (Head Alignment)" on page 101.
	Auto(Bi-D)	
	Auto(Dual Head)[1]	
	Manual(Uni-D)	
	Manual(Bi-D)	
	Manual(Dual Head)[1]	
Heating & Drying		

Item		Parameter	Explanation
	Heater Temperature	Pre-heater/platen heater: 30 °C to 50 °C (86 °F to 122 °F) After heater: 30 °C to 55 °C (86 °F to 131 °F)	The temperatures for the pre-, platen, and after heaters can each be adjusted separately.
	Drying Time Per Pass	0 to 10sec	Select the time the print head pauses to allow drying after each pass. Choose from values between 0.0 and 10.0 seconds. 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 for drying the ink. Increasing the drying time increases the time needed to print.
	After Heater Feed	Mode 1 Mode 2 Off	To feed media to the after heater after printing, choose **Mode 1** or **Mode 2**; otherwise, choose **Off**. If **Mode 1** is selected, the portion fed for drying will not be rewound before the next job starts. Select this option if the media will be cut before the next job starts. If **Mode 2** is selected, the portion fed for drying will be rewound before the next job starts, eliminating unnecessary margin. Select this option if multiple jobs will be printed consecutively.
	Additional Dryer	On Off	Select **On** to enable, or **Off** to disable, the optional additional print drying system. Note that even when **On** is selected, the additional print drying system will turn off with the heaters when the Heat Off Timer expires. The additional print drying system will turn back on when the heaters resume operation. See "Printer Setup Menu" on page 156. This item is displayed only when the optional additional print drying system is installed.
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 Printer Full 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 print results with less variation.
Multi-Strike Printing		Off 2 to 8	Choose the number of times each line is printed.
Roll Type		Printable Side Out Printable Side In	Choose **Printable Side Out** or **Printable Side In** according to how the media is rolled.

Item	Parameter	Explanation
Tension Measurement	Periodically	Choose **Periodically** or **Every page** to have the printer automatically monitor and adjust media tension during printing for optimal results, **Off** to disable automatic tension adjustment. **Periodically** is recommended in most circumstances. The printer may however be unable to adjust tension appropriately for some media, resulting in excessive slack or other maladjustments that cause printing problems, in which case you should select **Off**. Note, however, that **Off** may result in unusually large margin between pages. In addition, printing may not stop and the inside of the printer may become stained. Observe the following precautions: 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.
	Every page	
	Off	
Media Tension	0 to 40	Increase tension if creases appear in the media during printing. The higher the value, the greater the tension.
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.

Print Media List

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

Printer Setup Menu

indicates default settings. For more information on margins and media size, see “Printable area - S70670/S50670” on page 107 and “Printable Area - S30670” on page 110.

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. Margin widths vary with the model of printer used.
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. Margin widths vary with the model of printer used.
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. Margin widths vary with the model of printer used.

Item	Parameter	Explanation
Media Size Check	On	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**.
	Off	
Media End Check	On	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**.
	Off	
Media Skew Check	On	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.
	Off	
Head Strike Warning[2]		
Warning Options	Off	Choose whether the printer automatically detects (On) or does not automatically detect (Off), the media lifting during printing. If On is selected, the printer will stop when the media lifts to prevent a head strike. On is recommended if you will be performing other tasks and are unable to give the printer your full attention during printing. The printer may fail to detect the media lifting in the following instances even when On is selected. Off is selected for **Media Size Check** The **Platen Gap** is set to 2.5 Transparent film media is used The media has a high gloss
Warning Level Options	On	
Auto Nozzle Check		

Item		Parameter	Explanation
	Nozzle Check Cycle	Off 1 to 10 pages	Choose the frequency with which the printer performs an **Auto Nozzle Check**: never (**Off**) or once every **1** to **10** pages. Auto nozzle checks will not be performed while **Off** is selected. If **1** to **10** is selected, the printer will automatically checks for clogs at the specified interval by scanning a test pattern with a sensor as it is being printed. Note that **Auto Nozzle Check** is not capable of detected all types of clog. In addition, **Auto Nozzle Check** is not available under the following conditions: The media is transparent or colored. The printer is exposed to direct sunlight or interference from other ambient light sources. Shade the printer from sources of interference. **2.5** is selected for **Platen Gap** in the setup menu. Choose another option for **Platen Gap**.
	Options When Clogged	Continue Printing Stop Printing	Choose how the printer responds when an auto nozzle check detects clogged nozzles. If **Continue Printing** is selected, the printer will display **Nozzle Clog Detected** but keep printing. Perform head cleaning if you judge it necessary on inspecting the print results. If **Stop Printing** is selected, the printer will display **Nozzle Clog Detected** and pause printing. Inspect the print results and choose whether to resume or suspend printing according to the extent of the clog.
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			
	Light Medium Heavy Power[3]	Off/1 to 240 hours	Choose the frequency with which the printer performs head cleaning for each level: never (**Off**) or after **1** to **240** hours. Periodical 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 performs auto head cleaning: never (**Off**) or once every **1** to **10** pages. Head cleaning will not be performed while **Off** is selected. Select **1** to **10** to perform head cleaning before the specified number of pages is printed.

Item	Parameter	Explanation
Heat Off Timer	15 to 240 minutes	You can turn off the heaters automatically when no errors are detected and no print jobs are in progress. This option is used to choose the interval before the heaters turn 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. If an additional print drying system is installed (included with the S50670, optional with other models), it will turn off automatically. To reactivate the control panel display, press any button in the control panel except ⏻. 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.
Head Mode[1]	2 Heads Mode Head 1 Head 2	Select this option for dual-head printers to continue printing with the remaining head when one of the heads is clogged. The head that will be used can be determined by printing a nozzle check pattern as part of a nozzle clog test. See "Checking for clogged nozzles" on page 114 and "Head Mode Adjustment" on page 117.
Restore Settings	Yes No	Select **Yes** to restore all items in the **Printer Setup** menu to their default settings.

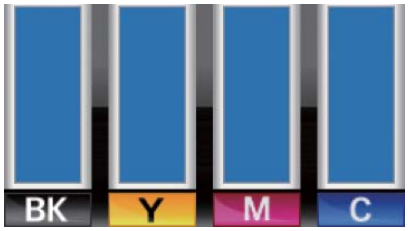
The Maintenance Menu

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 114.
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 (or all nozzles in the selected print head). 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 119.
Head 1/Head 2[1] Head 1[1] Head 2[1]		
Selected Nozzles	Execute (Light)/Execute (Medium)/Execute (Heavy)	
Ink Circulation[1]		Select this option should you notice uneven colors (areas of uneven density) when printing with white or metallic silver inks. See "Refresh" on page 118.

Item	Parameter	Explanation
WH,MS Ink Refresh[1] WH,WH Ink Refresh[1]		Select this option should you notice uneven colors (areas of uneven density) once the printer is turned on following a period of disuse. **WH,MS Ink Refresh** is available when 10 color mode is selected for the S70670, **WH,WH Ink Refresh** when 5 color mode is selected for the S50670. See "Refresh" on page 118.
Head Washing	XX/XX	The options displayed vary with the model of printer used. Wash the print head using a consumable cleaning cartridge. Head washing is performed on the selected nozzles. The required number of cleaning cartridges is given below. If **All Nozzles** and **Head1 AllNozzles/Head2 All Nozzles** are selected: S70670 10 color mode: 10 S70670 8 color mode: 8 S50670 5 color mode: 10 S50670 4 color mode: 8 S30670: 4 Selected array only: 2 Select **All Nozzles** only if the printer has not been used for an extended period. See "Options and Consumable Products" on page 176.
	Head1 All Nozzles[1]	
	Head2 All Nozzles[1]	
	All Nozzles	
Head Maintenance	Head Movement	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 "Regular Maintenance" on page 121.
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 Ink Level Menu

Item	Explanation
	You can see the level of each ink cartridge. When you replace an ink cartridge, the remaining ink level is automatically reset.

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.
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, and the status of periodical replacement parts. Use this option to view a variety of information about the printer on a single sheet and help schedule the periodic replacement of parts.
myEpsonPrinter Status	Not Started, Disabled, Enabled	You can see if myEpsonPrinter is enabled or disabled. If it is enabled, the last uploaded time is displayed. This function is not supported in some areas and some countries.
	Last_Uploaded:, (Not Uploaded), MM/DD/YY HH:MM GMT	
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	
Bonjour		On	Choose whether Bonjour is used (**On**), or is not used (**Off**), in the network interface.
		Off	

Item	Parameter	Explanation
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	
Alert Sound Setting	On	Enable (**On**) or disable (**Off**) the alarm that sounds when an error occurs.
	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 176.
Ink Cartridge Error Ink cartridge cannot be recognized. Insert again or replace ink cartridge.	Remove and reinsert the ink cartridge. If the message persists, insert a new ink cartridge (do not reinsert the ink cartridge that caused the error). See "How to replace" on page 143. Condensation may have formed inside the cartridge. Leave it at room temperature for at least four hours before installing the ink cartridge. See "Notes on handling ink cartridges" on page 32.
Ink Cartridge Error Ink cartridge cannot be detected. Insert again or replace ink cartridge.	
Ink Cartridge Error Replace cleaning cartridge.	Remove and reinsert the cleaning cartridge. If the message persists, insert a new cleaning cartridge (do not reinsert the cleaning cartridge that caused the error). See "How to replace" on page 143. Condensation may have formed inside the cartridge. Leave it at room temperature for at least four hours before installing the cleaning cartridge.
Ink Low	The ink is low. Ready a new ink cartridge. See "Options and Consumable Products" on page 176.
Warming Up OKForce to start printing	One or more heaters is still being warmed to the specified temperature. To start printing without waiting for the heater to warm up, press the OK button.
Command Error Check print settings on RIP.	Press II·🗑 and select **Job Cancel**. Check that the installed software RIP is compatible with the printer.
Unit Matching Error Check combination of Media Feeding Unit and Auto Take-up Reel Unit. Then restart printer.	The standard media feeding unit is used only with the standard auto take-up reel unit, the heavy roll media feeding unit only with the heavy roll auto take-up reel unit. If you have mismatched the feeding and take-up reel units, turn the printer off and install the correct equipment. See the S*etup Guide* and the *Heavy Media Roll System Setup Guide*.
Clogged nozzles detected. Cleaning recommended.	Stop printing and perform head cleaning if you judge it necessary on inspecting the print results. See "Head Cleaning" on page 119.
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 EPSON Support.
Print head is nearing end of service life.	The print head requires periodic replacement. The current print head is nearing the end of its service life. See "Parts That Are Periodically Replaced" on page 145.

Messages	What to do
Auto Take-up Reel Unit stopped.	Media is not correctly attached to the auto take-up reel unit. Press the II·🗑 button and select **Job Cancel** to cancel printing. 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 82.
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**. *The minimum supported width for ink layering is 508 mm (20 inches). See "Printer Setup Menu" on page 156.
Media Sensor Error Loaded media or print out has a problem. See documentation for details.	Press II·🗑 to clear the message from the display. If the message was displayed during auto head alignment, auto feed adjustment, or auto nozzle check, check the following. Is the current media not supported? The above options do not produce the desired results with transparent or colored media, or tracing paper. Are outside light sources interfering with the process? If the printer is exposed to direct sunlight or interference from other ambient light sources, shade the printer from these sources. Is **2.5** is selected for **Platen Gap** in the setup menu? The above options are not available when **2.5** is selected for **Platen Gap**. Are the nozzles clogged (auto head alignment, auto feed adjustment)? Perform head cleaning. See "Head Cleaning" on page 119. If this error is displayed under conditions other than those listed above, confirm that the printer supports the current media.
Pressure Roller Error Pressure rollers are positioned incorrectly. Release media loading lever and reposition rollers.	One of the following has occurred. Reposition the rollers as described in "Printable Area." None of the rollers is positioned inside the bounds of the black labels. Only one of the rollers is positioned inside the bounds of the black labels. The rollers at the edges of the media are not the same type. (A high pressure roller is at one edge, a low pressure roller at the other.) On is selected for Media Size Check in the printer settings menu and a roller is positioned in a black label that is not over the media. Two rollers are positioned inside the bounds of the same black label. See "Printable area - S70670/S50670" on page 107 and "Printable Area - S30670" on page 110.
Ink Layering Error Pressure rollers are positioned incorrectly. Reposition rollers.	You are using the low pressure rollers. Use the high pressure rollers for ink layering. See "High Print Quality" on page 27.

When a Maintenance Call/Service Call Occurs

Error messages	What to do
Maintenance Request Replace Part Soon/Replace Part Now XXXXXXXX	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".

Call-for-Service Request Error Codes

The portions indicated by asterisks ("*") vary depending on the type of error.

Carriage error	11**
Media feed error	12**, 15A*, 161*
Circuit error	00**, 13**, 1A**, 1F**, 20**, 3000, Dx**, Fx**
Ink system error	14**,162*
Component has reached end of service life	110*, 143*
Mechanical error	15**
Heater error	19**

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 180.

■	**Is the interface cable connected directly to the computer?** If you use a printer switching device or extension cable between the printer and the computer, you may not able to print depending on the their combinations. Connect the printer and the computer directly with the interface cable and check if you can print normally.

■	**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 20 and "When a Message is Displayed" on page 164.

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 114.

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 119.

■ **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 31.

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 114.

■ **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 101.

■ **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" on page 94.

■ **Are you using a genuine EPSON ink cartridge?**
This printer is developed for use with EPSON ink cartridges. If you use non-EPSON ink cartridges, printouts may be faint, or the color of the printed image may be changed because the remaining ink level is not correctly detected. Be sure to use the correct ink cartridge.

■ **Are you using an old ink cartridge?**
The print quality declines when an old ink cartridge is used. Replace the old ink cartridge with a new one. Use all the ink in the cartridge before the date printed on the package or within six months of opening, whichever is sooner.

■ **Are the heaters at the correct temperature?**
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 heaters 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 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 "Printer Setup Menu" on page 156.

■ **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.

■ **Is Ink Low displayed on the control panel's screen?**
The print quality may decline when the ink is low. We recommend replacing the ink cartridge with a new one. If there is a difference in color after replacing the ink cartridge, try performing head cleaning a few times.

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

See "Loading Media - S30670" on page 58 and "Printer Setup Menu" on page 156.

■ **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 "Printer Setup Menu" on page 156.

■ **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 "Printer Setup Menu" on page 156.

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 Head Alignment.

See "Correcting Print Misalignment (Head Alignment)" on page 101.

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 "Regular Maintenance" on page 121.

■ **Is the print head scuffing the printed surface?**
Smear caused by the print head scuffing the media can be prevented by adjusting the **Platen Gap** to suit the media. It may also be prevented by choosing a high value for **Media Tension**.

See "Platen Gap" on page 95 or "Media Tension" on page 99.

Media

Media Is Creased

■ **Are the Media 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 "Media Tension" on page 99 and "Feed Speed" on page 99.

■ **Are the heaters set too high?**
Adjust 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 98.

■ **Is the tensioner twisted?.**
The tensioner may twist when subject to excessive force. Taking up media when the tensioner is twisted may cause the media to crease or tear.

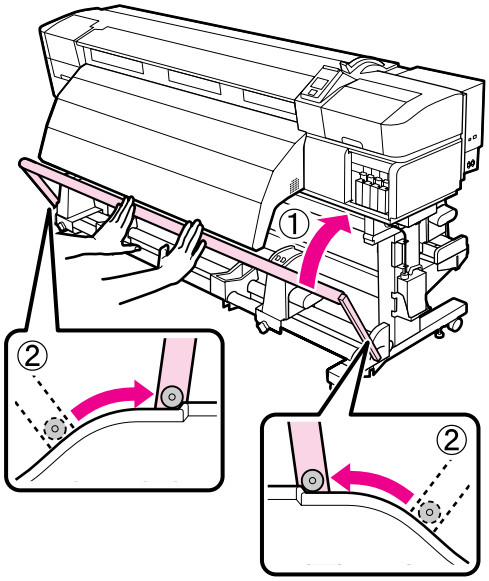
A twisted tensioner can be straightened as described below.

Straightening the Tensioner

Remove the six media guides from the tensioner bar (if attached).

1. Press the tensioner toward the printer.

2. Continue pressing the tensioner until the projections on the inside at both ends contact the case.



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 97.

Printing does not stop when the roll ends

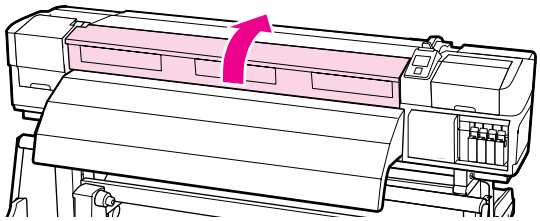
■	**Is Off selected for Tension Measurement?** **Periodically** is recommended in most circumstances. See "Tension Measurement" on page 98.

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.*

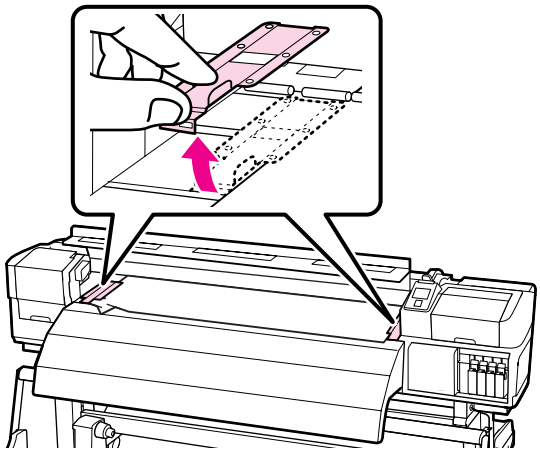
1. Open the front cover.



2. Turn off the printer.

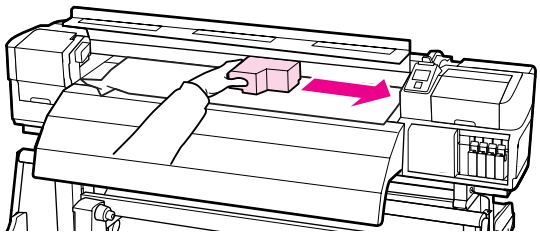
   If a message is displayed and the printer will not turn off, unplug both power cables.

3. Remove the media holding plates, if installed.



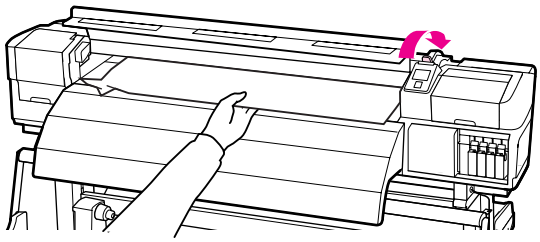
> ***Important:***
> *Cease use of the printer if the media holding plates are deformed. Continued use could damage the pressure rollers or print head.*
>
> *Contact EPSON Support.*

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

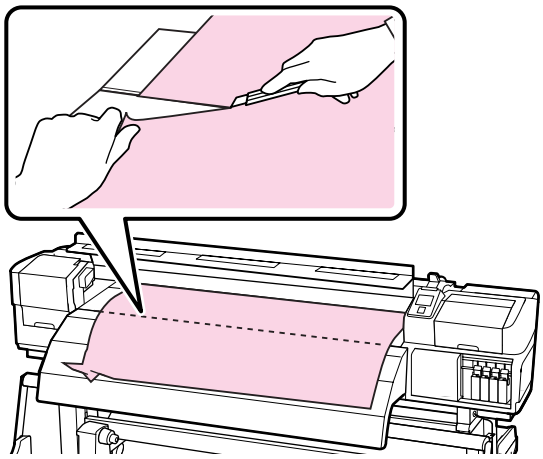


> ***Important:***
> *Move the print head only after removing the media holding plates. Contact with deformed media holding plates could damage the print head.*

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 the printer on.

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 - S70670/S50670” on page 39 or “Loading Media - S30670” on page 58.

Others

Heaters Turn off or the Optional Additional Print Drying System Stops

■ The pre-, platen, and after heaters will turn off if no print job is received for some time and no error occurs. The time before the heaters turn off automatically can be selected using the **Heat Off Timer** option in the setup menu. See “Printer Setup Menu” on page 156.

The heaters will be reactivated when a print job is received, the media loading lever is used, or another operation involving printer hardware is performed.

An additional print drying system is included with the S50670.

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 heaters turn off can be selected in the Printer Setup menu. See “Printer Setup Menu” on page 156.

The heaters 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 is a sensor and normally stays on inside the printer.

Chapter 6

Appendix

Options and Consumable Products

The following options and consumable products are available for use with your printer (as of February 2012).

For the latest information, see the EPSON website.

Product		Part number	Explanation
S70670 Ink cartridges	Black	T715100	Epson recommends the use of genuine EPSON ink cartridges. 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 ink levels may not be displayed,and use of non-genuine ink is recorded for possible use in service support. See "How to replace" on page 143.
	Cyan	T715200	
	Magenta	T715300	
	Yellow	T715400	
	Light Cyan	T715500	
	Light Magenta	T715600	
	Light Black	T715700	
	Orange	T715800	
	White	T715A00	
	Metallic Silver	T715B00	
S50670 Ink cartridges	Black	T689100	
	Cyan	T689200	
	Magenta	T689300	
	Yellow	T689400	
	White	T715A00	
S30670 Ink cartridges	Black	T689100	
	Cyan	T689200	
	Magenta	T689300	
	Yellow	T689400	
Cleaning cartridge		T699000	Use to wash the print head.
Maintenance Kit		T724100	Contains the cleaning sticks, gloves, wipers, wiper cleaner, and flushing pads required for printer maintenance (included with the S50670). See "Regular Maintenance" on page 121.
Ink Cleaner		T699300	Use for ink stains that can not otherwise be removed during normal maintenance. See "Regular Maintenance" on page 121.

Product	Part number	Explanation
Waste Ink Bottle	T724000	Identical to the waste ink bottle supplied with the printer.
Media Holding Plate	C12C890891	Identical to the media holding plate supplied with the printer.
High Speed Dryer	C890751	Uses a fan to blow air over the media and assist drying (included with the S50670). See "The Media Setup Menu" on page 152.
Heavy Roll Media System	C12C890761	A media feeding unit and auto take-up reel for heavy rolls (up to 80 kg or 176.4 lb).

Supported Media

The following media can be used with the printer. 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.

Note:
Ink layering is not available with some media types, such as banner and canvas.

Standard Roll Media System

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)

*Minimum media width for ink layering is 508 mm (20 in.)

Heavy Roll Media System

Roll core size	2 or 3 inch
Roll outer diameter	Up to 300 mm (11.8 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 80 kg (176.4 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 below for information on moving the printer between floors or to another building. See “Transport” on page 179.

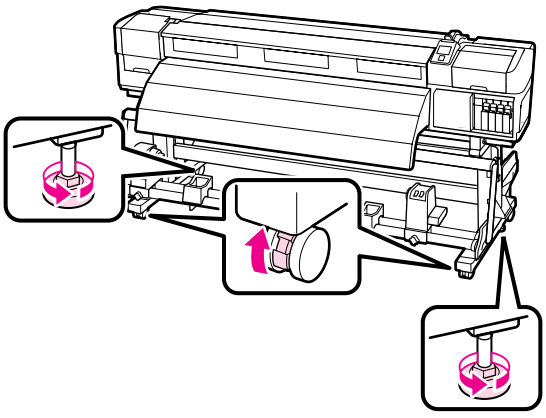
> ***Caution:***
> *Do not tilt the product more than 10 degrees forward or back while moving it. Failure to observe this precaution could result in the printer falling over, causing accidents.*

> ***Important:***
> *Do not remove the ink cartridges. Failure to observe this precaution could cause the print head nozzles to dry out.*

Getting Ready

1. Confirm that the printer is off.
2. Remove the waste ink bottle. See “Replacing the Waste Ink Bottle” on page 134.
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 can not 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. Plug in the power cables and turn the printer on.

   See the *Setup Guide.*

3. Perform a nozzle check to check for clogged nozzles. See “Checking for clogged nozzles” on page 114.

4. Perform Head Alignment and check print quality. See “Head Alignment” on page 96.

Transport

Before transporting the printer, contact EPSON Support.

System Requirements

Consult the documentation for your software RIP.

Specifications Table

Printer Specifications	
Printing method	On-demand ink jet
Nozzle configuration	S70670: 360 nozzles × 2 rows × 10 colors (Metallic Silver, Light Black, Black, Cyan, Magenta, Yellow, Orange, Light Cyan, Light Magenta, White) S50670: 360 nozzles × 2 × 2 rows × 5 colors (White, Black, Cyan, Magenta, Yellow) S30670: 360 nozzles × 2 rows × 4 colors (black, cyan, magenta, yellow)
Resolution (maximum)	1440 × 1440 dpi
Control code	ESC/P raster
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 (#1, #2, #3*2)	AC 100 to 120V AC 200 to 240V
Rated frequency (#1, #2, #3*2)	50 to 60Hz
Rated current (#1, #2)	10A (AC 100 to 120V) 5A (AC 200 to 240V)
Rated current (#3*2)	1A (AC 100 to 120V) 0.5A (AC 200 to 240V)
Power consumption	S70670 (total for numbers 1 and 2) Printing: Approx. 800 W Ready mode: Approx. 580 W Sleep mode: Approx. 12 W Power off: 0.6 W or less
	S50670 (total for numbers 1, 2, and 3*2) Printing: Approx. 895 W Ready mode: Approx. 775 W Sleep mode: Approx. 14 W Power off: 0.9 W or less
	S30670 (total for numbers 1 and 2) Printing: Approx. 650 W Ready mode: Approx. 520 W Sleep mode: Approx. 10 W Power off: 0.6 W or less

Printer Specifications	
Temperature	Operating: 15 to 35 °C/59 to 95 °F (20 to 32 °C/68 to 90 °F recommended) Storage: -20 to 40°C (-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: 5 to 85% (without condensation)
Dimension	Storage (minimum) dimensions: 2620 (W) × 963 (D) × 1311 (H) mm or 103.2 (W) × 37.9 (D) × 51.6 (H) inches Maximum dimensions: 2620 (W) × 1259 (D) × 1650 (H) mm or 103.2 (W) × 49.6 (D) × 65.0 (H) inches
Weight [3]	S70670: Approx. 229 kg (504.8 lb) S50670: Approx. 238 kg (524.7 lb) S30670: Approx. 219 kg (482.8 lb)

[*1] Use a shielded twisted pair cable (category 5 or better).

[*2] For additional print drying system included with the S50670.

[*3] Media system installed; ink cartridges not included

Ink Specifications	
Type	Special ink cartridges
Pigment ink	S70670: Black, Cyan, Magenta, Yellow, White, Metallic Silver, Light Black, Orange, Light Cyan, Light Magenta S50670: Black, Cyan, Magenta, Yellow, White S30670: Black, Cyan, Magenta, Yellow
Use by date	See the date printed on the package (at normal temperature)
Print quality guarantee expiry	Six months (from date package containing ink cartridge is opened)
Storage temperature	Uninstalled: -20 to 40 °C (-4 to 104 °F) (within a month at 40°C or 104 °F) Installed: -10 to 40°C (14 to 104 °F) (maximum four days at 40°C or 104 °F)) Transporting: -20 to 60°C (-4 to 140 °F) (within a month at 40°C or 104 °F, within 72 hours at 60°C or 140 °F)
Cartridge dimensions	(W) 40 x (D) 305 x (H) 110 mm or (W) 1.6 x (D) 12.0 x (H) 4.3 inches
Capacity	White: 600 ml Metallic Silver: 350 ml Other colors: 700 ml

Important:
Do not refill the ink cartridges.

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.

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 cartridges, paper, and accessories from an EPSON authorized reseller. To find the nearest reseller, call 800-GO-EPSON (800-463-7766). Or you can purchase online at http://www.epsonstore.com (U.S. sales) or http://www.epson.ca (Canadian sales).

Chapter B

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