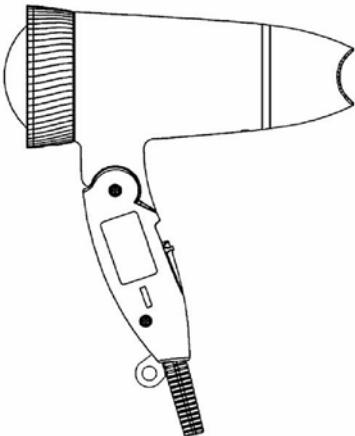


# Service Manual

## Hair Dryer

Model No. EH-ND51

TAIWAN



### **⚠ 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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# 1 Warning

## Caution:

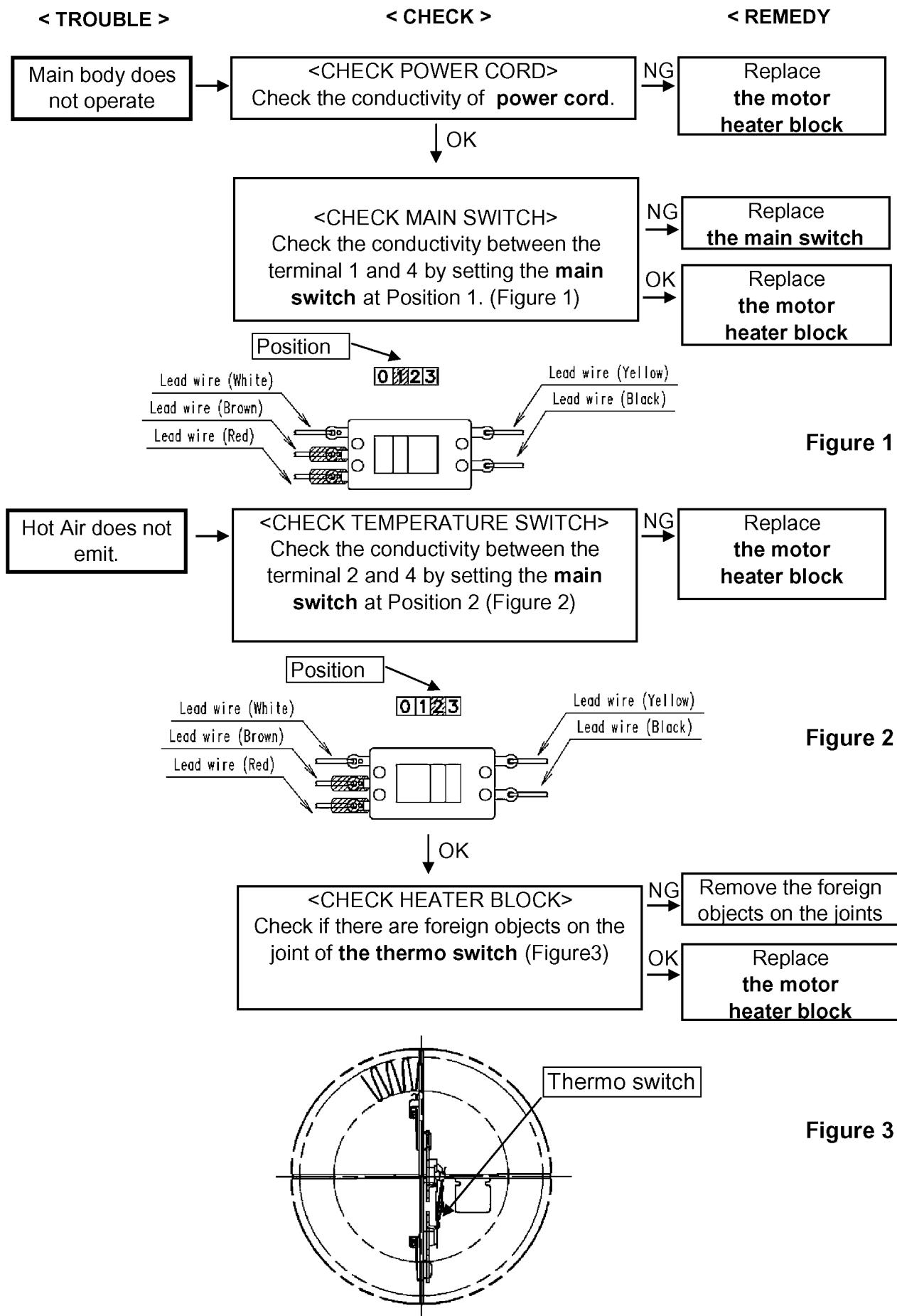
- Pb free solder has a higher melting point than standard solder; Typical the melting point is 50 - 70°F (30 - 40°C) higher. Please use a soldering iron with temperature control and adjust it to  $750 \pm 20^{\circ}\text{F}$  ( $400 \pm 10^{\circ}\text{C}$ ). In case of using high temperature soldering 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	AC110 V	60	Hz
Power consumption		1200	W
Air volume with attachment		1.00	$\text{m}^3/\text{min}$
Air flow temperature (Mode 3) (in case of room temperature 30°C)		120	$^{\circ}\text{C}$
Cord length	A2 Plug	1.875	m
Weight (without power cord and nozzle)		330	g

### 3 Troubleshooting Guide

Refer to WIRING CONNECTION DIAGRAM.



## 4 Disassembly and Assembly Instructions

### 4.1. Disassembly instruction

1. Take off nozzle as same direction in figure 4.

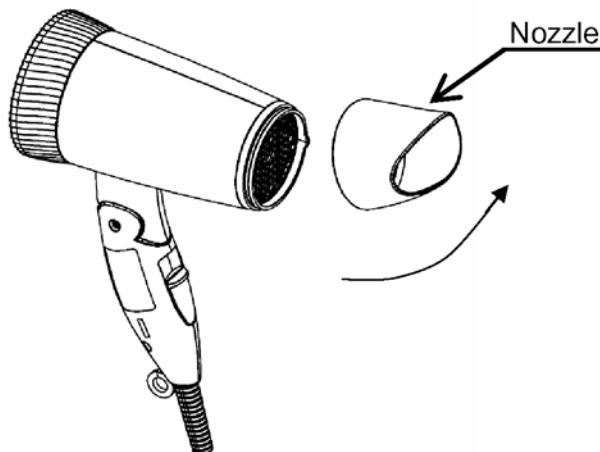


Figure 4

2. Remove tapping screws by Plus Driver and 2 torx screws by IEC driver as figure 5.

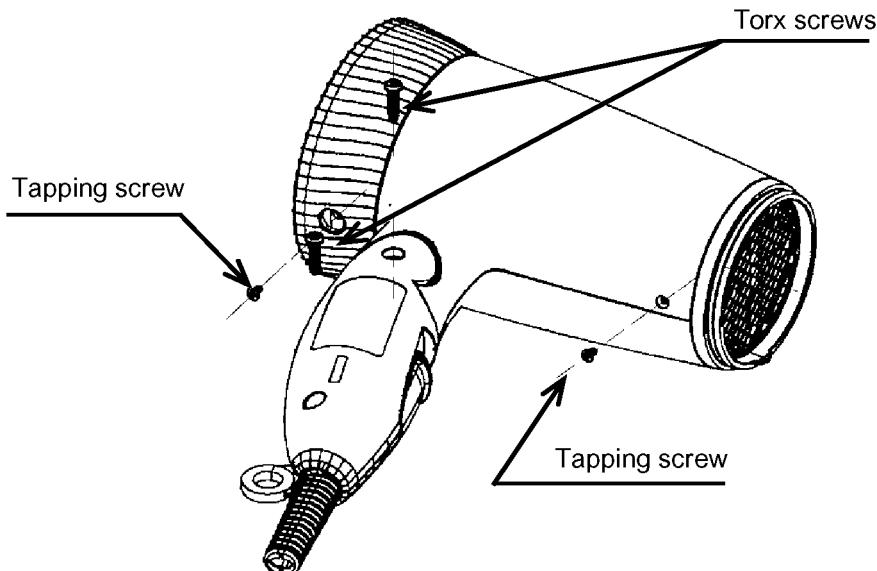
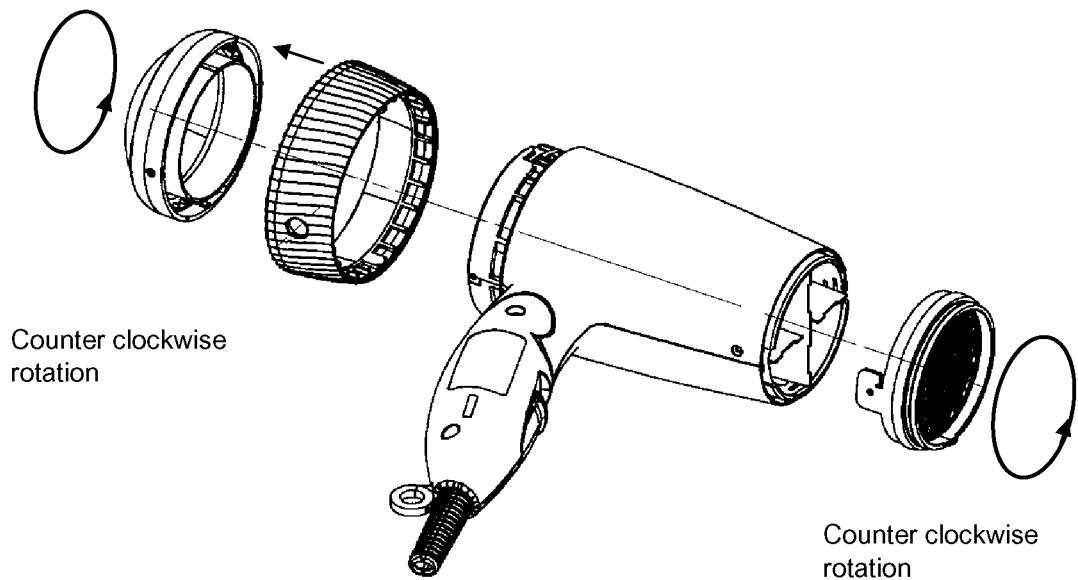


Figure 5

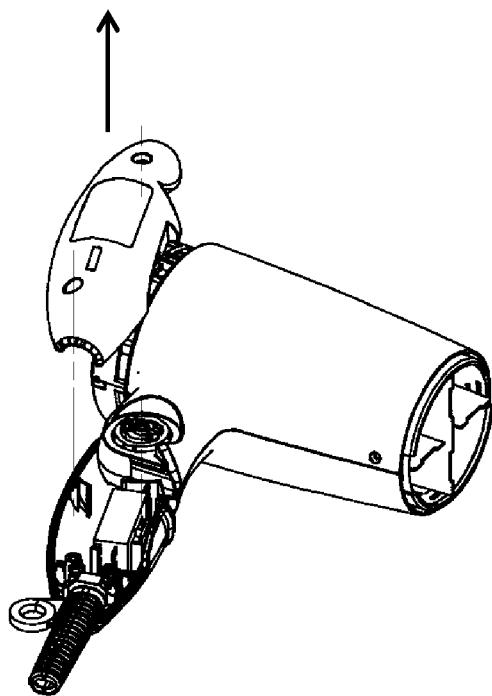
3. Take off an air outlet grill and an air outlet ring by rotating.

Take off an air inlet ring by rotating, then pulling a rear cover as figure 6.



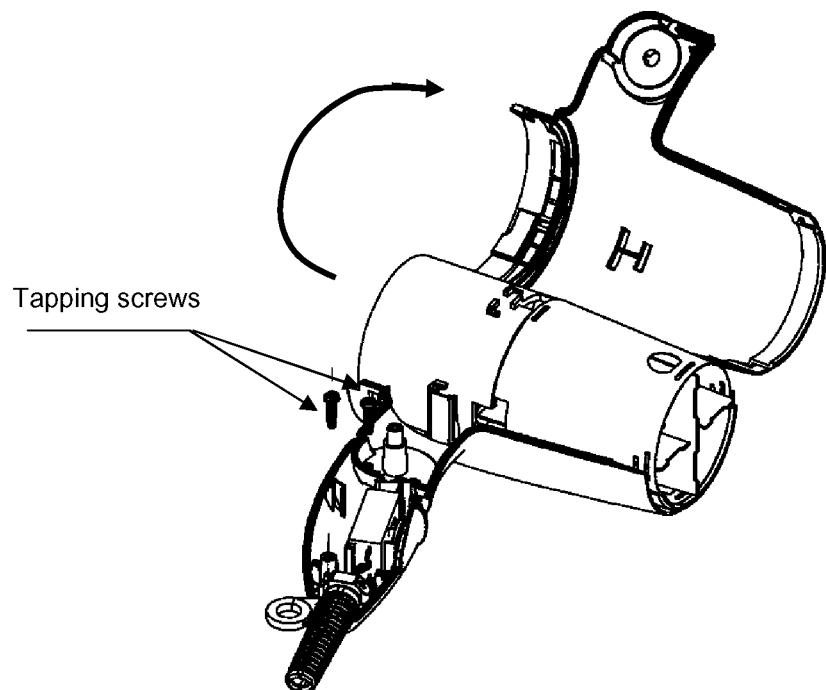
**Figure 6**

4. Take off a handle A from housing A and B as figure 7.



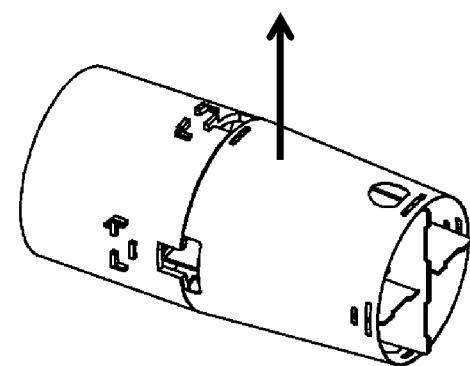
**Figure 7**

5. Take off a housing A from a housing B as figure 8.  
Then remove tapping screws and a power cord retainer from handle B as figure 8.

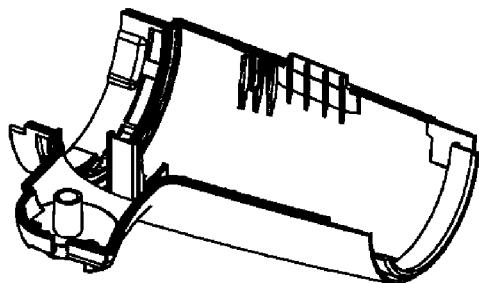


**Figure 8**

6. Take off a motor heater block from a housing B as figure 9.

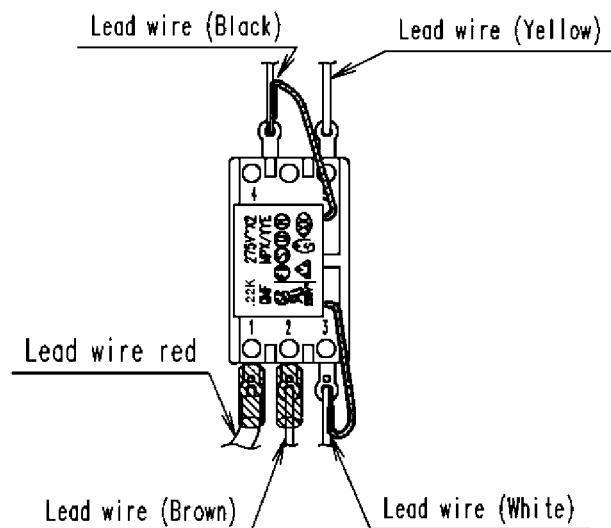


**Figure 9**



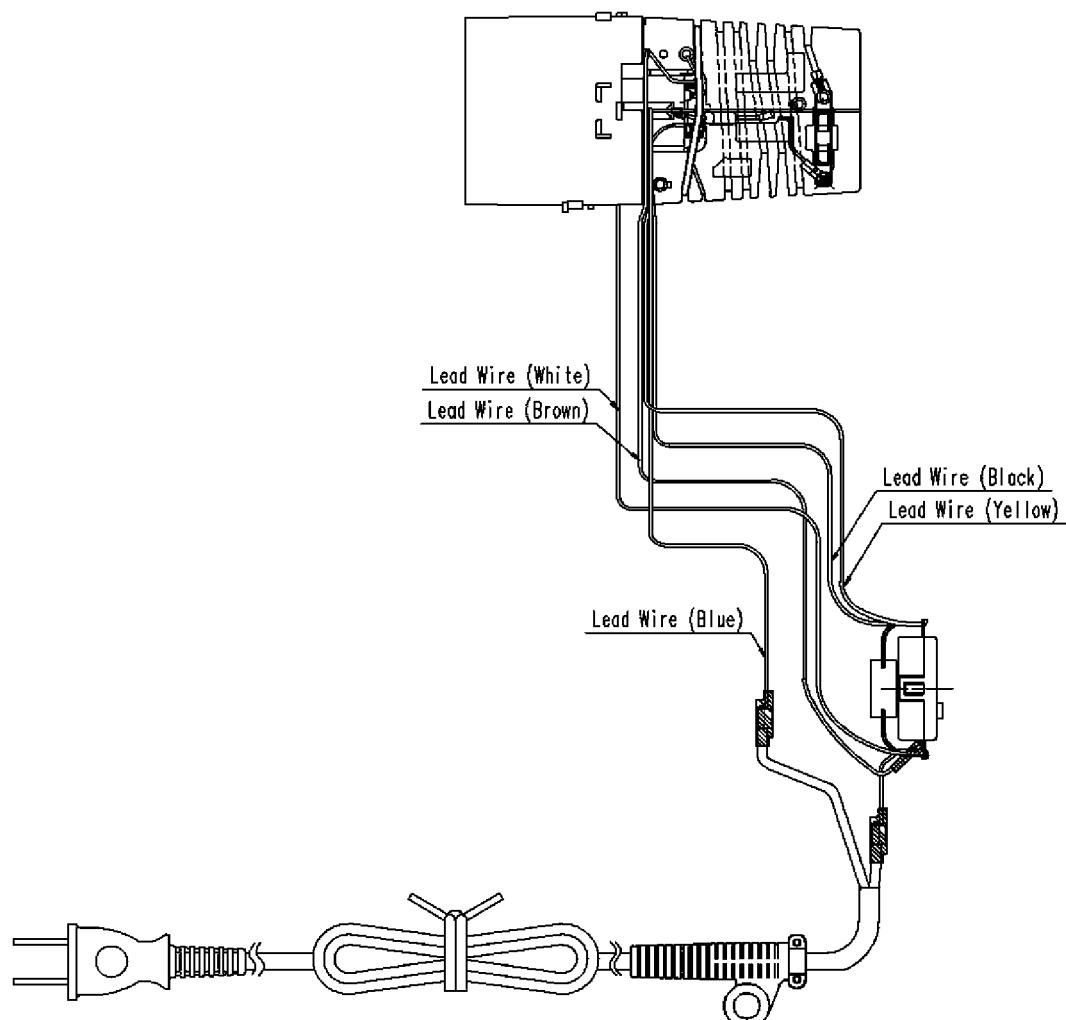
## 4.2. Assembly instruction

1. Install leadwire Black, Yellow, Brown, White and lead wire brown (from power cord) with a main switch and a capacitor as figure 10.



**Figure 10**

2. Connecting and soldering a motor heater block with a main switch as figure 11.



**Figure 11**

3. Assemble motor heater block with handle B and housing B as figure 12.

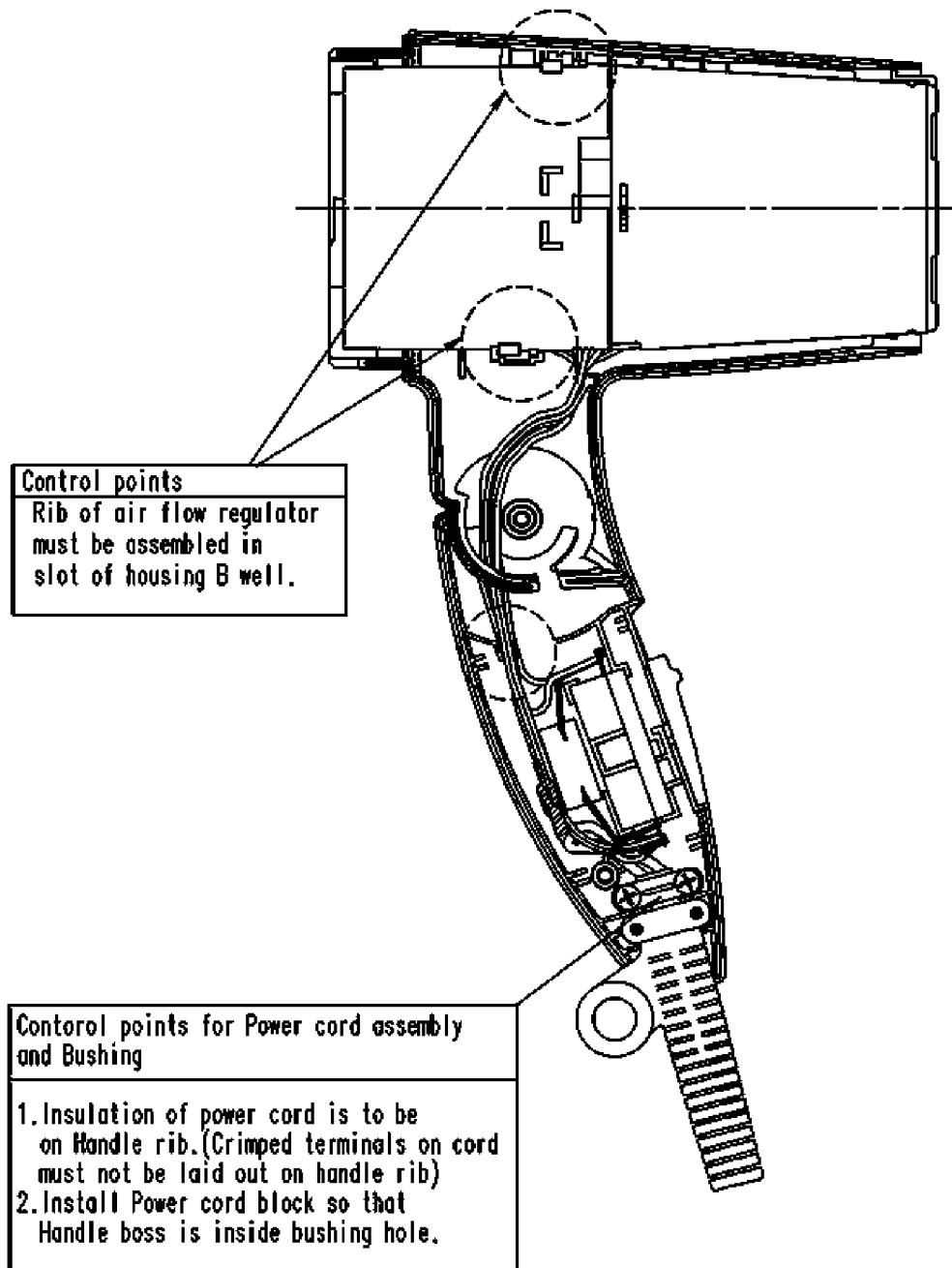
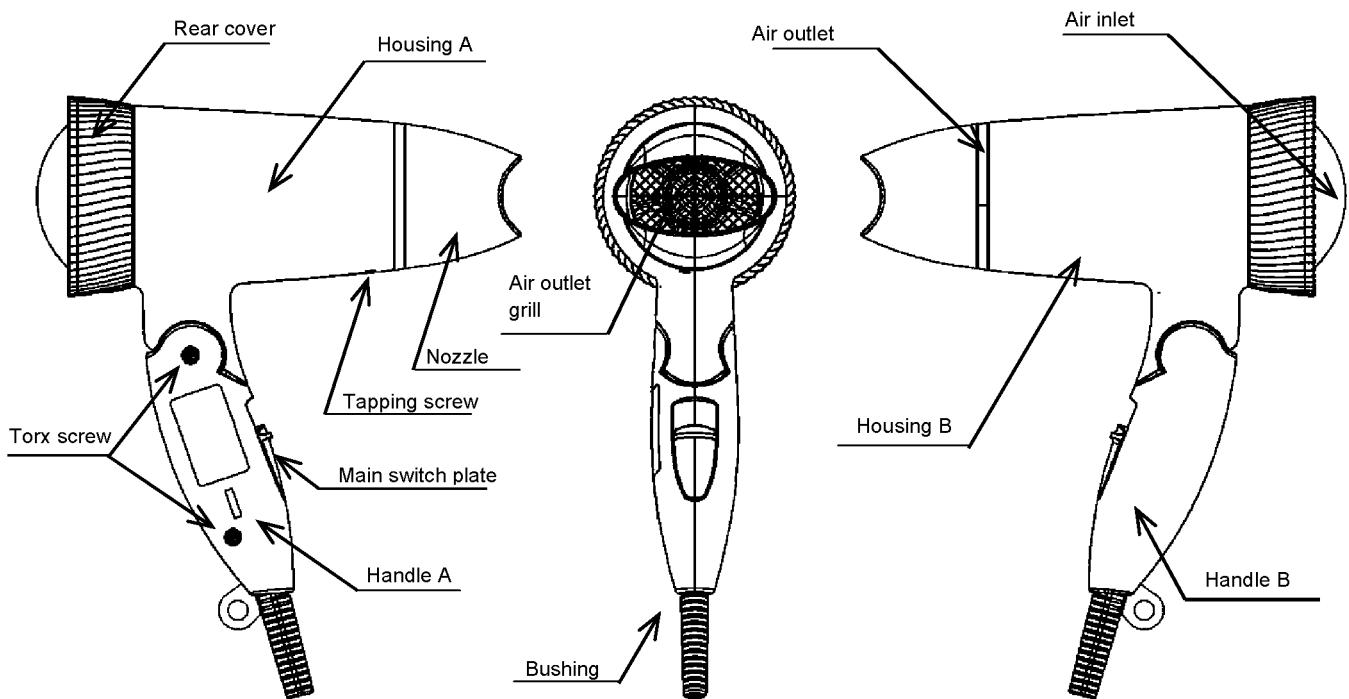


Figure 12

4. Assembly handle A , screw and nozzle as shown figure 13.



**Figure 13**

## 5 Wiring Connection Diagram

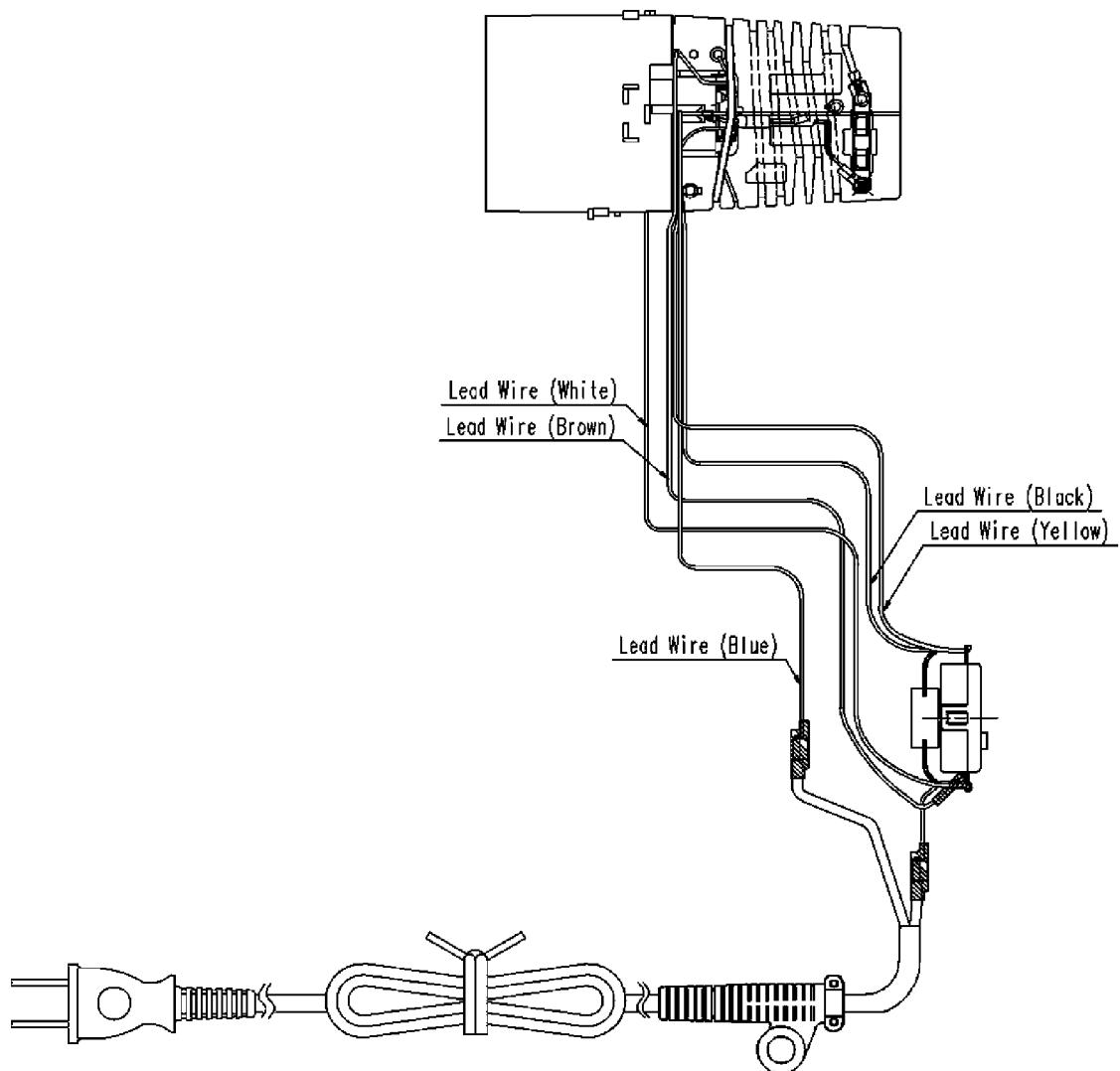


Figure 14

## 6 Schematic Diagram

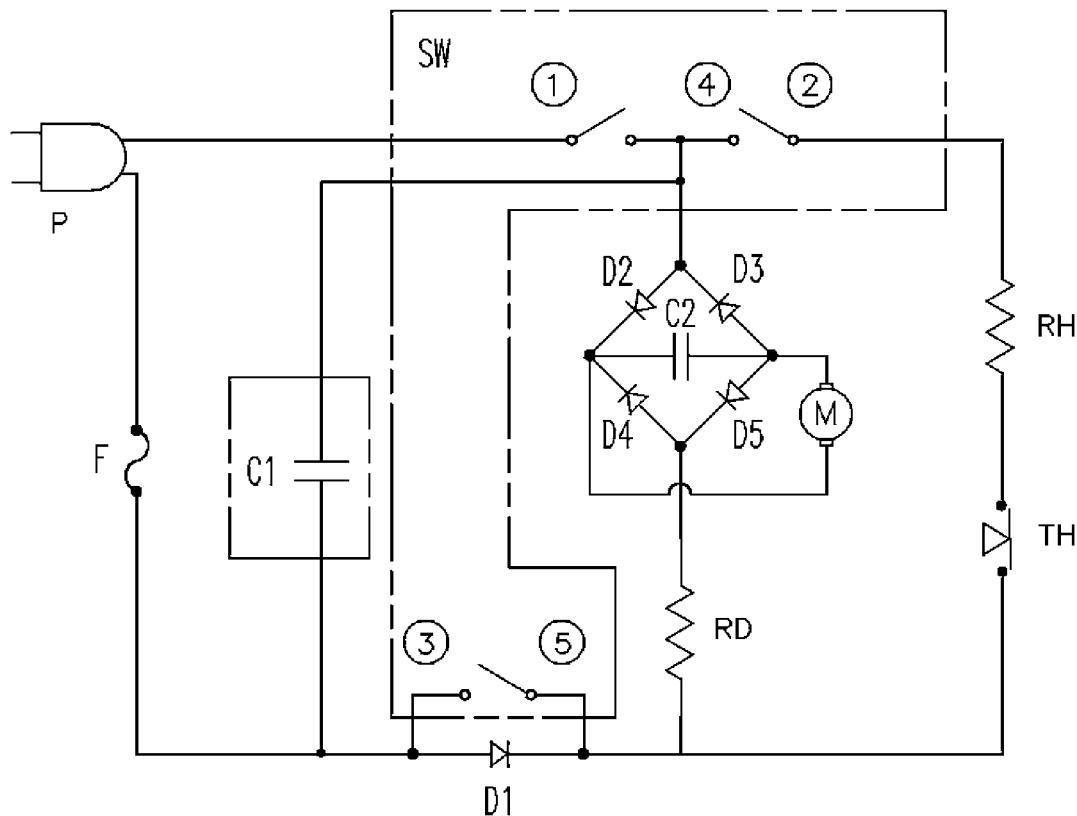


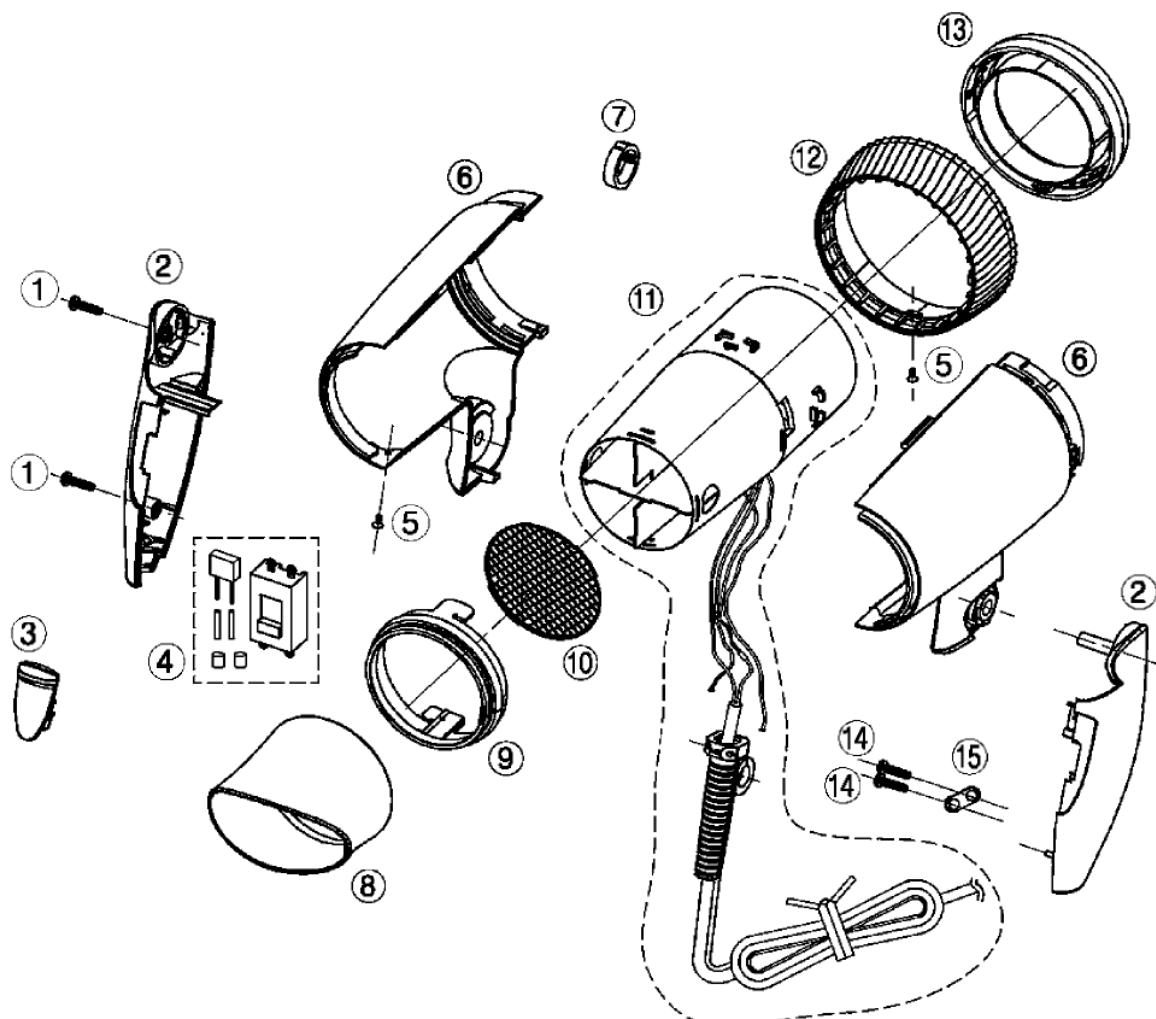
Figure 15

Mode	1~4	2~4	3~5
O	X	X	X
1	O	X	X
2	O	O	X
3	O	O	O

Component		Specifiacations
Symbol	Description	EH-ND51 (110 V) Code 135
C1	Capacitor (Noise suppression)	0.22 $\mu$ F , 275 Vac
C2	Capacitor ( Motor)	0.22 $\mu$ F , 100 Vdc
RH	Heater coil	$10.3 \pm 0.5 \Omega$
RD	Voltage dropping resistor	$210.0 \pm 8.0 \Omega$
TH	Thermo switch	$120 \pm 5 ^\circ\text{C}$
F	Temperature fuse	15 A , 250 V , 142 $^\circ\text{C}$
D1	Diode	1000 V , 7 A
D2,D3,D4,D5	Rectifier diode	600 V , 1 A
SW	Main switch	250 V , 7.5 A / 125 V , 13.5 A
P	Power cord	
M	Motor	DC 24 V

## 7 Exploded View and Replacement Parts List

Model No. : EH-ND51 Exploded View



Remarks : \*1 Individual Available

All parts are supplied from PEW-Thailand through PLGA

## Model No. : EH-ND51 Parts List

Safety	Ref. No.	Part No.	Part Name & Description	Q'ty	Remarks
	1	EHND51T0312W	TORX SCREW PTP 3*12	2	FOR HANDLE AB *1
	2	EHND51HDW1W	HANDLE AB (WHITE)	1	
	3	EHND51MSPWW	MAIN SWITCH PLATE (WHITE)	1	
	4	EHND51MS1W	MAIN SWITCH	1	INCLUDE CAPACITOR, 4 INSULATION TUBES
	5	EHND51T2005W	TAPPING SCREW 2.0*5	2	FOR HOUSING AND REAR COVER *1
	6	EHND51HSL1W	HOUSING AB (FLOWER META.BLUE)	1	FOR CODE A135
	6	EHND51HSP1W	HOUSING AB (FLOWER META.PINK)	1	FOR CODE P135
	6	EHND51HSS1W	HOUSING AB (FLOWER META.SILVER)	1	FOR CODE S135
	7	EHND51SRTW	SWIVEL RING	1	
	8	EHND51NZLW	NOZZLE (TRANS.BLUE)	1	FOR CODE A135
	8	EHND51NZPW	NOZZLE (TRANS.PINK)	1	FOR CODE P135
	8	EHND51NZHW	NOZZLE (TRANS.GRAY)	1	FOR CODE S135
	9	EHND51AORW	AIR OUTLET RING	1	
	10	EHND51AOGW	AIR OUTLET GRILL	1	
	11	EHND51MHA2W	MOTOR HEATER BLOCK	1	A2-PLUG, INCLUDE 2 INSULATION TUBES
	12	EHND51RCLW	REAR COVER (METALIC BLUE)	1	FOR CODE A135
	12	EHND51RCPW	REAR COVER (METALIC PINK)	1	FOR CODE P135
	12	EHND51RCSW	REAR COVER (METALIC SILVER)	1	FOR CODE S135
	13	EHND51AIRWW	AIR INLET RING	1	
	14	EHND51T3080W	TAPPING SCREW 3*8	2	FOR POWER CORD RETAINER *1
	15	EHND51PCRBW	POWER CORD RETAINER	1	
	-	EHND5113503W	INSTRUCTION BOOKLET	1	
	-	EHND511351W	INDIVIDUAL PACKAGE (BLUE)	1	FOR CODE A135
	-	EHND51135PW	INDIVIDUAL PACKAGE (PINK)	1	FOR CODE P135
	-	EHND51135SW	INDIVIDUAL PACKAGE (PINK)	1	FOR CODE S135