

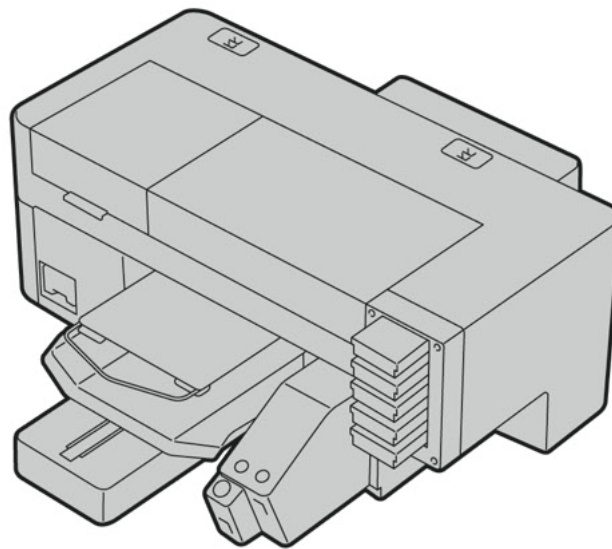


GTX300NC

Professional Use

GARMENT PRINTER

Instruction Manual Ver.1.0



Please be sure to read this manual before using this product.

Keep this manual in a safe place for future use.

This printer should only be used by operators who are appropriately trained in its safe operation.

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Chapter 1

SAFETY INSTRUCTIONS

Thank you very much for buying a BROTHER printer.

Before using your new printer, please read the "SAFETY INSTRUCTIONS" and handling instructions carefully.

1.1 Safety indications and their meanings

This instruction manual and the indications and symbols that are used on the printer itself are provided in order to ensure safe operation of this printer and to prevent accidents and injury to yourself or other people.

The meanings of these indications and symbols are given below.

Indications

 DANGER	The instructions which follow this term indicate situations where failure to follow the instructions will result in death or serious injury.
 WARNING	The instructions which follow this term indicate situations where failure to follow the instructions could result in death or serious injury.
 CAUTION	The instructions which follow this term indicate situations where failure to follow the instructions may result in minor or moderate injury.
IMPORTANT	The instructions which follow this term indicate situations where failure to follow the instructions may result in damage to property.
NOTE	The instructions which follow this term indicate precautions and restrictions for use.

Symbols

	This symbol indicates something that you must not do.
	This symbol indicates that getting wet is prohibited.
	This symbol indicates that disassembly is prohibited.
	This symbol indicates parts or components that must not be touched.
	This symbol indicates something that you must do.
	This symbol indicates that the grounding wire must be connected.
	This symbol indicates that the power plug must be unplugged immediately.

1.2 Notes on safety

Basic information



DANGER



Contact with high-voltage parts may lead to a serious injury. Turn off the power, and remove the cover 5 minutes later.



WARNING



The printer should only be used by operators who are appropriately trained in its safe operation.



The printer is not suitable for use in places where children are present.



To prevent accidents and malfunctions, do not modify the printer yourself. Brother will not be held responsible for any accidents or problems resulting from modifications made to the printer.



Do not handle the power plug with wet hands. Otherwise, it may cause electric shock.



Do not allow the printer to come into contact with liquids. Otherwise, it may cause fire or electric shocks or malfunction.



Do not place containers containing liquids on top of this printer.



In the following circumstances, Immediately turn off the power, disconnect the power cord, and contact the place of purchase or a qualified technician:

- If foreign matter or liquid has entered the interior of the printer
- If the printer has been dropped
- If smoke is coming from the printer or an unusual odor is detected

If you continue to use the printer in the above circumstances, it may result in fire or electric shocks or malfunction.

CAUTION



When malfunction occurs with the operation of the printer, contact your dealer or a qualified technician.



Use the printer in a place which is adequately ventilated. A slight bad odor is generated when the printed medium are being fixed by heat.

Unpacking, transport, and installation

WARNING



Unpacking, transporting, and installing this printer must be performed only by a qualified technician.



Do not set up the printer in a dusty environment. If dust collects inside the printer, it may cause fire or electric shocks or problems with correct operation.



When lifting this printer, lift it horizontally so that it does not tilt. Failure to do so may result in injury or product malfunction due to the printer falling.



When lifting the printer from packaging materials or when moving it, clear the area around your feet and ensure safety before starting work. Failure to do so may result in tipping, or injury or product malfunction due to dropping of the printer.



Be sure to connect the ground. Failure to do so may cause electric shock or malfunction.



Do not forcibly bend or crush the cord. Doing so may cause fire or electric shock.



Do not move the platen by hand. Doing so may cause injury such as entrapment of fingers in a drive unit.



When removing the platen base, remove only the top plate paten first. Failure to do so may cause the platen base and top plate to get unintentionally detached and fall, possibly causing injury.

⚠ CAUTION

The printer weighs 115 kg (254 lb). When transporting or installing the printer, follow the correct holding method for the printer. Failure to do so may result in injury or product malfunction due to the printer falling.



The printer has adjusters at its bottom. Do not allow them to get caught on the table onto which to install the printer.



Do not place the printer on a shaky table or high shelf or other unstable location. Doing so may result in tipping, or injury or product malfunction due to dropping of the printer. Furthermore, the table that supports the printer should be at least 35.4 in. (90 cm) in width and 23.6 in. (60 cm) in depth, and should be able to bear a weight of 150 kg (331 lb) or more.



Do not set up the printer in a place where it will be affected by vibration. This may cause deterioration in print quality, injury or product malfunction due to the printer falling.



Do not connect the power cord until installation is complete. The printer may operate if the power is turned on by mistake, which could result in injury.



Do not climb onto the printer or place heavy objects on top of it. Doing so may cause injury due to tipping or falling.



Be careful not to touch the latches of the mounting portion on the upper side of the rear cover. Failure to do so may cause injury.

IMPORTANT

The printer at its bottom comes with four adjusters and rubber fall-guard feet. When installing the printer, see to it that the rubber fall-guard feet will not be detached from the table.

Printing



WARNING



Keep your finger or any body part away from the rotating fan. Otherwise, it will get caught up, leading to injuries.



CAUTION



Ensure there is adequate space left in front of the printer. Failure to do so may result in injury from getting trapped with the platen.



Do not touch the print medium during operation. Doing so may result in injury such as fingers being caught.



Do not put your hands inside the covers while the printer's power is turned on. Otherwise your hands may touch against moving parts and this may result in injury.



When the pretreatment is applied to printed objects (like a T-shirt) with a spray or pretreatment applicator, sprayed mist is generated. So wear a pair of plastic gloves, a mask and protective glasses designed to shield against liquid splash, and ensure sufficient ventilation when you are working with it.

IMPORTANT



Do not move the platen by hand. Doing so may result in malfunction.



Avoid placing any objects in front of the printer. The platen may be hit and damaged.



Using a different ink version may have unexpected effects on printing quality.

Maintenance

CAUTION



Be careful not to pinch your fingers when closing the printer cover. Failure to do so may cause injury.



When replacing the head, be careful not to bump, rub, or pinch your hands or fingers. Doing so may cause injury.



When installing an ink pouch, do not touch any edges of parts inside the ink cartridge. Doing so may cause injury.



Do not drink grease or liquids such as the ink, maintenance solution, cleaning solution, pretreatment, or waste. They may cause diarrhea or vomiting. Keep out of reach of children.



If grease or liquids such as the ink, maintenance solution, cleaning solution, pretreatment, or waste get into your eyes or onto your skin, it may cause inflammation. Do not disassemble the ink pouch. In case of contact with eyes, do not rub but immediately rinse the eyes with water.



Follow the corresponding instructions in the manual when you put your hands inside the cover during regular maintenance while the power is turned on.



When replacing parts and installing optional accessories, be sure to use only genuine Brother parts. Brother will not be held responsible for any accidents or problems resulting from the use of non-genuine parts.



When replacing parts or installing optional accessories, be sure to follow the procedures described in the Instruction Manual. Incorrect procedures could cause injuries or problems.

Others

Note



Use the printer in an area which is free from sources of strong electrical noise such as electrical line noise or static electric noise. Sources of strong electrical noise may cause problems with correct operation.



Any fluctuations in the power supply voltage should be within $\pm 10\%$ of the rated voltage for the printer. Voltage fluctuations which are greater than this may cause problems with correct operation.

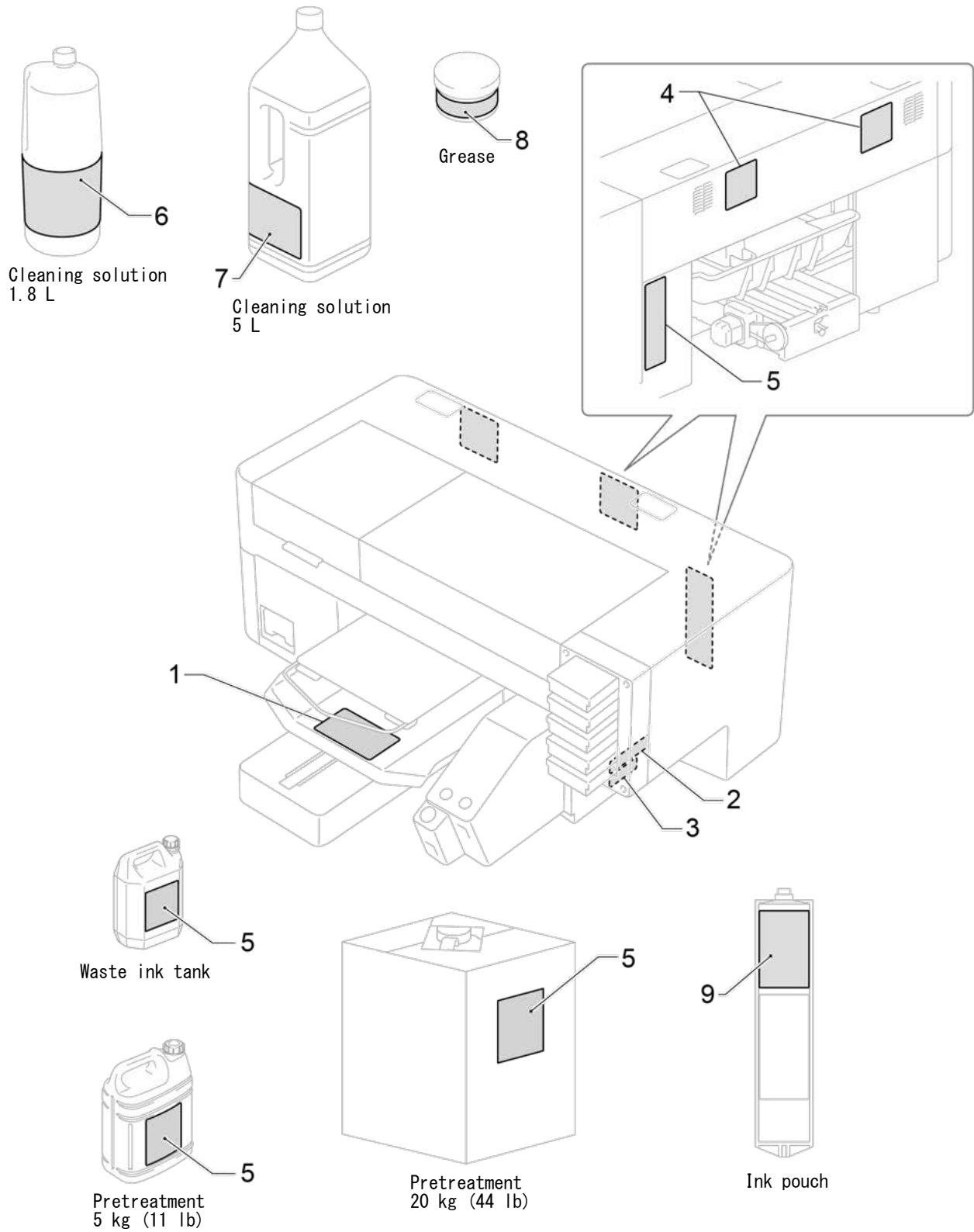


The power supply capacity should be greater than the requirements for the printer's power consumption. Insufficient power supply capacity may cause problems with correct operation.



In the event of an electrical storm, turn off the power and disconnect the power cord from the wall outlet. Lightning may cause problems with correct operation.

1.3 Warning labels



Chapter 1

SAFETY INSTRUCTIONS

This printer has the following warning labels displayed on it.

Follow the precautions given on each warning label for your work.

If a label is peeled off or illegible, contact your dealer.

For the latest information, refer to the labels on consumable supplies and the SDSs in our website.

1

CAUTION
Moving plates, T-shirt tray and covers can cause bodily injury. Keep body parts away from moving parts.

VORSICHT
Druckplatte, T-Shirt-Ablage und Abdeckungen können körperliche Verletzungen verursachen. Halten Sie Körperteile von beweglichen Teilen fern.

ATTENTION
Déplacement du plateau, chargeur T-shirt et couvercle peut blesser le corps. Gardez les parties du corps éloignées des pièces mobiles.

ATENCIÓN
Moviendo la placa, la bandeja de camiseta y las cubiertas pueden causar una herida personal. Mantenga las partes del cuerpo alejadas de las partes móviles.

ATTENZIONE
Tavoletta mobile, il ripiano per la T-shirt e il coperchio potrebbero causare infortuni. Tenete le parti del corpo lontane dalle parti in movimento.

注意
プラテンやTシャツトレイとカバーとの間に手をさか、けをする。運動部分から体を離すこと。

注意
手夾在压板、T恤托盘和罩盖之间会导致受伤。身体切勿靠近正在运行的机械部位。

CUIDADO
Movimiento del cilindro, plato de impresión e tapas pueden causar lesiones corporales.

6

CAUTION
Do not drink the liquid under any circumstances, as they can cause vomiting and diarrhea. Take care not to let the liquid come into contact with your eyes or onto your skin. Otherwise inflammation can result. Keep the liquid out of the reach of children.

VORSICHT
Nicht trinken Sie nicht die Flüssigkeiten, da die Gefahr von Erbrechen und Durchfall besteht. Vermeiden Sie den Kontakt der Flüssigkeiten mit Augen und Haut, sonst können diese gereizt werden. Halten Sie die Flüssigkeiten von Kindern fern.

ATTENTION
Ne pas avaler les liquides d'aucune manière, car ceci pourrait entraîner vomissements et diarrhées. Veillez à ne pas laisser ces liquides être en contact avec les yeux ou la peau, car ceci pourrait entraîner une inflammation. Maintenez les liquides hors de portée des enfants.

ATENCIÓN
No tome los líquidos en cualquier caso, como pueden causar vómitos y diarrea. Evite el contacto de estos líquidos con los ojos ni en la piel, de otro modo inflamación puede resultar. Mantenga los líquidos fuera del alcance de niños.

ATTENZIONE
Non bere per nessun motivo i liquidi poiché possono causare vomito e diarrea. Evitare il contatto di questi liquidi con gli occhi e con la pelle poiché potrebbero creare infiammazione. Conservare i liquidi lontano dalla portata dei bambini.

注意
下痢・おう吐する可能性があります。インクなどの液体類を飲まないこと、衣服を被ることも避け、インクなどの液体類が目の皮膚に付かないようにすること。子供の手の届かないところに置くこと。

注意
下痢・おう吐する可能性があります。インクなどの液体類を飲まないこと、衣服を被ることも避け、インクなどの液体類が目の皮膚に付かないようにすること。子供の手の届かないところに置くこと。

2

DANGER
Do not touch the liquid under any circumstances, as they can cause vomiting and diarrhea. Take care not to let the liquid come into contact with your eyes or onto your skin. Otherwise inflammation can result. Keep the liquid out of the reach of children.

GEFAHR
Nicht berühren Sie nicht die Flüssigkeiten, da die Gefahr von Erbrechen und Durchfall besteht. Vermeiden Sie den Kontakt der Flüssigkeiten mit Augen und Haut, sonst können diese gereizt werden. Halten Sie die Flüssigkeiten von Kindern fern.

DANGER
Ne pas toucher les liquides d'aucune manière, car ceci pourrait entraîner vomissements et diarrhées. Veillez à ne pas laisser ces liquides être en contact avec les yeux ou la peau, car ceci pourrait entraîner une inflammation. Maintenez les liquides hors de portée des enfants.

PERICOLO
Non toccare i liquidi in nessun caso, come possono causare vomito e diarrea. Evitare il contatto di questi liquidi con gli occhi e con la pelle poiché potrebbero creare infiammazione. Conservare i liquidi lontano dalla portata dei bambini.

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7

CAUTION
Do not drink the liquid under any circumstances, as they can cause vomiting and diarrhea. Take care not to let the liquid come into contact with your eyes or onto your skin. Otherwise inflammation can result. Keep the liquid out of the reach of children.

VORSICHT
Nicht trinken Sie nicht die Flüssigkeiten, da die Gefahr von Erbrechen und Durchfall besteht. Vermeiden Sie den Kontakt der Flüssigkeiten mit Augen und Haut, sonst können diese gereizt werden. Halten Sie die Flüssigkeiten von Kindern fern.

ATTENTION
Ne pas avaler les liquides d'aucune manière, car ceci pourrait entraîner vomissements et diarrhées. Veillez à ne pas laisser ces liquides être en contact avec les yeux ou la peau, car ceci pourrait entraîner une inflammation. Maintenez les liquides hors de portée des enfants.

ATENCIÓN
No tome los líquidos en cualquier caso, como pueden causar vómitos y diarrea. Evite el contacto de estos líquidos con los ojos ni en la piel, de otro modo inflamación puede resultar. Mantenga los líquidos fuera del alcance de niños.

ATTENZIONE
Non bere per nessun motivo i liquidi poiché possono causare vomito e diarrea. Evitare il contatto di questi liquidi con gli occhi e con la pelle poiché potrebbero creare infiammazione. Conservare i liquidi lontano dalla portata dei bambini.

注意
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3

PERICOLO
Do not touch the liquid under any circumstances, as they can cause vomiting and diarrhea. Take care not to let the liquid come into contact with your eyes or onto your skin. Otherwise inflammation can result. Keep the liquid out of the reach of children.

PERICOLO
Nicht berühren Sie nicht die Flüssigkeiten, da die Gefahr von Erbrechen und Durchfall besteht. Vermeiden Sie den Kontakt der Flüssigkeiten mit Augen und Haut, sonst können diese gereizt werden. Halten Sie die Flüssigkeiten von Kindern fern.

PERICOLO
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PERICOLO
Non toccare i liquidi in nessun caso, come possono causare vomito e diarrea. Evitare il contatto di questi liquidi con gli occhi e con la pelle poiché potrebbero creare infiammazione. Conservare i liquidi lontano dalla portata dei bambini.

注意
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8

CAUTION
Lubricating grease may cause irritation in eye and skin. Wear protective glasses and gloves. Handling grease can cause dizziness and vomiting. Do not swallow.

注意
潤滑グリースは目や皮膚に刺激を及ぼす可能性があります。保護眼鏡と手袋を着用してください。グリースを扱うとめまいや嘔吐の原因となります。嚥下しないでください。

4

警告
Do not touch the liquid under any circumstances, as they can cause vomiting and diarrhea. Take care not to let the liquid come into contact with your eyes or onto your skin. Otherwise inflammation can result. Keep the liquid out of the reach of children.

WARNING
Nicht berühren Sie nicht die Flüssigkeiten, da die Gefahr von Erbrechen und Durchfall besteht. Vermeiden Sie den Kontakt der Flüssigkeiten mit Augen und Haut, sonst können diese gereizt werden. Halten Sie die Flüssigkeiten von Kindern fern.

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Ne pas toucher les liquides d'aucune manière, car ceci pourrait entraîner vomissements et diarrhées. Veillez à ne pas laisser ces liquides être en contact avec les yeux ou la peau, car ceci pourrait entraîner une inflammation. Maintenez les liquides hors de portée des enfants.

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9

CAUTION
Do not drink the liquid under any circumstances, as they can cause vomiting and diarrhea. Take care not to let the liquid come into contact with your eyes or onto your skin. Otherwise inflammation can result. Keep the liquid out of the reach of children.

VORSICHT
Nicht trinken Sie nicht die Flüssigkeiten, da die Gefahr von Erbrechen und Durchfall besteht. Vermeiden Sie den Kontakt der Flüssigkeiten mit Augen und Haut, sonst können diese gereizt werden. Halten Sie die Flüssigkeiten von Kindern fern.

ATTENTION
Ne pas avaler les liquides d'aucune manière, car ceci pourrait entraîner vomissements et diarrhées. Veillez à ne pas laisser ces liquides être en contact avec les yeux ou la peau, car ceci pourrait entraîner une inflammation. Maintenez les liquides hors de portée des enfants.

ATENCIÓN
No tome los líquidos en cualquier caso, como pueden causar vómitos y diarrea. Evite el contacto de estos líquidos con los ojos ni en la piel, de otro modo inflamación puede resultar. Mantenga los líquidos fuera del alcance de niños.

ATTENZIONE
Non bere per nessun motivo i liquidi poiché possono causare vomito e diarrea. Evitare il contatto di questi liquidi con gli occhi e con la pelle poiché potrebbero creare infiammazione. Conservare i liquidi lontano dalla portata dei bambini.

注意
下痢・おう吐する可能性があります。インクなどの液体類を飲まないこと、衣服を被ることも避け、インクなどの液体類が目の皮膚に付かないようにすること。子供の手の届かないところに置くこと。

5

CAUTION
Do not touch the liquid under any circumstances, as they can cause vomiting and diarrhea. Take care not to let the liquid come into contact with your eyes or onto your skin. Otherwise inflammation can result. Keep the liquid out of the reach of children.

VORSICHT
Nicht berühren Sie nicht die Flüssigkeiten, da die Gefahr von Erbrechen und Durchfall besteht. Vermeiden Sie den Kontakt der Flüssigkeiten mit Augen und Haut, sonst können diese gereizt werden. Halten Sie die Flüssigkeiten von Kindern fern.

ATTENTION
Ne pas toucher les liquides d'aucune manière, car ceci pourrait entraîner vomissements et diarrhées. Veillez à ne pas laisser ces liquides être en contact avec les yeux ou la peau, car ceci pourrait entraîner une inflammation. Maintenez les liquides hors de portée des enfants.

ATENCIÓN
No tome los líquidos en cualquier caso, como pueden causar vómitos y diarrea. Evite el contacto de estos líquidos con los ojos ni en la piel, de otro modo inflamación puede resultar. Mantenga los líquidos fuera del alcance de niños.

ATTENZIONE
Non toccare i liquidi in nessun caso, come possono causare vomito e diarrea. Evitare il contatto di questi liquidi con gli occhi e con la pelle poiché potrebbero creare infiammazione. Conservare i liquidi lontano dalla portata dei bambini.

注意
下痢・おう吐する可能性があります。インクなどの液体類を飲まないこと、衣服を被ることも避け、インクなどの液体類が目の皮膚に付かないようにすること。子供の手の届かないところに置くこと。

6

CAUTION
Do not touch the liquid under any circumstances, as they can cause vomiting and diarrhea. Take care not to let the liquid come into contact with your eyes or onto your skin. Otherwise inflammation can result. Keep the liquid out of the reach of children.

VORSICHT
Nicht berühren Sie nicht die Flüssigkeiten, da die Gefahr von Erbrechen und Durchfall besteht. Vermeiden Sie den Kontakt der Flüssigkeiten mit Augen und Haut, sonst können diese gereizt werden. Halten Sie die Flüssigkeiten von Kindern fern.

ATTENTION
Ne pas toucher les liquides d'aucune manière, car ceci pourrait entraîner vomissements et diarrhées. Veillez à ne pas laisser ces liquides être en contact avec les yeux ou la peau, car ceci pourrait entraîner une inflammation. Maintenez les liquides hors de portée des enfants.

ATENCIÓN
No tome los líquidos en cualquier caso, como pueden causar vómitos y diarrea. Evite el contacto de estos líquidos con los ojos ni en la piel, de otro modo inflamación puede resultar. Mantenga los líquidos fuera del alcance de niños.

ATTENZIONE
Non toccare i liquidi in nessun caso, come possono causare vomito e diarrea. Evitare il contatto di questi liquidi con gli occhi e con la pelle poiché potrebbero creare infiammazione. Conservare i liquidi lontano dalla portata dei bambini.

注意
下痢・おう吐する可能性があります。インクなどの液体類を飲まないこと、衣服を被ることも避け、インクなどの液体類が目の皮膚に付かないようにすること。子供の手の届かないところに置くこと。

1.4 When you dispose of the machine

Required Tools

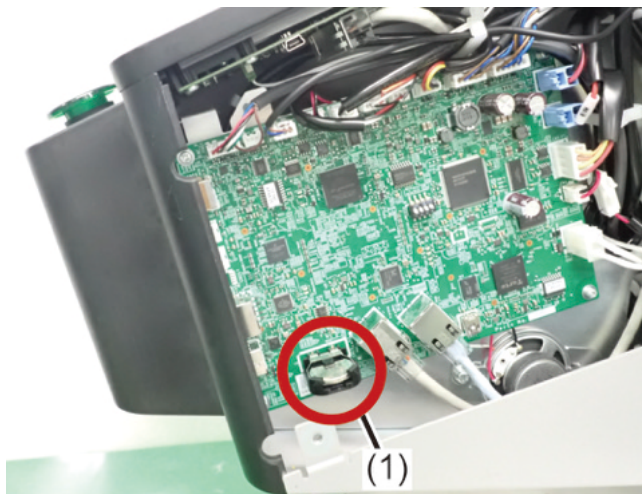
Phillips screwdriver: M3 to M5

Disassembling

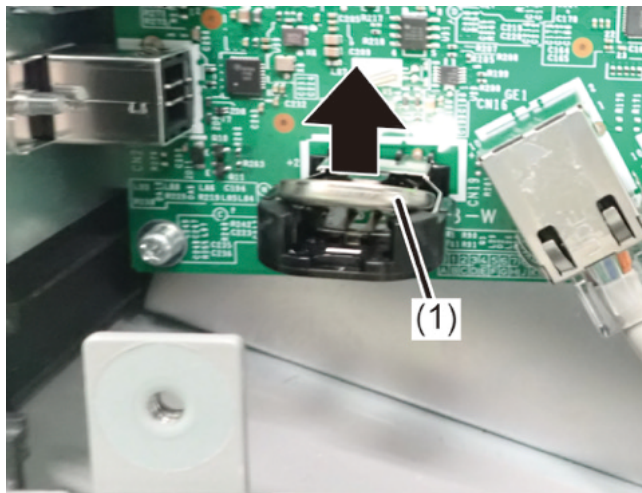
- 1 Remove the Cover PANEL SIDE.



- 2 You can see Lithium Battery (1) like following picture.



- 3 Remove the Lithium Battery (1) by pulling out the holder in the direction of the arrow.



* Dispose of the battery in accordance with local regulations.

Note based on California law (USA) on the use and handling of Perchlorate

This product contains a CR Coin Lithium Battery which contains Perchlorate Material – special handling may apply.

See <http://www.dtsc.ca.gov/hazardouswaste/perchlorate>.

Chapter 2

Before using your printer for the first time

2.1 Be sure to read the following notes before using the printer

Keep in mind the following points before using the printer:

Precautions for proper use

- **PLEASE LEAVE THE PRINTER POWERED ON 24 HOURS A DAY.**

Even when the printer is placed in standby mode, it performs such maintenance as white ink circulation inside the main unit automatically to prevent sedimentation of the white ink.

- **Use the printer within the scope covered by its warranty for the best print result (T-shirt printing: 18 to 30°C (64.4 to 86°F) in temperature and 35 to 85% in humidity, Film printing: 19 to 30°C (66 to 86°F) in temperature and 35 to 65% in humidity).**

Otherwise, the print heads may be clogged with ink and ink may splash.

- **Adjust the height of the platen according to the print medium before using it.**

For T-shirt printing, adjust the height so that it is lowered by one step from the limit height detected by the obstacle sensor, and check that the platen is not detected by the obstacle sensor.

For film printing, adjust the platen height at "A-".

- **Do not excessively lower the platen.**

Otherwise, ink mist will be scattered inside the printer, which may result in staining of the printing surface, blurring of the printed image, and malfunction of the sensor and the main unit. Increase the platen height if the "Platen too low" sensor is activated.

[Platen height adjustment on page 185](#)

- **Never power off the printer or open the cover while the printer is in operation.**

Otherwise, the printer may break down or a print job may end up in failure.

- **Until the ink is firmly fixed, do not touch the printed part.**

If a print medium is soiled with such ink that has not been firmly fixed on its surface, such ink stain cannot be removed even by washing.

About ink cartridge

- **Insert each of the cartridges into the hole of the same color as the printer seal.**
- **Shake the white ink cartridge approximately 100 times once a day immediately before use.**

Insufficient shaking may cause the white ink to precipitate and so may deteriorate print quality.

- **Never pull out any cartridges while the printer is operating.**

Otherwise, the print quality may deteriorate or the printer may break down.

- **Store consumable goods in a place where they are not exposed to direct sunlight.**

- **Use up the ink pouch, pretreatment and cleaning solution before their shelf life.**

Also, use up the ink pouch within six months after opening the sealed package.

Use of an expired ink pouch may make you liable for the cost of repairs even during the guarantee period.

- **Do not replenish or disassemble the ink pouch.**

In order to use the printer for a long period and to take full advantage of its capabilities, we recommend to use the ink pouches that are specified by us. In cases where the printer malfunctions due to the use of a non-genuine ink pouch, you may be liable for the cost of repairs even during the guarantee period.

- **Do not leave the printer with an ink cartridge removed.**

If the ink cartridge insertion slot is left empty, the inner needle may clog because ink dries up, or the printer may be damaged.

- **Take care to prevent the ink pouch from being bent, snagged by sharp objects, or dropped.**

Otherwise, it could be damaged.

About pretreatment

- **Avoid application of the pretreatment when no white ink is used.**

If a T-shirt to which the pretreatment is applied is printed with only color inks, washing fastness may get worse.

- **When storing T-shirts to which the pretreatment has been applied, store them in a place where they are not exposed to direct sunlight.**

- **When performing printing for the first time, try pretreatment in an unnoticeable area.**

Some T-shirts may be discolored by the pretreatment and cannot be restored to the original color even if they are washed.

- **Wash away any imprint of the pretreatment with water at an early stage after ink is applied to it.**

When a white or light-colored T-shirt is coated with the pretreatment, the coated surface color may change, and cannot be restored to the original color even if the T-shirt is washed.

- **When a color transfer occurs, wipe the color-transferred area clean of dirt with a soft and clean cloth or a toothbrush that is moistened with a small amount of mild detergent for home use or alcohol.**

If a printed material is rubbed with vinyl-chloride-based white or light-colored synthetic leather, color transfer may occur.

In addition, when a color-printed surface is rubbed vigorously against a surface printed only with white ink, color transfer may occur.

About maintenance

- **In order to keep good printing quality, perform maintenance on a regular basis.**

[Precautions to keep good printing quality/use printer over the long term on page 229](#)

- **Use the genuine cleaning solution that is specified by us when cleaning the nozzle guard or cap.**

This allows you to take full advantage of the printer's intrinsic capabilities and use it for a long period.

Using commercially available alcohol or cleaning solution could cause damage to the print heads.

- **Never remove the print heads except when they are replaced with new ones.**

Because they are precision components, the print head may fail.

What to do when not using printer

- **When the printer will not be used for a prolonged period of time, take appropriate procedures before storing the printer depending on storage period or condition.**

When not used for a long period of time on page 272

About waste handling

- **Dispose of the residual wastes and waste ink properly as water-based waste fluid in accordance with applicable laws and ordinances.**

Others

- **In the event that the printer is relocated elsewhere for layout change, etc., place a level gauge on the top surface of the platen to make such an adjustment that the printer will be placed horizontally level.**
- You cannot connect this product directly to the communications lines, including the public wireless LANs, of telecommunication carriers like mobile communications companies, fixed communications companies, or internet providers. Ensure that the product is connected through a router, if it is to be used over the internet.

Note

- This apparatus is Class A information technology equipment based on the standards of the Voluntary Control Council for Interference by Information Technology Equipment (VCCI). Using this apparatus in a home environment may cause radio interference. In that case, the user may be required to take appropriate measures.

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5.Term.

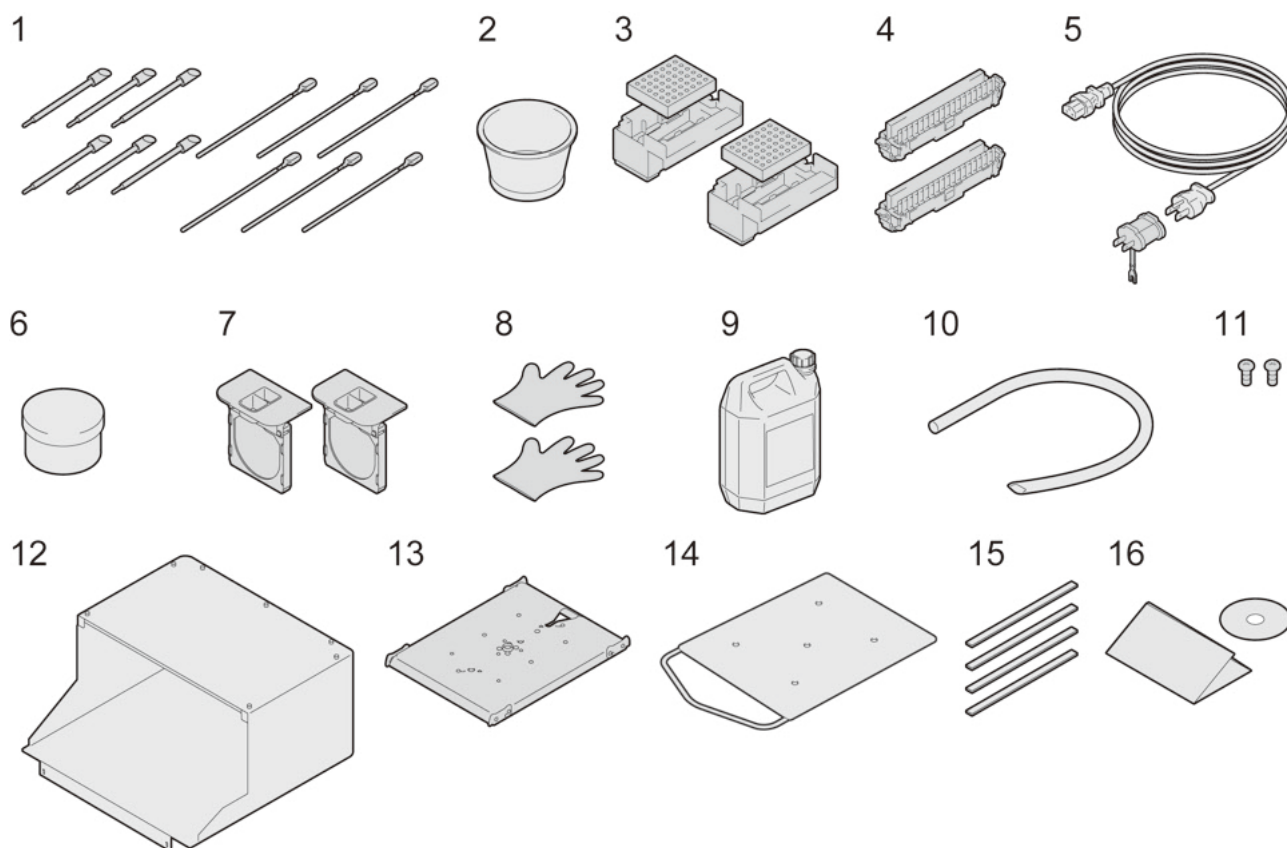
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2.2 Components included with printer

The components included with the printer are shown below. However, in the event that there is any missing component(s), please contact your dealer.



NO.	Name	Quantity	NO.	Name	Quantity
1	Clean stick R / Clean stick T	6 each	9	Waste ink tank	1
2	Cleaning cup	1	10	Waste ink tube	1
3	Flushing receiver / Flushing foam	2 each	11	Rear cover installation screws ^{*1}	2
4	Wiper	2	12	Rear cover	1
5	AC power cord	1	13	Platen base	1
6	Grease	1	14	Top plate platen (adult platen)	1
7	Filter cover / Fan filter	2 each	15	Rubber magnet	4
8	Gloves (for cleaning the maintenance unit)	2	16	Setup Manual	1

* The print heads are attached to the printer before shipping.



TIPS

^{*1}: Screws are already fixed with the printer.

2.3 Other items required

What you buy from our distributors

- Ink pouch
- Cleaning solution
- Pretreatment

Others

- USB 2.0-compliant device cable (A/B)

Note

- Using other cables than the specified one may cause the printer to be rendered inoperative. Also, do not use any extension cable.

- LAN cable (100BASE-TX/1000BASE-T)
- USB flash memory

Please use a FAT32-formatted USB flash memory of which storage capacity is 2 GB to 32 GB in total. You cannot use a USB memory with security functions such as password lock function or beyond 32 GB.

- Pure water (for T-shirt printing only)

It refers to such water as distilled water and purified water, which is used to dilute the pretreatment with it.

Note

- Avoid using such water as tap water in which impurities are contained.

- Pretreatment roller (option)

This is used to apply the pretreatment onto a T-shirt. It is advisable to use such a handgrip for the roller that is resistant to rust formation.

Note

- Separately provide a tray (container for dilution), handle (handgrip for roller), agent-coating table and weighing instrument for amount of coating.

- Spray (commercially available item)

This is used to apply the pretreatment onto a T-shirt. Use a spray (preferably of an electrically-operated type) that can emit fine spray. As compared with a roller, a spray allows for easy and even coating and reduces non-uniform coating, while it requires a special space for using it.

In addition to a spray, a pretreatment application device (commercial product) is available that can apply the pretreatment onto a T-shirt automatically. As required, make them available for use separately.

- Heat press

It must deliver the performance through which the print range of the size of a platen to be used can be covered and 180°C (356°F) can be kept for 35 seconds or more. At a fixing stage of the pretreatment, be sure to use the heat press, but not an oven, to smoothen the surface.

- Peel-off sheet

Always use this sheet to flatten the fixed surface and enhance the peel property when fixating the pretreatment and ink by means of the heat press. [Provisions for pretreatment on page 166](#)

- Silicone foam (of open-cell structure)

It is the foamed mattress which resists heat. Use this at a fixing stage through the use of the heat press.

- Adhesive roller (for T-shirt printing only)

Use these to remove lint from a T-shirt or debris from its surface.

- Transfer film (for film printing only)

Note

- Store away from high temperature and humidity according to the storage requirements for the film to be used. Not doing so may have unexpected effects on printing quality.

- Powder (for film printing only)

Note

- Store away from high temperature and humidity according to the storage requirements for the powder to be used. Not doing so may have unexpected effects on printing quality.

- Powder fixing device (for film printing only)

- T-shirt (printing medium)

- 100% cotton
- Polyester blended yarn fabric

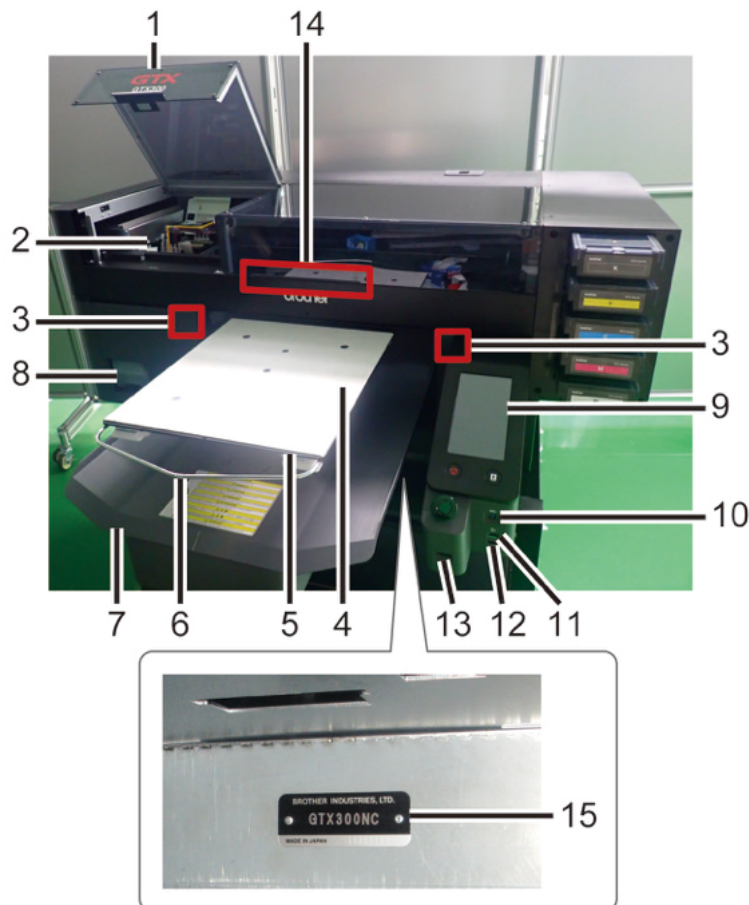


TIPS

- Although it is advisable to use a 100% cotton T-shirt, some textiles cannot necessarily guarantee good printing quality even if they are made of 100% cotton or blended yarn. In particular, for a T-shirt made of new material, perform a printing test on it beforehand.
- Perform a printing test beforehand to check the condition of the film and powder.
- Some textiles may leave noticeable imprints of the pretreatment after it is fixated. In that case, wash them away with water.
- Perform a printing test beforehand. Then, the following phenomena may occur:
 - The textiles may be discolored by the pretreatment and cannot be restored to the original color even if they are washed.
 - A deep-colored polyester blended yarn fabric dissolves dye, which may cause the white ink to change to a slightly different color.
 - It is likely that a textile may become yellowish in color after the pretreatment is fixated.

2.4 Name and function of each component

2.4.1 Front view



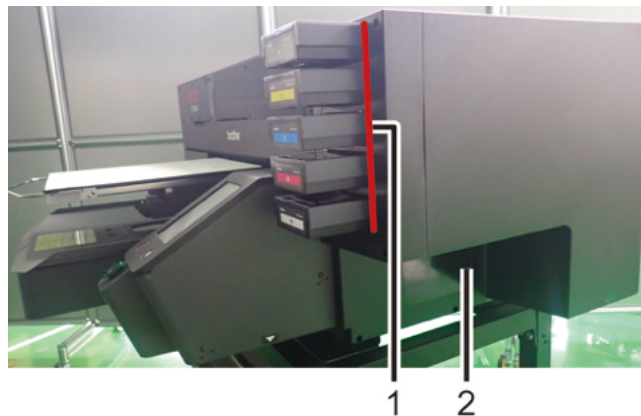
No.	Name	Function
1	Main unit cover	Open this cover when cleaning the internal area of the printer.
2	Carriage	Holds the print head.
3	Obstacle sensor	Checks the presence of any obstacles by their height (such as wrinkled T-shirt) that are within range to collide with the print head.
	"Platen too low" sensor	Make sure that the clearance between the head and platen is not too large.
4	Platen sheet	It helps to keep the T-shirt from moving/shifting during printing so that an image can be clearly printed.
5	Platen	Set the T-shirt to be printed.
6	Shoulder bar	Align the position of a T-shirt with this bar.
7	T-shirt tray	Holds such portions of T-shirt that droop down on it and feeds the entire T-shirt into the printer.
8	Cleaning solution tank	Reserves the cleaning solution used for maintenance.
9	Operation panel	Operate the printer using this panel.

Chapter 2

Before using your printer for the first time

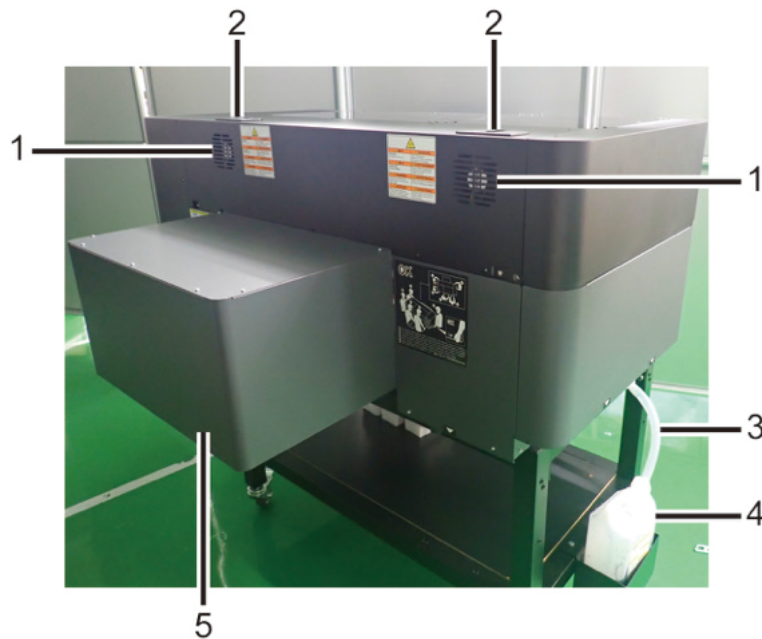
No.	Name	Function
10	USB flash memory insertion slot	Insert a USB flash memory into this slot.
11	LAN port	Insert the LAN cable which is to be connected with a PC.
12	USB port	Insert the USB cable which is to be connected with a PC.
13	Power button	Turn the power on/off to the printer. The power-off operation should be performed after completing any required operation. The standby power cannot be turned off.
14	Air intake	This opening serves as the ventilation hole. Keep it unobstructed.
15	Model plate	On this plate, a product serial number is inscribed.

2.4.2 Right side



No.	Name	Function
1	Ink cartridge slot	In the top-to-bottom order, the black (K), yellow (Y), cyan (C), magenta (M), and white (W) ink cartridges are shown here. Be sure to put each of the ink cartridges in their correct places.
2	Power cord insertion port	Insert the power cord into this port.

2.4.3 Left side view/Rear side view

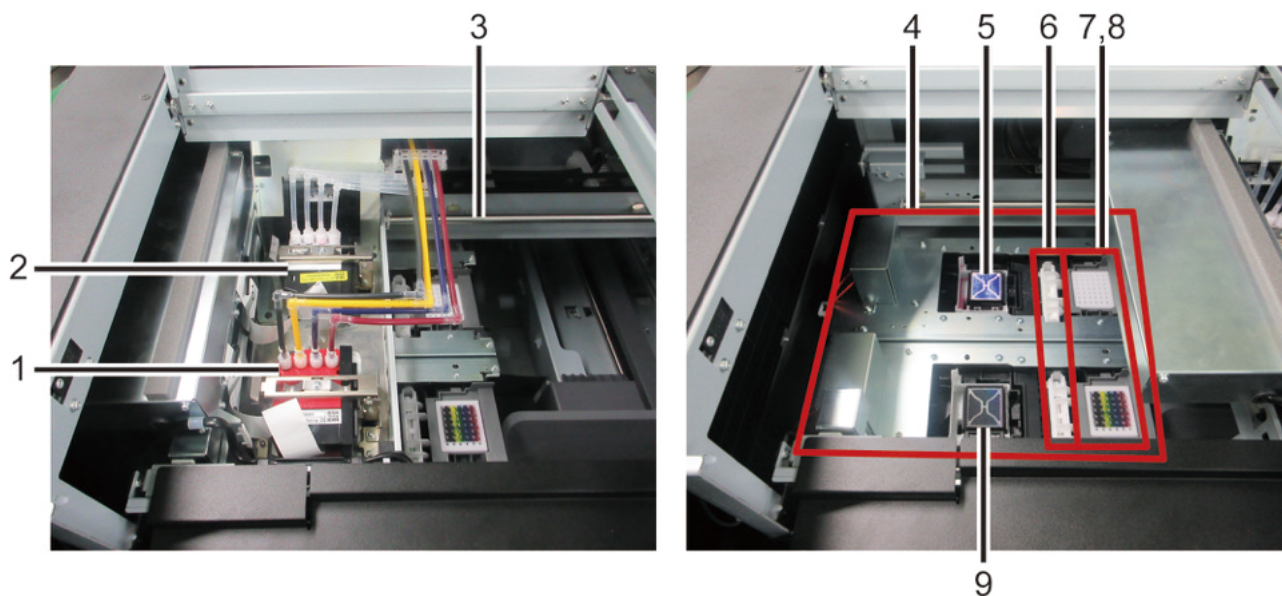


No.	Name	Function
1	Exhaust opening	This is the exhaust outlet for fan exhaust air. For proper use, keep this opening apart from the nearest wall by 7.9 in. (20 cm) or more.
2	Fan filter	It absorbs ink mist which is generated inside the printer on its surface.
3	Waste ink tube	This tube is used to direct the flow of waste ink down into the waste ink tank. Keep it unbent so that the flow of waste ink will not be obstructed.
4	Waste ink tank	This tank collects waste ink.
5	Rear cover	It protects the platen's working range.

2.4.4 Inside the main unit cover

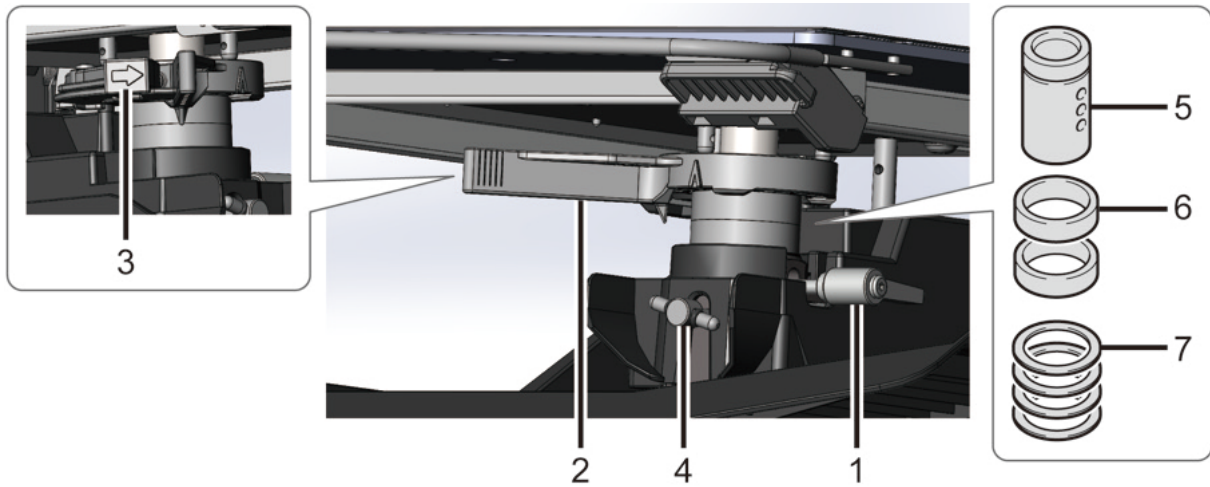
IMPORTANT

- Follow the corresponding instructions in the manual when you put your hands inside the cover during regular maintenance while the power is turned on.



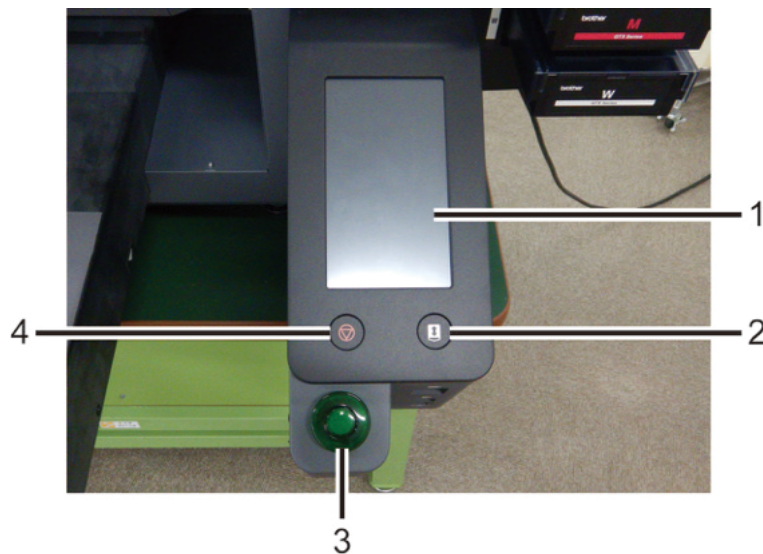
No.	Name	Function
1	Print head (front: on the color side)	It ejects the color ink.
2	Print head (rear: on the white side)	It ejects the white ink.
3	Carriage guide shaft	This shaft supports the carriage.
4	Maintenance unit	In order to keep good printing quality, this unit performs maintenance functions to the print heads on a regular basis. (Example: Auto-Cleaning Function)
5	Cap (rear: on the white side)	It protects the surface of heads on the white side, and sucks ink during head cleaning.
6	Wiper (for CMYK and white)	It wipes away ink from the head surface.
7	Flushing foam	To keep good printing quality the foam absorbs the ink-jet droplets ejected from the print head.
8	Flushing receiver	Set the flushing foam.
9	Cap (front: on the color side)	It protects the surface of heads on the color side, and sucks ink during head cleaning.

2.4.5 Bottom view of platen



No.	Name	Function
1	Platen fixing lever	Use this lever to secure the platen in place. Looseness may result in loss of image quality. Tighten or loosen it to adjust the height of the platen when attaching/removing the platen. Keep it tightened when printing.
2	Platen height adjustment lever	This lever should be used to adjust the platen's height.
3	Platen height adjustment lever tab	This tab should be used to switch the scale mark of platen height to "A-".
4	Knob	Use this knob to secure the platen bearing in place. This knob should be used to change the platen's height. Keep it tightened when printing. Looseness may result in loss of image quality.
5	Platen bearing	This is used to secure and hold the platen in place.
6	Collars	Used to change the platen's height by changing the number.
7	Spacer	Platen height of each machine is finely adjusted by the number of the spacer. Never tamper with or remove these spacers even if adjusting the collars or it will affect print output.

2.4.6 Operation panel



No.	Name	Function
1	Liquid crystal panel/touch panel	The panel displays information on print data, printer status, environment and errors and allows you to select and execute functions through the menu button at the bottom right of the panel.
2	Platen button 	It is used to move the platen toward the rear or front of the printer. Use this button to ascertain whether the platen is set to a proper height after the platen's height is adjusted.
3	Print button	There is no print data when this button remains off. This button blinks during reception of print data, and it illuminates when such reception is completed. Printing will begin if you press this button when it is illuminated.
4	Stop button 	With this button, such actions as printing and platen movement can be canceled. Printer will come to a stop after necessary actions for keeping the printer's good quality, such as retracting operation of print heads and capping operation, are completed. While the menu screen is being displayed, the screen will exit and return to the standby mode screen.

Liquid crystal panel

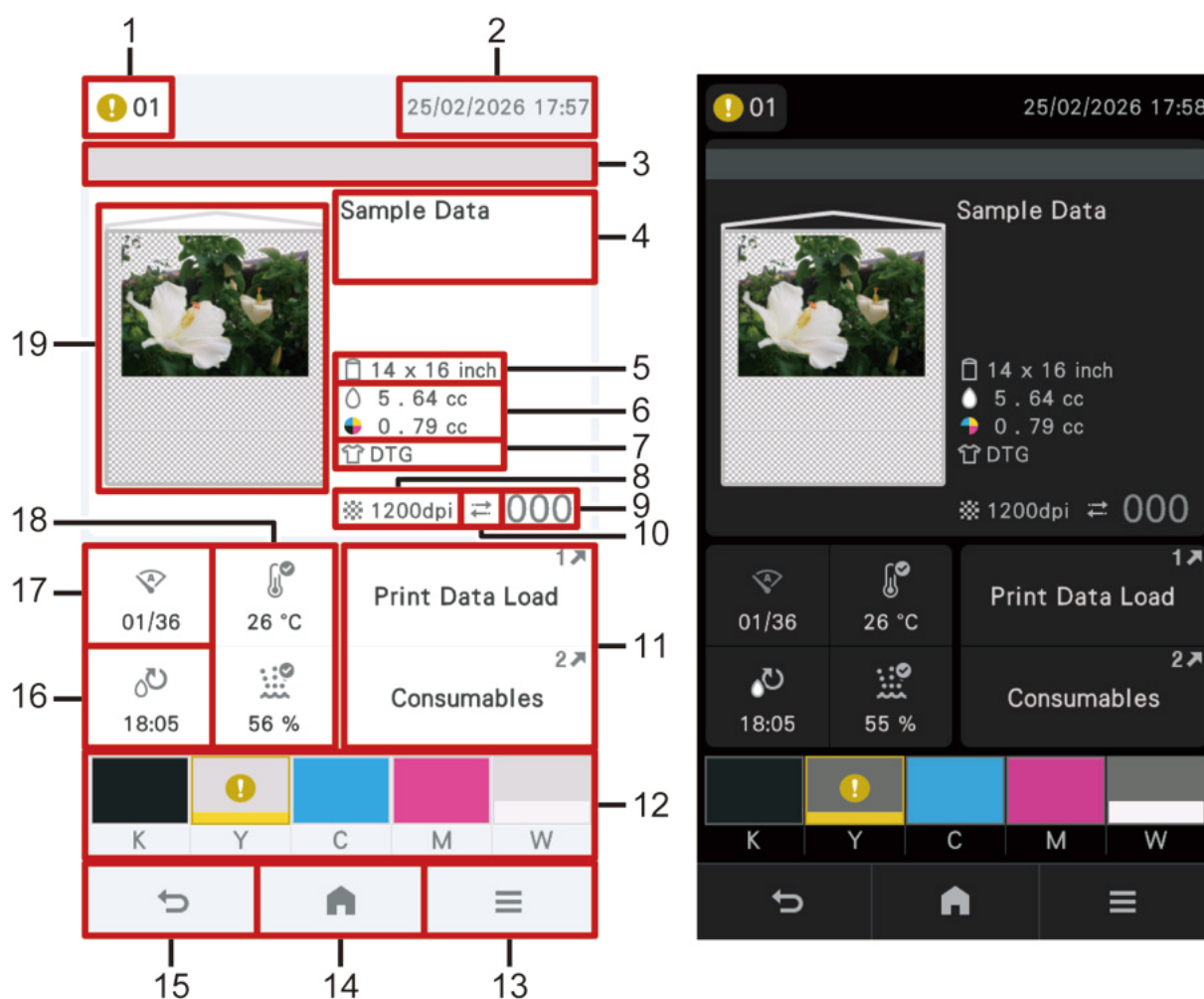
The picture shown below indicates a state under which the printer has received print data. On this screen, the printer's current state and necessary information for printing are displayed.



TIPS

- You can change the liquid crystal panel background modes.

[Panel background mode setting on page 291](#)



No.	Indications	Function
1	Warning mark	This mark appears when any warning is issued. Pressing causes the current screen to move to the warning screen where the applicable warning message is indicated.
2	Time display	The current date and time are displayed. You can change the date format from the menu.
3	Progress bar display area	It displays a state of progress during the process of printing and/or print-data reception.

Chapter 2

Before using your printer for the first time

No.	Indications	Function
4	Text string display area on basic display screen	In this area, the print job name or file name, auto cleaning, receiving state, standby state, etc. are shown.
5	Platen Size	Platen size that is specified by the print driver during file creation is indicated here.
6	Ink volume to be used	The required ink volume (cc) for printing out one sheet of the received print data is displayed here. (Each for color and white)
7	Print media icon	This icon shows whether the print is to be rendered on T-shirts (DTG) or film (DTF) according to the print data that you have created on the PC.
8	Resolution icon	The printing resolution of received print data is displayed here.
9	Number of printed sheets	The total number of printed sheets of which printing operation is completed in response to the received print data is displayed here. (0 to 999)
10	Print direction icon	The print direction is displayed here in the form of either bi-directional or the uni-directional icon.
11	Shortcut button	Pressing this button takes you to the menu that has been specified in the shortcut button setup menu.
12	Remaining ink volume indication area	In this area, current remaining ink volume of each cartridge is displayed. In the left-to-right order, the remaining ink volume in the black (K), yellow (Y), cyan (C), magenta (M), and white (W) ink cartridges are shown here.  : The remaining ink volume is running low. Make ink available for use in the next printing session. *1  : Ink has been depleted.
13	Menu button	Pressing this button takes you to the top of the user menu. Screen status will be canceled. *2
14	Home button	Pressing this button takes you to the standby display. Screen status will be canceled. *2
15	Undo button	Pressing this button returns you to the previous screen.
16	White ink circulation time display	The start time of the next white ink circulation is displayed. Pressing the [Mark Display] button allows you to check the time of scheduled white ink circulation that has been set from the PC.
17	Auto cleaning display	The number of sheets printed since the last auto cleaning is displayed. Irrespective of the number of sheets printed, the icon appears yellow when auto cleaning may be performed at the next print.
18	Humidity & temperature icons	The current temperature and humidity inside the printer are displayed.

No.	Indications	Function
19	Preview image	The preview display screen of received print data is shown in this window. The preview display screen shown here is indicated upside down as opposed to the page orientation (the upper side of the preview image is oriented toward the front of the printer main unit). Furthermore, it is possible to change the direction of the preview display screen as well.

IMPORTANT

*1: If you perform printing that requires a large volume of ink when the remaining ink level is low, the ink may be depleted during the printing process. As a rough indication, replace the ink pouch before you perform printing that requires 20 cc or more ink.

*2: In the case of screens for which cancellation is disabled, the menu button/home button is also disabled.

Chapter 3

Menu list

On-screen menu manipulation

What to do	How to operate
Start	Touching  on the touch panel in the wait state causes the current screen to move to the menu selection screen.
Select / Acknowledge	To select items, scroll or touch the touch panel.
Back	Touching  on the touch panel causes the current menu to change to another menu item which is one level higher in the menu layer.
Exit	• If you press  when a menu in the uppermost menu layer remains displayed, the menu will exit and the system will return to a standby state. • If you touch  and  on the touch panel when an optional menu remains displayed, the menu will exit and the system will return to a standby state.

Menu list

1st layer	2nd layer	3rd layer	Description
[Head Cleaning]	[Normal Cleaning]	[Color]	In the event that no ink-jet droplets are ejected, this menu item enables you to perform cleaning of all the nozzles of the color heads.
		[White]	In the event that no ink-jet droplets are ejected, this menu item enables you to perform cleaning of all the nozzles of the white heads.
		[All Print Heads]	In the event that no ink-jet droplets are ejected, this menu item enables you to perform cleaning of the nozzles of all the print heads.
	[Powerful Cleaning]	[Color]	In the event that the poor ejection of ink-jet droplets is not improved by means of the normal cleaning, use this menu item.
		[White]	
		[All Print Heads]	
	[Super Cleaning]	[Color]	In the event that the poor ejection of ink-jet droplets is not improved by means of the powerful cleaning, use this menu item.
		[White]	
		[All Print Heads]	
	[Flash Firing]	[Color]	Perform one of the flushing operations when the ink-jet droplets are not ejected stably.
		[White]	

1st layer	2nd layer	Description
[Test Print]	[Nozzle Check CMYK]	This is the test pattern to check to see if ink-jet drop-lets are ejected from the color heads properly or not.
	[Nozzle Check White]	This is the test pattern to check to see if ink-jet drop-lets are ejected from the white head(s) properly or not.
[Print Data Load]		Any print data stored in a USB flash memory (ARX3 or ARXP file) is loaded into the system.
[Receiving History]		By selecting this menu item, you can display any print data received in the order in which they are sorted from the newest to the oldest ones, and you can select any one of them.
[Maintenance]	[Cleaning/Replacing Maintenance Parts]	Used when performing printer maintenance.
	[White Ink Circulation]	
	[Head Replacement]	
	[Install Ink after Replacing Head]	
	[Initial Ink Installation]	
	[Air purge cleaning]	
	[Wiper installation]	
	[Operate wiper cleaning tank]	
[Get Log File]		Use it when instructed to do so by the service person.
[Printer Setting]	[Print settings]	Use when configuring the printer.
	[Cleaning settings]	
	[Display settings]	
	[IP Address Set]	
	[Network filtering]	
	[Shortcut button setting]	
[Printer operation information display]	[Consumables]	Use when needed.
	[Ink expiration date]	
	[Total Print]	
	[CTG Attach/Remove History]	
	[Check circulation schedule]	
	[Temperature and Humidity]	

1st layer	2nd layer	Description
[Confirm network setting]	[IP Address]	Use when needed.
	[Subnet Mask]	
	[Default Gateway]	
	[Host name]	
	[MAC address]	
[Language]		
[Version]	[Firm Version]	
	[Data Info]	
	[Serial No.]	
	[Head information]	
	[Open source license]	
	[Professional menu]	

Chapter 4

Installation and preparation

Be sure to use the printer after making correct setting in accordance with the instructions described in this chapter. Read [SAFETY INSTRUCTIONS on page 8](#) in the opening pages carefully before starting work.

4.1 Installing the printer

Please refer to the Setup Manual included with the printer, for details of unpacking procedures and installation procedures of the following accessories.

- Rear cover
- Filter cover / Fan filter
- Waste ink tube
- Wiper
- Flushing receiver / Flushing foam
- Platen

For an installation site of the printer, please bear the following points in mind:

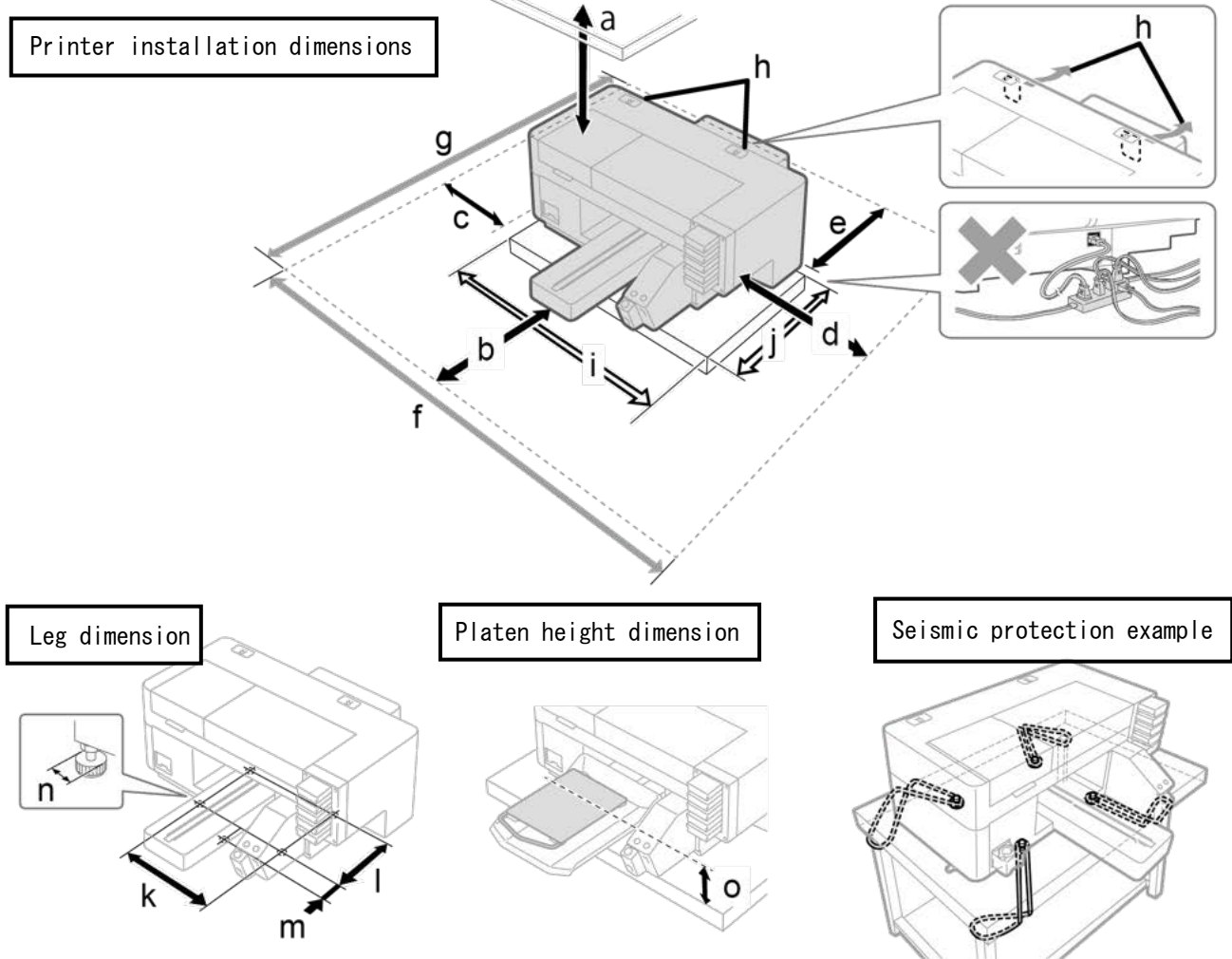
- When installing the printer, avoid any place that presents direct sunlight or a large amount of dust.
- The body size is 51.2 in. (width) x 59.1 in. (depth) x 22.6 in. (height) (130 cm (width) x 150 cm (depth) x 57.5 cm (height)). The main unit weighs 115 kg (254 lb).
- The dimensions of the legs are 21.5 in. (54.6 cm) in width and 13.8 in. (35 cm) in depth. The diameter of the legs is 1.6 in. (4 cm).

The printer has rubber fall-guard feet at its front. The size in depth is 17.7 in. (45 cm) including the rubber feet.

- The height from the table to the top surface of the platen is approx. 13.8 in. (35 cm).
- Do not use any extension cable.
- Ensure a work space of at least 39.4 in. (100 cm) on the front and right side of the printer and at least 15.7 in. (40 cm) at the back and on the left side of the printer.

Keep 19.7 in. (50 cm) or wider space free above the unit as well. As the air is exhausted toward the rear side, keep 7.9 in. (20 cm) or more space open behind the exhaust opening. If this space is not secured, you may have to move peripherals or the printer when making a repair.

- Be sure to use a table that supports the printer should be at least 35.4 in. (90 cm) in width and 23.6 in. (60 cm) in depth, and its top plate should be level and should be able to bear a weight of 150 kg (331 lb) or more without rattling the printer when in operation.
- When installing the printer, place a level gage on the top surface of the platen to make adjustments so that the main unit is set horizontally level.
- In preparation for a major earthquake or other natural disasters, fix the table and the main unit with a tool like a fixing band to prevent the main unit from falling from the table.
- When connecting the power cord to the printer, do not use a daisy chain.



	Location	Description	Required space
a	Top	Distance from ceiling	19.7 in. (50 cm) or more
b	Front	Distance from front	39.4 in. (100 cm) or more
c	Left side	Distance from left side	15.7 in. (40 cm) or more
d	Right side	Distance from right side	39.4 in. (100 cm) or more
e	Rear	Distance from rear side	15.7 in. (40 cm) or more
f	Working space	Width	133.9 in. (340 cm) or more
g		Depth	98.4 in. (250 cm) or more
h	Exhaust opening	Distance from exhaust opening	7.9 in. (20 cm) or more
i	Table on which to place printer	Width	35.4 in. (90 cm) or more
j		Depth	23.6 in. (60 cm) or more
k	Foot size	Width	21.5 in. (54.6 cm)
l		Depth	13.8 in. (35 cm)
m		Depth (including rubber feet)	17.7 in. (45 cm)

	Location	Description	Required space
n	Foot diameter		1.6 in. (4 cm)
o	Platen height	Height from the table to the platen's top surface	Approx. 13.8 in. (35 cm)

4.1.1 Installation of waste ink tank

Insert the supplied waste ink tube into the Y-shaped tube on the main body. Fasten the waste ink tank to a stable object, such as a table leg, with two pieces of string. Insert the waste ink tube into the waste ink tank.

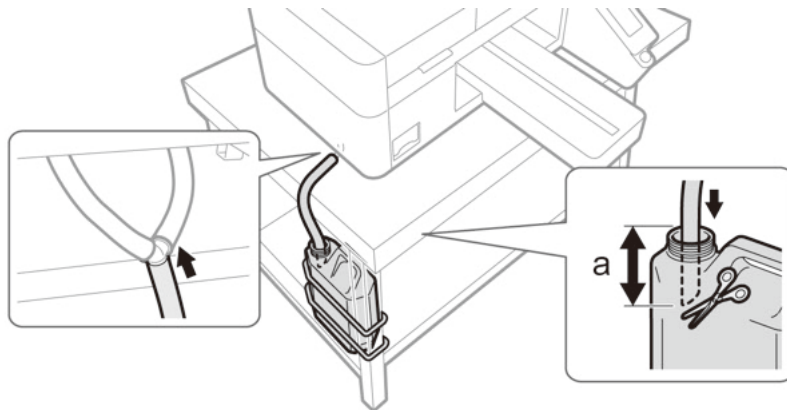
IMPORTANT

- If the tip of the waste ink tube immersed in liquid, it will prevent the smooth flow of liquid, and disable the ink suction operation of the head cleaning function. After the waste ink tank is fastened, the waste ink tube should be cut so that the length from the tube connection is 5.9 in. (15 cm) (a). The waste ink tube should be cut diagonally.
- Avoid placing the waste ink tube horizontally as much as possible, and be sure not to let it bend. Otherwise the waste ink may have difficulty flowing through the tube.



TIPS

- Install the waste ink tank at the front so that you can see the amount of waste ink accumulated.



4.1.2 Levelness adjustment

Prepare a level (precision ± 0.04 in. (1 mm)/39.4 in. (1 m) or higher) and a 0.7-in. (17-mm) wrench.

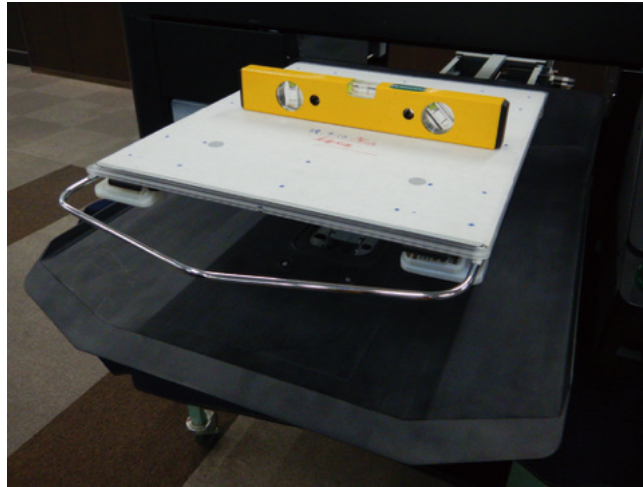
- 1 Make sure that the platen is in the front.



TIPS

- If the platen is in the back, press  on the operation panel to move the platen to the front.

- 2 Place a level on the top surface of the platen.



If the bubble (a) is to the right	If the bubble is to the left
Adjust the levelness by rotating the left adjusters (2 points).	Adjust the levelness by rotating the right adjusters (2 points).

- 3 Turn to loosen the two nuts that hold the adjusters (4 points) in place.

Adjust the levelness by rotating the lower nuts.

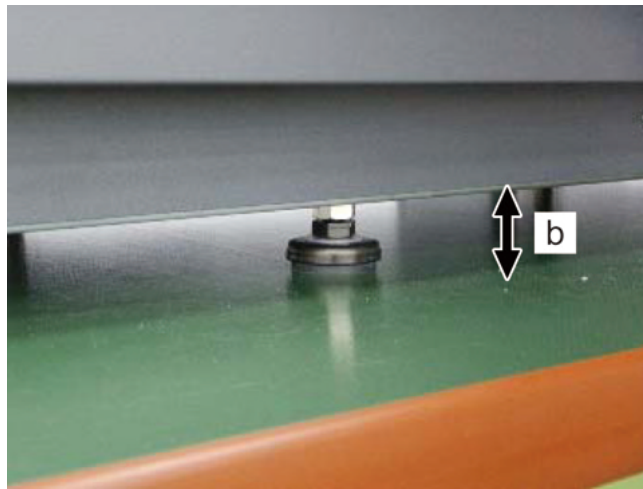
IMPORTANT

- Allow the height of the printer bottom from the installation table to be 1.4 in. (3.6 cm) or below (b).



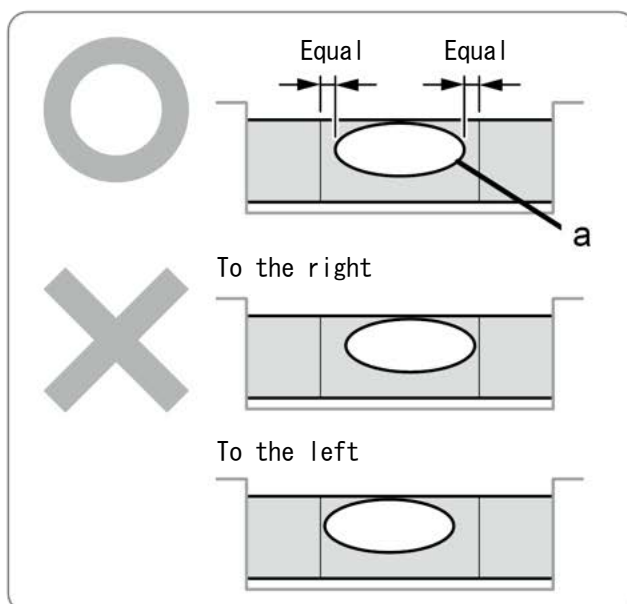
TIPS

- To increase the printer height, rotate the nut clockwise; to decrease the height, rotate the nut counterclockwise.



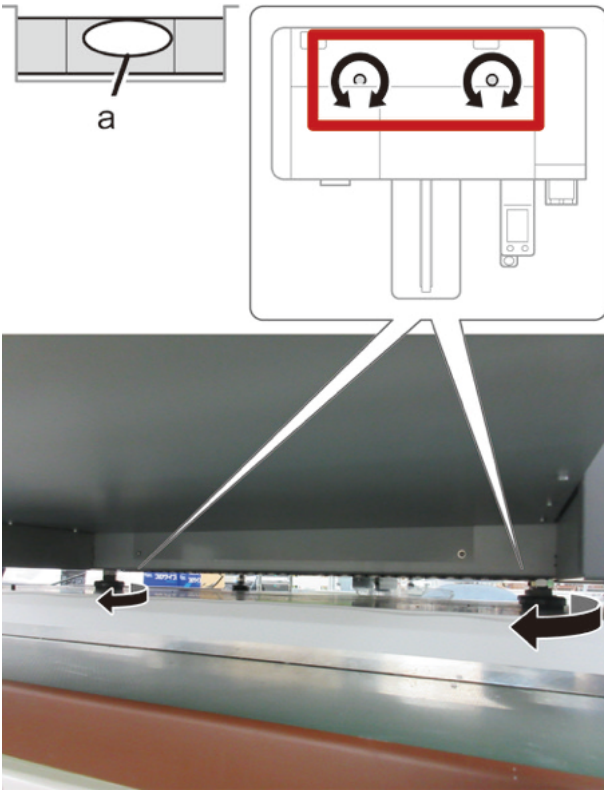
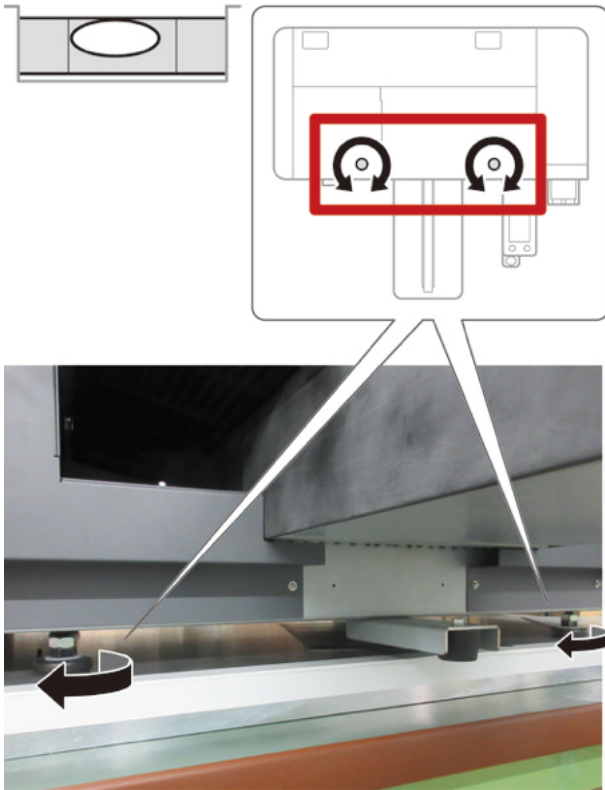
IMPORTANT

- Adjust the nuts so that the bubble (a) of the level is centered between the scale lines.

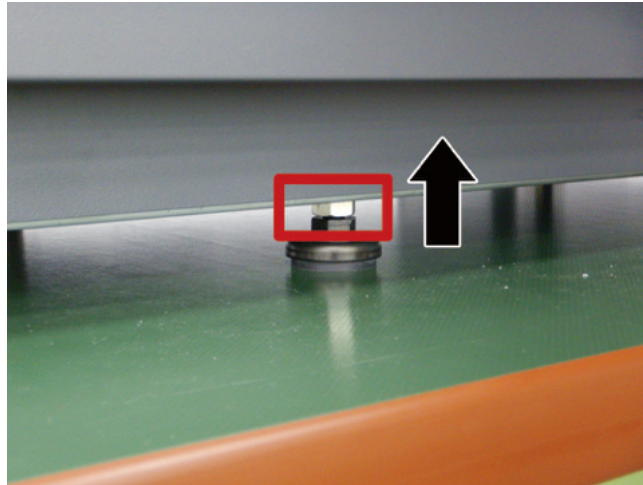


- 4 Adjust the levelness in the front-to-rear direction in the same manner.



If the bubble (a) is shifted to the right when viewed from the left side of the product:	If the bubble is shifted to the left when viewed from the left side of the product:
Adjust the levelness by rotating the rear adjusters (2 points). 	Adjust the levelness by rotating the front adjusters (2 points). 

- 5 Tighten the upper nuts upwards after adjusting the levelness.



IMPORTANT

- After securing everything, check the levelness again with a level in the front-to-rear and left-to-right directions.



TIPS

- If the installation location of the product is changed, check the levelness again with a level in the front-to-rear and left-to-right directions.

4.2 Power supply of printer

Even when the printer is placed in standby mode, such maintenance as white ink circulation is performed automatically. **PLEASE LEAVE THE PRINTER POWERED ON 24 HOURS A DAY.**



TIPS

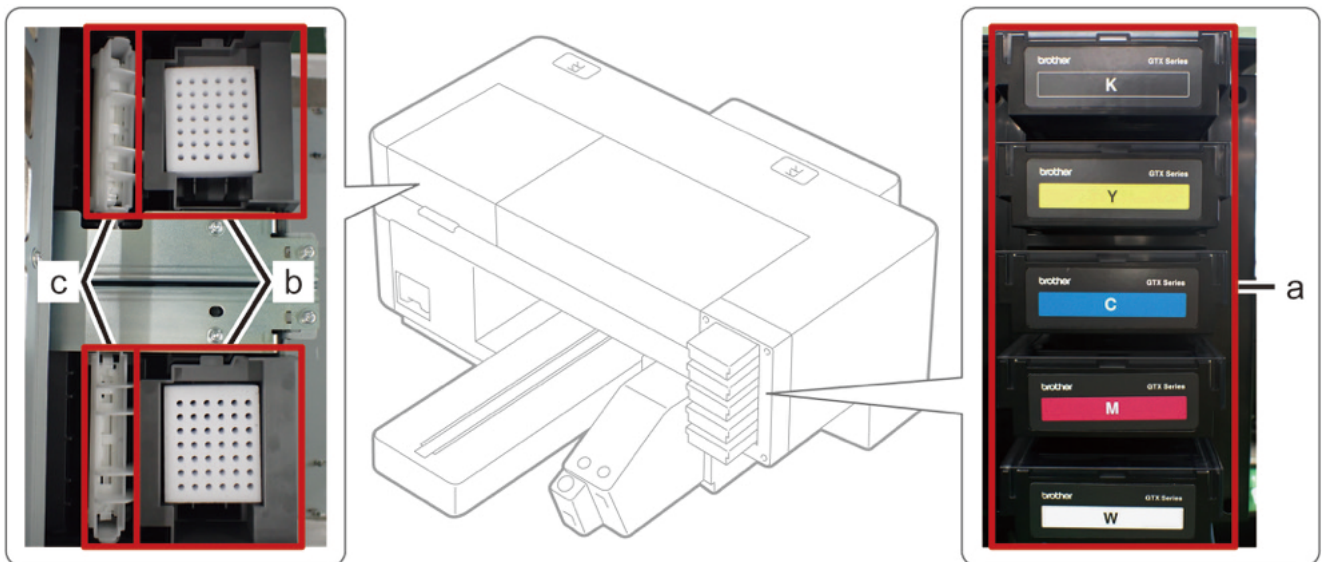
- Every time this printer is powered on or off, maintenance operations are performed to keep its print heads in good condition.
Turning on and off the power frequently causes more ink to be consumed because of the maintenance operations. In order to reduce the ink consumption, it is advisable to keep the power turned on for proper use of the printer.

4.2.1 Turning on the power

Please refer to the Setup Manual, after the unpacking procedures and installation procedures are completed.

Please check the following points, before connecting the power cord to the printer:

- Check that the cartridge is correctly installed. (a)
- Check that the flushing receiver is correctly installed. (b)
- Check that the wiper is installed correctly. (c)
- Ascertain whether the ink tube is connected to the print head correctly.



- Ascertain whether the waste ink tube is inserted into the waste ink tank which has been made available.
- Ascertain whether the rear cover is put in position.
- Ascertain whether there is enough cleaning solution in the cleaning solution tank and the tank is mounted correctly in place.
- Ascertain whether the required space (at least approx. 11.8 in. (30 cm)) for the platen to be moved forward is kept and the min. clearance (7.9 in. (20 cm)) is maintained at the back side of the printer for exhausting air from the exhaust opening.

- 1 Fully insert the power cord included with the printer to the printer's power cord insertion port.
- 2 Insert the power plug into an electric outlet.
- 3 Make sure that the printer's earth terminal is properly grounded.
- 4 With the main unit's cover being closed, turn on the power to the printer.

IMPORTANT

- Never power off the printer while it is in operation. Otherwise, the printer may be damaged.
- Do not turn off the power because if you do so, the printer may fail because necessary maintenance operations are not performed.



TIPS

- If the printer is activated after having been off for a long time, the maintenance operation including white ink circulation will be performed for up to 60 minutes.

4.2.2 Turning off the power

When you need to turn off the power

Turn off the power in the following cases.

- When instructed to do so for maintenance of the printer, etc.
- When moving the printer elsewhere.
- In the event that the power supply interruption is anticipated in advance, including the case where a planned power outage is scheduled.

IMPORTANT

- Any repair cost due to the damages by transportation shall be burdened by the customers. When moving or shipping the printer, please contact your Brother dealer.

How to turn off the power

- 1 Press the power button for a short time. (Release your finger when a beep sounds)

If the printer is operating, wait for it to finish.

- 2 Cleaning will start at the end of the print job.

Then the power will be turned off.

IMPORTANT

- No cleaning will be performed at the end of the print job to keep the print heads in good condition if you forcibly power off the printer such as by disconnecting the AC power cable before turning the power off. In these cases, the print heads may fail to eject ink-jet droplets. For this reason, be sure to activate the printer once again and perform the head cleaning after activation.

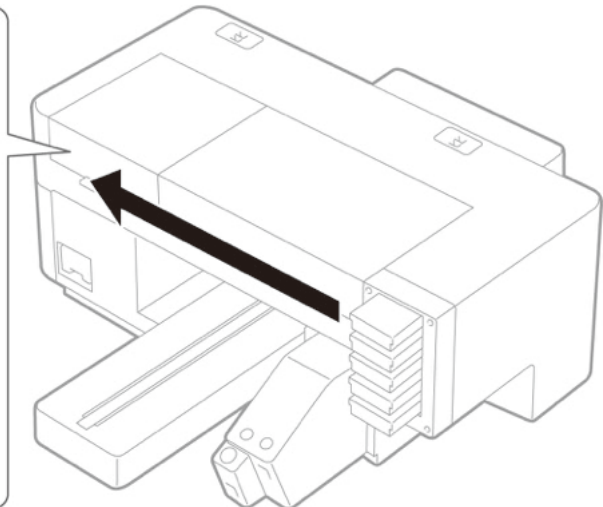
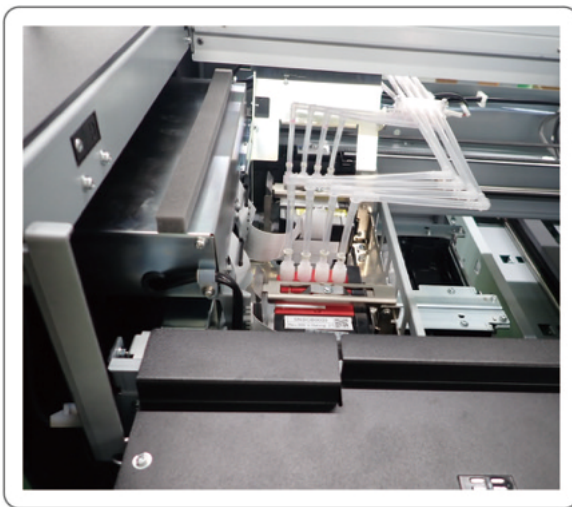
4.2.3 When there is no prospect of electric power recovery for a while due to power outage

- 1 Open the main unit cover and move the carriage to the left manually until it reaches the leftmost end.
- 2 When moved to the leftmost end, the carriage locks itself to get fastened.



TIPS

- Returning the carriage to the leftmost end (cap position) prevents the print head from drying up.



- 3 When the current state is brought to an available condition to turn on the power, restart the printer immediately.

IMPORTANT

- For this reason, be sure to activate the printer once again and perform the head cleaning after activation.

4.3 Connection between the Printer and PC (for Windows)

This chapter provides information about the procedures to install the GTX300 printer driver onto your PC and connection method of the printer to PC.

Proceed with the next step while checking each procedural step.

1 Installing printer driver onto your PC

[Installing printer driver onto your PC on page 53](#)

2 Connecting the printer to your PC

When connecting via USB	When connecting via LAN
Add a Printer to PC When connecting via a USB 2.0 cable: Adding the printer to the PC on page 54	- Set static IP address on PC - Set Printer static IP address When connecting via a LAN cable: Static IP address setting on page 56 - Add a Printer to PC When connecting via a LAN cable: Adding the printer to the PC on page 61 - Set static IP address on Printer main unit - Set Printer static IP address IP address setting on page 301 - Add a Printer to PC When connecting via a LAN cable: Adding the printer to the PC on page 61

3 Adjusting Printer

4.3.1 Installing printer driver onto your PC

To begin with, on your PC, install the printer driver for file output, "Brother GTX300 FileOutput".

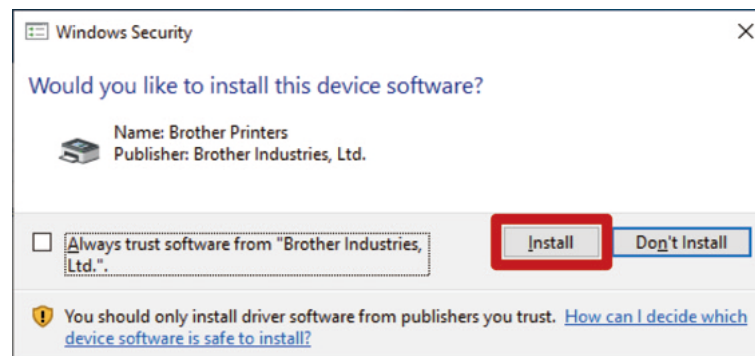
At this stage, do not connect the printer to your PC yet.



TIPS

- You must log into your PC with administrator privileges.

- 1 Activate the PC.
- 2 Complete all of the current sessions.
- 3 Double-click on the "setup.exe" to execute the installer.
- 4 Then, the installation procedures will begin. Follow the on-screen instructions to complete the installation.
- 5 When the dialog box shown below appears, click [Install].



- 6 After the installation is completed, reactivate the PC.

4.3.2 When connecting via a USB 2.0 cable: Adding the printer to the PC

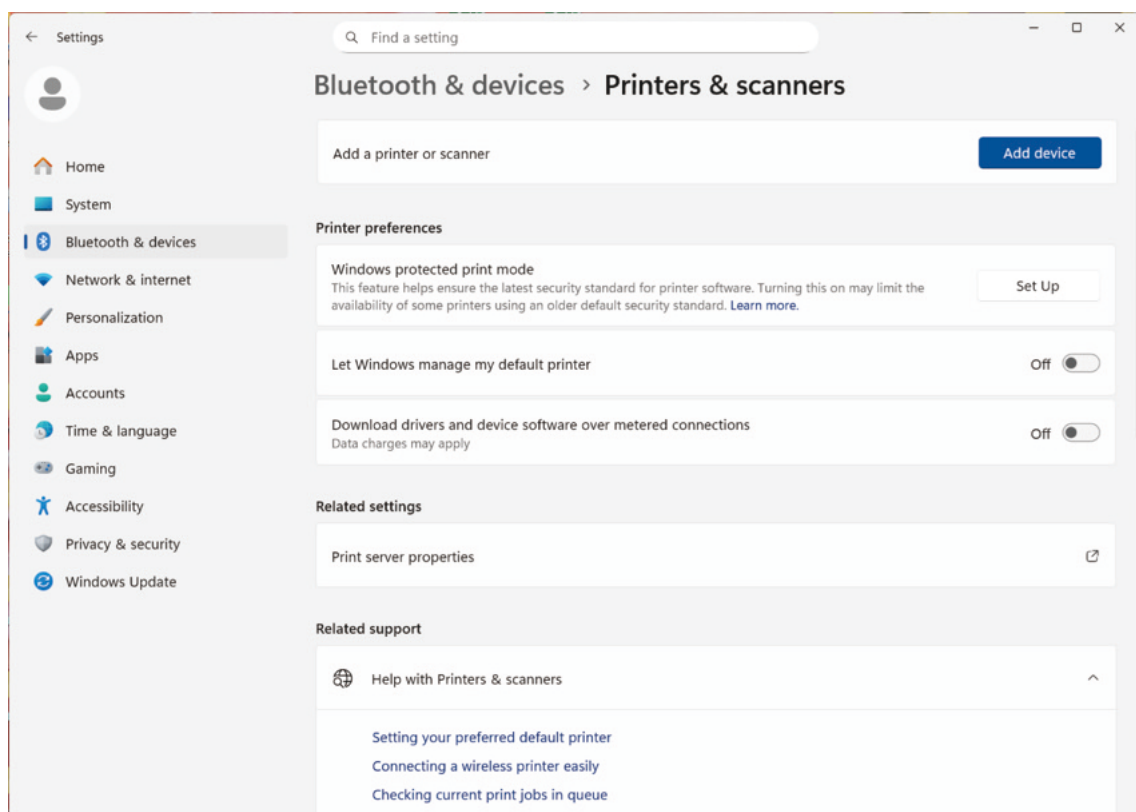
- 1 Once you have installed the printer driver, with the printer powered on, make a connection with a USB 2.0 cable between the printer and your PC.



TIPS

- Do not use any extension cable.
- You may skip step (2) if you can automatically select the printer driver for use. Follow the steps if it cannot be selected automatically.
- Connect the PC and the printer with a USB 2.0 cable after installing the printer driver. Connecting with a USB 2.0 cable before installing the printer driver may result in installation failure. In that case, uninstall the printer driver and try again.

- 2 Follow the on-screen instructions to complete the installation.
- 3 After the installation is completed, open [Settings] > [Bluetooth & devices] > [Printers & scanners].



- 4 Right-click the "Brother GTX300" icon or the "Brother GTX300 FileOutput" icon for file output, and select the [Set as default printer].
- 5 If LAN connection is required, perform static IP address setting on the printer and add the printer to the PC. If connecting only via USB and LAN connection is not required, configuration task on the PC is now completed.

- 6 Adjust the printer using "GTX Maintenance #".

**TIPS**

- The "#" of "GTX Maintenance #" is the version number. The version number changes with app update.

	Menu name to execute	Operation mode selected on the printer		See the operating procedure with GTX Maintenance #
		White and color ink mode	Color ink mode	
1	[Firing Adjustment]	Performed	Performed for color head only	Firing adjustment on page 81
2	[Platen-Rolling Adjustment]	Performed	Performed	Platen feed adjustment on page 83
3	[White/Color Alignment]	Performed	Not required	White/color alignment on page 84
4	[Setting of the time displayed on the nozzle check pattern]	Performed	Performed	Setting of the time displayed on the nozzle check pattern on page 85
5	[Setting of the scheduled time for white ink circulation]	Performed	Not required	Setting the scheduled time for white ink circulation on page 87

4.3.3 When connecting via a LAN cable: Static IP address setting

When connecting via LAN, the printer's static IP address needs to be obtained beforehand. There are two ways to set a static IP address for the printer: From the PC and from the printer. For information on the setting from the printer, see Chapter 8. [IP address setting on page 301](#)



TIPS

- If the PC cannot recognize the Printer, a correct static IP address might not be assigned. [When connecting via a LAN cable: Adding the printer to the PC on page 61](#)
Consult your administrator.

1 With the printer powered on, make a connection with a USB 2.0 cable between the printer and your PC.

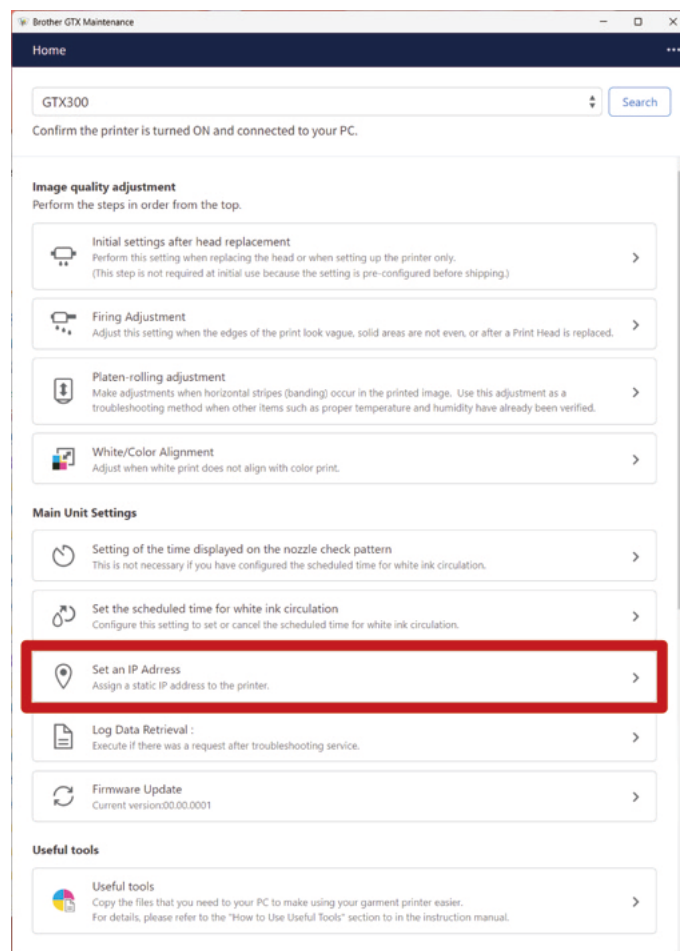
2 From the Start menu, select "GTX Maintenance #" from "Brother GTX Maintenance Tools".



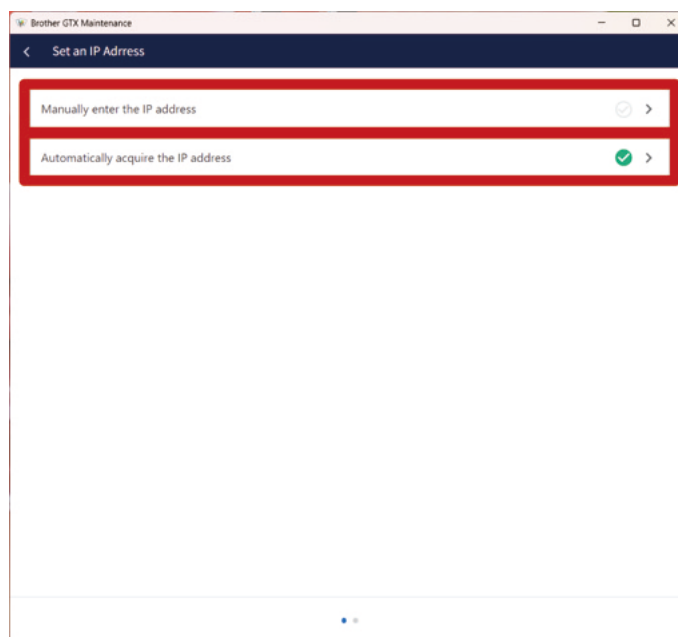
TIPS

- The "#" of "GTX Maintenance #" is the version number. The version number changes with app update.

3 After the window shown below appears, select [Set an IP Address].



- 4 Select the desired IP address setting method.



If you selected "Manually enter the IP address"

- 5 Enter each of the pre-determined values of the printer for [IP Address], [Subnet Mask], and [Default Gateway], and click [Complete]. (One instance of each value is cited as shown in the window below.)

Brother GTX Maintenance

< Set an IP Address

Input IP address, Subnet Mask and the default Gateway to the printer.

IP Address
192 . 168 . 0 . 0

Subnet Mask
255 . 255 . 255 . 0

Default Gateway
0 . 0 . 0 . 0

< Previous Complete

If you selected "Automatically acquire the IP address"

- 5 Enter the host name to be set for the printer and click [Complete].



TIPS

- The host name can contain up to 31 characters.

Brother GTX Maintenance

< Set an IP Address

Enter the host name to be associated with the printer.

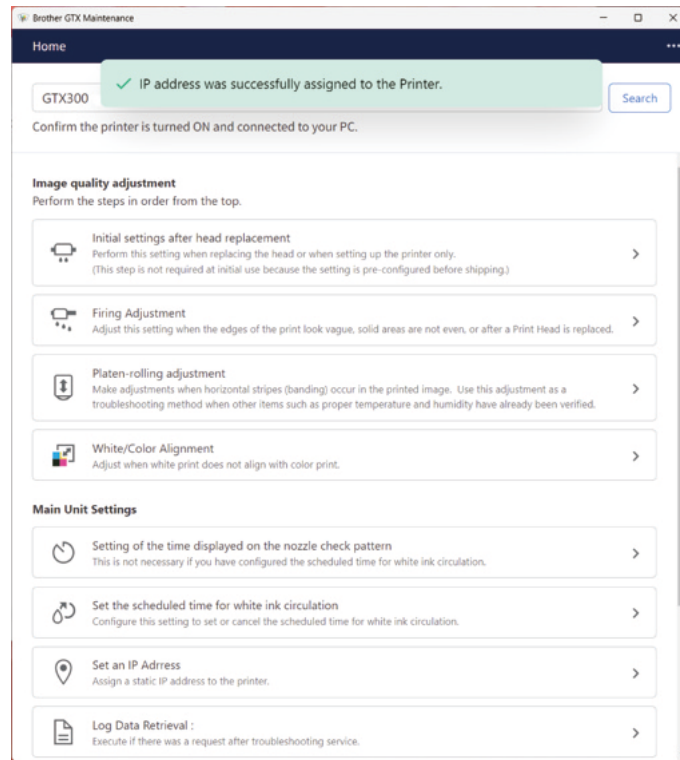
Host name
host-name

Press "Complete" to automatically acquire the IP address.

< Previous Complete

- 6 The steps are completed when the message [IP address was successfully assigned to the Printer.] is displayed.

If there is any error in each of the values you have entered for the static IP Address, Subnet Mask, and Default Gateway, an error message to inform you accordingly will appear. In this case, correct the error and attempt the process again.



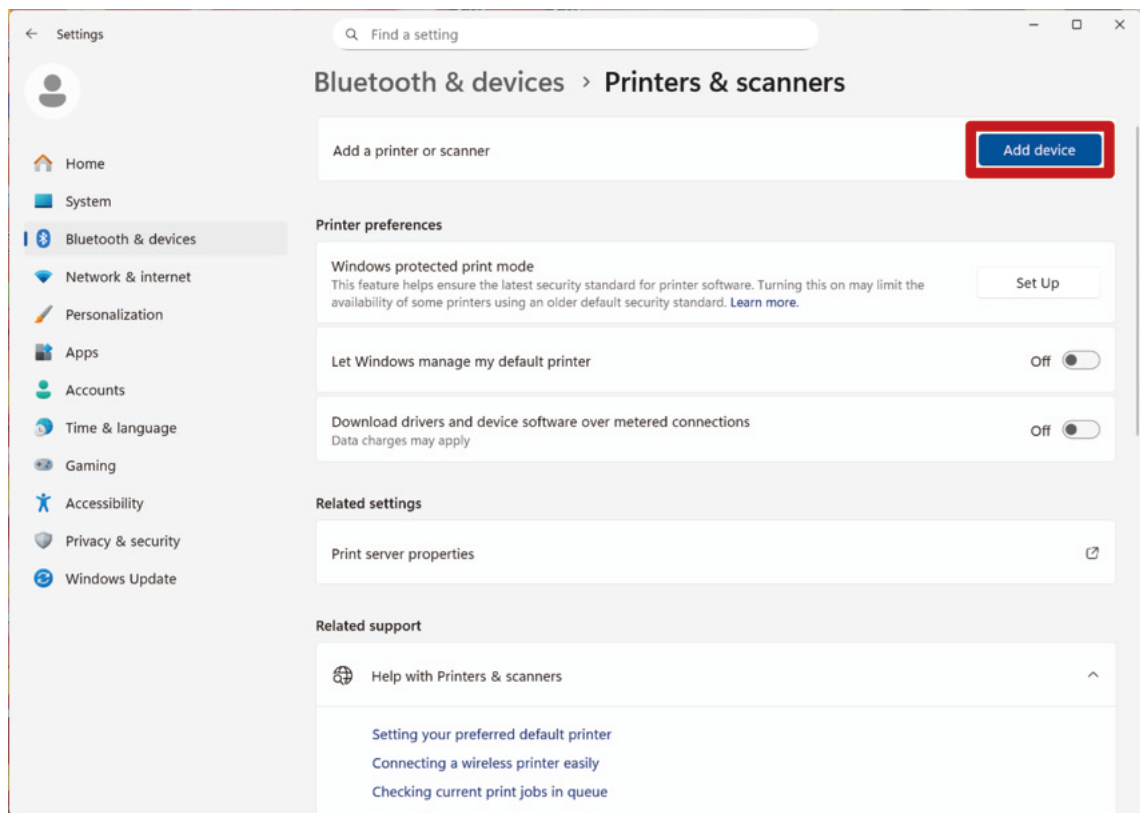
4.3.4 When connecting via a LAN cable: Adding the printer to the PC

Before connecting via LAN, set the IP address for the printer.

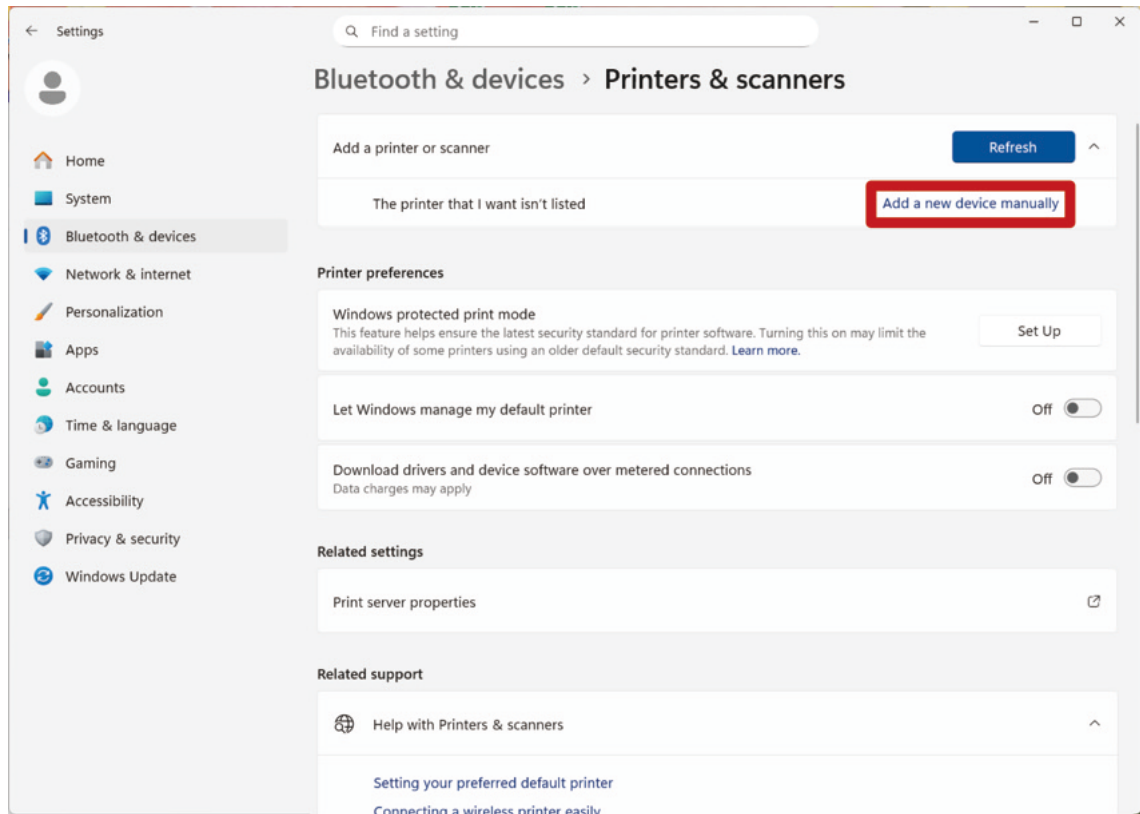
Then, add the printer to your PC according to the procedure specified below.

[IP address setting on page 301](#)

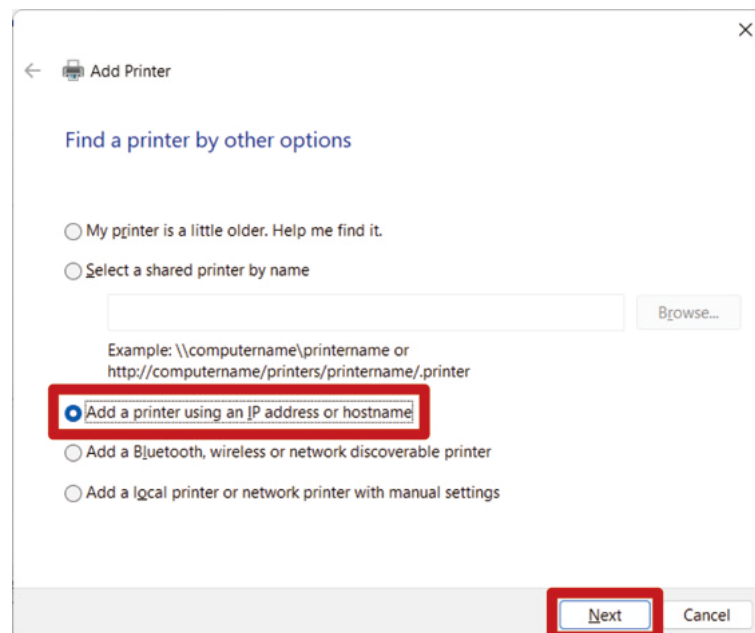
- 1 Connect your PC with the printer by means of the LAN cable to make a network connection, and power on the printer.
- 2 Select [Bluetooth & devices] > [Printers & scanners] from [Settings].
- 3 Click [Add device].



4 Select [Add a new device manually].



5 Select [Add a printer using an IP address or hostname], then click [Next].



- 6 Select [TCP/IP Device] in [Device type] and fill in [Hostname or IP address] with the IP address of the set printer. Make sure that [Query the printer and automatically select the driver to use] is checked, and click [Next]. (One instance of each value is cited as shown in the window below.)

The screenshot shows the 'Add Printer' window with the following fields and settings:

- Device type:** TCP/IP Device
- Hostname or IP address:** 192.168.0.0
- Port name:** 192.168.0.0
- ☒ Query the printer and automatically select the driver to use

At the bottom, there is a 'Next' button and a 'Cancel' button. A note at the bottom states: 'Autodetect detects WSD and TCP/IP printers. To search for an IPP printer, IPP must be selected from the drop down menu.'

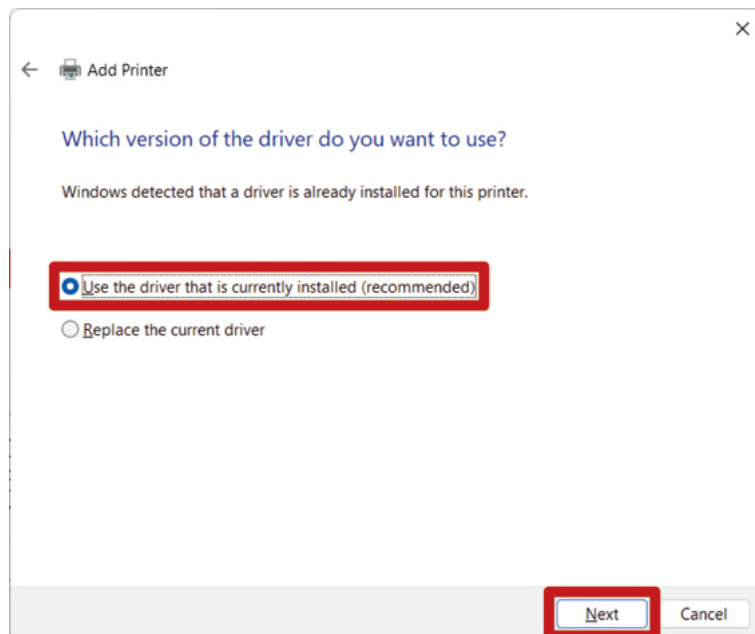


TIPS

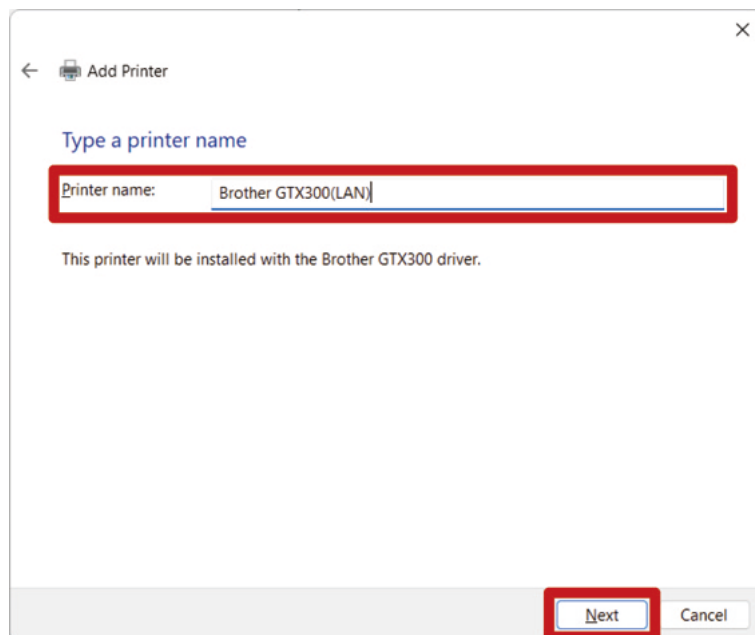
- You can omit steps (7) through (9) if the printer driver to use is automatically selected. Follow the steps if it cannot be selected automatically.
- If you set the printer's IP address by automatic acquisition, you must check the IP address of the printer in advance. You can check it by selecting [Confirm network setting] > [IP Address] from the printer menu. [Confirm network setting on page 311](#)
- If you are using a DNS server, you can use a host name and domain name instead of the IP address. Enter the host name of your choice. [When connecting via a LAN cable: Static IP address setting on page 56](#) As for the domain name, check with your network administrator.
- When the printer screen displays "00X", enter "X" in the IP address field.

- 7 Then, the detection window of TCP/IP port appears, and the current window will automatically go to the additional port information window after the detection is completed.

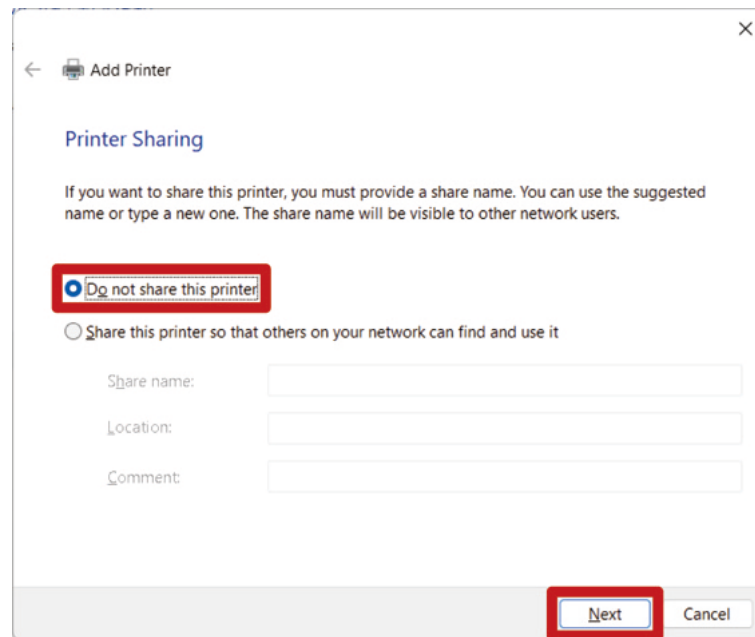
- 8 After the window shown below appears, select [Use the driver that is currently installed (recommended)], and click [Next].



- 9 Enter [Printer name], and click [Next].



- 10 Then, the specified printer will be added to the system, following which the window shown below appears, select the [Do not share this printer], and click [Next].

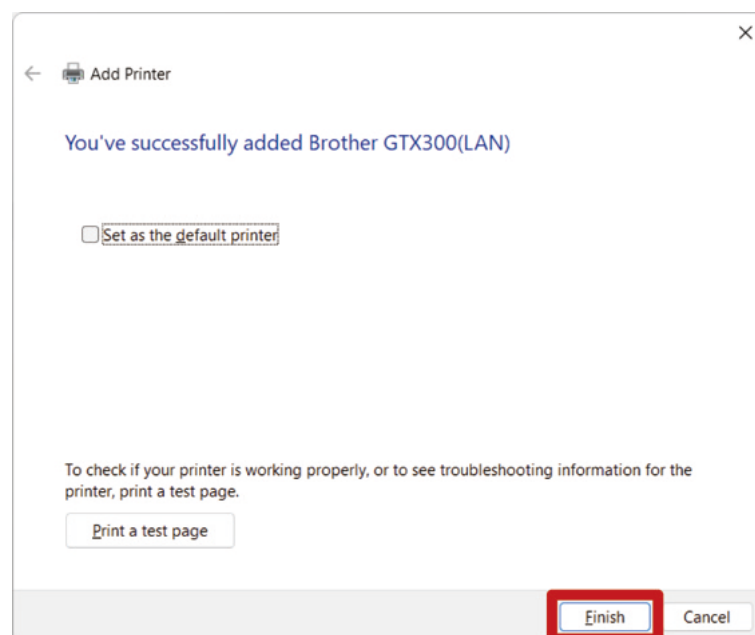


- 11 Click [Finish]. This exits the setting for the PC.



TIPS

- If the PC cannot recognize the Printer, a correct static IP address might not be assigned. Consult your administrator.



- 12 Adjust the printer using "GTX Maintenance #".



TIPS

- The "#" of "GTX Maintenance #" is the version number. The version number changes with app update.

	Menu name to execute	Operation mode selected on the printer		See the operating procedure with GTX Maintenance #
		White and color ink mode	Color ink mode	
1	[Firing Adjustment]	Performed	Performed for color head only	Firing adjustment on page 81
2	[Platen-Rolling Adjustment]	Performed	Performed	Platen feed adjustment on page 83
3	[White/Color Alignment]	Performed	Not required	White/color alignment on page 84
4	[Setting of the time displayed on the nozzle check pattern]	Performed	Performed	Setting of the time displayed on the nozzle check pattern on page 85
5	[Setting of the scheduled time for white ink circulation]	Performed	Not required	Setting the scheduled time for white ink circulation on page 87

4.4 Connection between the Printer and PC (for Macintosh)

This chapter provides information about the procedures to install the GTX300 printer driver onto your PC and connection method of the printer to PC.

You can connect the printer to your PC using either a USB cable or a LAN cable.

Proceed with the next step while checking each procedural step.

1 Installing printer driver onto your PC

[Installing printer driver onto your PC on page 68](#)

2 Connecting the printer to your PC

When connecting via USB	When connecting via LAN
Add a Printer to PC When connecting via a USB 2.0 cable: Adding the printer to the PC on page 69	- Set static IP address on PC - Set Printer static IP address When connecting via a LAN cable: Static IP address setting on page 56 - Add a Printer to PC When connecting via a LAN cable: Adding the printer to the PC on page 73 - Set static IP address on Printer main unit - Set Printer static IP address IP address setting on page 301 - Add a Printer to PC When connecting via a LAN cable: Adding the printer to the PC on page 73

3 Adjusting Printer

4.4.1 Installing printer driver onto your PC

To begin with, on your PC, install the printer driver for file output, "Brother GTX300 FileOutput".

At this stage, do not connect the printer to your PC yet.



TIPS

- You must log into your PC with administrator privileges.

- 1 Activate the PC.
- 2 Complete all of the current sessions.
- 3 Double-click on "GTX300-Ver***.pkg" to execute the installer.
- 4 Then, the installation procedures will begin. Follow the on-screen instructions to complete the installation.
- 5 After the installation is completed, reactivate the PC.

4.4.2 When connecting via a USB 2.0 cable: Adding the printer to the PC

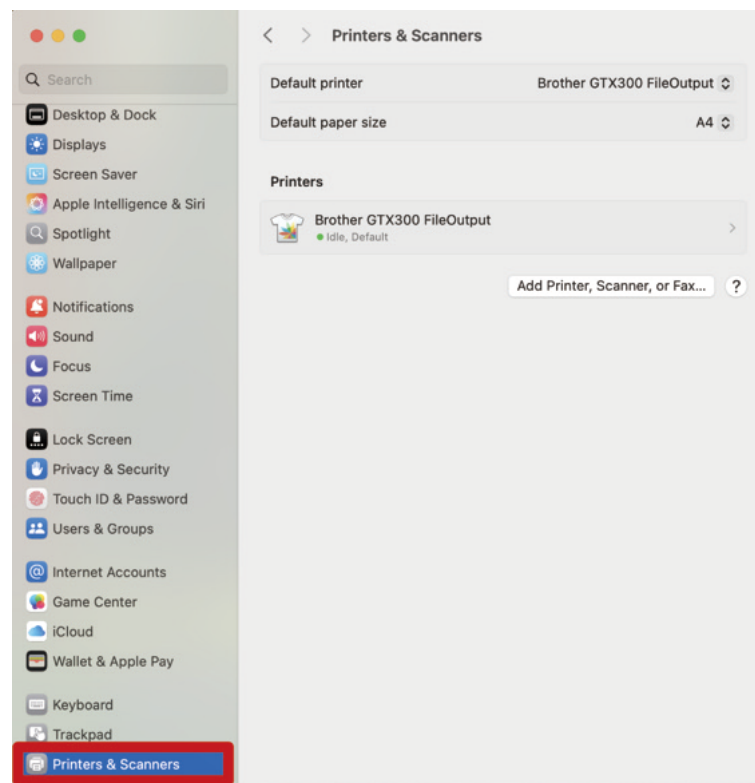
- 1 With the printer powered on, make a connection with a USB 2.0 cable between the printer and your PC.



TIPS

- Do not use any extension cable.
- You can omit steps (2) through (6) if the printer driver to use is automatically selected.
Follow the steps if it cannot be selected automatically.
- Connect the PC and the printer with a USB 2.0 cable after installing the printer driver.
Connecting with a USB 2.0 cable before installing the printer driver may result in installation failure. In that case, uninstall the printer driver and try again.

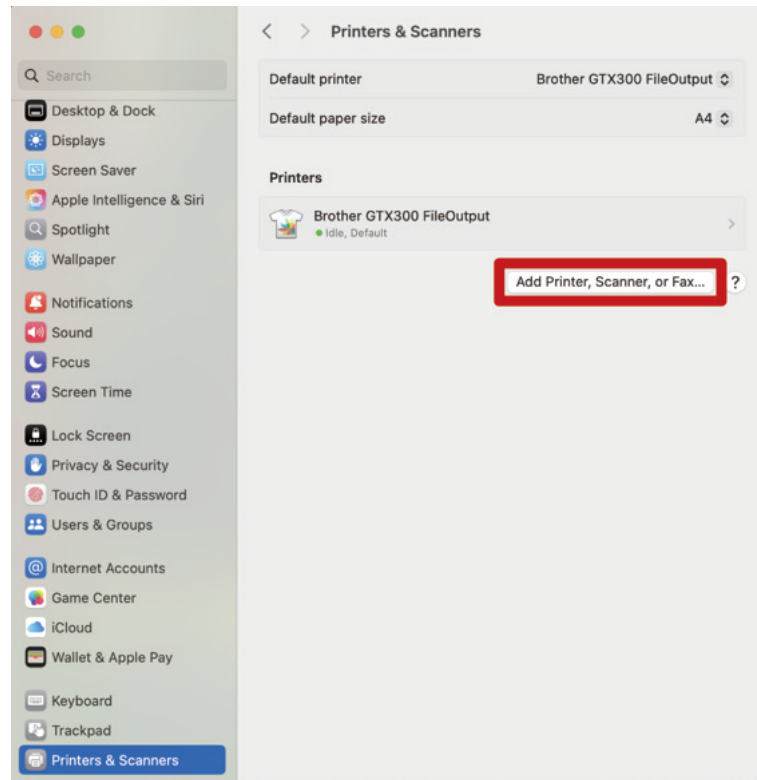
- 2 Open [System Settings] from the Apple menu and click [Printers & Scanners].



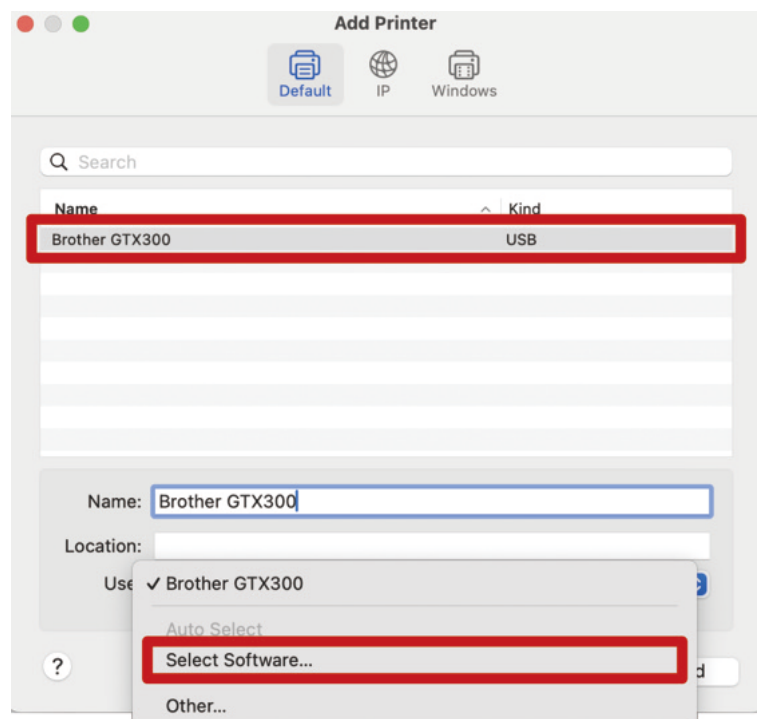
Chapter 4

Installation and preparation

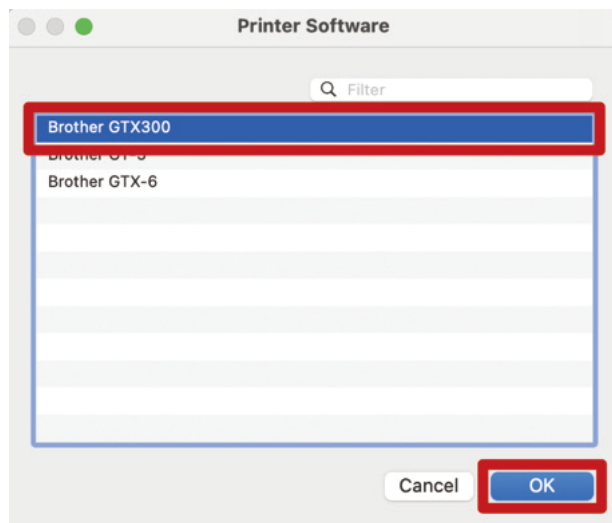
- 3 Click [Add Printer, Scanner, or Fax...] at the bottom right.



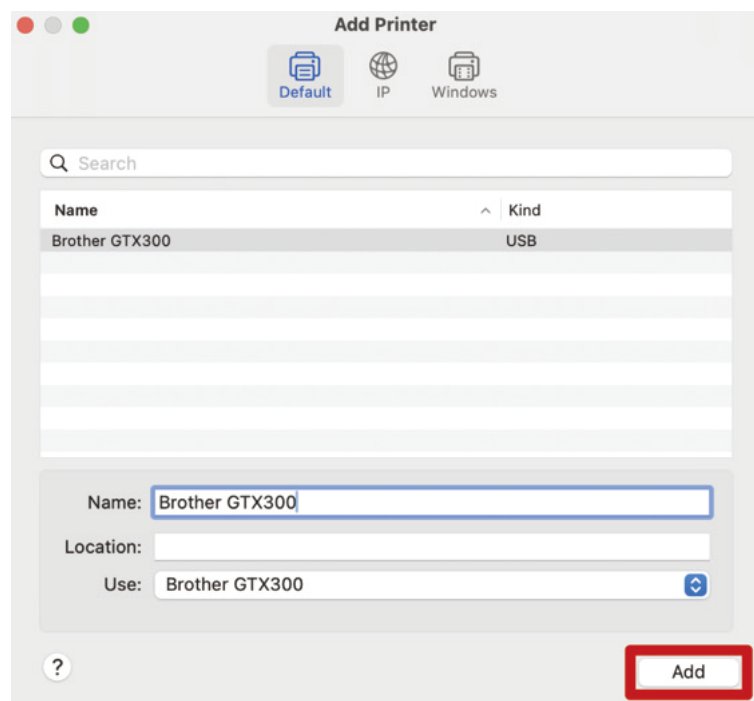
- 4 Select [Brother GTX300 xxx] and click [Select Software...] under [Use].



- 5 Select [Brother GTX300] and click [OK].

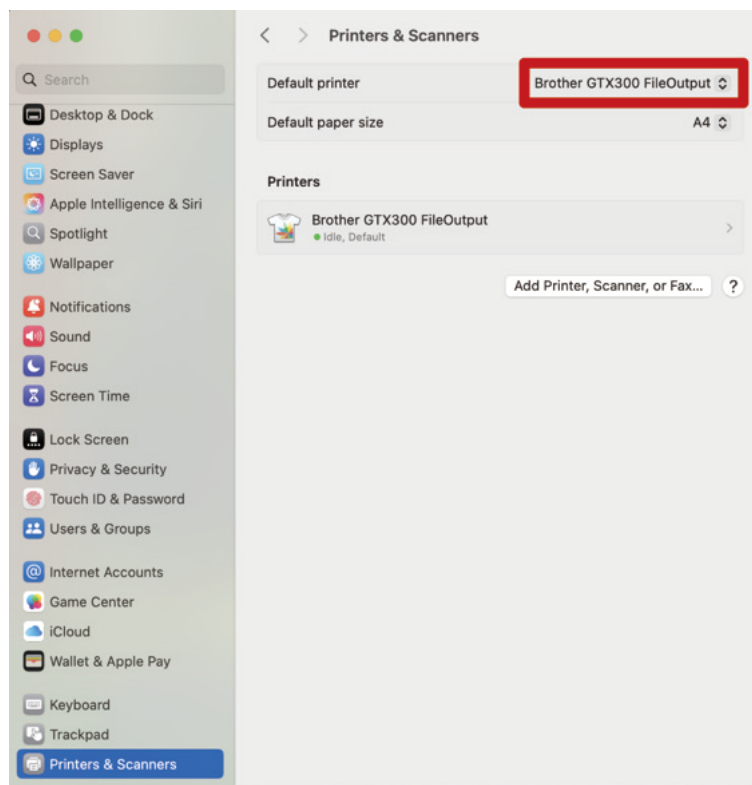


- 6 Click [Add].



- 7 Select [GTX300] or [GTX300 FileOutput] from [Default printer].

This exits the USB connection setting.



- 8 Adjust the printer using "GTX Maintenance #".



TIPS

- The "#" of "GTX Maintenance #" is the version number. The version number changes with app update.

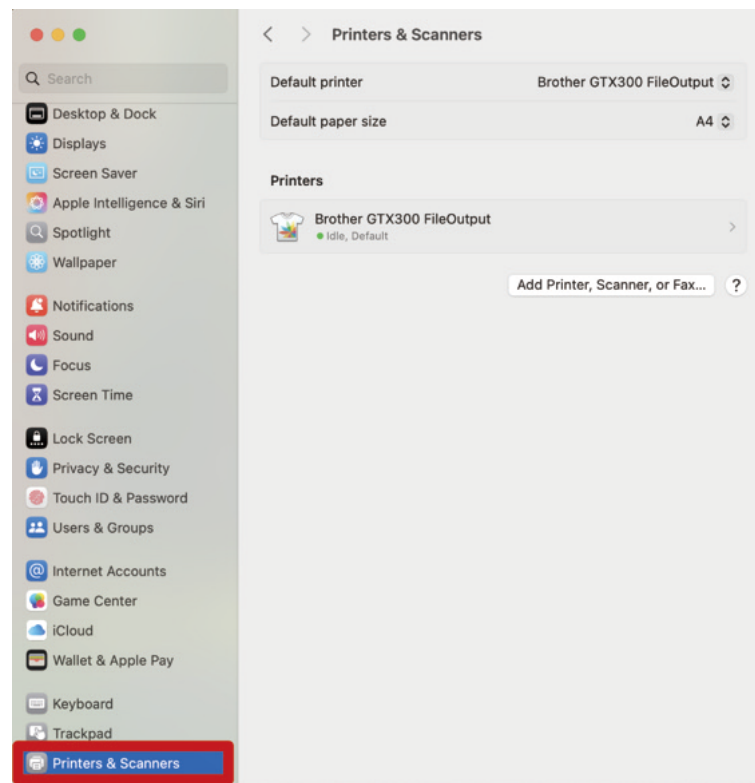
	Menu name to execute	Operation mode selected on the printer		See the operating procedure with GTX Maintenance #
		White and color ink mode	Color ink mode	
1	[Firing Adjustment]	Performed	Performed for color head only	Firing adjustment on page 81
2	[Platen-Rolling Adjustment]	Performed	Performed	Platen feed adjustment on page 83
3	[White/Color Alignment]	Performed	Not required	White/color alignment on page 84
4	[Setting of the time displayed on the nozzle check pattern]	Performed	Performed	Setting of the time displayed on the nozzle check pattern on page 85
5	[Setting of the scheduled time for white ink circulation]	Performed	Not required	Setting the scheduled time for white ink circulation on page 87

4.4.3 When connecting via a LAN cable: Adding the printer to the PC

When connecting via LAN, refer to the Instruction Manual and set the IP address for the printer.

Then, add the printer to your PC according to the procedure specified below.

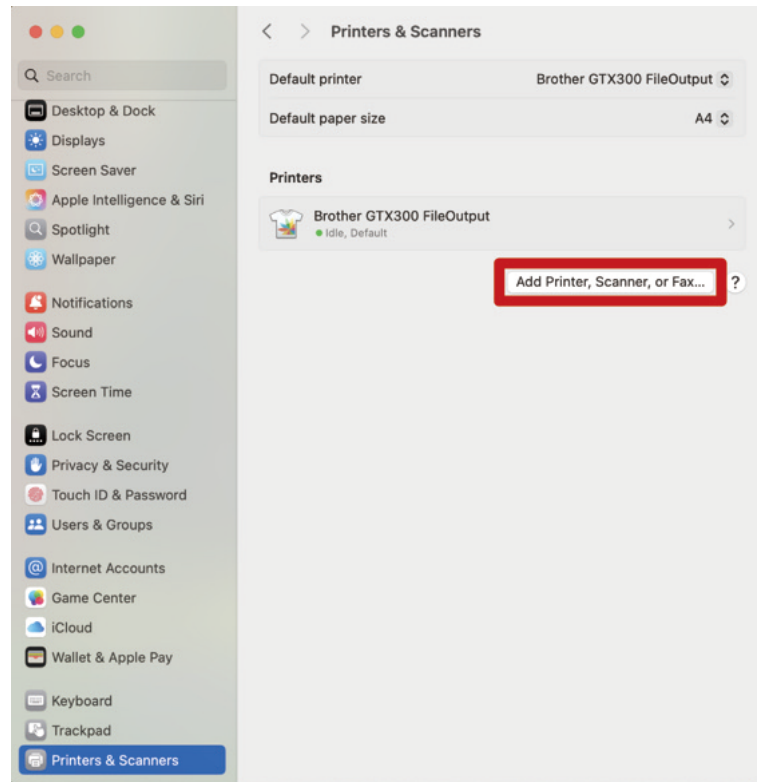
- 1 Connect your PC with the printer by means of the LAN cable to make a network connection, and power on the printer.
- 2 Open [System Settings] from the Apple menu and click [Printers & Scanners].



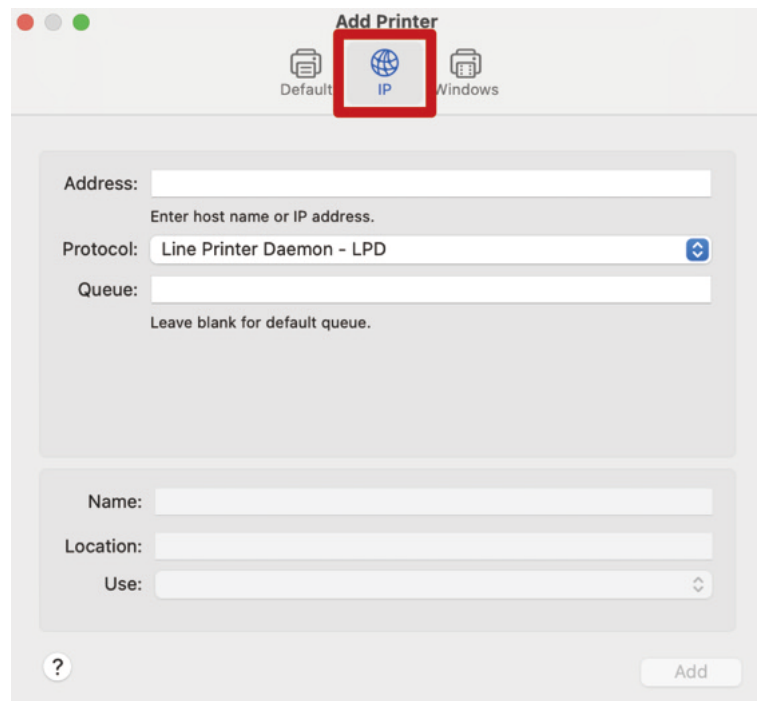
Chapter 4

Installation and preparation

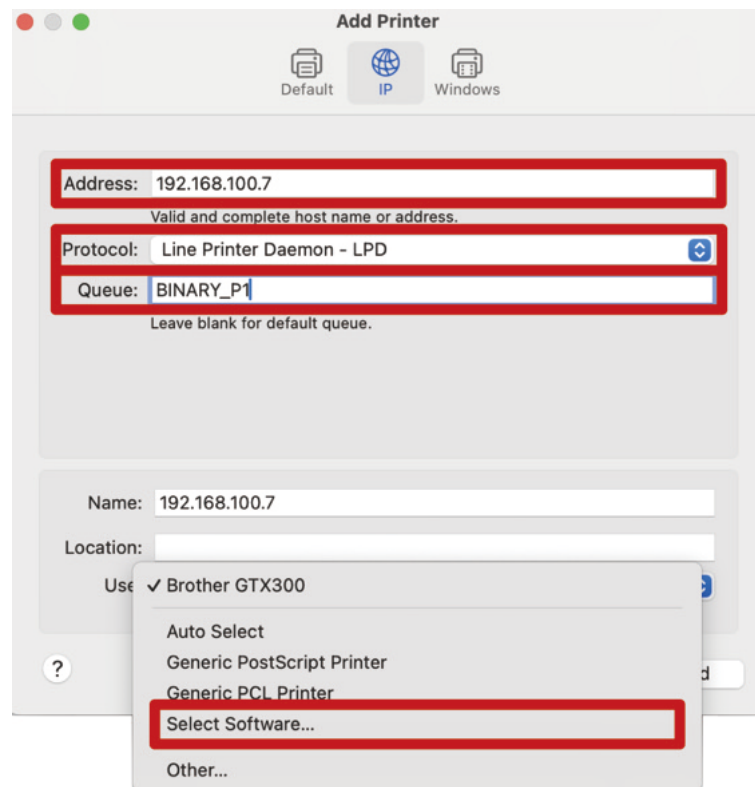
- 3 Click [Add Printer, Scanner, or Fax...] at the bottom right.



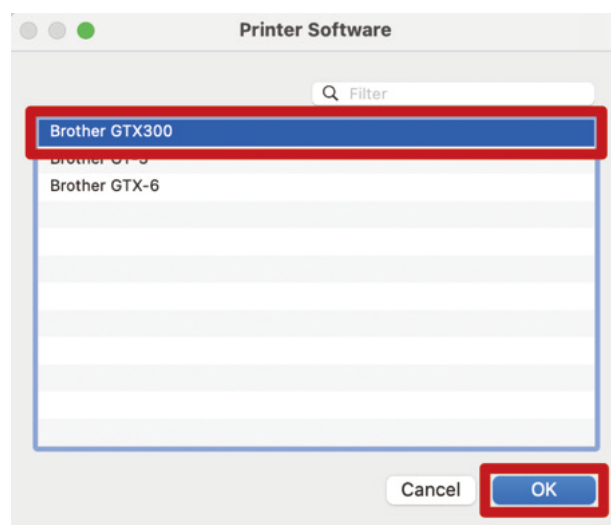
- 4 Select [IP].



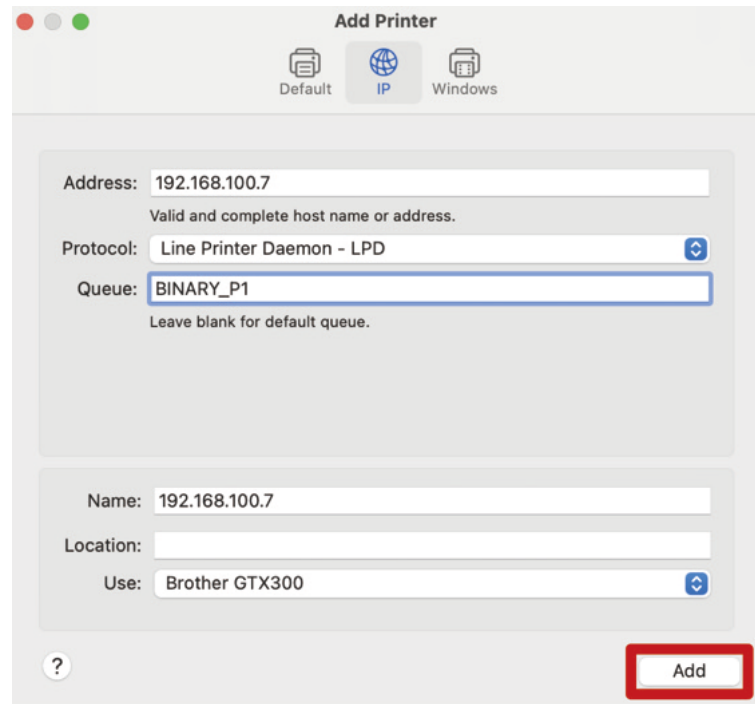
- 5 Enter the IP address of the printer for [Address].
Select [Line Printer Daemon - LPD] from [Protocol].
Enter "BINARY_P1" for [Queue].
Enter the printer name for [Name].
Select and click [Select Software...] under [Use].



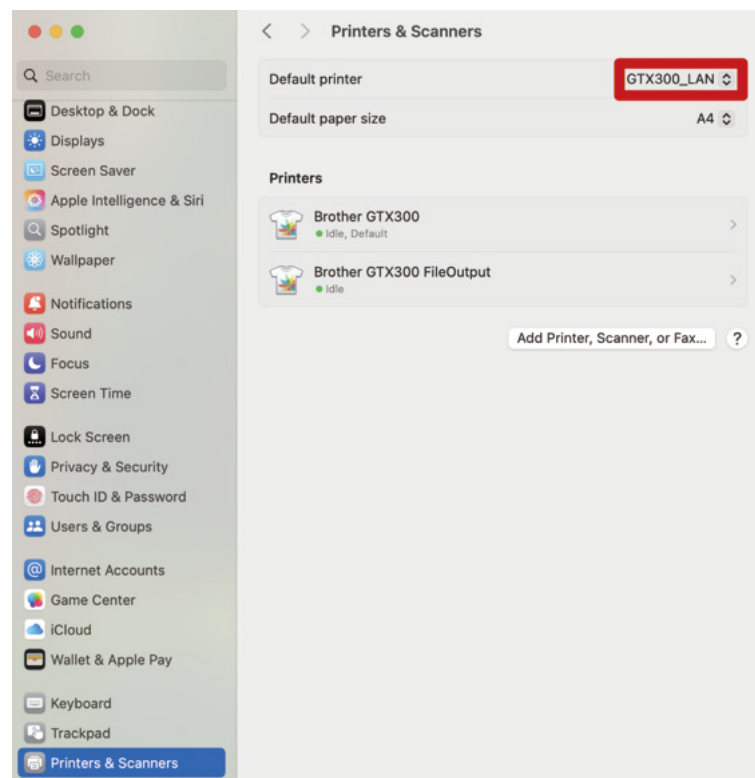
- 6 Select [Brother GTX300] and click [OK].



7 Click [Add].



8 The screen returns to the [Printers & Scanners] screen, and the GTX300 printer (LAN) is added. If necessary, select the GTX300 printer under [Default printer]. This exits the LAN settings.



- 9 Adjust the printer using "GTX Maintenance #".

**TIPS**

- The "#" of "GTX Maintenance #" is the version number. The version number changes with app update.

	Menu name to execute	Operation mode selected on the printer		See the operating procedure with GTX Maintenance #
		White and color ink mode	Color ink mode	
1	[Firing Adjustment]	Performed	Performed for color head only	Firing adjustment on page 81
2	[Platen-Rolling Adjustment]	Performed	Performed	Platen feed adjustment on page 83
3	[White/Color Alignment]	Performed	Not required	White/color alignment on page 84
4	[Setting of the time displayed on the nozzle check pattern]	Performed	Performed	Setting of the time displayed on the nozzle check pattern on page 85
5	[Setting of the scheduled time for white ink circulation]	Performed	Not required	Setting the scheduled time for white ink circulation on page 87

4.5 Adjustment

Adjust the printer using "GTX Maintenance #".



TIPS

- The "#" of "GTX Maintenance #" is the version number. The version number changes with app update.

Menu name	Description	Things to prepare	See the operating procedure with GTX Maintenance #
[Initial settings after head replacement]	Make settings after print head replacement.	—	Initial settings after head replacement on page 79
[Firing Adjustment]	Make adjustments after print head replacement if the print is blurred and the printed result appears too granular.	Black paper or transparent sheet (such as OHP sheet) White paper	Firing adjustment on page 81
[Platen Feed Adjustment]	Make adjustments if the horizontal stripes (banding) in the picture are noticeable after printing.	White paper	Platen feed adjustment on page 83
[White/Color Alignment]	Make adjustments if the white and color images are out of position.	Black paper	White/color alignment on page 84
[Setting of the time displayed on the nozzle check pattern]	No settings are required if scheduled time settings for white ink circulation have been made.	—	Setting of the time displayed on the nozzle check pattern on page 85
[Setting of the scheduled time for white ink circulation]	Make settings when making a time reservation for white ink circulation or canceling the reservation.	—	Setting the scheduled time for white ink circulation on page 87

4.5.1 Initial settings after head replacement

Perform settings after you replace a print head.



TIPS

- When the printer has just been delivered to you, you do not need to make these settings, which are factory-configured.

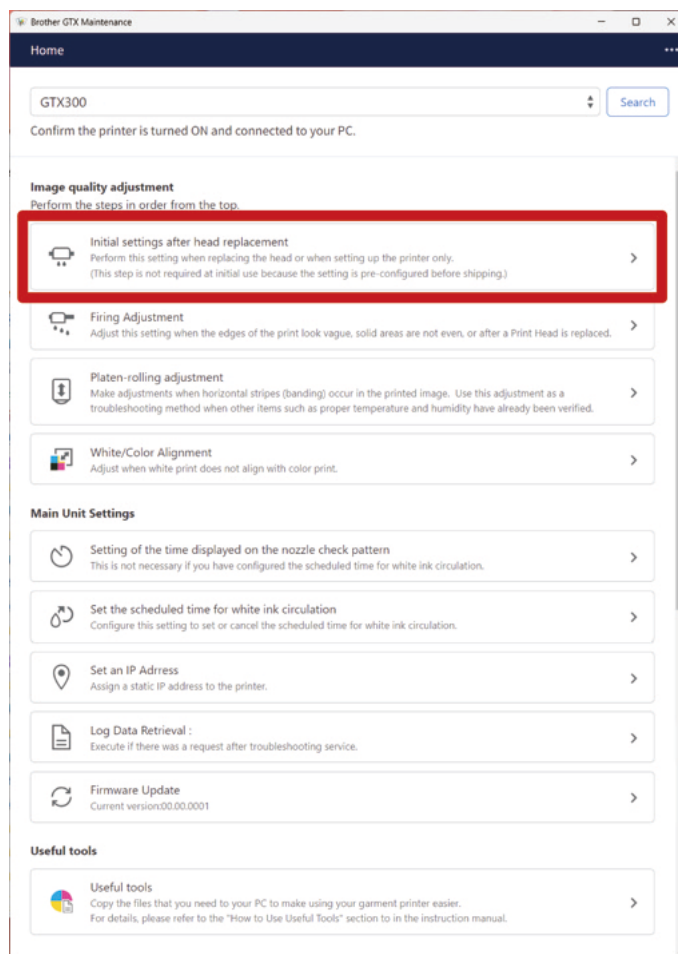
- 1 Make sure that a connection of USB 2.0 cable or LAN cable is made between the printer and your PC.
- 2 On the PC, from [All Programs] in the Start menu, select "GTX Maintenance #" from "Brother GTX Maintenance".



TIPS

- The "#" of "GTX Maintenance #" is the version number. The version number changes with app update.

- 3 After the window shown below appears, select [Initial settings after head replacement].



- 4 Perform the required operation by following the on-screen instructions in the dialog box.

After the adjustment is completed, the currently displayed screen will go back to the window mentioned above.



TIPS

- The serial number (SN) of the print head, which is required for setting, and the V-Rating information can be found on the location shown in the photos below.



4.5.2 Firing adjustment

Because the ejection timing varies depending on the platen's height and properties of each print head, this function is provided to adjust the ejection timing for each print head when any print head is replaced with a new one or after the completion of the setup procedure, for instance. If you want to make adjustments after replacing the print head, configure the initial settings after print head replacement before you do so.

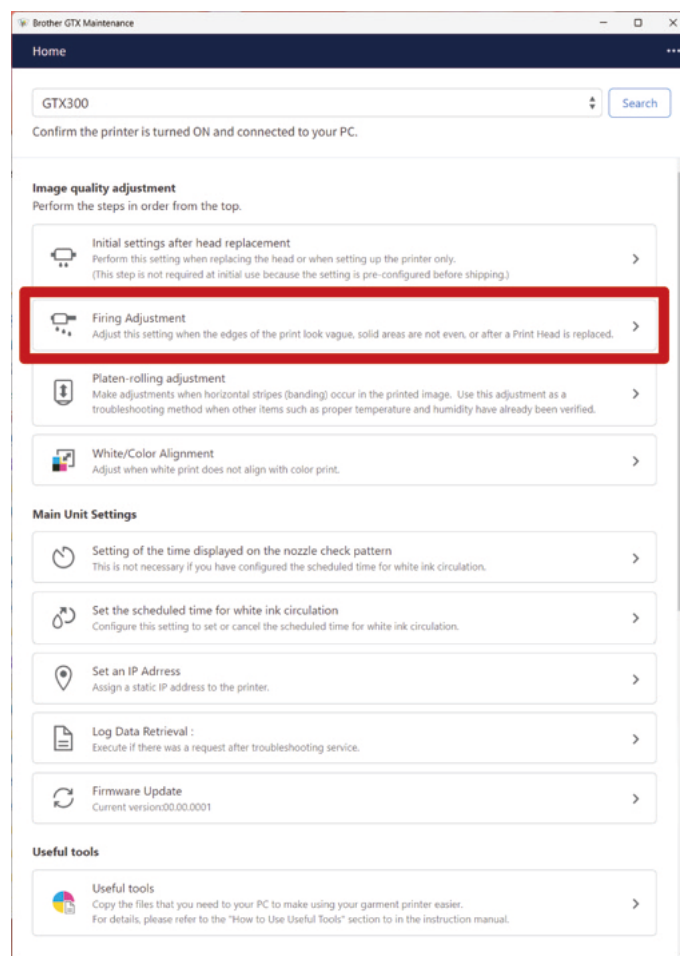
- 1 Make several sheets of A4-size or letter-size paper (black paper or transparent sheet such as OHP sheet, and white paper) available for use.
- 2 Make sure that a connection of USB 2.0 cable or LAN cable is made between the printer and your PC.
- 3 On the PC, from [All Programs] in the Start menu, select "GTX Maintenance #" from "Brother GTX Maintenance".



TIPS

- The "#" of "GTX Maintenance #" is the version number. The version number changes with app update.

- 4 After the window shown below appears, select [Firing Adjustment].



- 5 Perform the required operation by following the on-screen instructions in the dialog box.

After the adjustment is completed, the currently displayed screen will go back to the window mentioned above.

4.5.3 Platen feed adjustment

Platen feed adjustment should be performed after replacing the print head or completing the set up procedure, or if horizontal stripes appear in the printing.

If you want to make adjustments after replacing the print head, configure the initial settings after print head replacement and adjust the firing timing before you do so.

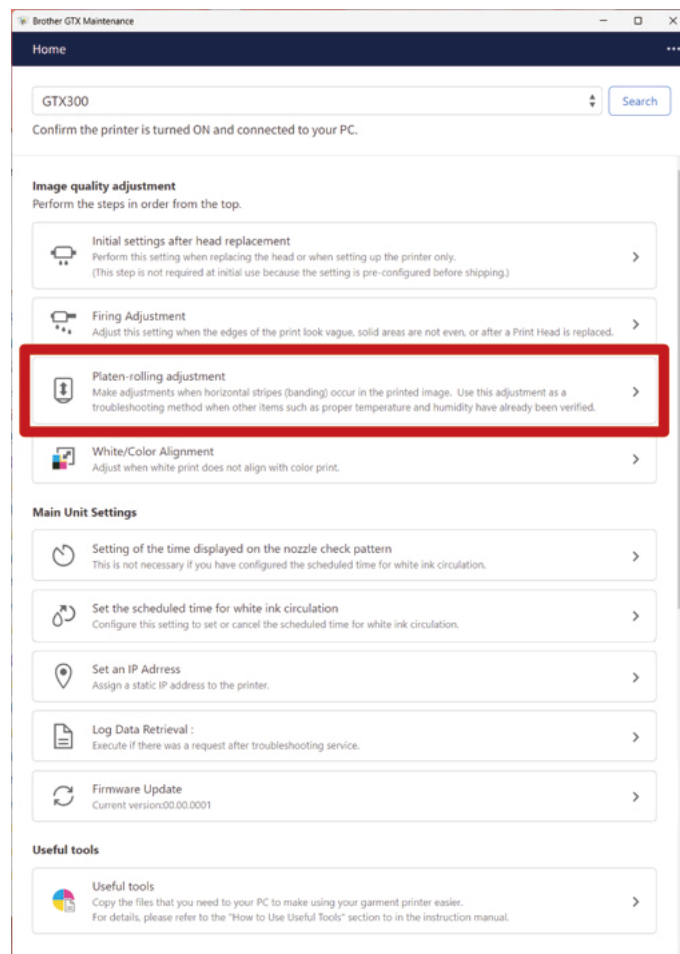
- 1 Make several sheets of A4-size or letter-size white paper available for use.
- 2 Make sure that a connection of USB 2.0 cable or LAN cable is made between the printer and your PC.
- 3 On the PC, from [All Programs] in the Start menu, select the "GTX Maintenance #" from "Brother GTX Maintenance".



TIPS

- The "#" of "GTX Maintenance #" is the version number. The version number changes with app update.

- 4 When the window shown below is displayed, select [Platen-rolling adjustment].



- 5 Perform the required operation by following the on-screen instructions in the dialog box.

After the adjustment is completed, the currently displayed screen will go back to the window mentioned above.

4.5.4 White/color alignment

This is the adjustment function to align the print position on the white side with the print position on the color side. Adjust white/color alignment after replacing a print head or completing the setup procedure.

If you want to make adjustments after replacing the print head, configure the initial settings after print head replacement and adjust the firing timing and platen feed before you do so.

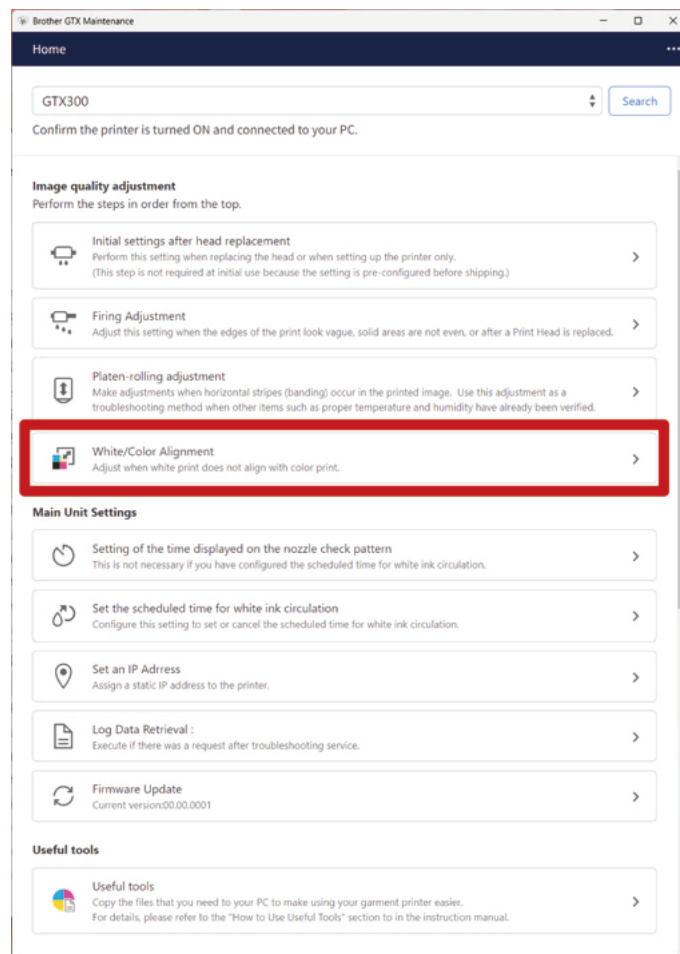
- 1 Make several sheets of A4-size or letter-size black paper available for use.
- 2 Make sure that a connection of USB 2.0 cable or LAN cable is made between the printer and your PC.
- 3 On the PC, from [All Programs] in the Start menu, select "GTX Maintenance #" from "Brother GTX Maintenance".



TIPS

- The "#" of "GTX Maintenance #" is the version number. The version number changes with app update.

- 4 After the window shown below appears, select [White/Color Alignment].



- 5 Perform the required operation by following the on-screen instructions in the dialog box.

After the adjustment is completed, the currently displayed screen will go back to the window mentioned above.

4.5.5 Setting of the time displayed on the nozzle check pattern

Set the time displayed on the nozzle check pattern.

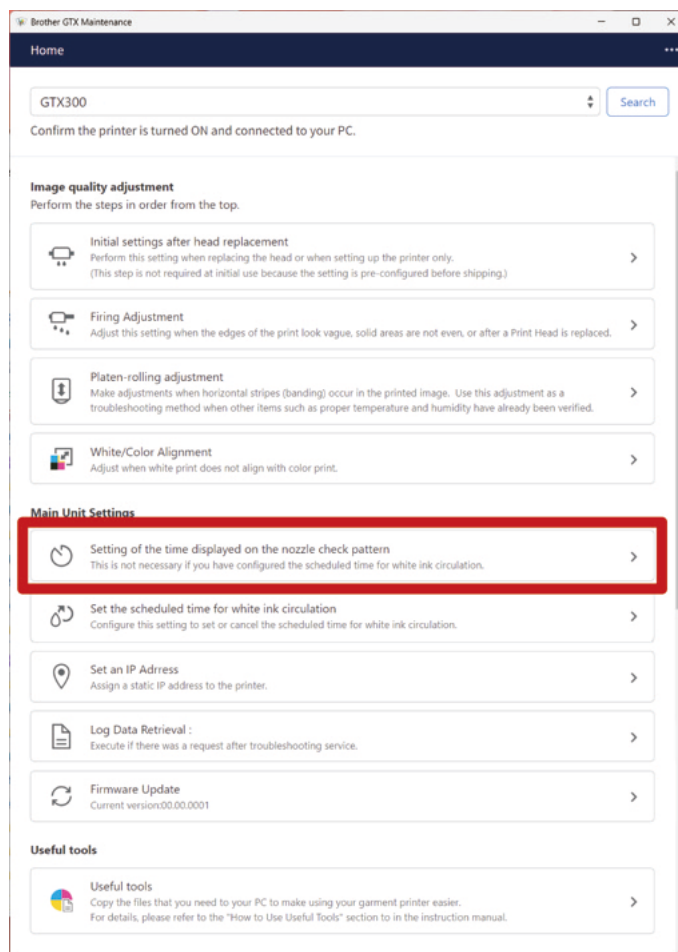
- 1 Make sure that a connection of USB 2.0 cable or LAN cable is made between the printer and your PC.
- 2 On the PC, from [All Programs] in the Start menu, select "GTX Maintenance #" from "Brother GTX Maintenance".



TIPS

- The "#" of "GTX Maintenance #" is the version number. The version number changes with app update.

- 3 After the window shown below appears, select [Setting of the time displayed on the nozzle check pattern].

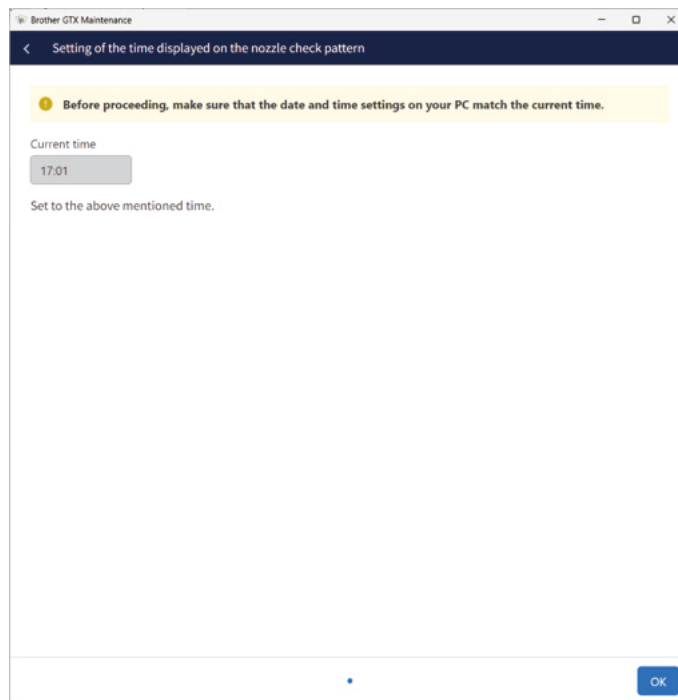


- 4 Perform the required operation by following the on-screen instructions in the dialog box.

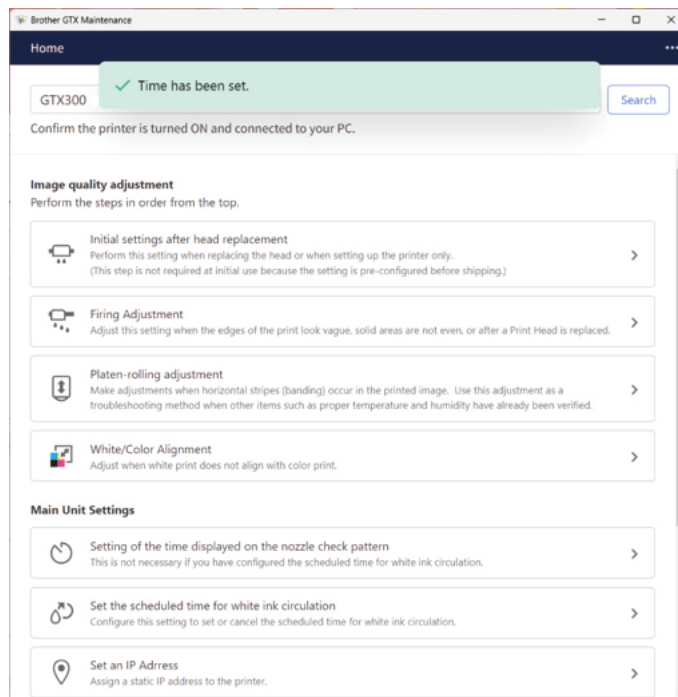


CAUTION

- Confirm that the date and time of your PC are set correctly, and continue.



- 5 After the setting is completed, the currently displayed screen will go back to the Main screen.



4.5.6 Setting the scheduled time for white ink circulation

White ink circulation can be performed at a specified time. If not set, white ink circulation will be performed automatically every four hours.

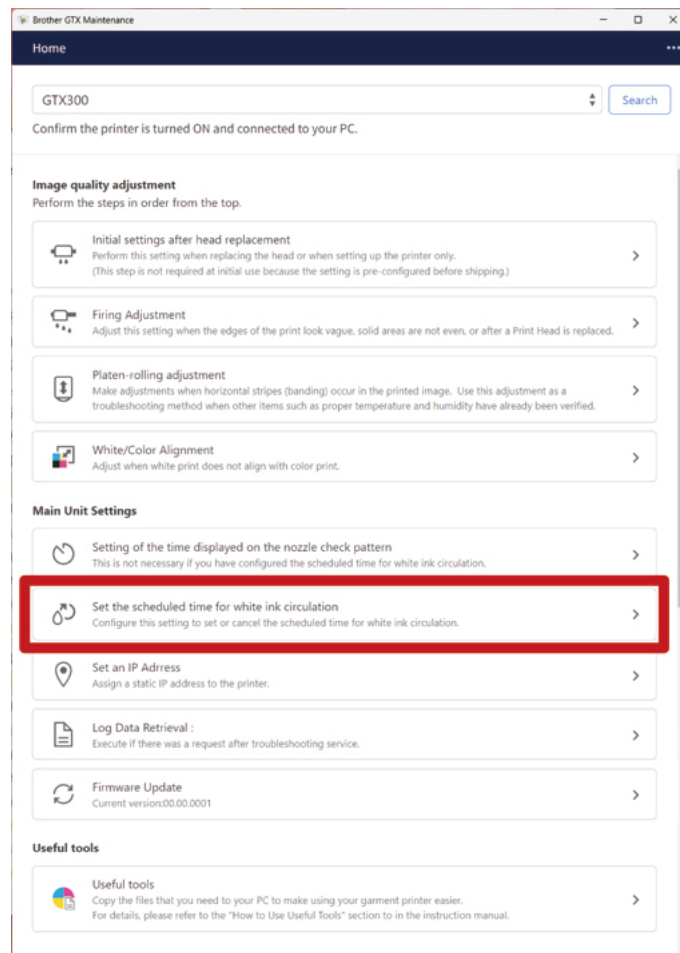
- 1 Make sure that a connection of USB 2.0 cable or LAN cable is made between the printer and your PC.
- 2 On the PC, from [All Programs] in the Start menu, select "GTX Maintenance #" from "Brother GTX Maintenance".



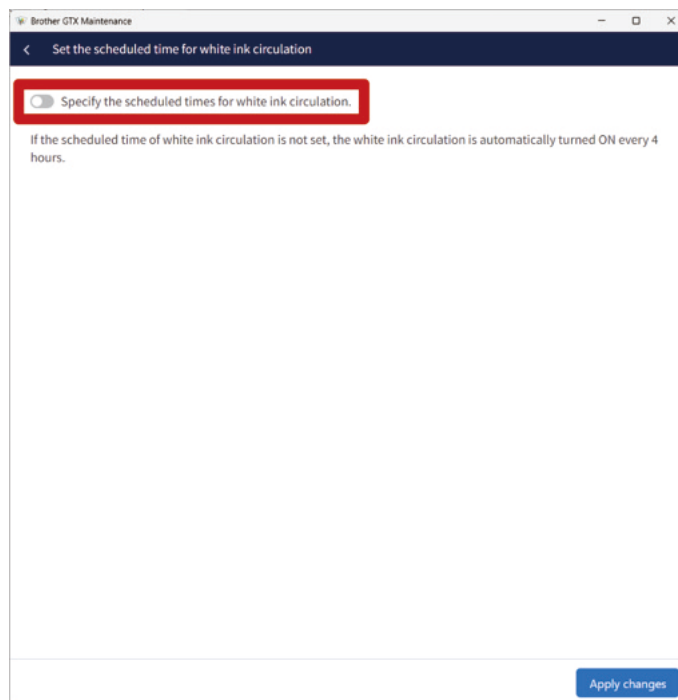
TIPS

- The "#" of "GTX Maintenance #" is the version number. The version number changes with app update.

- 3 After the window shown below appears, select [Set the scheduled time for white ink circulation].



- 4 After the window shown below appears, select [Specify the scheduled times for white ink circulation.].



- 5 Set the scheduled time for white ink circulation and click [Apply changes].



CAUTION

- Confirm that the date and time of your PC are set correctly, and continue.
- Enter at least six start-time settings.
- Set the white ink circulation interval to be between one hour and six hours.
- Input a time range of "0:00" to 23:59".



TIPS

- You can check on the main unit the scheduled time you set. [Check circulation schedule on page 309](#)

Brother GTX Maintenance

< Set the scheduled time for white ink circulation

☒ Specify the scheduled times for white ink circulation.

● If the displayed "Current Time" is incorrect, change your PC settings to the correct time.

Current time: 17:07

[1] 00:00 [2] 03:00

[3] 07:30 [4] 13:00 Enhanced circulation

[5] 15:30 [6] 21:00

[7] --:-- [8] --:--

- White ink circulation must be performed at least six times per day.
- Enter six or more scheduled times within the range from "00:00" to "23:59".
- One of the scheduled times must be set as enhanced circulation.
- Each scheduled time must be at least one hour apart.
- Each scheduled time must not exceed a six-hour interval.

Apply changes

4.6 Moving the printer

When moving or shipping the printer, please contact your Brother dealer.

Chapter 5

Creating print data

5.1 Types of applications

You can create print data by either "using Brother products" or "using other applications". Select applications to use depending on your needs.

You are recommended to use Brother product applications as far as possible. If you want to use other applications, however, you are recommended to use one of the two recommended applications to achieve high-quality print results.

This chapter describes the procedures for using other applications.

Using Brother products

Applications to use	Reference
GTX Graphics Lab	Graphics Lab Instruction Manual

When using other applications

Applications to use	Reference
Adobe Photoshop CC	When using Adobe Photoshop on page 95
Adobe Illustrator CC	When using Adobe Illustrator on page 102



TIPS

- Make proper settings, such as color settings and printing conditions, of each application, in accordance with the setting contents of the application.
- In this chapter, the value RGB=(254,254,254) is described as "RGB=254", and the value RGB=(255,255,255) is described as "RGB=255".

About color mode (color space)

The GTX300 printer is a printer of RGB type.

Be sure to create image data in RGB mode, and always set the color space (input) you use for such data to sRGB (sRGB IEC61966-2.1).



TIPS

- When such application as Adobe is used, there are instances in which an image in CMYK mode cannot reproduce the color that is intended.
- Even for an image in RGB mode, a similar color reproduction failure occurs when other color space than the specified one, such as Adobe RGB, is used.

About print layout

Specify the platen size that uses the paper size specified in the Print menu, and confirm the print layout.

Moreover, use the "Brother GTX300 FileOutput" printer driver for file output, then display and check the print preview.



TIPS

- For a print image to be oriented properly at all times, it is advisable to set the GTX300 printer to the [Set as default printer] for the PC.

How to create white data

When creating print data with [Color + White Ink] or [White Ink Only], RGB=255 is treated as "Transparent color", ejecting no ink.

For an image that you want to print pure white color with white ink, make sure that the white areas are set to RGB=254.



TIPS

- The treatment of RGB=255 varies depending on the applications.
Configure the settings appropriately.

About ARX3 file

Use the "Brother GTX300 FileOutput" printer driver for file output in order to save your print data in the ARX3 format.

When your print data is saved in the ARX3 format, its information and the amount of used ink will be able to be reviewed.



TIPS

- When performing file output, be sure to use the printer driver, "Brother GTX300 FileOutput". If file output is performed using [Print to file] command that is supplied with each application, there may be some cases where the file extension cannot be saved as .arx3, or the file destination cannot be specified.
- The GTX300 printer cannot print out the print data that has been created for the GT-541/GT-782/GT-3/GTX-4/GTX-proRoll/GTX-6 series.
- If you make a printer driver setting from the Control Panel of your PC, such setting sometimes will not take effect in each application. For this reason, verify that your printer driver has been set up properly before you begin printing.

5.2 Sending print data using Brother GTX300 FileOutput (for Macintosh only)

Saving print data to a file

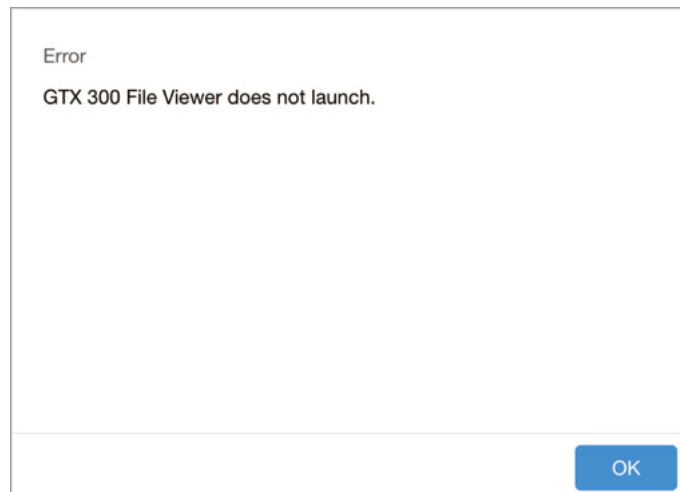
Check that the "GTX300 File Viewer" is running when saving print data to a file using the "Brother GTX300 FileOutput" printer.

The error shown below will occur, and you will not be able to save the data if you output without "GTX300 FileViewer" running.



TIPS

- Depending on the application, the following error may or may not appear. Try again with the "GTX300 FileViewer" running.



TIPS

- The procedure for outputting a file from "Brother GTX300 FileOutput" is the same as that for a Windows PC.

Sending print data

Follow the procedure below to send print data to the printer if the print data has been saved using the "Brother GTX300 FileOutput" printer.



TIPS

- The procedure for sending print data is the same as that for a Windows PC.

- 1 Double-click the file with the extension .arx3 saved using the "Brother GTX300 FileOutput" printer.
- 2 "GTX300 FileViewer" will be launched, and the file will be sent when you click [Send to Printer].

5.3 Using other applications

5.3.1 When using Adobe Photoshop

In Photoshop, configure the settings mentioned below:

- Color setting

As required, perform the following procedures:

- Create print data (ARX3 file).
- Use the color palette in Useful Tools.
- Replace RGB=255 with RGB=254



TIPS

- For an image created in the CMYK color mode, select [Image] > [Mode] in the menu bar, and change the color to the RGB color (sRGB). In order to edit an image, select [Image] > [Adjustments] in the menu bar and edit it, or edit it by means of the image quality improvement of the printer driver.
 - In the case of print data using white ink:[Set up the image quality on page 130](#)
 - In the case of print data using color ink and black ink only:[Set up the image quality on page 143](#)
- For this printer, it is recommended to use Photoshop CC. The display screen is described in Photoshop CC.

Color setting

1 In the menu bar, select [Edit] > [Color Settings].

2 Establish the settings of [Color Settings] as follows:

[Working Spaces]

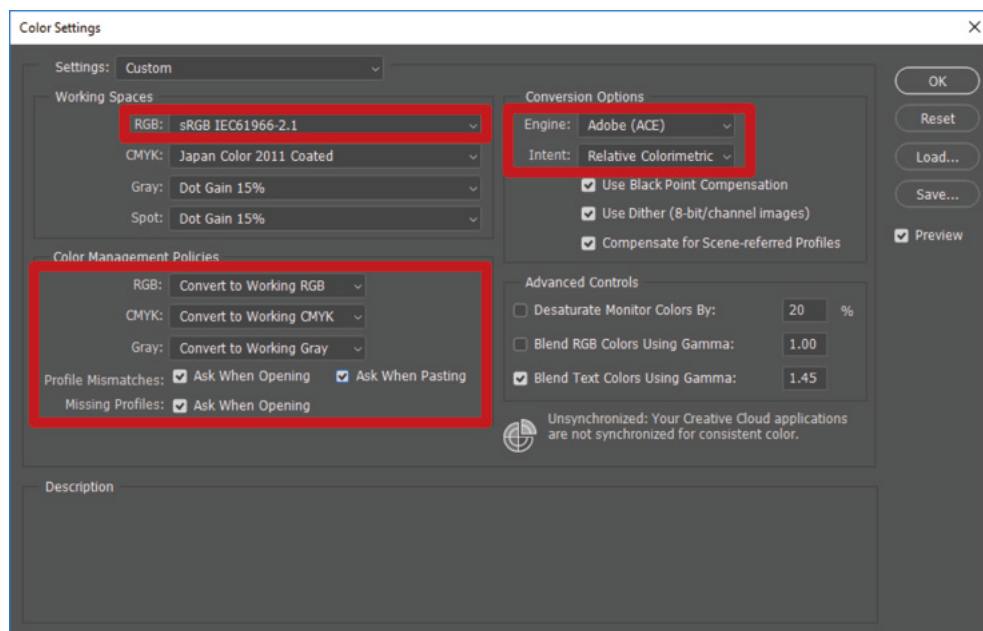
- [RGB]: [sRGB IEC61966-2.1]

[Conversion Options]

- [Engine]: [Adobe(ACE)]
- [Intent]: [Relative Colorimetric]

[Color Management Policies]

- [RGB]: [Convert to Working RGB]
- [CMYK]: [Convert to Working CMYK]
- [Gray]: [Convert to Working Gray]
- [Profile Mismatches]: Mark the [Ask When Opening] and [Ask When Pasting] checkboxes.
- [Missing Profiles]: Mark the [Ask When Opening] checkbox.



Create print data (ARX3 file)

Save the image data and print settings as a set of print data in ARX3 file format.

The following will be made available if the print data is converted into an ARX3 file:

- Image data and print settings can be put together and stored.
- Without connection to a PC, the printing can be performed directly from a USB flash memory.



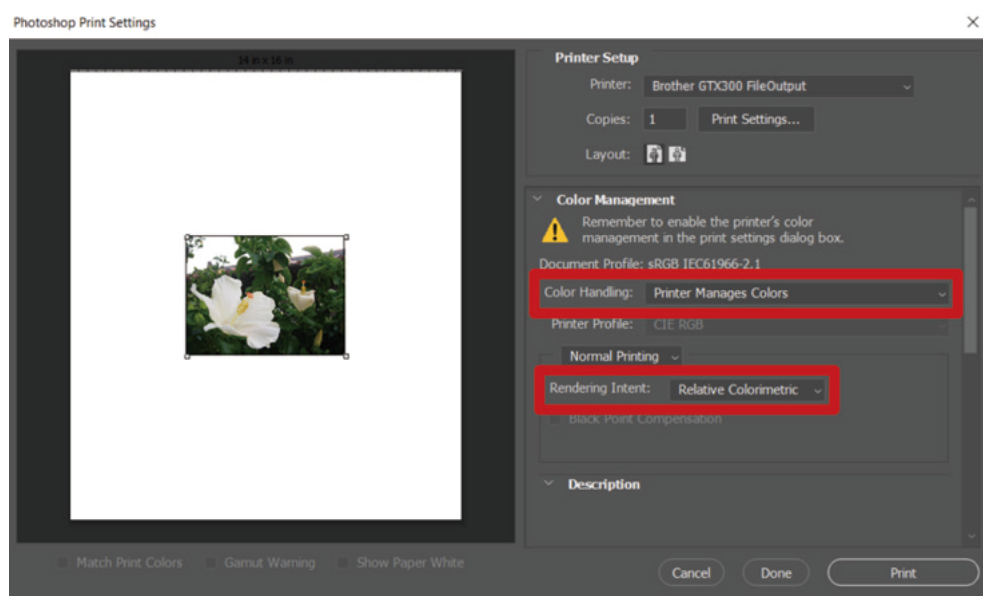
TIPS

- Image editing is unavailable for any ARX3 file. As such, save your image data for an editing purpose in advance.
- For file output, there are some cases where neither file output destination nor extension cannot be specified by the [Print to file] command. Be sure to use the printer driver "Brother GTX300 FileOutput".
- When directly sending print data from an application to the printer [Sending print data from applications on page 208](#)

1 In the menu bar, select [File] > [Print]. If the PC's default printer is either "Brother GTX300" or "Brother GTX300 FileOutput", the layout is set to the platen size.

2 Make the settings as follows:

- [Color Handling]: [Printer Manages Colors]
- [Rendering Intent]: [Relative Colorimetric]



3 From [Printer], select "Brother GTX300 FileOutput" for file output.



TIPS

- If [Printer] is set to "Brother GTX300", the print data will be sent to the printer.
If [Printer] is set to "Brother GTX300 FileOutput", the print data will be saved as an ARX3 file.

Chapter 5

Creating print data

4 On [Print Settings], make your settings for the printer driver.

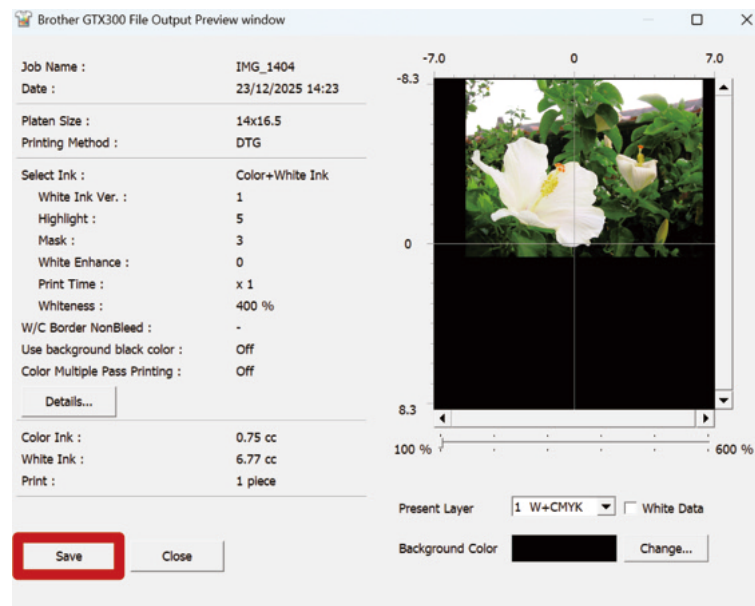
- In the case of print data using white ink: [Set up the printer driver on page 109](#)
- In the case of print data using color ink and black ink only: [Set up the printer driver on page 134](#)

5 When you press [Print], the dialog box shown below will be displayed on the screen. After that, click [Save].



TIPS

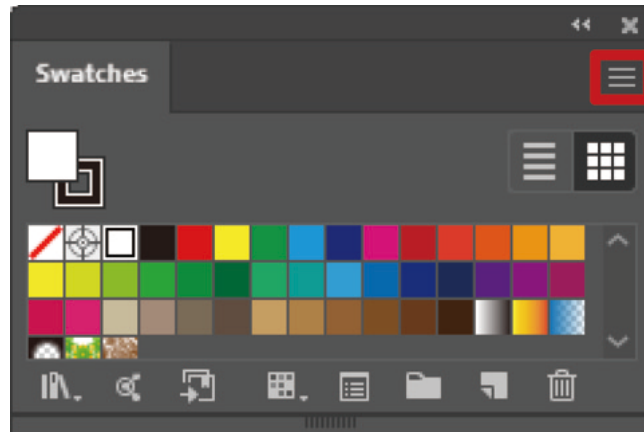
- There may be cases where this saving process takes several minutes.



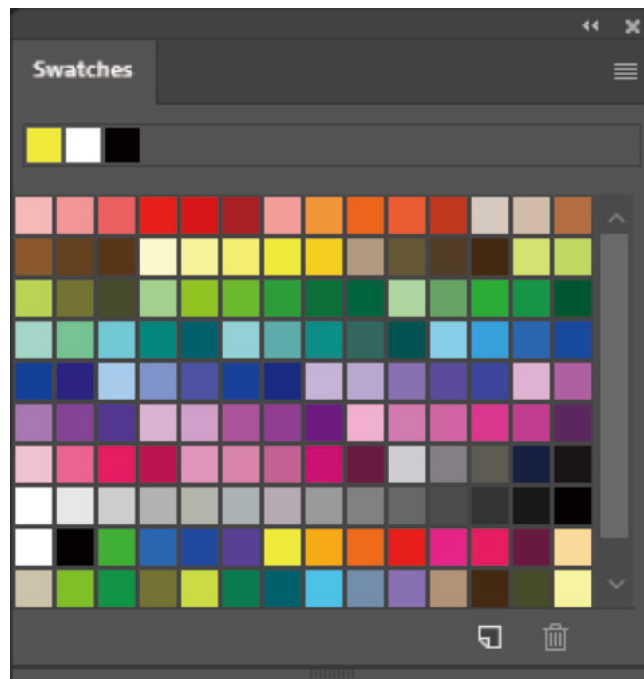
6 Specify the [Save In] and [File name] first, then click [Save] to save the ARX3 file to your PC.

Use the color palette in Useful Tools.

- 1 Save the color pallet file for Photoshop, "GT_Colors_T.ase", on your PC, following the instructions on screen.
- 2 In the menu bar, select [Window] > [Swatches].
- 3 Click on  to open the submenu.



- 4 From [Replace Swatches], select [Swatch Exchange (*.ASE)] for the type of file and then select the file name [GT_Colors_T.ase].



TIPS

- Do not use any color from the color sample palette, such as HKS and Pantone. Otherwise, an on-screen color may differ from the resulting print color.

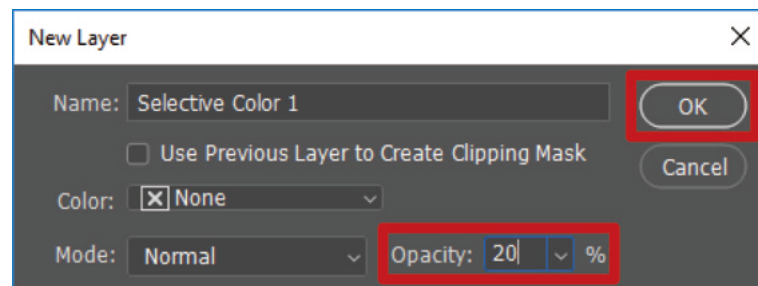
What to do when replacing RGB=255 with RGB=254

RGB=255 is identified as a transparent color. To a portion where RGB=255 is contained, no ink will be ejected.

In order for the white ink to be printed, select an area for RGB=255, and replace it with RGB=254.

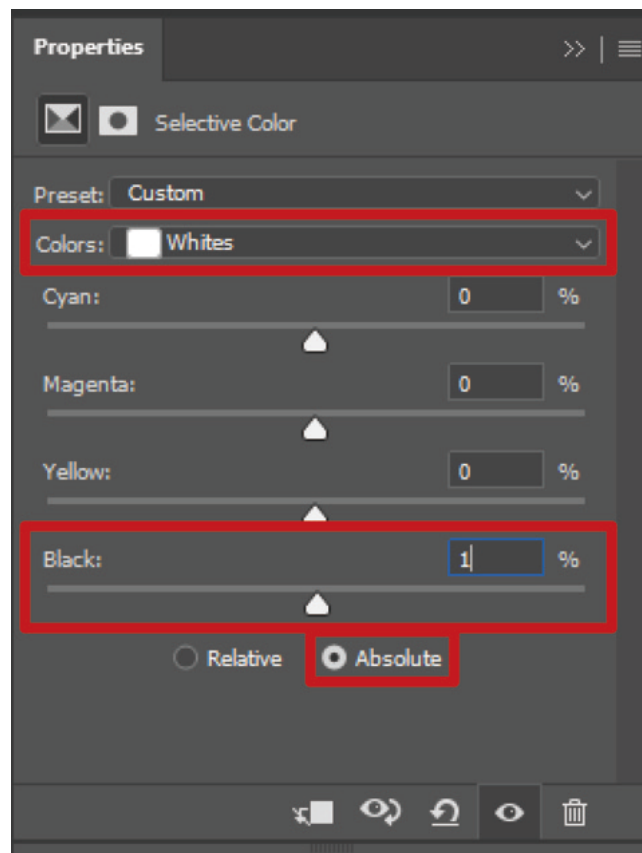
To make such replacement, use the method mentioned below.

- 1 On the menu bar, select [Layer] > [New Adjustment Layer] > [Selective Color], and create a new layer.
- 2 Set the opacity to 20%, and click [OK].



- 3 From the [Selective Color], make the following settings:

- [Colors]: [Whites]
- [Black]: 1%
- Mark the [Absolute] option





TIPS

- The method to replace RGB=255 with RGB=254 as shown above can be used only when the [Color mode] is set to [8 bit] of [RGB Color].
- For Photoshop, the action file "SolidWhite.atn" is made available in Useful Tools, which changes RGB=255 to RGB=254 ([Replace RGB=255 with RGB=254 \(for Photoshop only\) on page 147](#)). For how to use it, refer to the Help feature that Photoshop is provided with.

5.3.2 When using Adobe Illustrator

In Illustrator, perform the required procedures mentioned below:

- Color setting
- Open a new file

As required, perform the following procedures:

- Create print data (ARX3 file).
- Use the color palette in Useful Tools.



TIPS

- Take one of the actions mentioned below, in order to avoid such troubles that no image data is inserted into the print range or part of image data is cut off.
 - Before start-up, specify the PC's default printer as the "Brother GTX300" or the "Brother GTX300 FileOutput".
 - Use the "Brother GTX300 FileOutput" printer driver to output a file, then display and check the print preview.
- For an image created in CMYK color mode, load the image into Photoshop, select [Image] > [Mode] in the menu bar, and change the color to the RGB color (sRGB). In order to edit an image, load the image into Photoshop, edit it in the form of bitmap data, or edit it by means of the image quality improvement of the printer driver.
 - In the case of print data using white ink:[Set up the image quality on page 130](#)
 - In the case of print data using color ink and black ink only:[Set up the image quality on page 143](#)
- For this printer, it is recommended to use Illustrator CC. The display screen is described in Illustrator CC.

Color setting

- 1 In the menu bar, select [Edit] > [Color Settings].
- 2 Click on the [More Options].

3 Ensure selection of the settings as mentioned below, and click [OK].

- [Settings]: [Custom]

[Working Spaces]

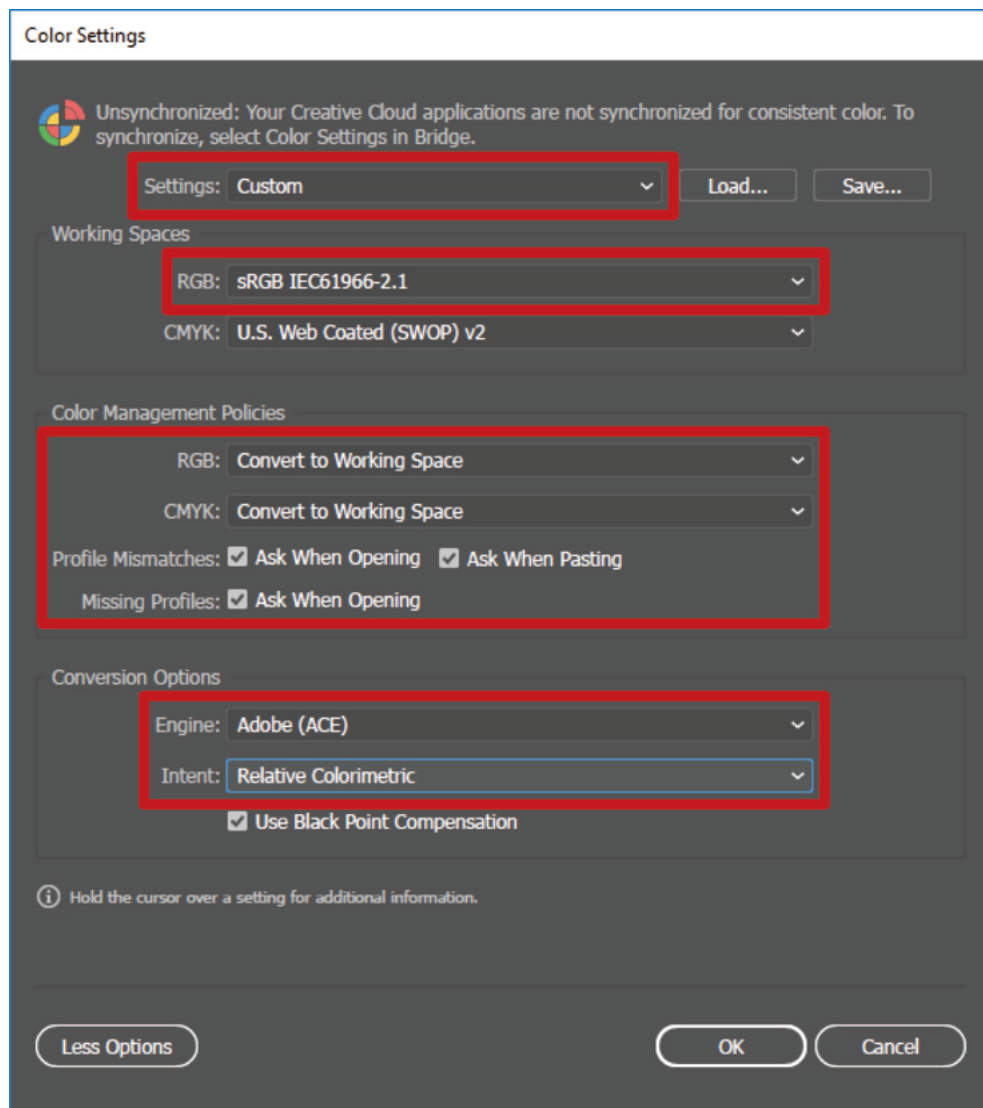
- [RGB]: [sRGB IEC61966-2.1]

[Color Management Policies]

- [RGB]: [Convert to Working Space]
- [CMYK]: [Convert to Working Space]
- [Profile Mismatches]: Mark the [Ask When Opening] and [Ask When Pasting] checkboxes.
- [Missing Profiles]: Mark the [Ask When Opening] checkbox.

[Conversion Options]

- [Engine]: [Adobe(ACE)]
- [Intent]: [Relative Colorimetric]



Open a new file

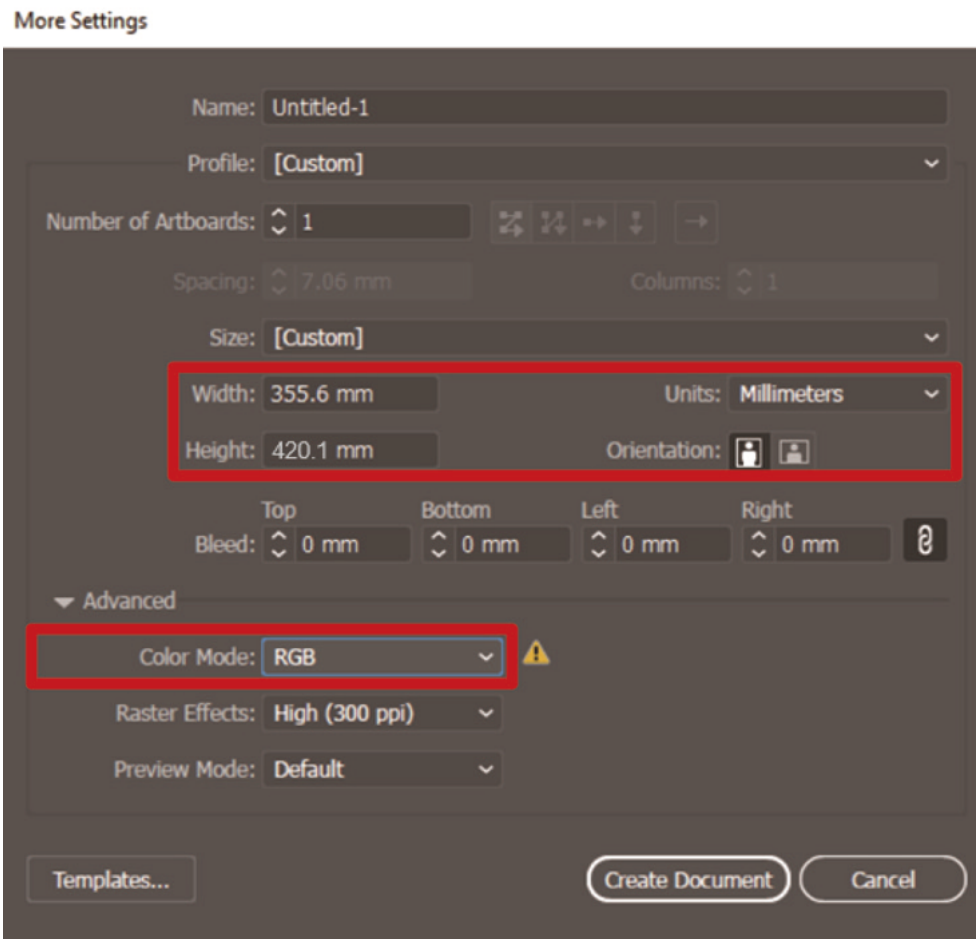
1 Set up a new document as follows:

- [Width]: 14.0 in. (355.6 mm)
- [Height]: 16.5 in. (420.1 mm)
- [Orientation]: Portrait
- [Color Mode]: [RGB]



TIPS

- Set the width and height to the size of platen to be used. The above size is the standard 14×16.5 platen size.
 - In the case of print data using white ink: [Select the platen size on page 111](#)
 - In the case of print data using color ink and black ink only: [Select the platen size on page 136](#)



Create print data (ARX3 file)

Save the image data and print settings as a set of print data in ARX3 file format.

The following will be made available if the print data is converted into an ARX3 file:

- Image data and print settings can be put together and stored.
- Without connection to a PC, the printing can be performed directly from a USB flash memory.



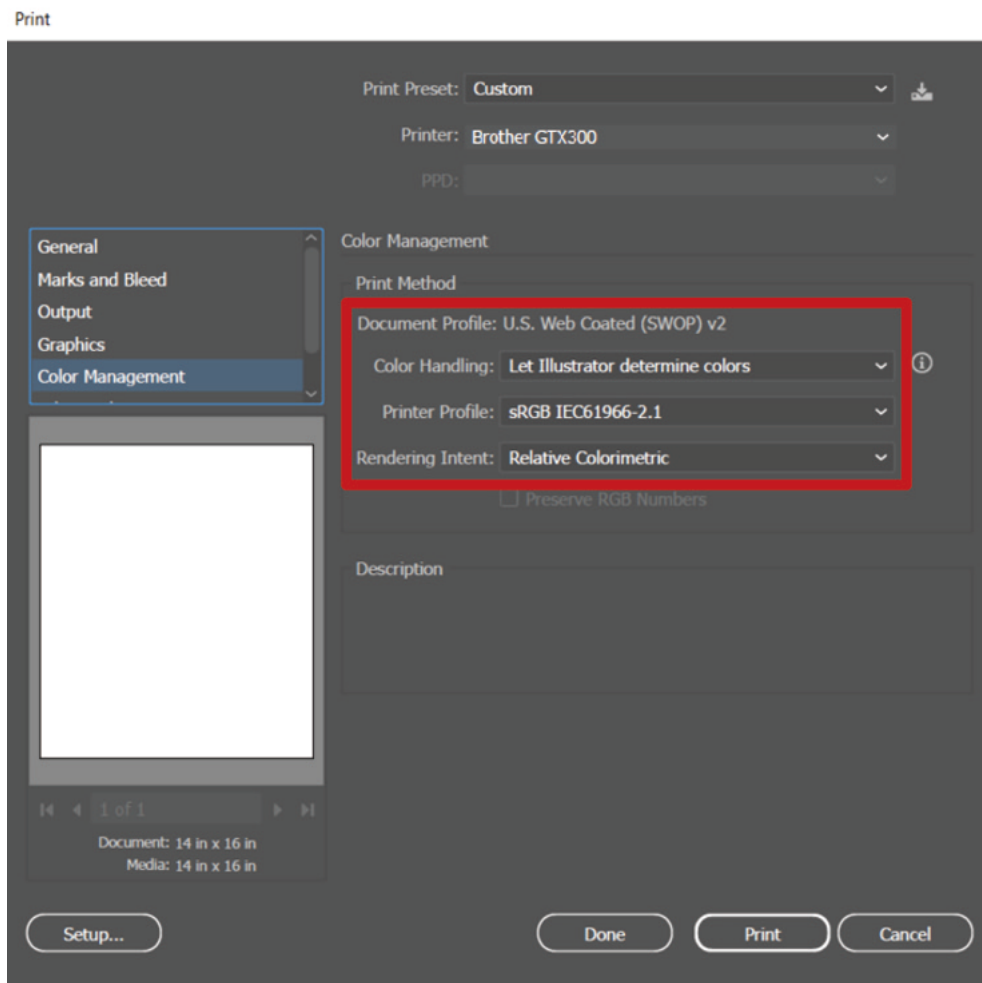
TIPS

- Image editing is unavailable for any ARX3 file. As such, save your image data for an editing purpose in advance.
- For file output, there are some cases where neither file output destination nor extension cannot be specified by the [Print to file] command. Be sure to use the printer driver "Brother GTX300 FileOutput".
- When directly sending print data from an application to the printer [Sending print data from applications on page 208](#)

1 In the menu bar, select [File] > [Print] > [Color Management].

2 Make the settings as follows:

- [Document Profile]: [sRGB IEC61966-2.1]
- [Color Handling]: [Let Illustrator determine colors]
- [Printer Profile]: [sRGB IEC61966-2.1]
- [Rendering Intent]: [Relative Colorimetric]



3 From [Printer], select "Brother GTX300 FileOutput" for file output.



TIPS

- If [Printer] is set to "Brother GTX300", the print data will be sent to the printer.
If [Printer] is set to "Brother GTX300 FileOutput", the print data will be saved as an ARX3 file.

4 On the [Advanced], make your settings for the printer driver.

- In the case of print data using white ink: [Set up the printer driver on page 109](#)
- In the case of print data using color ink and black ink only: [Set up the printer driver on page 134](#)

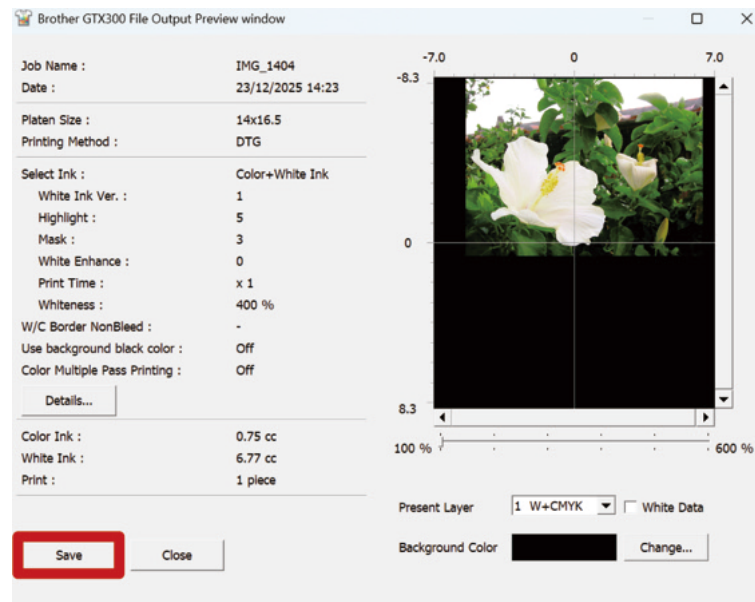
CAUTION

- For Adobe Illustrator, set the platen size for the paper size in the Print dialog box in the application. The size or placement of the image may not be set correctly if you make settings in the Print Settings dialog.

5 When you press [Print], the dialog box shown below will be displayed on the screen. After that, click [Save].

TIPS

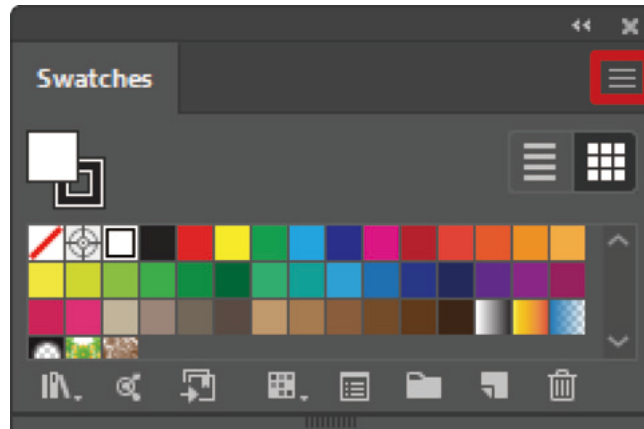
- There may be cases where this saving process takes several minutes.



6 Specify the [Save In] and [File name] first, then click [Save] to save the ARX3 file to your PC.

Use the color palette in Useful Tools.

- 1 Save the color pallet file for Illustrator, "GT_Colors_T.ase", on your PC, following the instructions on screen.
- 2 In the menu bar, select [Window] > [Swatches].
- 3 Click on , and select [Open Swatch Library] from the submenu.
- 4 Select [Other Library].

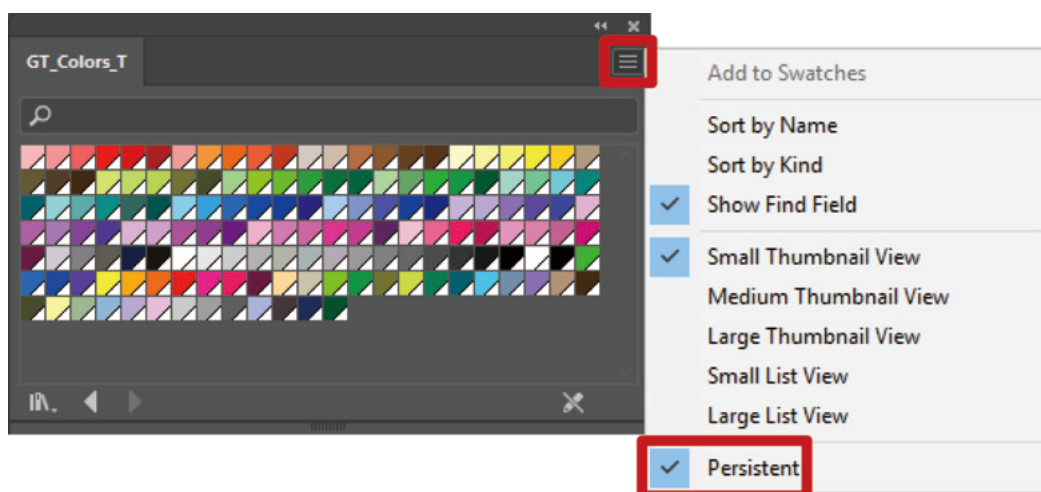


- 5 On the [Open] screen, select the file having such filename as "GT_Colors_T.ase".



TIPS

- Unlike Photoshop, this Swatch needs to be selected each time a file is opened.
However, you can fix the Swatch library in the following method to display the screen automatically when - ever you start the application if you are using Illustrator CC.
Click  on the top right corner of the Swatch library and select [Persistent] from the submenu.



5.4 Driver settings for print data using white ink

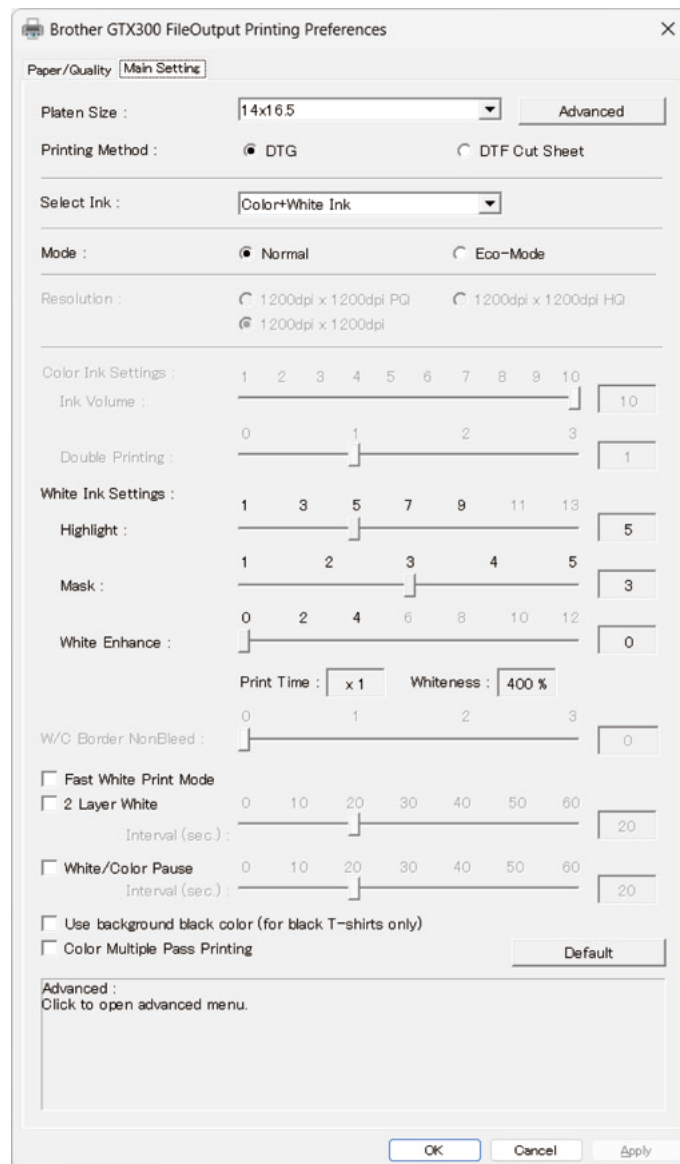
5.4.1 Set up the printer driver



TIPS

- The GTX300 printer driver treats RGB=255 as "Transparent color" and does not eject the ink. For an image that you want to print pure white color with white ink, make sure that the white areas are set to RGB=254.
- For the color replacement method, refer to a relevant page ([Using other applications on page 95](#)) or help menu of each application software.

- 1 By following the printing procedures of each application software, open the print setup dialog box of the printer driver.



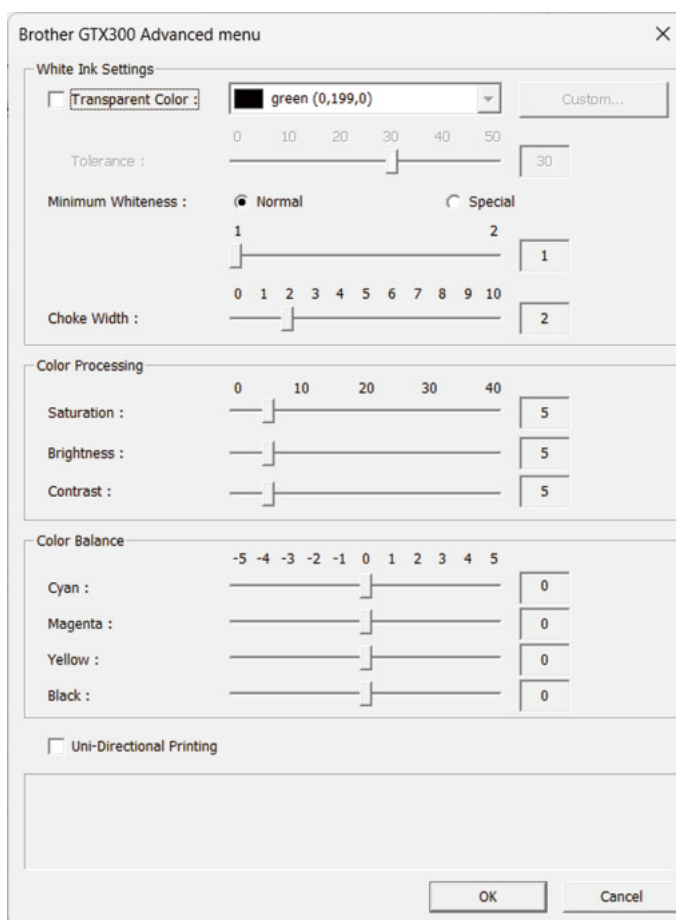
- 2 In the dialog box for setting the printer driver, configure required settings.

If you click on the [Advanced], [White Ink Settings], [Color Processing], and [Uni-Directional Printing] can be configured.



TIPS

- Depending on the settings you have made in the [Select Ink:] option or the like, setup items that appear on the screen vary.
- The rollover help is displayed in the square portion at the bottom of dialog box. Place the mouse pointer over it to browse the help feature.
- For the detailed description of setup items, refer to each chapter mentioned below.



- 3 After your settings are completed, click [OK].



TIPS

- You can refer to each value you have set up here by opening an ARX3 file from the “GTX300 File Viewer”.

5.4.2 Select the platen size

From the pull-down menu of [Platen Size:], select a platen size for print area.



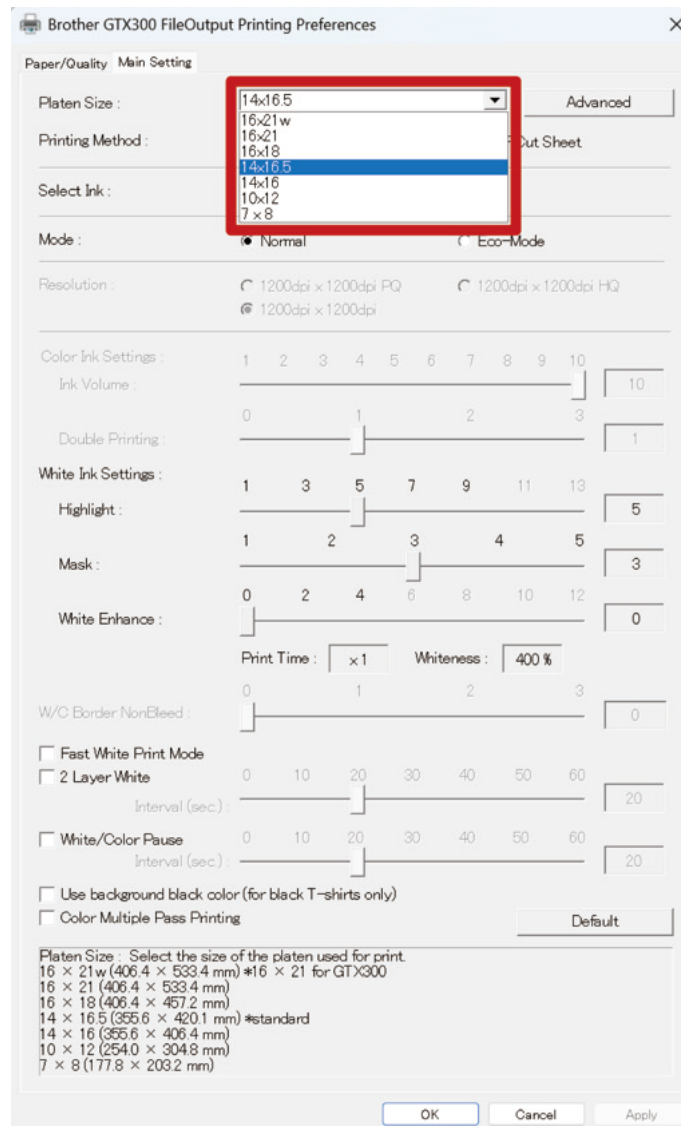
TIPS

- The platen size is equivalent to the paper size.

Setup item	Platen to be used	Size	Printing method	
			[DTG]	[DTF Cut Sheet]
[16×21]	16×21 platen	16.0 × 21.0 in (406.4 × 533.4 mm)	○	○
[16X18]	16X18 platen	16.0 × 18.0 in (406.4 × 457.2 mm)	○	
[14×16.5]	14×16.5 platen	14.0 × 16.5 in (355.6 × 420.1 mm)	○	○
[14X16]	14X16 platen	14.0 × 16.0 in (355.6 × 406.4 mm)	○	
[10X12]	10X12 platen	10.0 × 12.0 in (254.0 × 304.8 mm)	○	
[7X8]	7X8 platen	7.0 × 8.0 in (177.8 × 203.2 mm)	○	

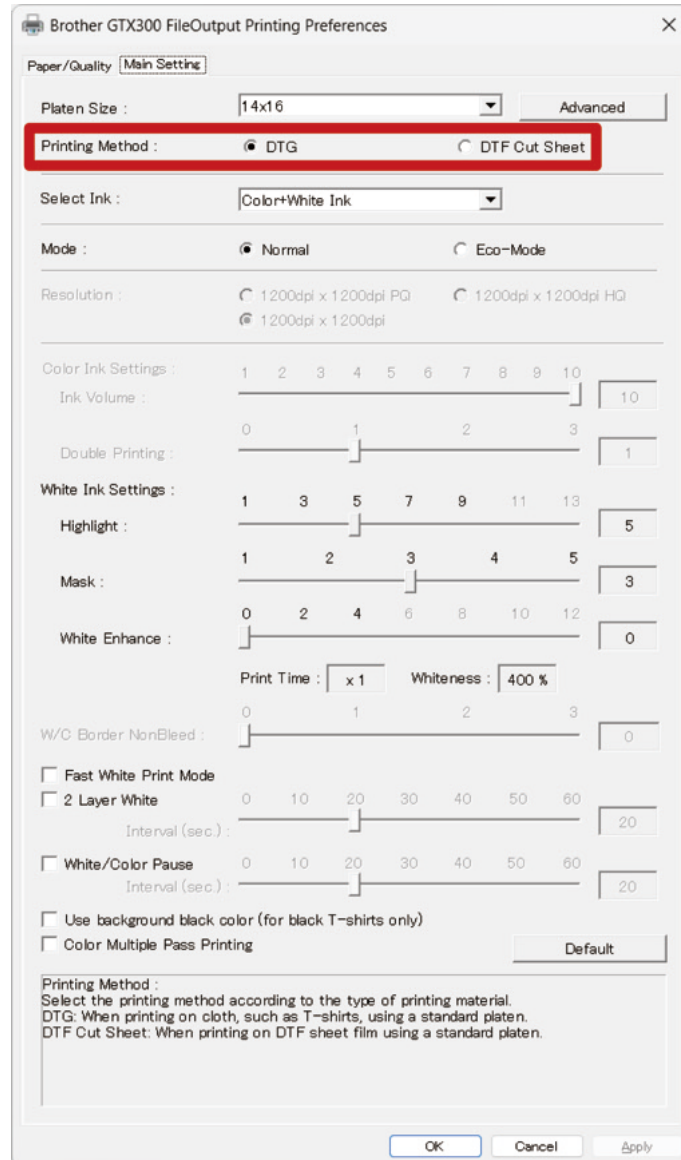
Chapter 5

Creating print data



5.4.3 Selecting a printing method

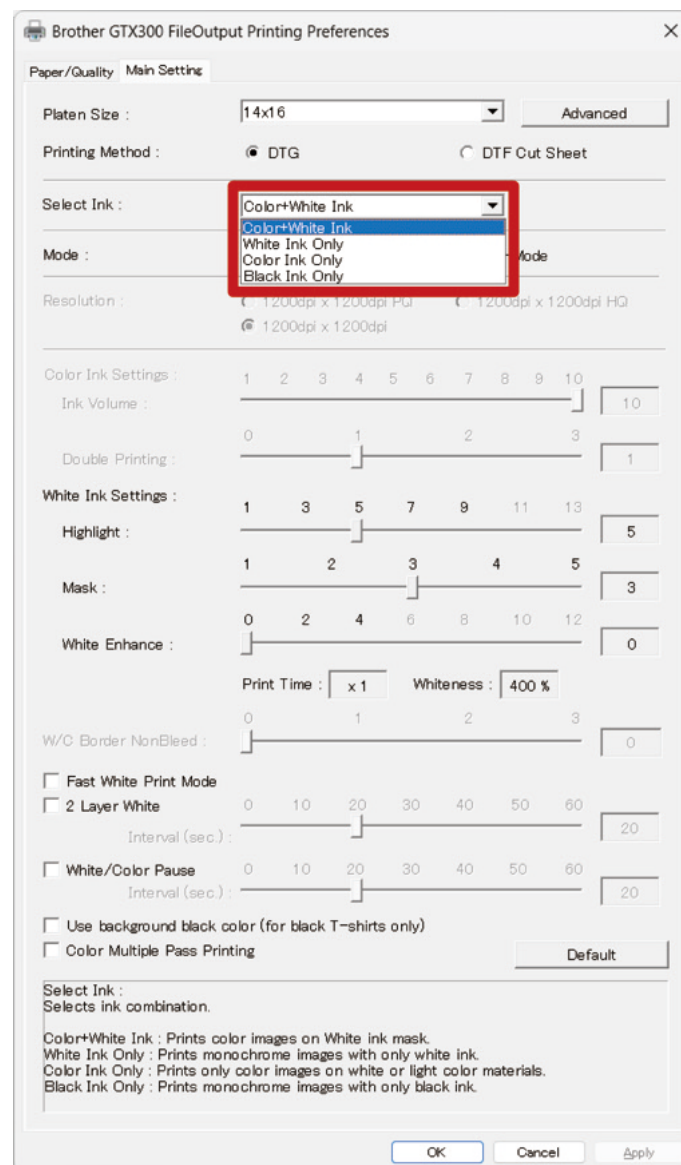
To set the printing method, select [DTG] or [DTF Cut Sheet] from [Printing Method:].



5.4.4 Select the ink type

From the [Select Ink:] option, select a combination of inks to be used.

Setup item	Description
[Color+White Ink]	This option enables a color image to be printed out on the mask layer of white ink.
[White Ink Only]	This option enables the white ink only to be used for printing out a monochrome image.
[Color Ink Only]	This option enables a color image to be printed out on a white background or lighter and pale color background.
[Black Ink Only]	This option enables the black ink only to be used for printing out monochrome image.



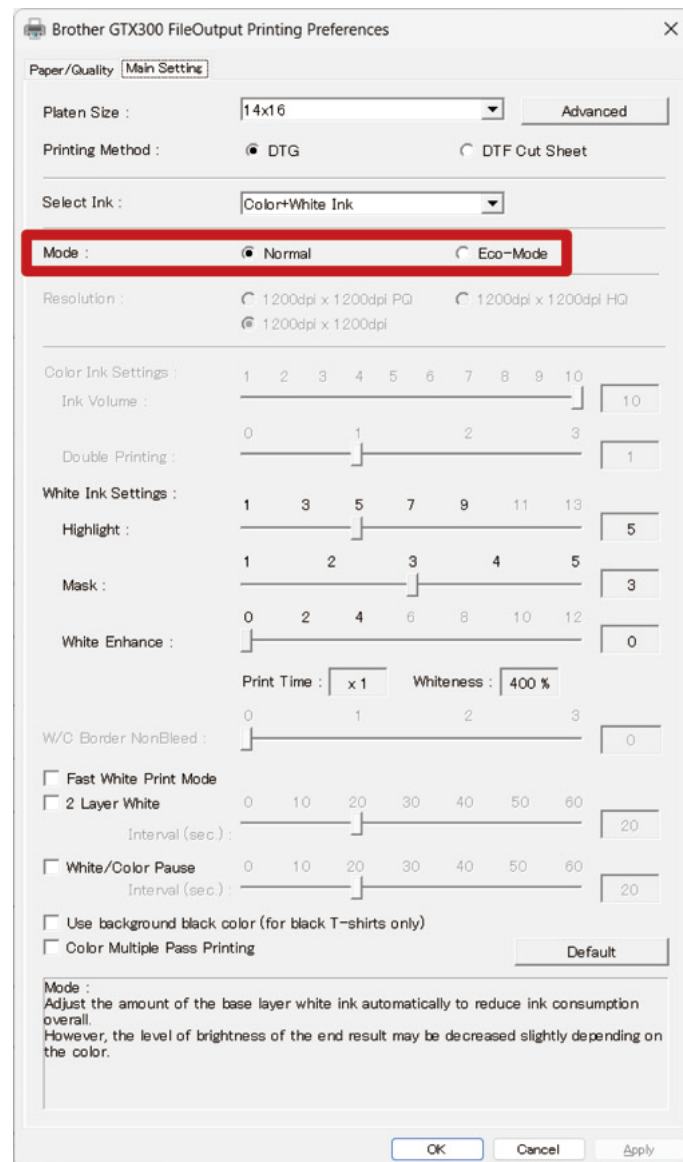
5.4.5 Select the mode

If you set [Mode:] to [Eco-Mode], the white ink volume serving as the background is automatically adjusted to reduce the overall ink consumption.



TIPS

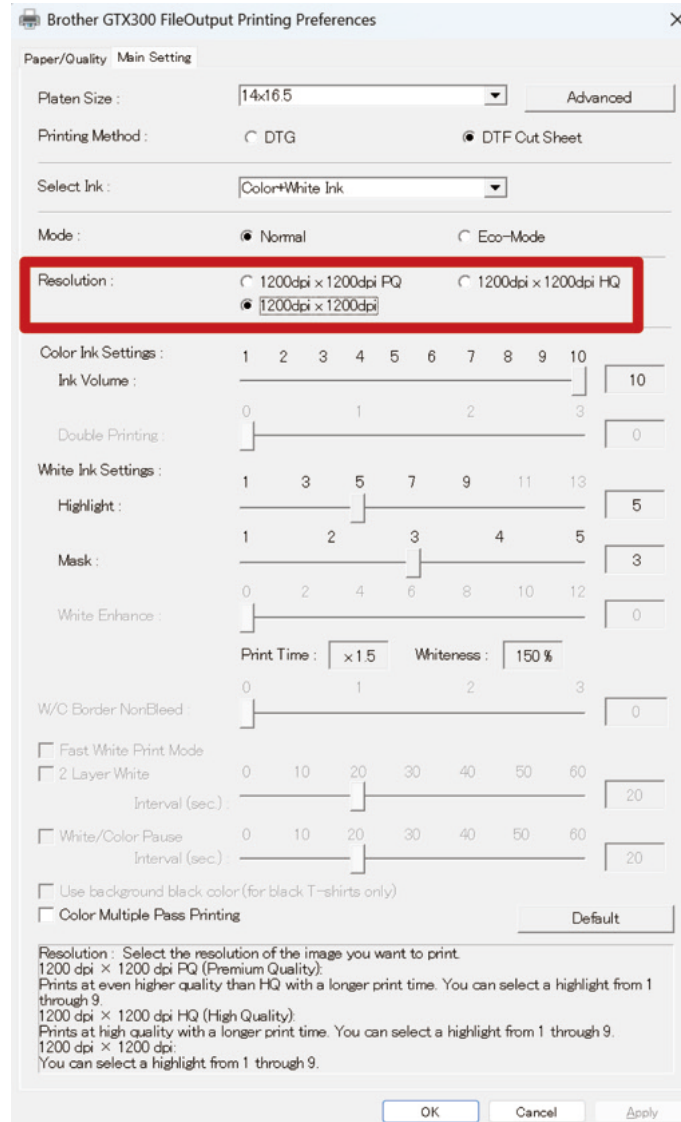
- The luminance on the finished print may be slightly reduced depending on the color.



5.4.6 Selecting the resolution

When you have selected [DTF Cut Sheet] in [Printing Method:], the setup items for [Resolution:] will appear.

The range that can be set for highlighting will change, and the printing time will also differ, depending on the resolution selected in [Resolution:].



Resolution

Resolution	Description
1200dpi x 1200dpi	Prints at 1200 dpi x 1200 dpi.
1200dpi x 1200dpi HQ	Prints at 1200 dpi x 1200 dpi HQ (High Quality).
1200dpi x 1200dpi PQ	Prints at 1200 dpi x 1200 dpi PQ (Premium Quality).



TIPS

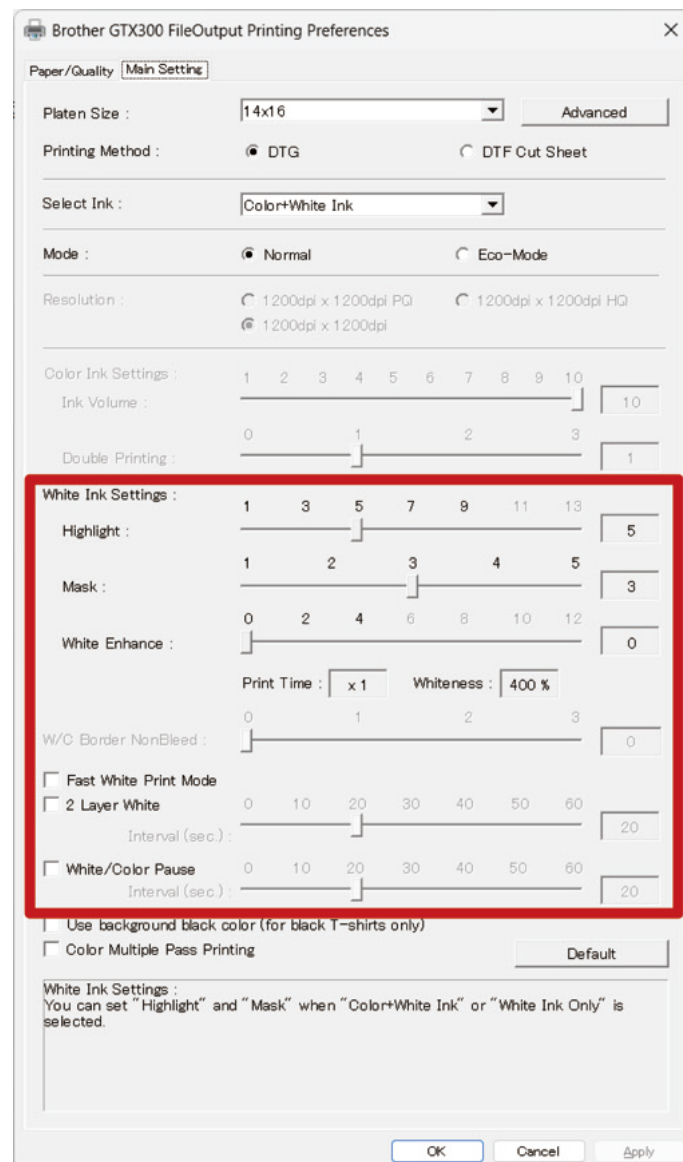
- Depending on the settings of [Resolution:], [Print Time:] will change.
- Actual ink consumption depends on the actual colors used in the original image. As such, use this number as a reference for ink consumption.

5.4.7 Set up the white ink

If you have selected [Color+White Ink] or [White Ink Only] in the [Select Ink:], the setup items for [White Ink Settings:] will appear.

Adjust the white ink volume separately in the [Highlight:] (visible white ink volume) and in the [Mask:] (white ink volume to cover the background color).

Also, depending on the [White High Speed Print], [2 Layer White], and [White/Color Pause] settings, the print time will change.



Highlight

This enables you to select whiteness (thickness) of RGB=254 in such 13 levels as [1] to [13]. When you increase this value, the White ink volume will increase.

You can specify [10] to [13] only if [2 Layer White] is enabled.

Highlight setpoints	Ink volume
[1]	White ink volume 200%
[2]	White ink volume 250%
[3]	White ink volume 300%
[4]	White ink volume 350%
[5]	White ink volume 400%
[6]	White ink volume 450%
[7]	White ink volume 500%
[8]	White ink volume 550%
[9]	White ink volume 600%
[10]	White ink volume 650%
[11]	White ink volume 700%
[12]	White ink volume 750%
[13]	White ink volume 800%



TIPS

- Appropriate highlight setting value depends on color or material of the T-shirt. It is recommended to consider and decide on an appropriate highlight setting value before creating print data. Perform a highlight check pattern print and select an appropriate setting value. [Print out highlight check pattern/mask check pattern on page 152](#)
- Depending on the settings of [Highlight:] and [Color Multiple Pass Printing], the [Print Time:] and [Whiteness:] will change accordingly.
- [Print Time:] will be set to [×1] if the setup value of [Highlight:] is [5], and [2 Layer White], [White/Color Pause] and [Color Multiple Pass Printing] are turned OFF. With this [X1] serving as a reference value, how many times relates to how long the print time will take when printing.
- Actual ink consumption depends on the actual colors used in the original image. As such, use this number as a reference for ink consumption.

Mask

This enables you to select the volume of white ink which is used as background color for color inks in such five levels as [1] to [5].

Setup value	Description
[1] or [2]	These setup values are suitable for such lighter and pale background colors as pale pink, ash and cream.
[3]	This is the default value. This value will reproduce the most smooth white-gray-black gradation.
[4]	This value is suitable for vivid background colors, e.g., red, purple, and green. It suppresses the influence of the color of the fabric.
[5]	This value enables the printing with the largest amount of white ink under all colors except darker color areas.



TIPS

- Perform a mask check pattern print and select an appropriate setting value. [Print out highlight check pattern/mask check pattern on page 152](#)

White Enhance

This option enables you to select the white ink volume only for the white (RGB=254) areas at a level of [0] to [12]. When you increase this value, the White ink volume will increase.

Depending on the [Highlight:] and [2 Layer White] settings, the white ink volume is added in increments of 25%.



TIPS

- Appropriate setting value for increasing white output depends on color or material of the T-shirt. It is recommended to consider and decide on an appropriate setting value for increasing white output before creating print data. Perform a highlight check pattern print and select an appropriate setting value.
[Print out highlight check pattern/mask check pattern on page 152](#)
- Depending on the [Highlight:] and [2 Layer White] settings, [Print Time:] and [Whiteness:] will change.
- [Print Time:] will be set to [×1] if the setup value of [White Enhance:] is [1], the setup value of [Highlight:] is [4], and [2 Layer White] is turned OFF.
With this [X1] serving as a reference value, how many times relates to how long the print time will take when printing.
- Actual ink consumption depends on the actual colors used in the original image. As such, use this number as a reference for ink consumption.

W/C Border NonBleed

This option reduces the volume of white ink at the boundary between white and colors to control boundary bleeding. When you increase this value, bleeding is reduced more.



TIPS

- Depending on the setup value, the white at the boundary between colors and white may be slightly lost.

Fast White Print Mode

This option allows high speed printing in the white ink use mode. This does not change the ink amount or concentration.

Turn it off if remarkable horizontal stripes are seen.



TIPS

- This setting menu will be enabled only if you have selected [DTG] in [Printing Method:].

2 Layer White

You can make highlight settings at a level of [1] to [13] when 2 Layer White is enabled.

Set 0–60 seconds for the time from the start of printing the first white ink layer to the start of printing the second white ink layer.

If you set a time shorter than the time it takes to print the first layer, the additional waiting time will be set to 0 seconds.



TIPS

- This setting menu will be enabled only if you have selected [DTG] in [Printing Method:].

White/Color Pause

Set 0-60 seconds for the time from the start of printing the previous white ink layer to the start of printing the color ink layer.

If you set a time shorter than the time it takes to print the previous white ink layer, the additional waiting time will be set to 0 seconds.



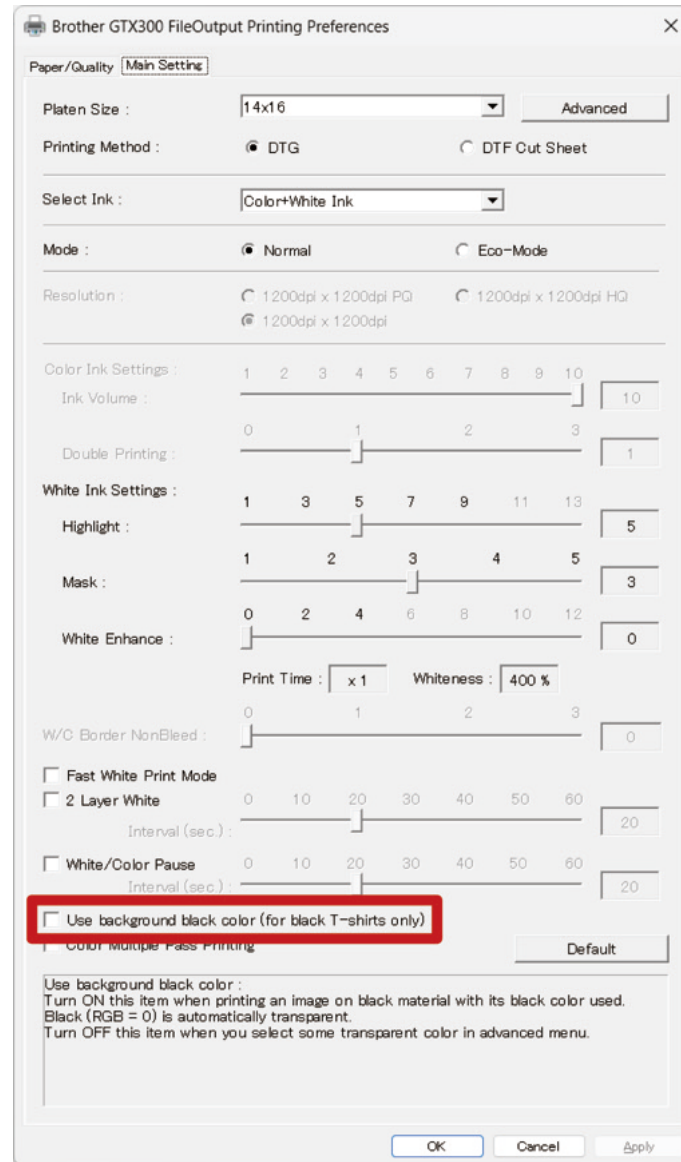
TIPS

- This setting menu will be enabled only if you have selected [DTG] in [Printing Method:].
- This setting menu will be enabled only if you have selected [Color+White Ink] in the [Select Ink:] settings.
- Check this checkbox to activate it when you print a tiny image.
- Tiny images may become black when printed. When that occurs, print a white layer first and wait for a while (waiting time), to print the color layers.

5.4.8 Specify whether or not to use the background black color

If you have selected [Color+White Ink] in [Select Ink:] or [DTG] in [Printing Method:], the setup items of [Use background black color (for black T-shirts only)] will appear.

In the event that you wish to print a black T-shirt making use of the T-shirt's background black color, mark the [Use background black color (for black T-shirts only)] checkbox.



5.4.9 Specify whether or not to perform Multiple Pass Printing

The setup items for [Color Multiple Pass Printing] will appear if you have selected [Color+White Ink], [Color Ink Only], or [Black Ink Only] in [Select Ink:].

The setup items for [White Multiple Pass Printing] will appear if you have selected [DTF Cut Sheet] in [Printing Method:] and [White Ink Only] in [Select Ink:].

In cases where small and horizontal stripes are highly noticeable in the print result, mark the [Color Multiple Pass Printing] or [White Multiple Pass Printing] checkbox.



TIPS

- Even if the [Color Multiple Pass Printing] or [White Multiple Pass Printing] checkbox is marked, the amount of ink to be consumed will remain unchanged.
- It takes longer to complete the print when [Color Multiple Pass Printing] or [White Multiple Pass Printing] is marked. For typical print time, refer to [Print Time:].

Chapter 5

Creating print data

Brother GTX300 FileOutput Printing Preferences

Paper/Quality **Main Setting**

Platen Size : 14x16 Advanced

Printing Method : ☒ DTG ☐ DTF Cut Sheet

Select Ink : Color+White Ink

Mode : ☒ Normal ☐ Eco-Mode

Resolution : ☐ 1200dpi x 1200dpi PQ ☐ 1200dpi x 1200dpi HQ
☒ 1200dpi x 1200dpi

Color Ink Settings :

Ink Volume : 1 2 3 4 5 6 7 8 9 10 10

Double Printing : 0 1 2 3 1

White Ink Settings :

Highlight : 1 3 5 7 9 11 13 5

Mask : 1 2 3 4 5 3

White Enhance : 0 2 4 6 8 10 12 0

Print Time : x1 Whiteness : 400 %

W/C Border NonBleed : 0 1 2 3 0

☐ Fast White Print Mode

☐ 2 Layer White

Interval (sec.) : 0 10 20 30 40 50 60 20

☐ White/Color Pause

Interval (sec.) : 0 10 20 30 40 50 60 20

☐ Use test print black color (for black T-shirts only)

☒ Color Multiple Pass Printing Default

Color Multiple Pass Printing :
Color Multiple Pass printing, for color print data, increases the number of platen line feeds to produce finer ink dots. It takes longer to print but enables better color printing.

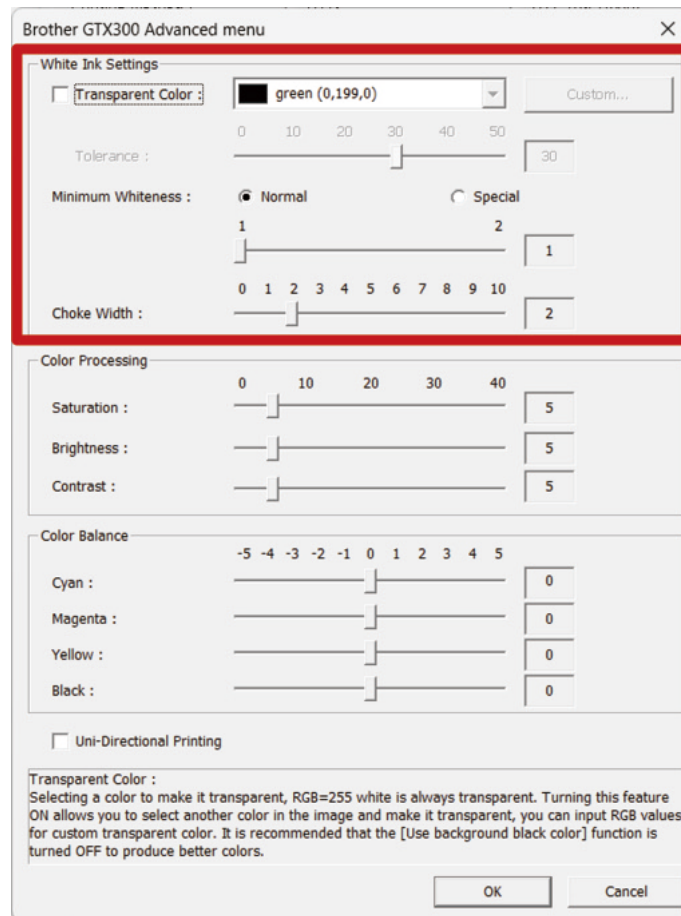
OK Cancel Apply

5.4.10 Set up the white ink

If you have selected [Color+White Ink] or [White Ink Only] in the [Select Ink:], this setting menu will be enabled.

When you click on the [Advanced] in the [Printing Preferences] dialog box, the setup items of [White Ink Settings] appear.

In [White Ink Settings], you can make settings for [Transparent Color:], [Tolerance:], [Minimum Whiteness:], [Choke Width:], and [Bleeding Reduction:].



Transparent color

With this option, specify a color which is treated as a transparent color without using any color during the printing process. If you want to specify other colors excluding the RGB=255 as "Transparent color", perform the following procedures to make your setting.



TIPS

- The RGB=255 is treated as a "Transparent color" (non-printing color).
- You would be better off making [Use background black color (for black T-shirts only)] OFF to produce better colors.

- 1 Click the [Transparent Color:] checkbox.

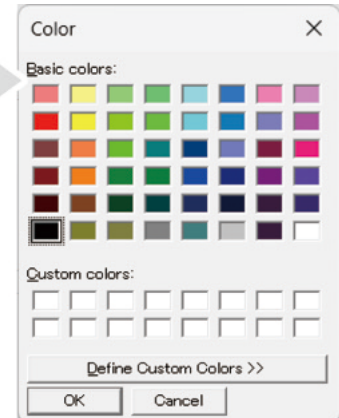
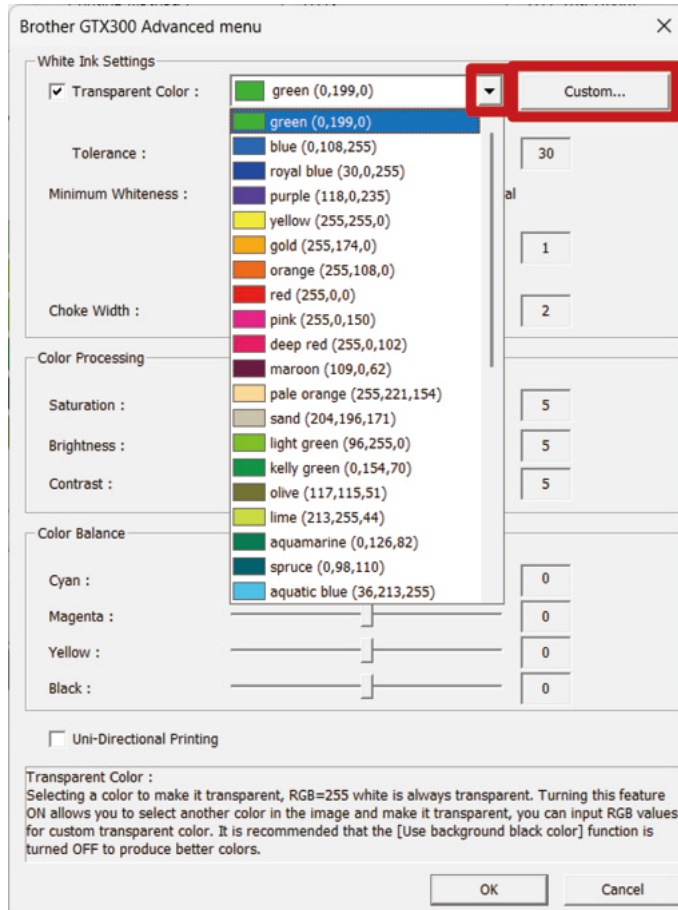
Then, the pull-down menu for color selection becomes active.

- 2 In the pull-down menu, select a color which serves as a background color of T-shirt, or click on the [Custom...] to specify a RGB value.



TIPS

- This custom color you have specified is valid only for one color which is specified immediately before. This color cannot be saved in the list.



Tolerance

Specify the gradation range (RGB values) to smoothly connect the zone between "Unprinted color" and "Printed color" to be gradually changed in tone.



TIPS

- If this value is increased, the gradation range in which the mask white is generated from a state in which no mask white exists will increase.
- The gradation's image quality depends on image data. For this reason, it is advisable to perform a test printing beforehand.

Minimum Whiteness

When printing with [Color+White Ink], the volume of background white color ink for dark or black color ink can be controlled.

When printing with [Color+White Ink], you can increase the amount of the white ink volume used as the base in a dark area by specifying a larger value.

Selecting [Special] allows you to select a value of [3] or higher.



TIPS

- Only when [DTF Cut Sheet] is selected in [Printing Method:], the setting range for [Minimum Whiteness] is between [0] and [2].
- The larger the value is, the more likely that blurring occurs.

Choke Width

This enables you to select the white ink choke width in such ten levels as [1] to [10]. When you increase this value, the choke width increases. By decreasing the print range of white ink, the white ink will be prevented from extending off from under the color inks.



TIPS

- Check the original image if white lines and/or dots are seen around the image, this may be caused by "Anti-alias" bitmap.
- There are instances in which fine lines (characters or photographs) will disappear if this level is increased. For this reason, it is advisable to perform a test printing beforehand.

Bleeding Reduction

[Bleeding Reduction] can be selected only when the printing method is [DTF Cut Sheet].

When you select [Bleeding Reduction], the white ink volume serving as the background is automatically adjusted to reduce bleeding.



TIPS

- The luminance on the finished print may be slightly reduced depending on the color.

5.4.11 Set up the image quality

When you click on the [Advanced] in the [Printing Preferences] dialog box, the setup items of [Color Processing] appear.

In the [Color Processing] option, you can make settings for [Saturation:], [Brightness:] and [Contrast:].

Make adjustments to increase vividness, brightness and clarity of an image without using any functions of application software.

Setup item	Description
[Saturation:]	The more vivid the color is, the higher its value.
[Brightness:]	The brighter the color is, the higher its value.
[Contrast:]	Contrast makes the image lighter for lighter colors and darker for darker colors if its value increases.



TIPS

- If a value of [Contrast:] is increased, there may be some cases in which fine lines will disappear.
- For this reason, it is advisable to perform a test printing beforehand when you specify a higher value.

Brother GTX300 Advanced menu

White Ink Settings

☐ Transparent Color : green (0,199,0) Custom...

Tolerance : 0 10 20 30 40 50 [30]

Minimum Whiteness : ☒ Normal ☐ Special

1 2 [1]

Choke Width : 0 1 2 3 4 5 6 7 8 9 10 [2]

Color Processing

Saturation : 0 10 20 30 40 [5]

Brightness : [5]

Contrast : [5]

Color Balance

-5 -4 -3 -2 -1 0 1 2 3 4 5

Cyan : [0]

Magenta : [0]

Yellow : [0]

Black : [0]

☐ Uni-Directional Printing

Saturation :
Saturation increases the color brightness. Use for grayish and colorless images, artwork created in CMYK color mode, scanned data, etc.

OK Cancel

5.4.12 Set up the color balance

When you click on the [Advanced] in the [Printing Preferences] dialog box, the setup items of [Color Balance] appear.

In the [Color Balance], you can make settings for [Cyan:], [Magenta:], [Yellow:], and [Black:].

You can adjust the color in 11 gradations, -5 to +5.



TIPS

- If you select [Black Ink Only] for ink selection, you can adjust [Black:] only.

Setup item	Description
[Cyan:]	Adjust the cyan ink volume. If you increase its value, the color becomes light bluish overall. If you decrease its value, the color becomes reddish overall.
[Magenta:]	Adjust the magenta ink volume. If you increase its value, the color becomes reddish-purple overall. If you decrease its value, the color becomes greenish overall.
[Yellow:]	Adjust the yellow ink volume. If you increase its value, the color becomes yellowish overall. If you decrease its value, the color becomes bluish overall.
[Black:]	Adjust the black ink volume. If you increase its value, the color becomes blackish overall. If you decrease its value, the color becomes whitish overall.

Brother GTX300 Advanced menu

White Ink Settings

☐ Transparent Color : green (0,199,0) Custom...

Tolerance : 0 10 20 30 40 50 30

Minimum Whiteness : ☒ Normal ☐ Special

1 2 1

Choke Width : 0 1 2 3 4 5 6 7 8 9 10 2

Color Processing

0 10 20 30 40

Saturation : 5

Brightness : 5

Contrast : 5

Color Balance

-5 -4 -3 -2 -1 0 1 2 3 4 5

Cyan : 0

Magenta : 0

Yellow : 0

Black : 0

☐ Uni-Directional Printing

Cyan :
Adjust the cyan ink volume.
If you increase its value, the color becomes light bluish overall.
If you decrease its value, the color becomes reddish overall.

OK Cancel

5.4.13 Specify the print direction

When you click on the [Advanced] in the [Printing Preferences] dialog box, you can make the settings for [Uni-Directional Printing].



TIPS

- What you have specified on the printer's operation panel are prioritized, and this option becomes active only when the print direction specified on the printer side is set to [Auto].
- Print time will be doubled.

Brother GTX300 Advanced menu

White Ink Settings

☐ Transparent Color : green (0,199,0) Custom...

Tolerance :

30

Minimum Whiteness : ☒ Normal ☐ Special

1

Choke Width :

2

Color Processing

Saturation :

5

Brightness :

5

Contrast :

5

Color Balance

Cyan :

0

Magenta :

0

Yellow :

0

Black :

0

☒ Uni-Directional Printing

Uni-Directional Printing :
Makes the print uni-directional.
The value of Print Direction set by the Panel has priority. This is available only if [Auto] is selected in Print Direction through the Control Panel.

OK Cancel

5.5 Driver settings for print data using color ink and black ink only

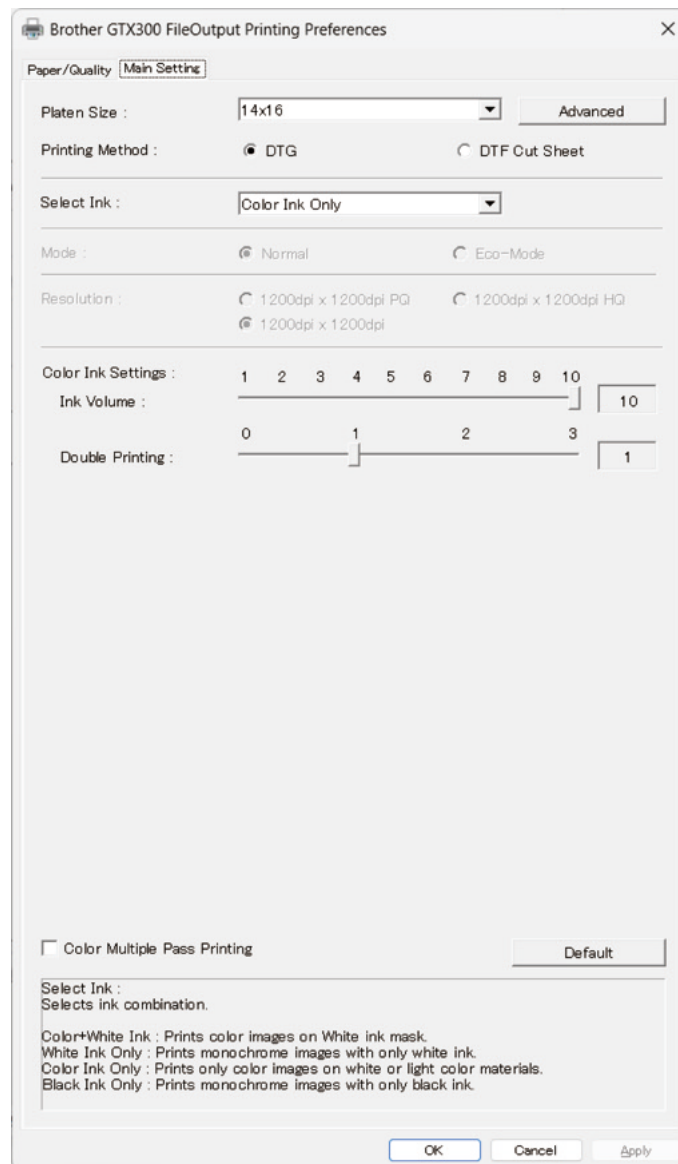
5.5.1 Set up the printer driver



TIPS

- The GTX300 printer driver treats RGB=255 as "Transparent color" and does not eject the ink.
- For the color replacement method, refer to a relevant page ([Using other applications on page 95](#)) or help menu of each application software.

- 1 By following the printing procedures of each application software, open the print setup dialog box of the printer driver.



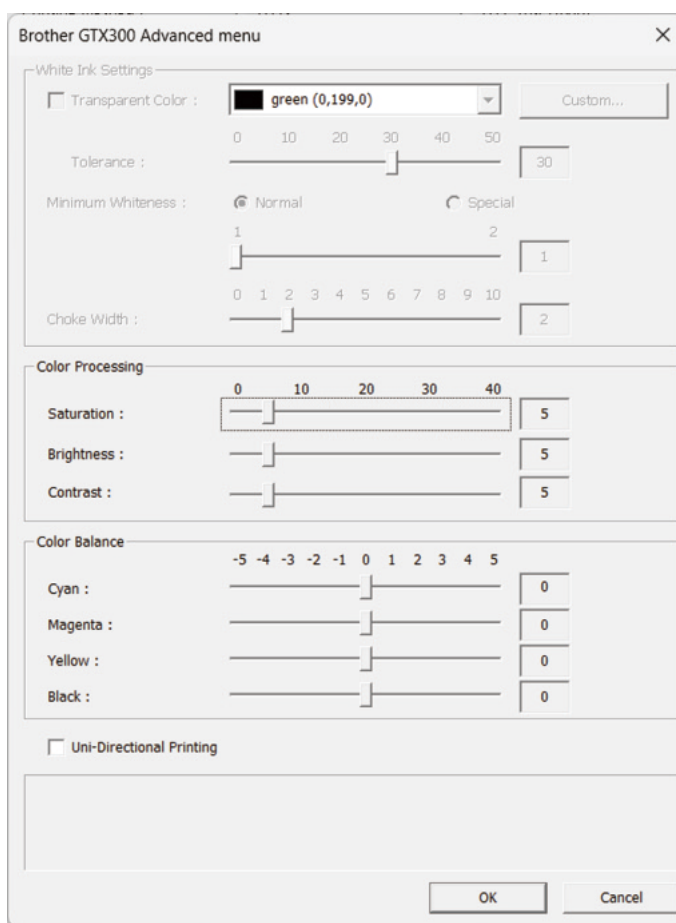
- 2 In the dialog box for setting the printer driver, configure required settings.

If you click on the [Advanced] option, [Color Processing] and [Uni-Directional Printing] can be configured.



TIPS

- Depending on the settings you have made in the [Select Ink:] option or the like, setup items that appear on the screen vary.
- The rollover help is displayed in the square portion at the bottom of dialog box. Place the mouse pointer over it to browse the help feature.
- For the detailed description of setup items, refer to each chapter mentioned below.



- 3 After your settings are completed, click [OK].



TIPS

- You can refer to each value you have set up here by opening an ARX3 file from the "GTX300 FileViewer".

5.5.2 Select the platen size

From the pull-down menu of [Platen Size:], select a platen size for print area.



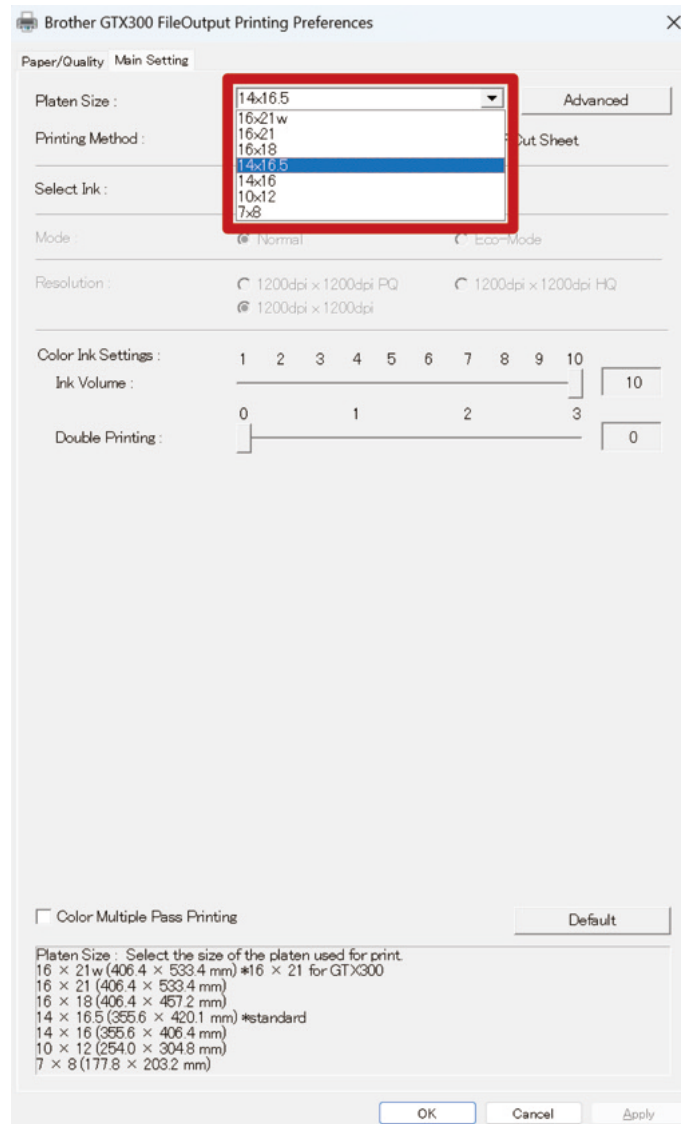
TIPS

- The platen size is equivalent to the paper size.

Setup item	Platen to be used	Size	Printing method	
			[DTG]	[DTF Cut Sheet]
[16×21]	16×21 platen	16.0 × 21.0 in (406.4 × 533.4 mm)	○	○
[16X18]	16X18 platen	16.0 × 18.0 in (406.4 × 457.2 mm)	○	
[14×16.5]	14×16.5 platen	14.0 × 16.5 in (355.6 × 420.1 mm)	○	○
[14X16]	14X16 platen	14.0 × 16.0 in (355.6 × 406.4 mm)	○	
[10X12]	10X12 platen	10.0 × 12.0 in (254.0 × 304.8 mm)	○	
[7X8]	7X8 platen	7.0 × 8.0 in (177.8 × 203.2 mm)	○	

Chapter 5

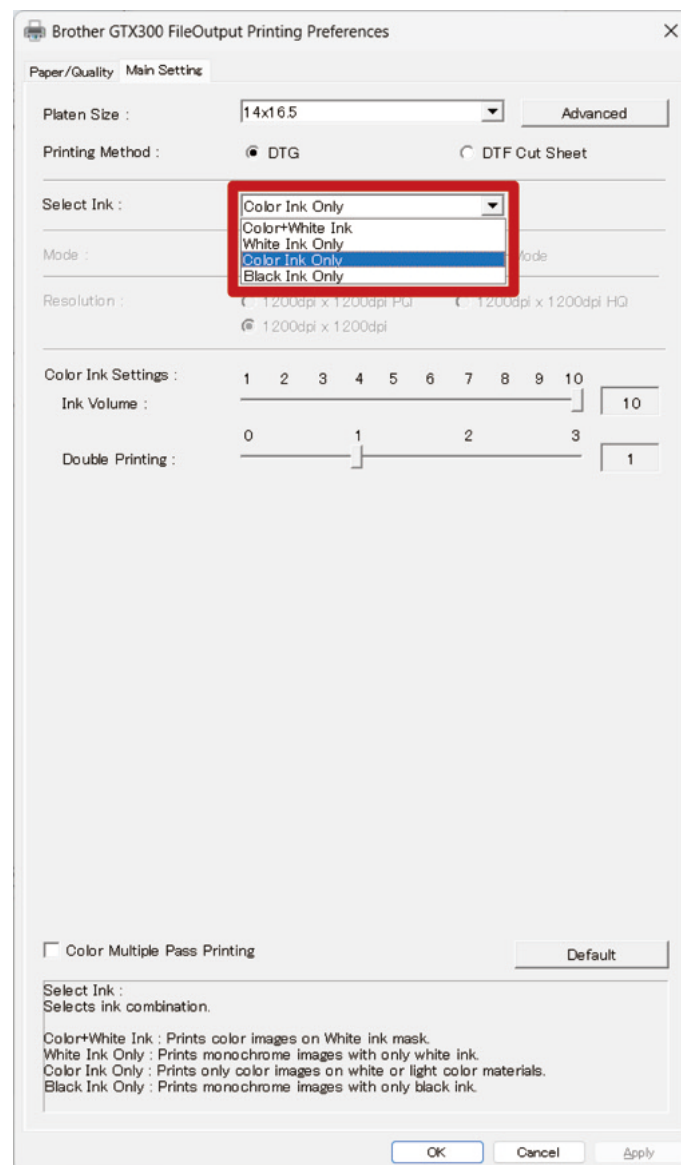
Creating print data



5.5.3 Select the ink type

From the [Select Ink:] option, select a combination of inks to be used.

Setup item	Description
[Color+White Ink]	This option enables a color image to be printed out on the mask layer of white ink.
[White Ink Only]	This option enables the white ink only to be used for printing out a monochrome image.
[Color Ink Only]	This option enables a color image to be printed out on a white background or lighter and pale color background.
[Black Ink Only]	This option enables the black ink only to be used for printing out monochrome image.



5.5.4 Specify whether or not to perform Multiple Pass Printing

The setup items for [Color Multiple Pass Printing] will appear if you have selected [Color+White Ink], [Color Ink Only], or [Black Ink Only] in [Select Ink:].

The setup items for [White Multiple Pass Printing] will appear if you have selected [DTF Cut Sheet] in [Printing Method:] and [White Ink Only] in [Select Ink:].

In cases where small and horizontal stripes are highly noticeable in the print result, mark the [Color Multiple Pass Printing] or [White Multiple Pass Printing] checkbox.



TIPS

- Even if the [Color Multiple Pass Printing] or [White Multiple Pass Printing] checkbox is marked, the amount of ink to be consumed will remain unchanged.
- It takes longer to complete the print when the [Color Multiple Pass Printing] or [White Multiple Pass Printing] checkbox is marked. For a typical print time, refer to [Print Time:].

Chapter 5

Creating print data

Brother GTX300 FileOutput Printing Preferences

Paper/Quality Main Setting

Platen Size : 14x16.5 Advanced

Printing Method : ☒ DTG ☐ DTF Cut Sheet

Select Ink : Color Ink Only

Mode : ☒ Normal ☐ Eco-Mode

Resolution : ☐ 1200dpi x 1200dpi PQ ☐ 1200dpi x 1200dpi HQ
☒ 1200dpi x 1200dpi

Color Ink Settings :

	1	2	3	4	5	6	7	8	9	10	
Ink Volume :											10
Double Printing :											1

☒ Color Multiple Pass Printing Default

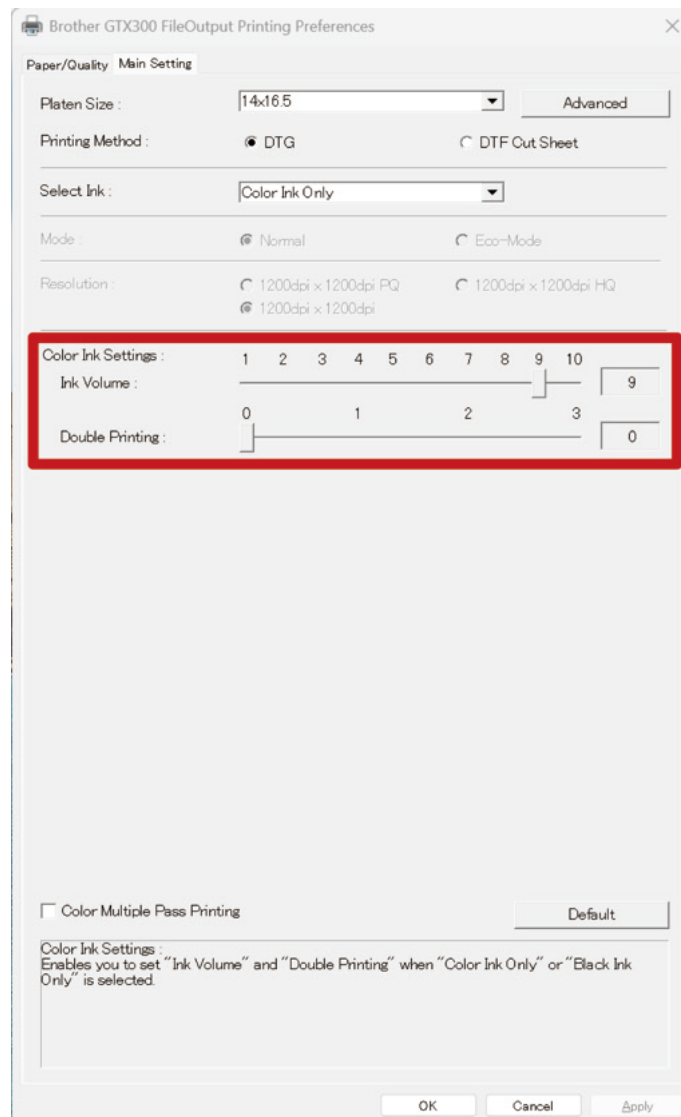
Color Multiple Pass Printing :
Color Multiple Pass printing, for color print data, increases the number of platen line feeds to produce finer ink dots. It takes longer to print but enables better color printing.

OK Cancel Apply

5.5.5 Set up the color ink

If you have selected [Color Ink Only] or [Black Ink Only] in the [Select Ink:], the setup items of [Color Ink Settings:] will appear.

In the [Color Ink Settings:] window, you can make your setting from the [Ink Volume:] or [Double Printing:] option.



Ink volume

This enables you to select the ink volume in such ten levels as [1] to [10].

Setup value	Description
[10]	This is the default value. This value corresponds to 100%-cotton fabrics as well as for blended yarn fabrics (hemp 50%/polyester 50% or cotton 50%/polyester 50%).
[9] to [7]	These values correspond to a thinner T-shirt, thick towel, and cotton products woven with twill fabrics.
[6] to [4]	These values correspond to thin and plain fabrics as well as for blended yarn fabrics that consist of cotton, polyester and polyurethane.
[3] to [1]	These values correspond to polyester jerseys and synthetic fabrics that have no water absorbency.



TIPS

- When you print other clothes than a thick T-shirt, check on the actual blurring first, then adjust a value in the [Ink Volume:] option.

Double Printing

Performing the print cycle two times separately will make the printed color stand out more.

Setup value	Description
[0]	No separate processes
[1]	Separate processes (wait time between the 1st and 2nd print cycle)
[2]	Separate processes (longer wait time than the case with setting [1] between the 1st and 2nd print cycle)
[3]	Separate processes (longer wait time than the case with setting [2] between the 1st and 2nd print cycle)



TIPS

- For the options [1] to [3], the platen will reciprocate two times.
- The higher the setpoint is, the longer the print time will be.

5.5.6 Set up the image quality

When you click on the [Advanced] in the [Printing Preferences] dialog box, the setup items of [Color Processing] appear.

In the [Color Processing] option, you can make settings for [Saturation:], [Brightness:] and [Contrast:].

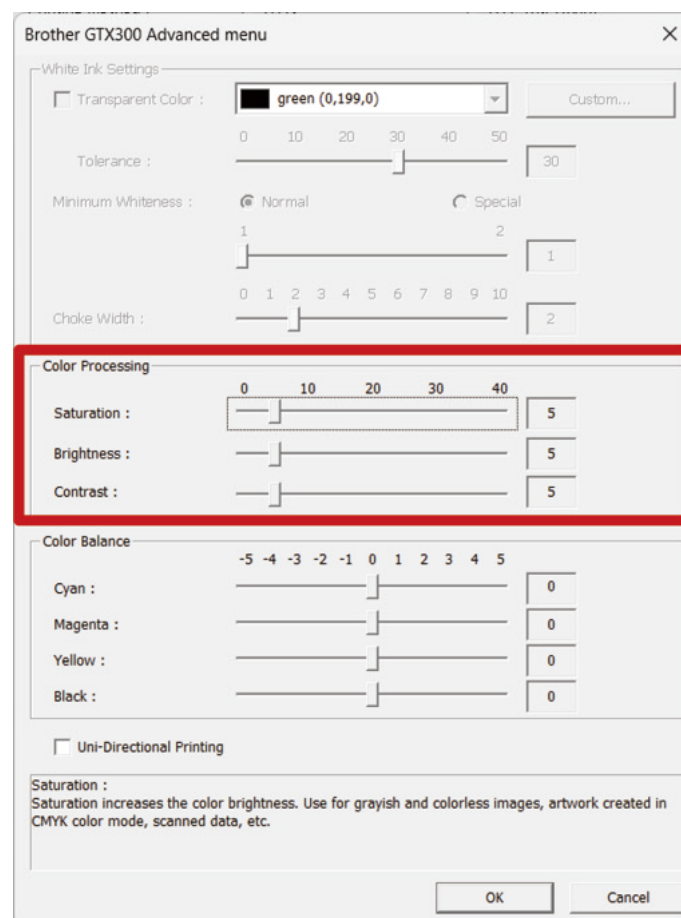
Make adjustments to increase vividness, brightness and clarity of an image without using any functions of application software.

Setup item	Description
[Saturation:]	The more vivid the color is, the higher its value.
[Brightness:]	The brighter the color is, the higher its value.
[Contrast:]	Contrast makes the image lighter for lighter colors and darker for darker colors if its value increases.



TIPS

- If a value of [Contrast:] is increased, there may be some cases in which fine lines will disappear.
- For this reason, it is advisable to perform a test printing beforehand when you specify a higher value.



5.5.7 Set up the color balance

When you click on the [Advanced] in the [Printing Preferences] dialog box, the setup items of [Color Balance] appear.

In the [Color Balance], you can make settings for [Cyan:], [Magenta:], [Yellow:], and [Black:].

You can adjust the color in 11 gradations, -5 to +5.



TIPS

- If you select [Black Ink Only] for ink selection, you can adjust [Black:] only.

Setup item	Description
[Cyan:]	Adjust the cyan ink volume. If you increase its value, the color becomes light bluish overall. If you decrease its value, the color becomes reddish overall.
[Magenta:]	Adjust the magenta ink volume. If you increase its value, the color becomes reddish-purple overall. If you decrease its value, the color becomes greenish overall.
[Yellow:]	Adjust the yellow ink volume. If you increase its value, the color becomes yellowish overall. If you decrease its value, the color becomes bluish overall.
[Black:]	Adjust the black ink volume. If you increase its value, the color becomes blackish overall. If you decrease its value, the color becomes whitish overall.

Chapter 5

Creating print data

Brother GTX300 Advanced menu

White Ink Settings

☐ Transparent Color : green (0,199,0) Custom...

Tolerance : 0 10 20 30 40 50 30

Minimum Whiteness : ☒ Normal ☐ Special

1 2 1

Choke Width : 0 1 2 3 4 5 6 7 8 9 10 2

Color Processing

0 10 20 30 40

Saturation : 5

Brightness : 5

Contrast : 5

Color Balance

-5 -4 -3 -2 -1 0 1 2 3 4 5

Cyan : 0

Magenta : 0

Yellow : 0

Black : 0

☐ Uni-Directional Printing

Cyan :
Adjust the cyan ink volume.
If you increase its value, the color becomes light bluish overall.
If you decrease its value, the color becomes reddish overall.

OK Cancel

5.5.8 Specifying the print direction

When you click on the [Advanced] in the [Printing Preferences] dialog box, you can make the settings for [Uni-Directional Printing].



TIPS

- What you have specified on the printer's operation panel are prioritized, and this option becomes active only when the print direction specified on the printer side is set to [Auto].
- Print time will be doubled.

Brother GTX300 Advanced menu

White Ink Settings

☐ Transparent Color : green (0,199,0) Custom...

Tolerance :

0

10 20 30 40 50

30

Minimum Whiteness : ☒ Normal ☐ Special

1

2

1

Choke Width :

0 1 2 3 4 5 6 7 8 9 10

2

Color Processing

Saturation :

0 10 20 30 40

5

Brightness :

5

Contrast :

5

Color Balance

Cyan :

-5 -4 -3 -2 -1 0 1 2 3 4 5

0

Magenta :

0

Yellow :

0

Black :

0

☒ Uni-Directional Printing

Uni-Directional Printing :
Makes the print uni-directional.
The value of Print Direction set by the Panel has priority. This is available only if [Auto] is selected in Print Direction through the Control Panel.

OK Cancel

5.6 Using Useful Tools

Useful tools and print data are provided for adjusting colors or searching for an appropriate print setting.

Find Useful Tools in the "GTX Maintenance #" menu in "Brother GTX Maintenance".

For the details of each tool, please refer to the chapters described later.



TIPS

- The "#" of "GTX Maintenance #" is the version number. The version number changes with app update.

5.6.1 Use the color palette

The different color palettes are available for each software application as follows:

- Adobe Photoshop/Illustrator: "GT_Colors_T.ase"

For more information, refer to a relevant page ([Using other applications on page 95](#)) or help menu of each application software.



TIPS

- When using the printer driver by default, use one of them as a color sample to check color reproduction and create/edit the image data.

5.6.2 Replace RGB=255 with RGB=254 (for Photoshop only)

For Photoshop, use this to change RGB=255 to RGB=254.

- 1 From the "Useful Tools", click "SolidWhite.atn", and follow the on-screen instructions to save the file on your PC.
- 2 In the menu bar of Photoshop, select [Window] > [Action file].
- 3 Click on  to open the submenu.
- 4 From the [Load Actions], select "SolidWhite.atn" saved on your PC.



TIPS

- For information on using action files, refer to the Help feature that Photoshop is provided with.
- "SolidWhite.atn" can be used only when the [Color mode] is set to [8 bit] of [RGB Color].

5.6.3 Check the color sample

Use when checking the color sample.

Please use this color chart as a color sample like the one that is commonly provided by an ink maker, for the print data (ARX3 file) you created using your desired printer driver setting.



TIPS

- Make use of this color chart when you perform the printing after changing the settings of the printer driver.



1 From the "Useful Tools", click a required file name to download the data. The following files are provided as color samples.

- GT_Blues.pdf
- GT_Greens.pdf
- GT_Oranges.pdf
- GT_Reds.pdf
- GT_ColorChart.pdf

- 2 Configure the printer driver and create print data.



TIPS

- Printer driver's setting procedure
 - In the case of print data using white ink: [Set up the printer driver on page 109](#)
 - In the case of print data using color ink and black ink only: [Set up the printer driver on page 134](#)
- Creating print data [Using other applications on page 95](#)

- 3 Send the created print data to the printer and perform printing. [Basic printing procedures on page 157](#)

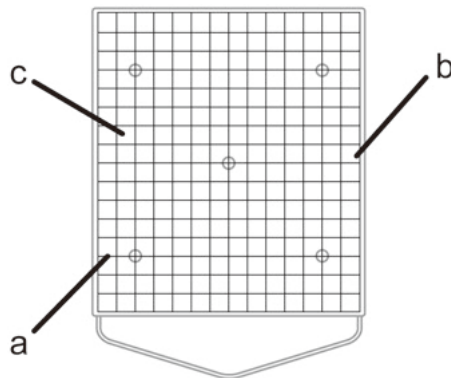


TIPS

- Check the print result and adjust the printer driver's settings.

5.6.4 Print a grid pattern on the platen sheet

You can print a grid pattern onto a new platen sheet.



- 1 From the "Useful Tools", open such an ARX3 file (for example, Grid14x16.arx3) that has a grid size suitable to the size of the platen (a).
- 2 Send the print data of grid pattern (b) to the printer.
- 3 Without putting a T-shirt in place, print the grid pattern directly onto the platen sheet (c).



TIPS

- After the printing is completed, press down the printed surface lightly with a dry cloth or a sheet of paper to dry the ink.

5.6.5 Adjust the ink volume

Set an optimum setting for [Ink Volume:] of the printer driver.

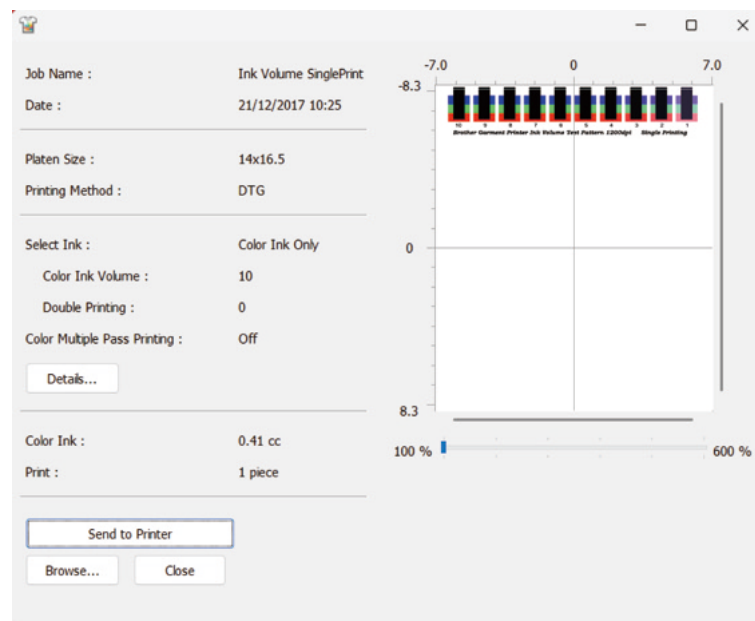
Download the data from "Useful Tools" and perform printing ([Basic printing procedures on page 157](#)) for checking the blurring beforehand.



TIPS

- Appropriate ink volume setting value depends on color or material of the T-shirt. It is recommended to consider and decide on an appropriate ink volume setting value before creating print data.
- There are four types of ink volume printing data. Select the ink volume print data to match the [Double Printing:] setting for the printer driver.

- 1 Select the desired file from "Ink Volume SinglePrint.arx3", "Ink Volume DoublePrint1.arx3", "Ink Volume DoublePrint2.arx3", and "Ink Volume DoublePrint3.arx3" from the "Useful Tools" to download data.
- 2 Send the data to the printer and perform printing.
- 3 Check the print result and adjust the value for [Ink Volume:] of the printer driver.



5.6.6 Print out highlight check pattern/mask check pattern

Set an optimum setting for [Highlight:] of the printer driver.

Download the data from "Useful Tools" and print the highlight check pattern for checking whiteness, background hiding level, and blurring beforehand.



TIPS

- Please print on a pretreated T-shirt. [Basic printing procedures on page 157](#)
- Appropriate highlight setting value depends on color or material of the T-shirt. It is recommended to consider and decide on an appropriate highlight setting value before creating print data.

- 1 From "Useful Tools", click "Highlight-Mask Check at MW1.zip", "Highlight-Mask Check at MW2.zip", or "Highlight-Mask Check at DTF Cut Sheet.zip" to download the data.



TIPS

- The file you should select differs depending on whether "Minimum Whiteness:" is set to [1] or [2].
Check the number at the end of the file name before downloading the file.

- 2 Unzip the file and the following print data will be displayed.

- "HighlightCheckPattern"
- "MaskCheckPattern" at each highlight

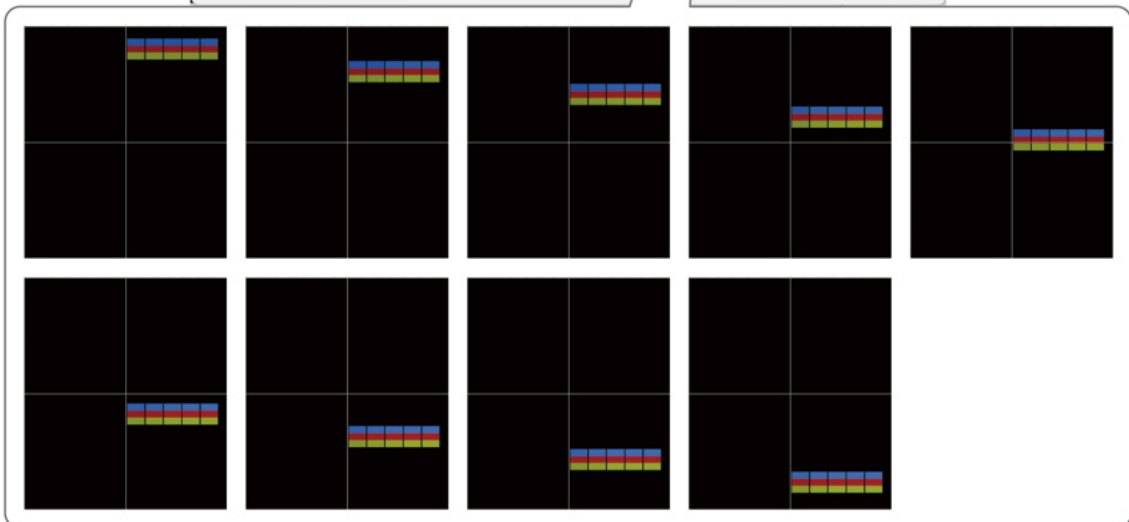
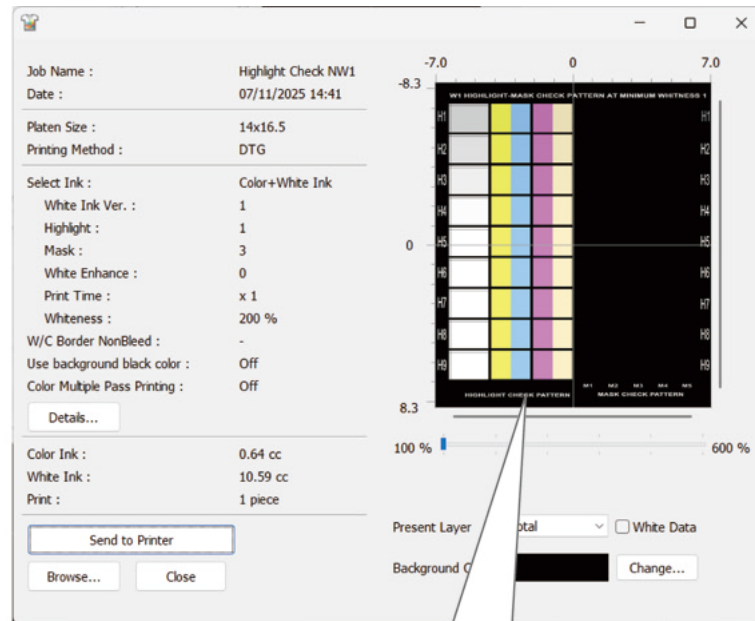
- 1 Print "HighlightCheckPattern" and select the optimum highlight setting.

- 2 Print "MaskCheckPattern" for the optimum highlight setting and select the optimum mask setting.

Chapter 5

Creating print data

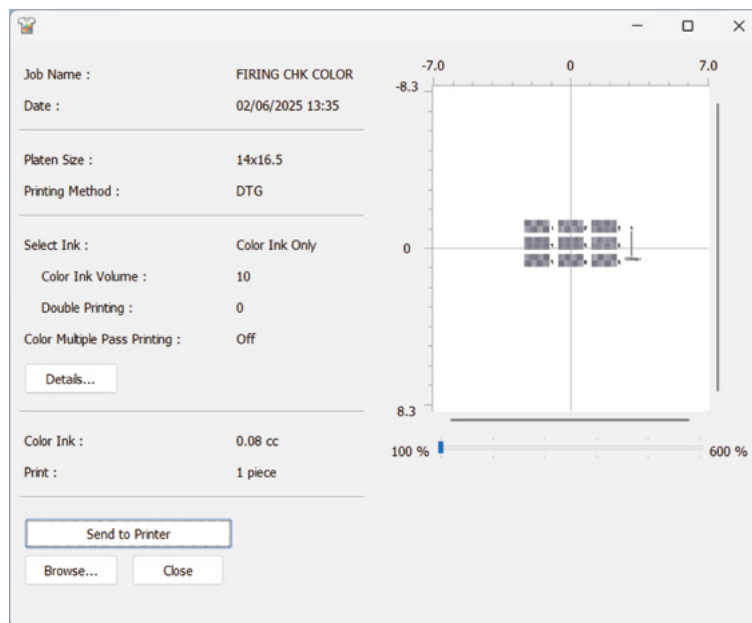
- 3 Check the print result and adjust the values for [Highlight:] and [Mask:] of the printer driver.



5.6.7 Check the ejection timing

Check whether or not the ejection timing is correct.

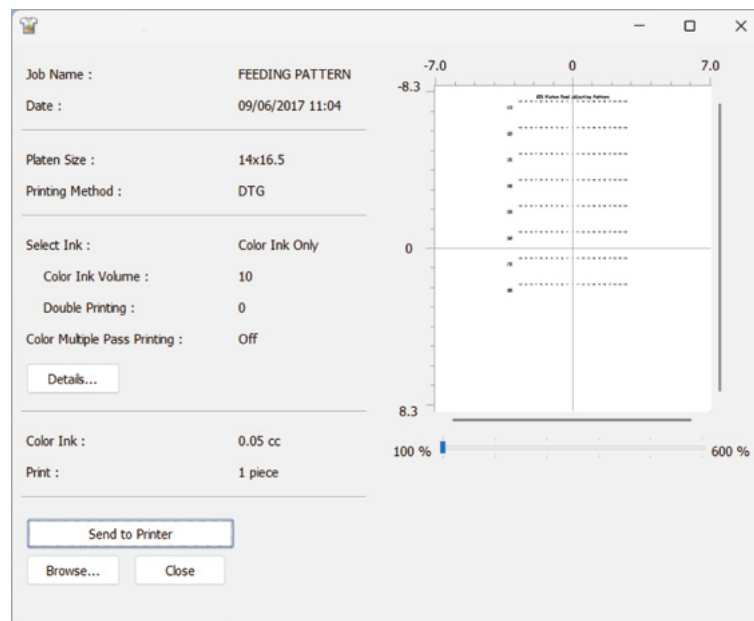
- 1 From the "Useful Tools", click "FIRING CHK COLOR.arx3" or "FIRING CHK WHITE.arx3" to download data.
- 2 Send the data to the printer and perform printing.
- 3 Check the print result to make sure the ejection timing has been set correctly.



5.6.8 Check the platen feed setting

Check whether or not the platen feed adjustment is appropriate.

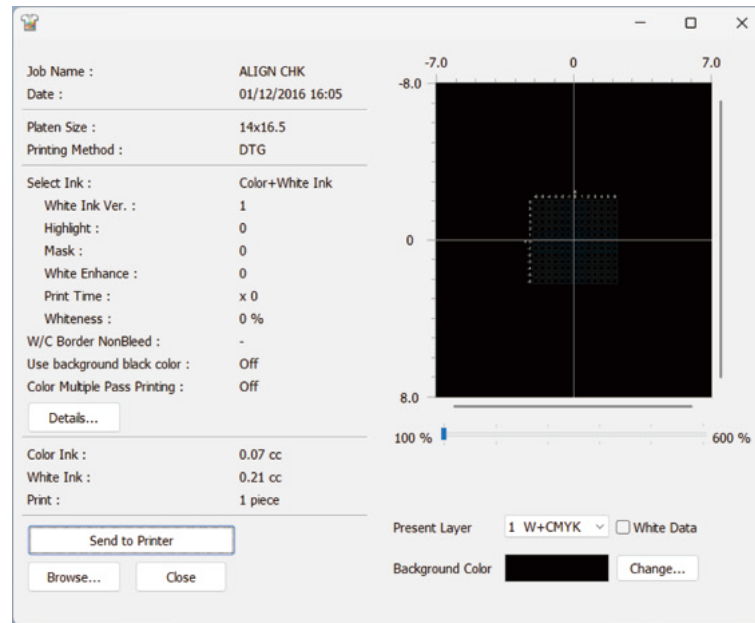
- 1 From the "Useful Tools", click "FEEDING PATTERN.arx3" to download data.
- 2 Send the data to the printer and perform printing.
- 3 Check the print result to make sure the platen-rolling adjustment has been set correctly.



5.6.9 Check the print position

Check the alignment of the print position on the white side with the print position on the color side.

- 1 From the "Useful Tools", click "ALIGN CHK.arx3" to download data.
- 2 Send the data to the printer and perform printing.
- 3 Check the print result to make sure the print position on the white side has been aligned with the print position on the color side correctly.



Chapter 6

Basic printing procedures

Read [SAFETY INSTRUCTIONS on page 8](#) in the opening pages carefully before starting work.

6.1 Basic printing process flow

What are described below are the basic work flows before the start and after the completion of print process.

- 1 Before starting printing, perform check and preparation tasks on the printer.
[Tasks to be performed before starting print operation on page 158](#)
- 2 To fixate the white ink onto the fabric of a T-shirt, apply the pretreatment to it beforehand. If you are not using white ink, you do not need to pretreat print medium.
[Pretreating process for print medium on page 166](#)
- 3 Replace the currently used platen with another one that suits the print medium. After the platen replacement is completed, adjust the platen's height.
[Platen adjustment on page 183](#)
- 4 Put a print medium on the platen.
[Placing print medium in position on page 196](#)
- 5 Send or load print data to the printer.
[Sending/Loading Print Data on page 202](#)
- 6 Start the print operation.
[Printing on page 215](#)
- 7 Remove the print medium from the platen.
[Removing the print medium from the platen on page 221](#)
- 8 Fixate the ink onto the print medium or fixate the powder onto the film.

For T-shirt printing	For film printing
(1) Fixate the ink onto the print medium Fixation of ink on page 222	(1) Fixate the powder onto the film. Powder fixing on page 226 (2) Transfer the powder-fixed ink onto the print medium. Transferring to print medium on page 227

6.2 Tasks to be performed before starting print operation

6.2.1 Confirmation and disposal of waste ink

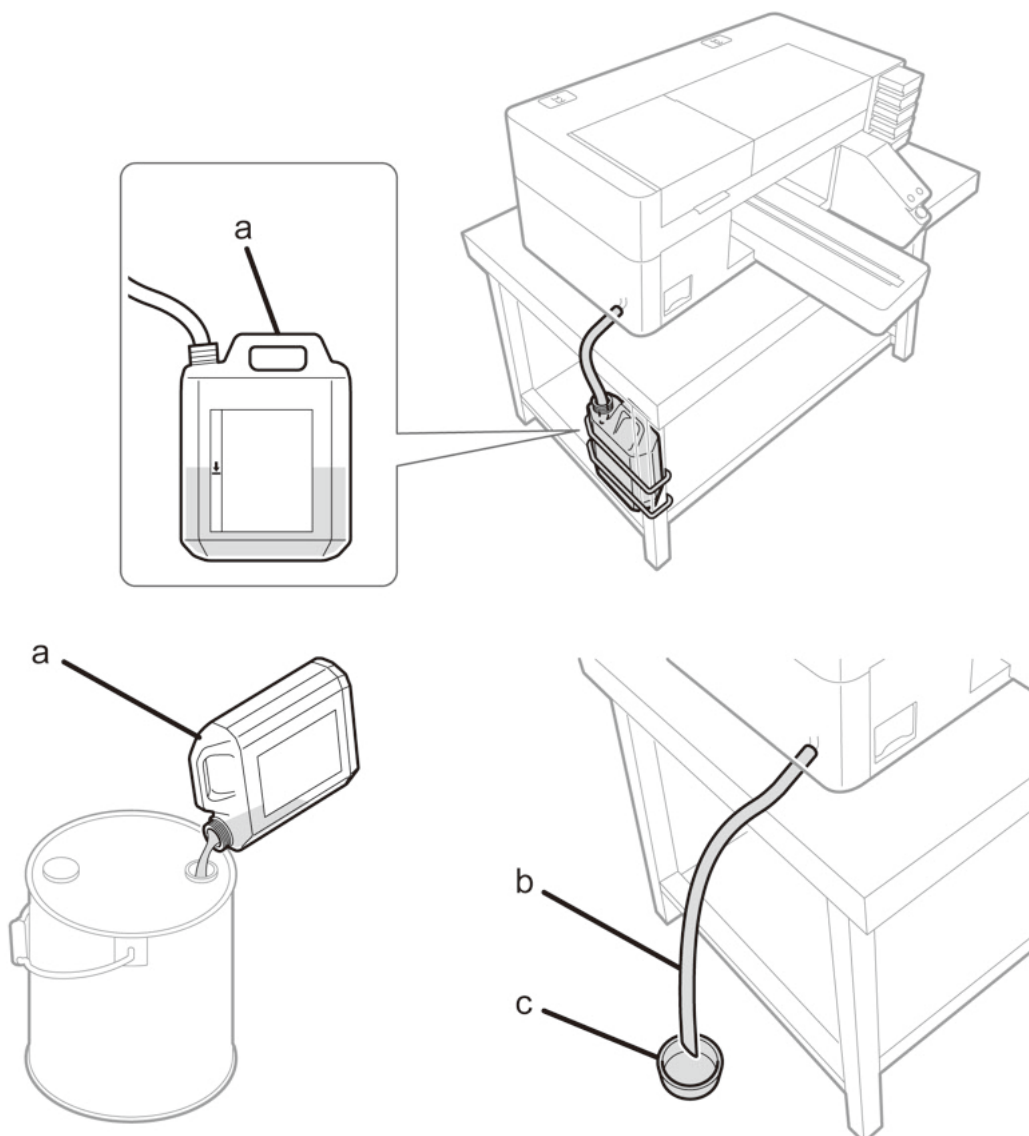
Check the amount of waste ink in the waste ink tank, and if the tank is filled with the waste ink up to its one-half or higher level, discard the ink.

- 1 Check on the waste ink tank (a), and discard the waste ink.

In an area under the other end of the waste ink tube (when removed) (b) from the waste ink tank, place a receiving tray (c) or the like so that the waste ink spilled from the tube will not be discharged onto the floor, etc.

Note

- Dispose of the waste ink properly as water-based waste fluid in accordance with applicable laws and ordinances.



- 2 Return the waste ink tank to its original state, and insert the waste ink tube into the tank.

IMPORTANT

- The waste ink tube should be cut diagonally. If the tip of the waste ink tube immersed in liquid, it will prevent the smooth flow of liquid, and disable the ink suction operation of the head cleaning function. Otherwise, waste fluid may flow reversely, causing the waste ink to spill contaminating the floor.
- Avoid placing the waste ink tube horizontally as much as possible, and be sure not to let it bend. Otherwise the waste ink may have difficulty flowing through the tube.

6.2.2 Confirmation and refilling of cleaning solution

Check to see if the amount of cleaning solution is kept at a proper liquid level in the cleaning solution tank, and refill the tank with the solution when its amount is below the proper level.

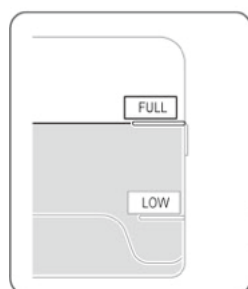
**TIPS**

- Also, refill the tank with the solution when a warning message appears on the operation panel screen or in the warning message window when the cleaning solution tank is not pulled out.

- 1 Pull out the cleaning solution tank from the front of the printer.
- 2 Open its lid and refill it with the cleaning solution up to the "FULL" line.

IMPORTANT

- Be sure not to put the cleaning solution into the tank above the "FULL" line.



- 3 Close the lid and slowly place the cleaning solution tank into the printer.

6.2.3 Daily agitation of the white ink

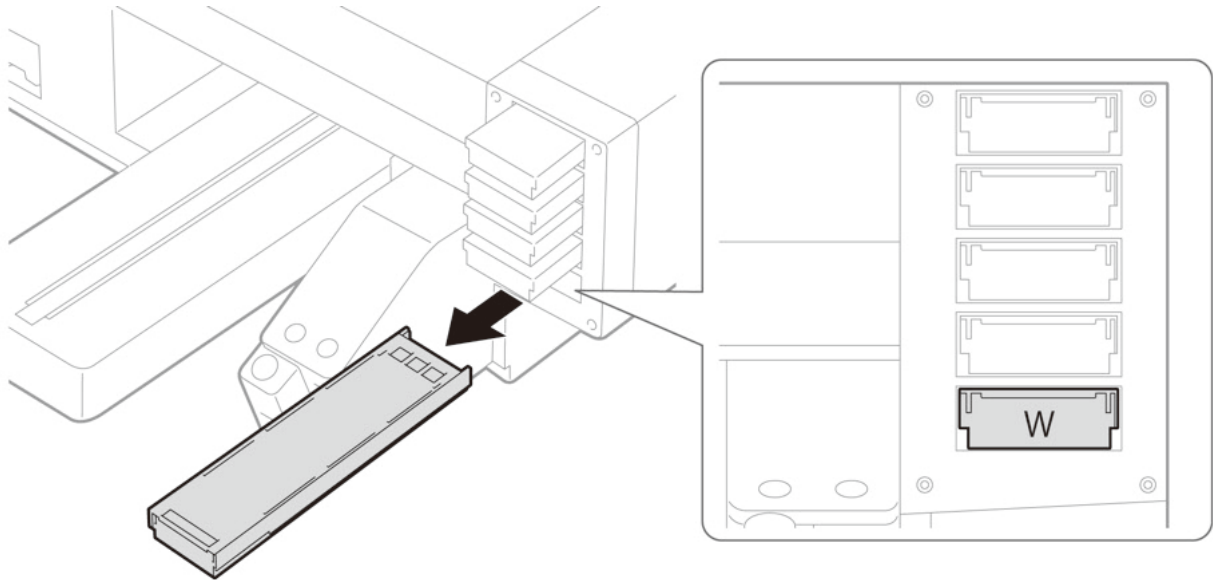
Perform the procedures shown below according to the on-screen instructions on the operation panel if a white ink cartridge stirring message is displayed before starting operation.



- 1 Remove the white ink cartridge from the printer.

IMPORTANT

- The bottom of the cartridge may be soiled with ink. Clean the printer on a regular basis.



- 2 Shake the cartridge 100 times (approximately 60 seconds) side by side to stir the white ink.

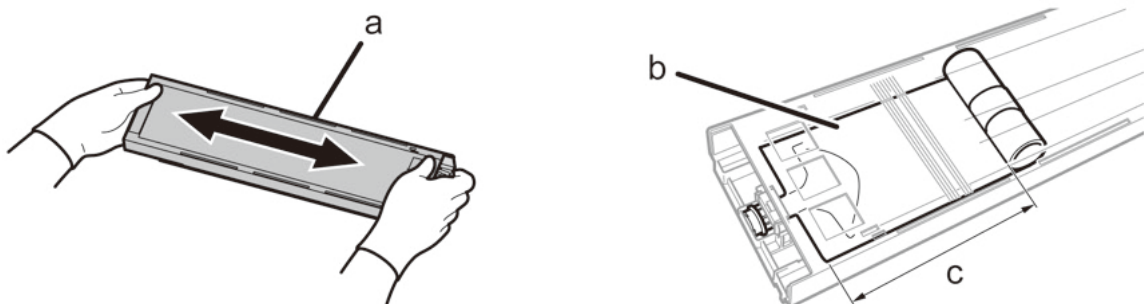
The swing distance should be approximately 2.0 in. (5 cm). Increase the swing distance when the remaining ink level becomes low.

IMPORTANT

- The white ink cartridge (a) should be held horizontally when shaking it.
- Holding the white ink cartridge upside down or shaking it too roughly could break the ink pouch (b).
- If ink adheres to the tip of the ink pouch, wipe it off with a dry cloth.

Note

- Wear the provided gloves when performing this task.
- When the remaining ink level becomes approximately 5.9 in. (15 cm) (c), open the cover and shake the cartridge with the winding part of the ink pouch slightly unwound to make the ink easier to mix.



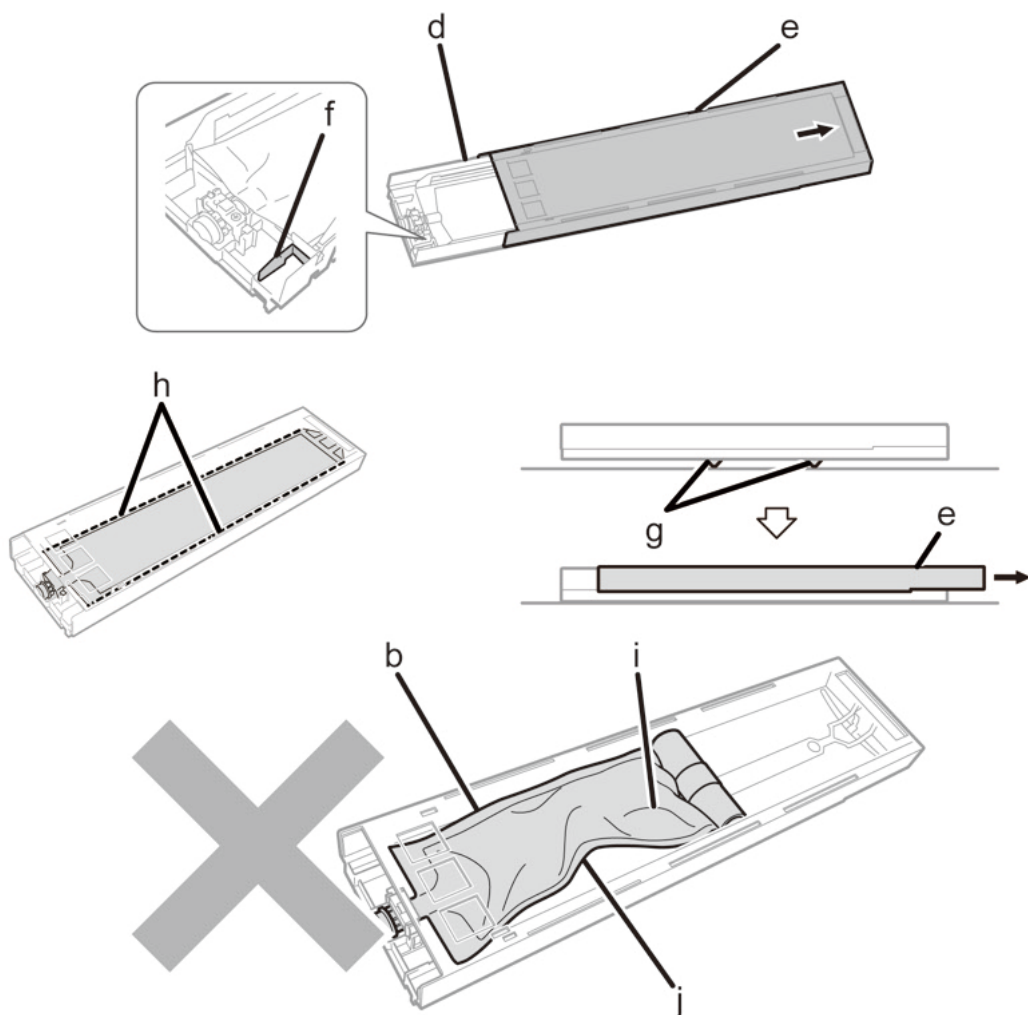
- 3 Open the lid (e) of the cartridge (d) and place the ink pouch (b) in its correct position.

IMPORTANT

- Always open the cartridge lid and properly rewind the ink pouch. If the pouch is placed without opening the lid, ink can flow into the wound section of the pouch when stirred, and cause improper winding of the pouch.
- When opening the lid, place the entire cartridge on a flat surface, push the latches (g) on the bottom surface of the cartridge downward and open the lid.
- When setting the ink pouch, avoid unevenness or wrinkles on the pouch.
 - Place the pouch in straight alignment with the cartridge (h)
 - No wrinkles (i)
 - Not sagged (j)
- When opening the lid, be sure not to touch portion (f). Otherwise, it could be damaged.

Note

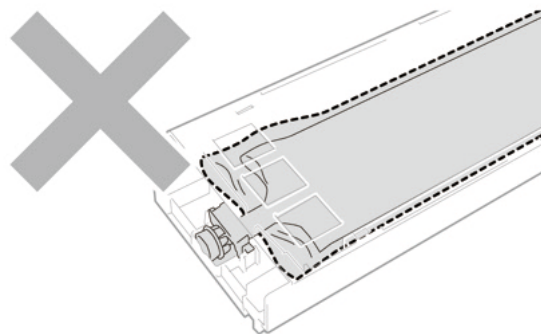
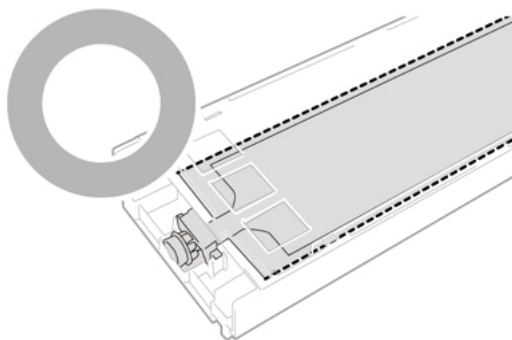
- If the remaining ink level is low, hold the sagged part of the ink pouch and close the lid.



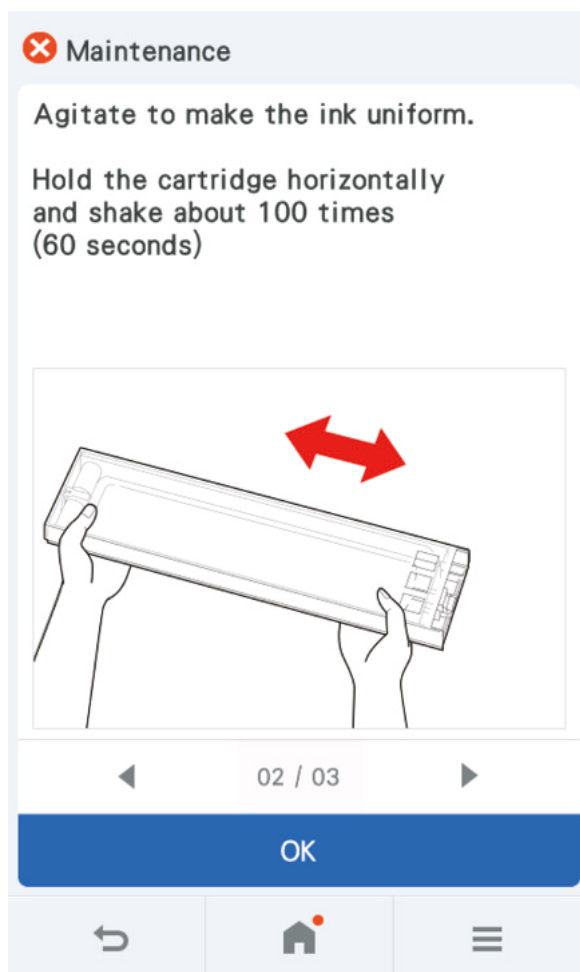
- 4 Close the lid, and put the white ink cartridge in position inside the printer.

IMPORTANT

- When stirring is insufficient, the stirring window for a stir of 60 seconds or more appears. Keep stirring according to the on-screen instructions on the panel. After that, press the [OK] button of the operation panel.
- When setting the cartridge, do not shake the cartridge with the ink pouch facing down with the aim of facilitating the winding of the pouch. Doing so will cause wrinkles, and the proper winding of the ink pouch will not be possible.

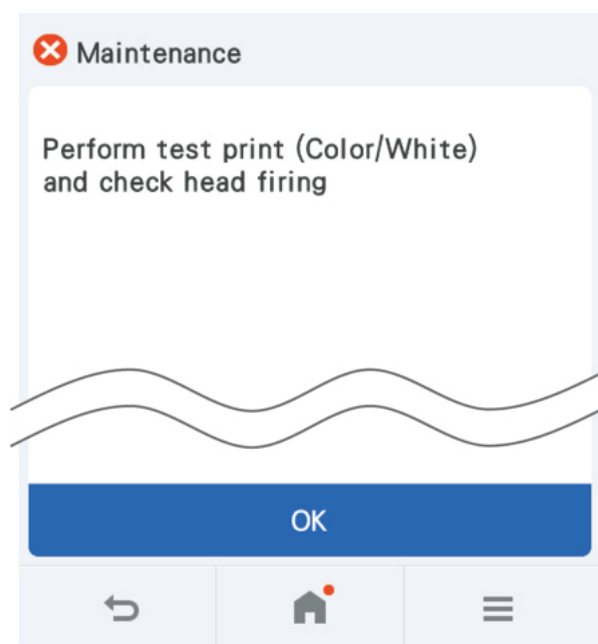


When stirring is insufficient



- 5 Print out a nozzle check pattern according to the on-screen instructions on the operation panel.

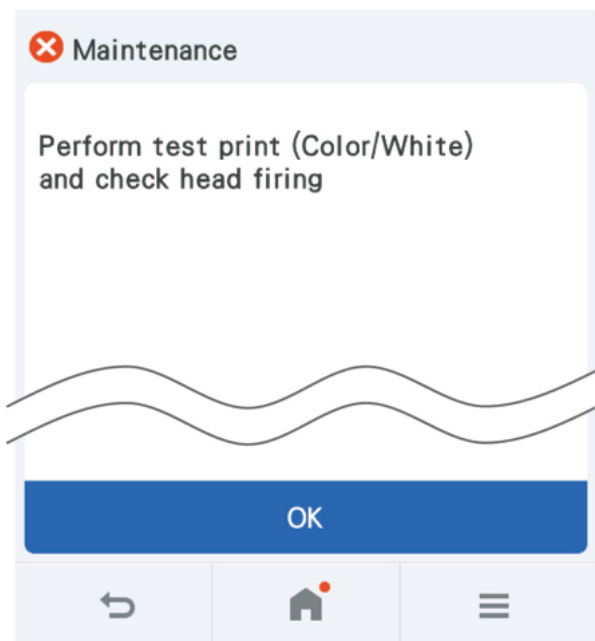
[Printing out the nozzle check pattern \(checking on the print heads\) on page 260](#)



6.2.4 Checking the ejection from the head

If a message prompting you to check the ejection from the head is displayed before work, print out a nozzle check pattern.

[Printing out the nozzle check pattern \(checking on the print heads\) on page 260](#)



6.3 Pretreating process for print medium

To fixate the white ink onto the surface of fabric of a T-shirt, apply the pretreatment to it beforehand. If you are not using white ink, you do not need to pretreat print medium.

Workflow of pretreating process

Step	Item	Detailed description
1	Dilution of pretreatment	Put the pretreatment into a polypropylene container or the like, and dilute it with pure water.
2	Application of diluted pretreatment	By means of a spray or roller, apply the diluted pretreatment onto the print medium.
3	Fixation of pretreatment	Fixate the pretreatment by using the heat press to apply heat and pressure onto the print medium.

6.3.1 Provisions for pretreatment

Items to be prepared

Two types of application means are available for the pretreatment—roller and spray.

With reference to the table below, make what you need available in advance.

Items to be prepared	For roller coating	For spray coating
Pretreatment	○	○
Pure water	○	○
Pretreatment roller	○	—
Handle (handgrip of roller)	○	—
Tray	○	—
Agent-coating table	△	—
Weighing instrument	○	○
Spray	—	○
Heat press	○	○
Peel-off sheet	△	△
Silicone foam (of open-cell structure)	△	△
Adhesive roller	△	△

- Pretreatment

It is the white liquid that is needed for pretreating process for printing with white ink. If a print medium is not coated with this agent, no color development of white ink takes place, and the whiteness becomes insufficient. Also, no color will be produced from the color inks that are applied onto the white ink. In order to apply the pretreatment onto a T-shirt, use a spray or roller, and use the heat press to fixate it.

CAUTION

- Be sure to wear a pair of plastic gloves, a mask and protective glasses during the work operation.
- For information on handling of the pretreatment, see the Material Safety Data Sheet issued by us.
<http://sds.brother.co.jp/sdsapp/index.html>

- Pure water

It refers to distilled water, purified water, etc. which is used to dilute the pretreatment with it.

- Pretreatment roller (option)

This is used to apply the pretreatment onto a T-shirt. It is advisable to use such a handgrip for the roller that is resistant to rust formation.

Note

- Separately provide a tray (container for dilution), handle (handgrip for roller), agent-coating table and weighing instrument for amount of coating.

- Spray (commercially available item)

This is used to apply the pretreatment onto a T-shirt. Use a spray (preferably of an electrically-operated type) that can emit fine spray. As compared with a roller, a spray allows for easy and even coating and reduces non-uniform coating, while it requires a special space for using it.

In addition to a spray, a pretreatment application device (commercial product) is available that can apply the pretreatment onto a T-shirt automatically. As required, make them available for use separately.

CAUTION

- Fully take care of the air ventilation when you work on operation that generates mist such as spray application.
- Be sure to wear a pair of plastic gloves, a mask and protective glasses (or goggles) designed to shield against liquid splash during the work operation.
- For information on handling of the pretreatment, see the Material Safety Data Sheet issued by us.
<http://sds.brother.co.jp/sdsapp/index.html>

IMPORTANT

- If you are using an electric spray to apply the pretreatment, perform the work at a place as far as possible from the printer. Otherwise, it may cause failure of print heads.

- Heat press

It must deliver the performance through which the print range of the platen can be covered and 180°C (356°F) can be kept for 35 seconds or more. At a fixing stage of the pretreatment, be sure to use the heat press, but not an oven, to smoothen the surface.

- Peel-off sheet

When using the heat press, place this sheet on a T-shirt so that neither inks nor pretreatment can be attached to the press surface of the heat press. As a peel-off sheet, use a silicone-coated paper or a fluororesin sheet. There is a tendency to bring the print result to an almost matte finish if a silicone-coated paper is used at the ink fixation stage. There is a tendency to bring the print result to an almost bright finish if a fluororesin sheet is used at the ink fixation stage.

- Silicone foam (of open-cell structure)

It is the foamed mattress which is made of silicone that resists heat. When fixating the inks or pretreatment by means of the heat press, use this foam to ventilate steam with ease.

- Adhesive roller

Use these to remove lint from a T-shirt or debris from its surface.

- T-shirt (printing medium)

100%-cotton fabric or polyester blended yarn fabric (cotton 50% or more)



TIPS

- Although it is advisable to use a 100% cotton T-shirt, some textiles cannot necessarily guarantee good printing quality even if they are made of 100% cotton or blended yarn. In particular, for a T-shirt made of new material, perform a printing test on it beforehand.
- Some textiles may leave noticeable imprints of the pretreatment after it is fixated. In that case, wash them away with water.
- Perform a printing test beforehand. Then, the following phenomena may occur:
 - The textiles may be discolored by the pretreatment and cannot be restored to the original color even if they are washed.
 - A deep-colored polyester blended yarn fabric dissolves dye, which may cause the white ink to change to a slightly different color.
 - It is likely that a textile may become yellowish in color after the pretreatment is fixated.

6.3.2 Dilution of pretreatment

Be sure to use the pretreatment after diluting it with pure water.

CAUTION

- Be sure to wear a pair of plastic gloves and protective glasses during the work operation.
- For information on handling of the pretreatment, see the Material Safety Data Sheet issued by us.
<http://sds.brother.co.jp/sdsapp/index.html>

Dilution ratio

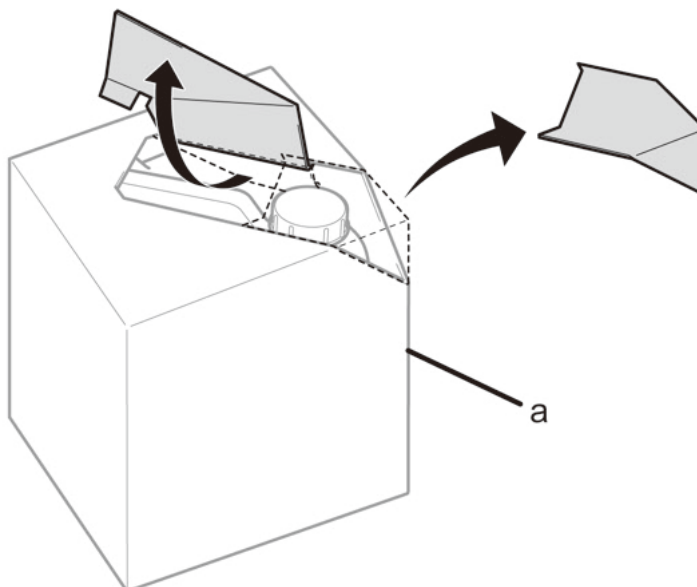
Use within the ratio range of x3 (Pretreatment:Pure water=1:2) (Volume ratio).

Dilution method

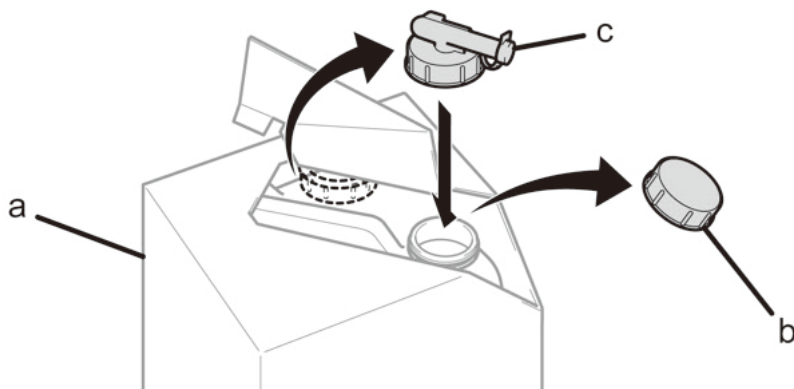
TIPS

- The figure below is based on the pretreatment (20 kg (44 lb)). When using the pretreatment (5 kg (11 lb)), remove the cap and pour the agent into the container, and dilute it with pure water, referring to step (4) and the subsequent steps. Dilution ratio is the same.

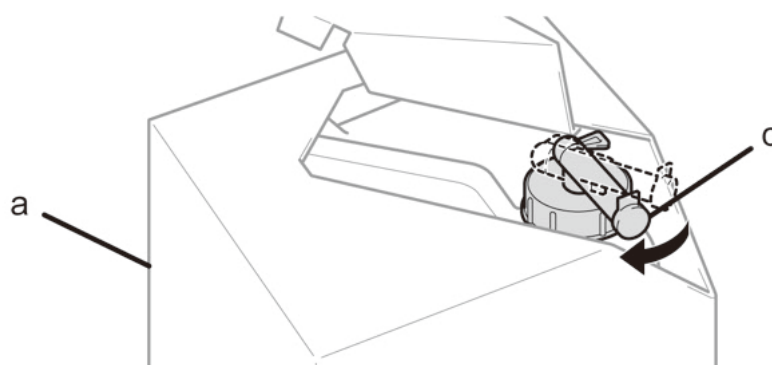
- 1 Unpack the pretreatment container (a) from the shipping carton by cutting off the perforated paper along the tear-off line to open the carton.



- 2 Remove the cap (b), and place the faucet (c) in position.



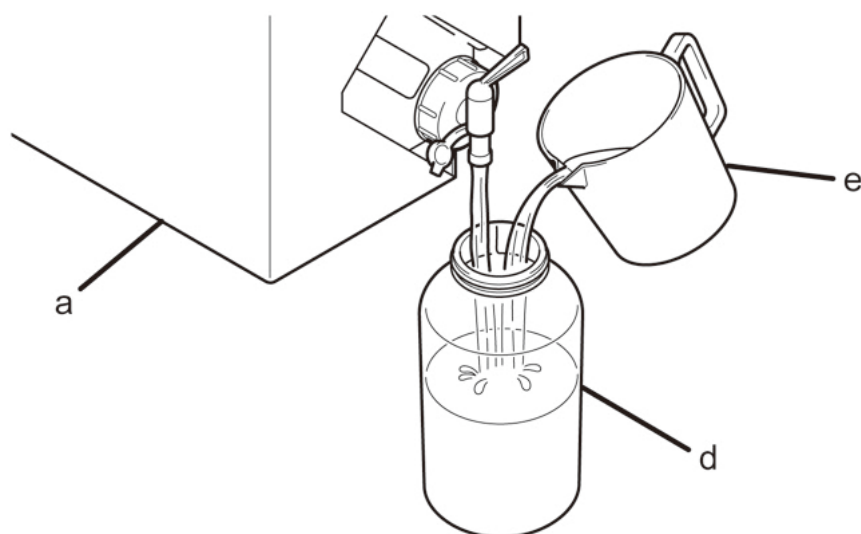
- 3 Orient the pour spout of faucet (c) in the position as shown in the figure below.



- 4 Pour the pretreatment with the carton into the container for dilution (d) and dilute the pretreatment with pure water (e).

IMPORTANT

- Dilute the pretreatment three times (pretreatment with pure water at the ratio of 1:2 by volume).
- Close the lid of the container for dilution and stir the content well to make the concentration uniform.



- 5 To provide safekeeping for the pretreatment, close the faucet, place the pretreatment with the faucet part facing upward, and store the entire carton in a safe place.

6.3.3 Application of pretreatment

In order for the pretreated portions to be printed with inks, apply the pretreatment evenly to a wider area than the print range.



CAUTION

- Fully take care of the air ventilation when you work on operation that generates mist such as spray application.
- Be sure to wear a pair of plastic gloves, a mask and protective glasses (or goggles) designed to shield against liquid splash during the work operation.
- For information on handling of the pretreatment, see the Material Safety Data Sheet issued by us.

<http://sds.brother.co.jp/sdsapp/index.html>

IMPORTANT

- Some T-shirts may leave distinct imprints of the pretreatment after it is fixated. Wash away any imprint of the pretreatment with water, if any.
Also, some T-shirts may be discolored by the pretreatment and cannot be restored to the original color even if they are washed.
When performing the printing for the first time, do that after applying the agent to an unnoticeable area on trial.
- If you are using an electric spray to apply the pretreatment, perform the work at a place as far as possible from the printer. Otherwise, it may cause failure of print heads.

Reference guide for amount of coating of pretreatment

Determine a coating area and amount of coating according to a platen size. When your coating area differs from what are shown in the table below, calculate the amount of coating based on the area ratio.

IMPORTANT

- Depending on the type of fabric, the print quality cannot be guaranteed with the amount of coating of pretreatment shown below. It is therefore necessary to conduct sufficient print tests and adjust the amount of coating.
- If the amount of coating of pretreatment is too small, imprints of the pretreatment may become less noticeable after it is fixated, whereas color reproduction of the white ink and color inks on the white ink will deteriorate.
- Meanwhile, if the amount of coating of pretreatment is too large, imprints of the pretreatment may become noticeable, the printed surface may be cracked or discoloring may occur after washing.

Platen Size	Amount of coating of pretreatment
16 x 21	45 g (1.6 oz)
16 x 18	39 g (1.4 oz)
14 x 16	30 g (1.1 oz)
10 x 12	16 g (0.6 oz)
7 x 8	8 g (0.3 oz)
Letter size/A4-size	15 g (0.5 oz)
Pocket size (3.9 in. x 3.9 in. (10 cm x 10 cm))	3 g (0.1 oz)

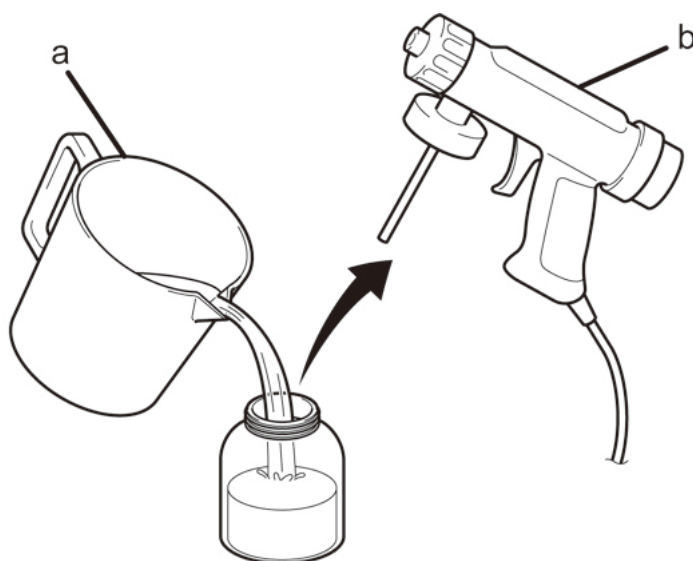
For coating with a spray (commercial product: preferably of an electrically-operated type)

- 1 Fill a spray (b) with the diluted pretreatment (a).



TIPS

- Please use a spray (preferably of an electrically-operated type) that can emit fine spray.



- 2 Put a T-shirt (c) flatly on a flat surface or lean it back against wall, and apply the pretreatment spray (b) evenly onto it.

**CAUTION**

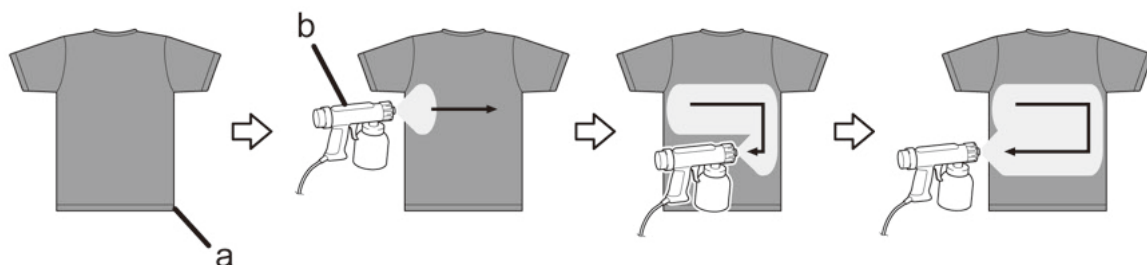
- Fully take care of the air ventilation when you work on operation that generates mist such as spray application.
- Be sure to wear a pair of plastic gloves, a mask and protective glasses (or goggles) designed to shield against liquid splash during the work operation.
- For information on handling of the pretreatment, see the Material Safety Data Sheet issued by us.
<http://sds.brother.co.jp/sdsapp/index.html>

IMPORTANT

- If you are using an electric spray to apply the pretreatment, perform the work at a place as far as possible from the printer. Otherwise, it may cause failure of print heads.

**TIPS**

- Note that pretreatment will not soak into the back (reverse) side of a T-shirt if you put an intermediate plate in the T-shirt. Remove the intermediate plate from the T-shirt before the pressing stage.
- When you are still unaccustomed to the spray coating, perform it while measuring the amount of coating by means of a weighing instrument.

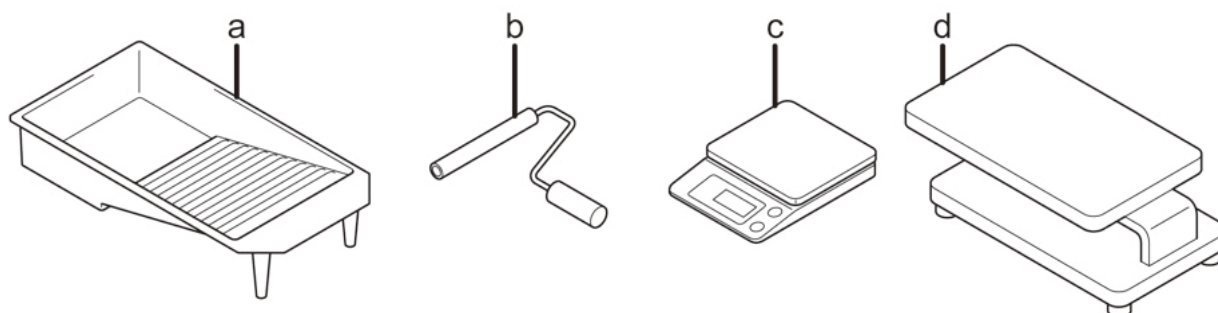


For coating with a pretreatment roller (option)

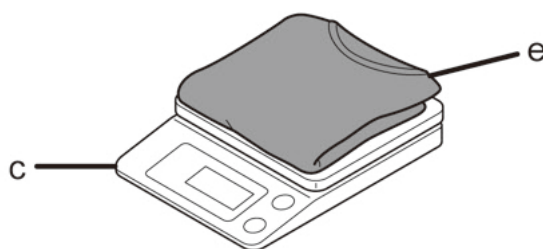
- 1 Make a polypropylene tray (a) or the like, handle (handgrip for roller) (b), weighing instrument (c) to measure the amount of coating and agent-coating table (d) ready for use.

**TIPS**

- It is convenient for you to use an agent-coating table that can cover the print area, because it prevents the pretreatment from soaking into the underside of the area.



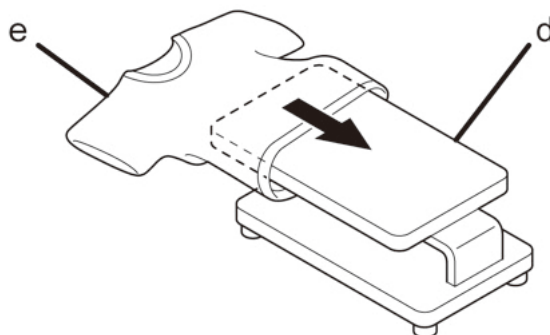
- 2 Weigh a T-shirt (e) before applying the pretreatment to it, so that you will be able to know how much of the agent you have applied to it later.



- 3 Slide a T-shirt (e) onto the agent-coating table (d), with its printing side facing upward.

**TIPS**

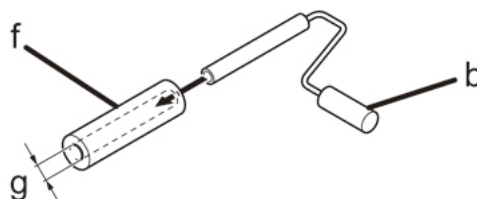
- Note that pretreatment agent will not soak into the back (reverse) side of a T-shirt if you put an intermediate plate inside the T-shirt when there is not an agent-coating table.



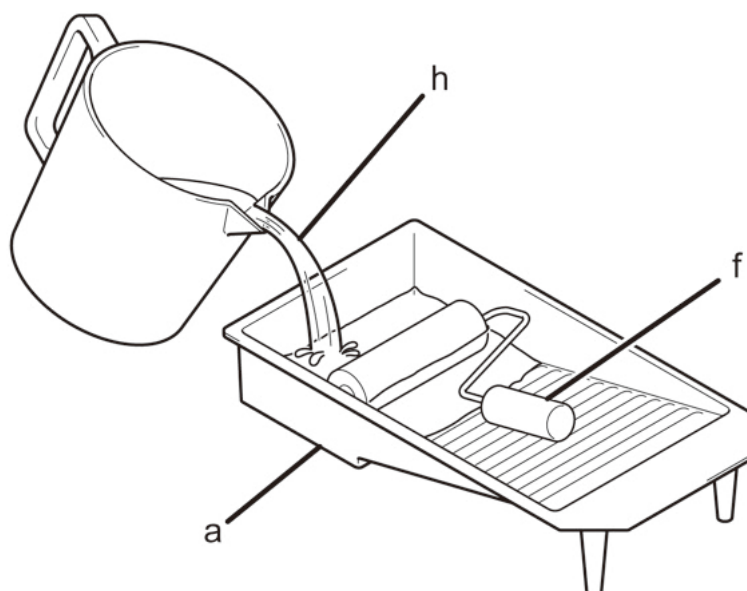
- 4 Attach the pretreatment roller (f) to the handle (handgrip of roller) (b).

**TIPS**

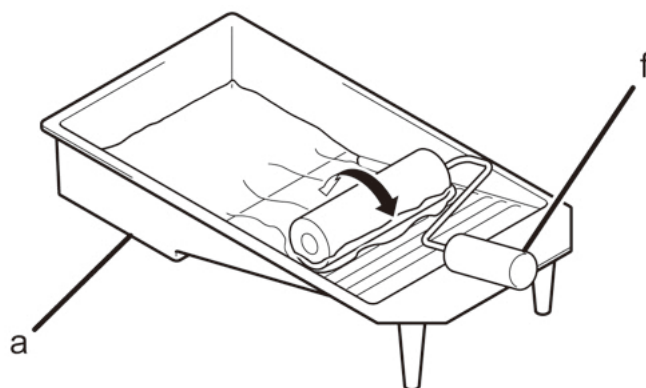
- Use a commercially available handle provided with a roller that fits the pretreatment roller's inside diameter (g) of 0.8 in. (21 mm).



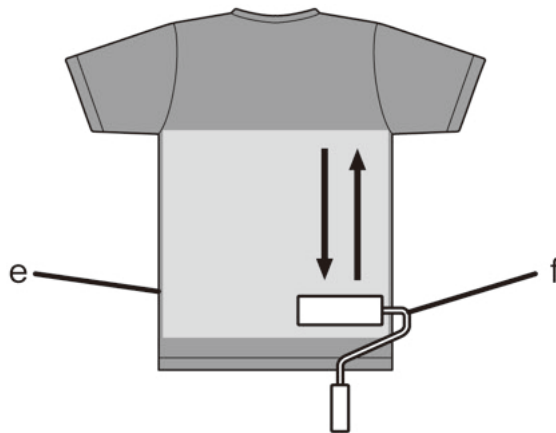
- 5 Pour the diluted pretreatment (h) into the tray (a), and dip the pretreatment roller (f) in the agent so that it will be dampened with the agent.



- 6 Rub the pretreatment roller (f) well against the scrub board of the tray (a) and squeeze a redundant agent out of it.



- 7 Move the pretreatment roller (f) on the T-shirt (e) in a longitudinal direction, and apply the agent evenly onto the print range.

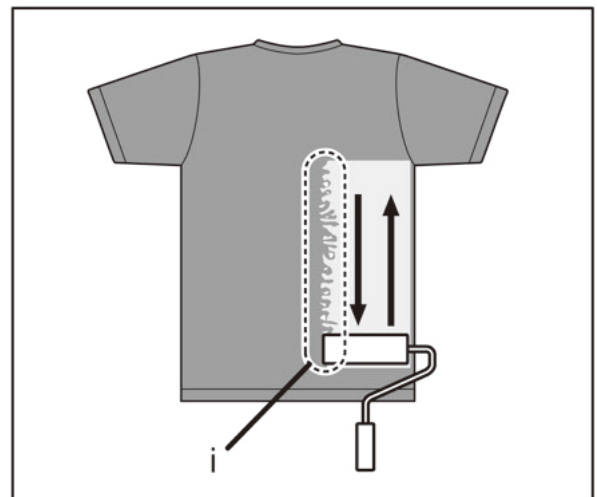
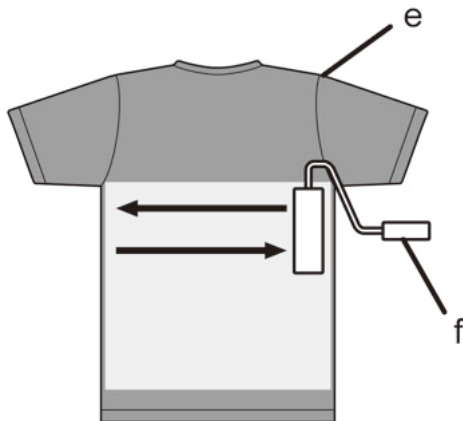


- 8 Move the pretreatment roller (f) on the T-shirt (e) in a lateral direction, and apply the agent evenly onto the print range.



TIPS

- Depending on a difference in the force applied by you to the pretreatment roller, the pretreatment may not be applied evenly (i) to a T-shirt. Move the pretreatment roller repeatedly on each area to apply the agent evenly onto such area.
- When there is any area (gap) that fails to be coated with the pretreatment or any other area that is found to be unevenly coated, dip the pretreatment roller in the agent again, and apply the agent evenly there.

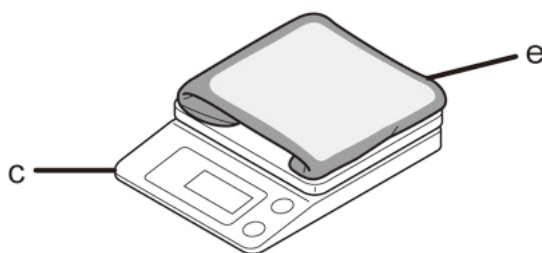


- 9 Weigh the T-shirt (e) to check to see if the required amount of pretreatment has been applied to it.



TIPS

- Reference guide for amount of coatingApplication of pretreatment
- If the amount of coating is small, color reproduction of the white ink and color inks on the white ink will deteriorate.
- Meanwhile, if the amount of coating is too large, it is likely that a T-shirt may harden, imprints of the pretreatment may become noticeable or washing fastness may get worse and so on after the pretreatment is fixated.



Maintenance of pretreatment roller

If you continue using the pretreatment roller (a) under a state in which any fuzziness, yarn waste, dust, etc. remain attached to its surface, you may not provide a uniform coating.

In such case, use a toothbrush (b) or the like to brush off such fuzziness to remove it from the surface.



CAUTION

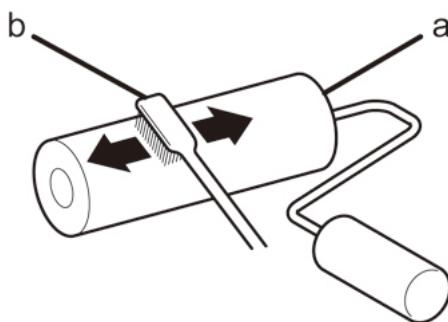
- Be sure to wear a pair of plastic gloves and protective glasses during the work operation.
- For information on handling of the pretreatment, see the Material Safety Data Sheet issued by us.

<http://sds.brother.co.jp/sdsapp/index.html>

Note

- After the pretreatment roller is used, put it in a plastic bag or the like hermetically to prevent it from drying up, and keep it in a flat place in an upright position.

Also, when it remains unused for two weeks or longer, wash it well with running water, and let it dry in a shaded area before using it again.



6.3.4 Fixation of pretreatment



CAUTION

- As the operation will generate mist, fully take care of the air ventilation.
- Be sure to wear a pair of plastic gloves, a mask and protective glasses (or goggles) designed to shield against liquid splash during the work operation.
- For information on handling of the pretreatment, see the Material Safety Data Sheet issued by us.
<http://sds.brother.co.jp/sdsapp/index.html>



TIPS

- Because the pretreatment will not work best if it is dried through oven-based drying or air drying, be sure to use the heat press. As the oven does not bind fuzziness, the agent may be applied unevenly on white print.
- When you put a T-shirt on the heat press, set it so as to flatten the T-shirt's surface, place a peel-off sheet on the entire press area, and apply pressure.
- Note that any area in which the pretreatment is fixated may cause its effect to deteriorate or could cause the agent to be coated there unevenly if such area gets wet once.
- Do not touch the treated area with your hand after the pretreatment is fixated.
- After the pretreatment is fixated, do not touch or place the T-shirts on top of each other.
- Avoid leaving the pretreatment as it is in any highly humid areas.
- If the agent is left unchecked for a long time, use the heat press to apply pressure to a T-shirt immediately before the printing in order to dry it well.

Guidelines on fixation conditions of pretreatment

The undermentioned fixation temperature/time serve as guidelines only, and optimum conditions vary with your heat press. Be sure to perform the fixation after checking on the temperature and fixation results beforehand.



TIPS

- Prior to and during a fixation process, check the heat press's temperature. If the fixation is performed continuously, the heat press's temperature will decrease, resulting in improper fixation of the pretreatment. In this case, the whiteness cannot be reproduced because the white ink soaks into the fabric of a T-shirt.
- Such a pressure is required that is adequate enough to flatten the surface. As the fixation conditions differ by heat press, check the ink fixation result in advance and adjust the pressure.
- If it is not dry enough after pressing for 35 seconds, extend the time while checking the dried condition of the pretreatment.
- The following values should be regarded as guidelines only, as the optimum fixation conditions depend on the amount of coating of pretreatment.

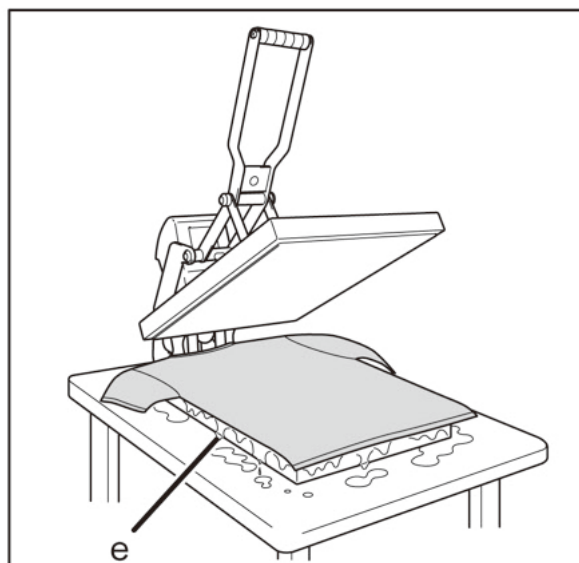
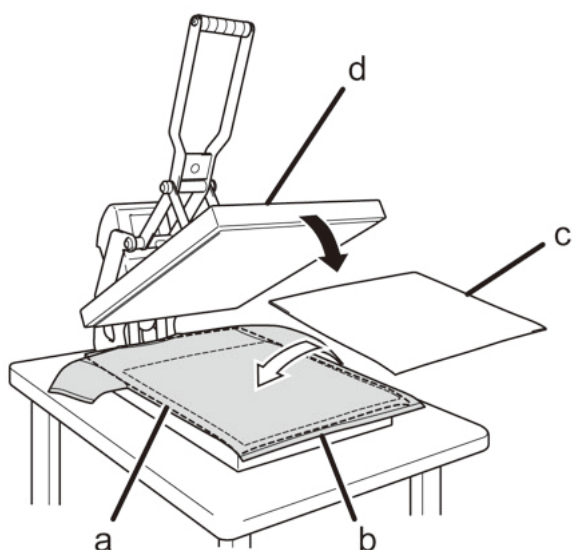
Temperature	Time
180°C (356°F)	35 seconds

- 1 Place the silicone foam (a), T-shirt (b) and peel-off sheet (c) in position under the heat press (d) first, and fixate the pretreatment properly.

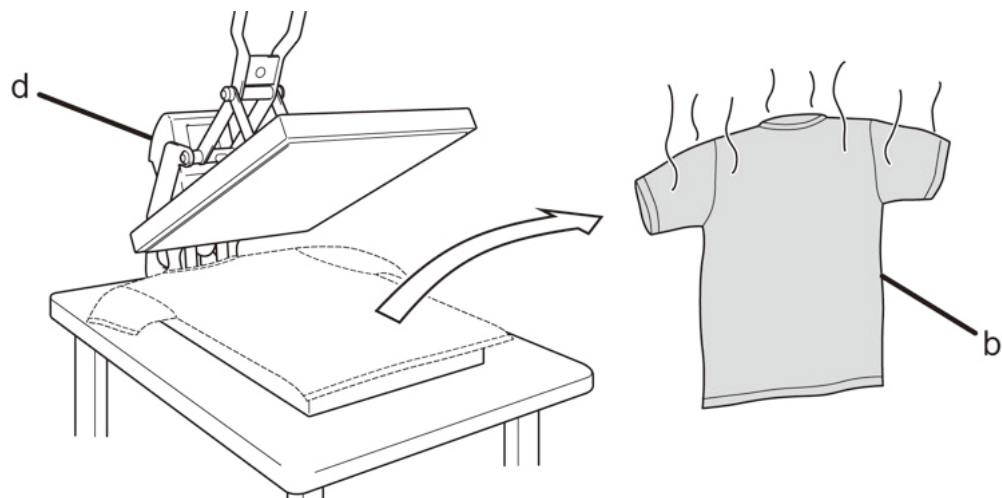


TIPS

- Water droplets (e) are generated around the heat press to evaporate water content of the pretreatment by the heat of heat press. Keep your working space clean so that the surface to be coated with the agent will not get wet.
- A peel-off sheet should be used if needed, depending on the heat press you use.



- 2 Remove the T-shirt (b) from the heat press (d) so that the steamy heat will escape from it.



6.4 Platen adjustment

Replace the currently used platen with another one that suits the medium to be printed.

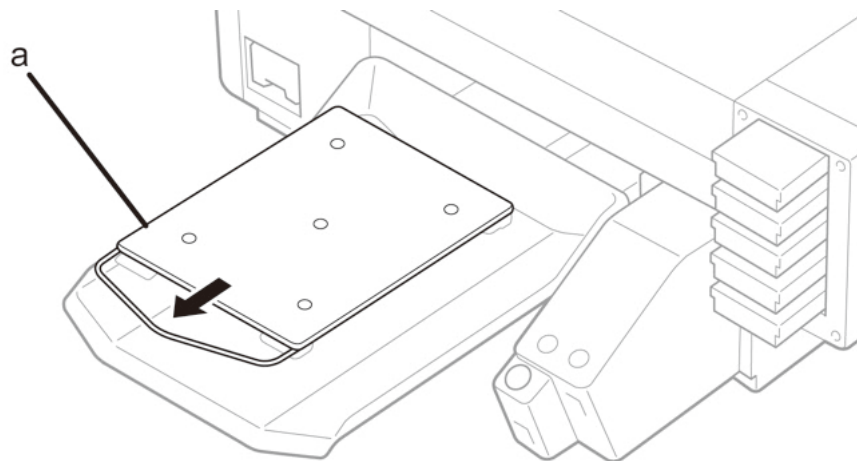


TIPS

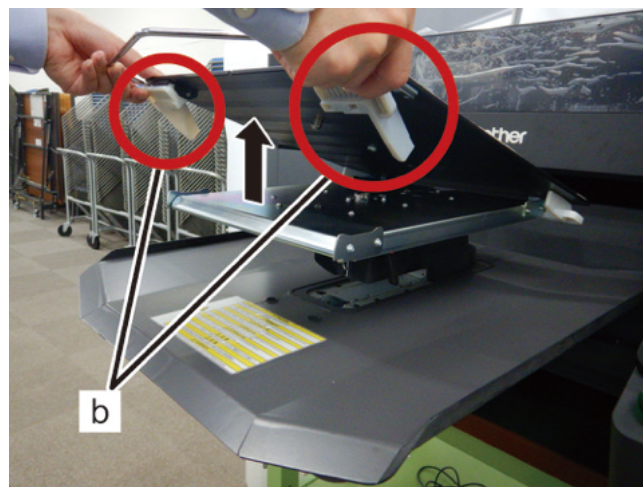
- In cases where such an optionally sized platen as 10X12 platen is used, ascertain that a proper "Platen size" has been selected in the printer driver's setting menu.
 - In the case of print data using white ink: [Select the platen size on page 111](#)
 - In the case of print data using color ink and black ink only: [Select the platen size on page 136](#)

6.4.1 Replacing the platen

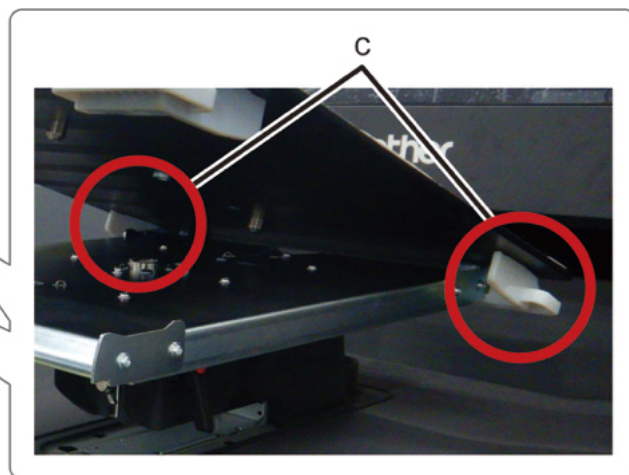
- 1 Press  on the operation panel to move the platen (a) toward the front of the printer.



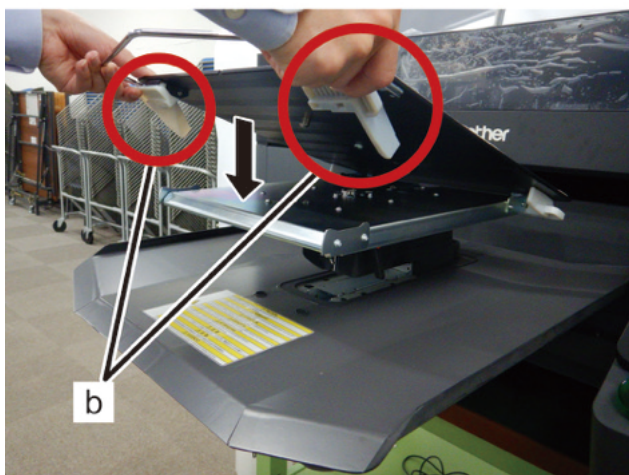
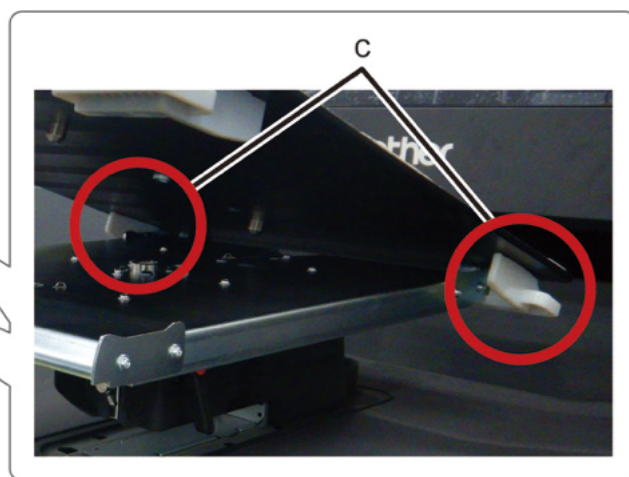
- 2 Holding the front-side (b) fixing levers, lift up the top plate platen.



- 3 Remove the top plate platen; push the top plate platen toward the back to detach the back-side (c) platen fixing levers.



- 4 Inserting the back-side (c) fixing levers of the top plate platen into the back of the platen base, fasten the top plate platen onto the platen base with the front-side (b) fixing levers.

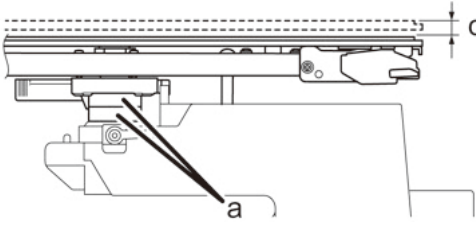
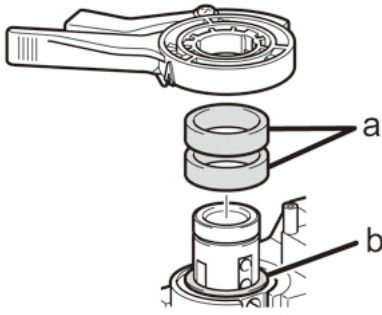
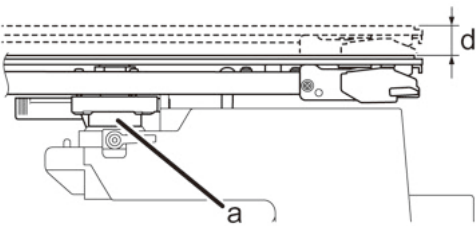
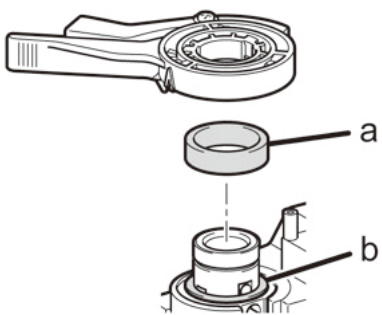
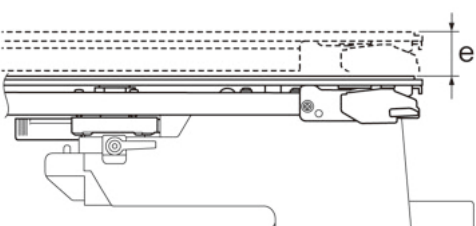
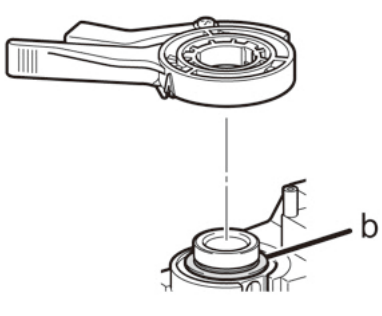


6.4.2 Platen height adjustment

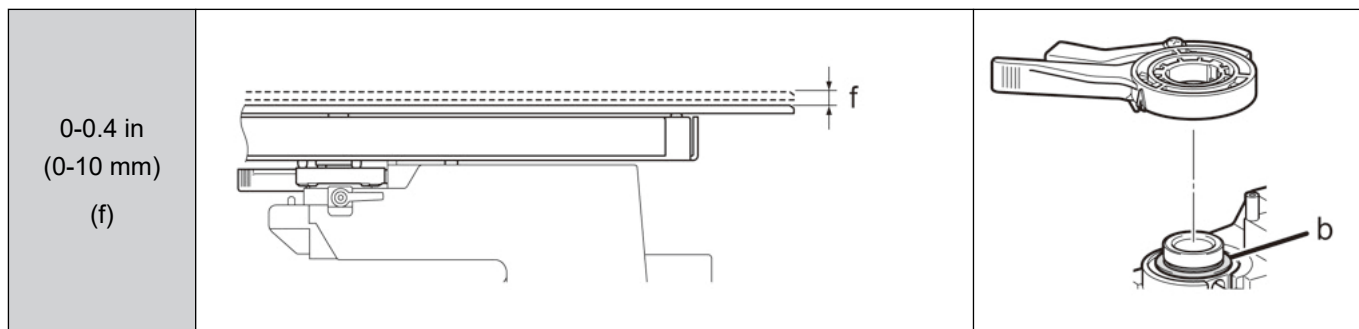
When constantly printing on thick material, the platen height can be lowered by up to 1.2 in. (30 mm) by adjusting the platen bearing and collars (a).

TIPS

- Please refer to the table below for the platen's height adjustment range (height A, measured from the platen height adjustment lever; with the standard parts installed).
- Spacers (b) are installed on your printer so that the height can be the reference value. Do not change the number of spacers.
- When using the 16X21 platen, it can be used only at the lowest position. Remove all the collars before mounting the platen. Also note that the height adjustment range of the 16X21 platen is 0.4 in. (10 mm) at maximum.
- When adjusting the height, put the latch of the platen height adjustment lever into the groove of the platen bearing.

0-0.4 in (0-10 mm) (c)		
0.4-0.8 in (10-20 mm) (d)		
0.8-1.2 in (20-30 mm) (e)		

Case of 16×21 platen



As an example, the cases where the platen's height is set to the lowest position from the standard position and to the middle position from the lowest position are described below.

From the standard to the lowest position

- 1 Detach the platen.
- 2 Remove the platen fixing lever (a), platen height adjustment lever (b), and collars (c).

The number of collars and the height adjustment range are as follows:

Position	Height	No. of collars
Highest position (standard)	0-0.4 in (0-10 mm)	2
Middle position	0.4-0.8 in (10-20 mm)	1
Lowest position	0.8-1.2 in (20-30 mm)	None

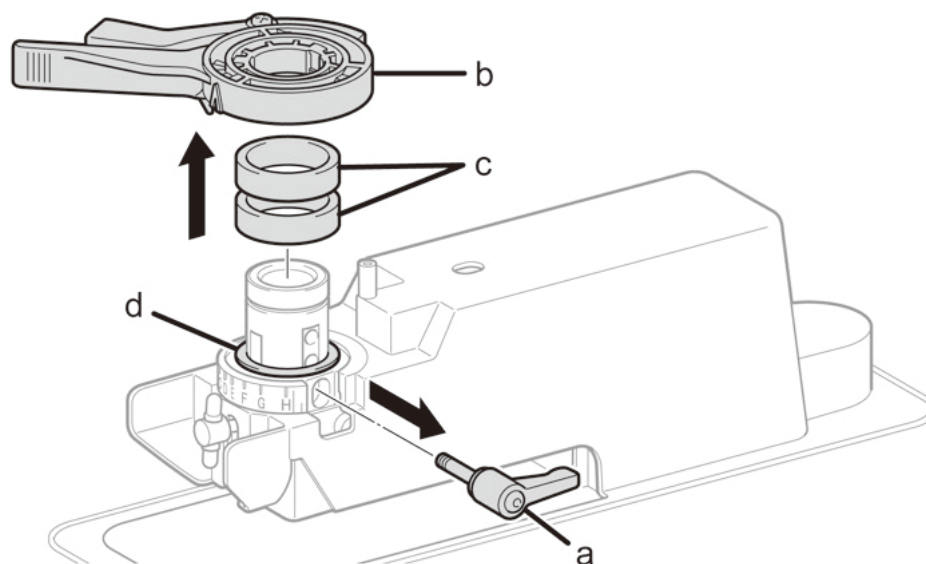
Case of 16×21 platen

		No. of collars
Lowest position	0-0.4 in (0-10 mm)	None



TIPS

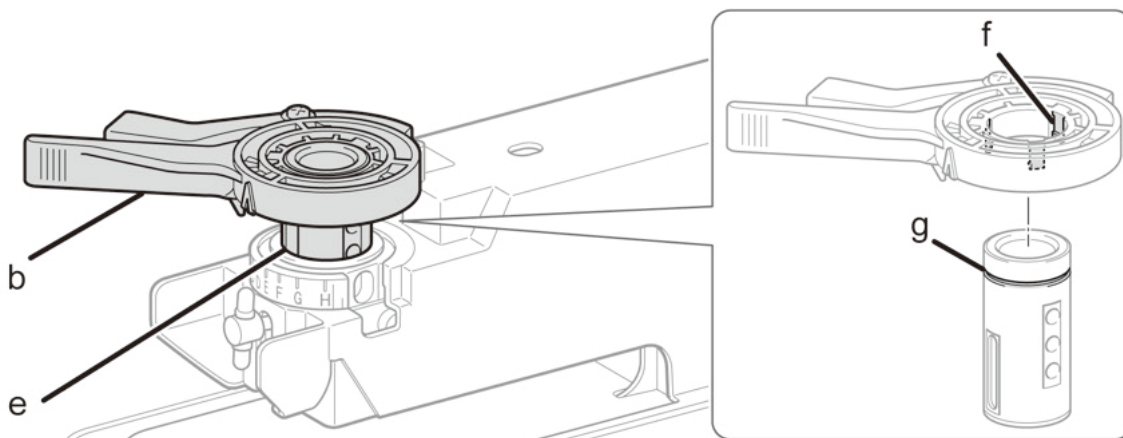
- Spacers (d) are installed on your printer so that the height can be the reference value. Do not change the number of spacers.



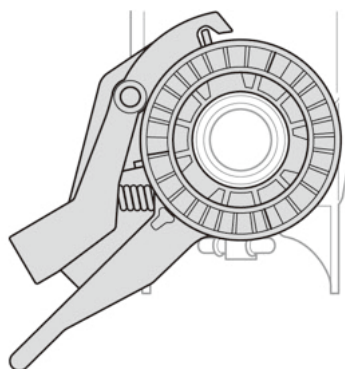
- 3 Attach the platen height adjustment lever (b) to the platen bearing (e).

**TIPS**

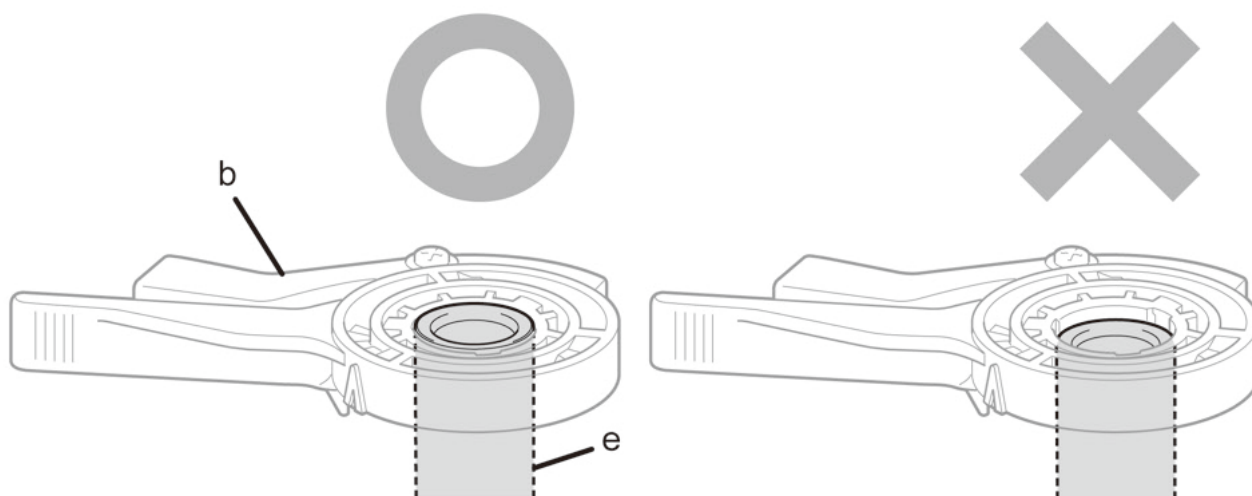
- When adjusting the height, put the latch (f) of the platen height adjustment lever into the groove (g) of the platen bearing.



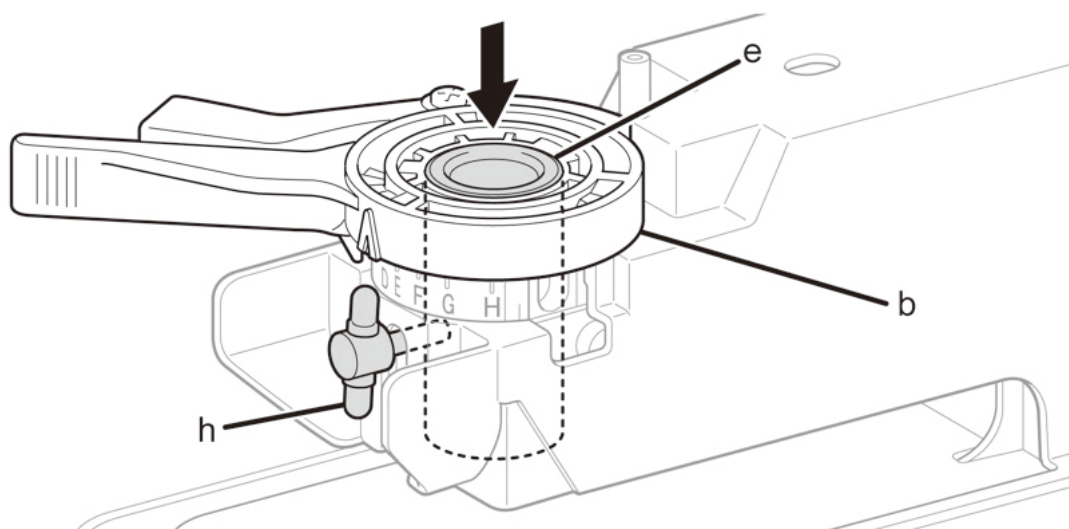
Top view



- 4 Check that the end position of the platen height adjustment lever is aligned with that of the platen bearing (e).



- 5 Loosen the knob (h) while holding the platen height adjustment lever (b) and lower the platen bearing (e) and the height control lever.



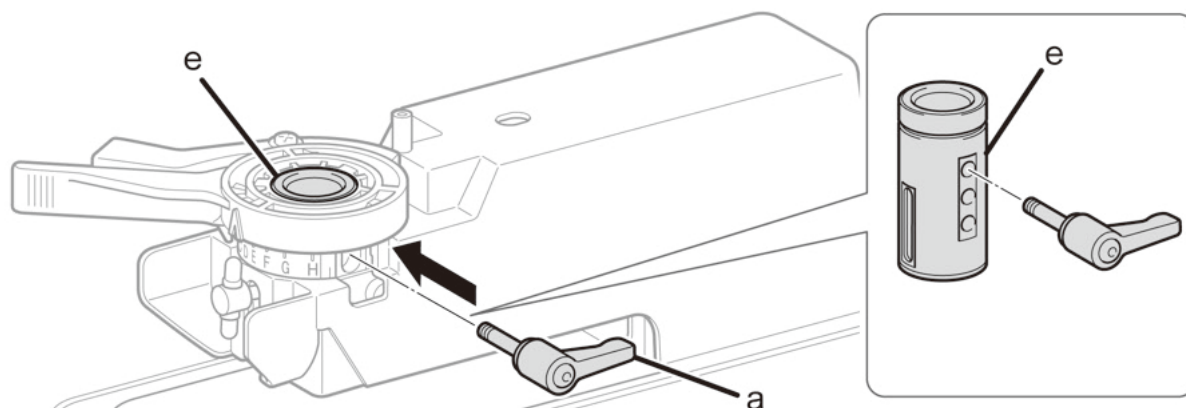
- 6 Use the platen fixing lever (a) to secure the platen temporarily.

The number of collars and the position of screw hole for the platen bearing (e) differ by the height of the platen adjusted.



TIPS

- If you are setting the platen's height to the lowest position, remove all the collars and fix the platen bearing at its highest screw hole temporarily.
- If you are setting the platen's height to the middle position, attach one collar and fix the platen bearing at its middle screw hole temporarily.
- If you are setting the platen's height to the highest position, attach two collars and fix the platen bearing at its lowest screw hole temporarily.

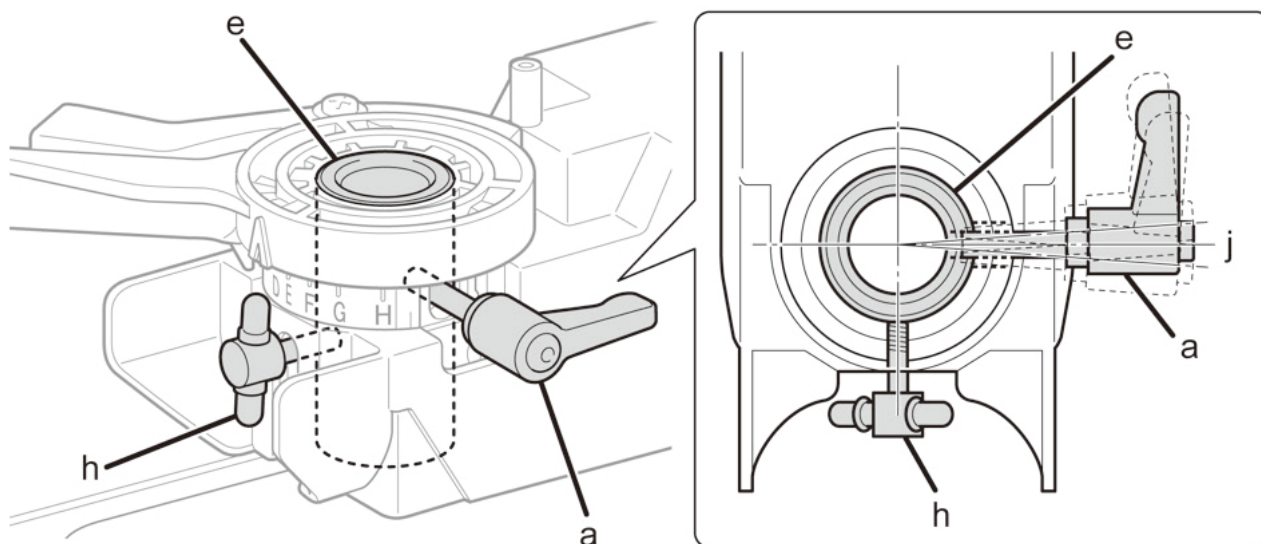


- 7 Tighten the knob (h) to secure the platen bearing (e) in place.



TIPS

- Align the center of platen fixing lever (a) with the position as illustrated in the figure below, and secure the platen bearing in place. (j)



- 8 Insert the platen to be used and tighten the platen fixing lever.

From the lowest position to the middle position

- 1 Detach the platen.
- 2 Remove the platen fixing lever (a) and platen height adjustment lever (b).

The number of collars and the height adjustment range are as follows:

Position	Height	No. of collars
Highest position (standard)	0-0.4 in (0-10 mm)	2
Middle position	0.4-0.8 in (10-20 mm)	1
Lowest position	0.8-1.2 in (20-30 mm)	None

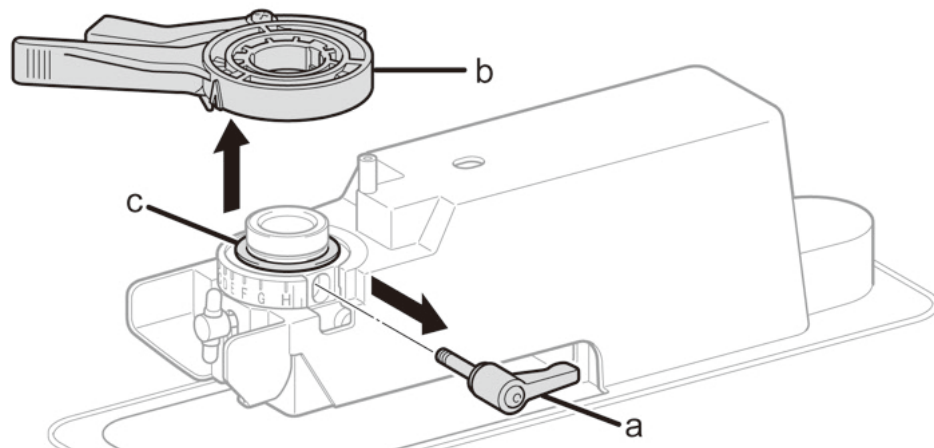
Case of 16×21 platen

Position	Height	No. of collars
Lowest position	0-0.4 in (0-10 mm)	None

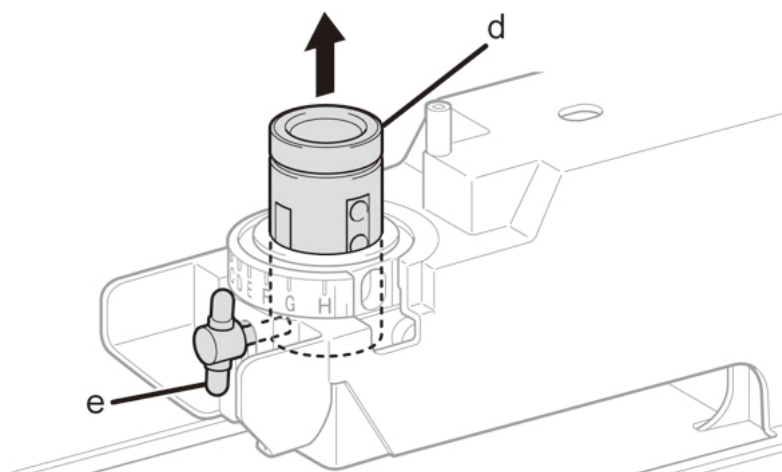


TIPS

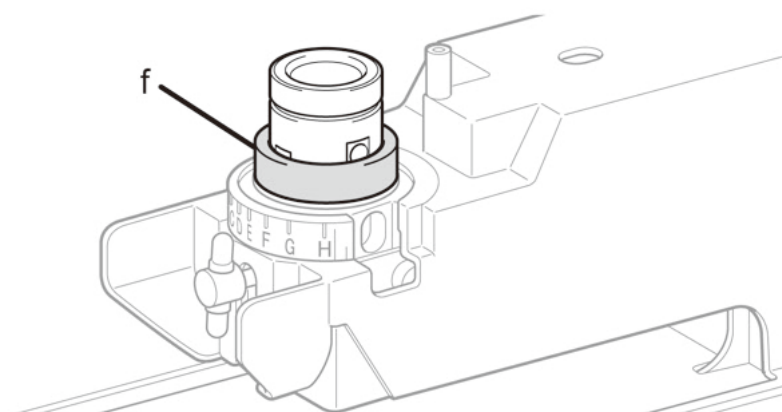
- Spacers (c) are installed on your printer so that the height can be the reference value. Do not change the number of spacers.



- 3 Loosen the knob (e) while holding the platen bearing (d) and lift the platen bearing to the top to tighten the knob again.



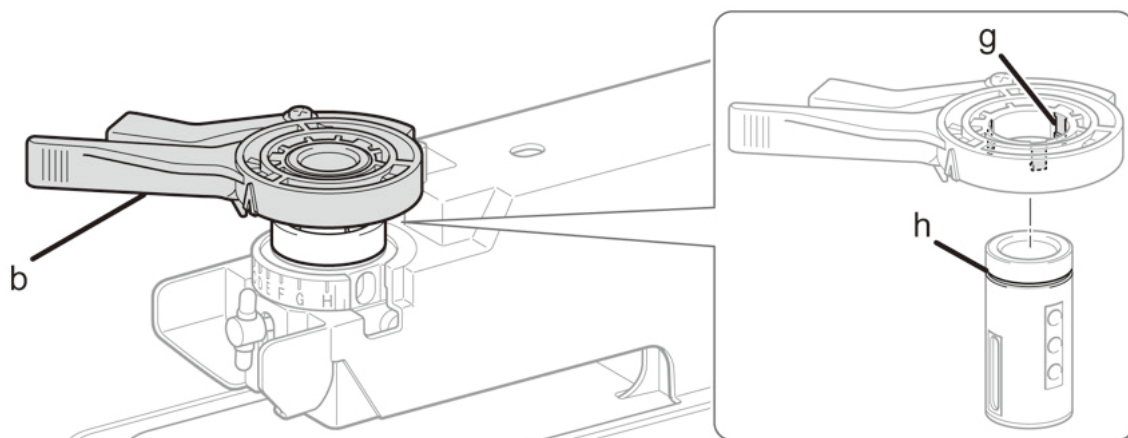
- 4 Attach the collar (f).



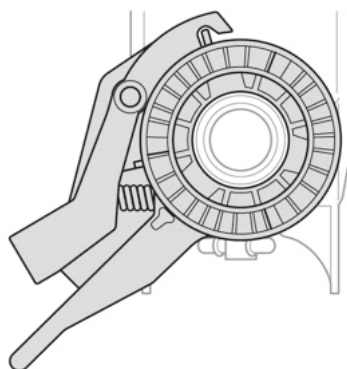
- 5 Attach the platen height adjustment lever (b) to the platen bearing.

**TIPS**

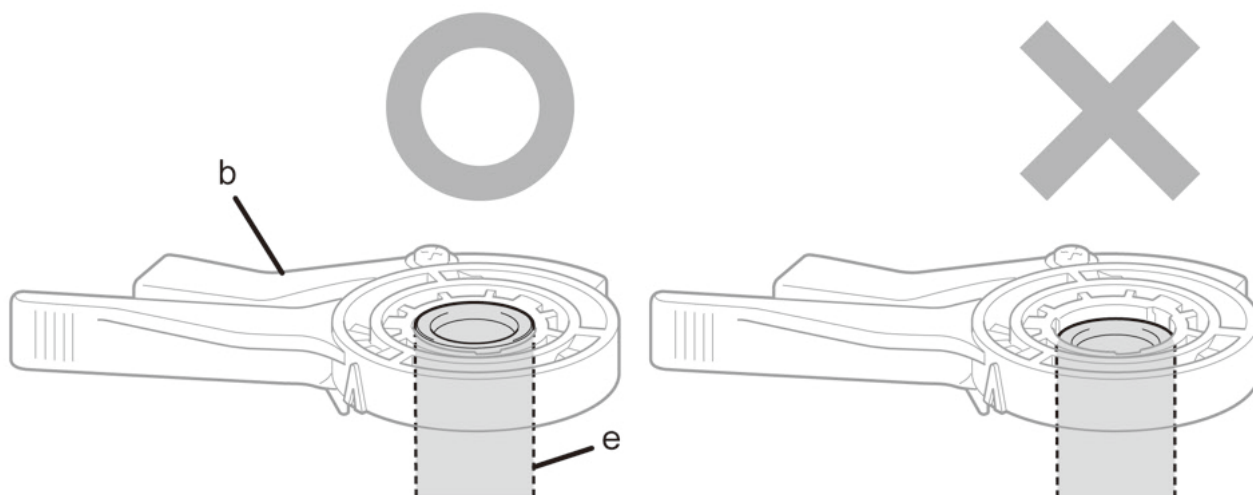
- When adjusting the height, put the latch (g) of the platen height adjustment lever into the groove (h) of the platen bearing.



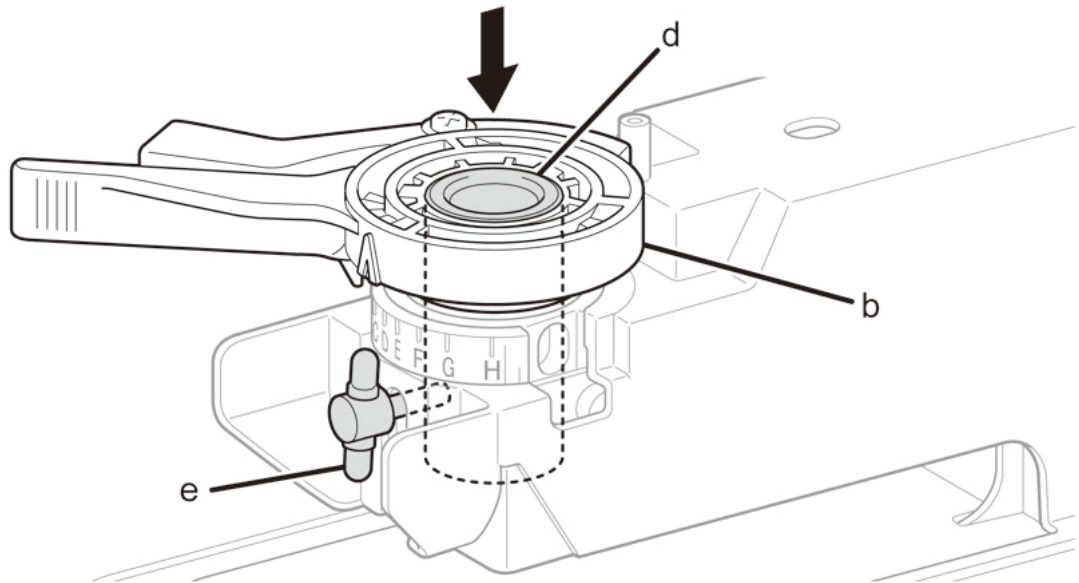
Top view



- 6 Check that the end position of the platen height adjustment lever (b) is aligned with that of the platen bearing (d).



- 7 Loosen the knob (e) while holding the platen height adjustment lever (b) and lower the platen bearing (d) and the height control lever.



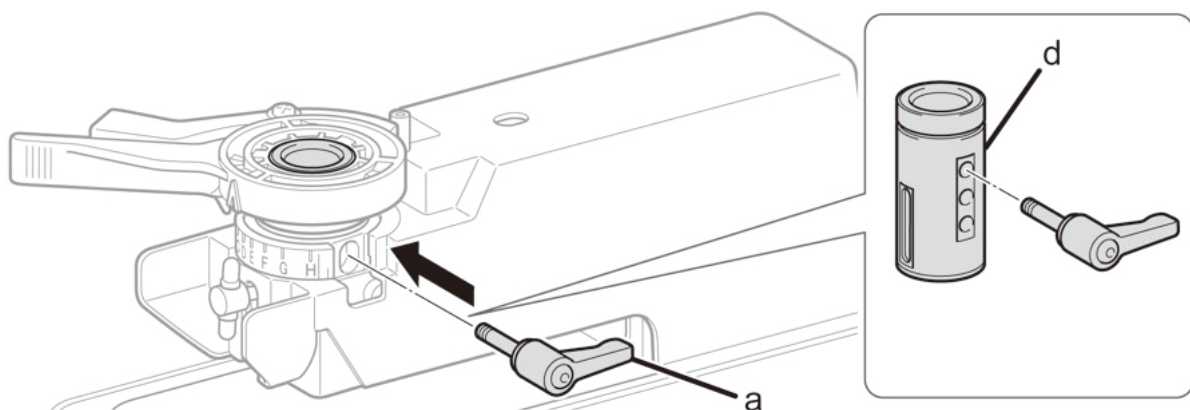
- 8 Use the platen fixing lever (a) to secure the platen temporarily.

The number of collars and the position of screw hole for the platen bearing (d) differ by the height of the platen adjusted.



TIPS

- If you are setting the platen's height to the lowest position, remove all the collars and fix the platen bearing at its highest screw hole temporarily.
- If you are setting the platen's height to the middle position, attach one collar and fix the platen bearing at its middle screw hole temporarily.
- If you are setting the platen's height to the highest position, attach two collars and fix the platen bearing at its lowest screw hole temporarily.

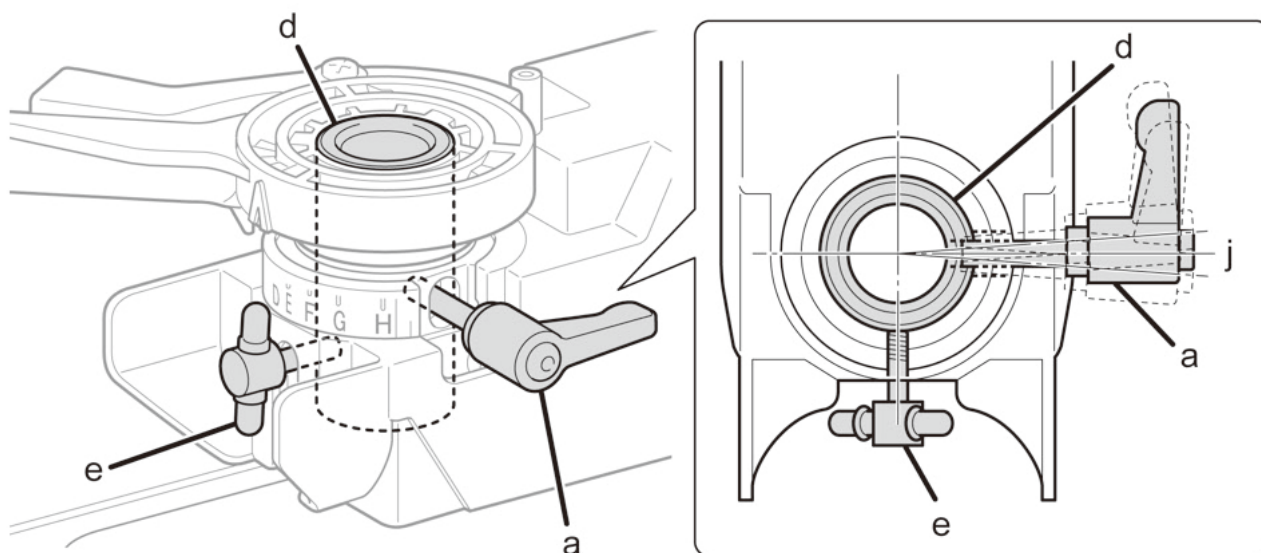


- 9 Tighten the knob (e) to secure the platen bearing (d) in place.



TIPS

- Align the center of platen fixing lever (a) with the position as illustrated in the figure below, and secure the platen bearing in place. (j)



- 10 Insert the platen to be used and tighten the platen fixing lever.

6.5 Placing print medium in position

In order to provide an optimum printing image quality when a print medium is placed in position, you need to adjust the platen's height in accordance with the thickness of the T-shirt or other print medium.



CAUTION

- Ensure there is adequate space left in front of the printer and avoid placing any objects. The platen moves forward while operating and it can strike your hand or anything set in its path of movement, potentially resulting in damage to the platen or injury.
- Do not handle the platen while printing. If your hand gets caught between the platen or the T-shirt tray and the covers, it may be injured.

IMPORTANT

- Do not move the platen by hand. Otherwise the printer may be mechanically and electrically damaged.



TIPS

- Adjust the height of the platen corresponding to the print medium before using it. You can use the platen height adjustment lever to adjust the height of platen. As a rough indication, adjust the height so that it is lowered by one step from the limit height detected by the obstacle sensor, and check that the platen is not detected by the sensor. In the event that the platen's height is lowered excessively, ink mist will be scattered inside the printer, which may result in staining of the printing surface, blurring of the printed image, and malfunction of the sensor and the main unit.
- For film printing, set the platen height adjustment lever to the position around "A-".
- Use Uni-Directional Printing in the case where the platen's height needs to be lowered to avoid a hemmed (edge) and seam.
[Print direction setting on page 278](#)
- You can specify the Uni-Directional Printing for each print data from the printer driver as well.
[Specify the print direction on page 133](#)
- When you print a thick printing material, you can always lower the platen's height by adjusting the platen bearing, collars.
[Platen height adjustment on page 185](#)

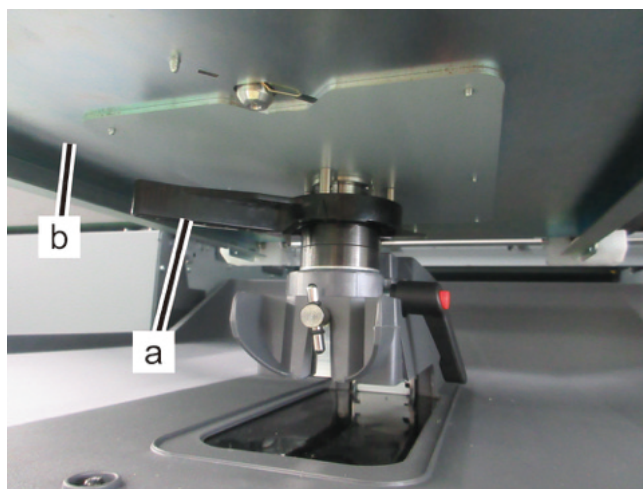
1 If the platen has not been moved forward, press  on the operation panel.

- 2 Use the platen height adjustment lever (a) to adjust the height of platen.



TIPS

- Set the platen height adjustment lever to the position around "A" for a T-shirt, or to the position "C" for such thick material as a sweatshirt.
- For film, set the platen height adjustment lever to the position around "A-".
- If the height of the platen (b) is lowered too much, the printing quality may deteriorate, the printer may be soiled with ink mist and so on.



- 3 Put the T-shirt or film onto the platen, with its printing side facing upward.

IMPORTANT

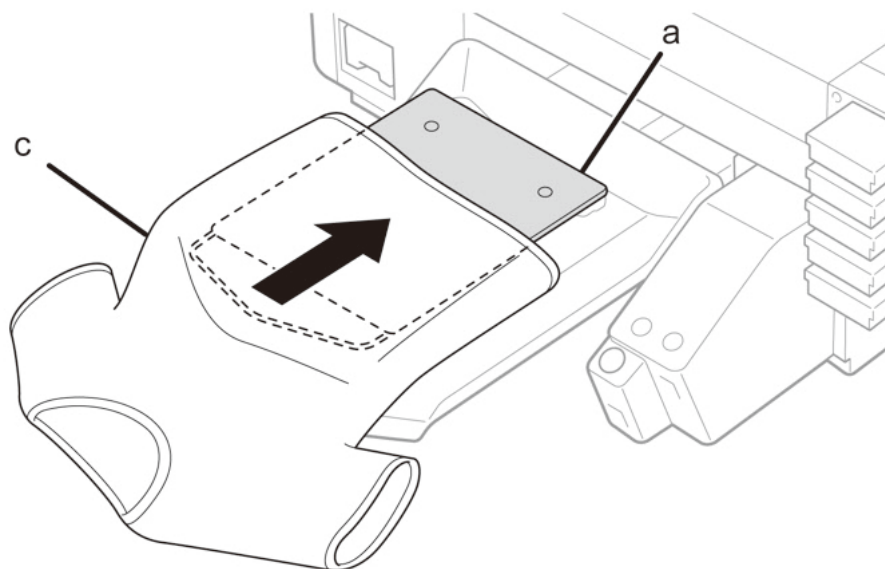
- If the 16X21 platen is mounted, slide it forward and place a T-shirt on it.



TIPS

- For the position alignment of white or pale-colored T-shirts, a grid to be printed out on the platen sheet is available from [All Programs] in the Start menu, by selecting "Brother GTX Maintenance" > "GTX Maintenance #" > "Useful Tools".

[Print a grid pattern on the platen sheet on page 150](#)



For film printing

IMPORTANT

- When fixing film or paper using rubber magnets, make sure to follow the instructions below to use rubber magnets correctly.

If incorrectly used, rubber magnets may adhere to the print heads during printing and may result in poor printing.

- Use only genuine Brother rubber magnets. Commercially available rubber magnets may more likely adhere to the print heads.
- When using rubber magnets, do not allow them to extend off the platen. Also, do not cut them for use. The rubber magnet may more likely fail to fix film or paper correctly.
- When using rubber magnets, have the white side (non-magnetic side) face upward on the film or paper to be fixed.

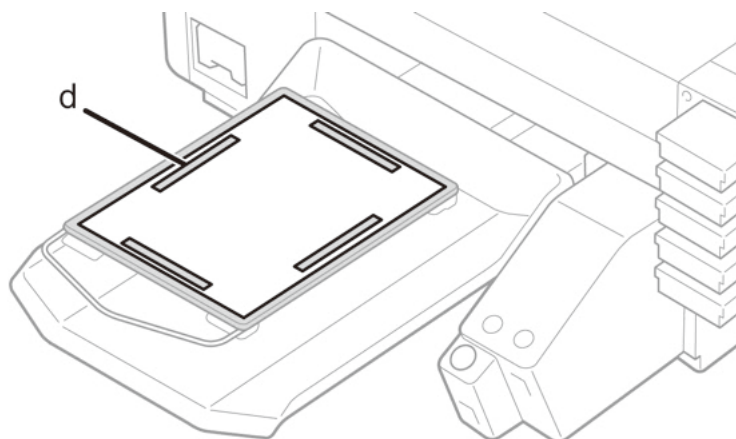
If placed with the black side (magnetic side) facing upward, the rubber magnet may more likely adhere to the print heads.

- When using rubber magnets, they must not be bent or unstuck on the film or paper to be fixed. Sensed as an obstruction, the rubber magnet may more likely interrupt printing.



TIPS

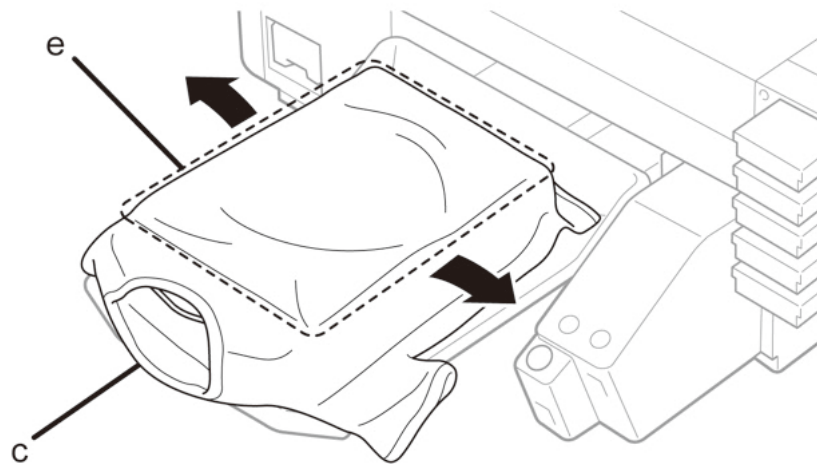
- For film printing, fix film by placing a rubber magnet (d) in the area near the center of each side (four locations: top, bottom, right, and left) so that the film does not move during printing.



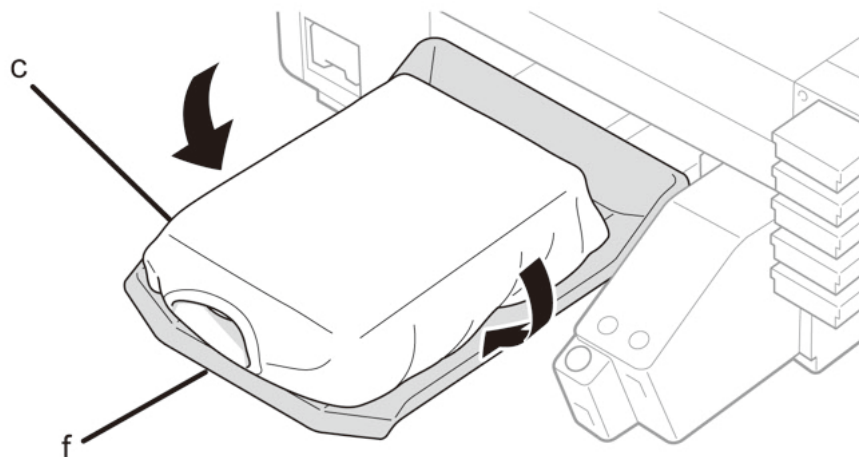
- 4 Smooth down the creases (e) in the T-shirt and remove lint and dust from it.

**TIPS**

- Seams on a hemmed (edge), neck portion, armhole, tucks and sleeves or the like are easily detected by the obstacle sensor.
- In particular, both ends of the T-shirt tend to be raised easily during the printing operation if not flattened properly and detected by the obstacle sensor.
- Touching on the fixated pretreated surface should be avoided during the work.
- Do not pull the T-shirt with the pretreatment applied (c). Instead, flatten it in such a way that it will fit onto the platen surface well.
- When the surface of the T-shirt does not remain flattened properly, the obstacle sensor detects it.
- In the event that any T-shirt is placed on the platen by pulling it outward forcibly, there are instances in which ejection areas of the white and color inks are misaligned and the white ink extends off its specified printing area. In particular, be careful not to stretch a thin T-shirt outward on the platen.



- 5 The T-shirt should be placed on the T-shirt tray (f), trying not to draw the excessive parts like sleeves and hems into the printer.



- 6 On the operation panel, press , and move the platen toward the rear of the printer.

Try moving the platen, and check on the gap between the T-shirt surface and the obstacle sensor over the entire print area.



TIPS

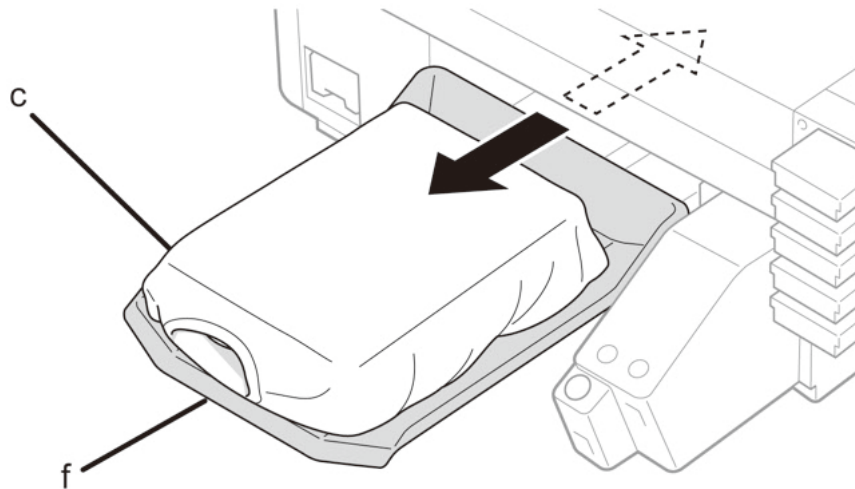
- If this gap is too wide, adjust it by rotating the platen height adjustment lever.
- Adjust the height so that it is lowered by one step from the limit height detected by the obstacle sensor, and check that the platen is not detected by the sensor.
- If the platen's height is too high, a print medium will strike against the print head during the printing process, which in turn results in ink stains or malfunction.
- If the 16X21 platen is mounted, manually slide it backward until it returns to the original position, then move the platen toward the rear of the printer.

- 7 On the operation panel, press , and move the platen toward the front of the printer.



TIPS

- Repeat the height adjustment until the platen will be positioned at a proper height.
- After your desired height is determined, start the printing operation. [Printing on page 215](#)



6.6 Sending/Loading Print Data

Print data can be loaded into the printer in the following ways:

- Receive the print data from the PC connected with the USB or LAN cable.
- Load the print data from the USB flash memory.

For details, please refer to the chapters described later.

6.6.1 Sending print data from ARX3 file preview

- 1 Open an ARX3 file.



TIPS

- Double click on the ARX3 file, or select [All Programs] in the Start menu, > "Brother GTX300 Tools" > "GTX300 File Viewer", to select and open the ARX3 file. You can also load an ARXP file.
- Make sure that the white ink version is "1".

- 2 The file's printing conditions and preview window will be displayed.



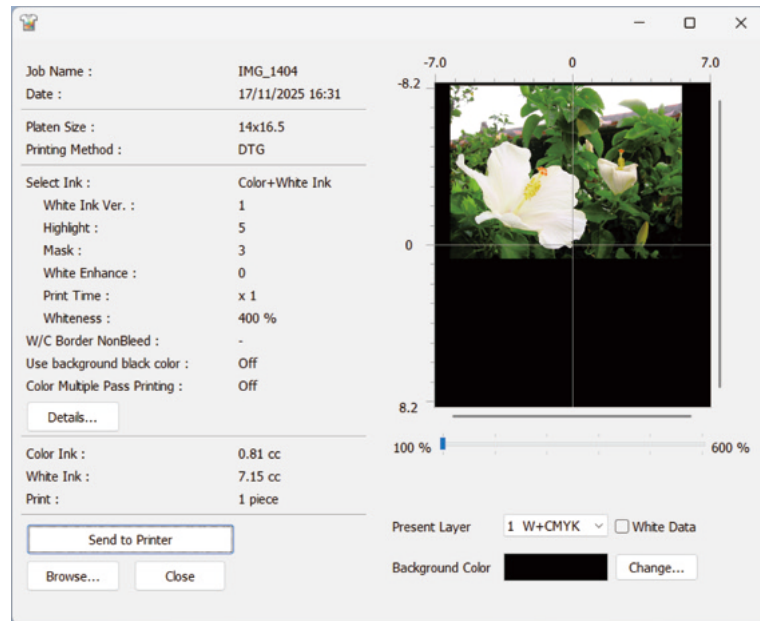
TIPS

- If you have selected [Color+White Ink] or [White Ink Only] in the Select Ink operation, the preview window will be displayed against a "Black" background or a "Transparent color" background which has been specified in the Advanced settings.
- If you have selected [Color Ink Only] in the Select Ink operation, the preview window will be displayed against a "White" background.
- When you press the Details button, those items that have been specified in the Advanced setting window of the printer driver appear.
- The amount of ink used specified in the ARX3 file refers to the amount of ink used for printing print images only.
The amount of ink used specified in the ARXP file includes also the amount of ink used for flushing and auto cleaning in addition to the amount of ink used for printing print images (GTX pro display).

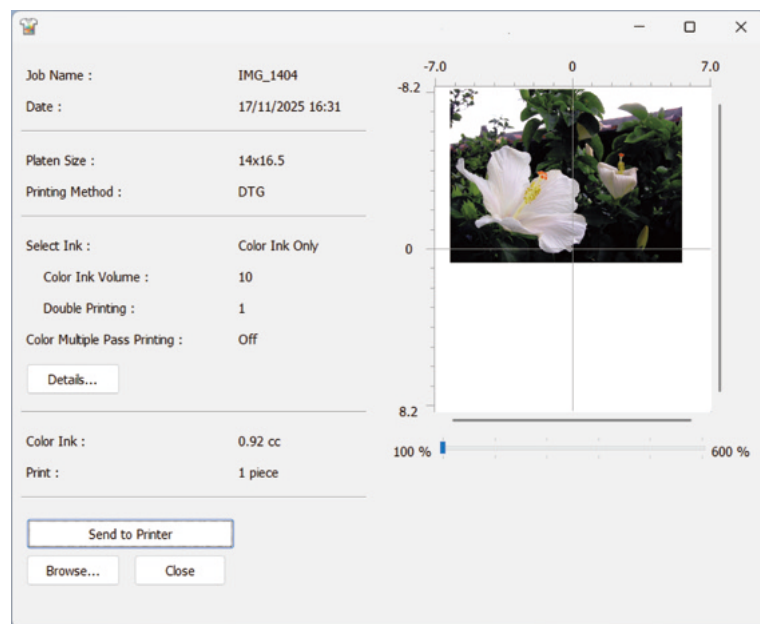
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Basic printing procedures

- When [Color+White Ink] or [White Ink Only] is selected



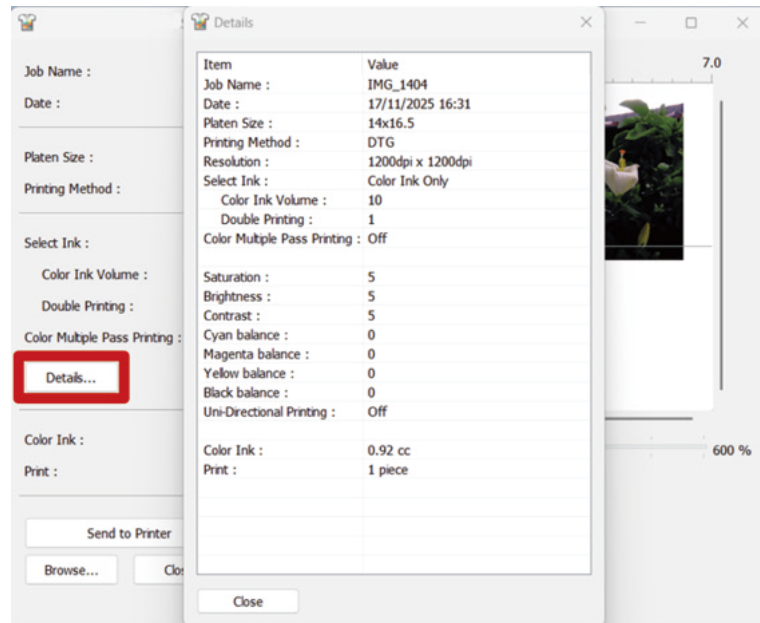
- When [Color Ink Only] is selected



Chapter 6

Basic printing procedures

– [Details...]



Chapter 6

Basic printing procedures

- 3 If you have selected [Color+White Ink] or [White Ink Only] in the Select Ink operation, you can change the background color of the preview window and preview the print image. Select [Change...] > [Define Custom Colors], and enter RGB value.

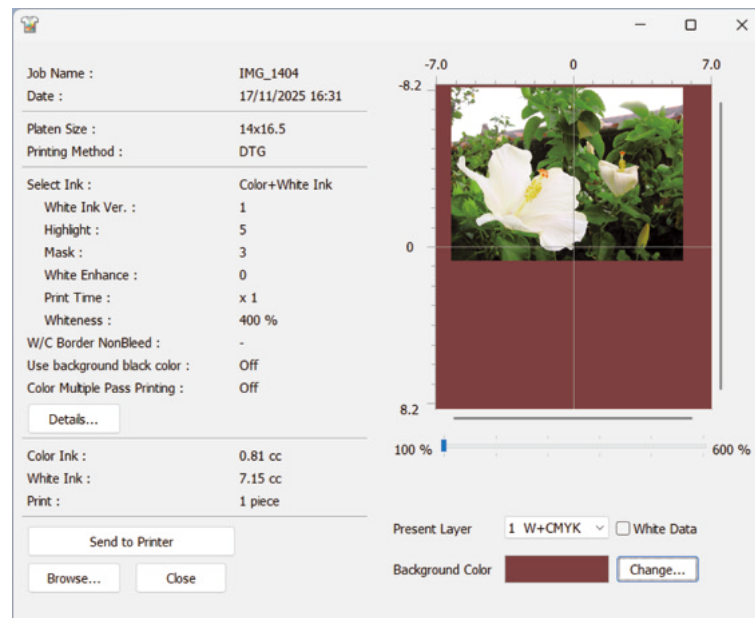


TIPS

- When the [White Data] checkbox is marked, the preview window for white ink only will be displayed.



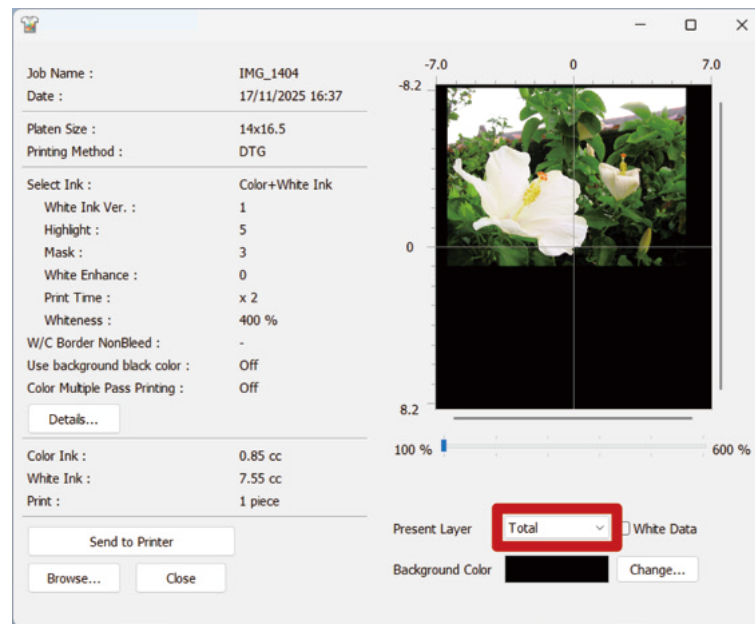
"Example: Preview window for printing an image on a brown (R=128, G=64, B=64) T-shirt"



- 4 For the print data that requires multiple cycles of platen reciprocate movement, print data of each layer can be verified separately by selecting the desired layer to be displayed. From the [Present Layer], select a layer that you want to bring into the view.

**TIPS**

- In the layer that is shown as [Total], the preview window of the final print result is displayed.
- When the [White Data] checkbox is marked, the preview window for white ink only will be displayed.



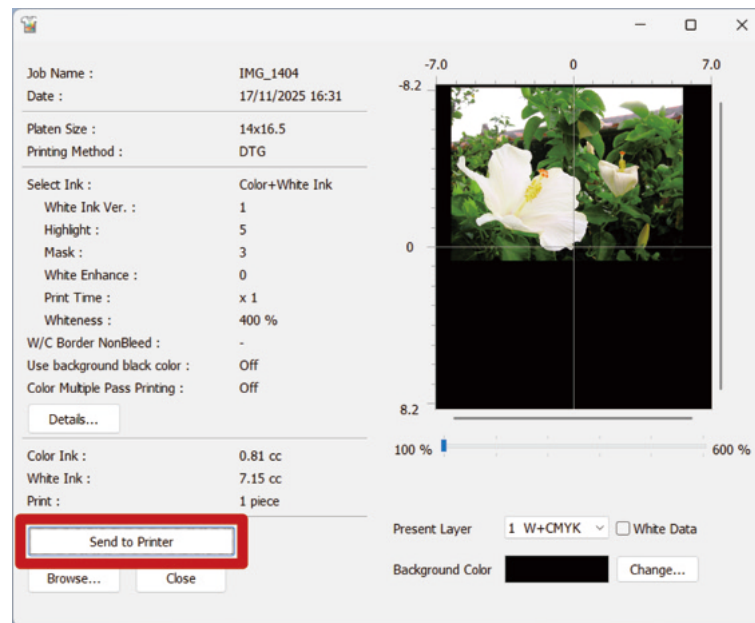
- 5 Check the printing conditions and preview window, and click on [Send to Printer].

Then, the ARX3 file is sent to the printer.



TIPS

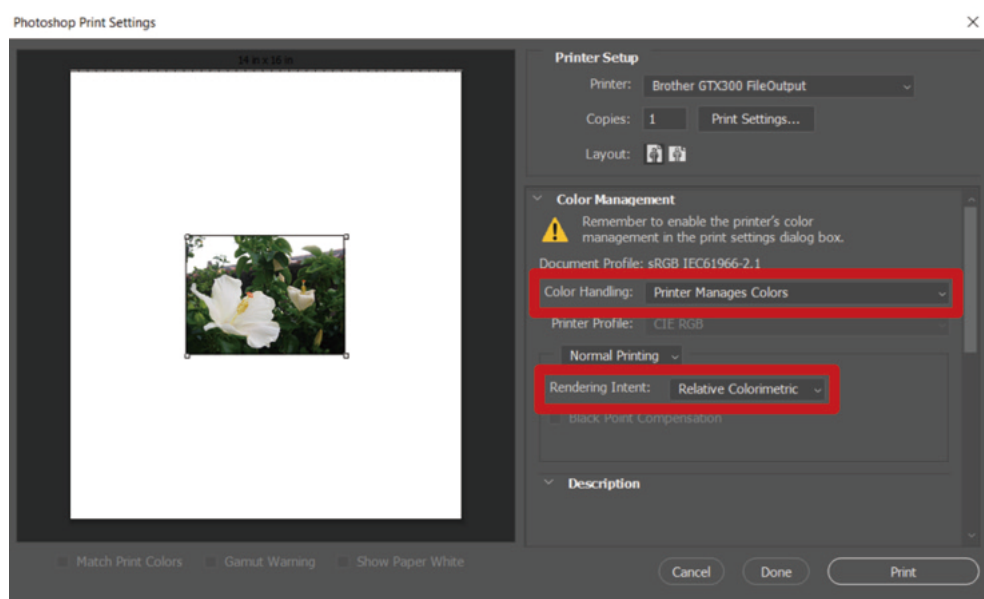
- Make sure that a connection of USB 2.0 cable or LAN cable is made between your PC and the printer.
- In the event that two or more GTX300 printer drivers have been installed on your PC, select one of them as the destination of data transmission and click [OK].



6.6.2 Sending print data from applications

Adobe Photoshop

- 1 In the menu bar, select [File] > [Print]. If the PC's default printer is either "Brother GTX300" or "Brother GTX300 FileOutput", the layout is set to the platen size.
- 2 Make the settings as follows:
 - [Color Handling]: [Printer Manages Colors]
 - [Rendering Intent]: [Relative Colorimetric]



- 3 From [Printer], select "Brother GTX300".



TIPS

- If [Printer] is set to "Brother GTX300", the print data will be sent to the printer.
If [Printer] is set to "Brother GTX300 FileOutput", the print data will be saved as an ARX3 file.

- 4 In the [Print Settings], set up the printer driver, and send the print data by clicking [Print].



TIPS

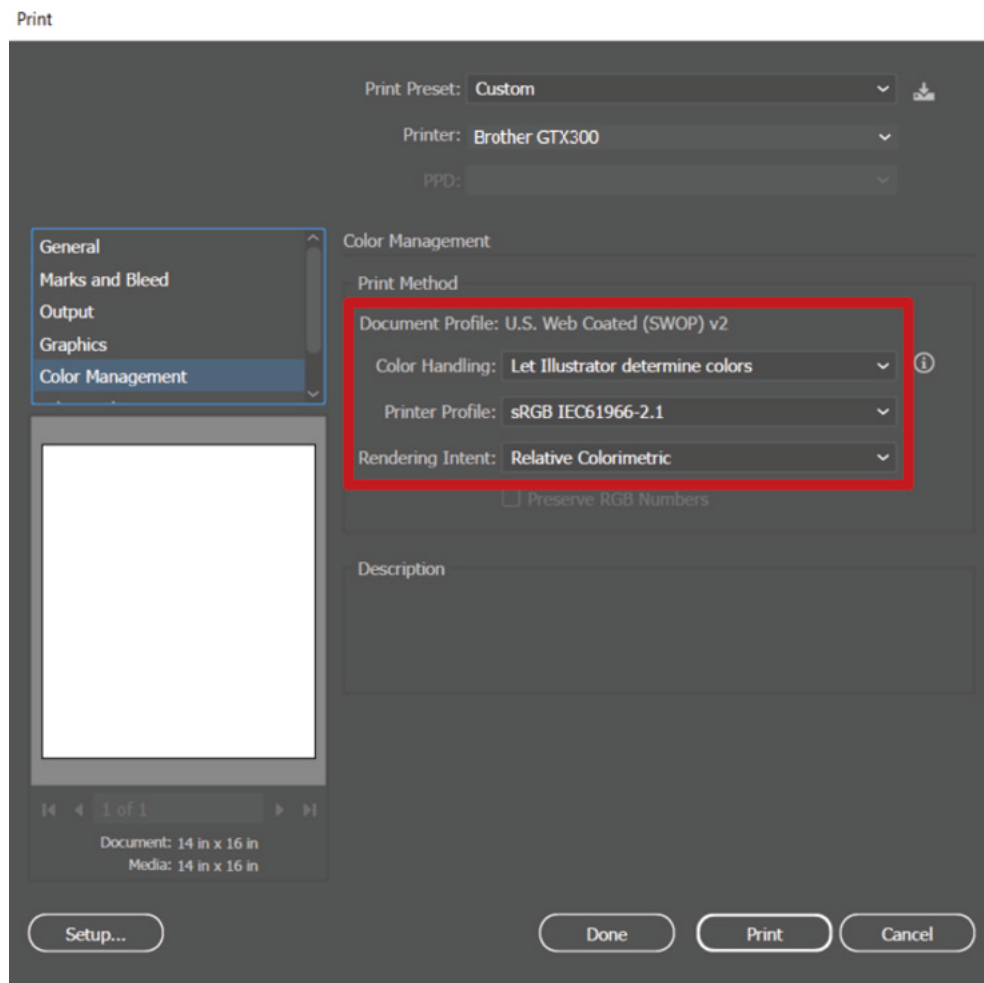
- How to set up the printer driver
 - In the case of print data using white ink: [Set up the printer driver on page 109](#)
 - In the case of print data using color ink and black ink only: [Set up the printer driver on page 134](#)
- Clicking on [Print] will not start the print operation of the printer itself. The print button of the printer should be pressed to start the printing operation.

Adobe Illustrator

1 In the menu bar, select [File] > [Print] > [Color Management].

2 Make the settings as follows:

- [Document Profile]: [sRGB IEC61966-2.1]
- [Color Handling]: [Let Illustrator determine colors]
- [Printer Profile]: [sRGB IEC61966-2.1]
- [Rendering Intent]: [Relative Colorimetric]



3 From [Printer], select "Brother GTX300".



TIPS

- If [Printer] is set to "Brother GTX300", the print data will be sent to the printer.
If [Printer] is set to "Brother GTX300 FileOutput", the print data will be saved as an ARX3 file.

- 4 In the [Advanced], set up the printer driver, and send the print data by clicking [Print].



TIPS

- How to set up the printer driver
 - In the case of print data using white ink: [Set up the printer driver on page 109](#)
 - In the case of print data using color ink and black ink only: [Set up the printer driver on page 134](#)
- Clicking on [Print] will not start the print operation of the printer itself. The print button of the printer should be pressed to start the printing operation.

6.6.3 Loading print data (ARX3 file) from USB flash drive

- 1 Insert a USB flash drive into the insertion slot (a) in front of the operation panel of the printer.

IMPORTANT

- Do not apply undue force to the USB flash memory when you insert it into the slot. Otherwise, it could be damaged.



TIPS

- Please use a FAT32-formatted USB flash memory of which storage capacity is 2 GB to 32 GB in total. You cannot use a USB flash memory with security functions such as password lock function or beyond 32 GB.
- Note that operation is not guaranteed with all USB flash drives.
- USB flash drives are consumable. USB flash drives may not be recognized when they are deteriorating.
- USB-attached solid-state drives (SSDs) and UASP devices cannot be used with the printer.
- Note that the data which can be loaded from the USB flash drive is only the data in the ARX3 or ARXP format.

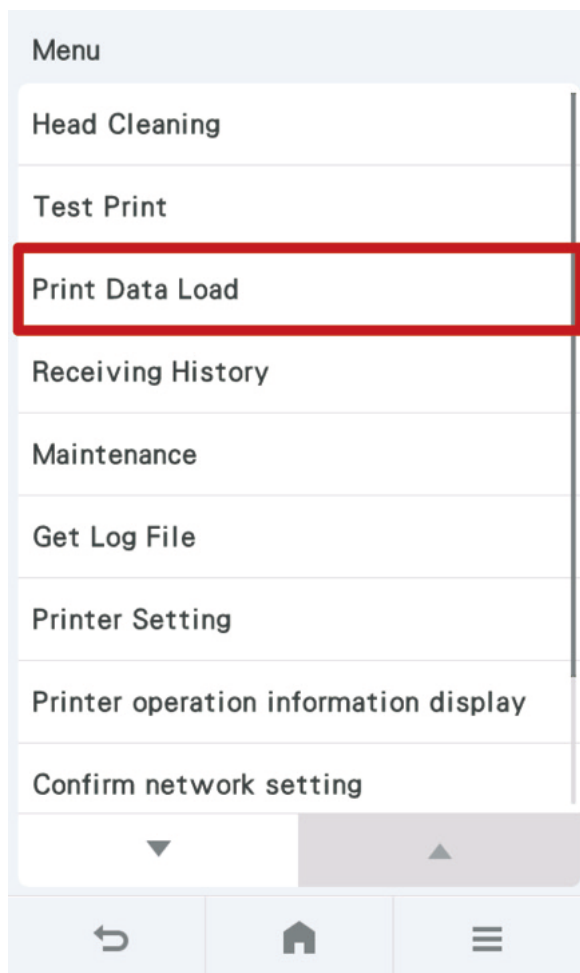


- 2 From the menu, select [Print Data Load].



TIPS

- The information on file is shown on the liquid crystal panel.



- 3 Select the filename of the file to be printed out.



TIPS

- Selecting  will display the file stored in .
- Folders in the USB flash memory are shown down to the 3rd layer. Folders created in the 4th layer or below are not displayed.

Select data file

 Sample Folder1

 Sample Folder2

Select data file

Sample Data1.arxp

Sample Data2.arxp

Sample Data3.arxp

- 4 Check the print image displayed in the preview window, and press [OK].

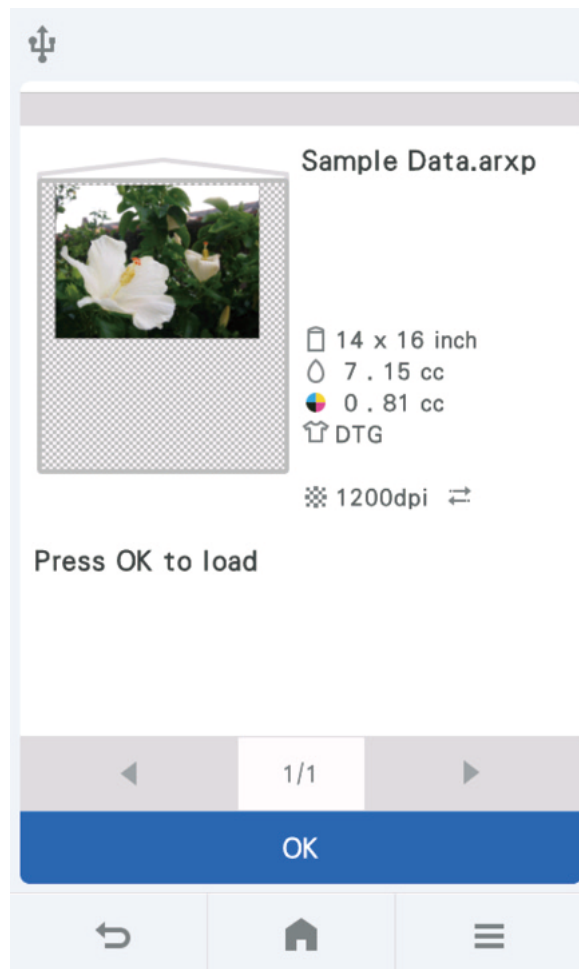
IMPORTANT

- Never touch the USB flash memory when the print button is blinking. Otherwise, any already-saved data may be corrupted.



TIPS

- Depending on data size, it may take several minutes before the loading process is completed.
- If any files of USB flash memory cannot be read out. [In case of the following problems on page 315](#)
- If a folder contains more than one print data item, use the ◀/▶ buttons to switch the preview window.
- It is possible to change the direction of the preview display screen as well. [Preview display settings on page 296](#)



The print data loading will be completed when the print button stops blinking and remains lit, while the electric chime sounds.

6.7 Printing

6.7.1 Executing a print job once for a single print medium

1 Receiving a print data file.

The print button blinks during reception of data. When the data reception is completed, an audible alarm is activated and the print button illuminates.

As there are two types of audible alarms, make sure the mounted platen matches the platen size of the print data.



TIPS

- When data of the same platen size as the previous one was received: A notice sound of "ping-pong" is output.
- When data of a different platen size from the previous one was received: A notice sound of "ping-pong pan-pong" is output.

2 Make sure that the print data you want to print out is displayed on the liquid crystal panel, and press the print button to start printing.

When the printing is completed, the platen moves to the forward-most position and the sound of "pong" is heard.



TIPS

- Pressing  causes the printing to be canceled.
- The printer may shift to low temperature operation mode, when the room temperature is less than 18°C (64.4°F) and white ink is used.
During low temperature mode, it may take a longer time for print operation and maintenance before starting the print. Change the low temperature operation setting as needed. Refer to .
- High-temperature and low-humidity environment may prolong the maintenance time after completion of printing. If any warning message about temperature and humidity is displayed, be sure to control the temperature and humidity promptly so as to conform with the print warranty scope. [Apparatus on page 377](#)

6.7.2 Executing a print job several times for multiple print media

You can keep the identical print data and execute a print job several times for multiple print media.



TIPS

- When the power is turned off, the retained print data is erased.
- In the event that [ON] is selected from [Printer Setting] > [Print settings] > [Print Data Auto Delete], the print data will be erased after the printing of the specified number of print media is completed. Change the settings as needed. [Automatic deletion of print data on page 284](#)

- 1 Make sure that the print data you want to print out is displayed on the liquid crystal panel, and press the print button to start printing.

When the printing is completed, the platen moves to the forward-most position and the sound of "pong" is heard.



TIPS

- Pressing  causes the printing to be canceled.
- The number of print media of which printing is completed is shown on the liquid crystal panel.
- The printer may shift to low temperature operation mode, when the room temperature is less than 18°C (64.4°F) and white ink is used.
During low temperature mode, it may take a longer time for print operation and maintenance before starting the print. Change the low temperature operation setting as needed. Refer to .
- High-temperature and low-humidity environment may prolong the maintenance time after completion of printing. If any warning message about temperature and humidity is displayed, be sure to control the temperature and humidity promptly so as to conform with the print warranty scope. [Apparatus on page 377](#)

- 2 Replace the platen's printed medium (T-shirt) with the next one and repeat the procedure until the desired number of print jobs are completed.

6.7.3 Performing the printing from receiving history

You can print out such print data that you have received before.



TIPS

- The print data that can be retained are max. 100 pieces of them and 800 MB in total capacity, wherein each print data will be erased in the order from the oldest to the latest.
- When the power is turned off, the retained print data is erased.
- In the event that [ON] is selected from [Printer Setting] > [Print settings] > [Print Data Auto Delete], the print function in [Receiving History] is disabled. Change the settings as needed. [Automatic deletion of print data on page 284](#)

- 1 From the menu, select a print data you want to print out in [Receiving History].



TIPS

- Each of the pieces of print data is displayed in the order in which they are received from the newest to the oldest ones.

- 2 Make sure that the print data you want to print out is displayed on the liquid crystal panel, and press the print button to start printing.

When the printing is completed, the platen moves to the forward-most position and the sound of "pong" is heard.



TIPS

- Pressing  causes the printing to be canceled.
- The printer may shift to low temperature operation mode, when the room temperature is less than 18°C (64.4°F) and white ink is used.
During low temperature mode, it may take a longer time for print operation and maintenance before starting the print. Change the low temperature operation setting as needed. Refer to .
- High-temperature and low-humidity environment may prolong the maintenance time after completion of printing. If any warning message about temperature and humidity is displayed, be sure to control the temperature and humidity promptly so as to conform with the print warranty scope. [Apparatus on page 377](#)

6.7.4 Checking the platen height before printing

Using the platen button before printing, you can check if the wrinkles of the T-shirt do not cause an error with the detection by the obstacle sensor or check if the platen is not too low.

When placed all the way forward, the platen will be moved into the back of the printer if the platen button is pressed.

At this time, if no error is detected with the platen height and obstacles, pressing the print button allows you to start printing without moving the platen back to the forward position.



TIPS

- The GTX Pro Series and other Brother's previous garment printers allow you to press the print button only when the platen is completely ejected from the printer.
With the GTX300, this specification has been changed.

6.8 Scheduling a print

A print can be scheduled by pressing the print button even when the printer is not on standby. The print begins automatically when the printer becomes available.

6.8.1 When you can schedule a print

You can schedule the next print by pressing the print button while the print data is being received, during the post-print processing, and during the circulation of white ink.

This function is useful when, for example, the printer performs the post processing for the previous print job after you remove the printed T-shirt and set a new T-shirt to the platen.



TIPS

- Be sure to remove the printed T-shirt from the platen and set a new T-shirt before you press the print button.
- No print can be scheduled with the print button when the menu is being operated or when an error is occurring.

When you can schedule printing	Description
The printer is receiving print data	While the printer is receiving print data sent via the USB or LAN cable
The printer is post-processing after a print	After a print job is finished and the platen is unloaded, and while the printer is performing operations such as wiping, capping, or an auto purge after a print job
During the white ink circulation	While the white ink is being circulated inside the printer at specified intervals or at a scheduled time for circulation

6.8.2 When the print begins

A scheduled print begins when each of the following conditions is true:

When you schedule printing	When the print begins
The printer is receiving print data	When the printer has completely received print data
The printer is post-processing after a print	When all post-processing operations, such as wiping, capping, or an auto purge after a print job, have been completed
During the white ink circulation	When the white ink circulation is completed



TIPS

- The Print button flashes fast during the period between when you schedule printing and when the printing begins.

6.8.3 When printing does not begin

A scheduled printing does not begin when each of the following conditions is true:

- If an error occurs when printing should begin. (For example, this is true if the ink is depleted in the previous print job.)
- If the data to print is missing from the printer when printing should begin. (For example, this is true if the data being printed when you schedule printing is deleted by the [Print Data Auto Delete] function. [Automatic deletion of print data on page 284](#))

6.8.4 Canceling scheduled printing

You can cancel scheduled printing by pressing the Cancel button during the period between when you schedule printing and when printing begins.

If you schedule a print during the white ink circulation and press the Cancel button, both the white ink circulation and the scheduled print are cancelled.

6.9 Removing the print medium from the platen

- 1 Hold the shoulder portions of print medium with your hand, and pull it out slowly in the forward direction indicated.

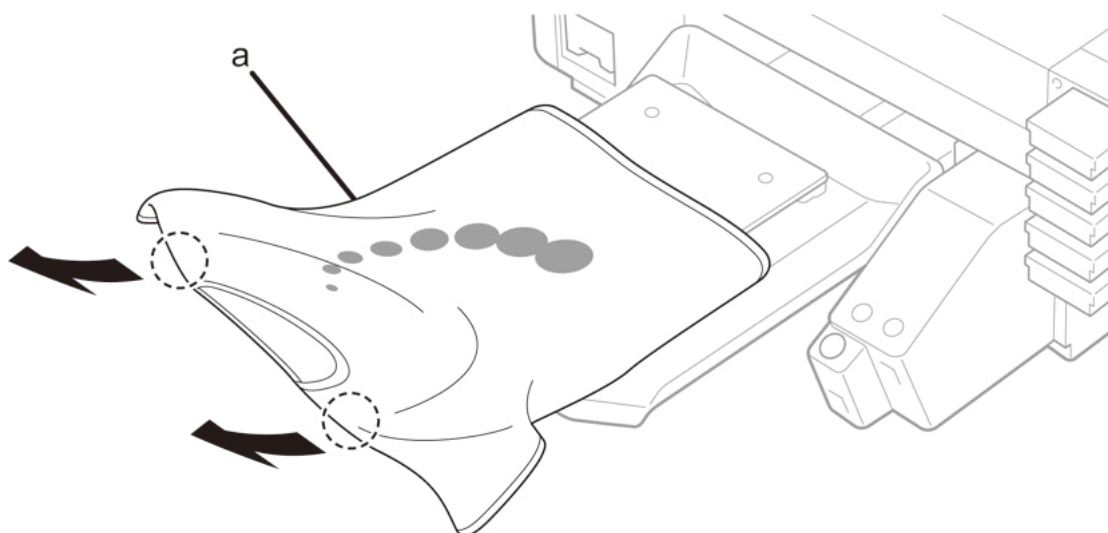
IMPORTANT

- Because the printed surface is still wet with ink, avoid touching it.
- If any ink is attached to your hands, wash your hands with soap and water.
- Those inks that are attached to fabrics cannot be cleaned up, please handle the inks with utmost care.



TIPS

- The printed ink is not fixated at this point; therefore, handle the T-shirt (a) or film with care to avoid the printed surface touching other objects.



6.10 Fixation of ink

For fixation of ink, use the heat press or oven.

- Heat press

It is useful because you can control its temperature and operating time with ease.

- Oven

If you are printing a large number of sheets, work efficiency will improve.



CAUTION

- Please use the heat press and oven in a well-ventilated area. If your working area is not well ventilated, wear a protective mask.



TIPS

- If the inks are fixated insufficiently, discoloring may occur due to washing and friction.
- Keep the fixation surface of heat press and peel-off sheet clean.
Otherwise, the printing surface may be soiled with stains from the peel-off sheet.
- If a printed material is rubbed with vinyl-chloride-based white or light-colored synthetic leather, color transfer may occur.
When a color-printed surface is rubbed strongly against a printed surface with only white ink, color transfer may occur in the same fashion.
When a color transfer takes place, wipe the color-transferred area and clean off dirt with a soft and clean cloth or a toothbrush that is moistened with a small amount of mild detergent for home use and/or alcohol.
- Component of pretreatment remains on the T-shirt on which the ink was fixated after applying pretreatment. For this reason, it is advisable to wash such T-shirts with water before wearing them.

Guidelines on fixation conditions of ink

The undermentioned fixation temperature/time serve as guidelines only, and optimum conditions vary with your heat press or oven. Be sure to perform the fixation after checking on the temperature and fixation results beforehand.



TIPS

- Because optimum conditions vary depending on the type of your heat press or oven, use the fixation conditions as a reference guide. Be sure to adjust the conditions while checking on the temperature and ink fixation results beforehand.
- Because some print media are prone to scorching, carefully check the surface condition.
In particular, the print media onto which the pretreatment has been applied will easily get scorched.
- When using the heat press, adjust the pressure while checking the ink fixation result.
- If it is not dry enough after processing for the period of the guideline, extend the time while checking the dried condition of the ink.

Device	Temperature	Time
Heat press	180°C (356°F)	35 seconds
Oven	Surface temperature: 160°C (320°F) ^{*1}	3 min. and 30 sec. to 5 min.

^{*1}: Because a T-shirt may be discolored if this temperature increases too high, great care should be taken to exercise temperature control.

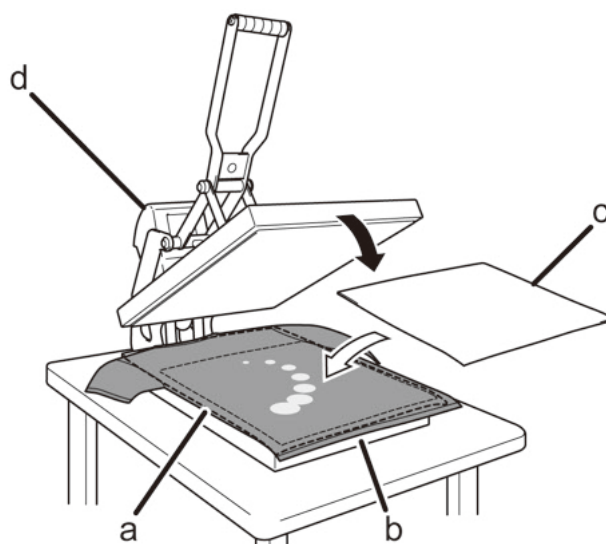
6.10.1 Ink fixation by means of heat press

- 1 Place the silicone foam (a), T-shirt (b) and peel-off sheet (c) in position under the heat press (d) first, and fixate the ink properly.



TIPS

- Ink fixation condition guidelines [Fixation of ink on page 222](#)
- For details, refer to the instruction manual of your heat press.
- There is a tendency to bring the print result to an almost matte finish if a silicone-coated paper is used as a peel-off sheet or to an almost bright finish if a fluororesin sheet is used as the same at the ink fixation stage. Selectively use either of them according to your desired finish.



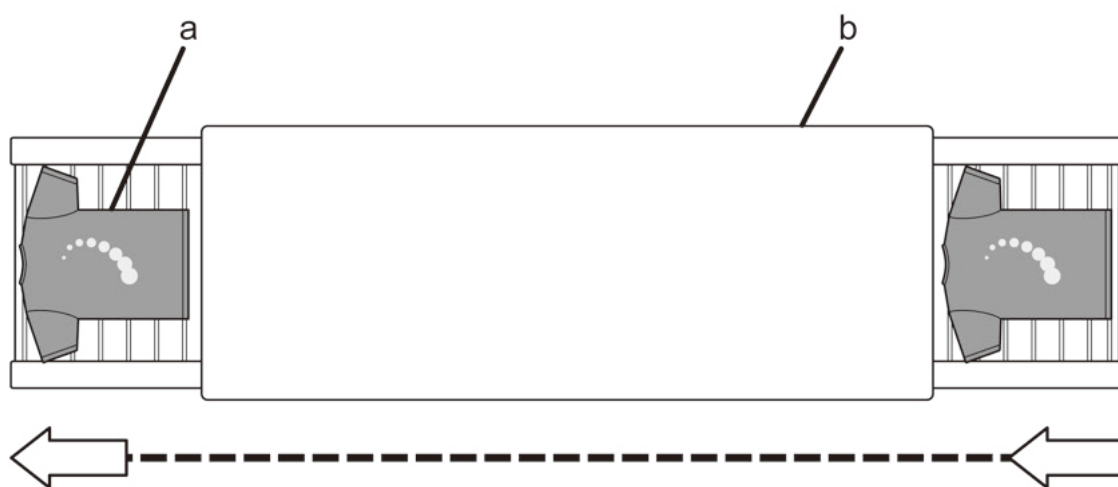
6.10.2 Ink fixation by means of conveyor-type oven

1 Fixate inks onto the T-shirt (a) by means of the conveyor-type oven (b).



TIPS

- Ink fixation condition guidelines [Fixation of ink on page 222](#)
- For the conveyor-type oven, identify the oven's internal temperature, and check up on actual ink fixation result.
- For details, refer to the instruction manual of your conveyor-type oven.



6.11 Powder fixing

By applying powder and then heating and curing it, the powder acts as the adhesive for the transfer film.

For fixation of powder, use an oven.

- Oven

If you are printing a large number of materials, work efficiency will improve.



CAUTION

- Please use the oven in a well-ventilated area. If your working area is not well ventilated, wear a protective mask.

1 Place the powder in a large container and use a scoop to spread the powder evenly over the film.

2 Remove any excess powder from the film.

The excess powder that is removed can be reused.

3 Cut the powdered film to fit into the oven.

4 Set the film in the oven and fixate the powder.



TIPS

- For details, refer to the instruction manual of your oven.

Powder fixation condition guidelines

The following fixation temperature/time serve as guidelines only, and optimum conditions vary with your oven. Be sure to perform the fixation after checking on the temperature and fixation results beforehand.



TIPS

- Because optimum conditions vary depending on the type of your oven, use the fixation conditions as a reference guide. Be sure to adjust the conditions while checking on the temperature and fixation results beforehand.
- Because some films are prone to scorching, carefully check the surface condition.

Temperature	Time
160°C (320°F)	300 seconds

6.12 Transferring to print medium

Transfer the transfer film created in [Powder fixing on page 226](#) to T-shirts or similar materials.

Use a heat press for transferring to T-shirts or similar materials.

- Heat press

It is useful because you can control its temperature and operating time with ease.



CAUTION

- Please use the heat press in a well-ventilated area. If your working area is not well ventilated, wear a protective mask.



TIPS

- If transfer is insufficient, discoloring may occur due to washing and friction.
- Keep the fixation surface of heat press and peel-off sheet clean.
Otherwise, the printing surface may be soiled with stains from the peel-off sheet.

Transfer condition guidelines

The following transfer temperature/time serve as guidelines only, and optimum conditions vary with your heat press. Be sure to perform transfer after checking on the temperature and transfer results beforehand.



TIPS

- Because optimum conditions vary depending on the type of your heat press, use the transfer conditions as a reference guide. Be sure to adjust the conditions while checking on the temperature and transfer results beforehand.
- Because some print media are prone to scorching, carefully check the surface condition.
- Adjust the pressure while checking the transfer result.
- If it is not dry enough after processing for the period of the guideline, extend the time while checking the dried condition of the ink.

Temperature	Time
150°C (302°F)	20 seconds (+ Additional press of 20 seconds)

- 1 Place the T-shirt, transfer film and peel-off sheet in position under the heat press first, and transfer the ink properly.



TIPS

- For details, refer to the instruction manual of your heat press.

- 2 Remove from the heat press and peel off the transfer film.

- 3 If necessary, set the T-shirt and peel-off sheet in the heat press for an additional press.

By using a peel-off sheet, the film can be firmly transferred to the T-shirt, resulting in a finish that blends better with the T-shirt.

Chapter 7

Precautions to keep good printing quality/use printer over the long term

Read [SAFETY INSTRUCTIONS](#) on page 8 in the opening pages carefully before starting work.

7.1 Tasks to be performed regularly

7.1.1 Replacement of ink pouch with a new one

If  is displayed in the remaining ink volume indication window on the operation panel screen, replace the ink pouch.

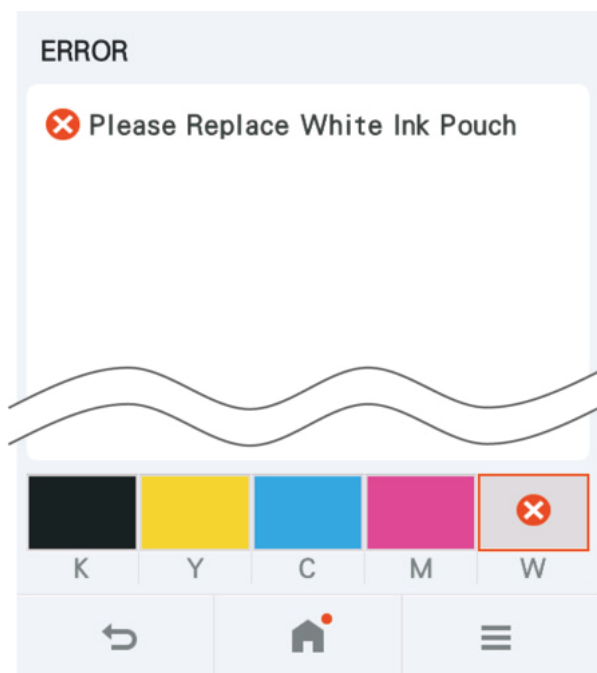
IMPORTANT

- No cartridges can be refilled with any ink. Do not disassemble the ink pouch. In order to use the printer for a long period and to take full advantage of its capabilities, we recommend to use the ink pouches that are specified by us.
- During the printing process or head cleaning operation, avoid replacing any ink pouch with a new one. Otherwise, the printer may break down.



TIPS

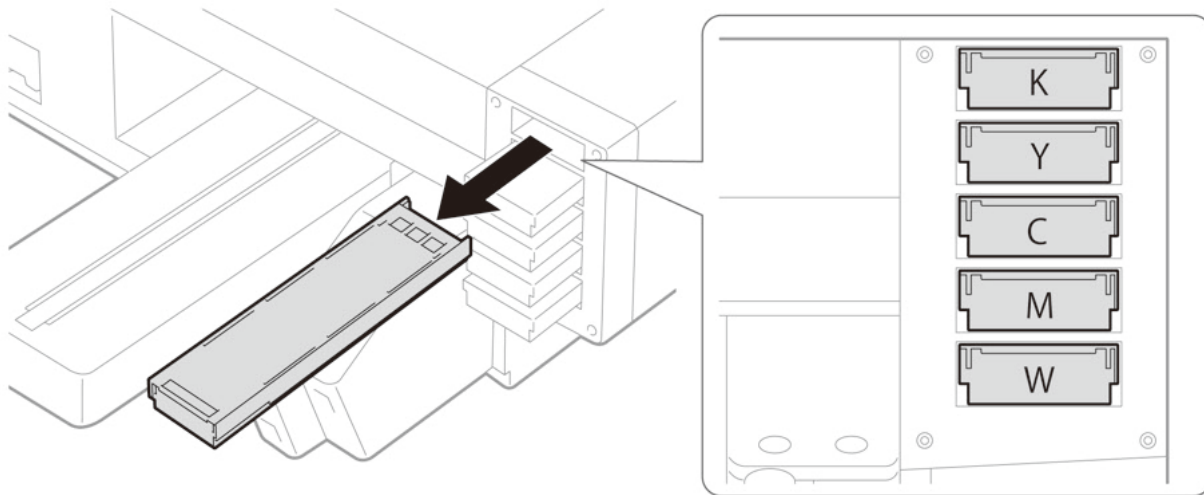
- If you replace an ink pouch that still has much amount of remaining ink in the way of use, the remaining ink volume indication window may not display the correct remaining volume.
- Any ink pouch has been designed to leave a small amount of ink in it when reading the end of its service life. This is required to protect the printer and keep its good printing quality. Please keep this matter in mind.



- 1 Take out the ink cartridge displayed on the screen from the printer.

IMPORTANT

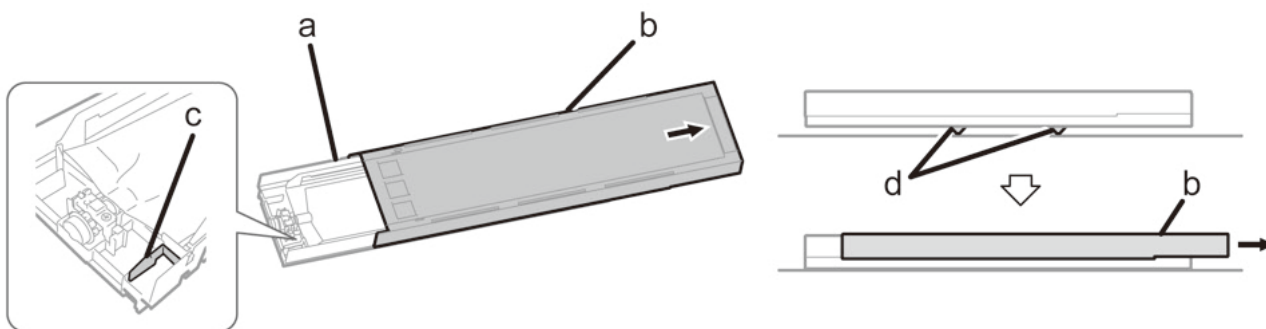
- The bottom of the cartridge may be soiled with ink. Clean the printer on a regular basis.



- 2 Open the lid (b) of the cartridge (a).

IMPORTANT

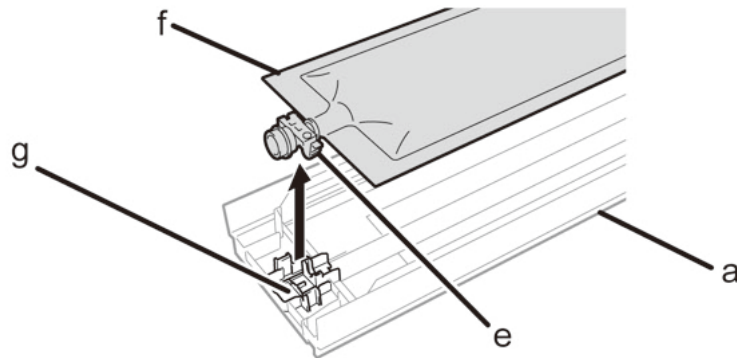
- When opening the lid, be sure not to touch portion (c). Otherwise, it could be damaged.
- Place the entire cartridge on a flat surface, push the latches (d) on the bottom surface of the cartridge downward and open the lid.



- 3 Pinch the latch (e) at the front end of ink pouch, and draw out the depleted ink pouch (f) from the cartridge (a).

IMPORTANT

- Remove the accumulated ink at the tip of the cartridge with a waste cloth (non-fuzzy cloth). Clean the printer on a regular basis.

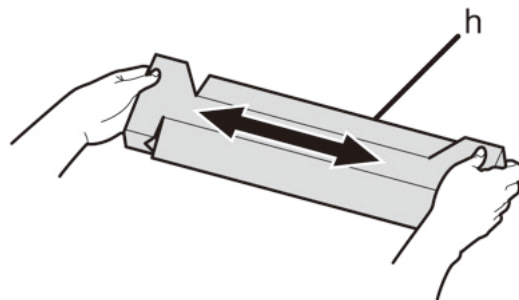


- 4 Unpack a new ink pouch from its shipping carton.

For the white ink pouch (h), shake it 100 times each in the side to side direction with its obverse side and reverse side facing upward separately, as shown below.

Note

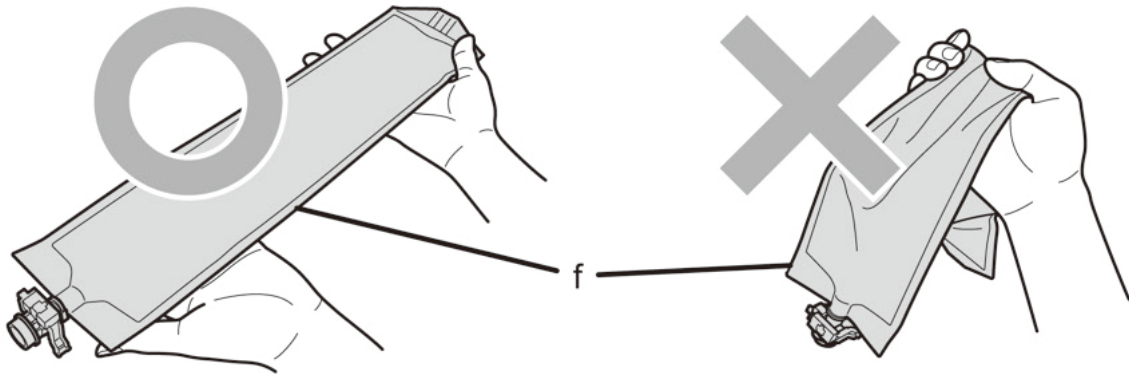
- Shake the pouch under the condition it remains contained in the inner box.



- 5 Unpack a new ink pouch (f) from its inner box.

IMPORTANT

- Do not place the ink pouch near the sharp edges. It could break the pouch and leak the contained ink.
- Handle the ink pouch with care. It could be damaged when bent, snagged by sharp objects, or dropped.



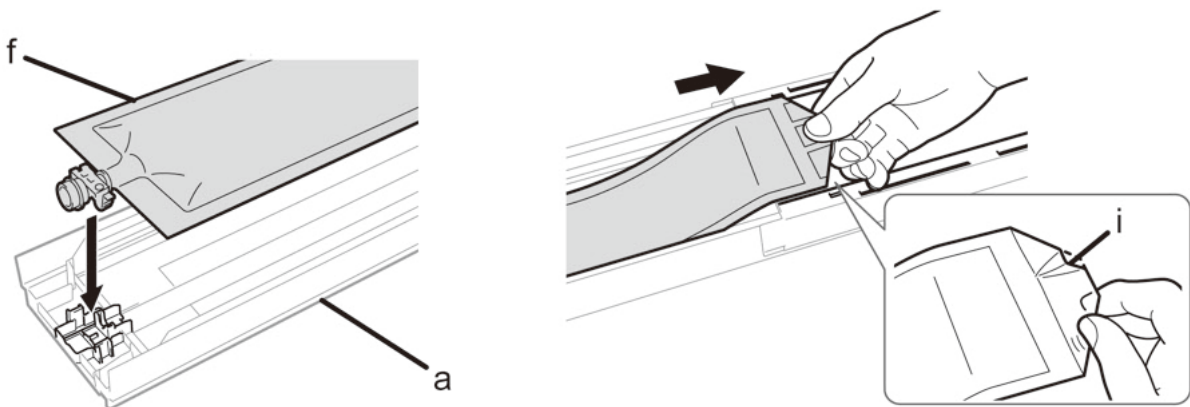
- 6 Put a new ink pouch (f) in the cartridge (a).

Push the tip end of the ink pouch into the cartridge until it clicks into place.

Straighten the ink pouch in such a manner that it will be aligned with the gutter of the lid of the cartridge, and mount in position by pulling it with your hand.

Note

- If the edge of the ink pouch is bent or undulating significantly, make it straight with your hand. (i)



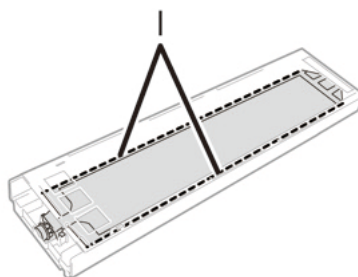
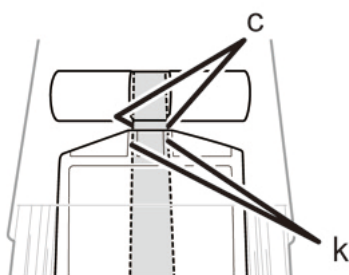
- 7 Put the ink pouch in its correct position.

CAUTION

- Avoid touching portion (c) of the cartridge. Otherwise, you may cut your hand.

TIPS

- Check that the two illustrated areas (k) and (l) are straight.



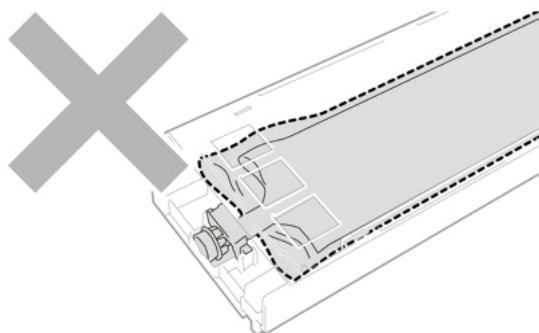
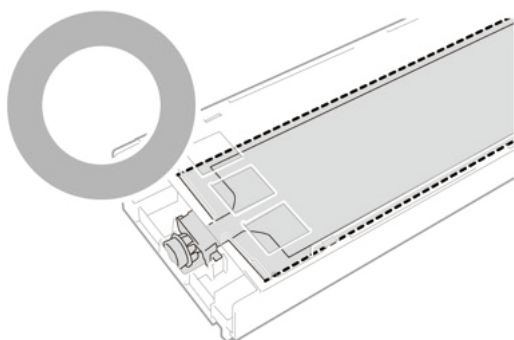
- 8 Close the lid, and put the ink cartridge in position inside the printer.

IMPORTANT

- Be sure to put a cartridge in its correct position. If a different ink cartridge is put by mistake, the applicable print head may be adversely affected. If a cartridge of different color is placed, please set it into the right position. If colors are mixed on the print result or within the ink pouch, please contact your dealer.
- When setting the cartridge, do not shake the cartridge with the ink pouch facing down with the aim of facilitating the winding of the pouch. Doing so will cause wrinkles, and the proper winding of the ink pouch will not be possible.

Note

- Dispose of any waste resulting from the replacement in accordance with applicable laws and ordinances.



7.1.2 Refilling the cleaning solution

When a warning message appears on the operation panel screen or in the warning message window, refill the cleaning solution.



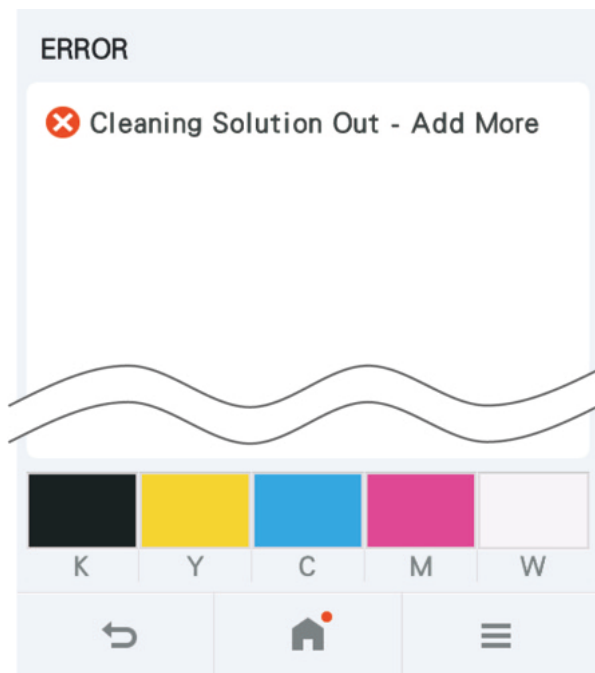
CAUTION

- Be sure to wear a pair of plastic gloves and protective glasses during the work operation.



TIPS

- Also, check to see if the cleaning solution is kept at a proper liquid level in the cleaning solution tank and refill the tank with the solution if its amount is insufficient.

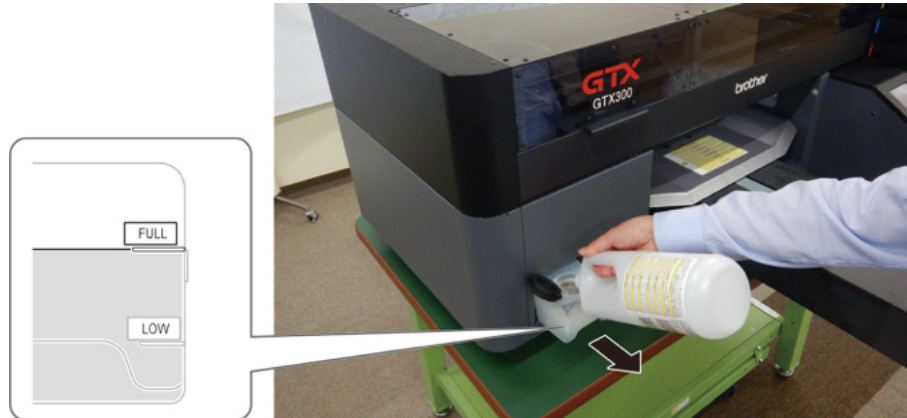


- 1 Pull out the cleaning solution tank from the front of the printer.

- 2 Open its lid and refill it with the cleaning solution up to the "FULL" line.

IMPORTANT

- Be sure not to put the cleaning solution into the tank above the "FULL" line.

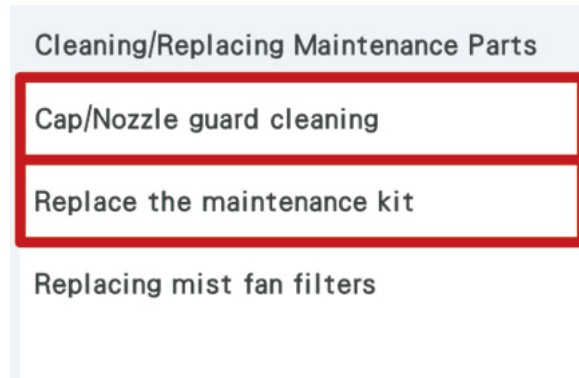


- 3 Close the lid and slowly place the cleaning solution tank into the printer.

7.1.3 Cleaning and replacement of maintenance parts

Select individually the maintenance parts to clean or replace.

- 1 From the menu, select [Maintenance] > [Cleaning/Replacing Maintenance Parts].
- 2 Select [Clean nozzle guard and cap] or [Replace the maintenance kit].



- 3 Perform cleaning and replacement.



TIPS

- The nozzle guard and suction cap should be cleaned at the same time.
- For the way to perform cleaning and replacement, refer to the respective maintenance parts section.

[Cleaning the nozzle guard and suction cap on page 237](#)

[Replacing the wiper on page 245](#)

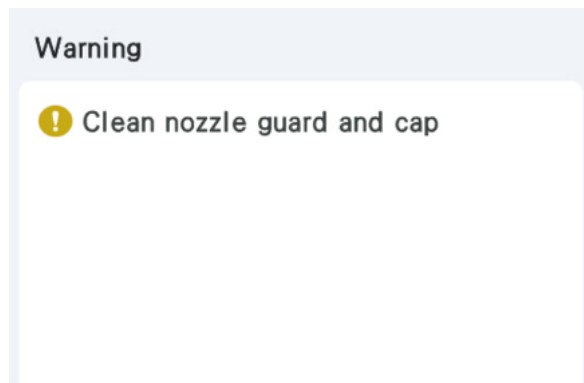
[Replace the flushing foam on page 253](#)

[Replacing the mist fan filter on page 256](#)

7.1.4 Cleaning the nozzle guard and suction cap

When a warning message appears in the warning message window, perform the cleaning.

In the event that maintenance has been performed inadequately, a printed material may be soiled with waste ink during a print session or a printed surface quality may deteriorate.



- 1 Make the clean stick R, clean stick T, cleaning cup, gloves and cleaning solution, which come standard with the printer, available for use.
- 2 From the menu, select [Maintenance] > [Cleaning/Replacing Maintenance Parts].
- 3 Select [Clean nozzle guard and cap].

IMPORTANT

- If any other error or message is displayed on the operation panel or warning message window, follow the message to solve the problem, then perform the cleaning.



TIPS

- Pressing [OK] causes the platen to start moving. Do not put anything around the platen.

- 4 Open the main unit cover (a) and clean the nozzle guards (b) and suction caps (c).

Two types of clean sticks are provided. Use either the clean stick T or R depending on what you want to clean.

IMPORTANT

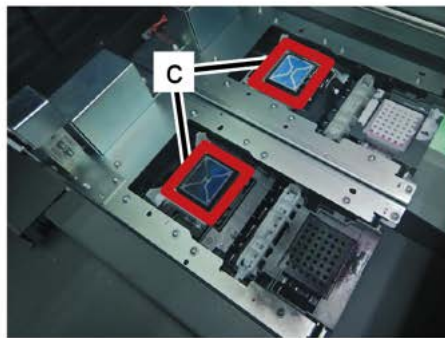
- Please complete the task within 15 minutes, in order to prevent the print heads from drying up.
- If the task takes more than 15 minutes to complete, close the main unit cover and then select [Clean nozzle guard and cap] again to restart the task. Then, the head cleaning will be performed to prevent any ink from drying up.



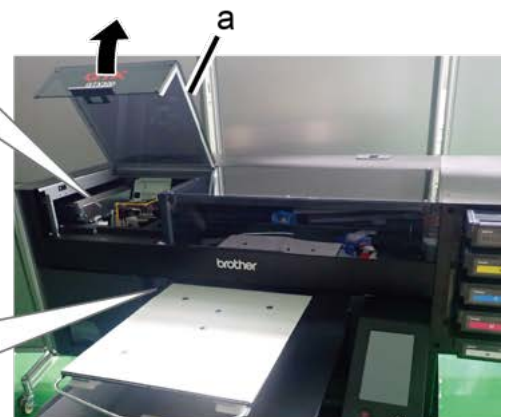
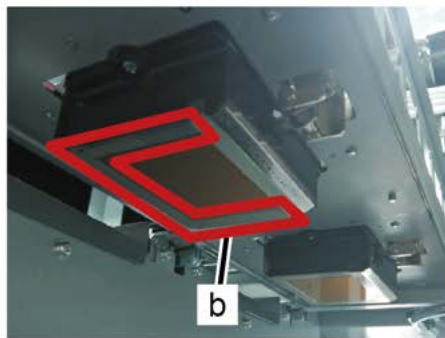
TIPS

- For the cleaning method, refer to the description mentioned below.

Locations to be
cleaned with
clean stick T



Locations to be
cleaned with
clean stick R



- 5 After the cleaning is completed, close the main unit cover.

6 Press [OK].

Note

- Dispose of any waste resulting from the cleaning in accordance with applicable laws and ordinances.



TIPS

- Then, the head cleaning will be performed to prevent any ink from drying up.
- Because the cleaning cup will be reused, rinse it in clean cleaning solution and store it in a safe place.

The nozzle guard and cap should be cleaned separately for the white side and color side.

For the way to perform cleaning, refer to the respective items.

Cleaning on the white side

- 1 Prepare a new clean stick R and the cleaning solution.
- 2 Perform cleaning of the nozzle guard part and the resin part on the white side.

[Cleaning the nozzle guard \(Use clean stick R\) on page 241](#)

- 3 Prepare a new clean stick T and the cleaning solution.
- 4 Perform cleaning of the suction cap part on the white side.

[Cleaning the suction cap \(Use clean stick T\) on page 243](#)

Cleaning on the color side

- 1 Prepare a new clean stick R and the cleaning solution.
- 2 Perform cleaning of the nozzle guard part and the resin part on the color side.

[Cleaning the nozzle guard \(Use clean stick R\) on page 241](#)

- 3 Prepare a new clean stick T and the cleaning solution.
- 4 Perform cleaning of the suction cap part on the color side.

[Cleaning the suction cap \(Use clean stick T\) on page 243](#)

Cleaning the nozzle guard (Use clean stick R)

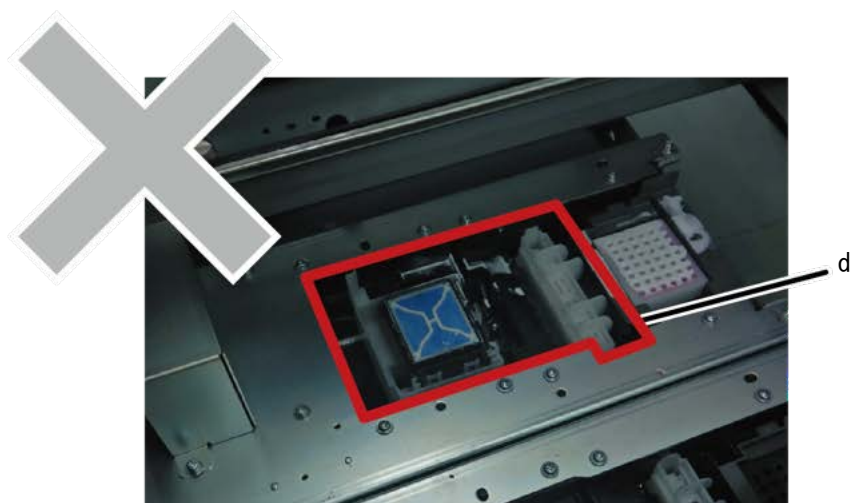
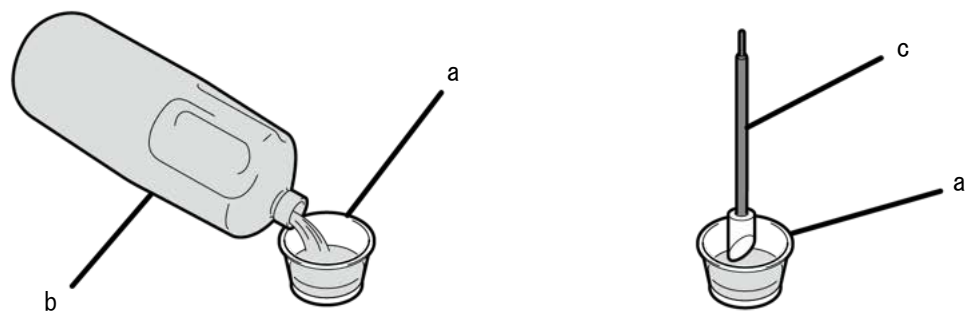
- 1 Put a proper amount of cleaning solution (b) into the cleaning cup (a).
- 2 Moisten a new clean stick R (c) with the cleaning solution.

IMPORTANT

- Use a new clean stick R when you start cleaning.
- Never touch the tip end of clean stick R with your hand. If any sebaceous matter is attached to the wiper, it may result in a printer malfunction.
- Do not use other fluids (water, etc.), because they may damage the print heads.
- Do not return the cleaning solution which has been put in the cleaning cup to the cleaning solution bottle.
- Do not shed cleaning solution in the maintenance unit (d).

Note

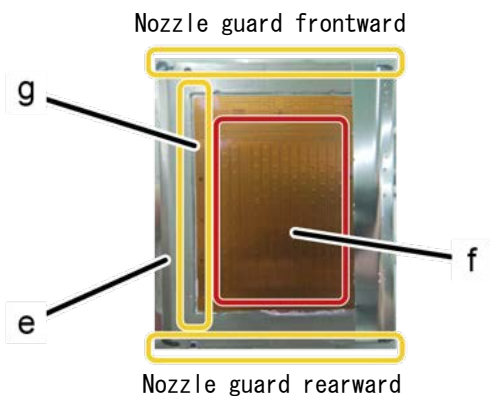
- For a proper work operation, be sure to wear the printer-provided gloves.



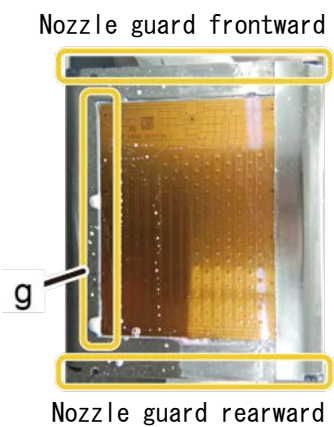
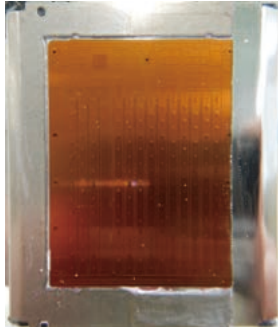
3 Wipe the area (g) between the print head's nozzle surface (f) and nozzle guard (e).

IMPORTANT

- Be sure not to touch the red-frame zone of the nozzle surface.
- For cleaning, be sure not to use any tool other than clean stick R.
- Do not rub the nozzle strongly.



Cleaning conditions

Pre-cleaning state	Post-cleaning state
Nozzle guard frontward  Nozzle guard rearward	

IMPORTANT

- Be sure to use the clean stick R separately for white ink and color ink.

 TIPS

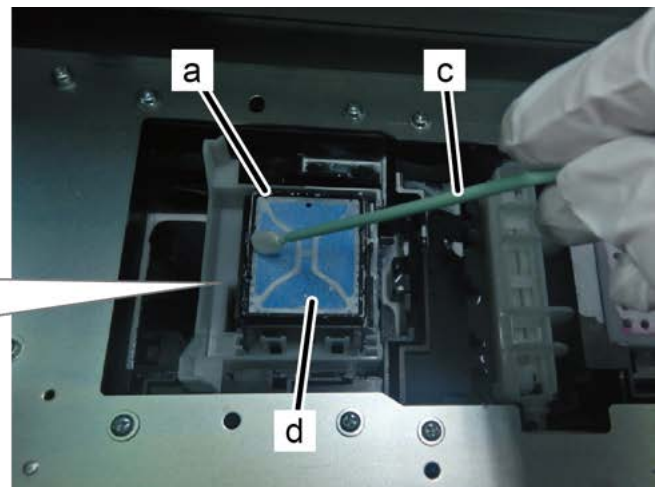
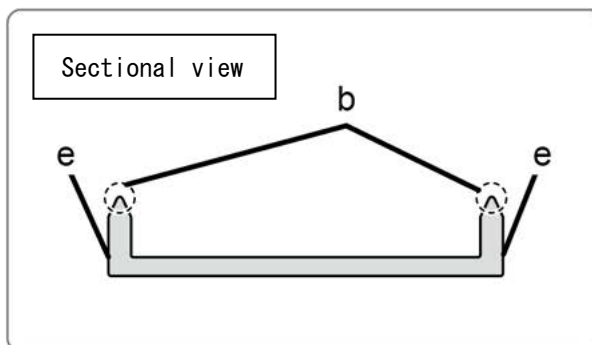
- There may remain white ink in the black resin part, but it doesn't matter if the severity is small as shown in the photo. Wipe away the white ink spreading out of the nozzle guard and nozzle surface.

Cleaning suction cap (Use clean stick T)

- 1 Wipe the rubber seal (a) and lip (b) of the suction cap with one side of the tip portion of clean stick T (c) in parallel with the seal.

IMPORTANT

- Clean the lip of the suction cap with clean stick T. The print head dries and causes an ejection failure if solidified ink remains.
- Do not touch the sponge (d) of the suction cap. The sponge may come off.
- Never touch the tip end of clean stick T with your hand. If any sebaceous matter is attached to the suction cap or such, it may result in a printer malfunction.
- Be sure to use the clean stick T separately for color ink and white ink.
- If ink clot floats on surface, remove it using the clean stick T. Do not use tweezers or other sharp objects. Using sharp objects could damage the suction cap and deteriorate its air tightness, possibly resulting in failure to eject ink-jet droplets.
- Be sure not to pinch the rubber seal. If it is damaged, its sealing property will be degraded, which in turn may lead to non-ejection of ink-jet droplets from the print heads.
- The outer side (e) of the suction cap does not need to be cleaned.

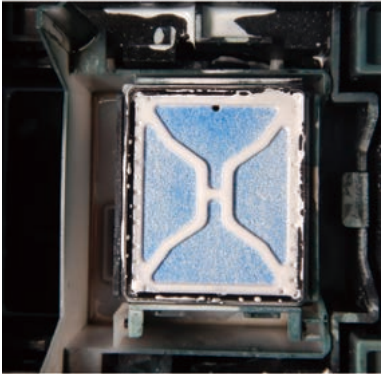
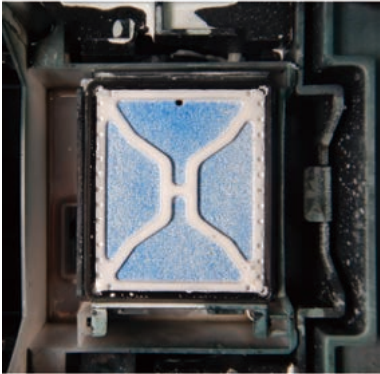


- 2 Replace clean stick T with clean stick R, rinse the cleaning cup, and clean the nozzle guard on the color side head.

IMPORTANT

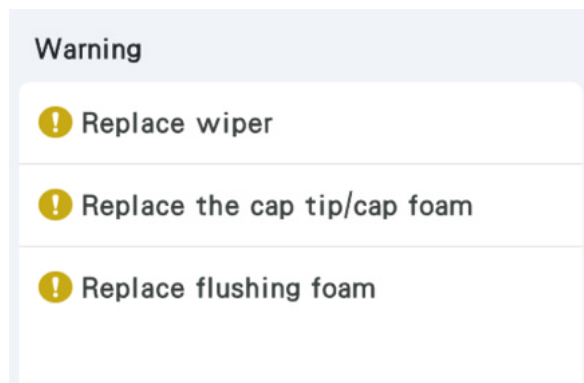
- Be sure to use the clean stick T separately for white ink and color ink.
- The used clean stick T should be disposed of, and should not be reused.
- After cleaning the nozzle guard of the color side head, rinse the cleaning cup with pure water, let it dry sufficiently, and store it so that dust does not get inside.

Cleaning conditions

Pre-cleaning state	Post-cleaning state
	

7.1.5 Replacing the wiper

When a warning message appears on the operation panel screen or in the warning message window, replace the specified wiper with a new one.



- 1 Have the supplied gloves and wiper ready.
- 2 From the menu, select [Maintenance]>[Cleaning/Replacing Maintenance Parts].
- 3 Select [Replace the maintenance kit].

IMPORTANT

- If any other error or message is displayed on the operation panel or warning message window, follow the message to solve the problem, then perform the cleaning.



TIPS

- Pressing [OK] causes the platen to start moving. Do not put anything around the platen.

- 4 Open the main unit cover according to the on-screen instructions, and perform replacement.

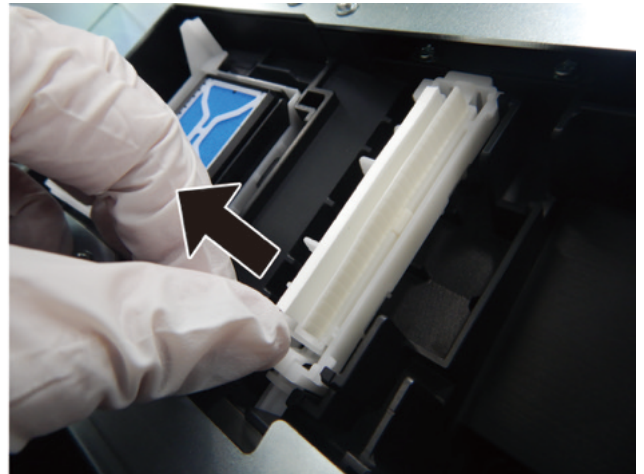
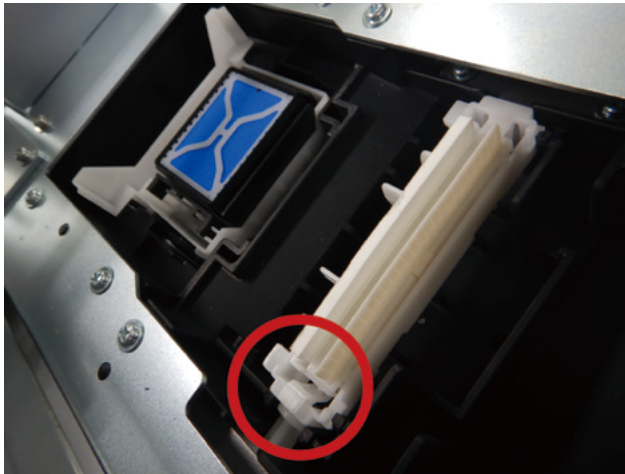
IMPORTANT

- Please complete the task within 15 minutes, in order prevent the print heads from drying up.
- If the task takes more than 15 minutes to complete, after attaching the wiper, close the main unit cover and then select [Replace the maintenance kit] again to restart the task. Then, the head cleaning will be performed to prevent any ink from drying up.

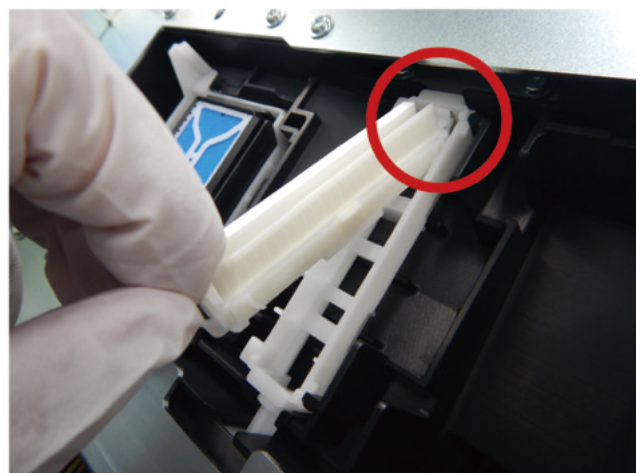
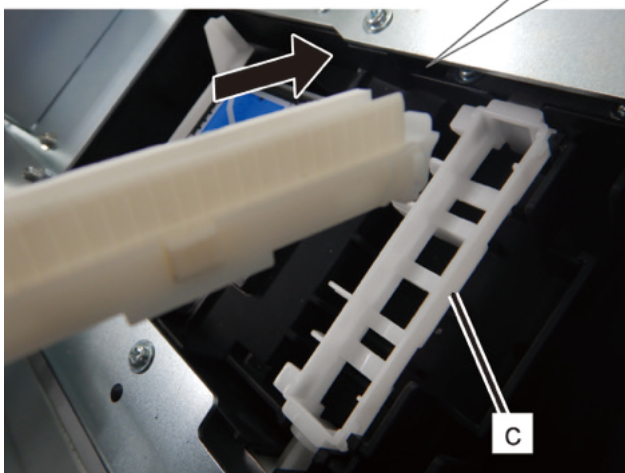
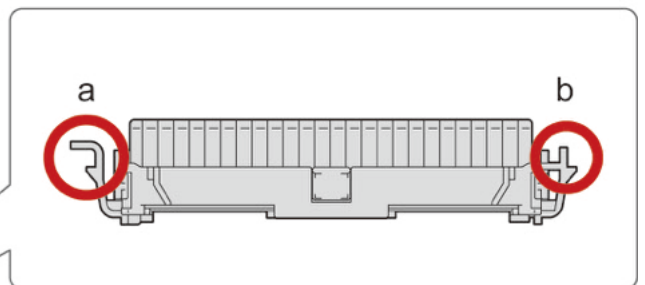
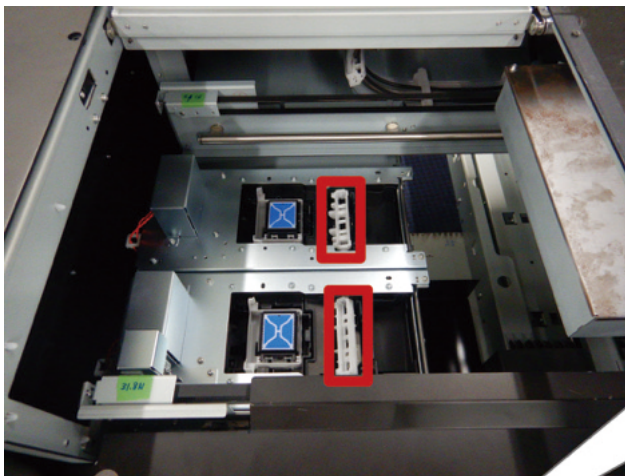
- 5 Remove the wiper from the maintenance unit by pushing up the hook's front side.

Note

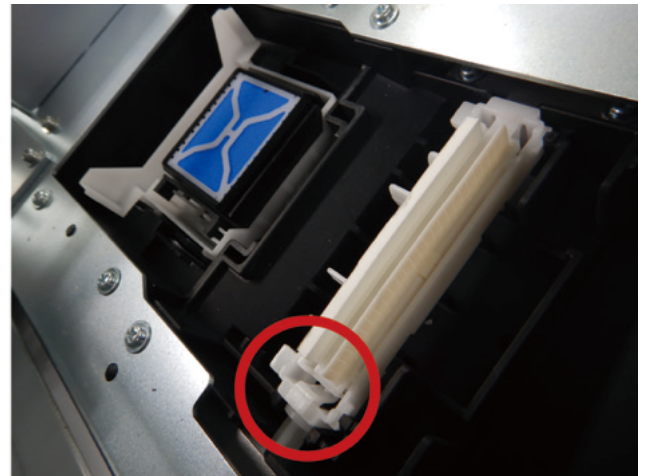
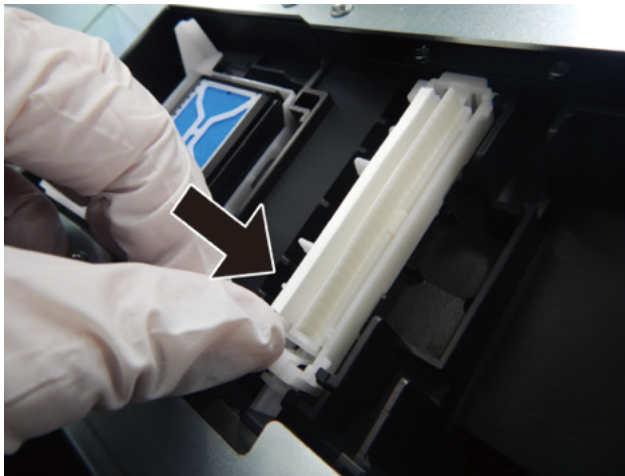
- For a proper work operation, be sure to wear the printer-provided gloves.



- 6 Inserting the hook's back side (b) toward the wiper holder (c) by holding the hook's front side (a), place the hook's back side onto the wiper holder.

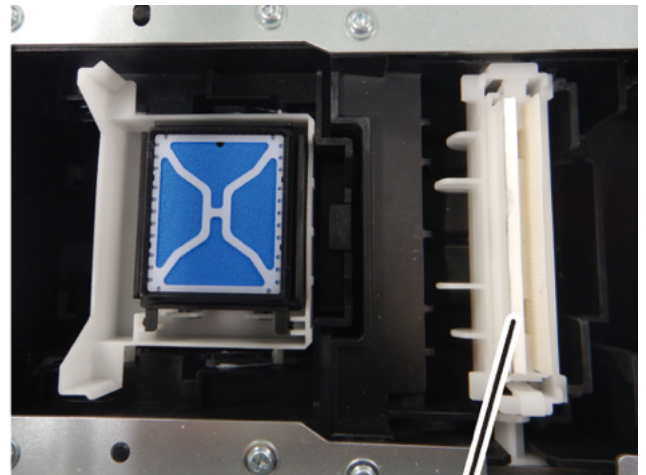
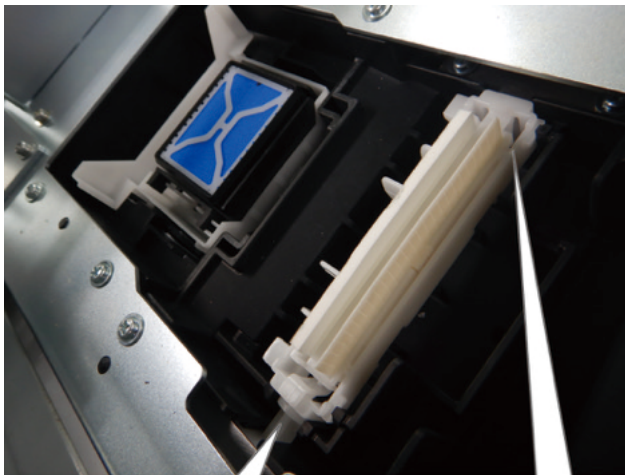


- 7 Establishing a pivot on the hook's back side, which you just have placed, lower the hook's front side and fit it into the wiper holder until it clicks into place.

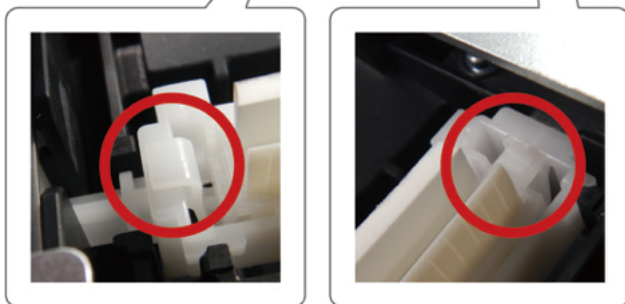


IMPORTANT

- Make sure that the wiper is attached in the correct direction (the sponge (d) must be on the cap side).
- Make sure that the hook's back side and front side are securely fit into the wiper holder.



d



- 8 Close the main unit cover.

9 Press [OK].

Note

- Dispose of any waste resulting from the replacement in accordance with applicable laws and ordinances.

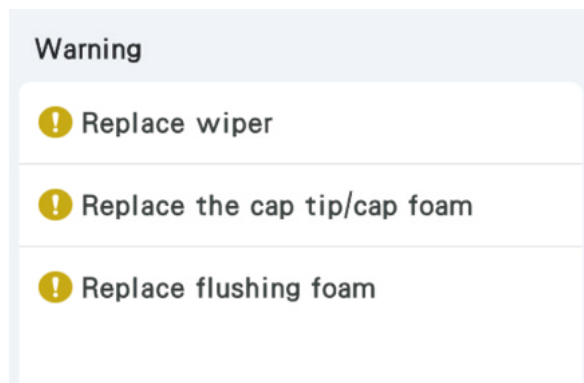


TIPS

- The head cleaning will be performed to prevent ink from drying up.

7.1.6 Replacing the cap chip and cap foam

When a warning message appears on the operation panel screen or in the warning message window, replace the cap chip and cap foam.



- 1 Prepare the gloves, cap chip and cap foam, which come standard with the printer.
- 2 From the menu, select [Maintenance] > [Cleaning/Replacing Maintenance Parts].
- 3 Select [Replace the maintenance kit].

IMPORTANT

- If any other error or message is displayed on the operation panel or warning message window, follow the message to solve the problem, then perform the cleaning.



TIPS

- Pressing [OK] causes the platen to start moving. Do not put anything around the platen.

- 4 Open the main unit cover according to the on-screen instructions, and perform replacement.

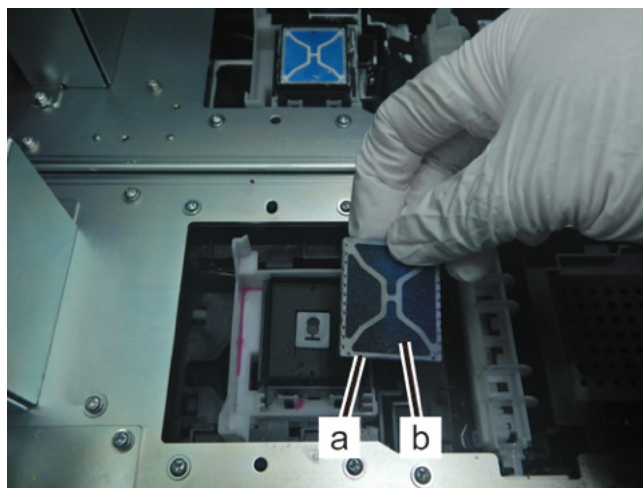
IMPORTANT

- Please complete the task within 15 minutes, in order prevent the print heads from drying up.
- If the task takes more than 15 minutes to complete, after attaching the cap chip and cap foam, close the main unit cover and then select [Replace the maintenance kit] again to restart the task. Then, the head cleaning will be performed to prevent any ink from drying up.

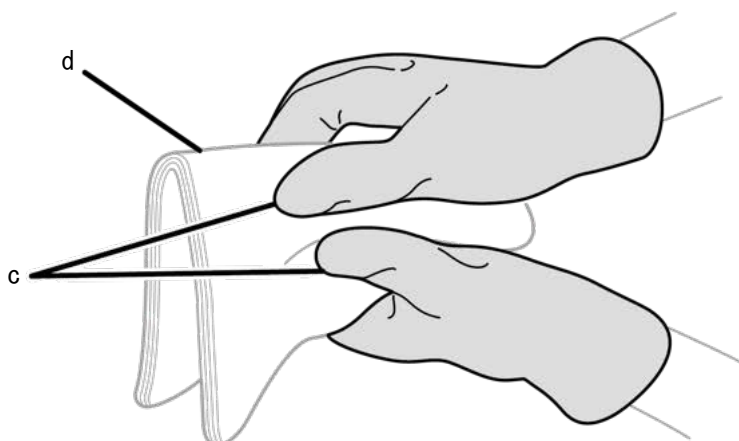
- 5 Remove the cap chip (a) and cap foam (b) from the maintenance unit.

IMPORTANT

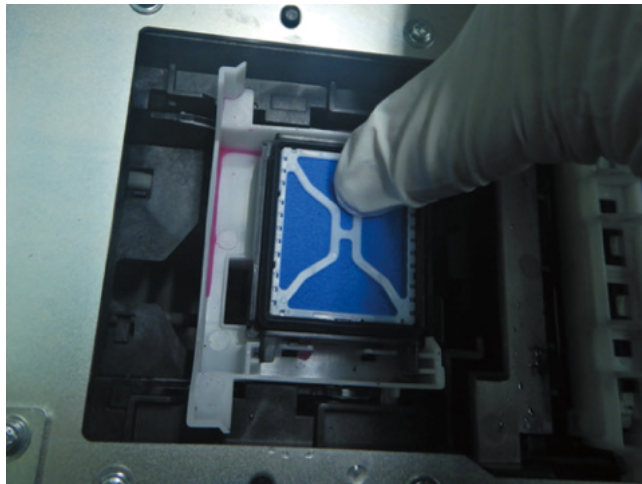
- Do not use sharp objects, such as tweezers, and be sure to remove the cap chip and cap foam by hand.



- 6 Wipe the gloves (c) with a waste cloth (d).

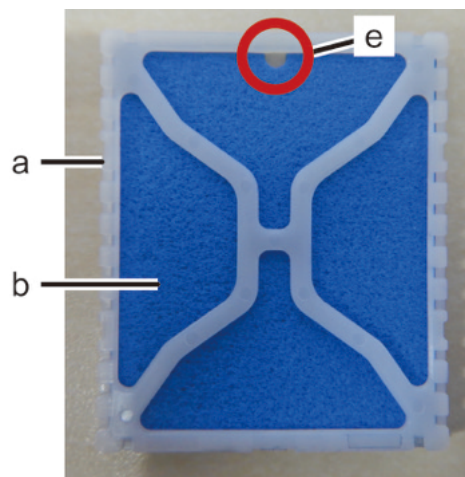


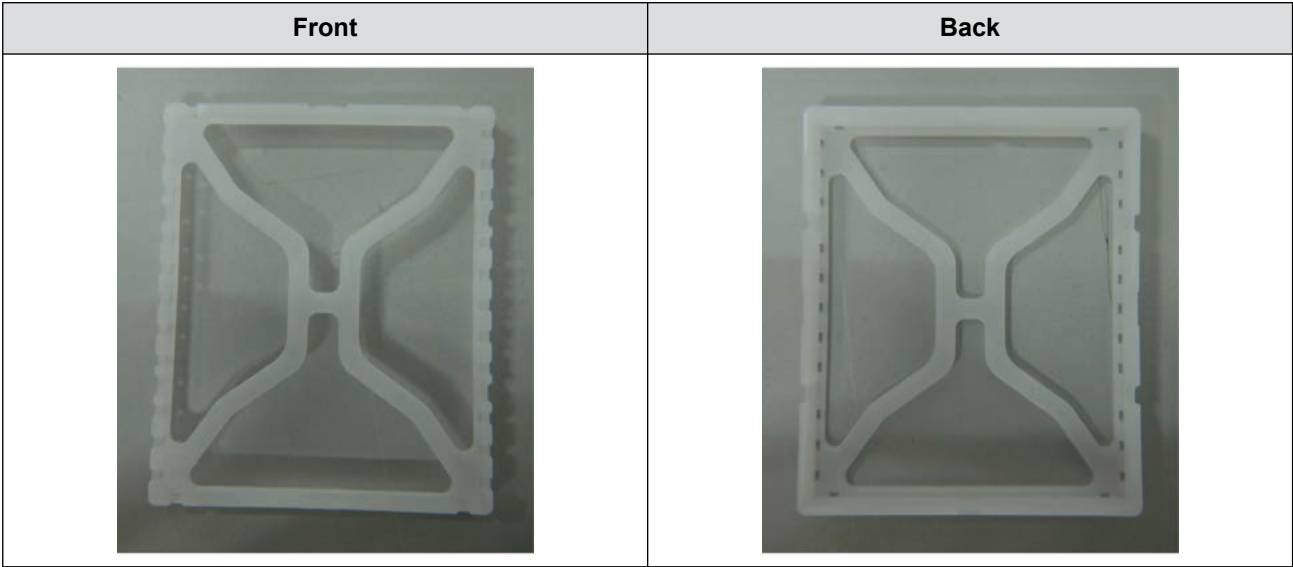
- 7 Set a new cap chip and cap foam.



IMPORTANT

- Set the cap foam by aligning the cap foam hole (e) with the protrusion on the backside of the cap rubber.
- Be careful not to reverse the orientation of the cap foam (b).
- The cap chip (a) has two sides. Be careful not to turn it upside down.
- Be careful not to turn the cap chip upside down when the cap chip and cap foam are assembled.





- 8
- Close the main unit cover.
- 9
- Press [OK].

Note

- Dispose of any waste resulting from the replacement in accordance with applicable laws and ordinances.

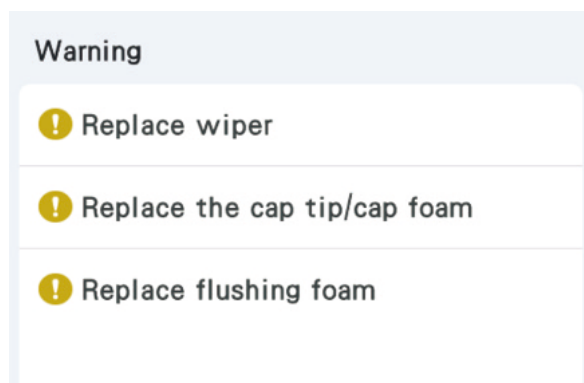


TIPS

- The head cleaning will be performed to prevent ink from drying up.

7.1.7 Replace the flushing foam

When a warning message appears on the operation panel screen or in the warning message window, replace the specified flushing foam with a new one.



- 1 Prepare the gloves and flushing foam, which come standard with the printer.



TIPS

- For this cleaning, you can use an already-used dirty clean stick R.

- 2 From the menu, select [Maintenance] > [Cleaning/Replacing Maintenance Parts].

- 3 Select [Replace the maintenance kit].

IMPORTANT

- If any other error or message is displayed on the operation panel or warning message window, follow the message to solve the problem, then perform the cleaning.



TIPS

- Pressing [OK] causes the platen to start moving. Do not put anything around the platen.

- 4 Open the main unit cover according to the on-screen instructions, and perform replacement.

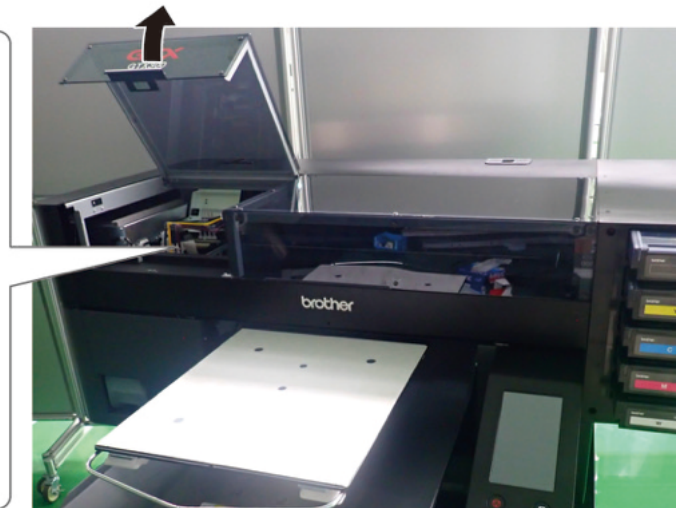
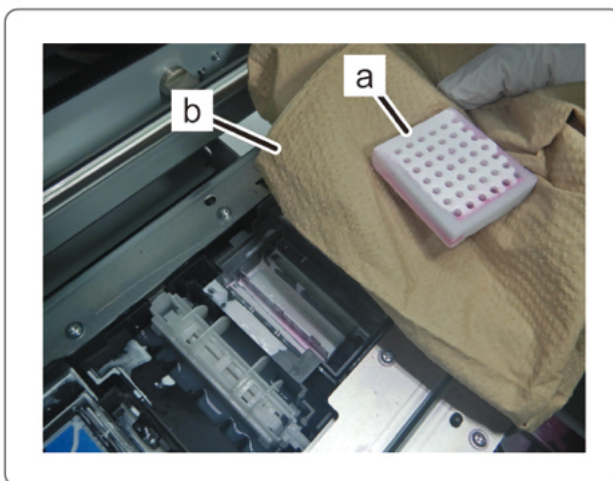
5 Remove the flushing foam (a) from the maintenance unit.

IMPORTANT

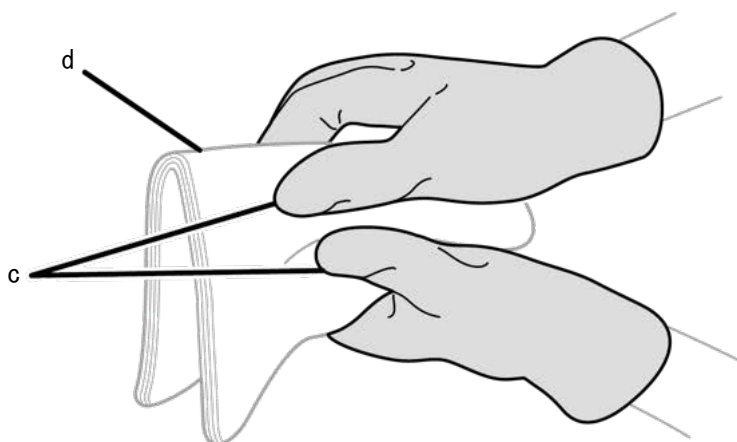
- Please complete the task within 15 minutes, in order to prevent the print heads from drying up.
- If the task takes more than 15 minutes to complete, after attaching the flushing receiver and closing the main unit cover, select [Replace the maintenance kit] again to restart the task. Then, the head cleaning will be performed to prevent any ink from drying up.
- Remove the flushing foam without removing the flushing receiver from the maintenance unit.
- Ink droplets will drop off from the hole in flushing foam. After removal, apply a waste cloth (b) to the bottom face.

Note

- For a proper work operation, be sure to wear the printer-provided gloves.



6 Wipe the gloves (c) with a waste cloth (d).



- 7 Assemble a new flushing foam (a) to the flushing receiver (e).

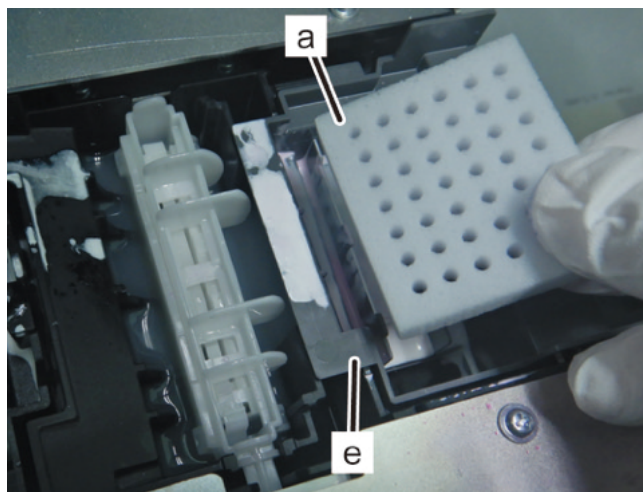
IMPORTANT

- After this assembly process is completed, make sure that no flushing foam extends off the outboard end portions of flushing receiver. If it sticks out of the end portions, it may interfere with any nozzles and may result in non-ejection of ink-jet droplets.



TIPS

- It is not necessary to clean the flushing receiver.



- 8 Close the main unit cover.

- 9 Press [OK].

Note

- Dispose of any waste resulting from the replacement in accordance with applicable laws and ordinances.



TIPS

- The head cleaning will be performed to prevent ink from drying up.

7.1.8 Replacing the mist fan filter

When a warning message appears in the warning message window, replace the mist fan filter with a new one.



- 1 Prepare the gloves, which come standard with the printer, as well as a new mist fan filter.
- 2 From the menu, select [Maintenance] > [Cleaning/Replacing Maintenance Parts].
- 3 Select [Replacing mist fan filters].

IMPORTANT

- If any other error or message is displayed on the operation panel or warning message window, follow the message to solve the problem, then perform the cleaning.



TIPS

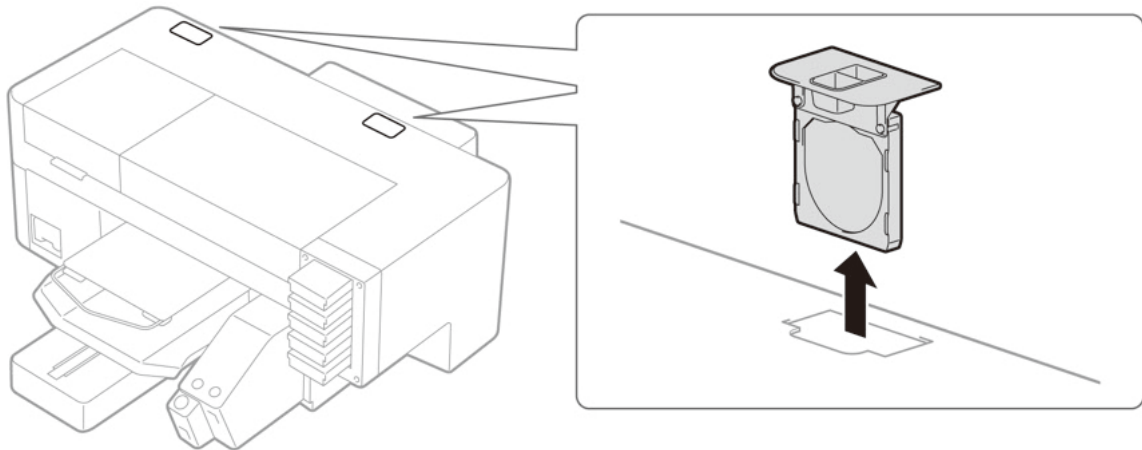
- Pressing [OK] causes the platen to start moving. Do not put anything around the platen.

- 4 Turn off the power.

5 Remove the mist fan filter from the printer.

Note

- For a proper work operation, be sure to wear the printer-provided gloves.



6 Mount a new mist fan filter to the frame.

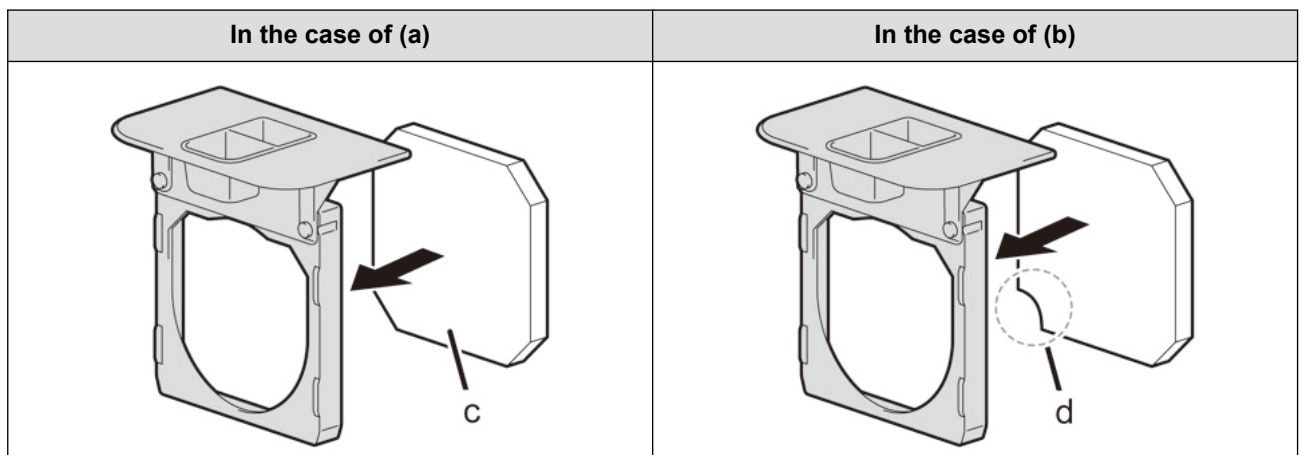


TIPS

- There are two types of mist fan filters.
Install the appropriate mist fan filter you have on hand.

IMPORTANT

- In the case of (a): Mount the filter properly in the correct position in such a way that the coarse mesh side (c) faces toward the inner area of the printer.
- In the case of (b): Mount it so that the part with the different shape (d) among the four corners is positioned as shown in the illustration.



7 Mount the assembled mist fan filter onto the printer.

8 Turn on the power.

Note

- Dispose of any waste resulting from the replacement in accordance with applicable laws and ordinances.



TIPS

- Then, the head cleaning will be performed to prevent any ink from drying up.

7.2 Tasks to be performed when needed

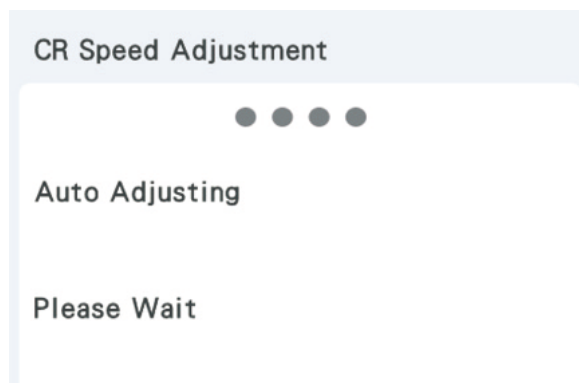
7.2.1 Adjusting the carriage speed

Carriage speed should be adjusted when the error message [Adjust CR] is displayed on the operation panel. Adjustment should always be performed when carriage shaft cleaning or print head replacement tasks are carried out.

- 1 From the menu, select [Printer Setting] > [Print settings] > [CR Speed Adjustment].
- 2 Select [Start] or [Start (after cleaning/setup)].
 - [Start]: When you cannot clean the internal area of the printer such as the carriage shaft immediately after the head replacement or when the error message is displayed
 - [Start (after cleaning/setup)]: After cleaning the carriage shaft

Wait until the carriage stops moving and the sound of pong is heard.

It takes about 3 minutes to adjust the carriage speed.



7.2.2 Printing out the nozzle check pattern (checking on the print heads)

By printing out a nozzle check pattern, you can check on the printing quality.

It is recommended to always perform this procedure to verify the output.



TIPS

- The serial number, firmware version, and print date and time are printed at the bottom of the nozzle check pattern. The date and time will be printed in Coordinated Universal Time with "(UTC)" printed at the end if time adjustment as a maintenance tool has not been made. You can print the date and time according to your environment by making time adjustment. [Setting of the time displayed on the nozzle check pattern on page 85](#)

- 1 Put the platen 14×16.54 in place, and position its level at "A-".

[Replacing the platen on page 183](#) and [Platen height adjustment on page 185](#)

- 2 As illustrated below, put the A4-size or letter-size white paper (a) on the platen in alignment with the right corner of the platen (b) at its front edge.

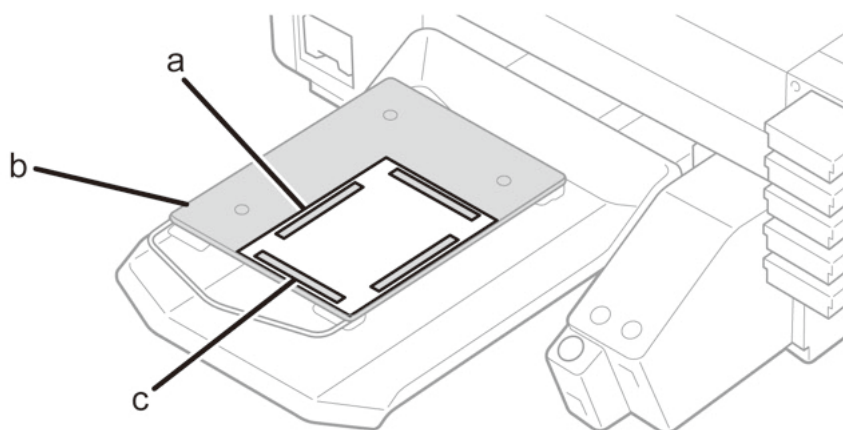
When the paper is loosely fitted, fix the area near the center of each side (four locations: top, bottom, right, and left) using a rubber magnet (c).

A T-shirt can also be used instead. However, set the platen height in the "A" position.



TIPS

- When printing out a nozzle check pattern on the white side, print it on a pretreated black or dark color textile or black paper, or a transparent sheet (such as OHP sheet). In the case of printing on textiles, set the platen height in the "A" position.



- 3 From the menu, select [Test Print] > [Nozzle Check CMYK] and press [OK].

Then, printing will begin.

- 4 After printing on the color side is completed, remove the printed paper and replace it with a paper for printing on the white side.

- 5 From the menu, select [Test Print] > [Nozzle Check White] and press [OK].

Then, printing will begin.



TIPS

- In the case of color ink mode, the white nozzle check is not necessary.

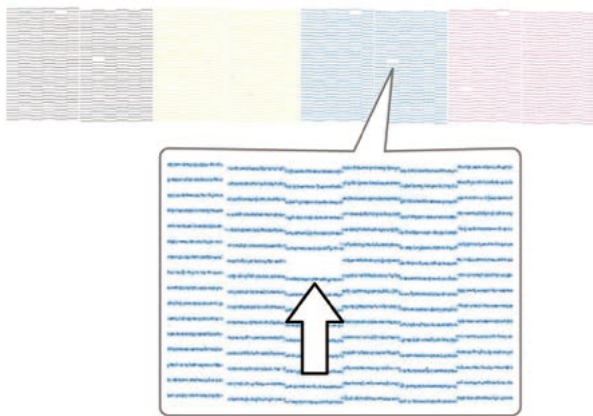
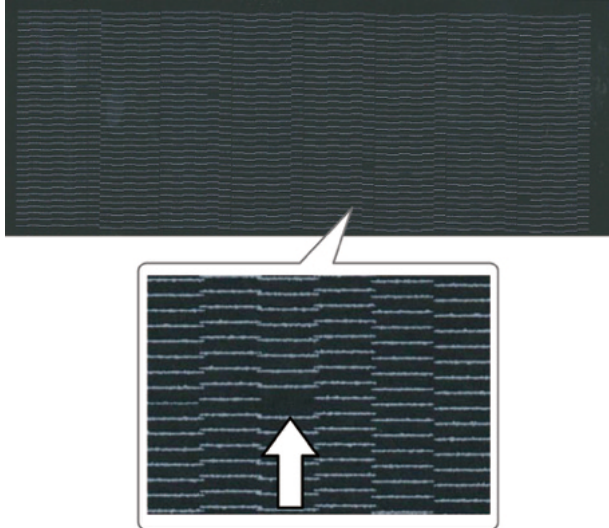
- 6 Check to see if the printed result of both sides are acceptable, and if no ink-jet droplets have been ejected, perform a head cleaning for the print head. [Head cleaning on page 264](#)

IMPORTANT

- If the print result shows an intermittent line, non-ejection has occurred. A head cleaning should be performed on the print head that has a poor nozzle check result.
- Even if the lines of the white-side printed result are light, since white ink is fired from more than one nozzle on the same place, the quality is not affected.

**TIPS**

- The following items are printed at the bottom of the nozzle check pattern:
 - Serial No.
 - Firmware version
 - Printing date
 - Time
 - Temperature
 - Humidity
 - Number of printed sheets

On the color side	On the white side
Non-ejection occurred at the arrowed area. Example: 	Non-ejection occurred at the arrowed area. Example: 

7.2.3 Air bleed cleaning

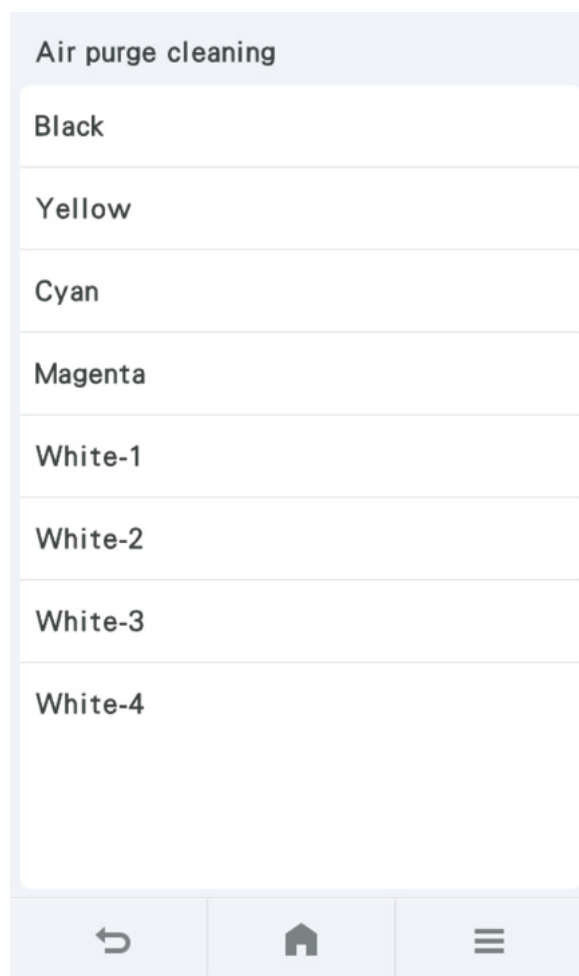
If air is mixed in the print head or tube and ink non-ejection is not improved, bleed the air in the tube.

- 1 From the menu, select [Maintenance] > [Air purge cleaning].
- 2 Select the color for which you want to perform air bleeding.



TIPS

- In the case of the white head, select the number. [Replacement of print head on page 340](#)



- 3 According to the message displayed on screen, press [OK] on the operation panel.
Air bleeding in the tube is executed.

7.2.4 Head cleaning

This printer has been designed to perform the Auto Cleaning every time 36 print jobs are printed after the previous Auto Cleaning, or before starting the printing using the white ink when one hour or more elapses after the previous printing that used the white ink.



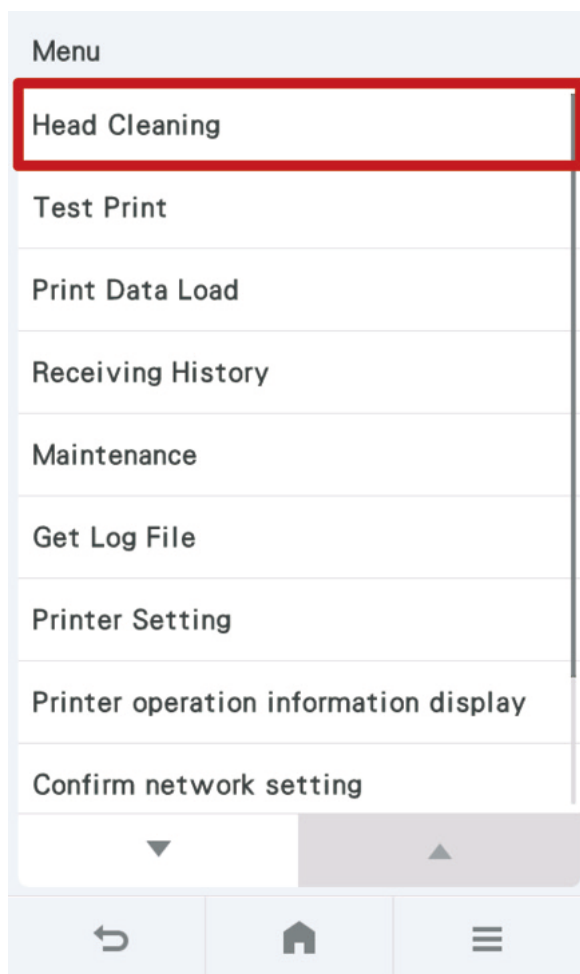
TIPS

- The frequency and start timing of Auto Cleaning can be changed. [Auto cleaning setting on page 286](#)

In the event that there is any faintly printed or missing portion on a printed material, head cleaning sometimes provides a solution.

Selecting a type of head cleaning from the menu to perform the head cleaning

- 1 Select [Head Cleaning] from the menu.

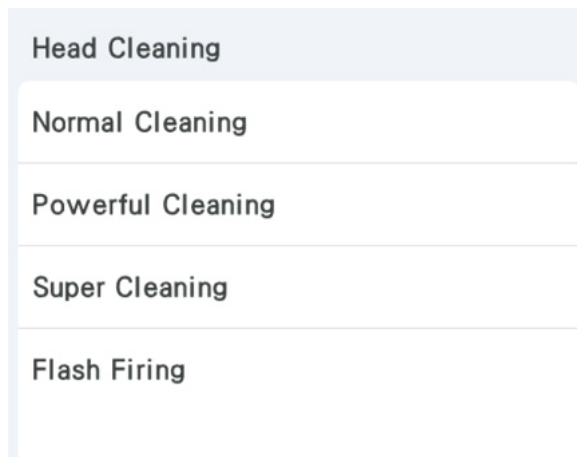


- 2 Select [Normal Cleaning], [Powerful Cleaning], [Super Cleaning], or [Flash Firing].



TIPS

- For selecting a desired cleaning option, follow the instructions in the respective steps. [Recovery action to be taken for such a nozzle that is unable to eject ink-jet droplets on page 328](#)

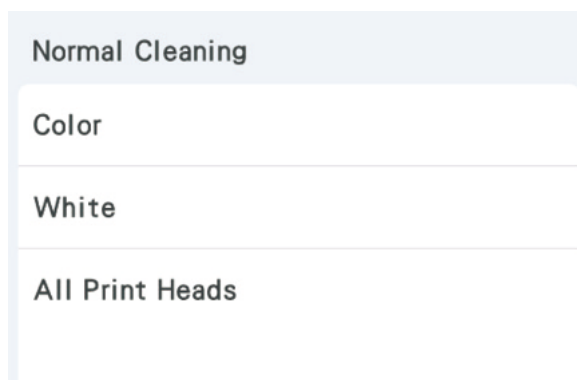


- 3 Select [Color], [White], or [All Print Heads].



TIPS

- Under the condition that the nozzle which has been confirmed not ejecting ink-jet droplets, determine the color for which the head cleaning should be performed. [Printing out the nozzle check pattern \(checking on the print heads\) on page 260](#)



- 4 Then, the head cleaning will be performed for the specified print heads.



TIPS

- The cleaning operation cannot be canceled halfway.
- After the procedures are completed, the current screen will go back to the standby mode screen.

7.2.5 White ink circulation

When whiteness is not enough, it may be solved by performing white ink circulation.

- 1 From the menu, select [Maintenance] > [White Ink Circulation].

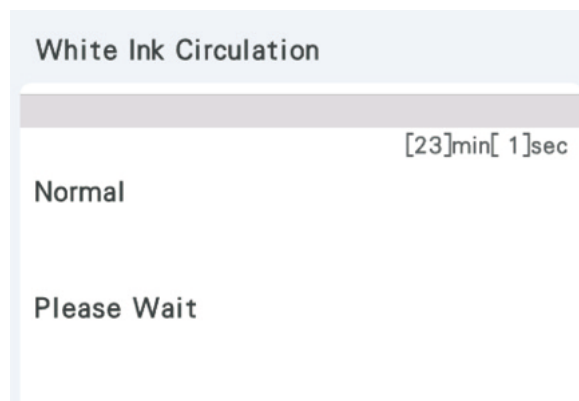
IMPORTANT

- Do not turn off the power because if you do so, the printer may fail because necessary maintenance operations are not performed.



TIPS

- Time required for completing the white ink circulation varies depending on the ambient temperature. It normally takes 7 and a half minutes although it can take up to 15 minutes. White ink is circulated automatically every six hours and white ink three times as much as normal is circulated every 24 hours.
- If you are activating the printer after having had its power off for a long period, it will take up to 40 minutes.



7.2.6 Cleaning the CR (carriage) plate

Clean the carriage plate when it is contaminated with ink.



TIPS

- You can use an already-used clean stick R.

- 1 Make the clean stick R, cleaning cup, gloves and cleaning solution, which come standard with the printer, available for use.
- 2 Select [Maintenance]>[Cleaning/Replacing Maintenance Parts] from the menu.
- 3 Select [Clean nozzle guard and cap].

IMPORTANT

- If any other error or message is displayed on the operation panel or warning message window, follow the message to solve the problem, then perform the cleaning.

Note

- The instructions on the screen differ from those in this manual. Perform cleaning as instructed in this manual.



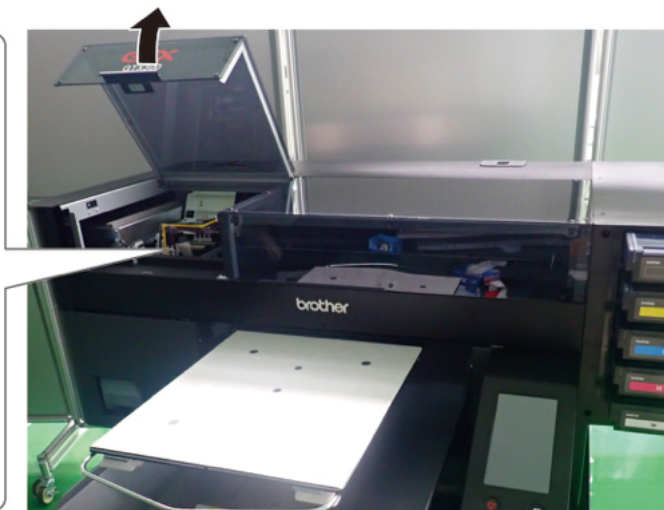
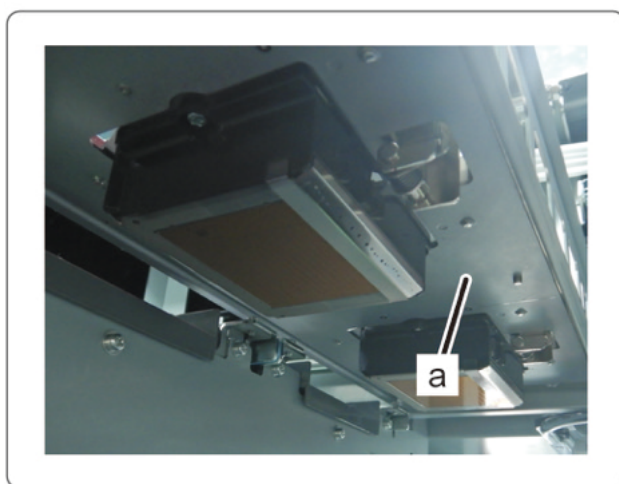
TIPS

- Pressing [OK] causes the platen to start moving. Do not put anything around the platen.

- 4 Open the main unit cover and clean the carriage plate (a).

IMPORTANT

- Please complete the task within 15 minutes, in order to prevent the print heads from drying up.
- If the task takes more than 15 minutes to complete, close the main unit cover and then select [Cleaning/Replacing Maintenance Parts] again to restart the task. Then, the head cleaning will be performed to prevent any ink from drying up.



- 5 Put a proper amount of cleaning solution (c) into the cleaning cup (b).

- 6 Moisten a new clean stick R (d) with the cleaning solution.

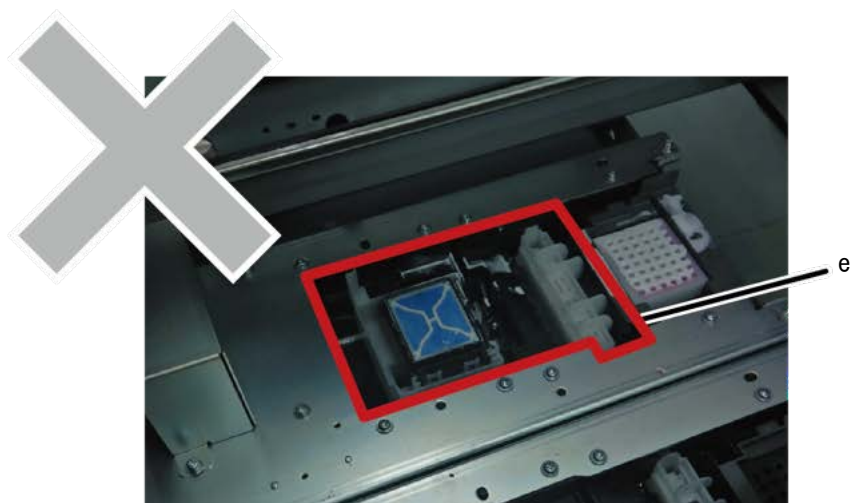
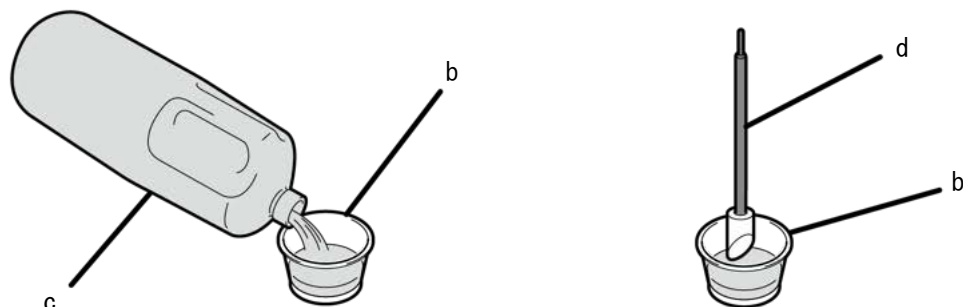


TIPS

- If you use an already-used clean stick R, do not use it for other purposes than cleaning the carriage plate.
- Never touch the tip end of clean stick R with your hand. If any sebaceous matter is attached to the head nozzle, it may result in the printer malfunction.
- Do not use other fluids (water, etc.), because they may damage the print heads.
- Do not return the cleaning solution which has been put in the cleaning cup to the cleaning solution bottle.
- Do not shed cleaning solution in the maintenance unit (e).

Note

- For a proper work operation, be sure to wear the printer-provided gloves.



- 7 With the clean stick R (f), wipe clean the carriage plate.

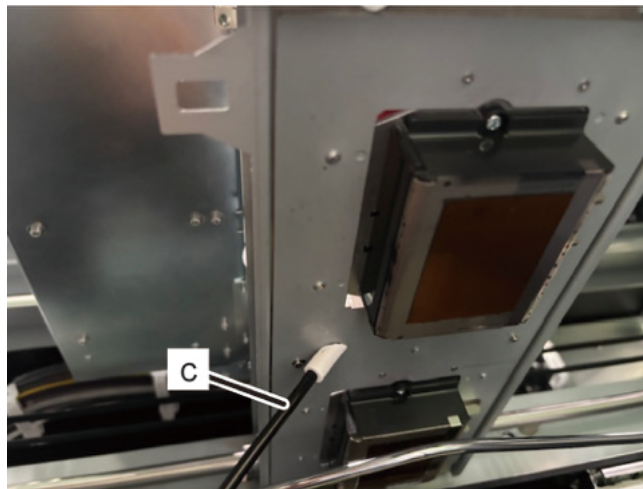
IMPORTANT

- Be sure not to touch the nozzle surface.



TIPS

- Manually move the carriage to such a position that you can perform the cleaning with ease.



- 8 After the cleaning is completed, close the main unit cover.

- 9 Press [OK].

Note

- Dispose of any waste resulting from the cleaning in accordance with applicable laws and ordinances.



TIPS

- Then, the head cleaning will be performed to prevent any ink from drying up.
- Because the cleaning cup will be reused, rinse it with pure water, let it dry sufficiently, and store it so that dust does not get inside.

7.2.7 Disposal of waste ink

For the disposal of waste ink, refer to [Confirmation and disposal of waste ink on page 158](#).

7.3 When not used for a long period of time

When the printer will not be used for a prolonged period of time, take appropriate procedures before storing the printer depending on storage period or condition.

IMPORTANT

- Do not turn the printer off. Otherwise, the printer may be damaged.
- If the power source to the printer cannot be sustained, please contact your dealer in advance.

Note

- If any error message is displayed on the screen, follow the instructions.
- When storing the printer for more than two weeks, clean the nozzle guard and cap. [Cleaning the nozzle guard and suction cap on page 237](#)

7.3.1 When printer is unused for a long period of time: Within 2 weeks

The printer can be used through normal procedure after the storage period, by performing the following maintenance tasks.

- 1 Check the amount of waste ink in the waste ink tank, and if the tank is filled with the waste ink up to its one-half or higher level, discard the ink.
[Confirmation and disposal of waste ink on page 158](#)
- 2 Check the amount of cleaning solution in the cleaning solution tank, and refill the tank when its amount is below the proper level.
[Confirmation and refilling of cleaning solution on page 159](#)
- 3 Stir the white ink if a white ink cartridge stirring message is displayed on the operation panel screen.
[Daily agitation of the white ink on page 160](#)
- 4 As required, print out a nozzle check pattern.
[Printing out the nozzle check pattern \(checking on the print heads\) on page 260](#)

7.3.2 When printer is unused for a long period of time: More than 2 weeks

Perform the following maintenance every two weeks.

- 1 Check the amount of waste ink in the waste ink tank, and if the tank is filled with the waste ink up to its one-half or higher level, discard the ink.
[Confirmation and disposal of waste ink on page 158](#)
- 2 Check the amount of cleaning solution in the cleaning solution tank, and refill the tank when its amount is below the proper level.
[Confirmation and refilling of cleaning solution on page 159](#)
- 3 Stir the white ink if a white ink cartridge stirring message is displayed on the operation panel screen.
[Daily agitation of the white ink on page 160](#)
- 4 Print out a nozzle check pattern and verify the result.
[Printing out the nozzle check pattern \(checking on the print heads\) on page 260](#)
- 5 If a non-firing nozzle is found, perform head cleaning and run the nozzle check pattern print, and verify the result again.
[Head cleaning on page 264](#)

Chapter 8

Other settings

As required, make settings and adjustments as mentioned below.

About menu layer on the setting screen

Menu	Setting screen	Description	
[Printer Setting]	[Print settings]	[Print Direction]	[Auto]
			[Always Bi-Directional]
			[Always Uni-Directional]
		[Obstacle Sensor Detection in Printing]	[Check Only at Start of Printing]
			[Check Also During Printing]
		[Excess Platen Lower Sensor Detection]	[Enable]
			[Disable]
		[Lower limit temperature Mode (DTF)]	[Print Stop]
			[Highest quality (default)]
			[High quality]
			[Disable]
		[Low temperature Mode]	[Highest quality]
			[High quality (default)]
			[Disable]
		[High temperature Mode]	[High quality (default)]
			[Disable]
		[Print Data Auto Delete]	[OFF]
			[ON]
		[Cartridge Attach/Remove Check]	[Check]
			[No check]
		[CR Speed Adjustment]	
	[Cleaning settings]	[Auto Cleaning Sheet Interval]	
		[Auto Cleaning Start Timing]	[Execute Before Printing]
			[Execute After Printing]
		[Wiping frequency]	[Standard]
			[More]
		[Flushing Interval]	[Every 40 lines]
			[Every 22 scans (Normal)]
			[every 6 lines]

Menu	Setting screen	Description	
[Printer Setting]	[Cleaning settings]	[Flushing Amount]	[Standard]
			[More]
	[Display settings]	[Background Mode]	[Light]
			[Dark]
		[Back Light]	[Light High]
			[Light Medium]
			[Light Low]
		[Auto Screen Erase Time]	[No Auto Screen Erase]
			[5min]
			[10 min]
			[15 min]
			[30 min]
		[Menu TimeOut Setting]	[1min]
			[3min]
			[5min]
		[Temperature Display Unit]	[Fahrenheit [°F]]
			[Centigrade [°C]]
		[Preview display orientation]	[Normal]
			[Inverted]
		[File name display selection]	[Priority to file name display]
			[Priority to job name display]
		[Date format]	[DD/MM/YYYY]
			[MM-DD-YYYY]
			[YYYY-MM-DD]
		[Speaker Volume]	0 to 7
		[USB Format]	
	[IP Address Set]	[Automatic acquisition]	
		[Manual setting]	
	[Network filtering]	[Enable]	
		[Disable]	

Menu	Setting screen	Description	
[Printer Setting]	[Shortcut button setting]	[Shortcut 1]	[Normal Cleaning]
			[Print Data Load]
			[White Ink Circulation]
			[Check circulation schedule]
			[Consumables]
			[Ink expiration date]
			[Test Print]
		[Shortcut 2]	[Normal Cleaning]
			[Print Data Load]
			[White Ink Circulation]
			[Check circulation schedule]
			[Consumables]
			[Ink expiration date]
			[Test Print]
[Printer operation information display]	[Consumables]		
	[Ink expiration date]		
	[Total Print]		
	[CTG Attach/Remove History]		
	[Check circulation schedule]		
	[Temperature and Humidity]		
[Confirm network setting]	[IP Address]		
	[Subnet Mask]		
	[Default Gateway]		
	[Host name]		
	[MAC address]		

Menu	Setting screen	Description
[Language]	[English]	
	[Español]	
	[Français]	
	[Deutsch]	
	[Italiano]	
	[Türkçe]	
	[Русский]	
	[Korean]	
	[中文]	
	[Português(Brasil)]	
	[日本語]	
[Version]	[Firm Version]	
	[Data Info]	
	[Serial No.]	
	[Head information]	
	[Open source license]	
	[Professional menu]	

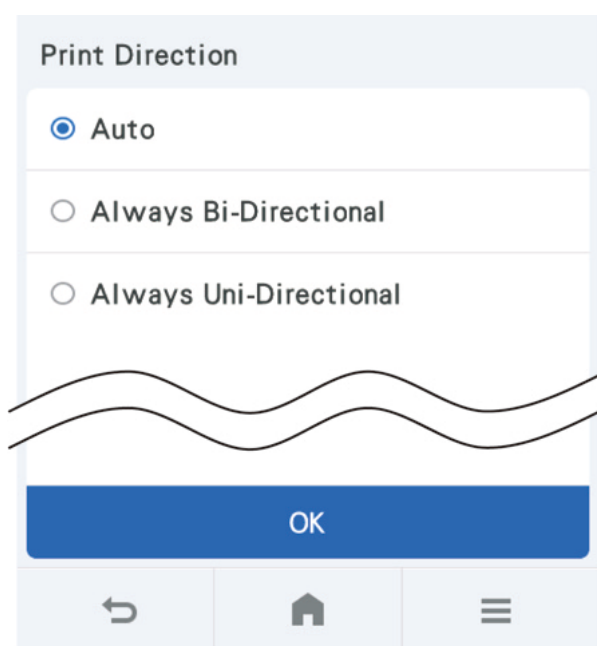
8.1 Print direction setting

- 1 From the menu, select [Printer Setting] > [Print settings] > [Print Direction].
- 2 Select your desired print direction of the print heads, and press [OK].



TIPS

- Note that the setting of the print direction gives priority to the printer's setting over the setting of the printer driver.
- The setting content will be kept intact until it is changed for the next printing job.



8.2 Platen obstacle sensor setting

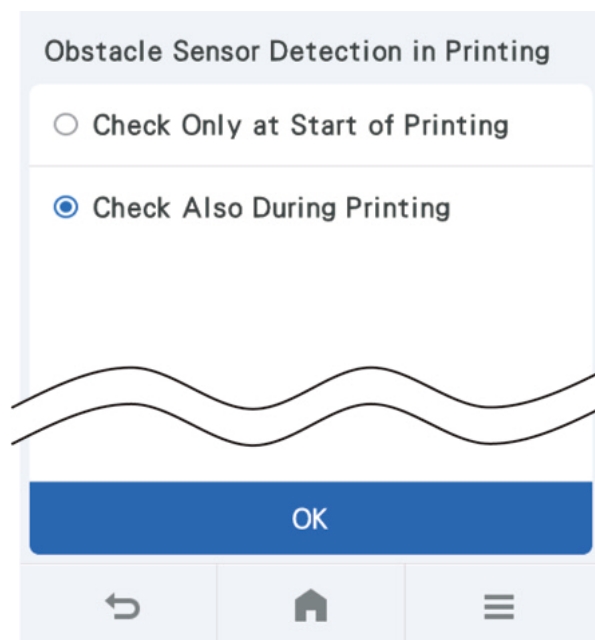
Specify the detection mode of the obstacle sensor by selecting either [Check Only at Start of Printing] or [Check Also During Printing].

- 1 From the menu, select [Printer Setting] > [Print settings] > [Obstacle Sensor Detection in Printing].
- 2 Select the obstacle sensor setting and press [OK].



TIPS

- During this menu selection process, the currently selected set value is displayed.
- The obstacle sensor is intended to detect wrinkles of the print media or foreign object on it to prevent the print head from contacting wrinkles or foreign matter or minimize the time during which the contact continues.
- If the print head comes into contact with wrinkles or foreign object, a failure to eject ink-jet droplets or a mechanical failure may occur.
- If the obstacle sensor detects a foreign object, the printing process and the platen operation are immediately stopped.
- If you select [Check Only at Start of Printing], the obstacle sensor works only while the platen is moving from the front to the rear.
- If you select [Check Also During Printing], the obstacle sensor works during the period from when you press the print button to when the printing process completes.



8.3 “Platen too low” sensor setting

The sensor is activated if it detects that the print medium is far because the platen is too low.

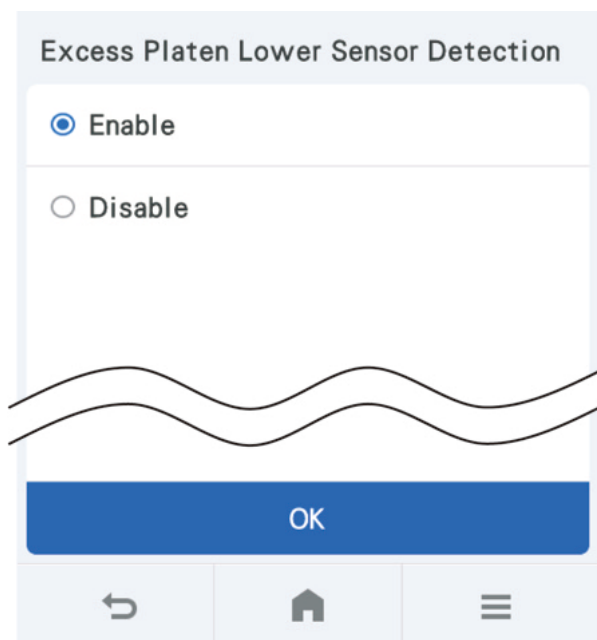
Enable or disable this function when using the printer.

- 1 From the menu, select [Printer Setting] > [Print settings] > [Excess Platen Lower Sensor Detection].
- 2 Select the "Platen too low" sensor function and press [OK].



TIPS

- The "Platen too low" sensor checks if the platen is too low when it is completely inserted.
- If the "Platen too low" sensor is activated, the printing process and the platen operation are stopped.



8.4 Setting the low-temperature print limit mode (DTF)

When the temperature icon on the LCD panel appears as a red warning sign, the printer automatically switches to the low-temperature print limit mode to prevent poor printing results. Enable or disable this function when using the printer. **By default, [Highest quality (default)] is selected.** Although printing is possible under lower-limit temperatures, printing quality may be affected when the low-temperature print limit mode is set to [High quality].

Quality degradation, which may occur under lower-limit temperatures, is less prone with [Highest quality (default)] than with [High quality], but the printing time will be longer.

The print speed will not slow down when the low-temperature print limit mode is set to [Disable]; however, print quality may be affected.

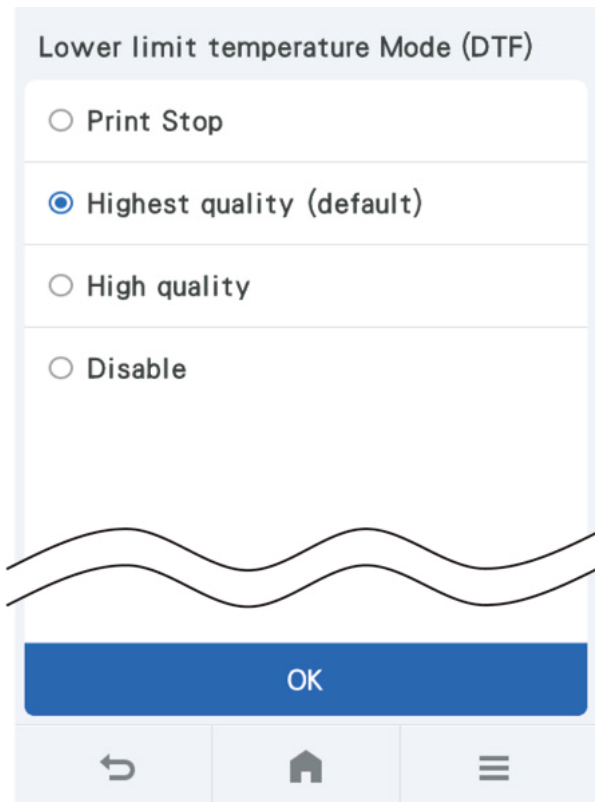
Normally, set to [Highest quality (default)].

- 1 From the menu, select [Printer Setting]>[Print settings]>[Lower limit temperature Mode (DTF)], and press [OK].
- 2 Select a desired print mode under lower-limit temperatures, and press [OK].



TIPS

- If [High quality] is selected, print quality may be affected. If [Disable] is selected, the print speed will not slow down; however, print quality may be affected more adversely.



8.5 Low temperature print mode setting

When the temperature icon on the LCD panel appears yellow as a warning sign and [Temp Low] is displayed on the alarm window, the printer automatically switches to the low temperature print mode to ensure print quality. Enable or disable this function when using the printer.

By default, [High quality (default)] is selected. When [Highest quality] or [High quality (default)] is selected, the printer automatically switches to the low temperature print mode if the temperature is low, and the printing time will be longer.

[Highest quality] provides higher quality at low temperature than [High quality (default)], but the printing time will be further longer.

If the low temperature print mode is set to [Disable], printing time will not increase; however, poor ejection may occur.

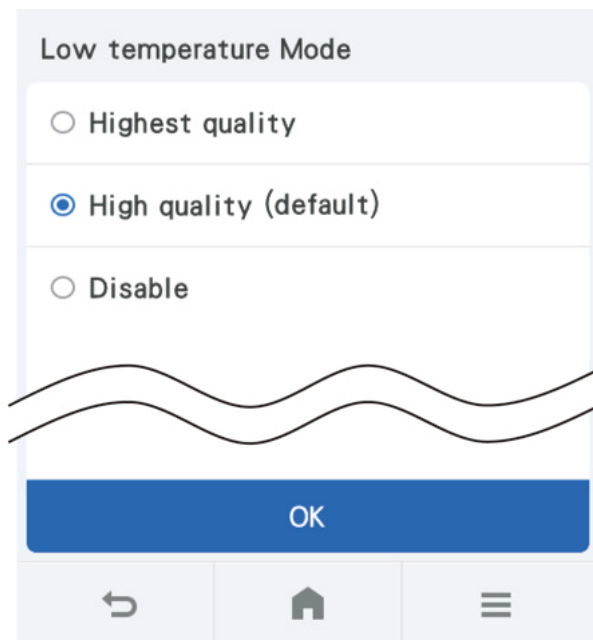
Normally, set to [High quality (default)].

- 1 From the menu, select [Printer Setting] > [Print settings] > [Low temperature Mode], and press [OK].
- 2 Select the low temperature print mode setting and press [OK].



TIPS

- When [Disable] is selected, white ink injection may become unstable when printing a wide area.



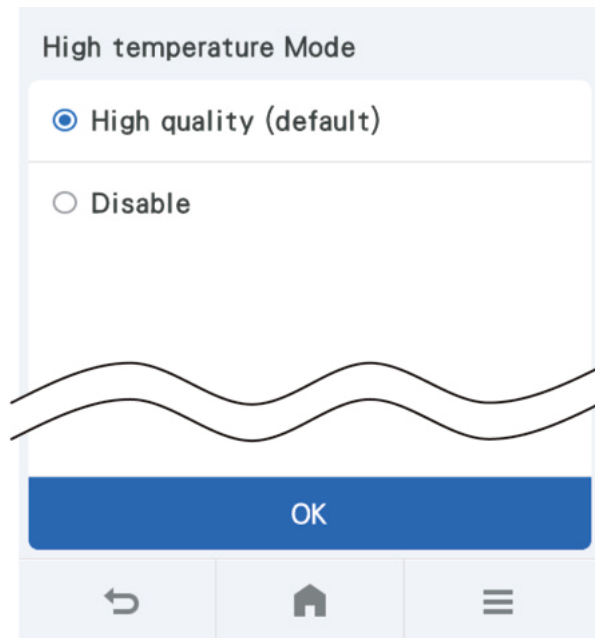
8.6 High temperature print mode setting

When the temperature icon on the LCD panel appears yellow as a warning sign and [Temp High] is displayed on the warning screen, the printer automatically switches to high temperature print mode for assuring print quality. Enable or disable this function when using the printer.

By default, [High quality (default)] is selected. As high temperature print mode assures print quality, it takes longer time for printing.

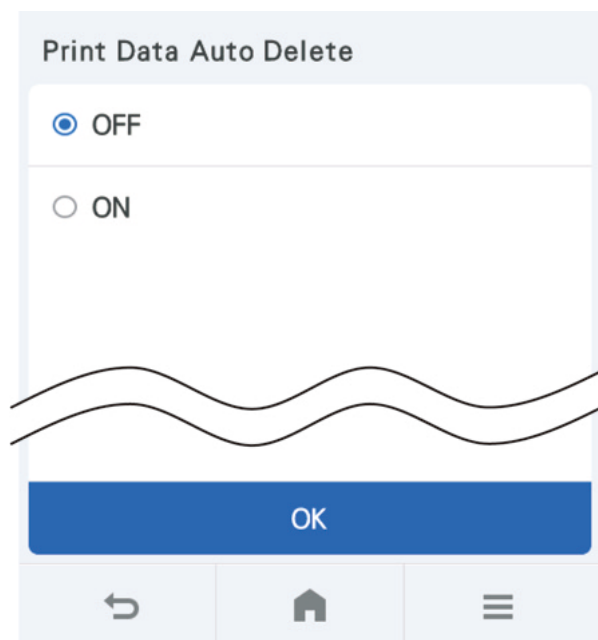
If the mode is set to [Disable], the print time will not increase; however, banding may occur under high temperature. Normally, set [High quality (default)].

- 1 From the menu, select [Printer Setting]>[Print settings]>[High temperature Mode], and press [OK].
- 2 Select the high temperature print mode setting and press [OK].



8.7 Automatic deletion of print data

- 1 From the menu, select [Printer Setting] > [Print settings] > [Print Data Auto Delete].
- 2 Select the desired function of Auto Job Delete, and press [OK].



8.8 Cartridge attach/remove check

This check function prevents the agitation omission and insufficient agitation of the white ink cartridge.

Enable or disable this function when using the printer.

Agitate the white ink cartridge if the white ink cartridge stirring message is displayed. [Daily agitation of the white ink on page 160](#)

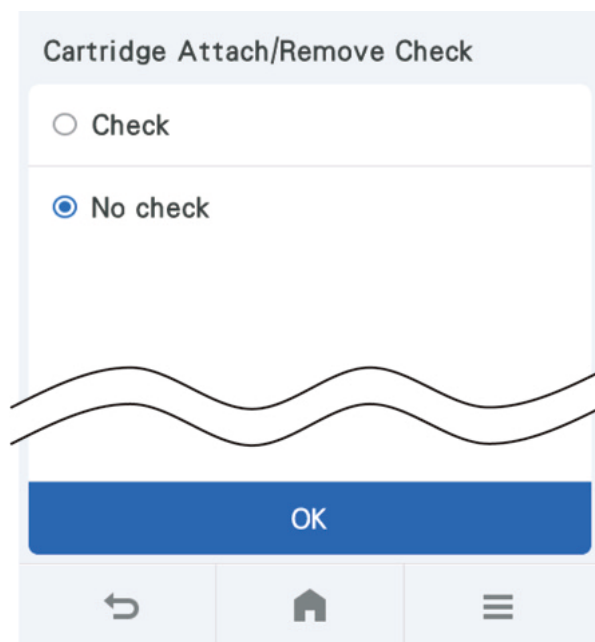


TIPS

- It takes about 60 to 120 seconds to agitate a cartridge.
- If the period in which each cartridge is removed is less than 60 seconds, you cannot move to the next screen by pressing [OK] while the white ink cartridge stirring message is displayed.

1 From the menu, select [Printer Setting] > [Print settings] > [Cartridge Attach/Remove Check].

2 Select either [Check] or [No check], and press [OK].



8.9 Auto cleaning setting

Setting the number of printed sheets as the auto cleaning cycle

Specify the number of printed sheets as the frequency of Auto Cleaning; where head cleaning is automatically performed every time a predetermined number of sheets are printed in order to protect the printer and provide stable printing quality. If the printing quality deteriorates in continuous printing, decrease the number of printed sheets for Auto Cleaning. The default value is 36.

- 1 From the menu, select [Printer Setting] > [Cleaning settings] > [Auto Cleaning Sheet Interval].
- 2 Set up the number of sheets to be printed in the range between 1 and 36, and press [OK].



TIPS

- The printing quality tends to deteriorate if the humidity is low.
- If auto cleaning is performed more frequently, the wiper, cap chip/cap foam, and flushing foam will need to be replaced earlier.

Auto Cleaning Sheet Interval

Set to OK to Confirm

3

1—36

1	2	3
4	5	6
7	8	9
- / +	0	✕
		◀ ▶

OK

↶ ⌂ ≡

Auto Cleaning Start Timing

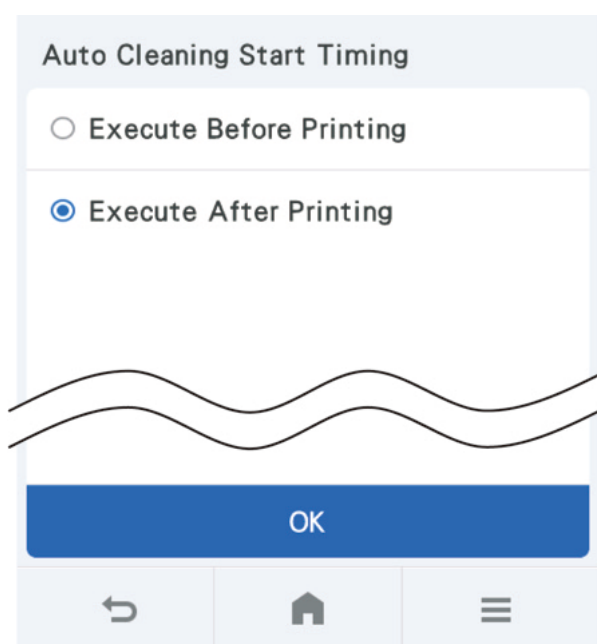
Specify your desired auto cleaning start timing.

- 1 From the menu, select [Printer Setting] > [Cleaning settings] > [Auto Cleaning Start Timing].
- 2 Select your desired auto cleaning start timing, and press [OK].



TIPS

- Even when [Execute After Printing] is selected, auto cleaning may be performed before printing, depending on the state of use.



8.10 Wiping frequency settings

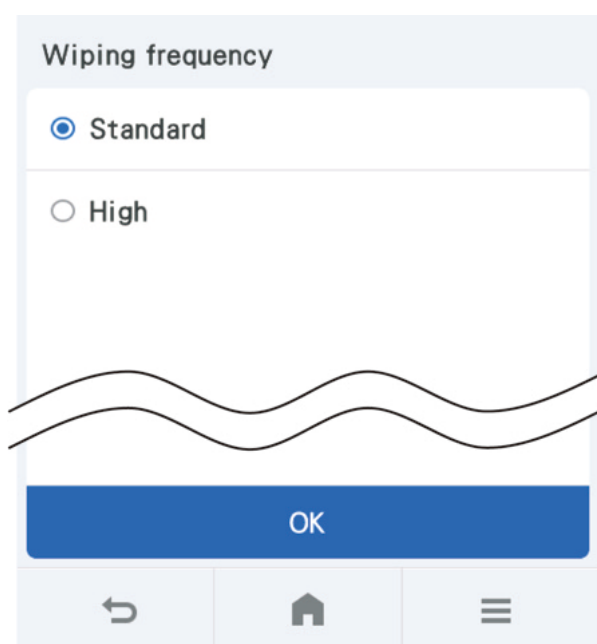
Perform this if the white printing quality deteriorates while printing.

- 1 From the menu, select [Printer Setting] > [Cleaning settings] > [Wiping frequency].
- 2 Select the target [Wiping frequency] while printing, and press [OK].



TIPS

- The printing quality tends to deteriorate while printing if the temperature is low.
- Frequent wipes will improve the printing quality, which, however, will take more time to print.



8.11 Flushing Interval Setting

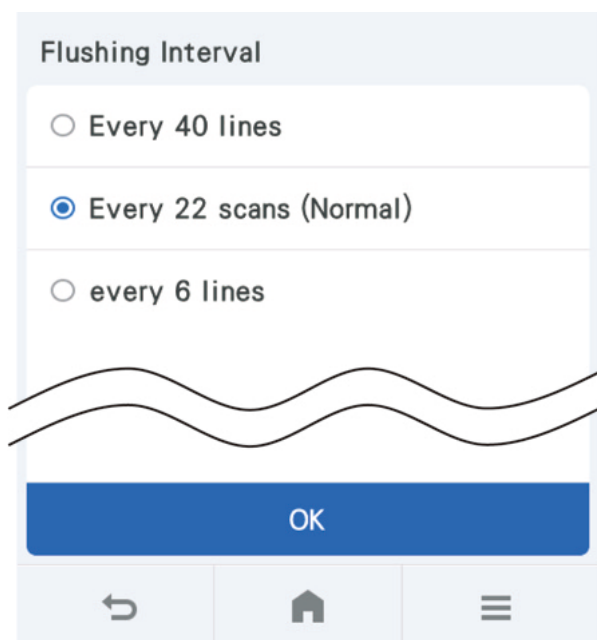
Perform this if the printing quality deteriorates during printing operations.

- 1 From the menu, select [Printer Setting] > [Cleaning settings] > [Flushing Interval].
- 2 Select the desired number of scanning operations until the flushing starts, and press [OK].



TIPS

- The printing quality tends to deteriorate during the printing operation if the humidity is low.
- Setting shorter flushing intervals improves the printing quality, however, increases the ink consumption and increases the time required for printing.



8.12 Flushing Volume Setting

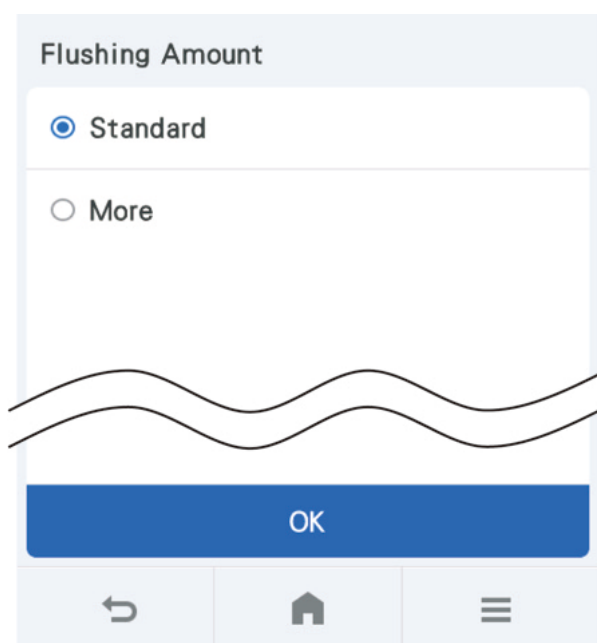
Perform this if the printing quality deteriorates at the startup of the printing operation.

- 1 From the menu, select [Printer Setting] > [Cleaning settings] > [Flushing Amount].
- 2 Select your desired volume of ink to be ejected from the print heads during the flushing operation before the printing operation starts, and press [OK].



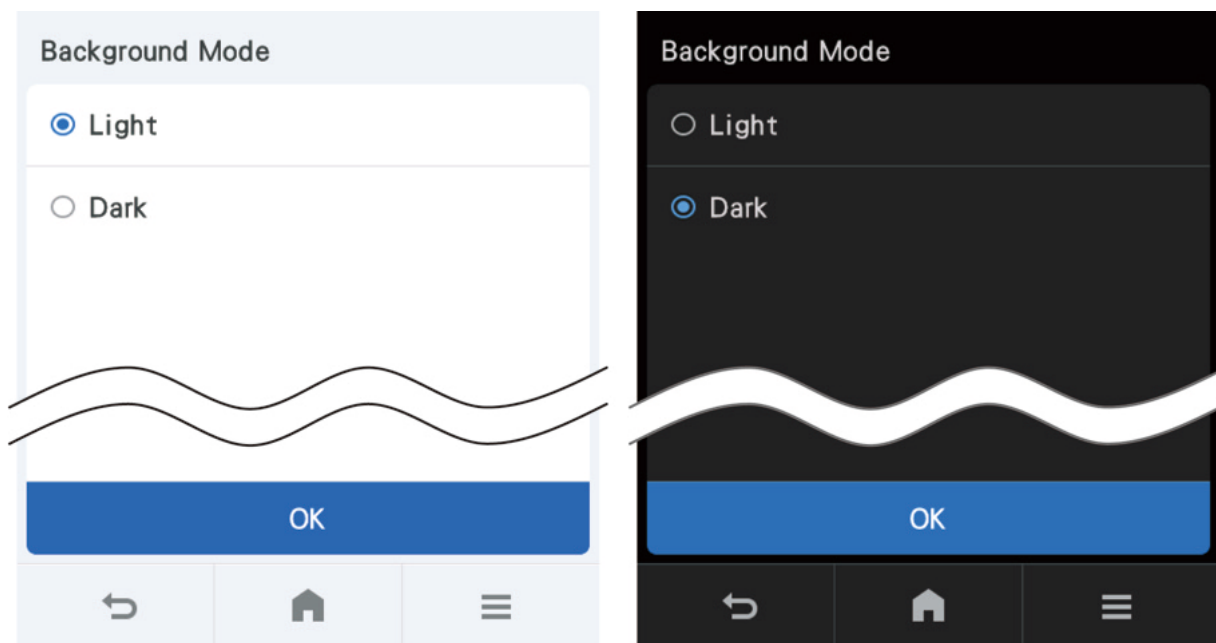
TIPS

- The printing quality tends to deteriorate at the startup of the printing operation if the humidity is low.
- Setting larger flushing volume improves the printing quality, however, increases the ink consumption.



8.13 Panel background mode setting

- 1 From the menu, select [Printer Setting]>[Display settings]>[Background Mode].
- 2 Select the panel background mode and press [OK].



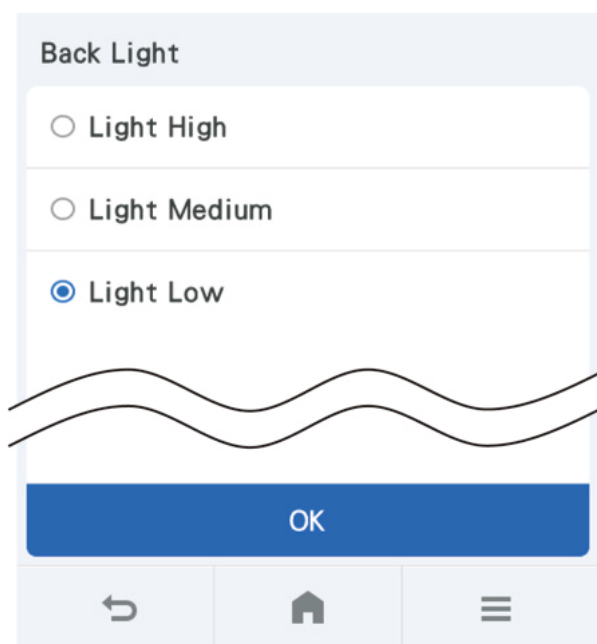
8.14 Screen back light adjustment

- 1 From the menu, select [Printer Setting] > [Display settings] > [Back Light].
- 2 Select your desired brightness of liquid crystal panel, and press [OK].



TIPS

- During this menu selection process, the screen is displayed with the selected brightness.



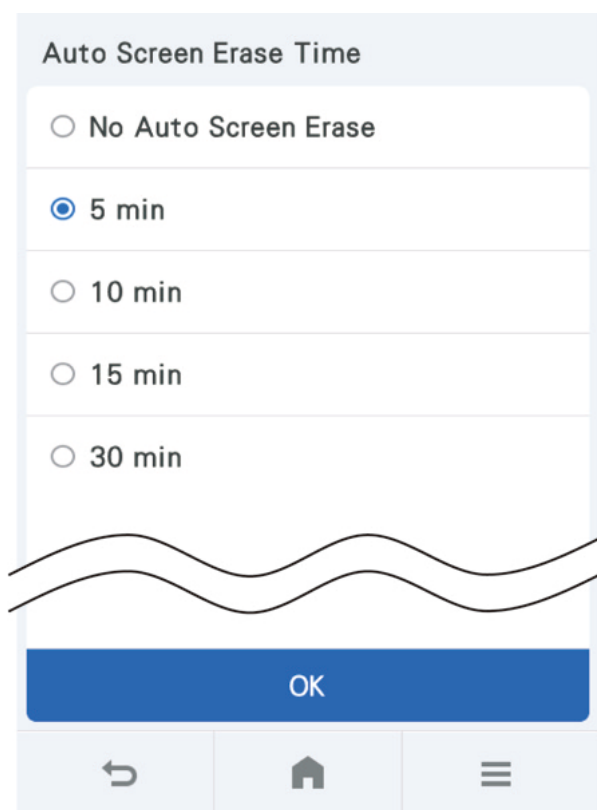
8.15 Setting the auto screen erase time

- 1 From the menu, select [Printer Setting] > [Display settings] > [Auto Screen Erase Time].
- 2 Select your desired time until the liquid crystal panel and print button become unlit, and press [OK].



TIPS

- During this menu selection process, the currently selected set value is displayed.



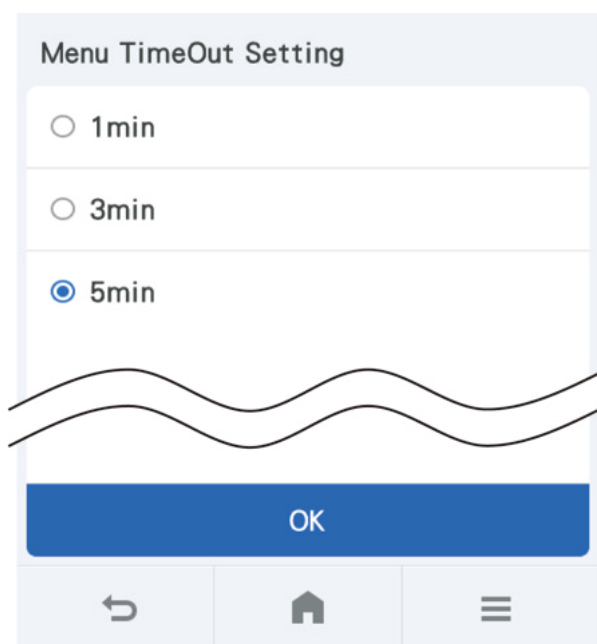
8.16 Setting the menu timeout period

- 1 From the menu, select [Printer Setting] > [Display settings] > [Menu TimeOut Setting].
- 2 Select the time before the display screen returns to the standby mode screen, and press [OK].



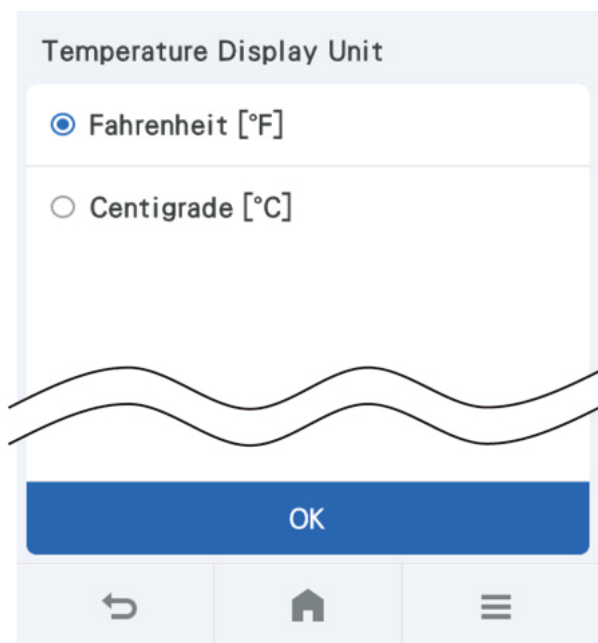
TIPS

- During this menu selection process, the currently selected set value is displayed.



8.17 Setup of temperature indication

- 1 From the menu, select [Printer Setting] > [Display settings] > [Temperature Display Unit].
- 2 Select your desired unit of ambient temperature to be shown on the liquid crystal panel, and press [OK].



8.18 Preview display settings

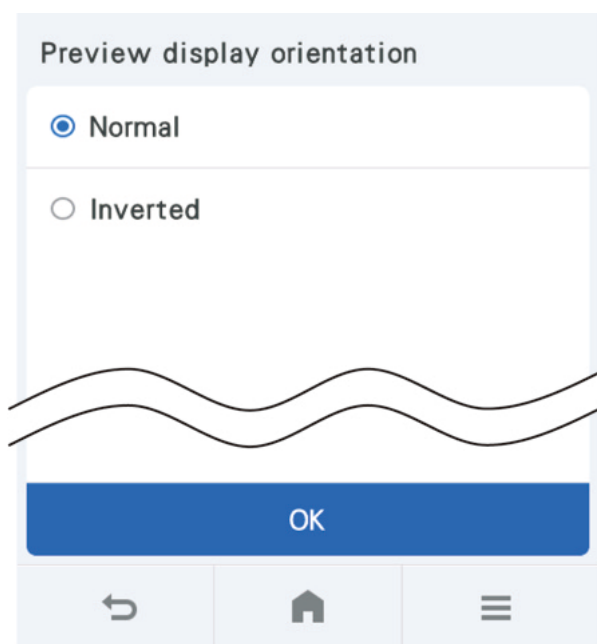
Set the display direction of the preview image.

- 1 From the menu, select [Printer Setting] > [Display settings] > [Preview display orientation].
- 2 Select the display direction and press [OK].



TIPS

- During this menu selection process, the currently selected set value is displayed.



8.19 File name display setting

Make file name display settings of print data.

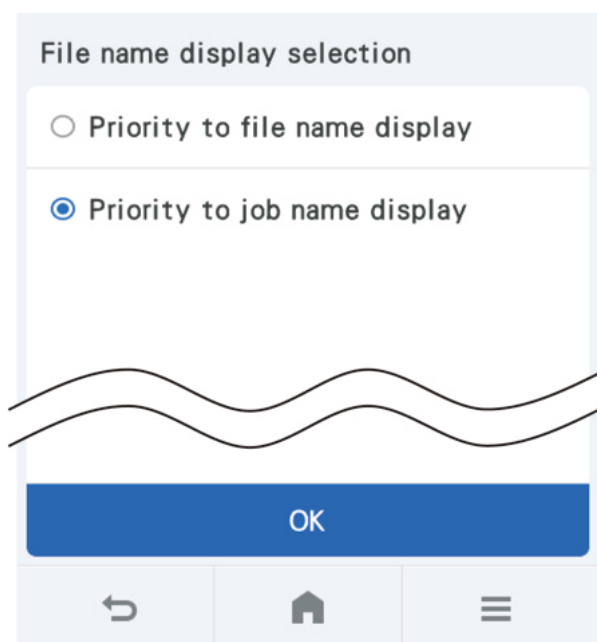
The display name you set is reflected in the selection screen of standby mode or receiving history or the USB flash memory loading screen.

- 1 From the menu, select [Printer Setting] > [Display settings] > [File name display selection].
- 2 Select the display method and press [OK].



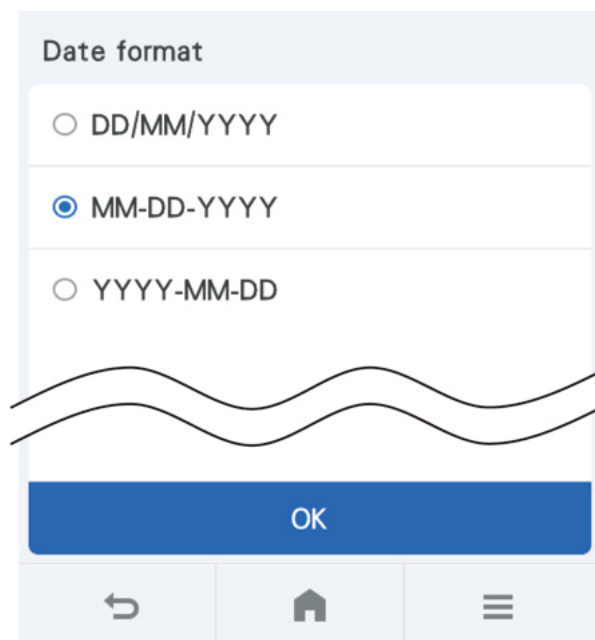
TIPS

- The job name is set automatically by the image editing application.



8.20 Date format setting

- 1 From the menu, select [Printer Setting] > [Display settings] > [Date format].
- 2 Select the display method and press [OK].



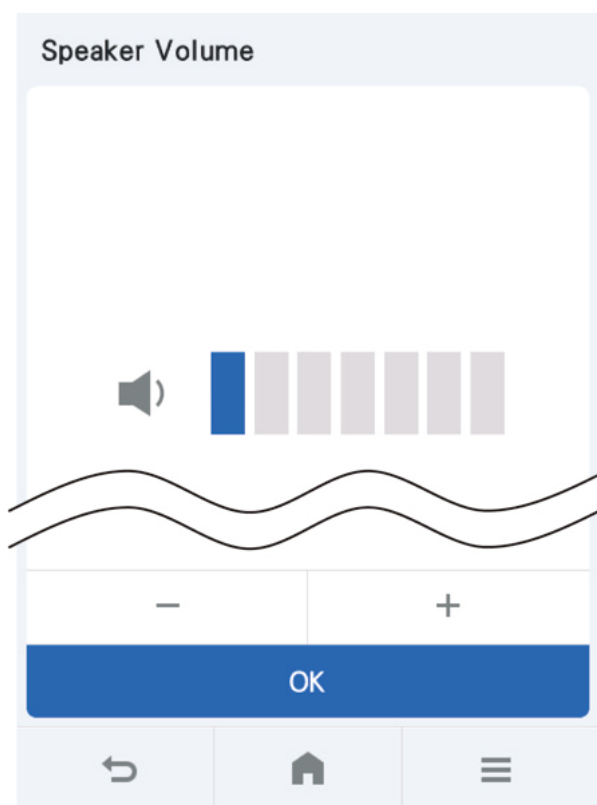
8.21 Speaker volume adjustment

- 1 From the menu, select [Printer Setting] > [Display settings] > [Speaker Volume].
- 2 Adjust the speaker volume in an eight-step scale from 0 to 7, and press [OK].



TIPS

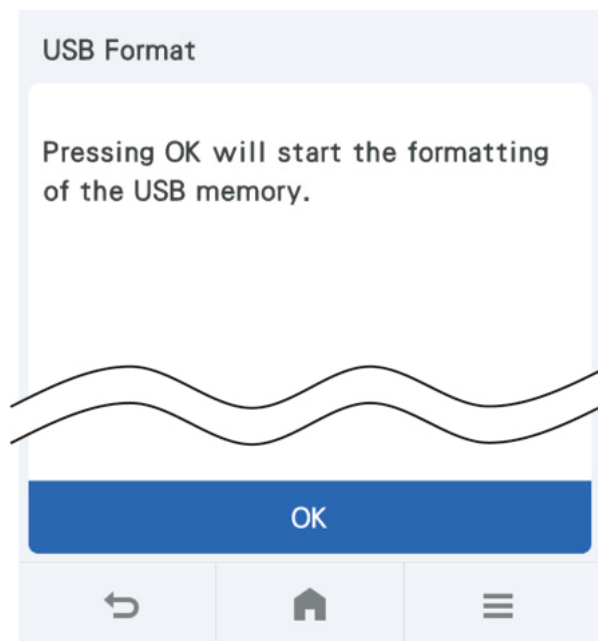
- You can adjust the volume while checking it.



8.22 USB flash drive format

Format the USB flash drive in FAT32 format.

- 1 Insert a USB flash drive and select [Printer Setting]>[Display settings]>[USB Format].
- 2 Pressing [OK] starts the formatting of the USB flash drive.



CAUTION

- Formatting deletes the data in the USB flash drive.
Save required data before performing formatting.

8.23 IP address setting

In [IP Address Set], select the manual setting or automatic acquisition, and set up [IP Address], [Subnet Mask] and [Default Gateway] when you select the manual setting.

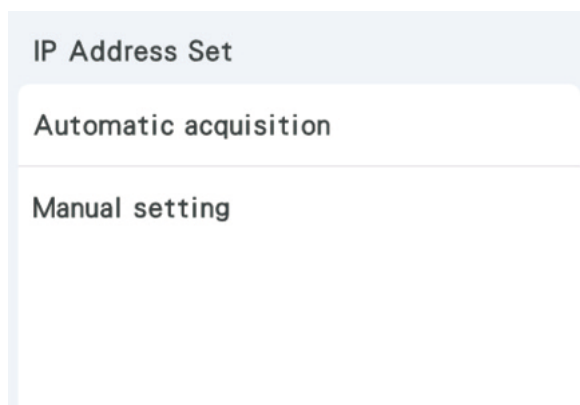
1 From the menu, select [Printer Setting] > [IP Address Set].

2 Select either [Manual setting] or [Automatic acquisition].



TIPS

- If you select [Automatic acquisition], the screen will go back to the standby mode screen after the settings are automatically acquired.



3 To make manual settings, specify your desired numeric value using the touch panel.

- 4
- When [OK] is pressed, the selected value is accepted, and the display screen goes to [IP Address], [Subnet Mask], and [Default Gateway] in sequence.



TIPS

- The display screen shown here has been taken as an example.

IP Address Set

IP Address

OK to Subnet Mask Screen

192.168.100.188

1	2	3
4	5	6
7	8	9
	0	

OK

IP Address Set

Subnet Mask

OK to Gateway Screen

000.000.000.00

IP Address Set

Default Gateway

Set OK

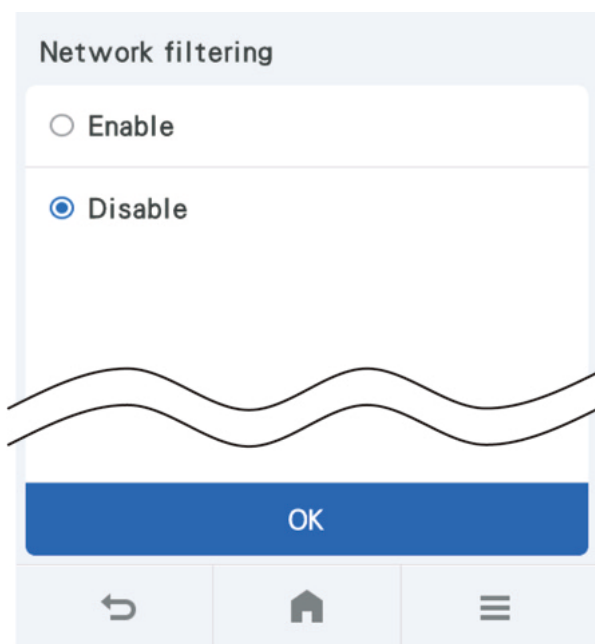
000.000.000.000

8.24 Network filtering settings

This function will enhance LAN security. Enable or disable this function when using the printer. Setting this function to [Enable] will allow only specific PC access. It is set to [Disable], by default.

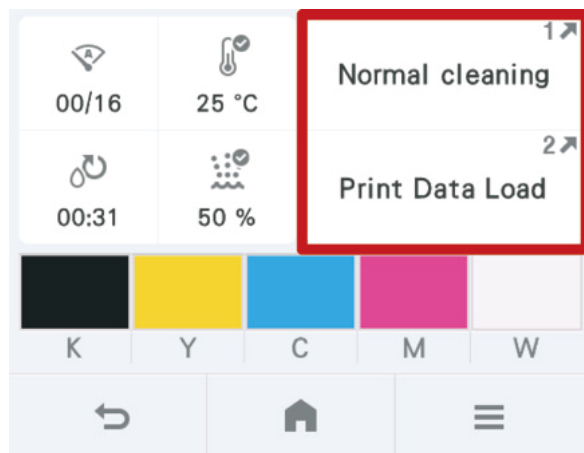
1 From the menu, select [Printer Setting] > [Network filtering].

2 Select either [Enable] or [Disable], and press [OK].



8.25 [Shortcut button] setting

You can set the operation that takes place when the shortcut buttons 1 and 2 on the operation panel are pressed.



- 1 From the menu, select [Printer Setting] > [Shortcut button setting].
- 2 Select [Shortcut 1] or [Shortcut 2].

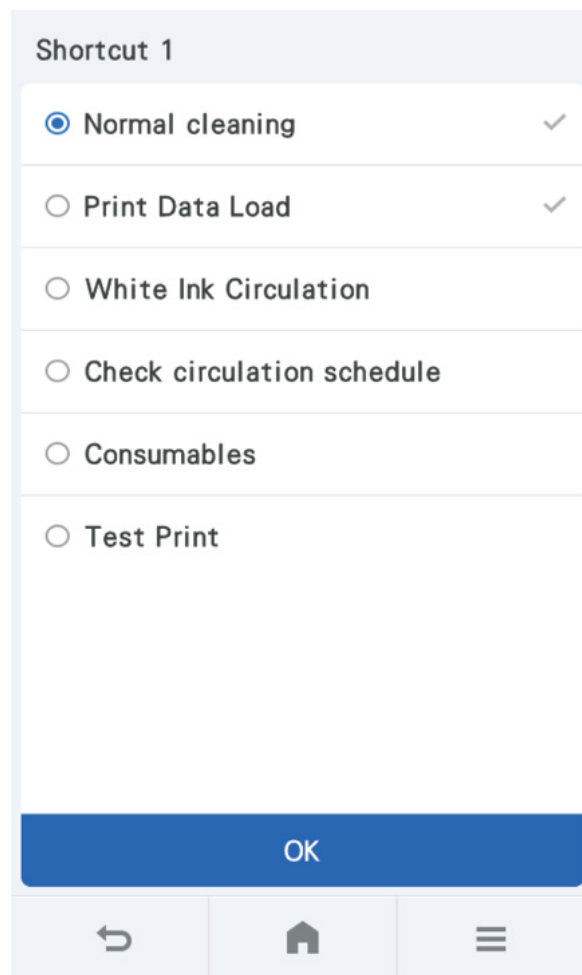
Shortcut button setting	
Shortcut 1	Normal cleaning
Shortcut 2	Print Data Load

3 Select the function to set up, and press [OK].



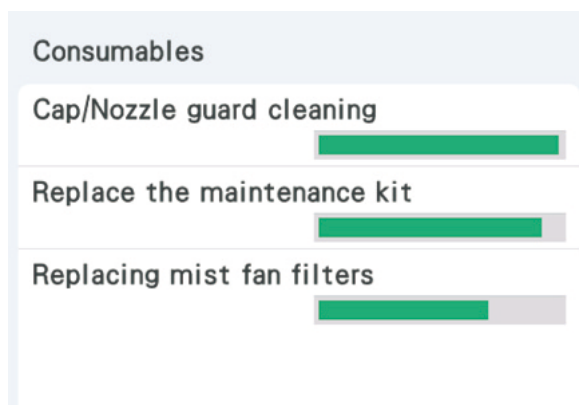
TIPS

- During this menu selection process, the currently selected set value is displayed.
- If you select [Normal Cleaning], you will be presented with the Normal Cleaning Head Selection menu.
- If you select [Print Data Load], you will be presented with the screen to select the print data to load.
- If you select [White Ink Circulation], the white ink circulation begins.
- If you select [Check circulation schedule], you will be presented with the circulation schedule check screen.
- If you select [Consumables], you will be presented with the screen for checking the usage status of consumable supplies.
- If you select [Test Print], you will be presented with the screen to select ink for test print.



8.26 Display of usage status of consumable supplies

- 1 From the menu, select [Printer operation information display]>[Consumables].
- 2 The usage status of consumable supplies is displayed.



8.27 Display of ink expiration date

- 1 From the menu, select [Printer operation information display]>[Ink expiration date].
- 2 The ink expiration date is displayed.

The screenshot shows a menu titled 'Ink expiration date' with five rows, each showing a color-coded circle, the ink color name, and the expiration date in the format --/------

Ink Color	Expiration Date
● Black	--/------
● Yellow	--/------
● Cyan	--/------
● Magenta	--/------
○ White	--/------

8.28 Display of total printed sheets

On this display screen, the total number of printed sheets is shown.

- 1 From the menu, select [Printer operation information display] > [Total Print].
- 2 Then, the total number of printed sheets is displayed.



TIPS

- Only the number of printed sheets of which printing has succeeded is counted, in which the canceled number of sheets is not included.
- All the printed sheets involved in printing operation, including test print, are counted.
- The display screen shown here has been taken as an example.
- The count of total number of printed sheets cannot be reset.

Total Print	
Number of prints	267

8.29 Cartridge attach/remove check history

This function makes it possible to display records on the state of the white ink cartridge removed for 60 seconds or more.

You can use this function to check whether the agitation of the white ink cartridge is performed regularly.

- 1 From the menu, select [Printer operation information display] > [CTG Attach/Remove History].
- 2 The cartridge attach/remove check history is displayed, and you can scroll the screen to see the records on cartridge attachment and removal.

CTG Attach/Remove History (UTC)		
03-11	02:01	0 Sec
04-02	10:42	0 Sec
04-25	19:22	0 Sec
05-19	04:03	0 Sec
06-11	12:43	0 Sec

8.30 Check circulation schedule

White ink circulation can be performed at a specified time.

- 1 From the menu, select [Printer operation information display] > [Check circulation schedule].
- 2 Display the circulation schedule.



TIPS

- If the scheduled time of white ink circulation is not set with the maintenance tool, the circulation schedule will not be displayed.
- The information can also be checked on the home screen as well.

Check circulation schedule	
Current time	16:15
1	01:00
2	04:00
3	07:00 (Long)
4	10:00
5	13:00
6	16:00
7	19:00
8	22:00



8.31 Display of temperature/humidity info

The ambient temperature and humidity are displayed.

- 1 From the menu, select [Printer operation information display] > [Temperature and Humidity].
- 2 Then, the ambient temperature and humidity are displayed.



TIPS

- Make the setting of temperature indication unit in the Temperature window.
- The display screen shown here has been taken as an example.

Temperature and Humidity	
Temperature [°C]	28
Humidity [%]	79

8.32 Confirm network setting

[IP Address], [Subnet Mask], [Default Gateway], [Host name], and [MAC address] can be displayed from [Confirm network setting].

- 1 Select [Confirm network setting] from the menu.
- 2 [IP Address], [Subnet Mask], [Default Gateway], [Host name], and [MAC address] are displayed.



TIPS

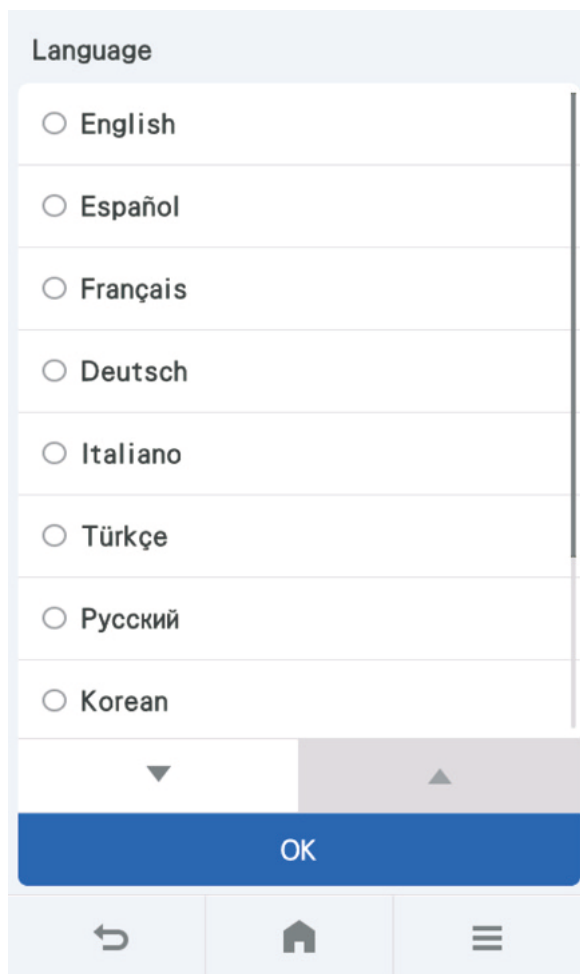
- The display screen shown here has been taken as an example.

Confirm network setting	
IP Address	000.000.000.000
Subnet Mask	000.000.000.000
Default Gateway	000.000.000.000
Host name	
MAC address	00:1B:A9:FD:FF:FF

8.33 Language setting

Select your desired language to be shown on the liquid crystal panel.

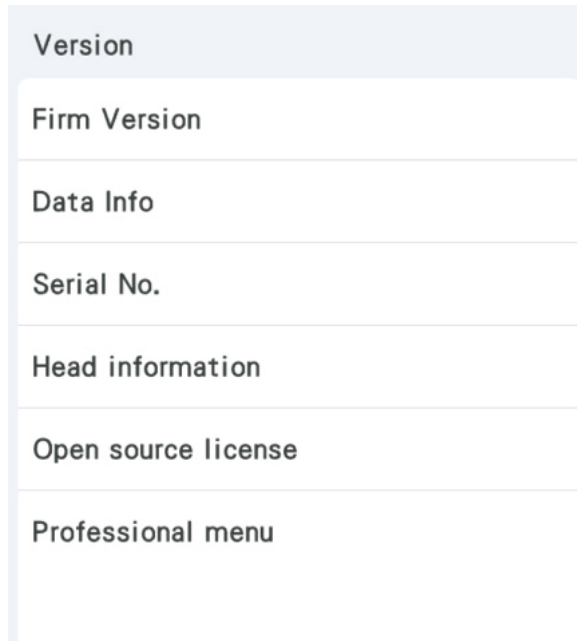
- 1 Select [Language] from the menu.
- 2 Select your desired language from [Language], and finalize your setting by pressing [OK].
- 3 Follow the on-screen message, and turn off the power and on again.



8.34 Display of version

The following firmware version information can be displayed: [Firm Version], [Data Info], [Serial No.], [Head information], [Open source license], and [Professional menu].

- 1 Select [Version] from the menu.
- 2 Select [Firm Version], [Data Info], [Serial No.], [Head information], or [Open source license].



- 3 The selected screen appears.



TIPS

- The [Professional menu] screen is intended for use by service personnel.

8.34.1 Firmware update

When a new firmware is released, please update the firmware.



TIPS

- To check any release information of a new firmware, please visit the website of Brother Industries, Ltd.

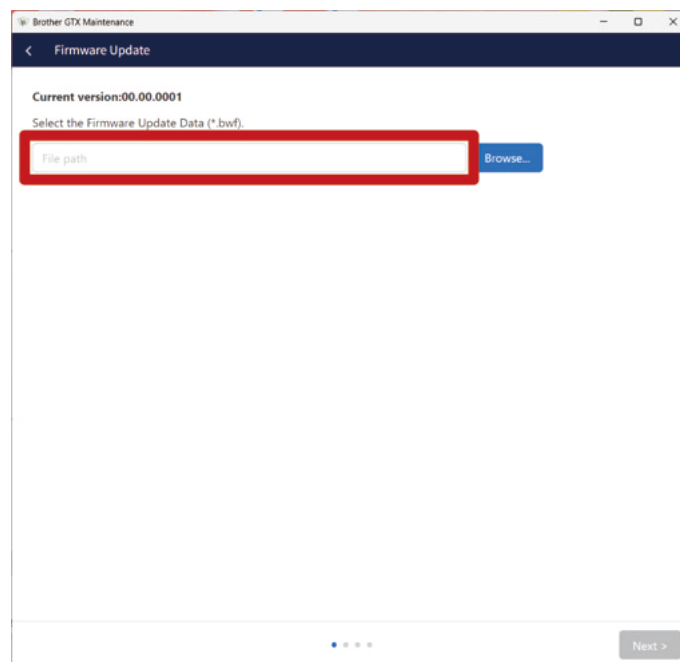
- 1 Download the firmware's updated data from the website of Brother Industries, Ltd.
- 2 In the Start menu, select "GTX Maintenance #" from "Brother GTX Maintenance Tools".



TIPS

- The "#" in "GTX Maintenance #" is the version number. The version number changes with app update.

- 3 From launched "GTX Maintenance", select "Firmware Update".
- 4 Specify the firmware's updated data (.bvf).



- 5 Make a connection of the USB 2.0 cable or LAN cable between your PC and the printer, and update your firmware by performing the on-screen procedures.

Chapter 9

Troubleshooting

Read [SAFETY INSTRUCTIONS](#) on page 8 in the opening pages carefully before starting work.

9.1 In case of the following problems

Refer to the following to resolve the problem.

No print data can be sent from PC

Probable cause	Remedy	Reference
Have you selected an incorrect printer or not?	From the menu for printing, check your printer name.	-
Has a USB or LAN cable been connected properly?	Ascertain that connection of the USB 2.0 cable or the LAN cable (category 5e or higher) has been made correctly.	-
Are you using such PC or OS that is outside the specification?	Check your PC's operating environment.	Software on page 379
Are you using a USB 2.0 cable that is outside the specification?	Use a USB 2.0 cable that is compliant with the specification.	Other items required on page 25
Has any noise been produced between the printer and your PC?	Disconnect the USB 2.0 cable/LAN cable first and connect it again in five seconds. If the problem continues, power off the printer first, then reactivate it in five seconds.	-
Does your PC function properly?	Restart the PC.	-
Has any other USB device been connected to your PC?	Remove the other USB device, restart the PC, and check to see if the printer functions properly.	-
Has the USB cable/LAN cable been damaged?	Use a different USB or LAN cable.	-

No printing job gets started even after pressing the print button

Probable Cause	Remedy	Reference
Check if the print is scheduled (the button is flashing fast).	The print begins as soon as the printer becomes available. Wait for a while.	-
Is any error message displayed?	Eliminate the cause of the error, and perform printing once more.	Error message on page 354
Does the menu screen still appear on the screen, or are you performing the maintenance operation from the menu?	Please exit the menu. Alternatively, please wait until the maintenance operation will come to an end.	-
Is the automatic head cleaning operation underway?	Please wait until the ongoing head cleaning operation is completed.	-

Probable Cause	Remedy	Reference
Is the printer in the white ink circulation stage?	Please wait until the ongoing white ink circulation is completed.	-
Is the room temperature suited to the usage conditions?	Check for your PC's operating environment and adjust the room temperature.	Apparatus on page 377
Does the printer receive no print data, or is it in the state to receive such data (the print button is not illuminating)?	Send the print data to the printer. Alternatively, please wait until the reception of print data is completed.	-
Do you find that the temperature of print heads are becoming high, and [Color Head Getting Warm] or [W Head Temp Rising] message appears?	There may be the possibility that the flat cables of print heads have not been put in place and the temperature of print heads has become high. Turn off the power, make sure that the flat cable is in place, and wait until the temperature decreases.	-
Is the room temperature suited to the usage conditions?	Check for your operating environment and adjust the temperature around the printer. The temperature requirement varies between T-shirt printing and film printing. Ascertain whether the data that you are going to use for printing is intended for T-shirt printing or film printing.	Apparatus on page 377 Setting the low-temperature print limit mode (DTF) on page 281

The power cannot be turned on

Probable Cause	Remedy	Reference
Is the power cord connected to the printer?	Make sure that the power cord is connected to the printer.	-

An error occurs immediately after activating the printer

Probable Cause	Remedy	Reference
Is any error message displayed?	Check the content of the error, and restart the printer. If the error is still not eliminated, please contact your dealer or Brother.	Error message on page 354

No print data can be loaded from USB flash drive

Probable Cause	Remedy	Reference
Has the USB flash drive been inserted into its insertion slot properly?	Insert the USB flash drive reliably.	-
Is the applicable file ARP or AR3 file?	This printer cannot print out the print data of GT-541/GT-782/GT-3. Recreate the print data.	-

Probable Cause	Remedy	Reference
Is your USB flash drive suited to required conditions?	Please use a FAT32-formatted USB flash drive of which storage capacity ranges from 2 GB to 32 GB. You cannot use a USB flash drive with security functions such as password lock function or beyond 32 GB.	-
Is the USB flash drive damaged?	Check to see if it functions properly using your PC or the like. Try using a different USB flash drive.	-

Neither uni-directional printing nor bi-directional printing can be performed

Probable Cause	Remedy	Reference
Do the settings of printer driver and printer agree with each other?	Note that the setting of the printer's setting has priority over the setting of printer driver. The printer driver's setup values take effect only if the printer's setting is [Auto].	Print direction setting on page 278

The depletion of ink in an ink pouch cannot be detected

Probable Cause	Remedy	Reference
Is an ink pouch in its correct position?	If the ink pouch is in contact with the side of the ink cartridge case, detection may not be performed correctly. Put a proper ink pouch in its correct position.	Replacement of ink pouch with a new one on page 229
After stirring the white ink, is the lid of the ink cartridge opened and the pouch placed in the correct position?	Open the lid of the white ink cartridge and appropriately rewind the ink pouch. Ink might have entered into the wound section of the pouch when stirred, which could have caused improper winding of the pouch.	Daily agitation of the white ink on page 160

"x" is displayed for the remaining ink level after replacing the ink pouch

Probable Cause	Remedy	Reference
Is a wrong color of an ink pouch installed?	Put an ink pouch in its correct position. If colors are mixed on the print result or within the ink pouch, please contact your dealer.	-

Remaining volume indication of the ink pouch does not reflect the actual status

Probable Cause	Remedy	Reference
Didn't you replace an ink pouch in the way of use?	If you take out an ink pouch that still has much amount of remaining ink in the way of use, then set a different ink pouch or the original used ink pouch back to the printer, it can indicate a different volume from the actual remaining volume. If you keep on using it and the volume is reduced to some extent, the correct remaining volume will be displayed again.	-

9.2 Solutions to print quality problems

Refer to the following to resolve the problem.

Print is too light

Probable cause	Remedy	Reference
Is the setting of an image editing software application made improperly, or is an image placed in CMYK mode?	Edit the image.	Using other applications on page 95
Have the printing conditions been applied improperly, or does your image data have insufficient color saturation?	Using [Color Processing], adjust saturation or contrast as appropriate.	Set up the image quality on page 130
Is a sufficient amount of ink left in a cartridge?	Replace the old ink pouch with a new one.	Replacement of ink pouch with a new one on page 229
Is there any nozzle that does not eject ink-jet droplets?	Perform [Head Cleaning] from the menu. If no improvement is attained, follow the referenced instructions.	Recovery action to be taken for such a nozzle that is unable to eject ink-jet droplets on page 328
Is initial settings after head replacement configured?	Perform the initial settings after head replacement configuration.	Initial settings after head replacement on page 79
Is [Low temperature Mode] set to [Disable]?	Change [Low temperature Mode] to [High quality (default)].	Low temperature print mode setting on page 282

Horizontal stripe (banding) is found on printed material

Probable cause	Remedy	Reference
Is there any nozzle that does not eject ink-jet droplets?	Perform [Head Cleaning] from the menu. If no improvement is attained, follow the referenced instructions.	Recovery action to be taken for such a nozzle that is unable to eject ink-jet droplets on page 328
Do you print ink dots on a highly water-absorbing print medium?	Set the print head's print direction to [Always Uni-Directional]. Also, combine the color multiple pass printing with the printing.	Print direction setting on page 278 Specify whether or not to perform Multiple Pass Printing on page 124

Probable cause	Remedy	Reference
Is the platen positioned at a level that is too low?	Adjust the height of the platen corresponding to the print medium before using it. You can use the platen height adjustment lever to adjust the height of platen. As a rough indication, adjust the height so that it is lowered by one step from the limit height detected by the obstacle sensor, and check that the platen is not detected by the sensor.	Placing print medium in position on page 196
Is the ejection timing correct?	Adjust the ejection timing again. It is likely that the setup value is incorrectly set after replacing a print head or the platen with a new one, or after adjusting the platen height.	Firing adjustment on page 81
Is platen feed adjusted?	Perform the platen feed adjustment. It is likely that the setup value is incorrectly set after replacing a print head or the platen with a new one.	Platen feed adjustment on page 83
Is the [White High Speed Print] check box of the print data turned on?	Turn off the [White High Speed Print] check box to create the print data.	Set up the white ink on page 118
Check if the temperature is low.	Change the wiping frequency setting.	Wiping frequency settings on page 288
Is [Low temperature Mode] set to [Disable]?	Change [Low temperature Mode] to [High quality (default)]. If no improvement is attained, change it to [Highest quality].	Low temperature print mode setting on page 282
Is [High temperature Mode] set to [Disable]?	Change [High temperature Mode] to [High quality (default)].	High temperature print mode setting on page 283

Blurring is observed (when printed with [Color Ink Only])

Probable cause	Remedy	Reference
Isn't the amount of ink excessive against the print media?	Print the ink volume and check the blurring, and select appropriate set value for [Ink Volume:].	Adjust the ink volume on page 151

Blurring is observed (when printed with [Color+White Ink])

Probable cause	Remedy	Reference
Is the [Highlight:] of [White Ink Settings:] too high?	Print the highlight check pattern to check the blurring, and select appropriate set value for [Highlight:].	Print out highlight check pattern/mask check pattern on page 152 Set up the white ink on page 118

Probable cause	Remedy	Reference
	By turning ON the [White/Color Pause] or [Color Multiple Pass Printing] checkbox, extend time before the color ink settles onto the white ink, to prevent blurring. Try this method to eliminate blurring without weakening the highlight.	Set up the white ink on page 126 Specify whether or not to perform Multiple Pass Printing on page 124
Is the [Bleeding Reduction] check box for [White Ink Settings] deselected?	Check the [Bleeding Reduction] check box for [White Ink Settings].	Set up the white ink on page 126
Is [Lower limit temperature Mode (DTF)] set to [Disable]?	Adjust the room temperature to 15°C (59°F) or more. If it is difficult to adjust the room temperature, set [Lower limit temperature Mode (DTF)] to [High quality] or [Highest quality (default)].	Setting the low-temperature print limit mode (DTF) on page 281
Is [Low temperature Mode] set to [Disable]?	Adjust the room temperature to 19°C (66°F) or more. If it is difficult to adjust the room temperature, set [Low temperature Mode] to [High quality (default)] or [Highest quality].	Low temperature print mode setting on page 282

Ink sticks to such an area where no print data exists (ink stain, horizontal stripe, etc.)

Probable cause	Remedy	Reference
Is the area around the print heads soiled with waste ink spilled from the wiper or head cap?	Clean the head section and suction cap. Replace the wiper with a new one.	Cleaning the nozzle guard and suction cap on page 237 Replacing the wiper on page 245
Is any lint attached to the nozzle surface?	Clean the nozzle guard.	Cleaning the nozzle guard and suction cap on page 237
Is the carriage plate contaminated?	Clean the carriage plate.	Cleaning the CR (carriage) plate on page 267
Do the print heads rub against a T-shirt?	Flatten the surface of T-shirt, and adjust the platen's height as required.	Placing print medium in position on page 196
Has the flushing foam become dirty?	Replace the flushing foam with a new one.	Replace the flushing foam on page 253
Has the platen sheet become dirty?	For information on replacing the platen sheet, contact the dealer.	-
Has any ink attached to the carriage that secures the print heads in place or is it dripping off?	Perform the cleaning of the carriage plate and remove the accumulated ink.	Cleaning the CR (carriage) plate on page 267

The edges of the image are blurred, characters and straight lines are doubly printed and printed result appears too granular

Probable cause	Remedy	Reference
Is the platen positioned at a level that is too low?	Adjust the height of the platen corresponding to the print medium before using it. You can use the platen height adjustment lever to adjust the height of platen. As a rough indication, adjust the height so that it is lowered by one step from the limit height detected by the obstacle sensor, and check that the platen is not detected by the sensor.	Platen height adjustment on page 185
Is the ejection timing correct?	Adjust the ejection timing again. It is likely that the setup value is incorrectly set after replacing a print head or the platen with a new one, or after adjusting the platen height.	Firing adjustment on page 81
Is the platen fixing lever or the knob loose?	Retighten the platen fixing lever or the knob.	Platen height adjustment on page 185
Is the image enlarged on the printer setting screen?	When a low resolution image is enlarged on the printer setting screen, it may blur appear blocky. Pattern data should be enlarged on an image editing application, and its roughness should be checked.	-

Thin color cannot be printed out well gradually

Probable cause	Remedy	Reference
Is the ambient atmosphere at a high temperature and very dry, which in turn tends to cause the nozzle surface to dry up?	Perform the flushing more frequently. In addition, increase the flushing volume.	Flushing Interval Setting on page 289 Flushing Volume Setting on page 290

White ink is not printed out evenly

Probable cause	Remedy	Reference
Has the pretreatment been applied unevenly?	Apply the recommended amount of pretreatment evenly to the target area.	Application of pretreatment on page 172
Has the pretreatment caused any change in hardness or deformation of the pretreatment roller? (This applies to the case where the pretreatment roller is used.)	After the pretreatment roller is used, put it in a plastic bag or the like hermetically to prevent it from drying up, and keep it in a flat place in an upright position. Also, when it remains unused for two weeks or longer, wash it well with running water, and let it dry in a shaded area.	-

Probable cause	Remedy	Reference
Is any water content attached to the pretreatment after the pretreatment is fixated?	Prevent water content from being attached to the pretreatment after the pretreatment is fixated.	Fixation of pretreatment on page 180
Is there any lint, yarn waste, dust, etc. that are attached to the surface of pretreatment roller? (This applies to the case where the pretreatment roller is used.)	Clean the surface of the pretreatment roller.	Application of pretreatment on page 172
Did you shake the pretreatment after its dilution?	Shake the pretreatment sufficiently.	Dilution of pretreatment on page 169
Is [Low temperature Mode] set to [Disable]?	Change [Low temperature Mode] to [High quality (default)].	Low temperature print mode setting on page 282
Has the pretreatment been fixated insufficiently?	Check on an actual temperature of the heat press and its pressure during the fixation stage. Always keeping the lower iron (where media is placed) of the heat press at heated temperature with a heating source may solve this problem.	Fixation of pretreatment on page 180

Whiteness of print result is insufficient

Probable cause	Remedy	Reference
Has the pretreatment been applied insufficiently?	Apply a proper amount of pretreatment.	Application of pretreatment on page 172
Has the pretreatment been fixated insufficiently?	Check on an actual temperature of the heat press and its pressure during the fixation stage.	Fixation of pretreatment on page 180
Is there any nozzle that does not eject ink-jet droplets?	Perform [Head Cleaning] from the menu. If no improvement is attained, follow the referenced instructions.	Recovery action to be taken for such a nozzle that is unable to eject ink-jet droplets on page 328
Is the white ink circulated insufficiently?	From the menu, perform [Maintenance] > [White Ink Circulation]. If the problem still persists, perform air bleed cleaning in the ink path by selecting the specified white ink from [Maintenance] > [Air purge cleaning] in the menu. Performing [Air purge cleaning] after [White Ink Circulation] is equivalent to the [Restore White] function of GTXpro.	-

Probable cause	Remedy	Reference
Is the white ink stirred insufficiently?	In the event that the white ink remains accumulated in the bottom of the ink pouch, shake the pouch 100 times and additionally shake it until the ink is stirred well. Also, when the remaining ink level becomes approximately 5.9 in. (15 cm), shake the cartridge with its cover open and with the winding part of the ink pouch slightly unwound.	-
Is [Low temperature Mode] set to [Disable]?	Change [Low temperature Mode] to [High quality (default)].	Low temperature print mode setting on page 282
Is the dilution rate of the pretreatment correct?	Dilute the pretreatment appropriately.	Dilution of pretreatment on page 169
Is the [Highlight:] of [White Ink Settings:] too low?	Print the highlight check pattern to check the blurring, and select appropriate set value for [Highlight:].	Print out highlight check pattern/mask check pattern on page 152 Set up the white ink on page 118

Too much luster

Probable cause	Remedy	Reference
Are you using Teflon-treated peel-off sheet for fixation?	Use a silicon coated peel off sheet when curing the ink to reduce the gloss.	-

Too fuzzy

Probable cause	Remedy	Reference
Did you touch the print media (T-shirt) just before printing?	Excessively touching the media (T-shirt) on the platen by trying to flatten the media before printing could cause fuzziness. Make sure not to touch the media surface too much after the pretreatment is fixated.	-
Does it take a long time before printing, after the pretreatment fixation?	Leaving the print media (T-shirt) after fixing the pretreatment may cause fuzziness, because the media would absorb water. Print the pretreatment fixated media as soon as possible.	-
Is the upper iron on the heat press contaminated during the pretreatment fixation process?	If the upper iron is contaminated, it could roughen the print media (T-shirt) surface by a heat press process, to cause fuzziness. Clean the upper iron of the heat press with a cloth. If the condition persists, try using a peel-off sheet during the pretreatment fixation process, to probably improve the condition.	-

Probable cause	Remedy	Reference
Unevenly dried during the fixation process?	It may be solved by inserting a silicone foam between the heat press lower iron and a print media (T-shirt) during ink fixation.	-

Background white ink spreads out when printed with [Color+White Ink]

Probable cause	Remedy	Reference
[White/Color Alignment] mis-aligned?	Misalignment of white and color inks can occur when the media thickness or the platen height is changed. Adjust the platen height first for the actual media to be printed, and align the white and color inks positions.	White/color alignment on page 84
Is the media easy to stretch when wet?	Print misalignment may occur between white and color inks when the media stretches when wet with white ink. Increasing [Choke Width:] can prohibit spreading of the background white ink.	Set up the white ink on page 126

Printed surface cracks after fixation

Probable cause	Remedy	Reference
Isn't the print surface folded before fixation is completed?	Try not to touch the print surface until the fixation process is completed.	-

The lower left side area of the printer's main unit is soiled with ink

Probable cause	Remedy	Reference
Is the waste ink tube dismounted from the maintenance unit?	For help, please contact your dealer.	-
Is the waste ink tube clogged causing the waste ink to flow reversely?	Straighten the waste ink tube to remove the clog.	-

The cleaning solution is leaked from the cleaning solution tank

Probable cause	Remedy	Reference
Is the main body of printer put aslant?	Place the printer horizontally. If the problem is still not remedied, please contact your dealer.	Installing the printer on page 40

Takes longer print time than before

Probable cause	Remedy	Reference
Is the ambient temperature under 19°C (66°F) for film printing?	Adjust the room temperature to 19°C (66°F) or more. If it is difficult to adjust, set [Low temperature Mode] to [Disable]. When the room temperature is under 15°C (59°F), set also [Lower limit temperature Mode (DTF)] to [Disable].	Low temperature print mode setting on page 282 Setting the low-temperature print limit mode (DTF) on page 281
Is the ambient temperature under 15°C (59°F) for T-shirt printing?	Adjust the room temperature to 15°C (59°F) or more. If it is difficult to adjust, set [Low temperature Mode] to [Disable].	Low temperature print mode setting on page 282
Is your printing under high-temperature and low humidity environment?	Lower your room temperature below 30°C (86°F). Raise your room humidity over 35%. If it is difficult to adjust, set [High temperature Mode] to [Disable].	High temperature print mode setting on page 283
Is the wiping frequency set to [More]?	Change the wiping frequency to [Standard].	-

Film transfer turns the T-shirt white

As shown in the photo below, the print turns white after a certain time has passed since transfer.



Probable cause	Remedy	Reference
Is the temperature of powder fixation too low?	Adjust the temperature of powder fixation to 160°C (320°F).	Powder fixing on page 226
Is the time of powder fixation too short?	Adjust the time of powder fixation to 300 seconds.	Powder fixing on page 226
Is the temperature of ink fixation for film transfer too low?	Adjust the temperature of ink fixation for film transfer to 150°C (302°F).	Transferring to print medium on page 227
Is the time of ink fixation for film transfer too short?	Adjust the time of ink fixation for film transfer to 20 seconds + additional press of 20 seconds.	Transferring to print medium on page 227

9.2.1 Recovery action to be taken for such a nozzle that is unable to eject ink-jet droplets

Please verify the followings when any nozzle is not ejecting ink droplets.

Items to be checked	Description	Remedy	Reference
Is the lip of the suction cap dirty?	If the lip of the suction cap is dirty, the suction cap may not be able to adhere to the print head, and ink may not be sucked.	Clean the suction cap	Cleaning the nozzle guard and suction cap on page 237
Is ink accumulated in the nozzle guard?	The suction cap may not be in close contact with the print head and ink may not be sucked if the space between the nozzle guard and the nozzle is contaminated.	Clean the Nozzle guard	Cleaning the nozzle guard and suction cap on page 237
Is there any deposit of ink around the nozzle surface?	When the surrounding area of nozzle surface is contaminated, it could lead to ejection failure since the wiper cannot clean the nozzle surface properly. Or, it could reduce the adhesion between the nozzle and suction cap, thereby causing ink suction failure.	Clean the surrounding area of nozzle surface	Cleaning the surrounding area of nozzle surface on page 334
Is the wiper contaminated?	The wiper may become dirty, and the nozzle surface may not be wiped cleanly if the wiper cleaning solution is not sufficiently filled in the wiper cleaning tank.	Introduction of wiper cleaning solution	From the menu, select [Maintenance] > [Operate wiper cleaning tank] > [Add wiper cleaning solution].
Is the wiper cleaning solution contaminated?	The wiper may not be sufficiently cleaned and the nozzle surface may not be wiped cleanly if the wiper cleaning solution is dirty.	Replacement of wiper cleaning solution	From the menu, select [Maintenance] > [Operate wiper cleaning tank] > [Initial wiper cleaning solution].
Is there any indication of scar or deformation on the wiper?	If the wiper has any scar or deformation, the wiper cannot clean the nozzle surface.	Replace the wiper	Replacing the wiper on page 245
Is the flushing foam installed correctly?	If the flushing foam is not placed appropriately with no rise, it may touch the nozzle surface to stop ejection from the nozzle.	Mount the flushing foam	Replace the flushing foam on page 253
Is the ink accumulated on the flushing foam?	If an ink accumulates on the flushing foam, the ink may touch the nozzle surface to prevent ink from ejecting.	Replace the flushing foam	Replace the flushing foam on page 253
Is the waste ink tube bent in the middle?	The bent waste ink tube will stop the waste liquid flow, thereby disabling ink suction operation of the head cleaning function.	Verify the waste ink tube	Confirmation and disposal of waste ink on page 158
Is the tip of the waste ink tube touching the waste ink tank bottom?	If the tip of the waste ink tube immersed in liquid, it will prevent the smooth flow of liquid, and disable the ink suction operation of the head cleaning function.	Verify the waste ink tube	Confirmation and disposal of waste ink on page 158

Items to be checked	Description	Remedy	Reference
Is the tube correctly connected to the head?	If they are loosely mated, it may allow air to enter into the head section during the head cleaning operation, to cause non-ejection condition of the nozzle.	Verify connection between the head and the tube	Replacement of print head on page 340
Is the tube filled with ink?	If a large amount of air exists in the tube, that air will go into the head to cause non-ejection condition of the nozzle.	Bleed ink air in the tube	Select the flow channel from [Maintenance] > [Air purge cleaning] in the menu.
Is the ink pouch properly attached to the cartridge?	If the ink pouch is not properly installed, the cartridge cannot fully wind it, and fails to supply enough ink to the head.	Install an ink pouch	Replacement of ink pouch with a new one on page 229

After carrying out appropriate remedial measures listed above, make sure the non-firing nozzle has been recovered. If it has not, perform the steps 1 to 5 to recover the non-firing nozzle.

Step 1: Print out a nozzle check pattern

- 1 Print out a nozzle check pattern (1st time). [Printing out the nozzle check pattern \(checking on the print heads\) on page 260](#)
- 2 Check the result of the printed nozzle check pattern (1st time), and carry out the following procedures. [Printing out the nozzle check pattern \(checking on the print heads\) on page 260](#)

**TIPS**

- Even if the white print result is weak, since the white ink is ejected on one same spot through multiple nozzles, a relatively large amount of ink volume will be used, and the firing problem of a single nozzle will not affect the print quality so much. Even in a condition with weak lines, the print is performed without a problem.

Existence or nonexistence of a nozzle that does not eject any ink-jet droplets	Recovery action
Such a nozzle does not exist that does not eject any ink-jet droplets	Contact your dealer if there is no non-ejection when printing the nozzle check pattern, but a large amount of non-ejection occurs during printing.
Such a nozzle exists that does not eject any ink-jet droplets	Proceed to Step 2.

Step 2: Perform the head cleaning

- 1 Perform a normal cleaning. [Head cleaning on page 264](#)
- 2 Print out a nozzle check pattern (2nd time).
- 3 Check the result of the printed nozzle check pattern (2nd time), and carry out the following procedures.

Existence or nonexistence of a nozzle that does not eject any ink-jet droplets	Recovery action
Such a nozzle does not exist that does not eject any ink-jet droplets	Exit
Less-than-ten nozzles exist that do not eject any ink-jet droplets	Perform the normal cleaning once again. Subsequently, proceed to (4).
Ten-or-more nozzles exist that do not eject any ink-jet droplets	Perform the powerful cleaning. Subsequently, proceed to (4).
More than half of the nozzles do not eject any ink-jet droplets	Re-install the ink. Re-install the ink on page 350 Subsequently, proceed to (4).

- 4 Print out a nozzle check pattern (3rd time).
- 5 Check the result of the printed nozzle check pattern (3rd time), and carry out the following procedures.

Existence or nonexistence of a nozzle that does not eject any ink-jet droplets	Recovery action
Such a nozzle does not exist that does not eject any ink-jet droplets	Exit
Such a nozzle exists that does not eject any ink-jet droplets	Proceed to Step 3.

Step 3: Check that no ink-jet droplets are ejected from the applicable nozzle

- 1 Check locations of the non-ejecting nozzles on the result of the printed nozzle check pattern (1st to 3rd time), and carry out the following procedures.

Comparison of non-ejection nozzle positions	Recovery action
The same nozzle always does not eject ink-jet droplets	Perform the super cleaning -> print out of nozzle check pattern for the third time in a row.
A different nozzle does not eject ink-jet droplets	Leave the printer as it is for about 30 minutes, and perform the normal cleaning -> print out of nozzle check pattern for the third time in a row.

- 2 Check a result of the nozzle check patterns, and carry out the following procedures.

Existence or nonexistence of a nozzle that does not eject any ink-jet droplets	Recovery action
Such a nozzle does not exist that does not eject any ink-jet droplets	Exit
Such a nozzle exists that does not eject any ink-jet droplets	Proceed to Step 4.

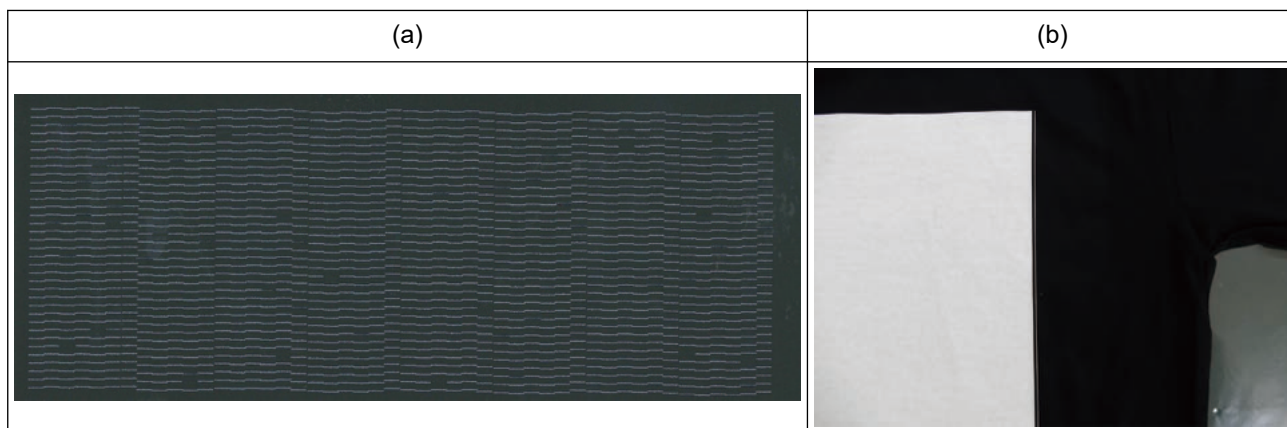
Step 4: Clean the nozzle surface

- 1 Clean the nozzle surface of the print heads. [Cleaning of head nozzle on page 337](#)
- 2 Print out a nozzle check pattern.
- 3 Check a result of the nozzle check patterns, and carry out the following procedures.

Existence or nonexistence of a nozzle that does not eject any ink-jet droplets	Recovery action
Such a nozzle does not exist that does not eject any ink-jet droplets	Exit
Such a nozzle exists that does not eject any ink-jet droplets	Proceed to Step 5.

IMPORTANT

- Even if the nozzles on the white side have a bit of problem concerning firing, since the white ink is ejected on one same spot through multiple nozzles, relatively large amount of ink volume will be used, and firing problem of a single nozzle will not affect the print quality so much. Even in a condition with a problem concerning firing as shown in (a), print is performed without a problem as shown in (b).
- To avoid possibly scratching the nozzle surface, do not clean it unnecessarily; clean it as the last option left after trying other means.



Step 5: Head Replacement

- 1 Replace the print head with a new one. [Replacement of print head on page 340](#)

9.2.2 Cleaning the surrounding area of nozzle surface

- 1 Make the clean stick R, cleaning cup, gloves and cleaning solution, which come standard with the printer, available for use.

IMPORTANT

- Use a new clean stick R when you start cleaning.
- Never touch the tip end of clean stick R with your hand. If any sebaceous matter is attached to the head nozzle, it may result in the printer malfunction.

- 2 From the menu, select [Maintenance] > [Cleaning/Replacing Maintenance Parts] > [Clean nozzle guard and cap].

IMPORTANT

- If any other error or message is displayed on the operation panel or warning message window, follow the message to solve the problem, then perform the cleaning.
- Please complete the task within 15 minutes, in order to prevent the print heads from drying up.
- If the task takes more than 15 minutes to complete, close the main unit cover and then select [Clean nozzle guard and cap] again to restart the task. Then, the head cleaning will be performed to prevent any ink from drying up.



TIPS

- Pressing [OK] causes the platen to start moving. Do not put anything around the platen.

- 3 Open the main unit cover.
- 4 Put a proper amount of cleaning solution (b) into the cleaning cup (a).

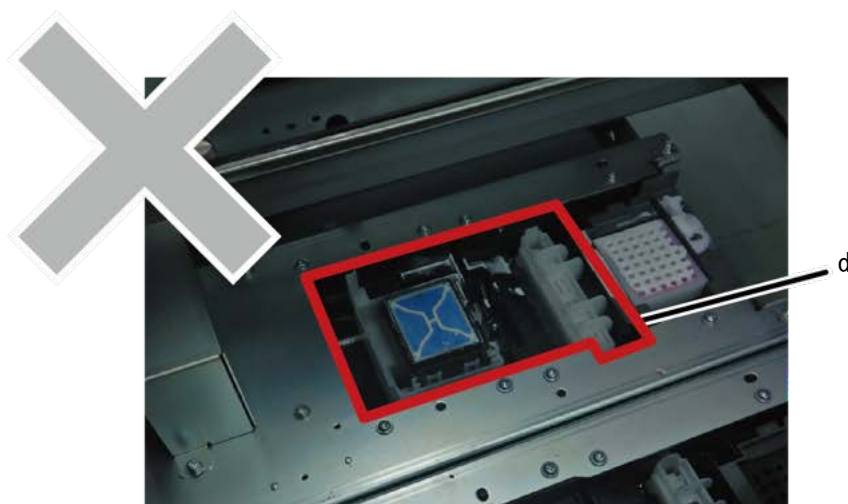
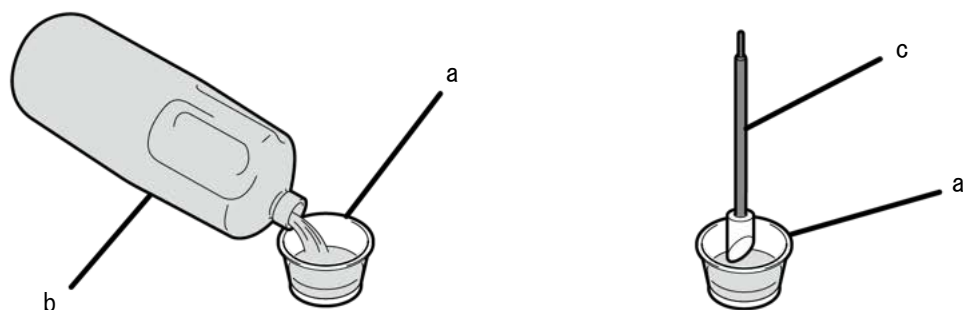
- 5 Moisten a clean stick R (c) with the cleaning solution.

IMPORTANT

- Be sure to use a different clean stick R separately for the color head and the white head. Use a new clean stick R when you start cleaning.
- Do not use other fluids (water, etc.), because they may damage the print heads.
- Do not return the cleaning solution which has been put in the cleaning cup to the cleaning solution bottle.
- Do not shed cleaning solution in the maintenance unit (d).

Note

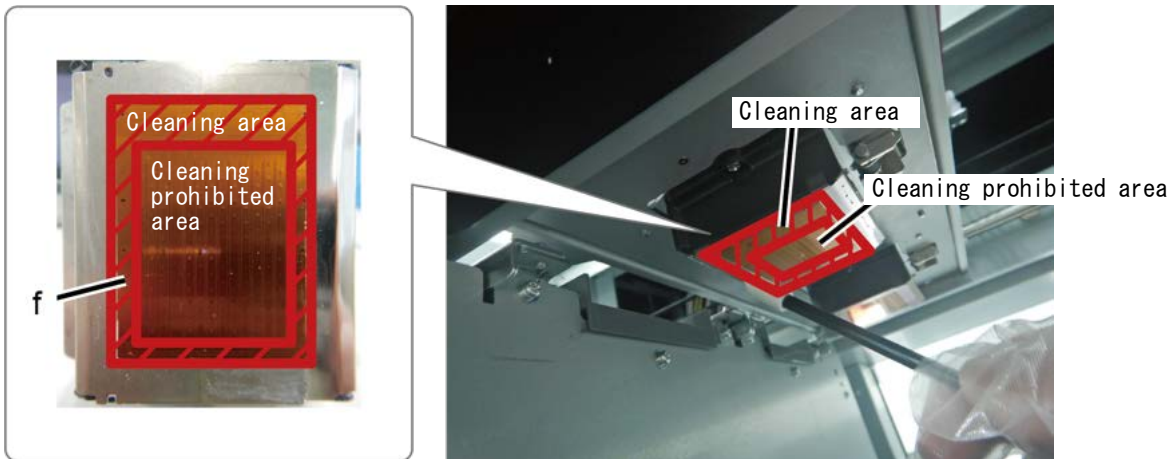
- For a proper work operation, be sure to wear the printer-provided gloves.



- 6
- With a clean stick R, clean the surrounding area of nozzle surface of print head (f).
Manually move the carriage to such a position that you can perform the cleaning with ease.

IMPORTANT

- Be sure not to bring the clean stick R into contact with the nozzle surface (cleaning prohibited area).
- The used clean stick R should be disposed of, and should not be reused.



- 7
- Close the main unit cover and press [OK].

Note

- Dispose of any waste resulting from the cleaning in accordance with applicable laws and ordinances.



TIPS

- Then, the head cleaning will be performed to prevent any ink from drying up.
- Because the cleaning cup will be reused, rinse it with pure water, let it dry sufficiently, and store it so that dust does not get inside.

Cleaning conditions

Pre-cleaning state	Post-cleaning state

9.2.3 Cleaning of head nozzle

If a problem of non-ejection of ink-jet droplets is not cleared even after performing the head cleaning, perform the head nozzle cleaning.

IMPORTANT

- Clean the nozzle guard first, then clean the head nozzle. [Cleaning the nozzle guard and suction cap on page 237](#)

- 1 Make the clean stick R, cleaning cup, gloves and cleaning solution, which come standard with the printer, available for use.

IMPORTANT

- Use a new clean stick R when you start cleaning.
- Never touch the tip end of clean stick R with your hand. If any sebaceous matter is attached to the head nozzle, it may result in the printer malfunction.

- 2 From the menu, select [Maintenance] > [Cleaning/Replacing Maintenance Parts] > [Clean nozzle guard and cap].

IMPORTANT

- If any other error or message is displayed on the operation panel or warning message window, follow the message to solve the problem, then perform the cleaning.
- Please complete the task within 15 minutes, in order to prevent the print heads from drying up.
- If the task takes more than 15 minutes to complete, close the main unit cover and then select [Clean nozzle guard and cap] again to restart the task. Then, the head cleaning will be performed to prevent any ink from drying up.



TIPS

- Pressing [OK] causes the platen to start moving. Do not put anything around the platen.

- 3 Open the main unit cover.
- 4 Put a proper amount of cleaning solution (b) into the cleaning cup (a).

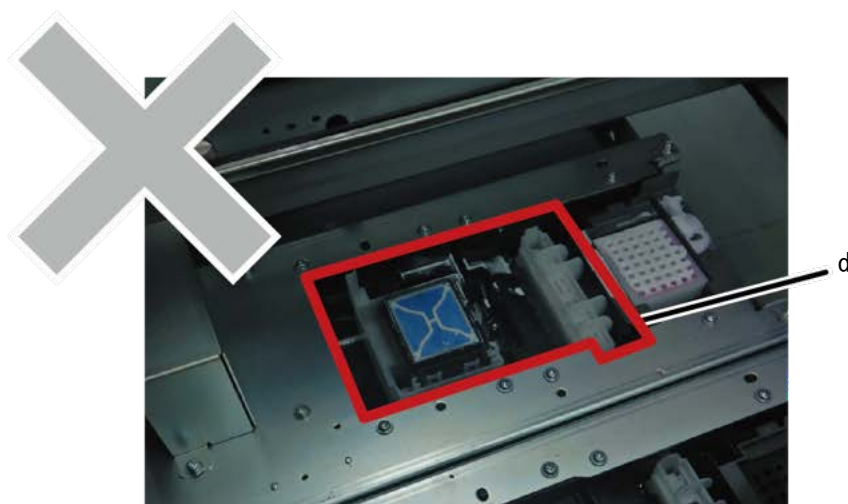
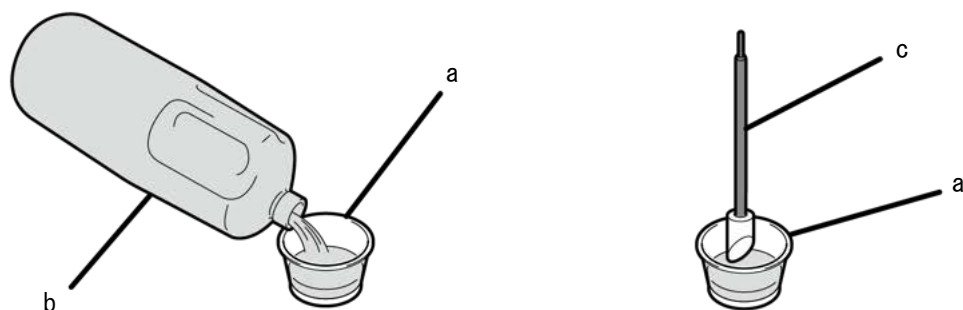
- 5 Moisten a clean stick R (c) with the cleaning solution.

IMPORTANT

- Be sure to use a different clean stick R separately for the color head and the white head. Use a new clean stick R when you start cleaning.
- Do not use other fluids (water, etc.), because they may damage the print heads.
- Do not return the cleaning solution which has been put in the cleaning cup to the cleaning solution bottle.
- Do not shed cleaning solution in the maintenance unit (d).

Note

- For a proper work operation, be sure to wear the printer-provided gloves.

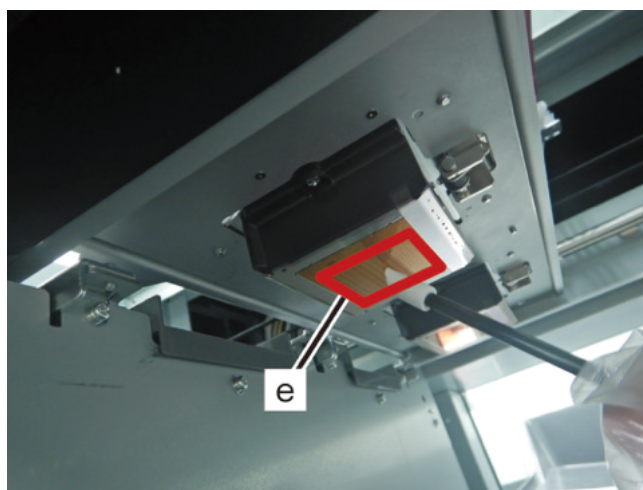


- 6 With a clean stick R, clean the nozzle surface (e) of print head.

Manually move the carriage to such a position that you can perform the cleaning with ease.

IMPORTANT

- Be sure not to bring corner edges of the clean stick R into contact with the nozzle surface.
- Avoid roughly rubbing the nozzle surface.
- The used clean stick R should be disposed of, and should not be reused.



- 7 Close the main unit cover and press [OK].

Note

- Dispose of any waste resulting from the cleaning in accordance with applicable laws and ordinances.



TIPS

- Then, the head cleaning will be performed to prevent any ink from drying up.
- Because the cleaning cup will be reused, rinse it in clean cleaning solution and store it in a safe place.

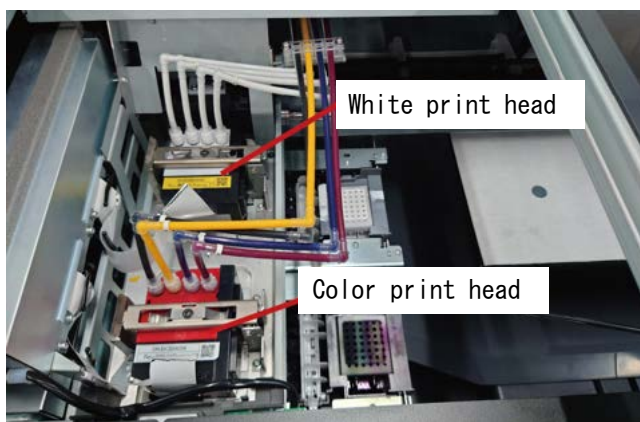
9.2.4 Replacement of print head

If a problem of non-ejection of ink-jet droplets is not cleared even after cleaning the head nozzle, replace the print head with a new one.



TIPS

- The following describes the procedure for replacing the print head on the white side. The same process can be used for the color side as well.
- Do not confuse the color side print head with the white side print head.
Check the cover color of the print head (red for the color side, white for the white side) and replace the print head.



- Ink needs to be re-installed after replacing the print head. If the ink level is low, make a new ink pouch available for use.

- 1 From the menu, select the corresponding head under [Maintenance]>[Head Replacement] and press [OK] in response to the instructions on the screen.



TIPS

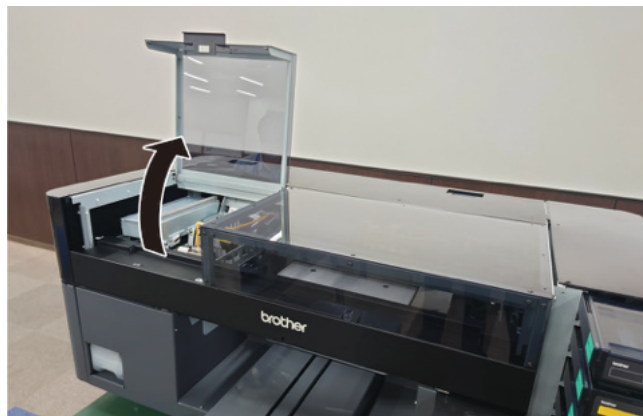
- Pressing [OK] causes the platen to start moving. Do not put anything around the platen.

- 2 Follow the on-screen message and turn off the power.

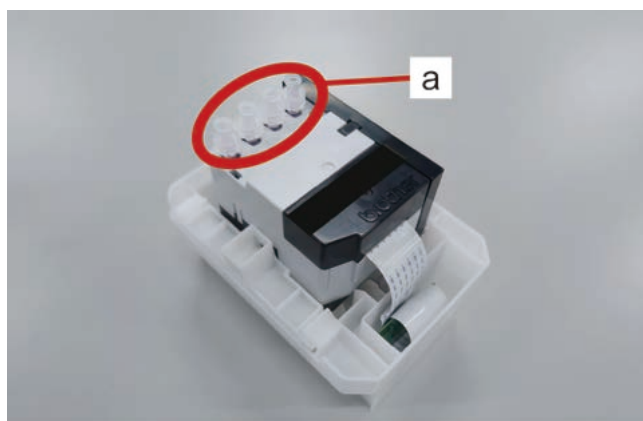
IMPORTANT

- Simply opening the main unit cover does not automatically turn off the power. Be sure to turn off the power before starting replacement.
- Please complete the task within 15 minutes, in order to prevent the print heads from drying up.

- 3 Open the main unit cover.



- 4 Remove the upper case of a new print head.
- 5 Remove four plugs (a) from the new print head.



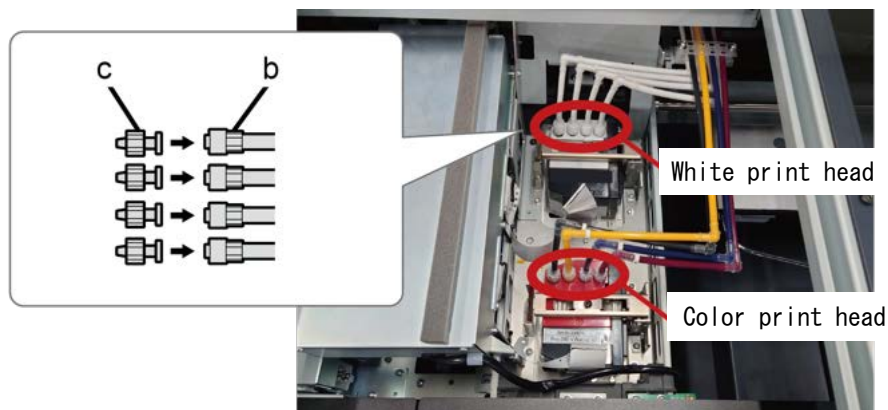
- 6 Remove each tube (b) from the print head to be replaced with a new one. Then, cover the tubes with the new four plugs (c) that have been removed from the new print head while exercising care to prevent any ink from being spilled.

IMPORTANT

- Care is needed in preventing any ink from being spilled from each tube. If the ink is dripping, wipe off the dripping ink.
- Be careful not to confuse them with the tubes for the other print head that is not intended to be replaced.

Note

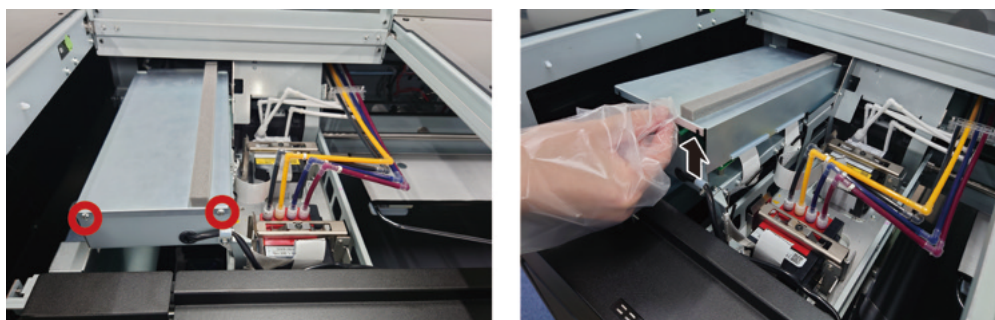
- For a proper work operation, be sure to wear the printer-provided gloves.



- 7 Loosen the two screws that hold the carriage circuit board cover in place and remove the cover by lifting it up and drawing it towards you.

IMPORTANT

- Do not allow the screws to come off by over-loosening them.

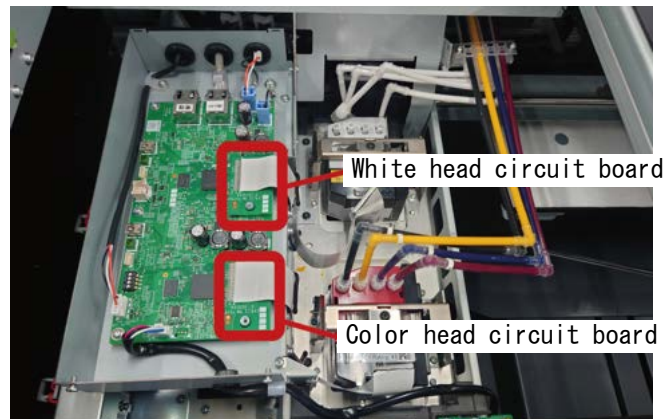


- 8 Remove the head circuit board of the print head that you are going to replace.

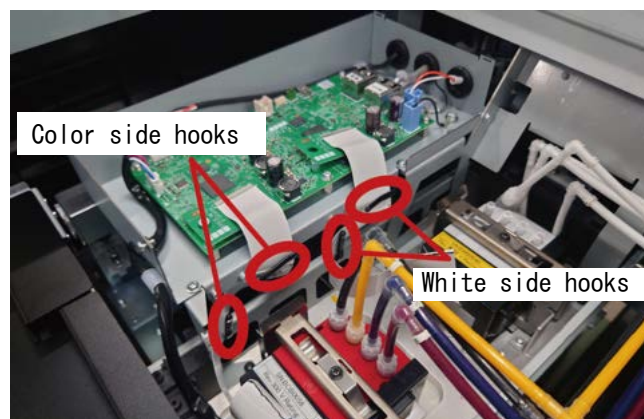


CAUTION

- Be sure not to touch other circuit boards.



- 9 Open the two hooks and remove the flat cable.



- 10 Unlock the print head, and remove the print head.

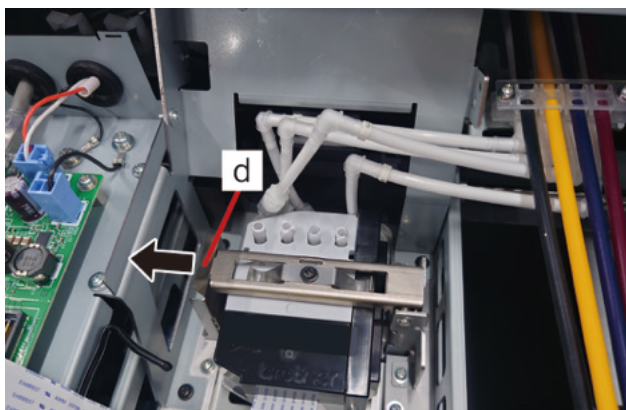
IMPORTANT

- When removing the print head, be careful not to drip the ink on the carriage plate. If the ink is dripping, wipe off the dripping ink.



TIPS

- Push the plate (d) in the direction shown by the arrow to unlock.



- 11 Pull the lock part (e) of the case toward yourself to unlock, and remove the new print head (f) from the case (g).

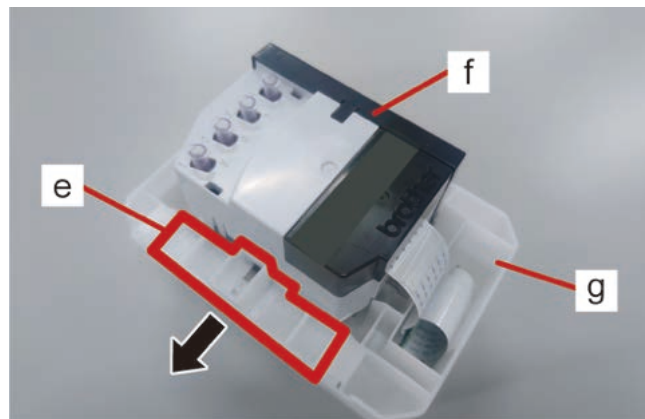
IMPORTANT

- When removing the print head, be careful not to touch the nozzle surface at the bottom of the head. Otherwise it may cause poor printing.



TIPS

- Sometimes, you may find it hard to remove the print head when you try to unlock the lock part. If it is hard, use both hands to remove it.



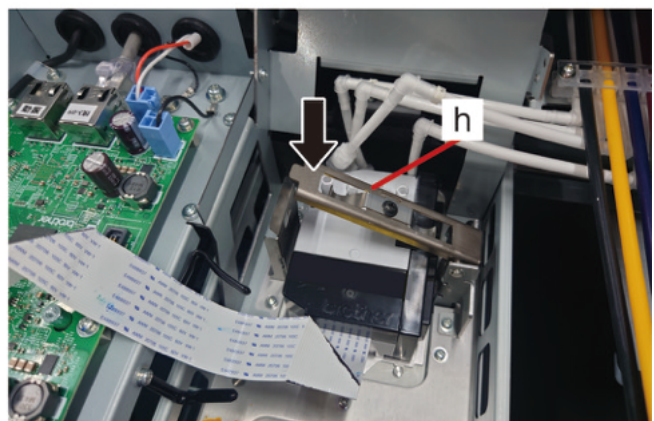
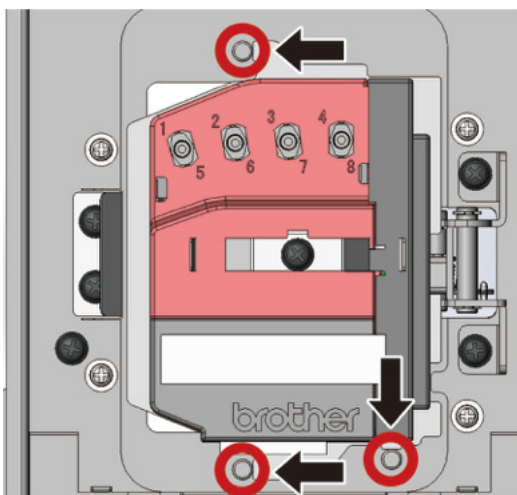
- 12 Mount the new print head onto the carriage.

IMPORTANT

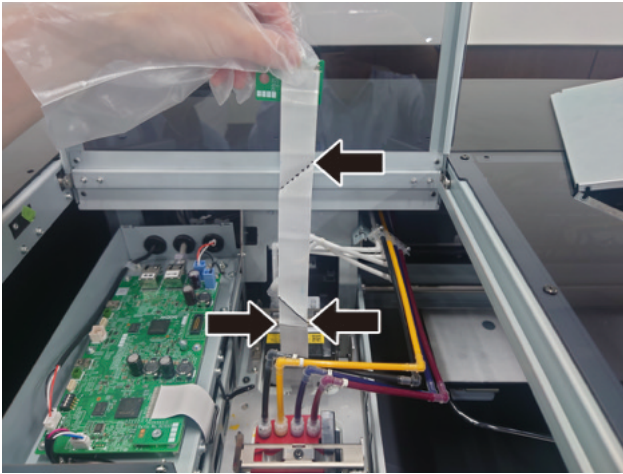
- Be careful not to move the carriage.
- When inserting it, be sure not to allow the head nozzle surface to touch the sheet metal and other nearby parts.
- Be careful not to entangle the tubes.
- Be careful not to pinch the flat cable between the metal plate of the print head and the carriage.
- Be careful not to pinch any foreign object between the metal plate of the print head and the carriage.
- Be careful not to let the metal plate of the print head ride on the positioning part.
- Make sure that the print head is fully fit to the carriage.
- Be careful not to touch the lock of the other head and release the lock.



- 13 Move the new print head in the direction shown by the arrow, and with it positioned by the three positioning pins, lock it by depressing the lock bar (h).



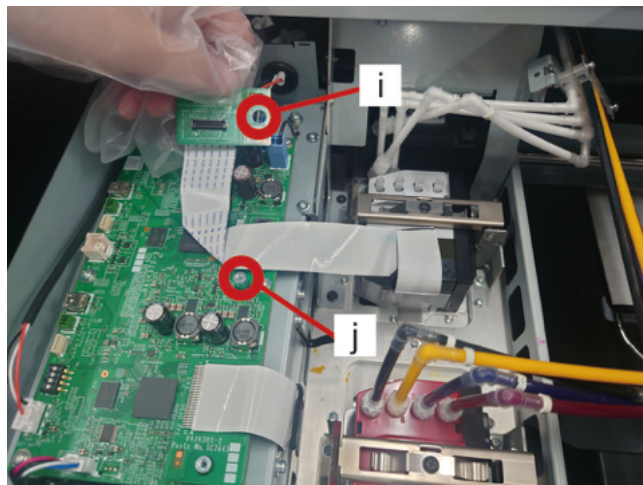
- 14 Fold the flat cable according to the mark lines (dashed line: valley fold, solid line: mountain fold).



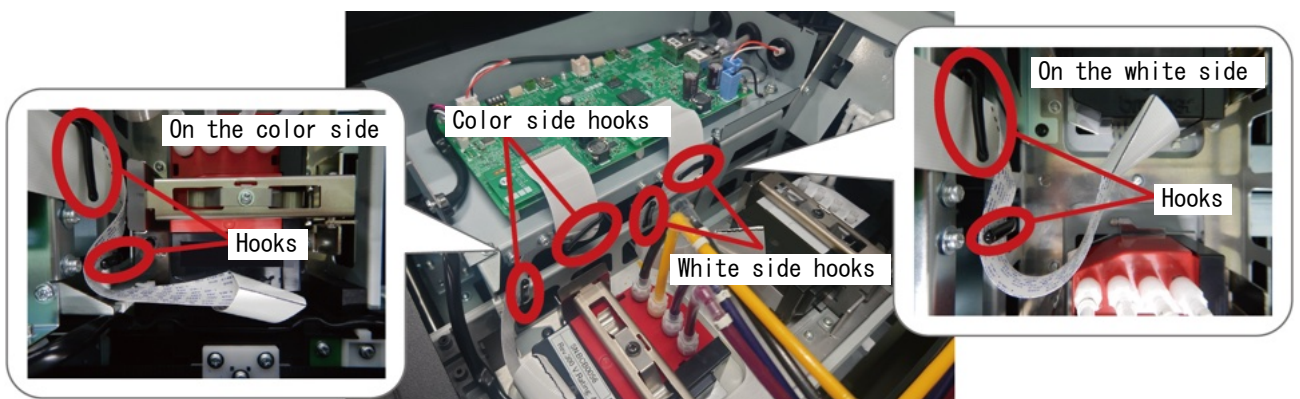
- 15 Connect the head circuit board's hole (i) in alignment with the positioning pin (j) on the carriage circuit board.

IMPORTANT

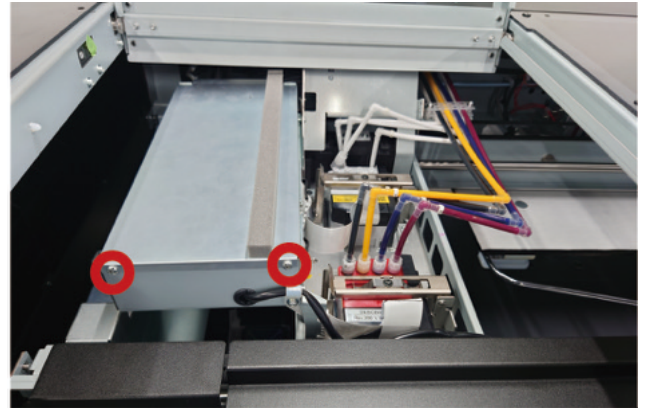
- After connecting, check that the head circuit board is not tilted.



- 16 Place the flat cable in the two hooks on the carriage.



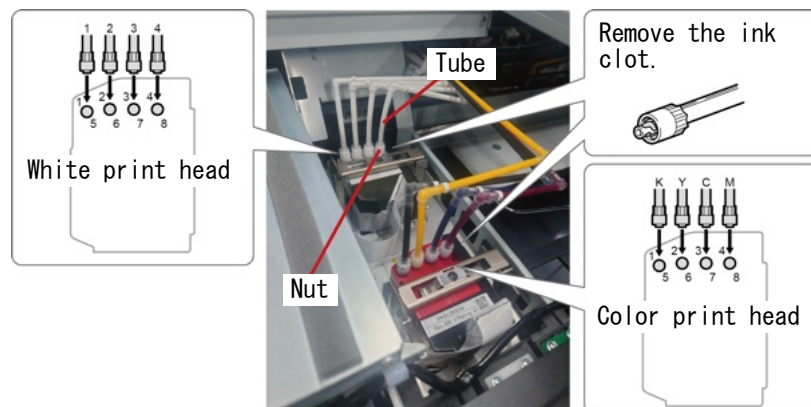
- 17 Place the carriage circuit board cover back into position and tighten the two screws.



- 18 Remove the four plugs from the tubes and connect the tubes to the new print head.

IMPORTANT

- Check the stamp on the print head and the tube number, and make sure that they are connected in the correct position. Incorrectly connecting them may cause the ink to leak during the circulation.



- 19 Tighten the nut firmly until it stops so that each tube is fixed to the print head.
- 20 Close the main unit cover and turn on the power.
- 21 Select the head from [Maintenance] > [Install Ink after Replacing Head] in the menu, and press [OK] according to the on-screen instructions.

Then, the Install Ink after Replacing Head function will be executed.



TIPS

- After the procedures are completed, the current screen will go back to the standby mode screen.
- Replace other print heads in the same way.
- When the ink pouch runs low on its remaining volume of ink, the Install Ink after Replacing Head function can no longer get started. Prepare a new ink pouch, follow the instructions on the screen to replace the ink pouch, and activate the mode again.
- After the procedures are completed, the current screen will go back to the standby mode screen.

- 22 Adjust the carriage speed.
[Adjusting the carriage speed on page 259](#)
- 23 Print the nozzle check patterns.
[Printing out the nozzle check pattern \(checking on the print heads\) on page 260](#)
- 24 Perform the initial settings after head replacement configuration.
[Initial settings after head replacement on page 79](#)
- 25 Adjust the ejection timing of the print head.
[Firing adjustment on page 81](#)
- 26 Perform the platen feed adjustment.
[Platen feed adjustment on page 83](#)
- 27 Make the position adjustment between the white head and the color head.
[White/color alignment on page 84](#)



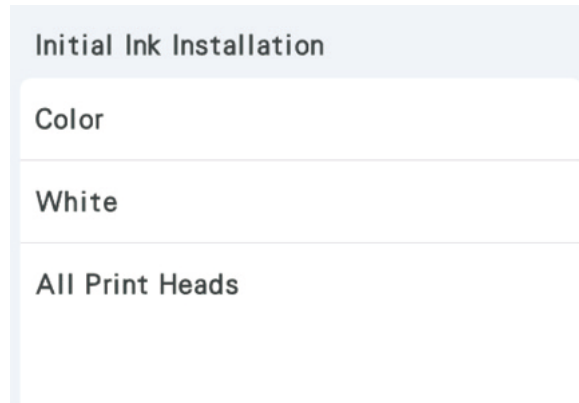
TIPS

- In the case of color ink mode, the position adjustment between the white head and the color head is not necessary.

9.2.5 Re-install the ink

Ink should be re-installed when an entrance of air into the print head or tube prevents proper ink-jet operation and remedial measure cannot improve the condition.

- 1 From the menu, select [Maintenance] > [Initial Ink Installation].
- 2 Select [Color], [White], or [All Print Heads].



- 3 Operate the panel according to the message displayed on screen.
Initial ink installation will be operated.



TIPS

- Estimated time to finish is 20 minutes for [White] and 15 minutes for [Color], which, however, may fluctuate depending on the temperature environment and printer status. After the procedures are completed, the current screen will go back to the standby mode screen.

9.3 Professional menu

Some of the troubleshooting functions are provided as "Professional Menu". Use this menu only when instructed so by your dealer.

"Professional Menu" is protected with a password. After the menu is selected, enter the following password.

Password: promenu

Professional menu list

"Professional Menu" includes the following functions. For details on each function, refer to the respective page.

Menu
Cap cleaning
Printer transport preparation
Detailed version information

9.3.1 Cap cleaning

Fill the selected cap with cleaning solution.

Use this procedure only when so instructed by your dealer.

- 1 From the Professional menu, select [Cap Cleaning].
- 2 Select the cap to be filled with cleaning solution and press [OK].

IMPORTANT

- Leaving the cap filled with cleaning solution on the color side may cause color mixing. Be careful.

9.3.2 Printer transport preparation

When moving or shipping the printer, please contact your Brother dealer.

9.3.3 Detailed version information

The information on hardware and BIOS version of the panel circuit board is displayed.

The user does not need to use this menu normally.

In cases where the operation panel or LCD display of the printer malfunctions, you may be required by our service personnel to check your printer's detailed version information menu. In that case, let the service personnel know the information displayed in this menu.

9.4 Acquisition of log file

In cases where the printer malfunctions, you may be required by our service personnel to obtain your printer's log file.

For this reason, please save your printer's log file to a file.

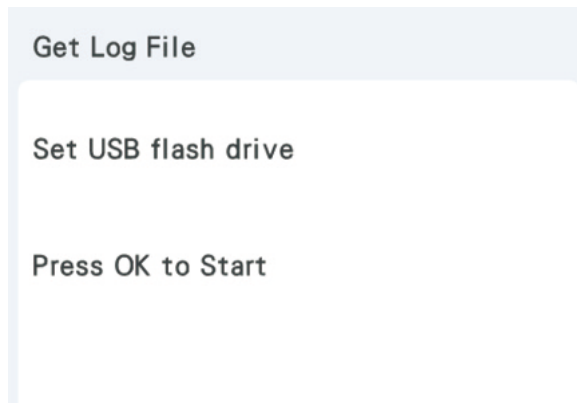


TIPS

- To the resultant file, such filename (.log) that automatically identifies your printer will be given.

Fetch a log file from USB flash memory

- 1 Insert a USB flash memory into the insertion slot of the printer.
- 2 Select [Get Log File] from the menu.



- 3 Then, the print button stops blinking, and the log file writing operation will be completed when you hear the sound of pong.

IMPORTANT

- Never remove the USB flash memory from the printer when the print button is blinking. Otherwise, the USB flash memory may be damaged, rendering its internal data to be unreadable.

- 4 Obtain the log file saved to the USB flash memory, and send such file to our service personnel.

Fetch a log file via USB/LAN connection

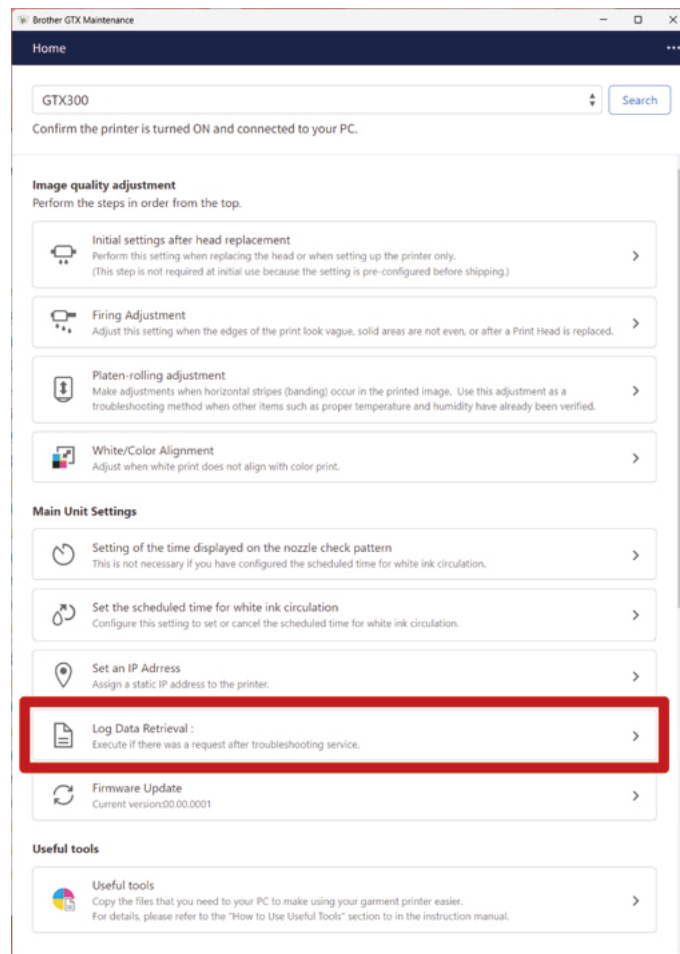
- 1 Select "GTX Maintenance #" from "Brother GTX Maintenance Tools" in the Start menu.



TIPS

- The "#" of "GTX Maintenance #" is a version number. The version number is changed with app update.

- 2 From launched "GTX Maintenance", select [Log Data Retrieval].



- 3 Perform the required operation by following the on-screen instructions.

Chapter 10

Error message

Error message

What is shown below is the error message list of the GTX 300 printer. Any error message is displayed on the liquid crystal panel.

Please try to solve any error according to the resolution strategy.

Error code	Panel message	Description	Remedy
0001	[I failed in initialization. Turn OFF and ON]	No communication was established between the main circuit board and panel circuit board when the power was turned on. (Displayed in English regardless of the selected language.)	Check and see if any source produces a loud noise near the printer. If the problem persists even after reactivating the printer, please contact your dealer.
0011	[Machine Error]	No communication was established between the main circuit board and the color head hardware of the carriage circuit board when the power was turned on.	Check and see if any source produces a loud noise near the printer. If the problem persists even after reactivating the printer, please contact your dealer.
0013	[Machine Error]	No communication was established between the main circuit board and the white head hardware of the carriage circuit board when the power was turned on.	Check and see if any source produces a loud noise near the printer. If the problem persists even after reactivating the printer, please contact your dealer.
0021	[Machine Error]	No communication was established between the main circuit board and ink supply circuit board when the power was turned on.	Check and see if any source produces a loud noise near the printer. If the problem persists even after reactivating the printer, please contact your dealer.
0022	[Machine Error]	No communication was established between the main circuit board and maintenance circuit board when the power was turned on.	Check and see if any source produces a loud noise near the printer. If the problem persists even after reactivating the printer, please contact your dealer.
0042	[Machine Error]	No communication was established inside the main circuit board when the power was turned on.	Check and see if any source produces a loud noise near the printer. If the problem persists even after reactivating the printer, please contact your dealer.
0043	[Machine Error]	No communication was established inside the main circuit board when the power was turned on.	Check and see if any source produces a loud noise near the printer. If the problem persists even after reactivating the printer, please contact your dealer.

Error code	Panel message	Description	Remedy
0111	[Machine Error]	A communication error has occurred between the main circuit board and carriage circuit board (color head area) while the printer is in operation.	Check and see if any source produces a loud noise near the printer. If the problem persists even after reactivating the printer, please contact your dealer.
0113	[Machine Error]	A communication error has occurred between the main circuit board and carriage circuit board (white head area) while the printer is in operation.	Check and see if any source produces a loud noise near the printer. If the problem persists even after reactivating the printer, please contact your dealer.
0121	[Machine Error]	A communication error occurred between the main circuit board and ink supply circuit board while the printer was in operation.	Check and see if any source produces a loud noise near the printer. If the problem persists even after reactivating the printer, please contact your dealer.
0122	[Machine Error]	A communication error occurred between the main circuit board and maintenance circuit board while the printer was in operation.	Check and see if any source produces a loud noise near the printer. If the problem persists even after reactivating the printer, please contact your dealer.
0141	[Machine Error]	A communication error has occurred between the main circuit board and panel circuit board while the printer is in operation.	Check and see if any source produces a loud noise near the printer. If the problem persists even after reactivating the printer, please contact your dealer.
0142	[Machine Error]	No communication was established inside the main circuit board while the printer was in operation.	Check and see if any source produces a loud noise near the printer. If the problem persists even after reactivating the printer, please contact your dealer.
0143	[Machine Error]	No communication was established inside the main circuit board while the printer was in operation.	Check and see if any source produces a loud noise near the printer. If the problem persists even after reactivating the printer, please contact your dealer.
1000	[Cleaning Solution Low - Add More]	The cleaning solution is running low.	Refill the cleaning solution tank with cleaning solution.
1001	[Cleaning Solution Out - Add More]	The cleaning solution has run out.	Refill the cleaning solution tank with cleaning solution.
1031	[Color Head Getting Warm]	The temperature of the color head is rising.	Please wait until the temperature decreases. If the problem persists, please contact your dealer.
1033	[W Head Temp Rising]	The temperature of the white head is rising.	Please wait until the temperature decreases. If the problem persists, please contact your dealer.

Error code	Panel message	Description	Remedy
1060	[Temp Low]	The ambient temperature is lower than the scope covered by its warranty for the best print result.	Raise your room temperature.
1061	[Temp High]	The ambient temperature is higher than the scope covered by its warranty for the best print result.	Lower your room temperature.
1064	[Humidity Too Low]	The humidity is lower than the scope covered by its warranty for the best print result.	Raise your room humidity.
1065	[Humidity Too High]	The humidity is higher than the scope covered by its warranty for the best print result.	Lower your room humidity. Condensation may occur on parts in the printer.
1070	[Battery To Be Replaced]	It is time to replace the battery on the main circuit board.	Note the error code and error message, and notify your dealer.
1080	[Please Adjust RTC]	The built-in clock has not been set up.	Note the error code and error message, and notify your dealer.
1085	[Please Adjust RTC]	The built-in clock has not been set up.	Note the error code and error message, and notify your dealer.
1090	[Clean Nozzle Guard and Cap]	The nozzle guard and cap need cleaning.	Select the [Clean nozzle guard and cap] menu and perform cleaning.
1091	[Clean Nozzle Guard and Cap]	The nozzle guard and cap need cleaning.	Select the [Clean nozzle guard and cap] menu and perform cleaning.
1202	[Remove the White Ink Cartridge and Shake It]	The white ink pouch needs to be shaken to stir the ink so that it does not settle.	Remove the white ink cartridge and shake it well to stir the white ink sufficiently.
1300	[Replace Cap Chip and Cap Foam]	The cap chip and cap foam need replacement.	Select the [Replace the maintenance kit] menu and replace the parts, which are included in the maintenance kit.
1301	[Replace Cap Chip and Cap Foam]	The cap chip and cap foam need replacement.	Select the [Replace the maintenance kit] menu and replace the parts, which are included in the maintenance kit.
1340	[Replace Wiper]	The wiper needs to be replaced.	Select the [Replace the maintenance kit] menu and replace the parts, which are included in the maintenance kit.
1341	[Replace Wiper]	The wiper needs to be replaced.	Select the [Replace the maintenance kit] menu and replace the parts, which are included in the maintenance kit.
1401	[Ink Not Set after Filter Replacement]	Because the black filter has been replaced, ink installation is needed.	Note the error code and error message, and notify your dealer.

Error code	Panel message	Description	Remedy
1402	[Ink Not Set after Filter Replacement]	Because yellow filter has been replaced, ink installation is needed.	Note the error code and error message, and notify your dealer.
1403	[Ink Not Set after Filter Replacement]	Because the cyan filter has been replaced, ink installation is needed.	Note the error code and error message, and notify your dealer.
1404	[Ink Not Set after Filter Replacement]	Because the magenta filter has been replaced, ink installation is needed.	Note the error code and error message, and notify your dealer.
1405	[Ink Not Set after Filter Replacement]	Because the W1 filter has been replaced, ink installation is needed.	Note the error code and error message, and notify your dealer.
1406	[Ink Not Set after Filter Replacement]	Because the W2 filter has been replaced, ink installation is needed.	Note the error code and error message, and notify your dealer.
1407	[Ink Not Set after Filter Replacement]	Because the W3 filter has been replaced, ink installation is needed.	Note the error code and error message, and notify your dealer.
1408	[Ink Not Set after Filter Replacement]	Because the W4 filter has been replaced, ink installation is needed.	Note the error code and error message, and notify your dealer.
1500	[Replace Mist Fan Filter]	The mist fan filter needs to be replaced.	Select the [Replacing mist fan filters] menu and replace the parts. Replace both the right and left fans.
1600	[Replace Flushing Foam]	The flushing foam needs to be replaced.	Select the [Replace the maintenance kit] menu and replace the parts, which are included in the maintenance kit.
1601	[Replace Flushing Foam]	The flushing foam needs to be replaced.	Select the [Replace the maintenance kit] menu and replace the parts, which are included in the maintenance kit.
1801	[Ink Not Set after Head Replacement (Color)]	Because the color head has been replaced, the Install Ink after Replacing Head function needs to be put into execution.	Select the [Install Ink after Replacing Head] menu to install the ink for the color head.
1803	[Ink Not Set after Head Replacement (White)]	Because the white head has been replaced, the Install Ink after Replacing Head function needs to be put into execution.	Select the [Install Ink after Replacing Head] menu to install the ink for the white head.
1901	[Perform Initial Ink Installation]	Initial ink installation has not been performed yet.	Select the [Initial Ink Installation] menu to perform initial ink installation.
1902	[Install Initial Ink (KYM)]	Initial ink installation for the color heads has not been performed yet.	Select the [Initial Ink Installation] menu to perform initial ink installation for the color heads.
1903	[Install Initial Ink (W)]	Initial ink installation for the white head has not been performed yet.	Select the [Initial Ink Installation] menu to perform initial ink installation for the white head.

Error code	Panel message	Description	Remedy
1922	[It's time for technical maintenance and inspection of 50,000 sheets. Please contact the service person.]	Now, 50,000-sheet periodical maintenance is needed.	Make note of the displayed message, and please notify it to your dealer.
1924	[It's time for technical maintenance and inspection of 100,000 sheets. Please contact the service person.]	Now, 100,000-sheet periodical maintenance is needed.	Make note of the displayed message, and please notify it to your dealer.
1925	[It's time for technical maintenance and inspection of 150,000 sheets. Please contact the service person.]	Now, 150,000-sheet periodical maintenance is needed.	Make note of the displayed message, and please notify it to your dealer.
1926	[It's time for technical maintenance and inspection of 200,000 sheets. Please contact the service person.]	Now, 200,000-sheet periodical maintenance is needed.	Make note of the displayed message, and please notify it to your dealer.
2000	[Cartridge Not Set Black]	No black ink cartridge exists.	Place the black ink cartridge in position.
2001	[Cartridge Not Set Magenta]	No magenta ink cartridge exists.	Place the magenta ink cartridge in position.
2002	[Cartridge Not Set Cyan]	No cyan ink cartridge exists.	Place the cyan ink cartridge in position.
2003	[Cartridge Not Set Yellow]	No yellow ink cartridge exists.	Place the yellow ink cartridge in position.
2004	[Cartridge Not Set White]	No white ink cartridge exists.	Place the white ink cartridge in position.
2020	[No Ink Black]	The black ink has run out.	Replace the black ink.
2021	[No Ink Magenta]	The magenta ink has run out.	Replace the magenta ink.
2022	[No Ink Cyan]	The cyan ink has run out.	Replace the cyan ink.
2023	[No Ink Yellow]	The yellow ink has run out.	Replace the yellow ink.
2024	[No Ink White]	The white ink has run out.	Replace the white ink.

Error code	Panel message	Description	Remedy
2030	[IC Chip Error Black]	The black ink pouch cannot be identified properly.	Make sure that the cartridge is inserted in the correct position and that the correct color of pouch is installed. Make sure that the cartridge is fully inserted into the printer. Make sure that the ink pouch is correctly set on the cartridge. Make sure that the metal contacts at the back of the ink pouch are not dirtied with ink.
2031	[IC Chip Error Magenta]	The magenta ink pouch cannot be identified properly.	Make sure that the cartridge is inserted in the correct position and that the correct color of pouch is installed. Make sure that the cartridge is fully inserted into the printer. Make sure that the ink pouch is correctly set on the cartridge. Make sure that the metal contacts at the back of the ink pouch are not dirtied with ink.
2032	[IC Chip Error Cyan]	The cyan ink pouch cannot be identified properly.	Make sure that the cartridge is inserted in the correct position and that the correct color of pouch is installed. Make sure that the cartridge is fully inserted into the printer. Make sure that the ink pouch is correctly set on the cartridge. Make sure that the metal contacts at the back of the ink pouch are not dirtied with ink.
2033	[IC Chip Error Yellow]	The yellow ink pouch cannot be identified properly.	Make sure that the cartridge is inserted in the correct position and that the correct color of pouch is installed. Make sure that the cartridge is fully inserted into the printer. Make sure that the ink pouch is correctly set on the cartridge. Make sure that the metal contacts at the back of the ink pouch are not dirtied with ink.

Error code	Panel message	Description	Remedy
2034	[IC Chip Error White]	The white ink pouch cannot be identified properly.	Make sure that the cartridge is inserted in the correct position and that the correct color of pouch is installed. Make sure that the cartridge is fully inserted into the printer. Make sure that the ink pouch is correctly set on the cartridge. Make sure that the metal contacts at the back of the ink pouch are not dirtied with ink.
2050	[Temp Low]	The ambient temperature is lower than the scope covered by its warranty for the best print result.	Raise your room temperature. The temperature requirement for printing varies depending on whether to print on T-shirts (DTG) or print on film (DTF).
2051	[Temp High]	The ambient temperature is higher than the scope covered by its warranty for the best print result.	Lower your room temperature. The temperature requirement for printing varies depending on whether to print on T-shirts (DTG) or print on film (DTF).
2070	[Obstacle on the Platen]	The obstacle sensor detected some obstacle on the platen or print medium	Make sure that no obstacle is placed on the platen. To avoid wrinkling the T-shirt, flatten the surface. Make sure that the platen's height fits the thickness of the print medium.
2071	[Obstacle Detected during Printing]	The obstacle sensor detected some obstacle on the platen or print medium while printing	Perform test printing and check the ejection from the head for any abnormalities. If the ejection is abnormal, immediately perform head cleaning to rectify the abnormality.
2072	[Platen is too low. Adjust it.]	The platen detected to be too low when attempting to start printing	The gap between the medium's print surface and the print head is too large. Make adjustments by raising the platen.
2100	[USB Flash Drive Not Ready]	No USB flash drive has been inserted into its insertion slot.	Reinsert the USB flash drive. Insert the USB flash drive fully. Insert a USB flash drive into the slot, wait for a couple of seconds, and operate the panel. If the problem persists, check on the format type of the USB flash drive. USB flash drives, which are consumables, may not function properly when they got old or they are subjected to an impact.

Error code	Panel message	Description	Remedy
2101	[Not Enough Area]	Writing is not possible because there is not enough free space in the USB flash drive.	Use your PC to check free space on the USB flash drive. Insert the USB flash drive that has enough free space into the slot.
2102	[USB Flash Drive Not Ready]	The USB flash drive cannot be recognized.	Reinsert the USB flash drive. Insert the USB flash drive fully. Insert a USB flash drive into the slot, wait for a couple of seconds, and operate the panel. If the problem persists, check on the format type of the USB flash drive. USB flash drives, which are consumables, may not function properly when they got old or they are subjected to an impact.
2105	[No Files]	The target file does not exist in the USB flash drive.	Connect the USB flash drive to your PC and check on the data stored in it.
2110	[Receiving History W/O Error1]	There has been no receiving history since the power was turned on.	Press [OK] to clear the error.
2120	[Print Data Auto Delete Enable]	Because the Print Data Auto Delete Enable function remains active, no receiving history menu is available.	Press [OK] to clear the error. When you use the receiving history, disable the Print Data Auto Delete option.
2240	[Ink Expired Black]	The black ink has expired.	The ink pouch has expired. In cases where the printer malfunctions due to the use of expired ink, you may be liable for the cost of repairs even during the guarantee period.
2241	[Ink Expired Magenta]	The magenta ink has expired.	The ink pouch has expired. In cases where the printer malfunctions due to the use of expired ink, you may be liable for the cost of repairs even during the guarantee period.
2242	[Ink Expired Cyan]	The cyan ink has expired.	The ink pouch has expired. In cases where the printer malfunctions due to the use of expired ink, you may be liable for the cost of repairs even during the guarantee period.
2243	[Ink Expired Yellow]	The yellow ink has expired.	The ink pouch has expired. In cases where the printer malfunctions due to the use of expired ink, you may be liable for the cost of repairs even during the guarantee period.

Error code	Panel message	Description	Remedy
2244	[Ink Expired White]	The white ink has expired.	The ink pouch has expired. In cases where the printer malfunctions due to the use of expired ink, you may be liable for the cost of repairs even during the guarantee period.
2250	[Close to Expiration Date Black]	The expiration date of black ink is soon.	The ink pouch will be expired soon.
2251	[Close to Expiration Date Magenta]	The expiration date of magenta ink is soon.	The ink pouch will be expired soon.
2252	[Close to Expiration Date Cyan]	The expiration date of cyan ink is soon.	The ink pouch will be expired soon.
2253	[Close to Expiration Date Yellow]	The expiration date of yellow ink is soon.	The ink pouch will be expired soon.
2254	[Close to Expiration Date White]	The expiration date of white ink is soon.	The ink pouch will be expired soon.
2300	[Special Work Mode]	Under the operation by the service man	If the problem still persists even after reactivating the printer, please contact your dealer.
2347	[Front Cover Open]	The main unit cover is open.	Close the main unit cover.
3000	[PC Communication Error]	Data reception from the PC has been suspended.	Make sure that your PC is connected to the printer, and resend the print data. If you have trouble, restart your PC and the printer. This error may also occur "when the cable is removed during data reception", "when the ongoing operation is canceled on the PC during data reception" or "when the application is terminated during the export of print data".
3001	[PC Communication Error]	Data transmission to the PC has been suspended.	Make sure that your PC is connected to the printer, and resend the print data. If you have trouble, restart your PC and the printer. This error may also occur "when the cable is removed during data reception", "when the ongoing operation is canceled on the PC during data reception" or "when the application is terminated during the export of print data".
3002	[PC Data Error]	Abnormal data has been received from the PC.	Update both the printer driver installed on the PC and the firmware of the printer to the latest version. Make sure that your PC is connected to the printer, and resend the print data. If you have trouble, restart your PC and the printer.

Error code	Panel message	Description	Remedy
3003	[PC Data Error]	Unsupported data has been received from the PC.	Update both the printer driver installed on the PC and the firmware of the printer to the latest version.
3004	[PC Data Error]	A communication error between the PC and printer.	Update both the printer driver installed on the PC and the firmware of the printer to the latest version. Make sure that your PC is connected to the printer, and start communication between your PC and the printer once again. If the problem is still not remedied, restart your PC and the printer.
3005	[PC Data Error]	A communication error between the PC and printer.	Update both the printer driver installed on the PC and the firmware of the printer to the latest version. Make sure that your PC is connected to the printer, and start communication between your PC and the printer once again. If the problem is still not remedied, restart your PC and the printer.
3010	[PC Data Error]	A communication error between the PC and printer.	Make sure that your PC is connected to the printer, and start communication between your PC and the printer once again. If the problem is still not remedied, restart your PC and the printer. If the problem persists, please contact your dealer.
3013	[PC Data Error]	A communication error between the PC and printer.	Make sure that your PC is connected to the printer, and start communication between your PC and the printer once again. If the problem is still not remedied, restart your PC and the printer. If the problem persists, please contact your dealer.
3014	[PC Data Error]	A communication error between the PC and printer.	Make sure that your PC is connected to the printer, and start communication between your PC and the printer once again. If the problem is still not remedied, restart your PC and the printer. If the problem persists, please contact your dealer.
3015	[Can No Longer Receive Data]	Too much print data has been sent from the PC during the print operation.	Check if a large amount of print data has been sent from the PC during the print operation.

Error code	Panel message	Description	Remedy
3400	[PC Data Error]	Abnormal data has been received from the PC.	Restart your PC and the printer, and then perform operation again. Check the compatibility in model and version between the printer driver used for creating the print data and the printer. Create the print data once again.
3401	[PC Data Error]	Abnormal data has been received from the PC.	Restart your PC and the printer, and then perform operation again. Check the compatibility in model and version between the printer driver used for creating the print data and the printer. Create the print data once again.
3402	[PC Data Error]	Abnormal data has been received from the PC.	Restart your PC and the printer, and then perform operation again. Check the compatibility in model and version between the printer driver used for creating the print data and the printer. Create the print data once again.
3407	[Blank Data]	Print data with no images contained has been received from the PC.	Check on the print data file by means of "GTX300 File Viewer". For example, please confirm the print range and paper size for your software application through the Print Preview function, etc. of Photoshop.
3408	[PC Data Error (too large)]	Abnormal data has been received from the PC.	Check the compatibility in model and version between the printer driver used for creating the print data and the printer. Note the error code and error message, and notify your dealer.
3410	[PC Data Error]	Abnormal data has been received from the PC.	Check on the print data file by means of "GTX300 File Viewer". Make sure that your PC is connected to the printer, and start communication between your PC and the printer once again. Restart your PC and the printer. If the problem persists, please contact your dealer.

Error code	Panel message	Description	Remedy
3411	[PC Data Error]	Abnormal data has been received from the PC.	Check on the print data file by means of "GTX300 File Viewer". Make sure that your PC is connected to the printer, and start communication between your PC and the printer once again. Restart your PC and the printer. If the problem persists, please contact your dealer.
3412	[PC Data Error]	Abnormal data has been received from the PC.	Check on the print data file by means of "GTX300 File Viewer". Make sure that your PC is connected to the printer, and start communication between your PC and the printer once again. Restart your PC and the printer. If the problem persists, please contact your dealer.
4100	[USB Flash Drive Access Error]	The file in the USB flash drive is not accessible.	Check on the data in the USB flash drive. Remove the USB flash drive and then insert it back fully to perform the operation again. If the problem is still not remedied, restart the printer and try to operate it once again. Try using a different USB flash drive.
4101	[USB Flash Drive Access Error]	File creation is not possible in USB flash drive.	Check on the data in the USB flash drive. Remove the USB flash drive and then insert it back fully to perform the operation again. If the problem is still not remedied, restart the printer and try to operate it once again. Try using a different USB flash drive.
4103	[USB Flash Drive Access Error]	The file in the USB flash drive is not accessible.	Check on the data in the USB flash drive. Remove the USB flash drive and then insert it back fully to perform the operation again. If the problem is still not remedied, restart the printer and try to operate it once again. Try using a different USB flash drive.

Error code	Panel message	Description	Remedy
4104	[USB Flash Drive Access Error]	The file in the USB flash drive is not readable.	Check on the data in the USB flash drive. Remove the USB flash drive and then insert it back fully to perform the operation again. If the problem is still not remedied, restart the printer and try to operate it once again. Try using a different USB flash drive.
4105	[USB Flash Drive Access Error]	The file in the USB flash drive is not writable.	Check on the data in the USB flash drive. Remove the USB flash drive and then insert it back fully to perform the operation again. If the problem is still not remedied, restart the printer and try to operate it once again. Try using a different USB flash drive.
4106	[Illegal Format]	The file in the USB flash drive is not accessible.	Check on the data in the USB flash drive. Remove the USB flash drive and then insert it back fully to perform the operation again. If the problem is still not remedied, restart the printer and try to operate it once again. Try using a different USB flash drive.
4108	[USB Flash Drive Access Error]	The file in the USB flash drive is not readable.	Check on the data in the USB flash drive. Remove the USB flash drive and then insert it back fully to perform the operation again. If the problem is still not remedied, restart the printer and try to operate it once again. Try using a different USB flash drive.
4200	[Machine Error]	An error has been detected in the display data on the LCD screen.	In the event that this error is displayed after suspending the updating of firmware, please start the updating operation over from the beginning. If the problem persists, please contact your dealer.
4201	[Machine Error]	An error has been detected in the display data on the LCD screen.	In the event that this error is displayed after suspending the updating of firmware, please start the updating operation over from the beginning. If the problem persists, please contact your dealer.

Error code	Panel message	Description	Remedy
4202	[Machine Error]	An error has been detected in the display data on the LCD screen.	In the event that this error is displayed after suspending the updating of firmware, please start the updating operation over from the beginning. If the problem persists, please contact your dealer.
4400	[Test Print Data Error]	An error has been detected in the built-in test print data.	In the event that this error is displayed after suspending the updating of firmware, please start the updating operation over from the beginning. If the problem persists, please contact your dealer.
4401	[Test Print Data Error]	An error has been detected in the built-in test print data.	In the event that this error is displayed after suspending the updating of firmware, please start the updating operation over from the beginning. If the problem persists, please contact your dealer.
4402	[Test Print Data Error]	An error has been detected in the built-in test print data.	In the event that this error is displayed after suspending the updating of firmware, please start the updating operation over from the beginning. If the problem persists, please contact your dealer.
4500	[Machine Error]	Network-related settings have been failed.	Press [OK] to clear the error. Contact your network administrator to ask for the network settings.
4501	[IP Address Setting Error]	Network-related settings have been failed.	Press [OK] to clear the error. Use the maintenance tool to set up the correct IP address and subnet mask value once again.
4502	[Machine Error]	Network-related settings have been failed.	Press [OK] to clear the error. Contact your network administrator to ask for the network settings.
4503	[Machine Error]	Network-related settings have been failed.	Press [OK] to clear the error. Use the maintenance tool to set up the correct default gateway address once again.
4504	[IP Address Setting Error]	Network-related settings have been failed.	Press [OK] to clear the error. Use the maintenance tool to set up the correct IP address and subnet mask value once again.

Error code	Panel message	Description	Remedy
4505	[Machine Error]	Network-related settings have been failed.	Press [OK] to clear the error. If the problem persists even after reactivating the printer, please contact your dealer.
4510	[Machine Error]	Network-related settings have been failed.	Press [OK] to clear the error. If the problem persists even after reactivating the printer, please contact your dealer.
5010	[PC Data Error]	An error has been detected in the current print data being run.	Press [OK] to clear the error. Create the print data again on the PC to load it to the printer, and try the print operation again.
5020	[Machine Error]	An error has been detected during carriage control.	If the problem persists even after reactivating the printer, please contact your dealer.
5021	[Machine Error]	An error has been detected during the operation of the heads.	If the problem persists even after reactivating the printer, please contact your dealer.
5022	[Machine Error]	An error has been detected during the operation of the heads.	If the problem persists even after reactivating the printer, please contact your dealer.
5080	[Machine Error]	An error has been detected during maintenance unit control.	If the problem persists even after reactivating the printer, please contact your dealer.
5081	[Machine Error]	An error has been detected during maintenance unit control.	If the problem persists even after reactivating the printer, please contact your dealer.
5094	[Machine Error]	An error has been detected during platen loading.	If the problem persists even after reactivating the printer, please contact your dealer.
5095	[Machine Error]	An error has been detected during platen unloading.	If the problem persists even after reactivating the printer, please contact your dealer.
5096	[Machine Error]	An error has been detected while the platen is in operation during printing.	If the problem persists even after reactivating the printer, please contact your dealer.
5501	[Machine Error]	An error has been detected in the control of the black sub tank.	Check that the ink pouch is wound correctly. If not, open the cartridge cover and have the ink pouch wound correctly. If the ink pouch is found empty, set a new pouch. If the problem persists even after reactivating the printer, please contact your dealer.
5502	[Machine Error]	An error has been detected in the control of the magenta sub tank.	Check that the ink pouch is wound correctly. If not, open the cartridge cover and have the ink pouch wound correctly. If the ink pouch is found empty, set a new pouch. If the problem persists even after reactivating the printer, please contact your dealer.

Error code	Panel message	Description	Remedy
5503	[Machine Error]	An error has been detected in the control of the cyan sub tank.	Check that the ink pouch is wound correctly. If not, open the cartridge cover and have the ink pouch wound correctly. If the ink pouch is found empty, set a new pouch. If the problem persists even after reactivating the printer, please contact your dealer.
5504	[Machine Error]	An error has been detected in the control of the yellow sub tank.	Check that the ink pouch is wound correctly. If not, open the cartridge cover and have the ink pouch wound correctly. If the ink pouch is found empty, set a new pouch. If the problem persists even after reactivating the printer, please contact your dealer.
5521	[Machine Error]	An error has been detected in the control of the black sub tank.	If the problem persists even after reactivating the printer, please contact your dealer.
5522	[Machine Error]	An error has been detected in the control of the magenta sub tank.	If the problem persists even after reactivating the printer, please contact your dealer.
5523	[Machine Error]	An error has been detected in the control of the cyan sub tank.	If the problem persists even after reactivating the printer, please contact your dealer.
5524	[Machine Error]	An error has been detected in the control of the yellow sub tank.	If the problem persists even after reactivating the printer, please contact your dealer.
5600	[Machine Error]	An error has been detected during ink carriage control.	Make sure that the pouch is correctly installed to the cartridge. Make sure that the cartridge is fully inserted into the printer. Make sure that the metal contacts at the back of the ink pouch are not dirtied with ink. If the problem persists even after reactivating the printer, please contact your dealer.
5601	[Machine Error]	An error has been detected during ink carriage control.	Make sure that the pouch is correctly installed to the cartridge. Make sure that the cartridge is fully inserted into the printer. Make sure that the metal contacts at the back of the ink pouch are not dirtied with ink. If the problem persists even after reactivating the printer, please contact your dealer.

Error code	Panel message	Description	Remedy
5602	[Machine Error]	An error has been detected during ink carriage control.	Make sure that the pouch is correctly installed to the cartridge. Make sure that the cartridge is fully inserted into the printer. Make sure that the metal contacts at the back of the ink pouch are not dirtied with ink. If the problem persists even after reactivating the printer, please contact your dealer.
5605	[Machine Error]	An error has been detected during ink carriage control.	If the problem persists even after reactivating the printer, please contact your dealer.
5606	[Machine Error]	An error has been detected during ink carriage control.	If the problem persists even after reactivating the printer, please contact your dealer.
5607	[Machine Error]	An error has been detected during ink carriage control.	If the problem persists even after reactivating the printer, please contact your dealer.
5801	[Machine Error]	An error has been detected in the board-to-board communication inside the printer.	Check and see if any source produces a loud noise near the printer. If the problem persists even after reactivating the printer, please contact your dealer.
5802	[Machine Error]	An error has been detected in the board-to-board communication inside the printer.	Check and see if any source produces a loud noise near the printer. If the problem persists even after reactivating the printer, please contact your dealer.
5803	[Machine Error]	An error has been detected in the board-to-board communication inside the printer.	Check and see if any source produces a loud noise near the printer. If the problem persists even after reactivating the printer, please contact your dealer.
5804	[Machine Error]	An error has been detected in the board-to-board communication inside the printer.	Check and see if any source produces a loud noise near the printer. If the problem persists even after reactivating the printer, please contact your dealer.
6004	[Machine Error]	An error in the platen obstacle sensor has been detected.	Check to see if something is placed on the platen. Check to see if the obstacle sensor is covered with something. If the problem persists even after reactivating the printer, please contact your dealer.

Error code	Panel message	Description	Remedy
6005	[Machine Error]	An error in the "Platen too low" sensor has been detected.	Check to see if something is placed on the platen. Check to see if the obstacle sensor is covered with something. If the problem persists even after reactivating the printer, please contact your dealer.
6006	[Machine Error]	The platen motor stopped abnormally.	Check and see if any source produces a loud noise near the printer. If the problem persists even after reactivating the printer, please contact your dealer.
6007	[Machine Error]	An error has been detected while checking the mechanism for loading and unloading the platen.	Check and see if any source produces a loud noise near the printer. If the problem persists even after reactivating the printer, please contact your dealer.
6010	[Machine Error]	An error has been detected when writing to the EEPROM on the main circuit board.	Check and see if any source produces a loud noise near the printer. If the problem persists even after reactivating the printer, please contact your dealer.
6011	[Machine Error]	An error has been detected when writing to the flash ROM on the main circuit board.	Check and see if any source produces a loud noise near the printer. If the problem persists even after reactivating the printer, please contact your dealer.
6012	[Machine Error]	An error has been detected when writing to the flash ROM on the main circuit board.	Check and see if any source produces a loud noise near the printer. If the problem persists even after reactivating the printer, please contact your dealer.
6015	[Machine Error]	An error has been detected when writing to the flash ROM on the panel circuit board.	Check and see if any source produces a loud noise near the printer. If the problem persists even after reactivating the printer, please contact your dealer.
6016	[No Enable Restore Data]	An error has been detected when reading from the flash ROM on the panel circuit board.	Check and see if any source produces a loud noise near the printer. If the problem persists even after reactivating the printer, please contact your dealer.
6019	[Machine Error]	An error has been detected when writing to the memory on the main circuit board.	Note the error code and error message, and notify your dealer.
6021	[No Battery]	The battery on the main circuit board is dead.	Note the error code and error message, and notify your dealer.

Error code	Panel message	Description	Remedy
6031	[Machine Error]	An error has been detected in the platen button at the startup.	Make sure that no buttons on the operation panel are pressed.
6033	[Machine Error]	An error has been detected in the cancel button at the startup.	Make sure that no buttons on the operation panel are pressed.
6044	[Machine Error]	An error has been detected in the touch panel at the startup.	Because the startup process performs checks on the touch panel, avoid placing something on it and avoid touching it. If the panel is dirty with ink or wet with water, wipe it off after turning the printer off. If the problem persists even after reactivating the printer, please contact your dealer.
6046	[Machine Error]	The main circuit board firmware and panel circuit board firmware are not compatible.	Restart the printer and update the firmware again. Check if the firmware update file is for the model of your printer. If the problem persists, please contact your dealer.
6102	[Machine Error]	The carriage has stopped abnormally.	If the problem still persists even after restarting the printer, please contact your dealer after noting the error code and message displayed.
6103	[Machine Error]	The head cap has not been locked successfully.	If the problem still persists even after restarting the printer, please contact your dealer after noting the error code and message displayed.
6104	[Machine Error]	Carriage does not move.	If the problem still persists even after restarting the printer, please contact your dealer after noting the error code and message displayed.
6106	[Machine Error]	The carriage has possibly bumped against the frame.	If the problem still persists even after restarting the printer, please contact your dealer after noting the error code and message displayed.
6107	[Machine Error]	The carriage has stopped abnormally.	If the problem still persists even after restarting the printer, please contact your dealer after noting the error code and message displayed.
6108	[Machine Error]	The carriage has stopped abnormally.	If the problem still persists even after restarting the printer, please contact your dealer after noting the error code and message displayed.
6109	[Machine Error]	Operation has stopped abnormally within the print range.	If the problem still persists even after restarting the printer, please contact your dealer after noting the error code and message displayed.
6110	[Machine Error]	The head is unable to be moved from the standby position.	If the problem still persists even after restarting the printer, please contact your dealer after noting the error code and message displayed.

Error code	Panel message	Description	Remedy
6111	[Machine Error]	The head is unable to go onto the cap.	If the problem still persists even after restarting the printer, please contact your dealer after noting the error code and message displayed.
6130	[Machine Error. Adjust CR]	Abnormal decrease in the carriage speed has been detected.	Referring to Adjusting the carriage speed on page 259 , perform [CR Speed Adjustment]. If the problem still persists, make note of the error code and error message, and please notify it to your dealer.
6131	[Machine Error. Adjust CR]	Excessive increase in the carriage speed has been detected.	Referring to Adjusting the carriage speed on page 259 , perform [CR Speed Adjustment]. If the problem still persists, make note of the error code and error message, and please notify it to your dealer.
6132	[Machine Error. Adjust CR]	Carriage stop adjustment error	Referring to Adjusting the carriage speed on page 259 , perform [CR Speed Adjustment]. If the problem still persists, make note of the error code and error message, and please notify it to your dealer.
6133	[Machine Error]	Carriage stop adjustment error Reverse direction	If the problem still persists even after restarting the printer, please contact your dealer after noting the error code and message displayed.
6134	[Machine Error]	Carriage stop adjustment error Forward direction	If the problem still persists even after restarting the printer, please contact your dealer after noting the error code and message displayed.
6151	[Machine Error]	An error has been detected in the communication with carriage control hardware.	If the problem still persists even after restarting the printer, please contact your dealer after noting the error code and message displayed.
6221	[Machine Error]	An error has been detected in the temperature of color head.	Ascertain whether or not the cable for the heads is disconnected. If the problem still persists even after restarting the printer, please contact your dealer after noting the error code and message displayed.
6223	[Machine Error]	An error has been detected in the temperature of white head.	Ascertain whether or not the cable for the heads is disconnected. If the problem still persists even after restarting the printer, please contact your dealer after noting the error code and message displayed.

Error code	Panel message	Description	Remedy
6231	[Machine Error]	An error has been detected in the voltage of color head.	Ascertain whether or not the cable for the heads is disconnected. If the problem still persists even after restarting the printer, please contact your dealer after noting the error code and message displayed.
6233	[Machine Error]	An error has been detected in the voltage of white head.	Ascertain whether or not the cable for the heads is disconnected. If the problem still persists even after restarting the printer, please contact your dealer after noting the error code and message displayed.
6241	[Machine Error]	An error has been detected in the FFC connection of color head.	Ascertain whether or not the cable for the heads is disconnected. If the problem still persists even after restarting the printer, please contact your dealer after noting the error code and message displayed.
6243	[Machine Error]	An error has been detected in the FFC connection of white head.	Ascertain whether or not the cable for the heads is disconnected. If the problem still persists even after restarting the printer, please contact your dealer after noting the error code and message displayed.
6251	[Machine Error]	An error has been detected in the fan of color head.	Ascertain whether or not the cable for the heads is disconnected. If the problem still persists even after restarting the printer, please contact your dealer after noting the error code and message displayed.
6253	[Machine Error]	An error has been detected in the fan of white head.	Ascertain whether or not the cable for the heads is disconnected. If the problem still persists even after restarting the printer, please contact your dealer after noting the error code and message displayed.
6502	[Machine Error]	An error has been detected during the firmware update of the main circuit board.	Make sure that the correct bwf file is going to be updated. Restart the printer and the PC and perform the operation again. If the problem still persists, make note of the error code and error message, and please notify it to your dealer.

Error code	Panel message	Description	Remedy
6503	[Machine Error]	An error has been detected during the firmware update of the carriage circuit board.	Make sure that the correct bwf file is going to be updated. Restart the printer and the PC and perform the operation again. If the problem still persists, make note of the error code and error message, and please notify it to your dealer.
6504	[Machine Error]	An error has been detected during the firmware update of the main circuit board.	Make sure that the correct bwf file is going to be updated. Restart the printer and the PC and perform the operation again. If the problem still persists, make note of the error code and error message, and please notify it to your dealer.
6505	[Machine Error]	An error has been detected during the firmware update of the panel circuit board.	Make sure that the correct bwf file is going to be updated. Restart the printer and the PC and perform the operation again. If the problem still persists, make note of the error code and error message, and please notify it to your dealer.
6506	[Machine Error]	An error has been detected during the firmware update of the main circuit board.	Make sure that the correct bwf file is going to be updated. Restart the printer and the PC and perform the operation again. If the problem still persists, make note of the error code and error message, and please notify it to your dealer.
6507	[Machine Error]	An error has been detected during the firmware update of the main circuit board.	Make sure that the correct bwf file is going to be updated. Restart the printer and the PC and perform the operation again. If the problem still persists, make note of the error code and error message, and please notify it to your dealer.

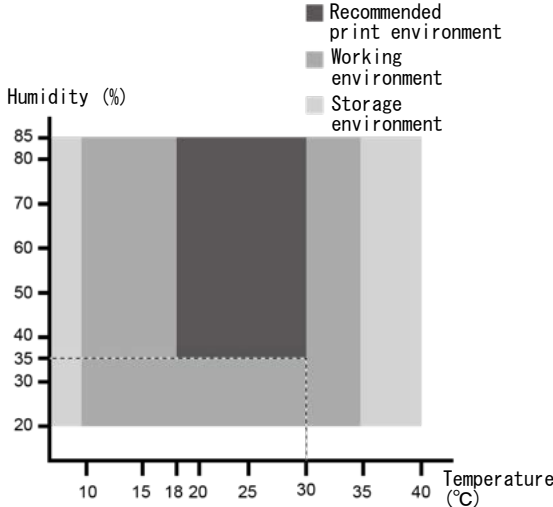
Error code	Panel message	Description	Remedy
6508	[Machine Error]	An error has been detected during the firmware update of the main circuit board.	Make sure that the correct bwf file is going to be updated. Restart the printer and the PC and perform the operation again. If the problem still persists, make note of the error code and error message, and please notify it to your dealer.
6509	[Machine Error]	An error has been detected during the firmware update of the ink supply circuit board or the maintenance circuit board.	Make sure that the correct bwf file is going to be updated. Restart the printer and the PC and perform the operation again. If the problem still persists, make note of the error code and error message, and please notify it to your dealer.
7000	[Machine Error]	The software detected an internal error.	If the problem still persists even after restarting the printer, please contact your dealer after noting the error code and message displayed.
7012	[Machine Error]	The software detected an internal error.	If the problem still persists even after restarting the printer, please contact your dealer after noting the error code and message displayed.
7013	[Machine Error]	The software detected an internal error.	If the problem still persists even after restarting the printer, please contact your dealer after noting the error code and message displayed.
7015	[Machine Error]	The software detected an internal error.	If the problem still persists even after restarting the printer, please contact your dealer after noting the error code and message displayed.
7020	[Machine Error]	The software detected an internal error.	If the problem still persists even after restarting the printer, please contact your dealer after noting the error code and message displayed.
8450	[Machine Error]	There is no response in the communication with the ink supply circuit board.	If the problem still persists even after restarting the printer, please contact your dealer after noting the error code and message displayed.

In the event that other error codes than those that are mentioned above are displayed or that any of the above-mentioned errors cannot be remedied even by following the troubleshooting procedures, please contact your dealer for help.

Chapter 11

Specifications

11.1 Apparatus

Model			GTX300NC		
Printing method			Piezo inkjet method		
Head	Quantity		2 pcs.		
Resolution	Maximum		1200 dpi x 1200 dpi		
Ink	Type		Water-based ink		
	Number of colors		5 colors of CMYKW		
Material supply method			Platen transportation method		
Supported media (size/thick- ness)	Size		14.0 in. (355.6 mm) × 16.5 in. (420.1 mm) (standard platen)		
	Thick- ness	For T- shirt printing	Up to 1.2 in. (30 mm)		
		For film printing	Up to 0.005 in. (0.12 mm)		
Printable area	Maximum		16.0 in. (406.4 mm) ×21.0 in. (533.4 mm)		
Interface			100BASE-TX/1000BASE-T (LAN port), SuperSpeed USB3.0 (USB flash drive), Hi-Speed USB2.0 (PC connection)		
External dimensions			51.0 in. (1,295 mm) × 57.7 in. (1,465 mm) × 23.0 in. (583 mm) (platen retracted)		
Weight			125 kg (276 lb) (including rear cover and platen equipped as standard)		
Installation conditions Environment	Power		Single-phase 100-240 V(Supply voltage fluctuation ±10% max.), 50/60 Hz		
	Power Con- sumptions		When active: 1.8 A max.		
	Tem- pera- ture and humid- ity re- quire- ments	Recom- mended print en- viron- ment	For T-shirt printing	Temperature: 18 to 30°C (64.4 to 86°F) Humidity: 35 to 85% (no condensa- tion)	For T-shirt printing 
			For film print- ing	Temperature: 19 to 30°C (66 to 86°F) Humidity: 35 to 65% (no condensa- tion)	

		Working environment	For T-shirt printing	Temperature: 10 to 35°C (50 to 95°F) Humidity: 20 to 85% (no condensation)	For film printing Legend: ■ Recommended print environment ■ Working environment ■ Storage environment
			For film printing	Temperature: 10 to 35°C (50 to 95°F) Humidity: 20 to 65% (no condensation)	
		Storage environment	Temperature: 0 to 40°C (32 to 104°F) Humidity: 20 to 85% (no condensation)		
Print direction			Bidirectional, unidirectional		
Fixation conditions			For T-shirt printing	Conveyor oven: 160°C (320°F) for 3.5 minutes, or heat press: 180°C (356°F) for 35 seconds * The temperature and time taken for fixation differ depending on the fixation device.	
			For film printing	Powder fixation: 5 minutes at 160°C (320°F) by conveyor oven Transfer: 20 seconds at 150°C (302°F) by heat press (+ additional press of 20 seconds) * The temperature and time taken for fixation differ depending on the fixation device.	
Pretreatment			For T-shirt printing	Pretreatment is required when you print using white ink. Apply pretreatment with a roller or pretreatment device and dry it up with a heat press.	

11.2 Software

OS	Windows 11 (64bit), macOS Sonoma (14.0), macOS Sequoia (15.0) * Both Intel and M1/M2 are supported for macOS.
Min. operating environment	CPU with 2 GHz or above RAM with 8 GB or above For film printing, 16GB of RAM or higher recommended
Display resolution	SXGA (1280 x 1024) or higher
Output	Printer driver, GTX Graphics Lab
Application software for high-level image editing	Adobe® Photoshop CC, Adobe® Illustrator CC

11.3 Ink, cleaning solution, pretreatment

11.3.1 Ink

Name		Black / Magenta / Cyan / Yellow ink pouch
Use expiration date		Expiration date on the pouch pack (supposing storage at normal temperature)
Storage temperature		0 to 40°C (32 to 104°F)
Cautions for storage		- Store them in a place where they are not exposed to direct sunlight. - Keep them out of the reach of children. - Store them away from fire, heat and oxidized substance.
Content		350 ml / 700 ml
External dimensions in transport condition	1-piece set	20.4 in. (width) x 5.2 in. (depth) x 1.9 in. (height) (518 mm (width) x 133 mm (depth) x 48 mm (height)) (same for both 350 ml and 700 ml)
	12-piece set	21.2 in. (width) x 11.4 in. (depth) x 14.9 in. (height) (538 mm (width) x 290 mm (depth) x 378 mm (height)) (same for both 350 ml and 700 ml)

Name		White ink pouch
Use expiration date		Expiration date on the pouch pack (supposing storage at normal temperature)
Storage temperature		0 to 40°C (32 to 104°F)
Cautions for storage		- Store them in a place where they are not exposed to direct sunlight. - Keep them out of the reach of children. - Store them away from fire, heat and oxidized substance.
Content		700ml
External dimensions in transport condition	2-piece set	20.4 in. (width) x 5.2 in. (depth) x 3.4 in. (height) (518 mm (width) x 133 mm (depth) x 87 mm (height))
	12-piece set	21.2 in. (width) x 11.4 in. (depth) x 11.6 in. (height) (538 mm (width) x 290 mm (depth) x 295 mm (height))

11.3.2 Cleaning solution

Name		Cleaning solution
Use expiration date		Expiration date on the container (supposing storage at normal temperature)
Storage temperature		0 to 40°C (32 to 104°F)
Cautions for storage		- Store them in a place where they are not exposed to direct sunlight. - Keep them out of the reach of children. - Store them away from fire, heat and oxidized substance. - Cap the container tightly, and keep it in a cool, dark place with good ventilation.
Content		1.8 L, 5 L
External dimensions in transport condition	1.8 L (6-piece set)	19.1 in. (width) x 13.6 in. (depth) x 14.2 in. (height) (486 mm (width) x 346 mm (depth) x 360 mm (height))
	5 L (4-piece set)	16.0 in. (width) x 16.0 in. (depth) x 16.0 in. (height) (406 mm (width) x 406 mm (depth) x 407 mm (height))

11.3.3 Pretreatment

Name		Pretreatment
Use expiration date		Expiration date on the outer case (supposing storage at normal temperature)
Storage temperature		0 to 40°C (32 to 104°F)
Cautions for storage		- Store them in a place where they are not exposed to direct sunlight. - Keep them out of the reach of children. - Store them away from fire, heat and oxidized substance. - Cap the container tightly, and keep it in a cool, dark place with good ventilation.
Content		20 kg, 5 kg (44 lb, 11 lb)
External dimensions in transport condition	1-piece set	10.4 in. (width) x 10.4 in. (depth) x 15.7 in. (height) (20 kg) (265 mm (width) x 265 mm (depth) x 400 mm (height) (44 lb))
	4-piece set	18.0 in. (width) x 12.6 in. (depth) x 12.5 in. (height) (5 kg) (456 mm (width) x 320 mm (depth) x 318 mm (height) (11 lb))

11.4 Consumable supplies, optional items and replacement parts

About consumable supplies, optional items and replacement parts

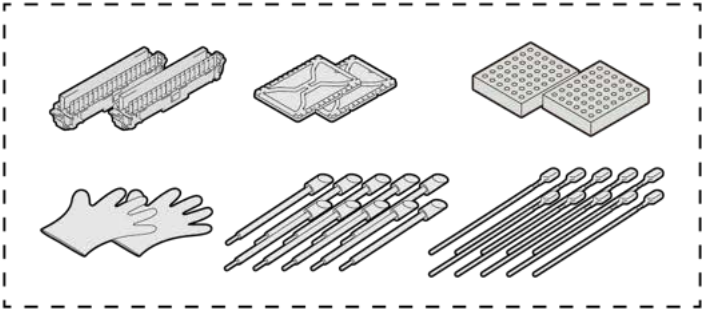
- Consumable supplies/replacement parts: Components that you need to provide to optimize the printer's operation
- Optional items: Available items through purchase order according to customers' usage status

Consumable supplies/replacement parts		Code No.
Black ink pouch	350 ml	GC30K01-350
	700 ml	GC30K01-700
Magenta ink pouch	350 ml	GC30M01-350
	700 ml	GC30M01-700
Cyan ink pouch	350 ml	GC30C01-350
	700 ml	GC30C01-700
Yellow ink pouch	350 ml	GC30Y01-350
	700 ml	GC30Y01-700
White ink pouch	700 ml	GC30W01-700
Cleaning solution	1.8 L	GC30E01-02K
	5 L	GC30E01-05L
Pretreatment	5 kg (11 lb)	GCX-4P05
	20 kg (44 lb)	GCX-4P20
Maintenance kit A300 <Printer-supplied items>		SD4117
Clean stick R	10 pcs.	
Clean stick T	10 pcs.	
Wiper	2 pcs.	
Flushing foam	2 pcs.	
Cap chip and cap foam	2 pcs.	
Gloves	2 pcs.	
Flushing foam	2-piece set	SD0137
Clean stick R	50-piece set	SB7008
Clean stick T	50-piece set	SC0032
Wiper	2 pcs.	SD0138
Cap chip and cap foam	2 pcs.	SD0139
Mist fan filter	2-piece set	SB7007
Grease	1 pcs.	SB3229

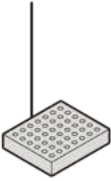
Consumable supplies/replacement parts		Code No.
Cleaning cup	1 pcs.	SB6925

Optional items		Code No.
Large platen X (16"×18"/406×457 mm)		SB6994
Platen sheet 16X18		SB6995
Adult platen X (14"×16"/356×406 mm)		SB6996
Platen sheet 14X16		SB6997
Youth platen X (10"×12"/254×305 mm)		SB6998
Platen sheet 10X12		SB6999
Baby platen X (7"×8"/178×203 mm)		SB7001
Platen sheet 7X8		SB7002
Wide platen (16"×21"/406×533 mm)		SD4110
Regular platen (14"×16.5"/355×420 mm)		SD4112
Pretreatment roller		SB1290
Rubber magnet (4 sets)		SD0621
Bottle ASSY (waste ink tank)		SB2582

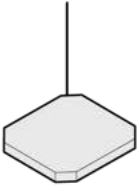
Maintenance kit A300



Flushing foam



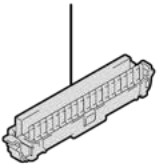
Mist fan filter



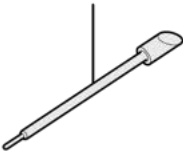
Pretreatment



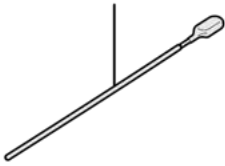
Wiper



Clean stick R



Clean stick T



Grease



Cleaning cup



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mDNSResponder
This software is used in the product which supports mDNS.

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T-Kernel
This software is used in the product as Operating System.

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Source code files were moved around in v0.6.x releases and compared to earlier releases, the programs are now built by first going to a subdirectory (wpa_supplicant or hostapd) and creating build configuration (.config) and running 'make' there (for Linux/BSD/cygwin builds).

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T-Kernel

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