

The following
material is
confidential.



AP-640 Replacement

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AP-640 Print Head Replacement

AP-640 Print Head Replacement Information

Step 1 / 7

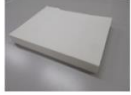
Adjustment after replacement

- 1.HEAD CHECK
- 2.HEAD GROUP history clear 3.HEAD RANK input
- 4.FILL HEAD 5.BIAS/VERTICAL adjustment
- 6.M-GAP DEFAULT adjustment
- 7.HORIZONTAL adjustment

Step 2 / 7

Necessary tools

一般ツール/General Tool

プラスドライバー No.2 No.2 Phillips screwdriver	
手袋 Gloves	
ウエス Waste cloth	
スケール (定規) Ruler	

Step 3 / 7

Special jig

特殊治具/Special Tools

TORQUE DRIVER LTD 120 CN	
BIT, PHILLIPS NO.2 L200MM	

Step 4 / 7

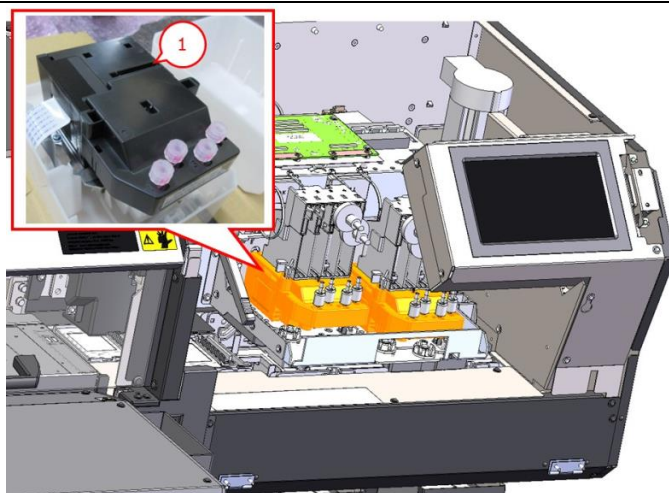
Typical work time

作業時間/Typical work time

作業内容/Contents of work	時間/Time
ヘッド交換 Print Head Replacement	25 min.

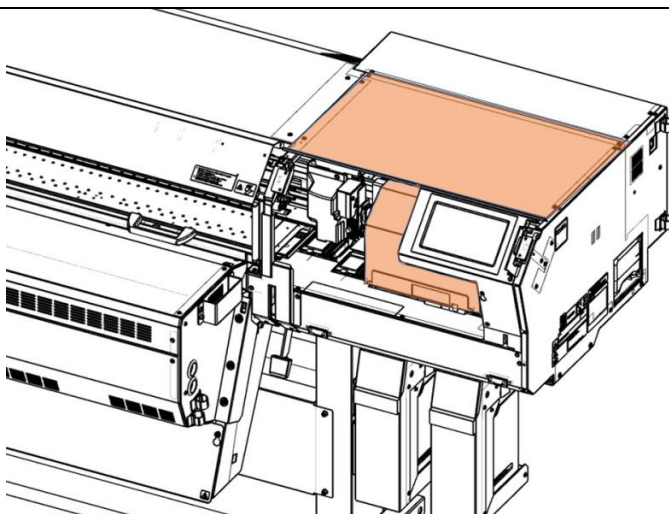
Step 5 / 7

1. Print head



Step 6 / 7

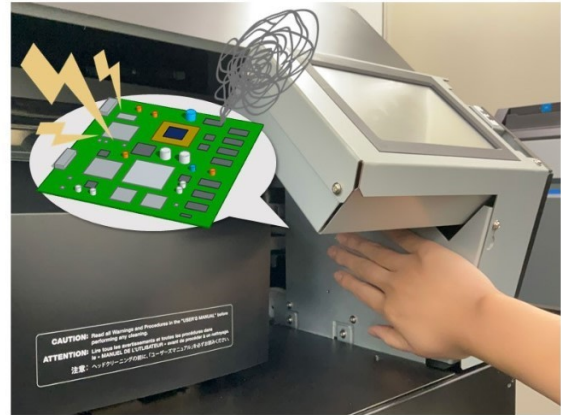
Cover that needs to be removed



Step 7 / 7

To prevent damage caused by static electricity, release static electricity from your body before touching electronic components. Touching an unpainted metal surface will release static electricity.

CAUTION !



AP-640 Print Head Replacement

AP-640 Print Head Replacement Procedure

Step 1 / 93

Start Peck2 to connect to the machine and retrieve parameters.



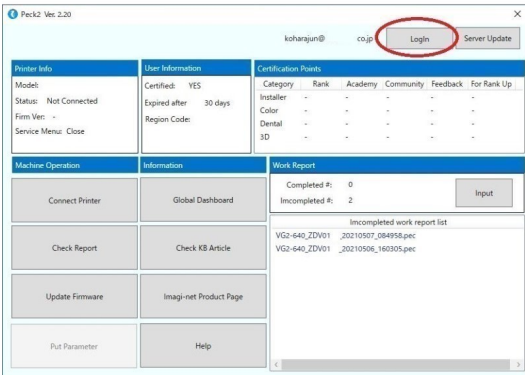
Step 2 / 93

Start Peck2.



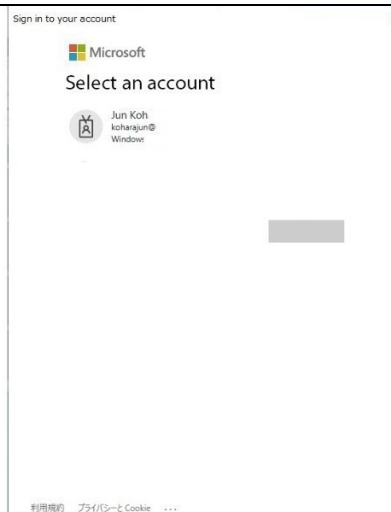
Step 3 / 93

Click the [Login] button.



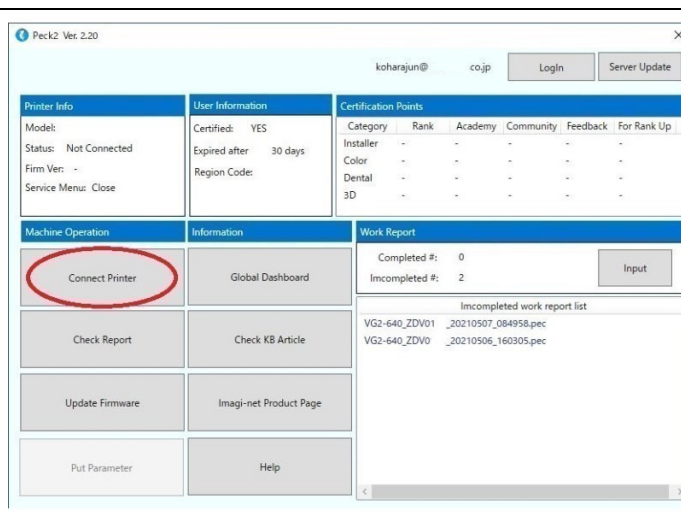
Step 4 / 93

Login with your Imagi-net ID.



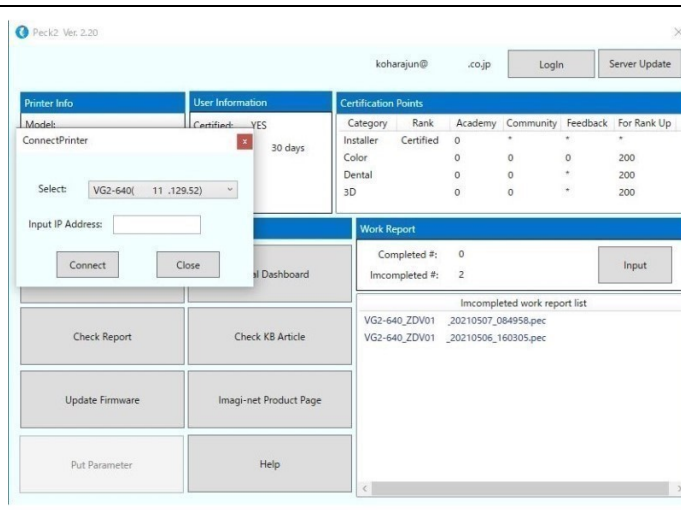
Step 5 / 93

Click the [Connect Printer] button.



Step 6 / 93

Enter the IP address of the printer you would like to connect to.



Step 7 / 93

When the printer is connected, printer information will be displayed in [Printer Info].

Peck2 Ver. 2.20

koharjun@ .co.jp Login Server Update

Printer Info		User Information		Certification Points					
Model:	VG2-640_ZDV01	Certified:	YES	Category	Rank	Academy	Community	Feedback	For Rank Up
Status:	UnSetup	Expired after:	30 days	Installer	Certified	0	*	*	*
Firm Ver:	2.00			Color		0	0	0	200
Service Menu:	Open			Dental		0	0	*	200
				3D		0	0	*	200

Machine Operation		Information		Work Report	
Connect Printer	Global Dashboard	Completed #:	0	Input	
Check Report	Check KB Article	Incompleted #:	2		
Update Firmware	Imagi-net Product Page	Incompleted work report list			
Put Parameter	Help	VG2-640_ZDV01 _20210507_084958.pec VG2-640_ZDV01 _20210506_160305.pec			

Step 8 / 93

Since the parameters have been obtained when connecting to the printer, click the [Put Parameter] button to confirm that the file has been generated.

Peck2 Ver. 2.20

koharjun@ .co.jp Login Server Update

Printer Info		User Information		Certification Points					
Model:	VG2-640_ZDV01	Certified:	YES	Category	Rank	Academy	Community	Feedback	For Rank Up
Status:	UnSetup	Expired after:	30 days	Installer	Certified	0	*	*	*
Firm Ver:	2.00			Color		0	0	0	200
Service Menu:	Open			Dental		0	0	*	200
				3D		0	0	*	200

Machine Operation		Information		Work Report	
Connect Printer	Global Dashboard	Completed #:	0	Input	
Check Report	Check KB Article	Incompleted #:	2		
Update Firmware	Imagi-net Product Page	Incompleted work report list			
Put Parameter	Help	VG2-640_ZDV01 _20210507_084958.pec VG2-640_ZDV01 _20210506_160305.pec			

Step 9 / 93

Confirm that the file has been saved.

\\源順 > AppData > Roaming > Peck2 > DeviceInfo > Parameter

Parameterの検索

VG2-640_ZDV010
4_20210507_1010
19.para

Step 10 / 93

Turn off the power and unplug the power cable.



Step 11 / 93

Remove the cover.



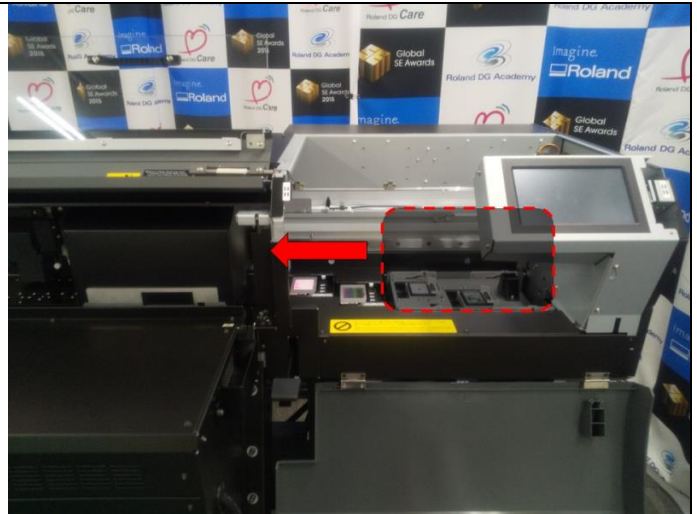
Step 12 / 93

Remove the print head cover.



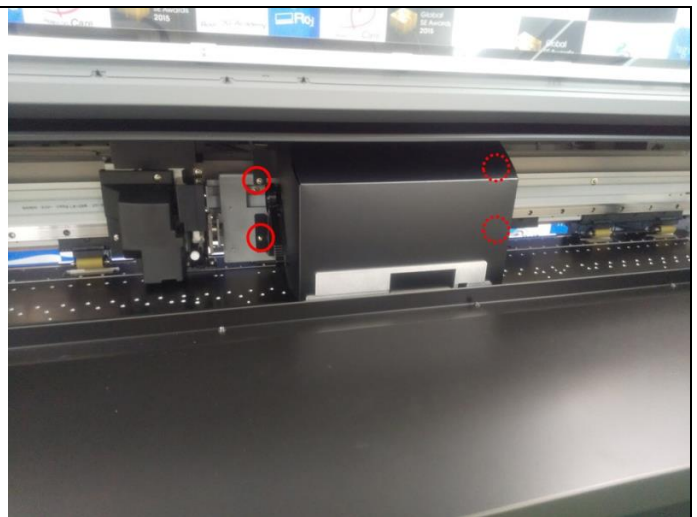
Step 13 / 93

Unlock the print head carriage and move it onto the platen.



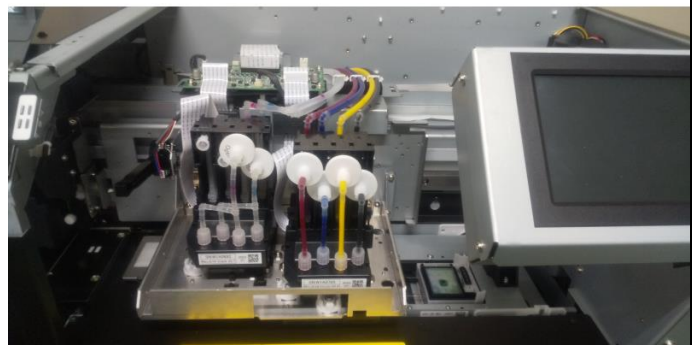
Step 14 / 93

Remove the four screws.



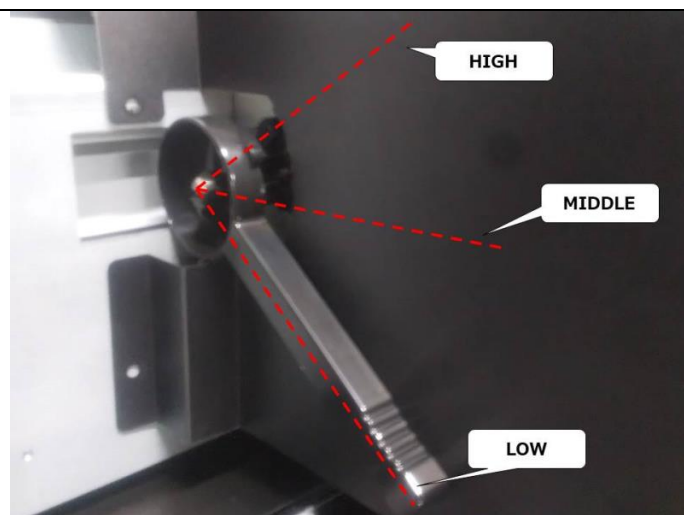
Step 15 / 93

Move the print head carriage to the position shown.



Step 16 / 93

Change the print head height to [MIDDLE] or [HI] and remove the cover.



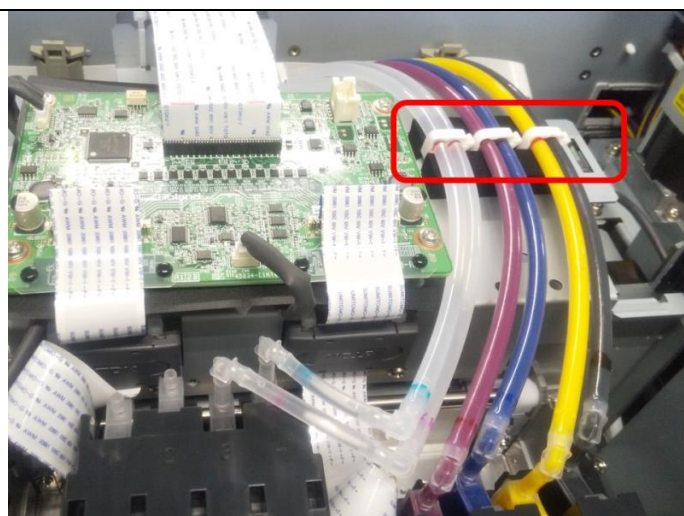
Step 17 / 93

Be sure to remove and install the print head while the head is not capped.



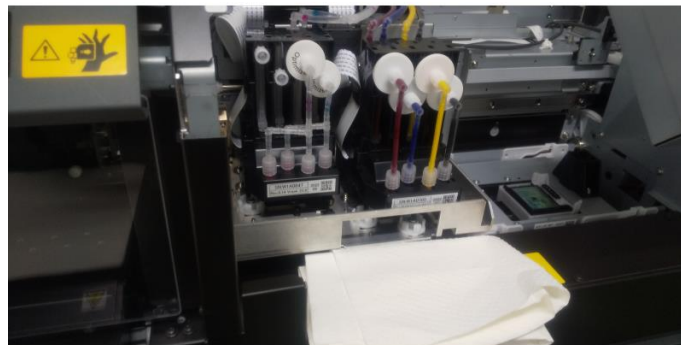
Step 18 / 93

Remove all tube clamps from the print head to be replaced.



Step 19 / 93

Prepare a dry cloth and place it near the tube.



Step 20 / 93

Remove the tube fixing screw attached to the print head and return the ink in the tube to the damper. Put the dry cloth under the removed tube. On the OP side, remove the two fixing screws at the same time to reduce the amount of ink remaining in the tube.



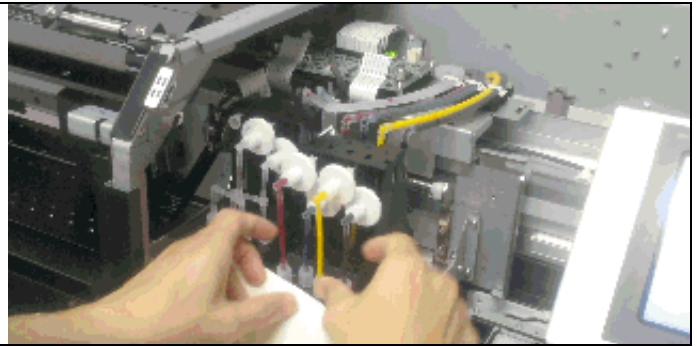
Step 21 / 93

H1: On the OP side, loosen the screws for two way-tube so that they come off at the same time as much as possible. If you loosen the screws on one side at a time, ink will easily remain in the tube.



Step 22 / 93

Refer to the video.



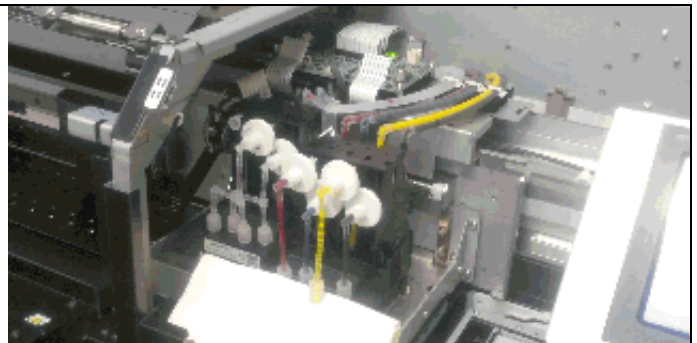
Step 23 / 93

Remove the tube fixing screw attached to the upper LC filter, and remove the tube from the LC filter.



Step 24 / 93

Refer to the video.



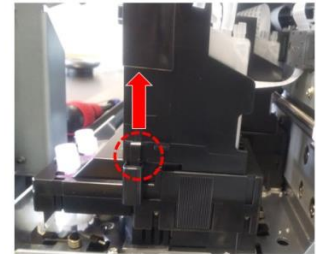
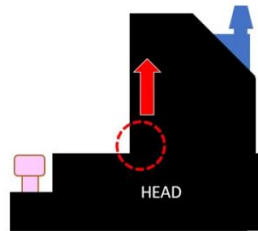
Step 25 / 93

Remove the damper unit from the print head.



Step 26 / 93

Push the claws on both sides of the front of the damper unit inward and lift the damper unit upward to remove it from the print head.



Step 27 / 93

Place the damper unit so as not to bend the tube.



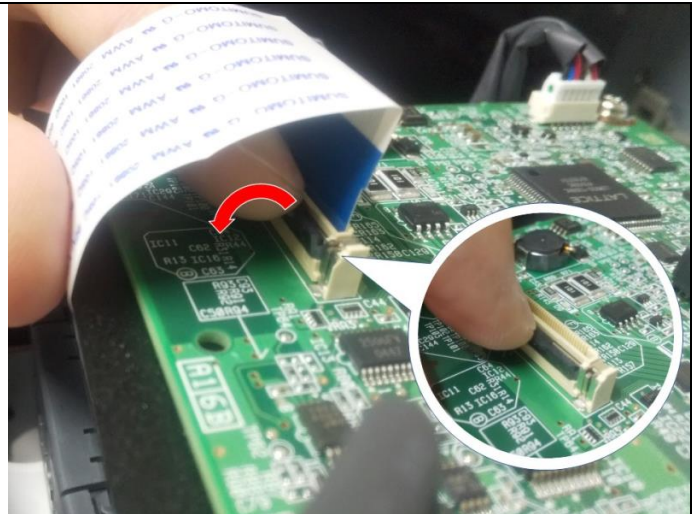
Step 28 / 93

Remove the push pin on one side holding the plate and disconnect the flexible cable held by the plate.



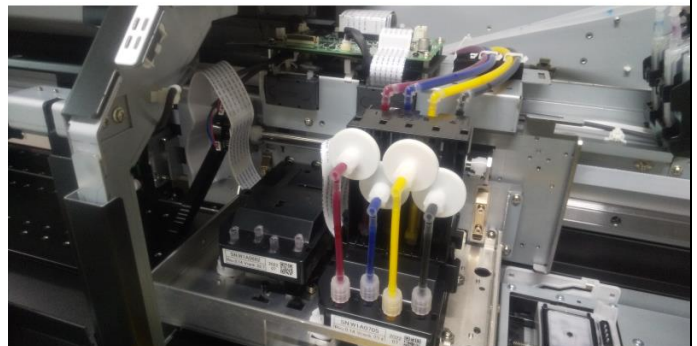
Step 29 / 93

Tilt the hook of the connector toward you and remove the flexible cable.



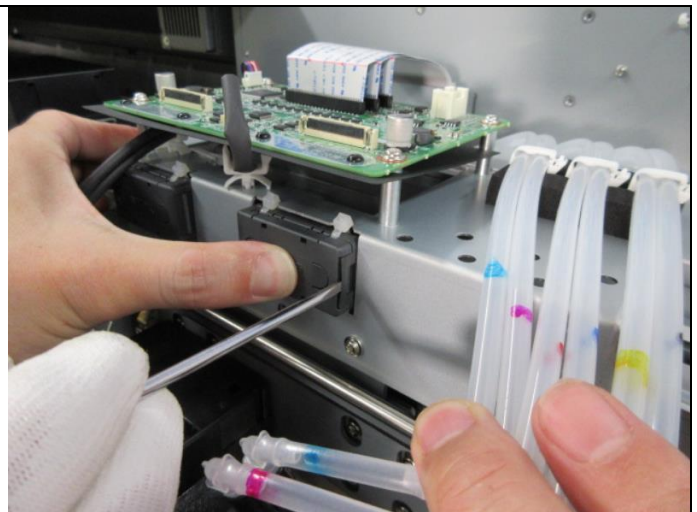
Step 30 / 93

Remove the flexible cable from the ferrite core.



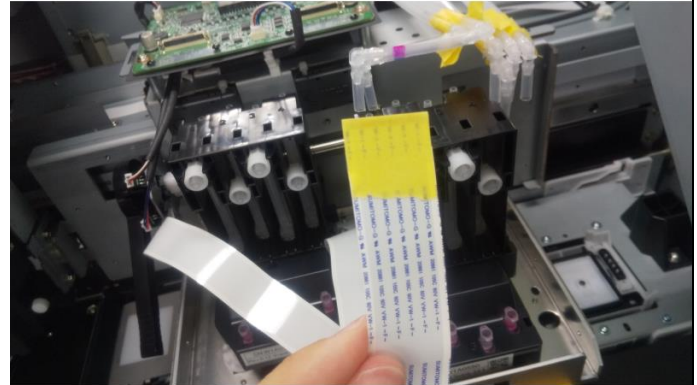
Step 31 / 93

While supporting the backside of the ferrite core, press down on the center of the core with your finger and insert your fingernail or a flat-blade screwdriver into the gap at the lock to open it.



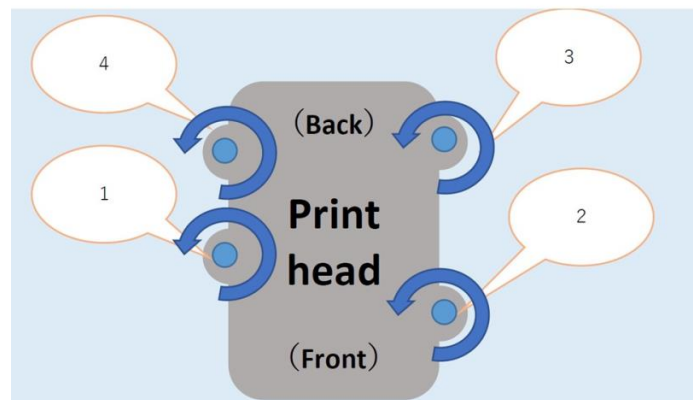
Step 32 / 93

When removing the flexible cable from the ferrite core, be sure to cover and protect all the terminals of the flexible cable with masking tape to prevent damage to the terminals.



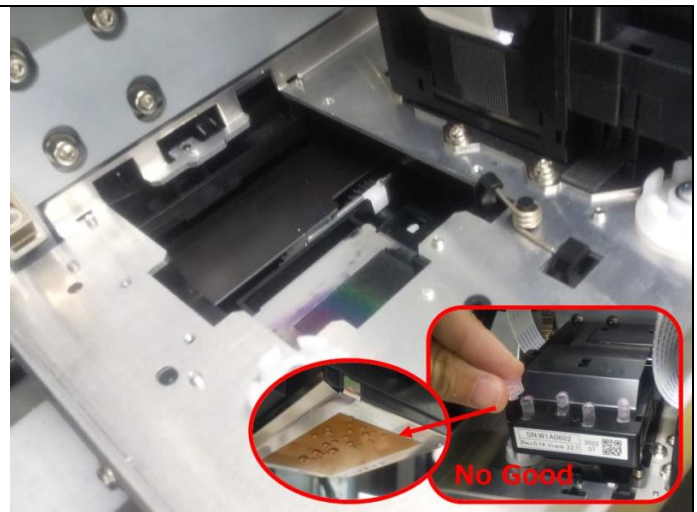
Step 33 / 93

Remove the head screws in the order shown in the figure.



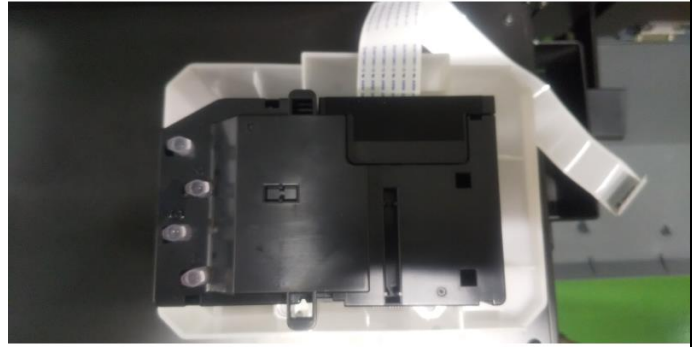
Step 34 / 93

Remove the print head. Do not attach the print head cap to the head at this time. It may cause ink to drip.



Step 35 / 93

To prevent ink leakage from the print head, place the removed head in the container.



Step 36 / 93

Place the print head in the container.



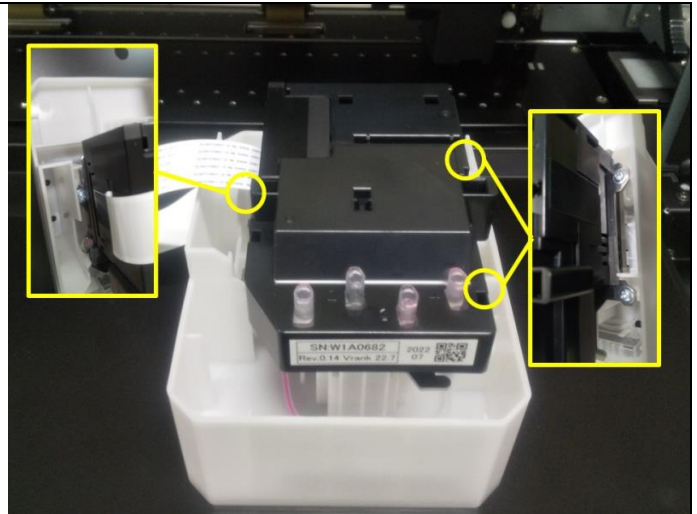
Step 37 / 93

Fix the print head using the screws for the container. The short screws that were assembled on the print head are used to fix the print head again.



Step 38 / 93

Attach the three screws to the container.



Step 39 / 93

Attach the print head caps.



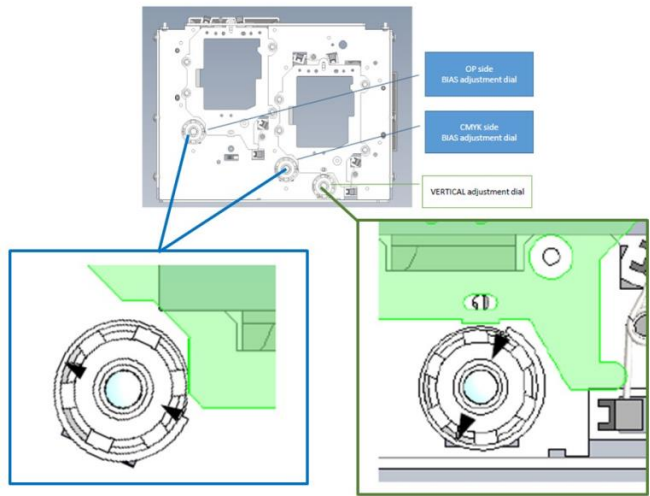
Step 40 / 93

Put the flexible cable of the print head in the container and close the container.



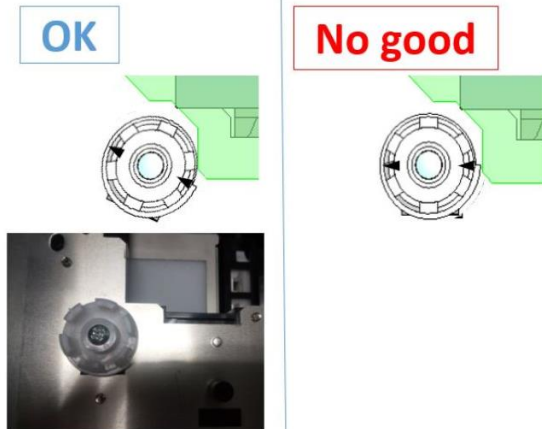
Step 41 / 93

Turn the adjustment dial to the position shown in the figure for the print head to be replaced.



Step 42 / 93

The figure shows the position of the BIAS adjustment dials on the OP side and the color side. In the position shown on the right, the tension will be stronger when installing the print head and it will be difficult to install the head.



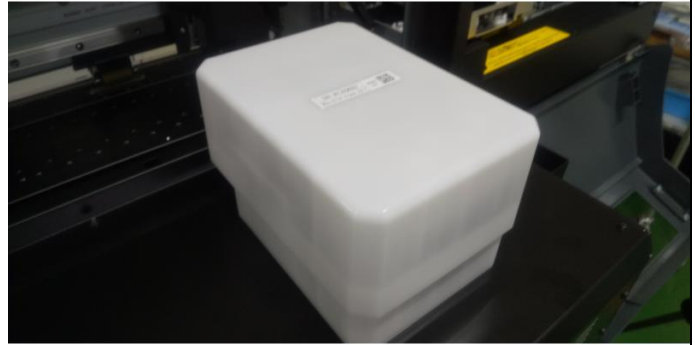
Step 43 / 93

The figure show the position of the VERTICAL adjustment dial. Change the position when replacing the print head on the color side. In the position shown on the right, the tension will be stronger when installing the print head, making it difficult to install the head.



Step 44 / 93

Remove the special container containing the print head from the packing box.



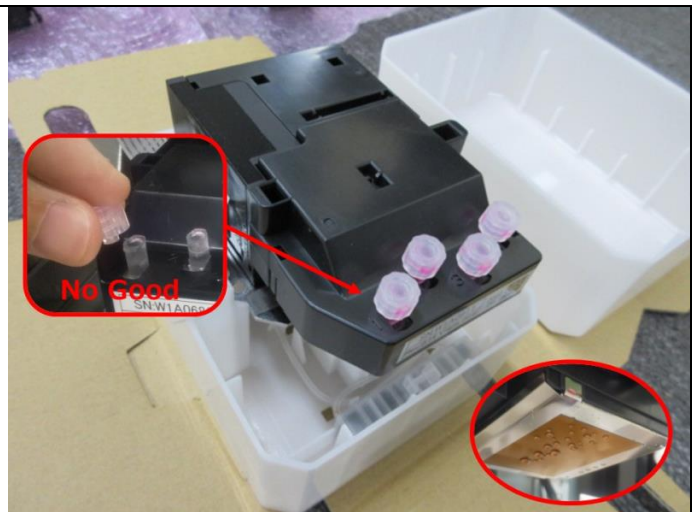
Step 45 / 93

The screws that secure the print head in the container are the screws for this container only. Do not use them in the work of fixing the print head to the printer.



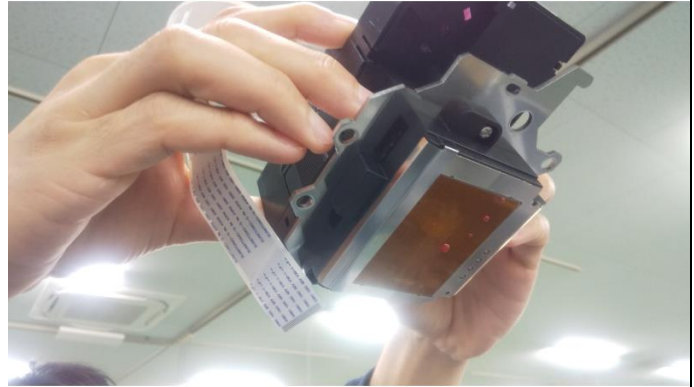
Step 46 / 93

Do not remove the head cap until the print head is installed into the printer, as liquid may drip from the print head.



Step 47 / 93

Remove the print head from the container. Be careful not to drop the pink liquid adhering to the print head surface.



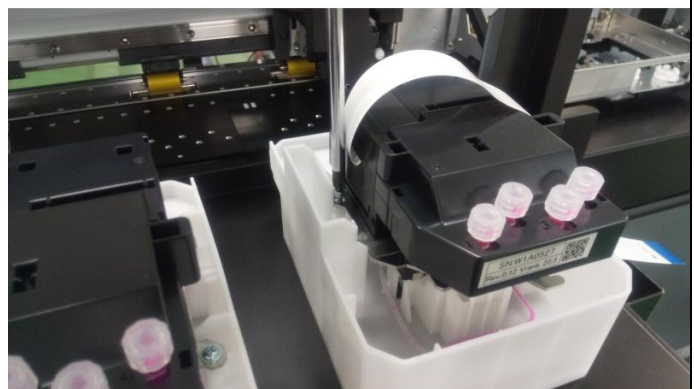
Step 48 / 93

Remove the flexible cable.



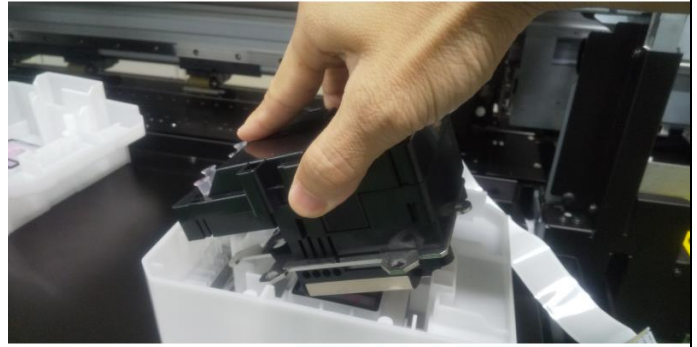
Step 49 / 93

Remove the screws. Be careful not to damage the flexible cable with the screwdriver when loosening the screw at the base of the flexible cable.



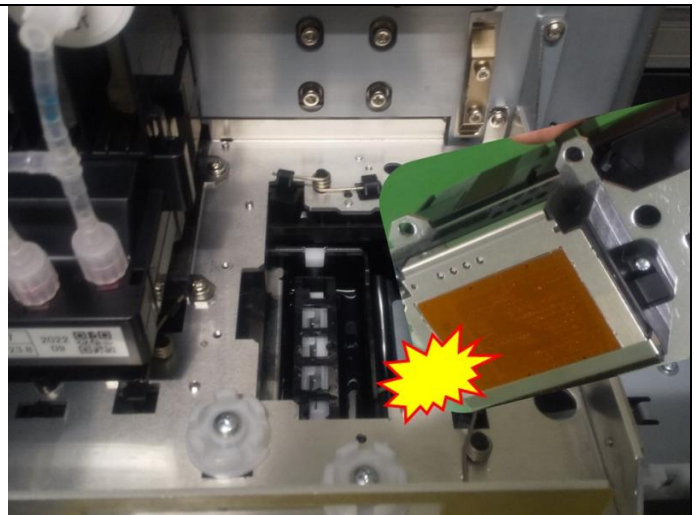
Step 50 / 93

Remove the print head.



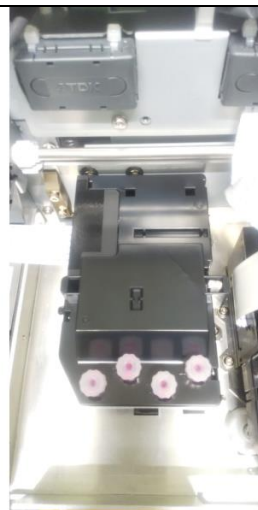
Step 51 / 93

The print head is a very precise component. Handle the print head with care to avoid scratching the head surface.



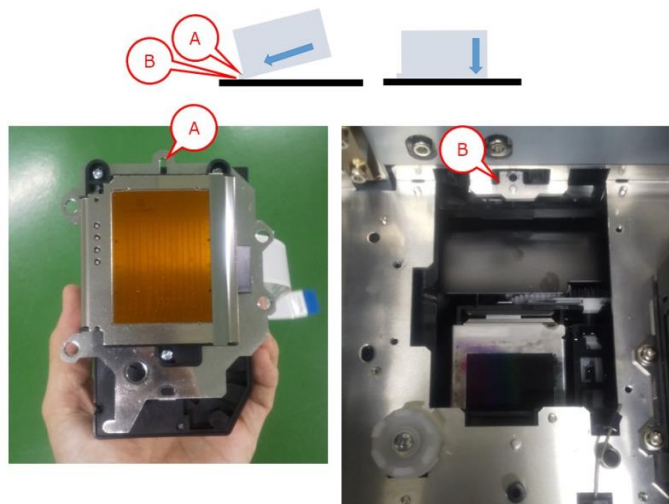
Step 52 / 93

Attach the print head on the OP side.
How to install the print head differs slightly between the OP side print head and color side print head.



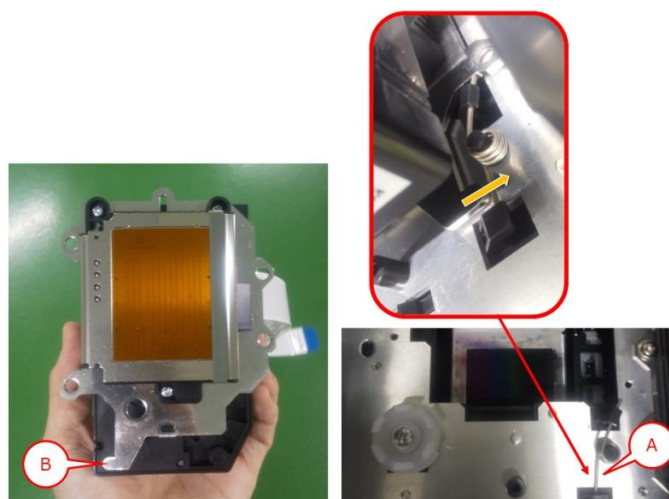
Step 53 / 93

Tilt the print head so that the back side of the print head is slightly lowered. Align the long hole (A) at the back side of the head plate with the alignment pin (B) on the carriage side to make the print head horizontal.



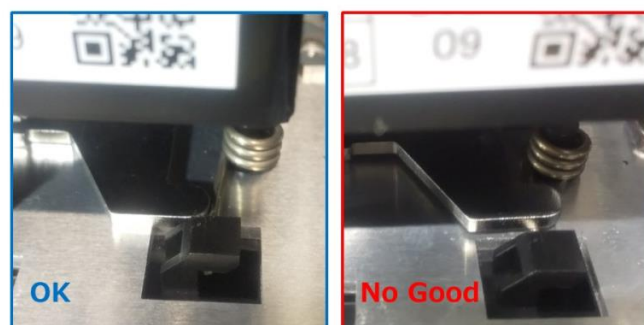
Step 54 / 93

Tilt the print head so that the right side of the head is slightly lowered and push the head plate (B) into the spring (A) on the carriage side.



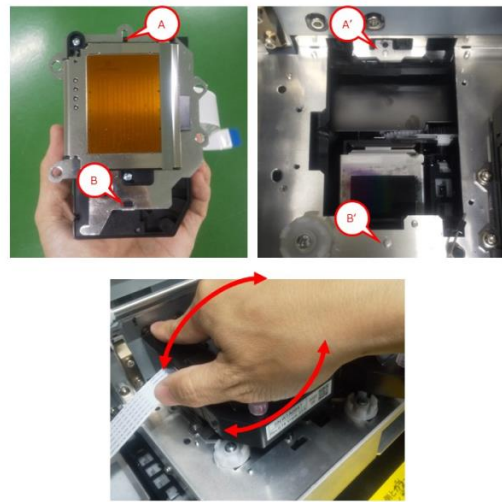
Step 55 / 93

Level the print head with the head plate pushed into the spring. At this time, make sure that the head plate does not overlap the spring.



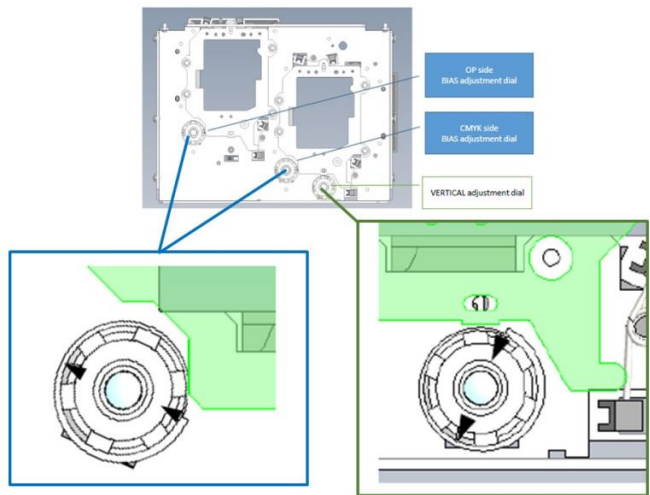
Step 56 / 93

Move the print head slightly to the right and left while pushing the head downwards lightly. Fit the long hole (A) and the positioning pin (A'), and the long hole (B) and the positioning (B') to eliminate the gap between the print head and the carriage.



Step 57 / 93

If the print head is difficult to fit, check the position of the adjustment dial.



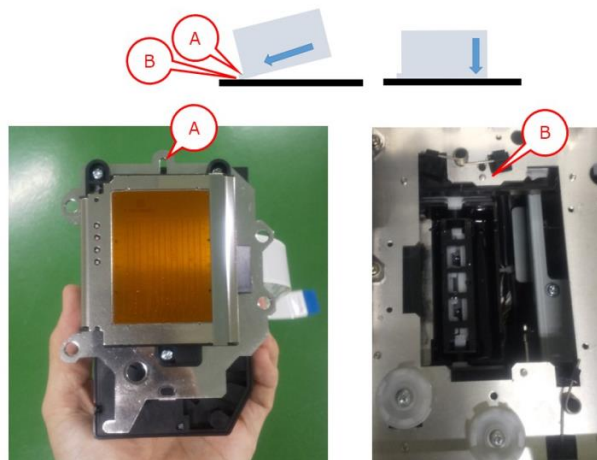
Step 58 / 93

Attach the print head on the color side. How to install the print head differs slightly between the OP side print head and color side print head.



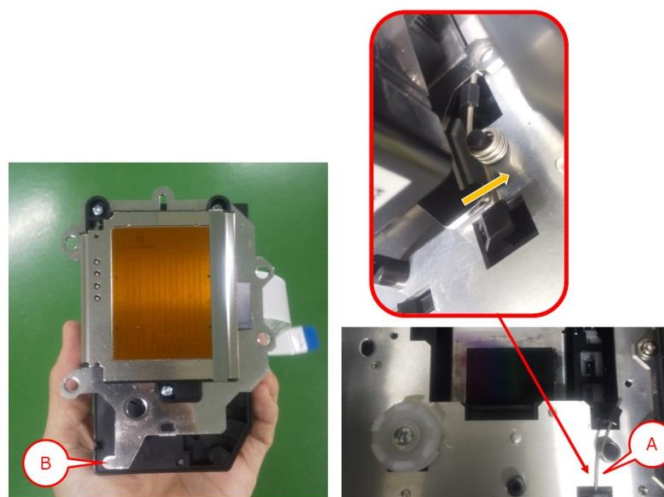
Step 59 / 93

Tilt the head so that the back side of the print head is slightly lowered. Align the long hole (A) at the back side of the head plate with the positioning pin (B) on the carriage side at the approximate position to make the print head horizontal. It does not matter if the head plate rides up on the spring at the back at this point.



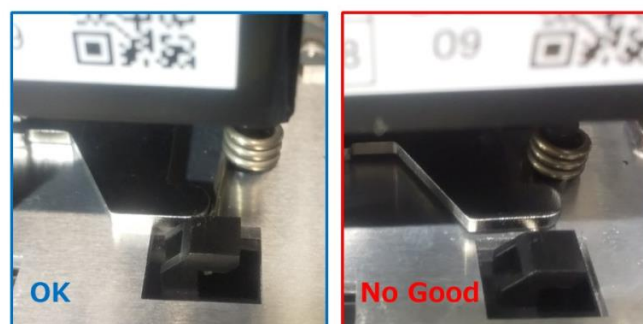
Step 60 / 93

Push the head plate (B) into the spring (A) on the carriage side by tilting the head so that the right side of the head is slightly lowered.



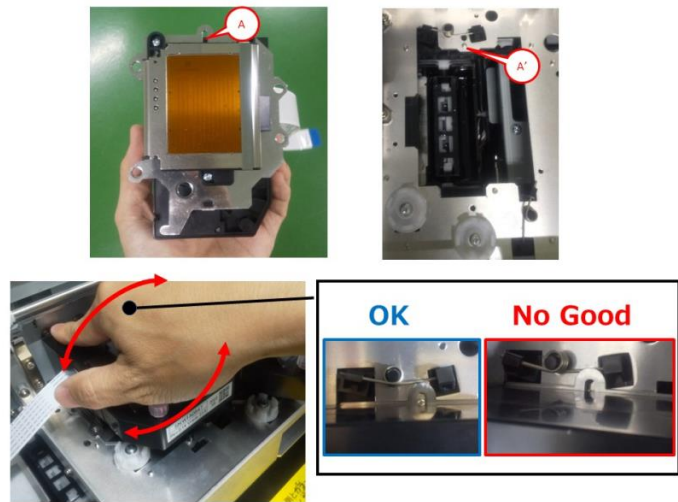
Step 61 / 93

With the head plate pushed into the spring, level the print head. At this time, make sure that the head plate does not overlap the spring.



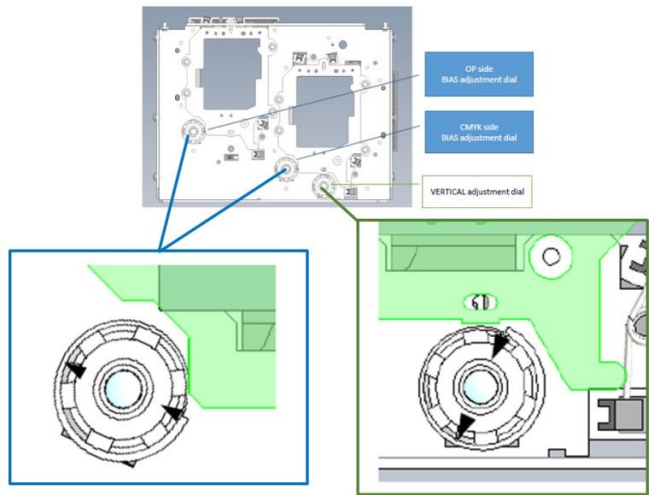
Step 62 / 93

Move the print head slightly to the right and left while pushing the head downwards to fit the long hole (A) and the positioning pin (A') to eliminate the gap between the head and the carriage. Make sure that the head plate on the far side moves from the state of overlapping the spring to the side of the spring in this operation.



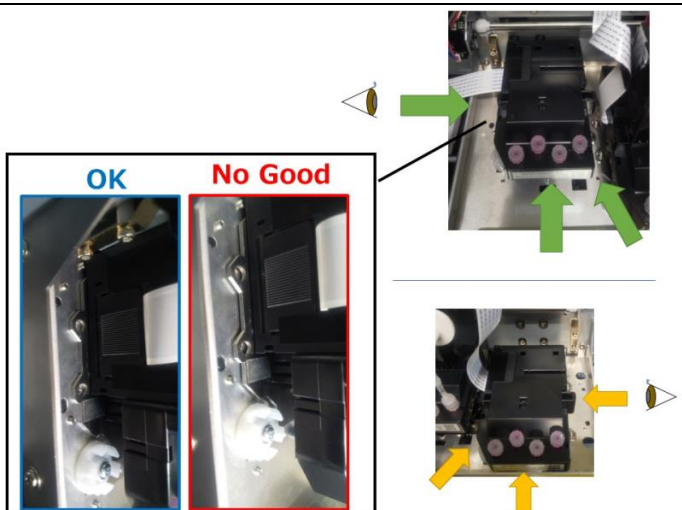
Step 63 / 93

If the head is difficult to fit, check the position of the adjustment dial.



Step 64 / 93

Check from three directions (front, right, and left) that there is no gap between the print head and carriage.



Step 65 / 93

The screws that were used to secure the print head in the container are only for the container. When mounting the head on the carriage, be careful not to mistake the screws.



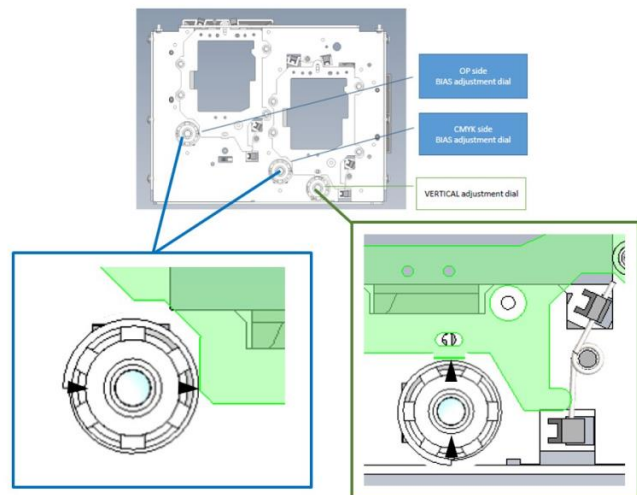
Step 66 / 93

Use a torque wrench [0.6 N-m (6 gf/cm)] for mounting the print head. Please use a type that does not generate impact, as it may cause missing dots.



Step 67 / 93

While holding the replaced print head lightly from above, move the adjustment dial to the position shown in the figure. This position is the initial adjustment position for head adjustment.



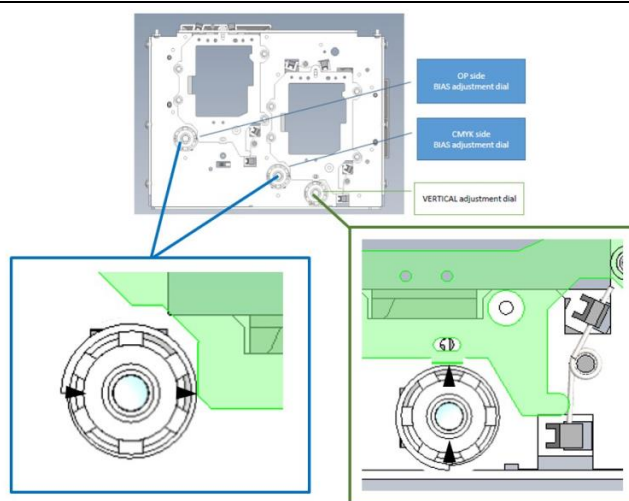
Step 68 / 93

Hold the print head lightly from the top so that it does not float.



Step 69 / 93

Move the adjustment dial on the replaced head clockwise to the position shown in the figure. (One dial on the OP side, two dials on the color side)



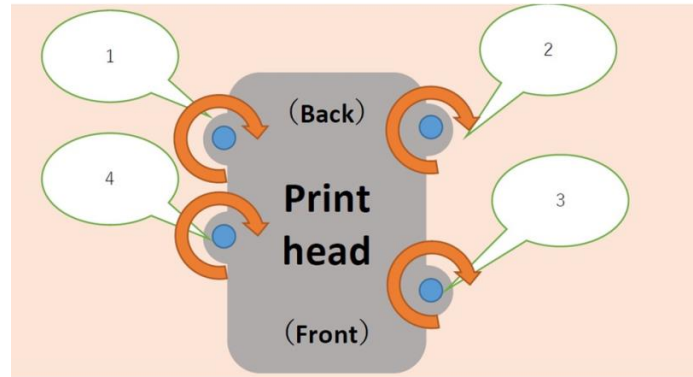
Step 70 / 93

The screw to attach the print head to the carriage is the short screw included in the package. Be careful not to use the long screws from the print head container.



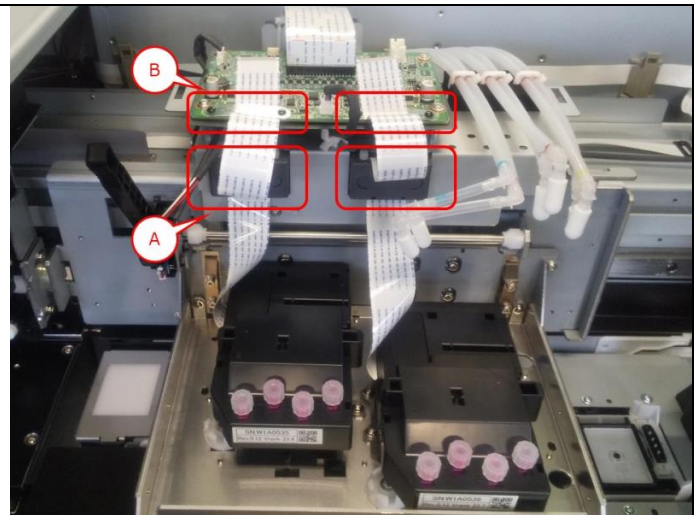
Step 71 / 93

Secure the print head using a torque wrench [0.6 N-m (6 gf/cm)] in the order shown in the figure. Be careful not to damage the flexible cable with the screwdriver when tightening the screws at the base of the flexible cable.



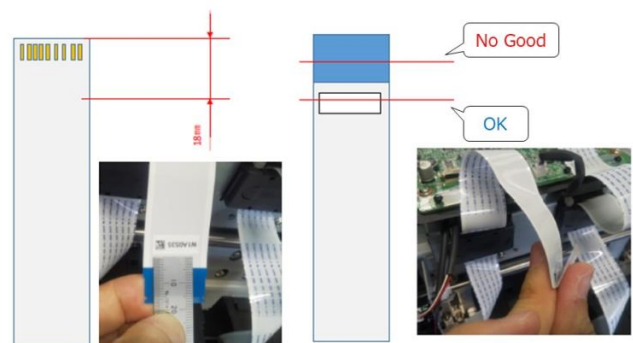
Step 72 / 93

Fix the flexible cable of the print head to the ferrite core (A) and plate (B).



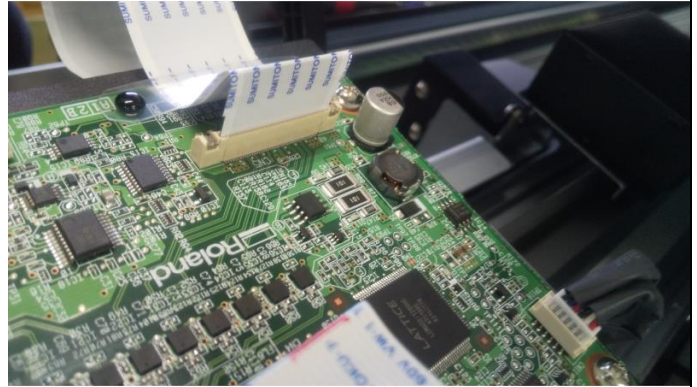
Step 73 / 93

Using a scale, measure about 18 mm from the end of the flexible cable and bend it. Bend over the part where the sticker is attached. However, do not bend the blue part as it may cause malfunction.



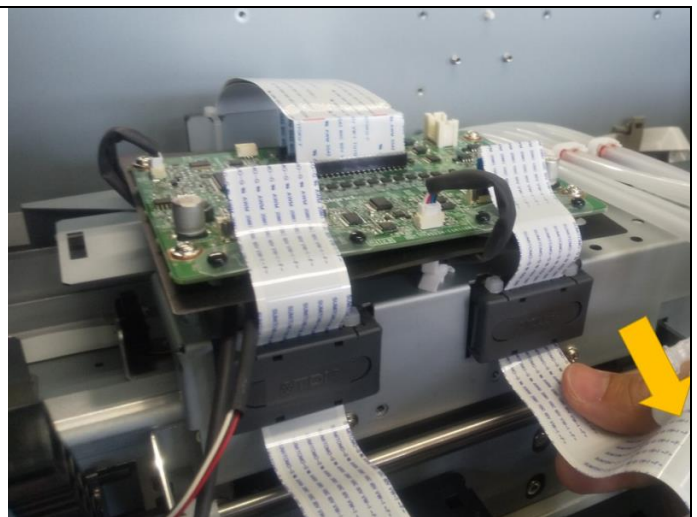
Step 74 / 93

Insert the flexible cable all the way into the connector on the board.



Step 75 / 93

Pull the flexible cable back toward the print head.



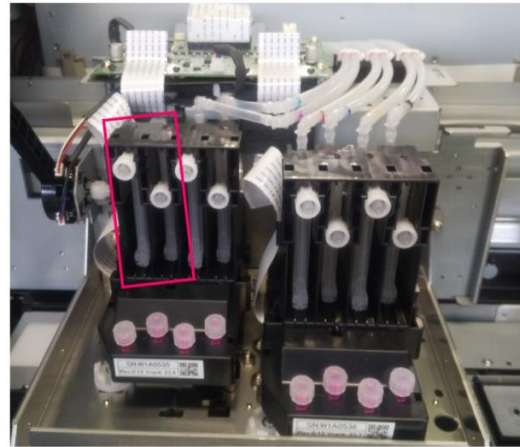
Step 76 / 93

Attach the damper unit to the print head so as not to pinch the flexible cable.



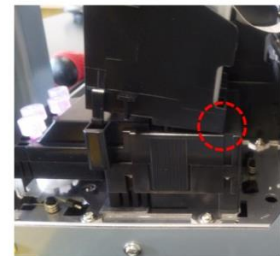
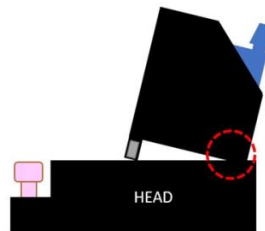
Step 77 / 93

Note: The two dampers on the left side of the OP side are not used, but do not need to be removed. If you find it difficult to install the damper unit, remove the damper to make it easier.



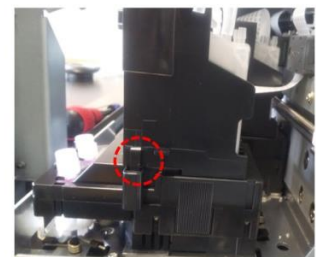
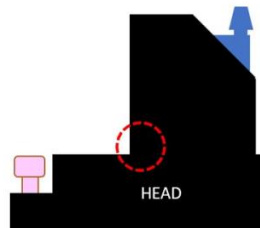
Step 78 / 93

Insert the two claws on the bottom rear side of the damper unit into the holes on the print head side.



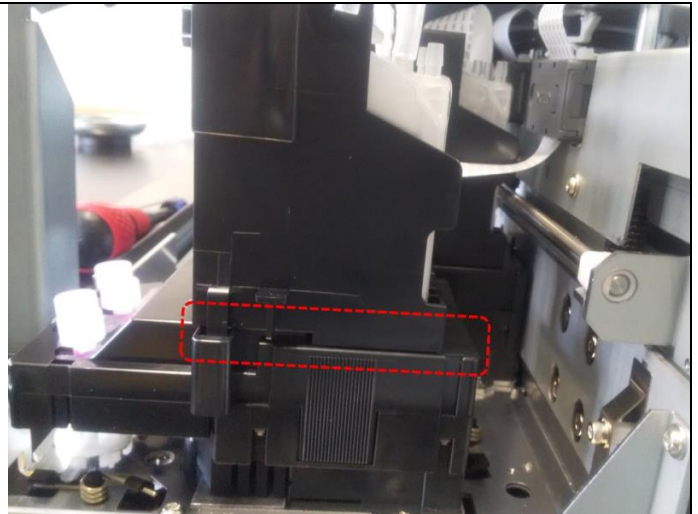
Step 79 / 93

While pushing the damper unit toward the back, push the front side claws in from the top.



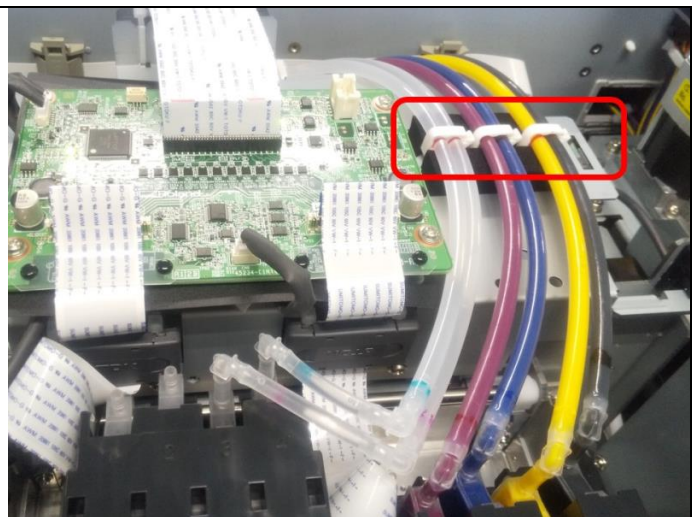
Step 80 / 93

Make sure there is no gap between the print head and the damper unit when viewed from the side.



Step 81 / 93

Attach the removed tube to the clamps, aligning it with the positioning marking on the tube.



Step 82 / 93

Secure the flexible cable to the side of the damper.



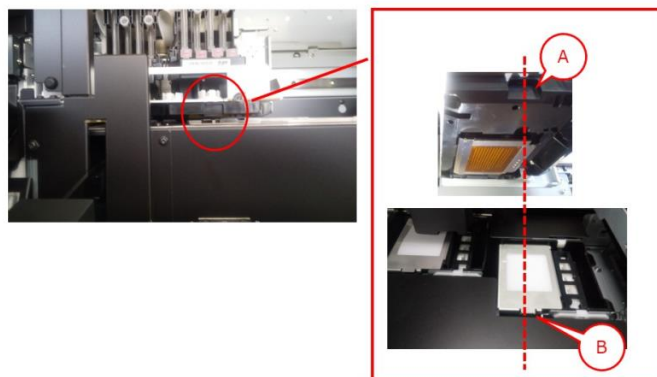
Step 83 / 93

Removing the cap from the print head may cause fluid in the head to drip out. Move the print head carriage to a position where the print head and flushing pad overlap to allow for any fluid to fall out.



Step 84 / 93

Move the print head carriage to a position where the positions of A and B overlap.



Step 85 / 93

Note that if you work without aligning the carriage, liquid may drip from the head in unexpected places as shown in the figure.



Step 86 / 93

Remove the head caps.



Step 87 / 93

To prevent the tube from twisting, hold the base of the tube with your right hand, turn the screw with your left hand, and attach the tube in this order: print head side and then LC filter side.



Step 88 / 93

With the tip of the tube sticking into the LC filter, attach the coupling on the head side.



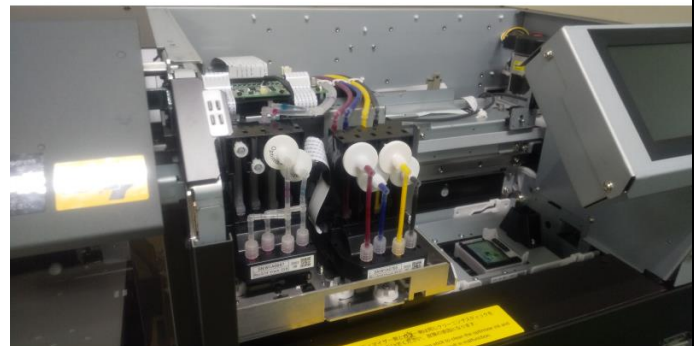
Step 89 / 93

Make sure that the tube is not twisted.



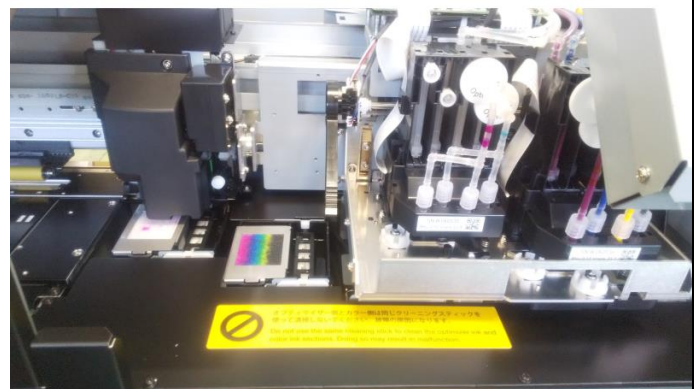
Step 90 / 93

Attach the LC filter side.



Step 91 / 93

Return the print head carriage to the home position and lock it.



Step 92 / 93

Turn on the main power. Put back the removed covers after the adjustment is completed.



Step 93 / 93

Go to HEAD POSITION ADJUSTMENT and make the following adjustments.

1. HEAD CHECK 2. HEAD GROUP history clear 3. HEAD RANK input 4. FILL HEAD 5. BIAS/VERTICAL adjustment 6. M-GAP DEFAULT adjustment 7. HORIZONTAL adjustment



次の手順

ヘッド位置調整

Next Step

Head Position Adjustment

AP-640 LC Filter Replacement

AP-640 LC Filter Replacement Information

Step 1 / 6

Use one syringe per color. Do not use the same syringe once used for different color.

Step 2 / 6

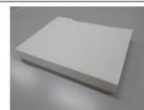
Necessary Tools

一般ツール/General Tool

プラスドライバー No.2
No.2 Phillips screwdriver



ウエス
Waste cloth



Step 3 / 6

Special Tools

特殊治具/Special Tools

シリンジ
Syringe



Step 4 / 6

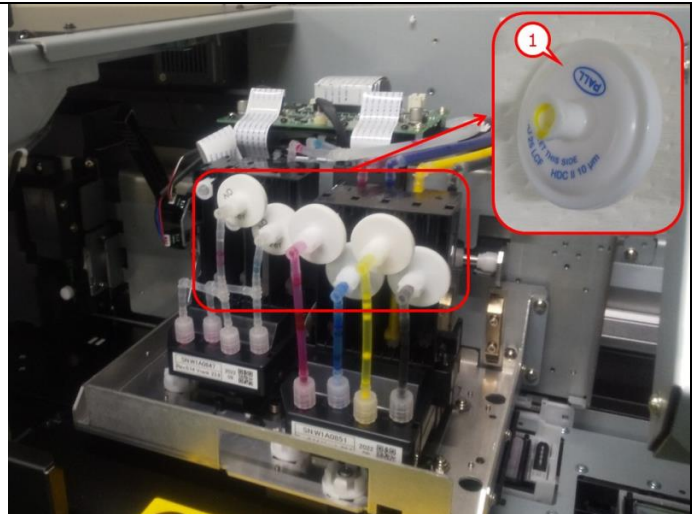
Typical Work Time

作業時間/Typical work time

作業内容/Contents of work	時間/Time
LCフィルタ交換 LC filter replacement	15 min.

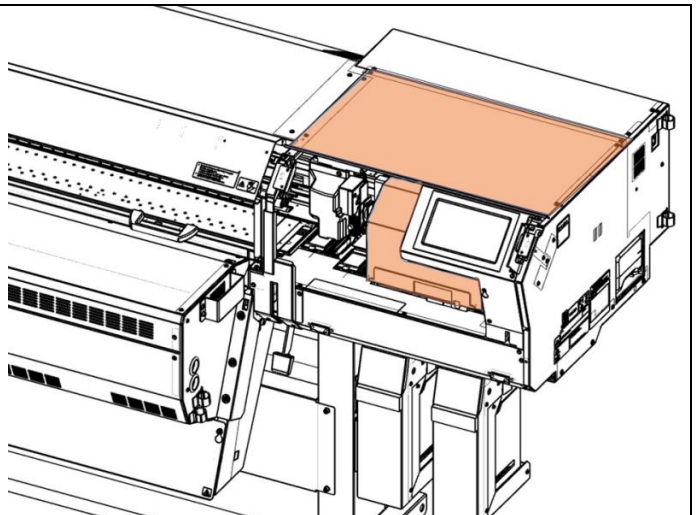
Step 5 / 6

1. LC filter



Step 6 / 6

Covers that need to be removed



AP-640 LC Filter Replacement

AP-640 LC Filter Replacement Procedure

Step 1 / 46

Connect Peck2 to the machine and enter Service Mode.

Tap to display the screen.



SERVICE
MODE

Step 2 / 46

Detail1: Start Peck2.



Peck2

Ver. X.XX

Imagine. 

Step 3 / 46

Detail2: Click the [Login] button.

Peck2 Ver. 2.20

koharjun@co.jp

Login

Server Update

Printer Info

User Information

Certification Points

Model: -

Certified: YES

Category: -

Rank: -

Academy: -

Community: -

Feedback: -

For Rank Up: -

Status: Not Connected

Expired after: 30 days

Installer: -

Color: -

Dental: -

3D: -

Firm Ver: -

Region Code: -

Machine Operation

Information

Work Report

Connect Printer

Global Dashboard

Completed #: 0

Input

Check Report

Check KB Article

Incompleted #: 2

Update Firmware

Imagi-net Product Page

Incompleted work report list

Put Parameter

Help

VG2-640_ZDV01_20210907_084958.pec

VG2-640_ZDV01_20210906_160305.pec

Step 4 / 46

Detail3: ogin with your Imagi-net ID.

Sign in to your account

Microsoft

Select an account

 Jun Koh
koharajun@
Window

利用規約

プライバシーとCookie

...

Step 5 / 46

Detail4: Click the [Connect Printer] button.

Peck2 Ver. 2.20

koharajun@

.co.jp

Login

Server Update

Printer Info

Model:

Status: Not Connected

Firm Ver: -

Service Menu: Close

User Information

Certified: YES

Expired after: 30 days

Region Code:

Certification Points

Category	Rank	Academy	Community	Feedback	For Rank Up
Installer	-	-	-	-	-
Color	-	-	-	-	-
Dental	-	-	-	-	-
3D	-	-	-	-	-

Machine Operation

Connect Printer

Check Report

Update Firmware

Put Parameter

Information

Global Dashboard

Check KB Article

Imagi-net Product Page

Help

Work Report

Completed #: 0

Imcompleted #: 2

Input

Imcompleted work report list

VG2-640_ZDV01_20210507_084958.pec

VG2-640_ZDV01_20210506_160305.pec

Step 6 / 46

Detail5: Enter the IP address of the printer you would like to connect to.

Peck2 Ver. 2.20

koharajun@

.co.jp

Login

Server Update

Printer Info

Model:

ConnectPrinter

Select: VG2-640(11 .129.52)

Input IP Address:

Connect

Close

User Information

Certified: YES

Expired after: 30 days

Certification Points

Category	Rank	Academy	Community	Feedback	For Rank Up
Installer	Certified	0	*	*	*
Color	0	0	0	200	
Dental	0	0	*	200	
3D	0	0	*	200	

Machine Operation

Global Dashboard

Check Report

Check KB Article

Update Firmware

Imagi-net Product Page

Put Parameter

Help

Work Report

Completed #: 0

Imcompleted #: 2

Input

Imcompleted work report list

VG2-640_ZDV01_20210507_084958.pec

VG2-640_ZDV01_20210506_160305.pec

Step 7 / 46

Detail6: When the printer is connected, the printer information will be displayed in [Printer Info].

Peck2 Ver. 2.20

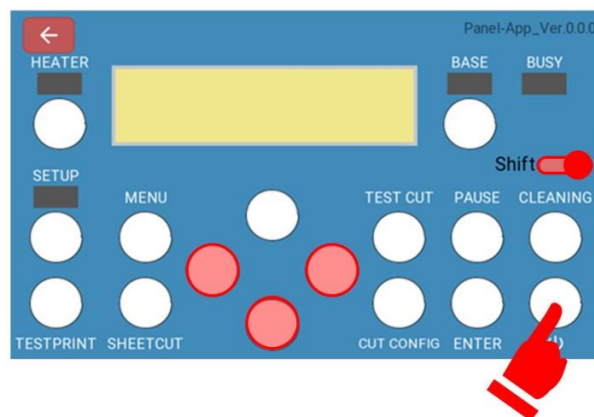
koharajun@ .co.jp Login Server Update

Printer Info		User Information		Certification Points					
Model:	VG2-640_ZDV01	Certified:	YES	Category	Rank	Academy	Community	Feedback	For Rank Up
Status:	UnSetup	Expired after:	30 days	Installer	Certified	0	*	*	*
Firm Ver:	2.00			Color		0	0	0	200
Service Menu:	Open			Dental		0	0	*	200
				3D		0	0	*	200

Machine-Operation		Information		Work Report	
Connect Printer	Global Dashboard	Completed #:	0	Input	
Check Report	Check KB Article	Incompleted #:	2		
Update Firmware	Imagi-net Product Page	Incompleted work report list			
Put Parameter	Help	VG2-640_ZDV01 _20210507_084958.pec			
		VG2-640_ZDV01 _20210506_160305.pec			

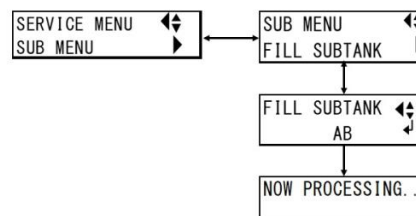
Step 8 / 46

Detail7: Press [Shift]> [◀]+[▶]+[▶]+[Sub Power] on the panel to enter the service mode. By turning on the [Shift] button, multiple buttons can be pressed at the same time.



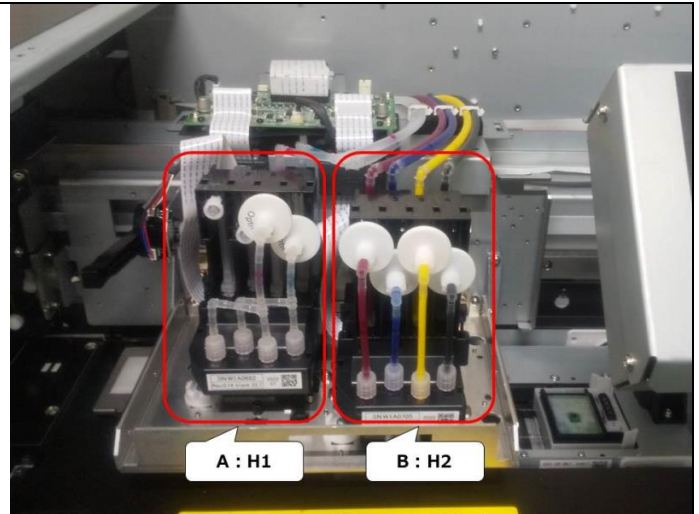
Step 9 / 46

Select [SERVICE MENU] > [SUB MENU] > [FILL SUBTANK] > [A/B] and fill ink into the sub tank of the print head with the LC filter to be replaced.



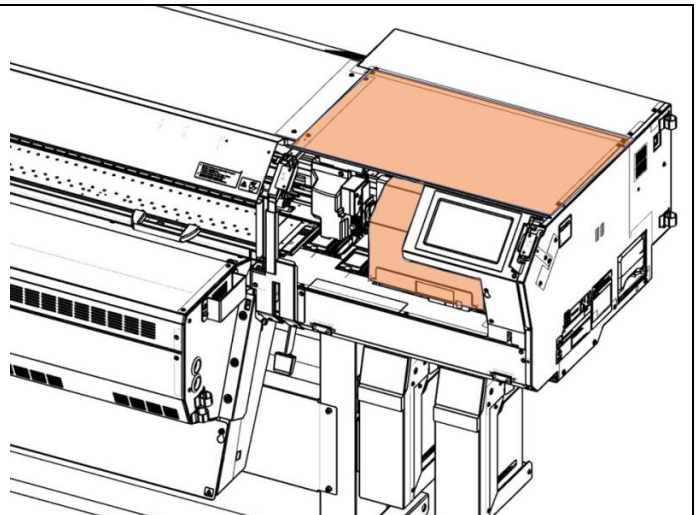
Step 10 / 46

Detail1: Print head arrangement



Step 11 / 46

Remove the covers.



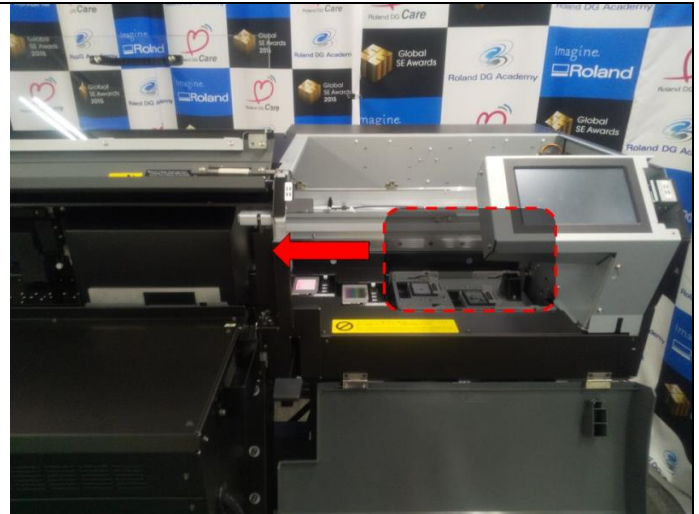
Step 12 / 46

Dtail1: Remove the cover on the top of the print head carriage.



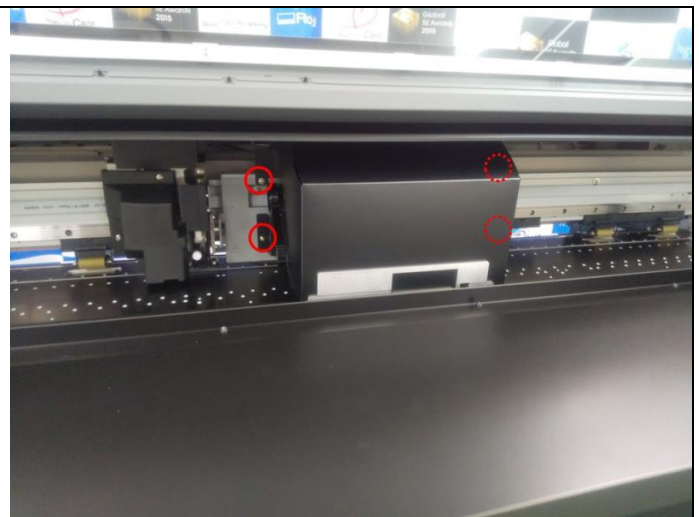
Step 13 / 46

Detail2: Unlock the carriage and move it onto the platen so as not to lose the screws.



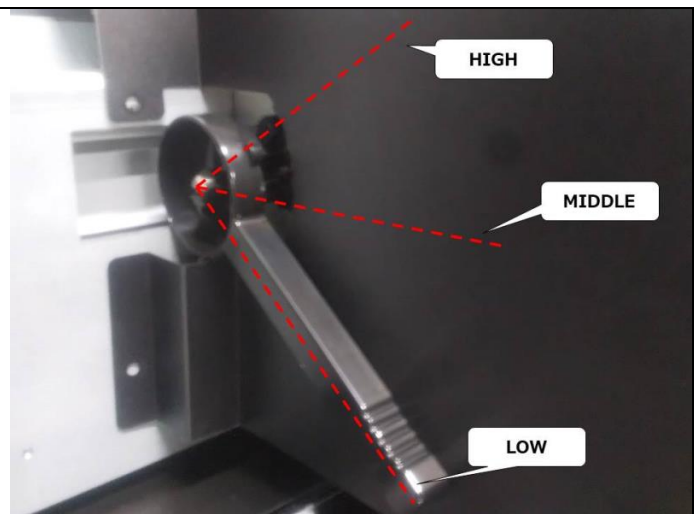
Step 14 / 46

Detail3: Remove the four screws.



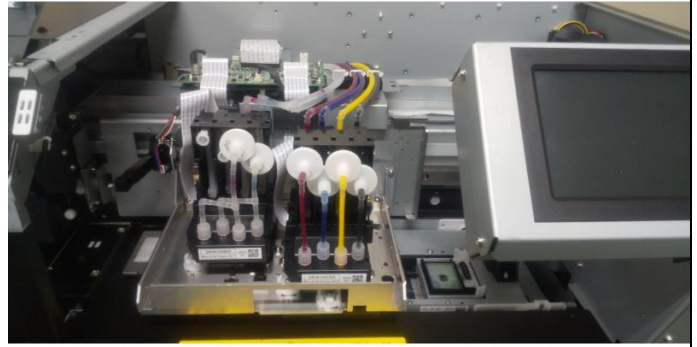
Step 15 / 46

Detail4: Set the print head height to [MIDDLE] or [HIGH] so that the cover is removed easily.



Step 16 / 46

Detail5: Move the carriage and remove the cover.



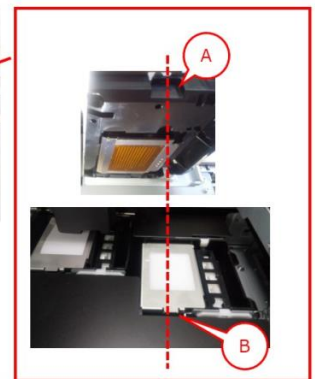
Step 17 / 46

Detail1: Ink in the print head may drip out. Move the print head carriage to the position where the print head and the flushing pad match.



Step 18 / 46

Detail2: Move the carriage to the position where the positions of A and B match.



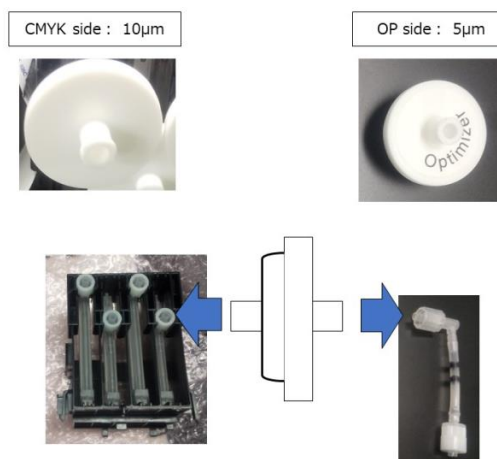
Step 19 / 46

Note that ink may drip from the print head in unexpected places as shown in the figure if you work without aligning the carriage.



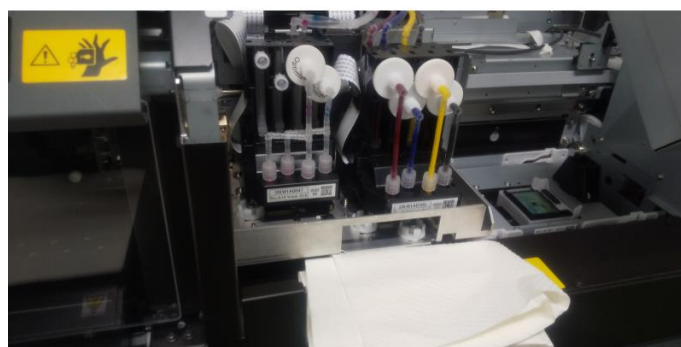
Step 20 / 46

The type of LC filters are different for OP and CMYK. Also, be careful not to make a mistake when installing the LC filter, as it has a specific direction to install into.



Step 21 / 46

Set a dry cloth near the tube.



Step 22 / 46

By removing the tube fixing screw attached to the print head, ink in the tube will return to the damper. On the OP side, removing the two fixing screws at the same time will reduce the amount of ink remaining in the tube.



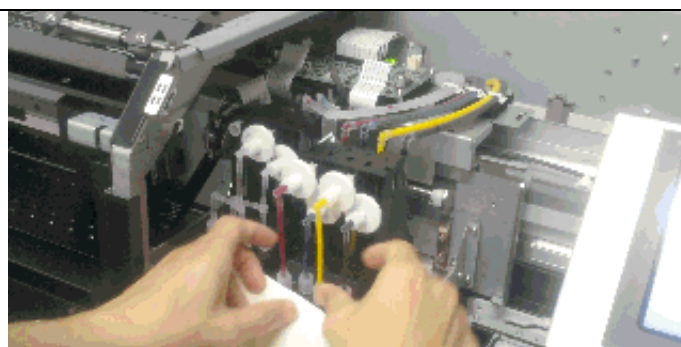
Step 23 / 46

Detail1: [H1: On the OP side] Loosen the screws for two way tube so that they come off at the same time as much as possible. If you loosen the screws on one side at a time, ink will easily remain in the tube.



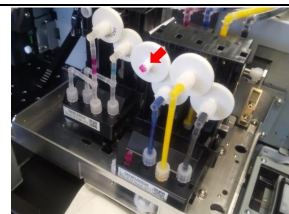
Step 24 / 46

Detail2: Reference video

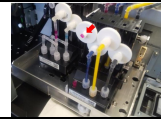


Step 25 / 46

Remove the tube fixing screw attached to the upper LC filter, and remove the

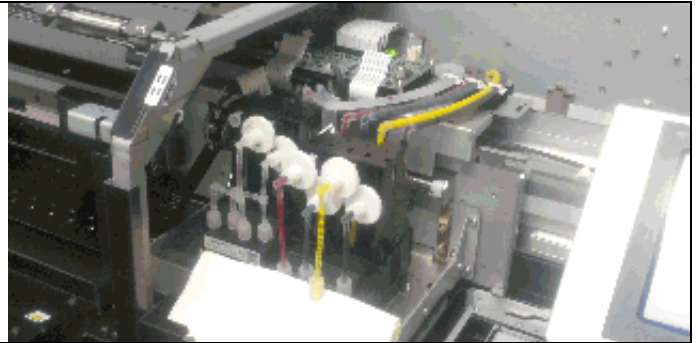


tube from the LC filter.



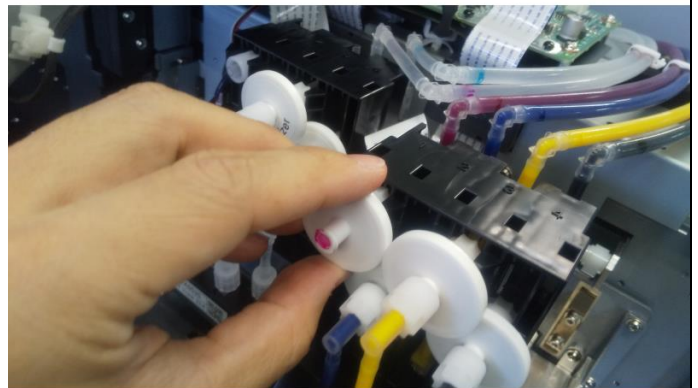
Step 26 / 46

Detail1: Reference video



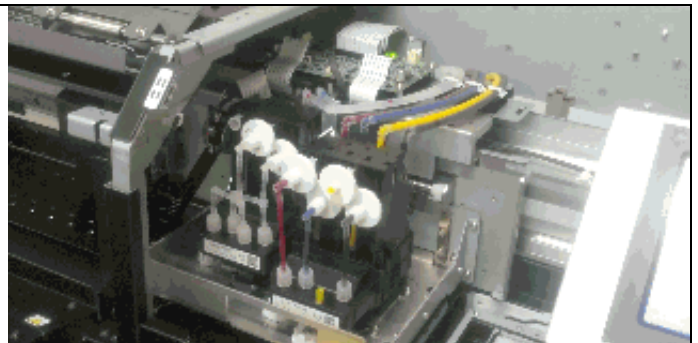
Step 27 / 46

Replace the LC filter with a new one.



Step 28 / 46

Detail1: Reference video



Step 29 / 46

If air remains in the ink path, print quality defects will occur. Be sure to use



a syringe to suck ink up to the LC filter.



Step 30 / 46

Use one syringe for each color, and be careful to dispose of the waste liquid, as the OP and ink will coagulate if they mix.



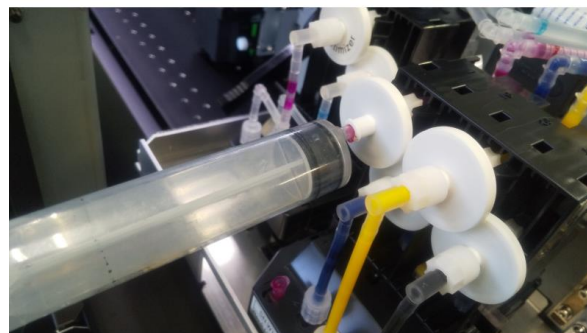
Step 31 / 46

Use the syringe to suck ink.



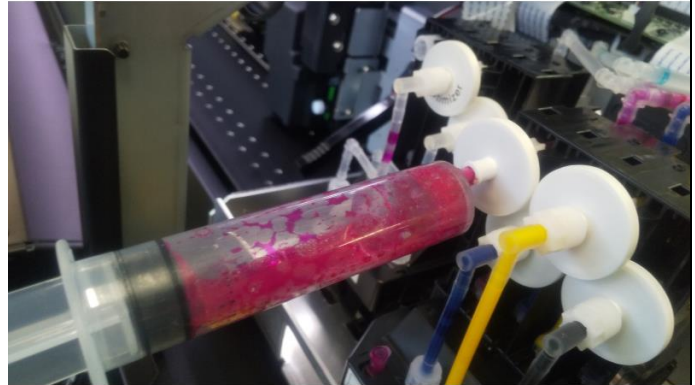
Step 32 / 46

Detail1: Press the syringe against the LC filter.



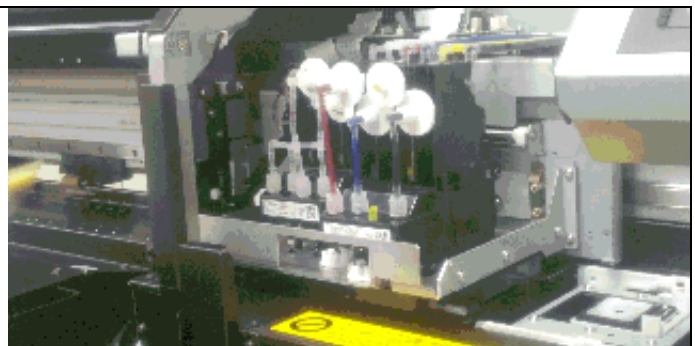
Step 33 / 46

Detail2: If ink cannot be sucked at one time, suck ink several times.



Step 34 / 46

Detail3: Reference video



Step 35 / 46

Attach the tubes in the order of the print head side and LC filter side to avoid twisting the tubes.



Step 36 / 46

Detail1: With the tip of the tube inserted into the LC filter, attach the joint on the



print head side.



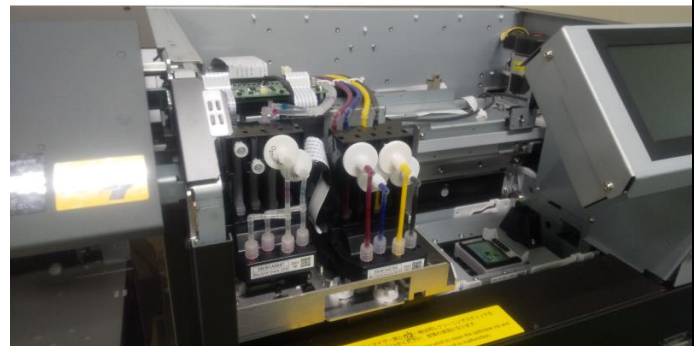
Step 37 / 46

Detail2: Make sure that the tube is not twisted.



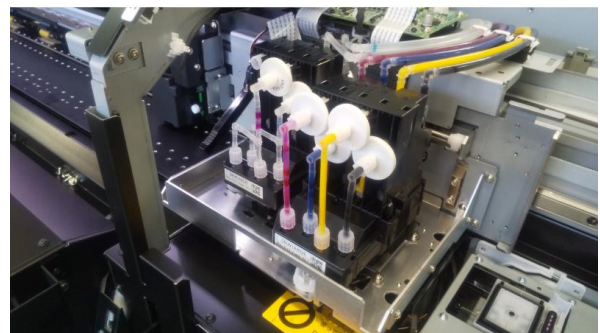
Step 38 / 46

Detail3 Attach the joints on the LC filter side.



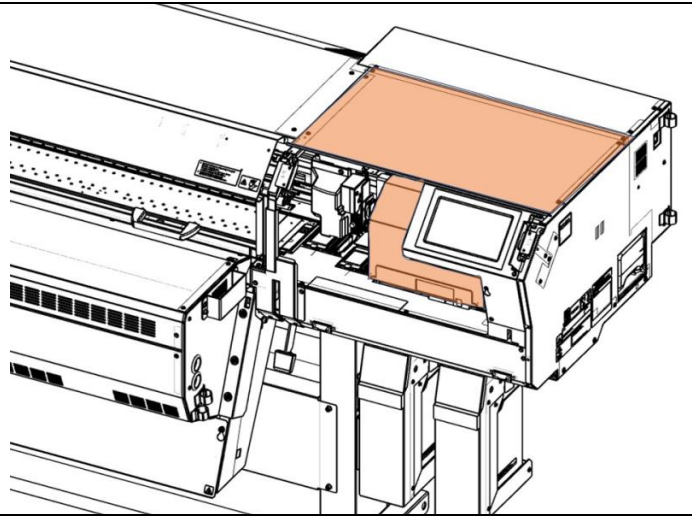
Step 39 / 46

Detail4: Check that the tube is not twisted.



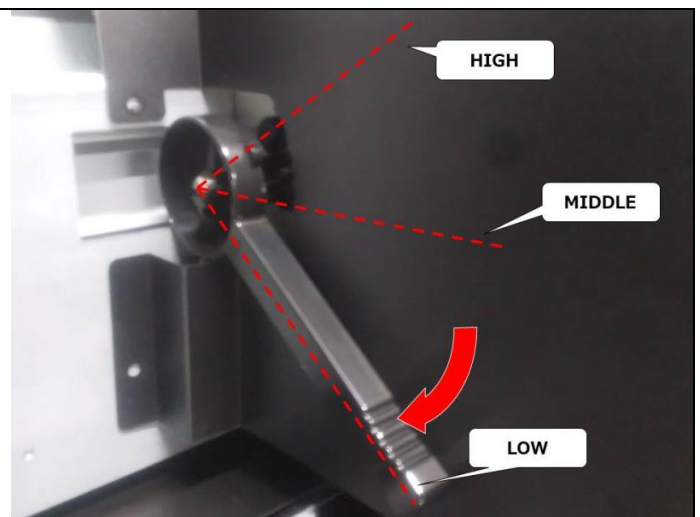
Step 40 / 46

Put back the covers that were removed.



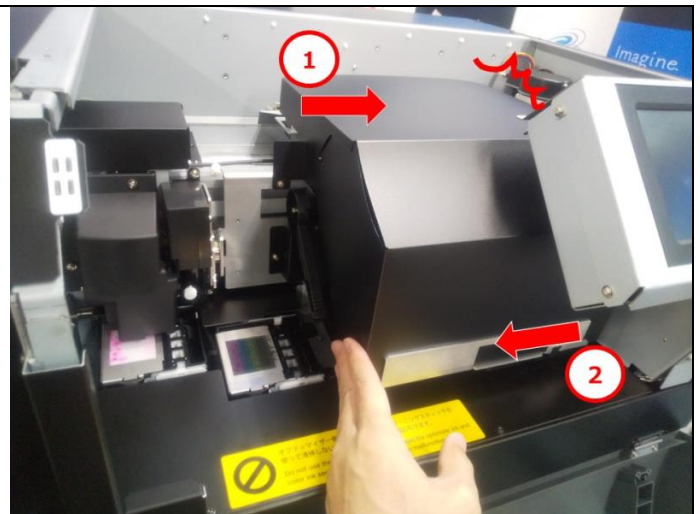
Step 41 / 46

Set the print head height to [LOW] for ink filling.



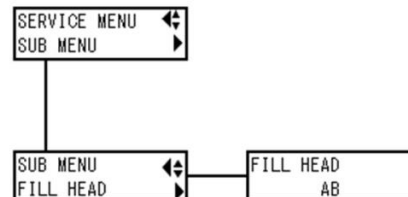
Step 42 / 46

Return the carriage to the home position and lock it.



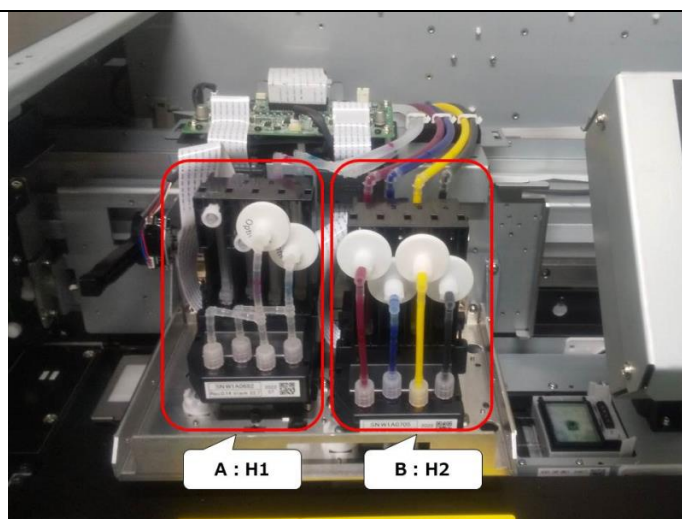
Step 43 / 46

Select [SERVICE MENU] > [SUB MENU] > [FILL HEAD] > [A/B] and fill the print head of the replaced LC filter with ink.



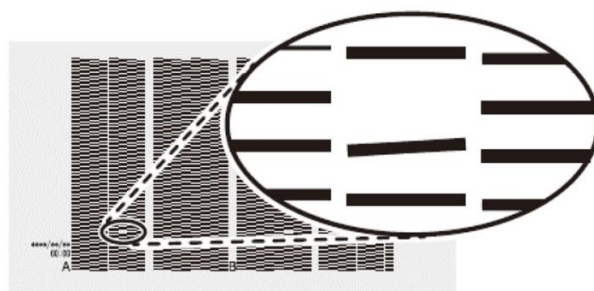
Step 44 / 46

Detail1: Print head arrangement



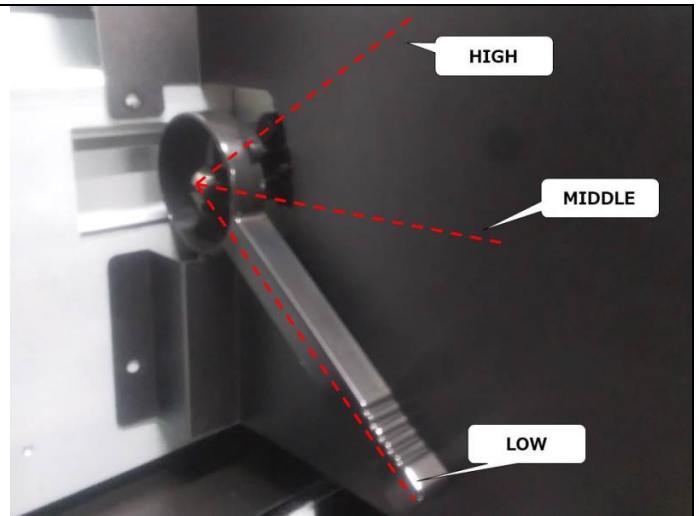
Step 45 / 46

Load the media and check for any abnormalities in ink ejection by test printing.



Step 46 / 46

If the print head height has been changed, return to the original height.



AP-640 Damper replacement

AP-640 Damper replacement Information

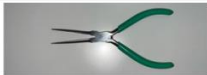
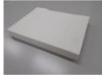
Step 1 / 6

Use one syringe per color. Do not use the same syringe once used for different color.

Step 2 / 6

Necessary Tools

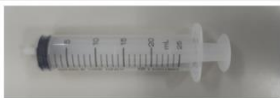
一般ツール/General Tool

プラスドライバー No.2 No.2 Phillips screwdriver	
ベンチ Pliers	
手袋 (滑り止め用) Gloves (anti-slip)	
ウェス Waste cloth	

Step 3 / 6

Special Tools

特殊治具/Special Tools

シリンジ Syringe	
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Step 4 / 6

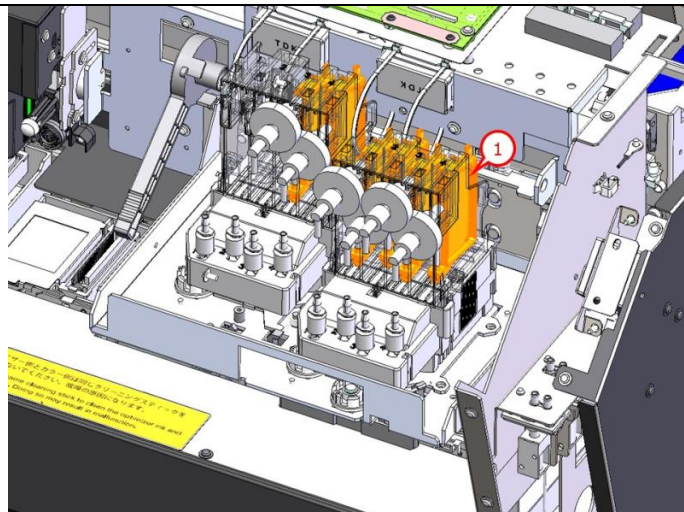
Typical Work Time

作業時間/Typical work time

作業内容/Contents of work	時間/Time
ダンパー油 Damper replacement	25 min.

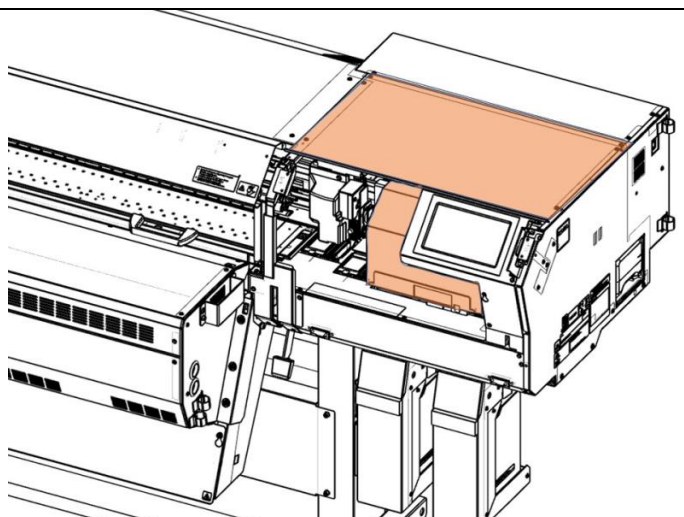
Step 5 / 6

1. Damper



Step 6 / 6

Covers that need to be removed

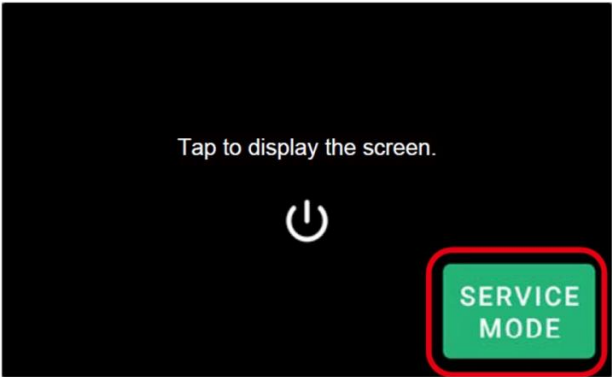


AP-640 Damper replacement

AP-640 Damper replacement Procedure

Step 1 / 97

Connect Peck2 to the machine and enter Service Mode.

The image shows a black screen with the text "Tap to display the screen." at the top. Below the text is a white power button icon. In the bottom right corner, there is a green rectangular button with the text "SERVICE MODE" in white, which is highlighted with a red rectangular border.

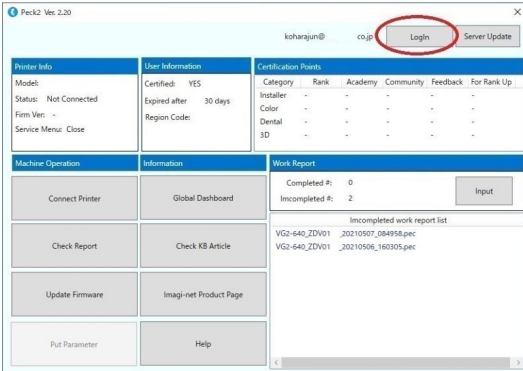
Step 2 / 97

Detail1: Start Peck2.

The image shows the Peck2 logo, which is a blue circle containing a white woodpecker. To the right of the logo, the text "Peck2" is displayed in a large, bold, blue font. Below "Peck2", the text "Ver. X.XX" is displayed in a smaller, blue font. At the bottom right, the text "Imagine. Roland" is displayed in a small, blue font.

Step 3 / 97

Detail2: Click the [Login] button.

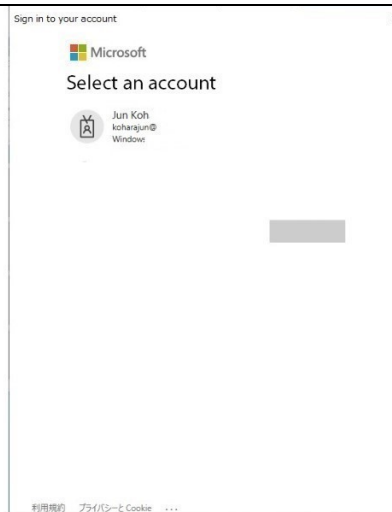
The image shows the Peck2 Web 2.20 interface. At the top right, there is a "Login" button highlighted with a red circle. Below the login button, there is a table with the following data:

Category	Rank	Academy	Community	Feedback	For Rank Up
Installer	-	-	-	-	-
Color	-	-	-	-	-
Dental	-	-	-	-	-
3D	-	-	-	-	-

Machine Operation	Information	Work Report
Connect Printer	Global Dashboard	Completed #: 0 Input
Check Report	Check KB Article	Incompleted #: 2
Update Firmware	Imagi-net Product Page	Incompleted work report list
Put Parameter	Help	VG2-640_ZDV01_20210907_084958.pec VG2-640_ZDV01_20210906_160305.pec

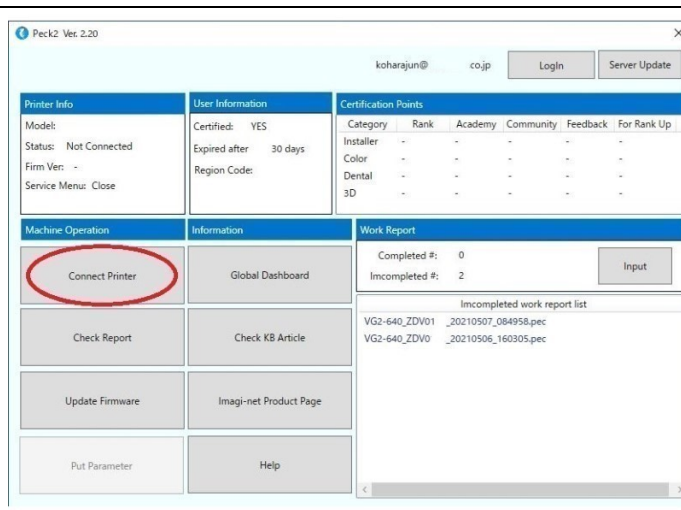
Step 4 / 97

Detail3: Login with your Imagi-net ID.



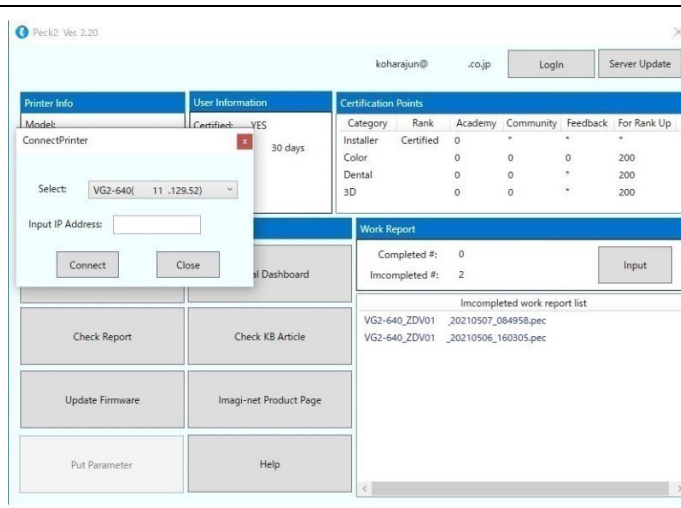
Step 5 / 97

Detail4: Click the [Connect Printer] button.



Step 6 / 97

Detail5: Enter the IP address of the printer you would like to connect to.



Step 7 / 97

Detail6: When the printer is connected, the printer information will be displayed in [Printer Info].

Peck2 Ver. 2.20

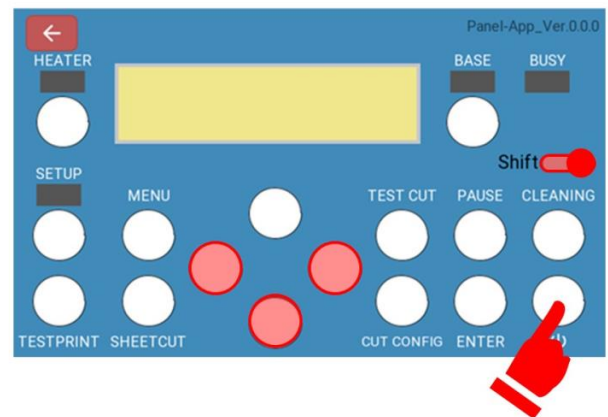
koharajun@ .co.jp Login Server Update

Printer Info		User Information		Certification Points				
Model:	VG2-640_ZDV01	Certified:	YES	Category	Rank	Academy	Community	Feedback
Status:	UnSetup	Expired after:	30 days	Installer	Certified	0	*	*
Firm Ver:	2.00			Color	0	0	0	200
Service Menu:	Open			Dental	0	0	*	200
				3D	0	0	*	200

Machine-Operation		Information		Work Report	
Connect Printer	Global Dashboard	Completed #:	0	Input	
Check Report	Check KB Article	Incompleted #:	2		
Update Firmware	Imagi-net Product Page	Incompleted work report list			
Put Parameter	Help	VG2-640_ZDV01 _20210507_084958.pec			
		VG2-640_ZDV01 _20210506_160305.pec			

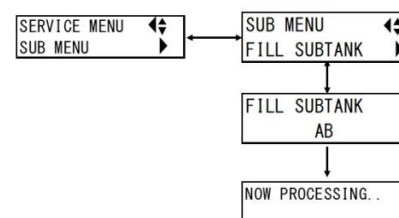
Step 8 / 97

Detail7: Press [Shift]> [◀]+[▶]+[▶]+[Sub Power] on the panel to enter the service mode. By turning on the [Shift] button, multiple buttons can be pressed at the same time.



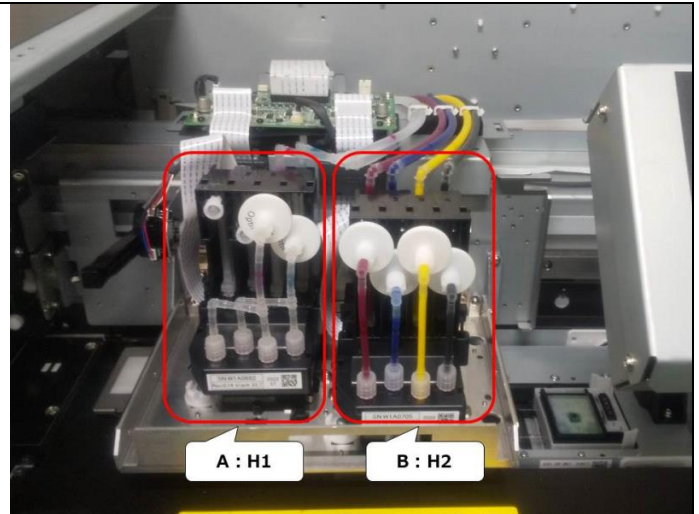
Step 9 / 97

Select [SERVICE MENU] > [SUB MENU] > [FILL SUBTANK] > [A/B] and fill ink into the sub tank of the print head with the LC filter to be replaced.



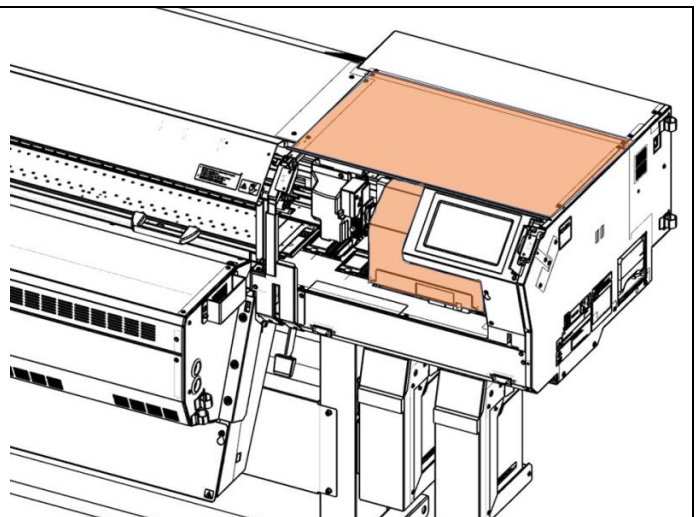
Step 10 / 97

Detail1: Print head arrangement



Step 11 / 97

Remove the covers.



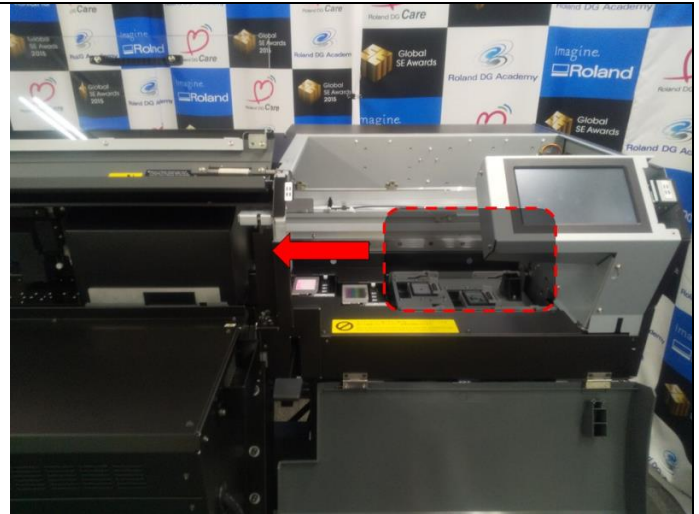
Step 12 / 97

Detail1: Remove the cover on the top of the print head carriage.



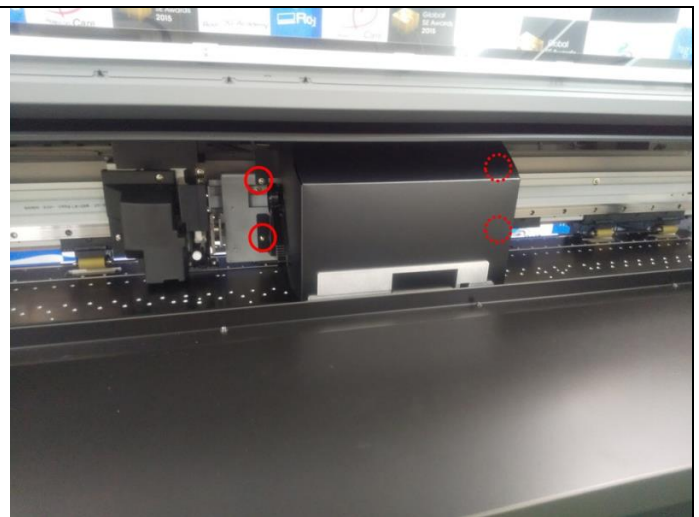
Step 13 / 97

Detail2: Unlock the carriage and move it onto the platen so as not to lose the screws.



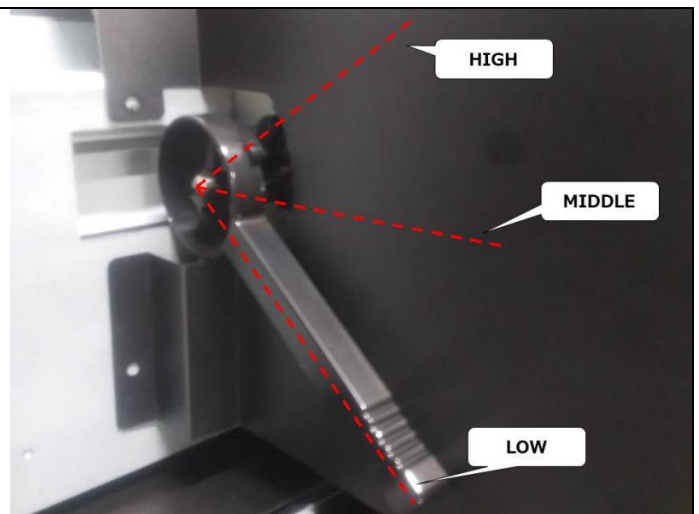
Step 14 / 97

Detail3: Remove the four screws.



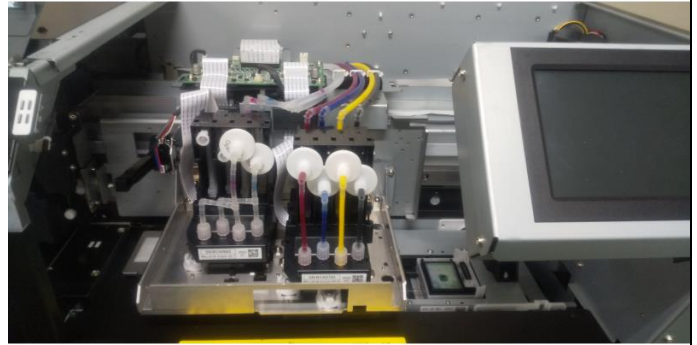
Step 15 / 97

Detail4: Set the print head height to [Middle] or [HIGH] so that the cover is removed easily.



Step 16 / 97

Detail5: Move the print head carriage and remove the cover.



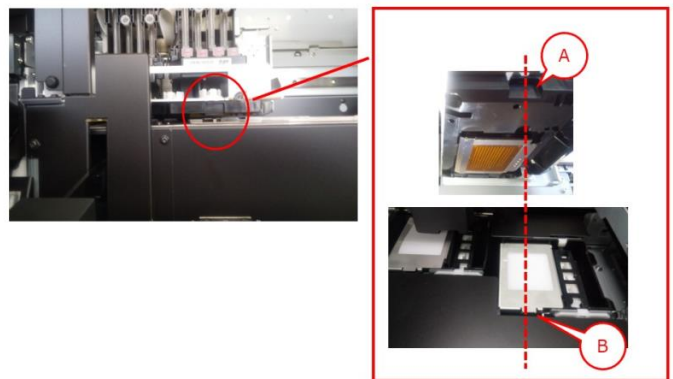
Step 17 / 97

Ink in the print head may drip out.
Move the carriage to the position where the print head and the flushing pad match.



Step 18 / 97

Detail1: Move the carriage to the position where the positions of A and B match.



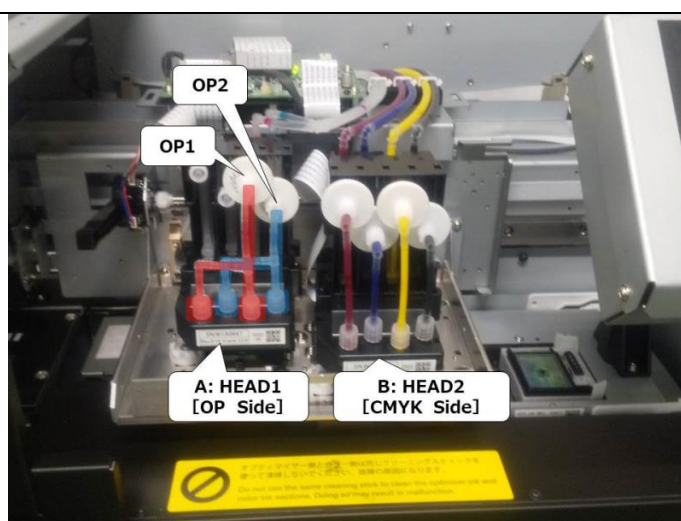
Step 19 / 97

Detail2: Note that if you work without aligning the carriage, ink may drip from the print head in unexpected places as shown in the figure.



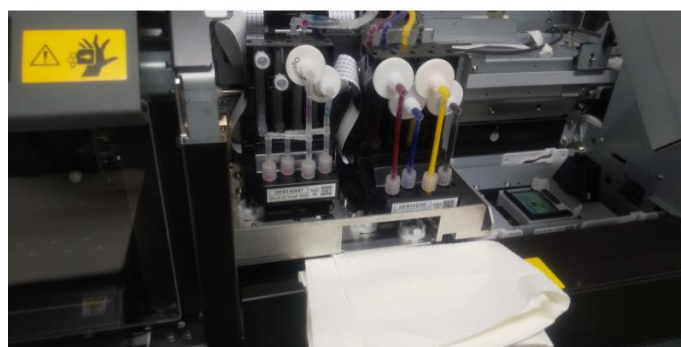
Step 20 / 97

When replacing the OP1 damper, remove the OP2 tube together since it interferes.



Step 21 / 97

Set a dry cloth near the tube to be removed.



Step 22 / 97

Remove the tube fixing screw attached to the print head and place a dry cloth under the tube. By unscrewing the screw, ink in the tube returns to the damper. The OP side can reduce the amount of ink remaining in the tube by removing the two side fixing screws at the same time.



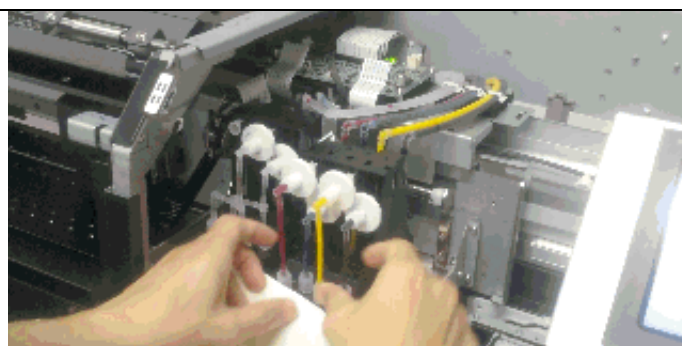
Step 23 / 97

Detail1: [H1 OP side] Loosen the two screws for the two way tube so that they come off at the same time. If you loosen the screws on one side at a time, ink will easily remain in the tube.



Step 24 / 97

Detail2: Reference video



Step 25 / 97

Remove the tube fixing screw attached to the LC filter, and remove the tube

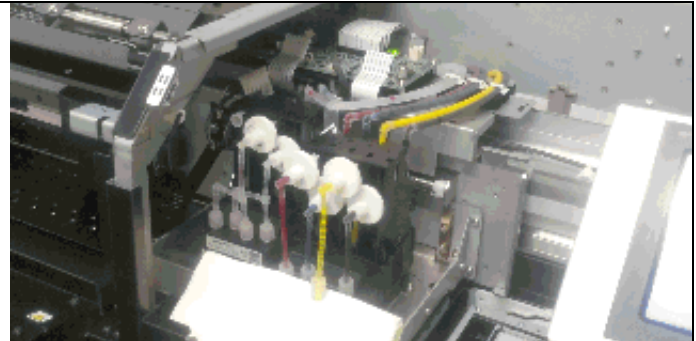


from the LC filter.



Step 26 / 97

Detail1: Reference video



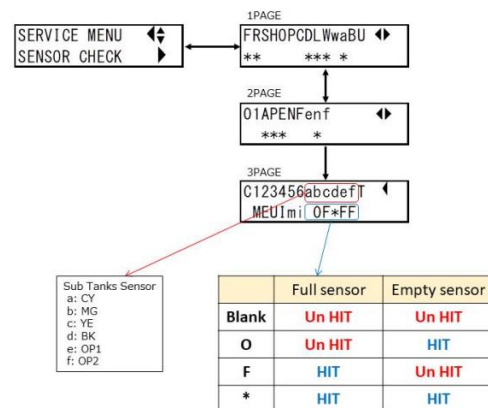
Step 27 / 97

Pull out the ink pouch tray of the damper to be replaced.



Step 28 / 97

Select [SERVICE MENU] > [SENSOR CHECK] to display page 3.



Step 29 / 97

Use one syringe for each color, and be careful to dispose of the waste liquid, as the OP and ink will coagulate when mixed.



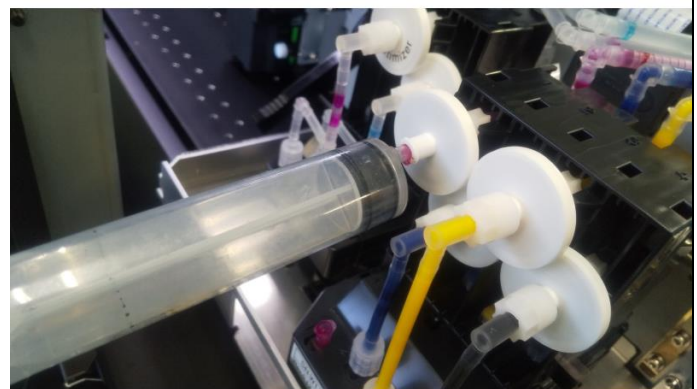
Step 30 / 97

Use the syringe to suck ink in the sub-tank. Check the panel and confirm that the display of the sub-tank being sucked changes to [O] or [*].



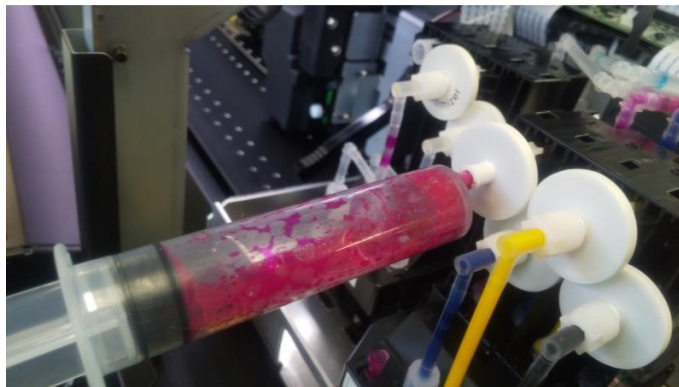
Step 31 / 97

Detail1: Press the syringe against the LC filter.



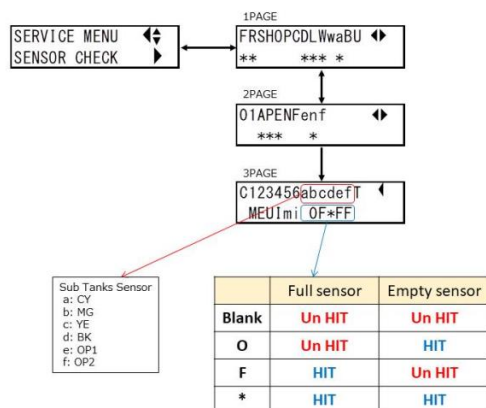
Step 32 / 97

Detail2: If ink cannot be sucked at one time, suck ink several times.



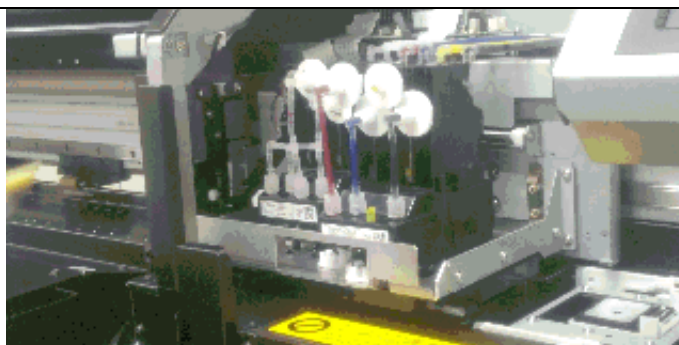
Step 33 / 97

Detail3: Confirm that the sub-tank is [O] or [*] on the panel display.



Step 34 / 97

Detail4: Reference video



Step 35 / 97

Do not dispose of the removed LC filter as it will be used in subsequent process.



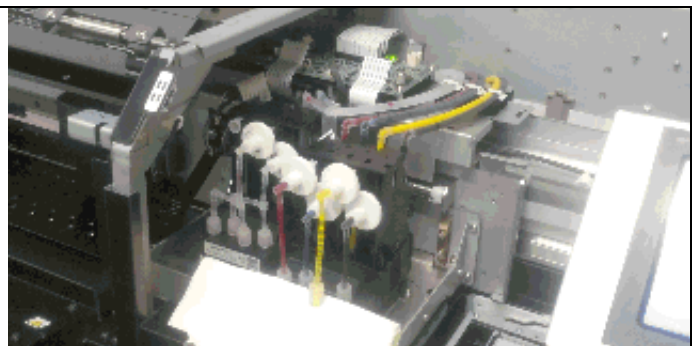
Step 36 / 97

Remove the tube fixing screw attached to the LC filter and remove the tube from the LC filter.



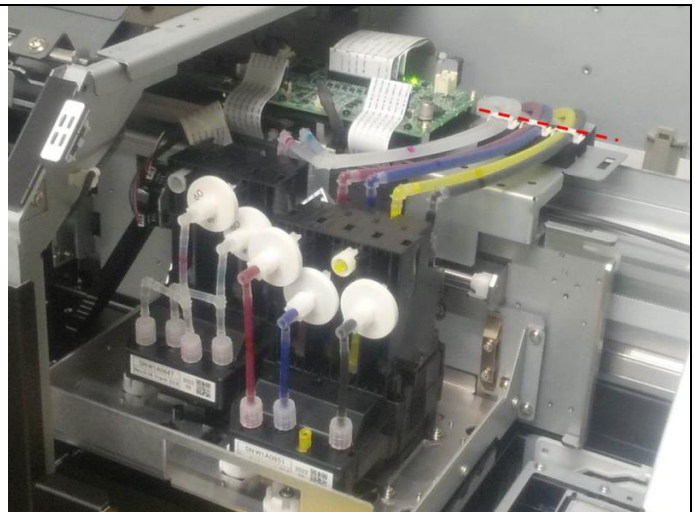
Step 37 / 97

Detail1: Reference Video



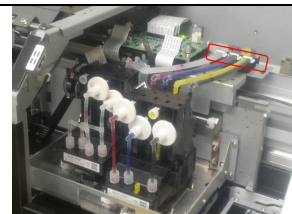
Step 38 / 97

Wait for the ink in the damper to be returning to the sub-tank. If the ink in the tube exceeds the saddle position shown in the figure, there is no problem.



Step 39 / 97

Open the saddle holding the tube of the damper to be replaced.



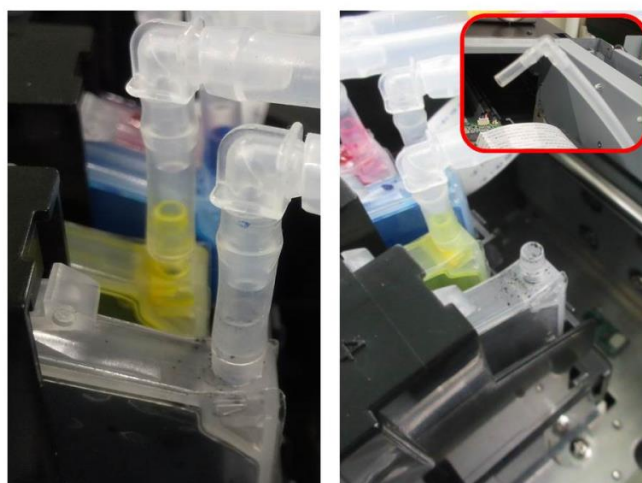
Step 40 / 97

The removed tube cannot be reused. Be sure to replace it with a new tube.



Step 41 / 97

Remove the tube from the top of the damper.



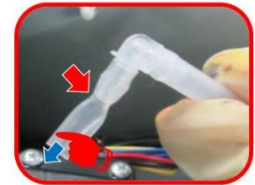
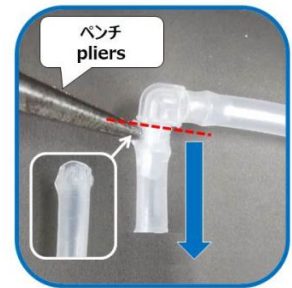
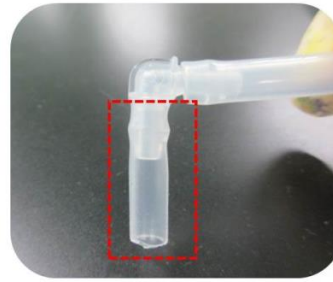
Step 42 / 97

Detail1: Hold the tube near A and hold the damper near B, and then pull the tube straight up to remove it from the damper.



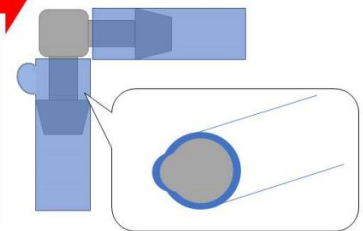
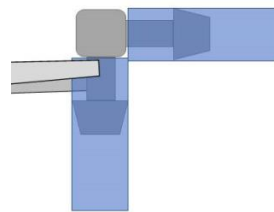
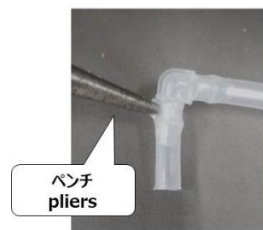
Step 43 / 97

Remove the shorter tube from the L-joint by deforming it with pliers. Note that if you pull the tube without doing anything, it will stretch without coming off.



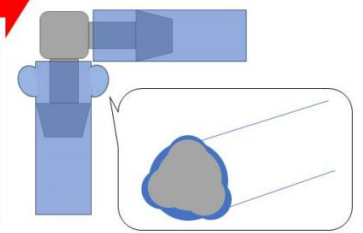
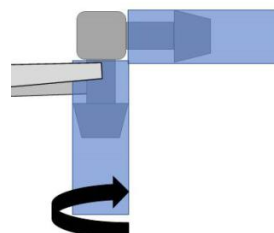
Step 44 / 97

Detail1: Using the tip of the pliers, strongly pinch the root of the tube assembled to the L-joint to deform the tube. At this time, the tip of the pliers should be placed on the end of the L-joint to deform the inside of the tube.



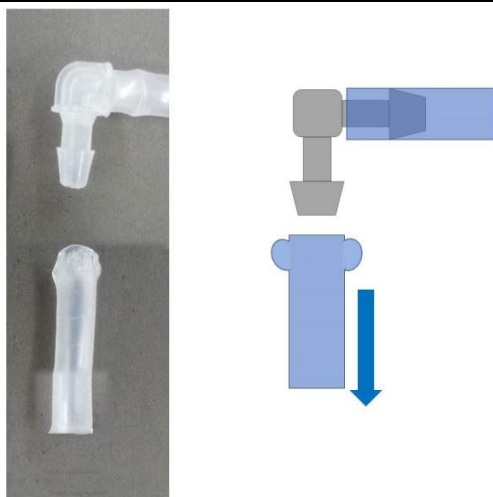
Step 45 / 97

Detail2: Deform the tube in about three places in the same way.



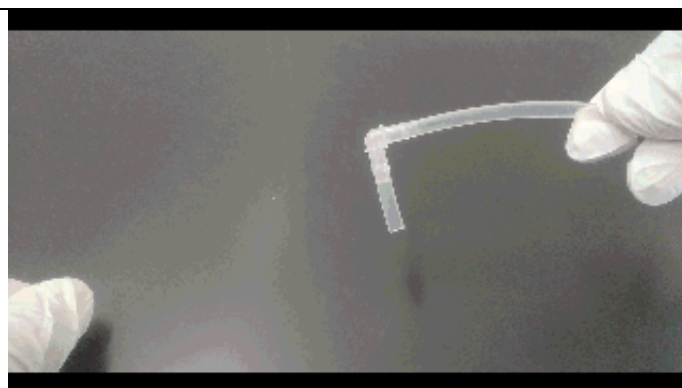
Step 46 / 97

Detail3: Remove the tube by pulling it.



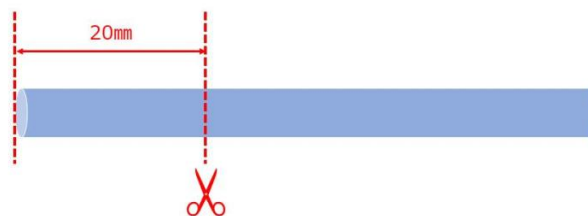
Step 47 / 97

Detail4: Reference video



Step 48 / 97

Cut a 20 mm piece of the tube for replacement.



Step 49 / 97

Do not apply lubricant such as ethanol



to the tube or L-joint as it may affect the gas barrier of the tube. Use gloves with good grip to prevent slipping when inserting the tube into the joint.



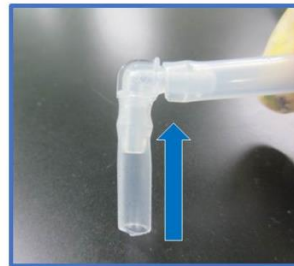
Step 50 / 97

If OP and CMYK inks are mixed, they will harden; change gloves or dry cloth if working continuously on the OP and CMYK.



Step 51 / 97

Assemble the new tube to the L-joint. Wearing gloves, hold the tube near the opening and insert it all the way into the L-joint without bending it.



Not Good



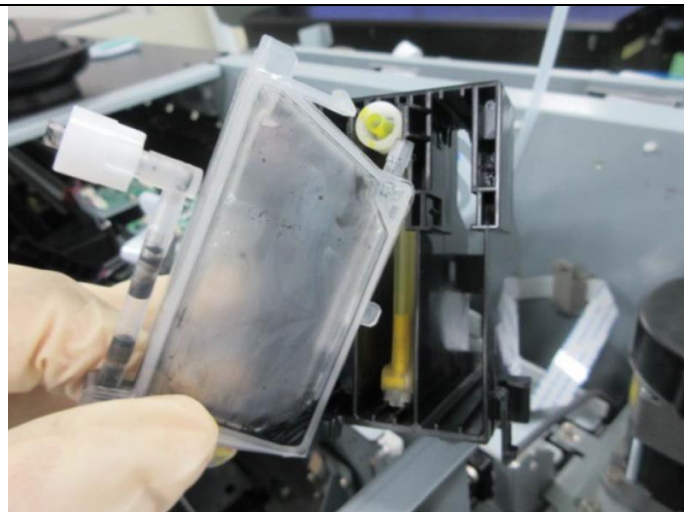
Step 52 / 97

Detail1: Reference video



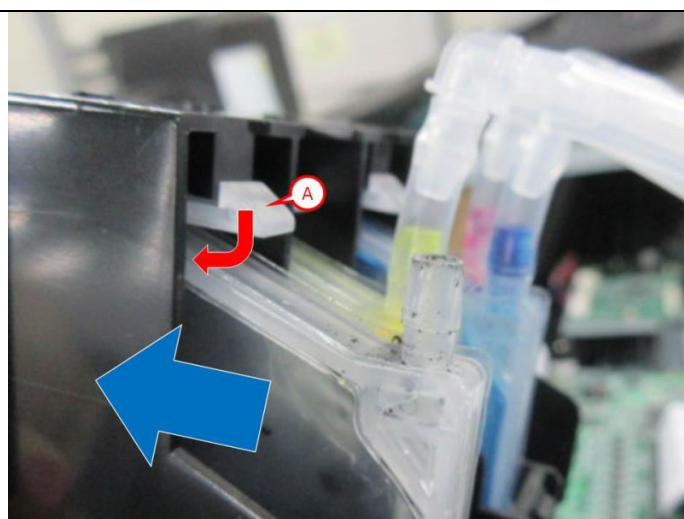
Step 53 / 97

Remove the damper.



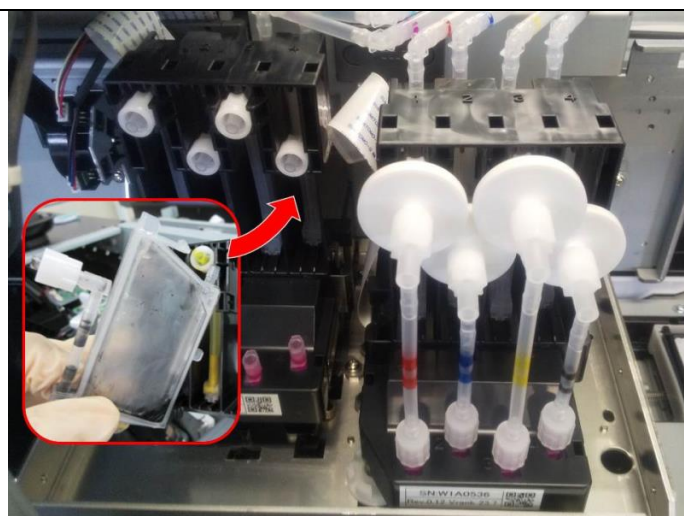
Step 54 / 97

Detail1: Remove the hook A and slide the damper toward the front. If the LC filter interferes with the damper, remove the damper while avoiding the LC filter by hand.



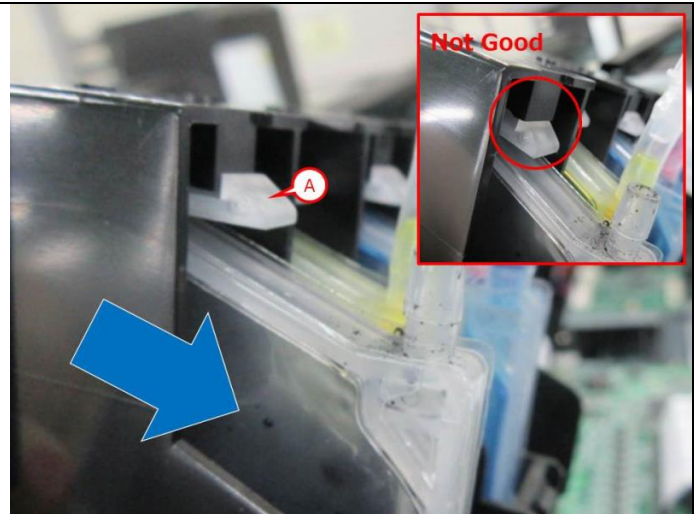
Step 55 / 97

Install the new damper.



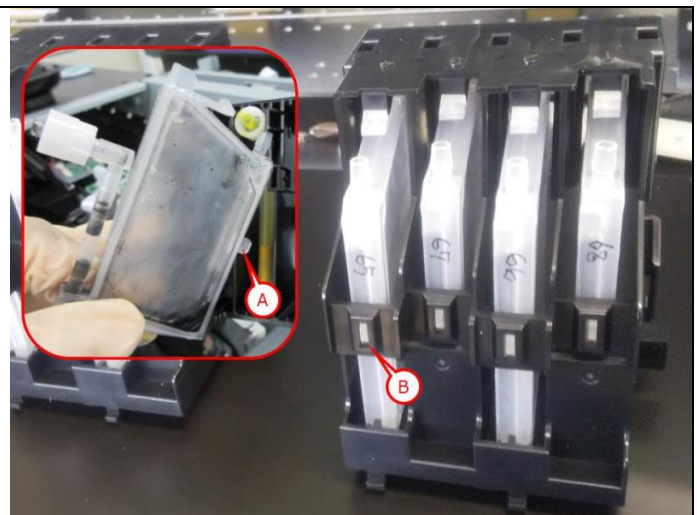
Step 56 / 97

Detail1: Slide the damper to lock the hook A.



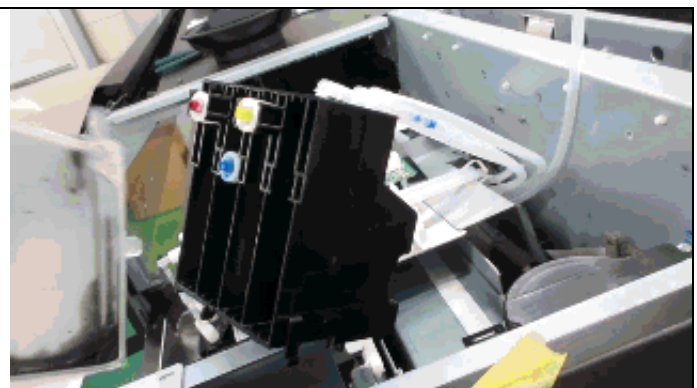
Step 57 / 97

Detail2: Make sure the protrusion of A is in the hole of B.



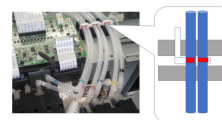
Step 58 / 97

Detail3: Reference video



Step 59 / 97

Align the markings on the tube with the



saddle to secure it in place.



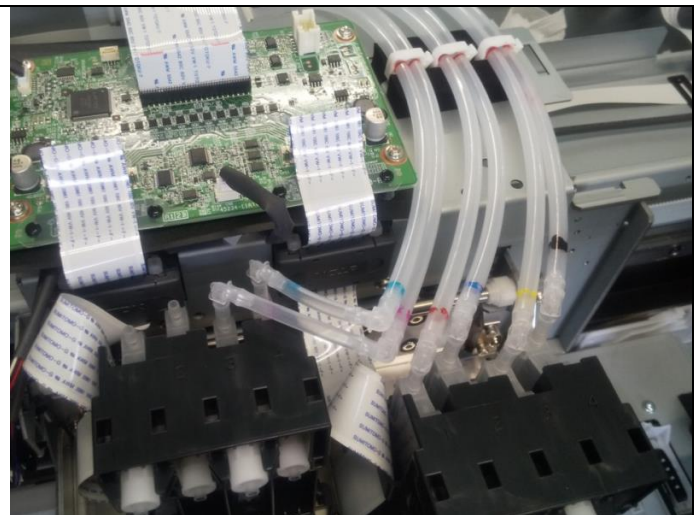
Step 60 / 97

Insert the tube deeply into the nipple section at the top of the damper.



Step 61 / 97

Detail1: Insert the tube at the position where the tube naturally assembles from the fixed saddle.



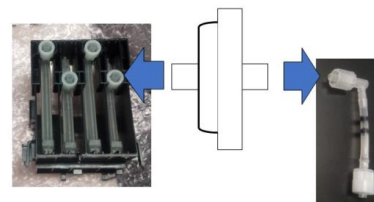
Step 62 / 97

The types of LC filters are different for OP and CMYK. Also, be careful not to make a mistake when installing the LC filter, as it has specific direction to install to.

CMYK side : 10µm

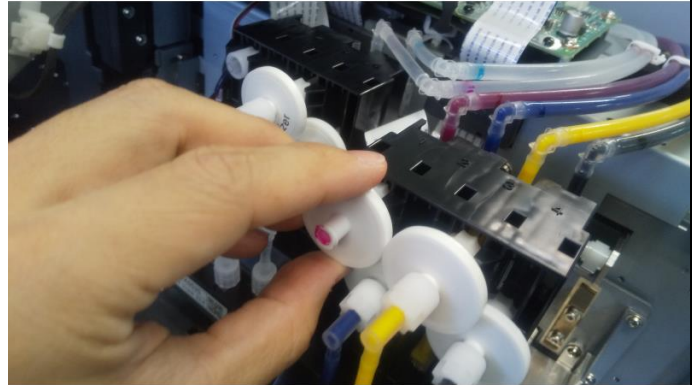


OP side : 5µm



Step 63 / 97

Assemble the LC filter that was removed earlier into the same ink path.



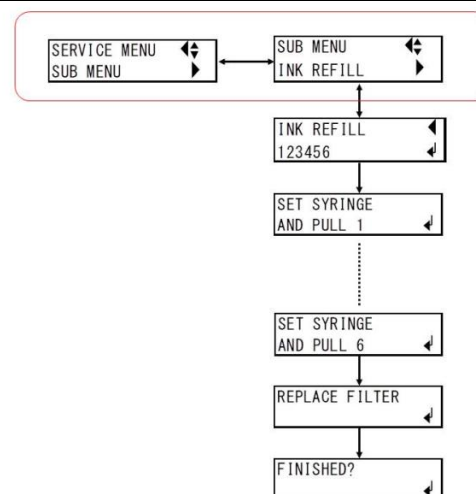
Step 64 / 97

Replace the removed ink pouch tray.



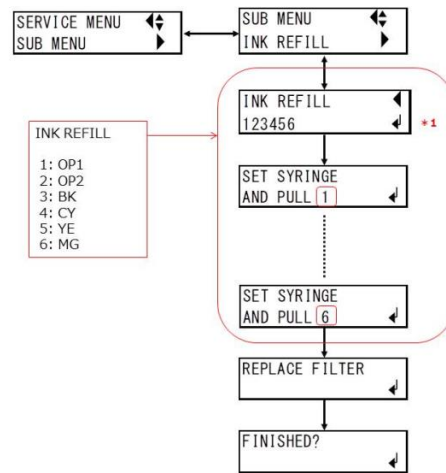
Step 65 / 97

Select [SERVICE MENU] > [SUB MENU] > [INK REFILL]. Fill the ink using the syringe in this menu.



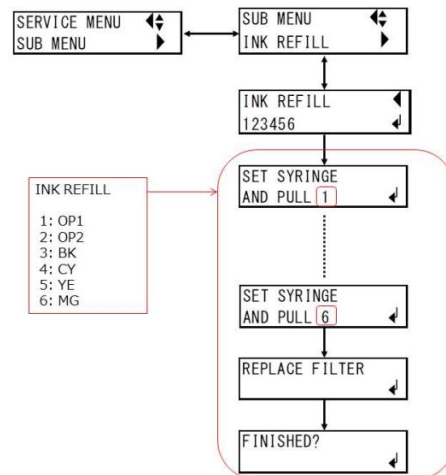
Step 66 / 97

Press [ENTER] until the ink path number of the replaced damper is displayed. *1 If "DRAIN INK" is not executed, all paths will be displayed. Press [ENTER] until the path you want to fill is displayed.



Step 67 / 97

Detail1: The choke valve of the sub-tank of the path displayed by [SET SYRINGE/AND PULL*] will open regardless of the Empty/Full Sensor. If you missed the path, press [ENTER] until [FINISHED?] is displayed, then exit the menu and re-enter the menu.



Step 68 / 97

Use one syringe for each color, and be careful to dispose of the waste liquid, as the OP and ink will coagulate when mixed.



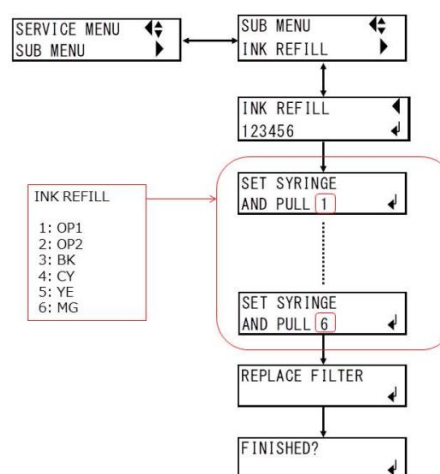
Step 69 / 97

Use the syringe to suck ink.



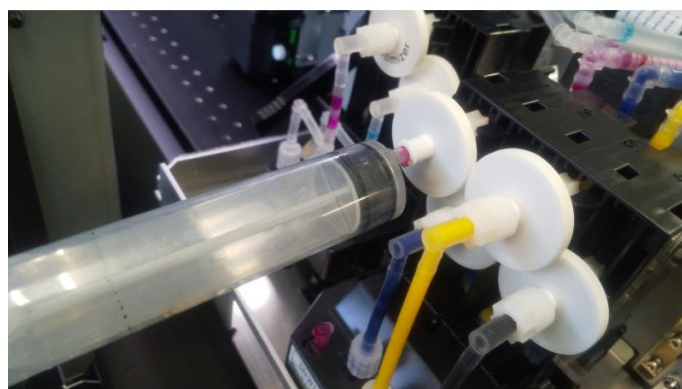
Step 70 / 97

Detail1: Check that the numeric part of the display [SET SYRINGE/AND PULL*] on the panel is the path you want to fill with ink.



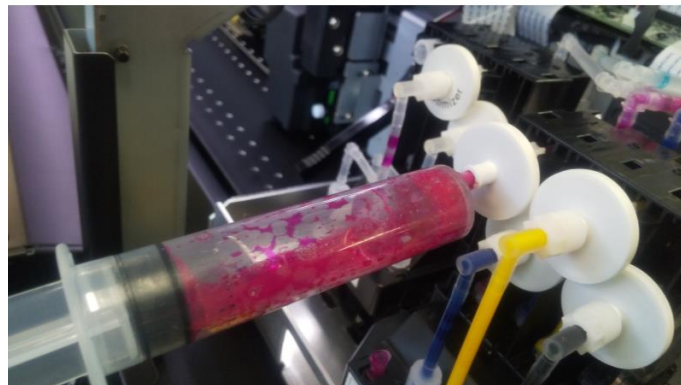
Step 71 / 97

Detail2: Press the syringe onto the LC filter.



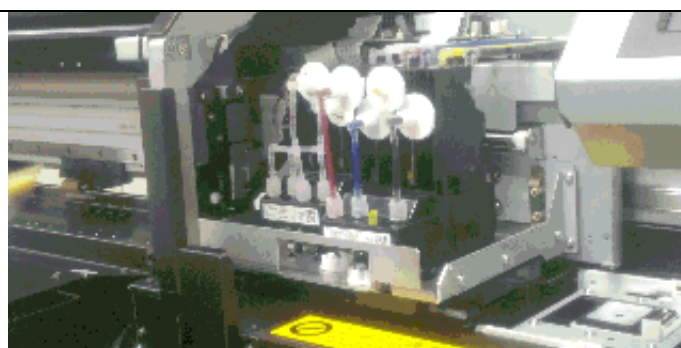
Step 72 / 97

Detail3: Suck ink about half of the syringe (about 10 ml); if ink cannot be sucked at one time, suck ink several times.



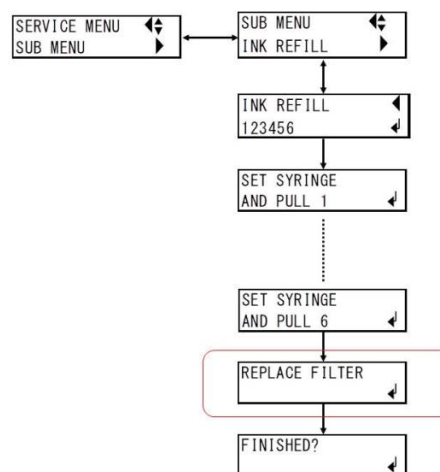
Step 73 / 97

Detail4: Reference video



Step 74 / 97

After all the ink paths in the target area have been filled, press [ENTER] on the panel to set the panel display to [REPLACE FILTER].



Step 75 / 97

Remove the old LC filter from the area where the damper was replaced.

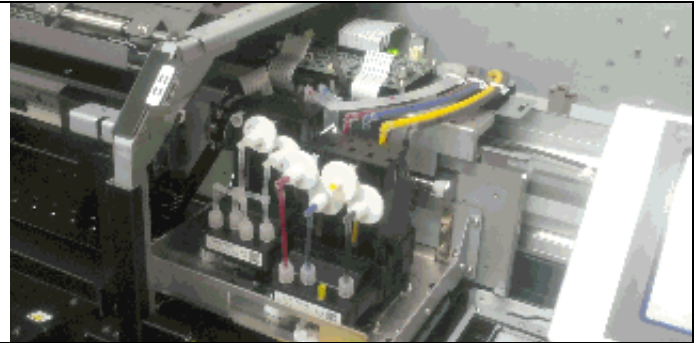


Replace it with a new LC filter.



Step 76 / 97

Detail1: Reference video



Step 77 / 97

If air remains in the ink path, print quality defects will occur. Be sure to use a syringe to suck ink to the LC filter.



Step 78 / 97

Use one syringe for each color, and be careful to dispose of the waste liquid, as the OP and ink will coagulate when mixed.



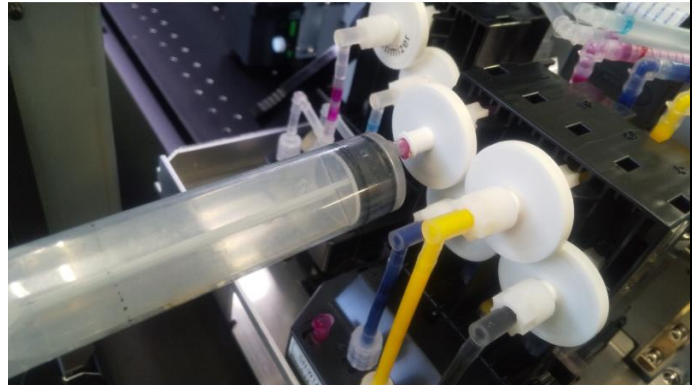
Step 79 / 97

Suck about 10ml of ink using the syringe.



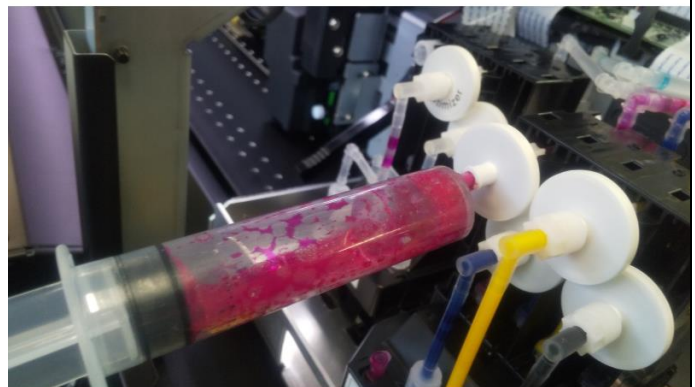
Step 80 / 97

Detail1: Press the syringe against the LC filter.



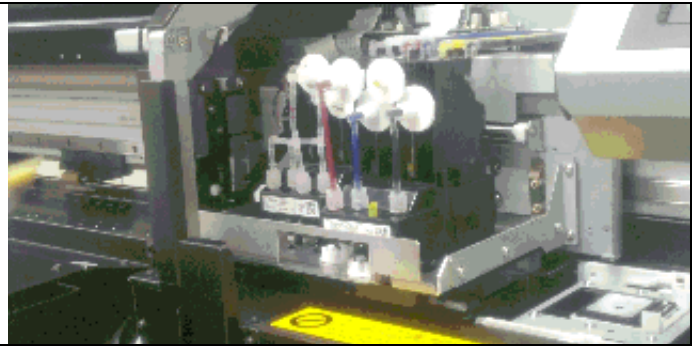
Step 81 / 97

Detail2: Suck ink about half (about 10 ml) from the syringe, or suck several times if the ink cannot be sucked at one time. Do not mix the sucked ink in the syringe with the OP side and the CMYK side, and put them into the drain tank.



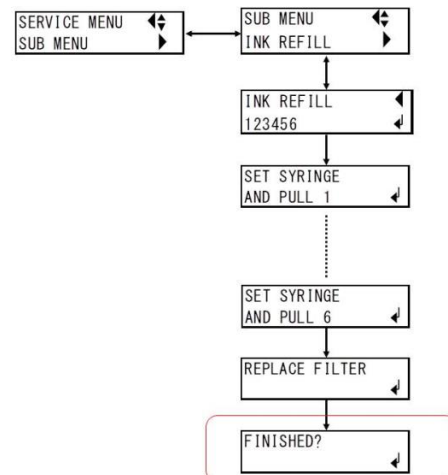
Step 82 / 97

Detail3: Reference video



Step 83 / 97

Confirm that all panels are set to [REPLACE FILTER] and press [Enter] to exit [INK REFILL].



Step 84 / 97

Attach the tube to the print head side, then the LC filter side, in that order to prevent the tube from twisting.

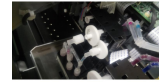


Step 85 / 97

Detail1: With the tip of the tube inserted into the LC filter, attach the joint on the



print head side.



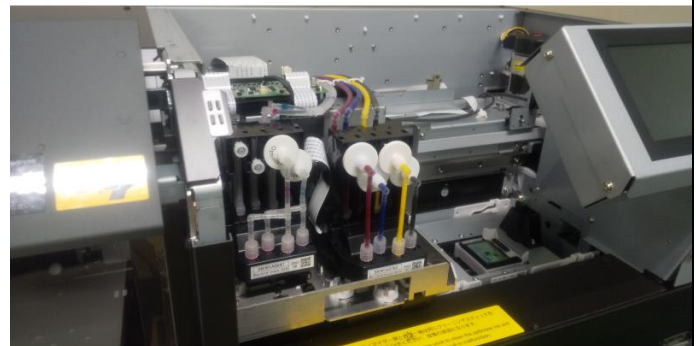
Step 86 / 97

Detail2: Make sure that the tube is not twisted.



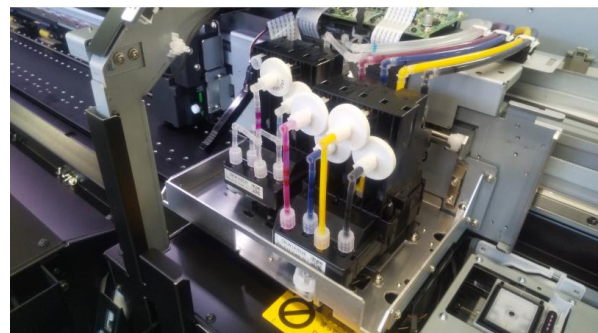
Step 87 / 97

Detail3: Attach the joints on the LC filter side.



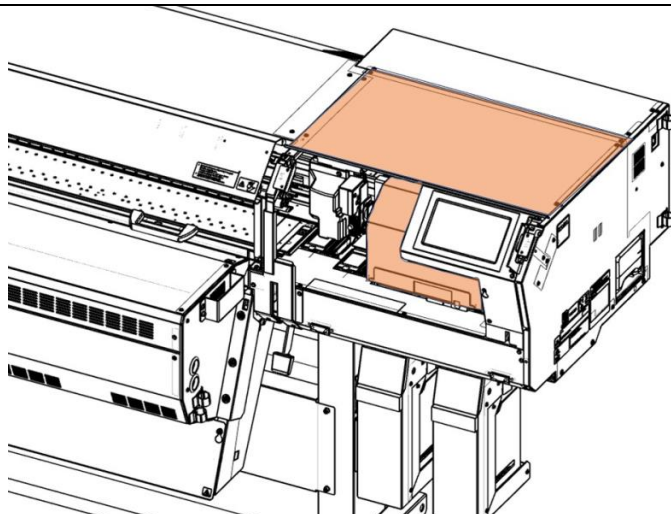
Step 88 / 97

Detail4: Check that the tube is not twisted.



Step 89 / 97

Put back the covers that were removed.



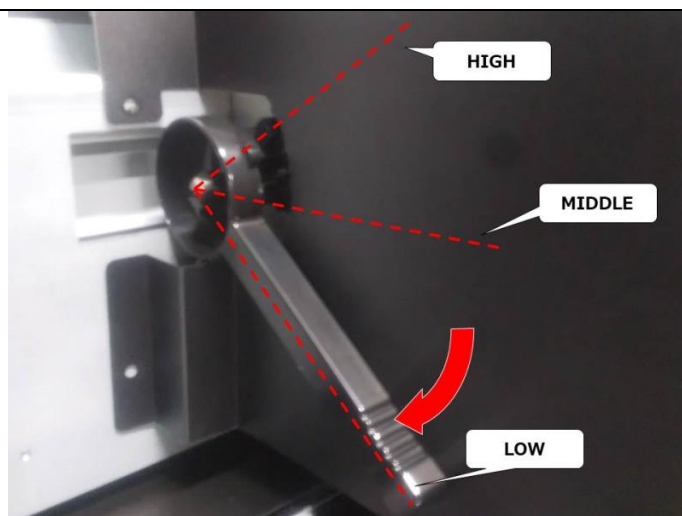
Step 90 / 97

Check that the drain tanks on the OP side and CMYK side are set properly.



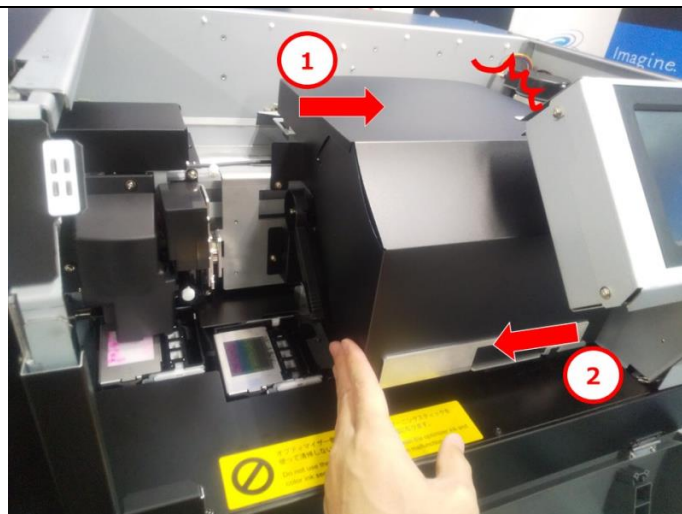
Step 91 / 97

Set the print head height to [LOW] for ink filling.



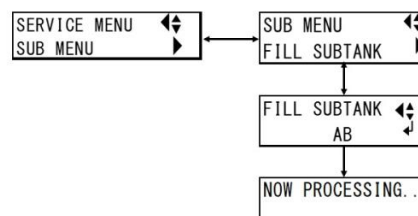
Step 92 / 97

Return the print head carriage to the origin position and lock it.



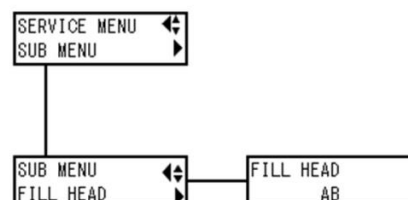
Step 93 / 97

Select [SERVICE MENU] > [SUB MENU] > [FILL SUBTANK] > [A/B] and fill the replaced sub tank with ink.



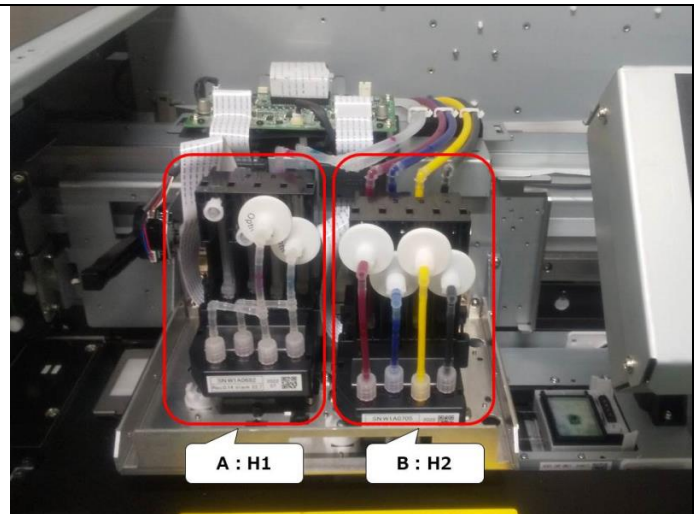
Step 94 / 97

Select [SERVICE MENU] > [SUB MENU] > [FILL HEAD] > [A/B] to fill the print head that the LC filter was replaced.



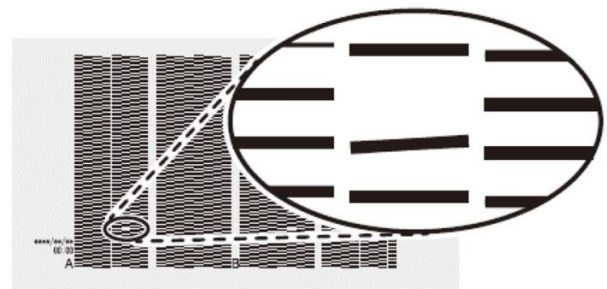
Step 95 / 97

Detail1: Print head arrangement



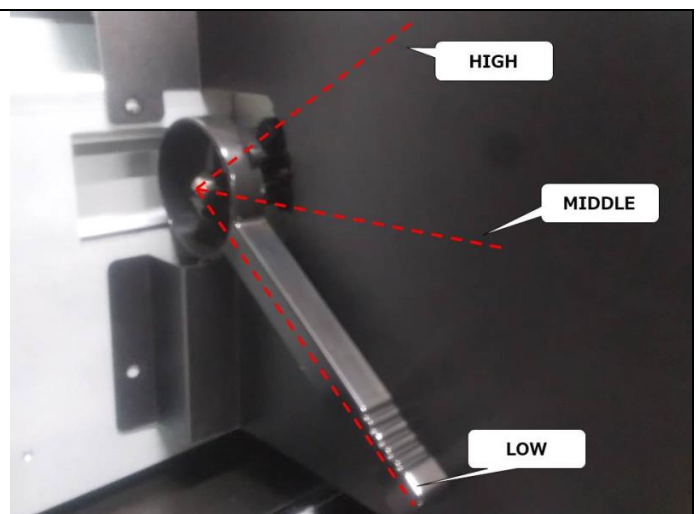
Step 96 / 97

Load the media and check for any abnormalities in ink ejection by test printing.



Step 97 / 97

If the print head height has been changed, return to the original height.



AP-640 Print Head Cap Replacement

AP-640 Print Head Cap Replacement

Information

Step 1 / 3

<Replacement Parts> Print Head Cap

<clear history> [HISTORY MENU]>[CAP TOP GROUP]>[1~2]

Step 2 / 3

Necessary Tools

一般ツール/General Tool

None

特殊治具/Special Tools

None

Step 3 / 3

Typical Work Time

作業時間/Typical work time

作業内容/Contents of work	時間/Time
プリントヘッドキャップの交換 Print Head Cap Replacement	5 min.

AP-640 Print Head Cap Replacement

AP-640 Print Head Cap Replacement Procedure

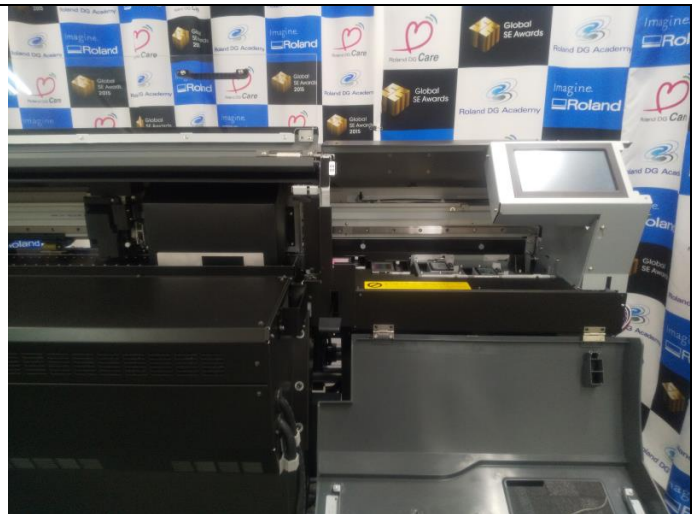
Step 1 / 24

Open the maintenance R.



Step 2 / 24

Unlock the print head carriage and move it onto the platen.



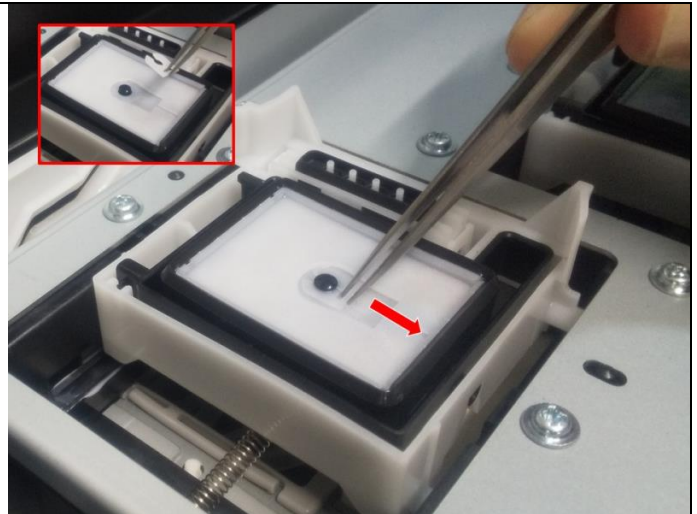
Step 3 / 24

Remove the stopper and remove the Print Head Cap.



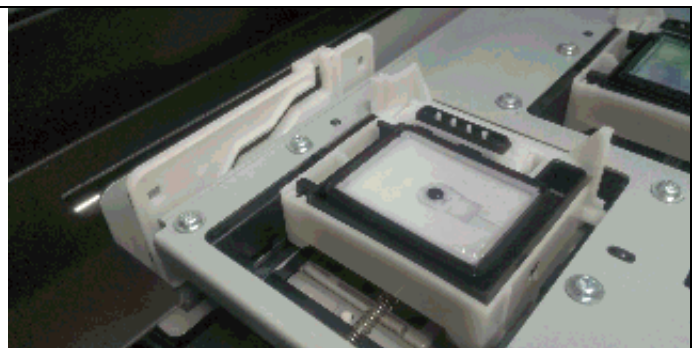
Step 4 / 24

Remove the stopper.



Step 5 / 24

Reference video



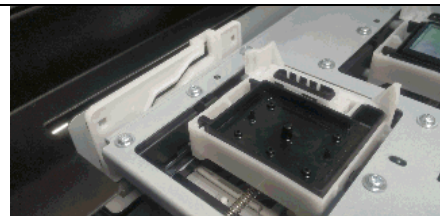
Step 6 / 24

Remove the Print Head Cap so as not to break the plastic pin.



Step 7 / 24

Reference video



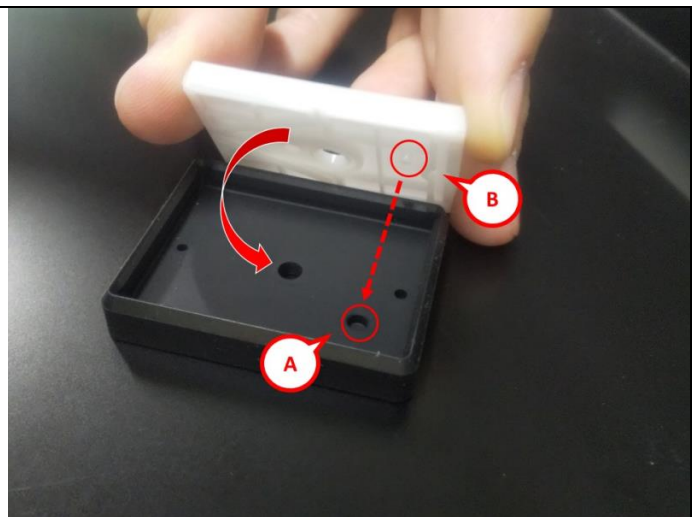
Step 8 / 24

Assemble the new Print Head Cap taking care of the direction of insertion.



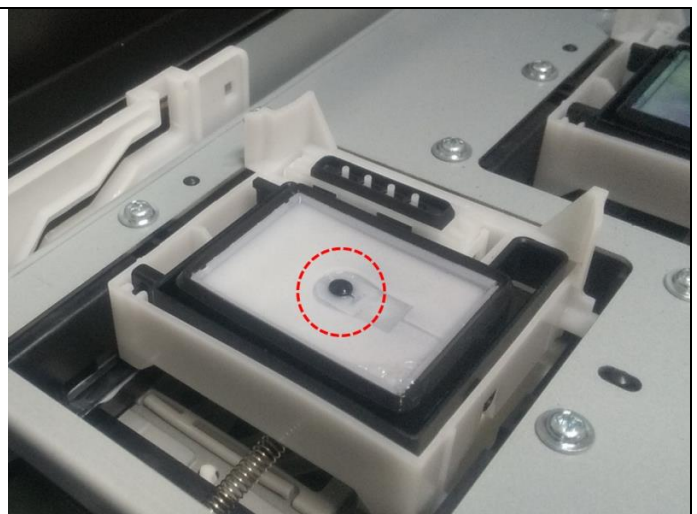
Step 9 / 24

Align the dent (A) in the rubber part with the pin (B) of the plastic part and insert it all the way in.



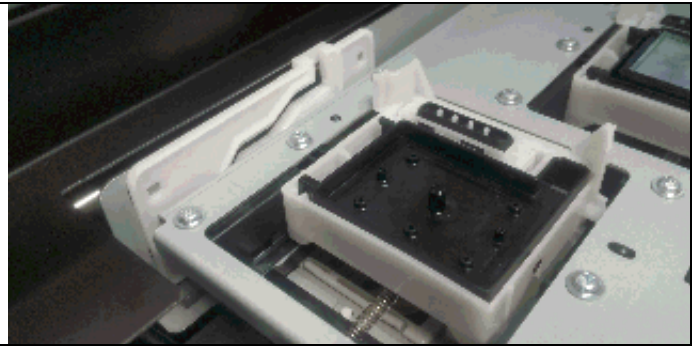
Step 10 / 24

Assemble the new Print Head Cap to the cap unit and attach the stopper.



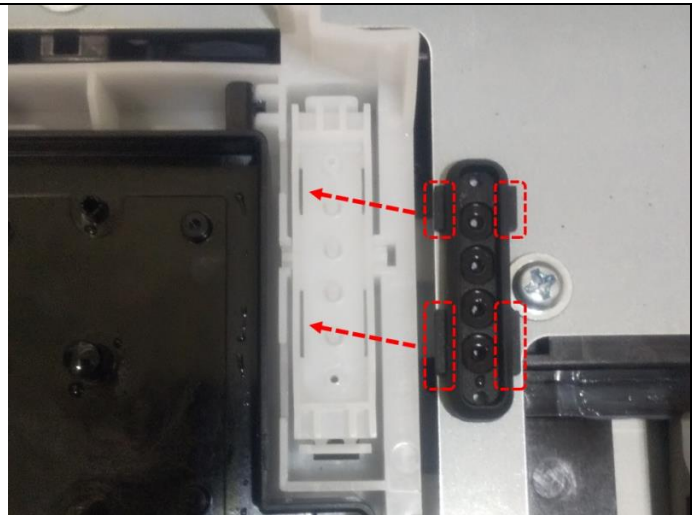
Step 11 / 24

Reference video



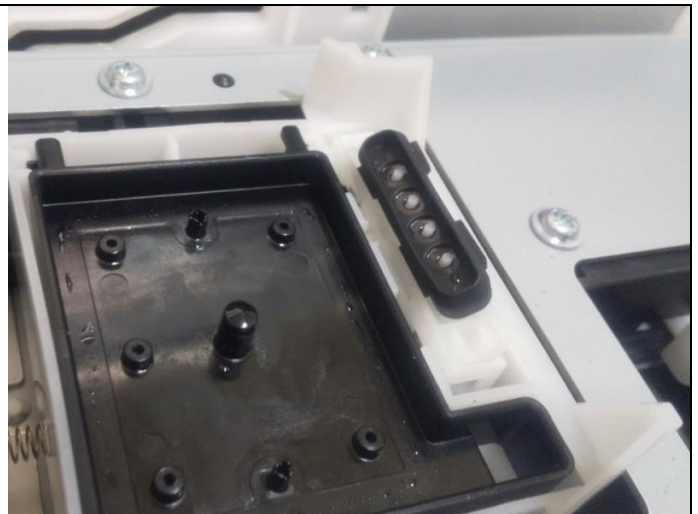
Step 12 / 24

Attach the Print Head Cap so as not to break the plastic pin. Be careful of the direction.



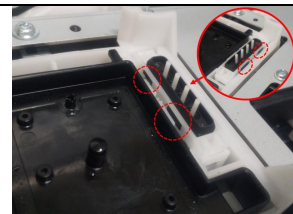
Step 13 / 24

Thread the Print Head Cap through the pins of the resin.



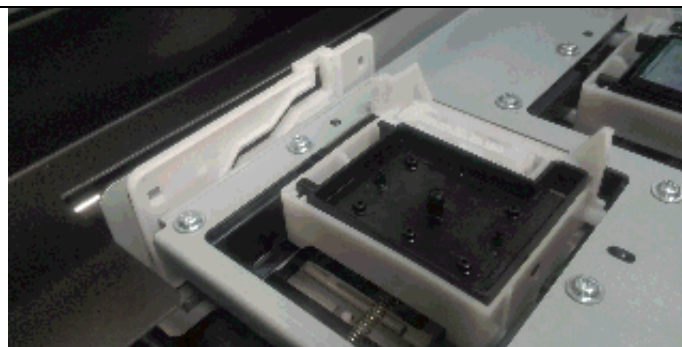
Step 14 / 24

Be sure to assemble the four positioning parts to the Print Head Cap securely.



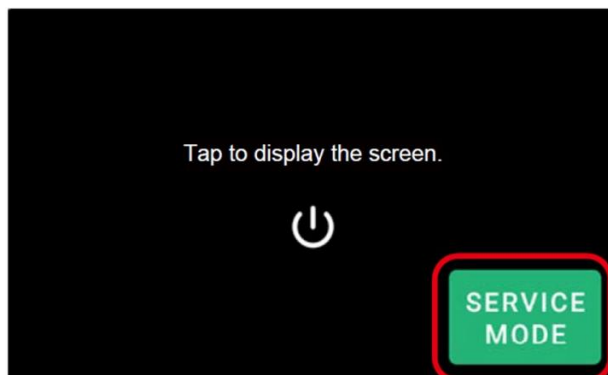
Step 15 / 24

Reference video



Step 16 / 24

Connect Peck2 to the machine and enter the service mode.



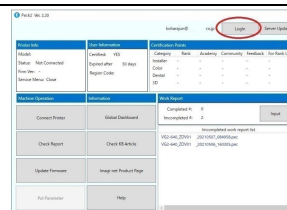
Step 17 / 24

Start Peck2.



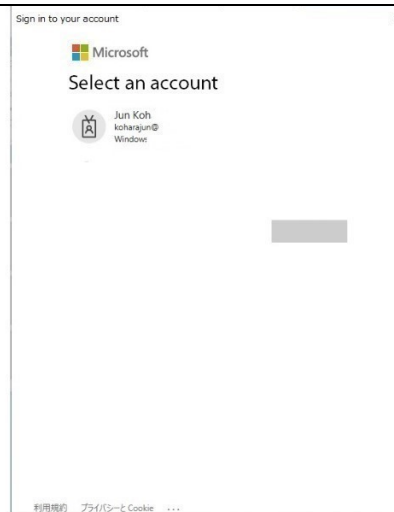
Step 18 / 24

Click the [Login] button.



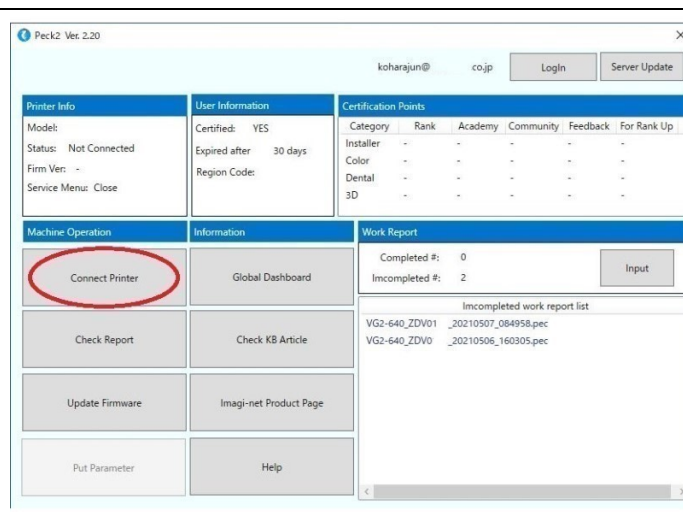
Step 19 / 24

Login with your Imagi-net ID.



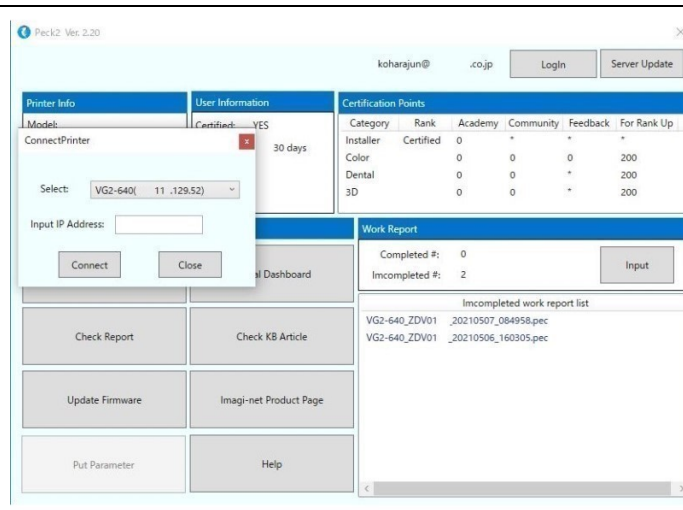
Step 20 / 24

Click on the [Connect Printer] button.



Step 21 / 24

Enter the IP address of the machine you would like to connect to.



Step 22 / 24

If you are able to connect to a printer, printer information will be displayed in [Printer Info].

Peck2 Ver. 2.20

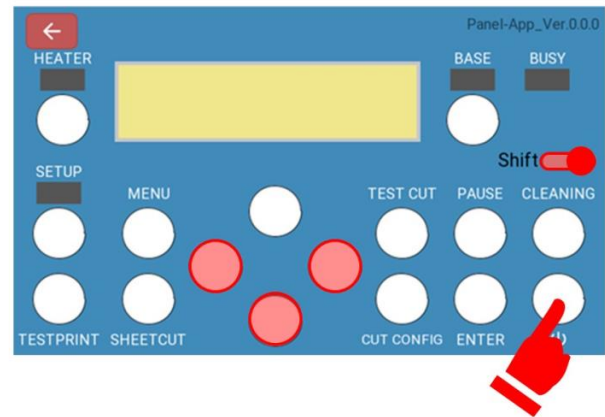
koharajun@ .co.jp Login Server Update

Printer Info		User Information		Certification Points				
Model: VG2-640_ZDV01	Certified: YES	Category	Rank	Academy	Community	Feedback	For Rank Up	
Status: UnSetup	Expired after: 30 days	Installer	Certified	0	*	*	*	
Firm Ver: 2.00		Color		0	0	0	200	
Service Menu: Open		Dental		0	0	*	200	
		3D		0	0	*	200	

Machine-Operation		Information		Work Report	
Connect Printer	Global Dashboard	Completed #:	0	Input	
Check Report	Check KB Article	Incompleted #:	2		
Update Firmware	Imagi-net Product Page	Incompleted work report list			
Put Parameter	Help	VG2-640_ZDV01 _20210507_084958.pec			
		VG2-640_ZDV01 _20210506_160305.pec			

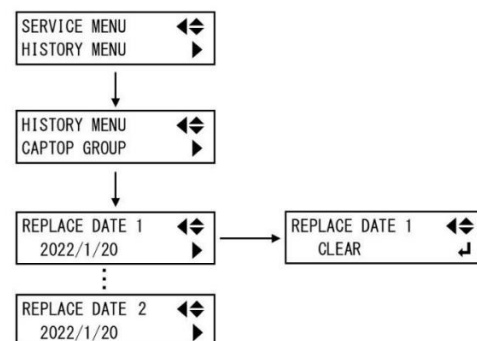
Step 23 / 24

Press[Shift]> [◀]+[▶]+[▶]+[Sub Power] on the panel to enter the service mode. By turning on the [Shift] button, multiple buttons can be pressed at the same time.



Step 24 / 24

Clear history [HISTORY MNENU]>[CAP TOP GROUP].



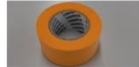
AP-640 Print Head Cap Motor Replacement

AP-640 Print Head Cap Motor Replacement Information

Step 1 / 5

Necessary Tools

一般ツール/General Tool

プラスドライバー No.2 No.2 Phillips screwdriver	
プラスドライバー No.2(80mm以下) No.2 Phillips screwdriver (80mm or less)	
六角レンチ 3.0 mm 3.0 mm hexagonal wrench	
ニッパー Nippers	
テープ Tape	

Step 2 / 5

Special Tools

特殊治具/Special Tools

無し None	
------------	---

Step 3 / 5

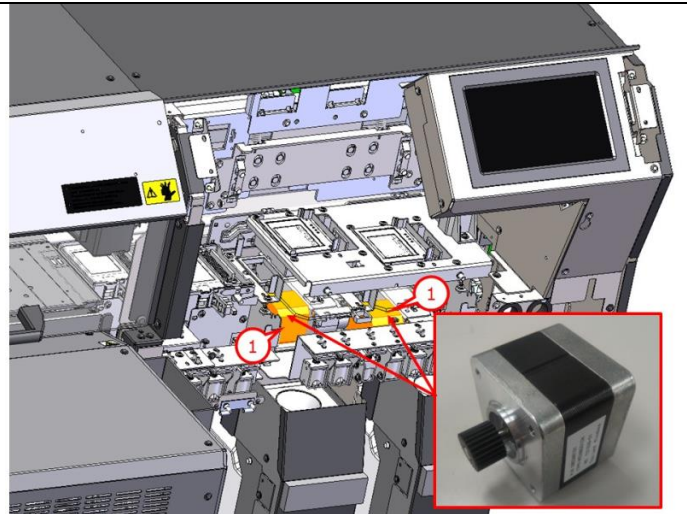
Typical work time

作業時間/Typical work time

作業内容/Contents of work	時間/Time
フロントヘッドキャップモーターの交換 Print Head Cap motor Replacement	55 min.

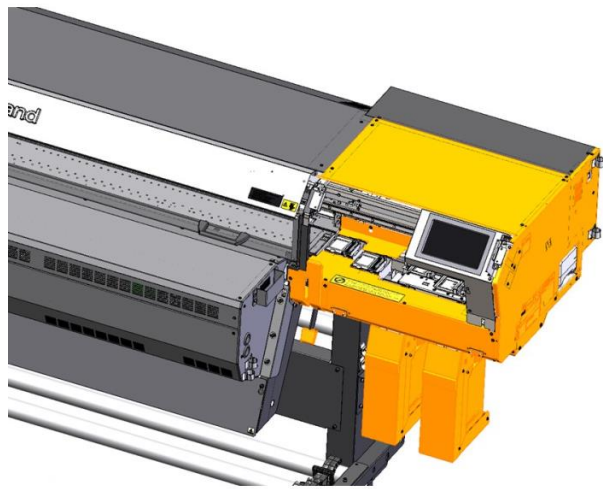
Step 4 / 5

1. Print Head Cap motor



Step 5 / 5

Covers that need to be removed



AP-640 Print Head Cap Motor Replacement

AP-640 Print Head Cap Motor Replacement Procedure

Step 1 / 89

Connect Peck2 to the machine and enter Service Mode.

Tap to display the screen.



SERVICE MODE

Step 2 / 89

Start Peck2.



Peck2

Ver. X.XX

Imagine.  Roland

Step 3 / 89

Click the [Login] button.

Peck2 Ver 2.00

Language: en

Logout

Direct Update

Master Info

User Information

Certification Points

Model

Serial

Print/Ver

Service Menu

Close

Certified

Expired after

Region Code

Category

Rank

Academy

Community

Feedback

For Rank Up

Machine Operation

Information

Work Report

Connect Printer

Global Dashboard

Check Report

Check KB Article

Update Firmware

Image not Product Page

Put Parameter

Help

Completed #

Uncompleted #

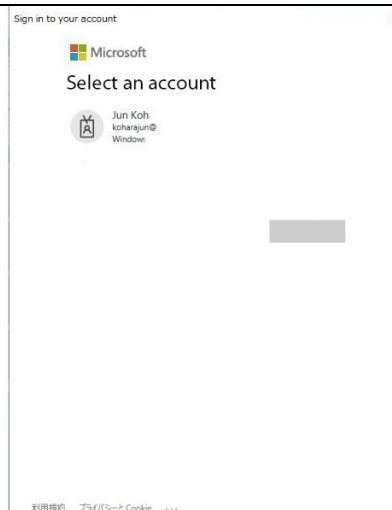
Uncompleted work report list

20210701_080108.png

20210701_160108.png

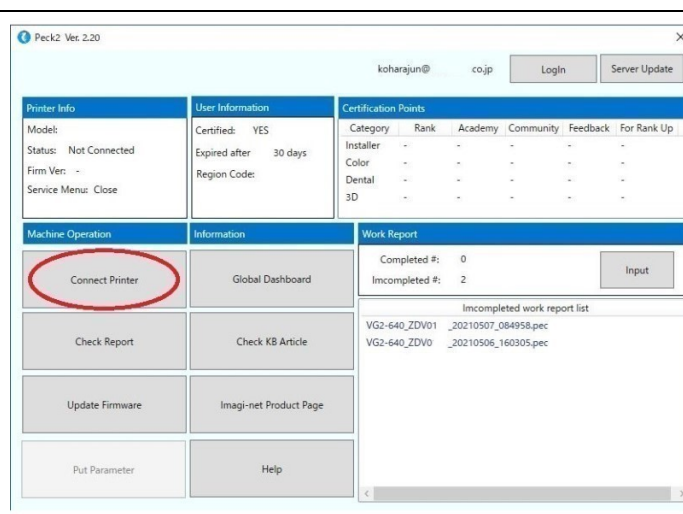
Step 4 / 89

Login with your Imagi-net ID.



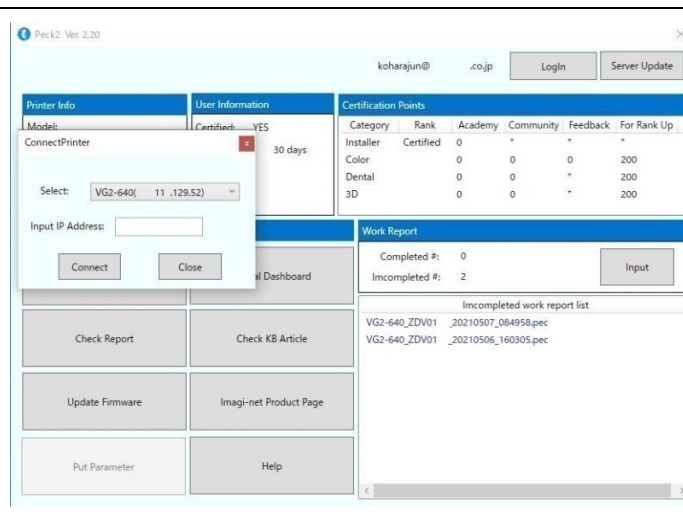
Step 5 / 89

Click the [Connect Printer] button.



Step 6 / 89

Enter the IP address of the printer you would like to connect to.



Step 7 / 89

When the printer is connected, the printer information will be displayed in [Printer Info].

Peck2 Ver. 2.20

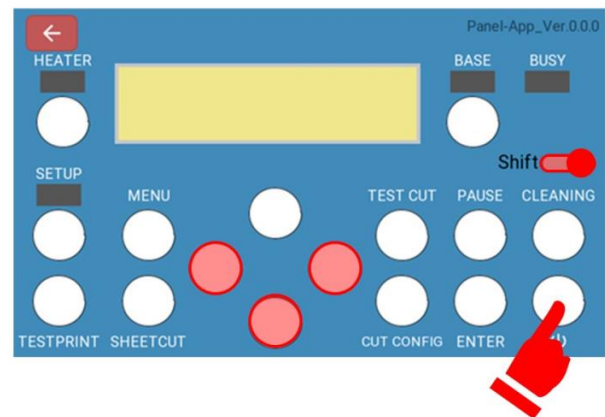
koharjun@ .co.jp Login Server Update

Printer Info		User Information		Certification Points				
Model: VG2-640_ZDV01	Certified: YES	Category	Rank	Academy	Community	Feedback	For Rank Up	
Status: UnSetup	Expired after: 30 days	Installer	Certified	0	*	*	*	
Firm Ver: 2.00		Color	0	0	0	200		
Service Menu: Open		Dental	0	0	*	200		
		3D	0	0	*	200		

Machine-Operation		Information		Work Report	
Connect Printer	Global Dashboard	Completed #:	0	Input	
Check Report	Check KB Article	Incompleted #:	2		
Update Firmware	Imagi-net Product Page	Incompleted work report list			
Put Parameter	Help	VG2-640_ZDV01 _20210507_084958.pec VG2-640_ZDV01 _20210506_160305.pec			

Step 8 / 89

Press [Shift]> [←]+[←]+[←]+[Sub Power] to enter the service mode. By turning on the [Shift] button, multiple buttons can be pressed at the same time.



Step 9 / 89

Turn off the main power and unplug the power cable.



Step 10 / 89

Open the maintenance cover R.



Step 11 / 89

Unlock the print head carriage and move it onto the platen.



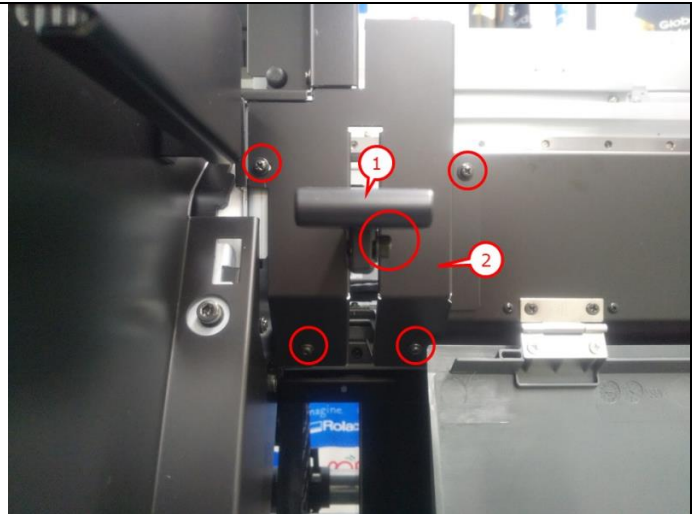
Step 12 / 89

Remove the screws and remove the cover.



Step 13 / 89

Remove the 1. resin lever and 2. lever cover.



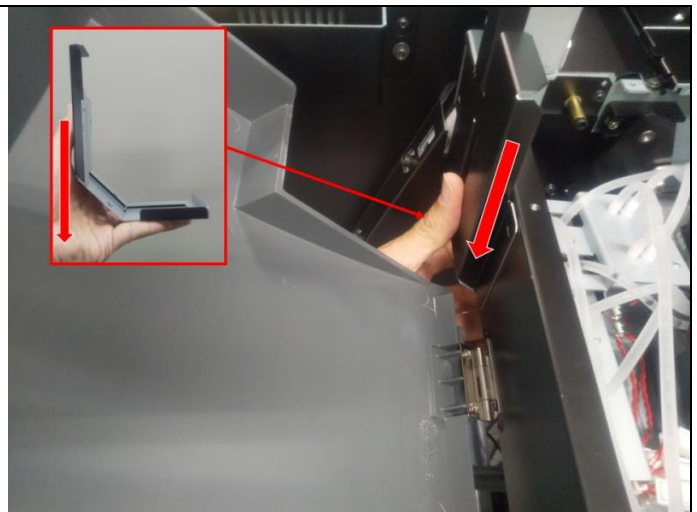
Step 14 / 89

Remove one screw and remove the resin lever.



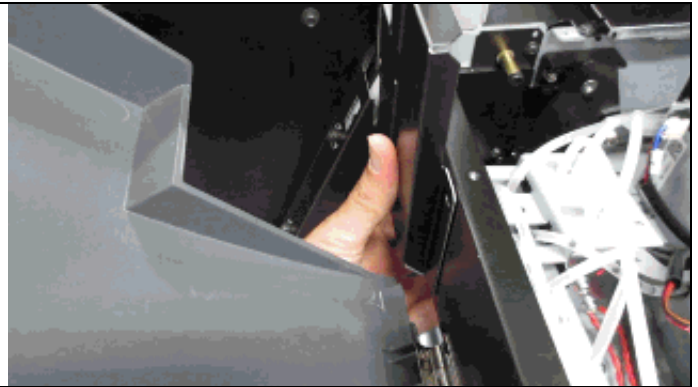
Step 15 / 89

Remove the 4 screws and remove the lever cover. The lever cover can be removed by closing the maintenance cover R about halfway and moving the lever cover straight down.



Step 16 / 89

Reference video



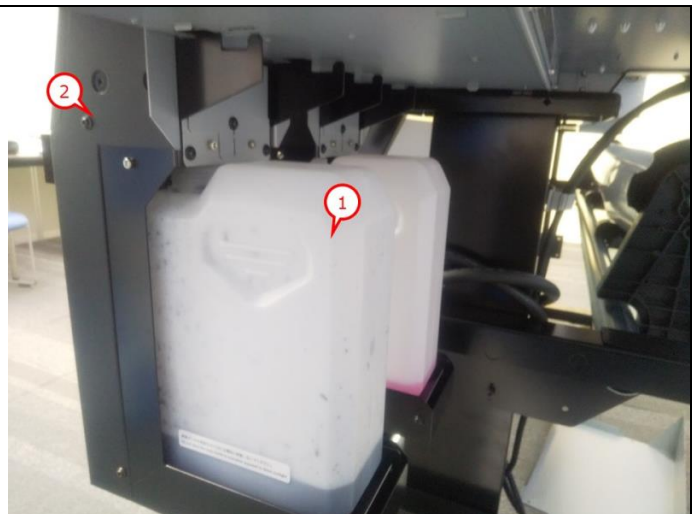
Step 17 / 89

Be careful not to splash the waste fluid from the tubes.



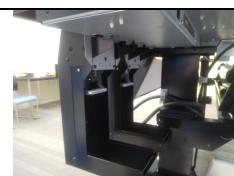
Step 18 / 89

Remove the drain bottle and the drain bottle stand.



Step 19 / 89

Remove the drain bottle.



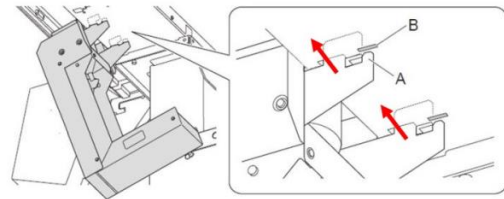
Step 20 / 89

Remove the four screws.



Step 21 / 89

Slide the drain bottle stand to the right side when viewed from the front, and insert the tabs (A) into the grooves (B).



Step 22 / 89

Remove the connectors.



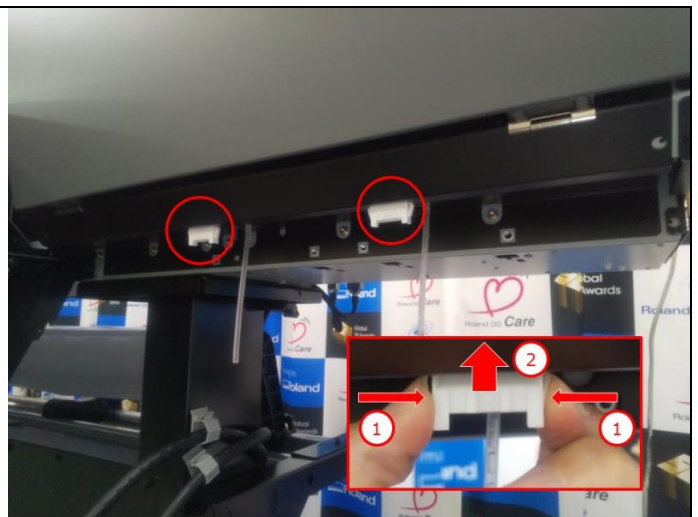
Step 23 / 89

Remove the drain bottle stand.



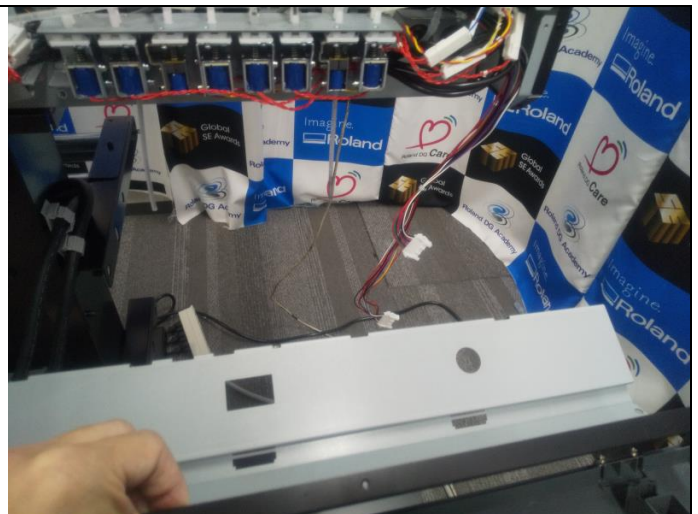
Step 24 / 89

Remove the connectors from the cover.



Step 25 / 89

Remove the screws and remove the covers. Remove the covers together with the maintenance cover R.



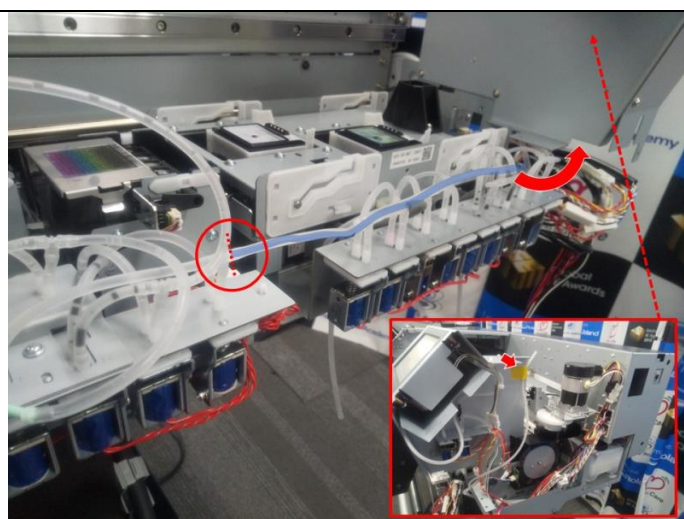
Step 26 / 89

Pull out the three tubes. Tubes with solenoid valves in the path will not leak fluid from the tubes because the valves are closed.



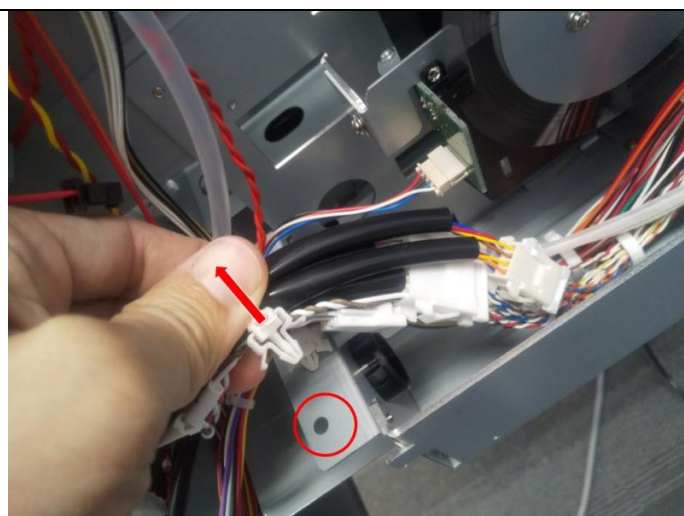
Step 27 / 89

Remove one tube and secure it with masking tape. This path does not have a solenoid valve in the middle, so if the tube is placed in a low position, fluid may leak.



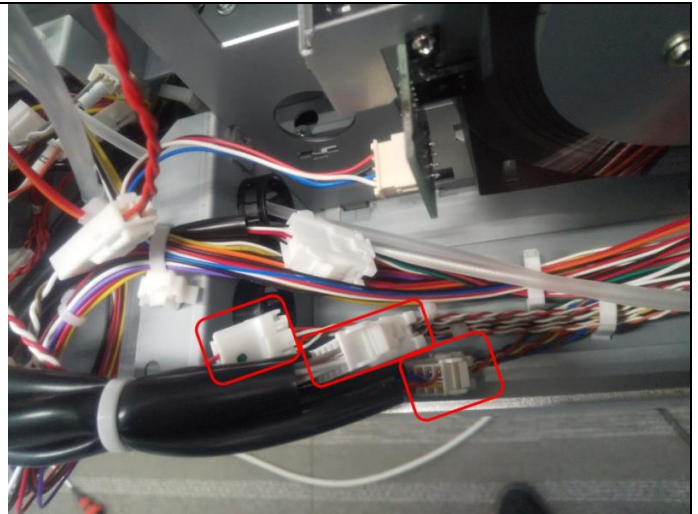
Step 28 / 89

Remove the cable tie together with the cables under the panel.



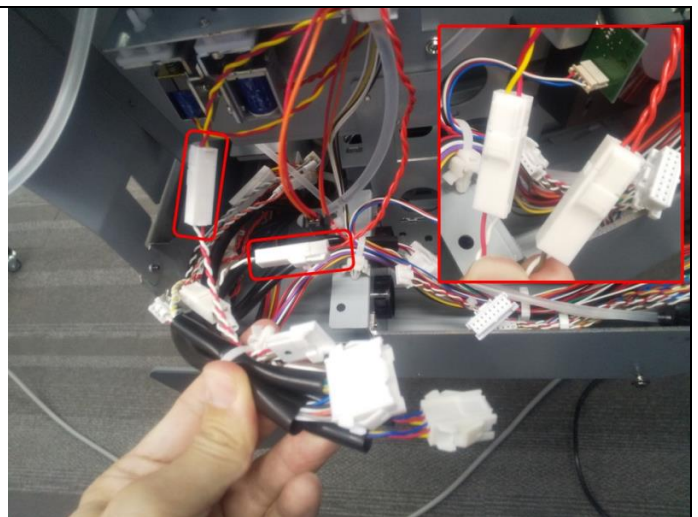
Step 29 / 89

Remove three connectors.



Step 30 / 89

Remove two connectors. When installing these connectors after replacement of the motor, check the color of the cables to make sure you do not insert the wrong connector.



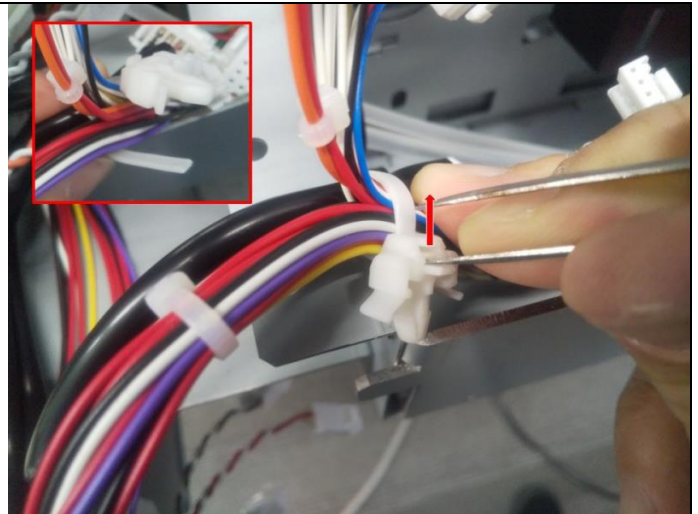
Step 31 / 89

Remove the cable tie together with the cables under the panel.



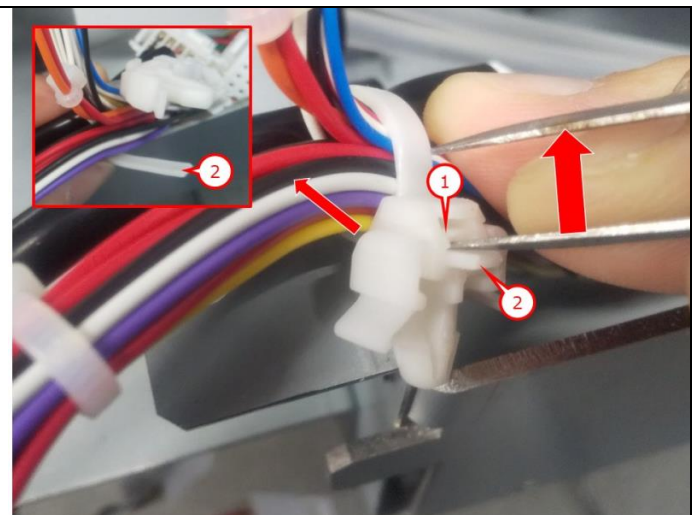
Step 32 / 89

Use tweezers to remove the cable tie.



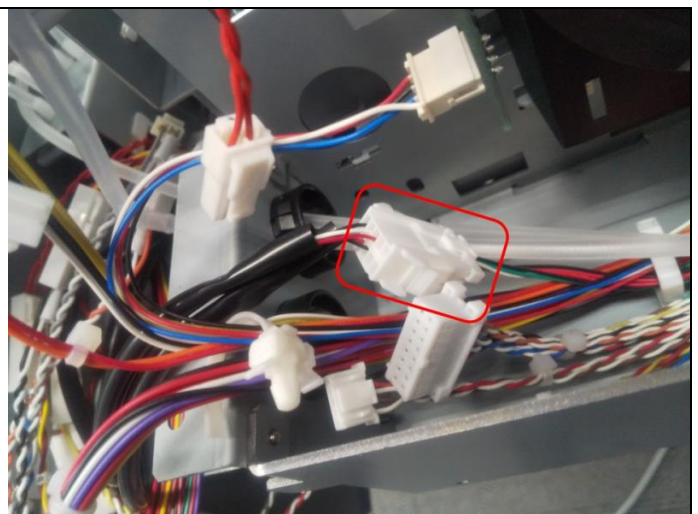
Step 33 / 89

Use tweezers to push up the stopper (1) of the cable tie and pull out (2).



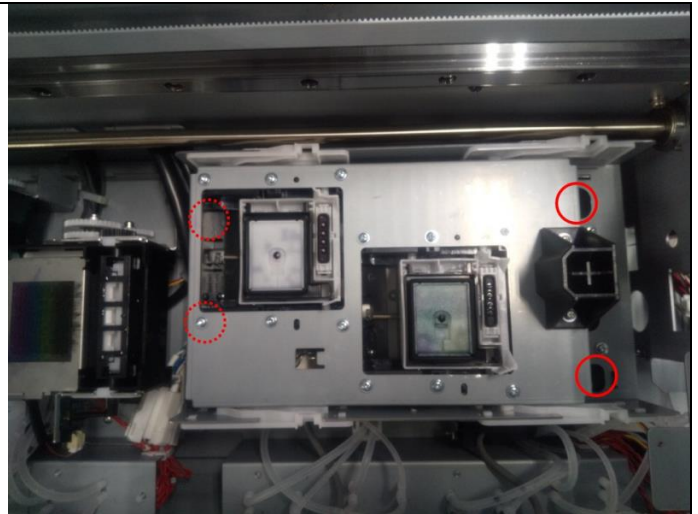
Step 34 / 89

Remove one connector under the panel.



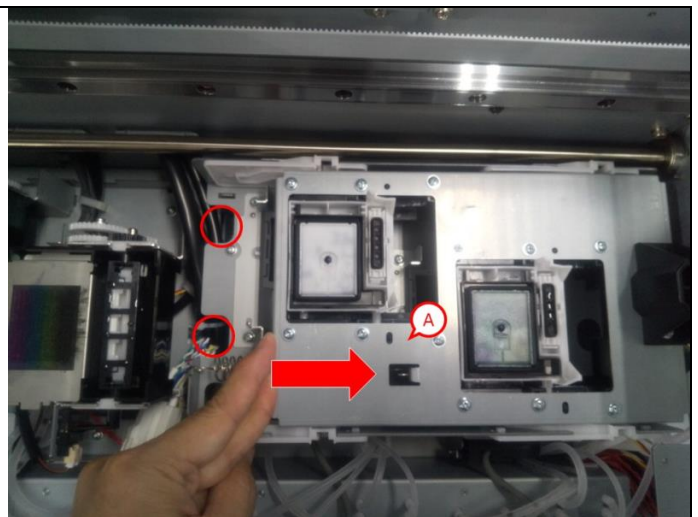
Step 35 / 89

Remove four screws from the cap unit.



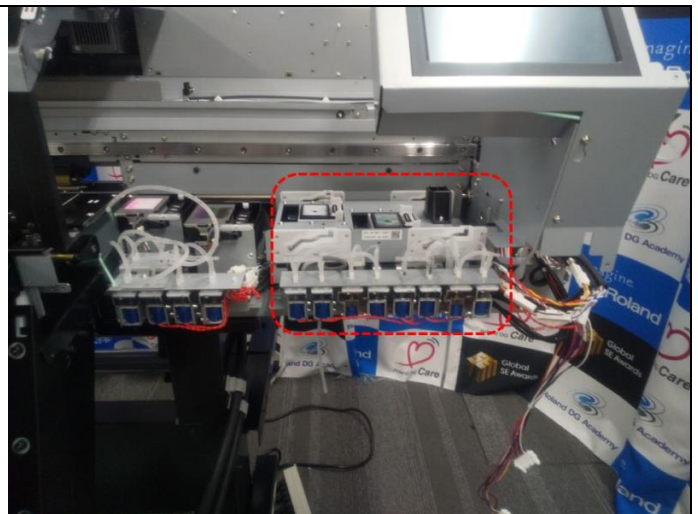
Step 36 / 89

Slide A to the side to see the screw hole.



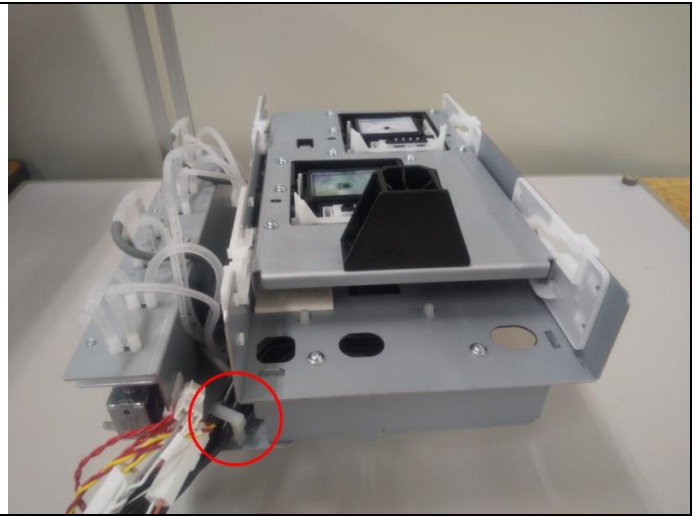
Step 37 / 89

Remove the cap unit, taking care of the cables and tubes.



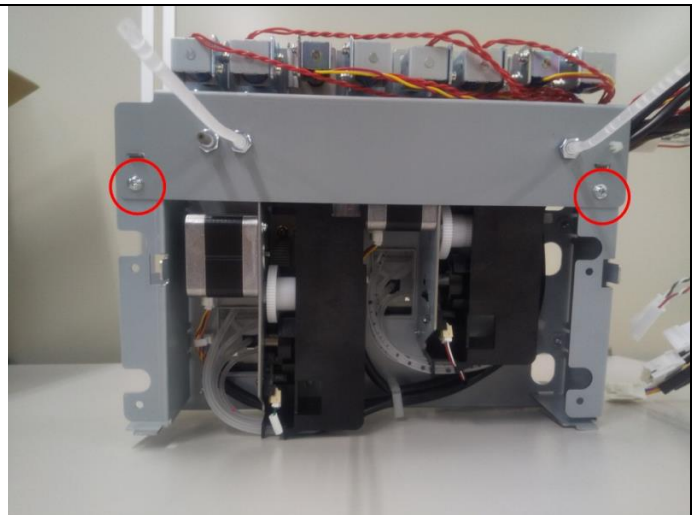
Step 38 / 89

Remove the clamp.



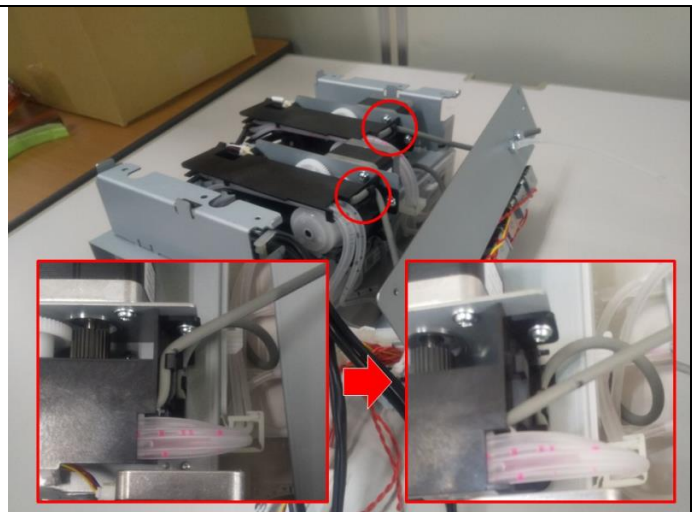
Step 39 / 89

Remove the two screws.



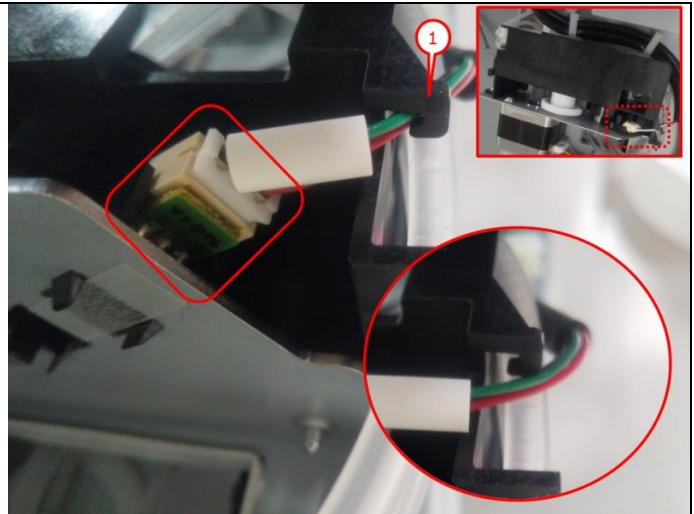
Step 40 / 89

Remove the two tube fixings.



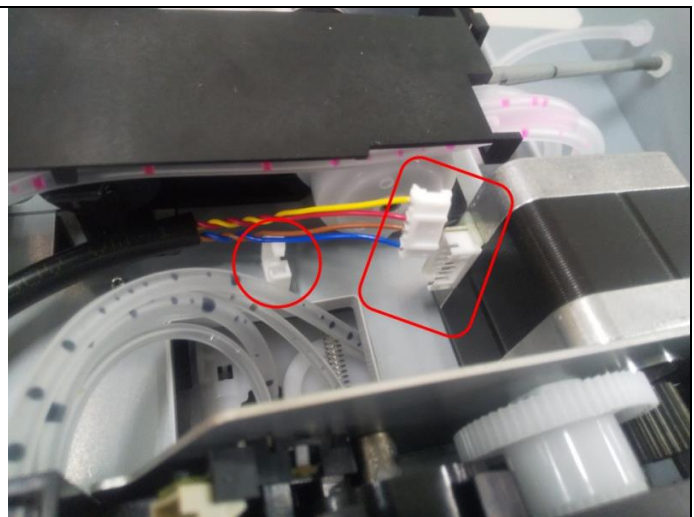
Step 41 / 89

1. Disconnect the cables from the cord lock and remove the connector.



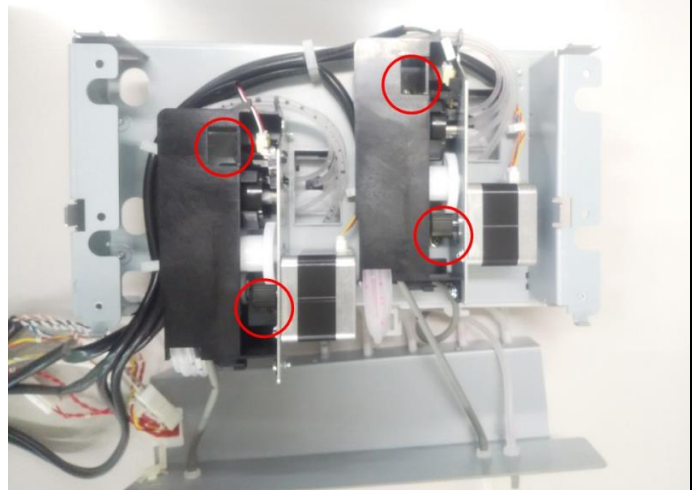
Step 42 / 89

- Remove the clamp and remove the connector.



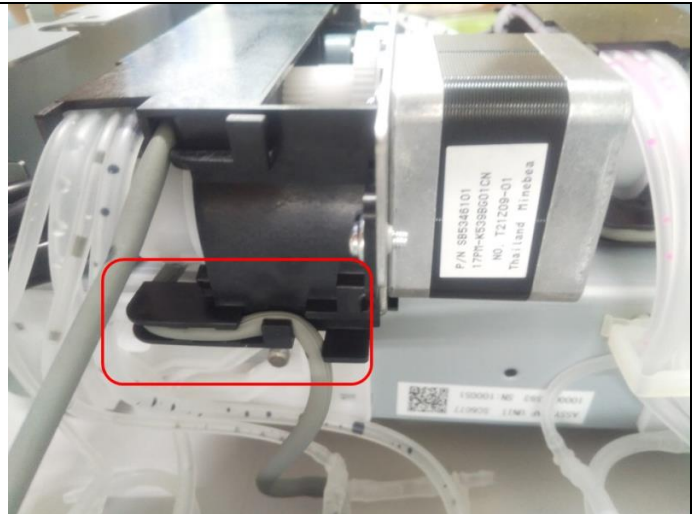
Step 43 / 89

- Remove two screws. Remove the screw on the side of the motor to be replaced.



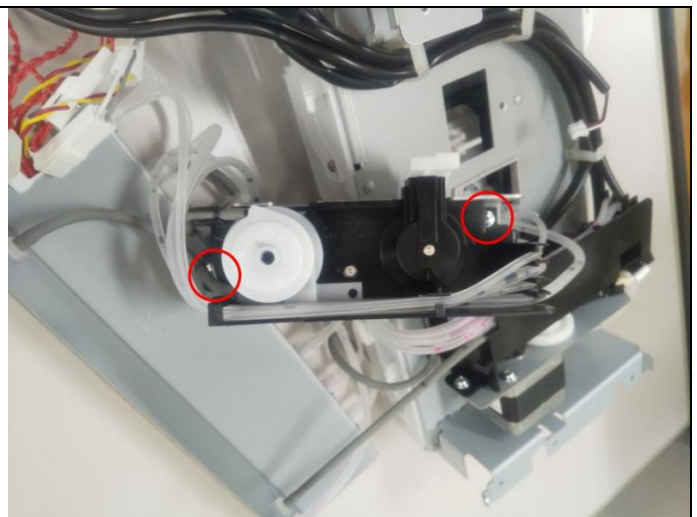
Step 44 / 89

Remove the tube.



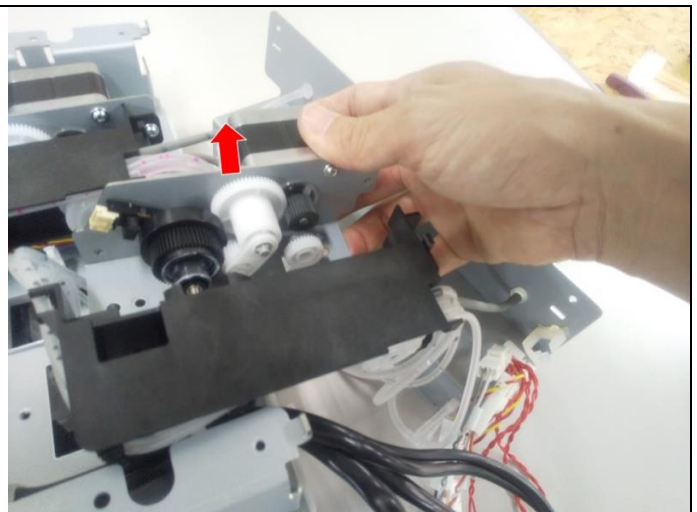
Step 45 / 89

Remove the two screws.



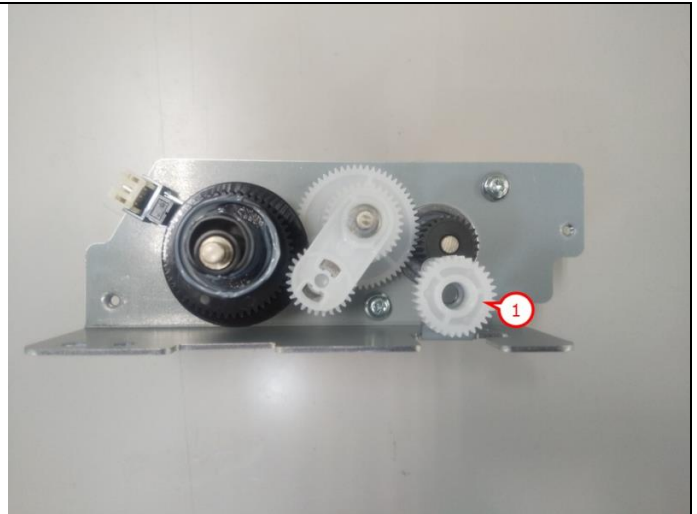
Step 46 / 89

Remove the stay with the motor attached, taking care not to damage the tube.



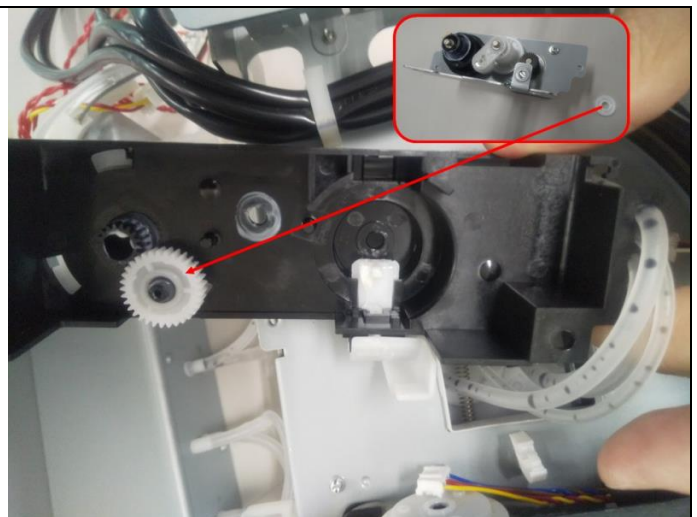
Step 47 / 89

If the gear (1) is attached to the motor side, remove the gear (1) and attach it to the cover side.



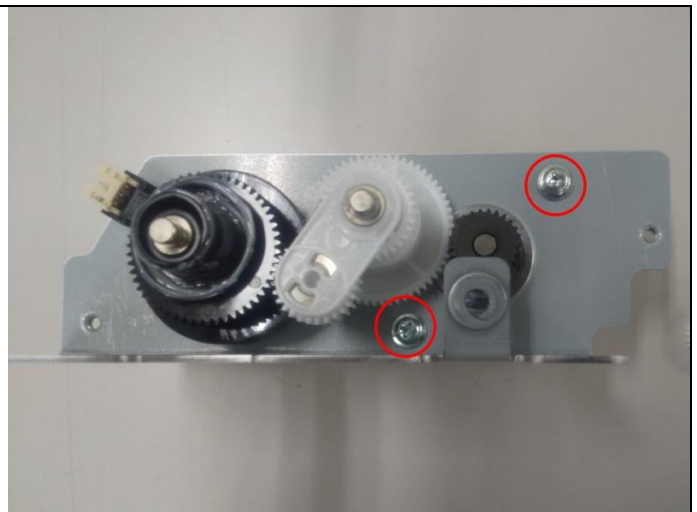
Step 48 / 89

Mount the gear on the cover side.



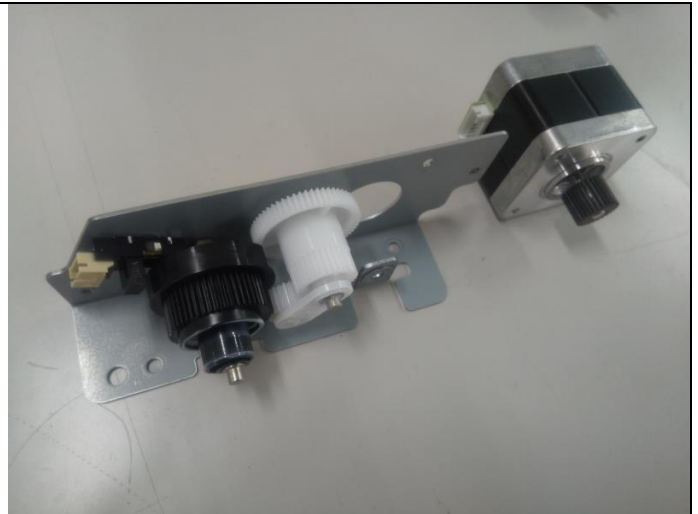
Step 49 / 89

Remove the two screws and remove the motor.



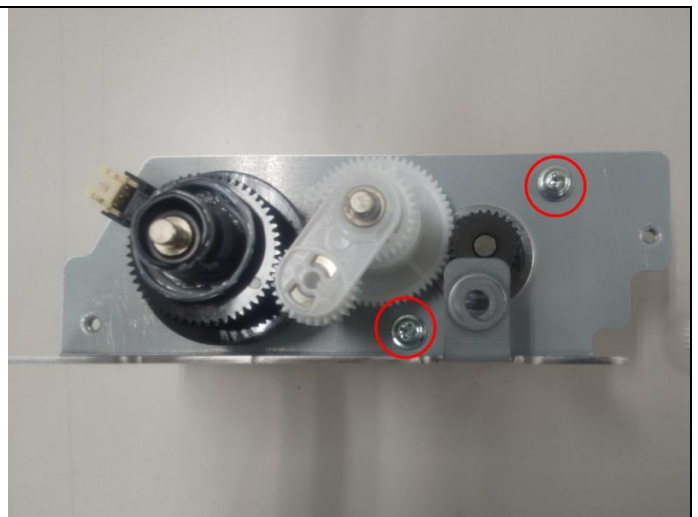
Step 50 / 89

Temporarily fasten the two screws,
paying attention to the direction of the
motor to be replaced.



Step 51 / 89

Temporarily fasten the screws.



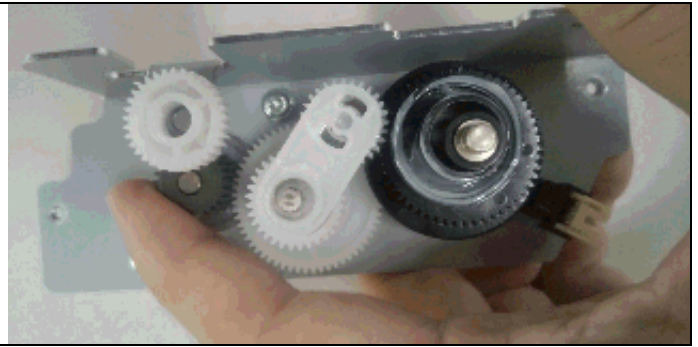
Step 52 / 89

Turn the gear several times to check the
engagement and retighten the screws.



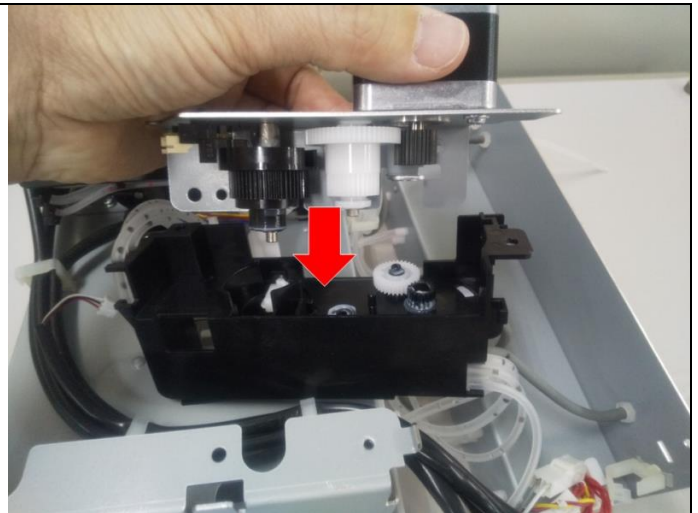
Step 53 / 89

Reference video



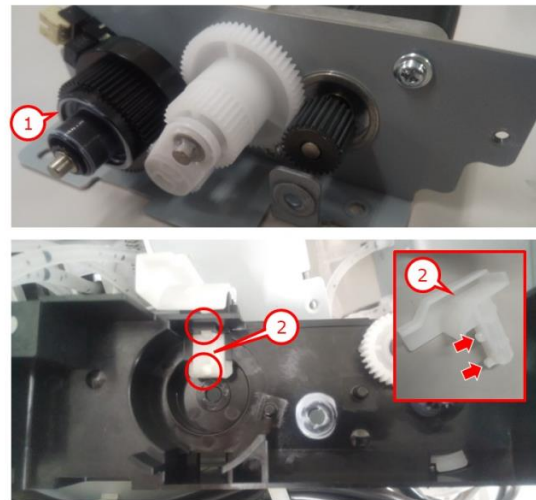
Step 54 / 89

Align the gear of the motor side with the shaft hole of the cover side.



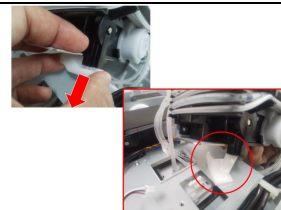
Step 55 / 89

Align the gear in (1) with the protrusion on the resin part in (2).



Step 56 / 89

If the resin part (1) comes off when pulled, it is not attached correctly and

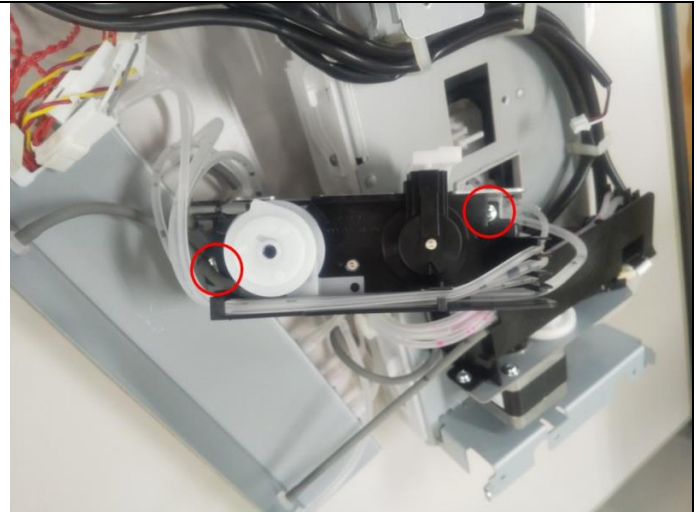


should be reinstalled.



Step 57 / 89

Temporarily fasten two screws.



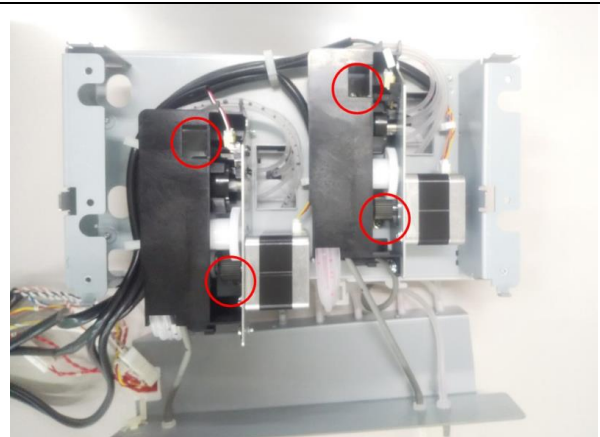
Step 58 / 89

Turn the gear several times by hand to check the engagement and retighten the screws.



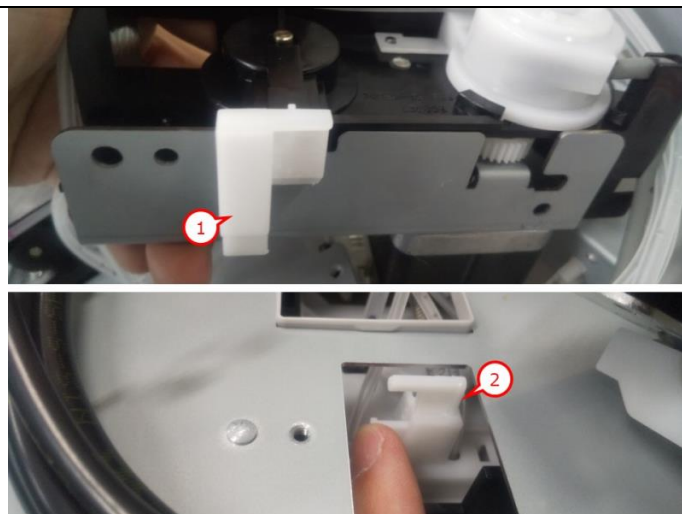
Step 59 / 89

Assemble the pump assembly and tighten the screws.



Step 60 / 89

Interlock the resin part in (1) with the resin part in (2).



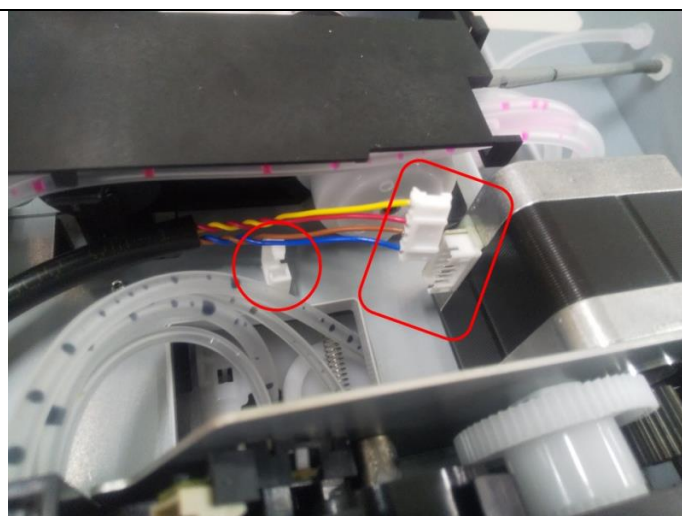
Step 61 / 89

Install the tube while checking the marking on the tube. Check to see if there are any other tubes that have come off.



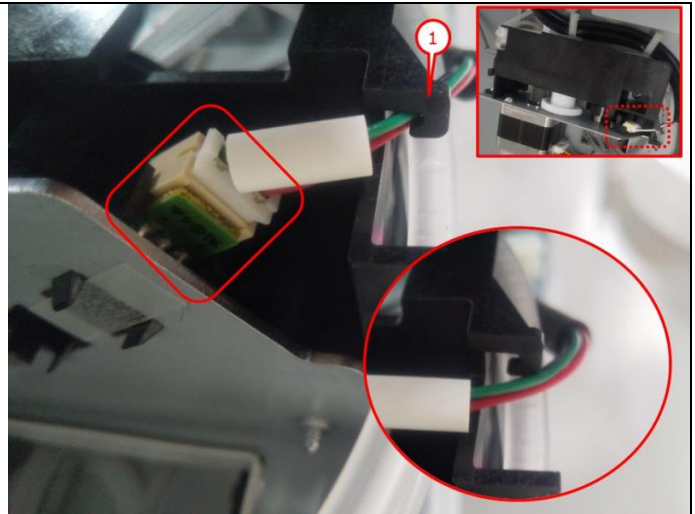
Step 62 / 89

Install the clamp and the connector.



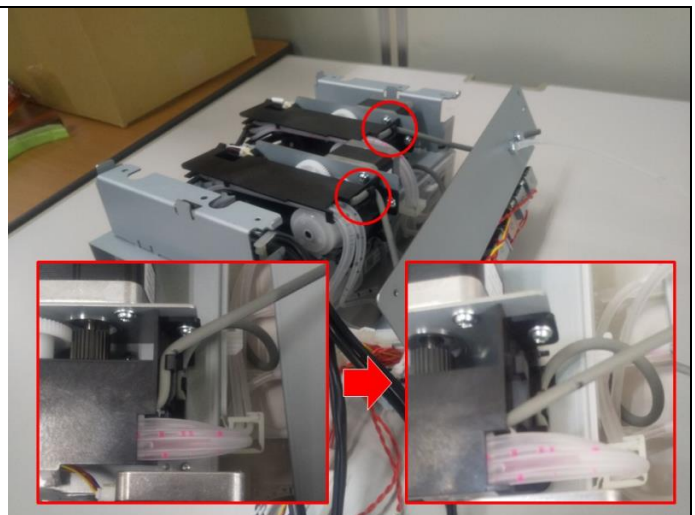
Step 63 / 89

Attach the connector, and then hook the cables to the 1. cord lock.



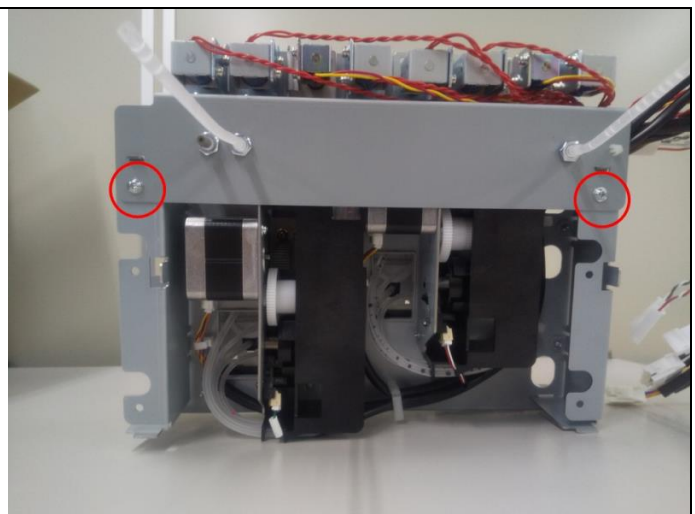
Step 64 / 89

Check the marking on the tube and install the tube in two places.



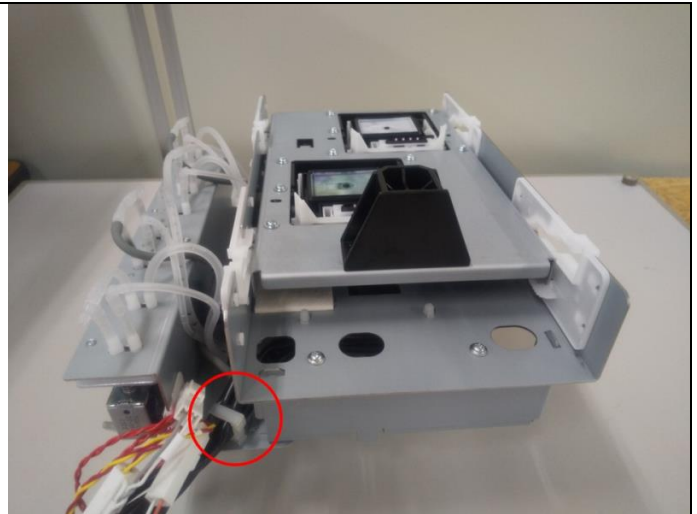
Step 65 / 89

Tighten the two screws.



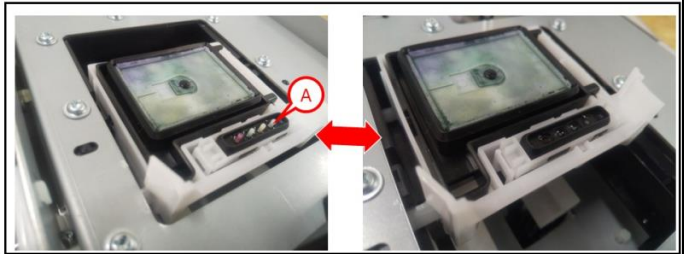
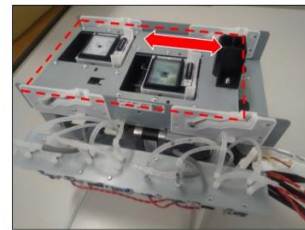
Step 66 / 89

Attach the clamp.



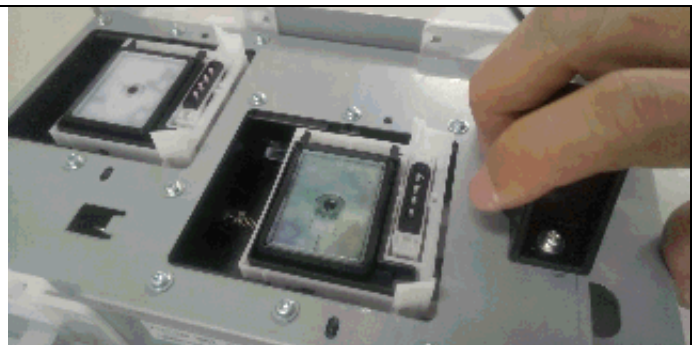
Step 67 / 89

Move the cover and check that A moves up and down.



Step 68 / 89

Reference video

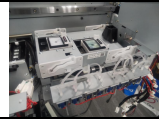


Step 69 / 89

Check the mounting area for dust and dirt, and install the new Print Head Cap

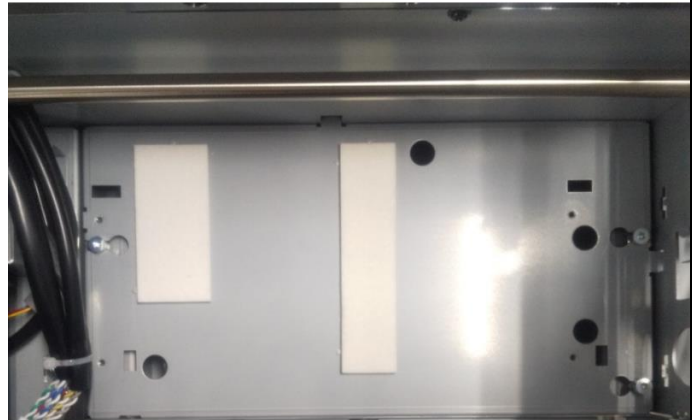


unit.



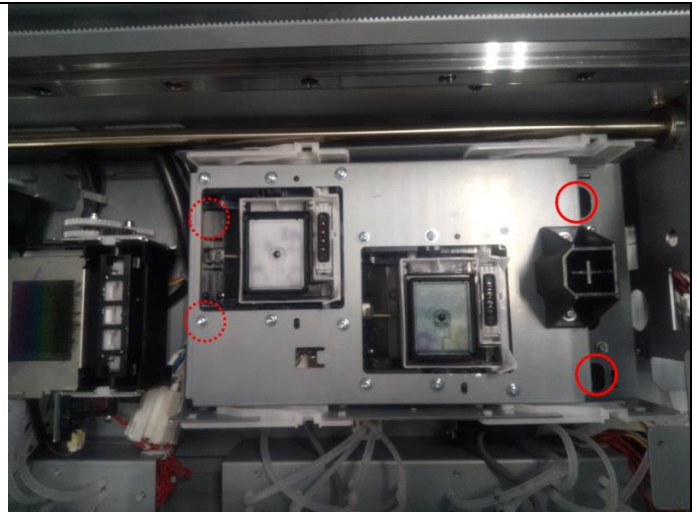
Step 70 / 89

Check for dust and dirt.



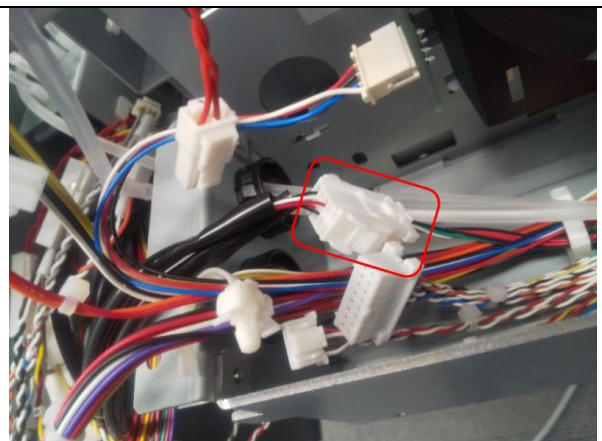
Step 71 / 89

Attach four screws on the cap unit.



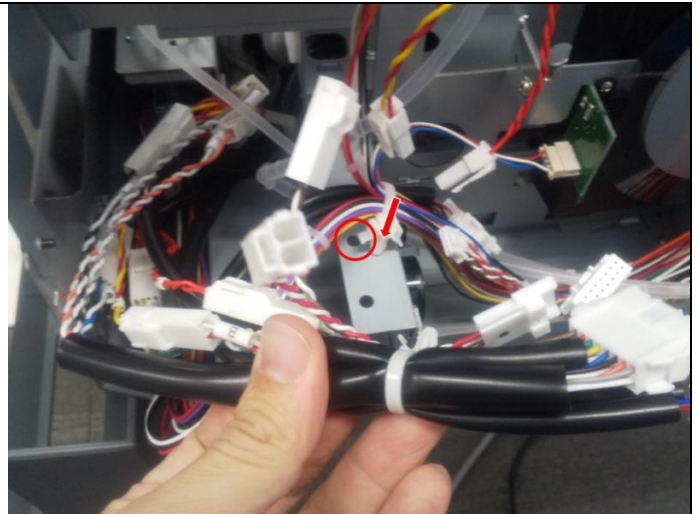
Step 72 / 89

Attach one connector.



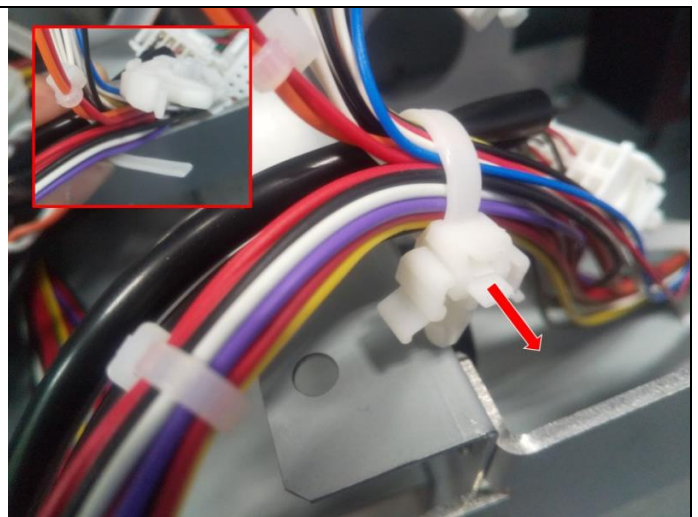
Step 73 / 89

Bundle the cables and secure them to the machine with cable ties.



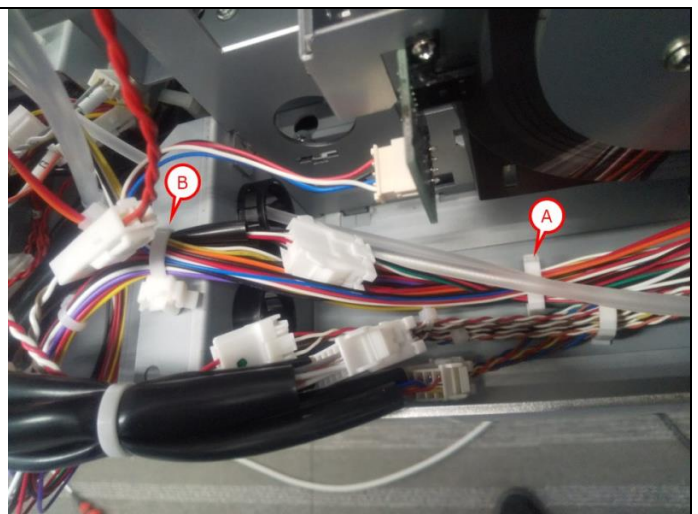
Step 74 / 89

Bundle the cables with the cable ties.



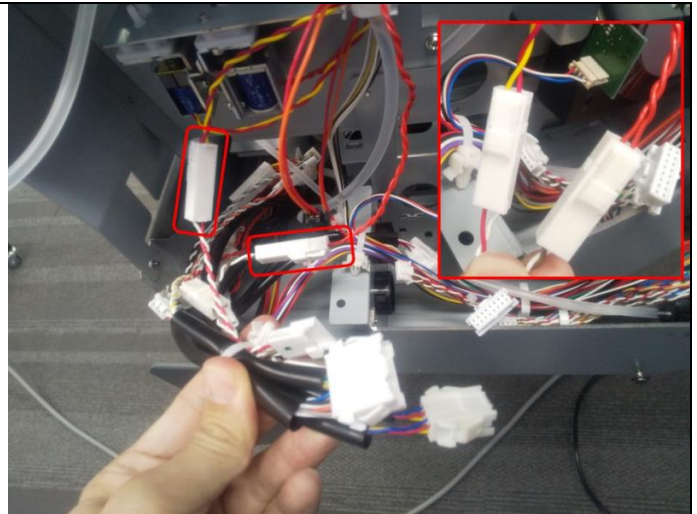
Step 75 / 89

Make sure that the cables between A and B are not pulled too tightly.



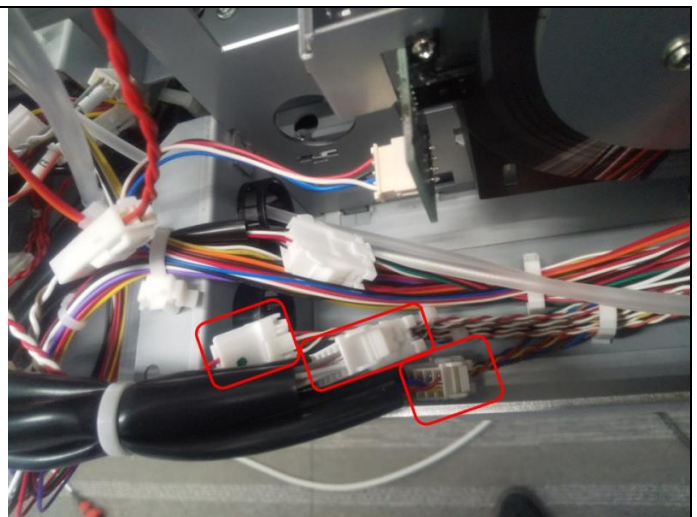
Step 76 / 89

Attach two connectors. When attaching them, check the colors of the cables in the photo and be careful to plug the correct cables. (White & red = yellow & red) (White & black = red & red)



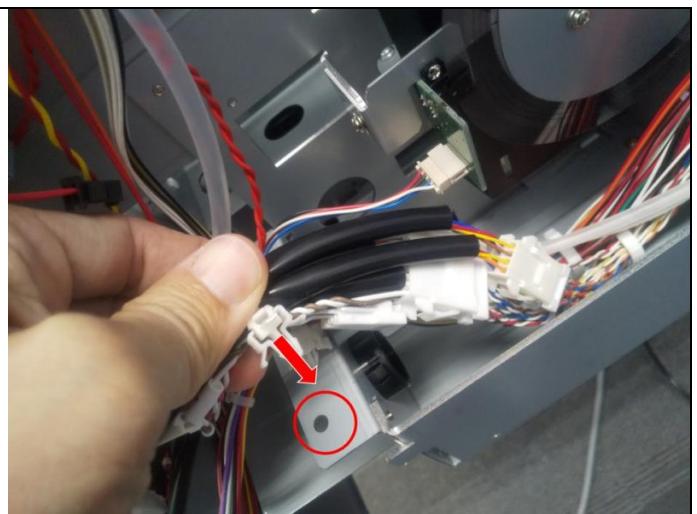
Step 77 / 89

Attach three connectors.



Step 78 / 89

Attach the cable ties that bundle the cables to the machine.



Step 79 / 89

Be sure to cut the tip of the removed tube by about 5 mm because the opening of the tube is wide. If the tube is not long enough, replace it with a new one.



Step 80 / 89

Cut about 5 mm off the tip of the tube.



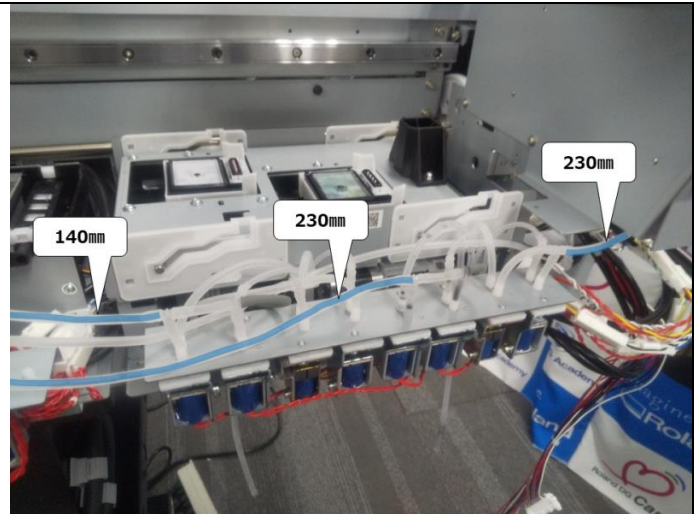
Step 81 / 89

Assemble the tube in three places.
Assemble the tube up to the butt end.



Step 82 / 89

Tube length



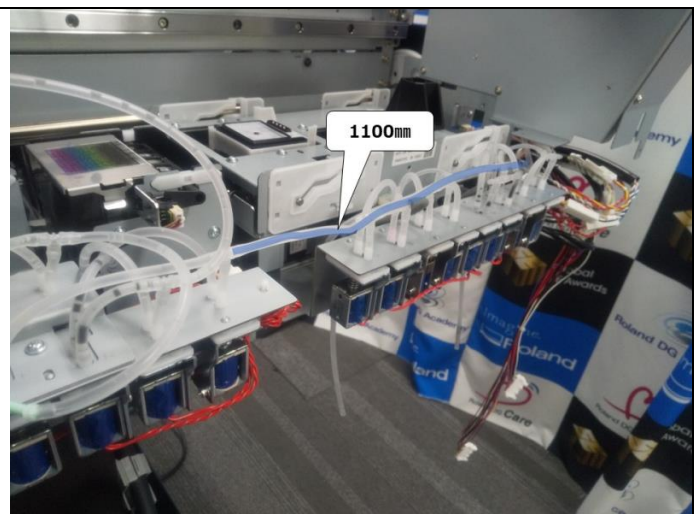
Step 83 / 89

Assemble one piece of tube. Assemble the tube up to the butt end.



Step 84 / 89

Tube length



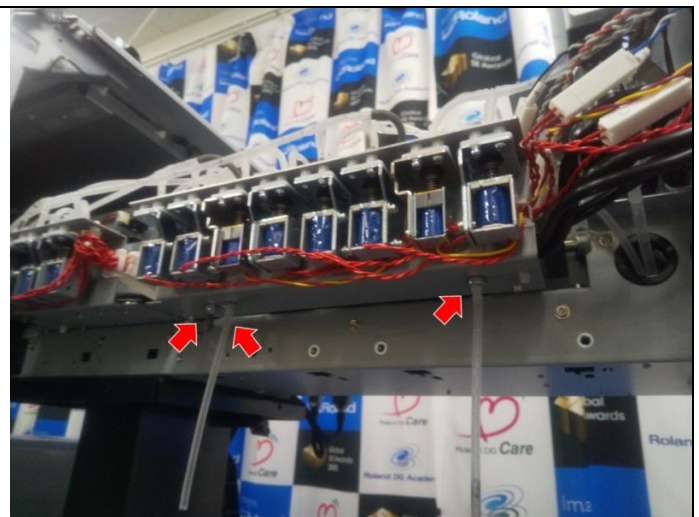
Step 85 / 89

Do not cut the drain tube. If the length is changed, the waste fluid cannot be discharged properly.



Step 86 / 89

Attach the drain tubes in three places. If the tube from the removed Print Head Cap unit can be reused, remove it and reuse it. If not, replace it with a new tube.



Step 87 / 89

Attach the removed cover.



Step 88 / 89

Check that the drain tube is slightly visible from the tip of the funnel before attaching the drain bottle.



Step 89 / 89

Perform the limit position initialization.



次の手順

リミット位置調整

Next Step

Limit Position Initialization

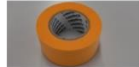
AP-640 Print Head Cap UNIT replacement

AP-640 Print Head Cap UNIT replacement Information

Step 1 / 5

Necessary Tools

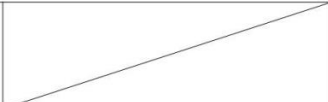
一般ツール/General Tool

プラスドライバー No.2 No.2 Phillips screwdriver	
プラスドライバー No.2(80mm以下) No.2 Phillips screwdriver (80mm or less)	
六角レンチ 3.0 mm 3.0 mm hexagonal wrench	
ニッパー Nippers	
テープ Tape	

Step 2 / 5

Special Tools

特殊治具/Special Tools

無し None	
------------	---

Step 3 / 5

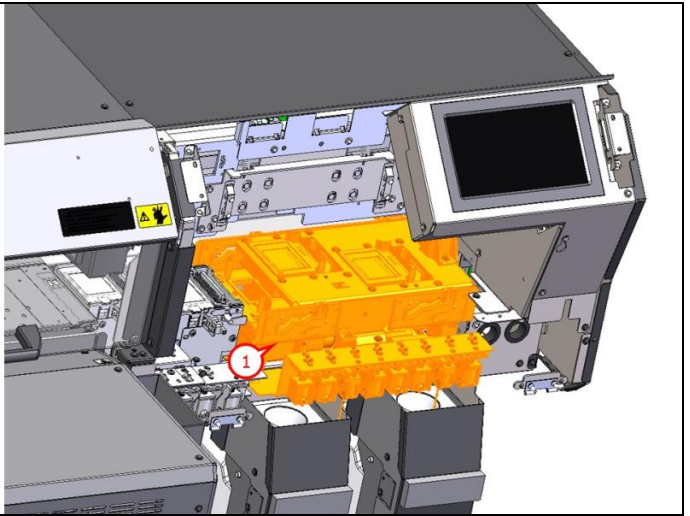
Typical Work Time

作業時間/Typical work time

作業内容/Contents of work	時間/Time
フロントヘッドキャップユニットの交換 Print Head Cap Unit Replacement	25 min.

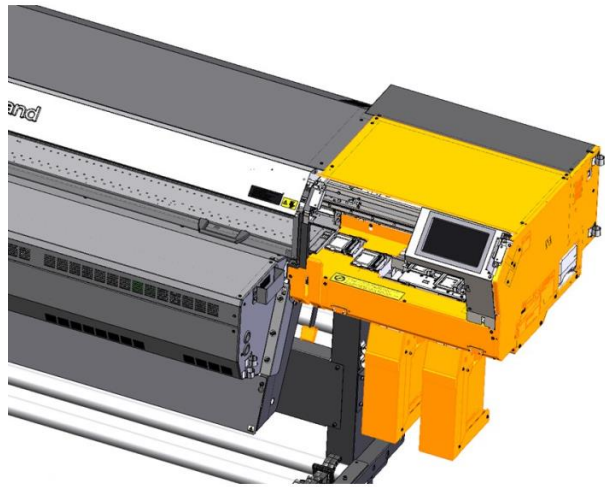
Step 4 / 5

1. Print Head Cap unit



Step 5 / 5

Cover that need to be removed



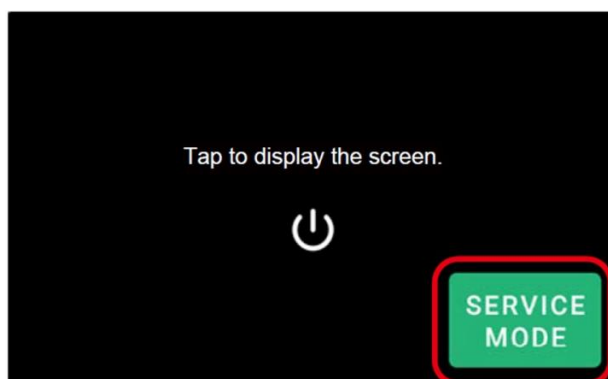
AP-640 Print Head Cap UNIT replacement

AP-640 Print Head Cap UNIT replacement

Procedure

Step 1 / 58

Connect Peck2 to the machine and enter Service Mode.



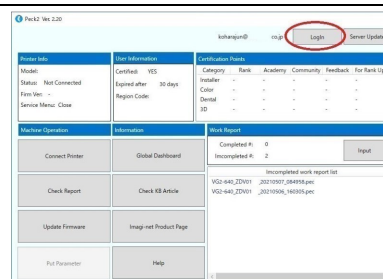
Step 2 / 58

Start Peck2.



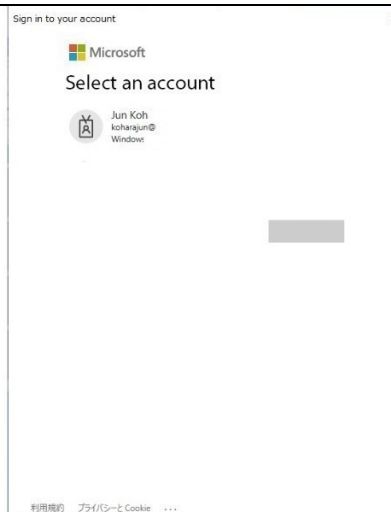
Step 3 / 58

Click [Login] button.



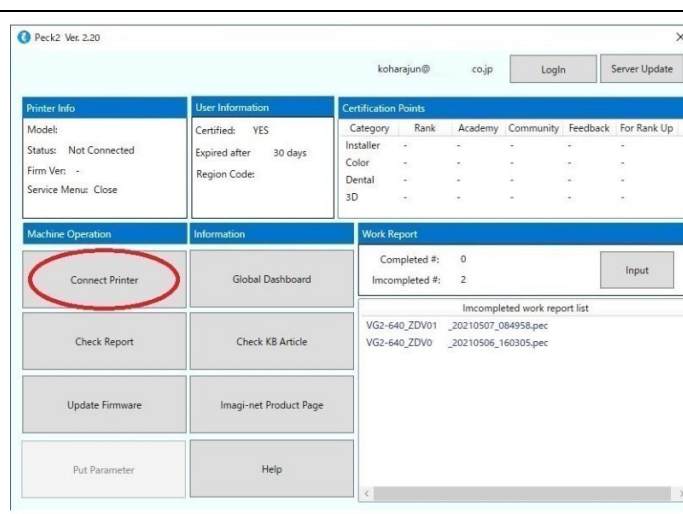
Step 4 / 58

Login with your Imagi-net ID.



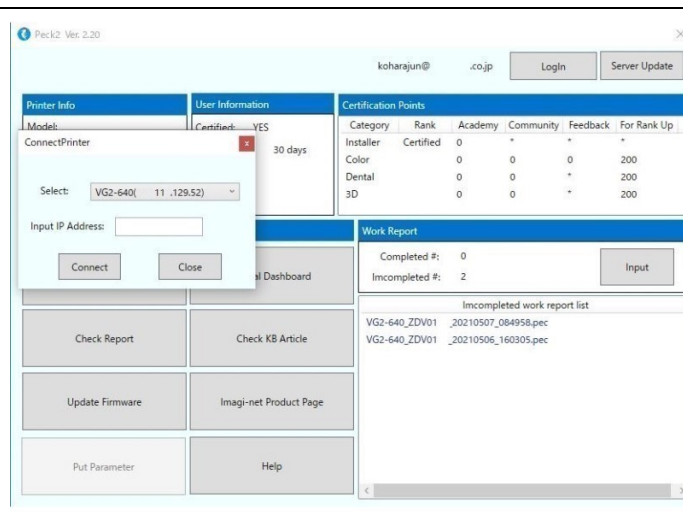
Step 5 / 58

Click the [Connect Printer] button.



Step 6 / 58

Enter the IP address of the printer you would like to connect to.



Step 7 / 58

When the printer is connected, the printer information will be displayed in [Printer Info].

Peck2 Ver. 2.20

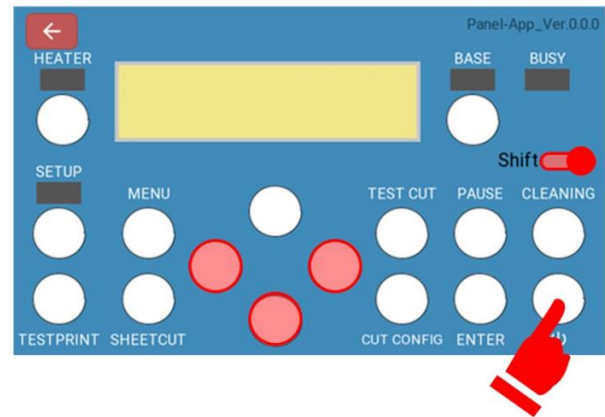
koharjun@ .co.jp Login Server Update

Printer Info		User Information		Certification Points				
Model: VG2-640_ZDV01	Certified: YES	Category	Rank	Academy	Community	Feedback	For Rank Up	
Status: UnSetup	Expired after: 30 days	Installer	Certified	0	*	*	*	
Firm Ver: 2.00		Color	0	0	0	200		
Service Menu: Open		Dental	0	0	*	200		
		3D	0	0	*	200		

Machine-Operation		Information		Work Report	
Connect Printer	Global Dashboard	Completed #:	0	Input	
Check Report	Check KB Article	Incompleted #:	2		
Update Firmware	Imagi-net Product Page	Incompleted work report list			
Put Parameter	Help	VG2-640_ZDV01 _20210507_084958.pec			
		VG2-640_ZDV01 _20210506_160305.pec			

Step 8 / 58

Press [Shift]> [←]+[←]+[←]+[Sub Power] to enter the service mode. By turning on the [Shift] button, multiple buttons can be pressed at the same time.



Step 9 / 58

Turn off the main power and unplug the power cable.



Step 10 / 58

Open the maintenance cover R.



Step 11 / 58

Unlock the print head carriage and move it onto the platen.



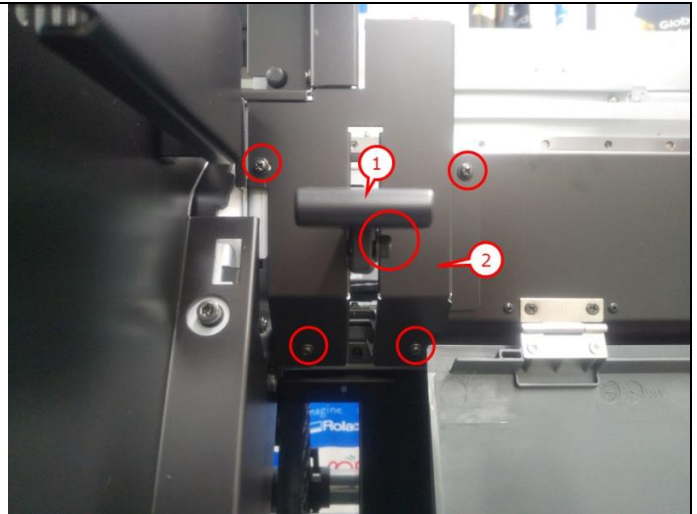
Step 12 / 58

Remove the screws and remove the cover.



Step 13 / 58

Remove the 1. resin lever and 2. lever cover.



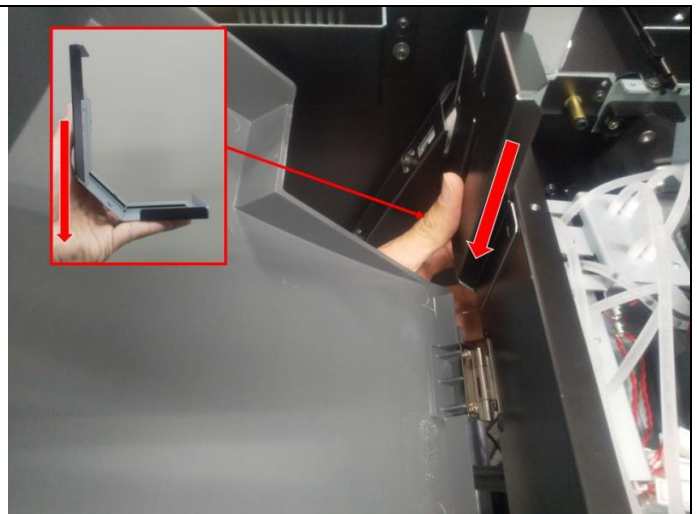
Step 14 / 58

Remove one screw and remove the resin lever.



Step 15 / 58

Remove the 4 screws and remove the cover.



Step 16 / 58

Reference video



Step 17 / 58

Be careful not to splash the waste fluid from the tubes.



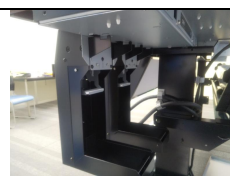
Step 18 / 58

Remove the drain bottle and the drain bottle stand.



Step 19 / 58

Remove the drain bottle.



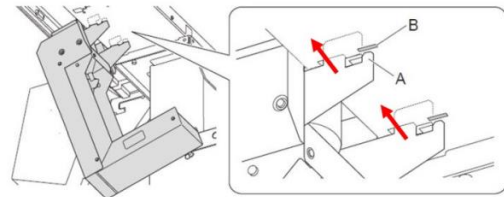
Step 20 / 58

Remove the four screws.



Step 21 / 58

Slide the drain bottle stand to the right side when viewed from the front, and insert the tabs (A) into the grooves (B).



Step 22 / 58

Remove the connector.



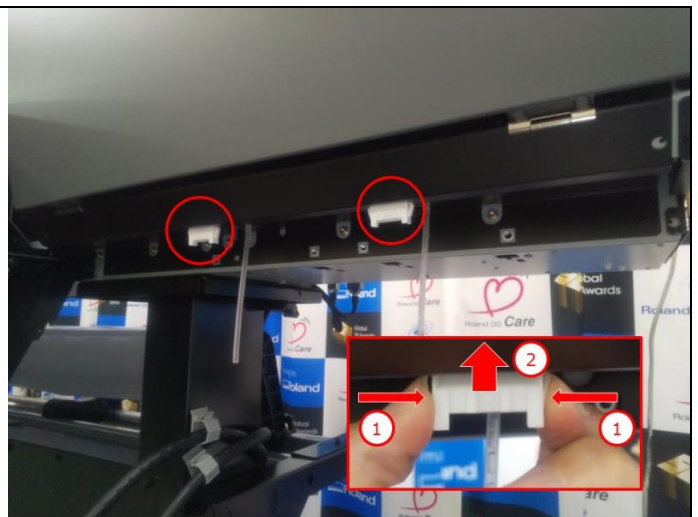
Step 23 / 58

Remove the drain bottle stand.



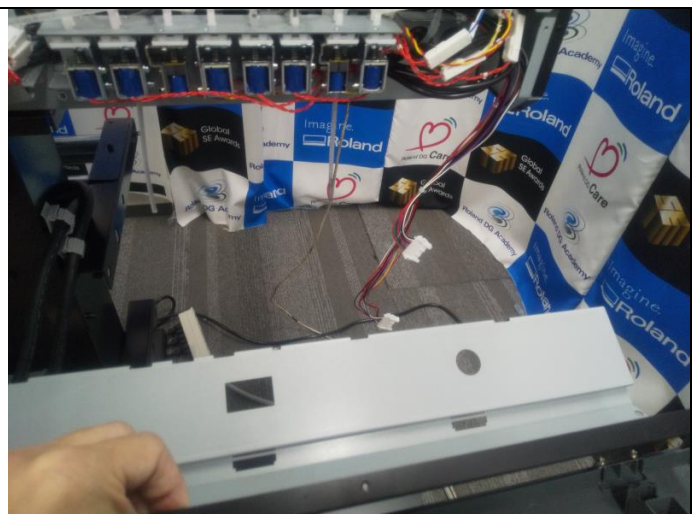
Step 24 / 58

Remove the connector from the cover.



Step 25 / 58

Remove the screws and remove the covers. Remove the covers together with the maintenance cover R.



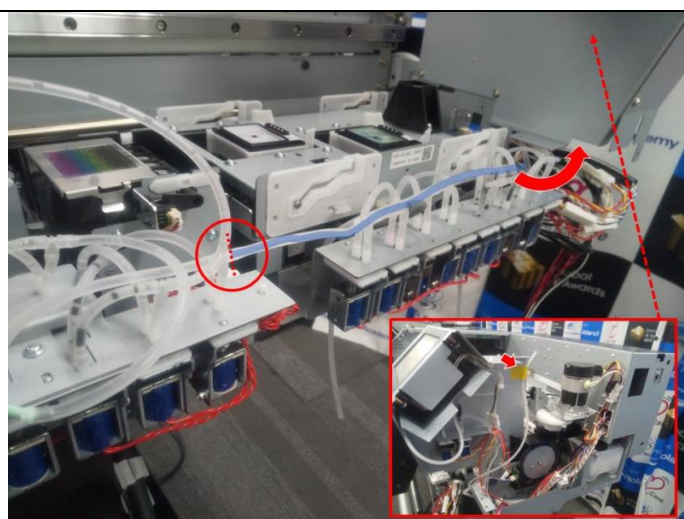
Step 26 / 58

Pull out the three tubes. Tubes with solenoid valves in the path will not leak fluid from the tubes because the valves are closed.



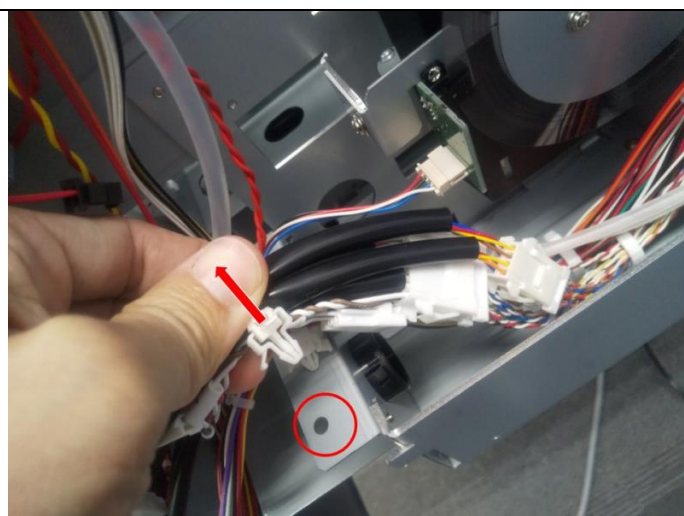
Step 27 / 58

Remove one tube and secure it with masking tape. This path does not have a solenoid valve in the middle, so if the tube is placed in a low position, fluid may leak.



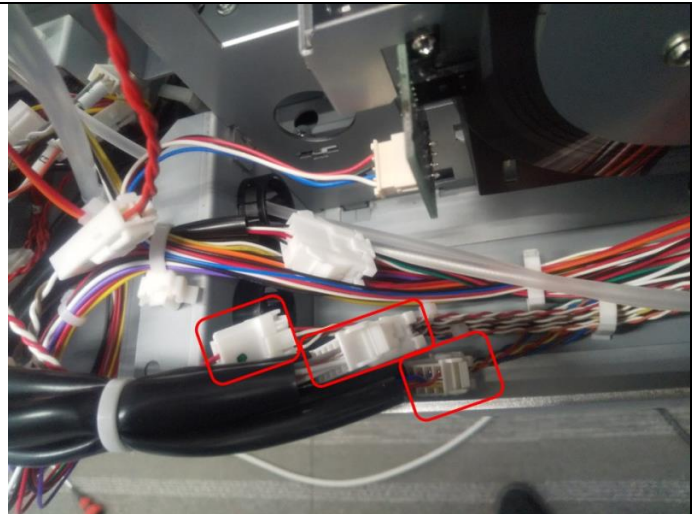
Step 28 / 58

Remove the cable tie together with the cables under the panel.



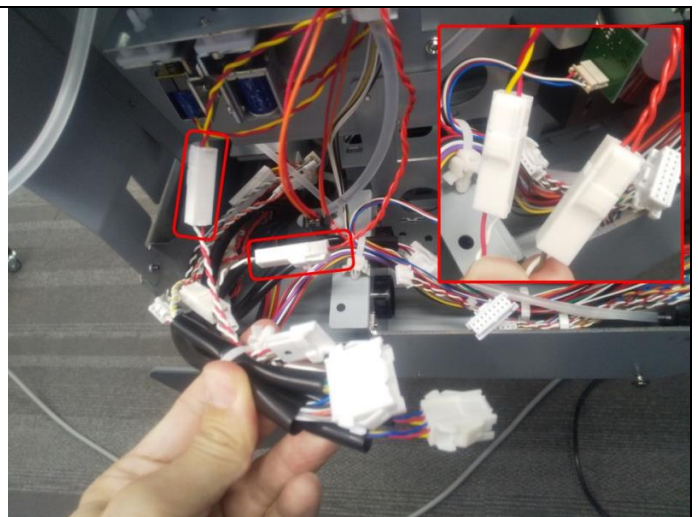
Step 29 / 58

Remove three connectors.



Step 30 / 58

Remove two connectors. When installing these connector after replacement, check the color of the cables and be careful to insert the correct cables.



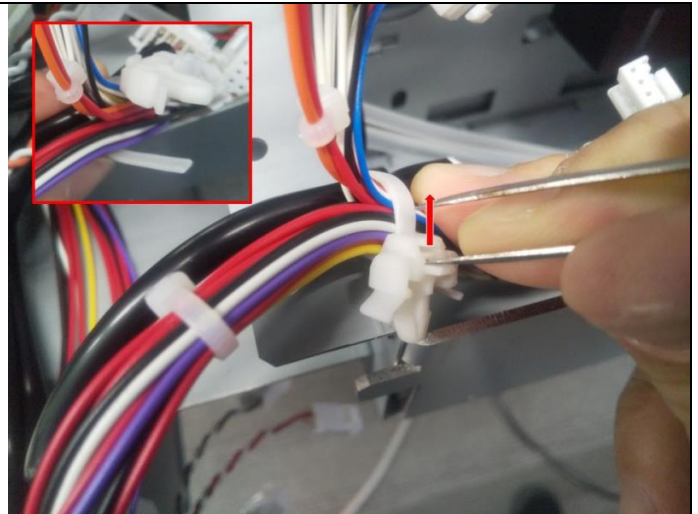
Step 31 / 58

Remove the cable tie together with the cables under the panel.



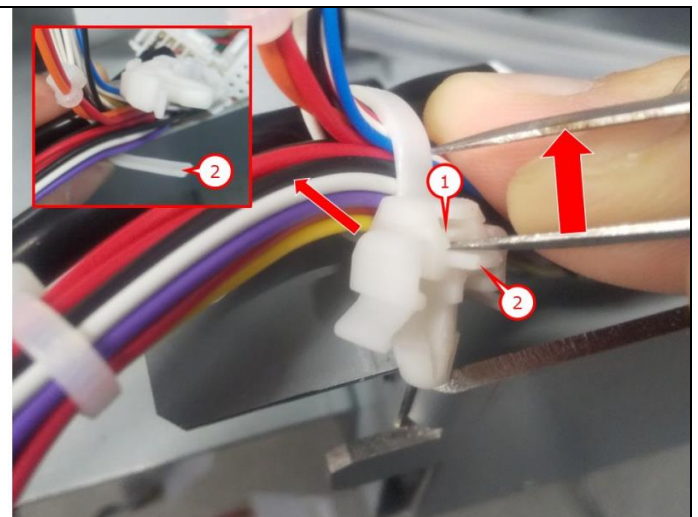
Step 32 / 58

Use tweezers to remove the cable tie.



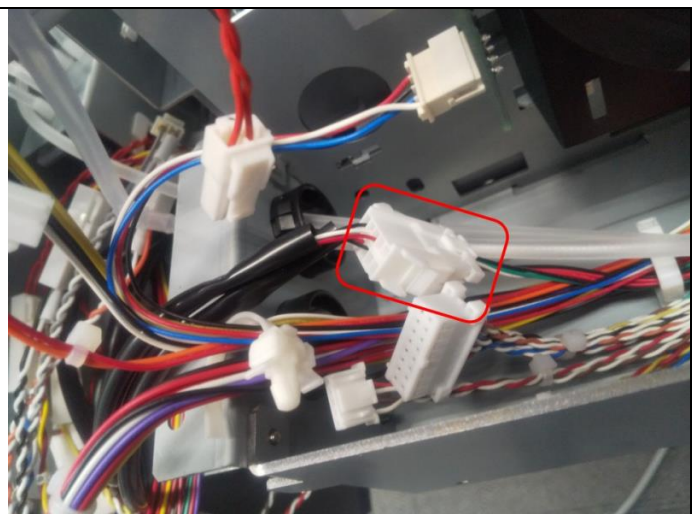
Step 33 / 58

Use tweezers to push up the stopper (1) of the cable tie and pull out (2).



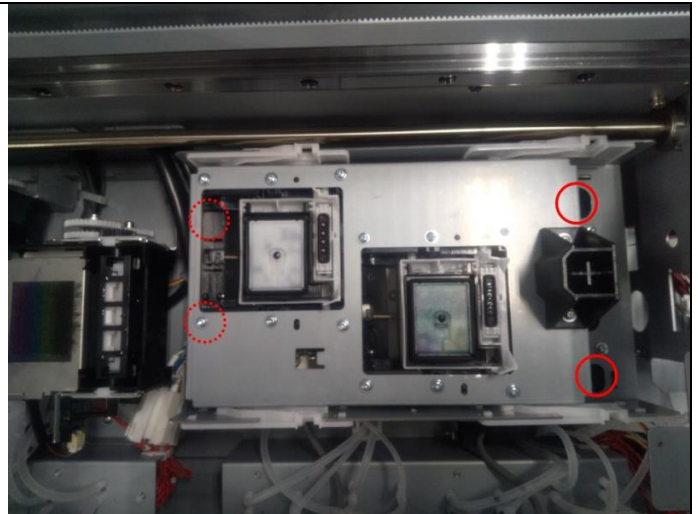
Step 34 / 58

Remove one connector under the panel.



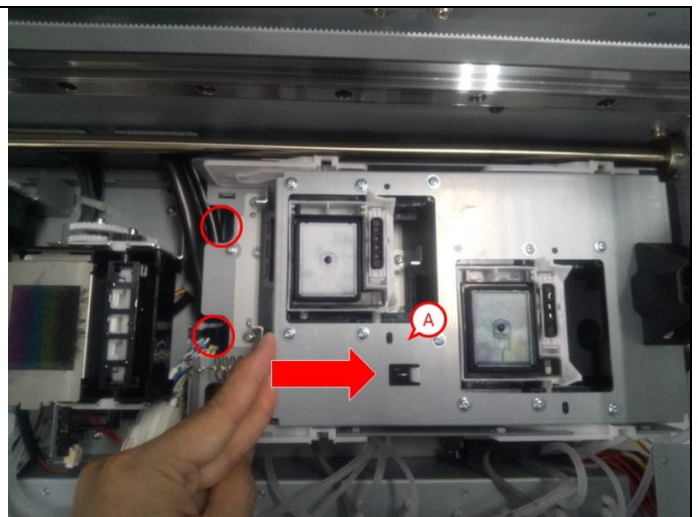
Step 35 / 58

Remove four screws from the cap unit.



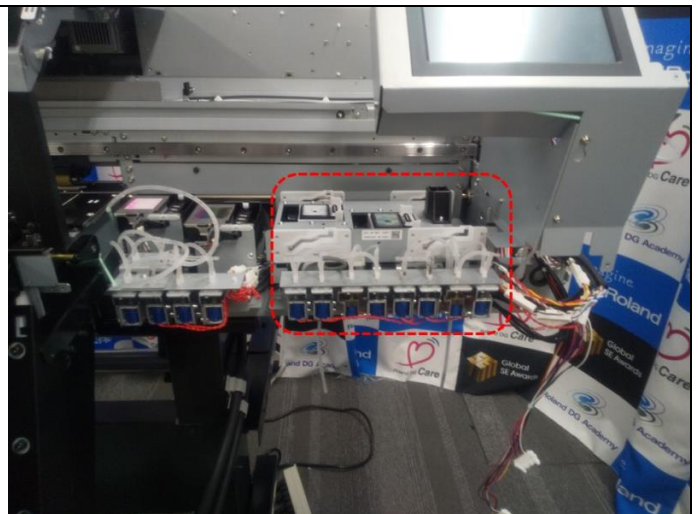
Step 36 / 58

Slide A to the side to see the screw holes.



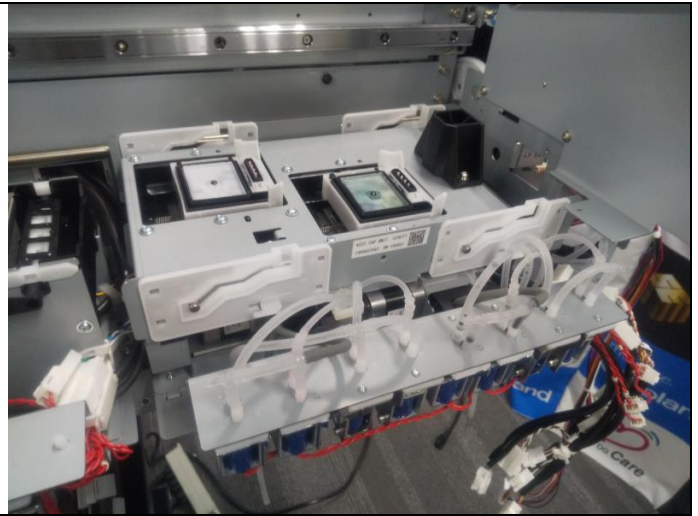
Step 37 / 58

Remove the cap unit, taking care of the cables and tubes.



Step 38 / 58

Make sure there is no dust or dirt in the mounting area, and install the new Print Head Cap unit.



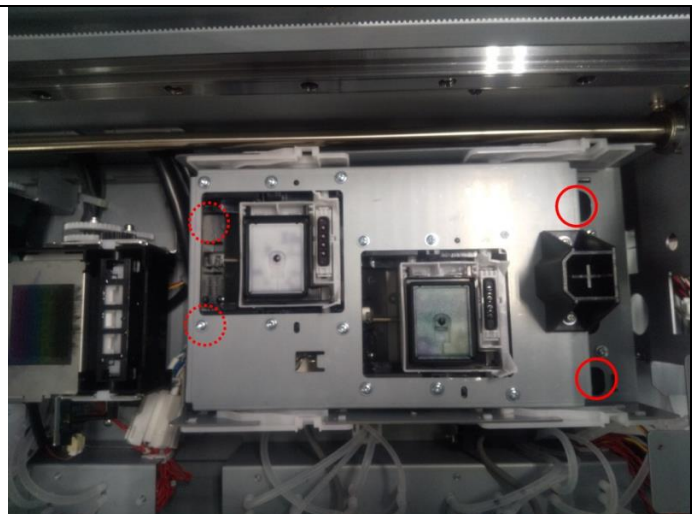
Step 39 / 58

Check for dust and dirt.



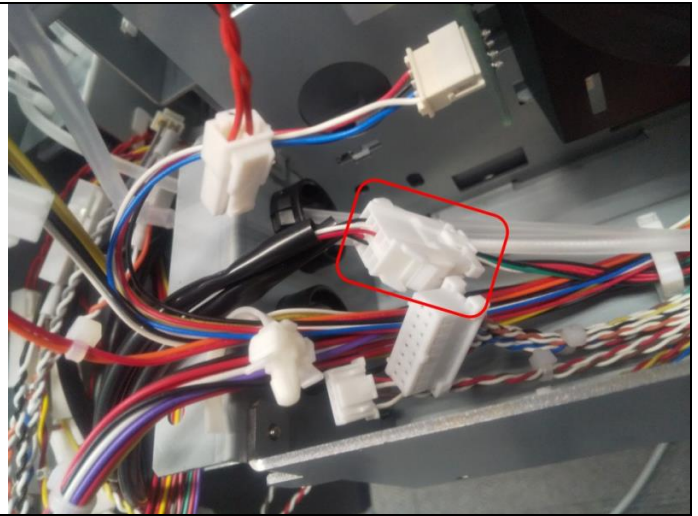
Step 40 / 58

Tighten four screws on the cap unit.



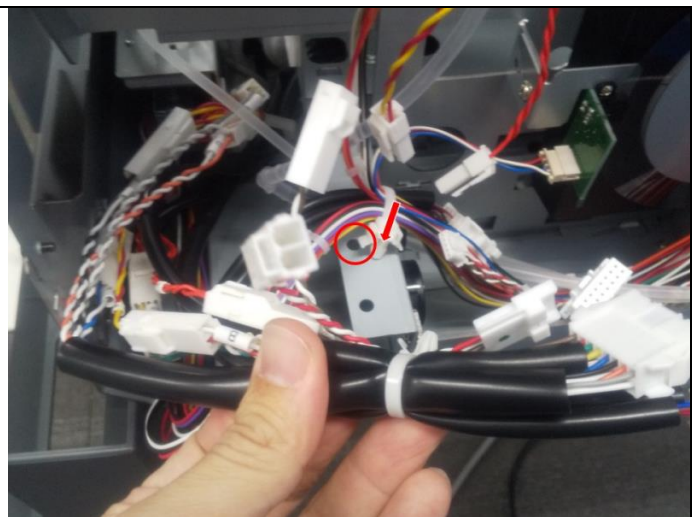
Step 41 / 58

Attach one connector.



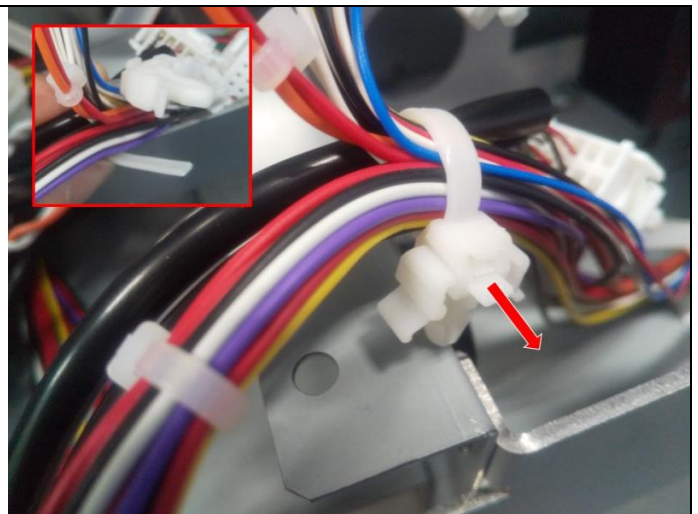
Step 42 / 58

Bundle the cables and secure them to the machine by attaching cable ties.



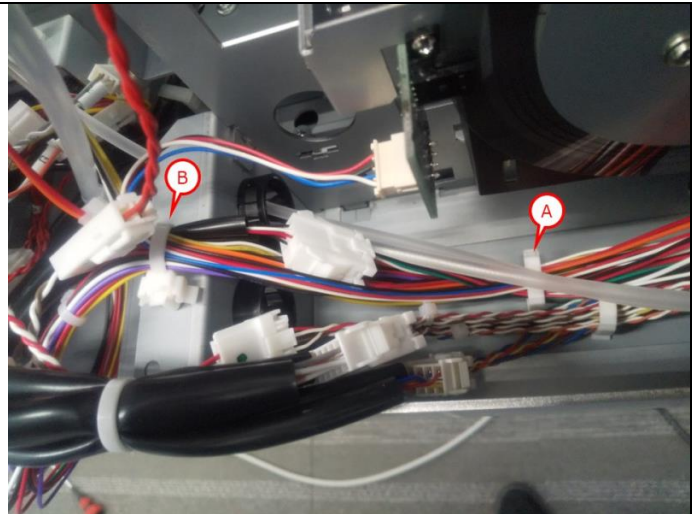
Step 43 / 58

Bundle the cables with the cable ties.



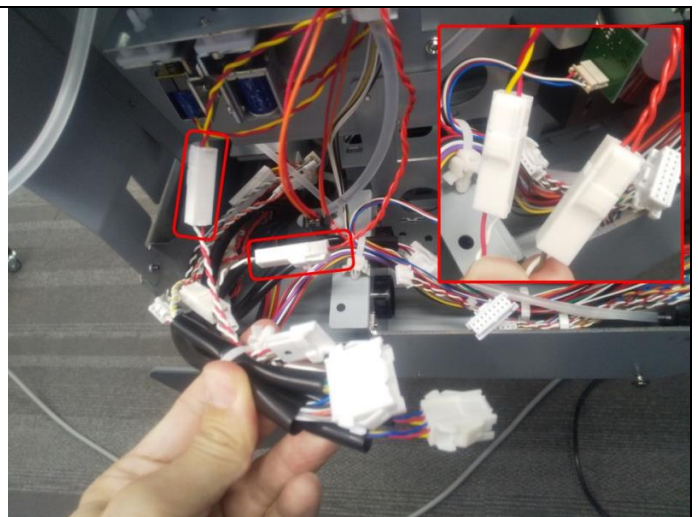
Step 44 / 58

Make sure that the cables between A and B are not pulled too tightly.



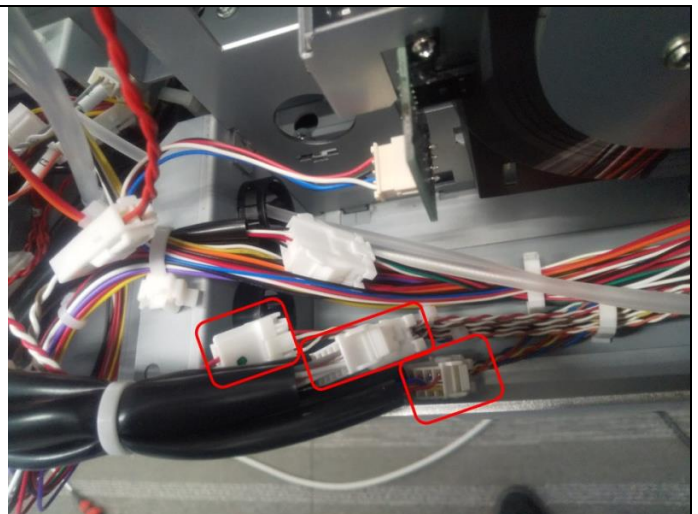
Step 45 / 58

Attach two connectors. When attaching them, check the colors of the cables in the photo and be careful to plug the correct cables (White & red = yellow & red) (White & black = red & red)



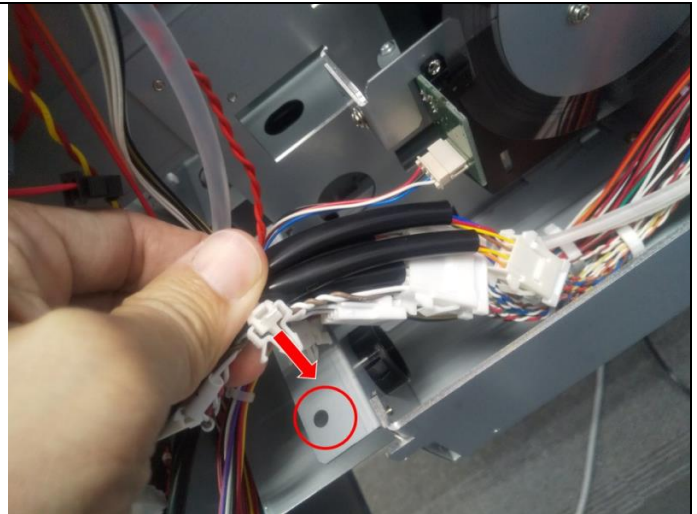
Step 46 / 58

Attach three connectors.



Step 47 / 58

Attach the cable ties that bundle the cables to the machine.



Step 48 / 58

Be sure to cut the tip of the removed tube by about 5 mm because the opening of the tube is wide. If the tube is not enough, replace it with a new one.



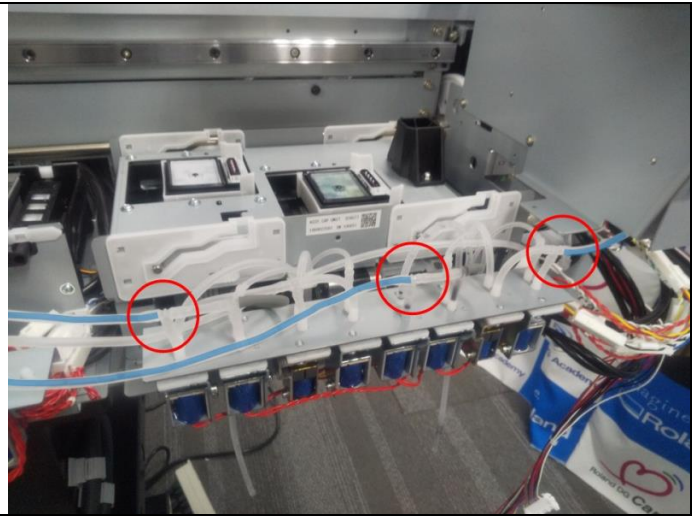
Step 49 / 58

Cut about 5 mm off the tip of the tube.



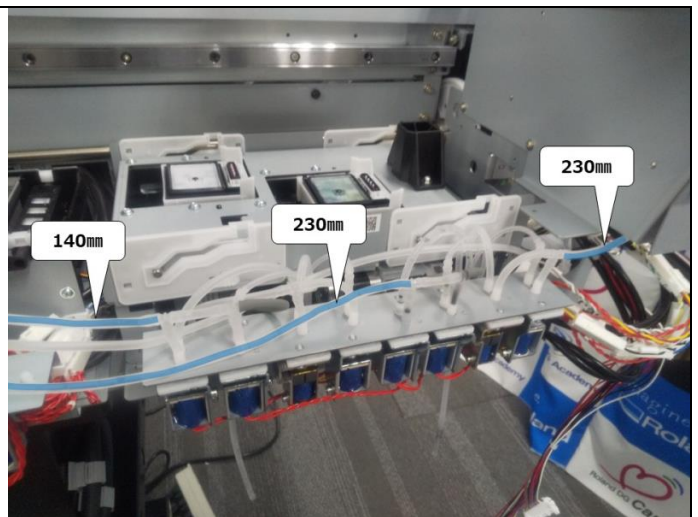
Step 50 / 58

Assemble the tube in three places.
Assemble the tube up to the butt end.



Step 51 / 58

Tube length



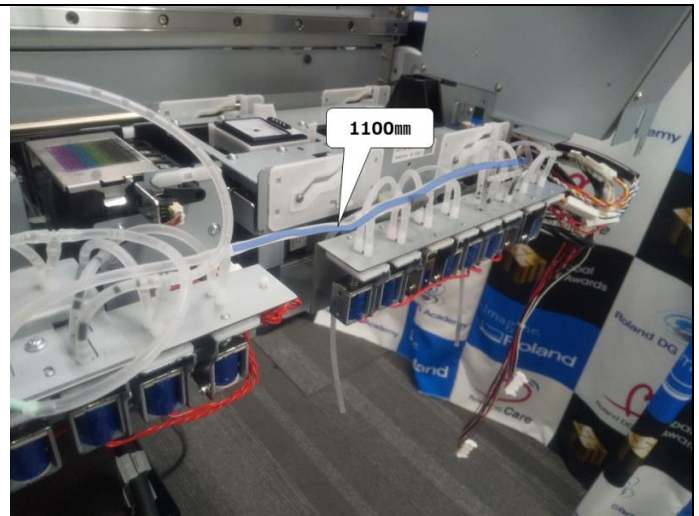
Step 52 / 58

Assemble one piece of tube. Assemble
the tube up to the butt end.



Step 53 / 58

Tube length



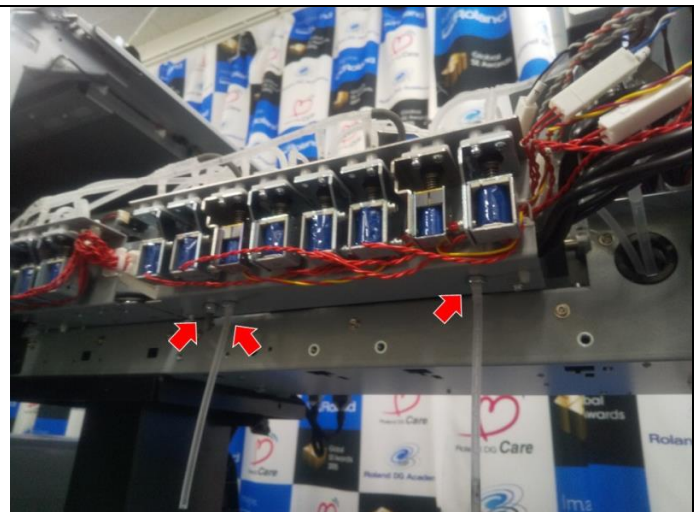
Step 54 / 58

Do not cut the drain tube. If the length is changed, the waste fluid cannot be discharged properly.



Step 55 / 58

Attach the drain tubes in three places. If the tube from the removed Print Head Cap unit can be reused, remove it and reuse it. If not, replace it with a new tube.



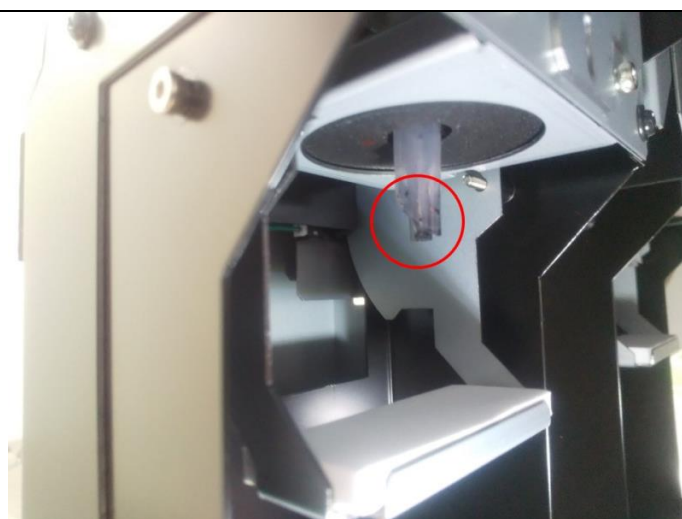
Step 56 / 58

Attach the removed cover.



Step 57 / 58

Check that the drain tube is slightly visible from the tip of the funnel before attaching the drain bottle.



Step 58 / 58

Perform the limit position initialization.



次の手順

リミット位置調整

Next Step

Limit Position Initialization

AP-640 Main board replacement

AP-640 Main board replacement

Information

Step 1 / 6

Necessary Tools

交換に必要なツール/Necessary tools

Peck2	
プラスドライバー No.2 No.2 Phillips screwdriver	

Step 2 / 6

Special Tools

特殊治具/Special Tools

None	
------	---

Step 3 / 6

Typical Work Time

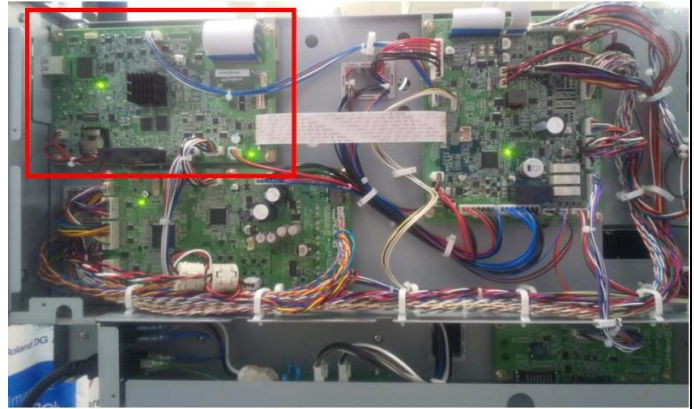
作業内容	時間
メインボード交換 (Peck2 でのパラメーターの移し替えが不可能な場合)	40 分
メインボード交換 (Peck 2 でのパラメーターの移し替えが可能な場合)	20 分
Contents of work	Time
Main board replacement (When parameters cannot be transferred by Peck2)	40 min.
Main board replacement (When parameters can be transferred by Peck2)	20 min.

Tuesday, July 1, 2025 2:34 PM

Language: en

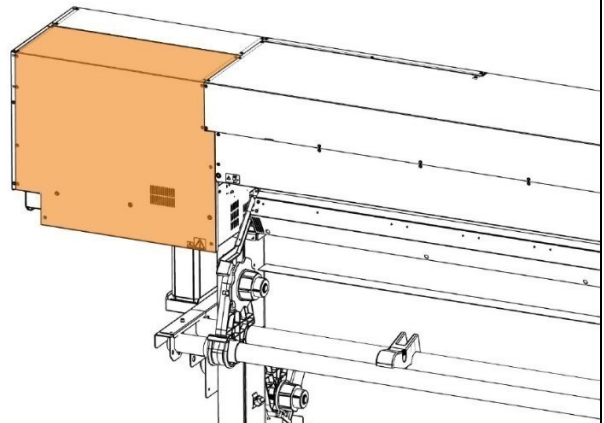
Step 4 / 6

Outline diagram



Step 5 / 6

Cover that needs to be removed



Step 6 / 6

To prevent damage caused by static electricity, release static electricity from your body before touching electronic components. Touching an unpainted metal surface will help release static electricity.

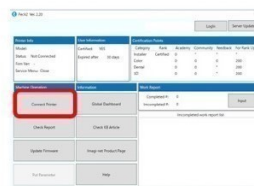


AP-640 Main board replacement

AP-640 Main board replacement Procedure

Step 1 / 38

Start Peck2. The parameters are automatically retrieved to the specified folder when the machine is connected from [Connect Printer].



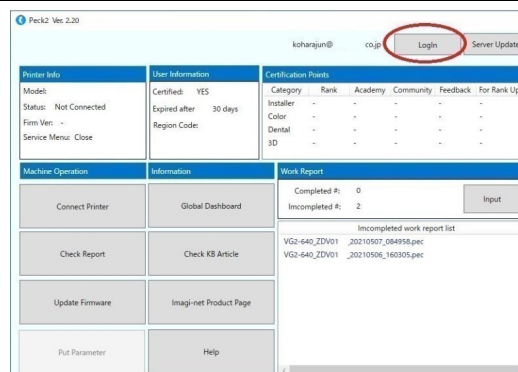
Step 2 / 38

Start Peck2.



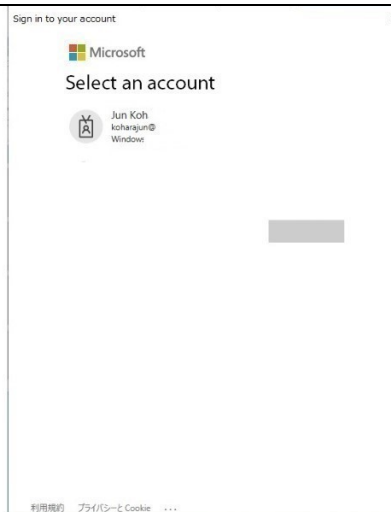
Step 3 / 38

Click the [Login button].



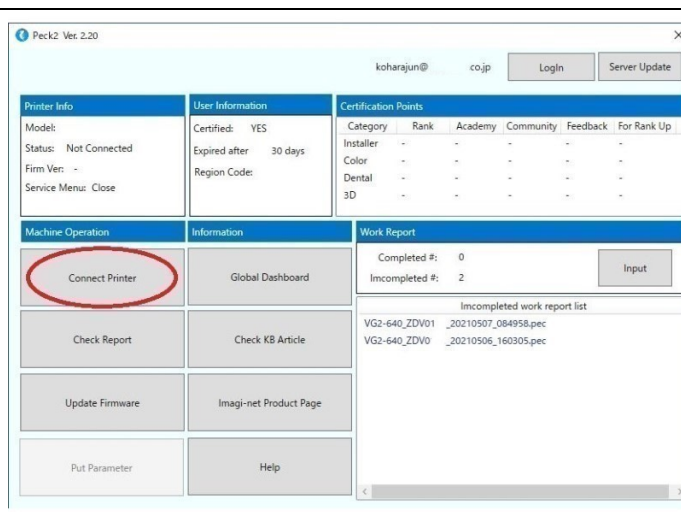
Step 4 / 38

Login with your Imagi-net ID.



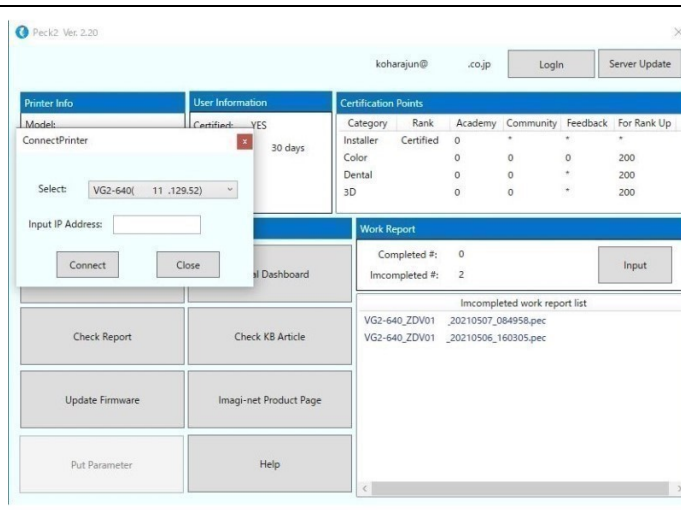
Step 5 / 38

Click the [Connect Printer] button.



Step 6 / 38

Enter the IP address of the printer you would like to connect to.



Step 7 / 38

When the printer is connected, the printer information will be displayed in [Printer Info].

Peck2 Ver. 2.20

koharjun@ .co.jp Login Server Update

Printer Info		User Information		Certification Points					
Model: VG2-640_ZDV01	Certified: YES	Category	Rank	Academy	Community	Feedback	For Rank Up		
Status: UnSetup	Expired after: 30 days	Installer	Certified	0	*	*	*		
Firm Ver: 2.00		Color		0	0	0	200		
Service Menu: Open		Dental		0	0	*	200		
		3D		0	0	*	200		

Machine Operation		Information		Work Report	
Connect Printer	Global Dashboard	Completed #:	0	Input	
Check Report	Check KB Article	Incompleted #:	2		
Update Firmware	Imagi-net Product Page	Incompleted work report list			
Put Parameter	Help	VG2-640_ZDV01 _20210507_084958.pec VG2-640_ZDV01 _20210506_160305.pec			

Step 8 / 38

Click the [Put Parameter] button to confirm the file.

Peck2 Ver. 2.20

koharjun@ .co.jp Login Server Update

Printer Info		User Information		Certification Points					
Model: VG2-640_ZDV01	Certified: YES	Category	Rank	Academy	Community	Feedback	For Rank Up		
Status: UnSetup	Expired after: 30 days	Installer	Certified	0	*	*	*		
Firm Ver: 2.00		Color		0	0	0	200		
Service Menu: Open		Dental		0	0	*	200		
		3D		0	0	*	200		

Machine Operation		Information		Work Report	
Connect Printer	Global Dashboard	Completed #:	0	Input	
Check Report	Check KB Article	Incompleted #:	2		
Update Firmware	Imagi-net Product Page	Incompleted work report list			
Put Parameter	Help	VG2-640_ZDV01 _20210507_084958.pec VG2-640_ZDV01 _20210506_160305.pec			

Step 9 / 38

Check the date and time of the file name to confirm that the parameters have been obtained. After confirming the file name return to the home screen without opening the file.

> AppData > Roaming > Peck2 > DeviceInfo > Parameter

VG2-640_ZDV010
4_20210507_1010
19.para

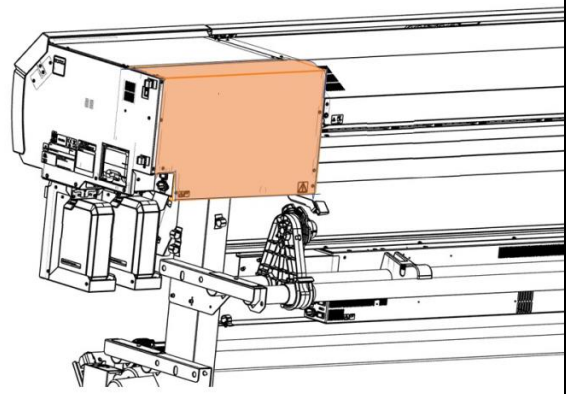
Step 10 / 38

Turn off the power and unplug the power cable.



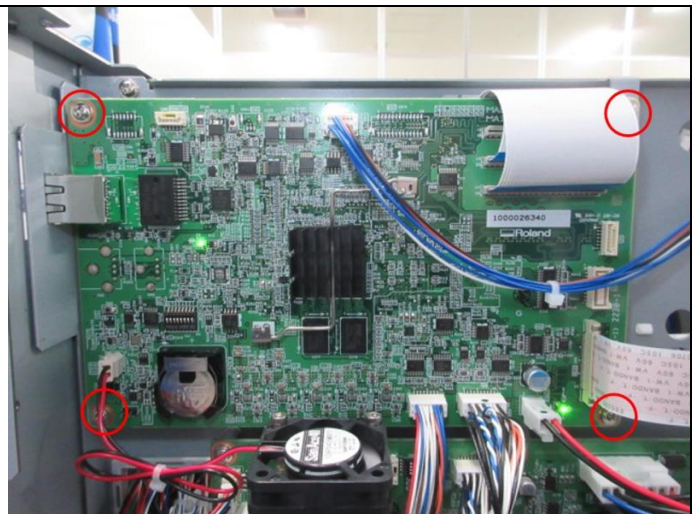
Step 11 / 38

Remove the cover.



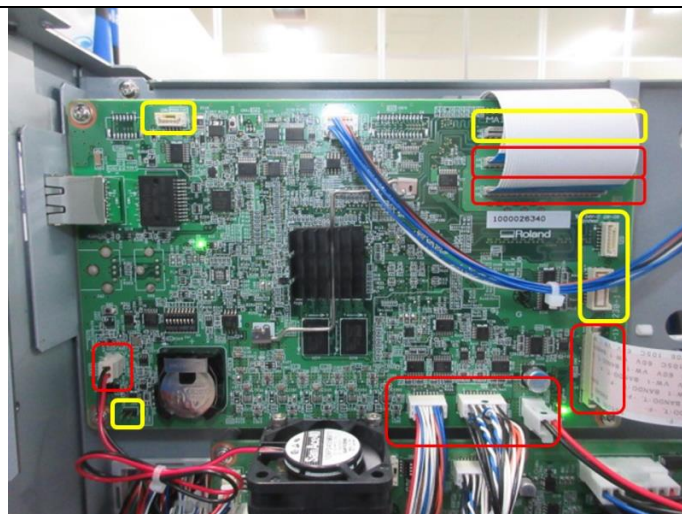
Step 12 / 38

Disconnect the connectors and remove the main board.



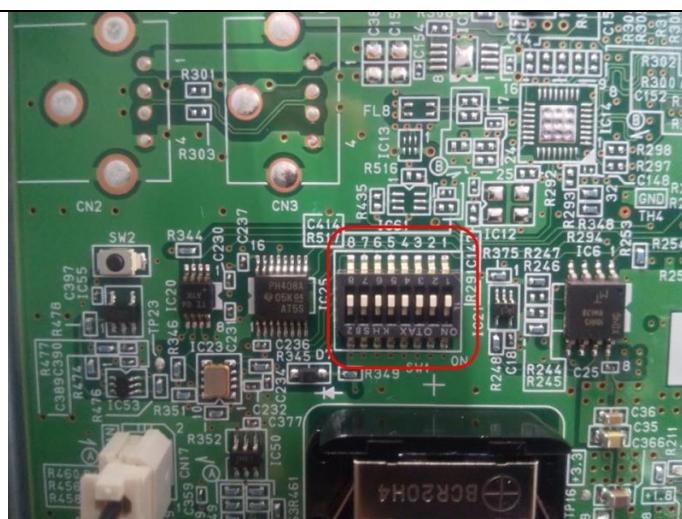
Step 13 / 38

Insert the connectors at the red parts and do not insert anything at the yellow parts.



Step 14 / 38

Make sure all DIP-SWs are turned off.



Step 15 / 38

Be sure to install the removed battery into the new main board.



次の手順

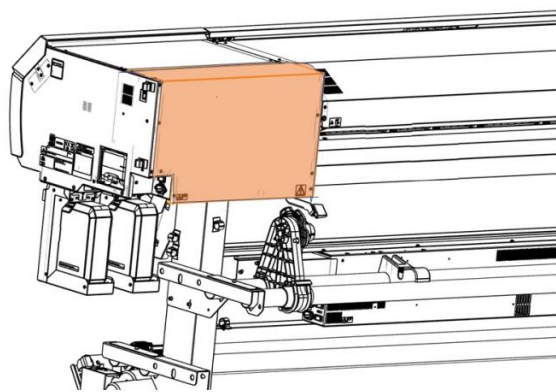
電池交換

Next Step

Battery replacement

Step 16 / 38

Install the cover.



Step 17 / 38

The following procedure is for when the parameters can be transferred with Peck2. If you do not have the parameters, go to the next step "When parameters cannot be transferred by Peck2".



Step 18 / 38

Install the firmware. [See Firmware Installation].



次の手順

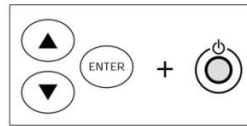
ファームウェアインストール

Next Step

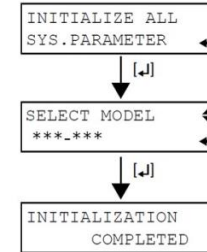
Firmware Installation

Step 19 / 38

Perform system parameter initialization.



OR



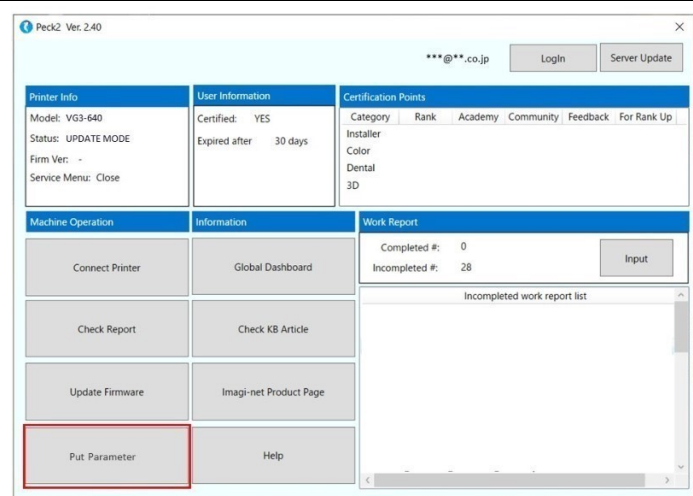
Step 20 / 38

Enter Temporary IP address mode.

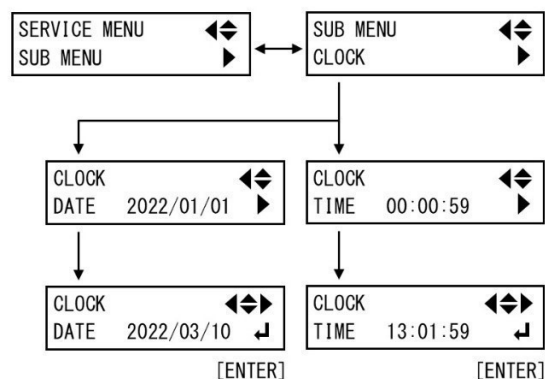


Step 21 / 38

Performs Put parameters.



Set the date and time. Set [DATE] in the order of [year/month/day].



Follow the next procedures if you are unable to transfer the parameters using Peck2. If you were able to transfer the parameters, the procedure is complete.



Install the firmware. [Refer to Firmware Installation Procedure].

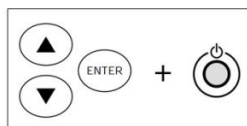


ファームウェアインストール

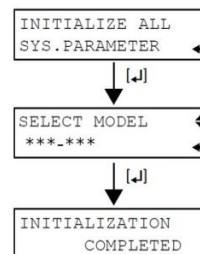
Firmware Installation

Step 25 / 38

Perform system parameter initialization.

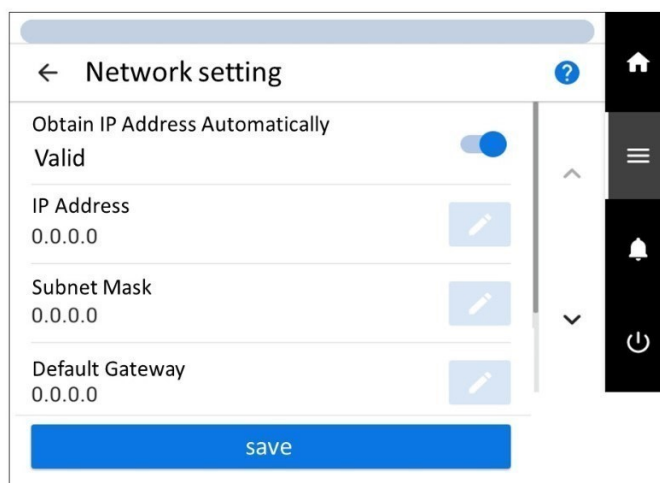


OR



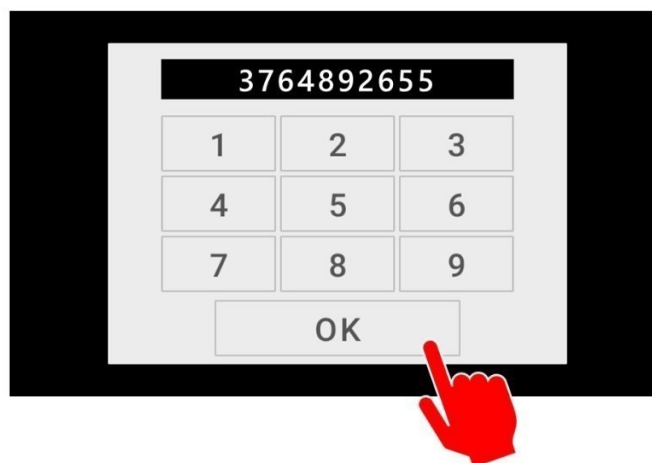
Step 26 / 38

Go to User Menu and set IP Address.



Step 27 / 38

Enter the temporary IP address mode.



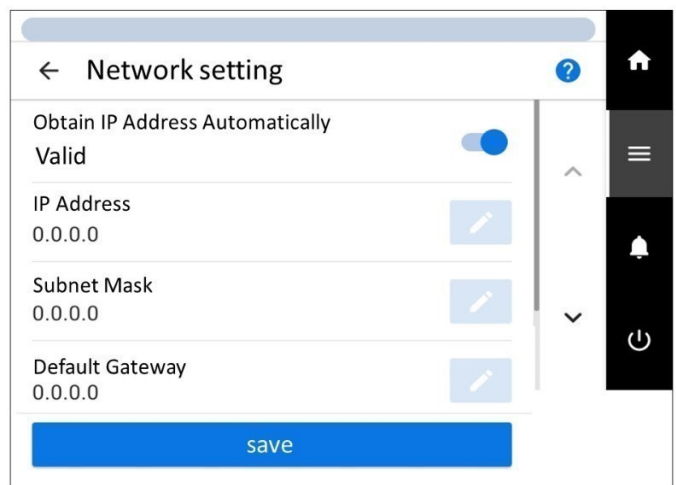
Step 28 / 38

Connect the machine to Peck2.



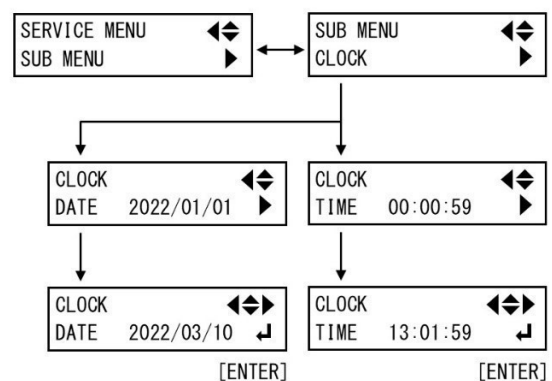
Step 29 / 38

Go to User Menu and set IP Address. To access the User Menu, press the red arrow in the upper left corner of the Service Mode Menu.



Step 30 / 38

Set the date and time [SUB MENU] > [CLCK].



Step 31 / 38

Enter serial number [SUB MENU] > [SERIAL NO.].



次の手順

シリアルナンバー入力

Next Step

Serial number input

Step 32 / 38

Ink type setting [SUB MENU] > [CHANGE INKTYPE]



次の手順

インクタイプ設定

Next Step

Ink type setting

Step 33 / 38

Head rank input [PRINT MENU] > [HEAD RANK].



次の手順

ヘッドランク入力

Next Step

Head rank setting

Step 34 / 38

Limit position initialization [LIMIT
POSITION ADJUSTMENT REFERENCE].



次の手順

リミット位置調整

Next Step

Limit Position Initialization

Step 35 / 38

Linear encoder position setting [see
LINEAR ENCODER POSITION SETTING].



次の手順

リニアエンコーダー位置設定

Next Step

Linear encoder position setting

Step 36 / 38

Multi sensor adjustment [see Multi
sensor adjustment].



次の手順

マルチセンサー調整

Next Step

Multi Sensor Adjustment

Step 37 / 38

Print head position adjustment [see
Head position adjustment] Adjust only
Horizontal and M-GAP DEFAULT.



次の手順

ヘッド位置調整

Next Step

Print head alignment

Step 38 / 38

Feed calibration [Feed calibration].



次の手順

距離補正

Next Step

Feed Calibration

AP-640 Battery replacement

AP-640 Battery replacement Information

Step 1 / 5

<Replacement parts> Lithium battery
CR2032



Step 2 / 5

Necessary Tools

一般ツール/General Tool

プラスドライバー No.2
No.2 Phillips screwdriver



特殊治具/Special Tools

無し
None

Step 3 / 5

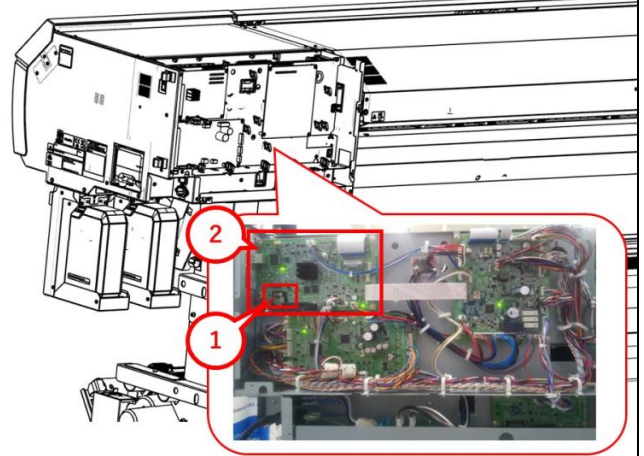
Typical Work Time

作業時間/Typical work time

作業内容/Contents of work	時間/Time
電池交換 Battery Replacement	7 min.
日時の設定 Time and date setting	2 min.

Step 4 / 5

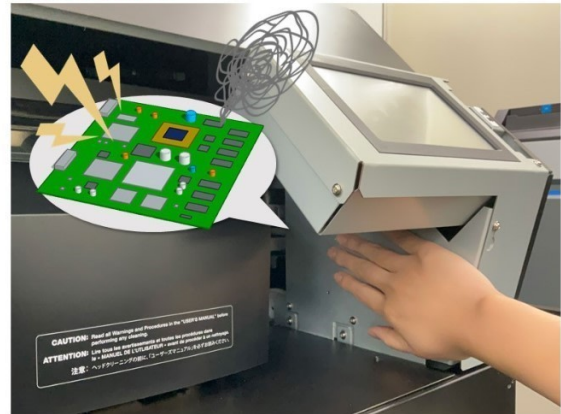
1. Battery, 2. Main board



Step 5 / 5

To prevent damage from static electricity, release static electricity from your body before touching electronic components. Touching an unpainted metal surface can release static electricity.

CAUTION !



AP-640 Battery replacement

AP-640 Battery replacement Procedure

Step 1 / 15

Caution: Lithium batteries may explode if not replaced properly. Replace the battery with one of the same type (or its equivalent) as the battery installed. Dispose of used batteries according to the manufacturer's instructions.
Lithium battery: CR2032



Step 2 / 15

Prohibited: Do not charge, short-circuit, disassemble, or throw into fire lithium batteries. Doing so may cause overheating, rupture, or ignition.



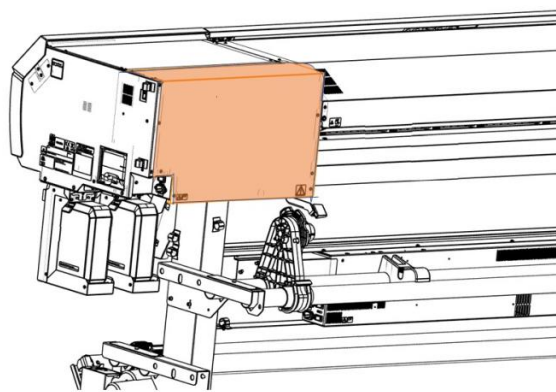
Step 3 / 15

Disposal: When disposing of or storing lithium batteries, insulate them by wrapping tape around them. Otherwise, heat generation, rupture, or ignition may occur.



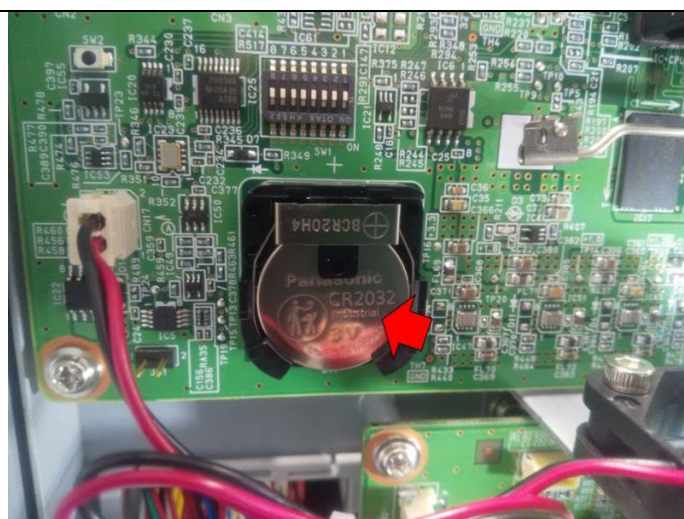
Step 4 / 15

Remove the cover.



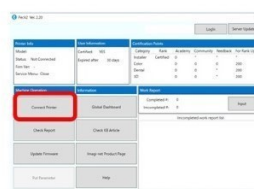
Step 5 / 15

Replace the battery with a new one. Be sure to install the batteries in the correct orientation.



Step 6 / 15

Turn on the power and connect the Peck2 to the machine to enter the service mode.



Step 7 / 15

Connect the power cable and turn on the power.



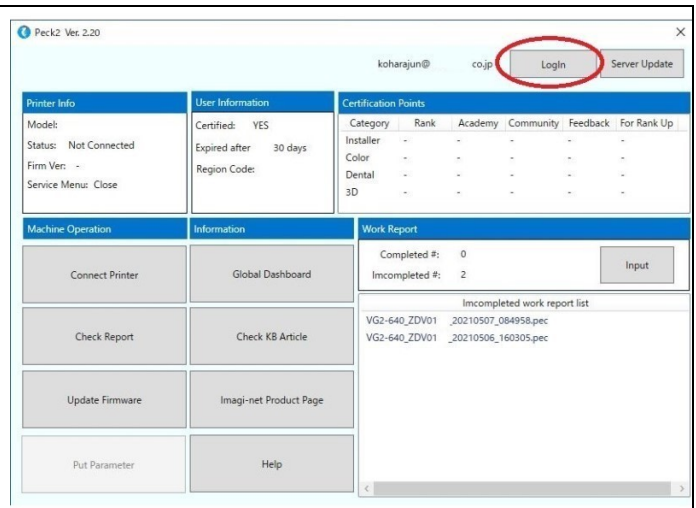
Step 8 / 15

Start Peck2.



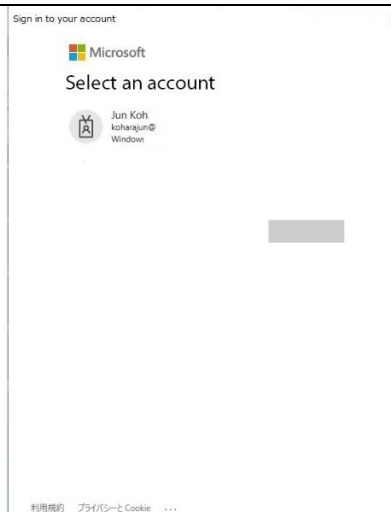
Step 9 / 15

Click the [Login] button.



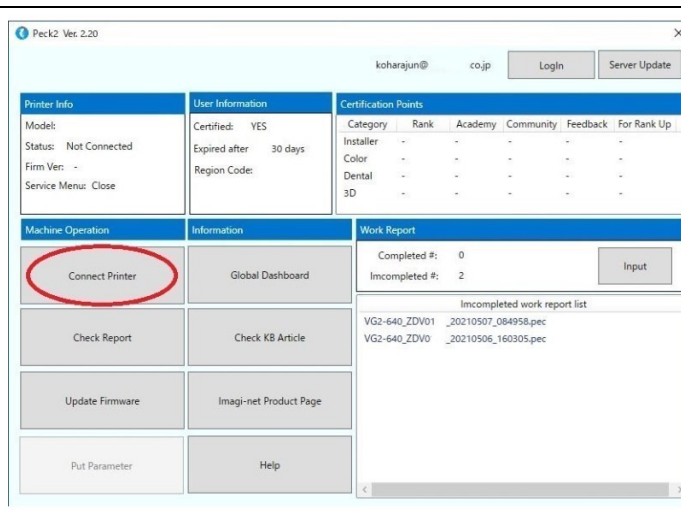
Step 10 / 15

Login with your Imagi-net ID.



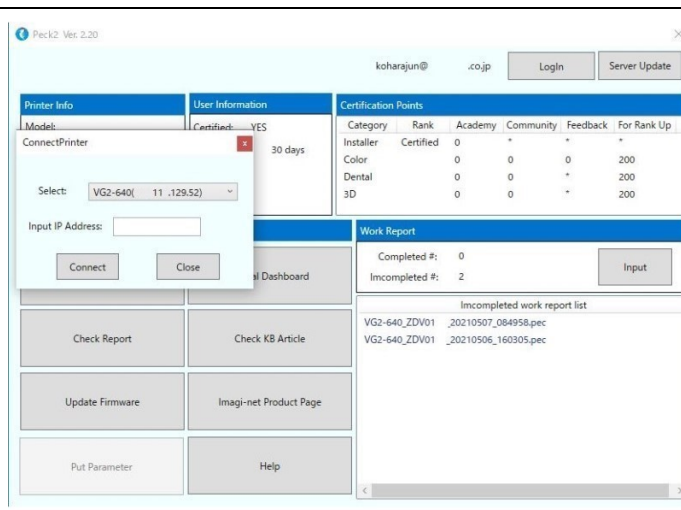
Step 11 / 15

Click the [Connect Printer] button.



Step 12 / 15

Enter the IP address of the printer you wish to connect to.



Step 13 / 15

When the printer is connected, the printer information will be displayed in [Printer Info].

Peck2 Ver: 2.20

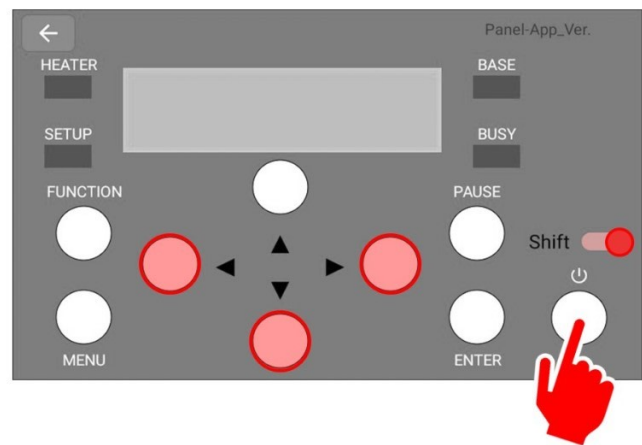
koharjun@ .co.jp Login Server Update

Printer Info		User Information		Certification Points					
Model: VG2-640_ZDV01	Certified: YES	Category	Rank	Academy	Community	Feedback	For Rank Up		
Status: UnSetup	Expired after: 30 days	Installer	Certified	0	*	*	*		
Firm Ver: 2.00		Color	0	0	0	200			
Service Menu: Open		Dental	0	0	*	200			
		3D	0	0	*	200			

Machine-Operation		Information		Work Report	
Connect Printer	Global Dashboard	Completed #:	0	Input	
Check Report	Check KB Article	Incompleted #:	2		
Update Firmware	Imagi-net Product Page	Incompleted work report list			
Put Parameter	Help	VG2-640_ZDV01 _20210507_084958.pec			
		VG2-640_ZDV01 _20210506_160305.pec			

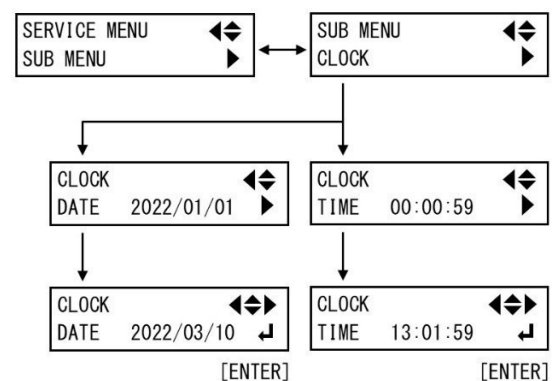
Step 14 / 15

Press [Shift]> [□]+[□]+[□]+[Sub Power] on the panel of the machine to enter the service mode. Turn on the [Shift] button so that multiple buttons can be pressed at the same time.



Step 15 / 15

Refer to the date/time adjustment procedure to perform date/time adjustment.



AP-640 Junction board replacement

AP-640 Junction board replacement

Information

Step 1 / 6

<Part to be replaced> Junction board

Step 2 / 6

Necessary Tools

一般ツール/General Tool

プラスドライバー No.2
No.2 Phillips screwdriver



特殊治具/Special Tools

無し
None

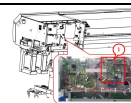
Step 3 / 6

Typical Work Time

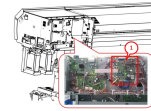
作業時間/Typical work time

作業内容/Contents of work	時間/Time
ジャンクションボードの交換 Junction Board Replacement	15 min.

Step 4 / 6

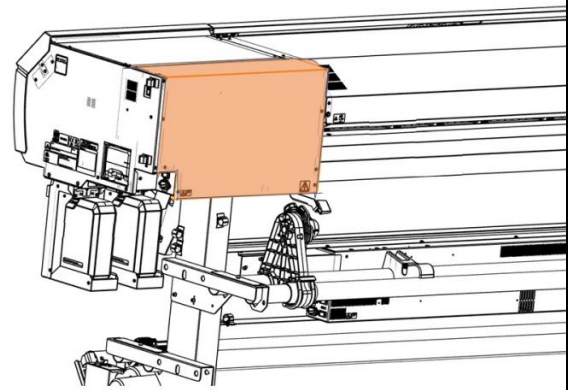


1. Junction board



Step 5 / 6

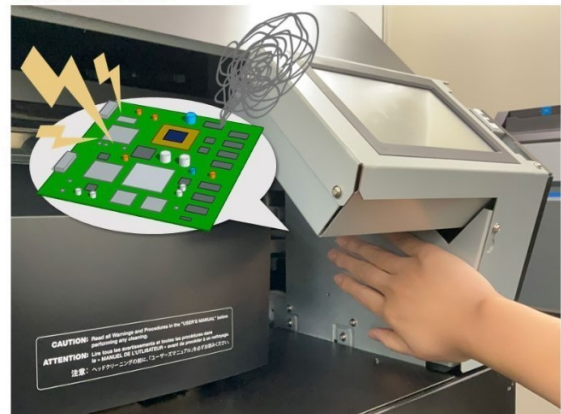
Cover that needs to be removed



Step 6 / 6

To prevent damage from static electricity, release static electricity from your body before touching electronic components. Touching an unpainted metal surface will release static electricity.

CAUTION !



AP-640 Junction board replacement

AP-640 Junction board replacement

Procedure

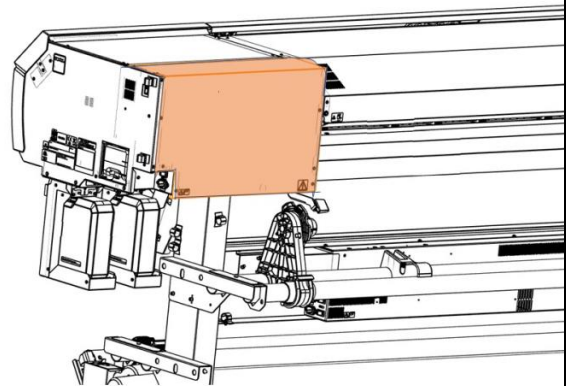
Step 1 / 5

Turn off the main power and unplug the power cord.



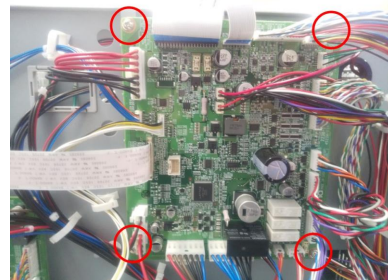
Step 2 / 5

Remove the cover.



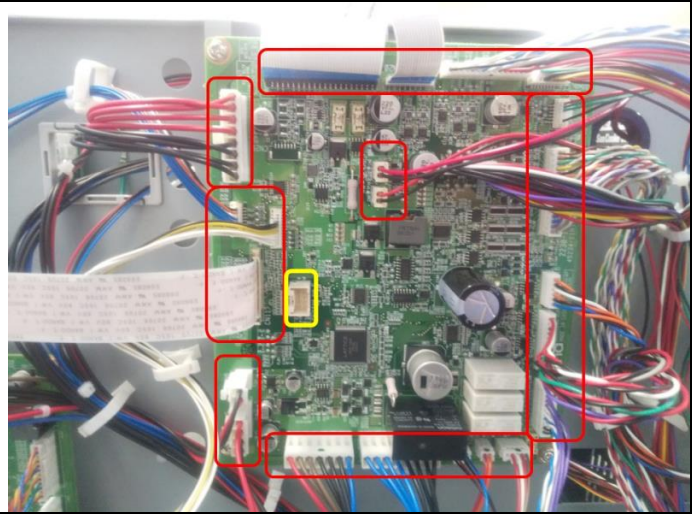
Step 3 / 5

Remove the connectors and screws connected to the junction board, and replace it with a new junction board.



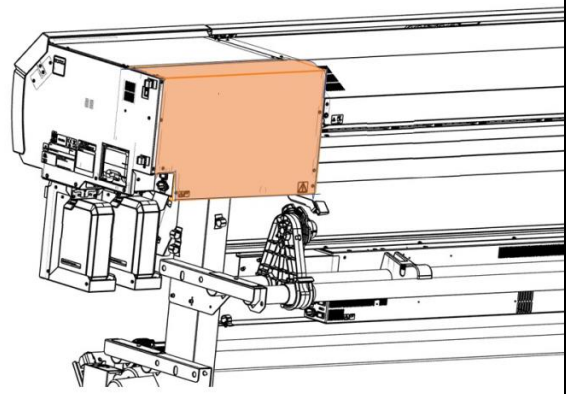
Step 4 / 5

Detail1: Remove the connectors marked in red and connect them to the new board. There is no connector to connect to the part marked yellow.



Step 5 / 5

Attach the cover.



AP-640 AC junction board replacement

AP-640 AC junction board replacement

Information

Step 1 / 6

Necessary Tools

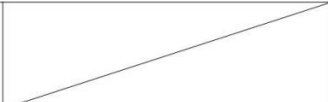
一般ツール/General Tool

プラスドライバー No.2 No.2 Phillips screwdriver	
プラスドライバー No.2 (80mm 以下) No.2 Phillips screwdriver (80mm or less)	

Step 2 / 6

Special Tools

特殊治具/Special Tools

無し None	
------------	---

Step 3 / 6

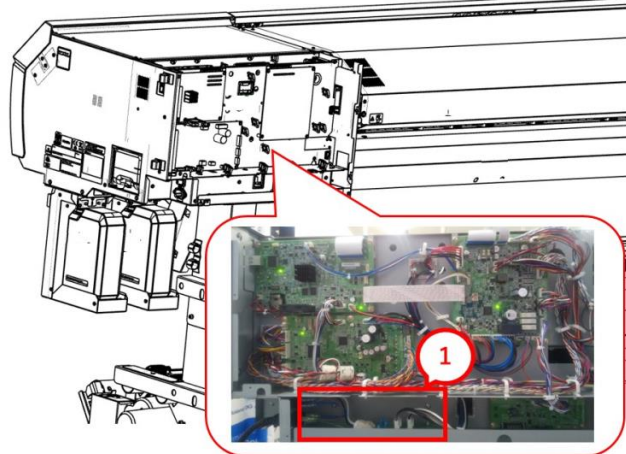
Typical Work Time

作業時間/Typical work time

作業内容/Contents of work	時間/Time
ACジャンクションボード交換 AC junction board replacement	25 min.

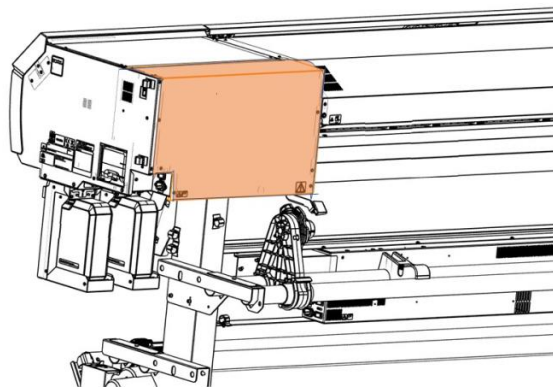
Step 4 / 6

1. AC junction board



Step 5 / 6

Covers that need to be removed



Step 6 / 6

To prevent damage caused by static electricity, release static electricity from your body before touching electronic components. Touching an unpainted metal surface will release static electricity.



AP-640 AC junction board replacement

AP-640 AC junction board replacement

Procedure

Step 1 / 7

Turn off the main power and unplug the power cable.



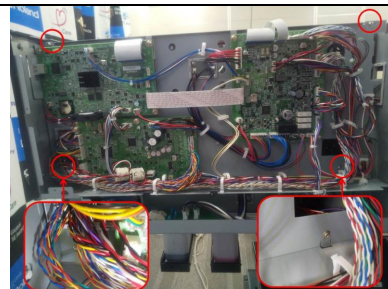
Step 2 / 7

Remove the cover.



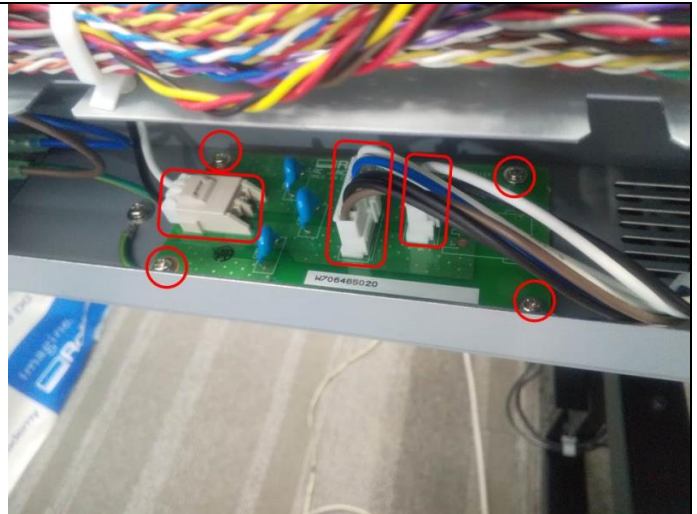
Step 3 / 7

Remove the four screws.



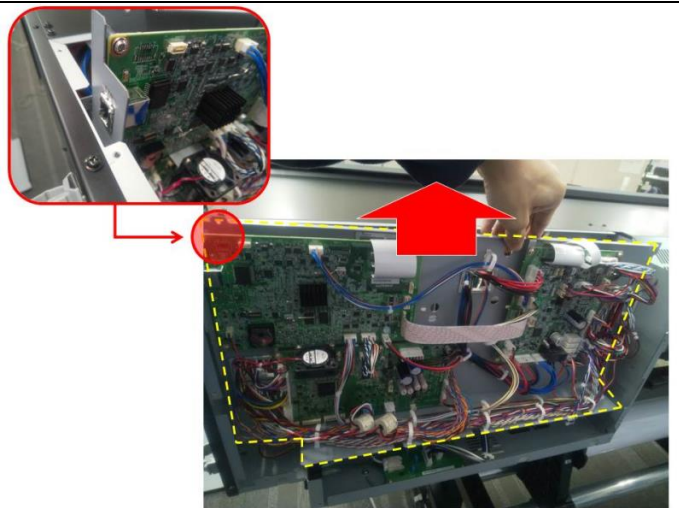
Step 4 / 7

Remove the connectors and screws and replace with the AC junction board with a new one.



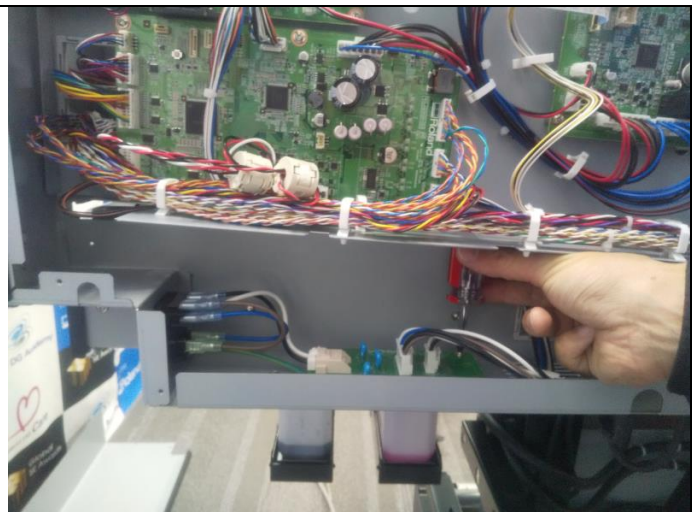
Step 5 / 7

Detail1: lift up the entire board together with the sheet metal, being careful with the cables.



Step 6 / 7

Detail2: Remove the screws.



Step 7 / 7

Attach the removed cover and screws.



AP-640 Servo Board Replacement

AP-640 Servo Board Replacement Information

Step 1 / 6

<Replacement Parts> Servo Board

Step 2 / 6

Necessary Tools

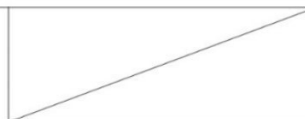
一般ツール/General Tool

プラスドライバー No.2
No.2 Phillips screwdriver



特殊治具/Special Tools

無し
None



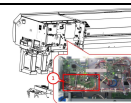
Step 3 / 6

Typical Work time

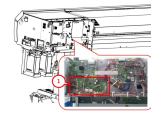
作業時間/Typical work time

作業内容/Contents of work	時間/Time
サーボボード交換 Servo Board Replacement	20 min.

Step 4 / 6

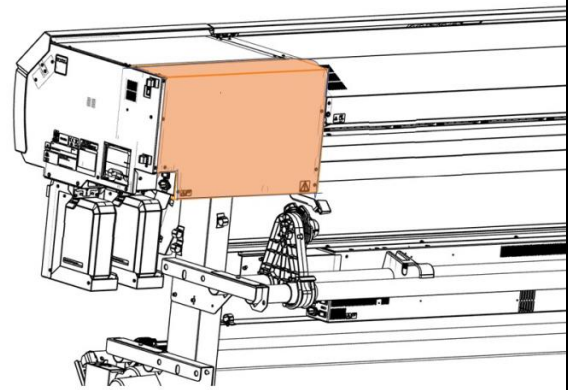


1. Servo board



Step 5 / 6

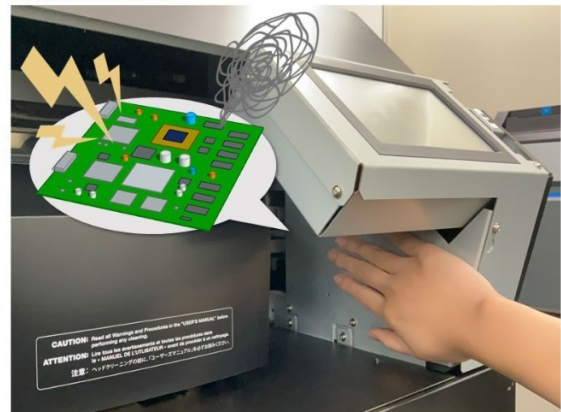
Cover that needs to be removed



Step 6 / 6

To prevent damage from static electricity, release static electricity from your body before touching electronic components. Touching an unpainted metal surface will release static electricity.

CAUTION !



AP-640 Servo Board Replacement

AP-640 Servo Board Replacement Procedure

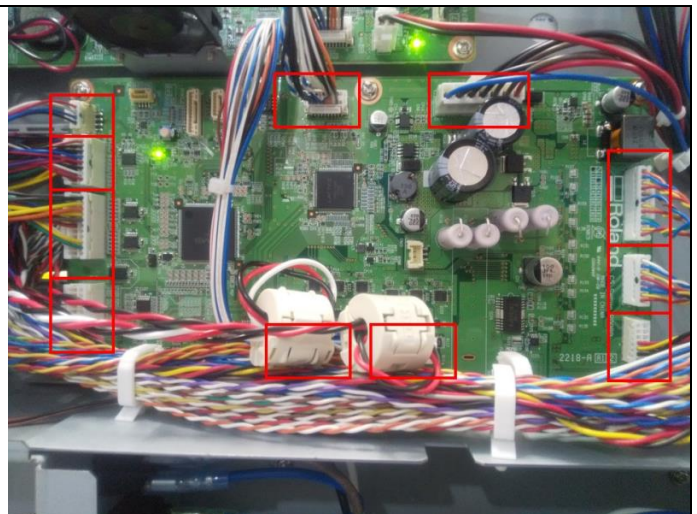
Step 1 / 4

Turn off the main power and unplug the power cable.



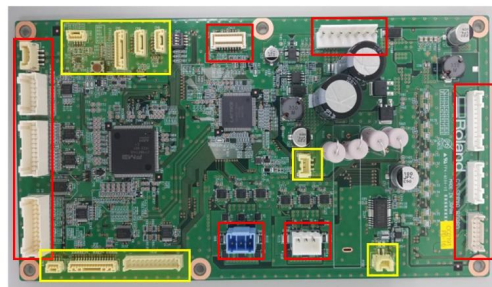
Step 2 / 4

Remove the connectors and screws connected to the servo board, and replace the servo board with a new one.



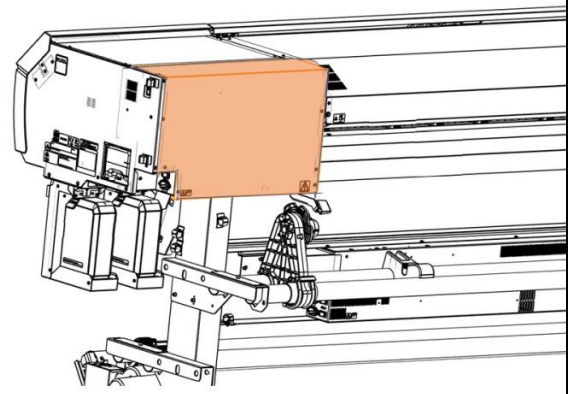
Step 3 / 4

Detail1: Note that there are no connectors to attach to the yellow parts.



Step 4 / 4

Attach the cover.



AP-640 Switching Power Supply Replacement 41V

AP-640 Switching Power Supply Replacement 41V Information

Step 1 / 6

Necessary Tools

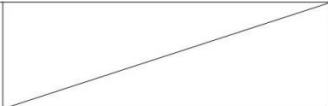
一般ツール/General Tool

プラスドライバー No.2 No.2 Phillips screwdriver	
プラスドライバー No.2 (80mm 以下) No.2 Phillips screwdriver (80mm or less)	

Step 2 / 6

Special tools

特殊治具/Special Tools

無し None	
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Step 3 / 6

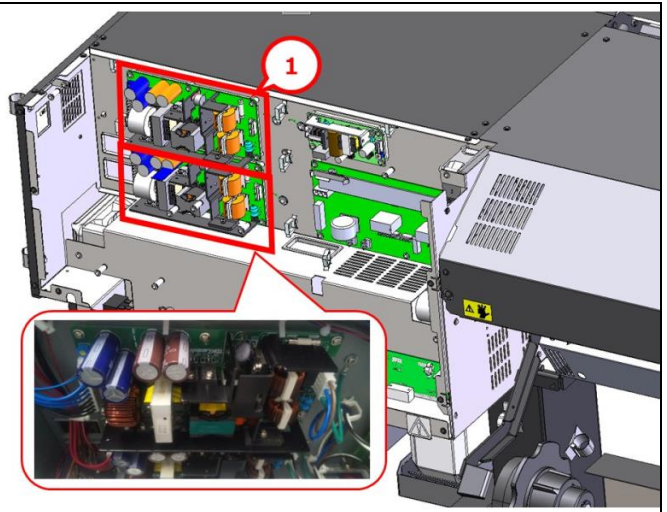
Typical Work Time

作業時間/Typical work time

作業内容/Contents of work	時間/Time
スイッチング電源交換 SW Power Supply Replacement	18 min.

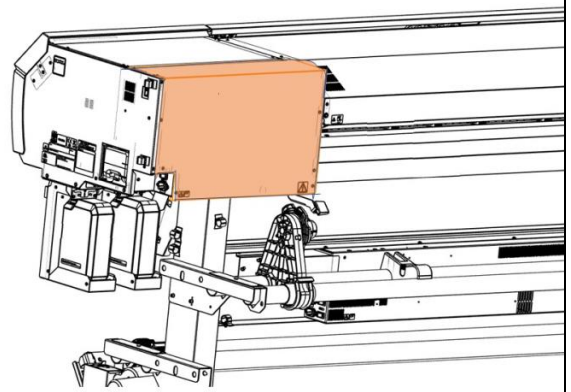
Step 4 / 6

1 switching power supply (41V)



Step 5 / 6

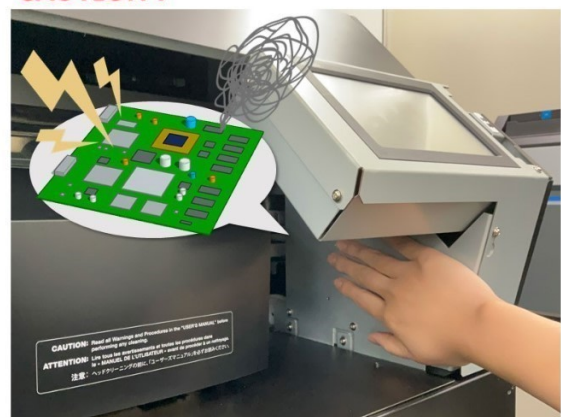
Cover that needs to be removed



Step 6 / 6

To prevent damage from static electricity, release static electricity from your body before touching electronic components. Touching an unpainted metal surface will release static electricity.

CAUTION !



AP-640 Switching Power Supply Replacement 41V

AP-640 Switching Power Supply Replacement 41V Procedure

Step 1 / 9

Turn off the main power and disconnect the power cable.



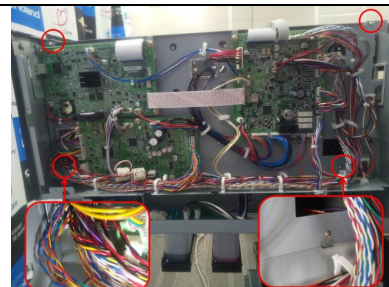
Step 2 / 9

Remove the cover.



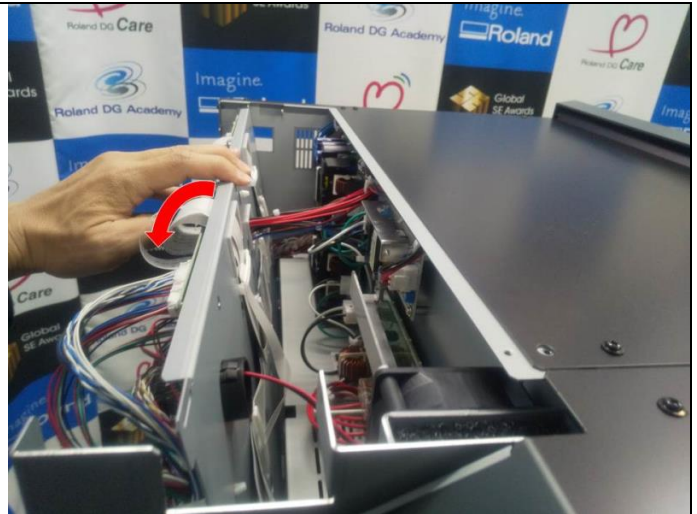
Step 3 / 9

Remove the four screws.



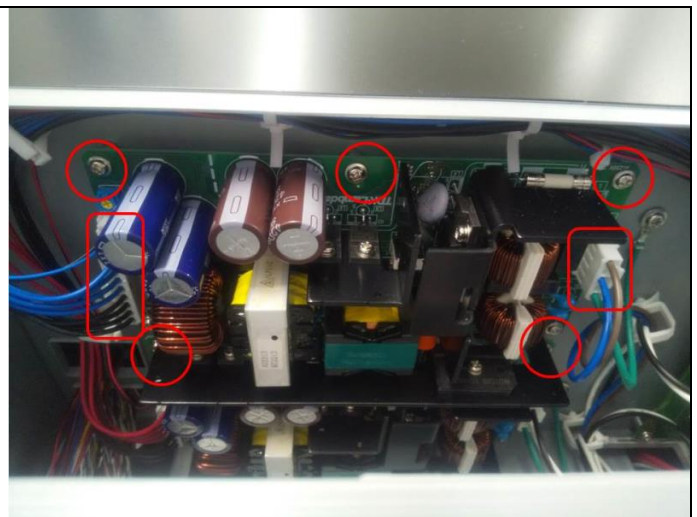
Step 4 / 9

Pull down the metal plate together with the board toward you, taking care of the cables.



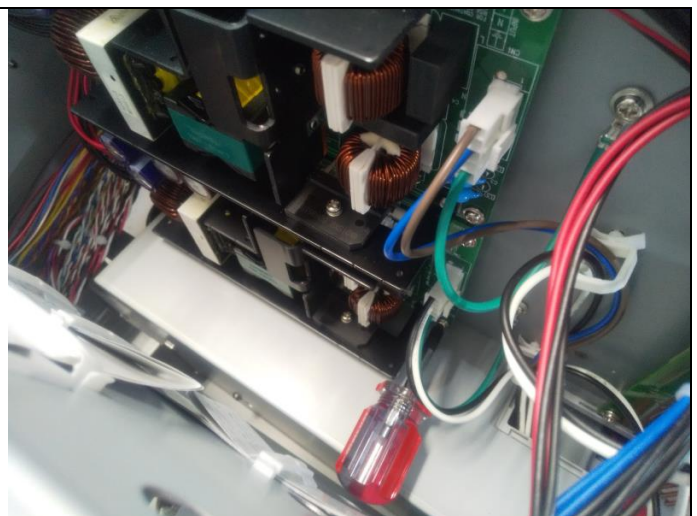
Step 5 / 9

Remove the connectors and screws and replace the switching power supply with a new one.



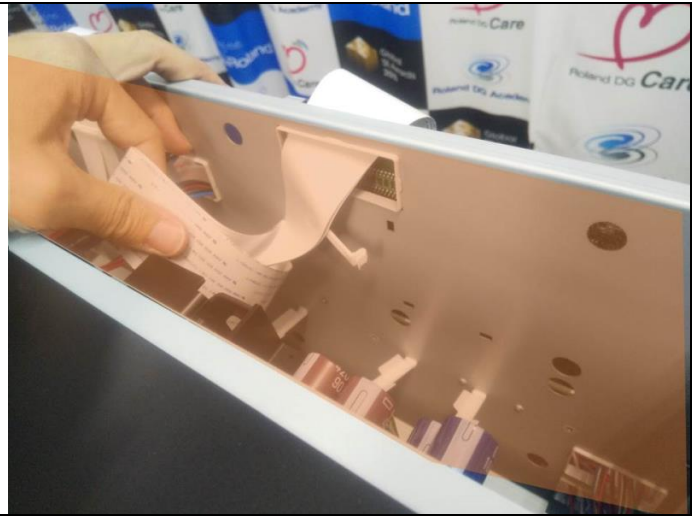
Step 6 / 9

Detail1: Remove the screws with a screwdriver of 80 mm or less.



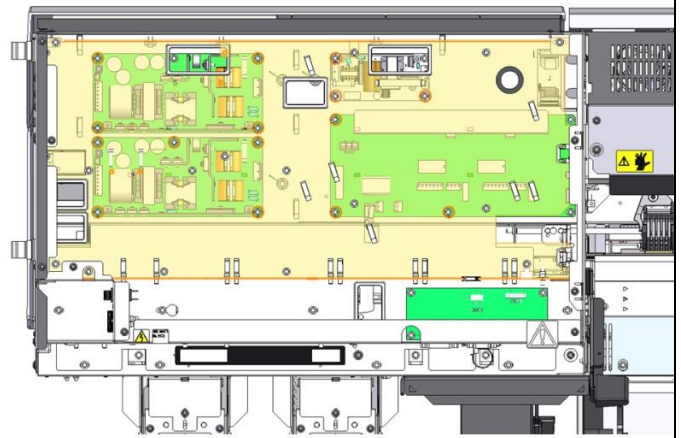
Step 7 / 9

Detail2: There is a hole in the metal plate in front of the board to access the screws. If necessary, remove the board and flexible cables.



Step 8 / 9

Detail3: Holes that the screwdriver can access to the board



Step 9 / 9

Attach the removed cover.



AP-640 Switching power supply replacement 5V

AP-640 Switching power supply replacement 5V Information

Step 1 / 6

Necessary Tools

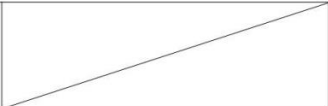
一般ツール/General Tool

プラスドライバー No.2 No.2 Phillips screwdriver	
プラスドライバー No.2 (80mm 以下) No.2 Phillips screwdriver (80mm or less)	

Step 2 / 6

Special tools

特殊治具/Special Tools

無し None	
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Step 3 / 6

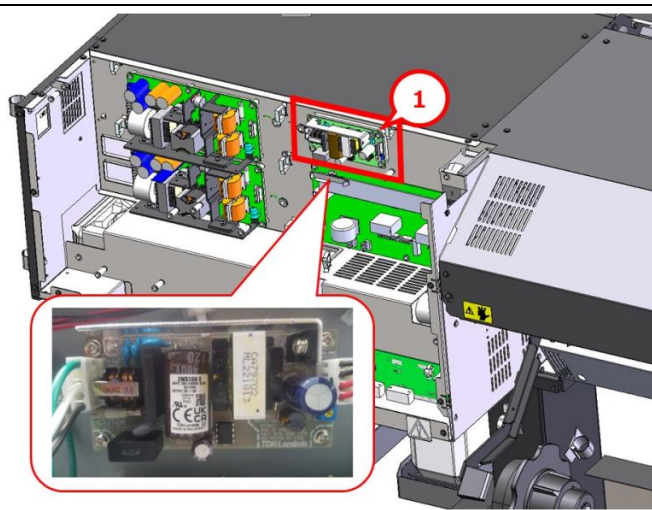
Typical Work Time

作業時間/Typical work time

作業内容/Contents of work	時間/Time
スイッチング電源交換 SW Power Supply Replacement	10 min.

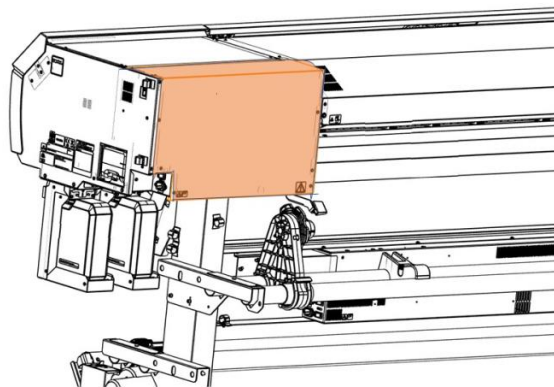
Step 4 / 6

1. Switching power supply



Step 5 / 6

Cover that needs to be removed



Step 6 / 6

To prevent damage from static electricity, release static electricity from your body before touching electronic components. Touching an unpainted metal surface will release static electricity.



AP-640 Switching power supply replacement 5V

AP-640 Switching power supply replacement 5V Procedure

Step 1 / 6

Turn off the main power and disconnect the power cable.



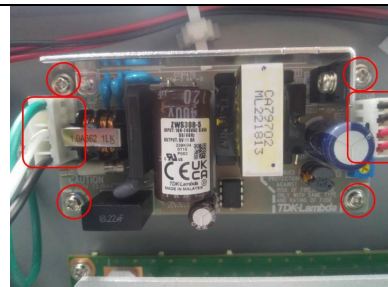
Step 2 / 6

Remove the cover.



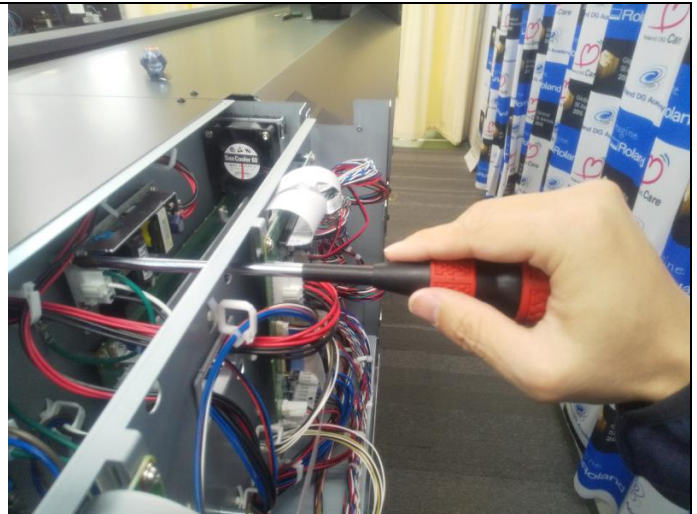
Step 3 / 6

Remove the connectors and screws and replace the switching power supply with a new one.



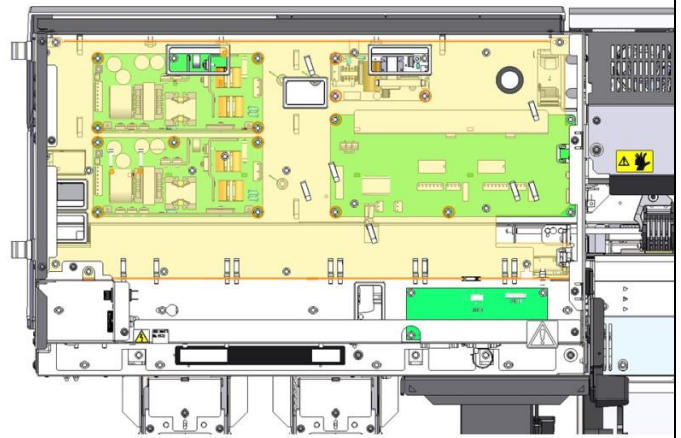
Step 4 / 6

Detail1: Insert a screwdriver through the hole of the sheet metal in front and turn the screw.



Step 5 / 6

Detail2: The diagram below shows the arrangement of the holes that screwdriver can approach inside.



Step 6 / 6

Attach the removed cover.



AP-640 Scan Motor Replacement

AP-640 Scan Motor Replacement

Information

Step 1 / 6

Scan motor replacement (15 minutes)

After replacement, perform the following. □Servo lock check (1 minute) □Aging check (5 minutes) □Clear history [MOTOR GROUP] > [MOTOR HOURS S] (1 minute)

Step 2 / 6

Necessary tools

一般ツール/General Tool

プラスドライバー No.2
No.2 Phillips screwdriver



六角レンチ 3.0 mm
3.0 mm hexagonal wrench

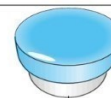


Step 3 / 6

Special jig

特殊治具/Special Tools

GREASE,FLOIL G-902 10ML_02



Step 4 / 6

Typical work time

作業時間/Typical work time

作業内容/Contents of work	時間/Time
スキャンモーター交換 Scan Motor Replacement	15 min.
サーボロック確認 Servo Lock check	1 min.
エージング確認 Aging check	5 min
モーター時間クリア Motor time clear	1 min.

Step 5 / 6

Turn off the main power and unplug the power cable.



Step 6 / 6

To prevent damage from static electricity, release static electricity from your body before touching electronic components. Touching an unpainted metal surface will release static electricity.

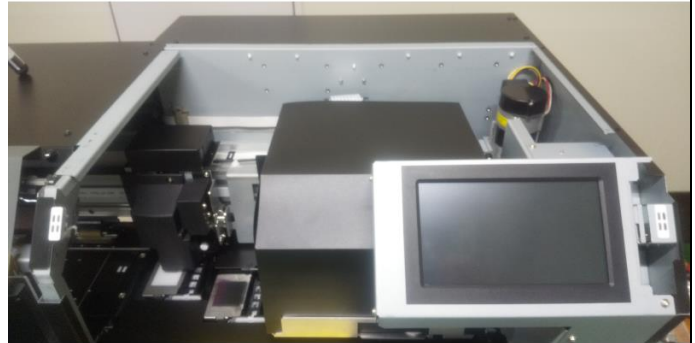


AP-640 Scan Motor Replacement

AP-640 Scan Motor Replacement Procedure

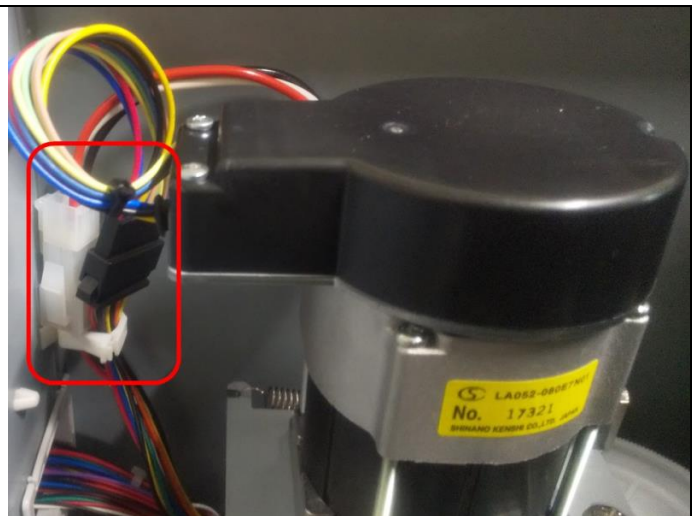
Step 1 / 28

Remove the cover.



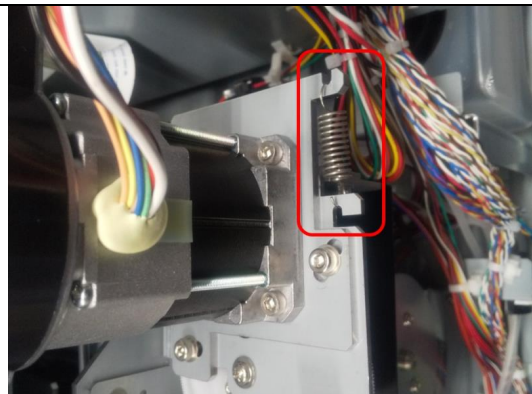
Step 2 / 28

Remove the two motor connectors.



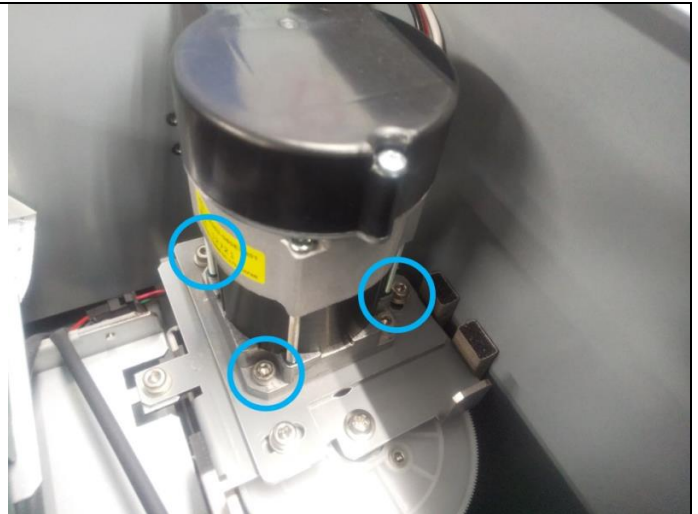
Step 3 / 28

Remove the spring.



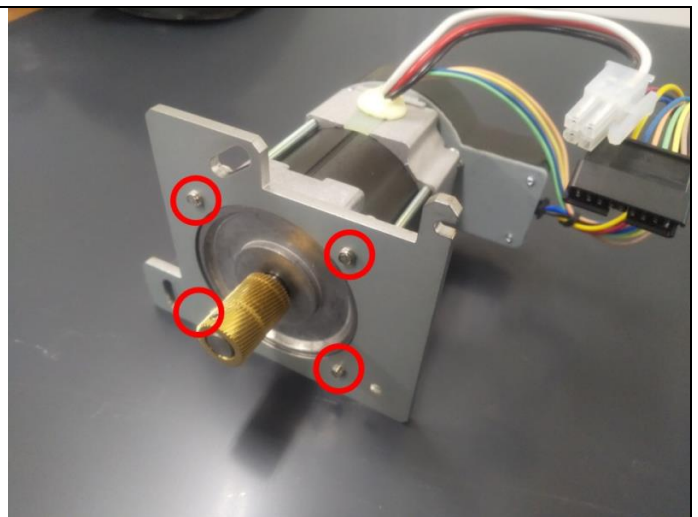
Step 4 / 28

Remove the motor together with the flange.



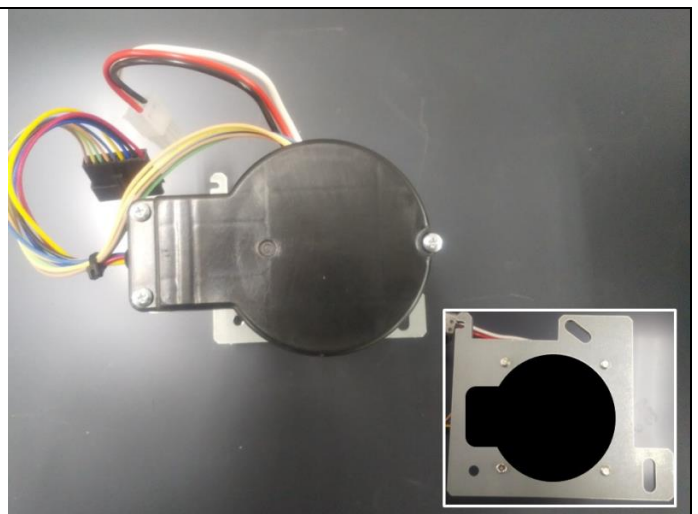
Step 5 / 28

Remove the screws and remove the motor from the flange.



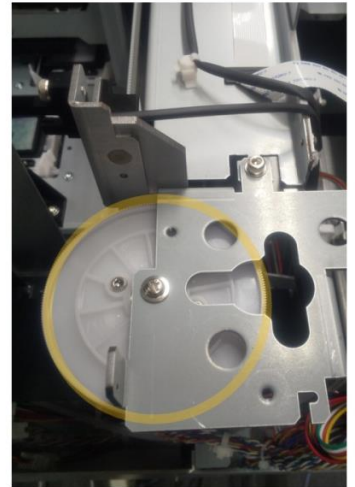
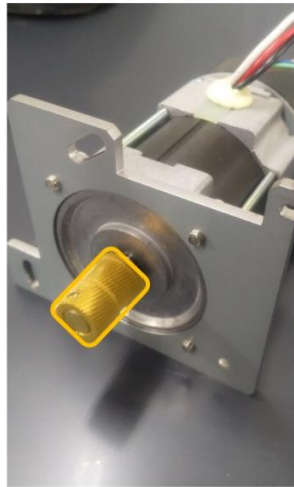
Step 6 / 28

Replace the motor with a new one.
Mount the motor and flange, taking care to orient them correctly.



Step 7 / 28

Apply an appropriate amount of grease to the drive gear and motor.



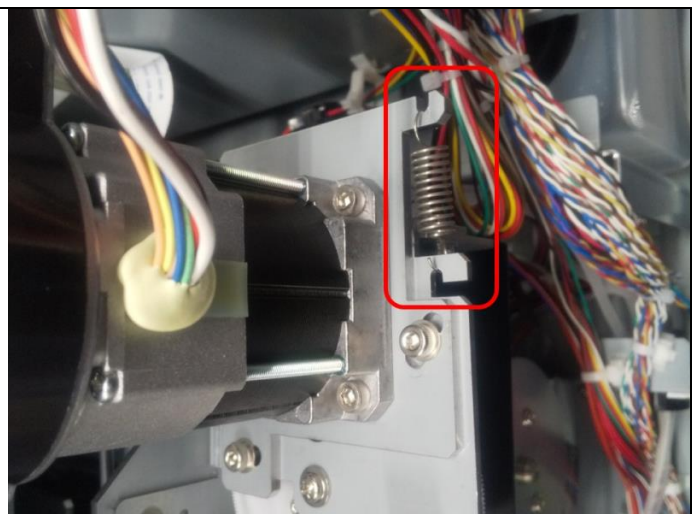
Step 8 / 28

Temporarily tighten the flange.



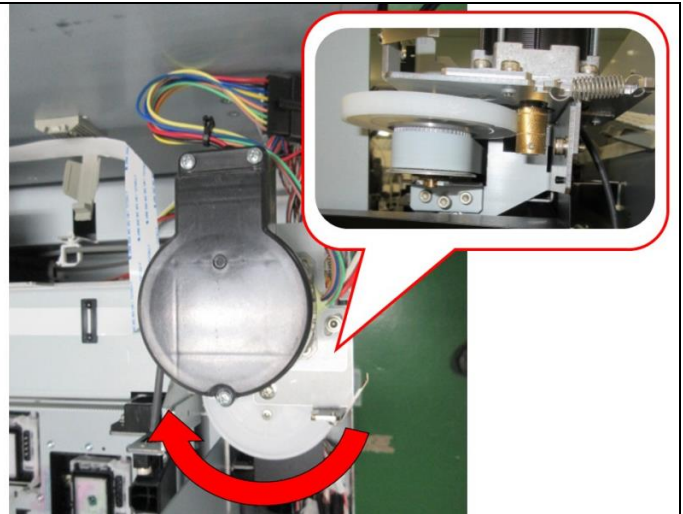
Step 9 / 28

Attach the spring.



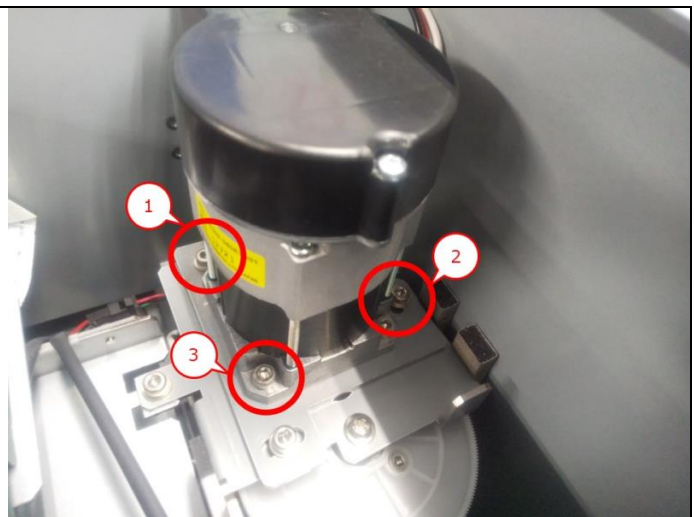
Step 10 / 28

Turn the drive gear at least three turns and check that the motor is engaged and turning together.



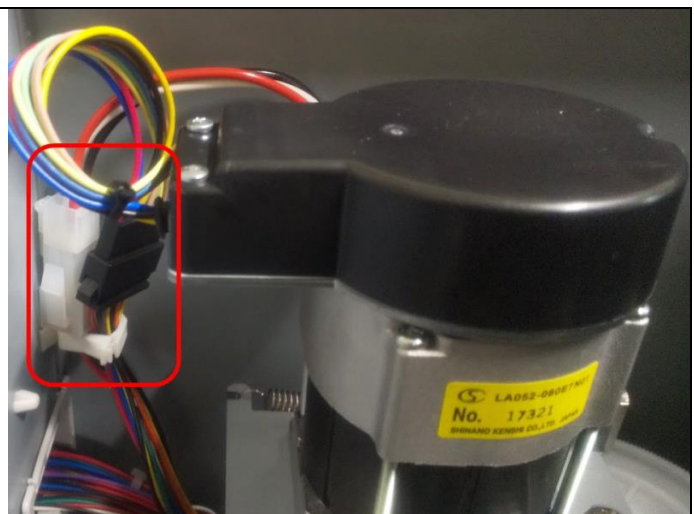
Step 11 / 28

Tighten the flange screws in the order shown.



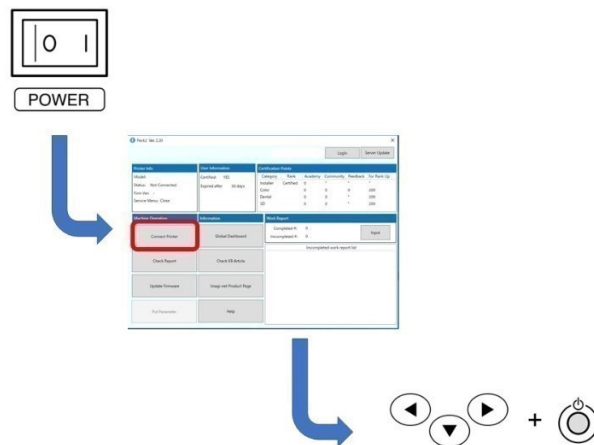
Step 12 / 28

Plug the connector and put back the cover that was removed.



Step 13 / 28

Turn on the power and enter service mode with Peck2.



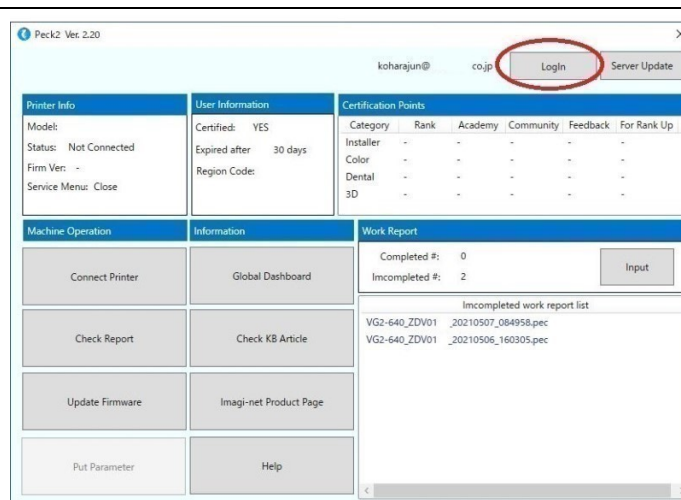
Step 14 / 28

Detail1: Start Peck2.



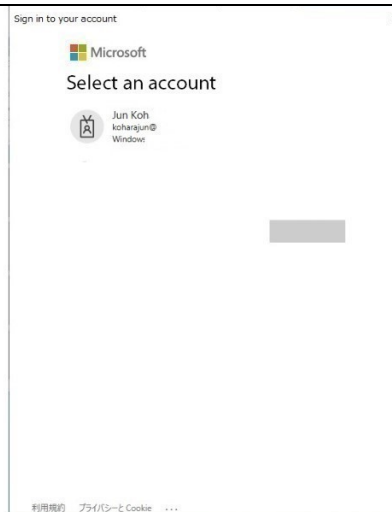
Step 15 / 28

Detail2: Click the [Login] button.



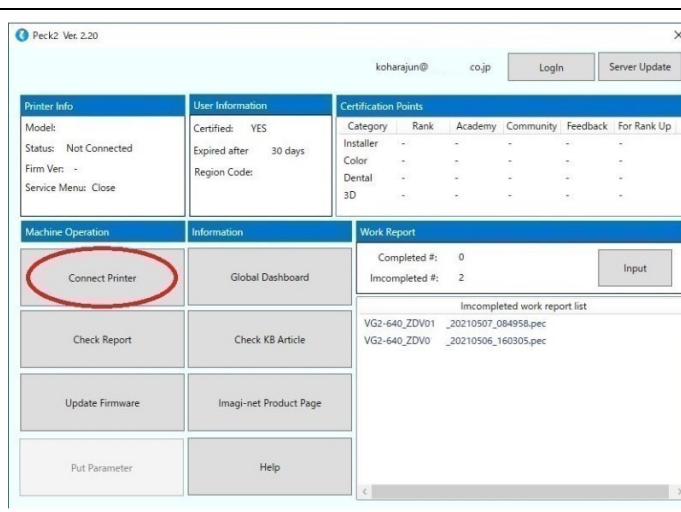
Step 16 / 28

Detail3: Login with your Imagi-net ID.



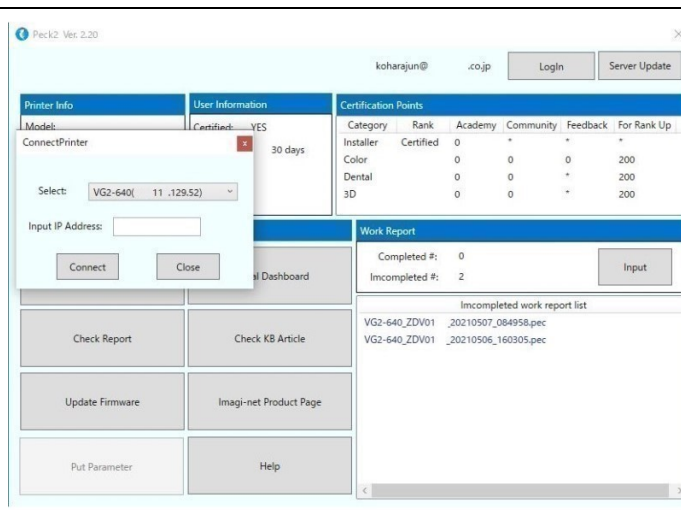
Step 17 / 28

Detail4: Click the [Connect Printer] button.



Step 18 / 28

Detail5: Enter the IP address of the printer you would like to connect to.



Step 19 / 28

Detail6: When the printer is connected, the printer information will be displayed in [Printer Info].

Peck2 Ver. 2.20

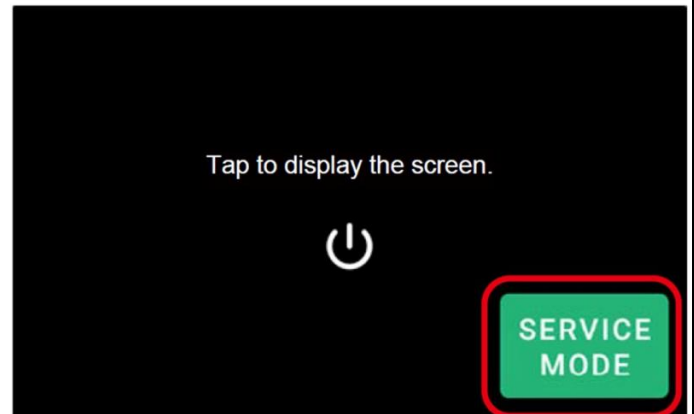
koharajun@ .co.jp Login Server Update

Printer Info		User Information		Certification Points					
Model:	VG2-640_ZDV01	Certified:	YES	Category	Rank	Academy	Community	Feedback	For Rank Up
Status:	UnSetup	Expired after:	30 days	Installer	Certified	0	*	*	*
Firm Ver:	2.00			Color		0	0	0	200
Service Menu:	Open			Dental		0	0	*	200
				3D		0	0	*	200

Machine Operation		Information		Work Report	
Connect Printer	Global Dashboard	Completed #:	0		
Check Report	Check KB Article	Incompleted #:	2	Input	
Update Firmware	Imagi-net Product Page	Incompleted work report list			
Put Parameter	Help	VG2-640_ZDV01 : _20210507_084958.pec			
		VG2-640_ZDV01 : _20210506_160305.pec			

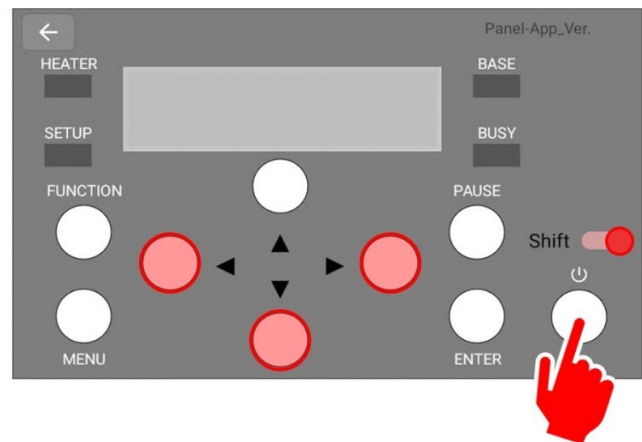
Step 20 / 28

Detail7: Touch [SERVICE MODE] on the panel.



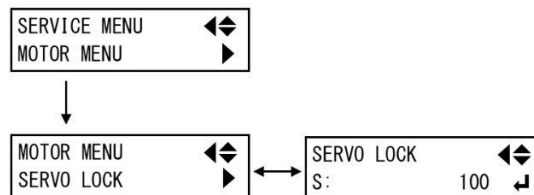
Step 21 / 28

Detail8: Press [Shift]> [□]+[□]+[□]+[Sub Power] on the machine panel to enter the service mode. Turning the [Shift] button ON enables you to press two or more buttons at the same time.



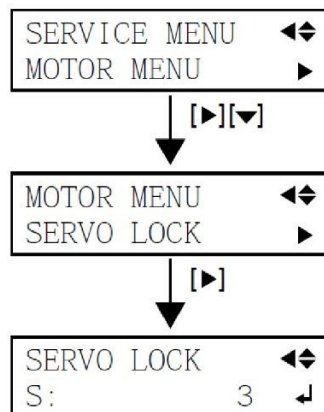
Step 22 / 28

Perform servo lock check.



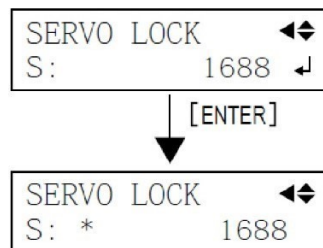
Step 23 / 28

Detail1: Select [SERVICE MENU] > [MOTOR MENU] > [SERVO LOCK] > [S]. Move the print-head carriage left and right by hand and confirm that the value on the LCD changes as you move the print head.



Step 24 / 28

Detail2: Press the [ENTER] key to energize the motor. Confirm that the print-head carriage cannot be moved easily by hand and that the value on the LCD returns to the original value.



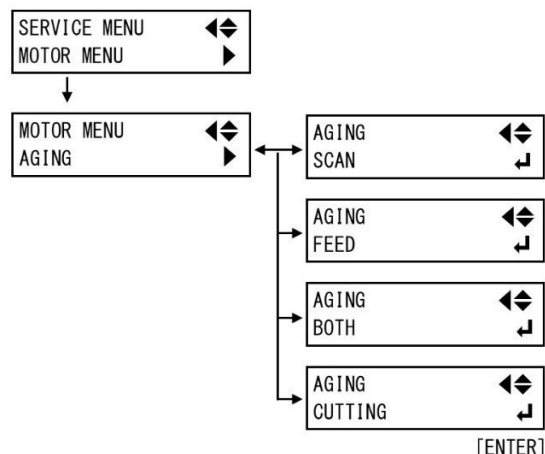
Step 25 / 28

Remove media before performing aging.



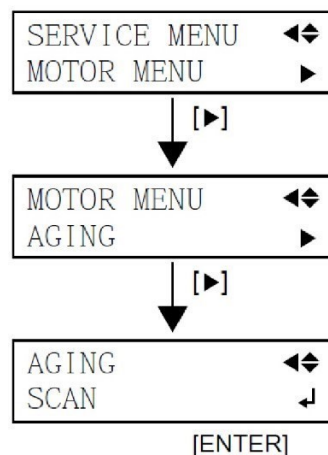
Step 26 / 28

Perform aging check by [AGING] > [SCAN].



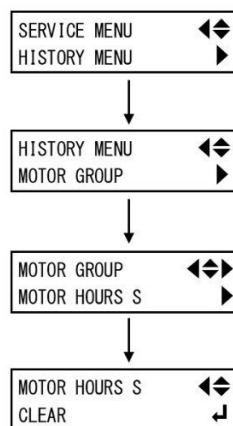
Step 27 / 28

Detail1: Go back to [MOTOR MENU].
Select [AGING] > [SCAN] and press the [ENTER] key. Make sure the printer performs aging, and then finish again by pressing the [ENTER] key again.



Step 28 / 28

Clear the history by [MOTOR GROUP] > [MOTOR HOURS S].



AP-640 Feed motor replacement

AP-640 Feed motor replacement Information

Step 1 / 7

Works after feed motor replacement

Servo lock check (1 minute) Grit encoder check (1 minute) Aging check (5 minutes)

Clear motor time (1 minute)

Step 2 / 7

Necssary Tools

一般ツール/General Tool

プラスドライバー No.2 No.2 Phillips screwdriver	
六角レンチ 3.0 mm 3.0 mm hexagonal wrench	
ペンチ Pliers	

Step 3 / 7

Special Tools

特殊治具/Special Tools

6000004129 GREASE,FLOIL G-902 10ML_02	
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Step 4 / 7

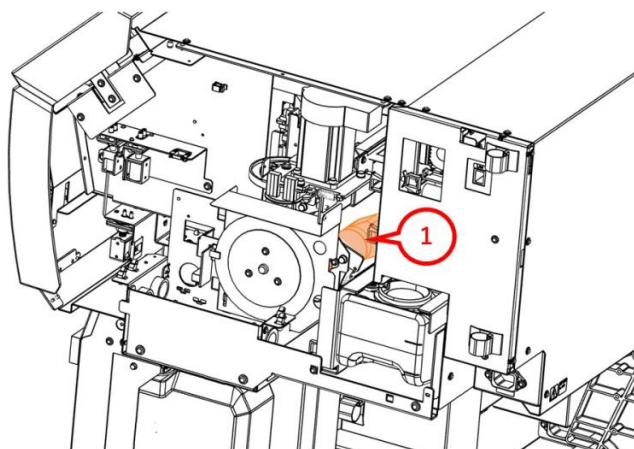
Typical Work Time

作業時間/Typical work time

作業内容/Contents of work	時間/Time
フィードモーター交換 Feed motor replacement	30 min.
サーボロック確認 Servo lock check	1 min.
グリットエンコーダチェック Grit encoder check	1 min.
エージング確認 Aging check	5 min
モーター時間クリア Motor time clear	1 min.

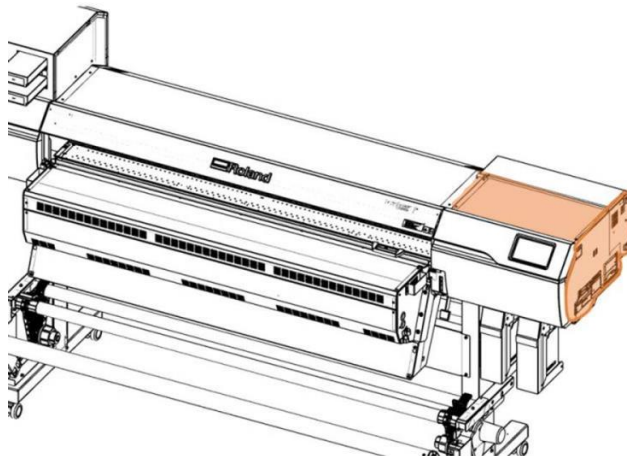
Step 5 / 7

1. Feed motor



Step 6 / 7

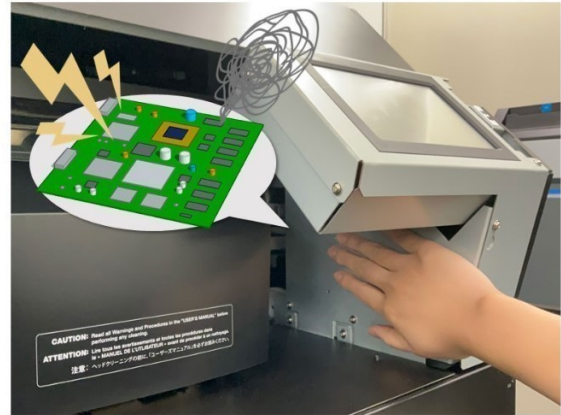
Covers that needs to be removed



Step 7 / 7

To prevent damage caused by static electricity, release static electricity from your body before touching electronic components. Touching an unpainted metal surface will release static electricity.

CAUTION !



AP-640 Feed motor replacement

AP-640 Feed motor replacement Procedure

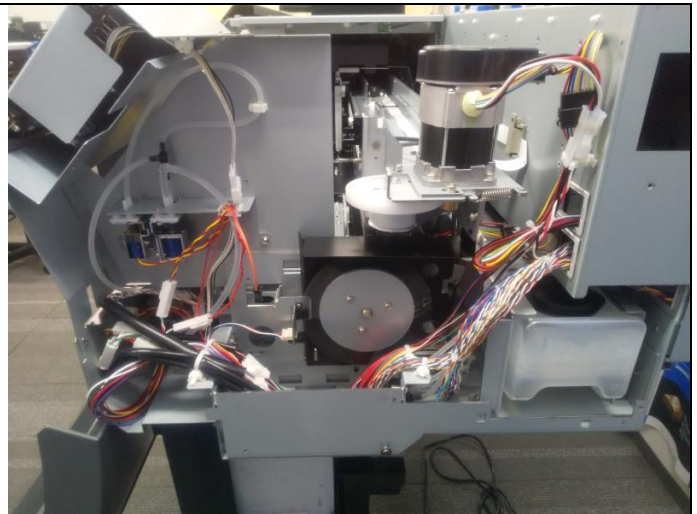
Step 1 / 45

Turn off the power and unplug the power cable.



Step 2 / 45

Remove the covers.



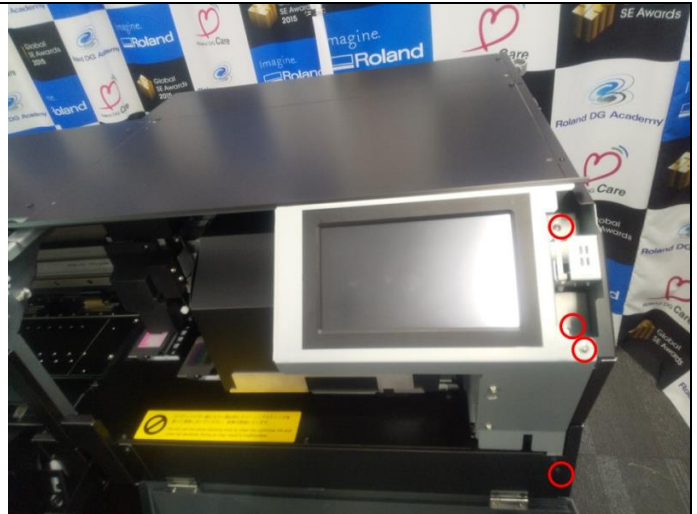
Step 3 / 45

Detail1: Remove the screws on the top and right side of the machine.



Step 4 / 45

Detail2: Remove the screws on the side of the panel.



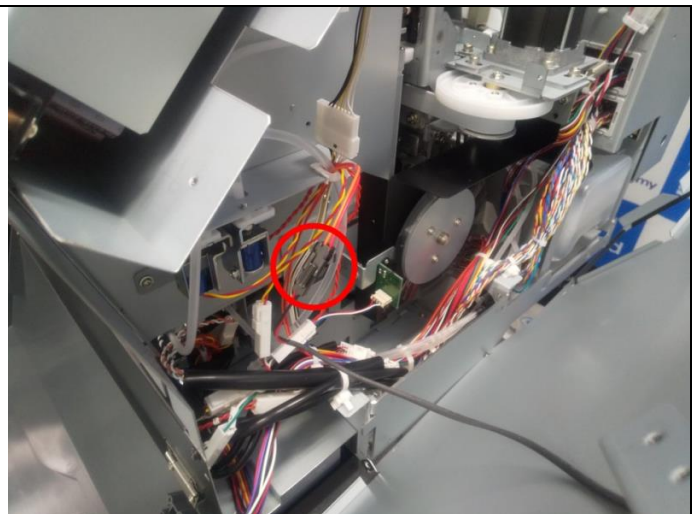
Step 5 / 45

Detail3: Remove the screws on the front of the machine.



Step 6 / 45

Detail4: Remove the cover sensor.



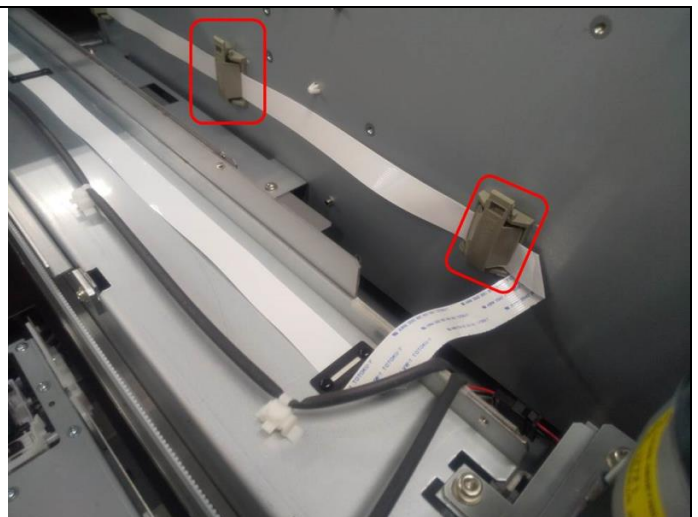
Step 7 / 45

Move the print head carriage to the platen.



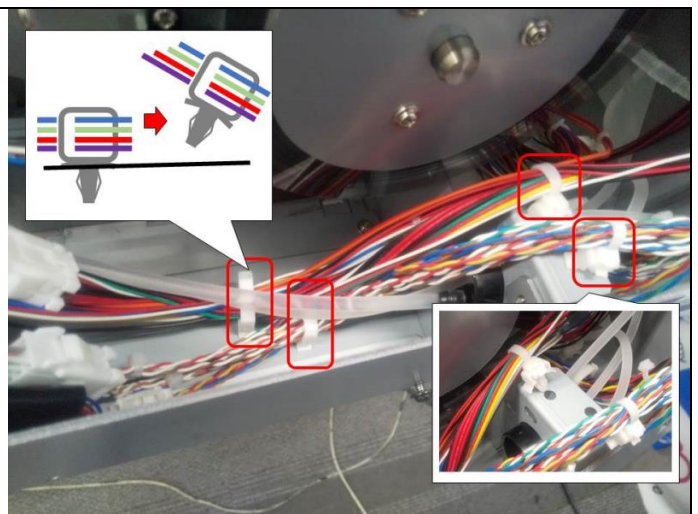
Step 8 / 45

Remove the flexible cable.



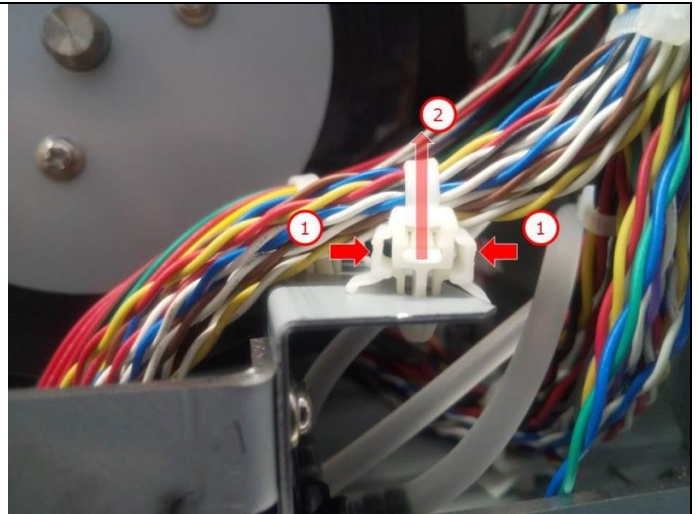
Step 9 / 45

Remove the cables secured by clamps and cable ties, leaving them bundled.



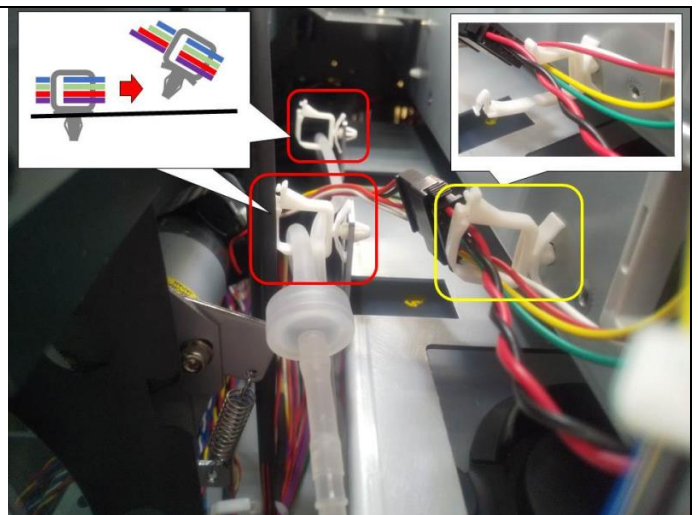
Step 10 / 45

Detail1: Pinch the cable tie from both sides and lift them upward to remove it.



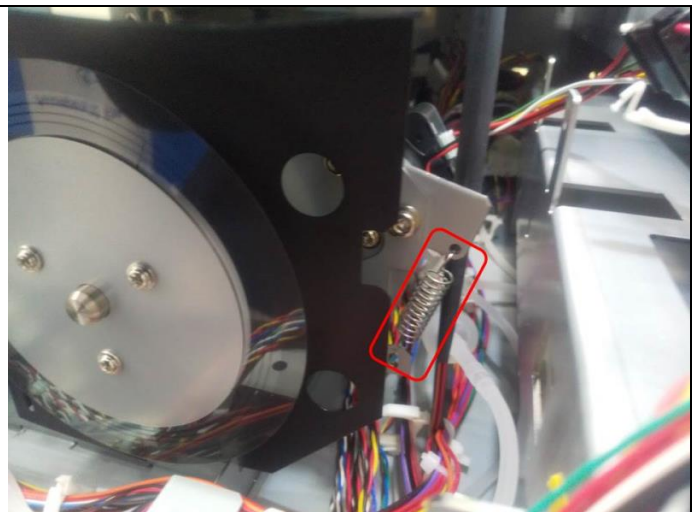
Step 11 / 45

Remove the cables and tubes secured by the clamp.



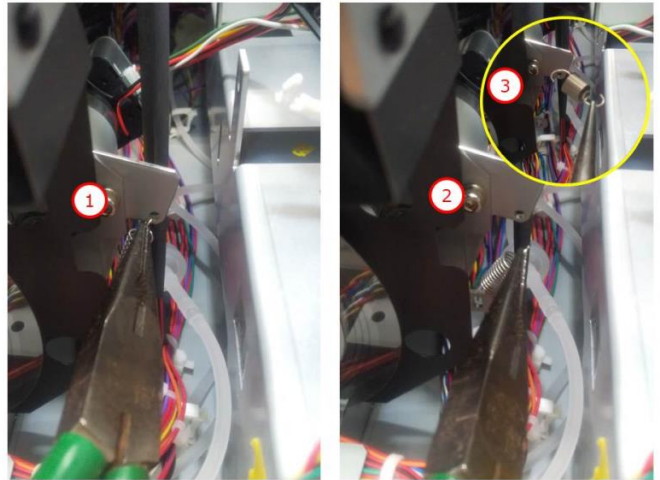
Step 12 / 45

Remove the spring.



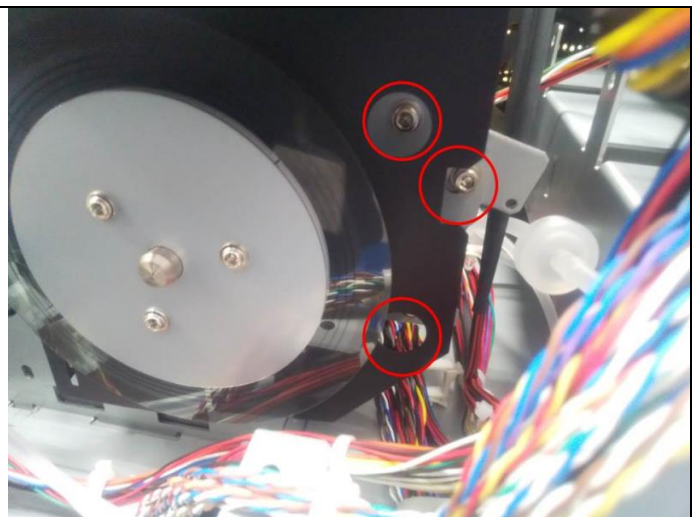
Step 13 / 45

Detail1: Use pliers to remove the upper spring, then remove the lower spring.



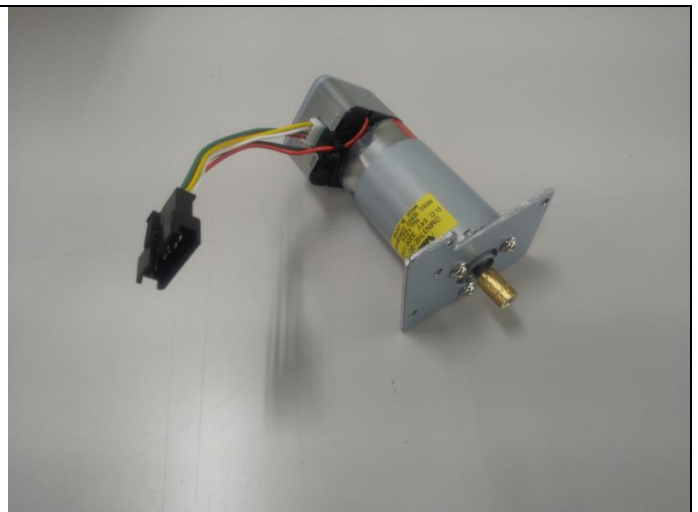
Step 14 / 45

Remove the screws and remove the motor with together with the flange.



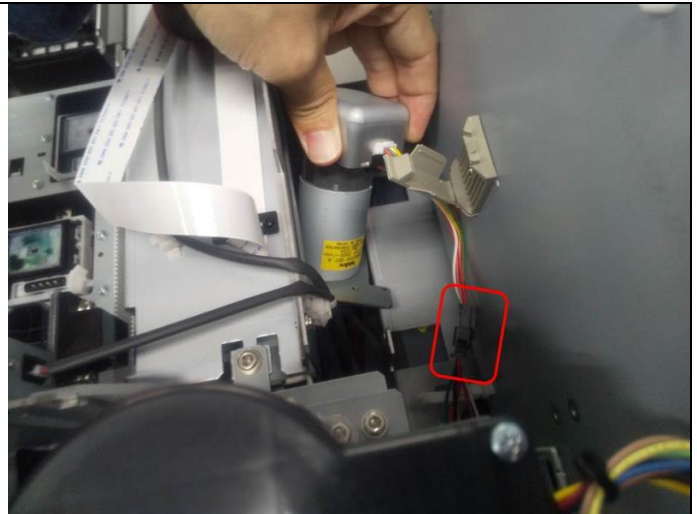
Step 15 / 45

Detail1: Motor with the flange



Step 16 / 45

Remove the cable connector.



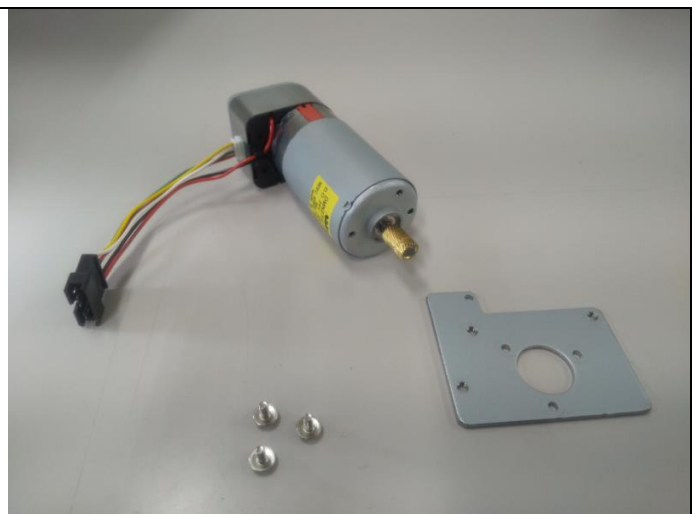
Step 17 / 45

Attach the new motor to the flange, taking care of the orientation of the flange relative to the motor cable.



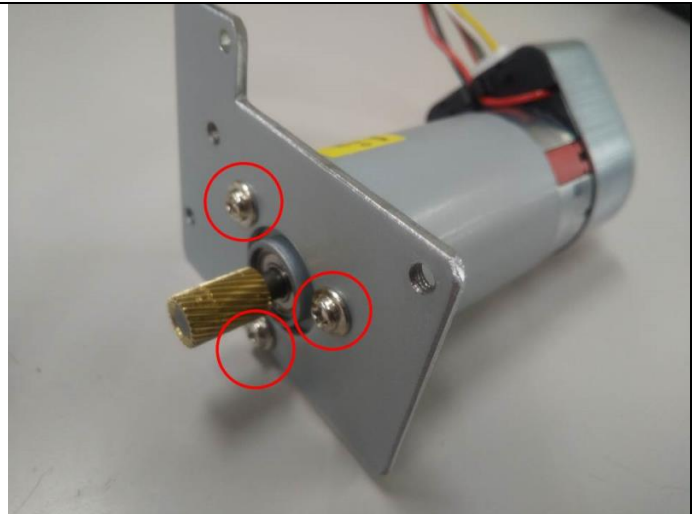
Step 18 / 45

Detail1: Remove the motor from the flange.



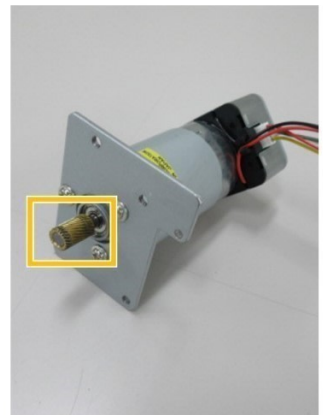
Step 19 / 45

Detail2; Check the mounting position of the flange and the new motor and tighten the screws.



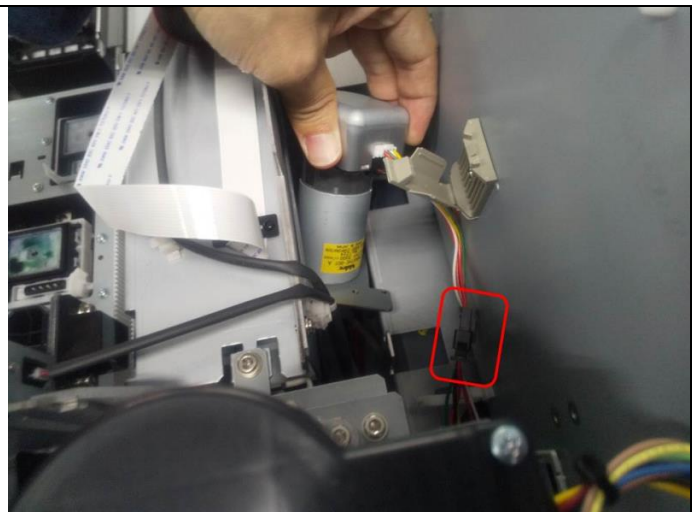
Step 20 / 45

Apply grease on the drive and motor gears. - Grease: GREASE,FLOIL G-902 10ML_02- Application amount: proper amount



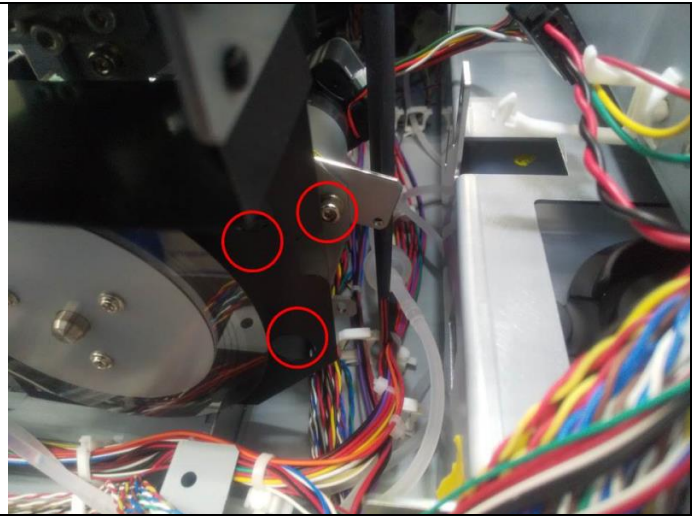
Step 21 / 45

Attach the connector.



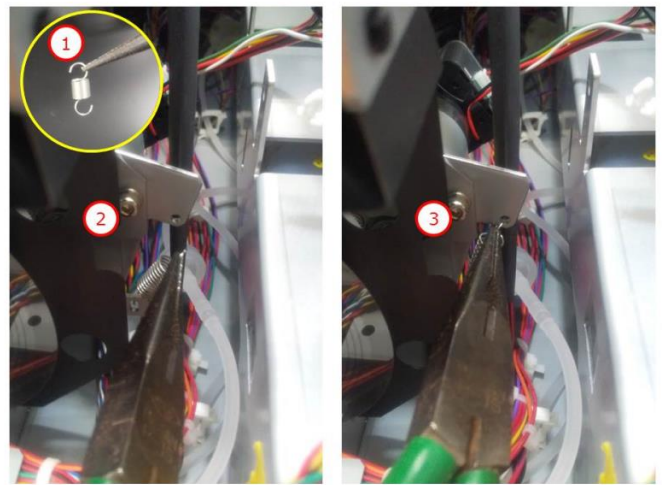
Step 22 / 45

Tighten the three screws temporarily, paying attention to the orientation of the flange.



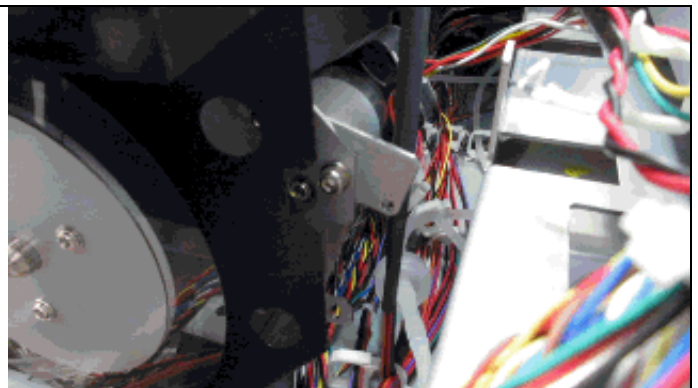
Step 23 / 45

Attach the lower spring using pliers, and then attach the upper spring.



Step 24 / 45

Detail1: Reference video



Step 25 / 45

Turn the drive gear at least 3 turns by

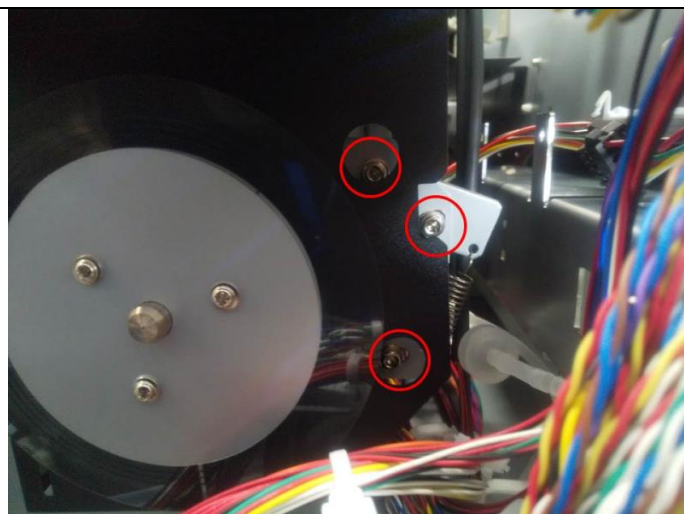


hand and confirm that the motor gear is engaged and turning together.



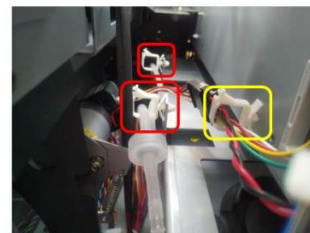
Step 26 / 45

Tighten the screws (3 positions).



Step 27 / 45

Put back the removed tubes, cables, and flexible cables.



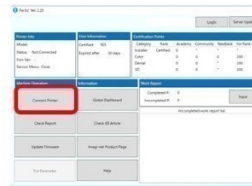
Step 28 / 45

Attach the cover and turn on the main power.



Step 29 / 45

Connect Peck2 to the machine and enter Service Mode.



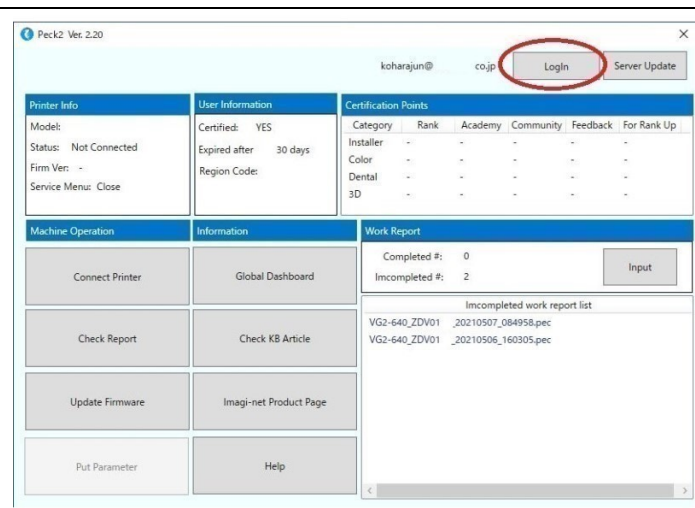
Step 30 / 45

Detail1: Start Peck2.



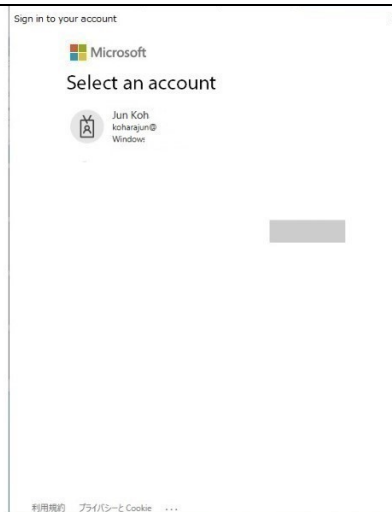
Step 31 / 45

Detail2: Click the [Login] button.



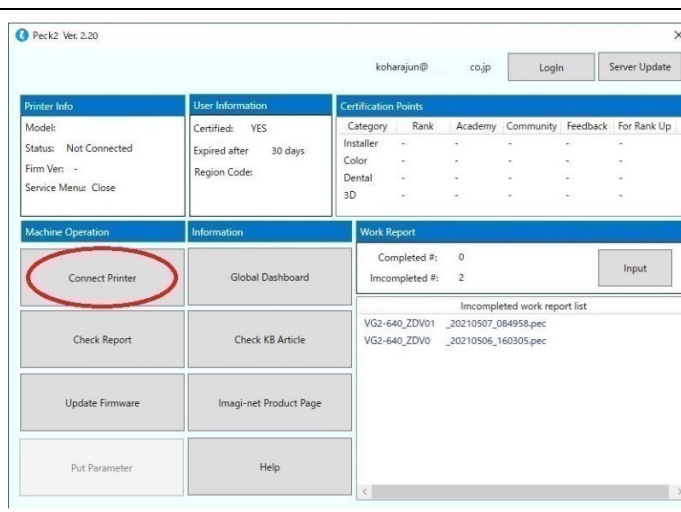
Step 32 / 45

Detail3: Login with your Imagi-net ID.



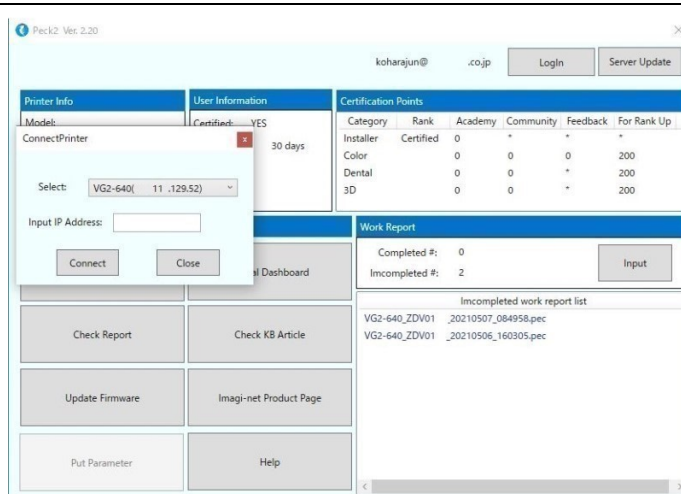
Step 33 / 45

Click the [Connect Printer] button.



Step 34 / 45

Enter the IP address of the device you would like to connect to.



Step 35 / 45

When the printer is connected, the printer information will be displayed in [Printer Info].

Peck2 Ver: 2.20

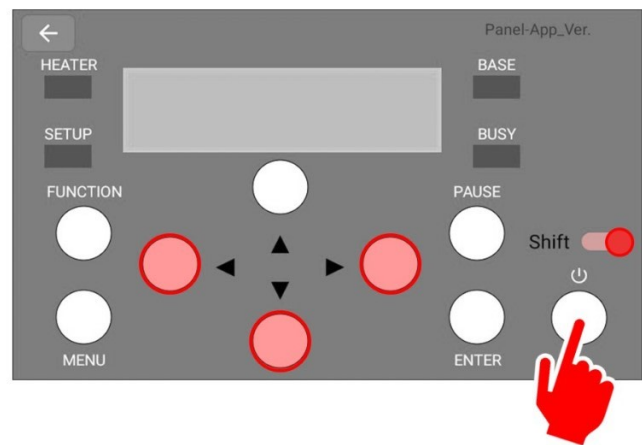
koharajun@ .co.jp Login Server Update

Printer Info		User Information		Certification Points				
Model: VG2-640_ZDV01	Certified: YES	Category	Rank	Academy	Community	Feedback	For Rank Up	
Status: UnSetup	Expired after: 30 days	Installer	Certified	0	*	*	*	
Firm Ver: 2.00		Color		0	0	0	200	
Service Menu: Open		Dental		0	0	*	200	
		3D		0	0	*	200	

Machine-Operation		Information		Work Report	
Connect Printer	Global Dashboard	Completed #: 0		Input	
Check Report	Check KB Article	Incompleted #: 2			
Update Firmware	Imagi-net Product Page	Incompleted work report list			
Put Parameter	Help	VG2-640_ZDV01 _20210507_084958.pec VG2-640_ZDV01 _20210506_160305.pec			

Step 36 / 45

Press [Shift]> [□]+[□]+[□]+[Sub Power] on the panel to enter the service mode. By turning on the [Shift] button, the multile buttons can be pressed at the same time.



Step 37 / 45

Select [SERVICE MENU] > [SENSOR CHECK].

SERVICE MENU	◀▶
SENSOR CHECK	▶

Step 38 / 45

When the maintenance cover is closed, check the display below the "D" on the monitor display, and if "*" is displayed, make adjustments.

When the cover is opened

FRSHODPLWwacQT ◀▶
*

When the cover is closed

FRSHODPLWwacQT ◀▶
◀▶

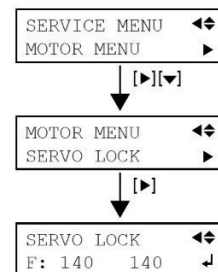
Step 39 / 45

Loosen the screws and adjust the cover sensor position so that "*" appears under "D" when the maintenance cover is closed.



Step 40 / 45

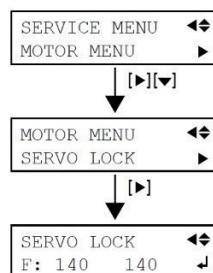
Check the servo lock.



Step 41 / 45

Go to [SERVICE MENU] > [MOTOR MENU] > [SERVO LOCK] and select [F].

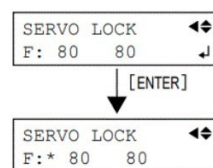
Rotate the grit roller by hand and confirm that the displayed value changes with the movement.



Step 42 / 45

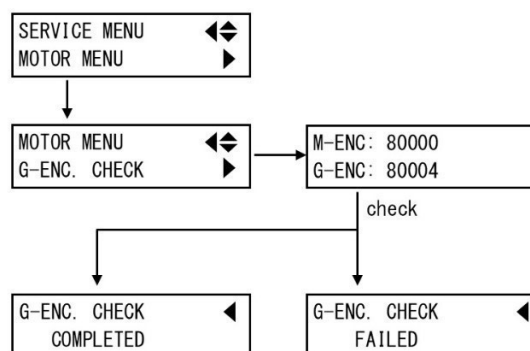
Press [ENTER] to excite the motor.

Rotate the grit roller by hand to confirm that it does not move easily and that the displayed value returns to its original value.



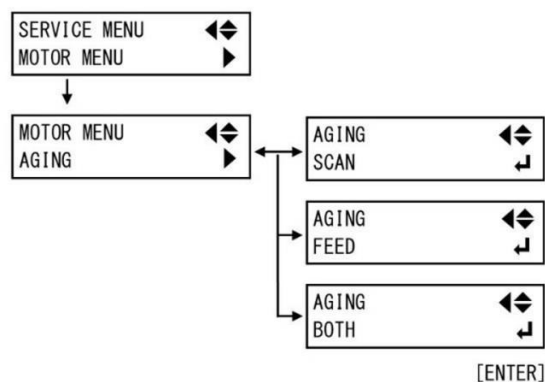
Step 43 / 45

Perform a grit encoder check. When [G-ENC. CHECK FAILED] is displayed, check the following: 1. the grit encoder is correctly installed; 2. the feed motor is correctly installed; 3. the grit encoder is free of scratches or dirt



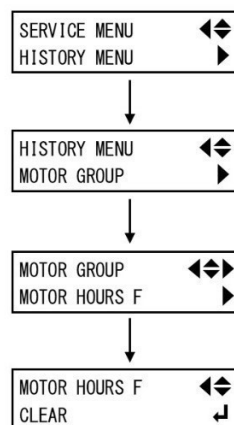
Step 44 / 45

Confirm aging [AGING] > [FEED].
Confirm that aging operation is performed, and press [ENTER] key again to exit. Remove the media when executing aging.



Step 45 / 45

Perform motor time clear [MOTOR GROUP] > [MOTOR HOURS F] > [CLEAR].



AP-640 Grid Encoder Replacement

AP-640 Grid Encoder Replacement

Information

Step 1 / 6

Grit encoder replacement [20 minutes]. Servo lock check [1 min]. Grit encoder check [1 min]. Aging check [5 min].

Step 2 / 6

Necessary Tools

一般ツール/General Tool

プラスドライバー No.1 No.1 Phillips screwdriver	
プラスドライバー No.2 No.2 Phillips screwdriver	
プラスドライバー No.2 (80mm 以下) No.2 Phillips screwdriver (80mm or less)	

Step 3 / 6

Special Tools

特殊治具/Special Tools

None	
------	---

Step 4 / 6

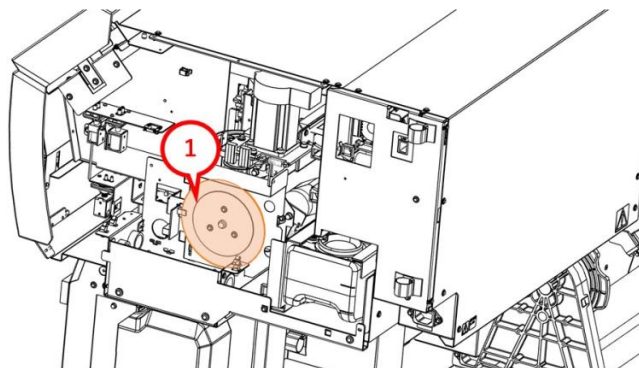
Typical Work Time

作業時間/Typical work time

作業内容/Contents of work	時間/Time
グリットエンコーダー交換 Grit encoder replacement	20 min.
サーボロック確認 Servo lock check	1 min.
グリットエンコーダーチェック Grit encoder check	1 min.
エージング確認 Aging check	5 min.

Step 5 / 6

1. grit encoder



Step 6 / 6

To prevent damage caused by static electricity, release static electricity from your body before touching electronic components. Touching an unpainted metal surface will release static electricity.



AP-640 Grid Encoder Replacement

AP-640 Grid Encoder Replacement Procedure

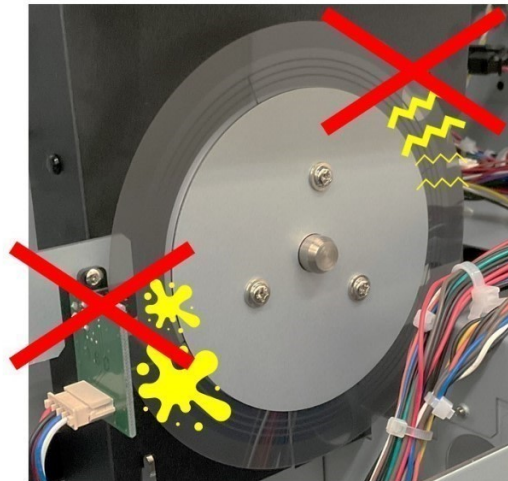
Step 1 / 33

Turn off the power and unplug the power cable.



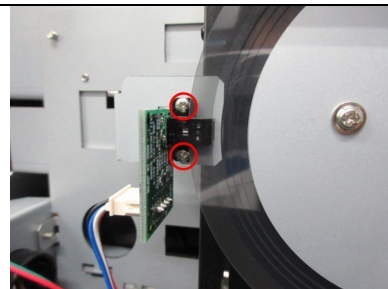
Step 2 / 33

Be careful not to scratch or smear the grid encoder as you work.



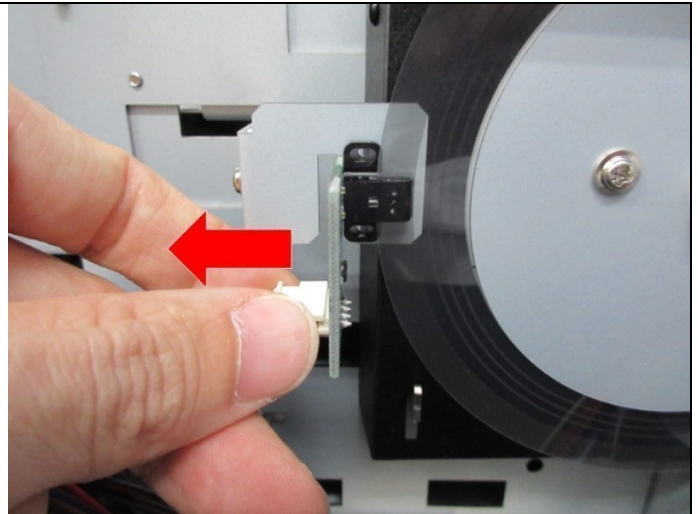
Step 3 / 33

Remove the screws and remove the encoder board so as not to scratch the encoder.



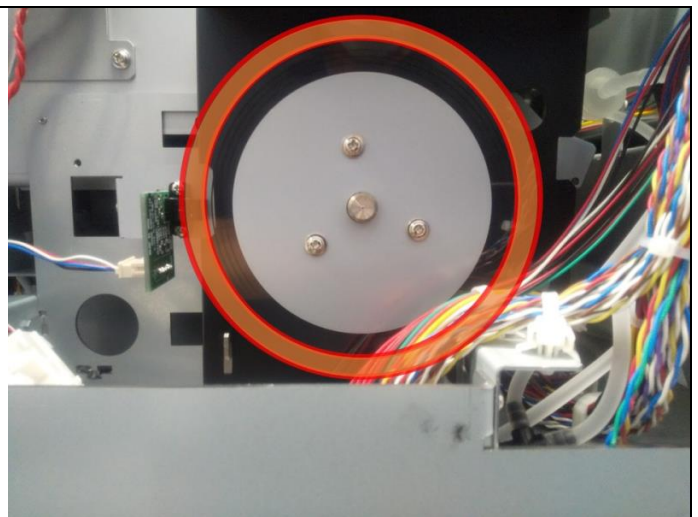
Step 4 / 33

Detail1: Remove the encoder board in the direction of the arrow. Be careful not to scratch it.



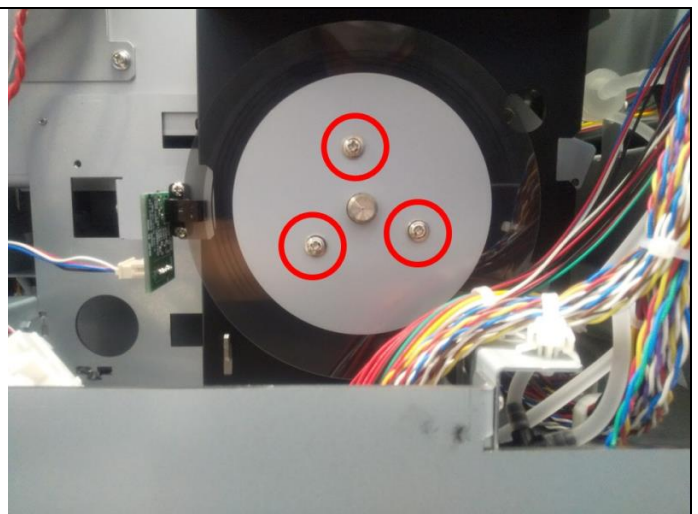
Step 5 / 33

Be careful not to touch the area to be read by the encoder board.



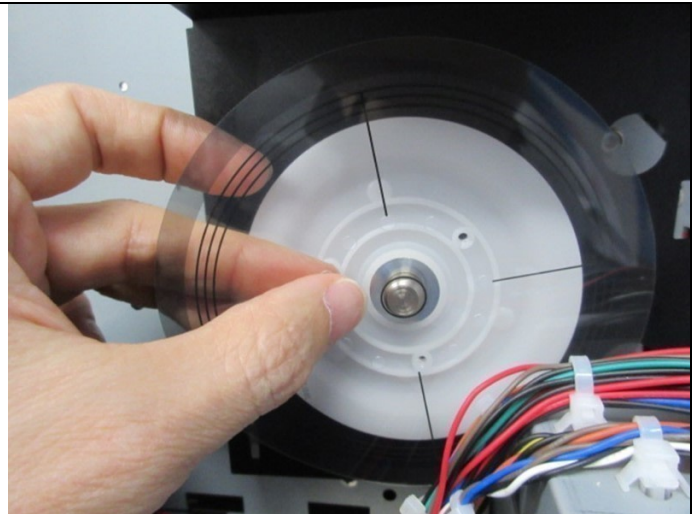
Step 6 / 33

Remove the grit encoder stopper and grit encoder.



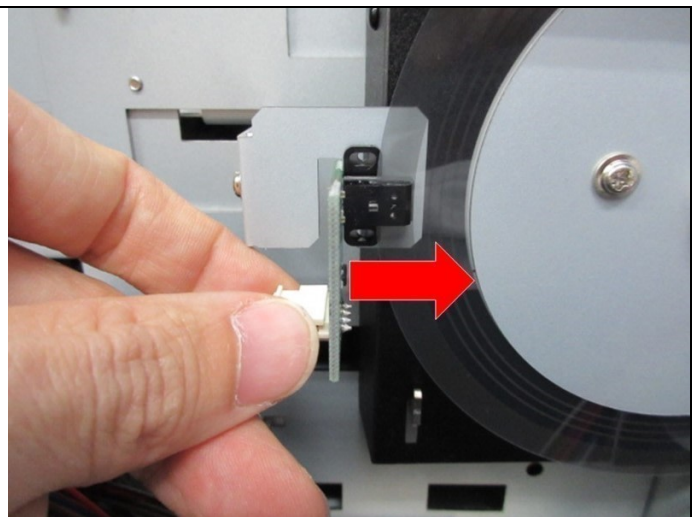
Step 7 / 33

Install the new grit encoder and grit encoder stopper.



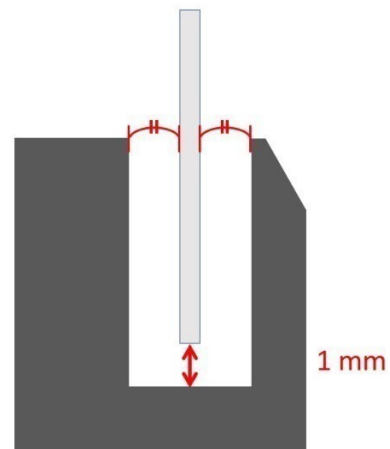
Step 8 / 33

Install the grit encoder board so that the encoder is not scratched.



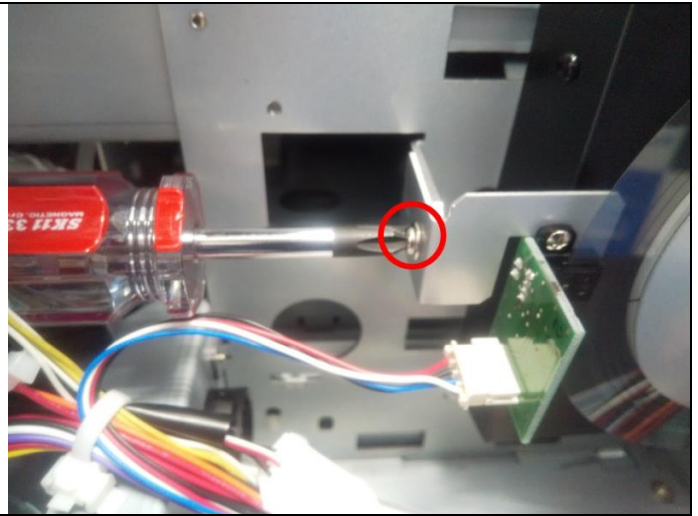
Step 9 / 33

Make sure that the grit encoder is positioned midway between the sensor and and about 1 mm between it and the sensor in the front-back direction.



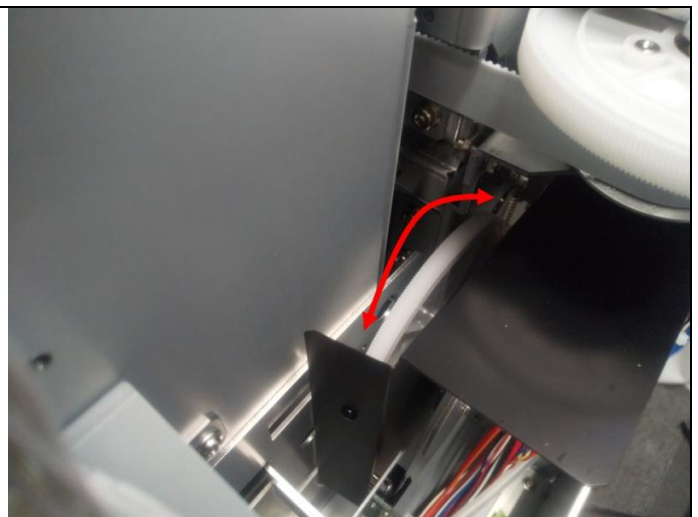
Step 10 / 33

If adjustment is necessary, loosen the stay screw and adjust the position.



Step 11 / 33

Detail1: Turn the white gear by hand and check for any unusual noise or interference with the encoder.



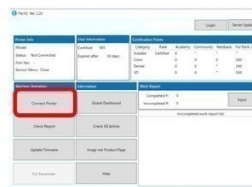
Step 12 / 33

Attach the cover and turn on the main power.



Step 13 / 33

Connect Peck2 to the machine and enter service mode.



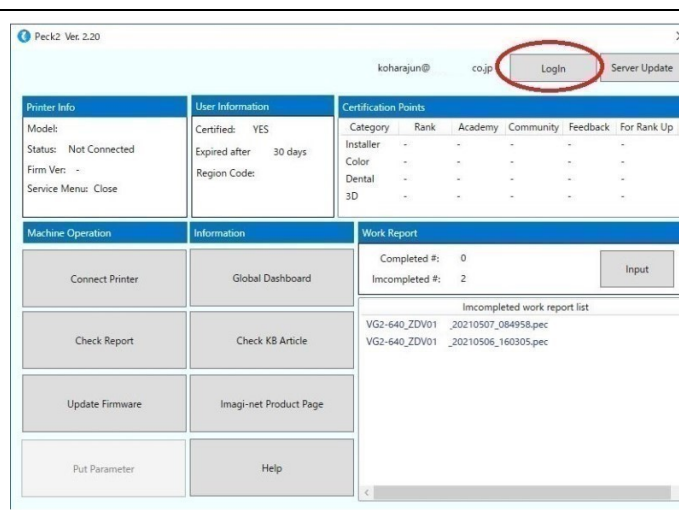
Step 14 / 33

Detail1: Start Peck2.



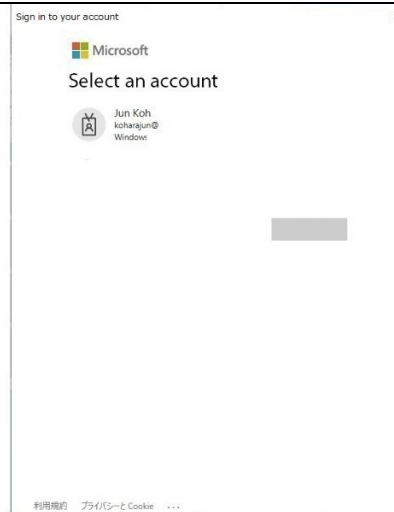
Step 15 / 33

Detail2: Click the [Login] button.



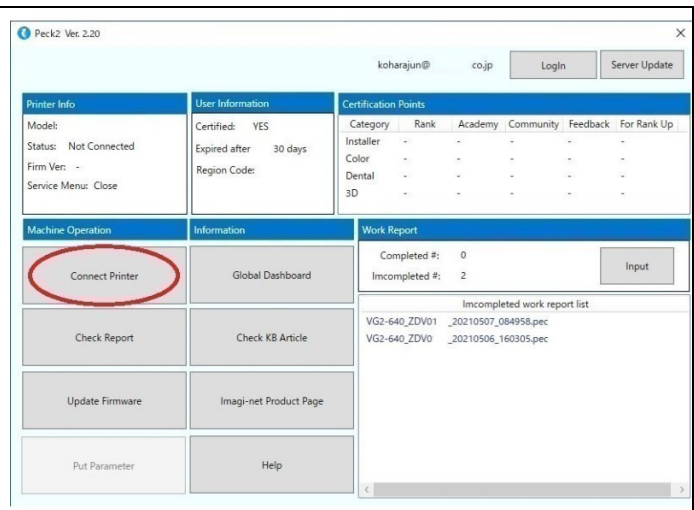
Step 16 / 33

Detail3: Login with your Imagi-net ID.



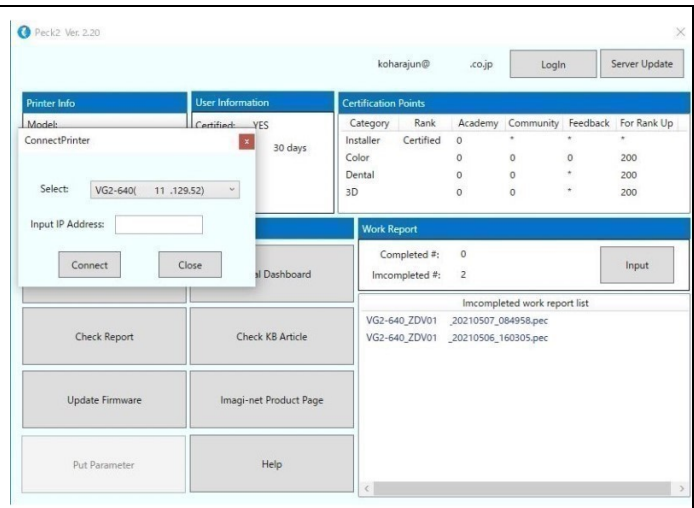
Step 17 / 33

Detail4: Click the [Connect Printer] button.



Step 18 / 33

Detail5: Enter the IP address of the printer you wish to connect to.



Step 19 / 33

Detail6: When the printer is connected, the printer information will be displayed in [Printer Info].

Peck2 Ver. 2.20

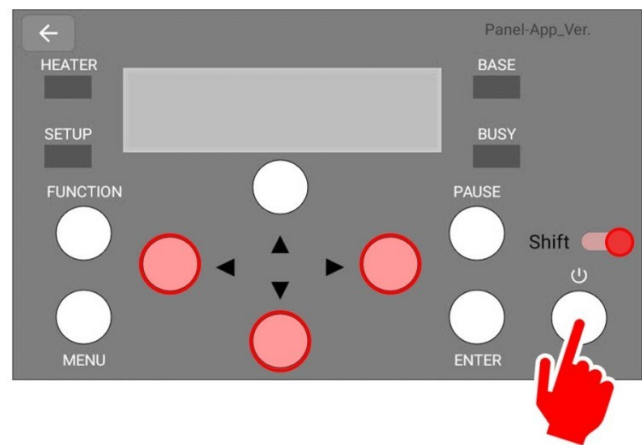
koharajun@ .co.jp Login Server Update

Printer Info		User Information		Certification Points					
Model:	VG2-640_ZDV01	Certified:	YES	Category	Rank	Academy	Community	Feedback	For Rank Up
Status:	UnSetup	Expired after:	30 days	Installer	Certified	0	*	*	*
Firm Ver:	2.00			Color		0	0	0	200
Service Menu:	Open			Dental		0	0	*	200
				3D		0	0	*	200

Machine-Operation		Information		Work Report	
Connect Printer	Global Dashboard	Completed #:	0		
Check Report	Check KB Article	Incompleted #:	2	Input	
Update Firmware	Imagi-net Product Page	Incompleted work report list			
Put Parameter	Help	VG2-640_ZDV01 _20210507_084958.pec			
		VG2-640_ZDV01 _20210506_160305.pec			

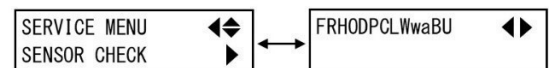
Step 20 / 33

Detail7: Press [Shift]> [□]+[□]+[□]+[Sub Power]on the panel to enter the service mode. By turning on the [Shift] button, the multiple buttons can be pressed at the same time.



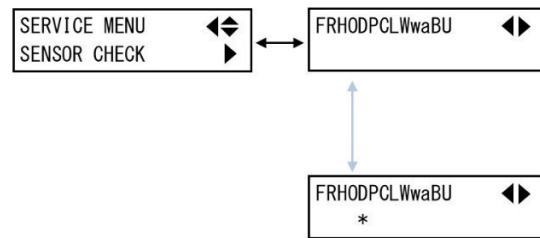
Step 21 / 33

Select [SERVICE MENU] > [SENSOR CHECK] and check if the cover sensor is responding properly.



Step 22 / 33

Detail1: Check if * is displayed under "D"
and make adjustments if it is displayed.



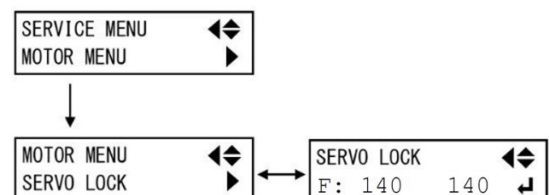
Step 23 / 33

Detail2: Loosen the screw and adjust the
cover sensor in front-back direction.



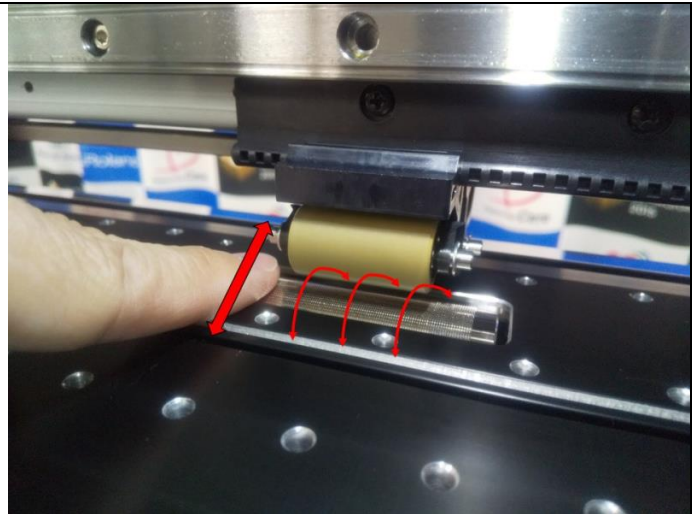
Step 24 / 33

From [SERVICE MENU] > [MOTOR
MENU] > [SERVO LOCK], select [F].



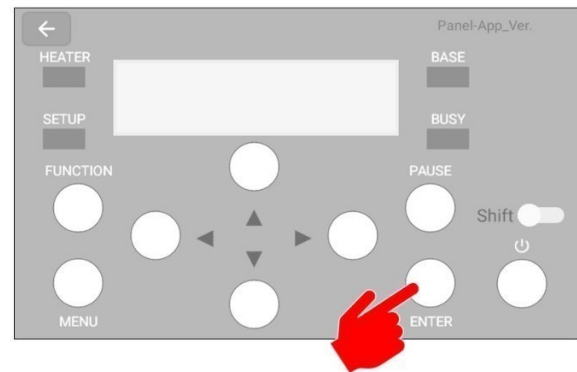
Step 25 / 33

Rotate the grit roller by hand and check that the displayed value changes with the movement.



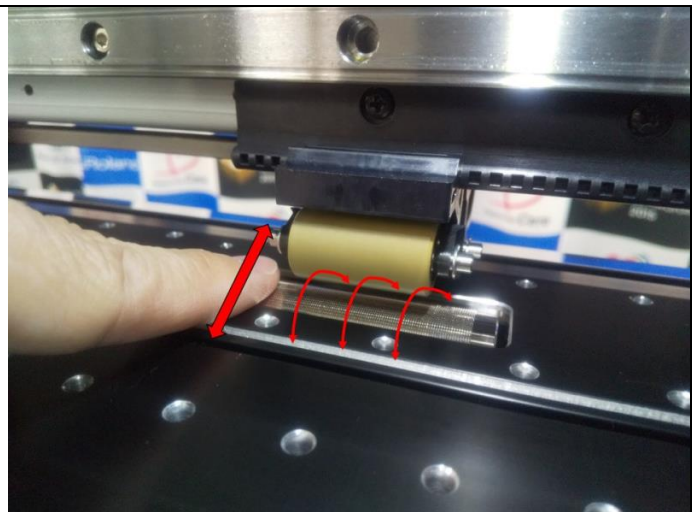
Step 26 / 33

Press [ENTER] to excite the motor.



Step 27 / 33

Check that the grit roller does not move easily when you try to move it by hand and that the displayed value returns to its original value.



Step 28 / 33

Perform a grit encoder check.



次の手順

グリットエンコーダーチェック

Next Step

Grit encoder check

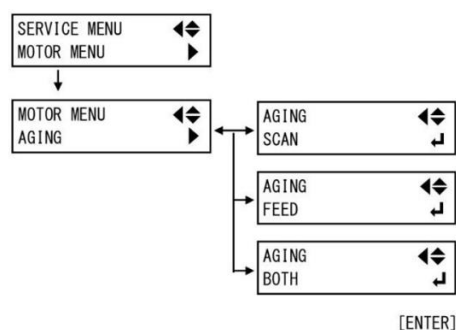
Step 29 / 33

Perform aging. Remove the media when performing aging.



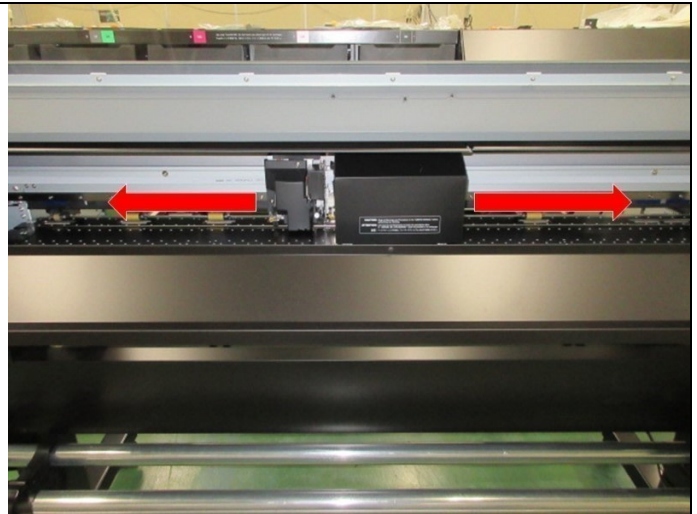
Step 30 / 33

From [SERVICE MENU] > [MOTOR MENU] > [AGING], select the item to be checked and press [ENTER]. Press the [ENTER] key to exit aging as well.



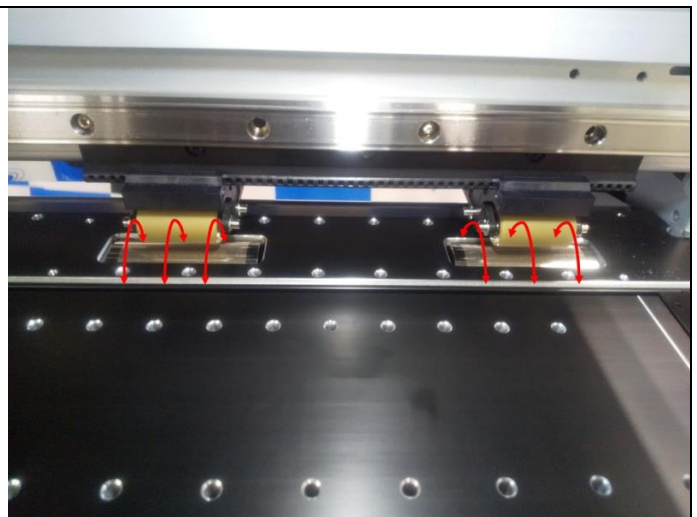
Step 31 / 33

Detail1: [SCAN] The SCAN motor operates with the cut carriage and print head carriage are attached.



Step 32 / 33

Detail2: [FEED] FEED motor operates and the grit roller operates.



Step 33 / 33

Detail3: [BOTH] The SCAN and FEED motors operate simultaneously while the cut and print head carriages are attached.



AP-640 Linear Encoder Board Replacement

AP-640 Linear Encoder Board Replacement Information

Step 1 / 7

<Work after replacement> Perform linear encoder position adjustment [SERVICE MENU] > [PRINT MENU] > [LINEAR ENCODER].

Step 2 / 7

Necessary Tools

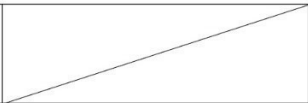
一般ツール/General Tool

プラスドライバー No.1 No.1 Phillips screwdriver	
プラスドライバー No.2 No.2 Phillips screwdriver	

Step 3 / 7

Special Tools

特殊治具/Special Tools

None	
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Step 4 / 7

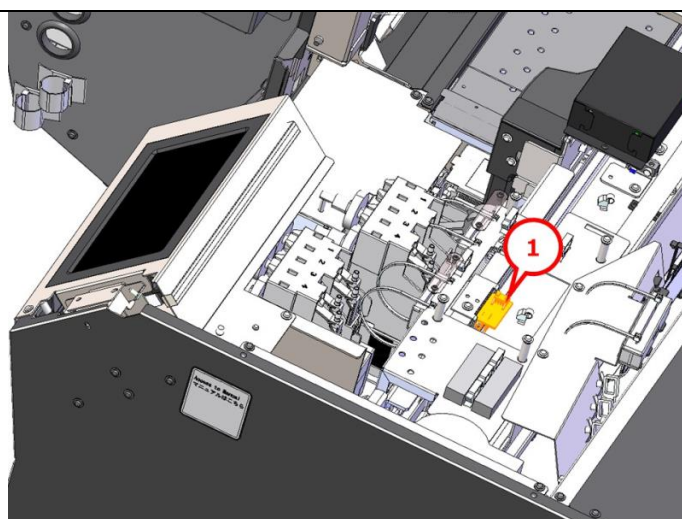
Typical Work Time

作業時間/Typical work time

作業内容/Contents of work	時間/Time
リニアエンコーダーボード交換 Linear encoder board Replacement	25 min.
リニアエンコーダー位置設定 Linear encoder setup	5 min.

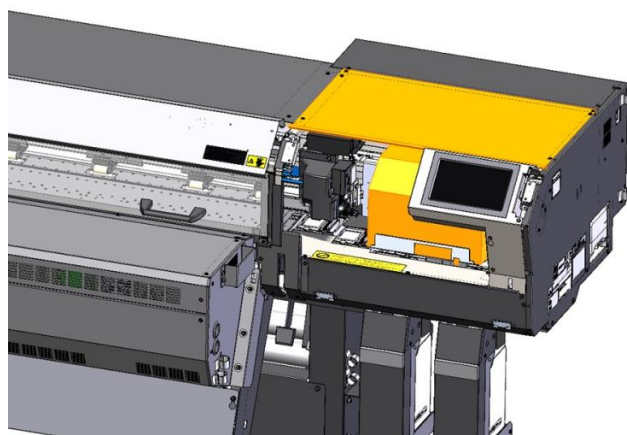
Step 5 / 7

1. Linear encoder board



Step 6 / 7

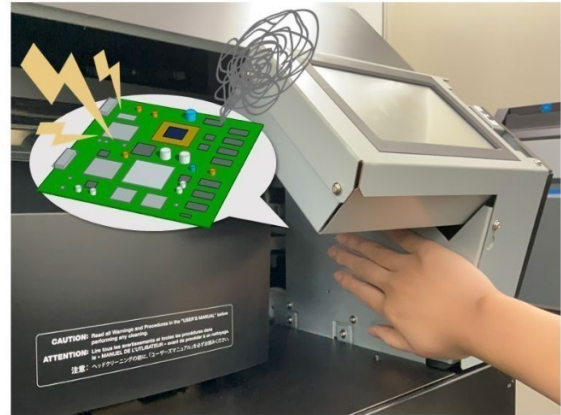
Covers that need to be removed



Step 7 / 7

To prevent damage caused by static electricity, release static electricity from your body before touching electronic components. Touching an unpainted metal surface will release static electricity.

CAUTION !

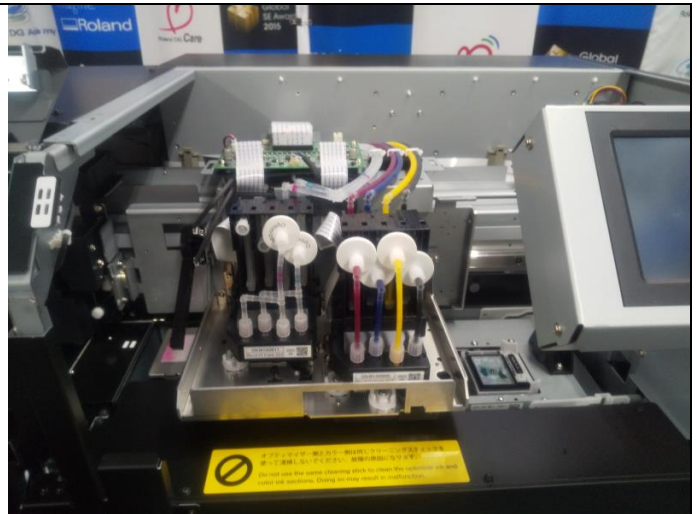


AP-640 Linear Encoder Board Replacement

AP-640 Linear Encoder Board Replacement Procedure

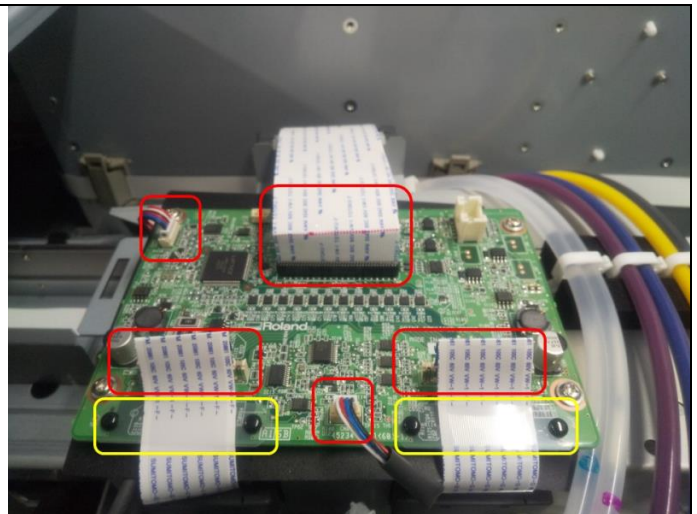
Step 1 / 17

Remove the covers.



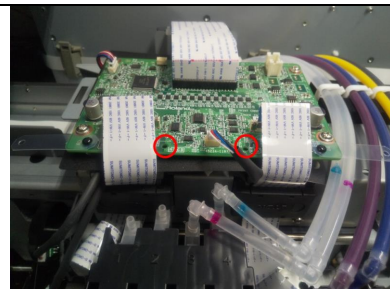
Step 2 / 17

Disconnect the head flexible cable connected to the print carriage board.



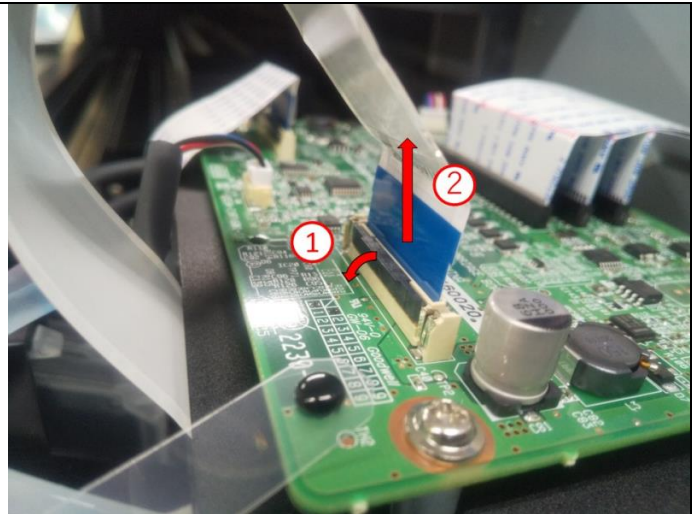
Step 3 / 17

Remove the push pins.



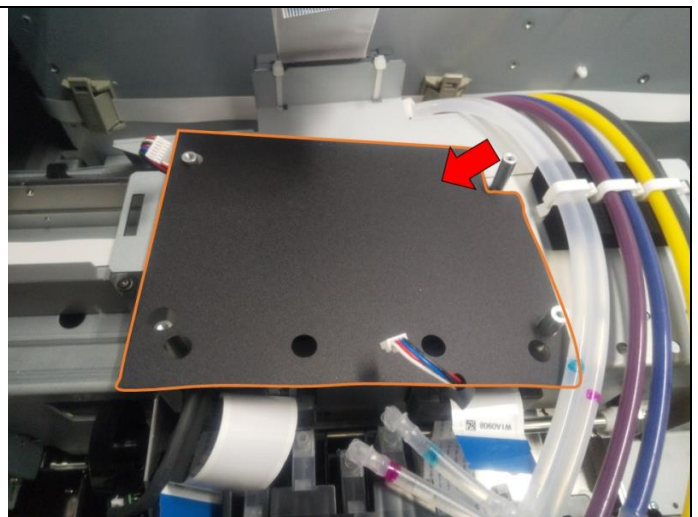
Step 4 / 17

With the hook pulled toward you,
remove the flexible cable.



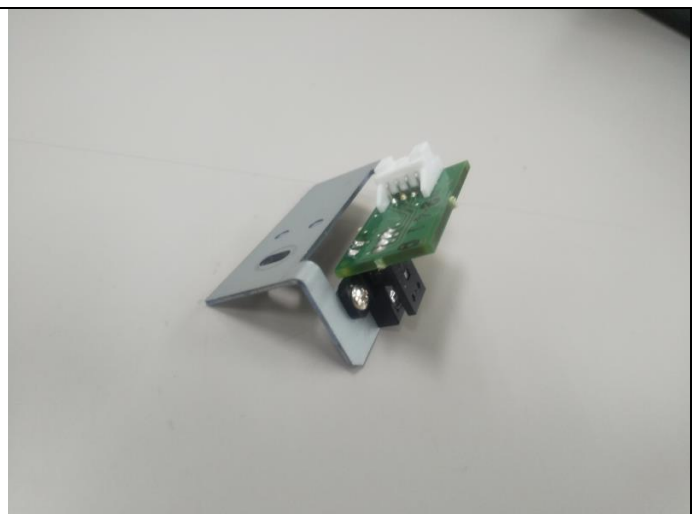
Step 5 / 17

Remove the cover.



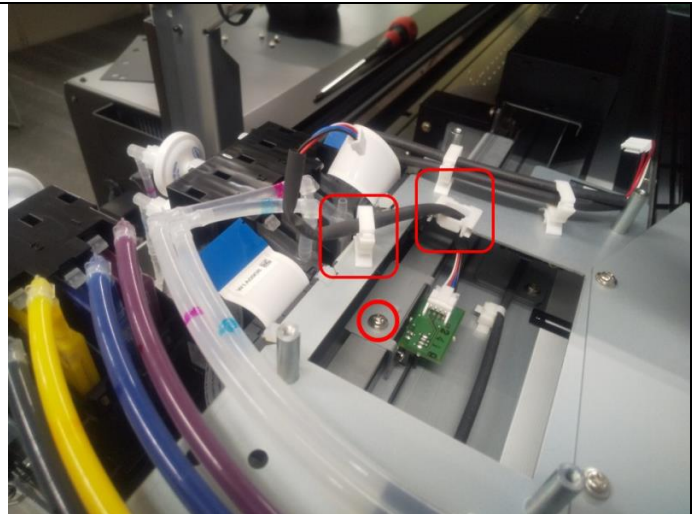
Step 6 / 17

Remove the linear encoder board
together with the stay.



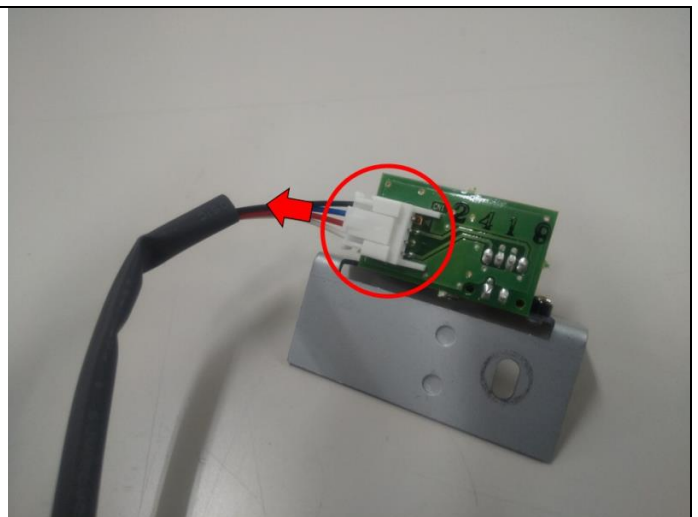
Step 7 / 17

Remove the cable clamps and remove the screw.



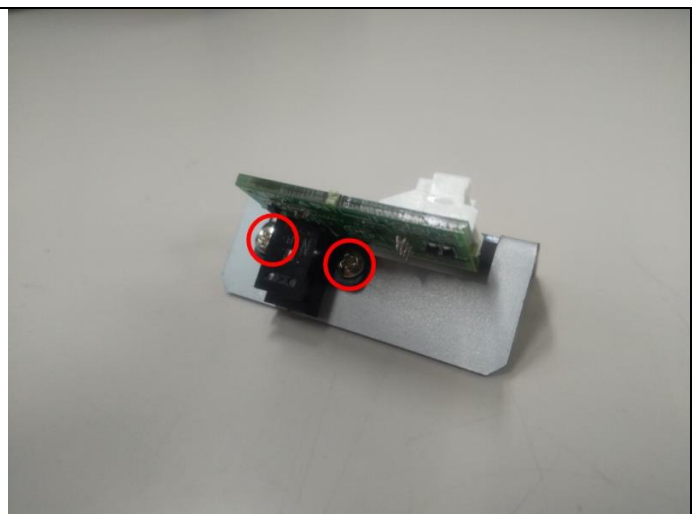
Step 8 / 17

Disconnect the connector.



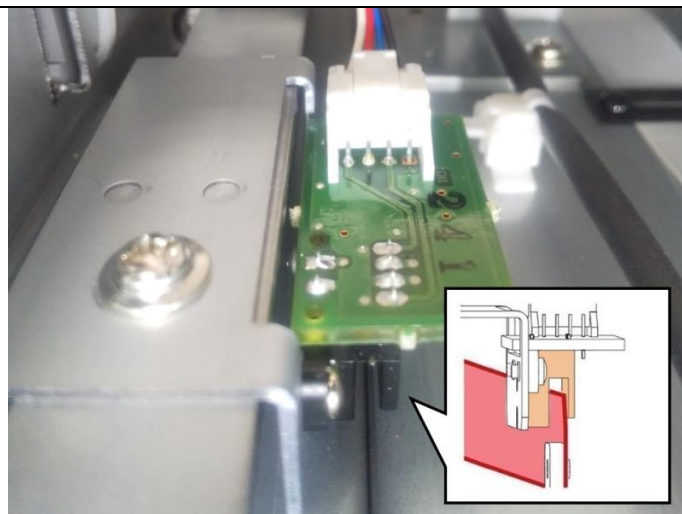
Step 9 / 17

Remove the linear encoder board from the stay and attach the new linear encoder board.



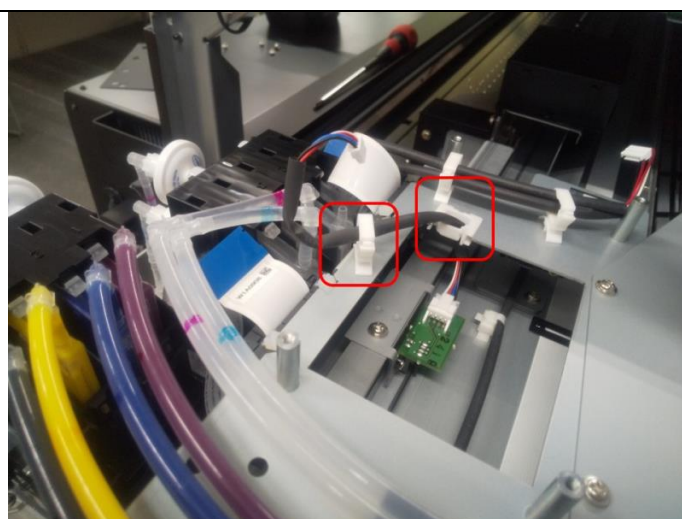
Step 10 / 17

Attach the linear encoder board together with the stay. Ensure that the encoder scale and encoder sensor are not touching. Also, check that the encoder scale is in between the slit of the encoder sensor.



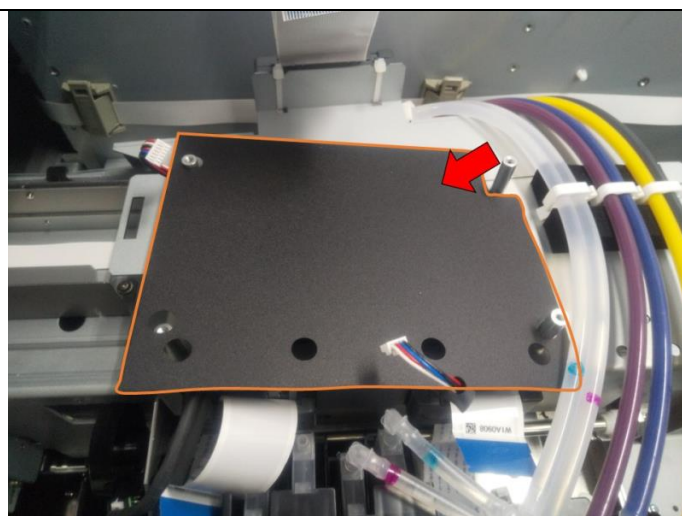
Step 11 / 17

Fix the cable with the clamps.



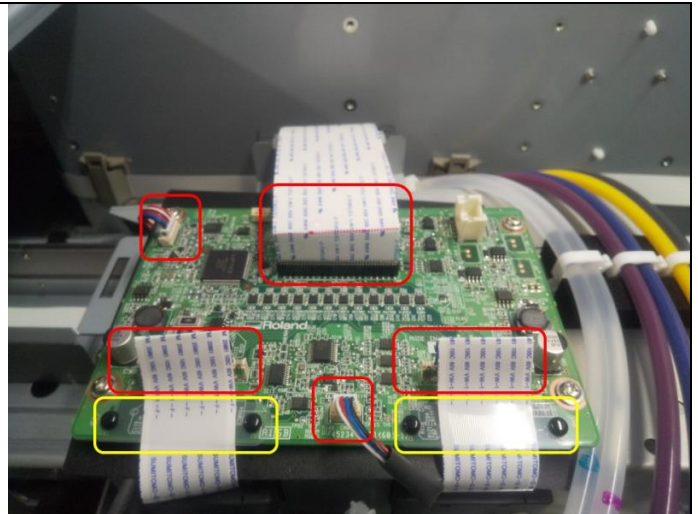
Step 12 / 17

Attach the cover.



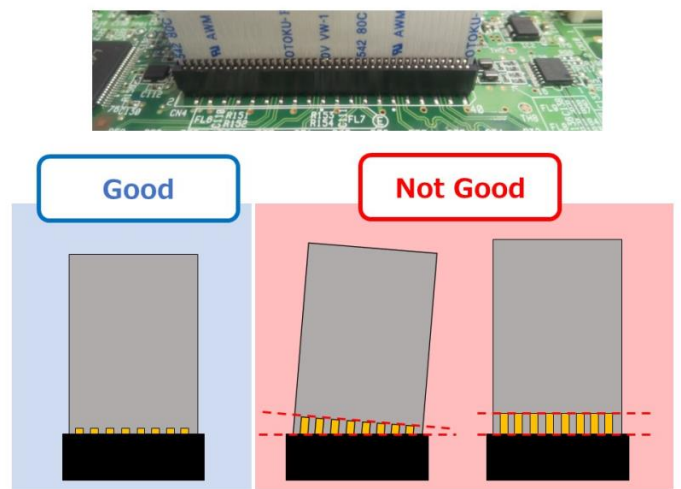
Step 13 / 17

Attach the print carriage board and connect the removed cables.



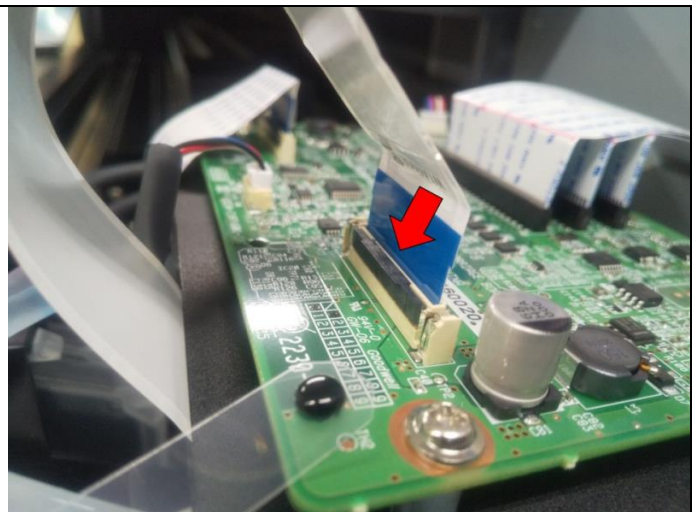
Step 14 / 17

Connect the flexible cables correctly.



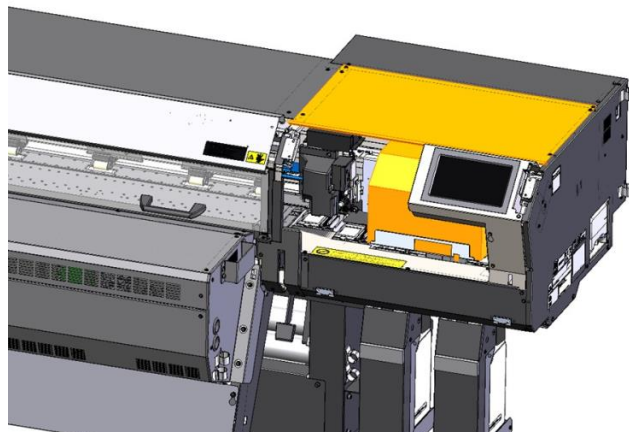
Step 15 / 17

Simply insert the flexible cable without touching the hooks to lock the flexible cable.



Step 16 / 17

Attach the removed cover.



Step 17 / 17

Perform linear encoder position adjustment [SERVICE MENU] > [PRINT MENU] > [LINEAR ENCODER].



次の手順

リニアエンコーダー位置設定

Next Step

Linear encoder position setting

AP-640 Encoder scale replacement

AP-640 Encoder scale replacement

Information

Step 1 / 5

<Part to be replaced> Encoder Scale

<Adjustment required after replacement> Linear encoder positino setting [SERVICE MENU] > [PRINT MENU] > [LINEAR ENCODER]

Step 2 / 5

Necesasary Tools

一般ツール/General Tool

プラスドライバー No.2
No.2 Phillips screwdriver



Step 3 / 5

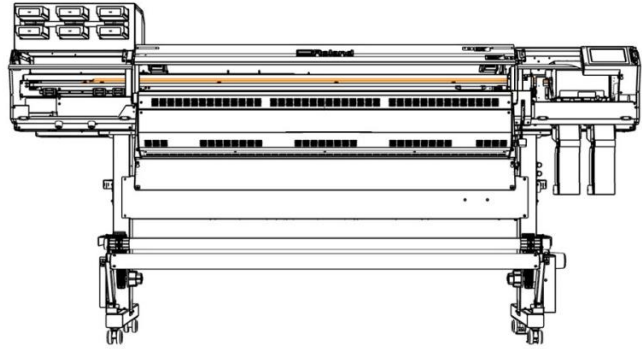
Typical Work Time

作業時間/Typical work time

作業内容/Contents of work	時間/Time
エンコーダスケール交換 Encoder scale replacement	15 min.
リニアエンコーダー位置設定 Linear encoder setup	5 min.

Step 4 / 5

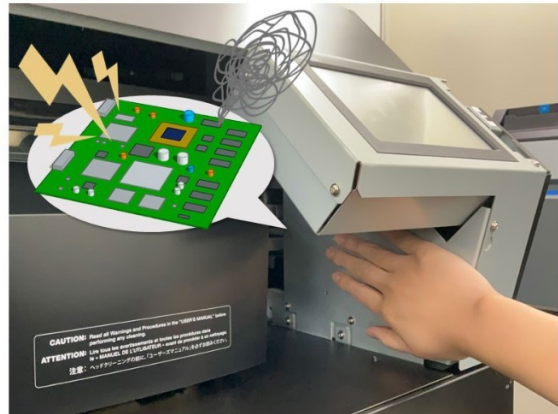
Encoder scale



Step 5 / 5

To prevent damage from static electricity, release static electricity from your body before touching electronic components. Touching an unpainted metal surface will release static electricity.

CAUTION !



AP-640 Encoder scale replacement

AP-640 Encoder scale replacement

Procedure

Step 1 / 17

Open the covers in three places and remove one.



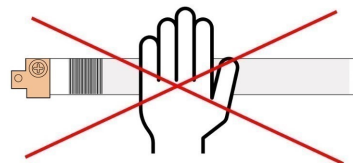
Step 2 / 17

Move the print head carriage around the center of the apron.



Step 3 / 17

Be careful not to touch, scratch or smudge the encoder scale surface during replacement.



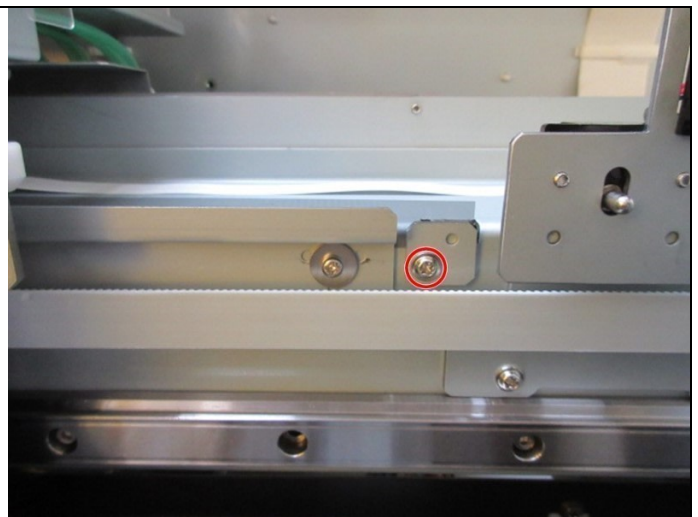
Step 4 / 17

Remove the left spring.



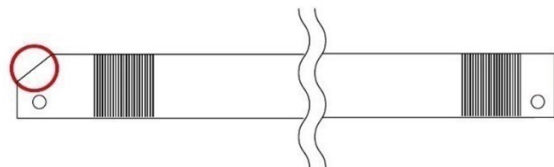
Step 5 / 17

Remove the plate securing the right side of the encoder scale and remove the encoder scale.



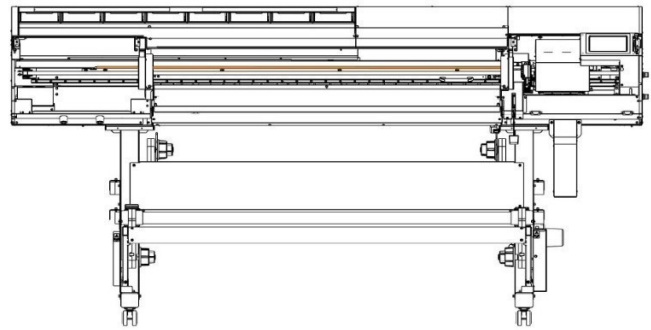
Step 6 / 17

The spring is attached to the notched side.



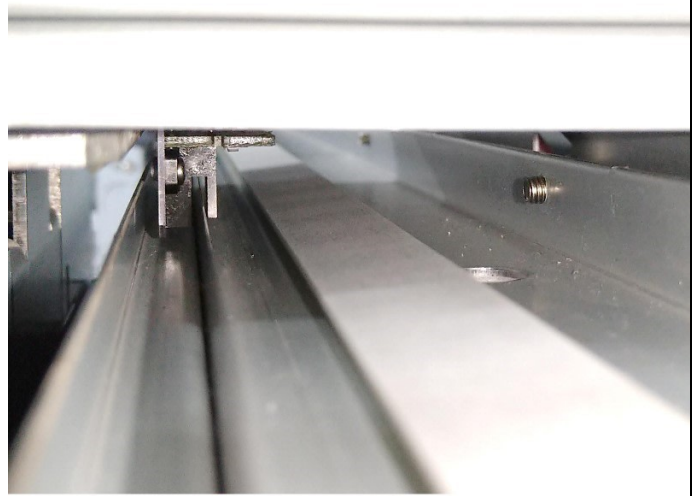
Step 7 / 17

Install the encoder scale.



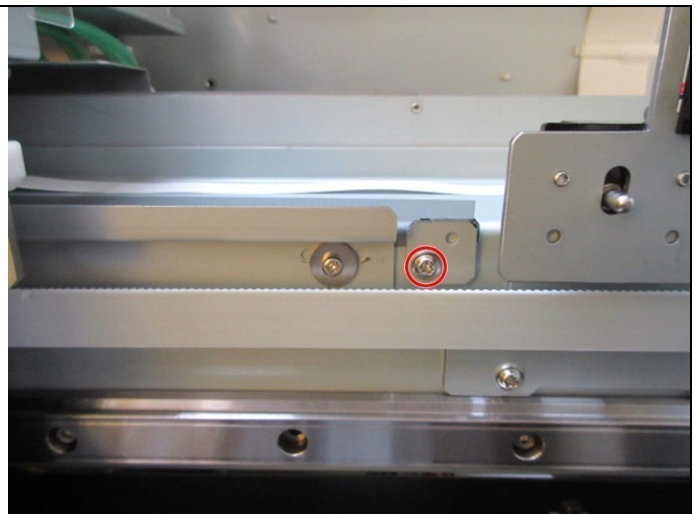
Step 8 / 17

Detail1: Insert the encoder scale into the gap between the encoder plate and the guide rail.



Step 9 / 17

Detail2: Temporarily fasten the right side of the encoder with the plate.



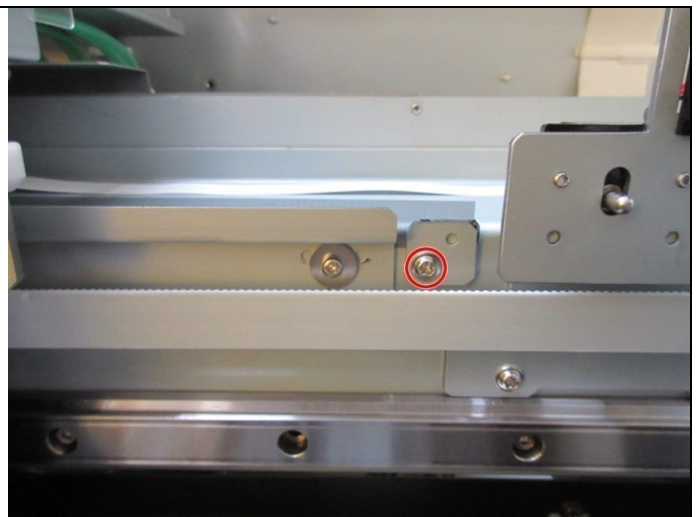
Step 10 / 17

Detail3: Attach the spring on the left side of the encoder.



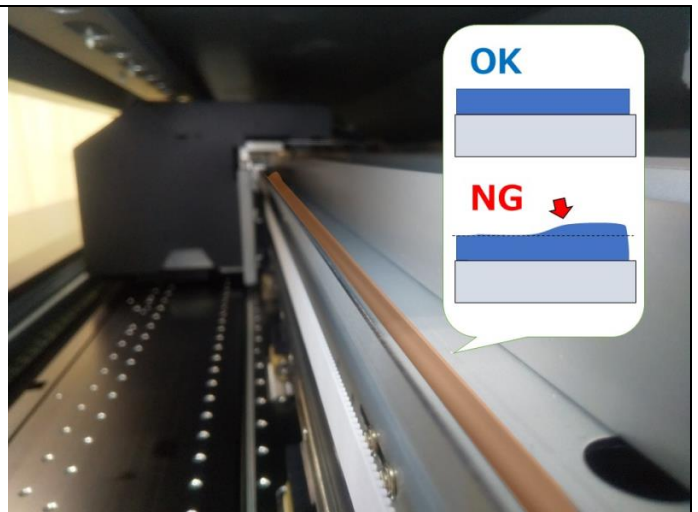
Step 11 / 17

Detail4: Retighten the screw on the right side.



Step 12 / 17

Visually check that the encoder scale is securely attached without floating.



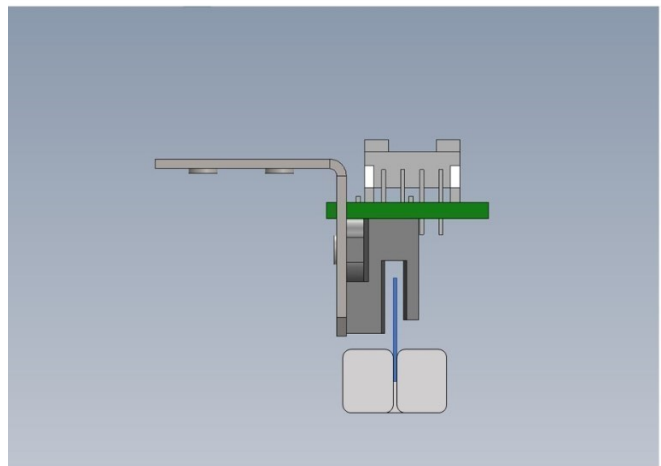
Step 13 / 17

Move the print head carriage across the entire width and check that the encoder scale is not in contact with the encoder sensor and that the encoder sensor covers the encoder scale.



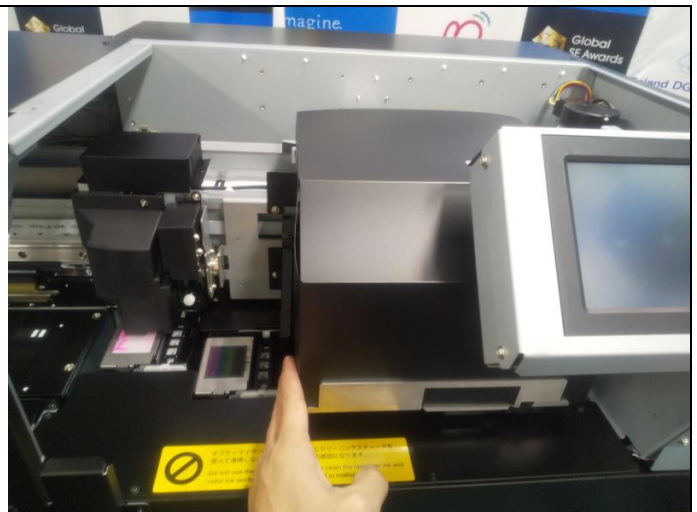
Step 14 / 17

Detail1: Make sure the encoder is not in contact with the sensor.



Step 15 / 17

Lock the print head carriage.



Step 16 / 17

Attach all removed covers.



Step 17 / 17

Perform [Linear Encoder Position Setting].



次の手順

リニアエンコーダー位置設定

Next Step

Linear encoder position setting

AP-640 Carriage belt replacement

AP-640 Carriage belt replacement

Information

Step 1 / 6

□Adjustment after carriage belt replacement> Belt tension adjustment Belt position adjustment Limit Position Initialization

Step 2 / 6

General Tools

一般ツール/General Tool

プラスドライバー No.2 No.2 Phillips screwdriver	
六角レンチ 3.0mm 3.0mm hexagonal wrench	
テープ Tape	

Step 3 / 6

Special Tools

特殊治具/Special Tools

None	
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Step 4 / 6

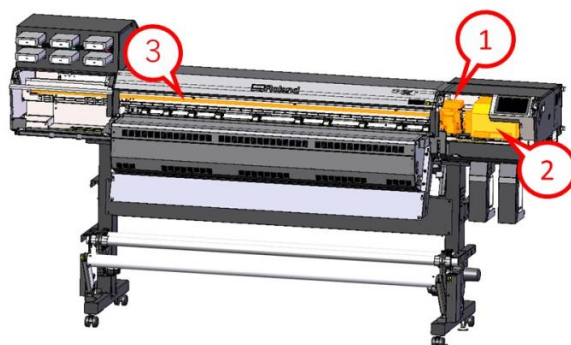
Typical Work Time

作業時間/Typical work time

作業内容/Contents of work	時間/Time
キャリッジベルト交換 Carriage belt Replacement	30 min.

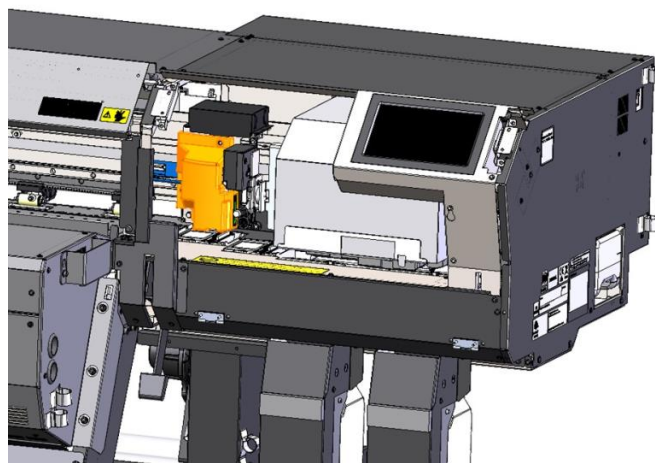
Step 5 / 6

1. Sub carriage, 2. Print head carriage,
3. Carriage belt



Step 6 / 6

Cover that needs to be removed

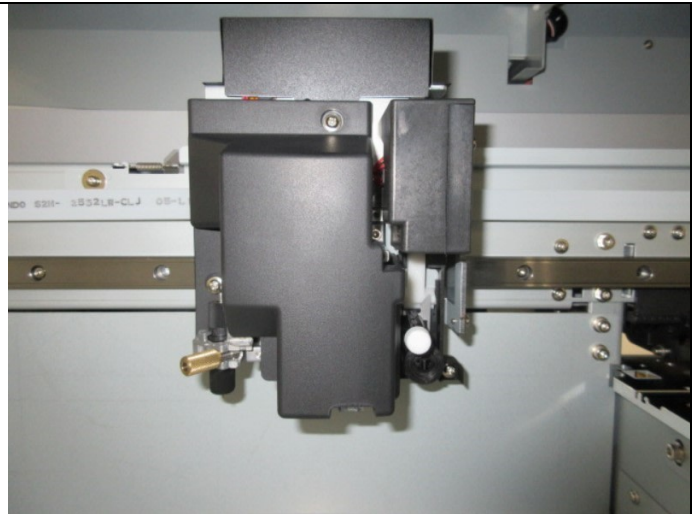


AP-640 Carriage belt replacement

AP-640 Carriage belt replacement Procedure

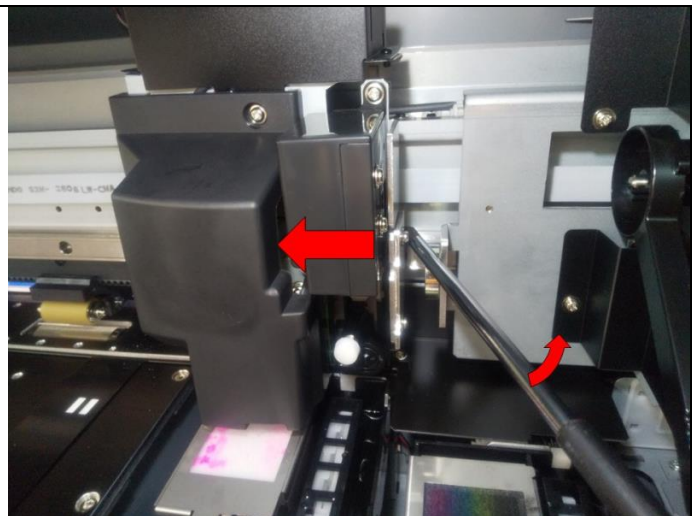
Step 1 / 27

Move the sub carriage to the maintenance cover L side.



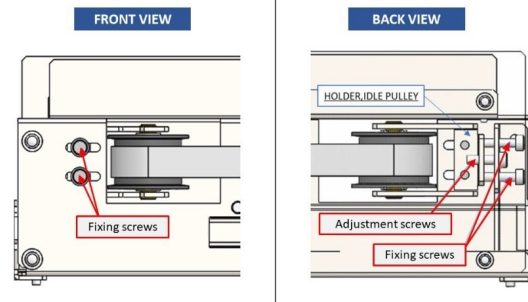
Step 2 / 27

Detail1: Use a screwdriver or similar tool to separate the sub carriage from the print head carriage.



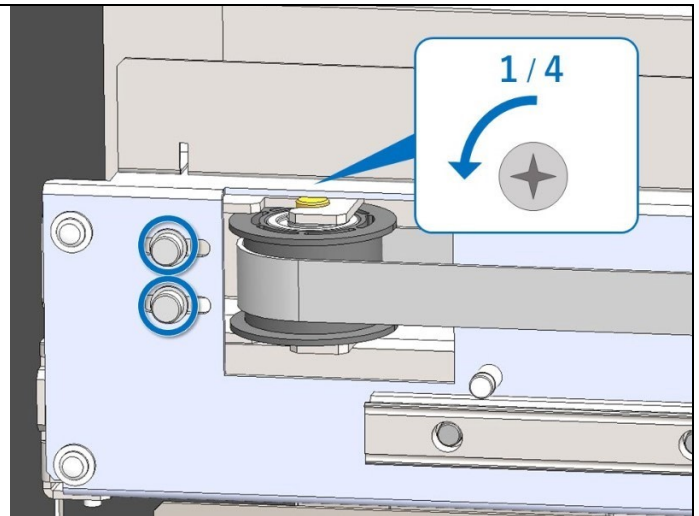
Step 3 / 27

Loosen the idle pulley side fixing screw at the left end of the belt about 1/4 of the way and loosen the adjustment screw about 2 to 3 turns.



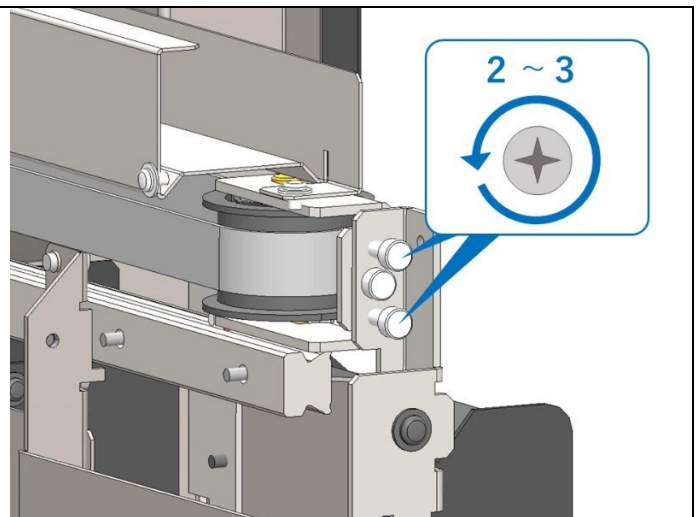
Step 4 / 27

Detail1: Loosen the idle pulley side fixing screw at the left end of the belt about 1/4 of the way.



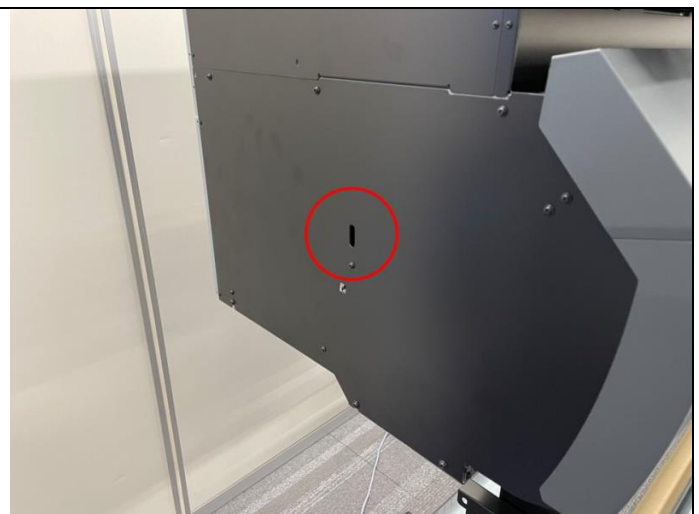
Step 5 / 27

Detail2: Loosen the adjustment screw about 2 to 3 turns.



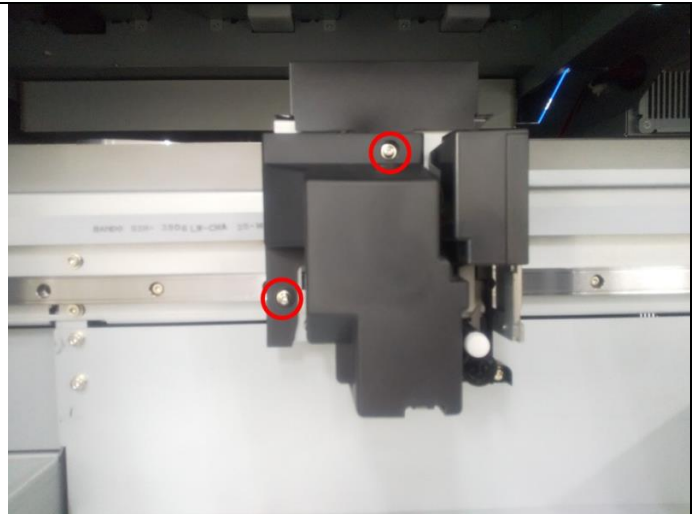
Step 6 / 27

Detail3: The adjustment screw can be accessed from outside the cover.



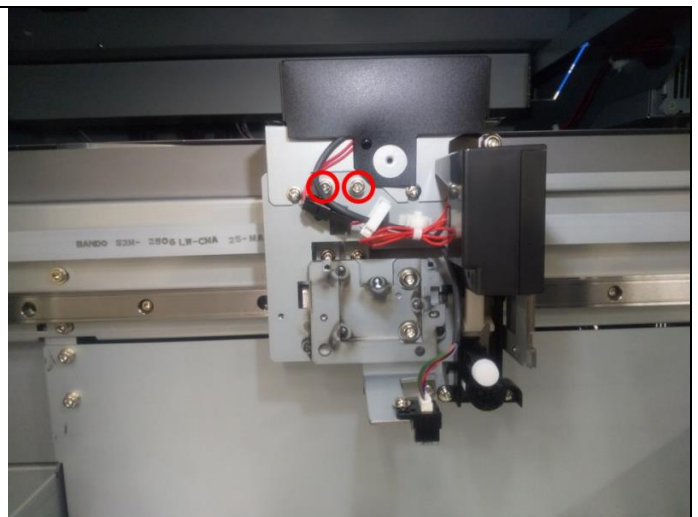
Step 7 / 27

Remove the sub carriage cover.



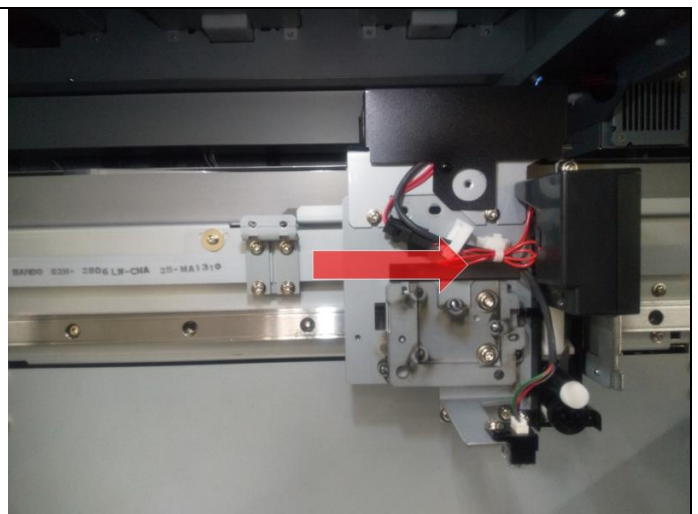
Step 8 / 27

Remove the two screws.



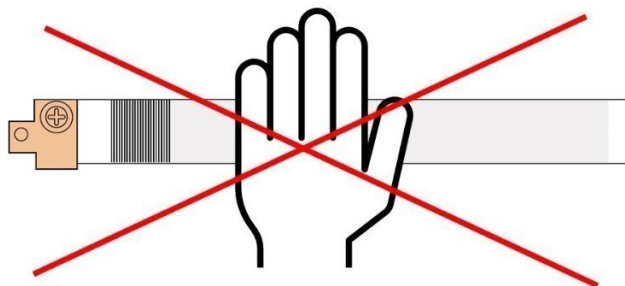
Step 9 / 27

Slide the sub carriage to the right to separate it from the belt.



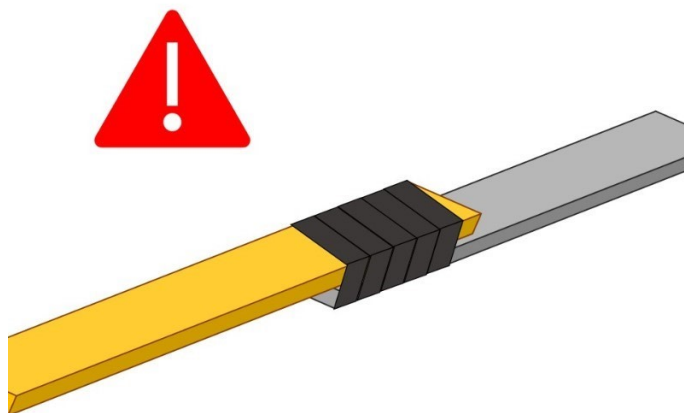
Step 10 / 27

Do not touch the encoder scale when removing the carriage belt. If the grease on the belt adheres to the encoder scale, print defects may occur.



Step 11 / 27

When replacing the carriage belt, be sure to put the new belt on the old belt, and then remove the old belt and put the new belt through at the same time. (If the belt is not replaced in this manner, the new belt may not be attached!)



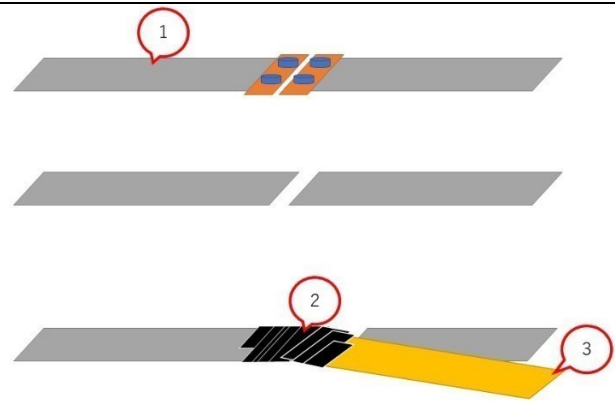
Step 12 / 27

Remove the carriage belt.



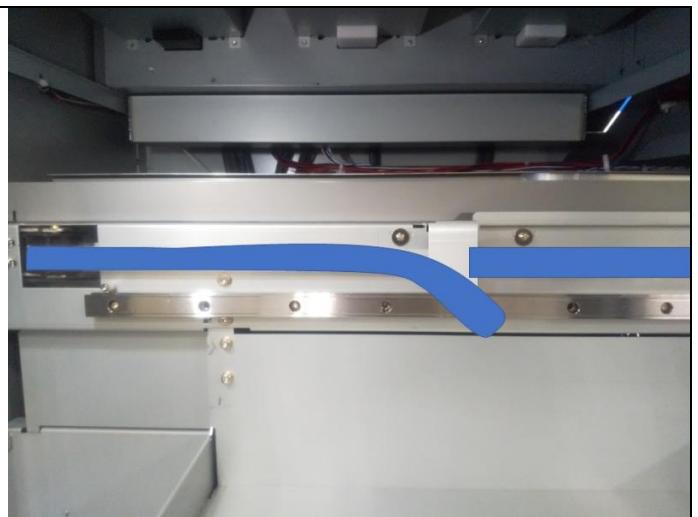
Step 13 / 27

Remove the carriage belt from the stay and tape the new carriage belt to one side. 1. old belt 2. tape 3. new belt



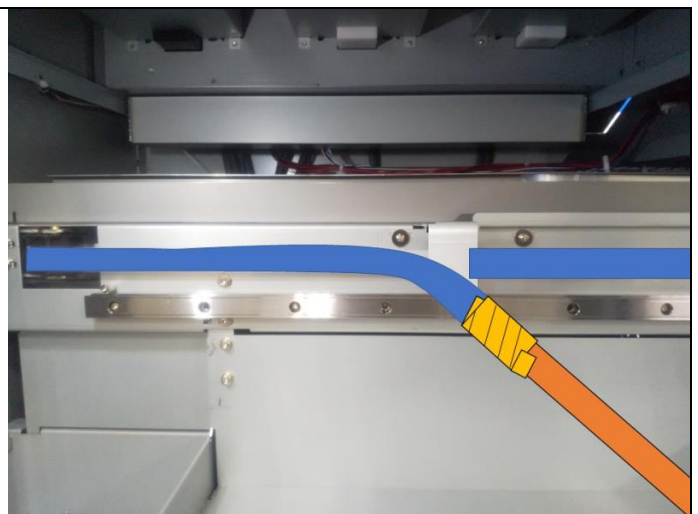
Step 14 / 27

Detail1: Remove the carriage belt from the stay.



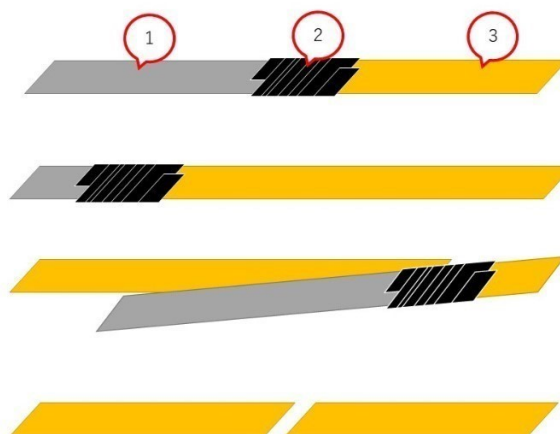
Step 15 / 27

Detail2: Tape the new carriage belt to one side.



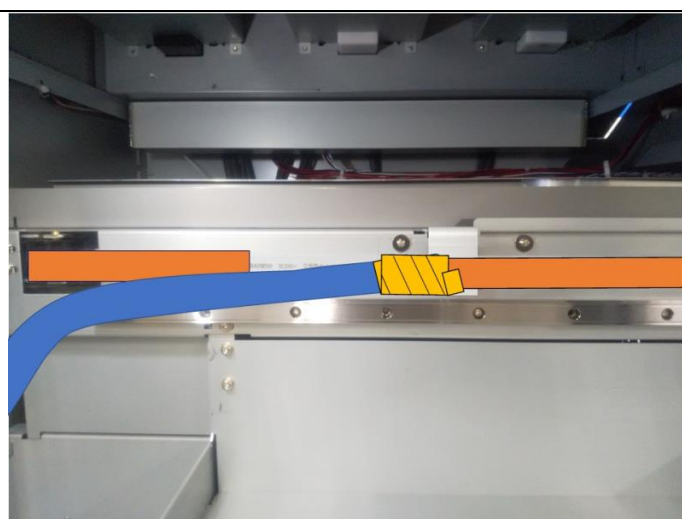
Step 16 / 27

Pull the new carriage belt until it reaches the belt on the unconnected side. Remove the tape after the belt has completed one lap. 1. old belt 2. tape 3. new belt



Step 17 / 27

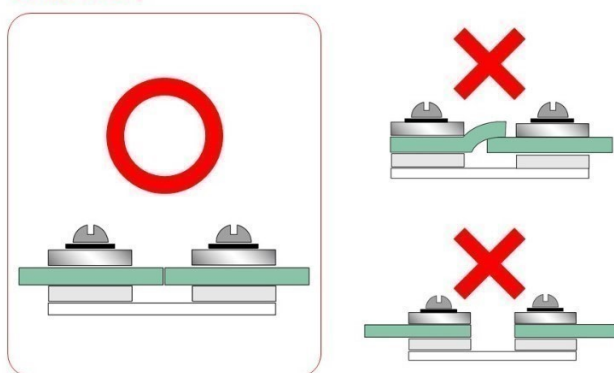
Detail1: Pull until the new carriage belt reaches the belt on the unconnected side.



Step 18 / 27

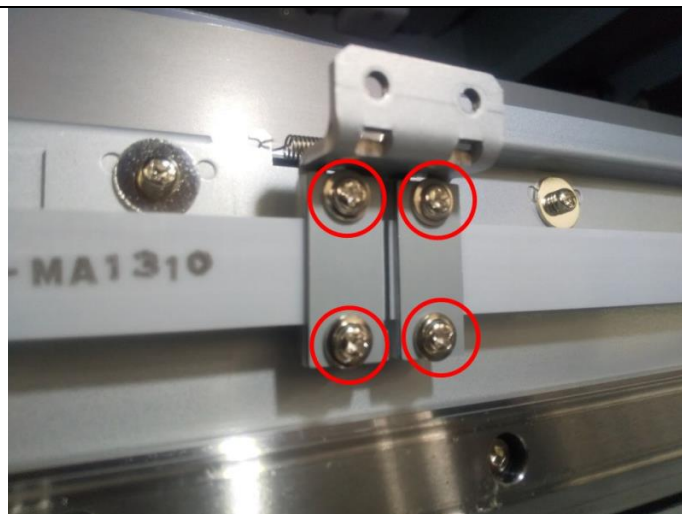
When installing the carriage belt, make sure that the two ends of the belt do not overlap. Also, be careful about the orientation of the plastic plate and the order in which the plates are fastened.

CAUTION



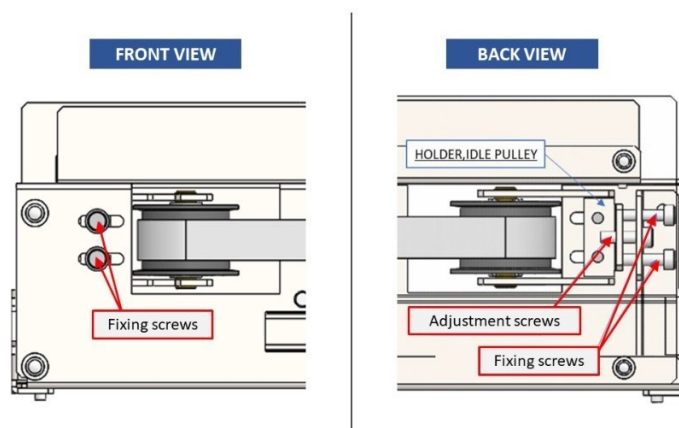
Step 19 / 27

Attach both ends of the carriage belt with the plastic and sheet metal plates and the belt holder with the screws.



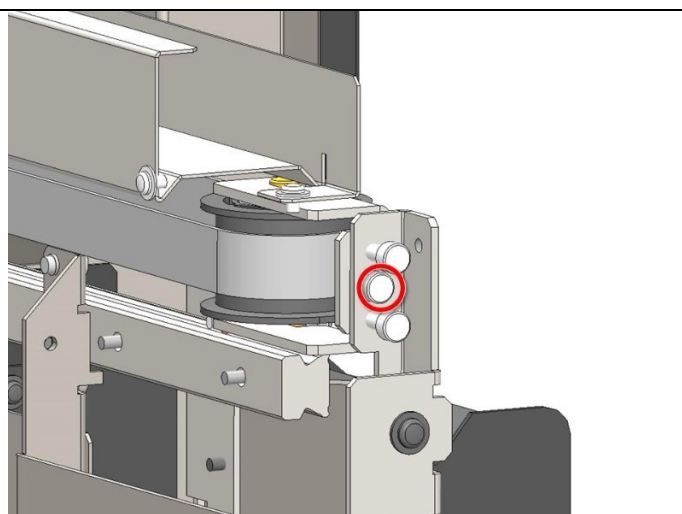
Step 20 / 27

Tighten the adjustment screws to eliminate belt deflection. Do not tighten the screws too tightly. Then tighten the idle pulley side fixing screw.



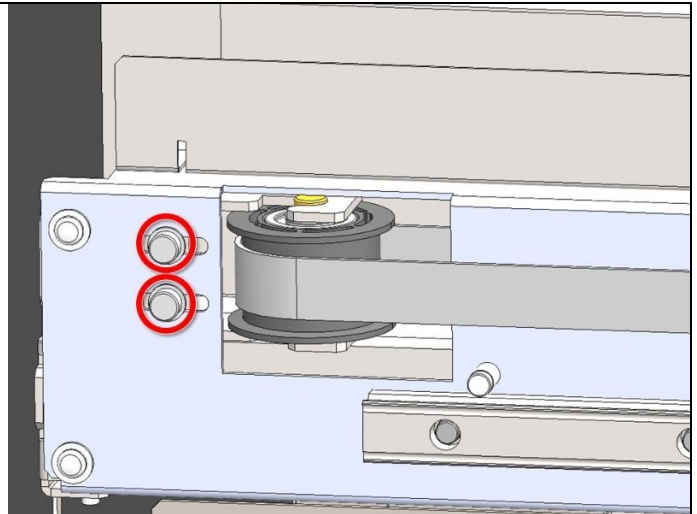
Step 21 / 27

Detail1: Tighten the adjustment screw to eliminate belt deflection. Do not over-tighten the screw.



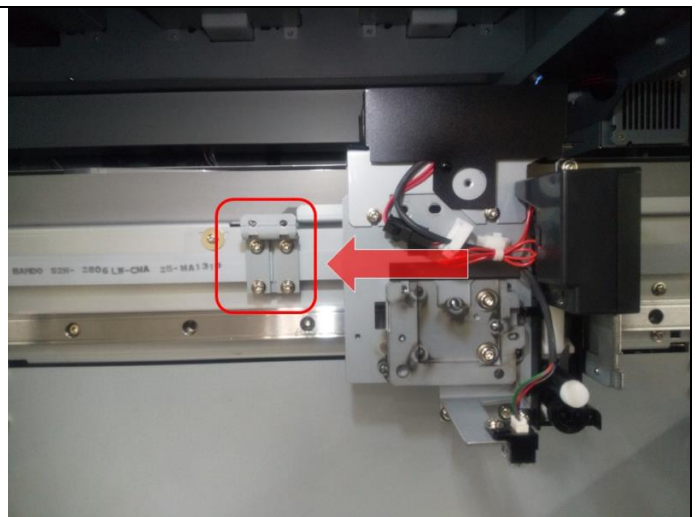
Step 22 / 27

Detail2: Tighten the idle pulley side fixing screw.



Step 23 / 27

Slide the sub carriage into the belt holder.



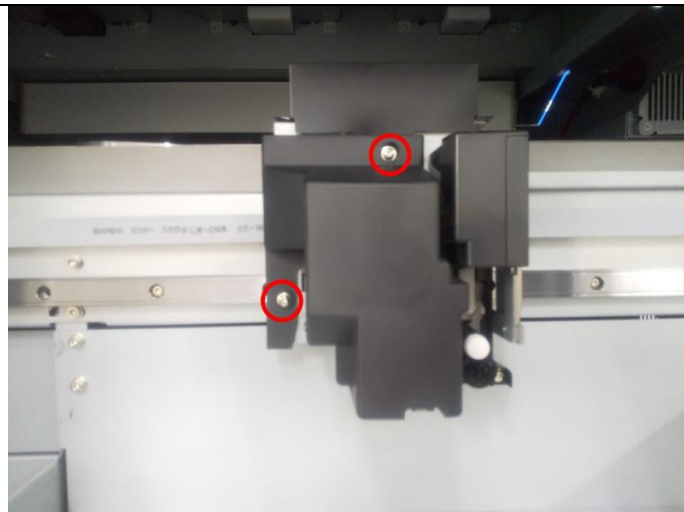
Step 24 / 27

Detail1: Tighten the screws.



Step 25 / 27

Install the sub carriage cover.



Step 26 / 27

Move the sub carriage back and forth several times over the entire area to eliminate slack in the carriage belt.



Step 27 / 27

Adjust the belt tension, belt position, and limit position.



次の手順

ベルトテンション調整
ベルト位置調整
リミット位置調整

Next Step

Belt tension adjustment
Belt position adjustment
Limit position adjustment

AP-640 EXT IF board replacement

AP-640 EXT IF board replacement

Information

Step 1 / 6

Necessary Tools

一般ツール/General Tool

プラスドライバー No.1 No.1 Phillips screwdriver	
プラスドライバー No.2 No.2 Phillips screwdriver	
ペンチ Pliers	

Step 2 / 6

Special Tools

特殊治具/Special Tools

無し None	
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Step 3 / 6

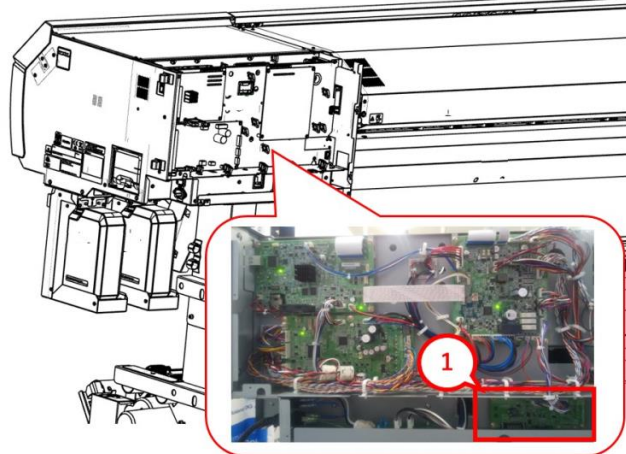
Typical Work Time

作業時間/Typical work time

作業内容/Contents of work	時間/Time
EXT IF ボード交換 EXT IF board replacement	25 min.

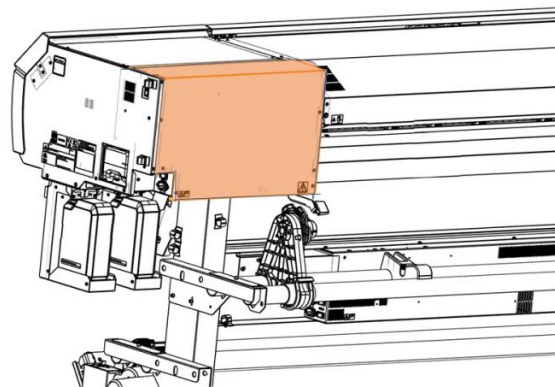
Step 4 / 6

1. EXT IF board replacement



Step 5 / 6

Cover that needs to be removed



Step 6 / 6

To prevent damage caused by static electricity, release static electricity from your body before touching electronic components. Touching an unpainted metal surface will release static electricity.



AP-640 EXT IF board replacement

AP-640 EXT IF board replacement Procedure

Step 1 / 6

Turn off the main power and unplug the power cable.



Step 2 / 6

Remove the cover.



Step 3 / 6

Disconnect the cables plugged into the [TAKE UP] and [DRYER] connectors.



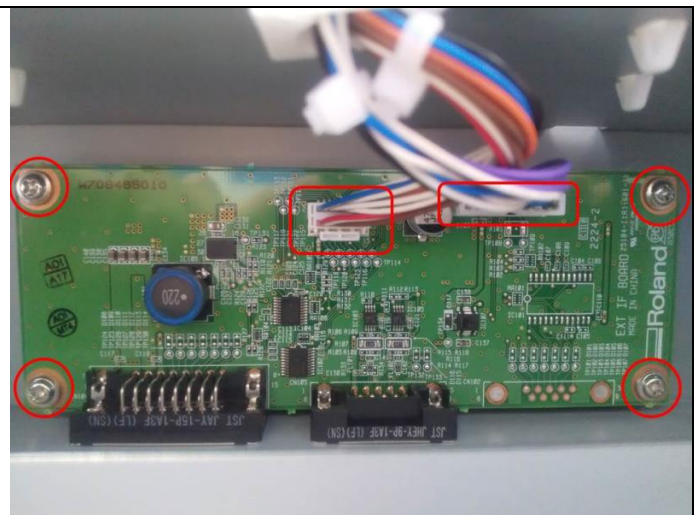
Step 4 / 6

Turn the screws with pliers to remove the connectors.



Step 5 / 6

Remove the connectors and screws, and replace the EXT IF board with a new one.



Step 6 / 6

Attach the removed covers and screws.



AP-640 Ink IC connector replacement

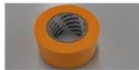
AP-640 Ink IC connector replacement

Information

Step 1 / 5

Necessary Tools

一般ツール/General Tool

プラスドライバー No.2 No.2 Phillips screwdriver	
テープ Tape	

Step 2 / 5

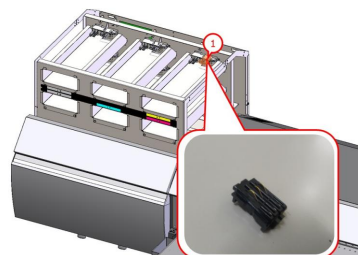
Typical Work Time

作業時間/Typical work time

作業内容/Contents of work	時間/Time
インクICコネクタ 交換 Ink IC connector replacement	20 min.

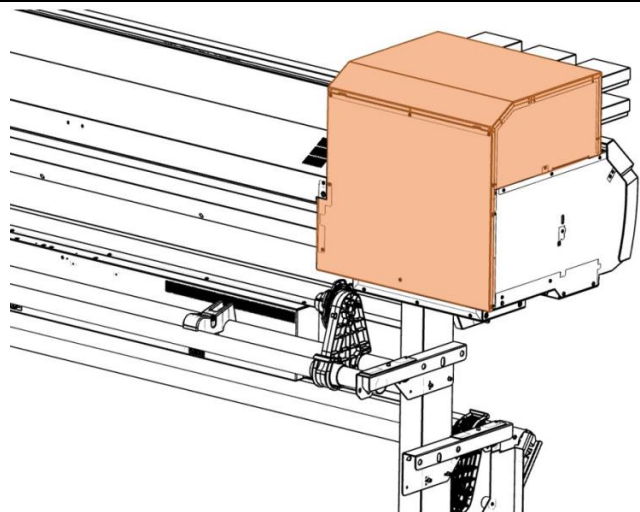
Step 3 / 5

1. Ink IC connector



Step 4 / 5

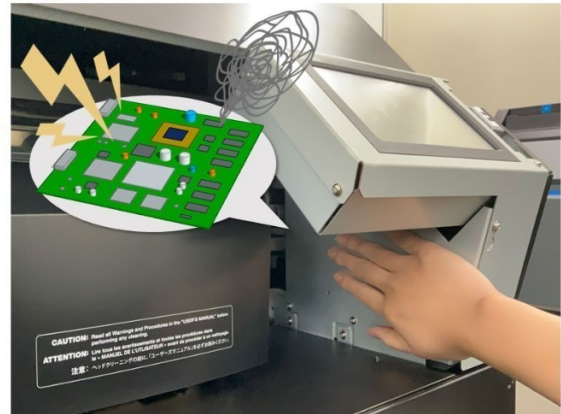
Covers that need to be removed



Step 5 / 5

To prevent damage from static electricity, release static electricity from your body before touching electronic components. Touching an unpainted metal surface will release static electricity.

CAUTION !



AP-640 Ink IC connector replacement

AP-640 Ink IC connector replacement

Procedure

Step 1 / 39

Turn off the main power and unplug the power cord.



Step 2 / 39

Remove all ink trays.



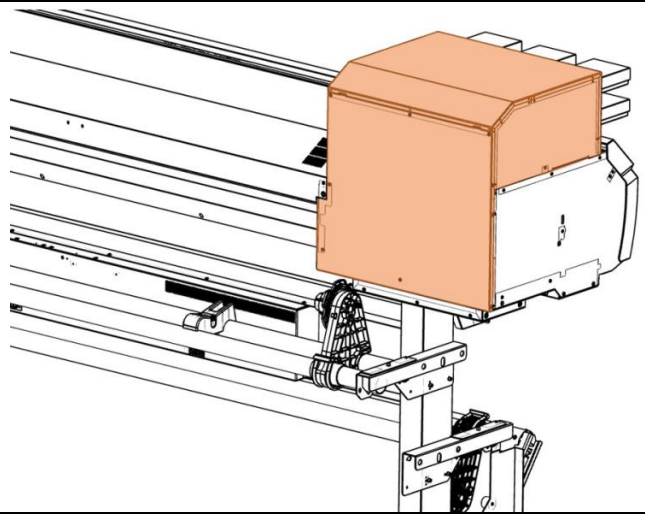
Step 3 / 39

Remove the covers.



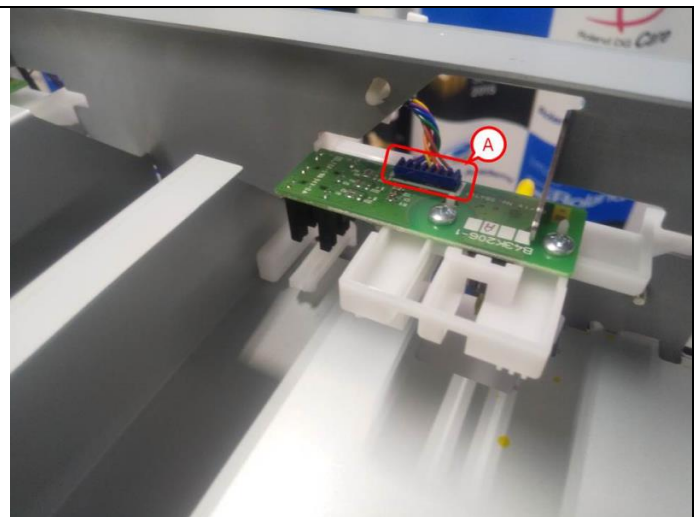
Step 4 / 39

Detail1: Covers to be removed.



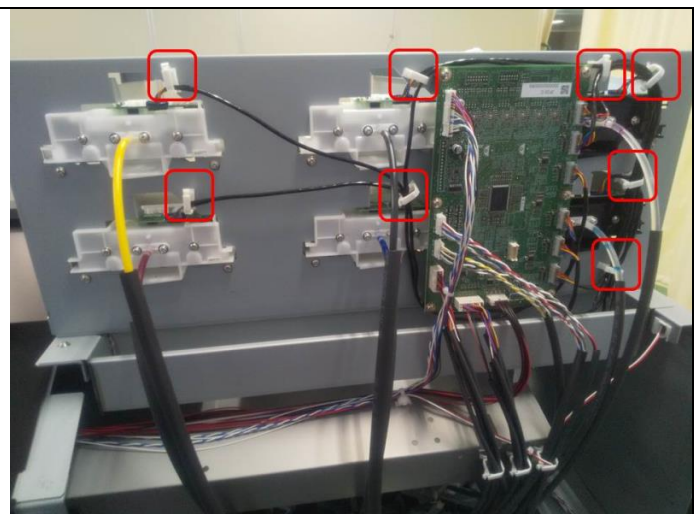
Step 5 / 39

The cable connector at point A cannot be unplugged.



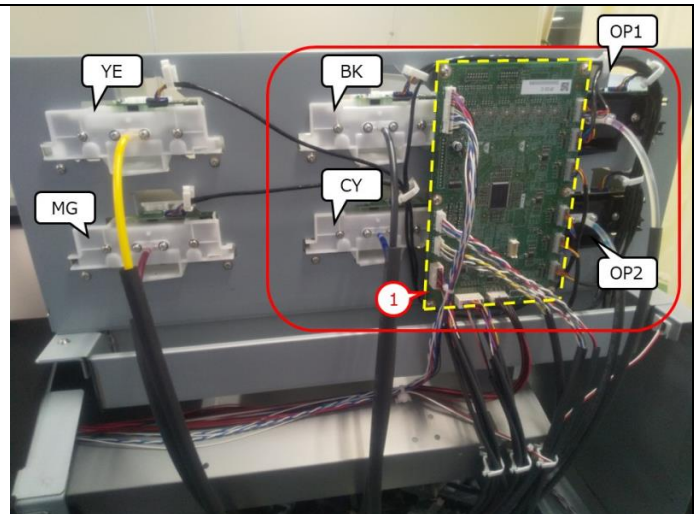
Step 6 / 39

Remove the saddles near the ink type to be replaced.



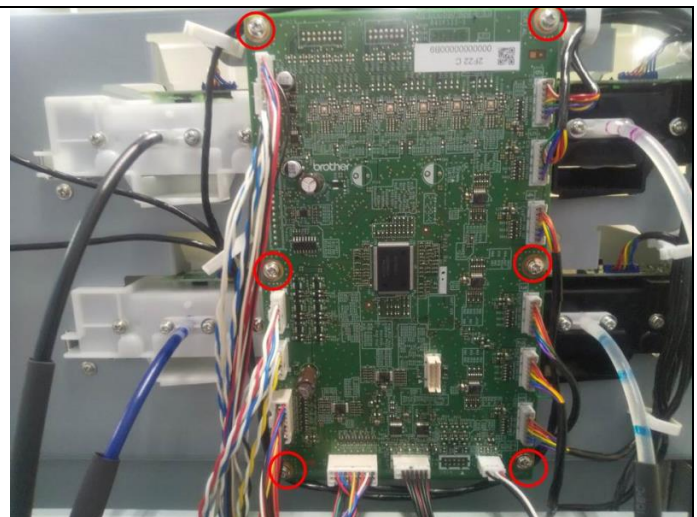
Step 7 / 39

When replacing OP1, OP2, BK, or CY parts, Remove 1. ink board.



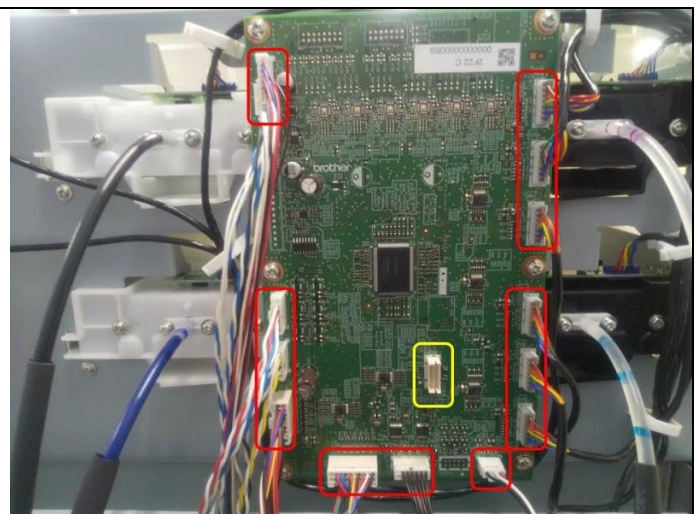
Step 8 / 39

Detail1: Remove the screws.



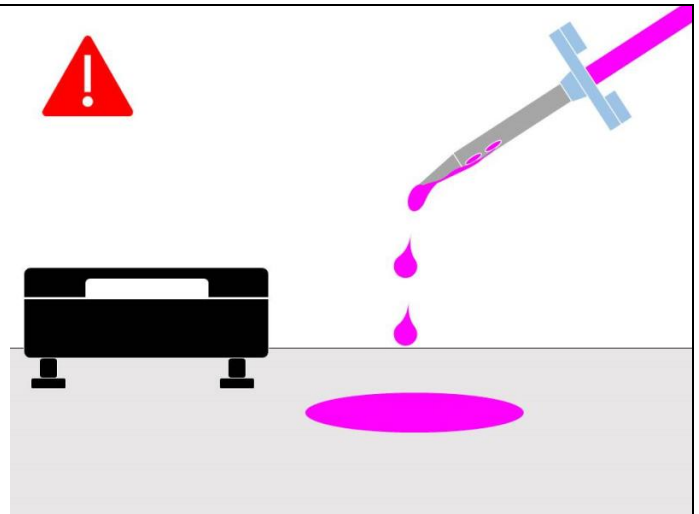
Step 9 / 39

Detail2: Remove the connector sof the red parts.



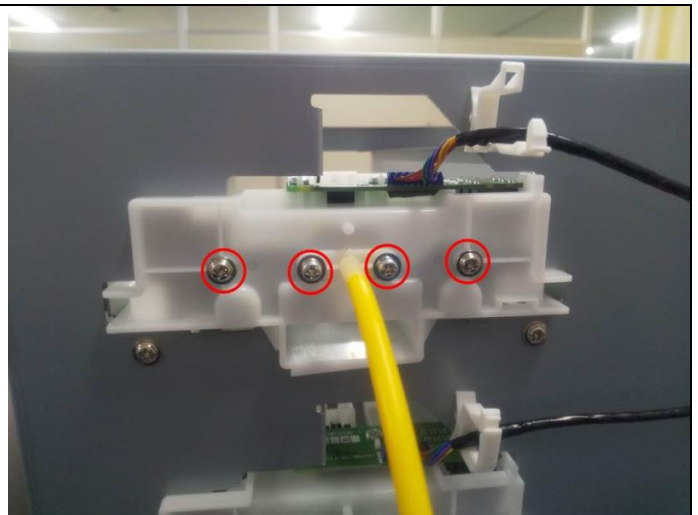
Step 10 / 39

Ink may drip from the tip of the needle.
Handle with care.



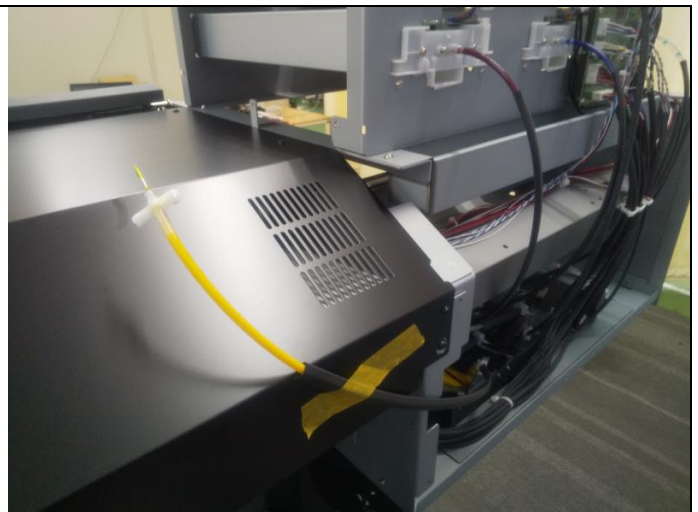
Step 11 / 39

Remove the four screws.



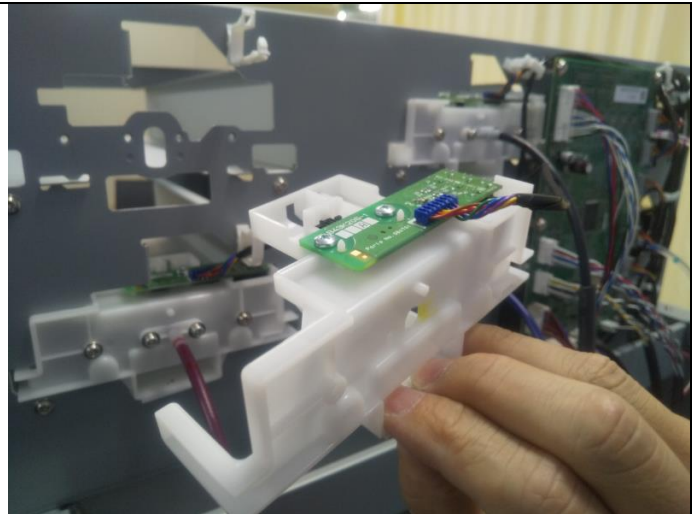
Step 12 / 39

Point the removed needle upward and
secure it with tape to prevent the tube
from bending.



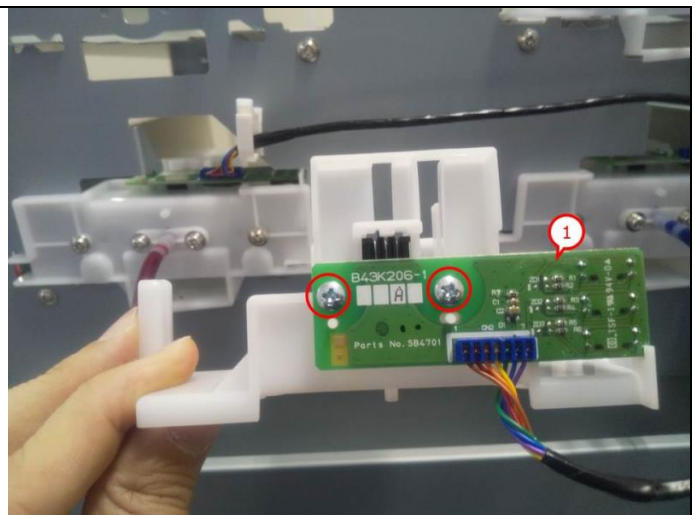
Step 13 / 39

Remove the cartridge holder.



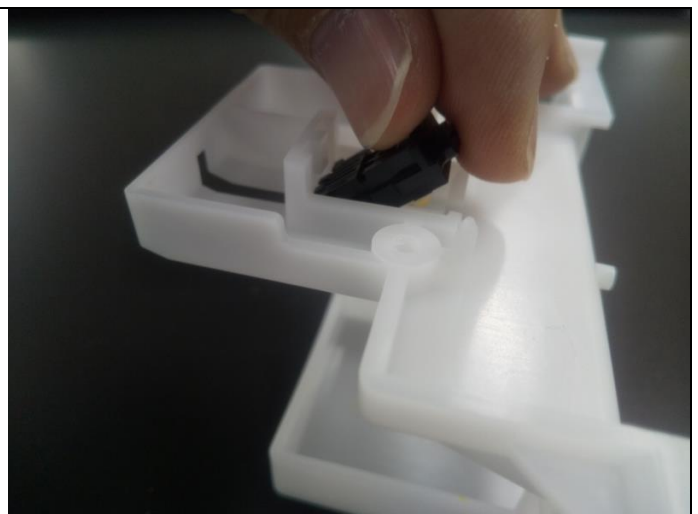
Step 14 / 39

Remove 1. ink sensor board.



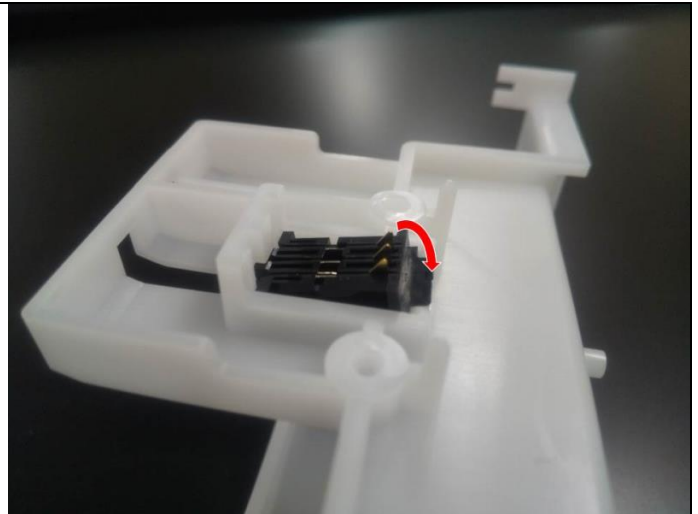
Step 15 / 39

Remove the ink IC connector and replace it with a new connector.



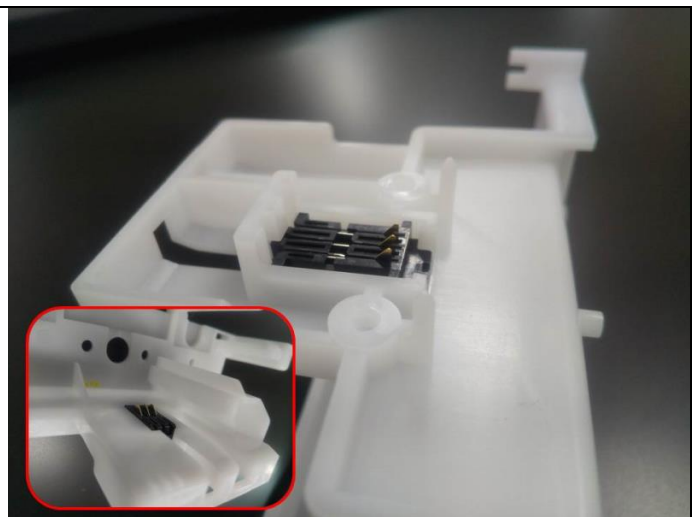
Step 16 / 39

Detail1: Attach the connector, paying attention to the direction in which it is attached.



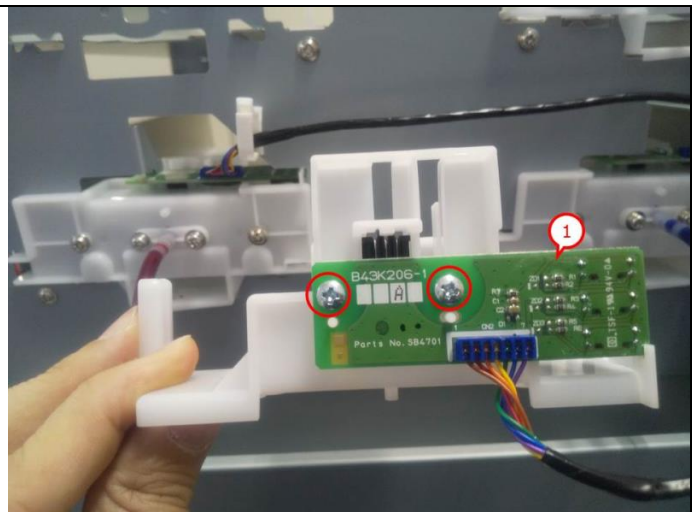
Step 17 / 39

Detail2: Make sure the connector is attached horizontally to the holder.



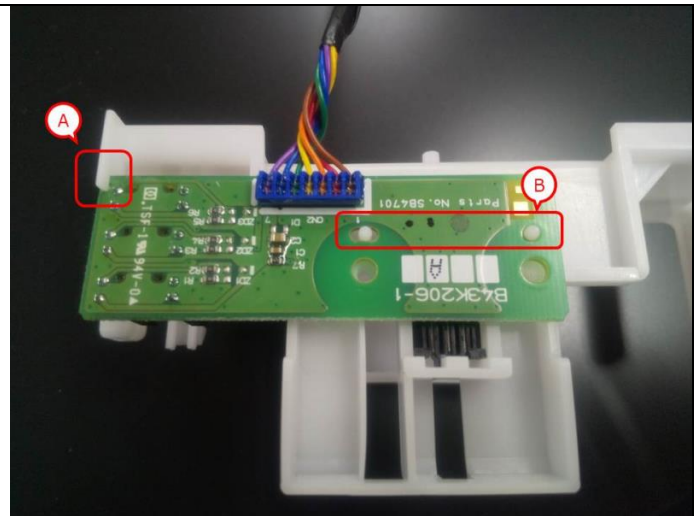
Step 18 / 39

Attach the ink sensor board.



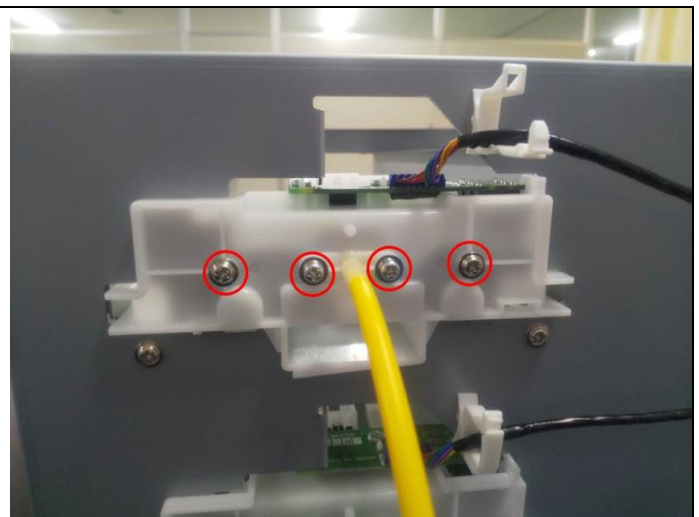
Step 19 / 39

Detail1: After placing the board between the resin pieces in A, assemble it to the positioning pins in B.



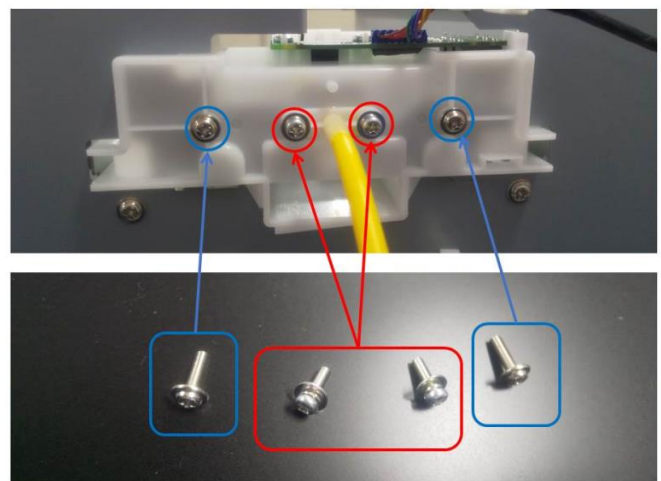
Step 20 / 39

1. Attach the cartridge holder.



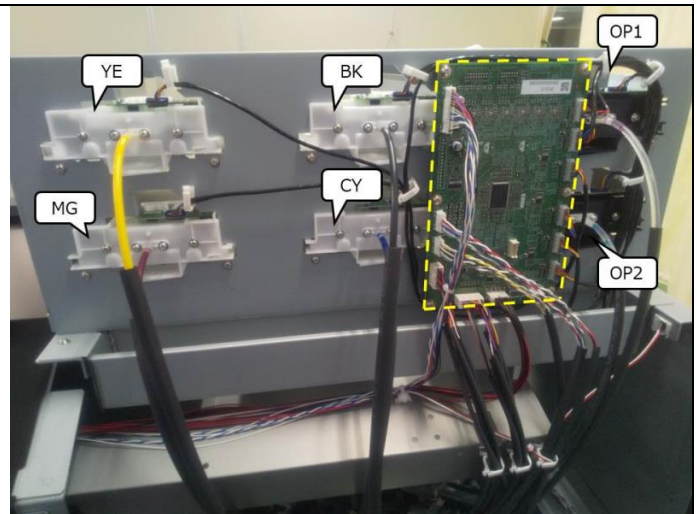
Step 21 / 39

Detail1: The type of screws on the needle side and right and left screws are different.



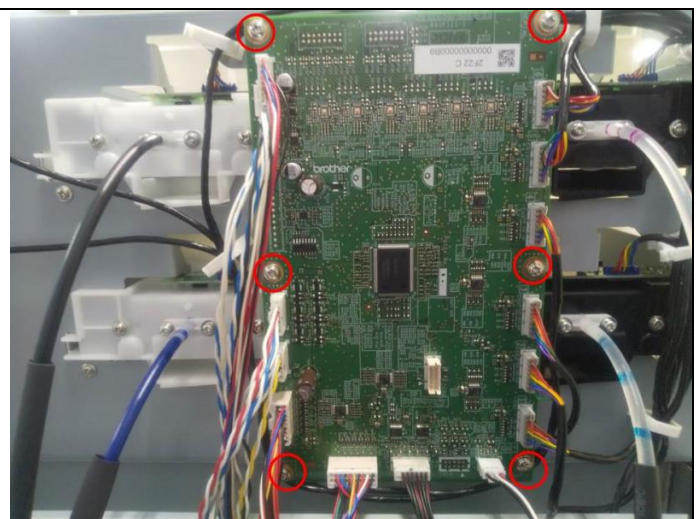
Step 22 / 39

Detail2: If the ink board has been removed, install the board and connector.



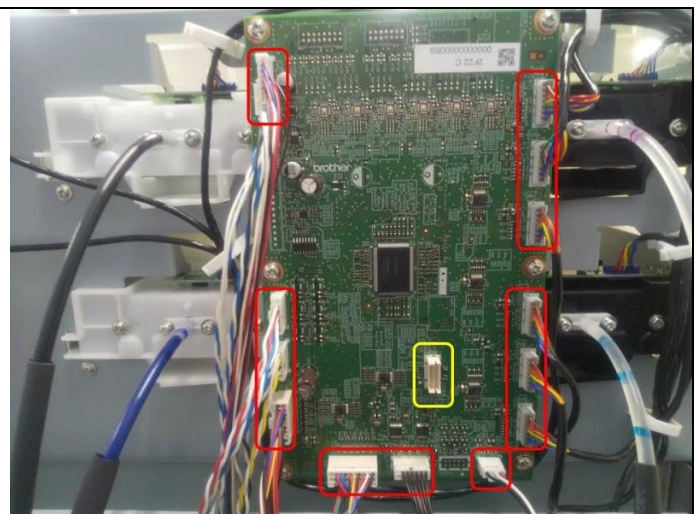
Step 23 / 39

Detail3: Attach the screws.



Step 24 / 39

Detail4: Attach the connectors in the red marked parts. There is no connector to be connected to the yellow marked part.



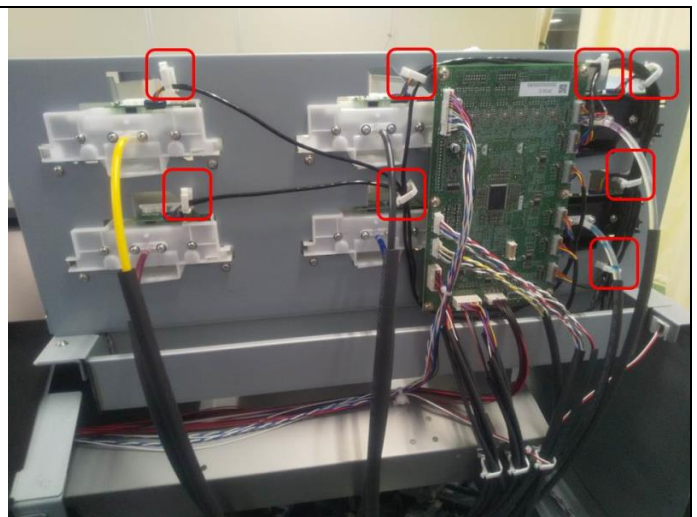
Step 25 / 39

Detail5: Attach the removed saddles, covers, and ink pouch tray.



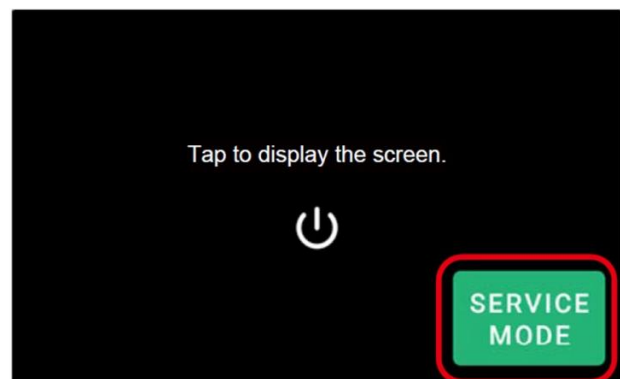
Step 26 / 39

Detail6: Saddle positions



Step 27 / 39

Detail7: Turn on the power and connect Peck2 to the machine to enter the service mode.



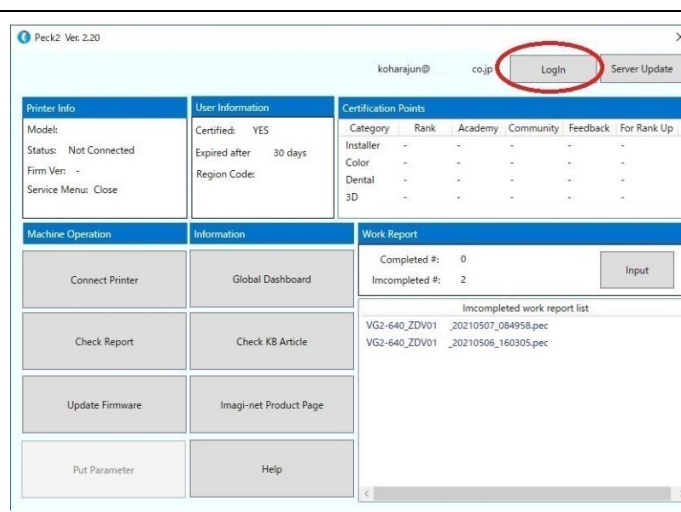
Step 28 / 39

Start Peck2.



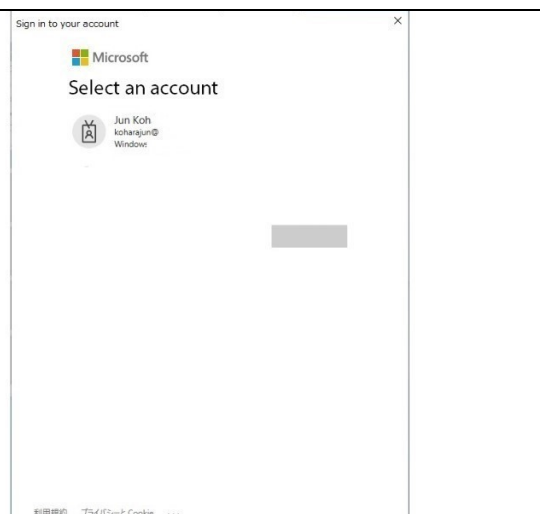
Step 29 / 39

Click the [Login] button.



Step 30 / 39

Log in with your Imagi-net ID.



Step 31 / 39

Click the [Connect Printer] button.

The screenshot shows the Peck2 Ver. 2.20 interface. The 'Connect Printer' button in the 'Machine Operation' section is highlighted with a red circle. The interface includes sections for Printer Info, User Information, Certification Points, Machine Operation, Information, and Work Report.

Category	Rank	Academy	Community	Feedback	For Rank Up
Installer	Certified	0	*	*	*
Color	0	0	0	200	
Dental	0	0	*	200	
3D	0	0	*	200	

Step 32 / 39

Enter the IP address of the printer you would like to connect to.

The screenshot shows the Peck2 Ver. 2.20 interface with the 'Connect Printer' dialog box open. The dialog box has a 'Select' dropdown menu showing 'VG2-640' and '11.129.52'. Below it is an 'Input IP Address' field and 'Connect' and 'Close' buttons.

Step 33 / 39

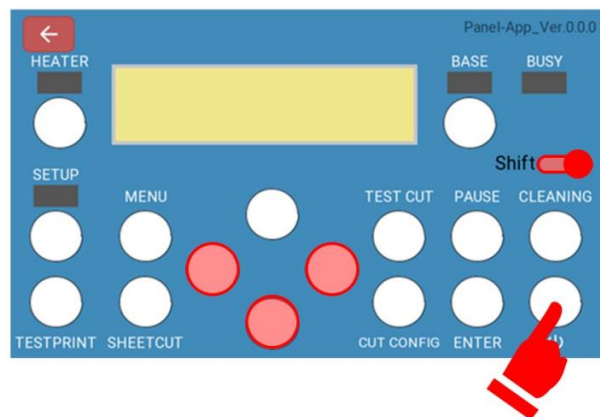
When the printer is connected, the printer information will be displayed in [Printer Info].

The screenshot shows the Peck2 Ver. 2.20 interface with the 'Printer Info' section highlighted by a red box. The printer status is 'UnSetup'. The interface includes sections for Printer Info, User Information, Certification Points, Machine Operation, Information, and Work Report.

Category	Rank	Academy	Community	Feedback	For Rank Up
Installer	Certified	0	*	*	*
Color	0	0	0	200	
Dental	0	0	*	200	
3D	0	0	*	200	

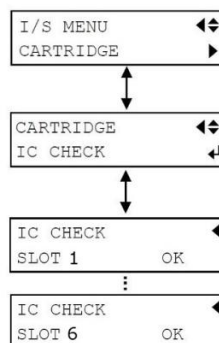
Step 34 / 39

Press [Shift]> []+[]+[]+[Sub Power]
on the panel to enter the service mode.
By turning on the [Shift] button, the
buttons can be pressed at the same time.



Step 35 / 39

Perform detection, writing, and reading
of the ink cartridge ICs from [SLOT1] to [
SLOT6] to check if there are any
problems with the device and
communication path.



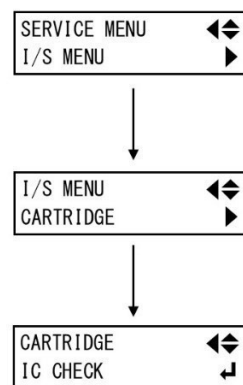
Step 36 / 39

Remove all ink cartridges.



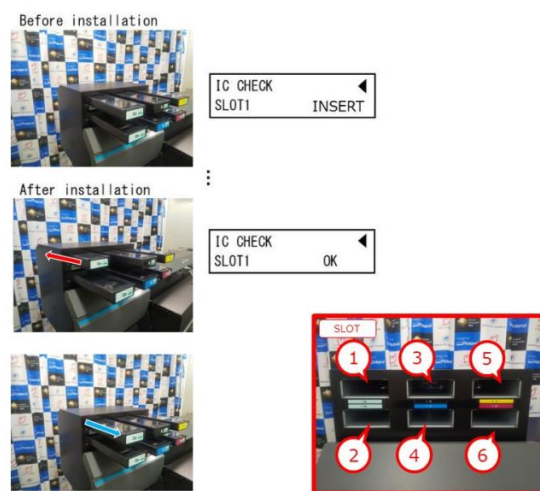
Step 37 / 39

Select [SERVICE MENU] > [I/S MENU] > [CARTRIDGE] > [IC CHECK] and press [ENTER].



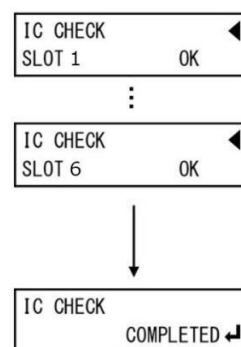
Step 38 / 39

Insert the cartridge for [SLOT1], and when [OK] appears on the panel, remove the cartridge for [SLOT1].



Step 39 / 39

Repeat this procedure up to SLOT6, and when [COMPLETED] appears on the panel, the operation check is complete.



AP-640 Ink board replacement

AP-640 Ink board replacement Information

Step 1 / 5

Necessary Tools

一般ツール/General Tool

プラスドライバー No.2
No.2 Phillips screwdriver



特殊治具/Special Tools

無し
None

Step 2 / 5

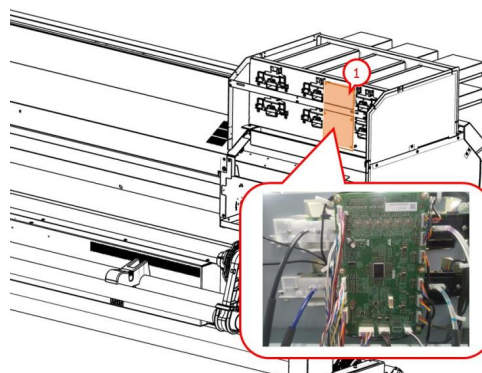
Typical Work Time

作業時間/Typical work time

作業内容/Contents of work	時間/Time
インクボード交換 INK board replacement	10 min.

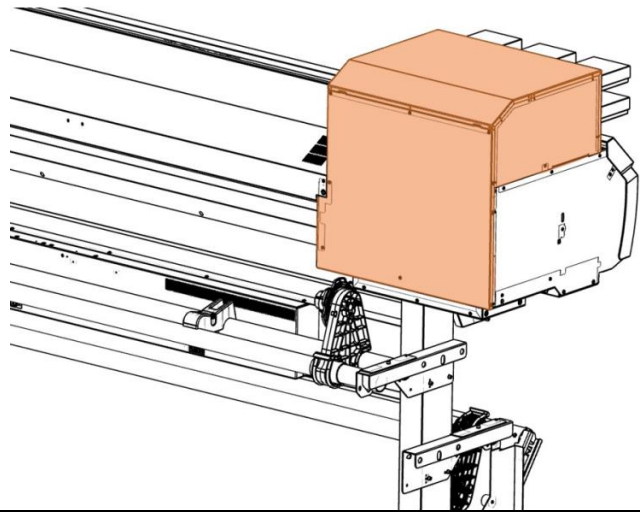
Step 3 / 5

1. Ink board



Step 4 / 5

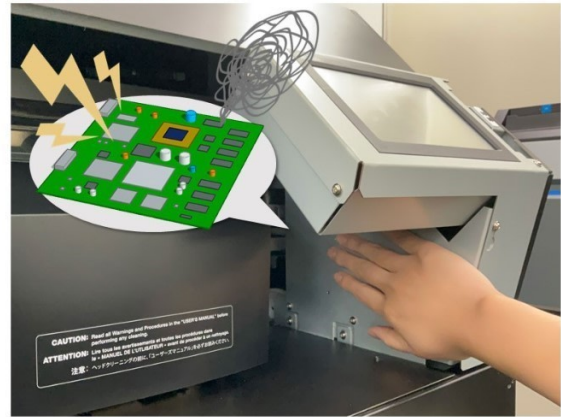
Covers that need to be removed



Step 5 / 5

To prevent damage from static electricity, release static electricity from your body before touching electronic components. Touching an unpainted metal surface will release static electricity.

CAUTION !



AP-640 Ink board replacement

AP-640 Ink board replacement Procedure

Step 1 / 20

Turn off the main power and unplug the power cord.



Step 2 / 20

Remove all ink trays.



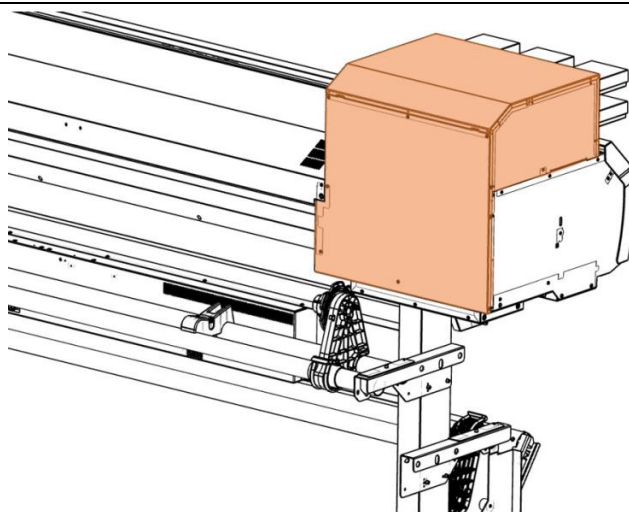
Step 3 / 20

Remove the covers.



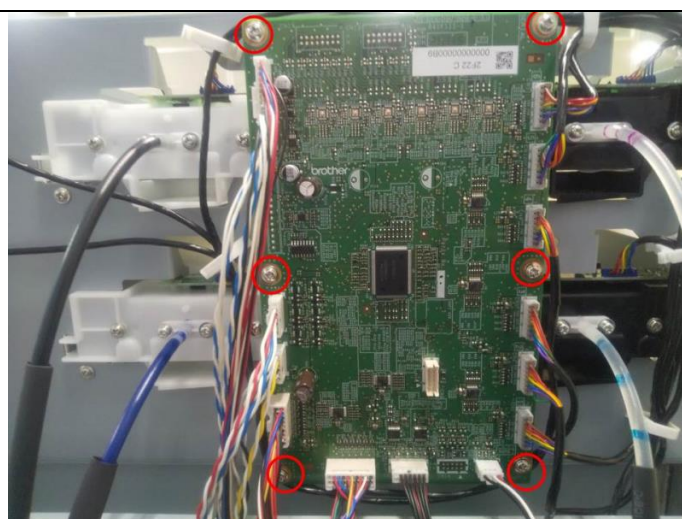
Step 4 / 20

Detail1: overs to be removed.



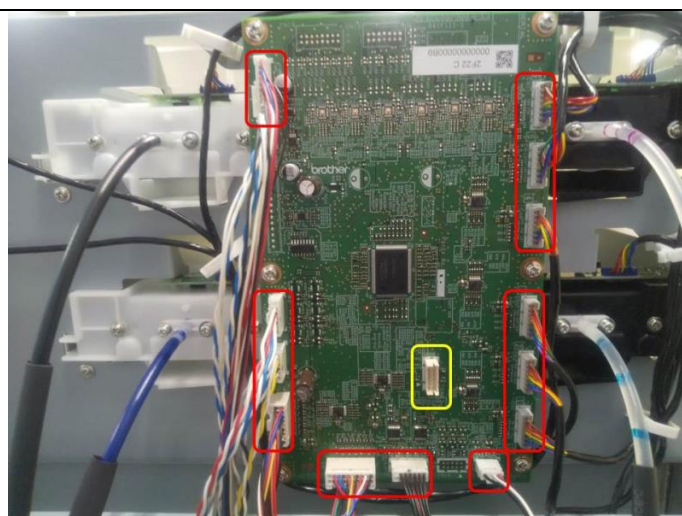
Step 5 / 20

Remove the connected connectors and screws to the board, and replace the ink board with a new one.



Step 6 / 20

Detail1: Disconnect the connectors in the red marked area and connect them to the new board. There is no connector to connect to the yellow marked part.



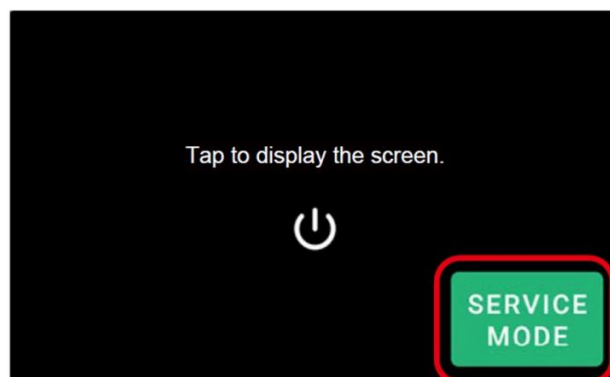
Step 7 / 20

Install the removed covers and ink pouch trays.



Step 8 / 20

Turn on the power and connect Peck2 to the machine to enter the service mode.



Step 9 / 20

Detail1: Start Peck2.



Step 10 / 20

Detail2: Click the [Login] button.

Peck2 Ver. 2.20

koharajun@ co.jp Login Server Update

Printer Info	User Information	Certification Points
Model:	Certified: YES	Category Rank Academy Community Feedback For Rank Up
Status: Not Connected	Expired after 30 days	Installer - - - - -
Firm Ver: -	Region Code:	Color - - - - -
Service Menu: Close		Dental - - - - -
		3D - - - - -

Machine Operation	Information	Work Report
Connect Printer	Global Dashboard	Completed #: 0 Incomplete #: 2 Input
Check Report	Check KB Article	Imcompleted work report list
Update Firmware	Imagi-net Product Page	VG2-640_ZDV01 _20210507_084958.pec VG2-640_ZDV01 _20210506_160305.pec
Put Parameter	Help	

Step 11 / 20

Detail3: Login with your Imagi-net ID.

Sign in to your account

Microsoft

Select an account

Jun Koh koharajun@ Windows

利用規約 プライバシーと Cookie

Step 12 / 20

Detail4: Click the [Connect Printer] button.

Peck2 Ver. 2.20

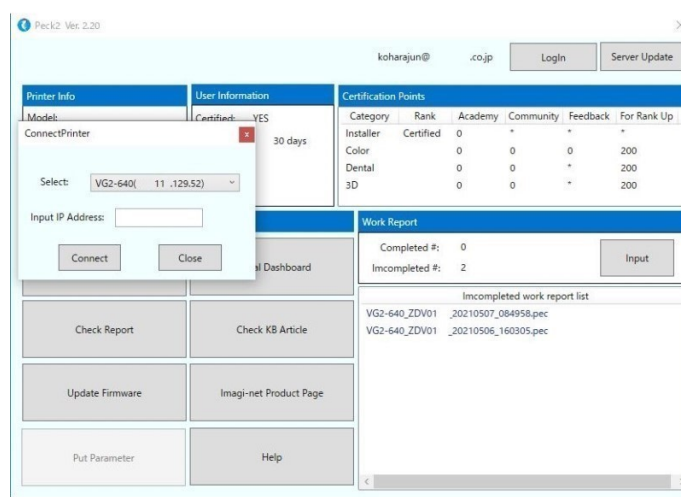
koharajun@ co.jp Login Server Update

Printer Info	User Information	Certification Points
Model:	Certified: YES	Category Rank Academy Community Feedback For Rank Up
Status: Not Connected	Expired after 30 days	Installer - - - - -
Firm Ver: -	Region Code:	Color - - - - -
Service Menu: Close		Dental - - - - -
		3D - - - - -

Machine Operation	Information	Work Report
Connect Printer	Global Dashboard	Completed #: 0 Incomplete #: 2 Input
Check Report	Check KB Article	Imcompleted work report list
Update Firmware	Imagi-net Product Page	VG2-640_ZDV01 _20210507_084958.pec VG2-640_ZDV01 _20210506_160305.pec
Put Parameter	Help	

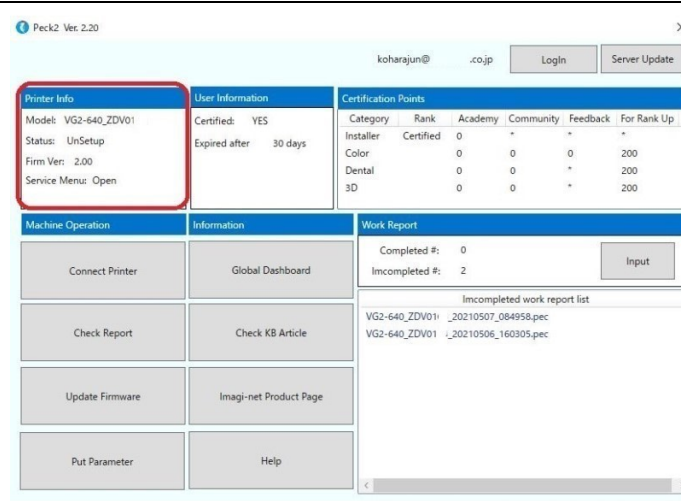
Step 13 / 20

Detail5: Enter the IP address of the printer you would like to connect to.



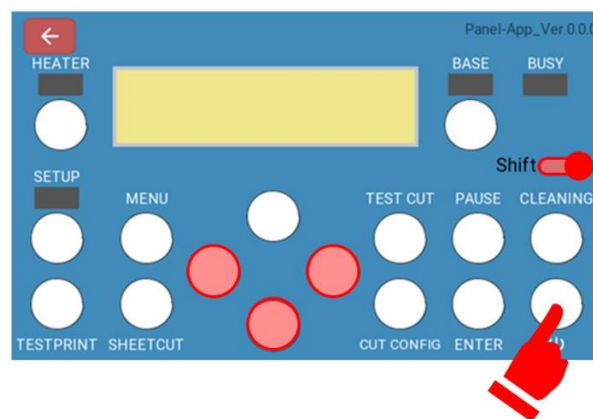
Step 14 / 20

Detail6: When the printer is connected, the printer information will be displayed in [Printer Info].



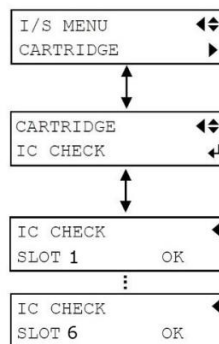
Step 15 / 20

Detail7: Press [Shift]> [HEATER]+[MENU]+[TEST CUT]+[Sub Power] on the panel to enter the service mode. By turning on the [Shift] button, multiple buttons can be pressed at the same time.



Step 16 / 20

Perform detection, writing, and reading of the ink cartridge ICs from [SLOT1] to [SLOT6] to check if there are any problems with the device and communication path.



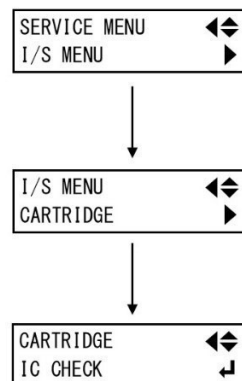
Step 17 / 20

Detail1: Remove all ink cartridges.



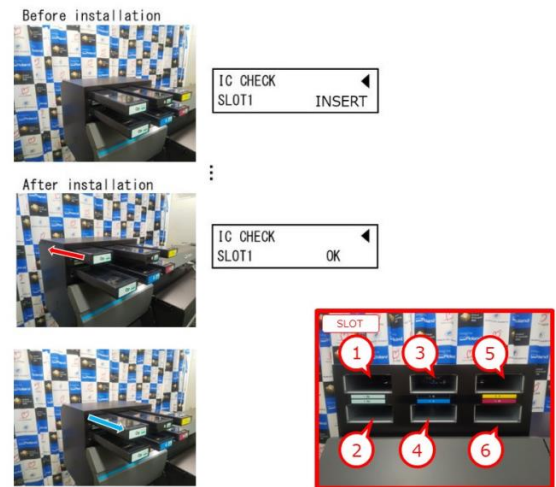
Step 18 / 20

Detail2: Select [SERVICE MENU] > [I/S MENU] > [CARTRIDGE] > [IC CHECK] and press [ENTER].



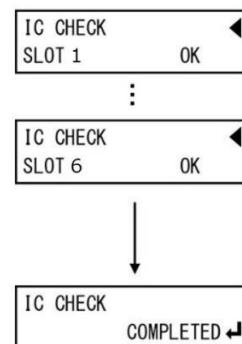
Step 19 / 20

Detail3: Insert the cartridge for [SLOT1], and when "OK" appears on the panel, remove the cartridge for [SLOT1].



Step 20 / 20

Detail4: Repeat this procedure up to SLOT6, and when "COMPLETED" appears on the panel, the operation check is complete.



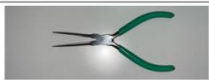
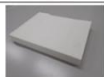
AP-640 Ink Tube Replacement

AP-640 Ink Tube Replacement Information

Step 1 / 7

Necessary Tools(1/2)

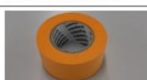
一般ツール/General Tool

プラスドライバー No.2 No.2 Phillips screwdriver	
ペンチ Pliers	
手袋 (滑り止め用) Gloves (anti-slip)	
ウエス Waste cloth	

Step 2 / 7

Necessary Tools (2/2)

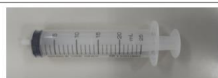
一般ツール/General Tool

六角レンチ (2.5mm) Hexagonal wrench (2.5mm)	
スケール (定規) Ruler	
ニッパー Nippers	
テープ Tape	

Step 3 / 7

Special Tools

特殊治具/Special Tools

シリンジ Syringe	
-----------------	---

Step 4 / 7

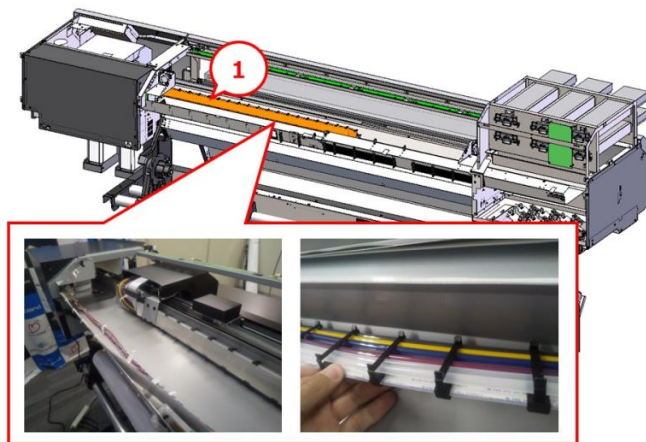
Typical Work Time

作業時間/Typical work time

作業内容/Contents of work	時間/Time
インクチューブ交換 Ink tube replacement	60 min.

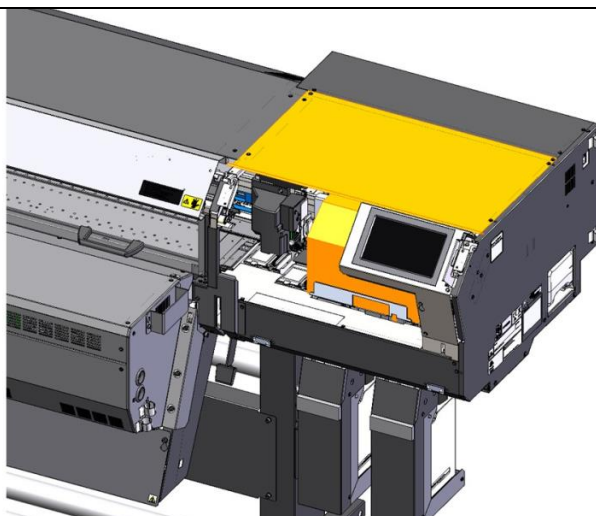
Step 5 / 7

1. Ink tube



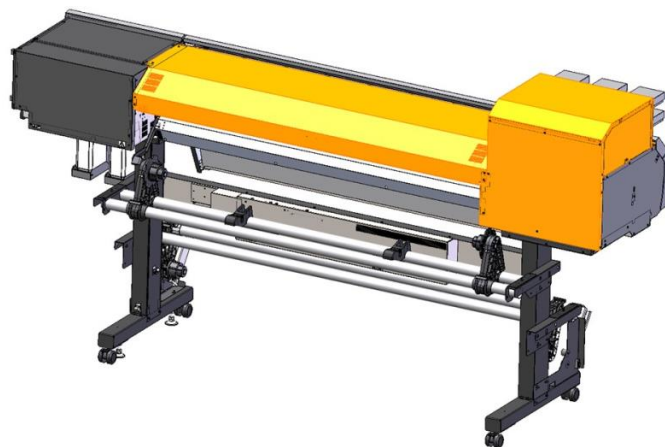
Step 6 / 7

Covers that need to be removed (1/2)



Step 7 / 7

Covers that need to be removed (2/2)



AP-640 Ink Tube Replacement

AP-640 Ink Tube Replacement Procedure

Step 1 / 134

This operation includes ink filling. In addition to the replacement parts, you will need to prepare the same number of syringes and new LC filters as the ink colors of the tubes to be replaced.



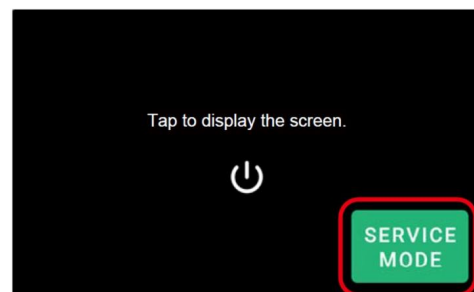
Step 2 / 134

There are several types of tubes. Make sure you have the correct part number for the tube you are replacing.



Step 3 / 134

Connect the Peck2 to the machine and enter the Service Mode.



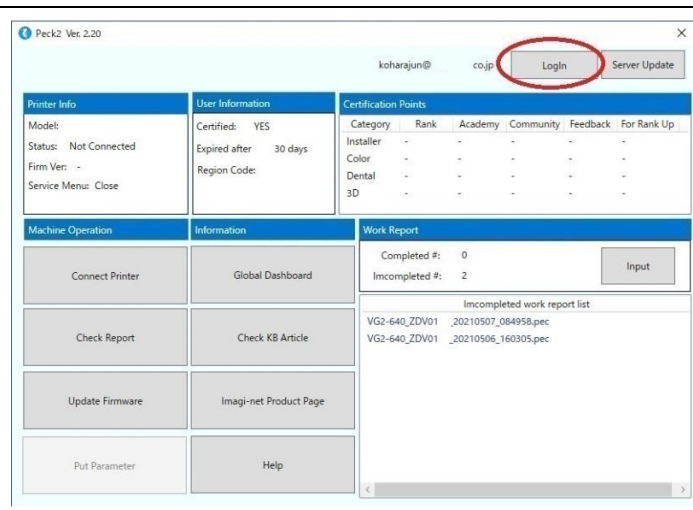
Step 4 / 134

Detail1: Start Peck2.



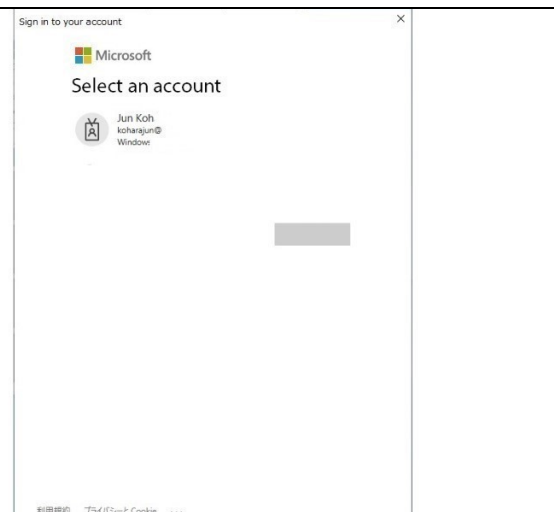
Step 5 / 134

Detail2: Click on the [Login] button.



Step 6 / 134

Detail3: Login with your Imagi-net ID.



Step 7 / 134

Detail4: Click the [Connect Printer] button.

Peck2 Ver. 2.20

koharjun@ .co.jp Login Server Update

Printer Info	User Information	Certification Points
Model: VG2-640_ZDV01	Certified: YES	Category Rank Academy Community Feedback For Rank Up
Status: Not Connected	Expired after: 30 days	Installer Certified 0 * * *
Firm Ver: 2.00	Region Code:	Color 0 0 0 200
Service Menu: Close		Dental 0 0 * 200
		3D 0 0 * 200

Machine Operation	Information	Work Report
Connect Printer	Global Dashboard	Completed #: 0
Check Report	Check KB Article	Imcompleted #: 2
Update Firmware	Imagi-net Product Page	Input
Put Parameter	Help	

Imcompleted work report list

VG2-640_ZDV01 _20210507_084958.pec

VG2-640_ZDV01 _20210506_160305.pec

Step 8 / 134

Detail5; the IP address of the printer you would like to connect to.

Peck2 Ver. 2.20

koharjun@ .co.jp Login Server Update

Printer Info	User Information	Certification Points
Model: VG2-640_ZDV01	Certified: YES	Category Rank Academy Community Feedback For Rank Up
Status: Not Connected	Expired after: 30 days	Installer Certified 0 * * *
Firm Ver: 2.00	Region Code:	Color 0 0 0 200
Service Menu: Close		Dental 0 0 * 200
		3D 0 0 * 200

Machine Operation	Information	Work Report
Connect Printer	Global Dashboard	Completed #: 0
Check Report	Check KB Article	Imcompleted #: 2
Update Firmware	Imagi-net Product Page	Input
Put Parameter	Help	

Imcompleted work report list

VG2-640_ZDV01 _20210507_084958.pec

VG2-640_ZDV01 _20210506_160305.pec

Step 9 / 134

Detail6: When the printer is connected, the printer information will be displayed in [Printer Info].

Peck2 Ver. 2.20

koharjun@ .co.jp Login Server Update

Printer Info	User Information	Certification Points
Model: VG2-640_ZDV01	Certified: YES	Category Rank Academy Community Feedback For Rank Up
Status: UnSetup	Expired after: 30 days	Installer Certified 0 * * *
Firm Ver: 2.00	Region Code:	Color 0 0 0 200
Service Menu: Open		Dental 0 0 * 200
		3D 0 0 * 200

Machine Operation	Information	Work Report
Connect Printer	Global Dashboard	Completed #: 0
Check Report	Check KB Article	Imcompleted #: 2
Update Firmware	Imagi-net Product Page	Input
Put Parameter	Help	

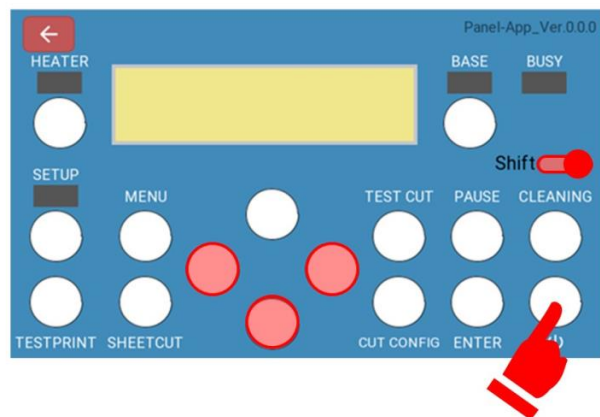
Imcompleted work report list

VG2-640_ZDV01 _20210507_084958.pec

VG2-640_ZDV01 _20210506_160305.pec

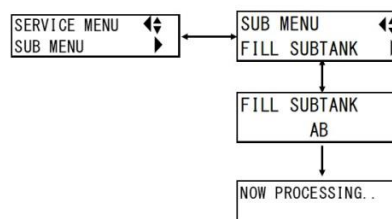
Step 10 / 134

Detail7: Press [Shift]> [□]+[□]+[□]+[Sub Power] to enter the service mode. By turning on the [Shift] button, multiple buttons can be pressed at the same time.



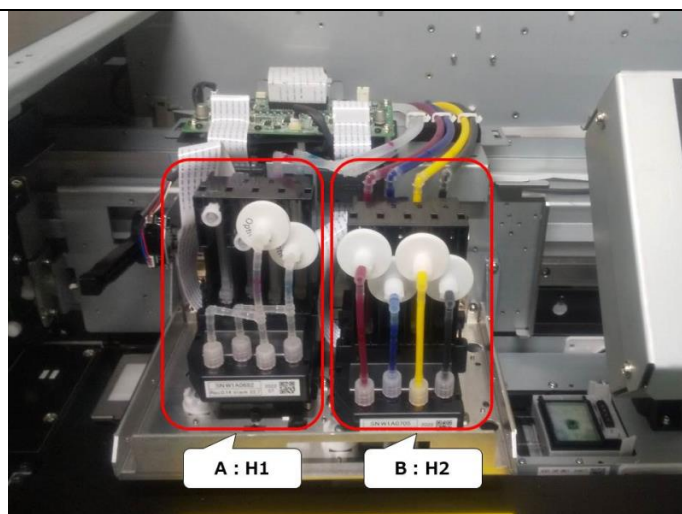
Step 11 / 134

Select [SERVICE MENU] > [SUB MENU] > [FILL SUBTANK] > [A/B] to fill the sub tank of the print head with ink tube to be replaced.



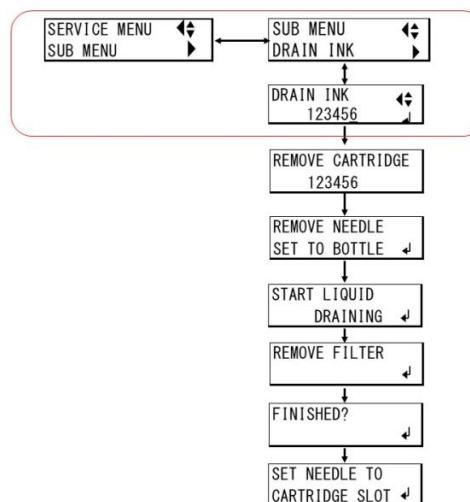
Step 12 / 134

Detail1: Print head arrangement



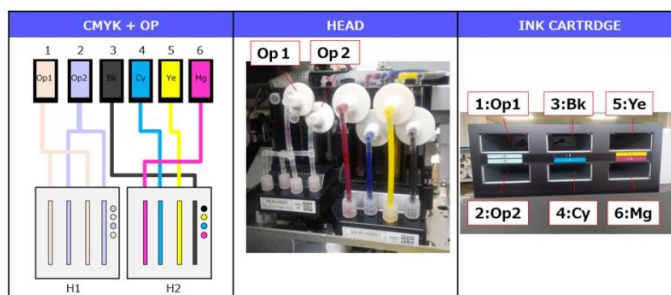
Step 13 / 134

Select [SERVICE MENU] > [SUB MENU] > [DRAIN INK] > [1 2 3 4 5 6] and select the same cartridge slot number as the ink in the ink tube to be replaced.



Step 14 / 134

Detail1: Ink arrangement



Step 15 / 134

Confirm that [REMOVE CARTRIDGE *] is blinking on the panel and pull out all ink cartridges.



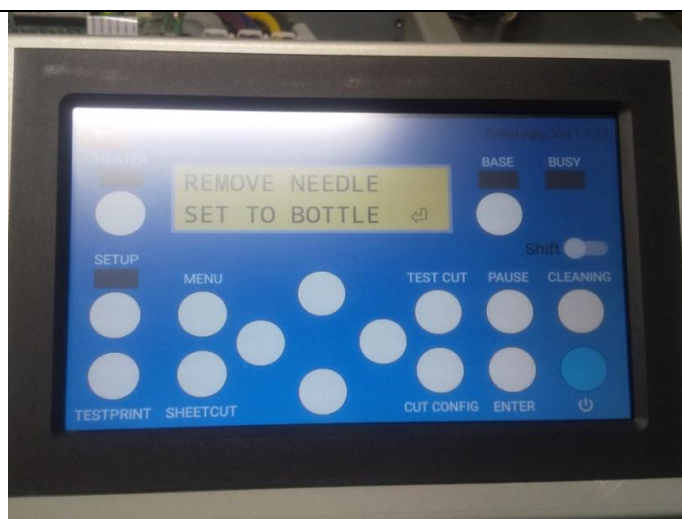
Step 16 / 134

Detail1: When the ink cartridge is removed, the blinking number will disappear and the display will automatically switch to the next screen [REMOVE NEEDLE/SET TO BOTTLE].



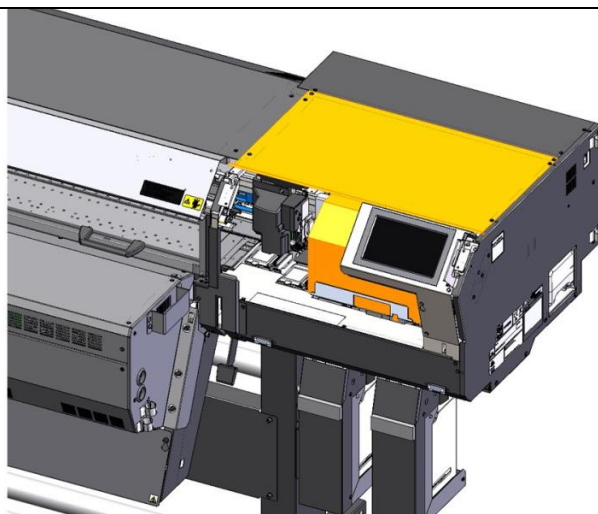
Step 17 / 134

Confirm that the panel display has switched to [SET TO BOTTLE]. After this, ink will be drained from the tip of the needle.



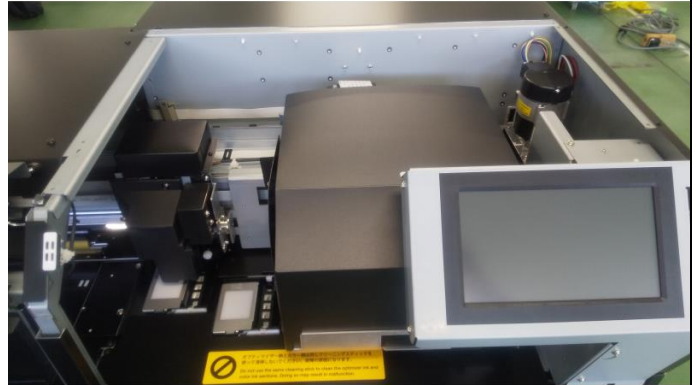
Step 18 / 134

Remove the covers around the print head carriage.



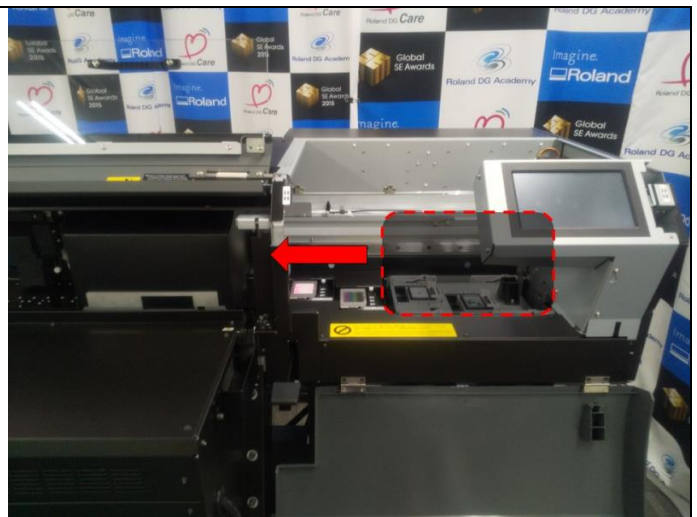
Step 19 / 134

Detail1: Remove the cover on top of the carriage.



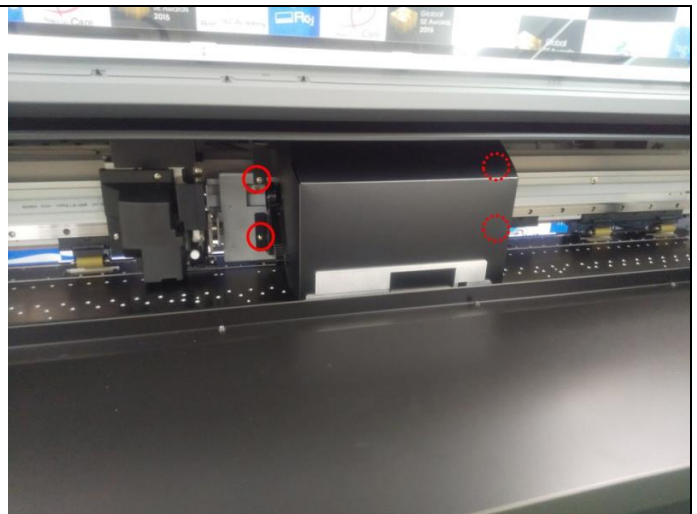
Step 20 / 134

Detail2: Unlock the print head carriage and move it onto the platen to avoid losing the screws.



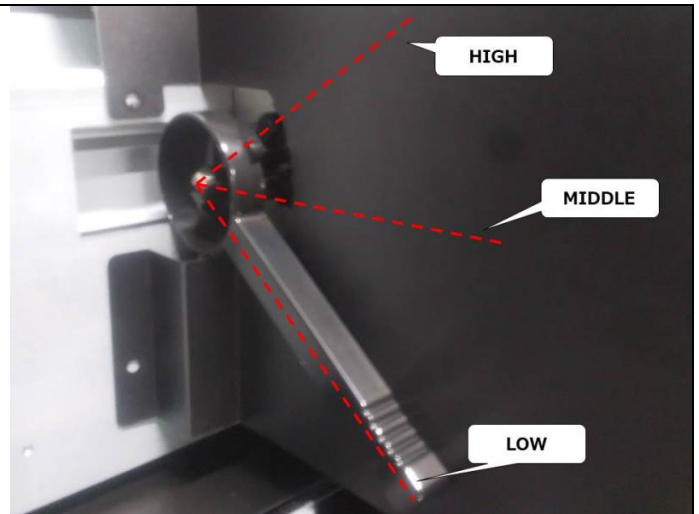
Step 21 / 134

Detail3: Remove the four screws.



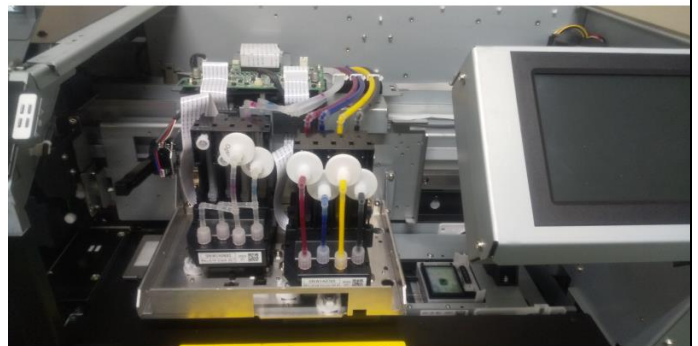
Step 22 / 134

Detail4: Set the print head height to [Middle] or [HIGH] to make it easier to remove the cover.



Step 23 / 134

Detail5: Move the print head carriage and remove the cover.



Step 24 / 134

Ink in the print head may drip out.
Move the carriage to the position where the positions of the print head and the flushing pad align.



Step 25 / 134

Detail1: Move the print head carriage to the position where the positions of A and B align.



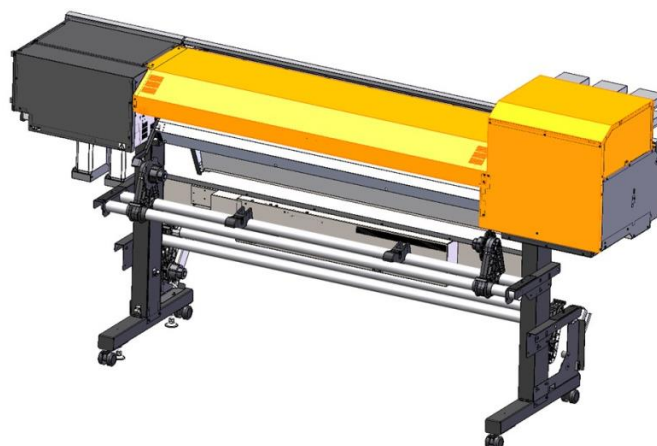
Step 26 / 134

Detail2: Note that if you work without aligning the carriage, ink may drip from the print head in unexpected places as shown in the figure.



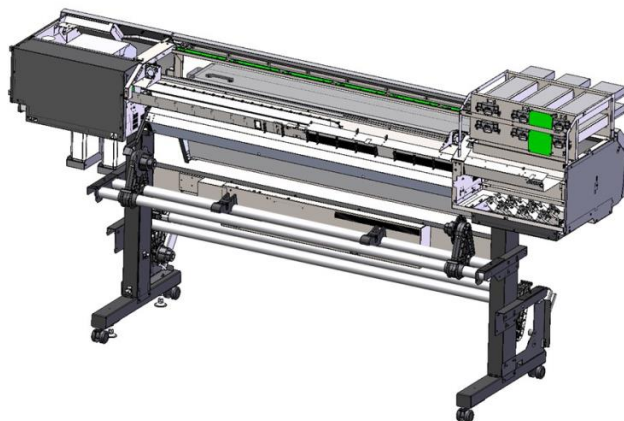
Step 27 / 134

Remove the covers around the ink pouch.



Step 28 / 134

Detail1: After covers removed



Step 29 / 134

Set the removed ink cartridge cover in the position shown in the figure. Put a dry cloth between the cover and the floor to prevent scratches and dirt from getting on the floor.



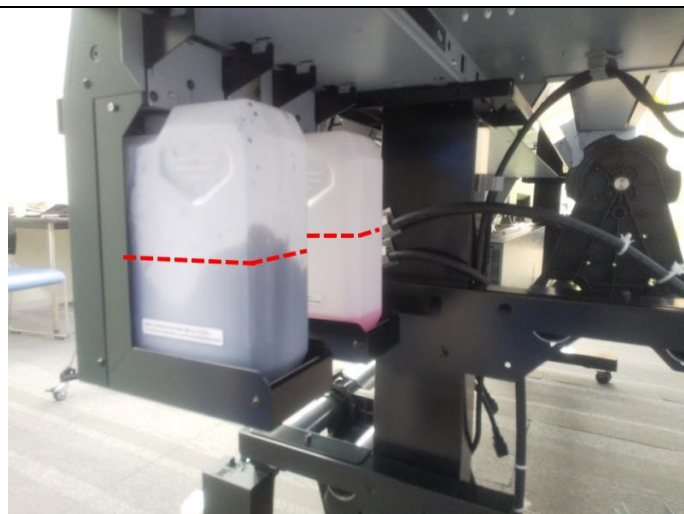
Step 30 / 134

There is work to be done to remove the drain bottle. Be careful not to spill the waste fluid when working with it.



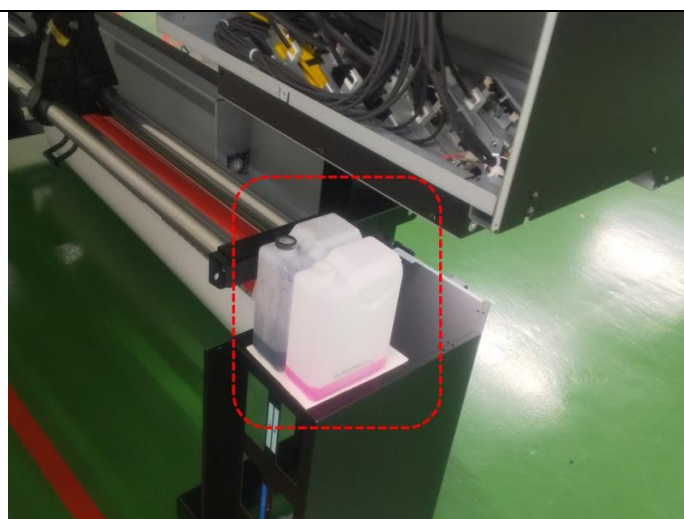
Step 31 / 134

Make sure that the waste liquid in the drain bottle is less than half full.



Step 32 / 134

Set the drain bottle used for the ink tube to be replaced on the cover. Put a dry cloth between the drain bottle and the cover to prevent scratches and dirt from getting on the cover.



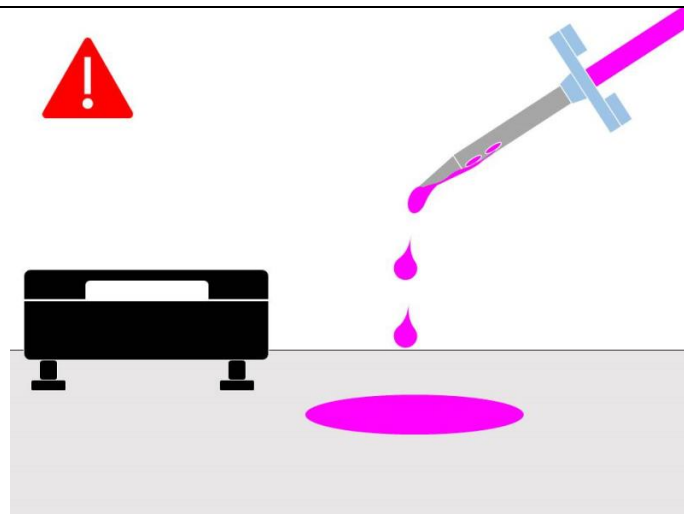
Step 33 / 134

Make sure to use the correct drain bottle for CMYK or OP. Note that if you use the wrong drain bottle, the waste liquid will solidify.



Step 34 / 134

Ink may drip from the tip of the needle.
Handle with care.



Step 35 / 134

Handle the tube carefully to prevent it
from bending.



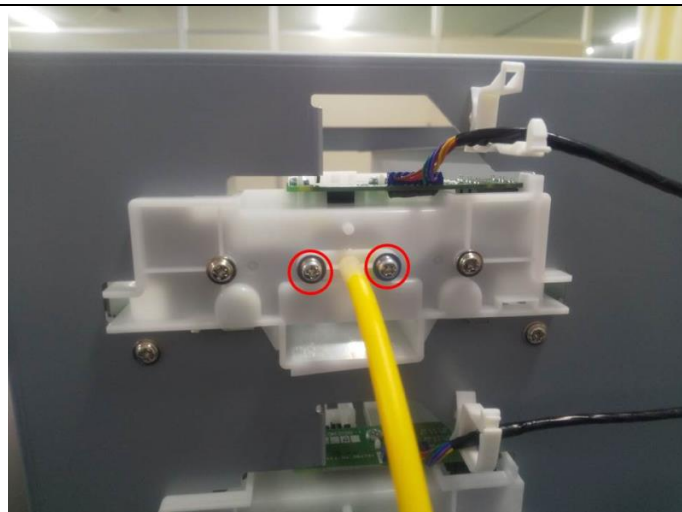
Step 36 / 134

Remove the clamps of the sub-tank of
the selected ink. (Red: YE/BK/OP1) (Blue:
MG/CY/OP2)



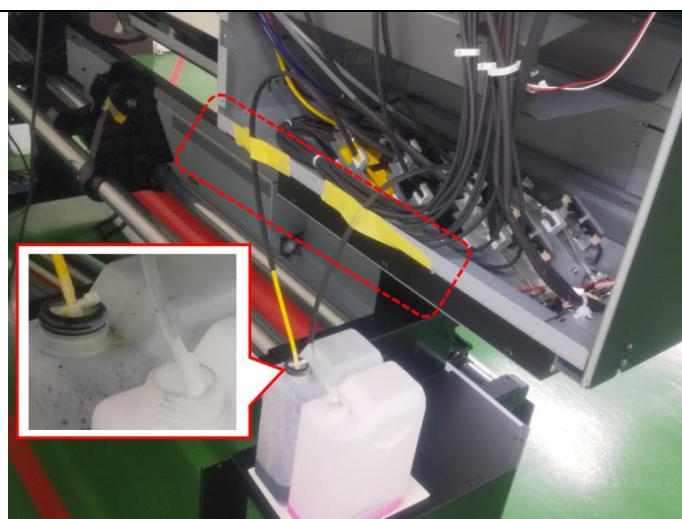
Step 37 / 134

Remove the two screws securing the needle.



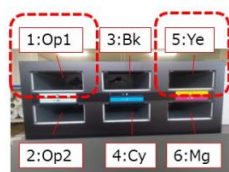
Step 38 / 134

Set the needle into the drain bottle so that it does not come out from the bottle, and secure it with masking tape.



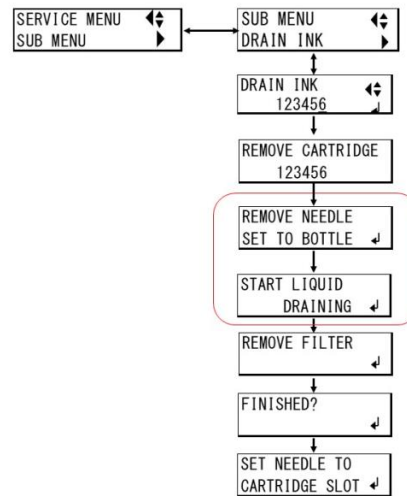
Step 39 / 134

Make sure that all the needles of the specified ink cartridge are set into the drain bottle. (Example: The photo shows OP1 and YE.)



Step 40 / 134

Press the [ENTER] button on the panel and set the panel display to [START LIQUID/DRAINING].



Step 41 / 134

The ink will be drained from the needle tip from the next operation. Make sure that ink does not leak from the drain bottle during ink draining.



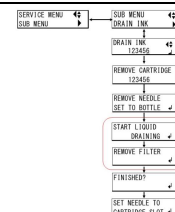
Step 42 / 134

Detail1: [Reference video] Ink being drained from the needle



Step 43 / 134

Pressing the [ENTER] button on the panel releases the valve in the selected

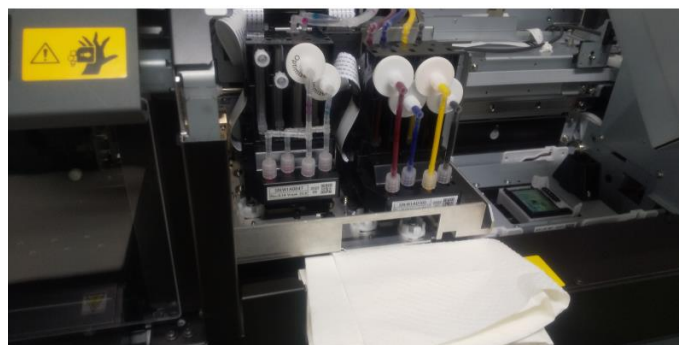


path and starts ink draining, and the panel display changes to [REMOVE FILTER]. Check for ink leakage from the drain bottle and proceed to the next operation when the amount of ink draining has decreased.



Step 44 / 134

Set a dry cloth near the tube from which ink is to be drained.



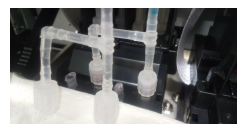
Step 45 / 134

Remove the tube fixing screw attached to the print head and place a dry cloth under the tube. On the OP side, remove the two fixing screws of the forked tube at the same time to reduce the amount of ink remaining in the tube.

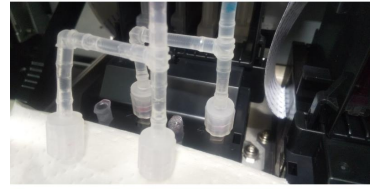


Step 46 / 134

Detail1: On the H1 OP side, loosen the



two screws on the forked tube so that they come off at the same time. If you loosen the screws on one side at a time, ink will easily remain in the tube.



Step 47 / 134

Detail2: Reference video



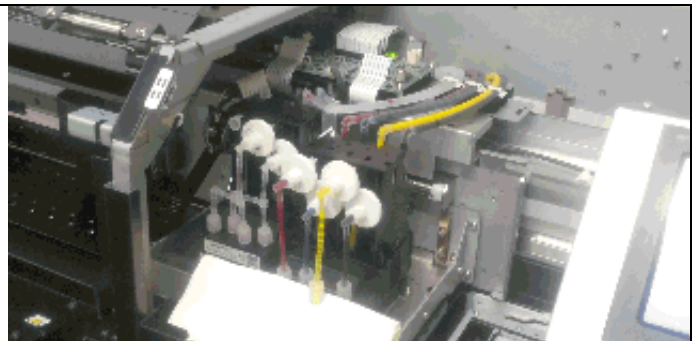
Step 48 / 134

Remove the tube fixing screw attached to the LC filter, and remove the tube from the LC filter.



Step 49 / 134

Detail1: Reference video



Step 50 / 134

Do not discard the removed LC filter as it will be used in the subsequent process.



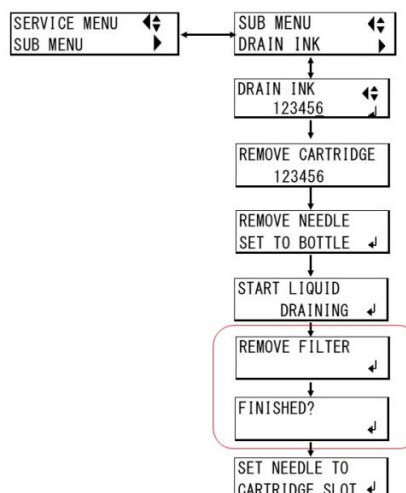
Step 51 / 134

In the next operation, ink in the path is drained from the tip of the needle. Make sure that no ink leaks from the drain bottle during ink draining.



Step 52 / 134

Remove the LC filter and press the [ENTER] button on the panel to eject ink. The display on the panel will change to FINISHED?}.



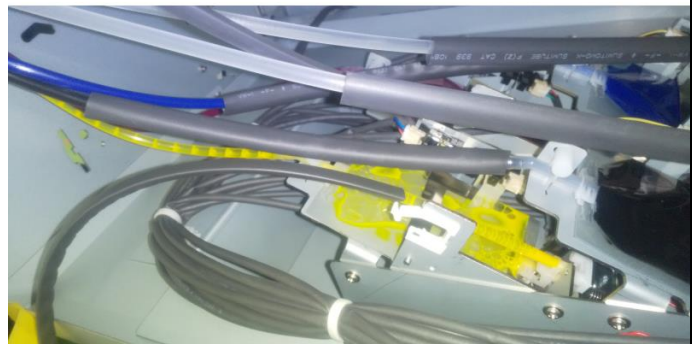
Step 53 / 134

Detail1: Ink being drained



Step 54 / 134

Check to see if there is any ink remaining in the tube or sub-tank. *Not all ink in the sub-tank can be drained out.



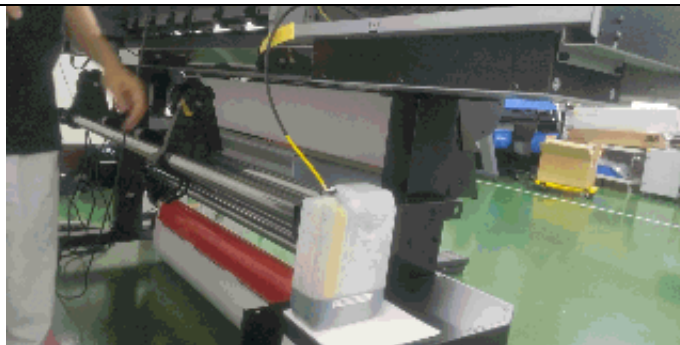
Step 55 / 134

Detail1: If ink remains in the tube between the sub-tank and needle, remove the masking tape securing the tube, then hold the drain bottle and tube and lower the height of the tube to drain ink.



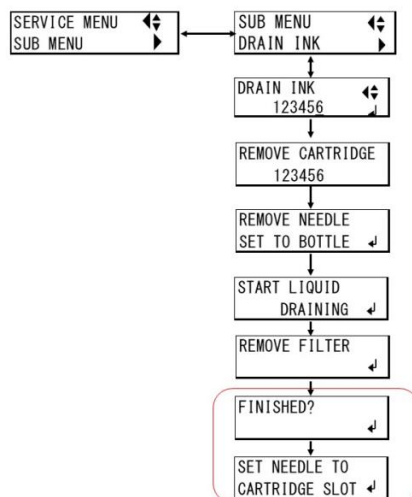
Step 56 / 134

Detail2: Reference video



Step 57 / 134

After the ink has been drained, press the [ENTER] button on the panel. Confirm that the panel display shows [SET NEEDLE TO CARTRIDGE SLOT] and proceed to the next step.



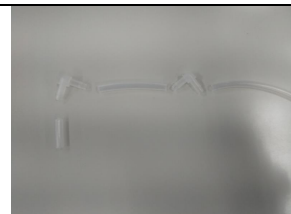
Step 58 / 134

There are several types of tubes. Use the appropriate tube for the tube to be replaced.



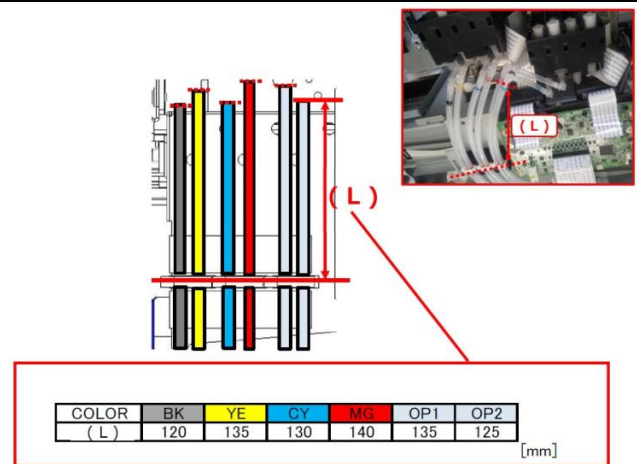
Step 59 / 134

Prepare the tube or L-joint to be replaced. (Refer to the details for cutting



Step 63 / 134

Detail1: Tube length for each color



Step 64 / 134

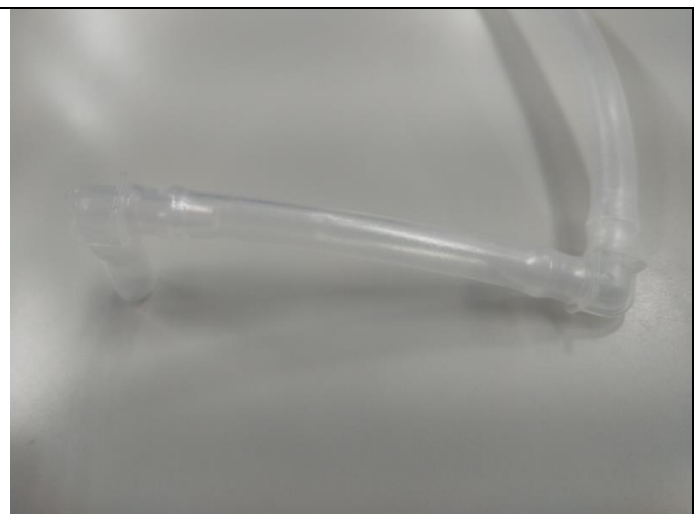
Do not apply lubricant such as ethanol to the tube or L-joint as it may affect the gas barrier of the tube.

Use gloves with good grip to prevent slipping when inserting the tube into the joint.



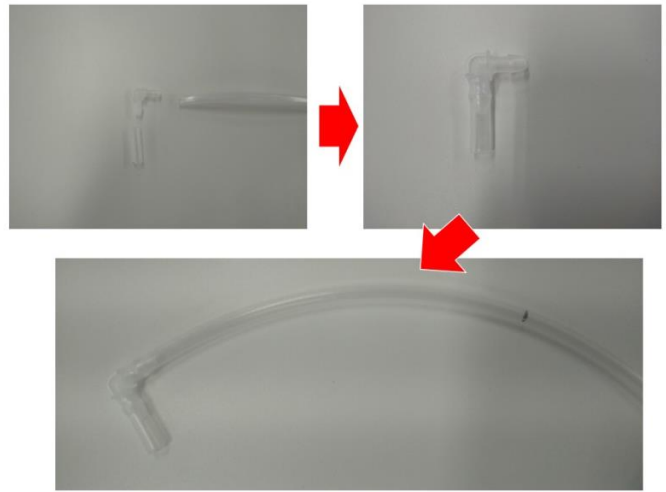
Step 65 / 134

Assemble the tube and joint to the damper insertion side of the replacement tube.



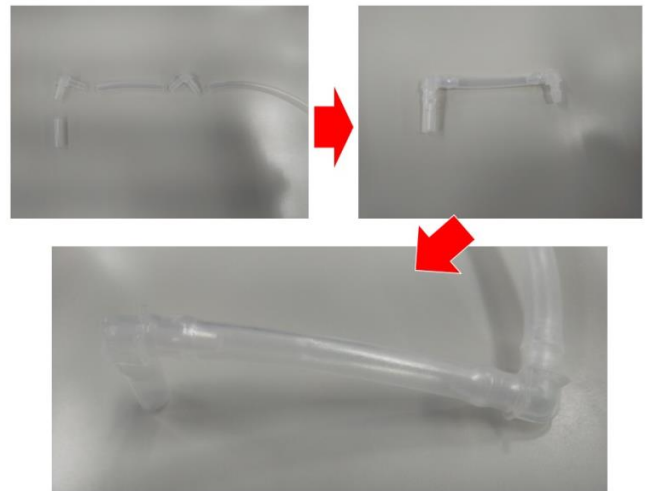
Step 66 / 134

Detail1: [CMYK] Assemble 1. L-joint 2. Tube for damper joint 3. Pre-marked tube. Wearing gloves, hold the tube near the opening and insert it all the way in without bending the tube.



Step 67 / 134

Detail2: [OP] Assemble 1. L-joint, 2. the damper connection tube, 3. the pre-marked tube, and 4. the OP tube. Wearing gloves, hold the tube near the opening and insert it all the way in so as not to bend the tube.



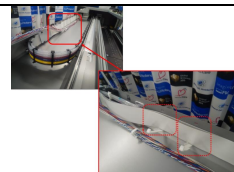
Step 68 / 134

Detail3: Reference video

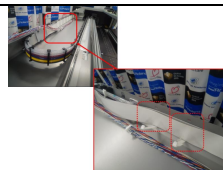


Step 69 / 134

Remove the two flexible cable guides

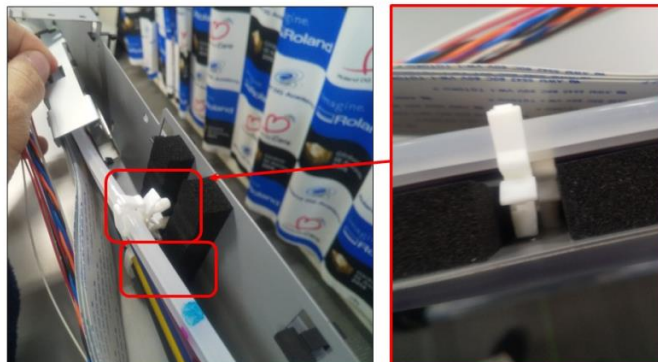


from the center of the machine near the tube fold.



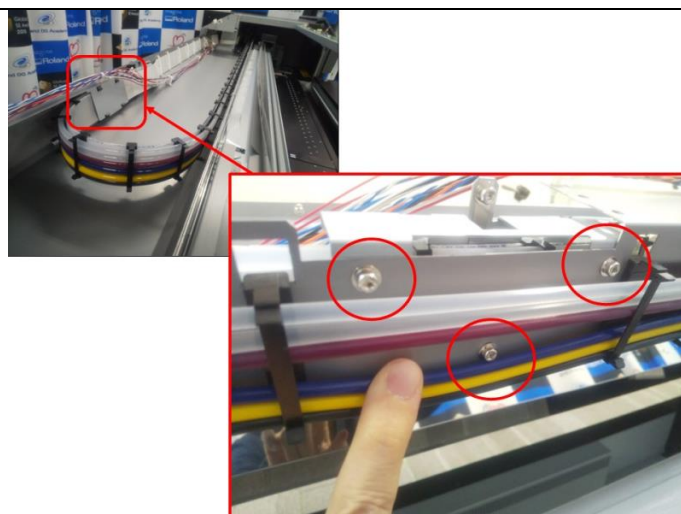
Step 70 / 134

Remove the tube with the clamp in the center of the machine.



Step 71 / 134

Remove the tube stay by removing three screws.

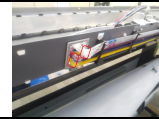


Step 72 / 134

Remove the tube to be replaced from the L-shaped joint located in the center of the machine. You will need to use pliers or other tools to remove the tube. We recommend that you work with a

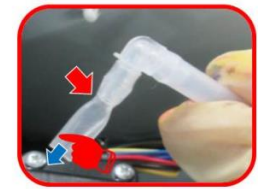
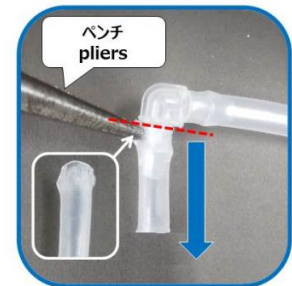
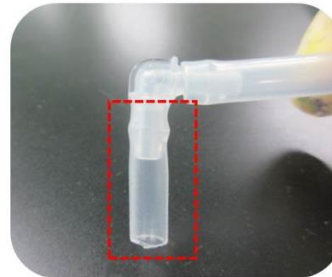


dry cloth under the tube.



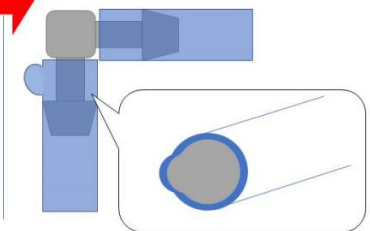
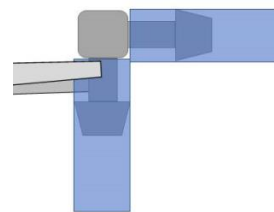
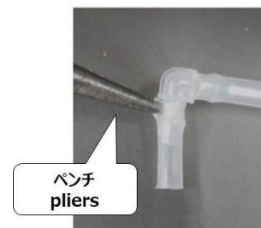
Step 73 / 134

Detail1: Deform the tube with pliers to remove it without damaging the joint. If you just pull the tube without doing anything, the tube will stretch and become difficult to remove. The photo of the damper replacement work is used here for reference. It is not the photo of removing tube for this work.



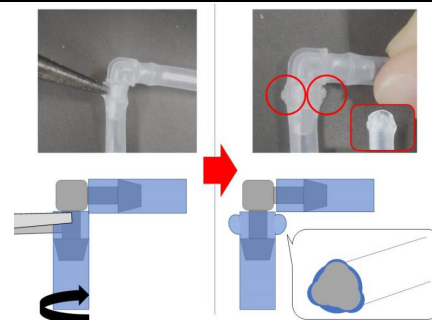
Step 74 / 134

Detail2: Use the tip of the pliers to strongly pinch the base of the tube that is assembled to the L-joint to deform the tube. At this time, the tip of the pliers should be placed on the end of the L-joint to deform the inner side of the tube. The photo of the damper replacement process is used here for reference. It is not the photo of removing tube for this work.

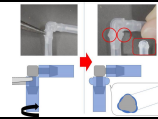


Step 75 / 134

Detail3: Deform the tube in about three places in the same way. The photo of the damper replacement process is used here for reference. It is not the photo of

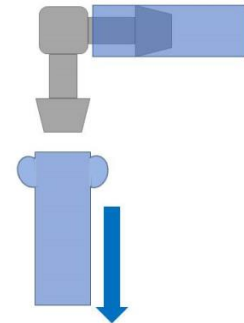


removing tube for this work.



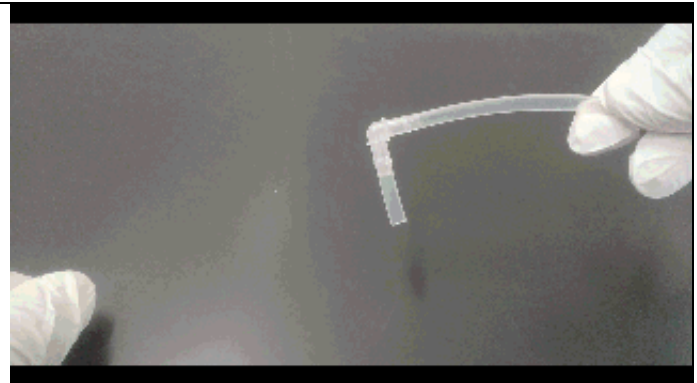
Step 76 / 134

Detail4: Pull the tube to remove it. The photo of the damper replacement work is used for reference. It is not the photo of removing tube for this work.



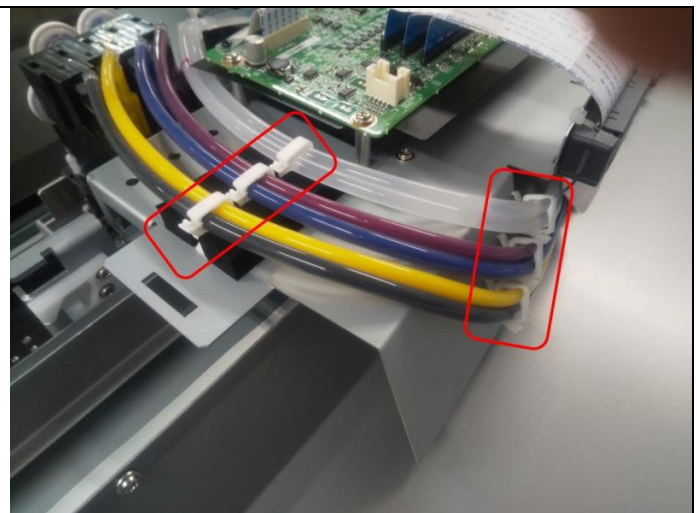
Step 77 / 134

Detail5: Reference video *The video of the damper replacement process is used for reference. It is not the video of removing tube for this work.



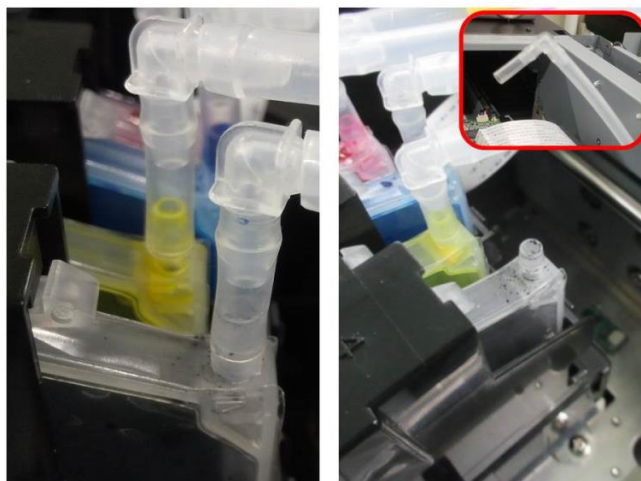
Step 78 / 134

Open the saddle that holds the carriage tube.



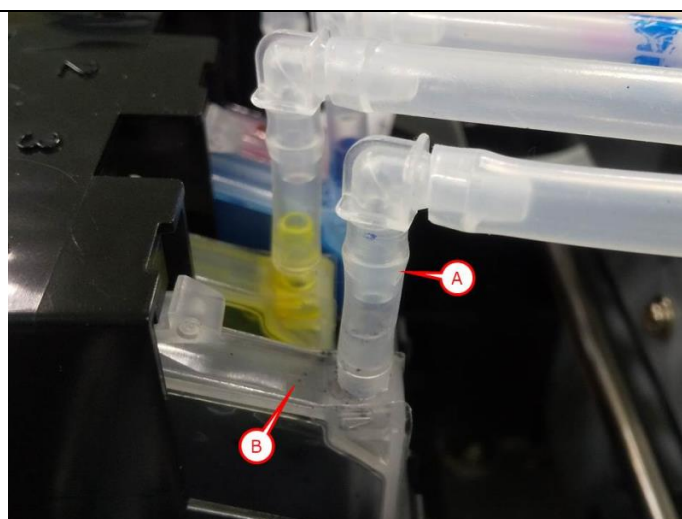
Step 79 / 134

Remove the tube at the top of the damper.



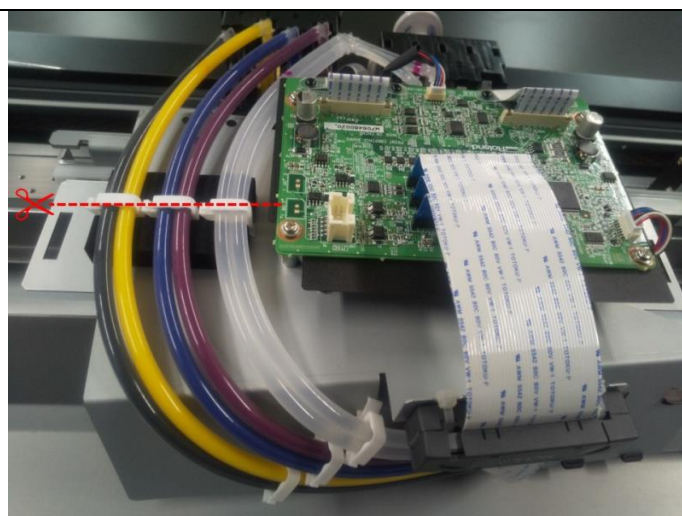
Step 80 / 134

Detail1: Hold the tube near A, hold the damper near B, and pull the tube straight up to remove it from the damper.



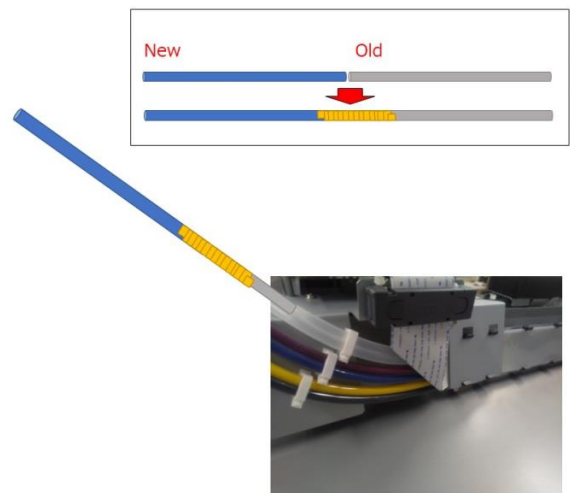
Step 81 / 134

Cut the tube near the marking.



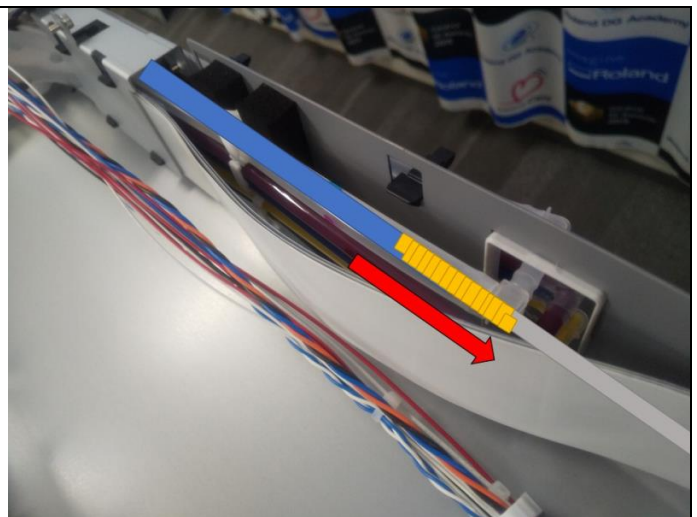
Step 82 / 134

Connect the cut side of the ink tube to be replaced with the new ink tube using tape. Be careful not to roll the tape too thick, or it will get caught in the tube guide when replacing the tube.



Step 83 / 134

Pull the old tube from the center of the machine to replace it.



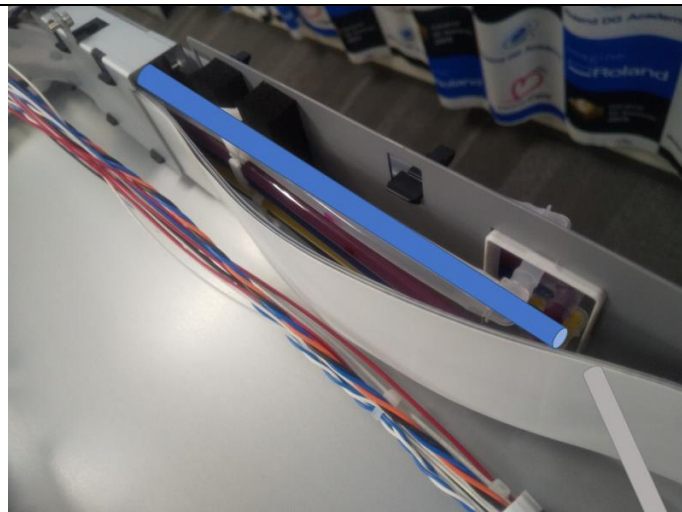
Step 84 / 134

Detail1: If the tube gets caught on a curve, move the print head carriage to change the position of the curve. When moving the carriage, be careful not to catch the flexible cable removed from the print head.



Step 85 / 134

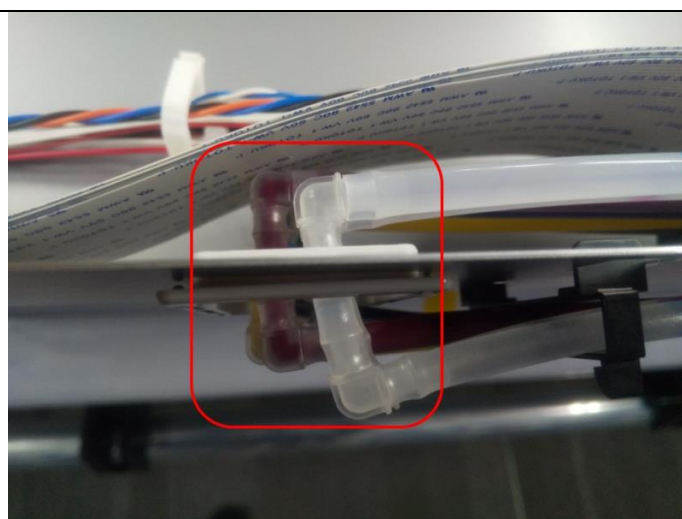
Remove the tape.



Step 86 / 134

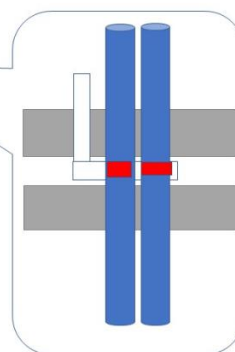
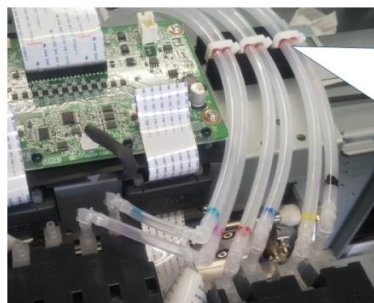
Attach the L-joint and tube (20 mm) to the newly replaced tube and attach it to the L-joint leading to the sub-tank.

Wearing gloves, hold the tube near the insertion point and insert it all the way in without bending the tube.



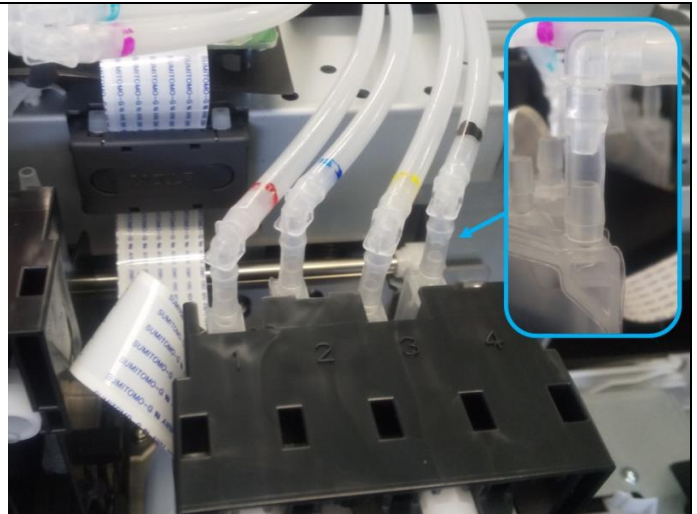
Step 87 / 134

Align the mark on the tube with the saddle on the carriage and close all open saddles to secure the tube.



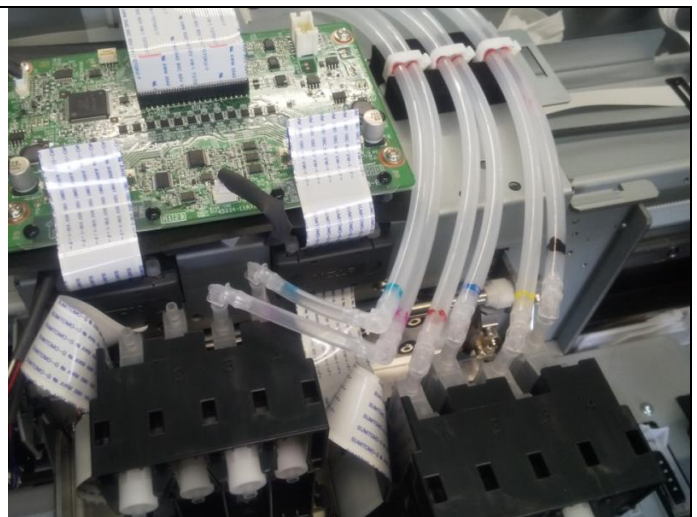
Step 88 / 134

Insert the tube all the way back into the nipple section at the top of the damper.



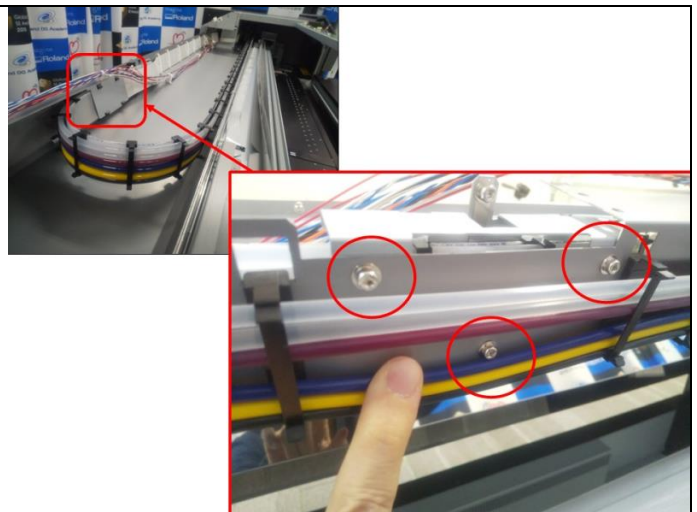
Step 89 / 134

Detail1: Insert the tube at the position where the tube naturally assembles from the fixed saddle.



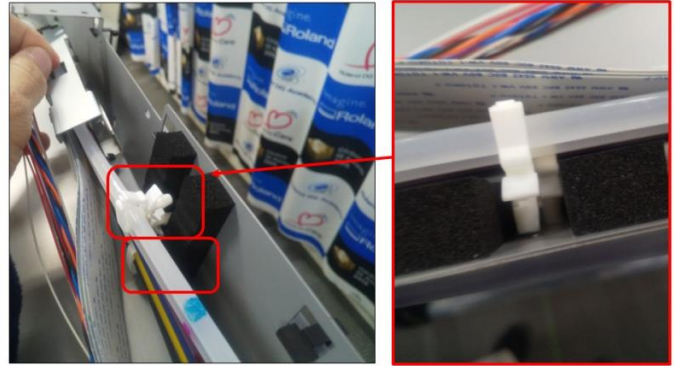
Step 90 / 134

Attach the three screws for the tube stay in the center of the fuselage.



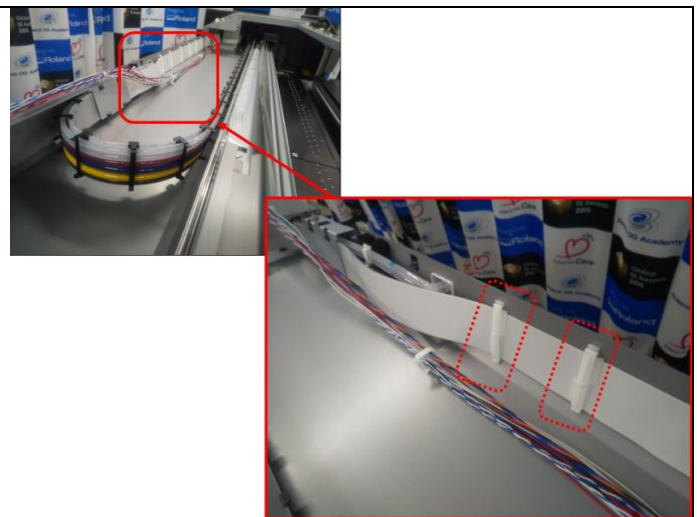
Step 91 / 134

Attach the clamp for the tube in the center of the machine.



Step 92 / 134

Attach the flexible cable guides near the L-joint in the center of the machine.



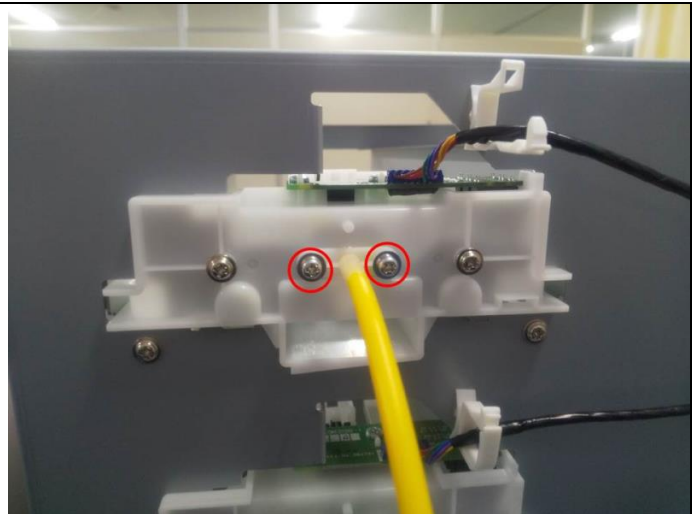
Step 93 / 134

Manually move the print head carriage back and forth several times over the entire area to check that the tube guide does not come off and that the tube is not twisted.



Step 94 / 134

Attach the two screws and put back the removed needle.



Step 95 / 134

Move the drain bottle near the print head to avoid spilling waste liquid, and attach the cover around the ink pouch.



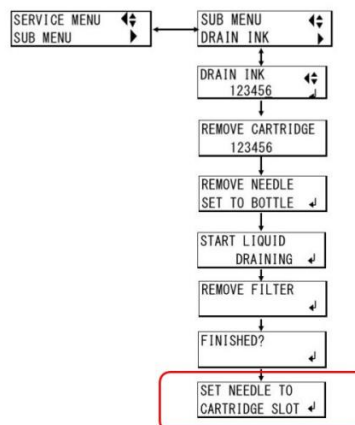
Step 96 / 134

Insert all the ink cartridges.



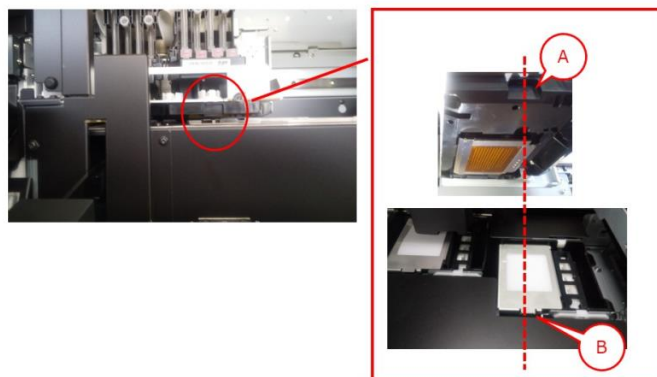
Step 97 / 134

Press the [ENTER] button on the panel to finish [DRAIN INK].



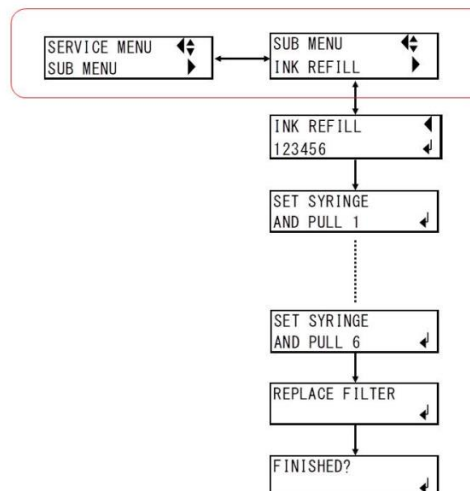
Step 98 / 134

Ink in the print head may drip out.
Make sure that the positions of print
head and flushing pad are aligned.



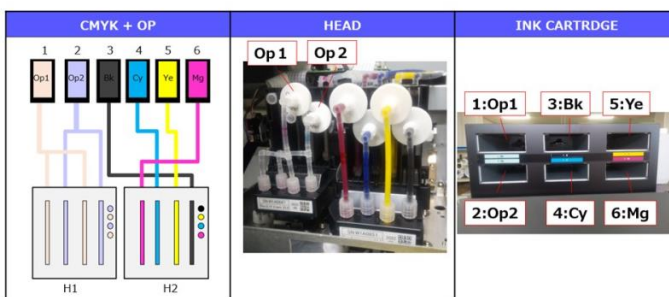
Step 99 / 134

Select [SERVICE MENU] > [SUB MENU] >
[INK REFILL]. If [DRAIN INK] has been
executed, only the executed path
number will be displayed. Confirm the
number and press [ENTER]. If [INK
REFILL] is not executed, all numbers are
displayed.



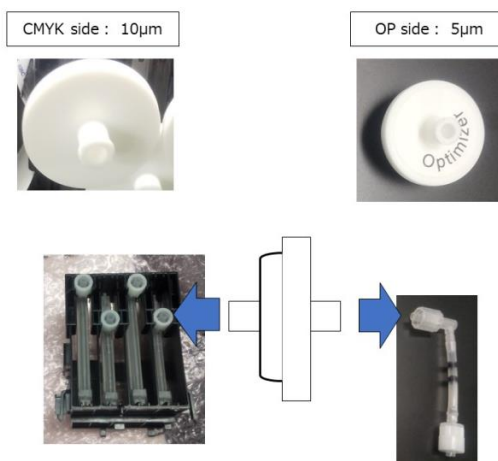
Step 100 / 134

Detail1: Ink arrangement



Step 101 / 134

LC filters are different for OP and CMYK.
Also, be sure to install them in the
correct direction.



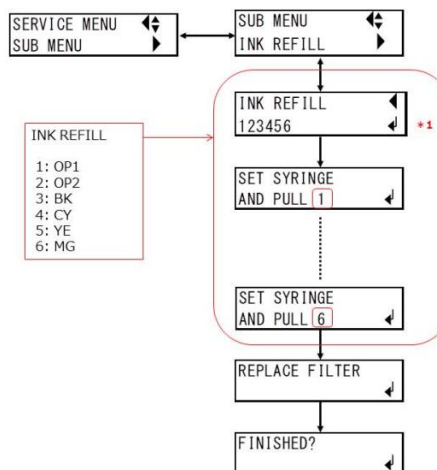
Step 102 / 134

One syringe should be used for each
color, and be careful to dispose of the
waste liquid, as the OP and ink will
coagulate when mixed.



Step 103 / 134

Install the LC filter of the same ink as the removed filter to the number displayed on the panel. The number of the path to pull OP/INK is indicated as [AND PULL *] .



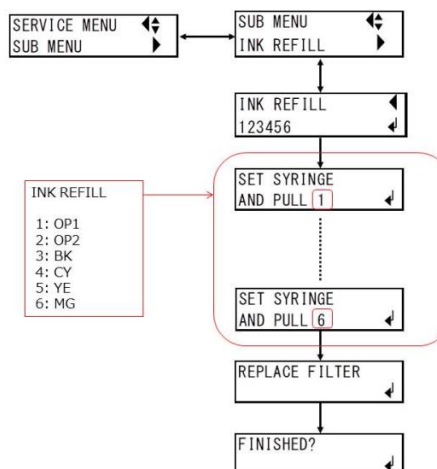
Step 104 / 134

Use a syringe to suck ink.



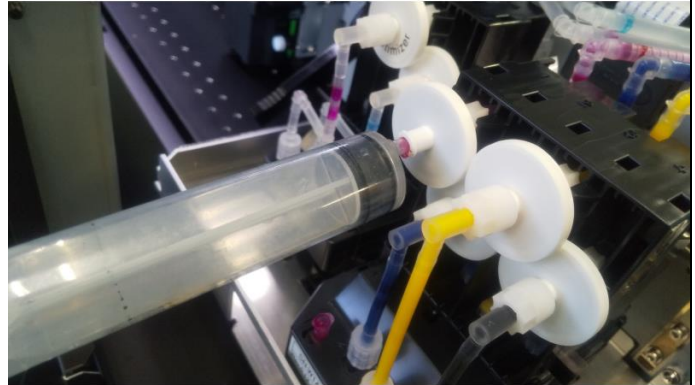
Step 105 / 134

Detail1: Check that the numbered portion of the panel display [SET SYRINGE/AND PULL *] is the path you want to fill with ink.



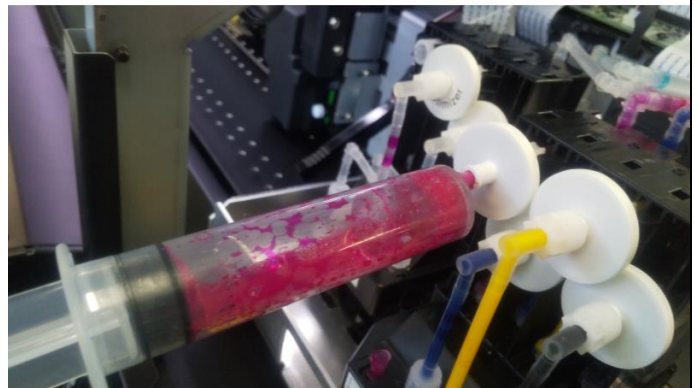
Step 106 / 134

Detail2: the syringe onto the LC filter.



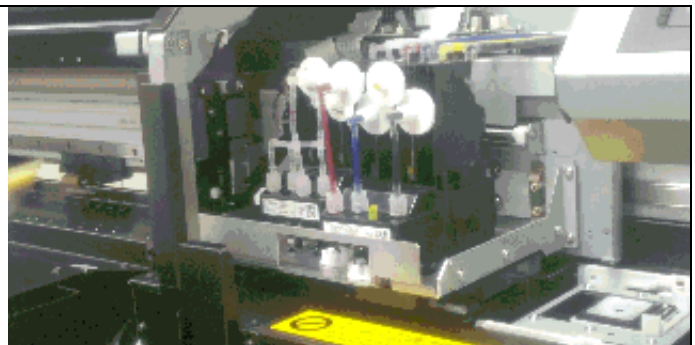
Step 107 / 134

Detail3: Suck about half of the syringe (about 10 ml) of ink. If ink cannot be sucked at one time, suck ink in several times.



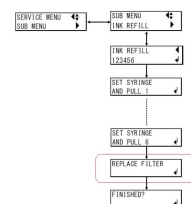
Step 108 / 134

Detail4: Reference video

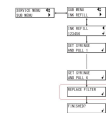


Step 109 / 134

After all the target ink paths have been filled, confirm that the panel display

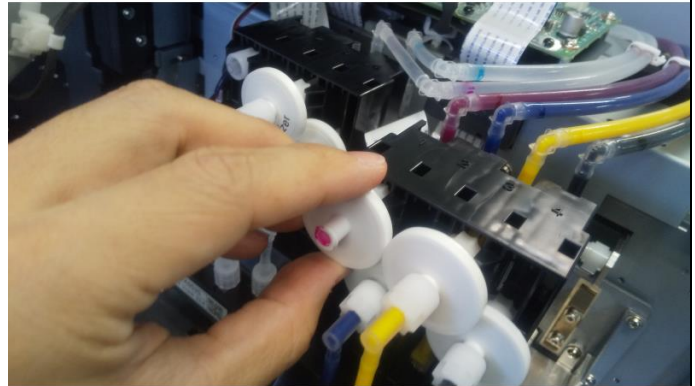


shows [REPLACE FILTER].



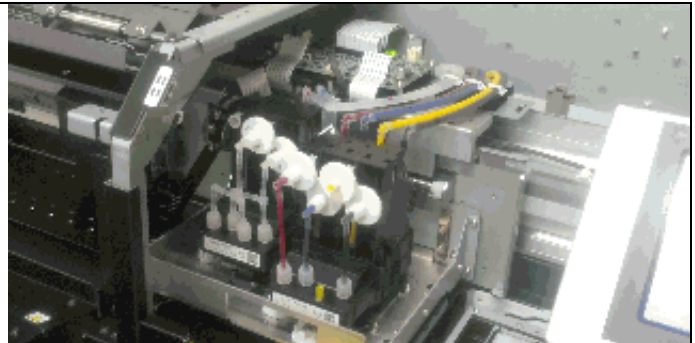
Step 110 / 134

Remove the old LC filter with ink sucked with a syringe. Replace it with a new LC filter.



Step 111 / 134

Detail1: Reference video



Step 112 / 134

If air remains in the ink path, quality defects will occur. Be sure to use a syringe to suck ink to the LC filter.



Step 113 / 134

Use one syringe for each color, and be careful to dispose of the waste liquid, as the OP and ink will coagulate when mixed.



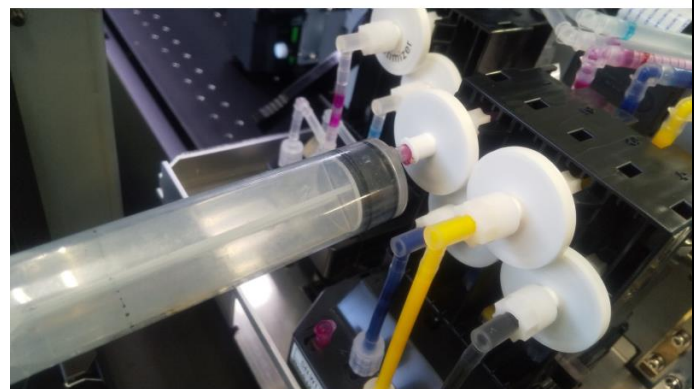
Step 114 / 134

Suck about 10ml of ink using the syringe.



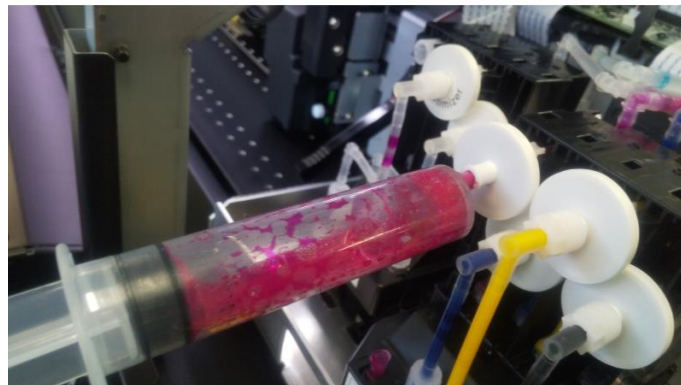
Step 115 / 134

Detail1: Press the syringe against the LC filter.



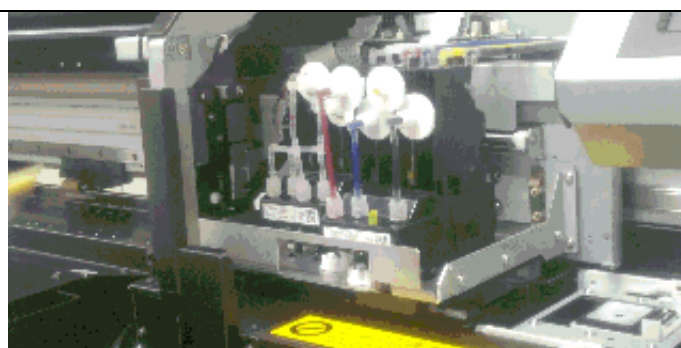
Step 116 / 134

Detail2: Suck about half of the syringe (about 10 ml) of ink. If ink cannot be sucked at one time, suck ink in several times. Do not mix the sucked ink in the syringe with the OP side and the CMYK side, and put them into the drain bottle.



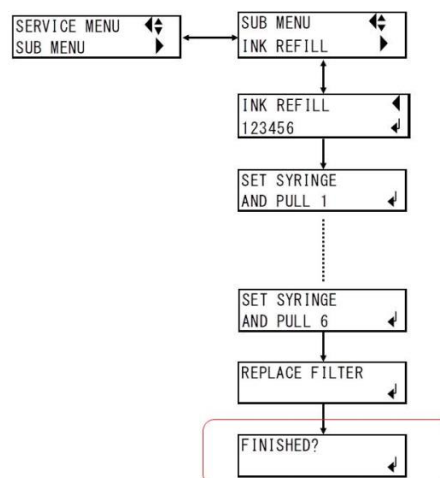
Step 117 / 134

Detail3: Reference video



Step 118 / 134

Confirm that the panel is set to [REPLACE FILTER] and press the [ENTER] button to exit [INK REFILL].



Step 119 / 134

Attach the tube to the print head, then the LC filter, in that order to prevent the



tube from twisting.



Step 120 / 134

Detail1: With the tip of the tube inserted into the LC filter, attach the joints on the print head side.



Step 121 / 134

Detail2: Make sure that the tube is not twisted.



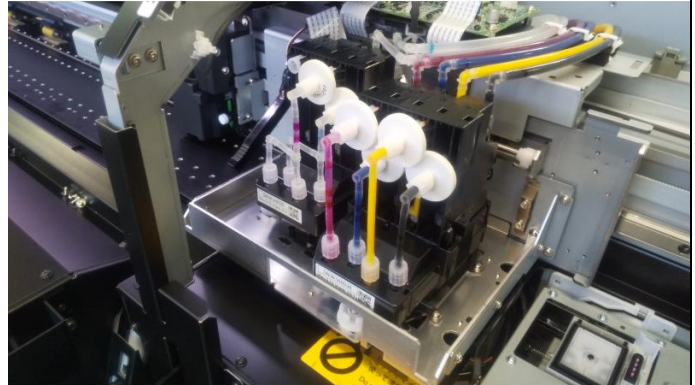
Step 122 / 134

Detail3: Attach the joints on the LC filter side.



Step 123 / 134

Detail4: Check that the tube is not twisted.



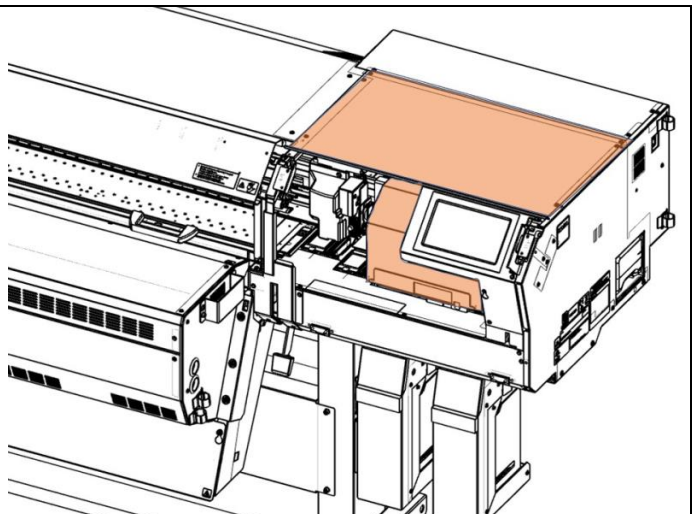
Step 124 / 134

Put back the covers that were removed.



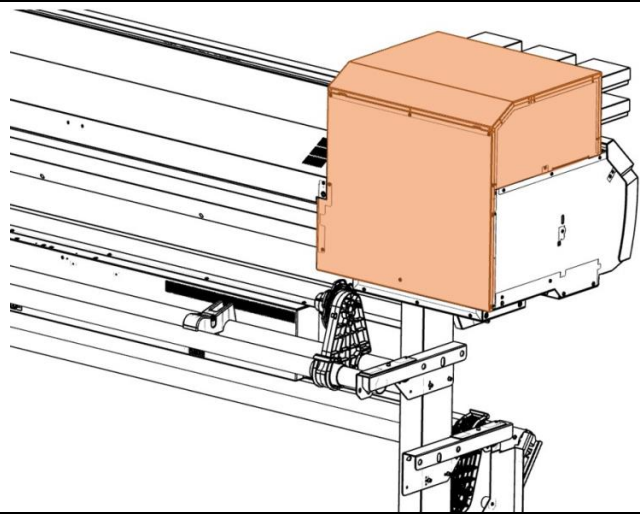
Step 125 / 134

Detail1: Covers around the panel



Step 126 / 134

Detail2: Ink pouch side



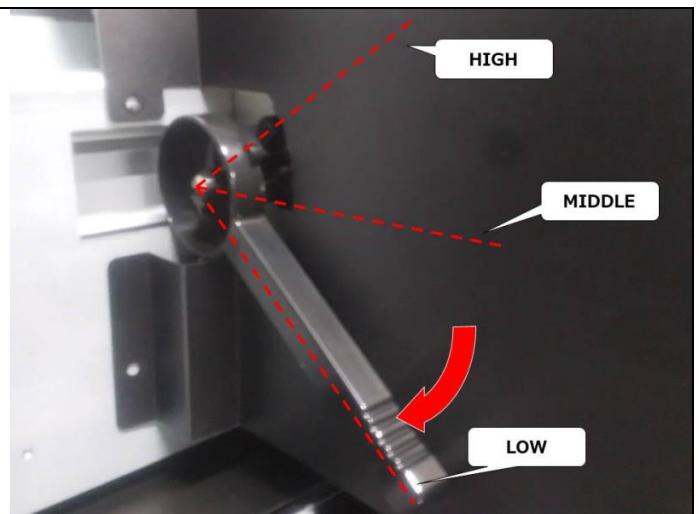
Step 127 / 134

Check that the drain bottles on the OP side and CMYK side are set correctly.



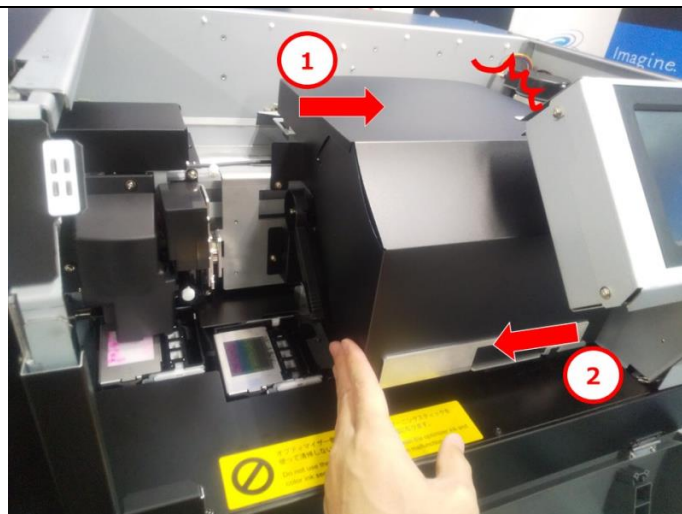
Step 128 / 134

Set the print head height to [LOW] for ink filling.



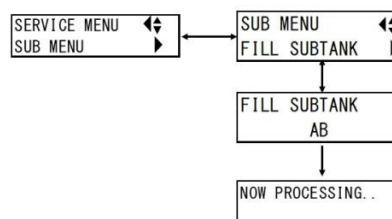
Step 129 / 134

Return the print head carriage to the origin position and lock it.



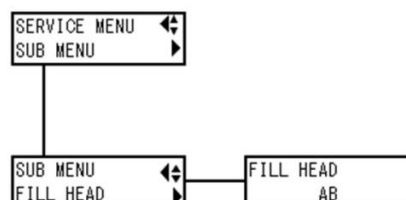
Step 130 / 134

Select [SERVICE MENU] > [SUB MENU] > [FILL SUBTANK] > [A/B] and fill the ink path of the replaced tube.



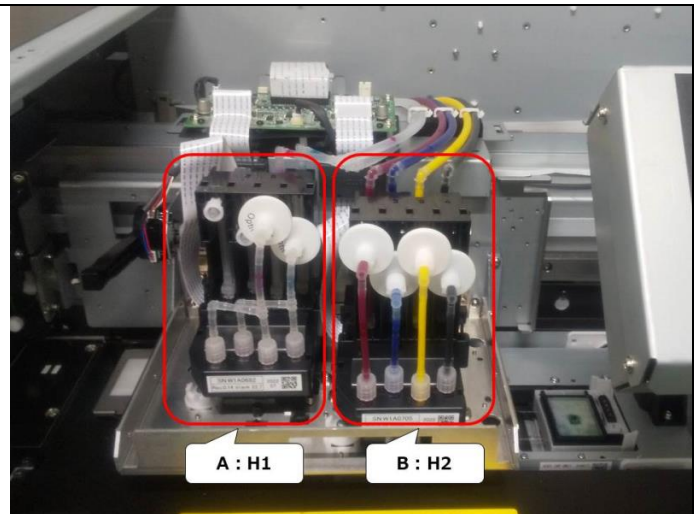
Step 131 / 134

Select [SERVICE MENU] > [SUB MENU] > [FILL HEAD] > [A/B] to fill the ink in the print head.



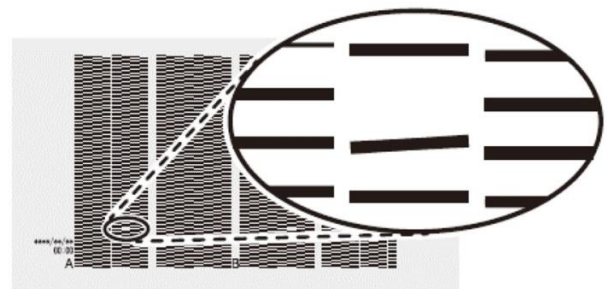
Step 132 / 134

Detail1: Print head arrangement



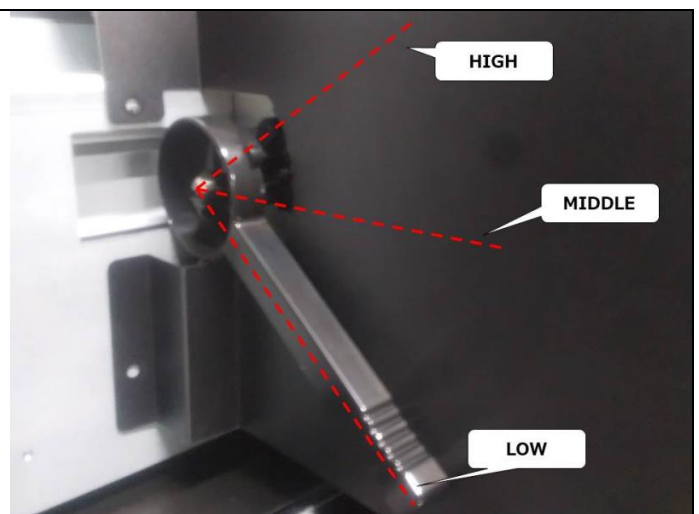
Step 133 / 134

Load the media and check for any abnormalities in ink ejection by test printing.



Step 134 / 134

If the print head height has been changed, return to the original height.



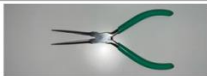
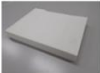
AP-640 Sub-tank replacement

AP-640 Sub-tank replacement Information

Step 1 / 7

Necessary Tools (1/2)

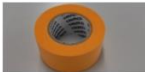
一般ツール/General Tool

プラスドライバー No.2 No.2 Phillips screwdriver	
ペンチ Pliers	
手袋 (滑り止め用) Gloves (anti-slip)	
ウエス Waste cloth	

Step 2 / 7

Necessary Tools (2/2)

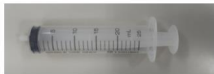
一般ツール/General Tool

スケール (定規) Ruler	
ニッパー Nippers	
テープ Tape	

Step 3 / 7

Special Tools

特殊治具/Special Tools

シリンジ Syringe	
-----------------	---

Step 4 / 7

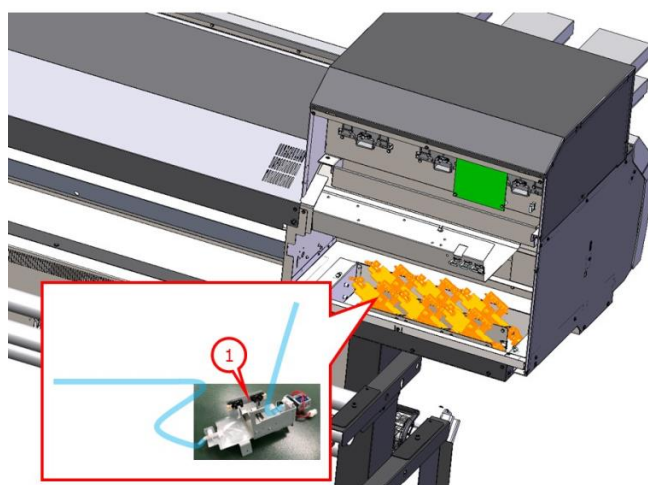
Typical Work Time

作業時間/Typical work time

作業内容/Contents of work	時間/Time
サブタンク交換 Sub-tank replacement	60 min.

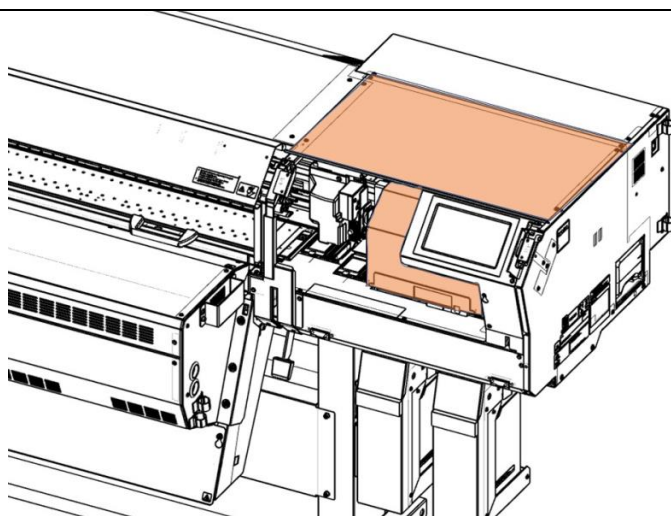
Step 5 / 7

1. Sub tank



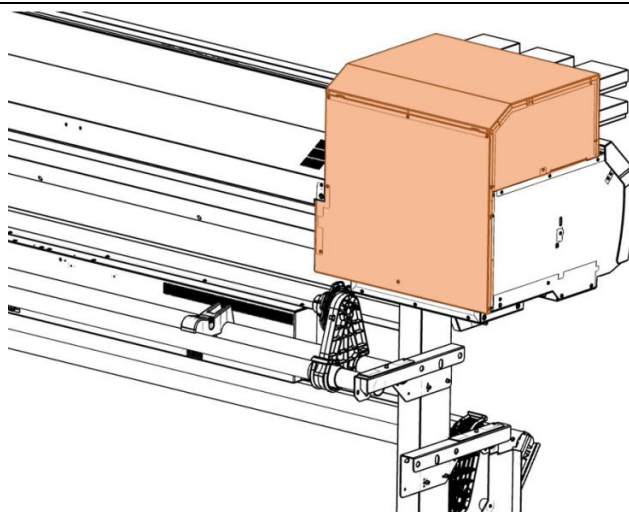
Step 6 / 7

Covers that need to be removed (1/2)



Step 7 / 7

Covers that need to be removed (2/2)



AP-640 Sub-tank replacement

AP-640 Sub-tank replacement Procedure

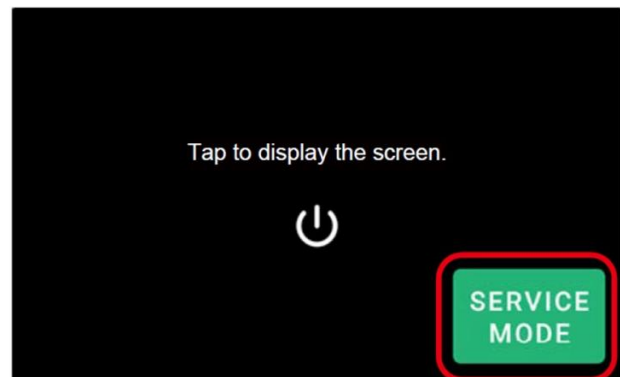
Step 1 / 121

This operation includes ink filling. You will need to prepare the same number of syringes and a new LC filter as the sub-tank to be replaced.



Step 2 / 121

Connect the Peck2 to the machine and enter the Service Mode.



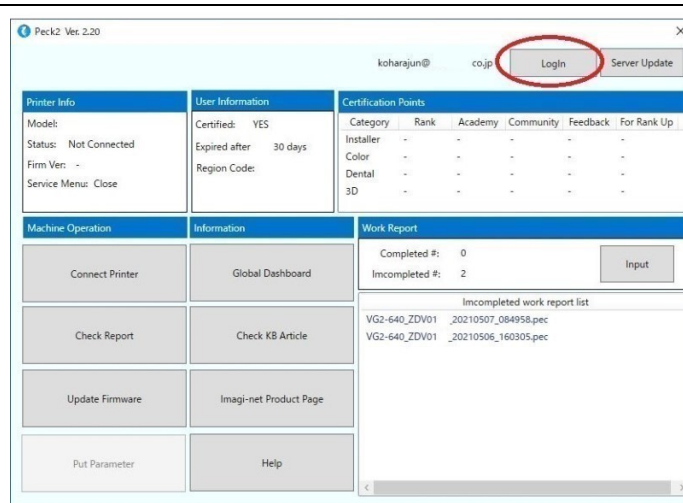
Step 3 / 121

Detail1: Start Peck2.



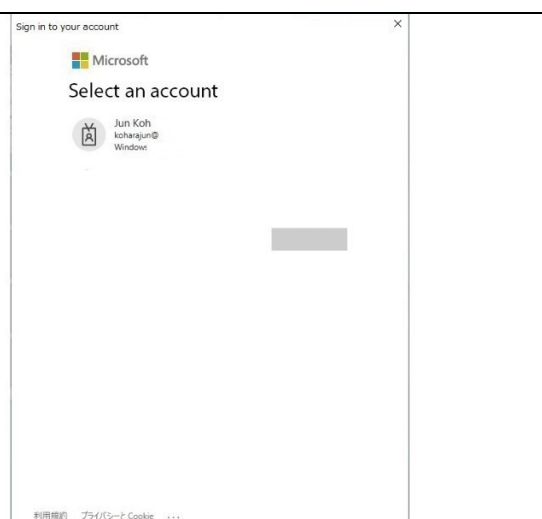
Step 4 / 121

Detail2: Click on the [Login] button.



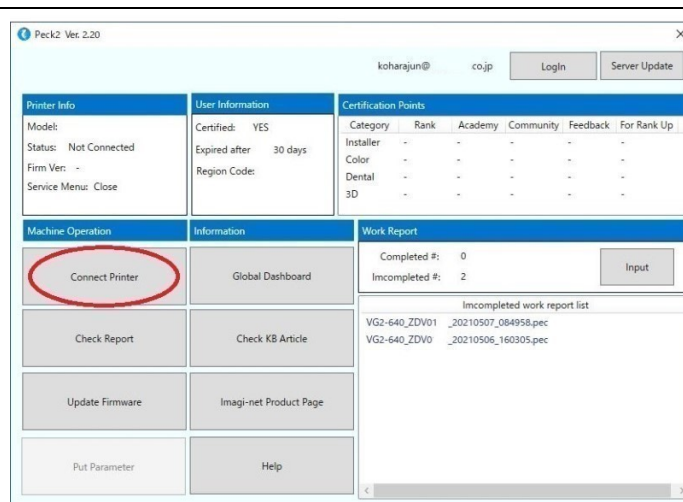
Step 5 / 121

Detail3: Login with your Imagi-net ID.



Step 6 / 121

Detail4: the [Connect Printer] button.



Step 7 / 121

Detail5: Enter the IP address of the printer you would like to connect to.

Peck2 Ver. 2.20

koharajun@ .co.jp Login Server Update

Printer Info		User Information		Certification Points					
Model:	VG2-640ZDV01	Certified:	YES	Category	Rank	Academy	Community	Feedback	For Rank Up
ConnectPrinter		Expired after	30 days	Installer	Certified	0	*	*	*
Select:	VG2-640ZDV01 (11.129.52)			Color		0	0	0	200
Input IP Address:				Dental		0	0	*	200
Connect	Close			3D		0	0	*	200

Work Report

Completed #: 0
Incomplete #: 2

Input

Imcompleted work report list

VG2-640_ZDV01 _20210507_084958.pec
VG2-640_ZDV01 _20210506_160305.pec

Check Report Check KB Article
Update Firmware Imagi-net Product Page
Put Parameter Help

Step 8 / 121

Detail6: When the printer is connected, the printer information will be displayed in [Printer Info].

Peck2 Ver. 2.20

koharajun@ .co.jp Login Server Update

Printer Info		User Information		Certification Points					
Model:	VG2-640_ZDV01	Certified:	YES	Category	Rank	Academy	Community	Feedback	For Rank Up
Status:	UnSetup	Expired after	30 days	Installer	Certified	0	*	*	*
Firm Ver:	2.00			Color		0	0	0	200
Service Menu:	Open			Dental		0	0	*	200
				3D		0	0	*	200

Machine-Operation Information Work Report

Connect Printer Global Dashboard

Check Report Check KB Article

Update Firmware Imagi-net Product Page

Put Parameter Help

Completed #: 0
Incomplete #: 2

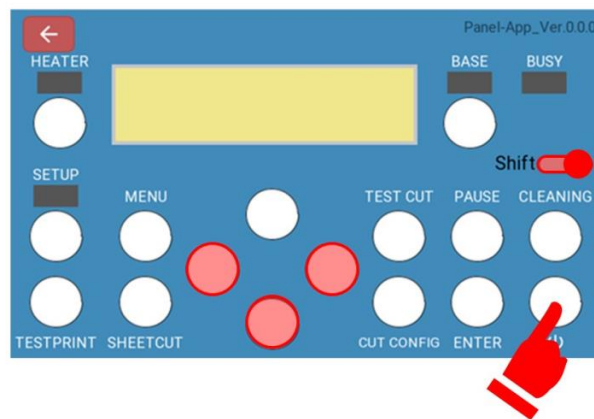
Input

Imcompleted work report list

VG2-640_ZDV01 _20210507_084958.pec
VG2-640_ZDV01 _20210506_160305.pec

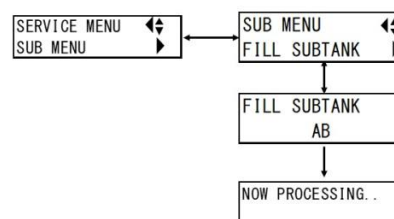
Step 9 / 121

Detail7: Press [Shift]> [HEATER]+[MENU]+[TEST CUT]+[Sub Power] to enter the service mode. By turning on the [Shift] button, multiple buttons can be pressed at the same time.



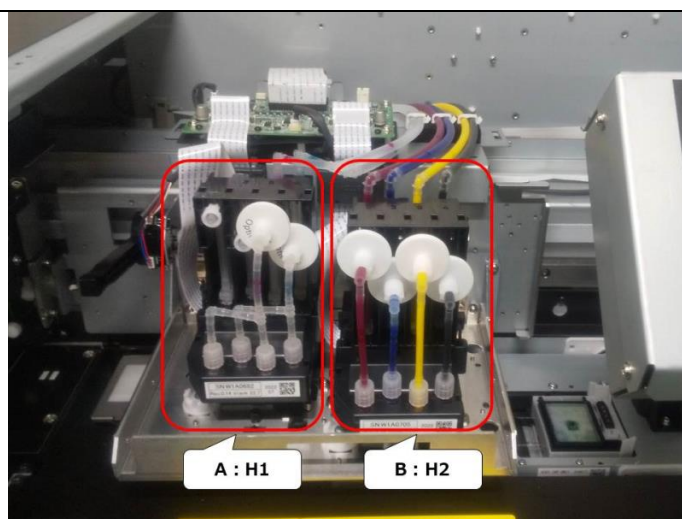
Step 10 / 121

Select [SERVICE MENU] > [SUB MENU] > [FILL SUBTANK] > [A/B] and fill ink into the sub tank to be replaced.



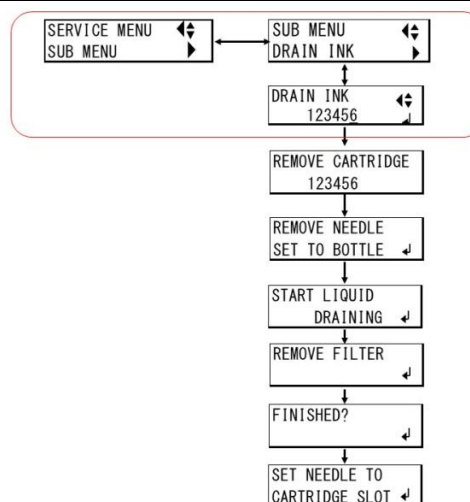
Step 11 / 121

Detail1: Print head arrangement



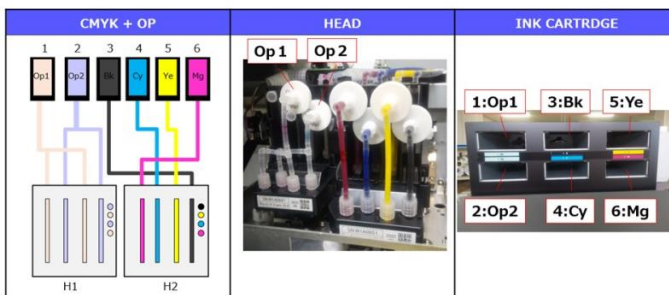
Step 12 / 121

Select [SERVICE MENU] > [SUB MENU] > [DRAIN INK] > [1 2 3 4 5 6] and select the same cartridge slot number as the ink in the subtank to be replaced.



Step 13 / 121

Detail1: Ink arrangement



Step 14 / 121

Confirm that [REMOVE CARTRIDGE *] is blinking on the panel and pull out all ink cartridges.



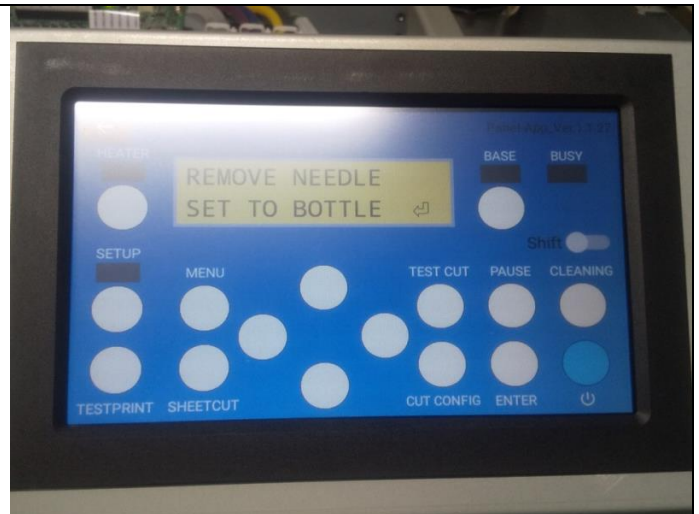
Step 15 / 121

Detail1: When the ink cartridge is removed, the blinking number will disappear and the display will automatically switch to the next screen [REMOVE NEEDLE/SET TO BOTTLE].



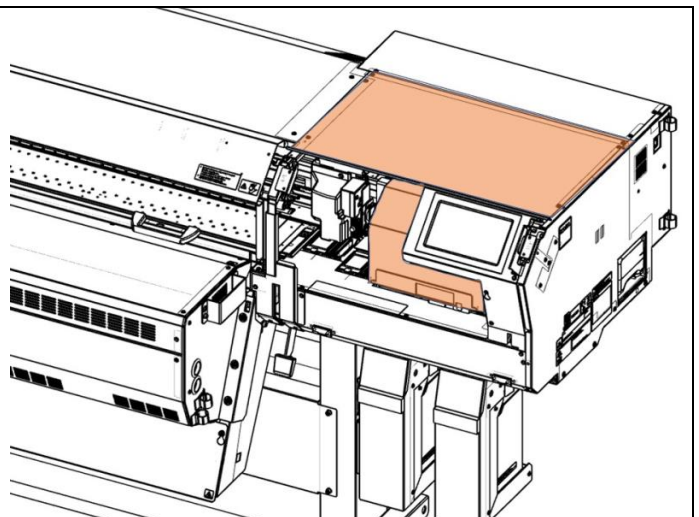
Step 16 / 121

Confirm that the panel display has switched to [SET TO BOTTLE]. After this, ink will be removed from the tip of the needle. However, keep this display on until ready to work.



Step 17 / 121

Remove the covers around the print head carriage.



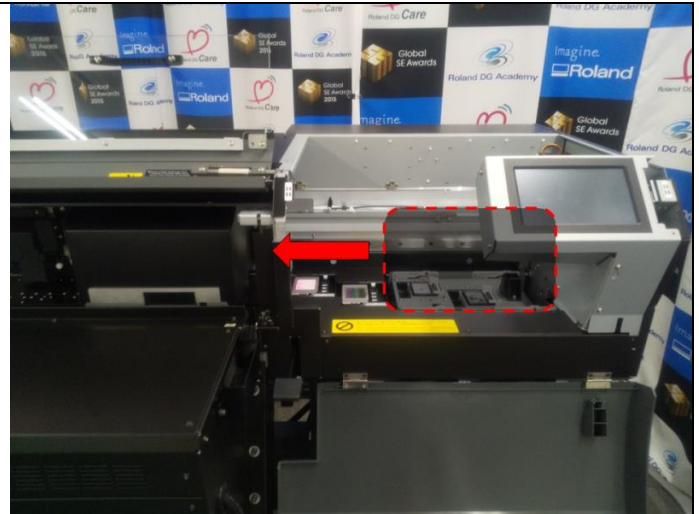
Step 18 / 121

Detail1: Remove the cover on top of the carriage.



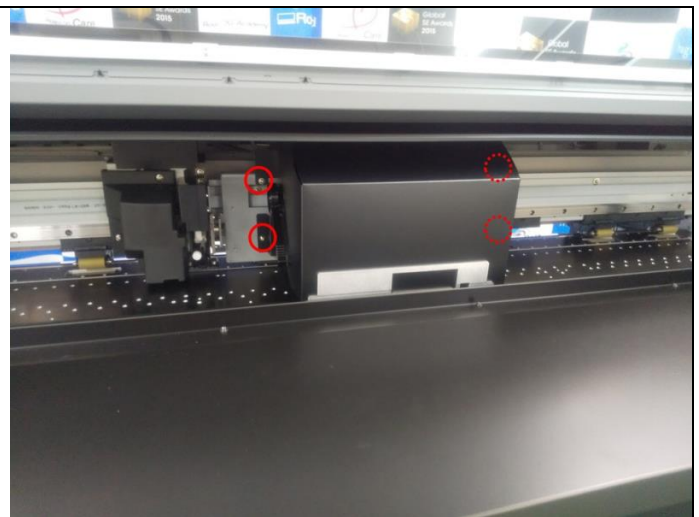
Step 19 / 121

Detail2: Unlock the carriage and move it onto the platen to avoid losing the screws.



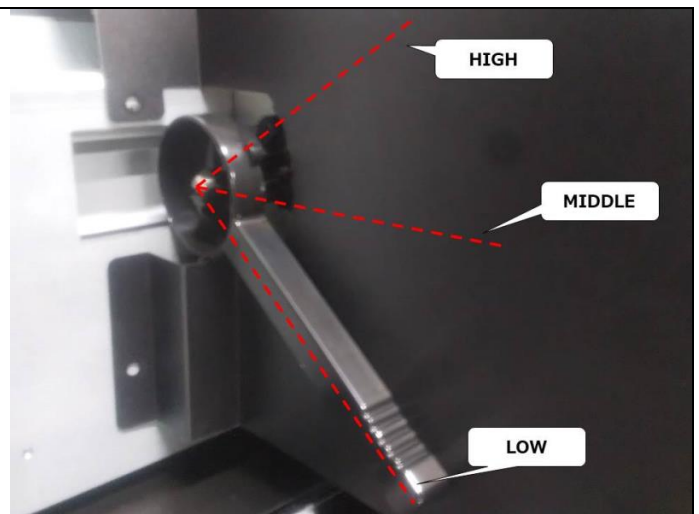
Step 20 / 121

Detail3: Remove the four screws.



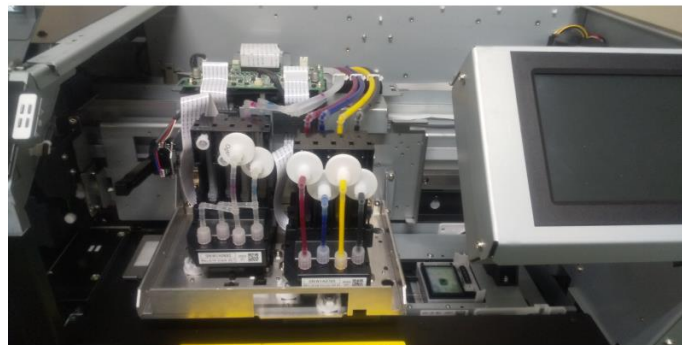
Step 21 / 121

Detail4: Set the print head height to [Middle] or [HIGH] to make it easier to remove the cover.



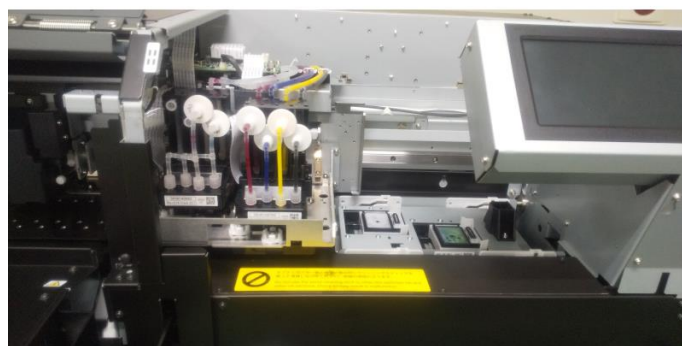
Step 22 / 121

Detail5: Move the print head carriage and remove the cover.



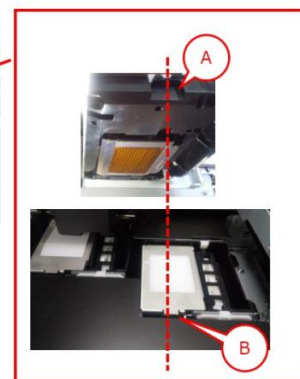
Step 23 / 121

Ink in the print head may drip out.
Move the print head carriage to the position where the print head and the flushing pad align.



Step 24 / 121

Detail1: Move the print head carriage to the position where the positions of A and B align.



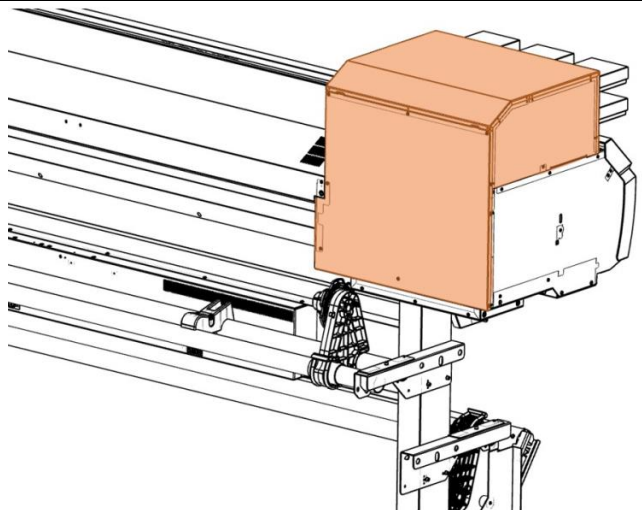
Step 25 / 121

Detail2: Note that if you work without aligning the carriage, ink may drip from the print head in unexpected places as shown in the figure.



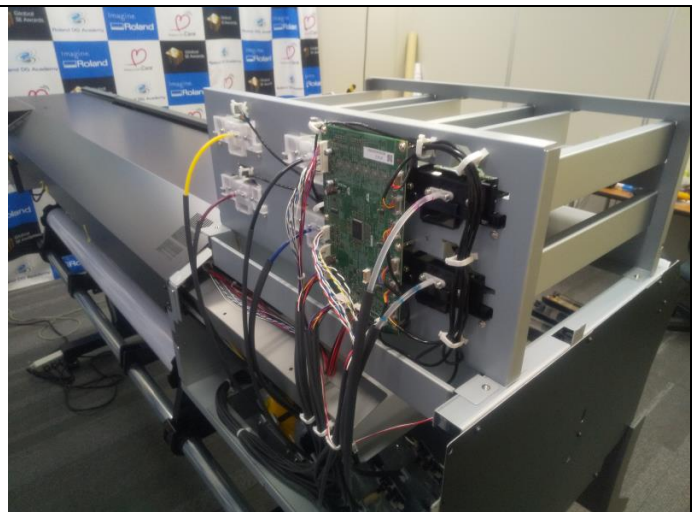
Step 26 / 121

Remove the covers around the sub-tank.



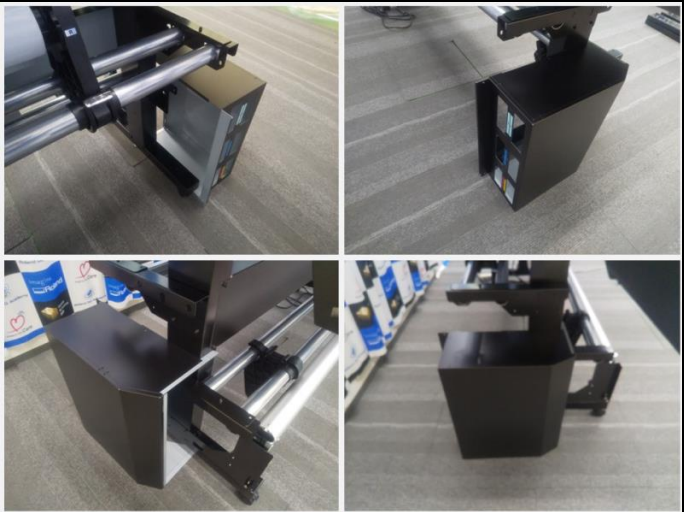
Step 27 / 121

Detail1: After covers removed



Step 28 / 121

Set the removed ink cartridge cover in the position shown in the figure below the sub-tank. Put a dry cloth between the cover and the floor to prevent scratches and dirt from getting on the floor.



Step 29 / 121

There is work to be done to remove and use the drain bottle. Be careful not to spill the waste fluid when working with it.



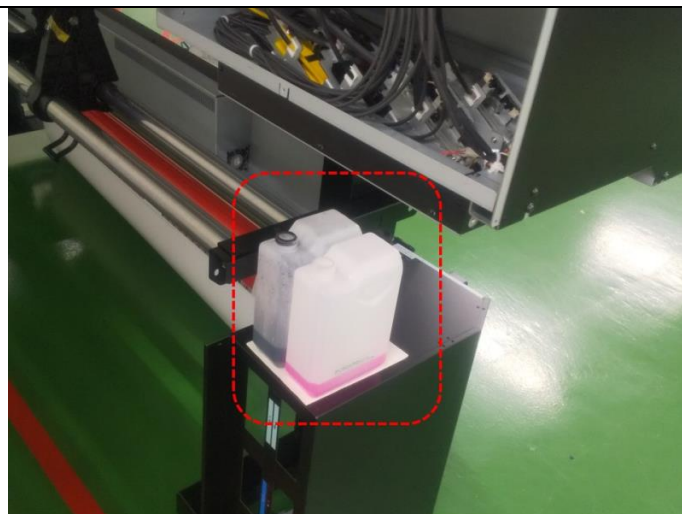
Step 30 / 121

Make sure that the waste liquid in the drain bottle is less than half full.



Step 31 / 121

Set the drain bottle used on the side of the sub-tank to be replaced on the cover. Put a dry cloth between the drain bottle and the cover to prevent scratches and dirt from getting on the cover.



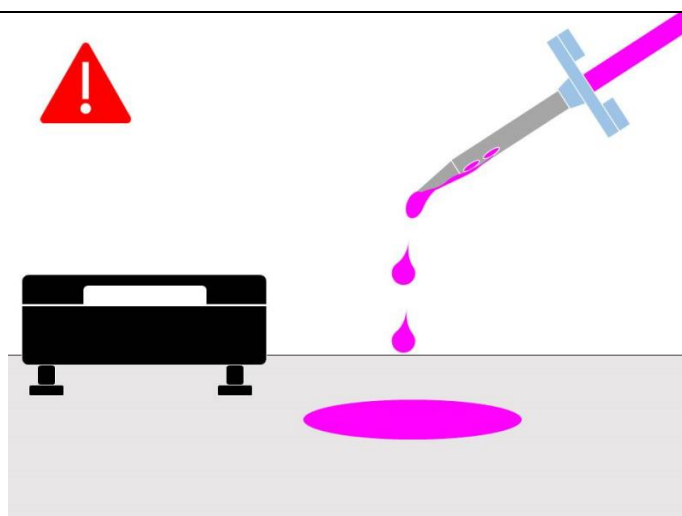
Step 32 / 121

Make sure to use the correct drain bottle for CMYK or OP. Note that if you use the wrong drain bottle, the waste liquid will solidify.



Step 33 / 121

Ink may drip from the tip of the needle. Handle with care.



Step 34 / 121

Handle the tube carefully to prevent it from bending.



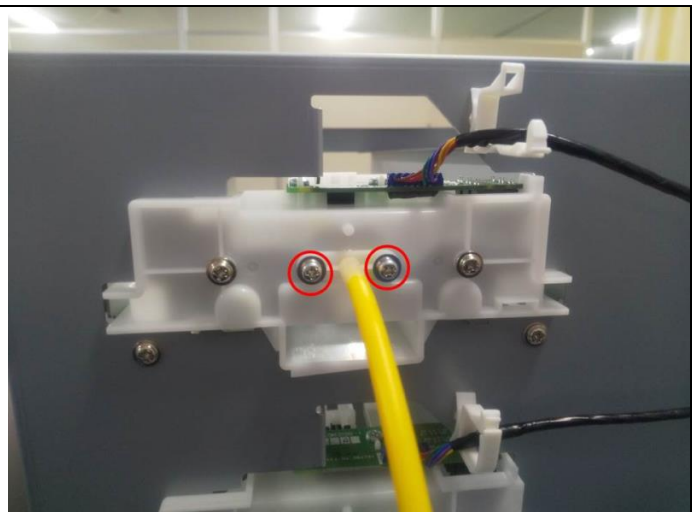
Step 35 / 121

Remove the clamps of the sub-tank to be replaced.



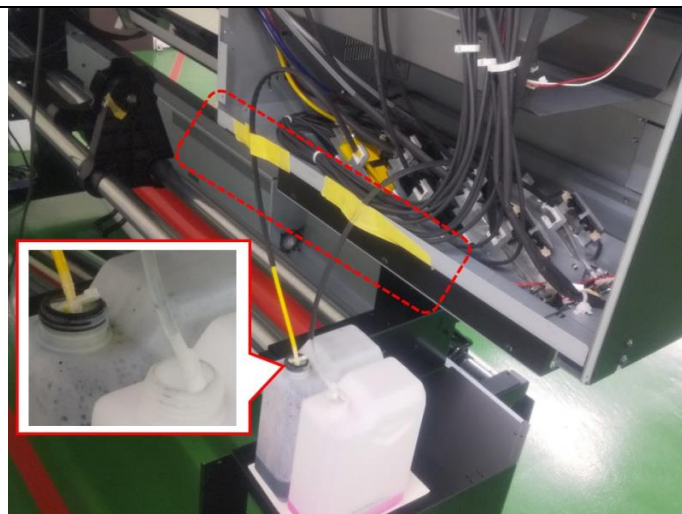
Step 36 / 121

Remove the two screws that attach the needle. (Red: YE/BK/OP1) (Blue: MG/CY/OP2)



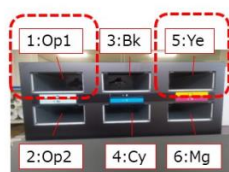
Step 37 / 121

Set the needle of the selected path into the drain bottle so that it does not come out from the bottle, and secure it with masking tape.



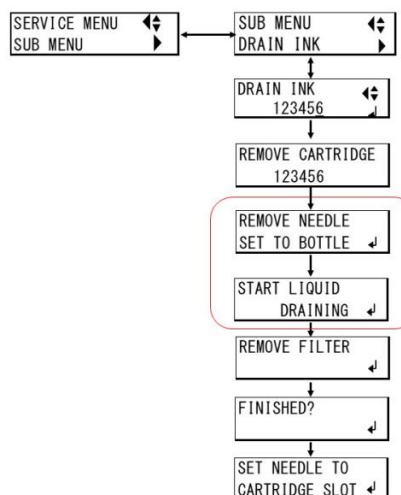
Step 38 / 121

Make sure that all the needles of the ink cartridge that you specified on the panel are set into the drain bottle.



Step 39 / 121

Press the [ENTER] button on the panel and set the panel display to [START LIQUID/DRAINING].



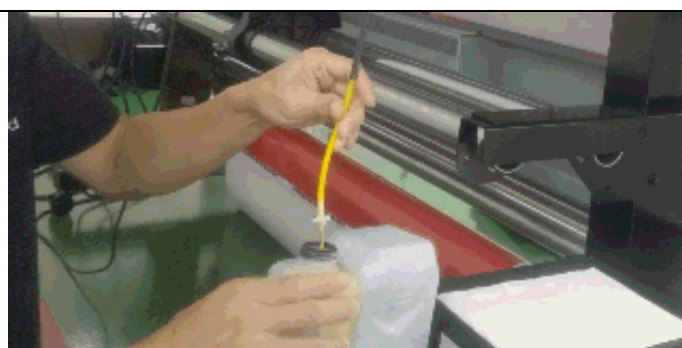
Step 40 / 121

The ink will be drained from the tip of the needle from the next operation. Make sure that ink does not leak from the drain bottle during ink draining.



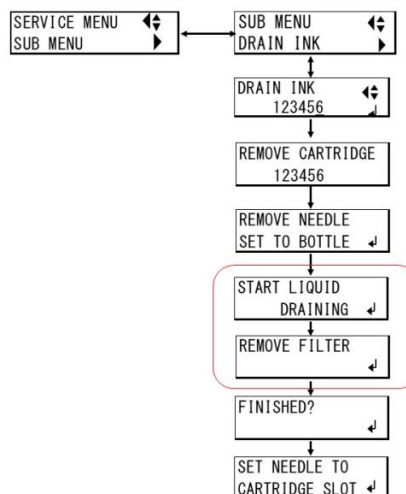
Step 41 / 121

Detail1: [Reference video] Ink being drained from the needle



Step 42 / 121

Pressing the [ENTER] button on the panel releases the valve in the selected path and starts ink draining, and the panel display changes to [REMOVE FILTER]. Check for ink leakage from the drain bottle and proceed to the next operation when draining ink has decreased.



Step 43 / 121

Set a dry cloth near the tube from which ink is to be drained.



Step 44 / 121

Remove the tube fixing screw attached to the print head and place a dry cloth under the tube. On the OP side, remove the two fixing screws for forked tube at the same time to reduce the amount of ink remaining in the tube.



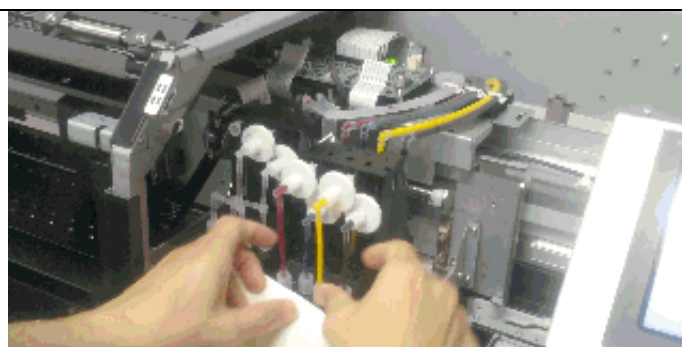
Step 45 / 121

Detail1: On the H1 OP side, loosen the two screws on the two sides of the tube so that they come off at the same time. If you loosen the screws on one side at a time, ink will easily remain in the tube.



Step 46 / 121

Detail2: Reference video



Step 47 / 121

Remove the tube fixing screw attached to the LC filter, and remove the tube

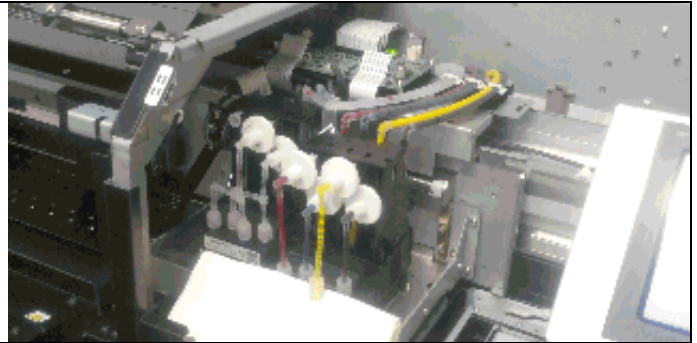


from the LC filter.



Step 48 / 121

Detail1: Reference video



Step 49 / 121

Do not discard the removed LC filter as it will be used in the subsequent process.



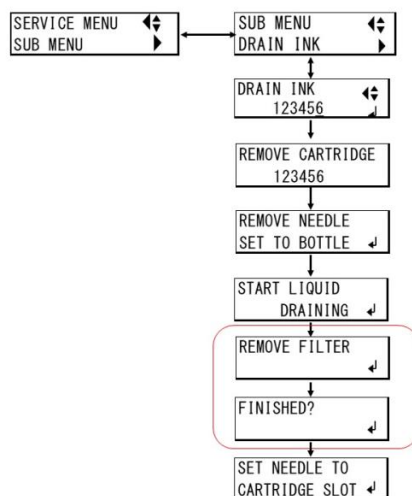
Step 50 / 121

In the next work, ink in the path is drained from the tip of the needle. Make sure that no ink leaks from the drain bottle during ink draining.



Step 51 / 121

Remove the LC filter and press the [ENTER] button on the panel to drain ink. The display on the panel will change to [FINISHED?].



Step 52 / 121

Detail1: Ink drained



Step 53 / 121

Check to see if there is any ink remaining in the tube or sub-tank. (It is not possible to drain all the ink in the sub-tank.)



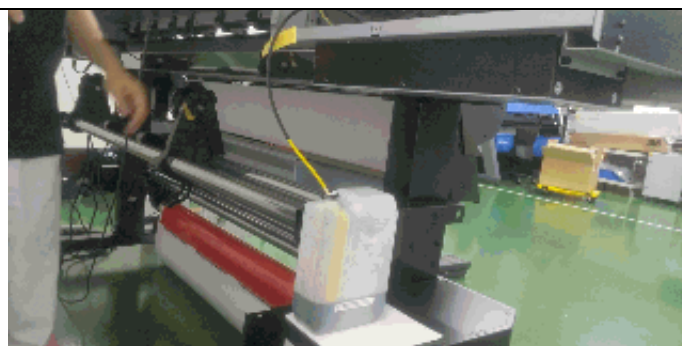
Step 54 / 121

Detail1: If ink remains in the tube between the sub-tank and the needle, remove the masking tape securing the tube, then hold the drain bottle and tube and lower the height of the tube to drain the ink.



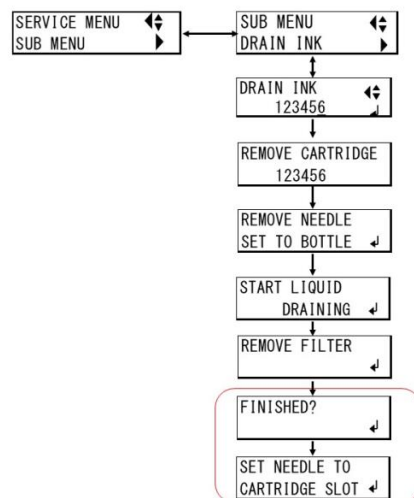
Step 55 / 121

Detail2: Reference video



Step 56 / 121

After the ink has been drained, press the [ENTER] button on the panel. The panel will change to [SET NEEDLE TO CARTRIDGE SLOT].



Step 57 / 121

Remove the solenoid valve connector on the selected sub-tank.



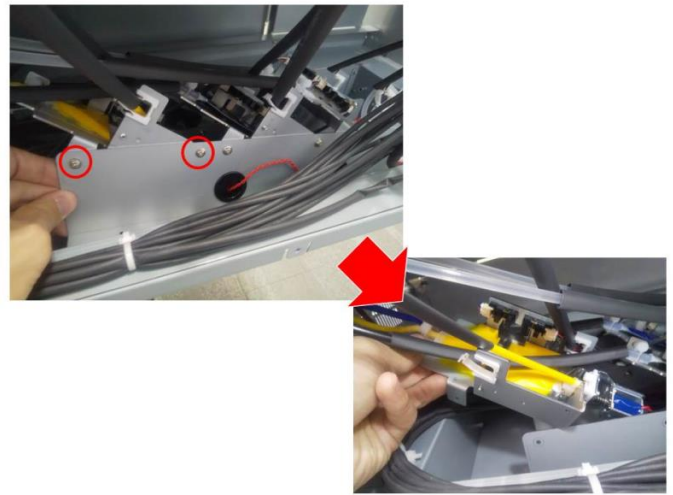
Step 58 / 121

Remove the two screws on the sub-tank stay. (Red: YE/BK/OP1) (Blue: MG/CY/OP2)



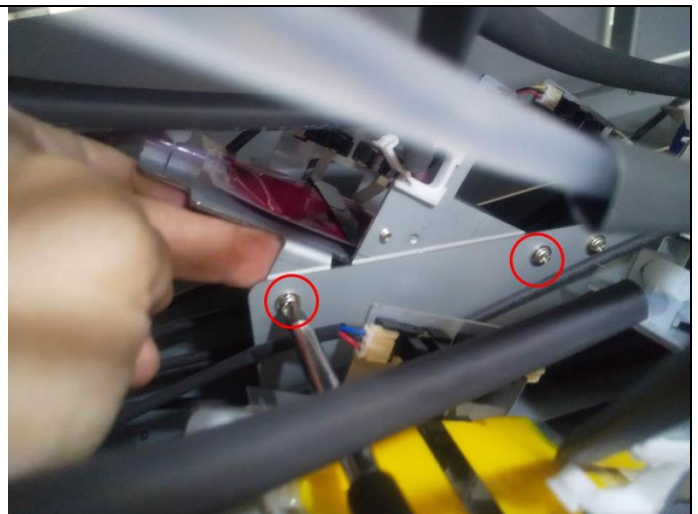
Step 59 / 121

Remove the two screws securing the sub tank.



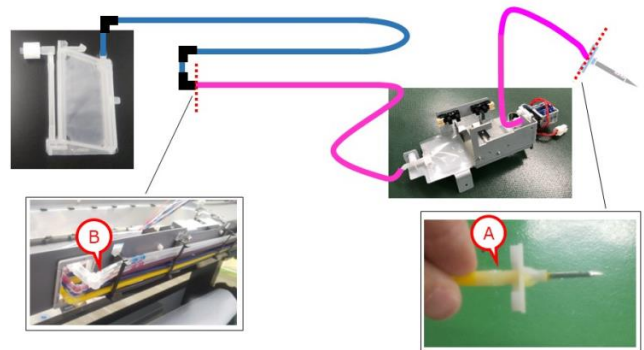
Step 60 / 121

Detail1: Back side



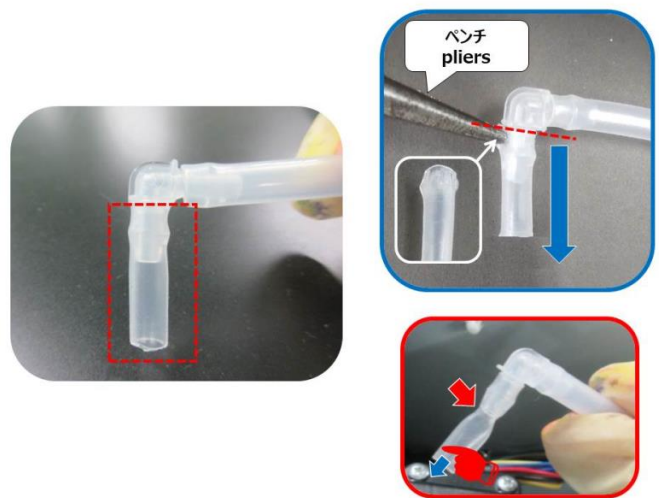
Step 61 / 121

Remove the needle (A) and middle joint (B) on the sub tank tube from the tube.



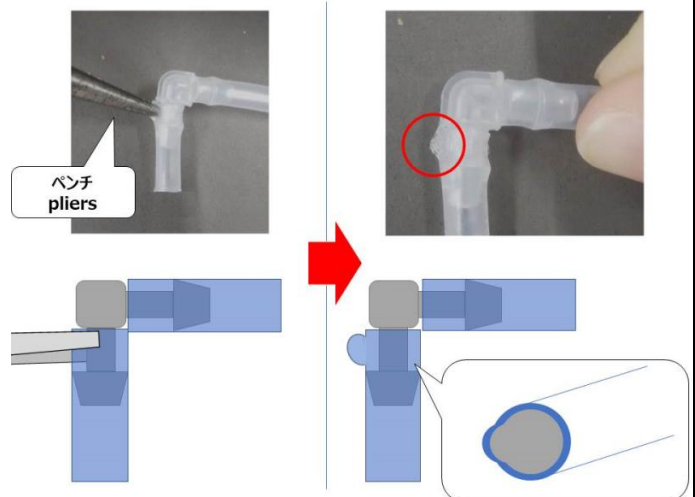
Step 62 / 121

Detail1: You can remove the tube by deforming it with pliers so that the joint will not get damaged. If you do nothing but pull the tube, the tube will stretch and become difficult to remove. The photo of the damper replacement work is used here for reference. It is not the photo of removing tube for this work.

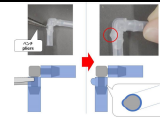


Step 63 / 121

Detail2: Use the tip of the pliers to strongly pinch the base of the tube that is assembled to the L-joint to deform the tube. At this time, the tip of the pliers should be placed on the end of the L-joint to deform the inner side of the tube. The photo of the damper replacement process is used here. It is not the photo of removing tube for this

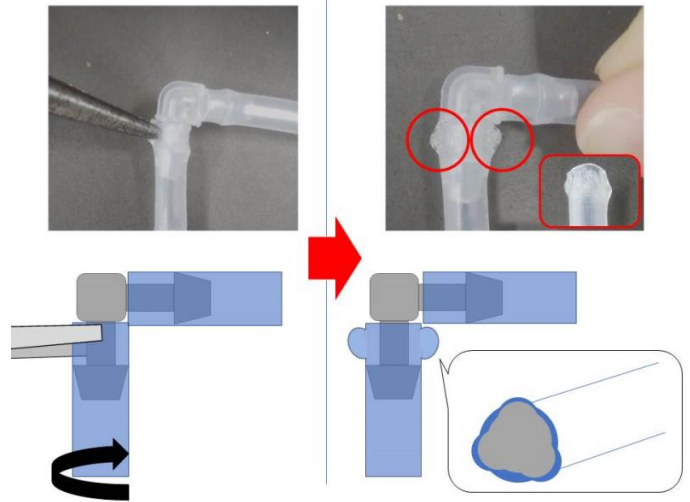


work.



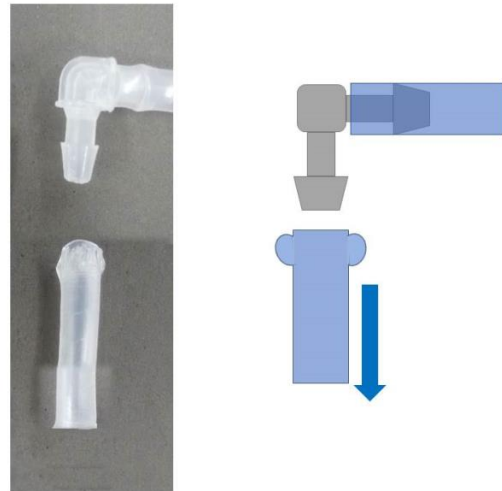
Step 64 / 121

Detail3: Deform the tube in about three places in the same way. The photo of the damper replacement process is used for reference here. It is not the photo of removing tube for this work.



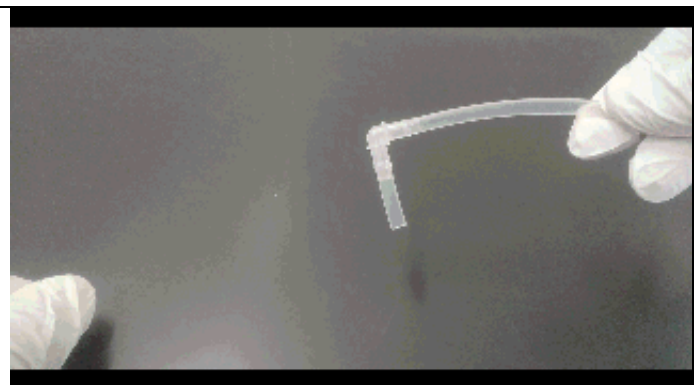
Step 65 / 121

Detail4: Pull the tube to remove it. The photo of the damper replacement work is used for reference. It is not the photo of removing tube for this work.



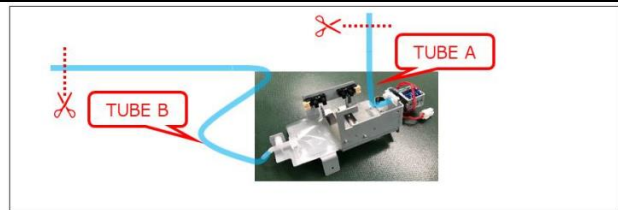
Step 66 / 121

Detail5: Reference video *The video of the damper replacement process is used instead of the original video. It is not the video of removing tube for this work.

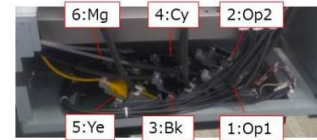
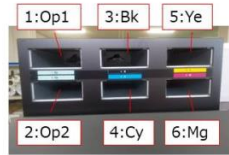


Step 67 / 121

Cut the tube of the new sub-tank to the specified length for each ink.

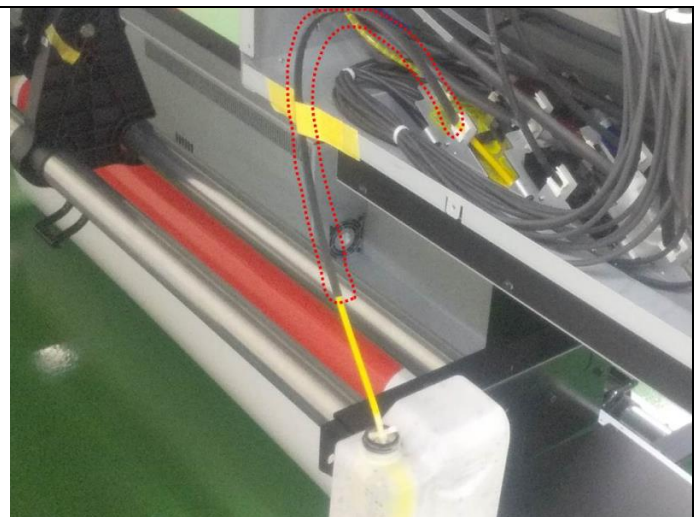


	Op1	Op2	Bk	Cy	Ye	Mg
TUBE A	600	560	600	560	600	560
TUBE B	1,400	1,440	1,320	1,380	1,270	1,370



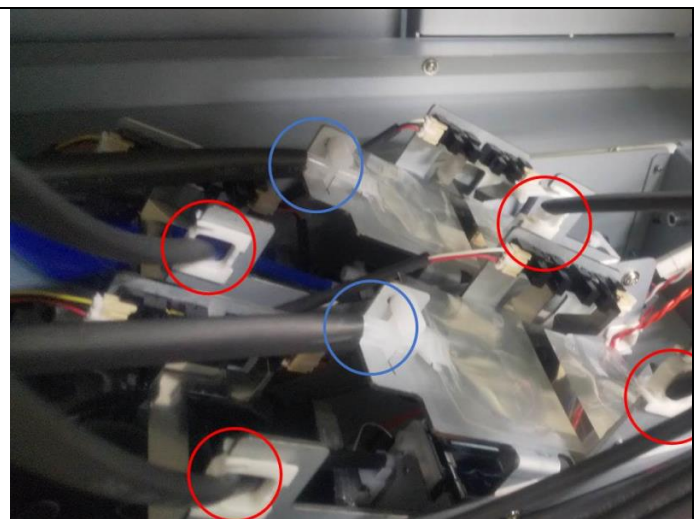
Step 68 / 121

Remove the protective tube from the removed sub-tank, attach it to the tube of the new sub-tank, and align the end face of the protective tube with the specified position.



Step 69 / 121

Detail1: Align the end face of the protective tube to the position shown in the figure. The blue circled areas should be covered with protective tube up to the base of the connection part. Align the end face of the protective tube with the side of the sub-ties in the red circled areas.



Step 70 / 121

Do not apply lubricants such as ethanol to the tube or L-joint as this may affect the gas barrier of the tube. Use gloves with good grip to prevent slipping when inserting the tube into the joint.



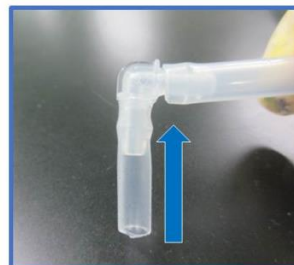
Step 71 / 121

If OP and CMYK inks are mixed, they will harden; change gloves when working continuously on the OP and CMYK.



Step 72 / 121

When inserting the tube, wear gloves, hold the tube near the opening, and insert the tube all the way in without bending it. The photo of damper replacement work is reproduced here. It is not the photo of inserting the tube for this work.

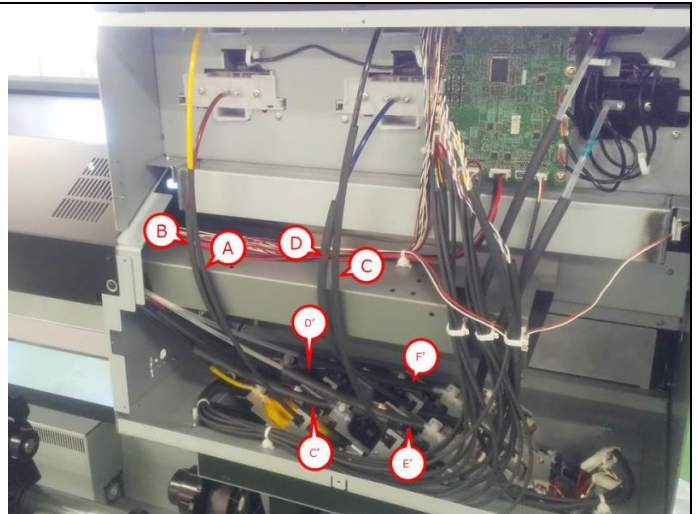


Not Good



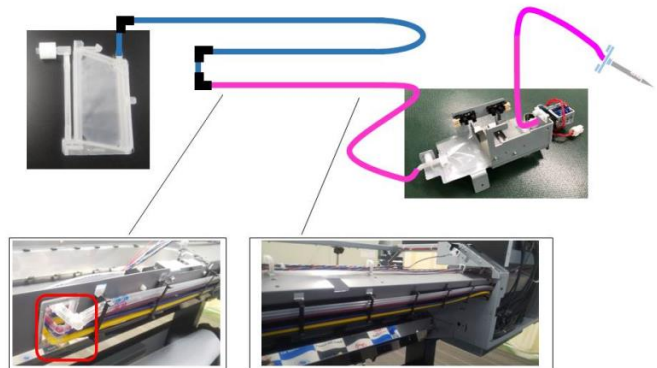
Step 73 / 121

The tube (C') must pass under E' and F.
The tube (D') must pass under E' and F.
The tube (E') must pass between A and B
and between C and D. (F') must pass
behind B and D.



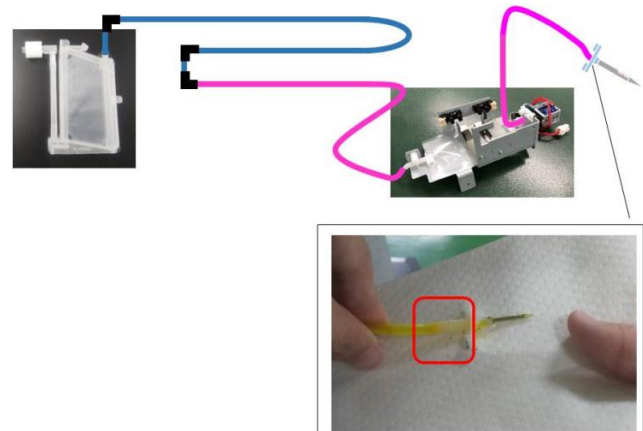
Step 74 / 121

Install the new sub-tank tube through
the stay and into the joint.



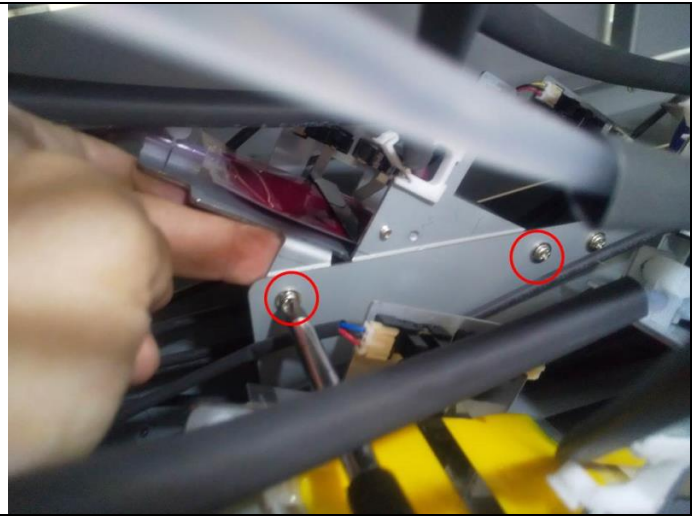
Step 75 / 121

Attach the needle to the tube. If there is
any dirt on the drain bottle at that time,
wipe it off with a dry cloth.



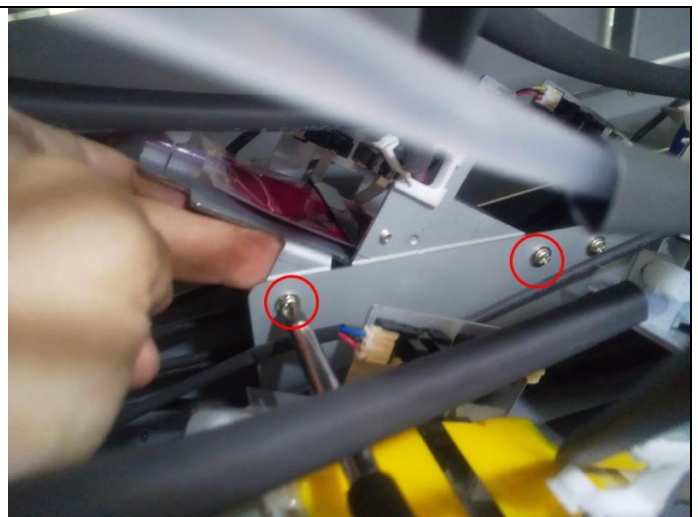
Step 76 / 121

Attach the sub-tank.



Step 77 / 121

Detail1: Attach the sub-tank to the stay with two screws.



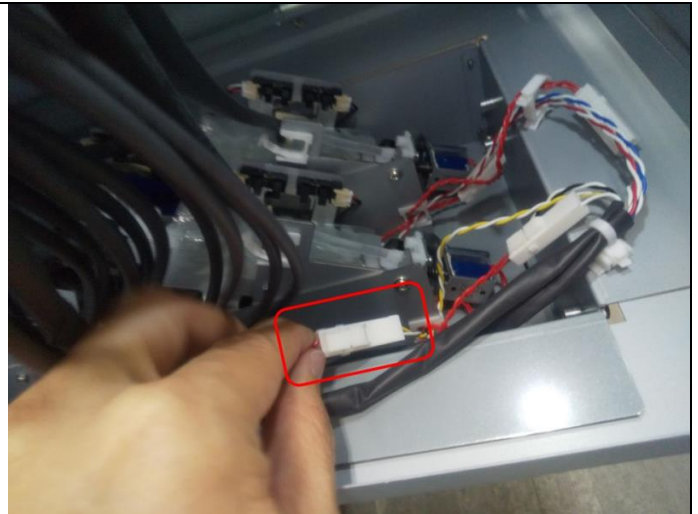
Step 78 / 121

Detail2: Attach two screws and attach the sub-tank stay to the machine.



Step 79 / 121

Detail3: Plug the connector for the solenoid valve.



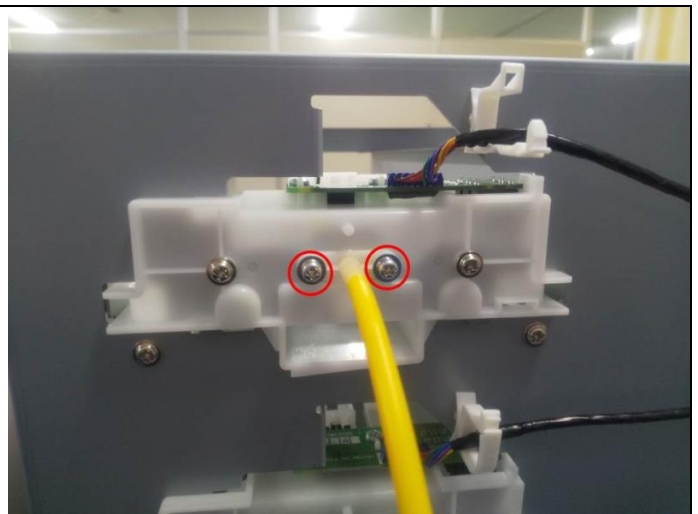
Step 80 / 121

Detail4: Fasten the removed sub-ties.



Step 81 / 121

Attach the two screws and put back the removed needle.



Step 82 / 121

Move the drain bottle near the print head to avoid spilling waste liquid, and put back the covers around the ink pouch.



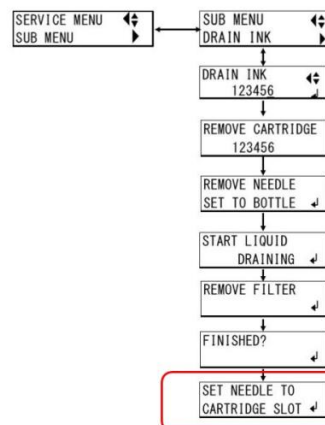
Step 83 / 121

Insert all the ink cartridges.



Step 84 / 121

Press the [ENTER] button on the panel to finish [DRAIN INK].



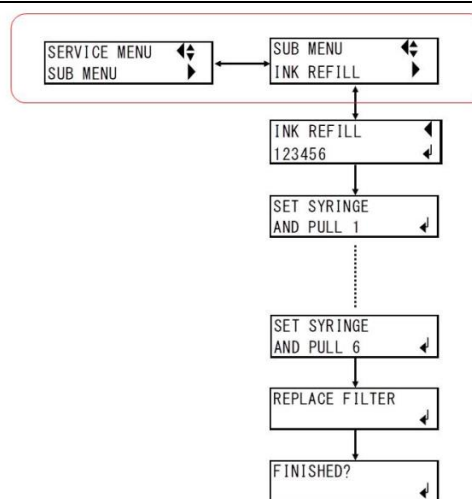
Step 85 / 121

Ink in the print head may drip out.
Make sure that the positions of the print head and flushing pad are aligned.



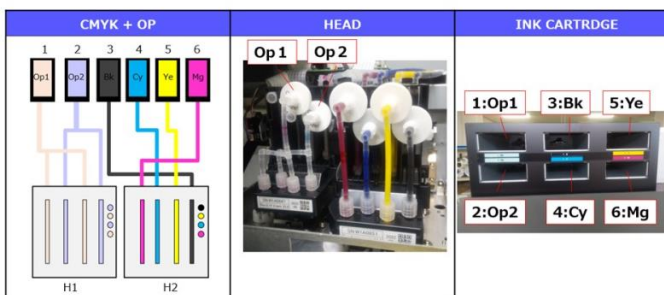
Step 86 / 121

Select [SERVICE MENU] > [SUB MENU] > [INK REFILL]. If [DRAIN INK] has been executed, only the executed path number will be displayed. Confirm the number and press [ENTER]. If [INK REFILL] is not executed, all numbers are displayed.



Step 87 / 121

Detail1: Ink arrangement



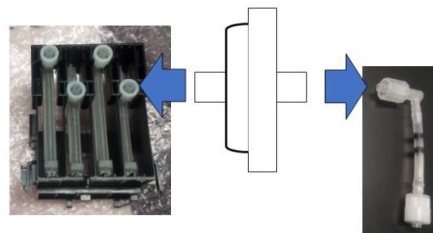
Step 88 / 121

LC filters are different for OP and CMYK.
Also, be sure to install them in the
correct direction.

CMYK side : 10µm



OP side : 5µm



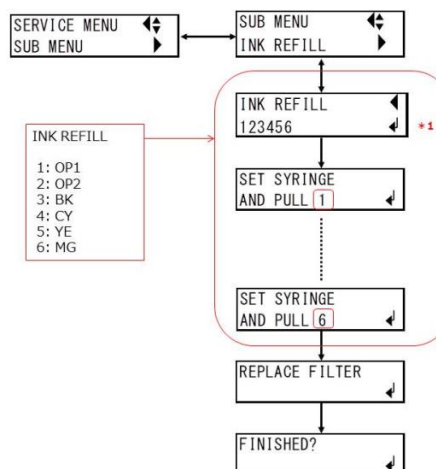
Step 89 / 121

Use one syringe for each color, and be
careful to dispose of the waste liquid, as
the OP and ink will coagulate when
mixed.



Step 90 / 121

Install the LC filter of the same ink as
the removed filter to the number
displayed on the panel. The number of
the path to pull OP/INK is indicated as [
AND PULL *] .



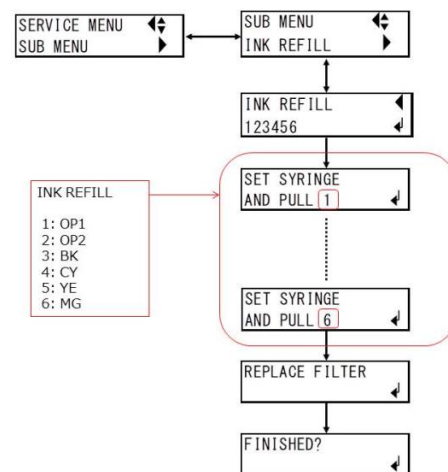
Step 91 / 121

Use the syringe to suck ink.



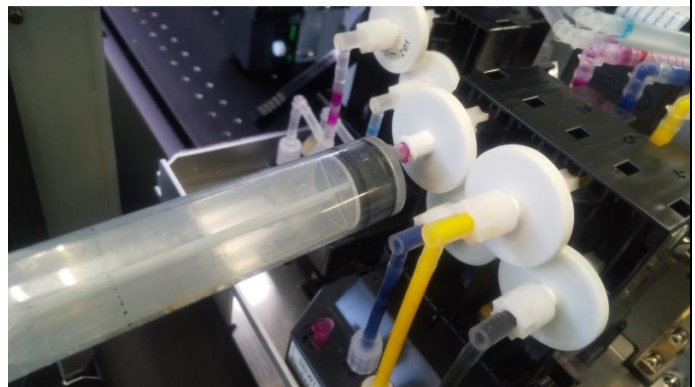
Step 92 / 121

Detail1: Check that the numbered portion of the panel display [SET SYRINGE/AND PULL *] is the ink path you want to fill ink.



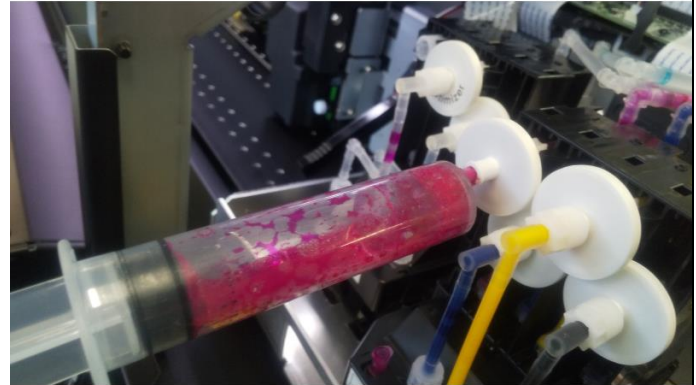
Step 93 / 121

Detail2: Press the syringe onto the LC filter.



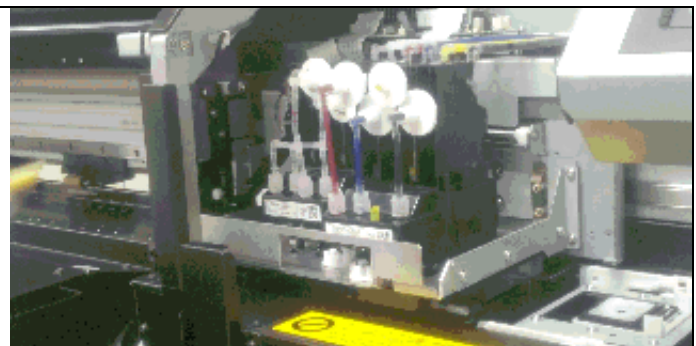
Step 94 / 121

Detail3: Suck about half of the syringe (about 10 ml) of ink. If ink cannot be sucked at one time, suck ink in several times.



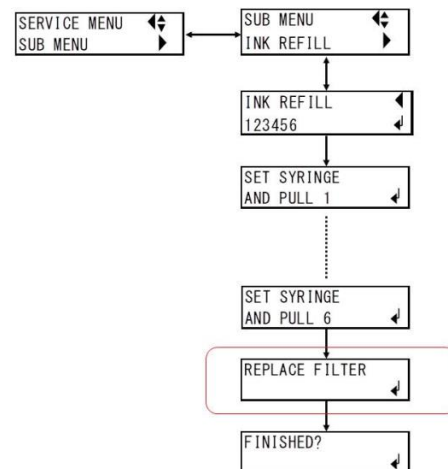
Step 95 / 121

Detail4: Reference video



Step 96 / 121

After all the target ink paths have been filled, confirm that the panel display shows [REPLACE FILTER].



Step 97 / 121

Remove the old LC filter with ink sucked with a syringe. Replace it with a new LC

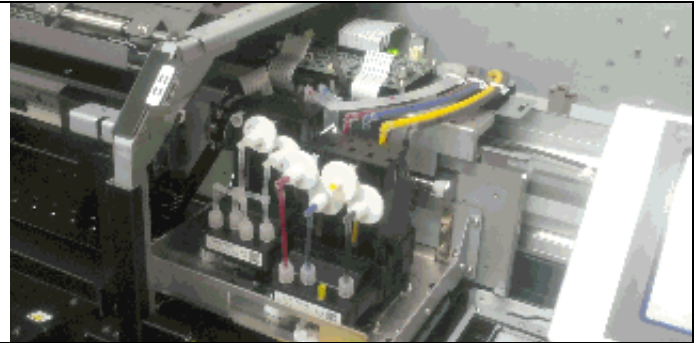


filter.



Step 98 / 121

Detail1: Reference video



Step 99 / 121

If air remains in the ink path, quality defects will occur. Be sure to use a syringe to suck ink to the LC filter.



Step 100 / 121

Use one syringe for each color, and be careful to dispose of the waste liquid, as the OP and ink will cured when mixed.



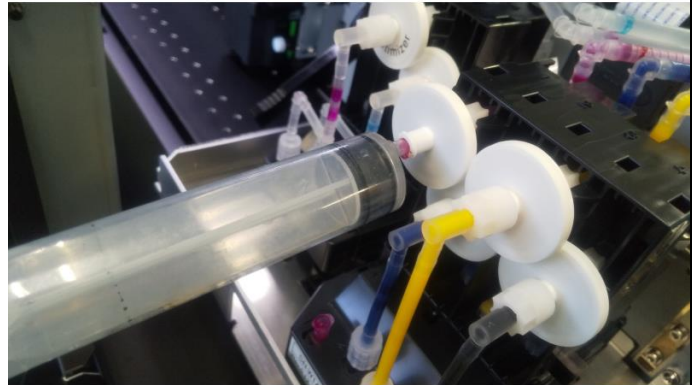
Step 101 / 121

Suck about 10 ml of ink using the syringe.



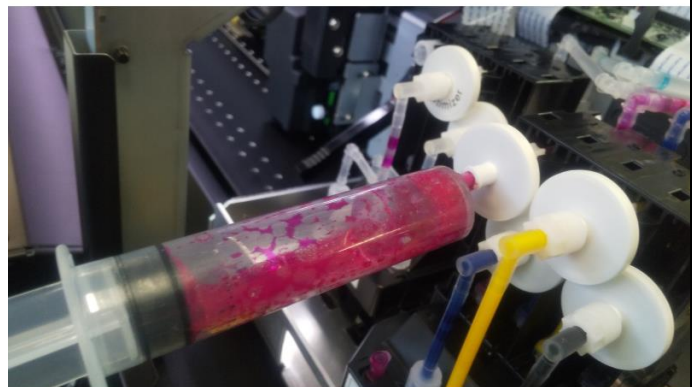
Step 102 / 121

Detail1: Press the syringe against the LC filter.



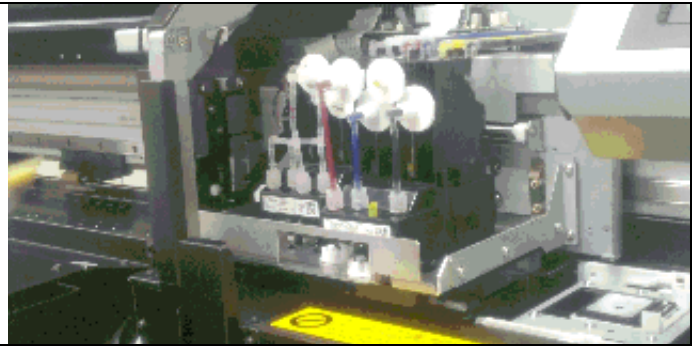
Step 103 / 121

Detail2: Suck about half of the syringe (about 10 ml) of ink. If ink cannot be sucked at one time, suck ink in several times. Do not mix the sucked ink in the syringe with the OP side and the CMYK side, and put them into the drain bottle.



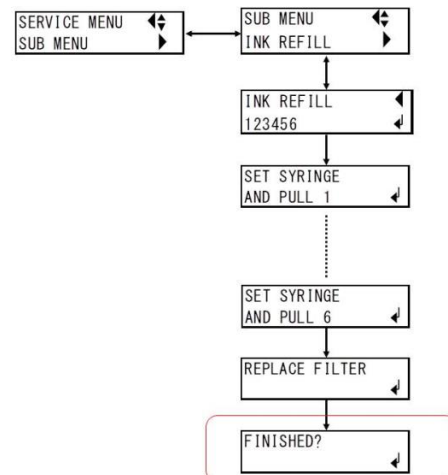
Step 104 / 121

Detail3: Reference video



Step 105 / 121

Confirm that the panel is set to [REPLACE FILTER] and press the [ENTER] button to exit [INK REFILL].



Step 106 / 121

Attach the tube to the print head, then the LC filter, in that order to prevent the tube from twisting.



Step 107 / 121

Detail1: With the tip of the tube inserted into the LC filter, attach the joints on the



print head.



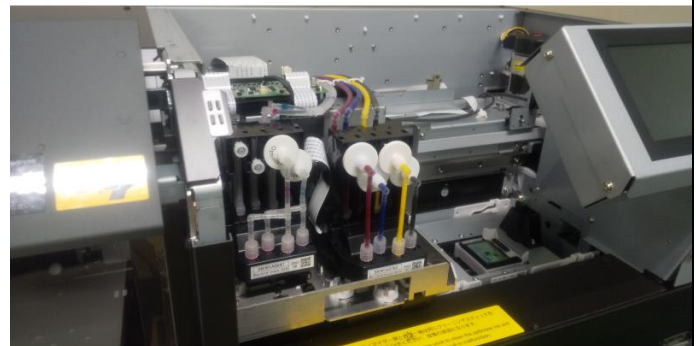
Step 108 / 121

Detail2: Make sure that the tube is not twisted.



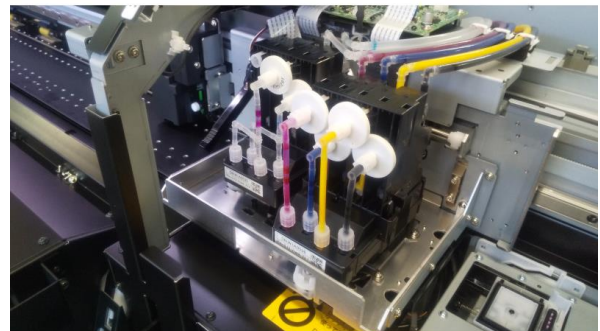
Step 109 / 121

Detail3: Attach the joints on the LC filter.



Step 110 / 121

Detail4: Check that the tube is not twisted.



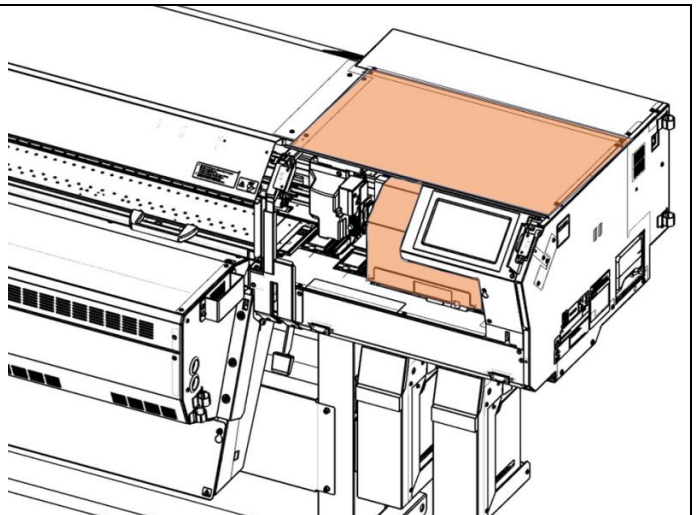
Step 111 / 121

Put back the covers that were removed.



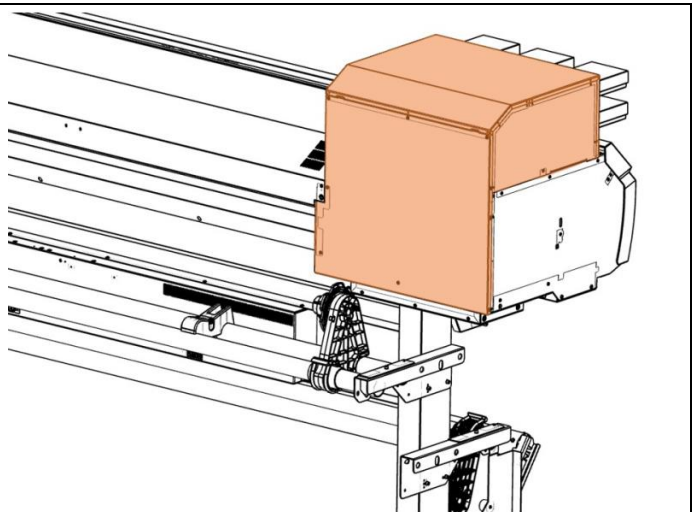
Step 112 / 121

Detail1: Covers around the panel



Step 113 / 121

Detail2: Ink pouch side



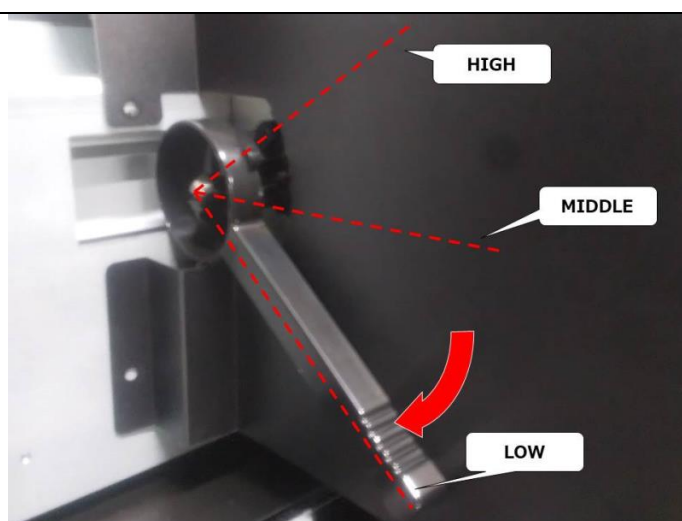
Step 114 / 121

Check that the drain bottles on the OP and CMYK are set correctly.



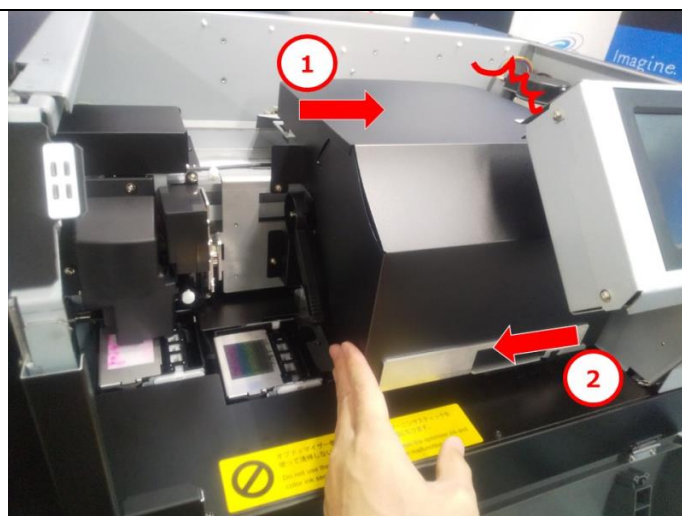
Step 115 / 121

Set the print head height to [LOW] for ink filling.



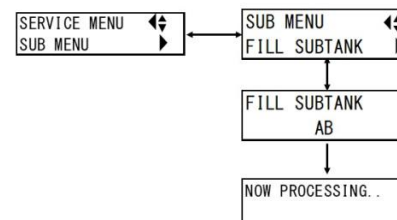
Step 116 / 121

Return the print head carriage to the origin position and lock it.



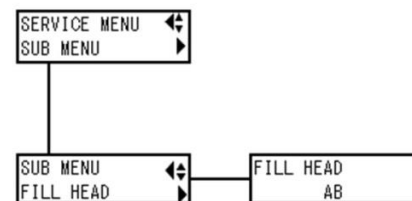
Step 117 / 121

Select [SERVICE MENU] > [SUB MENU] > [FILL SUBTANK] > [A/B] and fill the replaced sub-tank with ink.



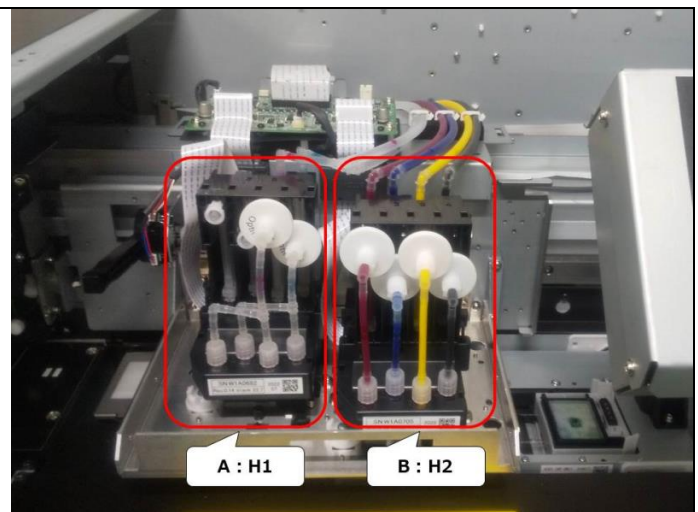
Step 118 / 121

Select [SERVICE MENU] > [SUB MENU] > [FILL HEAD] > [A/B] to fill the ink in the print head.



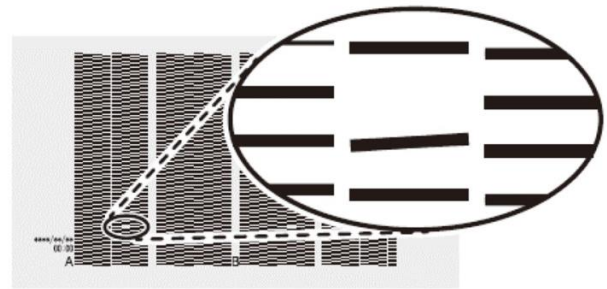
Step 119 / 121

Detail1: Print head arrangement



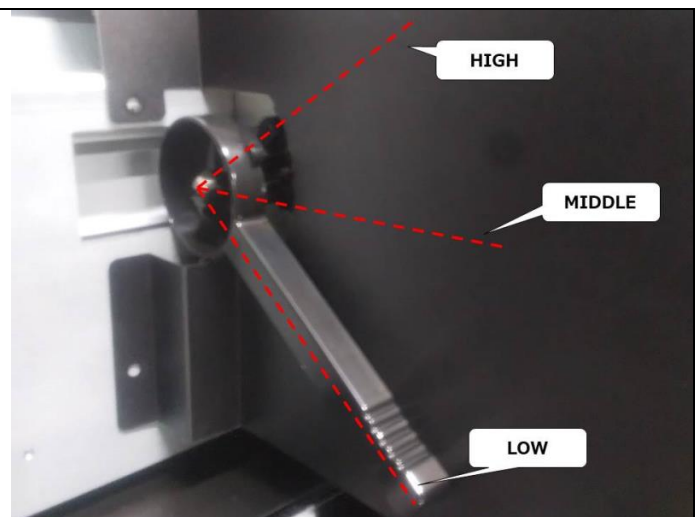
Step 120 / 121

Load the media and check for any abnormalities in ink ejection by test printing.



Step 121 / 121

If the print head height has been changed, return to the original height.



AP-640 Wiper unit replacement

AP-640 Wiper unit replacement Information

Step 1 / 5

Necessary Tools

一般ツール/General Tool

プラスドライバー No.2 No.2 Phillips screwdriver	
プラスドライバー No.2 (80mm 以下) No.2 Phillips screwdriver (80mm or less)	

Step 2 / 5

Special Tools

特殊治具/Special Tools

無し None	
------------	---

Step 3 / 5

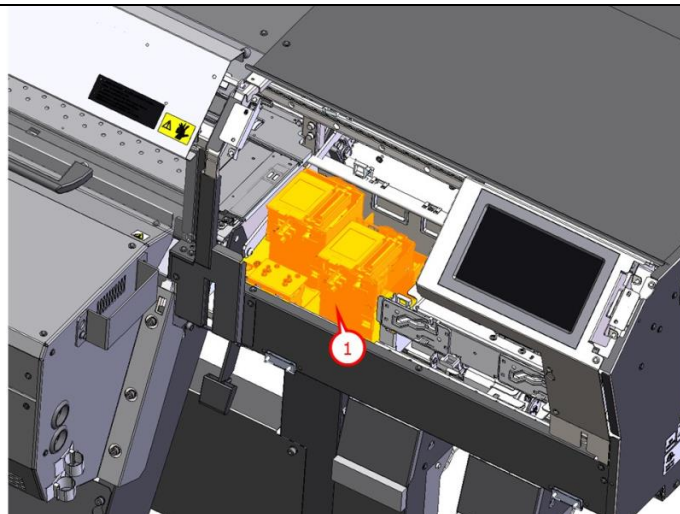
Typical Work Time

作業時間/Typical work time

作業内容/Contents of work	時間/Time
ワイパーユニット交換 Wiper Unit replacement	30 min.

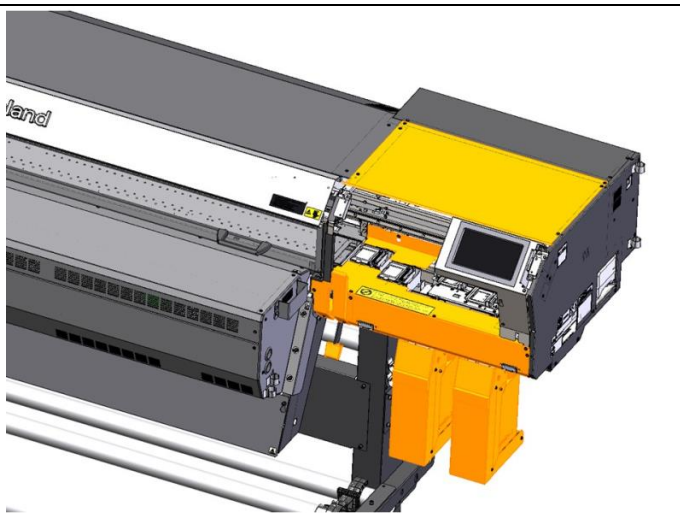
Step 4 / 5

1. Wiper unit



Step 5 / 5

Covers that need to be removed

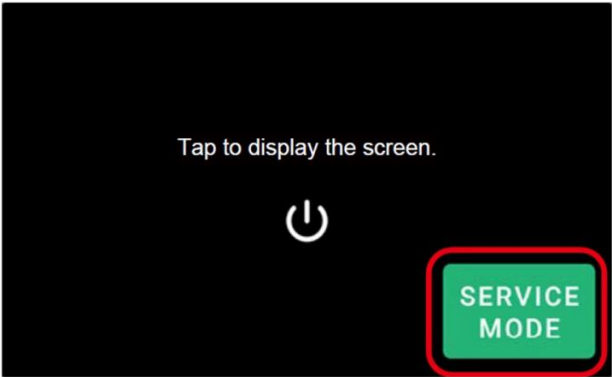


AP-640 Wiper unit replacement

AP-640 Wiper unit replacement Procedure

Step 1 / 60

Connect Peck2 to the machine and enter the service mode.

The image shows a black screen with the text "Tap to display the screen." at the top. In the center is a white power button icon. In the bottom right corner, there is a green rectangular button with the text "SERVICE MODE" in white, which is highlighted with a red rounded rectangle.

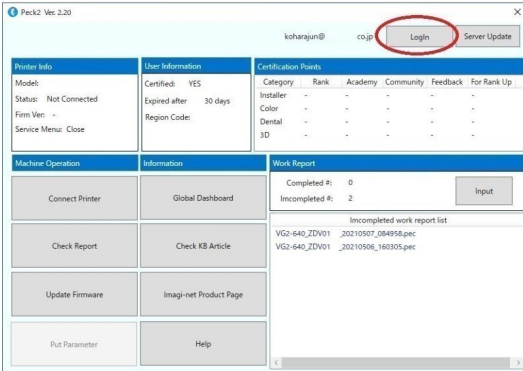
Step 2 / 60

Start Peck2.

The image shows the Peck2 logo, which is a blue circle containing a white woodpecker. To the right of the logo, the text "Peck2" is displayed in a large blue font, and "Ver. X.XX" is displayed in a smaller blue font below it. At the bottom right, the text "Imagine. Roland" is visible, with the Roland logo.

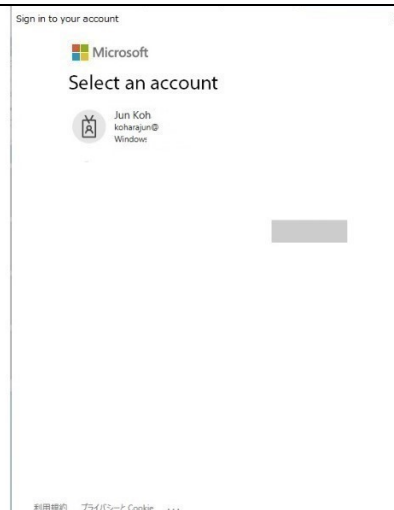
Step 3 / 60

Click the [Login] button.

The image shows the Peck2 login screen. At the top, there is a header bar with the text "Peck2 Ver. 2.20" on the left and "koharjun@ co.jp Login Server Update" on the right. The "Login" button is highlighted with a red circle. Below the header, there are three main sections: "Printer Info", "User Information", and "Certification Points". The "Printer Info" section contains fields for Model, Status, Firm Ver., and Service Menu. The "User Information" section contains fields for Certified, Expired after, and Region Code. The "Certification Points" section contains a table with columns for Category, Rank, Academy, Community, Feedback, and For Rank Up. Below these sections, there are buttons for "Connect Printer", "Check Report", "Update Firmware", "Put Parameter", "Global Dashboard", "Check KB Article", "Imagi-net Product Page", and "Help". On the right side, there is a "Work Report" section with fields for Completed #, Incompleted #, and a list of Incompleted work report items.

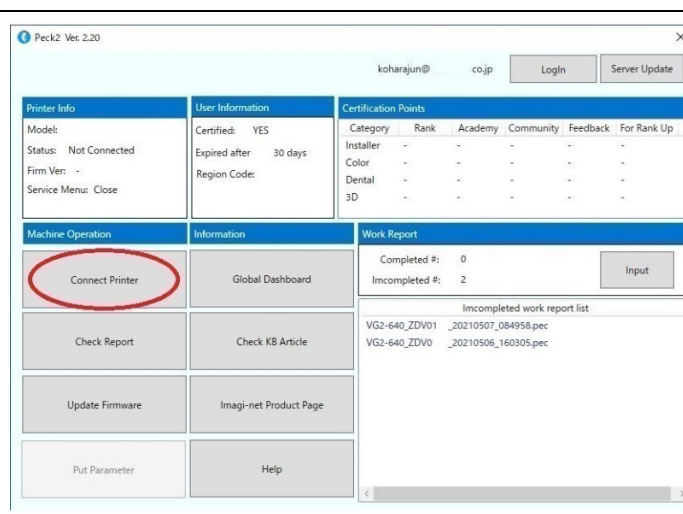
Step 4 / 60

Login with your Imagi-net ID.



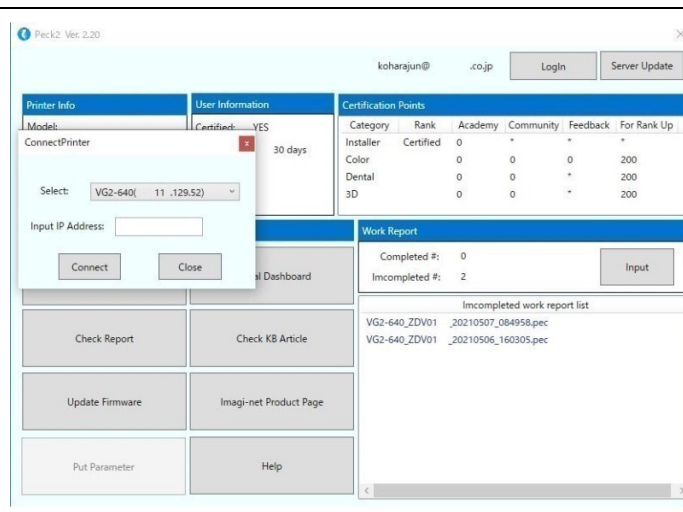
Step 5 / 60

Click the [Connect Printer] button.



Step 6 / 60

Enter the IP address of the device you would like to connect to.



Step 7 / 60

When the printer is connected, the printer information will be displayed in [Printer Info].

Peck2 Ver. 2.20

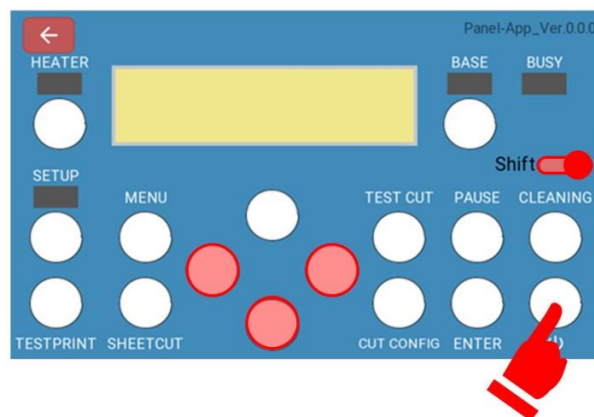
koharjun@ .co.jp Login Server Update

Printer Info		User Information		Certification Points				
Model: VG2-640_ZDV01	Certified: YES	Category	Rank	Academy	Community	Feedback	For Rank Up	
Status: UnSetup	Expired after: 30 days	Installer	Certified	0	*	*	*	
Firm Ver: 2.00		Color	0	0	0	200		
Service Menu: Open		Dental	0	0	*	200		
		3D	0	0	*	200		

Machine-Operation		Information		Work Report	
Connect Printer	Global Dashboard	Completed #: 0		Input	
Check Report	Check KB Article	Incompleted #: 2			
Update Firmware	Imagi-net Product Page	Incompleted work report list			
Put Parameter	Help	VG2-640_ZDV01 _20210507_084958.pec VG2-640_ZDV01 _20210506_160305.pec			

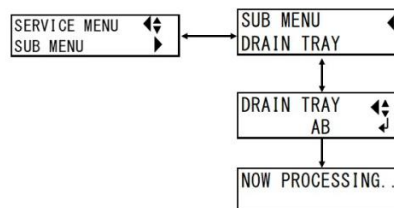
Step 8 / 60

Press [Shift]> [←]+[←]+[←]+[Sub Power] to enter the service mode. By turning on the [Shift] button, the multiple buttons can be pressed at the same time.



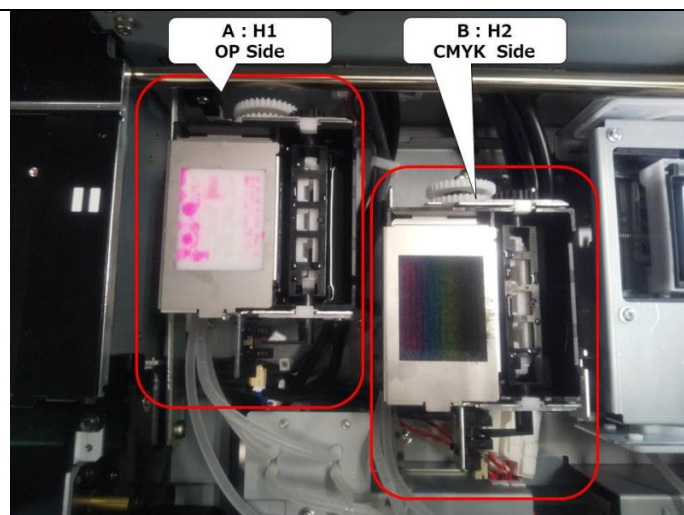
Step 9 / 60

Select [SERVICE MENU] > [SUB MENU] > [DRAIN TRAY] > [A/B] to drain the cleaning liquid from both A and B wiper trays.



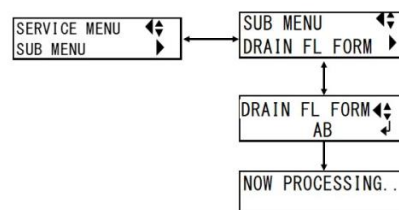
Step 10 / 60

Wiper Arrangement



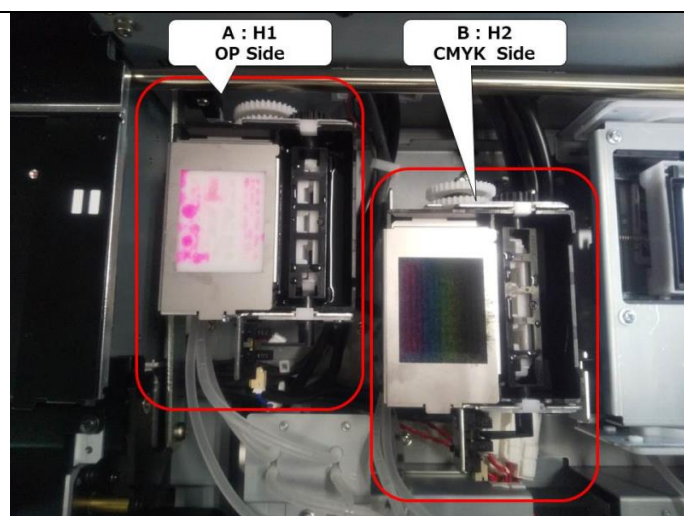
Step 11 / 60

Select [SERVICE MENU] > [SUB MENU] > [DRAIN FL FORM] > [A/B] to drain ink and cleaning liquid from both A and B FL pad.



Step 12 / 60

Wiper Arrangement



Step 13 / 60

Turn off the main power and unplug the power cable.



Step 14 / 60

Open the maintenance R.



Step 15 / 60

Unlock the print head carriage and move it onto the platen.



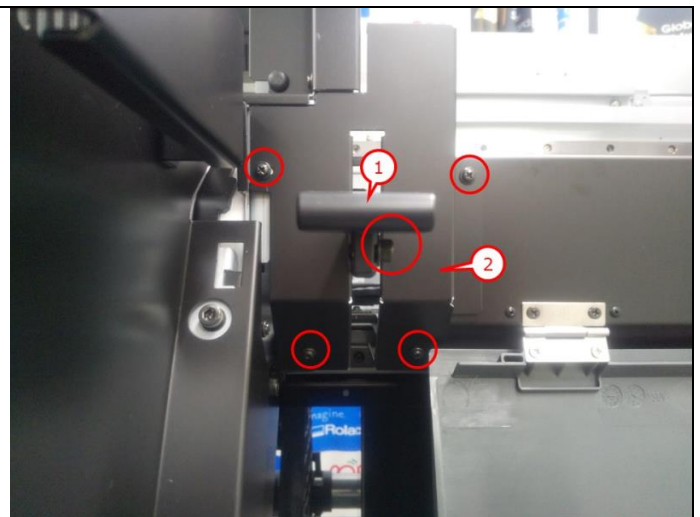
Step 16 / 60

Remove the screws and remove the cover.



Step 17 / 60

Remove the 1. resin lever and 2. lever cover.



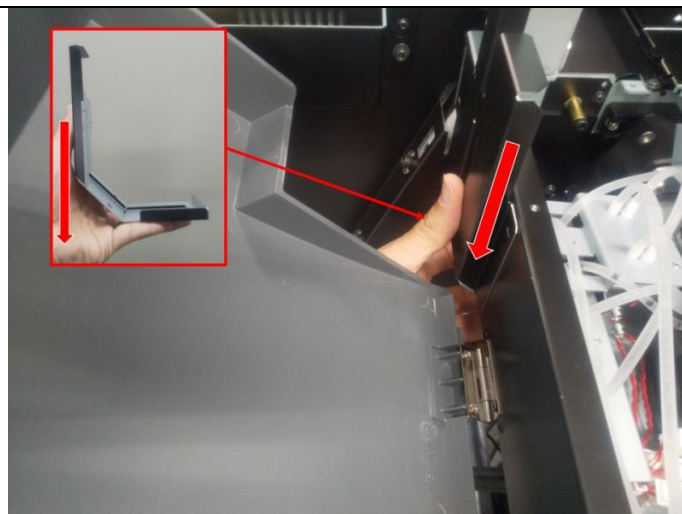
Step 18 / 60

Remove one screw and remove the plastic lever.



Step 19 / 60

Remove the 4 screws and remove the cover. Close the R side maintenance cover about halfway and move the cover straight down while the cover is still attached to the unit to remove it.



Step 20 / 60

Reference video



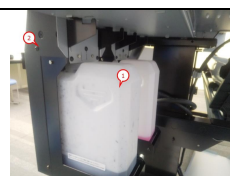
Step 21 / 60

Be careful not to splash the waste fluid from the tubes.



Step 22 / 60

Remove the drain bottle and the drain

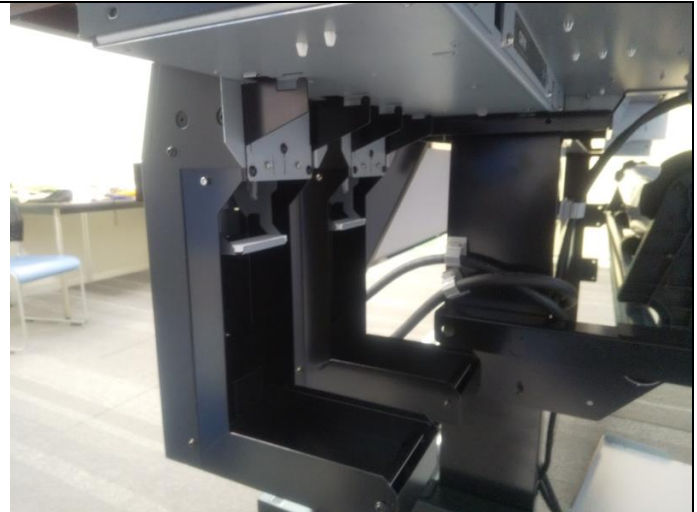


bottle stand.



Step 23 / 60

Remove the drain bottle.



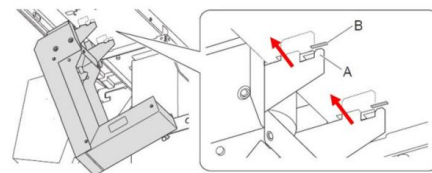
Step 24 / 60

Remove the four screws.



Step 25 / 60

Slide the drain bottle stand to the right side and put the tabs (A) into the grooves (B).



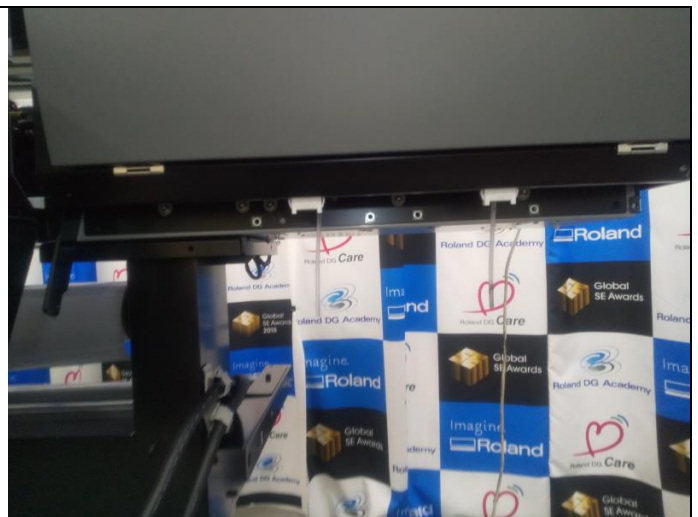
Step 26 / 60

Remove the connector.



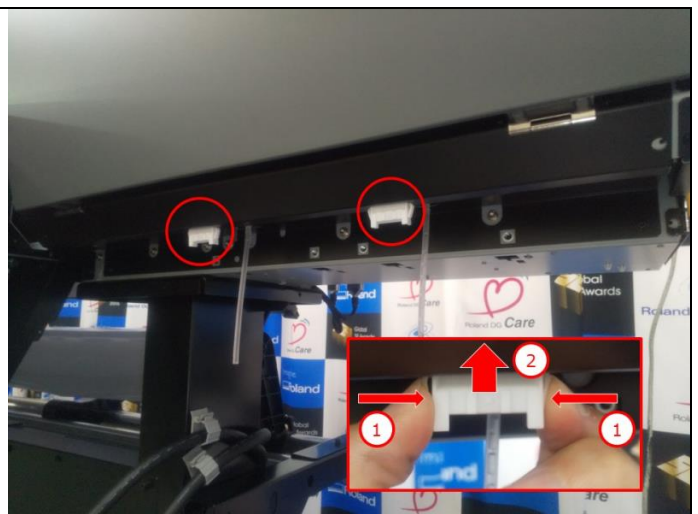
Step 27 / 60

Remove the drain bottle stand.



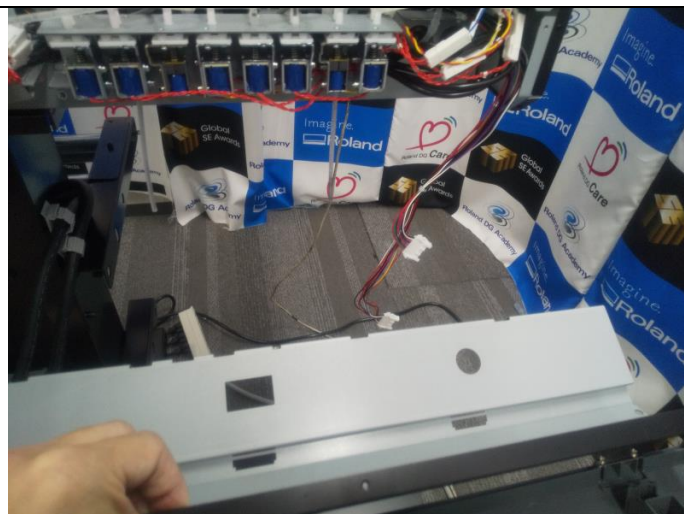
Step 28 / 60

Remove the connector from the cover.



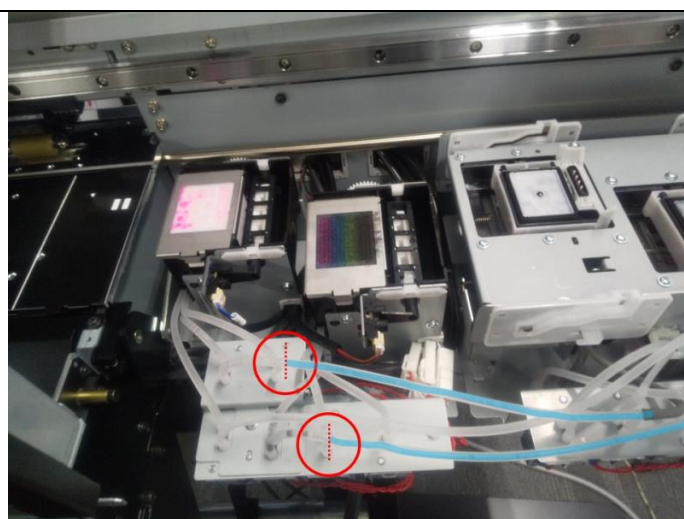
Step 29 / 60

Remove the screws and remove the cover. Remove the cover with the maintenance cover attached.



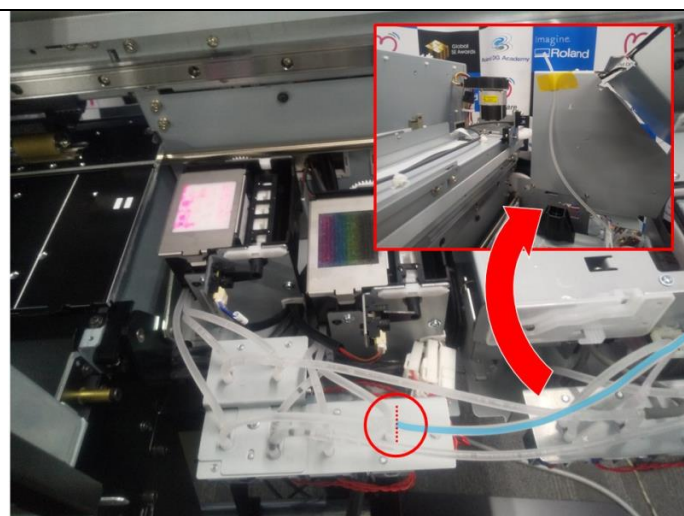
Step 30 / 60

Pull out the two tubes. The tube with the solenoid valve in its path will not leak fluid from the tube because the valve is closed.



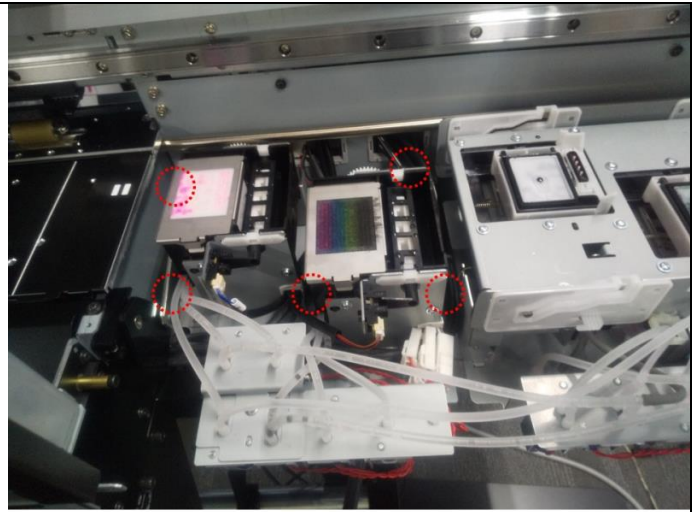
Step 31 / 60

Remove one tube and secure it with masking tape. This path does not have a solenoid valve in the middle, so if the tube is placed in a low position, fluid may leak out.



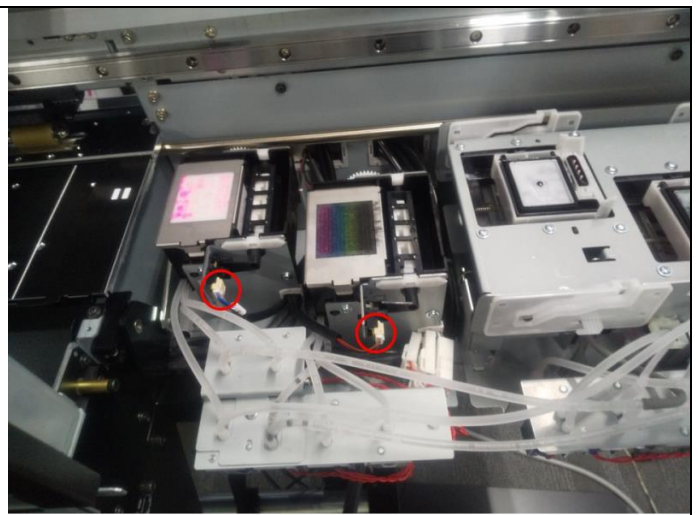
Step 32 / 60

Remove the five screws.



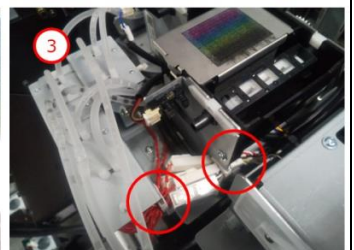
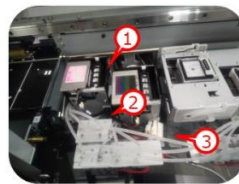
Step 33 / 60

Remove the sensor connector.



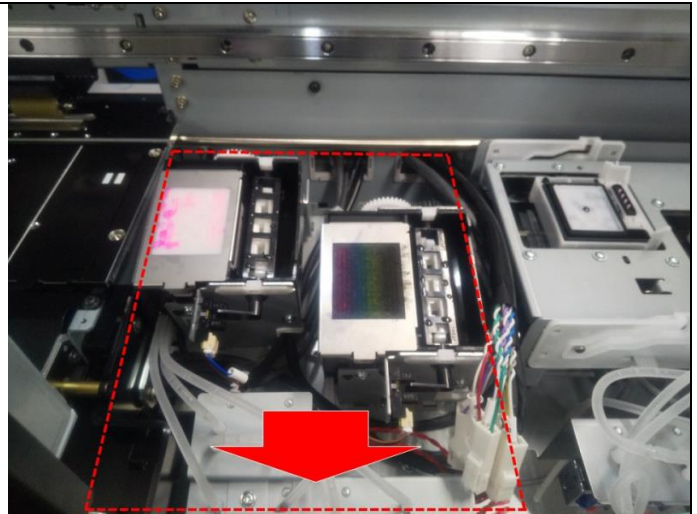
Step 34 / 60

Disconnect the cables from the clamps.



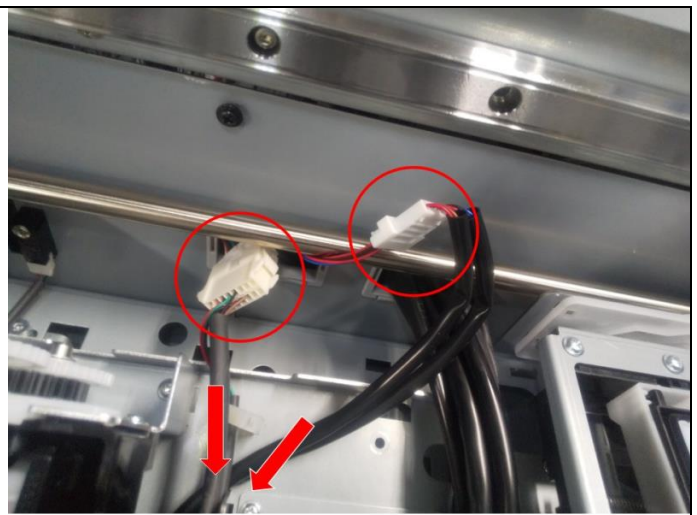
Step 35 / 60

Pull the wiper unit forward slightly to create an opening at the back where you can reach in.



Step 36 / 60

Pull the two cables on the left side to reveal the connectors. Pull out the connectors and remove them.



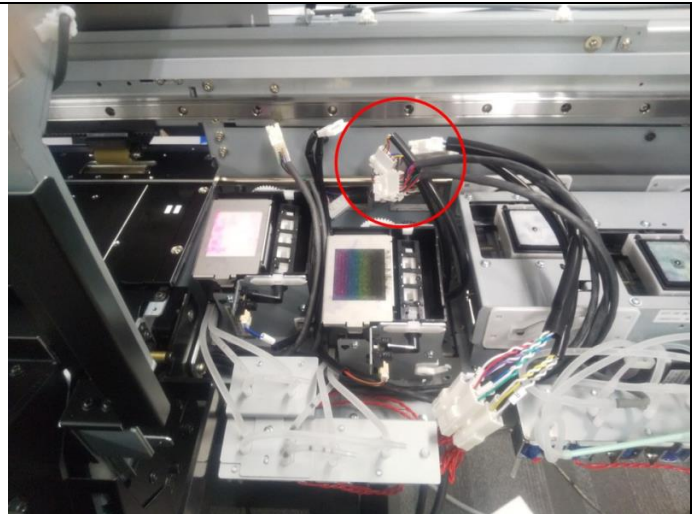
Step 37 / 60

Cut the sub-tie that hold the cables together on the right side.



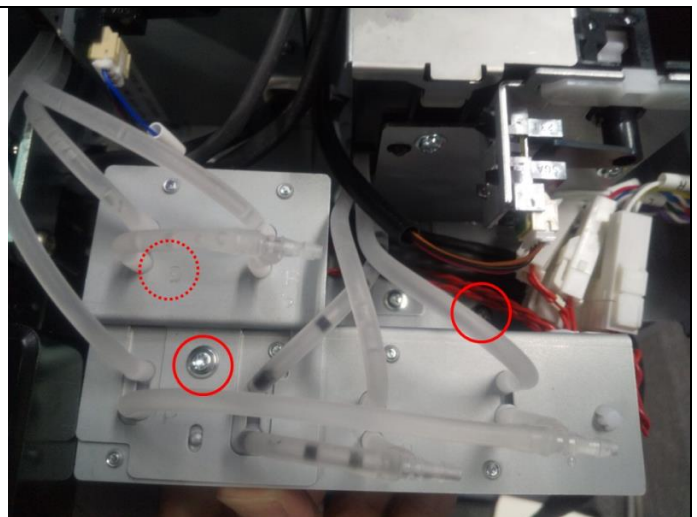
Step 38 / 60

Pull the cables out through the hole on the right side and remove the four connectors.



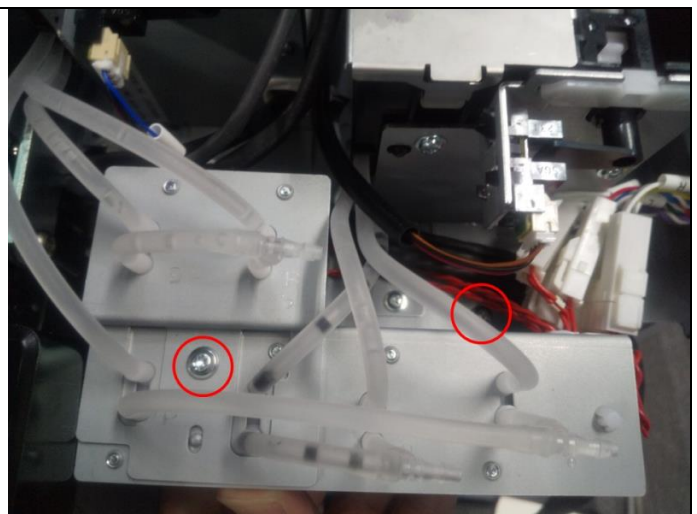
Step 39 / 60

Remove the two screws that fix the wiper unit and solenoid valve assembly. For the part where the screws are hidden, remove the solenoid valve plate and insert a screwdriver through the gap in the plate.



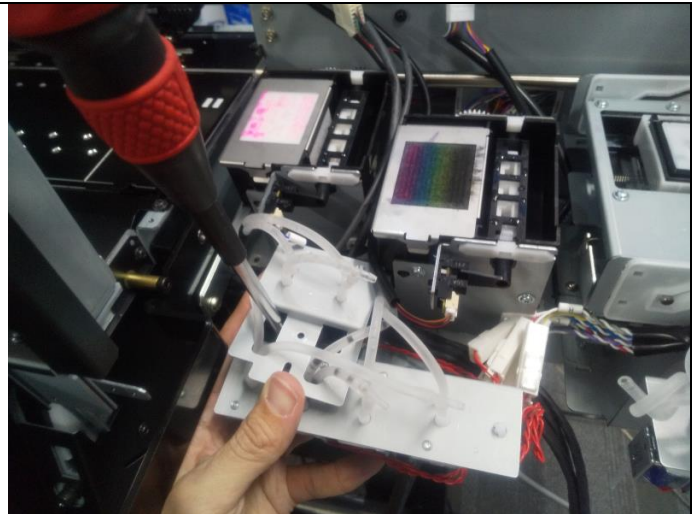
Step 40 / 60

Remove the two screws.



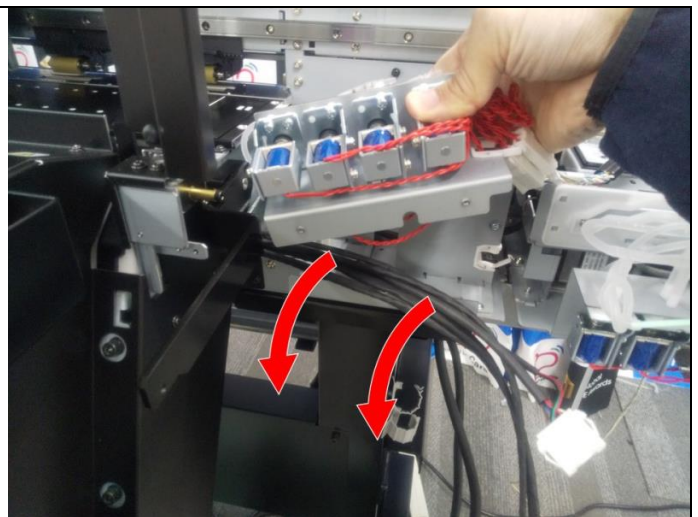
Step 41 / 60

With the tube attached, move the plate to the back and insert a screwdriver through the gap in the plate to remove the screws.



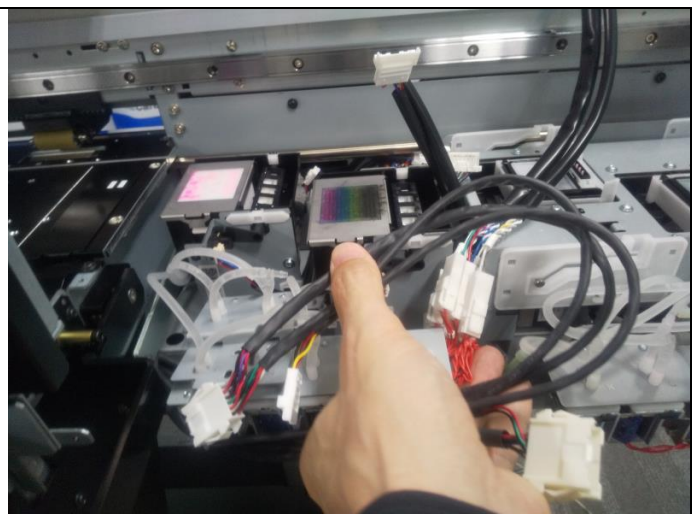
Step 42 / 60

Move the cables from between the wiper unit and the solenoid valve assembly under the wiper unit.



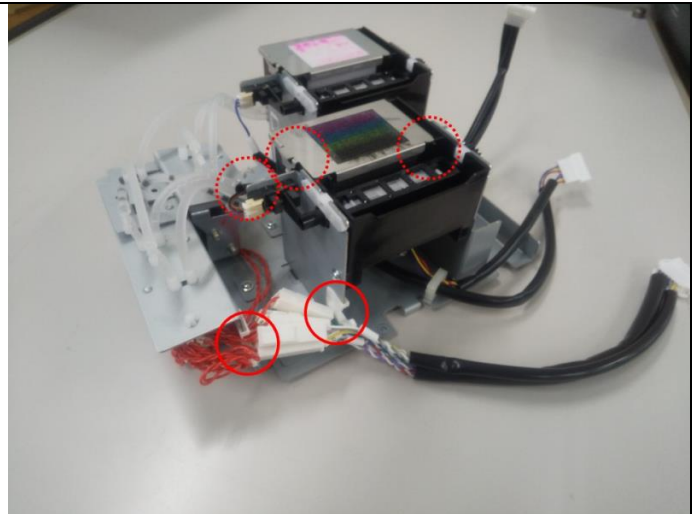
Step 43 / 60

Remove the wiper unit, taking care to avoid cables and tubes.



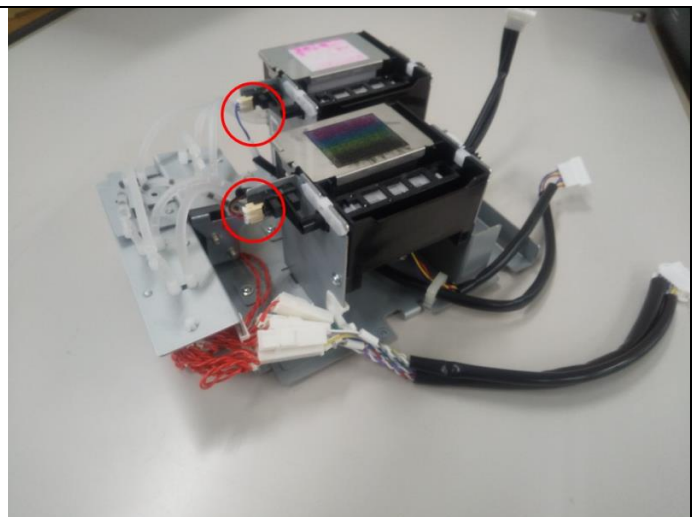
Step 44 / 60

Prepare a new wiper unit and open the clamps.



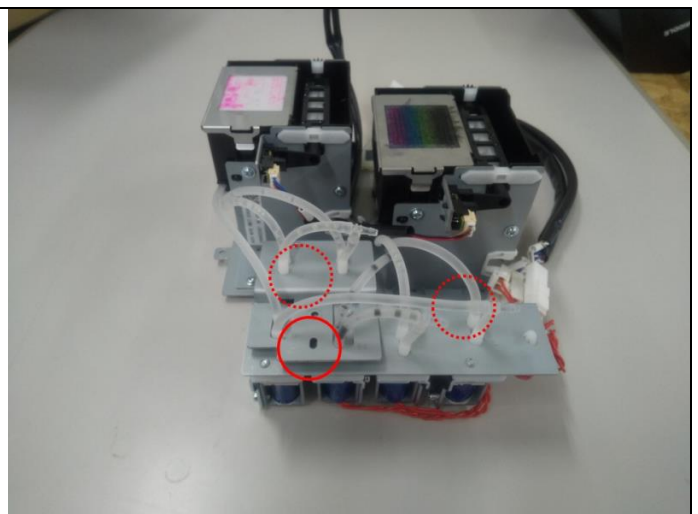
Step 45 / 60

Remove the connectors.



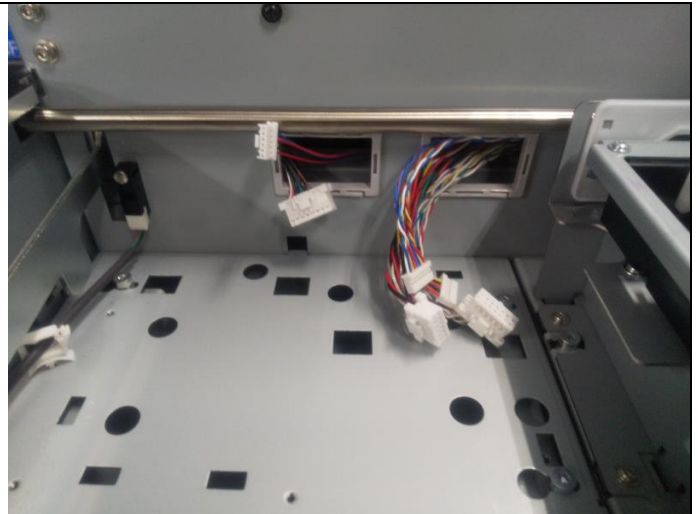
Step 46 / 60

Remove the two screws that fix the wiper unit and solenoid valve assembly. Where the screws are hidden, remove the solenoid valve plate and insert a screwdriver through the gap in the plate.



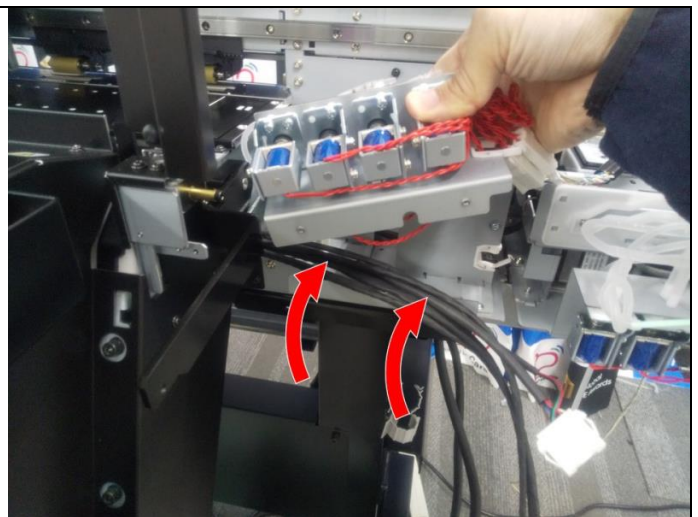
Step 47 / 60

Make sure the mounting area is free of dust and dirt, and place the new wiper unit slightly forward of the mounting position.



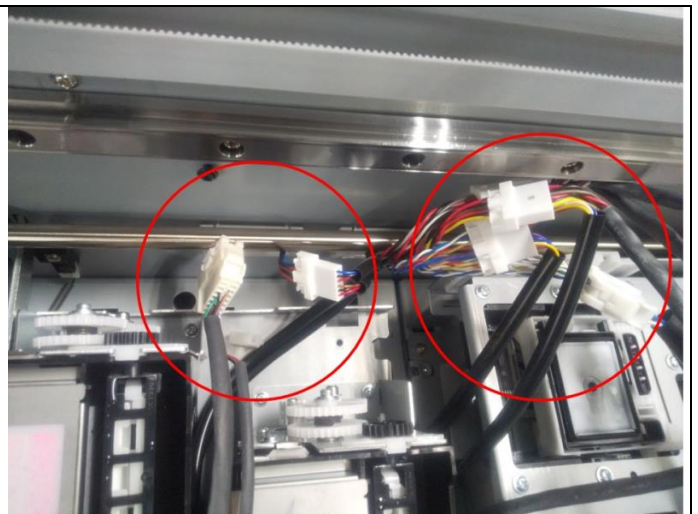
Step 48 / 60

Insert the three cables on the machine side from between the wiper unit and the solenoid valve assembly, and align them with the wiper unit.



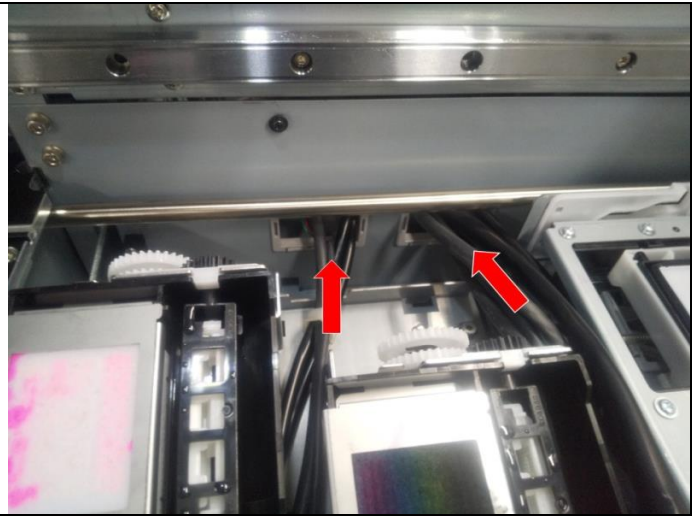
Step 49 / 60

Install the cable connectors. (2 on the left side, 4 on the right side)



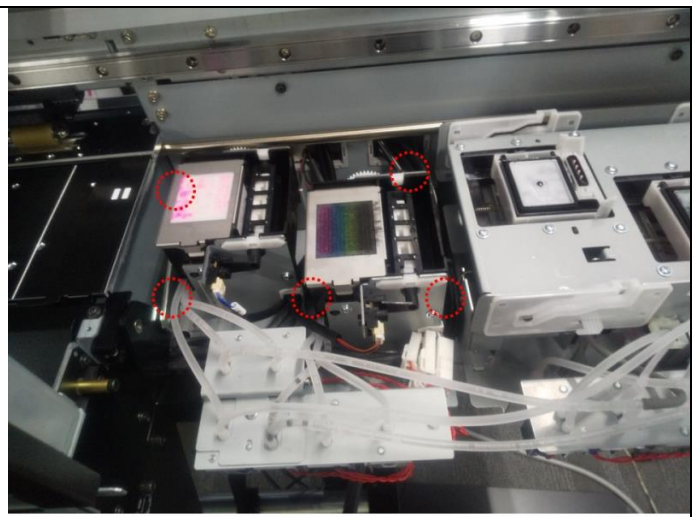
Step 50 / 60

Set the wiper unit to the screw installation position while feeding the cable with the connector inserted deep into the hole.



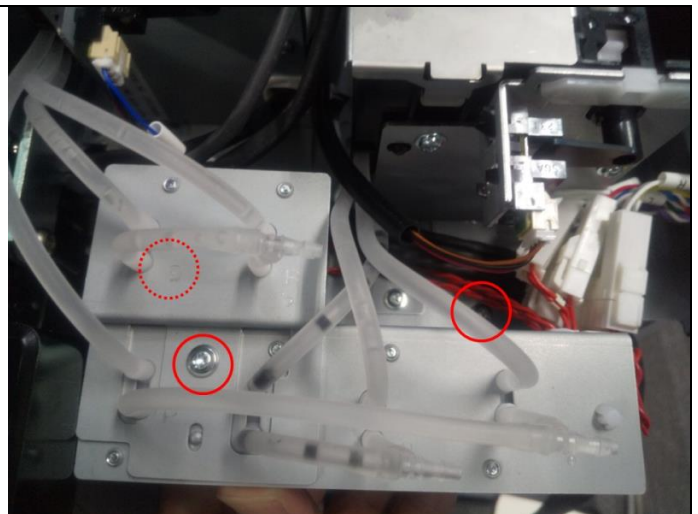
Step 51 / 60

Tighten the five screws.



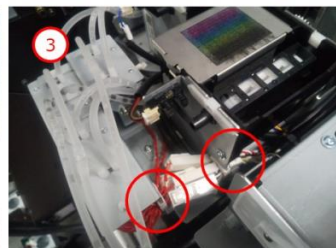
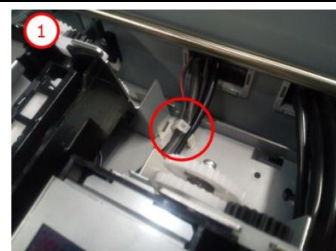
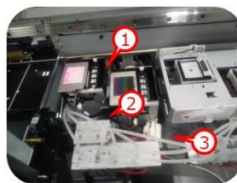
Step 52 / 60

Tighten the three screws that assemble the wiper unit and solenoid valve assembly.



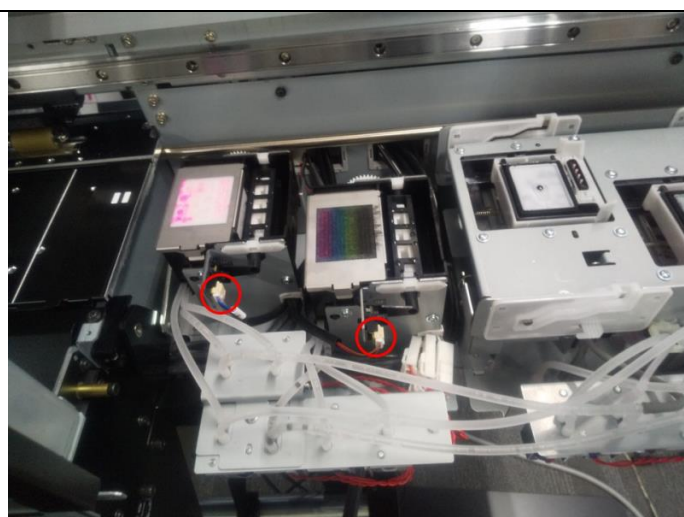
Step 53 / 60

Secure the disconnected cables with the clamps.



Step 54 / 60

Plug the connectors.



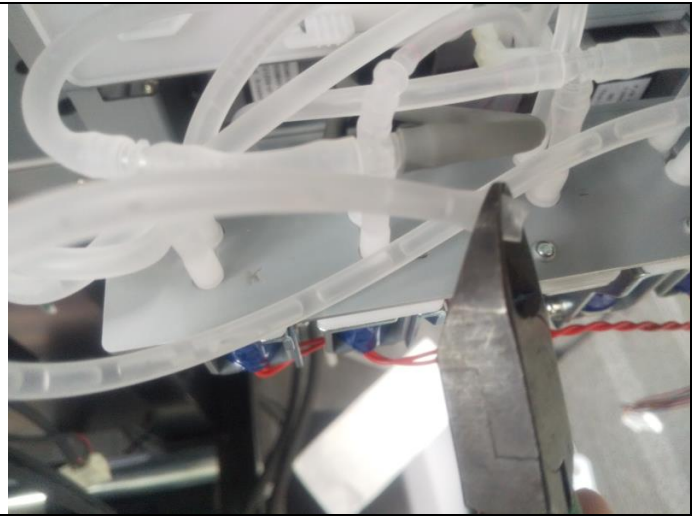
Step 55 / 60

After removing the tube, be sure to cut the tip of the tube by about 5 mm because the tube opening is wide. If the tube is not long enough, replace it with a new one.



Step 56 / 60

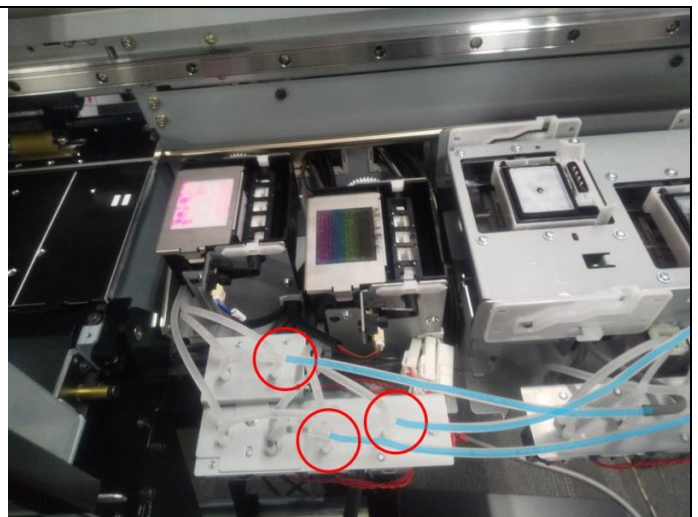
Cut about 5 mm off the end of the tube.



Step 57 / 60

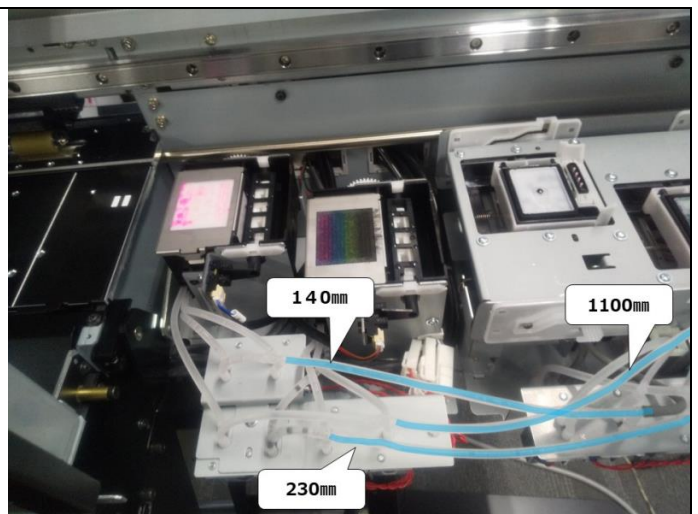
Assemble the tubes in three places.

Assemble the tubes up to the butt end.



Step 58 / 60

Tube length



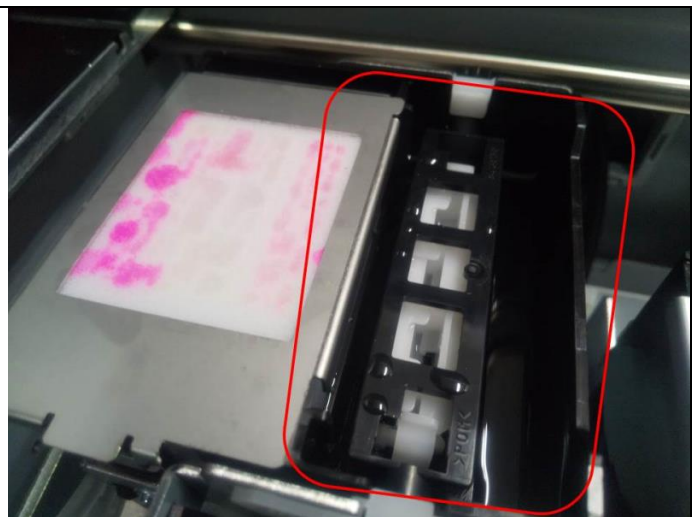
Step 59 / 60

Install the removed covers.



Step 60 / 60

Attach the power cord and turn on the sub power, and the cleaning liquid will be automatically filled. Confirm that the cleaning liquid has been refilled.



AP-640 Wiper motor replacement

AP-640 Wiper motor replacement

Information

Step 1 / 5

Necessary Tools

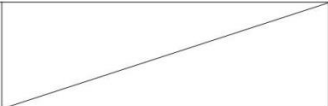
一般ツール/General Tool

プラスドライバー No.2 No.2 Phillips screwdriver	
プラスドライバー No.2 (80mm 以下) No.2 Phillips screwdriver (80mm or less)	

Step 2 / 5

Special Tools

特殊治具/Special Tools

無し None	
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Step 3 / 5

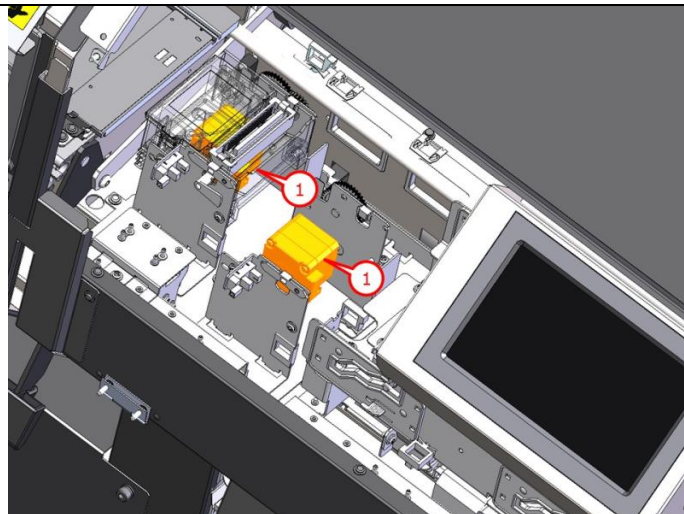
Typical Work Time

作業時間/Typical work time

作業内容/Contents of work	時間/Time
ワイパーモーター交換 Wiper Motor replacement	15 min.

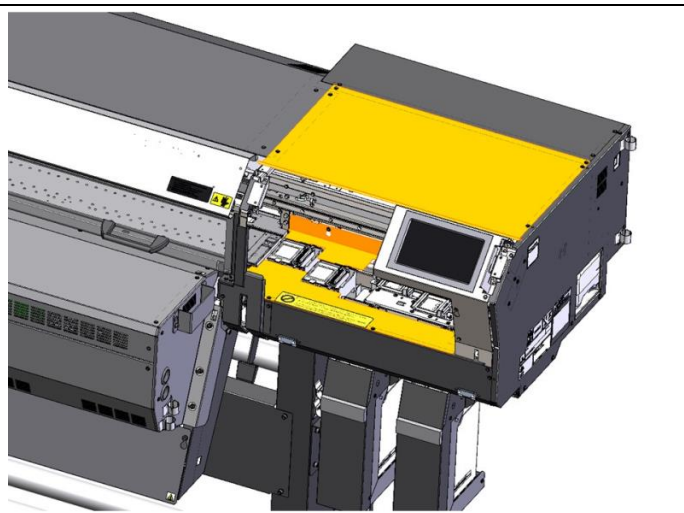
Step 4 / 5

1. Motor



Step 5 / 5

Covers that need to be removed

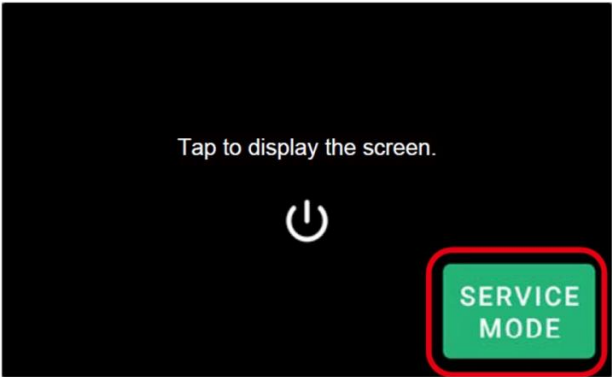


AP-640 Wiper motor replacement

AP-640 Wiper motor replacement Procedure

Step 1 / 37

Connect Peck2 to the machine and enter Service Mode.

A black screen with the text "Tap to display the screen." at the top. In the center is a white power button icon. In the bottom right corner, there is a green rectangular button with the text "SERVICE MODE" in white, which is highlighted with a red rounded rectangle.

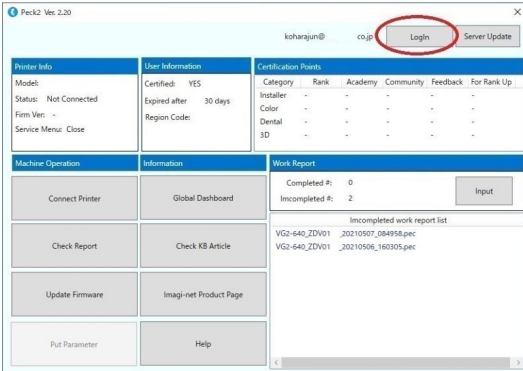
Step 2 / 37

Start Peck2.

The Peck2 logo, which is a blue circle containing a white woodpecker, is on the left. To its right, the text "Peck2" is displayed in a large blue font, followed by "Ver. X.XX" in a smaller blue font. At the bottom right, the text "Imagine. Roland" is shown, with the Roland logo.

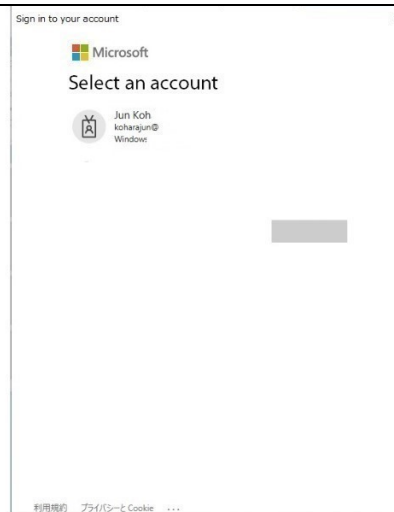
Step 3 / 37

Click the [Login] button.

A screenshot of the Peck2 web interface. At the top right, there is a "Login" button circled in red. The interface includes several sections: "Printer Info" (Model, Status, Firm Ver., Service Menu), "User Information" (Certified, Expired after, Region Code), "Certification Points" (Category, Rank, Academy, Community, Feedback, For Rank Up), "Machine Operation" (Connect Printer, Check Report, Update Firmware, Put Parameter), "Information" (Global Dashboard, Check KB Article, Imagi-net Product Page, Help), and "Work Report" (Completed #, Incompleted #, Incompleted work report list).

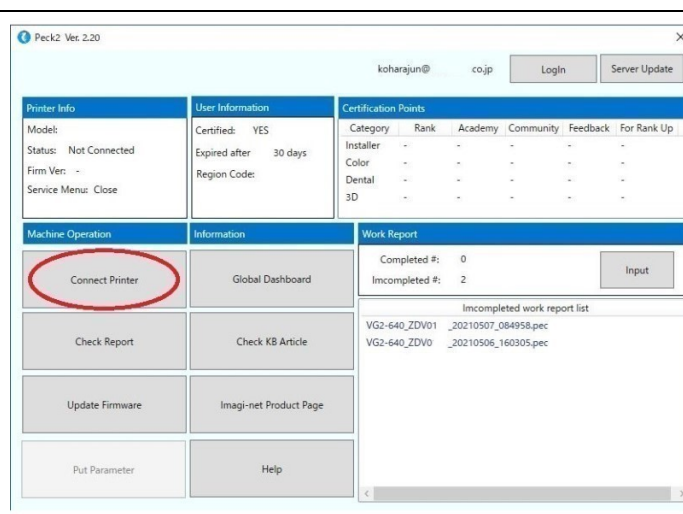
Step 4 / 37

Login with your Imagi-net ID.



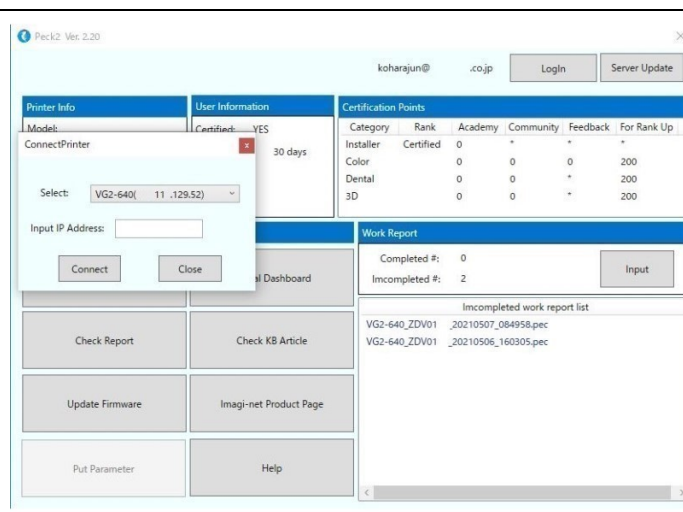
Step 5 / 37

Click the [Connect Printer] button.



Step 6 / 37

Enter the IP address of the device you would like to connect to.



Step 7 / 37

When the printer is connected, the printer information will be displayed in [Printer Info].

Peck2 Ver. 2.20

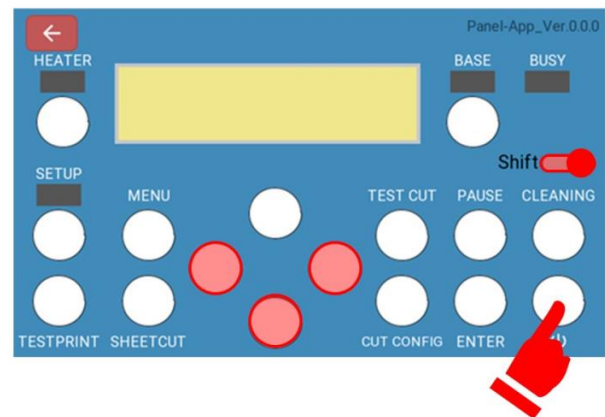
koharjun@ .co.jp Login Server Update

Printer Info		User Information		Certification Points				
Model: VG2-640_ZDV01	Certified: YES	Category	Rank	Academy	Community	Feedback	For Rank Up	
Status: UnSetup	Expired after: 30 days	Installer	Certified	0	*	*	*	
Firm Ver: 2.00		Color	0	0	0	200		
Service Menu: Open		Dental	0	0	*	200		
		3D	0	0	*	200		

Machine-Operation		Information		Work Report	
Connect Printer	Global Dashboard	Completed #: 0		Input	
Check Report	Check KB Article	Incompleted #: 2			
Update Firmware	Imagi-net Product Page	Incompleted work report list			
Put Parameter	Help	VG2-640_ZDV01 _20210507_084958.pec			
		VG2-640_ZDV01 _20210506_160305.pec			

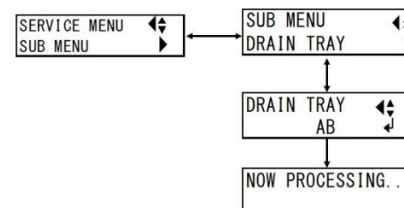
Step 8 / 37

Press [Shift]> [←]+[→]+[→]+[Sub Power] to enter the service mode. By turning on the [Shift] button, the multiple buttons can be pressed at the same time.



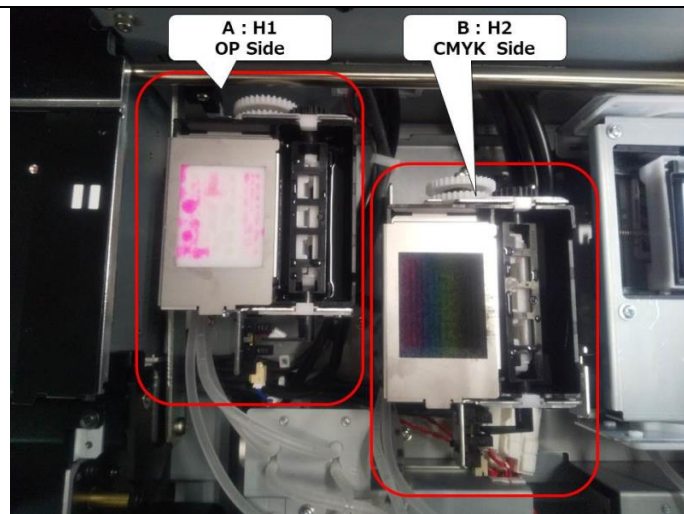
Step 9 / 37

Select [SERVICE MENU] > [SUB MENU] > [DRAIN TRAY] > [A/B] to drain the cleaning liquid from the wiper tray on the motor to be replaced.



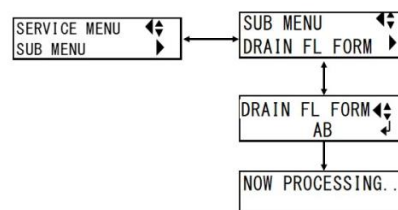
Step 10 / 37

Wiper Arrangement



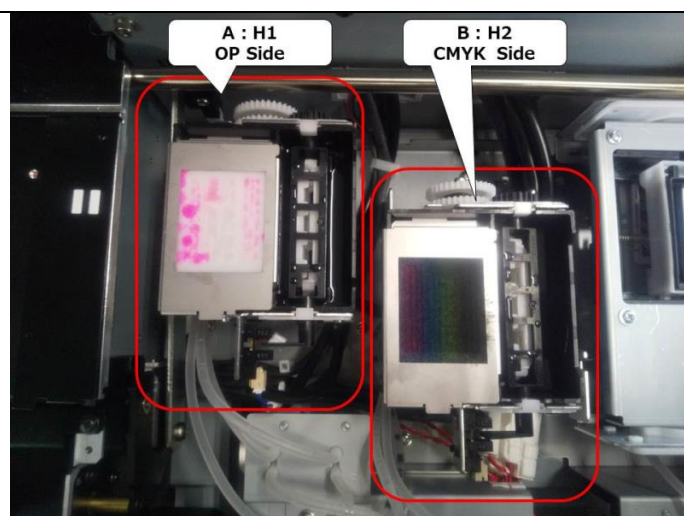
Step 11 / 37

Select [SERVICE MENU] > [SUB MENU] > [DRAIN FL FORM] > [A/B] to drain ink and cleaning liquid from FL pad of the motor to be replaced.



Step 12 / 37

Wiper Arrangement



Step 13 / 37

Turn off the main power and unplug the power cable.



Step 14 / 37

Open the maintenance R.



Step 15 / 37

Unlock the print head carriage and move it onto the platen.



Step 16 / 37

Remove the screws and remove the cover.



Step 17 / 37

Remove 6 screws from the metal plate.



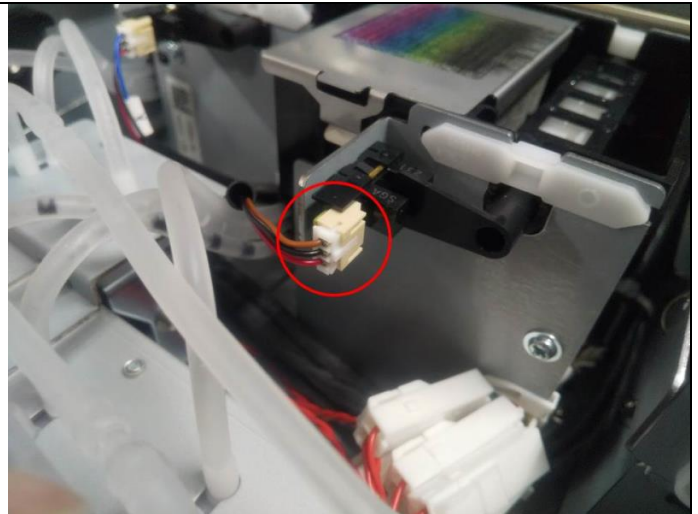
Step 18 / 37

Remove the four red screws, loosen the yellow screws about two turns, and remove the metal plate.



Step 19 / 37

Remove the sensor connector.



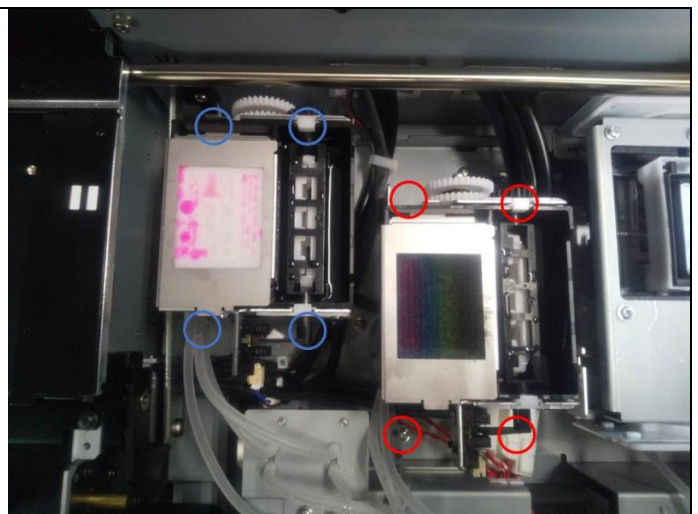
Step 20 / 37

Disconnect the cables from the clamp.



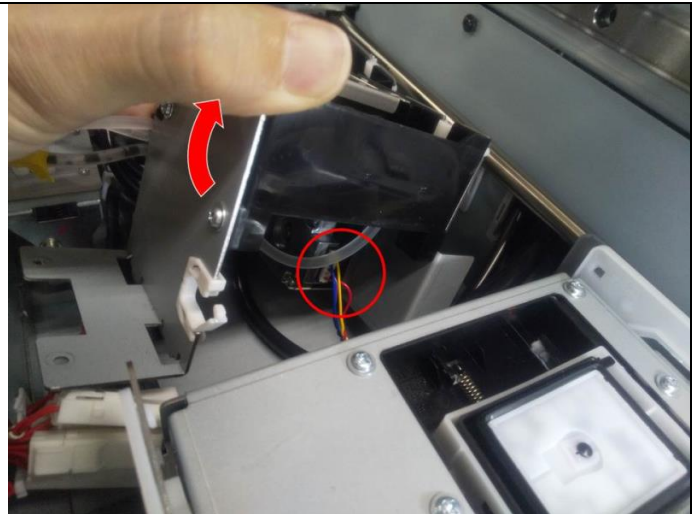
Step 21 / 37

Remove the four screws from the wiper unit.



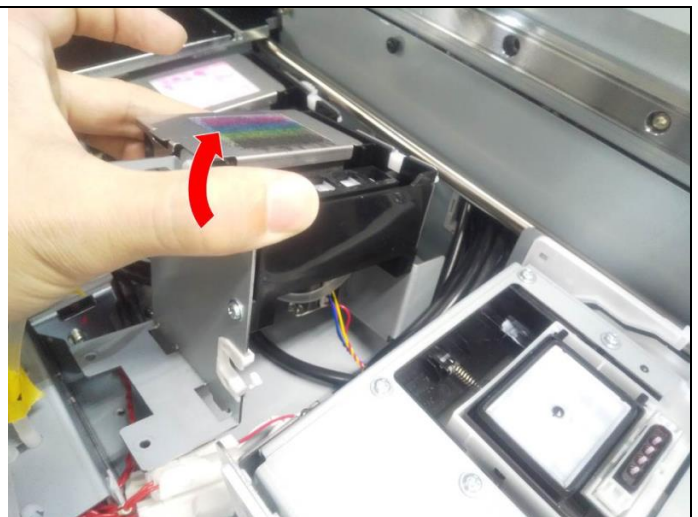
Step 22 / 37

Lift up the wiper unit and remove the connector attached to the motor.



Step 23 / 37

Lift up the wiper unit, taking care of the cables and tubes.



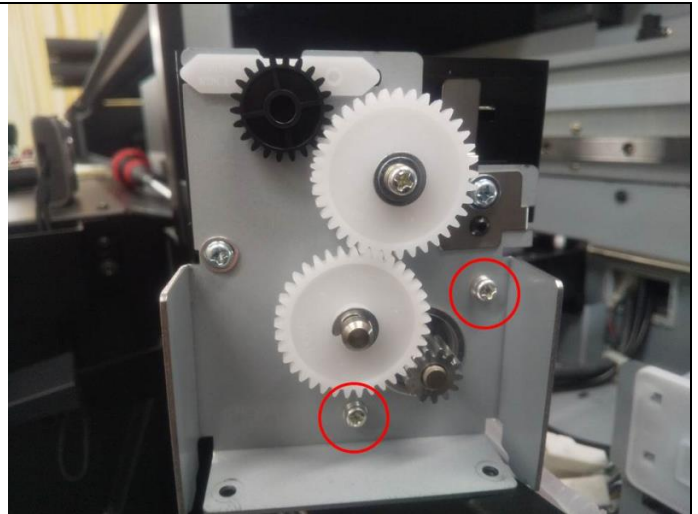
Step 24 / 37

Remove the connector from the motor.



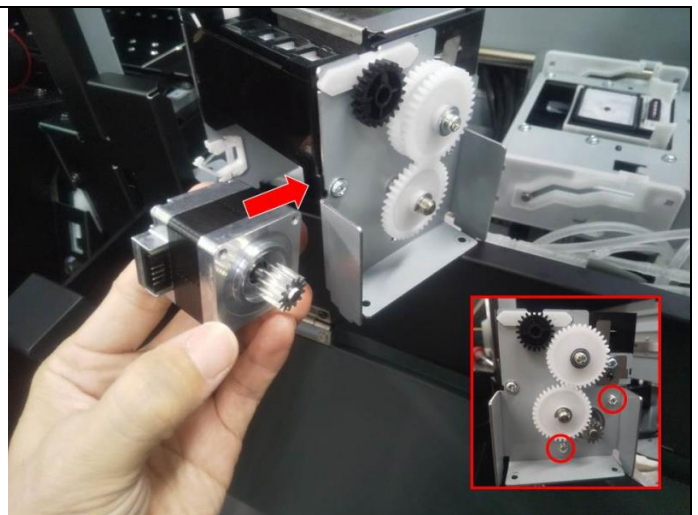
Step 25 / 37

Remove the two screws from the motor.



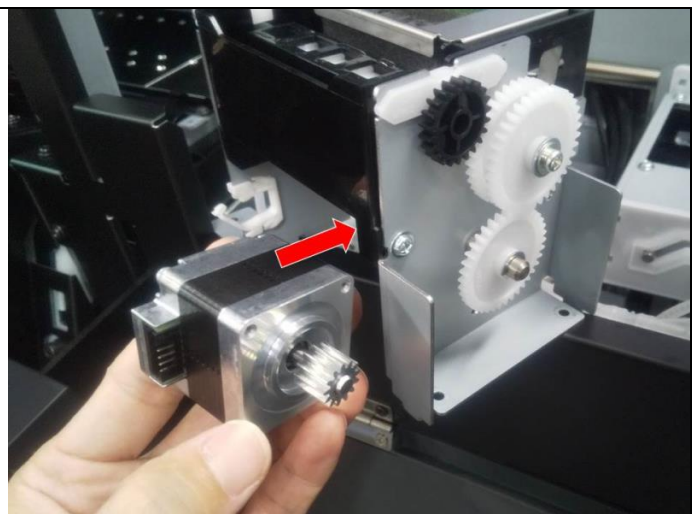
Step 26 / 37

Install the new motor, taking care to orient it for installation.



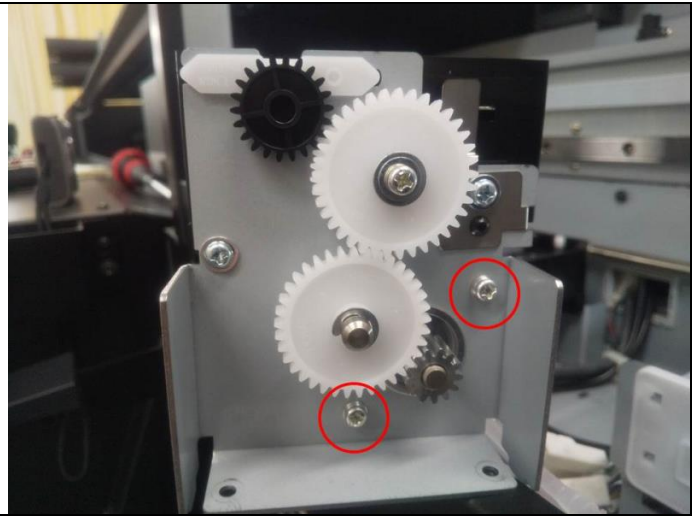
Step 27 / 37

Check the orientation of the motor to be installed.



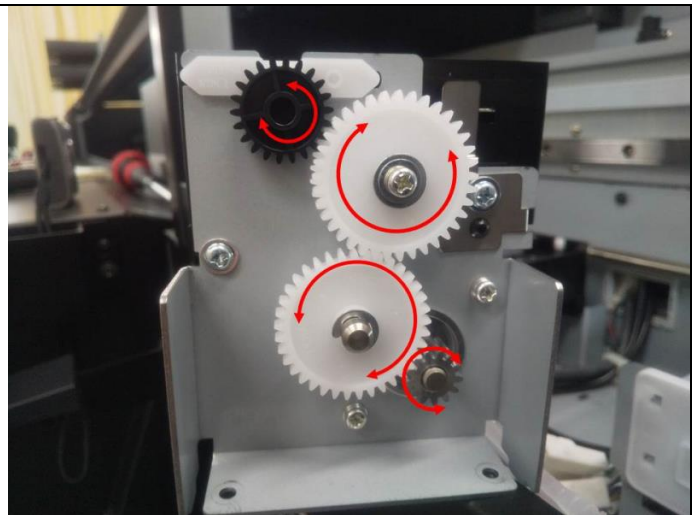
Step 28 / 37

Temporarily fasten the two screws.



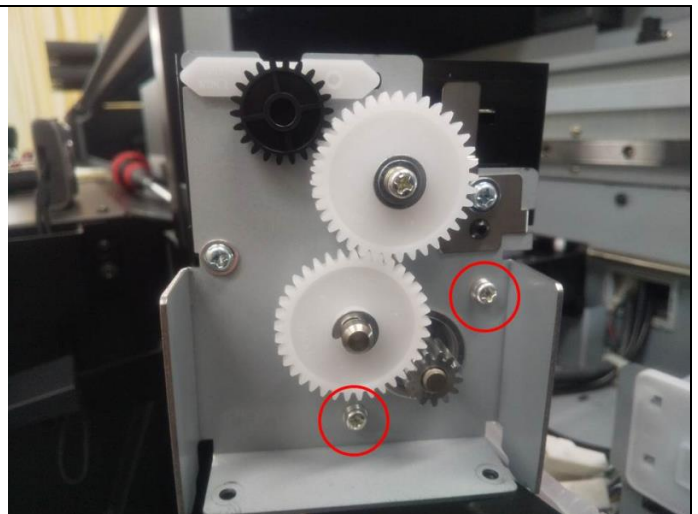
Step 29 / 37

Move the gear back and forth a few times.



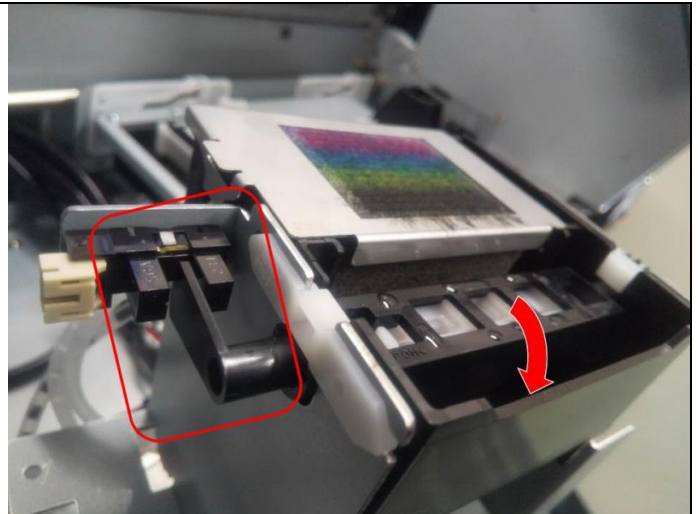
Step 30 / 37

Retighten the screws.



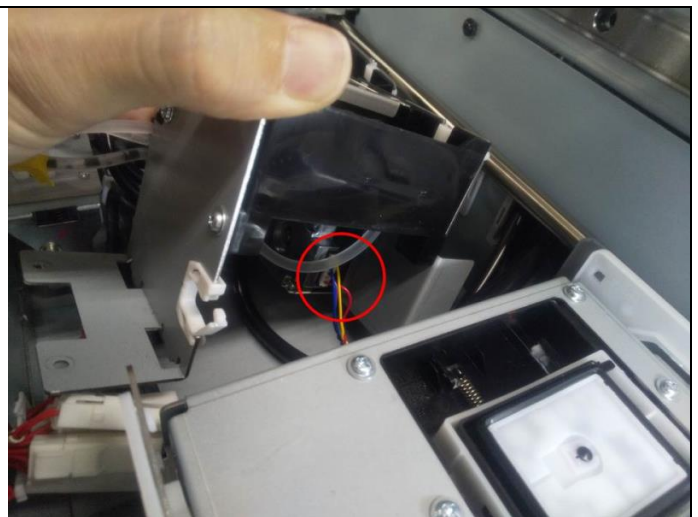
Step 31 / 37

Return the wiper to the home position so that it does not interfere with the print head carriage.



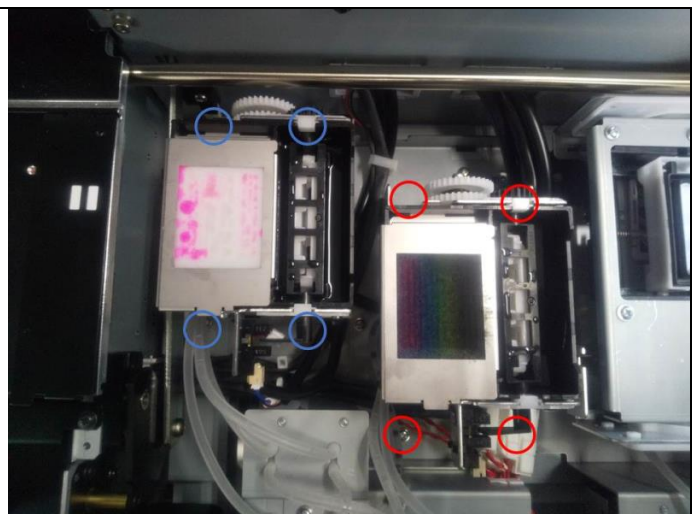
Step 32 / 37

Attach the connector to the motor.



Step 33 / 37

Install the wiper unit.



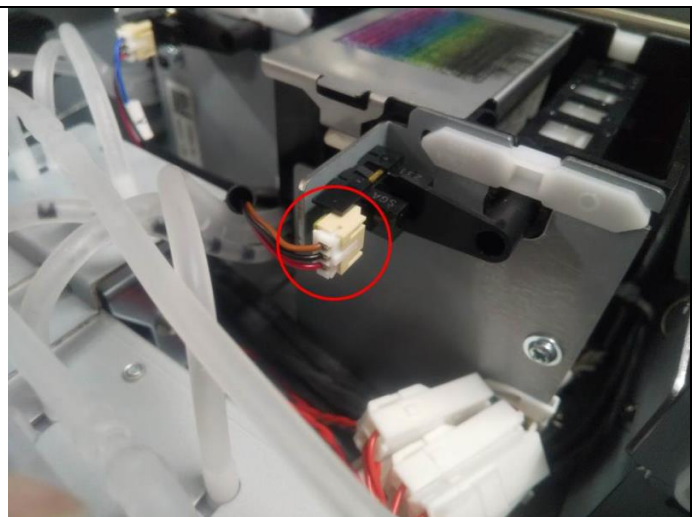
Step 34 / 37

Attach the cables to the clamp.



Step 35 / 37

Install the sensor connector.



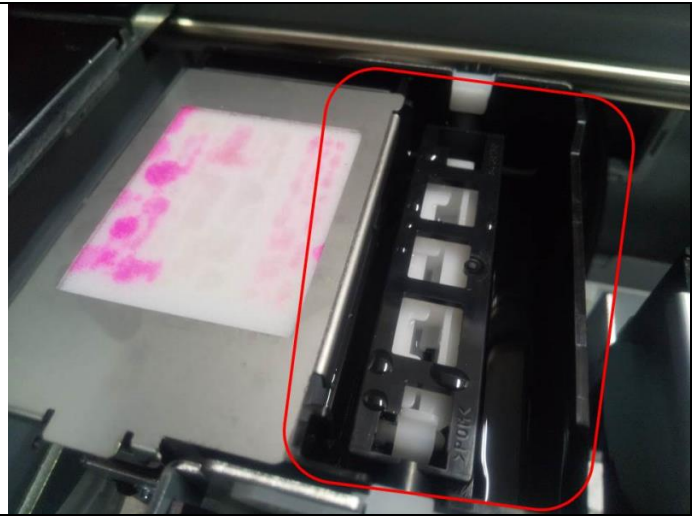
Step 36 / 37

Attach the removed covers.



Step 37 / 37

Attach the power cord and turn on the sub power, and the cleaning liquid will automatically fill. Confirm that the cleaning liquid has been refilled.



AP-640 Multi Sensor Replacement

AP-640 Multi Sensor Replacement Information

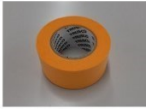
Step 1 / 5

After replacing multi sensor, please perform multi sensor adjustment.

Step 2 / 5

Necessary Tools (1)

一般ツール/General Tool

プラスドライバー No.1 No.1 Phillips screwdriver	
プラスドライバー No.2 No.2 Phillips screwdriver	
テープ Tape	

Step 3 / 5

Necessary Tools (2)

一般ツール/General Tool

六角レンチ 2.5mm 2.5mm hexagonal wrench	
六角レンチ 5.0mm 5.0mm hexagonal wrench	

Step 4 / 5

作業時間/Typical work time

作業時間 (min)	約10分
作業時間 (h)	約0.17h

Typical Work Time

作業時間/Typical work time

作業内容/Contents of work	所要時間/Required time
2. 部品を装着する/Load the components	3 分/3 min
3. 部品を固定する/Fix the components	3 分/3 min

Step 5 / 5

To prevent damage caused by static electricity, release static electricity from your body before touching electronic components. Touching an unpainted metal surface will release static electricity.



AP-640 Multi Sensor Replacement

AP-640 Multi Sensor Replacement Procedure

Step 1 / 20

Turn off the power and unplug the power cable.



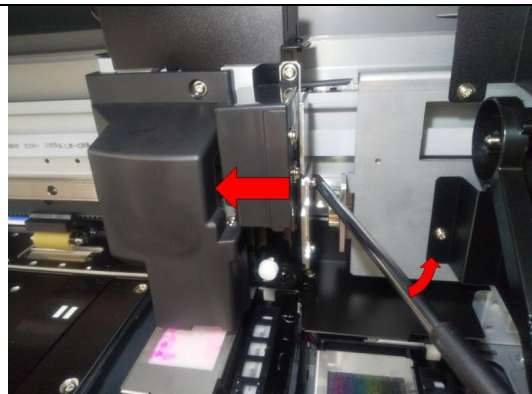
Step 2 / 20

Disconnect the sub carriage and move it to the manual cleaning position.



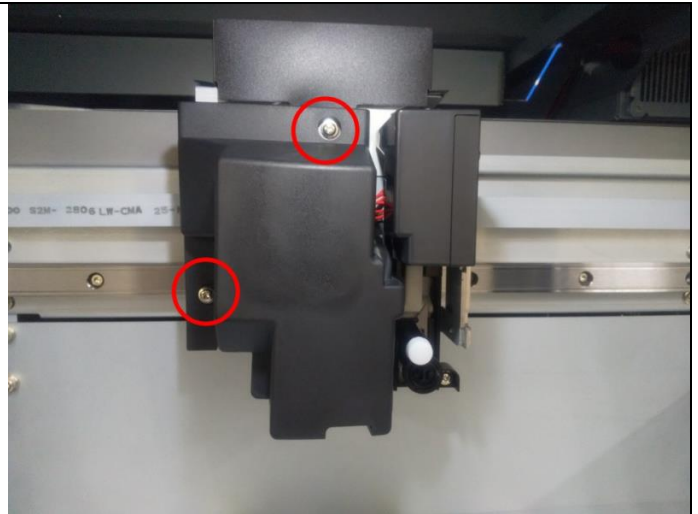
Step 3 / 20

If you use a screwdriver or similar tool, you can easily separate the sub carriage from the print head carriage.



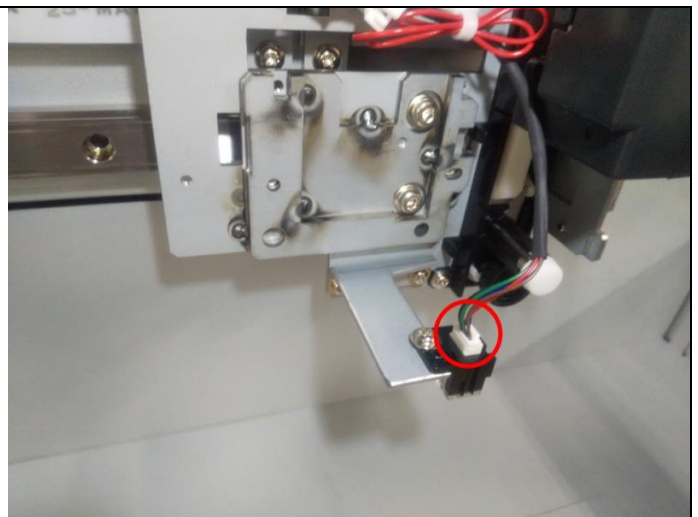
Step 4 / 20

Remove the sub carriage cover.



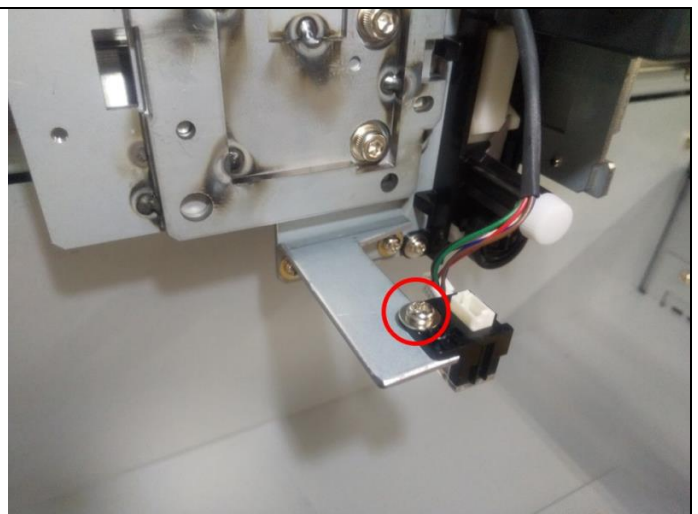
Step 5 / 20

Disconnect the connector.



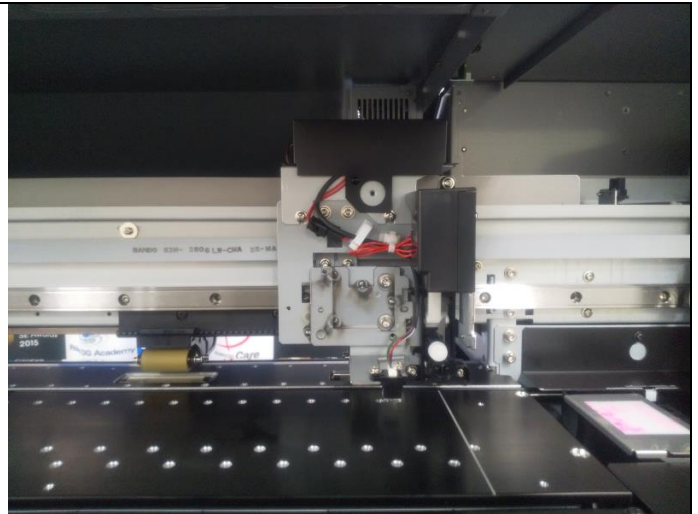
Step 6 / 20

Remove the mult sensor and replace it with a new multi sensor.



Step 7 / 20

Move the sub carriage to the rightmost position, in front of the pinch roller.



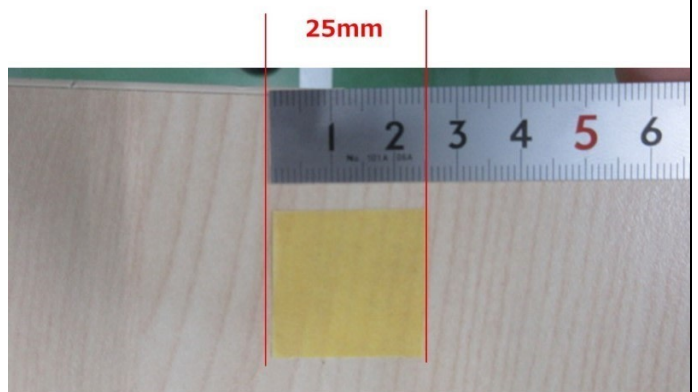
Step 8 / 20

Attach the hexagonal 5.0 mm and 2.5 mm wrench with masking tape to make a simple jig of 7.7 mm thickness. A Thickness Gauge can be used instead.



Step 9 / 20

Cut the masking tape to about 25 mm. Note that if the masking tape is too long, the thickness of the tape will change the target value.



Step 10 / 20

Line up the hexagonal wrench and stick the masking tape on the side of 5.0 mm wrench.



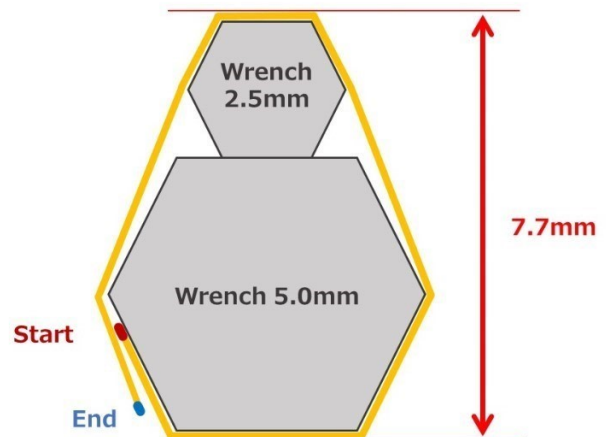
Step 11 / 20

Wrap the masking tape around the hexagonal wrenches while placing them against each other.



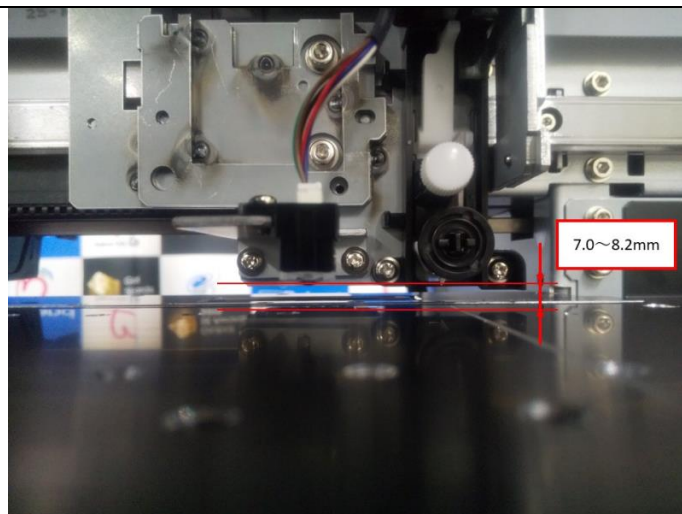
Step 12 / 20

Reference



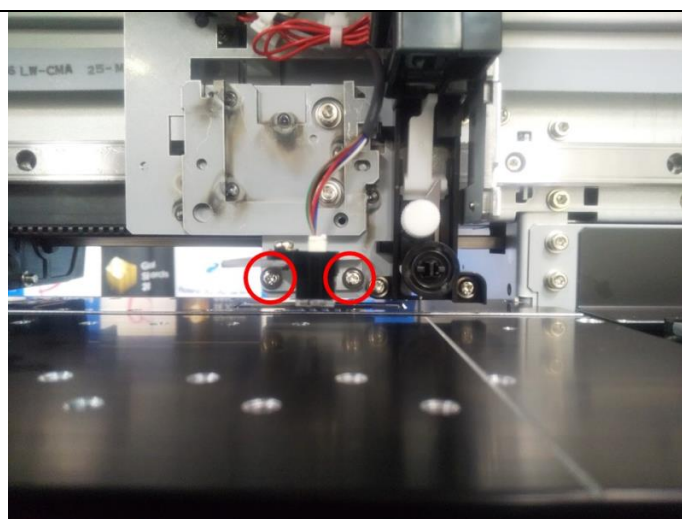
Step 13 / 20

The adjustment range between the platen surface and the sensor surface is 7.0 mm to 8.2 mm. The sensor must be installed parallel to the platen.



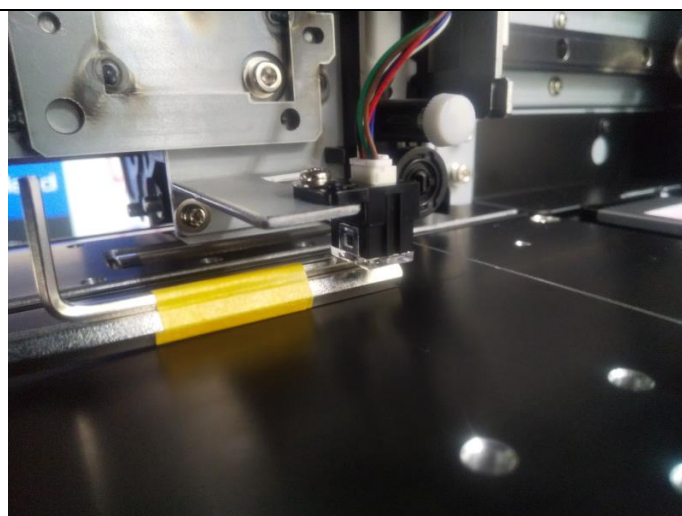
Step 14 / 20

Loosen the screw securing the sensor about 1/2 turn. If the screw is loosened too much, the adjustment cannot be performed correctly.



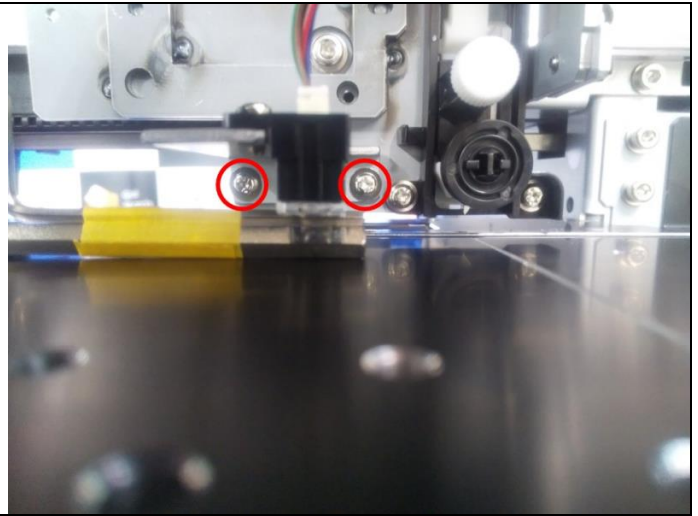
Step 15 / 20

To mount the sensor parallel to the platen, place a simple jig on the back side of the sensor in a horizontal position under the sensor. Place the jig on the flat part of the sensor, not on the convex part.



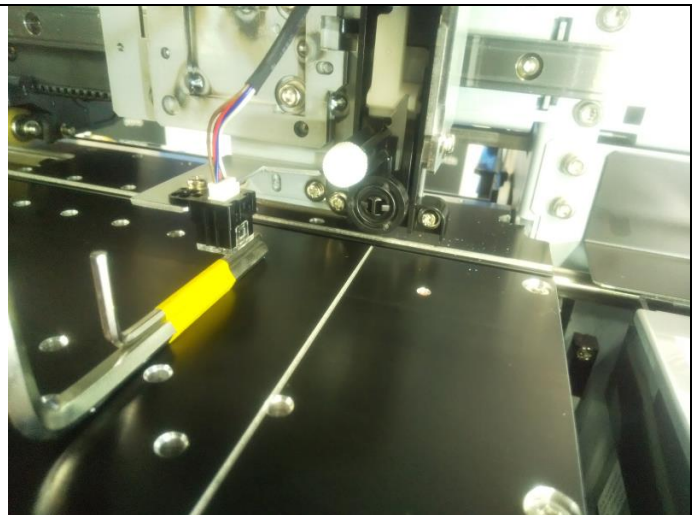
Step 16 / 20

Make sure that the simple jig and the sensor do not move, and tighten the screws.



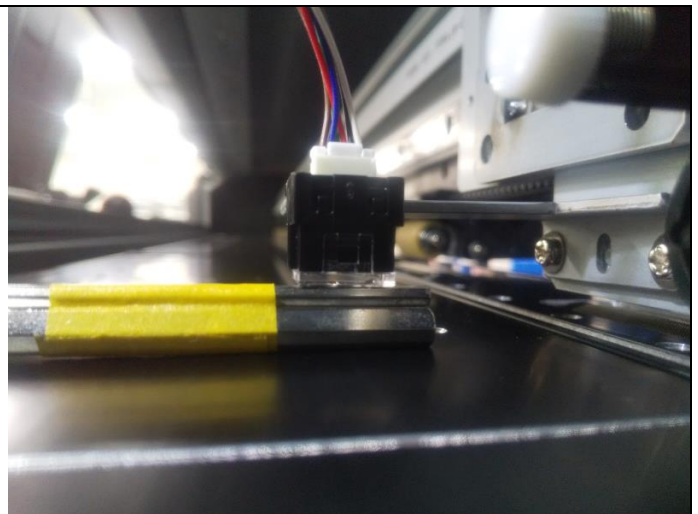
Step 17 / 20

Place the simple jig on the sensor from both sides and check if it is installed horizontally to the platen.



Step 18 / 20

Check that the sensor is installed horizontally from the side of the sensor.



Step 19 / 20

Put back the removed cover and cut carriage to its original position.



Step 20 / 20

Perform the multi sensor adjustment.



次の手順

マルチセンサー調整

Next Step

Multi Sensor Adjustment

AP-640 Panel Replacement

AP-640 Panel Replacement Information

Step 1 / 6

After panel replacement, language and units must be set when the panel starts up the next time.

Step 2 / 6

Necessary Tools

一般ツール/General Tool

プラスドライバー No.2
No.2 Phillips screwdriver



Step 3 / 6

Special Tools

特殊治具/Special Tools

None

Step 4 / 6

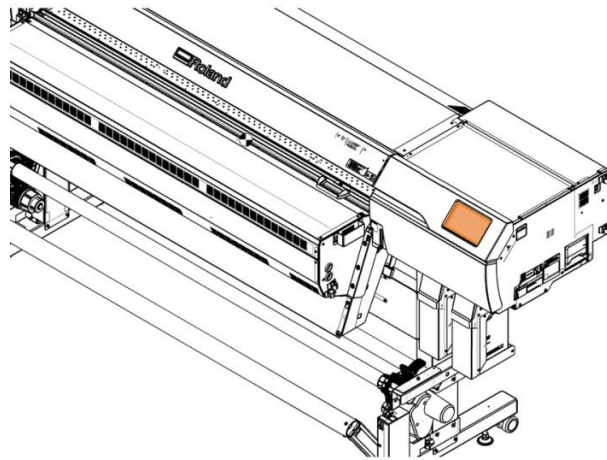
Typical Work Time

作業時間/Typical work time

作業内容/Contents of work	概略時間/Approx. time
175408 Panel Replacement	15 min.
20-105770705-9 Remove Sticker	10 min.

Step 5 / 6

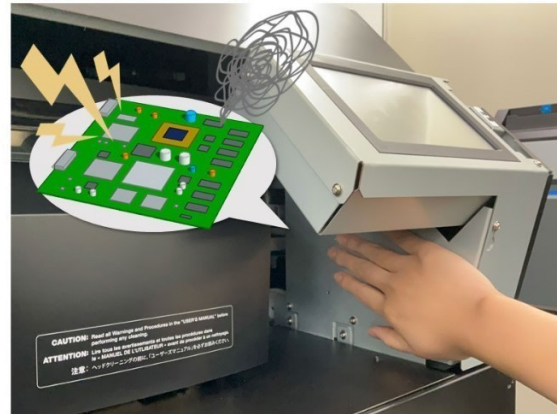
Part to be replaced



Step 6 / 6

To prevent damage from static electricity, release static electricity from your body before touching electronic components. Touching an unpainted metal surface will release static electricity.

CAUTION !



AP-640 Panel Replacement

AP-640 Panel Replacement Procedure

Step 1 / 15

Turn off the power and unplug the power cable.



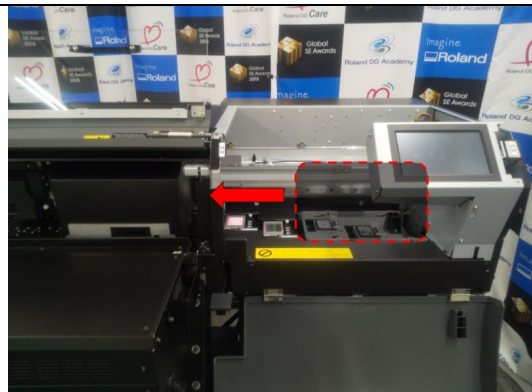
Step 2 / 15

Remove the screws and remove the top cover.



Step 3 / 15

Unlock the print head carriage and move it to the platen.



Step 4 / 15

Remove the screws at the back right of the panel.



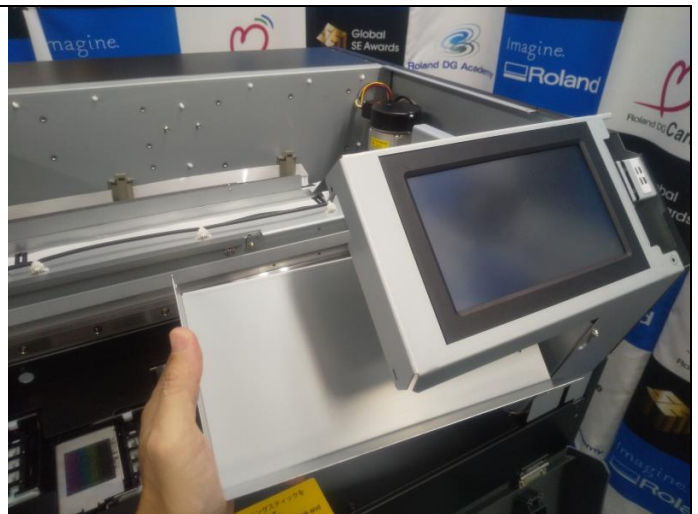
Step 5 / 15

Remove the screws and remove the rear cover.



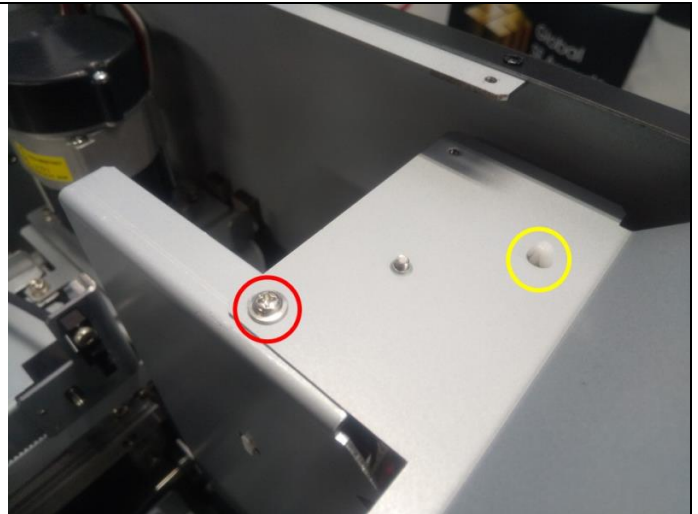
Step 6 / 15

Detail1: Remove the cover by sliding it to the left.



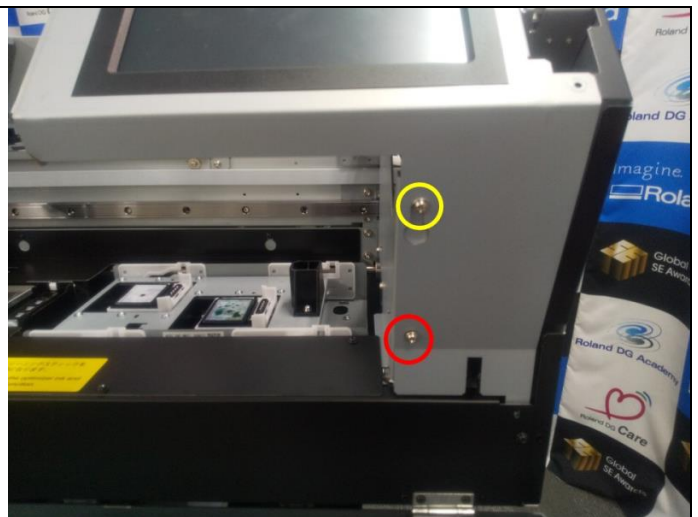
Step 7 / 15

Remove the cable tie by pushing it in and removing it, then remove the screw.



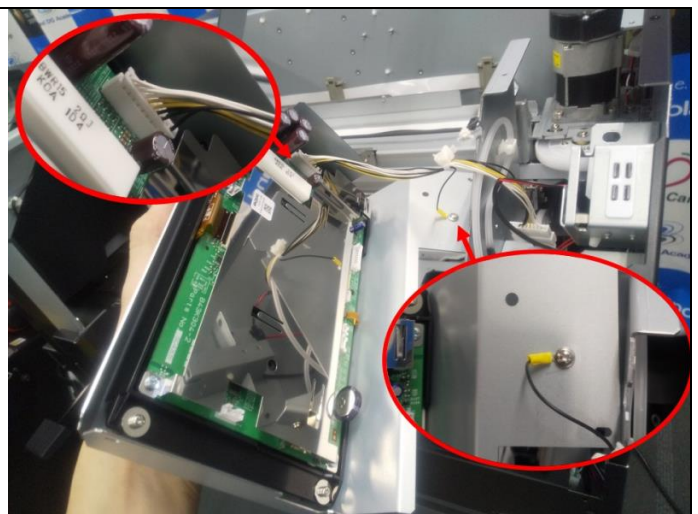
Step 8 / 15

Remove the screw and remove the stay. You do not need to remove the top screw to remove the stay.



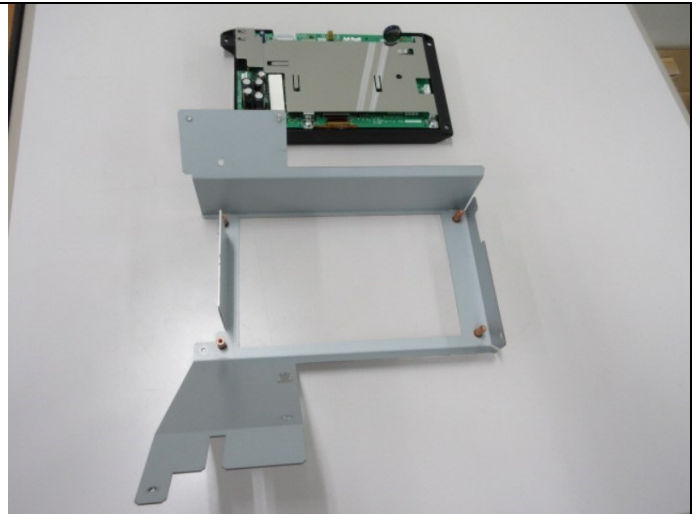
Step 9 / 15

Remove the panel connector and screw.



Step 10 / 15

Replace the panel with a new one.



Step 11 / 15

Detail1: There are four screws to attach the panel.



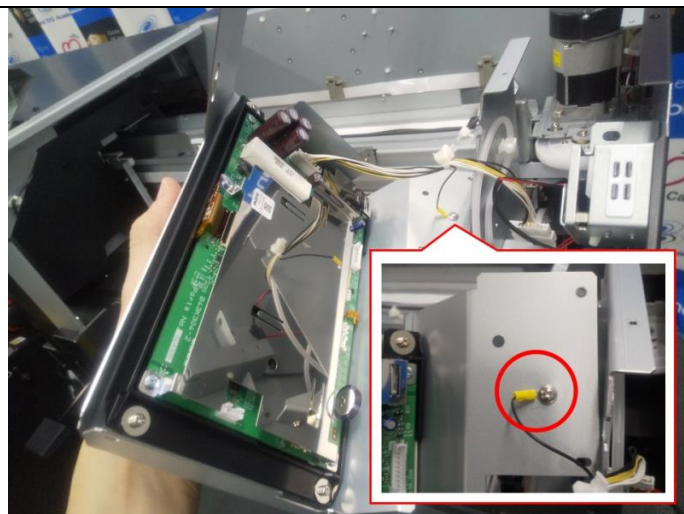
Step 12 / 15

Put back the print head carriage and cover.



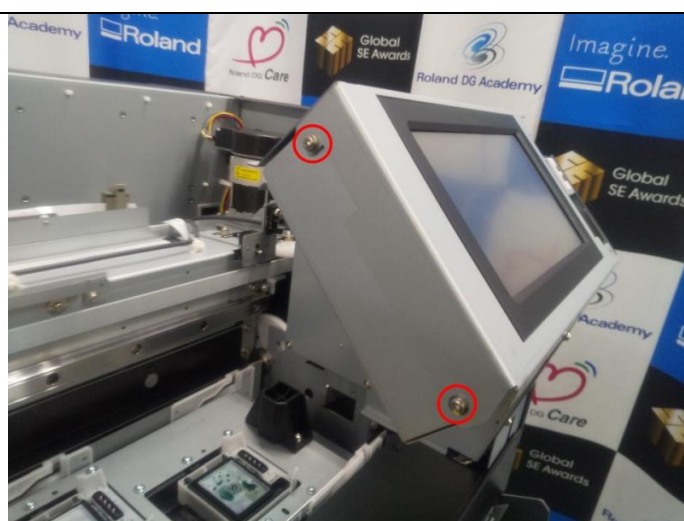
Step 13 / 15

Detail1: Install the orientation of the grounding as shown in the figure.



Step 14 / 15

Detail2: The two screws shown in the figure are longer than the other screws (Length of the thread: 6 mm).



Step 15 / 15

Update the firmware after replacement.



次の手順

ファームウェアアップデート

Next Step

Firmware Update

AP-640 Takeup Unit Dancer Bar Replacement

AP-640 Takeup Unit Dancer Bar Replacement Information

Step 1 / 3

Necessary Tools

一般ツール/General Tool

プラスドライバー No.2 No.2 Phillips screwdriver	
六角レンチ 4.0mm 4.0mm hexagonal wrench	

Step 2 / 3

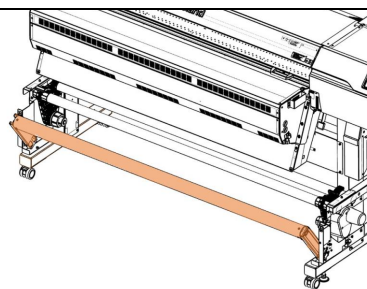
Typical Work Time

作業時間/Typical work time

作業内容/Contents of work	時間/Time
巻取り装置 ダンサーバー交換 Take-up unit dancer roller replacement	10 min.

Step 3 / 3

Outline diagram



AP-640 Takeup Unit Dancer Bar Replacement

AP-640 Takeup Unit Dancer Bar Replacement Procedure

Step 1 / 9

Remove the dancer bar.



Step 2 / 9

Remove the left and right screws.



Step 3 / 9

Remove the dancer roller from the arm.



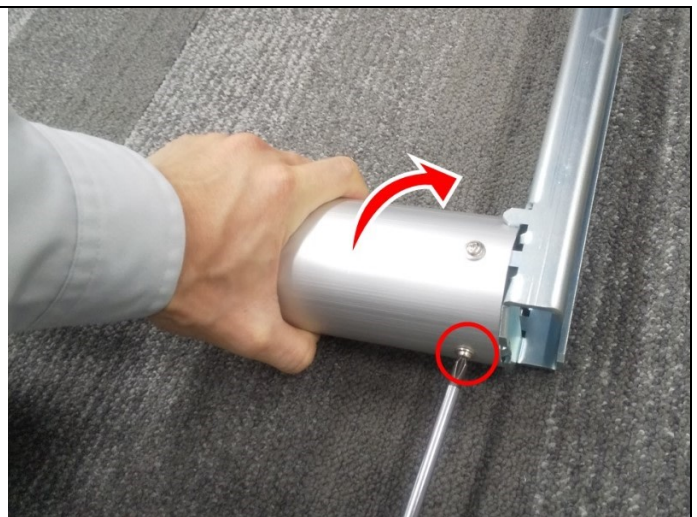
Step 4 / 9

Replace the dancer bar with a new one.
Tighten the screws temporarily.



Step 5 / 9

Eliminate the gap between the dancer roller and the arm, and retighten the screws while twisting the dancer roller toward the back. Retighten the screw shown in the figure first.



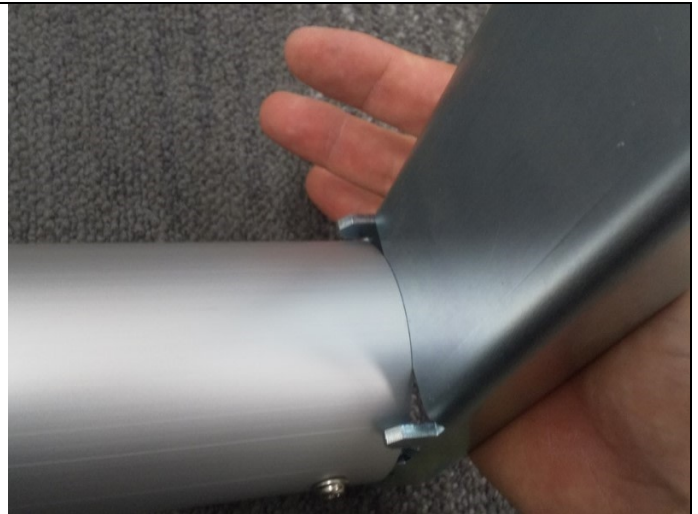
Step 6 / 9

Eliminate the gap between the dancer roller and the arms.



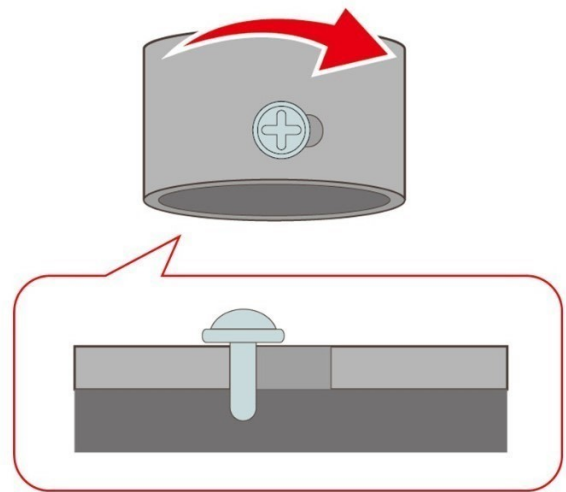
Step 7 / 9

Retighten the screw while twisting the dancer roller.



Step 8 / 9

Retighten the screws in the same direction on both left and right sides.



Step 9 / 9

Install the dancer bar.



AP-640 Takeup Unit Control Board Replacement

AP-640 Takeup Unit Control Board Replacement Information

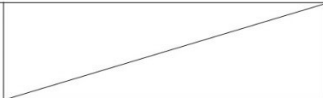
Step 1 / 4

Necessary Tools

一般ツール/General Tool

プラスドライバー No.1 No.1 Phillips screwdriver	
プラスドライバー No.2 No.2 Phillips screwdriver	

特殊治具/Special Tool

無し None	
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Step 2 / 4

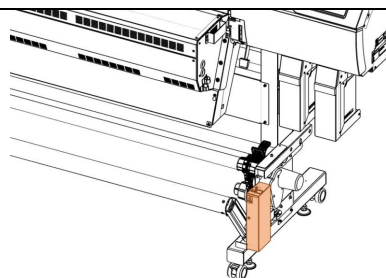
Typical Work Time

作業時間/Typical work time

作業内容/Contents of work	時間/Time
巻取り装置 コントロールボード交換 Take-up unit Control board replacement	10 min.

Step 3 / 4

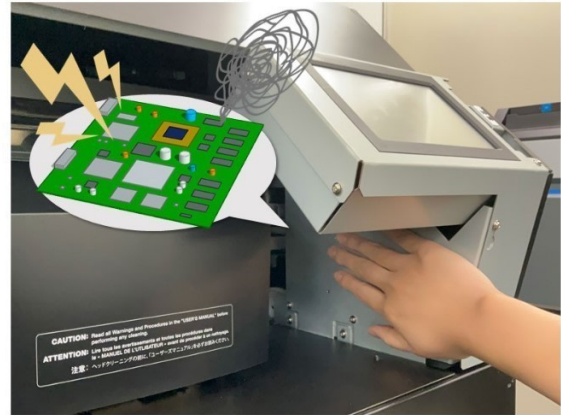
Cover that needs to be removed



Step 4 / 4

To prevent damage from static electricity, release static electricity from your body before touching electronic components. Touching an unpainted metal surface will release static electricity.

CAUTION !



AP-640 Takeup Unit Control Board Replacement

AP-640 Takeup Unit Control Board Replacement Procedure

Step 1 / 7

Turn off the power and unplug the power cable.



Step 2 / 7

Using a No. 1 Phillips screwdriver, disconnect the take-up unit connector.



Step 3 / 7

Remove the screws and remove the cover.



Step 4 / 7

Remove all connectors attached to the board.



Step 5 / 7

Remove the screws and replace the board with a new one.



Step 6 / 7

Attach the removed connectors and cover.



Step 7 / 7

Refer to the figure for the positions of the connector. Attach the connectors to the red parts only. Do not attach the connectors to the positions marked in yellow.

