

# SC-R5000 Series SC-R5000L Series

# **User Self Repair Guide**

CMP0302-00 EN

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#### Introduction

## Introduction

## **Meaning of Symbols**

Marning:	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.
<u>_</u>	Indicates related content.

# Illustrations and Photos Used in this Guide

The illustrations or photos may differ slightly from the model you are using. Please be aware of this when using the manual.

#### **About Doing User Self Repair Work**

## **About Doing User Self Repair Work**

#### What is User Self Repair Work

In this manual, starting this unit in Self Repair mode to perform diagnostics and then replace User Self Repair parts is known as "User Self Repair Work".

When should I do this?	_	_		_		
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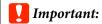
Standard clogged nozzles can be cleared with a simple procedure.	
See the printer's manual in advance to fix the problem.	

Regions other than North America and Latin America See "Troubleshooting & Tips" in the Online Manual.

	rth America view user manuals, visit the support site for your region and search for your product.
	https://www.epson.com/support (U.S.)
	http://www.epson.ca/support (Canada)
	in America view user manuals, visit the support site for your region and search for your product.
	http://www.latin.epson.com/support (Caribbean)
	http://www.epson.com.br/suporte (Brazil)
	http://www.latin.epson.com/soporte (other regions)
Us	er Self Repair operations should only be performed if the following issues persist even after taking corrective action.
	Head Cleaning causes other nozzles to become clogged.
	Nozzles are clogged on the area of the paper where printing starts.
	Nozzles become clogged when printing high-density areas.

Only replace User Self Repair parts when the diagnosis determines that you need to replace the Print Head or the anti-drying caps.

#### **About Doing User Self Repair Work**



 $Perform\ User\ Self\ Repair\ work\ within\ the\ following\ temperature\ and\ humidity\ ranges.$ 

15 to 30°C (59 to 86°F) 20 to 80%

#### **Notes on Safety**

## **Notes on Safety**

This section lists precautions that must be taken to use the product safely and prevent damage to property or injury to operators or others.

Regions other than North America and Latin America: In addition, be sure to read the "Safety Instructions" in the *Setup Guide* (booklet) or the *Safety Instructions* (booklet), which is a separate manual.

North American and Latin American users: In addition, be sure to read the safety instructions in the online *Notices*.

#### **Warning**

Do not replace User Self Repair parts without having been trained for User Self Repair.

An electric shock or injury could occur.

#### **Work Flow**

## **Work Flow**

#### 1. Start the printer in User Self Repair Mode

△ "How to Start in User Self Repair Mode" on page 9



#### 2. Run Diagnosis from the Repair Menu

Take measures according to the diagnostic results. In some cases, you may not need to replace the Self Repair parts, you may only need to perform Cleaning (Heavy) or clean the anti-drying caps.

△ "How to Do Diagnosis" on page 10





When the diagnosis indicates that the Print Headneeds to be replaced

Perform either according to the results of the anti-drying caps diagnosis







## 3. Replace the Print Head, and continue to adjust the Print Head

"Replacing and Adjusting the Print Head" on page 11

#### 3. Clean the anti-drying caps

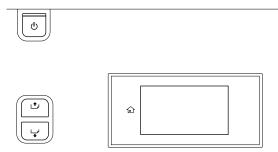
△ User's Guide (Online Manual)

#### 3. Replace the anti-drying caps

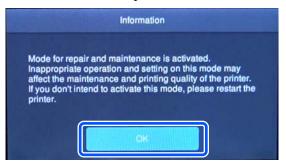
△ "Replace the Anti-Drying Caps" on page 21

# How to Start in User Self Repair Mode

- Check that the printer's power is off.
- While holding down the [ 1 and [ 1 buttons on the control panel, press and hold the button for approximately 10 seconds.



When the following screen is displayed, release all of the buttons and press **OK**.



Starting is successful if User Self Repair Mode appears in the upper left of the screen, as in the illustration.



If it does not appear, turn off the power and redo the procedure from step 2.

#### **How to Do Diagnosis**

## **How to Do Diagnosis**

## **Diagnosis Procedure**

- Start the printer in User Self Repair Mode.

  "How to Start in User Self Repair Mode" on page 9
- Press in the order of (menu) Maintenance Repair Menu Diagnosis.
- Press **Start**.

  Wait until the diagnosis results appear on screen.
- The diagnosis results appear on screen.

  Scroll down the screen to check the diagnosis results for the anti-drying caps and the Print Head.

#### When Cleaning (Heavy) needs to be executed

Make a note of the rows that need cleaning. Press Close to exit **Diagnosis**, and then perform Cleaning (Heavy).

A "How to Do Cleaning (Heavy)" on page 10

## When Head Cleaning does not need to be executed

Press **Done** to check the diagnostic results. Take measures according to the diagnostic results.

When the Print Head needs to be replaced "Replacing and Adjusting the Print Head" on page 11

When the anti-drying caps need to be cleaned 

\*Control of the Control of the Con

When the anti-drying caps need to be replaced "Replace the Anti-Drying Caps" on page 21

# How to Do Cleaning (Heavy)

- Press (Home), and then press in the order of (menu) Maintenance Head Cleaning Cleaning (Heavy).
- Select the rows that you noted needed cleaning when you executed **Diagnosis**.

Selecting **All Nozzles** cleans all the rows.

Check the message, and then press **Start**.

Cleaning starts. When cleaning is finished, we recommend that you select **Yes** on the confirmation screen, and then print a nozzle check pattern (Standard) to confirm that the clogging has been eliminated.

#### If clogging is cleared

Go to step 4.

#### If clogging is not cleared

Return to step 1, select **Cleaning (Heavy)** again, and execute cleaning for the rows that have gaps in the check pattern.

If the clogs are not cleared after executing **Cleaning (Heavy)** 2 times, execute **Diagnosis** again.

T "Diagnosis Procedure" on page 10

- Turn off the power to the printer, and start it normally.
- Send an actual print job to confirm if the print results are improved.

## Important:

Print jobs cannot be received while in User Self Repair Mode. Be sure to restart in the normal way before you send a print job.

If the print results are not improved, execute **Diagnosis** again.

T "Diagnosis Procedure" on page 10

# Replacing and Adjusting the Print Head

## **Preparation**

Use the following to do replacement work.

#### **Replacement Print Head**

Do not remove it from the protective case until just before replacement.

## Gloves (provided with replacement Print Head), protective glasses and mask (commercially available)

Prevent ink from coming into contact with your skin or from entering your eyes or mouth.

#### Media for adjustments

Prepare the media specified during User Self Repair training.

Premium Glossy Photo Paper (250) (product number: S041638)

## **Notes on Handling**

Print Heads are precision components.

When handling them, follow the procedures and precautions in this manual.

#### **Notes on Storage**

- ☐ Do not open the outer carton or the protective case before doing replacement work. There is a risk of lint or dust getting on the nozzle surfaces and ink supply ports.
- ☐ Store them in the following environment, away from direct sunlight.
  - $-20^{\circ}$ C to  $60^{\circ}$ C (-4 to  $140^{\circ}$ F) (without condensation)

- Do not store in damp location.
- ☐ Store correctly in upright orientation.
- ☐ Do not stack more than 3 boxes.

#### **Notes on Opening**

- ☐ Confirm the box is upright before opening it.
- ☐ Use the outer carton, plastic bag, and protective case to pack the used Print Head to send it to your dealer or Epson Support. Open them carefully without tearing anything.
- ☐ Do not open the protective case until you are ready to replace the Print Head. There is a risk of lint or dust getting on the nozzle surfaces and ink supply ports.

#### **Correctly Holding the Print Head**

When replacing the Print Head or removing it from its protective case, use both hands and hold it at the positions shown in the photos.



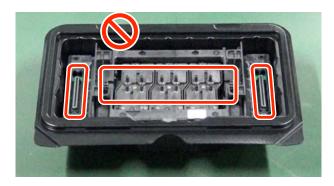




## **Do Not Touch These Areas**

Do not touch the areas outlined in the following illustration when handling the replacement Print Head. Otherwise, a malfunction may occur.

#### Connectors (left/right) and ink supply ports



#### Nozzle surfaces (bottom side of Print Head)



## **How to Remove**

You can check the procedure in a video on YouTube.

Epson Video Manuals



Touch a metal object before starting operations to disperse any static electricity from your body.

- Start the printer in User Self Repair Mode.

  "How to Start in User Self Repair Mode" on page 9
- Press in the order of (menu) Maintenance Repair Menu Replace Print Head.

Check the on-screen messages, and then press Start.



When the following message is displayed on screen, turn off the power to the printer.

After turning off the power, replace the print heads.

The replacement should be completed within 30 minutes.

If replacement takes too long, clogged nozzles may not improve.

Unplug the power cable connected to the right of the printer from the electrical outlet.



After unplugging the power plug, press the power switch.

The power LED (blue) and the screen on the control panel will turn on and then immediately turn off. This disperses any residual charge and allows the replacement procedure to be performed without difficulty.

- Put on the protective glasses and mask.
- Open the maintenance cover on the right.



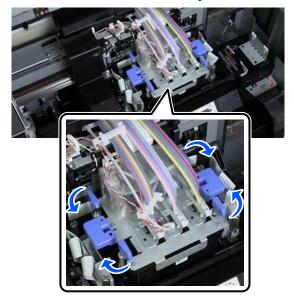
Squeeze the lock on the carriage cover to unlock it, and then open the carriage cover towards you.







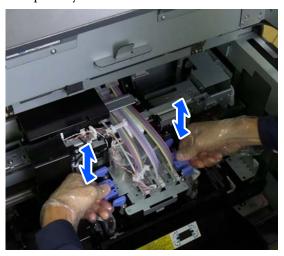
Turn all the fixing levers (4 locations) sideways to release the locks of the Ink Damper Unit.



Lift up the Ink Damper Unit and hang it temporarily on the hook.

Lift the Ink Damper Unit straight up while moving it up and down with both hands.

Turn over the Ink Damper Unit and hang it temporarily on the hook.











#### Important:

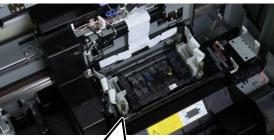
- ☐ Do not apply excessive force, such as pulling them too hard, to the ink tubes connected to the Ink Damper Unit. If they become deformed, a malfunction may
- ☐ Do not touch the bottom of the Ink Damper Unit. There is a risk of deforming the ink supply ports.

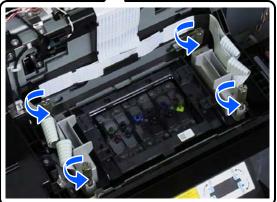


Use your fingers to turn the connector fixing screws (4 pc) counterclockwise to loosen them.

If you cannot loosen the screws with your fingers, use a coin or flathead screwdriver to loosen them.

You can loosen the screws, but they cannot be removed from the connector.





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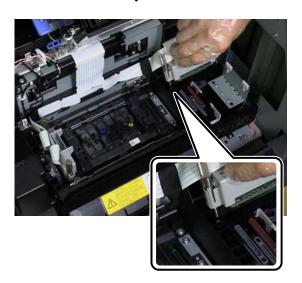
Lift the right side connector straight up to remove it, and place it on the holder.

## Important:

Press down on the Print Head as you remove the connector so the connector's pins are not deformed or damaged.







Remove the left side connector in the same way, and place it on the holder.







Open the protective case of the replacement Print Head, and place it so the inside of the lid is facing upwards.



Later, you will place the used Print Head that you removed on the upside down lid.

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Use both hands to lift the Print Head straight up and remove it.

Hold the Print Head correctly.



Place the used Print Head that you removed on the lid of the protective case.



## **How to Install**

You can check the procedure in a video on YouTube.

Epson Video Manuals

Hold the Print Head correctly.

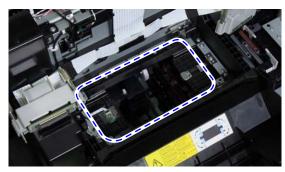
T "Correctly Holding the Print Head" on page 11

#### Important:

Do not touch the areas you should not touch while handling the replacement Print Head.

To Not Touch These Areas" on page 12

Use both hands to take the replacement Print Head out of the protective case and install it in the printer.







Install it as shown above so that the label can be seen towards the front.

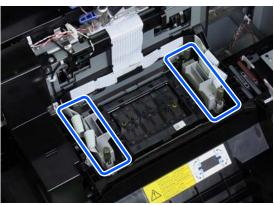
## Important:

- ☐ Immediately install the Print Head to the printer after removing it from the case.

  There is a risk of lint or dust getting on it.
- ☐ Placing the nozzle side on a surface can cause malfunctions.

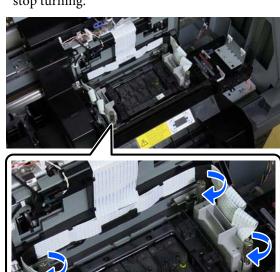
Connect the left and right connectors.

Lightly press on the top of the connectors to assure they are inserted.



Use your fingers to turn the fixing screws (4 pc) clockwise to secure the connector.

User your fingers to tighten the screws until they stop turning.



Hold the Ink Damper Unit in both hands, and install it on the Print Head.







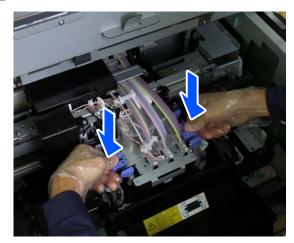
#### Important:

☐ Do not touch the bottom of the Ink Damper Unit. There is a risk of deforming the ink supply ports.



- ☐ Take care when performing operations so that you do not drop the Ink Damper Unit on to the Print Head.

  Otherwise, the ink supply pins in the Print Head could be damaged.
- Lightly press on the handles of the Ink Damper Unit to assure it is installed.



Turn all the fixing levers (4 locations) back lengthwise to lock them.



## Important:

Be sure to lock all the fixing levers.

If they are not locked, ink could leak when the printer is used.

7 Close the carriage cover.

## Important:

Make sure the carriage cover is securely locked.



Close the maintenance coveron the right.
Disposing of Used Print Heads

"Disposing of Used Print Heads" on page 19

## Process after Replacement

When Print Head replacement is complete, perform operations in the following order. Follow the on-screen instructions.

#### Fill the Print Head with ink



Print a nozzle check pattern to check if nozzles are clogged



#### Perform automatic adjustments

## Important:

Do not unplug the power plug from the outlet or trip the circuit breaker during the following operations. Otherwise, operations may not be performed correctly and a malfunction may occur.

- 1 Load the adjustment media in the printer.
  - You do not need to load the media in the take-up unit.
- Connect the power cable plug to an electrical outlet.
- Start the printer in User Self Repair Mode.

  "How to Start in User Self Repair Mode" on page 9

The ink starts filling automatically.

When the screen switches to **Print Head Nozzle Check**, make sure **Pattern Settings** is set to **Standard**, and then press **Start**.

The nozzle check pattern is printed.

5 Check the nozzle check pattern.

If there are no clogged nozzles

Select 🔘.

If there are clogged nozzles

Select X, and then do **Head Cleaning** until the clogged nozzles are cleared.

First, perform **Cleaning (Light)**. Print a nozzle check pattern (Standard), and if the nozzles remain clogged, perform **Cleaning (Medium)**. Print a nozzle check pattern (Standard) again, and if the nozzles are still not cleared, perform **Cleaning (Heavy)**.

When the screen switches to **Print Head Alignment**, you can continue with the adjustment process.

Press Start to start automatic adjustments.

Adjustments are performed automatically while printing the adjustment pattern.

When the screen display returns to the home screen, all the adjustment work is complete. If the adjustments are not complete and an error is displayed, follow the on-screen instructions to make manual adjustments.

# Disposing of Used Print Heads

Pack the used Print Head according to the following procedure, and then contact your dealer or Epson Support.

#### **How to Pack**

Apply commercially available adhesive tape to the contacts of the connectors on the used Print Head.

Be sure to apply the tape so that any ink left in the nozzles cannot leak out during transport and get into the contacts of the connectors.



- Put the Print Head into the protective case and close the lid.
- Put the protective case in the plastic bag in which was wrapped the replacement Print Head, and then put it all in the outer carton and seal it with adhesive tape.

Pack it securely so that the Print Head does not come out of the box during transport.

## Confirm the Adjustment Results

- Turn off the power to the printer, and start it normally.
- Send an actual print job to confirm if the print results are improved.



Print jobs cannot be received while in User Self Repair Mode. Be sure to restart in the normal way before you send a print job.

If there are problems with the print quality, perform **Media Settings** - **Print Adjustments**. For details on **Print Adjustments**, see the *User's Guide* (Online Manual).

If the problem is not eliminated by doing **Print Adjustments**, contact your dealer or Epson Support.

#### **Replace the Anti-Drying Caps**

## Replace the Anti-Drying Caps

Replace the anti-drying caps with new caps only if the diagnostic results indicate that they should be replaced.

## **Preparation**

Use the following to do replacement work.

#### Replacement anti-drying caps

Do not remove them from the bag until just before replacement.

Gloves (provided with replacement anti-drying caps), protective glasses and mask (commercially available)

Prevent ink from coming into contact with your skin or from entering your eyes or mouth.

## **Replacement Procedure**

Important:

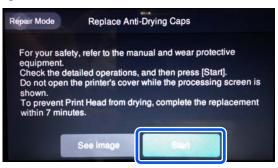
Do not unplug the power plug from the outlet or trip the circuit breaker during the following operations. Otherwise, operations may not be performed correctly and a malfunction may occur.

- Remove the new anti-drying caps from the bag.
- Start the printer in User Self Repair Mode.

  "How to Start in User Self Repair Mode" on page 9
- Press (menu) Maintenance Repair Menu - Replace Anti-Drying Caps.

Check the message, and then press **Start**.

The Print Head moves to the maintenance position.



#### Note:

A buzzer sounds seven minutes after moving the Print Head (manufacturer's settings).

Check the on-screen messages, and then press **OK** to continue operations. The buzzer sounds again after another seven minutes.

Open the maintenance cover on the right.



Squeeze the groove in the side to remove the anti-drying caps.



Put the removed anti-drying caps in the bag that contained the new ones.

#### **Replace the Anti-Drying Caps**

Install the new anti-drying caps, and push them in until you hear a click.







9 Remove the cover.



## Important:

If it is used while the cover is attached, the Print Head may be damaged.

- Close the maintenance coveron the right.
- Check the on-screen messages, and then press Complete.

The Print Head returns to its normal position and the settings menu closes.

#### **Disposing of Used Products**

Used anti-drying caps are classified as industrial waste.

Dispose of used products in accordance with local laws and regulations, such as by commissioning an industrial waste disposal company to dispose of the waste. You must also submit a Material Safety Data Sheet to the industrial waste disposal company when you hand over the used products.

You can download one from your local Epson website.

#### **Problem Solver**

## **Problem Solver**

## What to Do When a Message Is Displayed

If the printer displays one of the messages shown below, refer to the solution listed and take the necessary steps.

If messages that are not shown in the following table appear and you are uncertain about how to solve the problem, see the *User's Guide* (Online Manual).

Message	What to do
The print heads have not been replaced. Turn off the power and replace the print heads with new ones. Then start in User Self Repair Mode.	It is possible that the Print Head you replaced may not be new.  Turn off the printer, replace the Print Head with a new one, and then start the printer in User Self Repair Mode.  "Replacing and Adjusting the Print Head" on page 11  "How to Start in User Self Repair Mode" on page 9
A used print head is set. Turn off the power and replace the print heads with new ones. Then start in User Self Repair Mode.	It is possible that the Print Head you replaced may have been used. Turn off the printer, replace the Print Head with a new one, and then start the printer in User Self Repair Mode.  The "Replacing and Adjusting the Print Head" on page 11  The "How to Start in User Self Repair Mode" on page 9

#### **Problem Solver**

## **When a Printer Error Occurs**

See the following table and take the appropriate actions for the printer error code (6-digit number shown at the bottom of the screen).

If printer error codes that are not shown in the following table appear, see the *User's Guide* (Online Manual).

Printer error number	What to do
002100	Turn off the printer, and then restart it in User Self Repair Mode.
	△ "How to Start in User Self Repair Mode" on page 9
002200, 002201, 002205, 002207	The connector may not be connected correctly to the Print Head.
	Turn off the printer, reconnect the connector correctly, and then start the printer again in User Self Repair Mode.
	🕾 "Replacing and Adjusting the Print Head" on page 11
	△ "How to Start in User Self Repair Mode" on page 9
002202, 002204, 002206, 002208, 002209, 00220A	Contact your dealer or Epson Support for assistance. Tell them the printer error code is "XXXXXXX".
002203	A Print Head has been installed that is not for the printer.
	Turn off the printer, and then replace the Print Head with one that is for the printer.
	🖙 "Replacing and Adjusting the Print Head" on page 11
	Do not reuse the Print Head that was mistakenly installed. The colors of ink could mix and harden, resulting in lower quality. Handle it the same way as a used Print Head.
	△ "Disposing of Used Print Heads" on page 19
	After finishing the replacement, start the printer in User Self Repair Mode.
	△ "How to Start in User Self Repair Mode" on page 9
00220D	The carriage cover may not be closed properly.
	Turn off the printer, close the carriage cover properly, and then start the printer in User Self Repair Mode.
	△ "How to Start in User Self Repair Mode" on page 9