

### Inkjet printer UJF-3042MkII/3042MkII e/3042MkII EX/3042MkII EX e/6042MkII/ 6042MkII e

#### Requests for Daily Care and Maintenance

This machine is a precision machine equipped with extremely fine mechanisms. Especially, the nozzle surface of the heads from which the ink is discharged is affected even by a slightest attachment of dust or paper powder and the proper printing results could not be obtained. With a view to using this machine in a better condition, we would like to recommend performing the following care and maintenance on daily basis.

#### 1. When to care

Please take care of it for a short period of time if it is used frequently.

When to care	What to care	Reference Page
Daily (1 to 3 times a day) *Depends on usage conditions	Cleaning of head nozzle surface (Cleaning using maintenance liquid 11)	P.6
Once a day (at the end of the daily work)	Exterior	P.7
	Surroundings of the heads	P.7
	Capping station	P.8
	Mist filter 1	P.9
Twice a week (Monday and Friday)	Nozzle (When PR-200 ink using)	P.10
Once a week (at the end of the work on weekend)	Bottom of LED lamp and bottom of mist filter	P.12
	Waste ink tank	P.12
	Wiper tube	P.13
	Mist filter 2	P.13
	Ink discharge passage	P.13
Once a month	Refill and check the antifreeze liquid	P.14

To order replacement consumable items, contact your local dealer or our service office.

Tools required for maintenance	note
<ul><li>Maintenance liquid 11(ML011-Z-K2 / ML011-Z-B2)</li></ul>	When cleaning of head nozzle surface (Cleaning using maintenance liquid 11) using
■ PR-200 cleaning solution (ML013-Z-K2 / ML013-Z-B2)	When PR-200 ink using.(Cleaning using maintenance liquid 13)
■ F-200 / LF-200 maintenance liquid (SPC-0568)	Maintenance solution 15(ML015-Z-K2 / ML015-Z-B1)can be used as an alternative.
<ul><li>Maintenance solution 15(ML015-Z-K2 / ML015-Z-B1)</li></ul>	
■ clean stick (SPC-0527)	When cleaning of head nozzle surface (Cleaning using maintenance liquid 11) using
■ UJ Cleaning swab	
■ Cotton swab	
■ Gloves	
■ Soft fabric	
■ Polydropper (161-22-25-02)	When SUCTION WIPER using

For more information on other consumable items, refer to our website. https://mimaki.com/supply/inkjet.html





- This printer uses a ultraviolet curable ink (UV ink).
- Be sure to wear the included safety glasses and gloves.

#### 2. Safety Precautions

#### **CAUTION**



This printer uses a ultraviolet curable ink (UV ink). Be sure to wear the included safety glasses and gloves.



To secure the stability of the ink discharge, when the printer is not used (output) for an extended period of time, it could become necessary to discharge periodically a small amount of ink (flushing), depending on the kinds of the ink.



When not using for an extended period of time, execute the [CUSTODY WASH] function of this equipment, ("When the Machine Is Not Used for a Long Time (CUSTODY WASH)" Chapter 5 of Operation Manual) and put off the power switch on the front, only. Leave the main power switch at the side of the equipment on and keep the cable socket inserted into the plug.



Make maintenance after the LED UV has been sufficiently cooled, or burn injury may occur.



Never disassemble this machine. It could cause electrical shock, fire and breakage.



Keep away the moisture from the inside of this machine. If the inside is moistened, it could cause electrical shock, fire and breakage.



Perform the maintenance and care after switching off the power and taking off the power cable. Otherwise, it could cause unexpected accidents.



Avoid using benzine, thinner, and chemicals containing abrasive compounds. The surface of the cover could be degenerated or deformed.



Do not supply lubricant oil etc. to the inside this machine. It could cause the breakdown of this machine.



Aggregates will occur when the UV curing ink(UV ink) is mixed with water or alcohol. Please be careful not to adhere water or alcohol to not only the nozzle surface, but also the head and around the cap, wiper etc.

#### 3. Installation environment

- Use this printer as much as possible in a dust-free environment. Fans and air-blowers could cause the dustspewing.
- The using environment of this printer is from 20 to 30°C (68°F to 86°F) in temperature and from 35 to 65 % in relative humidity. Avoid the use of this printer at a temperature and humidity higher or lower than the indicated ranges.

#### 4. Notes for working environment

Performing frequency of the print setting or maintenance is greatly influenced by the printing environment or the condition of the media used. Use this machine with a full understanding of the followings.

Working environment	Consideration		
When the head gap is set wide because fibers stick out of media	UV light can expose the nozzle when there is a lot of scattered mist. Raise the refreshing level for drawing (Operation Manual Chapter 3  "Setting of DEEDES!") and set the automatic maintanance (		Raise the refreshing level for drawing (Operation Manual Chapter
When the media that reflects UV light well is used such as glasses or glazed metal	<ul> <li>"Setting of REFRESH"), and set the automatic maintenance (         Operation Manual Chapter 4 "Automatic Maintenance").</li> <li>Increase performing frequency of every maintenance.</li> </ul>		
When there is an infrequentlyused ink (print head)	<ul> <li>An infrequently-used print head can be unstable to discharge ink comparing with the other print heads. Raise the refreshing level for drawing (Operation Manual Chapter 3 "Setting of REFRESH") to raise the usage rate of the head.</li> </ul>		
When printing on the media on which static can be charged	<ul> <li>Please take a sufficient antistatic such as using the optional ionizer or putting a humidifier. Static may collect mist or dust around the</li> </ul>		
When printing in a dry place (such as in winter)	printing area or the head. To print continuously for a long time, set the automatic maintenance. (Operation Manual Chapter 4 "Automatic Maintenance")		
When printing on a markedly uneven media (or object)	To keep the head gap the same, please fill the gap by setting media which do not use where a printing media is set. Leaving the head that has been degraded by reflected light may cause failure that needs replacing of the head.		

#### 5. Storage of media

Media should be stored in the little dust area, and not in direct sunlight. Avoid storing the media in the area with high temperature and high humidity.

#### 6. Storage of ink bottle

Be careful of the followings to store.

- Store the ink bottle in no direct sunlight, and no high humidity.
- As it's a delicate product, do not drop it.
- Ink IC should not be contaminated and discharged static electricity.
- Be sure to store the ink bottle and the ink IC together.



Ink bottle and Ink IC

#### 7. Maintenance when needed



A proper maintenance schedule is determined by the operator who observes throughout a period of use of the printer.

- · Some media need maintenance every time of printing.
- The maintenance schedule differs depending on the image to be printed. For example, when the image is almost filled, perform maintenance frequently.

#### (1) Cleaning of head nozzle surface with maintenance liquid 11

Remove ink adhered by stray light around the head.



• Depending on the shape and material of the printed work, prints around the head may be stained, which may cause problems with the printing results.

Increase the maintenance frequency according to the staining level.

#### (2) Cleaning of the bottom of the carriage

Remove ink attached to the bottom of the carriage.

#### (3) Cleaning of the LED UV unit

Remove ink or dust attached to the LED UV periodically.



- Clean the LED UV with care in order not to scratch an irradiation part on the bottom of the unit. If there is
  a certain amount of dirt or a light shielding object on the irradiation part, ink may not cure well and it may
  cause banding.
- · Please replace the part if the stain is too strong.

#### (4) Removal of ink attached to the table

If necessary, remove ink attached to the table with an alcohol-impregnated cloth. Be careful not to scratch the table face when removing cured ink.



#### Caution when using solvent

• Leaving the table after attachment of ink may make the ink removal hard with alcohol only. When using a special solvent, contact our office before use. It may cause a failure of the machine.

#### (5) Removal of the vacuum hole clogging on the table

The vacuum holes on the table can be clogged with ink. Remove the ink in the vacuum holes when needed. Be careful not to leave a part of cured ink on the table.

#### 8. Daily care

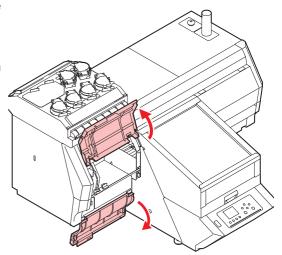


- When possible, use the UJ Cleaning swab for cleaning around the head/ capping station/ wiper.
   Using the other cotton bud may attach lint, then it may damage the machine.
- Be sure to perform maintenance for the ink cap and the wiper of capping station every day. If you leave it
  dirty, dirt may adhere to the nozzle surface, or, dust and dry ink may be rubbed against the nozzle. It may
  cause discharge defect.
- Clean the bottom of carriage every day so that it will not get dirt from inks or dusts. If you leave it dirty, dust and dry ink may be rubbed against the nozzle at wiping operation when performing head cleaning.
- When you clean the carriage bottom surface, fully be careful not to rub the nozzle surface.

#### (1) Cleaning of head nozzle surface ("Cleaning of head nozzle surface with maintenance liquid 11" Chapter 4 of the Operation Manual)



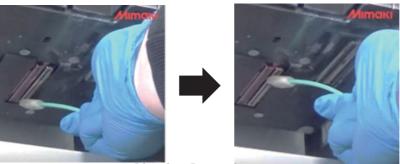
- The heads and their surroundings are the parts most liable to be tainted in this machine and if tainted, it could cause adverse effects to the functions of the machine and the results of the printings. Moreover, as the head itself uses very fine mechanisms, sufficient precautions are required for the care and maintenances.
- 1 Move the carriage to the left and open the maintenance cover.
  - Refer to the Step 1 to 5 of Chapter 4 "Cleaning the Head and the Area around It" of the user's manual to perform the operation.



- **9** Soak the clean stick with maintenance fluid11.
- 3 Remove adhered ink by wiping the overall nozzle surface one row at a time with a clean stick from the rear to the front of the head.



• If the nozzle surface is cleaned with a clean stick containing ink debris, dust, or damaged sponges, it may cause nozzle clogging. Please replace them when necessary.

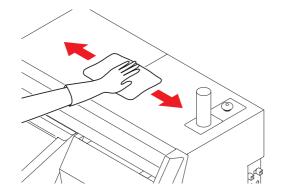


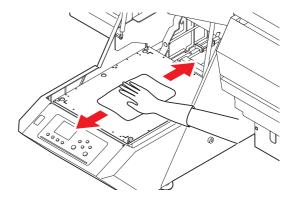
Direction: Rear to front

- ⚠ Press the ENTER key after the cleaning.
- 5 Close the maintenance cover, and press the **ENTER** key.
  - After its initial operation, the machine returns to LOCAL.
- 6 Perform head cleaning.
  - Refer to the Step 1 to 6 of Chapter 2 "Head Cleaning" of the user's manual to perform the operation.

#### (2) Exterior ("Cleaning the Exterior Surfaces" "Cleaning the table" Chapter 4, Operation Manual)

Depending on the using environment, the dusts or sand powder could stick to the exterior of the main unit. To avoid the entry of the dusts into the moving part of the head, wipe them off with soft cloth dipped into water and squeezed tightly.





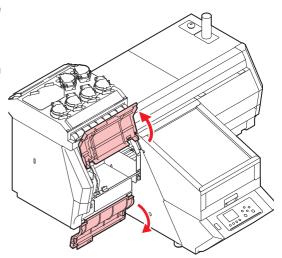
#### (3) Surroundings of the heads ("Cleaning the Head and the Area around It" Chapter 4 of the Operation Manual)



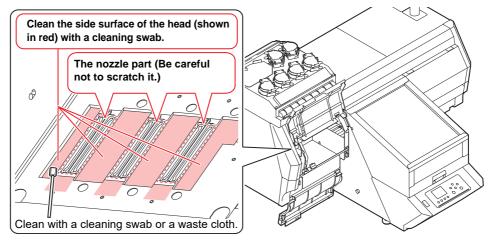
• The heads and their surroundings are the parts most liable to be tainted in this machine and if tainted, it could cause adverse effects to the functions of the machine and the results of the printings. Moreover, as the head itself uses very fine mechanisms, sufficient precautions are required for the care and maintenances.

#### 1 Move the carriage to the left and open the maintenance cover.

• Refer to the Step 1 to 5 of Chapter 4 "Cleaning the Head and the Area around It" of the user's manual to perform the operation.



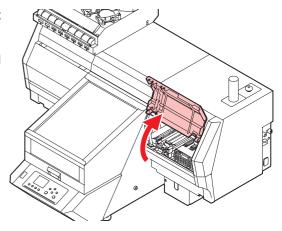
- 2 Soak the UJ Cleaning swab or the waste cloth in the maintenance liquid (F-200/LF-200) and wipe off an accumulated ink on the side of the head and on the bottom surface of the slider.
  - Be careful not to scratch the head nozzle surface.



#### (4) Capping Station ("Cleaning the Wiper and Cap" Chapter 4 of the Operation Manual)

The surrounding area of the cap is also liable to be stained by the dust and ink. It is recommended to clean the head frequently using the maintenance liquid (F-200/LF-200) for maintenance suitable for the ink used to avoid the stains on the head.

- maintenance liquid (F-200/LF-200)
- 1 Move the carriage and open the right front cover.
  - Refer to the Step 1 to 4 of Chapter 4 "Cleaning around the wiper" of the user's manual to perform the operation.

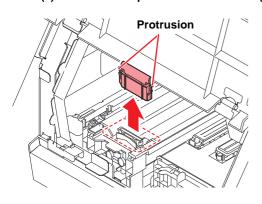


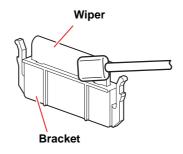
#### 2 (When using rubber wiper) Clean the wiper.

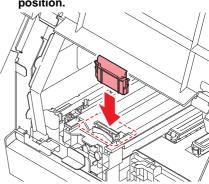


(2) Clean the wiper and bracket.

(3) Set the wiper at the original position.



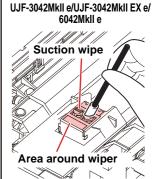




If the wiper is very dirty, or if the warning message "!REPLACE WIPER/ABSORBER", appears on the display, check and replace the wiper and wiper absorber by referring to Operation Manual Chapter 4 "(When using rubber wiper) Replace the wiper/wiper absorber.

#### **3** (When using suction wiper) Clean on or around the wiper.



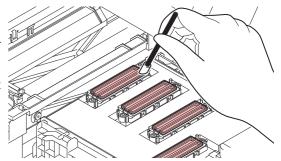


#### ▲ Clean the cap.

• Dip the UJ Cleaning swab into the cleaning liquid for maintenance and wipe off the cap.



Wipe off so that cleaning solution for maintenance will not remain.



#### 5 Clean the mist filter 1.("Cleaning the mist filter" Chapter 4 of the Operation Manual)

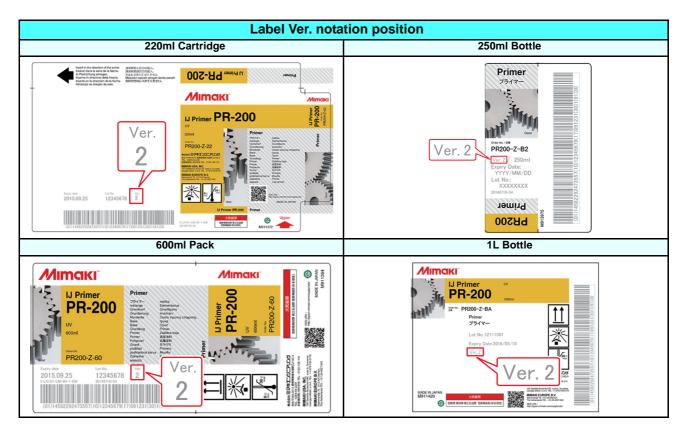
• If the stain is strong, please replace the filter referring to the Operation Manual Chapter 4 "Replacing the mist filter".



#### 9. Periodically care (for models with PR-200 ink only)

On models equipped with the PR-200, ink may clog the nozzle.

Regardless of the ink version, nozzles should be cleaned about twice a week.(Please take care of it for a short period of time if it is used frequently.)



(1) Nozzle ("Nozzle Wash (When PR-200 ink using)" Chapter 4 of the Operation Manual)

1 Open the maintenance cover on the station side.

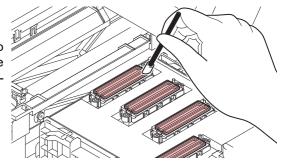
#### **?** Clean the wiper.

- Include F-200 / LF-200 maintenance liquid in the clean stick and clean.
- Wipe off F-200 / LF-200 maintenance liquid so that no maintenance liquid remains.
- Refer to the Operation Manual, "Chapter 8 (2) Capping Station" steps 2 to 3 and perform the operation.

3 Clean the cap rubber of the PR-200 head.



Use the F-200 / LF-200 maintenance liquid always to clean the wiper, bracket, and cap rubber, and do not use the PR-200 maintenance liquid (ML013-Z-K2 / ML013-Z-B2).



Fill the cap of PR-200 head completely with the PR-200 maintenance liquid (ML013-Z-K2 / ML013-Z-B2).

• Fill up the PR-200 maintenance liquid just before it overflows from the cap.

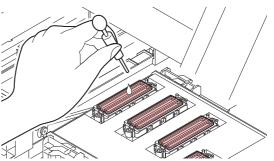


To prevent nozzle clogging, do not use PR-200 maintenance liquid other than the cap of the PR-200 head.





- The nozzle washing is started.
- 7 After washing the nozzles, perform the head cleaning (hard) for the PR-200 head.
- 8 Check the nozzle status with a test print.



#### 10. Periodically care (Once a week)

Users are advised to perform the maintenance works described below once a week so that the printer will keep its high performance and accuracy over an extended period of its life.

#### (1) Bottom of LED lamp and bottom of mist filter ("Clean the bottom of the LED lamp and the bottom of the mist filter" Chapter 4, Operation Manual)

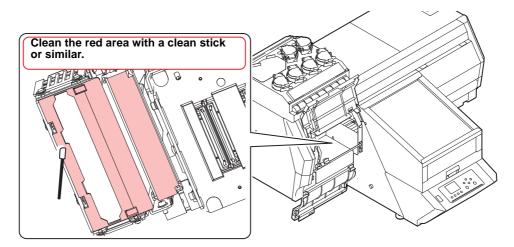
- 1 Move the carriage to the left and open the maintenance cover.
  - Refer to the Step 1 to 5 of Chapter 4 "Clean the bottom of the LED lamp and the bottom of the mist filter" of the user's manual to perform the operation.
- **?** Clean the bottom of the LED lamp and the bottom of the mist filter.
- •When it is very dirty
  - (1) Soak the cleaning stick in the maintenance liquid (F-200/LF-200).
  - (2) Clean the ink which is adhered to the bottom of the LED lamp and the bottom of the mist filter with the image of gently tapping.



- Do not rub. The low reflection treatment may peel off.
- •When there is dust on it
  - (1) Place the tape with weak adhesive strength (drafting tape, etc.) on the relevant part.
  - (2) Lightly press with your fingers.
  - (3) Peel off the tape.
  - · Execute multiple times as needed.



• The power to press the tape should not be too strong. The low reflection treatment may peel off.

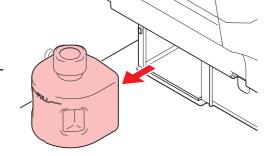


#### (2) Waste ink tank ("If a Waste Ink Tank Confirmation Message Appears" Chapter 4 of the Operation Manual)

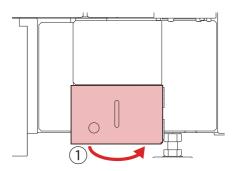
Check whether the waste ink tank is full or not. Take care so that the waste ink never overflows the tank.

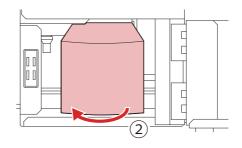


To prevent nozzle clogging, do not use PR-200 maintenance liquid other than the cap of the PR-200 head.



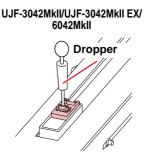
(3) (When using suction wiper) Wiper waste ink tank ("If Check Wiper Waste Ink tank Warning Appears" Chapter 4 of the Operation Manual) \*UJF-3042MkII/6042MkII only Check the waste ink level in the waste ink tank frequently. Continuing to use the machine without disposing of the waste ink may result in waste ink overflowing from the waste ink tank.





#### (4) (When using suction wiper) Wiper tube ("Cleaning the Wiper and Cap" Chapter 4 of the Operation Manual)

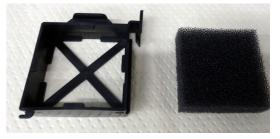
 Use a dropper to fill with the maintenance liquid (F-200/LF-200) through the mouth of suction wiper.





#### (5) Clean the mist filter 2. ("Cleaning the mist filter" Chapter 4 of the Operation Manual)

If the stain is strong, please replace the filter referring to the Operation Manual Chapter 4 "Replacing the mist filter".



#### (6) Ink Discharge Passage ("Washing the Ink Discharge Passage" Chapter 4 of the Operation Manual)

Wash the ink discharge passage (DISWAY WASH) regularly (about once a week) to prevent the head nozzles from clogging due to ink coagulation inside the passage.

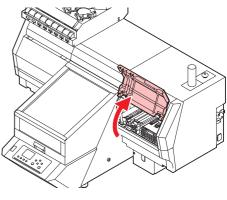
#### **1** Select "MAINTENANCE" menu → "STATION" → "DISWAY WASH".

- Refer to the Step 1 to 3 of Chapter 4 "Washing the Ink Discharge Passage" of the user's manual to perform the operation.
- The carriage will move onto the platen.

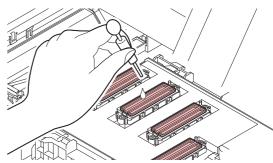
#### 2 Press ENTER key.

• Dry suction operation is performed repeatedly until the washing work is completed.

3 Open the right front cover.



- 4 Fill up the cap with cleaning solution for maintenance.
  - Suck maintenance liquid (F-200/LF-200) into a dropper and fill up the cap with it.
- 5 Press the ENTER key.



#### 11. Periodically care (once a month)

(1) Refill and check the antifreeze mixed water ("Refilling antifreeze mixed water" Chapter 4 of the Operation Manual)

It is recommended that check the amount of antifreeze liquid about once a month to keep the machine itself in good working order.

When antifreeze liquid is a little, refill the antifreeze liquid.

#### 12. Replacing consumables

To order replacement consumable items, contact your local dealer or our service office.

For more information on other consumable items, refer to our website.

https://mimaki.com/supply/inkjet.html

#### (1) Replace wipers/ wiper absorbers ("(When using rubber wiper) Replace the wiper/ wiper absorber." Chapter 4 of the Operation Manual)

The wiper and the wiper absorber are consumable. When the display indicates the warning message "!REPLACE WIPER/ABSORBER", it is necessary to check and replace the wiper and wiper absorber immediately with a new one.

Also, wipe ink sticking to the lower surface of the slider off.



- When the warning message for replacing wiper is shown, confirm whether there is no damage and
  fuzz at the top edge of the wiper film. If there is no damage on the top edge of the wiper film, it is
  possible to use the wiper continuously without replacing it. Also, if ink is not accumulated in the wiper
  absorber, use it as it is.
- A cleaning wiper is an option. Please buy one through the dealer in your region or at our service office.

#### (2) Replace the nozzle cap("(When using suction wiper)Replace the nozzle cap" Chapter 4 of the Operation Manual)

If the nozzle cap is badly scratched or dirty, replace it by referring to Chapter 4 "Replacing the Nozzle Cap" in the User's Manual.

#### (3) Replacing the mist filter ("Replacing the mist filter" Chapter 4 of the Operation Manual)

If the stain is strong, please replace the filter referring to the Operation Manual Chapter 4 "Replacing the mist filter".

#### (4) Replacing the mist filter box ("Replacing the mist filter box" Chapter 4 of the Operation Manual)

If the stain is strong, please replace the mist filter box referring to the Operation Manual Chapter 4 "Replacing the mist filter box".

#### (5) Replacing the LED Glass ("LED Glass Replacement" Chapter 4 of the Operation Manual)

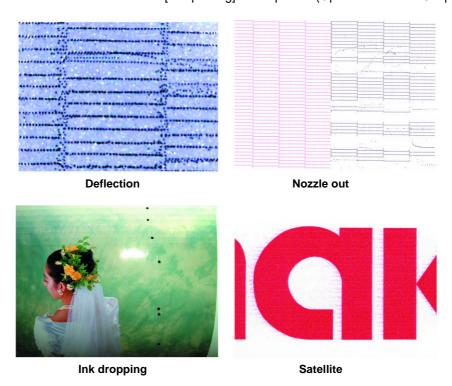
If the stain is strong, please replace the LED Glass referring to the Operation Manual Chapter 4 "LED Glass Replacement".

#### 13. The examples of defective printing

These following examples indicate improper head (nozzle) firing by dust, which effect printing.

Confirm the nozzle condition periodically before or during outputting not to use in such as this condition.

The nozzle condition can be confirmed with [test printing] in this plotter. (Operation manual Chapter 2 "Test Printing")



# UJF-MIKII Series

# Maintenance Liquid and Maintenance Items



D203936-10

Maintenance Liquid 11	(MI 011-7-K2 /MI 011-7-B2)
7	



- Clean Head nozzle surface

For Head Nozzle Surface

LH-100 LUS-120 ELH-100 ELS-120 Available ink type:

PR-200 Maintenance Liquid

(ML013-Z-K2/ML013-Z-B2)

13

- Perform Nozzle Wash for PR-200 Head Nozzle Wash for PR-200 Head

MAINTACKI
FIRESON MAINTACKI
FI

Maintenance Liquid 15 PR-200

Available ink type:

(ML015-Z-K2/ML015-Z-B1)

15

For Daily Maintenance

- Clean Wiper

- Clean the area around Heads - Clean Cap

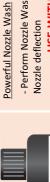
- Perform Nozzle Wash (except PR-200 Head)

LUS-150 PR-200 LH-100 LUS-120 ELH-100 ELS-120 Available ink type:

IN COLOR OF PROPERTY AND PROPER

## (ML016-Z-K2/ML016-Z-B2) Maintenance Liquid 16

**1**6



 Perform Nozzle Wash for Nozzle missing / Nozzle deflection

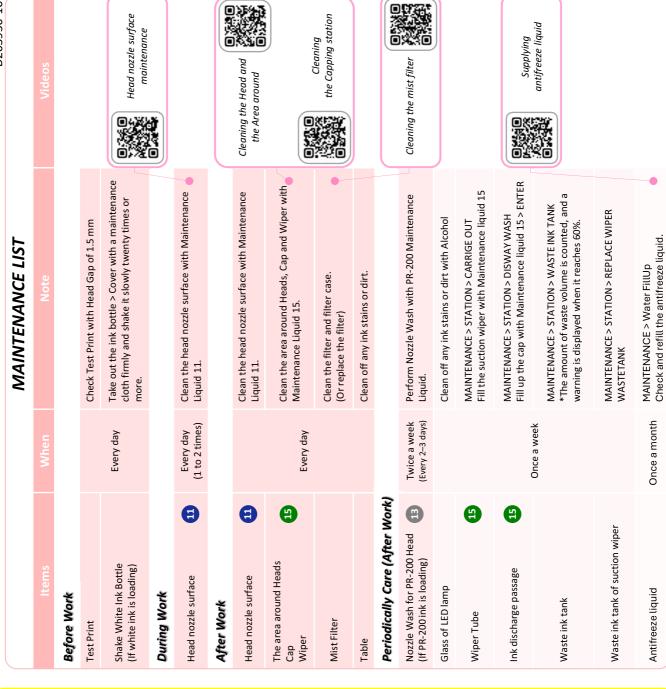
**USE WITH CAUTION** 

PR-200 (Instructions for use on the back) LH-100 LUS-120 LUS-150 ELH-100 ELS-120 Available ink type:

To get Details

How to Choose Maintenance Liquid





# The most frequent accident

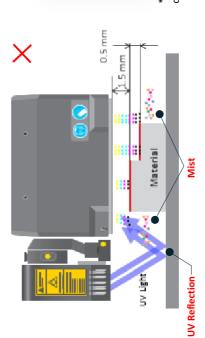


Nozzle missing

Nozzle deflection

If the gap between the media and the head is 2mm or more, the ink droplets turn into mist before they reach the media.

Also, the reflected UV light from UV LED will increase. That is caused the ink mist to harden due to the reflected UV light\*1, and the increased viscosity can cause the ink to land misaligned, missing nozzles, nozzle deflections, and blurry color.



#### on the nozzle surface \*1 Ink mist to harden

# To prevent the problems...



Use JIG

Use Head gap vithin 2.0 mm



# Countermeasure

### STEP 1

please create and use a jig to ensure that there is no height To prevent mist scattering and increased reflected light, difference between the edge of the print and the table.

### STEP 2

# HEAD GAP within 2.0 mm

make sure the Media thickness on the machine setting. Before printing or change the material,



# DAILY MAINTENANCE STEP 3

Especially, clean the nozzle surface with Maintenance Liquid 11. (LH-100, LUS-120, ELH-100, ELS-120 only) Perform daily maintenance follow per the maintenance list (page 1).

# If nozzle missing / nozzle deflection still occurs

If performing maintenance with Maintenance Liquid 15 or PR-200 Maintenance Liquid does not restore the nozzle, use Maintenance Liquid 16.

\* In some cases, nozzle problems caused by factors other than foreign matter on the nozzle surface cannot be resolved. (e.g., Scratches on the nozzle surface, ink hardening on the nozzle surface or inside the head, head damage, etc.)

### **Warning**

- ✓ Maintenance liquid 16 is stronger than other maintenance liquids and melts rubber, plastic, etc. Do not use other than Nozzle Wash.
- ✓ Before performing this maintenance for the first time, be sure to contact our engineers in advance. Also, be sure to read the operation manual before use

Procedure Items

Be sure to wear the included safety glasses and gloves.





(Dropper in ML016-Z-K1)

(ML016-Z-K2)

7 Check Test Print

Normal maintenance using Maintenance Liquid 15

- Clean wiper, cap, around head

- Head Cleaning

Nozzle Wash

(ML015-Z-K2)

(SPC-0527)

- If the problem is not resolved: <u></u>
- Perform Nozzle Wash up to three times - Perform cleaning (Hard) again

2 MAINTENANECE > STATION > NOZZLE WASH

Soak a clean stick in Maintenance liquid 15

- Clean wiper, cap

3

If it doesn't recover, please contact us.

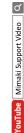


Maintenance Liquid 16 using the included dropper. Set the waiting time to 10 minutes and perform

Fill the cap where the defect occurs with

4





6 After Nozzle Wash is complete, perform Head

Cleaning (Hard).

Nozzle Wash.

Maintenance

[2]



Play List

**UJF-MkII Series** 

