
**MODEL**
**P500W  
P500E**

This product is not for medical diagnostic purpose, just for reference purpose.

**CAUTION** Before servicing this chassis, it is important that the serviceman reads "SAFETY PRECAUTIONS" and "PRODUCTION SAFETY NOTICE" in this service manual.

**SPECIFICATIONS**

- **Power Input** : AC 120V 50/60 Hz [W],  
AC 220 ~ 240V 50 Hz [W, E]
  - **Power** : 1.5A [When using AC 120V]
  - **Consumption** : 0.8A [When using AC 220-240V]
  - **Print Quality**

	Standard size	Half size
NTSC Under Scan		
Normal print	: 1,278 dots(H)X1,000 lines(V)	639 dots(H)X500 lines(V)
Side print	: 1,278 dots(H)X1,000 lines(V)	639 dots(H)X500 lines(V)
PAL Under Scan		
Normal print	: 1,278 dots(H)X1,200 lines(V)	639 dots(H)X600 lines(V)
Side print	: 1,278 dots(H)X1,200 lines(V)	639 dots(H)X600 lines(V)
  - **Printing Time**

	Standard size	Half size
NTSC Under Scan		
Normal print	: 9.4 sec/sheet	4.7 sec/sheet
Side print	: 12.0 sec/sheet	6.0 sec/sheet
PAL Under Scan		
Normal print	: 11.3 sec/sheet	5.7 sec/sheet
Side print	: 12.0 sec/sheet	6.0 sec/sheet
  - **Gradations** : 256 gradations
  - **Scanning Frequency** : Horizontal 15.734kHz (NTSC)  
15.625kHz (PAL)  
Vertical 60Hz (NTSC)  
50Hz (PAL)
  - **Input terminal** : Video signal (BNC type connector)
  - **Output terminal** : Video signal (BNC type connector)
- **Print size**

	Standard size	Half size
NTSC Under Scan		
Normal print	: 200 × 150mm (7.9" × 5.9")	100 × 75mm (3.9" × 3.0")
Side print	: 208 × 156mm (8.2" × 6.1")	104 × 78mm (4.1" × 3.1")
PAL Under Scan		
Normal print	: 200 × 150mm (7.9" × 5.9")	100 × 75mm (3.9" × 3.0")
Side print	: 250 × 188mm (9.8" × 7.4")	125 × 94mm (4.9" × 3.7")
  - **Cabinet Dimensions** : 370(W) × 120(H) × 330(D) mm  
(14.6"(W) × 4.7"(H) × 13.0"(D))
  - **Weight (Approx)** : 9.0 kg (19.9 lbs)
  - **Operating Conditions** : Temperature 5~40°C (41~104°F)  
Humidity 35~80%RH  
(no dewing)

● Design and specifications are subject to change without notice.

# CONTENTS

---

• SAFETY PRECAUTIONS .....	1
• LOCATION OF PRINTED CIRCUIT BOARDS .....	2
• DISASSEMBLY .....	3
PLATEN ROLLER REMOVAL .....	3
UNIT-HEAD REMOVAL .....	4
• SERVICING PCB (SOLDERED SIDE) .....	6
• LOCATIONS .....	7
• SERVICE MODE .....	8
How to indicate the SERVICE mode .....	8
How to Select the Setting Mode .....	8
How to Set and memorize the Adjustment Value .....	8
How to cancel the Service Mode .....	8
• HOW TO INDICATE THE ADJUSTMENT MODE .....	10
How to cancel the Adjustment Mode .....	10
• CHECK OF DETECTION LEVEL FOR PAPER .....	11
• INITIALIZATION OF THE E <sup>2</sup> PROM .....	12
• ELECTRIC ADJUSTMENT .....	13
1. Increased primary Voltage .....	14
2. Main Voltage / Head Voltage .....	15
3. Horizontal sychronized pluse width .....	18
4. Horizontal Position .....	18
5. Horizontal AFC .....	19
6. Clock Frequency 2 .....	19
7. Clock Frequency 1 .....	20
8. SUB-BRIGHT, SUB-CONTRAST, SUB-AGC .....	20
• CHIP PARTS REPLACEMENT .....	21
• PARTS LIST .....	22
• PACKING PARTS .....	28
• LEAD DRESS	
• EXPLODED VIEW	
• BLOCK DIAGRAM	
• SCHEMATIC DIAGRAM	

---

# SAFETY PRECAUTIONS

**NOTICE** : Observe all cautions and safety notes located inside the cabinet and on the chassis.

## LEAKAGE CURRENT CHECK

Before returning the printer to the customer, it is recommended that leakage current be measured according to the following methods.

### 1. Cold check

With the AC plug removed from the 120V/220-240V AC source, place a jumper across the two AC plug prongs. Turn the printer AC switch on. Using an ohm-meter, connect one lead to the AC plug and touch the other lead to each exposed metal part (screwheads, metal overlays, etc.), particularly any exposed metal part having a return path to the chassis. Exposed metal parts having a return path to the chassis should have a minimum resistance reading of 1 meg ohm. Any resistance below this value indicates an abnormality which requires corrective action. Exposed metal parts not having a return path to the chassis will indicate an open circuit.

### 2. Hot Check

Use the circuit in Fig. 1 to perform this test.

- (1) With switch S1 open, connect the printer to the measuring circuit. Immediately after connection, measure the leakage current using both positions of switch S2, and with the switching devices in the printer in all of their operating positions.
- (2) Switch S1 is then closed, energizing the printer. Immediately after closing the switch, measure the leakage current using both positions of switch S2, and with the switching devices in the printer in all of their operating positions. Current measurements of items (1) and (2) are to be repeated after the printer has reached thermal stabilization. The leakage current shall not be more than 0.5 milliamperes.

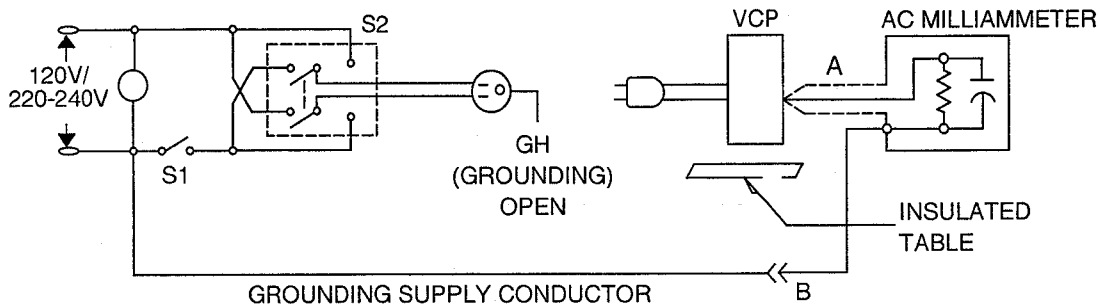


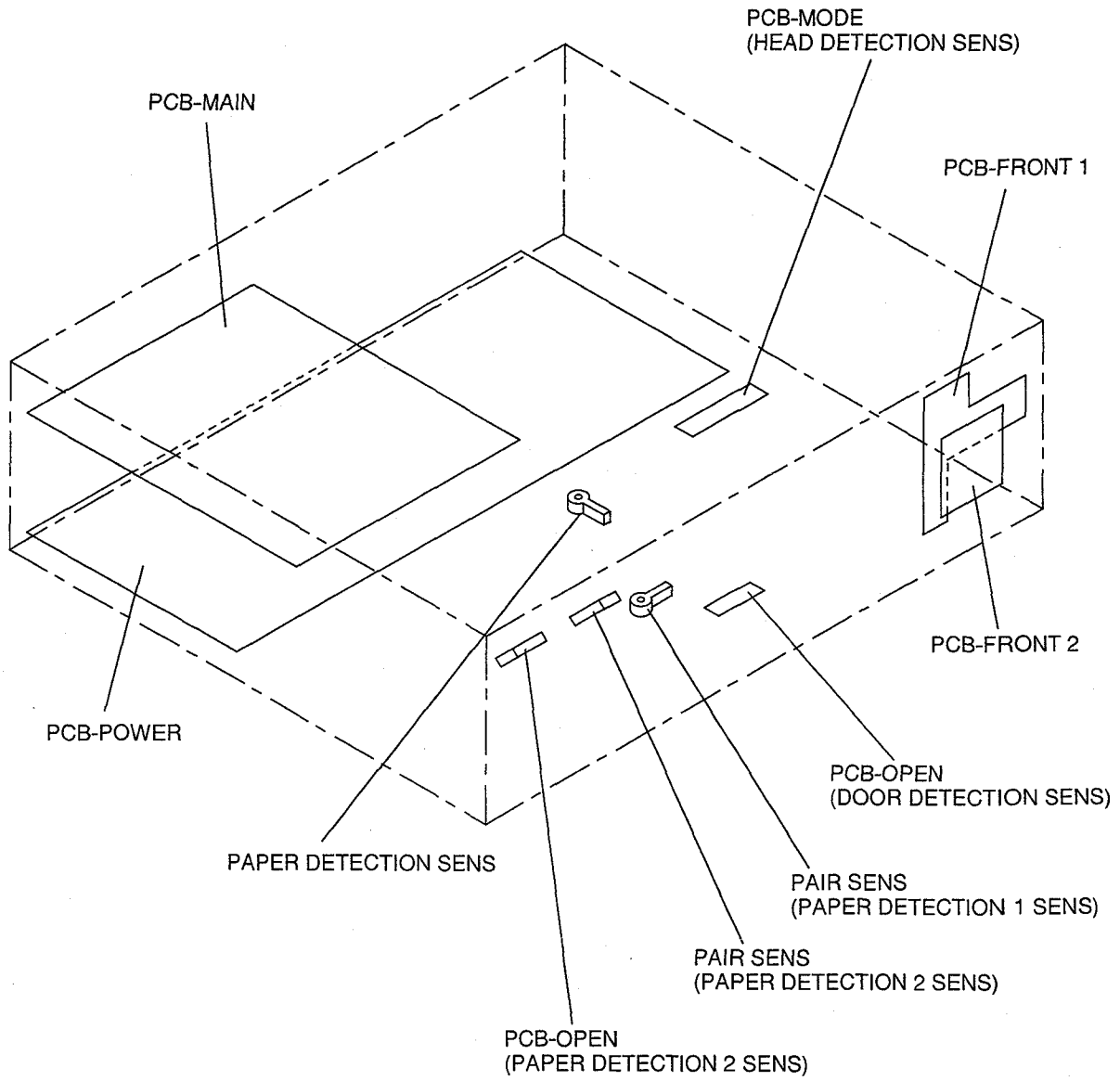
Fig. 1

## PRODUCT SAFETY NOTICE

Many electrical and mechanical parts in the video copy processor have special safety related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, etc.

Replacement parts which have these special safety characteristics are identified in this service manual. Electrical components having such features are identified by shading on the schematic diagram and the parts list of this service manual, and by the supplementary sheet for this chassis to be issued subsequently. Therefore replacements for any safety parts should be identical in value and characteristics.

# LOCATION OF PRINTED CIRCUIT BOARDED



# DISASSEMBLY

## PLATEN ROLLER REMOVAL

1. Remove the TOP PANEL and FRONT PANEL.
2. Raise the OPEN LEVER and open the PAPER HOLDER ASSY.
3. Remove one screw (a) securing the GEAR COVER shown in Fig. 1-1 to remove the GEAR COVER.
4. Loosen one hex screw (b) securing the PLATEN GEAR shown in Fig. 1-1 using the 1.5mm hex wrench to remove the PLATEN GEAR.  
**Note:** When mounting the PLATEN GEAR, match the hex screw against the D-cut face as shown in Fig. 1-2 with 0.2mm feeler gauges inserted between the PLATEN GEAR and the PLATEN BUSH. (Remove the feeler gauges after mounting the PLATEN GEAR.)
5. Remove one BUSH PLATEN (c) shown in Fig. 1-1.
6. Move the PLATEN ROLLER in the direction shown by the arrow as shown in Fig. 1-1 to remove it.
7. Remove one RETAINING RING (d) and one BUSH PLATEN (e) shown in Fig. 1-1.  
**Note:** Care shall be taken not to damage the PLATEN ROLLER shaft when removing the RETAINING RING.

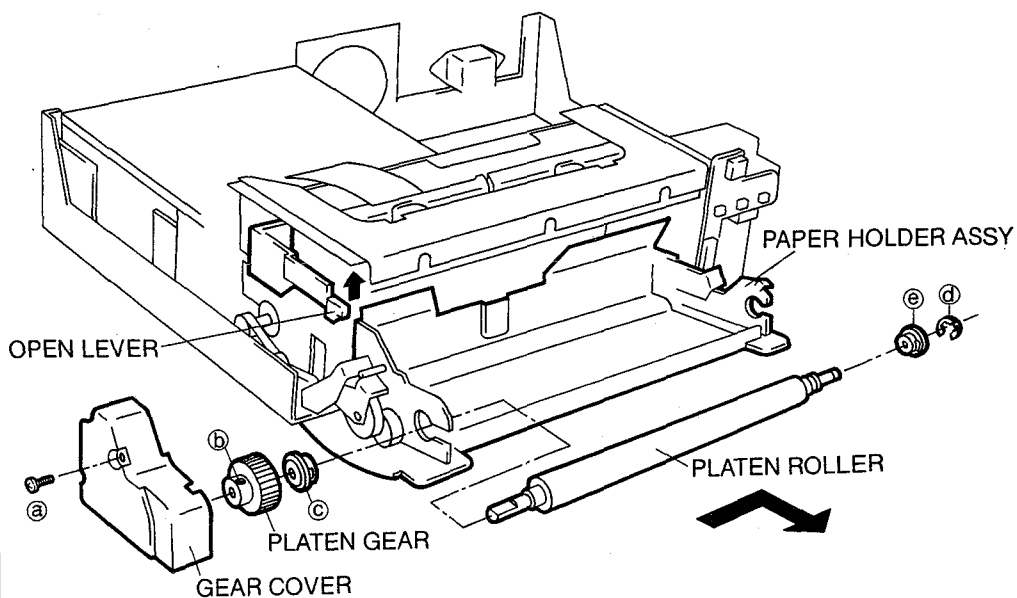


Fig. 1-1

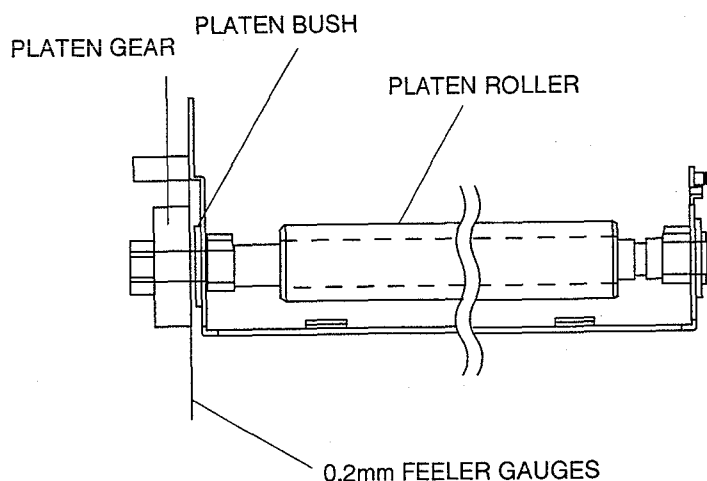
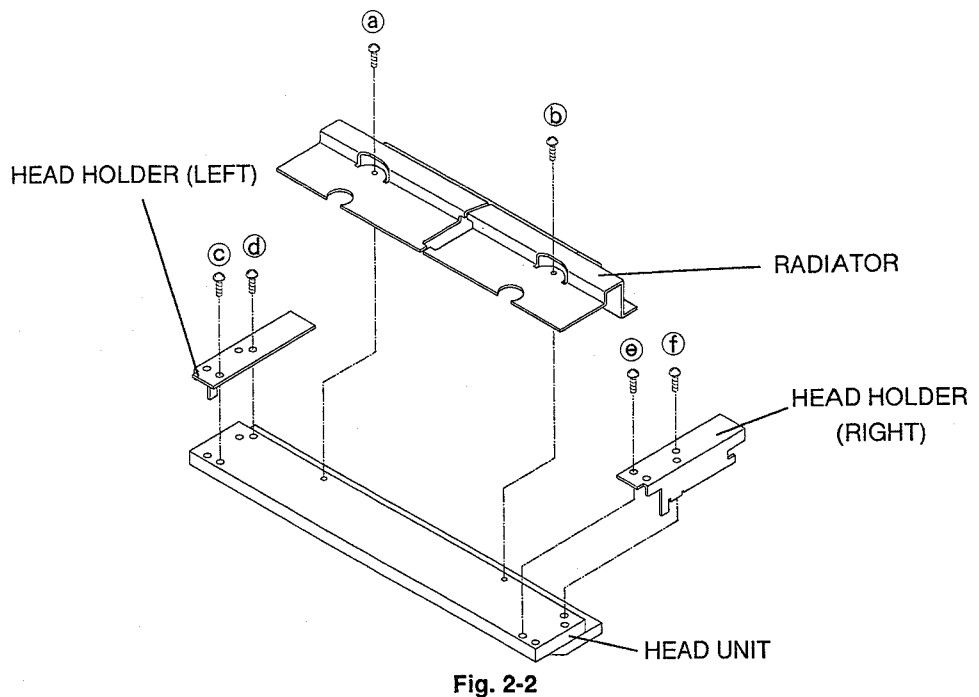
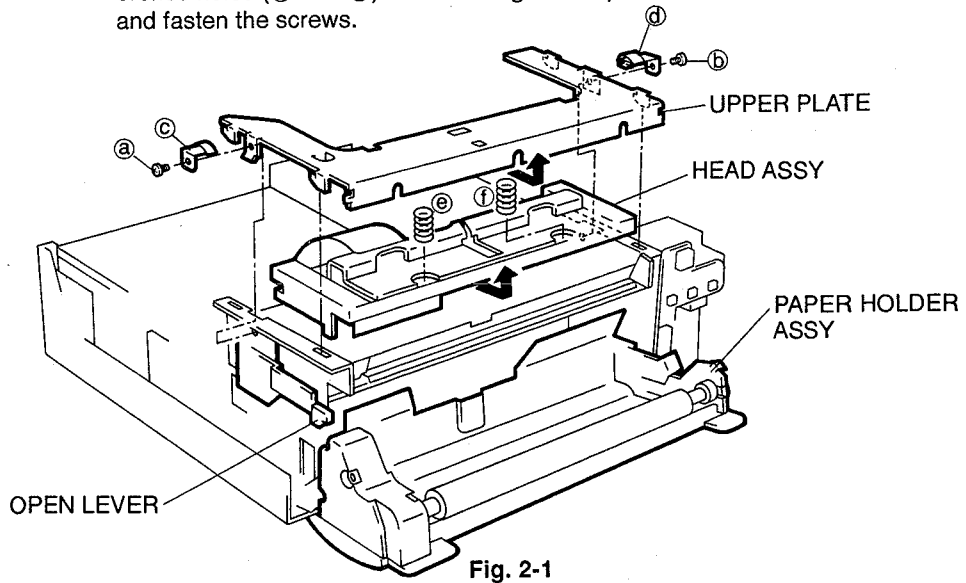


Fig. 1-2

## UNIT-HEAD REMOVAL

1. Remove the TOP PANEL and FRONT PANEL.
2. Raise the OPEN LEVER and open the PAPER HOLDER ASSY.
3. Remove two screws (a) and (b) securing the UPPER PLATE shown in Fig. 2-1 to remove the UPPER PLATE and two EARTH PLATES (c) and (d).
4. Remove two SPRING (A)s (e) and (f) shown in Fig. 2-1.
5. Disconnect all the connectors of the HEAD ASSY shown in Fig. 2-1 to remove the HEAD ASSY.
6. Remove two screws (a) and (b) securing the RADIATOR shown in Fig. 2-2 to remove the RADIATOR.
7. Remove two screws (c) and (d) securing the HEAD HOLDER (LEFT) shown in Fig. 2-2 to remove the HEAD HOLDER (LEFT).  
**Note:** When mounting the HEAD HOLDER (LEFT), insert the pin gauge (3φ) into two reference holes (a) and (b) shown in Fig. 2-3 to position the HEAD HOLDER (LEFT) and fasten the screws.
8. Remove two screws (e) and (f) securing the HEAD HOLDER (RIGHT) shown in Fig. 2-2 to remove the HEAD HOLDER (RIGHT).  
**Note:** When mounting the HEAD HOLDER (RIGHT), insert the pin gauge (3φ) into two reference holes (c) and (d) shown in Fig. 2-3 to position the HEAD HOLDER (RIGHT) and fasten the screws.



PIN GAUGE (3φ)

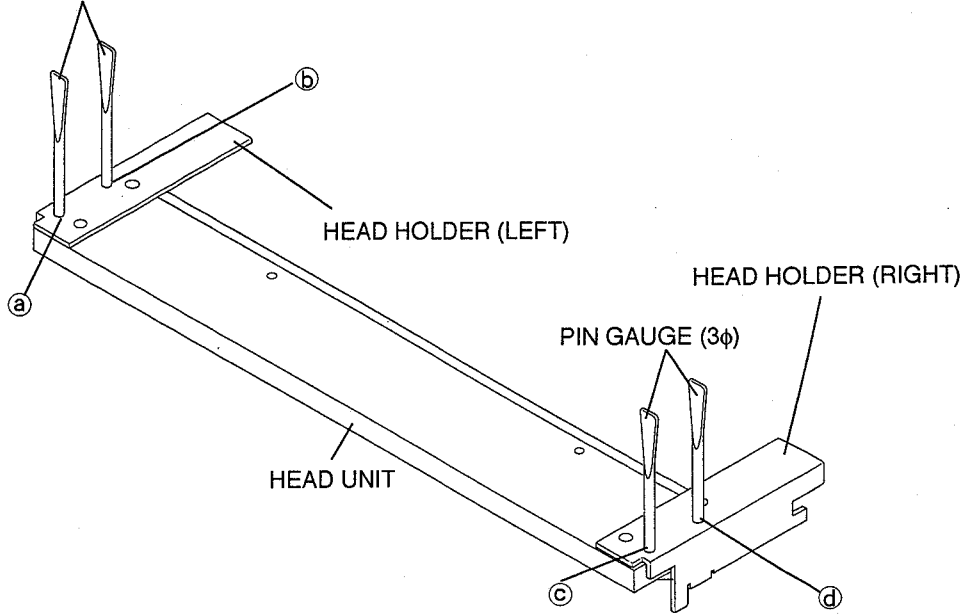
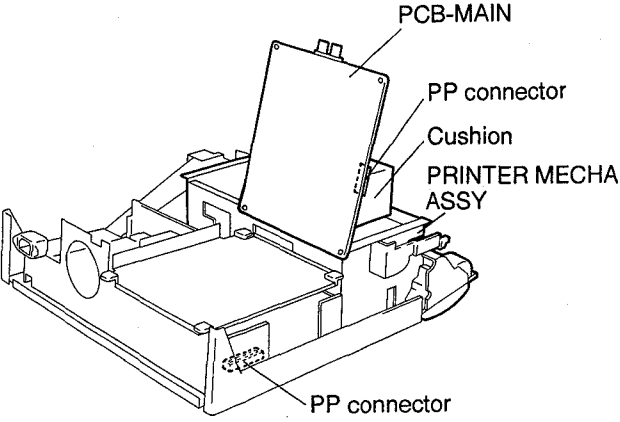
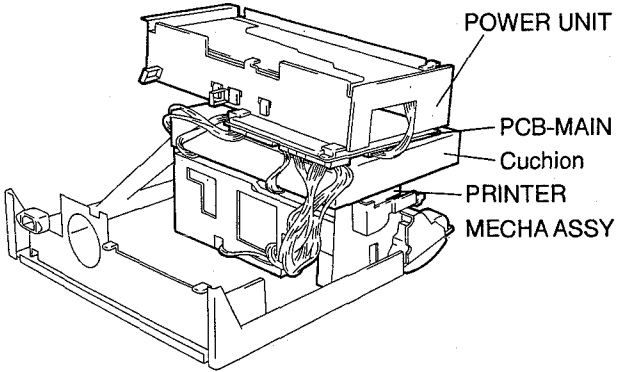


Fig. 2-3

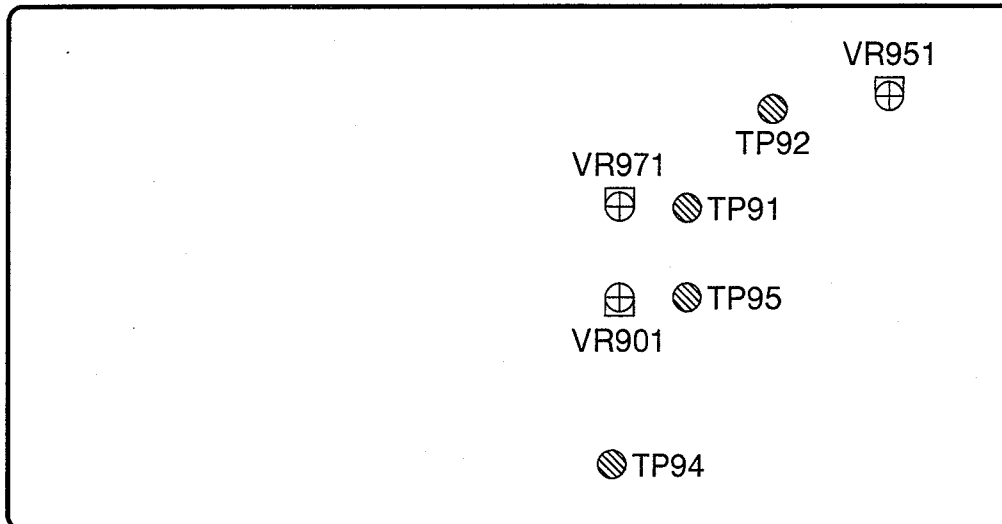
# SERVICING PCB (SOLDERED SIDE)

Service Position	Service Item
 <p>The diagram illustrates the first service position. A rectangular PCB-MAIN is shown standing vertically on its edge, supported by a cushion placed on the PRINTER MECHA ASSY. A PP connector is visible on the front of the printer mechanism. Labels with leader lines point to the PCB-MAIN, PP connector, Cushion, PRINTER MECHA ASSY, and another PP connector at the bottom.</p>	<ul style="list-style-type: none"> <li>• Failure can be repaired from the copper foil side of the PCB-MAIN.</li> </ul> <ol style="list-style-type: none"> <li>1 Disconnect the PP connector.</li> <li>2 Place cushion on the PRINTER MECHA ASSY as shown in the figure.</li> <li>3 Stand the PCB-MAIN as shown in the figure.</li> <li>4 Mount the extension jig (859C435O70) on the PP connector.</li> </ol>
 <p>The diagram illustrates the second service position. The POWER UNIT is placed on top of the PCB-MAIN, which is already standing on the printer mechanism. The cushion remains between the PCB-MAIN and the printer mechanism. Labels with leader lines point to the POWER UNIT, PCB-MAIN, Cushion, and PRINTER MECHA ASSY.</p>	<ul style="list-style-type: none"> <li>• Failure can be repaired from the copper foil side of the PCB-POWER.</li> </ul> <ol style="list-style-type: none"> <li>1 Remove the POWER UNIT from the BASE-CHASSIS with the PCB-MAIN provided.</li> <li>2 Place cushion on the PRINTER MECHA ASSY as shown in the figure.</li> <li>3 Place the POWER UNIT with the PCB-MAIN provided on the cushion placed in the step 2 above as shown in the figure.</li> </ol>

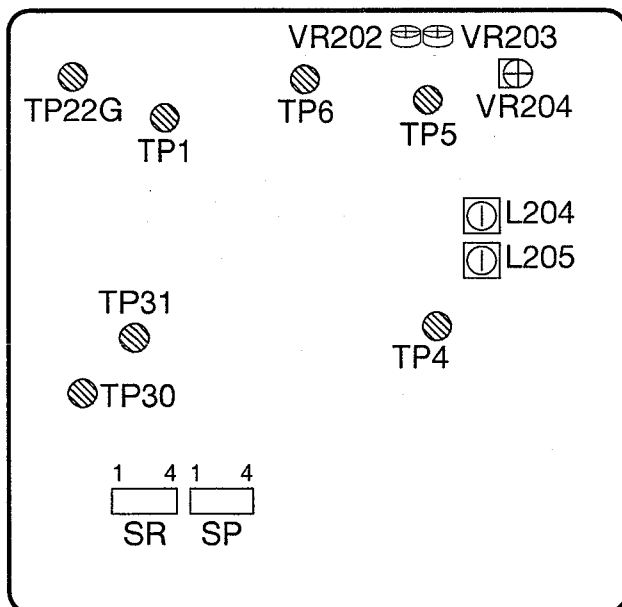


# LOCATIONS

## PCB-POWER (Component side)



## PCB-MAIN (Component side)

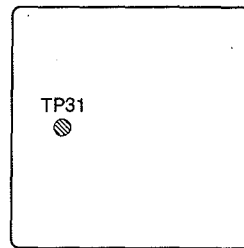


# SERVICE MODE

## How to indicate the SERVICE Mode

Operation	LED indication
1. Turn the <b>POWER</b> button OFF. 2. Short-circuit TP31 to GND. 3. Turn the <b>POWER</b> button ON with pressing the <b>GAMMA</b> button. 4. Stop pressing the <b>GAMMA</b> button. (SERVICE mode is completely selected.)	<i>B.B.</i> → 55 → 0.0 (Confirm the indicator LED changes from "55" to "00")

PCB-MAIN (Component side)



## How to Select the Setting Mode

1. Set the **SERVICE** mode.
2. Select the setting mode with the **GAMMA** button, observing the indicator LED.

**Note:** The set up mode varies in the order shown by the arrow in the figure.

## How to Set and memorize the Adjustment Value

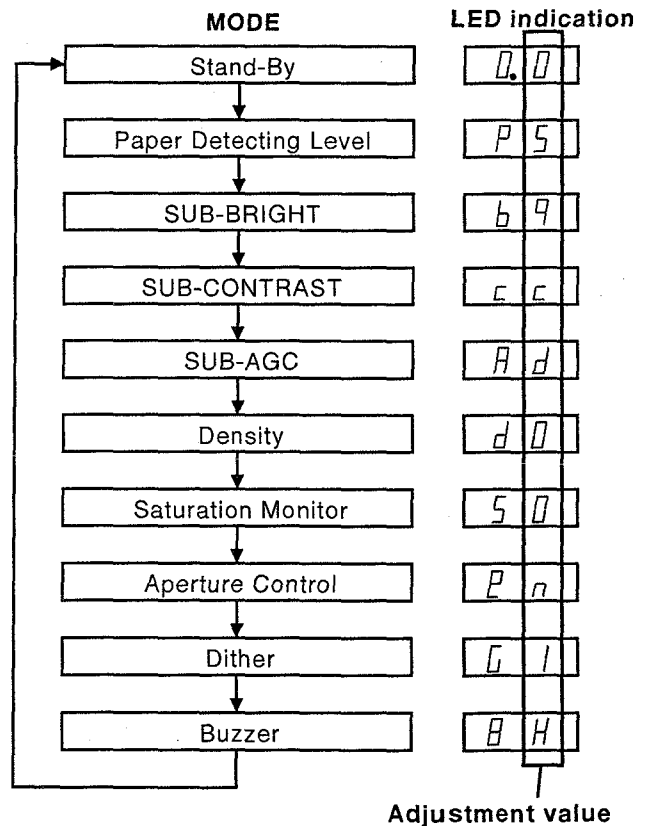
1. Select the **SET UP** mode.
2. Set the adjustment value with the varying the adjustment value **COPY** or **FEED** button.

**Note:** The adjustment value appears on the right of the indicator LED.

**COPY** button is setting the high value for the adjustment value.

**FEED** button is setting the low value for the adjustment value.

3. Press the **GAMMA**, **PRINT** or **PRT-SIZE** button.



## How to cancel the Service Mode

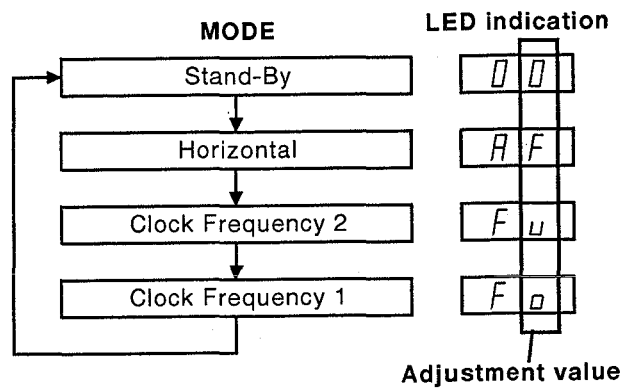
1. Press the **PRT-SIZE** button.
2. Open-circuit TP31 to GND.

The table below describes each set up mode position.

MODE	LED indicate			Right indication of the LED	Note
	Left	Right			
Stand-By	0	0	0	1	Print size can be set by varying the adjustment value. It is not necessary to set this in the <b>SERVICE</b> mode.
Paper Detecting Level	P	5		---	Fixed
SUB-BRIGHT	b	0~F			Index of brightness. Adjustment value change by "1" at 16 steps. Operation the varying the adjustment value <b>COPY</b> and <b>FEED</b> button with the adjustment value and $\square$ is no effect.
SUB-CONTRAST	c	0~F			Index of contrast. Adjustment value change by "1" at 16 steps. Ditto
SUB-AGC	A	0~F			Index of AGC. Adjustment value change by "1" at 16 steps. Ditto
Density	d	.9~9			Index of density, from .9 (-9) to 9 (9). Initial setting at shipment is restored by initializing the E <sup>2</sup> PROM.
Saturation Monitor	5	0	1		Used to reverse the signal polarity (white-black) of the image area that expands over the limits during BRIGHT and CONTRAST adjustment. When 1 (in), the image is reversed and when $\square$ (out), not reversed. Ditto
Aperture Control	P	5	n	H	Index of aperture control. H indicates maximum aperture correction 5 (soft), n (nomal), and H (Hard). Ditto
Dither	G	0	1		Used to select the gradation. 1 (in) indicates 256 gradations and $\square$ (out) 64 gradations. Ditto
Buzzer	B	0	L	H	Used to select the buzzer. $\square$ (volume:mute) L (volume:low) H (volume:high) <b>Note)</b> When the LED indicates $\square$ , the volume is low in case of occurring an error. Ditto

## HOW TO INDICATE THE ADJUSTMENT MODE

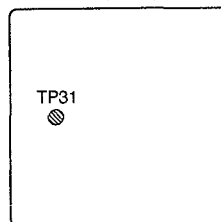
Operation	LED Display
<ol style="list-style-type: none"> <li>1. Turn the <b>POWER</b> button OFF.</li> <li>2. Short-circuit TP31 to GND.</li> <li>3. Turn the <b>POWER</b> button ON while pressing the <b>PRINT</b> button on the VCP.</li> <li>4. Release the <b>PRINT</b> button on the VCP. (The ADJUSTMENT mode is completely selected.)</li> <li>5. Select the setting mode with the <b>COPY</b> button, observing the indicator LED.</li> </ol>	<p style="text-align: center;"> <i>8.8.</i> → <i>8.8</i> → <i>00</i>                      (Confirm that the indicator LED changes from "<i>8.8</i>" to "<i>00</i>".)                 </p> <p>Note) If you make an error during the ADJUSTMENT mode, turn the <b>POWER</b> button OFF and then select the ADJUSTMENT mode again.</p>



### How to cancel the Adjustment Mode

1. Turn the **POWER** button OFF.
2. Open-circuit TP31 to GND.

PCB-MAIN(Component side)

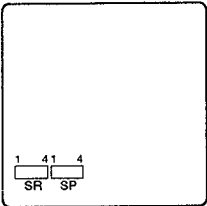


# CHECK OF DETECTION LEVEL FOR PAPER

Conduct the steps below and confirm the indicator LED.

Operation	LED Display						
1. Select the ADJUSTMENT mode.	00						
2. Take the printing paper out.	E0						
3. Close the door.	EP						
4. Press the <b>GAMMA</b> button once.	P5						
5. Press the <b>MONITOR</b> button once.	P0						
6. Open the door.	P0						
Note) The table below shows the normal voltage at pin 2 of connector <b>SR</b> and at pin 2 of connector <b>SP</b> respectively with and without a printing paper provided.							
<table border="1" style="margin: auto; border-collapse: collapse;"> <thead> <tr> <th style="padding: 5px;">Printing Paper</th> <th style="padding: 5px;">Voltage</th> </tr> </thead> <tbody> <tr> <td style="padding: 5px;">Provided</td> <td style="padding: 5px;">1.5V or less</td> </tr> <tr> <td style="padding: 5px;">Not provided</td> <td style="padding: 5px;">3.5V or more</td> </tr> </tbody> </table>		Printing Paper	Voltage	Provided	1.5V or less	Not provided	3.5V or more
Printing Paper	Voltage						
Provided	1.5V or less						
Not provided	3.5V or more						
7. Quit the ADJUSTMENT mode.							

PCB-MAIN(Component side)



## INITIALIZATION OF THE E<sup>2</sup>PROM

Necessary on replacement of E<sup>2</sup>PROM.

**Note)** Do not initialize E<sup>2</sup>PROM expect when replaced. User setting is canceled.

Operation	LED Display
1. Turn the <b>POWER</b> button OFF.	
2. Turn the <b>POWER</b> button ON while pressing <b>FEED</b> and <b>COPY</b> buttons at the same time.	<i>B.B.</i> → 11 → 00 (Confirm that the indicator LED changes from " 11 " to " 00 ")
3. Release the <b>FEED</b> and <b>COPY</b> buttons. (Initialization is completed.)	

\* After E<sup>2</sup>PROM is initialized, the following adjustment values in the service mode are restored to the initial values at shipment.

Set mode	LED Display
• Density	<i>d0</i>
• Saturation Monitor	<i>50</i>
• Aperture Control	<i>En</i>
• Dither	<i>G1</i>
• Buzzer	<i>BH</i>

# ELECTRIC ADJUSTMENT

## ■ Setting prior to adjustment

- Mode switch and others

Set Point			Setting
S201 Mode Switch (Back)	#1	IMP	75Ω
	#2	N-TRAP	OFF
	#3	P-TRAP	OFF
S701 Mode Switch (Front)	#1	IMAGE	POSI
	#2	AFC	OFF
	#3	DIR	NOR
	#4	MEMORY	FRAME
	#5	SCAN	UNDER
	#6	SAVING	OFF
	#7	PAPER	HD
	#8	AGC	OFF

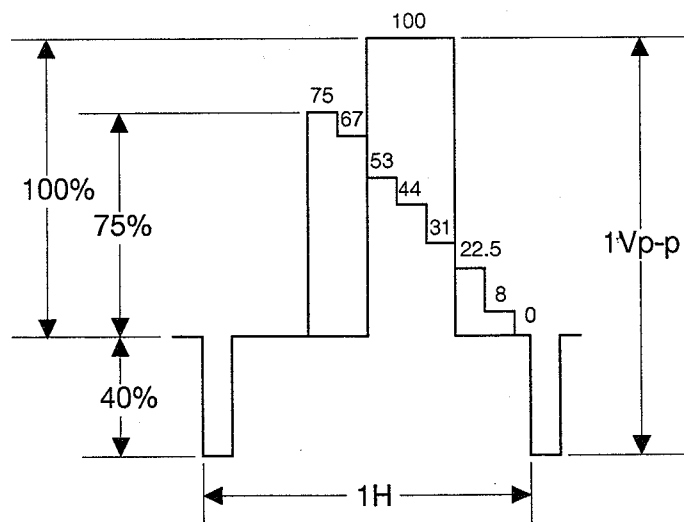
Set Point		Setting
Power Supply	OFF/ON	ON
Front Panel	Paper	K75HM
Remote Control	Input Terminal	Remote Control Connection
VIDEO IN	Input Terminal	NTSC Step Wave (provided with window)
VIDEO OUT	Output Terminal	Monitor
AC IN	Power Input	Connection 120V 220V-240V
BRT	Volume	Center Click
CONT	Volume	Center Click

## ■ Measuring Equipment & Jig

- ① Color monitor (TV for AV input)
- ② Oscilloscope (Set probe to 10:1 unless otherwise specified.)
- ③ Signal generator
- ④ Frequency counter
- ⑤ A set of general electric tools
- ⑥ Digital voltmeter

## ■ Input Signal

Video signal: NTSC step wave (provided with window)



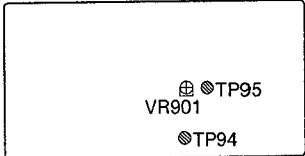
1. Increased primary Voltage	<b>Adjustment purpose</b> Worldwide voltage at the primary side: To increase voltage from 120V / 220-240V to 380V / 409V. <b>Symptom when incorrectly adjusted</b> The consumption power increases.
------------------------------	---

Measuring instrument	Digital voltmeter
Test point	TP94, TP95
EXT trigger	---
Measurement range	---
Input signal	---
Input terminal	---

1. Connect (-) terminal of the Digital voltmeter to TP95.
2. Connect (+) terminal of the Digital voltmeter to TP94.
3. Supply an AC 120V or 220-240V to the Set.
4. Adjust VR901 so that the Digital voltmeter reads the value specified in table.

AC voltage	Digital voltmeter value
120V	380 ± 3V
220-240V	409 ± 3V

PCB-POWER (Component side)



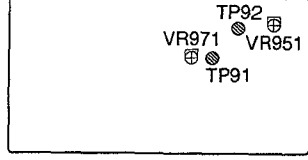


2. Main Voltage/Head Voltage	<b>Adjustment purpose</b>	To correct uneven density of the printed picture caused by unevenness of head resistor.
	<b>Symptom when incorrectly adjusted</b>	Too dense or too thin the printed picture particularly in the black area resulting in dull or burnt black picture.

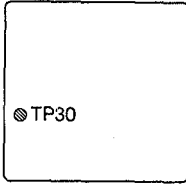
<b>Measuring instrument</b>	Digital voltmeter
<b>Test point</b>	TP91, TP92
<b>EXT trigger</b>	---
<b>Measurement range</b>	---
<b>Input signal</b>	---
<b>Input terminal</b>	---

1. Read the Thermal Head resistance value.
  2. Short-circuit TP30 to GND.
  3. Observe the voltage at TP91.
  4. Adjust VR971 so that the reading is  $E1 \pm 0.10V$ .
  5. Observe the voltage at TP92.
  6. Adjust VR951 so that the reading is  $E2 \pm 0.05V$ .
  7. Open-circuit TP30 to GND.
- Note) E1 :  $E2 \pm 2.5[V]$   
E2 : The value in table [V]

PCB-POWER (Component side)



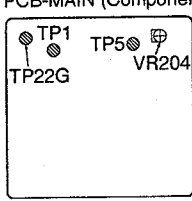
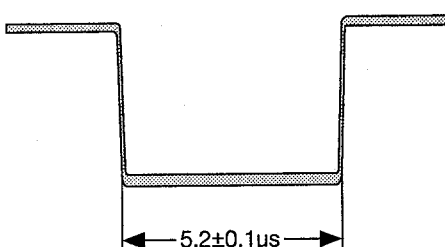
PCB-MAIN (Component side)

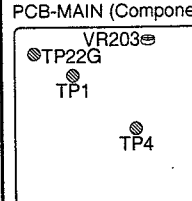
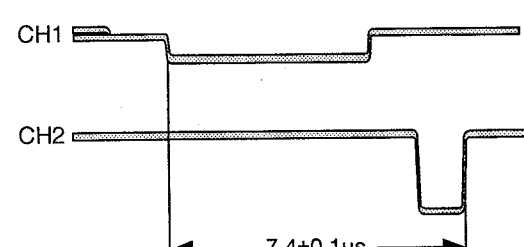


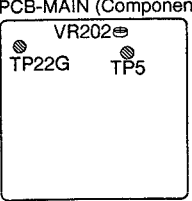
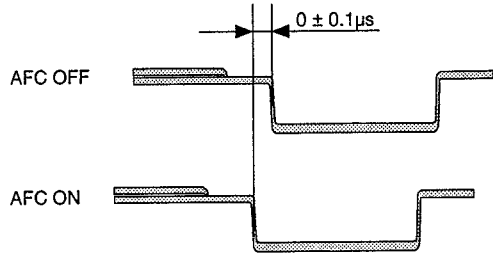
## HEAD RESISTANCE-APPLY VOLTAGE(E2)

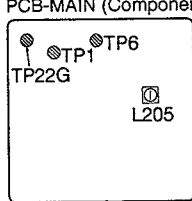
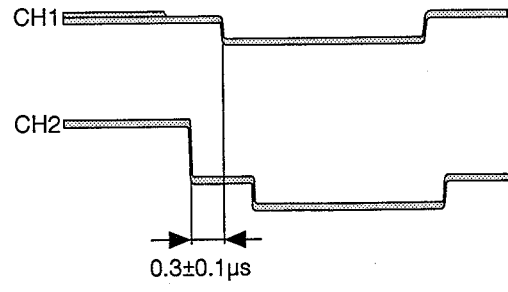
Resistance 3 significant figure [Ω]	Resistance 4th figure [Ω]									
	0	1	2	3	4	5	6	7	8	9
2970	21.323	21.327	21.330	21.334	21.337	21.341	21.344	21.348	21.351	21.355
2980	21.359	21.362	21.366	21.369	21.373	21.376	21.380	21.383	21.387	21.390
2990	21.394	21.397	21.401	21.404	21.408	21.411	21.415	21.418	21.422	21.425
3000	21.429	21.432	21.436	21.439	21.443	21.446	21.450	21.453	21.457	21.460
3010	21.464	21.467	21.471	21.474	21.478	21.481	21.485	21.488	21.492	21.495
3020	21.499	21.502	21.506	21.509	21.513	21.516	21.520	21.523	21.527	21.530
3030	21.534	21.537	21.541	21.544	21.548	21.551	21.555	21.558	21.562	21.565
3040	21.569	21.572	21.576	21.579	21.582	21.586	21.589	21.593	21.596	21.600
3050	21.603	21.607	21.610	21.614	21.617	21.621	21.624	21.628	21.631	21.635
3060	21.638	21.642	21.645	21.649	21.652	21.655	21.659	21.662	21.666	21.669
3070	21.673	21.676	21.680	21.683	21.687	21.690	21.694	21.697	21.701	21.704
3080	21.707	21.711	21.714	21.718	21.721	21.725	21.728	21.732	21.735	21.739
3090	21.742	21.746	21.749	21.752	21.756	21.759	21.763	21.766	21.770	21.773
3100	21.777	21.780	21.783	21.787	21.790	21.794	21.797	21.801	21.804	21.808
3110	21.811	21.815	21.818	21.821	21.825	21.828	21.832	21.835	21.839	21.842
3120	21.845	21.849	21.852	21.856	21.859	21.863	21.866	21.870	21.873	21.876
3130	21.880	21.883	21.887	21.890	21.894	21.897	21.900	21.904	21.907	21.911
3140	21.914	21.918	21.921	21.924	21.928	21.931	21.935	21.938	21.942	21.945
3150	21.948	21.952	21.955	21.959	21.962	21.966	21.969	21.972	21.976	21.979
3160	21.983	21.986	21.989	21.993	21.996	22.000	22.003	22.007	22.010	22.013
3170	22.017	22.020	22.024	22.027	22.030	22.034	22.037	22.041	22.044	22.048
3180	22.051	22.054	22.058	22.061	22.065	22.068	22.071	22.075	22.078	22.082
3190	22.085	22.088	22.092	22.095	22.099	22.102	22.105	22.109	22.112	22.116
3200	22.119	22.122	22.126	22.129	22.133	22.136	22.139	22.143	22.146	22.150
3210	22.153	22.156	22.160	22.163	22.166	22.170	22.173	22.177	22.180	22.183
3220	22.187	22.190	22.194	22.197	22.200	22.204	22.207	22.210	22.214	22.217
3230	22.221	22.224	22.227	22.231	22.234	22.238	22.241	22.244	22.248	22.251
3240	22.254	22.258	22.261	22.265	22.268	22.271	22.275	22.278	22.281	22.285
3250	22.288	22.292	22.295	22.298	22.302	22.305	22.308	22.312	22.315	22.318
3260	22.322	22.325	22.329	22.332	22.335	22.339	22.342	22.345	22.349	22.352
3270	22.355	22.359	22.362	22.366	22.369	22.372	22.376	22.379	22.382	22.386
3280	22.389	22.392	22.396	22.399	22.403	22.406	22.409	22.413	22.416	22.419
3290	22.423	22.426	22.429	22.433	22.436	22.439	22.443	22.446	22.449	22.453
3300	22.456	22.459	22.463	22.466	22.469	22.473	22.476	22.480	22.483	22.486
3310	22.490	22.493	22.496	22.500	22.503	22.506	22.510	22.513	22.516	22.520
3320	22.523	22.526	22.530	22.533	22.536	22.540	22.543	22.546	22.550	22.553
3330	22.556	22.560	22.563	22.566	22.570	22.573	22.576	22.580	22.583	22.586
3340	22.590	22.593	22.596	22.600	22.603	22.606	22.610	22.613	22.616	22.619
3350	22.623	22.626	22.629	22.633	22.636	22.639	22.643	22.646	22.649	22.653
3360	22.656	22.659	22.663	22.666	22.669	22.673	22.676	22.679	22.683	22.686
3370	22.689	22.692	22.696	22.699	22.702	22.706	22.709	22.712	22.716	22.719
3380	22.722	22.726	22.729	22.732	22.735	22.739	22.742	22.745	22.749	22.752
3390	22.755	22.759	22.762	22.765	22.768	22.772	22.775	22.778	22.782	22.785
3400	22.788	22.792	22.795	22.798	22.801	22.805	22.808	22.811	22.815	22.818

Resistance 3 significant figure [ $\Omega$ ]	Resistance 4th figure [ $\Omega$ ]									
	0	1	2	3	4	5	6	7	8	9
3410	22.821	22.825	22.828	22.831	22.834	22.838	22.841	22.844	22.848	22.851
3420	22.854	22.857	22.861	22.864	22.867	22.871	22.874	22.877	22.880	22.884
3430	22.887	22.890	22.894	22.897	22.900	22.903	22.907	22.910	22.913	22.917
3440	22.920	22.923	22.926	22.930	22.933	22.936	22.939	22.943	22.946	22.949
3450	22.953	22.956	22.959	22.962	22.966	22.969	22.972	22.975	22.979	22.982
3460	22.985	22.989	22.992	22.995	22.998	23.002	23.005	23.008	23.011	23.015
3470	23.018	23.021	23.024	23.028	23.031	23.034	23.038	23.041	23.044	23.047
3480	23.051	23.054	23.057	23.060	23.064	23.067	23.070	23.073	23.077	23.080
3490	23.083	23.086	23.090	23.093	23.096	23.099	23.103	23.106	23.109	23.112
3500	23.116	23.119	23.122	23.125	23.129	23.132	23.135	23.138	23.142	23.145
3510	23.148	23.151	23.155	23.158	23.161	23.164	23.168	23.171	23.174	23.177
3520	23.181	23.184	23.187	23.190	23.194	23.197	23.200	23.203	23.207	23.210
3530	23.213	23.216	23.219	23.223	23.226	23.229	23.232	23.236	23.239	23.242
3540	23.245	23.249	23.252	23.255	23.258	23.261	23.265	23.268	23.271	23.274
3550	23.278	23.281	23.284	23.287	23.291	23.294	23.297	23.300	23.303	23.307
3560	23.310	23.313	23.316	23.320	23.323	23.326	23.329	23.332	23.336	23.339
3570	23.342	23.345	23.349	23.352	23.355	23.358	23.361	23.365	23.368	23.371
3580	23.374	23.377	23.381	23.384	23.387	23.390	23.394	23.397	23.400	23.403
3590	23.406	23.410	23.413	23.416	23.419	23.422	23.426	23.429	23.432	23.435
3600	23.438	23.442	23.445	23.448	23.451	23.455	23.458	23.461	23.464	23.467
3610	23.471	23.474	23.477	23.480	23.483	23.487	23.490	23.493	23.496	23.499
3620	23.503	23.506	23.509	23.512	23.515	23.518	23.522	23.525	23.528	23.531
3630	23.534	23.538	23.541	23.544	23.547	23.550	23.554	23.557	23.560	23.563

3. Horizontal synchronized pulse width	<b>Adjustment purpose</b> To adjust the capture range of the AFC function center. <b>Symptom when incorrectly adjusted</b> Disturbance in horizontal sync.	
<b>Measuring instrument</b>	Oscilloscope	<ol style="list-style-type: none"> <li>1. Turn #2 : AFC switch of the S701 (MODE) off.</li> <li>2. Supply a video signal (staircase with window).</li> <li>3. Connect CH1 of the oscilloscope to TP1 and CH2 to TP5. (Connect the oscilloscope GND to TP22G.)</li> <li>4. Trigger in the falling edge of CH2.</li> <li>5. Magnify the pulse width of CH2 with delay sweep.</li> <li>6. Adjust VR204 so that the pulse width of the waveform indicated below is pulse width=<math>5.2 \pm 0.1 \mu\text{s}</math>.</li> </ol>
<b>Test point</b>	CH1 : TP1 CH2 : TP5	
<b>EXT trigger</b>	---	
<b>Measurement range</b>	DIV :0.1V TIM :1 $\mu\text{s}$ (DELAY mode)	
<b>Input signal</b>	Video signal (staircase with window)	
<b>Input terminal</b>	VIDEO IN terminal	
PCB-MAIN (Component side) 		

4. Horizontal Position	<b>Adjustment purpose</b> To adjust the horizontal picture position on the print paper. <b>Symptom when incorrectly adjusted</b> Horizontal position of printed picture displaced to left or right.	
<b>Measuring instrument</b>	Oscilloscope	<ol style="list-style-type: none"> <li>1. Turn #2 : AFC switch of the S701 (MODE) off.</li> <li>2. Supply a video signal (staircase with window).</li> <li>3. Connect CH1 of the oscilloscope to TP1 and CH2 to TP4. (Connect the oscilloscope GND to TP22G).</li> <li>4. Trigger in the rising edge of CH2 and magnify the portion.</li> <li>5. Magnify the horizontal synchronization.</li> <li>6. Adjust VR203 so that the phase difference between the falling edge of CH1 and the rising edge of CH2 is <math>7.4 \pm 0.1 \mu\text{s}</math>.</li> </ol>
<b>Test point</b>	CH1: TP1 CH2: TP4	
<b>EXT trigger</b>	---	
<b>Measurement range</b>	DIV :CH1 50mV :CH2 0.2V TIM :1 $\mu\text{s}$ (DELAY mode)	
<b>Input signal</b>	Video signal (staircase with window)	
<b>Input terminal</b>	VIDEO IN terminal	
PCB-MAIN (Component side) 		

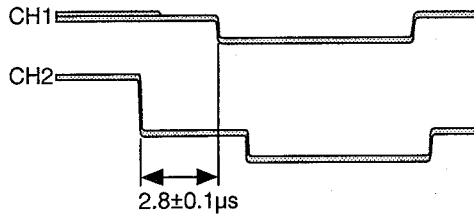
5. Horizontal AFC		<b>Adjustment purpose</b> To correct uneven oscillating frequency of the horizontal AFC circuit. <b>Symptom when incorrectly adjusted</b> Poor horizontal synchronization of picture to be printed.
<b>Measuring instrument</b>	Oscilloscope	<ol style="list-style-type: none"> <li>1. Supply a video signal (staircase with window).</li> <li>2. Connect CH1 of the oscilloscope to TP1 and CH2 to TP5. (Connect the oscilloscope GND to TP22G.)</li> <li>3. Trigger in the falling edge of CH2.</li> <li>4. Magnify the falling edge of CH1 by applying delay trigger.</li> <li>5. Set the indicator LED to <math>\square\square</math> in the ADJUSTMENT mode (AFC OFF).</li> <li>6. Press the <b>COPY</b> button to set LED to <math>\#F</math> (AFC ON).</li> <li>7. Adjust VR202 so that the phase difference between the center of the screen and the falling edge of CH1 is <math>0 \pm 0.1 \mu\text{s}</math>.</li> </ol>
<b>Test point</b>	CH1 : TP1 CH2 : TP5	
<b>EXT trigger</b>	---	
<b>Measurement range</b>	DIV :CH1 20mV :CH2 0.2V TIM : $1 \mu\text{s}$ (DELAY mode)	
<b>Input signal</b>	Video signal (staircase with window)	
<b>Input terminal</b>	VIDEO IN terminal	
PCB-MAIN (Component side) 		
		

6. Clock Frequency 2		<b>Adjustment purpose</b> To set the oscillating frequency of the input signal from sampling clock oscillator. <b>Symptom when incorrectly adjusted</b> Picture to be printed cut or shrunk horizontally.
<b>Measuring instrument</b>	Oscilloscope	<ol style="list-style-type: none"> <li>1. Supply a video signal (staircase with window).</li> <li>2. Set the ADJUSTMENT mode.</li> <li>3. Press the <b>COPY</b> button to set LED to <math>F_U</math>.</li> <li>4. Connect CH1 of the oscilloscope to TP1 and CH2 to TP6. (Connect the oscilloscope GND to TP22G.)</li> <li>5. Trigger in the falling edge of CH2 and magnify the portion.</li> <li>6. Magnify the horizontal synchronization.</li> <li>7. Adjust L205 so that <math>t_n</math> in the following figure is <math>0.3 \pm 0.1 \mu\text{s}</math>.</li> </ol>
<b>Test point</b>	CH1 : TP1 CH2 : TP6	
<b>EXT trigger</b>	---	
<b>Measurement range</b>	DIV :CH1 50mV :CH2 0.1V TIM : $0.5 \mu\text{s}$ (DELAY mode)	
<b>Input signal</b>	Video signal (staircase with window)	
<b>Input terminal</b>	VIDEO IN terminal	
PCB-MAIN (Component side) 		
		

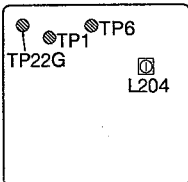
7. Clock Frequency 1	<b>Adjustment purpose</b> To set the oscillating frequency of input signal from sampling clock oscillator.
	<b>Symptom when incorrectly adjusted</b> Picture to be printed cut or shrunk horizontally.

<b>Measuring instrument</b>	Oscilloscope
<b>Test point</b>	TP1, TP6
<b>EXT trigger</b>	---
<b>Measurement range</b>	DIV :CH1 50mV :CH2 0.1V TIM :1 $\mu$ s (DELAY mode)
<b>Input signal</b>	Video signal (staircase with window)
<b>Input terminal</b>	VIDEO IN terminal

1. Supply a video signal (staircase with window).
2. Set the ADJUSTMENT mode.
3. Press the **COPY** button to set LED to  $F_D$ .
4. Connect CH1 of the oscilloscope to TP1 and CH2 to TP6.  
(Connect the oscilloscope GND to TP22G.)
5. Trigger in the falling edge of CH2 and magnify the portion.
6. Magnify the horizontal synchronization.
7. Adjust L204 so that  $t_n$  in the following figure is  $2.8 \pm 0.1 \mu s$ .



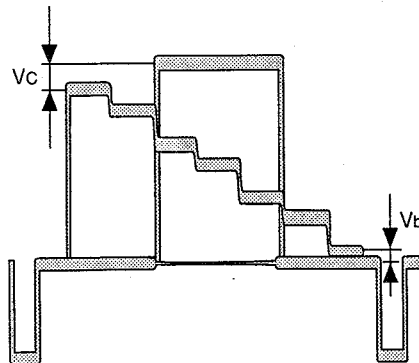
PCB-MAIN (Component side)



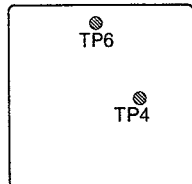
8. SUB-BRIGHT, SUB-CONTRAST, SUB-AGC	<b>Adjustment purpose</b> To set the brightness and contrast of the input signal.
	<b>Symptom when incorrectly adjusted</b> Poor brightness or poor contrast or poor AGC level of printed or monitored picture.

<b>Measuring instrument</b>	Oscilloscope
<b>Test point</b>	CH1 : TP6 CH2 : TP4
<b>EXT trigger</b>	---
<b>Measurement range</b>	DIV :10mV TIM :10 $\mu$ s
<b>Input signal</b>	Video signal (staircase with window)
<b>Input terminal</b>	VIDEO IN terminal

1. Supply a video signal (staircase with window).
2. Select the service mode.
3. Select the SUB-BRIGHT setting mode.
4. Connect CH1 of the oscilloscope to TP6 and CH2 to TP4.
5. Trigger in the rising of CH2.
6. Observe the waveform at TP6.
7. Press **COPY/FEED** buttons so that  $V_b$  in the below figure is  $0.04 \pm 0.01 V_{p-p}$ .
8. Select the SUB-CONTRAST and SUB-AGC setting mode.
9. Press **COPY/FEED** buttons so that  $V_c$  in the below figure is  $0.11 \pm 0.01 V_{p-p}$ .



PCB-MAIN (Component side)



# CHIP PARTS REPLACEMENT

## CHIP PARTS REPLACEMENT

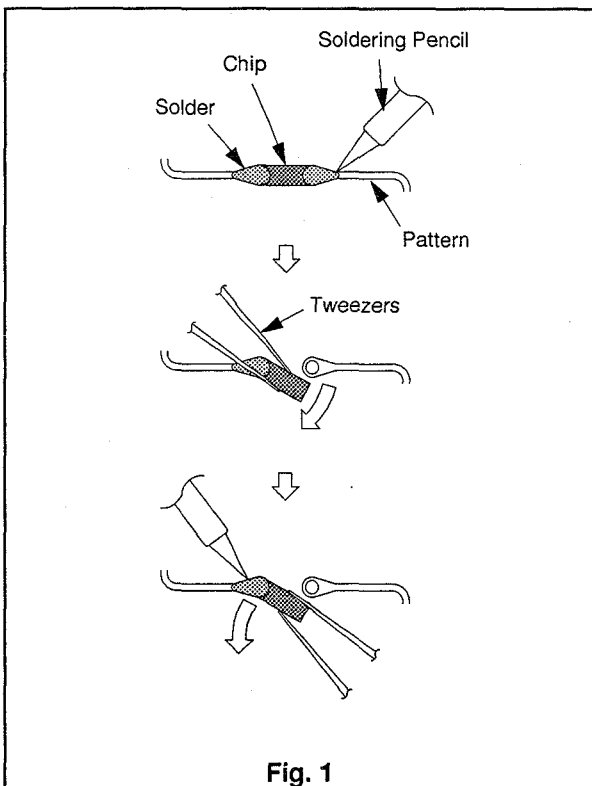
Some resistors, shorting jumpers ( $0\Omega$  resistor), ceramic capacitors, transistors and diodes are chip parts which are used for certain circuit elements. When replacing these parts, note the following cautions.

### Cautions:

- A. Use fine tipped, well insulated soldering pencil (iron), about 30 watts, and tweezers.
- B. Melt the solder and remove the Chip Parts carefully so as not to tear off the copper foil of the printed circuit board.
- C. Discard removed chips; do not reuse them.
- D. Do not apply heat for more than 3 seconds to new chip Parts.
- E. Avoid using a rubbing stroke when soldering.
- F. Take care not to scratch, or damage the Chip Parts when soldering.
- G. Supplementary cementing is not required.

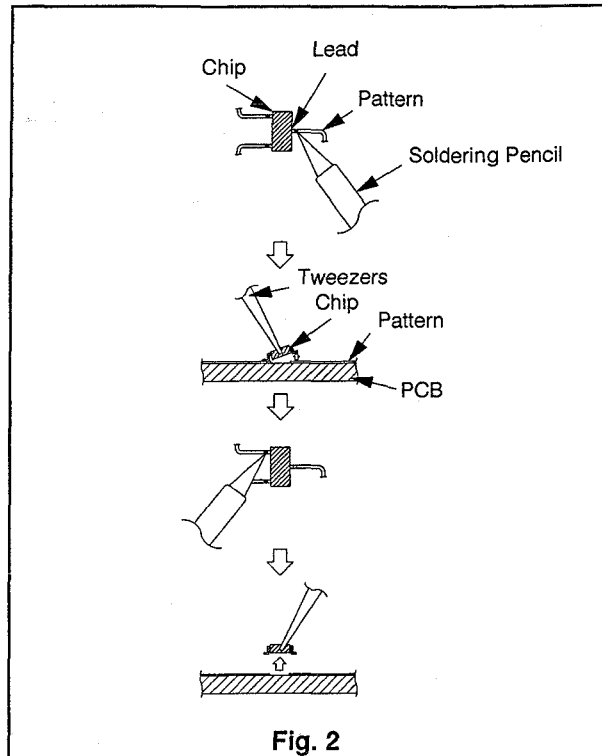
### 1 Removal of Chip Parts (Resistors, capacitors, etc.)

- A. Grasp the part with tweezers. Melt the solder at both sides alternately, remove one side of the part with a twisting motion.
- B. Melt the solder at the other side and remove the part.



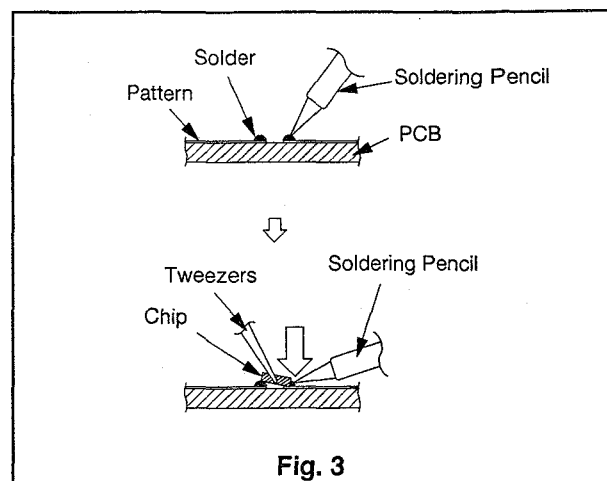
### 2 Removal of Chip Parts (Transistors)

- A. Melt the solder of one lead. Lift the side of that lead upward.
- B. Simultaneously melt the solder of the two remaining leads and lift the part.



### 3 Replacement

- A. Presolder the contact points of the circuit pattern.
- B. Press the part downward with tweezers and apply the soldering pencil as shown in Fig. 3.



# PARTS LIST


MODEL : P500W/P500E

In order to expedite delivery of replacement part orders.

- Specify :
1. Model number/Serial number
  2. Part number and Description
  3. Quantity

Unless full information is supplied, delay in execution of orders will result.

\* : Warranty return items (P500W only)

 : Critical components

MARK	B	C	D	F	G	J	K
TOLERANCE (%)	± 0.1	± 0.25	± 0.5	± 1	± 2	± 5	± 10

MARK	M	N	V	X	Z	P	Q
TOLERANCE (%)	± 20	± 30	+ 10 - 10	+ 40 - 20	+ 80 - 20	+ 100 - 0	+ 30 - 10

MARK	B	C	D	F	G
TOLERANCE (pF)	± 0.1	± 0.25	± 0.5	± 1	± 2

## ABBREVIATION

[W] : P500W

[E] : P500E



[W] : P500W

[E] : P500E

SYMBOL NO.	PARTS NO.	PARTS NAME	DESCRIPTION	SYMBOL NO.	PARTS NO.	PARTS NAME	DESCRIPTION
INTEGRATED CIRCUITS							
IC201	272P499010	IC	HA11465A	Q 705	260P852010	CHIP TRANSISTOR	FMG2
IC202	272P529010	IC	L78N09/AN78N09	Q 706	260P852010	CHIP TRANSISTOR	FMG2
IC203	266P923040	IC	NJM78L05A	Q 707	260P852010	CHIP TRANSISTOR	FMG2
IC204	272P151010	IC	NJM2217L	Q 708	260P849010	CHIP TRANSISTOR	1MZ1
IC205	272P773010	IC	SN74LS221NS	Q 712	260P807010	CHIP TRANSISTOR	UN2212
IC206	263P485010	IC	MC74HC00AF	Q 713	260P807010	CHIP TRANSISTOR	UN2212
IC207	272P086020	IC	MB40576PF	Q 714	260P852010	CHIP TRANSISTOR	FMG2
IC208	272P087020	IC	MB40776PF	Q 715	260P806010	CHIP TRANSISTOR	DTA124EK
IC209	270P250010	IC	M51489L	Q 716	260P807010	CHIP TRANSISTOR	UN2212
IC210	272P583010	IC	NJM2233BM	Q 717	260P806010	CHIP TRANSISTOR	DTA124EK
IC401	272P747020	IC	SLA7024M	Q 718	260P807010	CHIP TRANSISTOR	UN2212
IC402	272P235010	IC	TA7291S	Q 719	260P807010	CHIP TRANSISTOR	UN2212
IC403	272P235010	IC	TA7291S	Q 720	260P804030	CHIP TRANSISTOR	2SC3052-G
IC701	263P748010	IC	M50734SP	Q 721	260P804030	CHIP TRANSISTOR	2SC3052-G
IC702	274D029010	IC	M27C256B-12F1	Q 730	260P849010	CHIP TRANSISTOR	1MZ1
IC703	274P467010	IC	CXK5864CM-70LL	Q 731	260P849010	CHIP TRANSISTOR	1MZ1
IC704	263P599010	IC	M62352GP	Q 732	260P849010	CHIP TRANSISTOR	1MZ1
IC705	274P397010	IC	BR93LC56F	Q 733	260P849010	CHIP TRANSISTOR	1MZ1
IC706	272P357010	IC	PST529C (T529C)	Q 734	260P849010	CHIP TRANSISTOR	1MZ1
IC771	274P401010	IC	UPD65647GD-020-5BD	Q 735	260P849010	CHIP TRANSISTOR	1MZ1
IC772	274P392020	IC	HM514260ALJ-8	Q 736	260P849010	CHIP TRANSISTOR	1MZ1
IC773	274P392020	IC	HM514260ALJ-8	Q 737	260P849010	CHIP TRANSISTOR	1MZ1
IC775	274P653010	IC	M60052-0216FP	Q 951	260P560040	TRANSISTOR	2SA933S-S
IC776	274P398010	IC	M5M5256BFP-85	Q 952	260P642030	TRANSISTOR	2SB883
IC777	263P145010	IC	SC7S08F (E2)	△ Q 971	261P044010	TRANSISTOR	2SK2080-01
IC778	263P149010	IC	SN74HC74DB	△ Q 972	261P050010	TRANSISTOR	2SK1464
IC779	263P428010	IC	SC14S71F	Q 973	260P490010	TRANSISTOR	2SD1153
IC950	272P500010	IC	HA17431P	DIODES			
IC951	270P153010	IC	MC34063AP1	D 201	264P803010	CHIP DIODE	MC2838
IC952	270P290010	IC	MC34167T	D 202	264P803010	CHIP DIODE	MC2838
IC953	272P502010	IC	UPC2412AHF	D 501	264P579010	LIGHT EMITTING DIODE	GL9E030
IC954	272P240010	IC	M5237L	D 502	264P579010	LIGHT EMITTING DIODE	GL9E030
IC971	270P344010	IC	MC34262P	D 701	264P803010	CHIP DIODE	MC2838
IC972	272P564010	IC	M51977P	D 702	264P816050	CHIP DIODE	RD7. 5MB2
IC973	272P502010	IC	UPC2412AHF	D 703	264P816050	CHIP DIODE	RD7. 5MB2
IC974	270P389010	IC	M51945BL	D 704	264P816050	CHIP DIODE	RD7. 5MB2
TRANSISTORS				D 705	264P816050	CHIP DIODE	RD7. 5MB2
Q 201	260P804030	CHIP TRANSISTOR	2SC3052-G	△ D 901	264P535010	DIODE	RBV-608
Q 202	260P804030	CHIP TRANSISTOR	2SC3052-G	D 902	264P522010	DIODE	RU 1P
Q 203	260P804030	CHIP TRANSISTOR	2SC3052-G	D 904	264P521030	DIODE	EU 2
Q 204	260P806010	CHIP TRANSISTOR	DTA124EK	D 930	264P045040	DIODE	1S24710M
Q 205	260P849010	CHIP TRANSISTOR	1MZ1	D 950	264P580010	DIODE	ESAC92M-02
Q 206	260P849010	CHIP TRANSISTOR	1MZ1	D 952	264P657010	DIODE	EK14V
Q 207	260P849010	CHIP TRANSISTOR	1MZ1	D 953	264P670010	DIODE	D5S4M
Q 208	260P849010	CHIP TRANSISTOR	1MZ1	D 954	264P470050	DIODE	RD33EB2, EB3, EB4
Q 209	260P817030	CHIP TRANSISTOR	2SA1037K-S	D 955	264P045040	DIODE	1S24710M
Q 210	260P809010	CHIP TRANSISTOR	DTC114YK	D 956	264P045040	DIODE	1S24710M
Q 211	260P804030	CHIP TRANSISTOR	2SC3052-G	D 957	264P484040	DIODE	RD5. 6FB3
Q 701	260P802020	CHIP TRANSISTOR	2SA1235-F	D 958	264P045040	DIODE	1S24710M
Q 702	260P802020	CHIP TRANSISTOR	2SA1235-F	D 959	264P489010	DIODE	RD16FB1
Q 703	260P852010	CHIP TRANSISTOR	FMG2	D 971	264P588010	DIODE	FML-G16S
Q 704	260P852010	CHIP TRANSISTOR	FMG2	D 972	264P521030	DIODE	EU 2
				D 973	264P521030	DIODE	EU 2

[W] : P500W

[E] : P500E

SYMBOL NO.	PARTS NO.	PARTS NAME	DESCRIPTION	SYMBOL NO.	PARTS NO.	PARTS NAME	DESCRIPTION
D 976	264P521030	DIODE	EU 2	R 222	103P402040	CHIP RESISTOR	1/10W 820Ω-J
		FILTERS		R 223	103P402050	CHIP RESISTOR	1/10W 1kΩ-J
△ L 901	351P072010	LINE FILTER	SC-04-200JV	R 225	103P404010	CHIP RESISTOR	1/10W 22kΩ-J
△ L 902	351P072010	LINE FILTER	SC-04-200JV	R 226	103P409090	CHIP RESISTOR	1/10W 75Ω-J
		COILS		R 227	103P482010	CHIP METAL RESISTOR	1/4W 470Ω-J
L 201	349P064020	TRAP COIL	3.58MHz	R 228	103P474090	CHIP RESISTOR	1/10W 10kΩ-F
L 202	320P022020	TRAP COIL	4.43MHz	R 229	103P475000	CHIP RESISTOR	1/10W 11kΩ-F
L 203	325C166030	PEAKING COIL	10 μH-J	R 230	103P403010	CHIP RESISTOR	1/10W 3.3kΩ-J
L 204	349P179050	OSCILLATOR COIL		R 231	103P406010	CHIP RESISTOR	1/10W 1MΩ-J
L 205	349P179050	OSCILLATOR COIL		R 232	103P402090	CHIP RESISTOR	1/10W 2.2kΩ-J
L 206	325C166030	PEAKING COIL	10 μH-J	R 233	103P403070	CHIP RESISTOR	1/10W 10kΩ-J
L 207	325C107050	PEAKING COIL	100 μH-J	R 234	103P474090	CHIP RESISTOR	1/10W 10kΩ-F
L 208	325C107050	PEAKING COIL	100 μH-J	R 235	103P474090	CHIP RESISTOR	1/10W 10kΩ-F
L 771	325C140090	CHIP COIL	4.7 μH-M	R 236	103P402020	CHIP RESISTOR	1/10W 560Ω-J
L 950	351P132010	CHOKE COIL	HP-104Z	R 237	103P402090	CHIP RESISTOR	1/10W 2.2kΩ-J
L 951	351P113010	COIL	220 μH-K 1.1A	R 238	103P474050	CHIP RESISTOR	1/10W 6.8K
L 953	351P081030	COIL	SN8D-5005	R 239	103P403060	CHIP RESISTOR	1/10W 8.2kΩ-J
△ T 901	351P137010	CHOKE COIL		R 240	103P403030	CHIP RESISTOR	1/10W 4.7kΩ-J
		TRANSFORMERS		R 242	103P401090	CHIP RESISTOR	1/10W 330Ω-J
△ T 902	350P672010	POWER TRANSFORMER		R 243	103P401090	CHIP RESISTOR	1/10W 330Ω-J
		VARIABLE RESISTORS		R 244	103P402050	CHIP RESISTOR	1/10W 1kΩ-J
VR202	127C490080	SEMIFIXED VR	1/5W B10kΩ+-25%	R 245	103P402050	CHIP RESISTOR	1/10W 1kΩ-J
VR203	127C491000	SEMIFIXED VR	1/5W B30kΩ+-25%	R 246	103P402050	CHIP RESISTOR	1/10W 1kΩ-J
VR204	127C390080	SEMIFIXED VR	1/5W B10kΩ-M	R 247	103P402020	CHIP RESISTOR	1/10W 560Ω-J
VR701	129D167060	PCB VR	1/20W B5kΩ-15F CS	R 248	103P402020	CHIP RESISTOR	1/10W 560Ω-J
VR702	129D132020	PCB VR	1/20W B2kΩ-15F CS	R 249	103P404090	CHIP RESISTOR	1/10W 100kΩ-J
VR901	127C390050	SEMIFIXED VR	1/5W B2kΩ-M	R 250	103P404080	CHIP RESISTOR	1/10W 82kΩ-J
VR951	127C390090	SEMIFIXED VR	1/5W B20kΩ-M	R 251	103P404000	CHIP RESISTOR	1/10W 18kΩ-J
VR971	127C390070	SEMIFIXED VR	1/5W B5kΩ-M	R 254	103P401070	CHIP RESISTOR	1/10W 220Ω-J
		RESISTORS		R 255	103P405010	CHIP RESISTOR	1/10W 150kΩ-J
R 201	103P470050	CHIP RESISTOR	1/10W 150Ω-F	R 256	103P405070	CHIP RESISTOR	1/10W 470kΩ-J
R 202	103P470050	CHIP RESISTOR	1/10W 150Ω-F	R 257	103P403070	CHIP RESISTOR	1/10W 10kΩ-J
R 203	103P404010	CHIP RESISTOR	1/10W 22kΩ-J	R 258	103P403040	CHIP RESISTOR	1/10W 5.6kΩ-J
R 204	103P402050	CHIP RESISTOR	1/10W 1kΩ-J	R 259	103P402000	CHIP RESISTOR	1/10W 390Ω-J
R 205	103P403070	CHIP RESISTOR	1/10W 10kΩ-J	R 260	103P402000	CHIP RESISTOR	1/10W 390Ω-J
R 206	103P472050	CHIP RESISTOR	1/10W 1kΩ-F	R 261	103P405000	CHIP RESISTOR	1/10W 120kΩ-J
R 207	103P404020	CHIP RESISTOR	1/10W 27kΩ-J	R 262	103P403070	CHIP RESISTOR	1/10W 10kΩ-J
R 208	103P473020	CHIP RESISTOR	1/10W 2kΩ-F	R 263	103P477030	CHIP RESISTOR	1/10W 100kΩ-F
R 209	103P472020	CHIP RESISTOR	1/10W 750Ω-F	R 401	103P402010	CHIP RESISTOR	1/10W 470Ω-J
R 210	103P473020	CHIP RESISTOR	1/10W 2kΩ-F	R 402	103P401020	CHIP RESISTOR	1/10W 82Ω-J
R 211	103P404010	CHIP RESISTOR	1/10W 22kΩ-J	R 403	103P404050	CHIP RESISTOR	1/10W 47kΩ-J
R 212	103P402050	CHIP RESISTOR	1/10W 1kΩ-J	R 404	103P404050	CHIP RESISTOR	1/10W 47kΩ-J
R 213	103P402050	CHIP RESISTOR	1/10W 1kΩ-J	R 405	103P403000	CHIP RESISTOR	1/10W 2.7kΩ-J
R 214	103P403070	CHIP RESISTOR	1/10W 10kΩ-J	R 406	103P403000	CHIP RESISTOR	1/10W 2.7kΩ-J
R 215	103P473070	CHIP RESISTOR	1/10W 3.3kΩ-F	R 701	103P401090	CHIP RESISTOR	1/10W 330Ω-J
R 216	103P472050	CHIP RESISTOR	1/10W 1kΩ-F	R 702	103P401090	CHIP RESISTOR	1/10W 330Ω-J
R 217	103P474010	CHIP RESISTOR	1/10W 4.7kΩ-F	R 703	103P401090	CHIP RESISTOR	1/10W 330Ω-J
R 218	103P402030	CHIP RESISTOR	1/10W 680Ω-J	R 704	103P401090	CHIP RESISTOR	1/10W 330Ω-J
R 219	103P404080	CHIP RESISTOR	1/10W 82kΩ-J	R 705	103P401090	CHIP RESISTOR	1/10W 330Ω-J
R 220	103P476050	CHIP RESISTOR	1/10W 47kΩ-F	R 706	103P401090	CHIP RESISTOR	1/10W 330Ω-J
				R 707	103P401090	CHIP RESISTOR	1/10W 330Ω-J
				R 708	103P401090	CHIP RESISTOR	1/10W 330Ω-J
				R 709	103P402050	CHIP RESISTOR	1/10W 1kΩ-J
				R 710	103P402050	CHIP RESISTOR	1/10W 1kΩ-J
				R 711	103P402090	CHIP RESISTOR	1/10W 2.2kΩ-J

[W] : P500W

[E] : P500E

SYMBOL NO.	PARTS NO.	PARTS NAME	DESCRIPTION	SYMBOL NO.	PARTS NO.	PARTS NAME	DESCRIPTION
R 712	103P402090	CHIP RESISTOR	1/10W 2.2k $\Omega$ -J	R 779	103P401000	CHIP RESISTOR	1/10W 56 $\Omega$ -J
R 713	103P403070	CHIP RESISTOR	1/10W 10k $\Omega$ -J	R 780	103P401000	CHIP RESISTOR	1/10W 56 $\Omega$ -J
R 714	103P402090	CHIP RESISTOR(MAIN PCB ASSY)	1/10W 2.2k $\Omega$ -J	R 781	103P401000	CHIP RESISTOR	1/10W 56 $\Omega$ -J
R 714	103P474030	CHIP RESISTOR(FRONT2 PCB ASSY)	1/10W 5.6k $\Omega$ -F	R 782	103P401000	CHIP RESISTOR	1/10W 56 $\Omega$ -J
R 715	103P402090	CHIP RESISTOR(MAIN PCB ASSY)	1/10W 2.2k $\Omega$ -J	R 783	103P401000	CHIP RESISTOR	1/10W 56 $\Omega$ -J
R 715	103P472050	CHIP RESISTOR(FRONT2 PCB ASSY)	1/10W 1k $\Omega$ -F	R 784	103P401000	CHIP RESISTOR	1/10W 56 $\Omega$ -J
R 716	103P403070	CHIP RESISTOR(MAIN PCB ASSY)	1/10W 10k $\Omega$ -J	R 785	103P401000	CHIP RESISTOR	1/10W 56 $\Omega$ -J
R 716	103P474070	CHIP RESISTOR(FRONT2 PCB ASSY)	1/10W 8.2k $\Omega$ -F	R 786	103P401000	CHIP RESISTOR	1/10W 56 $\Omega$ -J
R 717	103P474090	CHIP RESISTOR	1/10W 10k $\Omega$ -F	R 787	103P401000	CHIP RESISTOR	1/10W 56 $\Omega$ -J
R 723	103P401030	CHIP RESISTOR	1/10W 100 $\Omega$ -J	R 788	103P401000	CHIP RESISTOR	1/10W 56 $\Omega$ -J
R 724	103P404020	CHIP RESISTOR	1/10W 27k $\Omega$ -J	R 789	103P401000	CHIP RESISTOR	1/10W 56 $\Omega$ -J
R 725	103P400070	CHIP RESISTOR	1/10W 33 $\Omega$ -J	R 790	103P401000	CHIP RESISTOR	1/10W 56 $\Omega$ -J
R 726	103P470050	CHIP RESISTOR	1/10W 150 $\Omega$ -F	R 791	103P401000	CHIP RESISTOR	1/10W 56 $\Omega$ -J
R 727	103P475050	CHIP RESISTOR	1/10W 18k $\Omega$ -F	R 792	103P401000	CHIP RESISTOR	1/10W 56 $\Omega$ -J
R 728	103P400010	CHIP RESISTOR	1/10W 10 $\Omega$ -J	R 793	103P401000	CHIP RESISTOR	1/10W 56 $\Omega$ -J
R 729	103P402080	CHIP RESISTOR	1/10W 1.8k $\Omega$ -J	R 794	103P401000	CHIP RESISTOR	1/10W 56 $\Omega$ -J
R 730	103P402080	CHIP RESISTOR	1/10W 1.8k $\Omega$ -J	R 795	103P400090	CHIP RESISTOR	1/10W 47 $\Omega$ -J
R 731	103P403070	CHIP RESISTOR	1/10W 10k $\Omega$ -J	R 796	103P406010	CHIP RESISTOR	1/10W 1M $\Omega$ -J
R 732	103P403070	CHIP RESISTOR	1/10W 10k $\Omega$ -J	R 922	103P371010	FUSE RESISTOR	1/4W 68 $\Omega$ -J
R 733	103P403070	CHIP RESISTOR	1/10W 10k $\Omega$ -J	R 932	109P052010	FUSE RESISTOR	1/4W 100 $\Omega$ -J
R 734	103P402080	CHIP RESISTOR	1/10W 1.8k $\Omega$ -J	$\Delta$ R 991	109P115010	CEMENT RESISTOR	10 $\Omega$ -J
R 735	103P402050	CHIP RESISTOR	1/10W 1k $\Omega$ -J	CAPACITORS AND TRIMMERS			
R 736	103P402090	CHIP RESISTOR	1/10W 2.2k $\Omega$ -J	C 203	154P331030	CHIP CAPACITOR	CH50V 12pF-J
R 737	103P402090	CHIP RESISTOR	1/10W 2.2k $\Omega$ -J	C 205	141P135080	CHIP CAPACITOR	F25V 0.1 $\mu$ F-Z
R 738	103P402050	CHIP RESISTOR	1/10W 1k $\Omega$ -J	C 207	154P330030	CHIP CAPACITOR	CK50V 2pF-C
R 739	103P404090	CHIP RESISTOR	1/10W 100k $\Omega$ -J	C 208	154P330030	CHIP CAPACITOR	CK50V 2pF-C
R 740	103P403070	CHIP RESISTOR	1/10W 10k $\Omega$ -J	C 209	154P330080	CHIP CAPACITOR	CH50V 7pF-C
R 741	103P403070	CHIP RESISTOR	1/10W 10k $\Omega$ -J	C 212	141P135080	CHIP CAPACITOR	F25V 0.1 $\mu$ F-Z
R 742	103P403070	CHIP RESISTOR	1/10W 10k $\Omega$ -J	C 213	141P135080	CHIP CAPACITOR	F25V 0.1 $\mu$ F-Z
R 743	103P403070	CHIP RESISTOR	1/10W 10k $\Omega$ -J	C 214	141P135080	CHIP CAPACITOR	F25V 0.1 $\mu$ F-Z
R 744	103P402010	CHIP RESISTOR	1/10W 470 $\Omega$ -J	C 217	154P331090	CHIP CAPACITOR	CH50V 22pF-J
R 745	103P403070	CHIP RESISTOR	1/10W 10k $\Omega$ -J	C 221	154P335090	CHIP CAPACITOR	CH50V 1000pF-J
R 748	103P403070	CHIP RESISTOR	1/10W 10k $\Omega$ -J	C 222	141P139030	CHIP CAPACITOR	B25V 0.1 $\mu$ F-K
R 749	103P403070	CHIP RESISTOR	1/10W 10k $\Omega$ -J	C 227	154P335010	CHIP CAPACITOR	CH50V 470pF-J
R 750	103P403070	CHIP RESISTOR	1/10W 10k $\Omega$ -J	C 229	141P135080	CHIP CAPACITOR	F25V 0.1 $\mu$ F-Z
R 753	103P473090	CHIP RESISTOR	1/10W 3.9k $\Omega$ -F	C 230	154P335010	CHIP CAPACITOR	CH50V 470pF-J
R 754	103P404090	CHIP RESISTOR	1/10W 100k $\Omega$ -J	C 232	141P135080	CHIP CAPACITOR	F25V 0.1 $\mu$ F-Z
R 755	103P403070	CHIP RESISTOR	1/10W 10k $\Omega$ -J	C 237	141P130090	CHIP CAPACITOR	B50V 1000pF-K
R 760	103P472010	CHIP RESISTOR	1/10W 680 $\Omega$ -F	C 238	141P130090	CHIP CAPACITOR	B50V 1000pF-K
R 761	103P403070	CHIP RESISTOR	1/10W 10k $\Omega$ -J	C 240	154P331010	CHIP CAPACITOR	CH50V 10pF-C
R 762	103P471010	CHIP RESISTOR	1/10W 270 $\Omega$ -F	C 241	141P135080	CHIP CAPACITOR	F25V 0.1 $\mu$ F-Z
R 763	103P471010	CHIP RESISTOR	1/10W 270 $\Omega$ -F	C 243	141P135080	CHIP CAPACITOR	F25V 0.1 $\mu$ F-Z
R 771	103P401070	CHIP RESISTOR	1/10W 220 $\Omega$ -J	C 245	141P135080	CHIP CAPACITOR	F25V 0.1 $\mu$ F-Z
R 772	103P401000	CHIP RESISTOR	1/10W 56 $\Omega$ -J	C 247	141P135080	CHIP CAPACITOR	F25V 0.1 $\mu$ F-Z
R 773	103P401000	CHIP RESISTOR	1/10W 56 $\Omega$ -J	C 248	141P130090	CHIP CAPACITOR	B50V 1000pF-K
R 774	103P401000	CHIP RESISTOR	1/10W 56 $\Omega$ -J	C 250	154P331090	CHIP CAPACITOR	CH50V 22pF-J
R 775	103P401000	CHIP RESISTOR	1/10W 56 $\Omega$ -J	C 251	141P133080	CHIP CAPACITOR	F50V 0.01 $\mu$ F-Z
R 776	103P401000	CHIP RESISTOR	1/10W 56 $\Omega$ -J	C 254	141P135070	CHIP CAPACITOR	F16V 1 $\mu$ F-Z
R 777	103P401000	CHIP RESISTOR	1/10W 56 $\Omega$ -J	C 259	141P133080	CHIP CAPACITOR	F50V 0.01 $\mu$ F-Z
R 778	103P401000	CHIP RESISTOR	1/10W 56 $\Omega$ -J	C 401	141P130050	CHIP CAPACITOR	B50V 470pF-K
				C 402	141P130050	CHIP CAPACITOR	B50V 470pF-K
				C 403	141P131030	CHIP CAPACITOR	B50V 2200pF-K
				C 404	141P131030	CHIP CAPACITOR	B50V 2200pF-K

[W] : P500W

[E] : P500E

SYMBOL NO.	PARTS NO.	PARTS NAME	DESCRIPTION
C 406	141P135080	CHIP CAPACITOR	F25V 0.1 μF-Z
C 408	141P135080	CHIP CAPACITOR	F25V 0.1 μF-Z
C 704	141P132010	CHIP CAPACITOR	B50V 0.01 μF-K
C 708	141P135080	CHIP CAPACITOR	F25V 0.1 μF-Z
C 709	141P132010	CHIP CAPACITOR	B50V 0.01 μF-K
C 710	141P132010	CHIP CAPACITOR	B50V 0.01 μF-K
C 711	141P135080	CHIP CAPACITOR	F25V 0.1 μF-Z
C 712	141P135080	CHIP CAPACITOR	F25V 0.1 μF-Z
C 713	141P135080	CHIP CAPACITOR	F25V 0.1 μF-Z
C 714	141P135080	CHIP CAPACITOR	F25V 0.1 μF-Z
C 715	141P132010	CHIP CAPACITOR	B50V 0.01 μF-K
C 716	141P132010	CHIP CAPACITOR	B50V 0.01 μF-K
C 720	141P135080	CHIP CAPACITOR	F25V 0.1 μF-Z
C 721	141P135080	CHIP CAPACITOR	F25V 0.1 μF-Z
C 723	141P132010	CHIP CAPACITOR	B50V 0.01 μF-K
C 724	141P133080	CHIP CAPACITOR	F50V 0.01 μF-Z
C 725	141P133080	CHIP CAPACITOR	F50V 0.01 μF-Z
C 727	141P133080	CHIP CAPACITOR	F50V 0.01 μF-Z
C 730	141P132010	CHIP CAPACITOR	B50V 0.01 μF-K
C 771	141P135080	CHIP CAPACITOR	F25V 0.1 μF-Z
C 772	141P135080	CHIP CAPACITOR	F25V 0.1 μF-Z
C 773	141P135080	CHIP CAPACITOR	F25V 0.1 μF-Z
C 775	141P135080	CHIP CAPACITOR	F25V 0.1 μF-Z
C 776	141P135080	CHIP CAPACITOR	F25V 0.1 μF-Z
C 777	141P135080	CHIP CAPACITOR	F25V 0.1 μF-Z
C 778	141P135080	CHIP CAPACITOR	F25V 0.1 μF-Z
C 779	141P135080	CHIP CAPACITOR	F25V 0.1 μF-Z
C 780	154P330060	CHIP CAPACITOR	CH50V 5pF-C
C 781	154P330060	CHIP CAPACITOR	CH50V 5pF-C
C 782	141P135080	CHIP CAPACITOR	F25V 0.1 μF-Z
C 783	141P135080	CHIP CAPACITOR	F25V 0.1 μF-Z
△ C 901	189P153080	METAL POLYESTER AC-C	AC250V 0.047 μF-M
△ C 902	189P153080	METAL POLYESTER AC-C	AC250V 0.22 μF-M
△ C 904	189P094030	AC CERAMIC CAPACITOR	ACT4K B470pF-K
△ C 905	189P094030	AC CERAMIC CAPACITOR	ACT4K B470pF-K
△ C 906	189P153080	METAL POLYESTER AC-C	AC250V 0.047 μF-M
△ C 907	189P094030	AC CERAMIC CAPACITOR	ACT4K B470pF-K
C 909	189P075010	PLASTIC-PP CAPACITOR	800V 0.01 μF-J
△ C 920	185D107060	ELECTROLYTIC-C	H450V 330 μF-M 30X45
SWITCHES			
	439P035010	LIMIT SWITCH(OPEN PCB ASSY)	ESE11SV1
S 201	431C104010	DIP SWITCH	JKS3121-0104
S 701	439C041010	SWITCH	8BIT
S 702	432P189010	KEY BOARD SWITCH	
S 703	432P189010	KEY BOARD SWITCH	
S 704	432P189010	KEY BOARD SWITCH	
S 705	432P189020	KEY BOARD SWITCH	1-1 H=5
S 706	432P189020	KEY BOARD SWITCH	1-1 H=5
S 707	432P189020	KEY BOARD SWITCH	1-1 H=5
△ S 901	432C067020	PUSH SWITCH	2-1 AC250V 8A
MISCELLANEOUS			
	411D030010	FERRITE CORE	TR-20-10-10
	243C165030	LEAD CARD	29PIN L=120

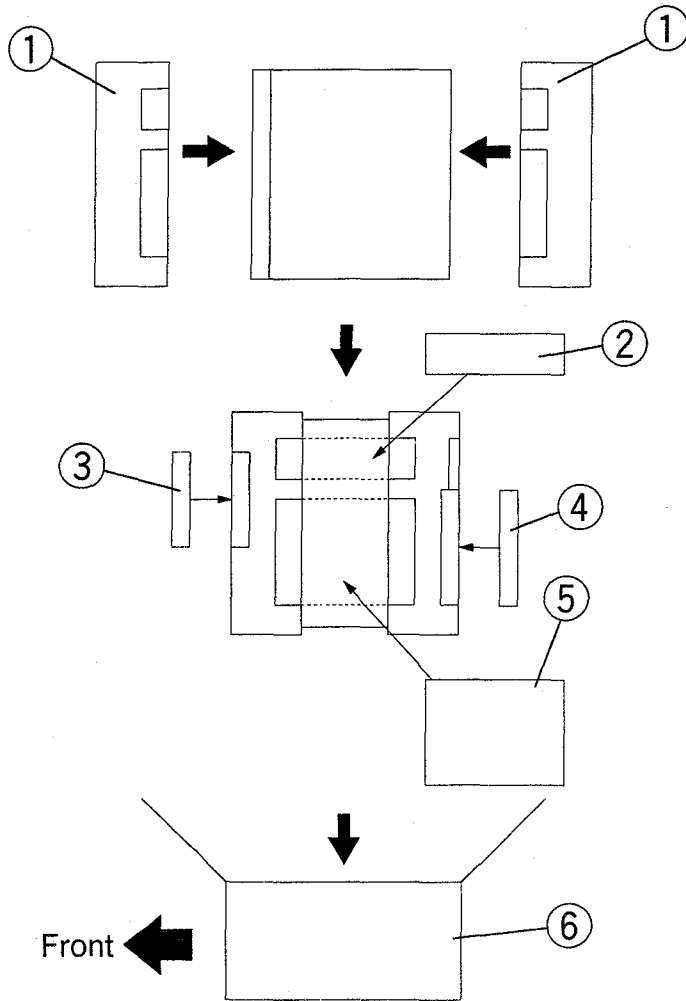
SYMBOL NO.	PARTS NO.	PARTS NAME	DESCRIPTION
	243C212010	PAPER DETECTION SENS	
	243C214010	PAIR SENS	
	243C213010	PAPER DETECTION SENS	
	621D745010	PAPER CORE	PA6
△	451D046010	POWER JACK (3PIN)	INLET-AC-3P
	916B042001	POWER UNIT	
BZ301	286P011010	BUZZER	PKM22EPP-4001
CF771	299P185010	CERAMIC OSCILLATOR	CSA20.00MX204
△ F 901	283D102070	FUSE	T4AH
△ F 902	283D102070	FUSE	T4AH
IC702	449P013090	IC SOCKET	28PIN
J 701	451C066010	JACK	
K 201	287P058010	RELAY	G5A-237P DC12V
L 903	411D021010	FERRITE CORE	
△ PC901	268P049020	PHOTO COUPLER	TLP732
△ PC902	268P049020	PHOTO COUPLER	TLP732
△ RV901	265P105020	VARIATOR	ENC471D-10A
△ RV902	265P105020	VARIATOR	ENC471D-10A
TH901	264P705010	THYRISTOR	TF361M-A
△ Z 901	265P103010	VARIATOR	DSA-362MA-UL
PRINTED CIRCUIT BOARD ASSY'S			
*△	936C099001	FRONT1 PCB ASSY	
*△	936C100001	FRONT2 PCB ASSY	
*△	936B090001	MAIN PCB ASSY	
*△	936D069001	MODE PCB ASSY	
*△	936D068001	OPEN PCB ASSY	
*△	936B091001	POWER PCB ASSY	
MECHANICAL PARTS			
	956D097001	GEAR ASSY	
	521C009010	BELT	204-2GT-4
	622D572010	PLATEN BUSH	POM
	288P171010	COOLING FAN	0610-12
	552C007040	CUT WASHER	3.0X5.4-0.5(10pcs)
	596C330010	CUTTER	
	642C207020	DAMPER	2G50-J
	621C569010	GEAR (A)	POM
	630C153010	GEAR (B)	C3604
	630C154010	GEAR (C)	C3604
	596D408010	DAMPER GEAR	
	859D055030	GEAR GREASE	PG-641 20G
	859D055070	GEAR GREASE	MOLYTONE GREASE
	630C152010	PLATEN GEAR	
	621C518010	SWITCH LEVER	POM
	621C524010	PULLEY	
	621C523010	PULLEY GEAR	
	685C002070	RETAINING RING	E-4(10pcs)
	685C002090	RETAINING RING	E-6(10pcs)
	685C002030	RETAINING RING	E1.5(10pcs)
	685C002040	RETAINING RING	ES-2(10pcs)
	685C002060	RETAINING RING	E-3(10pcs)
	522C101010	ROLLER	
	669D375090	SCREW	M2.6X4CU(10pcs)
	669D245010	SCREW	M4X0.7-8(10pcs)

[W] : P500W

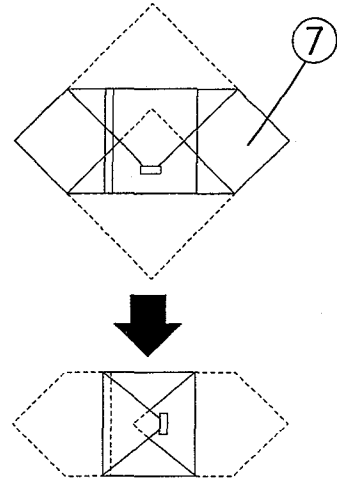
[E] : P500E

SYMBOL NO.	PARTS NO.	PARTS NAME	DESCRIPTION	SYMBOL NO.	PARTS NO.	PARTS NAME	DESCRIPTION
	669D204030	SCREW	M3X5-0.5(10pcs)				
	669D425020	SCREW	4X8 NI(10pcs)				
	669D220020	SCREW	3X8 46LA005(10pcs)				
	669D212040	SCREW	3X10(10pcs)				
	669D229010	SCREW	M3X6 46LA005				
	572D681010	SPRING	A SUS304-WPB D1.1				
	572D040010	FE ARM SPRING	SUS304 WPB				
	572D880010	CAM SPRING	SUS304-WPB				
	572D878010	TENSION SPRING	SUS304				
	288P163010	STEP MOTOR	PK244-01A-C51				
	669D229090	SCREW	M3.0X4 46LA005				
	669D199060	SCREW	M2-4(10pcs)				
	442D111010	EARTH TERMINAL					
	460P169010	HEAD UNIT					
		COSMETIC PARTS					
	754C025010	POWER BUTTON					
	702B991010	DOOR					
	761C437010	DOOR CATCH					
	734C025010	LEVEL KNOB					
	734D579010	LEVER KNOB					
	771D051010	PAD					
	702C953030	PANEL DOOR					
△	701A614010	FRONT PANEL					
	590A540010	REAR PANEL					
	710A088010	TOP PANEL					
	669D197020	SCREW	D=M3 L=4				
		PACKING PARTS AND ACCESSORY					
△	246C064010	AC POWER CORD					[W]
△	242C795090	AC POWER CORD					[E]
	242D232010	BNC CABLE	BNC-BNC 2.0m				
	803A437010	CUSHION					
	871C952080	INSTRUCTION BOOK					
	801C296010	PACKING CASE					[W]
	801C296020	PACKING CASE					[E]
	831D183040	PACKING BAG	400X270				
	831D190030	PACKING SHEET	800X800				
*	939P221060	REMOTE HAND UNIT					
	857P005010	CLEANING PAPER					
	859C435070	JIG	EXTENSION-CORD(10P)				

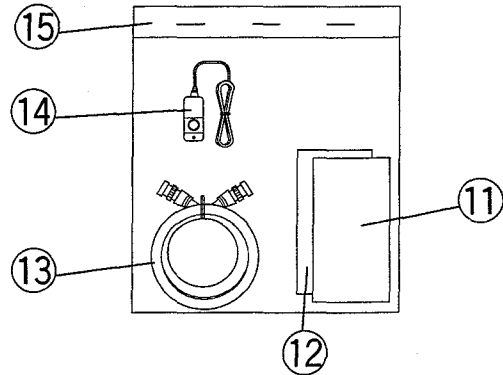
# PACKING PARTS



**How to pack product**  
Pack with gloss side out.

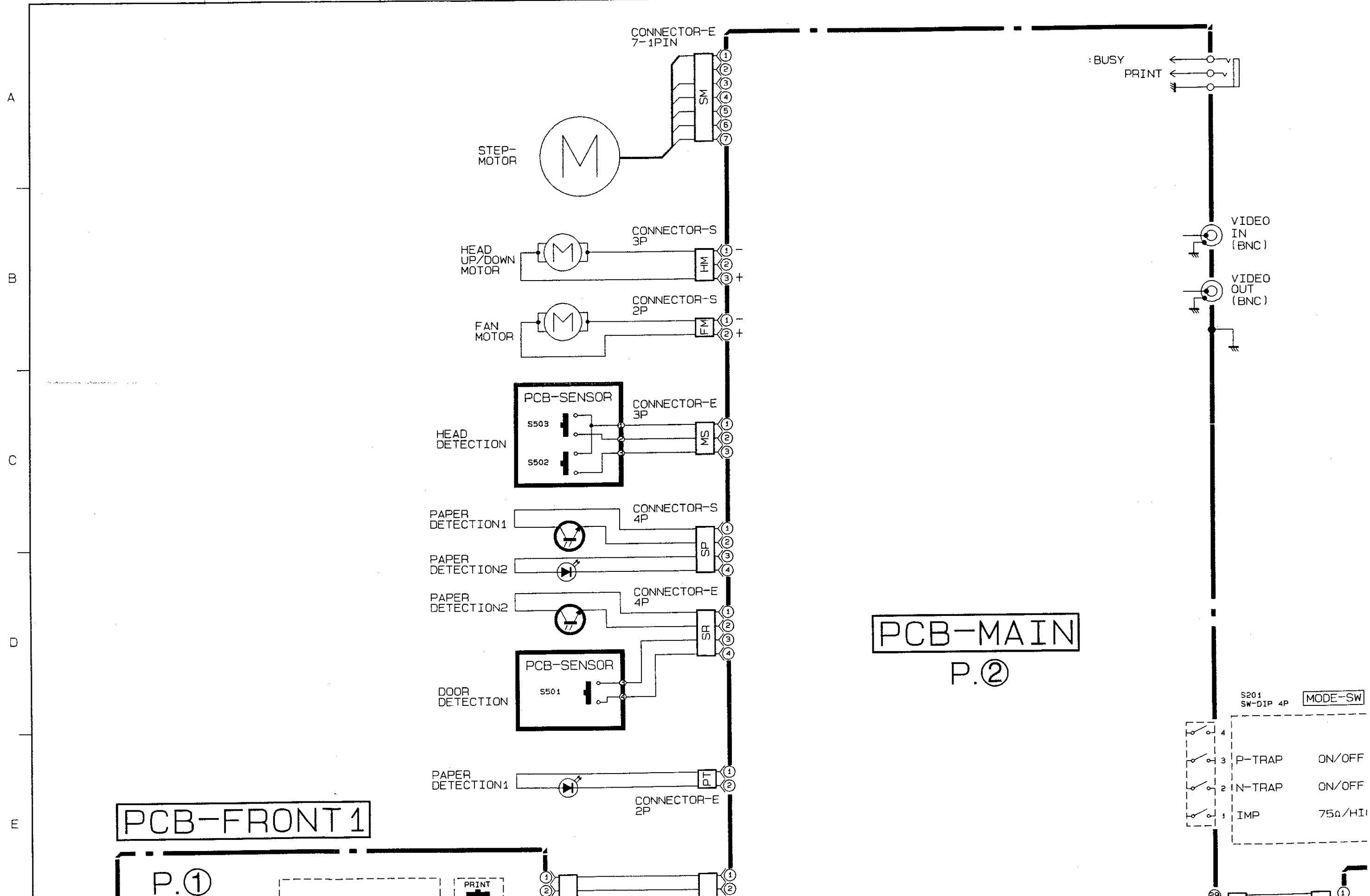


Accessory



ITEM NO.	PARTS NO.	PARTS NAME	DESCRIPTION
1	803A437010	CUSHION	
△ 2	246C064010	AC POWER CORD	[W]
△ 3	242C795090	AC POWER CORD	[E]
4	☆	PAPER	(859P026030)
5	☆	ACCESSORY	(859D151001) [W]
5	☆	ACCESSORY	(859D151002) [E]
6	801C296010	PACKING CASE	[W]
6	801C296020	PACKING CASE	[E]
7	831D190030	PACKING SHEET	800X800
<b>ACCESSORY</b>			
11	871C952080	INSTRUCTION BOOK	
12	857P005010	CLEANING PAPER	
13	242D232010	BNC CABLE	BNC-BNC 2.0m
* 14	939P221060	REMOTE HAND UNIT	
15	831D183040	PACKING BAG	400X270

☆:Not a stocked item.



PCB-MAIN

P.②

PCB-FRONT 1

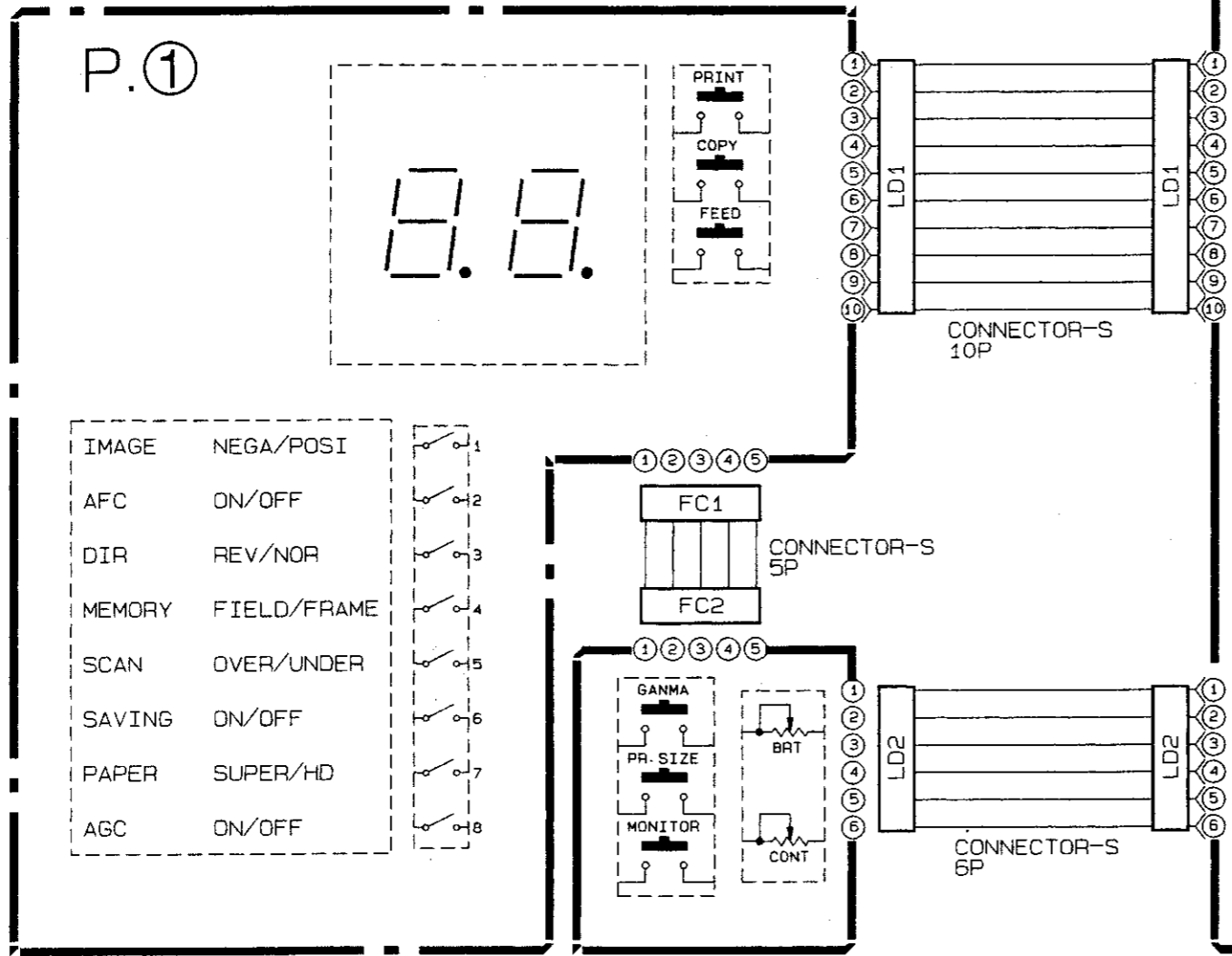
P.①

S201 SW-DIP 4P MODE-SW

4		
3	P-TRAP	ON/OFF
2	N-TRAP	ON/OFF
1	IMP	75Ω/HI

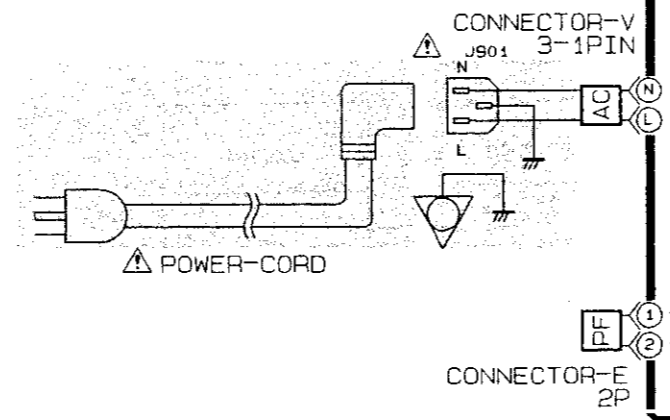
E  
F  
G  
H  
I  
J

# PCB-FRONT 1

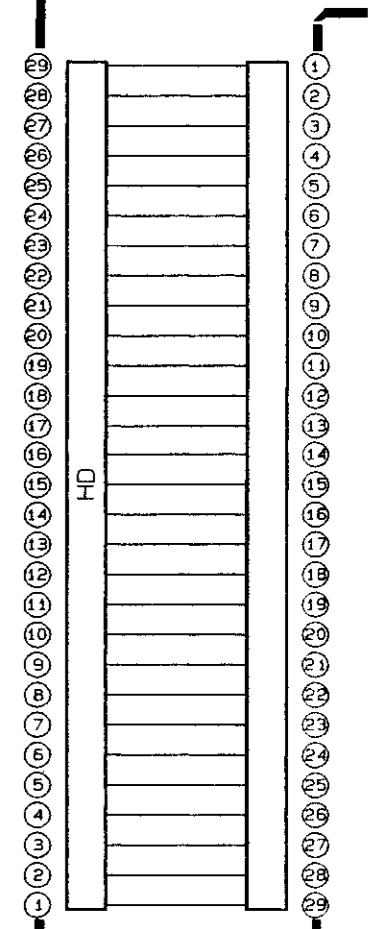


# PCB-FRONT 2

P. 1



- 3 P-TRAP ON/OFF
- 2 N-TRAP ON/OFF
- 1 IMP 75Ω/HI

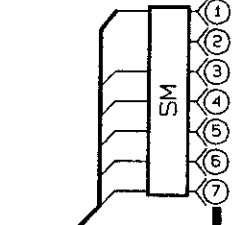


# PCB-POWER

P. 3



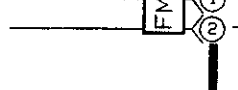
CONNECTOR-E  
7-1PIN



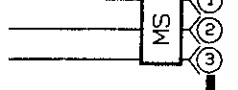
CONNECTOR-S  
3P



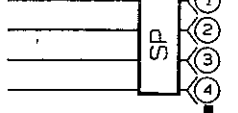
CONNECTOR-S  
2P



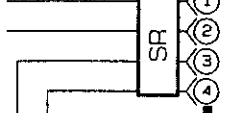
CONNECTOR-E  
3P



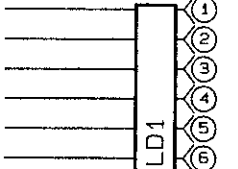
CONNECTOR-S  
4P



CONNECTOR-E  
4P

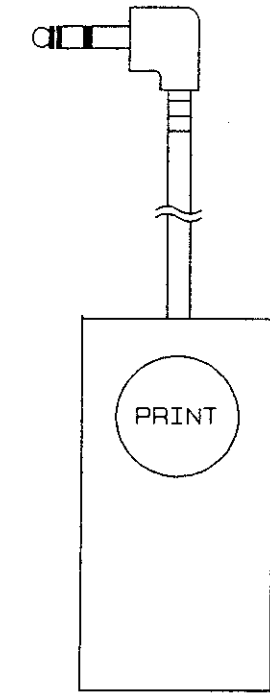


CONNECTOR-E  
2P

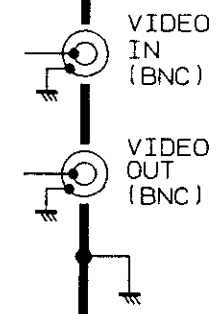


BUSY  
PRINT

REMOTE-JACK

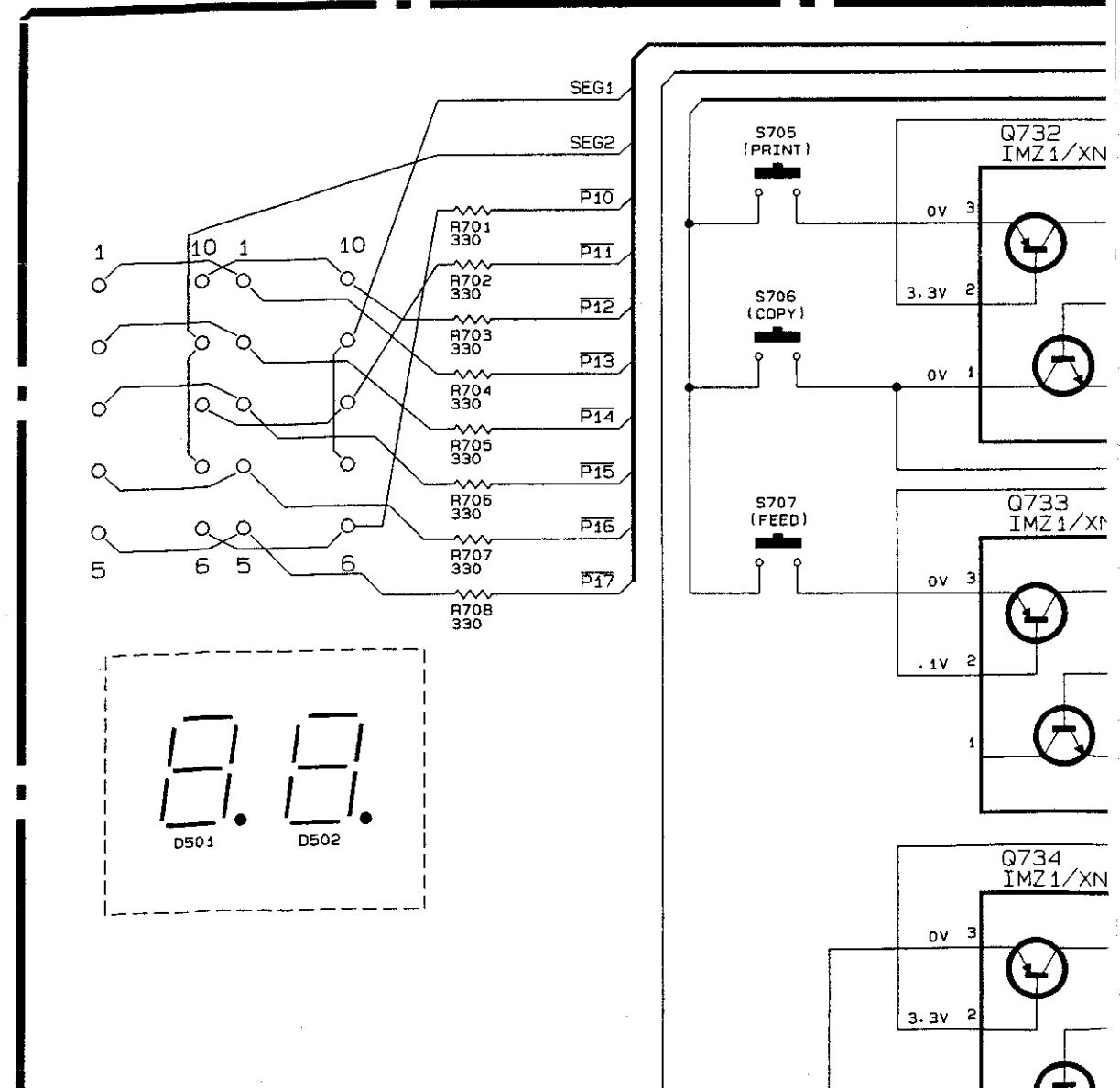
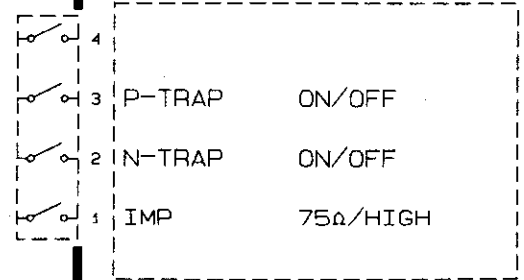


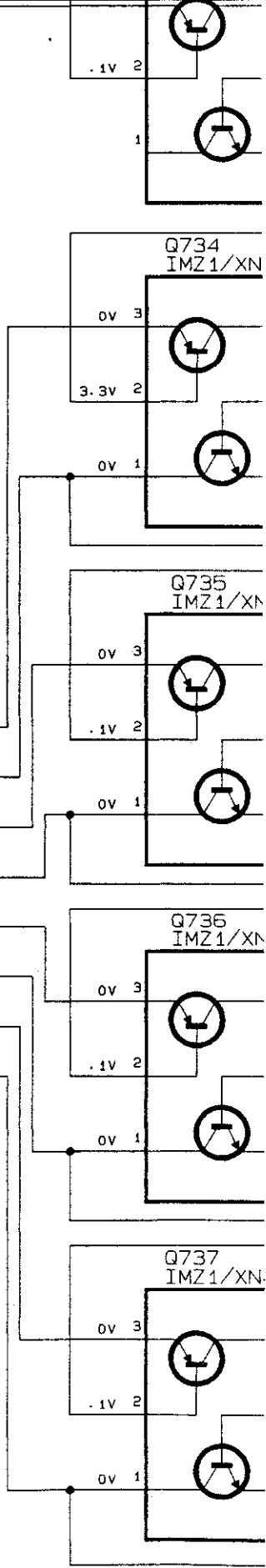
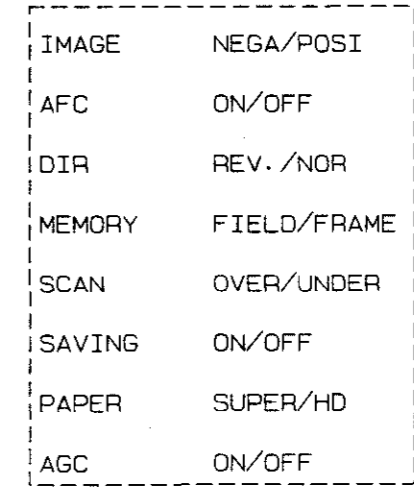
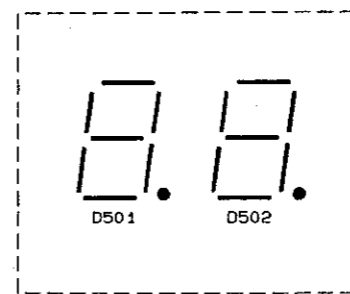
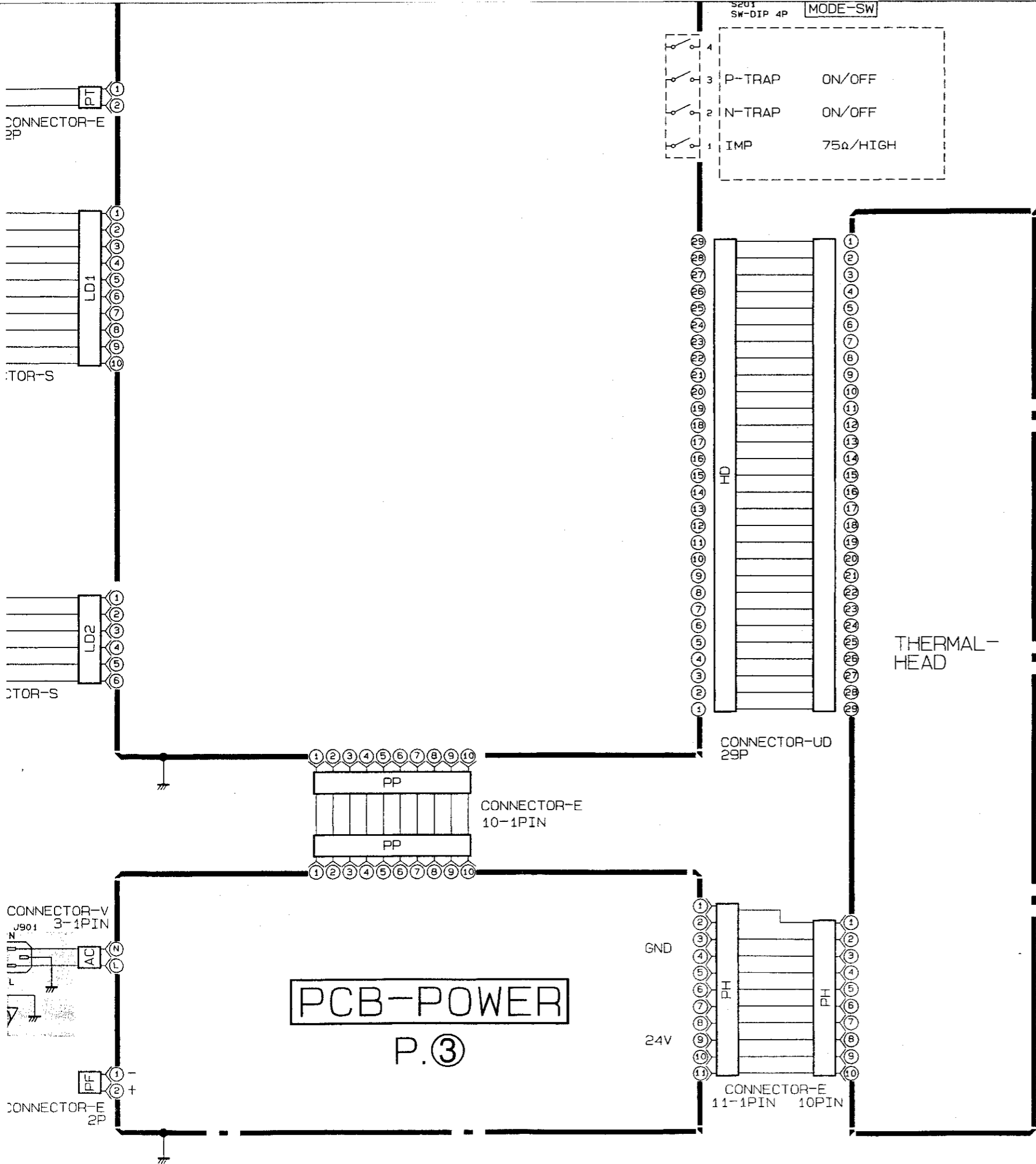
REMOTE-UNIT



PCB-MAIN  
P.②

S201  
SW-DIP 4P MODE-SW



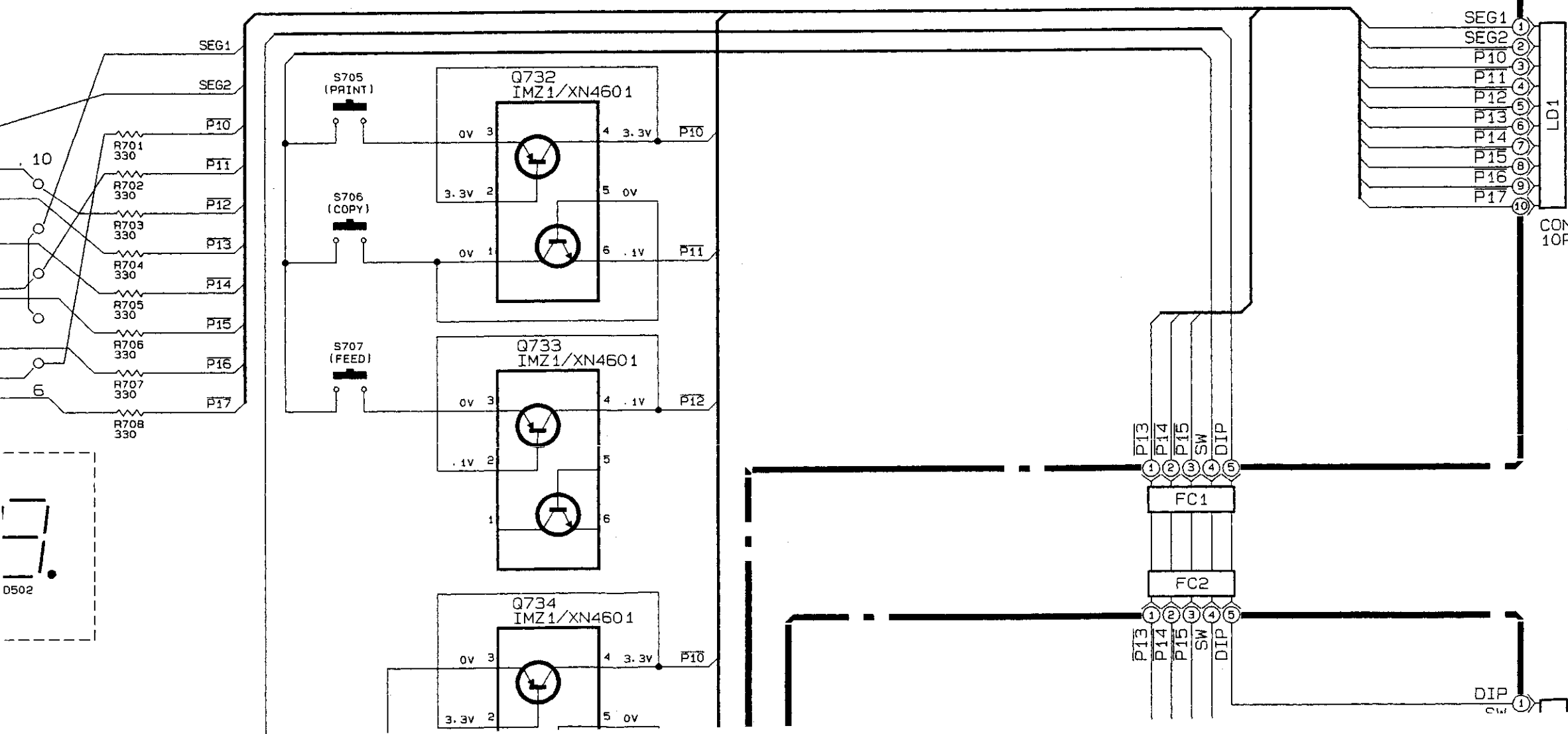


### SCHEMATIC DIAGRAM MODEL : P500W P500E

- NOTE
- DC voltages were measured from points indicated to the circuit ground with a high-Z voltmeter.
- Waveforms were taken with step wave (provided with window) signal.
- TP6A, etc. show Test Points.
- CAPACITORS

Value	Not indicated	PF, for numbers more than 1 μF, for numbers less than 1
Dielectric Strength	Not indicated :50V	
Tolerance	Not indicated =±10%	No Tolerance is indicated for electrolytic capacitors and ±20%
	G=±2% J=±5% K=±10% M=±20%	P=+100% -0% Z=+80% -20%
Sort	Not indicated : Ceramic capacitor	C=±0.25PF D=±0.5PF F=±1PF G=±2PF
	Parts except for chips	<ul style="list-style-type: none"> <li>MP : Polyester capacitor</li> <li>PP : Polypropylene film capacitor</li> <li>ALM : Aluminum electrolytic capacitor</li> <li>TF : Twin film capacitor</li> <li>SC : Semiconductor ceramic capacitor</li> <li>MP : Metalized paper</li> <li>MPP : Metalized plastic film capacitor</li> <li>MMP : Metalized polyester capacitor</li> <li>MFPP : Polyester polypropylene film capacitor</li> <li>PS : Styrol capacitor</li> <li>TAN or TANT : Tantalum capacitor</li> <li>Electrolytic capacitor</li> <li>BP or NP : Non polarized electrolytic capacitor</li> </ul>
Chips	Not indicated : Ceramic capacitor chip	Electrolytic capacitor BP or NP : Non polarized electrolytic capacitor chip
Characteristic (only ceramic capacitor)	Not indicated : F or B (high dielectric percentage) CH, SL, etc. : Temperature compensating types	

## PCB-FRONT 1



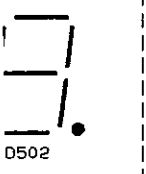
• Resistors

Value	Not indicated = Ω K = kΩ(1000Ω) M = MΩ(1000kΩ)
Wattage	Parts except for chips : Not indicated = 1/4W or 1/6W
	Chips : Not indicated = 1/10W
Tolerance	Not indicated = ±5% D = ±0.5% F = ±1%
	J = ±5% K = ±10%
Short	Not indicated : Carbon resistor
	Parts except for chips
Chip	Not indicated : Chip resistor

• This is a basic schematic diagram. Some sets may be subject to modification according to engineering improvement.

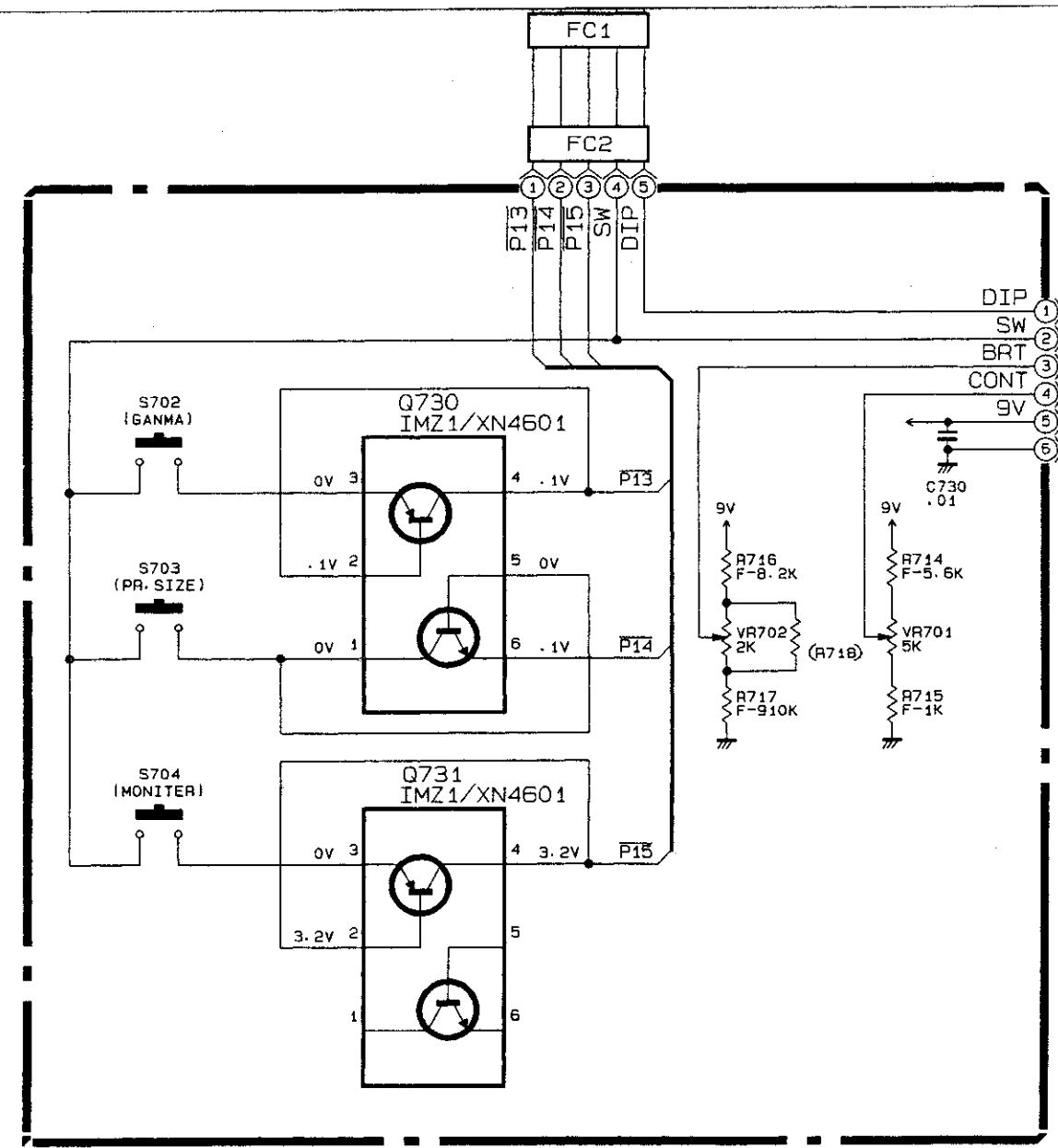
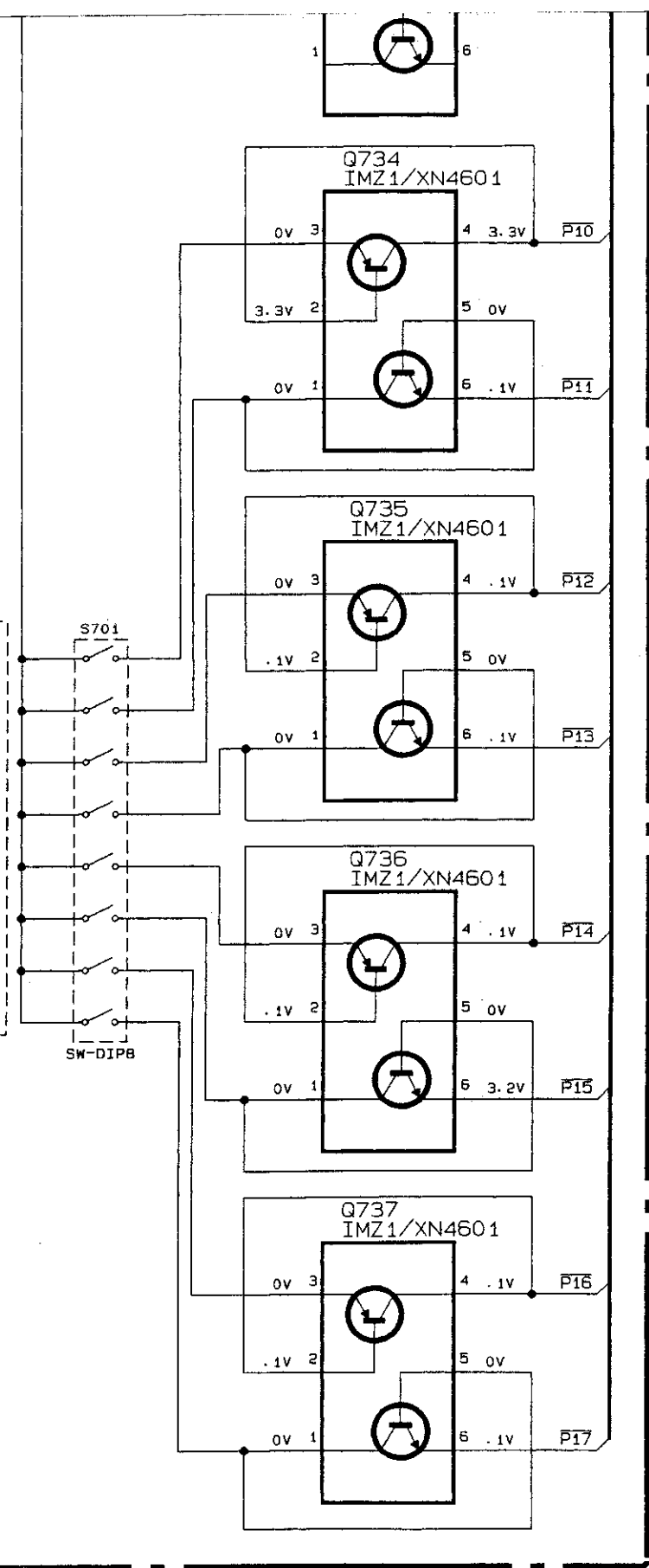
SPECIFIC SYMBOL

	Zener Diode		Crystal unit
	Variable capacitor		



D502

IMAGE NEGA/POSTI  
 AFC ON/OFF  
 DIR REV./NOR  
 MEMORY FIELD/FRAME  
 SCAN OVER/UNDER  
 SAVING ON/OFF  
 PAPER SUPER/HD  
 AGC ON/OFF



! PCB-FRONT2

Short	Not indicated	Carbon resistor
	Ⓢ	Fixed composition resistor
Parts except for chips	Ⓜ	Metal oxide film resistor (type B)
	Ⓢ	Cemented resistor
	Ⓜ	Wire wound resistor
	Ⓜ	Metal film resistor
	Ⓜ	Metal plate cement resistor
	Ⓜ	Metal liner resistor
Chip	Not indicated	Chip resistor

This is a basic schematic diagram. Some sets may be subject to modification according to engineering improvement.

SPECIFIC SYMBOL	
	Zener Diode
	Varicap
	Thermistor
	Fusible Resistor
	Crystal unit
	LE Diode
	Photo Diode
	Ceramic filter
	PNP DIGITAL TRANSISTOR
	NPN DIGITAL TRANSISTOR

**SERVICING PRECAUTION**

SYMBOLS INDICATE COMPONENTS HAVING SPECIAL CHARACTERISTICS IMPORTANT TO SAFETY AND PERFORMANCE. THEREFORE REPLACEMENT OF ANY SAFETY PARTS SHOULD BE IDENTICAL IN VALUE AND CHARACTERISTICS. FOR ACCURACY OF THE REPLACEMENT REFER TO THE PARTS LIST OF SERVICE MANUAL.

DON'T DEGRADE THE SAFETY OF THE VIDEO COPY PROCESSOR THROUGH IMPROPER SERVICING.

A

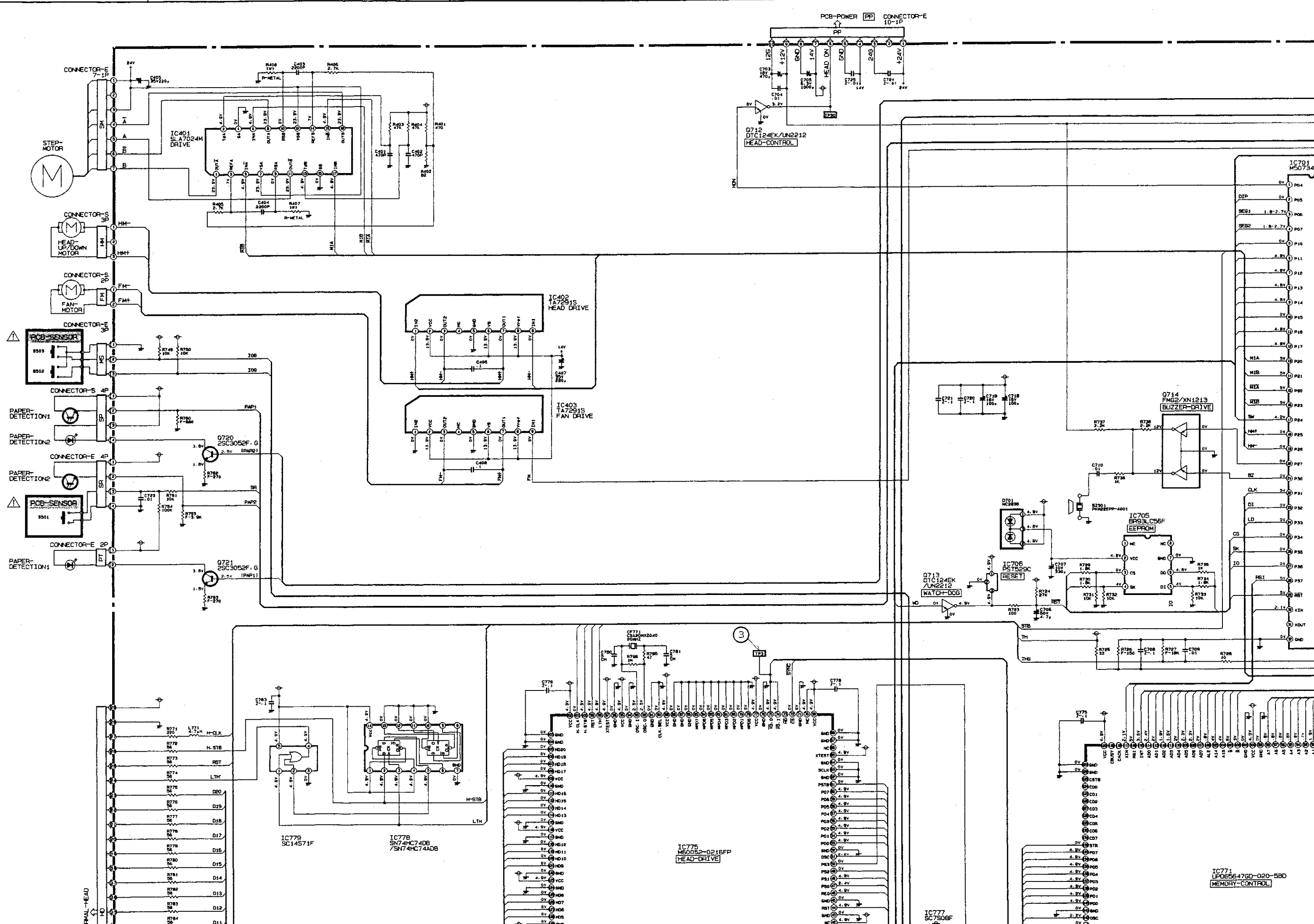
B

C

D

E

F



IC701 M50734

IC705 BR93LC56F EEPROM

IC706 PST529C RESET

IC707 SC750BF

IC775 M60052-0216FP HEAD-DRIVE

IC776 SN74HC74DB / SN74HC74ADB

IC777 SC14571F

IC778 UP0656476D-020-58D MEMORY-CONTROL

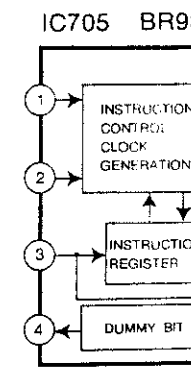
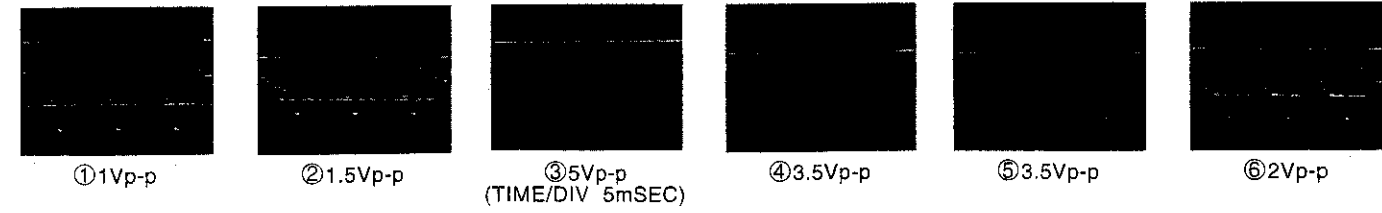
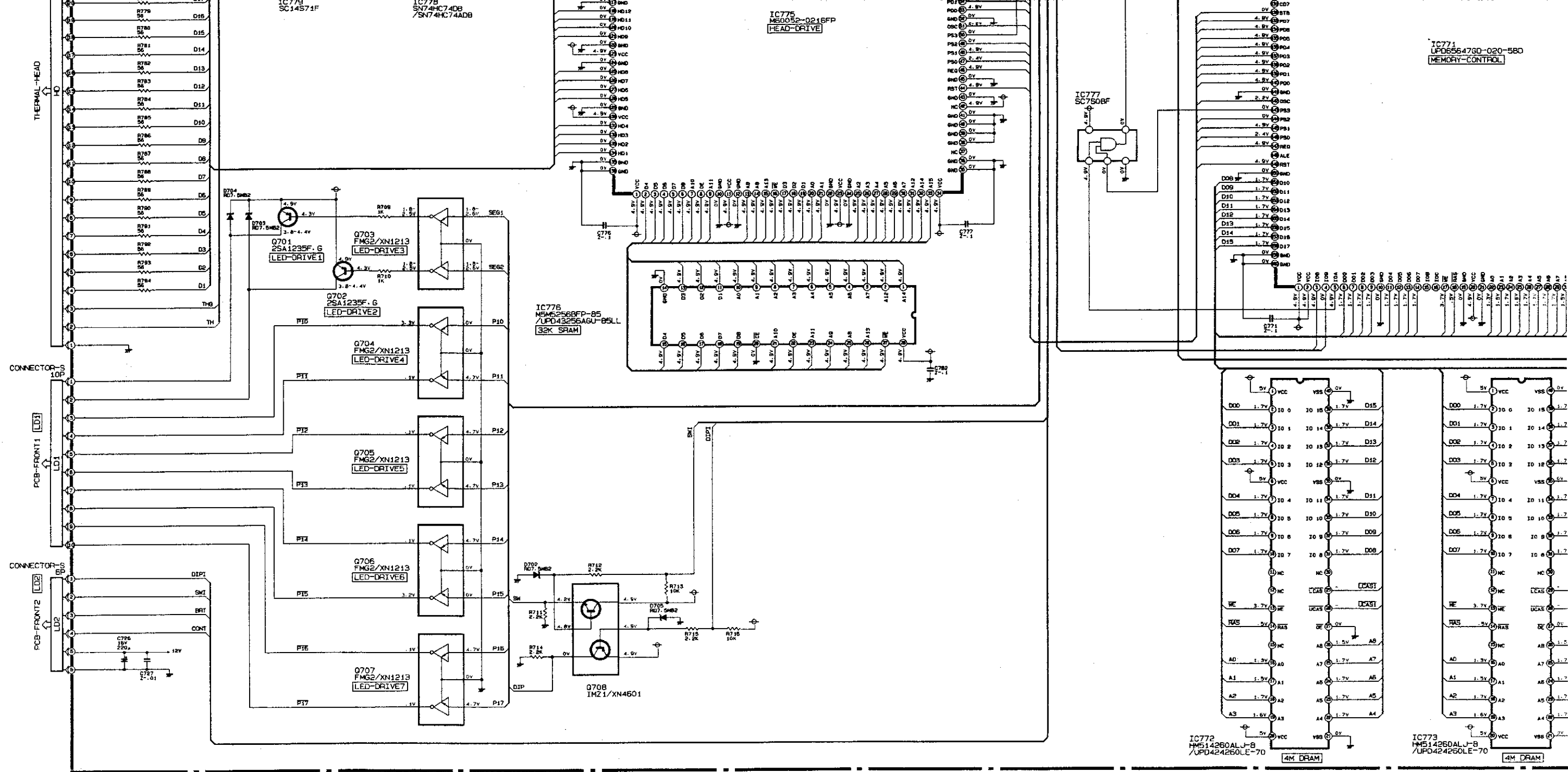
IC704 FMG8/XN1213 BUZZER-DRIVE

IC403 TA72915 FAN DRIVE

IC402 TA72915 HEAD DRIVE

IC401 SLA7024M DRIVE

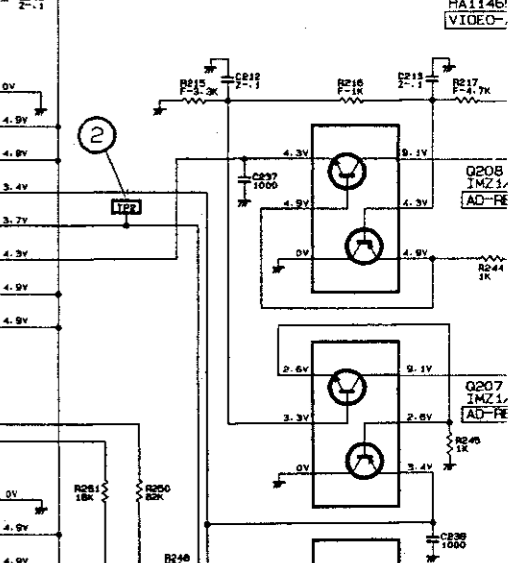
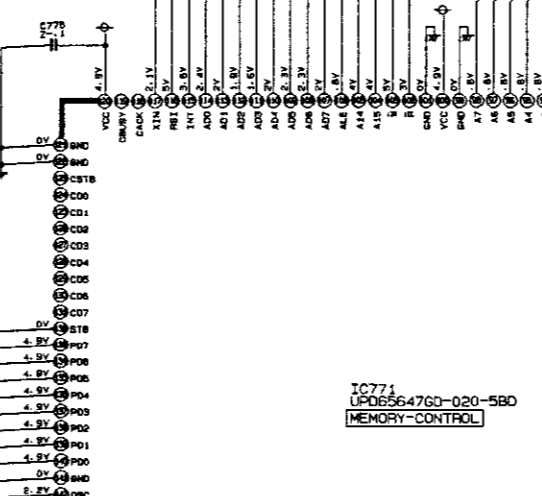
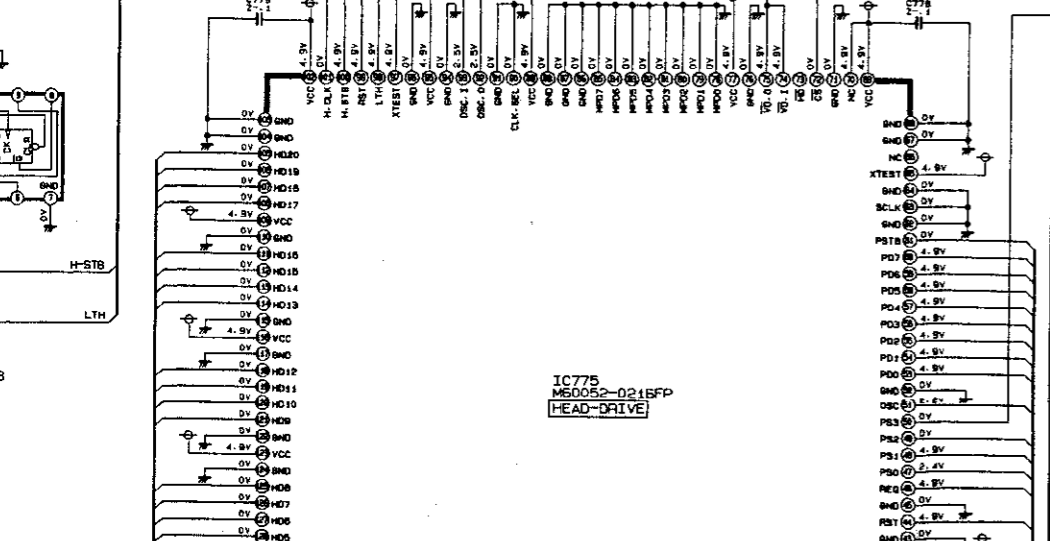
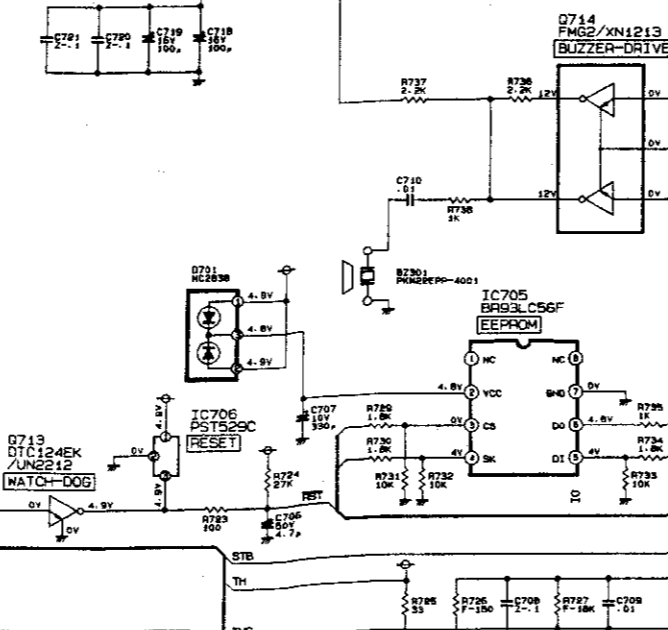
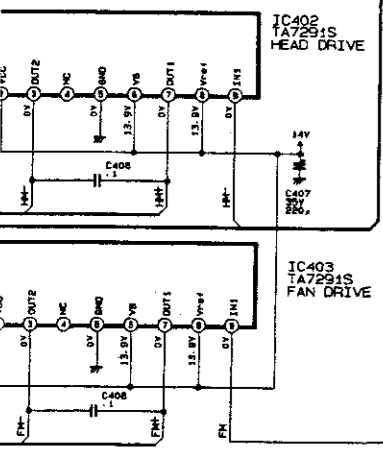
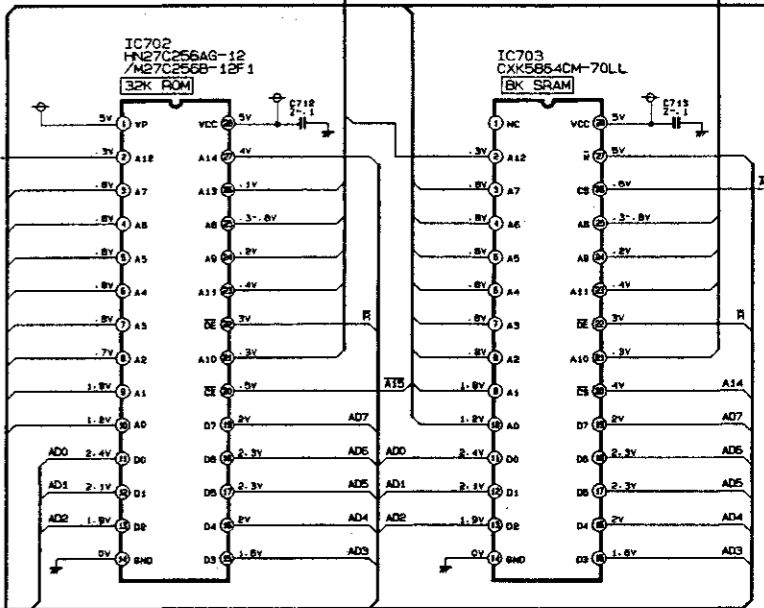
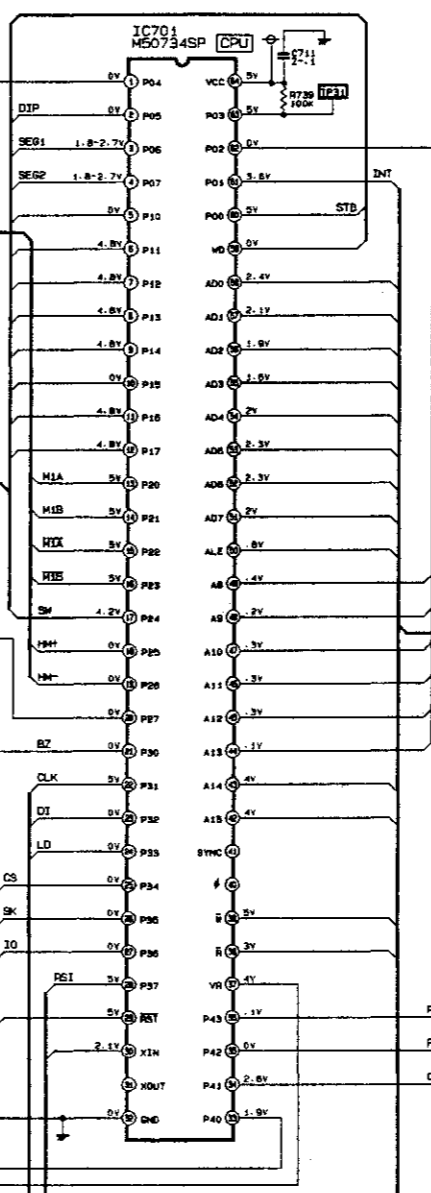
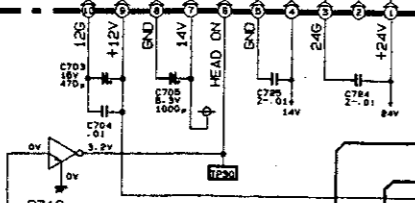
T  
G  
I  
I  
J

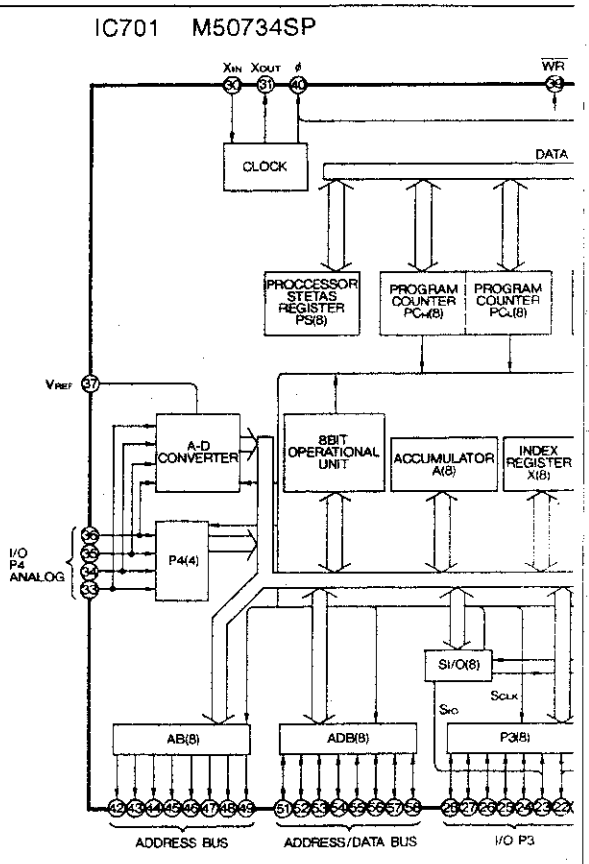
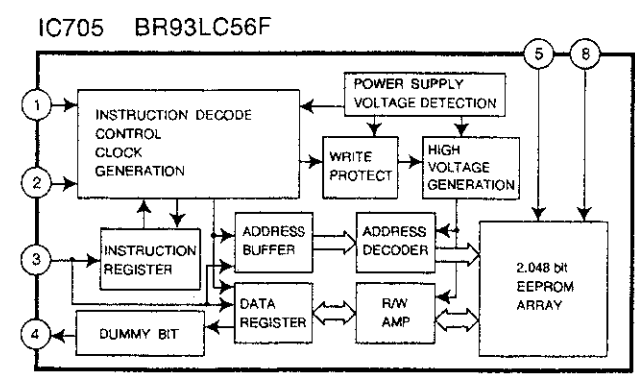
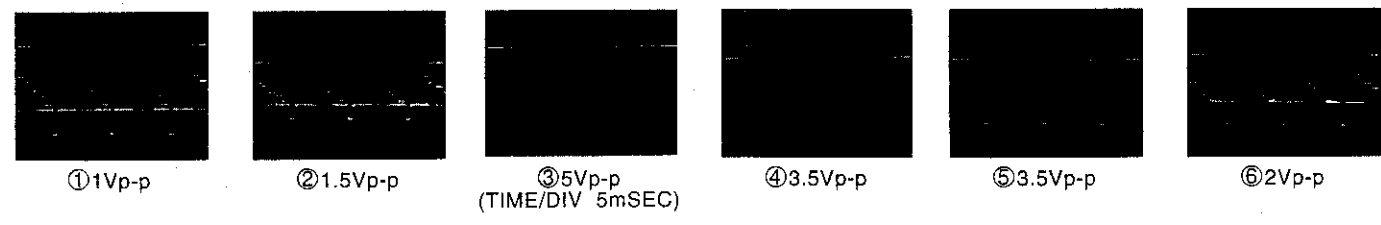
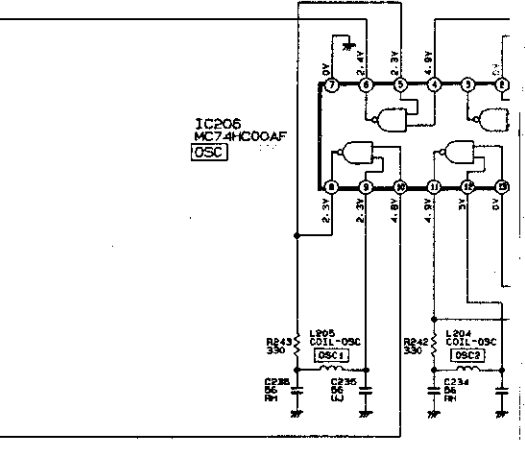
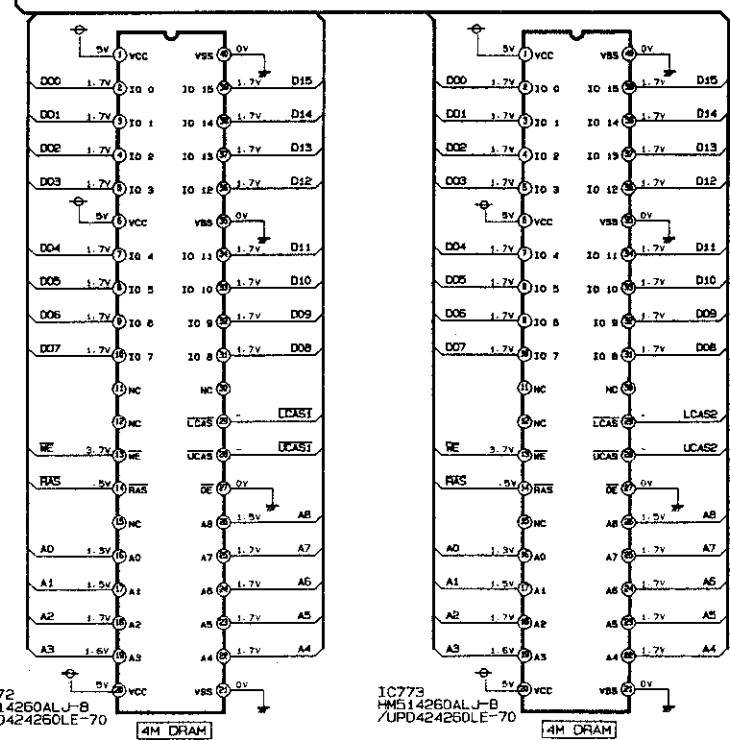
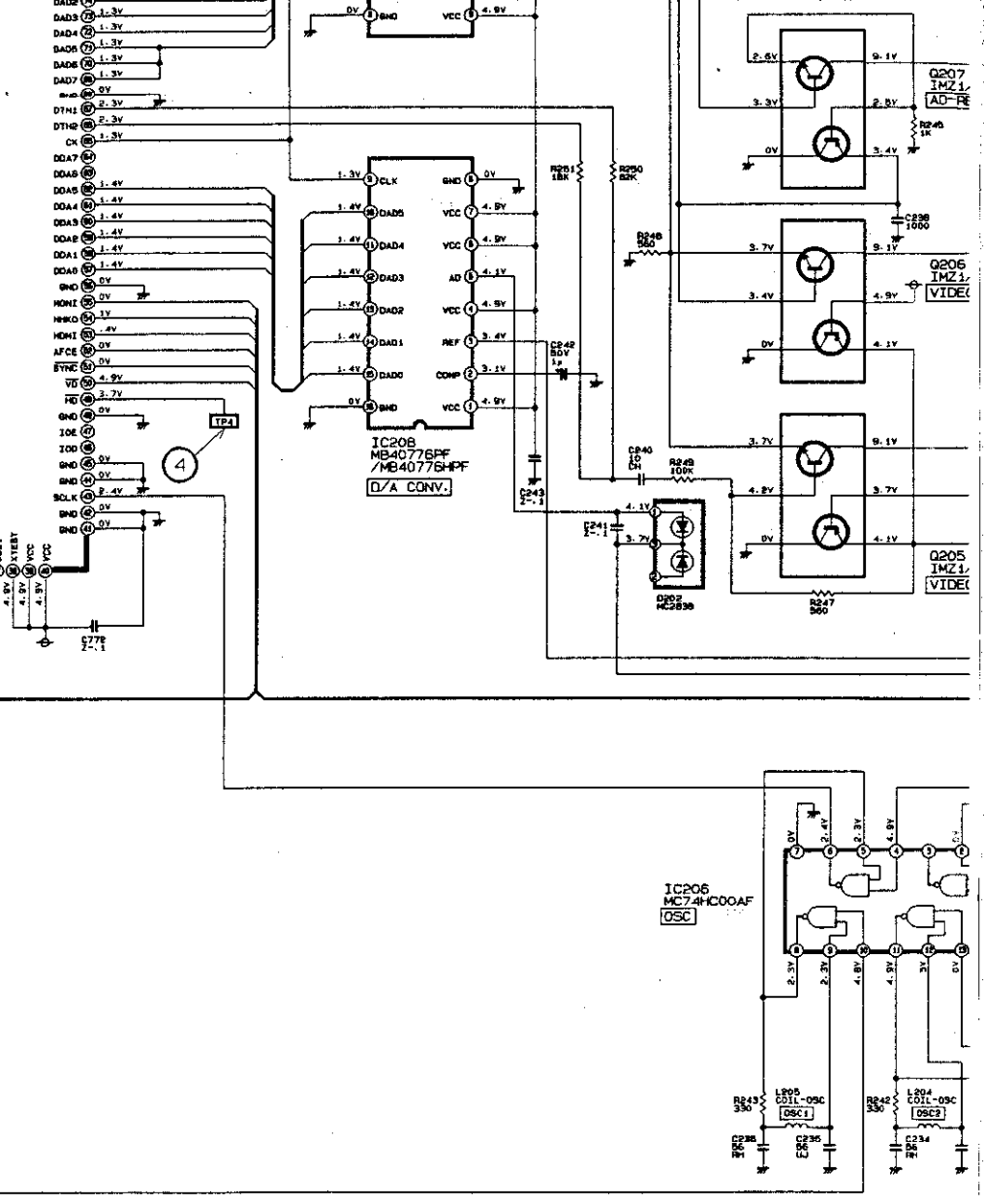
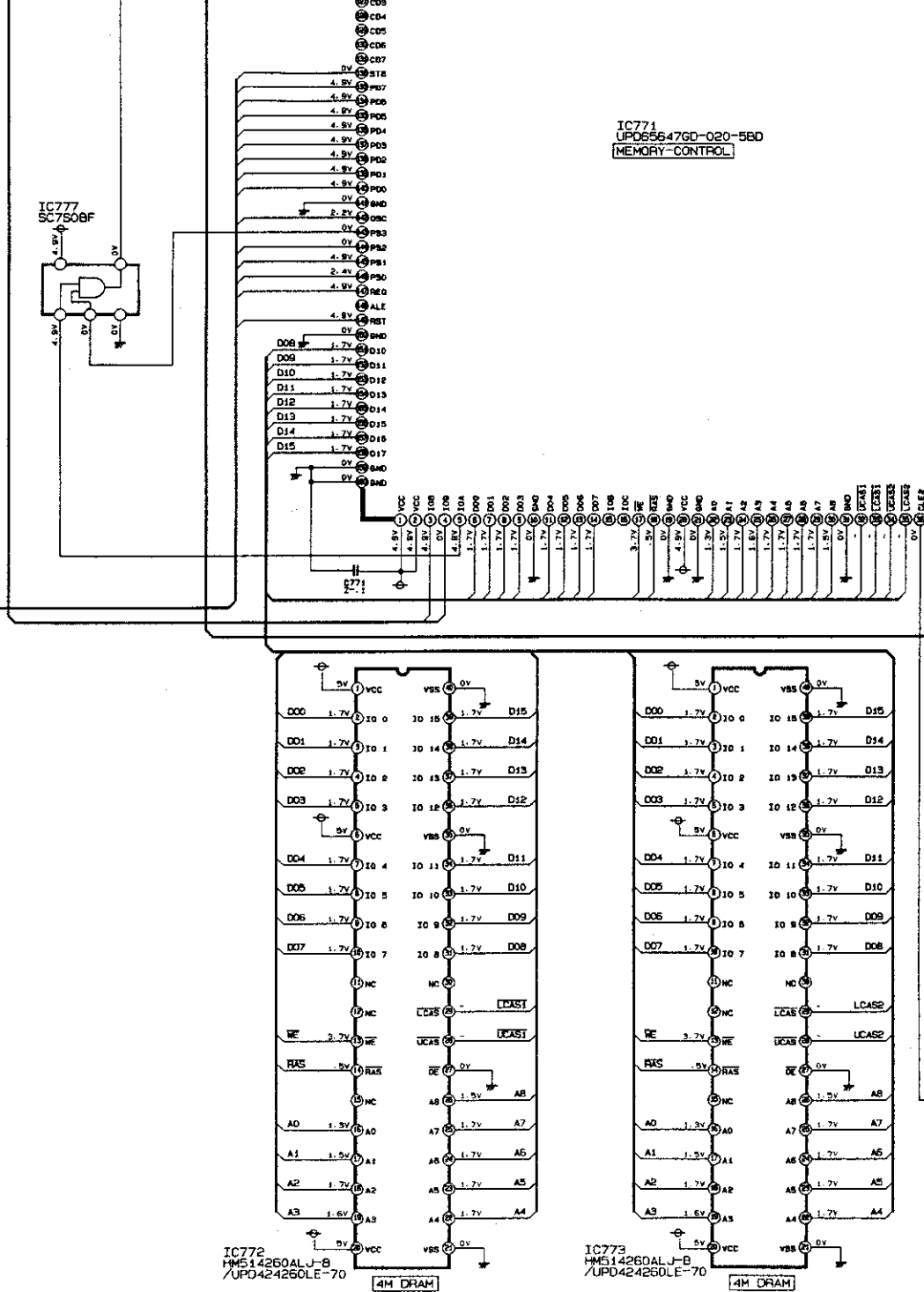
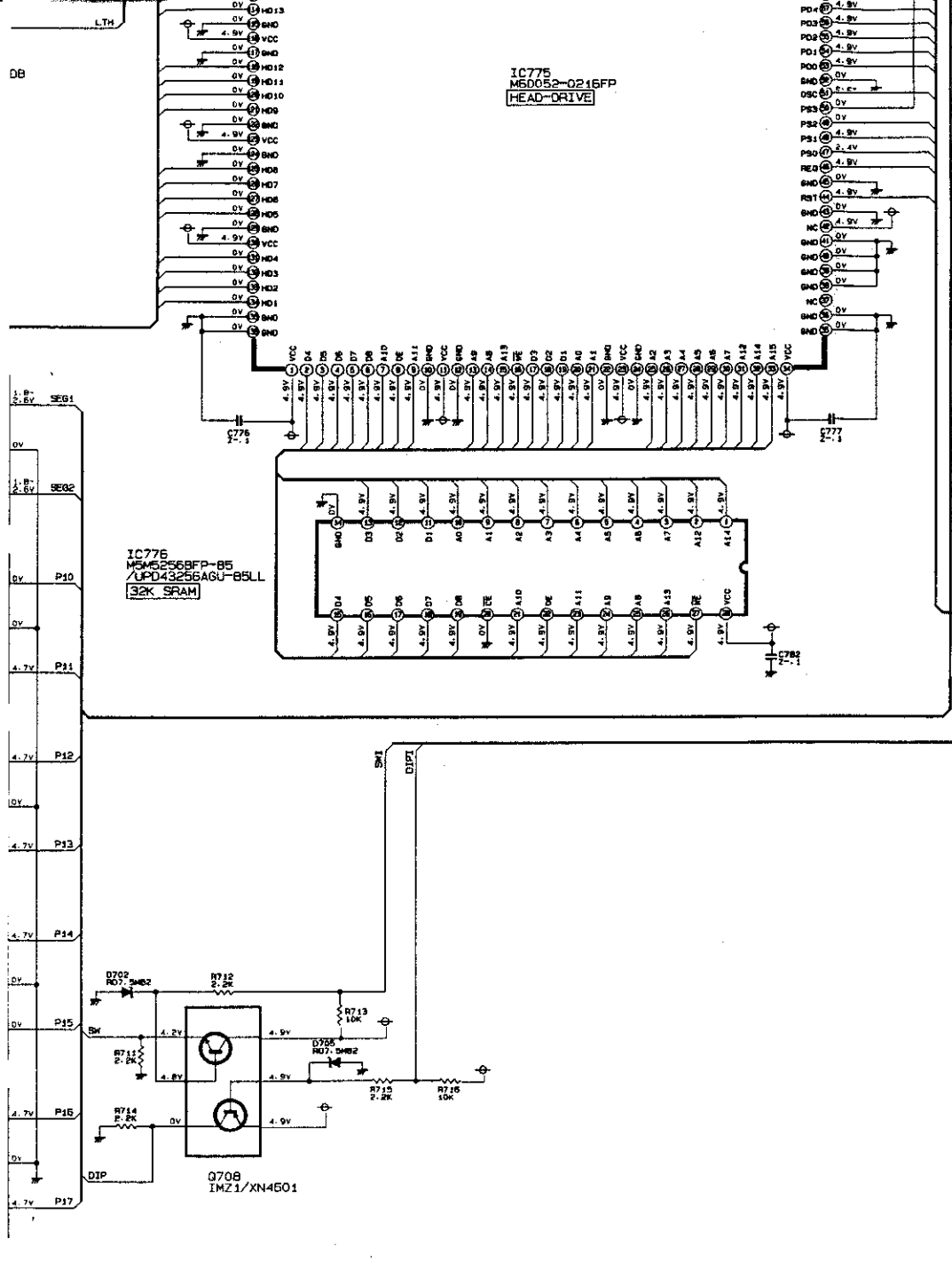


P500W  
P500E

②

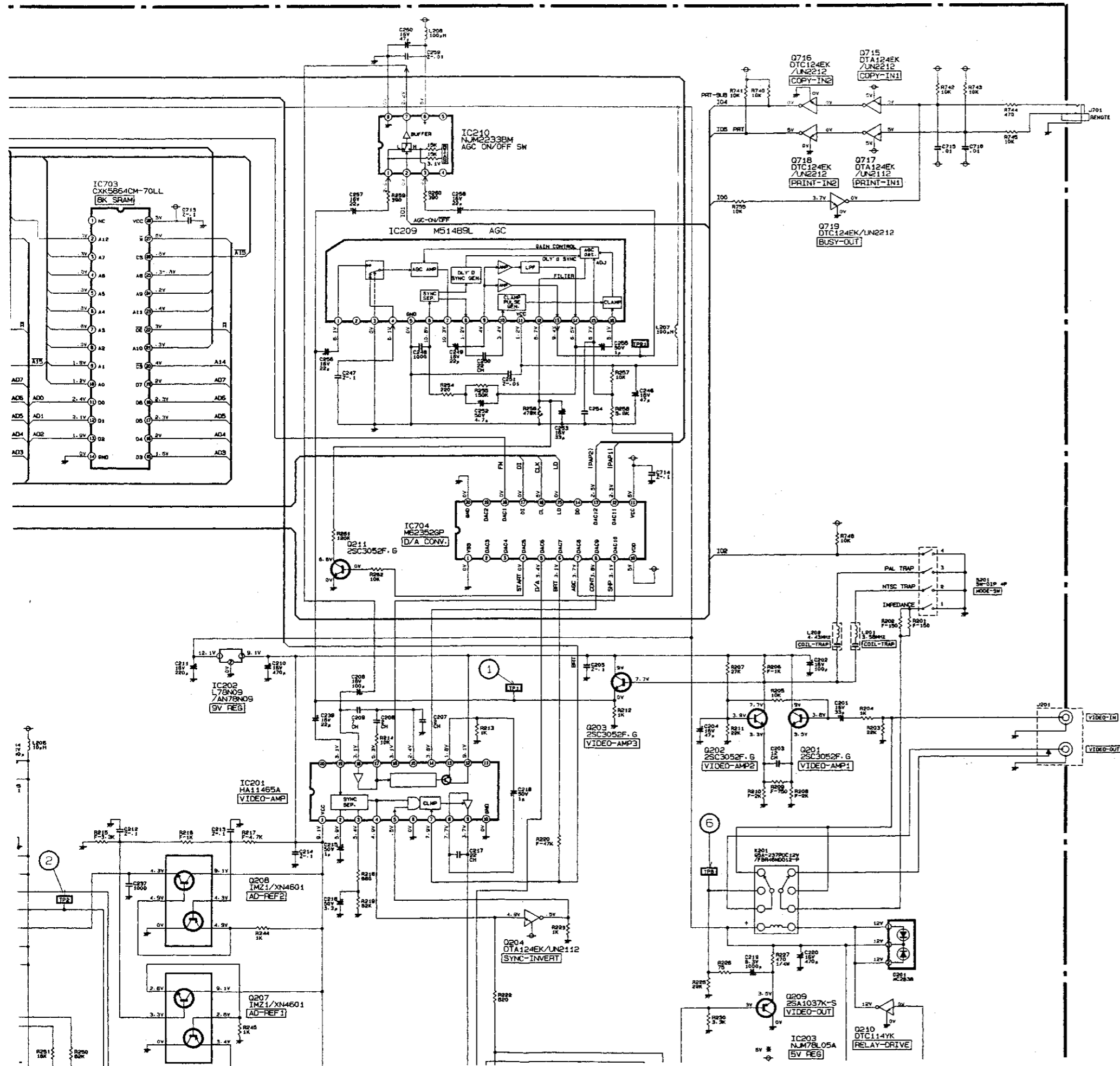
PCB-POWER PP CONNECTOR-E 10-1P



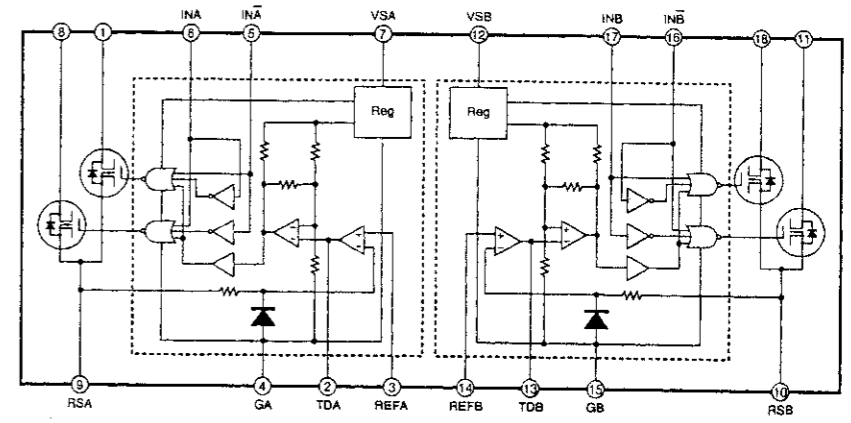




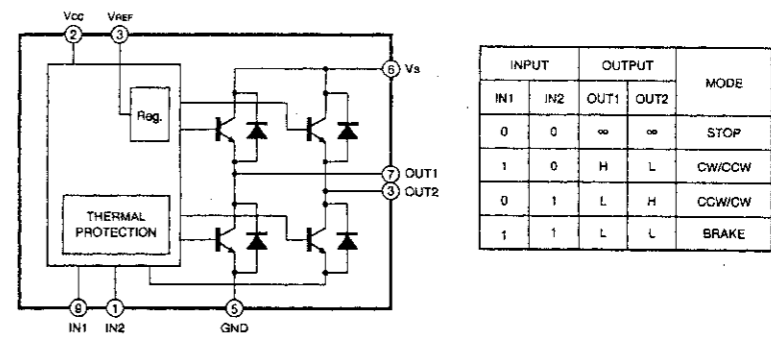
# PCB-MAIN



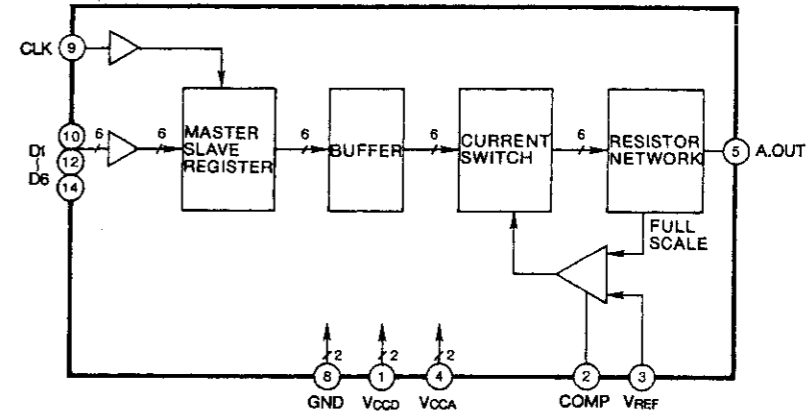
IC401 SLA7024M



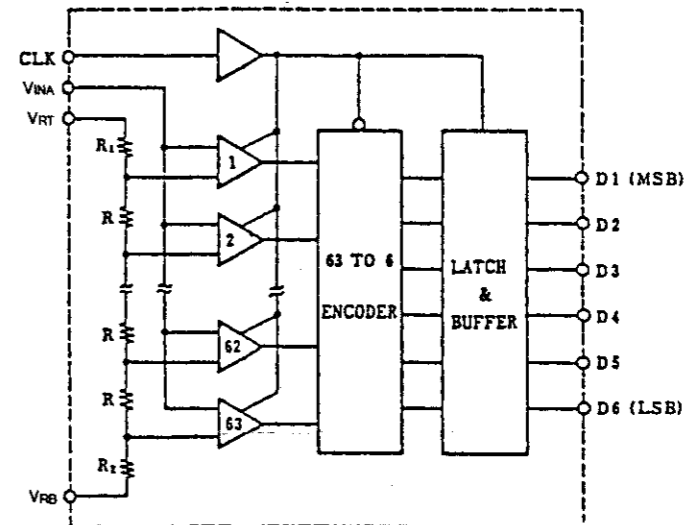
IC402,403 TA7291S

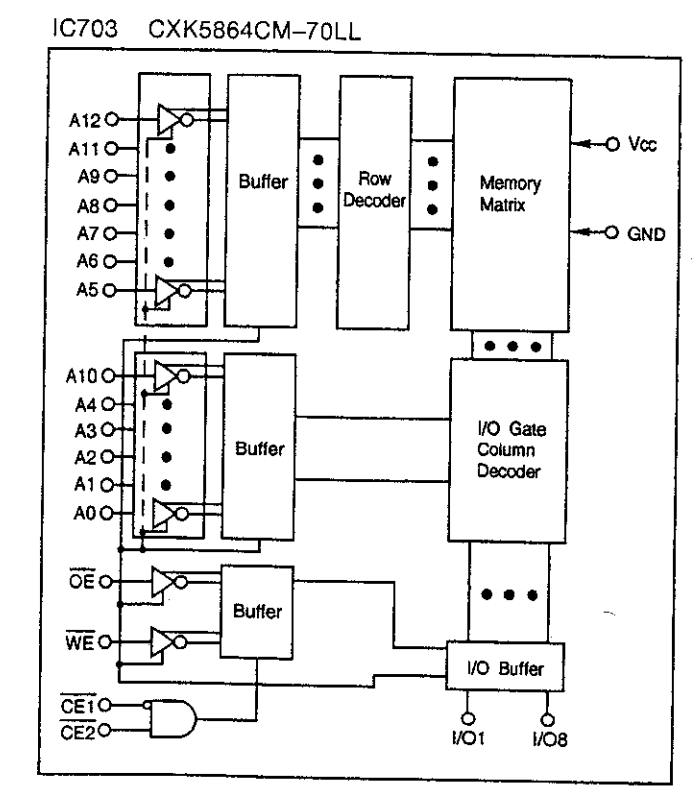
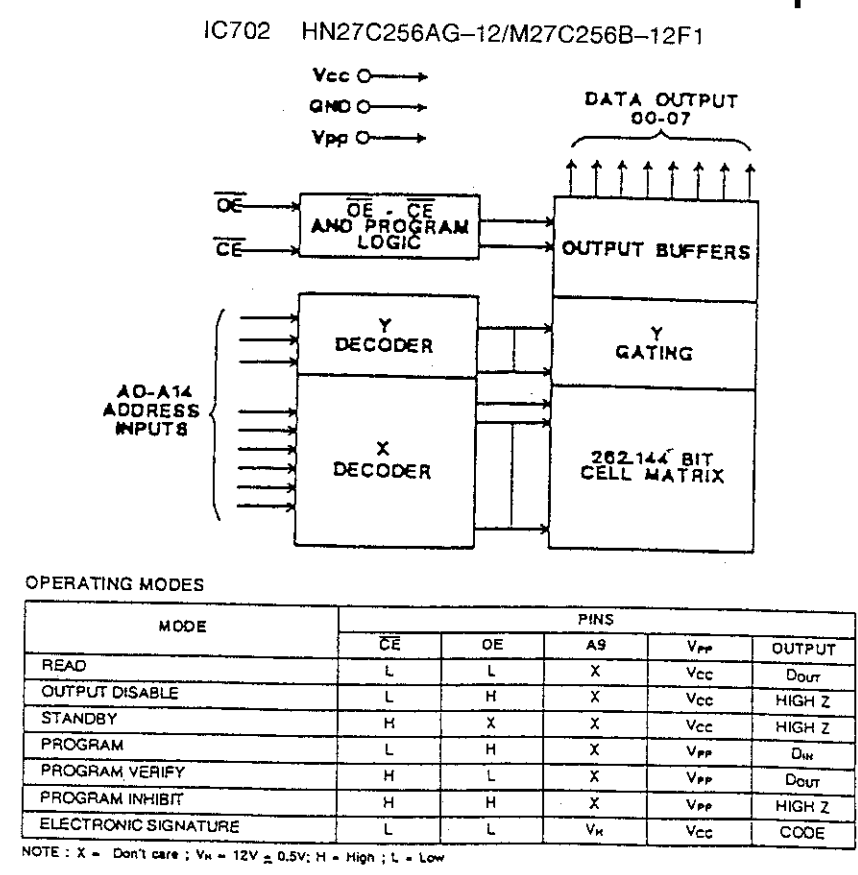
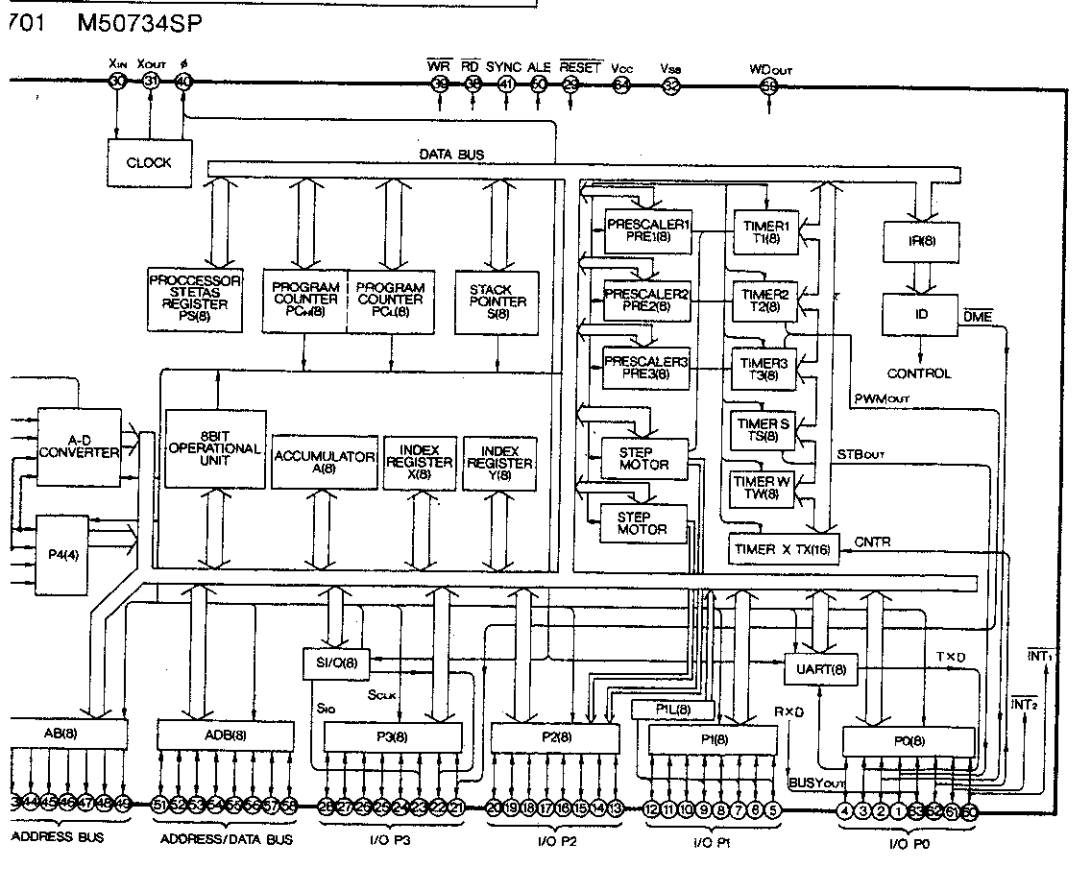
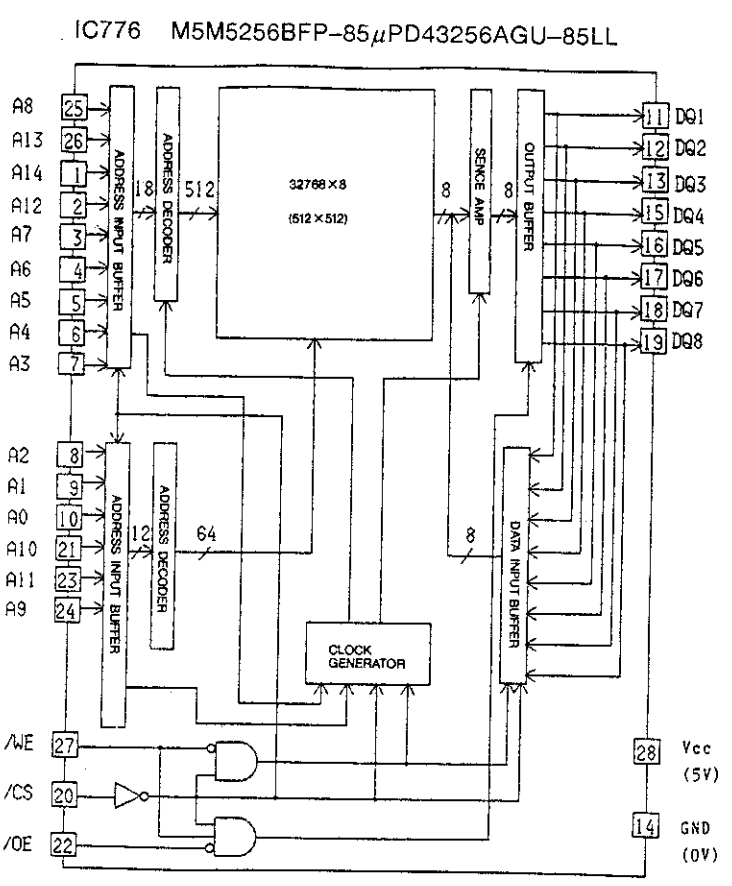
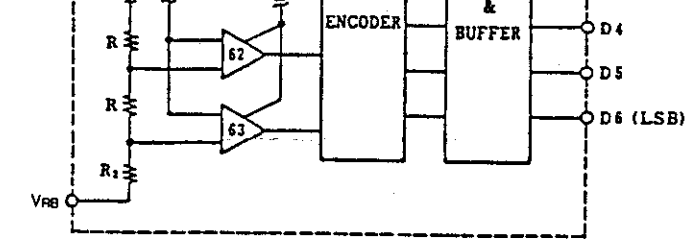
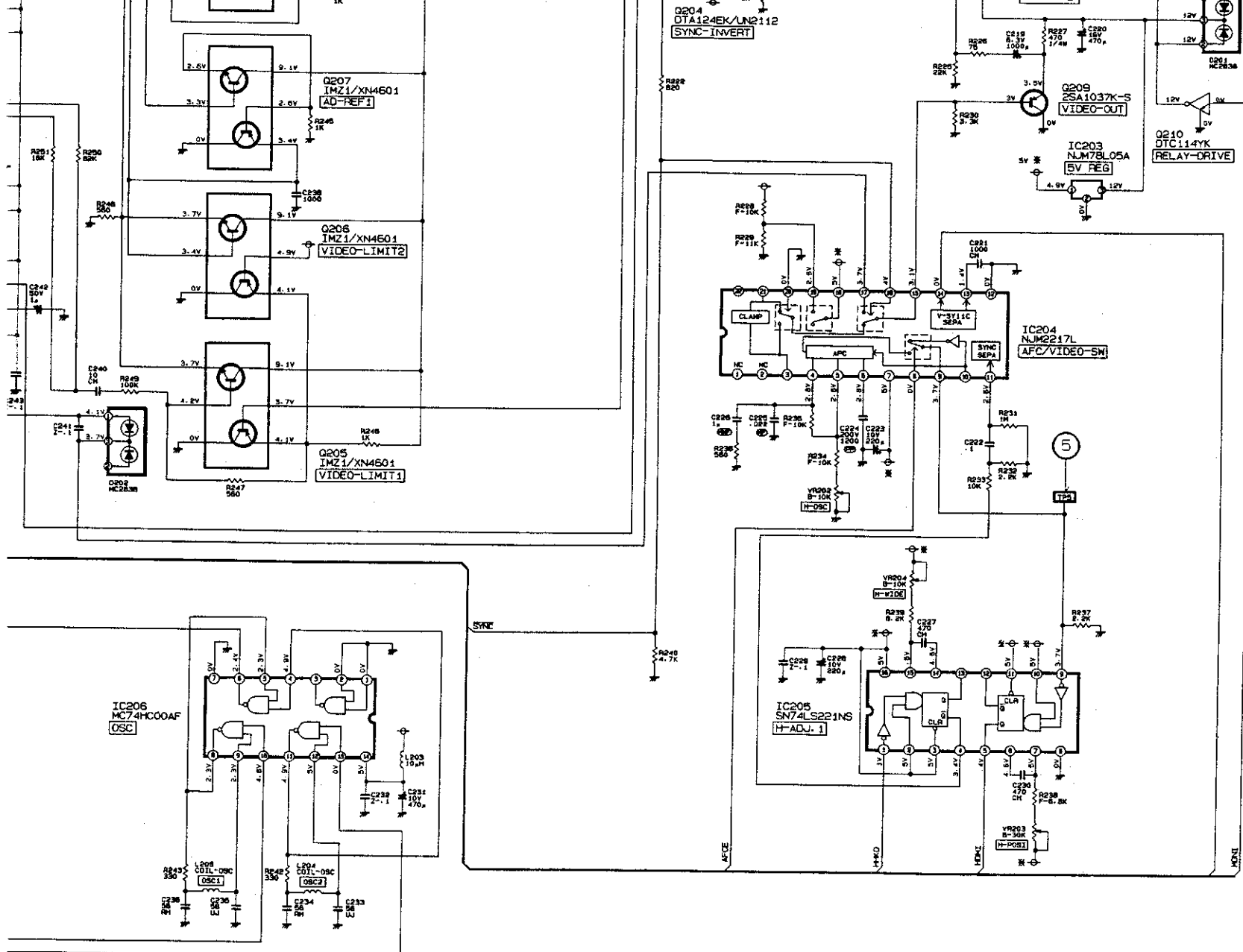


IC208 MB40776PF/MB40776HPF



IC207 MB40576PF





# LEAD DRESS

The figure shows the leads fastened with each clamp. Refer to the clamp list for detail  
The lead wires clamped are listed in the table below.

Note: The inner wires are clamped so that do not come close to heat generating or high voltage components After servicing route all wires in their original position.

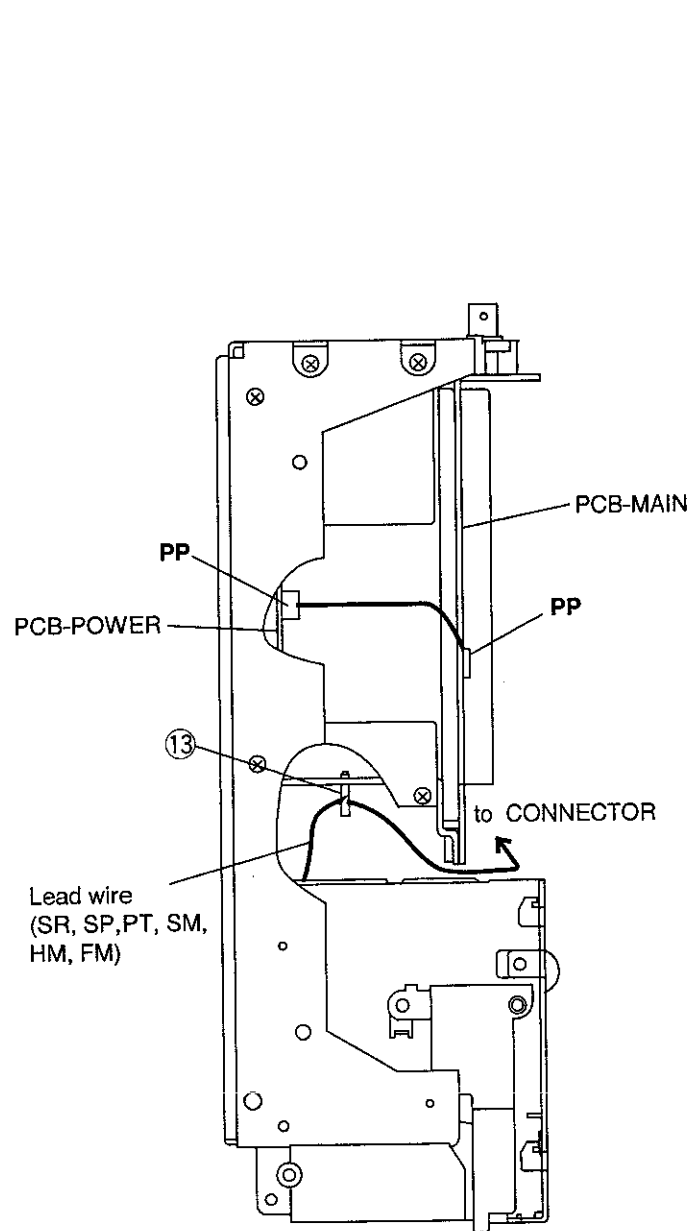


Fig. 1 (Left view of set)

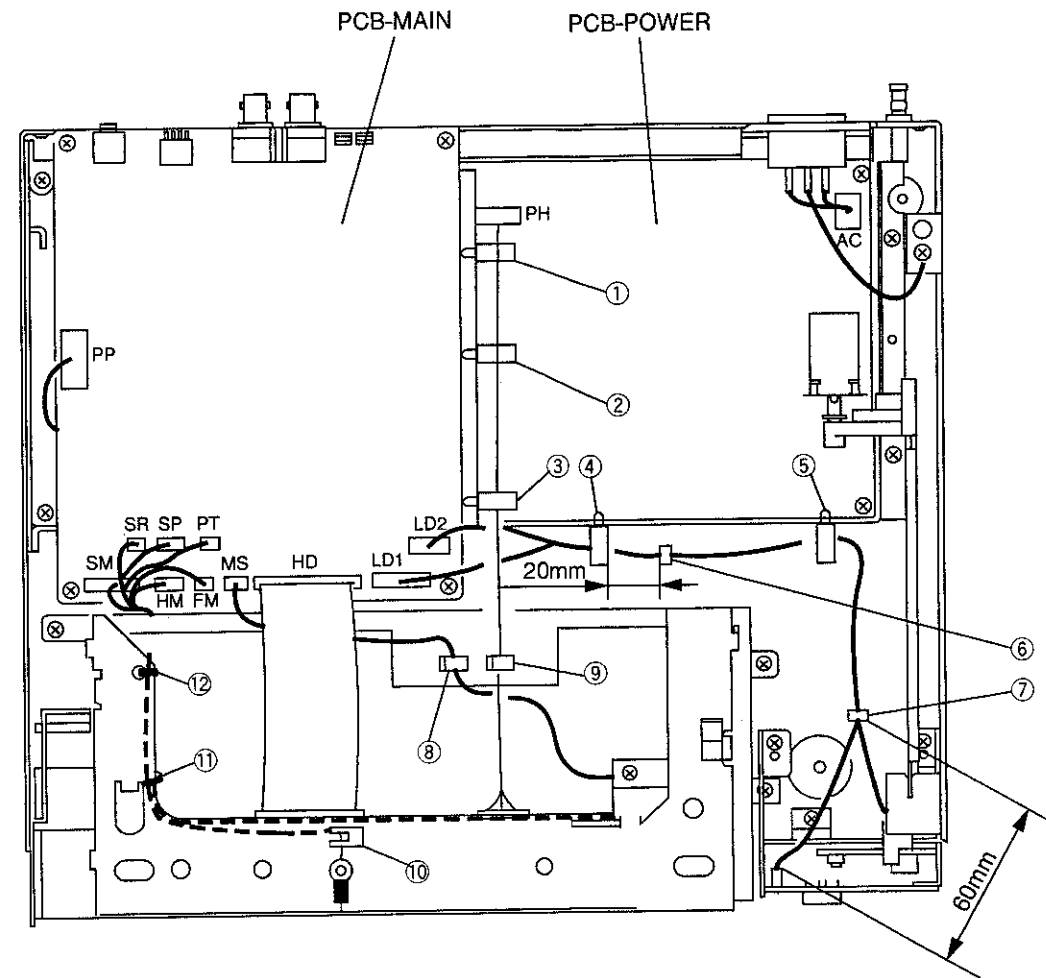


Fig. 2 (Top view of set)

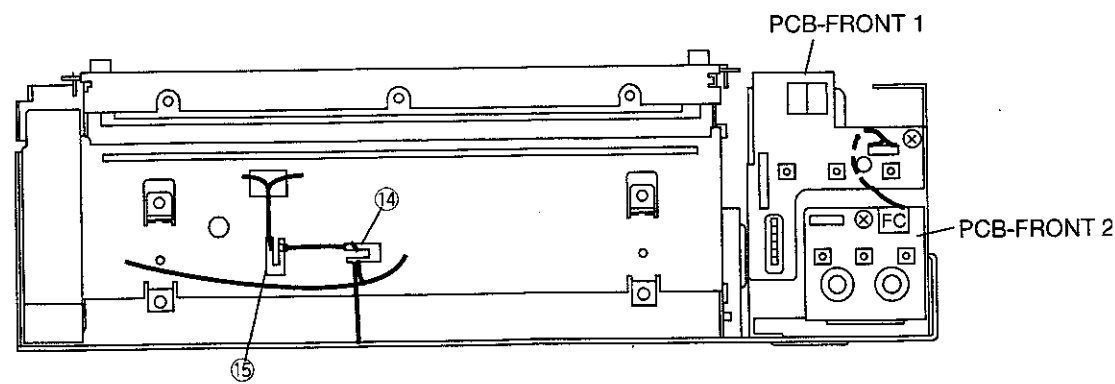


Fig. 3 (Front view of set)

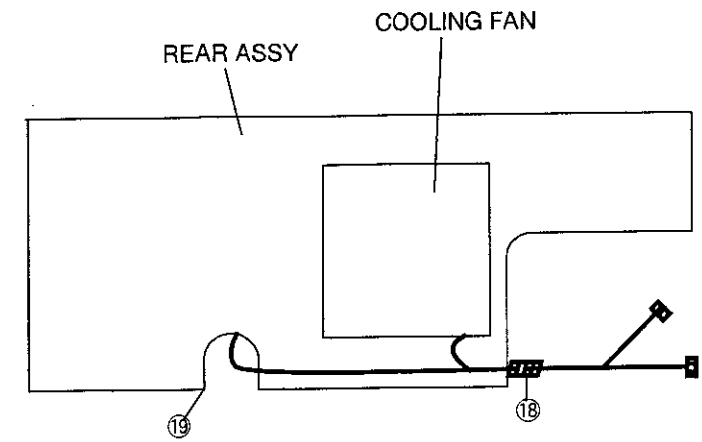


Fig. 4 (Rear view of REAR ASSY)

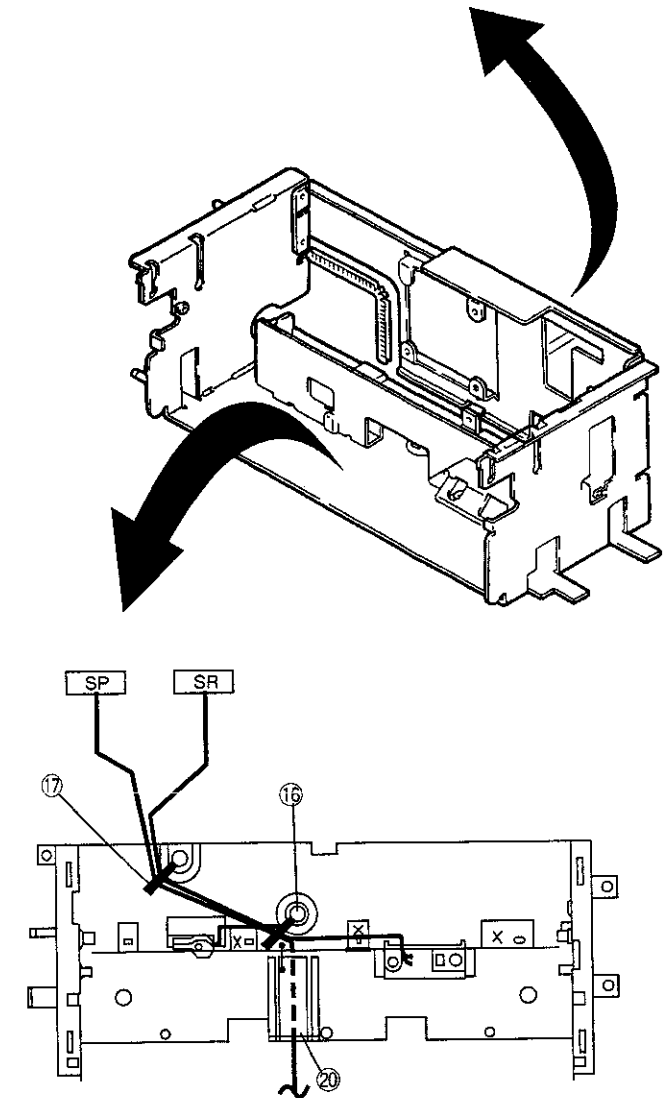


Fig. 5 (Top view of FRAME ASSY)

# CLAMPED FOR CONNECTOR LEAD

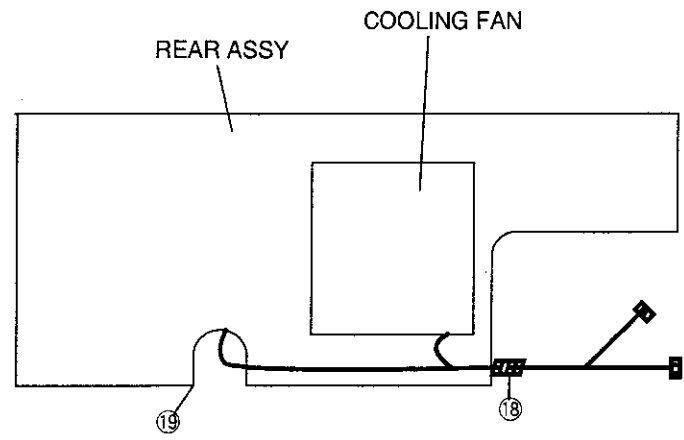
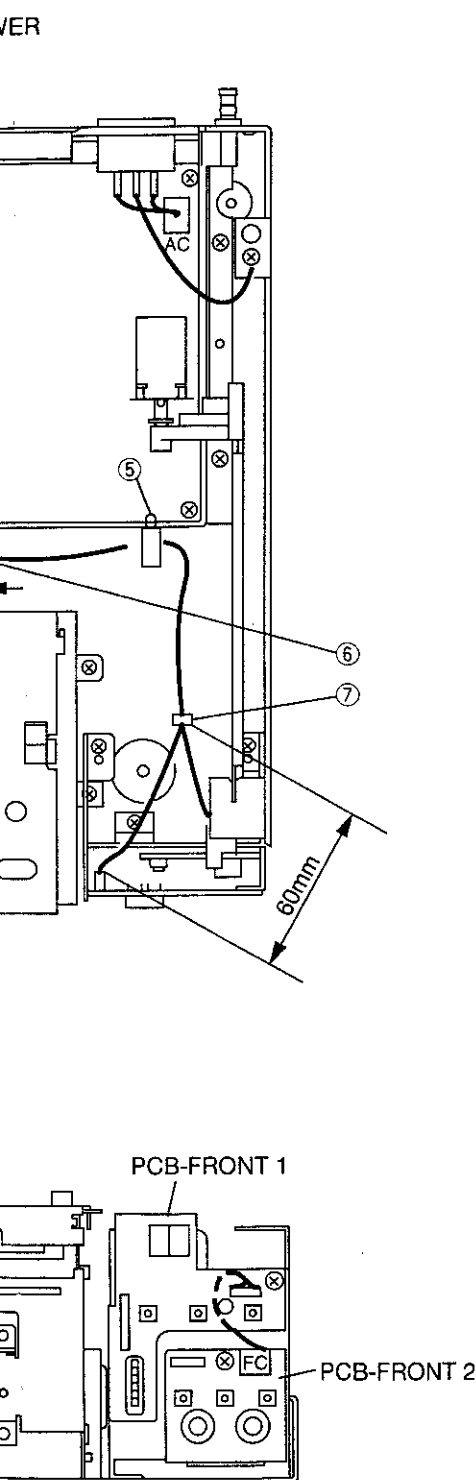


Fig. 4 (Rear view of REAR ASSY)

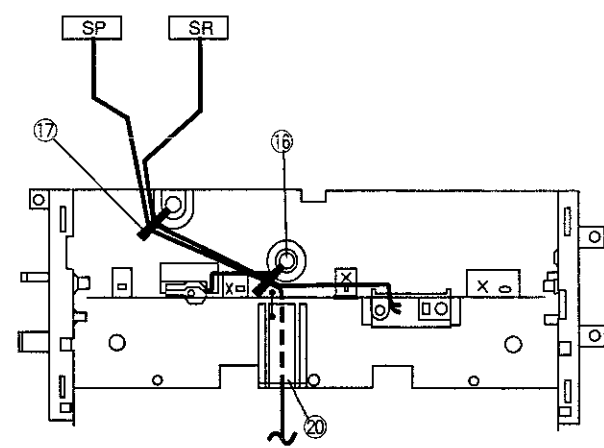
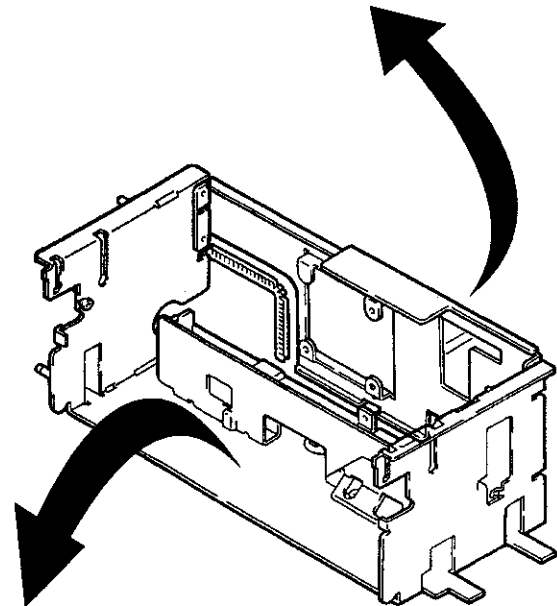
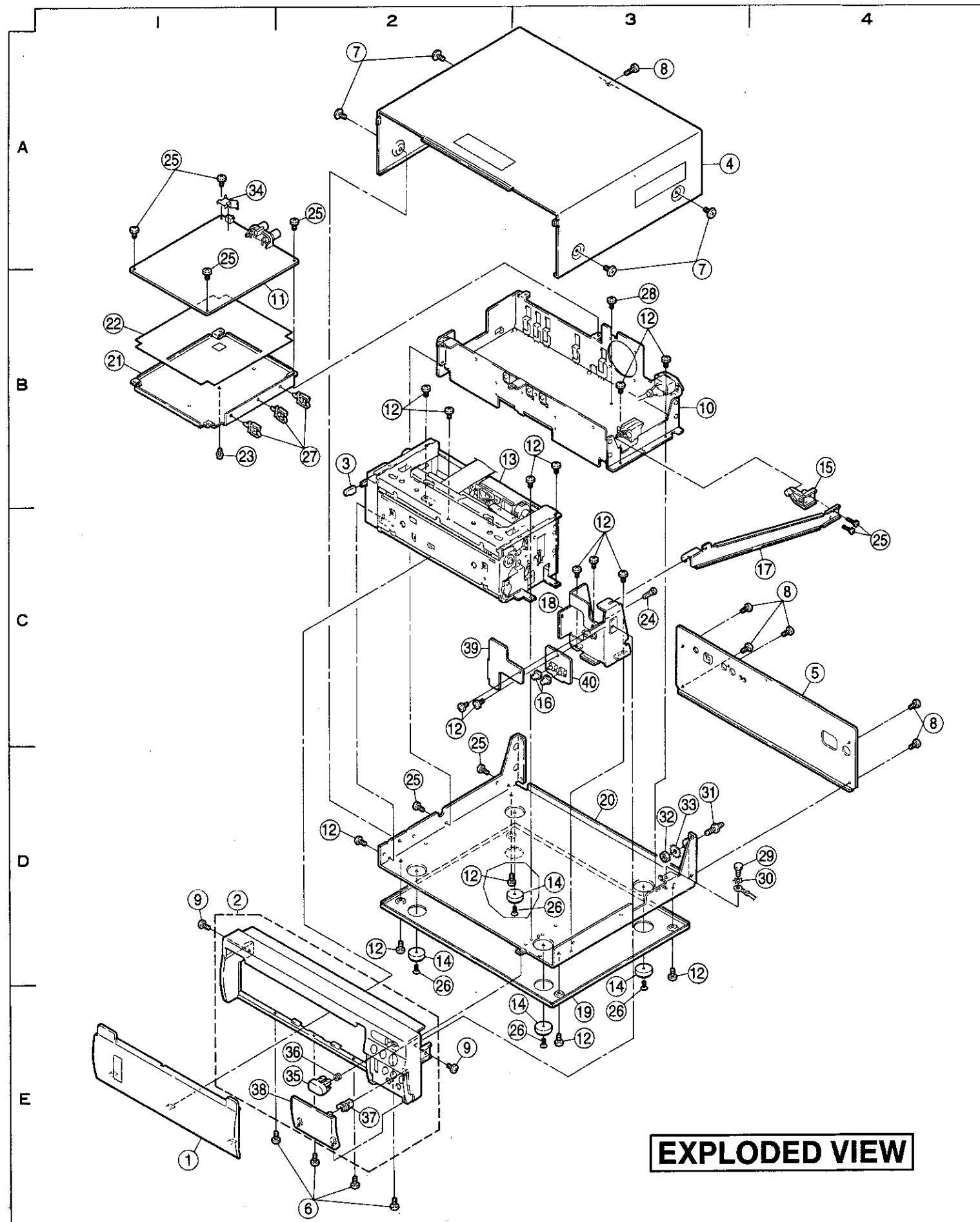


Fig. 5 (Top view of FRAME ASSY)

CONNECTOR LEAD	CLAMPER NO.		NOTE
AC	PCB-POWER		POWER JACK ASSY Fig. 2
FC1- FC2	PCB-FRONT 1		PCB-FRONT 2 Fig. 3
FM	PCB-MAIN	⑬⑱	COOLING FAN Fig. 1→Fig. 4
HD	PCB-MAIN		HEAD UNIT Fig. 2
HM	PCB-MAIN	⑬⑱⑲	DC MOTOR ASSY Fig. 1→Fig. 4
LD1	PCB-MAIN	④⑥⑤⑦	PCB-FRONT 1 Fig. 2
LD2- LD2	PCB-MAIN	④⑥⑤⑦	PCB-FRONT 2 Fig. 2
MS	PCB-MAIN	⑧	PCB-MODE Fig. 2 (HEAD DETECTION SENS)
PH	PCB-POWER	①②③⑨	HEAD UNIT Fig. 2
PT	PCB-MAIN	⑬⑫⑪⑩	PAPER DETECTION SENS Fig. 1→Fig. 2
SM	PCB-MAIN	⑬⑰	STEP MOTOR Fig. 1→Fig. 5
SP	PCB-MAIN	⑬⑰⑱⑲⑭⑮	PAIR SENS Fig. 1→Fig. 5→Fig. 3 (PAPER DETECTION 1 SENS)
SP	PCB-MAIN	⑬⑰⑱⑲⑭⑮	PAIR SENS Fig. 1→Fig. 5→Fig. 3 (PAPER DETECTION 2 SENS)
SR	PCB-MAIN	⑬⑰⑱	PCB-OPEN Fig. 1→Fig. 5 (PAPER DETECTION 2 SENS)
SR	PCB-MAIN	⑬⑰⑱	PCB-OPEN Fig. 1→Fig. 5 (DOOR DETECTION SENS)



**EXPLODED VIEW**

**PARTS LIST**

In order to expedite delivery of replacement part orders.

- Specify : 1. Model number/Serial number  
 2. Part number and Description  
 3. Quantity

Unless full information is supplied, delay in execution of order will result.

\* : Warranty return items (P500W only)

▲ : Critical components

SYMBOL NO.	PARTS NO.	ADDRESS	PARTS NAME	DESCRIPTION
1	702B991O10	E-1	DOOR	
2	701A614O10	D-1	FRONT PANEL	
3	734D579O10	B-2	LEVER KNOB	
4	710A088O10	A-3	TOP PANEL	
5	590A540O10	C-4	REAR PANEL	
6	669D229O10	E-1	SCREW	M3X0.6 46LA005
7	669D425O20	A-2	B-3 SCREW	M4X0.7-8 NI
8	669D212O40	A-3	C-4 SCREW	D-3 L=10 83AF
9	☆	D-1	E-2 SCREW	M3X6
10	916B042O01	B-3	POWER UNIT	
* ▲ 11	936B090O01	B-1	MAIN PCB ASSY	
12	669D229O90	B-2	B-3 SCREW	M3.0X4 46LA005
		C-2	C-3	
		D-2	E-3	
13	☆	B-2	PRINTER MECHA ASSY	
14	771D051O10	D-2	D-3 PAD	ABS GR-1000
		E-2	E-3	
15	☆	B-4	POWER SW LEVER	
16	734C025O10	C-3	LEVEL KNOB	
17	☆	C-4	SW LEVER	SE CC-C 20/20 T1.0
18	☆	C-3	LEVER BRACKET	SE CC-C 20/20 T1.2
19	☆	E-3	BOTTOM COVER	SE CC-C 20/20 T1.0
20	☆	D-3	BASE CHASSIS	
21	☆	B-1	SHIELD PLATE	
22	☆	B-1	TOP BARRIER	
23	☆	B-1	SUPPORT	
24	☆	C-3	SUPPORT	
25	669D220O20	A-1	A-2 SCREW	3X8 46LA005
		C-4	D-2	
26	☆	D-3	E-2 SCREW	3X6
		E-3		
27	540D124O10	B-2	LEAD CLAMPER	
28	☆	B-3	SCREW	M3X0.5-20
29	669D245O10	D-4	SCREW	M4X0.7-8
30	☆	D-4	TOOTHED WASHER	
31	442D111O10	D-3	EARTH TERMINAL	
32	☆	D-3	HEX NUT	
33	☆	D-3	TOOTED WASHER	
34	☆	A-1	EARTH JACK	
35	754C025O10	E-1	POWER BUTTON	
36	☆	E-1	POWER SPRING	
37	761C437O10	E-2	DOOR CATCH	
38	702C953O30	E-1	PANEL DOOR	
* ▲ 39	936C099O01	C-2	FRONT 1 PCB ASSY	
* ▲ 40	936C100O01	C-3	FRONT 2 PCB ASSY	

☆: Not a stocked item

# PARTS LIST

In order to expedite delivery of replacement part orders.

- Specify : 1. Model number/Serial number  
 2. Part number and Description  
 3. Quantity

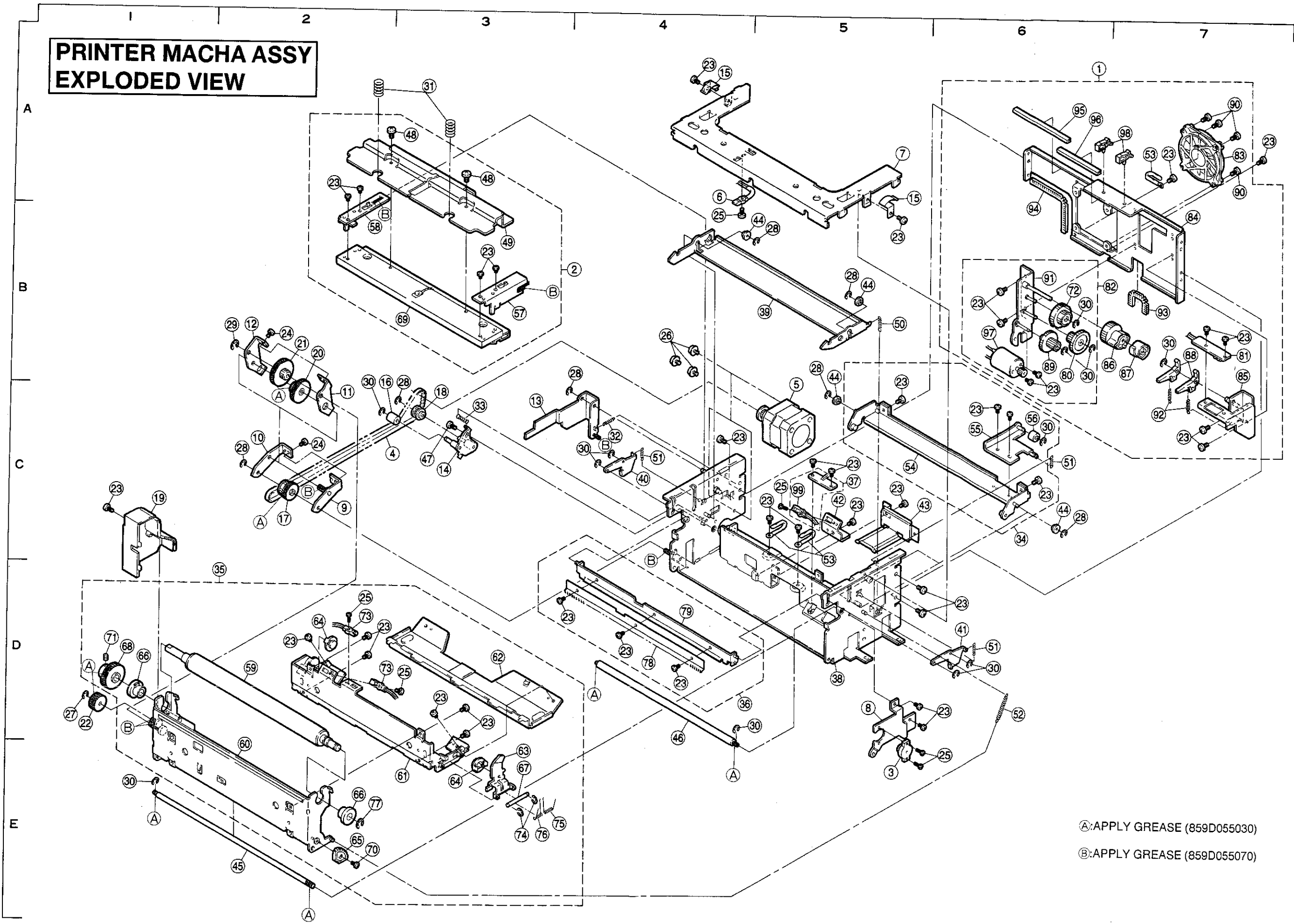
Unless full information is supplied, delay in execution of order will result.

\* : Warranty return items (P500W only)

△ : Critical components

SYMBOL NO.	PARTS NO.	ADDRESS	PARTS NAME	DESCRIPTION
1	702B991O10	E-1	DOOR	
2	701A614O10	D-1	FRONT PANEL	
3	734D579O10	B-2	LEVER KNOB	
4	710A088O10	A-3	TOP PANEL	
5	590A540O10	C-4	REAR PANEL	
6	669D229O10	E-1	SCREW	M3X0.6 46LA005
7	669D425O20	A-2 B-3	SCREW	M4X0.7-8 NI
8	669D212O40	A-3 C-4	SCREW	D-3 L=10 83AF
9	☆	D-1 E-2	SCREW	M3X6
10	916B042O01	B-3	POWER UNIT	
* △ 11	936B090O01	B-1	MAIN PCB ASSY	
12	669D229O90	B-2 B-3 C-2 C-3 D-2 E-3	SCREW	M3.0X4 46LA005
13	☆	B-2	PRINTER MECHA ASSY	
14	771D051O10	D-2 D-3 E-2 E-3	PAD	ABS GR-1000
15	☆	B-4	POWER SW LEVER	
16	734C025O10	C-3	LEVEL KNOB	
17	☆	C-4	SW LEVER	SE CC-C 20/20 T1.0
18	☆	C-3	LEVER BRACKET	SE CC-C 20/20 T1.2
19	☆	E-3	BOTTOM COVER	SE CC-C 20/20 T1.0
20	☆	D-3	BASE CHASSIS	
21	☆	B-1	SHIELD PLATE	
22	☆	B-1	TOP BARRIER	
23	☆	B-1	SUPPORT	
24	☆	C-3	SUPPORT	
25	669D220O20	A-1 A-2 C-4 D-2	SCREW	3X8 46LA005
26	☆	D-3 E-2 E-3	SCREW	3X6
27	540D124O10	B-2	LEAD CLAMPER	
28	☆	B-3	SCREW	M3X0.5-20
29	669D245O10	D-4	SCREW	M4X0.7-8
30	☆	D-4	TOOTHED WASHER	
31	442D111O10	D-3	EARTH TERMINAL	
32	☆	D-3	HEX NUT	
33	☆	D-3	TOOTED WASHER	
34	☆	A-1	EARTH JACK	
35	754C025O10	E-1	POWER BUTTON	
36	☆	E-1	POWER SPRING	
37	761C437O10	E-2	DOOR CATCH	
38	702C953O30	E-1	PANEL DOOR	
* △ 39	936C099O01	C-2	FRONT 1 PCB ASSY	
* △ 40	936C100O01	C-3	FRONT 2 PCB ASSY	
	☆: Not a stocked item			

**PRINTER MACHA ASSY  
EXPLODED VIEW**



Ⓐ:APPLY GREASE (859D055030)  
 Ⓑ:APPLY GREASE (859D055070)

PA  
 In or  
 S  
 Unles  
 SY  
 I  
 3  
 3  
 3

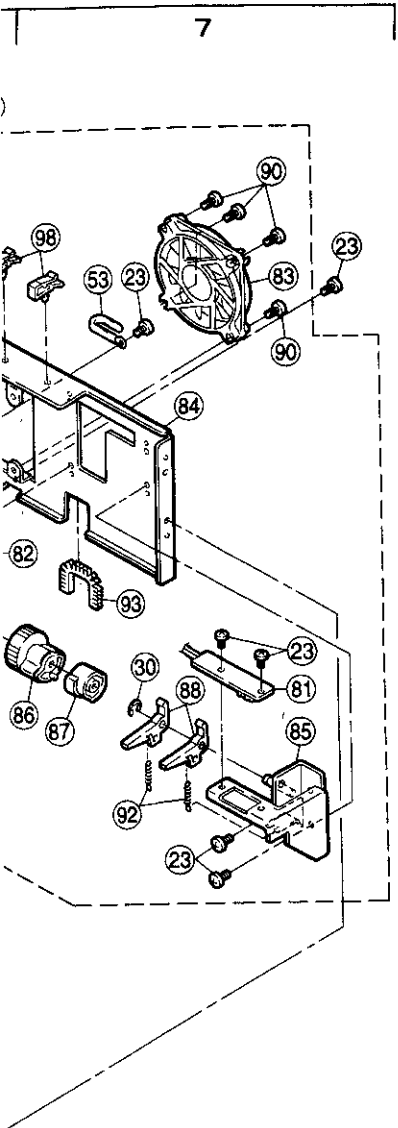
# PARTS LIST

In order to expedite delivery of replacement part orders.

- Specify : 1. Model number/Serial number  
2. Part number and Description  
3. Quantity

Unless full information is supplied, delay in execution of order will result.

- \* : Warranty return items (P500W only)  
▲ : Critical components



SYMBOL NO.	PARTS NO.	ADDRESS	PARTS NAME	DESCRIPTION
1	☆	A-6	REAR ASSY	
2	☆	B-4	HEAD ASSY	
3	642C207O20	E-5	DAMPER	
4	521C009O10	C-3	BELT	
5	288P163O10	B-5	STEP MOTOR	
6	243C212O10	A-4	PAPER DETECTION SENS	
7	☆	A-5	UPPER PLATE	
8	☆	D-5	DAMPER HOLDER	
9	☆	C-2	GEAR HOLDER (OB)	
10	☆	C-2	GEAR HPLDER (OT)	
11	☆	C-2	GEAR HPLDER (IB)	
12	☆	B-2	GEAR HPLDER (IT)	
13	☆	C-3	OPEN LEVER	
14	☆	C-3	TENSION PLATE	
15	☆	A-4 A-5	EARTH PLATE	
16	☆	B-2	TIMING ROLLER	
17	621C523O10	C-2	PULLEY GEAR	
18	621C524O10	B-3	PULLEY	
19	☆	C-1	GEAR COVER	
20	621C569O10	B-2	GEAR (A)	
21	630C153O10	B-2	GEAR (B)	
22	630C154O10	D-1	GEAR (C)	
23	☆	A-2 A-4	SCREW	M3X0.5-4
		A-7 B-3		
		B-5 B-6		
		B-7 C-1		
		C-4 C-5		
		C-6 C-7		
		D-2 D-3		
		D-4 D-6		
24	☆	B-2 C-2	SCREW	M2.6X0.45-3
25	669D199O60	A-4 C-5	SCREW	M2X0.4 L=4
		D-2 D-3		
		D-6		
26	669D204O30	B-4	SCREW	M3X0.5-5
27	552C007O40	D-1	CUT WASHER	3.0X5.4-0.5
28	685C002O60	B-3 B-4	RETAINING RING	E-3
		B-5 C-2		
		C-6		
29	685C002O70	B-2	RETAINING RING	E-4
30	685C002O40	B-6 B-2	RETAINING RING	E-2
		B-7 C-4		
		C-6 D-5		
		D-6 E-1		
31	572D681O10	A-3	SPRING (A)	SUS 304
32	572D040O10	C-4	FE ARM SPRING	SUS 304
33	572D878O10	C-3	TENSION SPRING	SUS 304

APPLY GREASE (859D055030)

APPLY GREASE (859D055070)

SYMBOL NO.	PARTS NO.	ADDRESS	PARTS NAME	DESCRIPTION
34	☆	C-6	UP LEVER ASSY	
35	☆	D-2	PAPER HOLDER ASSY	
36	☆	D-4	CUTTER ASSY	
* ▲ 37	936D068O01	C-5	OPEN PCB ASSY	
38	☆	D-5	FRAME	
39	☆	B-5	LOCK LEVER	
40	596C333O10	C-4	CUTTER LEVER	
41	☆	D-6	CUTTER LEVER	
42	☆	C-5	SENSOR PLATE	
43	☆	C-6	SHIELD (C)	
44	☆	A-5 B-5	BUSH	
45	☆	C-6		
45	☆	E-2	DOOR SHAFT	
46	☆	D-4	GUIDE SHAFT	
47	☆	C-3	SCREW	M3X0.5-5
48	☆	A-3	SCREW	M3X0.5-6
49	☆	B-3	RADIATOR	
50	☆	B-5	LOCK SPRING	
51	572D040O10	C-4 C-6	FE ARM SPRING	
		D-6		
52	☆	D-6	DOOR SPRING	
53	☆	A-7 C-5	LEAD CLAMPER	
54	☆	C-5	UP LEVER UNIT	
55	☆	C-6	UP LEVER STAY	
56	☆	C-6	HEAD UP ROLLER	
57	☆	B-3	HEAD HOLDER (RIGHT)	
58	☆	B-2	HEAD HOLDER (LEFT)	
59	522C101O10	D-2	PLATEN ROLLER	
60	☆	D-2	PAPER HOLDER	
61	☆	E-3	PAPER BRACKET	
62	☆	D-3	LOWER BRACKET	
63	☆	E-3	CORE LEVER	
64	621D745O10	D-2 E-3	PAPER CORE	
65	596D408O10	E-2	DAMPER GEAR	
66	622D572O10	D-1 E-2	PLATEN BUSH	
67	☆	E-3	LEVER SHAFT	
68	630C152O10	D-1	PLATEN GEAR	
69	460P169O10	B-3	HEAD UNIT	
70	669D375O90	E-2	SCREW	M2.6X0.45 L=4
71	669D197O20	D-1	SCREW	M3X0.5 L=4
72	☆	B-6	LOADING GEAR (3)	
73	243C214O10	D-2	PAIR SENS	
74	685C002O30	E-3	RETAINING RING	E-1.5
75	☆	E-3	LEVER SPRING	
76	☆	E-3	LEVER SPRING	
77	685C002O90	E-2	RETAINING RING	E-6
78	596C333O10	D-4	CUTTER	
79	☆	D-4	CUTTER BRACKET	
80	☆	B-6	LOADING GEAR (2)	

SYM N/

\* ▲

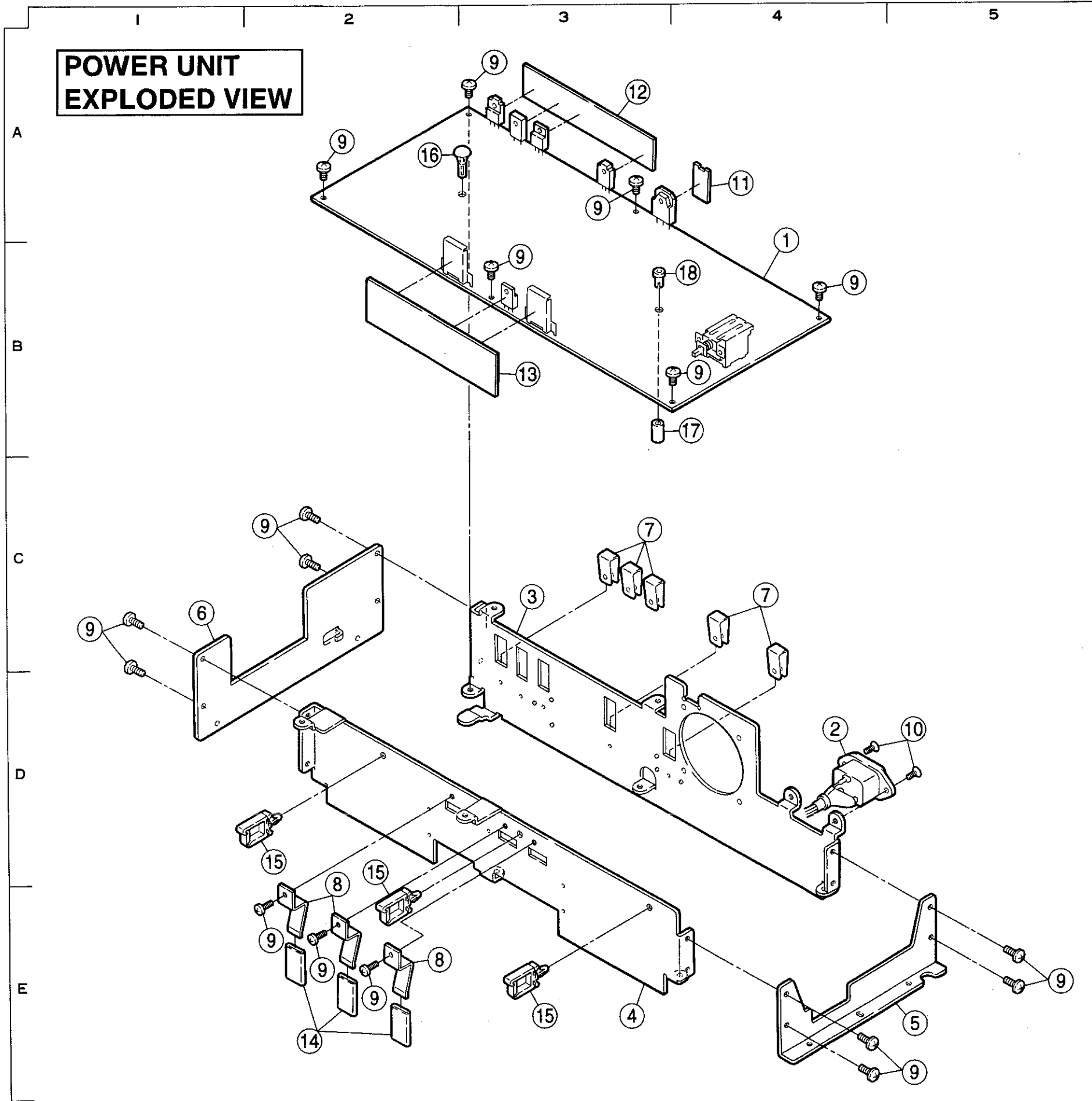


DESCRIPTION
-------------

SYMBOL NO.	PARTS NO.	ADDRESS	PARTS NAME	DESCRIPTION
34	☆	C-6	UP LEVER ASSY	
35	☆	D-2	PAPER HOLDER ASSY	
36	☆	D-4	CUTTER ASSY	
* Δ 37	936D068001	C-5	OPEN PCB ASSY	
38	☆	D-5	FRAME	
39	☆	B-5	LOCK LEVER	
40	596C333O10	C-4	CUTTER LEVER	
41	☆	D-6	CUTTER LEVER	
42	☆	C-5	SENSOR PLATE	
43	☆	C-6	SHIELD (C)	
44	☆	A-5 B-5	BUSH	
45	☆	E-2	DOOR SHAFT	
46	☆	D-4	GUIDE SHAFT	
47	☆	C-3	SCREW	M3X0.5-5
48	☆	A-3	SCREW	M3X0.5-6
49	☆	B-3	RADIATOR	
50	☆	B-5	LOCK SPRING	
51	572D040O10	C-4 C-6	FE ARM SPRING	
52	☆	D-6	DOOR SPRING	
53	☆	A-7 C-5	LEAD CLAMPER	
54	☆	C-5	UP LEVER UNIT	
55	☆	C-6	UP LEVER STAY	
56	☆	C-6	HEAD UP ROLLER	
57	☆	B-3	HEAD HOLDER (RIGHT)	
58	☆	B-2	HEAD HOLDER (LEFT)	
59	522C101O10	D-2	PLATEN ROLLER	
60	☆	D-2	PAPER HOLDER	
61	☆	E-3	PAPER BRACKET	
62	☆	D-3	LOWER BRACKET	
63	☆	E-3	CORE LEVER	
64	621D745O10	D-2 E-3	PAPER CORE	
65	596D408O10	E-2	DAMPER GEAR	
66	622D572O10	D-1 E-2	PLATEN BUSH	
67	☆	E-3	LEVER SHAFT	
68	630C152O10	D-1	PLATEN GEAR	
69	460P169O10	B-3	HEAD UNIT	
70	669D375O90	E-2	SCREW	M2.6X0.45 L=4
71	669D197O20	D-1	SCREW	M3X0.5 L=4
72	☆	B-6	LOADING GEAR (3)	
73	243C214O10	D-2	PAIR SENS	
74	685C002O30	E-3	RETAINING RING	E-1.5
75	☆	E-3	LEVER SPRING	
76	☆	E-3	LEVER SPRING	
77	685C002O90	E-2	RETAINING RING	E-6
78	596C330O10	D-4	CUTTER	
79	☆	D-4	CUTTER BRACKET	
80	☆	B-6	LOADING GEAR (2)	

SYMBOL NO.	PARTS NO.	ADDRESS	PARTS NAME	DESCRIPTION
* Δ 81	936D069O01	B-7	MODE PCB ASSY	
82	956D097O01	B-7	GEAR ASSY	
83	288P171O10	A-7	COOLING FAN	
84	☆	A-7	REAR PANEL	
85	☆	B-7	SW BRACKET	
86	☆	B-7	HEAD CAM	
87	☆	B-7	MODE CAM	
88	621C518O10	B-7	SW LEVER	
89	☆	B-6	LOADING GEAR (1)	
90	☆	A-7	SCREW	M3X0.5-10
91	☆	B-6	MOTOR BRACET	
92	572D880O10	C-7	CAM SPRING	
93	☆	B-7	BUSH	
94	☆	A-6	SPACER	
95	☆	A-6	EDGE GUARD	
96	☆	A-6	EDGE GUARD	
97	☆	B-6	DC MOTOR ASSY	
98	☆	A-7	MINI CLAMP	
99	243C213O10	C-5	PAPER DETECTION SENS	
☆: Not a stocked item				

**POWER UNIT  
EXPLODED VIEW**



**PARTS LIST**

In order to expedite delivery of replacement part orders.

- Specify : 1. Model number/Serial number  
2. Part number and Description  
3. Quantity

Unless full information is supplied, delay in execution of order will result.

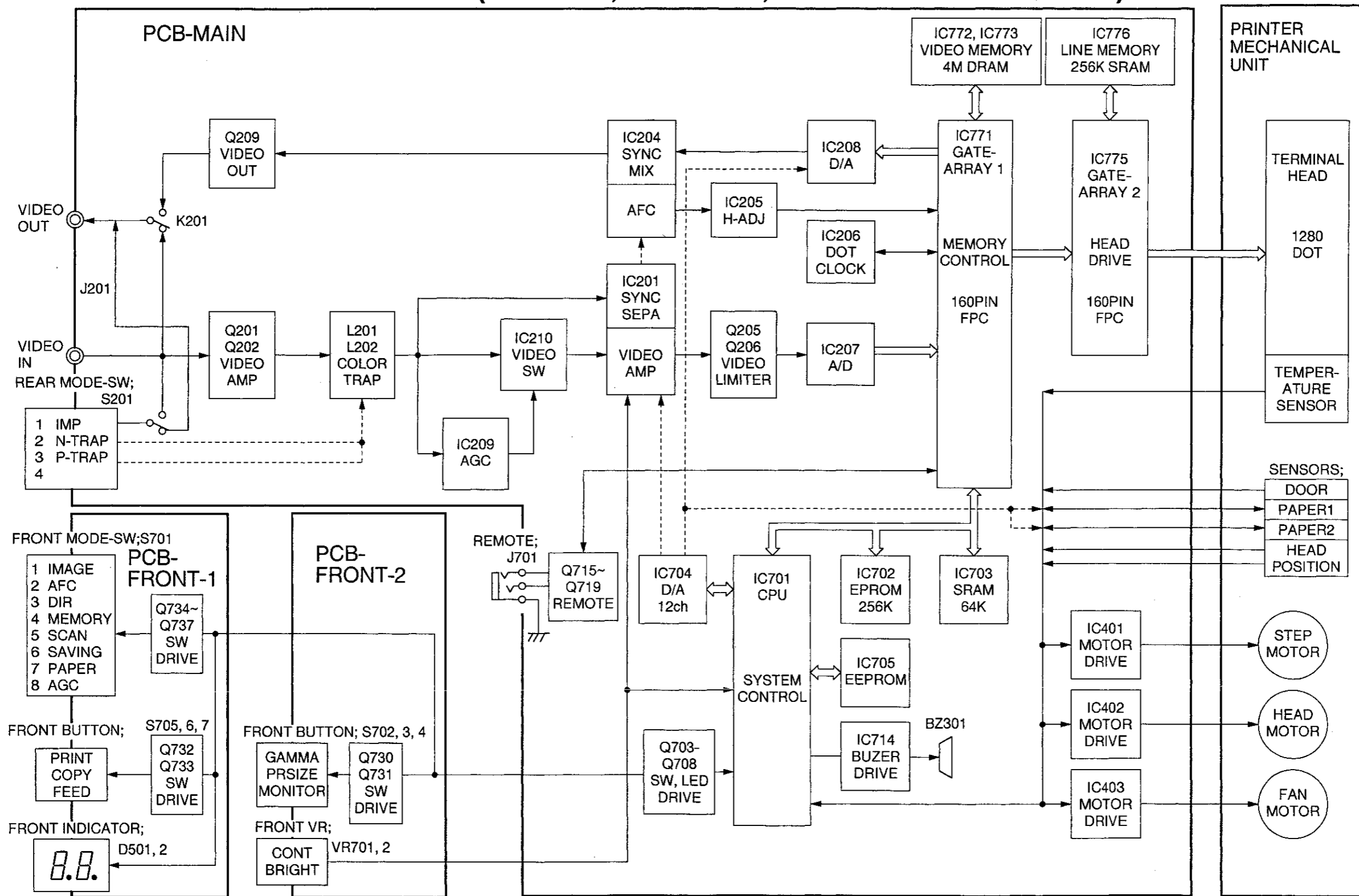
- \* : Warranty return items (P500W only)  
△ : Critical components

SYMBOL NO.	PARTS NO.	ADDRESS	PARTS NAME	DESCRIPT
* △ 1	936B091001	B-4	POWER PCB ASSY	
2	☆	D-4	POWER JACK ASSY	
3	☆	C-3	POWER RADIATOR (R)	
4	☆	E-3	POWER RADIATOR (F)	
5	☆	E-5	POWER PLATE	
6	☆	C-1	SIDE RADIATOR	
7	☆	C-3 C-4	IC HOLDER	
8	☆	E-2	IC HOLDER (2)	
9	669D220020	A-2 A-3 B-3 B-4 C-1 C-2 E-1 E-2 E-4 E-5	SCREW	3X8 46LA005
10	☆	D-5	SCREW	3X8
11	☆	A-4	INSULATOR	
12	☆	A-3	INSULATOR	
13	☆	B-3	INSULATOR	
14	☆	E-2	SUMI TUBE	
15	☆	D-2 E-3	LEAD CLAMPER	
16	☆	A-2	SUPPORT	
17	☆	B-3	COLLAR	
18	☆	B-3	BUSH	
☆: Not a stocked item				

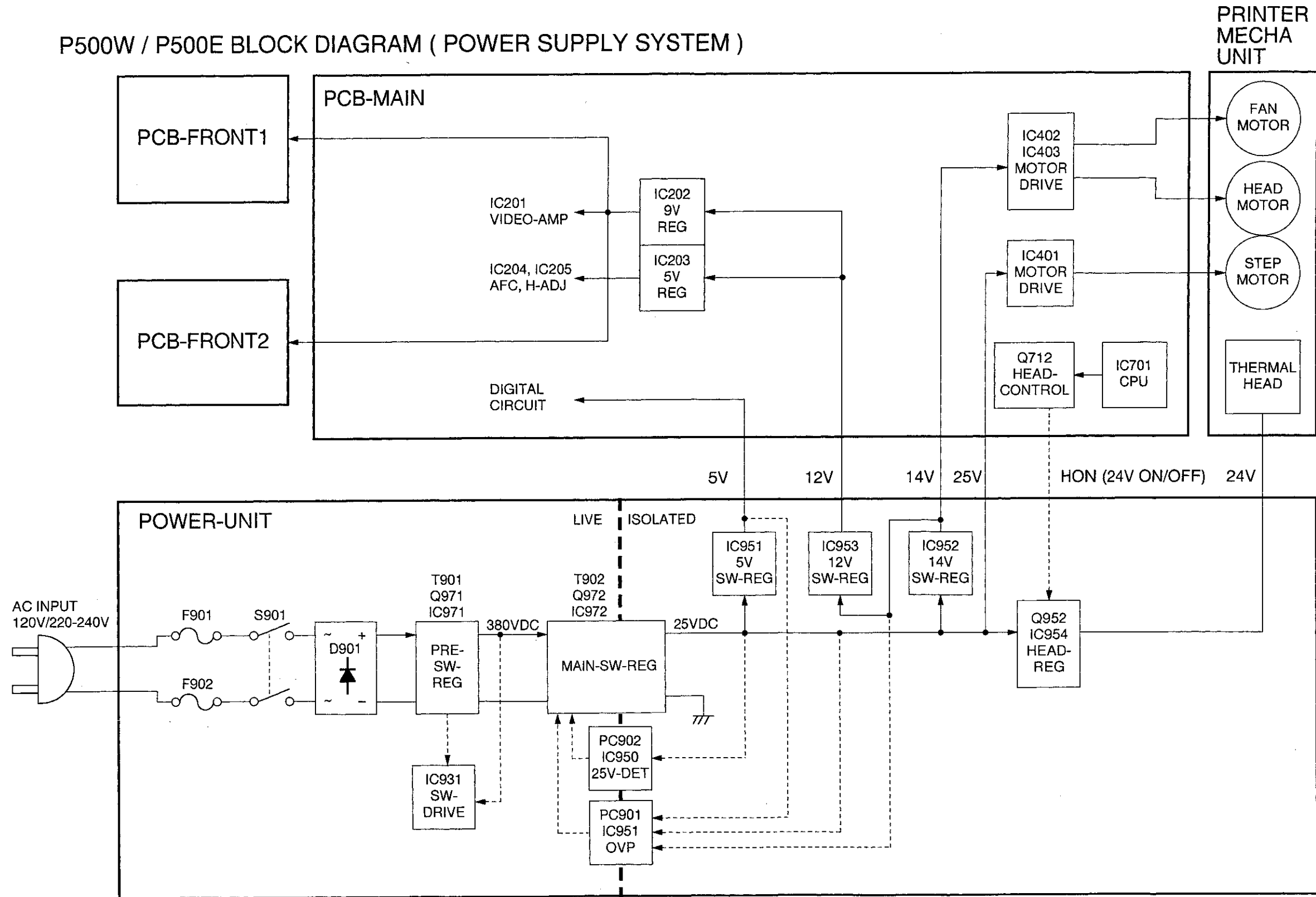
ent part orders.  
number  
tion  
execution of order will result.  
(W only)

PARTS NAME	DESCRIPTION
POWER PCB ASSY	
POWER JACK ASSY	
POWER RADIATOR (R)	
POWER RADIATOR (F)	
POWER PLATE	
SIDE RADIATOR	
IC HOLDER	
IC HOLDER (2)	
SCREW	3X8 46LA005
SCREW	3X8
INSULATOR	
INSULATOR	
INSULATOR	
SUMI TUBE	
LEAD CLAMPER	
SUPPORT	
COLLAR	
BUSH	

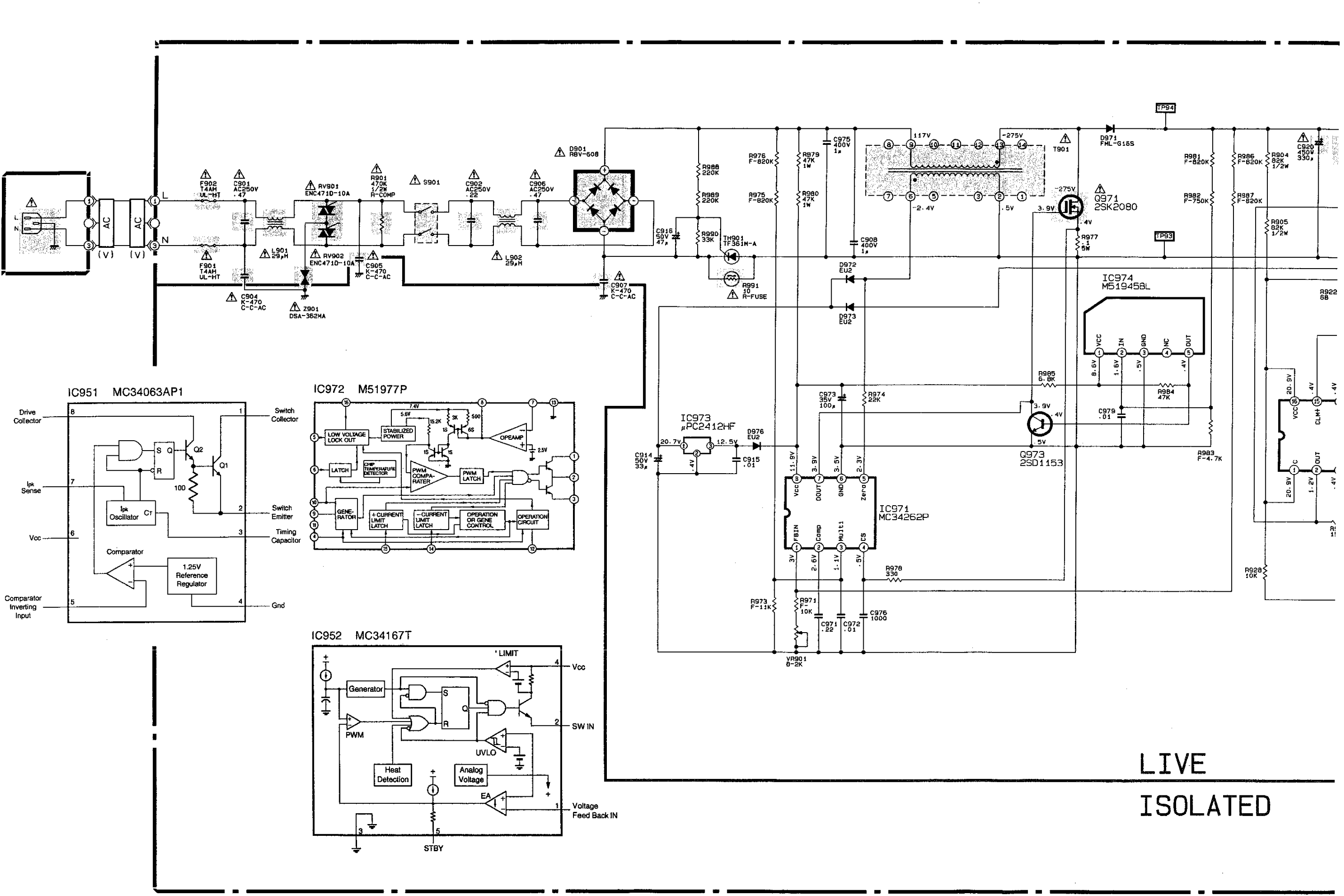
# P500W / P500E BLOCK DIAGRAM ( PCB-MAIN, PCB-FRONT, PRINTER MECHANICAL UNIT )



P500W / P500E BLOCK DIAGRAM ( POWER SUPPLY SYSTEM )

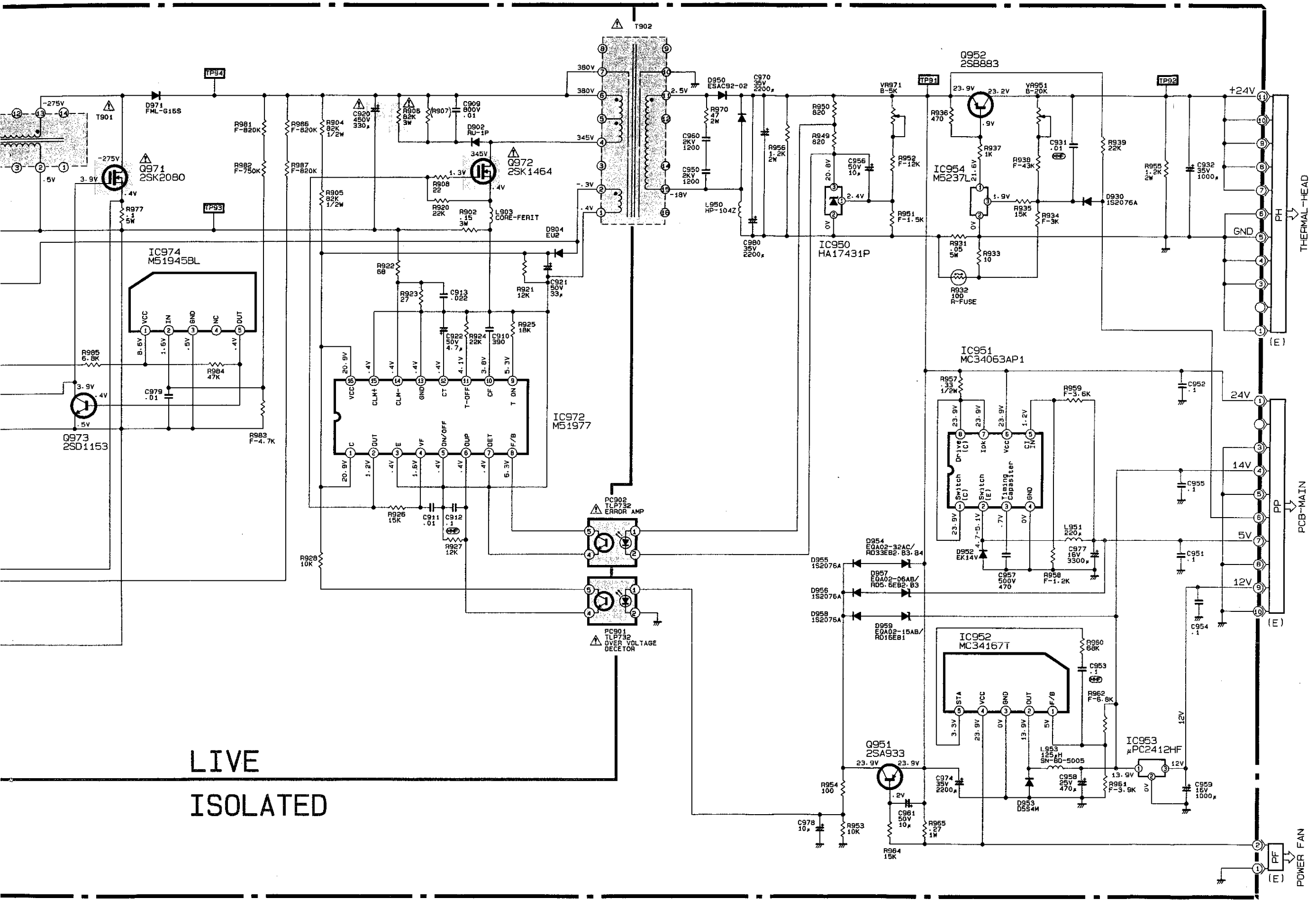


A  
B  
C  
D  
E  
F



LIVE  
ISOLATED

PCB-POWER



LIVE ISOLATED

P500W P500E

3