ZappAura II Maintenance Manual vol. 1.01

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Thank you very much for regularly using our product. Your ionizer unit requires maintenance work including cleaning and exchanges of parts. As a rough standard, please carry out a regular maintenance once every 1000 hours, although the interval may vary, depending on how you use this unit.

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Cleaning of Discharge Needle and Surrounding Areas

<Once every 1000 hours recommended>

☆ Perform this cleaning regularly even if CC (Cleaning) does not light up.

Foreign substances are liable to adhere to the discharge needle and its surrounding areas. When contamination of the needle should become excessive, the amount of ion emergence will decrease, causing the static elimination capability to decline. For this reason, be sure to carry out maintenance regularly.

- ① First, shut off the power supply to the **ZappAura** main unit to cut off the air supply.
- 2 <u>UNLOCK</u> the main unit of **ZappAura** and remove the discharge needle unit from the main unit. Clean the tip of the discharge needle with a cotton swab soaked with alcohol. Replace the discharge needle with a new needle if the contamination cannot me removed or its tip is broken (Optional part: DN—W25)



 Extreme care is required when handling a discharge needle as its tip is sharp, or else you may get physically injured.

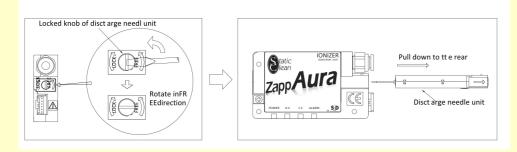


Tip of the discharge needle

Cleaning the discharge needle

Method for Removing the Discharge Needle Unit

- Turn the fixing knob at the rear of the discharge needle unit (black) in the direction of FREE (counterclockwise) using a flat head screwdriver.
- · Remove the discharge needle unit by pulling it rearward.



• After you have cleaned the discharge needle, re-install the discharge unit on the main unit. Slowly turn the fixing knob in the direction of LOCK (clockwise) to fix the unit on the main unit (tightening torque: 8~10N·cm).

Method for Removing the Discharge Needle

Remove the discharge needle unit from the main unit. Pull the discharge needle toward you to remove it from the main unit.



Replacement part: (Discharge needle with O-ring): DN-W25

- 3 Clean the nozzle attachment section and inside of the optional nozzle of the **ZappAura** main unit by removing the contamination adhered to these areas by wiping off the areas with a cotton swab soaked with alcohol.
 - ☼ Do not use any solvent or cleaner containing a solvent. Use of a solvent may cause the ZappAura main unit or the optional nozzle to deteriorate.



- 4 After the cleaning, securely install the optional nozzle and the discharge needle unit on the ZappAura main unit.
- 5 LOCK the fixing knob of the discharge needle unit.
- (In case the RED ALARM should light up, remove and re-install the discharge needle unit once again, and LOCK the fixing knob once again.)
- ☆ The purpose of the maintenance operations of the discharge needle or its surrounding area is not to extend the service life of the ionizer but to restore the degraded performance of the unit to the original condition.

For Availability of the Unit over a Long

To make it possible for you to use this product over a long period, be sure to observe the following:

- ① Be sure to use clean and dry air (not containing water or oil). Contaminated air will cause the electrode to burn out or deteriorate.
- ② Do not supply the power to the unit without supplying the air to the **ZappAura** II main unit, or else the nozzle and the **ZappAura** II main unit may deteriorate, causing the static elimination effect of the unit to be lost. In addition, a low airflow rate (less than 0.05 Mpa) may reduce the service life of the product.
- 3 Be sure to carry out the maintenance operation on a regular basis.
- 4 Furthermore, do not carry out any action not explicitly described in the ZappAura II Instruction Manual.

Replacement of the Discharge

We recommend once per every 20000 hours or every 3 years

☆ The discharge needle will wear out bit by bit because of corona discharges. To ensure that the product should provide a stable static elimination effect, we recommend that you replace the discharge needle every 20,000 hours or approximately every 3 years of operation.

When replacing the needle, please use our Service Part: Discharge Needle DN-W25 (with O-ring).

We can accept a discharge needle replacement as a regular repair service. If you wish us to carry out the work for you, please contact one of our sales offices or agency offices.

Names on the Display Panel of ZappAura II:

Name	Notation	Color	Content
Power indication	POWER	Green	Lights up when the power is turned on.
High voltage output indication	H.V	Green	Lights up when a discharge is performed.
Cleaning check indication	C.C	Yellow	Lights up when the electrode is contaminated.
High voltage error indication	ALARM	Red	Lights up when an error occurs on the internal H.V. power supply.

Troubleshooting:

Problem	Main Cause	Method for Handling
	No power supplied	Check if the power supply is outputting 24 VDC.
Power cannot be turned on	Cable incorrectly connected	Check if the power supply signal cable is correctly connected to the main unit and the power supply.
	Discharge needle unit not installed (Contact failure)	Install the discharge needle unit. If the discharge needle unit has already been installed, check the unit to confirm that the unit is properly locked. (Tightening torque: 8~10 N·cm) Check the metal spring of the discharge needle unit to confirm that it is not deformed. Check the clearance between the metal spring and the ZappAura II main unit to confirm that there is no foreign object or contamination existing there.
High voltage error indication (ALARM) lights up.	Shortage of discharge needle	Check the discharge needle to confirm that there is no electrically conductive material existing in its vicinity area. Check the resin parts of the ZappAura II unit to confirm that there is no water content, oil, or electrically conductive contamination attached to them. If a possibility exists that water, oil, or electrically conductive contamination may have attached to them, be sure to clean them completely by using a piece of cloth soaked with alcohol, etc. and let it thoroughly evaporated before turning on the power.
	Excessive air pressure	Confirm that the air pressure is within the specified range (OZ-S: 0.05~0.60 Mpa).
	Failure in the internal circuit	Turn on the power once again. If the result is not satisfactory, please contact your nearest sales office of our company.
Cleaning check indication (C.C. lights up)	Discharge needle contaminated	Clean the discharge needle. If the result is not satisfactory even then, clean the surrounding areas of the discharge needle.
	Discharge needle worn out	Replace the discharge needle with new one.
	Abnormal discharge	Check the surrounding areas of the discharge needle to confirm that there exists no electrically conductive substance there.



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☆ The specifications of our products are subject to change without notice for improvements.

If you should identify any malfunction of electric discharge or failure of the discharge needle, immediately discontinue the use of the unit. You are cordially requested to contact promptly any of our sales offices.

Manufactured by SHISHIDO ELECTROSTATIC, LTD.