

Models No. ▶ ADP02

Description ▶ Refreshing adapter

CONCEPTION AND MAIN APPLICATIONS

The above mentioned adaptor can be used for refreshing of our newly developed Ni-MH batteries.

After the process of refreshing it indicates the condition of batteries.

And it is equipped with over heat protector.

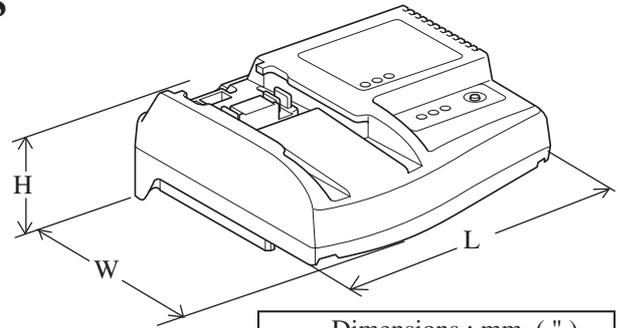
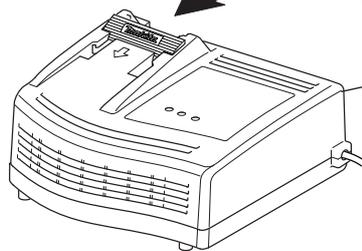
Newly developed Ni-MH batteries



ADP02 Refreshing adapter



DC14SA or DC24SA



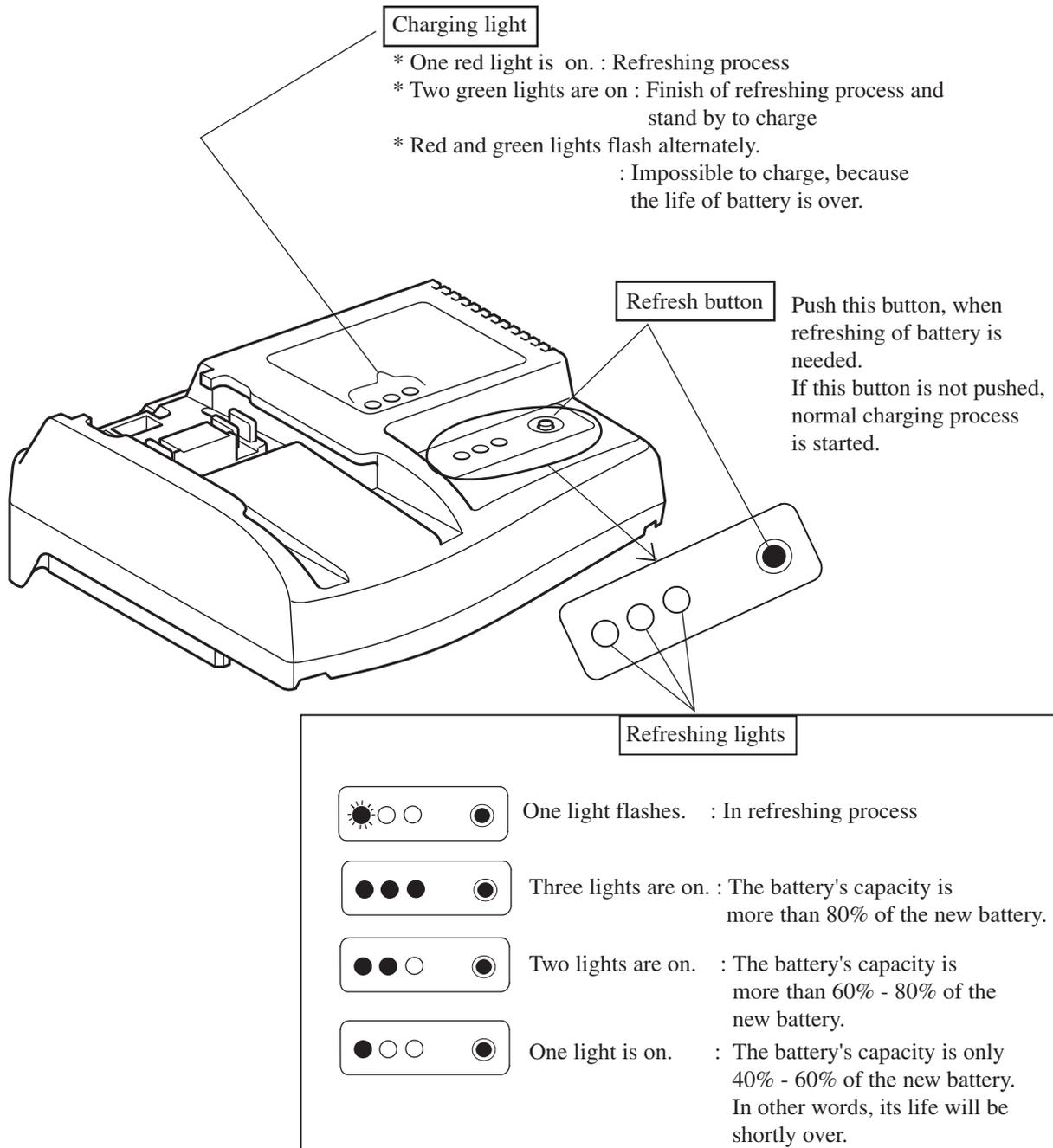
Dimensions : mm (")	
Width (W)	147 (5-13/16)
Height (H)	72 (2-7/8)
Length (L)	170 (6-11/16)

▶ Specification

The refreshing times are approximately as listed below.

Charger to be used with ADP02	Batteries No.	Voltage (V)	Capacity (Ah)	Refreshing time
DC14SA for 7.2V - 14.4V	B9017A	9.6	1.7	6 hours
	B9017A	9.6	1.7	6 hours
DC24SA for 7.2V - 24V	B2417	24	1.7	6 hours
	B2430	24	3.0	9 hours

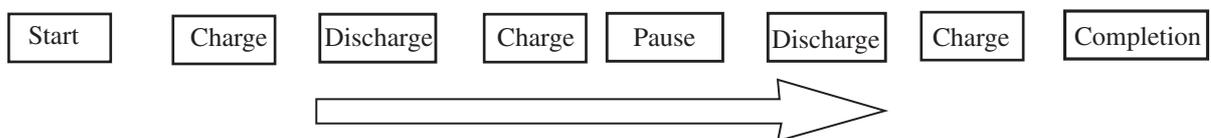
< Note > The above listed figures about refreshing time can change depending on the conditions of batteries, room temperature, charger, etc.



Refreshing adapter activates the inactive batteries which have the troubles listed below.

Cause of inactivity	Troubles
Repeated cycle of full charge and incomplete discharge	Down of output voltage Shorter operating time of D/C tools
Repeated over discharge (continue to discharge battery in spite of down of power)	Down of battery's capacity Shorter operating time of D/C tools
Storage without using for long time	Down of battery's capacity Shorter operating time of D/C tools

The refreshing cycle is as mentioned below.



< 1 > Removing adapter circuit

(1) Remove adapter case by taking off 4 tapping screws as illustrated in Fig.1.

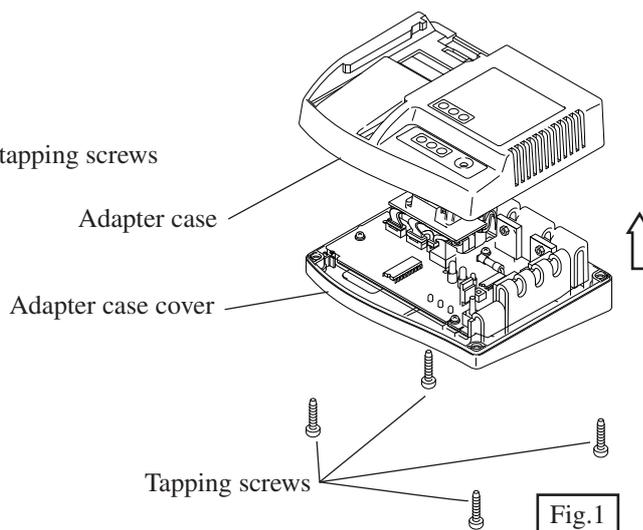


Fig.1

(2) Disconnect the 3 connectors. And take off a tapping screw in the center of adapter circuit.

Other screws on the adapter circuit remain as is.

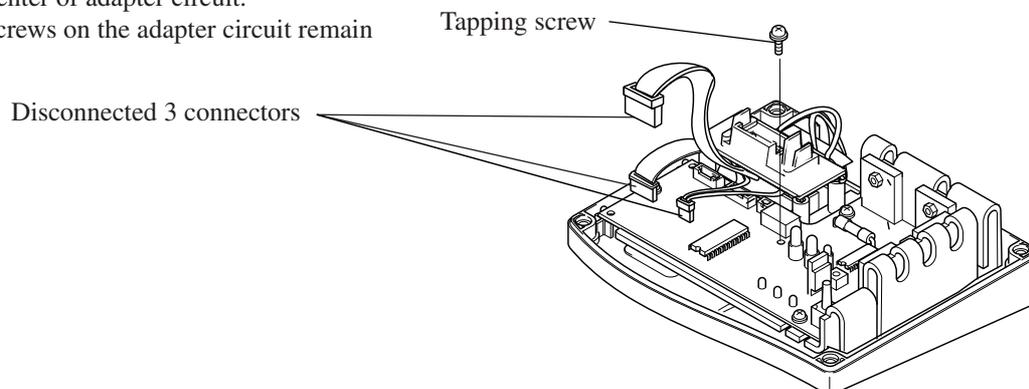


Fig.2

(3) Remove adapter circuit together with heat sink, and replace it with the new one.

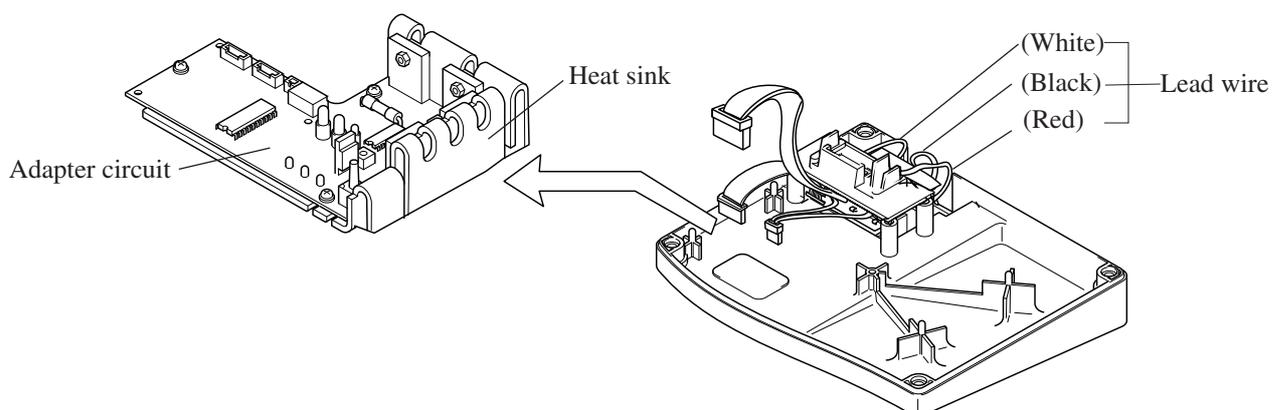


Fig.3

< 2 > Removing terminal unit and terminal board

- (1) Take off tapping screw holding terminal board, after disconnecting 3 connectors. Be careful, not to lose compression spring and spring holder. in this process.

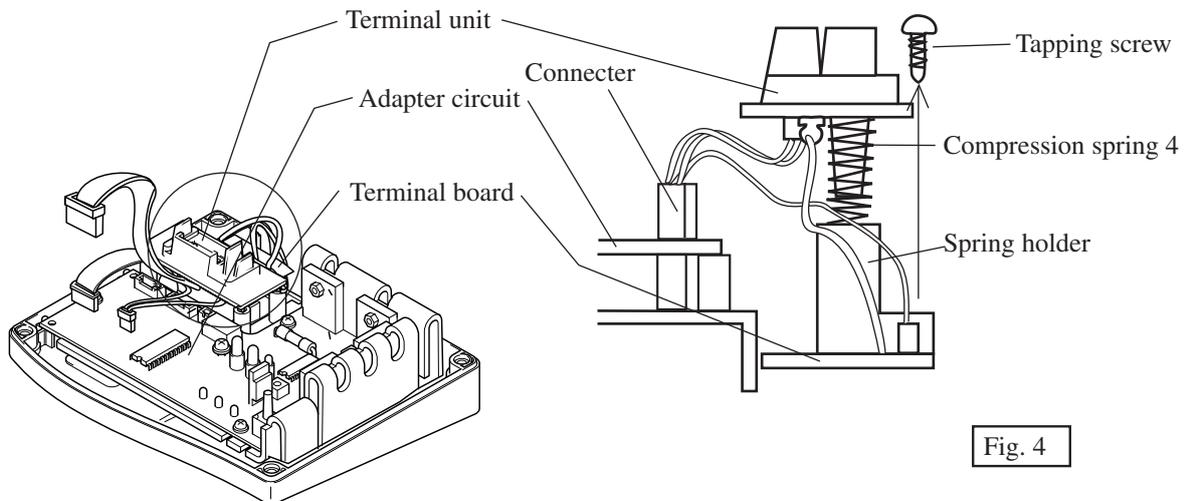
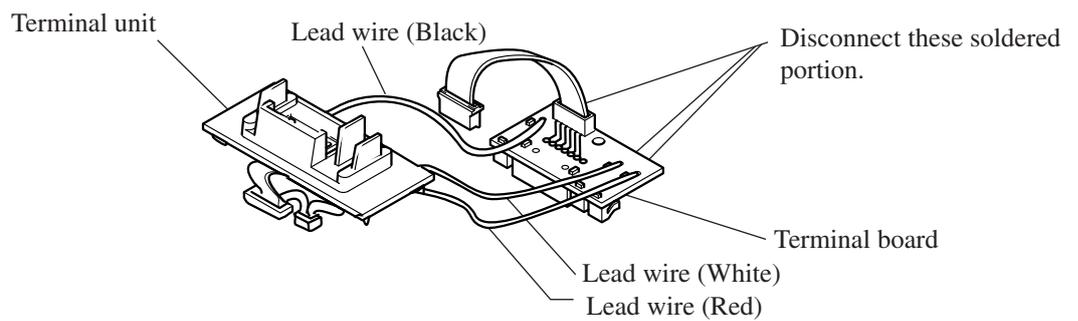


Fig. 4

- (2) Disconnect 3 soldered lead wires which are connecting terminal board with terminal unit. They have to be disconnected at the terminal board side, as illustrated in Fig. 5. And remove terminal unit from terminal board.



Pay attention to the color of lead wires in order to avoid mis-connection, when assembling terminal board and terminal unit.

Fig. 5

< 2 > Assembling

- (1) Connect 3 lead wires of terminal unit with terminal board as illustrated in Fig. 5. Fix terminal board and spring holder with tapping screw on adapter case cover. And insert compression spring 4 into spring holder as illustrated in Fig 6.

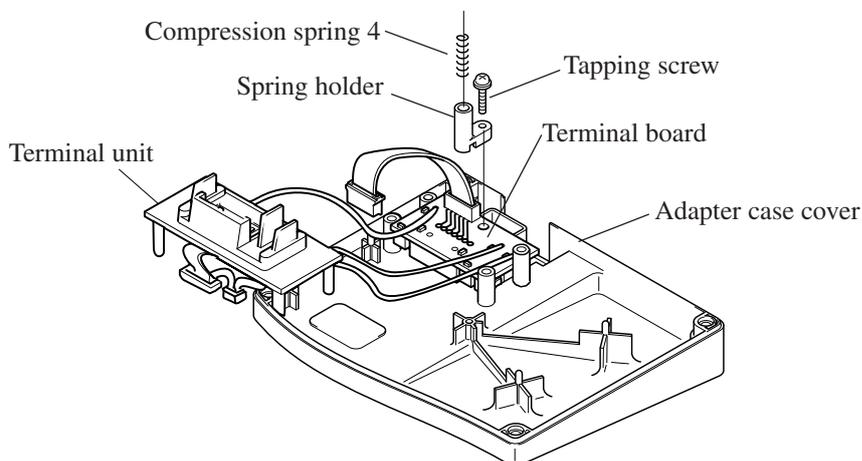


Fig. 6

(2) The 3 connectors have to be connected with adapter circuit as follows.

Connectors of terminal unit	Connectors of terminal board	Connectors of adapter circuit
	Connector (Black) 6 wires	→ Connector (Black)
Connector (White) 2 wires		→ Connector (White)
Connector (Light gray) 6 wires		→ Connector (White)

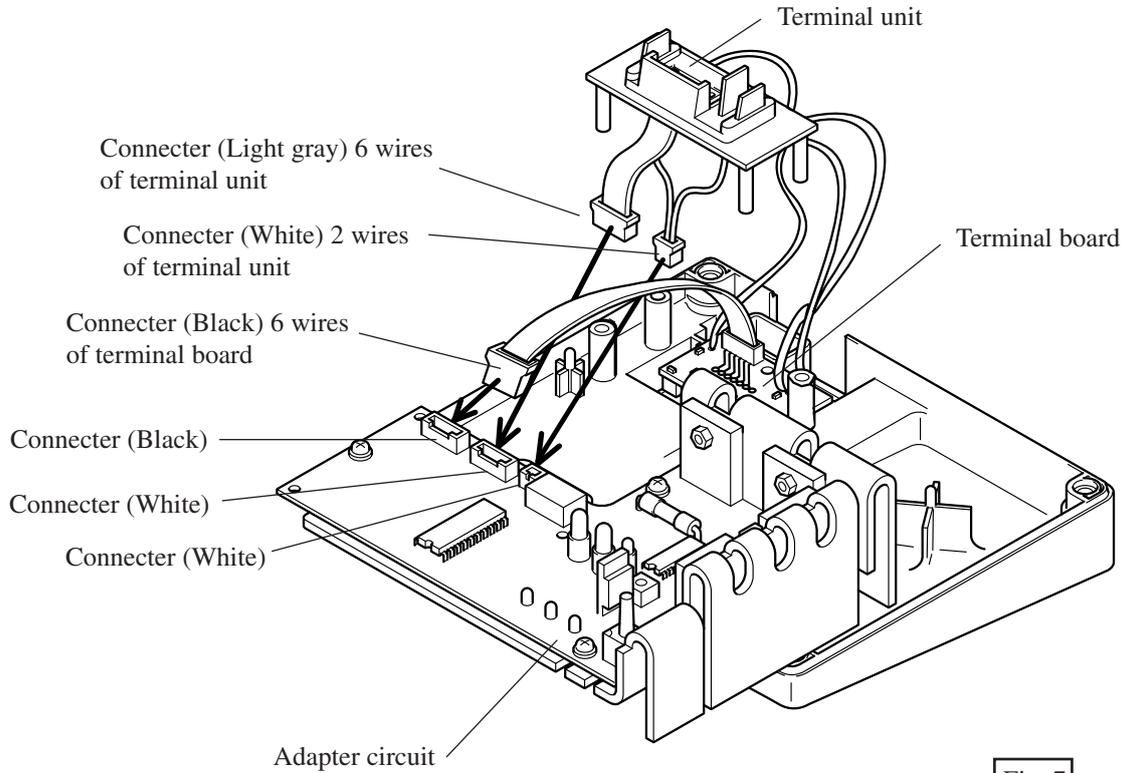


Fig. 7

(3) Mount terminal unit as illustrated in Fig. 8.

Be careful, not to pinch the lead wires in this process.

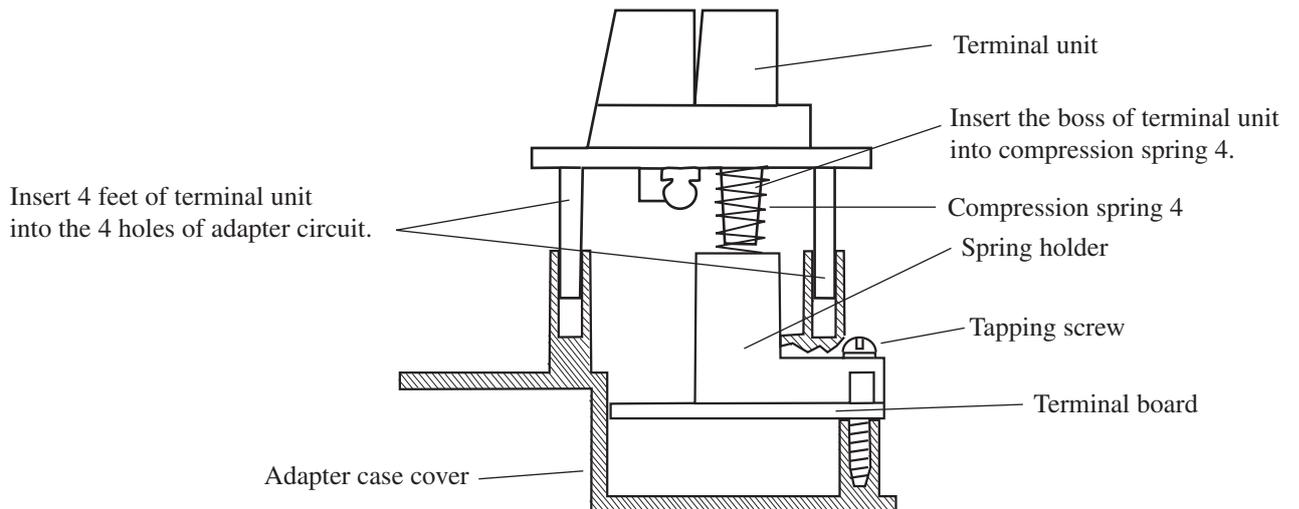
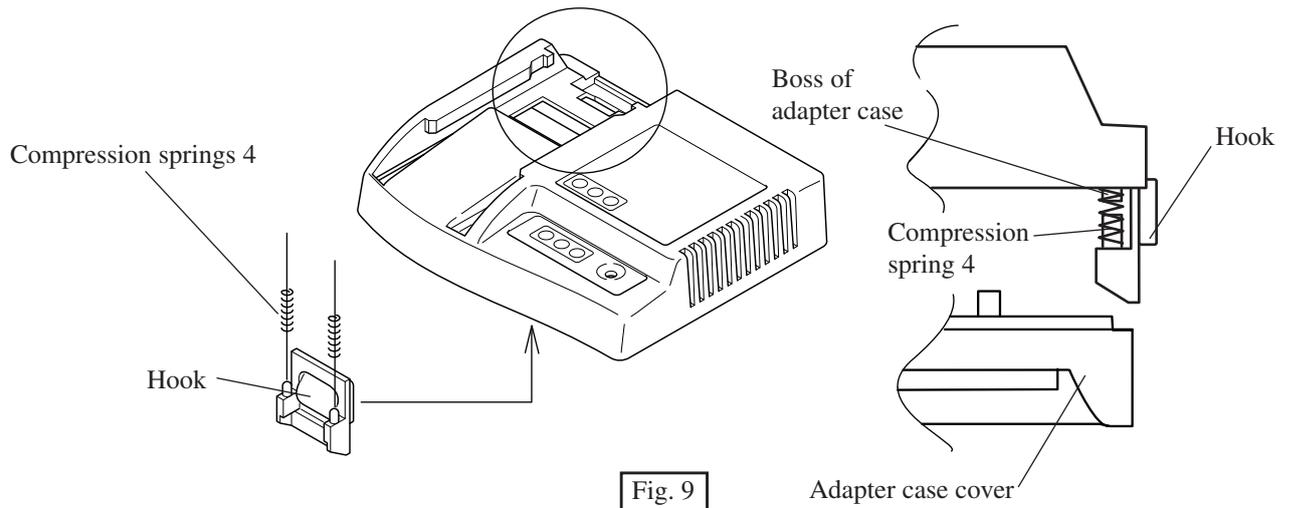


Fig. 8

- (4) After assembling 2 compression springs 4 to hook, install them into adapter case with aligning the 2 compression springs to the 2 bosses in the adapter case.



- (5) With holding hook with your finger, put adapter case on adapter case cover. And fasten it on adapter case cover with 4 tapping screws. Be careful, not to pinch lead wires, or not to deform spring terminals, in this process.

