

# INKJET PRINTER

# **Requests for Care and Maintenance**

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# MIMAKI ENGINEERING CO., LTD.

https://mimaki.com/

D203675-13 Original instructions

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## Maintenance

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# Introduction

Thank you for purchasing the Inkjet printer Tiger600 Series.

Read the Request for Care and Maintenance ("this document" hereinafter) thoroughly and make sure you understand its contents to ensure safe and correct use of the product.

Please note that the illustrations contained in this manual are intended to show functions, procedures, or operations and may sometimes differ slightly from the actual machine.

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# To Ensure Safe Use

# Symbols

In this manual, the symbols indicate and explain precautions. Make sure you fully understand the meaning of each symbol and use the machine safely and correctly.

Explanation			
	Warning	Indicates a potential hazard that may result in death or serious injury if handled improperly or if instructions are disregarded.	
	Caution	Indicates a potential hazard that may result in minor or moderate injury if handled improperly or if instructions are disregarded.	
NOTICE	Notice	Indicates a potential hazard that may result in property damage if handled improperly or if instructions are disregarded.	
	Warning sign	Indicates something that requires attention. Warning specifics are drawn inside the symbol.	
	Mandatory action sign	Indicates an action that must be carried out. The specifics of the mandatory action are drawn inside the symbol.	
$\bigcirc$	Prohibition sign	Indicates a prohibited action. The specifics of the prohibited action are drawn inside the symbol.	
(Important!)	Important	Indicates important information related to use of this machine.	
	Tip	Indicates useful reference information.	
(AP)	Reference information	Indicates the corresponding page for related information.	

# **Prohibited Dangerous Actions**

Never perform any of the following dangerous actions while the power is turned on. Disregarding these precautions may result in serious injury (crushing or severing) if the carriage moves, for example during periodic maintenance.

#### • Keep face, hands, and body away from carriage



• Keep your face, hands, and body away from the gap between the carriage and Y-bar.



• Keep your face, hands, and body away from the gaps between the carriage and platen or station.



• Keep face, hands, and body away from moving parts



Keep your face, hands, and body away from the Y-bar belt.



#### • Keep face, hands, body, and other objects away from cableveyor



Keep your face, hands, and body away from the Y cableveyor, and do not place objects on top of it.



#### • Keep face, hands, and body away from underneath platen during operation



•

Do not crawl under or insert your face, hands, or body underneath the platen while the machine is operating.

#### Keep face, hands, and body away from take-up unit, and do not peer inside during operation



• Keep your face, hands, and body away from the take-up unit, and do not peer inside while the machine is operating.

#### • Keep hands and objects away from platen



Keep your face, hands, and body away from the platen, and do not place objects other than media on top of it.



#### • Do not impede carriage operation



• Do not forcibly move the carriage while it is operating (e.g. during printing and cleaning).

# Ink and Other Liquid Handling Precautions

Precautions regarding ink, maintenance liquid, or other liquids used with this machine are included with the containers. Thoroughly read them and make sure you understand the contents.

	Be sure to read the safety data sheet (SDS) before use. https://mimaki.com/supply/sds/
	• Pay close attention to ventilation and be sure to wear safety glasses, gloves, and a mask when handling ink, maintenance liquid, waste ink, or other solutions used with the machine. Leaking ink may adhere to the skin or get into the eyes or mouth.
$\bigcirc$	• Do not subject cases containing ink to strong shock or violent shaking. Do not attempt to refill the ink. Leaking ink may adhere to the skin or get into your eyes or mouth.
	<ul> <li>Do not disassemble cases containing ink. Leaking ink may adhere to the skin or get into your eyes or mouth.</li> </ul>
	<ul> <li>Do not store ink, maintenance liquid, or other liquids used with the machine in locations where children may enter.</li> </ul>
0	• When disposing of ink, maintenance liquid or other liquid used with the product, or containers or non-woven fabric contaminated with ink or other liquid, contact an industrial waste disposal operator or dispose of the product in accordance with the local laws and regulations
$\bigcirc$	<ul> <li>Do not store ink, maintenance liquid, or other liquids used with the machine in locations exposed to direct sunlight.</li> <li>Do not store ink, maintenance liquid, or other liquids used with the machine in environments where cutting fluid or other volatile substances (such as amines or modified amine alcohol) are present in significant quantities. Storage in such places increases the risk of failure or ejection failures (e.g., nozzle clogging or deflection).</li> <li>Do not use ink, maintenance liquid, or other liquids used with this machine with other printers. Doing so may cause failure.</li> </ul>
	<ul> <li><i>NOTICE</i></li> <li>Do not store ink, maintenance liquid, or other liquids used with the machine in locations exposed to direct sunlight.</li> <li>Do not store ink, maintenance liquid, or other liquids used with the machine in environments where cutting fluid or other volatile substances (such as amines or modified amine alcohol) are present in significant quantities. Storage in such places increases the risk of failure or ejection failures (e.g., nozzle clogging or deflection).</li> <li>Do not use ink, maintenance liquid, or other liquids used with this machine with other printers. Doing so may cause failure.</li> <li>Be sure to store them in a low place no higher than 1 m above the floor. Otherwise there is a risk of scattering if the containers fall.</li> <li>Store in tightly sealed containers.</li> <li>Store in a cool, dark place.</li> </ul>
	<ul> <li>Do not store ink, maintenance liquid, or other liquids used with the machine in locations exposed to direct sunlight.</li> <li>Do not store ink, maintenance liquid, or other liquids used with the machine in environments where cutting fluid or other volatile substances (such as amines or modified amine alcohol) are present in significant quantities. Storage in such places increases the risk of failure or ejection failures (e.g., nozzle clogging or deflection).</li> <li>Do not use ink, maintenance liquid, or other liquids used with this machine with other printers. Doing so may cause failure.</li> <li>Be sure to store them in a low place no higher than 1 m above the floor. Otherwise there is a risk of scattering if the containers fall.</li> <li>Store in tightly sealed containers.</li> <li>Store in a cool, dark place.</li> <li>(1) Store ink in a place where ink does not freeze. Using defrosted ink may deteriorate ink constituents and reduce print quality.</li> </ul>
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	<ul> <li>NOTICE</li> <li>Do not store ink, maintenance liquid, or other liquids used with the machine in locations exposed to direct sunlight.</li> <li>Do not store ink, maintenance liquid, or other liquids used with the machine in environments where cutting fluid or other volatile substances (such as amines or modified amine alcohol) are present in significant quantities. Storage in such places increases the risk of failure or ejection failures (e.g., nozzle clogging or deflection).</li> <li>Do not use ink, maintenance liquid, or other liquids used with this machine with other printers. Doing so may cause failure.</li> <li>Be sure to store them in a low place no higher than 1 m above the floor. Otherwise there is a risk of scattering if the containers fall.</li> <li>Store in tightly sealed containers.</li> <li>Store in a cool, dark place.</li> <li>(1) Store ink in a place where ink does not freeze. Using defrosted ink may deteriorate ink constituents and reduce print quality.</li> <li>(2) When ink is moved from a cold place to a warm place, leave it in the environment where the machine is installed for at least three hours, and check that the ink temperature is close to that of the use environment before using it.</li> <li>(3) Open the container just before installing it, and use it up as quickly as possible. If it is opened and left for an extended period of time, print quality may be reduced.</li> </ul>

# **Installation Precautions**



• Do not install the machine in a place close to fire.

Do not place flower vases, pots, cups, containers containing cosmetics, chemicals or water, or small metal items on or close to the machine. If they enter the machine, there is a risk of failure, electric shock, or fire.



Do not install this machine in humid locations or locations where it may be exposed to splashing water. Otherwise there is a risk of failure, electric shock, or fire.



Do not install the machine in a place where children may enter.

# 



- A ventilation system must be provided if this machine is installed in a poorly ventilated area or sealed room.
- Be sure to observe the following points when installing an extractor outlet:
  - (1) The extractor outlet must be installed in accordance with applicable local EHS (environmental, health, and safety) guidelines.
  - (2) If the extractor outlet is fitted with a shutoff valve, the valve must be open when this machine is in use.



Check to confirm that the floor is sufficiently strong to bear the weight of the machine before installing.

## NOTICE

- Do not install this machine in locations where dust or powder is present. Failure or printing defects may result (e.g., nozzle clogging, deflection) if dust gets inside this machine.
- Do not install this machine in locations exposed to drafts (e.g., from air conditioning). Disregarding this precaution may result in dust or powder getting inside this machine.
- Do not install this machine in unstable locations or locations subject to vibration. This will increase the risk of failure or printing defects (e.g., nozzle clogging, deflection).
- · Do not install this machine in locations exposed to direct sunlight.
- Do not install this machine in locations subject to sudden temperature changes. This will increase the risk of failure or printing defects (e.g., nozzle clogging, deflection).
- Do not install this machine in locations exposed to excessive noise from large machinery.
- Do not install this machine in locations where photographic fixing agents generate vapor or acid gas (e.g., acetic acid, hydrochloric acid) or locations filled with metal working fluids or highly volatile substances (e.g., amines, amine-modified alcohols). Malfunctions or printing defects may result (e.g., nozzle clogging, deflection) as print head ink is more likely to harden under such environments.



Operating environment: 20 to 30 °C (68 to 86 °F), 35 to 65%RH (no condensation)
Temperature range in which accuracy is guaranteed: 20 to 25 °C (68 to 77 °F)

Install the machine in a location where the entire working area is clearly visible. (Guideline: 300 lux)
 There is a risk of incorrect operation and injury if operated in a dark location.



• Pay particular attention to the following diagram, and avoid installing in such conditions where possible. Conditions in which the side of the station is subject to drafts will increase the risk of nozzle clogging occurring during standby.

If using the machine in the conditions described in the diagram below is unavoidable and nozzle clogging occurs during standby, take measures to avoid the station being exposed to direct drafts, such as by installing a partition between the machine and the air conditioner.



# Installation Space

Provide the following space around the machine to allow safe and proper replacement of ink and media:

Item	Tiger600-1800TS
Width <sup>*1</sup>	At least 8,300 mm (5,300 mm)
Depth <sup>*1</sup>	At least 5,800 mm (2,800 mm)
Height <sup>*1</sup>	(1,900 mm)
Weight	1,620 kg

\*1. The figures in parentheses indicate machine dimensions.



If a safety fence is used to restrict the area, this should comply with the EN ISO 13857 standard.
If the machine is installed in a dedicated room, locks and safety Interlocks should be provided on the doors to the room, and ultimately a risk assessment should be conducted for the installation before use.

# Maintenance

To ensure years of precise performance, maintain the machine periodically based on frequency of use. Read the maintenance precautions thoroughly before maintaining this product.

# 1. Maintenance Precautions



This machine includes parts that must be replaced periodically. We therefore recommend taking out a maintenance contract. Carry out maintenance periodically and replace consumable items to prevent quality defects and accidents.

#### 



- Clean periodically. Debris and dust will accumulate on electrical components when the machine is used for extended periods. There is a risk of failure, electric shock, or fire due to current leakage.
- Do not clean by blowing—e.g., avoid using air blowers. Doing so may lead to failure, electric shock, or fire involving the machine if airborne debris or dust gets inside electrical components. Wipe using a soft cloth soaked in diluted neutral detergent and thoroughly wrung out. A vacuum cleaner may also be used for cleaning.



Be careful not to let liquids get inside the table. Do not allow liquids to get inside the device. Otherwise there is a risk of failure, electric shock, or fire.

# 



- For heavy soiling, wipe using a soft cloth soaked in diluted neutral detergent and thoroughly wrung out.
- Pay close attention to ventilation and be sure to wear safety glasses, gloves, and a mask when handling ink, maintenance liquid, waste ink, or other solutions used with the machine. Leaking ink may adhere to the skin or get into the eyes or mouth.

## NOTICE



- risk of machine failure or ejection failures (e.g., nozzle clogging or deflection).
  Do not use cotton swabs to clean around the head or carriage. Fibers from cotton swabs may adhere to the head nozzle surface and lead to ejection failures (e.g., nozzle clogging or deflection).
- Do not splash ink or maintenance liquid on the covers. Exposure to splashing ink or maintenance liquid may damage or deform the cover.
- Do not use benzine, thinner, or any chemical agent containing abrasives. Use of these chemicals may result in damage to or deformation of parts.
- Do not move the carriage by hand. To move the carriage, use the carriage out function on the menu.

# 2. Maintenance Timing

Timing	Item		
At the end of the work	Clean the wiper and wiper bracket. 🖙 "Wiper Cleaning"(P. 15)		
day	Clean the underside of the carriage. (IF) "Carriage Underside Cleaning"(P. 16)		
	Clean the wiper unit. 🕾 "Wiper Unit Cleaning"(P. 18)		
	Clean the flushing filter. 🐨 "Flushing Box Cleaning"(P. 18)		
	Check the waste ink levels in the waste ink tank. (Constraints and Waste Ink Tank Waste Ink Level Checking"(P. 19)		
At the end of the week's	Clean the platen. I "Platen Cleaning"(P. 20)		
work	Clean the X drive roller. I Drive Roller Cleaning"(P. 20)		
	Shake the ink. 🐨 "Ink Maintenance"(P. 21)		
At the end of two	Clean the blowing fan filter. 🐲 "Blowing Fan Filter Cleaning"(P. 22)		
weeks' work	Clean the jam sensor detecting plate. I Jam Sensor Detecting Plate Cleaning"(P. 23)		
	Clean the cover (exterior). 🕾 "Exterior Cleaning (e.g., cover, Y-bar, )"(P. 23)		
	Clean the moisture tray. 🕾 "Moisture Tray Cleaning"(P. 24)		
Once a month	Perform a supply test. ( Performing supply test" (P. 26).		
Cleaning as required	Clean the drying unit. Maintain the unit if there is any dust or ink contamination. (28) "Drying Unit Cleaning"(P. 28)		
	Clean the print head nozzle surface. As a guide, after using approximately one mini-jumbo roll (approx. 3,000 m) or when the printing time exceeds 24 hours, perform a nozzle status check using a test print before carrying out maintenance. The Print Head Nozzle Surface" (P. 29)		
	Replace the wiper (SPA-0271). The machine maintains a count of the number of wiping cycles. Once the specified value is reached, the message [0605] appears in SYSTEM ALARM. Replace dirty or warped wipers with new ones. I "Wiper Replacement" (P. 31)		
	Replace the carriage filter (SPC-0766). Check the mist filters, and replace all of them at the same time if especially dirty. Carriage Filter Replacement"(P. 32)		
	<ul> <li>Replace the blower filter (SPC-0921).</li> <li>Check the blower filter condition, and replace if especially dirty.</li> <li>Replacement guide: Once every six months (* Varies depending on extent of contamination, usage environment, and volume printed.) I Blower Filter Replacement"(P. 33)</li> </ul>		
	Replace the ink filters (SPA-0363). Replace the ink filter for the corresponding path if a message (067D or 061B) appears in SYSTEM ALARM or if the result of the supply test is less than 45 cc. The filter replacement"(P. 34)		

# **Items Required for Maintenance**

To order replacement consumable items, contact your local dealer or our service office. For more information on consumable items, refer to our website. https://mimaki.com/supply/inkjet.html

Code	Item	Intended use
SPC-0527	Cleaning Stick for Head Surrounding	For maintenance
SPC-0774	300 fan filter	For blowing fan filter replacement
SPC-0826	3-inch paper core 160	3-inch paper core
SPC-0755	Cotton gauze	For maintenance
SPC-0766	H fan filter	For carriage filter replacement
SPA-0271	Wiper kit 300TS	For wiper replacement
SPC-0876	Cap absorber	Ink wiping sponge
SPA-0327	20 L polyethylene container	For purified water tank and waste ink tank
SPA-0355	10 L ink tank cap	Cap for external supply tank
SPC-0921	Blower filter	For blower filter replacement
SPA-0363	Replacement ink filters (×4)	For external supply filter replacement



• Do not store consumable items in locations where children may enter.

# 3. Performing Maintenance

# Wiper Cleaning

The wiper wipes off ink adhering to the print head nozzle surface. Continuing to use the dirty wiper may cause the wiper to which dried ink and dust are attached to rub against the nozzle surface, leading to printing defects (e.g., nozzle clogging or deflection).



Be careful to avoid leaving fragments from the cleaning stick behind when cleaning. These fragments will increase the risk of ejection failures (e.g., nozzle clogging or deflection).

The following maintenance items can be performed at the same time. Maintenance can be performed efficiently since the carriage only needs to be moved once. It can be carried out simultaneously from the MPC MENU under [Maintenance] > [Daily Maintenance] > [Station & Head Maintenance].

 Wiper Cleaning"(P. 15)
 "Carriage Underside Cleaning"(P. 16)

 "Wiper Unit Cleaning"(P. 18)

From the MPC menu, tap [MAINTENANCE].

- The Maintenance menu is displayed.
- 7 Tap [Daily maintenance] > [Daily station maintenance].
  - The carriage moves over the platen.
- Switch the maintenance switch to maintenance mode. Maintenance Switch

#### **A** Remove the wiper.

• Hold the lugs on both sides of the wiper bracket, then pull out the wiper.



#### **5** Clean the wiper and bracket.

• Wipe off any ink and dust adhering using a cleaning stick moistened with maintenance liquid. Wipe off the maintenance liquid. Make sure none remains.





• Replace dirty or warped wipers with new ones. (27 "Wiper Replacement"(P. 31)

6 Reattach the wiper at the original position.



- 7 Switch the maintenance switch to print mode. Maintenance Switch
- **8** Tap [Complete] > [Finish] once cleaning is complete.

## **Carriage Underside Cleaning**

The underside of the carriage becomes coated with ink wiped off by the wiper. Continuing to use the dirty carriage underside will rub dried ink and attached dust on to the media, resulting in contaminated prints.

The print head uses an extremely delicate mechanism. Take great care when handling it.



• Be careful to avoid leaving fragments from the cleaning stick behind when cleaning. These fragments will increase the risk of ejection failures (e.g., nozzle clogging or deflection).



The following maintenance items can be performed at the same time. Maintenance can be performed efficiently since the carriage only needs to be moved once. It can be carried out simultaneously from the MPC MENU under [Maintenance] > [Daily

Maintenance] > [Station & Head Maintenance].

- CP "Wiper Cleaning"(P. 15)
  - "Carriage Underside Cleaning"(P. 16)
     "Wiper Unit Cleaning"(P. 18)

#### From the MPC menu, tap [MAINTENANCE].

• The Maintenance menu is displayed.

**2** Tap [Daily maintenance] > [Maintenance wizard], then tap [Head maintenance].

- The carriage moves to the maintenance space.
- **3** Switch the maintenance switch to maintenance mode. Maintenance Switch

#### **1** Slide the maintenance cover on the left side of the Y-bar.

• Lift the lever and slide it to the left.



#### **5** Clean around the print head.

• Wipe off any ink and dust adhering using a cleaning stick moistened with maintenance liquid. Wipe off the maintenance liquid. Make sure none remains.



- Never touch the print head nozzle surface.
- Once cleaning is complete, slide the maintenance cover on the left side of the Y-bar to close it.





•

6

Make sure the maintenance cover is returned to the correct position.

7 Switch the maintenance switch to print mode. Maintenance Switch

Tap [Complete] > [Finish].

# Wiper Unit Cleaning

Continued use when dirty may prevent ink from flowing into the waste ink tank or cause dried ink and attached dust to rub against the head nozzle surface, leading to ejection failures (e.g., nozzle clogging, deflection).

The following maintenance items can be performed at the same time. Maintenance can be performed efficiently since the carriage only needs to be moved once.
 It can be carried out simultaneously from the MPC MENU under [Maintenance] > [Daily Maintenance] > [Station & Head Maintenance].

 • Wiper Cleaning"(P. 15)

Wiper Cleaning (P. 13)
 "Carriage Underside Cleaning"(P. 16)
 "Wiper Unit Cleaning"(P. 18)

From the MPC menu, tap [MAINTENANCE].

• The Maintenance menu is displayed.

Tap [Weekly maintenance] > [Weekly station maintenance].

- The carriage moves over the platen.
- Switch the maintenance switch to maintenance mode. Maintenance Switch
- **C**lean the wiper tray.

1

- Wipe off any ink and dust adhering using a cleaning stick moistened with maintenance liquid. Wipe off the maintenance liquid. Make sure none remains.
- · Scrape off any dried ink with a spatula or similar tool.



- 5 Switch the maintenance switch to print mode. Maintenance Switch
- **6** Tap [Complete] > [Finish] once cleaning is complete.

#### Flushing Box Cleaning

The flushing box filter becomes dirty with ink during flushing. Continuing to use the dirty carriage underside will rub dried ink and attached dust on to the media, resulting in contaminated prints.

- **1** Switch the maintenance switch to maintenance mode. Maintenance Switch
- 2 Use a disposable cup or similar container to rinse the contaminated parts of the filter on the left and right with purified water.





• Be careful not to let liquids get inside the table. Do not allow liquids to get inside the device. Otherwise there is a risk of failure, electric shock, or fire.

**3** Switch the maintenance switch to print mode. Maintenance Switch

## Waste Ink Tank Waste Ink Level Checking

Ink used during head cleaning and other processes is collected in the waste ink tank at the lower right of the machine.



• Continuing to use the product without disposing of the waste ink may result in waste ink overflowing from the waste ink tank. Visually check the ink level in the waste ink tank every day.



• Pay close attention to ventilation and be sure to wear safety glasses, gloves, and a mask when handling ink, maintenance liquid, waste ink, or other solutions used with the machine. Leaking ink may adhere to the skin or get into the eyes or mouth.

# **Platen Cleaning**



• Switch the maintenance switch to maintenance mode before carrying out maintenance.

Continuing to use the dirty platen will prevent proper feeding of the media. It will also cause dried ink and attached dust to rub against the head nozzle surface and lead to ejection failures (e.g., nozzle clogging or deflection).





For heavy soiling, wipe using a soft cloth soaked in diluted neutral detergent and thoroughly wrung out.

## X Drive Roller Cleaning



• Switch the maintenance switch to maintenance mode before carrying out maintenance.

Continuing to use the dirty platen will prevent proper feeding of the media. It will also cause dried ink and attached dust to rub against the head nozzle surface and lead to ejection failures (e.g., nozzle clogging or deflection).





• Clean using purified water.

• Be careful not to let liquids get inside the table. Do not allow liquids to get inside the device. Otherwise there is a risk of failure, electric shock, or fire.

• For heavy soiling, wipe using a soft cloth soaked in diluted neutral detergent and thoroughly wrung out.

# Ink Maintenance

If ink constituents are sedimented, the ink density may become uneven. We recommend stirring the ink periodically to keep printing consistent.

#### • Shaking the lnk tank

- **1** Shake the lnk tank gently from left to right to ensure it is fully mixed.
  - Tighten the lnk tank lid securely, then move from left to right to ensure that the ink moves inside, holding the lid with a paper towel.



# **Blowing Fan Filter Cleaning**



• Switch the maintenance switch to maintenance mode before carrying out maintenance.

Wash the blowing fan filter in water if it is dirty.

#### • Recommended cleaning guide

(moortant!) • Check the filter for dirt every two weeks, and wash.

• Replace the filter every three months. Blowing Fan Filter Replacement

#### **1** Remove the fan filter cover.

• Push the fan filter cover claw outward, and pull the cover to the front.



**2** Remove the filter.



**3** Wash the filter.



Dry the filter after washing.

**Attach the dry filter together with the fan filter cover.** 

• Push in the fan filter cover until the tab clicks.



## Jam Sensor Detecting Plate Cleaning

Continuing to use the dirty carriage underside will rub dried ink and attached dust on to the media, resulting in contaminated prints.

#### Clean the jam sensor detecting plate.

- Clean the jam sensor detecting plate underside at the left and right sides of the carriage.
- Wipe off any ink and dust adhering using a cleaning stick moistened with maintenance liquid. Wipe off the maintenance liquid. Make sure none remains.



# Exterior Cleaning (e.g., cover, Y-bar, )



• Switch the maintenance switch to maintenance mode before carrying out maintenance.



#### 3. Performing Maintenance



For heavy soiling, wipe using a soft cloth soaked in diluted neutral detergent and thoroughly wrung out.

• Be careful not to let liquids get inside the table. Do not allow liquids to get inside the device. Otherwise there is a risk of failure, electric shock, or fire.

#### LM Guide

Wipe off dust from the left and right ends of the LM guide surface with a soft dry cloth.



• The LM guide is lubricated. Never wipe with solvents such as ethanol. Wipe off any excess or dripping lubricant with a soft dry cloth.

## **Moisture Tray Cleaning**

Replace the water in the moisture tray periodically. Continuing to use it when it is dirty will result in contaminated prints.



- be sure to wear the included safety glasses and gloves.
- Be careful to avoid contaminating the surrounding area with ink.



- **1** From the MPC menu, tap [MAINTENANCE].
  - The Maintenance menu is displayed.
- **7** Tap [Other maintenance] > [Moisture tray maintenance].
- **3** Move the carriage to the maintenance position.
- **A** Switch the maintenance switch to maintenance mode. Maintenance Switch
- **5** Open the discharge valve on the moisture tray as instructed on the wizard screen. Tap [OK], then drain the ink from the moisture tray.



Draining takes approximately 10 minutes.

**6** Clean the moisture tray. Once cleaning is complete, tap [OK].



- **7** Replenish the purified water in the moisture tray. Once complete, tap [OK].
- 8 Switch the maintenance switch to print mode. Maintenance Switch
- **Q** Return the carriage to its original position, then tap [OK].
- **1 O** Exit [Moisture tray maintenance], then tap [OK].

## Performing supply test

If the ink filter becomes clogged, this may prevent normal maintenance and possibly lead to head damage. This procedure should therefore be performed regularly to check the extent of ink filter clogging (ink supply capacity).



• If the ink supply capacity is reduced, replacing the ink filter can prevent problems caused by filter clogging.

• Note that the test may fail if the ink level in the ink tank is near the end or exceeds 10 L. The result for paths where the test failed will be 0.0 cc.



• Do not replace the ink tank or subject the external supply unit to vibration while the test is in progress, as this may cause the test to fail.

#### From the MPC menu, tap [MAINTENANCE].

• The Maintenance menu is displayed.

#### **7** Tap [Machine condition check] > [Ink supply unit test].

• A dialog box appears.



3 Check to confirm that "Supply test" is selected for [Test type], then tap [EXEC].

The test starts.





• The test takes approximately three to five minutes.



#### Check the results.



The result for paths where the test failed will be 0.0 cc. Check to confirm that there are no • ink tank level warnings (such as INK END or INK NEAR-END) and check to confirm that the ink tank is properly installed before starting the test.

Test result	Machine compatible with simple filter replacement kit	
45 cc or greater	Normal No particular action is required.	
Under 45 cc	Check to confirm that the ink tank is installed properly, then repeat the test. If the results do not improve, replace the ink filter. ( Ink filter replacement" (P. 34)	

# **Drying Unit Cleaning**

Maintain the unit if there is any dust or ink contamination.



• The drying unit becomes extremely hot. Check to confirm that the unit has sufficiently cooled before commencing maintenance.



• Switch the maintenance switch to maintenance mode before carrying out maintenance.

#### From the MPC menu, tap [MAINTENANCE].

- The Maintenance menu is displayed.
- **2** Tap [Other maintenance] > [Drying unit Taking out].
  - Pull out the drying unit as instructed on the wizard screen.

#### **3** Carry out maintenance once the drying unit has been pulled out.





For heavy soiling, wipe using a soft cloth soaked in diluted neutral detergent and thoroughly wrung out.



• Be careful not to let liquids get inside the table. Do not allow liquids to get inside the device. Otherwise there is a risk of failure, electric shock, or fire.

# **Cleaning the Print Head Nozzle Surface**

Clean the print head nozzle surface if other cleaning or maintenance fails to resolve ejection failures (e.g., nozzle clogging, deflection).

As a guide, after using approximately one mini-jumbo roll (approx. 3,000 m) or when the printing time exceeds 24 hours, perform a nozzle status check using a test print before carrying out maintenance.





• Use only the supplies specified by Mimaki. Cleaning with other products may cause print head wear.

• Do not clean the nozzle surfaces using cotton or other materials that may shed fibers. Fibers from such materials may cause nozzle clogging.



#### **1** From the MPC menu, tap [MAINTENANCE].

- The Maintenance menu is displayed.
- **7** Tap [Daily maintenance] > [Maintenance wizard], then tap [Head maintenance].
  - The carriage moves to the maintenance space.
- **3** Switch the maintenance switch to maintenance mode. Maintenance Switch

#### **A** Slide the maintenance cover on the left side of the Y-bar.

• Lift the lever and slide it to the left.



#### **5** The nozzle surface is cleaned.

• Gently press a cleaning stick moistened with maintenance fluid against the nozzle surface for about 10 seconds.



- Do not rub or press the cleaning stick with excessive force against the nozzle surface. Doing so may cause print head wear.
- Do not reuse cleaning sticks.
- 6 Once cleaning is complete, slide the maintenance cover on the left side of the Y-bar to close it.





Make sure the maintenance cover is returned to the correct position.

- **7** Switch the maintenance switch to print mode. Maintenance Switch
- **R** Tap [Complete] > [Finish].
- **Q** Execute cleaning (in normal mode).
  - Head Cleaning

#### **1** Make a test print and check the print results.

• Repeat the cleaning and test printing process until the print results appear normal.

# 4. Consumable Item Replacement

To order replacement consumable items, contact your local dealer or our service office. For more information on consumable items, refer to our website. https://mimaki.com/supply/inkjet.html



• Do not store consumable items in locations where children may enter.



• When disposing of consumable items, contact an industrial waste disposal operator or dispose of in accordance with local laws and regulations.

## **Wiper Replacement**

The machine maintains a count of the number of wiping cycles. Once the specified value is reached, [0605] will appear in SYSTEM ALARM on the touch panel. Replace dirty or warped wipers with new ones.



• The Maintenance menu is displayed.



- Tap [Replace parts] > [Replace wiper].
  - The carriage moves over the platen.
- **3** Switch the maintenance switch to maintenance mode. Maintenance Switch

#### **A** Remove the wiper.

• Hold the lugs on both sides of the wiper bracket, then pull out the wiper.





• (3) "Wiper Cleaning"(P. 15)

6 Mount a new wiper.



- **7** Switch the maintenance switch to print mode. Maintenance Switch
- **8** Tap [Complete] > [Finish] once replacement is complete.
  - The wiper usage count is reset.

#### **Carriage Filter Replacement**

Check the mist filters and replace if very dirty.



Switch the maintenance switch to maintenance mode before carrying out maintenance.

#### Remove the carriage filter covers.

• Remove the screws, then remove the filter covers.



• Filters are positioned on the left and right of the carriage.

#### **2** Install new filters.



#### Install the filter covers.

• Left and right of carriage: Fit the tabs on the bottom of the filter cover to the carriage cover, then secure with screws.

# **Blower Filter Replacement**

Check the blower filter condition, and replace if especially dirty.

• Replacement guide: Once every six months (\* Varies depending on extent of contamination, usage environment, and volume printed.)



1

• Turn off the main power before performing maintenance tasks.

#### Remove the side cover.

• Remove the knob screw, then slide the cover upward to remove it.



#### **2** Remove the filter box cover.

• Remove the three filter box clamps, then remove the cover.



#### **3** Replace the filter.

• Replace the cylindrical filter with a new filter.



**A** Reattach the filter box cover and the side cover.

• Reattach the three filter box clamps, and reattach the knob screw on the side cover.

## Ink filter replacement

#### • Ink filter replacement timing

Replace the ink filter for the corresponding path if one of the following messages appear in SYSTEM ALARM or if the result of the supply test is less than 45 cc.

Message	Status	Remarks
067D:09(ZZZZZZZ)INK SUPPLY WARN	The ink supply rate has started to drop.	Printing and maintenance are still possible, but it is recommended that the ink filter be replaced as a precaution.
061 B:09(ZZZZZZZ)INK SUPPLY	Ink cannot be supplied to the sub-tank.	Printing is not possible, and normal maintenance such as auto cleaning is not possible. While the basic maintenance operations are possible, leaving the machine in this state may lead to nozzle clogging that cannot be remedied. The ink filters therefore must be replaced.

\* "ZZZZZZZ" indicates the path number. (\_3\_ for path 3 and \_6\_ for path 6)



• Ink filters can be replaced by the operator only on machines compatible with the simple filter replacement kit.



• be sure to wear the included safety glasses and gloves.

• If the messages described persist even after replacing the ink filters, contact Mimaki Technical Support.

#### Ink filter replacement procedure

#### **From MENU on the touch panel, tap [MAINTENANCE].**

• The Maintenance menu is displayed.



**3** Open the F maintenance cover as instructed on the wizard screen.



#### **A** Remove the fitting below the filter.

• Press down on the fitting latch, then pull out the insert.



• Be sure to press down the latch fully before removing the insert. If you try to force off the insert without pressing down the latch fully, there is a risk of damaging the O-ring on the fitting, which may cause ink leakage.

#### **5** Remove the fitting above the filter.



#### 6 Detach the tube from the filter.

• Lay paper towels around the area before starting replacement work to protect the surrounding area from ink when disconnecting tubes.



7 Attach the tube to the new filter.



Mount the ink filter so that the arrow engraved on it is pointing upward.

#### 8 Attach the filter to the upper fitting.



**9** Attach the tube to the lower fitting.

- Be sure to press down the latch fully when inserting the fitting. If you try to forcibly insert the fitting without pressing down the latch fully, there is a risk of damaging the O-ring on the fitting, which may cause ink leakage.
  - Take care not to push in the valve at the tip of the fitting when connecting the fitting. If the valve is pushed in, ink may leak out, and air may enter the ink paths, causing malfunctioning.





**1** Mount the filter by pushing into the filter BKT.



**1** Tighten the fittings above and below the filter, and recheck to confirm that they are not loose.



#### **12** Check to confirm that the fittings are securely connected.

(1) There are no gaps in the fittings.



(2) The fittings do not detach when pulled gently.

#### **13** Close the F maintenance cover.

- **14** Perform a supply test from the MPC [MAINTENANCE] menu. <sup>(2)</sup> "Performing supply test"(P. 26)
- **15** Check to confirm that the test results are less than 45 cc.



 If the test results are less than 45 cc immediately after replacing the filters, contact Mimaki Technical Support.

# **Requests for Care and Maintenance**

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