

# CITIZEN

## **Service Manual**

**Model : iDP-3110**

Rev.	Issued	

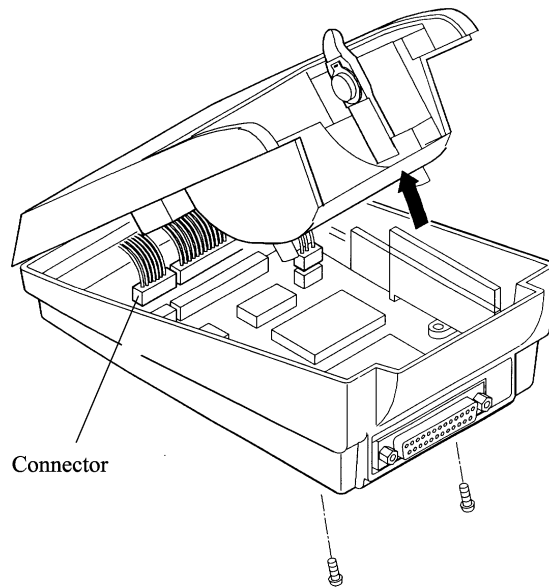
Japan CBM Corporation  
Information Systems Div.

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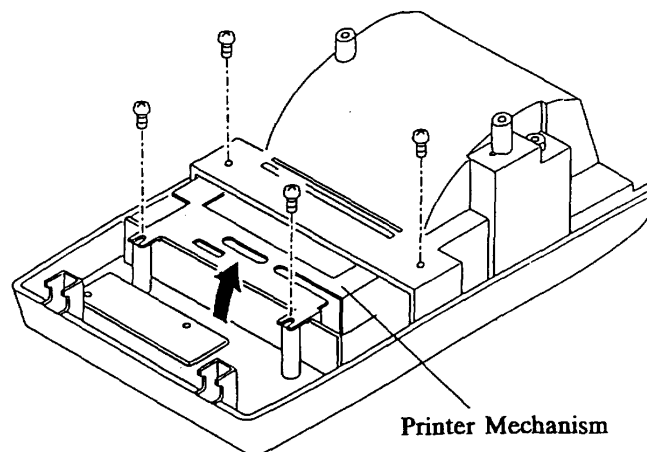
## 1. How to remove the Upper Cover

- (1) Unfasten 2 screws M3x8 on the Bottom Cover.
- (2) Lift the Upper Cover in the arrow direction removal.
- (3) Unfasten 2 screw, The Printer Mechanism mounting screw, Then remove the Shield Plate from the Printer Mechanism.
- (4) Disconnect the 2 Connectors from the Control Board.



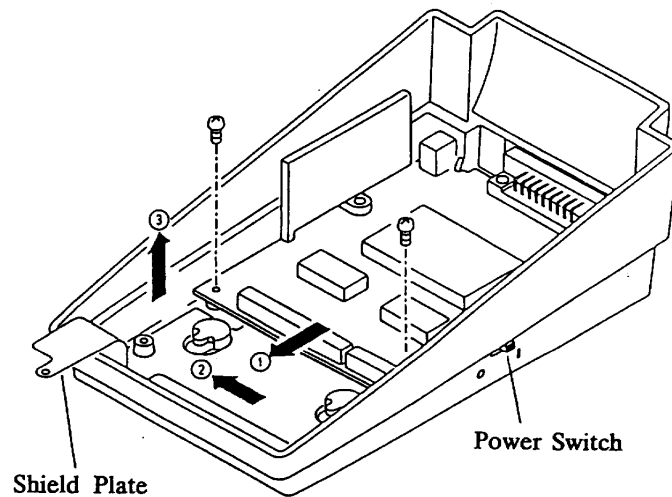
## 2. How to remove the Printer Mechanism

- (1) Remove the Upper Cover.
- (2) Unfasten 4 screws M2.6x8 and M2x6 as shown below.
- (3) Lift the Printer Mechanism in the arrow direction.



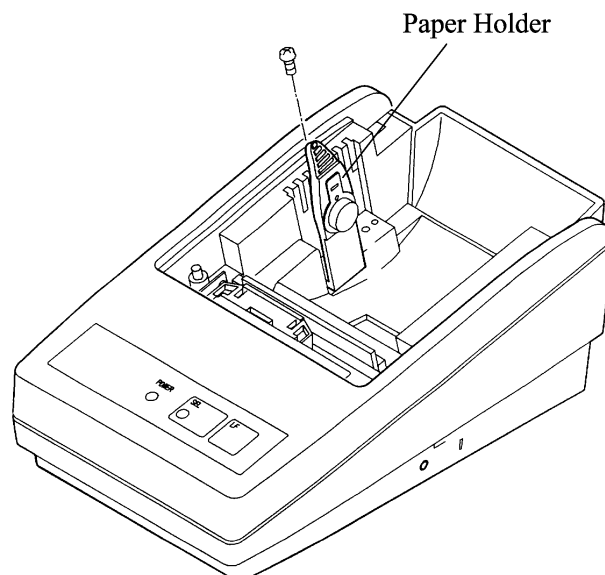
### 3. How to remove the Control Board

- (1) Remove the Upper Cover.
- (2) Unfasten 2 screws M3x8 as shown below.
- (3) Shift the Control Board in the arrow direction (1).
- (4) Shift the Control Board in the arrow direction (2). and remove the Power Switch from the Bottom Cover. Then lift in the arrow direction (3).  
Remove the shield Plate together with the Control Board.



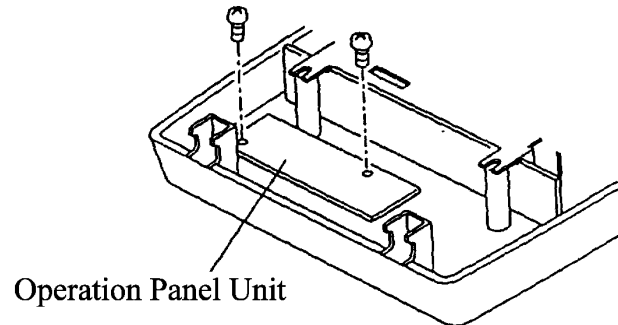
### 4. How to remove the Paper Holder

- (1) Remove the Printer Cover.
- (2) Unfasten a screw as shown below.



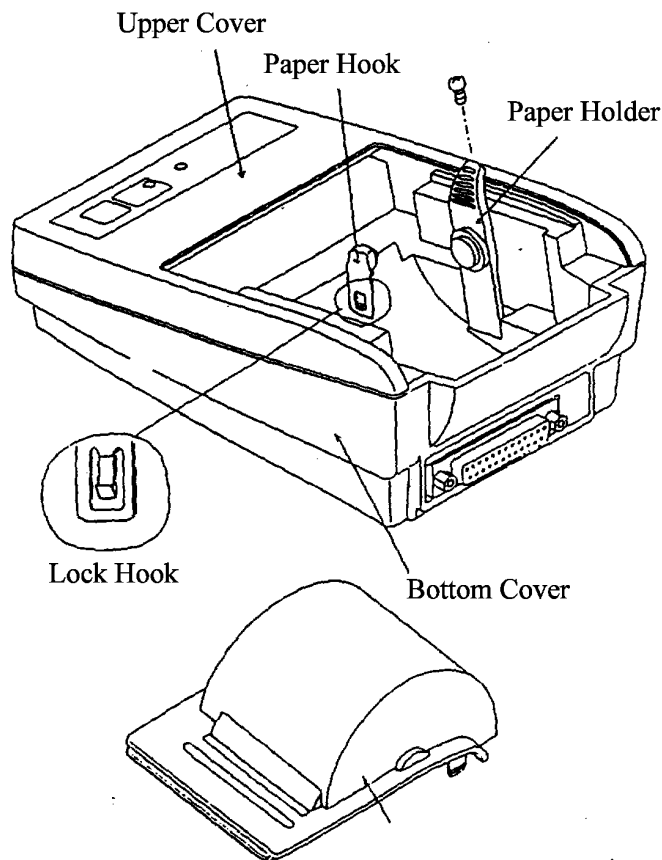
## 5. How to remove the Operation Panel

- (1) Remove the upper Cover.
- (2) Unfasten 2 screws M2.6x6 as shown below.



## 6. How to remove the Paper Hook

- (1) Remove the Printer Cover.
- (2) Release a Lock Hook as shown below and lift the Paper Hook to the upside.
- (3) When you set this Lock Hook, set the side of Hook to the Upper Cover. and according to the guide, inset the Lock Hook until this is locked completely.



## 7. Parts List

## PARTS LIST

iDP-3110RF / PF

## EXPLODED VIEW

Ref. No.	Parts No.	Description	Q'ty	Remarks
1	E 62010490	Top Case	1	
2	E 5200-150	OP Sheet	1	
5	MD910	Printer MD910-SS	<1>	24 Col.
	MD911	Printer MD911-IL	<1>	40 Col.
7	E 4000-850	OP PCB Assy	1	
10	E 6611-400	Paper Holder-L	1	
11	E 6611-405	Paper Holder-R	1	
15	E 62020020	Bottom Case	1	
16	E 6302-290	Rubber Foot	4	
18	E 4019-160	Shield Sheet	1	
20	E 70010310	PCB Assy iDP-3110-24RF	<1>	230V ONLY
	E 70010320	PCB Assy iDP-3110-40RF	<1>	230V ONLY
21	E 70010330	PCB Assy iDP-3110-24PF	<1>	115V/230V
	E 70010340	PCB Assy iDP-3110-40PF	<1>	115V/230V
20	E 70010350	PCB Assy iDP-3110-24RF	<1>	USA only
	E 70010360	PCB Assy iDP-3110-40RF	<1>	USA only
24	E 6204-940	Printer Cover	1	
25	E 6204-950	Printer Cover-H	<1>	
34	76G23760	Screw M2x6	2	
35	76G22839	Screw M2.6x8	3	
36	76G22796	Screw M3x8	3	
37	76G40207	Screw M3x10	2	
38	76G42133	Screw M2.6x8 / PW	1	
39	76G22270	Screw M3x8	2	
40	E 4900-080	Harness 25-0263	1	

PARTS LIST  
CONTROL BOARD

iDP-3110RF / PF

Ref. No.	Parts No.	Description	-RF	-PF	
IC	1	E 104-390	IC CBM909PC-2DU (24 Col.)	<1>	<1>
		E 104-400	IC CBM909PC-4DU (40 Col.)	<1>	<1>
	2	E 2010100	IC TC74HC00P	1	1
	3	E 2010130	IC TC74HC04P	1	1
	4	E 2010070	IC TC74HC14P	1	1
	5	E 2010040	IC MAX232CPE	1	
		E 202-811	IC TC7407		1
	6	E 2010321	IC TC74HC74P	1	
		E 201-930	IC TC74HC373P		1
	7	E 202-860	IC PST520E	1	
		E 2010321	IC TC74HC74P		1
	8	E 202-860	IC PST520E		1
	TA	1, 2	E 390-220	Tr. Array LB1235	2
TR	1	E 319-117	Transistor 2SA1175HF	1	1
	2, 12	E 379-060	Transistor 2SD1802ST	2	
	2, 10	E 379-060	Transistor 2SD1802ST		2
	3, 5	E 359-090	Transistor 2SC2785SR	7	
	7-11				
	3, 5	E 359-090	Transistor 2SC2785SR		5
	7-9				
	4	E 327-070	Transistor 2SB1202ST	1	1
	6	E 379-070	Transistor 2SD1817	1	1
	12	E 359-100	Transistor 2SC4685		1
14	E 359-100	Transistor 2SC4685	1		
D	1, 2	E 400-220	Diode 1S1554	2	2
	3	E 400-270	Diode 1S1588	1	1
	4	E 400-041	Diode 1S2076	1	1
ZD	1	E 413-033	Zener Diode RD13EB2	1	1
	2, 3	E 405-130	Zener Diode RD5.6EB2	2	2
OSC	1	E 501-280	OSC CSA4.19MG	1	1
R	1-3	E 3473-041	Resistor 1 / 4W 47KOHM	8	
	13-15 17, 20				
R	1-3	E 3473-041	Resistor 1 / 4W 47KOHM		8
	13-15 17, 18				

## PARTS LIST

iDP-3110RF / PF

## CONTROL BOARD

Ref. No.	Parts No.	Description	-RF	-PF
R 4, 22 24, 25	E 3103-041	Resistor 1 / 4W 10KOHM	4	
R 4, 16, 21 23, 24	E 3103-041	Resistor 1 / 4W 10KOHM		5
R 5, 6, 9 27, 30	E 3471-041	Resistor 1 / 4W 470 OHM	5	
R 5, 6, 9 26, 30	E 3471-041	Resistor 1 / 4W 470 OHM		5
R 7, 8, 16 19	E 3222-041	Resistor 1 / 4W 2.2KOHM	4	
R 7, 8	E 3222-041	Resistor 1 / 4W 2.2KOHM		2
R10,18,21	E 3331-041	Resistor 1 / 4W 330 OHM	3	
R 10, 19 20	E 3331-041	Resistor 1 / 4W 330 OHM		3
R 11	E 3332-041	Resistor 1 / 4W 3.3KOHM	1	
R 11, 27	E 3102-041	Resistor 1 / 4W 1KOHM		2
R 12, 28	E 3102-041	Resistor 1 / 4W 1KOHM	2	
R 12	E 3332-041	Resistor 1 / 4W 3.3KOHM		1
R 22	E 3472-041	Resistor 1 / 4W 4.7KOHM		1
R 23	E 3472-041	Resistor 1 / 4W 4.7KOHM	1	
R 25	E 3152-041	Resistor 1 / 4W 1.5KOHM		1
R 26	E 3152-041	Resistor 1 / 4W 1.5KOHM	1	
C 1	E 2010-080	El. Cap. 50MR-1	1	1
C 2, 3, 5 7, 21	E 2110-040	C. Cap. F26Y5R1H102M0	5	
C 2, 3, 5 7, 8, 19	E 2110-040	C. Cap. F26Y5R1H102M0		6
C 4	E 2147-160	C. Cap. F26SL1H471K0	1	1
C 6	E 2110-060	C. Cap. F26Y5V1H103Z0	1	1
C 8, 9	E 2130-010	C. Cap. F26SL1H300K0	2	
C 9, 10	E 2130-010	C. Cap. F26SL1H300K0		2
C 10	E 2010-615	El. Cap. 25MR-10	1	
C 11, 12	E 2022-625	El. Cap. 25MR-22	2	
C 11	E 2010-615	El. Cap. 25MR-10		1
C 12, 13	E 2022-625	El. Cap. 25MR-22		2
C 13, 14	E 2010-615	El. Cap. 25MR-10	2	
C 14, 15	E 2010-615	El. Cap. 25MR-10		2
C 15, 16	E 2047-525	El. Cap. 25JS-4.7	2	
C 16, 18	E 2110-460	C. Cap. F26Y5V1B104Z0		3
C 17, 18	E 2010-605	El. Cap. 25JS-10	2	



## PARTS LIST

iDP-3110RF / PF

## CONTROL BOARD

Ref. No.	Parts No.	Description	-RF	-PF
C 19, 20	E 2110-460	C. Cap. F26Y5V1H104Z0	2	
RA 1	E 3473-180	Re. Array M9-1-473J	1	1
RA 2, 3	E 3681-060	Re. Array M8-3-681J	2	2
RA 4	E 3332-200	Re. Array M5-1-332J	1	
RA 4, 5	E 3332-200	Re. Array M5-1-332J		2
DS 1	E 5103-390	Dip Switch KSD-04	1	1
CN 1	E 48000490	Connector MOJ-D14	1	1
CN 2	E 4800-925	Connector 5267-17AX	1	1
CN 3	E 48000470	Conn. 17LE-13250-27 (D3AD) (for Eur. Meter)	1	
	E 48000455	Conn. 17LE-13250-27 (D3CD) (for USA. Meter)	1	
	E 48000460	Connector 57LE-40360-730B		1
CN 4	E 4800-825	Connector 5267-06A	1	1
F 1	E 4005-590	Fuse 5ST2A	1	1
	E 4006-220	Fuse Holder UF-0033#01	2	2
SW 1	E 5105-330	Slide Switch SN20202-1218	1	1
	E 4010-410	Heat Sink 50-0079	1	1
	76G42141	Screw M3x8B	1	1

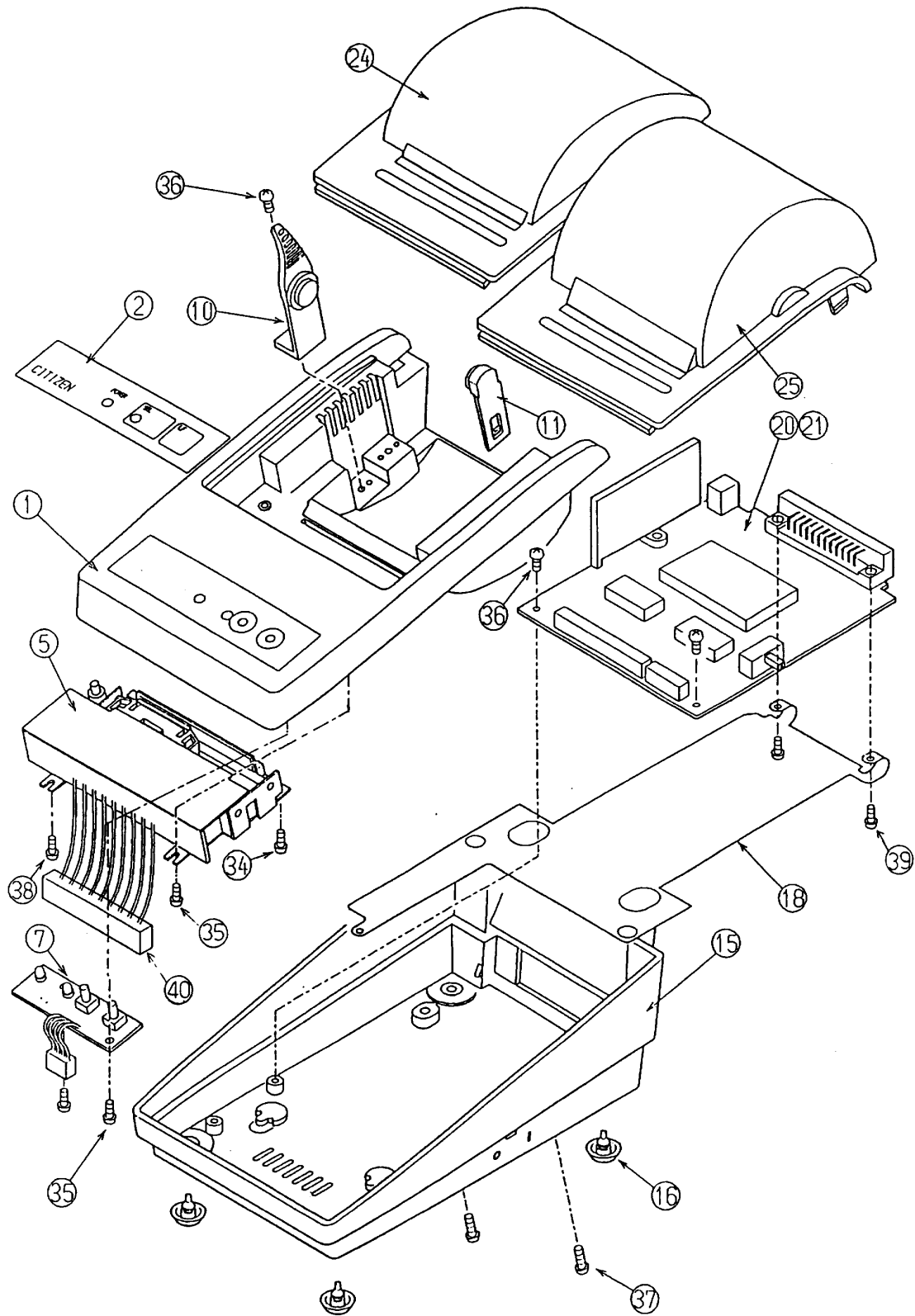
## PARTS LIST

iDP-3110RF / PF

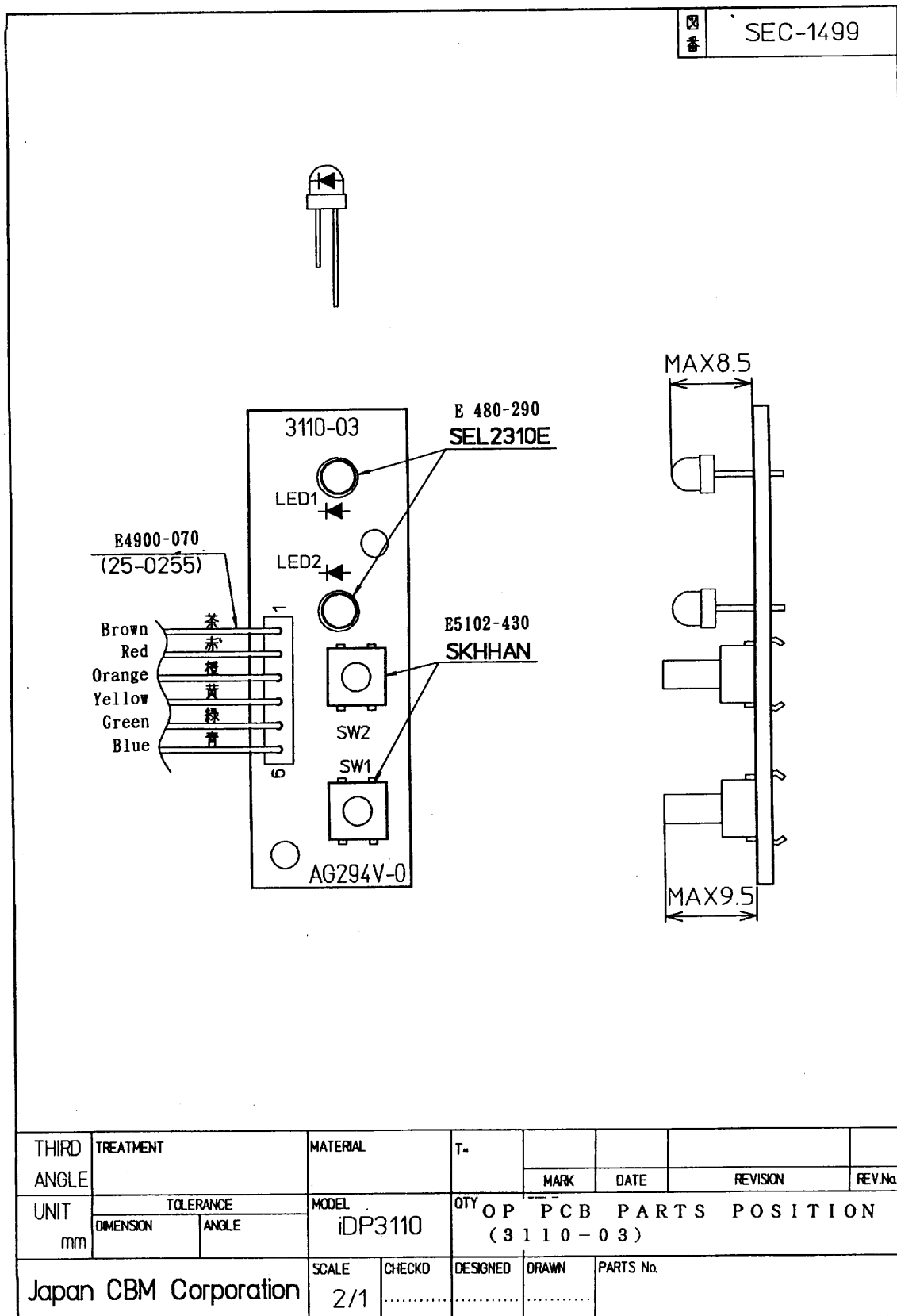
## OPERATION PANEL

Ref. No.	Parts No.	Description	Q'ty	Remarks
LED 1, 2	E 480-290	LED SEL2310E	2	
SW 1, 2	E 5102-430	SWITCH SKHHAN	2	
	E 4900-070	Harness 25-0255	1	

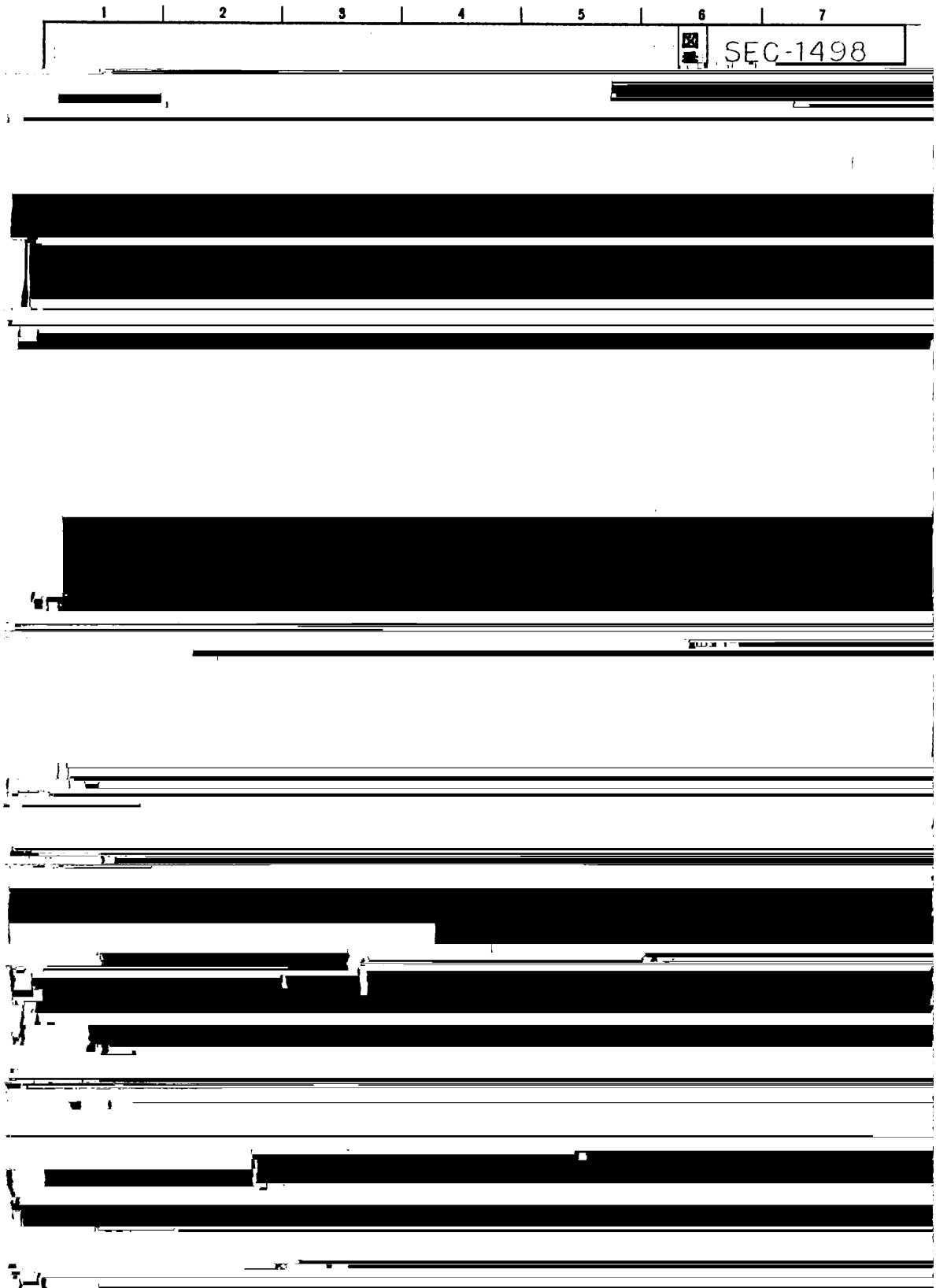
8. Exploded View  
iDP-3110



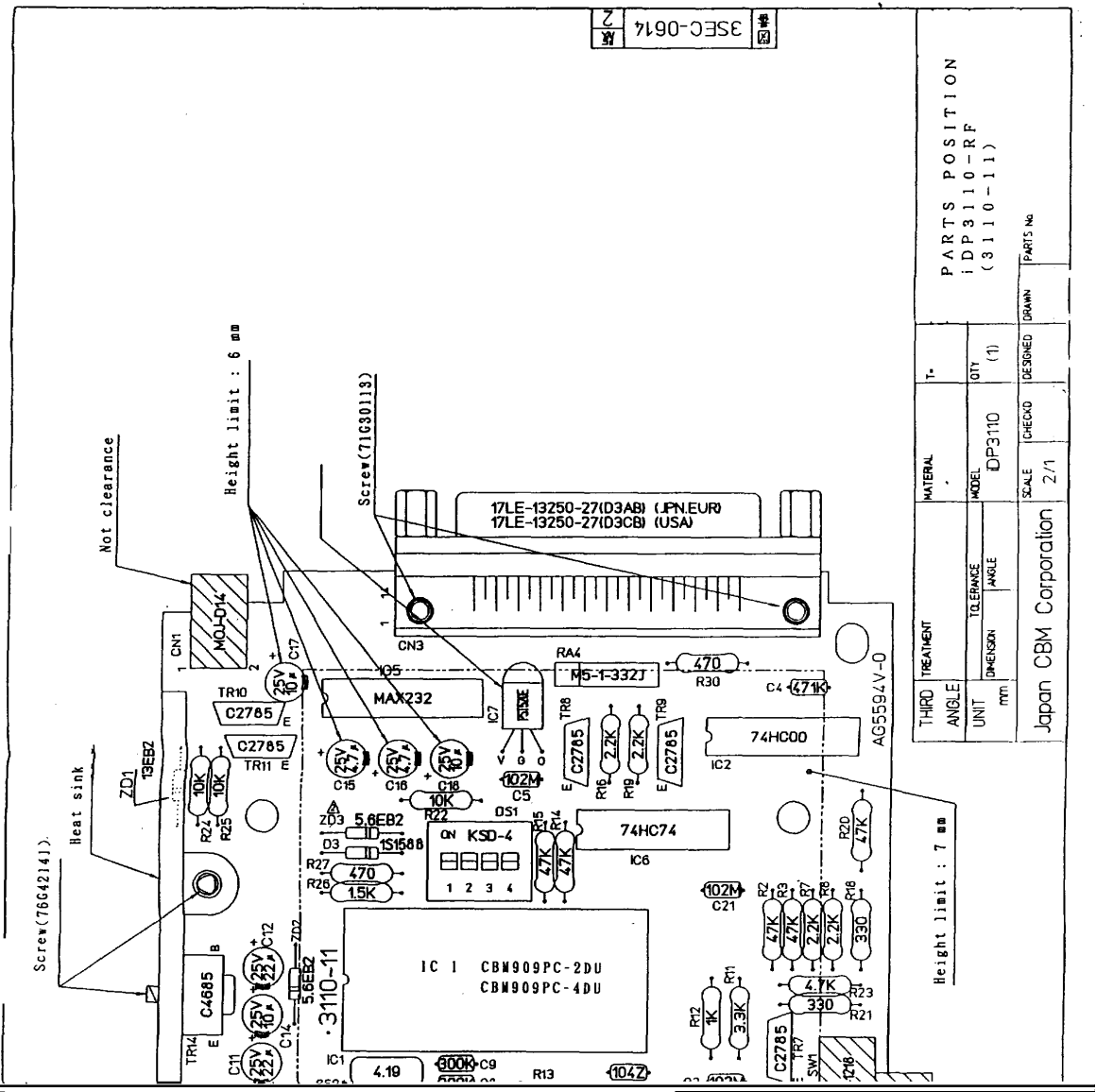
9. OP PCB Parts Position

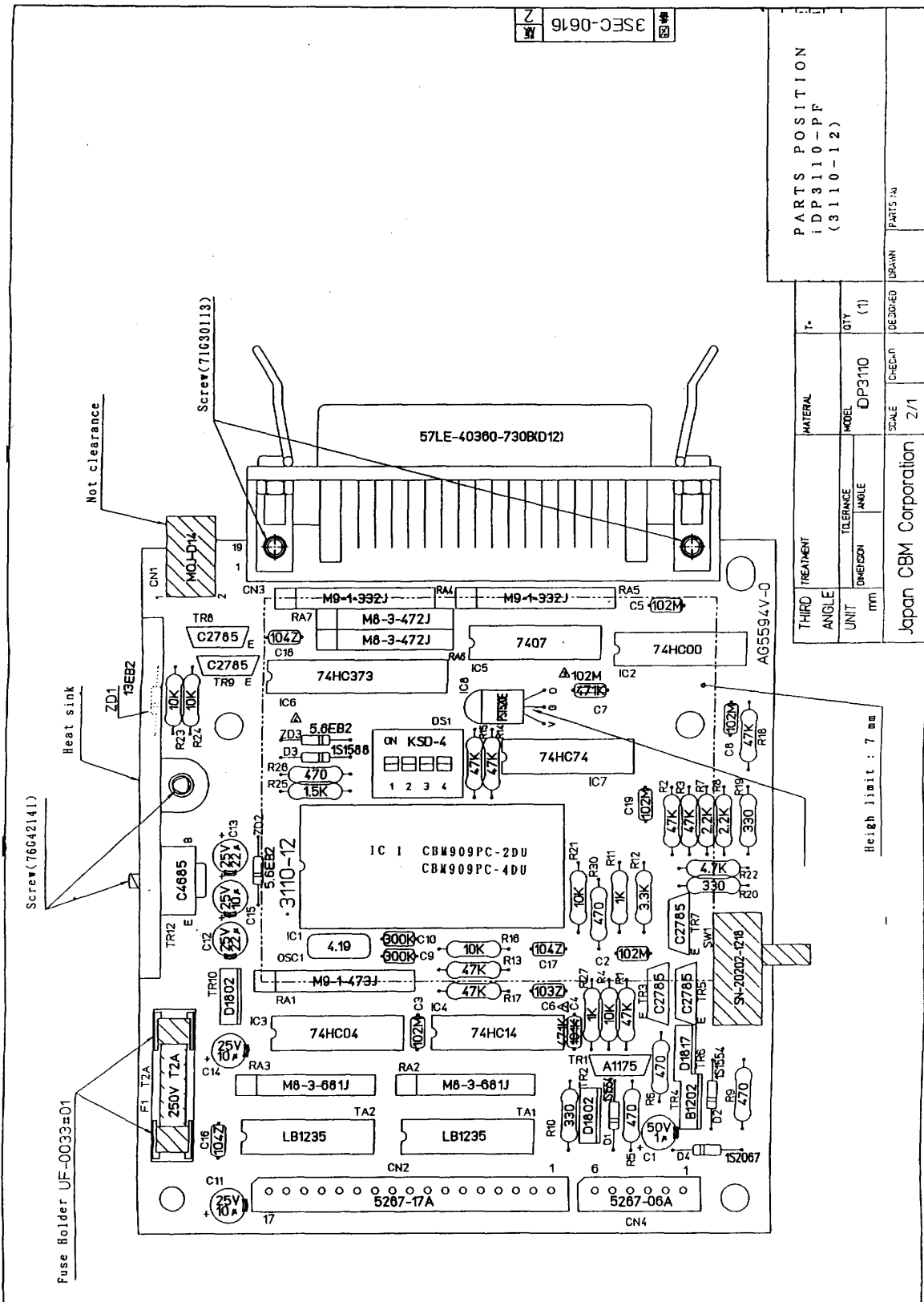


10. OP PCB Unit Schematic Diagram

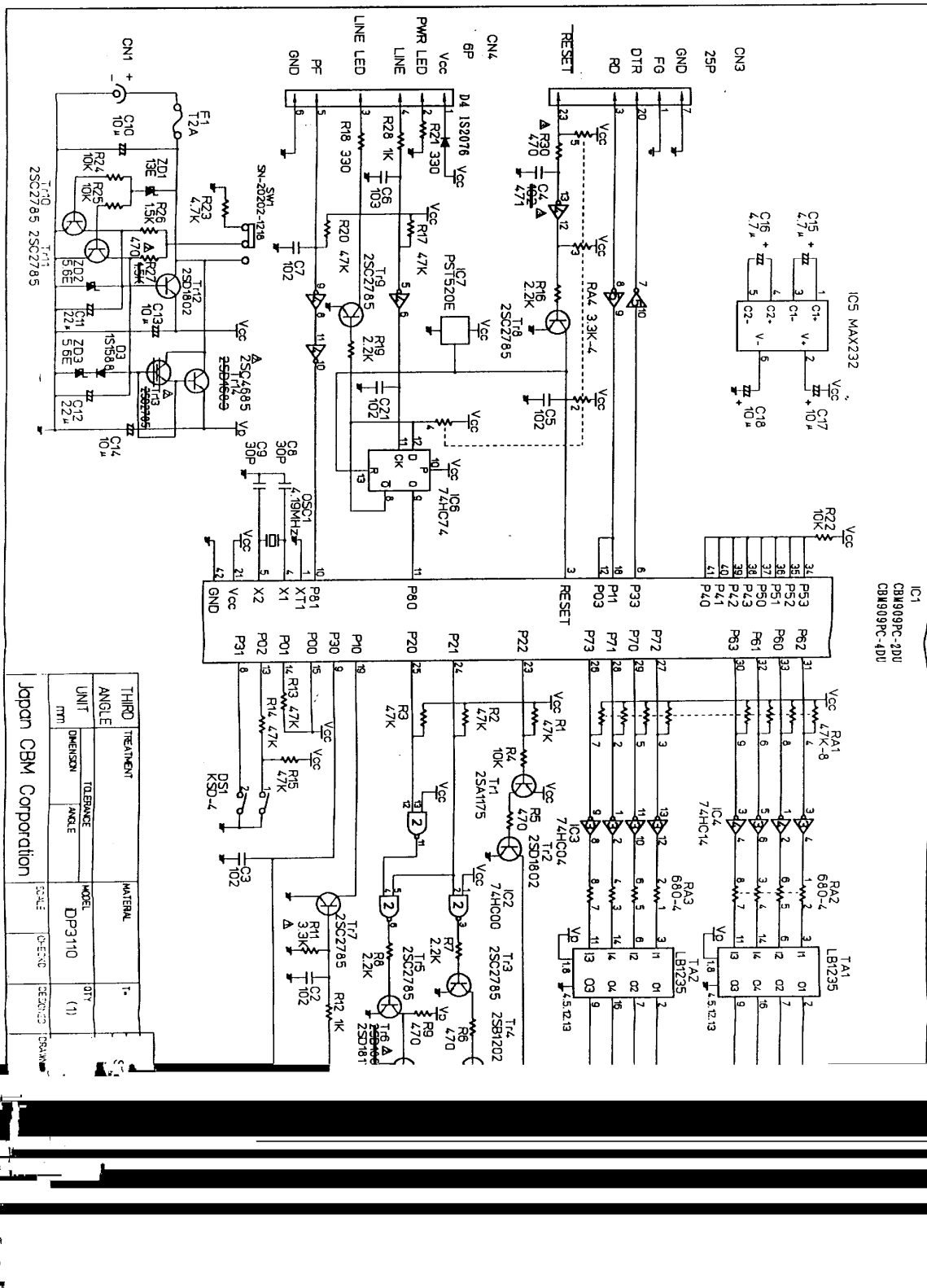


11. Control Board Parts Position





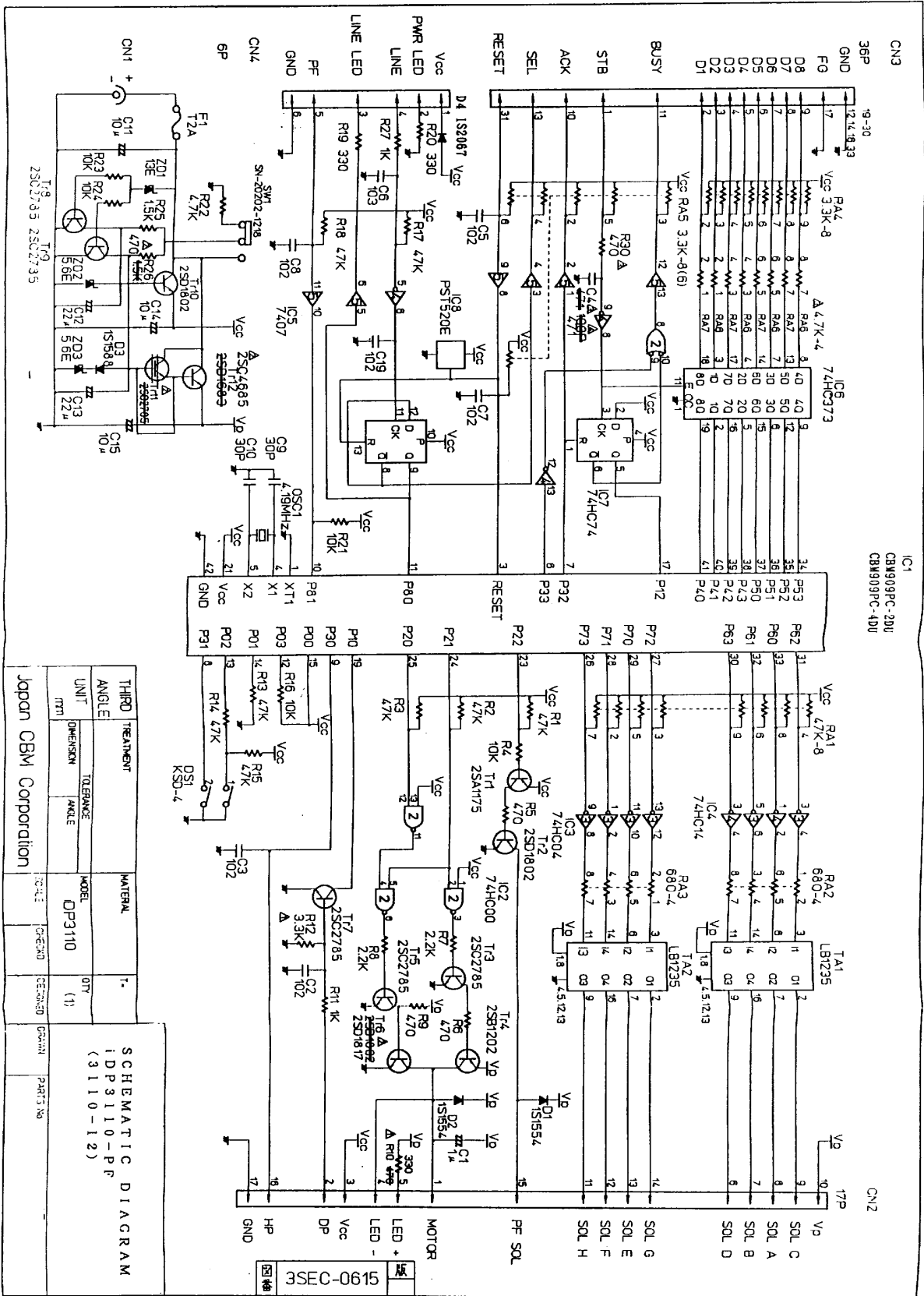
12. Control Board Circuit Diagram



THIRD ANGLE UNIT	TREATMENT	MATERIAL
UNIT	TEMPERATURE	MODEL
DIMENSION	ANGLE	DP3110
MM		QTY (1)

Japan CBM Corporation

SCALE: DRAWING



THIRD ANGLE	TREATMENT	MATERIAL
UNIT	TOLERANCE	MODEL
DIMENSION	ANGLE	DP3110
(mm)		(1)

SCHEMATIC DIAGRAM  
 I DP 3110 - P F  
 ( 3 1 1 0 - 1 2 )

Japan CBM Corporation

REV. 1.0

DATE: 1985.05

PARTS NO.

3SEC-0615