

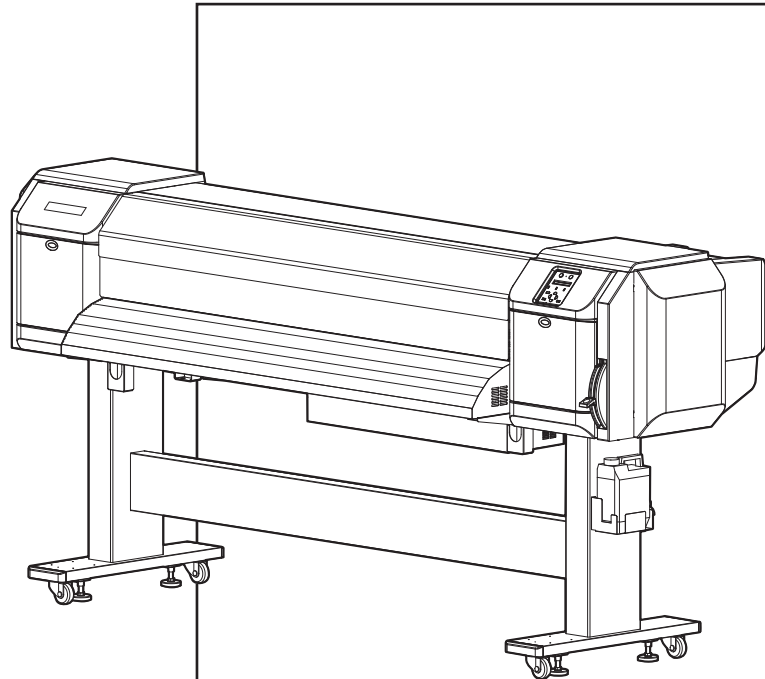
MUTOH

OPERATION MANUAL

Full-Color Inkjet Printer

ValueJet

VJ-1604X
VJ-1604WX



Read This Manual Before Using The
Printer.

Rev.

VJ1604XE-A-01

Important Notice

1. For Users in Europe



The CE marking is a mandatory European marking for certain product groups to indicate conformity with the essential health and safety requirements set out in European Directives.

By affixing the CE marking, the manufacturer, his authorized representative, or the person placing the product on the market or putting it into service ensures that the item meets all the essential requirements of all applicable EU directives and that the applicable conformity assessment procedures have been applied.

2. For Users in the United States

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules.

These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment.

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications.

Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

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Warranty Limitations

1. MUTOH INDUSTRIES LTD. warrants part repair or replacement as a sole measure only if a failure is found in the system or in the materials and workmanship of the product the seller produced. However, if the cause of failure is uncertain, decide the action after due mutual consultation.
2. The warranty shall not apply to any direct or indirect loss, or compensation for the loss due to the product that has been subject to misuse, neglect, or improper alternation.

About this Manual

1. Contents of the Manual

There are two manuals for this product.

Installation manual

Explains operating procedures along with unpacking, installation and preparation before use.

Operation Manual (this manual)

2. Purpose and Target Readers

This manual explains preparations before use and operation procedures for MUTOH Full Color Ink Jet Printer VJ-1604X/1604WX.

This manual is prepared for the owners and operators of this printer.

Before using this printer, fully understand the contents and directions in this manual.

3. Manual Configuration

Section	Description
1 Safety instructions	This chapter explains the installation of this printer, warning terms that operators need to know, caution items and warning labels on the printer main unit.
2 Product overview	This chapter explains the features of the printer along with the names and functions of each part.
3 Before using	This chapter explains necessary steps before using the printer.
4 Handling the printer	This chapter explains how to handle the printer.
5 Panel setup menu	The section explains the Setup menu of the printer.
6 Maintenance	This chapter describes daily maintenance of the product.
7 Troubleshooting	This chapter describes possible troubles during the use of this product and countermeasures.
8 Appendix	This chapter describes specifications and included components with this printer.

NOTE

- **1 Safety instructions** to **4 Handling the printer** must be read before using the printer.
- Read **5 Panel setup menu** through **8 Appendix** as necessary.

4. Manual Notation

This section explains general cautions that must be followed in order to use this printer safely.








Warning	Meaning
 WARNING	Used for dangerous situations where death or serious injury may be caused.
 CAUTION	Used for dangerous situations that may cause slight or medium injury, or when all or parts of products are damaged.
 NOTE	It is used for special cautions and for information that needs to be emphasized.
 TIP	Indicates useful tips for operating or understanding the printer.
	Indicates “prohibited” operations.
	Indicates “required” operations.
	Indicates reference pages in this manual.

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9 Setup menu diagram

1 Safety instructions

This chapter explains the installation of this printer, warning terms that operators need to know, caution items and warning labels on the printer main unit.





- **When installing and operating this printer, be sure to follow the directions and warnings in this manual.**
-

1.1 Types and meanings of warnings

The warnings in the Operation Manual and the warning labels attached to the printer are categorized into three stages.

Understand the meanings of the following warning terms and follow the contents (instructions) in this manual.












Warning	Meaning
 WARNING	Used for dangerous situations where death or serious injury may be caused.
 CAUTION	Used for dangerous situations that may cause slight or medium injury, or when all or parts of the products may be damaged.
NOTE	Used for special cautions and for information that needs to be emphasized.

1.2 Important safety instructions

This section explains general cautions that must be followed in order to use this printer safely.



<Common to VJ-1604X/1604WX>

-  Do not install this printer in the following places.
It may cause an injury if the printer falls down.
 - On a shaky stand
 - Slanting location
 - Places where vibration of other machines etc. is transmitted
-  Do not climb on the printer or place heavy things on top of it.
It may cause an injury if the printer falls down.
-  Do not block the vent when covering the printer with cloths, such as a blanket or tablecloth.
If the vent is blocked, heat may accumulate inside the printer and may cause a fire.
-  Do not install the printer where it is humid or dusty.
It could lead to an electric shock or fire.
-  Do not use a damaged power cord set.
It could lead to an electric shock or fire.
-  Do not pull out or insert the power plug with a wet hand.
This could lead to an electric shock.
-  Do not connect an earth wire to the following places.
 - Gas pipes
There is a possibility of ignition and explosion.
 - An earth wire of telephone cables and lightning rods
A heavy current might flow whenever lightning strikes.
 - Water pipe and faucet
The earth does not work if part of the metal pipe is plastic.
-  Do not insert or drop metal or flammable objects into the printer through openings such as a vent.
It could lead to an electric shock or fire.
-  If foreign substances or liquids such as water entered the printer, do not use the printer as it is.
It could lead to an electric shock or fire.
Immediately turn OFF the power switch, disconnect the power plug from the electric socket, and contact your local MUTOH dealer.
-  Wire the various cords as directed in the Operation Manual.
Wrong wiring could cause a fire.
-  Be sure to use the specified power cord set.
Using a power cord set other than the specified can cause an electric shock or fire.
-  Make sure to use only the specified power supply (AC 100 V to 120 V or AC 220 V to 240 V).
If a power supply other than the specified voltage is used, it could cause an electric shock or fire.
-  Take power for the printer directly from the power socket (AC 100 V to 120 V or AC 220 V to 240 V).
Do not use multiple plugs on the same socket.
This could generate heat and might cause a fire.



Be sure to use a dedicated power socket with an earth wire for the power supply, and connect it to the earth wire. If the earth wire is not connected, it may cause an electric shock or fire.



You are obligated to properly dispose of waste fluid from the printer in compliance with Wastes Disposal and Public Cleansing Act and local ordinances.
Delegate disposal to an industrial waste disposal contractor.

<VJ-1604X only>



Do not place any combustible materials on Platen while the heater is working.
There may be a risk of fire.



Do not spill flammable liquid on Platen.
It may cause a fire.



<Common to VJ-1604X/1604WX>



Pay attention to the following points when handling the power cord set.

- Do not tamper with the power cord set.
- Do not put heavy objects on the power cord set.
- Do not bend, twist or pull the power cord set by force.
- Do not route the power cord set near heating appliances.



Pay attention to the following points when handling the power plug.

- Any mishandling of the power cable could cause a fire.
- Make sure that no foreign substances such as dust are stuck to the power plug.
- Make sure that the power plug is inserted all the way.



When handling Ink cartridges, pay attention so that ink does not come into contact with your eyes or skin.

If ink gets into your eyes or sticks to your skin, immediately wash it off with water.
Failing to do so might cause irritation or light inflammation of eyes.
In case of any abnormality, consult a physician immediately.



Do not disassemble Ink cartridges.

If disassembled, ink might come into contact with your eyes or skin.



Do not operate Media loading lever during initial operation.

Print head may touch Pressurizing roller and cause a malfunction.



Do not use volatile solvents such as thinner, benzene, or alcohol.

These solvents may cause damage to the paint.



Make sure that no moisture enters the printer.

The electric circuit inside the printer may be short-circuited.















Never open covers attached using screws under any circumstances.

This may cause an electric shock or a malfunction.




Do not spill waste fluid when replacing Flushing-box sponges.

If waste fluid comes into contact with Grid roller, it may damage its surface and affect media feeding.

-  When cleaning Cleaning wiper,
 - Do not touch Cleaning wiper and Head cap unit.
Head cleaning may not be performed correctly because of oil from your hands.
 - Make sure to use Cleaning stick to wipe Print head.
A wet Cleaning stick may cause Print head to clog.
 - Do not reuse Cleaning stick.
The attached dust, etc may damage Print head.
-  When cleaning around Print head,
 - Never touch Print head nozzles.
Doing so may damage Print head.
 - Do not touch the tip of Cleaning stick.
Print head may be damaged because of oil from your hands.
 - Never put water, etc on the tip of Cleaning stick.
Doing so may damage Print head.
 - Do not reuse Cleaning stick.
The attached dust, etc may damage Print head.
-  Do not slant the printer, prop it against a wall or turn it upside down.
The ink inside the printer may leak.
Moreover, normal operation after shifting (to these positions) cannot be guaranteed.
-  Unpacking or moving this printer must be done by the following number of people.
 - More than 4 people
-  Installing the dedicated stands on the printer must be done by the following number of people.
 - More than 4 people
-  When taking the printer out of the container box, make sure to remove the vinyl, install Reinforcement for transportation, and hold Reinforcement.
If lifting up the printer with the vinyl on, there is a possibility the printer can slip and drop, and be damaged.
-  When you do not use the printer for a long period, make sure to pull out the power plug from the power socket for safety.
-  Make sure to connect an earth wire to the earth connection that meets the following standards.
 - An earth terminal of power socket
 - An earth wire with a copper plate which is buried at 650 mm or more in the ground.
-  Before operation, make sure to read the Safety Data Sheet (SDS).
-  Pay attention to the following points when cutting roll media.
Mishandling Razor blade may cause a cut on your finger or hand.
 - When you hold media, do not place your finger on Media cut groove.
 - Move Razor blade slowly along Media cut groove.
-  Before cleaning the areas other than Wiper and circumference of Print head, be sure to turn OFF the power and disconnect the power plug.
-  When moving the printer, make sure to maintain a horizontal position.

<VJ-1604X only>

-  Do not touch Media guide while printing.
Media guide becomes very hot and you could burn yourself.



Do not touch Media feed slot, Platen, and Media guide while Heater is working.
Media feed slot, Platen, and Media guide become very hot and you could burn yourself.



Ventilate the workplace.
Not doing so may cause nausea or a fire hazard.



Right after printing, Media guide becomes very hot.
Allow Media guide to cool down before the next operation.

1.3 Warning labels

This section explains the handling of warning labels, their pasting locations and types.

Warning labels are attached to parts of the printer that need special caution.

Understand the locations and the descriptions of the danger associated with each label before operating the printer.

1.3.1 Handling the warning labels

When handling the warning labels, be careful with the following points.

NOTE

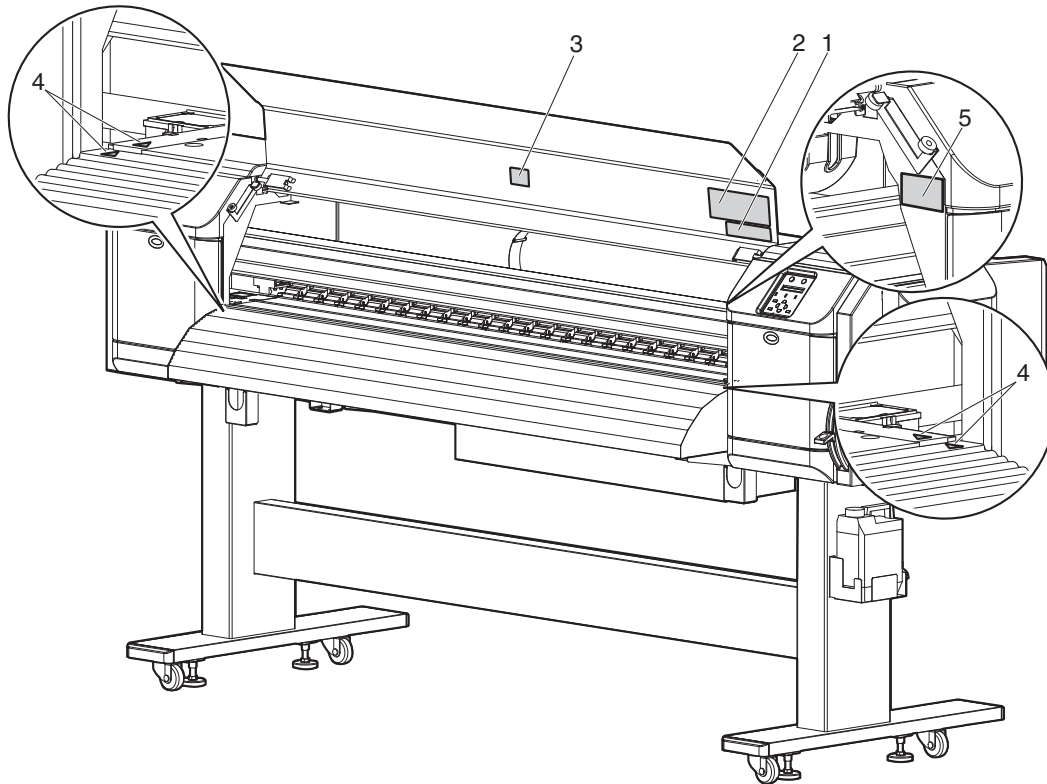
- Check whether all the warning labels can be read.
If the letters or illustrations on the label are not clear, remove the dirt from the label.
 - Use cloth, water and mild detergent for removing dirt from the warning labels.
Avoid organic solvents and gasoline.
 - Replace the labels if they are damaged, lost or illegible.
If the warning labels have to be replaced, contact your local MUTOH dealer.
-





1.3.2 Location and type of warning labels



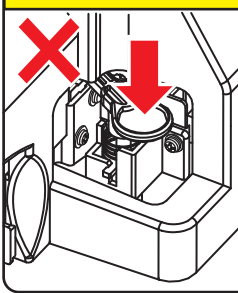
Pasting locations of the warning labels are shown in the following figure.

1.3.2.1 Warning labels

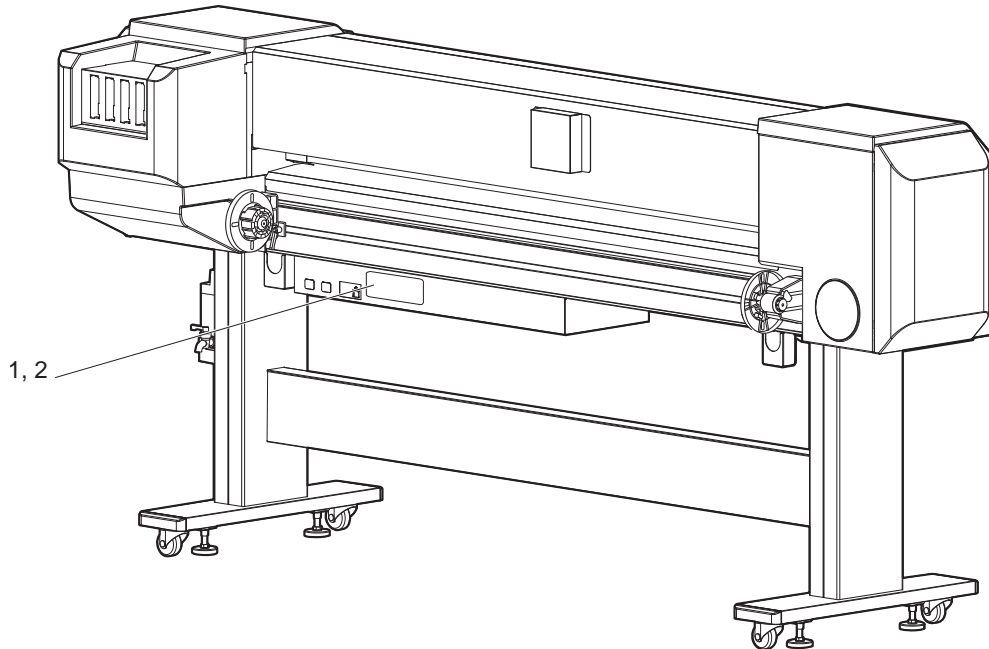
Front section



No.	Types of warning labels
1	<div style="display: flex; align-items: center; background-color: #f0f0f0; padding: 10px;">  <div style="margin-left: 20px;"> <div style="display: flex; justify-content: space-between; margin-bottom: 5px;"> <div style="background-color: yellow; padding: 2px 5px; border: 1px solid black;">  CAUTION </div> <div style="background-color: yellow; padding: 2px 5px; border: 1px solid black;">  ATTENTION </div> <div style="background-color: yellow; padding: 2px 5px; border: 1px solid black;">  注意 </div> </div> <p style="font-size: small; margin: 0;">Do not insert your fingers the cutting blade inside may injure your fingers.</p> <p style="font-size: small; margin: 0;">N'introduisez pas vos doigts. La lame racleuse qui est à l'intérieur peut vous blesser.</p> <p style="font-size: small; margin: 0;">カッター刃でけがをする可能性がありますので、指を入れな いでください。</p> </div> </div>

No.	Types of warning labels
2	<div style="border: 1px solid black; padding: 10px;"> <p style="text-align: center;">⚠ CAUTION / ATTENTION / 注意</p> <ul style="list-style-type: none"> ◆ Do not give a direct wind from a fan or air conditioner to the machine. ※ A wind may dry the ink in the head nozzles causing clogging that affects ink jetting, and you will not be able to obtain satisfactory printing results. ◆ Normal cleaning should be done once a week if the printer is not used for a long period. ※ If the printer is left without cleaning, the ink will be hardened inside the head nozzle, and may cause the head trouble. ◆ Do not open the front cover while printing. Moreover, do not touch the media while printing. Good printing result might not be obtained. ※ Please remove the media and hold the lever up when not using for a long time. Due to the environment conditions, media float and wrinkle might happen that does not obtain the good result. ◆ Paper guides, platen and paper holding plate will become hot due to the heater temperature setting. Beware of being burned. ◆ Ne pas exposer directement l'imprimante aux courants d'air des appareils de ventilation ou de dimatiation. ※ Un courant d'air peut affecter la projection d'encre, empêchant ainsi l'obtention d'une qualité d'impression satisfaisante; ou entraîner un dysfonctionnement de la tête d'impression, suite à l'assèchement de l'encre à l'intérieur des buses. ◆ Si vous n'utilisez pas l'imprimante durant une longue période, effectuez un nettoyage normal une fois par semaine. ※ Si vous ne le faites pas, cela pourrait entraîner un dysfonctionnement de la tête d'impression, suite à l'assèchement de l'encre à l'intérieur des buses. ◆ Ne pas ouvrir le capot frontal en cours d'impression. De plus, en cours d'impression, ne pas introduire vos mains par les ouvertures, et ne pas toucher au papier. Vous pourriez vous blesser, ou ne pas obtenir une qualité d'impression satisfaisante. ※ Si vous n'imprimez pas durant une longue période, retirez le papier, et maintenez le levier en position haute. À défaut, vous risquez de ne pas obtenir une qualité d'impression satisfaisante. ◆ Le réglage de la température du chauffe-eau, papier - depuis le guide, platine, papier plaque de pression est une température élevée, il peut provoquer des brûlures. ◆ 直接機械に送風機や空調装置の風を当てないで下さい。 ※ 風によりヘッドノズル内のインクが固まりヘッド故障の原因になったり、インクの吐出に影響を与え、満足な印刷結果が得られないことがあります。 ◆ 長期印刷を使用しない場合は、週に一度ノーマルクリーニングを行ってください。 ※ クリーニングを行わずに放置すると、ヘッドノズル内でインクが固まりヘッド故障の原因となります。 ◆ 作業中はフロントカバーを開けないでください。また、作業中は開口部から手を入れたり用紙に触れないでください。思わぬケガをしたり、良好な作業結果が得られないことがあります。 ※ 長時間作業を行わない時は、用紙を外しホルダーレバーをアップ状態にしてください。良好な作業結果が得られないことがあります。 ◆ ヒーターの温度設定により、ペーパーガイド、プラテン、用紙押えプレートが高温となるため、火傷をする恐れがあります。 </div>
3	<div style="border: 1px solid black; padding: 10px;"> <p style="text-align: center;">⚠ CAUTION / ATTENTION / 注意</p> <div style="display: flex; align-items: center;">  <div style="margin-left: 10px;"> <ul style="list-style-type: none"> ◆ Sharp Edges. Do not touch steel belt. ※ You may be injured. ◆ Ne pas toucher les bords de la bande métallique, car ceux-ci sont tranchants. ※ Vous pourriez vous blesser. ◆ スチールベルトは端が鋭く尖っていますので触らないでください。 ※ けがをする恐れがあります。 </div> </div> <p style="margin-top: 10px;">Steel belt Bande métallique スチールベルト</p> </div>
4	<p style="text-align: center;">VJ-1604X Only</p> <div style="text-align: center; margin: 10px 0;">  </div>
5	<div style="border: 1px solid black; padding: 10px;"> <p style="text-align: center;">⚠ CAUTION / ATTENTION / 注意</p> <div style="display: flex; align-items: center;">  <div style="margin-left: 10px;"> <ul style="list-style-type: none"> ◆ Do not push the cutter cap. It may damage the part. ◆ Évitez de pousser le couvercle du dispositif de coupe, au risque d'endommager la pièce. ◆ カッターキャップを押さないでください。カッターキャップが破損する場合があります。 </div> </div> </div>



1.3.2.2 Rear section



No.	Types of warning labels
1	<p style="text-align: center;">VJ-1604X Only</p> <div style="border: 1px solid black; padding: 5px; margin: 10px 0;"> <p style="text-align: center;">⚠ CAUTION</p> <p>◆ This device has two power systems. There is a risk of electric shock unless the two power cables are unplugged during the maintenance.</p> </div> <div style="border: 1px solid black; padding: 5px; margin: 10px 0;"> <p style="text-align: center;">⚠ 注意</p> <p>◆ この機器は2系統の電源を持っています。 保守の時には2本の電源ケーブルを抜かないと感電の危険があります。</p> </div>
2	<div style="border: 1px solid black; padding: 5px;"> <ul style="list-style-type: none"> ▪ Apparatet må tilkoples jordet stikkontakt ▪ Apparaten skall anslutas till jordat uttag ▪ Laite on liitettävä suojakoskettimilla varustettuun pistorasiaan ▪ Apparatets stikprop skal tilsluttes en stikkontakt med jord, som giver forbindelse til stikproppens jord </div>

NOTE

The following marks are for China's safety standards.

	汉文	仅适用于海拔2000m以下地区安全使用。
	藏文	《2000m ཁོང་གི་ཕོ་གསལ་ལོ་གཞི་བྱོལ་གྱི་ས་ཁུལ་ལྷོ་ནུབ་ཉེན་མེད་ལྗོངས་ལྷན་འཇུག་པ།》
	蒙古文	“ 2000 མིན་པའི་ས་ཁུལ་གྱི་ས་ཁུལ་ལྷོ་ནུབ་ཉེན་མེད་ལྗོངས་ལྷན་འཇུག་པ།”
	壮文	Dan hab yungh youq gij digih haijbaz 2000m doxroengz haenx ancienz sawjyungh.
	维文	دېڭىز يۈزىدىن 2000 مېتىر تۆۋەن رايونلاردىلا بىخەتەر ئىشلەتكىلى بولىدۇ
	汉文	“仅适用于非热带气候条件下安全使用。”
	藏文	《མེ་མཚམས་ལྷོ་ལྷོ་བུ་རྒྱུ་ལུ་ས་ཁུལ་ལྷོ་ནུབ་ཉེན་མེད་ལྗོངས་ལྷན་འཇུག་པ།》
	蒙古文	“ ཚ་བའི་ས་ཁུལ་གྱི་གན་མ་གཤིས་མིན་བའི་ས་ཁུལ་ལྷོ་ནུབ་ཉེན་མེད་ལྗོངས་ལྷན་འཇུག་པ།”
	壮文	Dan hab yungh youq gij dienheiq diuzgen mbouj dwg diegndat haenx ancienz sawjyungh.
	维文	غەيىرى ئىسسىق بەلباغ ھاۋا كىلىماتى شاراىتلىرىدا بىخەتەر ئىشلەتكىلى بولىدۇ

2 **Product overview**

This chapter explains the features of this printer along with the names and functions of each part.

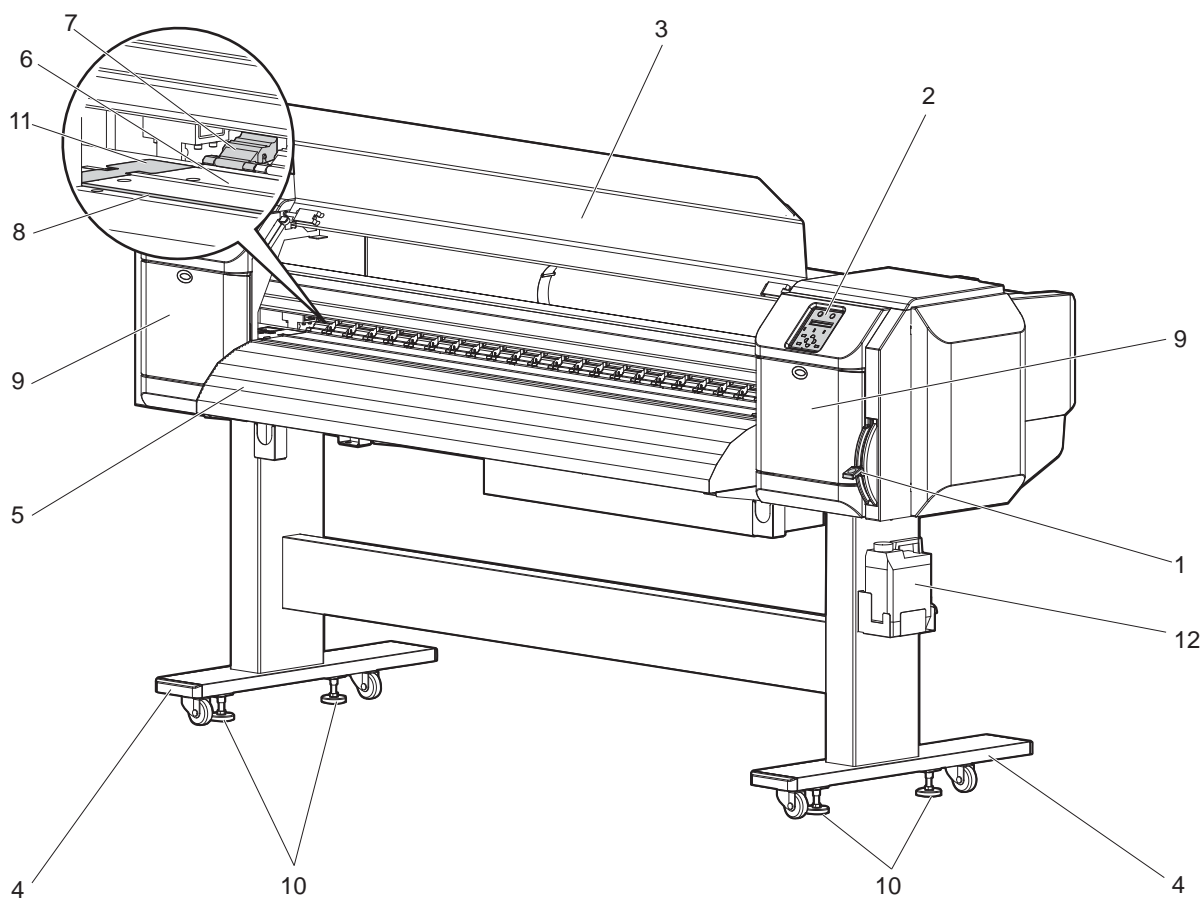
2.1 Names of parts and functions

This section explains the names and functions of each part.

2.1.1 Front section

NOTE

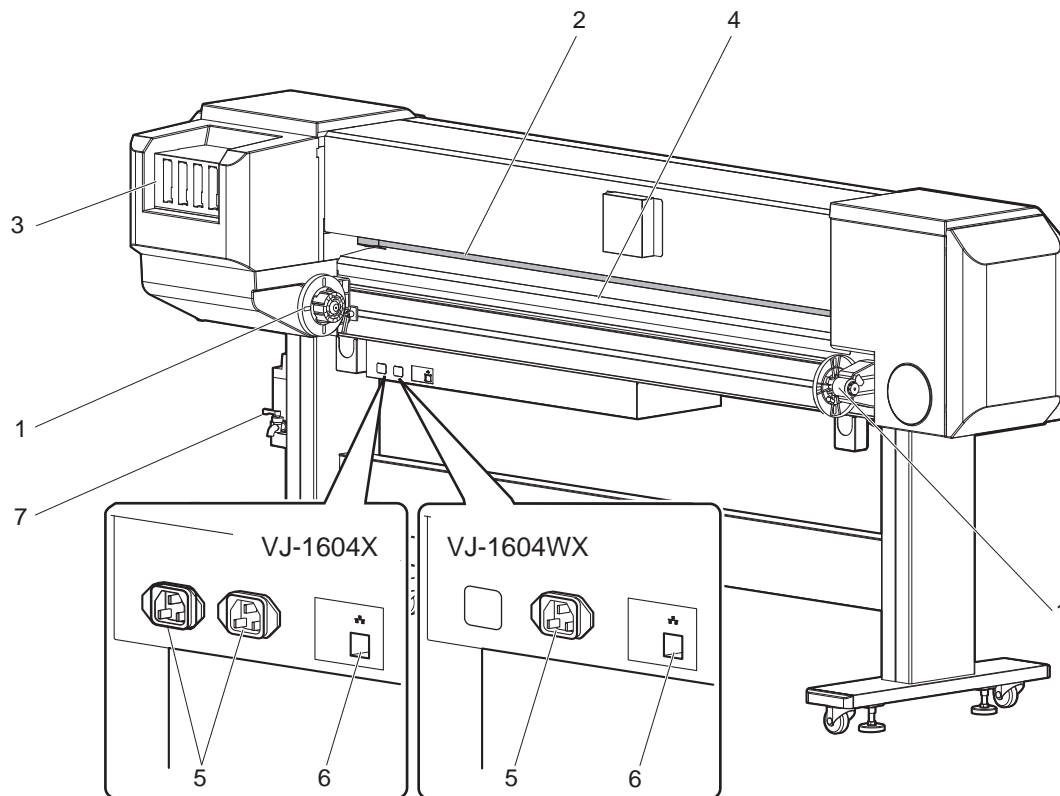
The illustrations used in this section are those of VJ-1604X.



No.	Name	Function
1	Media loading lever	Used for fixing or releasing the media. <ul style="list-style-type: none"> • Lower Lever to fix the media. • Lower Lever further to fix the media firmly. Used to improve the accuracy of media feeding. <ul style="list-style-type: none"> • Raise Lever to release the media.
2	Operation panel	Used to set the operation condition, printer display and various functions. ⓘ 2.1.3 Operation panel

No.	Name	Function
3	Front cover	Used to prevent the user from coming in contact with the driving mechanism during the printer operation. Opened and closed when media is loaded or jammed. It is normally closed.
4	Stand	Used when installing the printer on a flat floor.
5	Media guide	Used to feed the media smoothly when loading or printing on the media. <ul style="list-style-type: none"> • Heater (After heater) to dry ink is installed inside VJ-1604X. • VJ-1604WX is not equipped with Heaters.
6	Platen	Installed inside of Front cover. <ul style="list-style-type: none"> • Heater (Platen heater) to dry ink is installed inside VJ-1604X. • VJ-1604WX is not equipped with Heaters.
7	Pressurizing rollers	Installed inside of Front cover. Press and hold the whole media when printing.
8	Media cut groove	Installed inside of Front cover. Used to cut media straight.
9	Maintenance cover	Used to prevent the user from touching the inner mechanical section. Open/close in the following cases. <ul style="list-style-type: none"> • When cleaning Cleaning wiper • When cleaning circumference of Print head • When replacing Cutter It is normally closed.
10	Adjuster	Used to install the printer horizontally.
11	Media holder plate	Installed inside of Front cover. By attaching Media holder plates to both sides of the media, media warpage can be prevented to a degree.
12	Waste fluid tank	Used for collecting waste ink discharged from the printer.

2.1.2 Rear section



No.	Name	Function
1	Roll media holder	Load the roll media. Equipped with Flanges to attach the roll media and Fixing levers to fix Roll media holders.
2	Media feed slot	Used for feeding media.
3	Ink cartridge slot	Insert Ink cartridges.
4	Media guide	Used to feed the media smoothly when loading or printing on the media. <ul style="list-style-type: none"> • Heater (Pre-heater) to dry ink is installed inside VJ-1604X. • VJ-1604WX is not equipped with Heaters.
5	AC inlet	Used for connecting the power cord set.
6	Network interface cable connector	Connects a network interface cable.
7	Waste fluid valve	Open/close when discharging the waste fluid from Waste fluid tank. It is normally closed.

2.1.3 Operation panel

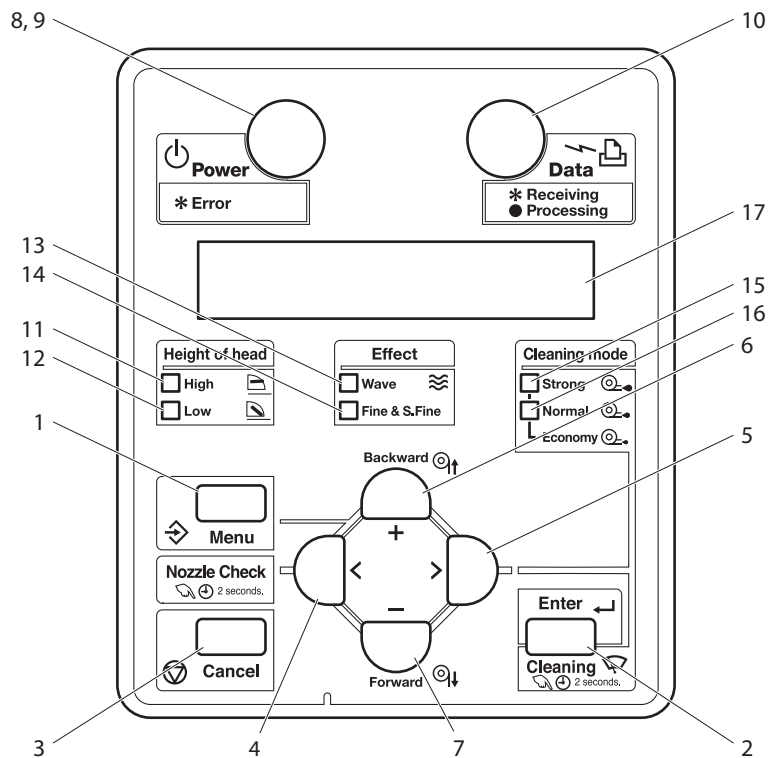
Used to set the operating conditions, to display the status of the printer, and to set various functions. Explains names of each operation key and status display along with the functions.

TIP

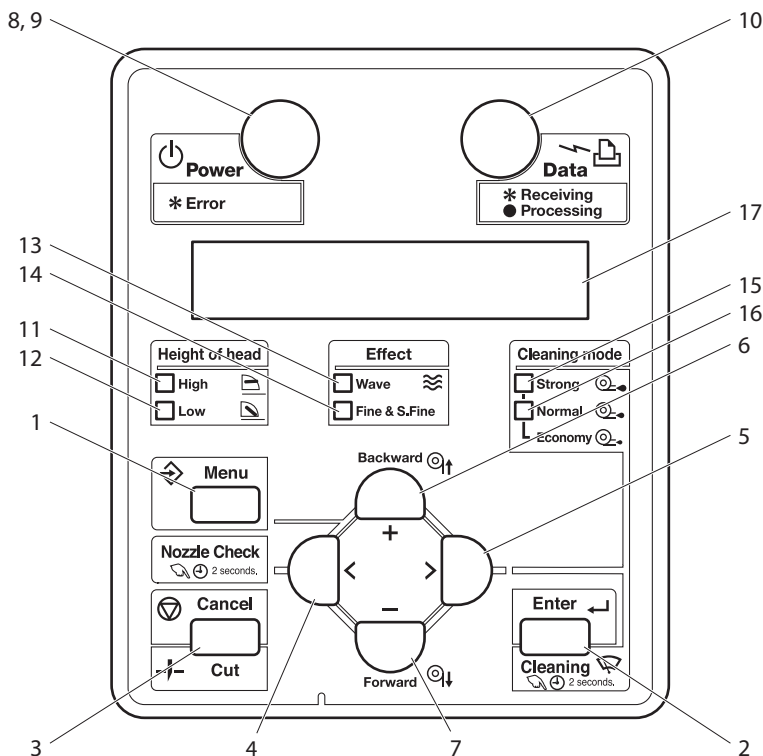
Refer to the following for details regarding the operation method of Operation panel.

- When setting the menu from Operation panel: [4.3 Menu setups on Operation panel](#)
- When performing various operations in Operation panel: [4.4 Operating from Operation panel](#)

VJ-1604X



VJ-1604WX



(1) Operation keys

NOTE

- Operation keys are assigned with different functions and names depending on the printer status (Normal or Setup menu display).
For details about the printer status, refer to "2.2 Printer status outline".
- The ⏻ symbol means “standby”. Even when the power button is not turned on, the printer consumes a tiny amount of power so long as the power cable is connected. This state is referred to as the power being “off” in this Manual.

No.	Name	Normal	Setup menu display
1	[Menu] key	Shifts to the Setup menu.	Shifts from Setup menu display to Normal.
2	[Enter] key	Restarts printing while printing is being suspended.	<ul style="list-style-type: none"> • Select the menu to set, and shift to the next hierarchy. • The setting is determined and saved.
	[Cleaning] key	Press and hold this key for two seconds or more to clean the print head.	—

No.	Name	Normal	Setup menu display
3	[Cancel] key	<ul style="list-style-type: none"> When printing: Forcefully terminates printing and deletes one file of the remaining data. When receiving or analyzing: Deletes data that are already received and analyzed, and delete the next data. 	<ul style="list-style-type: none"> Returns to the previous menu hierarchy. Changes made in the setting are discarded. Shifts from Setup menu display to Normal.
4	[<] key	—	—
	[Nozzle Check] key	Press and hold this key for two seconds or more to perform Nozzle Check printing.	—
5	[>] key	<ul style="list-style-type: none"> Sets Cleaning Mode. The lamp of Cleaning Mode that you set lights up in green. 	Shifts the menu in the lower hierarchy.
	[Cleaning] key	When pressed for more than two seconds, cleaning starts.	—
6	[Backward↑] key	The media is fed in the reverse direction.	—
	[+] key	—	<ul style="list-style-type: none"> Changes the displayed menu to the forward direction. The setting is changed to the reverse direction. The numeric value is increased during numerical input.
7	[Forward↓] key	Media is fed in the forward direction.	—
	[-] key	—	<ul style="list-style-type: none"> Changes the displayed menu to the reverse direction. Changes the setting in the forward direction. The numeric value is decreased during numerical input.
8	[Power] key	Turns the printer ON/OFF.	Turns the printer ON/OFF.

(2) Display section

No.	Name	Color	Status	Description
9	Power lamp	Blue	Lamp ON	Power ON.
			Lamp blinks	An error has occurred. Error content is displayed on the LCD.
			Lamp OFF	Power OFF.
10	Data lamp	Orange	Lamp ON	<ul style="list-style-type: none"> Analyzing received data. Under printing.
			Lamp blinks	Receiving data.
			Lamp OFF	Data is not received and analyzed.
11	High lamp	Green	Lamp ON	The head height is set to High.
			Lamp OFF	The head height is set to Low.
12	Low lamp	Green	Lamp ON	The head height is set to Low.
			Lamp OFF	The head height is set to High.
13	Wave lamp	Green	Lamp ON	The Effect menu is set to Wave.
			Lamp OFF	The Effect menu is set to None.
14	Fine & S.Fine lamp	Green	Lamp ON	The Effect menu is set to Fine or Super Fine.
			Lamp OFF	<ul style="list-style-type: none"> The Effect menu is set to Wave. When the Wave lamp is turned OFF, the Effect menu is set to None.
15	Strong lamp	Green	Lamp ON	<ul style="list-style-type: none"> Cleaning Mode is set to Long. When the Normal lamp is also turned on, Cleaning Mode is set to Short.
			Lamp OFF	Cleaning Mode is set to Normal.
16	Normal lamp	Green	Lamp ON	<ul style="list-style-type: none"> Cleaning Mode is set to Normal. When the Strong lamp is also turned on, Cleaning Mode is set to Short.
			Lamp OFF	Cleaning Mode is set to Long.
17	LCD display section	—	—	Displays the operation status of the printer or an error message.

TIP

When an error requiring a restart (fatal malfunction for the printer operation) occurs, all lamps blink with an alarm.

7.2.3 Error requiring restart

If the error persists even when the malfunction is fixed, contact your local MUTOH dealer.

2.2 Printer status outline

This section explains the printer status.

2.2.1 Status

(1) Normal

Printing is possible when the media is loaded.

The various functions for printing can be performed on Operation panel.

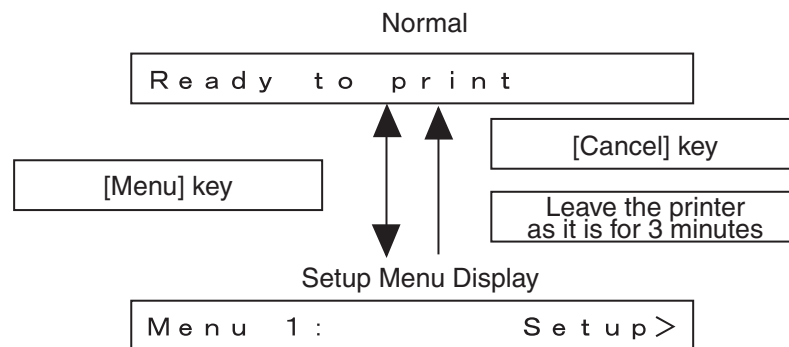
(2) Setup menu display

Various settings regarding printing can be made from Operation panel.

The various functions for printing can be performed on Operation panel.

Display contents in the LCD monitor of Operation panel are as follows.

(3) Panel display contents



2.2.2 Changing printer status

Follow the procedure below and change the printer status.

(1) Normal → Setup menu display

Press the [Menu] key on Operation panel when the printer is set to Normal.

- "Menu 1: Setup>" is displayed on Operation panel and the display shifts to the Setup menu.

NOTE

For details regarding the Setup menu, refer to [4.3 Menu setups on Operation panel](#).

(2) Setup menu display → Normal

When the printer is at Setup menu display, perform either of the following operations to shift Operation panel to the Normal display.

- Press the [Cancel] or [Menu] key on Operation panel.
- In the Setup menu, leave the keys untouched for three minutes.

NOTE

For details on Status message, refer to [7.2.1 Status messages](#).

3 Before using

This chapter explains necessary steps before using the printer.

3.1 Power cord set connection

This section explains power cord set connection.

WARNING

- **Be sure to use the specified power cord set.**
Using a power cord set other than the specified can cause an electric shock or fire.
- **Use the power cord set compliant with the safety standards, power-supply voltage, and plug shape of the country where the printer is used.**
- **Use a power cord set which is equipped with a protective earth, and securely connect it to the outlet.**
- **Do not use a damaged power cord set.**
It could lead to an electric shock or fire.

CAUTION

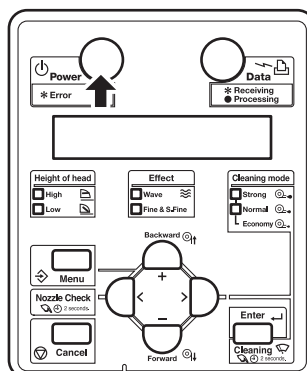
- **Pay attention to the following points when handling the power cord set.**
 - **Do not tamper with the power cord set.**
 - **Do not put heavy objects on the power cord set.**
 - **Do not bend, twist or pull the power cord set by force.**
 - **Do not route the power cord set near heating appliances.**

NOTE

Contact your local MUTOH dealer if the power cord set is damaged.

Follow the procedure below to install the power cord set.

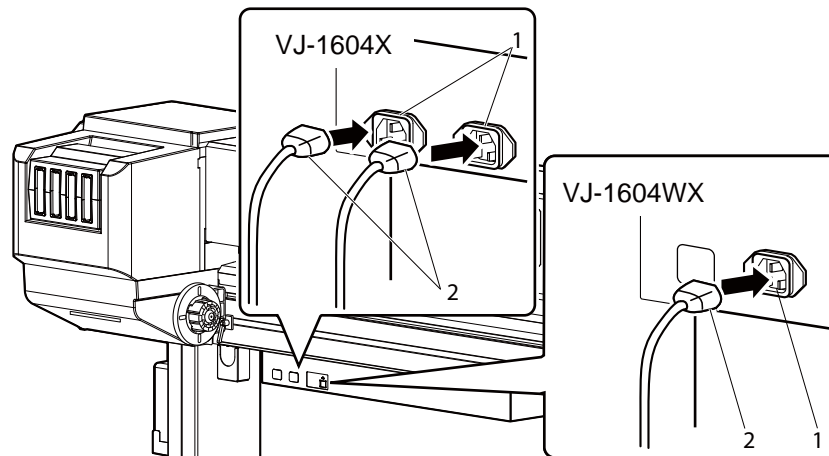
1. Make sure that the printer is turned OFF.



NOTE

The power is ON when the [Power] key of Operation panel is pressed in.
Press the key once again to turn OFF the power.

2. Connect the power cord set to the AC inlets on the right side of the printer (VJ-1604X: 2 places, VJ-1604WX: 1 place).



No.	Name
1	AC inlet
2	Power cord set

3. Insert the plug of the power cord set firmly in the socket.

⚠ WARNING

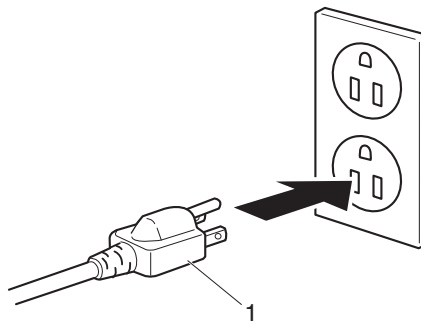
- Do not pull out or insert the power plug with a wet hand.
This could lead to an electric shock.
- Make sure to use only the specified power supply (AC 100 V to 120 V or AC 220 V to 240 V).
If a power supply other than the specified voltage is used, it could cause an electric shock or fire.
- Take power for the printer directly from the power socket (AC 100 V to 120 V or AC 220 V to 240 V).
Do not use multiple plugs on the same socket.
This could generate heat and might cause a fire.
- Be sure to use a dedicated power socket with an earth wire for the power supply, and connect it to the earth wire.
If the earth wire is not connected, it may cause an electric shock or fire.
- Do not connect an earth wire to the following places.
 - Gas pipes
There is a possibility of ignition and explosion.
 - An earth wire of telephone cables and lightning rods
A heavy current might flow whenever lightning strikes.
 - Water pipe and faucet
The earth does not work if part of the metal pipe is plastic.

⚠ CAUTION

- Pay attention to the following points when handling the power plug.
Any mishandling of the power cable could cause a fire.
- Make sure that no foreign substances such as dust are stuck to the power plug.
- Make sure that the power plug is inserted all the way.
- When you do not use the printer for a long period, make sure to pull out the power plug from the power socket for safety.
- Make sure to connect an earth wire to the earth connection that meets the following standards.
 - An earth terminal of power socket
 - An earth wire with a copper plate which is buried at 650 mm or more in the ground.

NOTE

- Contact your local MUTOH dealer if the earth connection is not/cannot be established.
- When the printer is ON, do not pull out the power cord set from the power socket. Whenever the plug is pulled out from the power socket, turn OFF the power on Operation panel and allow one minute or more before inserting the plug in the power socket again.
- For VJ-1604X, when connecting two power cord sets, a total capacity of 17A is required. When you cannot ensure the capacity of 17A, connect two power cord sets to separate outlets.



No.	Name
1	Power plug

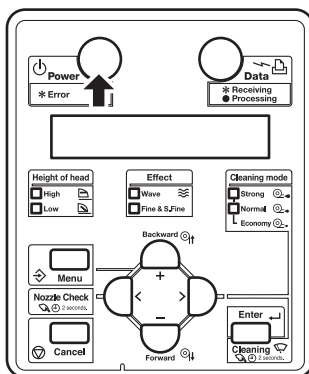
3.2 Turning the power ON/OFF

This section explains how to turn the printer ON/OFF.

3.2.1 Turning the power ON

Follow the procedure below to turn the power ON.

1. Press the [Power] key on Operation panel to turn ON the printer.
 - The Power lamp on Operation panel lights up in blue.



- The printer starts the initial operation.
- When the initial operation is complete, the printer enters Normal.

NOTE

If there is a problem during the initial operation, a message is displayed on Operation panel and the printer may stop operating.

If operation stops, refer to [7 Troubleshooting](#) and deal with the problem.

3.2.2 Turning the power OFF

Follow the procedure below to turn the printer OFF.

1. Verify the following regarding the operational condition of the printer.
 - Printing or other operations are not in progress.
 - Operation panel display is Normal.
 - The Low lamp on Operation panel lights up in green.
 - The High lamp on Operation panel is turned off.

NOTE

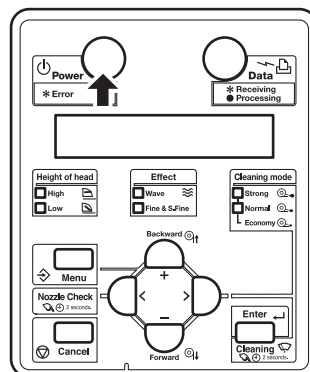
If the High lamp on Operation panel lights up in green, the head height is set to High. Return the head height to Low before turning the power OFF.

☞ [4.2.5.2 When setting the head height to Low](#)

2. Press the [Power] key on Operation panel to turn OFF the printer.
 - The Power lamp on Operation panel is turned off.

NOTE

- If Operation panel is in the following status, the power is ON.
 - The [Power] key is pressed in.
 - The Power lamp lights up in blue.
- Press the key once again to turn OFF the power.



- The printer turns the power OFF.
- "Power Off" is displayed on Operation panel.

NOTE

If the head height is set to High, "Set Height to Low" is displayed on Operation panel, and the printer stops the procedure to turn the power OFF.

To restart the procedure, return the head height to Low.

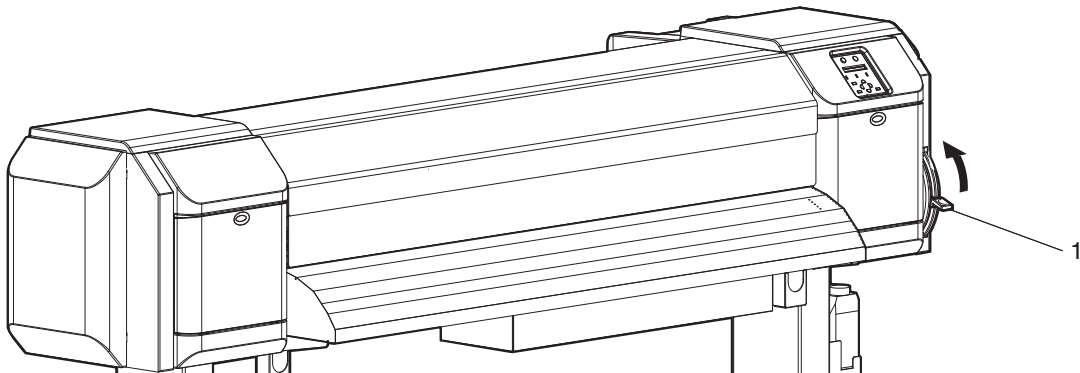
☞ [4.2.5.2 When setting the head height to Low](#)

- All the lamps on Operation panel and the LCD monitor are turned OFF.
- The printer automatically turns the power OFF.

NOTE

- If there is a problem during turning OFF operation, a message is displayed on Operation panel and the printer may stop operating.
If operation stops, refer to [7 Troubleshooting](#) and deal with the problem.
- After turning OFF the printer, wait for ten seconds or longer to turn it ON again.

3. Raise the media loading lever when the printer is not used for a long time.



No.	Name
1	Media loading lever

3.3 Filling ink

This section describes the procedure to install Ink cartridges for the first time.



- **Before operation, make sure to read the Safety Data Sheet (SDS).**
- **When handling Ink cartridges or Ink packs, pay attention so that ink does not come into contact with your eyes or skin.**
If ink gets into your eyes or sticks to your skin, immediately wash it off with water.
Failing to do so might cause irritation or light inflammation of eyes.
In case of any abnormality, consult a physician immediately.
- **Do not disassemble Ink cartridges or Ink packs.**
If disassembled, ink might come into contact with your eyes or skin.
- **Comply strictly with the following during ink filling.**
 - **Do not turn OFF the printer.**
 - **Do not unplug the power cord set.**
 - **Do not open Front cover.**
 - **Do not open Maintenance cover.**
 - **Do not raise Media loading lever.**

NOTE

- Do not use the Ink cartridge(s) you have inserted into Ink cartridge slot(s) for other printers. The Ink cartridge(s) will not be used again.
 - Use genuine Ink cartridges or Ink packs for charging.
This printer is designed to use genuine Ink cartridges and Ink packs.
If you use Ink cartridges which are not produced by the original manufacturer,
 - printing might become blurred and the end of the ink might not be detected correctly.
 - Any problems caused by using an ink bag other than those recommended above will not be covered by the warranty, and repair expenses will be paid by the customer.
 - For types and details of Ink cartridges, contact your local MUTOH dealer.
 - Do not shake Ink cartridges or Ink packs strongly.
Doing so may cause ink leakage.
 - Do not disassemble Ink cartridges.
A disassembled Ink cartridge or Ink packs cannot be used.
 - Be sure to use the dedicated cleaning fluid.
 - Shake the Ink cartridges or Ink packs lightly before installing.
Doing so may affect the print quality.
 - When the Ink cartridge or Ink pack is moved from a cold place to a warm place, leave it for 3 hours or more in the new printing environment before printing.
 - Ink cartridges and Ink packs for this printer have dedicated IC chips on them.
If removing/inserting the ink cartridges and High-capacity ink pack adapter (option) in the following situations, the information within the IC chips may be damaged and the cartridges cannot be used.
 - During printing
 - For ten seconds after inserting all Ink cartridges
-

3.3.1 When using 220ml Ink cartridges

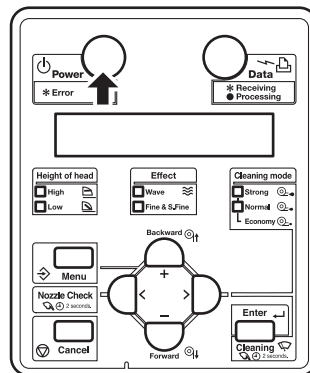
Follow the procedure below to install the 220ml Ink cartridges.

NOTE

- The procedures differ between VJ-1604X and VJ-1604WX. Check your printer model name and follow the correct procedure.
- Do not insert or remove an ink cartridge more than 10 times.
If the ink cartridge is inserted or removed 10 times or more, it cannot be used even if there is some remaining ink inside.

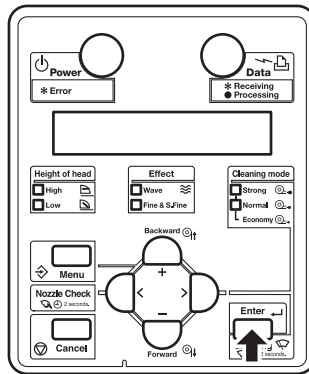
3.3.1.1 For VJ-1604X

1. Turn the printer ON.

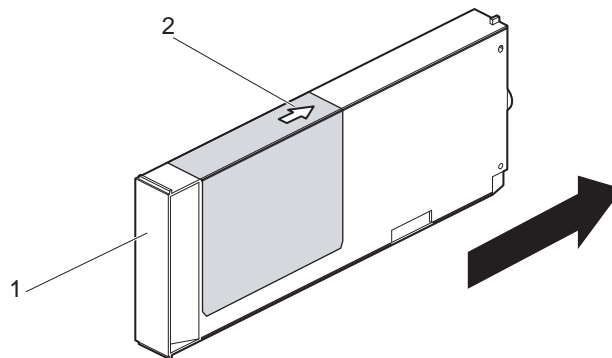


- The printer starts the initializing operation.
- After the initial operation is complete, "Start Ink Charge->ENTER" is displayed on Operation panel.

2. Press the [Enter] key on Operation panel.

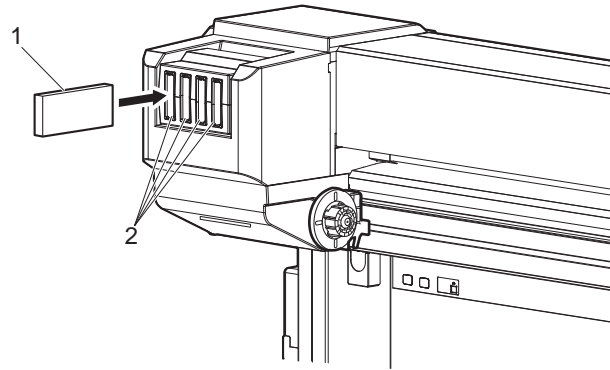


- "Insert CleaningCart." is displayed on Operation panel.
3. Take out Cleaning cartridges (4 pieces) from the bags.
 4. Insert Cleaning cartridge into Ink cartridge slot.
 - Keep the arrow of Cleaning cartridge facing up and insert it into the printer.



No.	Name
1	Cleaning cartridge
2	Arrow

- Insert Cleaning cartridge all the way in Ink cartridge slot.



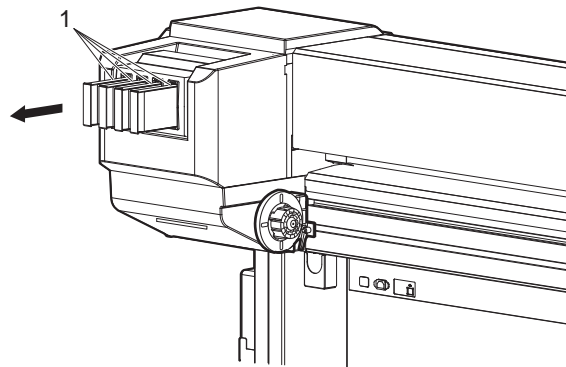
No.	Name
1	Cleaning cartridge
2	Ink cartridge slots

- If the head height is set to High, "Change Head Gap Low" is displayed on Operation panel. Change the head height to Low.

4.2.5 Head height adjustment

- When all Cleaning cartridges are installed, "Busy-Washing" is displayed on Operation panel, and the printer starts charging the cleaning fluid.
- When Cleaning fluid has been charged, "Remove Cartridges" is displayed on Operation panel.

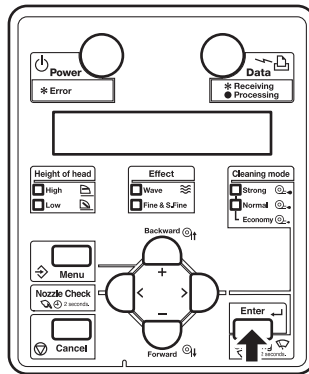
5. Remove all Cleaning cartridges.



No.	Name
1	Cleaning cartridge

- "Busy-Washing" is displayed on Operation panel and the printer starts head cleaning.
- When head cleaning is complete, "Wash retry? No" is displayed on Operation panel.

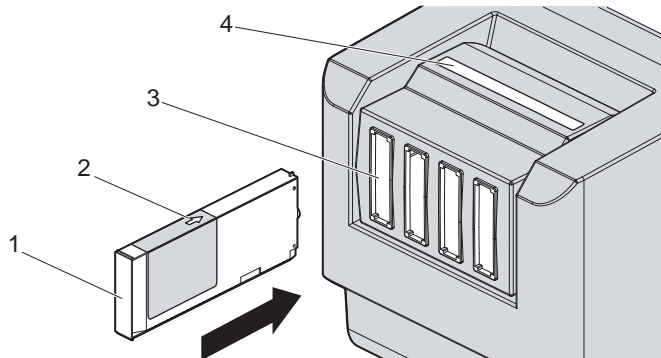
6. Press the [Enter] key on Operation panel.



- "Insert InkCartridges" is displayed on Operation panel.

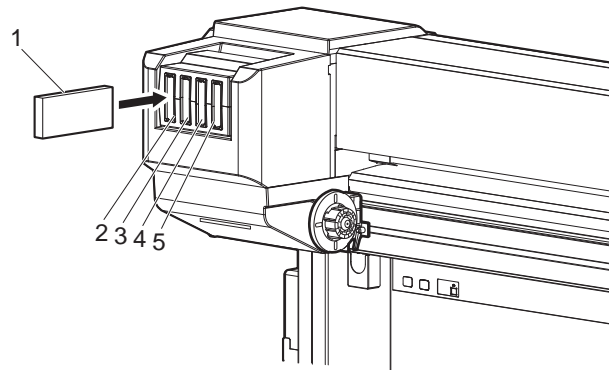
7. Install Ink cartridges (K, C, M, Y) in Ink cartridge slots on the back of the printer.

- Shake Ink cartridges 2 to 3 times lightly before installing them into Ink cartridge slots.
- Make sure that Ink cartridges are inserted into the correct Slots. Match the ink color label with the ink color before inserting Ink pack.
- Keep the arrow of Ink cartridge facing up and insert it into the printer.



No.	Name
1	Ink cartridge
2	Arrow
3	Ink cartridge slots
4	Ink color labels

- Insert Ink cartridges all the way in Ink cartridge slots.



No.	Name
1	Ink cartridge
2	Ink cartridge slot K
3	Ink cartridge slot C
4	Ink cartridge slot M
5	Ink cartridge slot Y

- When an Ink cartridge is installed, "Ink Refill **%" is displayed on Operation panel and ink replenishment starts.
- Initial filling takes about 10 minutes.
Ink filling operation and pause operation are repeated during the initial ink replenishment.
- When "100%" is displayed, the initial ink replenishment is complete.
- When the initial ink charge is complete, "SubTank Refill **%" is displayed on the operation panel, and the printer starts filling the subtank.
- When 100% is displayed, the subtank ink replenishment is complete.
- After the subtank ink replenishment is complete, Media End is displayed on the operation panel.

CAUTION

- **Comply strictly with the following during ink filling. If filling is interrupted, ink will be lost when filling is resumed.**
 - **Do not turn OFF the power of the printer.**
 - **Do not unplug the power cord set of the printer.**
 - **Do not open Front cover.**
 - **Do not open Maintenance cover.**
 - **Do not raise Media loading lever.**

NOTE

- If the printer perform the nozzle check printing immediately after the initial ink replenishment is complete, the following results may occur.
 - Printed lines become blurred.
 - The data is partially not printed.

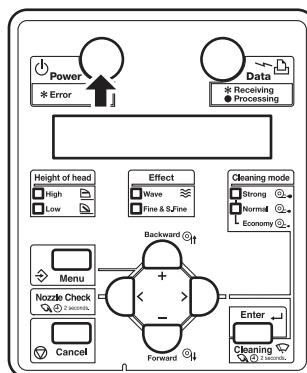
In such cases, follow "**5.4 Cleaning menu**" and refill a small amount of ink. Then, check the printing result.

- If there is no improvement in the print result even after refilling a small amount of ink, leave the printer unused for an hour or more. Then, refill a small amount of ink again and check the print result.

If there is still no improvement, contact your local MUTOH dealer.

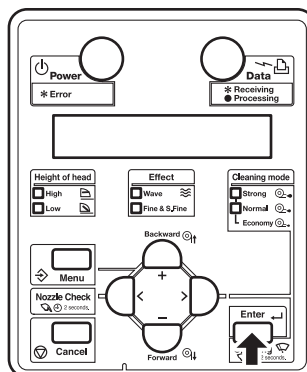
3.3.1.2 For VJ-1604WX

1. Turn the printer ON.



- The printer starts the initializing operation.
- After the initial operation is complete, "Start Ink Charge->ENTER" is displayed on Operation panel.

2. Press the [Enter] key on Operation panel.

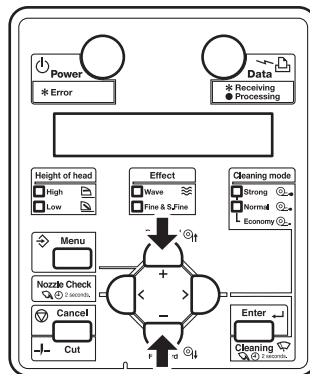


- When head cleaning is complete, "Wash retry? No" is displayed on Operation panel.
3. Select whether to perform cleaning of the ink path before the initial ink charge.

NOTE

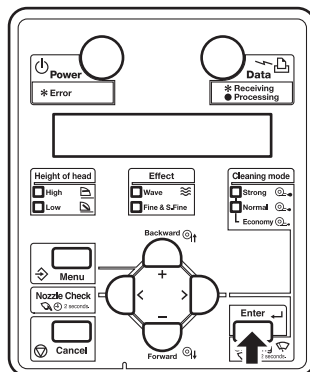
- Cleaning may be required depending on the ink type to be set.
- To perform head cleaning, make sure to use the cleaning liquid that matches the ink.

- a. When cleaning is required, press the [+] key or [-] key to select "Yes".



- b. When cleaning is not required, proceed to the step 8.

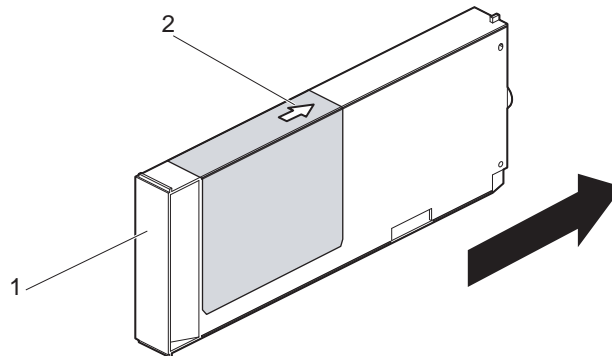
4. Press the [Enter] key on Operation panel.



- "Insert CleaningCart." is displayed on Operation panel.
5. Take out Cleaning cartridges (4 pieces) from the bags.

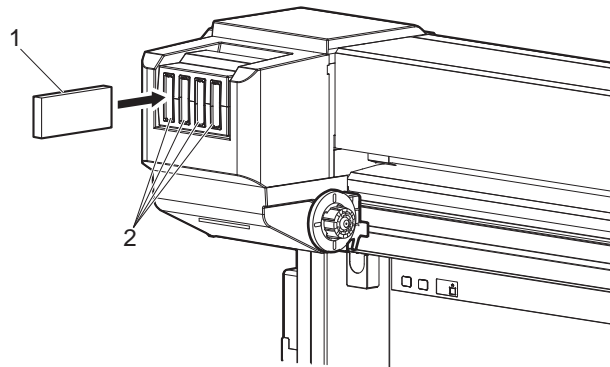
6. Insert Cleaning cartridge into Ink cartridge slot.

- Keep the arrow of Cleaning cartridge facing up and insert it into the printer.



No.	Name
1	Cleaning cartridge
2	Arrow

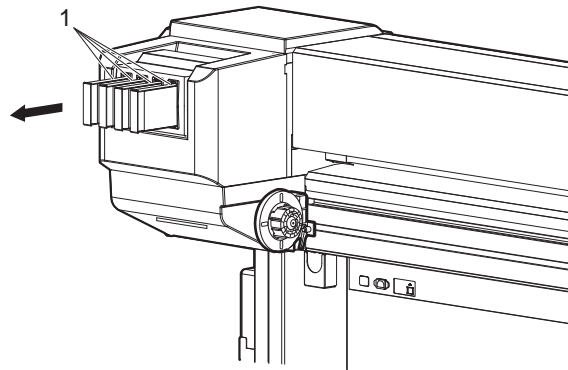
- Insert Cleaning cartridge all the way in Ink cartridge slot.



No.	Name
1	Cleaning cartridge
2	Ink cartridge slots

- If the head height is set to High, "Change Head Gap Low" is displayed on Operation panel.
Change the head height to Low.
[☞ 4.2.5 Head height adjustment](#)
- When all Cleaning cartridges are installed, "Busy-Washing" is displayed on Operation panel, and the printer starts charging the cleaning fluid.
- When Cleaning fluid has been charged, "Remove Cartridges" is displayed on Operation panel.

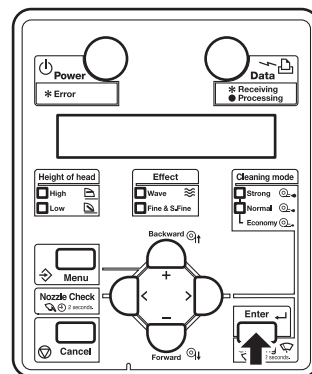
7. Remove all Cleaning cartridges.



No.	Name
1	Cleaning cartridge

- "Busy-Washing" is displayed on Operation panel and the printer starts head cleaning.
- When head cleaning is complete, "Wash retry? No" is displayed on Operation panel.

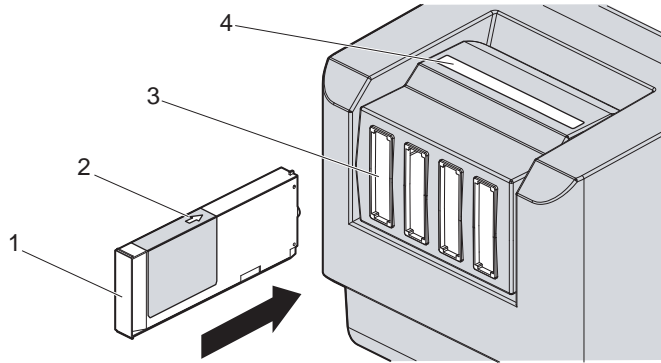
8. Press the [Enter] key on Operation panel.



- "Insert InkCartridges" is displayed on Operation panel.

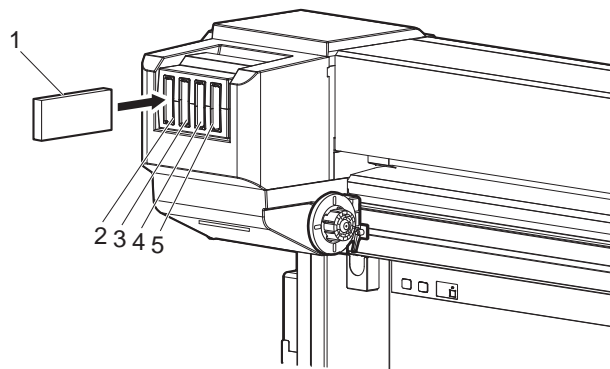
9. Install Ink cartridges (K, C, M, Y) in Ink cartridge slots on the back of the printer.

- Shake Ink cartridges 2 to 3 times lightly before installing them into Ink cartridge slots.
- Make sure that Ink cartridges are inserted into the correct Slots.
Match the ink color label with the ink color before inserting Ink pack.
- Keep the arrow of Ink cartridge facing up and insert it into the printer.



No.	Name
1	Ink cartridge
2	Arrow
3	Ink cartridge slots
4	Ink color labels

- Insert Ink cartridges all the way in Ink cartridge slots.



No.	Name
1	Ink cartridge
2	Ink cartridge slot K
3	Ink cartridge slot C
4	Ink cartridge slot M
5	Ink cartridge slot Y

- When an Ink cartridge is installed, "Ink Refill **%" is displayed on Operation panel and ink replenishment starts.
- Initial filling takes about 10 minutes.
Ink filling operation and pause operation are repeated during the initial ink replenishment.
- When "100%" is displayed, the initial ink replenishment is complete.
- When the initial ink charge is complete, "SubTank Refill **%" is displayed on the operation panel, and the printer starts filling the subtank.
- When 100% is displayed, the subtank ink replenishment is complete.
- After the subtank ink replenishment is complete, Media End is displayed on the operation panel.

CAUTION

- **Comply strictly with the following during ink filling. If filling is interrupted, ink will be lost when filling is resumed.**
 - **Do not turn OFF the power of the printer.**
 - **Do not unplug the power cord set of the printer.**
 - **Do not open Front cover.**
 - **Do not open Maintenance cover.**
 - **Do not raise Media loading lever.**

NOTE

- If the printer perform the nozzle check printing immediately after the initial ink replenishment is complete, the following results may occur.
 - Printed lines become blurred.
 - The data is partially not printed.

In such cases, follow [5.4 Cleaning menu](#) and refill a small amount of ink. Then, check the printing result.

- If there is no improvement in the print result even after refilling a small amount of ink, leave the printer unused for an hour or more. Then, refill a small amount of ink again and check the print result.

If there is still no improvement, contact your local MUTOH dealer.

3.3.2 Installing the optional High Capacity Ink Pack Adapter (VJ-1604X only)

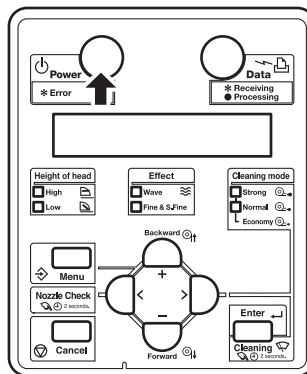
Use the optional High-capacity ink pack adapter to use the 1000ml Ink packs on VJ-1604X.

NOTE

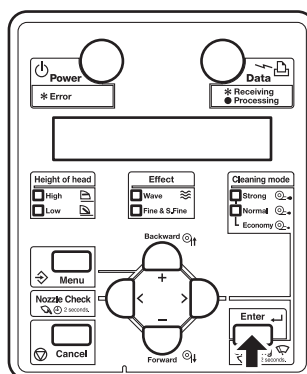
High-capacity ink pack adapters are not compatible with VJ-1604WX.

Follow the procedure below to install High-capacity ink pack adapter.

1. Turn the printer ON.



- The printer starts the initializing operation.
 - After the initial operation is complete, "Start Ink Charge->ENTER" is displayed on Operation panel.
2. Press the [Enter] key on Operation panel.



- "Insert CleaningCart." is displayed on Operation panel.
3. Take out Cleaning fluid pack from the bag.

4. Install Cleaning fluid pack and IC chip card to High-capacity ink pack adapter.

NOTE

To install or remove High-capacity ink pack adapter to/from Cleaning fluid pack and IC chip card, refer to the operation manual included with High-capacity ink pack adapter.

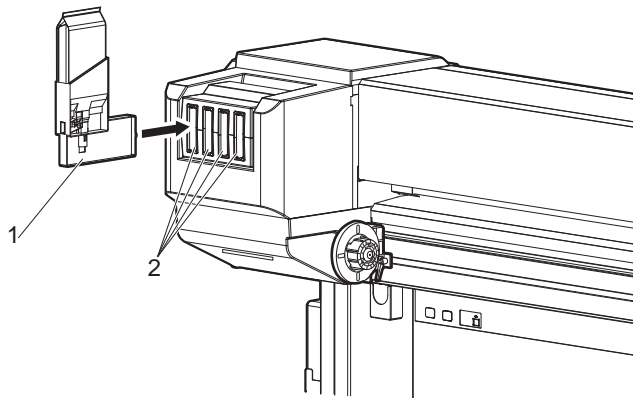
5. Insert High-capacity ink pack adapter into Ink cartridge slot.

NOTE

Do not insert High-capacity ink pack adapter into Ink cartridge slot without attaching Cleaning fluid pack.

The information of the remaining IC chip card will be rewritten and Cleaning fluid pack will not be usable.

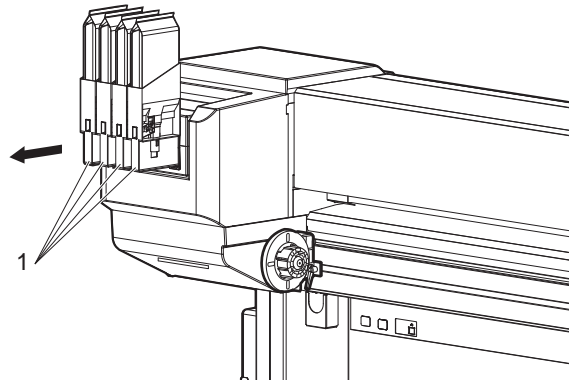
- Insert High-capacity ink pack adapters all the way in Ink cartridge slots.



No.	Name
1	High-capacity ink pack adapter
2	Ink cartridge slots

- If the head height is set to High, "Change Head Gap Low" is displayed on Operation panel. Change the head height to Low.
[4.2.5 Head height adjustment](#)
- When all High-capacity ink pack adapters are installed, "Busy-Washing" is displayed on Operation panel, and the printer starts charging Cleaning fluid.
- When Cleaning fluid has been charged, "Remove Cartridges" is displayed on Operation panel.

6. Remove all High-capacity ink pack adapters.



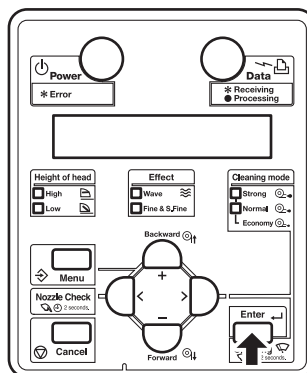
No.	Name
1	High-capacity ink pack adapter

- "Busy-Washing" is displayed on Operation panel and the printer starts head cleaning.
- When head cleaning is complete, "Wash retry? No" is displayed on Operation panel.

NOTE

Do not remove only Cleaning fluid pack while High-capacity ink pack adapter is installed on the printer. The information of the remaining IC chip card will be rewritten and Cleaning fluid pack will not be usable.

7. Press the [Enter] key on Operation panel.



- "Insert InkCartridges" is displayed on Operation panel.

8. Remove Cleaning fluid pack and IC chip card from High-capacity ink pack adapter.

NOTE

When there is remaining Cleaning fluid pack and IC chip card, clarify the corresponding pack and card, and store it as a set.

9. Install Ink pack and IC chip card to High-capacity ink pack adapter.

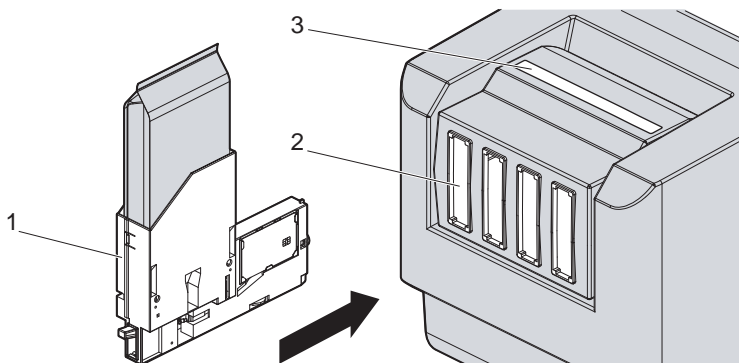
- Shake Ink packs 2 to 3 times lightly before installing them into High-capacity ink pack adapter.

10. Install High-capacity ink pack adapters (K, C, M, Y) in Ink cartridge slots on the back of the printer.

- Make sure that Ink packs are inserted into the correct Slots.
Match the ink color label with the ink color before inserting Ink pack.

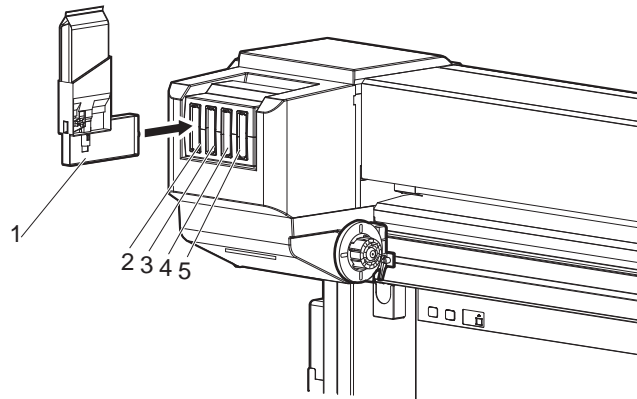
NOTE

Do not insert High-capacity ink pack adapter into Ink cartridge slot without attaching Ink pack.
The information of the remaining IC chip card will be rewritten and Ink pack will not be usable.



No.	Name
1	High-capacity ink pack adapter
2	Ink cartridge slots
3	Ink color labels

- Insert High-capacity ink pack adapters all the way in Ink cartridge slots.



No.	Name
1	High-capacity ink pack adapter
2	Ink cartridge slot K
3	Ink cartridge slot C
4	Ink cartridge slot M
5	Ink cartridge slot Y

- When a High-capacity ink pack adapter is installed, "Ink Refill **%" is displayed on Operation panel and ink replenishment starts.
- Initial filling takes about 6 minutes.
Ink filling operation and pause operation are repeated during the initial ink replenishment.
- When "100%" is displayed, the initial ink replenishment is complete.
- When the initial ink charge is complete, "SubTank Refill **%" is displayed on the operation panel, and the printer starts filling the subtank.
- When 100% is displayed, the subtank ink replenishment is complete.
- After the subtank ink replenishment is complete, Media End is displayed on the operation panel.

CAUTION

- **Comply strictly with the following during ink filling. If filling is interrupted, ink will be lost when filling is resumed.**
 - **Do not turn OFF the power of the printer.**
 - **Do not unplug the power cord set of the printer.**
 - **Do not open Front cover.**
 - **Do not open Maintenance cover.**
 - **Do not raise Media loading lever.**

NOTE

- If the printer perform the nozzle check printing immediately after the initial ink replenishment is complete, the following results may occur.
 - Printed lines become blurred.
 - The data is partially not printed.

In such cases, follow **5.4 Cleaning menu** and refill a small amount of ink. Then, check the printing result.

- If there is no improvement in the print result even after refilling a small amount of ink, leave the printer unused for an hour or more. Then, refill a small amount of ink again and check the print result.

If there is still no improvement, contact your local MUTOH dealer.

3.3.3 When using High-capacity ink pack adapter for the first time on the printer whose ink is filled.

If the printer is used without the initial ink replenishment, the air inside High-capacity ink pack adapter goes into Ink tubes and may cause nozzle clogging. Perform the initial ink replenishment from Cleaning menu in the following cases.

- When using High-capacity ink pack adapter for the first time on the printer whose ink is filled
- After using High-capacity ink pack adapters and replacing them with new ones

5.4 Cleaning menu

3.4 Loading media

This section explains how to load and set media, and settings for each media type.

NOTE

- Refer to the following for details about handling media.
📖 [4.2 Media](#)
- For types and details of the recommended media, contact your local MUTOH dealer.

3.4.1 Loading roll media

This section describes the procedure to load the roll media.
Put the roll media in the center of the printer.

NOTE

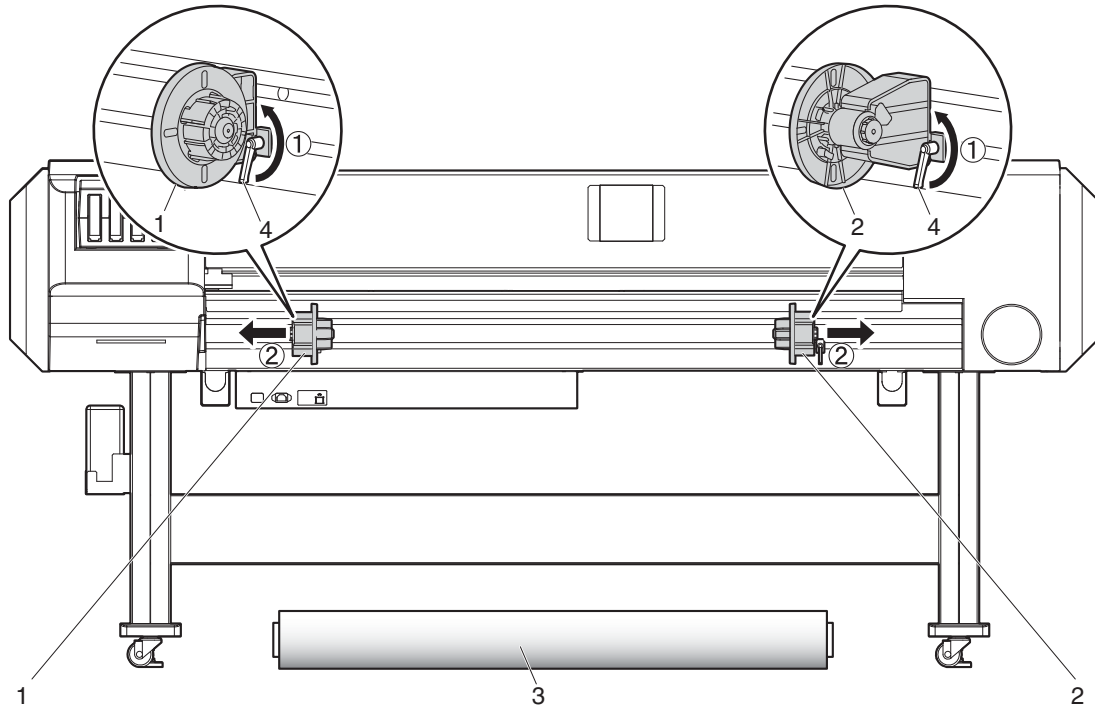
The following roll media can be loaded to this printer.

- Outer diameter: 150mm or less
- Media tube diameter: two inches or three inches
- Weight: 30kg or less
- Width: 1,625 mm or less
- Thickness: 1.3mm or less

📖 [8.1.1 Printer specifications](#)

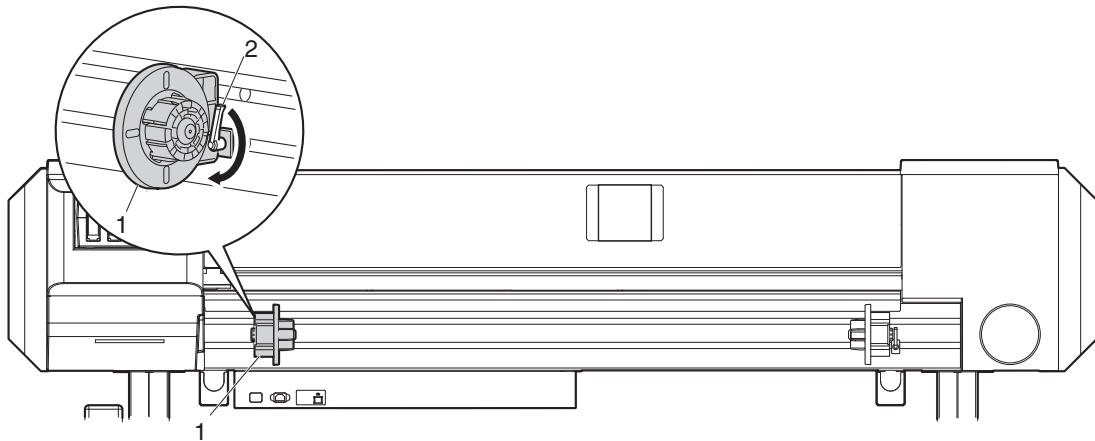
Follow the procedure below to load the roll media.

1. Loosen Fixing levers on the Roll media holders (both left and right) on the back of the printer. Set the distance between Roll media holders wider than the actual width of the roll media to be set.



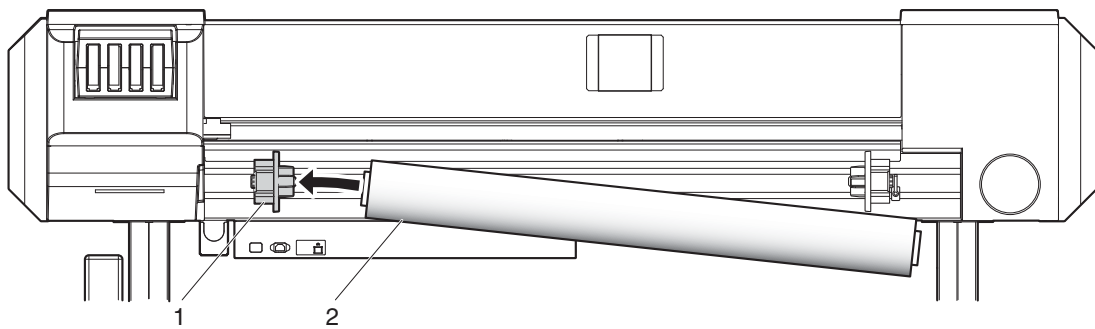
No.	Name
1	Roll media holder (Left)
2	Roll media holder (Right)
3	Roll media
4	Fixing lever

2. Tighten Fixing lever of Roll media holder (Left) and fix the roll media holder (Left).



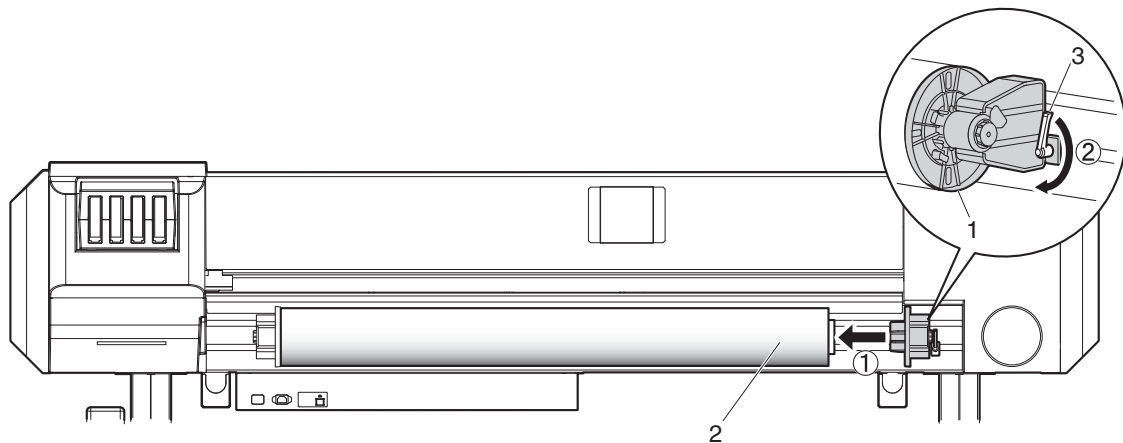
No.	Name
1	Roll media holder (Left)
2	Fixing lever

3. Set the roll media to Roll media holder (Left).



No.	Name
1	Roll media holder (Left)
2	Roll media

4. Attach Roll media holder (Right) to the roll media and tighten Fixing lever.

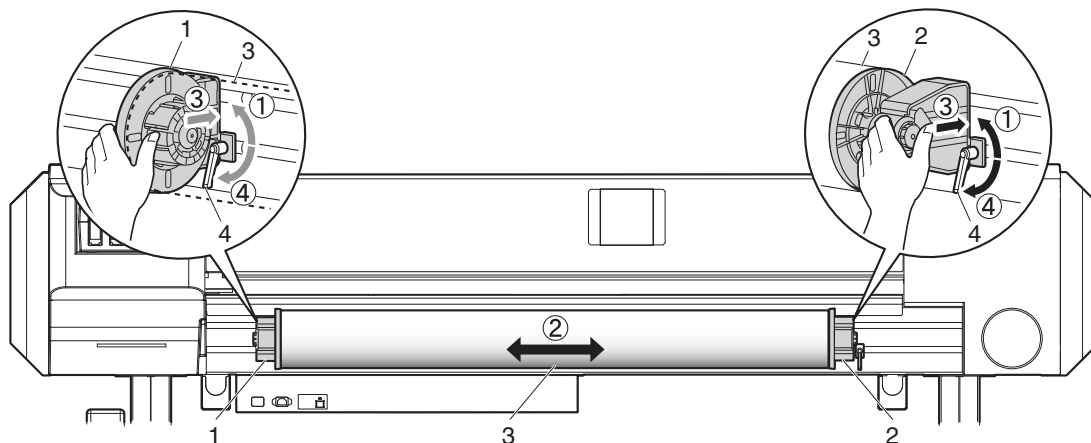


No.	Name
1	Roll media holder (Right)
2	Roll media
3	Fixing lever

5. Loosen the fixing levers of the right and left roll media holders, move the roll media to the center and tighten the levers.

NOTE

When tightening Fixing lever, press Roll media holder toward the printer. If you do not press Roll media holder, Fixing lever may not be completely locked because of the weight of the roll media.



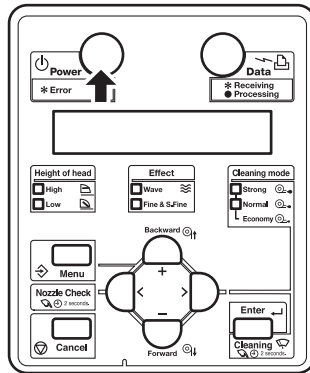
No.	Name
1	Roll media holder (Left)
2	Roll media holder (Right)
3	Roll media
4	Fixing lever

3.4.2 Setting Roll Media

This section explains how to set the roll media.

Follow the procedure below to set the roll media.

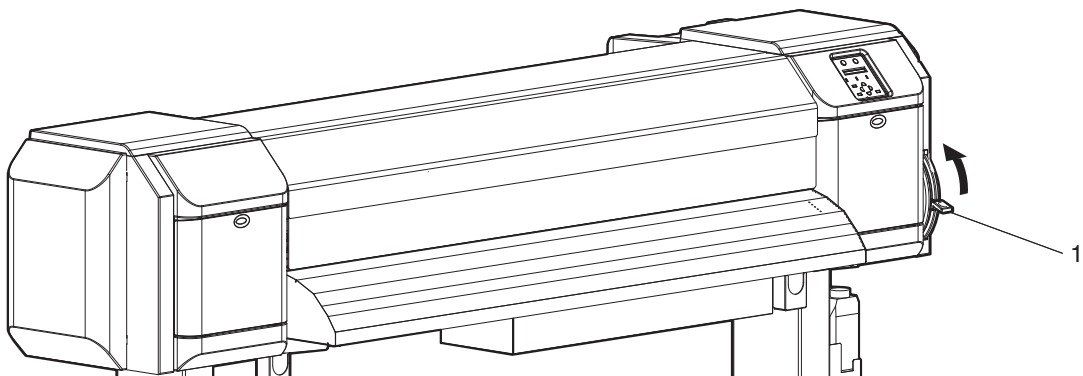
1. Turn the printer ON.



CAUTION

- Do not operate Media loading lever during initial operation. Print head may touch Pressurizing roller and cause a malfunction.

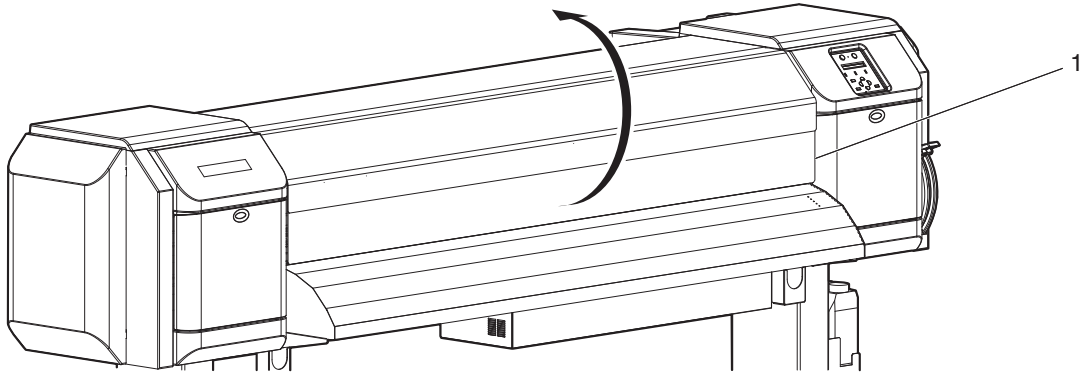
- The printer starts the initializing operation.
 - "Media End" is displayed on Operation panel.
2. Raise Media loading lever.



No.	Name
1	Media loading lever

- "Lever Up" is displayed on Operation panel.

- Open Front cover.

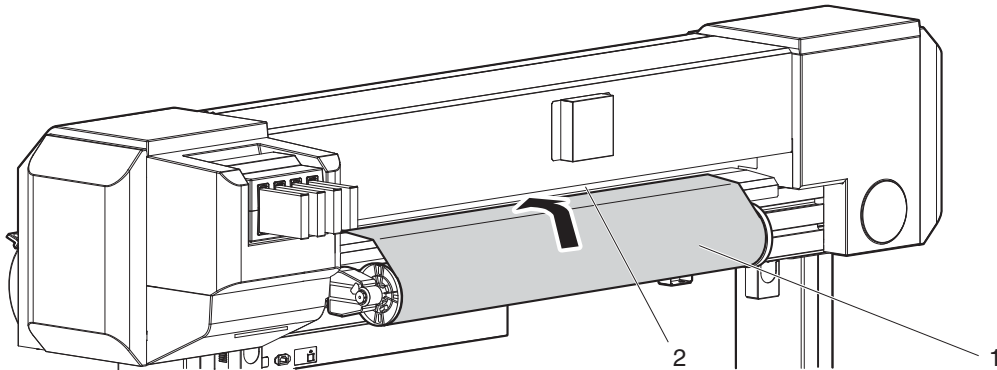


No.	Name
1	Front cover

- Set the roll media to Media feed slot.

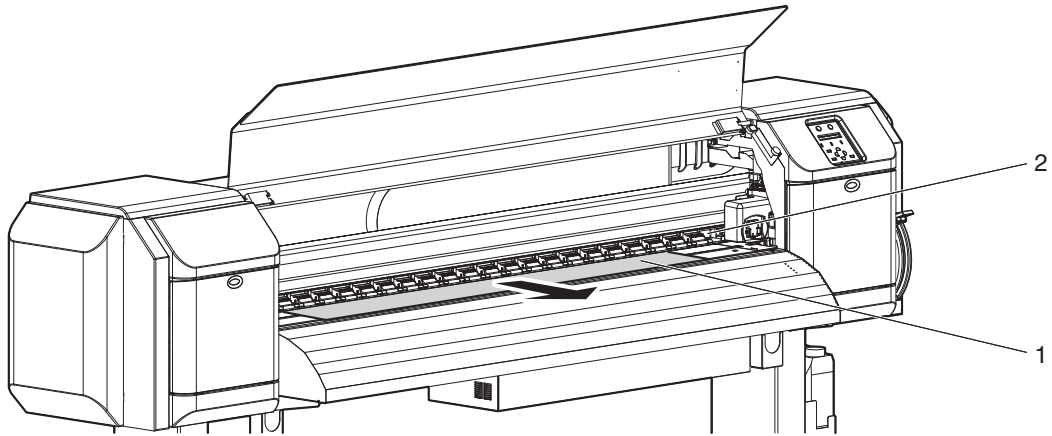
NOTE

If the end of the roll media is not wound tightly, wind it tightly again, and then load it.



No.	Name
1	Roll media
2	Media feed slot

- Pull the roll media out about 1 m from the front Media feed slot which is located inside of Front cover.

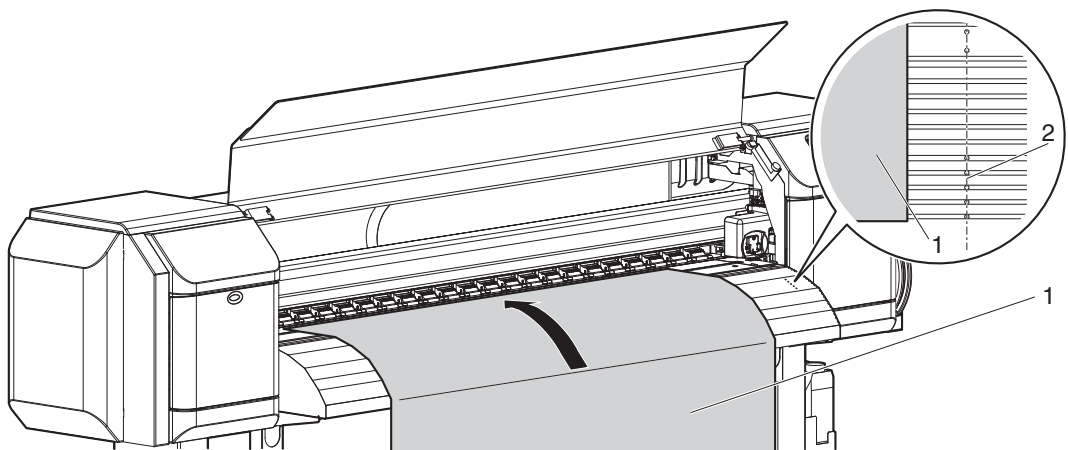


No.	Name
1	Roll media
2	Media feed slot

- Rewind the roll media a little by rolling Flange on Roll media holder while holding the edge of the media, and eliminate any slack or slant.

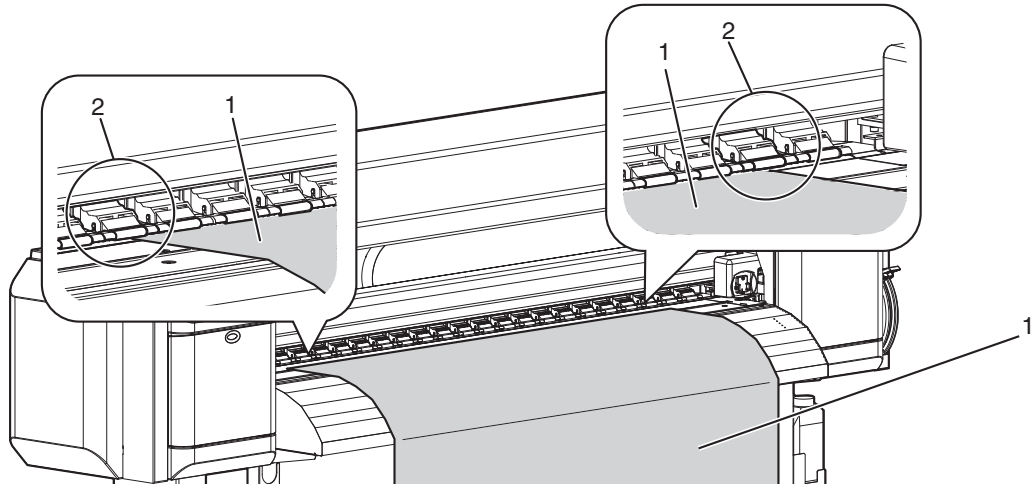
NOTE

- If you set the roll media free while rewinding, the roll media may fall out from Media feed slot and fall toward the back of the printer.
- Confirm that the right edge of the roll media does not go beyond the loading mark. If it does, it may affect print quality.



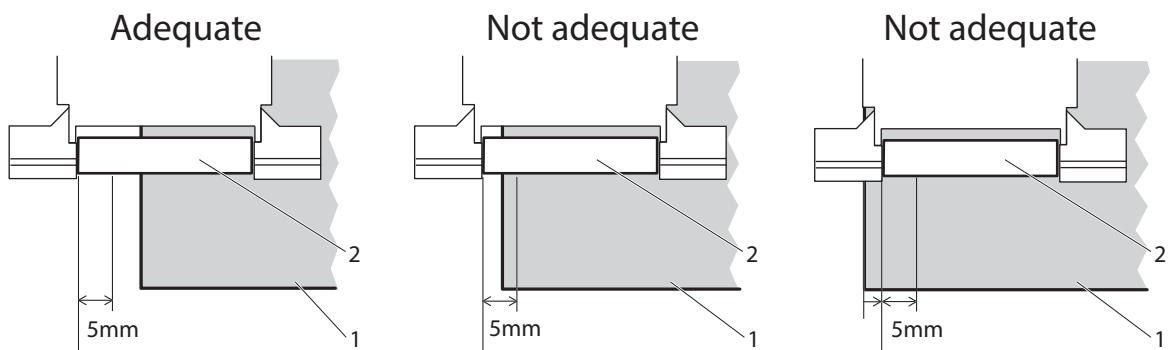
No.	Name
1	Roll media
2	Media loading mark

7. Make sure that the edges of the media is appropriately pressed by Pressurizing rollers.
- When the media is set as shown in the following figure “Not adequate”, follow the procedure to adjust the position of the roll media.
If the media is set as shown in the following figure “Not adequate”, the media may be misaligned or creased during printing.



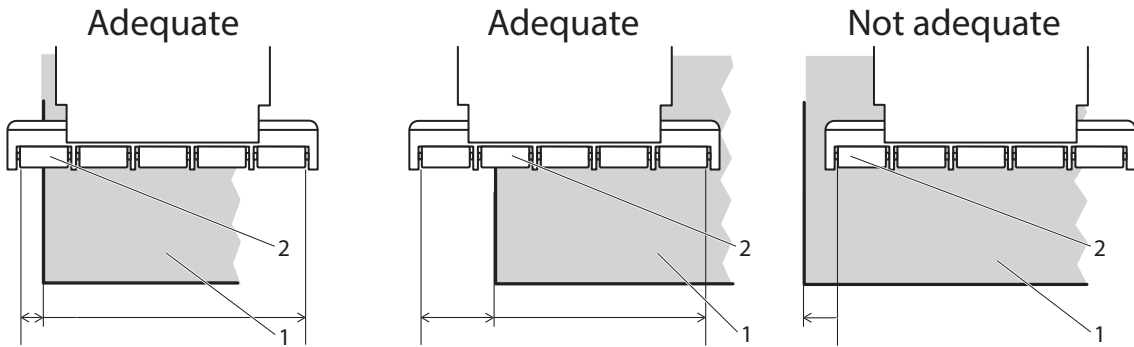
No.	Name
1	Roll media
2	Pressurizing rollers

<For VJ-1604X>



No.	Name
1	Roll media
2	Pressurizing rollers

<For VJ-1604WX>

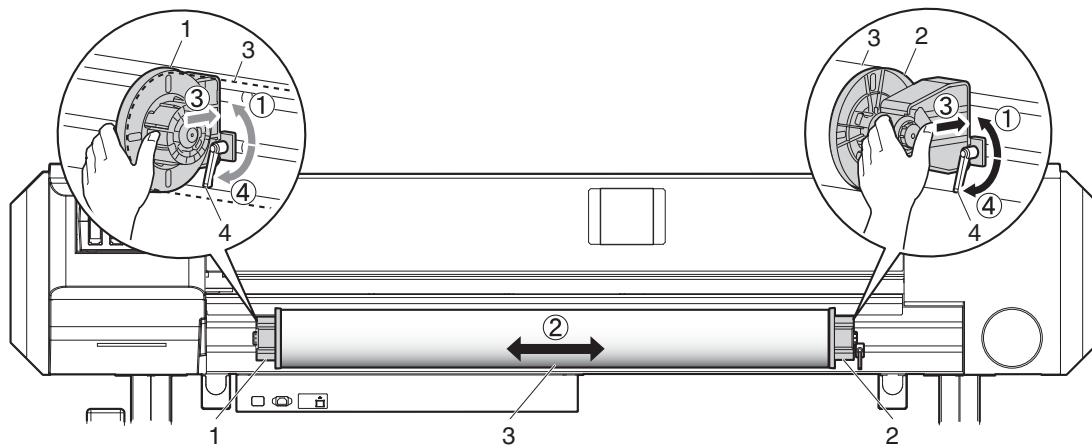


No.	Name
1	Roll media
2	Pressurizing rollers

- a. Loosen Fixing levers of the right and left Roll media holders, and move the roll media to left or right.
- b. After moving the roll media, fix it with Fixing levers of the right and left Roll media holders.

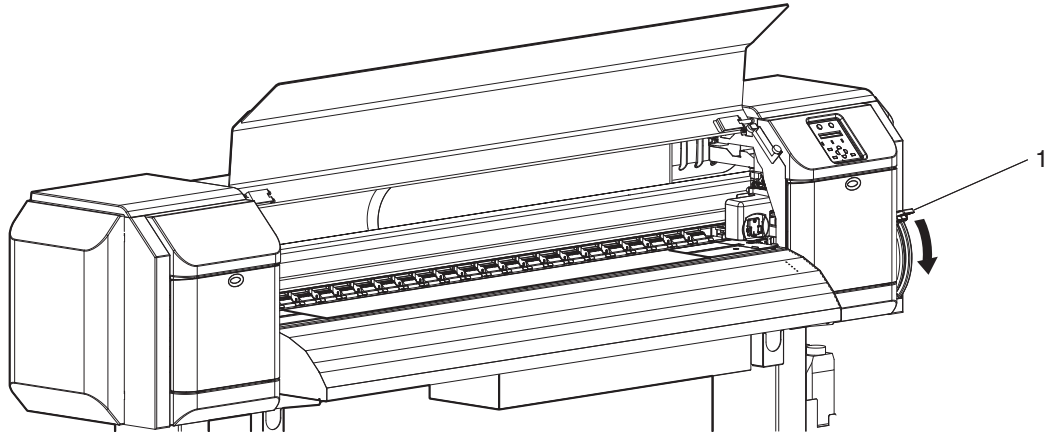
NOTE

When tightening Fixing lever, press Roll media holder toward the printer. If you do not press Roll media holder, Fixing lever may not be completely locked because of the weight of the roll media.



No.	Name
1	Roll media holder (Left)
2	Roll media holder (Right)
3	Roll media
4	Fixing lever

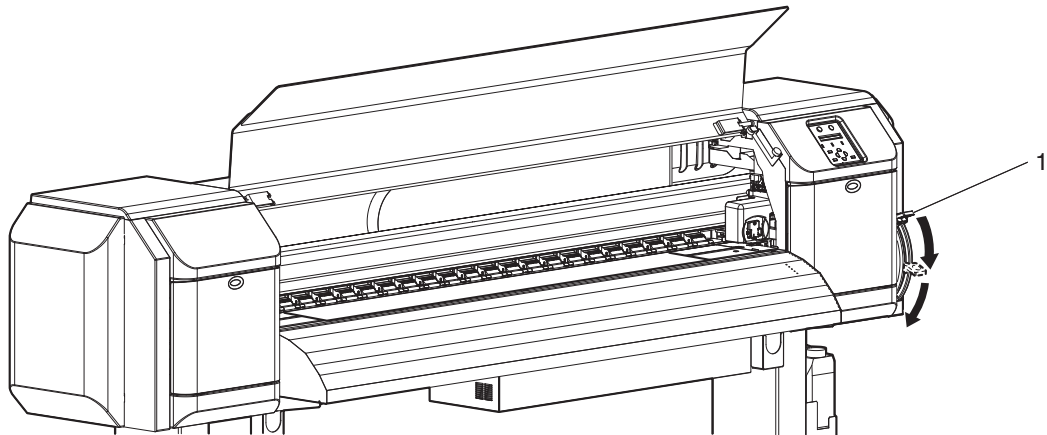
8. Lower Media loading lever.



No.	Name
1	Media loading lever

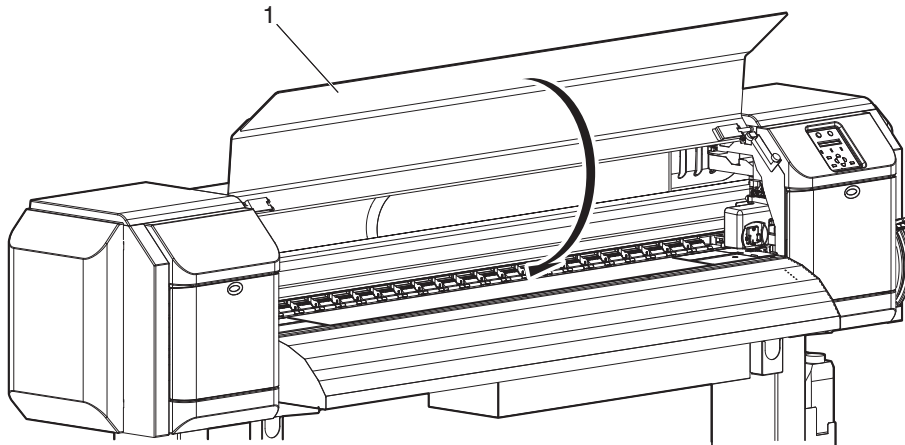
NOTE

- When loading the new roll media, cut the front edge of the media if it is not straight.
[☞ 4.4.3 Cutting media \(VJ-1604WX only\)](#)
- When you increase the pressure for the media, lower Media loading lever further as shown below.



No.	Name
1	Media loading lever

9. Close Front cover.



No.	Name
1	Front cover

- The media type Setup menu is displayed on Operation panel.

TIP

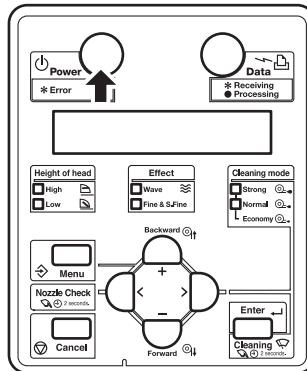
To change the media type, follow [3.4.3 Setting media type](#) and set the media type.

3.4.3 Setting media type

This section explains how to set the media type.

Follow the procedure below to set the media type.

1. Turn ON the printer and load the media.



- After loading the media, the printer enters the media type menu.

TIP

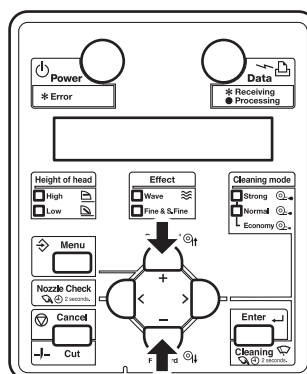
- Refer to the following for setting the media.

[3.4.2 Setting Roll Media](#)

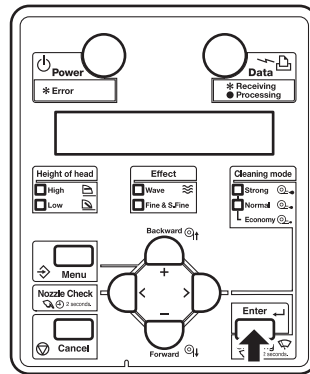
- Refer to the following for details on the media type menu.

[5.1.1 Media type menu](#)

2. Press the [+] key or [-] key on Operation panel to select the media type.



- Press the [Enter] key on Operation panel.



- the media type is set.
- "Media Initial" is displayed on Operation panel and media initialization starts.

NOTE

- If the following operations are performed in the media type menu, the printer starts media initial operation without changing the media type.
- Pressing the [Cancel] key on Operation panel.
- No keys on Operation panel are pressed for 30 seconds.

- After media initial operation is complete, "Ready to Print" is displayed on Operation panel and the printer status shifts to Normal.
- Media set is complete.

3.4.4 Changing the torque of Roll media holder (for VJ-1604X)

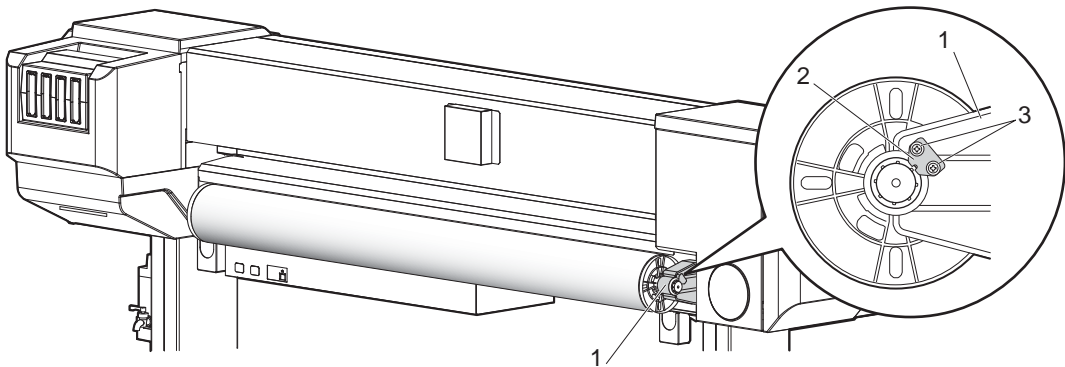
This section describes the procedure to change the torque of Roll media holder.

The torque should be the same as at the factory shipment. However, if the media is wrinkled or it may come in contact with Print head, follow the procedure below to fix Damper stopper and change the torque to 0.7kg.

NOTE

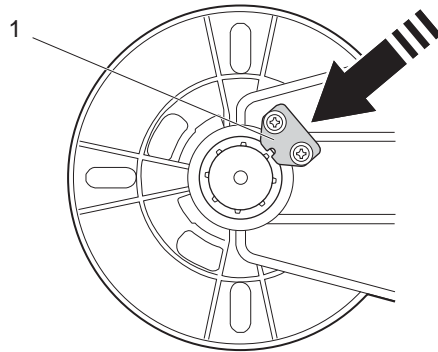
The torque of Roll media holder at the factory shipment (when Damper stopper is not fixed) is 0kg.

1. Change the locations of Damper drive switching plate of Media holder L and R, and fix Damper stopper.
 - a. Use a Phillips screwdriver to loosen the screws (2 pieces) retaining Damper drive switching plate on the right side of Roll media holder.



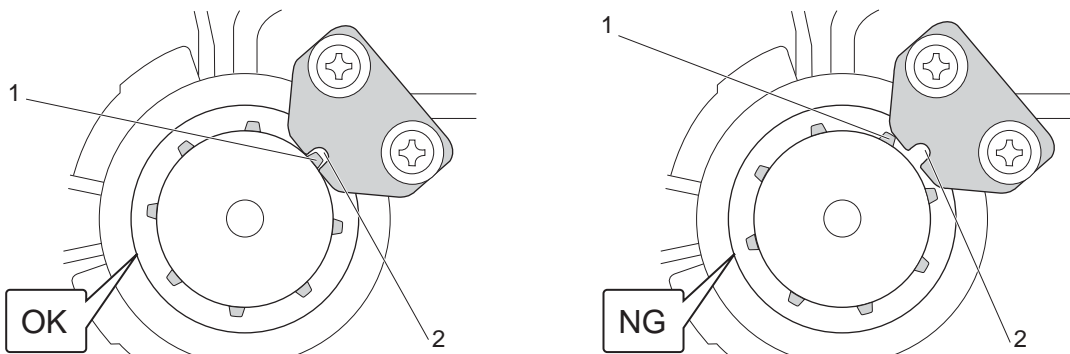
No.	Name
1	Roll media holder (Right)
2	Damper drive switching plate
3	Screw

- b. Slide Damper drive switching plate fully in the direction of the arrow in the illustration below.



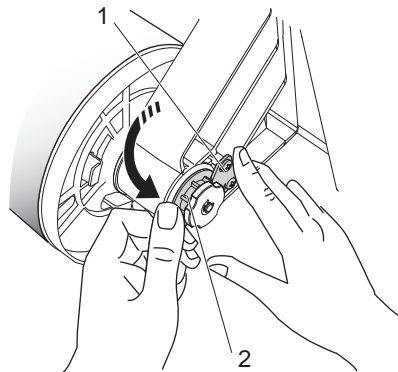
No.	Name
1	Damper drive switching plate

- c. Make sure that the protruding portion of Damper stopper is in the groove of Damper drive switching plate.



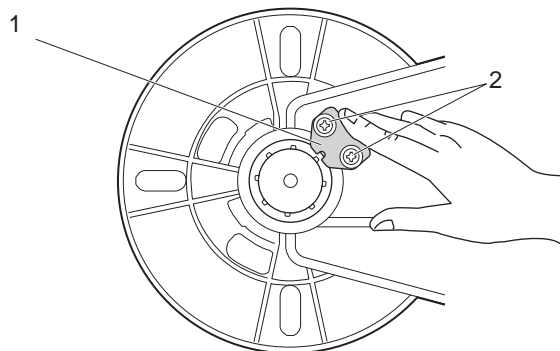
No.	Name
1	Protruding portion of Damper stopper
2	Groove of Damper drive switching plate

- d. If it is not in the groove, hold Damper drive switching plate and rotate Damper stopper, and then put the protruding portion in Damper drive switching plate.



No.	Name
1	Damper drive switching plate
2	Damper stopper

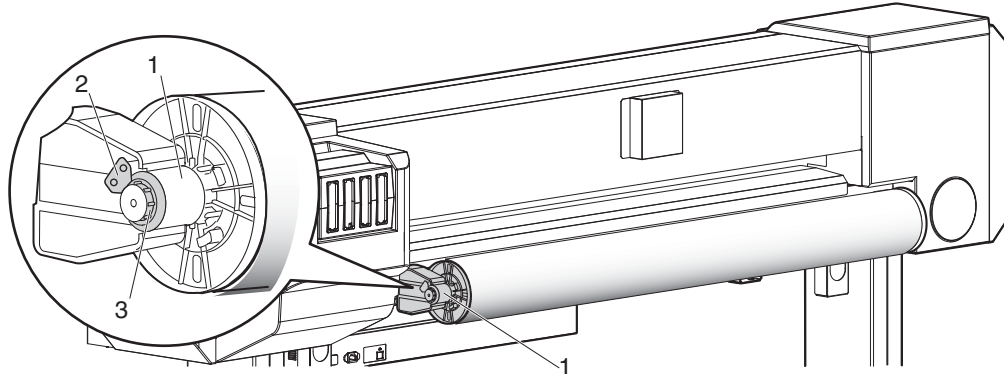
- e. Hold Damper drive switching plate and tighten the screws (2 pieces).



No.	Name
1	Damper drive switching plate
2	Screw

- f. Make sure that Damper stopper does not rotate.

- g. Change the locations of Damper drive switching plate of Media holder L in the same way, and fix Damper stopper.
- The torque of Media holder is changed to 0.7kg.

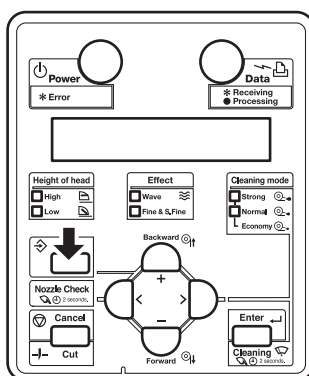


No.	Name
1	Roll media holder (Left)
2	Damper drive switching plate
3	Damper stopper

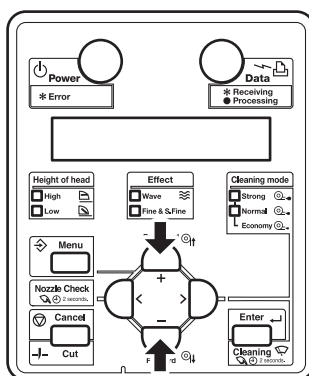
3.5 Test print

Follow the procedure below to perform test printing to confirm that the printer works correctly.

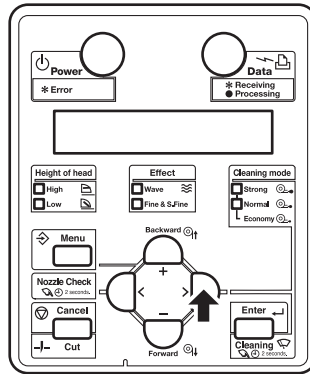
1. Turn ON the printer and load the roll media.
 🔗 [3.4.2 Setting Roll Media](#)
2. Confirm that the printer is in the Normal status.
3. Display the Test Print menu on Operation panel.
 - a. Press the [Menu] key on Operation panel.



- "Menu1: Setup>" is displayed on Operation panel.
- b. Press the [+] key or [-] key on Operation panel to select "Menu2: Test Print".



- c. Press the [>] key on Operation panel.

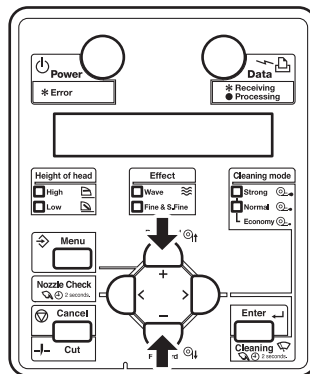


- "Test1: Nozzle Check" is displayed on Operation panel.
- The display shifts to the Test Print menu.

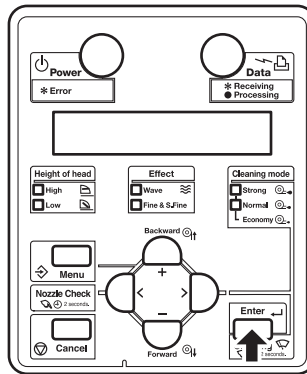
 **Sets the thickness of the media you are using.**

4. Press the [+] key or [-] key on Operation panel to select an item for printing from the following items.

- Nozzle Check
- Mode Print
- Setup List
- Palette



- Press the [Enter] key on Operation panel.



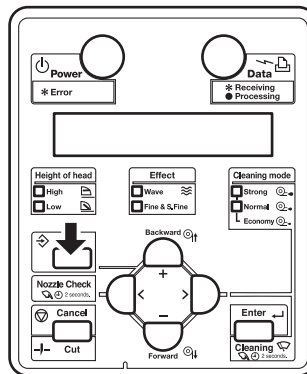
- Start performing Test Print for the selected item.

TIP

- Refer to the following for details on each of the print list items.

➤ [3.5.1 Nozzle check](#) to [3.6 Print quality adjustment](#)

- Repeat step 4 to step 5 when performing test print for other items.
- Press the [Menu] key on Operation panel to exit from test print.



- Operation panel returns to Normal.
- The procedure for test printing is complete.

3.5.1 Nozzle check

It is used to check whether there are any clogged heads, or missing/blurred prints.

NOTE

If the nozzle check result shows that the checked points are blurred or missing, perform head cleaning.

➤ [6.2.3 Head cleaning](#)

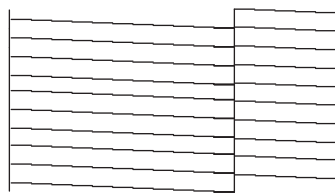
Perform nozzle check once again at the end of the work.

TIP

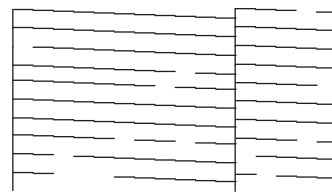
Refer to the following for printing procedure.

➤ [3.5 Test print](#)

No nozzle clog



Nozzle clogged



3.5.2 Mode print

Used to confirm the following printing conditions.

- Print Mode
- Effect
- Pre-heater set temperature (VJ-1604X only)
- Platen heater set temperature (VJ-1604X only)
- After heater set temperature (VJ-1604X only)
- Media feed compensation micro adjustment value

TIP

Refer to the following for printing procedure.

 [3.5 Test print](#)

<Print sample of VJ-1604X>

2015/07/01 0:00 G2(720x720 8Pass Bi)-Fine&Fuzz/Pre:30°C/Platen:30°C/After:30°C/PF Adjust:0.00%



<Print sample of VJ-1604WX>

2015/07/01 0:00 G2(720x720 8Pass Bi)-Fine&Fuzz /PF Adjust:0.00%



3.5.3 Setup print

Used to check the current setup of the printer.

NOTE

Keep the printed setup print at hand.

TIP

•Refer to the following for printing procedure.

☞ **3.5 Test print**

•The illustrations used in this section are print samples of VJ-1604X.

Setup List

< Information >		2017/07/01 0:00
SerialNo. = XXXX000001	Firmware M = V 1.00	Error!
Model = VJ-1624X		0: None [] 2: None [] 4: None []
Memory Size = 128MB		1: None [] 3: None [] 5: None []
< Menu Setup >		
Head Height : Low Cleaning Mode: Normal		
[Number][Select]Menu = Setup [1][*]User Type = Type 1 [1][Print Mode = Quality 1 (Effect = Fine&Fog) [2][Adjust Print [3][PF Adjust [1]Initial Adj. Print = 250.0/250mm [2]Initial Adjust = 30 C [3]GovtFirm Adj. Print [4]Micro Adj. Print = 0.00% [5]Micro Adjust = 0.00% [4]Preheater = 30 C [5]PlatenHeater = 30 C [6]Dryer = 30 C [7]Vacuum Fan = High [2][*]Spitting = On (Pass Count = 1cnt) [3][*]Side Margin = 5mm [4][*]Media Initial = Width [5][*]Media Width = 1000mm [6][*]Output Mode = Off (InkDryerTimer= 0sec) [7][*]Method of Cut = SingleOut-2steps [8][*]Origin = Off [9][*]Prevent Stick = Off [10][*]Standby Heating = 60min [11][*]Head Travel = Data [12][*]Multi Strike = 1cnt [13][*]Strike Wait = 0.0sec [14][*]Media Slant = On	[Number][Select]Menu = Setup [15][*]Auto Cleaning WaitingTime = 360min PrintingTime = Off Before Print = Off [16][*]Ink Status = Smart/Chip KCMY ---/---/--- [17][*]Rot I/Kind = Off [18][*]Exhaust Fan = Low [19][*]Longstore [20][*]OR Maintenance [21][*]Initialization [22][*]Life Times Head : E*****F Pump : E*****F OR Motor: E*****F PF Motor : E*****F [22][*]IP Address = 192.168.001.253 [23][*]Subnet Mask = 255.255.255.000 [24][*]Gateway = 192.168.001.254 SleepModeTimer = 6h Language = English Temperature = Celsius[C] Length = mm	

< User Type List >

User Type	Type 1	Type 2	Type 3	Type 4	Type 5
Print Mode	Graphics 2	Graphics 2	Graphics 2	Graphics 2	Graphics 2
Effect	A-S.Fine&Wave	Fine&Fuzz	Fine&Fuzz	Fine&Fuzz	Fine&Fuzz
PF:Initial Adjust	250.0/250mm	250.0/250mm	250.0/250mm	250.0/250mm	250.0/250mm
PF:Micro Adjust	0.00%	0.00%	0.00%	0.00%	0.00%
Preheater	30 C	30 C	30 C	30 C	30 C
PlatenHeater	30 C	30 C	30 C	30 C	30 C
Dryer	30 C	30 C	30 C	30 C	30 C
Vacuum Fan	High	High	High	High	High
User Type	Type 6	Type 7	Type 8	Type 9	Type10
Print Mode	Graphics 2	Graphics 2	Graphics 2	Graphics 2	Graphics 2
Effect	Fine&Fuzz	Fine&Fuzz	Fine&Fuzz	Fine&Fuzz	Fine&Fuzz
PF:Initial Adjust	250.0/250mm	250.0/250mm	250.0/250mm	250.0/250mm	250.0/250mm
PF:Micro Adjust	0.00%	0.00%	0.00%	0.00%	0.00%
Preheater	30 C	30 C	30 C	30 C	30 C
PlatenHeater	30 C	30 C	30 C	30 C	30 C
Dryer	30 C	30 C	30 C	30 C	30 C
Vacuum Fan	High	High	High	High	High
User Type	Type11	Type12	Type13	Type14	Type15
Print Mode	Graphics 2	Graphics 2	Graphics 2	Graphics 2	Graphics 2
Effect	Fine&Fuzz	Fine&Fuzz	Fine&Fuzz	Fine&Fuzz	Fine&Fuzz
PF:Initial Adjust	250.0/250mm	250.0/250mm	250.0/250mm	250.0/250mm	250.0/250mm
PF:Micro Adjust	0.00%	0.00%	0.00%	0.00%	0.00%
Preheater	30 C	30 C	30 C	30 C	30 C
PlatenHeater	30 C	30 C	30 C	30 C	30 C
Dryer	30 C	30 C	30 C	30 C	30 C
Vacuum Fan	High	High	High	High	High

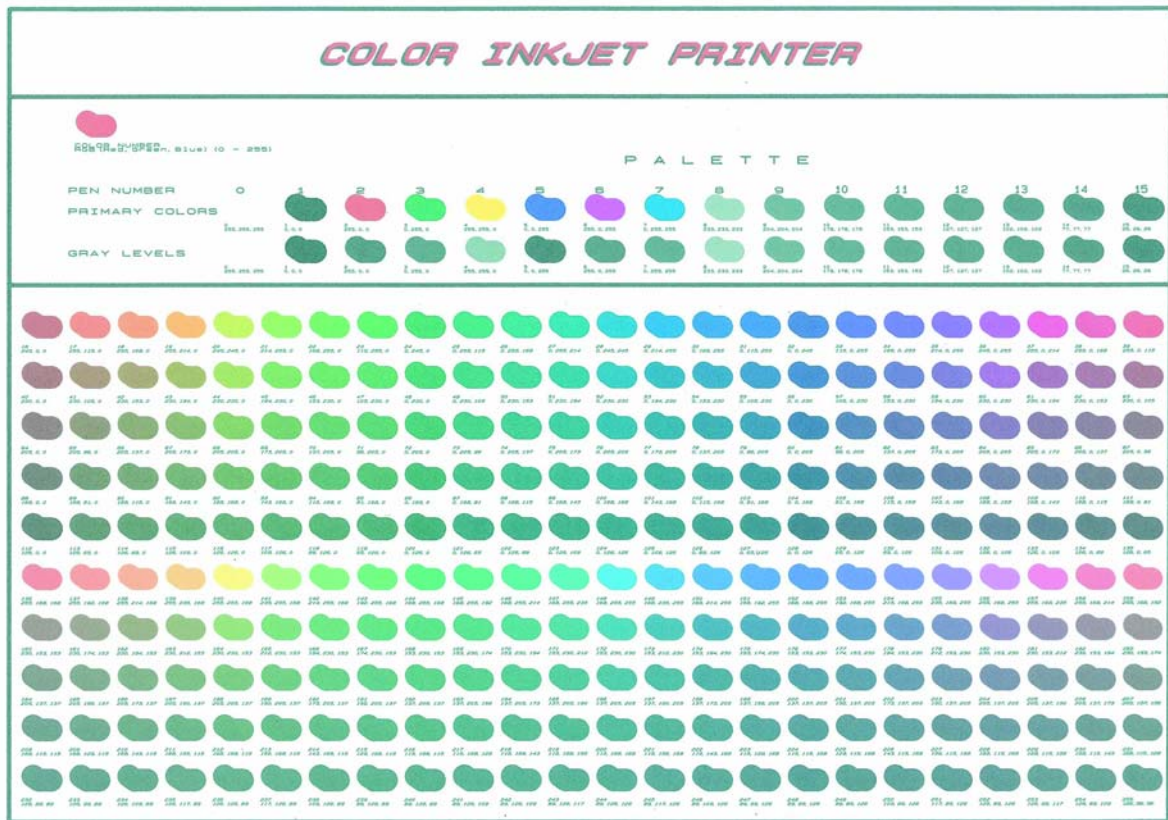
3.5.4 Palette print

Palette printing is performed as a color demonstration.

TIP

Refer to the following for printing procedure.

 [3.5 Test print](#)






3.6 Print quality adjustment

It is used for optimizing the quality of image prints.
Adjustment methods for this printer are as follows.




NOTE

When newly setting or changing the media type after adjusting Standard adjust print, make sure to adjust print.

Perform adjustment for all patterns (A to D).
All print modes will be adjusted.
This menu consists of the following menus.


Menu Name	Description	Reference
Confirm	Print out the confirmation patterns (A to F) and check the degree of misalignment.	 3.6.1 Confirmation Pattern
Rough pattern	Perform this when the degree of misalignment is big. All confirmation patterns (A to D) will be adjusted.	 3.6.2 Rough Pattern
Fine pattern	Perform this when the degree of misalignment is small. All confirmation patterns (A to D) will be adjusted.	 3.6.3 Fine Pattern

Follow the procedure below to perform adjustment.

1. Print out the confirmation pattern and check the degree of misalignment.
 [3.6.1 Confirmation Pattern](#)
2. Perform rough adjustment when the degree of misalignment is big.
 [3.6.2 Rough Pattern](#)
Perform micro adjustment when the degree of misalignment is small.
 [3.6.3 Fine Pattern](#)

NOTE

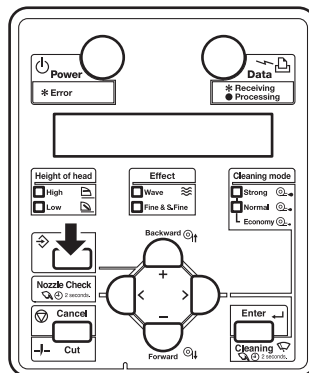
Perform rough adjustment first when the degree of misalignment is difficult to determine.

3. Print out the confirmation pattern again and check if the printer has been adjusted properly.
 [3.6.1 Confirmation Pattern](#)
4. If it has not been adjusted yet, return to Step 2.

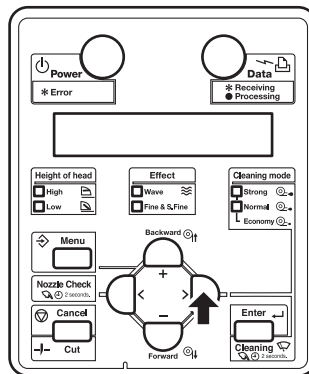
3.6.1 Confirmation Pattern

Using this menu, you can print out all of the confirmation patterns (A to D) and check the degree of misalignment.

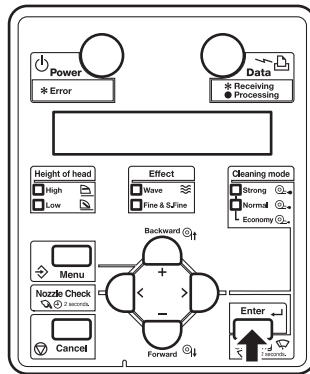
1. Turn ON the printer and load the roll media.
 - **3.4.2 Setting Roll Media**
2. Display the Adjust Print menu on Operation panel.
 - a. Press the [Menu] key on Operation panel.



- "Menu1: Setup>" is displayed on Operation panel.
- b. Press the [>] key on Operation panel to select "Set1: MediaType".

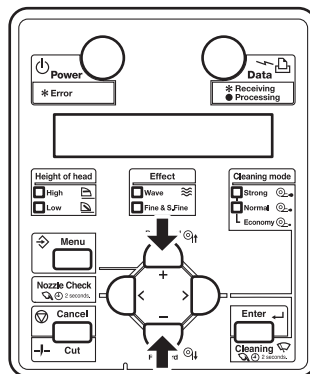


- c. Press the [Enter] key on the operation panel.

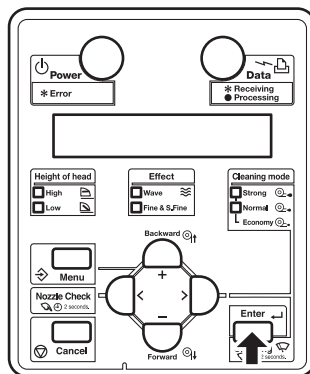


- "Media: Type 1" is displayed on the operation panel.

- d. Press the [+] key or [-] key on Operation panel to select the media type.



- e. Press the [Enter] key on Operation panel.

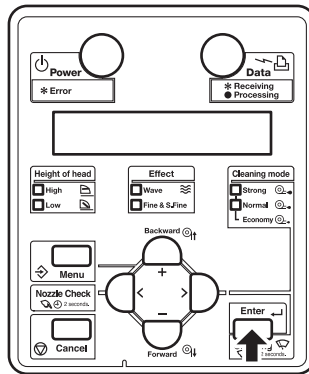


- "***>1: Print Mode" is displayed on the operation panel.

NOTE

The selected media (Type 1 to 30) is displayed in "***".

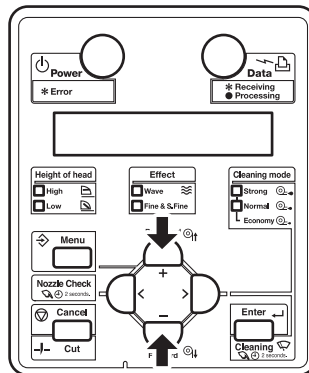
- f. Press the [Enter] key on the operation panel.



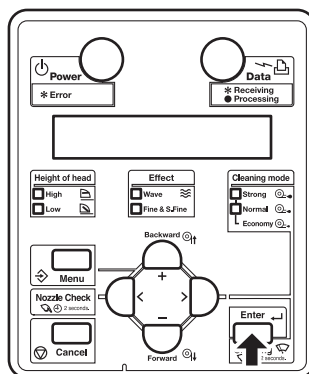
- "Mode: Graphics 2 ->" is displayed on the operation panel.

3. Select the printing mode that you want to use.

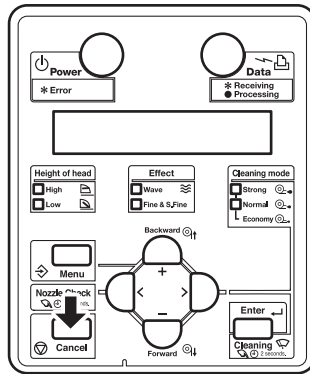
- a. Press the [+] key or [-] key on the operation panel to select the printing mode to use.



- b. Press the [Enter] key on Operation panel.



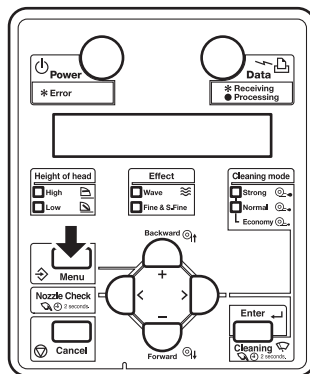
- c. Press the [Cancel] key on the operation panel several times.



- "Ready to Print" is displayed on Operation panel.

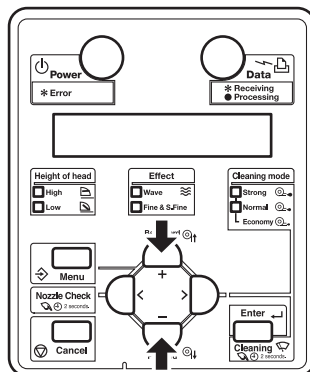
4. Display the Adjust Print menu on the operation panel.

- a. Press the [Menu] key on the operation panel.

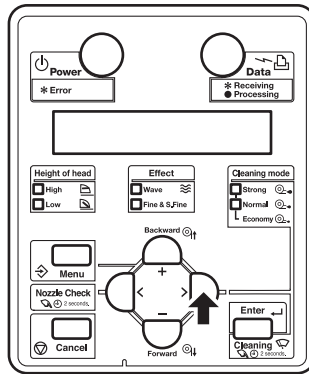


- "Menu 1: Setup>" is displayed on the operation panel.
- The operation panel shifts to the Setup menu display.

- b. Press the [+] key or [-] key to select "Menu3: Adjust Print>".



- c. Press the [>] key on the operation panel.

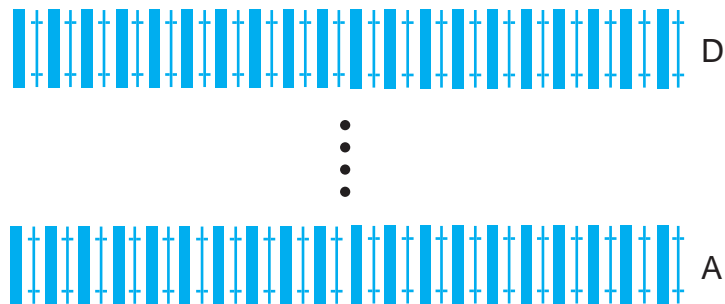


- For VJ-1604X, "Warming Up" is displayed on Operation panel.
(This is not displayed for VJ-1604WX since it does not perform warming up.)

CAUTION

- **While "Warming Up" is displayed, do not touch Platen and Media guide. They become very hot and you could burn yourself.**

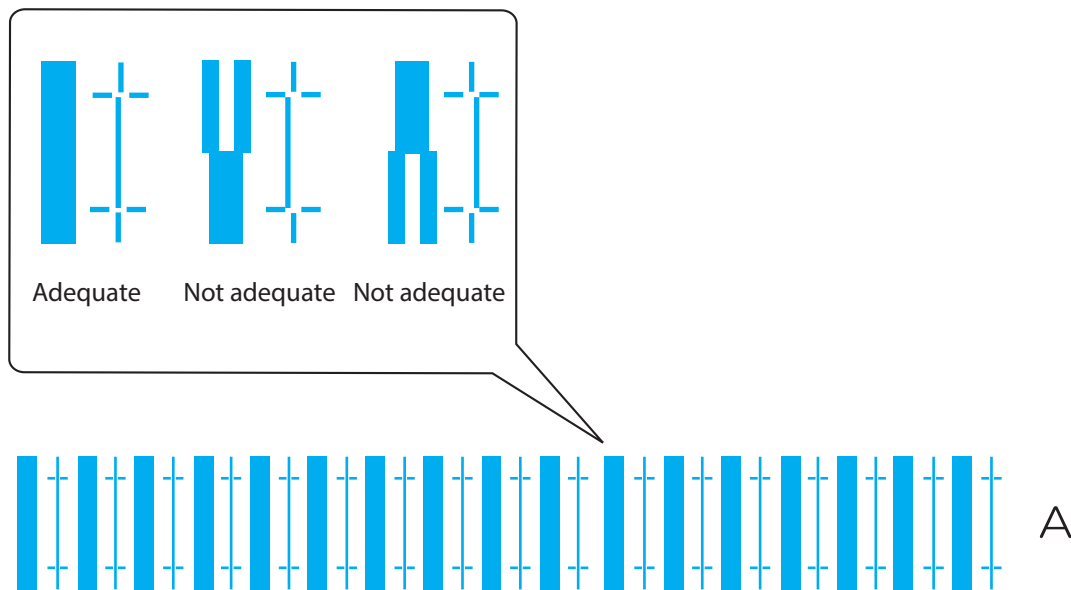
- A confirmation pattern for print quality adjustment is printed.
(VJ-1604X starts printing after warming up is complete.)
- Four confirmation patterns of A to D will be printed.



- After the confirmation pattern is printed, Operation panel returns to "Ready to Print".

5. Confirm that the confirmation pattern printing result is as follows.

- Check each of the confirmation patterns A to D.

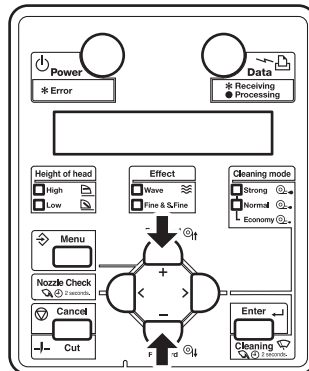


- When the printing result is Adequate;
You do not need perform print quality adjustment.
The procedure for print quality adjustment is complete.
- When the printing result is Not adequate;
You need to perform print quality adjustment.
 - Perform rough adjustment when the degree of misalignment is big.
[🔗 3.6.2 Rough Pattern](#)
 - Perform fine adjustment when the degree of misalignment is small.
[🔗 3.6.3 Fine Pattern](#)

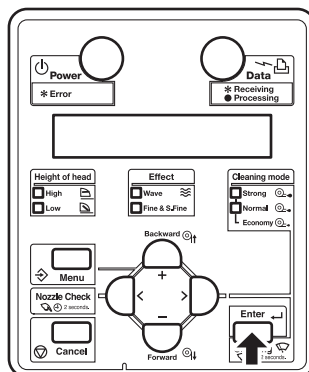
3.6.2 Rough Pattern

Perform rough adjustment when the degree of misalignment is big.

1. Display the Adjust Print menu on Operation panel in the same way as Step 2 of [3.6.1 Confirmation Pattern](#).
2. Press the [+] key or [-] key on Operation panel to select “Adj.2: Rough Pattern”.



3. Press the [Enter] key on Operation panel.



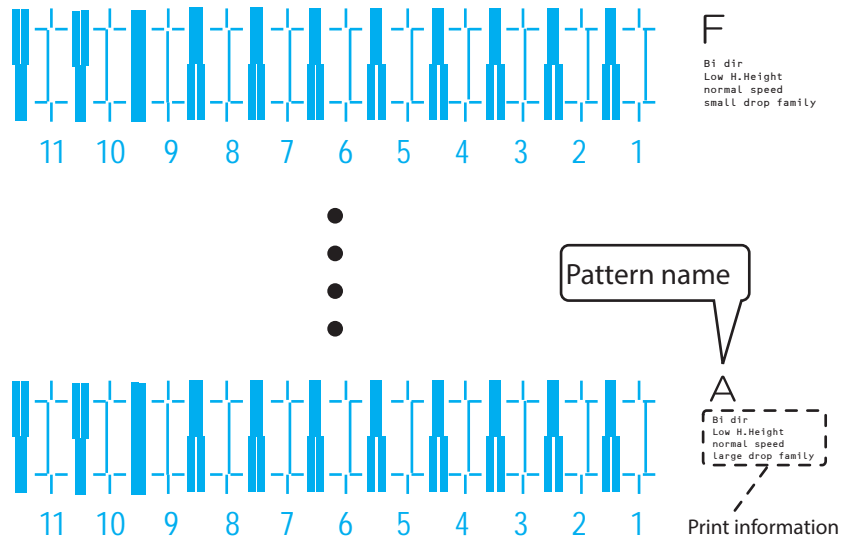
- For VJ-1604X, "Warming Up" is displayed on Operation panel.
(This is not displayed for VJ-1604WX since it does not perform warming up.)

CAUTION

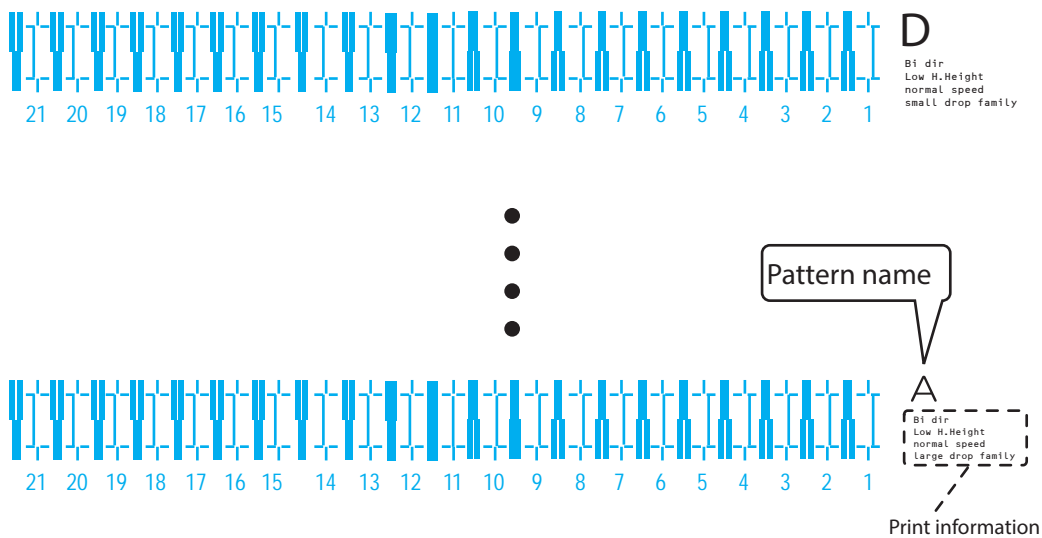
- While “Warming Up” is displayed, do not touch Platen and Media guide. They become very hot and you could burn yourself.

- Starts a rough pattern printing.
(VJ-1604X starts printing after warming up is complete.)

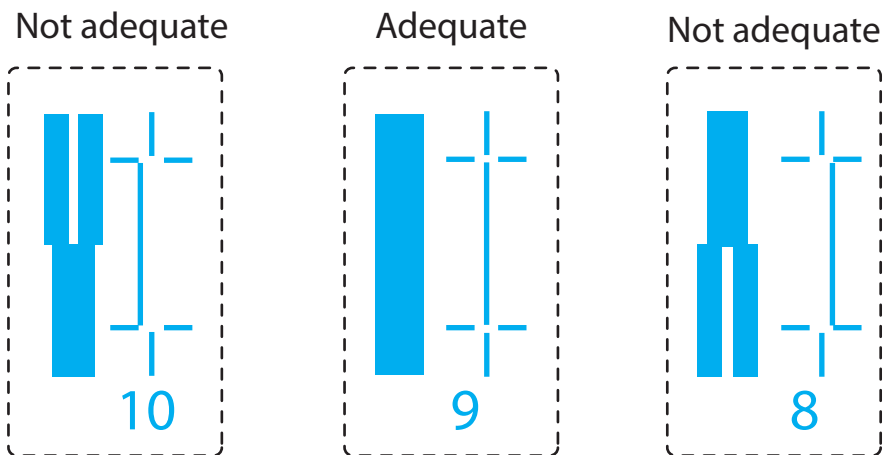
<For VJ-1604X>



<For VJ-1604WX>



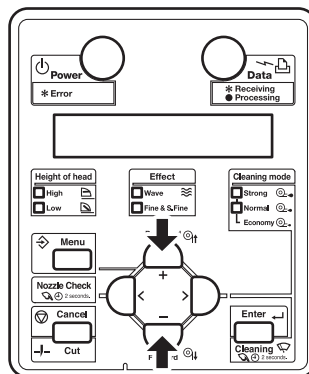
- For the rough adjustment pattern, the same patterns will be printed on both sides and center of the media.
 - Four rough adjustment patterns (A to D) are printed. Enter the adjusted values for each of them.
4. Check the print results on both sides and center of the media and select the number that looks most aligned between 1 and 11 (1 and 21 for VJ-1604WX).
- “9” is selected in the next printing sample.

**NOTE**

- For VJ-1604X, “6” represents the current setting value.
- For VJ-1604WX, “11” represents the current setting value.
- When the line is aligned, the bold line on its left side does not have a white vertical line in the middle.

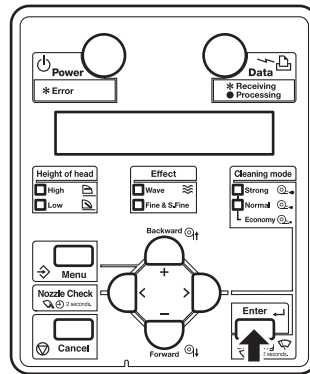
- “Pattern A: 6” (“Pattern A: 11” for VJ-1604WX. Refer to the chart below for *.) is displayed on Operation panel.

5. Press the [+] key or [-] key on Operation panel to enter the number that you selected in Step 4.

**NOTE**

When you press the [Cancel] key on Operation panel, the setting value is not entered and the display returns to “Ready to Print”.

6. Press the [Enter] key on Operation panel.

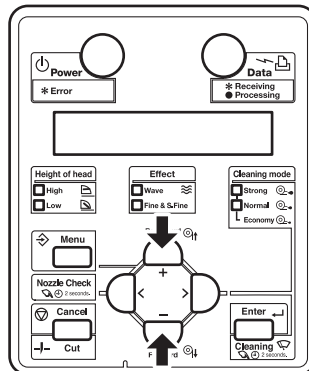


- Determines the setting.
7. Enter the values for patterns B to D in the same way.
- Press the [Enter] key to set the value.
 - Once all set values have been entered, press the [Enter] key to register the set values of patterns A to D.
 - “Ready to Print” is displayed on Operation panel.

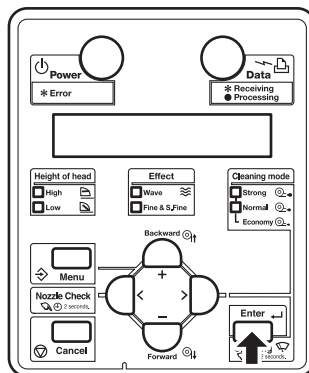
3.6.3 Fine Pattern

Perform fine adjustment when the degree of misalignment is small.

1. Display the Adjust Print menu on Operation panel in the same way as Step 2 of [3.6.1 Confirmation Pattern](#).
2. Press the [+] key or [-] key on Operation panel to select “Adj.3: Fine Pattern”.



3. Press the [Enter] key on Operation panel.

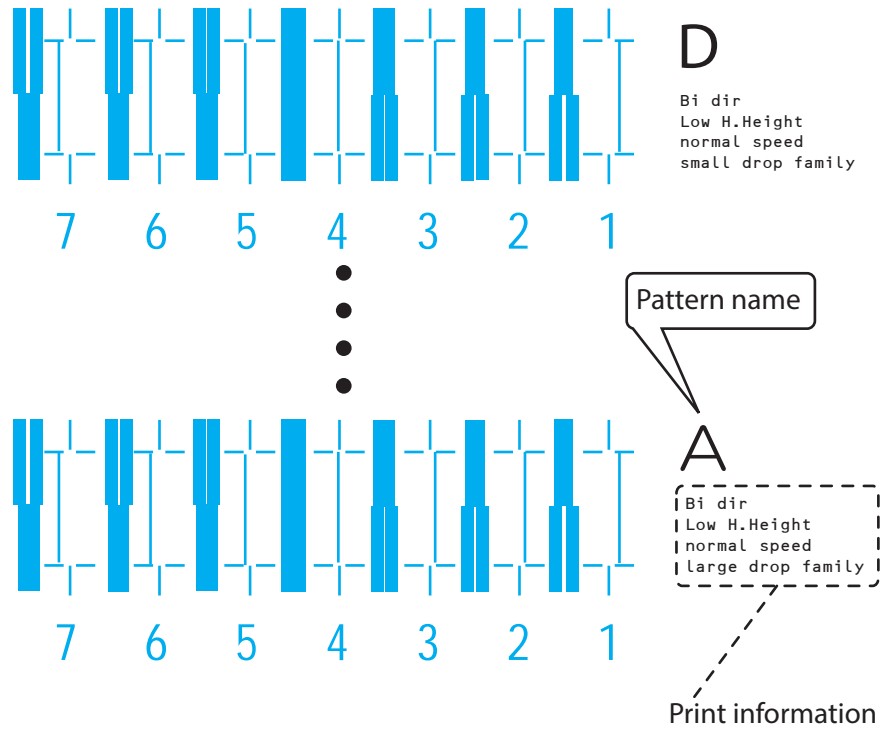


- For VJ-1604X, "Warming Up" is displayed on Operation panel.
(This is not displayed for VJ-1604WX since it does not perform warming up.)

CAUTION

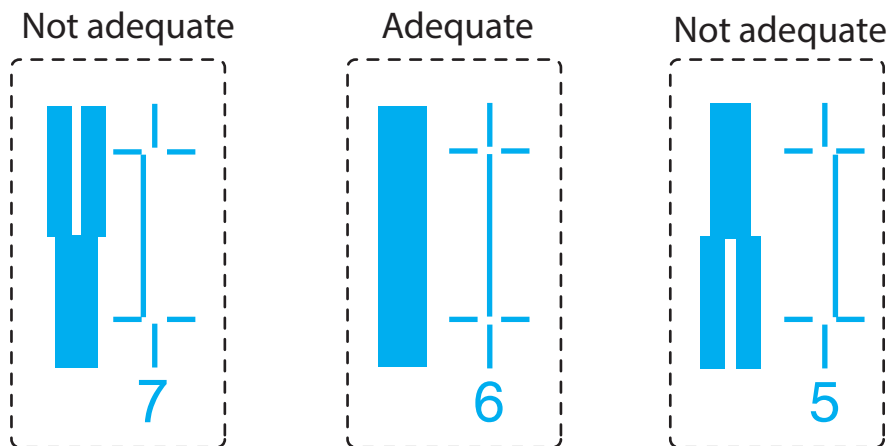
- While “Warming Up” is displayed, do not touch Platen and Media guide. They become very hot and you could burn yourself.

- An adjust print pattern is printed.
Four fine adjust print patterns (A to D) are printed. Enter the adjusted values for each of them.
(VJ-1604X starts printing after warming up is complete.)



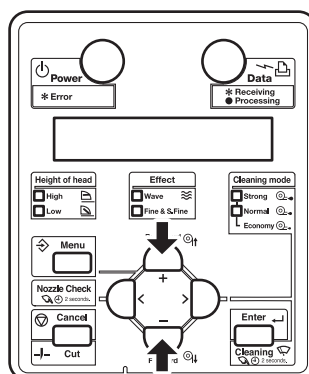
- For the Adjust print pattern, the same patterns will be printed repeatedly on both sides and center of the media.

4. Check the print results on both sides and center of the media and select the number that looks most aligned between 1 and 7.
 - “6” is selected in the following pattern.

**NOTE**

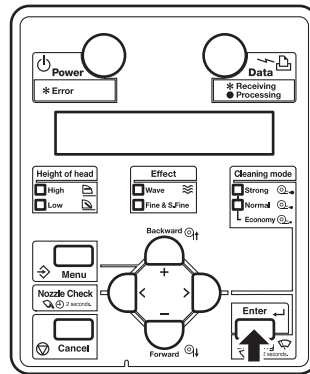
- “4” represents the current setting value.
- When the line is aligned, the bold line on its left side does not have a white vertical line in the middle.

5. “PatternA: 4” is displayed on Operation panel.
6. Press the [+] key or [-] key on Operation panel to enter the number that you selected in Step 4.

**NOTE**

When you press the [Cancel] key on Operation panel, the display returns to “Ready to Print”.

7. Press the [Enter] key on Operation panel.



- Determines the setting.
8. Enter the values for patterns B to D in the same way.
- Press the [Enter] key to set the value.
 - Once all set values have been entered, press the [Enter] key to register the set values of patterns A to D.
 - “Ready to Print” is displayed on Operation panel.

3.7 Connecting the printer to PC

This section explains how to connect the printer and a PC.

3.7.1 Preparing cables

The printer is equipped with a network interface for connecting with a PC. You need a network interface cable to connect a PC with this printer. Prepare the cable depending on the PC that it will be connected to.

TIP

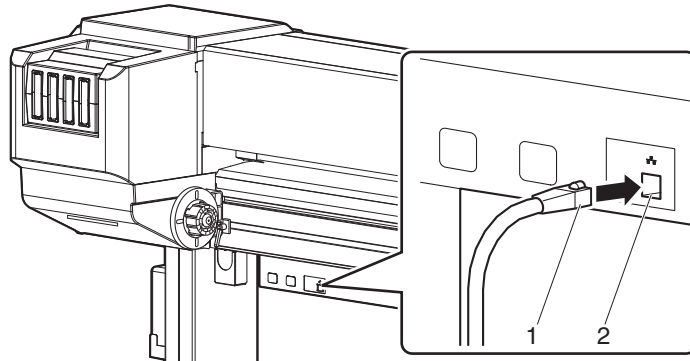
- About connecting a network interface cable, refer to [3.7.2 Connecting a network interface cable](#).
 - For the recommended cable specifications, refer to [8.2 Interface specification](#).
-

3.7.2 Connecting a network interface cable

This section explains how to connect a network interface cable.

Follow the procedure below to connect this printer to your PC.

1. Turn OFF both the printer and PC.
2. Insert the network interface cable into the network interface connector located on the back of the printer.



No.	Name
1	Network interface cable
2	Network interface cable connector

3. Connect the other connector of the network interface cable to your PC.

TIP

- About connecting to your PC, refer to the operation manual included with the PC.

- For network setting of the printer, refer to the following.

- ☞ [5.1.22 IP Address menu](#)

- ☞ [5.1.23 Subnet Mask menu](#)

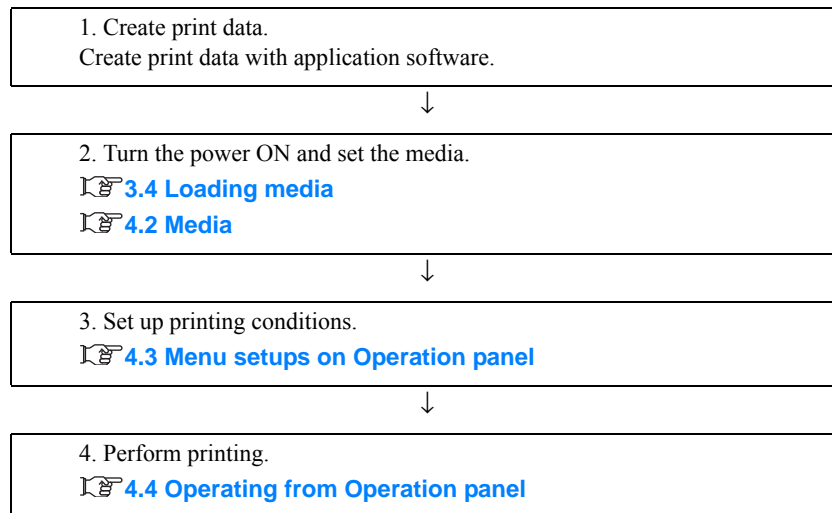
- ☞ [5.1.24 Gateway menu](#)

4 Handling the printer

This chapter explains how to handle the printer.

4.1 Print flow chart

The following flow chart illustrates the procedure to perform printing with the printer. Refer to each section as required.



Since VJ-1604X is equipped with Heaters, strictly comply with the following Warnings and Cautions.

WARNING

- Do not place any combustible materials on Platen while the heater is working. There may be a risk of fire.
- Do not spill flammable liquid on Platen. It may cause a fire.

CAUTION

- Do not touch Media guide while printing. Media guide becomes very hot and you could burn yourself.
- Do not touch Media feed slot, Platen, and Media guide while Heater is working. Media feed slot, Platen, and Media guide become very hot and you could burn yourself.
- Ventilate the workplace. Not doing so may cause nausea or a fire hazard.

NOTE

Do not open Front cover and Maintenance cover during printing.
If the above covers are opened, printing will be interrupted.
Printing restarts once Covers are closed. However, you are not guaranteed to have high print quality.

4.2 Media

This section explains details of available media for this printer.

4.2.1 Media type

The type and quality of media greatly influence the print result.

Fully understand the following and use the media that matches the intended use.

The following media is recommended and available for this printer.

Select the appropriate media according to the intended use.

NOTE

- For details of the recommended media, contact your local MUTOH dealer.
 - If failures or malfunctions of the printer occur by using the media other than the recommended media:
The printer will not be covered by the warranty and repair expenses will be covered by the customer.
 - For details, refer to the following.
 - [5 Panel setup menu](#)
 - [7 Troubleshooting](#)
 - To request a repair, contact your local MUTOH dealer.
-

TIP

- When printing on media that is not recommended, refer to the media manual or ask where you purchased the media for information on media types and appropriate settings for this printer.
 - Set the print quality according to [5.1.1 Media type menu](#).
-

4.2.2 Cautions on handling media

Note the following points when handling the media.

NOTE

- Use recommended media under an appropriate environment.
The appropriate temperature and humidity for printing are as follows.

	Temperature	Humidity
Guaranteed range of printing accuracy	22°C to 30°C	40% to 60%
Change rate	Within 2°C per hour	Within 5 % per hour

- Do not use media which is creased, cut, torn, or curled.
- The size of media can change according to changes in humidity in the printing environment. Before using media, leave media for 30 minutes in the printing environment to adapt it to the environment.
Performing printing without adapting media to the printing environment may cause media jams due to gaps or wrinkles in the media.
Print quality is also affected.
- When using the printer in a low-humidity environment, the cut media may stuck and may not come down. In such a case, open Front cover after the media is cut and remove the media.
- Do not touch the print side.
Moisture and oil on your hands may affect the print quality.
- Do not leave media set in the printer for a long time.
Some media has a tendency to bend, causing media jams and degradation of print quality.
Avoid using such media especially in winter, in dry conditions, and when printing formal documents.
- Do not discard the individual box and bag. Use them for storing media.

4.2.3 Precaution on storing media

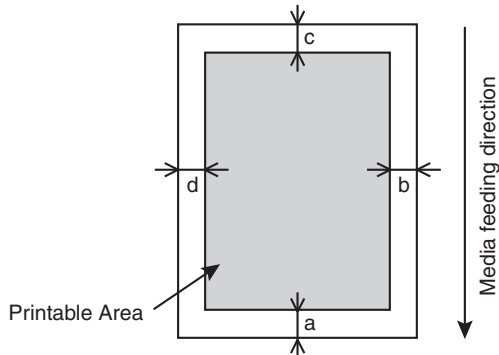
Note the following points on storing media.

NOTE

- Avoid high temperature, high humidity, and direct sunlight when storing media.
- After removing the unused roll media from Feed unit, wind it properly. Then wrap it with an individual bag and store it in an individual box.
- Keep the media dry.

4.2.4 Printable area

The printable area of this printer is as follows.



a=5mm *1
 b=5mm to 25mm
 c=5mm
 d=5mm to 25mm

*1 The value of "a" will be 15 mm in the following cases:
 - Immediately after media initialization
 - When feeding the media by using the [Backward] key

The value of "a" will be 40mm in the following cases:
 - When Media Initial menu is set to "Top&Width"
 - After cutting the media

4.2.5 Head height adjustment

Printing with high printing rate or using strongly-curved media can cause Print heads to rub the media. Changing the distance from Print head surface to the media (head height) may allow you to prevent Head from rubbing the media.

Head height can be switched in 2 levels.
 Follow the procedure below to change the head height.

TIP

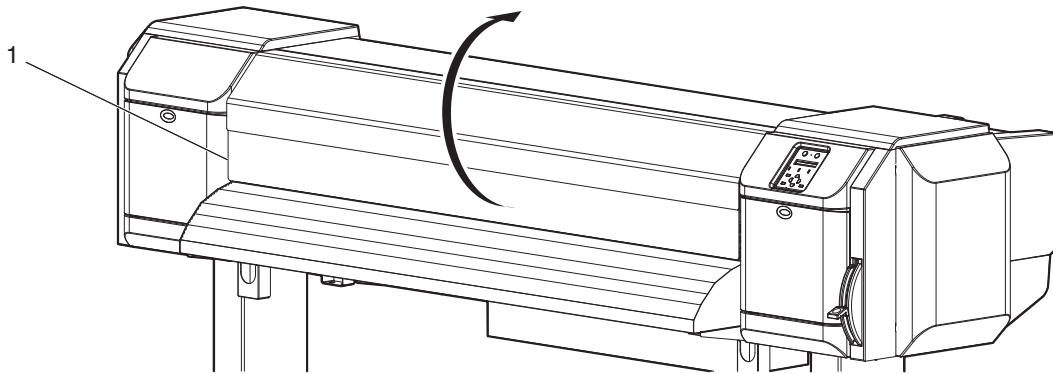
The illustrations used in this section are those of VJ-1604X.

4.2.5.1 When setting the head height to High

NOTE

- If Head height adjustment lever is raised, high print quality is not guaranteed.
- Do not open Front cover and change the head height during printing.
If the head height is changed, the alignment will be changed and high print quality will not be guaranteed.

1. Open Front cover.

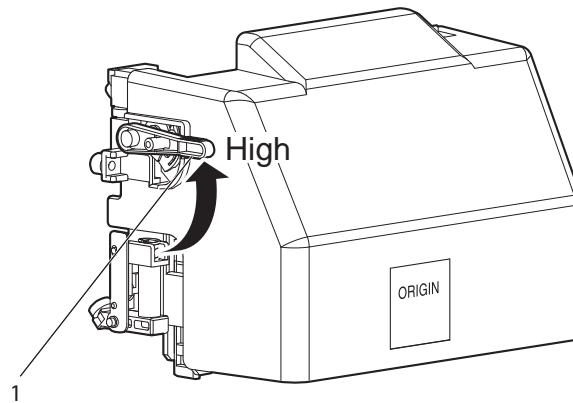


No.	Name
1	Front cover

- Change the head height by moving Head height adjustment lever (orange).

NOTE

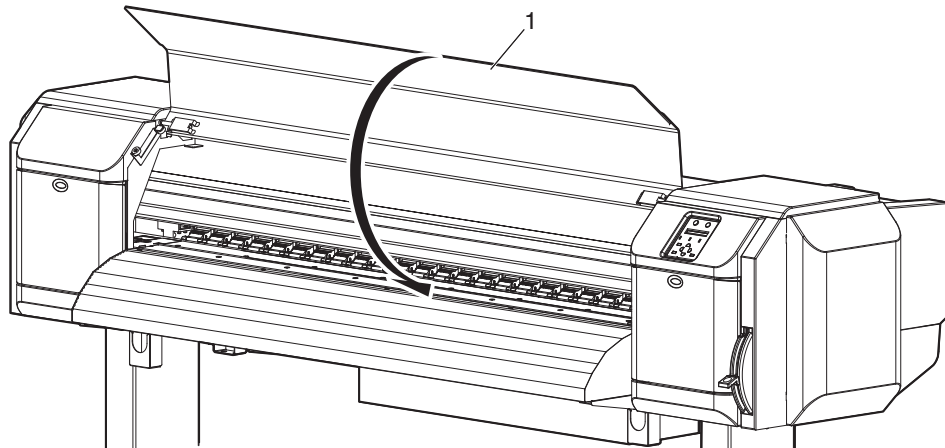
Do not raise Head height adjustment lever higher than the following position.
Doing so may damage the printer.



No.	Name
1	Head height adjustment lever

- High lamp on Operation panel lights up in green.

- Close Front cover.



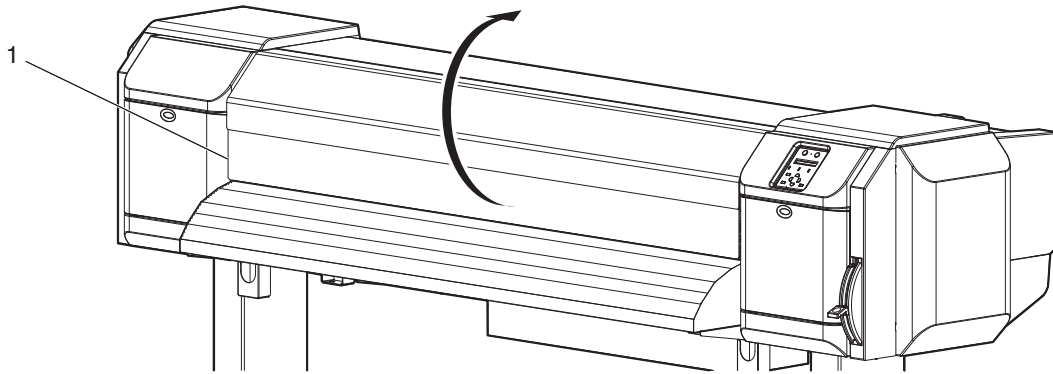
No.	Name
1	Front cover

4.2.5.2 When setting the head height to Low

NOTE

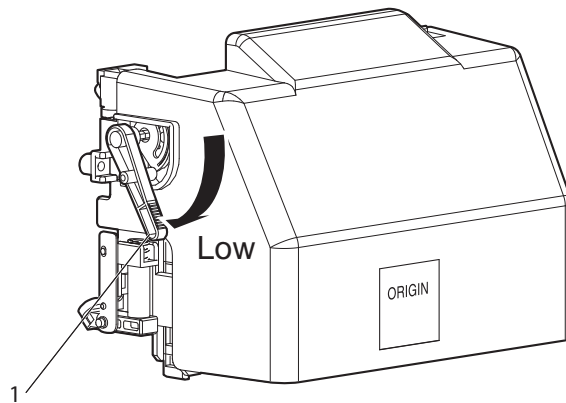
Do not open Front cover and change the head height during printing.
If the head height is changed, the alignment will be changed and high print quality will not be guaranteed.

1. Open Front cover.



No.	Name
1	Front cover

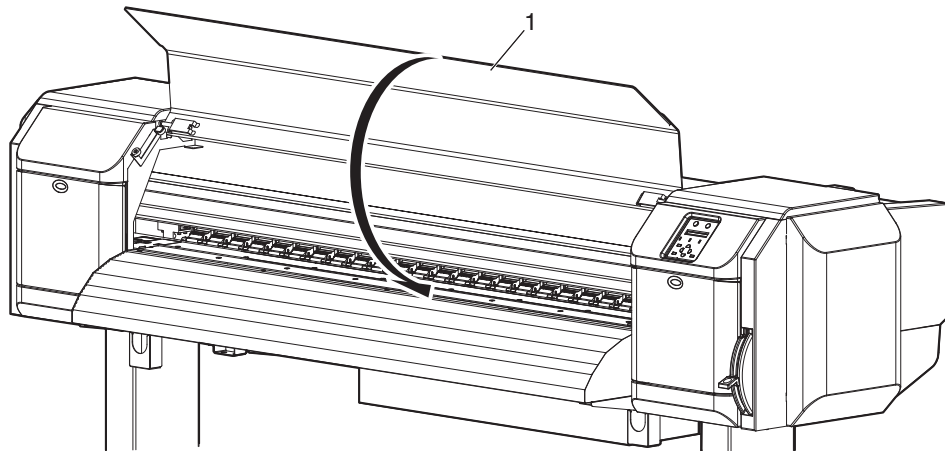
2. Change the head height by moving Head height adjustment lever (orange).



No.	Name
1	Head height adjustment lever

- Low lamp on Operation panel lights up in green.

3. Close Front cover.



No.	Name
1	Front cover



4.2.6 Media feed compensation

This section explains the Media feed compensation.

The feeding length depends on the media type. The following or similar results may be seen in prints.

- Printed images overlap.
- White lines are printed over images.

The accuracy of media feeding may be improved with the following methods.

1. Adjust the media feed compensation value.
 [4.2.6.1 Procedure for the media feed compensation value](#)
2. Fix the media firmly.
 [4.2.6.2 How to fix the media firmly](#)


4.2.6.1 Procedure for the media feed compensation value

1. Display the Media feed compensation menu on Operation panel.
 - a. Press the [Menu] key on Operation panel.
 - "Menu1: Setup>" is displayed on Operation panel.
 - Operation panel shifts to the Setup menu display.
 - b. Press the [>] key on Operation panel.
 - "Set1: MediaType" is displayed on Operation panel.
 - c. Press the [Enter] key on Operation panel.
 - "Media: Type **" (** is a number between 1 and 30) is displayed on Operation panel.
 - d. Press the [+] key or [-] key on Operation panel to select the media type to use.
 - e. Press the [Enter] key on Operation panel.
 - "***>1: Print Mode" is displayed on Operation panel.

TIP

The selected media type (Type 1 to 30) is displayed in "***".

 [5.1.1 Media type menu](#)

- f. Press the [+] key or [-] key on Operation panel to select "***>2: PF Adjust".
 - g. Press the [>] key on Operation panel.
 - "PF1: Initial Print" is displayed on Operation panel.
 - Proceed to Media feed compensation menu.
 -  [5.1.1.1.2 Media feed compensation](#)
2. Performs Initial Adjust Print.
 - a. Press the [Enter] key on Operation panel.
 - "Feed Length: 250 mm" is displayed on Operation panel.

TIP

•The length of media that is fed (feeding length) for initial adjustment printing is normally set at 250 mm.

•If you increase the feeding length, the accuracy of the Media feed compensation improves.

To change the feeding length, press the [+] key or [-] key on Operation panel and change the set value.

- b. Press the [Enter] key on Operation panel.
 - "Printing" is displayed on Operation panel.
 - Starts initial adjustment printing.



No.	Name
1	FeedLength
2	Media feeding direction

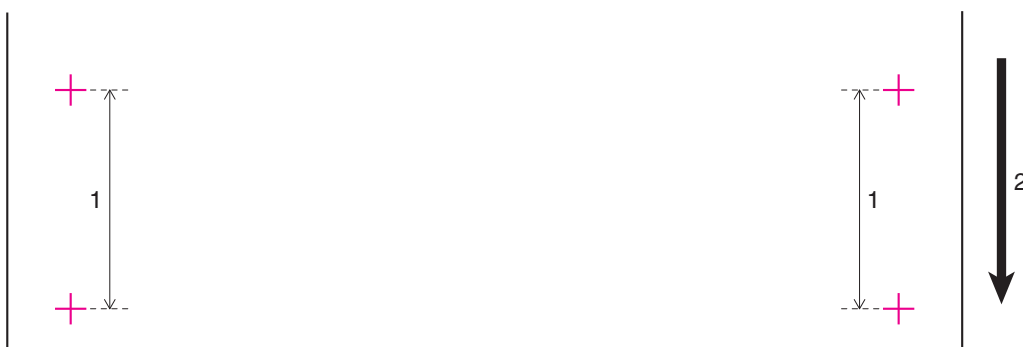
- When the initial adjustment printing is complete, the printer enters Normal.
- c. After the initial adjustment printing, cut the media.
 - 🔗 [4.4.3 Cutting media \(VJ-1604WX only\)](#)
3. Measure the distance between the two pluses (+) in the initial adjustment print using a ruler.

4. Sets up Initial Adjust Change.
 - a. Press the [+] key or [-] key on Operation panel to select "PF2: Initial Change".
 - b. Press the [Enter] key on Operation panel.
 - "Init.: 250.0/250 mm" is displayed on Operation panel.
 - c. Press the [+] key or [-] key on Operation panel and enter the measured value in Step 3.
 - d. Press the [Enter] key on Operation panel.
 - The initial adjustment value is saved.
 - "PF2: Initial Change" is displayed on Operation panel.
5. Performs Confirm Print.
 - a. Press the [+] key or [-] key on Operation panel to select "PF3: Confirm Print".
 - b. Press the [Enter] key on Operation panel.
 - "Feed Length: 250 mm" is displayed on Operation panel.

TIP

- The length of media that is fed (feeding length) for confirmation adjustment printing is normally set at 250 mm.
- If you increase the feeding length, the accuracy of the Media feed compensation improves.
To change the feeding length, press the [+] key or [-] key on Operation panel and change the set value.

- c. Press the [Enter] key on Operation panel.
 - "Printing" is displayed on Operation panel.
 - Starts confirmation adjustment printing.



No.	Name
1	FeedLength
2	Media feeding direction

- When the Confirm Print is complete, the printer enters Normal.

- d. After the confirmation adjustment printing, cut the media.

4.4.3 Cutting media (VJ-1604WX only)

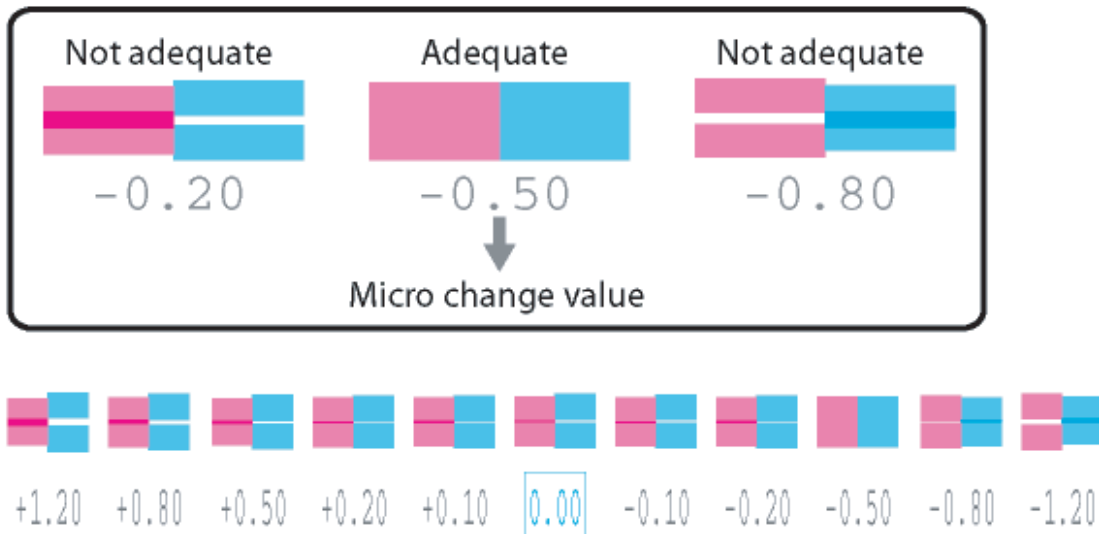
6. Measure the distance between the two pluses in the confirmation adjustment print using a ruler. Then, confirm that the distance matches the feeding length when printing.
 - a. If the distance does not match the feeding length, follow the procedure from Step 1 to Step 5 and readjust.
 - b. If the distance matches the feeding length, proceed to step 7.
7. Performs Micro Adjustment Print.
 - a. Display the Dist.Adj menu on Operation panel in the same way as in Step 1.
 - b. Press the [+] key or [-] key on Operation panel to select "PF4: Micro Print".
 - c. Press the [Enter] key on Operation panel.
 - For VJ-1604X, "Warming up Skip ->E" is displayed on Operation panel. (This is not displayed for VJ-1604WX since it does not perform warming up.)

CAUTION

- **While "Warming Up" is displayed, do not touch Platen and Media guide. They become very hot and you could burn yourself.**

- "Printing" is displayed on Operation panel. (VJ-1604X starts printing after warming up is complete.)
- Starts micro adjustment printing.

- In the pattern, look for a place that has least white lines or overlapping in images. The number printed below the adequate pattern is the micro change value.

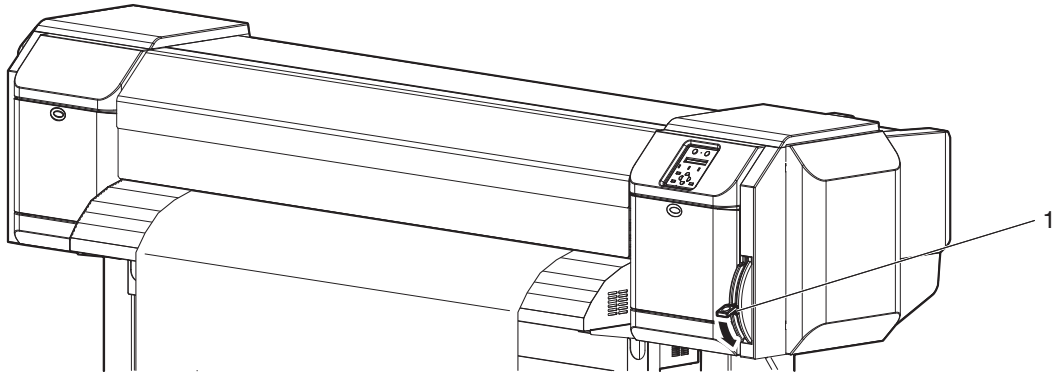


8. Sets up Micro Adjustment Change.

- Press the $[+]$ key or $[-]$ key on Operation panel to select "PF5: Micro Change".
- Press the $[\text{Enter}]$ key on Operation panel.
 - After the micro adjustment printing is completed, "Micro Change: 0.00%" is displayed on Operation panel.
- Press the $[+]$ key or $[-]$ key and enter the micro adjustment value according to the printing result in Step 7.
- Press the $[\text{Enter}]$ key on Operation panel.
 - The micro adjustment value is saved. (The saved micro change value will be always shifted to the base value for the pattern printing.)
 - "PF5: Micro Change" is displayed on Operation panel.
 - The adjustment of media feed compensation value is complete.

4.2.6.2 How to fix the media firmly

1. Load the roll media.
☞ [3.4.2 Setting Roll Media](#)
2. Lower the media loading lever.



No.	Name
1	Media loading lever

3. Adjust the Media feed compensation value again.
☞ [4.2.6.1 Procedure for the media feed compensation value](#)

4.2.7 Installing Media holder plates

Variations in quality and use conditions can cause the edges of the media to curl, resulting in damage to the media by the print head surface.

To prevent this, use Media holder plates to reduce the amount of curling in the media.

Follow the procedure below to install Media holder plates.

1. Display the Side Margin menu on Operation panel.
 - a. Press the [Menu] key on Operation panel.
 - "Menu1: Setup>" is displayed on Operation panel.
 - Operation panel shifts to the Setup menu display.
 - b. Press the [>] key on Operation panel.
 - "Set1: media type" is displayed on Operation panel.
 - c. Press the [+] key or [-] key to select Set4: Side Margin.
 - d. Press the [Enter] key on Operation panel.
 - "Side Margin: ** mm" is displayed on Operation panel.
 - The display shifts to the Side Margin menu.

 [5.1.4 Side Margin menu](#)

NOTE

- The current setting value is displayed in the "***" of the Side Margin menu.

2. Set up the margins (side margins) to 10 mm while printing.

NOTE

Set more than 10mm for the side margins.

In this section, the side margins are set to 10mm as a sample.

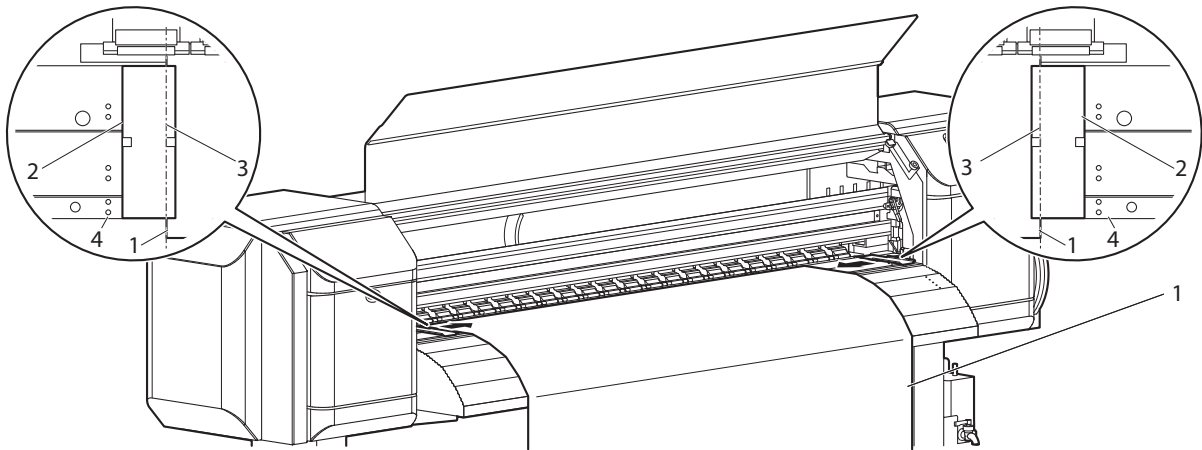
- a. Press the [+] key or [-] key to select Side Margin: 10 mm.
 - b. Press the [Enter] key on Operation panel.
 - After having saved the setting, "Set4: Side Margin" is displayed on Operation panel.
 - c. Press the [Menu] key on Operation panel.
 - Operation panel returns to Normal.
3. Load the roll media.

 [3.4.2 Setting Roll Media](#)

4. Set Media holder plates by sliding them from both sides of Platen.

NOTE

Do not use Media holder plates for the media whose thickness is 400 μ m (0.4mm) or thicker.
The media holder plate may interfere with Print head.



No.	Name
1	Roll media
2	Media holder plates
3	Media loading position
4	Platen

5. After installing Media holder plates, make sure that they do not interfere with media feeding.

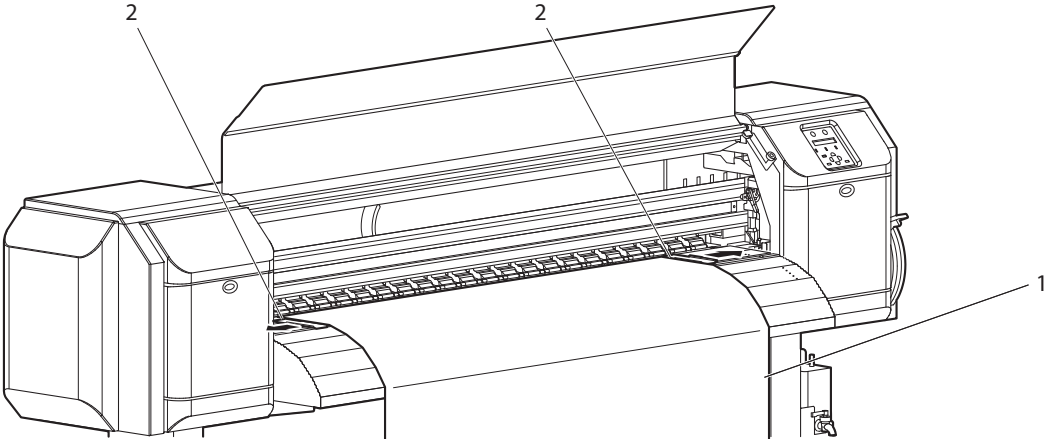
CAUTION

- If the media jams when using Media holder plates, the plates may be deformed. When Media holder plates are deformed:
- Do not remove the clogged media by force.
- Stop using the printer.
- Using the printer with deformed Media plates may damage Grid roller or Print heads.
Contact your local MUTOH dealer.

NOTE

If there is interference with the media as it is fed through the printer after Media holder plates have been installed, Media holder plates should not be used.

6. If Media holder plates are not used, return the plates to their initial positions as shown in the following figure.



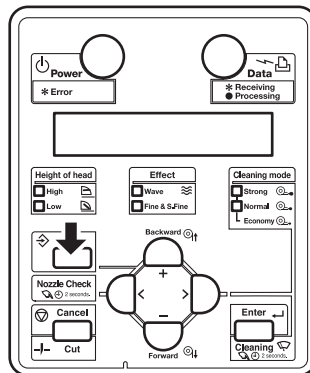
No.	Name
1	Roll media
2	Media holder plates

4.3 Menu setups on Operation panel

4.3.1 Menu setup procedure

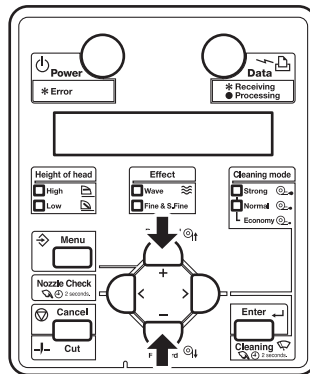
Follow the procedure below to configure each setup menu.

1. Confirm that Operation panel is Normal.
2. Press the [Menu] key on Operation panel.



- "Menu1: Setup>" is displayed on Operation panel.

3. Press the [+] key or [-] key on Operation panel to select a setup item and press the [>] key.

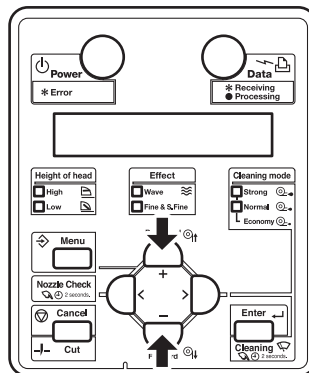


- The settings will be confirmed.
- When setup items have a submenu, the display shifts to the next menu.

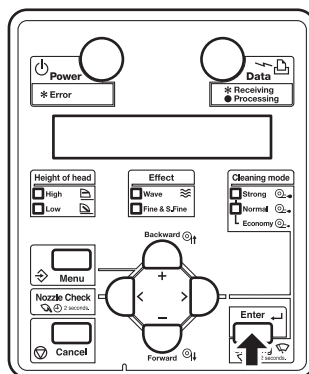
NOTE

- When a setup item has a submenu, ">" is displayed on the right end of LCD monitor of Operation panel.
- For the general outline of each setup item, refer to [4.3.2 Panel setup menu overview](#).

4. The setting in the blinking part on LCD monitor of Operation panel can be changed. Press the [+] key or [-] key on Operation panel to change the setting.



5. To save the changed setting, press the [Enter] key on Operation panel.

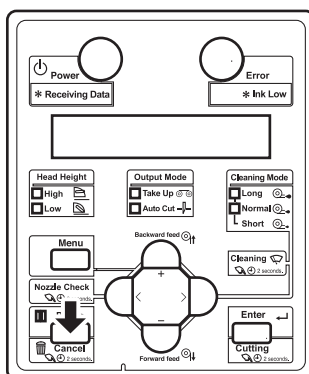


- The setting is saved and the next setup item is displayed.

NOTE

If you press the [Cancel] key without pressing the [Enter] key after changing a setting, the changed setting will not be saved.

6. Press the [Cancel] key on Operation panel to exit from the setup.



- Return to the menu in the previous hierarchy.

4.3.2 Panel setup menu overview

This section explains the outline of each menu.
There are the following items in the Panel setup menu.

Setup item	Description
Setup menu	Various settings of the printer are configured.
Test Print menu	Performs nozzle check of the print head and setup list.
Adjust Print menu	Print and adjust test patterns for Alignment.
Cleaning menu	Perform Head cleaning.
Selection menu	Set up the contents of the Setup menu.
Version menu	Displays the version of the firmware.

TIP

For details of each setup item, refer to [5 Panel setup menu](#).

4.4 Operating from Operation panel

This section explains various functions that can be operated from Operation panel.

TIP

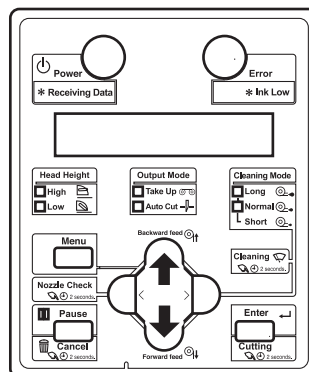
For names and functions of each key, refer to [2.1.3 Operation panel](#).

4.4.1 Feeding media

You can feed the roll media at a position that you want.

Follow the procedure below to feed media.

1. Confirm that Operation panel is Normal.
2. Check that Media loading lever is lowered.
3. Press the [Forward↓] key or the [Backward↑] key on Operation panel.

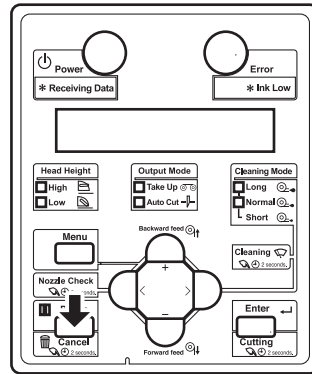


- The media is fed forward or backward.
4. Release the [Forward↓] key or the [Backward↑] key on Operation panel after feeding the media to the desired position.

4.4.2 Stopping printing operation

If you want to stop printing for some reason, operate as follows.

1. Stop sending printing data from the computer to the printer.
2. Press the [Cancel] key on Operation panel for more than 2 seconds.



- The printer operates as follows.

Printer status	Operation with the [Cancel] key pressed for two seconds
During printing	Terminates the printing, and deletes one data remaining in the printer.
Receiving data/analyzing data	Deletes the data already received and converted.

NOTE

If a large amount of data is saved on the printer, Operation panel may not return to Normal by a single [Cancel] key operation.

In such cases, wait for a few seconds and press the [Cancel] key again for more than 2 seconds.

4.4.3 Cutting media (VJ-1604WX only)

This section explains how to cut media.

NOTE

VJ-1604X is not equipped with cutter.

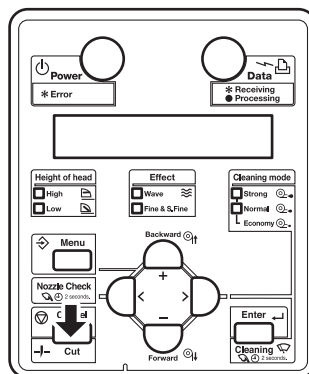
If Media ejection mode is set to Auto Cut, the printer cuts the media automatically after printing.

☞ 5.1.7 Take-up unit menu

If you press the [Cut] key on Operation panel more than two seconds while Operation panel is Normal, you can cut the media at the desired position.

Follow the procedure below to cut the roll media.

1. Confirm that Operation panel is Normal.
2. Press the [Cut] key on Operation panel.



- The printer feeds the roll media to the length of the margin and cuts the media.

NOTE

- When loading the new roll media, cut the front edge of the media if it is not straight.
- The cutter is a consumable component. Replace it periodically.

☞ 5.1.5 Media Initial menu

- When the media detection is set to "Off", the media cannot be cut automatically.

☞ 5.1.5 Media Initial menu

4.4.4 Cutting media manually

This section explains how to cut the roll media manually.

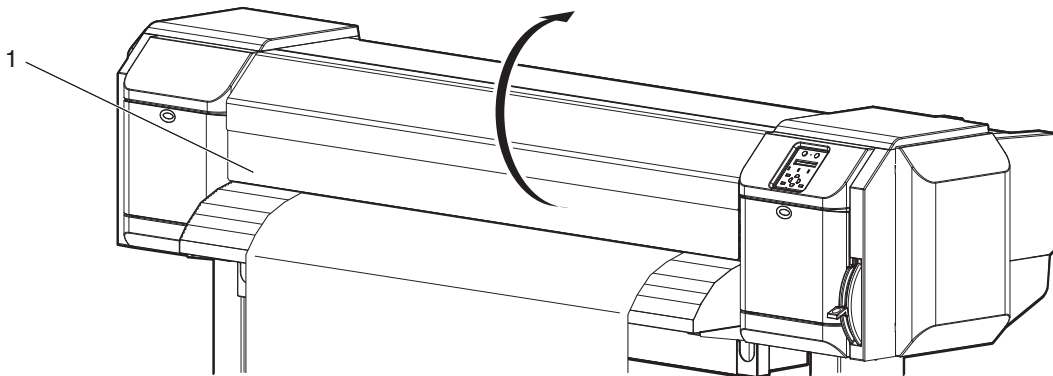
Since VJ-1604X is equipped with Heaters, strictly comply with the following Cautions.

CAUTION

- **Right after printing, Media guide becomes very hot.
Allow Media guide to cool down before the next operation.**

Follow the procedure below to cut the roll media.

1. Verify the following regarding the operational condition of the printer.
 - Printing or other operations are not in progress.
 - Operation panel display is Normal.
2. To change the position to cut the roll media, refer to [4.4.1 Feeding media](#) and advance the roll media to the desired cut position.
3. Open Front cover.

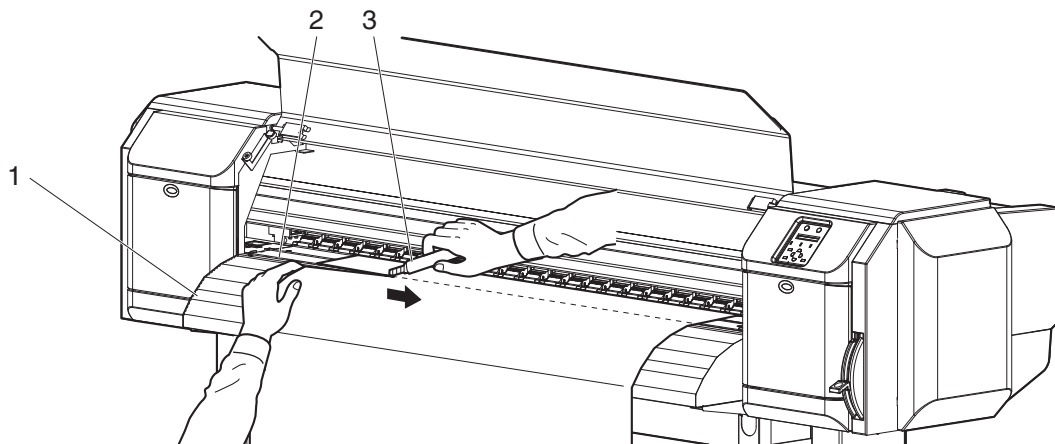


No.	Name
1	Front cover

4. Place a razor blade on Media cut groove on Media guide, and cut the roll media.

CAUTION

- Pay attention to the following points when cutting roll media.
Mishandling Razor blade may cause a cut on your finger or hand.
- When you hold media, do not place your finger on Media cut groove.
- Move Razor blade slowly along Media cut groove.



No.	Name
1	Media guide
2	Media cut groove
3	Razor blade

- The procedure for cutting the roll media is complete.

NOTE

When loading the new roll media, cut the front edge of the media if it is not straight.

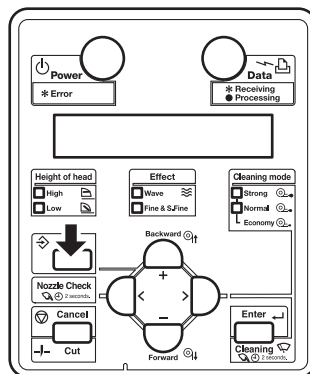
4.4.5 Changing and confirming settings while printing

While the printer is operating, you can change or confirm settings for the Panel setup menu.

4.4.5.1 Procedure for changing and confirming settings while printing

Follow the procedure below to change or confirm settings for the Panel setup menu.

1. Confirm that the printer is in one of the following conditions.
 - Receiving data
 - Analyzing data
 - Printing
 - Warming up
2. Press the [Menu] key on Operation panel.



- "Menu 1: Print Start" is displayed on the operation panel.
3. Press the [+] key or [-] key to change or confirm settings.

NOTE

For the setting items whose settings can be changed or confirmed, refer to [4.4.5.2 Settings that can be changed or confirmed while printing](#).

4.4.5.2 Settings that can be changed or confirmed while printing

NOTE

- When you change a setting during operation, be sure to select "Backup" to save the setting that you changed.
If the printer returns to Normal without "Backup" being selected, the changed setting is not saved.

Setup item	Setting	Description
Print Start	—	<ul style="list-style-type: none"> [Enter] key: If the heater temperature does not reach the set value during warming-up, printing starts.
Temperature (VJ-1604X only)	Pre	Check the current Pre Heater temperature.
	Platen	Check the current Platen Heater temperature.
	After	Check the current After Heater temperature.
Pre Heater (VJ-1604X only)	Off / 30 °C to 50 °C	Change the Pre Heater temperature.
Platen Heater (VJ-1604X only)	Off / 30 °C to 50 °C	Change the Platen Heater temperature.
After Heater (VJ-1604X only)	Off / 30 °C to 50 °C	Change the After Heater temperature.
PF Adjust	–20 pulse to 0 to 20 pulse	Change the feed adjustment value.
Backup	—	<ul style="list-style-type: none"> [Enter] key: Save the changed setting.
—	—	<ul style="list-style-type: none"> [Cancel] key: The printer returns to Normal.

4.4.6 Pausing printing

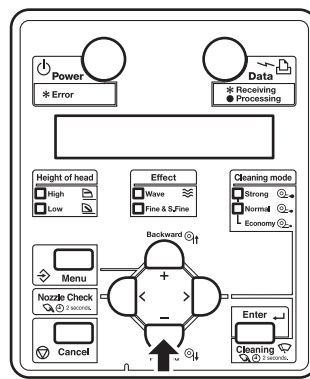
It is possible to pause to print during printing.

Follow the procedure below to pause or restart printing.

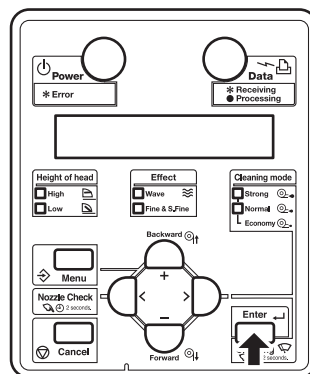
NOTE

If the printing is paused, the print quality will not be guaranteed.

1. Check that the printer is in operating.
2. Press the [-] key on Operation panel.



- The printer pauses printing.
 - "PrintRestart -> ENTER" is displayed on the operation panel.
3. To restart printing, press the [Enter] key on Operation panel.



- The printer restarts printing.

5 Panel setup menu

The section explains the Setup menu of the printer.

Setup item	Description
Setup menu	Various settings of the printer are configured. ☞ 5.1 Setup menu
Test Print menu	Sets up when adjusting the printer for the optimum quality of image print. ☞ 5.2 Test Print Menu
Adjust Print menu	Sets up when adjusting the printer for the optimum quality of image print. ☞ 5.3 Adjust Print menu
Cleaning menu	Perform Head cleaning. ☞ 5.4 Cleaning menu
Menu Option menu	Sets up the contents of the Setup menu. ☞ 5.5 Menu Option menu
Version menu	Displays the version of the firmware. ☞ 5.6 Version menu
Sleep Mode menu	Sleep mode settings are configured. ☞ 5.7 Sleep Mode menu

TIP



The <> parts in each list are factory default settings (default).

5.1 Setup menu

Various settings of the printer are configured.

Setup item	Description
MediaType	Sets up the media type to print. <ul style="list-style-type: none"> [Enter] key: shifts to the sub menu. ☞ 5.1.1 Media type menu
Effect	Sets up the Effect menu. <ul style="list-style-type: none"> [Enter] key: shifts to the sub menu. ☞ 5.1.2 Effect menu
Spitting	Set up the Flushing operation while printing. <ul style="list-style-type: none"> [Enter] key: shifts to the sub menu. ☞ 5.1.3 Spitting menu
Side Margin	Specifies the right and left margins of printed media. <ul style="list-style-type: none"> [Enter] key: shifts to the sub menu. ☞ 5.1.4 Side Margin menu
Media Initial	Decides whether to detect the width and front edge of the media when initializing the media. <ul style="list-style-type: none"> [Enter] key: shifts to the sub menu. ☞ 5.1.5 Media Initial menu
MediaWidth	Specifies the media width between the loading mark and the left end if media detection is not performed during media initialization. Displays the detected media width if media detection is performed during media initialization. <ul style="list-style-type: none"> [Enter] key: shifts to the sub menu. ☞ 5.1.6 Media Width menu
Take-up	Sets the operation of the optional winding unit. <ul style="list-style-type: none"> [Enter] key: shifts to the sub menu. ☞ 5.1.7.1 Page Gap menu
Origin	Sets the beginning of printing (origin) of the print data. <ul style="list-style-type: none"> [Enter] key: shifts to the sub menu. ☞ 5.1.8 Origin menu
Prev. Stick	Sets up to prevent media from sticking when printing starts. (This function is not displayed for VJ-1604WX.) <ul style="list-style-type: none"> [Enter] key: shifts to the sub menu. ☞ 5.1.9 Prev. Stick menu (VJ-1604X only)
HeadFan	Sets up head fan operation. <ul style="list-style-type: none"> [Enter] key: shifts to the sub menu. ☞ 5.1.10 HeadFan menu
Head Travel	Sets up the range that Print head moves while printing. <ul style="list-style-type: none"> [Enter] key: shifts to the sub menu. ☞ 5.1.11 Head Travel menu
Multi Strike	Sets up the overwrite count per line. <ul style="list-style-type: none"> [Enter] key: shifts to the sub menu. ☞ 5.1.12 Multi Strike menu
Strike Wait	Sets up the waiting time while overwrite printing. <ul style="list-style-type: none"> [Enter] key: shifts to the sub menu. ☞ 5.1.13 Strike Wait menu

Setup item	Description
Slant Check	Sets up slanting detection during media loading. <ul style="list-style-type: none"> • [Enter] key: shifts to the sub menu.  5.1.14 Slant Check menu
Auto Cleaning	Sets up the time for auto cleaning during standby, before printing, and during printing. <ul style="list-style-type: none"> • [Enter] key: shifts to the sub menu.  5.1.15 Auto Cleaning menu
Ink Status	Displays the various information about Ink cartridges (ink status) that are installed in Slots. <ul style="list-style-type: none"> • [Enter] key: shifts to the sub menu.  5.1.16 Ink Status menu
Roll Length	Sets up the roll media length. <ul style="list-style-type: none"> • [Enter] key: shifts to the sub menu.  5.1.17 Roll Length menu
Longstore	Wash Print head with the cleaning fluid. <ul style="list-style-type: none"> • [Enter] key: shifts to the sub menu.  5.1.18 Longstore menu
CR Maintenance	Performs maintenance. <ul style="list-style-type: none"> • [Enter] key: shifts to the sub menu.  5.1.19 CR Maintenance menu
Initialization	Returns the settings of the printer to default. <ul style="list-style-type: none"> • [Enter] key: shifts to the sub menu.  5.1.20 Initialization menu
Life Times	Displays the operational life time of each part. <ul style="list-style-type: none"> • [Enter] key: shifts to the sub menu.  5.1.21 Life Times menu
IP Address	Sets the IP address of the printer. <ul style="list-style-type: none"> • [Enter] key: shifts to the sub menu.  5.1.22 IP Address menu
Subnet Mask	Sets the subnet mask of the printer. <ul style="list-style-type: none"> • [Enter] key: shifts to the sub menu.  5.1.23 Subnet Mask menu
Gateway	Sets the gateway. <ul style="list-style-type: none"> • [Enter] key: shifts to the sub menu.  5.1.24 Gateway menu
Media Thickness	Sets the thickness of the media you are using. <ul style="list-style-type: none"> • [Enter] key: shifts to the sub menu.  5.1.25 Media thickness menu
Start Feed	You can change the margin setting between images. <ul style="list-style-type: none"> • [Enter] key: shifts to the sub menu.  5.1.26 Start Feed menu
Header Dump	Sets whether to print the information (damp data) when printing. <ul style="list-style-type: none"> • [Enter] key: shifts to the sub menu.  5.1.27 Header Dump menu

Setup item	Description
Temporary	Displays the settings of "Off" or "ALL Off" in the Selection menu in the Setup menu temporarily. <ul style="list-style-type: none">• [Enter] key: returns to the previous menu with all set up items displayed.• [Cancel] key: returns to the previous status in the Selection menu when the Setup menu is displayed.  5.5 Menu Option menu
—	<ul style="list-style-type: none">• [Cancel] key: shifts to the previous menu.  5 Panel setup menu

5.1.1 Media type menu

Select the media type for printing.

Setup item	Setting	Description
Media	Type 1	Sets the media type for printing. It is possible to set 30 different user settings as "Type 1 to 30" for printing. • [Enter] key: shifts to the sub menu. ☞ 5.1.1.1 User media menu
	Type 2	
	...	
	Type 29	
	Type 30	
	—	• [Cancel] key: saves the setting and shifts to the previous menu. ☞ 5.1 Setup menu

5.1.1.1 User media menu

Various settings on the media types are configured.

In media type menu, 30 different settings can be set as Type 1 to 30 for the following printing operation.









NOTE

If media other than recommended one is used, the following problems may occur.

- Media detection error
- Slant, torn, and wrinkle of media
- Media jams
- Favorable print quality cannot be obtained due to blots, blurs or dirt of ink.
- End detection of roll media cannot be performed, etc.

The problems caused by the use of the media other than recommended one will not be covered by the warranty and repair expenses will be paid by the customer.

For details, contact your local MUTOH dealer.

Setup item	Setting	Description
Type 1 to 30	Print Mode	Sets up the print mode according to the usage of print data or print speed. <ul style="list-style-type: none"> [Enter] key: shifts to the sub menu.  5.1.1.1.1 Print Mode menu
	PF Adjust	Sets up various settings on the media feed compensation. <ul style="list-style-type: none"> [>] key: shifts to the sub menu.  5.1.1.1.2 Media feed compensation
	Pre-Heater	Sets the temperature of Pre-Heater. <ul style="list-style-type: none"> This function is not displayed for VJ-1604WX. [Enter] key: shifts to the sub menu.  5.1.1.1.3 Pre-Heater menu (VJ-1604X only)
	Platen Heater	Sets the temperature of Platen Heater. <ul style="list-style-type: none"> This function is not displayed for VJ-1604WX. [Enter] key: shifts to the sub menu.  5.1.1.1.4 Platen Heater menu (VJ-1604X only)
	After Heater	Sets the temperature of After Heater. <ul style="list-style-type: none"> This function is not displayed for VJ-1604WX. [Enter] key: shifts to the sub menu.  5.1.1.1.5 After Heater menu (VJ-1604X only)
	StandbyHeating	Sets up the length of time to preheat the heater while the printer is in standby mode. <ul style="list-style-type: none"> This function is not displayed for VJ-1604WX. [Enter] key: shifts to the sub menu.  5.1.1.1.6 StandbyHeating menu
	Vacuum Fan	Sets up vacuum fan operation. <ul style="list-style-type: none"> [Enter] key: shifts to the sub menu.  5.1.1.1.7 Vacuum Fan menu
	—	<ul style="list-style-type: none"> [Cancel] key: shifts to the previous menu.  5.1.1 Media type menu




5.1.1.1.1 Print Mode menu

Settings for print quality (print mode) are set according to the usage of print data or print speed.

NOTE

When "Banner 1" or "Banner 2" is set in the Print Mode menu, "PalettePrint" is not displayed in the Test Print menu.

 [5.2 Test Print Menu](#)

Setup item	Setting	Description
Mode	Quality 1	Sets up print mode. <ul style="list-style-type: none"> Quality 1 to 4: Suitable for printing photos. Sets up to perform high quality printing. Graphics 1 to 2: Suitable for printing photos. Sets up to perform standard printing. Banner 1 to 4: Suitable for outdoor signs and test printing. Sets up to perform high speed printing. Displays details of each print mode while pressing [>] key.  Details of print mode
	Quality 2	
	Quality 3	
	Quality 4	
	Graphics 1	
	Graphics 2	
	Banner 1	
	Banner 2	
	Banner 3	
	Banner 4	
	—	<ul style="list-style-type: none"> [Enter] key: saves the setting and shifts to the sub menu.  5.1.1.1.2 Media feed compensation [Cancel] key: cancels the setting and shifts to the previous menu.  5.1.1.1 User media menu

NOTE

The printed images can be uneven depending on the media and print mode. In such cases, use the following mode to clear unevenness.

- When using bidirectional print mode (refer to the following chart [Details of print mode](#)), switch it to unidirectional print mode.
- When using Graphics 1 to 2, change it to Quality 1 to 4.

Details of print mode

The set values of print quality that are registered in each print mode are as follows.

NOTE

- In the chart below, the print speed becomes faster as the condition is closer to the following cases.
 - Having fewer number of passes
 - Having lower resolution
 - Printing direction is bidirectional







In actual printing, the selected effect affects the printing speed.

 [5.1.1.1.2 Media feed compensation](#)

Print Mode	Resolution	Pass	Direction
Quality 1	1440×1440 dpi	16 times	Uni (unilateral)
Quality 2	1440×720 dpi	8 times	Uni (unilateral)
Quality 3	720×720 dpi	8 times	Uni (unilateral)
Quality 4	720×720 dpi	8 times	Bi (bidirectional)
Graphics 1	720×720 dpi	8 times	Uni (unilateral)
Graphics 2	720×720 dpi	8 times	Bi (bidirectional)
Banner 1	540×720 dpi	6 times	Uni (unilateral)
Banner 2	540×720 dpi	6 times	Bi (bidirectional)
Banner 3	720×720 dpi	4 times	Uni (unilateral)
Banner 4	720×720 dpi	4 times	Bi (bidirectional)


5.1.1.1.2 Media feed compensation

Sets up various settings on the media feed compensation.

Setup item	Setting	Description
PF Adjust	Initial Print	Performs Initial Adjust Print. • [Enter] key: shifts to the sub menu.  (1) Initial Print menu
	Initial Change	Sets up Initial Adjust Change. • [Enter] key: shifts to the sub menu.  (2) Initial Change menu
	Confirm Print	Performs Confirm Print. • [Enter] key: shifts to the sub menu.  (3) Confirm Print menu
	Micro Print	Performs Micro Adjustment Print. • [Enter] key: shifts to the sub menu.  (4) Micro Print menu
	Micro Change	Sets up Micro Adjustment Change. • [Enter] key: shifts to the sub menu.  (5) Micro Change menu
	—	• [Cancel] key: shifts to the previous menu.  5.1.1.1 User media menu

(1) Initial Print menu

Performs Initial Adjust Print.

Setup item	Setting	Description
FeedLength	100mm to <250mm> to 500mm	Changes the length (feed length) of the media feed direction for initial adjust print. • [Enter] key: Determines the setting. “Printing” is displayed on Operation panel and initial adjust print starts. After printing, the printer enters Normal.
	—	• [Cancel] key: cancels the setting and shifts to the previous menu.  5.1.1.1.2 Media feed compensation

(2) Initial Change menu

Sets up Initial Adjust Change.

Setup item	Setting	Description
Init.	The setting value of “FeedLength” in the initial adjustment printing $\pm 50.0\text{mm}$	Sets up Initial Adjust Change. Example: When the value of “FeedLength” in the initial adjustment printing is set to 250mm, the adjustment range of this menu is 200mm to 300mm.
	—	<ul style="list-style-type: none"> • [Enter] key: saves the setting and shifts to the previous menu. • [Cancel] key: cancels the setting and shifts to the previous menu. 🔗 5.1.1.1.2 Media feed compensation

(3) Confirm Print menu

Performs Confirm Print.

Setup item	Setting	Description
FeedLength	100mm to <250mm> to 500mm	Changes the length (feed length) of the media feed direction for Confirm Print. <ul style="list-style-type: none"> • [Enter] key: Determines the setting. “Printing” is displayed on Operation panel and initial adjust print starts. After printing, the printer enters Normal.
	—	<ul style="list-style-type: none"> • [Cancel] key: cancels the setting and shifts to the previous menu. 🔗 5.1.1.1.2 Media feed compensation

(4) Micro Print menu

Performs Micro Adjustment Print.

Setup item	Setting	Description
Micro	-5.00% to <0.00%> to 5.00% (After printing)	<ul style="list-style-type: none"> • Prints a micro adjustment pattern based on the currently set micro adjustment value with each of the following values applied to it. $\pm 0.10\%$、$\pm 0.20\%$、$\pm 0.50\%$、$\pm 0.80\%$、$\pm 1.20\%$ • After printing, enter a micro adjustment value in the following range: $-5.00\% \sim <0.00\%> \sim 5.00\%$
	—	<ul style="list-style-type: none"> • [Cancel] key: shifts to the previous menu. If during printing, printing will be paused. 🔗 5.1 Setup menu

(5) Micro Change menu

Sets up Micro Adjustment Change.

Setup item	Setting	Description
Micro	-5.00% to <0.00%> to 5.00%	Sets up Micro Adjustment Change.
	—	<ul style="list-style-type: none"> • [Enter] key: saves the setting and shifts to the previous menu. • [Cancel] key: cancels the setting and shifts to the previous menu. 🔗 5.1 Setup menu

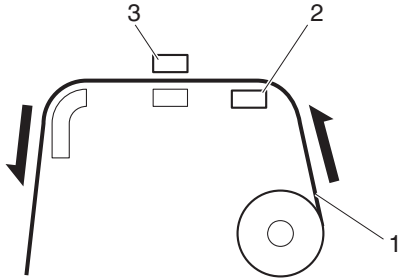
5.1.1.1.3 Pre-Heater menu (VJ-1604X only)

Sets the temperature of Pre-Heater.

Set to curb a rapid temperature change at the printing portion by pre-heating the media before printing.

NOTE

- This function is not displayed for VJ-1604WX.
- The set temperature of Pre-heater differs depending on the media.

Setup item	Setting	Description
Pre-Heater	Off / <30°C> to 50°C	Sets the temperature of Pre-Heater.  1. Roll media 2. Pre-Heater 3. Print head
	—	<ul style="list-style-type: none"> • [Enter] key: saves the setting and shifts to the previous menu. • [Cancel] key: cancels the setting and shifts to the previous menu. 🔗 5.1.1.1 User media menu

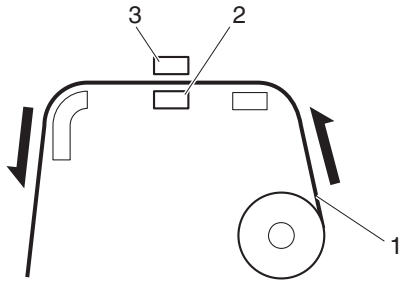

5.1.1.1.4 Platen Heater menu (VJ-1604X only)

Sets the temperature of Platen Heater.

Set to improve print quality by allowing the ink to settle by heat.

NOTE

- This function is not displayed for VJ-1604WX.
- The set temperature of Platen heater differs depending on the media.

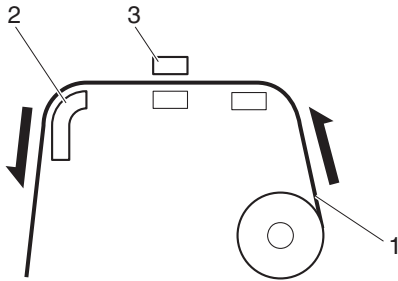
Setup item	Setting	Description
Platen Heater	Off / <30°C> to 50°C	<p>Sets the temperature of Platen Heater.</p>  <p>1.Roll media 2.Platen Heater 3.Print head</p>
	—	<ul style="list-style-type: none"> • [Enter] key: saves the setting and shifts to the previous menu. • [Cancel] key: cancels the setting and shifts to the previous menu. <p> 5.1.1.1 User media menu</p>

5.1.1.1.5 After Heater menu (VJ-1604X only)

Sets the temperature of After Heater.
Set to dry the print side after printing.

NOTE

- This function is not displayed for VJ-1604WX.
- The set temperature of After heater differs depending on the media.

Setup item	Setting	Description
After Heater	Off / <30°C> to 50°C	Sets the temperature of After Heater.  1.Roll media 2.After Heater 3.Print head
	—	<ul style="list-style-type: none"> • [Enter] key: saves the setting and shifts to the previous menu. • [Cancel] key: cancels the setting and shifts to the previous menu. 🔑 5.1.1.1 User media menu

5.1.1.1.6 StandbyHeating menu

Sets up the length of time to preheat the heater while the printer is in standby mode.

Setup item	Setting	Description
StandbyHeating	10 min to <60 min> to 240 min	Sets the length of time to preheat the heaters. When more than the set time has passed, each heater turns off.
	—	<ul style="list-style-type: none"> • [Enter] key: saves the setting and shifts to the previous menu. • [Cancel] key: cancels the setting and shifts to the previous menu. 🔑 5.1.1.1 User media menu

5.1.1.1.7 Vacuum Fan menu

Sets up vacuum fan operation.

Setup item	Setting	Description
Vacuum Fan	Low	Set this if there is a possibility of paper jamming from media feed failure when the setting is High.
	<High>	Set when using general media.
	—	<ul style="list-style-type: none"> • [Enter] key: saves the setting and shifts to the previous menu. • [Cancel] key: cancels the setting and shifts to the previous menu. ☞ 5.1.1.1 User media menu


5.1.2 Effect menu

Sets up the Effect menu.

Set up this menu when you want to improve print quality by adjusting the set print mode.

NOTE

The print quality may not be improved depending on the printing condition.

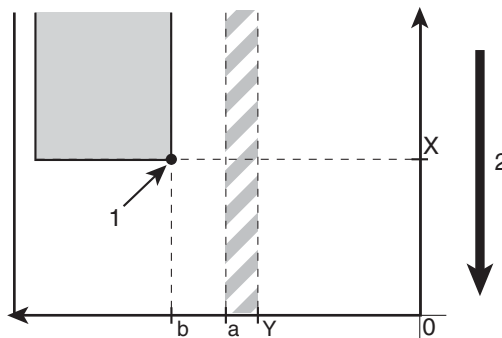
Setup item	Setting	Description
Effect	None 1	The Effect function is not used.
	None 2	If obvious white lines or uneven print density appear on printed media in "None 1", set to "None 2".
	Wave 1	The printing joint will be the wave form.
	Wave 2	It will be improved the print quality. If obvious white lines or uneven print density appear on printed media in "Wave 1", set to "Wave 2".
	Fuzz 1	The printing joint will shade off as the wave form.
	Fuzz 2	Set up this menu when obvious white lines or uneven print density appear on printed media in "Wave". If obvious white lines or uneven print density appear on printed media in "Fuzz 1", set to "Fuzz 2".
	Wow 1	Set when colors become irregular.
	Wow 2	If irregular colors are not fixed using "Wow 1", set to "Wow 2".
	Fine&Wave 1	Perform printing at a slow speed compared with "Wave".
	<Fine&Wave 2>	Set up this menu when improving the print quality compared with "Wave". If obvious white lines or uneven print density appear on printed media in "Fine&Wave 1", set to "Fine&Wave 2".
	Fine&Fuzz 1	Perform printing at a slow speed compared with "Fuzz".
	Fine&Fuzz 2	Set up this menu when improving the print quality compared with "Fuzz". If obvious white lines or uneven print density appear on printed media in "Fine&Fuzz 1", set to "Fine&Fuzz 2".
	A-S.Fine&Wave	Performs "Wave" printing using one side of the nozzles of the print head. Since only one side of the nozzles is used, printing speed becomes half of "Wave 1 to 2". Set up this menu when improving the print quality compared with "Fine&Wave 1 to 2".
	B-S.Fine&Wave	Performs "Wave" printing using the other side of the nozzles of the print head that is used for "A-S.Fine&Wave". Since only one side of the nozzles is used, printing speed becomes half of "Wave 1 to 2". Since only one side of the nozzles is used, printing speed becomes half of "Wave 1 to 2".
	Fine&Fog 1	The printing joint will shade off.
	Fine&Fog 2	Set this when there is horizontal unevenness in Fine&Fuzz. Prints at a slower speed than Fine&Fuzz. If obvious white lines or uneven print density appear on printed media in "Fine&Fog 1", set to "Fine&Fog 2".
	—	<ul style="list-style-type: none"> [Enter] key: saves the setting and shifts to the previous menu. [Cancel] key: cancels the setting and shifts to the previous menu.  5.1.1.1.1 Print Mode menu

5.1.3 Spitting menu

Sets up the spitting operation while printing.

NOTE

- When the spitting setting is "On Media", the maximum printable media width becomes 16mm shorter.
Therefore, the side margins become the value that you have set in Side Margin menu +8mm.
- The right side margin will be the following sum depending on the setting.
Y of Origin menu + 8mm (when the spitting is set to On Media) + Value set in Side Margin menu.



1. Print starting position
2. Media feed direction

X (media feeding distance)

Y (print head transferring distance)

a (0mm/8mm: Spitting setting is ON, On Media)

b (5mm to 25mm: Side margin setting)

[☞ 5.1.4 Side Margin menu](#)

[☞ 5.1.8 Origin menu](#)

Setup item	Setting	Description
Spitting	<On>	Perform the spitting operation on Spitting box located on the origin side for every shuttle. <ul style="list-style-type: none"> [Enter] key: saves the setting and shifts to the sub menu. ☞ 5.1.3.1 Spitting Pass Count menu
	On Media	Perform the spitting operation on the page margins. The printing speed will be improved since the number of time to return to Spitting box is reduced. <ul style="list-style-type: none"> [Enter] key: saves the setting and shifts to the sub menu. ☞ 5.1.3.1 Spitting Pass Count menu
	—	<ul style="list-style-type: none"> [Cancel] key: cancels the setting and shifts to the previous menu. ☞ 5.1 Setup menu

5.1.3.1 Spitting Pass Count menu

Set the intervals that Print head returns to Spitting boxes when "On" or "On Media" is set in Spitting menu. Print head returns to Spitting box every shuttle per the set number.

NOTE

- If the number of spitting returns is set high, the spitting operation is not done on Spitting box.
- Therefore there is a higher chance of nozzle clogging when printing for a long time. In such a case, print quality cannot be guaranteed.

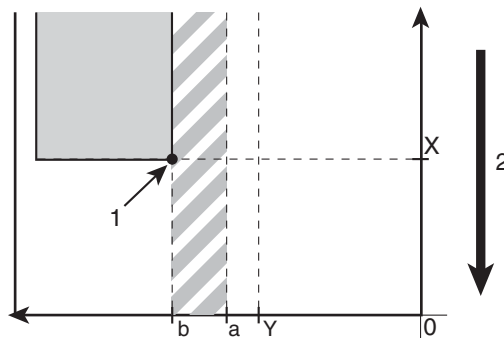
Setup item	Setting	Description
ReturnCount	-999 times to 0 times to <5 times> to 999 times	Set the spitting return count. Example <ul style="list-style-type: none"> • -1 times: return to the flushing box on the original side every time the print head goes and returns. Spitting is not performed over the media, either. • 0 times: the print head moves over the print media until printing finishes, and does not return to the flushing box. Spitting is not performed over the media, either. • 1 times: return to the flushing box on the original side every time the print head goes and returns. • 5 times: return to the flushing box on the original side every time the print head goes and returns five times.
	—	<ul style="list-style-type: none"> • [Enter] key: saves the setting and shifts to the previous menu. • [Cancel] key: cancels the setting and shifts to the previous menu. ☞ 5.1.2 Effect menu

5.1.4 Side Margin menu

Set up the right and left margins (side margins) while printing.

NOTE

- When the Spitting menu is set to "On Media", the maximum printable media width becomes 16mm shorter.
Therefore, the side margins become the value that you have set in Side Margin menu +8mm.
[☞ 5.1.2 Effect menu](#)
- The right side margin will be the following sum depending on the setting.
Y of Origin menu + 8mm (when the spitting is set to On Media) + Value set in Side Margin menu.



1. Print starting position
2. Media feed direction

X (media feeding distance)

Y (print head transferring distance)

a (0mm/8mm: Spitting setting is ON, Off/On Media)

b (5mm to 25mm: Side margin setting)

[☞ 5.1.2 Effect menu](#)

[☞ 5.1.8 Origin menu](#)

Setup item	Setting	Description
Side Margin	<5mm> to 25mm	Set the side margins.
	—	<ul style="list-style-type: none"> [Enter] key: saves the setting and shifts to the previous menu. [Cancel] key: cancels the setting and shifts to the previous menu. ☞ 5.1 Setup menu

5.1.5 Media Initial menu

Sets whether to detect the media width and edge while initializing the media.

NOTE

- When Media Detection menu is set to "Off", set the media width of the current media in Media Width menu.
[🔗 5.1.6 Media Width menu](#)
- When the the media detection is set to "Off", the media cannot be cut automatically(VJ-1604WX).

Setup item	Setting	Description
Init.	Off	The media will not be detected.
	Top&Width	Detect the media width and edge while initializing the media.
	<Width>	Detect the media width while initializing the media.
	—	<ul style="list-style-type: none"> • [Enter] key: saves the setting and shifts to the previous menu. • [Cancel] key: cancels the setting and shifts to the previous menu. 🔗 5.1 Setup menu

5.1.6 Media Width menu

Specifies the media width between the loading mark and the left end of the media if media detection is not performed during media initialization.

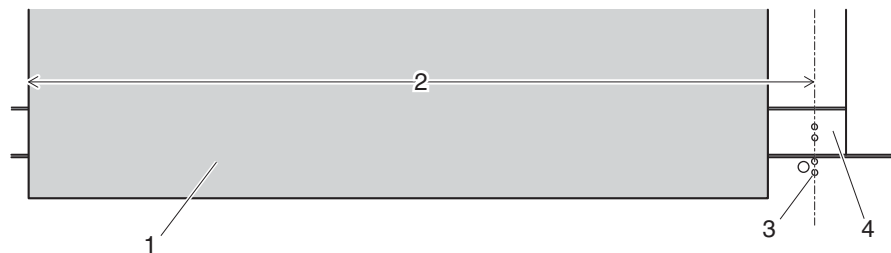
 [\(1\) Media Width menu](#)

Displays the detected media width if media detection is performed during media initialization.

 [\(2\) MediaWidth menu](#)

For media detection settings, refer to the following.

 [5.1.5 Media Initial menu](#)




No.	Name
1	Roll media
2	Media width (when not using media detection)
3	Media loading mark
4	Platen

NOTE

When the media is loaded as shown in the illustration and not using media detection, the printer may print on between the right edge of Platen and center of the media.

If this happens, adjust the print starting position in Origin menu.

 [5.1.8 Origin menu](#)

(1) Media Width menu**NOTE**

Setting a larger value than the media width set in the Media Width menu may cause ink to leak on the media or printer.

Setup item	Setting	Description
MediaWidth	210mm to <1000mm> to 1,625mm	Set the media width.
	—	<ul style="list-style-type: none"> • [Enter] key: saves the setting and shifts to the previous menu. • [Cancel] key: cancels the setting and shifts to the previous menu. 🔑 5.1.1.1 User media menu


(2) MediaWidth menu



Setup item	Setting	Description
MediaWidth	**** mm	Display the media width that is detected while initializing.
	—	<ul style="list-style-type: none"> • [Cancel] key: shifts to the previous menu. 🔑 5.1 Setup menu

5.1.7 Take-up unit menu

Set the operation of the optional take-up unit.

NOTE



- When the take-up unit is not installed, do not set Output mode to "Type1". By doing so, the product will be unable to function properly.
- When the Output Mode menu is set to "Type1", the setting for the Prev. Stick menu is disabled.
 [5.1.9 Prev. Stick menu \(VJ-1604X only\)](#)

Setup item	Setting	Description
Take-up	<Off>	No use of winding unit.
	Type1	Set when using the take-up unit. (The media will not be cut after printing.)
	—	<ul style="list-style-type: none"> • [Enter] key: saves the setting and shifts to the sub menu.  5.1.8 Origin menu • [Cancel] key: cancels the setting and shifts to the previous menu.  5.1 Setup menu

5.1.7.1 Page Gap menu

When "Take-up Unit menu" is set to "Type 1", the menu is shifted to "Page Gap".

In the Page Gap menu, you can change the margin setting between images.

Setup item	Setting	Description
Page Gap	<Normal>	The default margin setting between images will be applied.
	Narrow	The margin setting between images is smaller than Normal.
	—	<ul style="list-style-type: none"> • [Enter] key: saves the setting and shifts to the previous menu.  5.1.7 Take-up unit menu • [Cancel] key: cancels the setting and shifts to the previous menu.  5.1.7 Take-up unit menu

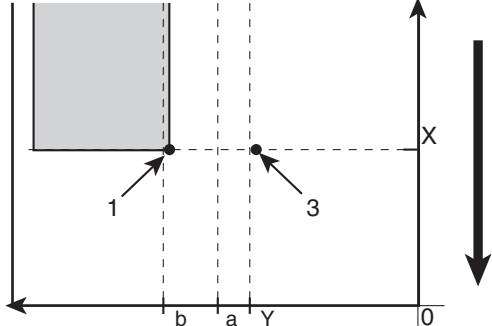
5.1.8 Origin menu

Sets the beginning of printing (origin) of the print data.

Set the menu when reprinting on the margin with changing the printing data position to the printed media.

NOTE


- When Output Mode menu is set to "Take-up", the set value X (media feeding distance) becomes 0 mm to 15,000 mm.
↳ [5.1.7 Take-up unit menu](#)
 - Depending on the set value of the side margin, the maximum set value of Y (print head transferring distance) decreases.
↳ [5.1.4 Side Margin menu](#)
-


Setup item	Setting	Description
Origin	<ul style="list-style-type: none"> • X (print head transferring distance): 00000 mm to 99,999 mm • Y (media feeding distance): 00000 mm to 9,999 mm 	<p>Change Print head position and media feeding distance with the following keys.</p> <ul style="list-style-type: none"> • [+] key: increases the setting value. • [-] key: decreases the setting value.  <p>1. Print starting position 2. Media feed direction 3. Setting position of "Origin"</p> <p>X (media feeding distance) Y (print head transferring distance) a (0mm/8mm: Spitting setting is ON, Off/On Media) b (5mm to 25mm: Side margin setting)</p> <p>NOTE</p> <p>The right side margin will be the following sum depending on the setting. Y of Origin menu + 8mm (when the spitting is set to On Media) + Value set in Side Margin menu.</p> <p>☞ 5.1.2 Effect menu ☞ 5.1.4 Side Margin menu</p>
Confirm Position -> Enter		<ul style="list-style-type: none"> • [Enter] key or after a certain period of time: Determines the setting. Print head returns to the original position. Save the setting and shift to the previous menu. <p>☞ 5.1 Setup menu</p>
—		<ul style="list-style-type: none"> • [Cancel] key: cancels the setting and shifts to the previous menu. <p>☞ 5.1 Setup menu</p>

5.1.9 Prev. Stick menu (VJ-1604X only)

Sets up to prevent media from sticking when printing starts.

NOTE


- This function is not displayed for VJ-1604WX.
- When the Output Mode menu is set to "Type1", the setting for the Prev. Stick menu is disabled.
 [5.1.7 Take-up unit menu](#)

Setup item	Setting	Description
Prev. Stick	<Off>	The stick-prevent operation is not performed.
	On	The stick-prevent operation is performed. Feed the media back and forth to prevent from sticking.
	—	<ul style="list-style-type: none"> • [Enter] key: saves the setting and shifts to the previous menu. • [Cancel] key: cancels the setting and shifts to the previous menu.  5.1 Setup menu

5.1.10 HeadFan menu


Sets up head fan operation.

If print blurring or dot losses occur, activate the head fan.

Setup item	Setting	Description
HeadFan	<Off>	Not activate the fan.
	On	Activates the fan.
	—	<ul style="list-style-type: none"> • [Enter] key: saves the setting and shifts to the previous menu. • [Cancel] key: cancels the setting and shifts to the previous menu.  5.1 Setup menu

5.1.11 Head Travel menu

Sets up the range that Print head moves while printing.


Setup item	Setting	Description
Distance	<Data>	Print head moves the range of the print data width. The printing speed will be improved since the moving range of Print head is optimized.
	Machine	Print head moves from origin to the maximum printable media width.
	—	<ul style="list-style-type: none"> • [Enter] key: saves the setting and shifts to the previous menu. • [Cancel] key: cancels the setting and shifts to the previous menu.  5.1 Setup menu

NOTE

- The minimum value for the shift width of Print head is 900 mm.
- Note that when the printer is set as "Media width" or "Data width", the shift width of Print head does not become below 900 mm, even though the width of the loaded media is below 900 mm.

5.1.12 Multi Strike menu

Sets up the overwrite count per line.


Setup item	Setting	Description
Strike Cnt	<1 cnt> to 9 cnt	Set the overwrite count.
	—	<ul style="list-style-type: none"> • [Enter] key: saves the setting and shifts to the previous menu. • [Cancel] key: cancels the setting and shifts to the previous menu.  5.1 Setup menu

5.1.13 Strike Wait menu

Sets up the waiting time while overwrite printing.


NOTE

- When using the media with a narrow width for VJ-1604X, Heater cannot warm up the media adequately, therefore the print quality may not be preserved.
In such a case, set up the Strike Wait time while overwrite printing to warm up the media adequately before printing.

Setup item	Setting	Description
Strike Wait	<0.0 sec.> to 0.1 sec. to 5.0 sec.	Sets the overwrite wait time.
	—	<ul style="list-style-type: none"> [Enter] key: saves the setting and shifts to the previous menu. [Cancel] key: cancels the setting and shifts to the previous menu.  5.1 Setup menu

5.1.14 Slant Check menu

Sets up slanting detection during media loading.

Setup item	Setting	Description
Media Slant	Off	Slant Check is not performed.
	<On>	Slant Check is performed.
	—	<ul style="list-style-type: none"> [Enter] key: saves the setting and shifts to the previous menu. [Cancel] key: cancels the setting and shifts to the previous menu.  5.1 Setup menu





5.1.15 Auto Cleaning menu

Configure the settings for the auto cleaning operation.

TIP



The cleaning mode reflects the settings in Operation panel.

 [6.2.3 Head cleaning](#)

Setup item	Setting	Description
Auto Cleaning	WaitingTime	Set the value for auto-cleaning in standby mode.  5.1.15.1 Waiting Time
	Printing time	Set the value for auto cleaning during printing.  5.1.15.2 Printing Time
	Before printing	Set the value for auto cleaning before printing.  5.1.15.3 Before Print
	—	<ul style="list-style-type: none"> • [Enter] key: saves the setting and shifts to the sub menu. • [Cancel] key: shifts to the previous menu.  5.1 Setup menu



5.1.15.1 Waiting Time

Set the auto cleaning interval for the standby mode.

Setup item	Setting	Description
WaitingTime	Off to 10 mins to <360 mins> to 1440 mins	Sets the time for auto cleaning in WaitingTime mode. <ul style="list-style-type: none"> • Off: Auto cleaning is not performed. • Others: Perform the head cleaning selected in the Cleaning menu after the setting time has elapsed.  6.2.3 Head cleaning
	—	<ul style="list-style-type: none"> • [Enter] key: saves the setting and shifts to the previous menu. • [Cancel] key: cancels the setting and shifts to the previous menu.  5.1.15 Auto Cleaning menu



5.1.15.2 Printing Time

Set the auto cleaning interval during printing.

Setup item	Setting	Description
PrintingTime	<Off> to 5 mins to 180 mins	Selects the time for auto cleaning while printing. <ul style="list-style-type: none"> • Off: Auto cleaning is not performed. • Others: Perform the head cleaning selected in the Cleaning menu after the setting time has elapsed.  6.2.3 Head cleaning
	—	<ul style="list-style-type: none"> • [Enter] key: saves the setting and shifts to the previous menu. • [Cancel] key: cancels the setting and shifts to the previous menu.  5.1.15 Auto Cleaning menu

5.1.15.3 Before Print

Set the value for auto cleaning before printing.


Setup item	Setting	Description
Before Print	<Off>	The auto cleaning is not performed.
	On	<ul style="list-style-type: none"> • Perform the head cleaning selected in the Cleaning menu before printing.  6.2.3 Head cleaning
	—	<ul style="list-style-type: none"> • [Enter] key: saves the setting and shifts to the previous menu. • [Cancel] key: cancels the setting and shifts to the previous menu.  5.1.15 Auto Cleaning menu

5.1.16 Ink Status menu

Displays various information of IC chips.




NOTE

- To display various information of IC chips, use genuine ink and S/C cards.
- If Ink cartridges other than genuine Ink cartridges are used, ink status will not be displayed correctly.

Setup item	Setting	Description
KCMY	0 to 100 (unit: %)	The amount of ink remaining in each Ink cartridge of K/C/M/Y is displayed.
	—	<ul style="list-style-type: none"> • [Cancel] key: shifts to the previous menu.  5.1 Setup menu

5.1.17 Roll Length menu

Sets up the roll media length.

Setup item	Setting	Description
Roll media	<Off>	Roll Length is not used. <ul style="list-style-type: none"> • [Enter] key: saves the setting and shifts to the previous menu.  5.1 Setup menu
	Roll1	Sets up the roll media length.
	Roll2	The set values of the roll media length can be set as "Roll1" to "Roll3".
	Roll3	<ul style="list-style-type: none"> • [Enter] key: saves the setting and shifts to the sub menu.  5.1.17.1 Roll Length menu
	—	<ul style="list-style-type: none"> • [Cancel] key: cancels the setting and shifts to the previous menu.  5.1 Setup menu

5.1.17.1 Roll Length menu

Sets up the roll media length.

NOTE

- After replacing the roll media, set the roll media length again.
- If the roll media length is not set, the residual quantity of roll media may not be displayed correctly.

Setup item	Setting	Description
Length	1 m to <30 m> to 200 m	Sets the roll media length.
	—	<ul style="list-style-type: none"> • [Enter] key: saves the setting and shifts to the previous menu. ➤ 5.1.17.3 Near End menu • [Cancel] key: cancels the setting and shifts to the previous menu. ➤ 5.1.17 Roll Length menu

5.1.17.2 Print Stop menu

You can set whether or not to display “Roll Remain Error” and pause printing when the length of the roll media that is counted inside the printer becomes 0.



NOTE

- Normally you can set this as “Off” as the rear sensor detects when the roll paper is finished.
- If you are using the roll media that does not come off the paper core easily when it is finished, printing may not be paused when the roll media is finished, if the print pause menu is set to “Off”. If this happens, set this to “On”.
- When “Roll Remain Error” or “Roll Near End” has occurred while the Print Pause menu is set to “On”, if you lower the media set lever after replacing to the new roll media, the Roll Media Length Setting menu is displayed. Enter the length of the roll media you have set.

Setup item	Setting	Description
Print Stop	<Off>	The roll media remaining count is not used to judge for pausing printing. Printing pauses when the rear sensor responds.
	On	Even when the rear sensor does not respond, printing pauses when the roll media remaining count becomes 0. <ul style="list-style-type: none"> • [Enter] key: saves the setting and shifts to the sub menu. ➤ 5.1.17.3 Near End menu
	—	<ul style="list-style-type: none"> • [Cancel] key: cancels the setting and shifts to the previous menu. ➤ 5.1.17 Roll Length menu

5.1.17.3 Near End menu

You can display “Roll Near End: *m” (* is replaced with a number between 1 and 10) before the length of the roll media that is counted inside the printer becomes 0.



Setup item	Setting	Description
Near End	<Off>	“Near end” is not displayed.
	Remain: 10 m to 1 m	“Near end” is displayed when the remaining count for the roll media becomes the length you selected.
	—	<ul style="list-style-type: none"> [Enter] key: saves the setting and shifts to the previous menu.  5.1.17 Roll Length menu [Cancel] key: cancels the setting and shifts to the previous menu.  5.1.17.2 Print Stop menu

5.1.18 Longstore menu

Wash Print head with the cleaning fluid.

NOTE




Be sure to use the dedicated cleaning fluid.


Setup item	Setting	Description
Longstore	Start	Wash Print head with the cleaning fluid.
		<ul style="list-style-type: none"> [Enter] key: Performs head cleaning. The following content is displayed on Operation panel. “Remove Cartridges” Remove Ink cartridge, and install Cleaning cartridge.  6.1.1 Replacing Ink cartridges
	—	<ul style="list-style-type: none"> [Cancel] key: shifts to the previous menu without Head washing.  5.1 Setup menu

5.1.19 CR Maintenance menu

Performs maintenance.


Used in the following cases.

- Cleaning Cleaning wiper
 [6.2.4 Cleaning Cleaning wiper](#)
- Cleaning circumference of Print head
 [6.2.5 Cleaning the circumference of Print head](#)
- Replacing Cutter
 [6.1.4 Replacing Cutter \(VJ-1604WX only\)](#)

Setup item	Setting	Description
CR Maintenance	Start	Performs maintenance. <ul style="list-style-type: none"> • [Enter] key: Print head moves to the left. Cleaning wiper rises.
		The following content is displayed on Operation panel. "End" <ul style="list-style-type: none"> • [Enter] key: Cleaning wiper returns to the original position. Print head returns to the original position.
	—	<ul style="list-style-type: none"> • [Cancel] key: shifts to the previous menu without maintenance.  5.1 Setup menu
	—	<ul style="list-style-type: none"> • Perform the pumping operation (start/stop) by pressing the “-” key while displaying “CR Maint.: End”.


5.1.20 Initialization menu

Returns the settings of the printer to default.

Setup item	Setting	Description
Initialization	ALL	All settings can be returned to factory default.
	Media Type	The setting of the Media Type is returned to factory default.
	Except Media Type	The setting other than the Media Type is returned to factory default.
	—	<ul style="list-style-type: none"> • [Enter] key: “** Initialing **” is displayed on Operation panel and the printer initializes the setting. • [Cancel] key: shifts to the previous menu without initialization.  5.1 Setup menu

5.1.21 Life Times menu

Displays the operational life time of each part.

Setup item	Setting	Description
Life Times	Head	Display the operational life of each part. <ul style="list-style-type: none"> The lifetime of each part is indicated by the asterisks (Maximum 5 asterisks: 100% left). As the part deteriorates, the number of asterisks decreases one by one (20 %). The part should be changed when all of the asterisks have disappeared and “Change” is displayed. Contact your local MUTOH dealer to ask for replacing parts.
	Pump	
	CR Motor	
	PF Motor	
	—	<ul style="list-style-type: none"> [Cancel] key: shifts to the previous menu.  5.1 Setup menu

NOTE

When replacing a part that its operational life has ended,


- No charge for replacing within the warranty period or under the contract.
- You are liable for the cost of repairs under conditions other than mentioned above.
- Do not keep using the part which has reached its life span. Problems caused by doing so will not be covered by the warranty.

5.1.22 IP Address menu

Sets the IP address of the printer.

NOTE

Be sure to set the IP address after consulting the network administrator.

Setup item	Setting	Description
IP Address	000.000.000.000 to <192.168.001.253> to 255.255.255.255	Change the IP address by operating the following keys. <ul style="list-style-type: none"> [+] key: increases the setting value. [-] key: decreases the setting value. [Enter] key: changes the setting for the next segment. Save the set values in the 4th segment and returns to the previous menu.
	—	<ul style="list-style-type: none"> [Cancel] key: cancels the setting and shifts to the previous menu.  5.1 Setup menu

5.1.23 Subnet Mask menu

Sets the subnet mask of the printer.

NOTE

Be sure to set the subnet mask after consulting the network administrator.

Setup item	Setting	Description
Subnet Mask	000.000.000.000 to <255.255.255.000> to 255.255.255.255	Change the subnet mask by operating the following keys. <ul style="list-style-type: none"> • [+] key: increases the setting value. • [-] key: decreases the setting value. • [Enter] key: changes the setting for the next segment. Save the set values in the 4th segment and returns to the previous menu.
	—	<ul style="list-style-type: none"> • [Cancel] key: cancels the setting and shifts to the previous menu. 🔑 5.1 Setup menu

5.1.24 Gateway menu

Sets the gateway.

NOTE


Be sure to set the gateway after consulting the network administrator.

Setup item	Setting	Description
Gateway	000.000.000.000 to <192.168.001.254> to 255.255.255.255	Change the gateway by operating the following keys. <ul style="list-style-type: none"> • [+] key: increases the setting value. • [-] key: decreases the setting value. • [Enter] key: changes the setting for the next segment. Save the set values in the 4th segment and returns to the previous menu.
	—	<ul style="list-style-type: none"> • [Cancel] key: cancels the setting and shifts to the previous menu. 🔑 5.1 Setup menu


5.1.25 Media thickness menu

Sets the thickness of the media you are using.

Once the media thickness is entered, print quality is automatically adjusted.


Setup item	Setting	Description
Media thickness	80 μ m to <170 μ m> to 1,300 μ m	Enter the thickness of the media you are using in increments of 10 μ m.
	—	<ul style="list-style-type: none"> • [Enter] key: saves the setting and shifts to the previous menu. • [Cancel] key: cancels the setting and shifts to the previous menu.  5.1 Setup menu

NOTE

- This menu is to automatically adjust print quality to a certain extent. If you want to improve print quality, manually adjust it.
 [3.6 Print quality adjustment](#)
- There is no problem even if you adjust print quality without setting the media thickness.

5.1.26 Start Feed menu

In the Start Feed menu, you can change the margin setting between images.

Setup item	Setting	Description
Start Feed	-10 mm to <0 mm> to 500 mm	<ul style="list-style-type: none"> • Value over 0: The margin setting between images will be wider than when setting “0”. • Value equal to 0: The default margin setting between images will be applied. • Value below 0: The margin setting between images will be smaller than when setting “0”.
	—	<ul style="list-style-type: none"> • [Enter] key: saves the setting and shifts to the previous menu. • [Cancel] key: cancels the setting and shifts to the previous menu.  5.1 Setup menu

NOTE

With take-up system: if you want to set “Start Feed” to below 0, set “Page Gap” to “Narrow”.
If not, the Start Feed setting is not reflected properly.

 [5.1.7.1 Page Gap menu](#)

5.1.27 Header Dump menu

This function is to specify whether to print the following information (dump data) of print data.


- Data Header
- Number of Dot in Data (Printed only when the header dump setting is “On”.)
- Printer Serial Number
- Firmware Version

NOTE

The dump data will be used as a reference material to receive technical supports.

TIP

When a print is executed in connection with computer, the setting of RIP software will be printed in the “Data Header”.

Setup item	Setting	Description
Header Dump	<Off>	Only a print data will be printed. • Dump data will not be printed.
	On	After printing of print data, the dump data will be printed.
	Dump	Only a dump data will be printed, but the “Number of Dot in Data” will not be printed. • Print data will not be printed.
	—	• [Cancel] key: cancels the setting and shifts to the previous menu.  5.1 Setup menu






5.2 Test Print Menu

Performs nozzle check of Print head and setup list.

TIP

Refer to the following for the operation procedure of test print.

 [3.5 Test print](#)

Setup item	Description
Nozzle check	<p>Perform the nozzle check printing. It is used to check whether there are any clogged heads, or missing or blurred prints.</p> <p> 3.5.1 Nozzle check</p>
Mode print	<p>Mode print can be performed. Used to confirm the following printing conditions.</p> <ul style="list-style-type: none"> • Print quality • Effect • Pre Heater temperature (VJ-1604X only) • Platen Heater temperature (VJ-1604X only) • After Heater temperature (VJ-1604X only) • Adjustment value <p> 3.5.2 Mode print</p>
Set List	<p>Setup list printing is performed. Use it for checking the setup item of the printer.</p> <p> 3.5.3 Setup print</p>
Palette	<p>Palette printing is performed. It is used to compare pen colors of the computer with colors of the printer.</p> <p> 3.5.4 Palette print</p> <div style="border: 1px solid black; border-radius: 10px; padding: 5px; margin: 10px 0;"> <p>NOTE</p> <p>When “Banner 1” or “Banner 2” is set in the Print Mode menu, “PalettePrint” is not displayed.</p> </div>
—	<ul style="list-style-type: none"> • [Enter] key: “Printing” is displayed on the operation panel and test printing starts. • [Cancel] key: shifts to the previous menu. <p> 5 Panel setup menu</p>





5.3 Adjust Print menu

Sets up when adjusting the printer for the optimum quality of image print.

NOTE

This printer was adjusted at the factory shipment so that it obtains the optimum printing quality. Adjust the quality if the print quality changes after the installation environment or the media is changed.

Perform adjustment for all patterns (A to D).
All print modes will be adjusted.

Setup item	Setting	Description
Adjust Print	Confirm	The test patterns of A to D will be printed for Adjust print. Check before adjusting.  3.6.1 Confirmation Pattern
	Rough Pattern	Perform this when the degree of misalignment is big. Print Adjust patterns A to D and enter the set values.  3.6.2 Rough Pattern
	Fine Pattern	Perform this when the degree of misalignment is small. Print Adjust patterns A to D and enter the set values.  3.6.3 Fine Pattern
	—	<ul style="list-style-type: none"> [Cancel] key: shifts to the previous menu.  5.1.1.1.2 Media feed compensation

5.4 Cleaning menu


Performs head cleaning.



TIP

Head cleaning can be operated when the printer is Normal.
Refer to the following for operation procedures.

 [6.2.3 Head cleaning](#)

NOTE

- If the head height is set to High for VJ-1604WX, "Change Head Gap Low" is displayed on Operation panel.
Set the head height to Low.
 [4.2.5.2 When setting the head height to Low](#)
- For VJ-1604X, auto cleaning can be performed regardless of the head height.

Setup item	Description
Short	Discharges smaller amount of ink compared to "Normal". • [Enter] key: "Cleaning **%" is displayed on Operation panel and head cleaning starts. Progress on the Head cleaning is displayed in % on Operation panel.
Normal	Select this mode normally. • [Enter] key: "Cleaning **%" is displayed on Operation panel and head cleaning starts. Progress on the Head cleaning is displayed in % on Operation panel.
Long	Discharges larger amount of ink compare to "Normal". Used when Print head does not improve by normal head cleaning. • [Enter] key: "Cleaning **%" is displayed on Operation panel and head cleaning starts. Progress on the Head cleaning is displayed in % on Operation panel.
LittleCharge	Refills a small amount of ink. Charge a small amount of ink when printing is not stable after ink replenishment.  3.3 Filling ink • [Enter] key: "Ink Refill **%" is displayed on Operation panel and ink replenishment starts. Progress on the ink replenishment is displayed in % on Operation panel.
—	• [Cancel] key: shifts to the previous menu.  5 Panel setup menu

5.5 Menu Option menu

Sets up the contents of the Setup menu.

You can make setup items that you do not normally use invisible.

Switch the setting On (displayed) to Off (undisplayed) using the [<] key or [>] key on Operation panel.

When the setting is On, "*" is displayed on Operation panel.


NOTE

- Even if you select "Off" in the Menu Option menu, you can display the settings temporarily by selecting "Temporary" in the Setup menu.
- For VJ-1604WX, "Prev. Stick" and "StandbyHeating" are not displayed even for temporary display.

 [5.1 Setup menu](#)

Setup item	Setting		Description
	(VJ-1604X)	(VJ-1604WX)	
MediaType	Off	Off	Sets up whether to display the MediaType menu.
	<On>	<On>	
Effect	Off	Off	Sets up whether to display the Effect menu.
	<On>	<On>	
Spitting	Off	Off	Sets up whether to display the Spitting menu.
	<On>	<On>	
Side Margin	Off	Off	Sets up whether to display the Side Margin menu.
	<On>	<On>	
Media Initial	Off	Off	Sets up whether to display the MediaWidth menu.
	<On>	<On>	
Media Width	Off	Off	Sets up whether to display the Media Width menu.
	<On>	<On>	
Take-up	Off	Off	Sets up whether to display the Winding unit menu.
	<On>	<On>	
Origin	Off	Off	Sets up whether to display the Origin menu.
	<On>	<On>	
Prev. Stick	Off	<Off>	Sets up whether to display the Prev. Stick menu.
	<On>		
HeadFan	Off	<Off>	Sets up whether to display the Head fan menu.
	<On>		
Head Travel	Off	Off	Sets up whether to display the Head Travel menu.
	<On>	<On>	


Setup item	Setting		Description
	(VJ-1604X)	(VJ-1604WX)	
Multi Strike	Off	Off	Sets up whether to display the Multi Strike menu.
	<On>	<On>	
Strike Wait	Off	Off	Sets up whether to display the Strike Wait menu.
	<On>	<On>	
Slant Check	Off	Off	Sets up whether to display the Slant Check menu.
	<On>	<On>	
Auto Cleaning	Off	Off	Sets up whether to display the Auto Cleaning menu.
	<On>	<On>	
Ink Status	Off	Off	Sets up whether to display the Ink Status menu.
	<On>	<On>	
Roll Length	Off	Off	Sets up whether to display the Roll Length menu.
	<On>	<On>	
Longstore	Off	Off	Sets up whether to display the Longstore menu.
	<On>	<On>	
CR Maintenance	Off	Off	Sets up whether to display the CR Maintenance menu.
	<On>	<On>	
Initialization	Off	Off	Sets up whether to display the Initialization menu.
	<On>	<On>	
Life Times	Off	Off	Sets up whether to display the Life Times menu.
	<On>	<On>	
IP Address	Off	Off	Sets up whether to display the IP Address menu.
	<On>	<On>	
Subnet Mask	Off	Off	Sets up whether to display the Subnet Mask menu.
	<On>	<On>	
Gateway	Off	Off	Sets up whether to display the Gateway menu.
	<On>	<On>	
Media Thickness	Off	Off	Sets up whether to display the Media Thickness menu.
	<On>	<On>	
Start Feed	Off	Off	Sets up whether to display the Start Feed menu.
	<On>	<On>	
Header Dump	Off	Off	Sets up whether to display the Header Dump menu.
	<On>	<On>	

Setup item	Setting		Description
	(VJ-1604X)	(VJ-1604WX)	
ALL On			Displays all items in the Setup menu. <ul style="list-style-type: none"> Pressing the [Enter] key displays "*" for all items in the Menu Option menu.
ALL Off			No items in the Setup menu are displayed. <ul style="list-style-type: none"> Pressing the [Enter] key deletes "*" for all items in the Menu Option menu. Even if you select "ALL Off", you can display the items temporarily by selecting "Temporary" in the Setup menu.
	—		<ul style="list-style-type: none"> [Cancel] key: saves the setting and shifts to the previous menu.  5 Panel setup menu


5.6 Version menu

Displays the versions of the firmware.

<VJ-1604X>

Setup item	Setting	Description
Ver. M/C	*.**(Main side)/ *.**(Controller side)	Displays the versions of the firmware of the main side (M) and controller side (C).
	—	<ul style="list-style-type: none"> [Cancel] key: shifts to the previous menu.  5 Panel setup menu

<VJ-1604WX>

Setup item	Setting	Description
Version	*.**	Displays the versions of the firmware.
	—	<ul style="list-style-type: none"> [Cancel] key: shifts to the previous menu.  5 Panel setup menu

5.7 Sleep Mode menu

Sleep mode settings are configured.

When you activate sleep mode, the printer operates as follows.

- Exhaust fan stops.
- Vacuum fan stops.
- All Heaters stop (VJ-1604X only).
- All Lamps turn off except for Power lamp.
- Automatic head cleaning is performed after the time set in the Timer Setting Menu has elapsed.

☞ [5.7.1 Timer Setting menu](#)

TIP

The cleaning mode reflects the settings in Operation panel.

☞ [6.2.3 Head cleaning](#)

Setup item	Setting	Description
Sleep Mode	Set Timer	Set the auto cleaning interval of this printer for Sleep Mode. ☞ 5.7.1 Timer Setting menu
	Start	Activate Sleep Mode ☞ 5.7.2 Sleep Mode Start menu
	—	<ul style="list-style-type: none"> • [Cancel] key: shifts to the previous menu. ☞ 5.1 Setup menu

5.7.1 Timer Setting menu


Set the head cleaning interval of this printer for Sleep Mode.

When more than the set time has passed, Print head is cleaned automatically.


NOTE

- During Sleep Mode, even if the set amount of time has passed, print-head cleaning is not performed under the following circumstances.
 - Front cover is open.
 - Maintenance cover is open.
 - Media loading lever is raised.
 - Waste fluid tank is full.
 - Ink cartridge is empty.
 - Ink cartridge has been removed.
 - An ink cartridge other than genuine Ink cartridges is inserted into Cartridge slot, etc.

When the printer returns to a normal state, head cleaning is restarted, and Sleep Mode continues.

 [7.2 Error messages](#)

- If one of the above conditions occurs during head cleaning, cleaning is stopped.
When the printer returns to a normal state, head cleaning is restarted.

 [7.2 Error messages](#)

Setup item	Setting	Description
Set Timer	1 hour	When the set time has elapsed, head cleaning starts.
	2 hours	
	3 hours	
	4 hours	
	5 hours	
	<6 hours>	
	9 hours	
	12 hours	
	18 hours	
	24 hours	
	—	

5.7.2 Sleep Mode Start menu

Activate Sleep Mode

During Sleep Mode, "Restart->Enter" will be displayed in the operation panel.

During Sleep Mode, pressing [Enter] key will return the printer to Normal.

NOTE


- If the printer is under one of the following conditions while shifting to the Sleep Mode, "Don't Start Sleep Mode" is displayed, and will not shift to the Sleep Mode.
 - Front cover is open.
 - Maintenance cover is open.
 - Media loading lever is raised.
 - Waste fluid tank is full.
 - Ink cartridge is empty.
 - Ink cartridge has been removed.
 - An ink cartridge other than genuine Ink cartridges is inserted into Cartridge slot, etc.

Activate Sleep Mode again after returning the printer to a normal state.

 [7.2 Error messages](#)

- If the printer is under one of the conditions above during the Sleep mode, the printer will not return to the Normal condition even after pressing the [Enter] key.
Return the printer to a normal state, and press the [Enter] key to return the printer to normal operation.

 [7.2 Error messages](#)

Setup item	Setting	Description
Start	Start Sleep Mode?	<ul style="list-style-type: none"> • [Enter] key: activates Sleep Mode. • [Cancel] key: shifts to the previous menu without activating Sleep Mode. <p> 5.7 Sleep Mode menu</p> <p>The following content is displayed on Operation panel. <Restart -> ENTER></p> <ul style="list-style-type: none"> • [Enter] key: return the printer to normal operation.

6 Maintenance

This chapter describes daily maintenance of the printer.

6.1 Replacing consumable components

This section describes when and how to replace Ink cartridges (or ink packs), roll media and Flushing-box sponges.

6.1.1 Replacing Ink cartridges

This section describes when to replace Ink cartridges.

(1) Replacement time

- a. When "[****] InkNearEnd" is displayed on the operation panel
 - This message is displayed when there is a small amount of ink remaining in Ink cartridge.
 - The alarm buzzer sounds.
To stop the buzzer, press the [Enter] key on Operation panel.
 - Replace with the new Ink cartridge.
- b. When "[****] InkEnd" is displayed on the operation panel
 - This message is displayed when there is no ink remaining in Ink cartridge.
 - The alarm buzzer sounds.
To stop the buzzer, press the [Enter] key on Operation panel.
 - Immediately replace it with the new Ink cartridge.

NOTE

- [****] in the messages for ink cartridge replacement indicates the color that is almost empty or runs out, using the following characters.
 - K: Black
 - C: Cyan
 - M: Magenta
 - Y: Yellow
- Do not insert or remove Ink cartridge except at the time of replacement. Inserting or removing Ink cartridge mixes air into Ink tube, and failures such as nozzle clogging trouble may occur.
- If "InkEnd" is displayed, you cannot print until inserting the new Ink cartridge.
- If there is no Ink cartridge for replacement at hand, leave the empty Ink cartridge inserted in the printer.
Leaving the printer with Ink cartridge removed may result in clogging of Print head.

(2) Type

Our genuine Ink cartridges and Ink packs that are compatible with the printer are as follows.

<For VJ-1604X>

Description	Model No.
Ink cartridge K (Black: 220 ml)	VJ-MSINK3A-BK220
Ink cartridge K (Black: 1,000ml)	VJ-MSINK3A-BK1000
Ink cartridge C (Cyan: 220 ml)	VJ-MSINK3A-CY220
Ink cartridge C (Cyan: 1,000ml)	VJ-MSINK3A-CY1000
Ink cartridge M (Magenta: 220 ml)	VJ-MSINK3A-MA220
Ink cartridge M (Magenta: 1,000ml)	VJ-MSINK3A-MA1000
Ink cartridge Y (Yellow: 220 ml)	VJ-MSINK3A-YE220
Ink cartridge Y (Yellow: 1,000ml)	VJ-MSINK3A-YE1000

<For VJ-1604WX>

Description	Model No.
Ink cartridge K (Black: 220 ml)	RJ-FGINK-BK2
Ink cartridge C (Cyan: 220 ml)	RJ-FGINK-CY2
Ink cartridge M (Magenta: 220 ml)	RJ-FGINK-MA2
Ink cartridge Y (Yellow: 220 ml)	RJ-FGINK-YE2

NOTE

- To use 1000ml Ink packs, High-capacity ink pack adapter (option) is required.
For details on High-capacity ink pack adapter, contact your local MUTOH dealer.
- Use genuine Ink cartridges for replacement.
This printer is designed to use genuine Ink cartridges and Ink packs.
If you use an ink bag that is not a product of the original manufacturer,
 - Printing might become blurred, or the end of the ink in the pack might not be detected correctly.
 - Any problems caused by using an ink bag other than those recommended above will not be covered by the warranty, and repair expenses will be paid by the customer.

(3) Replacing steps

Follow the procedure below to replace Ink cartridges and High-capacity ink pack adapters.

CAUTION

- **Before operation, make sure to read the Safety Data Sheet (SDS).**
- **When handling Ink cartridges or Ink packs, pay attention so that ink does not come into contact with your eyes or skin.**
If ink gets into your eyes or sticks to your skin, immediately wash it off with water.
Failing to do so might cause irritation or light inflammation of eyes.
In case of any abnormality, consult a physician immediately.
- **Do not disassemble Ink cartridges or Ink packs.**
If disassembled, ink might come into contact with your eyes or skin.

NOTE

- Do not use the Ink cartridge(s) you have inserted into Ink cartridge slot(s) for other printers. The Ink cartridge(s) will not be used again.
- Do not shake Ink cartridges or Ink packs strongly.
Doing so may cause ink leakage.
- Do not disassemble Ink cartridges.
A disassembled Ink cartridge or Ink packs cannot be used.
- When the Ink cartridge or Ink pack is moved from a cold place to a warm place, leave it for 3 hours or more in the new printing environment before printing.
- Do not refill an ink cartridge or ink pack with ink.
It may result in abnormal printing.
- Insert or remove Ink cartridge and High-capacity ink pack adapter at the time of replacement only.
Otherwise, it may result in incorrect printing.

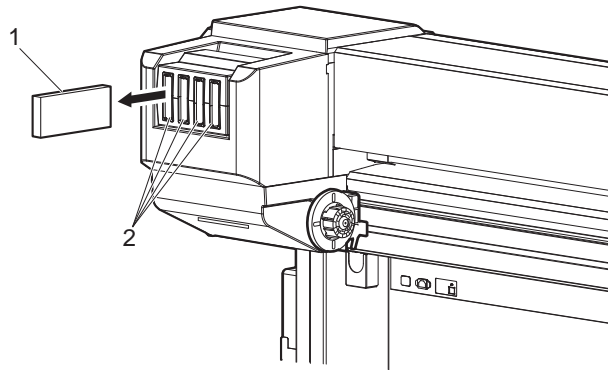
(1) Replacing 220ml Ink cartridges

1. Confirm that the printer is turned ON.

NOTE

Do not replace Ink cartridges when the printer is turned OFF.
The remaining ink may not be detected correctly, causing abnormal printing.

2. Remove Ink cartridge that you want to replace from Slot.



No.	Name
1	Ink cartridge
2	Ink cartridge slots

3. Take out the new Ink cartridge from the bag.

NOTE

- Open the bag just before attaching Ink cartridge to Ink cartridge slot.
Leaving Ink cartridge with the bag open for a long time may result in abnormal printing.
- Do not insert or remove Ink cartridge more than 10 times.
If the ink cartridge has been removed/inserted more than 10 times, it cannot be used even though ink remains.

4. Shake new Ink cartridge two to three times gently before inserting it into Ink cartridge slot.

5. Confirm that Operation panel returns to Normal.

NOTE

If Ink cartridge is replaced during printing, printing resumes.

- Ink cartridge replacement is complete.

(2) Replacing High-capacity ink pack adapter (option)**NOTE**

High-capacity ink pack adapters are not compatible with VJ-1604WX.

1. Confirm that the printer is turned ON.

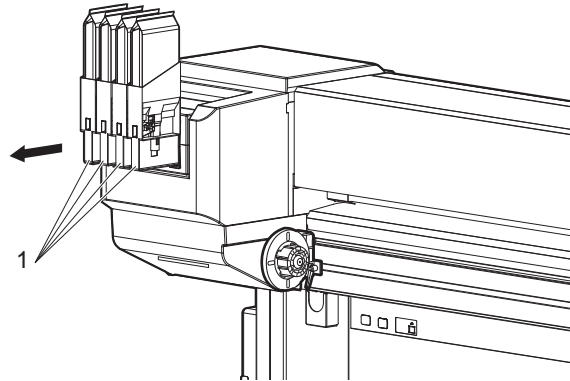
NOTE

Do not replace High-capacity ink pack adapters when the printer is turned OFF.
The remaining ink may not be detected correctly, causing abnormal printing.

- Remove High-capacity ink pack adapter that you want to replace from Ink cartridge slot.

NOTE

Put the used Ink packs in a plastic bag, etc, and dispose of it in compliance with local ordinance and instructions of local authorities.



No.	Name
1	High-capacity ink pack adapter

NOTE

Do not remove only Ink pack while High-capacity ink pack adapter is installed on the printer. The information of the remaining IC chip card will be rewritten and Ink pack will not be usable.

- Take out the new Ink pack from the bag.

NOTE

Open the bag just before attaching Ink pack to High-capacity ink pack adapter.
Leaving Ink pack with the bag open for a long time may result in abnormal printing.

4. Install Ink pack and IC chip card to High-capacity ink pack adapter.

- Shake Ink packs 2 to 3 times lightly before installing them into High-capacity ink pack adapter.

NOTE

To install/remove Ink pack or IC chip to/from High-capacity ink pack adapter, refer to the operation manual included with High-capacity ink pack adapter.

5. Insert High-capacity ink pack adapter into Ink cartridge slot.

NOTE

Make sure that Ink pack and IC chip are installed on High-capacity ink pack adapter before inserting it into Ink cartridge slot. If High-capacity ink pack adapter is inserted into Ink cartridge slot without Ink pack, the remaining information will be rewritten and the Ink pack will not be usable.

- Insert High-capacity ink pack adapters all the way in Ink cartridge slots.

6. Confirm that Operation panel returns to Normal.

NOTE

Printing resumes when High-capacity ink pack adapter is replaced during printing.

- High-capacity ink pack adapter replacement is complete.

 **CAUTION**

- **In the following cases, make sure to perform the initial ink charge from the Cleaning menu after installing High-capacity ink pack adapter.**
 - **When installing High-capacity ink pack adapter for the first time on the printer whose ink is filled**
 - **After using High-capacity ink pack adapters and replacing them with new ones**
- **If the printer is used without the initial ink charge, the air inside High-capacity pack adapter goes into Ink Tubes, which may cause nozzle clogging.**

 [5.4 Cleaning menu](#)

6.1.2 Replacing Roll Media

This section describes when and how to replace the roll media.

(1) Replacement time

Replace the roll media when the following situation occurs.

- a. When the roll media loaded in the printer runs out
 - "End Of Roll" is displayed on Operation panel.
 - If media runs out during printing, the printer stops printing.
- b. When you want to change the media type to use

(2) Type

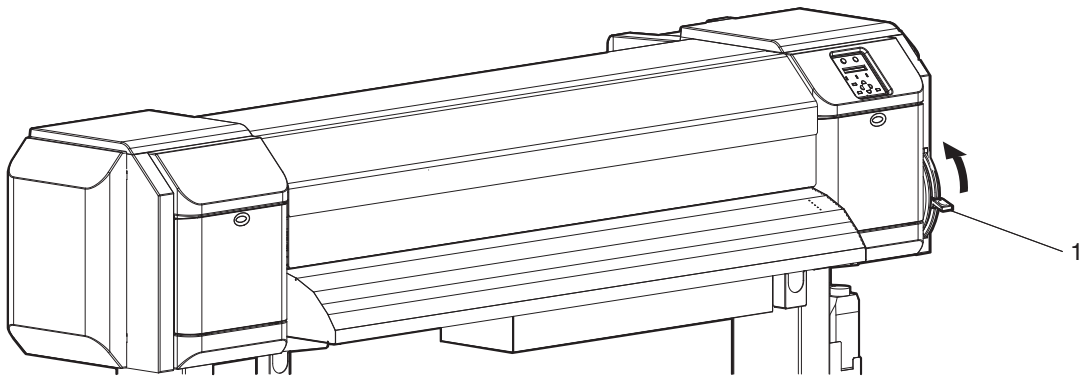
TIP

For types and details of the roll media, refer to [8.3 Options/Supply list](#).

(3) Replacing steps

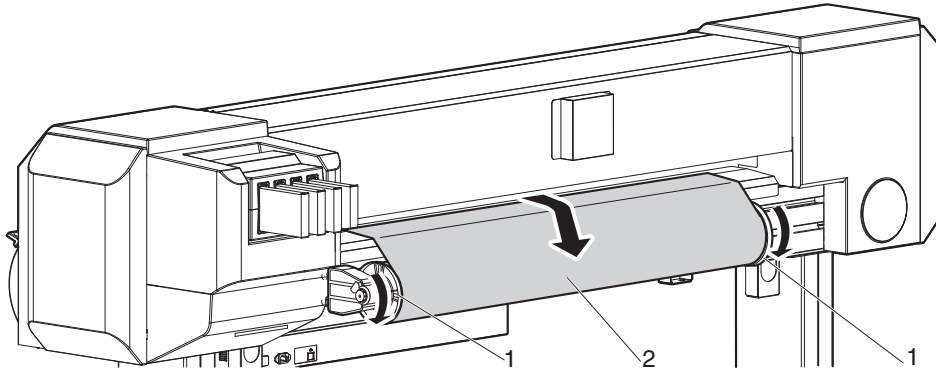
Follow the procedure below to replace the roll media.

1. If the printer is turned ON, confirm that operation such as printing is not in progress.
2. Raise Media loading lever.



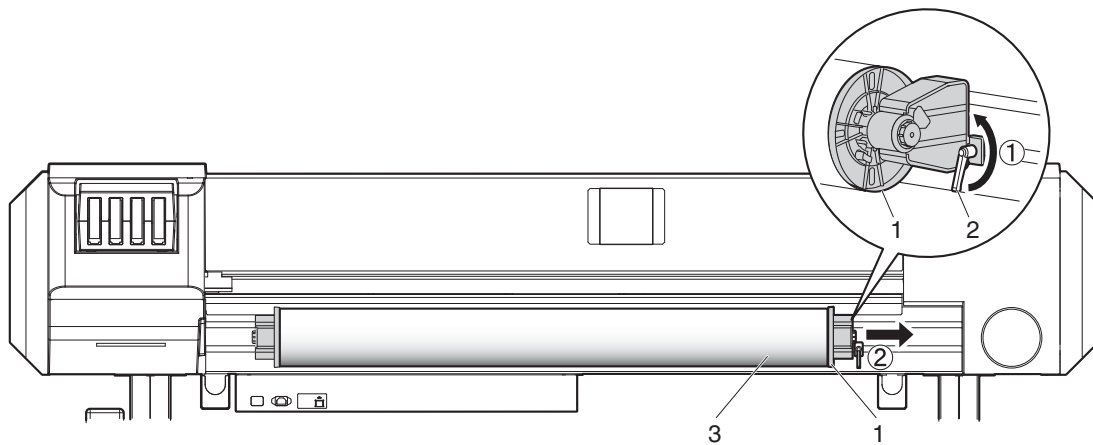
No.	Name
1	Media loading lever

3. Turn Flanges of Roll media holder and take up the roll media.



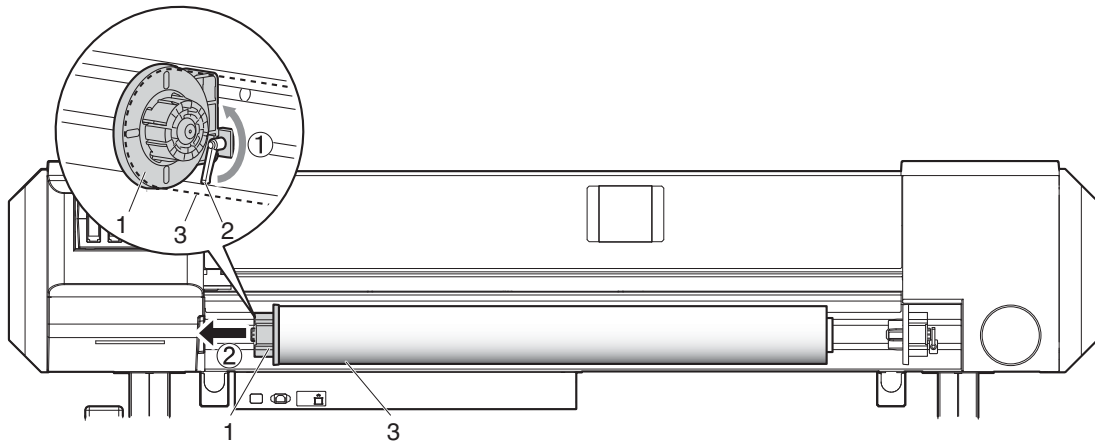
No.	Name
1	Roll media holder
2	Roll media

4. Loosen Fixing lever of Right roll media holder and remove the roll media from Roll media holder.



No.	Name
1	Roll media holder (Right)
2	Fixing lever
3	Roll media

5. Take the same procedure as in Step 4, remove the roll media from Roll media holder (left).



No.	Name
1	Roll media holder (Left)
2	Fixing lever
3	Roll media

6. To load another roll media, refer to the following.

TIP

- For loading the roll media, refer to [3.4 Loading media](#).
- For storing the roll media not in use, refer to [4.2.3 Precaution on storing media](#).

- The procedure for replacing the roll media is complete.

6.1.3 Replacing Flushing box sponges

This section explains how to replace Flushing-box sponges.

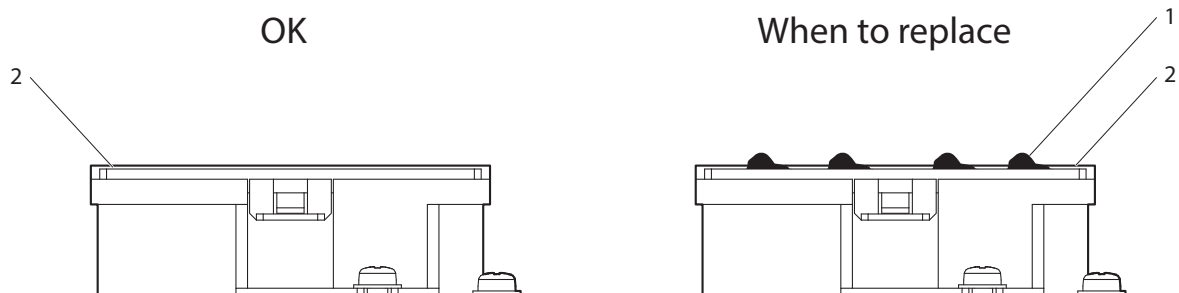
NOTE

Make sure to install Flushing-box sponges in the printer.
Flushing-box sponges are an essential part to make printing consistent.

(1) Replacement time

Replace Flushing-box sponges in the following situations.

- When the flushing-box sponge is deformed
- When the ink is spattered on the media
- When more than 2 months have passed since the last replacement
- When ink clumps have accumulated on Flushing-box sponges beyond Flushing-box frame



No.	Name
1	Ink clump
2	Flushing-box frame

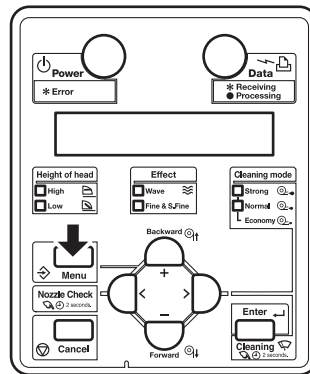
(2) Type

Compatible models	Description	Description
VJ-1604X/VJ-1604WX	Flushing-box sponge for VJ-1604	VJ16-FB-SO3

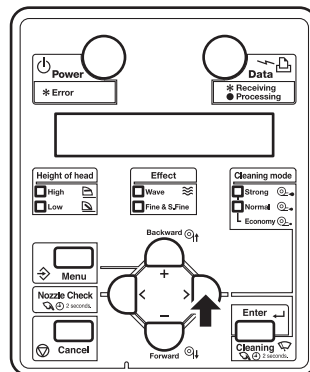
(3) Replacing steps

Follow the steps below to replace Flushing-box sponges.

1. Check the followings while the printer is turned ON
 - Printing or other operations are not in progress.
 - Operation panel display is Normal.
2. Display the CR Maintenance menu on Operation panel.
 - a. Press the [Menu] key on Operation panel.

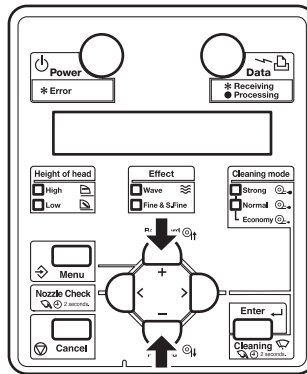


- "Menu1: Setup>" is displayed on Operation panel.
 - Operation panel shifts to the Setup menu display.
- b. Press the [>] key on Operation panel.

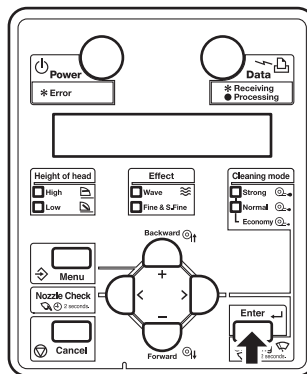


- "Set1: User Type" is displayed on Operation panel.

- c. Press the [+] key or [-] key on Operation panel to select "Set 20: CR Maintenance".



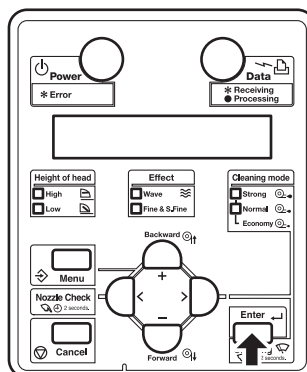
- d. Press the [Enter] key on Operation panel.



- "CR Maint.: Start" is displayed on Operation panel.
- The display enters the CR Maintenance menu.

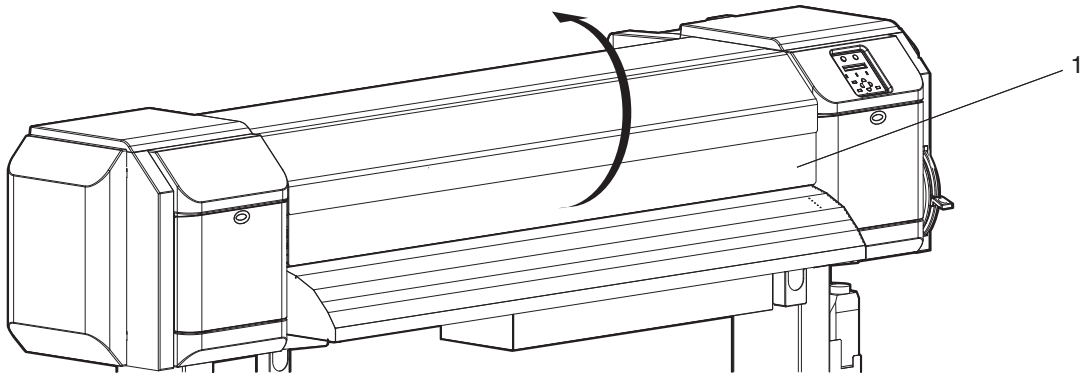
 [5.1.19 CR Maintenance menu](#)

3. Press the [Enter] key on Operation panel.



- Maintenance starts.
- Print head moves to the left.
- "CR Maint.: End" is displayed on Operation panel.

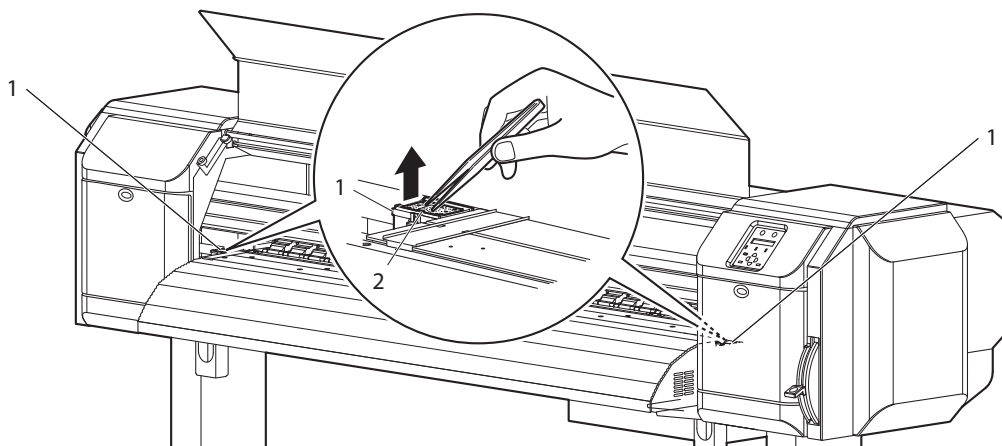
4. Open Front cover.



No.	Name
1	Front cover

- Replace Flushing-box sponge in a short time.
Leaving Print head at the replacement position may result in clogging of Print head.

5. Lift Flushing-box sponge tab and unhook. Then, remove Flushing-box sponge.

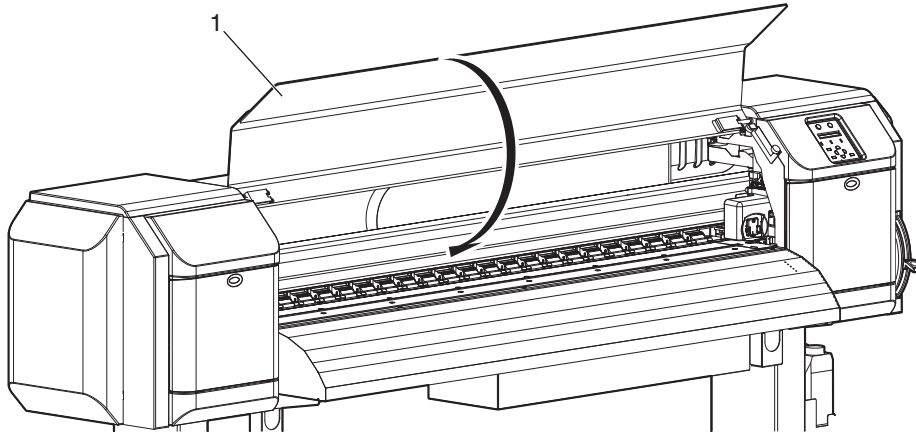


No.	Name
1	Flushing-box sponge tab
2	Flushing boxes

CAUTION

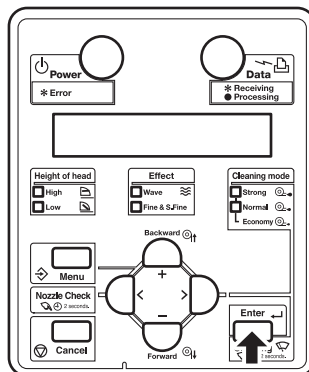
- **Do not spill waste fluid when replacing Flushing-box sponges.**
If waste fluid comes into contact with Grid roller, it may damage its surface and affect media feeding.

6. Close Front cover.



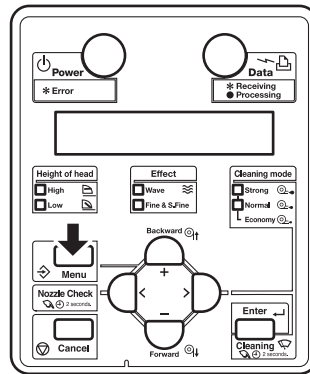
No.	Name
1	Front cover

7. Press the [Enter] key on Operation panel.



- Print head returns to its original position.
- "CR Maint.: Start" is displayed on Operation panel.

8. Press the [Menu] key on Operation panel.



- The printer enters Normal.
- Flushing-box sponge replacement is complete.

6.1.4 Replacing Cutter (VJ-1604WX only)

This section describes when and how to replace Cutter.

NOTE

VJ1604X is not equipped with Cutter.

(1) Replacement time

Replace Cutter when the following situation occurs.

- a. When the media is not cut smoothly
- b. When the cut surface is feathered, etc

(2) Type

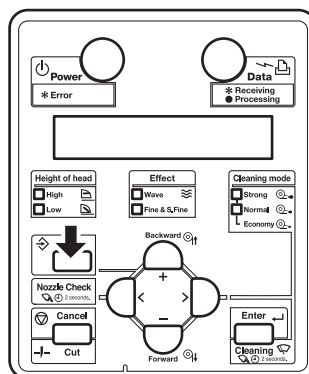
Our genuine Cutter that is compatible with the printer is as follows.

Description	Model No.
Cutter replacement blade	VJ-CB

(3) Replacing steps

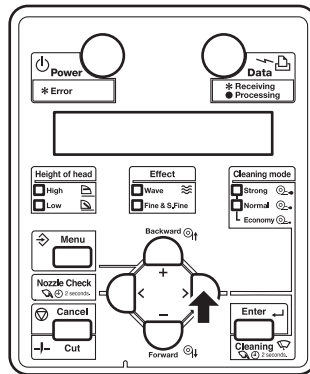
Follow the procedure below to replace Cutter.

1. Check the followings while the printer is turned ON
 - Printing or other operations are not in progress.
 - Operation panel display is Normal.
2. Display the CR Maintenance menu on Operation panel.
 - a. Press the [Menu] key on Operation panel.



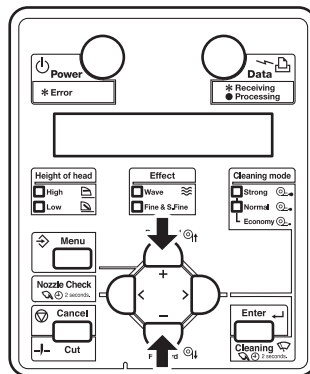
- "Menu1: Setup>" is displayed on Operation panel.
- Operation panel shifts to the Setup menu display.

- b. Press the [>] key on Operation panel.

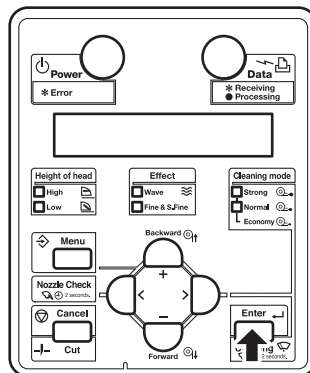


- "Set1: User Type" is displayed on Operation panel.

- c. Press the [+] key or [-] key on Operation panel to select "Set 20: CR Maintenance".



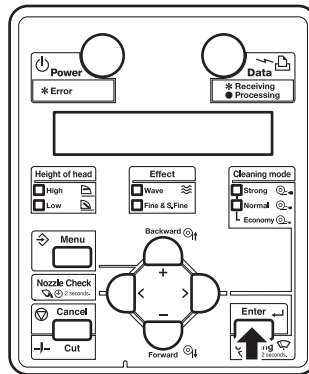
- d. Press the [Enter] key on Operation panel.



- "CR Maint.: Start" is displayed on Operation panel.
- The display enters the CR Maintenance menu.

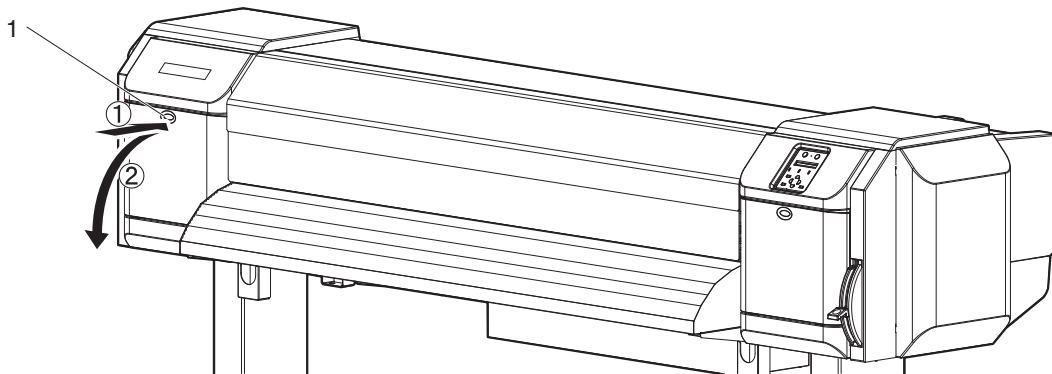
 **5.1.19 CR Maintenance menu**

3. Press the [Enter] key on Operation panel.



- Maintenance starts.
- Print head moves to the left of the printer (cutter replacement position).
- "CR Maint.: End" is displayed on Operation panel.

4. Open Maintenance cover on the left of the printer.



No.	Name
1	Maintenance cover

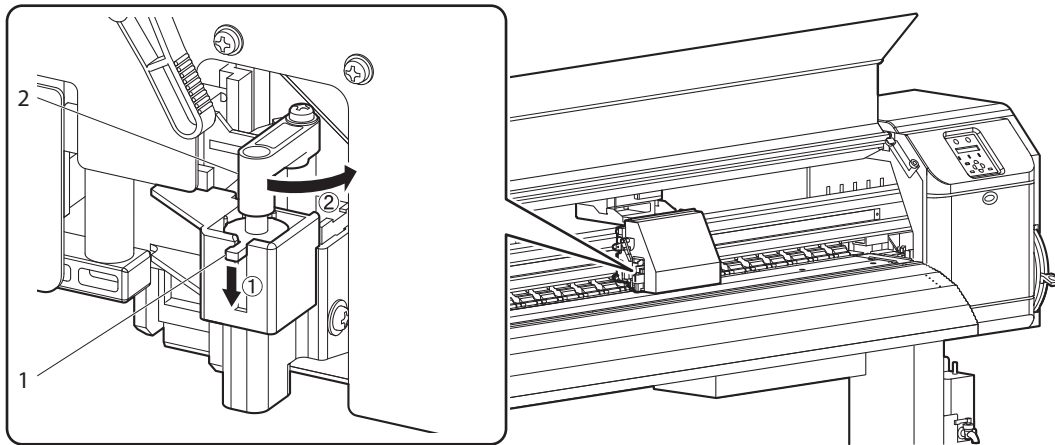
NOTE

Replace Cutter in a short time.
Leaving Print head at the cutter replacement position may result in clogging of Print head.

5. Press the tab of Cutter lightly, turn Cutter holder in the direction as illustrated below.

NOTE

- Do not press the tab of Cutter strongly or suddenly let go of it.
There is a spring in Cutter holder and it may fly out.
- Do not push Cutter all the way in.
Cutter blade may damage the inside of the printer.



No.	Name
1	Cutter holder
2	Cutter holder lever

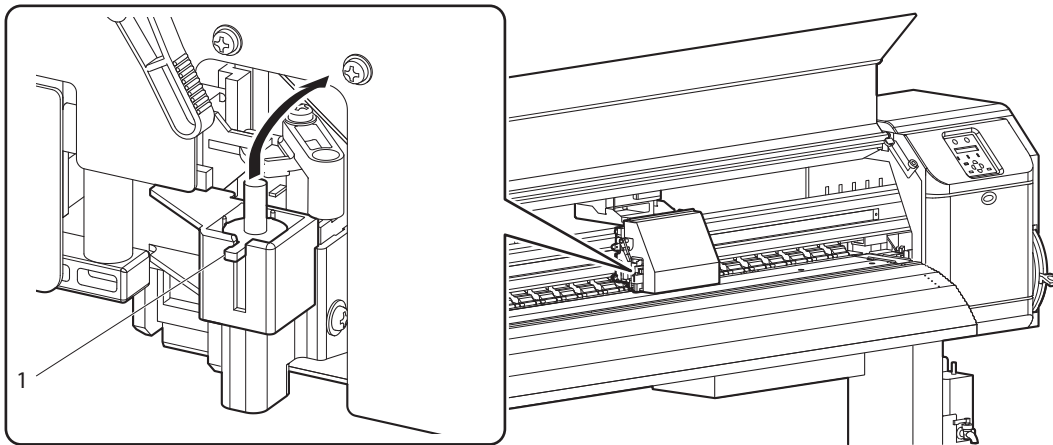
6. Remove Cutter.

CAUTION

- **Do not touch the blade edge.**
It may cause an injury.
- **Do not touch the cutter blade edge with a hard substance or drop Cutter.**
Cutter blade may be damaged or chipped.

NOTE

Used Cutter should be put in a plastic bag, etc, and dispose of it in compliance with local ordinance and instructions of local authorities.

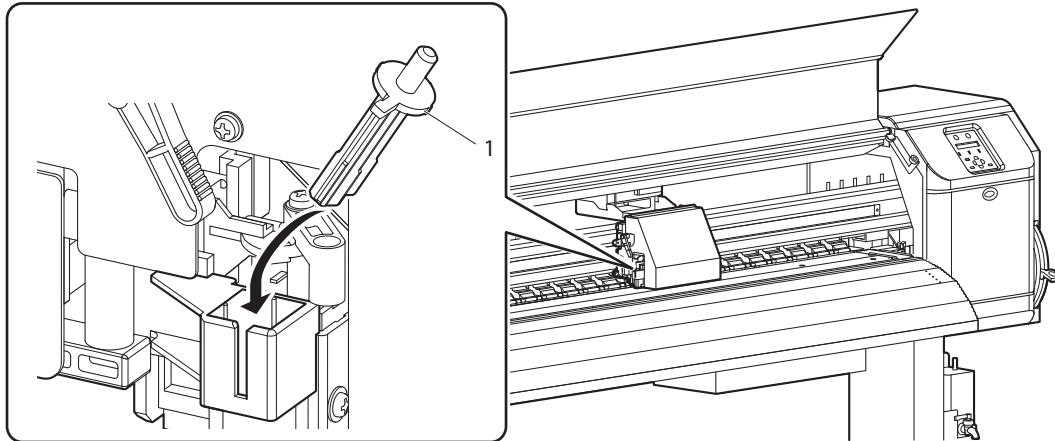


No.	Name
1	Cutter

7. Install a new Cutter as illustrated.

NOTE

Make sure that the spring in Cutter holder does not fly out while installing.

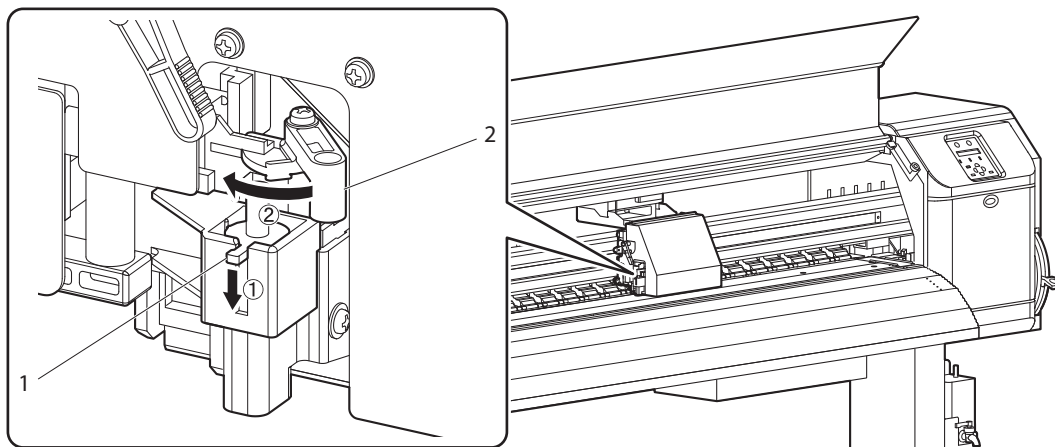


No.	Name
1	Cutter

8. Press the tab of Cutter lightly, return Cutter holder to its initial position.

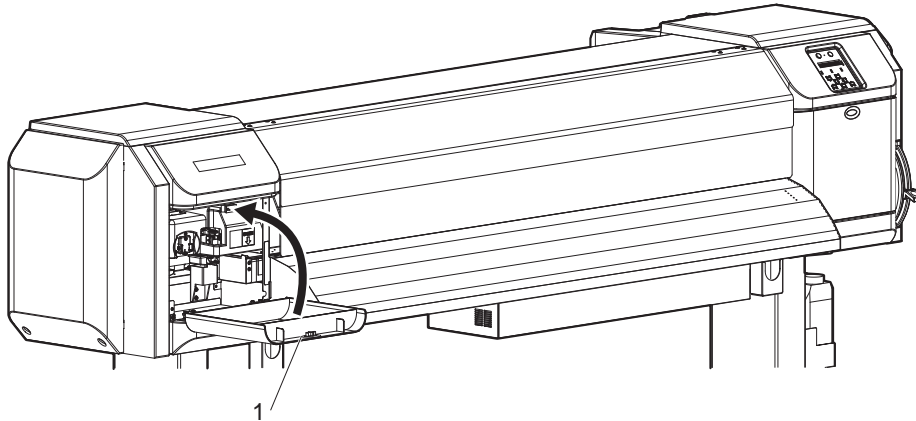
NOTE

- Do not press the tab of Cutter strongly or suddenly let go of it. There is a spring in Cutter holder and it may fly out.
- Do not push Cutter all the way in. Cutter blade may damage the inside of the printer.
- Refer to the illustrations below and install Cutter holder correctly. If it is not installed correctly, it may cause an error. If an error occurs, check if Cutter holder is installed correctly.



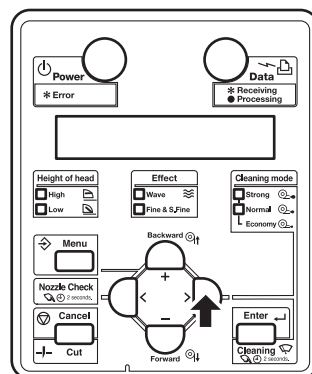
No.	Name
1	Cutter holder
2	Cutter holder lever

9. Close Maintenance cover.



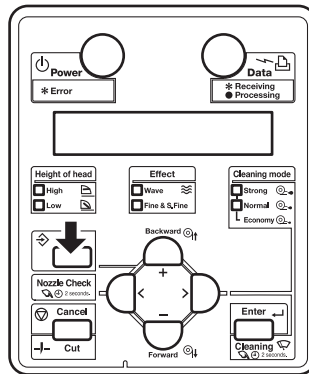
No.	Name
1	Maintenance cover

10. Press the [Enter] key on Operation panel.



- Print head returns to its original position.
- "CR Maint.: Start" is displayed on Operation panel.

11. Press the [Menu] key on Operation panel.



- The printer enters Normal.
- Cutter replacement is complete.

6.2 Cleaning the printer

Periodic (every month) cleaning is necessary to use the printer in good condition.

WARNING

- **Do not insert or drop metal or flammable objects into the printer through openings such as a vent.**
It could lead to an electric shock or fire.
- **If foreign substances or liquids such as water entered the printer, do not use the printer as it is.**
It could lead to an electric shock or fire.
Immediately turn OFF the power switch, disconnect the power plug from the electric socket, and contact your local MUTOH dealer.

CAUTION

- **When cleaning the outer case and inside of the printer, be sure to turn OFF the power and disconnect Power plug.**
- **Do not use volatile solvents such as thinner, benzene, or alcohol.**
These solvents may cause damage to the paint.
- **Make sure that no moisture enters the printer.**
The electric circuit inside the printer may be short-circuited.
- **Never open covers attached using screws under any circumstances.**
This may cause an electric shock or a malfunction.

This section describes how to clean each part of the printer.

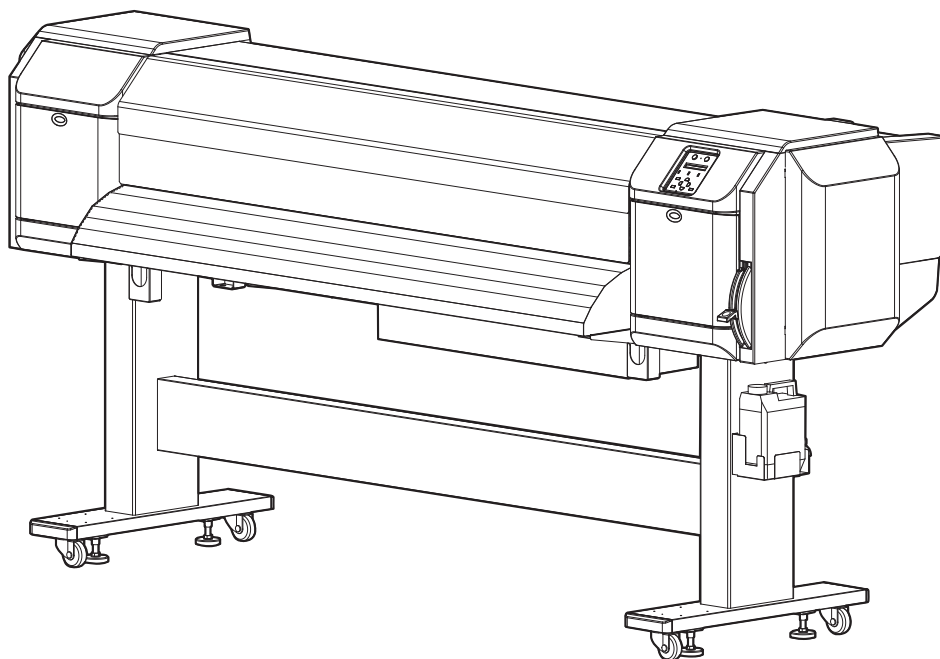
6.2.1 Cleaning the outer case

CAUTION

- When cleaning the outer case of the printer, be sure to turn OFF the power and disconnect Power plug.

This section describes how to clean the outer case.

Wipe out dust and dirt attached to the outer case by using a soft cloth.



6.2.2 Cleaning the inside of the printer

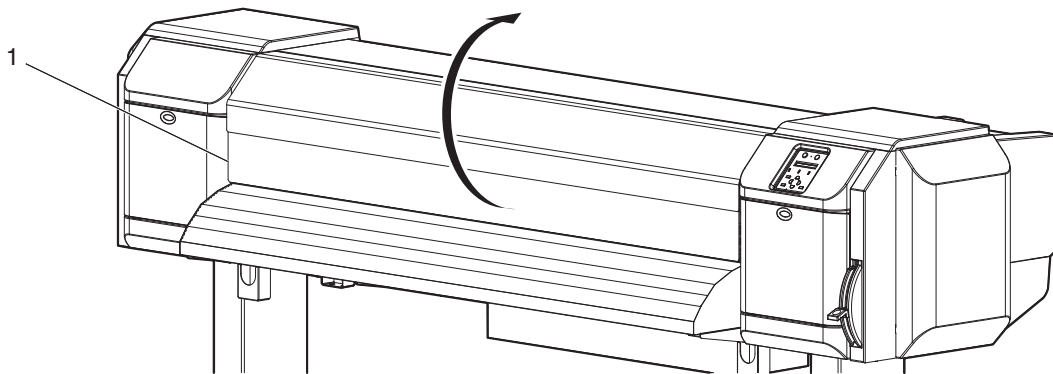


- When cleaning the inside of the printer, be sure to turn OFF the power and disconnect Power plug.

This section describes how to clean the inside of the printer.

Follow the procedure below.

1. Open Front cover.

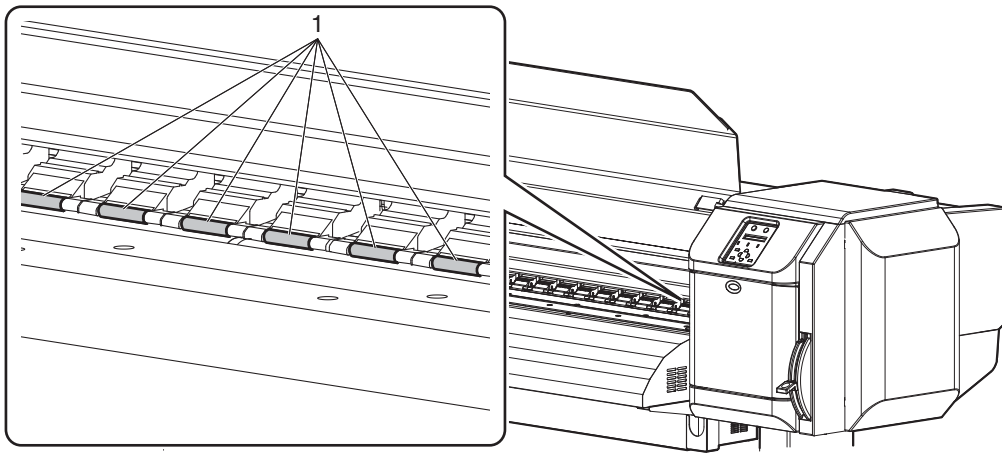


No.	Name
1	Front cover

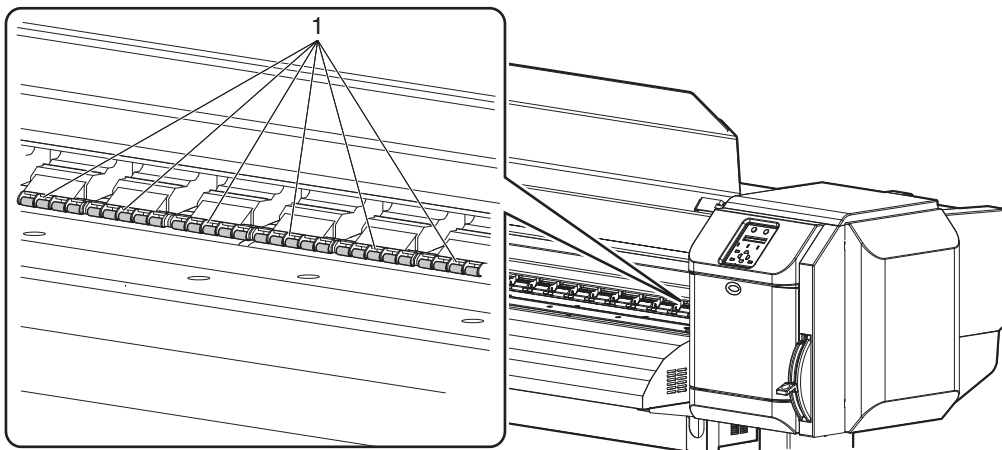
- Remove paper powder and dust attached to Pressurizing rollers using a soft brush.

NOTE

Do not blow paper powder inside the printer using tools such as an air duster.
It may cause an abnormal noise from the inside of the printer.

<VJ-1604X>

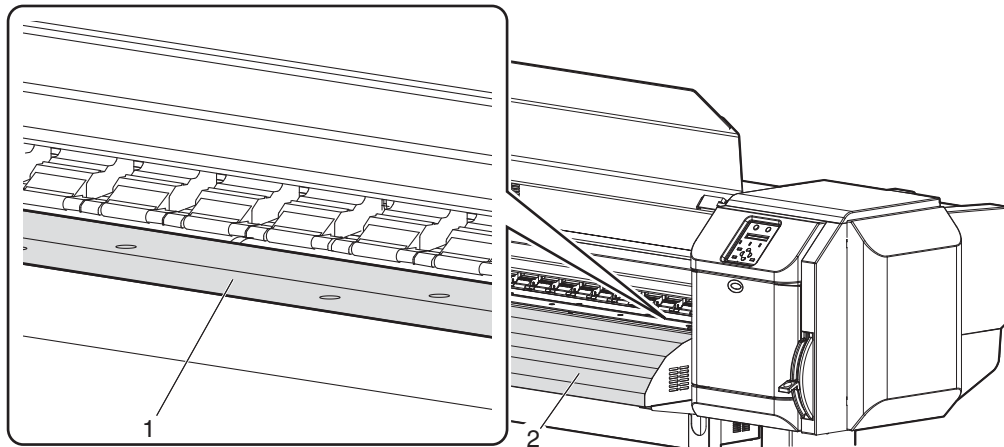
No.	Name
1	Pressurizing rollers

<VJ-1604WX>

No.	Name
1	Pressurizing rollers

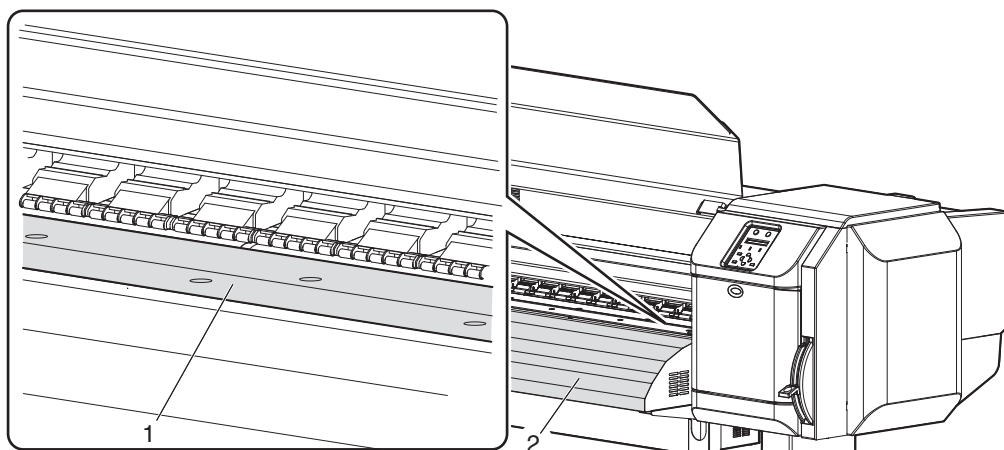
3. Apply a damp and tightly squeezed soft cloth to wipe out paper powder and ink attached to Platen and Media guide.

<VJ-1604X>



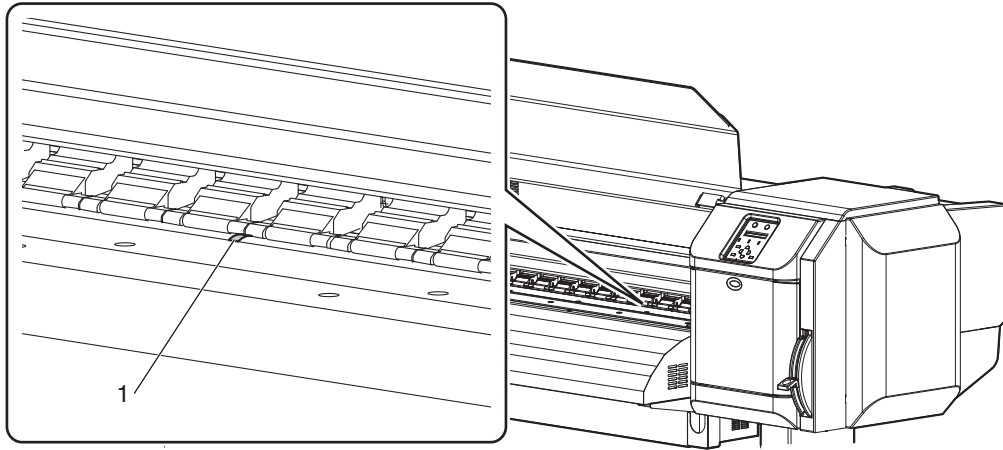
No.	Name
1	Platen
2	Media guide

<VJ-1604WX>

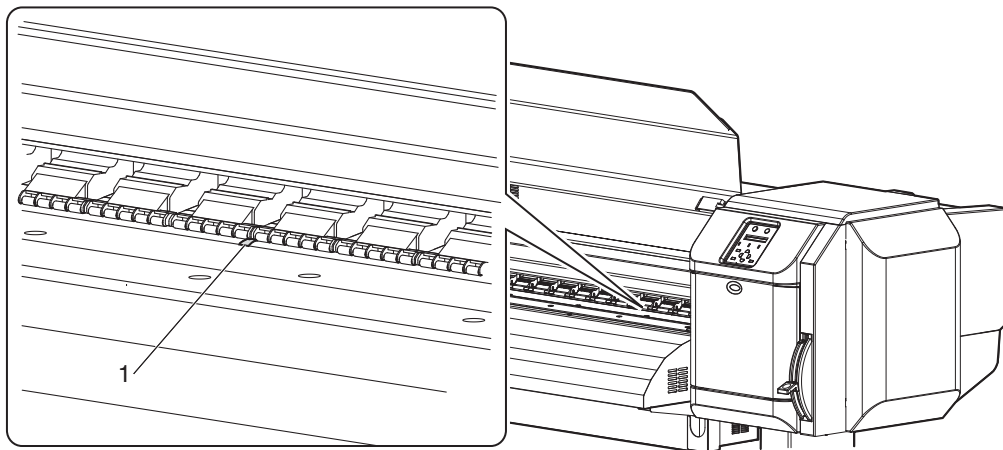


No.	Name
1	Platen
2	Media guide

4. Apply a damp and tightly squeezed soft cloth to wipe off the dirt of the unpainted (silver color) area in the center of Grid roller.

<VJ-1604X>

No.	Name
1	Grid roller

<VJ-1604WX>

No.	Name
1	Grid roller

6.2.3 Head cleaning

If printed data is blurred or lacks part of it, clean the print head surface and Nozzles (Head cleaning).

Follow the procedure below to perform Head cleaning.

**CAUTION**

- **When performing Head cleaning, be sure to turn OFF the power.**
-

NOTE

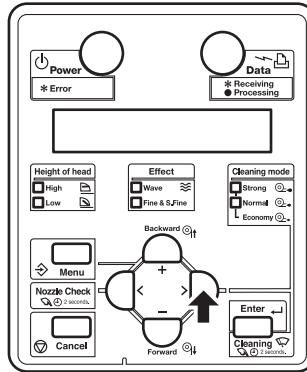
When not using the printer for a long period (one week or more), perform Head cleaning once a week.

If not performing Head cleaning, Print head is clogged. Doing so will preserve print quality.

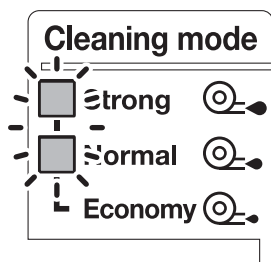
1. Confirm that Operation panel is Normal.
2. Check that Media loading lever is lowered.

3. Press the [>] key on Operation panel to select the Cleaning mode.

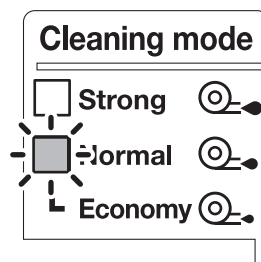
- Press [>] key to select the Cleaning mode.
- The LED lights on Operation panel show the currently selected Cleaning mode.



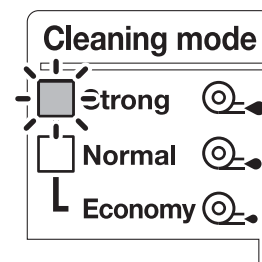
- The following figures explain the LED lights for each Cleaning mode.



Economy mode



Normal mode




Strong mode

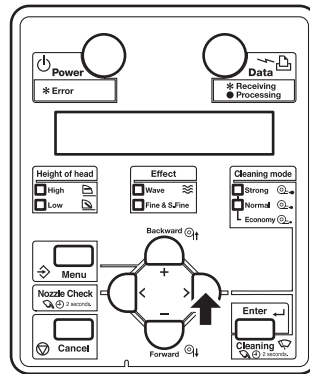
Cleaning mode	Description
Short mode	Discharges smaller amount of ink compared to "Normal".
Normal mode	Select this mode normally.
Long mode	Discharges larger amount of ink compare to "Normal". Used when Print head does not improve by normal head cleaning.

NOTE

Head Cleaning can also be performed from Panel Setup menu.

 [5.4 Cleaning menu](#)

4. Press the [Cleaning] key on Operation panel for more than two seconds.



- Head cleaning starts.
- "Cleaning **%" is displayed on Operation panel.
- After Head cleaning is complete, Operation panel shifts to Normal.

NOTE

- For VJ-1604WX, to perform head cleaning during printing while the head height is set to High, make sure to do the following.
 - When "Change Head Gap Low" is displayed on Operation panel, set the head height to Low.
 - After head cleaning is complete, "Change Head Gap High" is displayed on Operatino panel. Set the head height to High. After changing the setting, printing starts.
- [4.2.5 Head height adjustment](#)
- For VJ-1604X, auto cleaning can be performed regardless of the head height.
- If blurs or lacking parts in printed media do not disappear with one time of Head cleaning, perform Strong cleaning.
- If blurs or lacking parts in printed media do not disappear with several times of Head cleaning, refer to [7 Troubleshooting](#), and take appropriate measures.

6.2.4 Cleaning Cleaning wiper

This section describes how to clean Cleaning wiper.

(1) Time for cleaning

Once a week, or when blurs or lacking parts appear on printed media after Head cleaning.

(2) Cleaning procedures

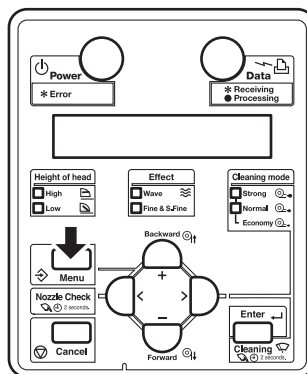
Follow the procedure below to clean Cleaning wiper.

NOTE

Use Cleaning stick to clean Cleaning wiper.

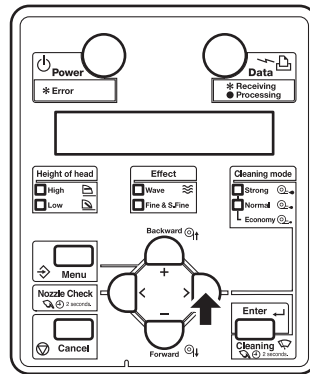
For details of Cleaning stick, refer to [8.3 Options/Supply list](#).

1. If the printer is turned ON, make sure the following.
 - Printing or other operations are not in progress.
 - Operation panel display is Normal.
2. Display the CR Maintenance menu on Operation panel.
 - a. Press the [Menu] key on Operation panel.

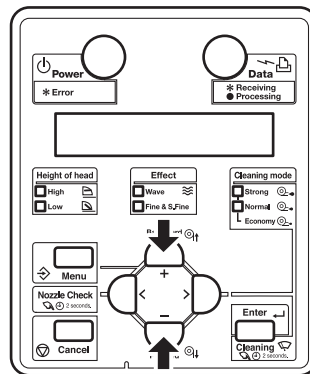


- "Menu1: Setup>" is displayed on Operation panel.
- Operation panel shifts to the Setup menu display.

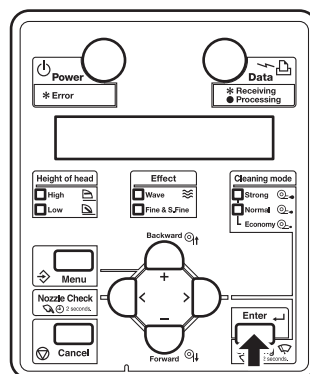
- b. Press the [>] key on Operation panel.



- "Set1: User Type" is displayed on Operation panel.
- c. Press the [+] key or [-] key on Operation panel to select "Set 20: CR Maintenance".

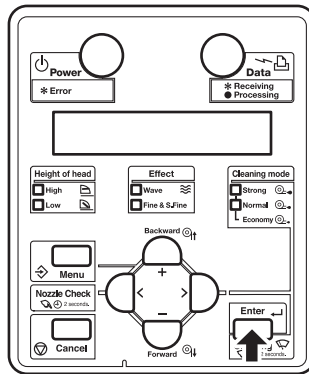


- d. Press the [Enter] key on Operation panel.

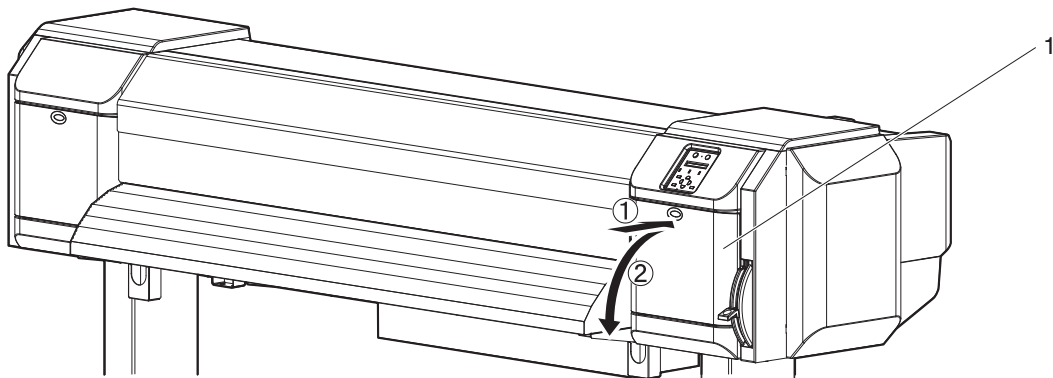


- "CR Maint.: Start" is displayed on Operation panel.
 - The display enters the CR Maintenance menu.
- [5.1.19 CR Maintenance menu](#)

3. Press the [Enter] key on Operation panel.



- Maintenance starts.
 - Print head moves to the left.
 - The cleaning wiper sifts towards the front.
 - "CR Maint.: End" is displayed on Operation panel.
4. Open Maintenance cover on the right of the printer.



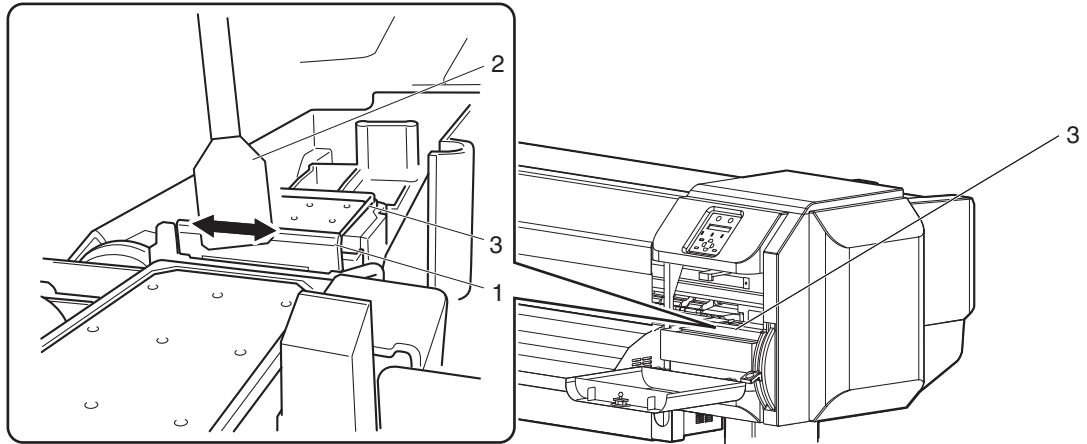
No.	Name
1	Maintenance cover

CAUTION

- **When cleaning Cleaning wiper,**
 - **do not touch Cleaning wiper and Head cap unit.**
Head cleaning may not be performed correctly because of oil from your hands.
 - **Make sure to use Cleaning stick to wipe Print head.**
A wet Cleaning stick may cause Print head to clog.
 - **Do not reuse Cleaning stick.**
The attached dust, etc may damage Print head.

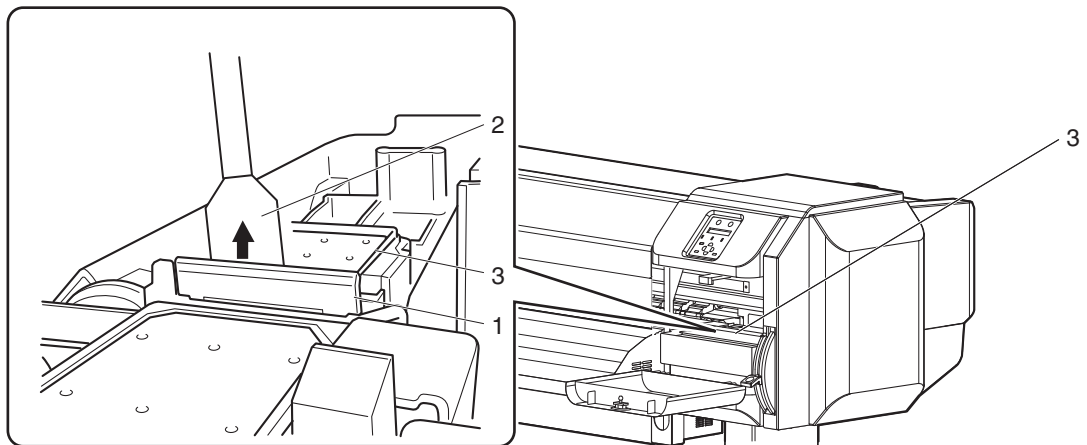
5. Use Cleaning stick to remove the ink and dust on Cleaning wiper.

- a. Front side of Cleaning wiper:
Remove the ink and dust in the horizontal direction.



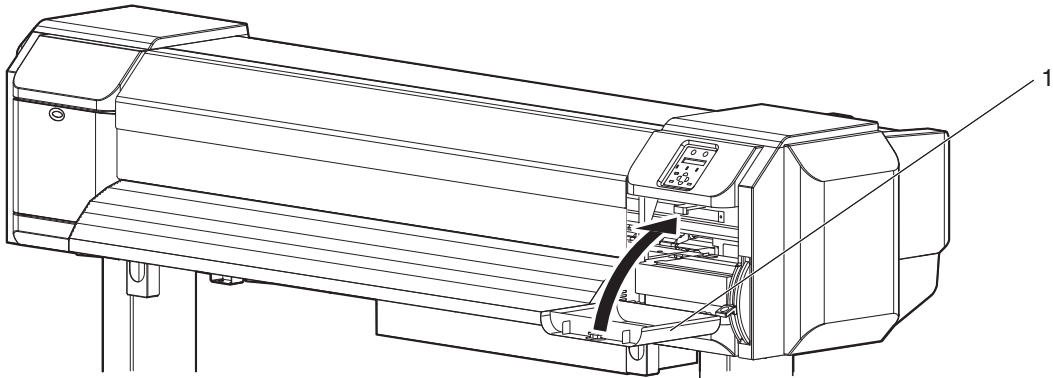
No.	Name
1	Cleaning wiper
2	Cleaning stick
3	Head cap unit

- b. Cleaning wiper back side:
Remove the ink and dust in the upper direction.



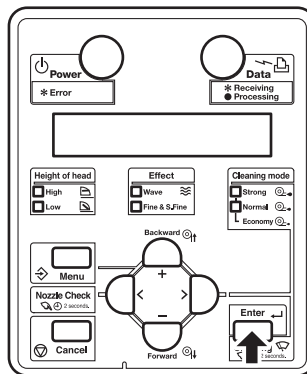
No.	Name
1	Cleaning wiper
2	Cleaning stick
3	Head cap unit

6. Close the right maintenance cover.
 - Close Cover firmly until it is locked.



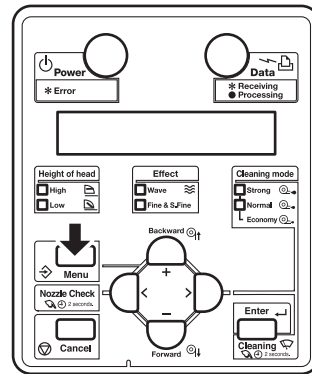
No.	Name
1	Maintenance cover

7. Press the [Enter] key on Operation panel.



- Cleaning wiper returns to the original position.
- Print head returns to its original position.
- "CR Maint.: Start" is displayed on Operation panel.

8. Press the [Menu] key on Operation panel.



- The printer enters Normal.
- Cleaning wiper is complete.

6.2.5 Cleaning the circumference of Print head

This section describes how to clean the circumference of Print head.

(1) Time for cleaning

When foreign substances such as dust or ink clump that can cause missing dots or ink leakage is attached around Print head

(2) Cleaning procedures

Follow the procedure below to clean the circumference of Print head.

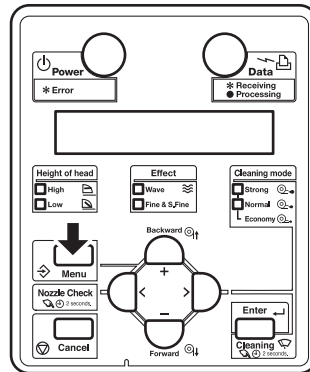
NOTE

- Before cleaning the circumference of Print head, read this procedure thoroughly to fully understand it, and clean promptly and correctly.
 - While cleaning the circumference of Print head, Print head cap is removed, therefore cleaning must be done before Print head dries.
This operation should be done within 15 minutes.
If the operation lasts over 15 minutes, follow the steps 8 and 9 and stop the operation, perform head cleaning, and resume cleaning.
☞ [6.2.3 Head cleaning](#)
 - Use Cleaning stick to clean the circumference of Print head.
For details of Cleaning stick, refer to [8.3 Options/Supply list](#).
-

1. Check the followings while the printer is turned ON
 - Printing or other operations are not in progress.
 - Operation panel display is Normal.

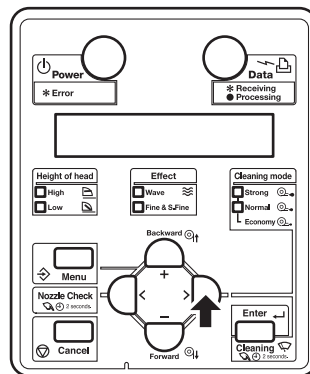
2. Display the CR Maintenance menu on Operation panel.

- a. Press the [Menu] key on Operation panel.



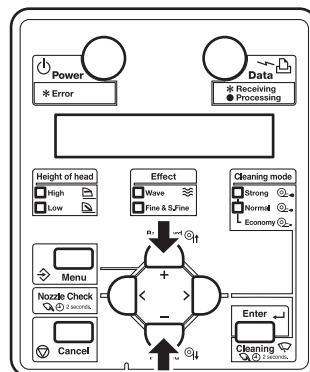
- "Menu1: Setup>" is displayed on Operation panel.
- Operation panel shifts to the Setup menu display.

- b. Press the [>] key on Operation panel.

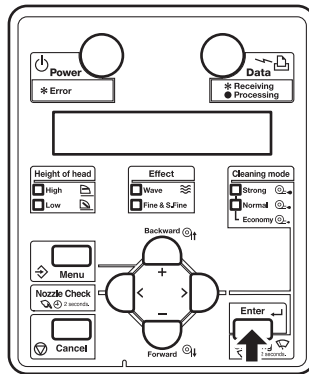


- "Set1: User Type" is displayed on Operation panel.

- c. Press the [+] key or [-] key on Operation panel to select "Set 20: CR Maintenance".



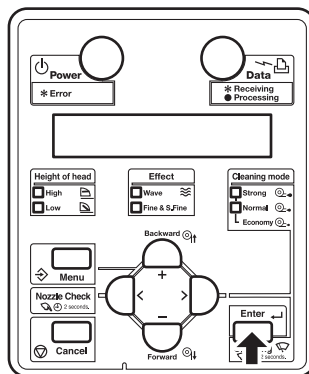
- d. Press the [Enter] key on Operation panel.



- "CR Maint.: Start" is displayed on Operation panel.
- The display enters the CR Maintenance menu.

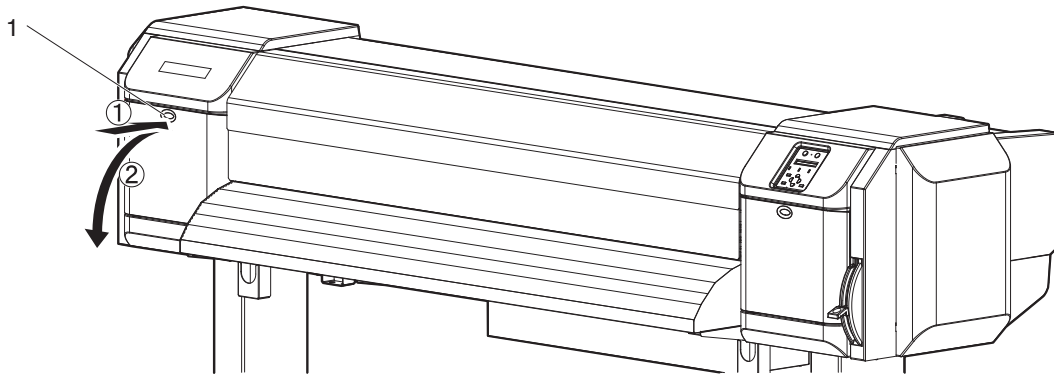
5.1.19 CR Maintenance menu

3. Press the [Enter] key on Operation panel.



- Maintenance starts.
- Print head moves to the left.
- "CR Maint.: End" is displayed on Operation panel.

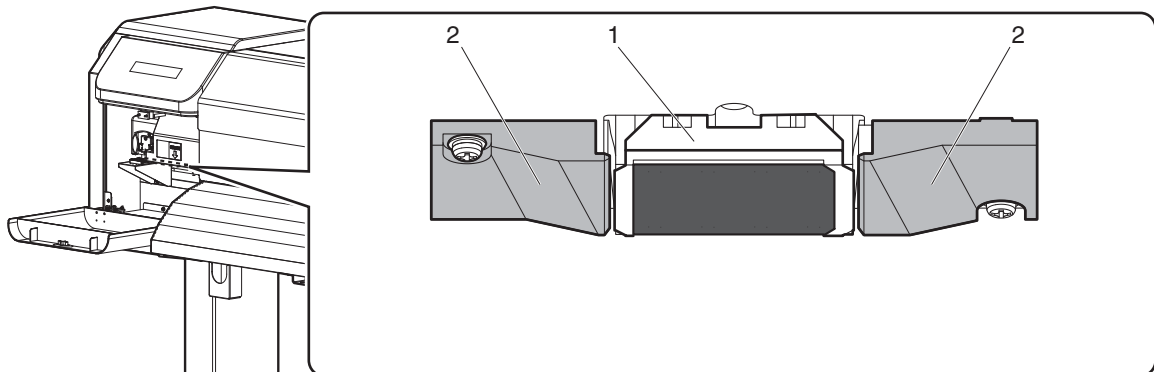
4. Open Maintenance cover on the left of the printer.



No.	Name
1	Maintenance cover

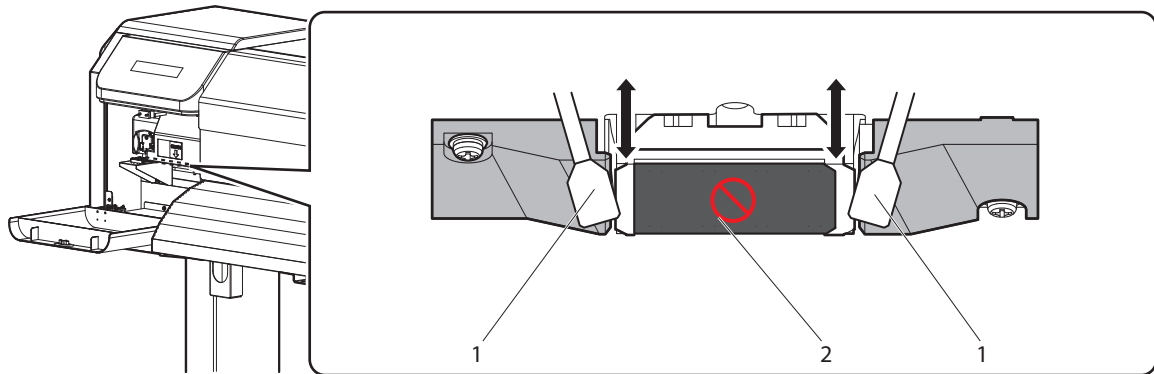
5. Use a penlight, etc to check if any foreign substance such as dust or ink clump is attached to the following places.

- Circumference of Print head (silver colored metal assembly)
- Head guide (black plastic)



No.	Name
1	Circumference of Print head (silver colored metal assembly)
2	Head guide (black plastic)

6. When some foreign substance such as dust or ink clump is attached, use Cleaning stick to remove it.



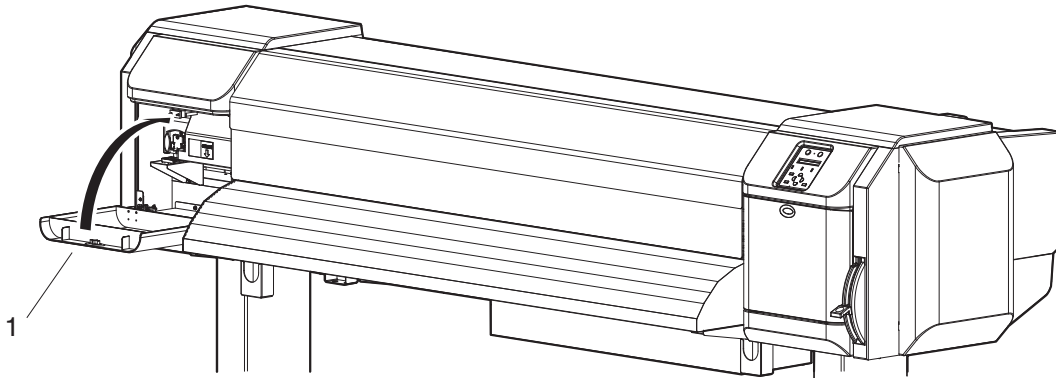
No.	Name
1	Cleaning stick
2	Nozzles (Never touch Nozzles.)

CAUTION

- When cleaning around Print head,
 - Never touch Print head nozzles.
Doing so may damage Print head.
 - Do not touch the tip of Cleaning stick.
Print head may be damaged because of oil from your hands.
 - Never put water, etc on the tip of Cleaning stick.
Doing so may damage Print head.
 - Do not reuse Cleaning stick.
The attached dust, etc may damage Print head.

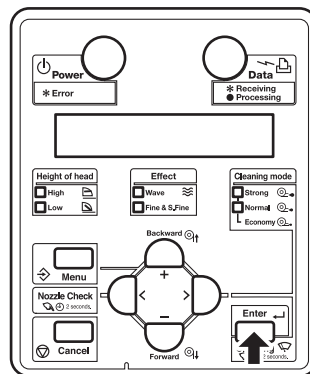
7. Close Maintenance cover on the left.

- Close Cover firmly until it is locked.



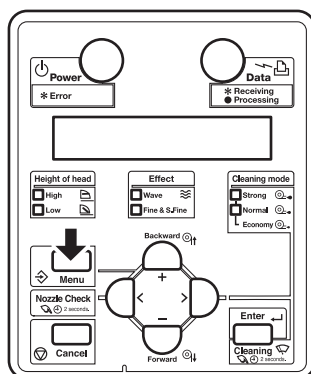
No.	Name
1	Maintenance cover

8. Press the [Enter] key on Operation panel.



- Print head returns to its original position.
- "CR Maint.: Start" is displayed on Operation panel.

9. Press the [Menu] key on Operation panel.



- The printer enters Normal.
- Cleaning the circumference of Print head is complete.

6.3 Disposal of waste fluids

The timing and method for the disposal of waste fluid are described below.

(1) Disposal timing

Dispose of waste fluids in the following cases:

- a. When Waste fluid tank is more than half full.
- b. When "Full WasteInkTank" is displayed on Operation panel.

(2) Disposal method

Follow the procedure below to dispose of waste fluid.



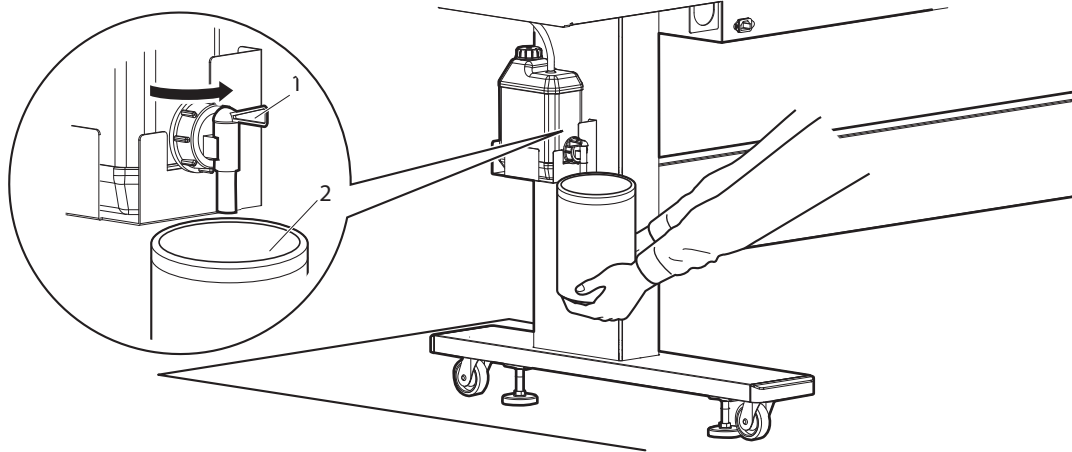
- **You are obligated to properly dispose of waste fluid from the printer in compliance with Wastes Disposal and Public Cleansing Act and local ordinances. Delegate disposal to an industrial waste disposal contractor.**

1. Ready an empty container such as a supply waste fluid bottle, to contain the waste fluid.
2. Lay a protective material, such as waste media, on the floor under Waste fluid tank.

- Open the waste fluid valve, and transfer the waste fluid to the container.

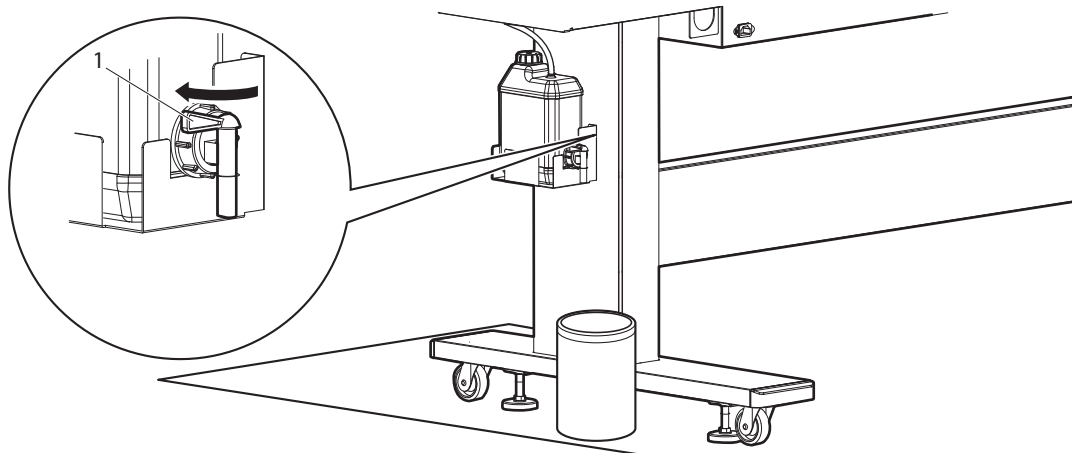
NOTE

When transferring the waste fluid to the empty container, the waste fluid may spatter. Make sure to put the container close to the waste fluid valve.



No.	Name
1	Waste fluid valve
2	Empty container

- After pouring the waste fluid to the empty container, close the waste fluid valve securely.



No.	Name
1	Waste fluid valve

- Wipe the opening of Waste fluid valve with a cloth, etc.
- Dispose of the waste fluid as an industrial waste product.
 - Disposal of waste fluids is completed.

6.4 Moving or transporting the printer

This section describes how to move or transport the printer.

6.4.1 Moving the printer

This section describes how to move the printer.



- **When moving the printer, make sure to maintain a horizontal position.**
- **Do not slant the printer, prop it against a wall or turn it upside down. The ink inside the printer may leak. Moreover, normal operation after shifting (to these positions) cannot be guaranteed.**

(1) Preparation before moving

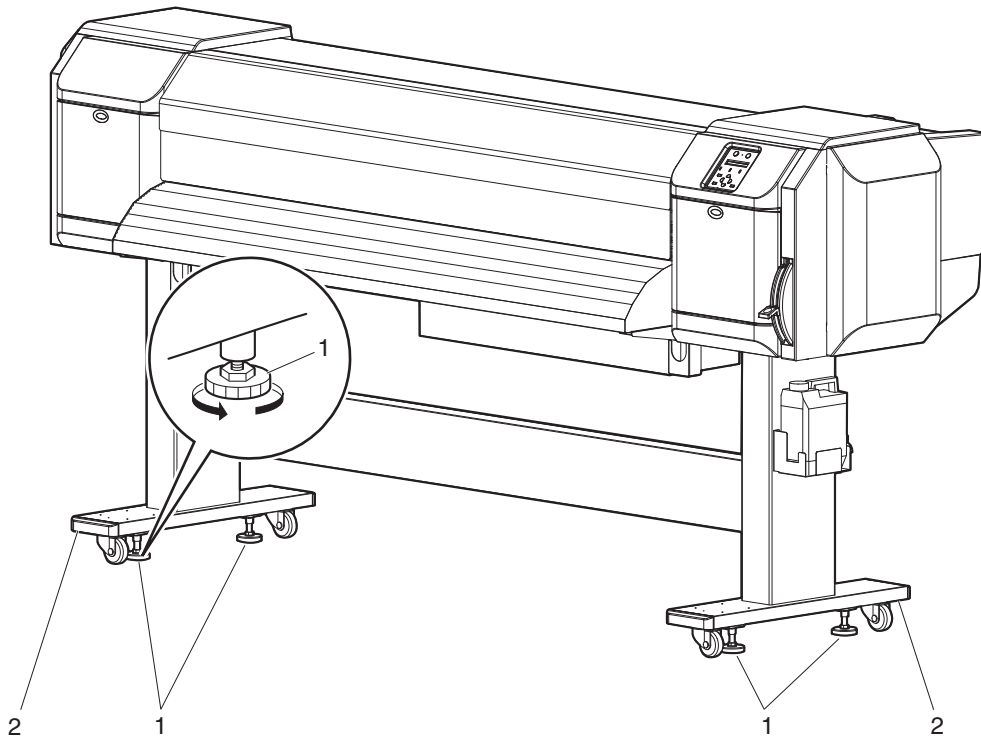
When using the dedicated Stands, follow the procedure below to move the printer.

1. Make sure that the printer is turned OFF.
☞ [3.2.2 Turning the power OFF](#)
2. Dispose of waste fluid.
☞ [6.3 Disposal of waste fluids](#)
3. Remove all the cables, such as Power cord set.

4. Loosen the four adjusters of Stand as shown in the next illustration.
5. Move the printer.

NOTE

The casters supplied with the dedicated Stand are manufactured for little movement in flat indoor areas, not for transporting equipment.



No.	Name
1	Adjusters
2	Stands

(2) Reinstalling

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

1. Select a suitable place for installation.
☞ Installation manual
2. Move and install the printer to the location.
3. Attach Cables, such as Power cord set.
☞ [3.1 Power cord set connection](#)
☞ [3.7 Connecting the printer to PC](#)
4. Perform Nozzle check, and then confirm that there is no clogging in Print head.
☞ [3.5.1 Nozzle check](#)
5. Perform Alignment.
☞ [3.6 Print quality adjustment](#)

6.4.2 Transporting the printer

When transporting the printer, make sure to pack it in the same condition as purchased, using protective and packing materials to protect the printer from vibration and shocks.

NOTE

When transporting the printer, consult the MUTOH product dealer at your point of purchase.

7 Troubleshooting

This chapter describes possible troubles and countermeasures of this product.

If the error not included in any items of this section occurs, contact your local MUTOH dealer.

NOTE

If you want to receive product warranty, prepare the warranty certificate.

If the warranty certificate is not presented, the repair will not be covered by the warranty even if within the warranty period.





If you have signed a maintenance service contract, prepare that or a similar document.

7.1 Malfunctions and failures




This section describes undisplayed malfunctions and failures of the printer, possible causes and countermeasures.

7.1.1 Problems in installation and introduction

(1) Cannot perform the initial ink charge






No.	Possible cause	Remedy	Reference
1	Is Front cover open or Media loading lever raised?	Close Front cover, or lower Media loading lever.	 3.4 Loading media
2	Is Maintenance cover open?	Close Maintenance cover.	 6.2.4 Cleaning Cleaning wiper  6.2.5 Cleaning the circumference of Print head
3	Are all 4 Ink cartridges fully inserted?	Fully insert all 4 Ink cartridges.	 6.1.1 Replacing Ink cartridges

(2) Ink does not come out after the initial ink charge








No.	Possible cause	Remedy	Reference
1	Is Ink cartridge cold and frozen?	Leave Ink bag at room temperature for at least three hours, and perform cleaning several times.	 6.2.3 Head cleaning
2	Is the power turned OFF during the initial ink charge?	Turn the power ON again and continue the initial ink charge.	 3.3 Filling ink
3	Occasionally, normal printing cannot be performed after the initial ink charge.	Perform cleaning several times, and check it every time.	 6.2.3 Head cleaning

7.1.2 Cannot print at all

(1) Does not work at all after power activation

No.	Possible cause	Remedy	Reference
1	Is Power cord set connected to the plug?	Connect Power cord set.	 3.1 Power cord set connection
2	Does the AC power supply provide the specified voltage?	Connect the cable to another outlet.	 3.1 Power cord set connection
3	Is Front cover open or Media loading lever raised?	Close Front cover. Lower Media loading lever.	 3.4 Loading media
4	Is Maintenance cover open?	Close Maintenance cover.	 6.2.4 Cleaning Cleaning wiper  6.2.5 Cleaning the circumference of Print head

(2) Does not work after loading the media

No.	Possible cause	Remedy	Reference
1	Is Front cover open or Media loading lever raised?	Close Front cover. Lower Media loading lever.	 3.4 Loading media
2	Is Maintenance cover open?	Close Maintenance cover.	 6.2.4 Cleaning Cleaning wiper  6.2.5 Cleaning the circumference of Print head
3	Is the media loaded at an angle?	Load the media straight.	 3.4 Loading media
4	Is Ink cartridge inserted?	Insert Ink cartridge.	 6.1.1 Replacing Ink cartridges
5	Are you using the recommended media?	Use the recommended media.	 4.2.1 Media type
6	Is the printer being used in an environment other than the one specified, such as in direct sunlight?	Only use the printer in an environment that is specified for use.	 Installation manual

(3) When data is sent from the computer, an error occurs at the printer and nothing is printed

No.	Possible cause	Remedy	Reference
1	Is the type of printer selected correctly at the computer?	Check that the printer type settings on the computer side and printer side are the same.	📖 3.7 Connecting the printer to PC
2	Are the interface requirements and command mode the same on the computer side and printer side?		

(4) Cannot use the computer online using LAN









No.	Possible cause	Remedy	Reference
1	Is Network interface cable connected correctly?	Confirm the types of the cross and straight cables, and connect Network interface cable correctly.	📖 3.7.2 Connecting a network interface cable
2	Are the network settings configured correctly?	Configure the network settings correctly.	📖 5.1.22 IP Address menu to 5.1.24 Gateway menu
3	Do the printer's network settings match the computer's settings?	Match this product's network settings with the computer side environment.	📖 3.7.1 Preparing cables
4	Does Power lamp on Operation panel blink after sending printing data from the computer?	If Power lamp does not blink, contact the computer manufacturer.	—

7.1.3 Media-related troubleshooting

(1) The media slips or is torn during initialization

NOTE





If the media is jammed or torn, remove it according to [7.3 The media is jammed](#).



No.	Possible cause	Remedy	Reference
1	Are you using the recommended media?	Use the recommended media.	 4.2.1 Media type
2	Is the loading position of the media correct?	Load the media correctly.	 3.4.2 Setting Roll Media
3	Is the roll media loaded correctly?	Load the roll media correctly.	 3.4.1 Loading roll media
4	Are there any foreign materials such as torn paper attached to Pressurizing roller?	Clean Pressurizing roller.	 6.2.2 Cleaning the inside of the printer
5	Is the printer being used in an environment other than the one specified, such as in direct sunlight?	Only use the printer in an environment that is specified for use.	 Installation manual
6	Are you using creased, damaged, torn or curled media?	Replace the media.	 4.2.2 Cautions on handling media
7	Does the media bend?	Use the recommended media. When using media other than the recommended one, set the Vacuum Fan menu.	 4.2.1 Media type  5.1.1.1.6 StandbyHeating menu

(2) The media is crumpled during initialization






NOTE

If the media is jammed or torn, remove it according to [7.3 The media is jammed](#).

No.	Possible cause	Remedy	Reference
1	Are you using the recommended media?	Use the recommended media.	 4.2.1 Media type
2	Is the loading position of the media correct?	Load the media correctly.	 3.4.2 Setting Roll Media
3	Is the media loaded at an angle?	Set the media straight.	 3.4.2 Setting Roll Media
4	Are there any foreign materials such as torn paper attached to Pressurizing roller?	Clean Pressurizing roller.	 6.2.2 Cleaning the inside of the printer

No.	Possible cause	Remedy	Reference
5	Is the printer used in an environment other than the one specified, such as near an air conditioner?	Only use the printer in an environment that is specified for use.	 Installation manual
6	Are you using creased, damaged, torn or curled media?	Replace the media.	 4.2.2 Cautions on handling media






(3) The wrong media size is set during initialization

No.	Possible cause	Remedy	Reference
1	Are you using the recommended media?	Use the recommended media.	 4.2.1 Media type
2	Is the media loaded at an angle?	Set the media straight.	 3.4.2 Setting Roll Media
3	When the media is set, does it curl upward?	Straighten the media or set a new media.	 3.4.2 Setting Roll Media
4	Is the printer used in an environment other than the one specified, such as near an air conditioner?	Only use the printer in an environment that is specified for use.	 4.2.1 Media type
5	Are you using media that has been printed on already?	Use a new media.	 4.2.1 Media type




(4) Media jams frequently occur

NOTE

If media other than the recommended one is used, correct media feeding cannot be assured.




No.	Possible cause	Remedy	Reference
1	Are you using the recommended media?	Use the recommended media.	 4.2.1 Media type
2	Is the media used in an environment other than the one specified?	Use the media in the specified environment.	 4.2.2 Cautions on handling media
3	Are you using the old media?	Replace it with the new media.	 6.1.2 Replacing Roll Media
4	Are you using the creased or wrinkled media?		
5	Does the media bend?	Use the recommended media. When using media other than the recommended one, set the Vacuum Fan menu.	 4.2.1 Media type  5.1.1.1.6 StandbyHeating menu

(5) The media veers during printing



No.	Possible cause	Remedy	Reference
1	Are you using the recommended media?	Use the recommended media.	 4.2.1 Media type
2	Is the loading position of the media correct?	Load the media correctly.	 3.4.2 Setting Roll Media
3	Is the roll media loaded correctly?	Load the roll media correctly.	 3.4.1 Loading roll media

7.1.4 Printing-related troubleshooting**(1) Printing is partially stained or incomplete****NOTE**








Proper print quality may not be obtained with the media other than the recommended one.

No.	Possible cause	Remedy	Reference
1	Does the media include moisture?	Replace it with the new media.	 6.1.2 Replacing Roll Media
2	Are you using the creased or wrinkled media?		
3	Does the media bend?	Use the recommended media. When using media other than the recommended one, set the Vacuum Fan menu.	 4.2.1 Media type  5.1.1.1.6 StandbyHeating menu








(2) The printing position is incorrect (some parts of the media cannot be printed on)

No.	Possible cause	Remedy	Reference
1	Is the loading position of the media correct?	Load the media correctly.	 3.4.2 Setting Roll Media
2	Did you set up the origin and print position?	Cancel or reset the settings of the origin and print position.	 5.1.8 Origin menu





(3) Printing is blurred

No.	Possible cause	Remedy	Reference
1	Are you using the recommended media?	Use the recommended media.	 4.2.1 Media type
2	Are you using the thick or thin media?	Use the recommended media.	 4.2.1 Media type
3	Is the media printed on the printing surface?	Confirm the printing surface of the media and set it correctly.	 3.4 Loading media
4	Did you perform Micro adjust print?	Perform Adjust print.	 3.6 Print quality adjustment
5	Did you perform Media feed compensation?	Perform Media feed compensation.	 4.2.6 Media feed compensation
6	Is the temperature setting of each heater appropriate? (VJ-1604X only)	Set the temperature appropriately.	 5.1.1.1.3 Pre-Heater menu (VJ-1604X only) to 5.1.1.1.5 After Heater menu (VJ-1604X only)
7	Is the head height set to "High" or "Mid"?	Return the head height to "Low".	 4.2.5 Head height adjustment



(4) White or black lines appear on printed media

No.	Possible cause	Remedy	Reference
1	Are you using the recommended media?	Use the recommended media.	 4.2.1 Media type
2	Is the roll media loaded correctly?	Load the roll media correctly.	 3.4.1 Loading roll media
3	Are Nozzles in good condition?	Perform Head cleaning.	 6.2.3 Head cleaning
4	Did you perform Micro adjust print?	Perform Adjust print.	 3.6 Print quality adjustment
5	Did you perform Media feed compensation?	Perform Media feed compensation.	 4.2.6 Media feed compensation
6	Is the temperature setting of each heater appropriate? (VJ-1604X only)	Set the temperature appropriately.	 5.1.1.1.3 Pre-Heater menu (VJ-1604X only) to 5.1.1.1.5 After Heater menu (VJ-1604X only)
7	Is the head height set to "High" or "Mid"?	Return the head height to "Low".	 4.2.5 Head height adjustment

(5) Printing lines are not straight

No.	Possible cause	Remedy	Reference
1	Is Ink cartridge within the validity period?	Use a new Ink cartridge.	 6.1.1 Replacing Ink cartridges
2	Are you using the recommended media?	Use the recommended media.	 4.2.1 Media type
3	Did you perform Micro adjust print?	Perform Adjust print.	 3.6 Print quality adjustment
4	Did you perform Media feed compensation?	Perform Media feed compensation.	 4.2.6 Media feed compensation

(6) Printing lines are duplicated or patchy

No.	Possible cause	Remedy	Reference
1	Are Nozzles in good condition?	Perform Head cleaning.	 6.2.3 Head cleaning
2	Is the head height set to "High" or "Mid"?	Return the head height to "Low".	 4.2.5 Head height adjustment












7.2 Error messages









This section describes messages displayed during normal printer operation or when errors occur, and solutions to the messages.

7.2.1 Status messages

This section describes messages displayed during printer normal operation.

When the printer is operating correctly, each operation status is displayed on Operation panel as below.

No.	Display	Description	Reference
1	Ready to Print	Standby (Media is loaded).	—
2	Media End	Standby (Media is not loaded).	 3.4 Loading media
3	Receiving	Receiving data.	—
4	Analyzing data	Analyzing data.	—
5	Printing	Under printing.	—
6	PrintRestart -> ENTER	Pausing printing. Press the [Enter] key.	 4.4.6 Pausing printing
7	Warming Up	Warming up Heater. (VJ-1604X only)	—
8	Cleaning **%	Cleaning the head. Please wait a while.	 6.2.3 Head cleaning
9	Ink Refill **%	Filling the ink. Please wait a while.	 3.3 Filling ink
10	SubTank Refill	Filling the subtank. Please wait a while.	 3.3 Filling ink
11	Moving Origin Pos.	Print head is moving to the original printing position in the Origin menu. Please wait a while.	 5.1.8 Origin menu
12	Confirm Position -> ENTER	Print head is moving to the original printing position in the Origin menu. Press the [Enter] key.	 5.1.8 Origin menu
13	During Washing	Cleaning Head. Please wait a while.	 5.1.17.3 Near End menu
14	Remove Cartridges	Perform head cleaning. Remove Cartridge.	 5.1.17.3 Near End menu
15	** Initializing **	Initializing the setting in the Initialization menu. Please wait a while.	 5.1.20 Initialization menu
16	** Press 2sec. **	The [Cleaning] key or the [Nozzle Check] key is pressed for less than 2 seconds. Press the key for more than 2 seconds again.	 2.1.3 Operation panel

No.	Display	Description	Reference
17	Power Off	Turning the printer off. Please wait a while. Do not unplug Power cord set till Operation panel is turned off.	 3.2.2 Turning the power OFF
18	Change Head Gap Low	Displayed in the following cases. •During power shutdown •Before head cleaning Set the head height to Low.	 4.2.5.2 When setting the head height to Low
19	Change Head Gap High	Set the head height to High. Starts printing.	 4.2.5.1 When setting the head height to High
20	Insert CleaningCart.	Washing Print head. Install Cleaning cartridge.	 3.3 Filling ink
21	Insert InkCartridges	Filling the ink. Insert Ink cartridge.	 3.3 Filling ink
22	User: Type ** OK?	Initializing the media. Please wait a while. (** represents the set User type.)	 3.4.3 Setting media type
23	Media Initial		
24	Roll Remain Error	The remaining roll paper count has become 0. Printing stops.	 5.1.17.2 Print Stop menu
25	Roll Near End: *m	The remaining roll paper count is almost 0. The remaining roll paper is *m.	 5.1.17.3 Near End menu

7.2.2 Message type error display and remedies


This section describes message type errors and remedies.

Message type errors are displayed when certain failures occur during printer operation.

If a message type error occurs, the printer may display the following error messages on Operation panel and stop operation.

If the printer stops operating, solve the error so that the printer restarts.

No.	Display	Description	Remedy	Reference
1	Cover Open	Front cover is open.	Close Front cover.	 3.4 Loading media
2	Mainte.CoverL Open	Left Maintenance cover is open.	Close Maintenance cover.	 2.1 Names of parts and functions
3	Mainte.CoverR Open	Right Maintenance cover is open.	Close Maintenance cover.	 2.1 Names of parts and functions
4	Lever Up	The media is not loaded.	Load the media.	 3.4 Loading media
5	Undefined Media	Media detection has failed. (Stops operation)	Reload the media.	 3.4 Loading media
6	Media Slant	Media is fed obliquely. (Stops operation)	Reload the media.	 3.4 Loading media
7	Media Cut Error	The media was not cut. (Stops operation)	Reload the media.	 3.4 Loading media
8	End Of Roll	Roll media has run out. (Stops operation)	Load a new roll media.	 6.1.2 Replacing Roll Media
9	[****] InkNearEnd	The remaining amount of ink is low. (Continues operation)	Replace with a new S/C card and Ink cartridge.	 6.1.1 Replacing Ink cartridges
10	[****] InkEnd	Ink has run out. (Stops operation)	Replace with a new S/C card and Ink cartridge.	 6.1.1 Replacing Ink cartridges
11	[****] Check Ink	Ink cartridges/Ink packs cannot be recognized correctly.	<ul style="list-style-type: none"> •Insert Ink cartridge/Ink pack adapter again. •Contact your local MUTOH dealer. 	 6.1.1 Replacing Ink cartridges
12	[****] S/C ReadErr	IC chip cannot be read.	Insert Ink cartridge again. If IC chip still cannot be read, insert a new Ink cartridge.	 6.1.1 Replacing Ink cartridges
13	[****] S/C Col.Err	Ink cartridge is inserted into a wrong Ink cartridge slot.	Insert it into the correct Ink cartridge slot.	 6.1.1 Replacing Ink cartridges
14	[*] S/C Ink Err	This type of ink cannot be used for this printer.	Contact your local MUTOH dealer.	 6.1.1 Replacing Ink cartridges
15	[*] S/C CodeErr	An improper Ink cartridge is inserted.	Contact your local MUTOH dealer.	—
16	[*] Broken Chip	IC chip is broken.	Replace with the new Ink cartridge.	 6.1.1 Replacing Ink cartridges
17	Full WasteInkTank	Waste fluid tank is full. (Stops operation)	Dispose of waste fluid.	 6.3 Disposal of waste fluids

No.	Display	Description	Remedy	Reference
18	Life Times [Head]	The operational life of Print head has almost expired. (Continues operation)	Contact your local MUTOH dealer.	—
19	Life Times [Pump]	The operational life of the pump motor is almost expired. (Continues operation)	Contact your local MUTOH dealer.	—
20	Life Times [CR Motor]	The life CR motor is almost expired. (Continues operation)	Contact your local MUTOH dealer.	—
21	Life Times [PF Motor]	The operational life of PF motor is almost expired. (Continues operation)	Contact your local MUTOH dealer.	—
22	[*****] Change Plug	Time to replace Connector rubber of High-capacity ink pack adapter. (VJ-1604X only)	Replace Connector rubber.	 High-capacity ink pack adapter Operation Manual "3.2 Replacing Connector Rubber"

NOTE

- [*****] of "Change Plug" display indicates the slot number that is subject to changing.
- [****] of the error display indicates the ink color that is subject to warning.

7.2.3 Error requiring restart

This section describes errors requiring restart and remedies.

An error requiring restart is displayed if a fatal operational failure such as the following occurs.

- When an obstacle that prevents printing occurs
- When a problem occurs with the electrical circuit (PCB, motor, sensor, etc.) of the printer
- When a failure in the printer control program occurs

If an error requiring restart occurs, the printer stops operating after performing the following operations.



1. The drive power automatically shuts down.
2. All Lamps on Operation panel blink, and the buzzer rings continuously.
3. The error message is displayed on Operation panel.

Pressing any key on Operation panel stops the beeping.

For an error requiring restart, operation will return to normal after removing the cause of the error and restarting the printer.

If the same error continues to be displayed, contact the your local MUTOH dealer.

Be sure to tell us the code no. of the error message when you contact us.

No.	Display	Description	Remedy	Reference
1	E*** Error []	A problem that does not have a remedy has occurred.	<ol style="list-style-type: none"> 1. Remove obstacles such as paper scraps in the drive system. 2. Confirm that the replaced items are correctly attached. 3. Turn OFF the printer and turn it ON again after 10 seconds or longer. 	<p> 7.3 The media is jammed</p> <p> 6.1 Replacing consumable components</p>

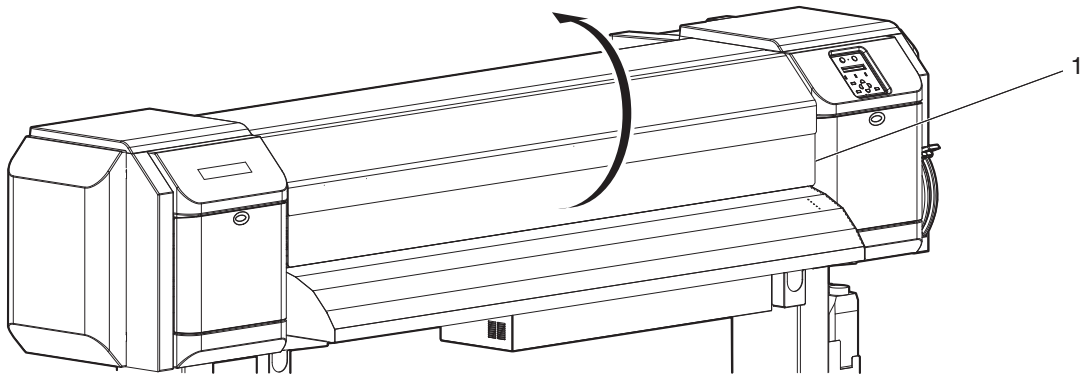
NOTE

- "***" in the error message is the code no. that indicates what type of error occurred.
- The command code representing the error occurred may be indicated in [].
- For the settings on your PC side, refer to the Operating Manual attached with your PC.

7.3 The media is jammed

When the set media is jammed, follow the procedure below to remove it.

1. Turn OFF the power of the printer.
☞ [3.2.2 Turning the power OFF](#)
2. Open Front cover.



No.	Name
1	Front cover

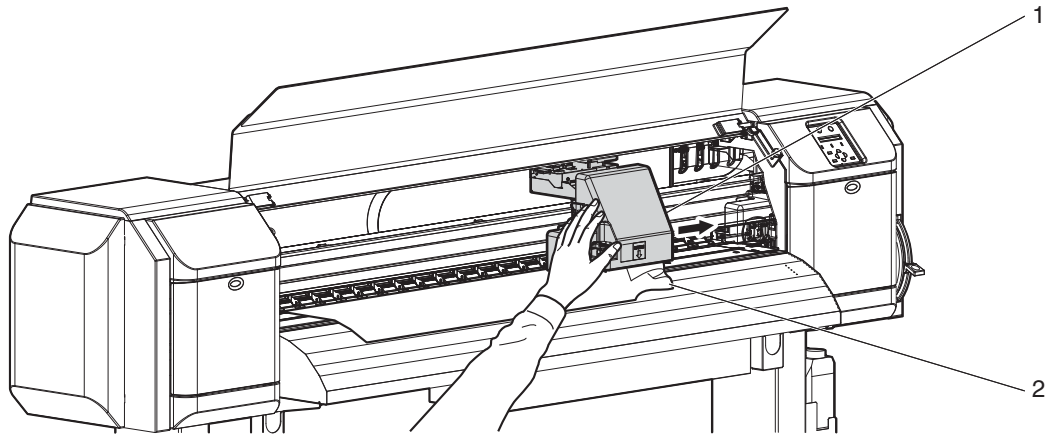
3. Move Print head section from the top of the media to the right.

NOTE

When the head height is set to Low, change it to High and then shift Head.
After shifting Head, change the setting back to Low.

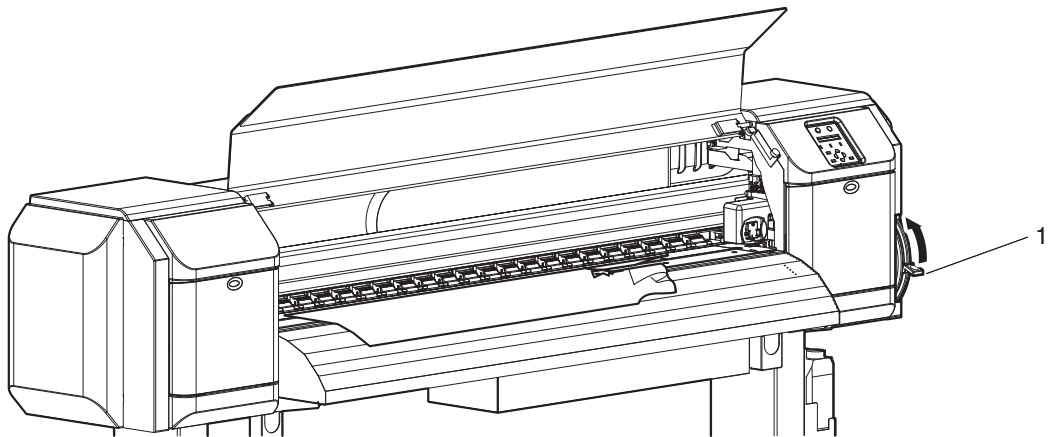
☞ 4.2.5.1 When setting the head height to High

☞ 4.2.5.2 When setting the head height to Low



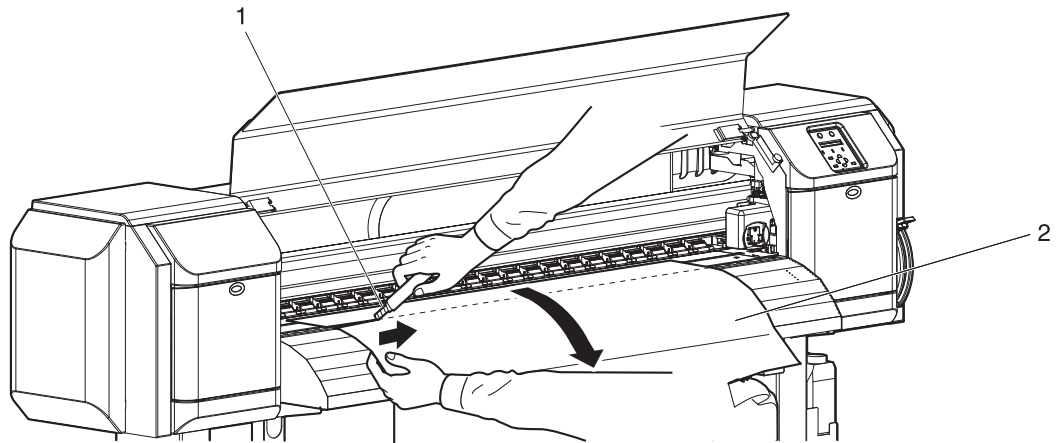
No.	Name
1	Print head section
2	Roll media

4. Raise Media loading lever.



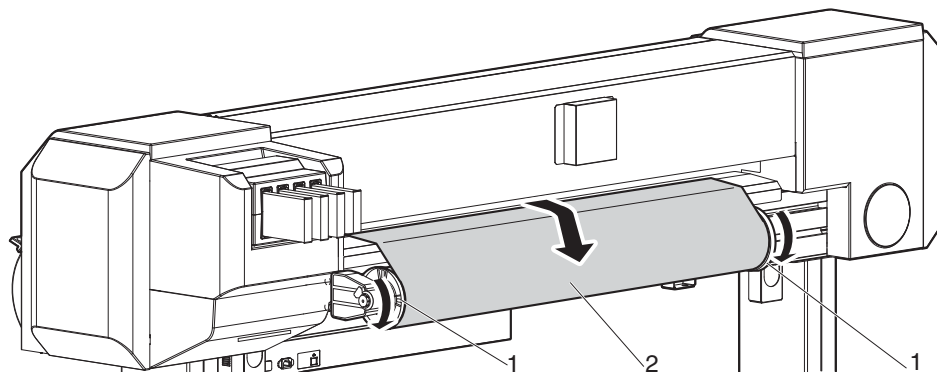
No.	Name
1	Media loading lever

5. Pull the media to your side, and cut the torn part with cutting tools such as a razor blade.



No.	Name
1	Razor blade
2	Roll

6. Turn Flanges of Roll media holder and take up the roll media.



No.	Name
1	Flanges
2	Roll media

7. If paper dust or pieces of paper remain inside the printer, remove them.

8 Appendix

This chapter describes specifications and included components with this printer.

8.1 Product specifications

8.1.1 Printer specifications

Items		Specification
Model name		VJ-1604X VJ-1604WX
Printing method		On-demand piezo drive system
Drive system		Firmware servo/DC motor drive
Media feed system		Multipoint pressurizing grid roller system
Media fixing system		Pressurization roller down system by manual lever
Media feed/ejection		Rear feed/Front ejection
Roll media outer diameter		150mm or less
Roll media weight		30kg or less
Maximum media width		<VJ-1604X/1624W> 1,625mm
Minimum media width		900mm
Maximum media thickness		VJ-1604X: 0.3mm (when the head height is Low)/1.3mm (when the head height is High) VJ-1604WX: 0.3 mm (when the head height is Low)/1.3 mm (when the head height is Mid)/2.8 mm (when the head height is High)
Maximum printable media width		<VJ-1604X/1624W> 1,615mm
Print margin		Top: 5 mm (15 mm after media initialization or after winding the media manually, 40 mm when media initialization front edge detection is ON or after cutting the media), Bottom: 5 mm (102 mm at the roll media end), Left: 5 mm to 25 mm, Right: 5 mm to 25 mm.
Media cut system		Horizontal automatic cut system/manual cut system
Head height adjustment		VJ-1604X: Two-level adjustment of Low and High VJ-1604WX: Three-level adjustment of Low, Mid, and High
CPU		64-bit RISC CPU
Memory		<VJ-1604X/VJ-1604WX> 128MB
Command		MH-RTL (RTL-PASS)
Interface		Network interface (Ethernet IEEE 802.3)
Ink	Supply system	Supplied through tubes from independent color cartridges
	Cartridges	<VJ-1604X> Black, Cyan, Magenta, Yellow: 220ml ± 5ml each or 440ml ± 5ml (1000ml ± 5ml when the optional High-capacity ink pack adapter is used) <VJ-1604WX> Black, Cyan, Magenta, Yellow: 220ml ± 5ml each

Items		Specification
Environmental condition	Operating condition	Temperature: 20°C to 32°C Humidity: 40% to 60%, No condensation
	Printing accuracy coverage	Temperature: 22°C to 30°C Humidity: 40% to 60%, No condensation
	Change rate	Temperature: within 2°C per hour Humidity: within 5% per hour
	Archiving condition (Ink not filled)	Temperature: -20°C to 60°C Humidity: 20% to 80%, No condensation Storage life: six months
	Archiving condition (Ink filled)	Temperature: -10°C to 40°C Humidity: 20% to 80%, No condensation Storage life: four days (32°C or higher)
Power	Power voltage	AC 100V to AC 120V $\pm 10\%$ / AC 200V to AC 240V $\pm 10\%$
	Frequency	50 Hz/60 Hz ± 1 Hz
Power consumption	Printing	<VJ-1604X> MAIN: 1100W HEATER: 1200W <VJ-1604WX> 210W
	Standby	<VJ-1604X> 55W <VJ-1604WX> 1W
Outer diameter	Height	1,261 mm (including the stands)
	Width	<VJ-1604X/1624W> 2,698mm
	Depth	885mm
Weight		<VJ-1604X/1624W> 160kg

8.2 Interface specification

This section describes each type of interface specifications supported by this printer.

8.2.1 Network interface specification

Items	Specification
Network type	Ethernet IEEE802.3
Network I/F	10BASE-T/100BASE-TX Automatic transfer type (RJ-45 Connector twisted pair cable) MDI/MDI-X Automatic transfer
Corresponding protocol	TCP/IP

8.3 Options/Supply list

For more information about the options and the supply items, contact your local MUTOH dealer.

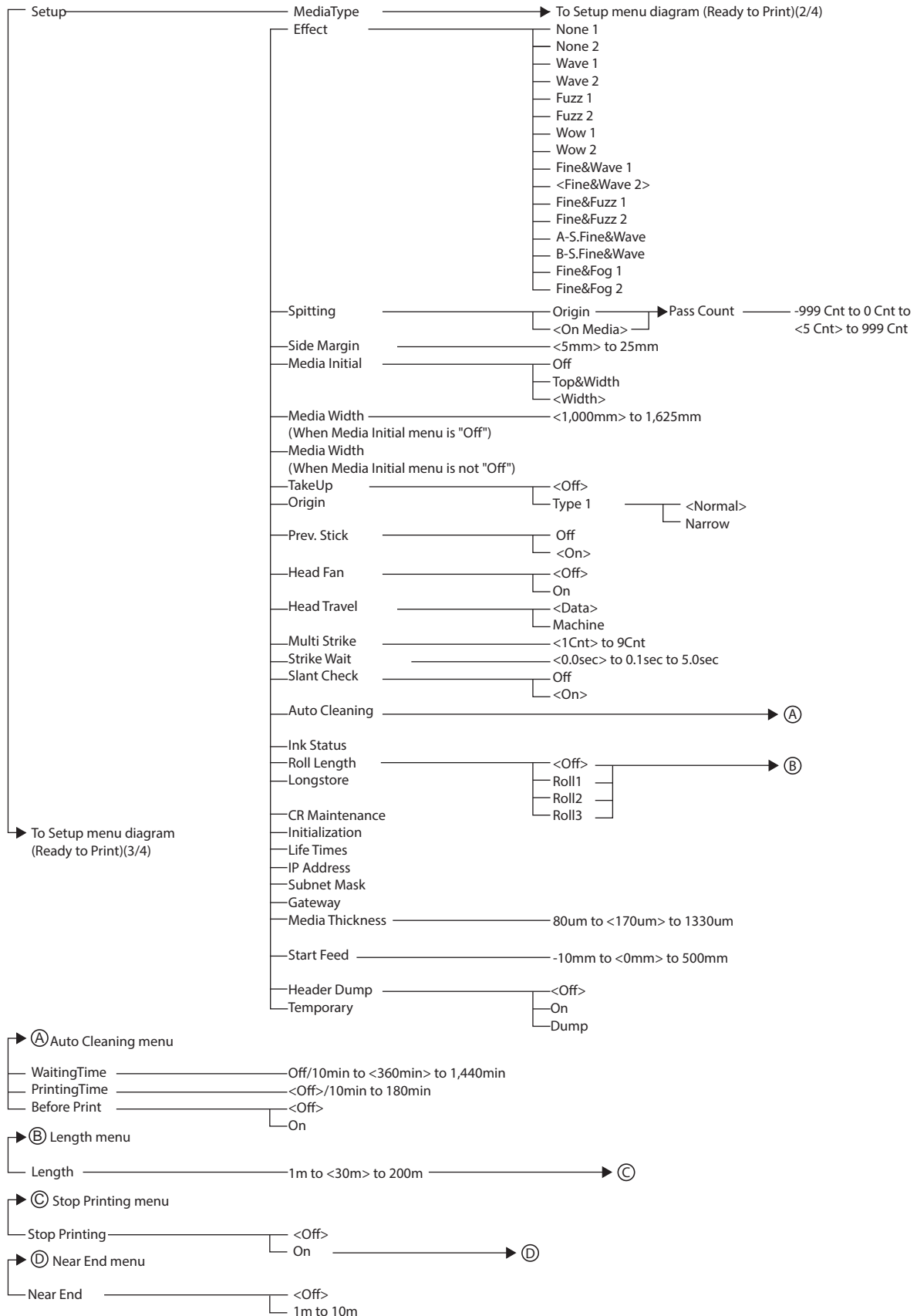
9 Setup menu diagram

For details of the Setup menu configuration diagram, refer to the followings.

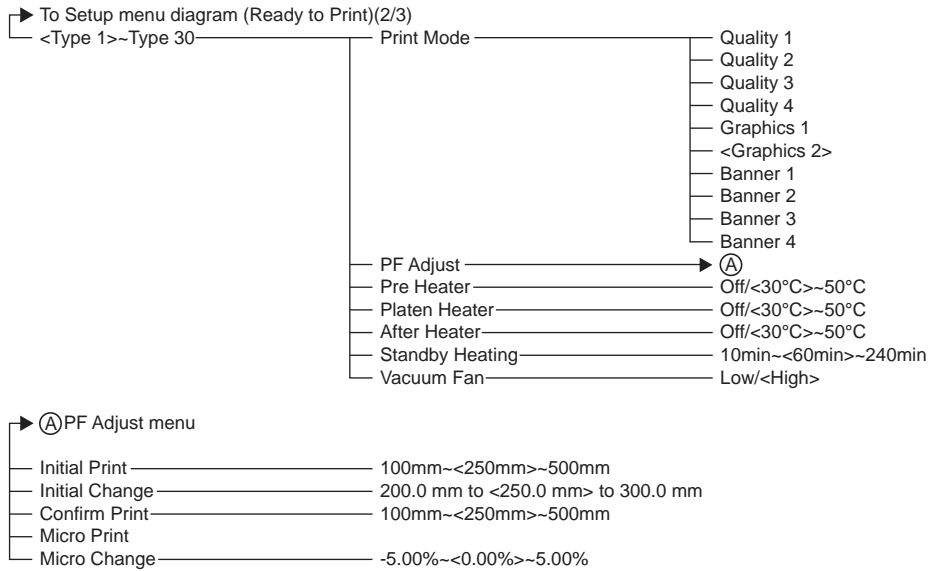
NOTE

- For details of each setup item, refer to followings:
 - Setup menu diagram (Ready to Print):
☞ [5 Panel setup menu](#)
 - Setup menu diagram (Receiving / Converting / Printing):
☞ [4.4.4 Cutting media manually](#)
 - The <> parts in each list are factory default settings (initial values).
-

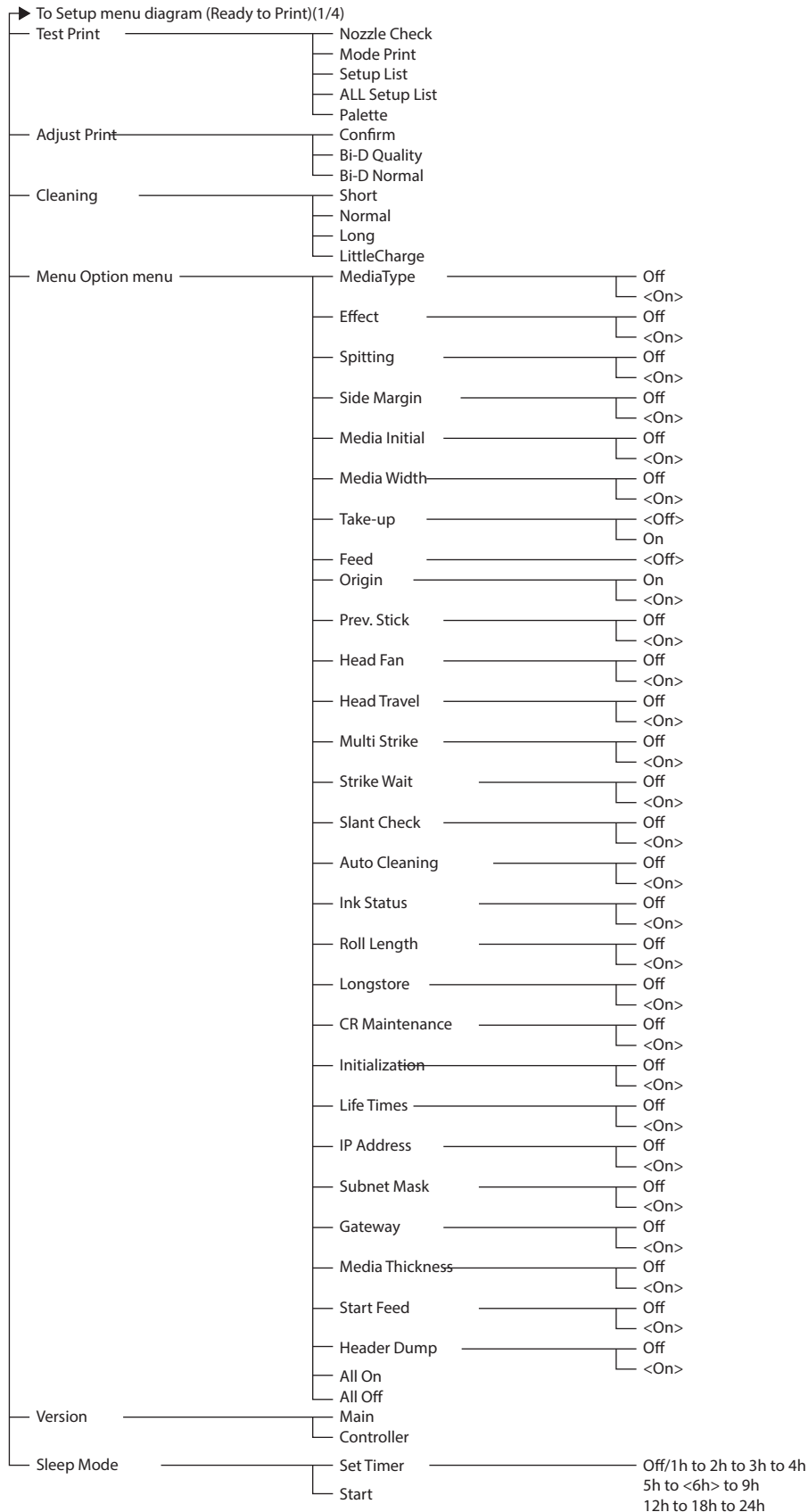
Setup menu diagram (Ready to Print) (1/3)



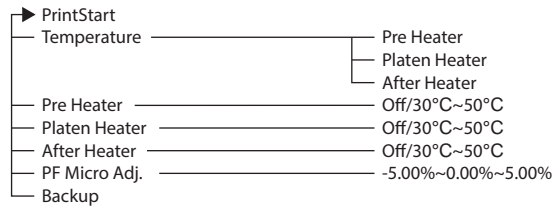
Setup menu diagram (Ready to Print) (2/3)



Setup menu diagram (Ready to Print) (3/3)



Setup menu diagram (Receiving / Converting / Printing)



Revision History

General Information

Date	Version	Manual code	Supported Firmware
2015.10	00	VJ1604XE-A-00	V.3.00
2016.7	01	VJ1604XE-A-00	V.3.03

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