

INKJET PRINTER Tiger600-1800TS

Safety Precautions

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MIMAKI ENGINEERING CO., LTD.

https://mimaki.com/

D203677-11 Original instructions

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Introduction

Thank you for purchasing the Inkjet printer Tiger600 Series.

Read this the safety precautions ("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 document are intended to show functions, procedures, or operations and may sometimes differ slightly from the actual machine.

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DISCLAIMERS

- MIMAKI ENGINEERING REJECTS ALL LIABILITY FOR DAMAGE ARISING DIRECTLY OR INDIRECTLY FROM THE USE OF THE Tiger600 Series ("THIS MACHINE" HEREINAFTER), WHETHER OR NOT THE PRODUCT IS FAULTY.
- MIMAKI ENGINEERING REJECTS ALL LIABILITY FOR DAMAGE, DIRECT OR INDIRECT, TO MATERIALS CREATED WHILE USING THIS MACHINE.
- USING THIS MACHINE IN CONJUNCTION WITH DEVICES OTHER THAN THOSE RECOMMENDED BY MIMAKI ENGINEERING MAY RESULT IN FIRE OR ACCIDENTS. SUCH INCIDENTS ARE NOT COVERED BY THE PRODUCT WARRANTY. MIMAKI ENGINEERING REJECTS ALL LIABILITY FOR DAMAGE, DIRECT OR INDIRECT, ARISING FROM SUCH INCIDENTS.
- USE ONLY GENUINE MIMAKI ENGINEERING INK AND MAINTENANCE LIQUID. USE OF OTHER PRODUCTS MAY RESULT IN FAILURES OR REDUCE PRINT QUALITY. SUCH INCIDENTS ARE NOT COVERED BY THE PRODUCT WARRANTY. MIMAKI ENGINEERING REJECTS ALL LIABILITY FOR DAMAGE, DIRECT OR INDIRECT, ARISING FROM SUCH INCIDENTS.
- DO NOT ATTEMPT TO REFILL THE INK TANKS WITH UNAUTHORIZED INK. SUCH INCIDENTS ARE NOT COVERED BY THE PRODUCT WARRANTY. MIMAKI ENGINEERING REJECTS ALL LIABILITY FOR DAMAGES, DIRECT OR INDIRECT, ARISING FROM SUCH INCIDENTS.

• TV and radio interference

• The product emits high-frequency electromagnetic radiation while operating. Under certain circumstances, this may result in TV or radio interference. We make no guarantee that this machine will not affect special radio or TV equipment.

If radio or TV interference occurs, check the radio or TV reception after turning off the product. If the interference disappears when the power is turned off, the product is likely to be the cause of the interference.

Try any of the following solutions or combinations of these solutions:

- Change the orientation of the TV or radio antenna to find a position where interference does not occur.
- Move the TV or radio away from this machine.

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.			
		Indicates a potential hazard that may result in minor or moderate injury if handled improperly or if instructions are disregarded.			
NOTICENoticeIndicates a potential hazard that may result in property damage if handled improperly or if instructions are disregarded.		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 specific drawn inside the symbol.		Indicates something that requires attention. Warning specifics are drawn inside the symbol.			
0	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.			
(CBF)	Reference information	Indicates the corresponding page for related information.			

Usage Precautions

• In the event of abnormal conditions

 In the event of abnormal conditions such as smoke or unusual odor, turn off the main power immediately and turn off the breaker. Continuing to use the machine under these conditions may result in failure, electric shock, or fire. Once you have confirmed that smoke is no longer being emitted, contact your local dealer or our service office. Never attempt to repair the machine yourself. Doing so is hazardous.



- Immediately wipe off any ink, maintenance liquid, waste ink, or other liquid used with the product that comes into contact with your skin. Then wash using soap, and rinse with plenty of water. Failure to wash off ink may result in skin inflammation. If your skin becomes irritated or painful, seek medical attention immediately.
- If ink, maintenance liquid, waste ink, or any other liquid used in the product comes into contact with your eyes, rinse immediately with plenty of clean water. Rinse for at least 15 minutes. If you wear contact lenses and they can be easily removed, remove after rinsing for at least 15 minutes with clean water. Be sure to also rinse the undersides of your eyelids. Failure to rinse off ink may result in blindness or impaired vision. If your eyes become irritated or painful, seek medical attention immediately.
- If ink, maintenance liquid, waste ink, or any other liquid used in the product enters your mouth or is swallowed, gargle with water immediately. Do not induce vomiting. Seek medical attention promptly. Inducing vomiting may cause liquid to enter the airway.
- If a large amount of vapor is inhaled, move to a well-ventilated area, keep warm, and rest in a
 posture that allows easy breathing. If the condition does not improve, seek medical attention
 promptly.

NOTICE



• If an ink leak occurs, turn off the main power immediately and turn off the breaker. Then, contact your local dealer or our service office.

Power supply precautions

 Do not attempt to modify the cable. Avoid damaging the cable. Avoid placing heavy objects on the power cable or pulling on or exposing the cable to heat. Doing so may damage the cable, resulting in electric shock or fire.

• Do not use if the power cable appears to be damaged or the core wire has an exposed or broken core. Otherwise there is a risk of failure, electric shock, or fire.



• Always connect the machine to a switchboard with grounded polarity. Otherwise there is a risk of failure, electric shock, or fire. All electrical work (Class C grounding work; formerly Type 3 grounding work) must be handled by a licensed electrician.

NOTICE

• Do not turn off the main power supply for the machine and the power supply for the control PC. Turning off the power supply will disable the automatic maintenance function (including nozzle clogging prevention function and ink discharge channel cleaning function). This increases the risk of ejection failures (such as nozzle clogging or deflection).





Use this machine with a power supply that meets specifications.When connecting the power cable, check the input voltage of the power outlet and the capacity

of the breaker. Also, connect each cable to a separate power source with an independent breaker. Connecting to power outlets linked with the same breaker will cause the breaker to trip.

Vacuum unit

NOTICE

• Do not attempt to disassemble or repair the vacuum unit. Doing so may reduce the vacuum strength or cause abnormal heat generation or failure of this machine.

• Avoid touching the relief valve (pressure regulating valve) and blocking the exhaust port of the vacuum unit. Doing so may reduce the vacuum strength or cause abnormal heat generation or failure of this machine.





Use at low temperature may cause the vacuum unit to generate a high-pitched noise. This does not indicate a failure.

• Do not stand or sit on the machine.

NOTICE



- Never stand or sit on the platen. Disregarding this precaution may impair the precision of the platen surface and affect print quality.
- Never stand or sit on the drying unit, take-up/feeding motors, or external supply unit. Disregarding this precaution is extremely dangerous and may damage the machine and result in injury.

Caution regarding moving parts



• Keep parts of the body such as the face and hands away from moving parts. Also keep clothing (e.g., loose clothing and accessories) that may impede work away from the machine. Failure to do so may result in injury.



Long hair should be tied back. Failure to do so may result in injury.

• Do not disassemble or repair



Do not attempt to disassemble or repair this machine. Otherwise there is a risk of failure, electric shock, or fire.

• About the monitor arm

• The maximum load capacity of the monitor arm is 8 kg. Do not install a monitor that is heavier than the maximum load capacity. Doing so may damage the arm.

• The monitor arm on which the touch panel is mounted is attached to the front of the machine. Take care to avoid bumping into the monitor arm or touch panel and injuring yourself while working.

NOTICE



The monitor arm angle can be adjusted to vary the touch panel mounting angle and orientation. Adjust the arm angle so as not to impede the carriage movement range or printing operations.

• About the touch panel

NOTICE

- Do not press, rub, or push the touch panel with excessive force.
- Do not tap the touch panel with a ball-point pen or other hard metal object.
- Do not touch the black outer frame of the screen.
- Do not affix adhesive tape or labels to the touch panel screen or black outer frame. Doing so may reduce sensitivity and prevent operation.



- Immediately wipe off any liquid on the touch panel.
- Take care not to allow any liquids to get inside the touch panel gaps.

• Other usage precautions



• Keep children away from the machine.

• Do not use the product after consuming medication or alcohol that may impair movement or thinking. Otherwise there is a risk of injury due to incorrect operation.

NOTICE

• Disposing of the product

Please contact your local retailer or service agent.
When disposing of the product yourself, contact an industrial waste disposal operator or dispose of the product in accordance with local laws and regulations.

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).

Usage Restrictions

Usage Restrictions

• The machine includes fast-moving and high temperature parts, which present extreme hazards. The machine must be used only by persons that are fully aware of these potential dangers.

Operator Restrictions

🕂 WARNING

The machine must be operated only by persons that have received our safety training or who have been trained by such trained personnel.

Area Restrictions



• Persons other than users who have received the appropriate training are prohibited from approaching the machine. Restrictions must be applied to the area indicated in the diagram below. The area restrictions must make it clear that the area is hazardous, for example by installing the machine within a dedicated room or by enclosing it within a fence.

WARNING

• Implement measures to prevent those other than persons that have received our safety training or who have been trained by such trained personnel from entering the danger area. There is a danger of injury from moving parts such as the carriage or tension bar while printing is in progress if untrained personnel are allowed within the restricted area while the machine is operating.





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.

Ink and Other Liquid Handling Precautions

Precautions regarding liquids are indicated on the containers of ink, maintenance liquid, and other liquids used with this machine. 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.
	• Do not disassemble cases containing ink. Leaking ink may adhere to the skin or get into your eyes or mouth.
	 Do not store ink, maintenance liquid, or other liquids used with the machine in locations where children may enter.
0	 When disposing of ink, maintenance liquid or other liquid used with the product, or the container or paper towel to which ink or other liquid is attached, contact an industrial waste disposal operator or dispose of the product in accordance with the local laws and regulations.
	NOTICE
\bigcirc	
	 NOTICE Do not store ink, maintenance liquid, or other liquids used with the machine in locations exposed to direct sunlight. 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). Do not use ink, maintenance liquid, or other liquids used with this machine with other printers.
	 NOTICE Do not store ink, maintenance liquid, or other liquids used with the machine in locations exposed to direct sunlight. 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). Do not use ink, maintenance liquid, or other liquids used with this machine with other printers. Doing so may cause failure. Store in a location not more than 1 m above the floor. Otherwise there is a risk of scattering if the containers fall. Store the tank in a sealed condition.
	 NOTICE Do not store ink, maintenance liquid, or other liquids used with the machine in locations exposed to direct sunlight. 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). Do not use ink, maintenance liquid, or other liquids used with this machine with other printers. Doing so may cause failure. Store in a location not more than 1 m above the floor. Otherwise there is a risk of scattering if the containers fall. Store the tank in a sealed condition. Store the tank in a cool, dark location. (1) Store in conditions where the ink will not freeze. Using ink that has frozen and then thawed
	 NOTICE Do not store ink, maintenance liquid, or other liquids used with the machine in locations exposed to direct sunlight. 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). Do not use ink, maintenance liquid, or other liquids used with this machine with other printers. Doing so may cause failure. Store in a location not more than 1 m above the floor. Otherwise there is a risk of scattering if the containers fall. Store the tank in a sealed condition. Store the tank in a cool, dark location. (1) Store in conditions where the ink will not freeze. Using ink that has frozen and then thawed may result in reduced print quality due to degradation of the ink constituents. (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

Installation Precautions



Do not place plant pots, cups, containers of cosmetics, chemicals, or water, or small metal objects on top of the machine. There is a risk of failure, electric shock, or fire if liquids or other items fall inside the machine.



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 ^{*1}	8,300 mm or more (5,300 mm)
Depth ^{*1}	5,800 mm or more (2,800 mm)
Height ^{*1}	(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.

Adjuster Feet

Do not attempt to adjust the adjuster feet yourself. Doing so may prevent the machine from operating correctly.

If you have any queries, contact your local distributor, our sales office, or service center.



When Relocating This Machine

Contact your local dealer or our service office. Attempting to handle relocation yourself may result in failure or damage.



• 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.



Emergency Stop Switches and Light Curtain

The machine is equipped with emergency stop switches and a light curtain to ensure safety during use. The light curtain stops the machine when a person or object is detected.



• Check to confirm that the emergency stop switches and light curtain operate correctly before starting operation.



• If an obstruction or danger to the operator occurs, press one of the emergency stop switches to stop the machine and prevent more serious problems from arising.



• To release an emergency stop switch, check to confirm that there are no objects trapped in the feed unit and that the operator is safe before resetting the switch. To reset the emergency stop switch, turn it counterclockwise. Once the emergency stop switch has been reset and the alarm has been cleared on the MPC screen, the feed unit initializes, after which the machine is ready for operation.

• Emergency stop switch locations and light curtain detection area







Warning labels

Make sure you fully understand the details indicated on the various warning labels.

If any of the warning labels becomes dirty and illegible or peel off, contact your local dealer or our service office to request new warning labels.



N o.	Order code	Label	Details
1	M903239	<u>SSS</u>	Indicates hot parts.
2	M903281	See SET UP GUIDE before connecting to the supply. 電源を接続する前に、必ず セットアップガイドを読むこと。 在接通电源之前请一定阅读安装说明书。	Note when connecting the power supply cable.
3	M903330		Wear safety glasses and gloves while working.
4	M905624		Caution regarding current leakage.
5	M906115		Caution regarding moving parts.
6	M906222		Caution overhead.
7	M907764	注意 CAUTION ATTENTION ATTENTION 上部に乗るな DO NOT STEP ON TOP NE GRIMPEZ PAS DESSUS	Do not climb on top
8	M907935	Â	Caution regarding high voltage.
9	M909381		Caution regarding moving parts.

N o.	Order code	Label	Details
1 0	M912054		Caution regarding entrapment.
1	M918531		Caution when lifting heavy objects.

Safety Precautions Check sheet

Nº	Category	Item	Remarks	Check
1	DISCLAIME RS	Make sure you fully understand the DISCLAIMERS details.	ራም P. 3	
2	Safety feature	Make sure you fully understand the Emergency stop switch locations and light curtain detection area.	ርጅ P. 18	
3	Installation environment	Make sure you fully understand the installation environment of machine.	ሬም P. 14 ሬም P. 16	
4	Area Restrictions	 Persons other than users who have received the appropriate training are prohibited from approaching the machine. The area restrictions must make it clear that the area is hazardous, for example by installing the machine within a dedicated room or by enclosing it within a fence. There is a danger of due to serious injury from moving parts such as the carriage or tension bar while printing is in progress if untrained personnel are allowed within the restricted area while the machine is operating. 	Œ ₽. 11	
5	Input caution	Make sure you fully understand the precaution of power supply connection. Supply connection. See SET UP GUIDE before connecting to the supply. 電源を接続する前に、必ず セットアップガイドを読むこと。 在接通电源之前请一定阅读安装说明书。 	☞ P. 19	
6	Danger voltage	 Be careful of high voltage in Y motor amps. Be careful of high voltage in X motor amps. Be careful of high voltage in the take-up and feeding motor. Be careful of high voltage in heater. 	ੴ ₽. 19	
7	High temperature caution	 Be careful of the take-up motor surface. Be careful of the feeding motor surface. Be careful of the drying heater exterior. 	☞ P. 19	

Nº	Category	Item	Remarks	Check
8	Be careful of moving parts. Be careful of contacts.	 Pinching and crashing when scanning the carriage. Pinching of the Y-bear when scanning the carriage. Pinching of the tension bar when feeding operation is performed. Pinching of the motor when feeding operation is performed. Overhead during the maintenance. 	₩ P. 19	
9	Weight caution	 Be careful of setting the heavy medias. Be careful of loading the ink tank. Be careful of replacement the waste tank. Be careful of replacement the cleaning solution tank. 	(3) P. 19	
10	Liquid caution	Make sure you fully understand Handling and SDS for the ink or any other liquid used with the machine. Make sure you fully understand wearing safety glasses and gloves when operation.	ርም P. 13	
11	Risk assessment	Make sure you fully understand the Risk assessment details.	Related manuals	

Agreement Confirmation

Customer's copy

Agreement Confirmation

I hereby confirm that I have received appropriate safety training from a MIMAKI ENGINEERING CO., LTD. service engineer or a retail company in accordance with "Safety Precautions" in the machine manual. I also hereby confirm that this machine will be used only by persons that have received safety training or who have been trained by such trained personnel.

This machine: Tiger600 series

Date received

Recipient of safety training

Name

Name

Safety trainer

Company name

Company name

	Signature (recipient)	Signature (trainer)	Date received	
Cut here				Cut here

Manufacturer's copy

Agreement Confirmation

I hereby confirm that I have received appropriate safety training from a MIMAKI ENGINEERING CO., LTD. service engineer or a retail company in accordance with "Safety Precautions" in the machine manual. I also hereby confirm that this machine will be used only by persons that have received safety training or who have been trained by such trained personnel.

This machine: Tiger600 series

Date received

Recipient of safety training

Name

Company name

Safety trainer

Name

Company name

Safety Precautions

December, 2023

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