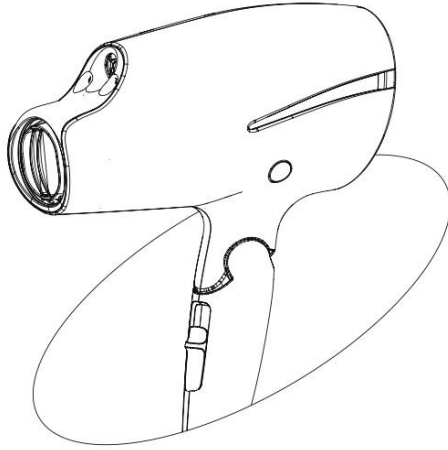


# Service Manual

(Household) Hair Dryer

Model No. EH-NA9J

Oceania




 nanoe™

## WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

## IMPORTANT SAFETY NOTICE

There are special components used in this equipment which are important for safety. These parts are marked by  in the Schematic Diagrams, Circuit Board Diagrams, Exploded Views and Replacement Parts List. It is essential that these critical parts should be replaced with manufacturer's specified parts to prevent shock, fire or other hazards. Do not modify the original design without permission of manufacturer.

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# Panasonic

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# 1. Warning

## Caution:

- Pb free solder has a higher melting point than standard solder; Typically the melting point is 50 - 70°F (30 - 40°C) higher. Please use a soldering iron with temperature control and adjust it to 750 ±20°F (400 ± 10 °C). In case of using high temperature soldering iron, please be careful not to heat too long.
- Pb free solder will tend to splash when heated too high (about 1100°F / 600°C).

# 2. Specifications

Power source	AC 220-240 V~ 50-60 Hz
Power consumption	Approx." Turbo-Hot " 220 V ~ 1500 W 230 V ~ 1650 W 240 V ~ 1800 W
Air volume without nozzle	1.40 m <sup>3</sup> /min
Air flow temperature ("Turbo-Hot")	105 K (in case of room temperature 30°C)
Dimensions	(W) 89 x (D) 210 x (H) 226 mm
Cord length	L = 2.7 m
Weight	Approx. 500 g ( Without Nozzle & Power cord )

Supplied accessory	Nozzle
	Diffuser set

# 3 TROUBLESHOOTING GUIDE

Refer to WIRING CONNECTION DIAGRAM.

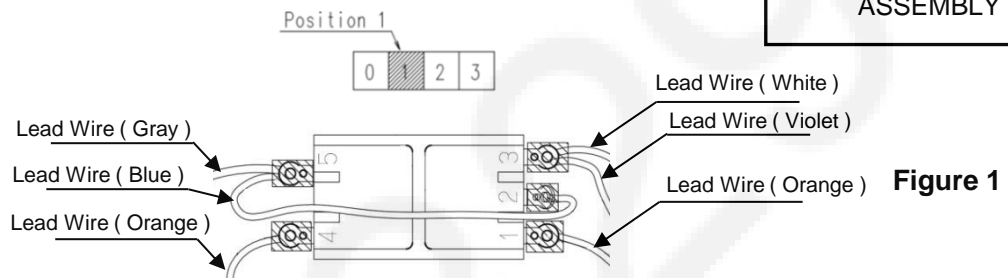
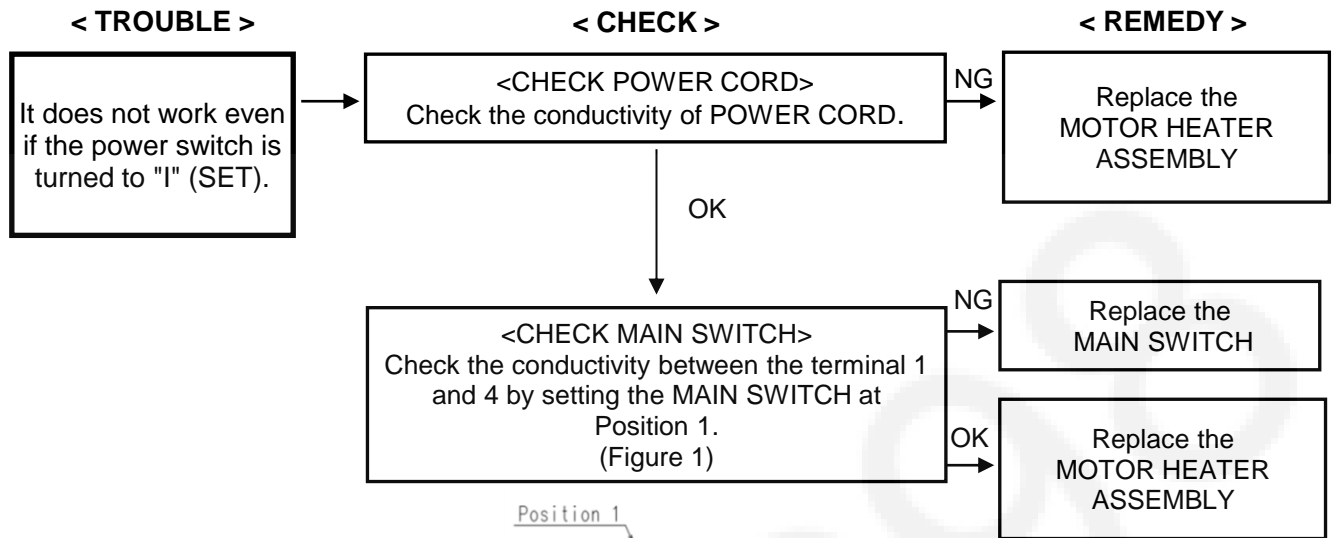


Figure 1

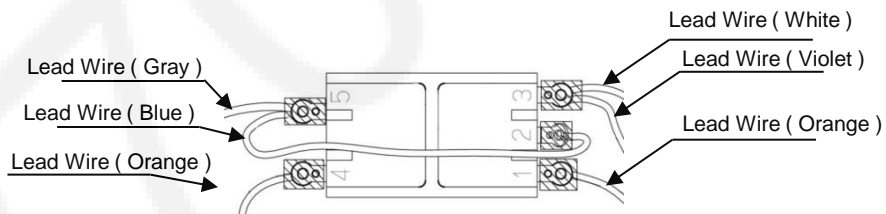
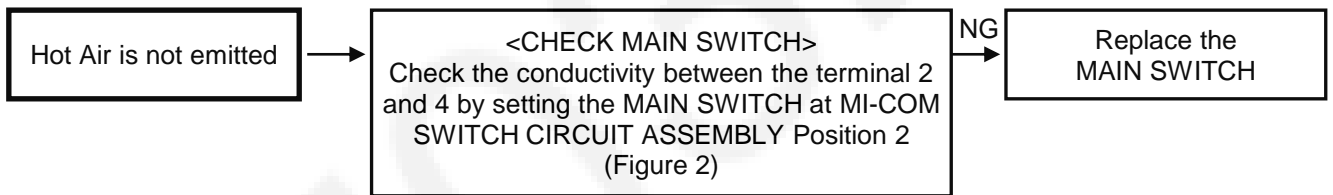


Figure 2

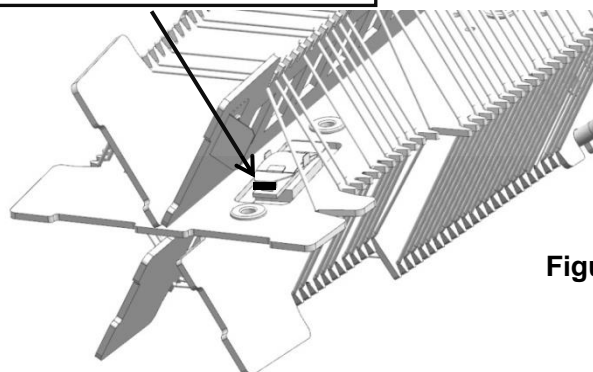
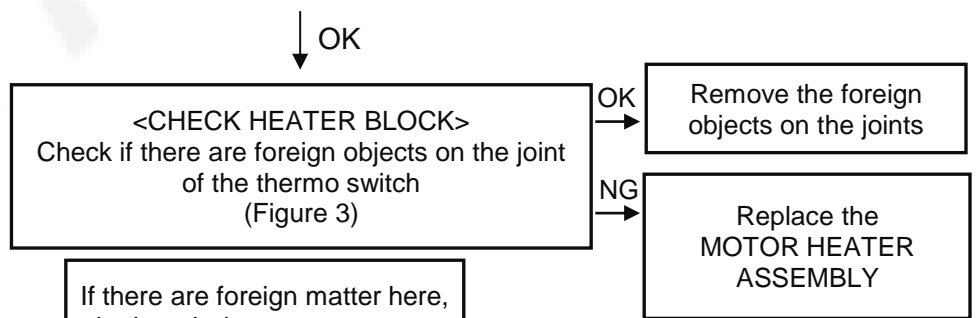
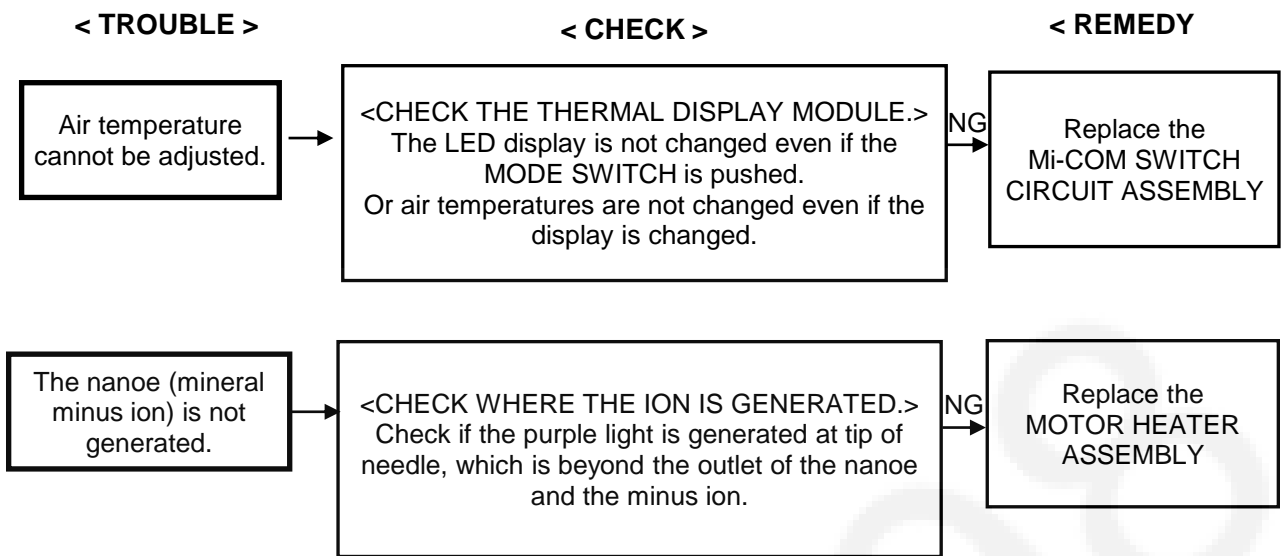


Figure 3



These parts glow purple.

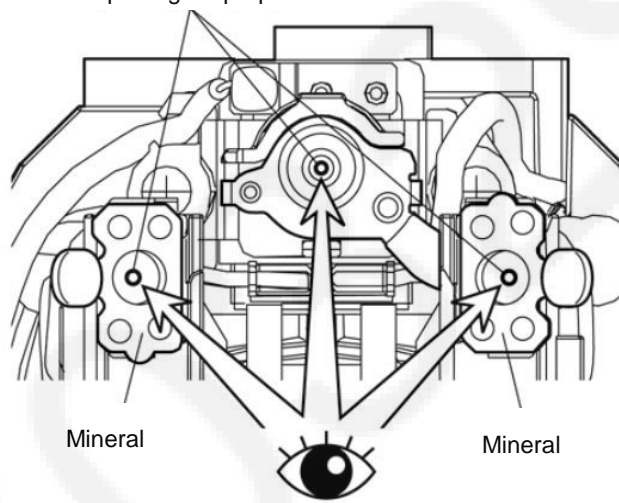
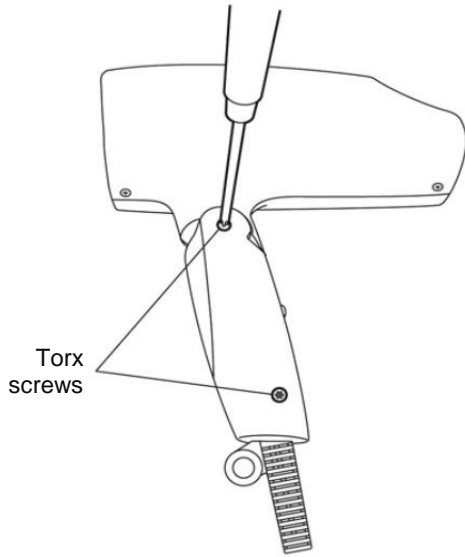


Figure 4

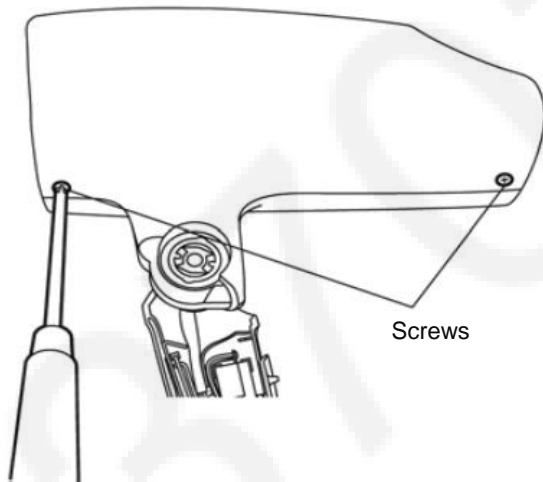
# 4 Disassembly and Assembly instructions

## 4.1 Disassembling instruction

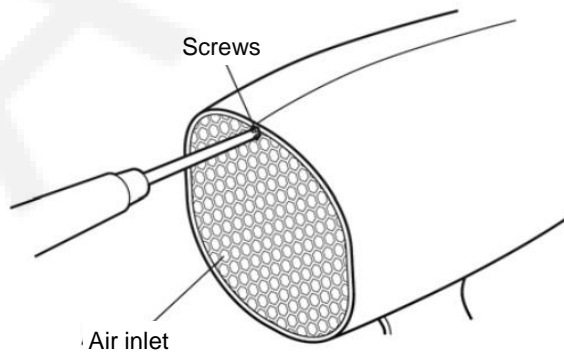
- (1) Remove two TORX SCREWS by torx screwdriver.
- (2) Disassemble the HANDLE.



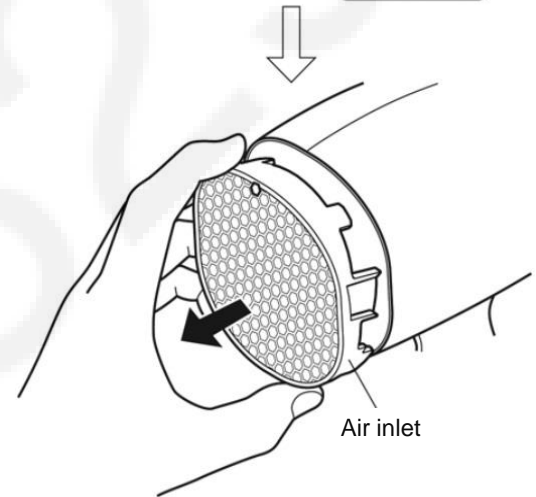
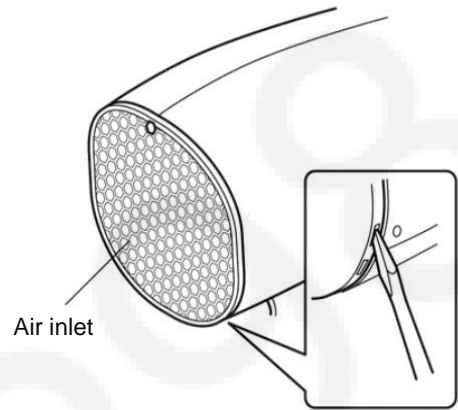
- (3) Remove two SCREWS at side of AIR INLET and OUTLET.



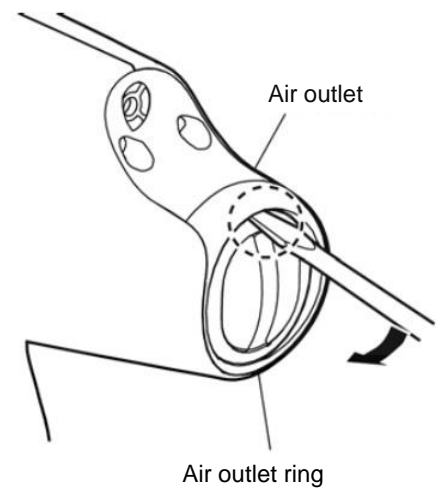
- (4) Remove the SCREW at AIR INLET.



- (5) Remove the AIR INLET by a slotted screwdriver etc.as the figure.



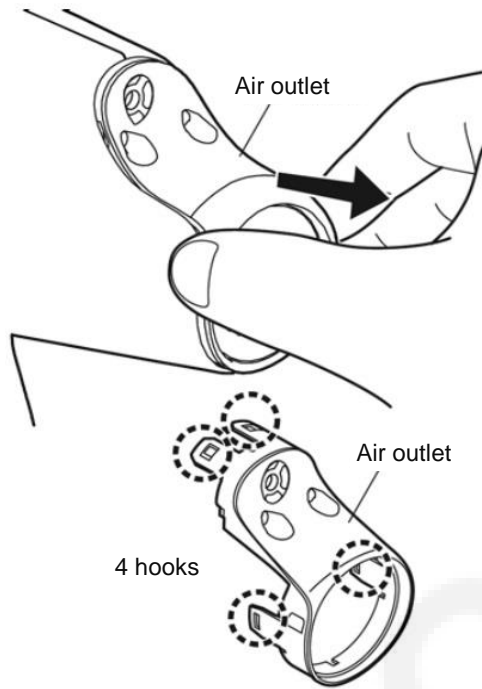
- (6) Insert the slotted screwdriver as the figure and pull out the AIR OUTLET toward front a little using the AIR OUTLET RING (gray) as the fulcrum.



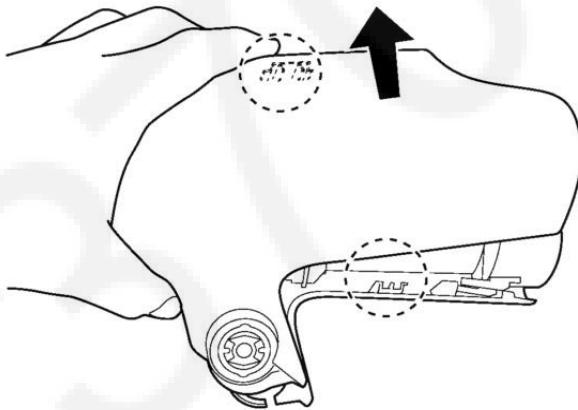
## 4 Disassembly and Assembly instructions

### 4.1 Disassembling instruction

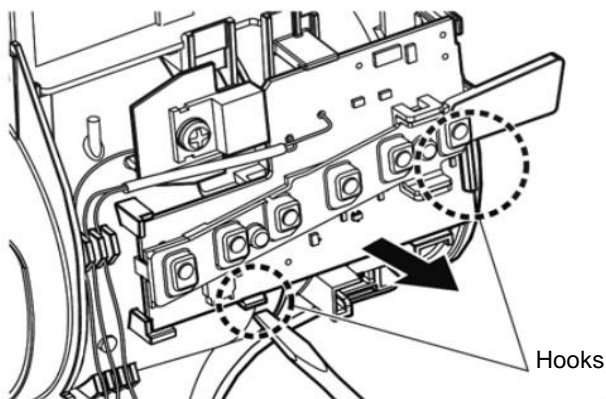
(7) Draw out the AIR OUTLET by hand.



(8) Remove the hooks and disassemble the HOUSING.

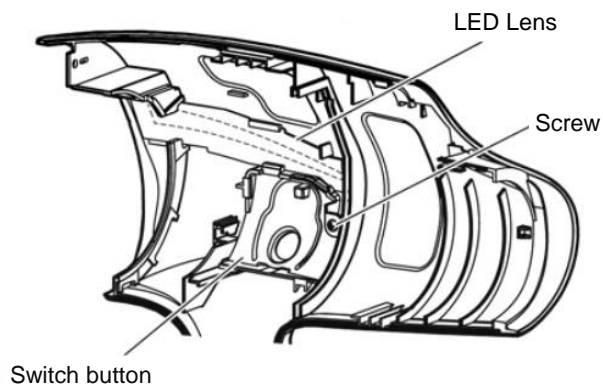


(9) Remove the Mi-COM SWITCH CIRCUIT ASSEMBLY from two hooks and lift it to remove.

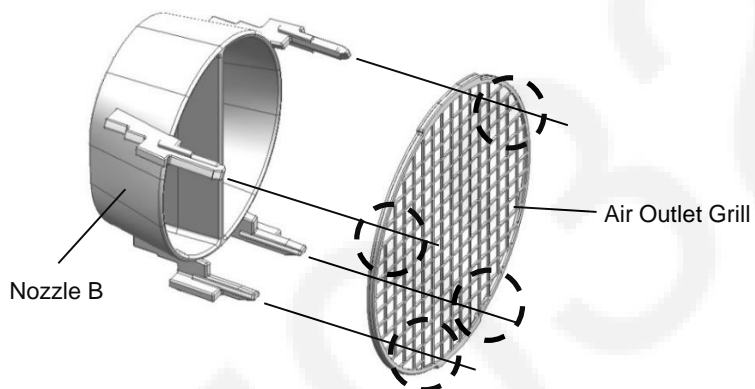


## 4.2 Assembly instruction

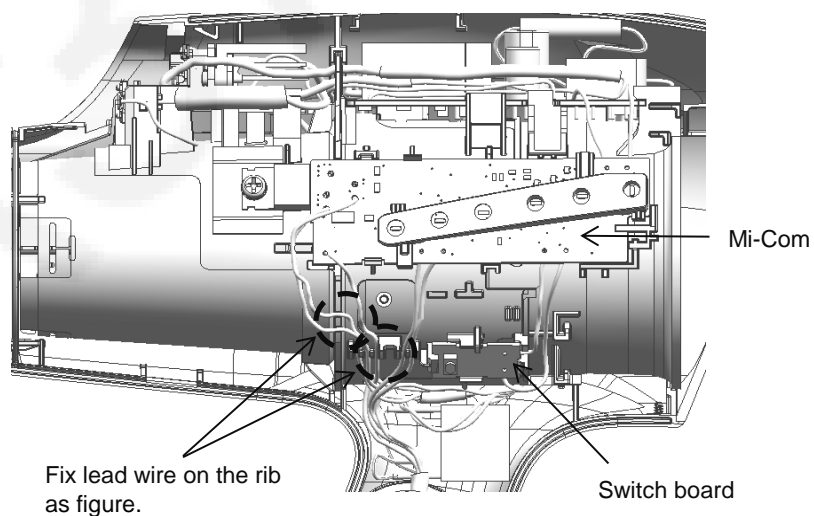
(1) Install the MAIN SWITCHC BUTTON, LED lens, and LED PANEL inside of the HOUSING A.



(2) Assemble the AIR OUTLET GRILL as the figure.

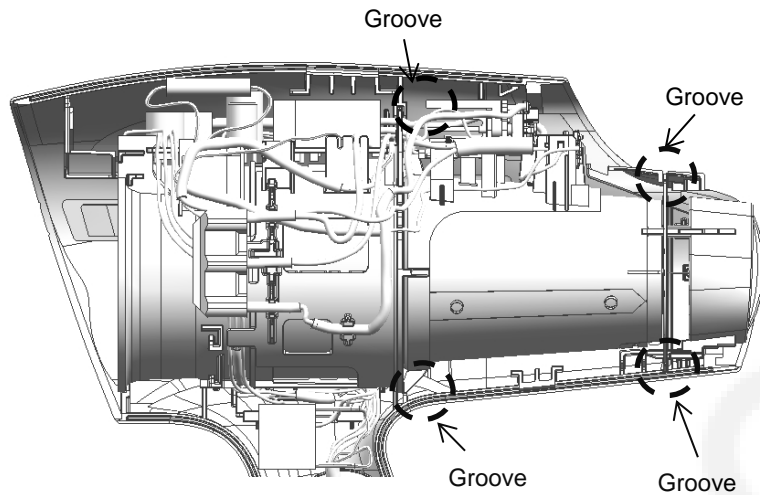


(3) Assemble the Mi-COM SWITCH CIRCUIT ASSEMBLY and switch board with MOTOR HEATER ASSEMBLY.

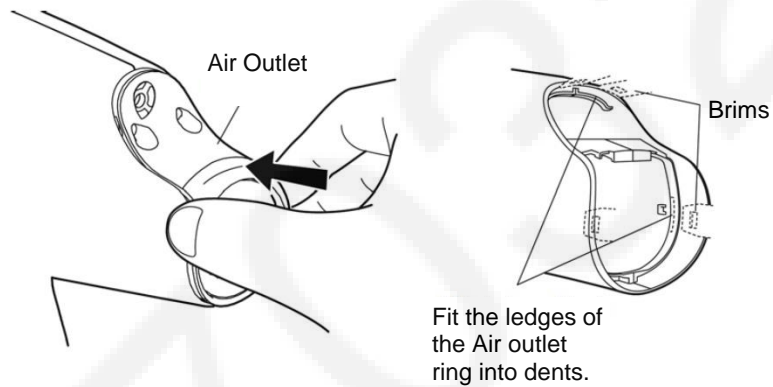


## 4.2 Assembly instruction

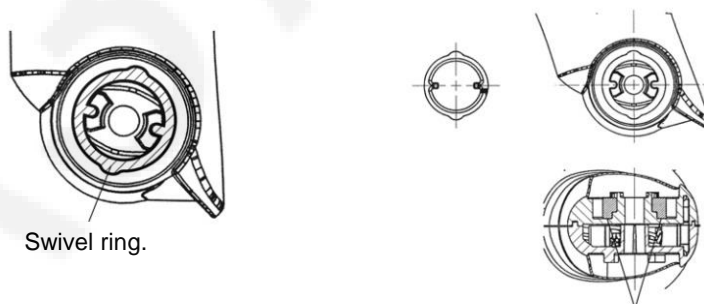
- (4) Assemble AIR OUTLET GRILL, NOZZLE B and the MOTOR HEATER ASSEMBLY to the groove of the HOUSING A.



- (5) Assemble HOUSING A, B and AIR OUTLET RING.  
- Install AIR OUTLET RING with its four brims inside.



- (6) Install the SWIVEL RING.

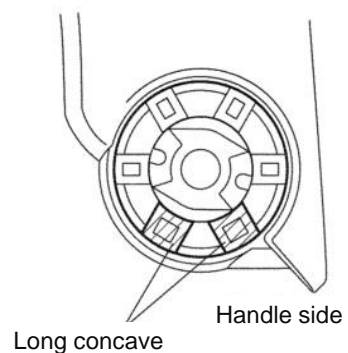


Assemble the swivel ring so that the concave of the rotation ring and the convex of the main body case are fitted with each other.

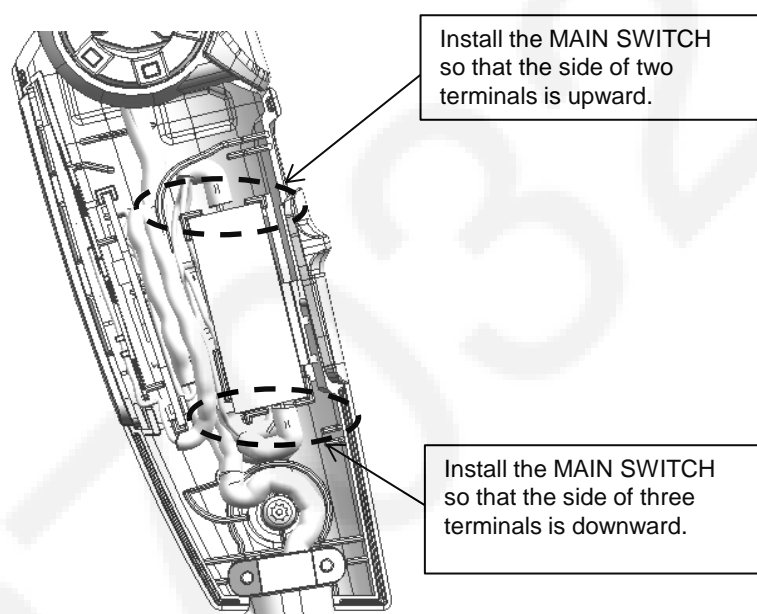


## 4.2 Assembly instruction

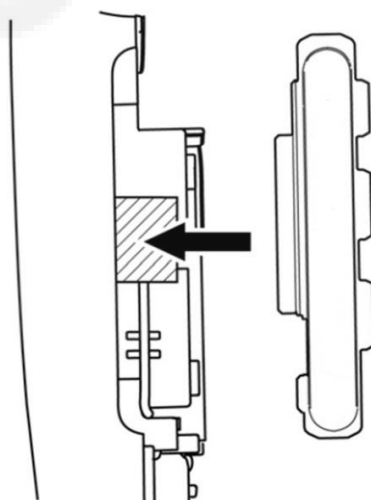
(7) Install the CLICK RING so that to long concaves are on the HANDLE side.



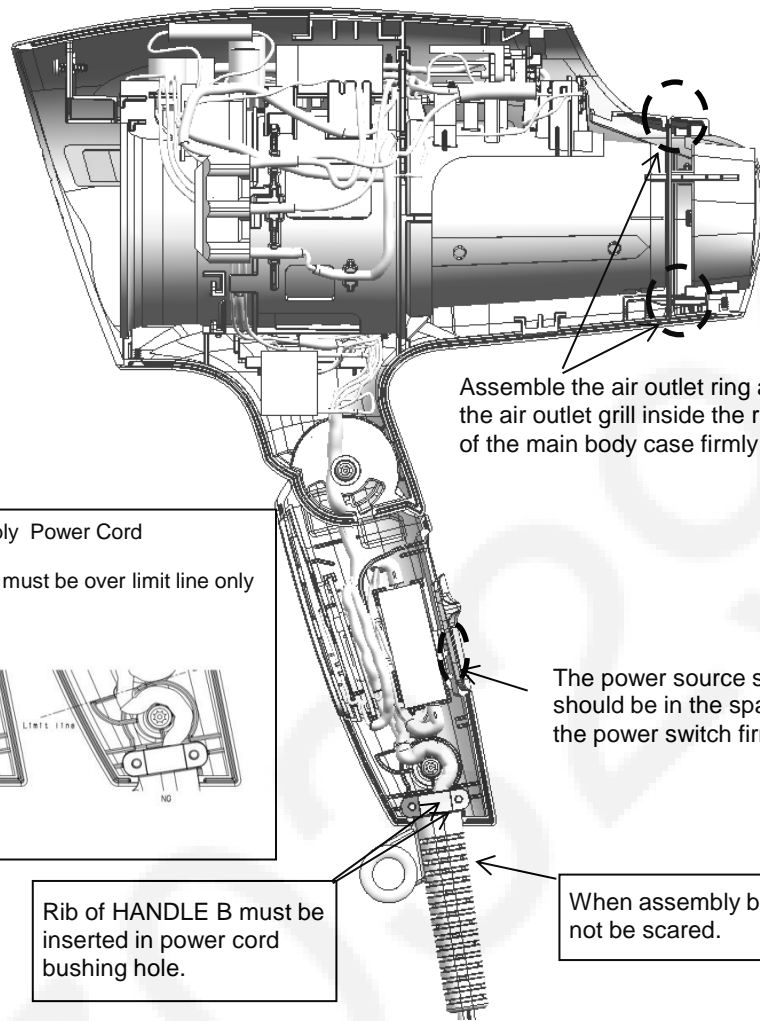
(8) Allocating the lead wire at the HANDLE.



(9) Install the ELECTRIFICATION PANEL as the figure.



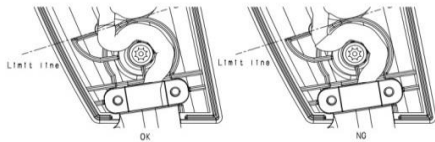
**Point of assembling the parts and allocating the wires.**



Assemble the air outlet ring and the air outlet grill inside the ribs of the main body case firmly.

**Control point for assembly Power Cord**

Insulation of power cord must be over limit line only as shown in a picture.

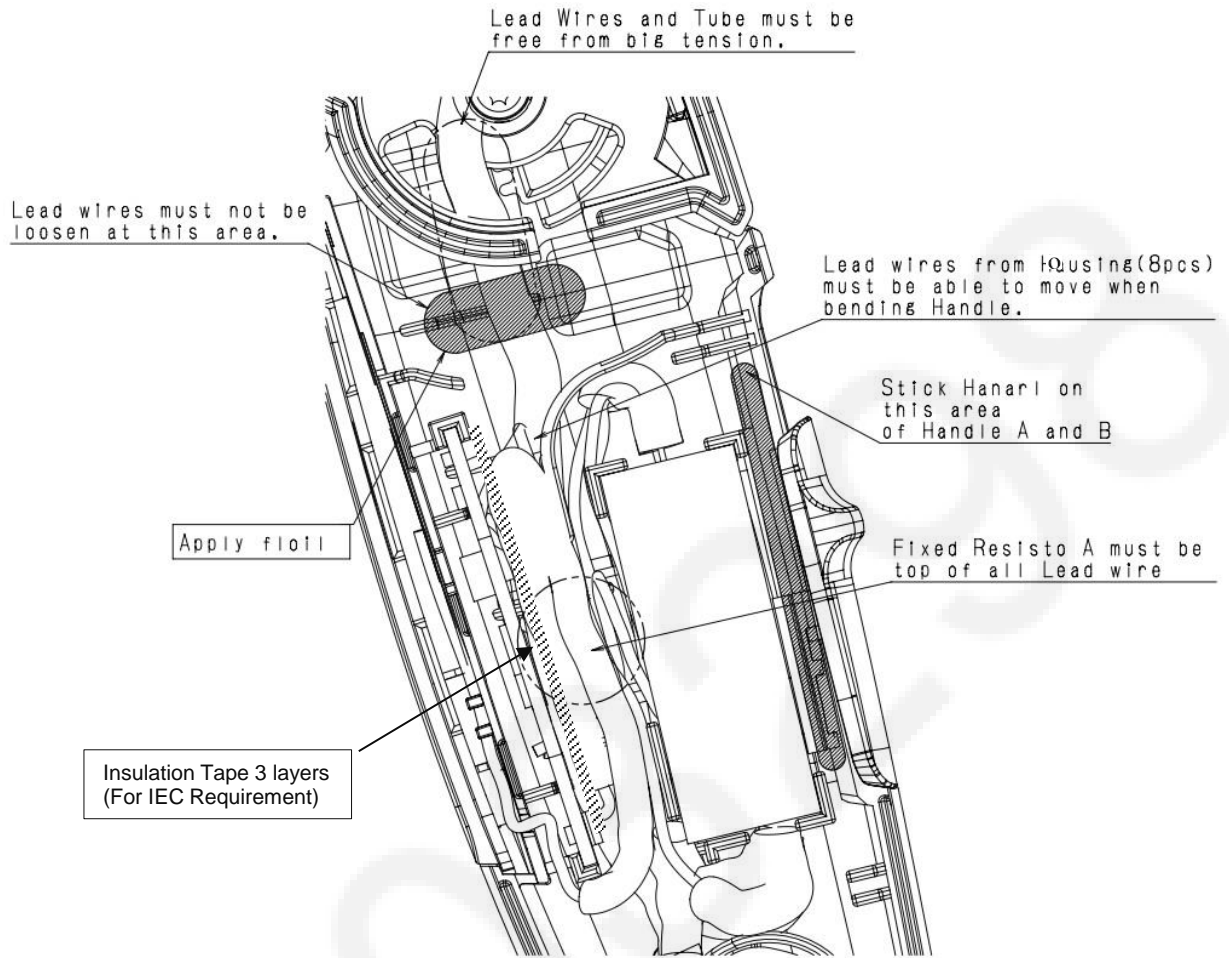


The power source switch should be in the space of the power switch firmly.

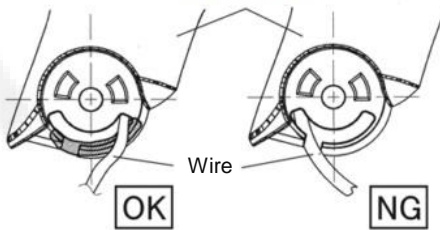
Rib of HANDLE B must be inserted in power cord bushing hole.

When assembly bushing must not be scared.

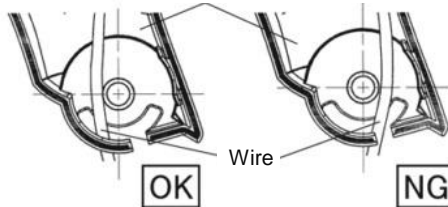
# Point of allocation of the wire of the main body inside the handle.



Housing A



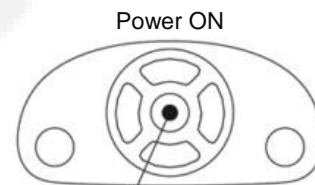
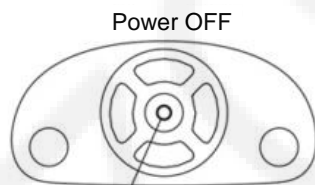
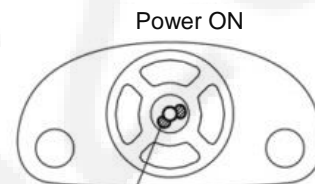
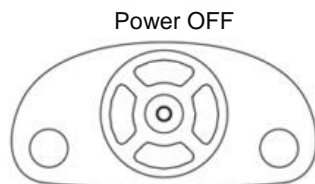
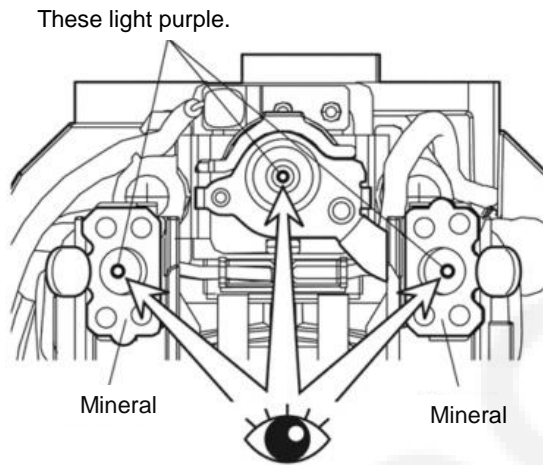
Housing B



**Check if the nanoe and the mineral ions are generated at the discharge electrode before installing the main body case.**

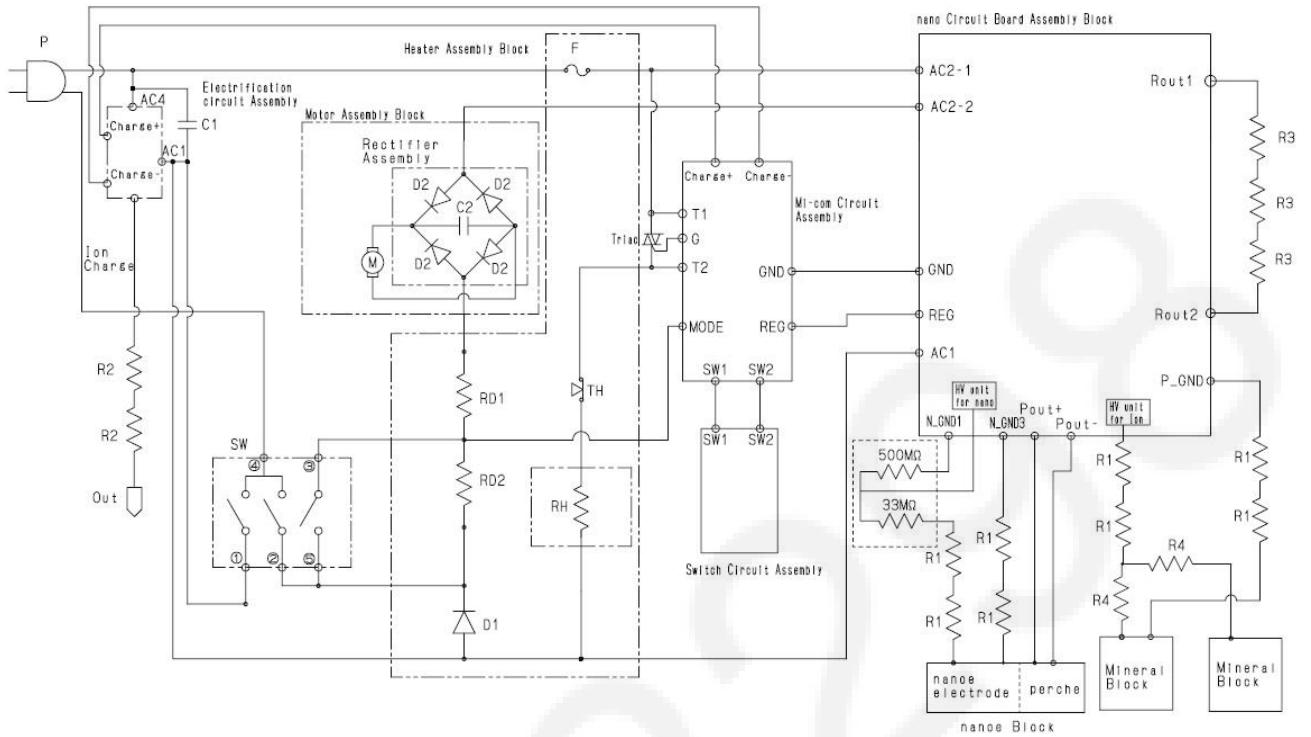
\* The following figures are just for reference. If the tip of discharge electrode lights, it is normal.

\* Check the tip of the discharge electrode from the side diagonally.



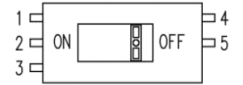
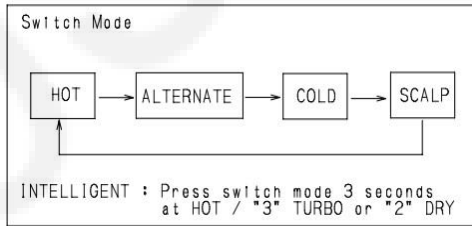


# 6. Schematic Diagram



SW 1

Main Sw.	1-4	2-4	3-5
OFF " O "	X	X	X
SET " I "	O	X	X
DRY " II "	O	O	X
TURBO " III "	O	O	O

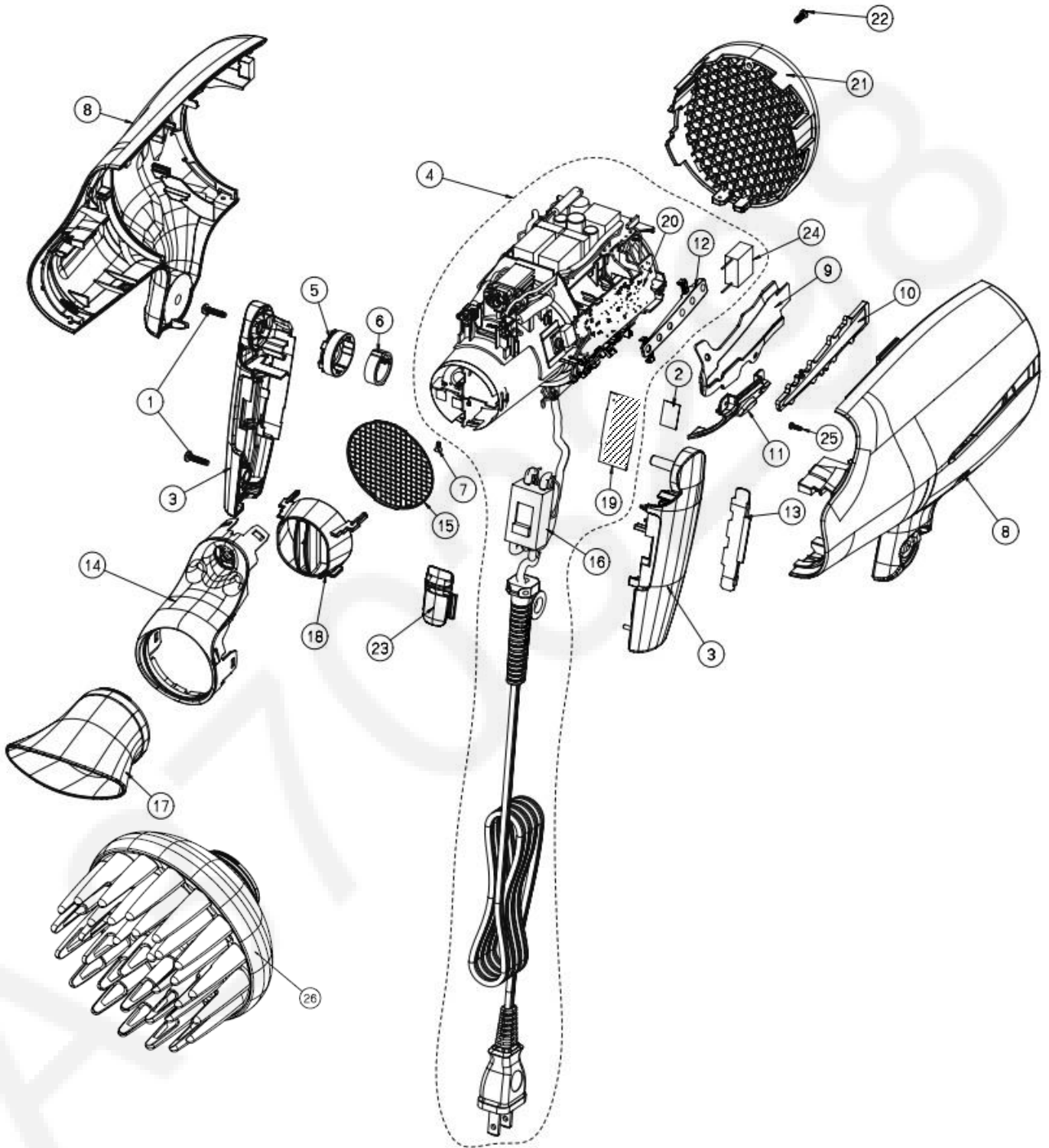


O = ON  
X = OFF

Symbol	Part name	Specification
C1	CAPACITOR (FOR EMC)	0.68 $\mu$ F, 275V
C2	CAPACITOR (FOR DIODE BRIDGE)	0.1 $\mu$ F, 100VDC
D1	DIODE	400V, 2A
D2	DIODE (BRIDGE)	400V, 2A
F	TEMPERATURE FUSE	133°C, 250V, 15A
M	MOTOR	RS-365SV-14130
SW	MAIN SWITCH	AC 13.5A 125V
TH	THERMO SWITCH	80 $\pm$ 5 °C
RH	RESISTANCE WIRE	45.0 $\pm$ 1.3 $\Omega$
RD1	RESISTANCE WIRE D	118.0 $\pm$ 3.5 $\Omega$
RD2	VOLTAGE DROPPING RESISTOR	10.5 $\pm$ 0.7 $\Omega$
R1	FIXED RESISTANCE (PROTECTION)	1.0M $\Omega$ 1/2W
R2	FIXED RESISTANCE (ION CHARGE)	3.3M $\Omega$ 1/2W
R3	FIXED RESISTANCE (HV DROPPING)	1.8 k $\Omega$ 2W
R4	FIXED RESISTANCE (MINERAL)	15.0M $\Omega$ 1W

# 7 EXPLODED VIEW & REPLACEMENT PARTS LIST

## 7.1. Exploded View for : EH-NA9J



All parts are supplied from PMFTH-AP through PLAP

## Model No. : EH-NA9J Parts List

Ref.No.	Part No.	Parts Name & Descriptions	Q'ty	Remarks
1	EHNA9JT3012W	TORX SCREW 3.0*12	2	*1
2	EHNA9JALMAW	ALUMINIUM SEAL A	4	*1
3	EHNA9JHDNW	HANDLE AB	1	For -N765 : AU
4	EHNA9JMHB76W	MOTOR HEATER ASSEMBLY	1	For -N765 : AU
5	EHNA9JCRTW	CLICK RING	1	
6	EHNA9JSRTW	SWIVEL RING	1	
7	EHNA9JT2005W	TAPPING SCREW 2.0*5	2	*1
8	EHNA9JHSN7W	HOUSING AB ASSEMBLY	1	For -N765 : AU
9	EHNA9JLEDLW	LED LENS	1	
10	EHNA9JLEDPW	LED PANEL	1	
11	EHNA9JMSBBW	MODE SWITCH BUTTON	1	
12	EHNA9JSPWW	SHIELD PANEL	1	
13	EHNA9JELPCW	ELECTRIFICATION PANEL	1	
14	EHNA9JAORNW	AIR OUTLET RING WITH SEAL	1	
15	EHNA9JAOGW	AIR OUTLET GRILL	1	
16	EHNA9JMSW	MAIN SWITCH	1	
17	EHNA9JNZAHW	NOZZLE A	1	
18	EHNA9JNZBBW	NOZZLE B	1	
19	EHNA9JELC89W	ELECTRIFICATION CIRCUIT	1	
20	EHNA9JMCSCW	MI-COM SWITCH CIRCUIT ASSEMBLY	1	
21	EHNA9JAIGBW	AIR INLET GRILL ASSEMBLY	1	
22	EHNA9JT2608W	TAPPING SCREW 2.6*8	1	
23	EHNA9JMSPBW	MAIN SWITCH PLATE	1	
24	EHNA9JCPTW	CAPACITOR ASSEMBLY	1	
25	EHNA9JT2006W	TAPPING SCREW 2.0*6	1	
26	EHNA9JDFAB8W	DIFFUSER ASSEMBLY	1	
-	EHNA9J76503W	OPERATING INSTRUCTIONS	1	For -N765 : AU
--	EHNA9J7601NW	INDIVIDUAL PACKAGE	1	For -N765 : AU
---	EHNA9JS05W	LOWER PAD	1	

Remarks : \*1 Individual Available

All parts are supplied from PMFTH-AP through PLAP