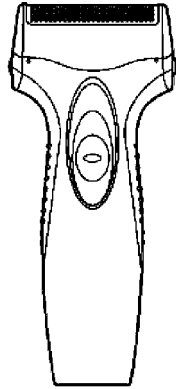


Service Manual

Rechargeable Shaver

Model No. **ES-SA40**

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

	Hong Kong	Taiwan	Korea
Power source	AC220-240V / 50 Hz	AC110V / 50-60Hz	AC220V / 60Hz
Motor voltage	1.2V DC		
Charging time	8 Hour		
Shaves per charge	7 times (3 minutes shave)		
Measurement	(H)14.1 x (W)6.1 x (D)3.8 cm		
Weight	140g		

Supplied accessory	Cleaning brush
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3 Troubleshooting Guide

<TROUBLE>

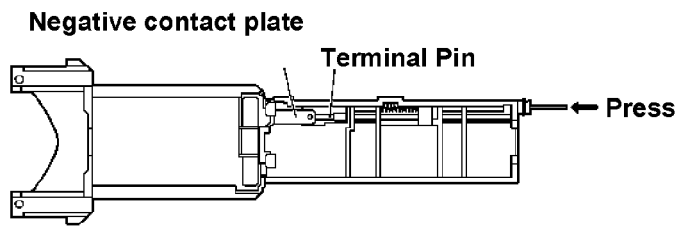
<CHECK>

<REMEDY>

Motor does not rotate. Does not charge.	→	<p style="text-align: center;"><CHECK THE CHARGING ADAPTOR.></p> Supply the rated voltage to the adaptor. And check the conductivity. OK if there is approx. DC0.6V between the (A) terminal and the (1) of the charging adaptor at the no-load operation.	NO →	Replace the charging adaptor.
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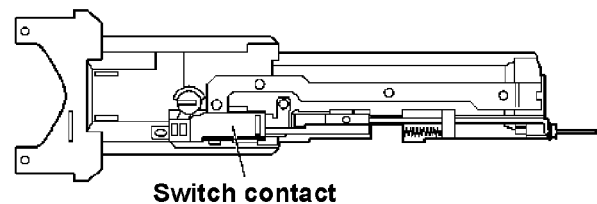
↓ OK

<p style="text-align: center;"><CHECK CONTACT CONDITIONS OF SWITCH.></p> Check the contact between the negative contact plate and the terminal pin when terminal pin is depressed.	NO →	Repair the contact of negative contact plate.
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↓ OK

<p style="text-align: center;"><CHECK THE SWITCH.></p> Check the contact of switch.	NO →	Repair the switch contact or replace the chassis assembly.
--------------------------------------------------------------------------------------------------	---------	------------------------------------------------------------



↓ OK

<p style="text-align: center;"><CHECK THE MOTOR.></p> OK if motor rotates when DC 1.2V is applied to (+) terminal and (-).	NO →	Replace the motor.
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↓ OK

<p style="text-align: center;"><CHECK THE RECHARGEABLE BATTERY.></p> OK if the voltage of rechargeable battery is more than approx. 1.2V DC between (+) terminal and (-) after charging a battery for several minutes.	NO →	Replace the rechargeable battery.
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↓ OK

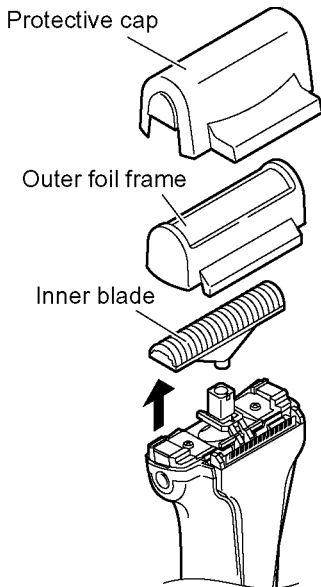
<p style="text-align: center;"><CHECK THE CHARGING CURRENT.></p> Connect the plug lever (2) to the charging adaptor (1) to measure the charging current across (A) and (A'). OK if there is 70 ~ 120mA.	NO →	Replace the charging adaptor.
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4 Disassembly and Assembly Instructions

4.1. Disassembly Instructions

Follow the procedure below to disassemble the main unit.

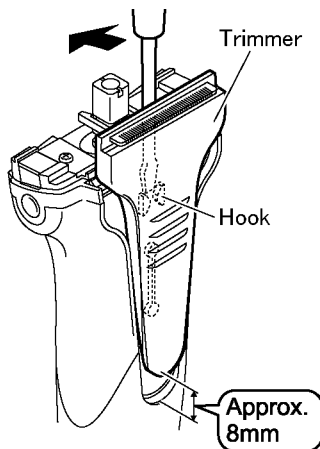
1. Remove the protective cap, the outer foil frame and the inner blade.



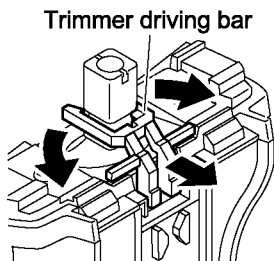
2. Slide the trimmer approx. 8mm to upper side, and remove the trimmer by using straight -edge screwdriver.

Note :

If you remove the trimmer by forcing, it is easy to break.



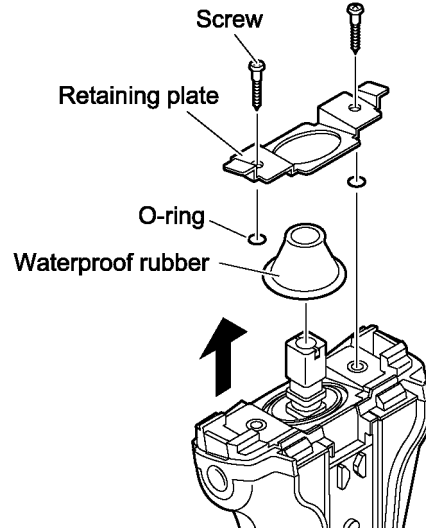
3. Remove the trimmer driving bar by pressing it outward.



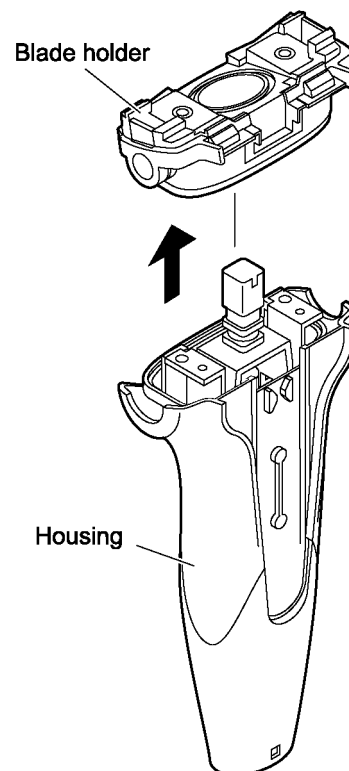
4. Loosen two screws, and remove the retaining plate and the waterproof rubber.

Note :

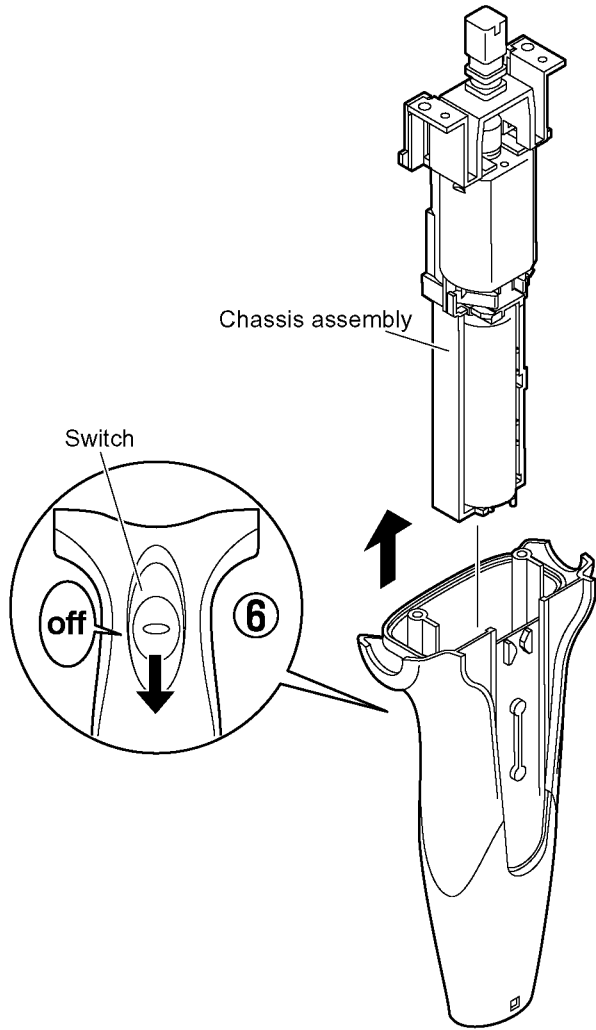
Be careful not to lose the O-rings.



5. Remove the blade holder.



6. Set the switch to "OFF", and remove the chassis assembly from the housing.



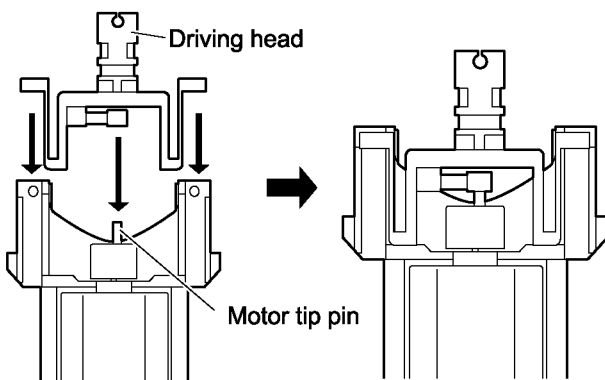
4.2. Caution in Assembly

Note :

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

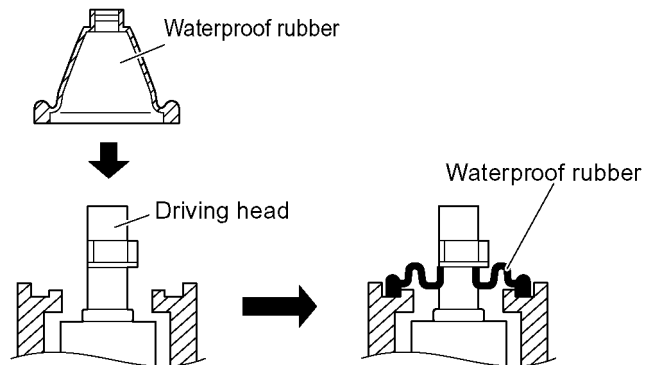
1. Driving Head

Insert a motor tip pin into the hole of driving head and install driving head in chassis.



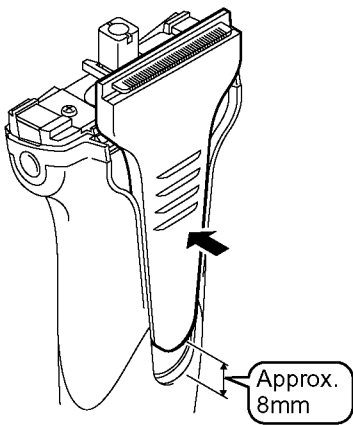
2. Waterproof Rubber

The waterproof rubber must be fitted properly. Install by inserting firmly to the set position as the following Fig.



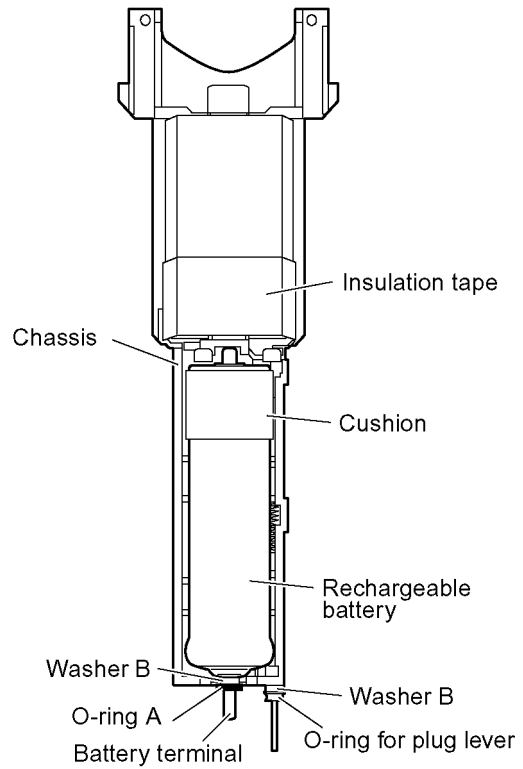
3. Trimmer

Set the trimmer at the upward position of 8mm as the following Fig, and hook it.

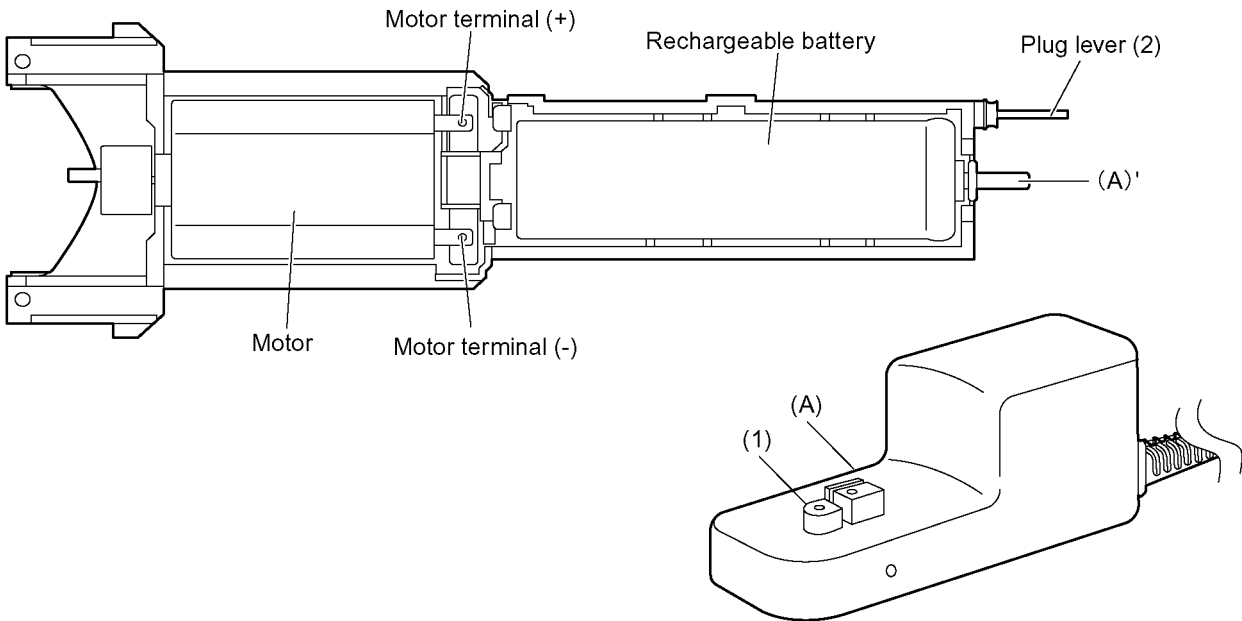


4. Battery/Plug lever

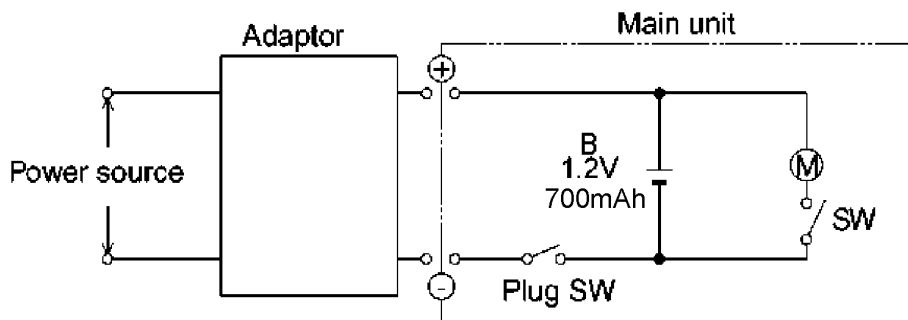
Make sure of the position for O-ring and washer.



5 Wiring Connection Diagram

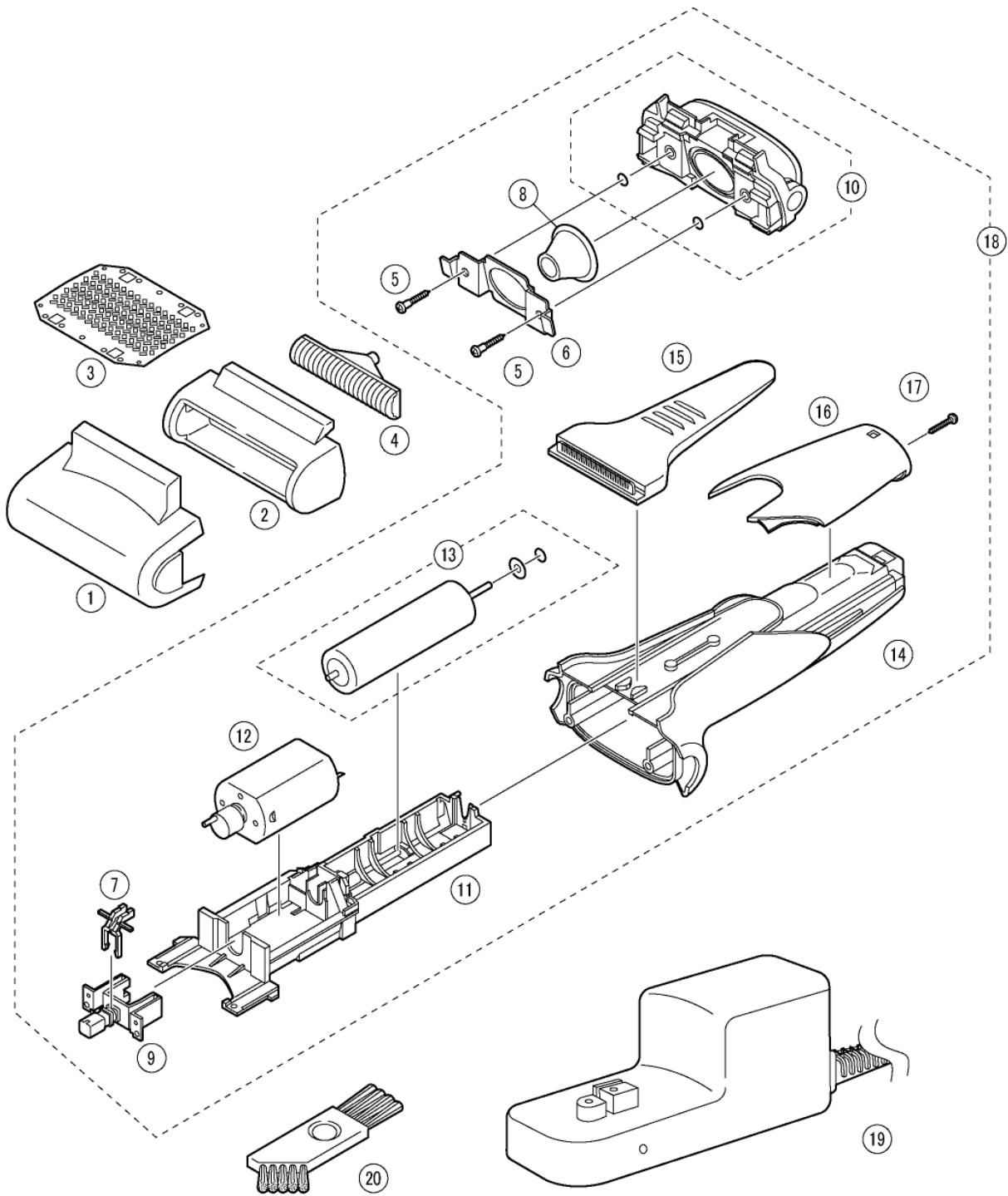


6 Schematic Diagram



7 Exploded View and Replacement Parts List

Model No. : ES-SA40 Exploded View



NOTE: *A= available as an optional accessory
*B= only available as set
*C= available individually

Model No. : ES-SA40 Parts List

Safety	Ref. No.	Part No.	Part Name & Description	Q'ty	Remarks
	1	WESSA40X7158	PROTECTIVE CAP	1	(BG)
	2	WESSA40K0048	OUTER FOIL FRAME	1	(Black HK/Korea), (BG)
	2	WESSA60S0047	OUTER FOIL FRAME	1	(White Taiwan), (BG)
	3	WES9941EP	OUTER FOIL	1	
	4	WES9942EP	INNER BLADE	1	
	5	WES701S9707	SCREW	2	(*3)
	6	WESSA60L0207	RETAINING PLATE	1	(BG)
	7	WESSA60L1087	TRIMMER DRIVING BAR	1	(BG)
	8	WESSA60L0327	WATERPROOF RUBBER	1	(BG)
	9	WESSA60L1247	DRIVING HEAD	1	(BG)
	10	WESSA40K0008	BLADE HOLDER	1	(Black HK/Korea), (BG)
	10	WESSA60S0007	BLADE HOLDER	1	(White Taiwan), (BG)
	11	WESSA40L0778	CHASSIS	1	(BG)
	12	WESSA60L1007	MOTOR BLOCK	1	(BG)
	13	WESSA40L2509	RECHARGEABLE BATTERY	1	(Ni-MH), (BG)
	14	WESSA40K3158	HOUSING	1	(Black HK/Korea), (BG)
	14	WESSA40S3159	HOUSING	1	(White Taiwan),
	15	WESSA40K1508	TRIMMER	1	(Black HK/Korea), (BG)
	15	WESSA40S1508	TRIMMER	1	(White Taiwan), (BG)
	16	WESSA40K3849	BOTTOM COVER	1	(Black HK/Korea), (BG)
	16	WESSA40S3840	BOTTOM COVER	1	(White Taiwan), (BG)
	17	WESSA60L6007	SCREW	1	(BG)
	18	WESSA40K3039	BODY BLOCK	1	(Black HK/Korea), (BG)
	18	WESSA40S3030	BODY BLOCK	1	(White Taiwan), (BG)
	19	WESSA40K7651	CHARGING ADAPTOR	1	(C-2 Hong Kong), (BG)
	19	WESSA40K7652	CHARGING ADAPTOR	1	(A-2 Taiwan), (BG)
	19	WESSA40K7653	CHARGING ADAPTOR	1	(Korea), (BG)
	20	WES861B7056	CLEANING BRUSH	1	(BG)
	-	WESES40K8000	INDIVIDUAL BOX	1	(Hong Kong), (BG)
	-	WESES40S8001	INDIVIDUAL BOX	1	(Taiwan), (BG)
	-	WESES40K8001	INDIVIDUAL BOX	1	(Korea), (BG)
	-	WESES40K8101	OPERATING INSTRUCTIONS	1	(BG)