CITIZEN

Service Manual

Model: iDP3550/3551

Dot Matrix Printer

Rev. 1.00 Newly issued on May 10, 1999

Japan CBM Corporation
Information Systems Div.

INTRODUCTION

This manual describes the disassembly, reassembly, and maintenance procedures of the dot impact printer iDP3550/3551. It is intended for field maintenance men.

FEATURES

This is a small-size dot impact printer developed for various data communication terminals, POS terminals, kitchen-use printers, bank card, terminals, and so on.

Its abundant built-in features allow you to widely use this printer for different applications. Prior to using it, read and understand this manual thoroughly.

(1) Small size, light weight, and low price
(2) High-speed print (Bi-directional)
(3) Red and black print
(4) Very easy paper loading by the auto loading function
(5) Paper end detecting function
(6) Power supply through an AC adapter

CONTENTS

♦ For the printer mechanism (DP-400/410), see the separate Service Manual.

1. HANDLING AND MAINTENANCE OF PRINTER

See the User's Manual coming with the printer body.

2. SPECIFICATIONS

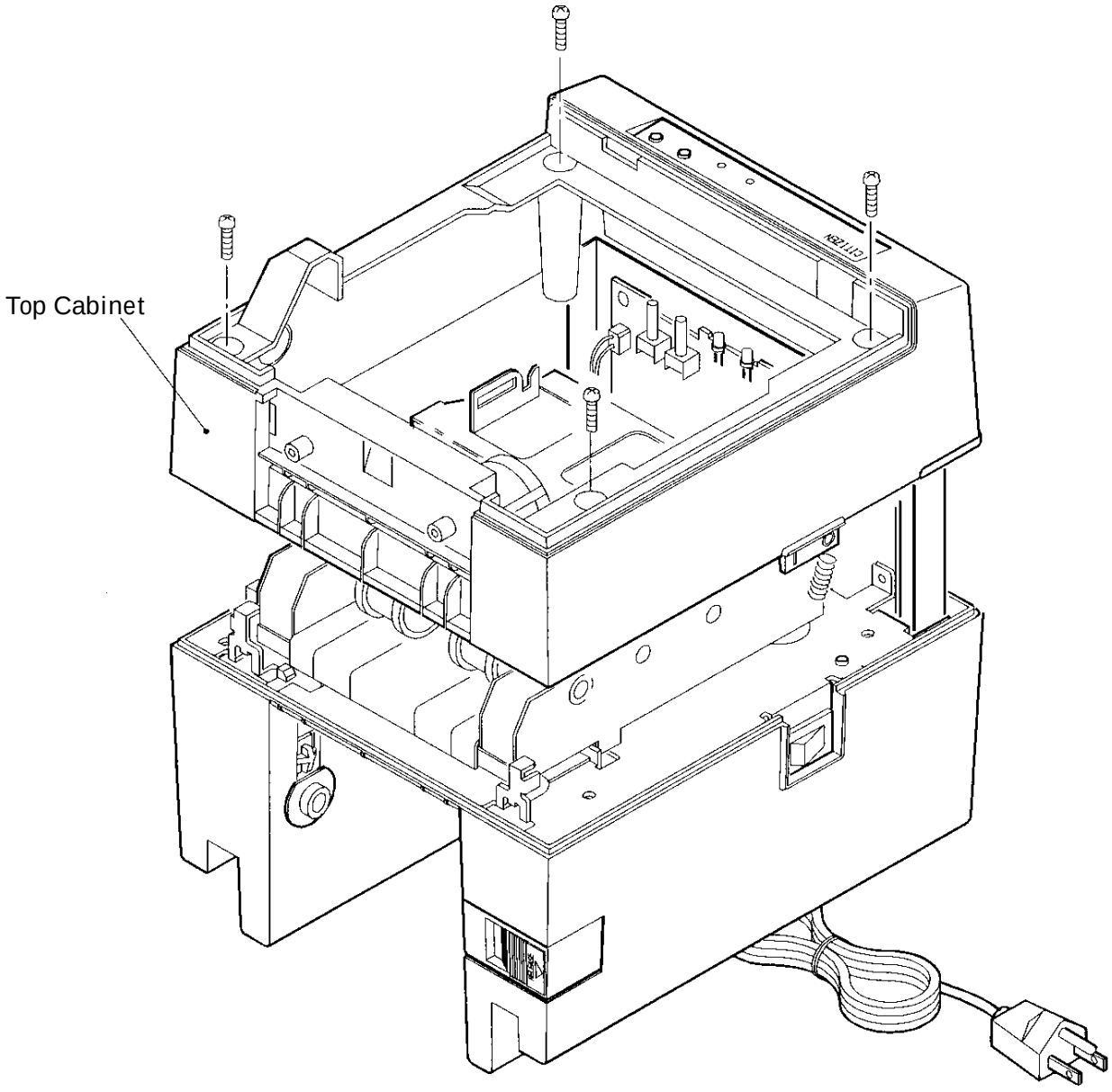
2.1 Basic Specifications

Item \ Model	iDP3550	IDP3551
Printer mechanism	Character type: DP-654 series/Graphic type: DP-657series (CITIZEN)	
Print method	Serial dot impact method (Bidirectional print), 2-pass graphic (Unidirectional print)	
Print width	Character type: 63.6 mm/Graphic type: 58.7 mm	
Print head	9 pins	
Print speed	Character type: Approx. 3.6 lines/second/Graphic type: Approx. 3 lines/second	
Print columns	40 columns	
Character size	Character type: 1.36 mm(W) × 2.4 mm(H) (7 dots) 1.36 mm(W) × 3.1 mm(H) (9 dots) Graphic type: 1.20 mm(W) × 2.4 mm(H) (7 dots) 1.20 mm(W) × 3.1 mm(H) (9 dots)	
Character types	Alphanumeric, Katakana, International characters, Code page 850, 860, 863, 865, 852, 866, 857, Windows code	
Line spacing	Character type: 4.23 mm (1/6 inch)/Graphic type: 2.82mm (1/9 inch)	
Paper	Ordinary paper and non-carbon paper: 76 +/- 0.5 mm(W) × ϕ83 mm(OD)	
Ink ribbon	Special purpose ribbon cartridge: Red/Black or Single Color (Black or Purple)	
Interface	Serial(RS-232C), Parallel(CENTRONICS compliant)	
Command system	CBM mode, STAR mode, ESC/POS mode The user can select the mode with the DIP switch and preset jumpers.	
Print function	On-line, self-test, and hex. dump print function Provided by operating the power, LF, and SEL switches.	
Input buffer	6K byte or 256 bytes (Selectable with the DIP switch)	
Buffer backup function	Within 24 hours (After 10 minutes or more of printer operation)	
Drawer function	2-drawer, 1-drawer switch	
Auto loading function	Automatically feeds the paper by several lines when it is inserted.	
Paper end detection	Stops printing when the paper has run out.	
Paper near end detection	Stops printing when the paper is running out.(Settable with a command)	
Auto cutter	None	AC-134-E (Capable of partial and full cut)
Winder	Special purpose winder AW-3-E (Option) that will be placed separately.	
Supply voltage	120 V AC +/- 10 %, 50/60 Hz 230 V AC +/- 10 %, 50/60 Hz	
Power consumption	Not printing: Approx. 10 W, Printing: Approx. 30 W	
Weight	Approx. 2.8 kg	Approx. 3 kg
Outer dimensions	160(W)×212(D)×194(H) mm	160(W)×212(D)×173(H) mm
Operating temperature and humidity	0 to 40°C, 35 to 85 % RH (No dew condensation)	
Storage temperature and humidity	-20 to 60 °C, 10 to 90 % RH (No dew condensation)	
EMI standard	U.S.A.: FCC Class-A Europe: EN55022 Class-A, CE Marking	
Safety standard	U.S.A., Canada: UL, c-UL Europe: TUV, GS	

3. DISASSEMBLY AND REASSEMBLY

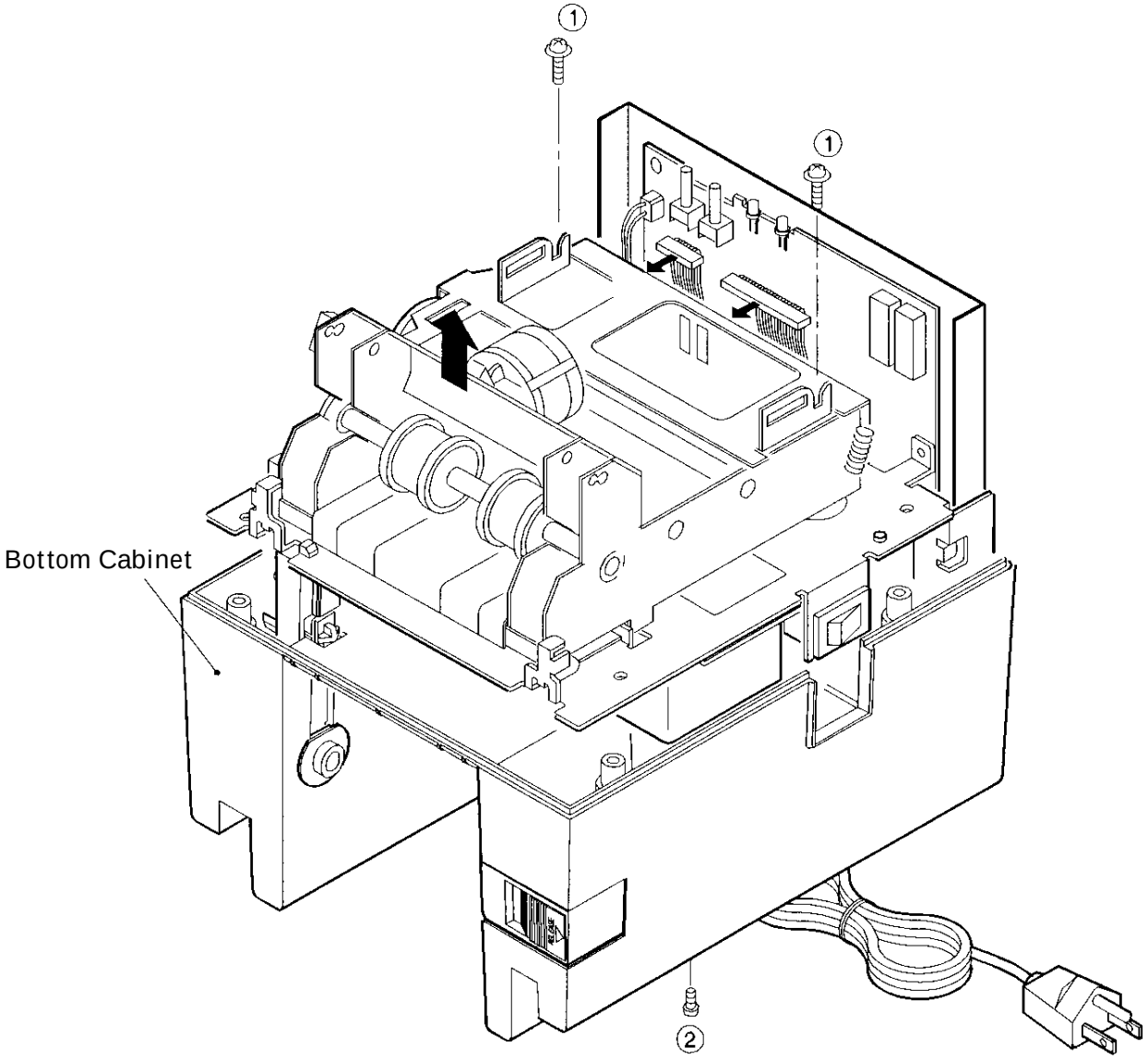
3.1 Disassembly Procedure

1. Removing the Top Cabinet
   (1) Remove the printer cover.
   (2) Remove the four screws (M3×12) and detach the top cabinet by gently lifting it upward

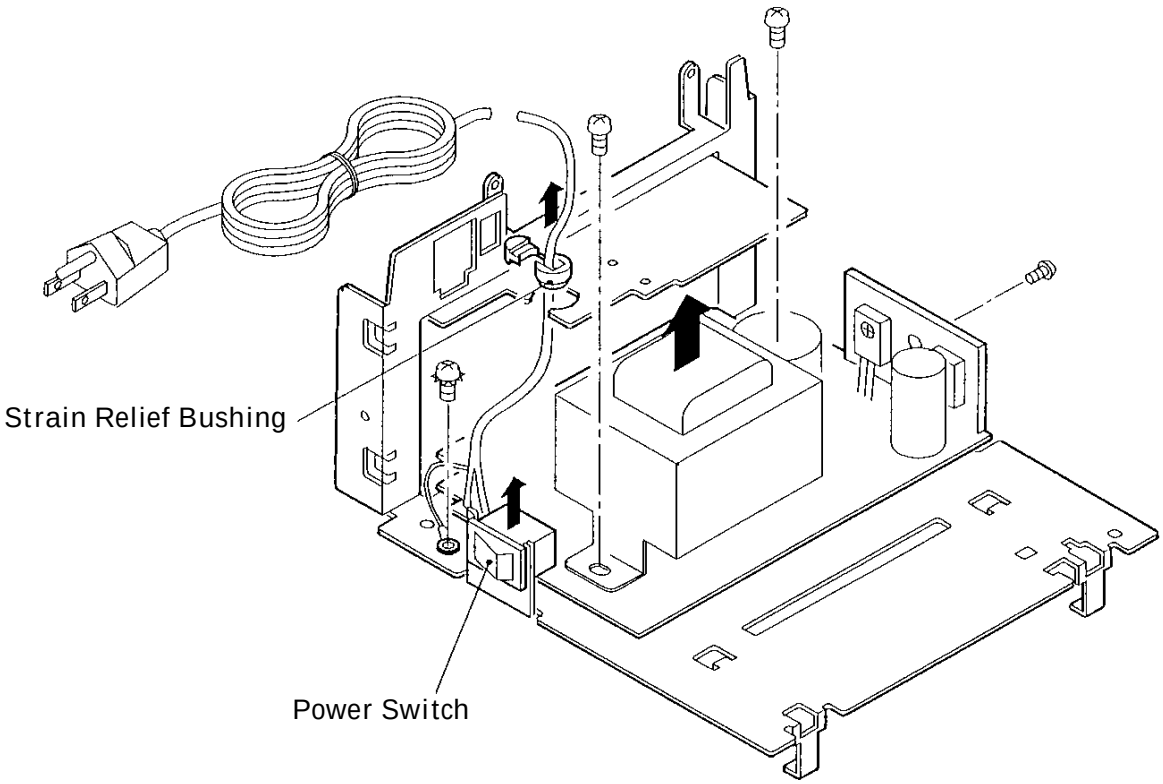


2. Removing the Chassis Assembly
   (1) Remove the top cabinet.
   (2) Remove the one screw (M3×6) ② from the bottom and gently lift the chassis assembly upward. Pull out the power cable from the bottom cabinet.

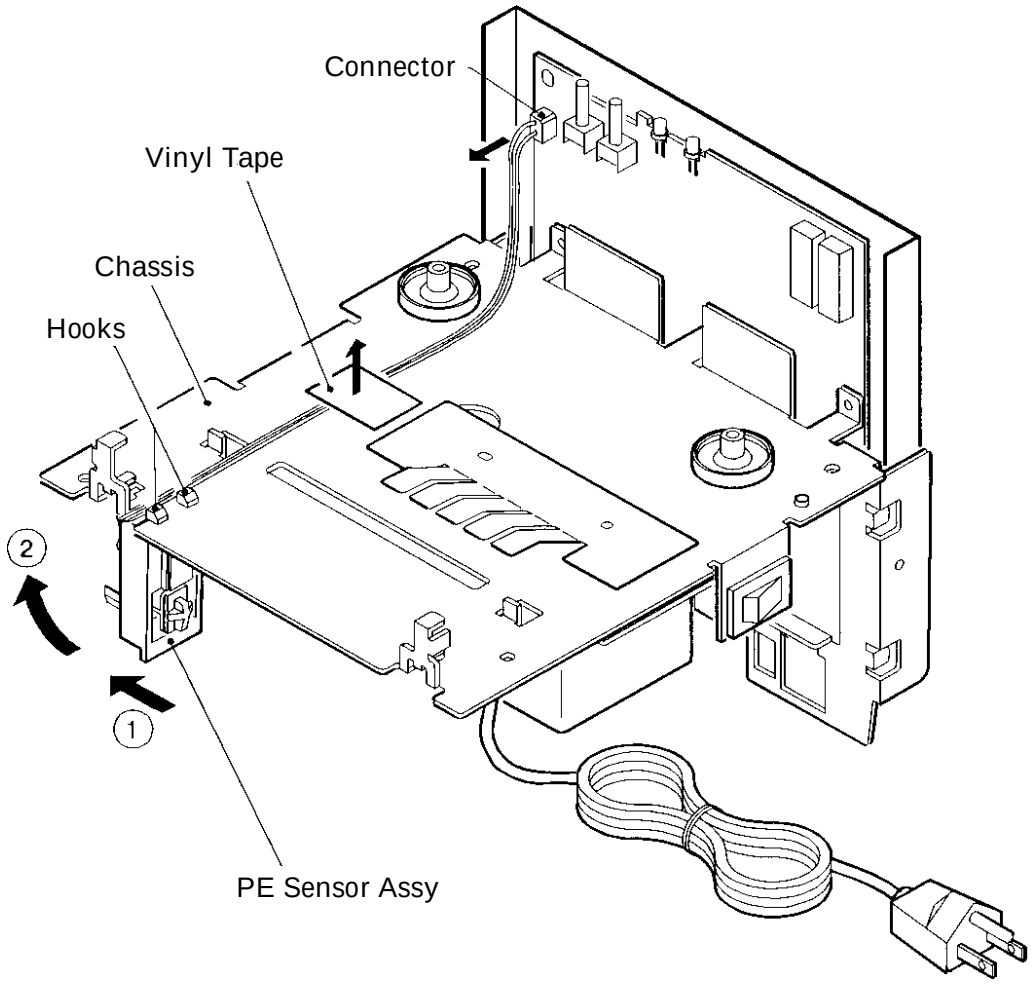
3. Removing the Printer Mechanism
   (1) Remove the top cabinet.
   (2) Remove the two screws (M3×14) ①.
   (3) Disconnect the two connectors and remove the printer mechanism by lifting its connector side upward.



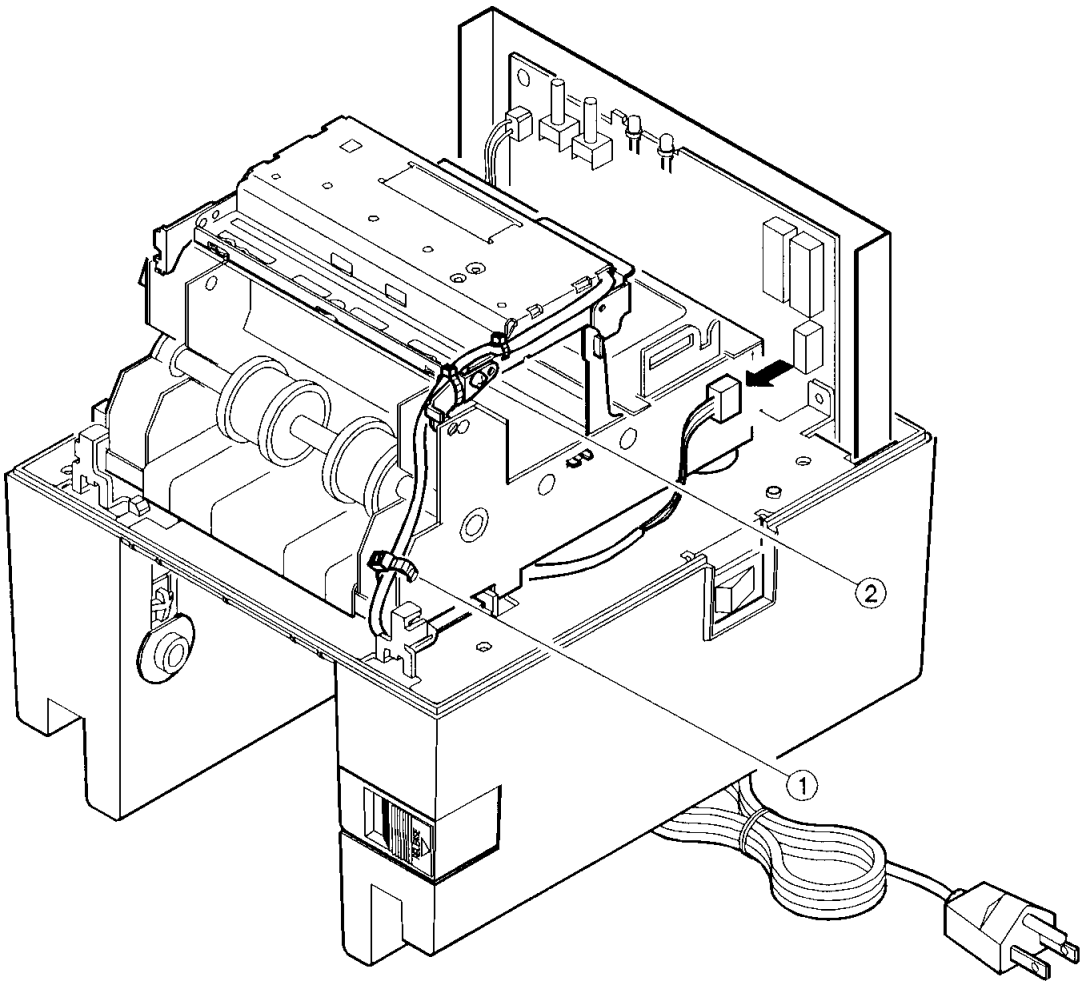
4. Removing the Power Board
   (1) Remove the chassis assembly and then detach the control board.
   (2) Remove the strain relief bushing of the power cable from the chassis with a special tool, round nose pliers, or a similar tool.
   (3) Remove the following four screws and detach the power board by lifting it upward while pulling out the power switch from the chassis.
      • Two screws (M4×6) that fasten the transformer
      • One screw (M3×8) that fastens the heat sink
      • One screw with outer-toothed washer (M4×6) that fastens the earth lug of the power cable



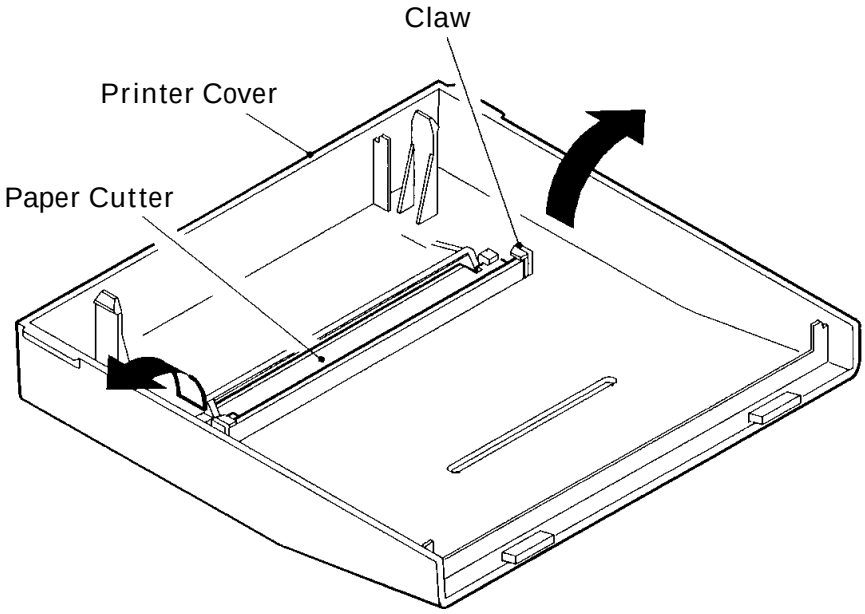
5. Removing the PE Sensor Assembly
   (1) Remove the chassis assembly and the printer mechanism.
   (2) Disconnect the one connector from the control board.
   (3) Peel off the vinyl tape from the chassis.
   (4) Slide the PE sensor assembly in the direction ① until its hooks come off the chassis, and then remove it by turning it in the direction ②.



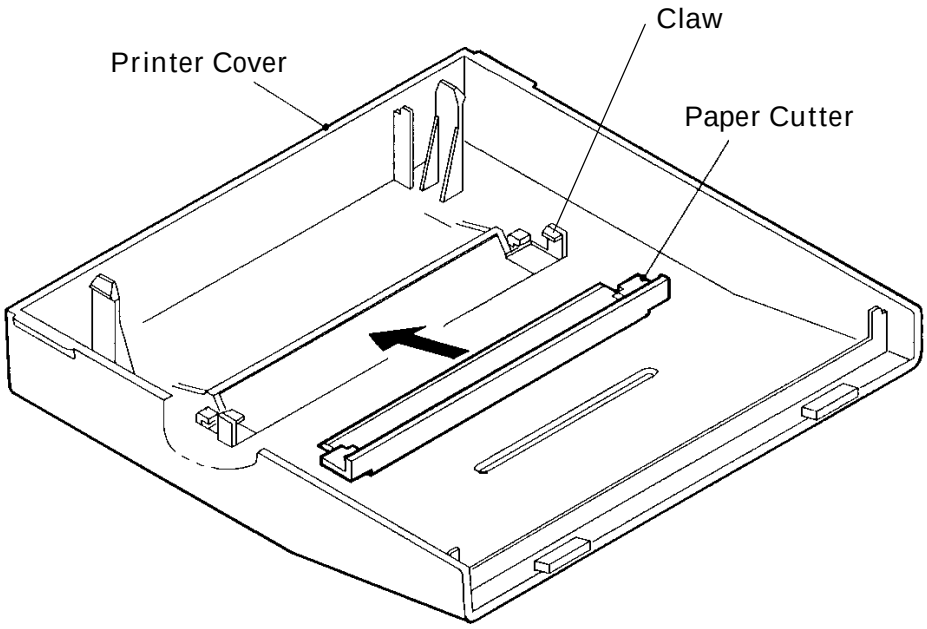
6. Removing the Auto Cutter AC-134
   (1) Remove the top cabinet.
   (2) Cut the cable tie ① to set the cable of the auto cutter AC-134, that is fastened to the printer mechanism, free.
   (3) Disconnect the one connector from the control board.
   (4) Loosen (not remove) the one screw (M2.6×6) ② and disengage both cutter BK from the cutter BK mounting holes on the printer mechanism chassis to remove the auto cutter.



7. Removing the Paper Cutter (iDP3550)
   (1) While widening both sides of the printer cover as shown by the arrows, push the paper cutter toward you to disengage it from the two claws.



- Reassembling the Paper Cutter (iDP3550)
  While facing the cutter blade away from you, gently insert the paper cutter into the paper cutter mounting slit on the printer cover until it is securely hooked by the two claws.



8. Assembling the Auto Cutter AC-134

(1) Notes

1) See the User's Manual of AC-130 Auto Cutter for specifications and detailed operations.

2) The printer mechanisms that can mount the auto cutter AC-134 are as follows.

• DP-61*, DP-62*, and DP-65*

(2) Packing List (See Fig. 1.)

1) Auto Cutter Unit AC-130 1 unit
2) Hook L 1 pc.
3) Hook R 1 pc.
4) Cutter BK L 1 pc.
5) Cutter BK R 1 pc.
6) Screw (M2.6×6) 2 pcs.
7) Lock Lever (1 pc) (Attached to AC-130)
8) Paper Gate (1 pc) (Attached to AC-130)

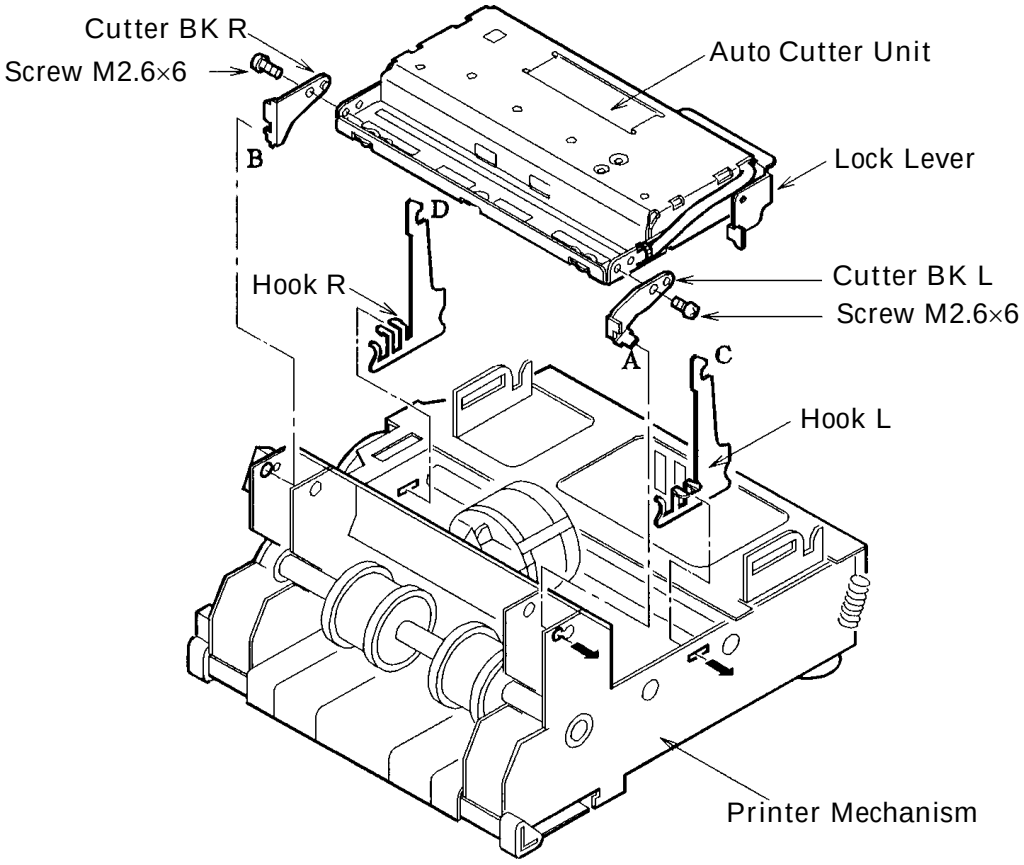


Fig. 1

(3) Assembling the Auto Cutter (See Fig. 1)

1) Securely insert the claws of the hook L and hook R into the square holes on the printer mechanism.
2) Securely mount the cutter BK R on the auto cutter unit with the supplied screw (M2.6×6).
3) Temporarily mount the cutter BK L on the auto cutter unit with the supplied screw (M2.6×6). Insert the projections "A" and "B" of the cutter BK L and R into the round holes on the printer mechanism to mount the auto cutter unit. Engage both ends of the lock lever with the notches "C" and "D" of the hook L and R, and then securely tighten the screw to fix the cutter BK L.

(4) How to Open the Auto Cutter (See Fig. 2.)

Push the handle and open the auto cutter.

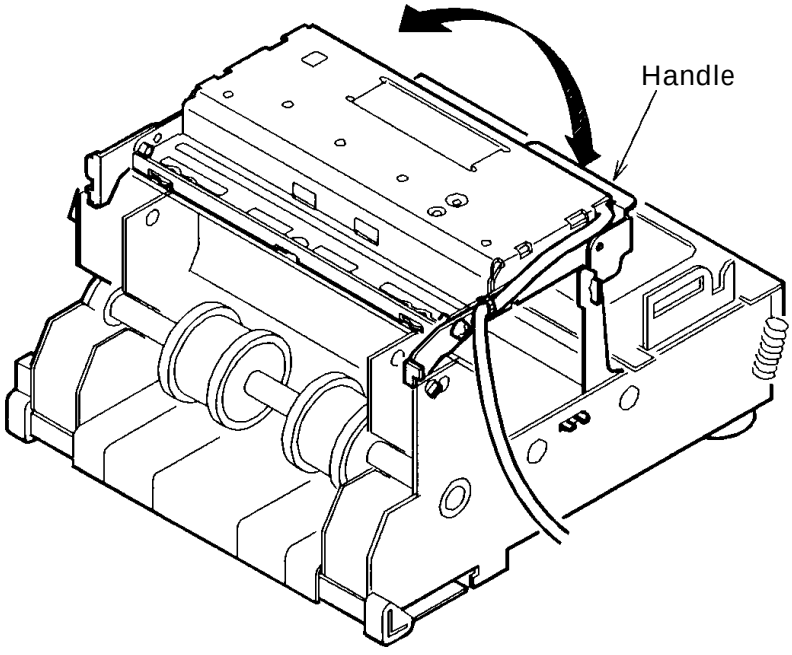


Fig. 2

3.2 Reassembly Procedure

Reassemble each part in the reverse order of the disassembly procedure described in Section 3.1.

4. TROUBLESHOOTING

4.1 Troubleshooting Procedure

When a trouble occurs, confirm its phenomenon, locate a defective part in accordance with 4.2 Troubleshooting Guide, and troubleshoot as described below.

- Phenomenon: Find a trouble phenomenon in this column. If there are multiple phenomena, take all the corresponding items into consideration. This allows you to specify a hidden defective part.
- Cause: Lists as many possible causes as possible. Guess a trouble cause out of them and take its check method to specify the trouble cause.
- Check Method: Describes a check method to specify a trouble cause.
- Remedy: Troubleshoot by taking a remedy described in this column.

By troubleshooting in accordance with the above-mentioned procedure, you can troubleshoot efficiently with fewer misjudgments.

4.2 Troubleshooting Guide

- **Power Supply Failure**

Phenomenon	Cause	Check Method	Remedy
No power (POWER lamp not illuminated)	The AC cord is not connected.	———	Connect the AC cord to the AC outlet.
	Not connected to the terminal block (For AC230V only)	———	Connect to the terminal block.
	The fuse is gone.	Check whether any unspecified power has been used so far.	Use the specified AC voltage.
		Check whether the specified fuse is used.	Use the specified fuse.
The fuse immediately goes again after replacing with new on.	The printer mechanism, control PCB assy, or power PCB assy is defective.	The power is normally supplied when the cable is disconnected from the printer mechanism. (No operation is done.)	Replace the printer mechanism.
		The power is normally supplied when the cable of the power PCB assy is disconnected from the control PCB assy.	Replace the control PCB assy.
		The phenomenon does not change after the above-mentioned check.	Replace the power PCB assy.
	The printer mechanism or circuit drive power is abnormal.	With a DC voltmeter, measure the mechanism drive voltage and circuit drive voltage.	Replace the power PCB assy.

♦ If the fuse is gone with the specified AC voltage supplied, it is likely that the printer mechanism, control PCB assy, or power PCB assy is defective. Replace either defective one. Incidentally, check the wiring of the drawer and interface cable.

- **Printing failure**

Phenomenon	Cause	Check Method	Remedy
No printing	Faulty AC supply voltage	Check whether the specified AC voltage is used.	Use the specified AC voltage.
	Faulty mounting or connection of the printer mechanism	Check mounting and connection of the printer mechanism.	Mount the printer mechanism properly.
	Faulty printer mechanism	_____	Replace the printer mechanism.
Paint printout	Non-recommended paper is used.	_____	Replace it with the specified paper.
	Faulty ink ribbon	Check wear and tear of the ink ribbon.	Replace the ink ribbon.
	Low AC supply voltage	Check the supply voltage with an AC voltmeter.	Use the AC voltage within the specified range.
Missing dots	Faulty connection of the printer mechanism	Check whether the printer mechanism cable is properly connected.	Connect the printer mechanism cable properly.
	Foreign substance is attached to the print head.	Check the head for any adhered foreign substance.	Dip a cotton swab or soft cloth in ethyl alcohol and wipe away the foreign substance.
	Faulty print head	_____	Replace the print head or printer mechanism.
	Bent ribbon mask	Check whether the ribbon mask is bent or not.	Correct the ribbon mask to remove unwanted bending.
Badly blurred printout	Faulty AC supply voltage	Check whether the specified AC voltage is used.	Use the specified AC voltage.
	Foreign substance is attached to the print head.	Check the head for any adhered foreign substance.	Dip a cotton swab or soft cloth in ethyl alcohol and wipe away the foreign substance.
Bad printing quality	Faulty paper	Check whether the paper meets the specifications.	Replace it with the specified paper.
	Faulty ink ribbon	Check wear and tear of the ink ribbon	Replace the ink ribbon.
	Low AC supply voltage	Check the AC supply voltage with an AC voltmeter.	Use the AC voltage within the specified range

- **Faulty carriage mechanism**

Phenomenon	Cause	Check Method	Remedy
Abnormal sound	Faulty connection of the head connector	Check the connection of the head connector.	Connect the connector properly.
ERROR lamp illuminated	The print head does not move to the home position at power-on, or it does not move.	Check for any foreign substance within a movable range or any wear of the gear, etc.	Replace the print head or printer mechanism.
Shear in printing	The paper is jamming.	Turn off the power once, and then on it again.	If there is a shear in printing, replace the printer mechanism.
	Faulty AC supply voltage	Check whether the specified AC voltage is supplied with an AC voltmeter.	Use the specified AC voltage.
	Foreign substance in the gear	Remove the printer mechanism and check for any foreign substance caught in the gear, head motor gear, or print head moving part.	Eliminate the foreign substance.
	Broken gear	Remove the printer mechanism and check for any breakage of the gear, head motor gear, or print head moving part.	If broken, replace the printer mechanism.

- **Paper feed failure**

Phenomenon	Cause	Check Method	Remedy
Paper is not fed or fed irregularly	Faulty connection of the motor connector	Check connection of the motor connector.	Connect the connector correctly.
	Defective motor	Measure the supply voltage with a DC voltmeter or oscilloscope.	If the supply voltage is normal, replace the motor (printer mechanism).
	Paper feed failure (Paper jam)	Check whether or not the paper is jamming or torn and caught in the paper path.	Eliminate unnecessary paper in the paper path and set paper properly.
	Low AC supply voltage	Check the AC supply voltage with an AC voltmeter.	Use the specified AC voltage.
	Foreign substance in the gear	Remove the printer mechanism and check for any foreign substance caught in the gear or motor gear.	Eliminate the foreign substance.
	Broken gear	Remove the printer mechanism and check for any breakage of the gear or motor gear.	If broken, replace the printer mechanism.

- **Faulty sensors**

Phenomenon	Cause	Check Method	Remedy
Does not detect presence of paper.	Faulty paper sensor	Replace the printer mechanism and check if the replaced one functions properly. Check whether the ERROR lamp flickers when paper is out.	Replace the printer mechanism.
	Foreign substance, etc. caught by the sensor	Check for any foreign substance.	Eliminate the foreign substance.
Does not detect paper near-end status.	Faulty paper near-end sensor	_____	Replace the paper near-end sensor.
	Faulty connection of the paper near-end sensor	Check connection of the connector.	Connect the connector correctly.
	Foreign substance, etc. caught by the sensor	Check for any foreign substance.	Eliminate the foreign substance.

♦ If the no-paper condition is not detected while the printer is running out of the recording paper, it will print without the paper, leading to a trouble of the head, and so on.

- **Faulty auto cutter (iDP3551 only)**

Phenomenon	Cause	Check Method	Remedy
Does not cut paper.	Faulty connection of the motor connector	Check connection of the motor connector.	Connect the connector correctly.
	Faulty AC supply voltage	Check whether the specified AC voltage is supplied with an AC voltmeter.	Use the specified AC voltage.
	Defective motor	Measure the supply voltage with a DC voltmeter or oscilloscope.	If the supply voltage is normal, replace the motor (auto cutter).
	Paper feed failure (Paper jam)	Check whether or not the paper is jamming or torn and caught in the paper path.	Eliminate unnecessary paper in the paper path and set paper properly.

- **Faulty winder (When AW-3 is used)**

Phenomenon	Cause	Check Method	Remedy
Does not wind paper.	Paper end is not correctly inserted into the slit of the winder reel.	————————	Insert paper into the slit correctly.
	Faulty connection of the motor connector	Check connection of the motor connector.	Connect the connector correctly.
	Faulty AC supply voltage	Check whether the specified AC voltage is supplied with an AC voltmeter.	Use the specified AC voltage.
	Paper feed failure (Paper jam)	Check whether or not the paper is jamming or torn and caught in the paper path.	Eliminate unnecessary paper in the paper path and set paper properly.
	Defective motor	Measure the supply voltage with a DC voltmeter or oscilloscope.	If the supply voltage is normal, replace the motor assy AW.

5. SERVICE PARTS LIST

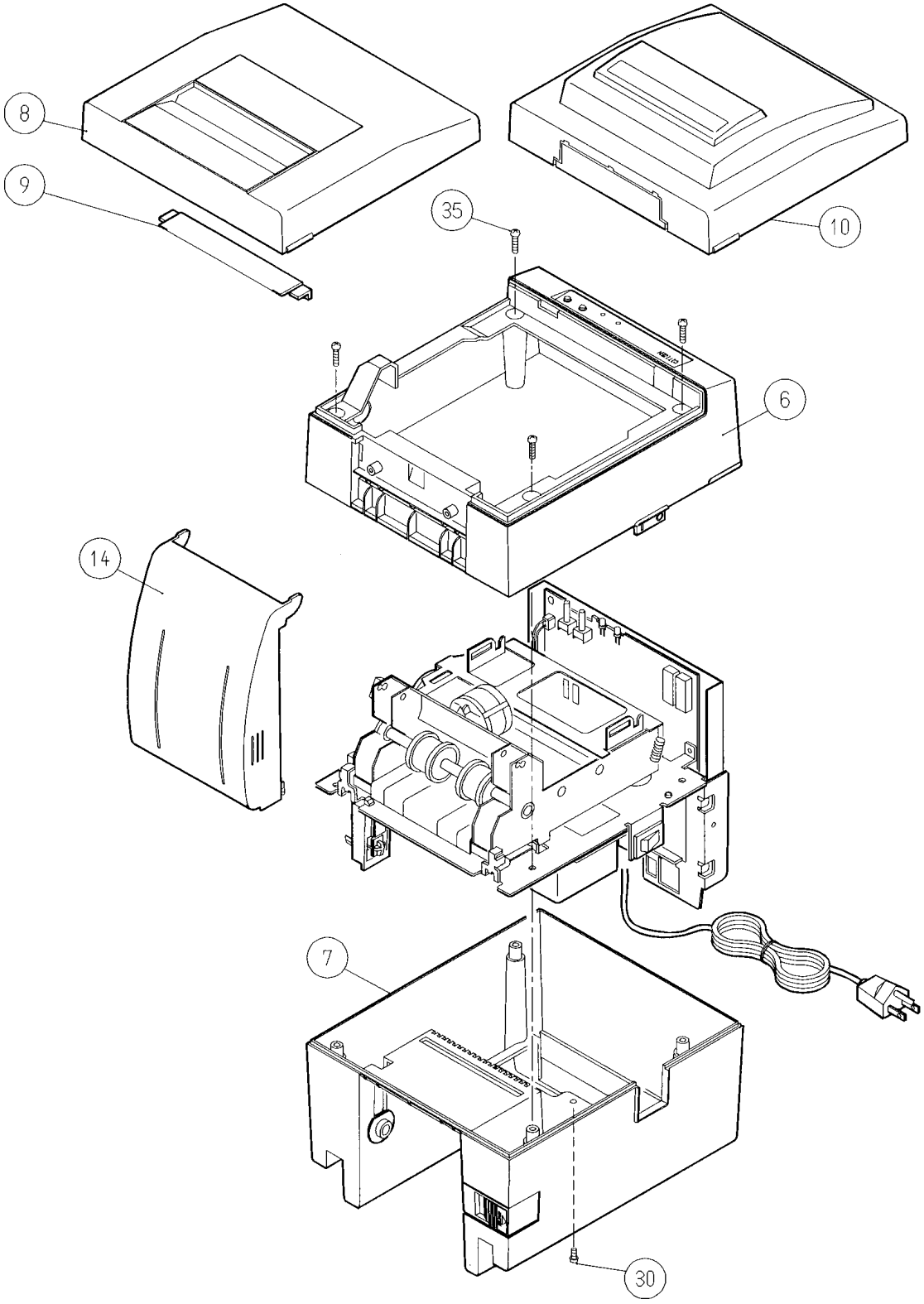
5.1 Parts List for Mechanism

EXPLODED VIEW **1/1**

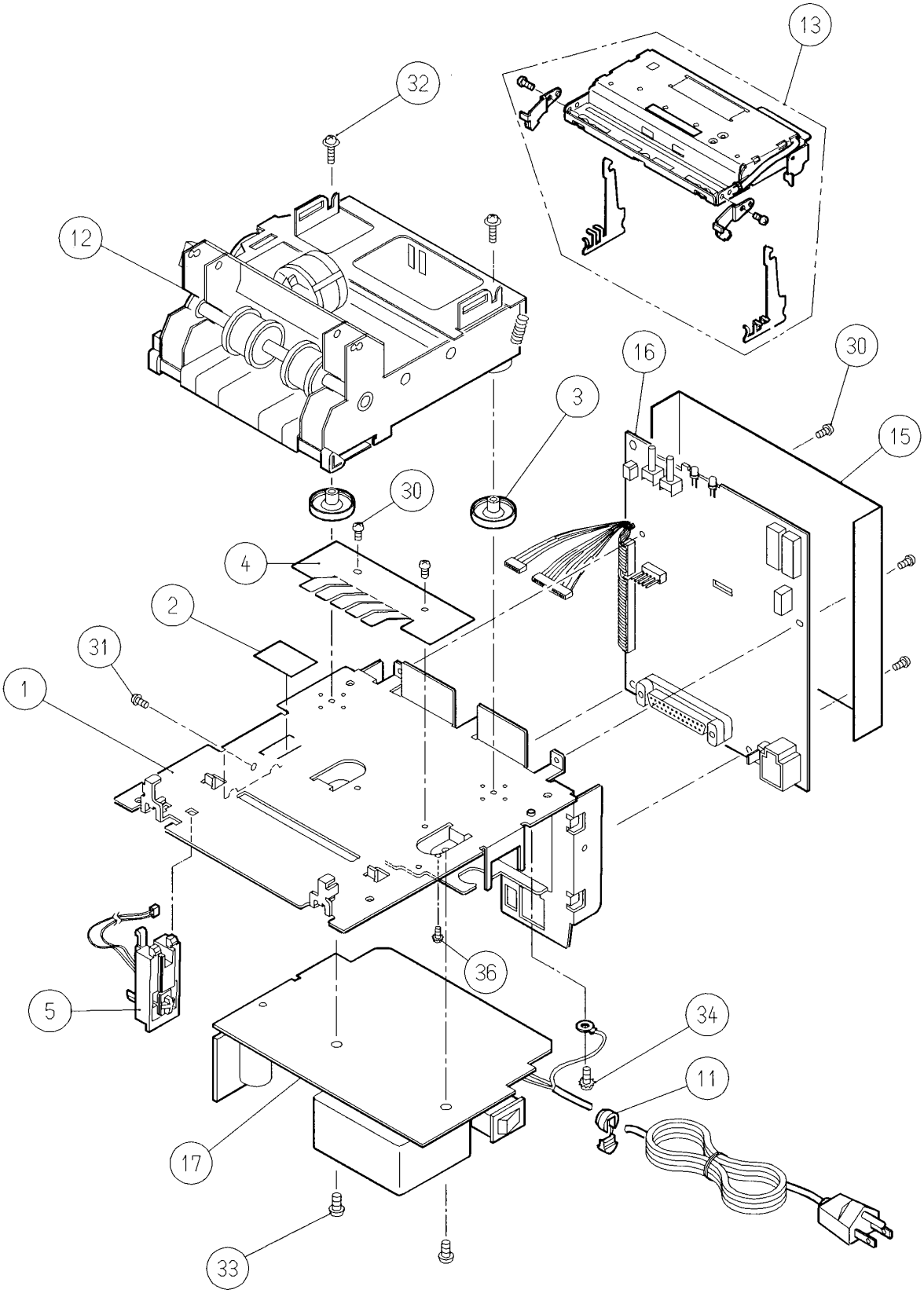
Ref. No.	Parts No.	Description		iDP3550	iDP3551
1	E4002-430	Chassis		1	1
2		Vinyl Tape		1	1
3	E6601-220	Printer Stand		2	2
4	E4035-690	Ground Plate		1	1
5	E40000290	PE Mechanism Assy		1	1
6	E66201-060	Top Cabinet Assy		1	1
7	E62020390	Bottom Cabinet Assy		1	1
8	E62040550	Printer Cover Assy		1	
9	E6220-220	Paper Cutter		(1)	
10	E62040340	Printer Cover AC			1
11	E6101-115	Strain Relief Bushing (HEYCO)		(1)(JPN,USA)	(1)(JPN,USA)
11	E6101-120	Strain Relief Bushing (HEYCO)		(1) (EUR)	(1) (EUR)
12		DP-654, 657		(1)	(1)
13	AC-134	Auto Cutter Unit	AC-134-E		1
14	E6310-010	Rear Cover		1	1
15	E4002-560	Shield Plate		1	1
16	E77001-465	Control PCB Assy	3550-01(Serial EUR)	(1)	(1)
16	E77001-470	Control PCB Assy	3550-01(Serial USA)	(1)	(1)
16	E77001-475	Control PCB Assy	3550-02(Parallel)	(1)	(1)
16	E77001-480	Control PCB Assy	3551-01(Serial EUR)	(1)	(1)
16	E77001-485	Control PCB Assy	3551-01(Serial USA)	(1)	(1)
16	E77001-490	Control PCB Assy	3551-02(Parallel)	(1)	(1)
17	E40000305	Power PCB Assy	3535-03(230V)	(1)	(1)
17	E40000315	Power PCB Assy	3535-03(120V)	(1)	(1)
30	76G22579	Screw	M3×6 Tapping	7	7
31	76G22796	Screw	M3×8 Tapping	1	1
32	76G38641	Screw	M3×14 Tapping (with Washer)	2	2
33	76G72589	Screw	M4×6 Tapping	2	2
34	76G42959	Screw	M4×6 Tapping (with Outer-Toothed Lock Washer)	1	1
35	76G29560	Screw	M3×12 Tapping	4	4
36	76G42966	Screw	M3×6 Tapping (with Outer-Toothed Lock Washer)	1	1

5.2 Disassembly Drawing

- **Disassembly Drawing-1**



● **Disassembly Drawing-2**



5.3 Parts List for PCB Assy

5.3.1 Control PCB Assy 3550-01 (R)/3550-02 (P) 1/4

Ref. No	Parts No.	Description		iDP3550		iDP3551	
				R	P	R	P
SW1,2	E5102-450	Switch	SKHHNH	2	2	2	2
IC1	404PC-10	CPU	404PC-10	1	1	1	1
IC2	E 107-370	EPROM	M27C512B	1	1	1	1
IC3	E 107-350	SRAM	TC55257DPL-85L	1	1	1	1
IC4	E2010610	TTL IC	SN74LS14AP	1	1	1	1
IC6	E2002-670	Reset IC	M51953BL	1	1	1	1
IC7	E 202-950	I/F-IC	MAX202CPE	1		1	
IC7	E2010630	TTL IC	SN74LS373AP		1		1
IC8	E 202-950	I/F-IC	MAX202CPE	1		1	
IC8	E2010620	TTL IC	SN74LS74AP		1		1
IC9	E2010101	HCMOS	TC74HC00AP	1	1	1	1
IC10	E2016110	TTL IC	SN74LS04AP	1	1	1	1
IC11	E2016110	TTL IC	SN74LS04AP		1		1
IC11	E2010640	TTL IC	SN74LS00AP	1		1	
IC12	E2010640	TTL IC	SN74LS00AP		1		1
TA1	E 390-300	Tr. Array	MTA001M F4002	1	1	1	1
TA2	E 390-370	Tr. Array	M54567P	1	1	1	1
TA3	E 390-230	Tr. Array	TA8428K			1	1
TR1	E 379-129	Transistor	2SD1292R	1	1	1	1
TR2-6,12	E 359-090	Transistor	2SC1740SR	6	6	6	6
TR7	E 359-200	Transistor	2SA1458	1	1	1	1
TR8	E 358-040	Transistor	RN1002	1	1	1	1
TR9-11	E 359-170	Transistor	2SC4671-AN	3	3	3	3
D1,2	E 400-460	Diode	1S2076	2		2	
ZD1	E406-505	Z. Diode	RD20EB2	1	1	1	1
LED1,2	E480-390	LED	SEL2410E	2	2	2	2
Xtal	E 501-410	X'tal	CST16.00MXW0C4	1	1	1	1
DSW1	E 5103-490	DIP SW.	KSD-10	1	1	1	1
DSW2	E 5103-510	DIP SW.	KSD-8	1		1	
BZ	MEB12C5	Buzzer	MEB-12C-5	1	1	1	1
C1	E2010-960	Ele. Cap.	16YK100M	1	1	1	1
C2	E2010-920	Ele. Cap.	35YK47M	1	1	1	1
C3,4,17-21,25 CP1-6	E 2220-170	C. Cap.	DD308-63F104Z50	14	14	14	14
C5,7,8	E2220-110	C. Cap.	DD104-63B102K50	3	3	3	3
C6,9,10	E2220-100	C. Cap.	DD106-63F103Z50	3	3	3	3
C11	E2220-210	C. Cap.	DD804-63B222Z50	1		1	
C11	E2220-110	C. Cap.	DD104-63B102K50		1		1

2/4

Ref. No	Parts No.	Description		iDP3550		iDP3551	
				R	P	R	P
C12-16,22-24 26,34,38	E2220-170	C. Cap.	DD308-63F104Z50	11		11	
C12,16,22	E2220-100	C. Cap.	DD106-63F103Z50		3		3
C13	E2220-100	C. Cap.	DD106-63F103Z50				1
C14	E2220-210	C. Cap.	DD804-63B222Z50		1		1
C15	E2220-120	C. Cap.	DD104-63B471K50		1		1
C23	E2010-950	Cap.	FS0H-473Z		1		1
C24, 26-28	E2220-200	C. Cap.	DD104-63B101K50		4		4
C27	E2220-110	C. Cap.	DD104-63B102K50	1		1	
C28,30	E2220-100	C. Cap.	DD106-63F103Z50	2		2	
C29	E2220-100	C. Cap.	DD106-63F103Z50			1	
C29, CP7-9	E2220-170	C. Cap.	DD308-63F104Z50		4		4
C31	E2010-950	Cap.	FS0H-473Z	1		1	
C33, 35-37	E2220-200	C. Cap.	DD104-63B101K50	4		4	
RA1	E3500-040	Re. Array	M9-1-103J	1		1	
RA1,2	E3500-080	Re. Array	M9-1-332J		2		2
RA2,3	E3500-050	Re. Array	M5-1-103J	2		2	
RA3,6	E3500-040	Re. Array	M9-1-103J		2		2
RA4	E3500-290	Re. Array	M5-1-332J	1		1	
RA4	E3500-050	Re. Array	M5-1-103J		1		1
RA7	E3500-290	Re. Array	M5-1-332J		1		1
R1,17		Resistor	RD25M10-1KΩJ	2		2	
RA1,16		Resistor	RD25M10-1KΩJ		2		2
R2		Resistor	RD25M10-33KΩJ	1	1	1	1
R3		Resistor	RD25M10-180ΩJ	1	1	1	1
R4,18		Resistor	RD25M10-10KΩJ	2	2	2	2
R5,7,9,19,23 28		Resistor	RD25M10-10KΩJ	6		6	
R5,23		Resistor	RD25M10-100ΩJ		2		2
R6		Resistor	RD25M10-100ΩJ	1		1	
R6,8,17,24,29		Resistor	RD25M10-10KΩJ		5		5
R7		Resistor	RD25M10-62KΩJ		1		1
R8		Resistor	RD25M10-62KΩJ	1		1	
R9,14,22,31		Resistor	RD25M10-3.3KΩJ		4		4
R10,11,15,21 30		Resistor	RD25M10-3.3KΩJ	5	5	5	5
R12,16,29		Resistor	RD25M10-3.3KΩJ	3		3	
R12		Resistor	RD25M10-68KΩJ		1		1
R13		Resistor	RD25M10-68KΩJ	1		1	
R13,28		Resistor	RD25M10-330KΩJ		2		2

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Ref. No	Parts No.	Description		iDP3550		iDP3551	
				R	P	R	P
R14,26		Resistor	RD25M10-330KΩJ	2		2	
R19		Resistor	1.5Ω-1W		1		1
R20		Resistor	1.5Ω-1W	1		1	
R22		Resistor	RD25M10-4.7KΩJ	1	1	1	1
R24,25		Resistor	RD25M10-10KΩJ			2	
R25,26		Resistor	RD25M10-10KΩJ				2
R27		Resistor	RD25M10-330KΩ	1	1	1	1
LB1-18,23-26	E4009-510	Fe. Beads	BL02RN1-A62	22	22	22	22
LB19-22	E4009-510	Fe. Beads	BL02RN1-A62			4	4
LB27	E4009-510	Fe. Beads	BL02RN1-A62				1
CA1	E4900-620	Cord Assy	25-0371	1	1	1	1
CA2	E4900-630	Cord Assy	25-0372	1	1	1	1
CN1	E48000260	Connector	B5P-SHF-1AA	1	1	1	1
CN2	E48000940	Connector	5267-02A-X	1	1	1	1
CN3	E48000265	Connector	5045-04A	1	1	1	1
CN4	E48000280	Connector	FCN-674J025-L/C	1		1	
CN4	E48000600	Connector	57GE-40360-751		1		1
(CN4)		Metal Stay	17L-002A	(2) (JPN,EUR)		(2) (JPN,EUR)	
(CN4)		Screw	M2.6×12 ZNP	(2) (JPN,EUR)		(2) (JPN,EUR)	
(CN4)		Metal Stay	17L-002C	(2) (USA)		(2) (USA)	
(CN4)		Screw	UNC#4-40×12(ZNP)	(2) (USA)		(2) (USA)	
CN5	E4800-945	Connector	5267-04A-X			1	1
CN6	E48000565	Connector	JACK-285D-9660J-101	1	1	1	1
JP102		Jumper	ϕ0.7mm 10mm	1		1	
SC1	E48000860	Switching Connector	00-8261-24-33-10-806	1	1	1	1
REC1-4	E48000855	Receptacle	20-8261-0249-06-807	4	4	4	4
REC5-8	E48000855	Receptacle	20-8261-0249-06-807	4		4	
ICS	E48000870	IC Socket	87-2806S04	1	1	1	1
PC		PCB	3550-01	1		1	
PC		PCB	3550-02		1		1

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Ref. No	Parts No.	Description		iDP3550		iDP3551	
				R	P	R	P
		Screw	M3×10 ZNP (C)		2		2
		Screw	M3×8 (B-506)	2	2	2	2
		Nut	M3 ZNP (C)	2	4	2	4
	E8035-010	Insu-Lock Tie	T18S	1	1	1	1
(IC2)		ROM Label	PDL-65	1	1	1	1

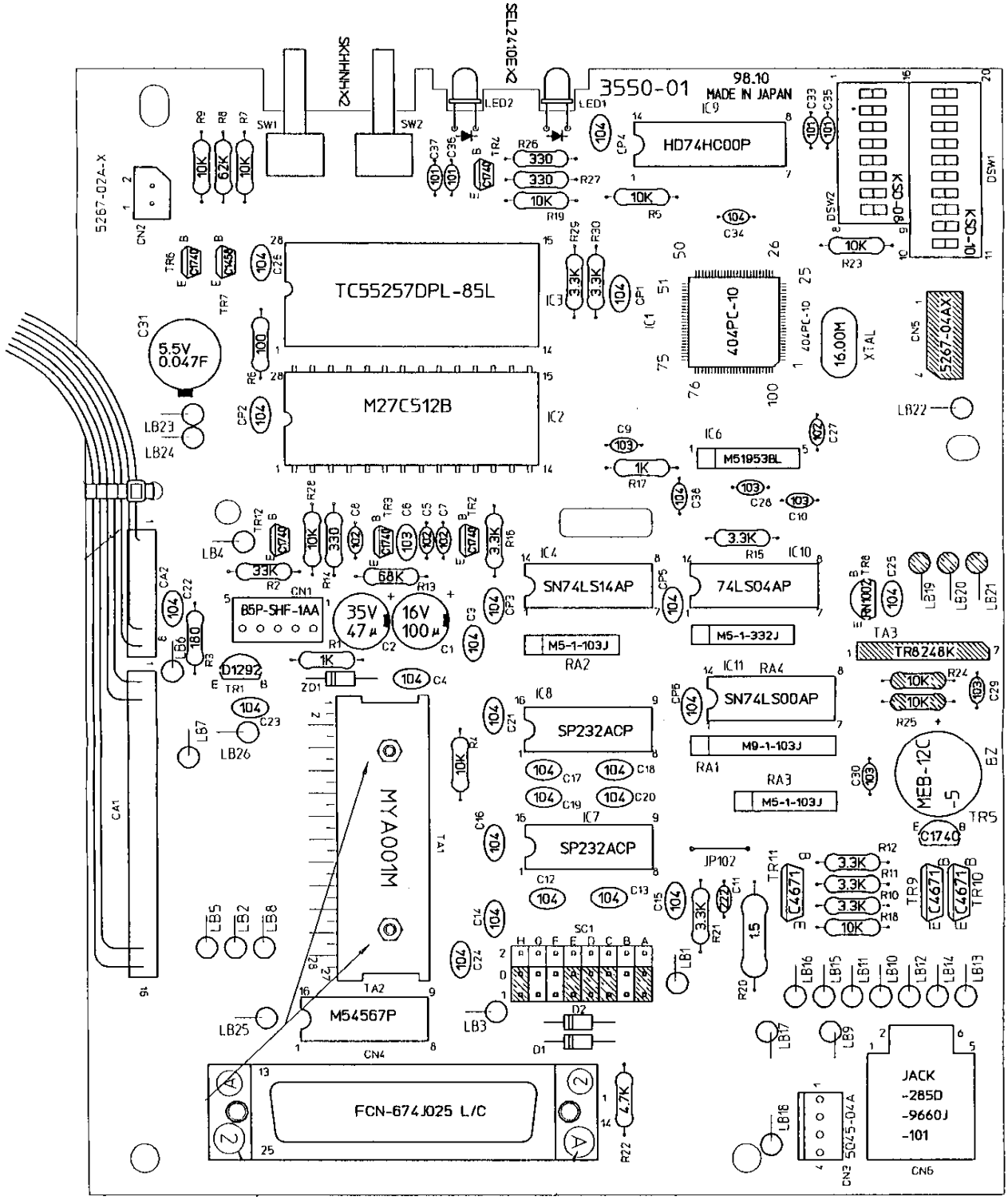
5.3.2 Power PCB Assy 3535-03 1/2

Ref. No	Parts No.	Description	USA	EUR
TR		Transformer 25-0289 120V	(1)	
TR		Transformer 25-0290 230V		(1)
		Power Cord 25-0184 120V	(1)	
		Power Cord 25-0185 230V		(1)
NF		Noise Filter PLAA3221R0D01	1	1
IC1		Regulator M5231TL	1	1
IC2		Regulator µPC2405AHF	1	1
TR1		Transistor 2SB1340	1	1
DS1		Diode Stack 2KBP02M	1	1
DS2		Diode Stack KBP02M	1	1
C1,2		Film Cap. PHE830M	2	2
C5		Ele. Cap 63PNJ-2200A 25×25	1	1
C6		C. Cap. DD804B101K50	1	1
C7		Ele. Cap. 50YK1M-TA-5×11	1	1
C8		Ele. Cap. 35YK470M 10×16	1	1
C9		Ele. Cap. SME16VB-3300M	1	1
C10		Ele Cap. CESME1C101	1	1
C11		Mylar Cap. DMY21H104	1	1
R1		Resistor RD25T(26)-330Ω	1	1
R2		Resistor RD25T(26)-560Ω	1	1
R3		Resistor SN14K2ET26A20KΩ F	1	1
R4		Resistor SN14K2ET26A1.54KΩ F	1	1
CN1		Connector F5P-SHVQ	1	1
CN5		Terminal GSK801		1
F1,3		Fuse 235001	2	1
F1		Fuse 218500		1
		Heat Sink 50-0079	1	1
SW		Switch SF-W1P1A-01BB2	1	1

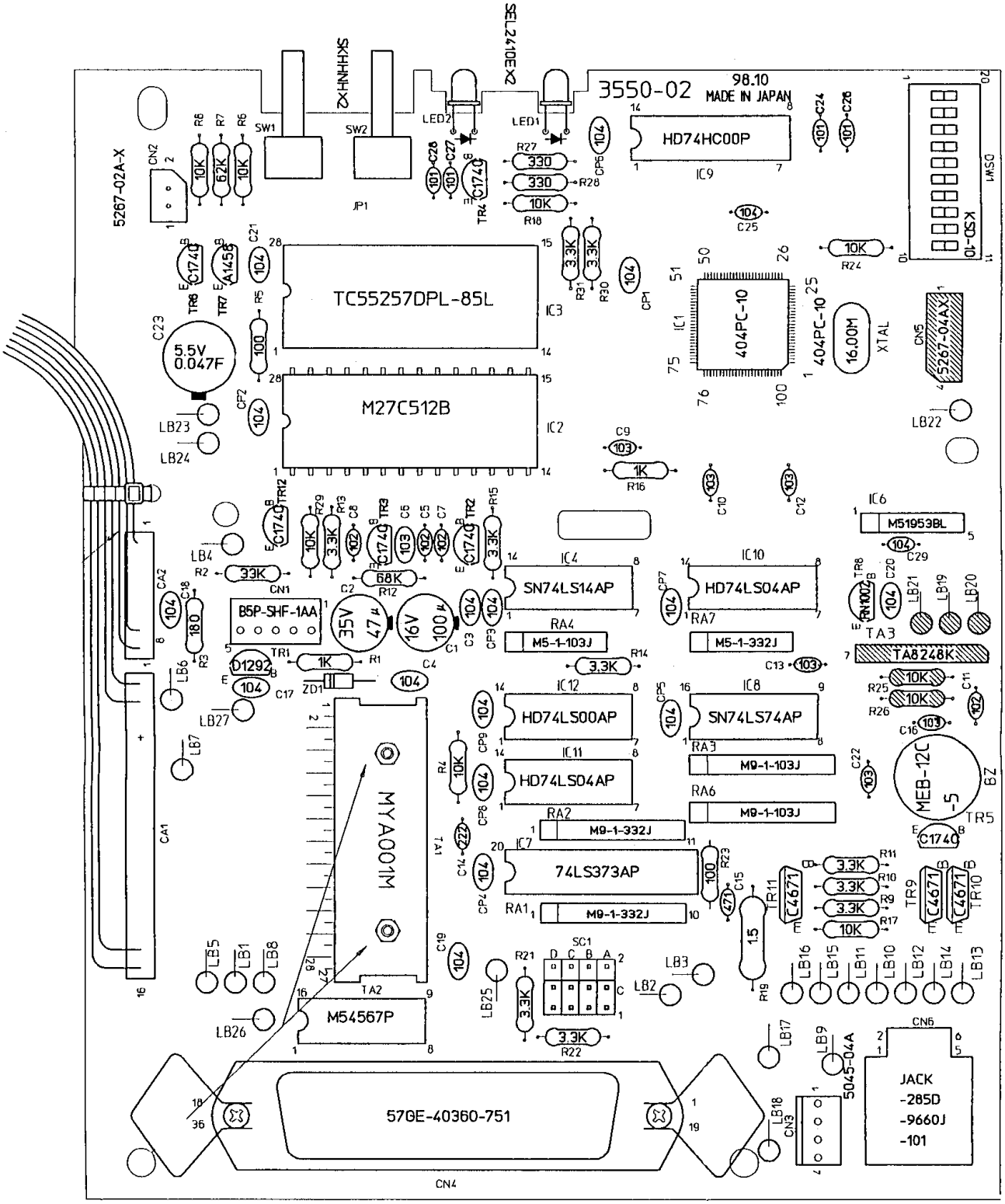
Ref. No	Parts No.	Description		USA	EUR
		Adhesive Tape	ϕ10mm L=10mm	1	1
FH2		Jumper	ϕ0.7mm L=18mm	1	1
		Screw	M3×8 B Tight Znp(c)	2	2
		Screw	M3×8 B Tight (B-567)	1	1
FH1,3		Fuse Holder	F218P	4	4
PCB		PCB	3535-03	1	1
		Cord Bushing	SR-4N-4	1	
		Cord Bushing	SR-5N-4		1
		Tie	CV-075		1

5.4 Parts Layout Drawing

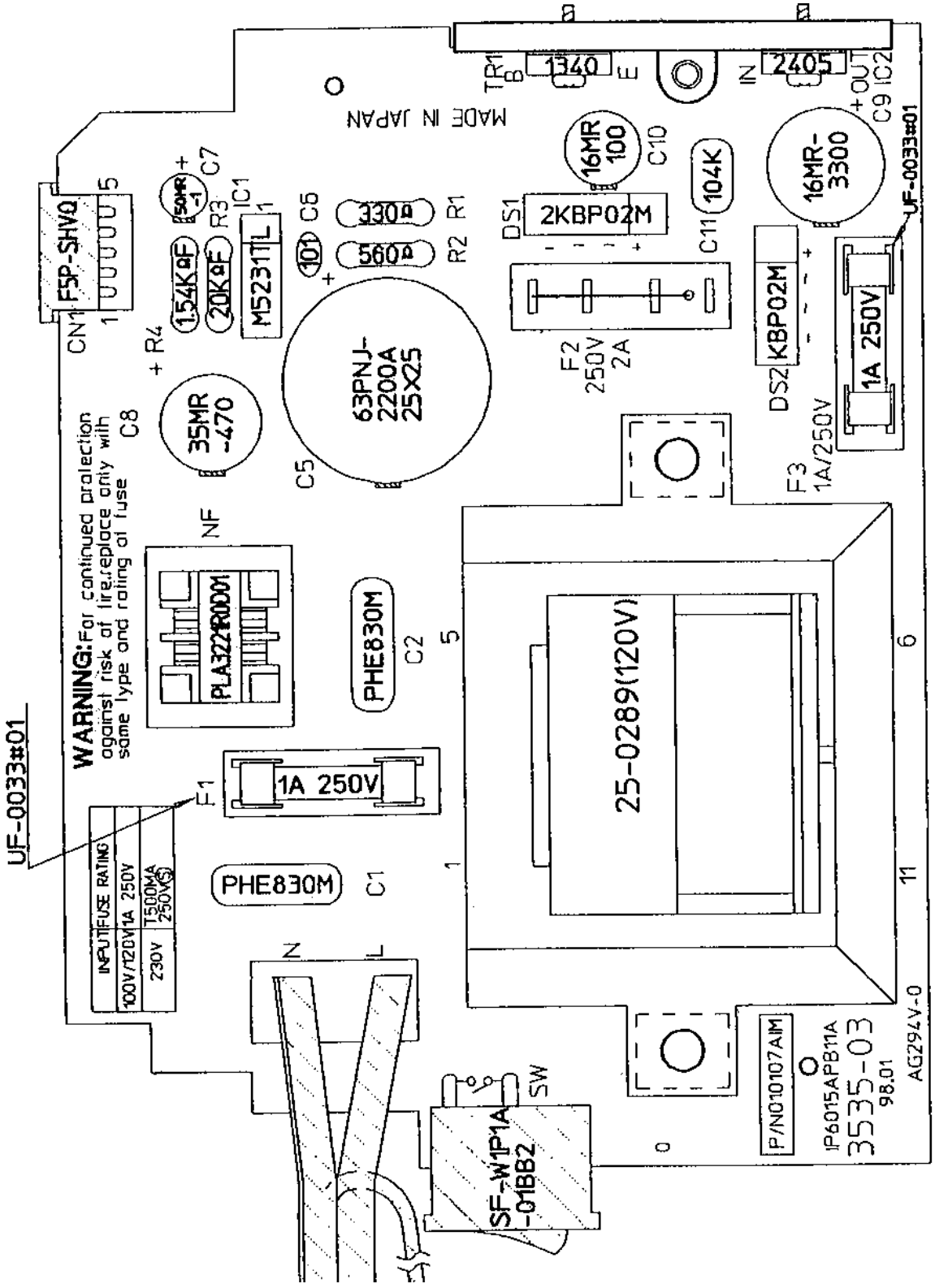
5.4.1 Control PCB Assy 3550-01 (Serial Interface D-sub 25)



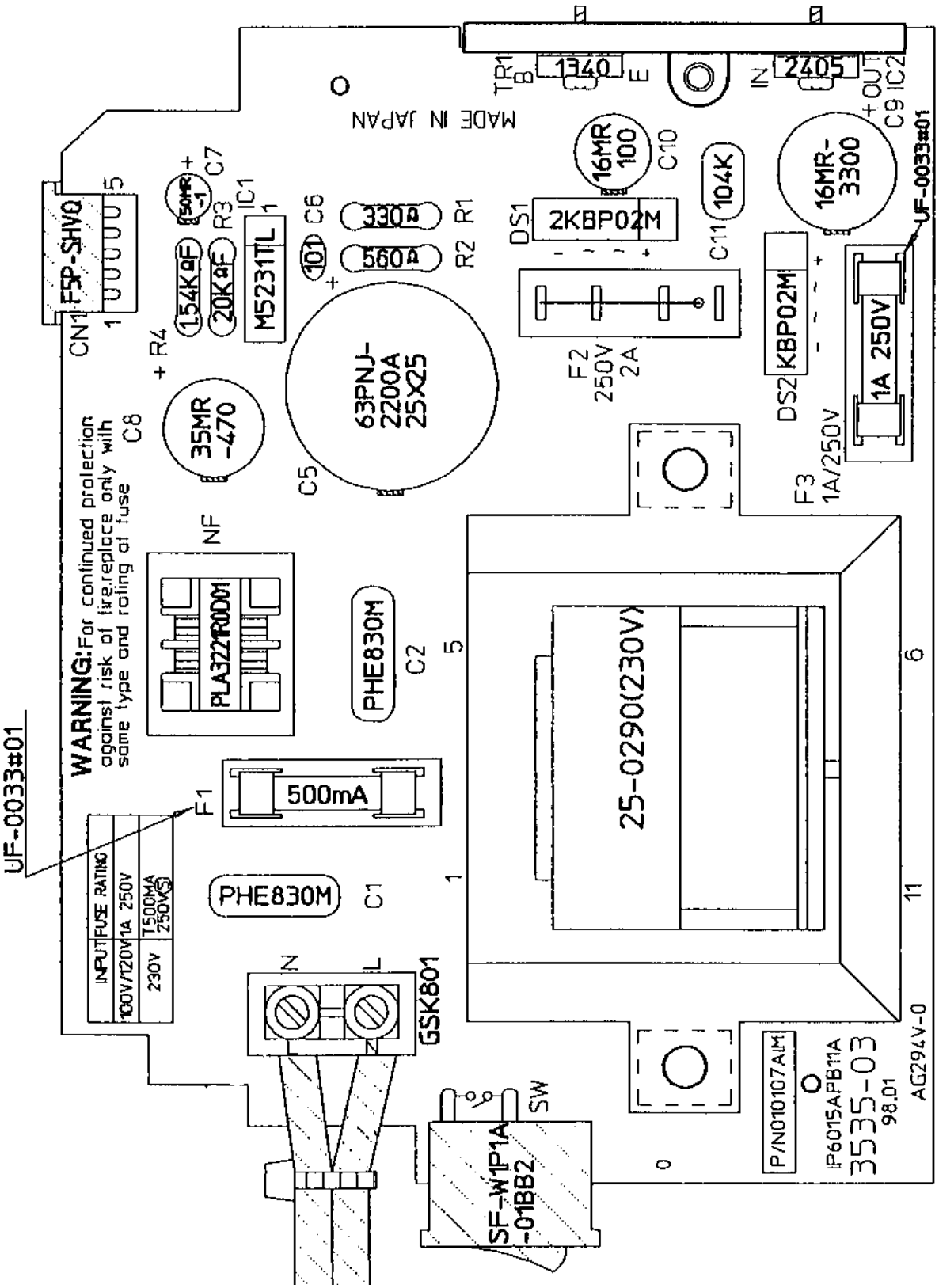
5.4.2 Control PCB Assy 3550-02 (Parallel Interface)



5.4.3 Power PCB Assy 3535-03 (120V)



5.4.4 Power PCB Assy 3535-03 (230V)

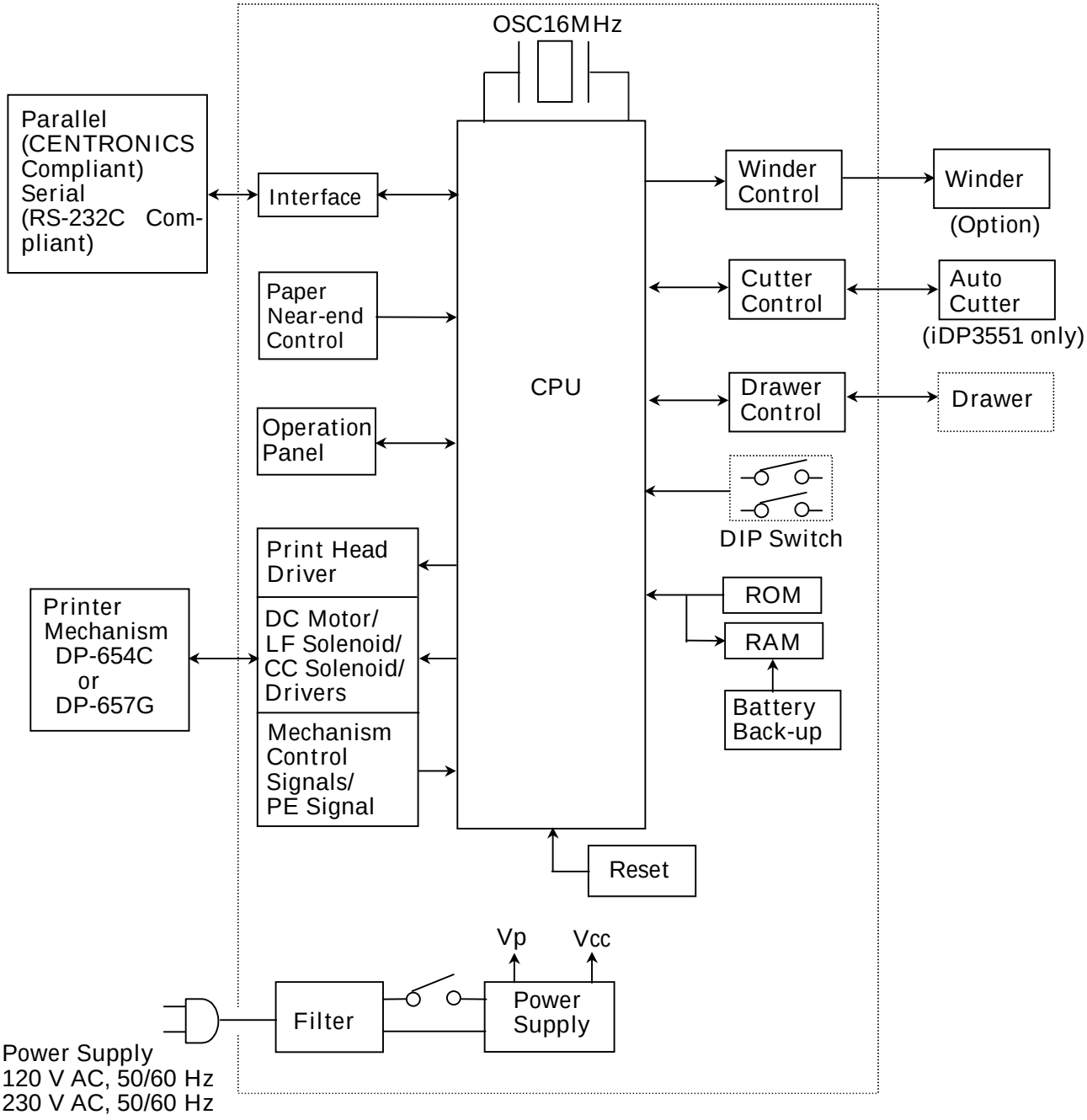


6. DRAWING

The following lists the reference drawings for maintenance, and so on.

- Block diagram
- Circuit diagrams for the following circuits
  - Control PCB Assy (Serial Interface)
  - Control PCB Assy (Parallel Interface)
  - Power PCB Assy

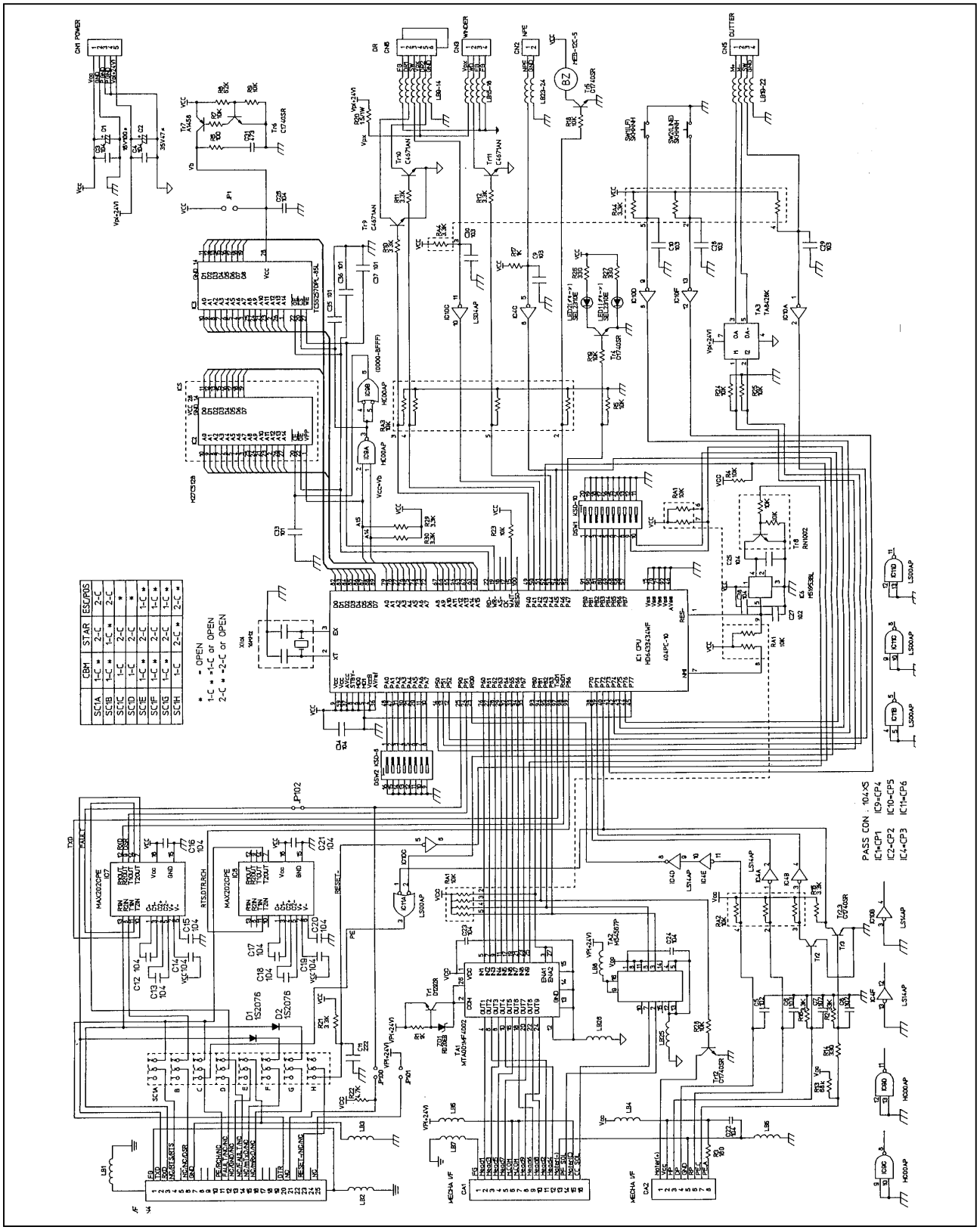
6.1 Block Diagram



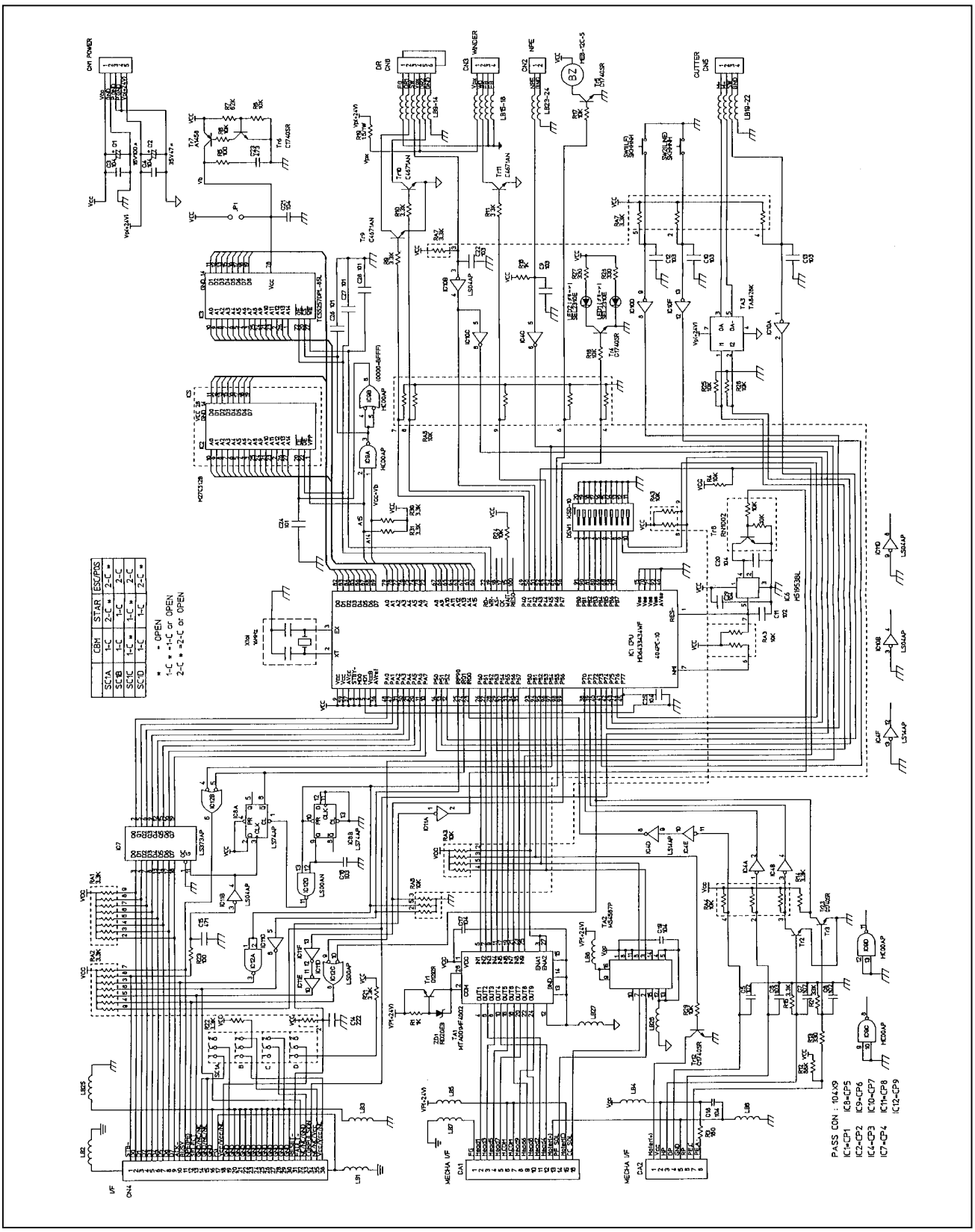
Vp: For mechanism drive/drawer kick-out
Vcc: For circuit

6.2 Circuit Diagram

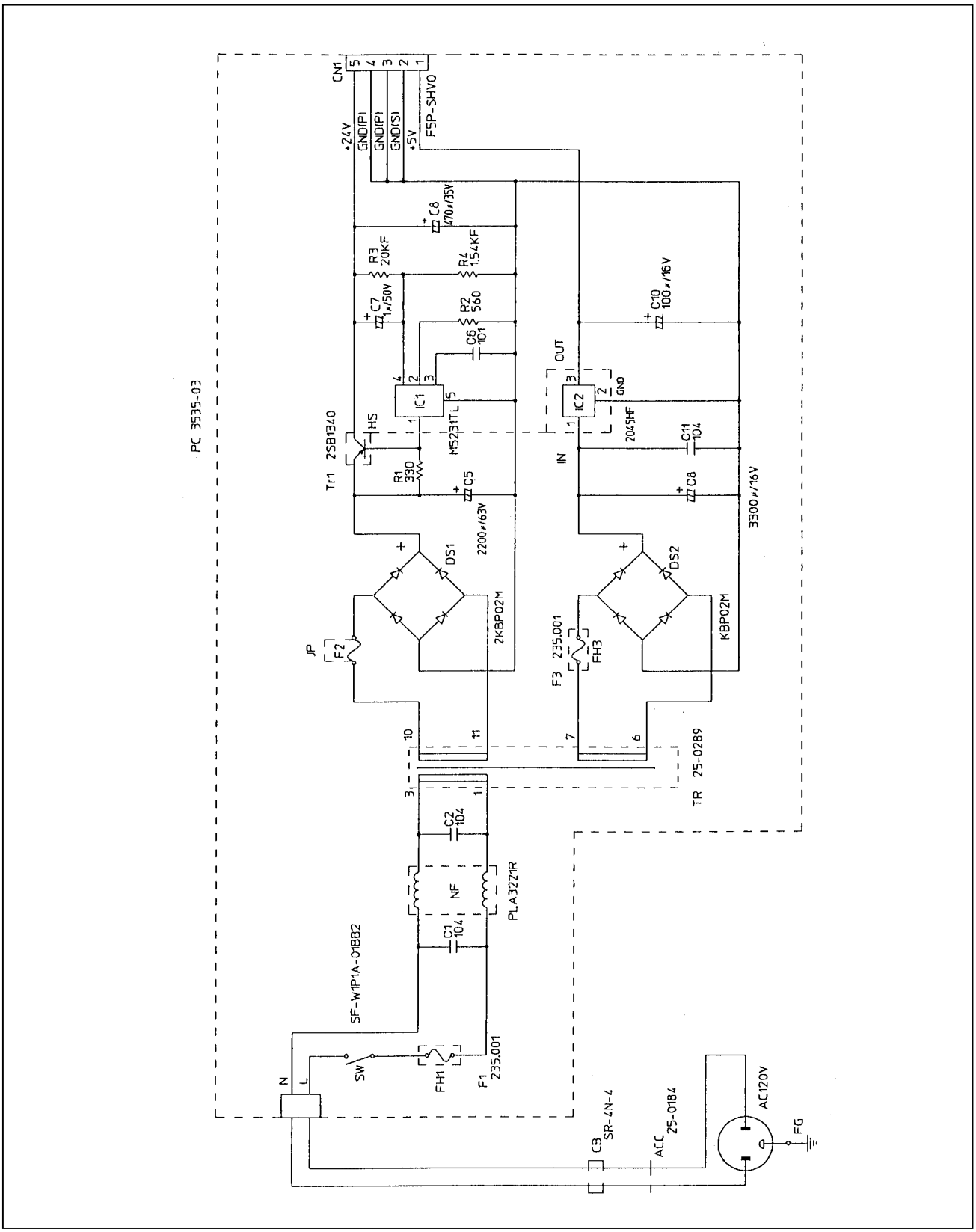
6.2.1 Control PCB Assy 3550-01 (Serial Interface D-sub 25)



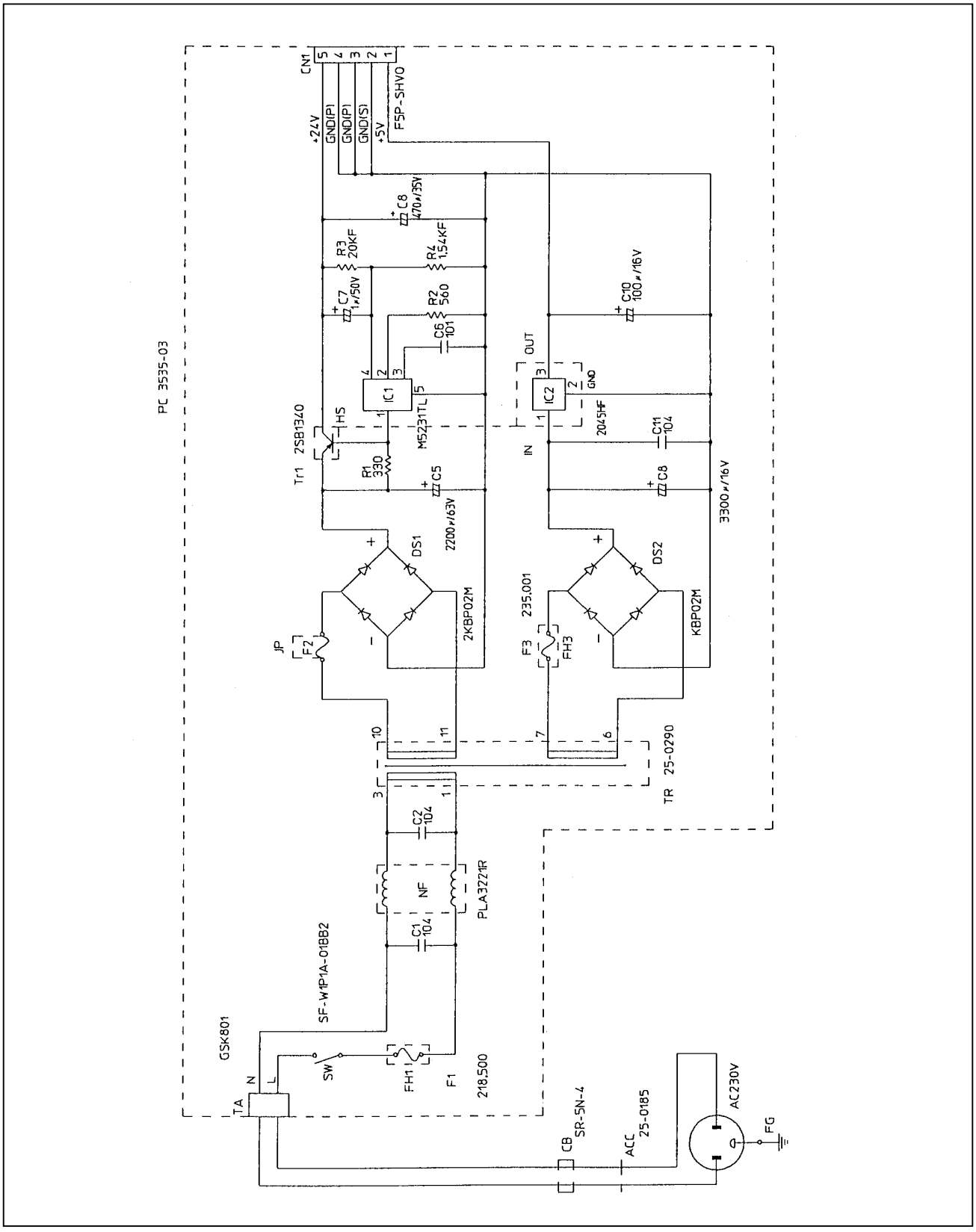
6.2.2 Control PCB Assy 3550-02 (Parallel Interface)



6.2.3 Power PCB Assy 3535-03 (120V)



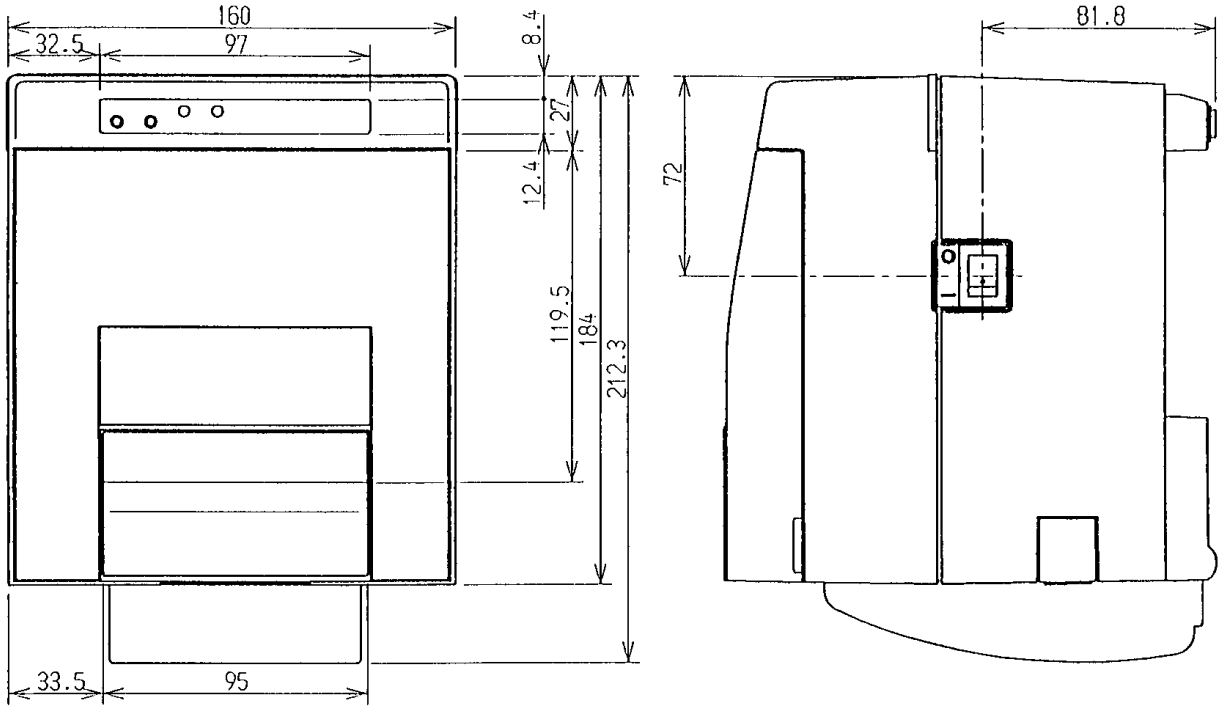
6.2.4 Power PCB Assy 3535-03 (230V)

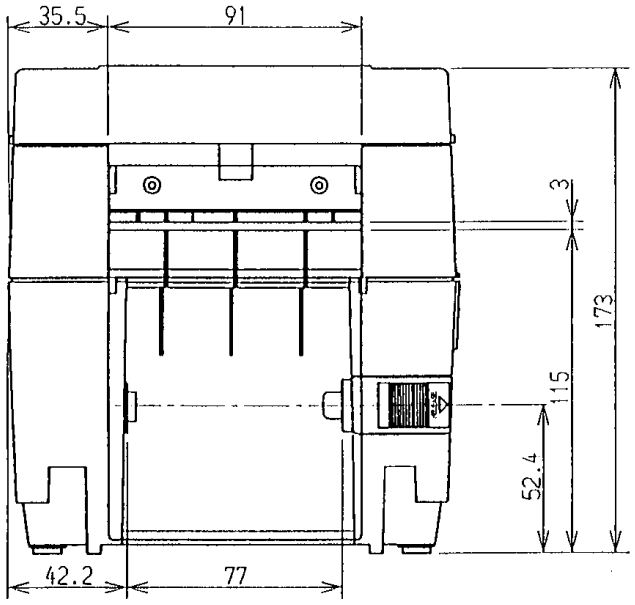


7. OUTER DIMENSION

7.1 iDP3550

Unit: mm





7.2 iDP3551

Unit: mm