# Service Manual



(Household) Hair Dryer Model No. **EH-ND30** Asia

#### **⚠ 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  $\triangle$  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:

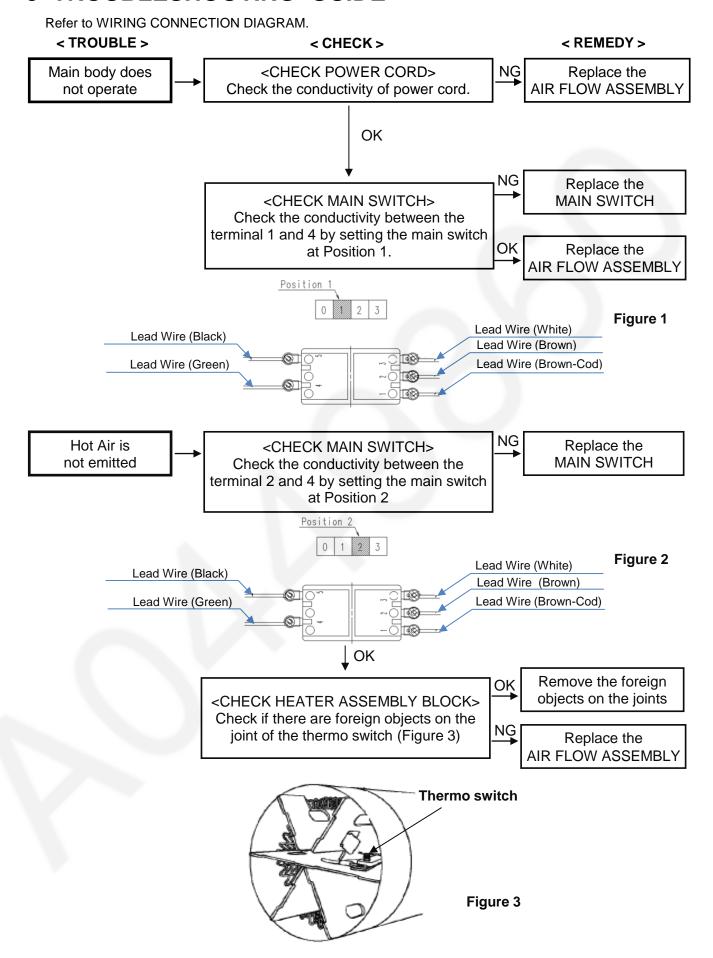
- Pb free solder has a higher melting point that standard solder; Typicall the melting point is 50 70°F (30 40°C) higher. Please use a oldering iron with temperature control and adjust it to 750 ±20°F (400 ± 10 °C). In case of using high temperature soldering iron, please becareful not to heat too long.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

## 2. Specifications

Power source	AC 220-240 V 50-60 Hz		
Power consumption	Approx. "III" Turbo 220 V ~ 1500 W		
	230 V ~ 1650 W		
	240 V ~ 1800 W		
Air volume without nozzle	1.30 m3/min		
Air flow temperature ("III" Turbo)	90 K (in case of room temperature 30°C)		
Dimensions	(W) 74 x (D) 172 x (H) 210 mm		
Cord length	L = 1.7 m		
Weight	Approx. 315 g (Without cord and Without Nozzle)		

Supplied accessory	EH-ND30	Set nozzle

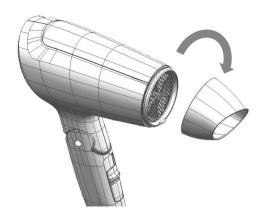
#### 3 TROUBLESHOOTING GUIDE



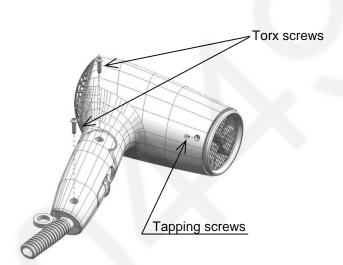
## 4. Disassembly and Assembly Instructions

#### 4.1. Disassembly Instructions

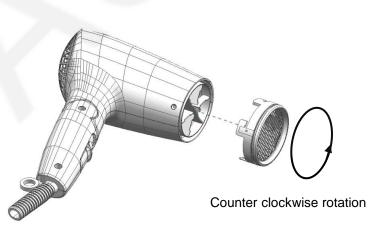
(1). Take off **NOZZLE** as same direction as below.



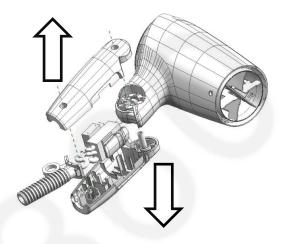
(2). Remove two TAPPING SCREWS at HOUSING A by flat-blade screwdriver and two TORX SCREWS at HANDLE by Driver.



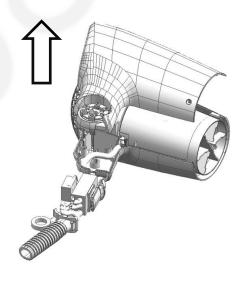
(3) Take off an AIR OUTLET GRILL and an AIR OUTLET RING by rotating method as below.



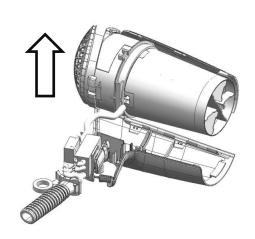
(4). Take off HANDLE AB then take out CLICK RING and SWIVEL RING method as below.



(5). Take off HOUSING A method as below.

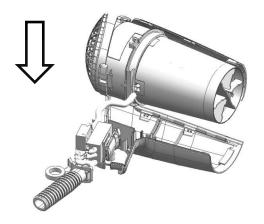


(6). Take off a AIR FLOW ASSEMBLY method as below.

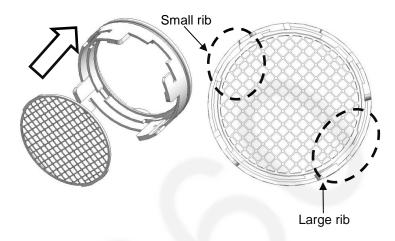


#### 4.2 Assembly Instructions

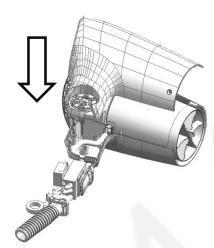
(1). Install **AIR FLOW ASSEMBLY** into **HOUSING A** as below drawing.



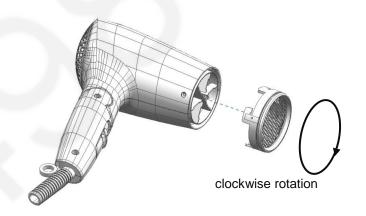
(4). Insert an **AIR OUTLET GRILL** into an **AIR OUTLET RING** by fix position as below.



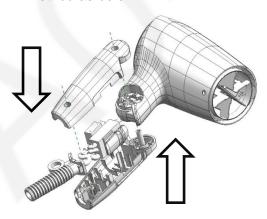
(2). Install HOUSING A method as below.



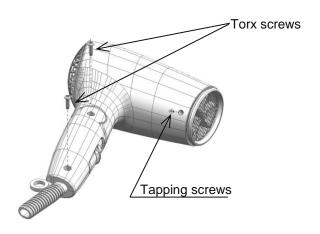
(5). Insert an **AIR OUTLET RING** into main body by fix position as below.



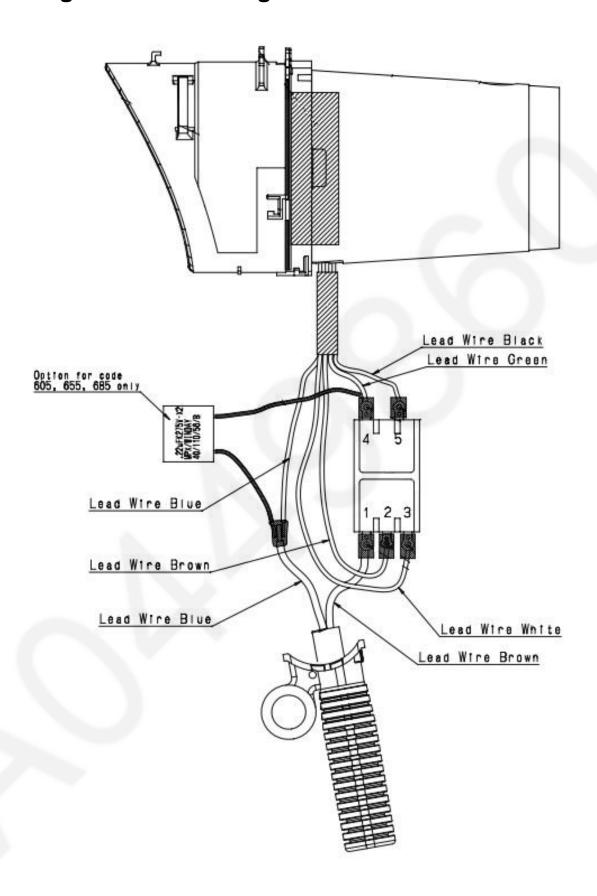
(3). Install SWIVEL RING on HANDLE A and install CLICK RING on HOUSING A then install HANDLE AB on HOUSING AB method as below.



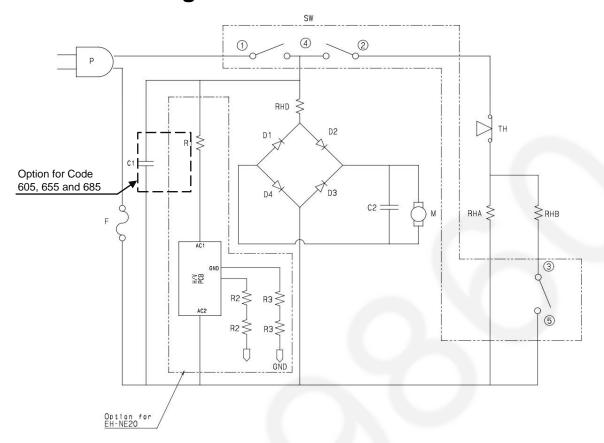
(6). Tightening screw both 2 TORX SCREWS and TAPPING SCREWS as below.



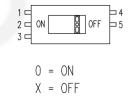
# 5. Wiring Connection Diagram



# 6. Schematic Diagram



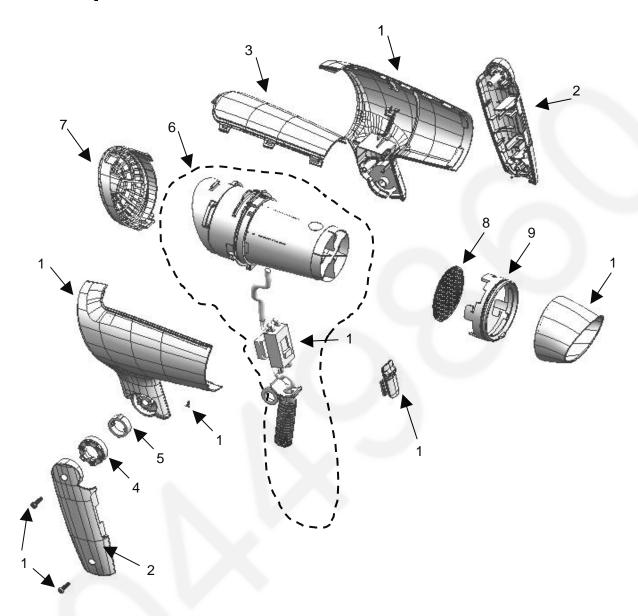
Main Sw.	1-4	2-4	3-5
Off " O "	Х	Х	Х
Cool " 🌣 "	0	Χ	Χ
Heat Protection " U "	0	0	Χ
Turbo " III "	0	0	0



Symbol	Part name	Specification		
		Code:	Code :	
		605/655/685	L/415/615/645/62B	
C1	CAPACITOR	0.22 mF, 275V	NOT USE	
C2	CAPACITOR (FOR MOTOR)	0.1 mF, 50VDC		
D1, D2, D3, D4	DIODE (BRIDGE)	400V, 2A		
F	TEMPERATURE FUSE	133°C, 250V, 15A		
M	MOTOR	RS365SV-1988		
Main Sw.	MAIN SWITCH	AC 250V/15A		
TH	THERMO SWITCH	90 ± 5 °C		
RHA	HEATER COIL A	86.5 ± 2.5 W		
RHB	HEATER COIL B	86.0 ± 2.5 W		
RHD	HEATER COIL D	124.0 ± 3.5 W		
TH	THERMO SWITCH	90 ± 5 °C		
R1	RESISTOR (R1)	27.0 kW		
R2	RESISTOR (R2)	3.3 MW		
R3	RESISTOR (R3)	1.0 MW		

# 7 EXPLODED VIEW & REPLACEMENT PARTS LIST

# 7.1. Exploded View for : EH-ND30



All parts are supplied from PMFTH-AP throught PLAP

#### 7.2 Parts List for EH-ND30

Safety	Ref. No.	Part No.	Part Name & Description	Q'ty	Remarks
	1	EHND30HSBW	HOUSING AB	1	BLACK,OTHERS
	1	EHND30HSPW	HOUSING AB	1	PINK,OTHERS
	1	EHND30HS41BW	HOUSING AB	1	BLACK,FOR -K415 : INDONESIA
	1	EHND30HS41PW	HOUSING AB	1	PINK,FOR -P415 : INDONESIA
	1	EHND30HS64BW	HOUSING AB	1	BLACK,FOR -K645 : VIETNAM
	1	EHND30HS64PW	HOUSING AB	1	PINK,FOR -P645 : VIETNAM
	1	EHND30HS68BW	HOUSING AB	1	BLACK,FOR -K685 : OMAN/SAUDI A./KUWAIT/U.A.E
	2	EHND30HDBW	HANDLE AB	1	BLACK,FOR -K All Series
	2	EHND30HDPW	HANDLE AB	1	PINK,FOR -P All Series
	3	EHND30DSCNW	DESIGN COVER	1	TRANSPARENT BROWN,FOR -K All Series
	3	EHND30DSCPW	DESIGN COVER	1	TRANSPARENT LIGHT PINK,FOR -P All Series
	4	EHND30CRTW	CLICK RING	1	WHITE
	5	EHND30SRTW	SWIVEL RING	1	NATURAL
	6	EHND30AFB2W	AIR FLOW ASSEMBLY	1	PLUG B2,FOR -K/-P415,-K615,-K/-P62B
	6	EHND30AFS3W	AIR FLOW ASSEMBLY	1	PLUG S3,FOR -K/-P605,-K/-P655,-K685
	7	EHND30AIFBW	AIR INLET FRAME WITH FILTER	1	BLACK,FOR -K All Series
	7	EHND30AIFPW	AIR INLET FRAME WITH FILTER	1	PINK,FOR -P All Series
	8	EHND30AOGW	AIR OUTLET GRILL	1	
	9	EHND30AORBW	AIR OUTLET RING	1	BLACK,FOR -K All Series
	9	EHND30AORPW	AIR OUTLET RING	1	PINK,FOR -P All Series
	10	EHND30NZBW	NOZZLE	1	BLACK,FOR -K All Series
	10	EHND30NZPW	NOZZLE	1	PINK,FOR -P All Series
	11	EHND30MSW	MAIN SWITCH	1	OTHERS : Include 5 Insulation Tubes
	11	EHND30MS2W	MAIN SWITCH	1	FOR -K/-P605,-K/-P655,-K685 : Include 5 Insulation Tubes
	12	EHND30MSPBW	MAIN SWITCH PLATE	1	BLACK,FOR -K All Series
	12	EHND30MSPPW	MAIN SWITCH PLATE	1	LIGHT PINK,FOR -P All Series
	13	EHND303012BW	TORX SCREW 3.0*12	2	BLACK,FOR -K All Series *1
	13	EHND303012SW	TORX SCREW 3.0*12	2	SILVER,FOR -P All Series *1
	14	EHND302004BW	TAPPING SCREW 2.0*4	1	BLACK,FOR -K All Series
	14	EHND302004SW	TAPPING SCREW 2.0*4	1	SILVER,FOR -P All Series
	-	EHND30S03W	OPERATING INSTRUCTIONS	1	OTHERS
	-	EHND3060503W	OPERATING INSTRUCTIONS WITH CAUTION SHEET	1	FOR -K/-P605 : HONG KONG/SINGAPORE
	-	EHND3061503W	OPERATING INSTRUCTIONS	1	FOR -K615 : U.A.E (RE-EXPORT)
	-	EHND3068503W	OPERATING INSTRUCTIONS WITH QR CODE	1	FOR -K685 : OMAN/SAUDI A./KUWAIT/U.A.E
	-	EHND30S01KW	INDIVIDUAL PACKAGE WITH BARCODE	1	BLACK,FOR -K605/-K615 : HONG KONG/SINGAPORE
	-	EHND30S01PW	INDIVIDUAL PACKAGE WITH BARCODE	1	PINK,FOR -P605 : HONG KONG/SINGAPORE
	-	EHND30415KW	INDIVIDUAL PACKAGE WITH BARCODE	1	BLACK,FOR -K415 : INDONESIA
	-	EHND30415PW	INDIVIDUAL PACKAGE WITH BARCODE	1	PINK,FOR -P415 : INDONESIA
	-	EHND3062BKW	INDIVIDUAL PACKAGE WITH BARCODE	1	BLACK,FOR -K62B : INDIA
	-	EHND3062BPW	INDIVIDUAL PACKAGE WITH BARCODE	1	PINK,FOR -P62B : INDIA
	-	EHND30645KW	INDIVIDUAL PACKAGE WITH BARCODE	1	BLACK,FOR -K645 : VIETNAM
	-	EHND30645PW	INDIVIDUAL PACKAGE WITH BARCODE	1	PINK,FOR -P645 : VIETNAM
	-	EHND30655KW	INDIVIDUAL PACKAGE WITH BARCODE	1	BLACK,FOR -K655 : MALAYSIA
	-	EHND30655PW	INDIVIDUAL PACKAGE WITH BARCODE	1	PINK,FOR -P655 : MALAYSIA
	-	EHND30685KW	INDIVIDUAL PACKAGE WITH BARCODE	1	BLACK,FOR -K685 : OMAN/SAUDI A./KUWAIT/U.A.E
	-	EHND30S09W	PULP FILLER	1	
	-	EHND30S55W	POUCH FOAM	1	

Remarks: \*1 Individual Available