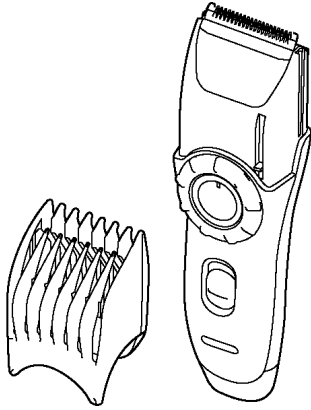


# Service Manual

AC/Rechargeable Beard/Hair Trimmer

ER217-E2



## SPECIFICATIONS

Power source	230V AC, 50Hz
Motor voltage	1.2V DC
Power consumption	4W
Charging time	Standard 8 hours
Rated usable time with full-charging	50 minutes
Weight	180g
Standard accessories	Comb attachment
	Soft case
	Oil
	Cleaning brush

### **⚠ 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.

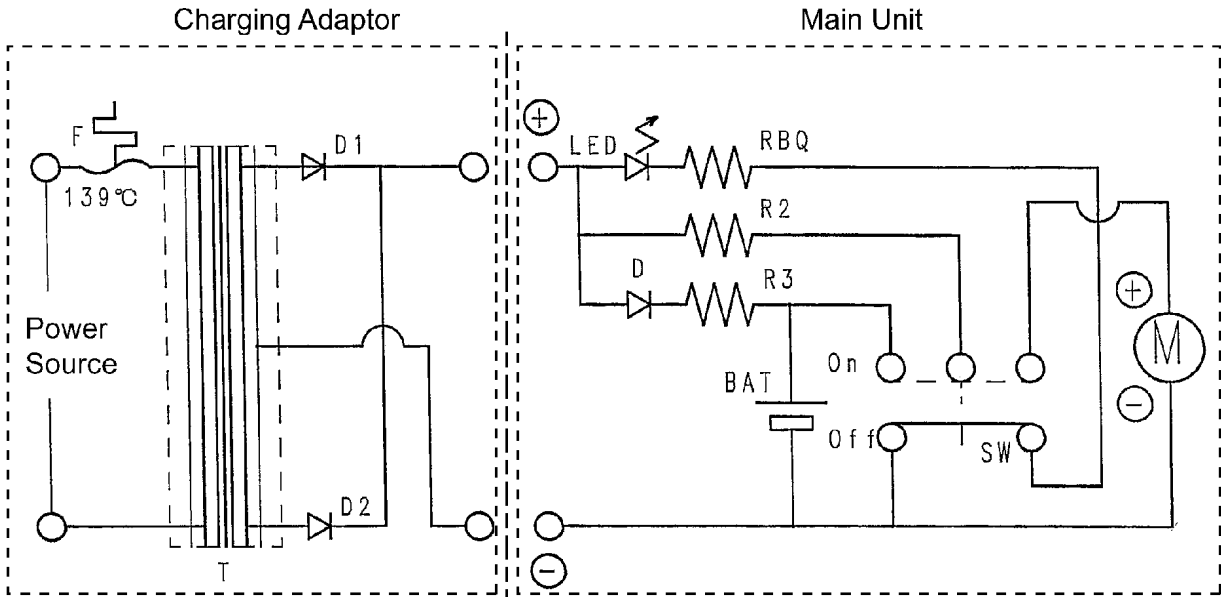
## CONTENTS

	Page		Page
1 SCHEMATIC DIAGRAM .....	2	5 TROUBLESHOOTING GUIDE .....	7
2 WIRING CONNECTION DIAGRAM .....	2	6 EXPLODED VIEW .....	8
3 DISASSEMBLY INSTRUCTIONS .....	3	7 REPLACEMENT PARTS LIST .....	9
4 ASSEMBLY INSTRUCTIONS .....	5		

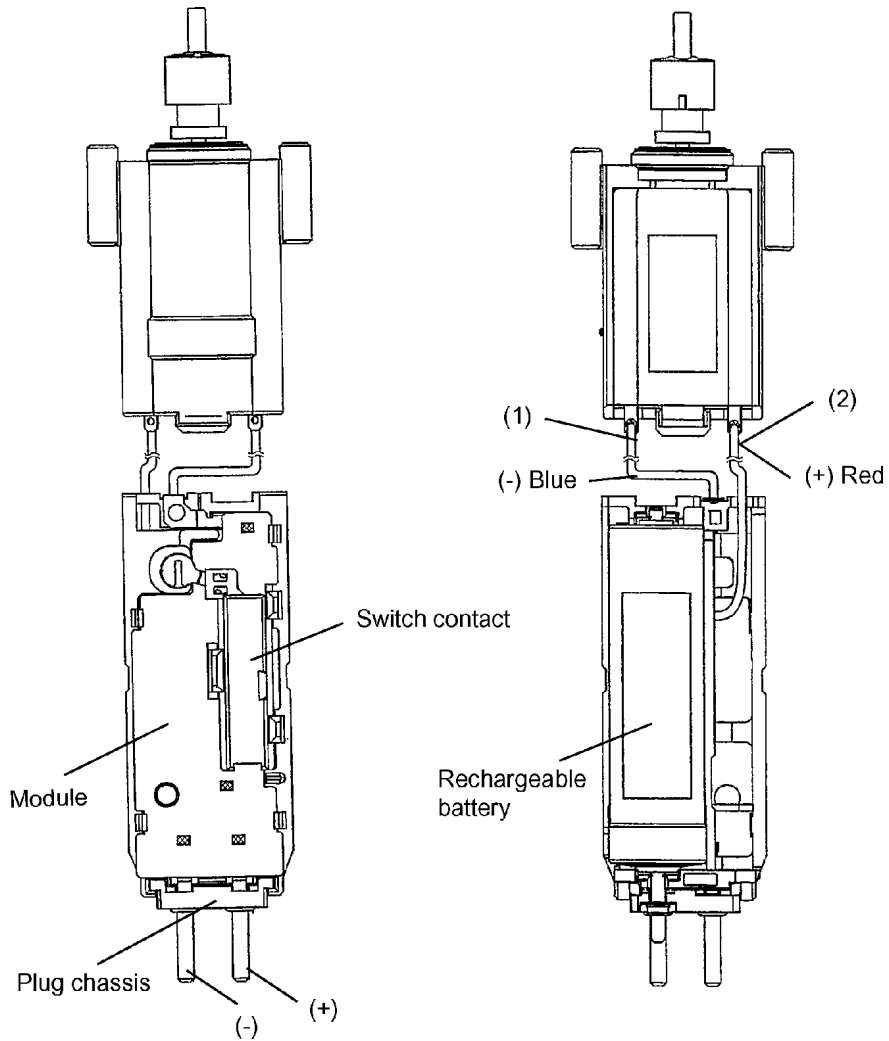
# Panasonic

© 2006 Matsushita Electric Works, Ltd. All rights reserved. Unauthorized copying and distribution is a violation of law.

# 1 SCHEMATIC DIAGRAM



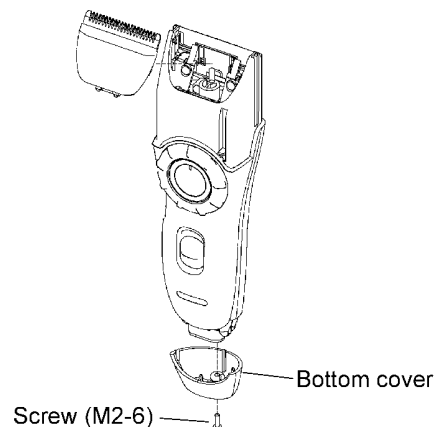
# 2 WIRING CONNECTION DIAGRAM



### 3 DISASSEMBLY INSTRUCTIONS

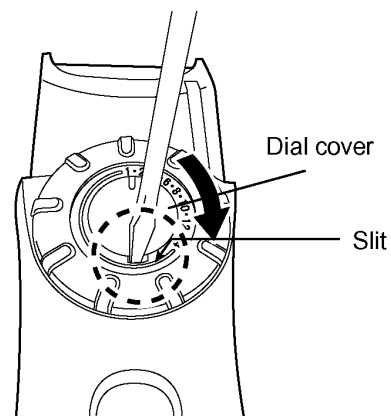
Follow the procedure below to disassemble the main body.

1. Remove the attachment and blade.
2. Loosen a screw and remove the bottom cover.

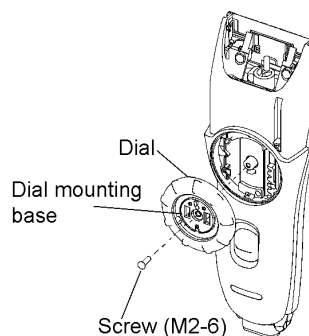


3. Insert a slotted-head screw driver (less than 2.4mm width on top) into the slit of dial cover and raise it with the driver.

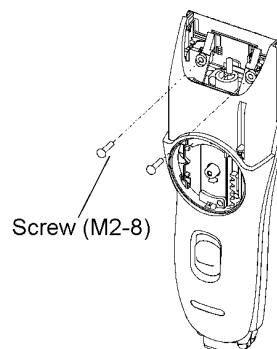
**NOTE: Make sure there is NO scratch or damage on the parts.**



4. Loosen a screw and take out the dial mounting base, the trimming length indicator ring with the dial.



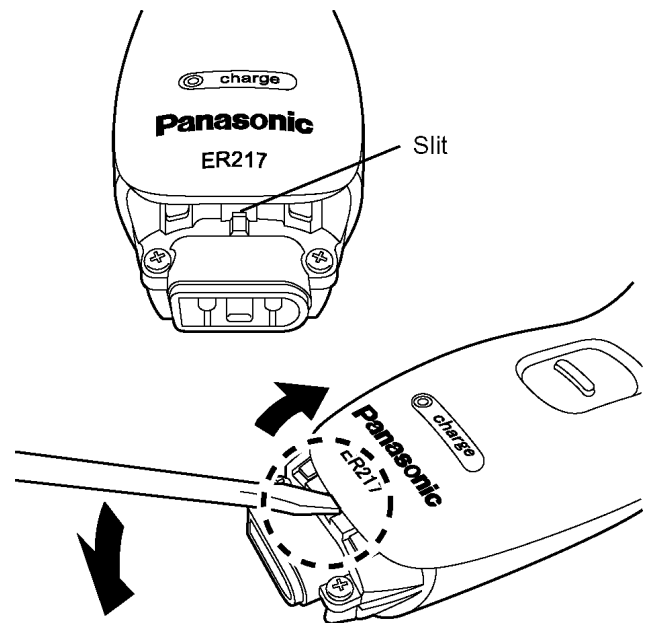
5. Loosen two screws tightening the blade spring.



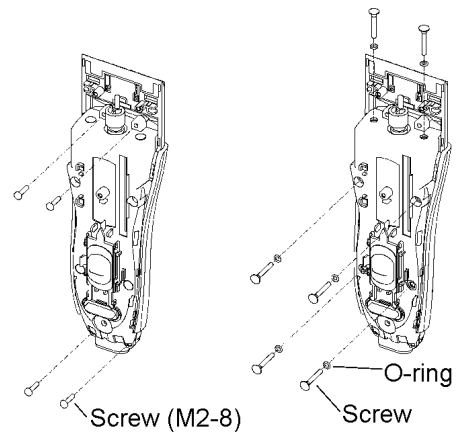
6. To separate the housing C and B, insert a slotted-head screw driver into the slit of housing.

Raise the housing C with the driver slightly and open the housings with hand slowly.

**NOTE:** In case of the housings can not be opened, insert the driver further (depth to the lamp cover).

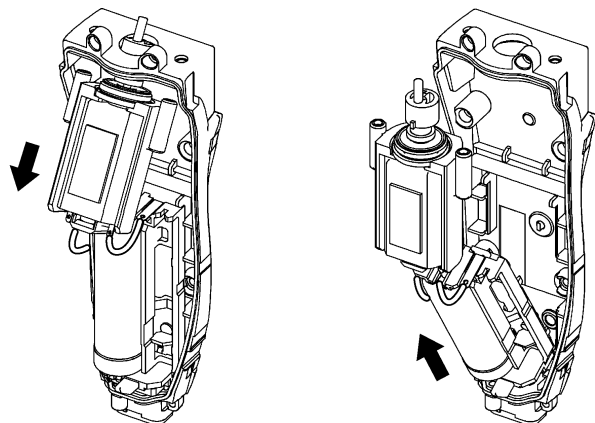


7. Loosen two screws on both top and bottom of housing A. And remove the housing A after losing six screws.



8. Take out the motor, module and battery assembly from housing A.

9. Take out the rechargeable battery from the battery holder and the motor from the motor holder.

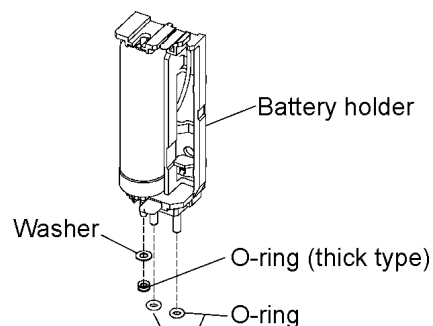


## 4 ASSEMBLY INSTRUCTIONS

1. Insert the rechargeable battery into the battery holder.

**NOTE: Make sure to attach the washer and O-ring to the battery terminal. The O-ring for the battery terminal is the thickest. Confirm if the O-ring is attached properly.**

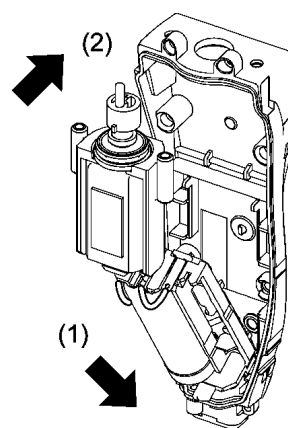
- battery terminal: washer X 1 and o-ring X 1
- terminal pins: o-ring X 1



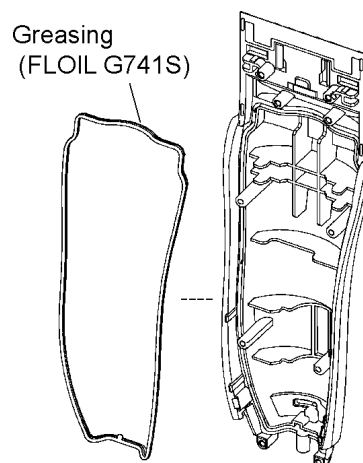
2. Set motor, module and battery assembly to the housing A. Insert from the battery terminal side first and then place the motor holder.

**NOTE: Make sure that two motor lead wires are set within the space between the battery holder and the motor holder to prevent pinching.**

**NOTE: Make sure to attach the switch cam with the lowest position.**



3. Attach the housing O-ring to the housing B.

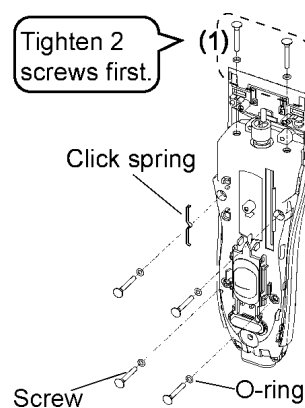


4. Set the housing A onto the housing B with tightening ten screws starting from the upper face of housing A first.

**NOTE: Make sure that six O-rings are set.**

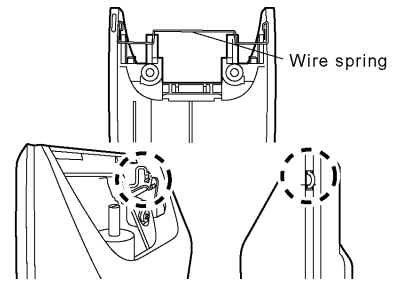
5. Set the click spring on the housing A.

**NOTE: It is available to measure the waterproof tester.**

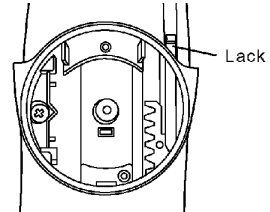


6. Attach the wire spring and the blade springs with the housing C.

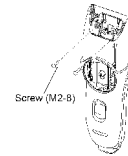
**NOTE: Make sure to set the wire spring properly.**



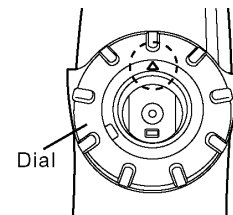
7. Attach the lack to the housing C with the lowest position.



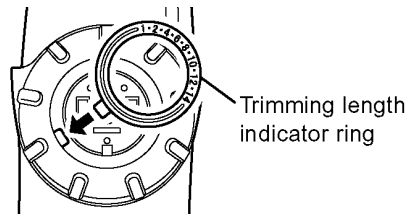
8. Set the housing C firmly and tighten two screws.



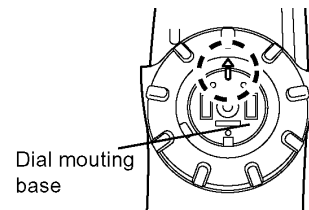
9. Place the dial with setting the triangle mark on top.



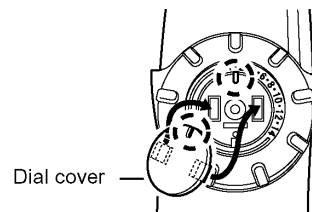
10. Place the trimming length indicator ring with inserting the projection into the groove of the dial.



11. Set the dial mounting base aligning the projection with the triangle mark on dial and tighten a screw.



12. Place the dial cover.



13. Attach the bottom cover with a screw.

# 5 TROUBLESHOOTING GUIDE

(Refer to WIRING CONNECTION DIAGRAM)

<TROUBLE>	<CHECK>	<REMEDY>
Does not operate.	<p>(Connect adaptor and charge for 10 seconds. Confirm if the switch turn ON.)</p> <p>&lt;CHECK ADAPTOR.&gt; Supply the rated voltage to the adaptor. OK if it is more than DC 1.8V between the terminals of the plug.</p>	NO → Replace adaptor.
	↓ OK	
	<p>&lt;CHECK SWITCH.&gt; Replace the battery. If there is continuity between (1) and (2) with switching ON, the switch is normal. (See Fig. 1.)</p>	NO → Replace the switch terminal plate.
	↓ OK	
	<p>&lt;CHECK MOTOR.&gt; The motor should turn when 1.2V DC is applied to terminals.</p>	NO → Replace the motor.
	↓ OK	
	<p>&lt;CHECK RECHARGEABLE BATTERY.&gt; Okay if the voltage of rechargeable battery is more than approximately 1.2V DC between (+) and (-) terminals.</p>	NO → Replace rechargeable battery.
	↓ OK	
	<p>&lt;CHECK MODULE.&gt; Replace the battery and set the switch ON. Connect the adaptor with the plug chassis and supply the rated voltage. OK if it is more than DC 1.2V between (1) and (2). NOTE: Make sure of the electrical polarity on adaptor.</p>	NO → Replace the module.
Does not charge. Does not light the charge indicator lamp.	<p>&lt;CHECK RECHARGEABLE BATTERY.&gt; Okay if the voltage of rechargeable battery is more than approximately 1.2V DC between (+) and (-) terminals.</p>	NO → Replace rechargeable battery.
	↓ OK	
	<p>&lt;CHECK CHARGING CURRENT.&gt; Replace the battery and wire the module &amp; battery assembly referring with the figure 2. Check charging current, if it is more than 75mA when connecting AC power source with switch OFF.</p>	OK → Replace module.

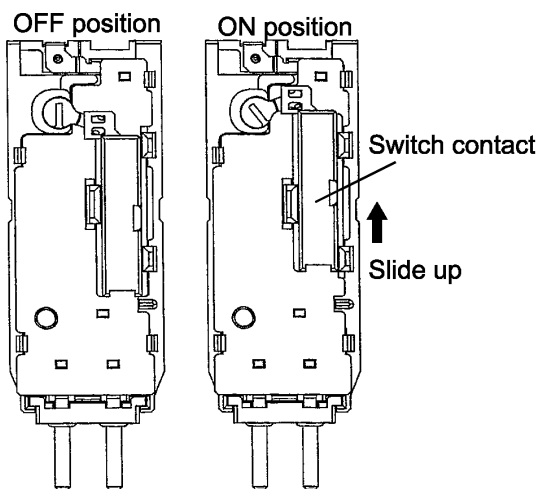


Fig. 1

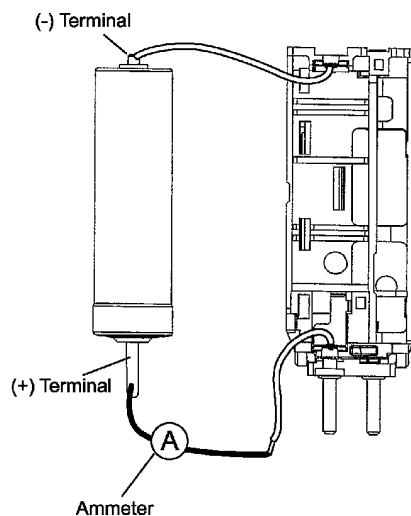
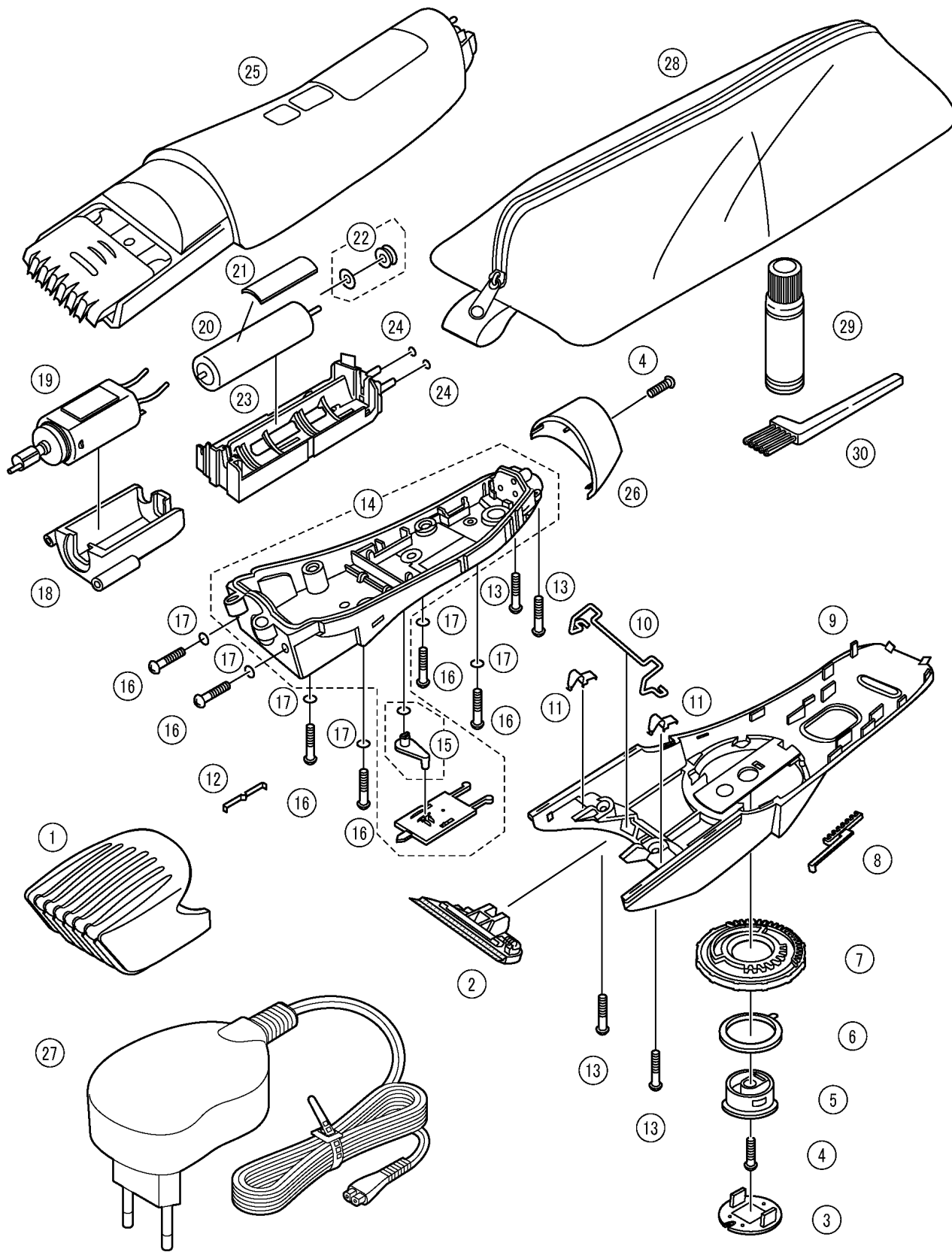


Fig. 2

# 6 EXPLODED VIEW





# 7 REPLACEMENT PARTS LIST

## NOTE :

\*A=available as an optional accessory

\*B=only available as set

\*C=available individually

Ref.No.	Part No.	Part Name & Descriptions	Remarks			Per Unit
1	WER217K7457	COMB ATTACHMENT			(BG)	1
2	WER9602Y	BLADE BLOCK				1
3	WER217S3107	DIAL COVER			(BG)	1
4	WES7023L9008	TAPPING SCREW	*C	M2-6	(BG)	2
5	WER217D1477	DIAL MOUNTING BASE			(BG)	1
6	WER217K3338	TRIMMING LENGTH INDICATOR RING			(BG)	1
7	WER217H3288	DIAL			(BG)	1
8	WER223L0287	RACK			(BG)	1
9	WER217S3028	HOUSING C			(BG)	1
10	WER217L0207	WIRE SPRING			(BG)	1
11	WES504L0167	SPRING FOR CUTTER	*B	(2PCS/PK)	(BG)	2
12	WER221L1578	CLICK SPRING			(BG)	1
13	WES631W6057	TAPPING SCREW	*C	K2-8	(BG)	6
14	WER217H3058	HOUSING A			(BG)	1
15	WER217L1678	SWITCH CAM			(BG)	1
16	WES7025L9707	SCREW	*C		(BG)	6
17	WER217L0967	O-RING	*B	(6PCS/PK)	(BG)	6
18	WER217L3577	MOTOR HOLDER			(BG)	1
19	WER217L1008	MOTOR			(BG)	1
20	WER217L2508	RECHARGEABLE BATTERY		NI-MH TYPE	(BG)	1
21	WER217L0318	CUSHION	*B	(2PCS/PK)	(BG)	1
22	WES7025L0977	O-RING AND WASHER	*B	(2PCS/PK)	(BG)	1
23	WER217L2109	MODULE ASSEMBLY			(BG)	1
24	WER217L0977	O-RING	*B	(2PCS/PK)	(BG)	2
25	WER217H3069	HOUSING B			(BG)	1
26	WER217H3849	BOTTOM COVER			(BG)	1
27	WER217K7664	ADAPTOR		C-2 PLUG	(BG)	1
28	WER217K7007	SOFT CASE			(BG)	1
29	WER203X7918	OIL				1
30	WES76806761	CLEANING BRUSH				1
-	WER217S8009	INDIVIDUAL BOX			(BG)	1
-	WER217S8109	OPERATING INSTRUCTIONS			(BG)	1