

Service Manual

Epilator

Model No. **ES-WD70**
ES-WD60
ES-WD10

Europe



⚠ 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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Panasonic

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1 Warning

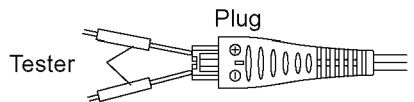
Caution:

- 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	100-240V AC, 50-60Hz (Automatic voltage conversion)
Charging time	1 hour
Power consumption	Approx. 5W (when charging)
Weight	Approx. 170g with the shaver head
Supplied accessories	Soft case
	Cleaning brush

3 Troubleshooting Guide

<TROUBLE>	<CHECK.>	<REMEDY>
Motor does not operate. Does not work without attaching the epilation head or shaver head. Does not charge. Does not light the charging indication lamp.	→ <CHECK CHARGING ADAPTOR.> Connect to rated voltage with the charging adaptor. OK if it is approximately DC5.7V.	NO → Replace charging adaptor.
↓ OK 		

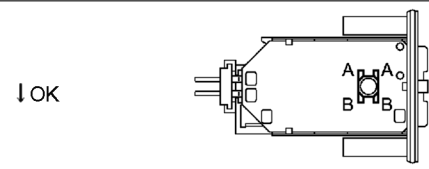
<CHECK MOTOR.> The motor should turn when 3.5V DC is applied to terminals.	NO → Replace the motor.
--	-------------------------

↓ OK

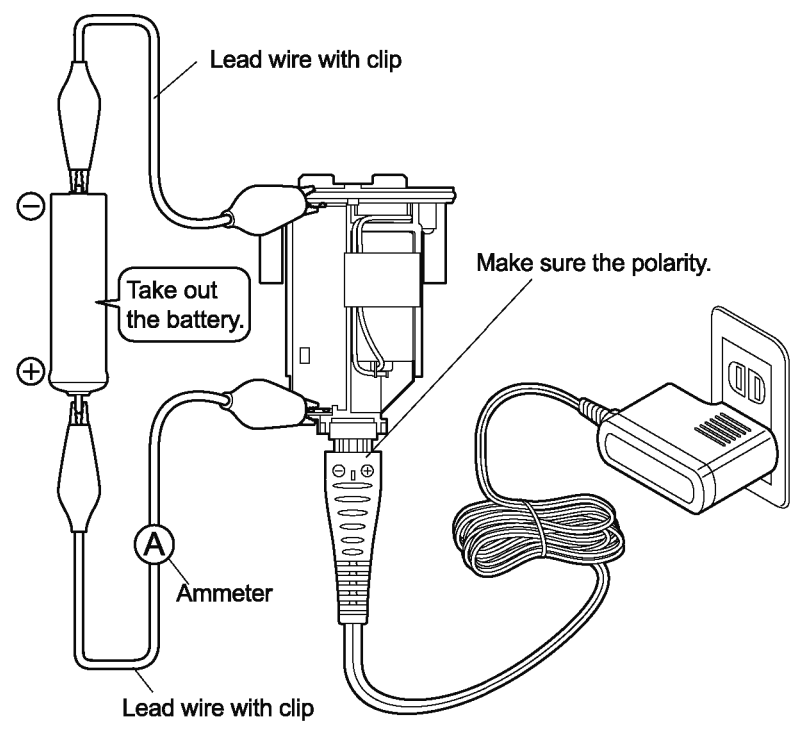
<CHECK RECHARGEABLE BATTERY.> Okay if the voltage of rechargeable battery is more than approximately 3.6V DC between (+) and (-) terminals.	NO → Replace rechargeable battery.
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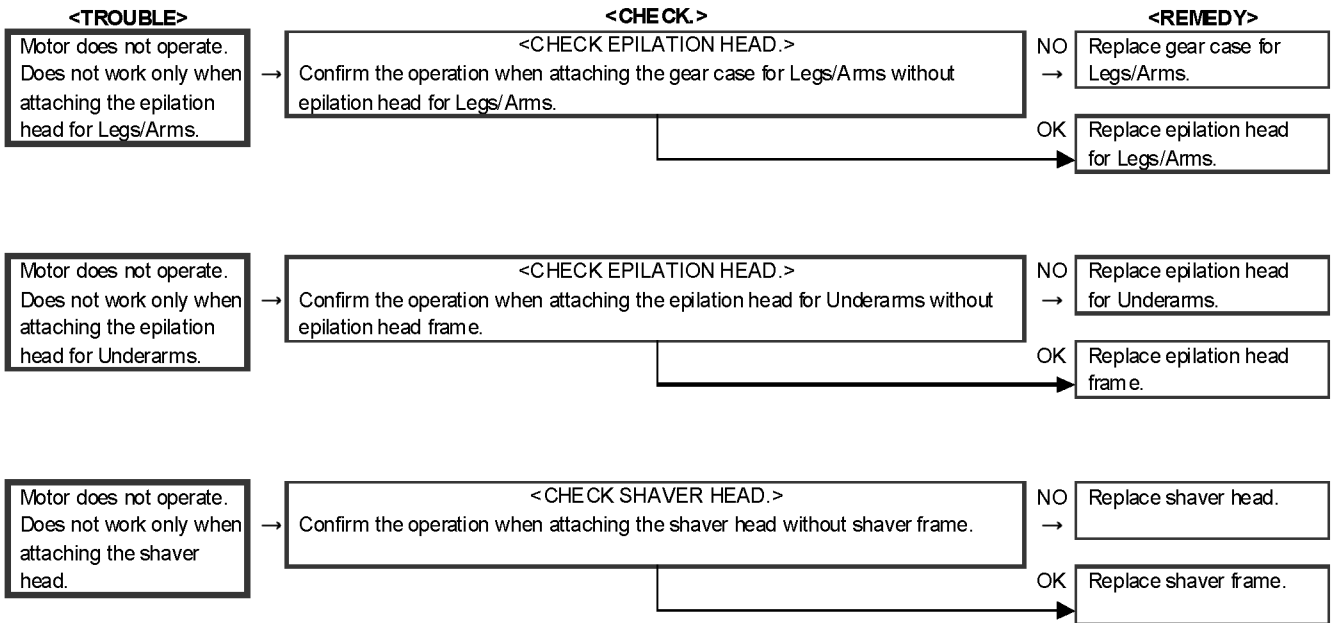
↓ OK

<CHECK MODULE.> Check continuity between (A)-(A) and (B)-(B) when pushing on the push switch. Check if the switch button works smoothly.	NO → Replace module.
--	----------------------



<CHECK MODULE.> Replace the battery and connect the rated voltage with switch OFF position. Check charging current, if it is approximately 700mA.	NO → Repair soldering parts. → Replace module.
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4 Disassembly and Assembly Instructions

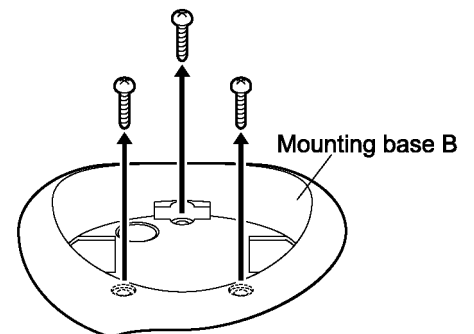
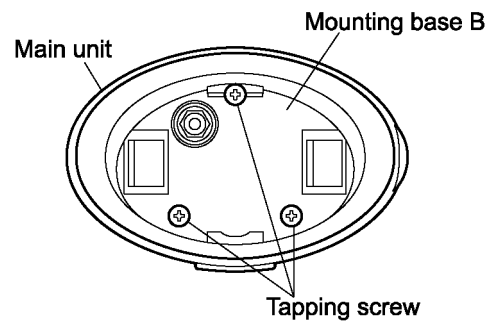
Follow the procedure below to disassemble the main unit.

4.1. Disassembly Instructions

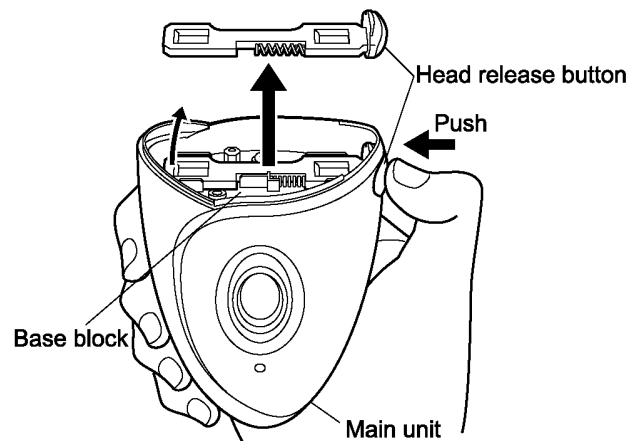
[MAIN UNIT]

Follow the procedure below to disassemble the main body.

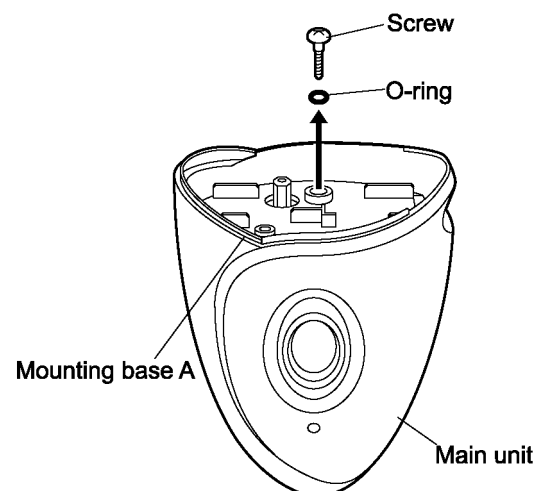
1. Remove the cap and the epilation head.
Loosen three tapping screws on top and take out the mounting base B.



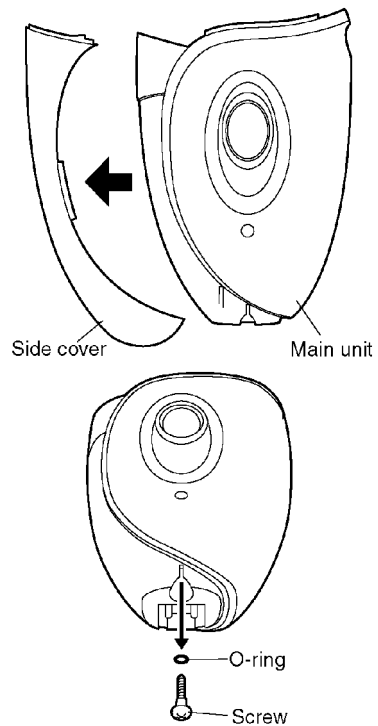
2. Remove the head release button with pushing the buttons. Be careful the spring jumps up when removing the head release button.



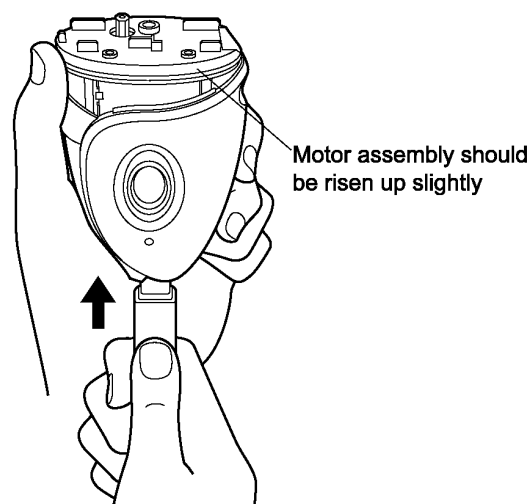
3. Loosen one screw where tightening the mounting base A.



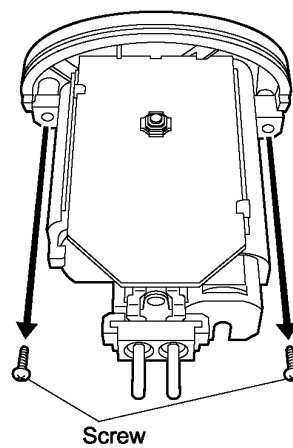
4. Remove the side cover from upper side.
Loosen one screw on bottom.



5. Insert the motor remove jig into the connecting area of adaptor and push up the motor block.
Take out the motor assembly.



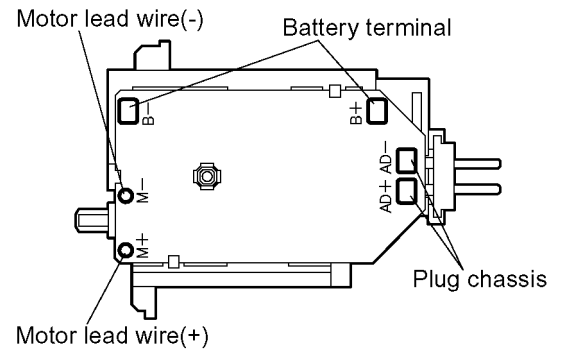
6. Loosen two screws at the rear and take off the Mounting base B.



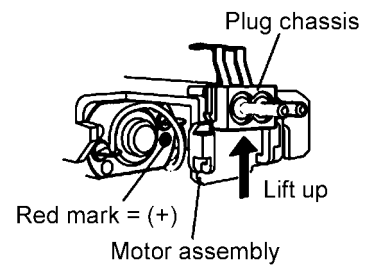
7. Unsolder the three locations, battery terminals, motor lead wires and plug chassis.

NOTE:

If the motor lead wires are attached the opposite pole, the rotation speed will be decrease and the life of motor will become short.



8. Lift up the plug chassis.

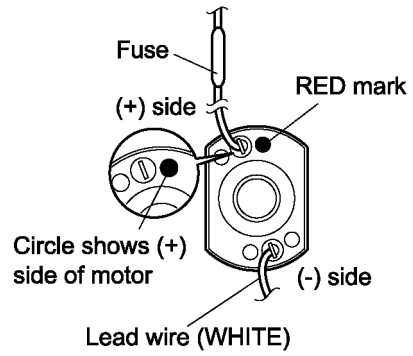


4.2. Assembly Instructions

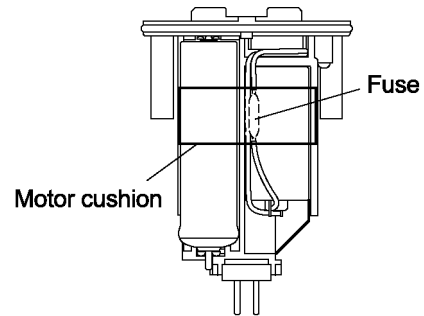
[MAIN UNIT]

For assembly, reverse the order of disassembly.

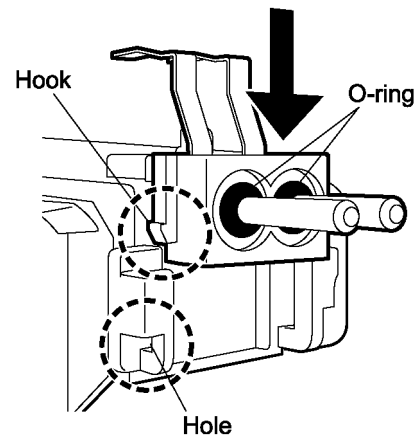
1. Confirm the colors of each lead wire when soldering with motor.



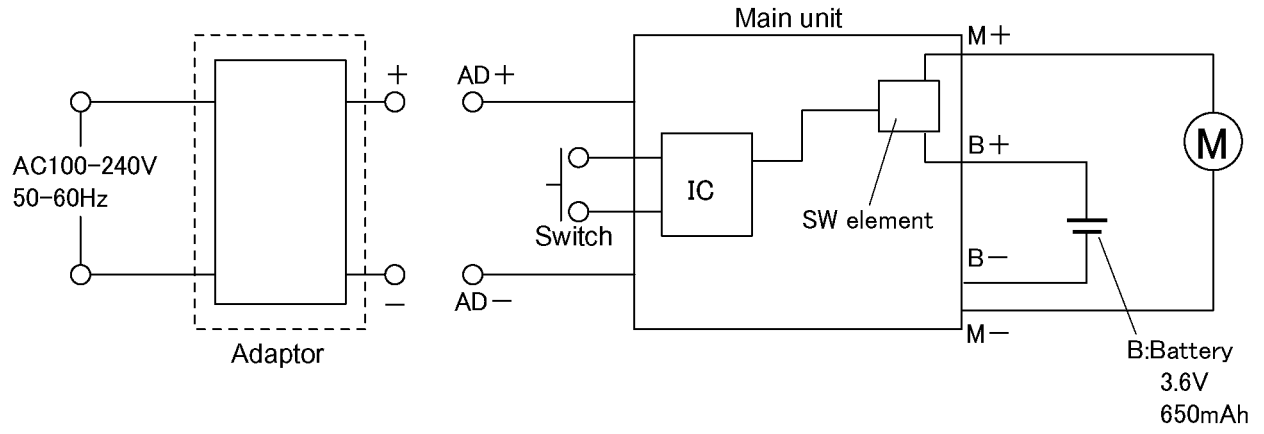
2. Put fuse onto the motor and fixed it with the motor cushion.



3. Press fit the plug chassis into the motor base block until clicking between the hook of plug chassis and the hole of motor base. Attach the O-rings.

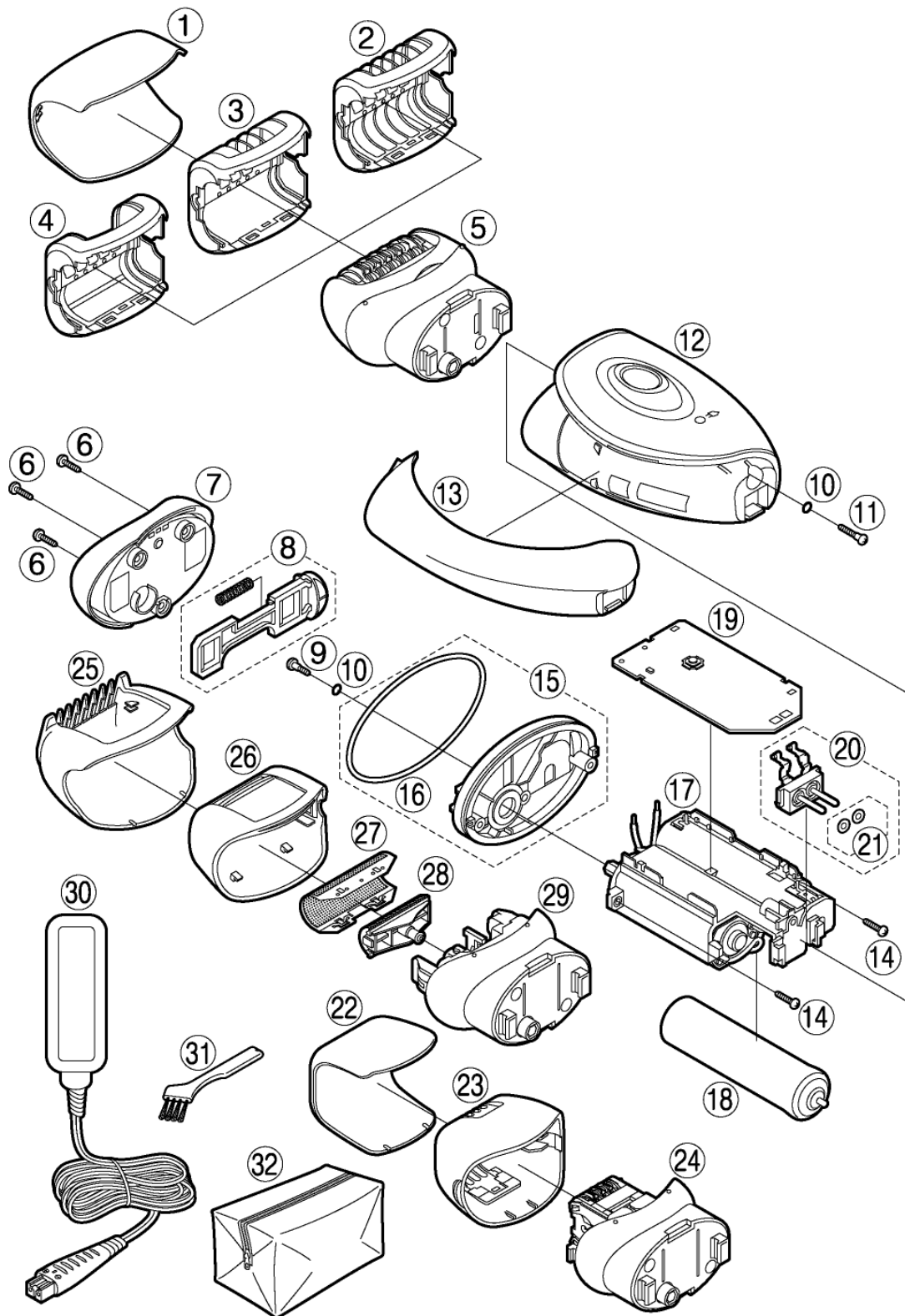


5 Schematic Diagram



6 Exploded View and Replacement Parts List

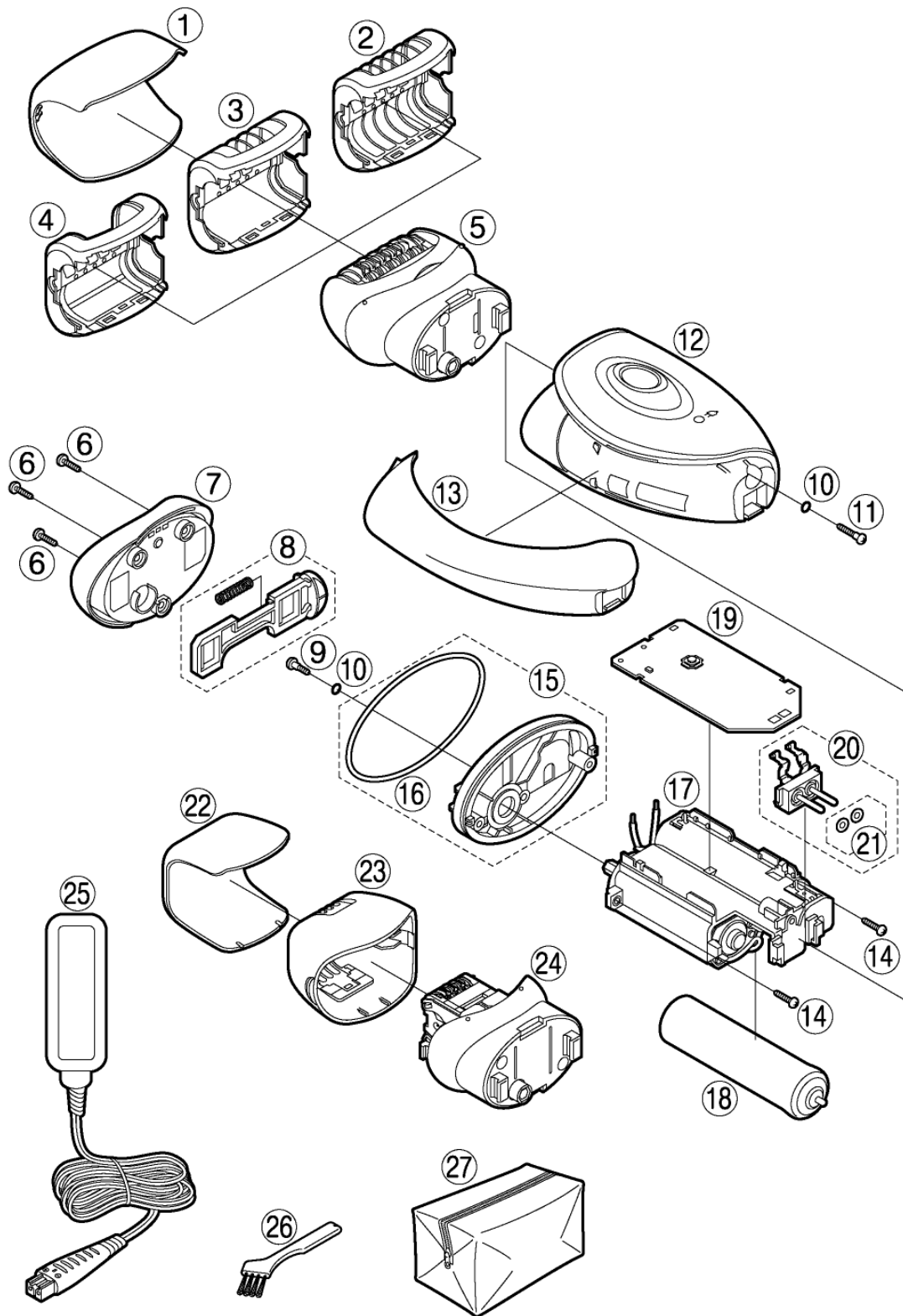
Model No. : ES-WD70 Exploded View for ES-WD70



Model No. : ES-WD70 Parts List

Safety	Ref. No.	Part No.	Part Name & Description	Q'ty	Remarks
ES-WD70					
	1	WESWD51X7157	PROTECTION CAP	1	[BG]
	2	WESWD51P3107	GENTLE CAP	1	[BG]
	3	WESWD51P3117	BEGINNER CAP	1	[BG]
	4	WESWD70P3128	FAST CAP	1	[BG]
	5	WESWD51W1067	EPILATION HEAD (LEGS/ARMS)	1	[BG]
	6	WESWD51L9397	TAPPING SCREW	3	(K2-5), [BG]
	7	WESWD51W3367	MOUNTING BASE B	1	[BG]
	8	WESWD51P3277	HEAD RELEASE BUTTON	1	[BG]
	9	WES2047S9707	SCREW	1	(K2-8), [BG]
	10	WES8016L0967	O-RING	2	(4PCS/PK), [BG]
	11	WES701S9706	SCREW	1	(K2-12), [BG]
	12	WESED70P3058	HOUSING	1	[BG]
	13	WESWD51W3377	SIDE PANEL	1	[BG]
	14	WES331B9257	TAPPING SCREW	2	(K2-8), [BG]
	15	WESWD51L0497	MOUNTING BASE A	1	[BG]
	16	WES2067L0997	HOUSING O-RING	1	[BG]
	17	WESWD51L1007	MOTOR ASSEMBLY	1	[BG]
	18	WESWD70L2508	RECHARGEABLE BATTERY	1	(Li-ion TYPE), [BG]
	19	WESWD51L2107	MODULE	1	[BG]
	20	WESWD51L2157	PLUG CHASSIS	1	[BG]
	21	WES2047L0327	O-RING A	2	(2PCS/PK), [BG]
	22	WESWD70X7158	PROTECTION CAP	1	[BG]
	23	WESWD70W3128	EPILATION HEAD FRAME	1	[BG]
	24	WESWD70W1078	EPILATION HEAD (UNDERARMS)	1	[BG]
	25	WESWD51X3557	BIKINI COMB	1	[BG]
	26	WESWD51W4037	FOIL FRAME	1	[BG]
	27	WES9753Y	OUTER FOIL	1	
	28	WES9752Y	INNER BLADE	1	
	29	WESWD51W0787	SHAVER HEAD	1	[BG]
	30	WES2067W7664	POWER ADAPTOR	1	(C-2 PLUG), [BG]
	31	WES2047H6767	CLEANING BRUSH	1	[BG]
	32	WESWD70S7008	SOFT CASE	1	[BG]
	-	WESWD70P8008	INDIVIDUAL PACKAGE	1	[BG]
	-	WESWD70P8108	OPERATING INSTRUCTIONS	1	[BG]

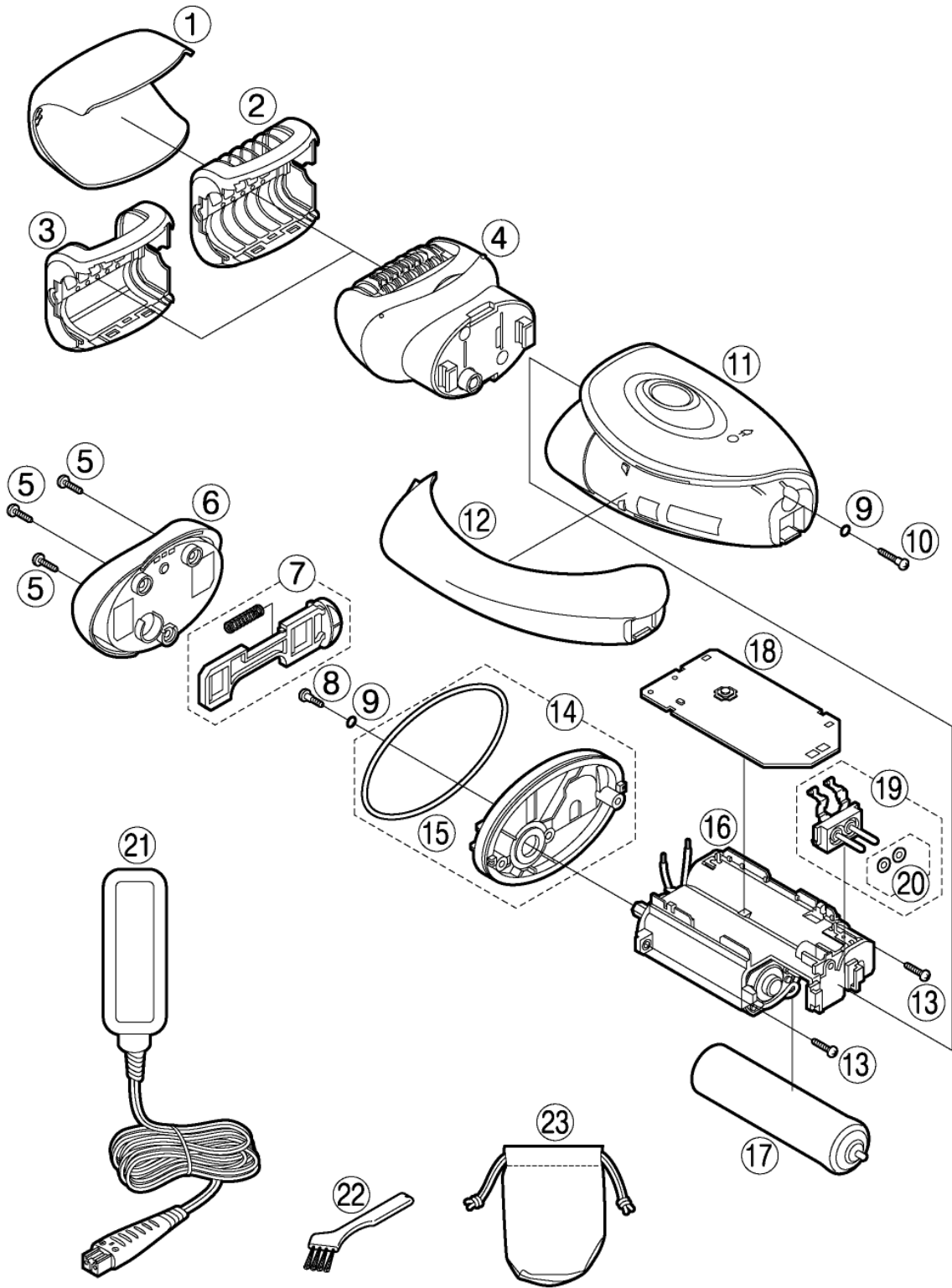
Model No. : ES-WD60 Exploded View for ES-WD60



Model No. : ES-WD60 Parts List

Safety	Ref. No.	Part No.	Part Name & Description	Q'ty	Remarks
ES-WD60					
	1	WESWD51X7157	PROTECTION CAP	1	[BG]
	2	WESWD21A3107	GENTLE CAP	1	[BG]
	3	WESWD21A3117	BEGINNER CAP	1	[BG]
	4	WESWD60A3128	FAST CAP	1	[BG]
	5	WESWD51W1067	EPILATION HEAD (LEGS/ARMS)	1	[BG]
	6	WESWD51L9397	TAPPING SCREW	3	(K2-5), [BG]
	7	WESWD51W3367	MOUNTING BASE B	1	[BG]
	8	WESWD21A3277	HEAD RELEASE BUTTON	1	[BG]
	9	WES2047S9707	SCREW	1	(K2-8), [BG]
	10	WES8016L0967	O-RING	2	(4PCS/PK), [BG]
	11	WES701S9706	SCREW	1	(K2-12), [BG]
	12	WESWD60A3058	HOUSING	1	[BG]
	13	WESWD51W3377	SIDE PANEL	1	[BG]
	14	WES331B9257	TAPPING SCREW	2	(K2-8), [BG]
	15	WESWD51L0497	MOUNTING BASE A	1	[BG]
	16	WES2067L0997	HOUSING O-RING	1	[BG]
	17	WESWD51L1007	MOTOR ASSEMBLY	1	[BG]
	18	WESWD70L2508	RECHARGEABLE BATTERY	1	(Li-ion TYPE), [BG]
	19	WESWD51L2107	MODULE	1	[BG]
	20	WESWD51L2157	PLUG CHASSIS	1	[BG]
	21	WES2047L0327	O-RING A	2	(2PCS/PK), [BG]
	22	WESWD70X7158	PROTECTION CAP	1	[BG]
	23	WESWD70W3128	EPILATION HEAD FRAME	1	[BG]
	24	WESWD70W1078	EPILATION HEAD (UNDERARMS)	1	[BG]
	25	WES2067W7664	POWER ADAPTOR	1	(C-2 PLUG), [BG]
	26	WES2047H6767	CLEANING BRUSH	1	[BG]
	27	WESWD70S7008	SOFT CASE	1	[BG]
	-	WESWD60A8008	INDIVIDUAL PACKAGE	1	[BG]
	-	WESWD60A8108	OPERATING INSTRUCTIONS	1	[BG]

Model No. : ES-WD10 Exploded View for ES-WD10



Model No. : ES-WD10 Parts List

Safety	Ref. No.	Part No.	Part Name & Description	Q'ty	Remarks
ES-WD10					
	1	WESWD51X7157	PROTECTION CAP	1	[BG]
	2	WESWD10V3108	GENTLE CAP	1	[BG]
	3	WESWD10V3128	FAST CAP	1	[BG]
	4	WESWD51W1067	EPILATION HEAD (LEGS/ARMS)	1	[BG]
	5	WESWD51L9397	TAPPING SCREW	3	(K2-5), [BG]
	6	WESWD51W3367	MOUNTING BASE B	1	[BG]
	7	WESWD10V3277	HEAD RELEASE BUTTON	1	[BG]
	8	WES2047S9707	SCREW	1	(K2-8), [BG]
	9	WES8016L0967	O-RING	2	(4PCS/PK), [BG]
	10	WES701S9706	SCREW	1	(K2-12), [BG]
	11	WESED10V3058	HOUSING	1	[BG]
	12	WESWD51W3377	SIDE PANEL	1	[BG]
	13	WES331B9257	TAPPING SCREW	2	(K2-8), [BG]
	14	WESWD51L0497	MOUNTING BASE A	1	[BG]
	15	WES2067L0997	HOUSING O-RING	1	[BG]
	16	WESWD51L1007	MOTOR ASSEMBLY	1	[BG]
	17	WESWD70L2508	RECHARGEABLE BATTERY	1	(Li-ion TYPE), [BG]
	18	WESWD51L2107	MODULE	1	[BG]
	19	WESWD51L2157	PLUG CHASSIS	1	[BG]
	20	WES2047L0327	O-RING A	2	(2PCS/PK), [BG]
	21	WES2067W7664	POWER ADAPTOR	1	(C-2 PLUG), [BG]
	22	WES2047H6767	CLEANING BRUSH	1	[BG]
	23	WESWD10S7008	SOFT CASE	1	[BG]
	-	WESWD10V8008	INDIVIDUAL PACKAGE	1	[BG]
	-	WESWD10V8108	OPERATING INSTRUCTIONS	1	[BG]