

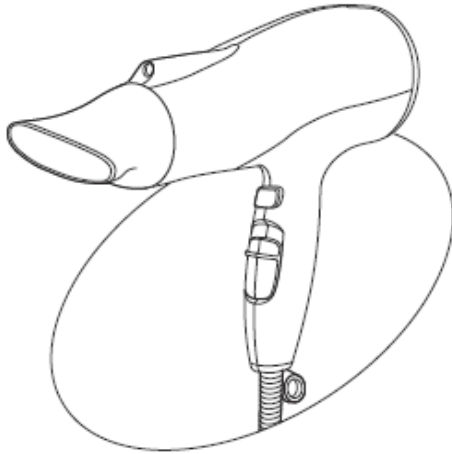
Service Manual

(Household) Hair Dryer

Model No. EH-NE83

Asia

Middle East



⚠ 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.

TABLE OF CONTENTS

	PAGE
1 Warning	2
2 Specifications	2
3 Troubleshooting Guide	3
4 Disassembly and Assembly Instructions	5
5 Wiring Connection Diagram.....	12
6 Schematic Diagram	13
7 Exploded View & Replacement Parts List	15

Panasonic

© Panasonic Corporation 2013 Unauthorized copying and distribution is a violation of law.

1. Warning

Caution:

- Pb free solder has a higher melting point than standard solder; Typical the melting point is 50 - 70°F (30 - 40°C) higher. Please use 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 (" II - Hot ")	AC 220 V, 50~60 Hz, 2100 W AC 230 V, 50~60 Hz, 2300 W AC 240 V, 50~60 Hz, 2500 W
Air volume without nozzle	1.9 m ³ /min
Air temperature without nozzle (" II - Hot ")	90 K (in case of room temperature 30°C)
Dimensions	(W) 90mm x (D) 220mm. x (H) 270mm.
Cord length	Code L / 605 / 615 / 655 / 685 = 1.7 m
Weight	Approx. =530g. (without power cord and nozzle)
Supplied accessory	Set nozzle

3. TROUBLESHOOTING GUIDE

Refer to WIRING CONNECTION DIAGRAM.

< TROUBLE >

< CHECK >

< REMEDY >

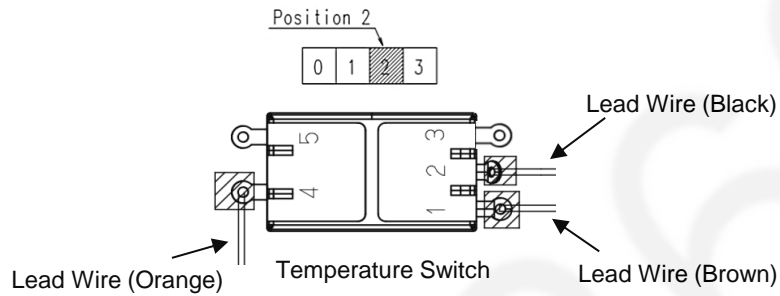
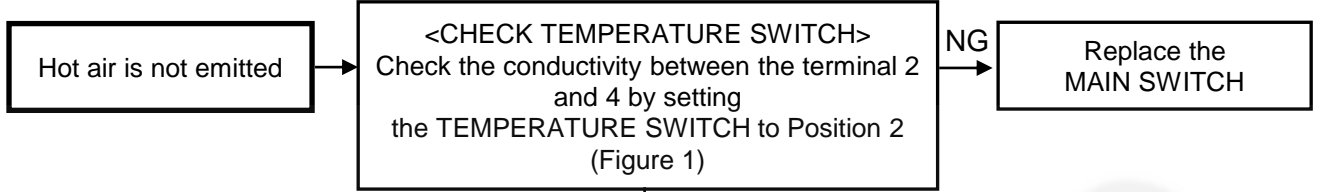
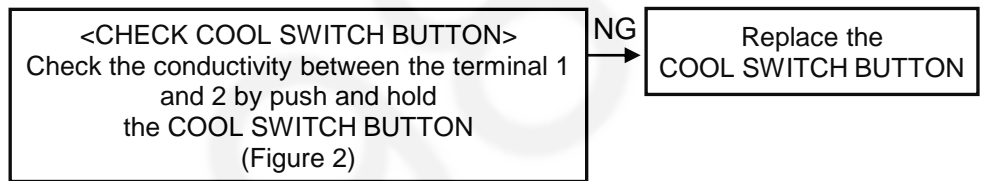


Figure 1



For EH-NE81-84 only

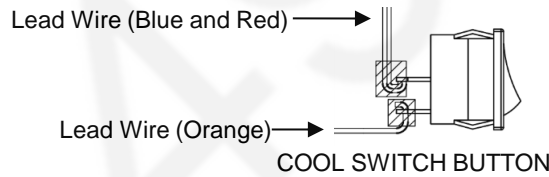
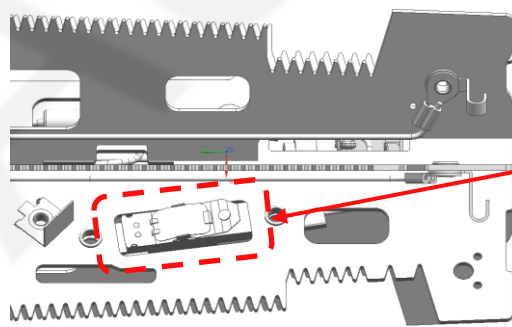
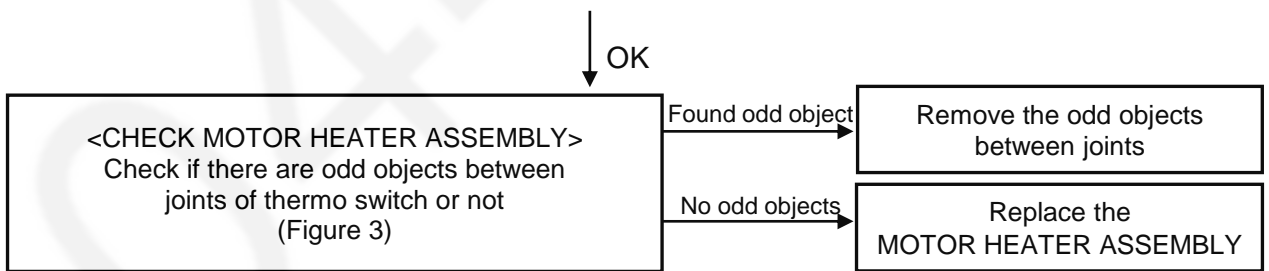


Figure 2



Thermo Switch

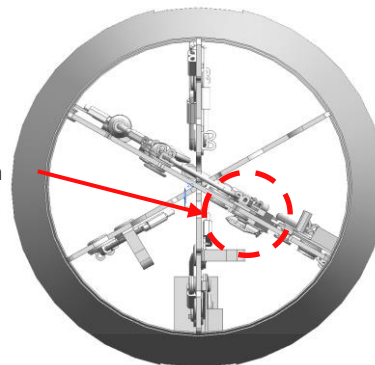


Figure 3

3. TROUBLESHOOTING GUIDE

Refer to WIRING CONNECTION DIAGRAM.

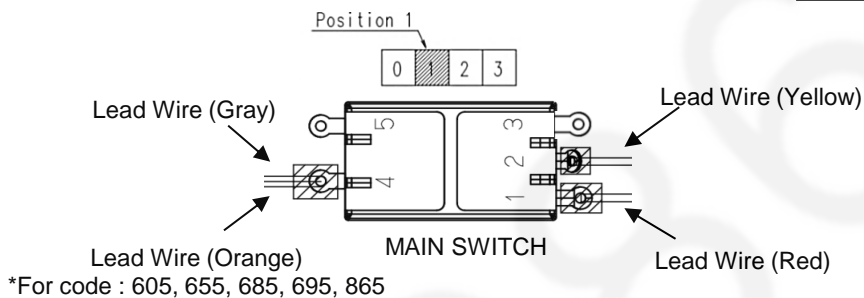
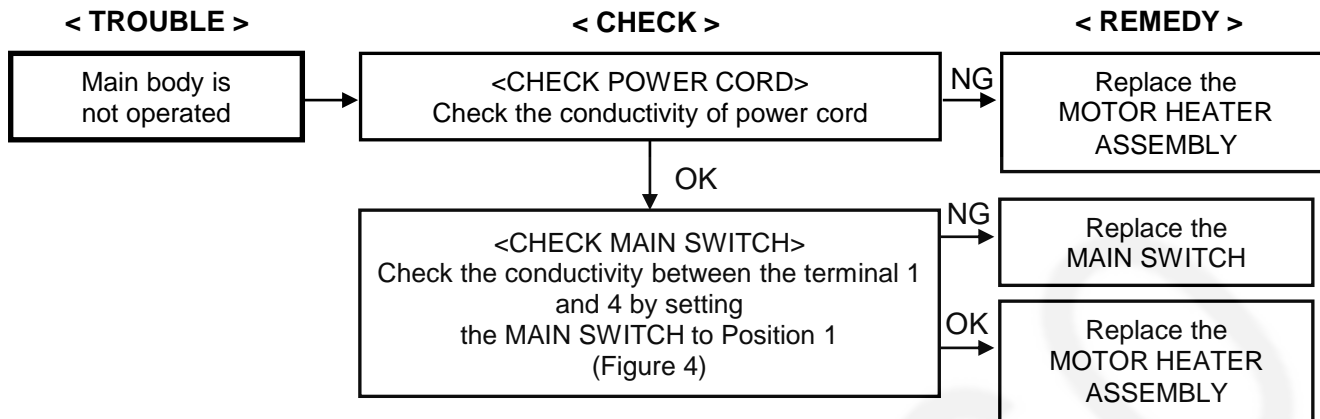
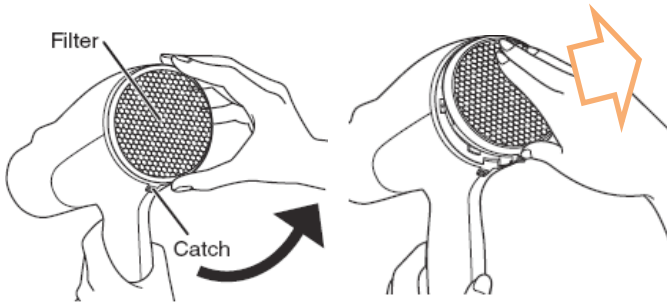


Figure 4

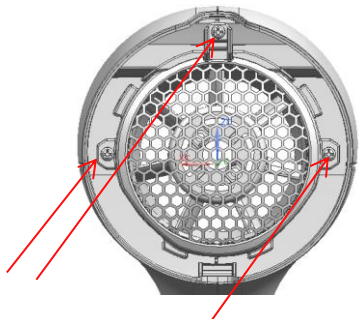
4. Disassembly and Assembly Instructions

4.1. Disassembly Instructions

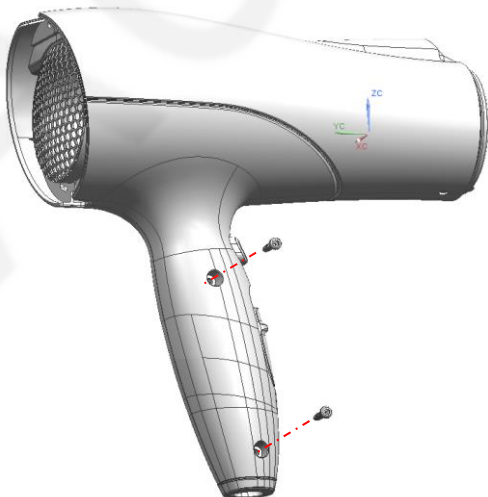
1. Remove the FILTER FRAME ASSEMBLY



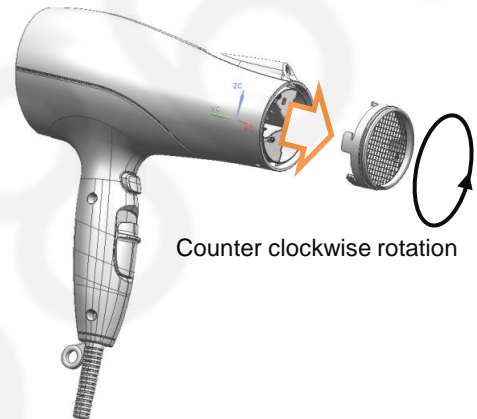
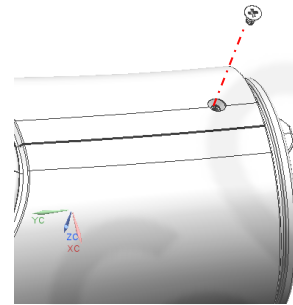
2. Remove 3 TAPPING SCREWS by a cross slot screw driver, then Remove AIR INLET RING.



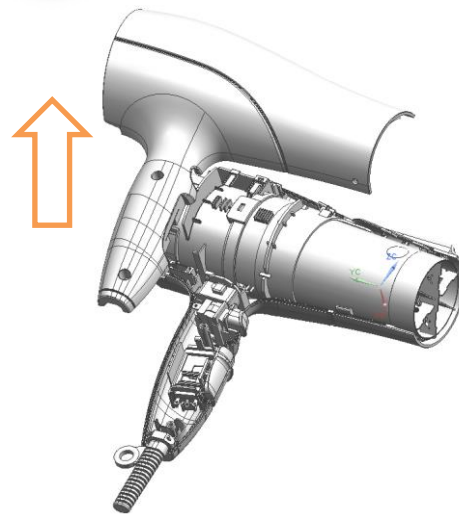
3. Remove 2 TAPPING SCREWS at HOUSING A by flat-blade screwdriver and 2 TORX SCREWS at HANDLE by Driver then remove HANDLE AB.



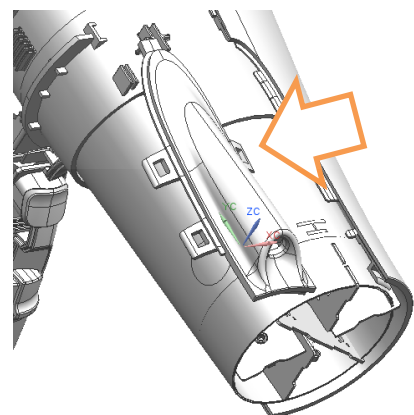
4. Remove TAPPING SCREWS by a cross slot screw driver. Then take out AIR OUTLET RING and AIR OUTLET GRILL by rotating follow the direction below.



5. Take off HOUSING AB follow the figure below.



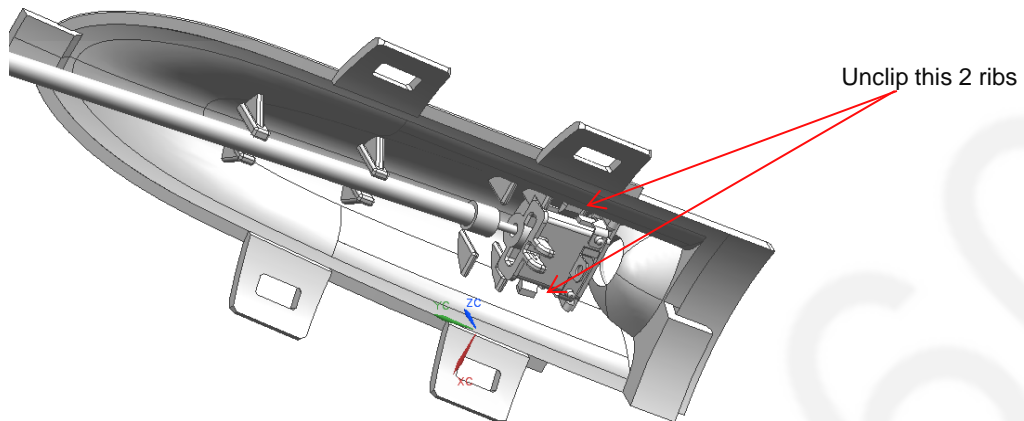
6. Remove DISCHARGE COVER



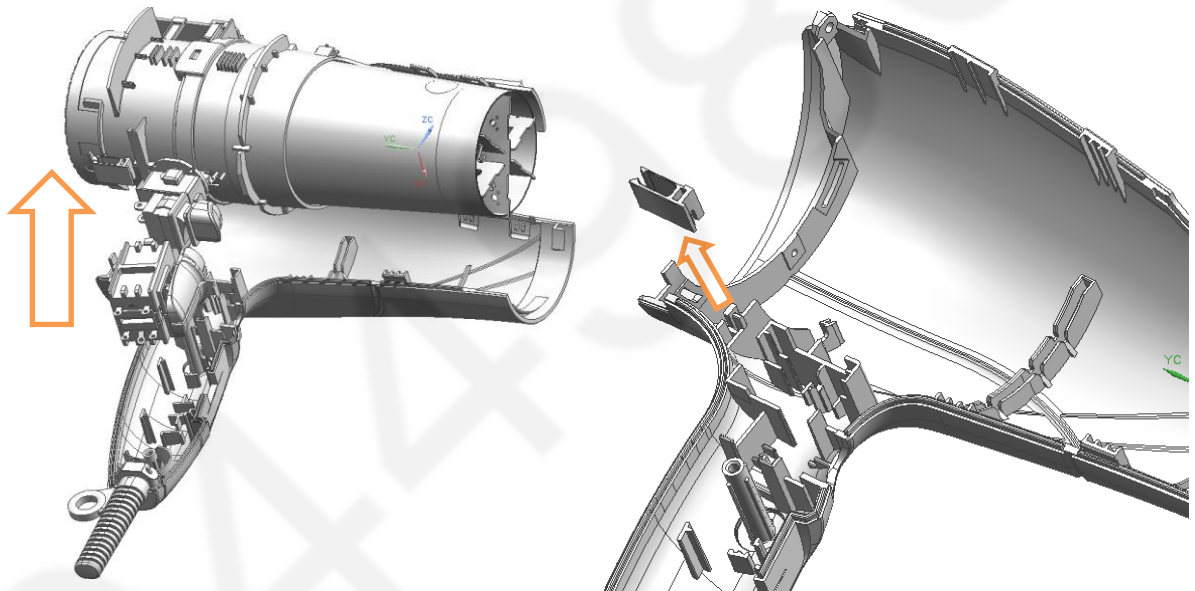
4. Disassembly and Assembly Instructions

4.1. Disassembly Instructions

7. remove Ion Holder from DISCHARGE COVER as figure below.



8. Take off MOTOR HEATER ASSEMBLY, and PLATE SPRING from HOUSING B.

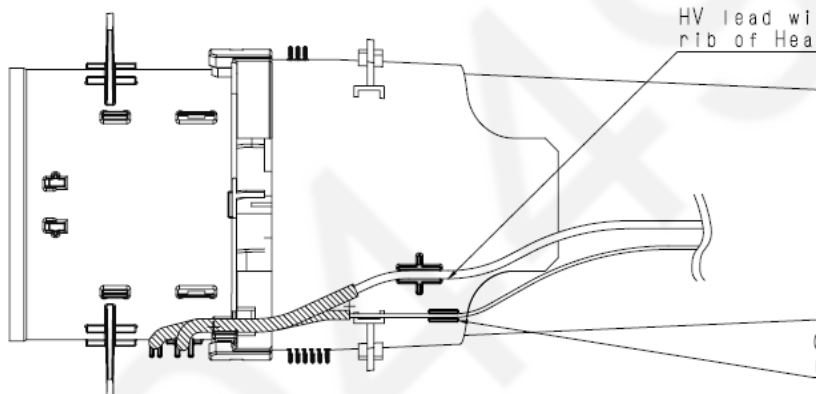
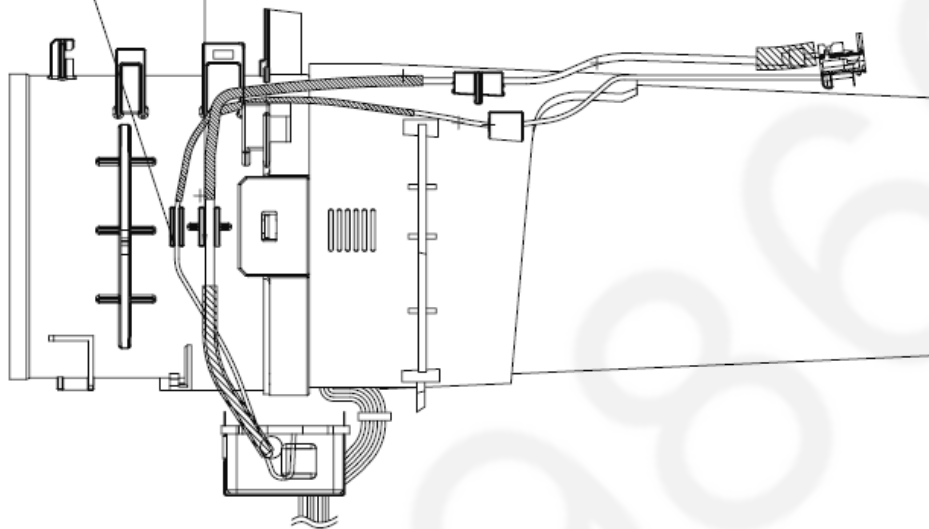


4.2 Assembly Instructions

1. High voltage lead wire for Ion discharge must be fixing with Ribs from Heater holder as below picture.

Ground lead wire black must be fixed with rib of Heater holder as drawing.

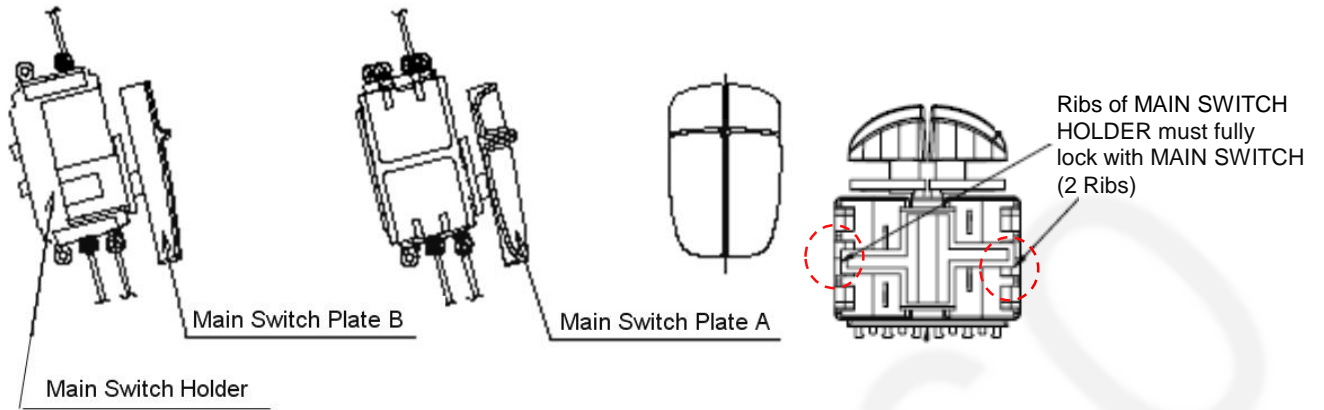
HV lead wire white must be fixed with rib of Air flow regulator as drawing.



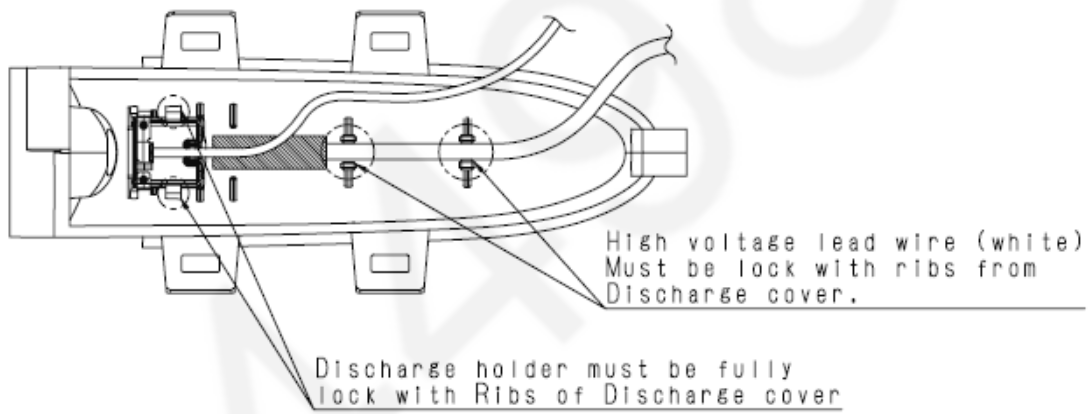
HV lead wire white must be fixed with rib of Heater holder as drawing.

Ground lead wire Gray must be fixed with rib of Heater holder as drawing.

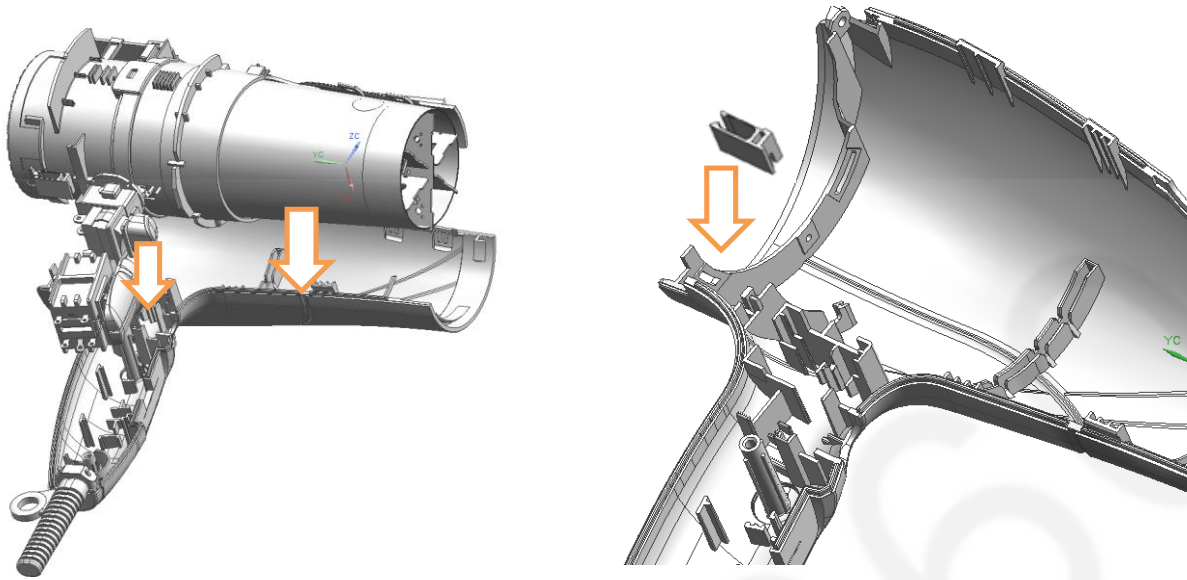
2. Install MAIN SWITCH PLATE AB and MAIN SWITCH HOLDER.



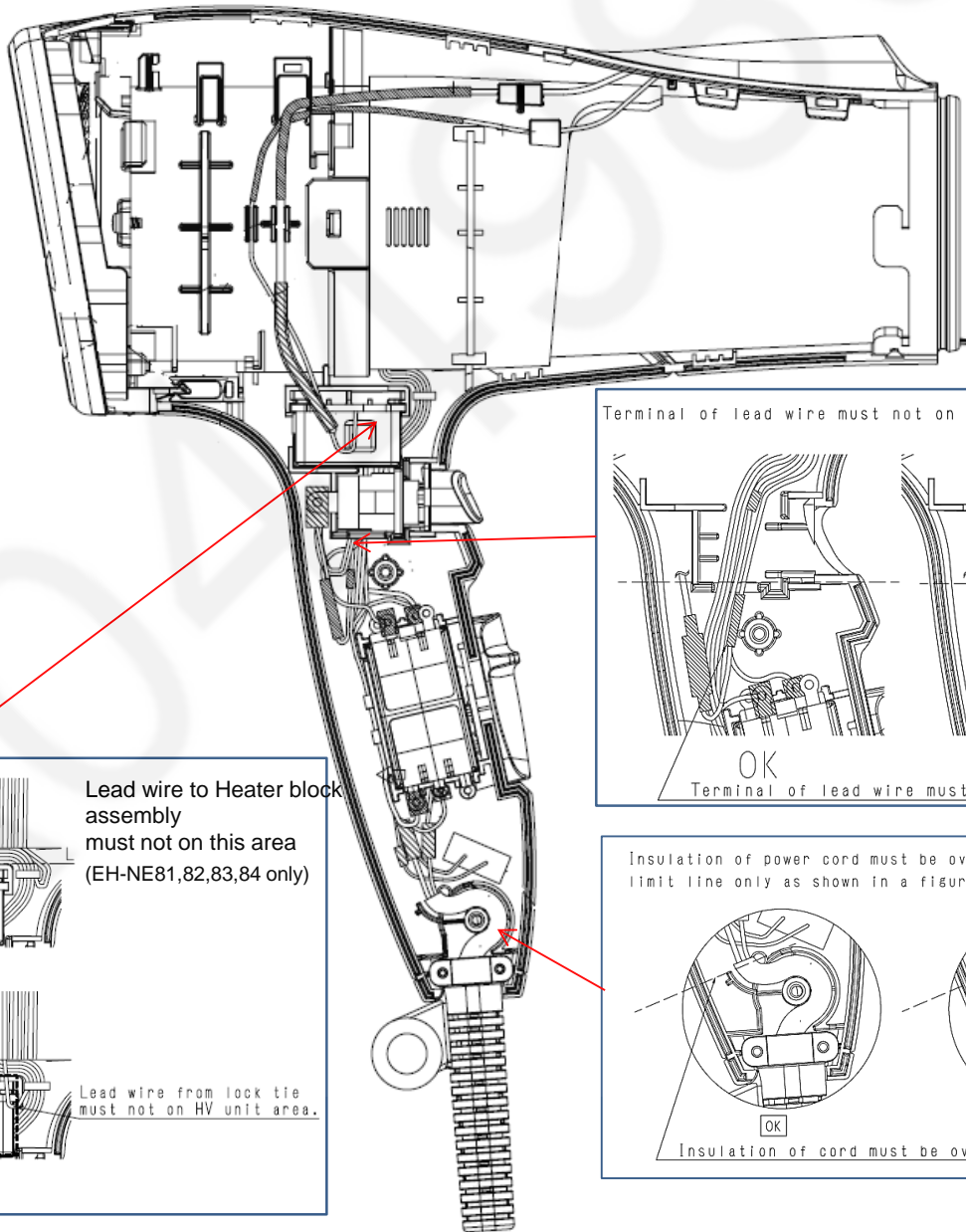
3. Install Ion discharge in to DISCHARGE COVER.



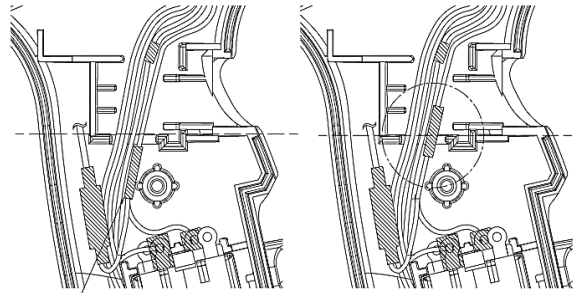
4. Assemble MOTOR HEATER ASSEMBLY, COOL SWITCH PLATE and PLATE SRPING into HOUSING B.



Position of component must be as below



Terminal of lead wire must not on cool switch area.

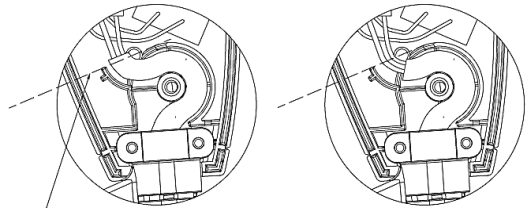


OK

NG

Terminal of lead wire must not over limit line

Insulation of power cord must be over limit line only as shown in a figure A

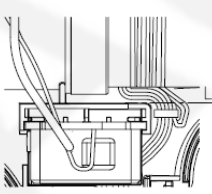


OK

NG

Insulation of cord must be over limit line

Lead wire to Heater block assembly must not on this area (EH-NE81,82,83,84 only)

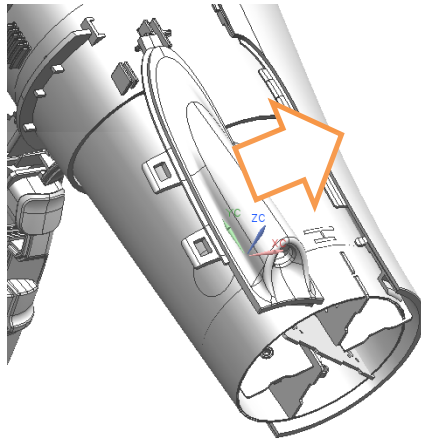


OK

NG

Lead wire from lock tie must not on HV unit area.

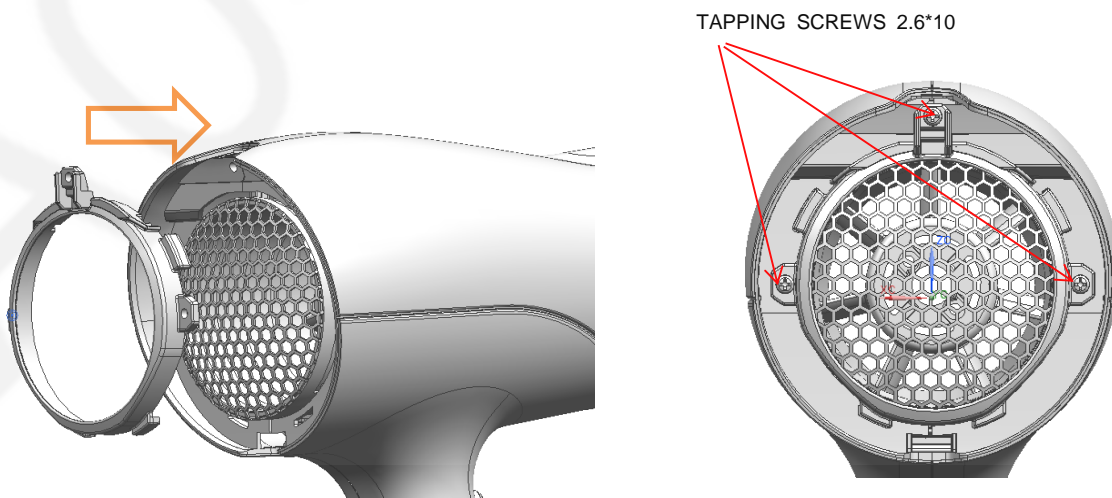
5. Assemble DISCHARGE COVER / DESIGN COVER into HOUSING B.



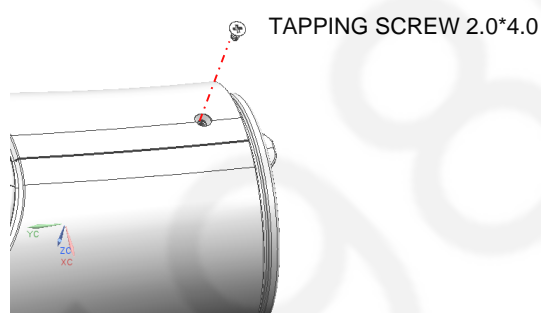
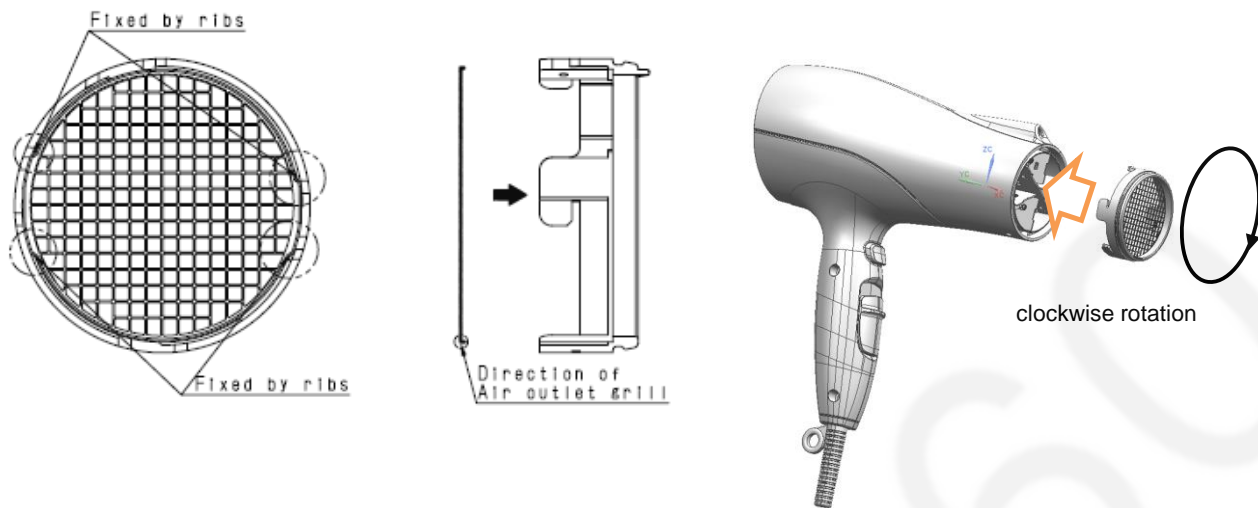
6. Assemble HOUSING A, then tightening 2 TORX SCREWS.



7. Assemble AIR INLET RING and 3 TAPPING SCREWS.



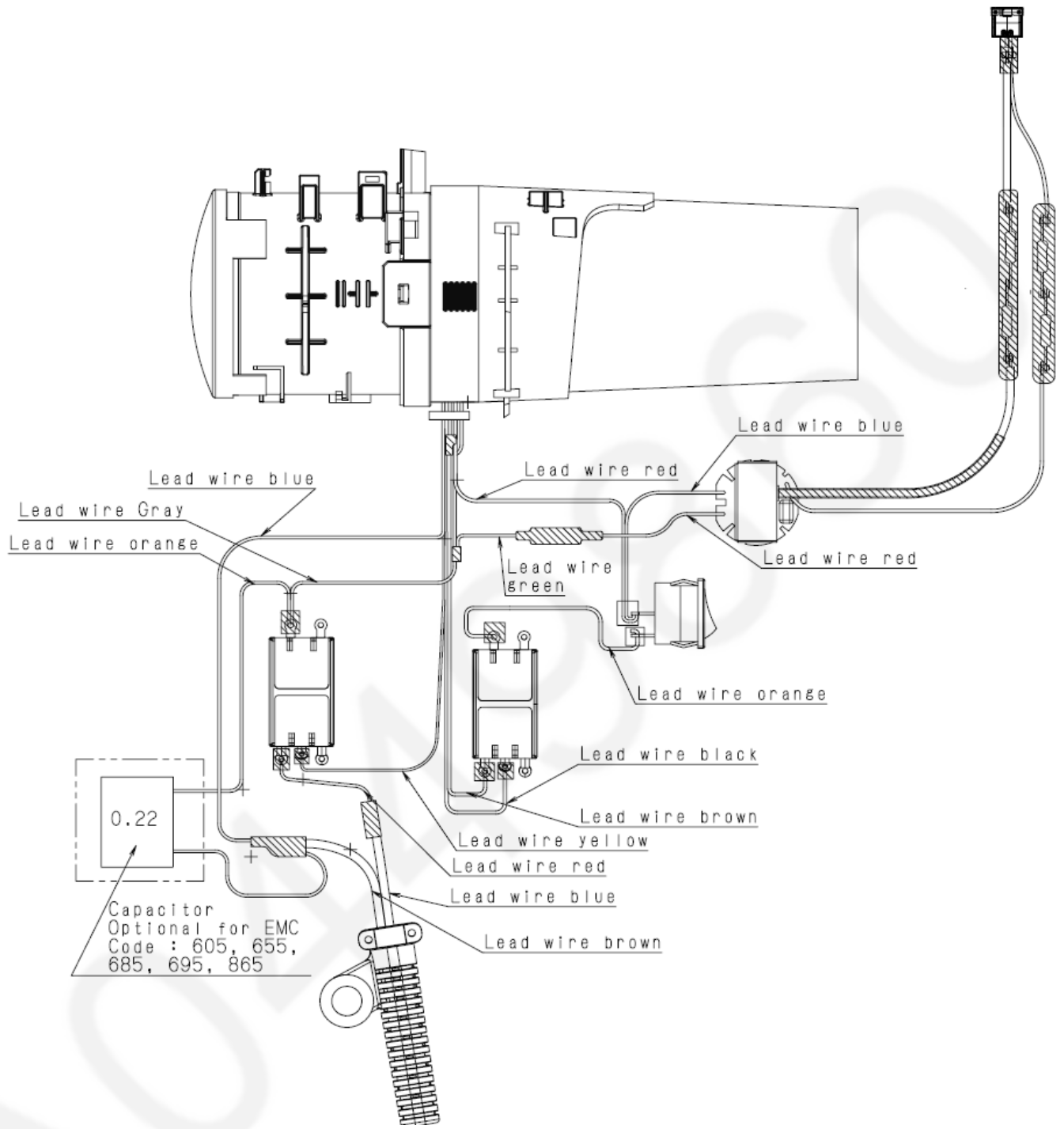
8. Install a AIR OUTLET GRILL into AIR OUTLET RING. Then install in to MAIN BODY with TAPPING SCREW.



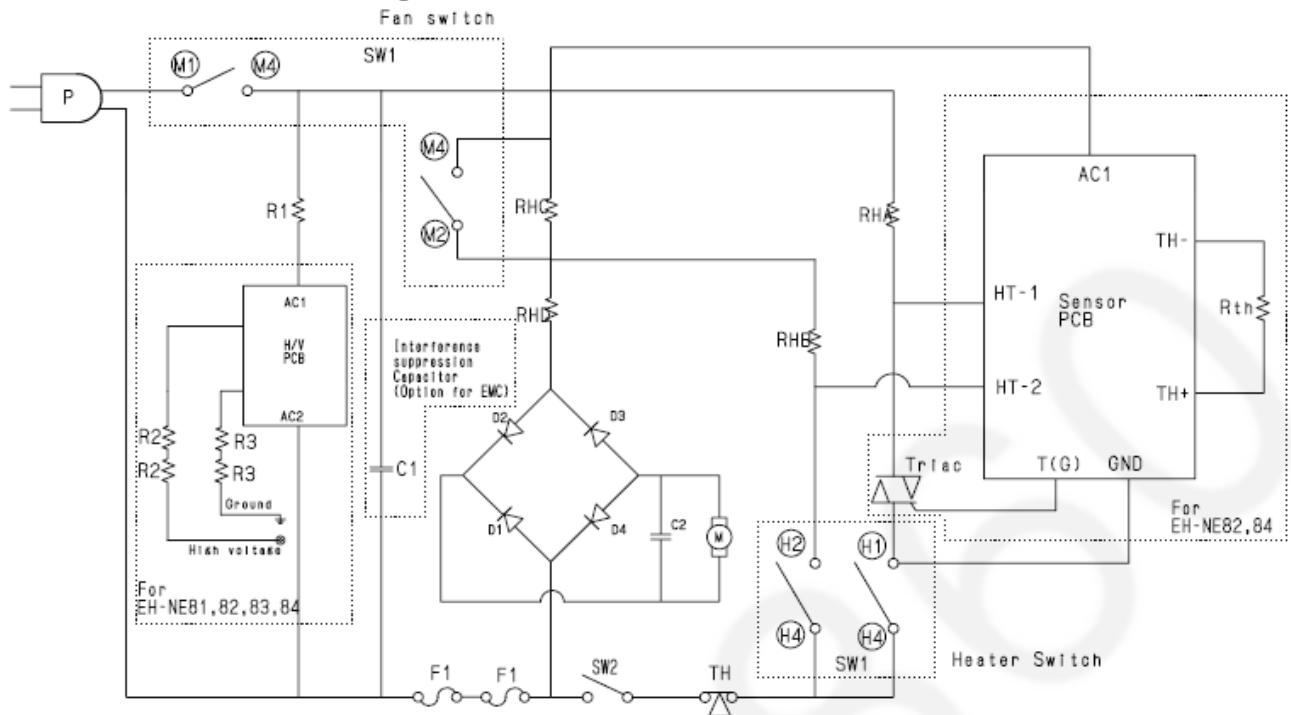
9. Install a FILTER FRAME ASSEMBLY.







5. Wiring Connection Diagram



6. Schematic Diagram



Main Sw.	1-4	2-4	3-5
O	X	X	X
I	O	X	X
II	O	O	X

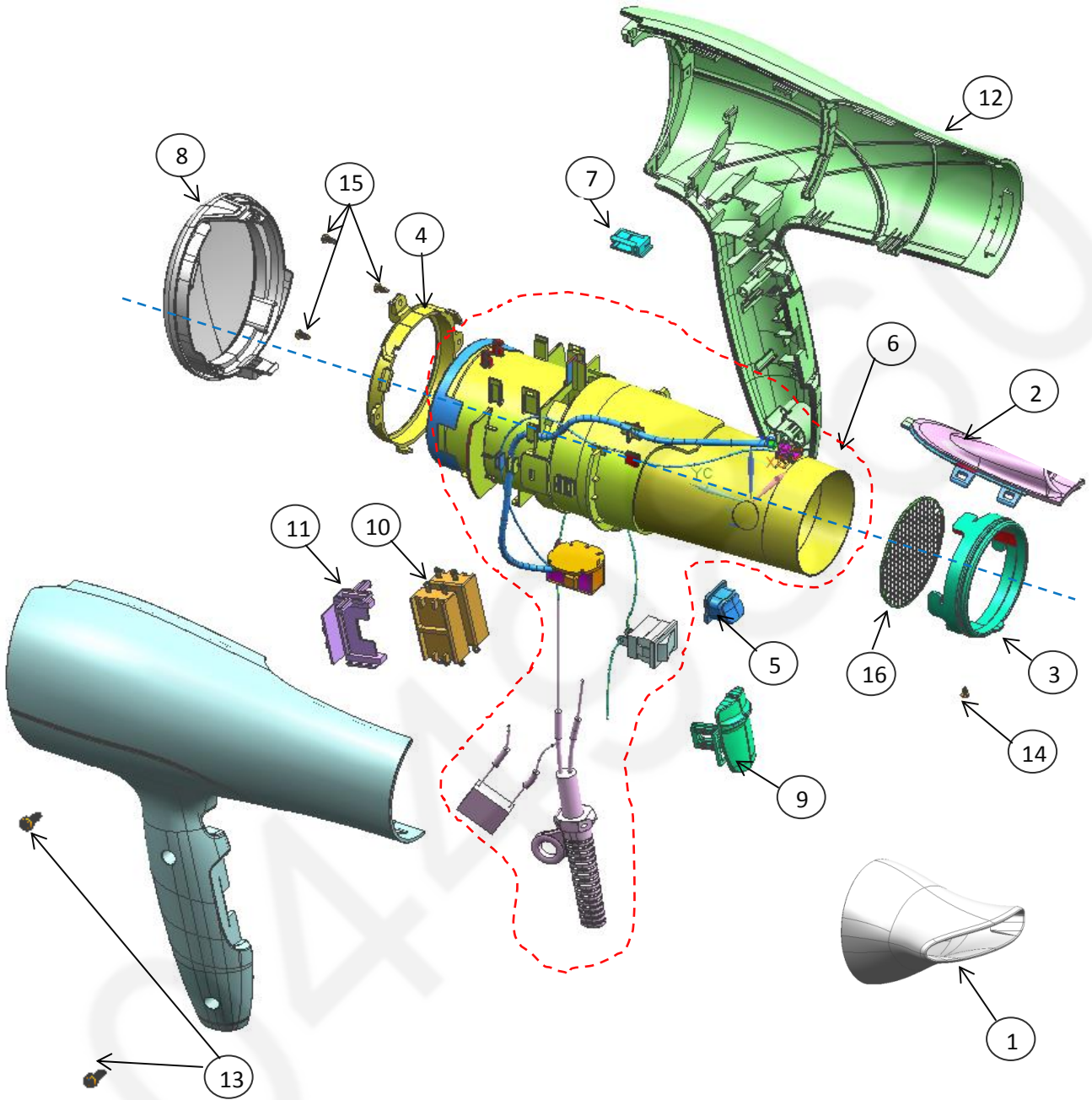
Temp Sw.	1-4	2-4	3-5
 Cool mode	X	X	X
 Healthy mode (EH-NE81, 83, N2500)	O	X	X
 Sensor mode (EH-NE82, 84)	O	O	X
 Hot mode	O	O	X

Cool Sw.	11-12
Off	O
On	X

Symbol	Part name	Specification
RHA, RHB	Resistance Wire A, B	FCHW1, 11.5 Ω/m
RHC	Resistance Wire C	FCHW1, 7.13 Ω/m
RHD	Resistance Wire D	NCHW2, 21.29 Ω/m
TH	Thermo Switch	80 ± 5 °C
F1	Temperature Fuse	15 A, 250 V, 142 °C
M	Motor	26 VDC
SW2	Cool Switch	250 V, 10 A
C1	Interference Suppression Capacitor	0.22 μF, 275 VAC
C2	Capacitor Across Motor	0.10 μF, 100 VDC
R1	Fixed Resistance (R1)	27 kΩ, 2W
R2	Fixed Resistance (R2)	3.3 MΩ, 1/2W
R3	Fixed Resistance (R3)	1.0 MΩ, 1/2W
P	Power Cord	
HV PCB	Hi-Voltage Circuit PCB	
Sensor PCB	Sensor Printed Circuit Board	
D1 - D4	Diode (Rectifier)	400 V, 2A
SW1	Main Switch	250VAC, 15A

7. EXPLODED VIEW & REPLACEMENT PARTS LIST

7.1. Exploded View for : EH-NE83



All parts are supplied from PMFTH-AP through PLAP

7.2 Parts List for EH-NE83

Safety	Ref. No.	Part No.	Part Name & Description	Q'ty	Remarks
	1	EHNE83SNZBW	SET NOZZLE (BLACK)	1	
	2	EHNE83DCBW	DISCHARGE COVER (BLACK)	1	
	3	EHNE83AORBW	AIR OUTLET RING (BLACK)	1	
	4	EHNE83AIRBW	AIR INLET RING (BLACK)	1	
	5	EHNE83CSBBW	COOL SWITCH BUTTON (BLACK)	1	
	6	EHNE83MHB2W	MOTOR HEATER ASSEMBLY	1	B2-PLUG,SET LOCKING TIE
	6	EHNE83MHS3W	MOTOR HEATER ASSEMBLY	1	S3-PLUG,SET LOCKING TIE
	7	EHNE83PSPW	PLATE SPRING	1	
	8	EHNE83FTFBW	FILTER FRAME ASSEMBLY	1	
	9	EHNE83MSPBW	MAIN SWITCH PLATE AB (BLACK)	1	
	10	EHNE83MSW	MAIN SWITCH	1	(2PCS/PACK, INCLUDE 6 INSULATION TUBES)
	11	EHNE83MSHTW	MAIN SWITCH HOLDER	1	
	12	EHNE83HS615W	HOUSING AB ASSEMBLY	1	FOR -K615,BLACK
	12	EHNE83HS685W	HOUSING AB ASSEMBLY	1	FOR -K685,BLACK
	13	EHNE83T3012W	TORX SCREW 3.0*12	2	*1
	14	EHNE83T2004W	TAPPING SCREW 2.0*4.0	1	
	15	EHNE83T2610W	TAPPING SCREW 2.6*10	3	*1
	16	EHNE83AOGW	AIR OUTLET GRILL	1	
	-	EHNE83S03W	OPERATING INSTRUCTIONS	1	FOR -K615
	-	EHNE8368503W	OPERATING INSTRUCTIONS WITH	1	FOR -K685
	-	EHNE83S615KW	INDIVIDUAL PACKAGE ASSEMBLY	1	FOR -K615
	-	EHNE83S685KW	INDIVIDUAL PACKAGE ASSEMBLY	1	FOR -K685
	-	EHNE83S09W	FILLER FOR PACKAGE	1	
	-	EHNE83S55W	POUCH FOAM	1	

Remarks : *1 Individual Available