CANON
FAU-S11

SERVICE MANUAL

REVISION 0

Canon

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Imprimè au Japon

Use of this manual should be strictly supervised to avoid disclosure of confidential information.

LIST OF SERIAL NUMBER

FAU-S11	**F96-1911**	**AZH000000-**
	F96-1931	**BZH000000-**

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 CANON FAU-S11 REV.0 APR 2000 PRINTED IN JAPAN (IMPRIME AU JAPON)

CHAPTER 1

GENERAL DESCRIPTIONS

I. FEATURES

FAU-S11 is a film adapter unit (FAU) used for CanoScan FB1210U to scan films incorporating the following features.

* Color and monochrome, negative and positive films can be scanned.
* Film guide enables to scan 35mm film, brownie film (max. 120 x 60mm), and 4 x 5 inches film.

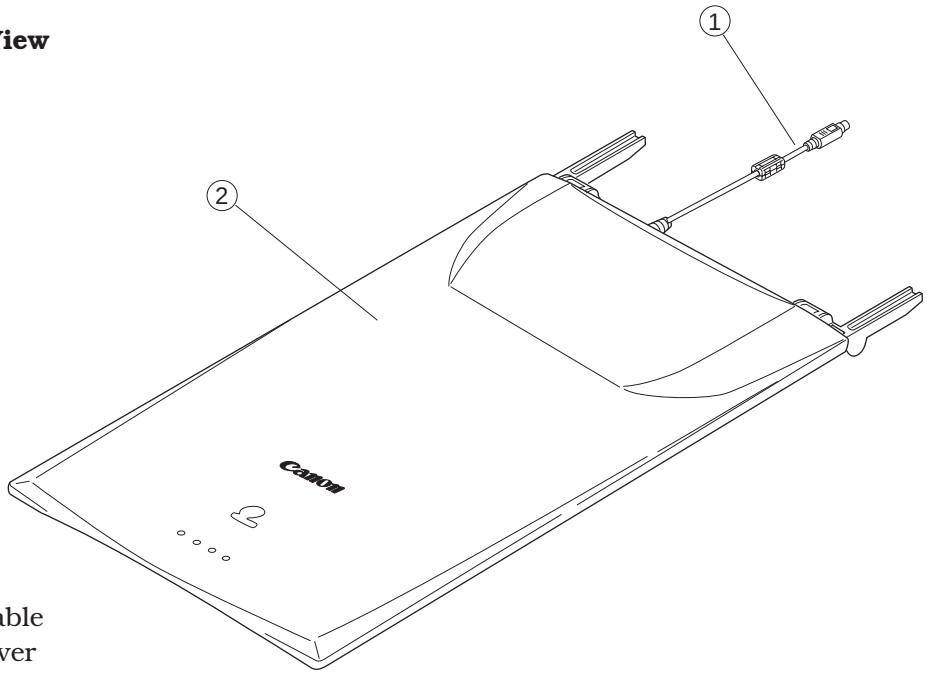
II. SPECIFICATIONS

Film Type	: Color and monochrome, negative and positive
Film Size	: 35mm sleeve (preview by 3 frames, scan by 1 frame) 35mm slide mount Brownie (Max. 120 x 60mm) 4 x 5 inches
Light Source	: Cold cathode fluorescent lamp
Brightness	: 3200cd/square meters +/-10%
Operating Environment	: Temperature : 10 to 35 degrees Relataive humidity : 20 to 80%RH
Power Source	: Supplied from CanoScan FB1210U
Standard point of scanning area	: X=45mm, Y=35mm
Dimensions	: 285 (width) x 407.5 (depth) x 33 (height) mm
Weight	: 920g
Durability	: 20,000 times of the FAU's open/close

Specifications are subject to change without prior notice.

III. EXTERIOR FEATURES

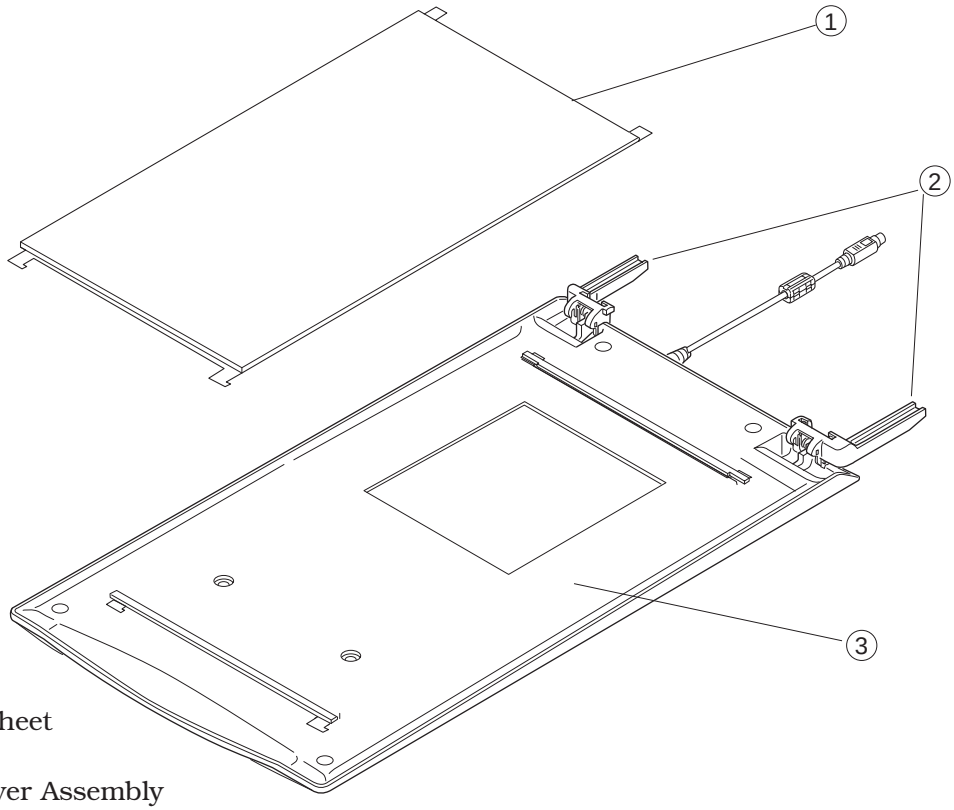
A. Front View



① FAU Cable
② Top Cover

Figure 1-1

B. Bottom View



① Sponge Sheet
② Hinge
③ Lamp Cover Assembly

Figure 1-2

CHAPTER 2

OPERATION AND TIMING

I. BASIC OPERATION

A. System Configuration

The film adapter unit FAU-S11 is an optional device for CanoScan FB1210U to provide the light source for scanning films.

When the appropriate light source projects through a film and the host computer program controls the scanning unit moving, charge-coupled-device (CCD) collects all the light signals of the film and synchronically generates the real analog signals. The main PCB then converts the analog signal into digital signal. Finally, scanner driver transforms the digital signal into an image and saves it in the host computer.

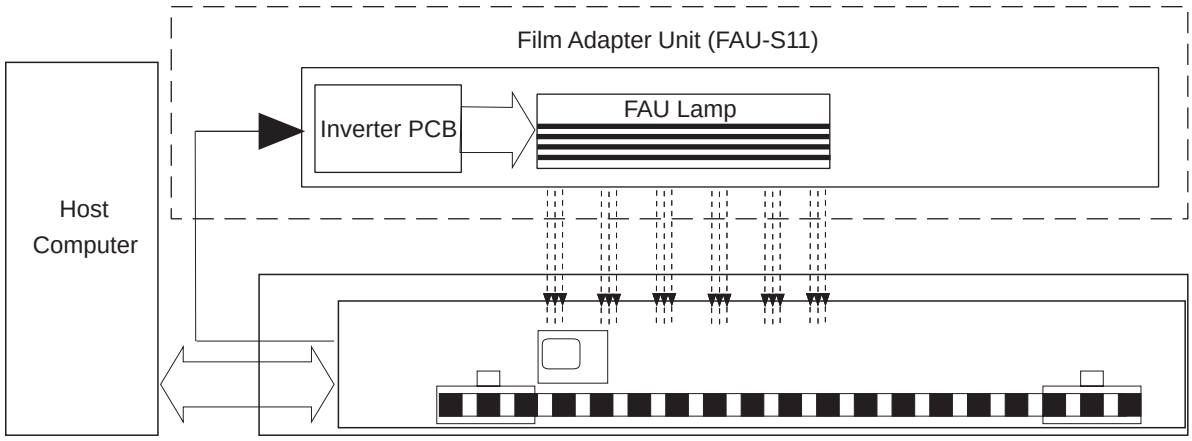


Figure 2-1

B. Electrical System

Electrical control of the FAU is perfromed by the main PCB in the scanner. Inverter PCB performs various processing in the FAU according to the control signal sent from the main PCB.

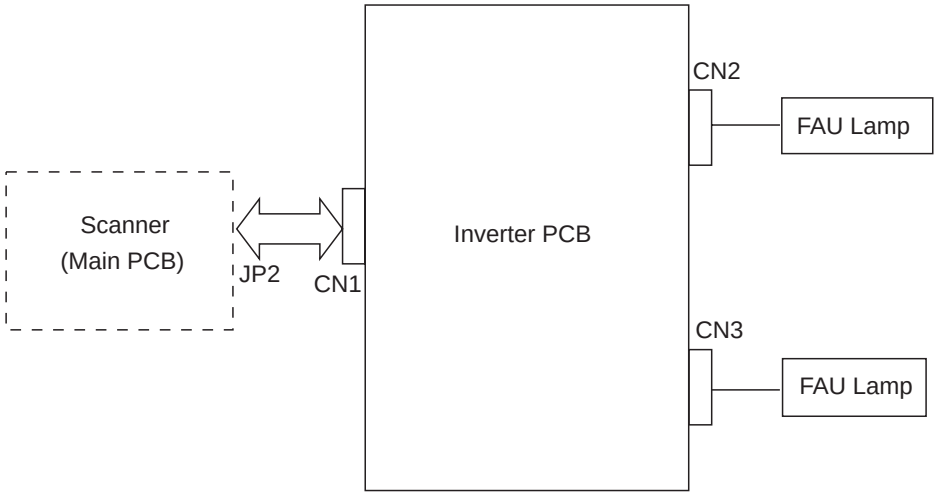


Figure 2-2

C. Inverter PCB

FAU lamp ON depends on the device selection by the host computer. When the scanner is powered ON, the scanning lamp is turned ON. When FAU is selected by the host computer as a TWAIN or Plug-in Module compliant input device and application software is started, the FAU lamp is turned ON and the scanning lamp is turned OFF.

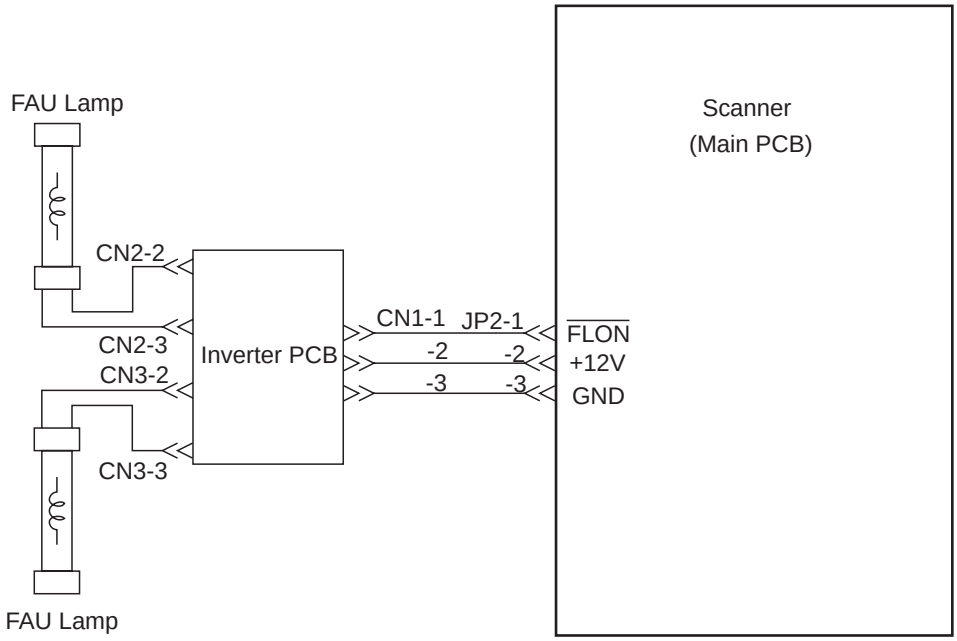


Figure 2-3

An inverter transforms the voltage (+12V) supplied from the scanner into tremendously high voltages to light on two cold cathode fluorescent lamps to generate the initial light source. The initial light source is transformed to an equal-intensity light source through Reflective Film, Light Guide Plate, 1st Diffusive Film, Brightness Enhancement Film (BEF), 2nd Diffusive Film to Transparent Plate.

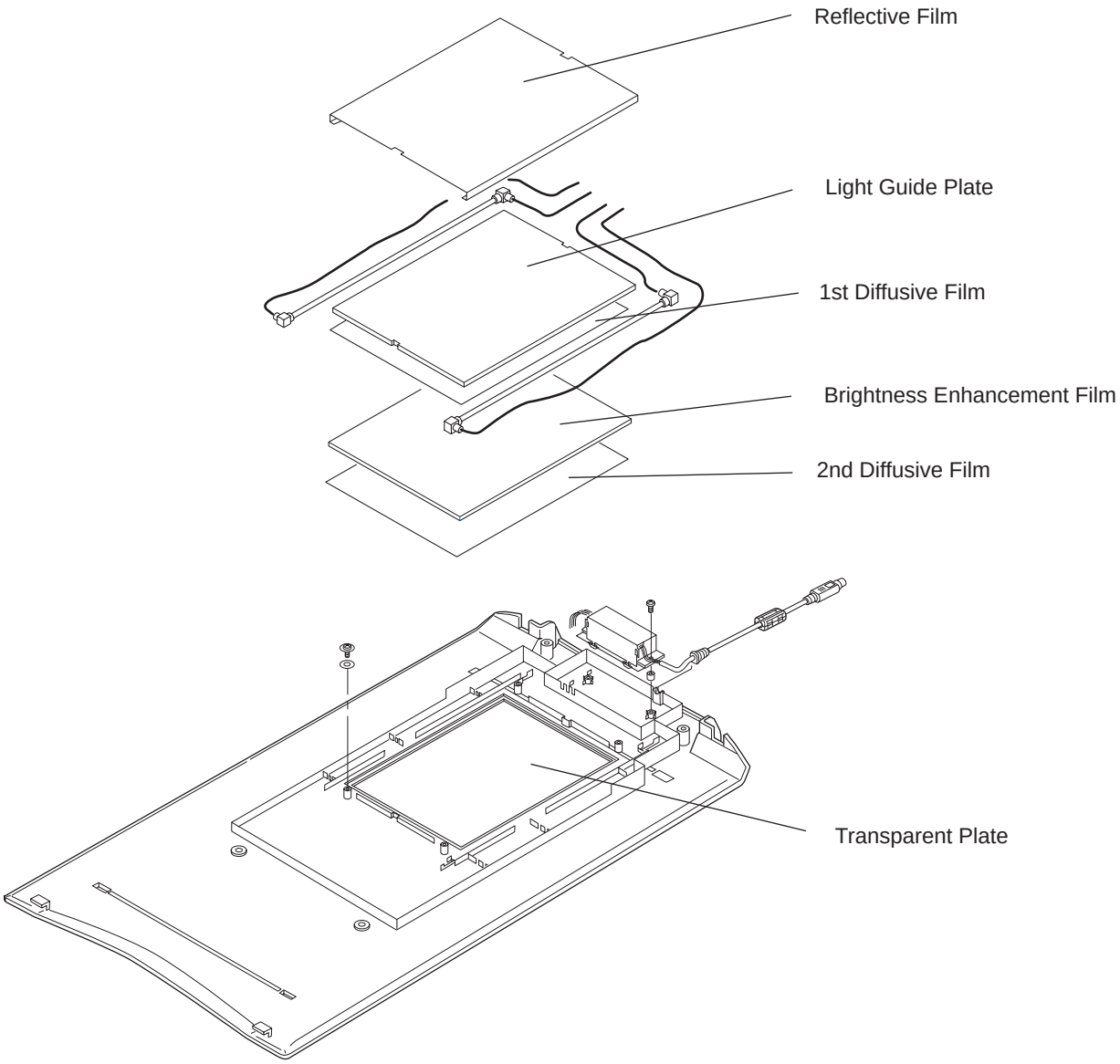


Figure 2-4

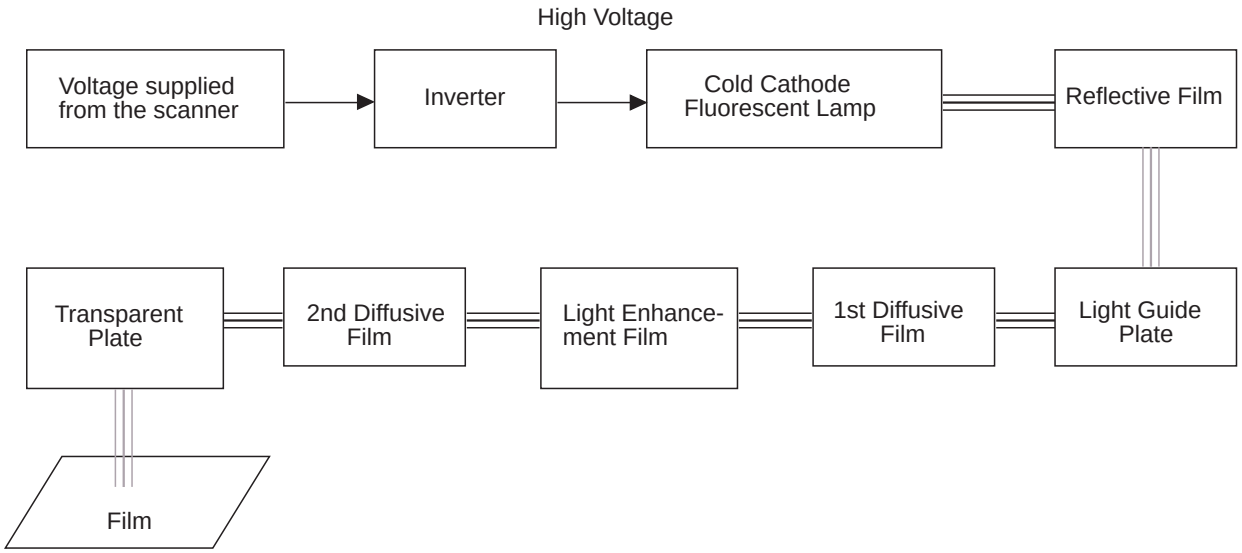


Figure 2-5

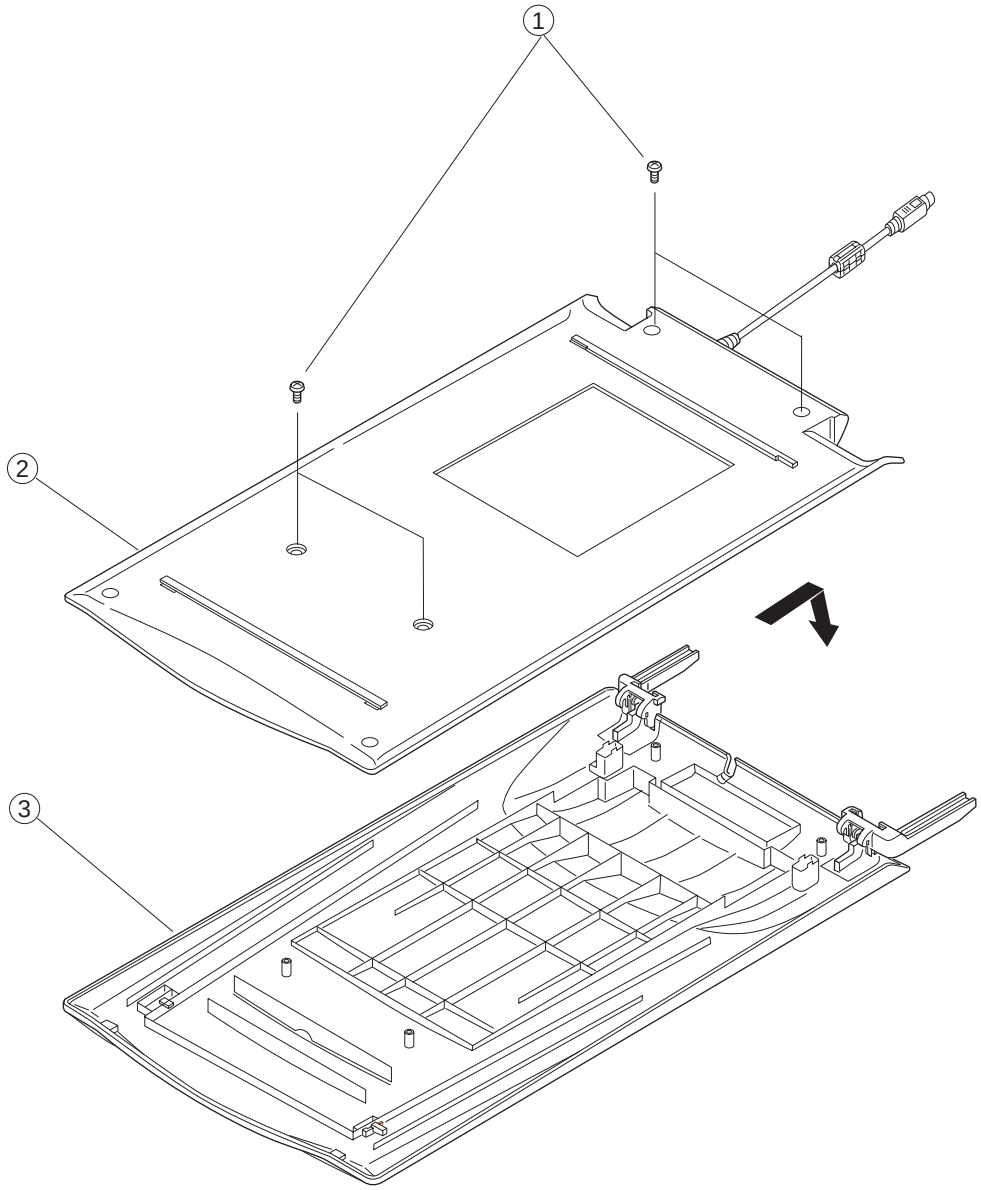
CHAPTER 3

MECHANICAL SYSTEM

I. PARTS REPLACEMENT

A. Removing Top Cover

1) Remove four screws from the lamp cover assembly, then slide the top cover to remove it.

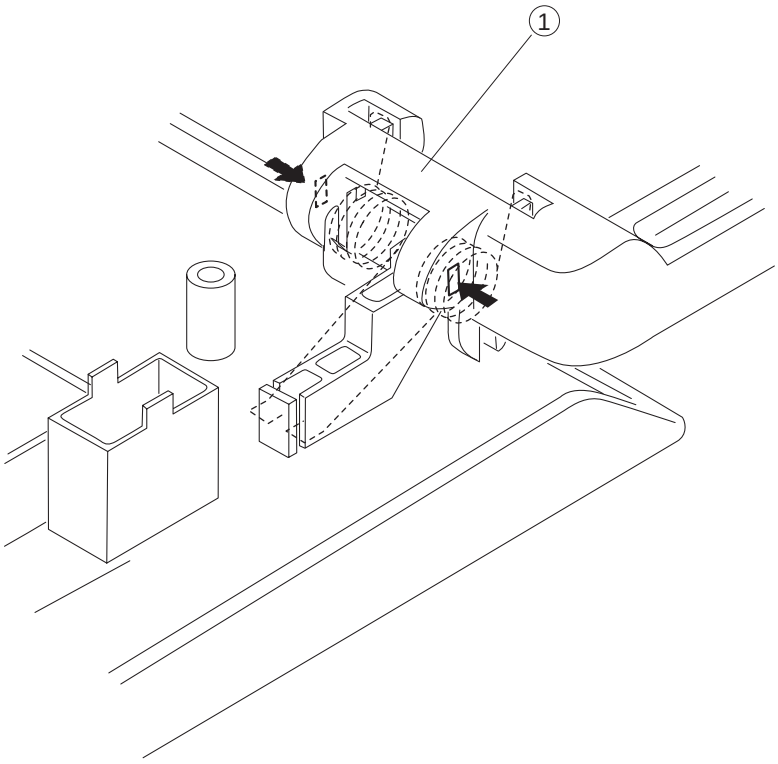


① Screw
② Lamp Cover Assembly
③ Top Cover

Figure 3-1

B. Removing Hinge

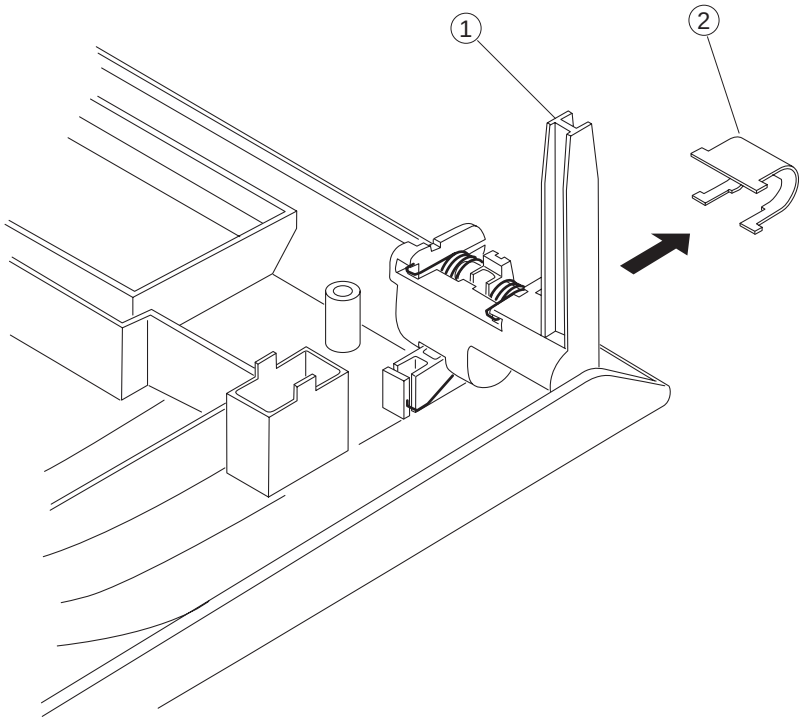
1) Remove the top cover.
2) Push both hooks of the hinge cover to unhook it.



① Hinge Cover

Figure 3-2

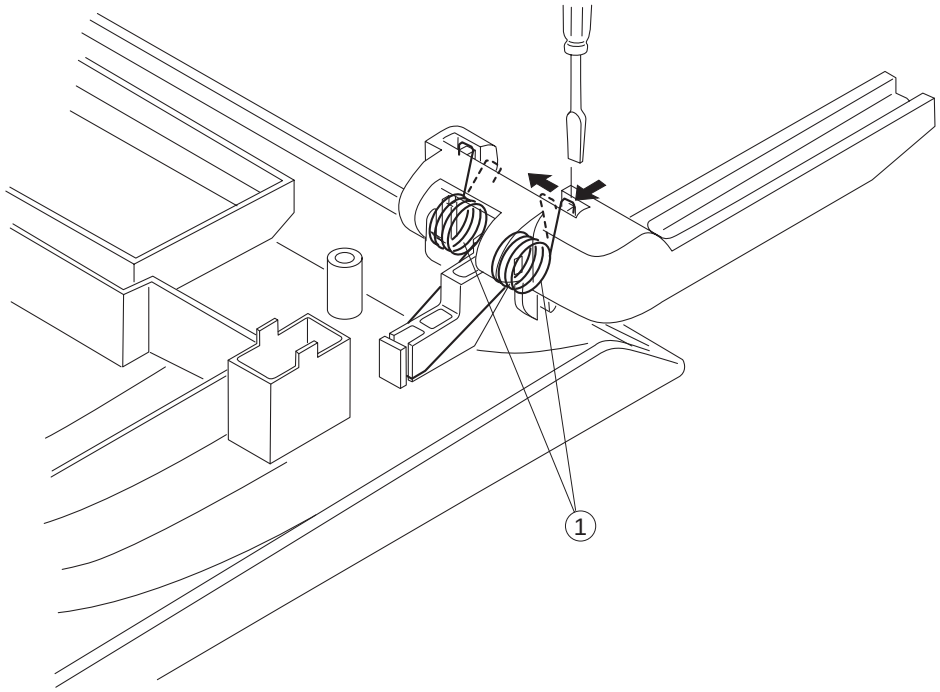
3) Stand the hinges then remove the hinge cover in the arrow direction in the figure.



① Hinge
② Hinge Cover

Figure 3-3

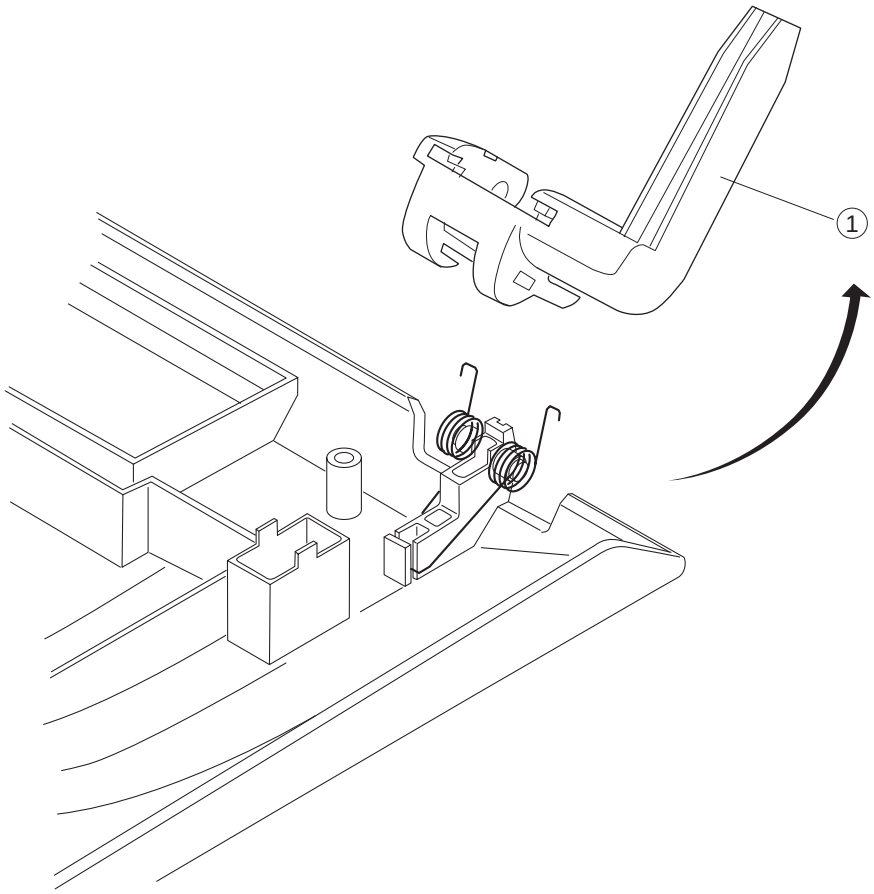
4) Pull up the hinge spring to unhook it.



① Hinge Spring

Figure 3-4

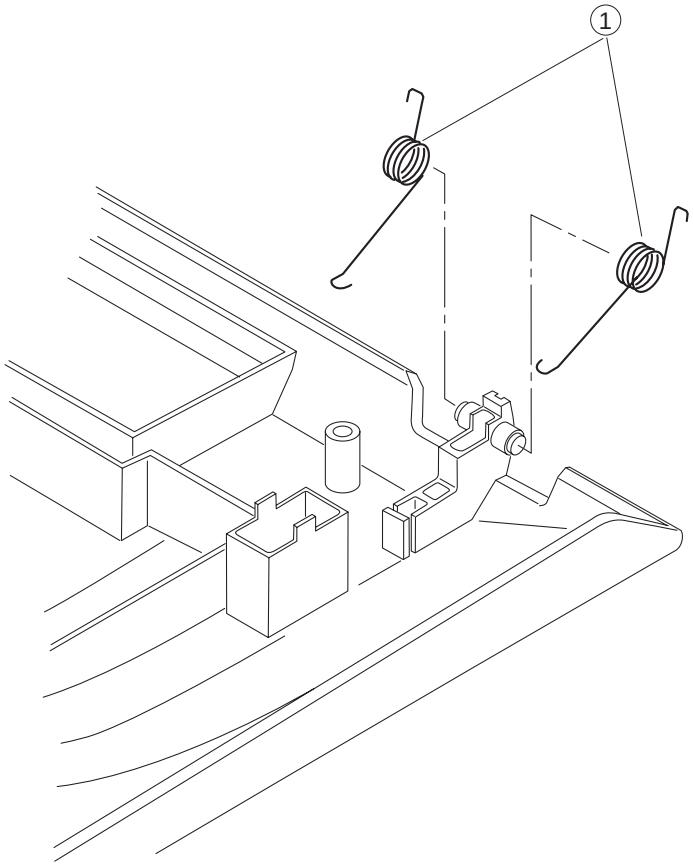
5) Turn the hinge in the arrow direction in the figure to remove it.



① Hinge

Figure 3-5

6) Remove the left and right hinge springs from the hinge shaft.

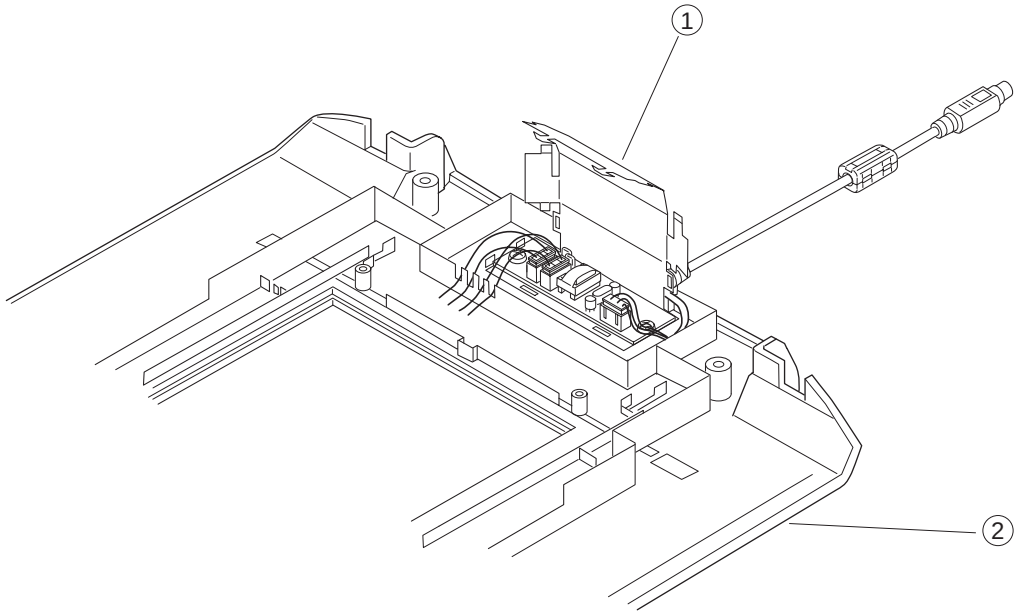


① Hinge Spring

Figure 3-6

C. Removing FAU Cable

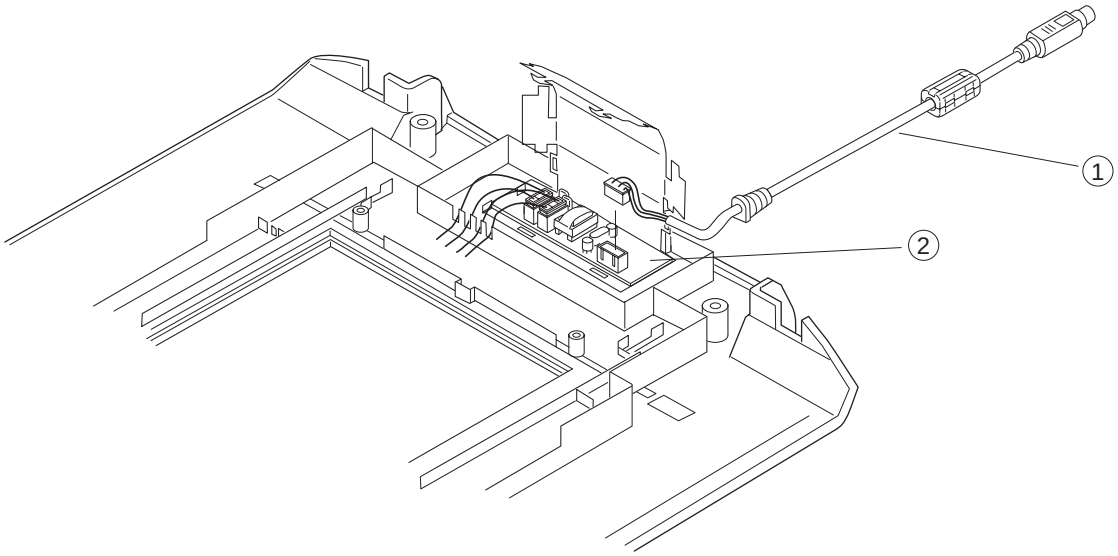
1) Remove the top cover.
2) Open the inverter cover on the lamp cover assembly.



① Inverter Cover
② Lamp Cover Assembly

Figure 3-7

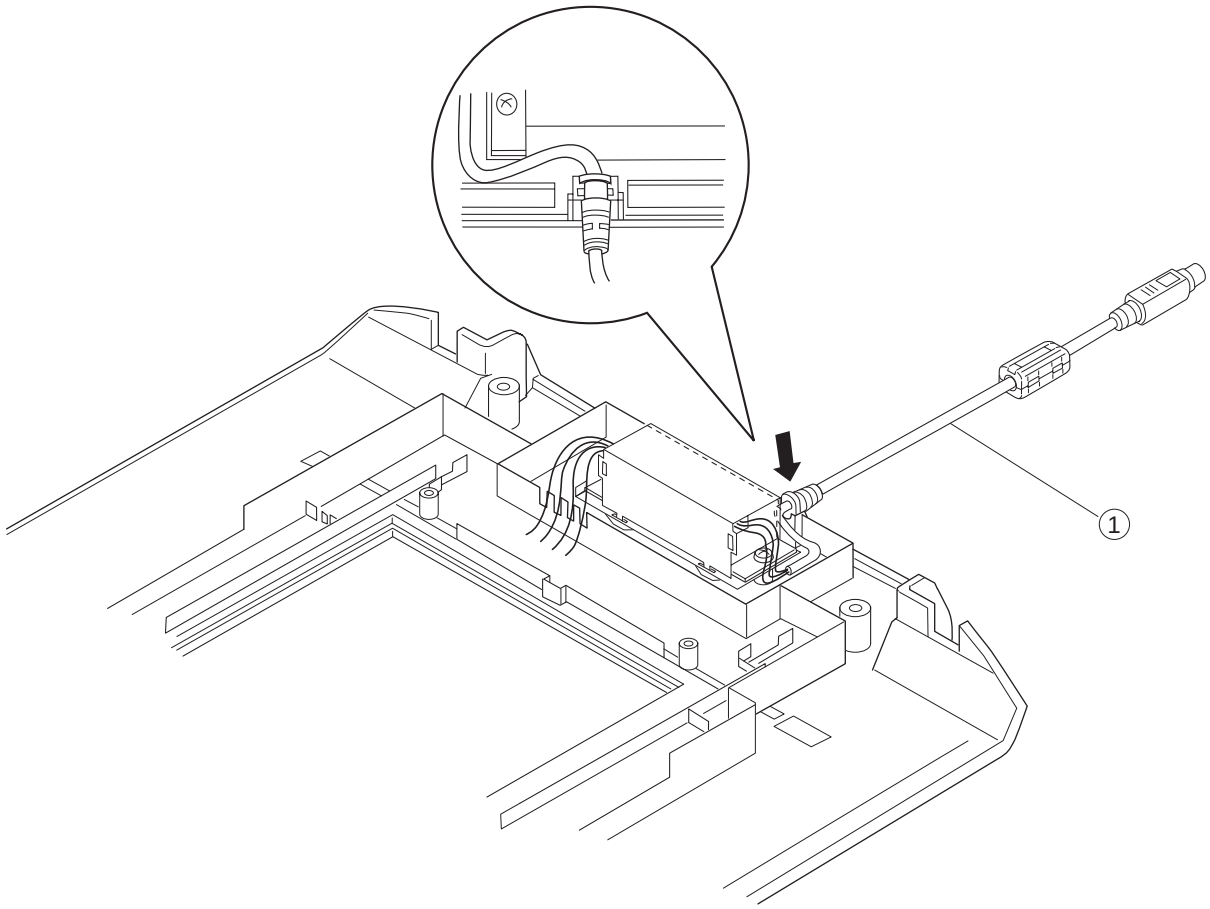
3) Remove the FAU cable from the connector CN1 on the inverter PCB.



① FAU Cable
② Inverter PCB

Figure 3-8

Note: When assembling, insert the FAU cable in the recess shown in the figure.

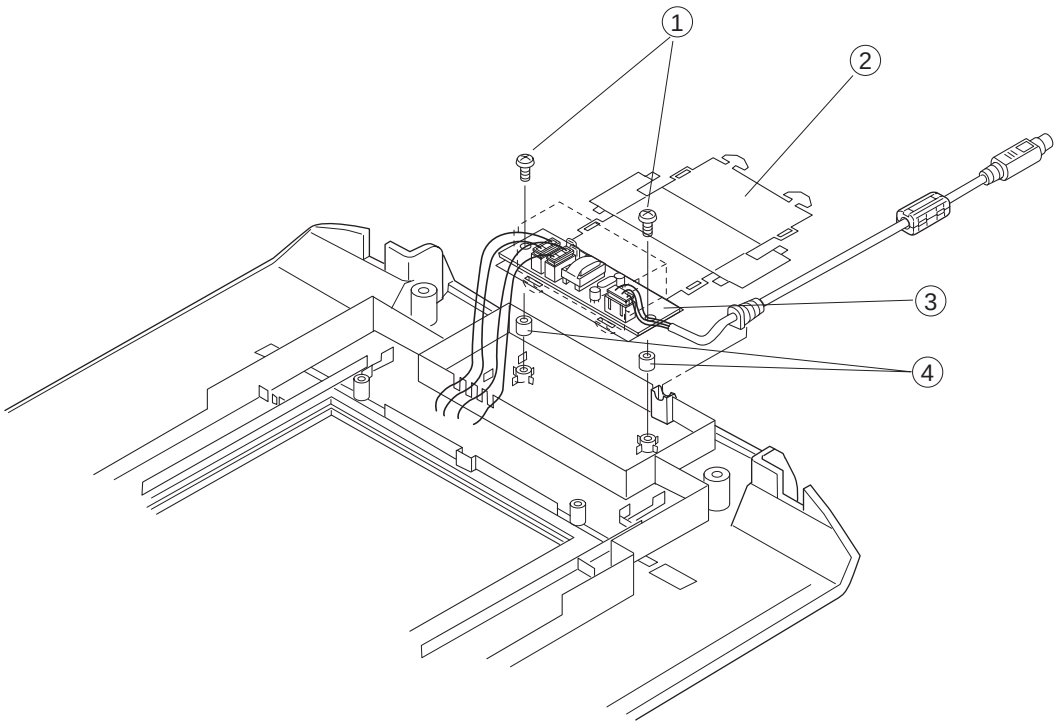


① FAU Cable

Figure 3-9

D. Removing Inverter Cover

1) Remove the top cover.
2) Remove two screws from the inverter PCB to hold it, then remove the inverter cover.



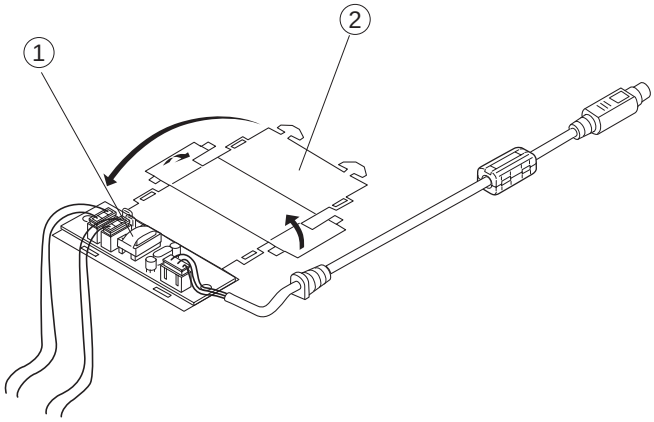
① Screw
② Inverter Cover
③ Inverter PCB
④ Spacer

Figure 3-10

Note: Take care not to miss two spacers under the inverter PCB.

E. Attaching the Inverter Cover

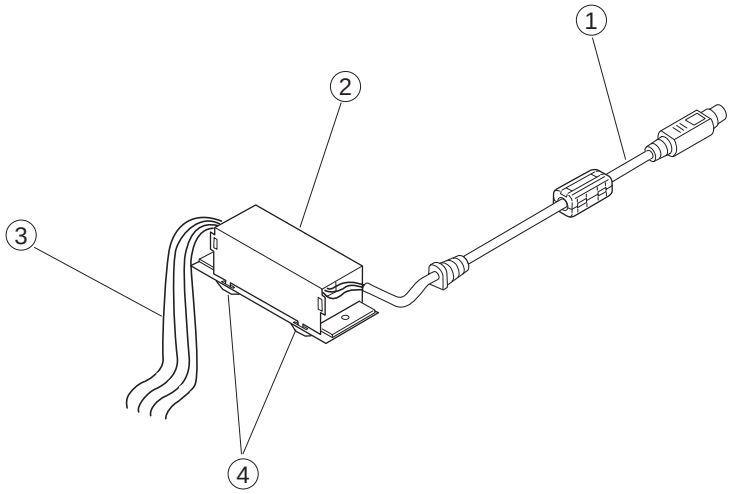
1) Place the inverter PCB on the inverter cover.



① Inverter PCB
② Inverter Cover

Figure 3-11

2) Draw FAU cable and lamp cable through the inverter cover, cover the inverter PCB with the inverter cover, then hook two hooks in the front.

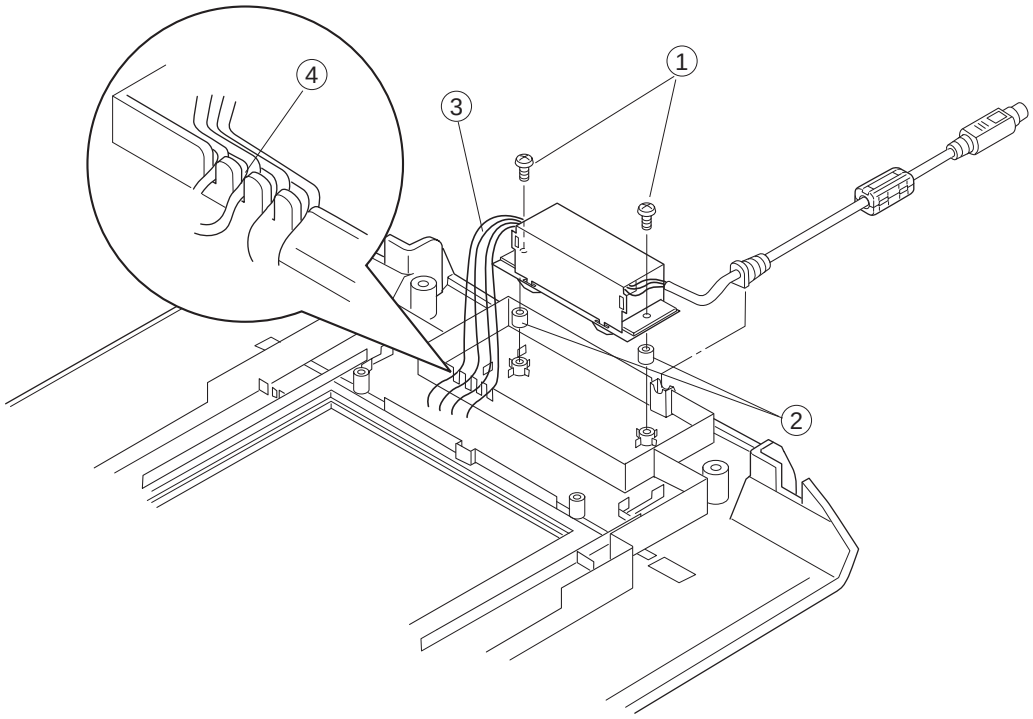


① FAU Cable
② Inverter Cover
③ Lamp Cable
④ Hook

Figure 3-12

3) Close both sides of the inverter cover, place two spacers under the inverter PCB, then fasten two screws to fix the inverter PCB.

Note: Insert the lamp cable in the recess shown in the figure.



① Screw
② Spacer
③ Lamp Cable
④ Recess

Figure 3-13

CHAPTER 4

MAINTENANCE AND SERVICING

I. PERIODICAL REPLACEMENT PARTS

None

II. CONSUMABLE PARTS DURABILITY

None

III. PERIODICAL SERVICING

None

IV. SPECIAL TOOLS

None

V. SOLVENTS AND LUBRICANTS

None

CHAPTER 5

TROUBLESHOOTING

I. POSSIBLE CAUSE AND CORRECTIVE ACTION

FAU-S11 may have a failure "FAU lamp does not light". Table 5-1 shows its possible cause and corrective action.

Cause	Corrective Action
Inverter PCB failure	Replace the inverter PCB
FAU cable poor connection	Reconnect the FAU cable
FAU cable failure	Replace the FAU cable
Lamp cover assembly failure	Replace the lamp cover assembly

Table 5-1

CHAPTER 6

PARTS CATALOG

FAU-S11

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FIGURE 100 FAU-S11

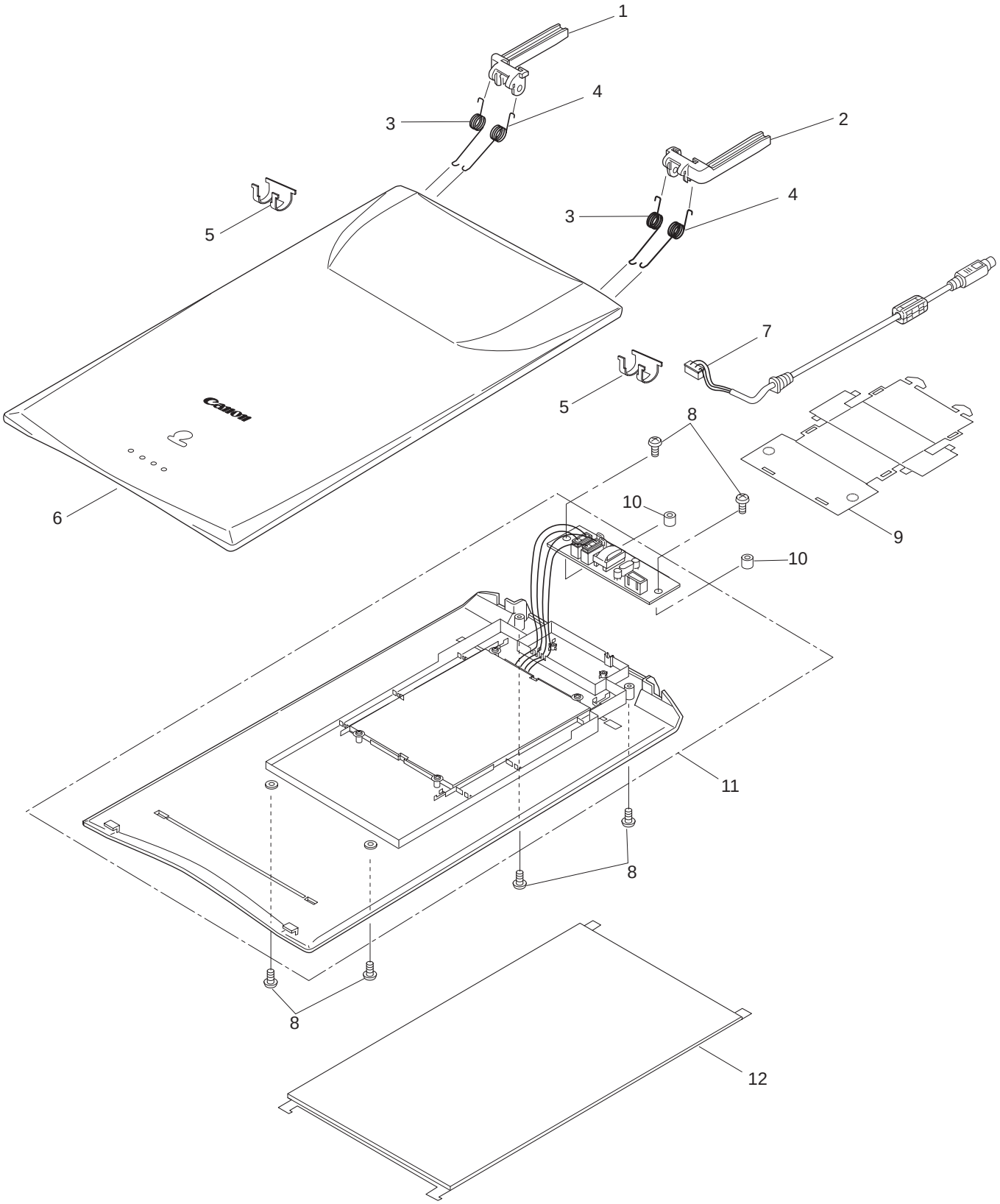
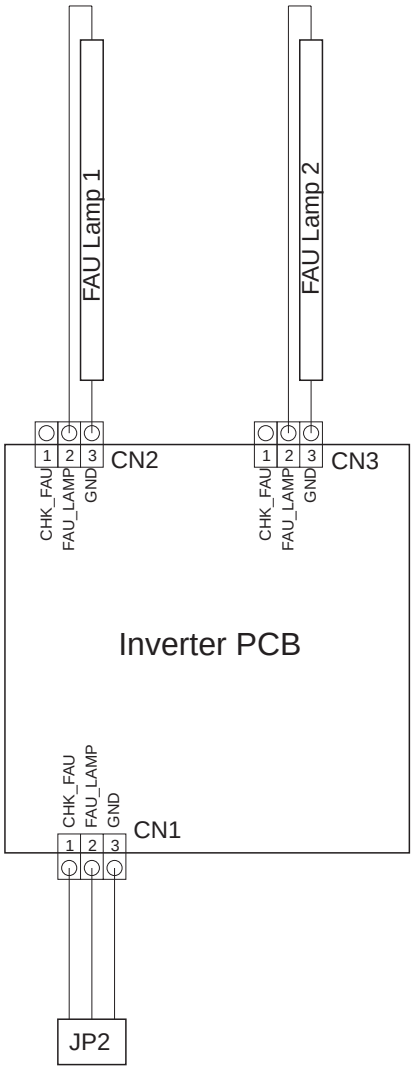


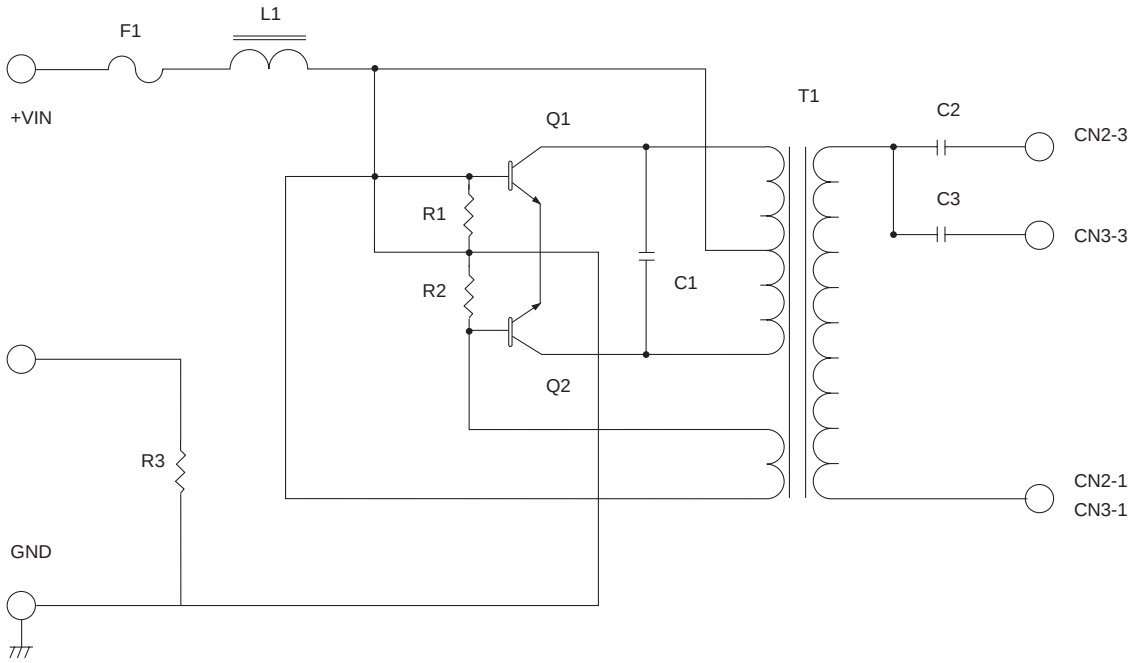
FIGURE & KEY NO.	PART NUMBER	RANK	Q'TY	DESCRIPTION	SERIAL NUMBER/REMARKS
100-01	NIP-N406-400		1	HINGE, LEFT	
02	NIP-N406-300		1	HINGE, RIGHT	
03	NIM-L103-600		2	SPRING, 1	
04	NIM-L103-500		2	SPRING, 2	
05	NIP-N219-400		2	COVER, HINGE	
06	NIP-N218-700		1	COVER, TOP	
07	NIA-YFSC-087		1	CABLE, I/F	
08	NIS-X300-874		6	SCREW, M3x8, SELF-TAPP	
09	NIP-S200-500		1	COVER, INVERTER	
10	NIM-U200-100		2	SPACER	
11	NIA-YFSC-123		1	FLUORESCENT LAMP ASSEMBLY	
12	NIA-YFSC-111		1	DOCUMENT COVER PP (F)	

APPENDIX

I. GENERAL CIRCUIT DIAGRAM



II. INVERTER PCB CIRCUIT DIAGRAM



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