

Service Manual

Rechargeable Shaver

Model No. **ES8253**

ES8259

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 ⚠ 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; Typically the melting point is 50 - 70°F (30 - 40°C) higher. Please use a 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

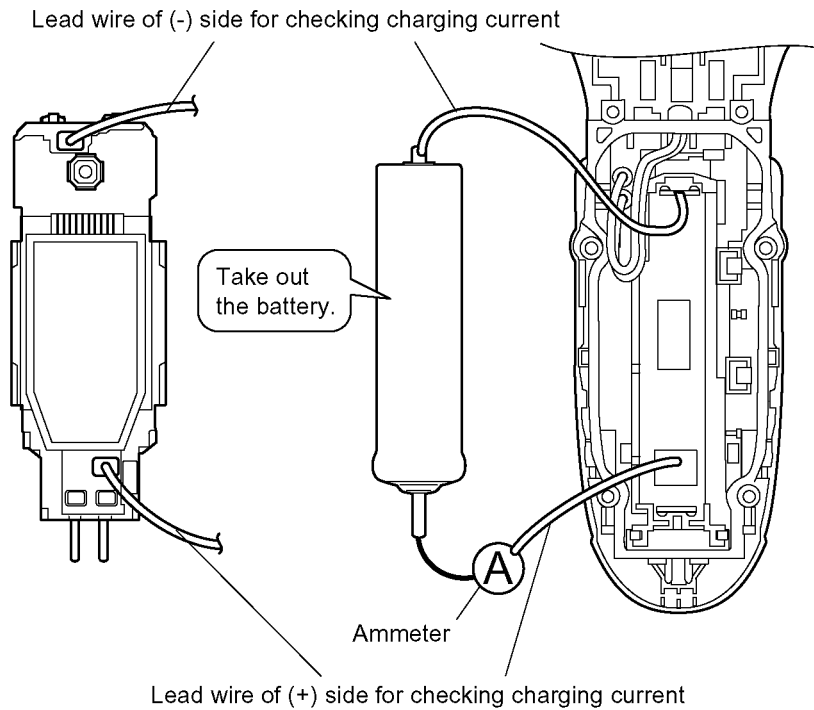
Power source	AC 100-240V, 50-60Hz (Automatic voltage conversion)
Power consumption	Approx. 6W (when charging)
Charging time	1 Hour
Shaves per charge	14 times (3 minutes shave)
Measurement	(H)15.7 x (W)6.1 x (D)4.6 cm
Weight	180g

Supplied accessories	Self-cleaning recharger (ES8259 only)
	Semi-Hard case
	Soft case
	Oil
	Cleaning brush

3 Troubleshooting Guide

3.1. Main unit and charging adaptor

<TROUBLE>	<CHECK>	<REMEDY>
Motor does not rotate. Does not charge. Functions for a moment and stops.	<CHECK CHARGING ADAPTOR.> Supply the rated voltage to the adaptor. And confirm the continuity. OK if it is approx. DC6V between the terminals of the plug at the no-load operation.	NO → Replace charging adaptor.
↓ OK		
	<CHECK RECHARGEABLE BATTERY.> Okay if the voltage of rechargeable battery is more than approximately 3.6V DC between (+) and (-) terminal.	NO → Replace rechargeable battery.
↓ OK		
	<CHECK MODULE.> Wire the main unit returned from a customer refer with the following figure, and connect the rated voltage to it by the normal adaptor. When switching ON and OFF, check if motor rotates and the indicator of LCD is lid. Discharge the battery completely and check charging current, if it is more than 600mA when connecting AC power source.	NO → Check the soldering points. ↓ OK Replace module. ↓ OK Replace linear motor assembly.



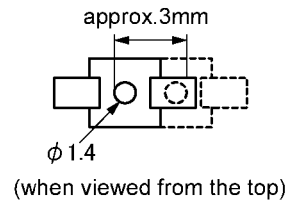
NOTE: Once taking the battery out, the shaver is RESET. The shaver must be charged for several seconds first.

NOTE: Completely discharge and then fully charge before returning the shaver to the customer.

<TROUBLE> Noise is too loud. Amplitude is too small.	<CHECK> → Check if there any deformation with the outer foil.	NO → Replace outer foil or oiling a drop on the foil.
	↓ OK	
	<CHECK DRIVING BARS.> → Check if there is any deformation with trimmer driving bar, slit blade driving bar and finishing blade driving bar or these are set firmly.	NO → Replace trimmer driving bar, slit blade driving bar or finishing blade driving bar.
↓ OK		
<CHECK DRIVING HEAD AMPLITUDE.> → Turn the switch ON, and measure the amplitude by checking a pin of driving head. (See the figure shown below.)	NO → Replace linear motor assembly or module.	



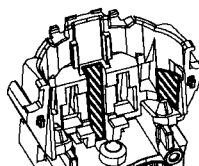
OK



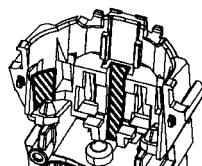
<CHECK TREMBLE LINEAR MOTOR.> → Confirm 4 screws (M2-12 X 2 screws and M2-8 X 2 screws) whether they are tightened firmly and no tremble on the driving head or suspension.	NO → Re-tighten screws.
↓ OK	
<CHECK TREMBLE LINEAR MOTOR.> → Check the wear condition in each part, Housing A, Linear motor assembly or Float springs.	NO → Replace housing A or float springs.

Does not move pivot action selector or does not float the head smoothly.

<CHECK FLOAT SUSPENSION.> → Confirm if the float springs are assembled properly. Confirm if the beard chips collect around the linear motor assembly. Confirm if the grease still remains on Housing A and B where contacting with the linear motor assembly.	NO → Repair float springs or clean. Apply the grease (FLOIL G741) the area marked the diagonal lines on Housing A and B.
---	---



<Housing A>

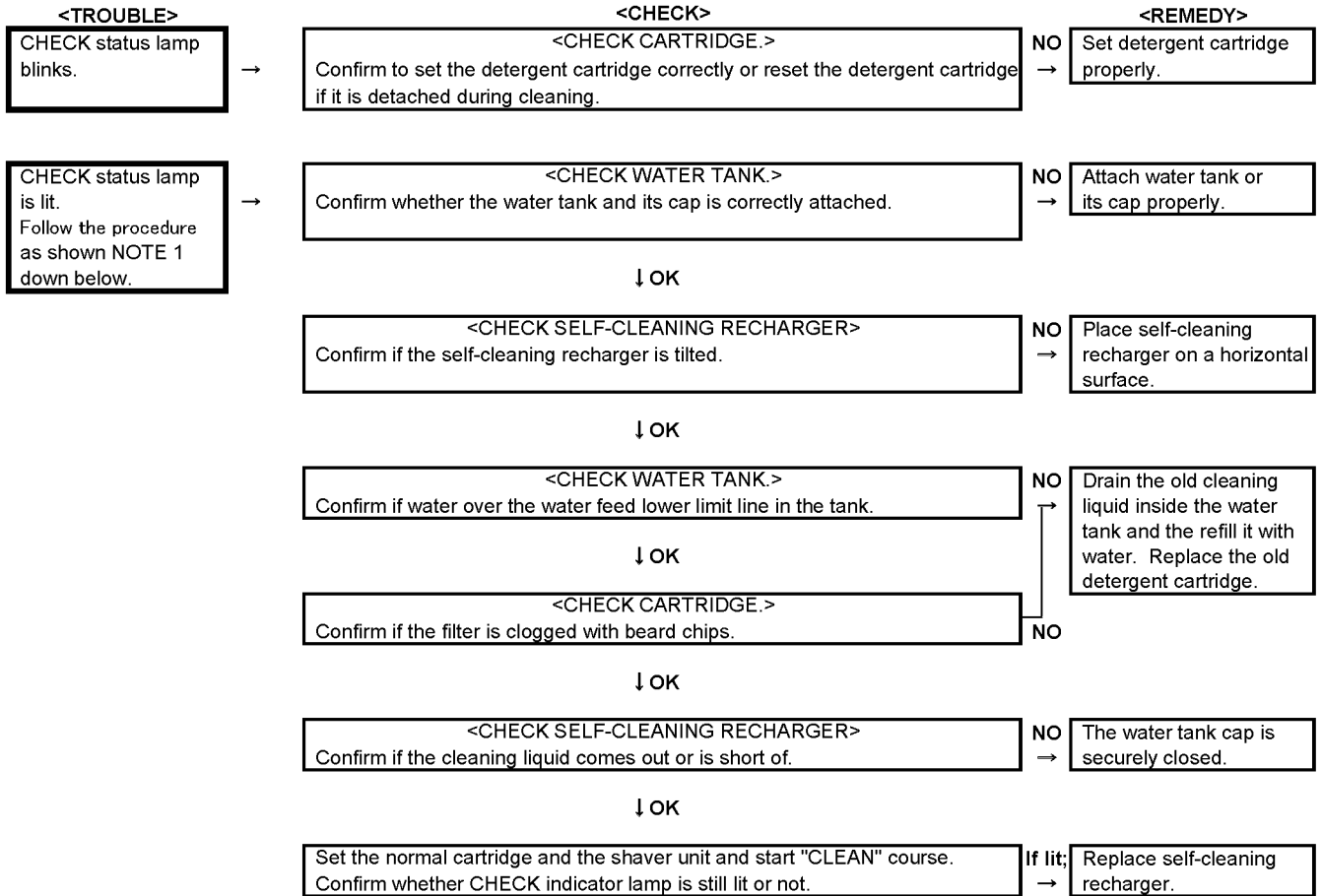


<Housing B>

Shaver head does not fix even changing pivot action selector.

<CHECK PIVOT ACTION SELECTOR.> → Confirm the smooth movement of the lock lever shaft after removing the rear panel.	NO → Confirm the deformation of lock lever shaft. Replace linear motor assembly.
↓ OK	
<CHECK PIVOT ACTION SELECTOR.> → Confirm the action selector fixture is set properly after assembling the rear panel. Confirm both lock lever shaft and pivot action selector handle are set on LOCK position.	NO → Replace rear panel.

3.2. Self-cleaning recharger (ES8259 only)



NOTE 1: Hold down the SELECT button for approximately two seconds to extinguish the CHECK indicator lamp.

The course will be aborted if the power is cut off during cleaning.

(Phenomenon)

The cleaning liquid remains the tray even the course is completed normally.

(Action)

Try to re-operate the course once again to exhaust the cleaning liquid on the cartridge tray.

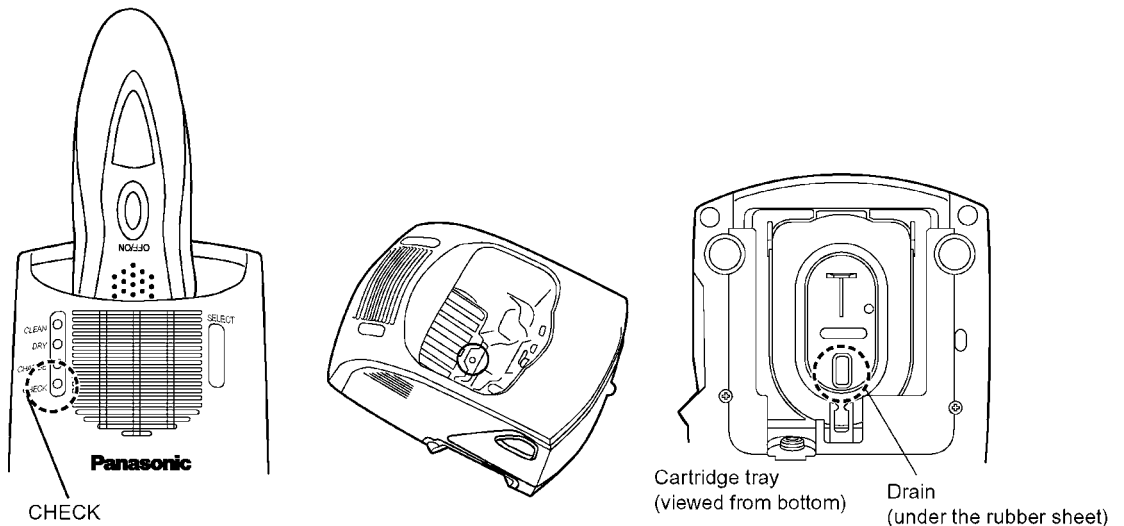
Too much cleaning liquid remains the tray.

(Phenomenon)

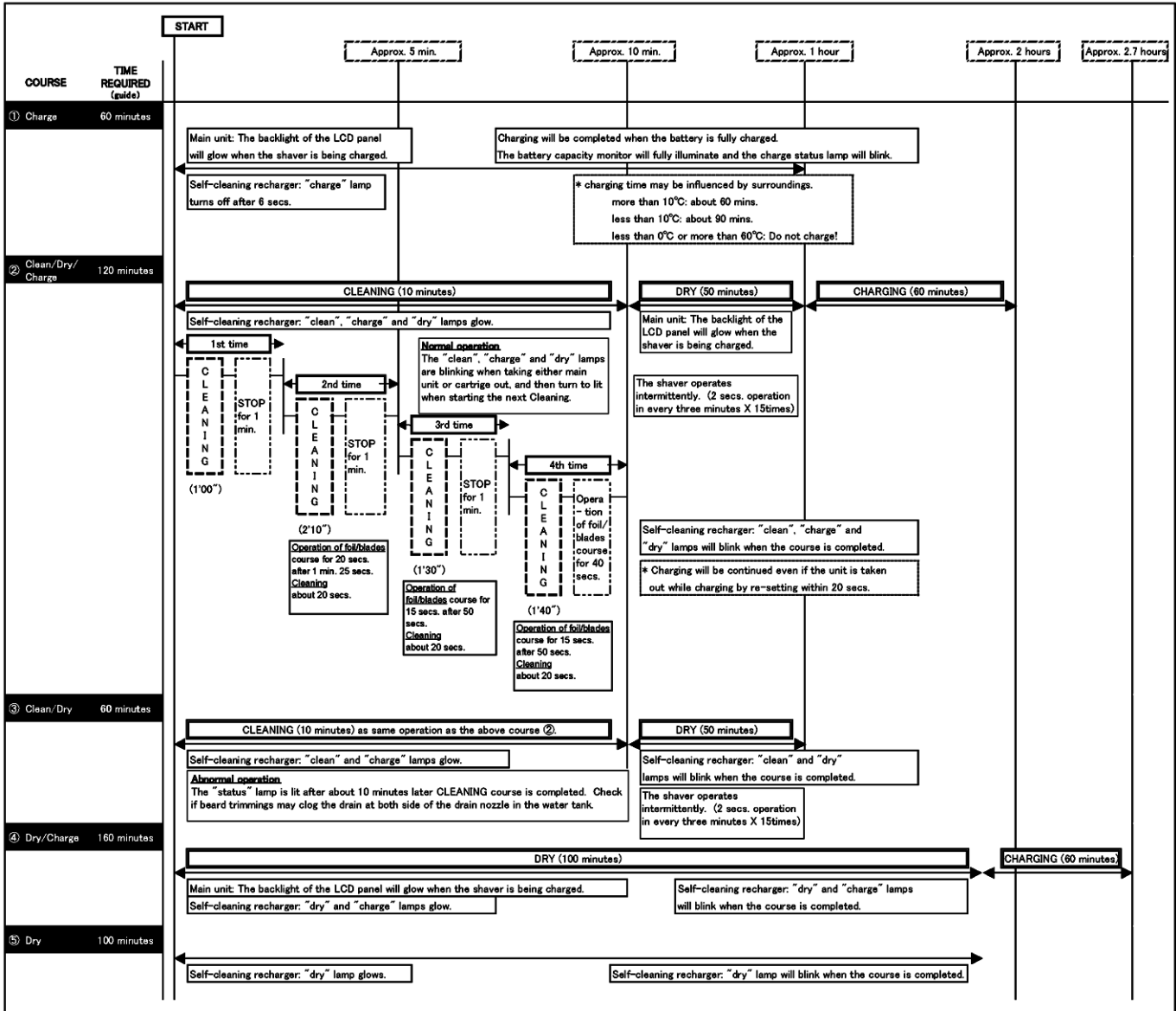
The cleaning liquid remains the tray even the course is completed normally.

(Action)

Clean the drain holes as pointed with the circule down below.



3.3. OPERATION OF SELF-CLEANING RECHARGER (ES8259 only)



NOTE: When the shaver is set on the self-cleaning recharger, ① "Charge" course is selected automatically. Press the select button within six seconds to choose a difference course starting from ①⇒②⇒③⇒④⇒⑤⇒①.....

Course	Course selection indications				Changeable course halfway through	Course completion summary				Time required (guide) [In the low temperature]
	On recharger			On shaver		On recharger			Backlight	
	clean	dry	charge			clean	dry	charge		
① Charge	○	○	●*	②③④⑤	▶	○	○	○	Blinks	1 hour
② Clean/Dry/Charge	●	●	○	③	▶	☀	☀	○	Blinks	2 hours [+30 min]
③ Clean/Dry	●	●	○	②	▶	☀	☀	○	—	1 hour [+30min]
④ Dry/Charge	○	●	●	②③⑤	▶	○	☀	○	Blinks	2 h 40 min
⑤ Dry	○	●	○	②③④	▶	○	☀	○	—	1 h 40 min

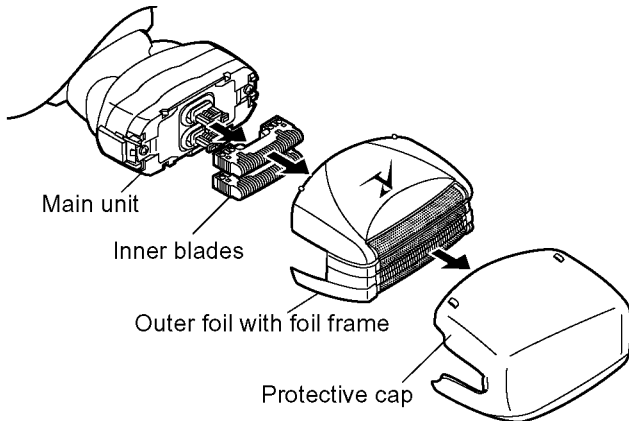
*The lamp goes out in 6 seconds.

4 Disassembly and Assembly Instructions

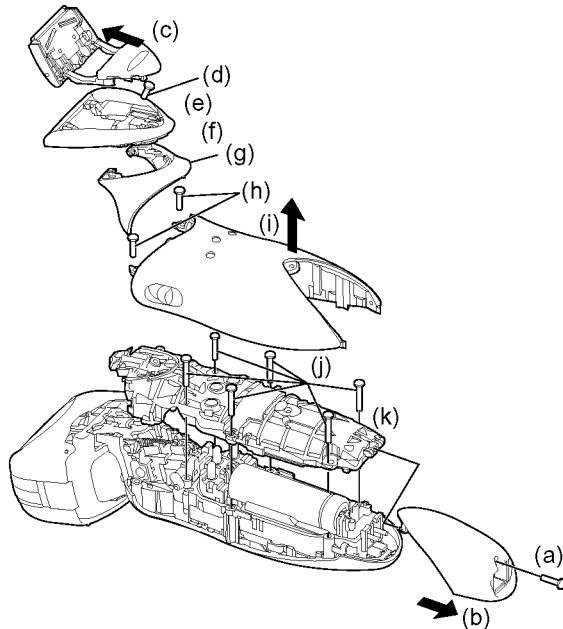
4.1. Disassembly Instructions

Follow the procedure below to disassemble the main unit.

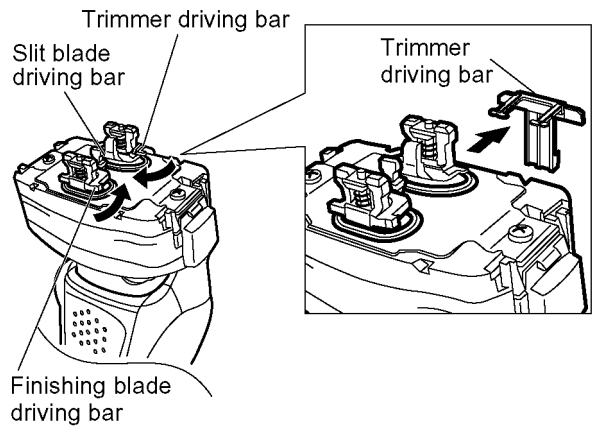
1. Remove the cap, the outer foil and the inner blade.



2. How to disassemble the housing A and B.
 - a. Loosen a screw.
 - b. Remove the bottom cover.
 - c. Slide the trimmer handle up.
 - d. Loosen a screw.
 - e. Slide the trimmer handle down.
 - f. Remove the trimmer sliding downward.
 - g. Remove the upper rear panel.
 - h. Loosen two screws.
 - i. Remove the rear panel.
 - j. Loosen six screws.
 - k. Remove the housing B.



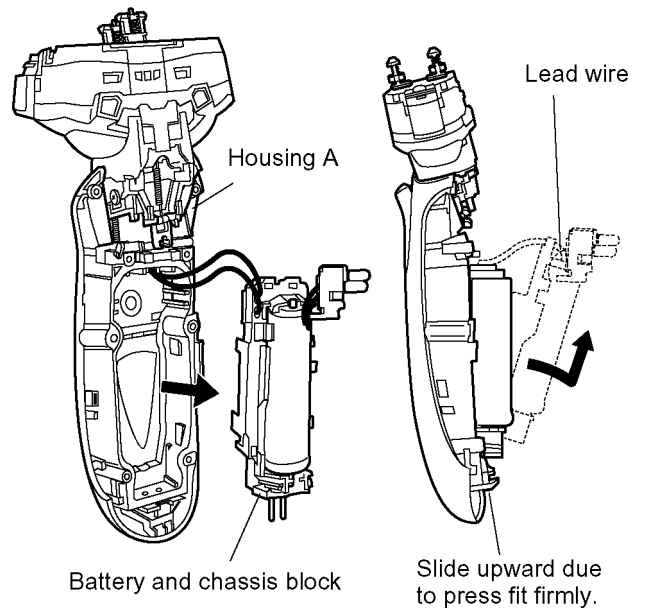
3. To remove the trimmer driving bar or the slit blade driving bar, press bars outward.



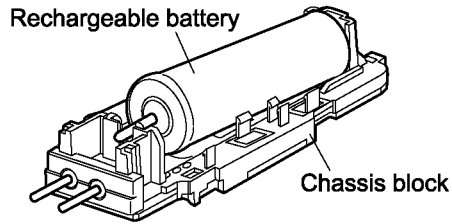
4. Pull up the battery and chassis block from the linear motor side first. Then, slide it upward and take it out from the housing A.

NOTE:

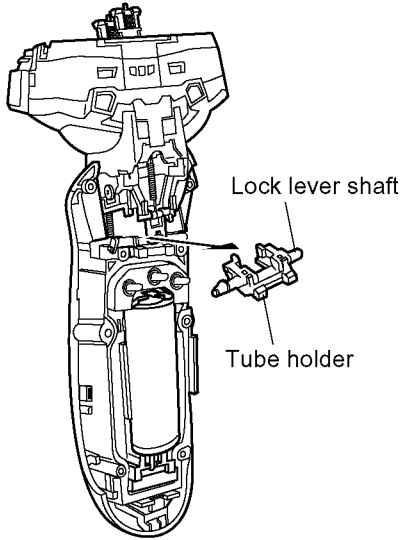
Do not pull the battery and chassis block forcefully due to connecting the linear motor by the lead wires.



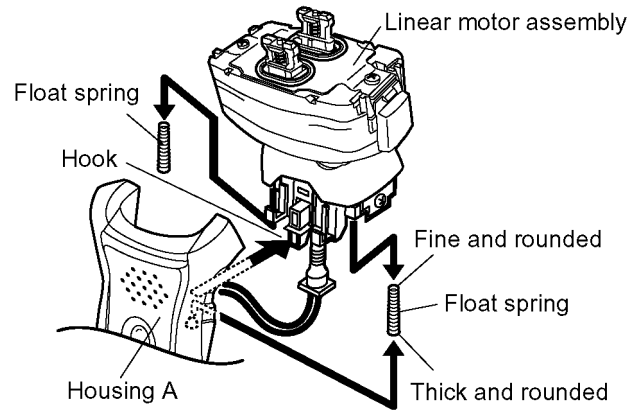
5. Take out the battery from the chassis.



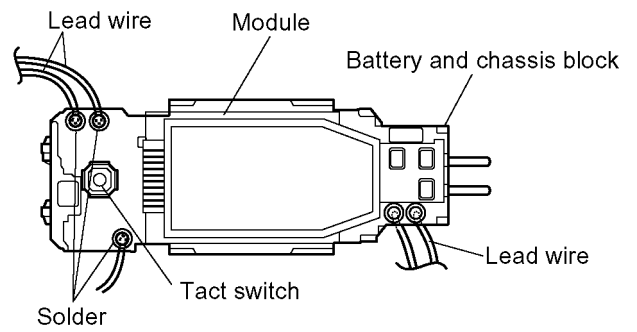
6. Take out the tube holder.



7. Move gently the linear motor assembly down and unhook it and remove the float springs from housing A.



8. Unsolder the lead wires from the module.



4.2. Caution in Assembly

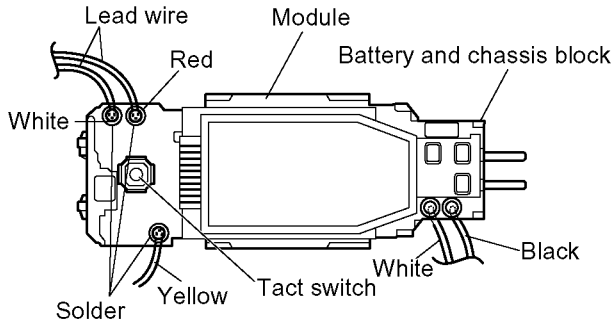
NOTE:

When reassembling, replace the new waterproof seal. Make sure whether there is NO foreign substance sticking around a part covered with waterproof seal.

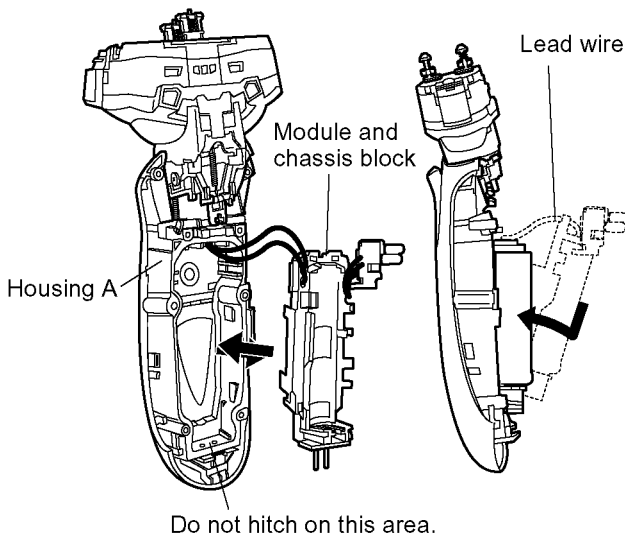
1. Solder the lead wires with the module.

NOTE:

Make sure of the color of lead wires.



2. When inserting the module and chassis block into the housing A, confirm if the module does not get any damage or deformation.



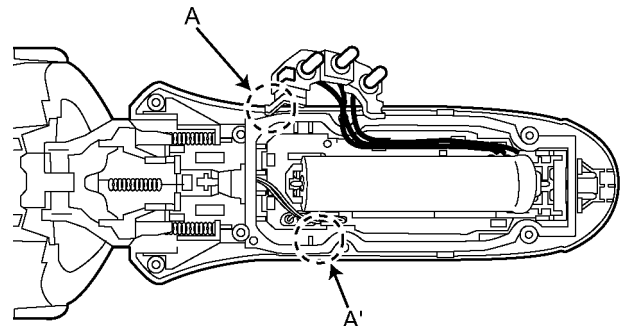
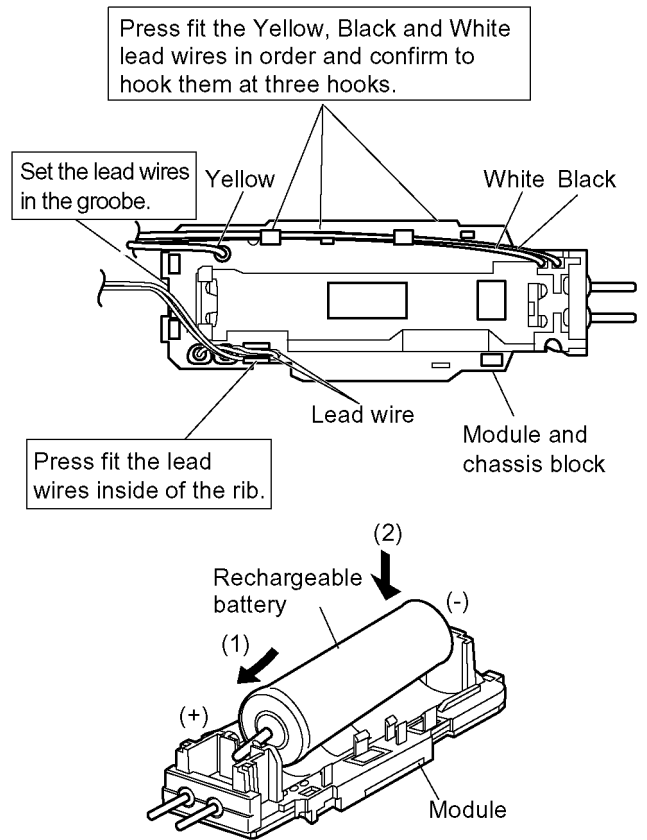
3. Make sure that the lead wires set in position to avoid abnormal noise. Install (+) terminal of battery into the terminal plate at the bottom cover side and firmly set the battery sliding the direction of arrow. Attach (-) terminal of battery.

NOTE:

Once taking the battery out, the shaver is RESET. The shaver must be charged for about 10 seconds first.

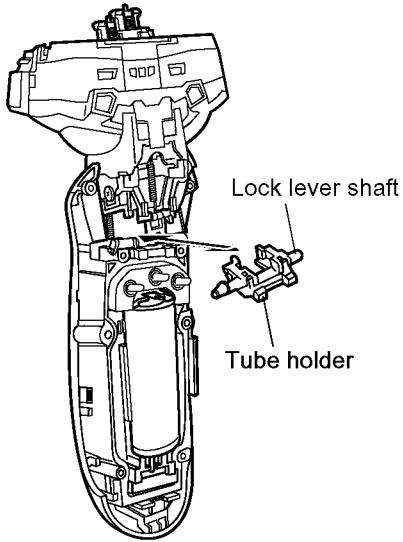
NOTE:

Completely discharge and then fully charge before returning the shaver to the customer.

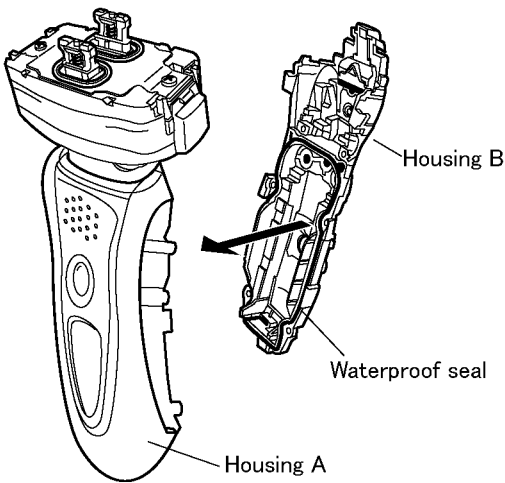


NOTE: The projection A should be set into the place A'

4. Set the linear motor assembly on the housing A and sliding it upward to hook. Confirm that the lead wire tube fits to the housing A firmly and no foreign substance sticking around. Attach the tube holder with the lock lever shaft to housing A with care of the direction.



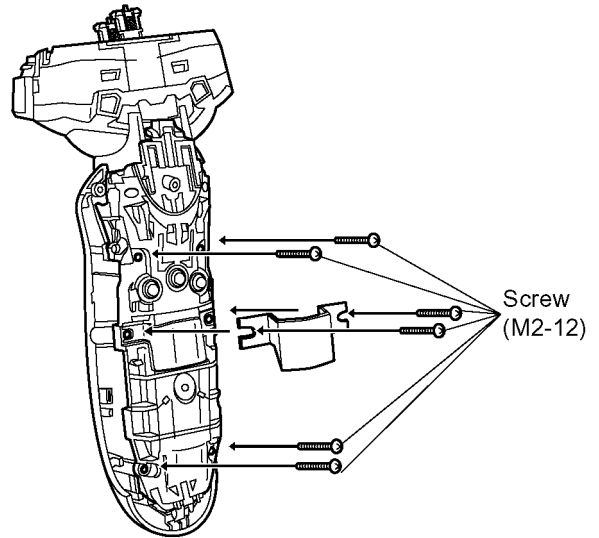
5. When putting the housing A and the housing B together, make sure if the waterproof seal must be fitted properly and no foreign substance sticking around.



6. Tighten six screws.

NOTE:

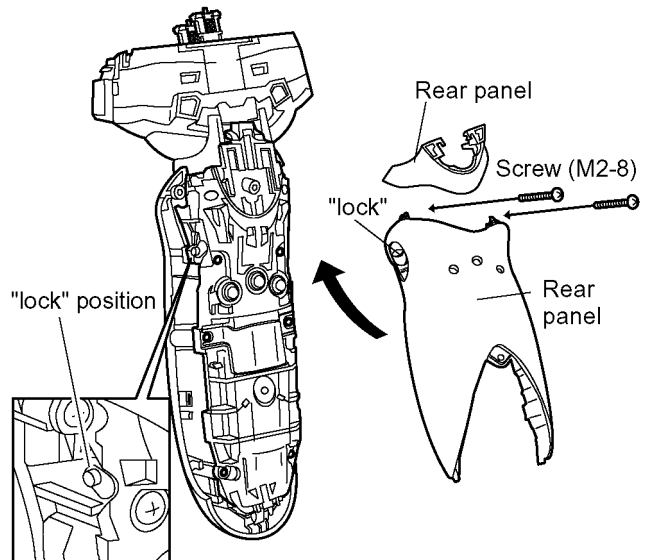
Make sure to attach the connecting plate.



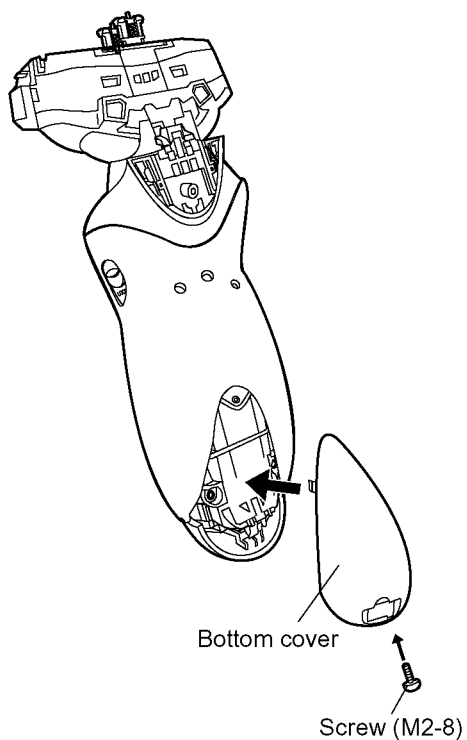
7. Insert two hooks on top of the rear panel into the dent of housing first and attach the rear panel firmly. Set the rear panel with the position "LOCK".

NOTE:

Make sure of the smooth movement of the lock lever shaft.

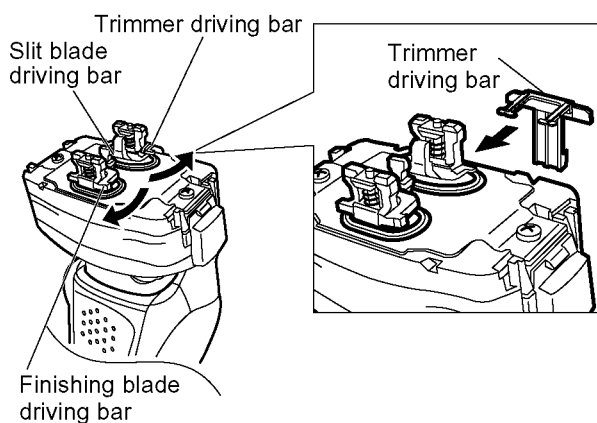


8. Attach the bottom cover and tighten a screw.



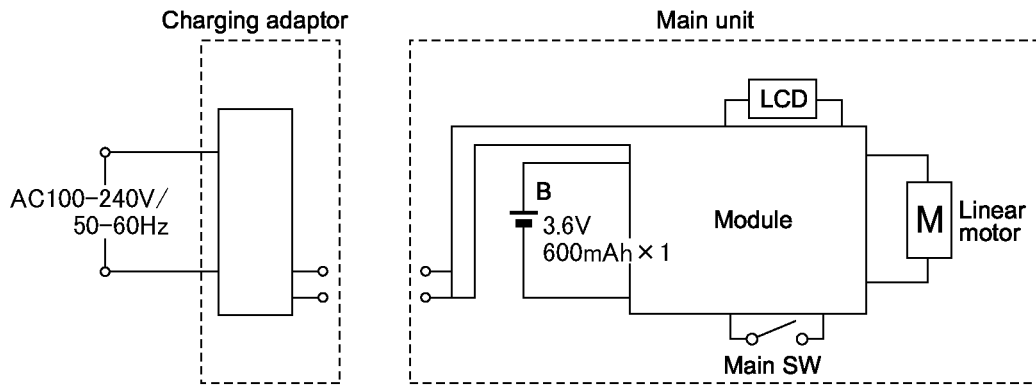
10. Set the trimmer and tighten a screw. If the position is not properly, it makes the deformation of the hook.

9. Set the trimmer driving bar and the slit blade driving bar.

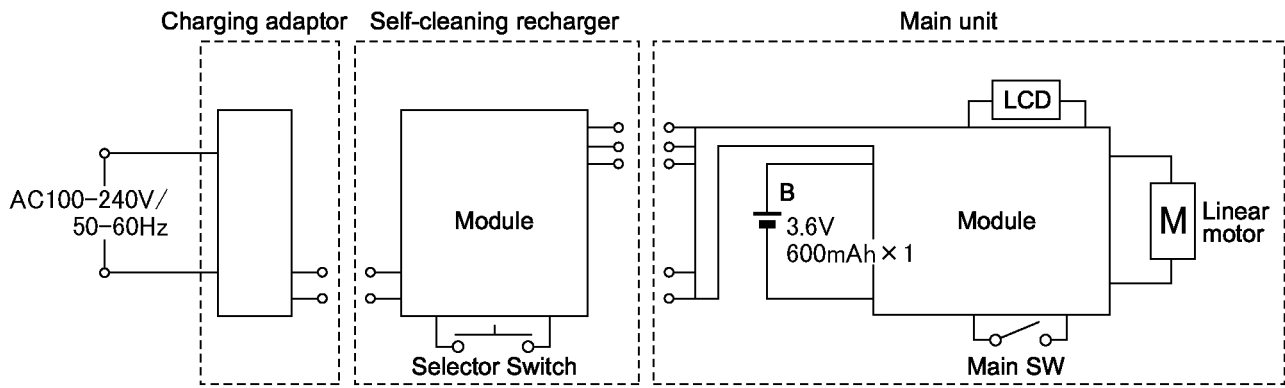


5 Schematic Diagram

5.1. ES8253

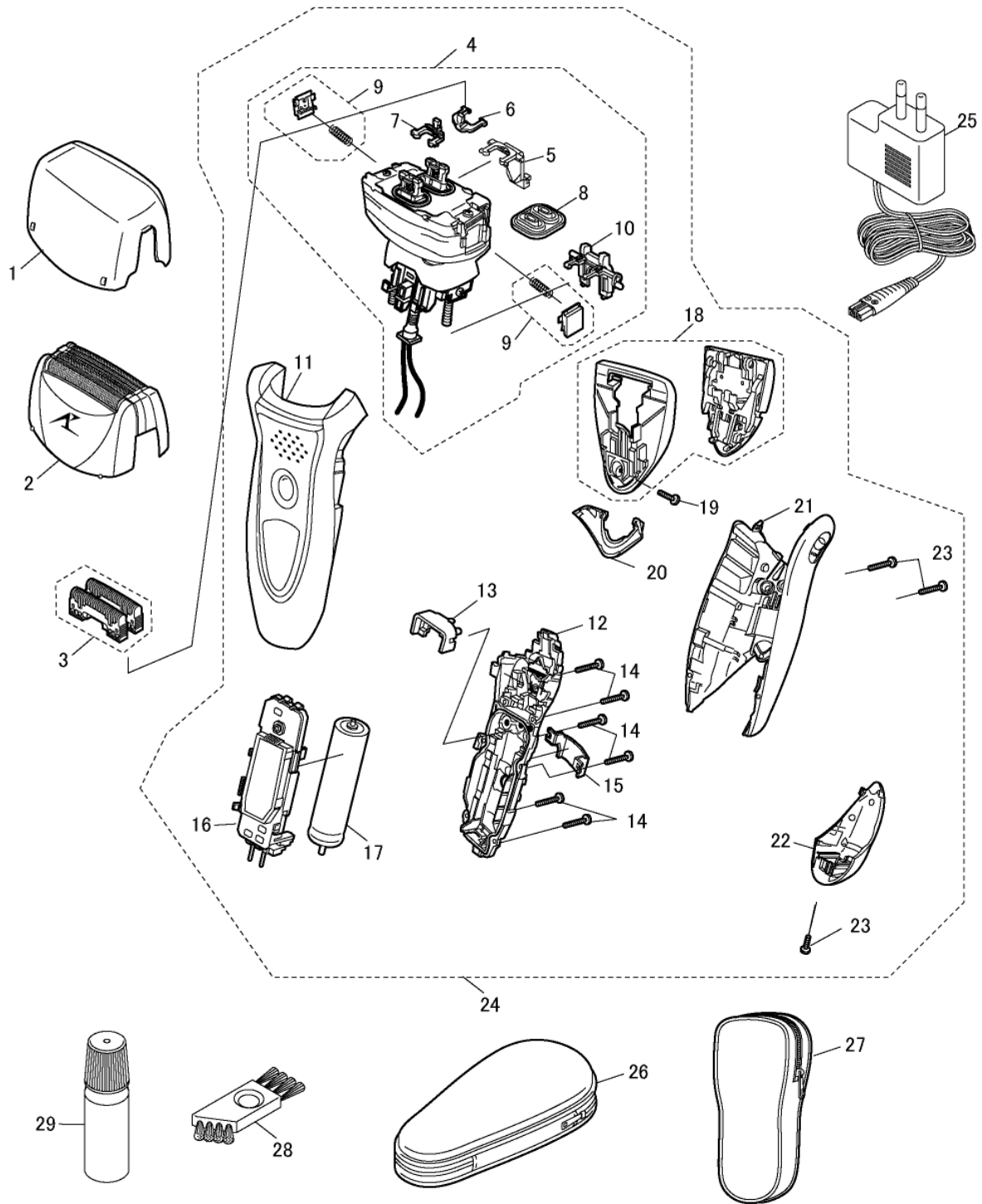


5.2. ES8259



6 Exploded View and Replacement Parts List

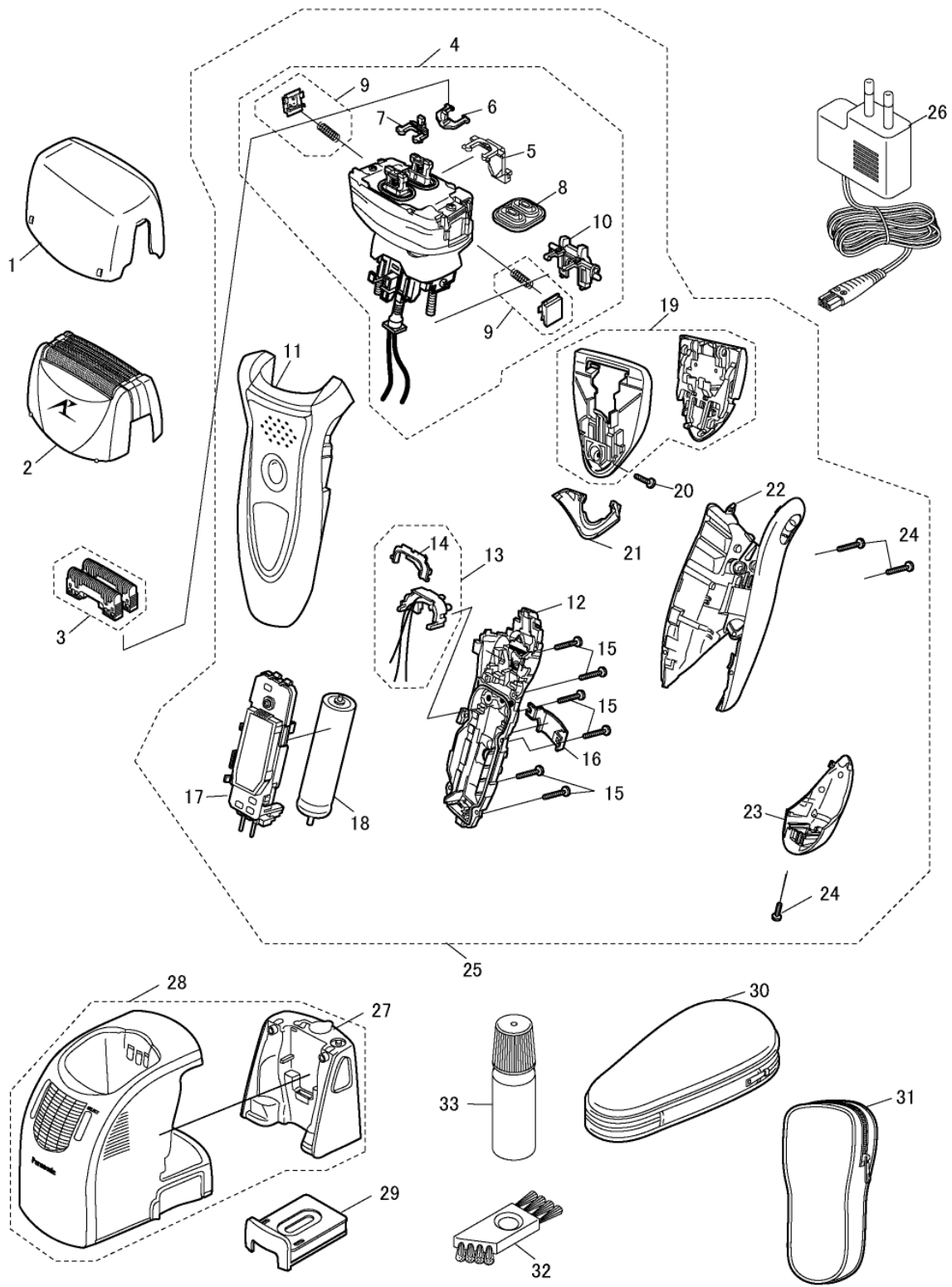
Model No. : ES8253 Exploded View for ES8253



Model No. : ES8253 Parts List

Safety	Ref. No.	Part No.	Part Name & Description	Q'ty	Remarks
ES8253					
	1	WES8259X7158	PROTECTIVE CAP	1	
	2	WES9161E	OUTER FOIL	1	
	3	WES9068E	INNER BLADE	1ST	
	4	WES8258L1007	LINEAR MOTOR ASSEMBLY	1	
	5	WES8258L1087	TRIMMER DRIVING BAR	1	
	6	WES8258L1077	SLIT BLADE DRIVING BAR	1	
	7	WES8258L1177	FINISHING BLADE DRIVING BAR	1	
	8	WES8258L0327	WATERPROOF RUBBER	1	
	9	WES8258K3267	FOIL RELEASE BUTTON	2	(2PCS/PK)
	10	WES8258L0537	TUBE HOLDER	1	
	11	WES8253S3058	HOUSING A	1	
	12	WES8258H3067	HOUSING B	1	
	13	WES8255L0497	REAR COVER	1	
	14	WES8176L6007	P TIGHT SCREW	6	(M2-12)
	15	WES8238L0487	CONNECTING PLATE	1	
	16	WES8253L2128	MODULE	1	
	17	WES8176L2508	RECHARGEABLE BATTERY	1	(LM-ION TYPE)
	18	WES8258S1507	TRIMMER	1	
	19	WES8238L6007	P TIGHT SCREW	1	(M2-6)
	20	WES8258S3857	REAR PANEL (UPPER)	1	
	21	WES8258K3367	REAR PANEL	1	
	22	WES8253S3129	BOTTOM COVER	1	
	23	WES8176L6057	TAPPING SCREW	3	(M2-8)
	24	WES8253S3039	BODY BLOCK	1	
	25	WES8238K7663	CHARGING ADAPTOR	1	(C-2 PLUG)
	25	WES8238K7671	CHARGING ADAPTOR	1	(KS PLUG)
	26	WES8259K7019	SEMI-HARD CASE	1	
	27	WES8259K7018	SOFT CASE	1	(only for KOREA)
	28	WES8093H7057	CLEANING BRUSH	1	
	29	WES8196X7918	OIL	1	
	-	WES8253S8009	INDIVIDUAL BOX	1	
	-	WES8253S8109	OPERATING INSTRUCTIONS	1	

Model No. : ES8259 Exploded View for ES8259



Model No. : ES8259 Parts List

Safety	Ref. No.	Part No.	Part Name & Description	Q'ty	Remarks
ES8259					
	1	WES8259X7158	PROTECTIVE CAP	1	
	2	WES9163E	OUTER FOIL	1	
	3	WES9068E	INNER BLADE	1ST	
	4	WES8259L1007	LINEAR MOTOR ASSEMBLY	1	
	5	WES8258L1087	TRIMMER DRIVING BAR	1	
	6	WES8258L1077	SLIT BLADE DRIVING BAR	1	
	7	WES8258L1177	FINISHING BLADE DRIVING BAR	1	
	8	WES8258L0327	WATERPROOF RUBBER	1	
	9	WES8258K3267	FOIL RELEASE BUTTON	2	(2PCS/PK)
	10	WES8258L0537	TUBE HOLDER	1	
	11	WES8259K3058	HOUSING A	1	
	12	WES8258H3067	HOUSING B	1	
	13	WES8258L0497	TERMINAL BASE	1	
	14	WES8238H0527	TERMINAL COVER	1	
	15	WES8176L6007	P TIGHT SCREW	6	(M2-12)
	16	WES8238L0487	CONNECTING PLATE	1	
	17	WES8259L2127	MODULE	1	
	18	WES8176L2508	RECHARGEABLE BATTERY	1	(LM-ION TYPE)
	19	WES8259K1507	TRIMMER	1	
	20	WES8238L6007	P TIGHT SCREW	1	(M2-6)
	21	WES8259K3857	REAR PANEL (UPPER)	1	
	22	WES8258K3367	REAR PANEL	1	
	23	WES8259K3129	BOTTOM COVER	1	
	24	WES8176L6057	TAPPING SCREW	3	(M2-8)
	25	WES8259K3039	BODY BLOCK	1	
	26	WES8238K7663	CHARGING ADAPTOR	1	(C-2 PLUG)
	26	WES8238K7671	CHARGING ADAPTOR	1	(KS PLUG)
	27	WES8258K7357	WATER TANK	1	
	28	WES8259K4219	SELF-CLEANING RECHARGER	1	
	29	WES035K7778	DETERGENT CARTRIDGE	1	(3PCS/BOX)
	30	WES8259K7019	SEMI-HARD CASE	1	
	31	WES8259K7018	SOFT CASE	1	(only for KOREA)
	32	WES8093H7057	CLEANING BRUSH	1	
	33	WES8196X7918	OIL	1	
	-	WES8259K8009	INDIVIDUAL BOX	1	
	-	WES8259K8109	OPERATING INSTRUCTIONS	1	