

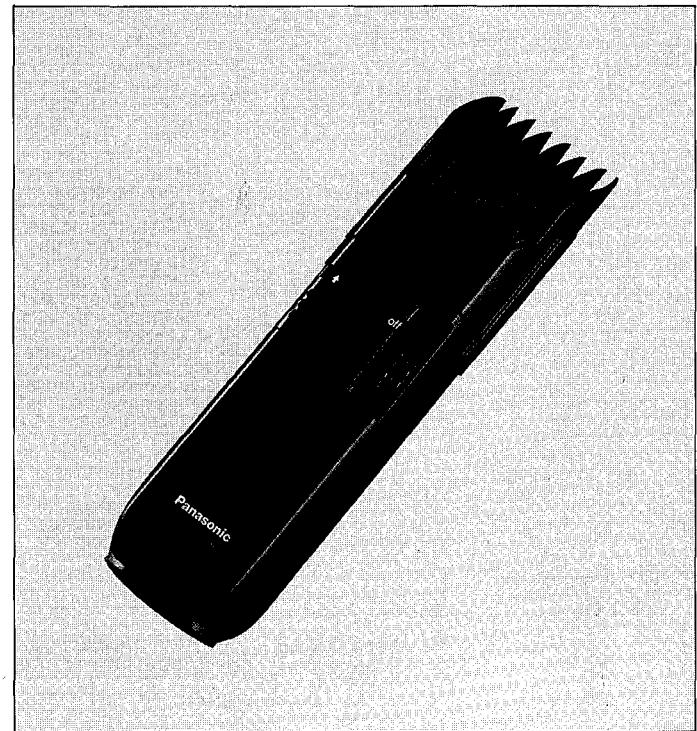
# Service Manual

Rechargeable Beard/hair trimmer

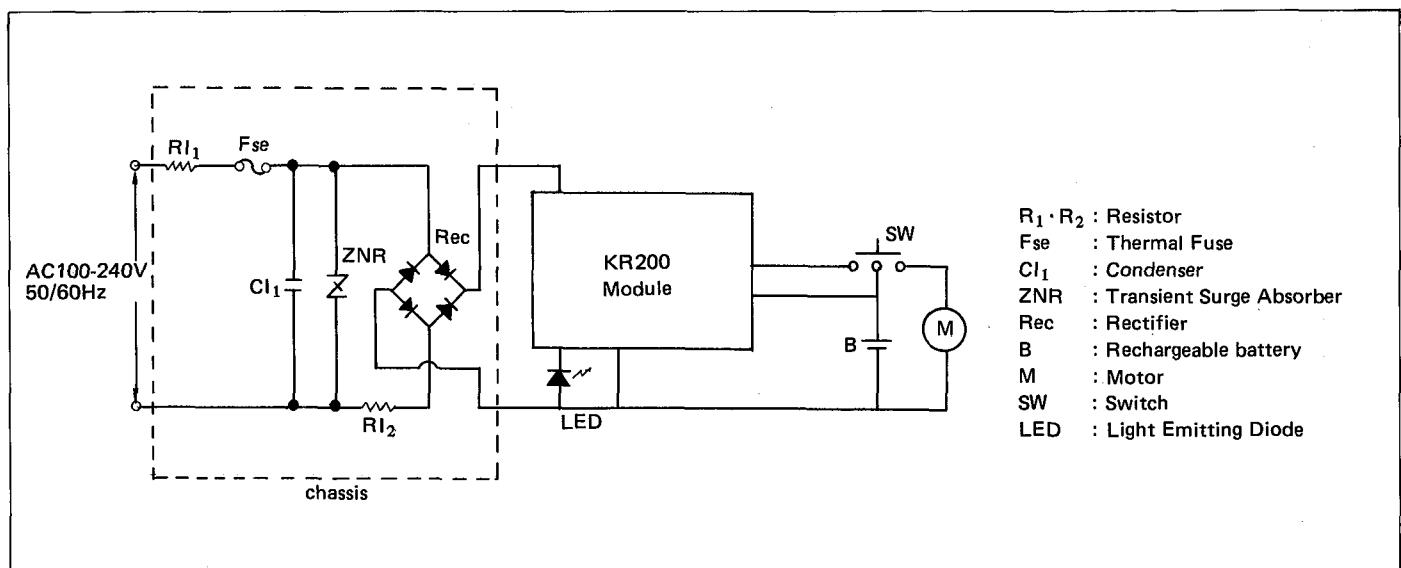
**ER200**

## Specifications:

Model No.:	ER200
Power source:	100-240V AC, 50-60Hz
Power consumption:	6.0W
Standard charging time:	8 hours
Rated time:	30 min.
Weight:	5.7 oz. (6.2 oz., including attachment)
Accessories:	Cleaning brush Oil Comb attachment Short comb attachment AC power cord Soft case



## SCHEMATIC DIAGRAM



R<sub>1</sub> · R<sub>2</sub> : Resistor  
Fse : Thermal Fuse  
CI<sub>1</sub> : Condenser  
ZNR : Transient Surge Absorber  
Rec : Rectifier  
B : Rechargeable battery  
M : Motor  
SW : Switch  
LED : Light Emitting Diode

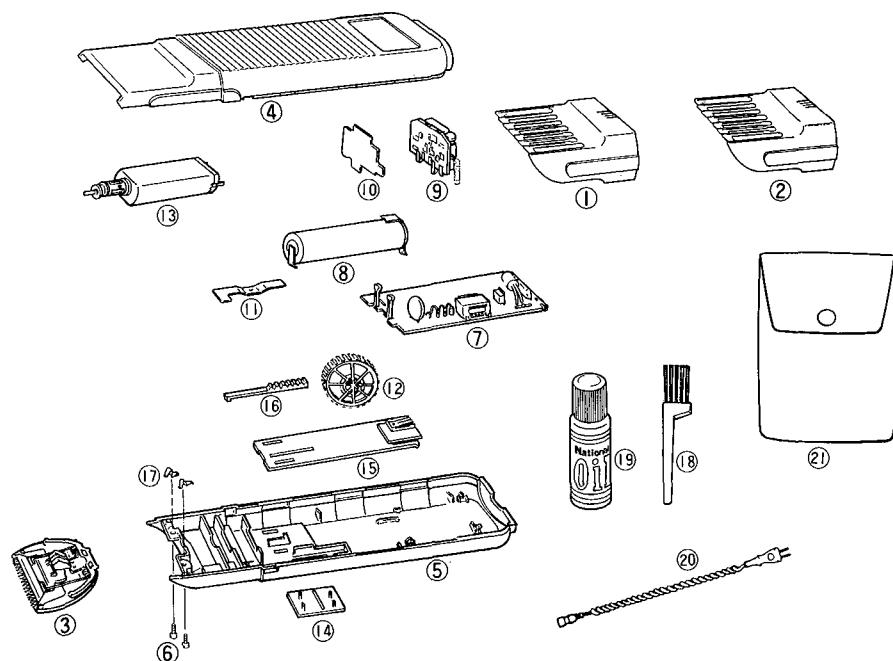
**Panasonic**

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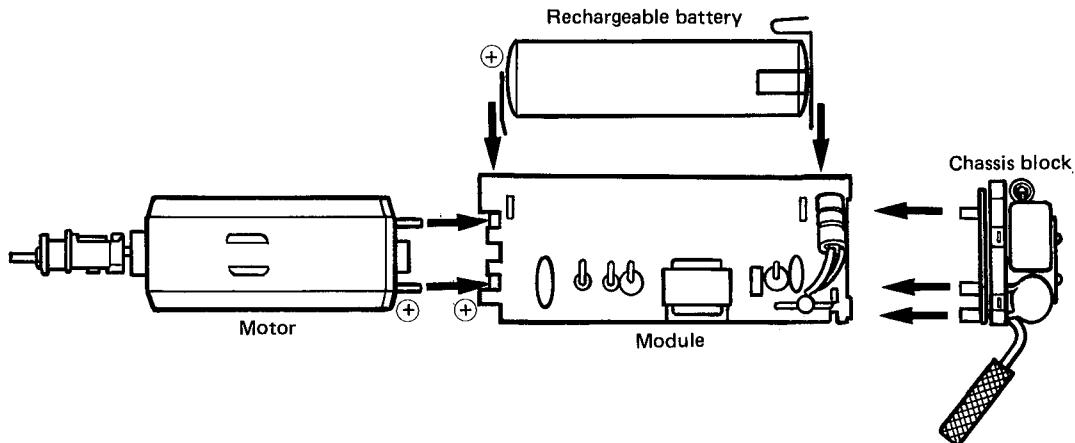
# EXPLODED VIEW



## REPLACEMENT PARTS LIST

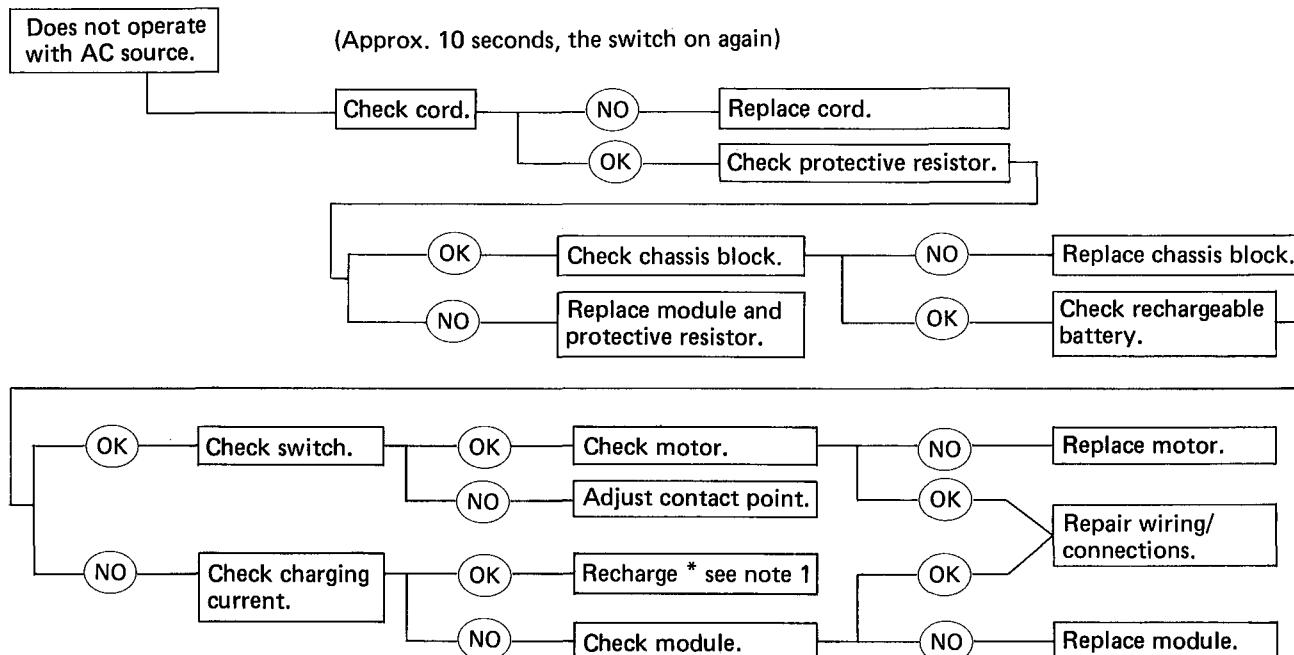
Ref. No.	Part No.	Part Name & Description	Per Set	Remarks
1	WER200B7398	Normal Comb attachment	1	
2	WER200B7408	Short Comb attachment	1	
3	WER9193P	Blade block	1	
4	WER200B3058	Housing A	1	
5	WER200B3068	Housing B	1	
6	WEH73346137	Housing screw	1	
7	WER200B2128	Module	1	
8	WES601L2507	Rechargeable battery	1	
9	WER200B0778	Chassis block	1	
10	WER200B0108	Insulator	1	
11	WER200B0188	Adjusting dial spring	1	
12	WER200B3288	Adjusting dial	1	
13	WER200B1008	Motor block	1	
14	WER200B3208	Switch handle	1	
15	WER200B3578	Switch plate	1	
16	WER200B0288	Indicator shaft	1	
17	WER392W0167	Cutter holddown spring	1	
18	WER398B7058	Cleaning brush	1	
19	WER398B7919	Oil	1	
20	WER200B2068	AC cord	1	
21	WER200B7008	Soft case	1	
—	WER200B8008	Individual box	1	
—	WER97682000	Operating instructions	1	

# WIRING CONNECTION DIAGRAM



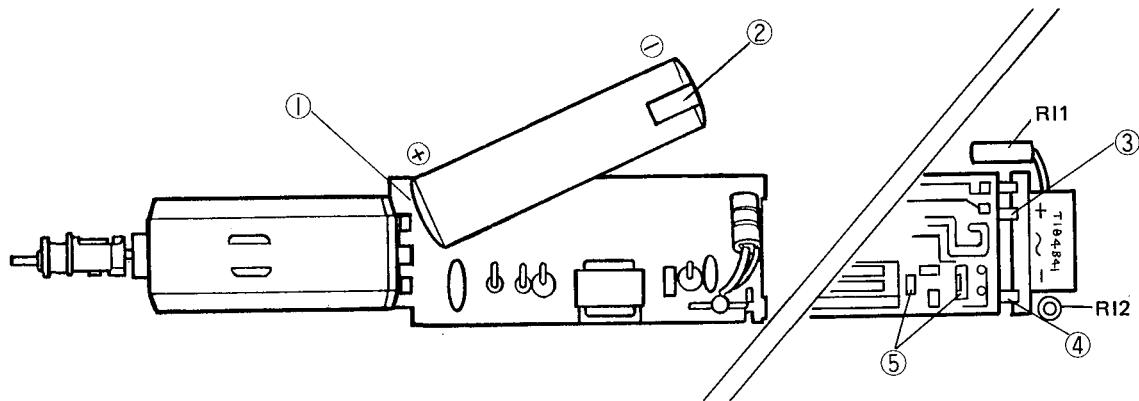
## TROUBLE SHOOTING GUIDE

NOTE: If the switch is in the "on" position when the trimmer is connected to the A.C. source, the trimmer may not operate, in this case, move the switch to the "off" position, wait for approximately 10 seconds, the switch on again.



NOTE 1: If after recharging has been completed the battery voltage is less than 1.1DC or the charge will not last more than 2 to 3 uses (5 ~ 10min.). Replace the battery.

# INSPECTION METHOD



## [1] Cord

The current should run the length of the cord between the plug blades and the contacts of connectors (terminal plug in holes).

## [2] Motor

The motor should turn when 1.2V DC is applied to terminals.

## [3] Rechargeable Battery

Unsolder the chassis at the  $\ominus$  terminal of the rechargeable battery and inspect.

The voltage should be at least 1.2V DC at terminals ① and ②. If even after charging the voltage is less than 1.1V DC or if there is leakage, the battery is defective. After charging, if the voltage is 1.2V DC or more, but the trimmer can be used only a few minutes, the battery is defective.

## [4] Protective Resistor and Rectifier

There should be 100 ~ 240V DC at ③ and ④ when the power cord is connected and 100 ~ 240V AC are applied to the two terminal pins. When the voltage does not completely reach this level, unplug the power cord and inspect the two protective resistors. They should each read  $68\Omega$ . If the protective resistors are defective, change the module after confirming that the motor and the battery are not defective. When the voltage is not correct, and the protective resistors check out good, then the rectifier is defective.

## [5] Module and Charging Current

Plug in the power cord to a 100 ~ 240V AC power supply and to the terminal pins.

There should be approximately 90 ~ 140mA between test points ② and ⑤. The led should be lit.

In case the LED is not lighted check the LED.

## [6] Housing A

Check to see if the metal parts of the housing are damaged.

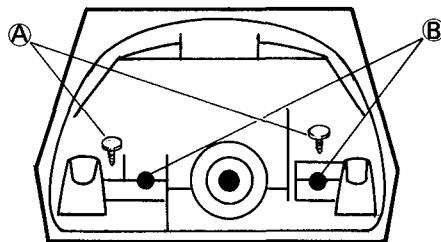
## [7] Switch

Confirm that the contact spring in housing B make contact with module. Adjust and clean if necessary.

## DISASSEMBLY METHOD

### Disassembly procedure

1. Remove the attachment and blade block.
2. Remove the two housing screws **A**.
3. To Disassemble housing.  
Insert the slotted screwdriver about 1/4" (2cm) into the body at points **B**.



## ASSEMBLY METHOD

1. Place the module, motor block, adjusting dial spring and adjusting dial into housing A.  
After replacing the adjusting dial, turn it forward until stops.
2. Replace cutter holddown spring, switch plate and switch handle into housing B.
3. Place the indicator shaft in the guides in housing B. Position indicator to number 5.
4. Join housing A with housing B.
5. Replace housing screws and blade block.

