



[ For FX951-51 -up ]

## Service Manual

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### Cautionary points during use

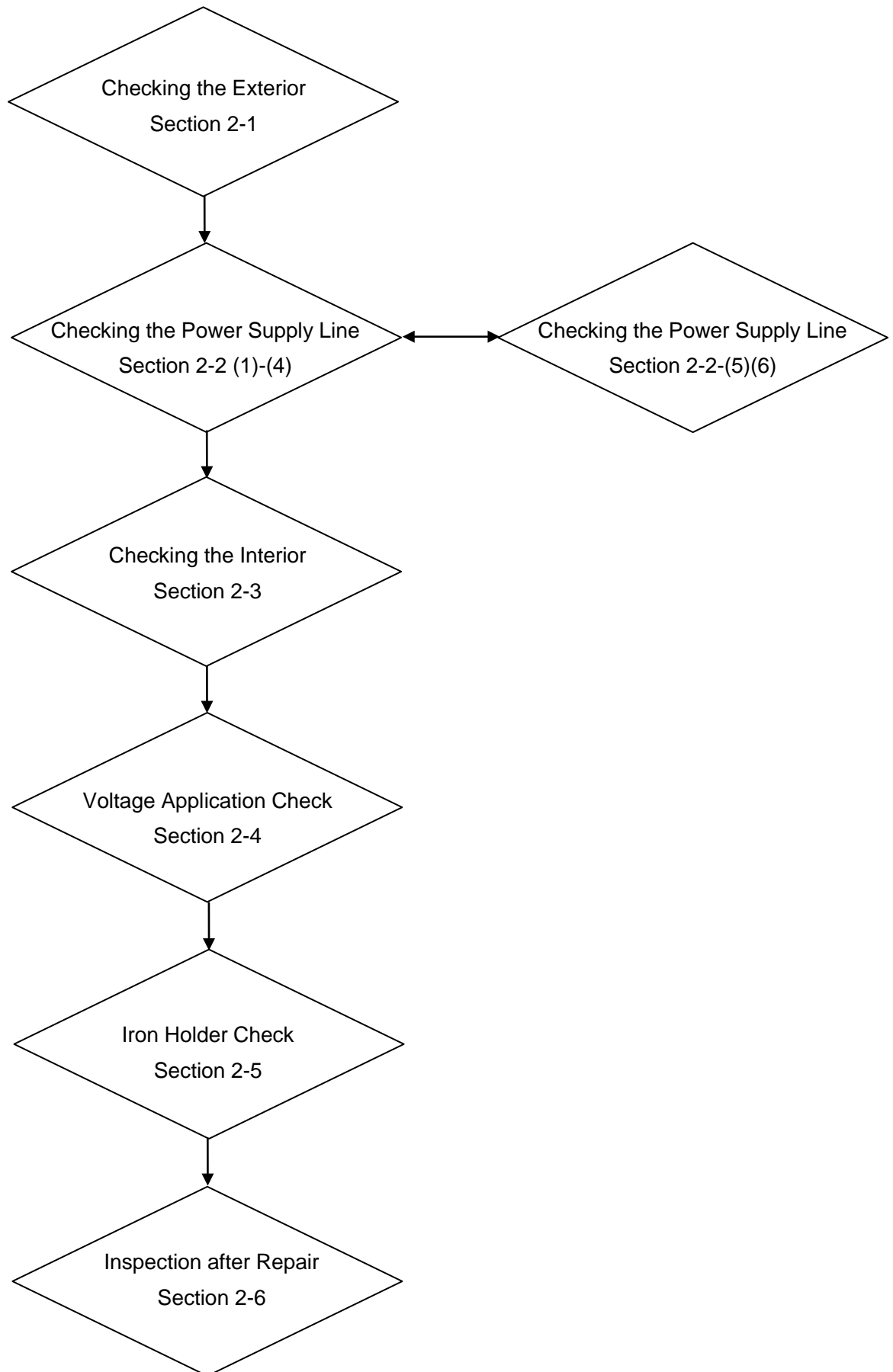
Warnings, cautions and notes are placed at critical points in this manual to direct the operator's attention to significant items. They are defined as follows: Please read the following sentences and understand them sufficiently before reading the main text.

▲WARNING:	Failure to comply with a WARNING may result in serious injury or death.
△CAUTION:	Failure to comply with a CAUTION may result in injury to the operator, or damage to the items involved.
NOTE:	Indicates the items which operators are likely to make a mistake in and should pay attention to.

**Revision History**

Revision Date	Information Revised	Description	Approved by	Created by
March 31, 2007	-	First edition	Hirai	Nishii
March 9, 2012	3-2 Station Parts List	Change the part number for Receptacle. B3076 → 699-031236	Nagase	Nishii

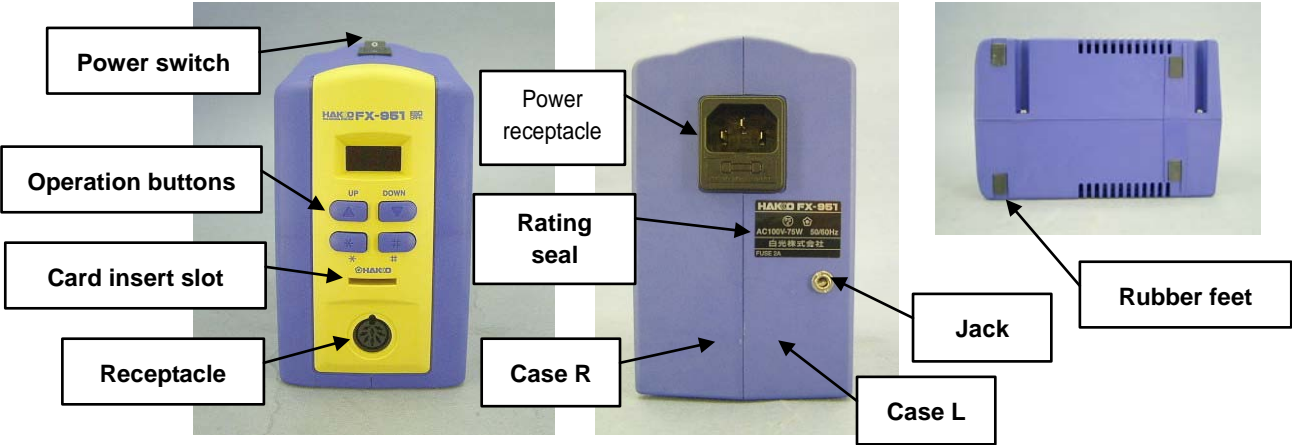
## Chapter 1 Inspection Flow Chart



Chapter 2 Procedure and Method of Repair

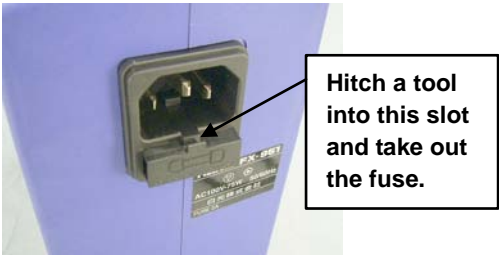
2-1 Checking the Exterior

Check the exterior for the following points.



- (1) Are the case R and case L damaged?  
➡★If the case R and case L are damaged:  
Replace each case.
- (2) Do the four operation buttons and card operate smoothly?  
➡★If operations are not smooth:  
Installation of the P.W.B. (for control/connector) is faulty, or the P.W.B. itself is faulty.  
Install the P.W.B. again or replace the P.W.B. (for control/connector).
- (3) Does the receptacle allow smooth insertion and removal?  
➡★If the receptacle does not allow smooth insertion or removal:  
Replace the P.W.B. (for control/connector).
- (4) Are the rubber feet of the case R and case L chipped or damaged?  
➡★If the rubber feet of the case R and case L are chipped or damaged:  
Mount a new rubber feet or replace them.
- (5) Take out the fuse from the power receptacle and check that the fuse has not blown.  
Check the rating of the fuse with reference to the table on the right.
- ➡★If the fuse has blown:  
Replace the fuse.
- ➡★If the wrong fuse has been used:  
Replace the fuse.

Voltage	Fuse rating
100V-110V	250V-2A
220V-240V	250V-1A



## 2-2 Checking the Power Supply Line

### Check the power supply line for the following points.

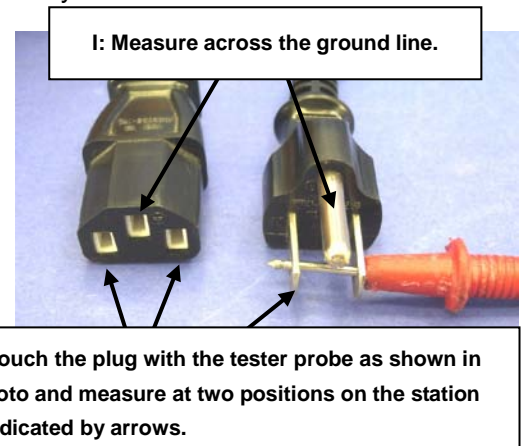
- (1) Has the sheath on the power cord been dropped or damaged?

➡ ★ If the sheath on the power cord has been dropped or damaged:  
Replace the power cord, as it may break eventually.

- (2) Measure the resistance values of the power cord at three points using a tester. (Photo on the right)

**NOTE** The cord is normal if resistance values are “1Ω or less”.

➡ ★ If a resistance value is abnormal:  
Replace the power cord.



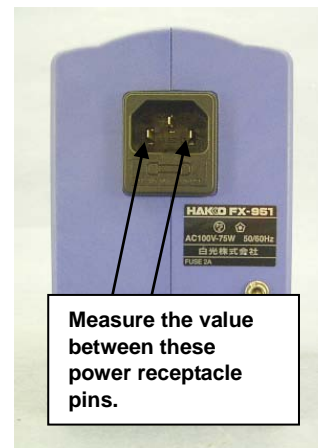
- (3) During measurement in step (2) above, twist and bend the power cord at various angles (including the plug and the station connecting part).

➡ ★ If abnormal resistance values are detected:  
The line is broken. Replace the power cord.

- (4) Turn on the power switch and measure the resistance value between power receptacle pins.

**NOTE** Under normal conditions, the resistance values are as listed in the following table.  
(resistance values of the primary side of the transformer)

100V	5.6Ω to 6.8Ω
110V	6.0Ω to 7.4Ω
120V	6.5Ω~9.5Ω
220V	30.9Ω to 37.7Ω
230V	30.4Ω to 37.2Ω
240V	



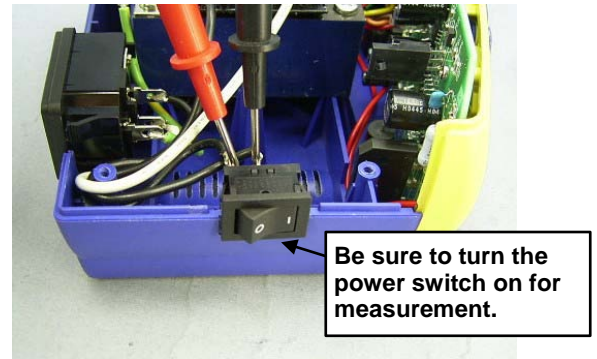
➡ ★ If the resistance value is different from the value in the table above:  
The power switch or the transformer is faulty. Proceed to steps (5) and (6).  
★ If the resistance value is within the above range:  
Proceed to section 2-3.

**NOTE** Remove the case R before taking the following steps.

(5) Measure a resistance value of the power switch using a tester.

**NOTE** With the power switch turned on, the switch is normal if a resistance value is “1Ω or less”.

➡ ★ If a resistance value is abnormal:  
Replace the power switch.

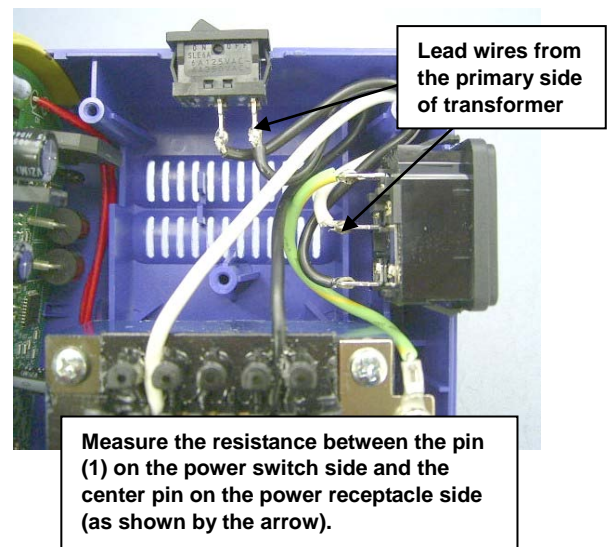


(6) Check the resistance on the primary side of the transformer as follows.

Measuring points: Between the soldered parts of the power switch and the power receptacle on the primary side of the transformer.

100V	5.6Ω to 6.8Ω
110V	6.0Ω to 7.4Ω
120V	6.5Ω~9.5Ω
220V	30.9Ω to 37.7Ω
230V	30.4Ω to 37.2Ω
240V	

➡ ★ If a resistance value is abnormal:  
Replace the transformer.



## 2-3 Checking the Interior

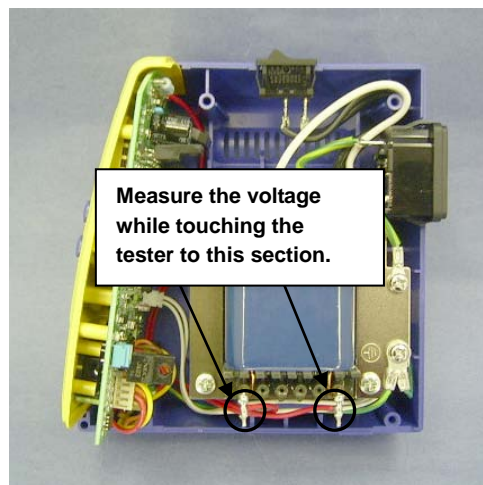
Remove the cover and check the internal components for the following points:

### ⚠CAUTION

Wear a wrist strap when following these procedures to prevent damage to the P.W.B.

- (1) Measure the secondary voltage (ACV) of the transformer with the power turned on.

100V	AC 24.3V to 29.7V
110V	
120 V	
220V	
230V	
240V	



- ➡ ★If the measured voltage is different from the values of the above table:  
Replace the transformer.

- (2) Check the surface of the P.W.B. (for control/connector) visually.

- ➡ ★If abnormalities such as cracks and explosions are found on the components:  
Replace faulty components.
- ➡ ★If portions around the cracked or exploded components are burned:  
Replace the whole P.W.B.

- (3) Are the transformer and P.W.B. (for control/connector) correctly mounted?

- ➡ ★If the parts are not installed correctly:  
It may result in a failure. Mount the parts correctly.

- (4) Is insulation on the lead wires damaged?

- ➡ ★If the insulation is damaged:  
Replace the damaged lead wires.

- (5) Are there any failures in any of the soldered lead wires?

- ➡ ★If a soldered section is faulty:  
Repair each section.

## 2-4 Voltage Application Check

### Perform a voltage application check.

**NOTE** Without attaching the iron, perform a check with the following procedures.

(1) Check the soldering iron error.

1. Turn on the power switch.
2. The following indications appear on the display in the order presented, and the buzzer keeps beeping.



3. Turn off the power switch.

➡★If no indication appears on the display:

The P.W.B. is faulty. Check the P.W.B. using the procedure in step (7).

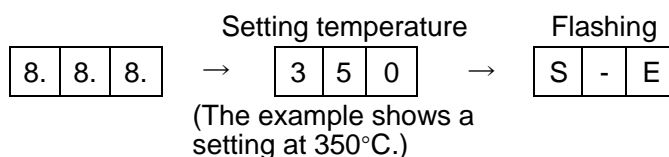
➡★When an indication appears on the display but it does not function properly:

The P.W.B. is faulty. Check the P.W.B. using the procedure in step (7).

**NOTE** Connect the iron (without the tip) and check according to the following procedures.

(2) Check the sensor errors.

1. Turn on the power switch.
2. The following indications appear on the display in the order presented, and the buzzer keeps beeping.



3. Turn off the power switch.

➡★If no indication appears on the display:

The P.W.B. is faulty. Check the P.W.B. using the procedure in step (7).

➡★When an indication appears on the display but it does not function properly:

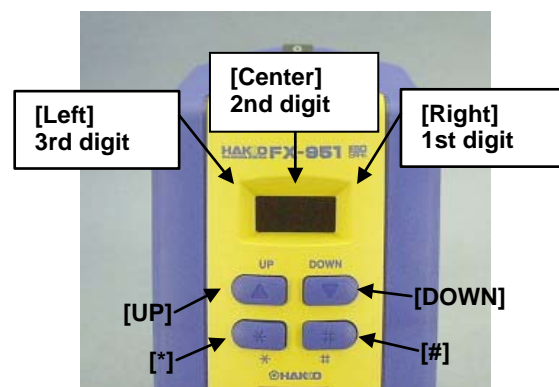
The P.W.B. is faulty. Check the P.W.B. using the procedure in step (7).

**NOTE** Connect the iron (without the tip) and check according to the following procedures.

(3) Check the LCD.

1. Insert a card.
2. While holding down the four operation buttons, turn on the power switch.
3. After the version No. (ex. [001]) is displayed, the segment of the indicator [Left] will be lit sequentially.

**NOTE** The figures to be displayed vary depending on the version of P.W.B.



4. After [UP] is pressed, the segment of the indicator [Center] will be lit sequentially.
5. After [DOWN] is pressed, the segment of the indicator [Right] will be lit sequentially.
6. After [\*] is pressed, [4] will be displayed in the center.
7. After [#] is pressed, figures around [769] will be displayed. (only when setting temperature (°C))
8. After [#] is pressed, [6] will be displayed in the center.
9. If the card is pulled, [888] will be displayed.
10. Turn off the power switch.



★If the unit does not operate correctly:

The P.W.B. is faulty. Check the P.W.B. using the procedure in step (7).

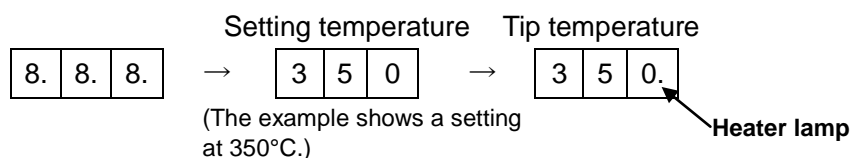
**NOTE** Connect the iron (with the tip) and perform a voltage application check using the following steps:

(4) Check the setting temperature.

Setting temperature range	
In Centigrade	200°C to 450°C
In Fahrenheit	400°F to 840°F

1. Turn on the power switch with a card detached.
2. The following indications appear on the display in the order presented, and the tip temperature rises to the setting temperature.

**NOTE** When the tip temperature reaches the setting temperature, the buzzer will sound and the heater lamp at the lower right of the panel will start to flash.



3. Insert a card. Indicator [Left] flashes.
4. Press [UP] and [DOWN] to check that the indication changes within the temperature setting range.
5. Indicator [Center] flashes if you press [\*]. Press [UP] and [DOWN] to check that the indication changes within the temperature setting range.
6. Indicator [Right] flashes if you press [\*]. Press [UP] and [DOWN] to check that the indication changes within the temperature setting range.
7. Press [\*] to return to usual operations. The tip temperature rises to the setting temperature.
8. Measure the tip temperature. (Check that the tip temperature is at the setting temperature plus or minus 15°C.)



★If the unit does not operate correctly:

The P.W.B. is faulty. Check the P.W.B. using the procedure in step (7).



★If a tip temperature does not reach a temperature range:

The tip has degenerated or an offset value is incorrect. Replace the tip or correct an offset value as described in step (5) below and check a tip temperature again.

## (5) Check the offset value.

Input range for the offset value	
In Centigrade	-50°C to + 50°C
In Fahrenheit	-90°F to + 90°F

1. Hold down [#] for one second or longer to make the indicator [Left] flash, indicating "0" or "-".
2. Press [UP] and [DOWN] to check that the indication changes alternately between [0] and [-].
3. Indicator [Center] flashes by pressing [\*]. Press [UP] and [DOWN] to check that the indication changes within the input range.
4. Indicator [Right] flashes by pressing [\*]. Press [UP] and [DOWN] to check that the indication changes within the input range.
5. Press [\*] to return to usual operations.

**NOTE** If an input range of offset values is exceeded, the operation returns to the beginning.



★ If the unit does not operate correctly:

The P.W.B. is faulty. Check the P.W.B. using the procedure in step (7).

## (6) Check the parameters.

1. Turn off the power switch before inserting the card.
2. If turning on the power switch while pressing the [UP] and [DOWN] at the same time, the mode will change to the temperature scale setting.
  - Check that pressing the [UP] and [DOWN] changes the indication alternately as follows:

1		C	1		F
---	--	---	---	--	---

Temperature scale setting	
C	Centigrade (°C)
F	Fahrenheit (°F)

3. Pressing [\*] accepts the indicated setting and proceeds to the "**Power save setting**".
  - Check that pressing [UP] and [DOWN] changes the indication within the input range.

2		0	2		1	2	3	0
---	--	---	---	--	---	---	---	---

\* The above example shows the case when it is set to 1 min.

Power save setting	
0	OFF
1 to 29	Indicates "SLP" after the set time has elapsed.
30	Indicates "---" after 30 minutes.

**NOTE** Check the power-save operation according to the procedure in Section 2-5: "Iron Holder Check "

4. Pressing [\*] confirms the indication, and the “**Low Temperature Alarm Tolerance Setting**” is indicated.
- Indicator [Left] flashes. Press [UP] and [DOWN] to check that the indication changes within the input range.

**NOTE** Every time [\*] is pressed, the indication will be determined and the flashing indicator will be shifted from [Center] to [Right].

1 5 0 (Example of indicating 150°C)

Temperature indication	Input range of low temperature alarm setting
°C	30 to 150
°F	50 to 300

5. Pressing [\*] accepts the indicated setting and proceeds to the “**Supervisor/operator Control Setting**”.
- Check that pressing [UP] or [DOWN] changes the indication alternately as follows:

4 0      4 1

Supervisor/operator control setting”.	
0	Card is required for offset value entry
1	Offset value entry is allowed without card

6. Pressing [\*] finishes the parameter setting and returns the unit to the normal operation.

➡★ If the unit does not operate correctly:  
The P.W.B. is faulty. Check the P.W.B. using the procedure in step (7).

**NOTE** Perform the following inspection if the unit does not operate in steps (1) to (6).

- (7) Visually inspect the reverse side of the P.W.B. (for control/connector) for faulty soldering or pattern exfoliation.

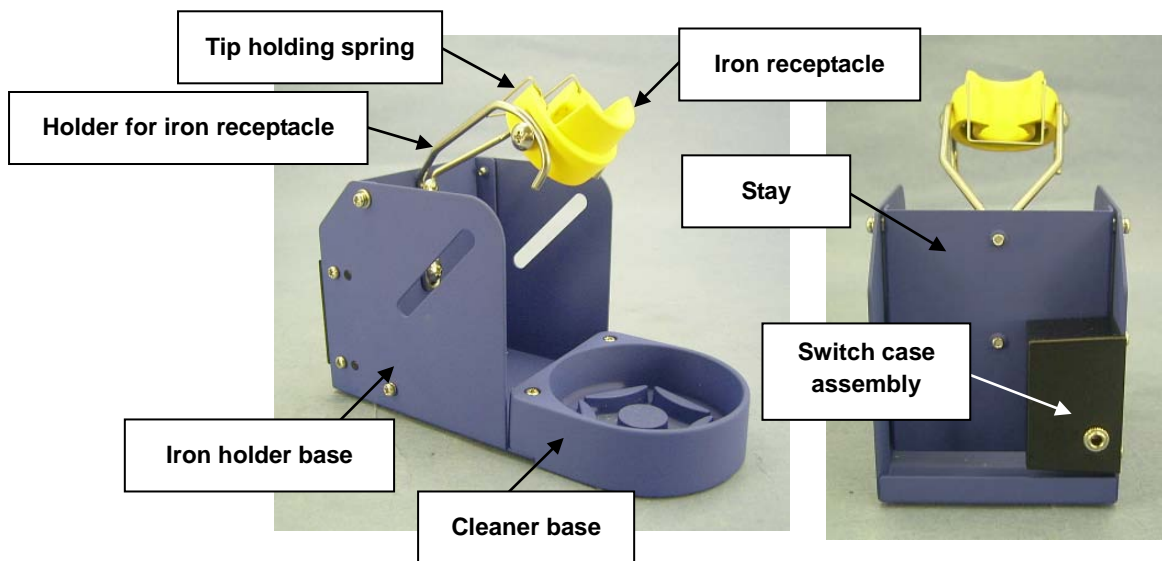
➡★ If a faulty portion is found:  
Correct soldering.

➡★ If a pattern coming off is found:  
Replace the whole P.W.B.

<b>ΔCAUTION</b>	If a fault is not found visually, replace the whole P.W.B. (for control/connector).
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## 2-5 Iron Holder Check

Check the following points of the iron holder.



1. Are any of the rubber feet (4 feet) lost or damaged?

➡ ★ If lost or damaged:  
Replenish or replace the rubber foot with a new one.

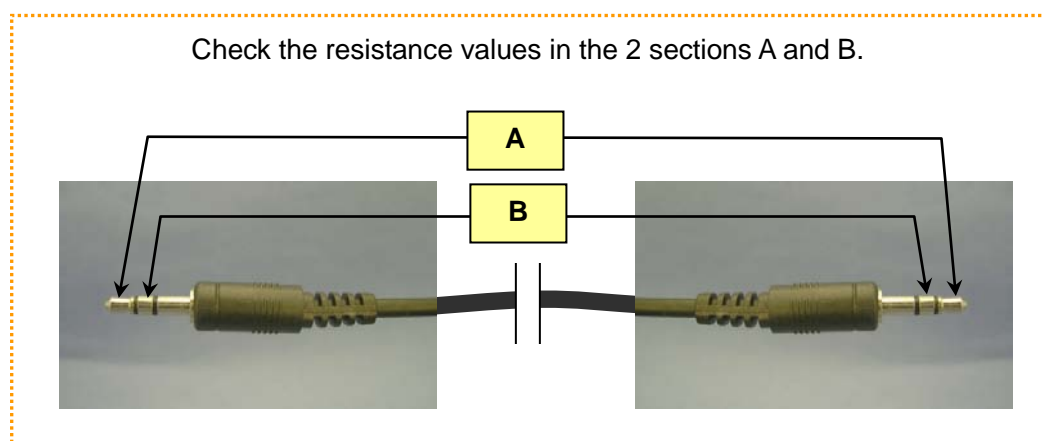
2. There are 11 screws in total securing the iron holder. Are any screws lost?

➡ ★ If lost:  
Replenish the lost screw with a new one.

3. Check whether the connecting cable is broken.

**NOTE** Measure the resistance values in sections A and B. If each resistance value is “1Ω or less”, the unit conditions are normal.

➡ ★ If the resistance value is  $\infty$ :  
The connecting cable is broken. Replace the connecting cable with a new one.



## 4. Insert the connection cable into the iron holder and check the following points:

- Does the stay operate smoothly?

➡★ If the stay does not smoothly operate:

The iron holder base may be deformed, the spacer may be lost or the spring in the switch case may be damaged.

Check each point and correct or replenish and replace it.

- Measure the resistance of the connection cable to check that the switch operates normally.

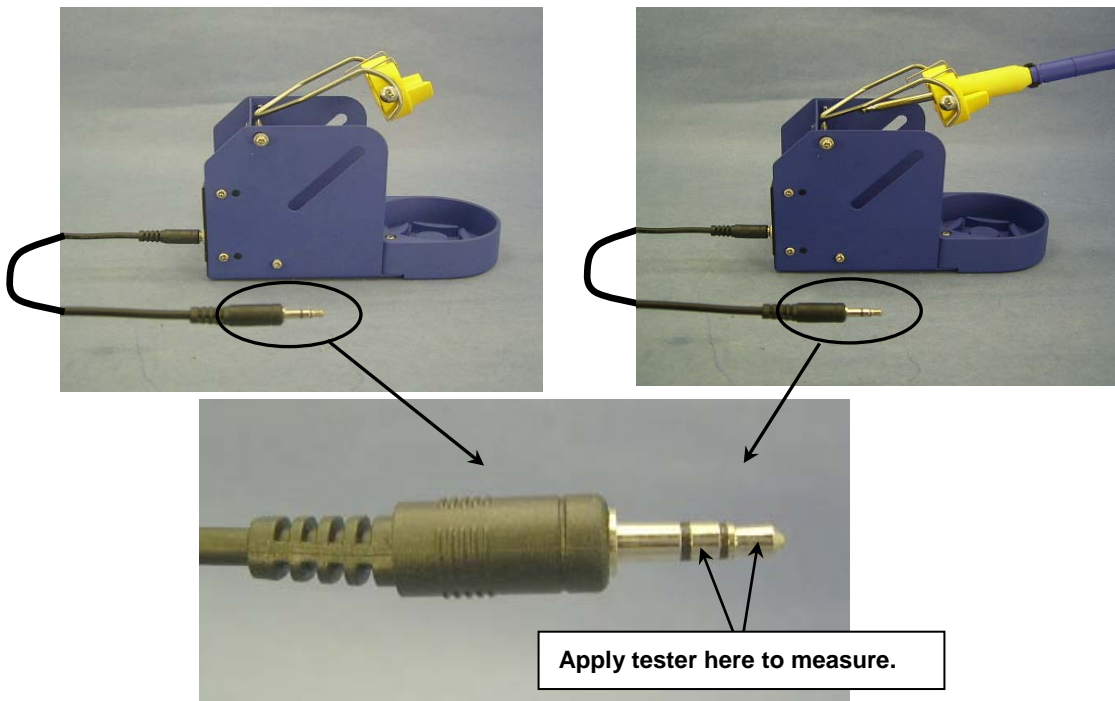
**NOTE** If the resistance value is “ $1\Omega$  or less” when the tip is placed on the soldering holder base and the resistance value is “ $4.7k\Omega \pm 10\%$ ” when the tip is released from the iron holder, the unit conditions are normal.

➡★ If the resistance value is abnormal:

Replace the switch case assembly with a new one.

If the resistance value is “ $4.7k\Omega \pm 10\%$ ” in this condition, the unit conditions are normal.

If the resistance value is “ $1\Omega$  or less” in this condition, the unit conditions are normal.



## 5. Connect the connecting cable to the iron holder and FX-951 and then check the power save function.

**NOTE** If the connecting cable is not inserted fully into the jack, the power-save function will not activate.

Power save setting	
0	OFF
1 to 29	Indicates “SLP” after the set time has elapsed.
30	Indicates “---” after 30 minutes.

➡★ If the power-save function does not operate normally:

Replace the P.W.B. with a new one.

2-6 Inspection after Repair

Perform the inspection after repair.

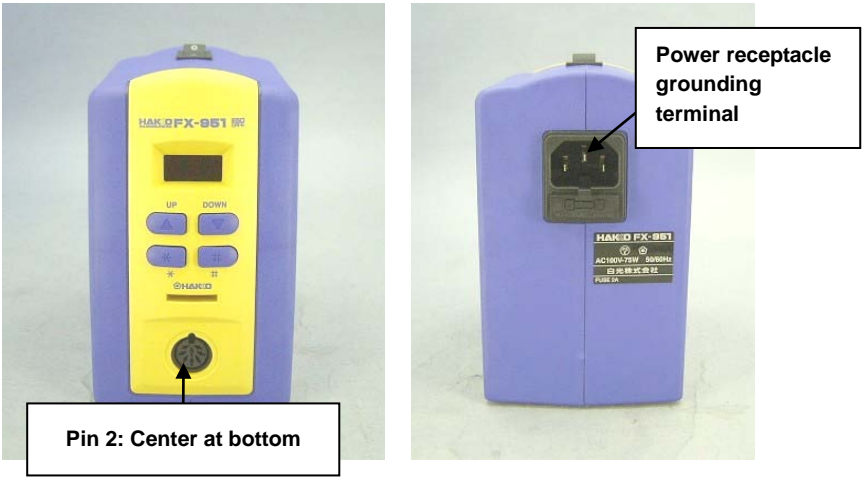
<Preparations>

W-I tester / DMM (Tester) / Power meter (or ammeter) / Thermo-couple thermometer (HAKKO192)

(1) Voltage application test

Resistance between power receptacle ground terminal and receptacle pin 2 (for measurement point, refer to the photo) is 1Ω or lower.

Resistance between power receptacle ground terminal and IRON 2 receptacle pin 2 is 1Ω or lower.



(2) Insulation test and withstanding voltage test

[Insulation test] Apply 500VDC and check that the value is 25MΩ or higher.

[Withstanding voltage test] Apply 1250VAC (1mA) to check that it can resist for 1 second or longer.

**NOTE** Perform the following inspections with a proper tip.

(3) Check the power consumption.

Power consumption must be 75W ±10%.

(4) Measure the tip-to-ground potential and the tip to ground resistance.

The tip-to-ground potential must be 1mV or lower.

The tip to ground resistance must be 1.0Ω or less.

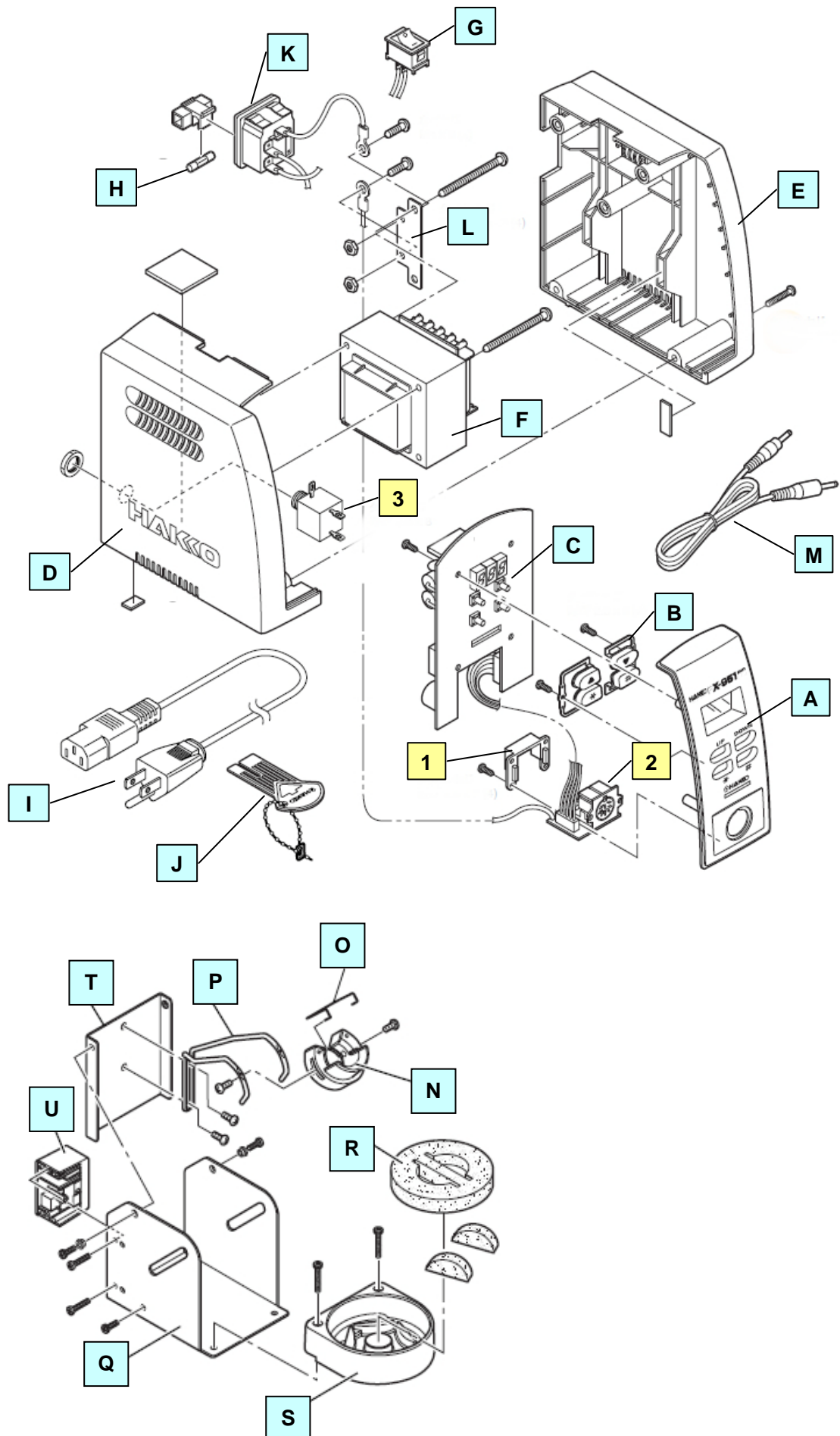
(5) Check the temperature.

The tip temperature must be at the setting temperature ±15°C.

<b>△CAUTION</b>	<b>If an accessory iron is provided, return it to a customer with lead-free solder put on the tip. (To prevent oxidation)</b>
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## Chapter 3 Exploded Drawings and Parts List

### 3-1 Exploded Drawings



**3-2 Station Parts List**

No.	Category	Part name	Specifications	Product No. for each voltage						
				100V	110V	120V	220V	230V	240V	
A	Sales	Front panel		B2973						
B	Sales	Button set		B2982						
C	Sales	P.W.B. for control	For control and connector	B3256						
D	Sales	Case L	With rubber feet/cushion rubber A (Refer to Photo 4-1-5 to 4-1-7)	B3255						
E	Sales	Case R	With rubber feet/cushion rubber B (Refer to Photo 4-1-5 to 4-1-7)	B2978						
F	Sales	Transformer		B2979	B2983	B2836	B2984	B2985	B3067	
				* The transformer 230V for Australian plug is B3067.						
G	Sales	Power switch		B2852						
H	Sales	Fuse		B2403(250V-2A)-			B2987(250V-1A)			
I	Sales	Power cord	Rubber 2-pole grounding	B2387	-	-	-	-	-	
			Vinyl 2-pole grounding	B2419					-	-
			Vinyl 3-conductor CH plug	-	-	-	B2436	-	-	
			Without vinyl 3-conductor plug	-	-	-	B2421		-	
			Molded BS plug	-	-	-	-	B2422	-	
			Molded BS plug CE					B2425		
			European plug	-	-	-	B2424	-	-	
			European plug CE				-	B2424		
			Australian plug	-	-	-	-	B2426		
J	Sales	Card		B2972						
K	Sales	Power receptacle		B2666						
L	Sales	Grounding plate		B2227						
M	Sales	Connecting cable		B3253						
N	Sales	Iron receptacle	With screws	B3001						
O	Sales	Tip fixing spring		B2791						
P	Sales	Holder for iron receptacle		B3248						
Q	Sales	Iron holder base	With rubber feet	B3251						
R	Sales	Cleaning sponge		A1536						
S	Sales	Cleaner base	With rubber feet	B3249						
T	Sales	Stay		B3250						
U	Sales	Switch case assembly		B3252						
*	Sales	Rubber feet	Two feet for FX-951 station (Refer to Photo 4-1-5 to 4-1-7)	B2016						

No.	Category	Part name	Specifications	Product No. for each voltage					
				100V	110V	120V	220V	230V	240V
1	Repair	Holder		B3073					
2	Repair	Only receptacle		Please let us know the following part number when ordering. 699-031236					
3	Repair	Jack	PJ-35N With nut 	B3329					
*	Repair	Cushion rubber A	For case L (Refer to Photo 4-1-5 )	B3086					
*	Repair	Cushion rubber B	For case R (Refer to Photo 4-1-6 )	B3087					

## Chapter 4 Disassembly Procedure

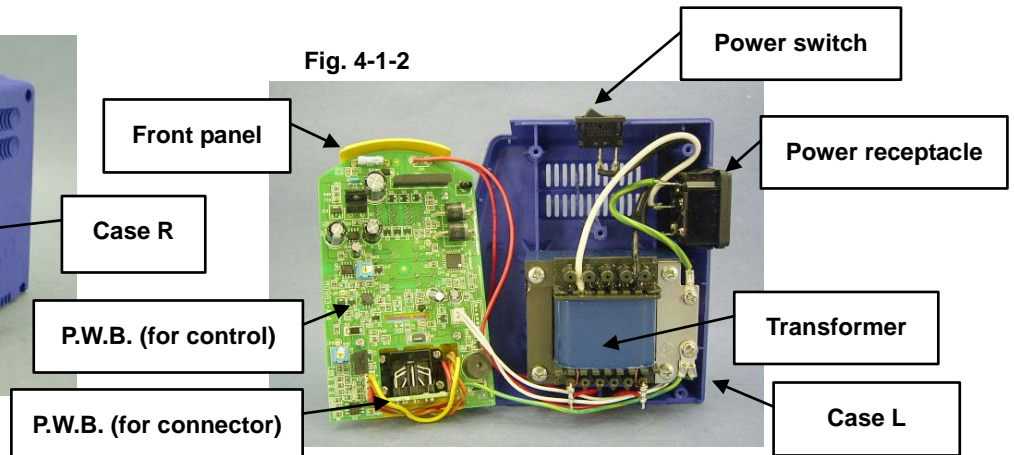
### 4-1 Opening the Cover

- (1) Loosen 5 screws on the sides of the case R to remove the cover.

Fig. 4-1-1



Fig. 4-1-2



#### ● Assembly procedures (opening)

- (1) Install the front panel in the case L. (Fig. 4-1-3)

**NOTE** Install the red lead wire and the lead wire for jack (white) carefully so that they do not get caught.

**NOTE** Run the lead wire of P.W.B. (for control) outside the boss.

- (2) Install the grounding wire for the P.W.B. in the designated place. (Figs. 4-1-3, 4-1-4)

- (3) Install the lead wires for transformer, power switch and power receptacle outside the boss. (Fig. 4-1-3)

**NOTE** Run the grounding wire not to let it come in contact with the power receptacle terminal.

- (4) Cover the case L with the case R and secure them with 5 screws (P tight round head screw M3 x 16) (Figs 4-1-3, 4-1-5 and 4-1-6)

**NOTE** Check that the cushion rubber B is installed in the case R and the cushion rubber A is installed in the case L.

- (5) Check that 2 rubber feet are installed in each of case R and L. (Fig. 4-1- 7)

Fig. 4-1-3

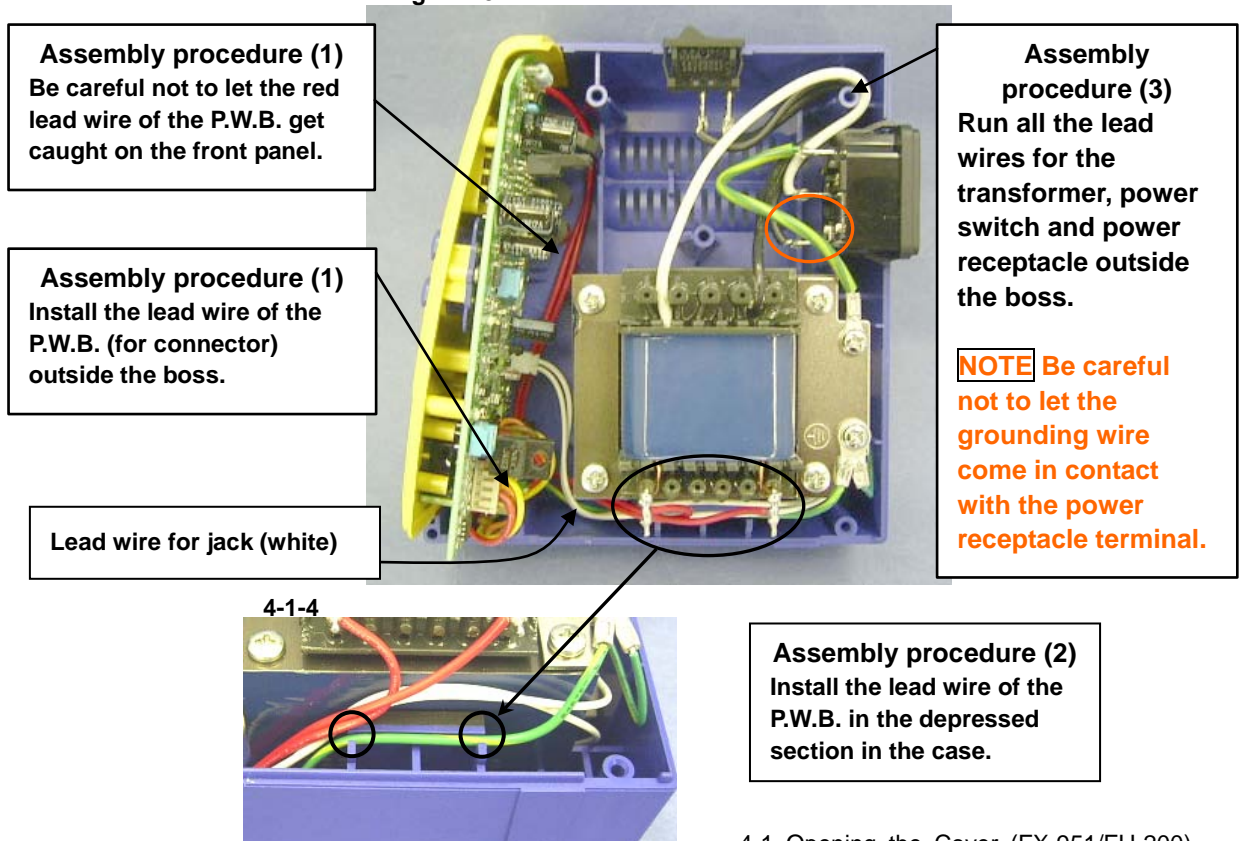


Fig. 4-1- 5

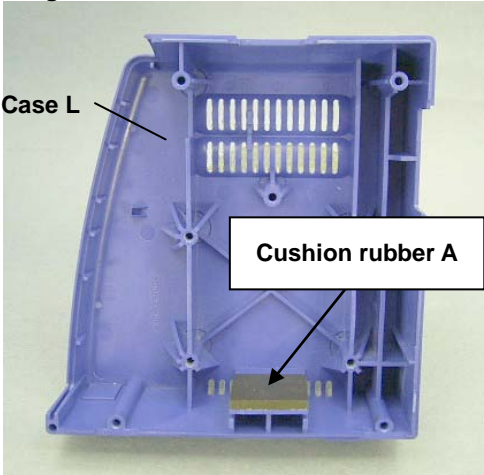


Fig 4-1- 6

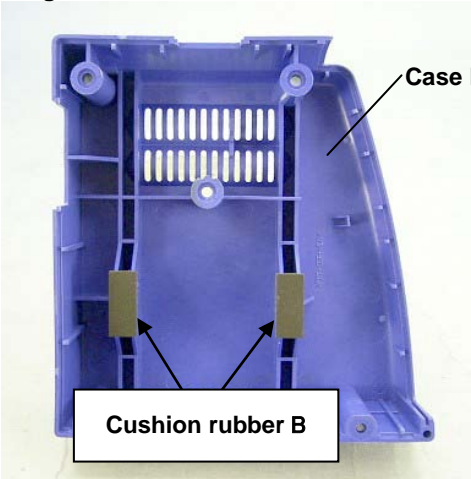
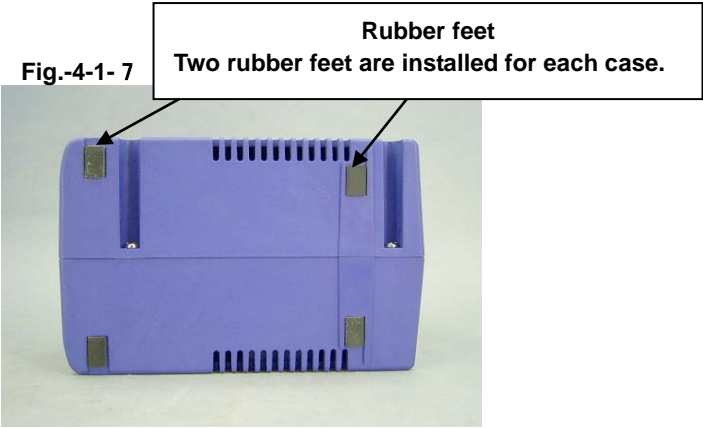


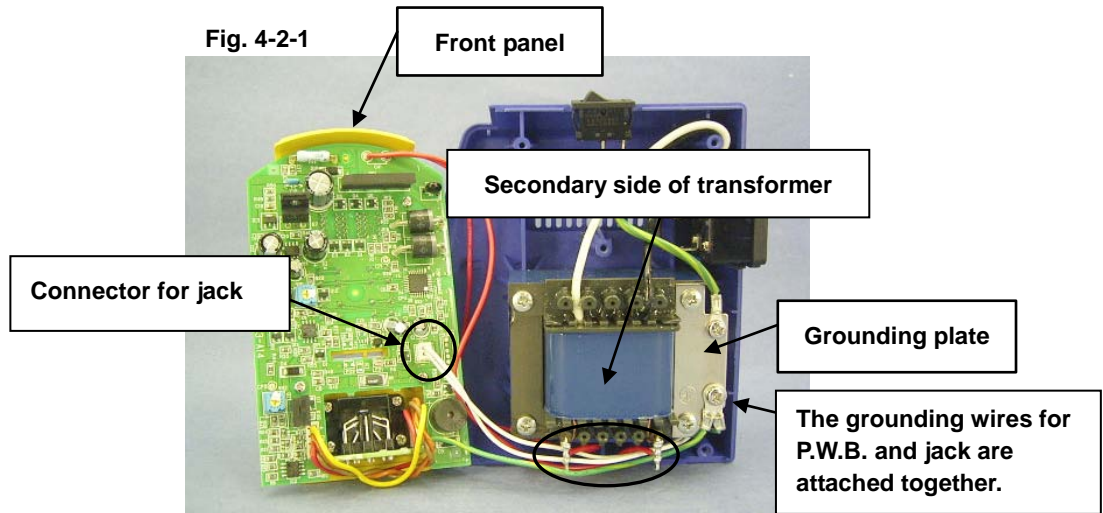
Fig.-4-1- 7



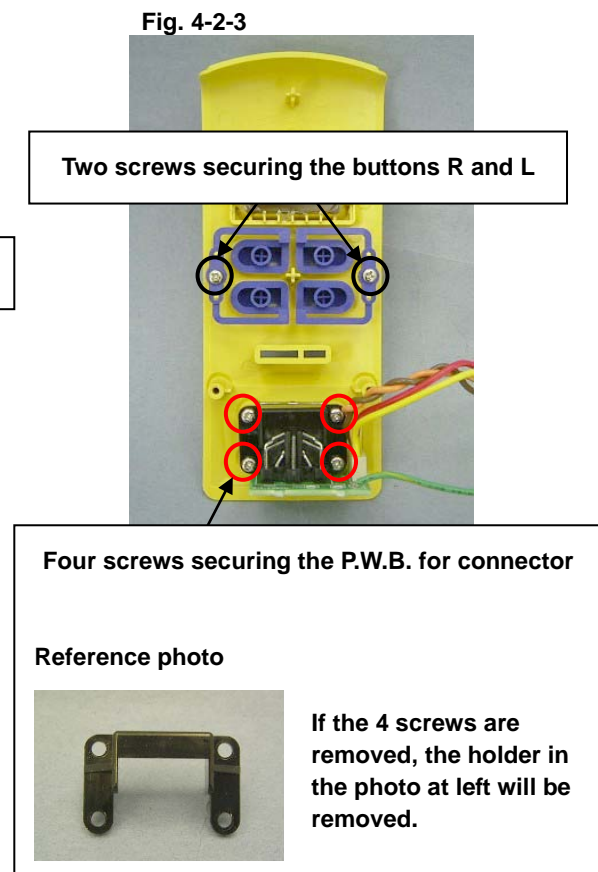
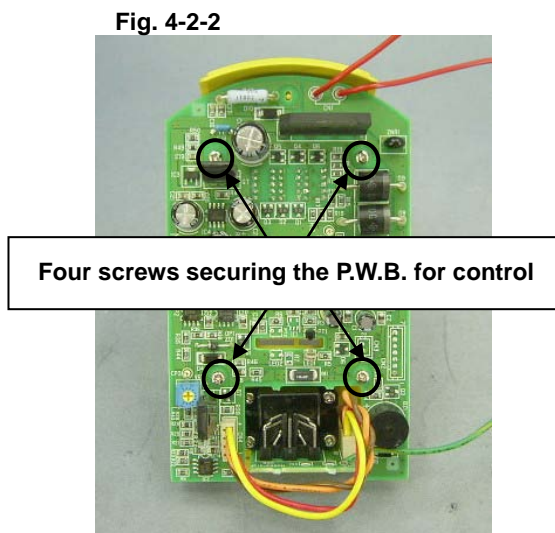
## 4-2 P.W.B. (for Control/Connector) and Front Panel

- (1) Follow the procedures 4-1.
- (2) Disconnect the connector for jack from the P.W.B. (4-2-1)
- (3) Desolder 2 soldered sections at the secondary side of the transformer. (Fig. 4-2-1)
- (4) Disconnect the grounding wire for P.W.B from the grounding plate. (Fig. 4-2-1)

**Note** The grounding wire for P.W.B. is attached together with the grounding wire for jack.



- (5) Remove 4 screws and then disconnect the P.W.B. for control from the front panel. (Fig. 4-2-2)
- (6) Remove 4 screws and then disconnect the P.W.B. for connector and holder from the front panel. (Fig. 4-2-3)
- (7) Remove 2 screws and disconnect the buttons R and L. (Fig. 4-2-3)



● Assembly procedures (P.W.B. (for control/connector))

- (1) Attach the buttons R and L onto the front panel with 2 screws (P tight round head screw M2.6 x 6). (Figs. 4-2-3 to 4-2-5)

**NOTE** Attach the buttons R and L properly, so as to correlate with the indications on the front panel.

**NOTE** To prevent buttons from being cracked, be careful not to tighten screws excessively.

- (2) Mount the P.W.B. (for connector) onto the front panel with the holder and 4 screws (P tight round head screw M2.6 x 8). (Figs. 4-2-3 to 4-2-5)

- (3) Mount the P.W.B. (for control) onto the front panel with 4 screws (P tight round head screw M2.6 x 8). (Figs. 4-2-2, 4-2-5 and 4-2-6)

**NOTE** Align the holes of the P.W.B. with 2 depressed sections of the front panel.

- (4) Run the lead wire of the connector section under the P.W.B. to insert and pull the card smoothly. (Fig. 4-2-6)

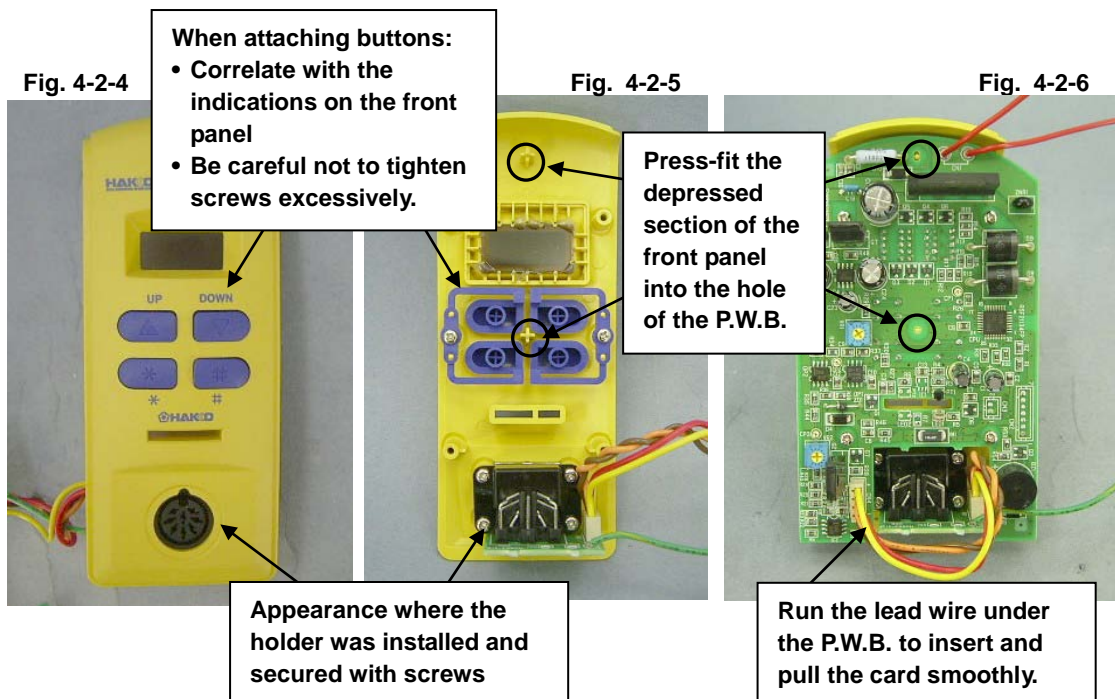
- (5) Mount the grounding wire of the P.W.B. onto the grounding plate with 1 screw (round head screw M4 x 6). (Fig. 4-2-1)

**NOTE** Run the grounding wire as close as possible to parallel with the edge of the grounding plate and attach it together with the grounding wire for jack.

- (6) Solder the lead wire of the P.W.B. to the secondary side of the transformer.

- (7) Plug the connector for jack into the P.W.B. (4-2-1)

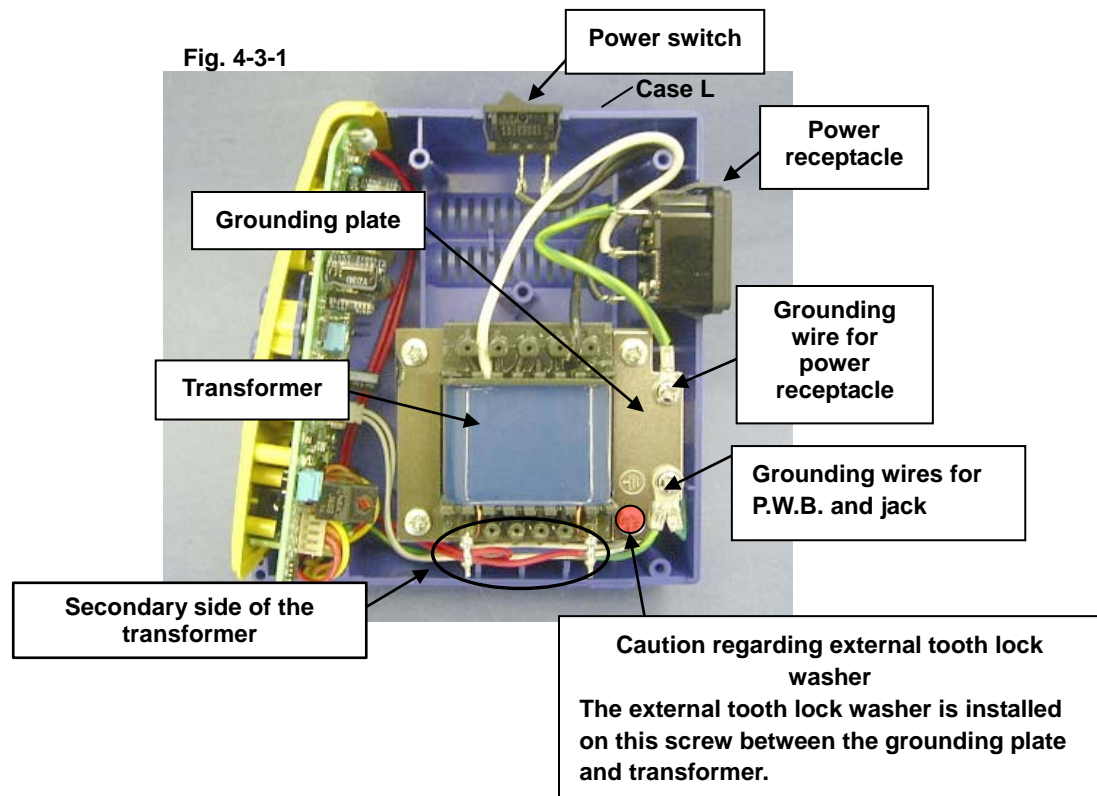
- (8) Close the case. (Refer to the assembly procedures in Section 4-1.)



### 4-3 Power Receptacle, Power Switch and Transformer

- (1) Follow the procedures in 4-1.
- (2) Disconnect the grounding wire of the power receptacle from the grounding plate. (Photo 14)
- (3) Desolder 3 soldered sections of the lead wire of the power receptacle.
- (4) Desolder 2 soldered sections of the lead wire of the power switch.
- (5) Desolder 2 soldered sections of the secondary lead wire of the transformer.
- (6) Remove the grounding wire of the P.W.B. from the grounding plate.
- NOTE** The grounding wire for P.W.B. is attached together with the grounding wire for jack.
- (7) Remove 4 screws securing the transformer, grounding plate and chassis.

**NOTE** The external tooth lock washer is installed in only one section. Be careful not to lose it. (Photo 14)



#### ● Assembly procedures (Power receptacle, power switch and transformer)

- (1) Mount the transformer and grounding plate onto case L with 4 screws (TP Bind B1 M3.5 x 45).

**NOTE** Install the external tooth lock washer (M4) in the designated place of the transformer. (Fig. 4-3-1)

**NOTE** Check that the cushion rubber A is installed in the case L. (Fig. 4-1-5)

- (2) Mount the grounding wire of the P.W.B. onto the grounding plate with 1 screw (round head screw M4 x 6). (Fig. 4-3-1)

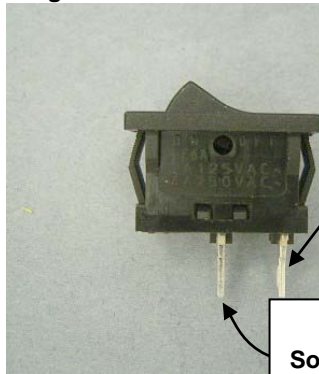
**NOTE** Run the grounding wire as close as possible to parallel with the edge of the grounding plate and attach it together with the grounding wire for jack.

- (3) Solder the lead wire of the P.W.B. to the secondary side of the transformer. (Fig. 4-3-1)
- (4) Solder the black lead wire of the transformer and the black lead wire leading from the power receptacle to the power switch. (Fig. 4-3-2)
- (5) Solder the white lead wire of the transformer, the black lead wire leading from the power switch and grounding wire to the power receptacle. (Fig. 4-3-3)
- (6) Mount the grounding wire of the power receptacle to the grounding plate with 1 screw (round head screw M4 x 6). (Fig. 4-3-1)

**NOTE** Mount the grounding wire to be aligned parallel with the grounding plate.

- (7) Close the case. (Refer to Assembly Procedures in Section 4-1.)

Fig. 4-3-2

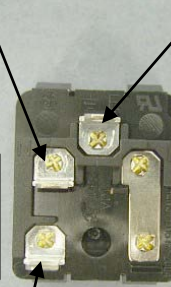


**Assembly procedure (5)**  
Solder the white lead wire  
of the transformer.

**Assembly procedure (4)**  
Solder the black lead wire  
of the transformer.

**Assembly procedures (4) and (5)**  
Solder the black lead wire to the terminals of  
the power switch and power receptacle.

Fig. 4-3-3

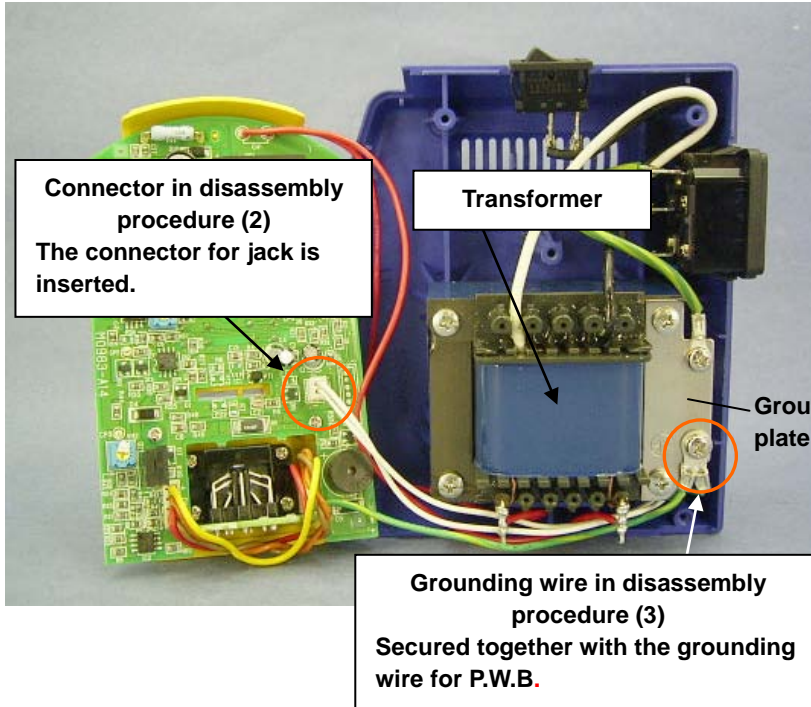


**Assembly procedure (5)**  
Solder the grounding  
wire.

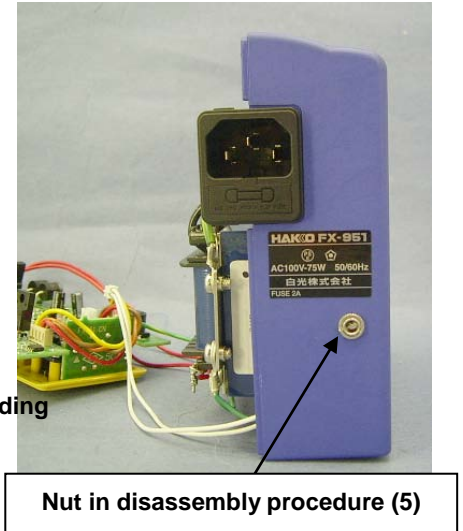
## 4-4 Jack

- (1) Perform the procedures in Section 4-1. (Open the case).
- (2) Disconnect the connector for jack from the P.W.B. (4-4-1)
- (3) Disconnect the grounding wire for jack from the grounding plate. (4-4-1)
- NOTE** This grounding wire is attached together with the grounding wire for P.W.B.
- (4) Remove the 4 screws securing the transformer, grounding plate and chassis. (4-4-1)
- NOTE** The external tooth lock washer is installed in only one place. Be careful not to lose it.
- (5) Remove the nut outside the case to remove the jack from the case. (4-4-2, 4-4-7, 4-4-8)

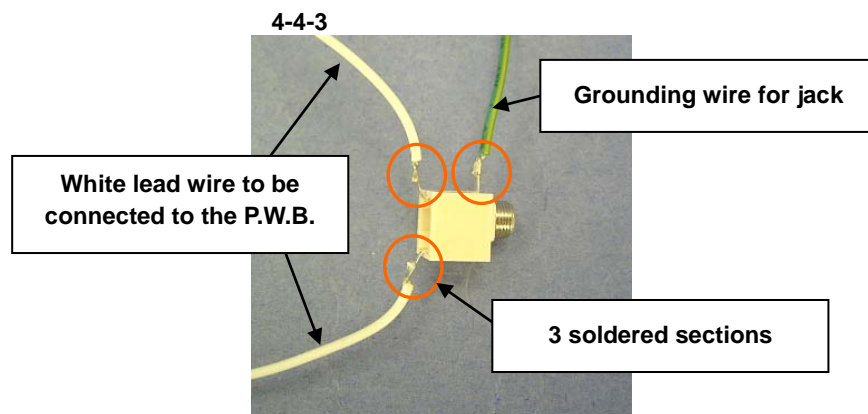
4-4-1



4-4-2

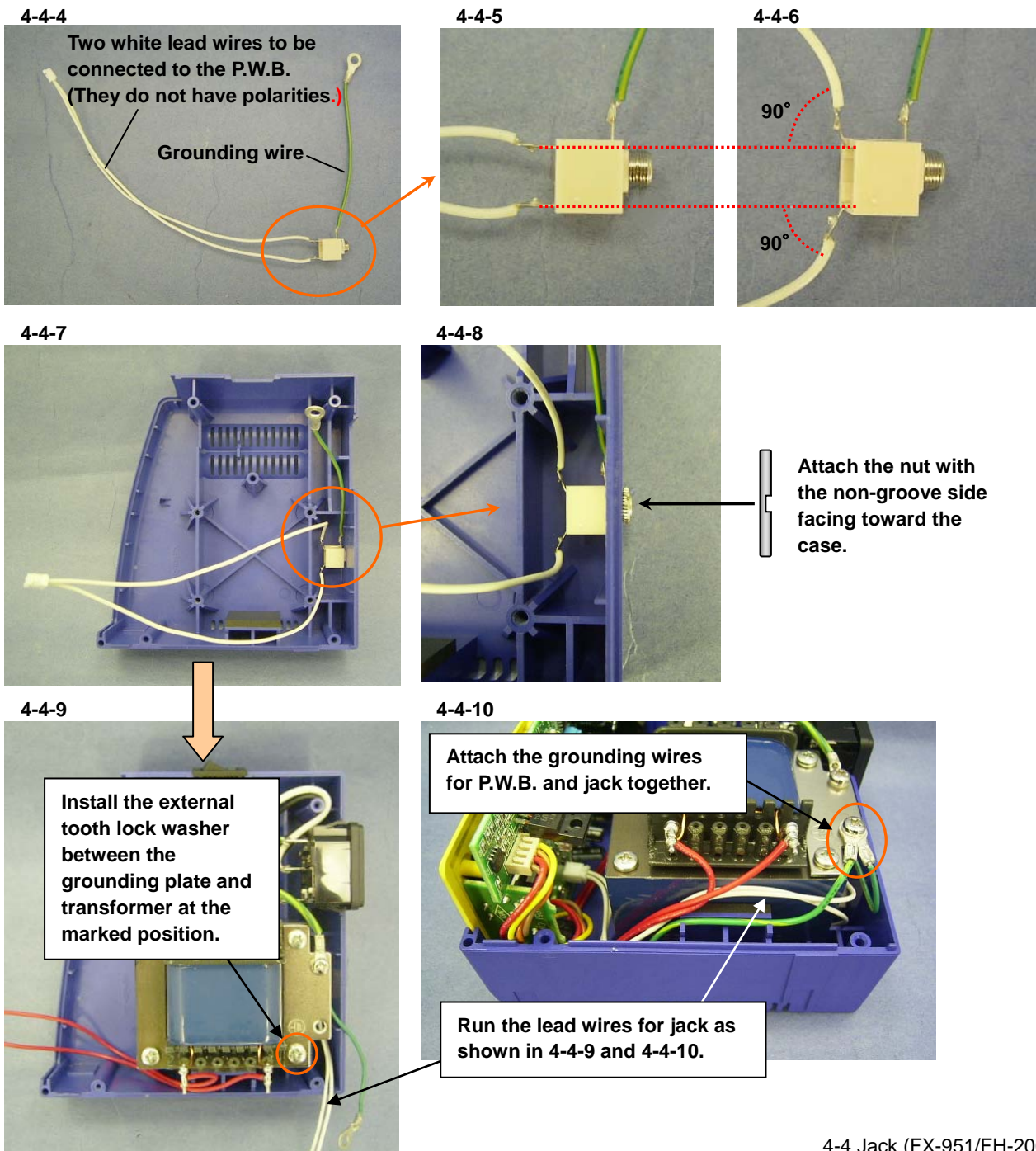


- (6) Desolder the 3 soldered sections of the jack.



### ● Assembly procedures (Jack)

- (1) Solder the grounding wire to the jack. (4-4-4)
  - (2) Solder the white lead wires leading from the P.W.B. to the jack and bend the terminal at 90°. (4-4-4 to 4-4-6)
  - (3) Attach the jack to Case L. (4-4-7 to 4-4-8)
- NOTE** Note that the jack nut attachment orientation is specified. Be careful not to install it backwards. (4-4-8)
- (4) Attach the transformer and grounding plate to the case L with 4 screws (TP Binding B1 M3.5 x 45). (4-4-9)
- NOTE** Install the external tooth lock washer (M4) at the designated position of the transformer.
- NOTE** Make sure that the lead wires for jack does not get caught.
- (5) Attach the grounding wires for jack and P.W.B. to the grounding plate with one screw (pan head screw M4 x 6). (4-4-10)
  - (6) Insert the connector for jack into the P.W.B. (4-4-1)
  - (7) Close the case. (Refer to the assembly procedures in Section 4-1.)



## 4-5 Iron Holder

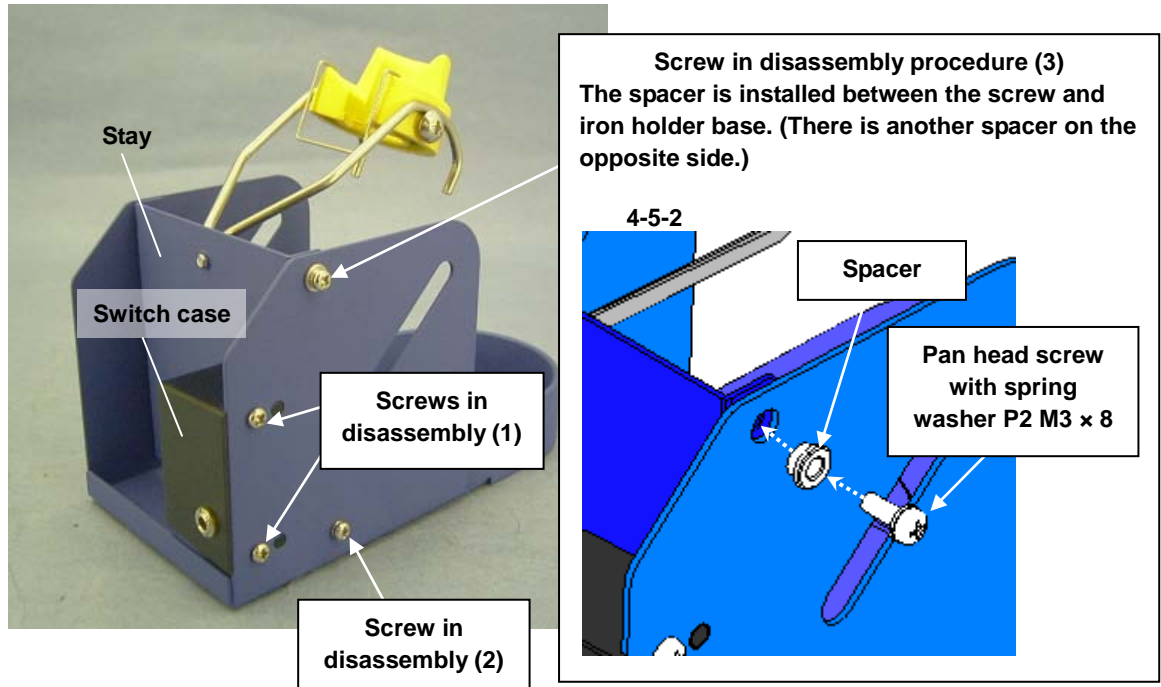
(1) Remove the 2 screws of the switch case to remove the switch case assembly. (4-5-1)

**NOTE** Be careful not to lose the spring in the switch case. (4-5-3)

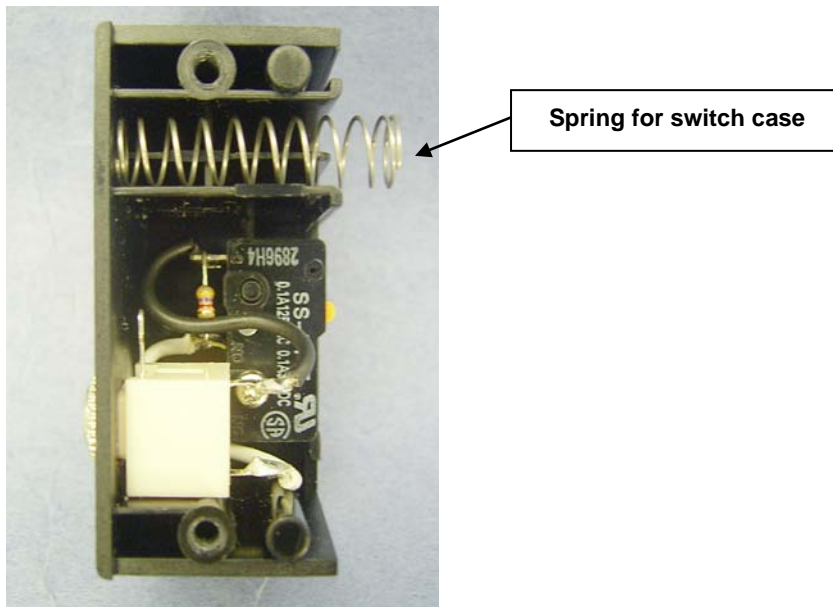
(2) Remove 1 screw of the stopper. (4-5-1)

(3) Remove 2 screws of the stay to remove the stay. (4-5-1, 4-5-2)

4-5-1



4-5-3



### ● Assembly procedures (Iron holder)

- (1) Attach the stay to the iron holder base with the 2 spacers and 2 screws (Pan head screw with spring washer P2 M3 × 8). (4-5-1)
- (2) Attach one screw (pan head screw with spring washer P2 M3×8) to the iron holder base. (4-5-1)
- (3) Install the spring in the switch case and attach the switch case to the iron holder base with the 2 screws (Tapping screws M3 × 12). (4-5-1, 4-5-3)

Chapter 5    Wiring Diagram

