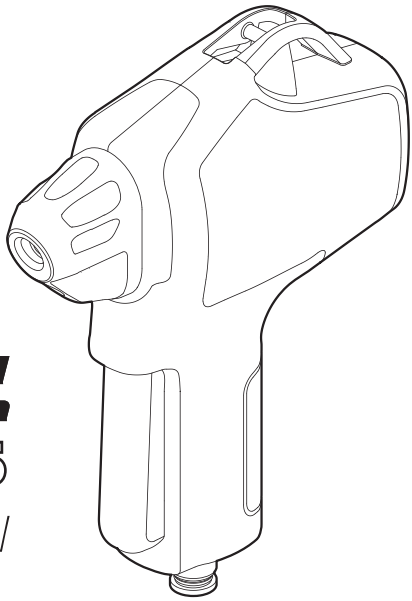
VESSEL

Air-Powered Ion Gun

No.G-5

CE

Instruction Manual



Air-Powered Ion Gun

G-5

STAT·CLEAN

Read the instructions before using the product.
The words “Original instructions” appear on the English manual.

Purpose

○This product is a static eliminator designed to eliminate electrostatic charges.
○It is intended to be used to address various production problems caused by electrostatic charges.

Contents

●For Your Safety P.2
●Product Overview P.4
●External View and Part Names P.7
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Original instructions

■For Your Safety

Safety Precautions

- ●This product is designed for general industrial use.
- ●When selecting and handling the equipment, ensure that system designers or personnel with sufficient knowledge and experience read the “Safety Precautions” and “Instruction Manual” before handling it. Improper handling is dangerous.
- ●All personnel using this product must be made aware of safety considerations. Use this manual responsibly.
- ●After thorough reading, keep in a safe handy place for future reference.
- ●This unit uses compressed air for dust removal and operation. Use it in accordance with general compressed air safety precautions.

●The precautions listed here are categorized into two levels based on the severity of the risk.

⚠ **Warning**	In cases where improper handling could potentially result in death or serious injury.
⚠ **Caution**	In cases where improper handling may result in injury or where only property damage is anticipated.

Example of pictorial display

⃠	This symbol indicates that the action is “prohibited.”
●	This symbol indicates content that “enforces” an action.
⚠	This symbol indicates content that prompts warnings or caution.

⚠**Warning**	
⃠ **Prohibited**	Do not use for any purpose other than static elimination and dust removal.
⃠ **Prohibited**	If you use a pacemaker or similar device, do not come within 1 meter of this product. Electrical fields may cause your pacemaker to malfunction.
⃠ **Peering Prohibited**	Do not look into the nozzle tip. Compressed air will be discharged, and contact with the eyes or face is dangerous.
⃠ **Disassembly Prohibited**	Do not remove or modify components, or attempt forced disassembly or assembly. ●This product is manufactured to meet safety and performance standards. Removal or modification is dangerous. ●Depending on the nature of the malfunction, customer intervention may not be possible. Always contact the retailer where you purchased the product or our sales office.
⃠ **Prohibited**	Do not use in environments requiring explosion-proof protection, such as those containing flammable gases or solvents. This product is not explosion-proof, and there is a risk of explosion or fire.

⚠ Caution	
⃠ **Prohibited**	Do not bring this product into areas where it may be exposed to water, oil, solvents, high humidity, or corrosive gases such as acids, alkalis, or chlorine gas. Also, do not use it in such areas. Doing so may cause electric shock or malfunction.
⃠ **Prohibited**	Do not use in locations subject to significant vibration or impact, environments with rapid temperature changes, or areas prone to condensation. Doing so may cause malfunction.
⃠ **Prohibited**	Do not use beyond the operating conditions and range specified in the specifications. Risk of fire or electric shock.
⃠ **Prohibited**	Do not use, maintain, or store the product until you have fully understood this manual.
● **Remember**	Consider the surrounding conditions of the usage location. ●Use indoors in a location protected from wind, rain, and direct sunlight. ●Avoid locations exposed to water or oil. ●Use at temperatures between 5°C (41°F) and 45°C (113°F) and humidity levels between 10% and 90% RH. ●Please use in a moderately ventilated area.
● **Remember**	If this product is subjected to significant impact or damage due to dropping or other causes, be sure to inspect it. If it does not operate correctly, or if any abnormality is discovered during inspection, be sure to have it repaired or replaced as necessary.
● **Remember**	The equipment is not intended for use by persons (including children) with reduced physical sensory or mental capabilities or lack of experience and knowledge.
● **Remember**	Children should be supervised to ensure that they do not play with the appliance.
● **Remember**	This product is for dry use only.
● **Remember**	This product should be used at an altitude of 2,000 m or less.
● **Remember**	Keep this manual near the product for easy reference.

Explanation of Warning Signs

	Read the instruction manual carefully		Do not disassemble
	Wear earplugs		Caution: Electric Shock
	Do not look into the air nozzle tip		Wear safety glasses

Product Overview

When the trigger is pulled while clean dry air is supplied, the force of the compressed air initiates power generation within the gun's internal generator motor. This generated low-voltage 12V power then activates the internal high-voltage power supply.
When high voltage generated by a high-voltage power supply is applied to the needle electrode at the tip of the gun, ions are generated. Compressed air passing through the gun then propels these ions at high speed onto the charged object, simultaneously removing dust and eliminating static electricity.
The G-5 is an energy-saving “static electricity removal device” that requires no external power source, using only compressed air for both power supply and air blowing.

Features

●Built-in power generation mechanism eliminates need for external power supply or batteries

This product operates solely on compressed air. Since no external power supply is required, conventional AC adapters and power cables are unnecessary, eliminating wiring issues such as broken connections.

●Automatically adjusts power generation

Automatically regulates the power required for ion generation. (※Patent pending)
If excess power is supplied, it adjusts the surplus and uses only the necessary power. Furthermore, if an abnormality occurs during power generation, the safety circuit stops the power supply.

●High-frequency AC corona discharge type

This is an AC corona discharge static eliminator that generates ions using high-frequency electricity. It enables consistently stable static elimination.

●Wound-type high-voltage power supply

When a “high-voltage short circuit", “internal board overheating”, or “sustained excessive voltage supply” occurs, the status indicator LED flashes or illuminates red, and a built-in safety circuit automatically stops the output.

●Air output increased by approximately 2.5 times

Significantly higher air output compared to our previous model ※.
※ G-9

●Operating air pressure: 0.2MPa to 0.7MPa

Suitable for a wide range of applications, from ESD protection for electronic components to dust removal in automotive maintenance.

●Hanger

The integrated upper hanger section allows suspension from both vertical and horizontal positions.

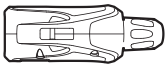
Main Unit Specifications

Model	G-5
Ion Generation Method	AC corona discharge type
Applied Voltage/Frequency	AC 8kVp-p/ 32kHz
Working Fluid/ Working Air Pressure	Clean dry air/ Rated 0.5MPa (Operable air pressure range: 0.2–0.7MPa)
Air Consumption Flow Rate	422 liters/min※3
Ozone Output	0.05 ppm or less※4
Operating Temperature/ Humidity	5°C (41°F) to 45°C (113°F) / 10 to 90% RH (No condensation or freezing)
Storage Temperature/ Humidity	-30°C (-22°F) to 50°C (122°F) / 10 to 90% RH (No condensation or freezing)
Discharge Time※1	Less than 1 second [Measured value]
Ion Balance※2	Within ±20V※5, Within ±40V※6
Noise Level (dBA)	99.3dB(A)※7 105.4dB(A)※8
Installation Location	Indoor
Protection Circuit	High-voltage short-circuit detection circuit/ High-temperature abnormal shutdown circuit/ Overvoltage protection circuit
Air Connection	Compatible with 8mm (5/16inch) outer diameter tubing, one-touch fitting
Operating Distance	50mm (2inch) to 600mm (23-5/8inch) (Installation location: Non-hazardous indoor locations)
Weight	Approx. 365g (0.8lbs)
Width×Depth×Height	W139×D51×H164mm (W5-15/32×D2×H6-29/64inch)
Material	Housing...Polycarbonate (flame-retardant) Elastomer (flame-retardant) Needle electrode...Tungsten Nozzle...PBT Female threaded section on the main body for air joint installation+Internal components...PBT
Accessories	Instruction manual

※1 ±1000V→±100V, supply air 0.5MPa/Measured at 150mm distance
※2 Measured at 150mm distance / ※3 supply air 0.5MPa / ※4 0.5MPa/Measured at 50mm distance
※5 Up to 0.4MPa / ※6 Up to 0.7MPa
※7 Measured at 1000mm distance, supply air 0.5MPa
※8 Measured at 1000mm distance, supply air 0.7MPa

Electrostatic discharge capability

Air pressure 0.5MPa, temperature 25.0°C (77°F), humidity 50.0% RH, CPM: conforming to IEC 61340-4-7

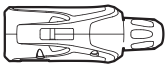


	50mm	150mm	300mm	450mm	600mm	750mm	900mm	1050mm
150mm				4.0	3.5	2.2	1.5	1.3
				6.3	7.1	3.3	2.1	1.9
100mm			2.5	0.5	0.8	0.8	1.0	1.0
			3.6	0.7	1.0	1.3	1.3	1.4
50mm	0.4	0.2	0.3	0.4	0.5	0.8	0.7	1.9
	0.3	0.3	0.5	0.5	0.6	0.9	1.1	1.3
±0mm	0.3	0.3	0.4	0.4	0.5	0.6	0.7	0.9
	0.3	0.2	0.5	0.5	0.6	0.8	1.0	1.3
50mm	0.4	0.3	0.4	0.4	0.4	0.6	0.8	0.9
	0.3	0.3	0.5	0.5	0.5	0.8	1.1	1.3
100mm	5.8	0.4	0.6	0.6	0.5	0.7	1.0	1.1
	7.9	0.4	0.7	0.7	0.7	0.9	1.3	1.4
150mm			3.6	3.6	1.2	1.3	1.9	1.8
			4.3	4.3	1.6	1.8	2.5	2.1

(Upper stage: +1000V→+100V(sec) / Lower stage: -1000V→-100V(sec))

Ion Balance

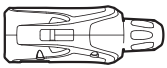
Air pressure 0.5MPa, temperature 25.0°C (77°F), humidity 50.0% RH, CPM: conforming to IEC 61340-4-7

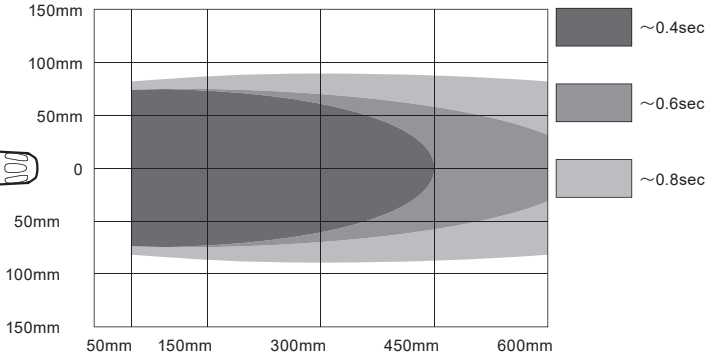


	50mm	150mm	300mm	450mm	600mm	750mm	900mm	1050mm
150mm				-2.2	-1.7	-1.7	-2.7	-2.4
100mm			-2.6	-1.9	-2.6	-2.8	-3.3	-2.8
50mm	-8.9	-6.0	-3.3	-3.3	-6.1	-4.8	-3.3	-3.7
±0mm	-14.5	-10.3	-6.5	-6.5	-6.2	-4.3	-3.8	-3.4
50mm	-11.0	-22.6	-8.2	-8.2	-5.7	-4.3	-3.9	-1.7
100mm	3.4	-10.9	-4.9	-4.9	-3.6	-4.5	-2.5	-2.2
150mm			-1.6	-1.6	-1.8	-2.3	-1.9	-2.4

(V)

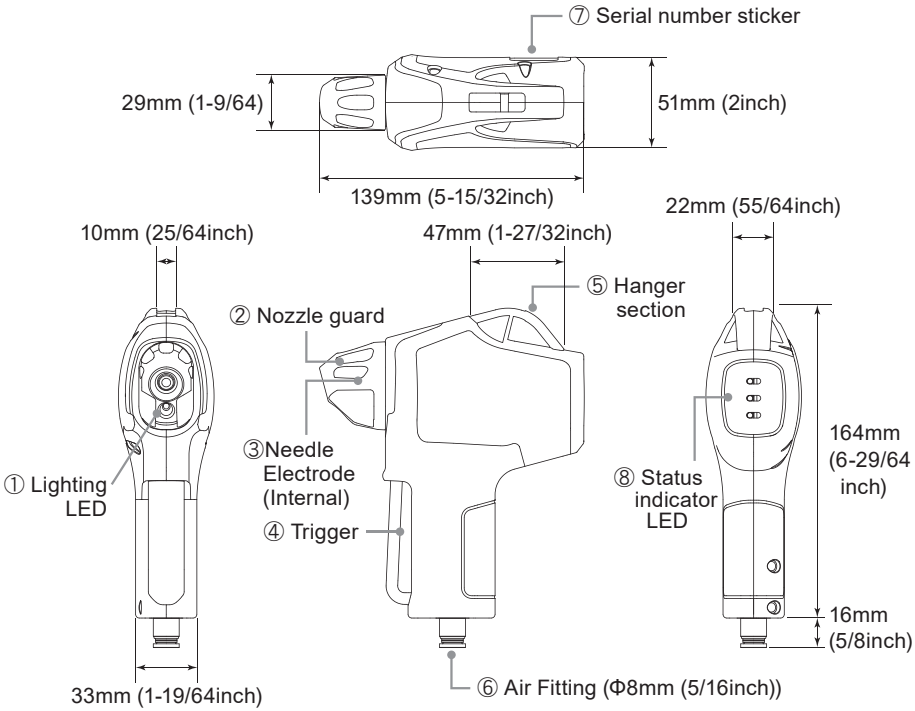
Electrostatic discharge range ※Image: ±1000V → ±100V Decay Time (Measured Value)





※Data regarding static elimination performance is based on measurements taken in our company's environment and is not guaranteed.

■External View and Part Names



① Lighting LED	:	Pull the trigger to activate the light.
② Nozzle guard	:	This is the nozzle's protective component. Do not remove the nozzle guard except during maintenance.
③ Needle electrode	:	This component receives high voltage from the high-pressure power supply to generate ions.
④ Trigger	:	Pulling the trigger ejects ionized air.
⑤ Hanger section	:	Can be hung on hooks on tool balancers, workbenches, etc.
⑥ Air fitting	:	Can connect to tubing with an outer diameter of φ8mm. (5/16inch)
⑦ Serial number sticker	:	Displays the serial number and year of manufacture.
⑧ Status indicator LED	:	Indicates whether power generation is functioning correctly and alerts you if the unit malfunctions. (See P.27)

■Air Tube Connection

⚠Warning	
⃠ Prohibited	Do not use in the following locations. Risk of explosion or fire. ●Do not bring the product into environments requiring explosion-proof measures, flammable atmospheres, high temperatures and humidity, environments with rapid temperature changes, locations prone to condensation, areas where water, oil, or solvents may splash, humid locations, areas with fine dust, or locations containing corrosive gases such as acids, alkalis, or chlorine gas.
● Remember	Always use air tubes with pressure resistance. Non-pressure-resistant tubes may rupture or leak air.
● Remember	Ensure the installation environment meets the following conditions: Humidity: 10 to 90% RH (provided there is no condensation or freezing) Temperature: 5°C (41°F) to 45°C (113°F)
● Remember	This unit is precision equipment containing intricate mechanisms and delicate electronic components. The design incorporates considerations for durability against impacts during general static elimination and dust removal operations, but never throw it down or drop it. When using tools such as a tool balancer, take great care to ensure the main unit does not collide with rigid structures when rewinding with the spring.

Installation location

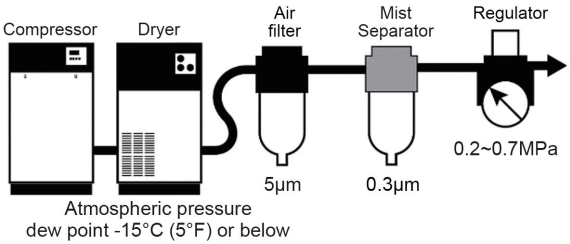
For safety, use in a location where the tube cannot get caught or fully extended.
Install in a location where standard air piping is possible.

Air piping

⚠ Caution	
⃠ Prohibited	Air from oil-lubricated compressors or oilers cannot be used.
● Remember	Always use air hoses with pressure resistance. Hoses without pressure resistance may burst or leak air.
● Remember	When screwing in fittings, ensure that no thread shavings or sealant material enters the gun interior. When using sealing tape, wrap it leaving 1.5 to 2 threads exposed.
⚠ Caution	Do not subject the tube to twisting, kinking, pulling, or moment loads. This can cause damage to fittings, crushing, bursting, or dislodging of the tube.
⚠ Caution	Before installation, verify the model type, size, and other specifications. Also, inspect the product for any scratches, dents, cracks, or other damage.

Air used

- ●Supply clean dry air.
- ●Supply air within the range of 0.2 to 0.7 MPa.
- ●If moisture adheres to the needle electrode, discharge will not occur properly and static elimination will fail.
- ●Use a dryer to remove moisture. (Dew point temperature: -15°C (5°F) or lower)
- ●Use a mist separator (0.3μm) to remove impurities.
- ●Supply air at a temperature between 0 and 40°C (104°F).



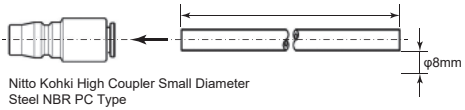
Tube used

Use pressure-resistant air tubes (outer diameter φ8mm (5/16inch)).

Tube connection

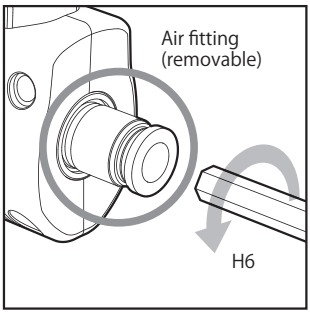
Connect the air tube with an outer diameter of 8mm (5/16inch) to the air fitting. (Refer to the external view diagram. (P23))

※An optional set (G-9UTP) is available for purchase separately, containing a 3m (10ft) tube with an outer diameter of φ8mm (5/16inch) and a male coupler.



Nitto Kohki High Coupler Small Diameter
Steel NBR PC Type

The air fittings can be replaced according to the customer's usage. The original air fittings can be removed using a hex wrench (H6).



1. Checking the screw specifications

The threaded part of the air fitting for this product is R1/4 (tapered thread). Please confirm that the threaded part of the air fitting you are installing is R1/4.

2. Seal Treatment

The threaded parts of the air fittings on this product are pre-treated with a seal.
When replacing the air fittings, remove the existing seal material and apply a new seal material before use. Use fluororesin tape with a width of 13 mm and a thickness of 0.1 mm, wrapping it 1.5 to 2 times around the threads.
*Do not use liquid sealants as they may cause damage.

3. Installing the Air Fitting

After hand-tightening the air fitting onto the threaded part of this product, use a torque-controlled tool to secure it. Be careful not to overtighten, as this may cause damage to the main body.
Install with a torque of approximately 2.0 N·m.

■Air Tube Connection

4. Leak Check
Supply low-pressure air and gradually increase the air supply pressure to check for air leaks from the air fittings and surrounding areas. If air leaks from the fittings, gradually increase the tightening torque to 2.5 N·m, then 3 N·m, and check again.
If leaks persist from the fittings following the above procedure, the internal threads may be damaged. In this case, contact your nearest dealer or distributor for repairs.

Please be aware that if the tube diameter of the air fitting being replaced is too small, the flow rate may be low, which could lead to unstable power generation.

■Use

⚠ Caution	
⃠ Prohibited	Avoid using this product on people or on individuals who have sustained injuries to their hands or other body parts. Also, do not block the air outlet with your hands or other body parts. Doing so may lead to unexpected accidents or injuries.
⃠ Prohibited	Do not modify or disassemble the product. It contains high-voltage components and is extremely dangerous.
⃠ Prohibited	Do not drop the product on the floor or subject it to strong impacts.
⃠ Prohibited	Do not forcefully pull the tube. Doing so may damage the unit or cause the tube to detach internally, which is dangerous.
⃠ Prohibited	Do not damage or expose high-pressure hoses to high temperatures.
⃠ Prohibited	Do not use if the product is cracked or chipped.
⃠ Prohibited	If water, oil, or solvents come into contact with this product, wipe it off immediately and allow it to dry completely before use. Using the product while any liquid remains may cause a fire.
⃠ Prohibited	Do not use the trigger while it is constantly pulled. This may lead to unexpected accidents or injuries.
⃠ Prohibited	Never look into high luminance light beam with your naked eye.
● Remember	If any abnormalities are observed, stop using immediately.
● Remember	Supply clean dry air. Moisture and contaminants in the supply air can cause product degradation and contamination of workpieces.
● Remember	After cleaning the needle electrode during maintenance, be sure to reinstall the nozzle and nozzle guard.
● Remember	When operating at high pressure, all operators and surrounding personnel must wear protective equipment such as ear protectors. Prolonged exposure to high noise levels can cause hearing loss and other impairments.
● Remember	To ensure proper grounding, wear the wristband while using the device.
⚠ Caution	If you experience any physical discomfort during use, discontinue use and consult a physician.
⚠ Caution	Ensure a safe working space to prevent collisions or accidents before use.

Inspection before use

The basic inspection items before use.

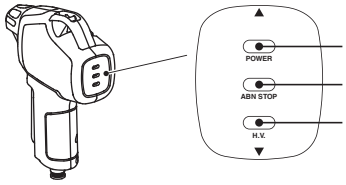
Inspection points	Inspection method	Judgment criteria
Main unit and its individual parts, Nozzle guard	Visual inspection of external appearance	No cracks, chips, warping, large scratches, or discoloration
	Hold the main unit in your hand and shake it gently	When gently shaken, ensure there is no loud rattling sound inside the main unit, and that there is no looseness in any parts
Nozzle	Looseness inspection	Tighten it slightly to ensure it does not move
Trigger	Operate without supplying air (pull/release)	When released after being pulled, it must return to its original position within one second
Supply air pressure	Check the supply air pressure value	Within the specifications
Main body fitting section, trigger section, Air coupling section	Air leak inspection by listening and touch	No air leaks
Electrostatic discharge performance	Test specimens and electrostatic measuring instruments (such as our model No. Eye-02) for inspection	Sufficient static elimination performance
Ion Balance	Static electricity tester (Our model No. Eye-02, etc.) inspection	Within ±30V

① Pulling the trigger releases ionized air.
- ●The ion balance may fluctuate depending on the air pressure and flow rate.
- ●Confirm that the [POWER] status indicator LED is lit green.

② Blow air onto charged workpieces or workpieces with dust accumulation.

③ After completing deionization and dust removal, release the trigger to stop operation.

Status Indicator LED Display



Green light: (When power is ON/During operation)
Operating normally
Red light: Abnormalities in power generation
Red flashing light: Internal circuit board overheating
Red light: High-voltage power supply abnormality

Abnormal Warning Function

When the high-voltage power supply enters an overload state, output will stop and the [H.V.] indicator LED will light red.
Additionally, if a power generation abnormality occurs or the internal circuit board overheats, the [ABN STOP] indicator LED will light or flash red.

- If the [H.V.] or [ABN STOP] LED lights or flashes red, release the trigger immediately.
- If the [H.V.] or [ABN STOP] LED continues to light or flash after restarting the power, contact your retailer for inspection and repair to prevent accidents.

■Maintenance

⚠ Caution	
Disassembly Prohibited	Do not disassemble except for cleaning or replacing the needle electrode.
Prohibited	Do not pour water on it. Risk of electric shock or malfunction.
Prohibited	Do not wipe with detergent or solvents. This may cause cracking, electric shock, or malfunction.
Prohibited	Never use bent or broken needle electrodes.
Prohibited	Do not insert foreign objects or tools into the nozzle.
Remember	Always remove the air tube before cleaning the needle electrode.
⚠ Caution	Hand-tighten until the nozzle stops rotating.
⚠ Caution	The tip of the needle electrode is sharply pointed. Take care to avoid puncture wounds or lacerations.

We recommend periodically measuring the ion balance and decay time to check for performance degradation. Dirt or wear around the needle electrode reduces static elimination capability. Clean the needle electrode approximately once a week. If cleaning does not restore performance, replace it with a new needle electrode (GN-H). Replace the needle electrode approximately every 1200 hours.

Body Cleaning Method

To clean the body, wipe it with a soft cloth dampened with water and wrung out thoroughly.
Do not use detergents or other substances containing surfactants, as they may affect the static elimination capability.

Cleaning Method for Needle Electrodes

① Remove the nozzle guard (black).

② Remove the nozzle (white).

Remove the nozzle surrounding the needle electrode.

③ Remove dirt.

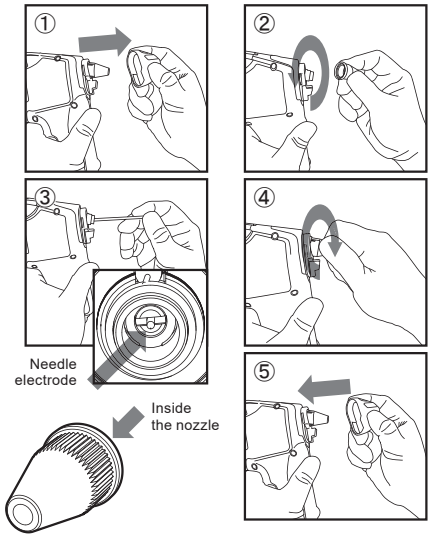
Use a cotton swab to wipe away dirt from the tip and surrounding area of the needle electrode. For heavy soiling, lightly moisten the swab with IPA (isopropyl alcohol) or anhydrous ethanol to remove deposits. Also clean the inside of the nozzle at the same time.

- Before use, check that no fibers from the cotton swab or other cleaning materials are adhering to the needle electrode.

④ Reattach the nozzle.

※Ensure the nozzle is securely attached.
Over-tightening may cause damage.

⑤ Reattach the nozzle guard.

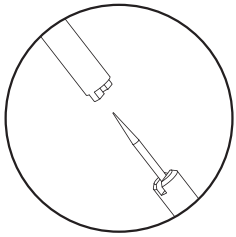


Replacing the Needle Electrode

The needle electrode is a consumable item (GN-H, sold separately) that requires periodic replacement.
A dedicated replacement driver (G-7DR, sold separately) is required to replace the needle electrode.

Replacement Procedure

The needle electrode is screw-type.



① Remove the nozzle guard.

② Remove the nozzle.

③ Using the needle electrode replacement driver, turn the needle electrode counterclockwise to remove it.

④ Install the new needle electrode.

- Use the needle electrode replacement driver to turn the needle electrode clockwise to secure it. If the needle electrode is overtightened, there is a risk of damaging the main unit. Also, if it is too loose, it may come off, so please tighten it just enough to prevent any looseness.

⑤ Reattach the nozzle as before.

⑥ Reattach the nozzle guard.

※Ensure the nozzle is securely attached.

■Action in Case of Abnormality

If you notice any of the following symptoms or other defects or abnormalities, discontinue use immediately as they may cause product failure or accidents. Contact the retailer where you purchased the product for repairs.

⚠ Caution	
⃠ Disassembly Prohibited	Do not disassemble under any circumstances.
⃠ Prohibited	Do not use under the following conditions. Risk of fire or electric shock. ●Smoke is coming from the unit. A burning smell is present. ●The unit is damaged from dropping or impact. ●Air is leaking from anywhere other than the nozzle. ●Abnormal noise or vibration occurs during use. ●Sparks are visible at the needle electrode tip. (Spark discharge is not observed during normal operation.)
● Remember	In case of an abnormality, stop the air supply.

■Troubleshooting

Problem	Possible causes	Solution
Do not discharge	Discharge abnormalities due to contamination	Clean the needle electrode and its surrounding area
	Needle electrode wear	Replace the needle electrode
	High-voltage power supply failure (H.V.red light illuminated)	Request repairs from the retailer where you made the purchase
A spark is visible at the needle electrode	Wetting around the needle electrode	Request repairs from the retailer where you made the purchase
The status indicator LED does not light up	Air is not being supplied	Check that the regulators and valves on the air piping are not closed
	Internal circuit board failure	Request repairs from the retailer where you made the purchase
	Shortage of power generation	Verify that the air pressure is 0.2 MPa or higher
The red LED is lit/flashing	ABN STOP(illuminated): Abnormalities in power generation	Request repairs from the retailer where you made the purchase
	ABN STOP(flashing): Internal board overheating	Wait about a day and try again If the flashing persists, contact the retailer where you made the purchase for repairs
	H.V. (illuminated): High-voltage power supply failure	Request repairs from the retailer where you made the purchase
	Internal circuit board failure	Request repairs from the retailer where you made the purchase
There is a strange noise	Internal component malfunction	Request repairs from the retailer where you made the purchase
The trigger is stiff	Supply air quality	Request repairs from the retailer where you made the purchase
Even when the trigger is pulled no air comes out	Air is not being supplied	Verify that the supply air is being supplied correctly
	The mechanical valve inside the unit is malfunctioning	Request repairs from the retailer where you made the purchase
The trigger does not return	The mechanical valve inside the unit is malfunctioning There is a foreign object inside the valve.	Request repairs from the retailer where you made the purchase
Wear/Damage to the Needle Electrode Insertion Port	Age-related deterioration/ Load during replacement	Request repairs from the retailer where you made the purchase

The main unit is abnormally hot	Failure of the circuit board	Request repairs from the retailer where you made the purchase
When air is added, air escaping noises occur or the tube comes off	Damage to fittings Damage to internal components	Request repairs from the retailer where you made the purchase

■Air Tube Removal/ Storage/ Disposal/ Replacement Parts

Removing the Air Tube

⚠ Caution	
● Remember	Before removing the air tube, always ensure the air source is shut off. Also, removing the air tube may cause compressed air inside to spray out, so do not remove it while your face or other body parts are close to it.
● Remember	Before removing the air tube from this machine, ensure the safety of the surrounding area and personnel.

Storage

⚠ Caution	
⃠ Prohibited	Do not store in the following locations. Doing so may cause malfunction. ●Locations subject to significant vibration or impact ●Locations with high temperatures and humidity exceeding the specified range, or locations prone to condensation ●Locations with rapid temperature changes ●Locations with flammable solvents, dust, or other substances posing a risk of ignition or explosion ●Locations with excessive dust, smoke, or locations where water, oil, chemicals, etc., may come into contact ●Locations generating strong electric or magnetic fields

Disposal

When disposing of this unit, handle it appropriately in accordance with applicable laws and local ordinances.

Replacement Parts

The following parts are replaceable consumable parts that can be replaced by the customer. Confirm the model number and lot number and order them from your retailer.

Needle Electrode
GN-H



Nozzle Guard
G-5NZG



Standard Nozzle
G-5SN



*For replacement procedures, refer to the “Maintenance” section of this manual.

■Warranty

If the product malfunctions during the warranty period while being used normally in accordance with the instructions in the manual, labels on the unit, and other warnings,
we will repair it free of charge based on the terms of this document.
If the product malfunctions during the warranty period, contact the retailer where you purchased it.
Even within the warranty period, repairs will be charged in the following cases:

1) Damage or malfunction caused by incorrect usage or careless handling
2) Damage or malfunction caused by improper repairs, modifications, or disassembly
3) Damage or malfunction caused by fire, earthquake, flood, lightning strike, other natural disasters, gas damage, salt damage, pollution, abnormal voltage, etc.
4) Damage or malfunction caused by moving or transporting the product after purchase
5) Loss of this document, failure to complete required information, or alteration of text. This document will not be reissued. Keep it in a safe place to prevent loss.

●This warranty guarantees free repair or replacement for product malfunctions only. We assume no liability for damages arising from the use or inability to use this product.
●This warranty guarantees free repair under the specified period and conditions. It does not limit your legal rights.
●Replacement parts and consumables are not covered by this warranty.

Model	G-5	
Warranty	(1) year from the date of purchase	The shipping date is managed by our company using the product serial number.
Customer	Name	
	Address	
	Tel. No.	
Retailer	Name/Address/Tel. No.	

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