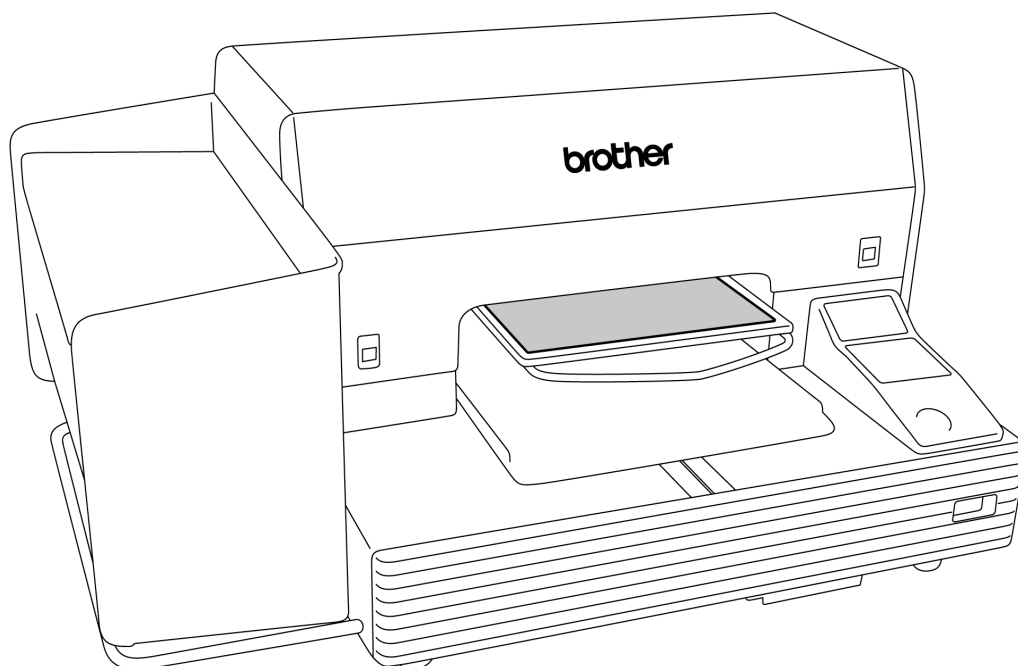


GT-541

INSTRUCTION MANUAL

Please read this manual before using the printer.
Please keep this manual within easy reach for quick reference.

GARMENT PRINTER



brother[®]

GT-541 US support homepage <http://www.brother-usa.com/Garmentprinters/>

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>.




Thank you very much for buying a BROTHER printer. Before using your new printer, please read the safety instructions below and the explanations given in the instruction manual.

SAFETY INSTRUCTIONS







[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 severe injury.
 CAUTION	The instructions which follow this term indicate situations where failure to follow the instructions could cause injury when using the machine or physical damage to equipment and surroundings.

Symbols

-  This symbol () indicates something that you should be careful of. The picture inside the triangle indicates the nature of the caution that must be taken.
(For example, the symbol at left means "beware of injury".)
-  This symbol () indicates something that you must not do.
-  This symbol () indicates something that you must do. The picture inside the circle indicates the nature of the thing that must be done.
(For example, the symbol at left means "you must make the ground connection".)

[2] Notes on safety

 DANGER
 Wait at least 5 minutes after turning off the power switch and disconnecting the power cord from the wall outlet before opening the cover of the control unit. Do not touch as high voltage can result in severe injury.

 WARNING	
Basic precautions	
 Do not disassemble or modify the printer, otherwise it may cause fire or electric shocks or problems with correct operation.	 Do not handle the power cord with wet hands, otherwise it may cause electric shocks.
 Ask the place of purchase or a qualified technician to carry out any internal inspections, adjustments or repairs that may be required. (Any problems with correct operation that occur as a result of the customer attempting to disassemble or modify the printer will not be covered by the warranty.)	

WARNING

Installation



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.



Do not bend the cords excessively or fasten them too hard with staples or anything similar to secure cords, otherwise there is the danger that fire or electric shocks could occur.



Be sure to connect the ground. If the ground connection is not secure, you run a high risk of receiving a serious electric shock, and problems with correct operation may also occur.

Printing



If a foreign object gets inside the printer, immediately turn off the power switch and disconnect the power cord, and arrange for a service call to resolve.



If you continue to use the printer while there is a foreign object inside, it may result in fire or electric shocks or problems with correct operation.



Do not use the printer when smoke or a bad odor coming from the printer, otherwise it may cause fire or electric shocks or problems with correct operation.



Immediately turn off the power switch and disconnect the power cord, and arrange for a service call to resolve.



Do not allow water or oil to get onto the printer, otherwise it may cause fire or electric shocks or problems with correct operation.



If any liquids get onto the printer, immediately turn off the power switch and disconnect the power cord, and arrange for a service call to resolve.

Maintenance



Do not put your hands in the ink cartridge slot, otherwise the needle inside the slot may cause injury.

CAUTION

Environmental requirements



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.



The ambient temperature should be within the range of 15°C to 30°C during use. Temperatures which are lower or higher than this may cause problems with correct operation.



The relative humidity should be within the range of 20% to 85% during use, and no dew formation should occur in any devices. Excessively dry or humid environments and dew formation may cause problems with correct operation.



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



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.

CAUTION

Installation



Setting up and moving of the printer should only be carried out by a qualified technician.



The printer machine weighs approximately 100 kg. Transporting and setting up of the printer should be carried out by four or more people.



The machine must be transported using the correct handling points only. Do not use the cartridge housings to move the machine. The machine may fall down and cause injury.



The printer must be used on a suitable stable surface, otherwise it may tip over or fall down and cause injury.

Furthermore, the table that supports the printer should be at least 100 cm in width and 80 cm in depth, and should be able to bear a weight of 150 kg or more.



Do not set up the printer in a place where it will be affected by vibration. It may become unbalanced and fall down, which cause injury or damage to the printer.



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



Do not climb onto the printer or place heavy objects on top of it, otherwise it may become unbalanced and tip over or fall down and cause injury.

Printing



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



Ensure there is adequate space left for safe working. The Platen moves forward while operating and it may be injured.



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.



Do not move the Platen by hand. The Printer may be mechanically and electrically damaged.



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 a problem occurs with the operation of the printer, contact the place of purchase or a qualified technician.

Maintenance



Wait at least 1 minute after turning off the power switch before opening the front cover. Do not touch the head heat sink as it may be HOT and may cause a burn.



Be careful not to get your fingers caught when closing the front cover, otherwise it may result in injury to your fingers.



Do not move the Platen by hand. The Printer may be mechanically and electrically damaged.



Do not disassemble the ink cartridge or the waste ink cartridge.



Take care not to let the ink, waste liquid or wash liquid come into contact with your eyes or onto your skin, otherwise inflammation can result. In case of contact with eyes, do not rub but immediately rinse the eyes with water.

Furthermore, do not drink the ink, waste liquid or wash liquid under any circumstances, as they can cause vomiting and diarrhea.

Keep the ink, waste liquid and wash liquid out of the reach of children.



Use only the proper replacement parts as specified by Brother.

[3] Warning labels

The following warning labels appear on the printer.

Please follow the instructions on the labels at all times when using the printer. If the labels have been removed or are difficult to read, please contact your nearest Brother dealer.

1

	▲ 危険 ▲ 危険 高電圧部分にふれて、大けがをすることがある。電源を切り、5分たってからカバーをはずすこと。 触摸高圧電部分、会导致受伤。在切断电源5分钟后，再开启盖罩。
▲ DANGER ▲ GEFAHR ▲ DANGER ▲ PELIGRO	
Hazardous voltage will cause injury. Turn off main switch and wait 5 minutes before opening this cover.	Hochspannung Verletzungsgefahr! Bitte schalten sie den hauptschalter aus und warten sie 5 minuten, bevor sie diese abdeckung öffnen.
Un voltage non adapte provoque des blessures. Eteindre l'interrupteur et attendre 5 minutes avant d'ouvrir le capot.	Un voltaje inadecuado puede provocar las heridas. Apagar el interruptor principal y esperar 5 minutos antes de abrir esta cubierta.

2

Watch your fingers, or you may be injured.

3

	▲ 警告 ▲ WARNING ▲ WARNUNG 内蔵の針でけがをする恐れがある。カートリッジ口の内部に手を入れない。 Neddele im inneren kann Verletzungen verursachen. Führen Sie die Hände nicht in den Tinte Kartuschen Schütz ein.
▲ AVERTISSEMENT ▲ AVISO ▲ AVVERTENZE	
L'aiguille à l'intérieur peut blesser. Ne pas mettre la main dans l'emplacement de cartouche.	La aguja interior puede causar heridas. No ponga las manos en la ranura de cartucho de tinta.
	La presenza di aghi può causare infortuni. Non infilare le mani nella fessura delle cartucce.

4

High temperature warning display

5

	▲ 注意 プラテンやTシャツトレイと各カバーとの間に手をはさみ、けがをする。印刷中はプラテンから手を離すこと。
▲ CAUTION	
Moving platen, T-shirt tray and covers can cause bodily injury. Keep hands off platen while printing.	
▲ ACHTUNG	
Druckplatte, T-Shirt-Ablage und Abdeckungen können körperliche Verletzungen verursachen. Halten Sie die Hände von der Auflage während des Druckvorganges fern.	
▲ ATTENTION	
Déplacement du plateau, chargeur T-shirt et couvercle peut blesser le corps. Garder les mains éloignées lors de l'impression.	
▲ ATENCION	
Moviendo la placa, la bandeja de camiseta y las cubiertas pueden causar una herida personal. Retire las manos de la placa durante la impresión.	
▲ ATTENZIONE	
Tavoletta mobile, il ripiano per la T-shirt ed il carter potrebbero causare infortuni. Tenere le mani lontane dalla tavoletta durante la stampa.	

6

▲ 注意 炎症を起こす可能性がある。廃液が目や皮膚に付かないようにすること。下痢・おう吐する可能性がある。廃液を飲まないこと。子供の手の届かないところに置くこと。
▲ CAUTION Waste liquid can cause inflammation. Avoid contact with eyes and skin. Waste liquid can cause vomiting and diarrhea. Do not drink. Keep waste ink cartridge out of reach of children.
▲ ACHTUNG Rest Flüssigkeit kann Entzündung verursachen. Vermeiden Sie Kontakt mit Augen und Haut. Rest Flüssigkeit kann das Erbrechen und Diarrhöe verursachen. Trinken Sie diese nicht. Halten Sie den Rest Tinte Behälter aus Reichweite Ihrer Kinder.
▲ ATTENTION Liquide déchet peut causer une inflammation. Eviter contact avec les yeux et la peau. Liquide déchet peut provoquer vomissement et diarrhée. Ne pas boire. Garder cartouche déchet d'encre hors de portée des enfants.
▲ ATENCION El líquido de desecho puede causar inflamación. Evitar el contacto con los ojos y la piel. El líquido de desecho puede causar vómitos y diarreas. No ingerir. Guarde el cartucho de tinta gastada fuera del alcance de niños.
▲ ATTENZIONE Il liquido di scarto può causare infiammazioni. Evitare il contatto con gli occhi e con la pelle. Il liquido di scarto può causare vomito e diarrea. Non bere. Tenere la cartuccia dell'inchiostro di scarto lontano dalla portata dei bambini.

7

▲ 注意 炎症を起こす可能性がある。廃液が目や皮膚に付かないようにすること。下痢・おう吐する可能性がある。廃液を飲まないこと。子供の手の届かないところに置くこと。	▲ CAUTION Ink can cause inflammation. Avoid contact with eyes and skin. Ink can cause vomiting and diarrhea. Do not drink. Keep ink cartridge out of reach of children.	▲ ACHTUNG Die Tinte kann Entzündungen verursachen. Vermeiden Sie Kontakt mit Augen und Haut. Tinte kann das Erbrechen und Diarrhöe verursachen. Trinken Sie diese nicht. Halten Sie die Tintenpatrone aus der Reichweite Ihrer Kinder.
▲ ATTENTION L'encre peut provoquer inflammation. Eviter le contact avec les yeux et la peau. L'encre peut provoquer vomissement et diarrhée. Ne pas boire. Garder les cartouches d'encre éloignées des enfants.	▲ ATENCION La tinta puede causar inflamaciones. Evite el contacto con los ojos y la piel. Puede causar diarreas y vómitos. No ingerir. Mantenga los cartuchos de tinta fuera del alcance de los niños.	▲ ATTENZIONE L'inchiostro può causare infiammazioni. Evitare il contatto con occhi e pelle. L'inchiostro può causare vomito e diarrea. Non bere. Tenere le cartucce di inchiostro lontano dalla portata dei bambini.

8

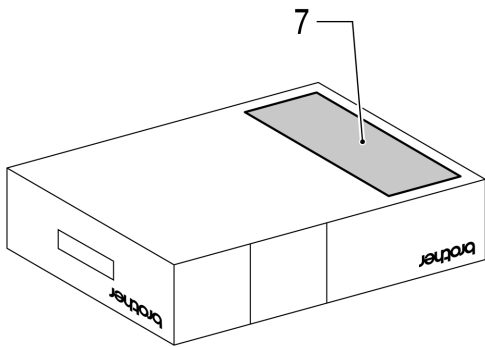
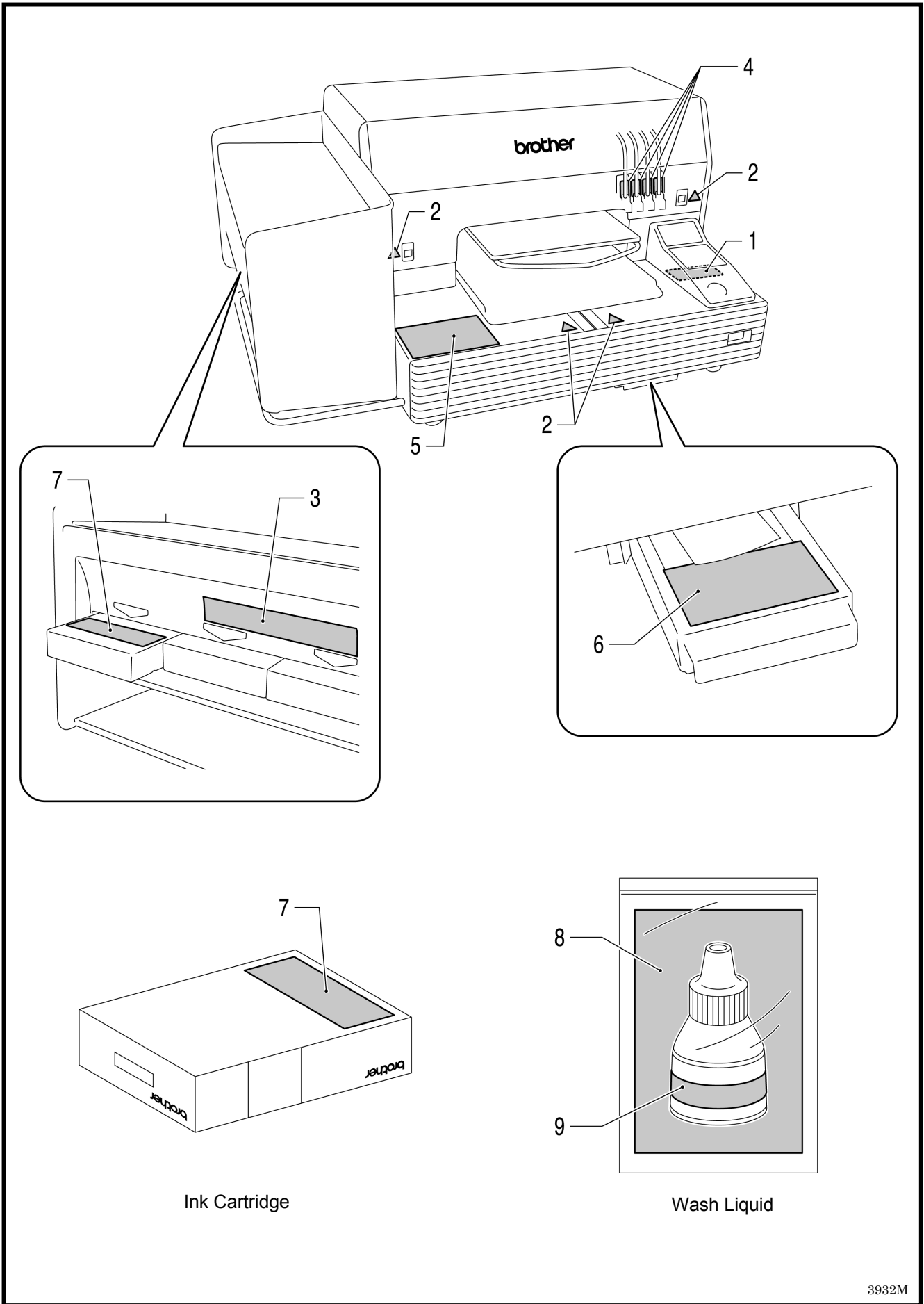
brother 5cc

ウォッシュ液 / Wash Liquid
Reinigungsflüssig / Liquide nettoyage
Líquido de lavar / Liquido detergente

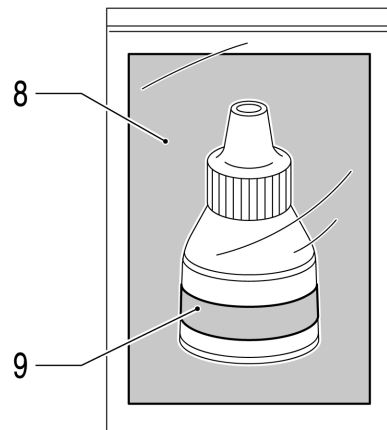
▲ 注意 下痢・おう吐する可能性がある。廃液を飲んではいけません。目に入った場合は、擦らずに、直ちに水で洗い流すこと。
▲ CAUTION Wash liquid can cause vomiting and diarrhea. Do not drink. In case of contact with eyes, do not rub but immediately rinse the eyes with water.
▲ ACHTUNG Reinigungsflüssigkeit kann das Erbrechen und Diarrhöe verursachen. Trinken Sie diese nicht. Sollte es zum Kontakt mit Augen kommen, reiben Sie diese nicht, spülen Sie aber sofort die Augen mit Wasser aus.
▲ ATTENTION Liquide de nettoyage peut provoquer vomissement et diarrhée. Ne pas boire. En cas de contact avec les yeux, ne pas frotter mais rincer abondamment les yeux à l'eau.
▲ ATENCION El líquido de lavar puede causar vómitos y diarreas. No ingerir. En caso del contacto con los ojos, láveselos inmediatamente con agua abundante sin frotar.
▲ ATTENZIONE Il liquido detergente può causare vomito e diarrea. Non bere. In caso di contatto con gli occhi, non strofinarli ma lavare immediatamente gli occhi con acqua.

9

	飲んではいけません。 / Do not drink. Trinken Sie nicht. / Ne pas boire.	brother
	No ingerir. / Non bere.	



Ink Cartridge



Wash Liquid

3932M

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1. Read This First

1-1. Precautions

Please observe the following precautions before using your printer.

- Please advise the following to customers.
Printed colors may transfer when a printed surface rubs on a white or light-colored synthetic leather made of PVC (polyvinyl chloride). In that case, clean the stains with a soft cloth or toothbrush with a household cleaner or alcohol.
- The machine is designed to be used within the temperature and humidity levels below. Less humidity may cause ink clogging in Print Head nozzles.

	Temperature	Humidity
Keeping your printer	32 °F to 104 °F (0 °C to 40 °C)	20 % to 85 % (no condensation)
Operating your printer	50 °F to 95 °F (10 °C to 35 °C)	
For the best print result	59 °F to 86 °F (15 °C to 30 °C)	35 % to 85 % (no condensation)

- Do not pull out Ink Cartridge(s) during the operation; it may result in poor print quality or cause damage to your printer.
- Do not turn off your printer, or open the Front Cover during the operation; otherwise the printer may be damaged or spoil the print job.
- Be careful in handling a printed T-shirt that has not yet fixed by heat. Ink is difficult to wash from stained clothes.
- When you replace Yellow Ink Cartridge, replace Wiper Cleaner and clean the Head Caps and Wiper Blade at the same time. This regular treatment helps you to keep your printer in good condition. If not, it may cause poor print quality or your printer may be damaged.
- Never use alcohol when you clean Head Caps and Wiper Blade; it will cause damage to the Print Heads. Use Wash Liquid.
- Install the Ink Cartridges in the correct positions as shown. Confirm both the colors of labels on your printer and the Ink Cartridges.
- When the ink cartridge is used your printer will show "empty" status. At this point you will need to replace with a new Ink Cartridge. A small amount of ink remains to avoid damage to your printer.
- New consumables should be stored away from direct sunlight until they are required. Use up within six months by the date written on the cartridge.

1. Read This First

- Never refill ink, never reconstruct ink cartridges; ink may cohere inside the cartridge bag, tube or even Print Head and may cause serious damage to your printer. We assume no responsibility for any problem caused by using them. Only genuine new ink cartridges should be used.
- The ink cartridges should always be installed; otherwise the needles may stop up with ink and your printer may be damaged.
- If the printer is unused for a period of time there is a possibility that Print Heads may become blocked as ink dries. To avoid this, we recommend that the printer should be turned on at least once a week and press the Head Cleaning Button to clean the Print Head. If you are planning not to use your printer for more than two weeks, follow "6-1-5. Required Maintenance for the Long Storage" to prevent ink clogging.

<Note> Only for the use in the United States

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

<Note>

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CompactFlash is a trademark of SanDisk Corporation.

Beefy-T is a trademark of Hanes Corporation.

Other product and company names mentioned herein may be the trademarks or registered trademarks of their respective owners.

Screen shots used in this document are in accordance with the guidelines of Microsoft Corporation.

1-2. Unpacking Your Printer

<Note>

Your printer must be unpacked by a Brother representative or a Brother authorized shipping company.

After unpacking, check that the following parts are included.

Contact Brother Customer Service Hot Line if any of these is missing.

- GT-541 Printer
- Rear Cover
- 4 Print Heads
- Install CD
- AC cord, UL/CSA 13A
- Ink Cartridges:
Ink GC-50K (black), Ink GC-50M (magenta), Ink GC-50C (cyan), and Ink GC-51Y (yellow)
- Nozzle Cleaning Kit
- Basic Operation Manual
- "How to uncrate" Manual

<Note>

Four Filter Cartridges are installed in the Ink Cartridge Slots. Keep them since they should be used for maintenance & transport operations.

1-3. Required Condition

Please use your printer under the conditions described in this section.

1-3-1. Environment

	Temperature	Humidity
Keeping your printer	32 °F to 104 °F (0 °C to 40 °C)	20 % to 85 % (no condensation)
Operating your printer	50 °F to 95 °F (10 °C to 35 °C)	
For the best print result	59 °F to 86 °F (15 °C to 30 °C)	35 % to 85 % (no condensation)

If your room is dry, we recommend using a humidifier to avoid Print Heads from clogging with dried ink.

1-3-2. Electrical Requirements

Power:

120 V, 50/60 Hz (USA)

230 V, 50/60 Hz (Europe)

100 V, 50/60 Hz (Japan)

Power Consumptions:

0.8 A (average)

1-3-3. Software Information

Supported OS:

Latest Windows 2000 Professional, Windows XP (32 bit), Windows Vista (32 bit / 64 bit),
Windows 7 (32 bit / 64 bit)

Supported Interface:

USB 1.1/ 2.0

Minimum System Requirements:

256 MB RAM (512 MB or more is recommended),

128 MB free disk space (256 MB or more is recommended),

1 GHz CPU (2 GHz or more is recommended.)

Recommended Applications for precise output:

Adobe Photoshop, Adobe Photoshop Elements, Paint Shop Pro (for BMP editing)

Adobe Illustrator, CorelDRAW (for Vector Data editing)

1-3-4. Other Requirements

When purchasing optional tools, choose one that meets the following requirements.

USB cable:

USB 2.0-compliant device cable (A/B)

<Note>

Using other USB 2.0-compliant device cable may result in improper connection.

CompactFlash:

Type I Memory Card, Capacity of 64 MB to 2 GB,

FAT16 formatted,

SanDisk CompactFlash is recommended.

Heat Press:

Must be able to handle the Platen 14 x 16, and maintain heat production of 356 °F (180 °C) for 35 seconds.

T-shirt:

White or light-colored

Made with 100 % cotton, or 50 % cotton and 50 % polyester

“Hanes Beefy-T” is recommended.

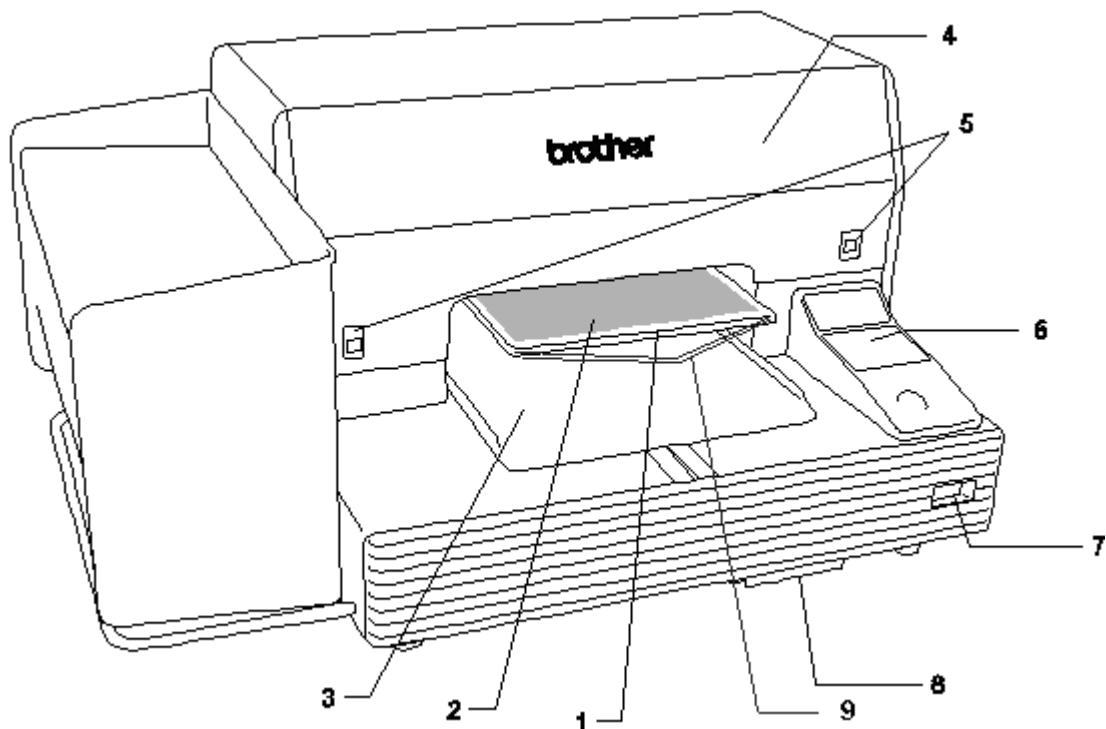
1-3-5. Consumable Requirements

For ordering new or replacement items please use the codes below.

Consumable	Item Code
Black Ink Cartridge	GC-50K
Magenta Ink Cartridge	GC-50M
Cyan Ink Cartridge	GC-50C
Yellow Ink Cartridge	GC-51Y
Waste Ink Cartridge	SA5629
Cap Cleaning Kit	SA5774
Nozzle Cleaning Kit	SA5885
Platen Sheet	SA5620
Platen Sheet S	SA6401
Platen Sheet SS	SA8211
Wash Liquid	SA6248

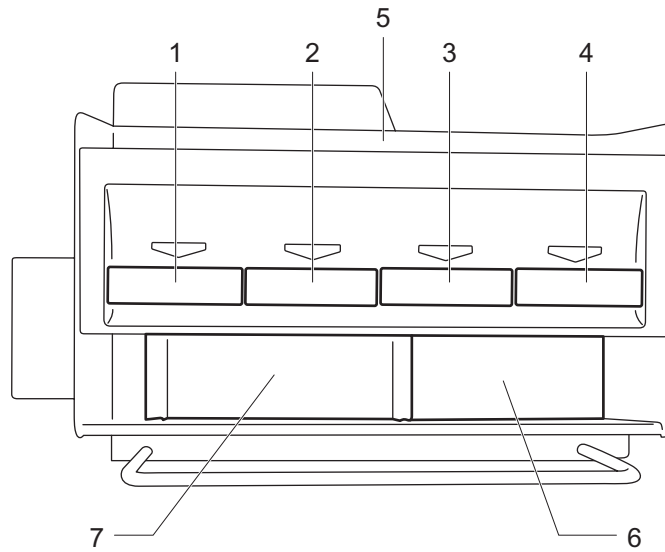
2. Identifying Your Printer's Parts

2-1. Front



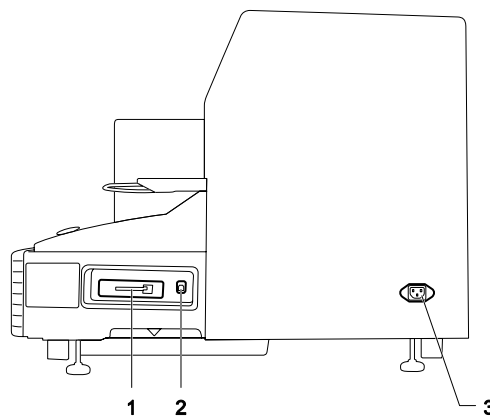
No.	Name	Description
1	Platen	Holds the T-shirt to be printed.
2	Platen Sheet	Prevents a T-shirt from slipping so that an image is printed on your desired position.
3	T-shirt Tray	Keeps parts of T-shirt hanging from the Platen (e.g. sleeves) on this T-shirt Tray.
4	Front Cover	Open this to work on the inside of your printer.
5	Cover Locks	Push this up to open the Front Cover.
6	Control Panel	Use this to operate your printer. See "2-7. Control Panel" for the details.
7	Power Switch	Turns on/off your printer.
8	Waste Cartridge Tray	Contains the Waste Ink Cartridge.
9	Shoulder Bar	Adjusts the T-shirt position.

2-2. Left



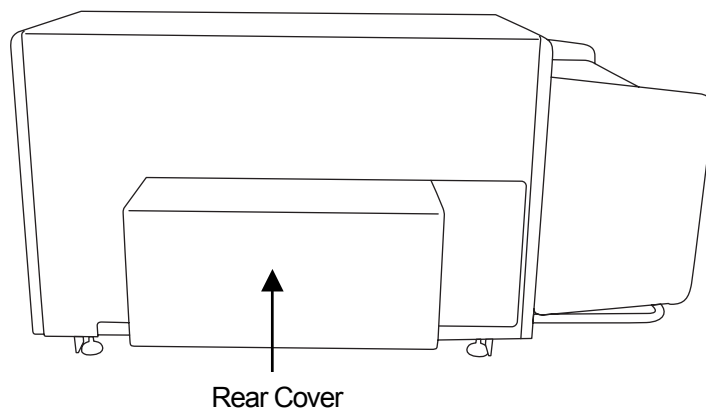
No.	Name	Description
1	Black Ink Cartridge Slot	Load an Ink Cartridge of the appropriate color.
2	Magenta Ink Cartridge Slot	
3	Cyan Ink Cartridge Slot	
4	Yellow Ink Cartridge Slot	
5	Ink Cartridge Storage	Store the new Ink Cartridges.
6	Cleaning Tool Storage	Store the Cleaning Kits.
7	Filter Cartridge Storage	Store the four Filter Cartridges.

2-3. Right



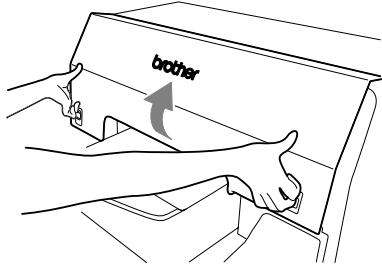
- 1. CompactFlash slot
- 2. USB port
- 3. Power cord socket

2-4. Rear

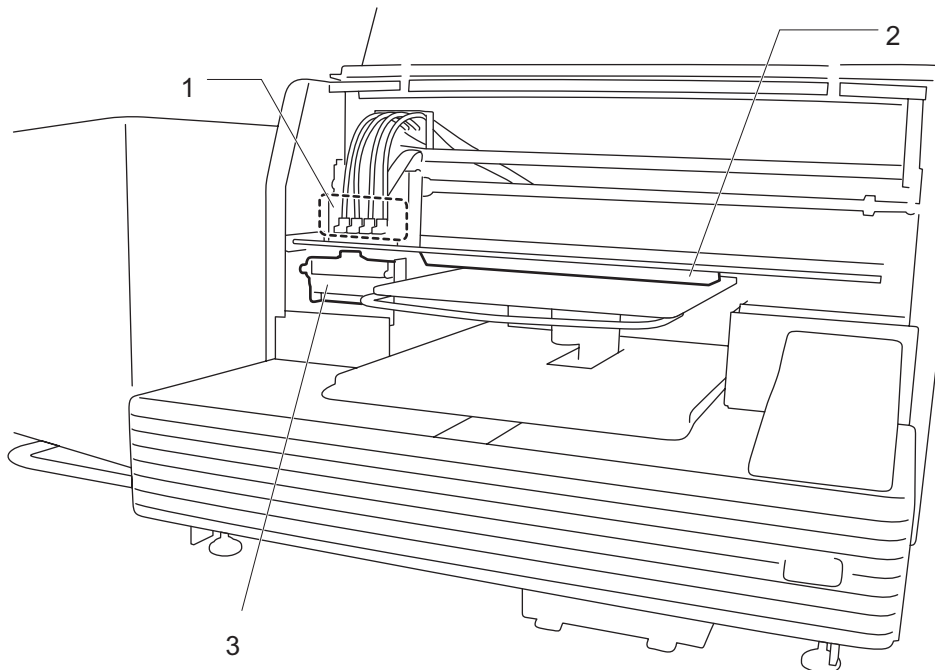


2-5. Inside of the Front Cover

Cancel any operation and turn off your printer before opening the Front Cover.
 Open the Front Cover by pushing up the Cover Locks with both hands.

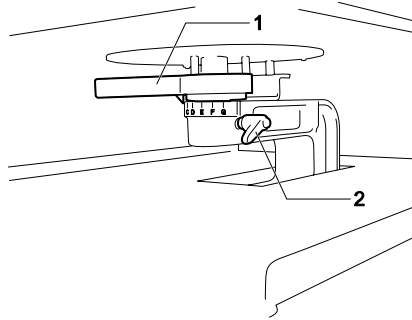


<Note> If you open the Front Cover while operating, the power automatically turns off.



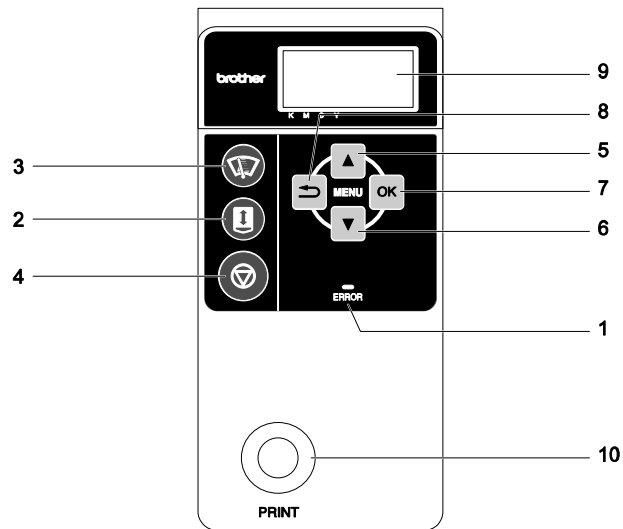
No.	Name	Description
1	Print Heads	Jets the ink to the platen. From the left black, magenta, cyan, and yellow.
2	Obstruction Sensor	Cancels an operation for safety, if it detects obstructions on the Platen.
3	Wiper Cleaner Cassette	Contains the Wiper Cleaner.

2-6. Under the Platen



No.	Name	Description
1	Platen Height Adjustment Lever	Adjusts the Platen height. Leftmost "A" is the normal T-shirt position. Check the exact height with Platen Button on Control Panel when you print on thicker material.
2	Platen Fixing Lever	Fixes the Platen. Tighten/Loosen this lever to install/uninstall the Platen and to adjust the Platen height.

2-7. Control Panel



No.	Name	Description
1	Error Lamp	Indicates errors or warnings. See "2-7-1. Indication Lamps" for the details.
2	Platen Button	Loads / Ejects the Platen.
3	Head Cleaning Button	Cleans the Print Heads. See "7-2-2. Cleaning the Print Heads" in the Instruction Manual for the details.
4	Stop Button	Cancels printing or Print Head cleaning. Returns to Standby mode.
5	Up Button	Selects the previous (upper) item. Increases a numeric value. Opens the Menu display.
6	Down Button	Selects the next (lower) item. Decreases a numeric value. Opens the Menu display.
7	OK Button	Executes the selected command. Opens the Menu display. Clears the error status.
8	Back Button	Returns to the previous display. Opens the Menu display.
9	Display	Displays the Job Comment of the print data received, the status of the printer, and the menu items for various settings.
10	Print Button	Starts printing operation.

2-7-1. Indication Lamps

The lamps on the control panel indicate the status of your printer as shown below.

Lamp	Printer Status
Print Button	Off: No print data has been received.
	Flashing: Receiving a print data.
	On: Printing data has been received.
Error Lamp	Off: No error is detected.
	On: One or more errors have been detected (See "7-4. Error Messages" in the Instruction Manual for the details).

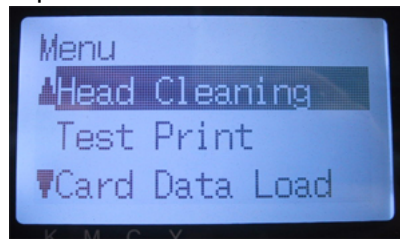
<Note>

On machine initialization these lamps have a 30 second self check time.

2-7-2. Display

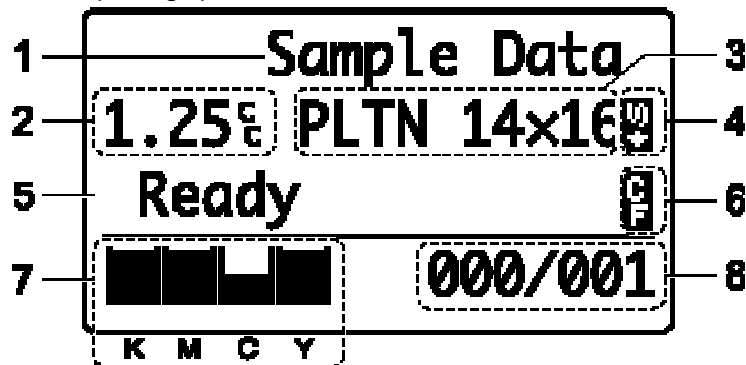
Menu Display:

This display is used to select an operation for maintenance or setting up.



Job/ Status Display

When your printer has received a print data, it shows the Job/ Status Display: it displays the information needed for printing operations.


















No.	Item Shown	Description
1	Job Comment	Shows the last 17 characters of a received data.
2	Amount of Ink Required	Shows how much ink (cc) is required for making one print of the received data. Shows warning message(s) if necessary.
3	Platen Size	Shows Platen Size set by Printer Driver.
4	Double Print Icon	Appears when "Double Printing" is checked.
5	Printer Status	Shows the printer status.
6	CF Icon	Appears when a CompactFlash card is inserted.
7	Amount of Ink Remained	Shows amount of ink remained in each cartridge (from the left, <K (Black)>/ <M (Magenta)>/ <C (Cyan)>/ <Y (Yellow)>). It flashes when ink is low.
8	Number of Print	Shows "Number of prints completed"/ "Total number of prints set by Printer Driver".

<Note> When one or more errors are detected, error message(s) will be displayed instead.

3. Getting Started

Before using your printer, it needs to be correctly setup as described in this chapter.

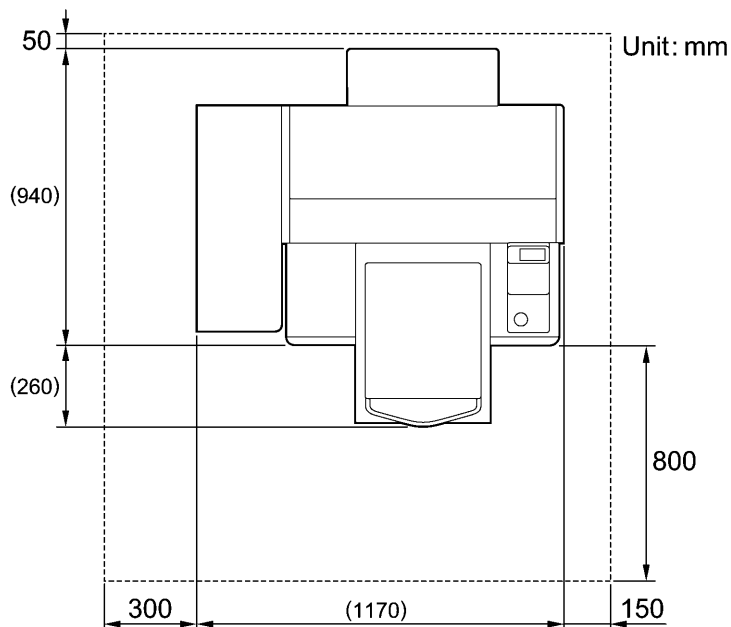
 WARNING	
	Do not handle the power cord with wet hands, otherwise it may cause electric shocks.
 	Do not set up the printer in a dusty environment. If dust collects inside the printer, it may cause fire or electric shocks or problems with correct operation.
	Be sure to connect the ground. If the ground connection is not secure, you run a high risk of receiving a serious electric shock, and problems with correct operation may also occur.
 	Do not bend the cords excessively or fasten them too hard with staples or anything similar to secure cords, otherwise there is the danger that fire or electric shocks could occur.

 CAUTION	
	Setting up and moving of the printer should only be carried out by a qualified technician.
	The printer machine weighs approximately 100 kg. Transporting and setting up of the printer should be carried out by four or more people.
	The machine must be transported using the correct handling points only. Do not use the cartridge housings to move the machine. The machine may tip over or fall down and cause injury.
	The printer must be used on a suitable stable surface, otherwise it may tip over or fall down and cause injury. Furthermore, the table that supports the printer should be at least 100 cm in width and 80 cm in depth, and should be able to bear a weight of 150 kg or more.
	Do not set up the printer in a place where it will be affected by vibration. It may become unbalanced and fall down, which cause injury or damage to the printer.
	Do not connect the power cord until setup is complete, otherwise the printer may operate if the power switch is turned on by mistake, which could result in injury.
	Do not climb onto the printer or place heavy objects on top of it, otherwise it may become unbalanced and tip over or fall down and cause injury.

3-1. Placing Your Printer

Locate your printer taking the following into account

- Environmental conditions are suitable.
- Avoid direct sunlight, dust and extremes of humidity.
- Never use an extension cable.
- A working space must be left around the printer.
Minimum space of 80 cm on the front, 5 cm on the rear, 30 cm on the left side (for ink cartridges) and 15 cm on the right side (for CF card, USB and power code).
Body size is about 120 cm x 95 cm x 60 cm . See the figure below.
- Put your printer on a stable and flat table, at least 100 cm in width, 80 cm in depth, which should be able to bear a weight of 150 kg or more.



3-2. Turning On/Off Your Printer

<Note>

Before you connect the power cord, make sure:

- The Ink Cartridges, Waste Cartridge Tray, and Wiper Cleaner Cassette are installed.
- The Rear Cover is mounted.
- Keep the front space as the Platen slides out approximately 30 cm (12 inches) when operating.

3-2-1. Turning On Your Printer

- (1) Connect the power cord (included) to the power cord socket of your printer.
- (2) Connect the power plug to the power outlet.
Ensure the printer is connected to a suitable earth point
- (3) Press the Power Switch to turn on your printer.
Your printer turns on, displays "Welcome to GT-541", and lights up the Error Lamp and the Print Button while initializing.
The initialization requires approx. 40 seconds and will indicate when it is completed.
When the installation finishes, the machine enters standby mode.

3-2-2. Turning Off Your Printer

When you have finished using your printer, follow the instructions below to turn it off.

- (1) Make sure that your printer is "standby" or "ready" mode.
- (2) Select "Platen Reset" in Menu or press Platen Button to store the Platen.
- (3) Press Power Switch to turn off your printer.
- (4) If you are planning not to use your printer for over-two-week periods of time, disconnect the power plug from the power outlet.

<Note>

- Do not turn off your printer when it is operating. It may cause serious damage to your printer. If you turn off your printer accidentally during the operation, immediately restart it, and then turn it off correctly following the steps described in this section.
- If the printer is unused for a long time we recommend turning on your printer once a week and press the Head Cleaning Button to clean the Print Head. This ensures the ink is kept free flowing. If you are planning not to use your printer for more than two weeks, follow "6-1-5. Required Maintenance for the Long Storage" to prevent ink clogging.

3-3. Preparing Your PC

This section describes how to install the GT-541 Printer Driver (File Output), manuals (Basic Operation Manual/ Instruction Manual), Brother GT File Viewer, and other tools. Make sure the steps because there are some different dialogs shown by Windows OS.

After those installations are over, install GT-541 Printer Driver (USB) by connecting USB 2.0 cable.

3-3-1. PC preparation: For Windows XP / 2000 (32 bit)

Do not connect the printer to the PC at this stage.

<Note>

You must be logged on with Administrator rights on the PC.

- (1) Turn on your PC.
- (2) Close all open applications
- (3) Insert the Install CD (included) to your PC. Open the CD-ROM drive, move to [32 bit_OS] and double-click "Setup.exe".
- (4) The installer starts installation. Follow the indications of the dialogs.

<Note>

When you click "Install Driver & Tools" after completing the installation, the message to confirm uninstallation appears. If you click "Yes", uninstallation starts to uninstall the necessary tools but Printer Driver(s) is/are not uninstalled. If uninstallation fails, a dialog box appears "Uninstallation of the former version failed. Do you want to continue installing the new version?". Click [No] and quit the installer. Open "Add or Remove Programs" of Control Panel and remove "Brother GT-Tools". Then start the installation from the beginning.

3. Getting Started

- (5) During the installation, the following warning appears. Click "Continue Anyway" and continue.



Windows XP



Windows 2000

- (6) After installation, your PC will need to restart. Remove your Install CD and restart your PC. If you are going to use your printer without connecting it to your PC, this will be the end of PC preparation.

3-3-2. Connection with USB 2.0 Cable: for Windows XP

- (1) Connect the USB 2.0 cable to your printer (power OFF).

<Note>

We do not recommend connection via a USB hub to the printer.

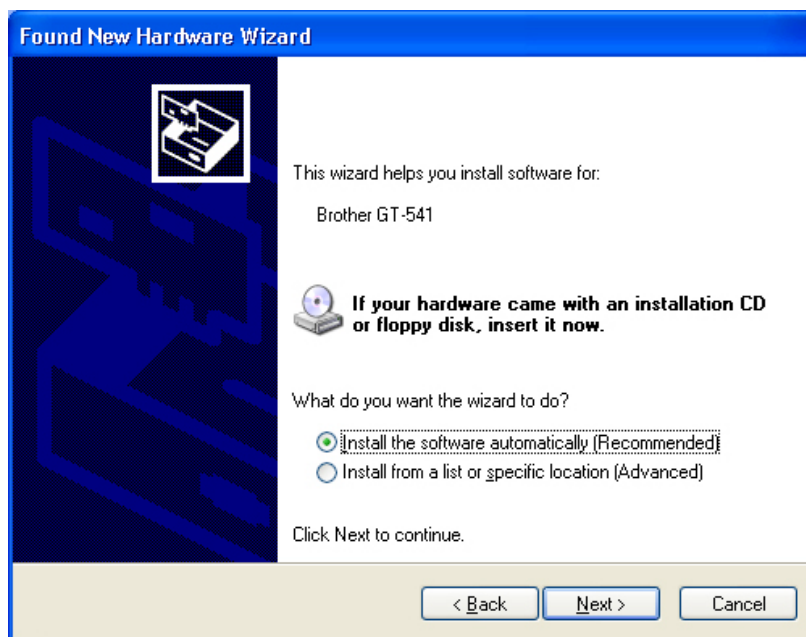
- (2) Connect the other end of the USB 2.0 Cable to your PC.

- (3) Turn on your GT-541 printer. The following window appears.



Select "No, not this time", and then click "Next".

- (4) Insert the Install CD. The following window appears.



- (5) Select "Install the software automatically (Recommended)", and then click "Next". The installation starts. When "Hardware installation" dialog (not passed Windows Logo testing) appears during installation, Click "Continue Anyway". The installation continues.

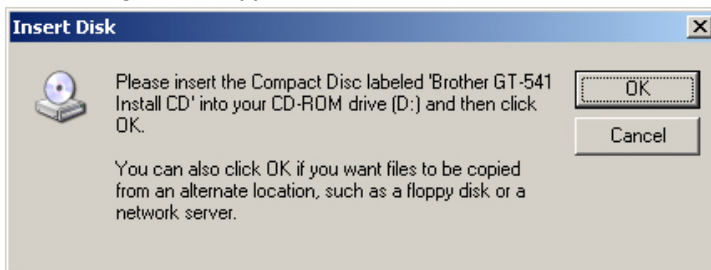
<Note>

If the following window appears, follow the instruction below:

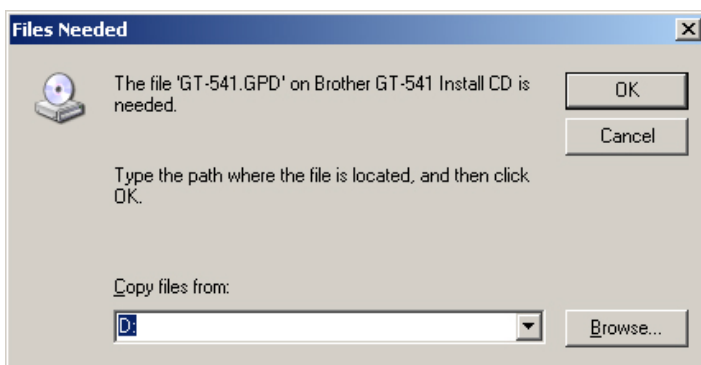
3. Getting Started

- (1) Confirm that the Install CD is inserted properly, and then click "OK".

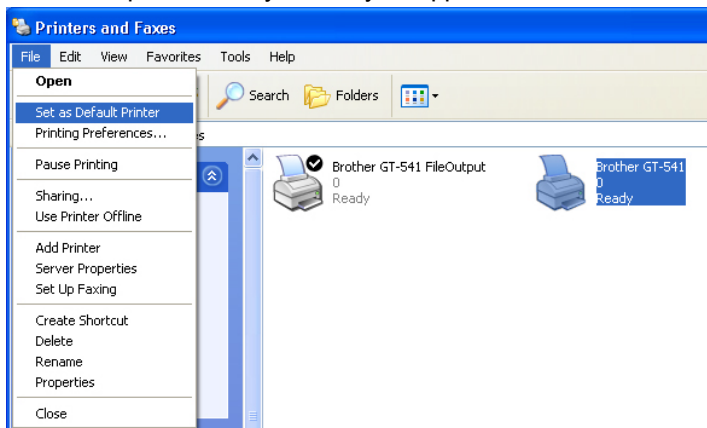
The following window appears.



- (2) If install CD is not in drive [D:], the following window appears. Click "Browse..." to select the CD drive, and then click "OK". The installation continues.



- (6) Click "Finish" when "Completing the Found New Hardware Wizard" dialog.
- (7) Open "Printers and Faxes" in "Control Panel".
- (8) Click either "Brother GT-541" or Brother GT-541 FileOutput icon and select "Set as Default Printer" on "File" menu. "Brother GT-541" icon is checked and Brother GT-541 is set as the default printer. This will help to do the layout with your application software.



The PC setup is now completed.

<Note> for installations of more than one GT-541 printer.

To connect another GT-541 to the PC, repeat the steps of 3-3-2. Connection with USB 2.0 Cable: for Windows XP. From the second GT-541, the printer names automatically become "GT-541(copyX)". You can change the names as "GT-541 xxx" in the "Printer and Faxes" in the "Control Panel" for your workability.

3-3-3. Connection with USB 2.0 Cable: for Windows 2000

- (1) Connect the USB 2.0 cable to your printer (power OFF).

<Note>

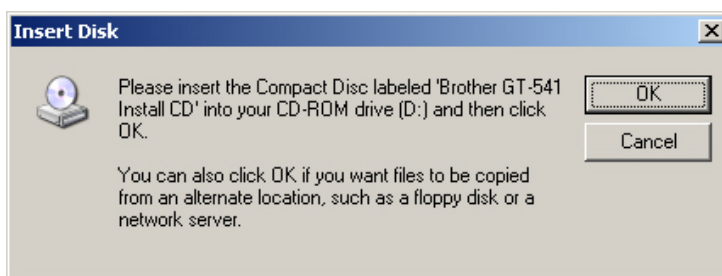
We do not recommend connection via a USB hub to the printer.

- (2) Connect the other end of the USB 2.0 Cable to your PC.
 (3) Turn on your GT-541 printer. Brother GT-541 Printer Driver starts installing automatically.

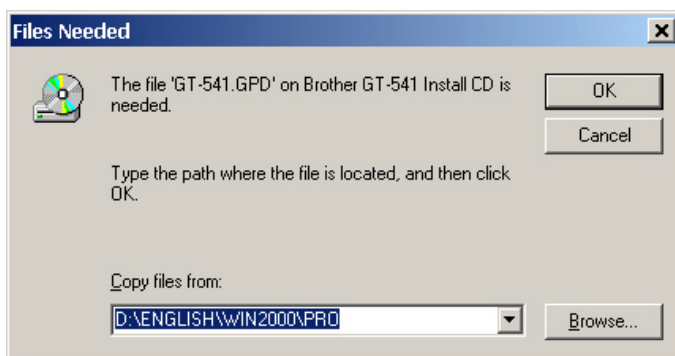
<Note>

If Brother GT-541 is not installed, the following window appears: follow the instruction below to install it manually:

- (1) *Insert the Install CD, and then click "OK". The following window appears.*



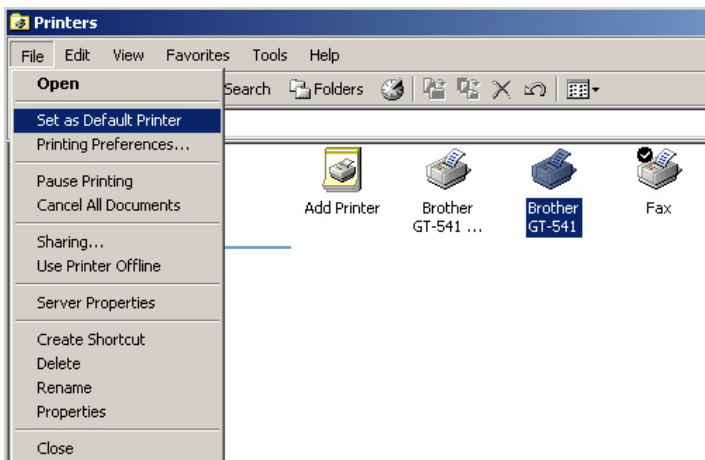
- (2) *If install CD is not in drive [D:], the following window appears. Click "Browse..." to select the CD drive, and then click "OK". Brother GT-541 is installed.*



- (4) Open the "Printers" in the "Control Panel".

3. Getting Started

- (5) Click either "Brother GT-541" or Brother GT-541 FileOutput icon and select "Set as Default Printer" on "File" menu. "Brother GT-541" icon is checked and Brother GT-541 is set as the default printer. This helps to do the layout with your application software.



The PC setup is now completed.

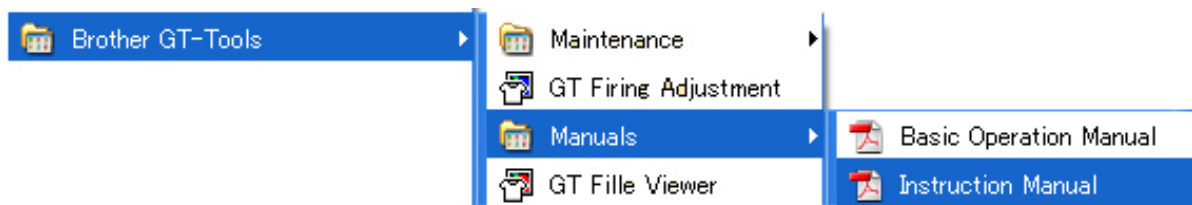
<Note>

To connect another GT-541 to the PC, repeat the steps 3-3-3. Connection with USB 2.0 Cable: for Windows 2000. From the second GT-541, the printer names automatically become "GT-541(copyX)". You can change the names "GT-541 xxx" in the "Printers" in the "Control Panel" for your workability.

Modify same as previous section for multiple printers.

3-3-4. Opening the installed manuals

- (1) Click "All Programs" on "Start" menu.
- (2) Select "Brother GT-Tools".



- (3) Click the manual you want to open.

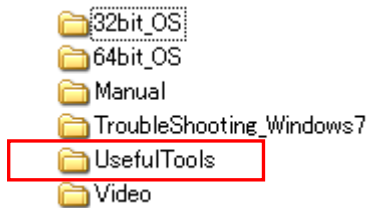
<Note>

Only manuals with selected language are installed to your PC. Others PDF files are in the folder "Manual" on Install CD.

3-3-5. Installing Useful Tools

We provide Color Palettes for Adobe Photoshop (GT-541_Colors.aco) / CorelDRAW (GT-541_Colors.cpl) to help you with printing. The colors are the same in ColorChart which is available in "Test Print" menu of Printer Driver. Print ColorChart to check the colors that your Printer actually provides as color formula guide. CorelDRAW template files are also available to help you with final layout.

- (1) Turn on your PC.
- (2) Insert the Install CD (included) to your PC.
- (3) Open [UsefulTools] folder.



- (4) Select the language (UsefulTools_XXX.html).

3-3-6 Installation of PC for Windows Vista / Windows 7 (32 bit / 64 bit)

Refer to "3-3-2. Connection with USB 2.0 Cable: for Windows XP" first and confirm the procedures and notes. In brief, like for Windows XP and Windows 2000, GT-541 File Output Printer Driver, tools and manuals are installed first from Install CD, and PC must be restarted. Then PC is connected to USB 2.0 cable, the printer turned ON, and USB 2.0 cable connected to the printer.

Installation of GT-541 File Output Printer Driver

Do not connect the printer to the PC at this stage.

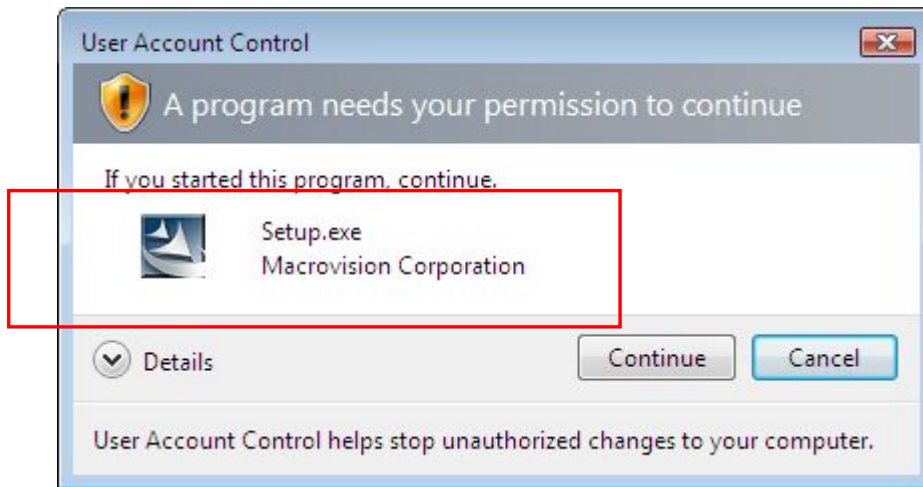
<Note>

You must be logged on with Administrator rights on the PC.

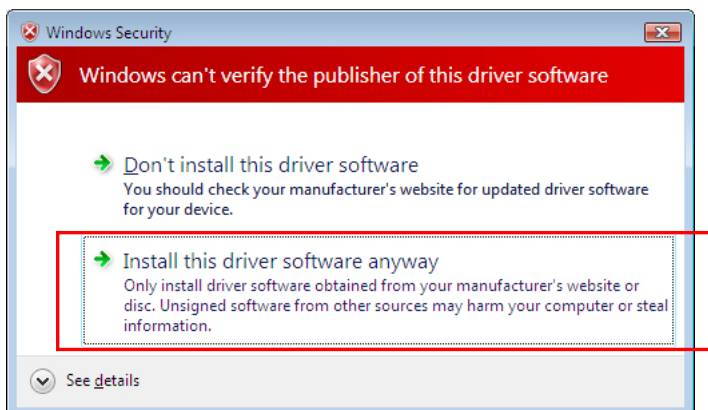
- (1) Turn on your PC.
- (2) Close all open applications

3. Getting Started

- (3) Insert the Install CD (included) to your PC.
Select either [32bit_OS] or [64bit_OS] (depends on your PC) and execute "Setup.exe".
- (4) The monitor turns dark and the following dialog appears when User Account Control is ON. Select "Continue".



- (5) The Installer starts installation. Follow the indications of the dialogs.
- (6) During the installation, the following warning appears. Click "Install this driver software anyway" and continue.



- (7) After installation, your PC will need to restart. Remove your Install CD and restart your PC. If you are going to use your printer without connecting it to your PC, this will be the end of PC preparation.

Connection with USB 2.0 Cable

- (1) Connect the USB 2.0 cable to your printer (power OFF).
- (2) Connect the other end of the USB 2.0 Cable to your PC.
- (3) Turn on your GT-541 printer. Installation starts automatically. The information appears at the right bottom of the PC monitor.
- (4) After installation, open "Printers" in "Control Panel" of PC.
- (5) Click either "Brother GT-541" or Brother GT-541 FileOutput icon and select "Set as Default Printer" on "File" menu. "Brother GT-541" icon is checked and Brother GT-541 is set as the default printer. This will help to do the layout with your application software. The PC setup is now completed.

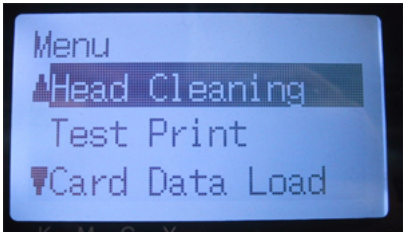
3-4. Setting Up Your Printer

Adjust the display contrast and the speaker volume as required.

3-4-1. Adjusting the Display Contrast

- (1) Press the OK Button on your printer's Control Panel.

The following display appears.



- (2) Use the Up/Down Button to highlight "LCD Contrast", and then press the OK Button.

The following display appears.

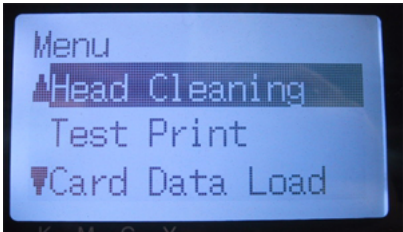


- (3) Use the Up/Down Button to select your desired contrast from 0 to 7, and then press the OK Button.

3-4-2. Adjusting the Speaker Volume

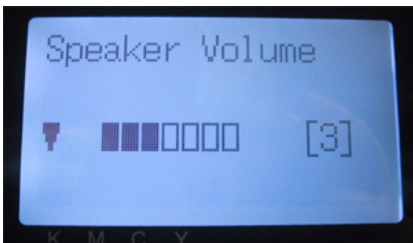
- (1) Press the OK Button on your printer's Control Panel.

The following display appears.



- (2) Use the Up/Down Button to select "Speaker Volume", and then press the OK Button.

The following display appears.



- (3) Use the Up/Down Button to select your desired volume from 0 (silent) to 7, and then press the OK Button.

3-4-3. Language

- (1) Press the OK Button on your printer's Control Panel.
- (2) Use the Up/Down Button to select "Language", and then press the OK Button.
- (3) Use the Up/Down Button to select your desired language from English / Español / Français / Deutsch / Italiano and then press the OK button.

3-4-4. Temperature

- (1) Press the OK Button on your printer's Control Panel.
- (2) Use the Up/Down Button to select "Temperature", and then press the OK Button.
- (3) Use the Up/Down Button to select your desired language from Fahrenheit / Centigrade and then press the OK button.

4. Printing Directly from Applications

WARNING



If a foreign object gets inside the printer, immediately turn off the power switch and disconnect the power cord, and arrange for a service call to resolve.



If you continue to use the printer while there is a foreign object inside, it may result in fire or electric shocks or problems with correct operation.



Do not allow water or oil to get onto the printer, otherwise it may cause fire or electric shocks or problems with correct operation.



If any liquids get onto the printer, immediately turn off the power switch and disconnect the power cord, and arrange for a service call to resolve.



Do not use the printer when smoke or a bad odor coming from the printer, otherwise it may cause fire or electric shocks or problems with correct operation. Immediately turn off the power switch and disconnect the power cord, and arrange for a service call to resolve.



CAUTION



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



Do not move the Platen by hand.
The Printer may be seriously damaged by this.



When a problem occurs with the operation of the printer, contact the place of purchase or a qualified technician.

4-1. Basic Printing Procedure

- (1) Set the proper color settings and print conditions of the application. For precise editing and output, applications such as Adobe Photoshop, Illustrator, CorelDRAW, Paint Shop Pro are recommended. See "4-2. Setting the Applications' Print Condition" for further details.
- (2) Create the artwork using a suitable graphic application.
- (3) Select [File] > [Print] menu of your application and set Printer Driver conditions. See "4-3. Setting the Printer Driver Condition".
- (4) Turn on your printer:
See "3-2-1. Turning On Your Printer".
- (5) Send data to your Printer. Select Printer Driver: either GT-541 Printer Driver (USB 2.0 Cable) for direct print or GT-541 FileOutput Printer Driver to make print data file (.arp).
As for sending .arp file to your Printer, see "5. Printing ARP Files".
- (6) Install the Platen of the size you have selected in step (3):
See "4-4. Uninstalling / Installing the Platen".
- (7) Set the T-shirt on the Platen and adjust the Platen height:
See "4-5. Placing the T-shirt on the Platen".
- (8) Press the Print Button on the Control Panel to start printing.
- (9) Remove the "printed" T-shirt from the Platen.
See "4-7. Removing the T-shirt From the Platen".
- (10) Fix the ink with heat onto the T-shirt.
Use the Heat Press to fix the ink onto the T-shirt. See "4-8. Fixing the Ink onto the T-shirt".
- (11) Repeat (7) to (10) until all the prints are finished.
- (12) Turn off your printer if all printing is completed.
See "3-2-2. Turning Off Your Printer".

4-2. Setting the Applications' Print Condition

This section describes the settings for correct printing of garments.

4-2-1. Common Notice for All Applications

Color Mode / Color Space:

GT-541 Printer is **RGB (Red Green Blue) printer**.. If you use Adobe, Corel applications, please note that some colors in CMYK (Cyan Magenta Yellow Black) mode cannot be printed as expected because of the color matching process.. We strongly recommend that the artwork should be made in RGB mode and working space should be always "**sRGB IEC61966-2.1**".

Print Layout:

Your printer has a large print area 14x 16 inches (35 x 40 cm), Any application has a rule to do the layout in printing, e.g. Microsoft Internet Explore sets the artwork at the center top, Microsoft Power Point does at the center middle. The GT-541 Printer does not have Letter or A4 paper size. To avoid this issue, please set the paper size as 14x 16 inches (35 x 40 cm) and do the layout manually by yourself.

We recommend that GT-541 Printer should be your PC's default printer.

Print Cancel:

Your printer does not start printing until you press the Print Button; The printer memory only holds one print job data at any time.

<Important!>

Do not use canceling command from "Printer and Faxes (for Windows XP)" / "Printers (for Windows 2000, Vista)" / "Devices and Printers (Windows 7)" in "Control Panel". Doing so causes an error and you may have to restart your printer.

Print ARP files:

Use "GT-541 FileOutput" Printer Driver, which saves print data in ARP format. With this you can see the detailed print conditions and estimated ink cost. See "5. Printing ARP Files." for the details.

<Important!>

Do not use "Print to File" command in the applications' Print window.

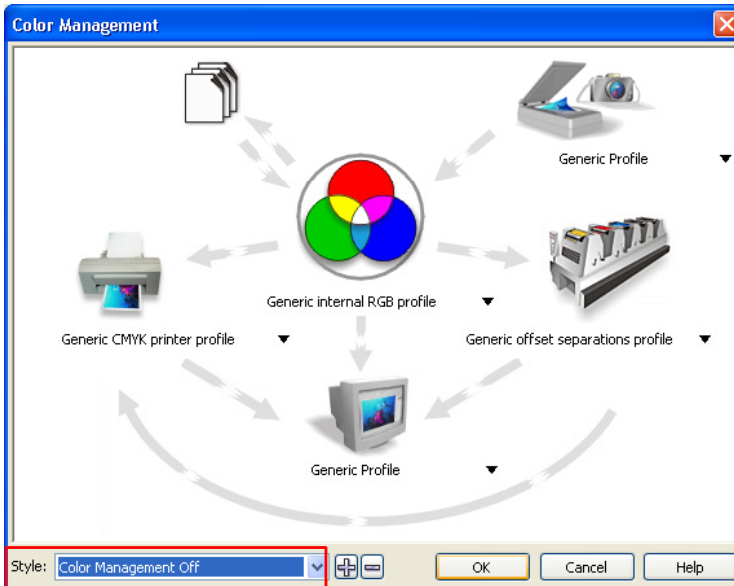
<Note>

- *The settings of printer driver may be applied for one print; it depends on the application.*
- *The settings made with Control Panel of your PC sometimes may not be applied to the application. If so, make the settings again in the menu of printer driver; these are applied to the actual settings.*

4-2-2. Settings for CorelDRAW 10/11/12/X3

Color settings:

- (1) Select [Tools] > [Color Management]
- (2) **CorelDRAW 10/11/12:** Select "Color Management off" as the style.

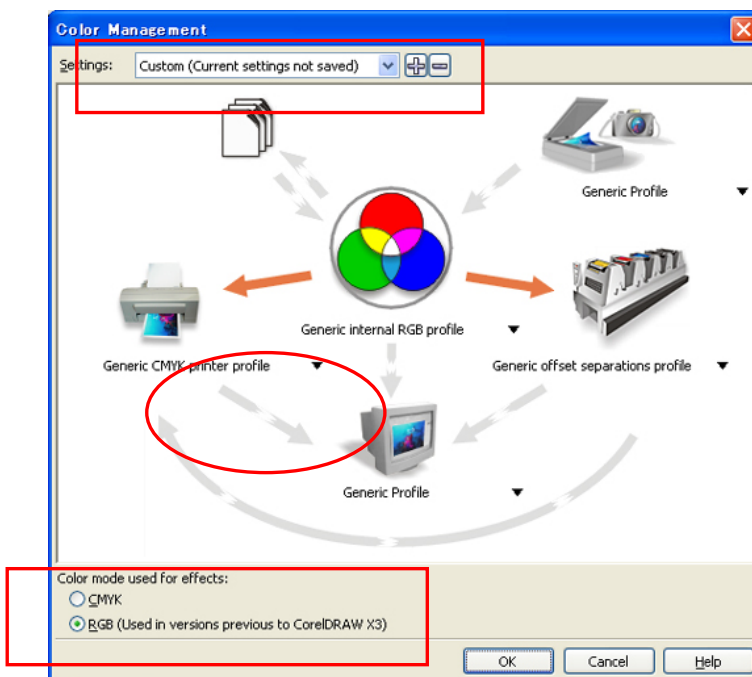


CorelDRAW 10/11/12

CorelDRAW X3: Select RGB radio button. Check the left top menu:

it changes [default settings] to [Custom (Current settings not saved)].

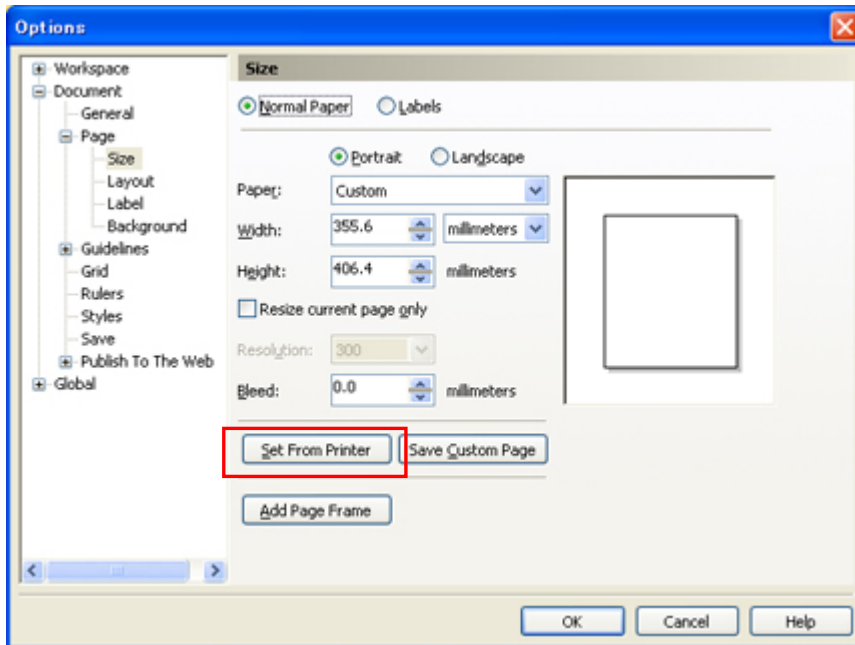
Also click the orange arrow from [Generic CMYK printer profile] to [Generic Profile]



CorelDRAW X3

Print Area (CoreIDRAW 10/11/12/X3) :

- (1) Select [File] > [Print Setup] menu.
- (2) Select "Brother GT-541" or "Brother GT-541 FileOutput" for the printer to be used. Your PC's default printer is recommended.
- (3) Select [Layout] > [Page Setup] menu.
<Note> These steps can be applied to set an accurate layout for already existing files.
- (4) Click "Set From Printer" to preview the created image in the Platen size.



<Note>

The image may not be able to be previewed properly with the Platen 10 x 12. In this case, enter the Platen size using the numeric buttons.

Color Palette in Install CD (CoreIDRAW 10/11/12/X3):

- (1) See "3-3-5. Installing the Useful Tools" and download CoreIDRAW Color Palette.
- (2) Select the [Window] > [Color Palette] > [Open palette] menu.
- (3) Select "GT-541_Colors.cpl".

<Important!>

Do not use HKS, Pantone and other licensed palettes. Those spot Colors are treated "special" for screen-printing Color separation (remember you can print each Color by print menu). GT-541 Printer Driver cannot deal with these information in Color matching.

Print: (CoreIDRAW 10/11/12/X3):

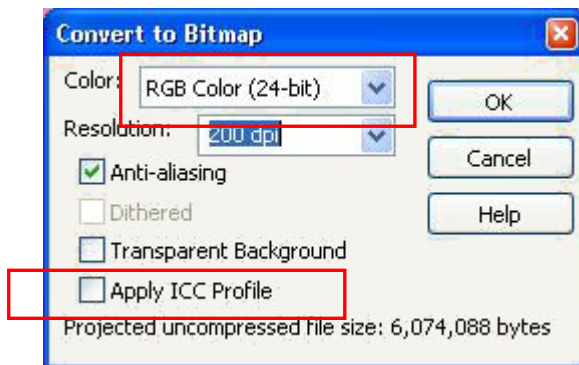
- (1) Select [File] > [Print] menu.
Click "Properties" to do Printer Driver settings.

<Important!>

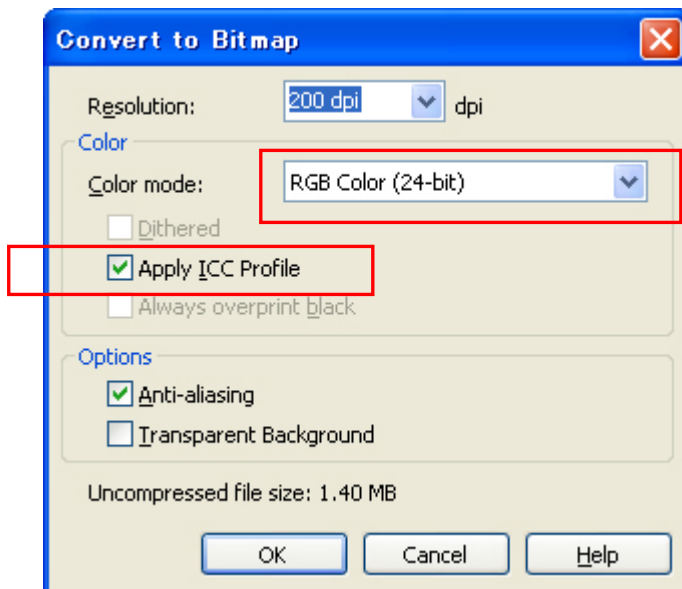
Do not check "Print to File" on Print window to make print files.

Convert to Bitmap:

- (1) Select [Bitmaps] > [Convert to Bitmap...] menu.
- (2) **CoreIDRAW 10/11/12:** Make sure that "Color" is RGB and "Apply ICC Profile" is OFF.



CoreIDRAW X3: Make sure that "Color" is RGB and "Apply ICC Profile" is ON

**<Important!>**

- The platen size may become 14x16 inches when pressing Set From Printer, even after setting the size of 10x12 inches at "Document Properties" dialog box of Printer Driver. To make print data in platen size of 10x12 inches, set Width : 10 inches, Height : 12 inches.
- If the print data file is not saved from the printer driver menu but application menu, the extension of the print data is automatically ".pm" although you added .arp. Before you use GT File Viewer to print, change the extension to ".arp" manually.
- There are some cases reported in CoreIDRAW 11/12 that outline Colors of curved texts (often by Envelop Effects) are not fully printed. In those cases, convert the text object into Bitmap before you print or check "Rasterize entire page (DPI)" checkbox in [Misc] tag of [Print] menu. The default DPI is 400, but 200-300 dpi will be enough to save time.

4-2-3. Settings for Adobe Photoshop 6/7/CS/CS2

Color settings:

- (1) Select [Edit] > [Color Settings] menu. The Color Settings window appears.
- (2) Make Color settings as follows, and then click "OK".

Advanced Mode: Check

Working Spaces

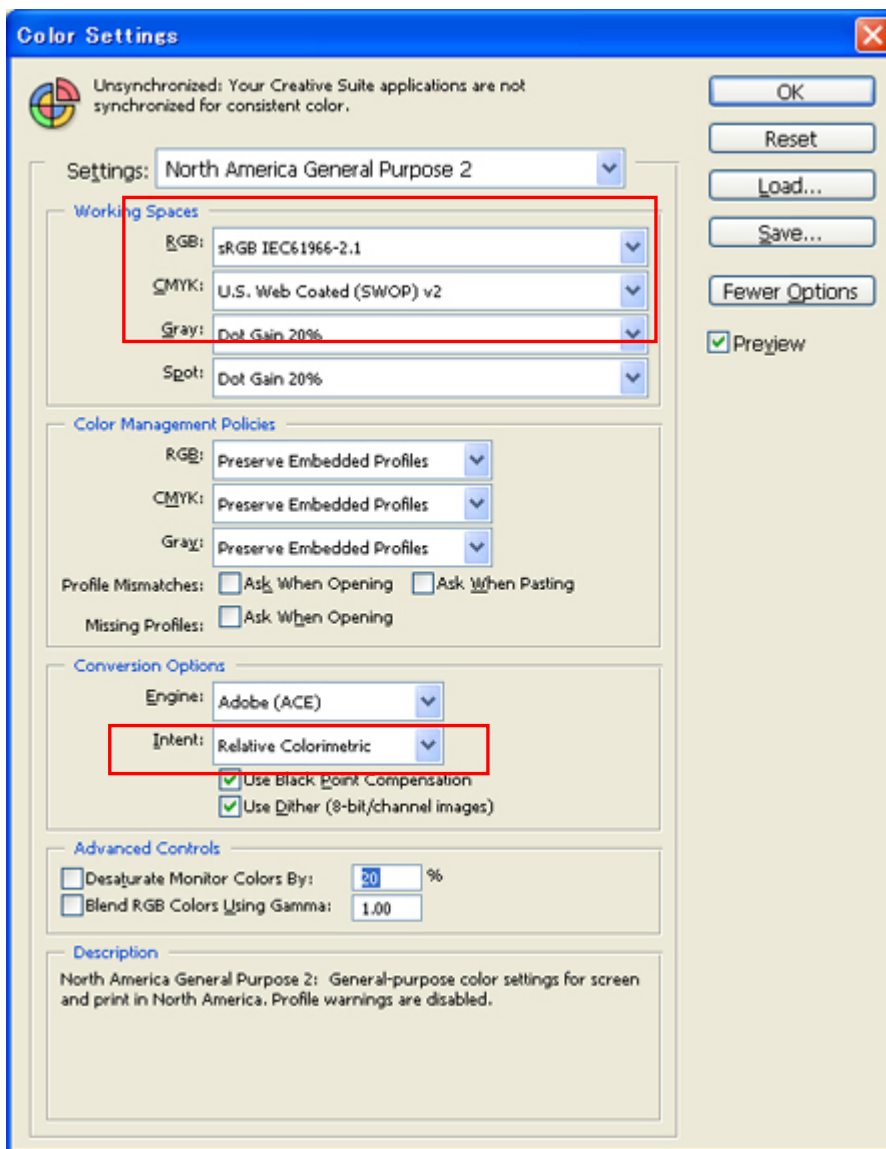
RGB: sRGB IEC61966-2.1

CMYK: U.S. Web Coated (SWOP) v2 / Europe ISO Coated FOGRA27

Conversion Options/ Intent: Relative Colorimetric

<Important!>

Make the artwork in RGB mode because CMYK artwork is printed, colors e.g. black, yellow and purple turn vague and dull. Convert to RGB in sRGB IEC61966-2.1 profile Color space and improve the Color saturation: select [Image] > [Arrangements] to select the proper menu. Or use Vivid Processing in Printer Driver (see "4-3. Setting the Printer Driver Condition").



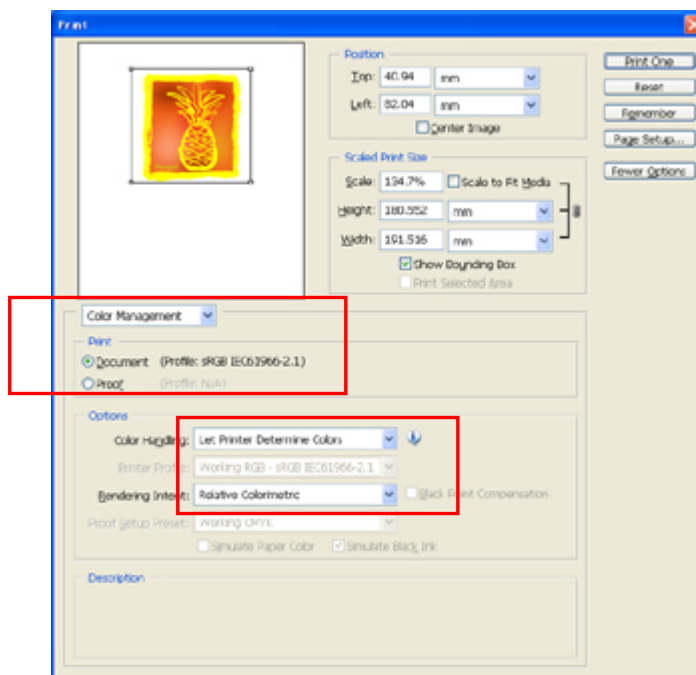
Photoshop CS2

Print:

- (1) Select [File] > [Print with Preview Alt + Ctrl + P] menu (depends on versions).
When the default printer of the PC used is set "Brother GT-541", the layout is set in this window.
- (2) Photoshop 6/7/CS:
Make print options as follows, go to "Page Setup..." to do Printer Driver settings, and then click "Print".
 - Show More Options: Check
 - Pull-down menu: Color Management
 - Source Space/ Document: sRGB IEC61966-2.1 or Untagged RGB
 - Print Space/ Profile: Printer Color Management

Photoshop CS2

- Make print options as follows, go to "Page Setup..." to do Printer Driver settings, and then click "Print".
- More Options: click
- Pull-down menu: Color Management
- Print: Document: Profile: sRGB IEC IEC61966-2.1 or untagged
- Options: Color Handling: Let Printer Determine Colors



Photoshop CS2

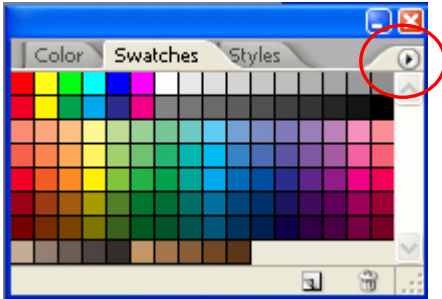
- (3) Go on to the Page Setup dialog and click "OK".

<Note>

Do not check "Print to File" on Print window to make print files.

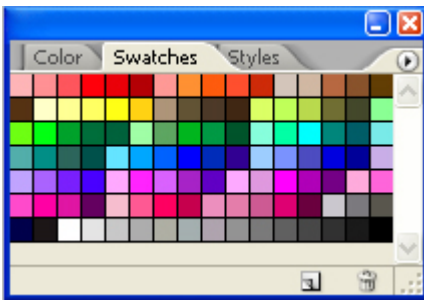
Color Palette (Swatch) in Install CD:

- (1) See "3-3-5. Installing the Useful Tools" and download Photoshop Color Palette (called swatch in Photoshop) GT-541_Colors.aco.
- (2) Select [Window] and check [Swatches] to show. Click the little triangle at the right top of the window (in the orange circle below) to show the submenu.



Photoshop CS2

- (3) Select [Replace Swatches...] and select file GT-541_Colors.aco. The swatch replaced.



<Important!>

Do not use HKS, Pantone and other licensed palettes. Those spot Colors are treated "special" for screen-printing Color separation (remember you can print each Color by print menu). GT-541 Printer Driver cannot deal with these information in color matching.

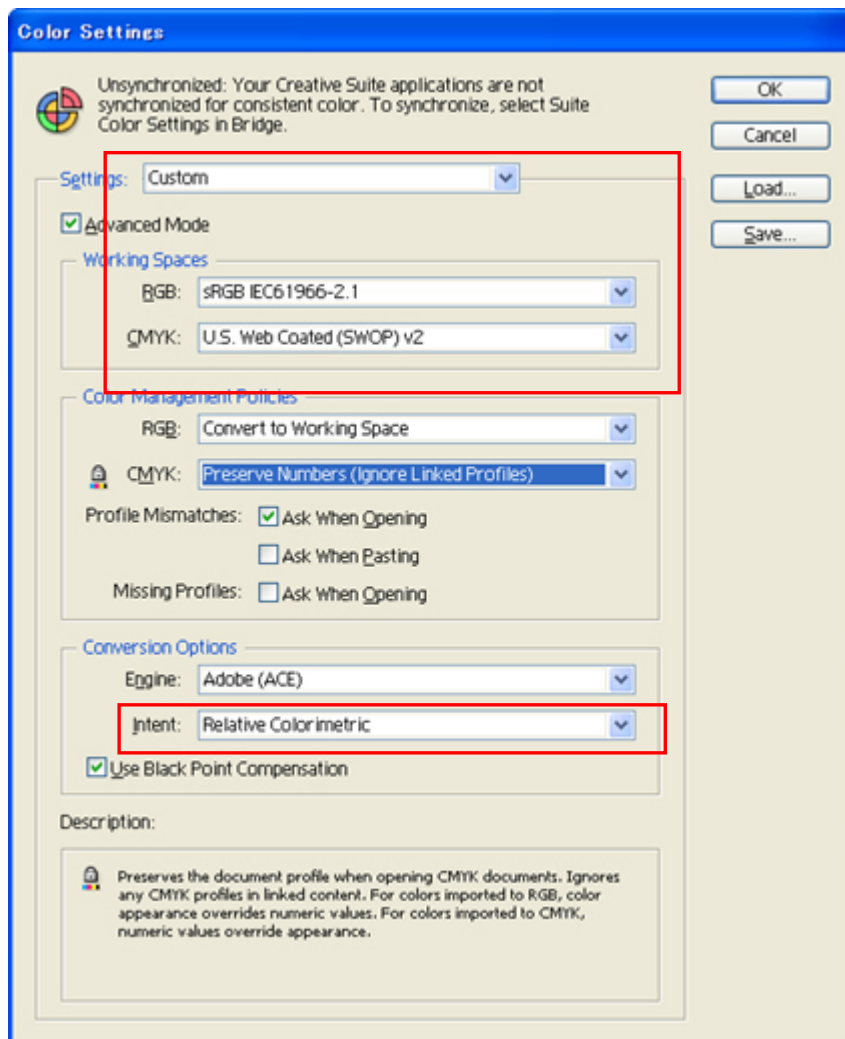
4-2-4. Settings for Adobe Illustrator 10/CS/CS2

<Important!>

- Set Brother GT-541 as the default printer before you go on to the following steps, otherwise, an image may be printed incorrectly.
- Make the print data in RGB Color mode to get the best Color accuracy. In CMYK color mode artwork may be printed dark and unclear. Transforming it to RGB ("Document Color Mode" on "File" menu) may improve the result, but black, yellow, and purple cannot be printed accurately. We recommend you edit the artwork or use Vivid Processing (see 4-3-4. Increasing the Vividness).

Color settings:

- (1) Select [Edit] > [Color Settings] menu. The Color Settings window appears.
- (2) Make Color settings as follows, and then click "OK".
 - Advanced Mode: Check
 - Working Spaces
 - RGB: sRGB IEC61966-2.1
 - CMYK: U.S. Web Coated (SWOP) v2 / Europe ISO Coated FOGRA27
 - Conversion Options/ Intent: Relative Colorimetric



Illustrator CS2

Opening the new file:

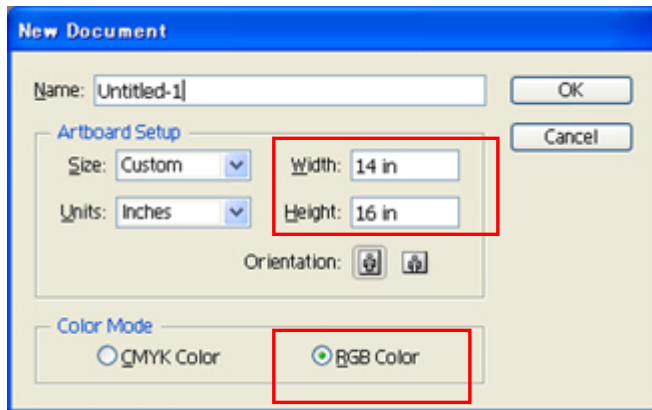
Set the New Document settings as follows:

Width: 14 in

Height: 16 in

Orientation: Portrait

Color Mode: RGB Color



Illustrator CS2

Printing:

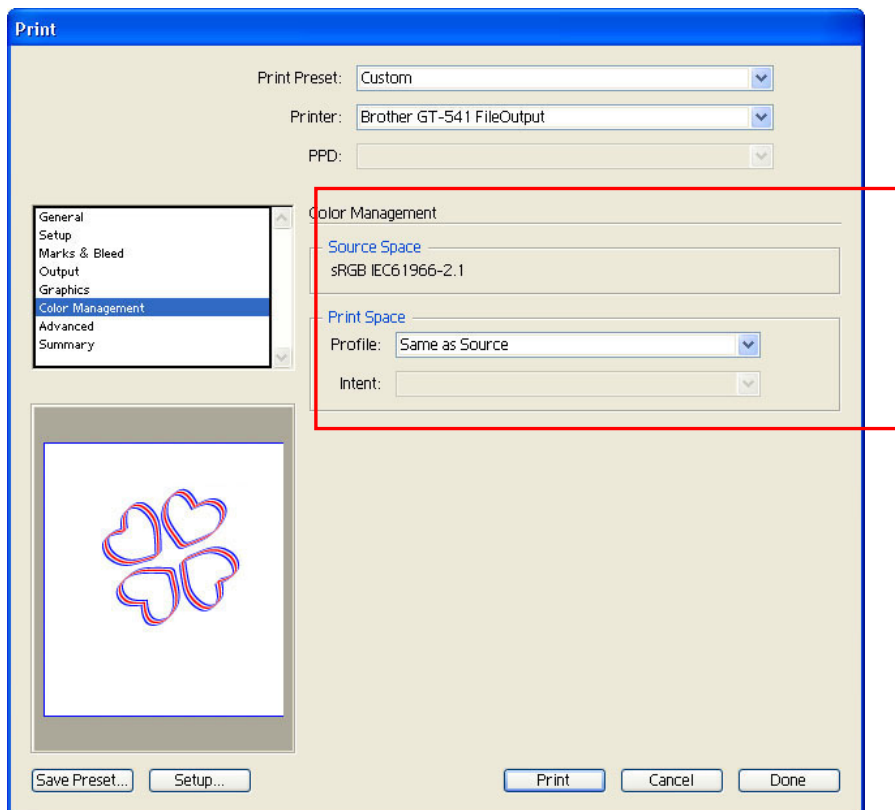
(1) Click [File] > [Print] menu.

(2) **Illustrator 10/CS:** Make sure the following settings.

Make sure Source Space is either "sRGB IEC61966-2.1" or "Untagged RGB".

Print Space/ Profile: Same As Source

Click "Properties" (Illustrator 10) or "Setup" (Illustrator CS) to do Printer Driver Settings.



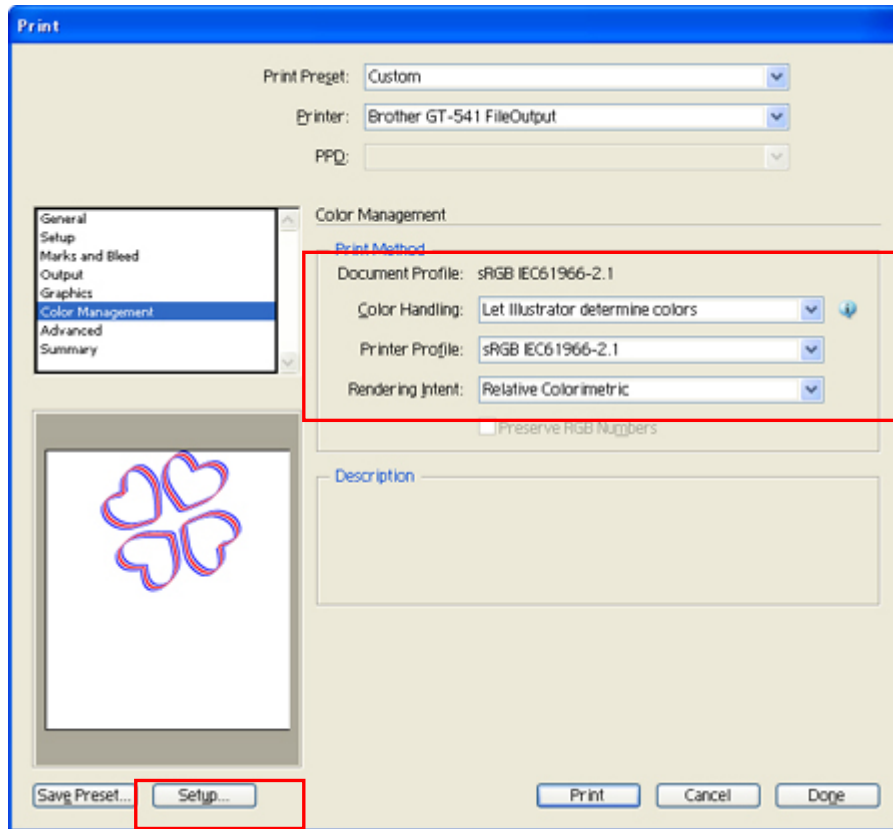
Illustrator CS (English Version)

Illustrator CS2: Make sure the following settings.

Make sure Document Profile and Printer Profile are either "sRGB IEC61966-2.1" or "Untagged RGB".

Color Handling: Let Illustrator determine Colors

Click "Setup" to do Printer Driver Settings.



Illustrator CS2

<Important!>

- In Illustrator 10, if "Use Print Setup" is selected as the Artboard and "Single Full Page" is selected as the View in "Document Setup" window, proper print image will not be sent to your printer. If you want to use "Use Print Setup", apply "Tile Full Pages" or "Tile Imageable Areas" as the View, and then select "Use Print Setup".
- The tile print is not available; only the last-received image will be printed.
- When printing a small image (especially an image smaller than 14 x 16 inches), the Platen Size may be set to Platen 10 x 12 automatically. Confirm the Platen Size in the Printer Driver window before you print.
- Do not check "Print to File" on Print window to make print files.

4. Printing Directly from Applications

- *An image that is smaller than 14 x 16 inches (e.g. a letter-size image) may not be printed on proper positions, or may result in errors. If this happens follow the steps below to correct.*
 - (1) *Open "Document Setup" on "File" menu.*
 - (2) *Select "Artboard".*
 - (3) *Check "Use Print Setup", and then click "Print Setup...".*

The Print Setup window appears.

If "Platen 14x16" is selected for "Size", temporarily change it to "Platen 10x12", and then click "OK".

If "Platen 10x12" is selected for "Size", temporarily change it to "Platen 14x16", and then click "OK".
 - (4) *Click "OK" on the Document Setup window.*
 - (5) *Open "Document Setup" in "File" menu again, and select "Artboard".*
 - (6) *Click "Print Setup..." to open the Print Setup window.*
 - (7) *Change "Size" back to the original setting, and then click "OK".*
 - (8) *Click "OK" on the Document Setup window.*
- *Landscape images may not be printed properly. Check the preview on Print window, and if it is not correct, follow the procedure below to solve the problem.*
 - (1) *Confirm the Media Size in Print window is "Defined by Driver (it is set as default; do not change it)".*
 - (2) *Change the Orientation to portrait*

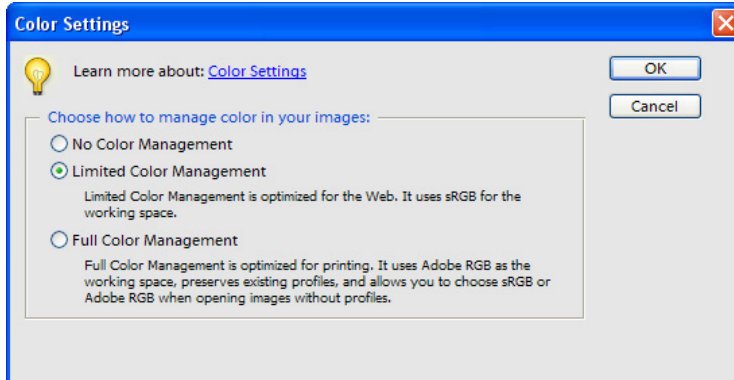
To change the Platen Size, go on to the next step. If not, skip to step (6).
 - (3) *Click "Setup...". Click "Continue" when the warning window appears.*
 - (4) *Another Print window appears. Click "Preferences".*
 - (5) *Change the Platen Size on Printer Driver window, and then click "OK".*
 - (6) *Confirm the preview on the original Print window, and then click "Print".*

4-2-5. Settings for Adobe Photoshop Elements

Color settings and print settings are required before printing. After the printer driver is installed, set the Colors before editing the document.

Color settings:

- (1) Select "Color Settings..." on "Edit" menu.
The Color Settings window appears.
- (2) Select "Limited Color management" – optimized for Web graphics", and then click "OK".



Photoshop Elements 3 (English Version)

Printing

Refer to Photoshop 6/7/CS page in "4-2-3. Settings for Photoshop 6/7/CS/CS2".

- (1) Select [File] > [Print...] menu.
The Print Preview window appears.
- (2) Do the settings as follows:
Show More Options: Check
Print Space/ Profile: Printer Color Management
- (3) Click "Properties" on Print dialog to do Printer Driver settings.

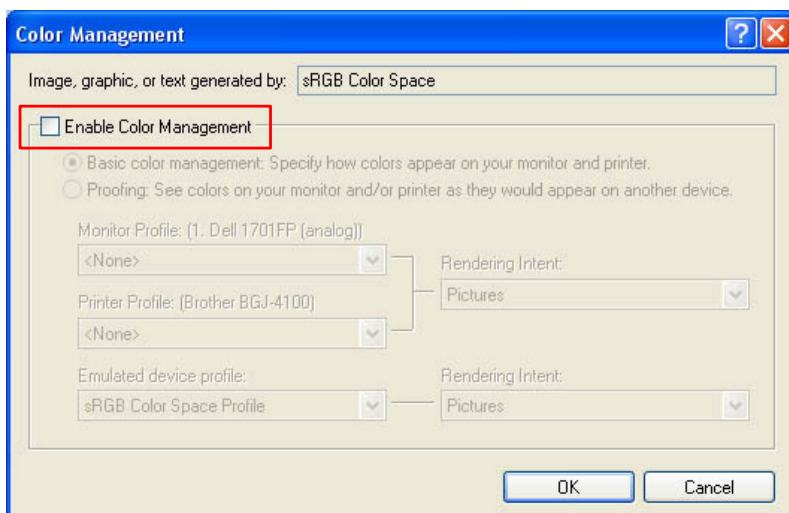
Color Palette (swatch) in install CD:

Color Palette GT-541_Colors.aco is available for Photoshop Element. See "4-2-3 Settings for Adobe Photoshop 6/7/CS/CS2".

4-2-6. Setting Paint Shop Pro Print Condition

Color settings:

- (1) Select [File] > [Preferences] menu.
- (2) Select "Color Management".
The Color Management window appears.
- (3) Uncheck "Enable Color Management", and then click "OK".



Paint Shop Pro 9 (English Version)

Printing

- (1) Select [File] > [Print] menu. Click "Properties" to do Printer Driver Settings.

<Important!>

- Leaving the Job Comment blank displays Windows files system name called "PSP PRINT" which indicates the application name on your printer's display. If you have entered the Job Comment, it will be displayed.
- Do not check "Print to File" on Print window to make print files.

4-2-7. Printing From Other Applications

If the application does not have Color Settings, the Color space is sRGB (Windows standard). Just select [File] > [Print] menu to print.

<Important!>

Fit Paper size / Page size to the Platen size you are going to use; either 14x16 or 10x12 and do the layout of the artwork.

4-3. Setting the Printer Driver Condition

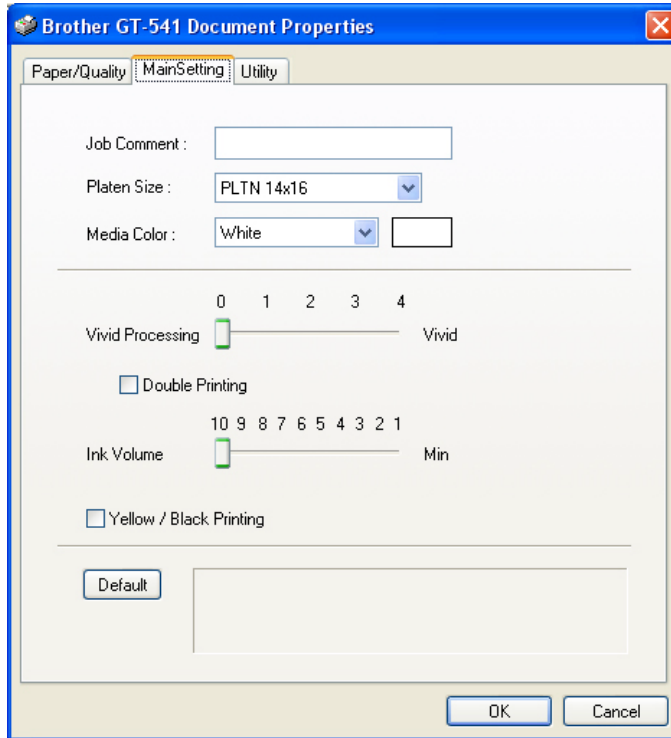
Set the printer driver condition following the procedure below.

- (1) Select [File] > [Print] menu of the graphic application.

The Print window appears.

- (2) Select "Brother GT-541" for the printer, and then click "Properties ...".

The following window appears: make the necessary settings, and then click "OK".



The following items can be set in this window.

"Rollover help" indicates in the bottom of the dialog. Move the pointer on the menu. The information can be seen with GT File Viewer when you use Brother GT-541 FileOutput Printer Driver to make ARP file.

- Job Comment: See "4-3-1. Entering the Job Comment".
- Platen Size: See "4-3-2. Selecting the Platen Size".
- Media Color: See "4-3-3. Setting the Media".
- Vivid Processing: See "4-3-4. Increasing the Vividness".
- Double Printing: See "4-3-5. Setting Double Print".
- Ink Volume: See "4-3-6. Selecting the Ink Volume".
- Yellow / Black Printing: See "4-3-7. Setting Yellow / Black Printing".

Click "Default" to make all items to their defaults.

4-3-1. Entering the Job Comment

You can enter a comment (max 17 characters) to display on your printer's Control Panel. It is used to advise the operator.

4-3-2. Selecting the Platen Size

Select the appropriate Platen size from the pull-down menu. When you use the Platen which mismatches with print data, or use Baby Platen (7x8 inches, option) , make sure the location and offset information.

4-3-3. Setting the Media Color

To reproduce the Color on a T-shirt, you need to specify the Color of T-shirt. Select "White", "Pink", "Yellow", "Blue", or "Gray" from the pull-down menu are the available options.

4-3-4. Increasing the Vividness of the Colors

Use this function to increase the vividness of an image. Slide the "Vivid Processing" tab to select 0 (almost the same vividness as shown on the display), 1 (increases the vividness one level without changing the tone; suitable for photo images), 2 (increases the vividness two levels; select this to print photo images most vividly), 3 (increases the vividness three levels; suitable for illustrated images), or 4 (increases the vividness four levels; also suitable for illustrated images).

The bigger the number is, the more vivid the image is printed. When the original artwork is in CMYK mode, Vivid Processing 3 (2-4) is recommended to increase the saturation.

<Note>

The Colors may be unexpectedly changed by Vivid Processing 3 or 4.

4-3-5. Setting Double Printing

Check the Double Printing to print an image clearer and sharper by widening the Color gamut. This is recommended especially for black and white images.

<Note>

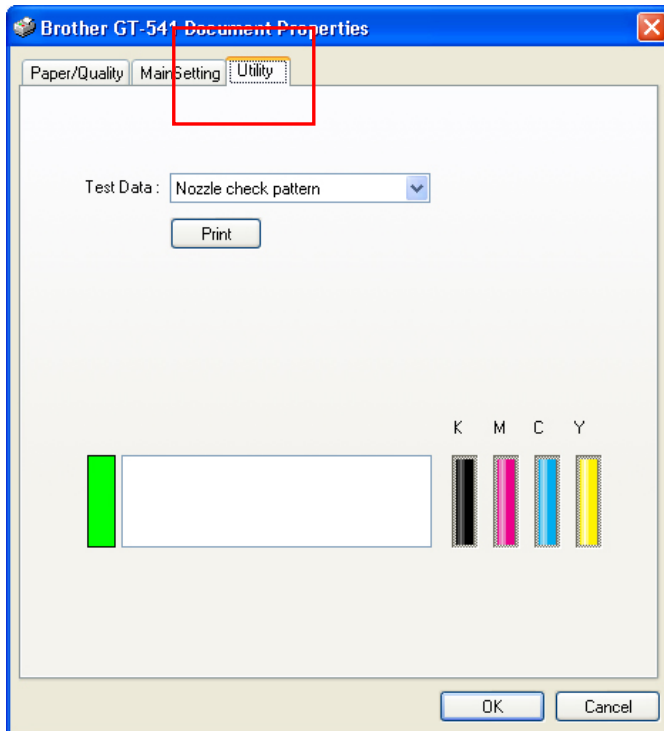
When you are using this function, you cannot select the "Ink Volume" or "Yellow / Black Printing".

4-3-6. Selecting the Ink Volume

To get the best print result, you may need to adjust the amount of ink depending on the fabric of the T-shirt to prevent blurring

Print "Ink volume check pattern" first and select the best ink volume by sliding the Ink Volume tab.

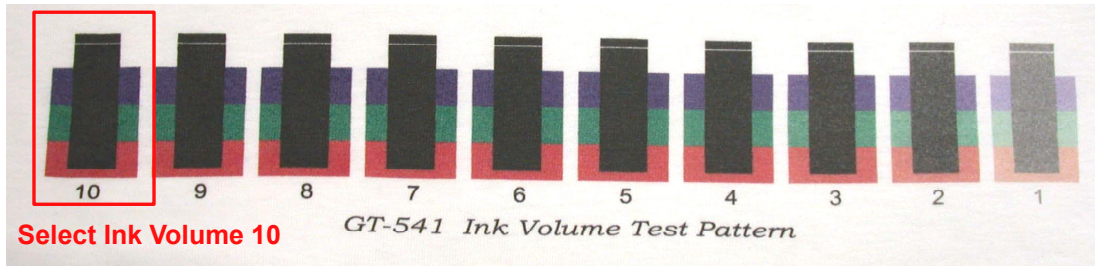
- (1) Make sure that your PC is connected to GT-541 printer with USB 2.0 Cable and select the Utility tab.



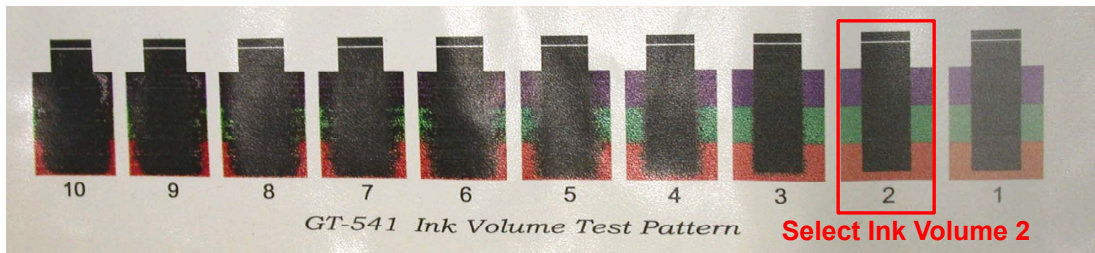
- (2) Select "Ink volume check pattern" from the pull down menu, and then click "Print" to send the data to your printer.
- (3) Set the Platen selected in the Main Setting tab.
See "4-4. Uninstalling / Installing the Platen".
- (4) Place the T-shirt you want to test on the Platen.
See "4-5. Placing the T-shirt on the Platen".
- (5) Press the Print Button on your printer's Control Panel to start printing the "Ink volume check pattern".
- (6) Remove the T-shirt from the Platen.
See "4-7. Removing the T-shirt From the Platen".
- (7) Set the ink onto the T-shirt using the Heat Press.
See "4-8. Fixing the Ink onto the T-shirt".
- (8) Find out which number shows the best result with Refer to the following examples:

4. Printing Directly from Applications

Example 1 (50% cotton 50% polyester thin T-shirt)



Example 2 (100% polyester synthetic leather fabric)



4-3-7. Setting Yellow / Black Printing

Yellow/black printing can sometimes show the problem below.

Check the Yellow / Black Printing check box to solve the problem.

Checking the Yellow / Black Printing means the printer prints with yellow ink first, and then prints with other Colors, to optimize quality.



Yellow / Black Printing off



Yellow / Black Printing on

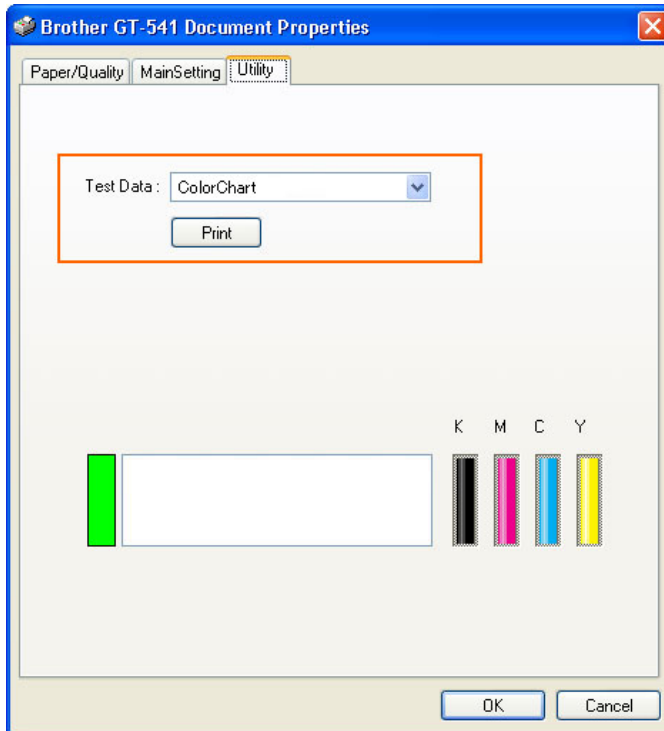
<Note> When you are using this function, you cannot select the "Double Printing".

4-3-8. Printing Color Chart

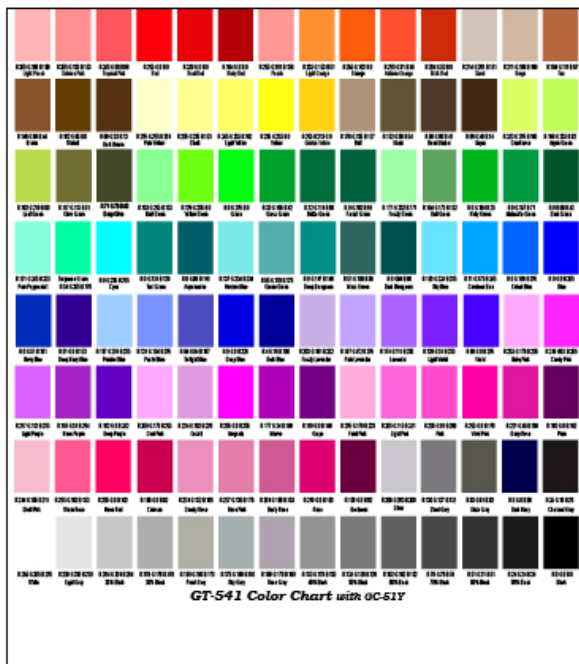
For your information, GT-541 Color Chart is available to understand Color gamut. Print the T-shirt and Color Chart will work something like Pantone's Color Formula Guide.

(1) Make sure that your PC is connected to GT-541 printer with USB 2.0 Cable and select the Utility tab.

- (2) Select "Color Chart" form the pull down menu, and then click "Print" to send the data to your printer.



- (3) Print on the T-shirt and set ink with Heat Press.



<Note>

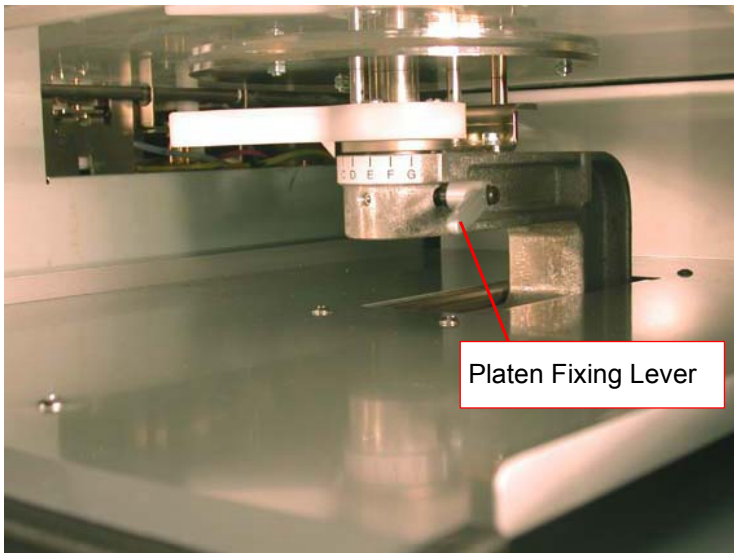
- Use our Color Palette for Photoshop and CoreIDRAW, which is in Install CD. See "4-2-3. Settings for CoreIDRAW 10/11/12/X3" and "4-2-3. Settings for Adobe Photoshop 6/7/CS/CS2".
- These are RGB values in Vivid Processing = 0. Colors change as the number increase.

4-4. Uninstalling / Installing the Platen

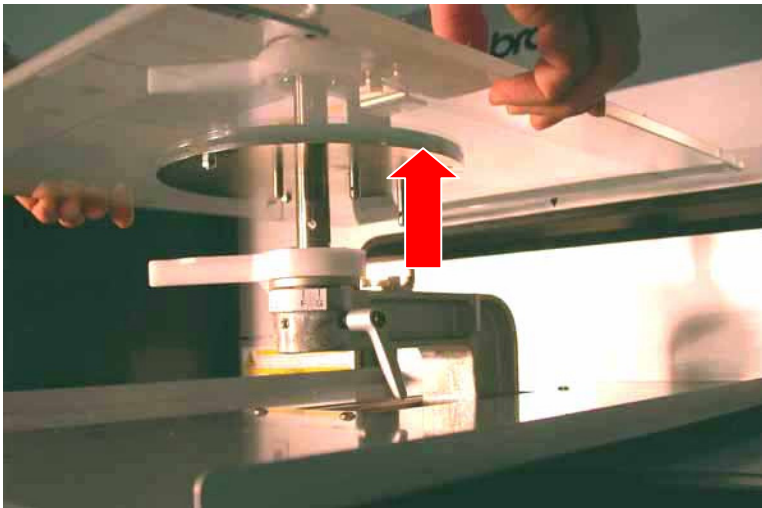
Replace the Platen for your print material. When Youth Platen 10 x 12 inches is used, be sure to set "Platen Size" in Printer Driver menu (see "4-3-2. Selecting the Platen Size").

4-4-1. Uninstalling the Platen

- (1) Press the Platen Button to eject the Platen
- (2) Loosen the Platen Fixing Lever underneath the Platen.

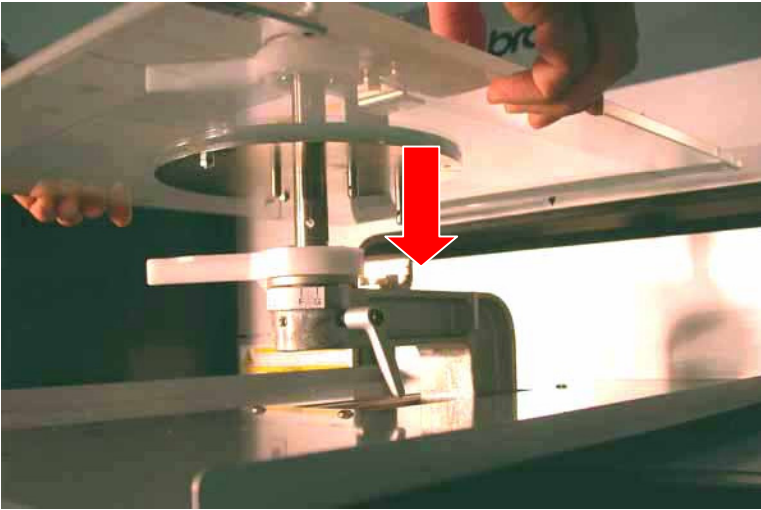


- (3) Uninstall the Platen by lifting it up straight.



4-4-2. Installing the Platen

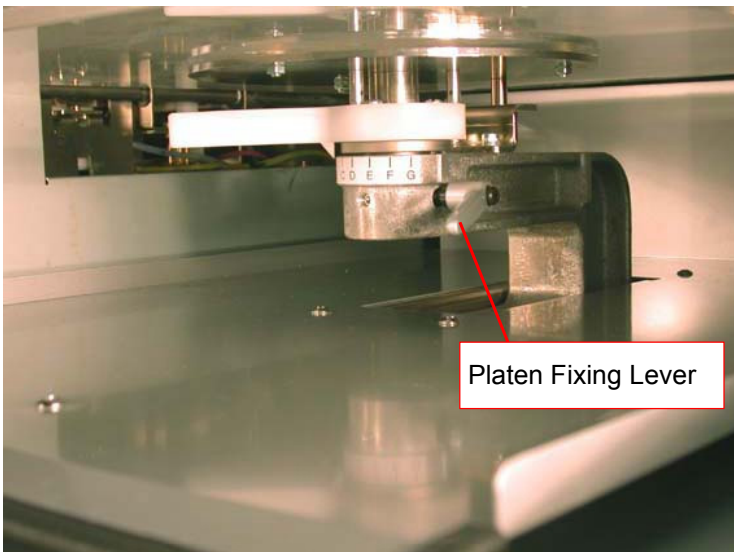
- (1) Place the Platen.





- (2) Tighten the Platen Fixing Lever securely.

<Note>

Adjust the Platen Height (see "4-5. Placing the T-shirt on the Platen").



4-5. Placing the T-shirt on the Platen

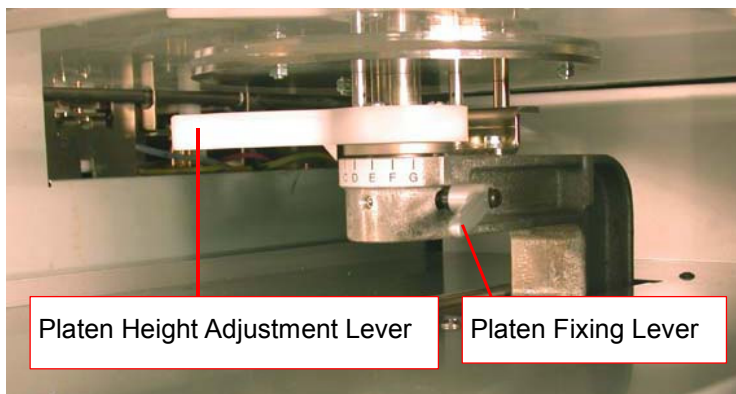
 CAUTION	
	Ensure there is adequate space left for safe working. The Platen moves forward while operating.
	Do not handle the platen while printing. If your hand gets caught between the platen or the T-shirt tray and the covers, it may be injured.
	Do not move the Platen by hand. The Printer may be seriously damaged by this.

To get the optimum quality print result, you need to adjust the Platen height depending on the thickness of the T-shirt.

<Note>

If Platen height is too low, the result may be poor quality (e.g. a straight line becomes double). Adjust it properly by test moving the platen in with Platen Button on the Control Panel. When you have to lower the Platen to avoid any material which is thicker i.e. hems the hems, use Uni-Directional print (see "7-2-4. Changing the Print Direction").

- (1) If the Platen is not ejected, press the Platen Button to eject it.
- (2) Gently turn the Platen Height Adjustment Lever to the left until it stops.



<Note> Do not use force.

- (3) Loosen the Platen Fixing Lever.
- (4) Turn the Platen Height Adjustment Lever to the "A" position (leftmost), where is best for normal T-shirts.
- (3) Tighten the Platen Fixing Lever securely.

- (4) Place the T-shirt, with its print side on the top of Platen and the other side underneath the Platen, as shown below.



<Note>

Pay attention to the hems; neck, arm holes, tags, and the bottom.

The side edges may raise and hit the Print Head during printing operation. It is important to ensure the t shirt surface is flat and smooth.

- (7) Smooth the surface to remove wrinkles and threads with your hands. It is easier to smooth from the center of the shirt outwards.

<Note>

- *If the surface of T-shirt is not smooth enough, the Obstruction Sensor may be activated*
- *When placing a thick fabric such as a sweatshirt, keep its surface as flat as possible.*

- (8) Keep the sleeves and overflows on the T-shirt Tray to avoid jamming.



4. Printing Directly from Applications

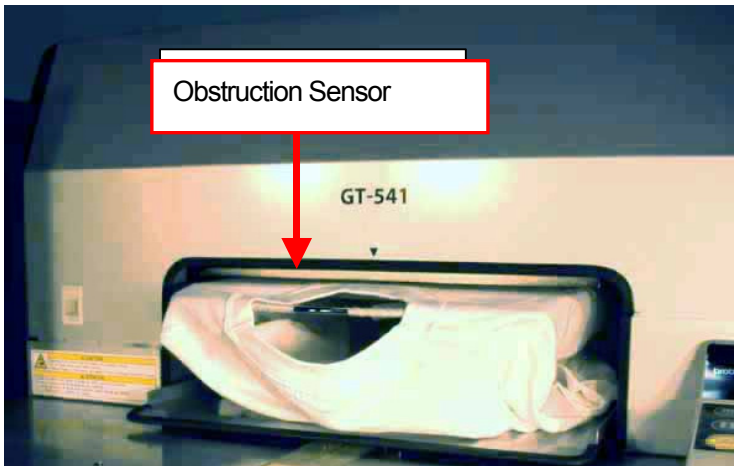
- (9) Press the Platen Button to insert the Platen, and check the gap between the Obstruction Sensor and the T-shirt.

If the Platen height is appropriate, the space is around 2.0 mm.

<Note>

Make sure you check the space when the Platen is moving, so that the Obstruction Sensor work properly. While the platen stops, it is in upper position.

If the Platen height is too high, the T-shirt, Print Head, or both of them may be damaged when printing.



- (10) Press the Platen Button to eject the Platen.
If the Platen height is appropriate, you can go to “4-6. Printing” to start printing.
If not, go on to the following steps.
- (11) Loosen the Platen Fixing Lever.
- (12) Adjust the Platen height by turning the Platen Height Adjustment Lever.
The “A” position is the highest. The Platen lowers as you turn the Platen Height Adjustment Lever to the right.
- (13) Tighten the Platen Fixing Lever securely.
- (14) Repeat steps (9) and (10) and check the Platen height.
Repeat steps (11) to (14) until the Plate height becomes appropriate.

4-6. Printing

CAUTION



Ensure there is adequate space left for safe working. The Platen moves forward while operating.



Do not handle the platen while printing. If your hand gets caught between the platen or the T-shirt tray and the covers, injury may result.



Do not move the Platen by hand.
The Printer may be mechanically and electrically damaged.



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.

4-6-1. Making One Print

- (1) Make sure the Print Button has been turned on, which indicates your printer has received the print data successfully.

<Note>

Your printer cannot receive a print data when printing, head cleaning, or in other menus. Do not send data while the Printer is operating, or it may not be received correctly.

- (2) Make sure that the Platen is ejected. If not, press the Platen Button.
- (3) Confirm the Job Comment on the Display shows the correct print job details.
- (4) Press the Print Button to start printing operation

When the printing is completed, the Platen is ejected and an audible indication is given.

If printing is to be stopped before it is finished the Stop button can be used.

<Note>

- *By pressing the Print Button, your printer automatically starts cleaning the Print Head every 24 prints (default) or every numbers of prints you have set (see "7-2-5. Changing the Auto Head Cleaning Setting"), or after your printer has not been used for more than two hours. In this case, wait until the cleaning completes (takes about 20 seconds), and then printing will automatically start.*
- *Keep away from the moving platen.*
- *If the Platen is not at the appropriate position when the Print Button is pressed, it automatically adjusts the position to start printing. Press the Print Button again to start printing after the Platen is available*
- *Do not open unlock or open the Cover during printing. If you do the power is turned off for safety reasons.*

4-6-2. Printing More than One Print Using the Same Print Data

After making one print following the procedure in “4-6-1. Making One Print”, you can continue making more prints using the same print data.

- (1) If you change the printed material, we recommend setting the necessary print condition (see “4-3. Setting the Printer Driver Condition”) and the Platen height before you print.
- (2) Press the Print Button to start printing. The counter indicates how many images are printed.

4-7. Removing the T-shirt From the Platen

- (1) Hold the shirt slightly to allow air to get between the shirt and the platen.
- (2) Hold both shoulders of the T-shirt, and then pull it out straight from the Platen.

<Note>

Be careful not to get "wet" ink on your hands or printed material. Wash your hands or clothes with soap if stained.

4-8. Fixing the Ink onto the T-shirt

To Fix the ink onto the T-shirt, A Heat Press is recommended.

Follow the instruction manual that comes with your Heat Press.

<Note>

- *An appropriate heat treatment requires 356 °F (180 °C) of heat for 35 seconds.*
- *The fixing is important and if not done correctly the image may fade or have other symptoms.*
- *The heat press should be used in a well ventilated environment.*
- *After using the Heat Press, always confirm if the ink is completely dry and cured.*
- *Make sure the surface of the Heat Press is clean before and after fixing the t shirt.*

5. Printing ARP Files

When saving a print data in ARP format file, you can select the printing procedure by either of these two methods

- Print an ARP file with GT File Viewer. You can check the detailed print conditions and ink cost before sending a print data to your printer.
- Save ARP files in a CompactFlash. You can print with Stand-alone printer without using PC.

The procedure of printing ARP files:

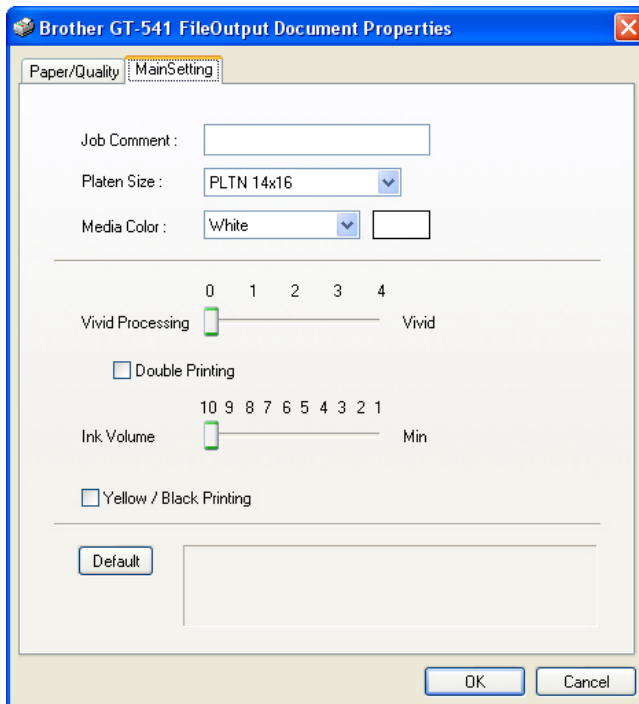
- (1) Use GT-541 FileOutput Printer Driver and save the print data in ARP file format.
See "5-1. Making Print Data in ARP format".
- (2) Turn on your printer:
See "3-2-1. Turning On Your Printer".
- (3) Send the ARP file to your printer using GT File Viewer or a CompactFlash.
See "5-2. Reading ARP Files Saved in a CompactFlash" or "5-3. Sending ARP Files from GT File Viewer to your Printer".
- (4) Install the Platen.
See "4-4. Uninstalling / Installing the Platen".
- (5) Place the T-shirt on the Platen and adjust the Platen height:
See "4-5. Placing the T-shirt on the Platen".
- (6) Press the Print Button on the Control Panel to start printing.
- (7) Remove the T-shirt from the Platen.
See "4-7. Removing the T-shirt From the Platen".
- (8) Set the ink with heat onto the T-shirt.
Use the Heat Press to set the ink onto the T-shirt. See "4-8. Setting the Ink onto the T-shirt".
- (9) Repeat (5) to (8) until all the prints are finished.
- (10) Turn off your printer:
See "3-2-2. Turning Off Your Printer".

5-1. Making Print Data in ARP Format

<Note>

You cannot edit ARP files; we recommend you save the data in the original format as well.

- (1) Create the artwork using a graphic application. See “4-2. Setting the Applications’ Print Condition” for proper settings.
- (2) Select "Print" on "File" menu of the application.
Print dialog box appears.
- (3) Select “Brother GT-541 FileOutput ” Printer Driver and click "Properties".
The following Main Setting window appears.



Set the following items in this window, and then click “OK”:

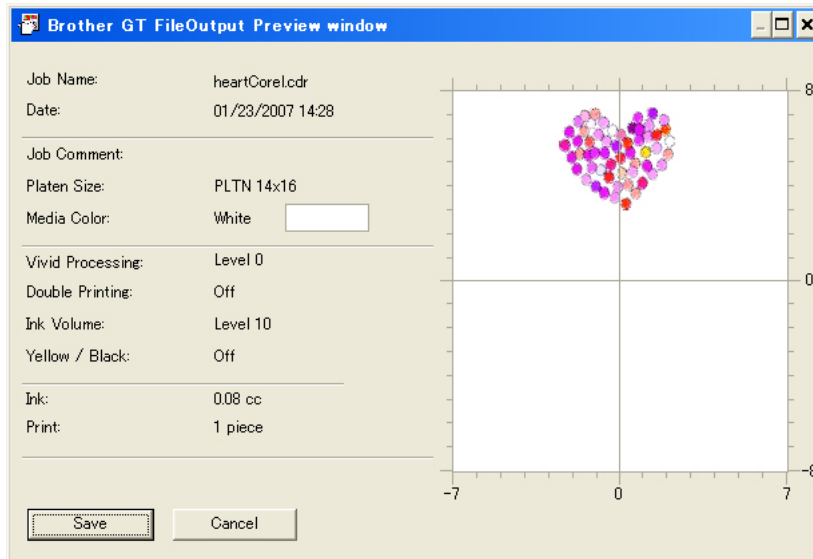
- Enter the job comment (see “4-3-1. Entering the Job Comment”).
- Select the Platen size (see “4-3-2. Selecting the Platen Size”).
- Select the media color (see “4-3-3. Setting the Media Color”).
- Increase the vividness if necessary (see “4-3-4. Increasing the Vividness”).
- Check Double Printing if necessary (see “4-3-5. Setting Double Print”).
- Select the ink volume (see “4-3-6. Selecting the Ink Volume”).
- Check Yellow / Black if necessary (see “4-3-7. Setting Yellow / Black Printing”).

Click “Default” to make all items to their default.

- (4) Follow the procedures in “4-2. Setting the Applications’ Print Condition”, as selecting “Brother GT-541 FileOutput” for the printer, and then click “Print” or “OK” on the application’s print window. Wait for a while until the following preview window appears.

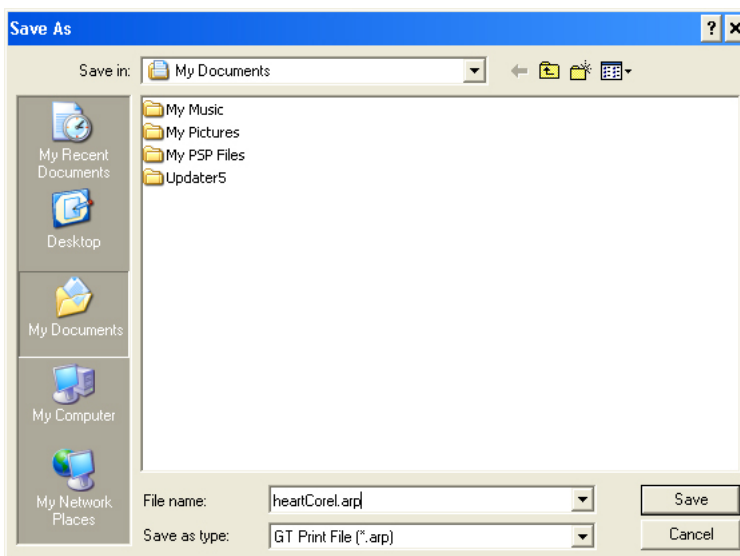
<Important!>

Depending on the application or the image, it may take a few minutes to open the Preview window after clicking “OK” or “Print”. Do not click “Print” or “OK” again.



- (5) Click “Save”.

The following window appears.



- (6) Select where to save the data, enter the file name, select “GT-541 Print File (*.arp)” as the file type, and then click “Save”.

The ARP file is created and saved in the selected location.

<Important!>

Your printer cannot read files in a CompactFlash if it is saved in a folder.

<Note>

To read the file name of data saved in a CompactFlash and display it correctly on your printer’s Display, the file name should be 8 characters or less.

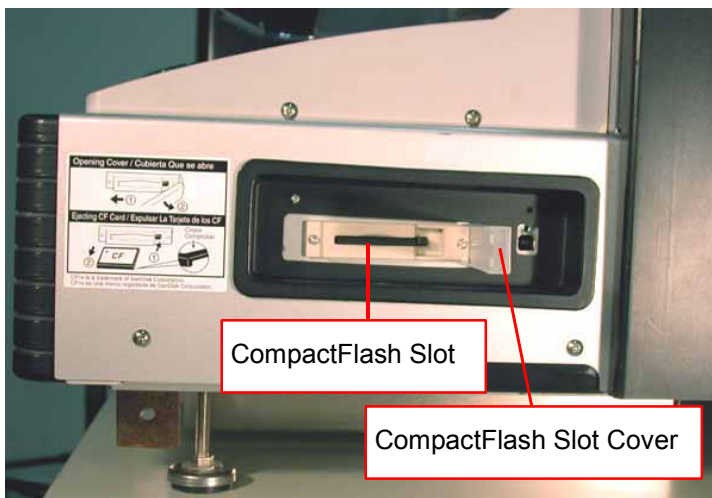
5-2. Reading ARP Files Saved in a CompactFlash

<Note>

- Use a CompactFlash that meets the requirements (see “1-3-4. Other Requirements”).
- Your printer can only read ARP files from a CompactFlash.
- Save ARP files directly in a CompactFlash without making folder beneath it.
- The names of ARP files must be less than 8 characters.

- (1) Open the CompactFlash Slot Cover and insert the CompactFlash, and then close the CompactFlash Slot Cover.

<Note> Do not insert the CompactFlash by force; it may destroy the data saved in it.



- (2) Press the OK Button on your printer's Control Panel to select Menu.
- (3) Press the Up/Down Button to select “Card Data Load”, and then press the OK Button.
The file information (file names, Job Comments, Platen Sizes, etc.) of the data in the CompactFlash is displayed (one display per data) one by one.
- (4) Press the Up/Down Button to select the file to be printed, and then press the OK Button.
Your printer starts reading the CompactFlash and the Print Button on your printer's Control Panel starts flashing.
When the ARP file finished reading, the printer beeps and the Print Button turns on.

<Note>

If a file name of the data saved in a CompactFlash cannot read properly, see “7-1. Solving Printer Problems”.

Do not touch the CompactFlash while the Print Button is flashing; it may destroy the saved data.

Reading the CompactFlash may take more than two minutes depending on the stored data sizes.

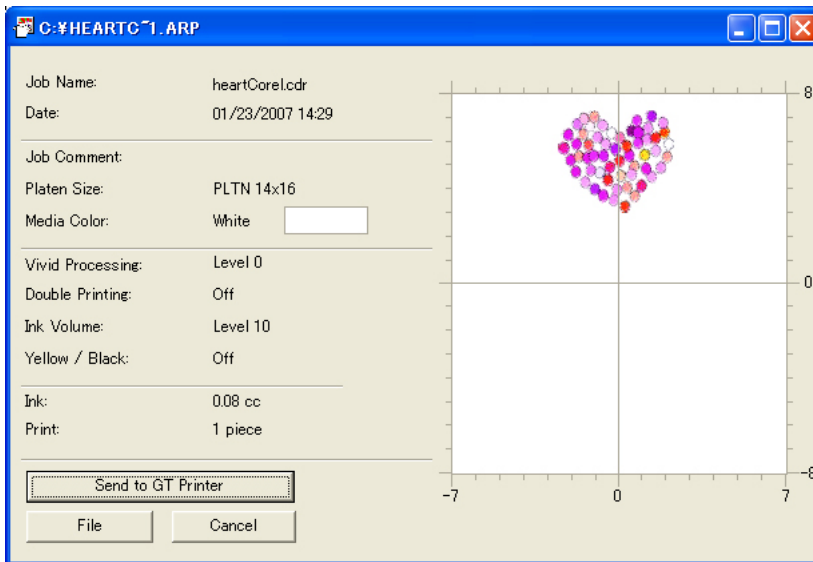
- (5) Pull out the CompactFlash when you have finished printing the data, and then close the CompactFlash Slot Cover.

5-3. Sending ARP Files from GT File Viewer to your Printer

- (1) Double-click the shortcut of GT File Viewer on the PC desktop.
GT File Viewer opens.
- (2) Click “File” and select the ARP file you want to open, and then click “OK”.
The file’s print condition and the preview appear in the following window.

<Note>

You can open the ARP file by double-clicking it instead of doing steps 1 and 2.



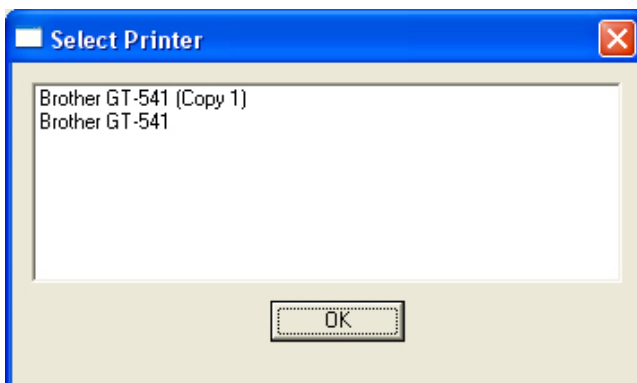
- (3) Confirm the print conditions and layout, then click “Send to GT Printer”. Also confirm that your printer is connected to PC with USB 2.0 Cable.

The ARP file has been sent to your printer.

<Note>

If more than one GT-541 are installed in your PC, the Select Printer dialog appears.

Select the one to send the data to, and then click OK. PC starts sending the print data.



6. Maintenance

For optimum product performance regular maintenance is required.

DANGER



Wait at least 5 minutes after turning off the power switch and disconnecting the power cord from the wall outlet before opening the cover of the control unit. Do not touch as high voltage can result in severe injury.

WARNING



Do not put your hands in the ink cartridge slot, otherwise the needle inside the slot may cause injury.

CAUTION



Wait at least 1 minute after turning off the power switch before opening the front cover. Do not touch the head heat sink as it may be HOT and may cause a burn.



Be careful not to get your fingers caught when closing the front cover, otherwise it may result in injury to your fingers.



Do not move the Platen by hand.
The Printer may be seriously damaged by this.



Do not disassemble the ink cartridge or the waste ink cartridge.



Take care not to let the ink, waste liquid or wash liquid come into contact with your eyes or onto your skin, otherwise inflammation can result.

Do not drink the ink, waste liquid or wash liquid under any circumstances, as they can cause vomiting and diarrhea. In case of contact with eyes, do not rub but immediately rinse the eyes with water.

Keep the ink, waste liquid and wash liquid out of the reach of children.



Use only the proper replacement parts as specified by Brother.

6-1. Replacing Consumables

This section describes how to replace the consumables:

Ink Cartridge,
Wiper Cleaner,
Waste Ink Cartridge,
and Platen Sheet.

6-1-1. Replacing the Ink Cartridge

The ink indicator on the Display flashes when the Ink Cartridge is getting low. Prepare the new Ink Cartridge, and replace it when "EMPTY XXXX (color)" is displayed.

<Note>

Use the Ink Cartridges described in "1-3-5. Consumable Requirements".

Be careful not to get ink on your hands or clothing. Wash with soap if stained with ink.

Do not replace cartridges while printing or head cleaning; is in operation it may cause damage to your printer.

Do not disassemble the Ink Cartridge.

Replace the Wiper Cleaner when Black Ink is empty. See 6-1-2. Replacing the Wiper Cleaner".

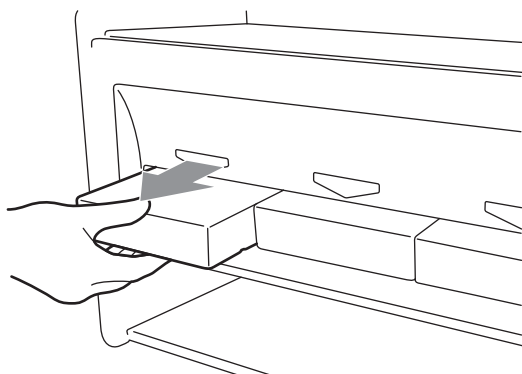
To keep the best print result, your printer will show empty status for the color cartridge that is empty. To keep print quality, a small amount of ink remains to avoid damage to your printer.

- (1) Remove the new Ink Cartridge from its packing.
- (2) Carefully remove the used Ink Cartridge from your printer.

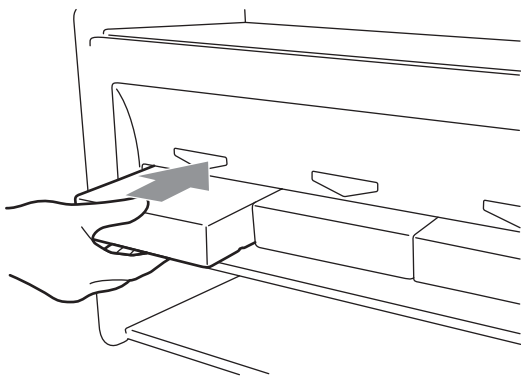
<Note>

Leave the used Ink Cartridge installed until just before the replacement. Leaving your printer with no Ink Cartridge installed may cause ink leakage.

Do not put your finger to the Ink Cartridge Slot; otherwise you may get injured with the needle inside.



- (3) Insert the new Ink Cartridge securely (ensure the direction and the color are correct).



<Note>

Confirm the color of the ink cartridge. Loading a wrong color causes serious damage to print quality, and could damage to the Print Heads. If you have installed a wrong color, immediately contact Brother or your dealer for a service call

- (4) When you have replaced the Black Ink Cartridge, refer to “6-1-2. Replacing the Wiper Cleaner” and replace the attached Wiper Cleaner and clean the surroundings. This is really important to keep your printer in good condition.

<Note>

- Do not repeat uninstalling / installing the Ink Cartridge.
- Dispose the used Ink Cartridge in compliance with your local regulations.

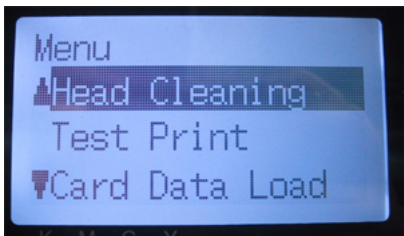
6-1-2. Replacing the Wiper Cleaner

The Wiper Cleaner is attached to the Black Ink Cartridge, and it needs to be replaced regularly when the Ink Cartridge is replaced. Keep the Print Head Cap and Wiper Blade clean when replacing the Wiper Cleaner.

<Note>

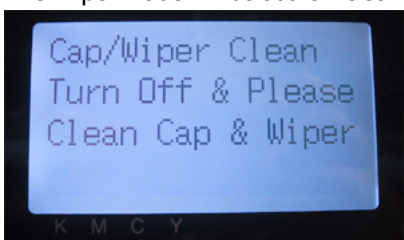
Generally Yellow Ink is used most of other colors when you print colorful artwork. But if you use other ink more than Black Ink, e.g. Yellow Ink, the regular cleaning at the timing of Black Ink replacement might be insufficient to keep print quality good. Please get a Cap Cleaning Kit and do this maintenance regularly at the timing of ink replacement that you use most.

- (1) Press the OK Button to show the Menu Display.

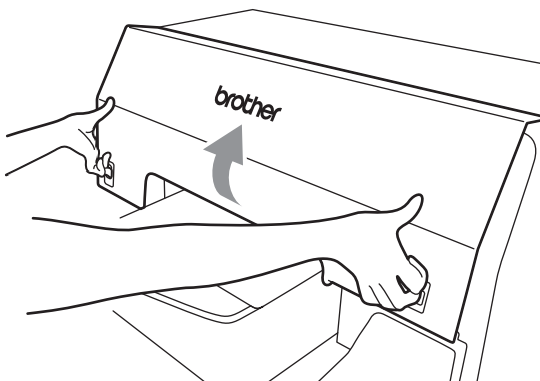


- (2) Press the Up/Down Button to select the “Maintenance”, and then press the OK Button.

- (3) Press the Up/Down Button to select the “Cap/Wiper Clean”, and then press the OK Button.
The Wiper Blade will be at the cleaning position. Follow the message and turn off the printer.



- (4) Open the Front Cover by unlocking the Cover Locks with both hands.

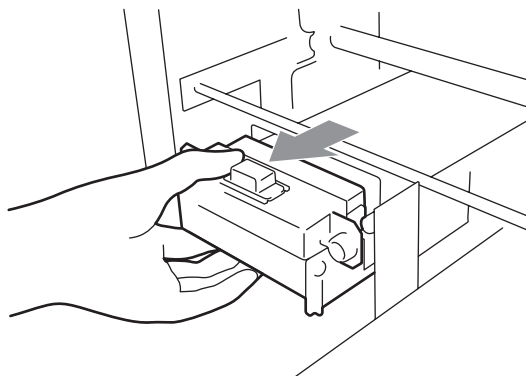


- (5) Pull out the Wiper Cleaner Cassette straight and slowly.

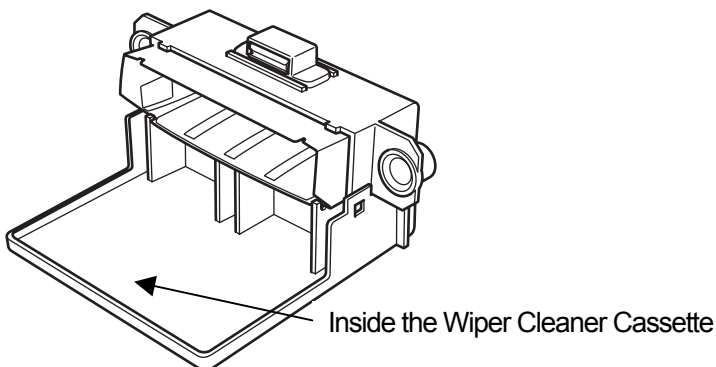
<Note>

Do not tilt the Wiper Cleaner Cassette; ink may get on your hands or clothing.

Do not touch the Clearance Sensor (the bar above the Wiper Cleaner Cassette).

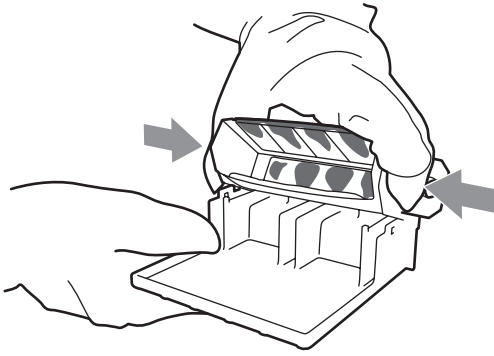


- (6) If the ink inside of the Wiper Cleaner Cassette is soiled with ink:
Wear gloves and remove the ink with a dry cloth, and then clean with a moist cloth

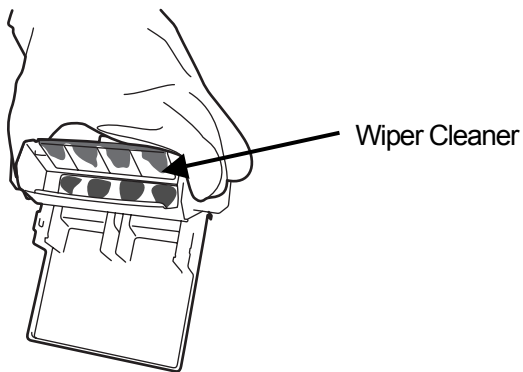


6. Maintenance

- (7) Push both sides of the Wiper Cleaner Cassette to open it.



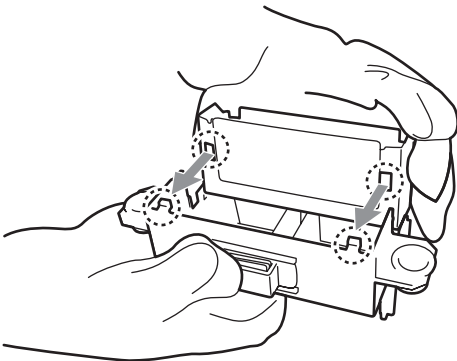
- (8) Carefully drop off the used Wiper Cleaner. And dispose of in accordance with local regulations.



<Note>

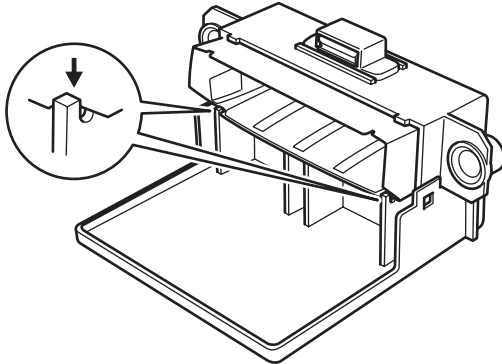
Dispose the used Wiper Cleaner in compliance with your local regulations.

- (9) Insert the two projections of the Wiper Cleaner Cassette into the holes on the new Wiper Cleaner.



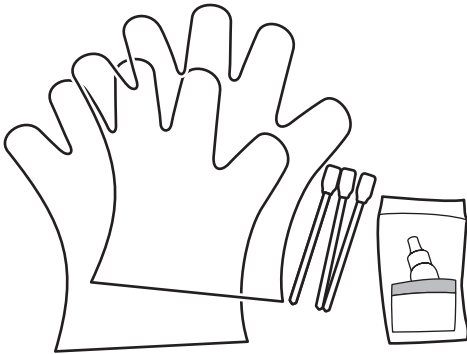
- (10) Close the Wiper Cleaner Cassette.

Make sure that the bottom of the Wiper Cleaner is set within the two projections on the Wiper Cleaner Cassette. Push in the Wiper Cleaner after closing.



- (11) Open the Wiper Cleaning Kit which comes with the new Black Ink Cartridge.

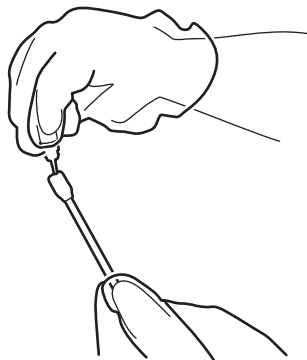
The following items are included.



- (12) Wear the gloves, and wet both sides of a Clean Applicator with the Wash Liquid.

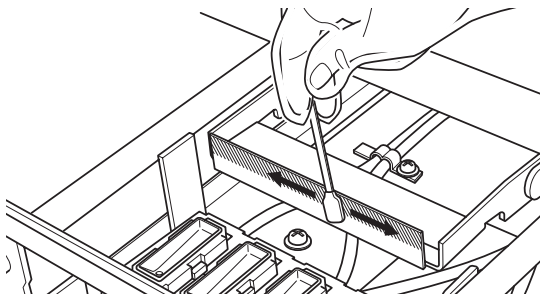
<Note>

Use only the Wash Liquid included to wet the Clean Applicators; using other liquid will cause damage to the Print Heads.

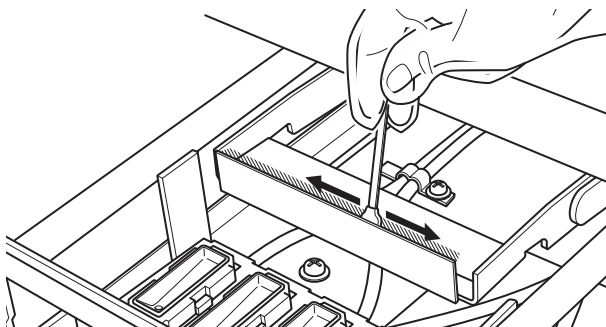


6. Maintenance

(13) Use the one side of wet Clean Applicator to clean the front side of the Wiper Blade.



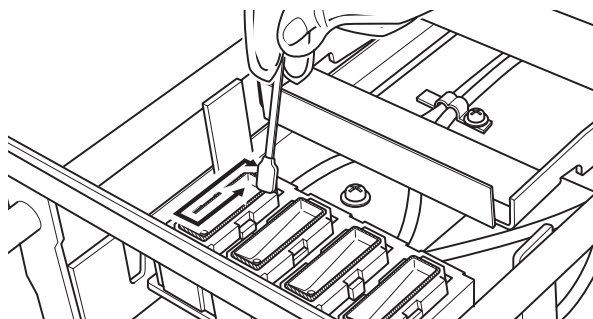
(14) Use the other side of the wet Clean Applicator to clean the rear of the Wiper Blade.



(15) Wet other two Clean Applicators and use them to remove ink or dust from the Print Head Caps. Use one side of the Clean Applicator to clean one Print Head Cap.

<Note>

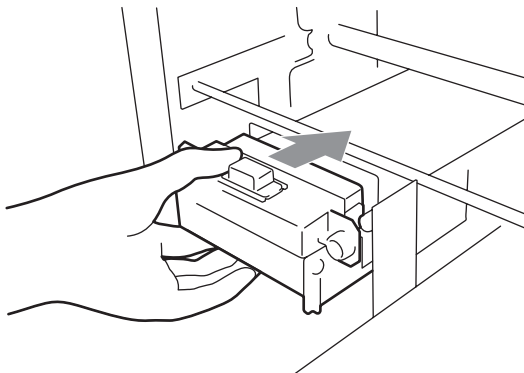
Do not use dry Clean Applicator; it cannot clean ink or dust. It may damage the Print Head Caps. Wipe off the dirty ink of Clean Applicator with soft cloth if it is too dirty and wet with Wash Liquid.



(16) Insert the Wiper Cleaner Cassette straight into your printer.

<Note>

Do not touch the Clearance Sensor (the bar above the Wiper Cleaner Cassette)..



(17) Check the top edge of the black Flash Plate on the right and the front/back surface of the Obstruction Sensor, if they are dirty with ink and/or dust wipe off the dirt with a soft wet cloth with water.

<Note>

When ink or dust is mounted high on the top edge of the Flash Plate, it may touch the surface of the print head during printing, this may cause misfiring. When the surface/back of the Obstruction Sensor is dirty, it may damage the printing material when loading.

(18) Close the Front Cover, and then turn on your printer.

If your printer turns on with no errors, replacement of the Wiper Cleaner has been completed.

If there is problem (abnormal noise or error "WPC removed"), turn off your printer, and check if the Wiper Cleaner and the Wiper Cleaner Cassette are correctly installed.

6-1-3. Replacing the Waste Ink Cartridge

When the message "WARNING WASTE INK FULL" is displayed on the Control Panel, prepare the new Waste Ink Cartridge. Replace it when the message "ERROR WASTE INK FULL" is displayed.

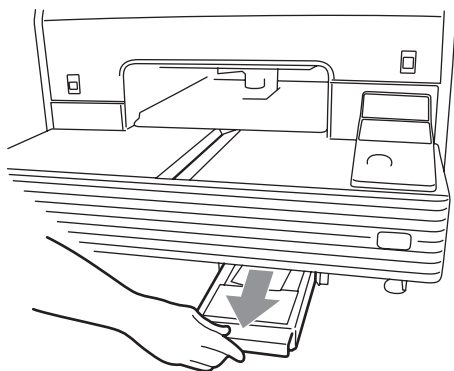
<Note>

- *Do not replace the Waste Ink Cartridge while printing or head cleaning. It may contaminate the inside of your printer, which may cause damages to your printer.*
- *Be careful not to get ink on your hands or clothing when you handle the Waste Ink Cartridge. Wash with soap if stained with ink.*

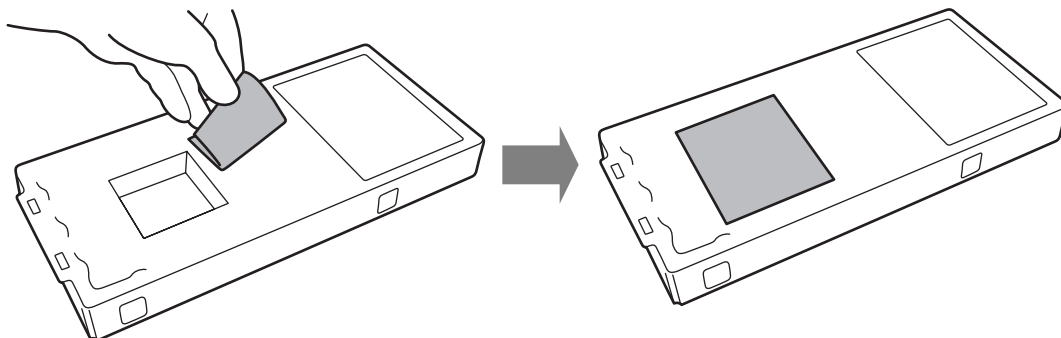
6. Maintenance

- (1) Pull out the Waste Cartridge Tray.

The message "ERROR NO WASTE INK TRAY" is displayed.



- (2) Remove the sticker on the used Waste Ink Cartridge, and use it to seal the hole on it.

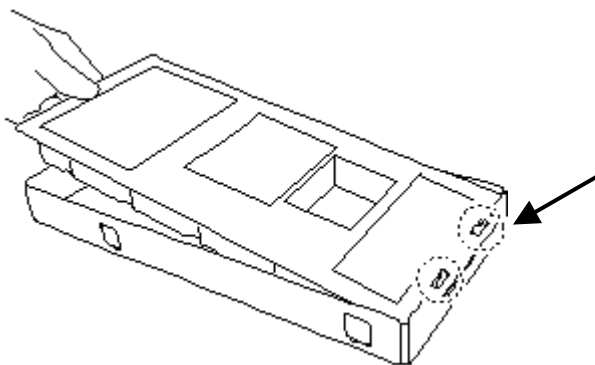


- (3) Remove the new Waste Ink Cartridge from its package.

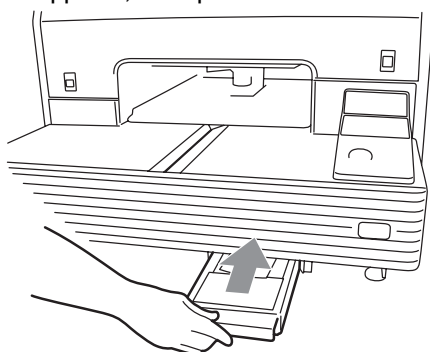
<Note>

Save the plastic package for storing the used cartridge.

- (4) Remove the used Waste Ink Cartridge from the Waste Cartridge Tray, and put it in the package, in which the new Waste Ink Cartridge came in.
- (5) Install the new Waste Ink Cartridge into the Waste Cartridge Tray. Make sure that two projections of the Waste Cartridge Tray pierce the two holes of the Waste Ink Cartridge.



- (6) Install the Waste Cartridge Tray. When the error display "ERROR NO WASTE INK TRAY" disappears, the replacement of the Waste Ink Cartridge has been completed.

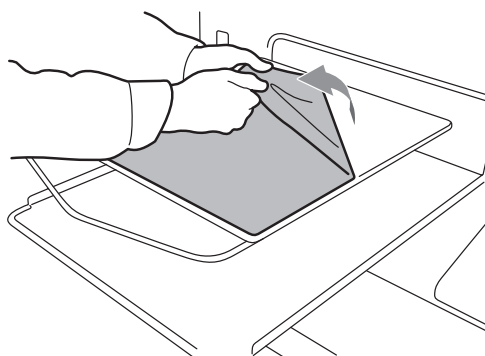


<Note> Dispose the used Waste Ink Cartridge in accordance with your local regulations.

6-1-4. Replacing the Platen Sheet

The Platen Sheet gets dirty in operation. Please replace the Platen Sheet to avoid making smudges on a T-shirt.

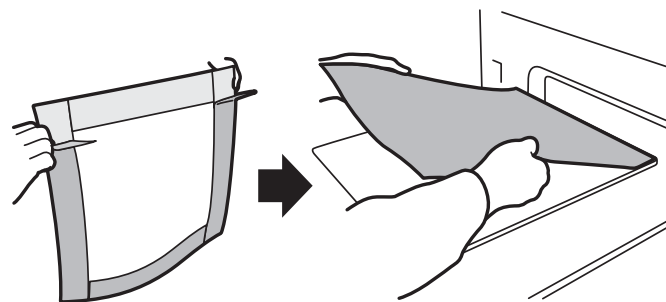
- (1) Press the Platen Button to eject the Platen.
- (2) Remove the Platen Sheet and the adhesive tape from the Platen.



- (3) Clean the surfaces of the Platen using a soft cloth dampened with mild detergent, and then wipe it using a soft and dry cloth.
- (4) Make sure the surface of the Platen is completely dry, and then put the new Platen Sheet on the Platen. It is easier if you peel off the release-coated paper little by little as you put the new Platen Sheet.

<Note>

Put the Platen Sheet straight against the Platen without making creases.



- (5) Press the Platen Button to install the Platen and check it is flat.

6-1-5. Required Maintenance for the Long Storage

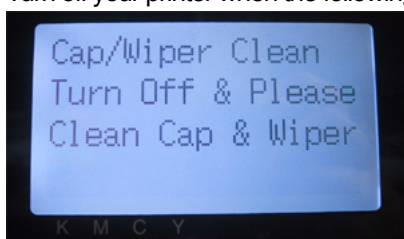
If you are not going to use your printer for more than two weeks, clean the Print Head Caps before storage to prevent ink drying on the print heads

<Note>

The Wash Liquid is used for this cleaning. You can use the one in the Nozzle Cleaning Kit, the Cap Cleaning Kit which comes with the new Black Ink Cartridge, or you can purchase one. If you use the Wash Liquid in the Nozzle Cleaning Kit or the Cap Cleaning Kit, make sure you replace it with the new one.



- (1) Press the OK Button to open the Menu Display.
- (2) Select "Maintenance", and then press the OK Button.
- (3) Select "Cap/Wiper Cleaning", and then press the OK Button.
The Platen moves.
- (4) Turn off your printer when the following display appears.



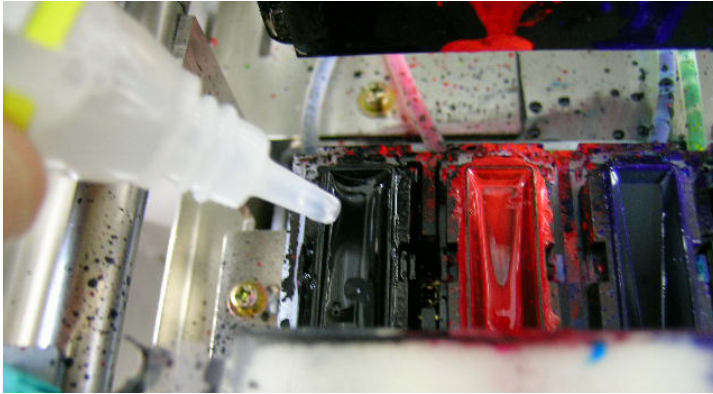
- (5) Open the Front Cover.

- (6) Fill the Print Head Caps with Wash Liquid to prevent from ink clogging inside.

<Note>

Be careful not to spill the Wash Liquid around the Print Head Caps.

If the Wiper Cleaner and the surroundings are dirty, refer to "6-1-2. Replacing the Wiper Cleaner" and clean them.



- (7) Close the Front Cover.
- (8) Turn on your printer wait for initialization to finish.
- (9) After "Standby" is indicated, turn machine off.
- (10) When the machine is first switch on after a long storage period. The heads are automatically cleaned. If print quality is not good, refer to "7-2-6. Cleaning the Print Head Nozzle" and clean the nozzles (the surface of the Print Heads) softly with Nozzle Cleaning Kit or Wash Liquid and Clean Applicators.
- (11) See also the Maintenance Video (English Only) in Install CD.

7. Troubleshooting

WARNING



Do not put your hands in the ink cartridge slot, otherwise the needle inside the slot may cause injury.

CAUTION



Ensure there is adequate space left for safe working. The Platen moves forward while operating and it may be injured.



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.



Do not move the Platen by hand.
The Printer may be seriously damaged by this.



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.



Wait at least 1 minute after turning off the power switch before opening the front cover.



Do not touch the head heat sink as it may be HOT and may cause a burn.



Be careful not to get your fingers caught when closing the front cover, otherwise it may result in injury to your fingers.



Do not disassemble the ink cartridge or the waste ink cartridge.



Take care not to let the ink, waste liquid or wash liquid come into contact with your eyes or onto your skin, otherwise inflammation can result.

Do not drink the ink, waste liquid or wash liquid under any circumstances, as they can cause vomiting and diarrhea. In case of contact with eyes, do not rub but immediately rinse the eyes with water.

Keep the ink, waste liquid and wash liquid out of the reach of children.

7-1. Solving Printer Problems

Use the table below to help solve printer problems.

Problem	Cause	Solution
<i>Cannot send print data from the PC.</i>	<i>You have selected the wrong printer.</i>	<i>Confirm the selected printer, and select the correct one.</i>
	<i>USB cable not connected</i>	<i>Disconnect and re-connect the USB 2.0 cable</i>
	<i>Your PC and OS do not satisfy the requirements of GT-541.</i>	<i>See "1-3-3. Software Information" and check your PC properties.</i>
	<i>Using an USB cable that does not meet the requirement.</i>	<i>Use the USB cable that meets the requirement. See "1-3-4. Other requirements".</i>
	<i>The USB hub is not working properly.</i>	<i>Connect GT-541 directly to PC with USB. USB hub is not operationally approved.</i>
	<i>Noise is disturbing the communication between GT-541 and the PC.</i>	<i>Disconnect the USB 2.0 cable once, and wait for 5 seconds and connect it again. If this does not solve the problem, turn off GT-541, wait for 5 seconds and restart.</i>
	<i>The PC is not working properly.</i>	<i>Restart the PC. Try another inlet of USB port.</i>
	<i>Added USB card in PC and GT-541 do not match.</i>	<i>Connect GT-541 with the original USB port in PC</i>
	<i>Other USB device is connected with your PC.</i>	<i>Remove the other USB device and restart your PC, and check if GT-541 works properly.</i>
<i>Something is wrong with the USB cable.</i>	<i>Try other or shorter USB 2.0 cables.</i>	

7. Troubleshooting

Problem	Cause	Solution
<i>Pressing the Print Button does not start printing.</i>	<i>GT-541 is indicating an error</i>	<i>Solve the cause of the error, and try again.</i>
	<i>Auto Head Cleaning is in process.</i>	<i>Wait until the Head Cleaning finishes.</i>
	<i>The room temperature does not meet the requirements.</i>	<i>Adjust the room temperature. See "1-3-1 Environment".</i>
	<i>The printer has not received/read a data, or is now receiving/reading the data.</i>	<i>Machine will not print until print job has been received.</i>
	<i>The Print Heads are overheated and the message "Fail: Head Temp (CMYK)" appears.</i>	<i>Wait until the heads cool down.</i>
<i>GT-541 does not turn on.</i>	<i>There is no power..</i>	<i>Check the power cable connections.</i>
	<i>The Front Cover is open or not closed properly.</i>	<i>Close the Front Cover properly.</i>
<i>An error occurred just after turning on GT-541.</i>	<i>An error occurred.</i>	<i>Check the error code with "7-4. Error Messages" and restart GT-541. If the error is not cleared, please contact Brother or your dealer.</i>
<i>GT-541 cannot read data from CompactFlash.</i>	<i>No CompactFlash is inserted in the slot, or it is not inserted properly.</i>	<i>Insert CompactFlash properly.</i>
	<i>That CompactFlash is not supported.</i>	<i>Use the supported CompactFlash. See "1-3-4. Other Requirements".</i>
	<i>The CompactFlash is not FAT16 formatted.</i>	<i>Use the CompactFlash that is FAT16 formatted.</i>
	<i>The CompactFlash has poor quality.</i>	<i>Use the recommended CompactFlash. See "1-3-4. Other Requirements".</i>
	<i>Files are under the folder in CompactFlash.</i>	<i>Move files in root folder (out of the sub-folder).</i>
<i>The file name of the print data saved in a CompactFlash is not displayed properly.</i>	<i>The file name has been changed when saving it in the CompactFlash because it had more than 8 characters.</i>	<i>Rename the file with characters of 8 or less, and then save it again in the CompactFlash.</i>

7-2. Solving Print Quality Problems

Use the table below to solve print quality problems.

Problem	Cause	Solution
<i>Print is faded.</i>	<i>The graphic application's settings are not appropriate. Maybe CYMK mode is being used for data.</i>	<i>See "4-2 Setting the Application's Print Condition" and modify the artwork.</i>
	<i>The print condition is not appropriate.</i>	<i>See "4-3. Setting the Printer Driver Condition" and select proper Vivid Processing & Ink Volume.</i>
	<i>Ink in the Ink Cartridge may be getting low.</i>	<i>See "6-1-1. Replacing the Ink Cartridge".</i>
<i>Your print has horizontal stripes (banding).</i>	<i>Some nozzles misfired by checking the Nozzle Check Pattern (see "7-2-3. Checking Print Quality with Nozzle Check Pattern "). The Print Heads need to be cleaned.</i>	<i>Press the Head Cleaning Button to clean the Print Heads. Or select "Head Cleaning" menu and try "Powerful Cleaning". After Head Cleaning, check the nozzles with "Nozzle Check Pattern. If repeating this 5 times does not solve the problem, see "7-2-2. Cleaning the Print Heads".</i>
	<i>Printing by wider gaps between Print Heads and printed medium or printing on very high absorbent material.</i>	<i>Select "uni-directional" of Print Direction. See "7-2-4. Changing the Print Direction".</i>
<i>The ink runs and blurs on the edge.</i>	<i>Too much ink is used.</i>	<i>Adjust the Ink Volume. See "4-3-6. Selecting the Ink Volume".</i>
	<i>Using a thin T-shirt that is not made with 100% cotton.</i>	<i>Adjust the ink volume.</i>
<i>The outlines of printed image are not clear, or texts and outlines are printed doubled.</i>	<i>The Platen height may be wrong. with a too large gap..</i>	<i>Adjust the Platen Height. See "4-5. Placing the T-shirt on the Platen".</i>
<i>T-shirt is smudged with ink.</i>	<i>Print Heads hit garment</i>	<i>Keep the surface flat (esp. both edges) and take care in removing the wet T-shirt..</i>
	<i>The Platen Sheet needs to be replaced and is dirty.</i>	<i>See "6-1-4. Replacing the Platen Sheet".</i>
<i>Ink dots smudged yellow area where is next to black area.</i>	<i>Select Yellow / Black Printing of Printer Driver.</i>	<i>See "4-3-7. Setting Yellow / Black Printing".</i>

7-2-1. Procedure for Solving the Print Quality Problems

Follow the procedure (Step 1 to 7) below until the print quality problem is solved.

Step 1: Clean the Print Heads by pressing the Head Cleaning Button.

Head Cleaning with flushing fresh ink can solve most print quality problems. See “7-2-2. Cleaning the Print Heads / Using the Head Cleaning” and do it a maximum of five times. Check the nozzles by test printing of Nozzle Check Pattern (see "7-2-3. Checking Print Quality with Nozzle Check Pattern "). If the problem is not solved, go on to the next step.

<Note>

It is very important the machine is used in an environment as specified. Use a humidifier to keep the humidity up to 35% to keep print quality.

<Note>

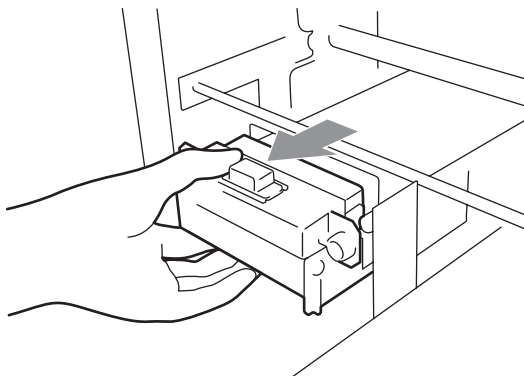
Your printer automatically cleans its Print Heads every 24 prints; however more frequent Print Heads cleaning may need to be done depending on the environment. In this case, change the Auto Head Cleaning frequency (see “7-2-5. Changing the Auto Head Cleaning Setting”).

Step 2: Check the Wiper Cleaner, replace it when it is full.

The Wiper Cleaner absorbs some waste ink carried by the Wiper Blade. If Wiper Cleaner cannot absorb waste ink any more, the dirty Wiper Blade wipes the Print Head Nozzles and this causes misfiring or damage the Print Head. Please replace the Wiper Cleaner and clean the Wiper Blade and caps when you insert the new Black Ink Cartridge; Check if it is too dirty to wipe off the waste ink. Please use Cap Cleaning Kit. If the black ink is not changed frequently please consider the wiper.

How to Check:

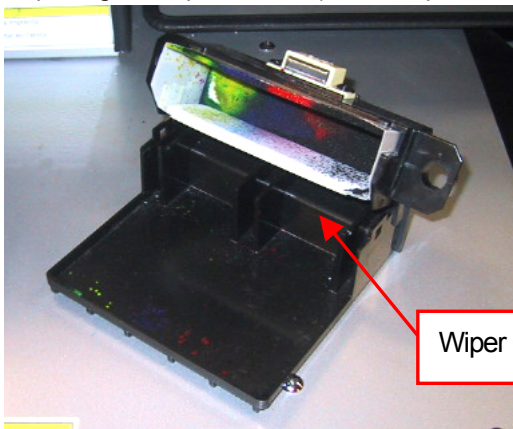
- (1) See “6-1-2. Replacing the Wiper Cleaner” and select “Cap/Wiper Clean” and then turn off your printer.
- (2) Open the Front Cover.
- (3) Pull out the Wiper Cleaner Cassette in the left.



<Note>

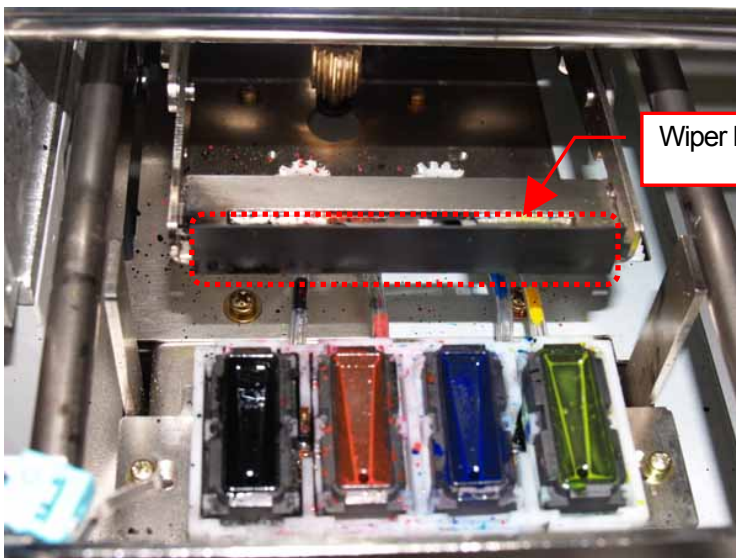
Do not tilt the Wiper Cleaner Cassette; ink may get on your hands or clothing.

- (4) Check the Wiper Cleaner, and if it is heavily soiled, replace it using the Cap Cleaning Kit (see “6-1-2. Replacing the Wiper Cleaner”). If the Wiper Cleaner is not heavily soiled, go on to the next step.



The condition of the left photo is "not yet but soon". When the bottom absorber is full it must be changed.

- (5) Check the Wiper Blade, and if it is damaged or worn , replace it using the Wiper ASSY (see “7-2-10. Replacing the Wiper Blade” for the details).



Step 3: Check the ink tubes and do “Powerful” head cleaning.

Check the ink tube inside to see if there is any "empty" air space longer than 5 mm. If so, do "Powerful" head cleaning to fill the tube with ink. If not enough, please do "Initial" head cleaning (you can cancel if the empty air space disappears.)

If the problem is not solved, proceed to the next step.

Step 4: Clean the Print Heads with the “Powerful” mode.

- (1) Print the Nozzle Check Pattern, and check which Print Head has the problem (see "7-2-3. Checking Print Quality with Nozzle Check Pattern").
- (2) Clean the Print Head that has the problem with the “Powerful” mode (see “7-2-2. Cleaning the Print Heads”).
- (3) Print the Nozzle Check Pattern and check if the problem is solved. If you still notice the problem, repeat steps (1) to (3) up to five times.

If the problem is not solved, proceed to the next step.

Step 5: Clean the Print Head Nozzles.

- (1) Clean the Print Head Nozzle using the Nozzle Cleaning Kit (see "7-2-6. Cleaning the Print Head Nozzles").

<Note> Purchase the new one after use.

- (2) Clean the Print Head with the "Powerful" mode and do test print with "Nozzle Check Pattern" (see "7-2-3. Checking Print Quality with Nozzle Check Pattern "). If the problem is not solved, try the Step 6 two or three times.

<Note> Make sure you always clean the Print Head with either "Powerful" or "Initial" mode after the Print Head Nozzle cleaning.

If the problem is not solved, proceed to the next step.

Step 6: Contact Brother Customer Service or your dealer.

If you are asked to replace the Print Head (PRINT HEAD) by yourself, see "7-2-7. Replacing the Print Head" for the procedure.

7-2-2. Cleaning the Print Heads

Your printer automatically cleans its Print Heads every 24 prints (you can change the frequency; see "7-2-5. Changing the Auto Head Cleaning Setting"), or when your printer has not been used for more than two hours. The auto-cleaning starts when you press the Print Button in these situations. However, the auto-cleaning may not be enough and cannot solve print quality problems (e.g. stripes/ banding appears on the printed image). Please do the "manual" head cleaning.

Using the Head Cleaning Button

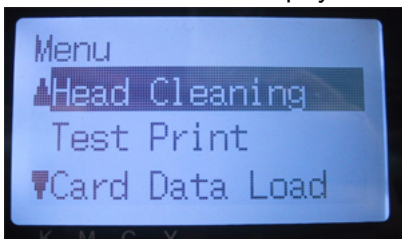
- (1) Make sure your printer is either Standby or Ready mode.
- (2) Press the Head Cleaning Button.

The message "Head Cleaning..." appears and your printer starts "Normal" head cleaning.
(Press the Stop Button to cancel cleaning.)

The message changes to "Stand By" or "Ready" when the head cleaning has been completed.

Normal/ Powerful/ Initial Head Cleaning

- (1) Make sure your printer is either Standby or Ready mode.
- (2) Press the OK Button to display the Menu Display.



- (3) Press the Up/Down Button to select "Head Cleaning", and then press the OK Button.
- (4) Press the Up/Down Button to select the mode (Normal/Powerful/Initial), and then press the OK Button. Select "Normal" or "Powerful" by the steps shown in "7-2-1. Procedure for Solving the Print Quality Problems". After a long storage, or when you find ink tubes have "empty air" space inside, try "Initial" head cleaning first to replace all the ink inside the tube.
- (5) Press the Up/Down Button to select which Print Head (color) to clean (can select "All Colors" for Normal mode), and then press the OK Button.

The message "Head Cleaning..." appears and your printer starts cleaning the Print Heads.

The message changes to "Stand By" when the head cleaning has been completed.

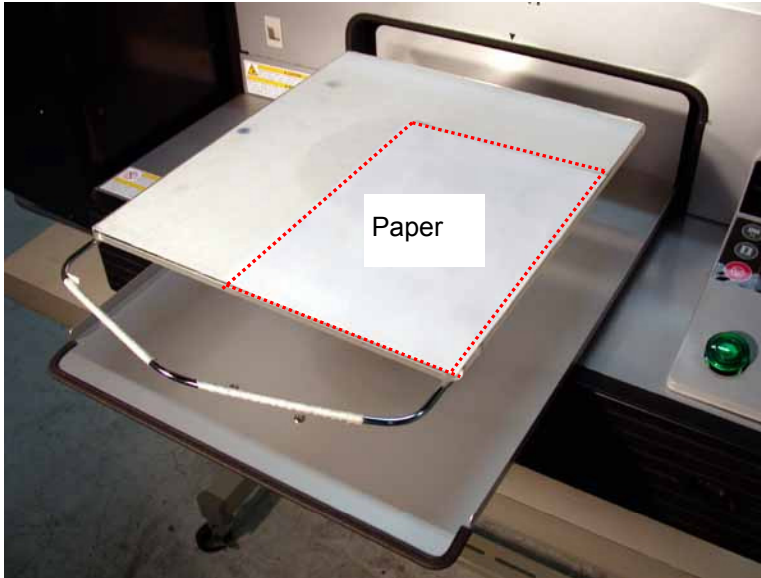
<Note>

The "Initial" cleaning cannot happen with the Waste Ink Cartridge is full, and the message "WASTE INK FULL" on the display. In this case, replace the Waste Ink Cartridge before the "Initial" cleaning (see "6-1-3. Replacing the Waste Ink Cartridge").

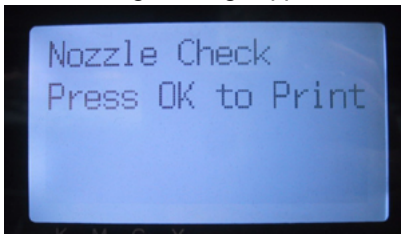
7-2-3. Checking Print Quality with Nozzle Check Pattern

You can identify which Print Head has the problem by using the Nozzle Check Pattern.

- (1) Install the Platen 14 x 16 (see “4-4. Uninstalling / Installing the Platen”).
- (2) Set the Platen height to the “A” position (see “4-5. Placing the T-shirt on the Platen”).
- (3) Place a sheet of paper (A4 or letter size) at the right corner of the Platen as shown below. You can use a T-shirt instead of paper (see “4-5. Placing the T-shirt on the Platen”).



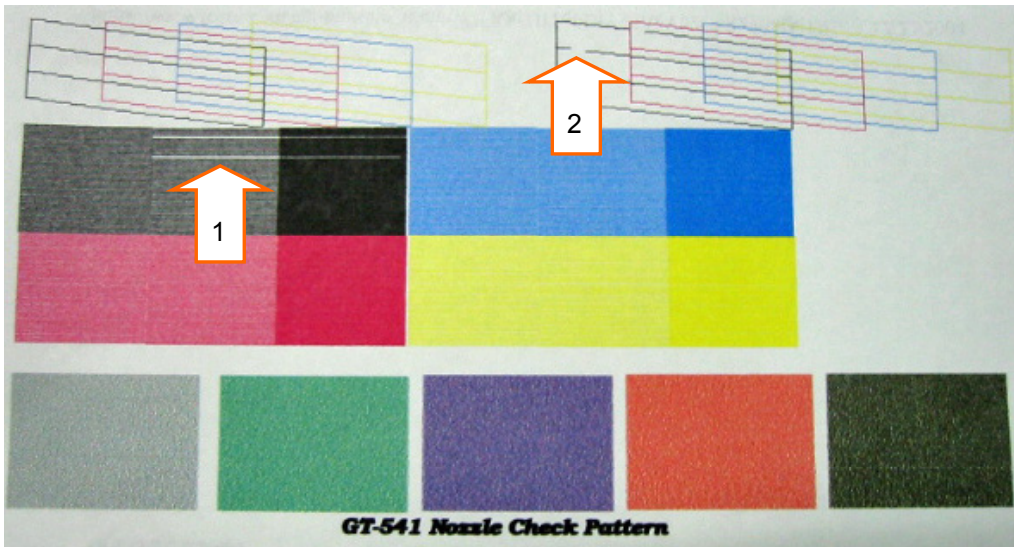
- (4) Press the OK Button to open the Menu Display.
 - (5) Press the Up/Down Button to select “Test Print”, and then press the OK Button.
 - (6) Press the Up/Down Button to select “Nozzle Check”, and then press the OK Button.
- The following message appears.



- (7) Press the OK Button to start printing the Nozzle Check Pattern.

- (8) Check the printed pattern to identify which Print Head has the problem.

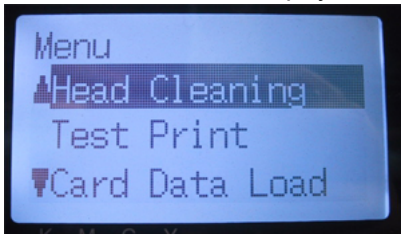
If there is stripes (arrow 1) or line breaks (arrow 2), the Print Head of the color (in the following example: Black) has the problem. The Print Heads need to be cleaned (see "7-2-2. Cleaning the Print Heads").



7-2-4. Changing the Print Direction

When there are large gaps between the Print Heads and printed medium, or when printing on very high absorbent material, horizontal stripes can appear on the printed image. You can solve this problem using one-way "Uni-Directional" print. If you adjust to a larger gap then we recommend this mode is used.

- (1) Send the print data, which you want to print changing the print direction, to your printer.
- (2) Press the OK Button to display the Menu Display.



- (3) Press the Up/Down Button to select "Print Direction", and then press the OK Button. Select "Uni-Directional".

The print direction is then changed and returns to Job/ Status Display.

<Note>

There is no control panel indication that uni directional print has been set.

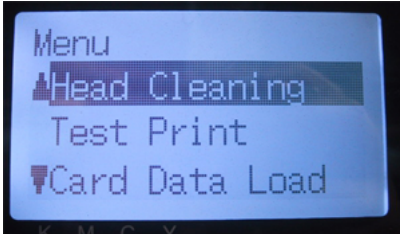
<Note>

The print direction setting returns to its default (Bi-Directional) when your printer receives the new print data or once your printer turns off.

7-2-5. Changing the Auto Head Cleaning Setting

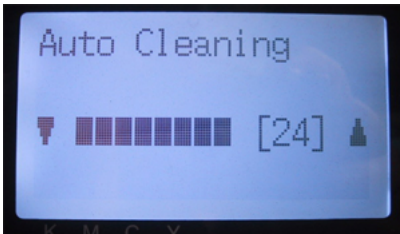
Your printer automatically cleans its Print Heads every 24 prints. However more frequent Print Heads cleaning needs to be done depending on the environment. In this case, change the Auto Head Cleaning frequency as follows.

- (1) Press the OK Button to open the Menu Display.



- (2) Press the Up/Down Button to select "Maintenance", and then press the OK Button.
- (3) Press the Up/Down Button to select "Auto Cleaning", and then press the OK Button.

The following display appears.



- (4) Press the Up/Down Button to select the frequency from 1 to 24, and then press the OK Button.
The Auto Head Cleaning will be executed at every number of prints you have set.

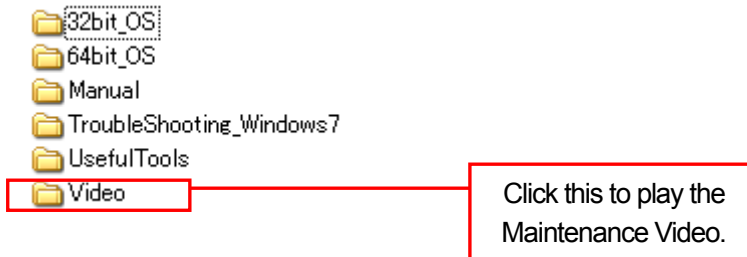
<Note>

Cleaning the Print Heads frequently may hasten the Wiper Cleaner consumption.

7-2-6. Cleaning the Print Head Nozzles

Use the Nozzle Cleaning Kit to clean the Head Nozzle.

See the "Maintenance Video" in the Install CD (English only).

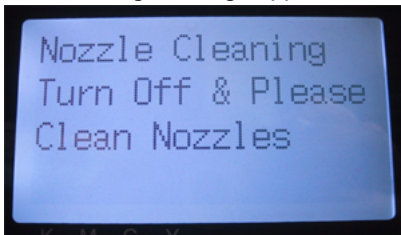


<Note>

Pay careful attention in cleaning the clean Print Head Nozzles, which are both delicate and expensive. The Print Head Nozzle should be cleaned only when it is needed as follows in "7-2-1. Procedure for Solving the Print Quality Problems".

- (1) Make sure your printer is in either "Standby" or "Ready".
- (2) Press the OK Button to display the Menu Display.
- (3) Press the Up/Down Button to select "Maintenance", and then press the OK Button.
- (4) Press the Up/Down Button to select "Nozzle Cleaning", and then press the OK Button. The Head Caps and the Wiper Blade prepare for cleaning.

The following message appears.



- (5) Turn off your printer.
- (6) Open the Front Cover Using both hands after unlocking the cover locks.

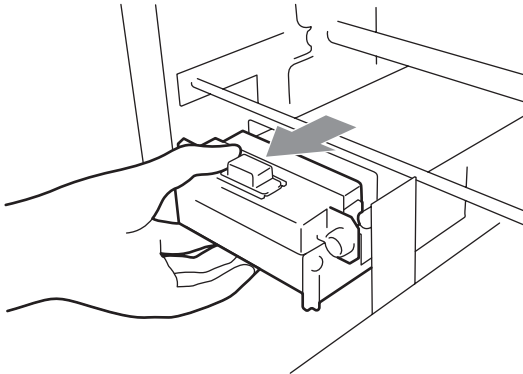
7. Troubleshooting

- (7) Pull out the Wiper Cleaner Cassette.

<Note>

Do not tilt the Wiper Cleaner Cassette; ink may get on your hands or clothing.

Do not touch the Clearance Sensor (the bar above the Wiper Cleaner Cassette).



- (8) Open the Nozzle cleaning Kit. Wear the gloves and wet a Clean Applicator with full of Wash Liquid.

<Note>

Use Clean Applicators in Nozzle Cleaning Kit (round form), not in Cap Cleaning Kit (green stick with flat form) of Black Ink Cartridge.



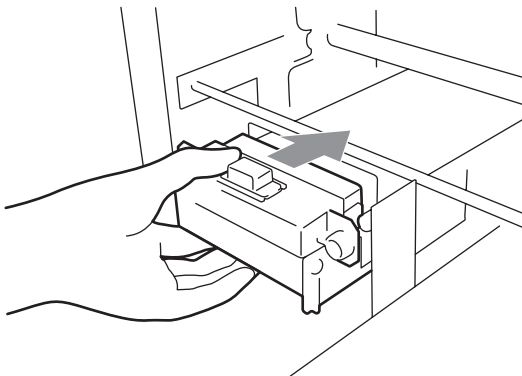
- (9) Wet the surface (nozzle plate) of the Print Head with Wash Liquid. Then rub softly the nozzle plate to remove ink and debris from the nozzle plate until the nozzle plate is clean. Use a soft, clean and lint-free cloth to loosen and remove the dirty ink and debris from the Clean Applicator to keep its surface clean and wet again with Wash Liquid. Use one Clean Applicator for each color.



- (10) Insert the Wiper Cleaner Cassette straight into your printer.

<Note>

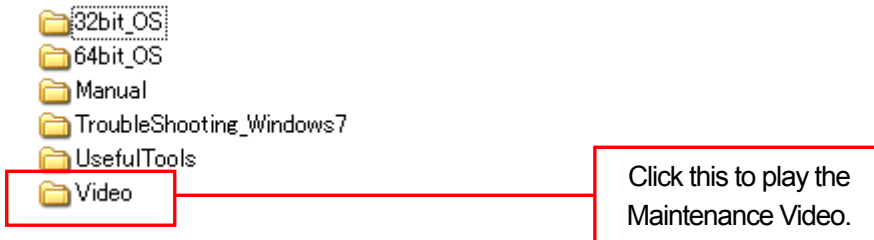
Do not touch the Clearance Sensor (the bar above the Wiper Cleaner Cassette);



- (11) Close the Front Cover, and then turn on your printer.
(12) Do the "Powerful" head cleaning and print the Nozzle Check Pattern until the print quality is satisfactory.

7-2-7. Replacing the Print Head

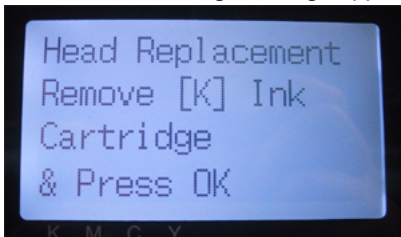
The print heads can be replaced following the "Replacing the print head procedure". We also recommend you to see the maintenance video in the Install CD (English only). If you have any questions please contact your service number



<Note>

Replacement of the Black Print Head is shown as an example in this section.

- (1) Make sure your printer is in either "Standby" or "Ready" modes.
- (2) Press the OK Button to display the Menu Display.
- (3) Press the Up/Down Button to select "Maintenance", and then press the OK Button.
- (4) Press the Up/Down Button to select "Head Replacement", and then press the OK Button.
- (5) Press the Up/Down Button to select the color of Print Head to be replaced, and then press the OK Button. The following message appears. (e.g. Black)



- (6) Remove the Ink Cartridge of color, and then press the OK Button.. The black example is shown.



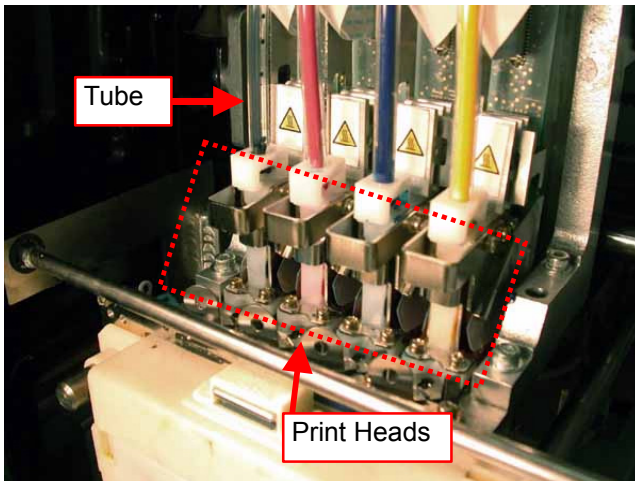
The message "Set Filter Cartridge & Press OK" appears.

- (7) Insert the Filter Cartridge to the Ink Cartridge Slot, and then press the OK Button.



The ink draining of the head begins. Wait until the message "Turn Off & Please Change [X] Head" appears

- (8) Turn off your printer.
(9) Open the Front Cover by unlocking the Cover Locks with both hands
The Print Heads are on the left.

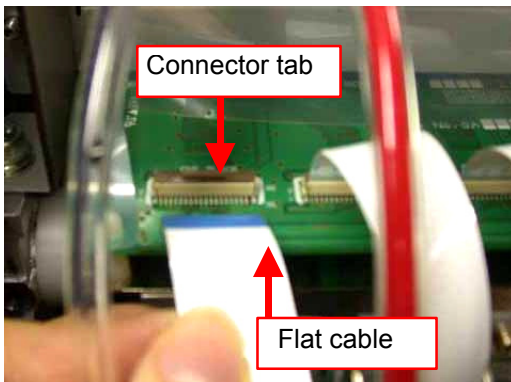
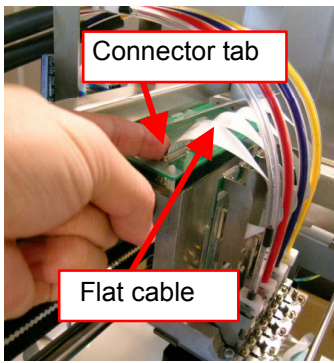


<Note>

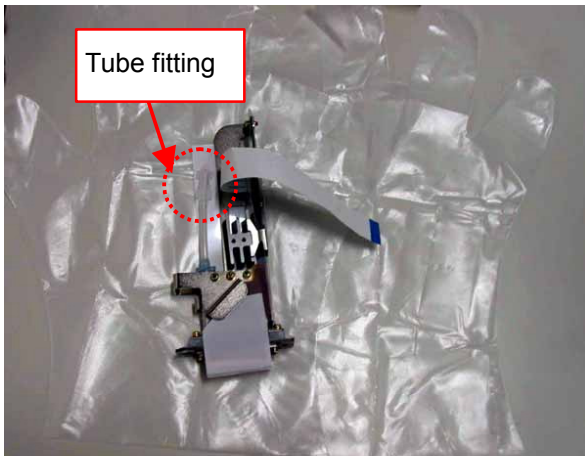
- Make sure the color of the corresponding head tube is clear.
- Better to remove the Wiper Cleaner Cassette first before replacing Print Head. Otherwise the space is narrow and the edge of the cassette may hit and seriously damage the Print Head.

7. Troubleshooting

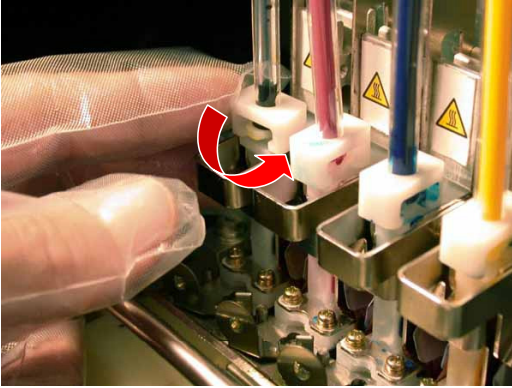
(10) Turn up the appropriate flat cable connector tab, and then disconnect the flat cable.



(11) Wear the gloves included with the new Print Head, and then remove the tube fitting from the new Print Head.



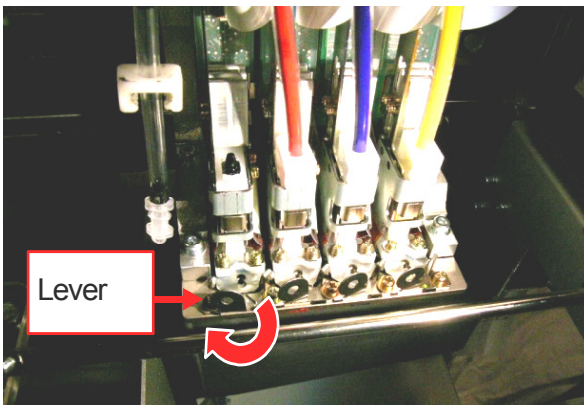
(12) Rotate the tube connector 90 degrees as shown below.



(13) Disconnect the tube and put the tube fitting removed from the new Print Head to prevent the ink from coming out.

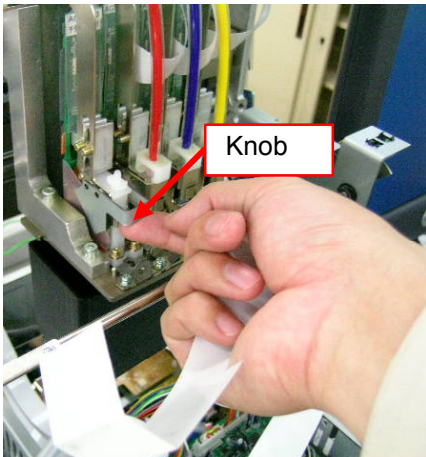


(14) Turn the lever to the direction of the arrow to unlock the Print Head.

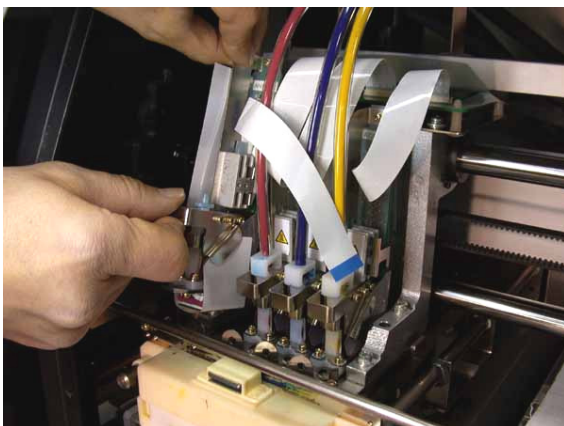
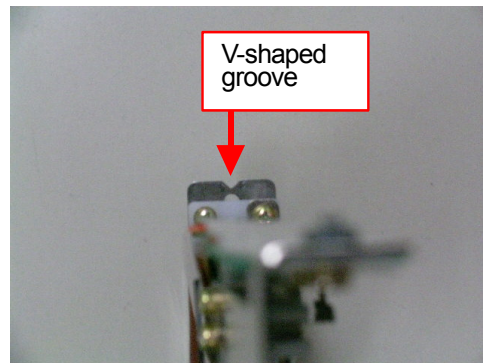
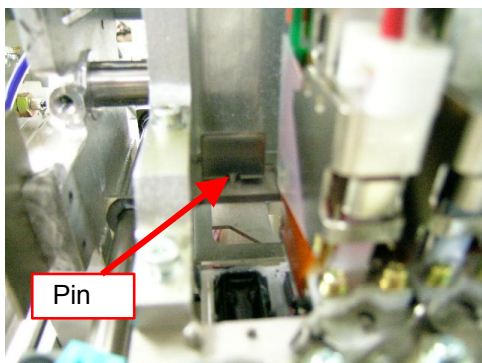
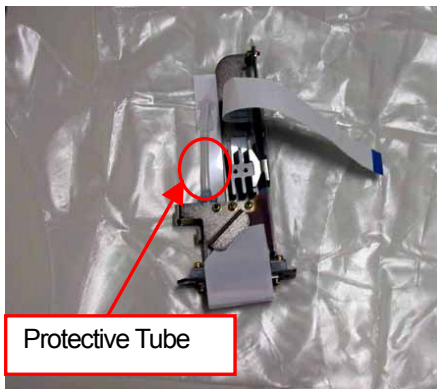


7. Troubleshooting

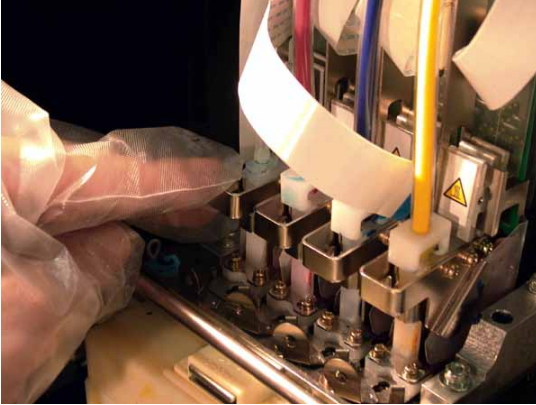
(15) Take off your gloves and remove the used Print Head by lifting up the knob.



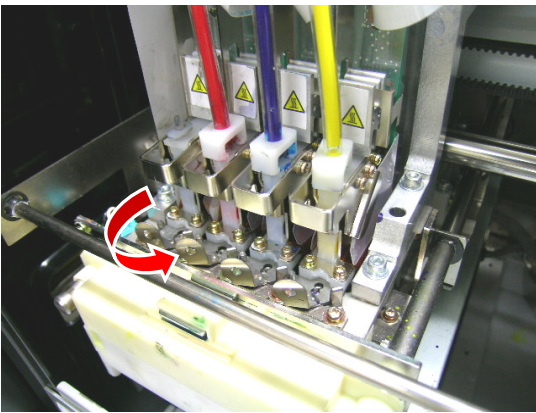
(16) Remove the Protective Tube from the new Print Head, and then install the new Print Head by holding the knob, and holding the flat cable with the other hand. Make sure the V-shaped groove of the Print Head hits the pin.



- (17) Press down the Print Head knob securely and push in the Print Head backward to align the Print Head properly.



- (18) Turn the lever to the direction of the arrow to lock the Print Head.



- (19) Remove the Nozzle Protection Seal by pulling it up.

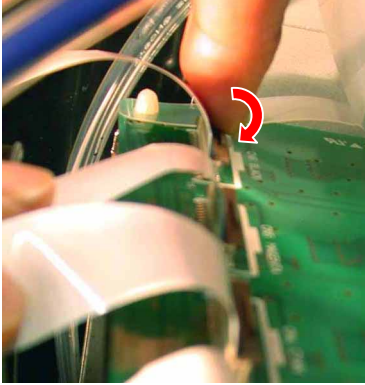


7. Troubleshooting

(20) Take off the gloves, insert the flat cable into the connector, and then turn down the connector tab to lock the cable.

<Note>

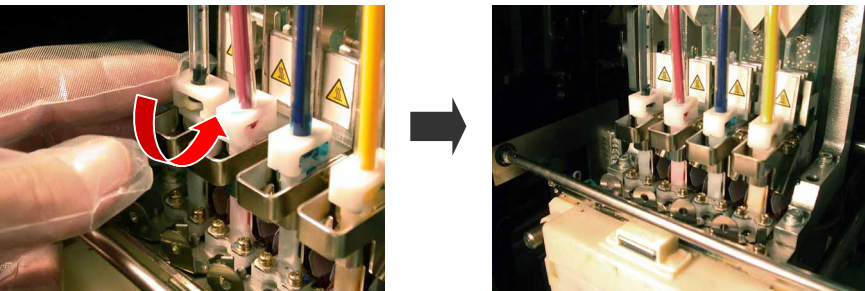
- *Make sure the flat cable is inserted straight against the connector. If not, reconnect it correctly.*
- *The flat cable is very fragile. Be careful with handling it.*



(21) Put on your gloves again, and then remove the tube fitting from the end of tube.



(22) Insert the tube into the new Print Head, and then rotate the tube connector 90 degrees to the direction of the arrow.



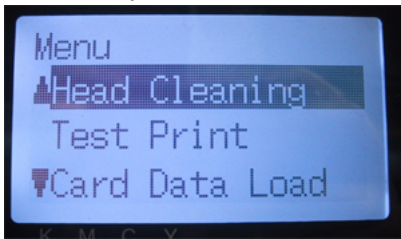
(23) Close the Front Cover.

(24) Remove the Filter Cartridge, and then install the cartridge previously removed.

(25) Turn on your printer.

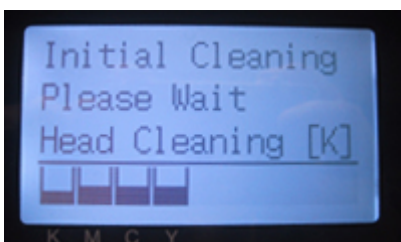
(26) Press the Platen Button to eject the Platen.

- (27) Press the OK Button to open the Menu Display.
- (28) Press the Up/Down Button to select "Head Cleaning", and then press the OK Button.

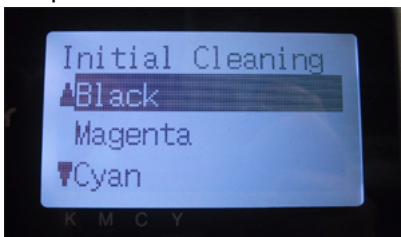


- (29) Press the Up/Down Button to select "Initial" Cleaning mode, and then press the OK Button.
- (30) Press the Up/Down Button to select the color of the Print Head you have replaced, and then press the OK Button.

The following message appears, and the initial cleaning starts.



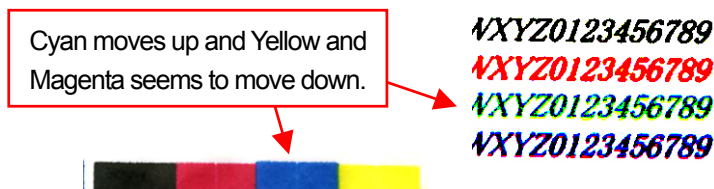
The display returns to the Print Head color-selecting display, when the initial cleaning has been completed.



- (31) Print and check the Nozzle Check Pattern (see "7-2-3. Checking Print Quality with Nozzle Check Pattern ") if the replaced Print Head works.
- (32) Print the Standard Check Pattern to check the alignment if the Print Head is placed properly.

<Note>

If the Print Heads do not align properly, the printer cannot make correct r colors. See the example below: Cyan Print Head does not align (shifted forward). Check (17) and (18) in former page.



- (33) If the quality is OK go on to the next section "7-2-8. Adjustment after the Print Head replacement" to complete the adjustment after the Print Head replacement.

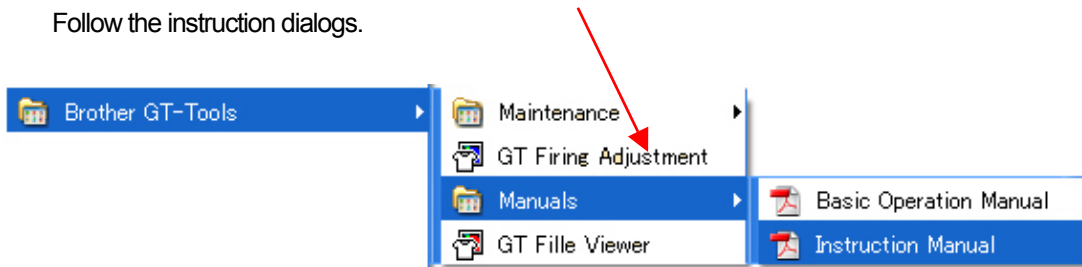
If you still see the problem in print quality, contact your Brother dealer for assistance.

7-2-8. Adjustment after the Print Head has been replaced.

If the printed image is unclear then the print head timing may need to be adjusted.

- (1) Make sure your printer is connected to your PC.
- (2) Turn on your PC.
- (3) Prepare some sheets of paper and tapes to fix on the Platen.
- (4) Execute GT Firing Adjustment in Brother GT-Tools.

Follow the instruction dialogs.



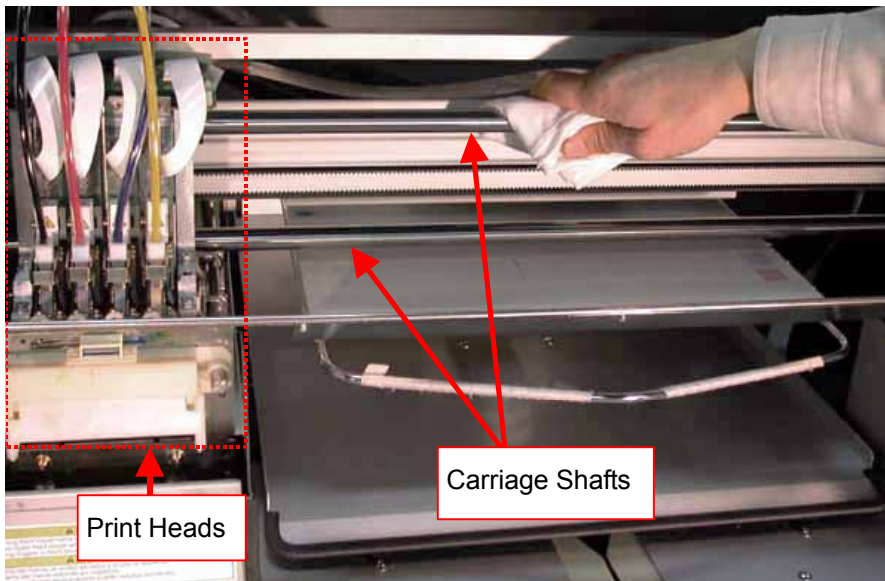
7-2-9. Cleaning the Carriage Shafts

If the error message "Fail: CRG Speed" or "Fail: CRG Stop 1" is displayed, the Carriage Shafts might be smudged with inks and dusts. Clean and oil the Carriage Shafts following the procedure below.

- (1) Turn off your printer.
- (2) Open the Front Cover by unlocking the Cover Locks with both hands
- (3) Wipe the Carriage Shafts with a cloth soaked with alcohol.

<Note>

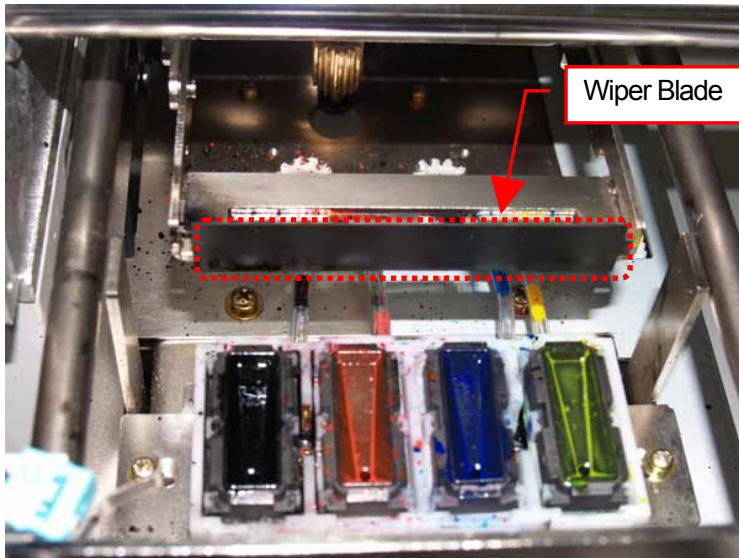
Do not move the Print Heads.



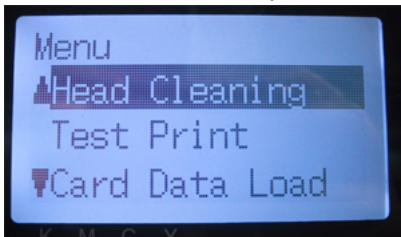
- (4) Soak a cloth with sewing oil and use it to apply the sewing oil on the Carriage Shafts.
- (5) Close the Front Cover.
- (6) Turn on your printer.
- (7) Adjust the timing of firing. See "7-2-8. Adjustment after the Print Head replacement".

7-2-10. Replacing the Wiper Blade

The Wiper Blade needs to be replaced periodically , to solve the ink jetting problem. Use the Wiper ASSY (sold separately) for the replacement.

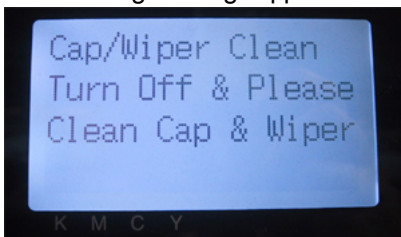


- (1) Turn on your printer if it is off.
- (2) Press the OK Button to open the Menu Display.



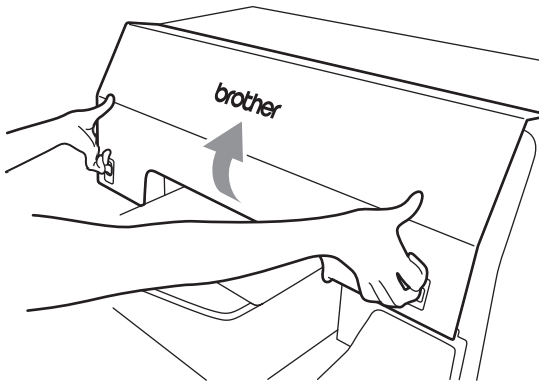
- (3) Press the Up/Down Button to select the "Maintenance", and then press the OK Button.
- (4) Press the Up/Down Button to select the "Cap/Wiper Clean", and then press the OK Button.

The following message appears.



- (5) Turn off your printer.

- (6) Open the Front Cover by unlocking the Cover Locks with both hands.

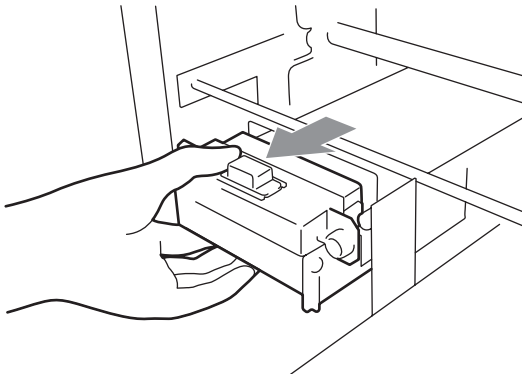


- (7) Pull out the Wiper Cleaner Cassette.

<Note>

Do not tilt the Wiper Cleaner Cassette; ink may get on your hands or clothing.

Do not touch the Clearance Sensor (the bar above the Wiper Cleaner Cassette); it may cause a malfunction.



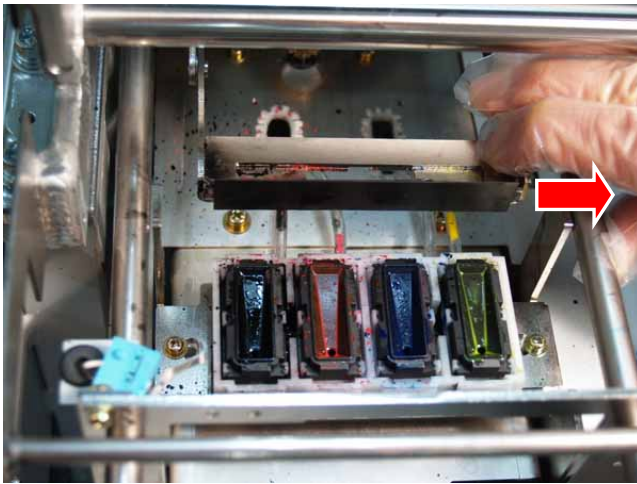
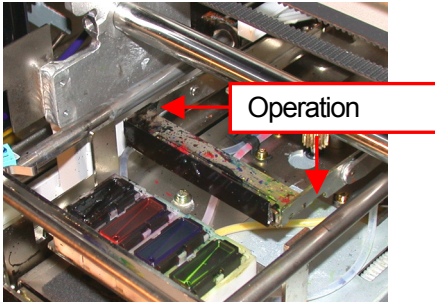
- (8) Open the Wiper Replacing Kit and put on the gloves.

7. Troubleshooting

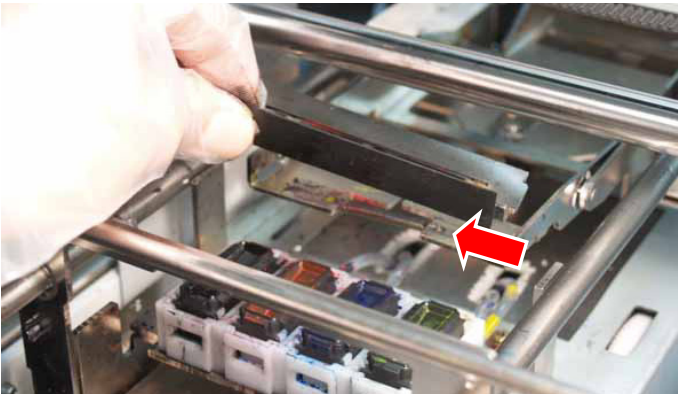
- (9) Push the right Operation Arm about 5 mm (0.2 inches) to the right and pull out the Wiper Blade as holding its left.

<Note>

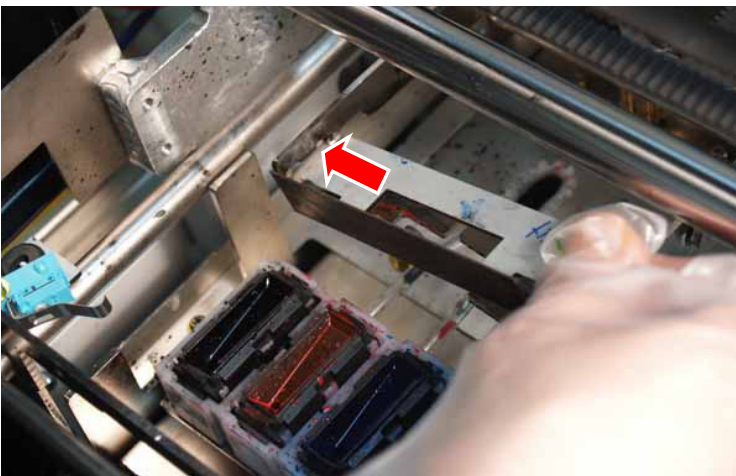
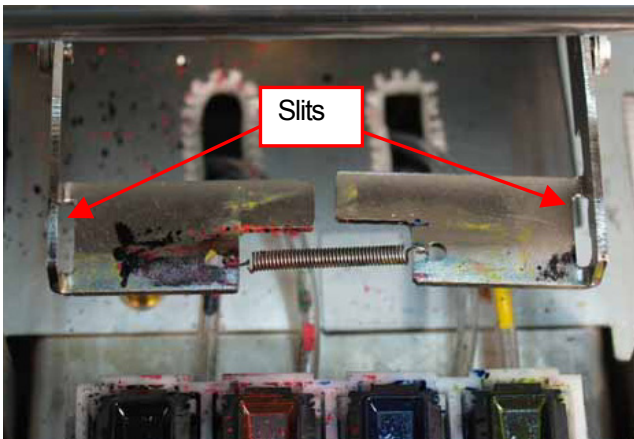
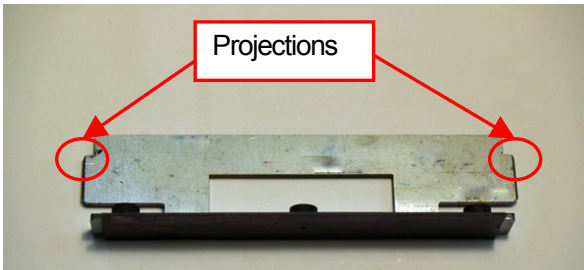
Do not push the Operation Arm by force.



(10) Remove the Wiper Blade by pulling it to the left.



(11) Insert the left projection of the new Wiper Blade to the slit of the left Operation Arm.



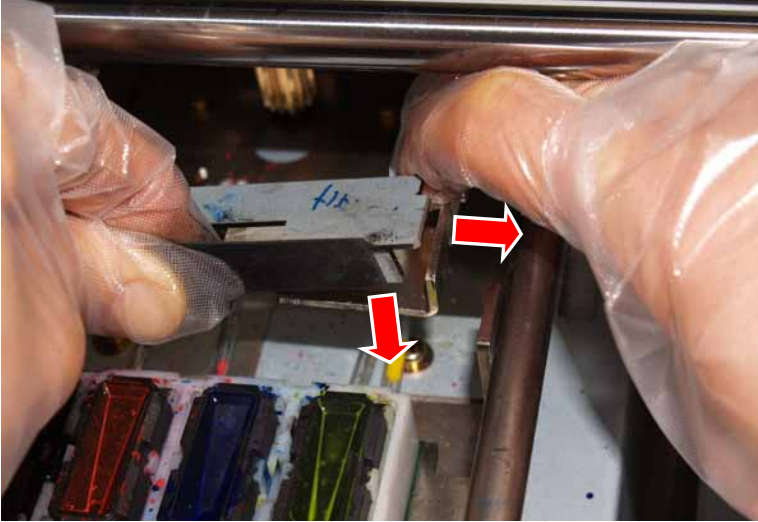
7. Troubleshooting

- (12) Insert the right projection of the new Wiper Blade to the slit of the right Operation Arm by pushing the right Operation Arm about 5 mm (0.2 inches) to the right.

<Note>

Do not push the Operation Arm by force. It may be distorted.

Take care not to push down the Wiper Blade and the Operation Arms by force. They can be easily damaged..



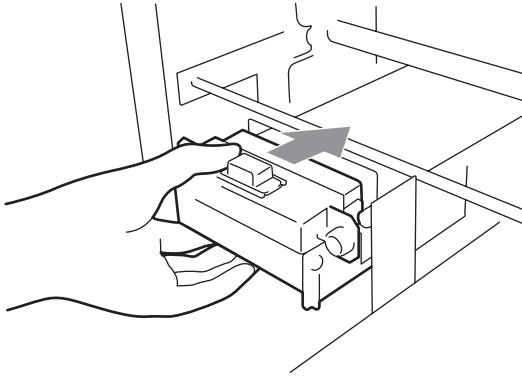
- (13) Confirm that both projections of the Wiper Blade are inserted to the slits of the Operation Arms.



(14) Insert the Wiper Cleaner Cassette straight into your printer.

<Note>

Do not touch the Clearance Sensor (the bar above the Wiper Cleaner Cassette);



(15) Close the Front Cover, and then turn on your printer.

If your printer turns on without any problem, replacement of the Wiper Blade has been completed.

If there is problem (such as abnormal noise or an error)then turn off your printer, and check if the Wiper Blade, the Wiper Cleaner and the Wiper Cleaner Cassette are correctly installed.

7-3. Solving Application Problems

Problem	Cause	Solution
<p>The image sent from Adobe Illustrator 10 is printed 90 degree rotated.</p>	<p>The Print Setup or Document Setup is not appropriate.</p>	<p>In Adobe Illustrator 10 follow the instruction below, and then try to send the print data again:</p> <ol style="list-style-type: none"> (1) Open "Print Setup" in the "File" menu. (2) Select GT-541 as the printer, and then click "OK". (3) Open "Document Setup" on "File" menu. (4) Check "Use Print Setup". (5) Confirm the "Orientation", "Width" and "Height". <p>If they are not appropriate, correct them, and then click "OK".</p>
<p>The image sent from Adobe Illustrator CS is printed 90 degree rotated.</p>	<p>The Print Setup or Document Setup is not appropriate.</p>	<p>With Adobe Illustrator CS, landscape image may not be printed properly. Correct the setting following the instruction below, and then try to send the print data again:</p> <ol style="list-style-type: none"> (1) Open "Print" in the "File" menu. (2) Confirm that the Media Size is "Defined by Driver". (3) Change the Media Orientation to the portrait. (4) If you are not changing the Platen size, skip to step (8). If you want to change the Platen Size, click "Setup...", and then click "Continue". <p>Print window appears.</p> <ol style="list-style-type: none"> (5) Click "Preference". (6) Change the Platen Size in the Printer Driver Window, and then click "OK". (7) Click "Print" in the Print window. (8) Confirm the preview, and then click "Print" to send the data to your printer.

Problem	Cause	Solution
<i>The Platen Size setting changes to Platen 10 x 12 (this happens especially when printing the image smaller than 14 x 16 inches).</i>	—	<i>Check the Platen Size in the Printer Driver window before you send the print data to your printer.</i>
<i>The image sent from Adobe Illustrator cannot be printed on proper position, or it cannot be sent and result in errors.</i>	—	<i>See “4-2-4. Setting Adobe Illustrator 10 Print Condition”.</i>
<i>There are some Properties windows shown in Photoshop 6/7/CS. When the values of Printing Preferences in Windows are set beforehand and you modified the values from the printer driver Properties window of Photoshop, mismatching information appears among different dialog boxes.</i>	—	<i>The setting in the Properties of the Print window is applied.</i>
<i>In CorelDRAW 12 and 11, sometimes outlines of warped artwork cannot be printed.</i>	—	<i>Upgrade CorelDRAW to X3(13).</i>

7-4. Error Messages

Here is a complete list of error messages that GT-541 shows. When mark ** is in Solution, write down the error code number and the message, and then make contact to your dealer or Brother. Error codes of Warnings (#1xxx) are only written in Log file.

Error code	Message	Meaning	Solution
1000	(INK LOW Black)	Black ink level is too low.	Prepare a new black ink cartridge.
1001	(INK LOW Magenta)	Magenta ink level is too low.	Prepare a new magenta ink cartridge.
1002	(INK LOW Cyan)	Cyan ink level is too low.	Prepare a new cyan ink cartridge.
1003	(INK LOW Yellow)	Yellow ink level is too low.	Prepare a new yellow ink cartridge.
1010	WASTE INK FULL	Warning: The Waste Ink Cartridge is almost full.	Prepare a new Waste Ink Cartridge. You can keep printing for a while, but replacement is soon required.
1021	Wp-Blade Life	The Print Head Wiper Blade needs to be replaced.	See "7-2-10. Replacing the Wiper Blade" and replace to a new one.
1051	CR Motor Life	The Carriage Motor is worn.	**
1060	Temp Low: xxx °F	The ambient temperature is below the range that maintains the print quality. "xxx" is the current temperature.	Raise the room temperature.
1061	Temp High: xxx °F	The ambient temperature is above the range that maintains the print quality. "xxx" is the current temperature.	Drop the room temperature.
1070	Battery Life	The battery ran out.	**
1080	RTC not Adjusted	The internal clock has not been set.	**
2000	NO INK Black	The Black Ink Cartridge is not installed.	Install a Black Ink Cartridge.
2001	NO INK Magenta	The Magenta Ink Cartridge is not installed.	Install a Magenta Ink Cartridge.
2002	NO INK Cyan	The Cyan Ink Cartridge is not installed.	Install a Cyan Ink Cartridge.
2003	NO INK Yellow	The Yellow Ink Cartridge is not installed.	Install a Yellow Ink Cartridge.
2010	NO WASTE INK TRAY	The Waste Cartridge Tray is not installed.	Install a Waste Ink Cartridge Tray
2020	EMPTY Black	The Black Ink Cartridge ran out of ink.	Replace to a new Black Cartridge.
2021	EMPTY Magenta	The Magenta Ink Cartridge ran out of ink.	Replace to a new Magenta Cartridge.

Error code	Message	Meaning	Solution
2022	EMPTY Cyan	The Cyan Ink Cartridge ran out of ink.	Replace to a new Cyan Cartridge.
2023	EMPTY Yellow	The Yellow Ink Cartridge ran out of ink.	Replace to a new Yellow Cartridge.
2030	WASTE INK FULL	The Waste Ink Cartridge is full.	Replace to a new Waste Ink Cartridge.
2040	WPC Removed	The Wiper Cleaner Cassette is not installed.	Install the Wiper Cleaner Cassette.
2050	Temp Low: xxx °F	The ambient temperature is under the operative temperature range. "xxx" shows the current temperature.	Raise the room temperature.
2051	Temp High: xxx °F	The ambient temperature is over operative temperature range. "xxx" is the current temperature.	Drop the room temperature.
2062	-	(1) Platen didn't return to the home position because Platen Motor stepped out. Or (2) Platen Org Sensor did not work while Platen returned correctly.	**
2070	OBSTACLE SENSED Push OK, Unload	GT-541 detected an obstacle on the Platen (or the media) when printing is started.	Remove the obstacle, flat the platen surface and then press OK Button.
2080	Sys Wrt Fault	Defect in FLASH ROM Check Sum on the SH side. When updating the firmware, no backup was made because of the defect of the current firmware.	**
2090	Not Initiated	No individual information (the serial number etc.) is recorded in GT-541.	**
2091	Fail: Head Temp	The Print Head temperature is raised too high while printing.	Wait until the head(s) cool down. Or contact Brother Customer Service Hot Line.
2092	Fail: Head Temp K		
2093	Fail: Head Temp M		
2094	Fail: Head Temp C		
2095	Fail: Head Temp Y		
2100	Card Not Ready Push OK Button	The Compact Flash is not inserted.	Push OK Button to escape menu and re-enter Compact Flash. Or see " 7-1. Solving Printer Problems".
2101	Not Enough Area	The Compact Flash does not have enough area for storing logs.	Check the free space of the Compact Flash with PC. Insert a Compact Flash with free area available.
2102	Card Access Error	Failure in file reading / writing	Push OK Button to escape menu and re-enter Compact Flash. Or see " 7-1. Solving Printer Problems".

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Error code	Message	Meaning	Solution
3000	PC Comm. Error Send data again	GT-541 failed to receive the print data (time out). This error occurs when the USB cable is disconnected during data transmission, or data transmission is canceled on the PC.	Check the connection between the PC and GT-541, and send print data again. If it has no effect, reboot both the PC and GT-541.
3001	-	The PC will not receive the data sent from GT-541 (transmission buffer overflow).	**
3002	PC Data Error	GT-541 received the data that is not supported.	Check the connection between the PC and GT-541, and send print data again. Or reboot both the PC and GT-541. Contact your dealer or Brother .
3003	PC Data Error	No compatibility of communication command between the PC driver and the GT-541 firmware. The versions of the PC driver and the GT-541 firmware do not correspond.	
3004	PC Data Error	The Check Sums of the received program data did not correspond when updating the firmware.	Reboot and update GT-541 again. Contact your dealer or Brother .
3005	PC Data Error	The Check Sums of the received data did not correspond when updating EEPROM.	
3006	Received NG Data	GT-541 received the data that is not supported, or the data transmission from the PC to GT-541 is interrupted in an inappropriate way. The data transmission might be made from the PC to GT-541 by using a printer driver not for GT-541.	Check the printer setting of the PC. Check the connection between the PC and GT-541 and send print data again.
3007	PC Data Error	GT-541 received a job in which commands are arranged improperly.	Reboot GT-541 and send print data again. Contact your dealer or Brother These errors might happen when GT-541 malfunctions by environmental reasons. If the error does not show, the printer is available.
3008	PC Data Error	The Check Sums of the received commands did not correspond.	
3009	PC Data Error	GT-541 received a command that is not supported.	
3010	PC Data Error	A maintenance command is mixed in normal jobs.	
3011	PC Data Error	Non-command data is mixed.	
3012	PC Data Error	The Check Sums of the received jobs did not correspond.	
4000	PC Data Error	GT-541 received the data that is not supported from the PC.	Reboot GT-541 and send print data again. Contact your dealer or Brother . These errors might happen when GT-541 malfunctions by environmental reasons. If the error does not show, the printer is available.
4001	PC Data Error		
4002	PC Data Error		
4003	PC Data Error		
4004	PC Data Error		

Error code	Message	Meaning	Solution
4005	PC Data Error		
4006	PC Data Error		
4007	Blank Data	GT-541 received blank print data from the PC. This error unintentionally occurs when the print data is simply white design (object or image), and when paper size of application is too small and the design is out of range, etc.	Check the print data with GT File Viewer. Check the print range set in the application on the PC. Check the "Print with Preview" screen in e.g. PhotoShop 7.0.
4008	PC Data Error	GT-541 received a print job that is improperly large in data size.	Reboot GT-541 and send print data again. Contact your dealer or Brother .
4009	PC Data Error	GT-541 received a print job in which commands are arranged improperly.	These errors might happen when GT-541 malfunctions by environmental reasons. If the error does not show, the printer is available.
4011	DT:ILGL MNT SEQ	Maintenance sequence data error	**
4020	PC Data Error	The received update program file is not for SH.	
4021	PC Data Error	The received update program file is not for BY.	Reboot GT-541 and update firmware again. Contact your dealer or Brother .
4022	PC Data Error	The received update program file is not for H8.	
4100	Card Access Error	The file cannot be opened.	Check the contents in the Compact Flash. Push OK Button to escape menu and re-enter Compact Flash. Or see " 7-1. Solving Printer Problems".
4101	Card Access Error	No file can be created.	**
4102	Card Access Error	The file cannot be closed.	Check the contents in the Compact Flash.
4103	Card Access Error	Failure in file seeking	Push OK Button to escape menu and re-enter Compact Flash. Or see " 7-1. Solving Printer Problems".
4104	Card Access Error	Failure in file reading	
4105	Card Access Error	Failure in file writing	**
4106	Card Access Error	File error	Check the contents in the Compact Flash.
4107	Card Access Error	File size error	
4108	Card Access Error	Failure in file size acquisition	Check the contents in the Compact Flash.
4109	No Files	Failure in file search	Check the contents in the Compact Flash. See " 7-1. Solving Printer Problems".
4110	No Files	No file is found.	Check the contents in the Compact Flash. Move ARP files out of the folder to the root folder.
4200	Language Error		
4201	Language Error	Error in program of selected language	Update firmware again. Contact your dealer or Brother .
4202	Language Error		

7. Troubleshooting

Error code	Message	Meaning	Solution
5000	Machine Error or SHBY: Send MSG TO	Communication error inside the firmware.	**
5003	Machine Error or SHBY:ILGL MSGID	Communication error inside the firmware.	**
5032	Machine Error	Communication error inside the firmware.	**
5033	Machine Error		
5034	Machine Error		
5035	Machine Error		
5036	Machine Error		
5080	BYSH: Send MSG TO		
5081	BYSH:ILGL MSGID	Communication error inside the firmware.	**
5082	BYSH:ILGL MSGLEN		
5083	Machine Error or BYSH: CHECKSUM	Communication error inside the firmware.	**
5090	BYSH: Cap On TO	Cap opening request time-out (Cap opening completion message did not return within the predetermined time after sending the Cap opening request.)	**
5091	BYSH: Cap Off TO	Cap closing request time-out (Cap closing completion message did not return within the predetermined time after sending the Cap closing request.)	
5092	BYSH: WP FWD TO	Wipe (outward) command request time-out	
5093	BYSH: WP BWD TO	Wipe (homeward) command request time-out	**
5094	BYSH: PLT LD TO	Platen loading request time-out	
5095	BYSH: PLT UNLD TO	Platen unloading request time-out	
5096	BYSH: PLT LF TO	LF time-out	**
5097	BYSH: CRG ORG TO	-	
5098	BYSH:ILGL PLT NO	Defect in the Platen number from SH	
5099	BYSH:ILGL SIZE X	Defect in the Platen information from SH (x)	**

Error code	Message	Meaning	Solution
5100	BYSH:ILGL SIZE Y	Defect in the Platen information from SH (y)	**
5101	BYSH:ILGL OFFSET	Defect in the scan print area from SH	
5102	Machine Error	Time-out of sending print data from SH	
5200	SHMN: Response TO	Time-out of waiting for the Maintenance Unit response	**
5201	SHMN:ILGL RSP	Error in the Maintenance Unit response format	**
5210	-	Received an error response from the Maintenance Unit.	
5211	MNT RSP Error: XX	Received an error response from the Maintenance Unit while purging.	
5212	MNT RSP Error: XX	Received an error response from the Maintenance Unit while initializing.	
5213	MNT RSP Error: XX	Received an error response from the Maintenance Unit while printing.	
5214	MNT RSP Error: XX	Received an error response from the Maintenance Unit while wiping.	
5215	MNT RSP Error: XX	Received an error response from the Maintenance Unit while operating the Cap.	
5216	MNT RSP Error: XX	Received an error response from the Maintenance Unit while initializing the Wiper Cleaner Cartridge after mounting it.	
5217	MNT RSP Error: XX	Received an error response from the Maintenance Unit while canceling purging.	
5218	MNT RSP Error: XX	An overrun, framing error or parity error has occurred.	
5219	MNT ILGL VERSION	The Maintenance version is too old.	**
5220	Error: RSP10	Received an error response from the Maintenance Unit while measuring negative pressure.	**
5221	MNT RSP Error: XX	Received an error response from the Maintenance Unit while updating the firmware.	**
5222	MNT RSP Error: XX	Received an error response from the Maintenance Unit while re-initializing after inserting the Wiper Cleaner Cassette.	**
6000	Fail: PLTN Load	Platen loading error	**
6001	Fail: PLTN Unload	Platen unloading error	
6002	Fail: PLTN LF	Platen moving error	

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Error code	Message	Meaning	Solution
6003	Fail: PLTN Put in	Platen moving error	**
6004	Fail: CLRNS SNSR	Clearance sensor error	**
6010	Fail: SH EEP WRT	Failure in writing to EEPROM of SH	
6011	Fail: SH FLSH ERS	Failure in clearing FLASH ROM of SH	
6012	Fail: SH FLSH WRT	Failure in writing to FLASH ROM of SH	
6013	Fail: SH FLSH CHK	Defect in FLASH ROM Check Sum of SH.	
6014	Fail: SH RAM Test	Defect in RAM check of SH	
6020	Fail: RTC Read	Defect in the real time clock	
6021	Fail: No Battery.	Battery exhaustion of the real time clock	
6031	Fail: Panel Button	Platen Button may be malfunctioning.	Check whether something is placed on the Control Panel. Contact your dealer or Brother .
6032	Fail: Panel Button	Print Button may be malfunctioning.	
6033	Fail: Panel Button	The Stop Button may be malfunctioning.	
6034	Fail: Panel Button	The Back Button may be malfunctioning.	
6035	Fail: Panel Button	The OK Button may be malfunctioning.	
6036	Fail: Panel Button	The Down Button may be malfunctioning.	
6037	Fail: Panel Button	The Up Button may be malfunctioning.	
6038	Fail: Panel Button	The Head Cleaning Button may be malfunctioning.	
6100	Fail: CRG Speed	Defect in the Carriage load (in the high level).	Clean the Carriage by referring to "7-2-9. Cleaning the Carriage Shafts". If the cleaning has no effect, contact your dealer or Brother .
6101	Fail: CRG Move	An error occurred while moving the Carriage.	**
6102	Fail: CRG STOP 1	Failure in stopping the Carriage at the proper position	Check whether the media is jamming in the Carriage. Clean the Carriage by referring to "7-2-9. Cleaning the Carriage Shafts". If the cleaning has no effect, contact your dealer or Brother .
6103	Fail: CRG STOP 2	Failure in stopping the Carriage at the proper position (ASIC error)	**
6104	Fail: CRG STP PRT	CR time-out of the Carriage during printing	**
6105	Fail: CRG STP FLS	CR time-out of the Carriage during flashing	

Error code	Message	Meaning	Solution
6110	Fail: BY EEP WRT	Failure in writing to EEPROM of BY	**
6111	Fail: BY FLSH ERS	Failure in clearing FLASH ROM of BY	**
6112	Fail: BY FLSH WRT	Failure in writing to FLASH ROM of BY	
6113	Fail: BY FLSH CHK	Defect in FLASH ROM Check Sum of BY	
6114	Fail: BY RAM Test	Defect in RAM check of BY	**
6134	Fail: Head VLTG	Print Head voltage defect	**
6150	Fail: Sur Temp	Ambient temperature sensor defect	**
6200	Fail: MNT Cap Drv	The operation stopped because the Cap Driver has overheated.	**
6210	Fail: MNT Pump Drv	The operation stopped because the Pump Driver has overheated.	
6220	Fail: MNT Wipe Drv	The operation stopped because the Wipe Driver has overheated.	
6230	Fail: MNT INK-PCBA	The Maintenance Unit failed to communicate with the Ink Sensor A PCB.	**
6240	Fail: MNT INK-PCBB	The Maintenance Unit failed to communicate with the Ink Sensor B PCB.	**
7000	PRG: SH SCER 1508	Carriage initialization failed.	**
	PRG: SH SCER 1757	Reading EEPROM Timeout (BY)	
	PRG: SH SCER 1788	Writing EEPROM Timeout (BY)	
	PRG: SH SCER XXXX	Communication timeout (SH to BY)	
7001	PRG: SH Exception	Error inside the program (Exceptionally occurs in CPU of SH)	**
7002	PRG: SH ILGL TMR	Error inside the program (Incorrect timer setting of SH)	**
7010	PRG: SH ILGL Arg	Error inside the program (Argument defect of SH)	**
7011	PRG: SH ILGL RTN	Error inside the program (Returning value defect of SH)	**
7012	PRG: SH Event TO	Error inside the program (Time-out of waiting for the vent/message of SH)	
7013	PRG: SH Internal	Error inside the program (General program error of SH)	
7100	PRG: BY SYSCALL	Error inside the program (System call error of BY)	

7. Troubleshooting

Error code	Message	Meaning	Solution
7101	PRG: BY Exception	Error inside the program (Exceptionally occurs in CPU of BY)	
7110	PRG: BY ILGL Arg	Error inside the program (Argument defect of BY)	
7111	PRG: BY ILGL RTN	Error inside the program (Returning value defect of SH)	
7112	PRG: BY Event TO	Error inside the program (Time-out of waiting for the vent/message of BY)	
7120	PRG: BY CRG Mode	Error inside the program (Mode for optimizing the undefined Print Head movement)	**
7121	PRG: BY No Line	Error inside the program (Error in the number of print lines (0 line))	
7122	PRG: BY Line Over	Error inside the program (Error in the number of print lines (too many))	
7123	PRG: BY ILGL Cmd	Error inside the program (Commands other than CR/LF)	
7124	PRG: BY ILGL Dir	Error inside the program (Undefined print direction)	
7125	PRG: BY Too near	Error inside the program (Moving error: It is too close to move.)	
7126	PRG: BY ILGL Mode	Error inside the program (Undefined print mode)	

Error Messages of Maintenance Unit

Error code	Message	Meaning	Solution
CA	Cap Driver Overheat	The operation stopped because the Cap Driver has overheated.	**
CC	Wiper Cleaner Cassette error	Wiper Cleaner Cassette is coming off.	**
CE	Communication error	Communication error other than FE, OE and PE	**
CI	Cap initialization error	The Cap initialization was not made before moving the Cap.	**
CO	Cap error	The Cap was in the raised position when moving the Wiper.	**
CP	Cap Sensor error	Failure of the Cap Sensor or Cap Motor	**
FE	Data framing error	Serial communication/data framing error occurred.	**
IE	Internal error	Incorrect program behavior	**
OB	Cap obstacle error	An obstacle prevents the Cap from being raised.	**
OE	Data overrun error	Serial communication/buffer overrun occurred.	**
PA	Pump Driver Overheat	The operation stopped because the Pump Driver has overheated.	**
PE	Parity error	Serial communication/parity error occurred.	**
PI	Pump initialization error	The Pump initialization was not made before operating the Pump.	**
PN	The number of arguments is different.	The number of arguments is abnormal.	**
PS	Pump Sensor Error	Failure in the Pump sensor or Pump motor	**
RT	Response timeout	Time-out of waiting for the Maintenance Unit response	**
SH	Ink Sensor error	Failure in the Ink Sensor harness	**
SR	Ink Sensor error	Defect in the Ink Sensor reading	**
VC	Valve error	The valve is closed when moving the Cap.	**
VO	Valve error	The valve is open when operating the Pump.	**
WA	Wiper Driver Overheat	The operation stopped because the Wipe Driver has overheated.	**
WI	Wiper initialization error	The Wiper initialization was not made before moving the Wiper.	**
WS	Wipe Sensor error	Failure in the Wiper Sensor or Wiper Motor	**

8. Specifications

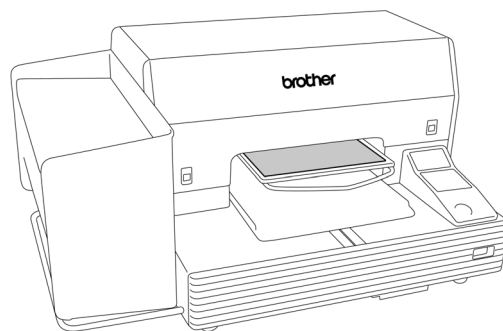
8-1. Mechanical Specification

<i>Dimensions</i>	<i>1170 (W) × 935 (D) × 610 (H) mm</i>	
<i>Weight (GT-541 including Platen)</i>	<i>Approx. 100 Kg</i>	
<i>Maximum print area</i>	<i>14 x 16 inches (355.6 x 406.4 mm)</i>	
<i>Print Resolution</i>	<i>600 x 600 dpi</i>	
<i>Power source</i>	<i>Single-phase 120 V (USA) 230 V (Europe) 100 V (Japan)</i>	
<i>Power supply frequency</i>	<i>50/60 Hz</i>	
<i>Power consumptions</i>	<i>0.8 A (average)</i>	
<i>Mechanical noise</i>	<i>Lower than 70 dB</i>	
<i>Temperature and Humidity</i>	<i>For operation:</i>	<i>Temperature: 50 °F to 95 °F (10 °C to 35 °C) Humidity: 20 % to 85 % (no condensation)</i>
	<i>For optimum print result</i>	<i>Temperature: 59 °F to 86 °F (15 °C to 30 °C) Humidity: 35 % to 85 % (no condensation)</i>
	<i>For storage:</i>	<i>Temperature: 32 °F to 104 °F (0 °C to 40 °C) Humidity: 20 % to 85 % (no condensation)</i>

8-2. Software Specification

<i>Supported OS</i>	<i>Latest Windows 2000 Professional / Windows XP (32 bit) / Windows Vista (32 bit / 64 bit) / Windows 7 (32 bit / 64 bit)</i>
<i>Supported interface</i>	<i>USB 1.1/ 2.0, CompactFlash</i>
<i>Minimum system requirements</i>	<i>256 MB RAM (512 MB or more is recommended) 128 MB free disk space (256 MB or more is recommended) 1 GHz CPU</i>
<i>Recommended Applications for precise output</i>	<i>Adobe Photoshop, Adobe Photoshop Elements, Adobe Illustrator, CorelDRAW, Paint Shop Pro</i>

brother®



INSTRUCTION MANUAL

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This is the original instructions.

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