



TERMS OF USE

Users of this Product Guide shall be deemed to agree with the following Terms of Use.

1. USERS

This Product Guide is only for authorized persons with user ID and password issued by Roland DG Corporation.

2. PURPOSE

Authorized persons can use this Product Guide only for the purposes of selling and providing to the customers maintenance service of SG3-540/300.

3. REUSE

Authorized persons shall not disclose, transfer, rent or distribute this Product Guide to, or allow this Product Guide to be used in any manner by, any third party other than authorized persons.

4. REPRODUCTION

Authorized persons shall not copy, change or alter this Product Guide without permission of Roland DG Corporation.

5. EFFECT OF VIOLATION

Regardless of circumstances, we will vigorously respond to any violation hereof, through legal action.

Roland DG Corporation

Product Guide

SG3-540/300



Version 1.2 January 20, 2023

Version	Date	Contents
0.1	February 22, 2022	Preliminary version
1.0	March 9, 2022	First edition
1.1	June 1, 2022	Name of sensor corrected. (corrected from multicolor sensor to multi sensor) Change the length of the tube connected to the ink damper.
1.2	January 20, 2023	Logo corrected. (VersaWorks / Roland DG Connect)

Contents

- | | |
|------------------------|--------------------------------|
| 1. Product Information | 7. Special Pump Operations |
| 2. Printing Theory | 8. Maintenance |
| 3. Ink Line | 9. Software |
| 4. Ink | 10. Installation |
| 5. Cutting Function | 11. Transport |
| 6. Other Features | 12. Periodic Replacement Parts |

1. Product Information

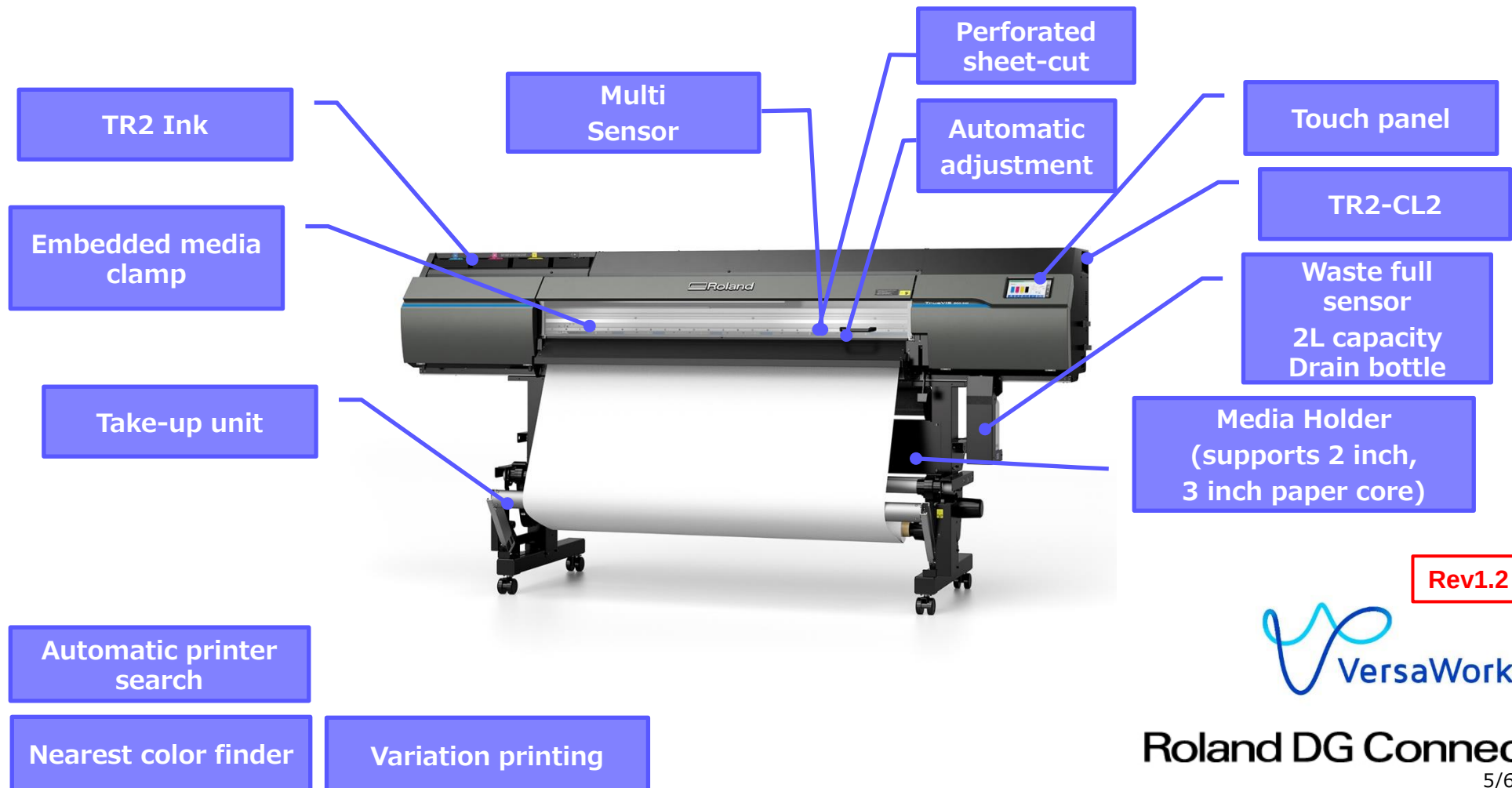
- SG3-540/300

- Series name: TrueVIS
 - ❖ 54/30 inch Print & Cut device
- Overview
 - ❖ Ink cartridge
 - TR2 ink
 - Capacity: 500 ml
 - ❖ Ink type
 - CMYK (4 colors)
 - ❖ Supported software
 - VersaWorks (ver. 6.13.0 or later)
 - Roland DG Connect (ver. 1.3.0 or later)

- Overview

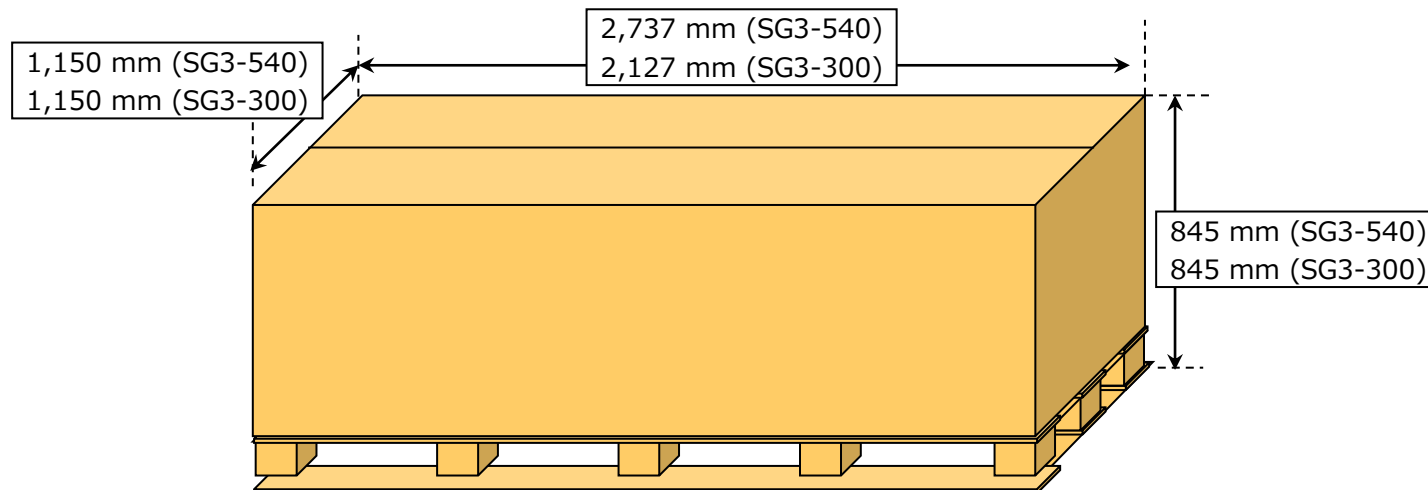
Imagine. 
CONFIDENTIAL

Entry color model based on VG3 with enhanced usability and excellent print quality



● Specifications

	SG3-540	SG3-300
Loadable Media Width	295 to 1,371 mm, Roll diameter no greater than 250 mm	182 to 762 mm, Roll diameter no greater than 250 mm
Printable Area	Max. 1,346 mm	Max. 736 mm
Media Weight	Max. 35 kg	Max. 30 kg
Dimensions with stand	2,632 [W] x 748 [D] x 1,320 [H] mm	2,022 [W] x 748 [D] x 1,320 [H] mm
Weight with stand	183 Kg	150 Kg
Power consumption	100-120V: During Operation 1,090 W, Sleep mode 50 W	100-120V: During Operation 710 W, Sleep mode 50 W
	220-240V: During Operation 1,090 W, Sleep mode 50 W	220-240V: During Operation 710 W, Sleep mode 50 W
Packaging dimensions (including skid)	2,737 [W] x 1,150[D] x 845[H] mm	2,127 [W] x 1,150[D] x 845[H] mm
Packaging Weight (including skid)	255kg	209kg



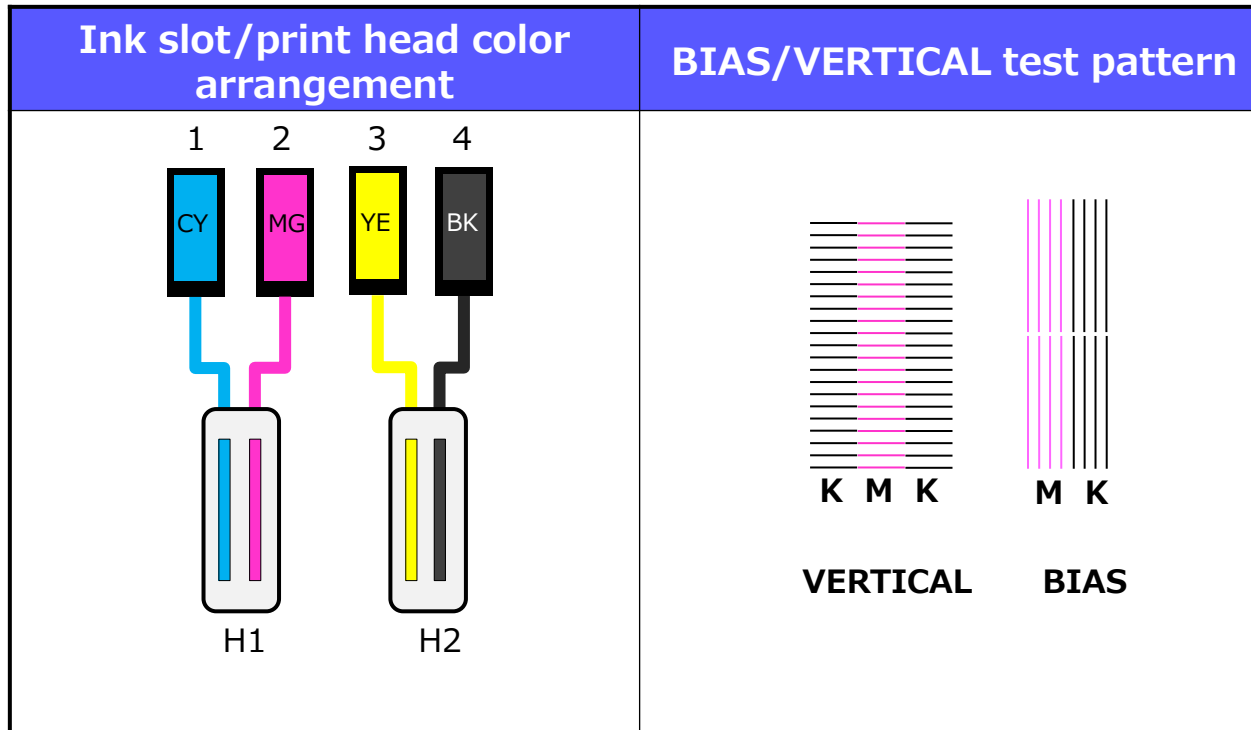
- Product specification comparison between SG3-540/340 and SG2-640/540/300

	SG2-640/540/300	SG3-540/300
Print head	FlexFire	FlexFire
Number of print head	2	2
Ink type	TR2 ink	TR2 ink
Ink configuration	CY/MG/YE/BK	CY/MG/YE/BK
Cleaning liquid	TR2-CL	TR2-CL2
Ink capacity	500 ml	500 ml
Circulation route of ink flow	N/A	N/A
Panel	LCD 2*16	7 inch display
Option dryer	DU2	DU3
Media take-up unit	TU4	Included
Software	Versa Works MobilePanel2 Roland DG Connect	VersaWorks Roland DG Connect
Service application	Peck2	Peck2 (ver. 2.5 or later)

2. Printing Theory

- Color arrangement

- ▣ Print head



● Print head alignment



▣ M-GAP DEFAULT (Service menu)

How to set adjustment is the same as the previous version, but by changing the print head height according to the panel instruction, MIDDLE and LOW test patterns can be printed at one time. Thereby, the time required to adjust the print head height LOW and MIDDLE has been reduced.

Print head alignment sequence

- 1. BIAS/VERTICAL
- 2. M-GAP DEFAULT (MIDDLE►LOW)
- 3. HORIZONTAL (MIDDLE►LOW)

M-GAP DEFAULT		HORIZONTAL	
No.1/No.2:MIDDLE No.3/No.4:LOW Print head number		No.1:MIDDLE No.2:LOW Print head number Note: H2 is reference and not printed.	
MEDIA GAP ADJ.	No2 H2 0 +1 +2 +3 +4 +5 +6 +7 +8 +9 +10 +11 +12 +13 +14 +15 +16 +17 +18 +19 +20 +21 +22 +23 +24 +25 +26 +27 +28	Horizontal	No. 2 H1 -14 -13 -12 -11 -10 -9 -8 -7 -6 -5 -4 -3 -2 -1 0 +1 +2 +3 +4 +5 +6 +7 +8 +9 +10 +11 +12 +13 +14
MEDIA GAP ADJ.	No2 H1	Horizontal	No. 1 H1
MEDIA GAP ADJ.	No1 H2		
MEDIA GAP ADJ.	No1 H1		

HIGH value for M-GAP DEFAULT/HORIZONTAL in the service mode is the automatically corrected value from LOW and MIDDLE input value.

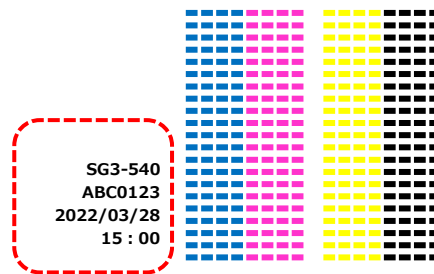
● Print head alignment

▣ Test Pattern

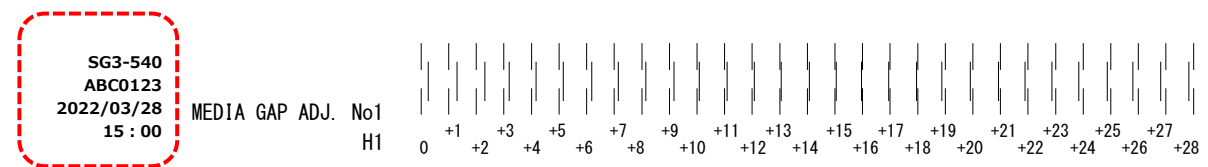
- Model, serial number and date and time are now displayed when performing test print.

SG3-□□□ (Model)
 ABC0123 (Serial Number)
 2022/03/28 (Date and time)
 15 : 00

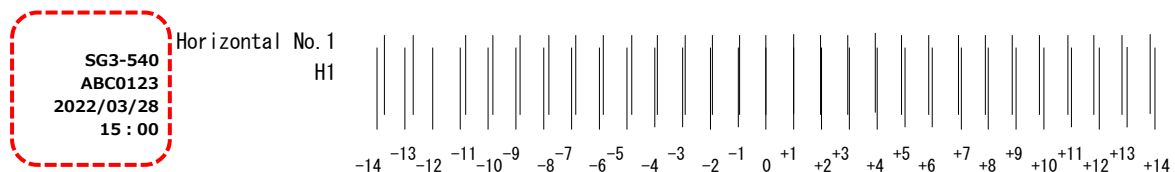
Nozzle drop-out Test print



M-GAP



HORIZONTAL



- Printing speed: CMYK

	Quality	Resolution [dpi]	Pass Counts	Direction	SCAN Speed [mm/s]	Throughput [m ² /h]	
						SG3-540	SG3-300
Generic vinyl I	High Quality	900x900	16p	Bi	1016	4.6	3.6
			14p	Bi	1016	5.1	4.0
	Standard	900x600	12p	Bi	1016	6.1	4.8
			10p	Bi	1016	7.2	5.7
	High Speed	600x600	8p	Bi	762	7.4	6.0
			7p	Bi	762	8.4	6.8
Generic vinyl II	High Quality	900x900	16p	Bi	592	2.9	2.4
			14p	Bi	592	3.3	2.7
	Standard	900x600	12p	Bi	1016	6.1	4.8
			10p	Bi	1016	7.2	5.7
	High Speed	600x600	8p	Bi	762	7.4	6.0
			7p	Bi	762	8.4	6.8

- Printing speed: CMYK

	Quality	Resolution [dpi]	Pass Counts	Direction	SCAN Speed [mm/s]	Throughput [m ² /h]	
						SG3-540	SG3-300
Generic Banner I	High Quality	900x900	16p	Bi	1016	4.6	—
			14p	Bi	1016	5.1	—
	Standard	900x600	12p	Bi	1016	6.1	—
			10p	Bi	1016	7.2	—
	High Speed	600x600	8p	Bi	762	7.4	—
			7p	Bi	762	9.8	—
Generic Banner II	High Quality	900x900	16p	Bi	1016	4.6	—
			14p	Bi	1016	5.1	—
	Standard	900x600	12p	Bi	1016	6.1	—
			10p	Bi	1016	7.2	—
	High Speed	600x600	8p	Bi	762	7.4	—
			7p	Bi	762	9.8	—

- Ink consumption 4 colors (CMYK)

[ml /m²]**CONFIDENTIAL**

Ink Type					TR2		TR2	
Size					SG3-540		SG3-300	
Color Setting			Resolution	Pass count	Pre-Press General	True Rich Color 3	Pre-Press General	True Rich Color 3
Generic Vinyl 1	N5A	High Quality	900x900	16	3.88	4.79	4.18	5.09
				14				
		Standard	900x600	12	3.99	4.98	4.42	5.41
				10				
	High Speed	600x600		8	3.48	4.09	3.42	4.04
				7				
	N2A	High Quality	900x900	16	7.28	9.08	7.79	9.79
				14				
		Standard	900x600	12	7.68	9.57	8.27	10.13
				10				
	High Speed	600x600		8	6.32	7.55	6.18	7.34
				7				



N5A



N2A

Conditions

RIP : VersaWorks

Data : ISO N5A,N2A

Size : A0 (841mmx1189mm)

- Ink consumption 4 colors (CMYK)

[ml /m²]Imagine. **CONFIDENTIAL**

Ink Type					TR2	
Size					SG3-540	
Color Setting			Resolution	Pass count	Pre-Press General	True Rich Color 3
Generic Banner 1	N5A	High Quality	900x900	16	4.11	5.57
				14		
		Standard	900x600	12	4.16	4.36
				10		
		High Speed	600x600	8	4.11	4.82
				6		
	N2A	High Quality	900x900	16	8.10	10.75
				14		
		Standard	900x600	12	8.26	10.56
				10		
		High Speed	600x600	8	8.36	9.73
				6		



N5A



N2A

Conditions

RIP : VersaWorks

Data : ISO N5A,N2A

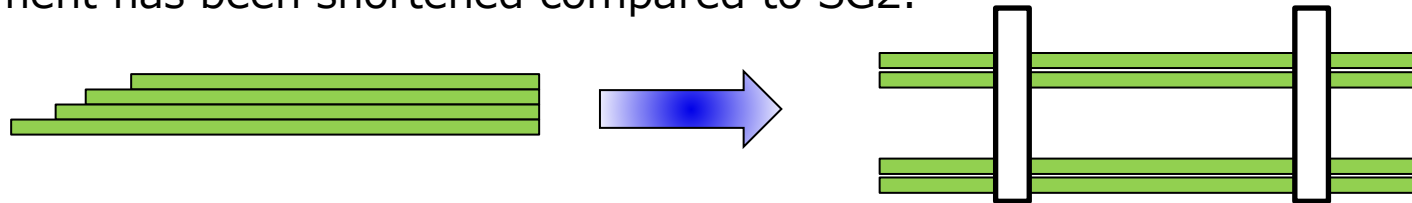
Size : A0 (841mmx1189mm)

3. Ink Line

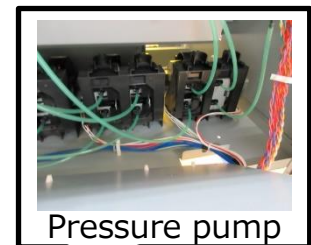
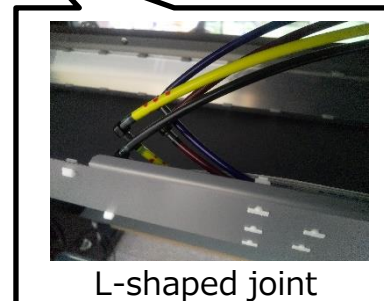
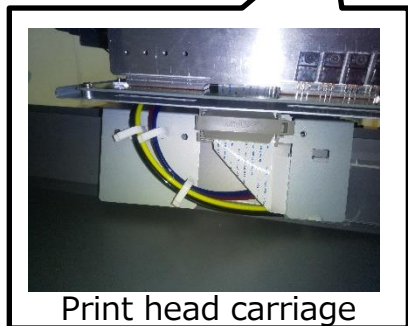
● Ink Tube

▣ Ink tube path

- Tube from the pressure pump to print head has been changed from interconnecting tube to single tube. You can now replace only one tube and the time it takes for replacement has been shortened compared to SG2.



- An L-shaped joint has been added to the middle of the ink tube. Replacement time has been shortened compared to the SG2 by enabling the replacement with minimum amount of tube necessary.

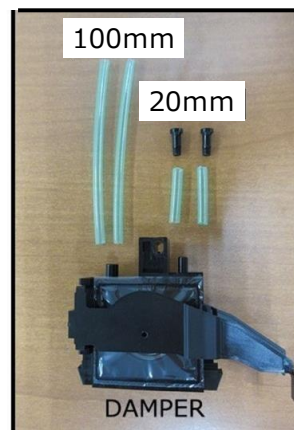
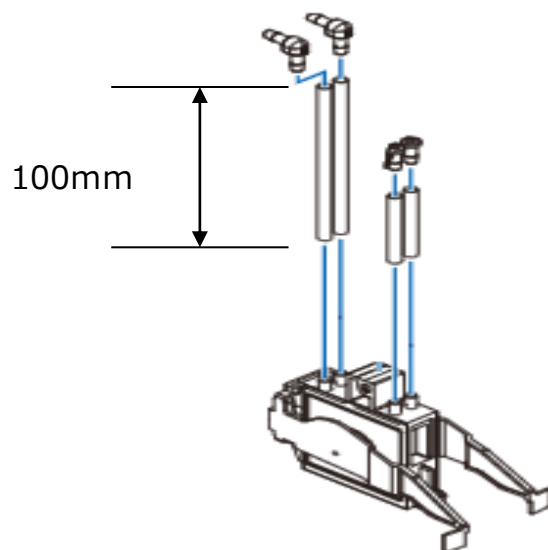


● Ink Tube In The Head

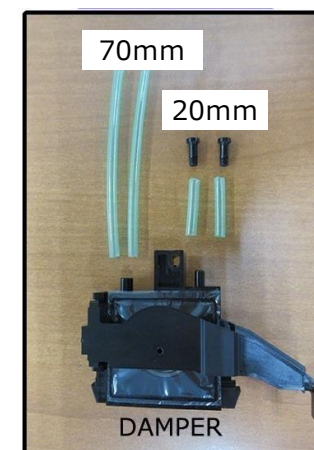
Rev1.1

Imagine. **Roland****CONFIDENTIAL**

- The length of the ink tube from the L-shaped joint has been changed.
 - ❖ The length of the ink tube connected from the L-shaped joint to the damper has been changed 100mm.



VG3-640/540
SG3-540/300



VG2-640/540
SG2-640/540/300
VF2-640
VG-640/540※
SG-540/300

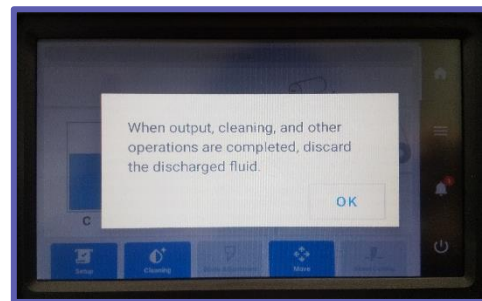
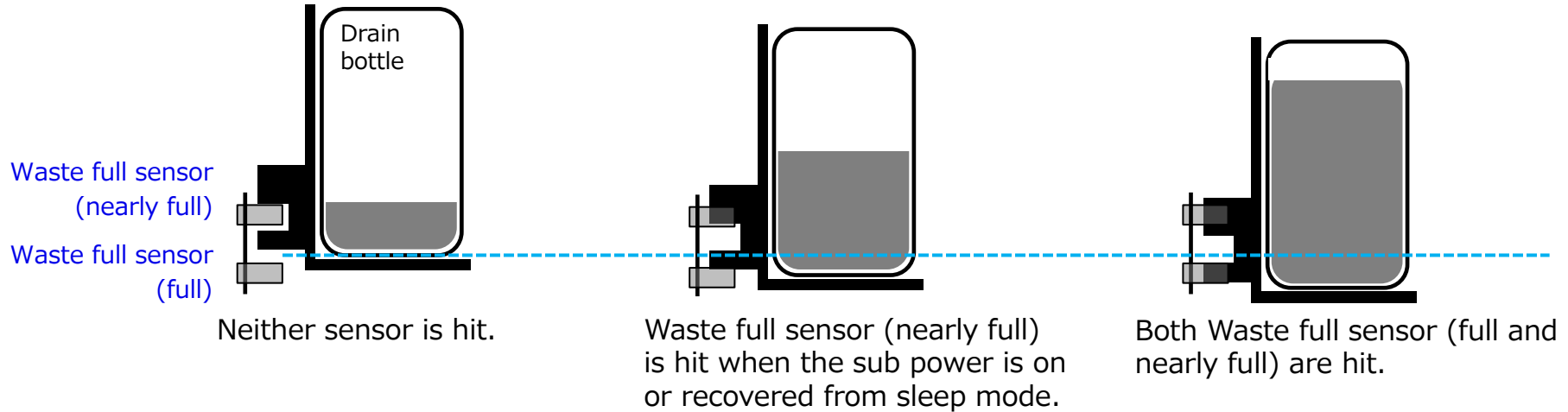
※VG-640 Serial No.
 ADC0100 or later/VG-
 540: Serial No. LDA0100
 or later

● Ink System

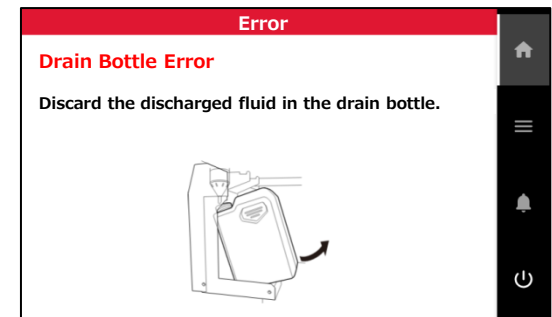
□ Drain bottle stand

Sensor that detects the weight of waste liquid has been added to prevent waste liquid overflow.

Waste Full sensor



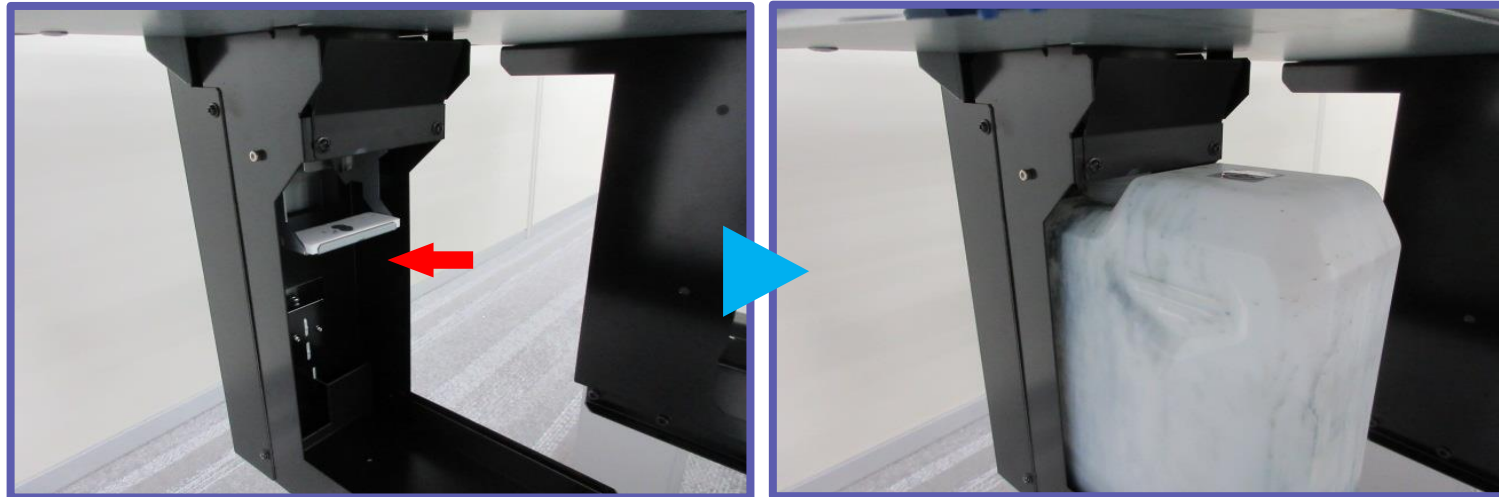
Even if the sensor is hit, printing continues with the message displayed. Message is displayed at the start of the sequence where a large amount of ink is discharged such as PUMP UP/INK FILL.



The message appears and the machine stops printing even during printing.

- Ink System

- ▣ Drain bottle stand

Waste bottle sensor

When the drain bottle is installed, the part in red arrow is pressed, and the sensor becomes ON.
When the drain bottle is not installed, the sensor can receive ink dripped from the funnel.

4. Ink

- Ink cartridge

- Model number

- ❖ TR2-CY/TR2-MG/TR2-YE/TR2-BK
 - ❖ TR2-CL2

- Capacity

- ❖ CY/MG/YE/BK 500ml

- Features

- ❖ GREENGUARD (GOLD certified)
 - ❖ Avery Dennison ICS Warranty
 - ❖ 3M MCS warranty



PRODUCT CERTIFIED FOR
LOW CHEMICAL EMISSIONS
UL.COM/CG
UL 2818



Avery Dennison
ICS™ Warranty



3M™ MCS™ Warranty

Package box



Ink Pouch



5. Cutting Function

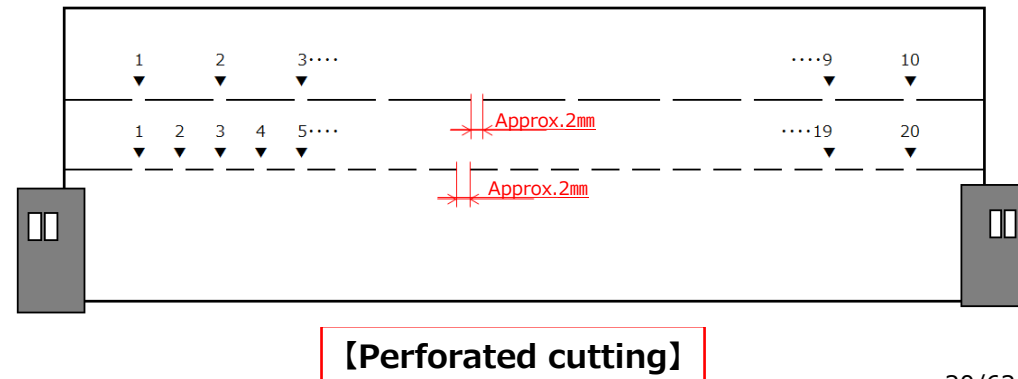
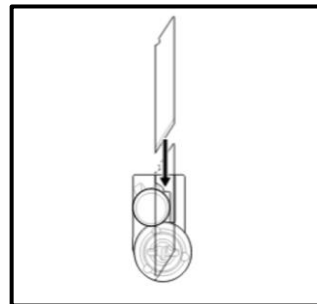
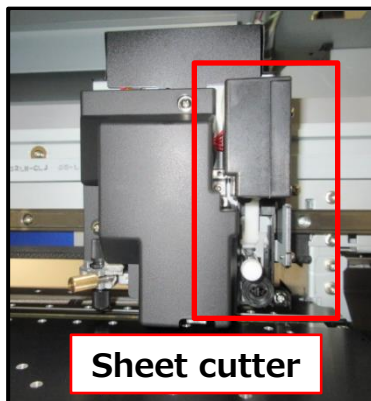
● Cut carriage

□ Specifications (same as SG2)

- ❖ Blade: ZEC-U5032
- ❖ Cutter Holder: XD-CH3
- ❖ Maximum cutting down force: 500 gf
- ❖ Maximum cutting Speed: 300 mm/sec

□ Sheet cutter

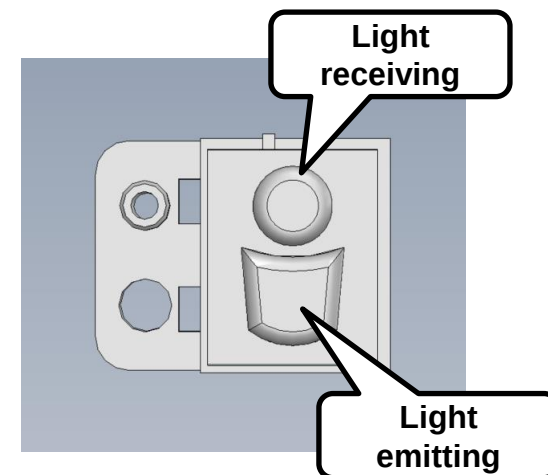
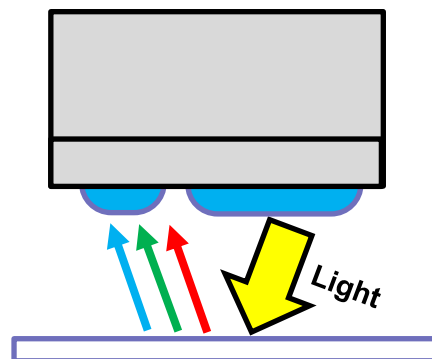
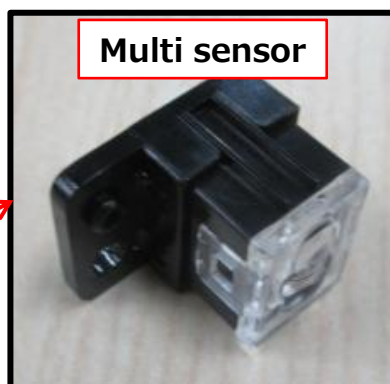
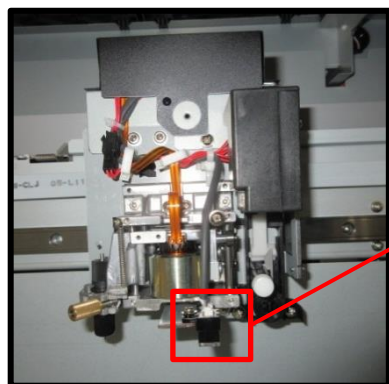
- ❖ Blade: XB10 (same as SG2)
- ❖ Up/down of sheet cutter has been changed from the type to pressing on the frame to solenoid type.
 - Perforated cutting can be now performed. (It takes longer time than regular sheet cutting.)
2 types of perforated cutting can be selected depending on media. (Can be set in VersaWorks)
[Standard]----- Cut sheet with leaving 10 places uncut evenly depending on sheet width.
(Width of uncut part: approx. 2 mm)
[Increase Uncut Locations] ----- Cut sheet with leaving 20 places uncut evenly depending on sheet width.
Prevents the media from being torn off when using the take up unit.
(Width of uncut part: approx. 2 mm)
 - Cutter can be detached and attached and that allows easier replacement.



Multi sensor

Sensor that can detect crop marks, test patterns, and media clamps.

- ❖ RGB sensor is used.
- ❖ It irradiates white LED light source and detects the diffuse reflected light of the object to the light source.
- ❖ The intensity of the LED is adjusted on the white media and the light receiving voltage.
- ❖ The following is the recommended media for adjustment for user menu and service menu.
IJ5331、IJ1220、LLSPEX、3164G、SPM



WARNING

Please do not use solvents for cleaning of lens.

The lens is made of acrylic resin, and cleaning with solvents will cause the lens to become cloudy, making it impossible for detection correctly.

Rev1.1

Imagine. **CONFIDENTIAL**

□ Multi sensor (function)

❖ Automatic adjustment

- After printing a test pattern on the media, it automatically reflects the correction value read by the sensor. Perform Multi sensor adjustment , M-gap (bi-directional adjustment), and Calibration.

❖ Crop mark detection

❖ Media clamp detection

- Detects the positional relationship between the media clamp and the white media and checks if the media clamp is attached correctly.
- Detects the width of the slit in the white part of the media clamp to check if the media clamp is deformed.

*1: LED light is irradiated on the media and the sensor is adjusted to the optimal state. If the result is displayed as [FAILED], automatic adjustment cannot be performed on that media.

	Automatic adjustment	Manual adjustment
Adjustment time	Approx. 8 min.	Approx. 5 to 7 min.
Amount of media	100 mm	160 mm
Test pattern [M-GAP]		
Test pattern [Calibration]		

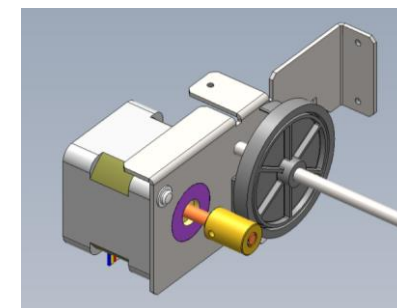
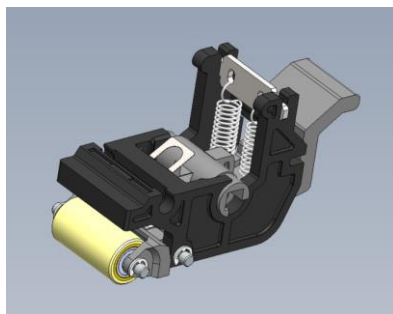
As with SG2, the media width is detected by the pinch roller position using the sensor on the back of the cut carriage. Perform automatic adjustment when there is no ink ejection error such as a missing dots.

6. Other Features

• New features/Changes

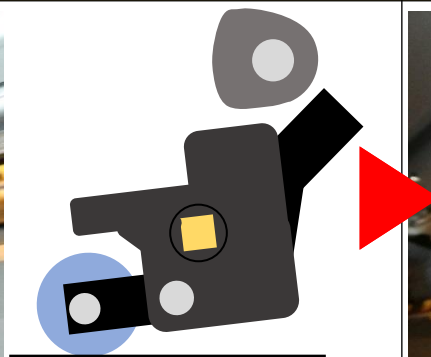
▣ ASSY pinch roll

- The shaft mechanism that raises Middle pinch roller has been changed. The shaft pushes the rear of the Assy Pinch roll when raising it as shown in the figure.
- The shaft rotation has been changed from belt type to gear type.

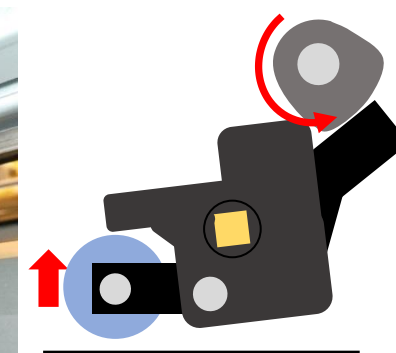
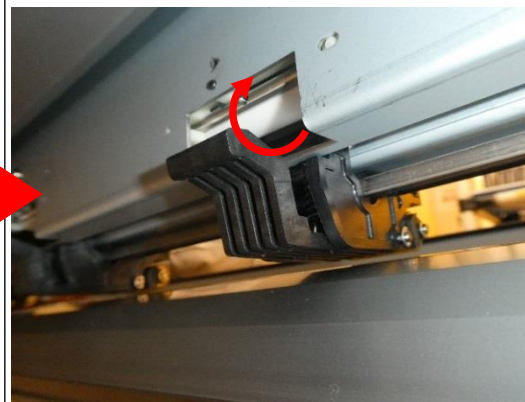


Print and cut

During printing: Middle pinch rollers are used.



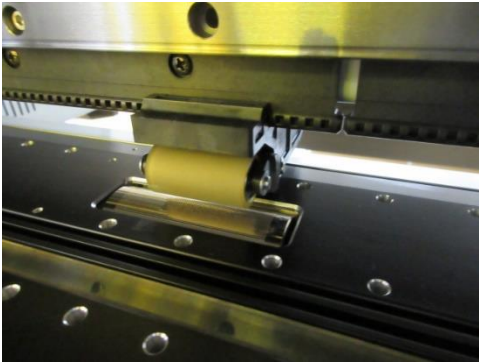
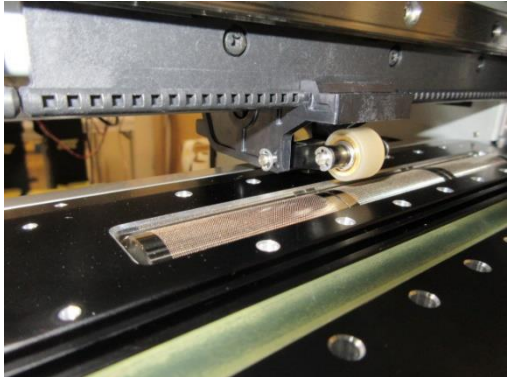
During cutting: Middle pinch rollers move up



- New features/Changes

- Pinch roller

The width of the middle pinch roller has been widened to provide more stable media feeding. (changed from 15 mm to 30 mm) As with the SG2, the tapered pinch rollers on the L/R sides reduce media deflection.

Pinch roller		
Left	Middle	Right
 	 	 

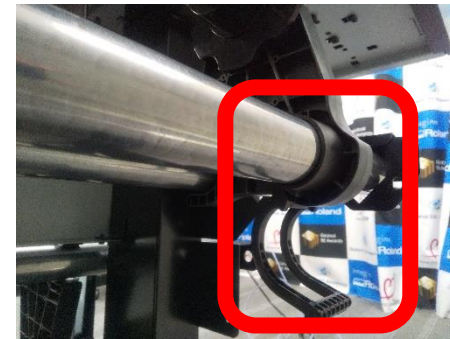
● New features/Changes

▣ Media holder

- Workability has been improved since the holder position has been changed so that it can be fixed with a lever.
- Shape of flange guide has been changed and roll media with paper tube inner diameter of 76.2 mm (3 inches) and 50.8 mm (2 inches) have been supported.
- Workability has been improved with the flange on the handle during media setup.

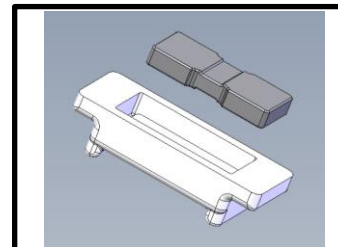
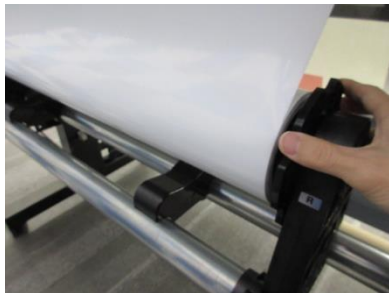


How to secure the media holder (Rubber pressing type)

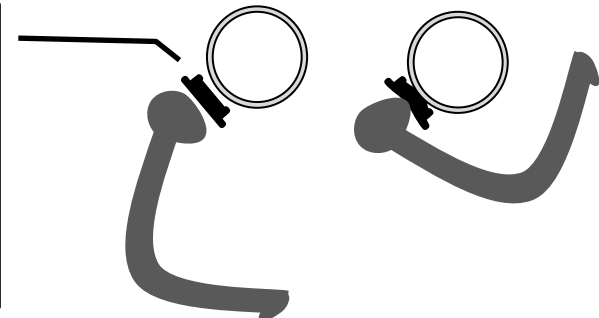


SG3

SG2



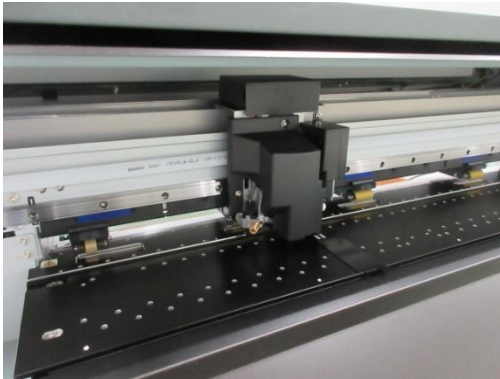
Rubber & resin



- New features/Changes

- ▣ Belt

- The belt orientation has been changed.



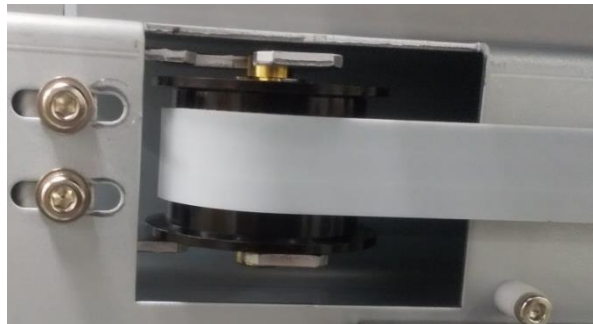
- ▣ Handle position

- The handle position on the front cover has been moved closer to the panel to improve operability.



- ▣ Idle pulley

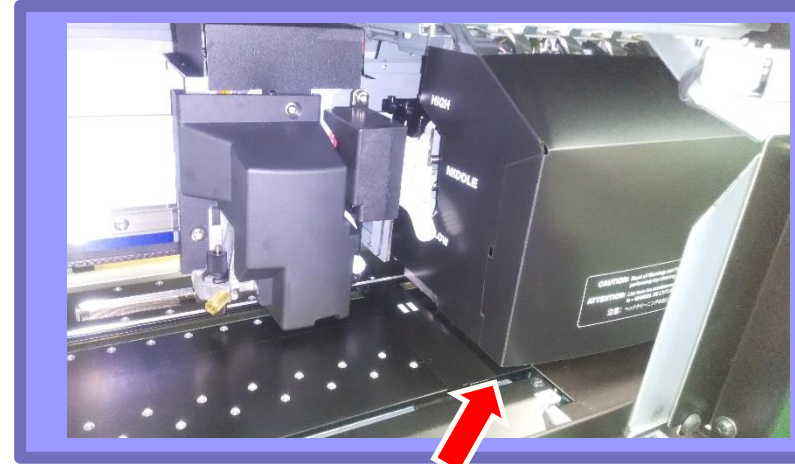
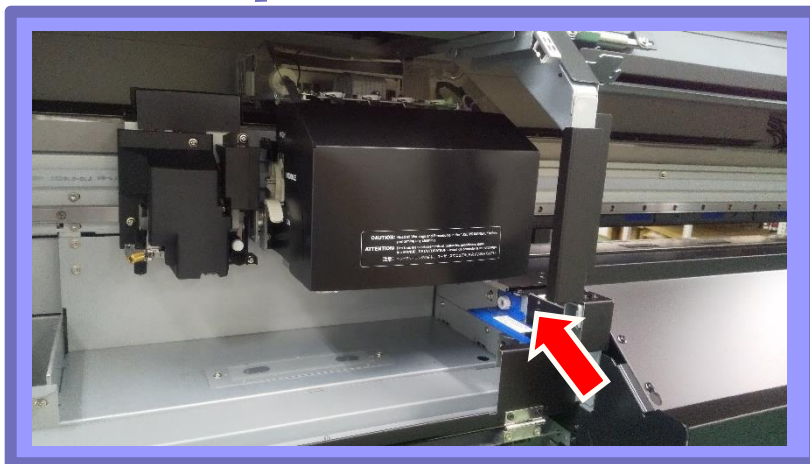
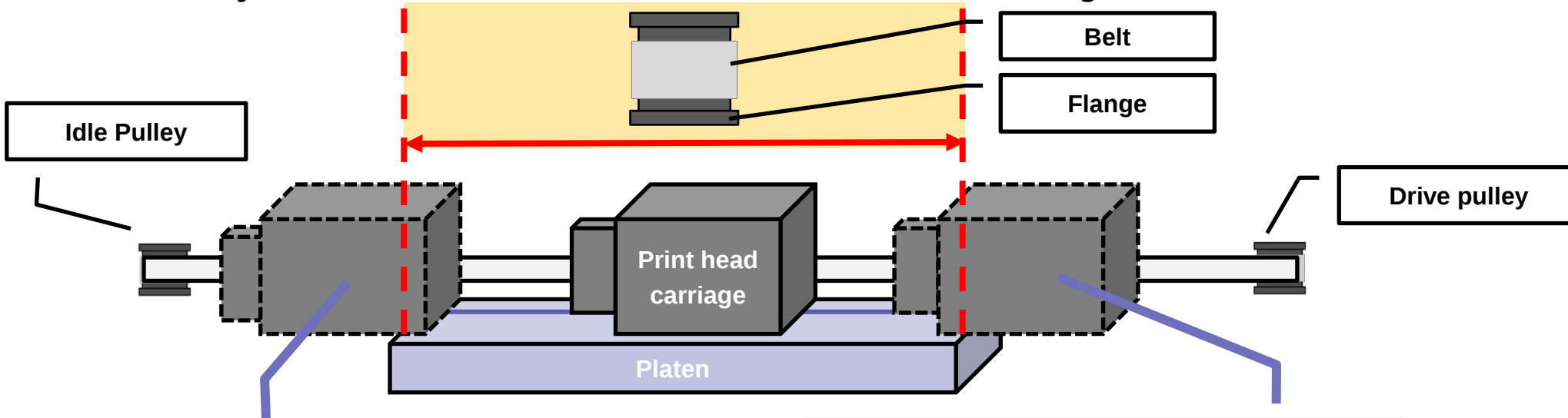
- Idle pulley is made of resin now and no longer has a groove.
 - Since the groove has been eliminated, the belt position may move slightly when the print head carriage is moved to the left side. However, if the belt is adjusted correctly, it will not affect the operation of carriage.



- New features/Changes

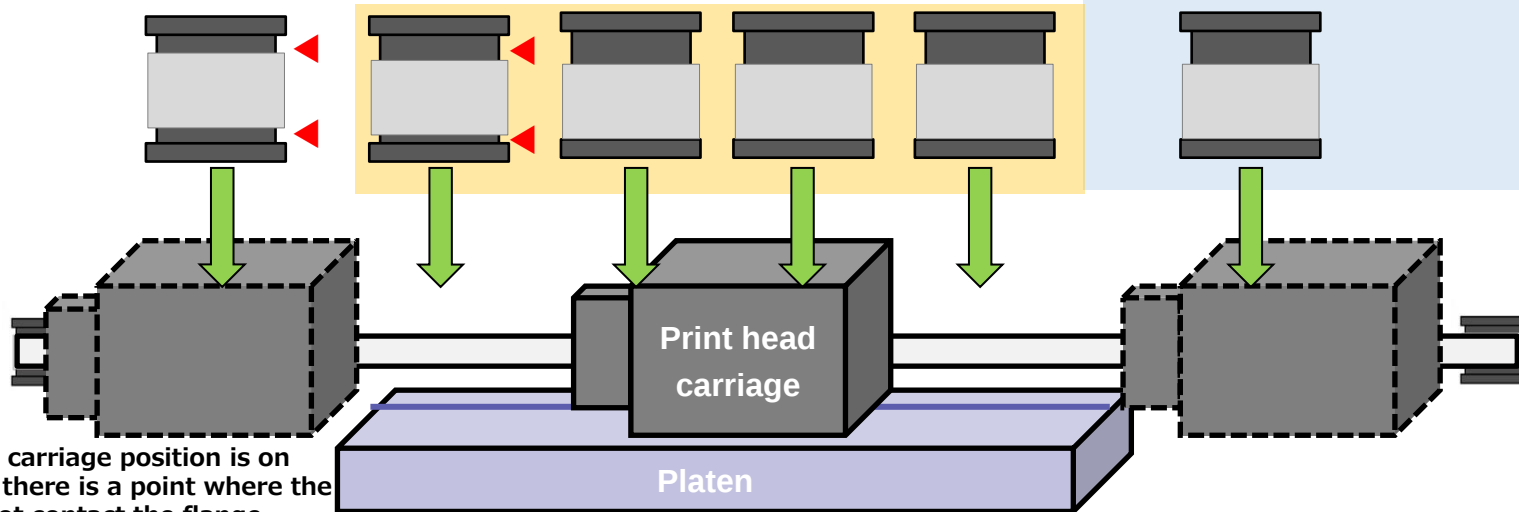
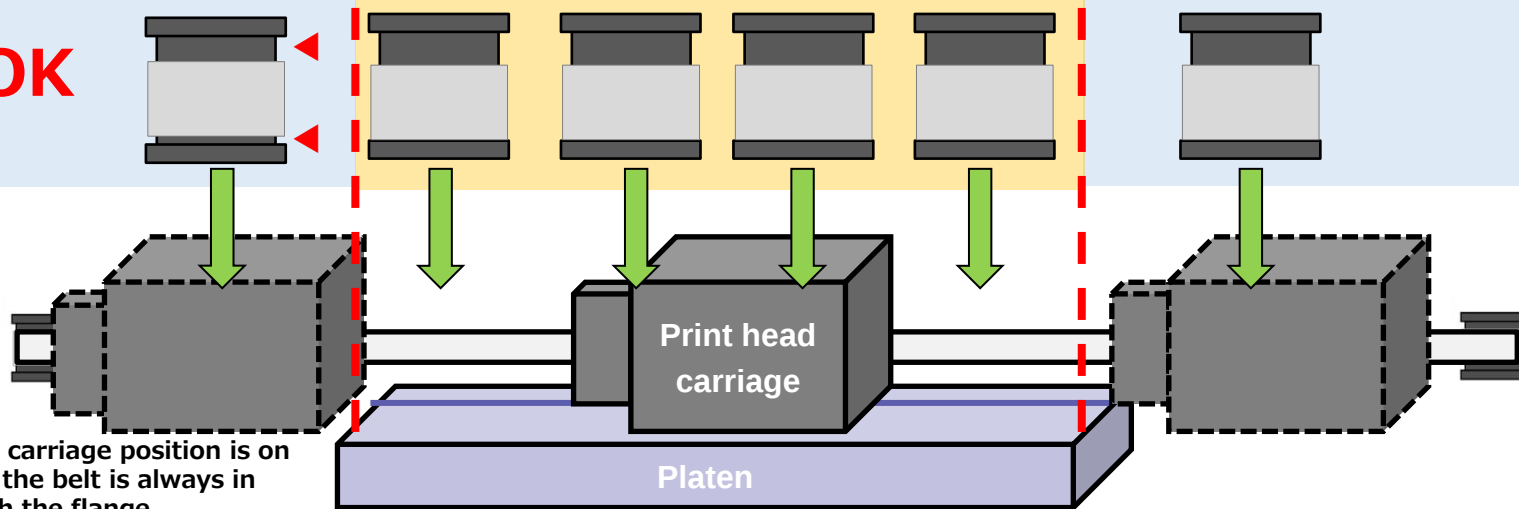
- ▣ Idle pulley/Drive pulley (Belt position adjustment)

- If there is a moment when the print head carriage is on the platen and the belt is not in contact with the flange, there is no effect on operation. It is not necessary to adjust the belt if the belt is not in contact with the flange at all times.



- New features/Changes

- ▣ Idle pulley/Drive pulley (Belt position adjustment)

OK**Not OK**

- New features/Changes

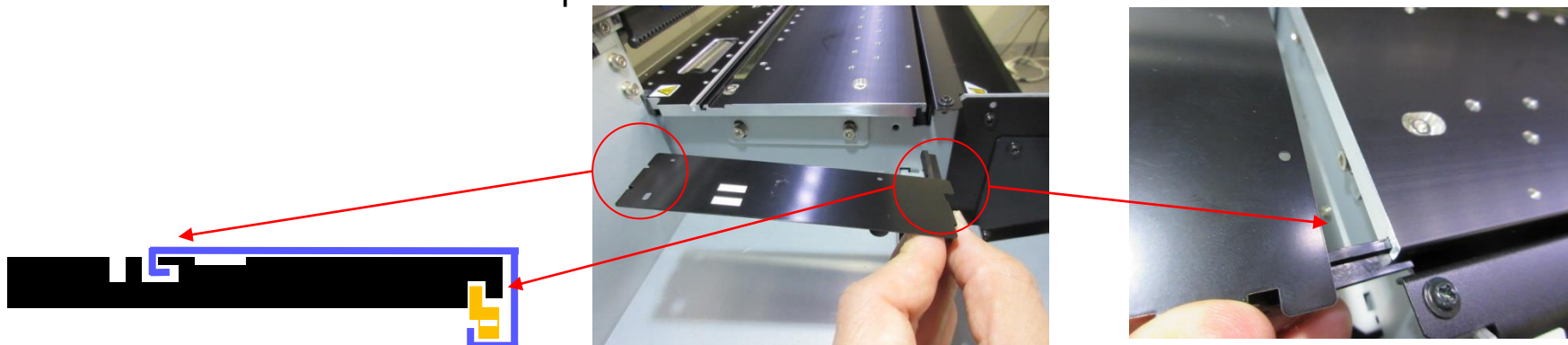
- ▣ Media clamp

- A white color coating for media clamp detection has been added. If the white area becomes dirty, the media clamp cannot be detected accurately.
 - The media clamp can be attached to the platen by assembling a resin part to it.
 - When removing and attaching the media clamp, it is necessary to remove the retainer.



Retainer

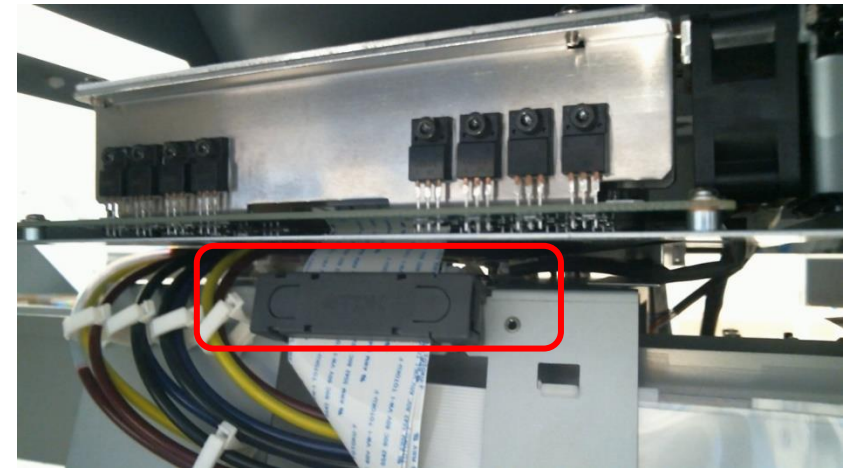
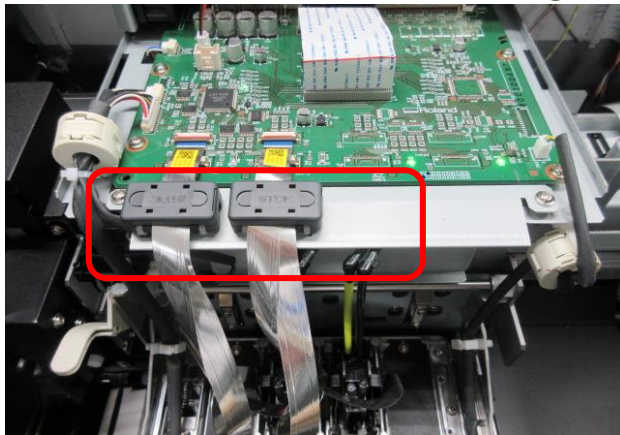
- How to attach media clamps



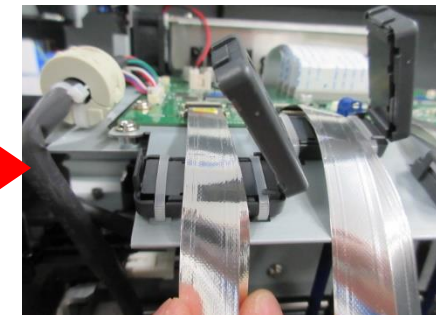
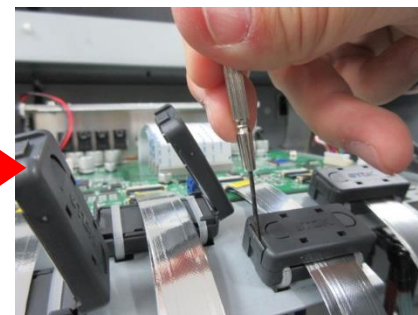
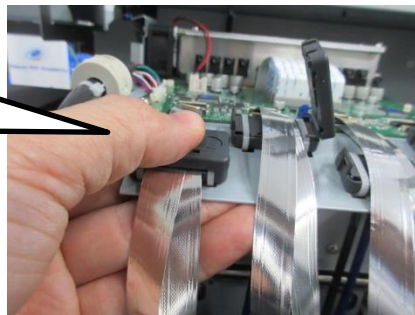
- New features/Changes

- ▣ Ferrite core

- Ferrite core has been changed.



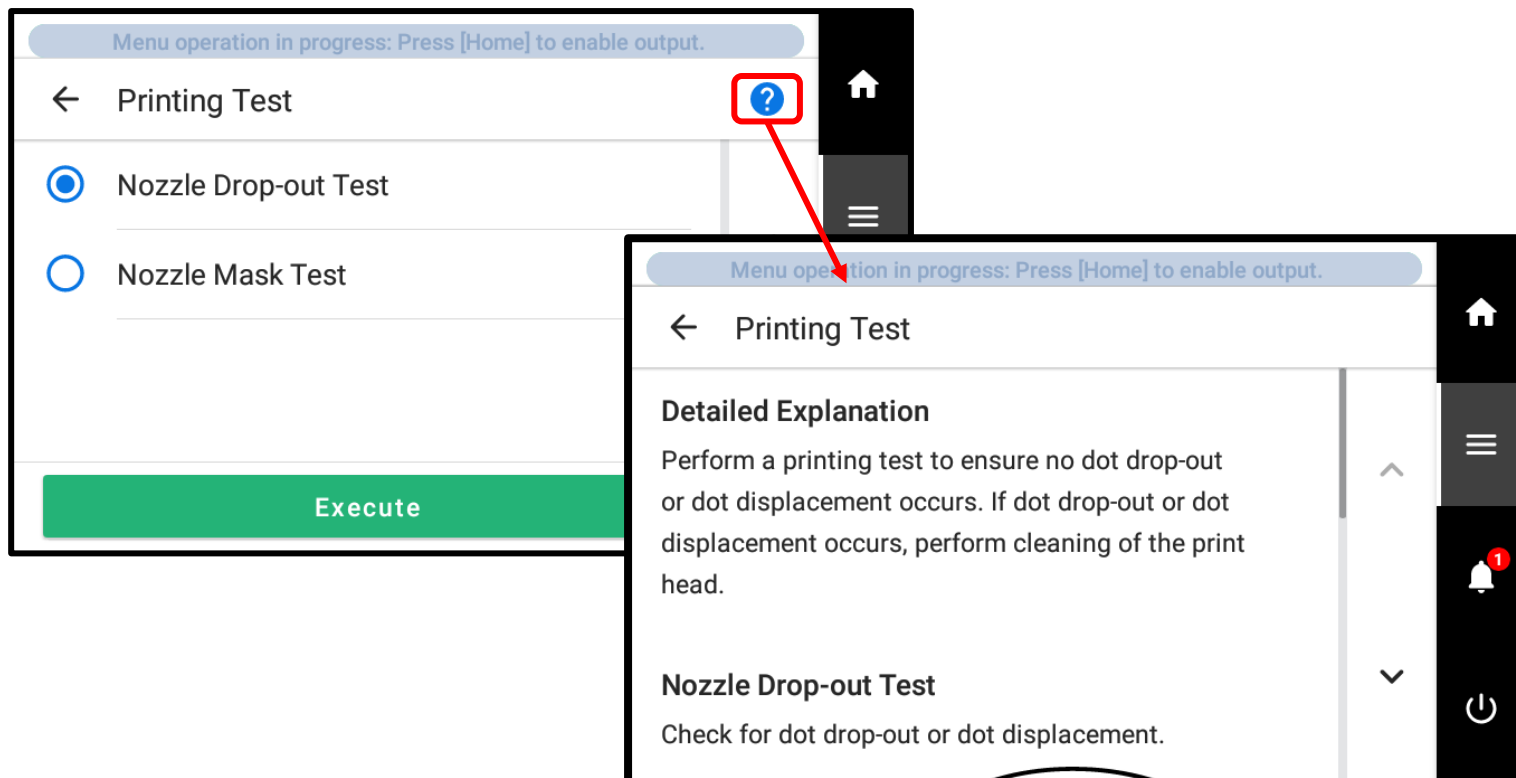
- The ferrite core can be opened with a fingernail, but it may be difficult to open if it is brand-new. In that case, a flathead screwdriver (about 1.0 mm to 2.0 mm) can be used to remove it. Also, if you push the center of the ferrite core, there will be a small gap in the locking part, and you can insert a flathead screwdriver into the gap to open the ferrite core. When pushing the ferrite core on the print head side, support the back side so that the metal plate is not deformed.



- New features/Changes

- LCD panel (specification)

- Touch panel (heat sensing)
 - Supports 7 languages: Japanese, English, French, Italian, German, Spanish (Europe)/Spanish (South America)
 - Supporting function with [?] icon has been added. You can see details and explanation of the menu in the panel.



- New features/Changes

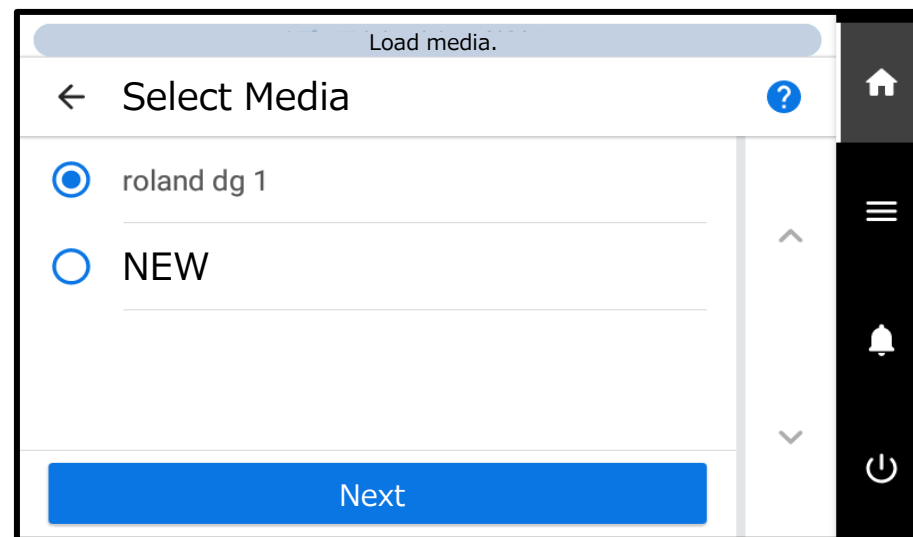
- LCD panel (specification)

- Select media before setup. You need to register media information and details of machine information beforehand for the first time you use media. You can choose whether you use the take-up unit or not when you select the registered media.

Number of media that can be registered: 20

Note: In the service mode, you can setup a media as before even if the media has not been registered.

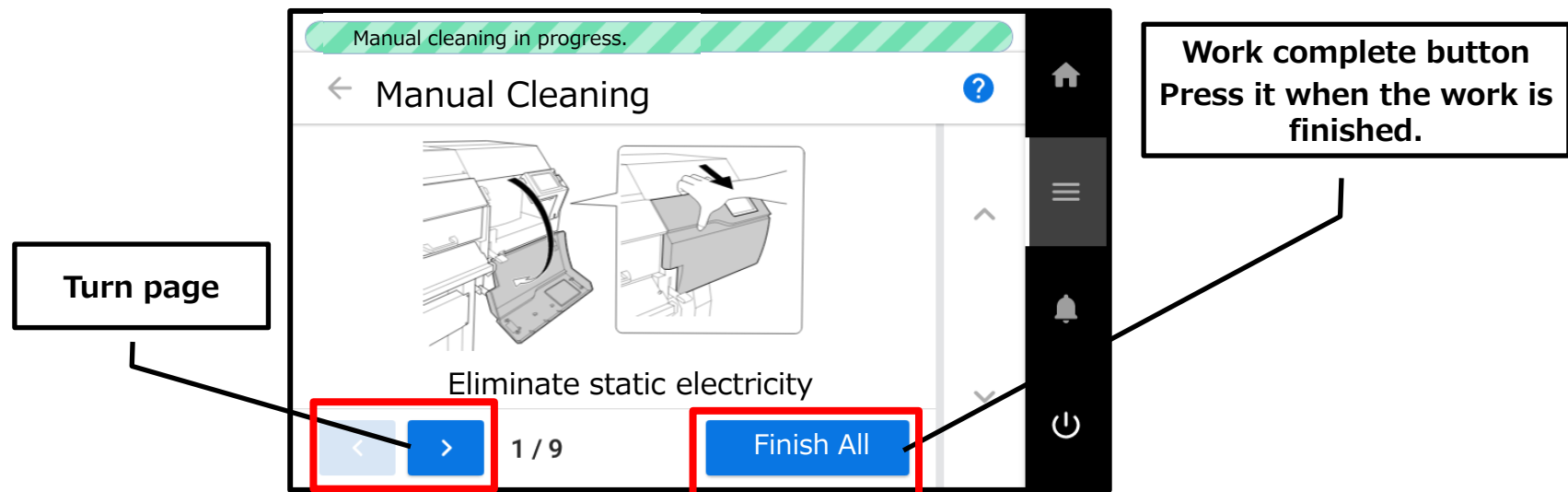
- Necessary media setup settings can be configured with [Batch Media Settings].



- New features/Changes

- ▣ LCD panel (specification)

- The procedure is displayed on the panel so that the user can check it while performing maintenance work.
 - Manual cleaning
 - Wiper replacement
 - Blade replacement
 - Separating knife replacement
 - Drain bottle replacement, etc.



CONFIDENTIAL

- New features/Changes

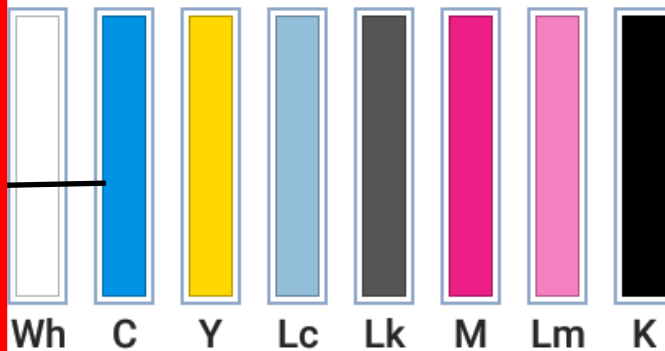
- LCD panel (Standard display)

- A wide variety of information is now displayed on the panel.

Name of media
Media selected during setup

roland dg 1

Ink information
Ink color information and estimated remaining amount



Short-cut button
Shortcut button to move to a specific screen in the menu

Cancel Setup

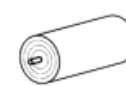
Nozzle Drop-out Test

Blade Adjustment

Move

Sheet Cutting

Output possible.



W : 1600 mm
L : -- m

Media information
Size of the printable area of the media and the amount of media remaining.

Heater
40 / 40°C
Dryer
50 / 50°C



Heater information
Current temperature and the set target temperature during standby

Take-up Unit



Take-up unit information
If it is connected to the machine or not/ Take-up unit settings

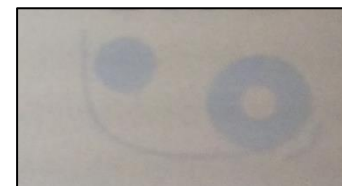
• New features/Changes

□ LCD panel (Standard display)

- The connection information of the take-up unit and its settings are now displayed.
When the origin sensor of the dancer bar is OFF, the icon is shown clear, but when the sensor is ON, the icon becomes faded.

Take-up Unit	Take-up Unit	Take-up Unit
Not connected		
Not connected to the machine	Standard Rolling outward	Tension Rolling outward
	Take-up Unit	Take-up Unit
		
	Standard Rolling inward	Tension Rolling inward

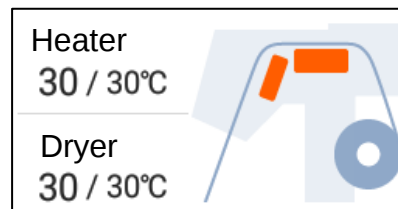
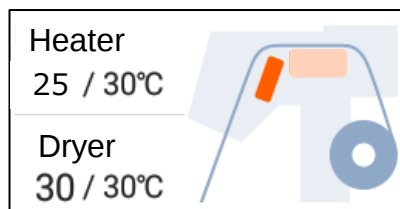
Origin sensor of dancer bar is ON



Origin sensor of dance bar is OFF



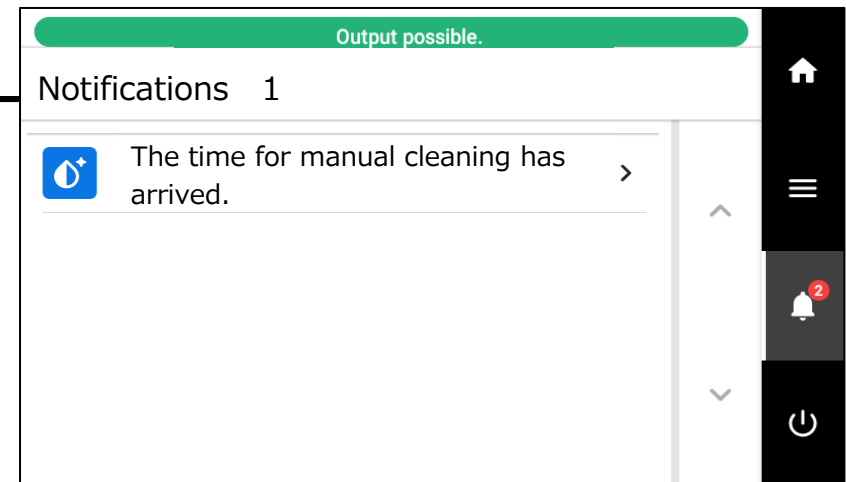
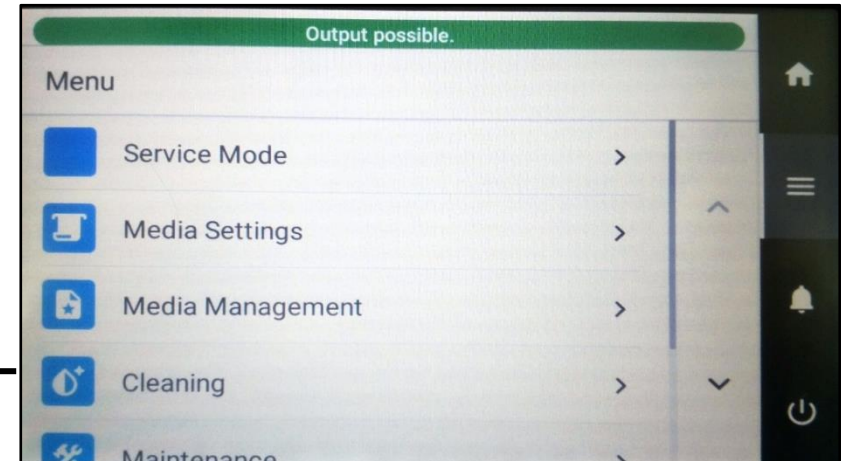
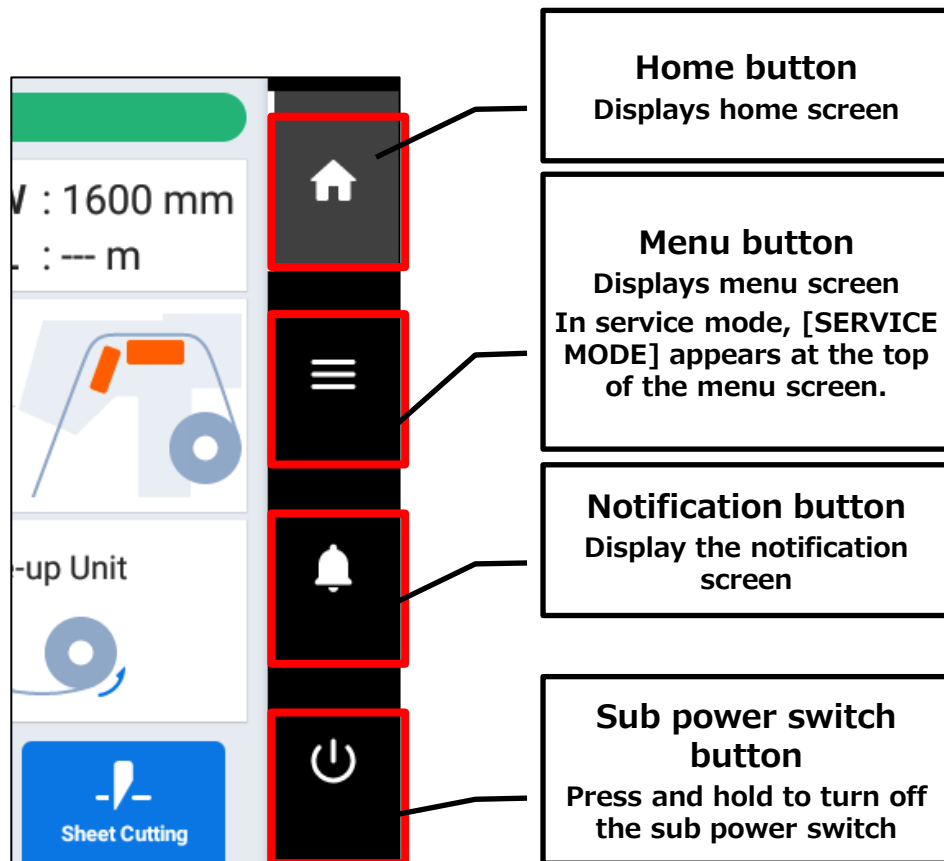
- The color of the icon changes depending on the temperature rise status of the heater.



- New features/Changes

- ▣ LCD panel (Standard display)

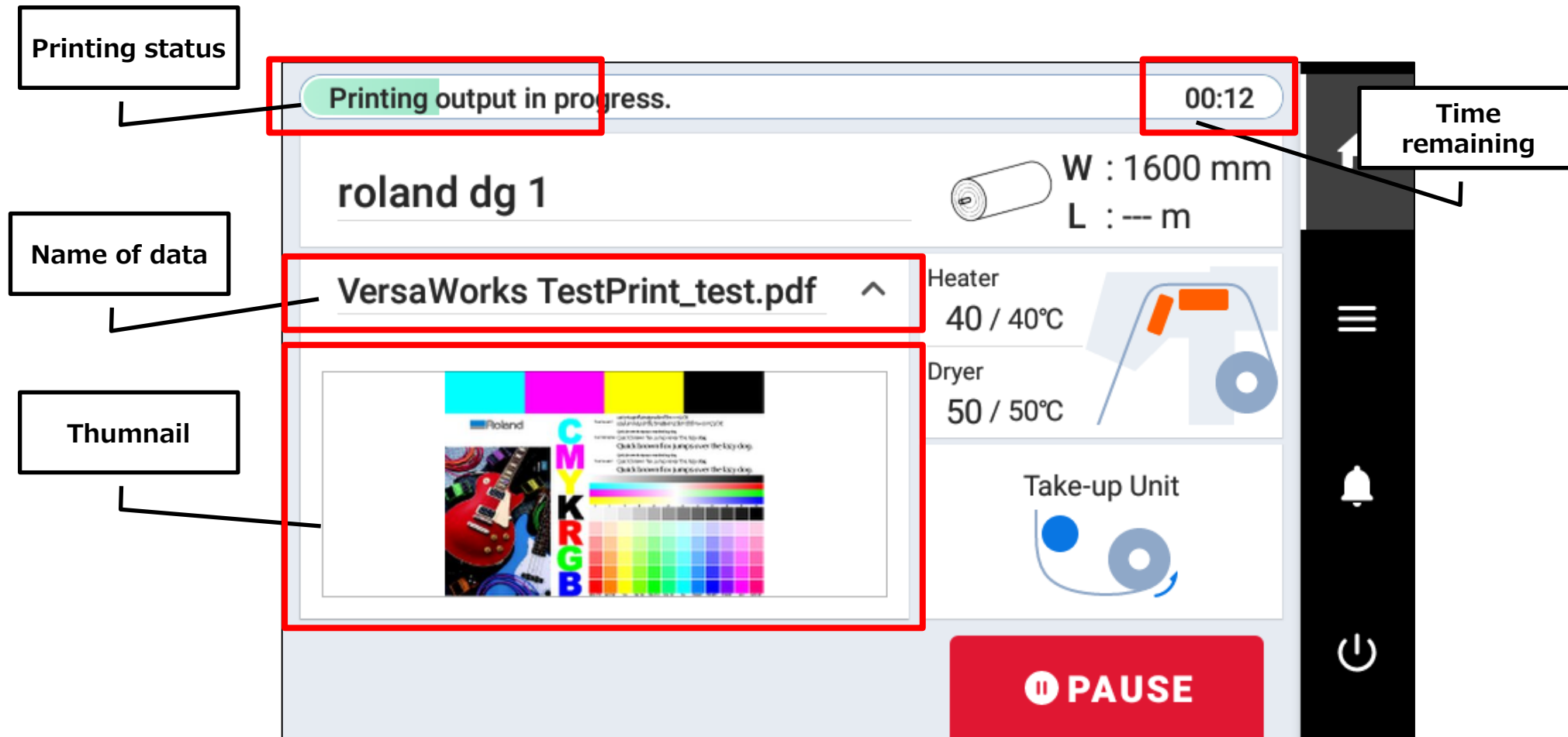
- A wide variety of information is now displayed on the panel.



- New features/Changes

- LCD panel (Output display)

- When outputting data, thumbnails, data names, remaining time, etc., are displayed that are being output.



- New features/Changes

- LCD panel (Service Mode)

- As before, [Peck2] is required to enter the service mode.

- 1. Connect the machine with [Peck2].

- 2. Touch the panel to display the [SERVICE MODE] button.

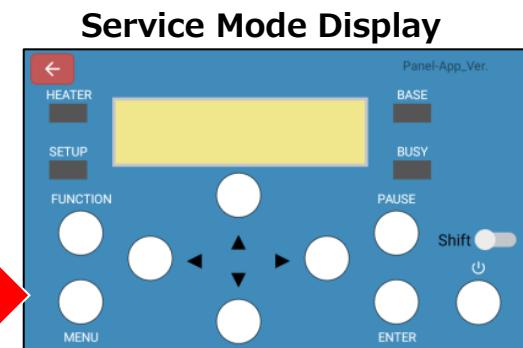
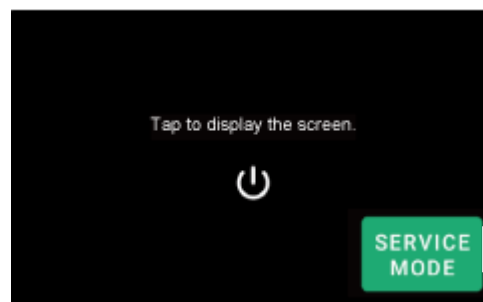
- 3. Touch the [SERVICE MODE] button to display the classic screen (same appearance as the conventional panel).

- 4. Set [Shift] to ON and press [◀] [▼] [▶] keys.

- Then press [Power] to start the service mode and enter the service menu.

- Note: With [Shift] key ON, multiple keys can be pressed at the same time.

- 5. Press the red arrow button at the upper left corner of the service mode display to return to the User Operation screen.



Make sure to turn off the sub power switch when you disconnect from Peck2. If not, the service mode menu remains visible on the machine.

● New features/Changes

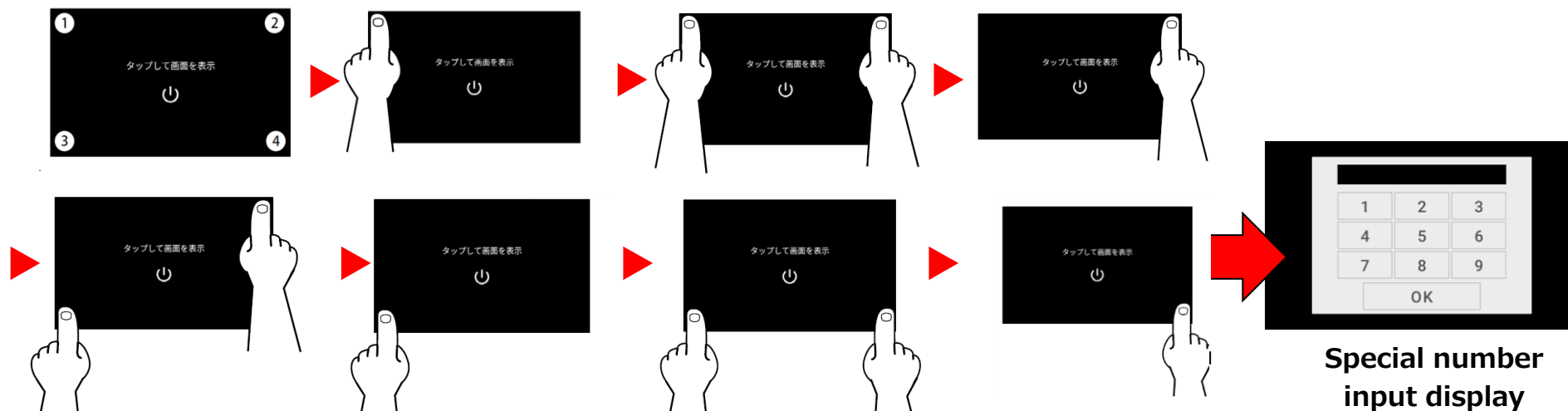
▣ LCD panel (Special number input mode)

- Another way has been added to enter the special mode apart from the special key operation. By using this function, you can use the special mode as in the same way with the conventional special key operation without entering the service mode.

1. Turn off the sub power switch and confirm the machine is in standby.
2. With fingers of both hands, hold down the four points on the screen in order from (1) to (4).
(see the figures below)

*There is another way to enter the special number input mode. Put your finger at the upper left corner then move your finger quickly in the order (upper left corner -> upper right corner -> lower left corner -> lower right corner) without removing your finger from the screen.

3. [Special number input display] is displayed.
4. You can enter the special mode by inputting special mode number.

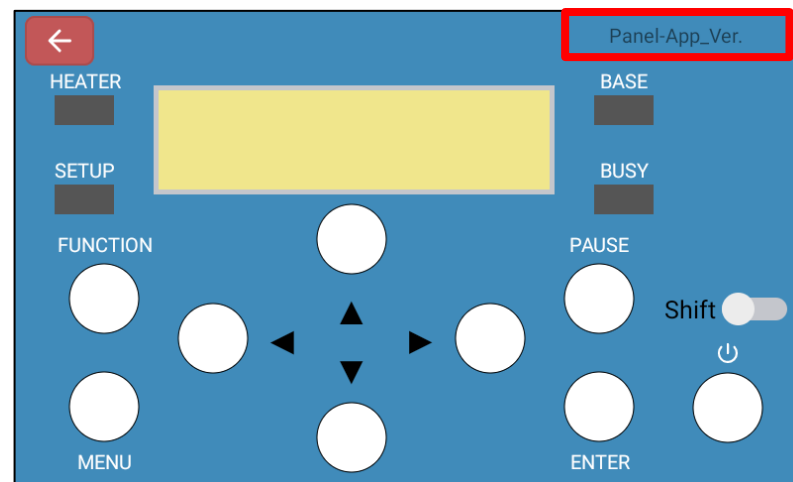


- New features/Changes

- LCD panel (Firmware)

In addition to the firmware of the machine, there is also the firmware of the panel. When upgrading the firmware, it is necessary to upgrade both the firmware of the machine and the panel, because the firmware of machine and of the panel need to be compatible to work. However, the firmware is provided with both firmware included basically. By performing firmware upgrade, you will be able to upgrade the firmware of both the machine and the panel.

- Upgrading firmware takes about 5 minutes.
- Firmware version of the panel can be checked in the service mode display.
- You also need to upgrade the firmware when you replace the panel. Language and unit settings are also required after turning on the power after the panel has been replaced.

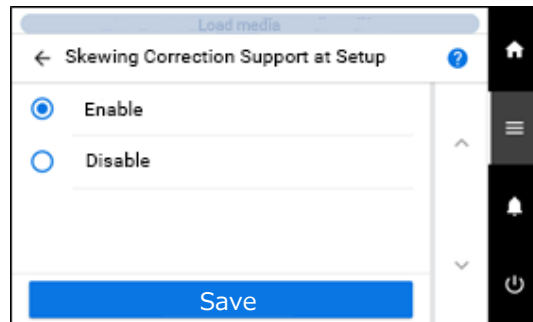


- New features/Changes

- ▣ Skewing correction support at setup

To prevent media from skewing, the vacuum fan now operates during media setup.

- When the front and rear media sensors are turned on when media is set, there is a "beep" sound (one time), followed by "beep" sound (two times) about 5 seconds later. Then vacuum fan starts operating. Set the media while the vacuum fan is operating since the media will be held even if you take your hand off the media.



- ▣ Manual cleaning

- Since the cut rail is eliminated, the print head automatically moves to the maintenance space.

 **WARNING**
Use TR2-CL2 for manual cleaning.

● New features/Changes

□ Obtain IP Address Automatically

- When [Obtain IP Address Automatically] is enabled, the IP address will be obtained automatically from the DHCP server.
- Note: The IP address, subnet mask, and default gateway are set automatically.
- If IP address cannot be obtained from a DHCP server, a link local address is set automatically. If a link local address is not set or the LAN cable is not plugged in, the default value [0.0.0.0] will be set.
- When disabled, you can enter any IP address, etc., as in the previous specification.
- From VersaWorks (Ver. 6.13.0 or later), if there is a change in the IP address when VersaWorks is started, VersaWorks will detect the change and automatically rewrite the IP address to the new one.



CAUTION

If the [Obtain IP address automatically] is enabled, the originally set IP address may change when the IP address is obtained automatically.

● New features/Changes

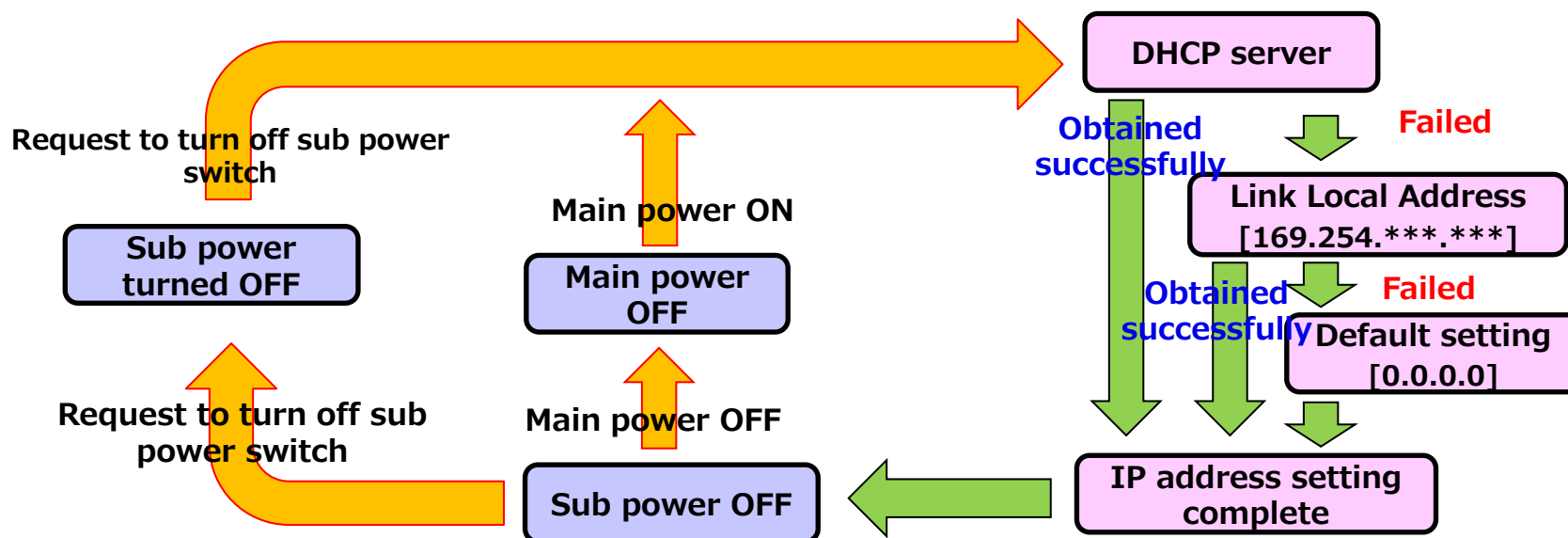
□ Timing of Obtain IP Address Automatically

1. When the setting for automatic IP address acquisition is enabled.
2. When the main power switch is on
3. When [Turning off sub power...] is displayed in the panel after the sub power switch is turned off.

• When the setting is changed as 1 mentioned above, or when the main power switch is turned off for a long time and then turned on again, the IP address may be assigned to a different IP address from the one that was originally set.

• In the automatic acquisition timing of 2 and 3 mentioned above, the same IP address is often assigned as the IP address that was used immediately before.

□ Sequence of IP address automatic acquisition



Pink rectangles show the process of obtaining new IP address. Green arrow indicates automatic process.

- Compatibility between SG3 and SG2

Cleaning liquid		
Manual cleaning	SG3 (TR2)	SG2 (TR2)
TR2-CL (bottle)	—	✓
TR2-CL2 (bottle)	✓	—
Head wash	SG3 (TR2)	SG2 (TR2)
TR-CL (Pouch)	✓	✓
TR2-CL (Pouch)	—	—
TR2-CL2 (Pouch)	—	—
Ink slot cleaning	SG3 (TR2)	SG2 (TR2)
TR2-CL (Pouch)	—	✓
TR2-CL2 (Pouch)	✓	✓ (Ver. 3.00 or later)

✓	Compatible
—	Incompatible

The parts used in SG3 are the same as in VG3.

Parts		
Damper	SG3	SG2
For SG2/VG3	✓	✓
Print head	SG3	SG2
For SG2/VG3	✓	✓
Cap top	SG3	SG2
For SG2/VG3	✓	✓

**WARNING**

For HEAD WASH use TR-CL. Never use TR2-CL or TR2-CL2 for HEAD WASH.

7. Special Pump Operations

- Pump movement

- ▣ Ink consumption [ml/ink line].

	SG3-540	SG3-300
Normal Cleaning	0.87	0.87
Medium Cleaning	1.93	1.93
Powerful Cleaning	8.63	8.63
Ink Renewal (same as previous super cleaning)	45.25	37.25
Initial Ink Fill	64.8	56.3
FILL INK	64.8	56.3
FILL DAMPER	15.0	15.0
PUMP UP	0.0	0.0
HEAD WASH	72.0	72.0
Light Cleaning	0.3	0.3
Wet Wipe cleaning	0.3	0.3

 WARNING

Use TR-CL for HEAD WASH. Never use TR2-CL/TR2-CL2.

- Pump movement

- ▣ Operation time

	Condition *1	SG3-540	SG3-300
Normal Cleaning	A	1分31秒	1分31秒
	B	2分00秒	2分00秒
Medium Cleaning	A	1分45秒	1分45秒
	B	2分14秒	2分14秒
Powerful Cleaning	A	3分15秒	3分15秒
	B	3分44秒	3分44秒
Ink Renewal (same as previous super cleaning)	—	9分38秒	11分26秒
	—	10分07秒	11分55秒
Initial Ink Fill	—	16分12秒	16分50秒
FILL INK	—	9分38秒	10分16秒
FILL DAMPER	—	6分17秒	6分17秒
PUMP UP	—	14分32秒	16分42秒
HEAD WASH	—	21分54秒	24分04秒
Light Cleaning	A	1分04秒	1分04秒
	B	1分30秒	1分30秒
Wet Wipe cleaning	A	1分32秒	1分32秒
	B	1分58秒	1分58秒

*1 A: When micro opening ink suction adjustment is adjusted properly
 B: When micro opening ink suction adjustment is not adjusted properly

⚠ WARNING
 Use TR-CL for HEAD WASH. Never use TR2-CL/TR2-CL2.

- Pump movement

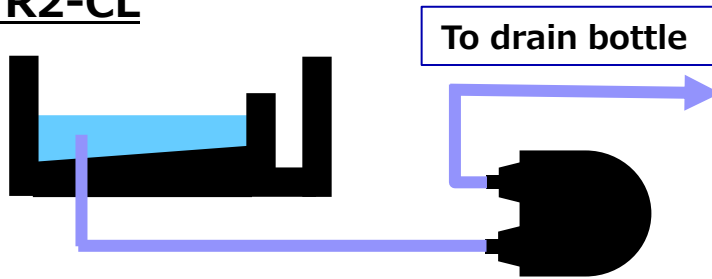
- ▣ Amount of waste liquid [ml]

	SG3-540	SG3-300
Initial Ink FILL	137.2	147
FILL INK	137.2	147
FILL DAMPER	60	60
PUMP UP (Ink discharge)	88	112
HEAD WASH	236	250

8. Maintenance

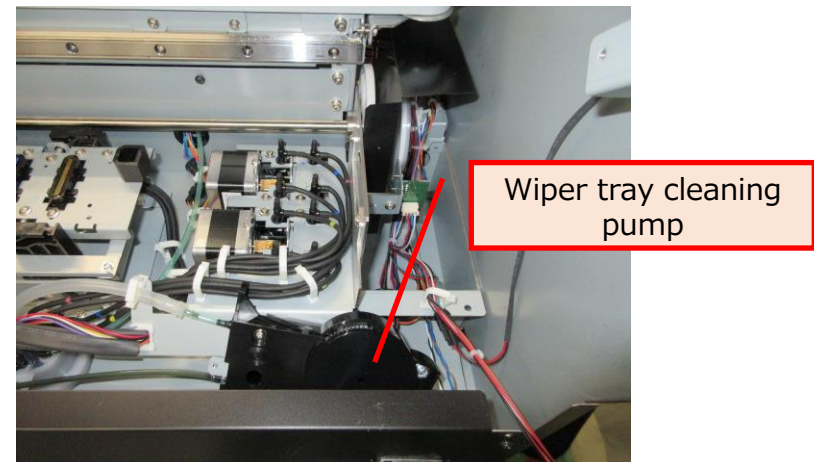
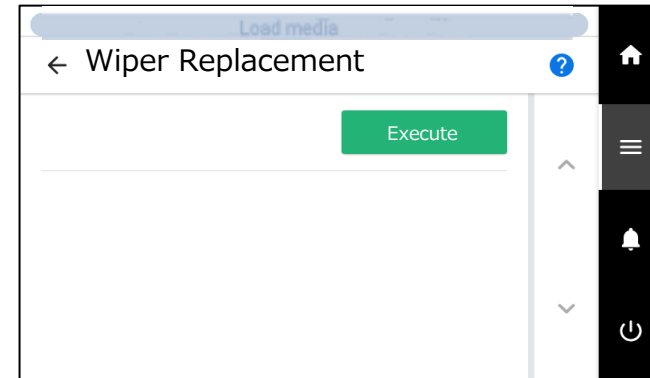
● Wiper tray cleaning

- ❖ Cleaning liquid is replaced by user menu.
- ❖ The replacement timing will be notified by the printer.
- ❖ **TR2-CL**



Waste liquid is discharged by the dedicated pump.

If you replace the pump with a new one, you need to perform [Wiper Tray Discharging] in order to discharge the cleaning liquid from the tube.



- Simulation of monthly ink consumption for maintenance

- Condition

Condition	Working day	Working hour	
Use frequency: low	Monday to Friday (22 days/month)	2 h/day	Print data with large print area
Use frequency: medium	Monday to Friday (22 days/month)	8 h/day	Print data with medium print area
Use frequency: high	Monday to Friday (22 days/month)	8 h/day	Print data with small print area

* Estimate that Normal Cleaning is performed once a week

- Ink consumption

Condition	Model	Ink consumption (ml/cartridge)	
		4 colors	
		CMYK	CL*
Use frequency: low	SG3	31.6	31.6
	SG2	31.6	67.0
Use frequency: medium	SG3	95.6	48.4
	SG2	95.6	96.6
Use frequency: high	SG3	109.0	48.4
	SG2	—	—

CL* Wiper tray Cleaning

Consumption of wiper tray cleaning liquid has been reduced because it has low volatility compared to TR2-CL. Consumption has been reduced by about 48% on average compared to SG2.

9. Software

● VersaWorks

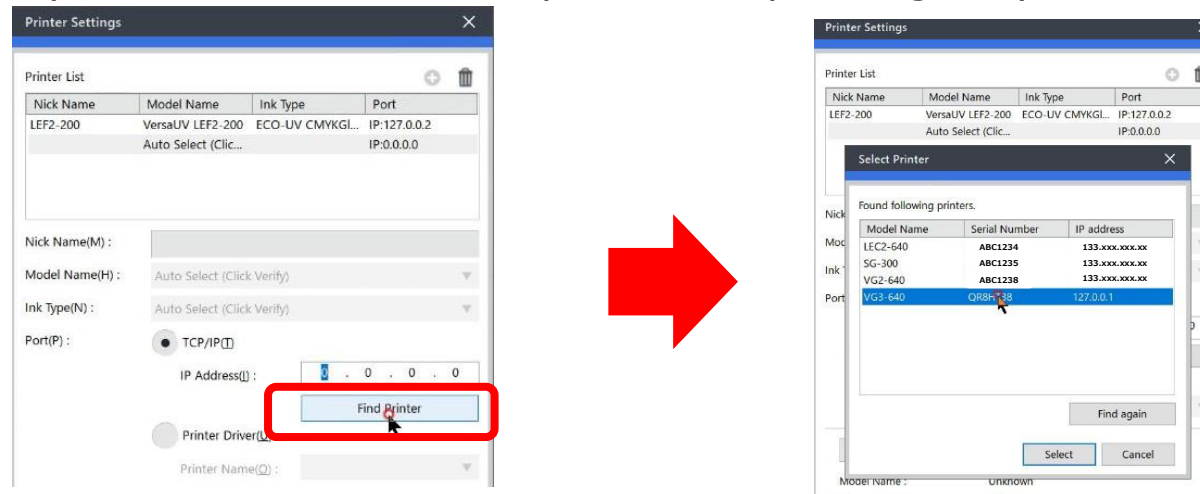
- Supported from ver. 6.13.0



Imagine. **Roland**
CONFIDENTIAL

Refer to VersaWorks Product Guide for details.

- Automatically extract printers on network
 - VersaWorks can now search printers automatically on network at the time of printer registration. Printers that exist on the network are listed at once. By selecting the target printer from the list, you can register the printer without entering IP address manually.
- Note: You may not be able to search printers depending on your network configuration.



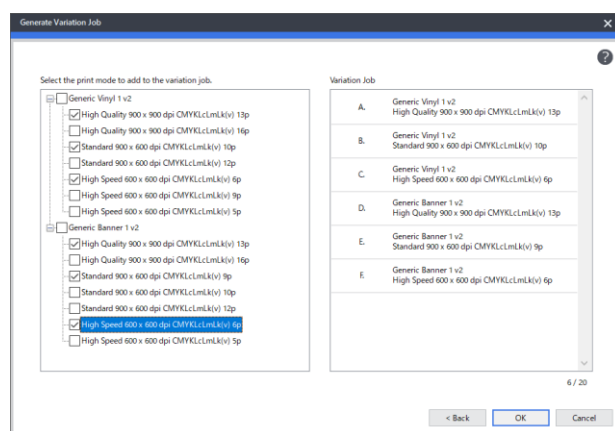
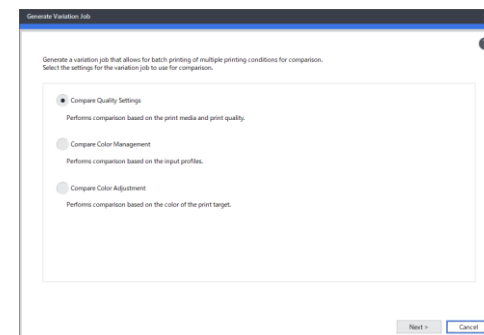
● VersaWorks

▣ Variation printing

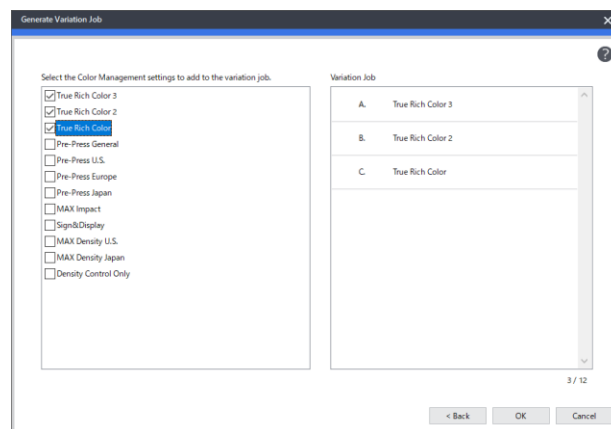
- Multiple jobs with different print settings (1. Quality 2. Color management 3. Color adjustment) can be printed at one time, and comparison among each print setting has become easier.

1. Quality (High Quality/Standard/High Speed)
2. Color management (True Rich Color3/True Rich Color2/Prepress General, etc.)
3. Color adjustment (Stronger Magenta/Stronger Red/ .../Stronger Green, etc.)

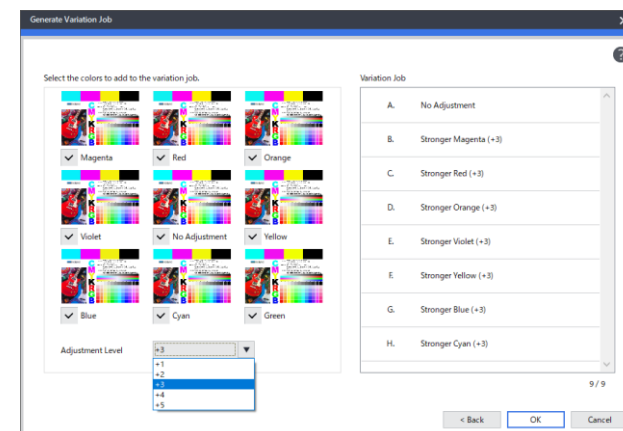
Note: You can select color variation or color density.



1. Quality



2. Color Management



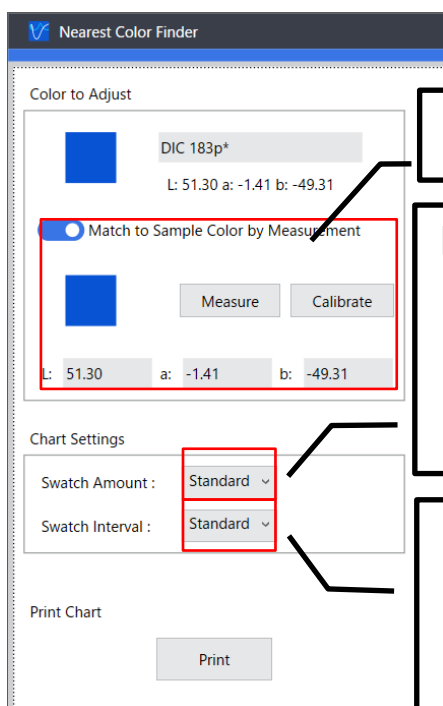
3. Color Adjustment

● VersaWorks

□ Nearest color finder

- Color chart close to a selected spot color (*1) is created and can be printed on media. You can also select the best color from the output results and register the color in the [Nearest Color Finder Library] to apply it to other job data. This feature makes it easier for users to express the colors they are aiming for.
- Color can be selected by a colorimeter.

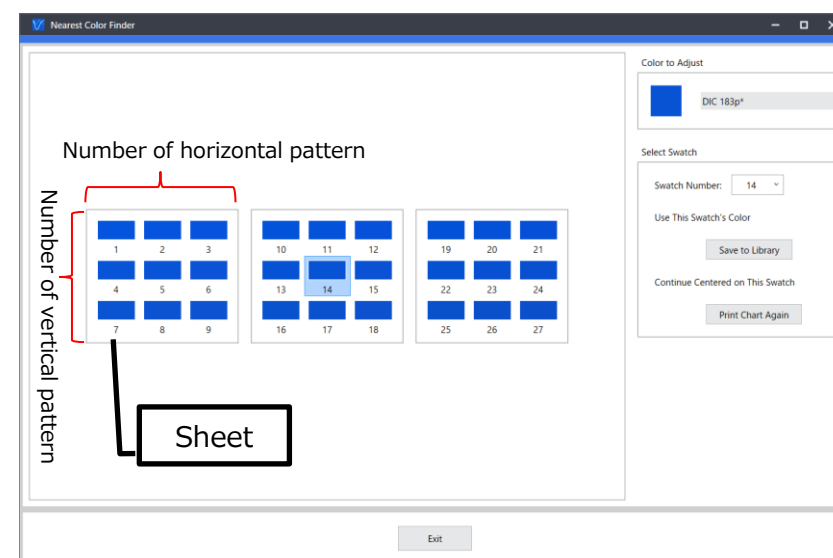
*1 Pantone / DIC / TOYO



Settings by
colorimeter

[Number of vertical pattern] × [Number of
horizontal pattern]
(number of sheet)
Many : 7×7 (5 sheets)
Standard : 5×5 (5 sheets)
Few : 3×3 (3 sheets)

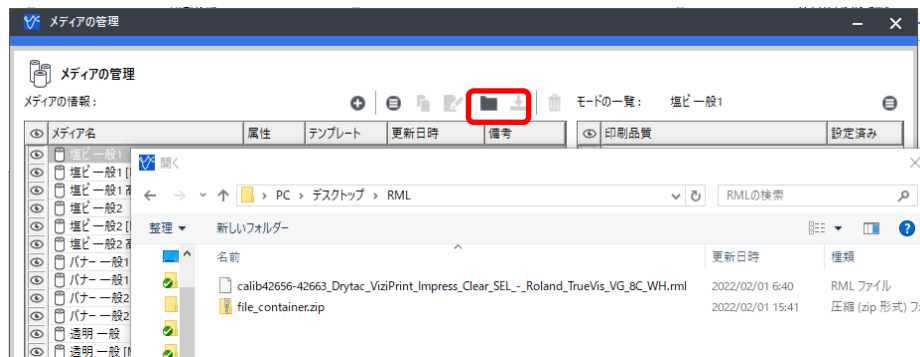
[Sample patch interval]
Large : ΔE00 2.0
Standard : ΔE00 1.0
Small : ΔE00 0.5



● VersaWorks

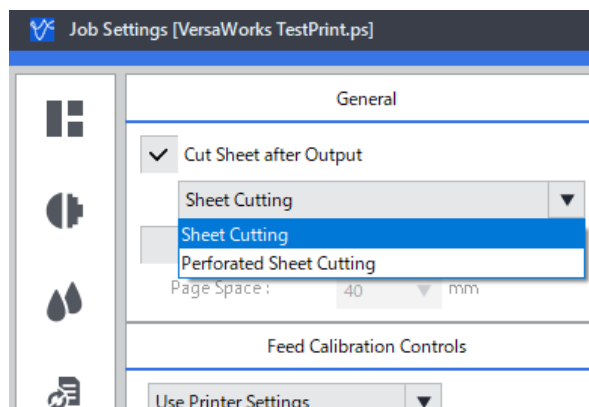
□ Roland Media File

- Compressed Roland media files (.rml) in ZIP format can now be imported without decompression.



□ Perforated cutting

- [Perforated Sheet Cutting] has been added to the sheet cutting feature after output.
- When [Perforated Sheet Cutting] is selected, the sheet is cut based on the machine's settings.



- Peck2

- ▣ Supported from ver. 2.5 or later

- ❖ Service mode

Enter service mode not by the conventional key operation, but by Peck 2.

The following is required to enable the service menu with Peck2.

- Have above a certain certified points of Installer or Color category for Roland Academy Online
- ID and password of Imagi-net



 WARNING

**You cannot enter the service mode unless you satisfy the above requirements.
The motor operates when the cover is open in the service mode only.**

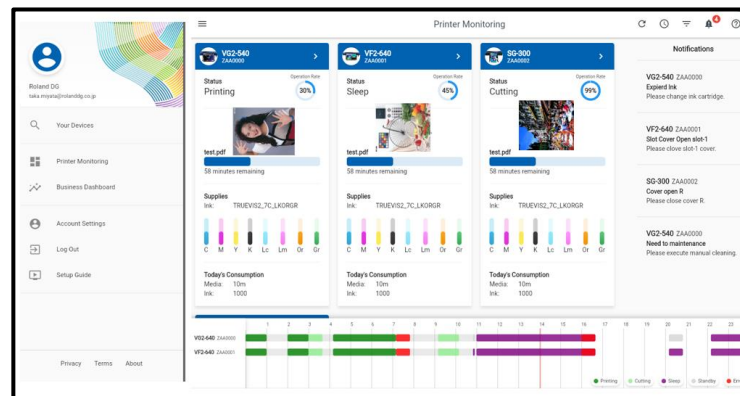
- ❖ Save the machine information and contents of work in the cloud server and download the information
 - Display the past Peck report
 - Upload work contents to the server and reflect on dashboard

Refer to Peck2 product guide for detailed information.

● Roland DG Connect

▣ Roland DG Connect (ver. 1.30 or later)

Note: In order to use Roland DG Connect, Roland DG Connect Hub (ver. 1.2 or later) is required.



▣ Added feature

❖ Business dashboard

- Name of media that is set in the machine is displayed by default.

❖ Profile download

- Profiles that can be used with VersaWorks can now be downloaded.

Refer to Roland DG Connect product guide for detailed information.

10. Installation

- Installation

- ▣ Operation

	Description	Required time	Accumulated time
1	Unpacking	20 min.	20 min.
2	Printer installation	30 min.	50 min.
3	Initial ink filling	20 min.	70 min.
4	M-GAP DEFAULT, HORIZONTAL adjustment	10 min.	80 min.
5	RIP software, Roland DG Connect Hub installation/Connection check	30 min.	110 min.
6	Explanation of how to use the machine	Depending on the user	Depending on the user

*Listed time is just a reference. Actual working time may vary depending on the installation environment.

 CAUTION

After filling ink, adjustments of [M-GAP DEFAULT] and [HORIZONTAL] are required.

● Installation

□ Electronic-format user's manual

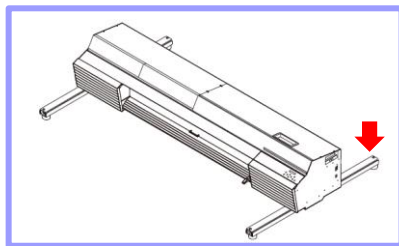
- Setup guide and user's manuals are in electronic format.
- Safety Information and Regular maintenance are printed.

You can view electronic-format manuals on the website on you PC or smart phone. They are downloadable.

Imagine. **Roland**
CONFIDENTIAL



□ Auxiliary jigs for lifting the machine is not supported.



Lifting Bar



Shoulder Strap

**When installing the stand, six or more people lift the printer.
One person should adjust the position of the stand.**

□ A convex part on the lower front side of the machine has been added to make it safer to lift the machine.



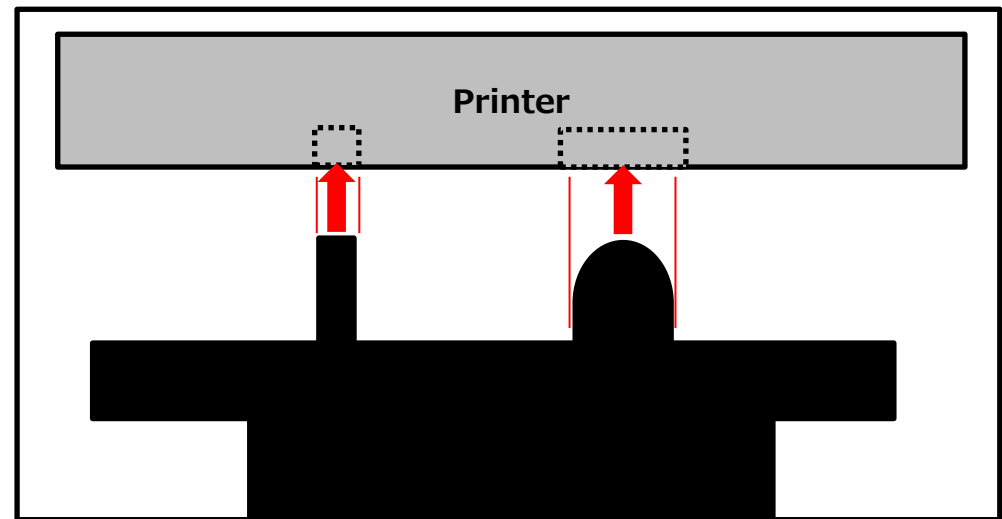
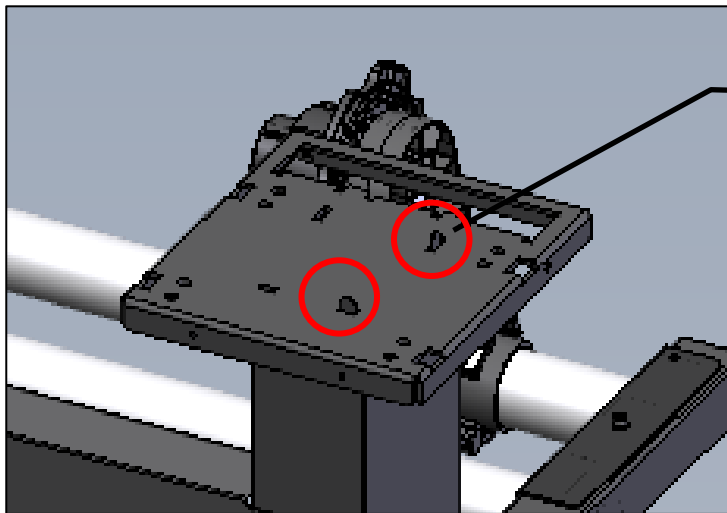
● Installation

▣ Stand design changed

- The distance between the floor and the top surface of platen has become longer about 30 mm compared to the SG2 in order to provide a user-friendly height.

▣ Feed adjuster adjustment discontinued

- Two new positioning claws have been added to the surface where the printer is placed on each stand. The distance from the media holder to the grit roller is reduced.



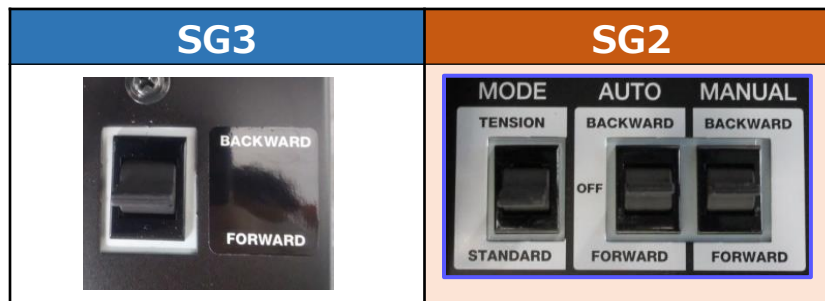
CAUTION

The positioning claws may bend if an unexpected force is applied. Be careful not to apply any force other than the vertical direction to the claws.

● Installation

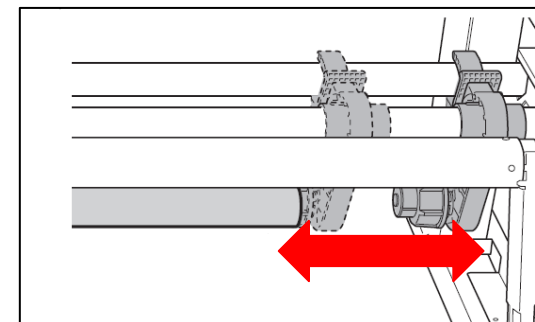
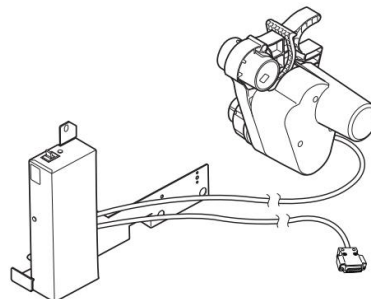
▣ Take-up unit

- Take-up unit and the stand have become integrated.
- Operation switch on the upper part of control box is now only a manual switch and [Take-up Method] and [Take-up Direction] can be set on the panel of the machine.
- There is only one cable for the take-up unit, and no AC adapter is required.
- In VersaWorks, perforated cutting can be performed in between printing data and take-up unit can be used.



▣ Media holder (take-up unit)

- The media holder on the left is the same as the media holder on the back of the printer.
- The media holder on the right side now has an integrated motor that allows the media holder to be moved left and right.



11. Transport

- Transport of the machine

- ▣ Transfer the machine without ink removed

1. Discharge the cleaning liquid in the wiper tray.
Execute User Menu > Media Management > Maintenance > Wiper Tray Discharging.
2. Discard the waste fluid in the drain bottle and attach the drain pad. (included in the package at delivery).
3. Remove the cutter holder.
4. Fix the print head by the retainer.

 CAUTION

Please complete the transfer within 24 hours, then turn on the power after transfer is completed immediately.

- Transport of the machine

- ▣ Transfer the machine with ink removed

1. Remove the cleaning liquid in the wiper tray.
Execute User Menu > Media Management > Maintenance > Wiper Tray Discharging.
2. Remove the cleaning tray and ink pouch tray.
3. Clean the ink line.
Execute SERVICE MENU > SUB MENU > HEAD WASH.
*Two pouches of **TR-CL** are required.
4. Discard the waste fluid in the drain bottle and attach the drain (included in the package at delivery).
5. Remove the cutter holder.
6. Fix the print head by the retainer.

 CAUTION

Please complete the transfer within 2 days, then turn on the power after transfer is completed immediately.

12. Periodic Replacement Parts

- Periodic replacement parts

Name	Estimated replacement time
Print head	6 billion times/nozzle
Rubber wiper	Wiping 3,000 times
Cap top	6 months
Scan motor	3,000 hours or 12,800 km
Ink tube	3,000 hours
Pinch roller	Replace it if the rubber part is worn out.
Blade protector	Replace it if there are scratches on it.
Wiper pad	Wiping 1,000 times
Lithium battery	24 months