Service Manual

AC/Rechargeable Shaver



ES7026-A3 ES7027-A3

SPECIFICATIONS

Power source	AC 100-240V, 50-60Hz (Automatic voltage conversion)	
Power consumption	80mA	
Motor voltage	2.4V DC	
Charging time	1 Hour	
Shaves per charge	20 times (3 minutes shave)	
Measurement	(H)15.0 x (W)6.0 x (D)3.7 cm	
Weight	200g	

Supplied accessories	Soft case
	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.

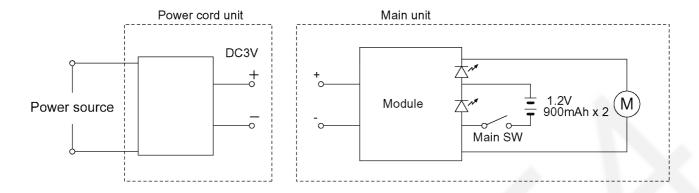
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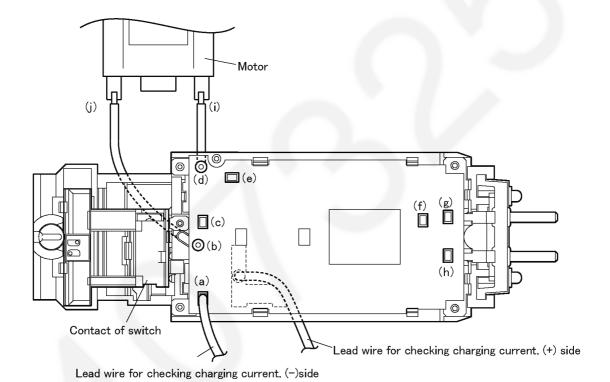
Panasonic

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1 SCHEMATIC DIAGRAM



2 WIRING CONNECTION DIAGRAM

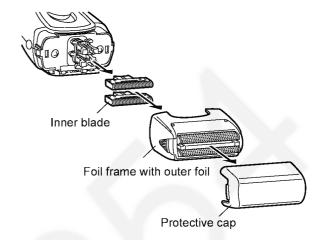


2

3 DISASSEMBLY INSTRUCTION

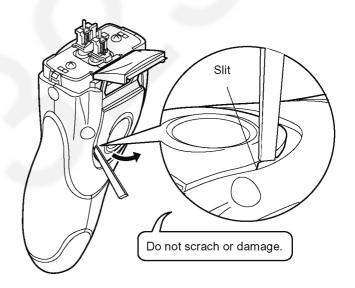
Follow the procedure below to disassemble the main unit.

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

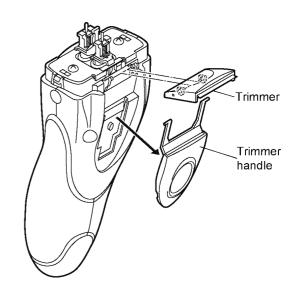


2. Slide the trimmer handle up to open the trimmer and unhook the trimmer handle by inserting something like a plastic spatula into a slit.

NOTE: Make sure not to scratch or damage on the housing.



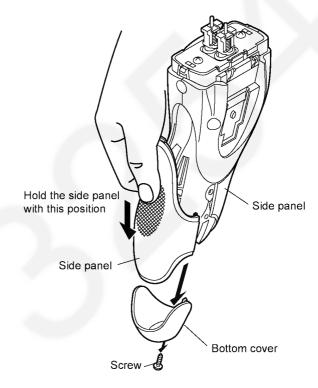
3. Remove trimmer and trimmer handle.



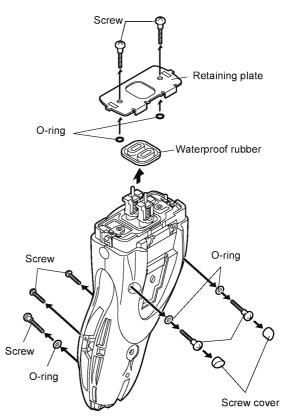
- 4. To remove the trimmer driving bar or the slit blade driving bar, press bars outward.
- Slit blade driving bar

 Trimmer driving bar

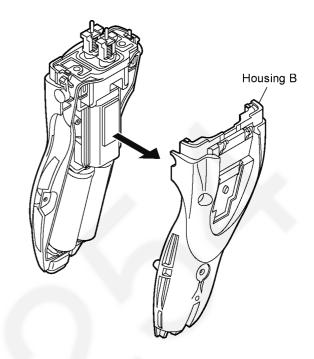
- 5. Loosen a screw and remove the bottom cover.
- 6. Slide down the side panels for both sides.



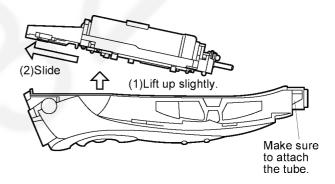
- 7. Loosen two screws and the retaining plate. Remove the waterproof rubber.
- 8. Remove the two screw covers using something like a toothpick and five screws.



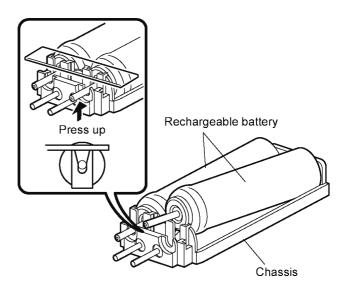
9. Take out the housing B.



10. Remove the motor assembly first. And take out the module assembly from housing A.



11. Remove the battery o-ring and washer in each battery. Take out the rechargeable batteries from the chassis.

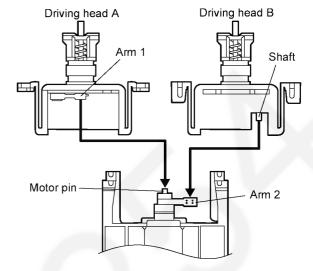


4 CAUTION IN ASSEMBLY

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

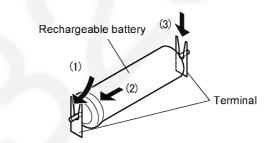
4.1. Driving heads

Install the driving head A in motor and assemble the driving head B



4.2. Rechargeable batteries

Insert the rechargeable batteries into chassis. Attach the battery o-ring and washer to the battery.

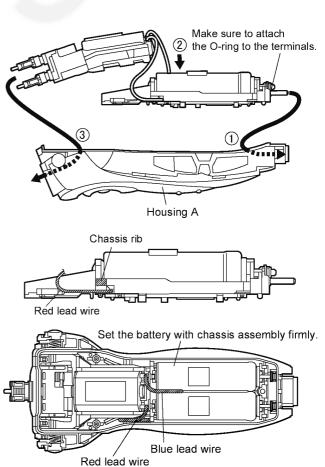


4.3. Motor and Module assembly

Put the motor and module assembly from the battery terminal side into housing A, and insert the driving heads side into housing A.

NOTE: Make sure that the red lead wire is not over the chassis rib.

Press fit the red lead wire neatly under the rib of motor holder and the blue lead wire in between batteries certainly in order to protect pinching.

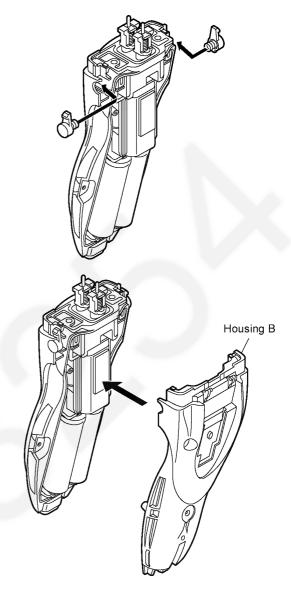


Housing 4.4.

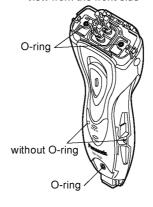
Set the both sides of foil frame release buttons with springs.

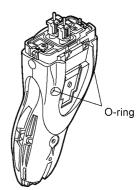
Put the housing B on the housing A.

Tighten the screws with care of pinching screw o-rings.



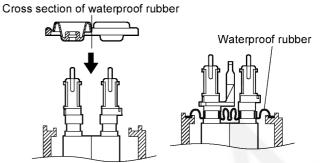
<view from the front side> <view from the rear side>





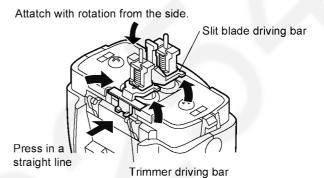
4.5. Waterproof rubber

The waterproof rubber must be fitted the right way around. Install as shown in figure by inserting firmly to the proper position.



4.6. Driving bars

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

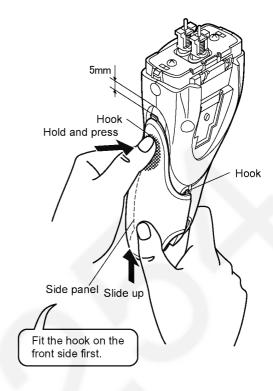


4.7. Side panel

Set the side panel on the body and slide it up until clicking the hook of panel at three locations.

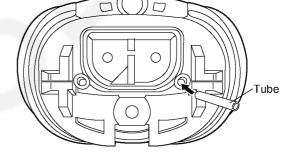
NOTE: Make sure that the left and right side panels are firmly fitted on both rear and front side.

Fit the front side of hook first, then on top and rear side.



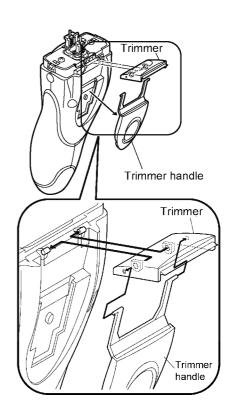
4.8. Bottom cover

Greasing FLOIL (G741S) around the tube and insert it into the both sides of battery terminals. Assemble the bottom cover with a screw.



4.9. Trimmer

- Make sure if the bosses of handle arm insert into the holes of trimmer
- 2. Align the bosses of housing with the holes of trimmer, and hook the trimmer handle.
- 3. Confirm its operation or smooth movement of trimmer.



5 TROUBLESHOOTING GUIDE

(Refer toWIRING CONNECTION DIAGRAM)

<TROUBLE>

Motor does not rotate.
Does not charge.
Functions for a moment and stops.
Does not operate by

CTROUBLE>

COUNTY
C

AC power source.

<CHECK.>

<CHECK POWER CORD UNIT.>

Connect the rated voltage to the normal main unit of empty charge capacity by the power cord unit. Check if the charge status lamp of main unit is lit. Confirm if the motor rotates more than one minutes by AC power source when turning ON the switch.

<REMEDY>

NO Replace power cord unit.

↓ oκ

<CHECK RECHARGEABLE BATTERIES.>

Okay if the voltage of rechargeable batteries is more than approximately 1.2V DC between (+) and (-) terminals.

(Replace two rechargeable batteries at the same time even though one battery is defective due to series connection.)

Replace both recharge-

able batteries at the same

↓ oк

<CHECK SWITCH CONTACT.>

Okay if there is a continuity and no deformation of switch terminals.

Repair contact or replace

→ terminal plate.

↓ oĸ

<CHECK MOTOR.>

Okay if motor rotates when DC2.4V is applied to (+) and (-) terminals.

NO Replace motor.

↓ 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 power cord unit.

Take out the left battery (viewed from the front). Connect the chassis and (-) terminal of battery with the lead wire. Check charging current with the wire between chassis and (+) terminal of battery.

Check charging current, if it is in between 665mA to 1235mA.

NO Check the

soldering points from (a) to (j)

↓ oĸ

Replace module.

↓ **OK** (remove the wire and reassemble the unit and attach the blades and foil frame with outer foils.)

<CHECK MODULE.>

Connect the rated voltage to the main unit with empty charge capacity by the power code.

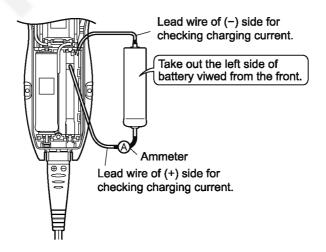
Check if the motor rotates more than one minutes by AC power source when turning on the switch.

NO Check the

soldering points from (a) to (j)

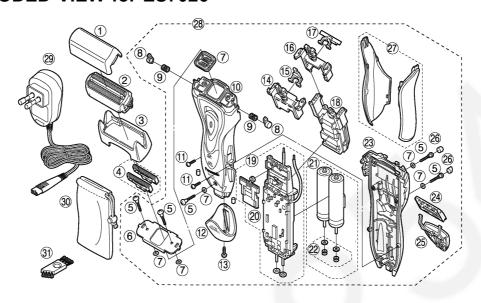
↓ oĸ

Replace module.



6 EXPLODED VIEW & REPLACEMENT PARTS LIST

6.1. EXPLODED VIEW for ES7026



6.2. REPLACEMENT PARTS LIST for ES7026

NOTE:

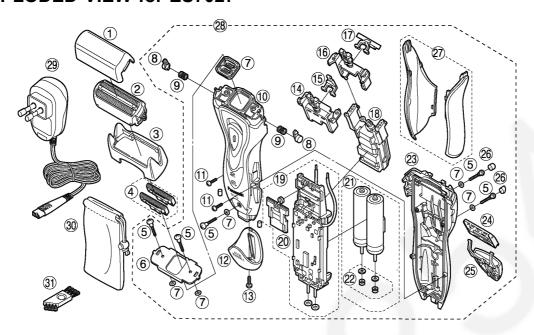
*A=available as an optional accessory

*B=only available as set

*C=available individually

Ref. No.	Part No.	Part Name & Description		Remarks		Per Unit
1	WES7024X7158	PROTECTIVE CAP			(BG)	1
2	WES9077E	SYSTEM OUTER FOIL				1
3	WES7023A0047	OUTER FOIL FRAME		SILVER BLUE	(BG)	1
4	WES9074E	INNER BLADE				1
5	WES7025L9707	SCREW	*C	K2-15	(BG)	5
6	WES7025L0207	RETAINING PLATE			(BG)	1
7	WES7025L0327	WATERPROOF RUBBER			(BG)	1
8	WES764H3267	FOIL FRAME RELEASE BUTTON	*B	LIGHT GRAY (2PCS/PK)		2
9	WES7025L0177	SPRING FOR RELEASE BUTTON	*B	(2PCS/PK)	(BG)	2
10	WES7026A3058	HOUSING A		SILVER BLUE	(BG)	1
11	WES626A6057	TAPPING SCREW	*C	K2-8		2
12	WES7026A3849	BOTTOM COVER		DARK BLUE	(BG)	1
13	WES8093L9007	TAPPING SCREW		K2-6		1
14	WES7025L1247	DRIVING HEAD A			(BG)	1
15	WES8068L1077	SLIT BLADE DRIVING BAR				1
16	WES7025L1257	DRIVING HEAD B			(BG)	1
17	WES7025L1087	TRIMMER DRIVING BAR			(BG)	1
18	WES7025L1007	MOTOR			(BG)	1
19	WES7026L2127	MODULE ASSEMBLY			(BG)	1
20	WES7025L0057	SWITCH CONTACT PLATE			(BG)	1
21	WES7024L2508	RECHARGEABLE BATTERY	*B	Ni-Mh TYPE (2PCS/PK)	(BG)	2
22	WES7025L0977	WASHER & O-RING SET	*B	(2PCS/PK)	(BG)	2
23	WES7026A3068	HOUSING B		SILVER BLUE	(BG)	1
24	WES8016A1507	TRIMMER		DARK BLUE	(BG)	1
25	WES8016A3197	TRIMMER HANDLE		DARK BLUE	(BG)	1
26	WES7025H3767	SCREW CAP	*B	GRAY (2PCS/PK)	(BG)	2
27	WES7026A3368	SIDE PANEL			(BG)	1
28	WES7026A3039	BODY BLOCK		SILVER BLUE	(BG)	1
29	WES7027K7663	POWER CORD UNIT		C-2 PLUG	(BG)	1
29	WES7027K7674	POWER CORD UNIT		C-2 PLUG (only for HONG KONG)	(BG)	1
29	WES7026K7671	POWER CORD UNIT		KOREAN PLUG	(BG)	1
29	WES7027K7662	POWER CORD UNIT		A-2 PLUG	(BG)	1
30	WES7025K7007	SOFT CASE			(BG)	1
31	WES861B7057	CLEANING BRUSH			1	1
-	WES7026S8009	INDIVIDUAL BOX			(BG)	1
-	WES7026S8000	INDIVIDUAL BOX		only for HONG KONG	(BG)	1
-	WES7026S8001	INDIVIDUAL BOX		only for KOREA	(BG)	1
-	WES7026S8002	INDIVIDUAL BOX		only for TAIWAN	(BG)	1
	WES7026S8109	OPERATING INSTRUCTIONS	+	•	(BG)	1

6.3. EXPLODED VIEW for ES7027



6.4. REPLACEMENT PARTS LIST for ES7027

NOTE:

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

Ref. No.	Part No.	Part Name & Description		Remarks	_	Per Unit
1	WES7024X7158	PROTECTIVE CAP			(BG)	1
2	WES9077E	SYSTEM OUTER FOIL				1
3	WES7025S0047	OUTER FOIL FRAME		SILVER	(BG)	1
4	WES9074E	INNER BLADE				1
5	WES7025L9707	SCREW	*C	K2-15	(BG)	5
6	WES7025L0207	RETAINING PLATE			(BG)	1
7	WES7025L0327	WATERPROOF RUBBER			(BG)	1
8	WES764H3267	FOIL FRAME RELEASE BUTTON	*B	LIGHT GRAY (2PCS/PK)		2
9	WES7025L0177	SPRING FOR RELEASE BUTTON	*B	(2PCS/PK)	(BG)	2
10	WES7027S3059	HOUSING A		SILVER	(BG)	1
11	WES626A6057	TAPPING SCREW	*C	K2-8		2
12	WES7027A3848	BOTTOM COVER		DARK BLUE	(BG)	1
13	WES8093L9007	TAPPING SCREW		K2-6		1
14	WES7025L1247	DRIVING HEAD A			(BG)	1
15	WES8068L1077	SLIT BLADE DRIVING BAR				1
16	WES7025L1257	DRIVING HEAD B			(BG)	1
17	WES7025L1087	TRIMMER DRIVING BAR			(BG)	1
18	WES7025L1007	MOTOR			(BG)	1
19	WES7960L2127	MODULE ASSEMBLY			(BG)	1
20	WES7025L0057	SWITCH CONTACT PLATE			(BG)	1
21	WES7024L2508	RECHARGEABLE BATTERY	*B	Ni-Mh TYPE (2PCS/PK)	(BG)	2
22	WES7025L0977	WASHER & O-RING SET	*B	(2PCS/PK)	(BG)	2
23	WES7025S3068	HOUSING B		SILVER	(BG)	1
24	WES8016A1507	TRIMMER		DARK BLUE	(BG)	1
25	WES8016A3197	TRIMMER HANDLE		DARK BLUE	(BG)	1
26	WES7025H3767	SCREW CAP	*B	GRAY (2PCS/PK)	(BG)	2
27	WES7026H3368	SIDE PANEL			(BG)	1
28	WES7027S3039	BODY BLOCK		SILVER	(BG)	1
29	WES7027K7663	POWER CORD UNIT		C-2 PLUG	(BG)	1
29	WES7027K7674	POWER CORD UNIT		C-2 PLUG (only for HONG KONG)	(BG)	1
29	WES7027K7671	POWER CORD UNIT		KOREAN PLUG	(BG)	1
29	WES7027K7662	POWER CORD UNIT		A-2 PLUG	(BG)	1
30	WES7025K7007	SOFT CASE			(BG)	1
31	WES861B7057	CLEANING BRUSH				1
-	WES7027S8009	INDIVIDUAL BOX			(BG)	1
-	WES7027S8000	INDIVIDUAL BOX		only for HONG KONG	(BG)	1
-	WES7027S8001	INDIVIDUAL BOX		only for KOREA	(BG)	1
-	WES7027S8002	INDIVIDUAL BOX		only for TAIWAN	(BG)	1
_	WES7026S8109	OPERATING INSTRUCTIONS	1	-	(BG)	1