

# Service Manual

Smooth operator  
Twin float

## ES702

### < Specifications >

Power source : 100-120/220-240V AC  
50-60Hz  
(Automatic voltage conversion)

Power consumption : 15VA

Motor voltage : 2.4V

Charging time : 1 hour

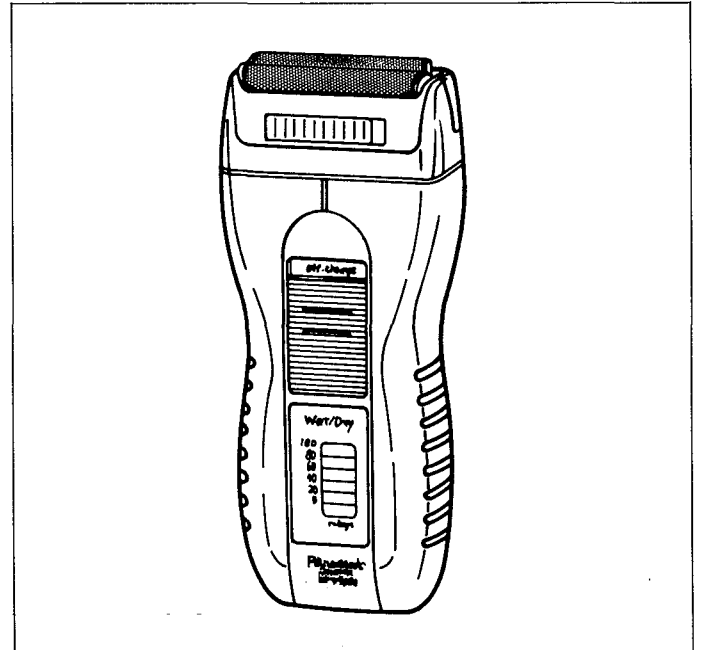
Shaves per charge : Approx. 42minutes

Dimensions : 5 3/8(H) × 2 1/4(W) × 1 3/16(D)

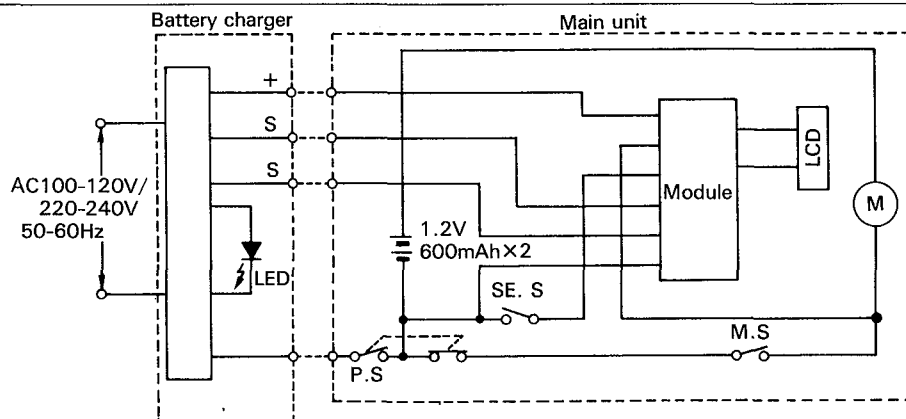
Weight : 7.41oz., 210g

### < Supplied accessories >


Hard case  
Battery charger



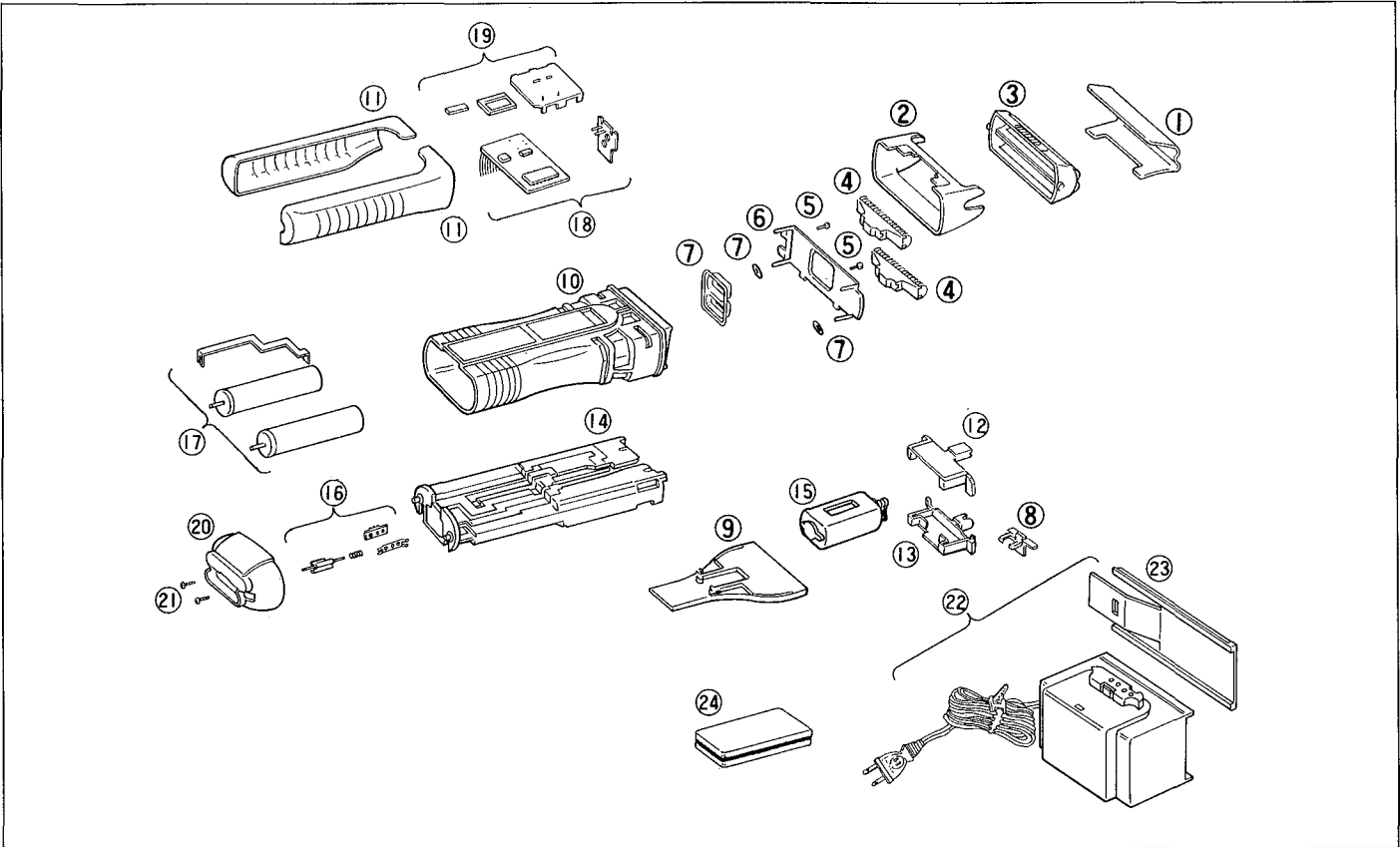
## SCHEMATIC DIAGRAM



### < DISPLAY OF CHARGING INDICATOR LAMP >

The  mark (plug mark) in the power monitor lights up, and the charging indicator lamp on the charging adapter lights red, indicating that the battery is being charged. In approximately 30 minutes, the whole power monitor lights up, and the indicator lamp on the charging adapter turns green to indicate charging is completed.  
(This is the Battery Capacity Detection System.)

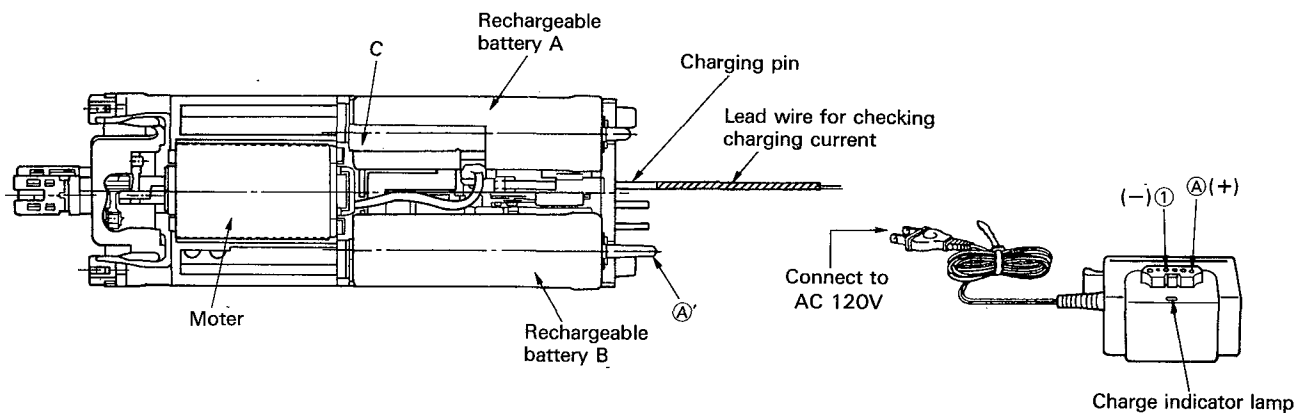
# EXPLODED VIEW



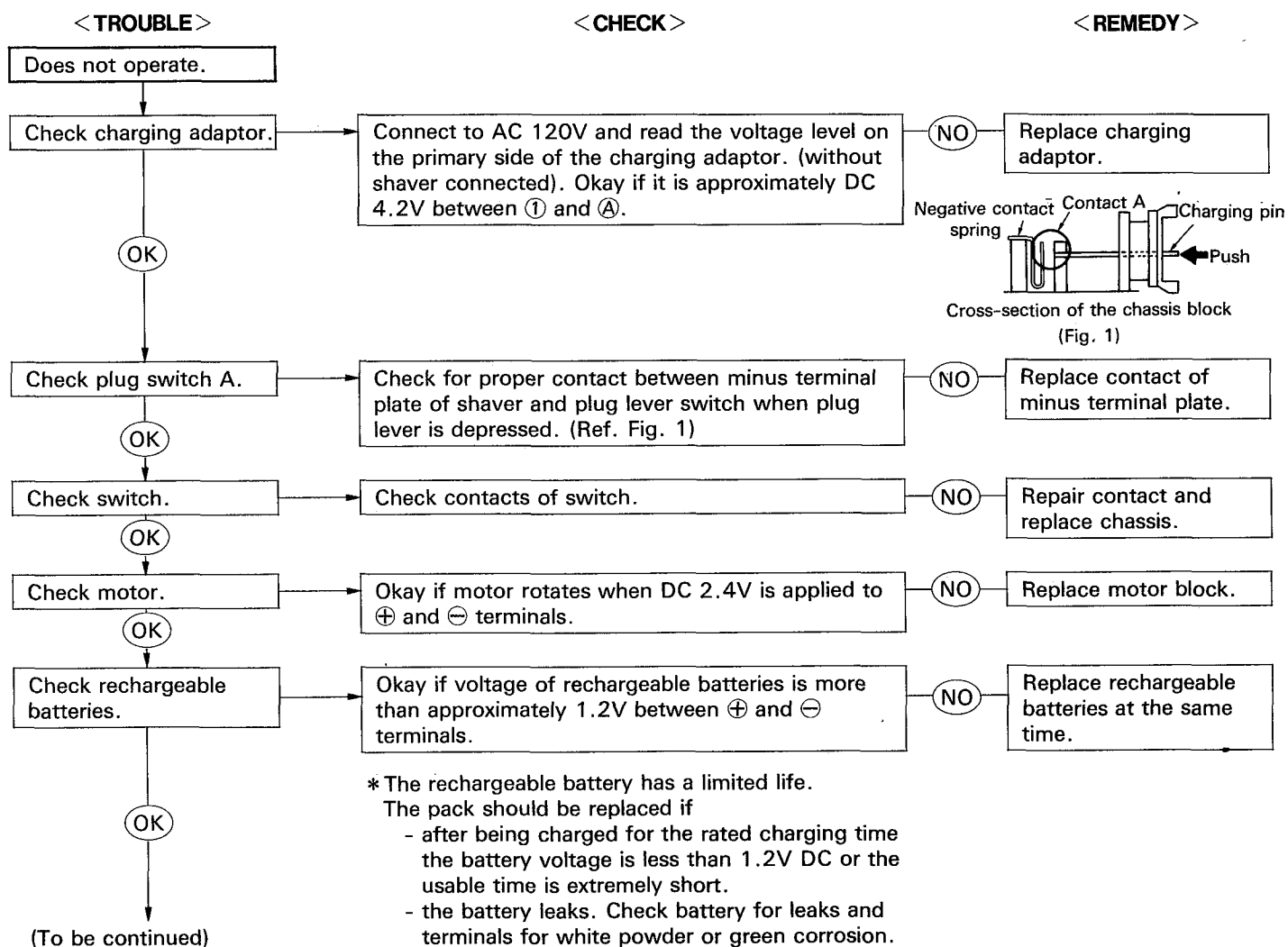
# REPLACEMENT PARTS LIST

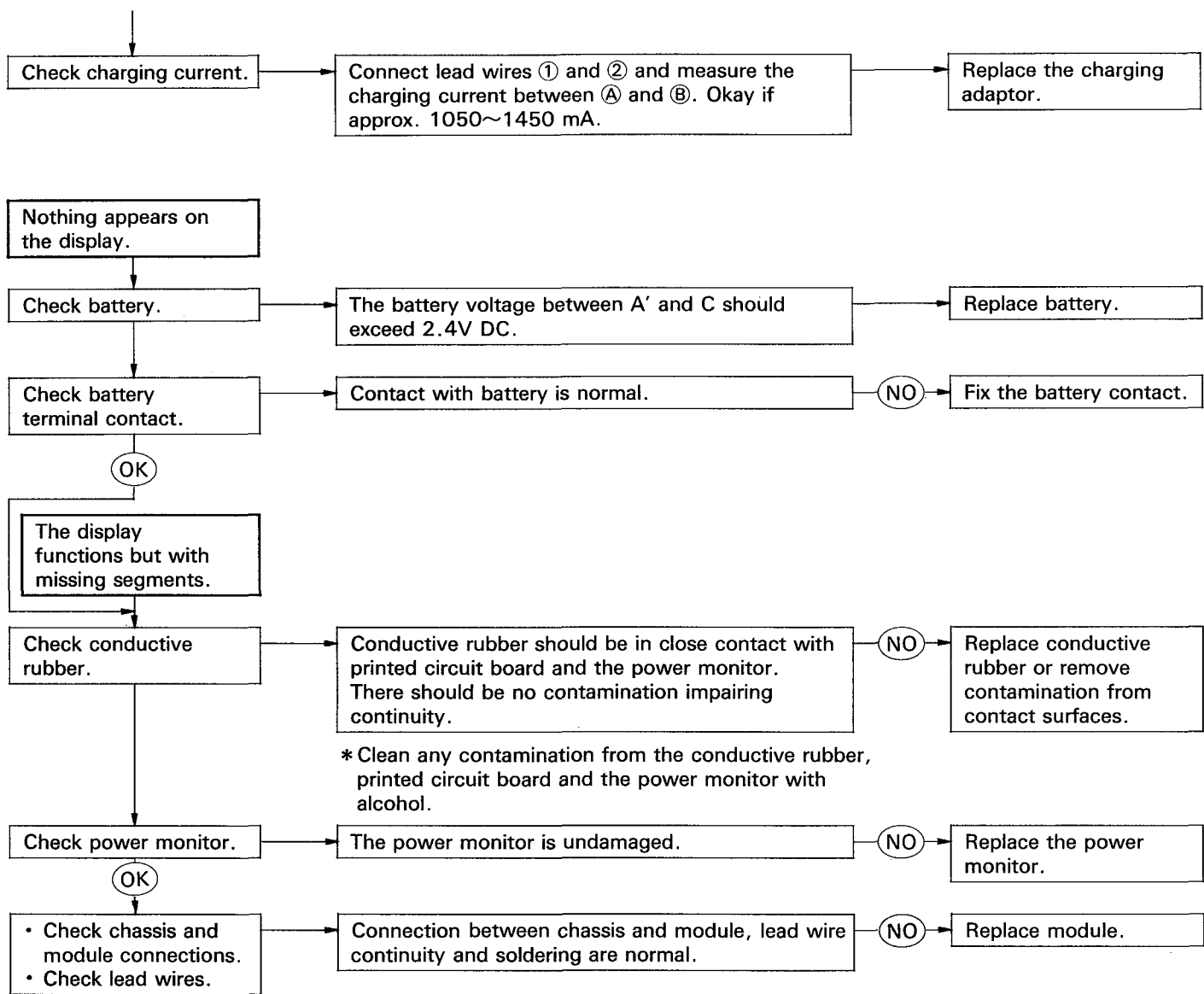
Ref. No.	Part No.	Part Name & Descriptions	Per set	Remarks
1	WES702C7158	Protective cap	1	
2	WES701S0047	Outer foil frame	1	
3	WES9861P	Outer foil	1	
4	WES9870P	Inner blade	1	
5	WES701S9707	Screw	2	
6	WES701S0207	Retaining plate	1	
7	WES701S0327	Water-Proof rubber set	1	
8	WES701S1087	Trimmer driving bar	1	
9	WES701H1507	Trimmer	1	
10	WES702H3158	Housing	1	
11	WES701S3367	Side panel AB set	1	
12	WES701S1247	Driving head A	1	
13	WES701S1257	Driving head B	1	
14	WES702S0778	Chassis	1	
15	WES701S1007	Motor	1	
16	WES701S2447	Terminal pin	1	
17	WES702S2508	Rechargeable battery	1	
18	WES702S2128	Module	1	
19	WES702S2368	LCD block	1	
20	WES701H3847	Bottom cover	1	
21	WEW631W6057	Screw	2	
22	WES702H7658	Charging adaptor	1	
23	WES702H7198	Wall mount	1	
24	WES702H7018	Hard case	1	
—	WES702S8008	Individual box	1	
—	WES702S8108	Operating instructions	1	

# WIRING CONNECTION DIAGRAM



# TROUBLESHOOTING GUIDE





## CAUTION

\* If the shaver is operated on AC with the battery fully discharged, the battery may use all available power, leaving insufficient to start the motor or run it at full strength.

In this case, turn OFF the switch and charge the battery for approximately 10 seconds before using. Explain this to the user. (Also tell the user that if the unit is only operated on AC, the battery should be fully charged once every 6 months.)

## CAUTIONS ON DISASSEMBLY AND REASSEMBLY

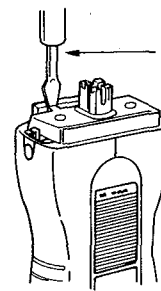
ES702 is washable. For disassembly or reassembly, strictly observe the following precautions.

\* When reassembling the driving head water proof rubber after disassembly of the main block, check it is completely free from twists, scratches, dust (including waste hairs), and wipe the rubber surface clean before reassembly.

# CAUTIONS ON DISASSEMBLY

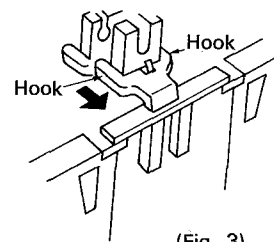
Follow the procedure below to disassemble the main block.

- ① Pull the outer foil frame block off.
- ② Remove the trimmer block. (This facilitates the removal of the trimmer driving rod. (See Fig. 2) )  
When the trimmer block is removed with the trimmer handle positioned at 1 or 2, trimmer hook can be damaged. With the trimmer handle set to the OFF position or slightly above it, remove the trimmer block to one side using a flat screwdriver.
- ③ Remove the trimmer driving rod. (See Fig. 3) While removing the two hooks, push the trimmer driving rod outward. (Careful it doesn't fly off.)
- ④ Remove the two top screws and lift the rubber holding plate away. (See Fig. 4)
- ⑤ Remove the two screws from the bottom cover. (See Fig. 5)
- ⑥ Remove the side panels outwards. (See Fig. 4) (The panels do not come off until the rubber holding plate has been removed.)
- ⑦ Remove the driving head water proof rubber. (As the rubber is thin, be careful not to break it.)
- ⑧ Set the switch to OFF and, holding the housing, push the top part of the driving head and push the base block out with the bottom cover.

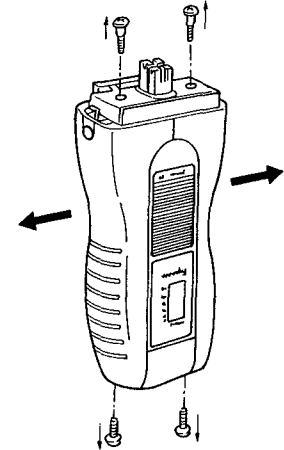


(Fig. 2)

Insert a flat screwdriver head between the housing and the trimmer blade to raise one end of the trimmer block for removal. (There are two hooks on the left and right sides.)



(Fig. 3)

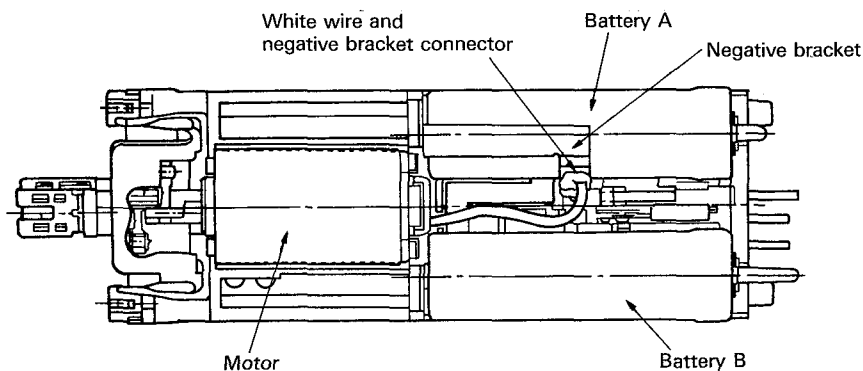


(Fig. 4)

# BATTERY REPLACEMENT

(See Fig. 5)

- ① Remove the bottom cover block and pull out the white wire and negative bracket connector.
- ② Remove battery blocks A and B.  
(Since the two batteries are used in series, replace them both with new ones.)



(Fig. 5)

# MODULE REPLACEMENT

(See Figs. 5 and 6)

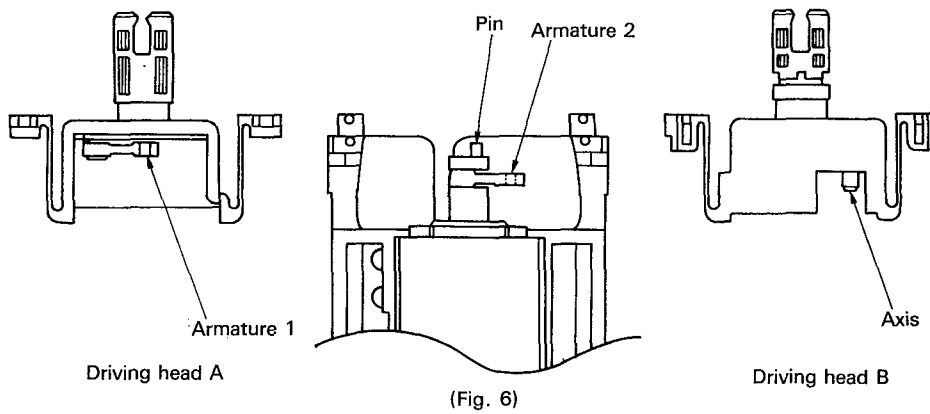
\* The module is soldered to the chassis at 4 points. To replace the module, follow the procedure below.

**Disassembly Procedure** (See Figs. 5 and 6)

- ① Unsolder the white wire and the negative bracket from the negative contact spring as shown in Fig. 5 (to prevent short circuit).
- ② Unsolder the 3 connections to the chassis (See Fig. 6).
- ③ Remove the module from the 4 hooks of the chassis.

**Reassembly Procedure** Driving head A and B Installation (See Fig. 6)

- ① Install driving head A in the chassis (with the motor assembled) after inserting the motor tip pin into the hole of armature 1 of driving head A.
- ② Then install driving head B in the assembly ① above after inserting driving head B axis into the hole of armature 2 of the motor.



# DRIVING HEAD WATER SEAL INSTALLATION

The driving head water proof rubber must be fitted the right way around. Install as shown in Fig. 7 by inserting firmly to the set position.

