

Personal Computer **MZ-80B**

Options

MZ-80EU	(Expansion Port)
MZ-80IO2	(Universal I/O Card)
MZ-80GMK	(Expansion Graphic RAM)
MZ-80FI	(Floppy Disk I/O Card)

Optional Peripherals

MZ-80FB	(Floppy Disk)
MZ-80FBK	(Expansion Floppy Disk)

FEATURES

- The MZ-80B, stepped up version of the MZ-80K, is a personal computer with many new functions.
- Using a Z-80 processor (4MHz Version) in the CPU, it is capable of high speed data processing.
- It has a keyboard touch that's ideal for a professional operator and is equipped with a 10 numerical keys and 10 function keys.
- The cassette-recorder, using an electromagnetic mechanism, can be stopped/started remotely. Programs and data can be recorded automatically.
- With the optional expansion port, I/O card can be set in the body of the MZ-80B for peripherals such as a floppy disk, printer, etc.

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MZ-80B

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Caution in Service

- * Maintain the safety and protecting ability of the apparatus after service.
- * High voltage shall not be rised to excess specified level so as to prevent this apparatus from the extra X-ray radiation.

SPECIFICATIONS

■ MZ-80B General

CPU	LH0080A (Z 80A-CPU)	Key Layout	Keys 92 ASCII Standard, 10 Numerical keys, Function keys, Cursor control keys, Cassette tape deck control keys
Clock	4MHz		
Memory	ROM 2K bytes RAM 64K bytes (dynamic RAM)		
Display	9" CRT (green display) 8 x 8 dot matrix 1) Characters; 1000 (40 characters x 25 lines) 2) Characters; 2000 (80 characters x 25 lines) 1), 2): software change-over	Clock function	Built-in
		Editor function	Cursor control; up, down, right, left, home, clear. Edit key Delete key
		Power supply	AC 240V (50Hz)
		Temperature	Operating temp; 0° to 35°C Storage temp; -15° to 60°C
		Humidity	Lower than 80%
Cassette	Standard audio cassette tape Data transfer speed; 1800 bits/sec. Data transfer system; SHARP PWM Manual or Automatic control	Weight	Approx. 16kg
		Dimensions	Width 45cm Depth 52cm Height 27cm
Sound output	400mW max. (440Hz)		

■ CPU Board Section

CPU	LH0080A (Z80A-CPU)	1 pc.	Programmable counter	8253	1 pc.
PIO	LH0081A (Z80A-PIO)	1 pc.			
ROM	IPL 1 pc. (2K bytes) Character generator 1 pc. (2K bytes)		Programmable peripheral interface	8255	1 pc.
RAM	Standard; 16K RAM 32 pcs. (64K bytes) Video RAM; 1 pc. (2K bytes)		Other IC's	40 pcs.	

■ Power Supply Section


Input	AC 240V (50Hz)
Output	5V -5V 12V (stabilizing) 12V (non-stabilizing)

■ Graphic RAM (I) PWB Section

RAM	Static RAM; 4 pcs. (8K bytes)
Other IC's	17 pcs.

NOTE Specifications and appearance are subject to change without prior notice for improvement. In such a case, the explanation here may be a little different from the product.

■ Display Section

I. General specifications		II. Electrical specifications	
Size	9"	Video output	40Vp-p standard (35Vp-p limit)
Vertical Horizontal Frequency	60Hz (vertical), 15.75kHz (horizontal)	Resolution	Horizontal  *The pattern of the left in the center of the picture must be clear.
Power source	DC 12V, 1.1A $\pm 10\%$	Non-linearity distortion	Horizontal; $\pm 8\%$ ($\pm 14\%$ max.) Vertical; $\pm 8\%$ ($\pm 12\%$ max.)
Picture tube	E2728B31; 9" 90° deflection explosion proof type Heater; 12V, 75mA	Geometrical distortion	Pincushion dist.; 1% (2% max.) Barrel dist.; 1% (2% max.) Trapezoidal dist.; 1% (2% max.) Parallelogram dist.; 1° (2.5° max.)
IC's	2 pcs.	High voltage	Zero beam; 11.0kV (10.0kV, min., 12.0kV, max.)
Transistors	7 pcs.		
Diodes	13 pcs.	Power supply	DC12.0V, 1.05A (1.2A max.)
Sound output	400mW max. (440 Hz) Speaker 8cm, round dynamic type (32 Ω)	Working range	12V $\pm 10\%$
		Scan size	Horizontal; 10% (15% max.) Vertical; 10% (15% max.)
Control knobs	Volume, V-Hold, Contrast, H-Hold, Brightness, Focus	Horizontal lock-in range	± 300 Hz (± 100 Hz limit)
		Vertical lock-in range	-12 Hz (-6 Hz limit)
Working temperature	-10°C to 50°C	Audio frequency characteristic	440 Hz (0dB) -10dB ± 4 dB at 100 Hz -12dB ± 4 dB at 10kHz
		Sound maximum output	400mW at 440 Hz

■ Cassette Tape Recorder Section

System	PWM recording	Biasing	DC system
Power source	5V $\pm 5\%$ 12V $\pm 5\%$ (stabilizing) 9.5V~16.5V (Non-stabilizing)	Erasing	DC system
		Playback sensitivity	667 μ sec. to 333 μ sec. (standard)
Semi-conductors	22 transistors 13 ICs 9 diodes	Working temperature	-10°C to +40°C
Tape	From C30 to C60	Storage temperature	-25°C to +65°C
Tape speed	4.75 cm/sec.		
Track	2-track monaural type		
Motor	Electronic governor motor (12V)		

SYSTEM CONFIGURATION AND NOMENCLATURE OF MZ-80B

The MZ-80B system and expansion thereof are shown in the block diagram of Fig. 1. The inside of the dotted lines is the constitution of the MZ-80B, in which units enclosed in thick-line frames are optional ones. In the expansion port, interface cards can be inserted up to six pieces. The devices outside the dotted lines are optional peripheral devices and user's devices.

Figures 2 and 3 show the front view and rear view of the MZ-80B, identifying the parts with names.

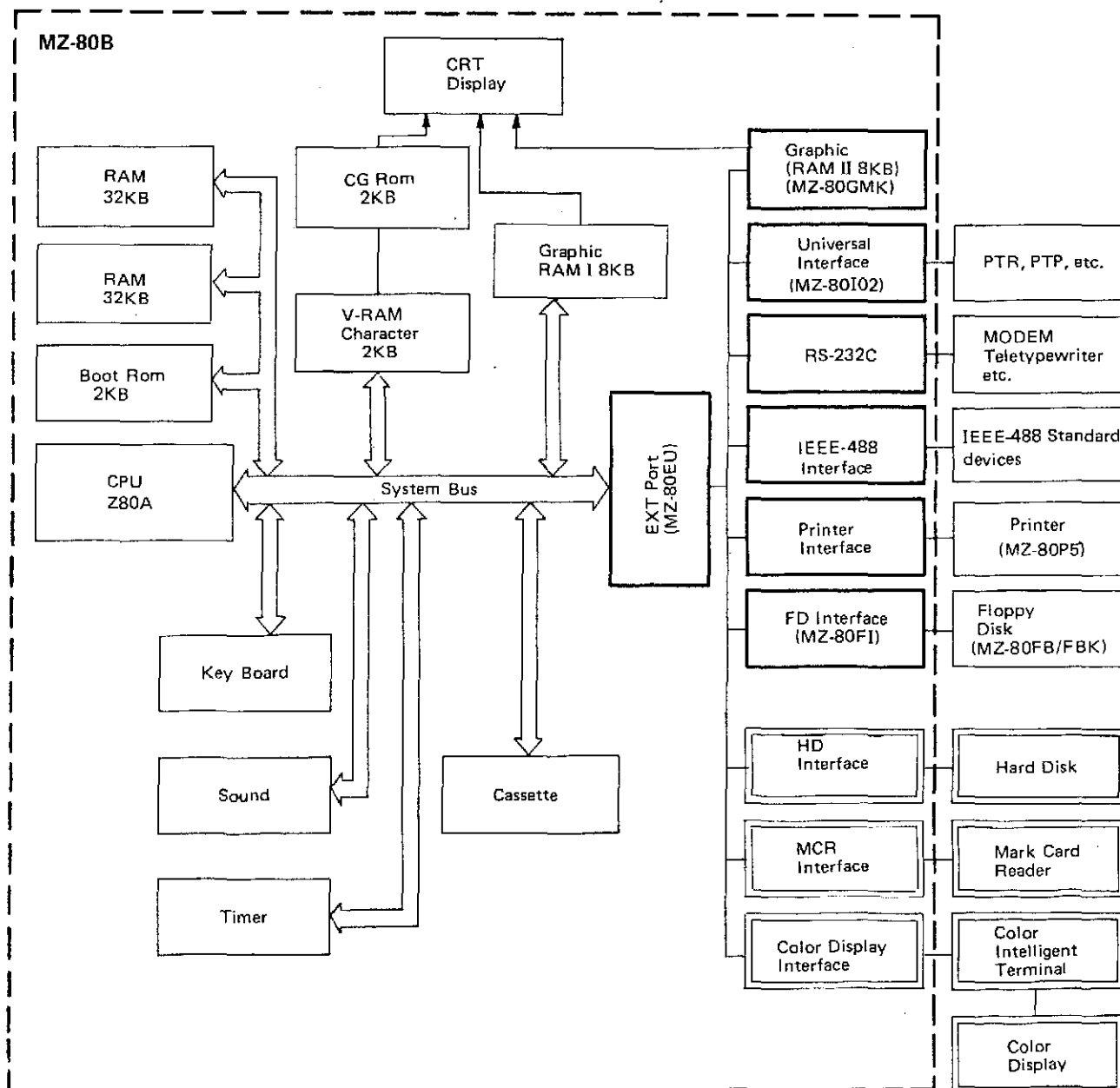


Fig. 1 MZ-80B System and Expansion

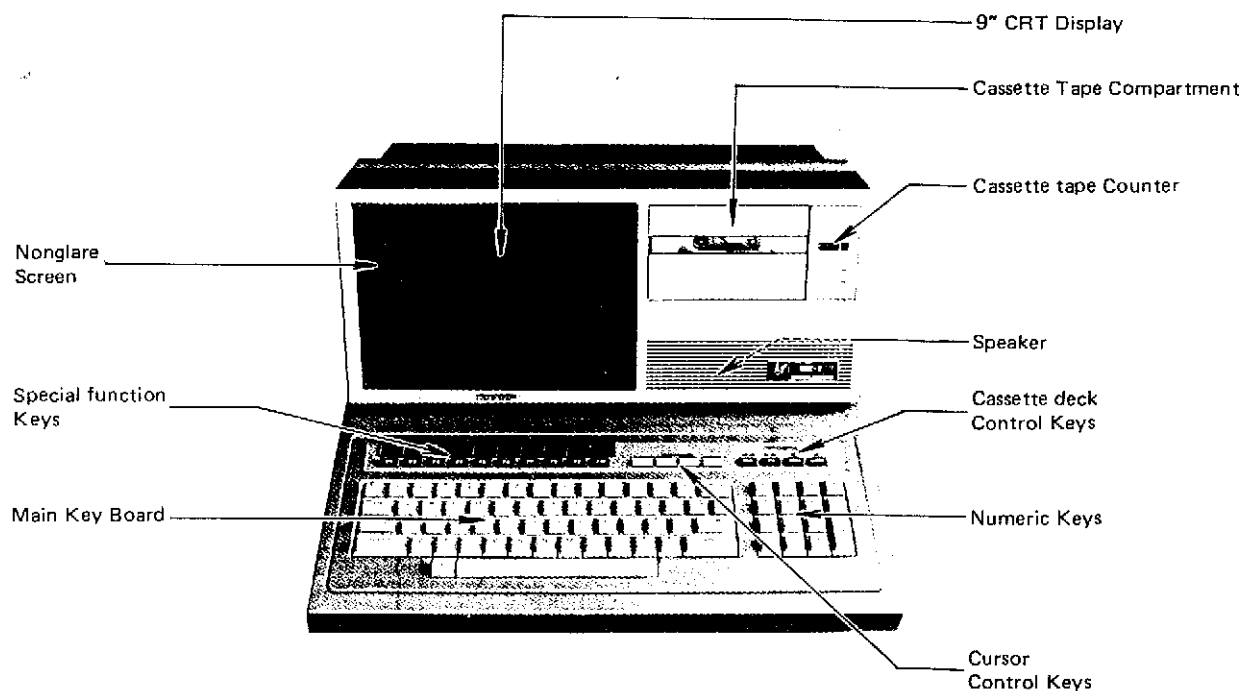


Fig. 2 Front View of MZ-80B

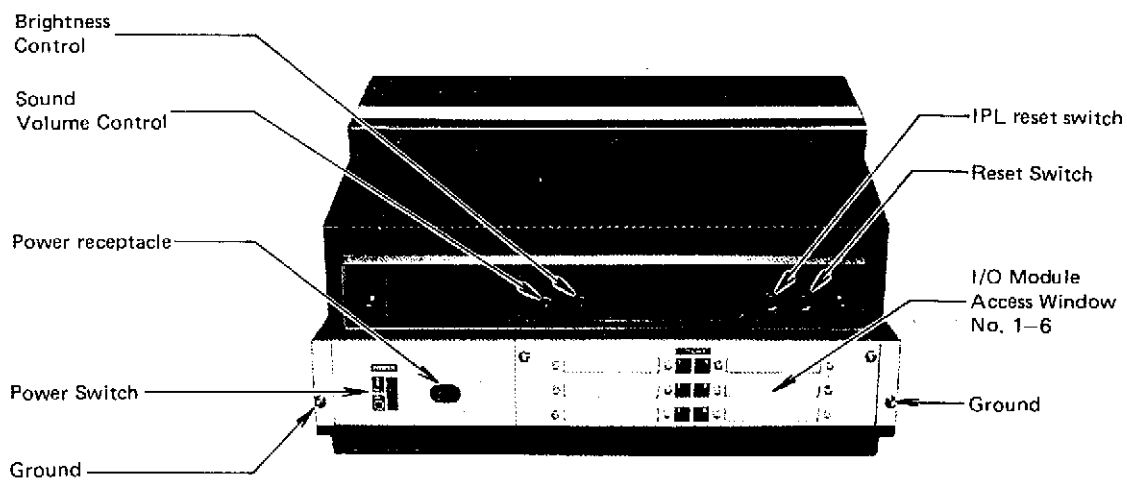
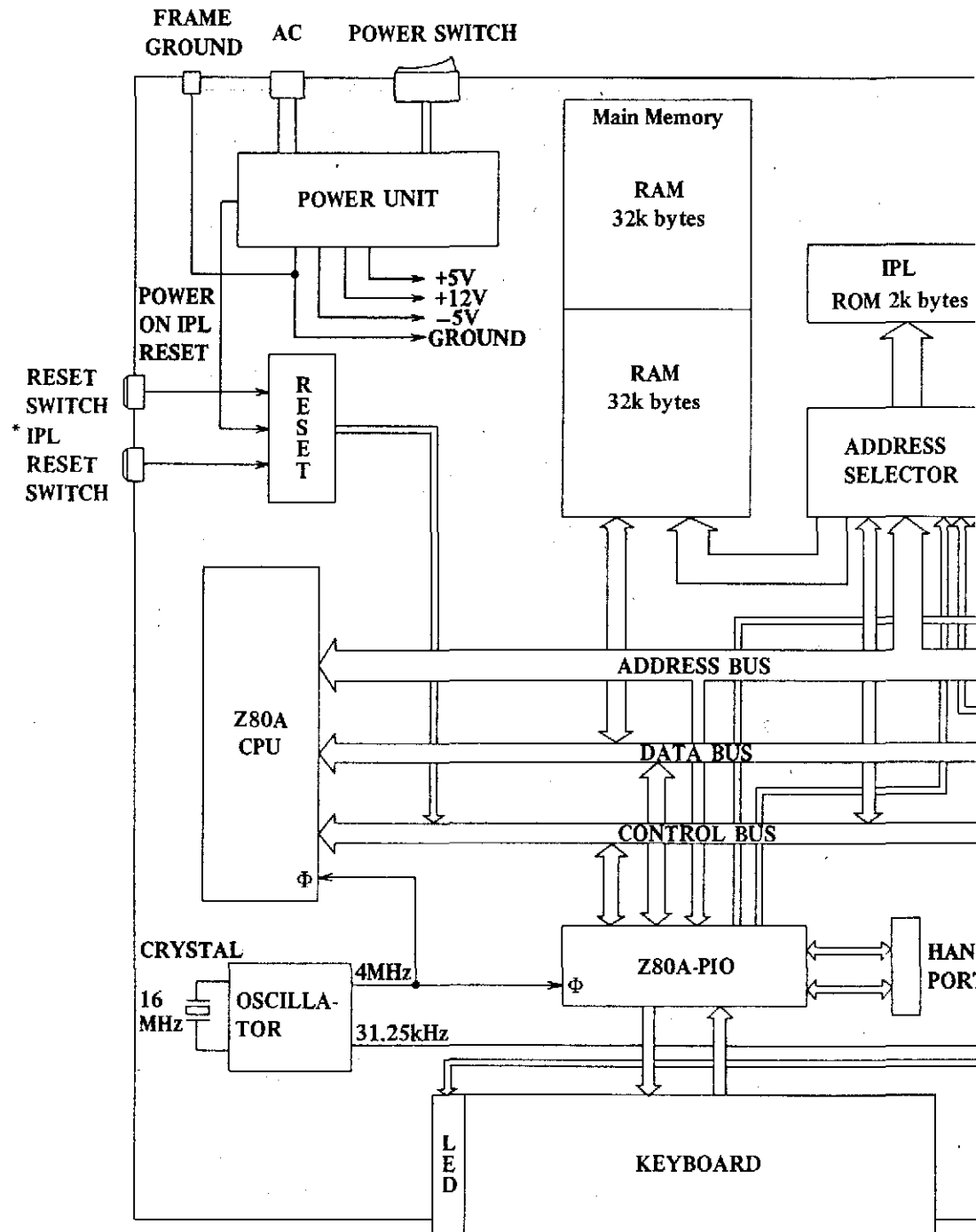


Fig. 3 Rear View of MZ-80B

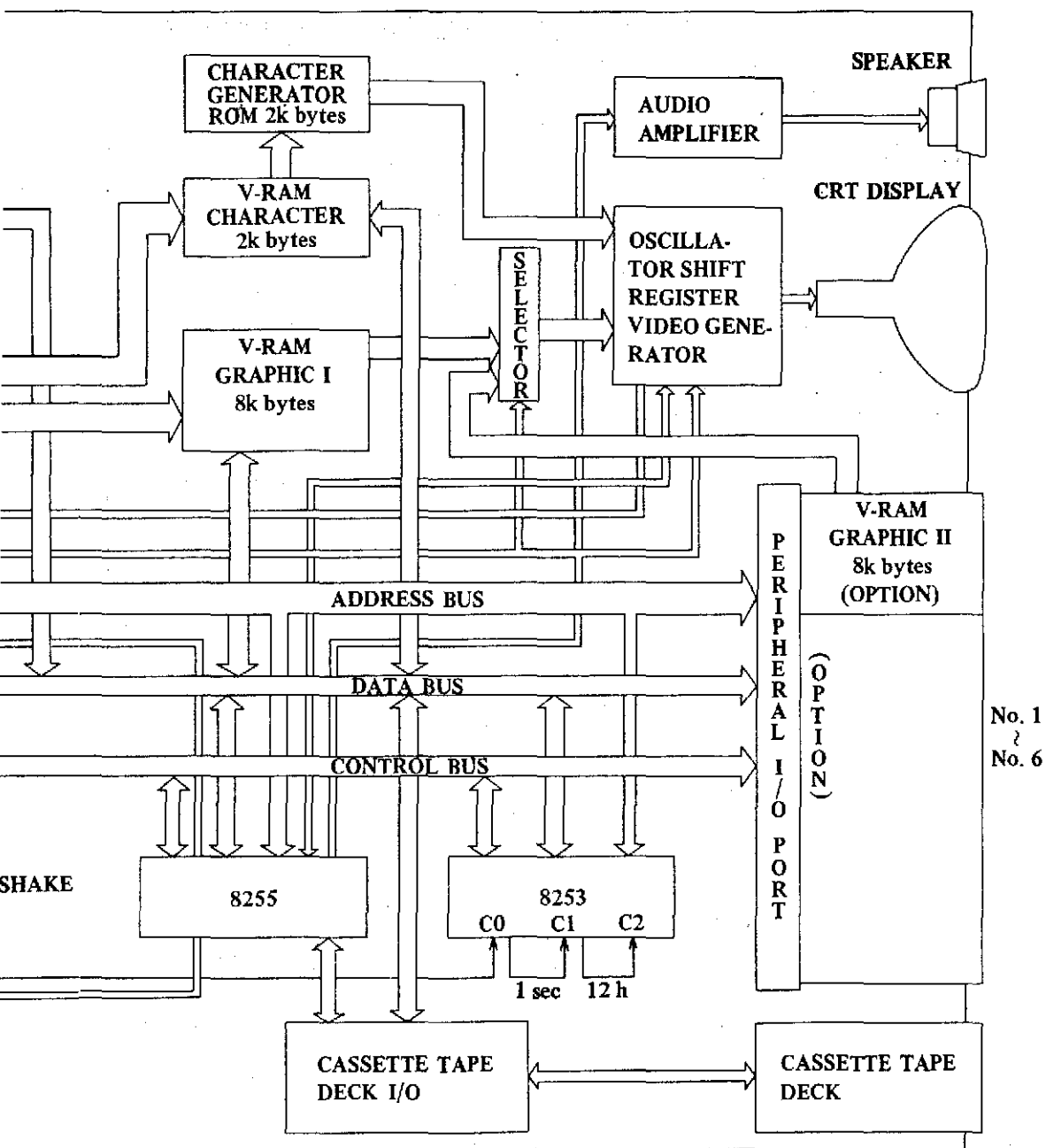
CONFIGURATION OF MZ-80B

The system diagram of the MZ-80B is shown in Fig. 4. With the CPU and its bus lines in the center, the memories (main memory, boot ROM, V-RAM), keyboard, cassette recorder, CRT display, clock, reset circuit, and I/O port are arranged, showing the relations with PIO, 8225, 8253, to constitute the MZ-80B.



*IPL RESET Initial Program Loader RESET

Fig. 4

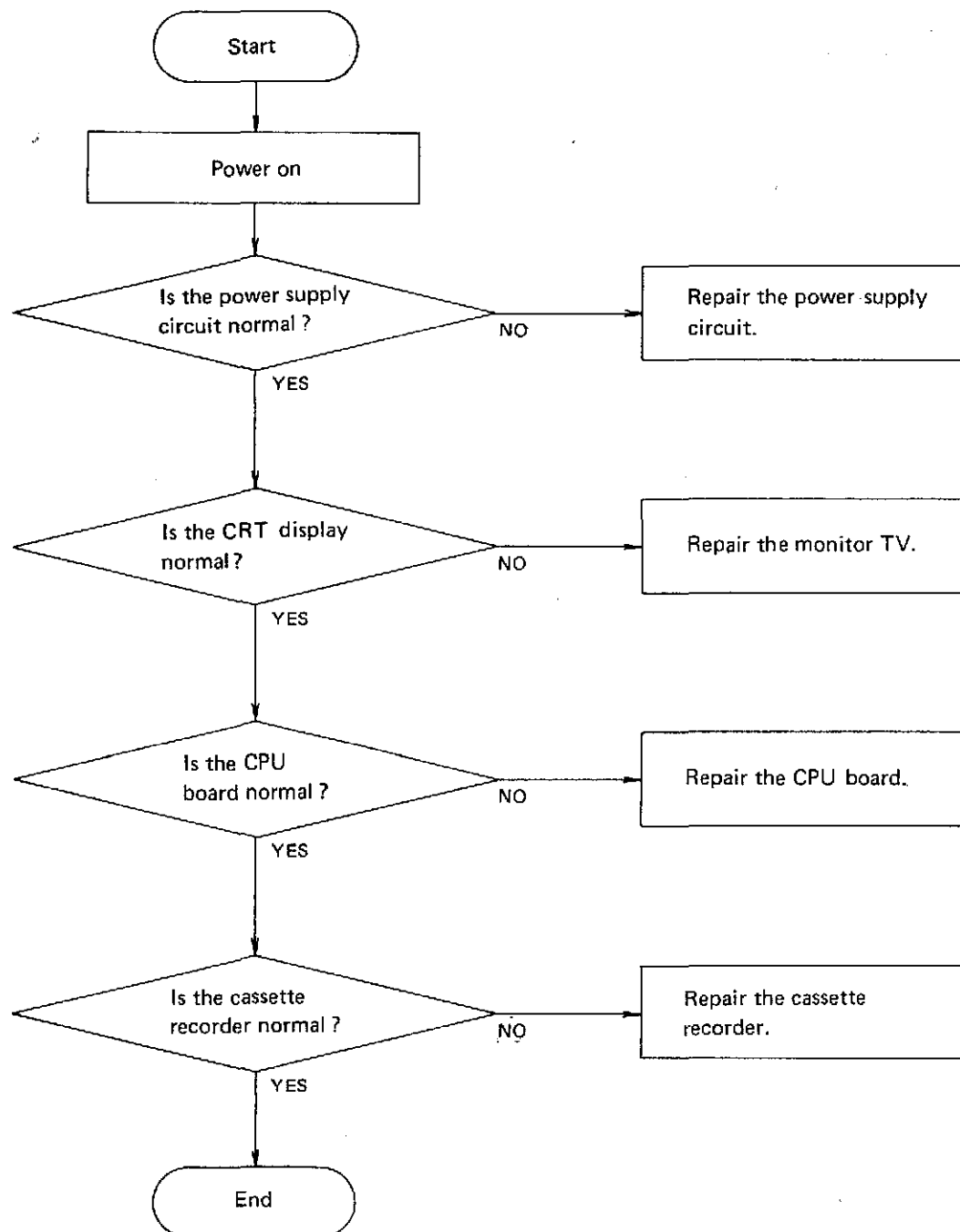


-80B System Diagram

TROUBLESHOOTING GUIDE

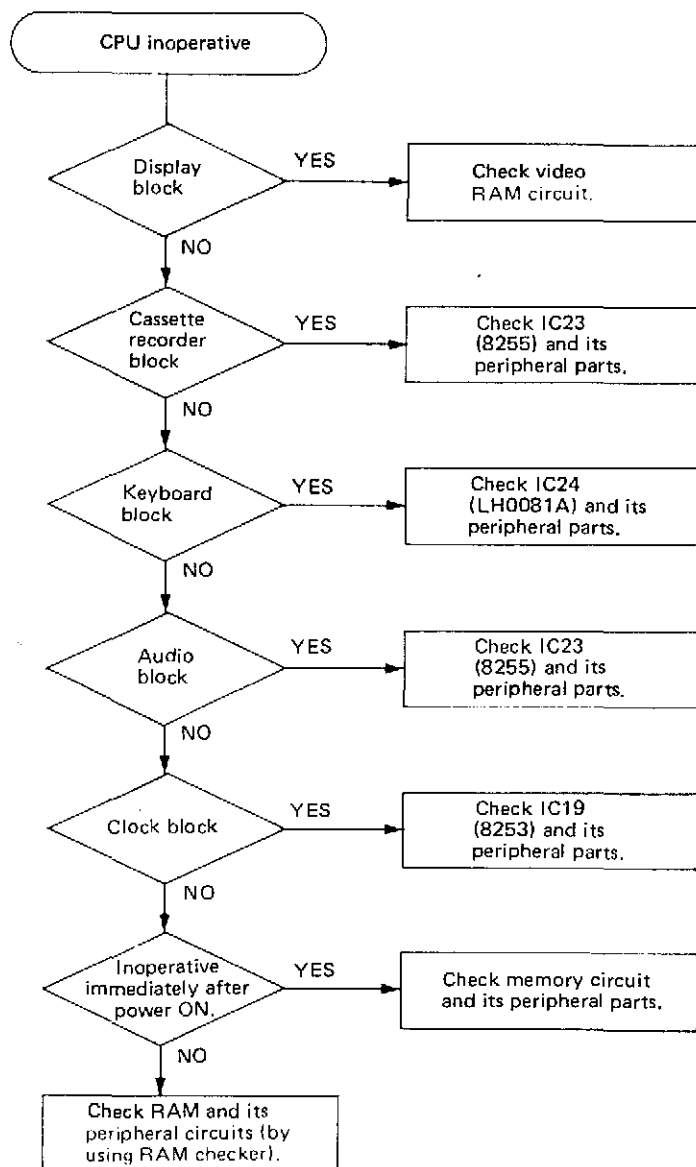
The system comprises four main units.

For quick solution to most operational difficulties, follow the chart below to find which unit is causing the problem.



CPU BOARD SECTION

The CPU board is composed of the following six blocks. When it malfunctions, first locate which block is concerned with the malfunctions, and next try to check for its corresponding circuits; the wiring diagrams of every block will be shown separately.



■ Checking methods of each circuit

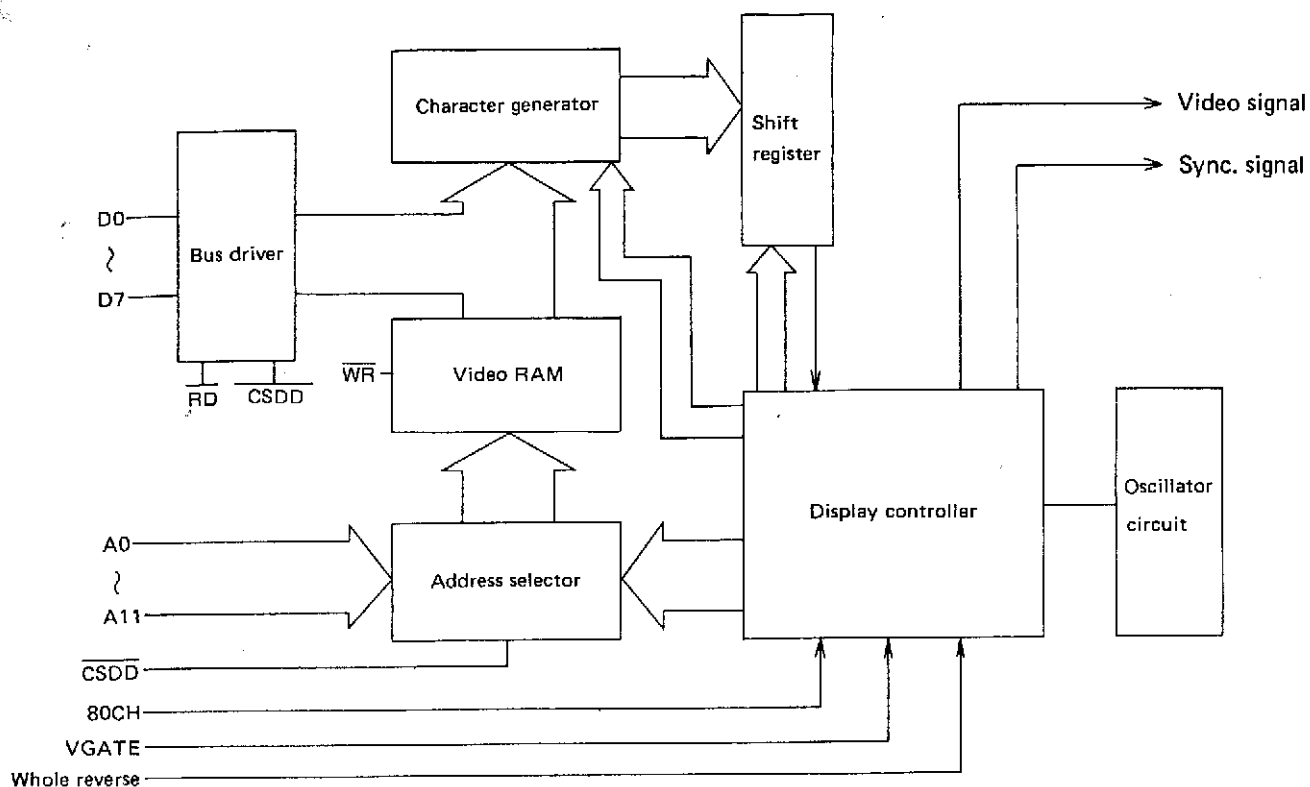
1. By touching IC package by fingers:

- If they seem too hot by heat generation; IC is defective, IC load is heavy or components are touching each other (ROM and V-RAM are exempted from this checking).
- If a circuitry state changes to another; Soldering is poor, socket contact is improper or printed-wiring is erroneous.

2. By using a synchroscope:

- If the relation between input and output of TTL IC is illogical, this means defective IC gate.
- Check if the voltage of TTL IC is as specified: High level; over 2.4V, Low level; below 0.5V.
- When the signal is between the high and low levels, is there circuit touching or IC malfunction?

■ Display Block

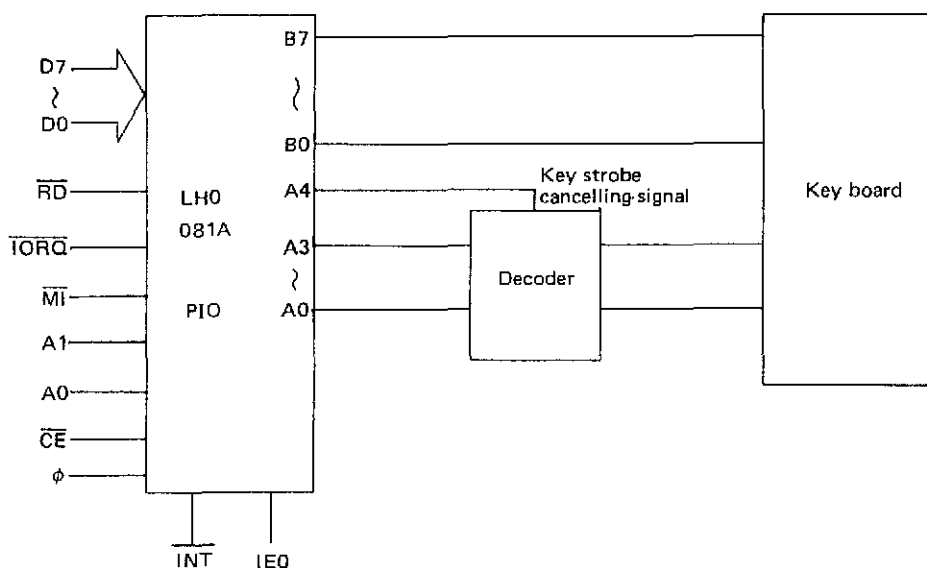


Block Diagram around Video RAM

Problem	Check Point
No sync. signal	<p>Is the correct signal present at pins 12 and 13 of IC36 ?</p> <p>Yes: Check IC36.</p> <p>No: Check IC42 and IC43 and around them. (In particular, check if the input of 8MHz, 16MHz and other clocks are correct (Wave form is shown on page 15.))</p>
No video signal	<p>Is pin 16 of IC42 at a high level ?</p> <p>No: Check IC23.</p> <p>Yes: Proceed to the following.</p> <p>Is a video signal present at pin 8 of IC46 ?</p> <p>Yes: Check IC31, IC33 and IC36.</p> <p>No: Check IC42 and IC43 and around them. (In particular, check if the input of 8MHz and 16MHz and other clocks are correct (Wave form is shown on page 15.))</p>
Characters displayed but position abnormal	<p>Is the signal at pins 3, 6, 10 and 13 of IC37, IC38 and IC39 correct ?</p> <p>Yes: Check the address of IC41 and the signals of IC37, 38 and 39 connected to it.</p>

<p>Position is correct but characters are abnormal</p> <p>Displayed characters are abnormal</p>	<p>No: Check IC 37, 38, 39, 42 and 43.</p> <p>Check the common line of IC22, IC41 and IC44 and around the IC22.</p> <p>Check $A_3 - A_0$ and $D_7 - D_0$ of IC45 and IC42.</p>
-------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

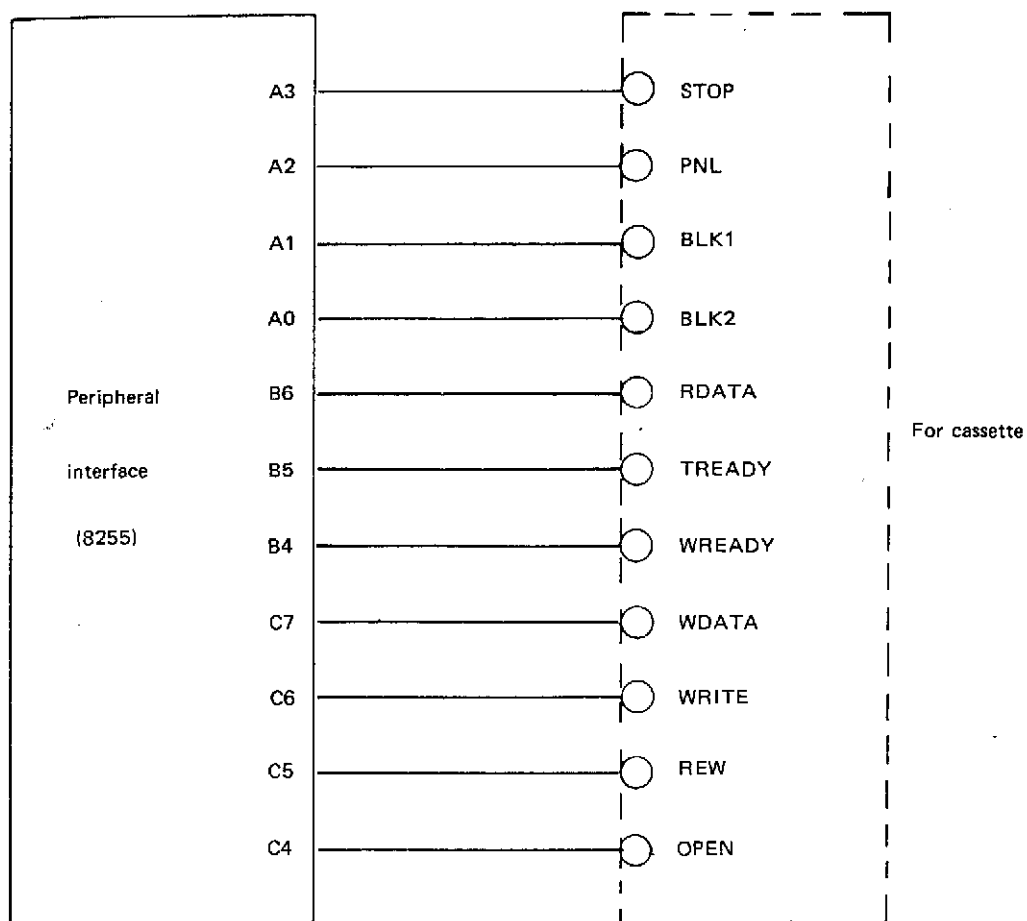
■ Keyboard Block



Block Diagram around Keyborad

Problem	Check Point
Does not accept key entry.	<p>Is key strobe present ?</p> <p>Yes: Check keyboard, IC24 and around it.</p> <p>No: Check IC25, IC27, IC28, IC29 and IC36. If they are normal, check IC24 and around it.</p>

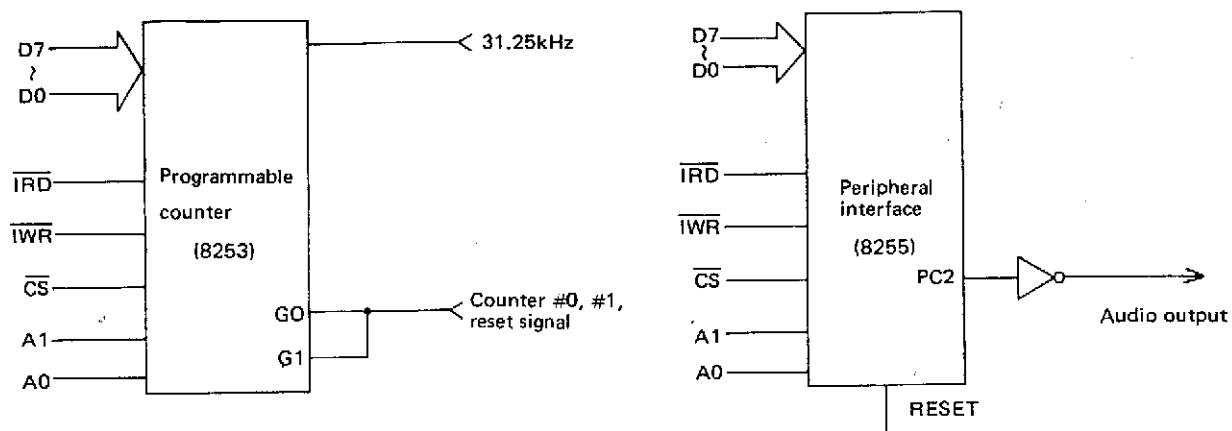
■ Cassette Block



Block Diagram around the Cassette

Condition	Check Point
Load is not possible.	Is there a signal from pin 6 of IC 26? YES: Check IC23. NO: Check IC26.
Save is not possible.	Is there a signal from pin 10 of IC23? YES: Check IC26. NO: Check IC23.
Motor does not turn.	Check IC23.
Motor does not stop.	Check IC23.

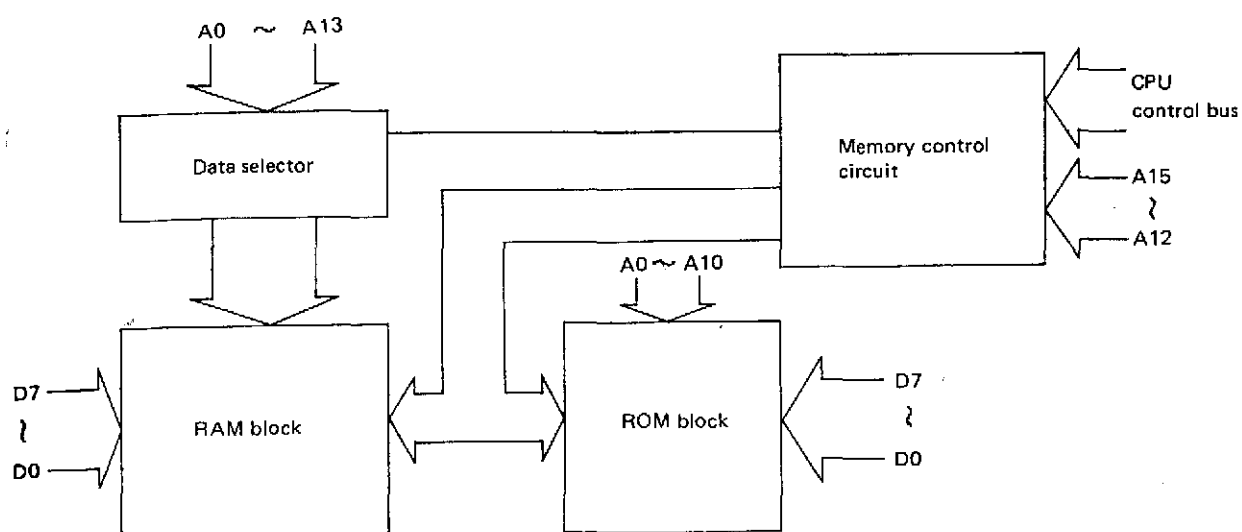
■ Clock/Audio Block



Block Diagram around Clock/Audio Block

Problem	Check Point
Clock function is abnormal.	Is there a 31.25kHz signal present at pin 9 of IC19? Yes: Check IC19 (8253) and around it. No: Check IC42 and around it.
Audio output is abnormal.	Is an output signal present at pin 4 of IC31? Yes: Check amplifier section in the display board. No: Check IC23, IC31

■ Memory/Reset Circuit Block



Memory/Reset Circuit

Problem	Check Point
Picture "panic" when power is on.	<p>Does pin 26 of IC3 go from High to Low when the BOOT reset SW is pushed ?</p> <p>No: Check IC33</p> <p>Yes: Proceed the following.</p> <p>Is pin 15 of IC2 High ?</p> <p>No: Check IC34</p> <p>Yes: Check address line A0 – A15 (IC6, IC10)</p> <p>Data line D0 – D7 (IC11)</p> <p>Control line (IC7)</p> <p>IC2, IC8, IC14, IC16</p>
Abnormal action immediately after end of program due to BOOT program	<p>Is pin 15 of IC2 at Low Level ?</p> <p>Yes: Check IC34</p> <p>No: Check IC2</p>
Error when program is in RAM	Check RAM

* How to Use RAM CHECKER

Insert RAM CHECKER into BOOT ROM socket and turn the power on. Then RAM TEST-1 and RAM TEST-2 will automatically be carried out from RAM address \$0000 to address \$FFFF as shown below and the tested results will be displayed.

The checker tests the store by dividing it into two parts of addresses \$0000 to \$7FFF and \$8000 to \$FFFF.

Example of the test results (When all RAM's are normal)

Check RAM (I) block, 16K bytes, RAM (II) block 16K bytes

```

RAM TEST-1  0000-OK
             4000-OK
RAM TEST-2  00 FF 00 FF F0 OK
    
```

The checker continues to check the RAM (III) block 16K bytes and RAM (IV) block 16K bytes.

```

RAM TEST-1  8000-OK
             C000-OK
RAM TEST-2  00 FF 00 FF F0 OK
    
```

1) RAM TEST-1

A write/read test of data \$00 and \$FF is carried out from address \$0000 to \$FFFF, and if an error occurs ERROR is displayed in the 16K bytes unit.

Example of above mentioned display

```
0000 OK
```

..... Result of write/read test from address \$0000 to \$3FFF is normal.

Example of display when ERROR appears.

```
ER-235B-00, 01
```

..... Write in data was \$00 at address \$235B but read-out data was \$01.

An error is displayed by the address number at which the error takes place, and the execution of check is stopped at the address.

2) RAM TEST-2

Write/read test is carried out with the following items.

- Write-in data \$00 (From address \$0000 to \$7FFF)
- Write-in data \$FF (From address \$0000 to \$7FFF)
- Write-in data \$00 (From address \$7FFF to \$0000)
- Write-in data \$FF (From address \$7FFF to \$0000)
- Write-in data \$F0 and \$0F entered alternately (From address \$0000 to \$7FFF and vice versa.)
- Write-in data \$00 (From address \$8000 to \$FFFF)
- Write-in data \$FF (From address \$8000 to \$FFFF)
- Write-in data \$00 (From address \$FFFF to \$8000)
- Write-in data \$FF (From address \$FFFF to \$8000)
- Write-in data \$F0 and \$0F alternately (From address \$8000 to \$FFFF and vice versa)

Example of ERROR in RAM TEST-2

```

RAM TEST-2  00 FF 00 ER-23FF-01
    
```

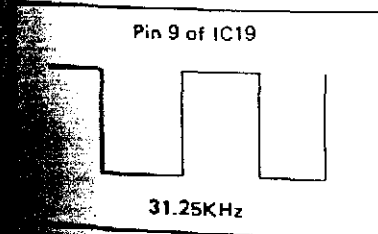
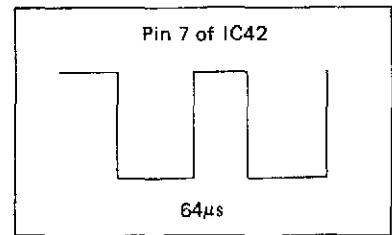
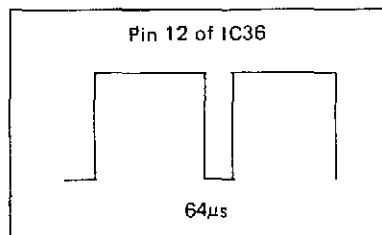
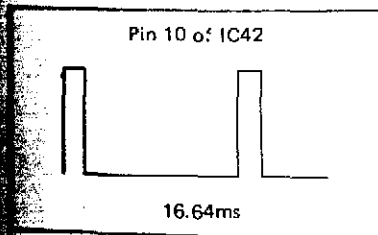
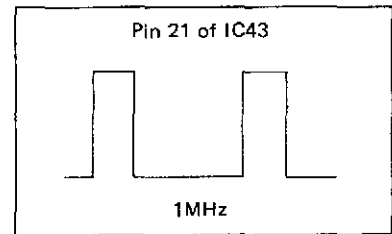
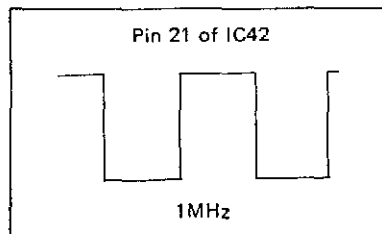
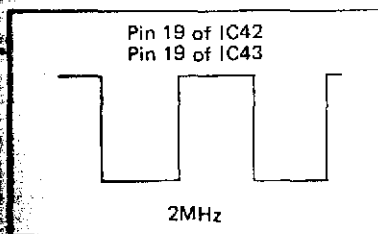
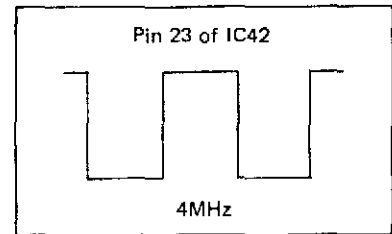
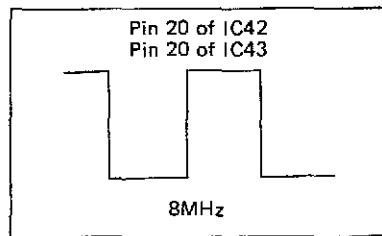
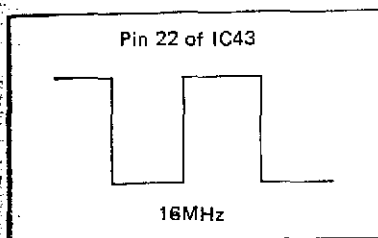
Test results of a) and b) were normal but in c), although data \$00 was written in address \$23FF, read-out data was \$01. When ERROR is displayed in the above mentioned RAM TESTs, decide which RAM block is bad according to the memory address where the error occurs. Then you can decide which RAM is bad in the RAM block where the error occurs by the bytes pattern of the write-in data and read-out data. In the above example, you can tell that it's RAM (I) block by \$23FF and that RAM 1 is bad because write-in data is \$00 but read-out data is \$01. (See Fig. next)

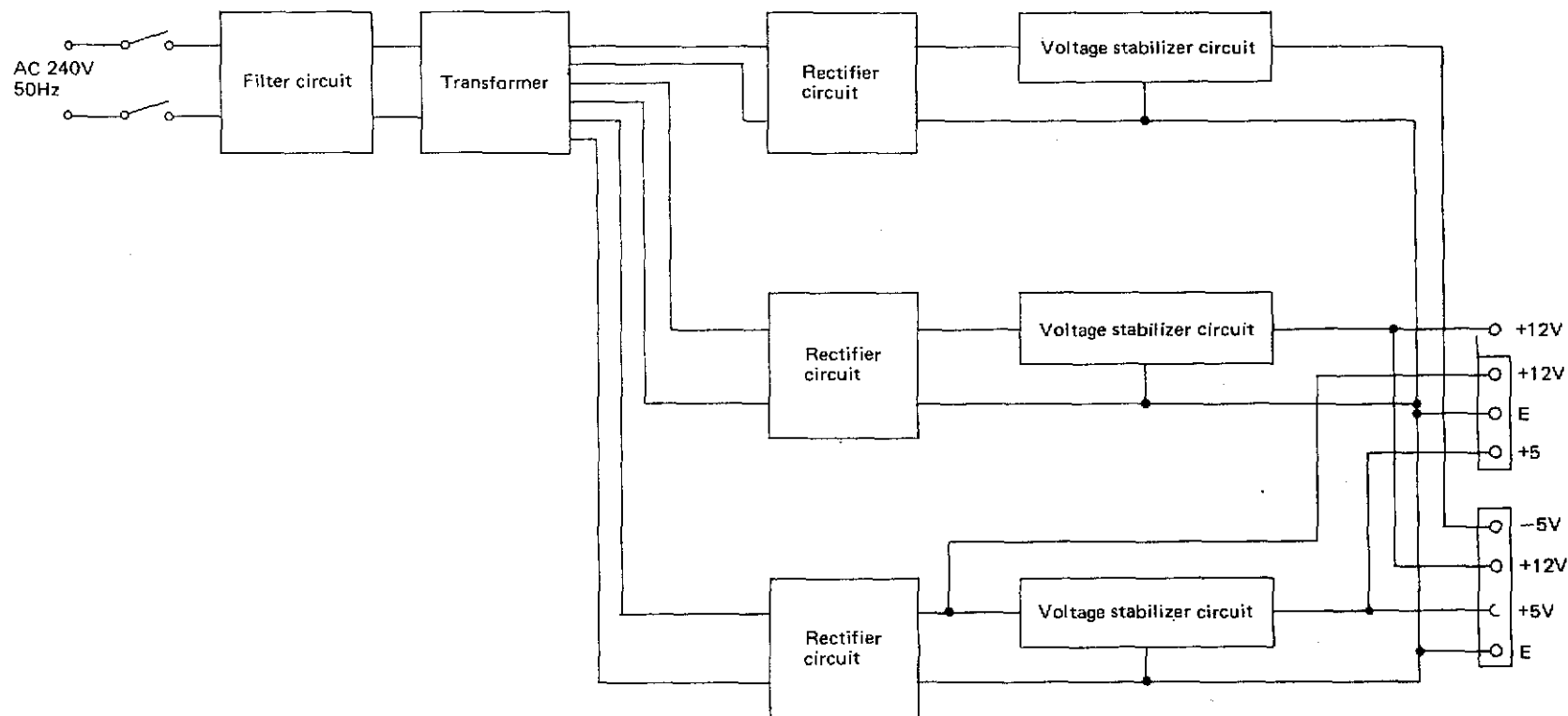
	D7	D6	D5	D4	D3	D2	D1	D0	
Write-in data \$00	0	0	0	0	0	0	0	0	Error to occur
Read-out data \$01	0	0	0	0	0	0	0	1	

	RAM (I)	RAM (2)
D7	SHARP 8	16
D6	7	15
D5	6	14
D4	5	13
D3	4	12
D2	3	11
D1	2	10
D0	1	9

	RAM (III)	RAM (IV)
	SHAR 24	32
	23	31
	22	30
	21	29
	20	28
	19	27
	18	26
	17	25

■ Waveforms of CPU Board



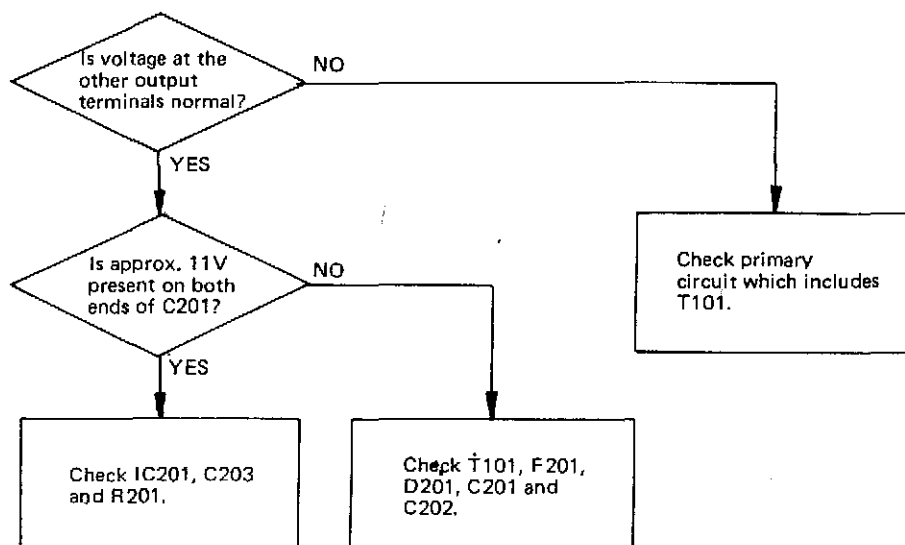


Block Diagram of Power Supply Circuit

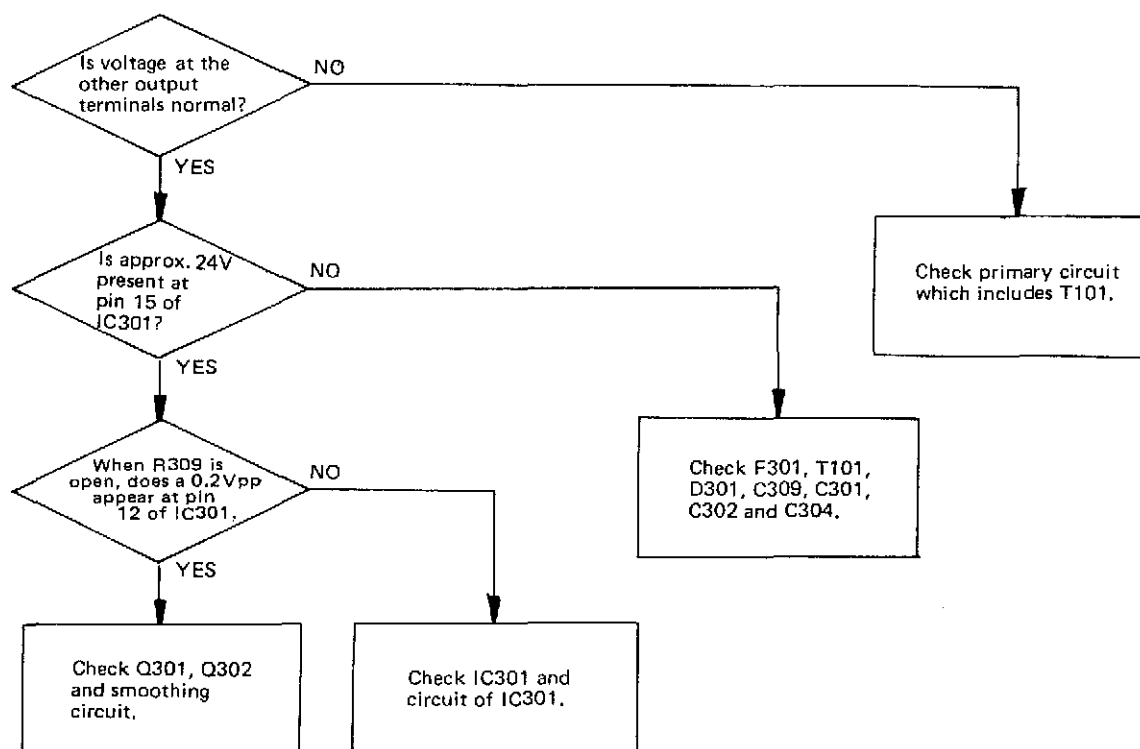
■ Trouble Shooting Chart

Problem (1) No voltage at any output terminal.
Check primary circuit which includes the transformer.

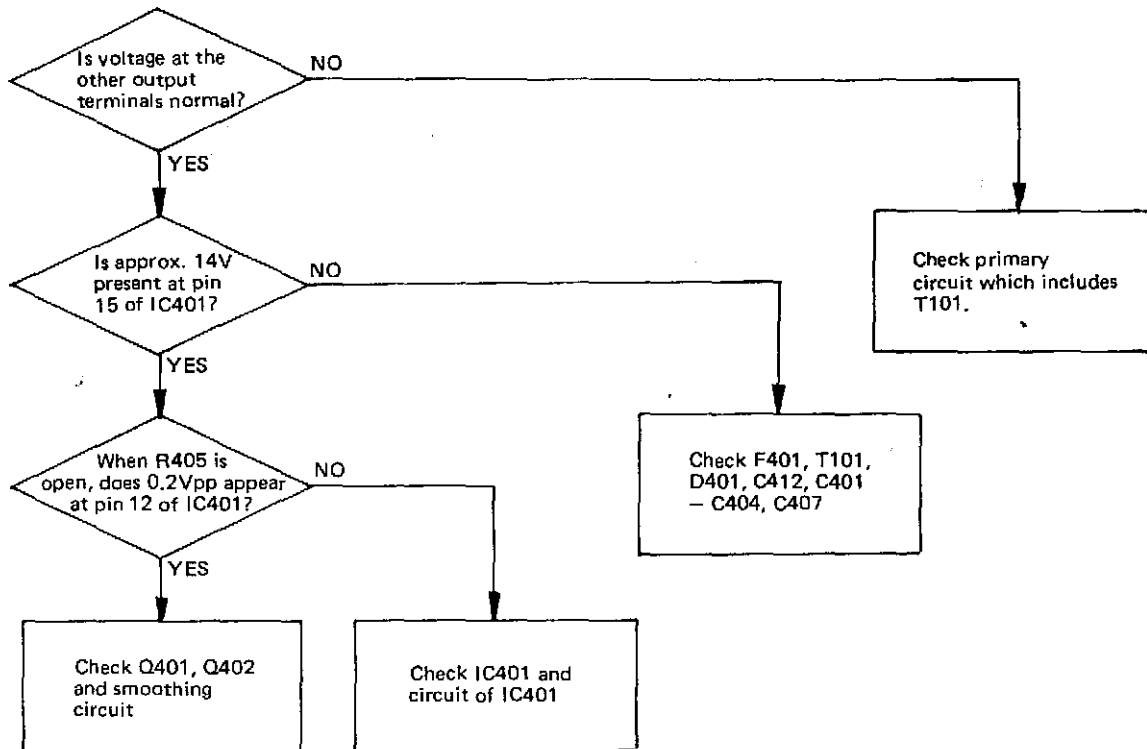
Problem (2) No. -5V.



Problem (3) No +12V.



Problem (4) No +5V,

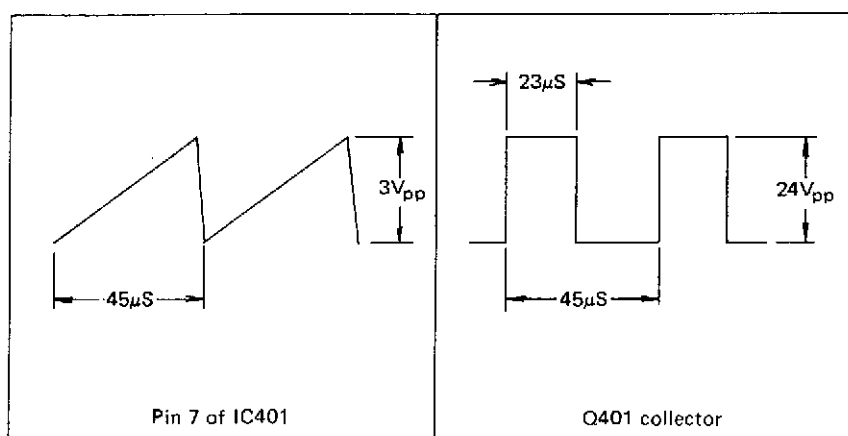
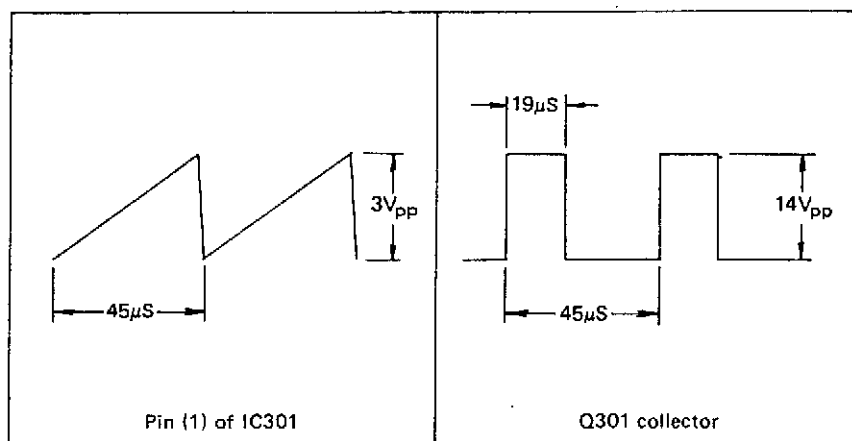


Problem (5) -5V is abnormally high.
Check IC201

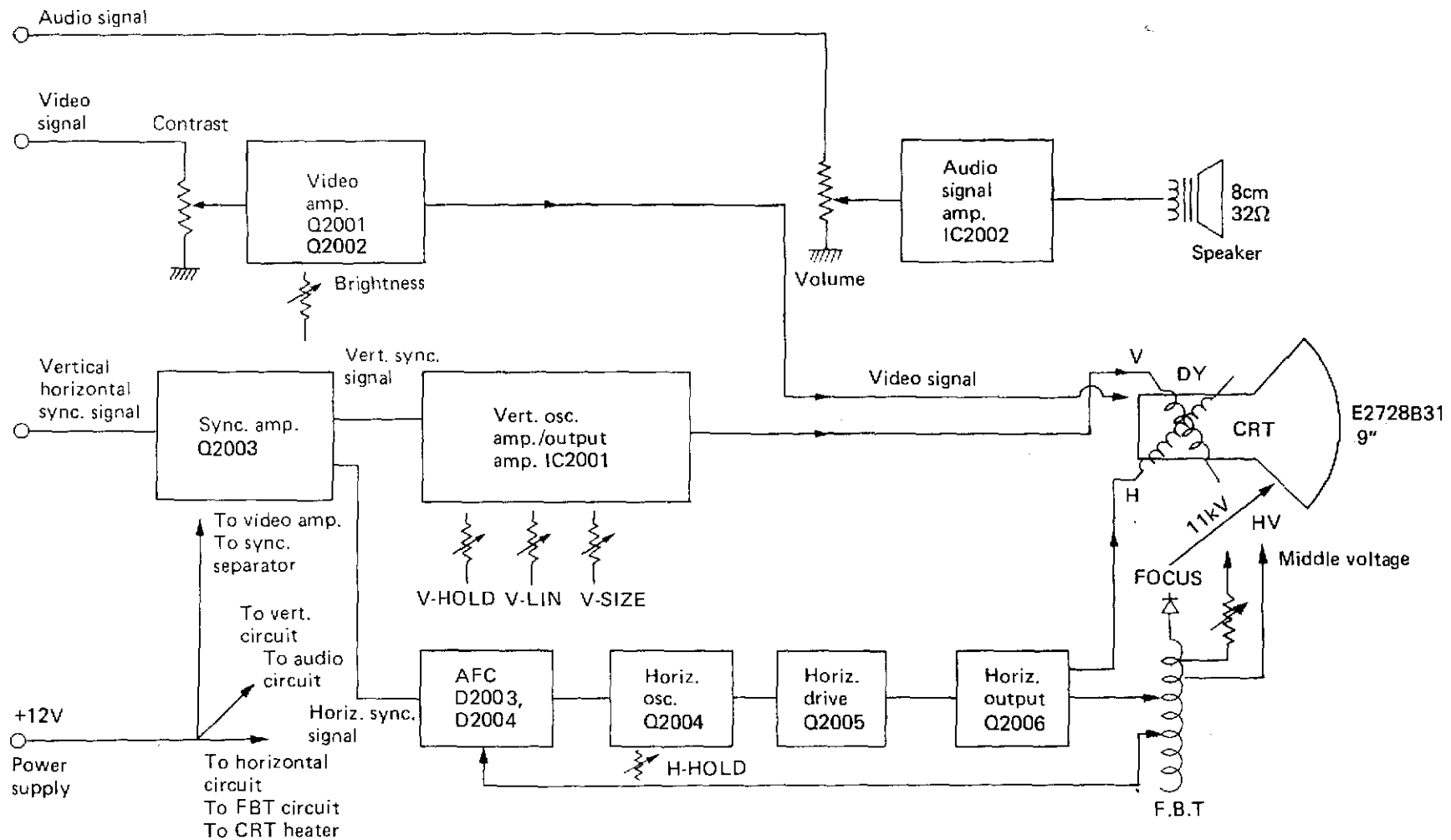
Problem (6) +12V is abnormally high.
Check Q301, Q302 and IC 301.

Problem (7) +5V is abnormally high.
Check Q401, Q402 and IC401.

■ Waveforms of Power Supply Circuit



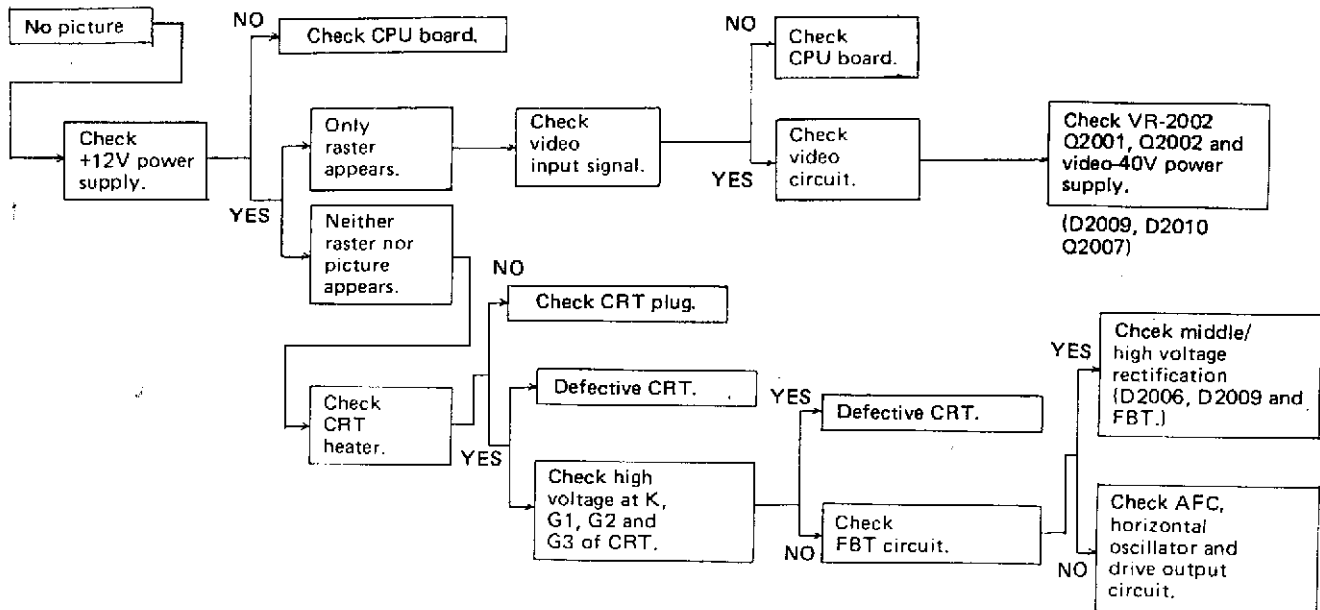
These are basic waveforms when the load current of +5V 2.5A, +12V 1.25A and -5V 10mA flow from the output terminals.



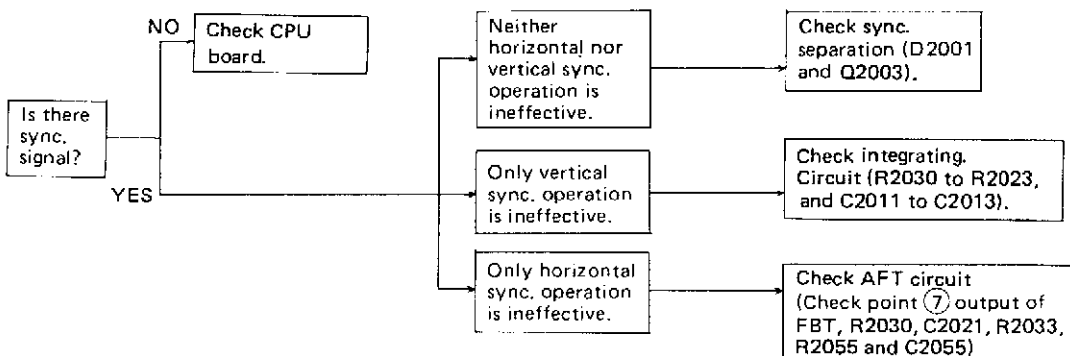
Block Diagram of Monitor TV Section

■ Trouble Shooting Chart

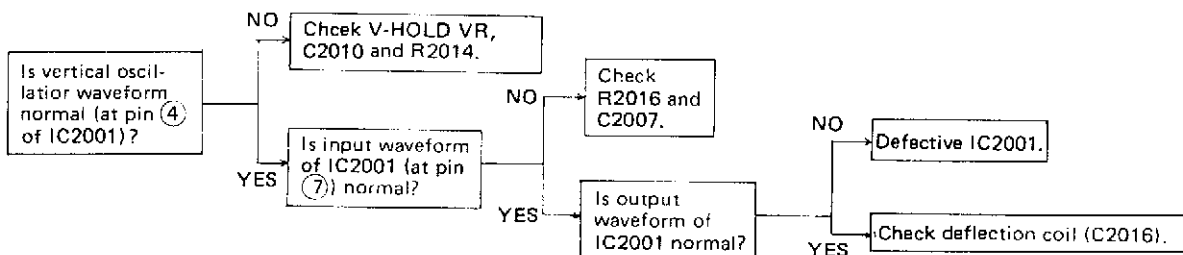
Problem 1: No picture appears.



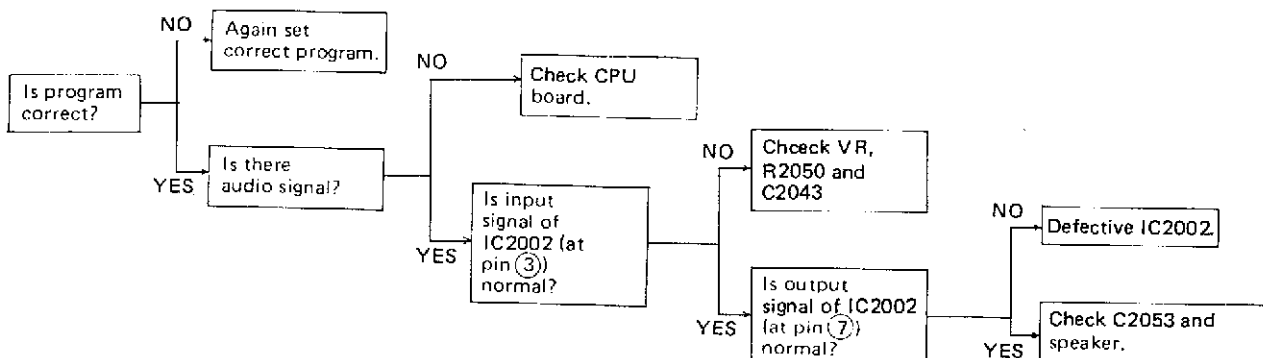
Problem 2: Sync operation remains ineffective.



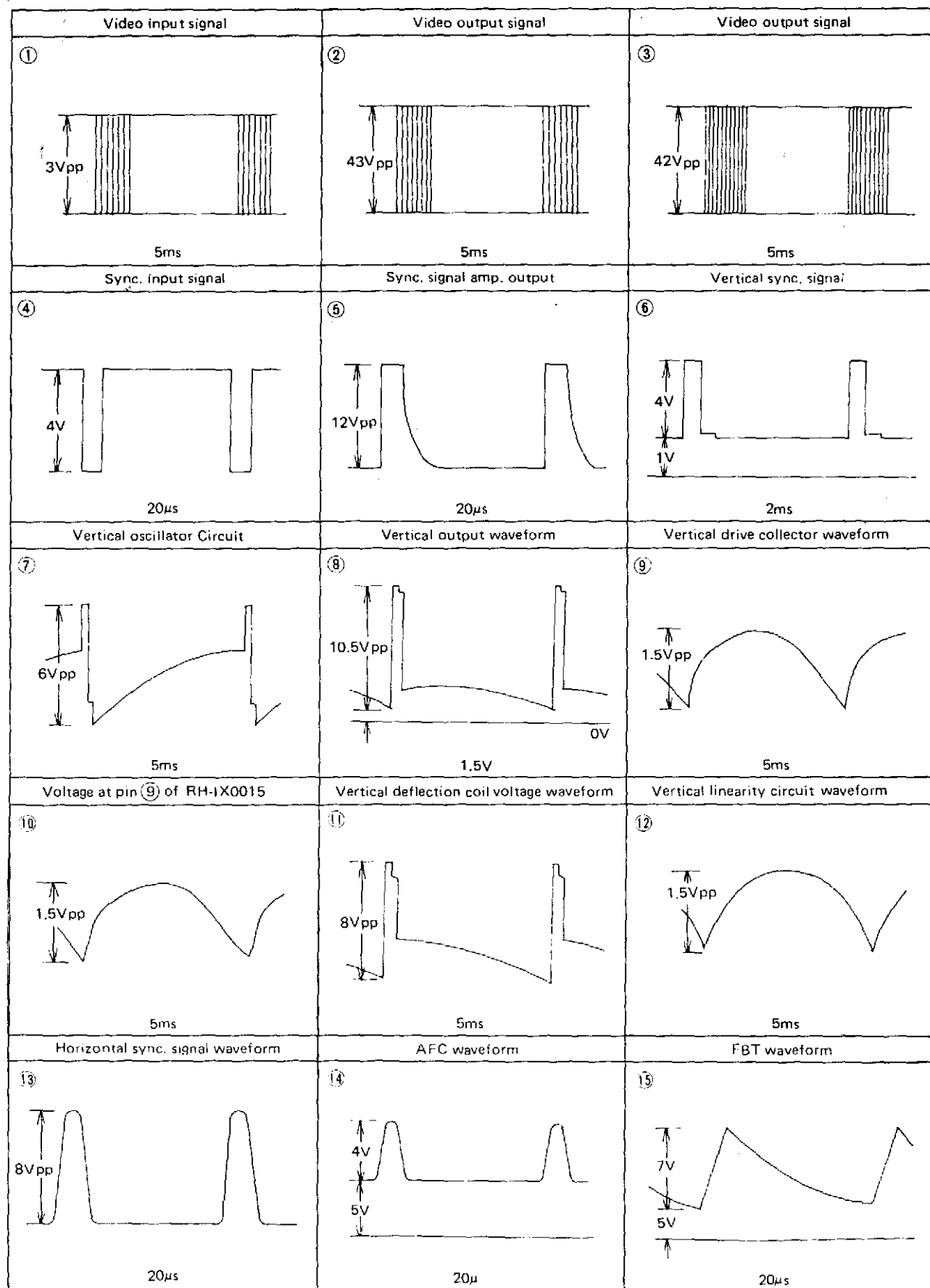
Problem 3: Raster is too narrow.

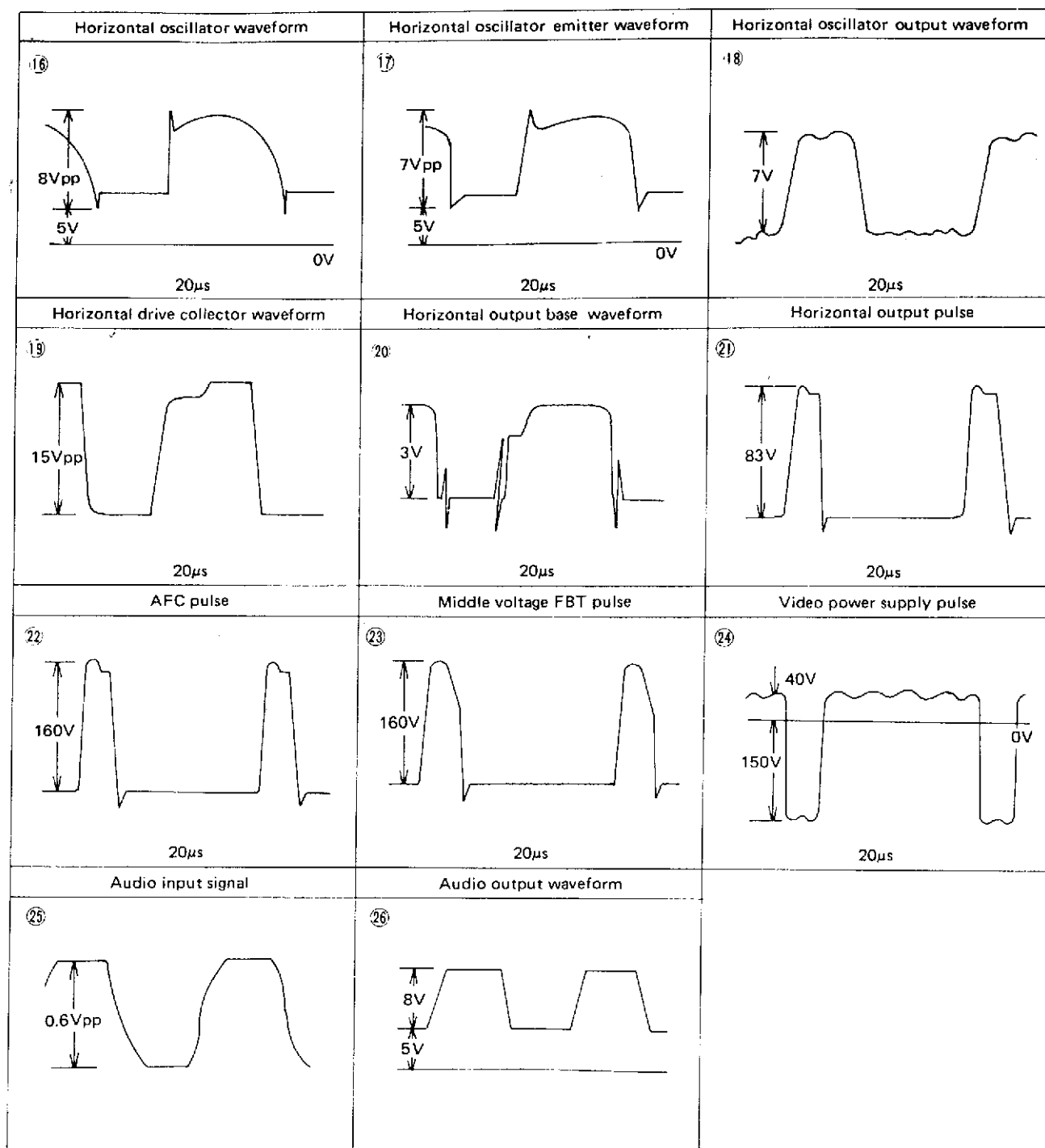


Problem 4: No sound comes out.



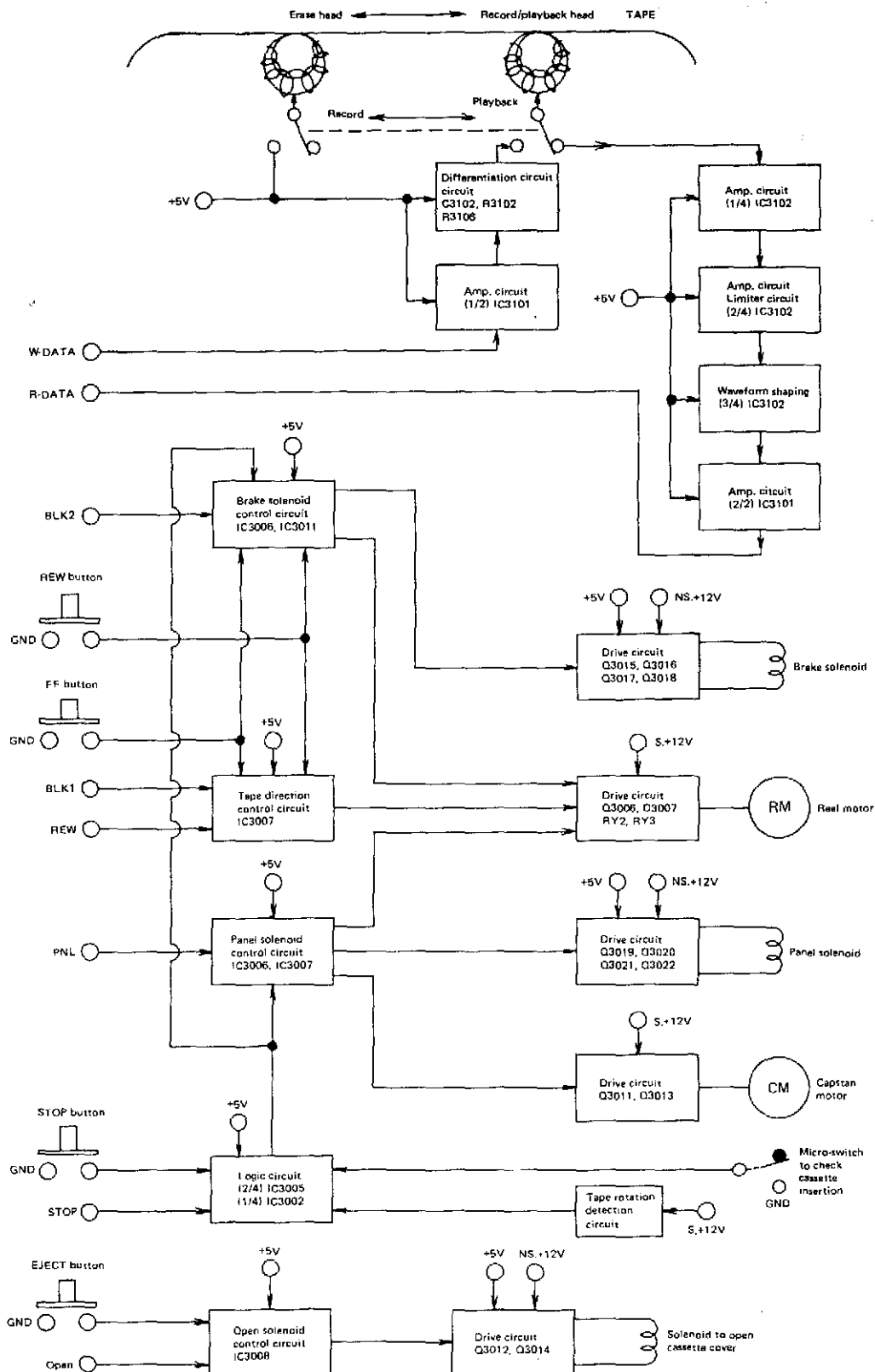
■ Waveforms of Monitor TV Section





The figures encircled by ① in the above refer to those of "Wiring Diagram" --- "Check Points of Waveforms".

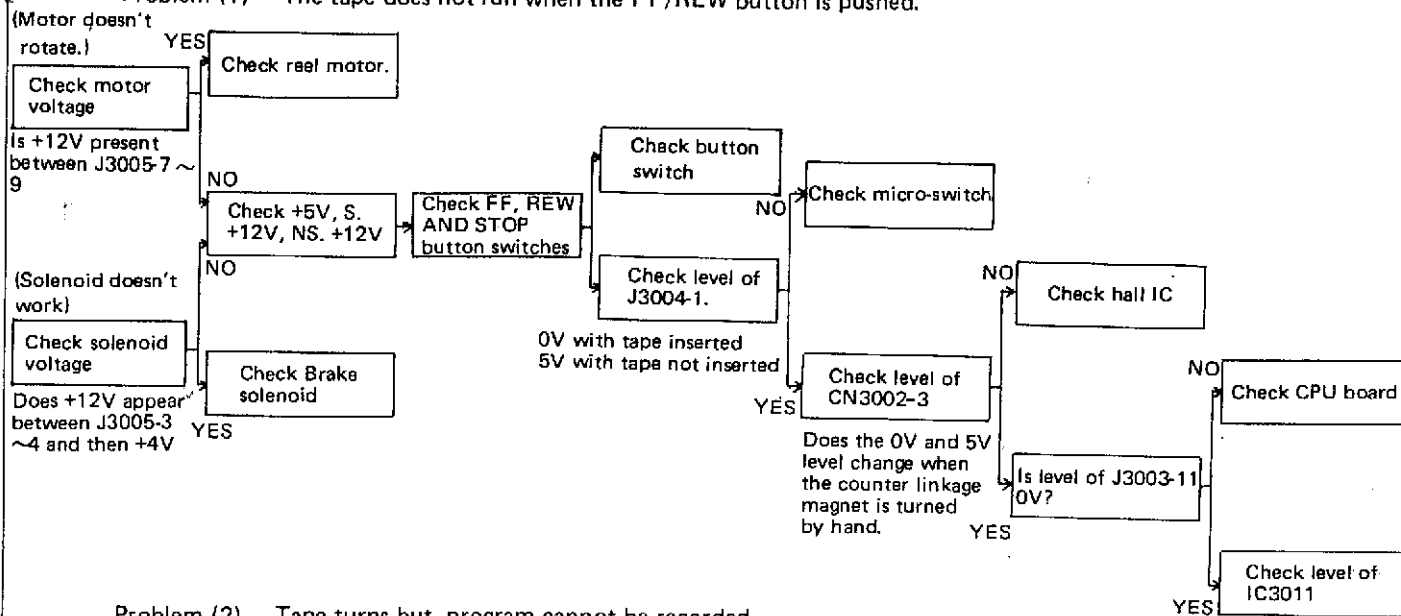
CASSETTE TAPE RECORDER SECTION



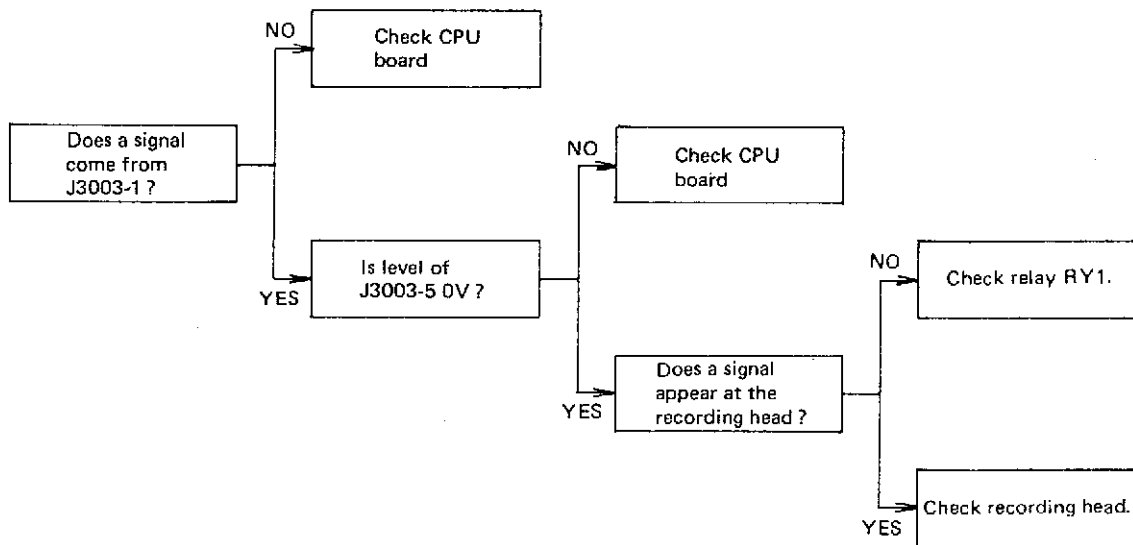
Block Diagram of Cassette Tape Recorder

■ Trouble Shooting Chart

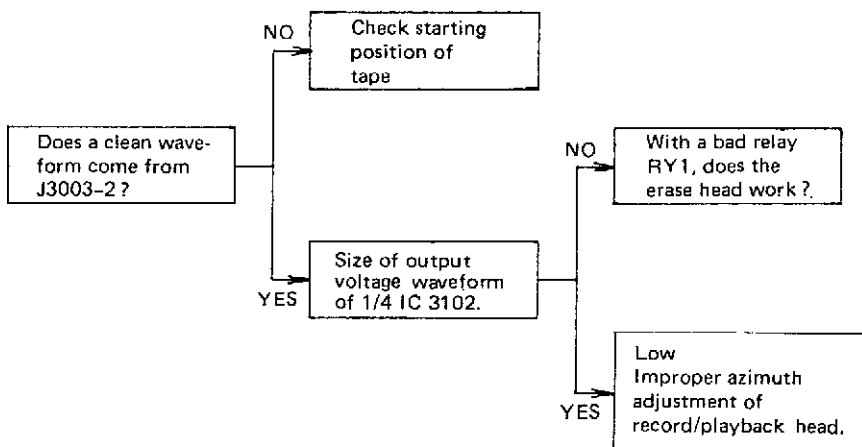
Problem (1) The tape does not run when the FF/REW button is pushed.



Problem (2) Tape turns but, program cannot be recorded.



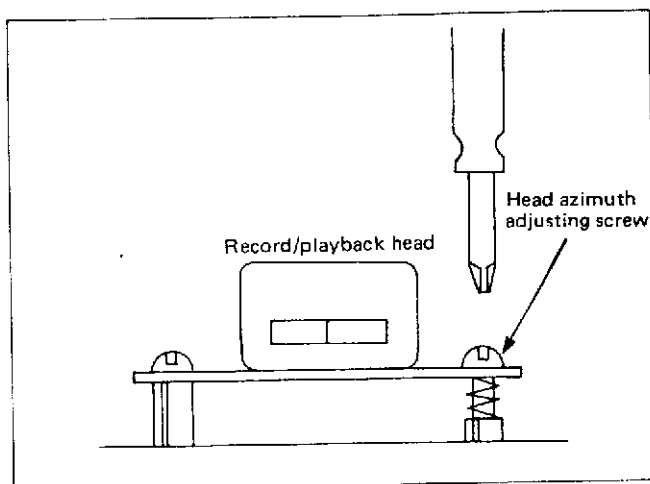
Problem (3) Tape turns, but programs cannot be played back or an error occurs.



■ Azimuth Adjustment and Head Cleaning

* Azimuth adjustment of record/playback head

1. Connect a synchroscope to pin 8 of IC3102.
2. Load a test tape (TEAC, 3kHz-signal recorded) and play it back.
3. Rotate the azimuth adjusting screw so that the waveform on a synchroscope will be the maximum.



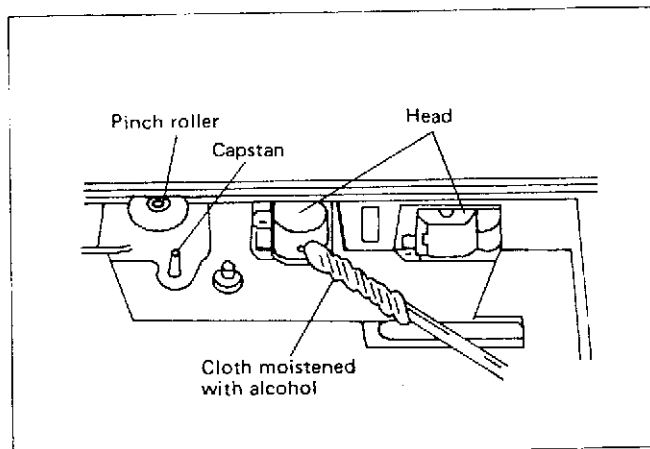
Head cleaning

Clean the heads, capstan and pinch roller often, to remove dust and tape residue. Foreign material on them impairs the sound quality of both recording and playback.

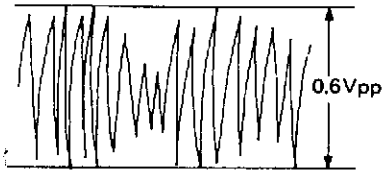


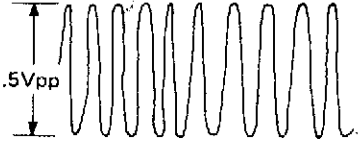
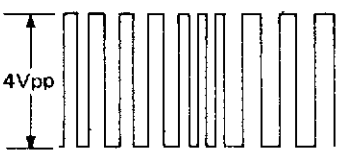
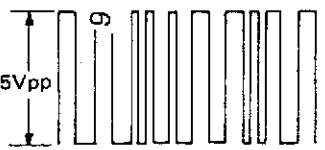

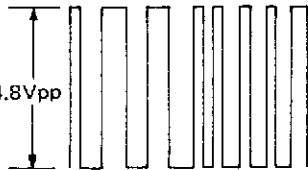

Open the cassette holder, remove the tape, push the play button and clean them with a soft cloth moistened in alcohol.

Erase protection

To protect a cassette tape from being accidentally erased it was designed with two removable tabs. By removing tabs recording mechanism does not function when the record button is pushed.



■ Waveforms of Cassette Tape Recorder

1st stage amp. output waveform	Operational amp. input waveform	Operational amp. input waveform
① 	② 	③ 
Operational amp. input waveform	Operational amp. output waveform	Output waveform
④ 	⑤ 	⑥ 
Record input waveform	Record amp. waveform	Head input waveform
⑦ 	⑧ 	⑨ 

The figures encircled by ○ correspond to those of "Wiring Diagram" — "Check Points of Waveforms".

PRINTED WIRING BOARD AND CIRCUIT DI

■ CPU PWB

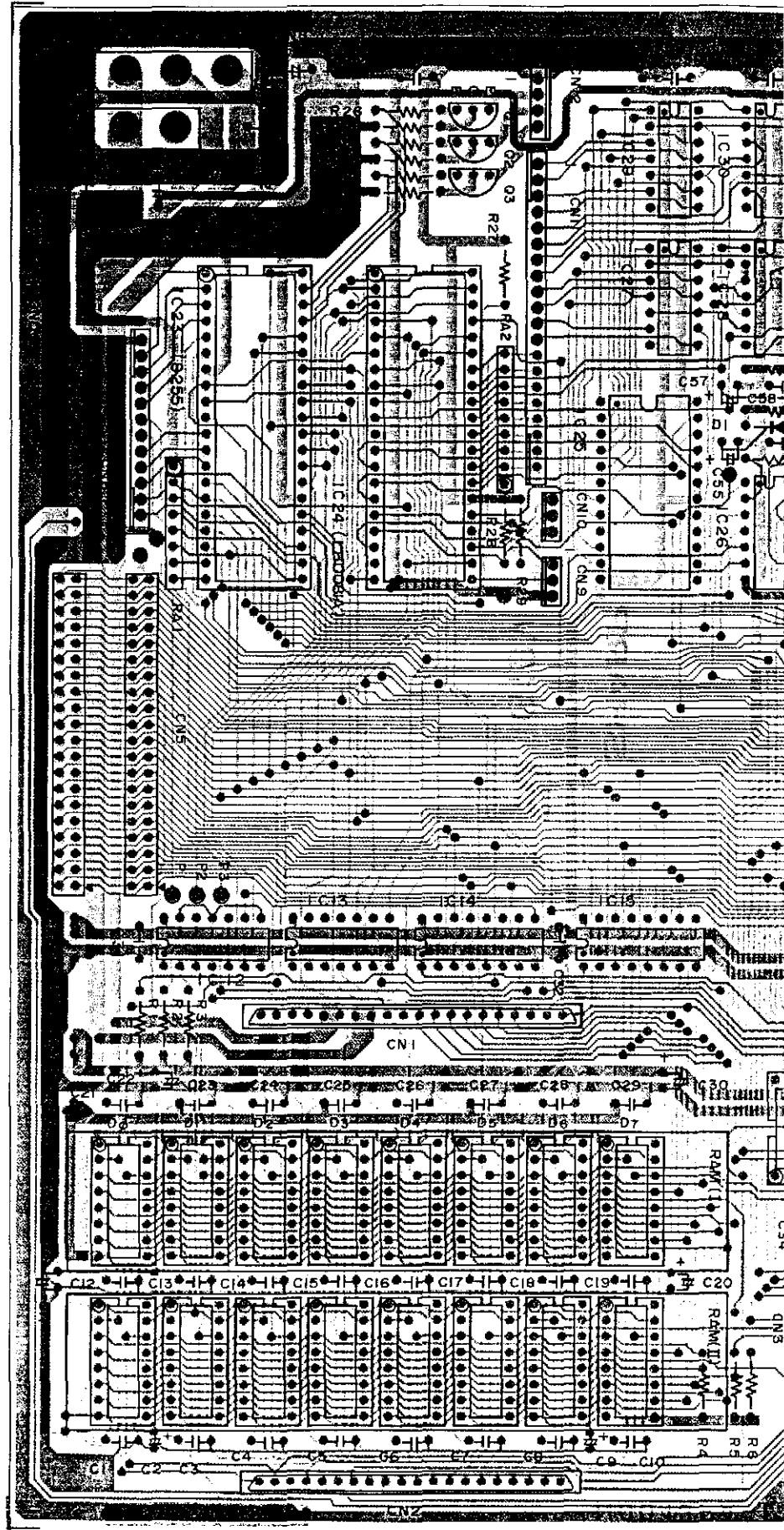
1

2

3

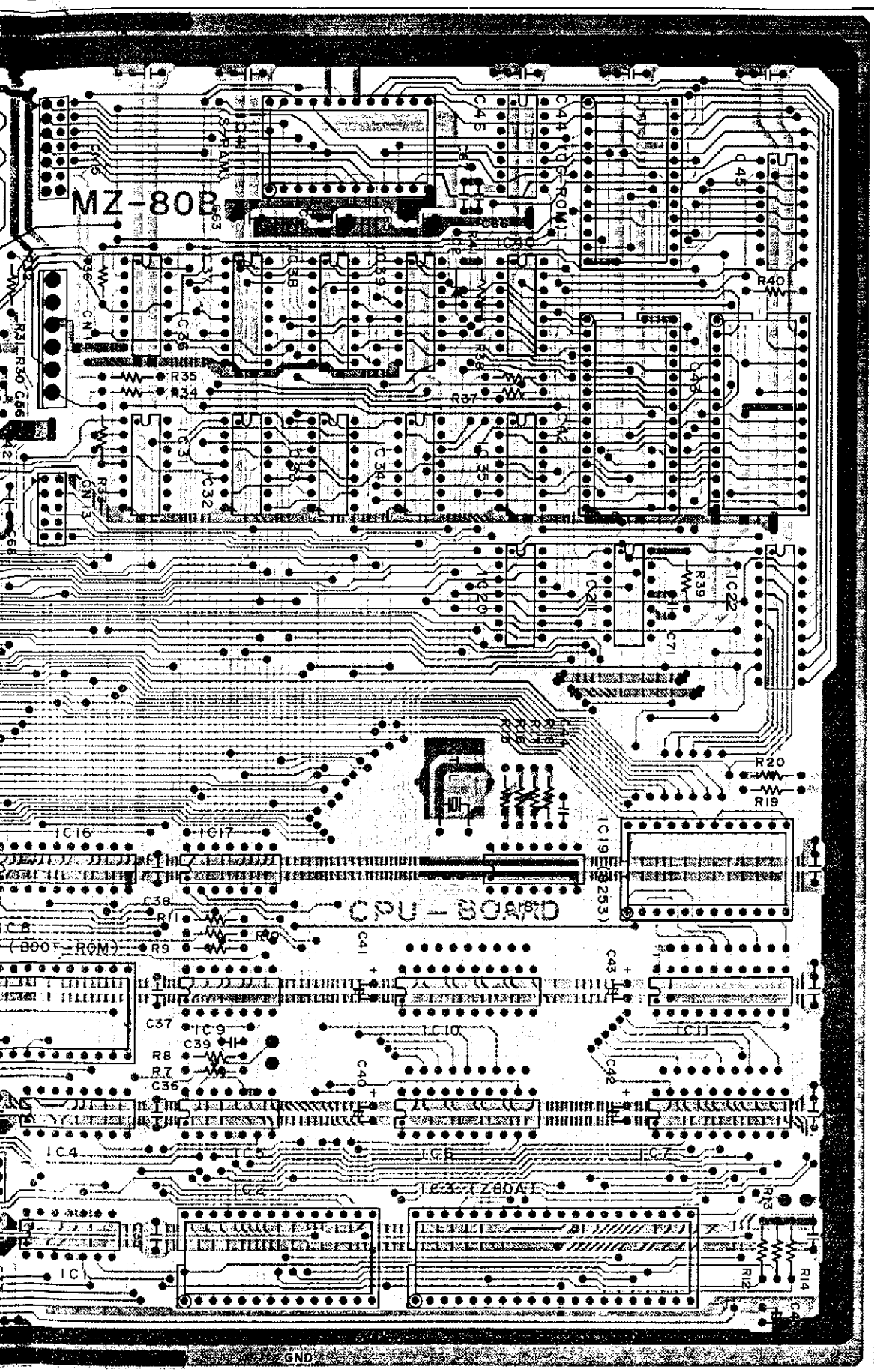
4

8



GRAM

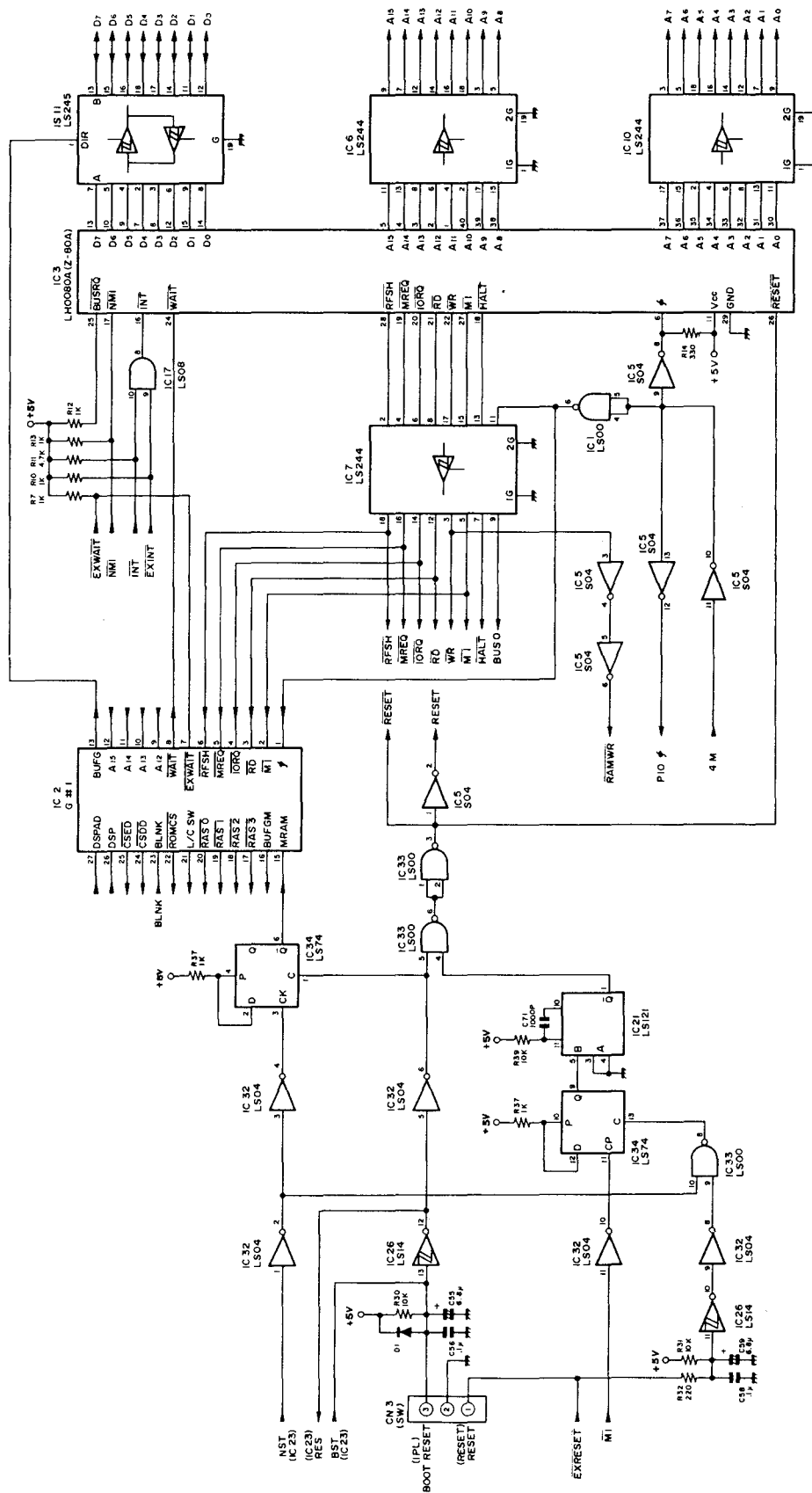
Notes: The circuit diagram and printed wiring board subject to change without prior notice.



Perspective View

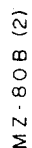
- ☐ Parts-fitted face
- ☐ Opposite Side

■ CPU Board Circuit (1)

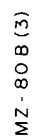


MZ-80B (I)

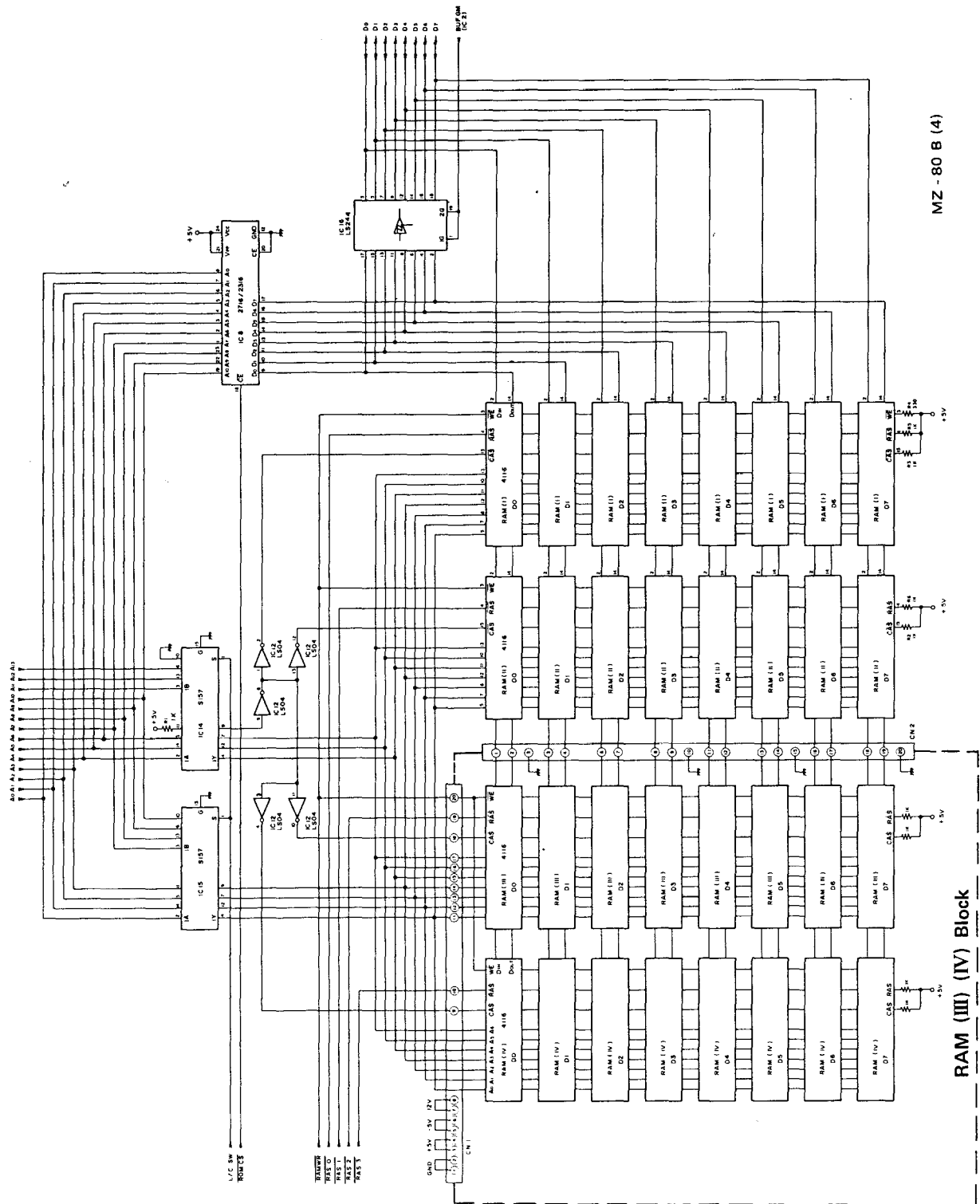
A | B | C | D | E | F | G | H



A | B | C | D | E | F | G | H



■ CPU Board (4) and Expansion RAM (III) (IV) Block Circuits

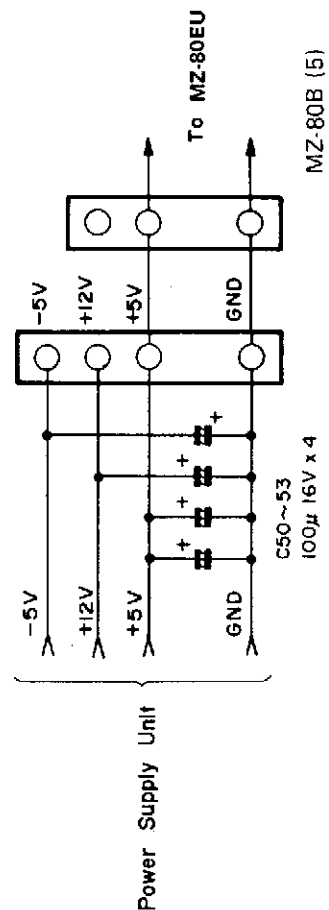


■ CPU Board Circuits (5)

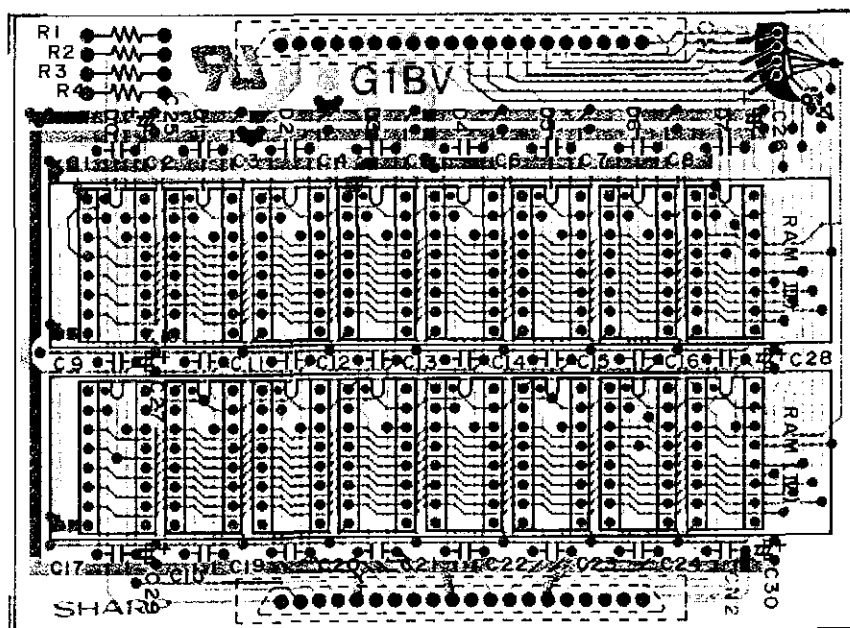
CN4 → MZ-80EU
CN5 → Graphic RAM PWB

CN4, 5		40P	
1	A15	2	A14
3	A13	4	A12
5	A11	6	A10
7	A9	8	A8
9	GND	10	A7
11	A6	12	A5
13	A4	14	A3
15	A2	16	A1
17	A0	18	GND
19	D7	20	D6
21	D5	22	D4
23	D3	24	D2
25	D1	26	D0
27	GND	28	NMI
29	EX WAIT	30	EX INT
31	EX RESET	32	RESET
33	IEO	34	HALT
35	MREQ	36	TREQ
37	RD	38	WR
39	MT	40	BUS0


BUS CONNECTOR

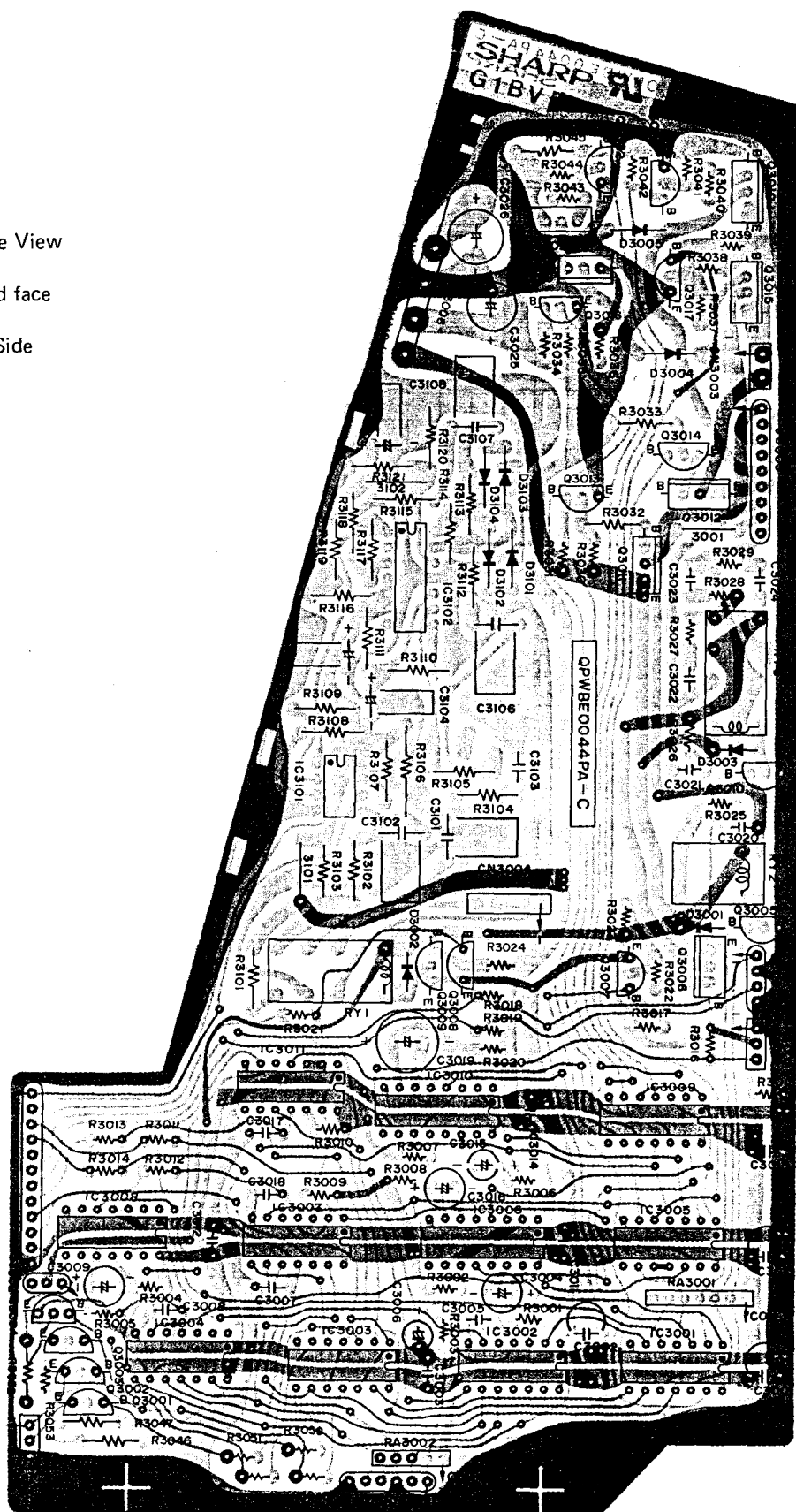


■ RAM (III) (IV) Block PWB Section

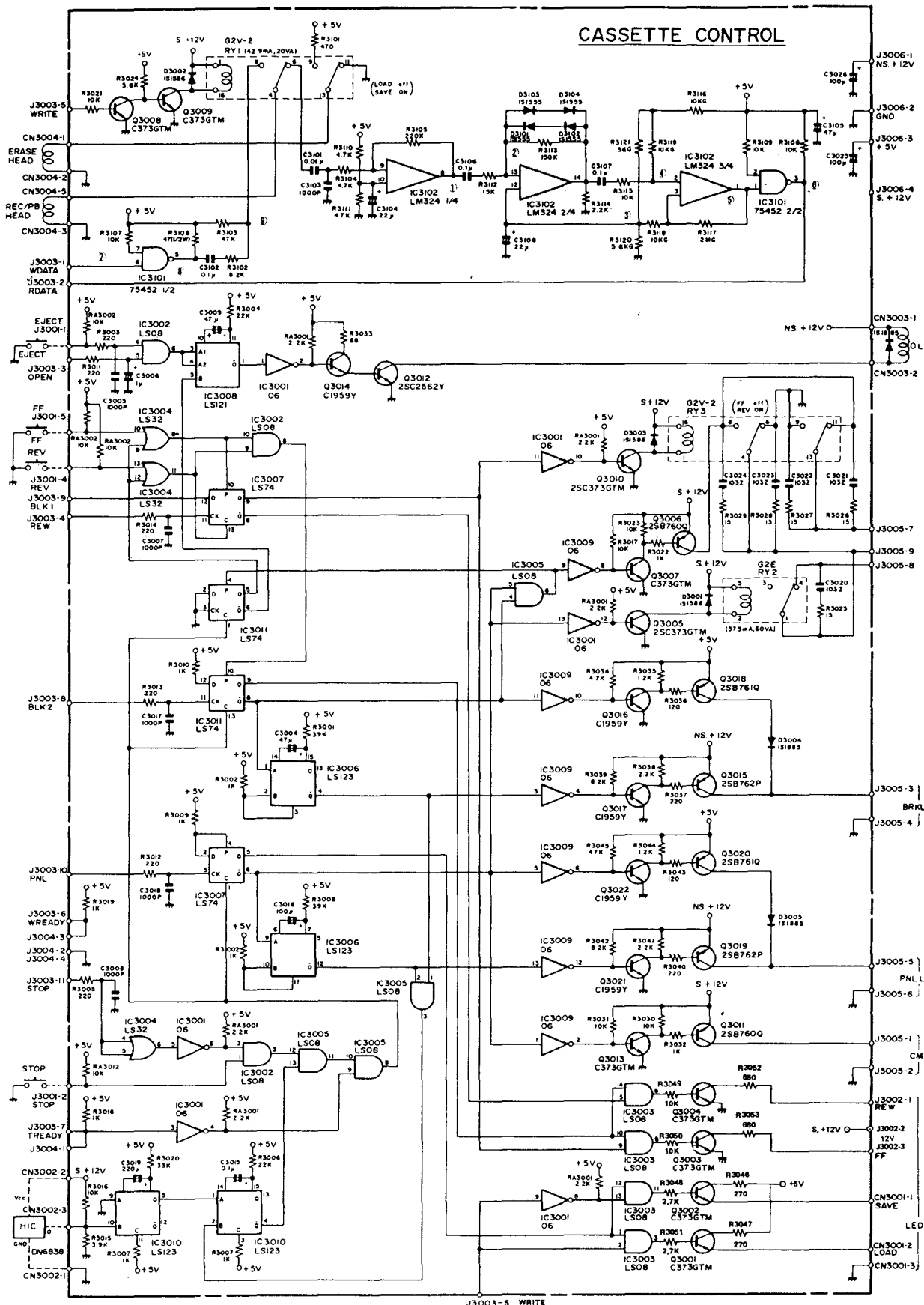


Parts-fitted face
Opposite Side

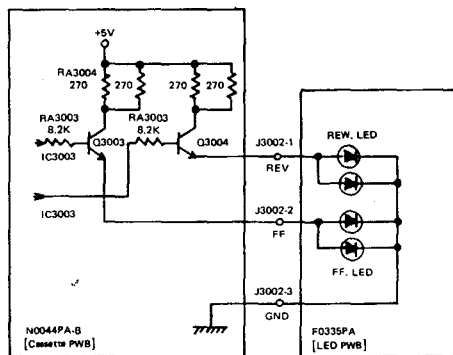
 Opposite Side



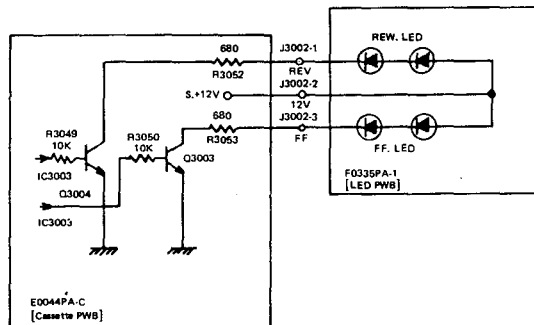
■ Cassette Tape Recorder Circuit



* Alteration of "FF" and "REW" display LED circuit
(Cassette Tape Recorder)



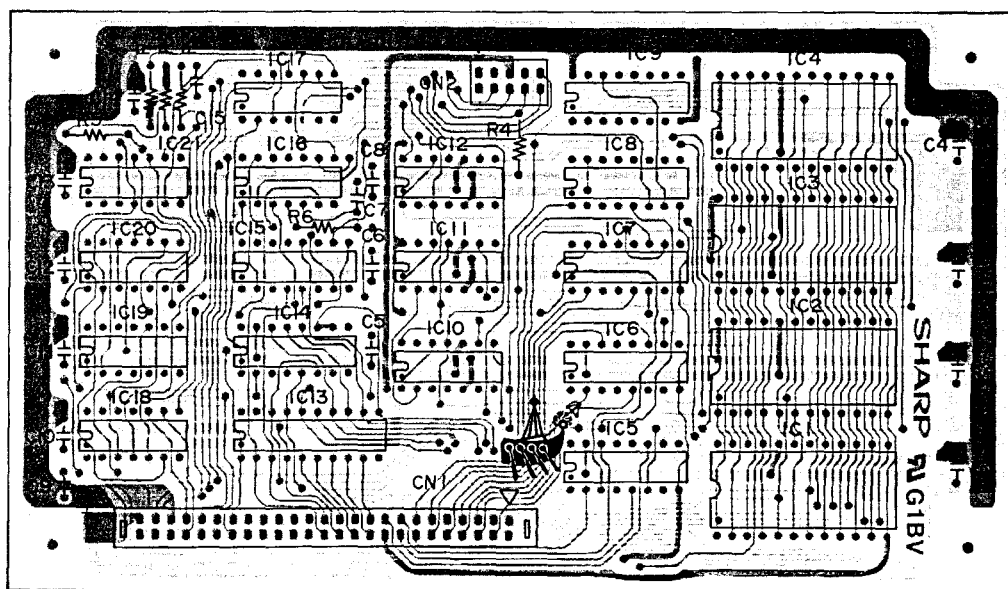
Early Circuit Diagram



Late Circuit Diagram

The "FF" and "REW" display LED circuit was changed with later products. When the cassette PWB is replaced, check the LED PWB circuit. (Adjust the pattern of the LED PWB if the circuit does not conform.)

■ Graphic RAM (I) PWB Section



Perspective View

Parts-fitted face

Opposite Side

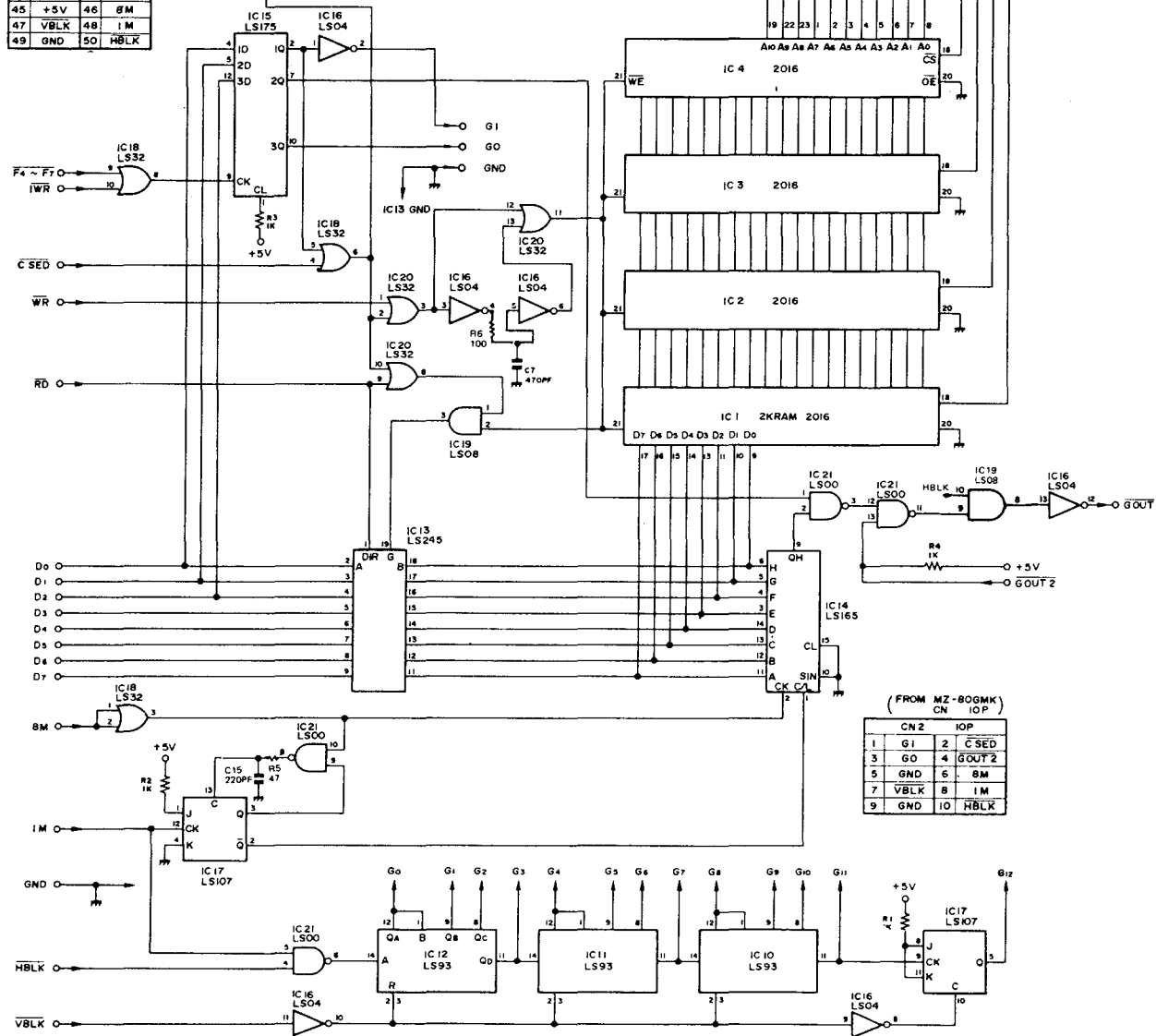
■ Graphic RAM (I) Circuit Diagram

(To CPU BOARD)
CN1 50P

1	—	2	—
3	—	4	A12
5	A11	6	A10
7	A9	8	A8
9	GND	10	A7
11	A6	12	A5
13	A4	14	A3
15	A2	16	A1
17	A0	18	GND
19	D7	20	D6
21	D5	22	D4
23	D3	24	D2
25	D1	26	D0
27	—	28	—
29	—	30	—
31	—	32	—
33	—	34	—
35	—	36	—
37	RD	38	WR
39	—	40	—

(To CPU BOARD)
CN13 10P

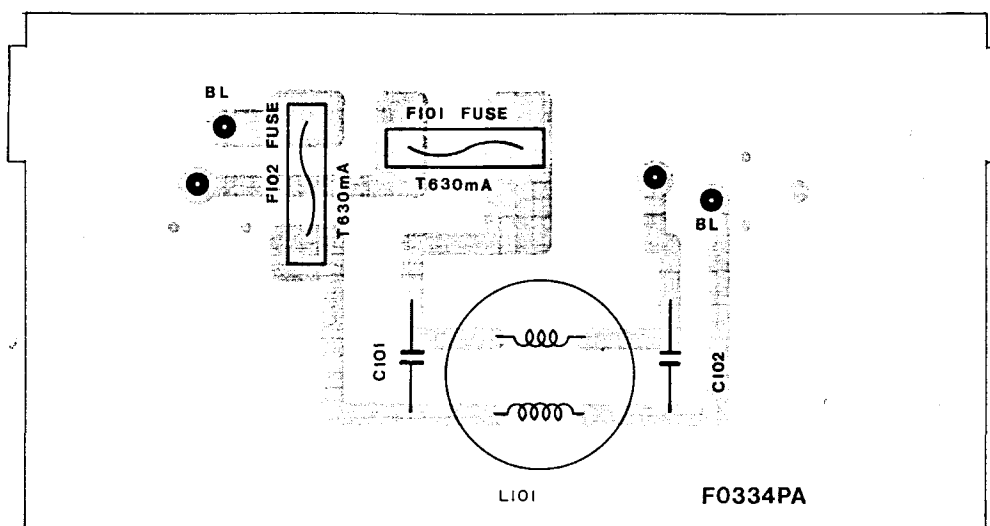
41	GOUT	42	CSED
43	IWR	44	F4 ~ F7
45	+5V	46	8M
47	VBLK	48	1M
49	GND	50	HBLK



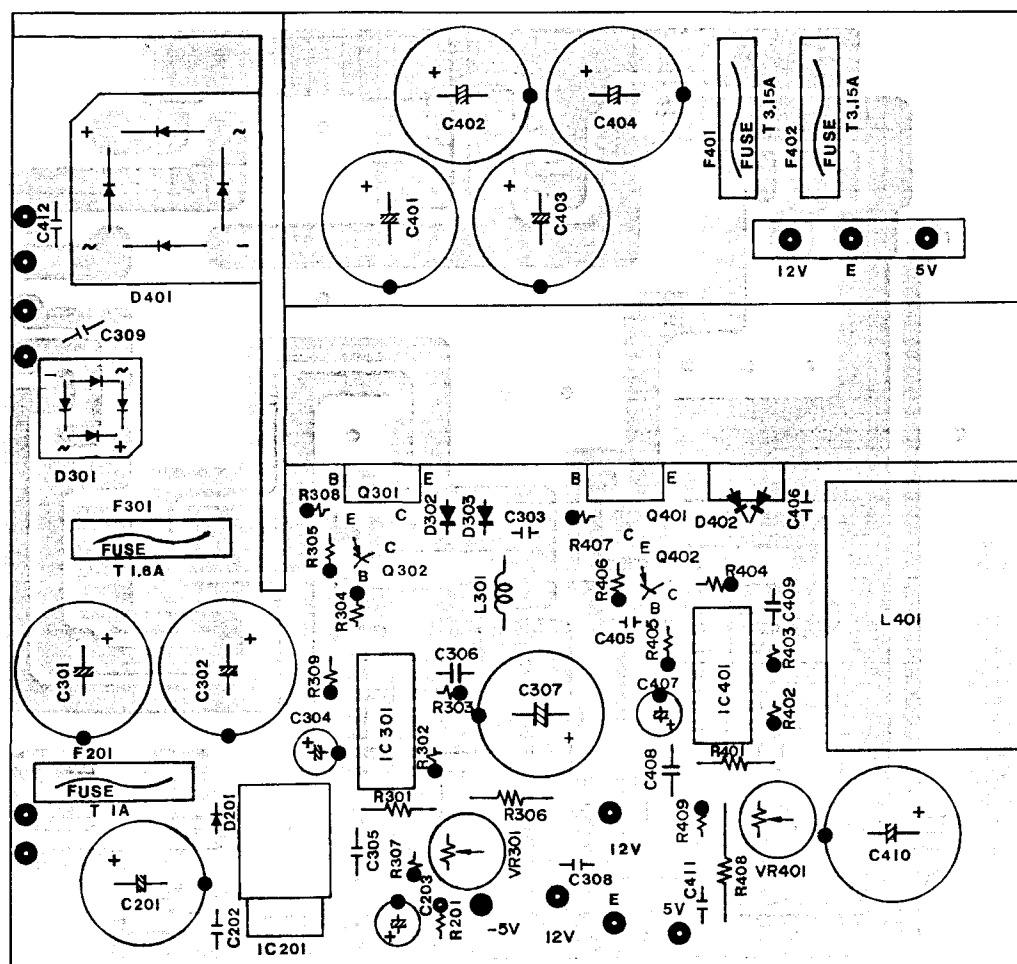
(FROM MZ-80GMK)
CN2 10P

1	G1	2	CSED
3	GO	4	GOUT2
5	GND	6	8M
7	VBLK	8	1M
9	GND	10	HBLK

■ Power Supply PWB Section

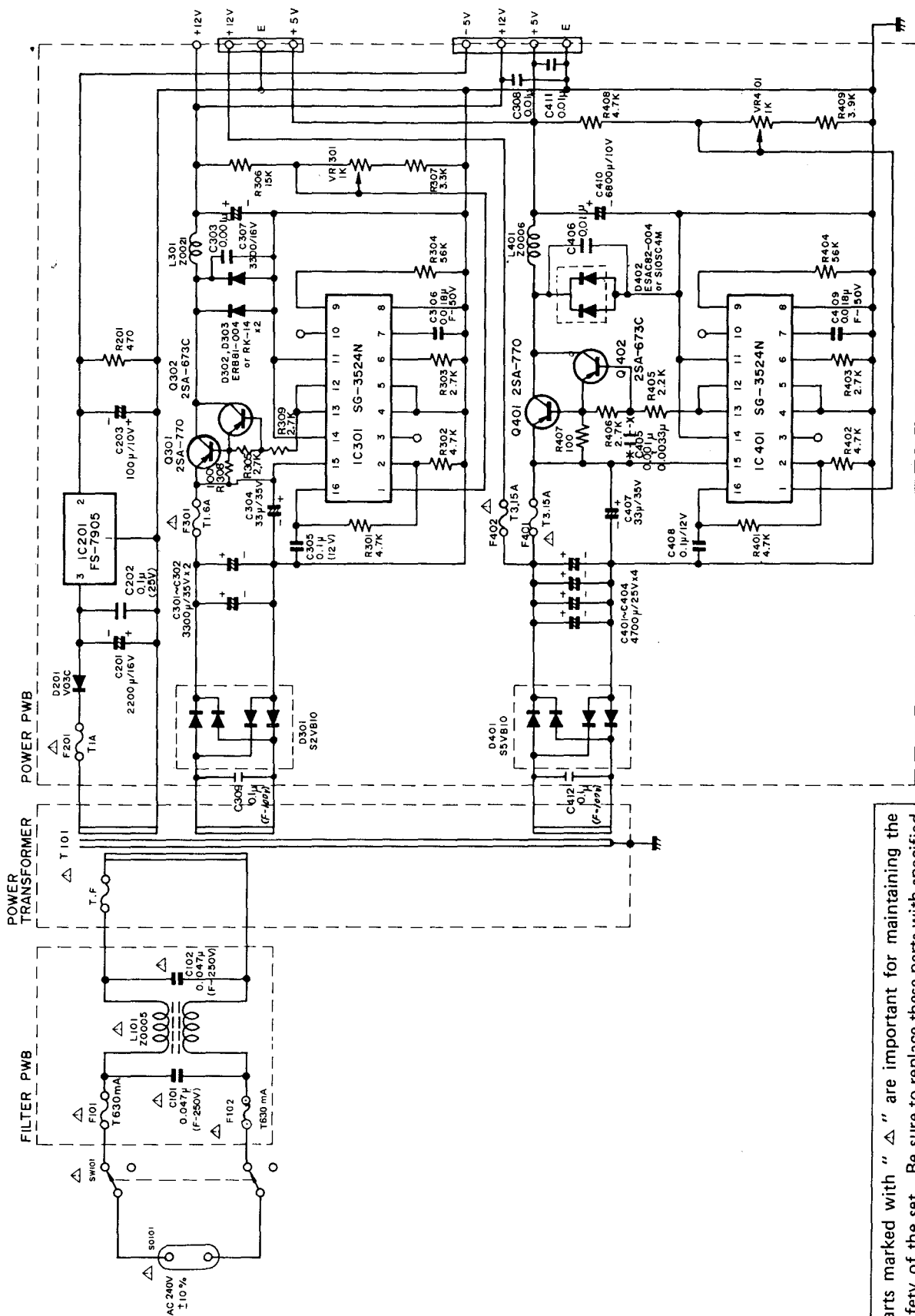


Primar



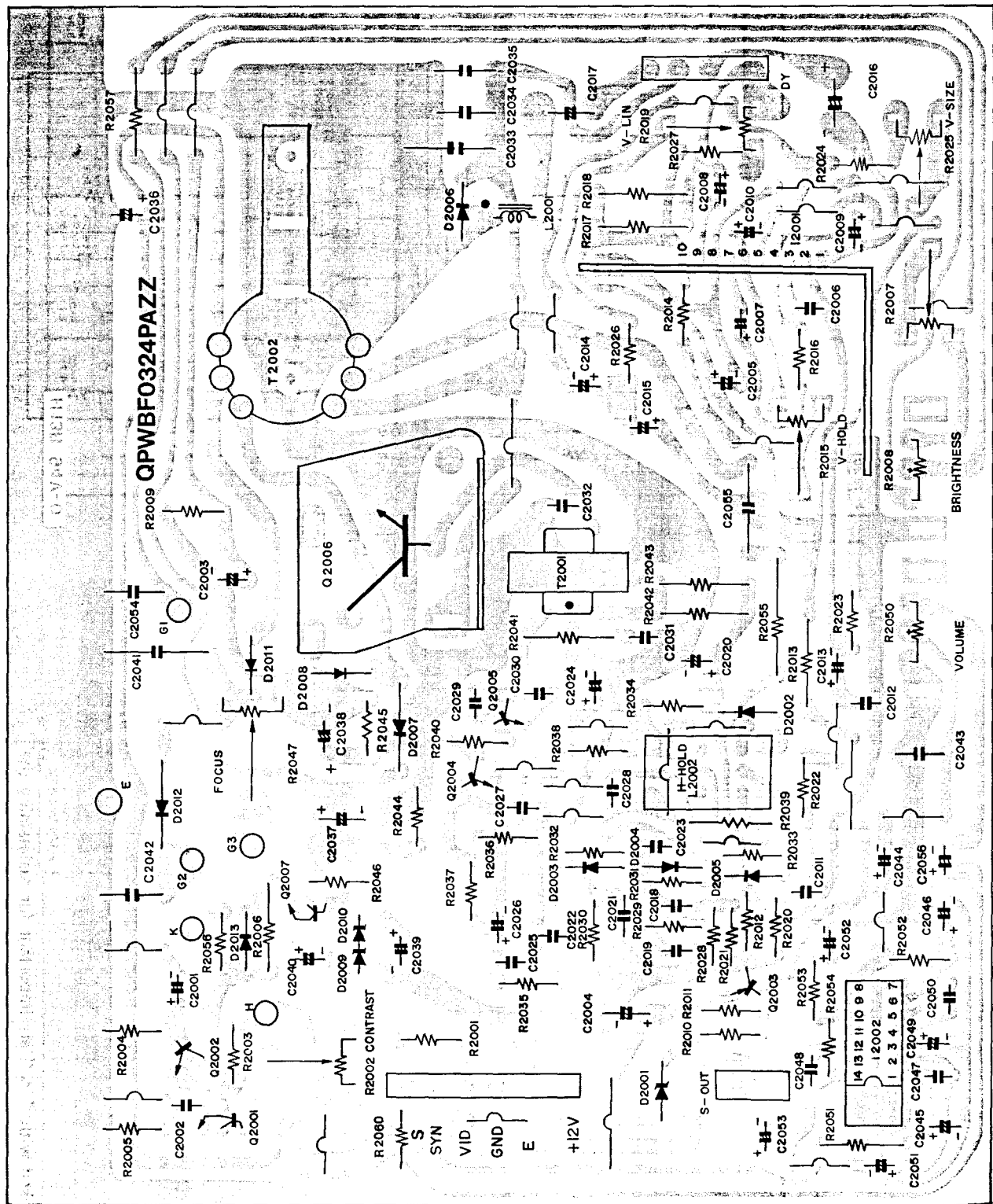
Secondary

■ Power Supply Circuit



Parts marked with "△" are important for maintaining the safety of the set. Be sure to replace these parts with specified ones for maintaining the safety and performance of the set.

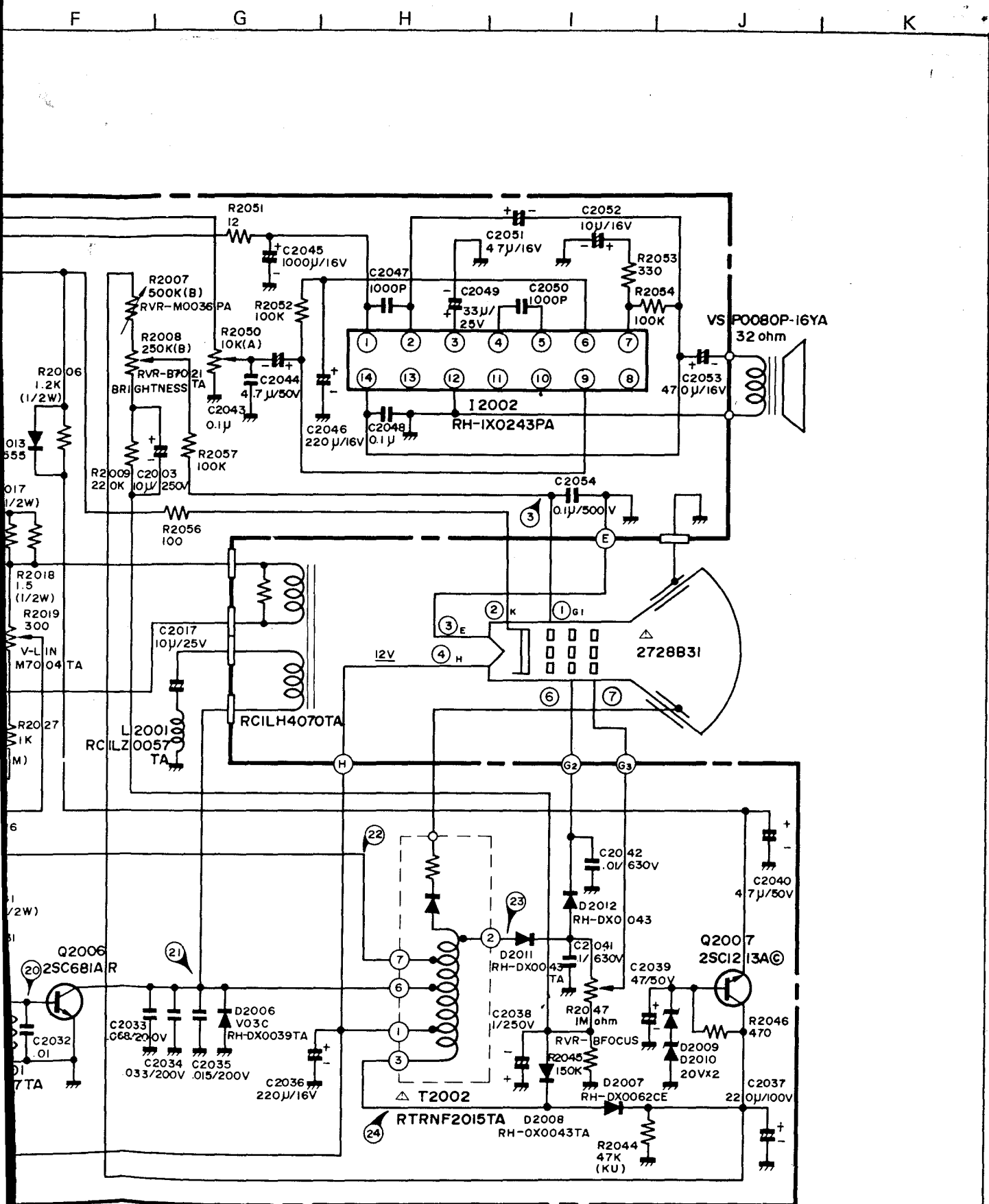
Monitor TV PWB Section



1
—
2
—
3
—
4
—
5
—
6
—
7
—
8



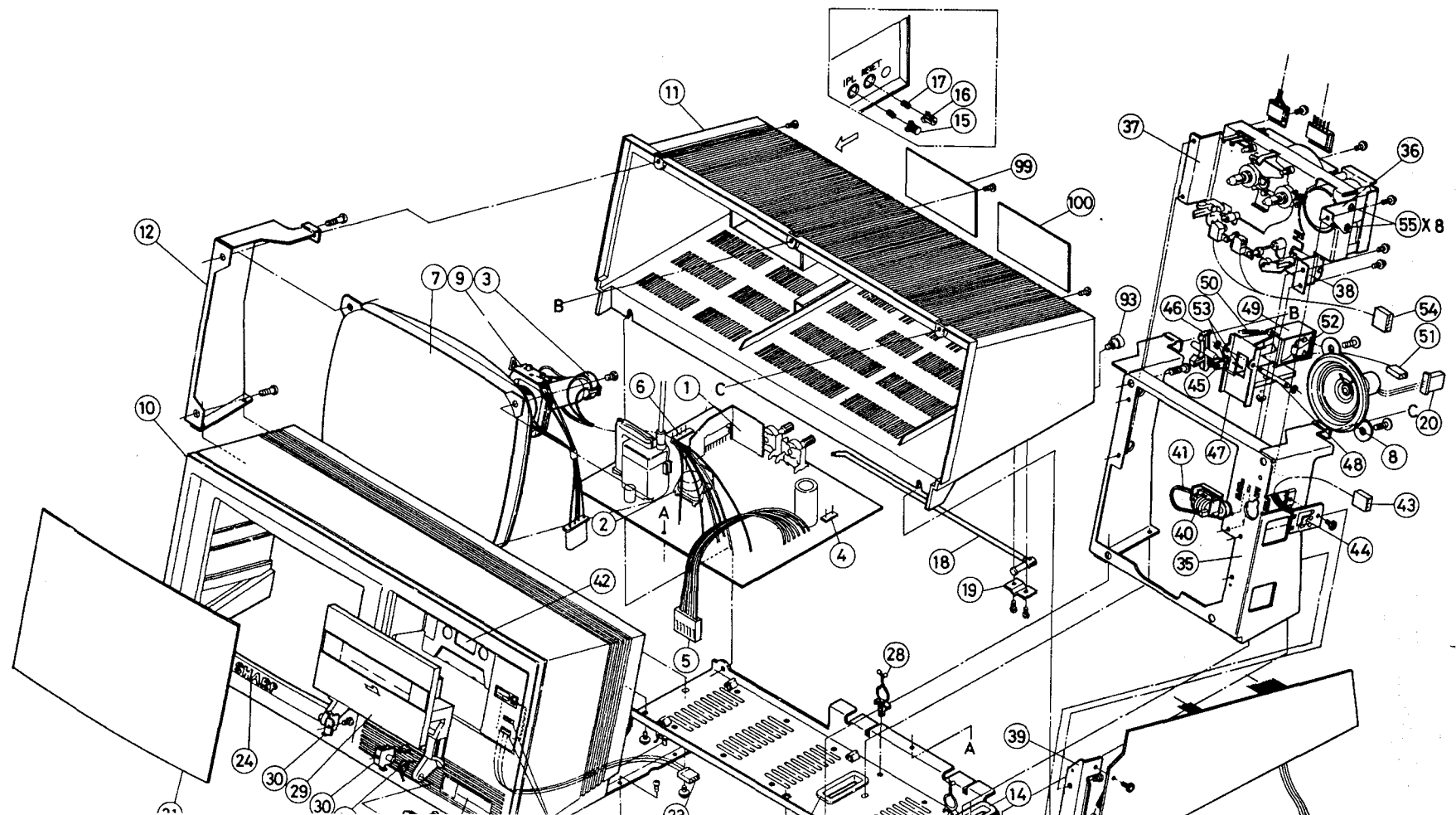
- 43 -

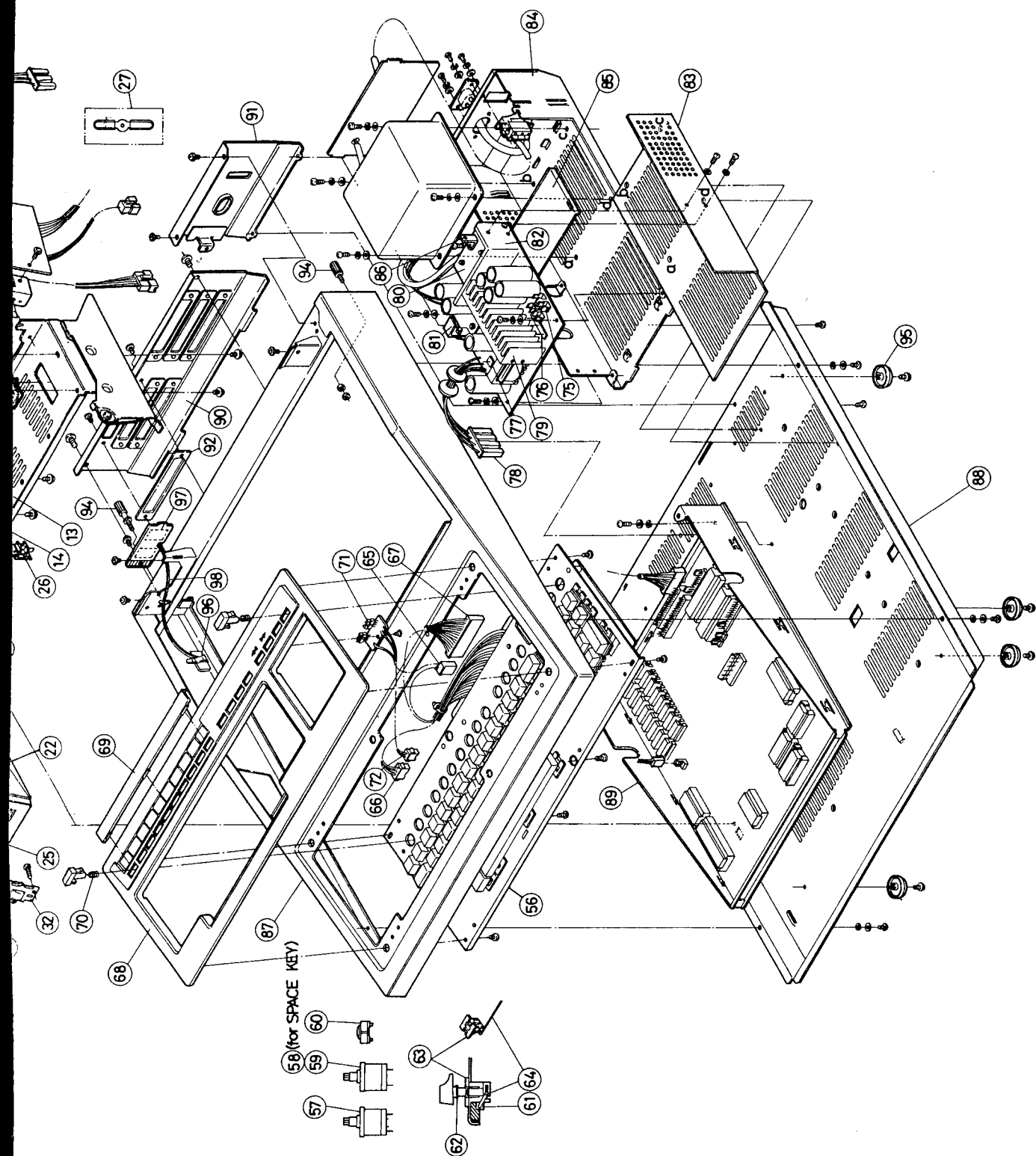


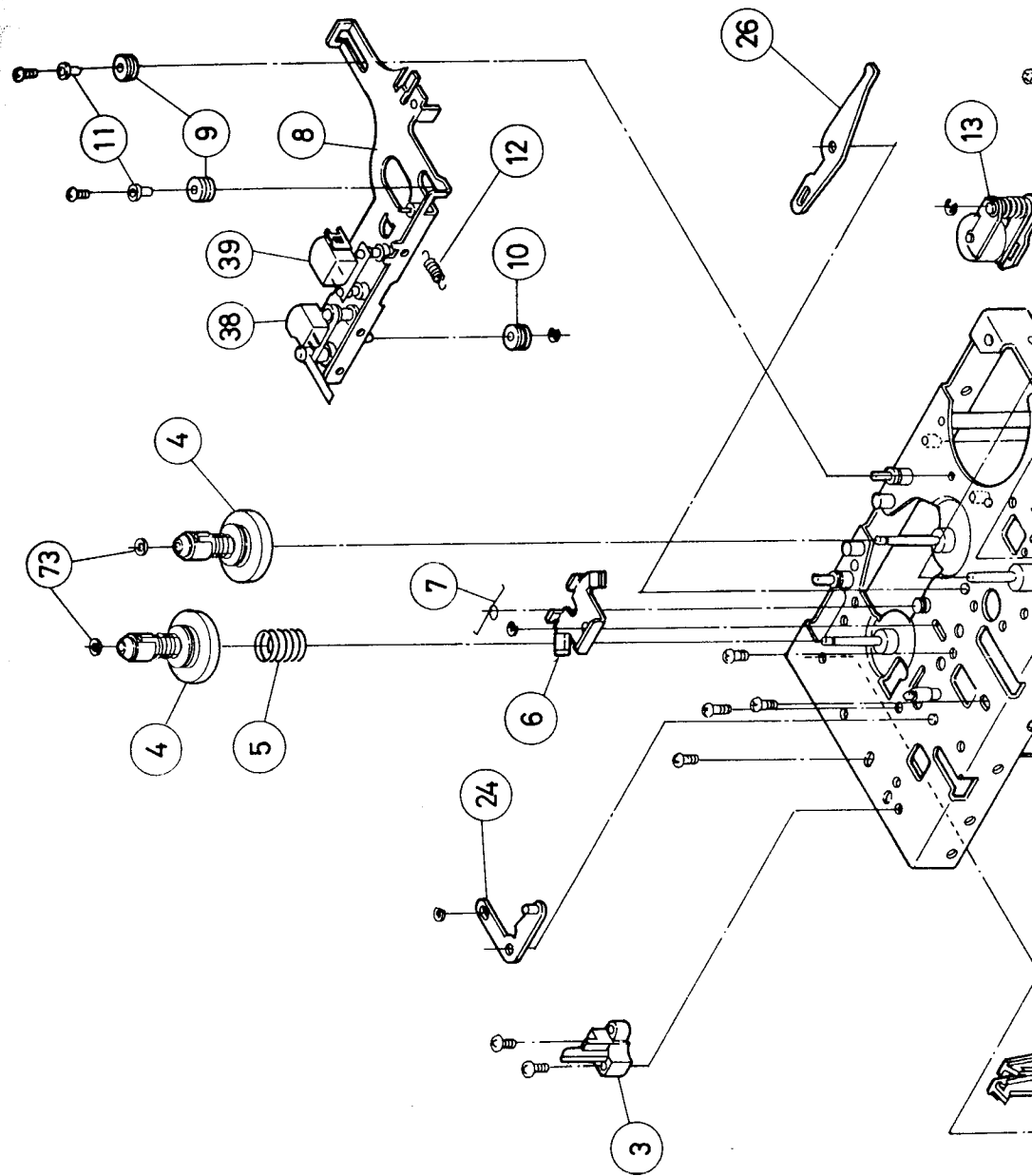
re to replace these parts with specified ones for maintaining the safety and performance of the

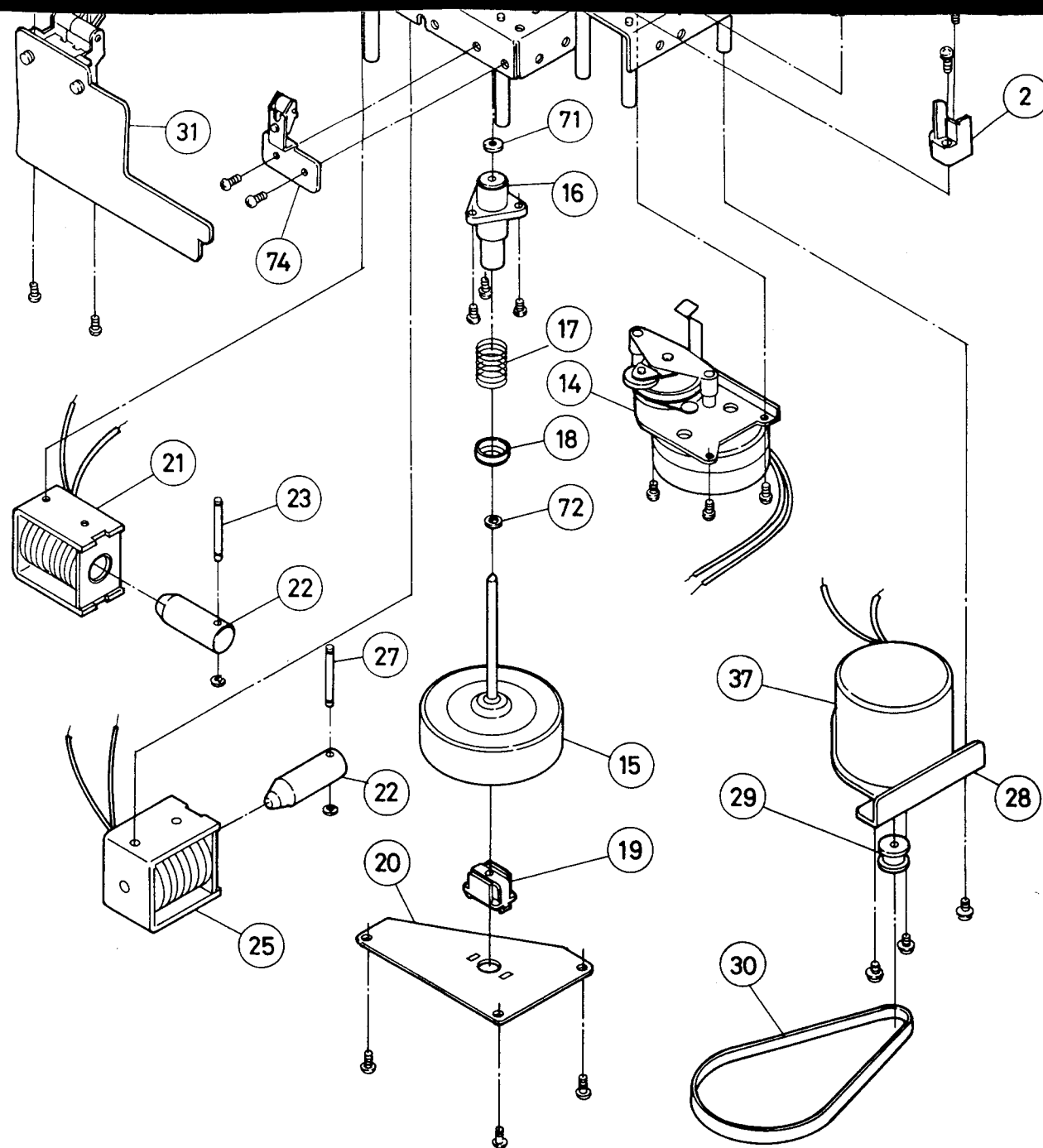
A | B | C | D | E | F | G | H

DISASSEMBLED VIEW









Cassette tape recorder mechanical parts

REF. NO.	PART NO.	DESCRIPTION	CODE
2	94R00280BCTRM	Cassette Guide R	AC
3	94R00380BCTRM	Cassette Guide L	AC
4	94R00480BCTRM	Reel Ass'y	AF
5	94R00580BCTRM	B.T Spring	AA
6	94R00680BCTRM	Brake Arm Ass'y	AE
7	94R00780BCTRM	Brake Arm Spring	AA
8	94R00880BCTRM	Head Panel Ass'y	AK
9	94R00980BCTRM	Guide Roller A	AB
10	94R01080BCTRM	Guide Roller B	AB
11	94R01180BCTRM	Guide Coller	AA
12	94R01280BCTRM	Head Panel Spring	AA
13	94R01380BCTRM	Pinch Roller Arm Ass'y	AQ
14	94R01480BCTRM	Drive Unit Ass'y	BB
15	94R01580BCTRM	Flywheel Capstan	AP
16	94R01680BCTRM	Flywheel Metal	AH
17	94R01780BCTRM	Thrust Pressure Spring	AA
18	94R01880BCTRM	Thrust Pressure	AA
19	94R01980BCTRM	F.L. Damper	AC
20	94R02080BCTRM	F.L. Hold Plate	AD
21	94R02180BCTRM	Panel Plunger Coil Ass'y	AW
22	94R02280BCTRM	Plunger	AG
23	94R02380BCTRM	Plunger Shaft (L)	AB
24	94R02480BCTRM	Plunger Lever Ass'y	AC
25	94R02580BCTRM	Brake Plunger Coil Ass'y	AW
26	94R02680BCTRM	RC Lever	AC
27	94R02780BCTRM	Brake Pin	AB
28	94R02880BCTRM	Main Motor Ass'y	AV
29	94R02980BCTRM	Motor Pulley	AC
30	94R03080BCTRM	Main Belt	AE
31	94R03180BCTRM	P.C.B. Ass'y	AX
37	94R06480KCTRM	Motor	AV
38	94R06180KCTRM	Erase Head	AG
39	94R06080KCTRM	R/P Head	AM
71	94R07180BCTRM	Nylon Washer 2.5 x 7 x 0.5	AA
72	94R07280BCTRM	Nylon Washer 2.5 x 6 x 0.5	AA
73	94R07380BCTRM	Nylon Washer 1.6 x 3.8 x 0.5	AA
74	LSTPF2015PAZZ	Spring Ass'y	AD







KEY BUTTON PARTS No.

SYMBOL	PART NO.	CODE
ASCII	Graphic	
! 1	JBTN-0039PA01	AG
" 2	JBTN-0039PA02	AG
# 3	JBTN-0039PA03	AG
\$ 4	JBTN-0039PA04	AG
% 5	JBTN-0039PA05	AG
& 6	JBTN-0039PA06	AG
' 7	JBTN-0039PA07	AG
(8	JBTN-0039PA08	AG
) 9	JBTN-0039PA09	AG
- 0	JBTN-0039PA10	AG
= -	JBTN-0039PA11	AG
~ ^	JBTN-0039PA12	AG
\	JBTN-0039PA13	AG
` @	JBTN-0039PA14	AG
[JBTN-0039PA15	AG
CLR HOME	JBTN-0039PA16	AG
INST DEL	JBTN-0039PA17	AG
+ ;	JBTN-0039PA18	AG
* :	JBTN-0039PA19	AG
]	JBTN-0039PA20	AG
< , ≠	JBTN-0039PA21	AG
> . π	JBTN-0039PA22	AG
- / →	JBTN-0039PA23	AG

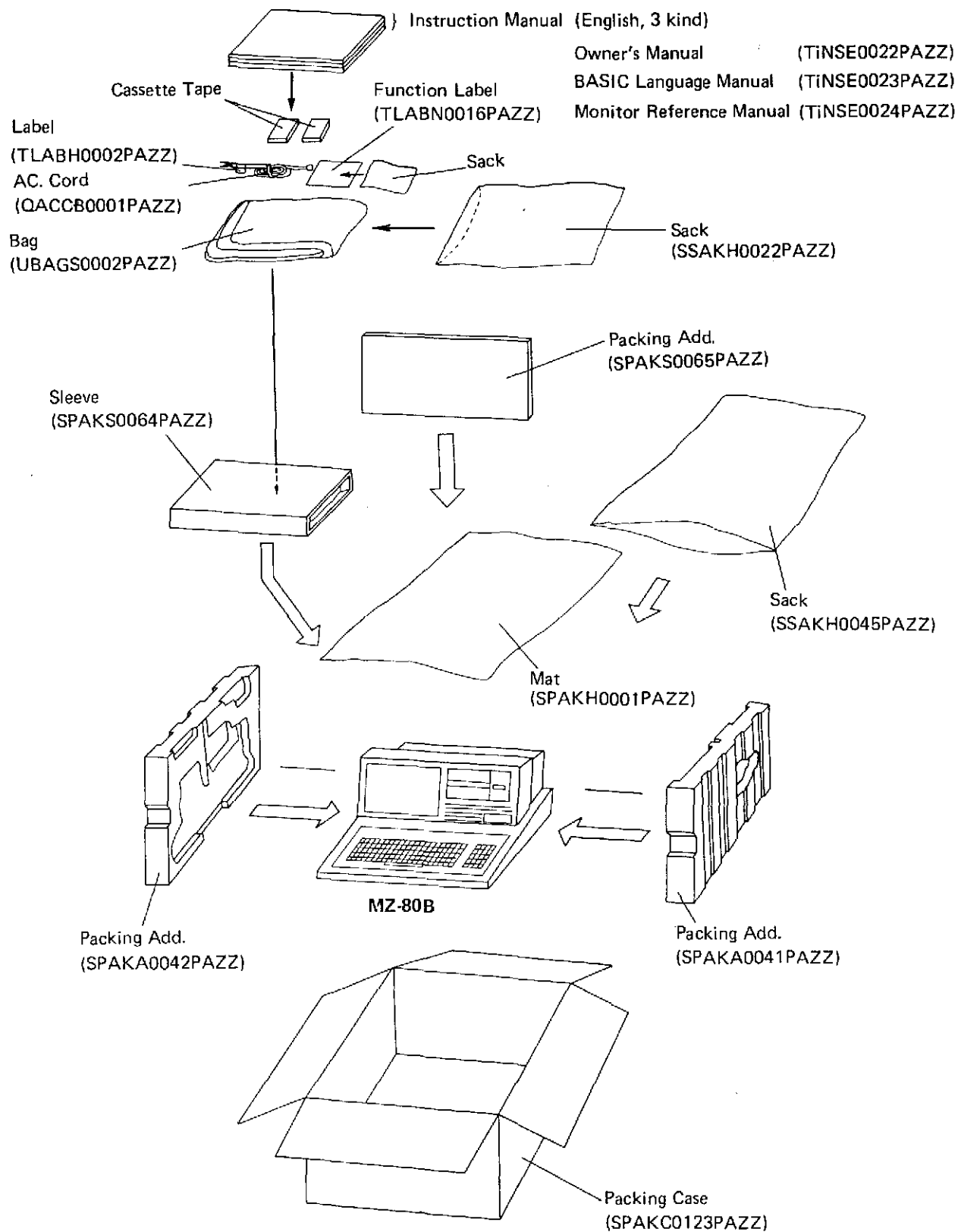
SYMBOL	PART NO.	CODE
ASCII	Graphic	
↑ ? ↓	JBTN-0039PA24	AG
A	JBTN-0039PA25	AG
B	JBTN-0039PA26	AG
C	JBTN-0039PA27	AG
D	JBTN-0039PA28	AG
E	JBTN-0039PA29	AG
F	JBTN-0039PA30	AG
G	JBTN-0039PA31	AG
H	JBTN-0039PA32	AG
I	JBTN-0039PA33	AG
J	JBTN-0039PA34	AG
K	JBTN-0039PA35	AG
L	JBTN-0039PA36	AG
M	JBTN-0039PA37	AG
N	JBTN-0039PA38	AG
O	JBTN-0039PA39	AG
P	JBTN-0039PA40	AG
Q	JBTN-0039PA41	AG
R	JBTN-0039PA42	AG
S	JBTN-0039PA43	AG
T	JBTN-0039PA44	AG
U	JBTN-0039PA45	AG
V	JBTN-0039PA46	AG

KEY BUTTON PARTS No.

	SYMBOL		PART NO.	CODE
	ASCII	Graphic		
Main Key Board	W		JBTN-0039PA47	AG
	X		JBTN-0039PA48	AG
	Y		JBTN-0039PA49	AG
	Z		JBTN-0039PA50	AG
Numeric Key	■		JBTN-0039PA51	AG
	1		JBTN-0039PA52	AG
	2		JBTN-0039PA53	AG
	3		JBTN-0039PA54	AG
	4		JBTN-0039PA55	AG
	5		JBTN-0039PA56	AG
	6		JBTN-0039PA57	AG
	7		JBTN-0039PA58	AG
	8		JBTN-0039PA59	AG
	9		JBTN-0039PA60	AG
	0		JBTN-0039PA61	AG
	00		JBTN-0039PA62	AG
	+		JBTN-0039PA63	AG
	-		JBTN-0039PA64	AG
	ENT		JBTN-0045PASA	AG
Main Key Board	BREAK		JBTN-0040PASA	AG
	CR		JBTN-0041PASA	AG
	SHIFT		JBTN-0042PASA	AH
	(SPACE bar)		JBTN-0043PASA	AM

	SYMBOL		PART NO.	CODE
	ASCII	Graphic		
Main Key Board	TAB		JBTN-0044PASA	AG
	RVS		JBTN-0046PASA	AG
	GRPH		JBTN-0047PASA	AG
	SFTLOCK		JBTN-0048PASA	AG
Special Function Key	F1		JBTN-0049PASA	AG
	F2		JBTN-0049PASB	AG
	F3		JBTN-0049PASC	AG
	F4		JBTN-0049PASD	AG
	F5		JBTN-0049PASE	AG
	F6		JBTN-0049PASF	AG
	F7		JBTN-0049PASG	AG
	F8		JBTN-0049PASH	AG
	F9		JBTN-0049PASI	AG
	F10		JBTN-0049PASJ	AG
Cursor Control Key	←		JBTN-0049PASK	AG
	→		JBTN-0049PASL	AG
	↑		JBTN-0049PASM	AG
	↓		JBTN-0049PASN	AG
Cassette Control Key	REW		JBTN-0049PASO	AG
	FF		JBTN-0049PASP	AG
	STOP		JBTN-0049PASQ	AG
	EJECT		JBTN-0049PASR	AG

PACKING METHOD

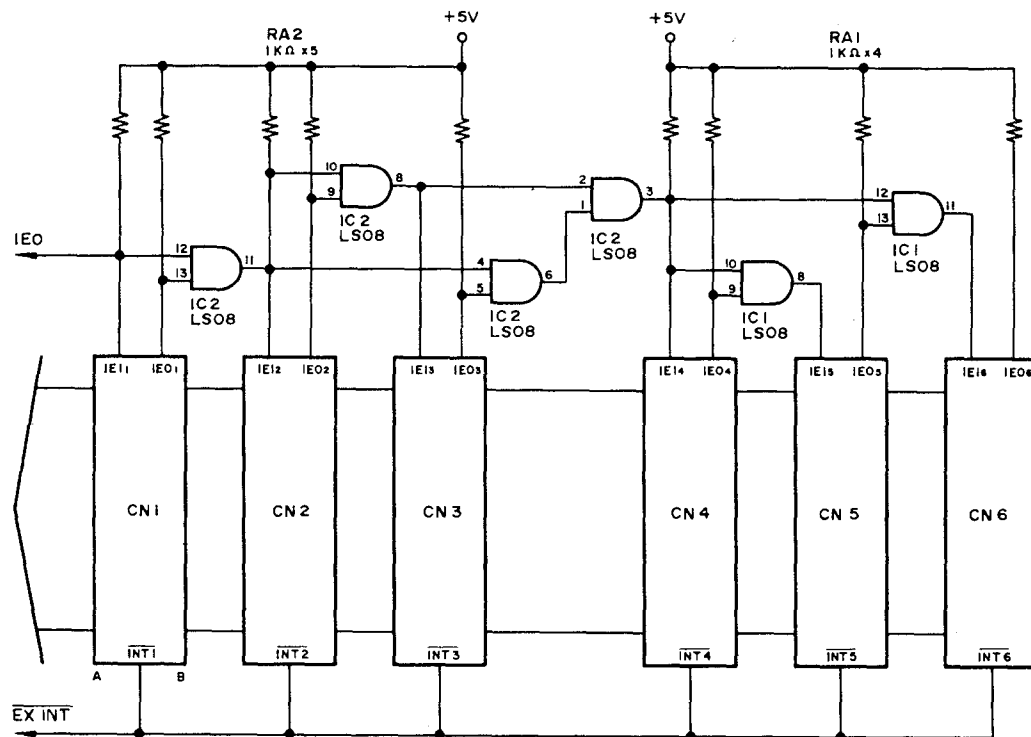


Expansion Port **MZ-80EU**

■ Circuit Diagram

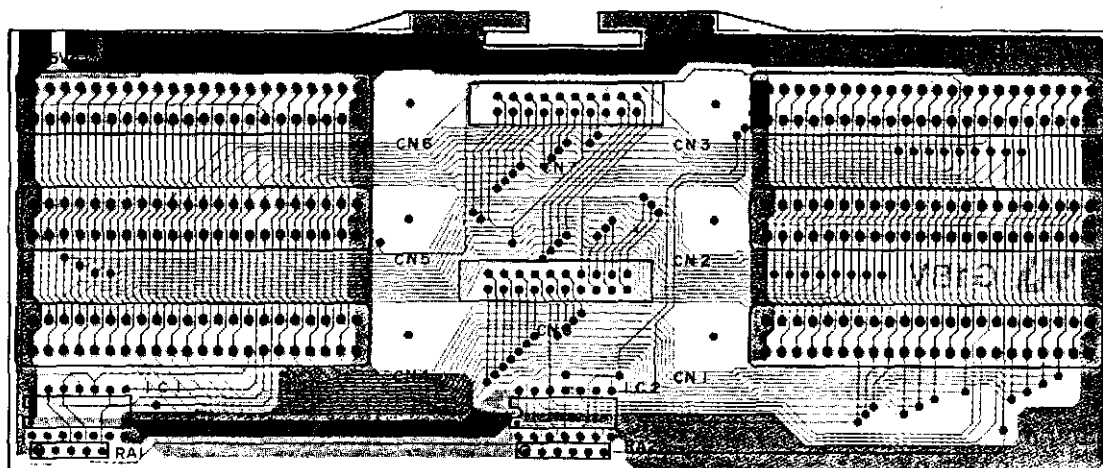
CN1 ~ CN6			
A		B	
+5V	1	+5V	
D2	2	D3	
D1	3	D4	
D0	4	D5	
GND	5	D6	
A15	6	D7	
A14	7	BUS ϕ	
A13	8	M1	
A12	9	WR	
A11	10	RD	
A10	11	$\overline{\text{IOREQ}}$	
A9	12	MREQ	
A8	13	GND	
A7	14	HALT	
A6	15	IE1	
A5	16	IE0	
A4	17	RESET	
A3	18	EX RESET	
A2	19	EX INT	
A1	20	EX WAIT	
A0	21	NMI	
GND	22	GND	

A: PARTS SIDE





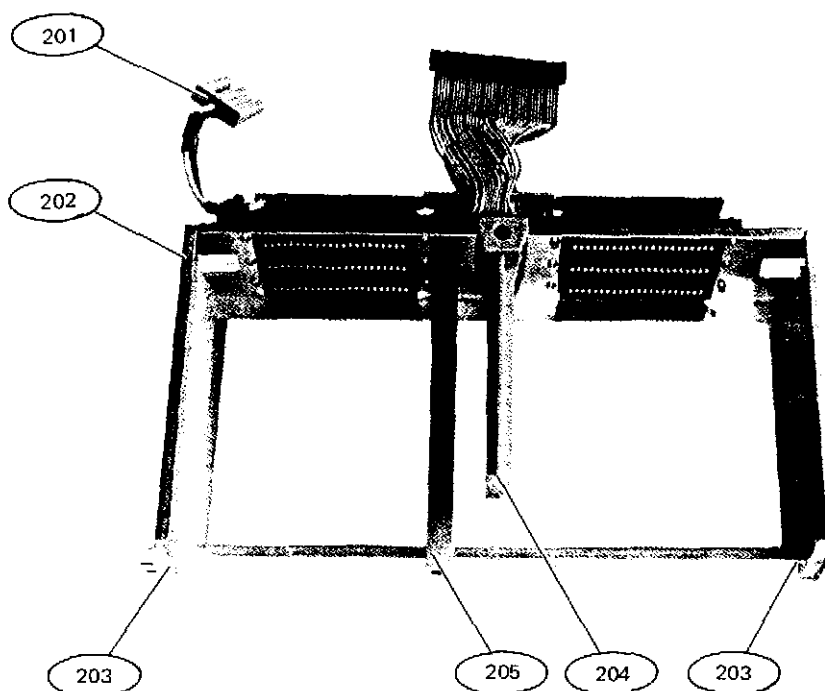
(To CPU BOARD) CN4 40P			
CN 7, 8 40P			
1	A15	2	A14
3	A13	4	A12
5	A11	6	A10
7	A9	8	A8
9	GND	10	A7
11	A6	12	A5
13	A4	14	A3
15	A2	16	A1
17	A0	18	GND
19	D7	20	D6
21	D5	22	D4
23	D3	24	D2
25	D1	26	D0
27	GND	28	NMI
29	EX WAIT	30	EX INT
31	EX RESET	32	RESET
33	IE0	34	HALT
35	MREQ	36	$\overline{\text{IOREQ}}$
37	RD	38	WR
39	M1	40	BUS ϕ

■ PWB and Disassembled Views

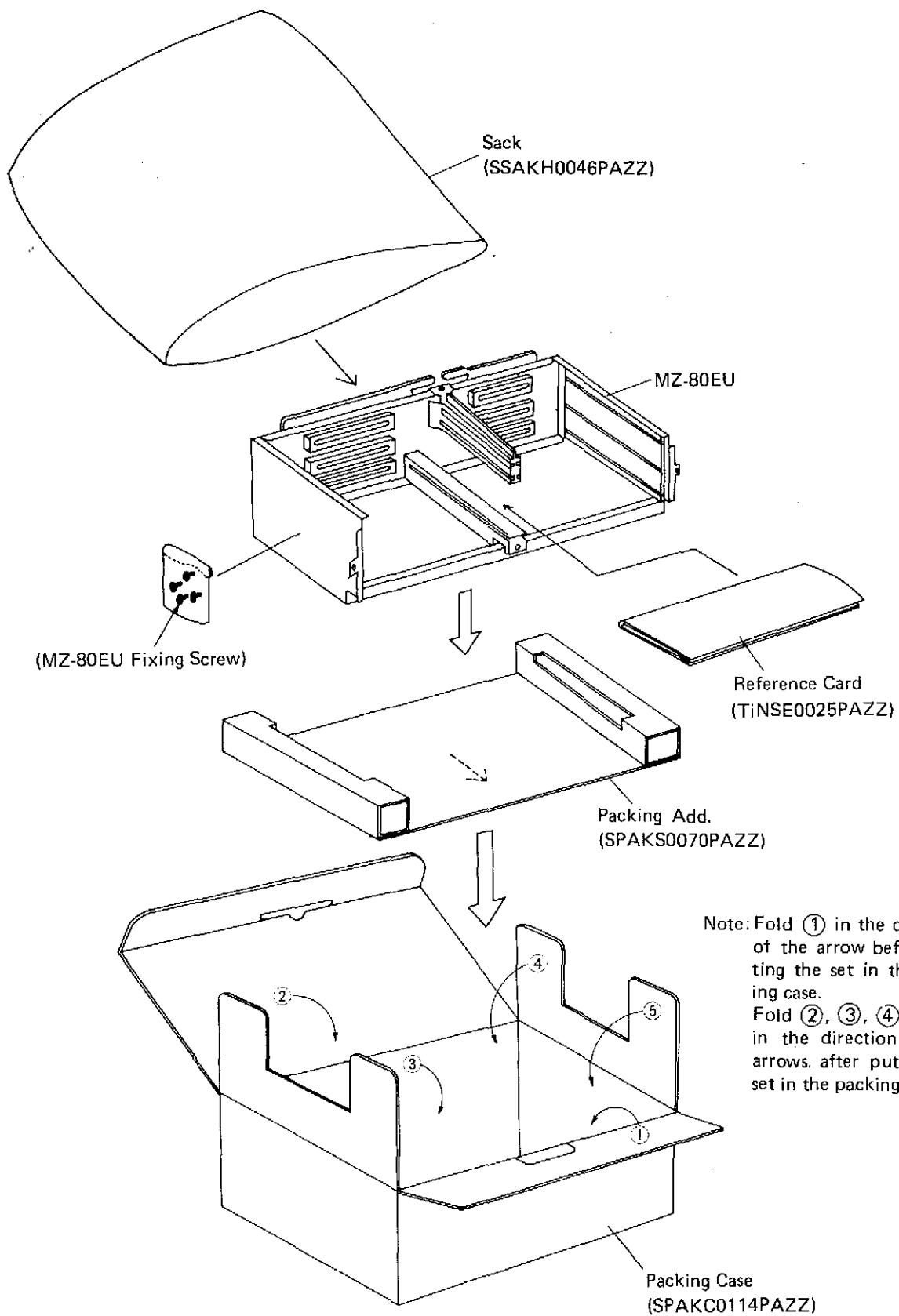


Perspective View

-  Parts-fitted face
-  Opposite side

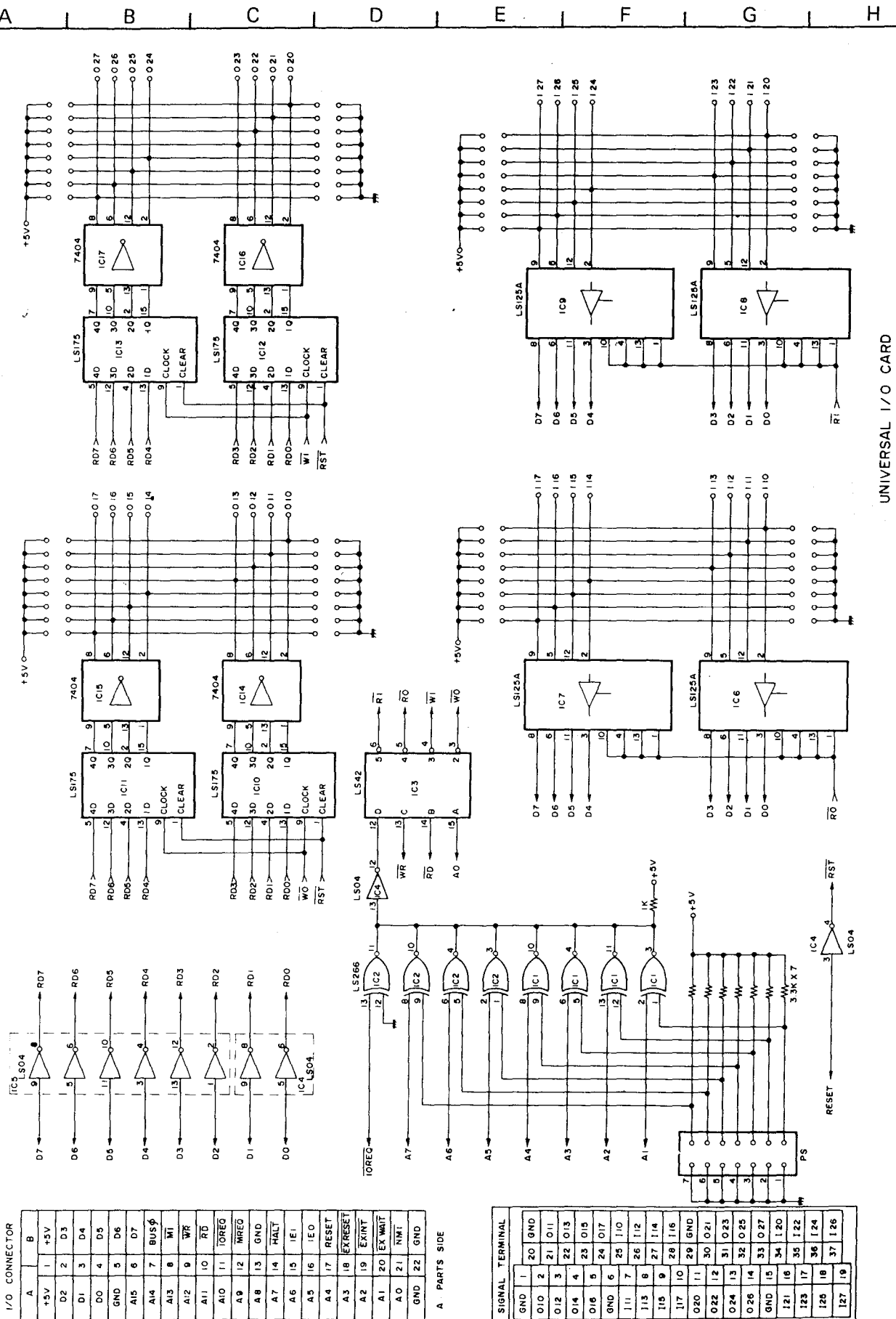


■ Packing Method



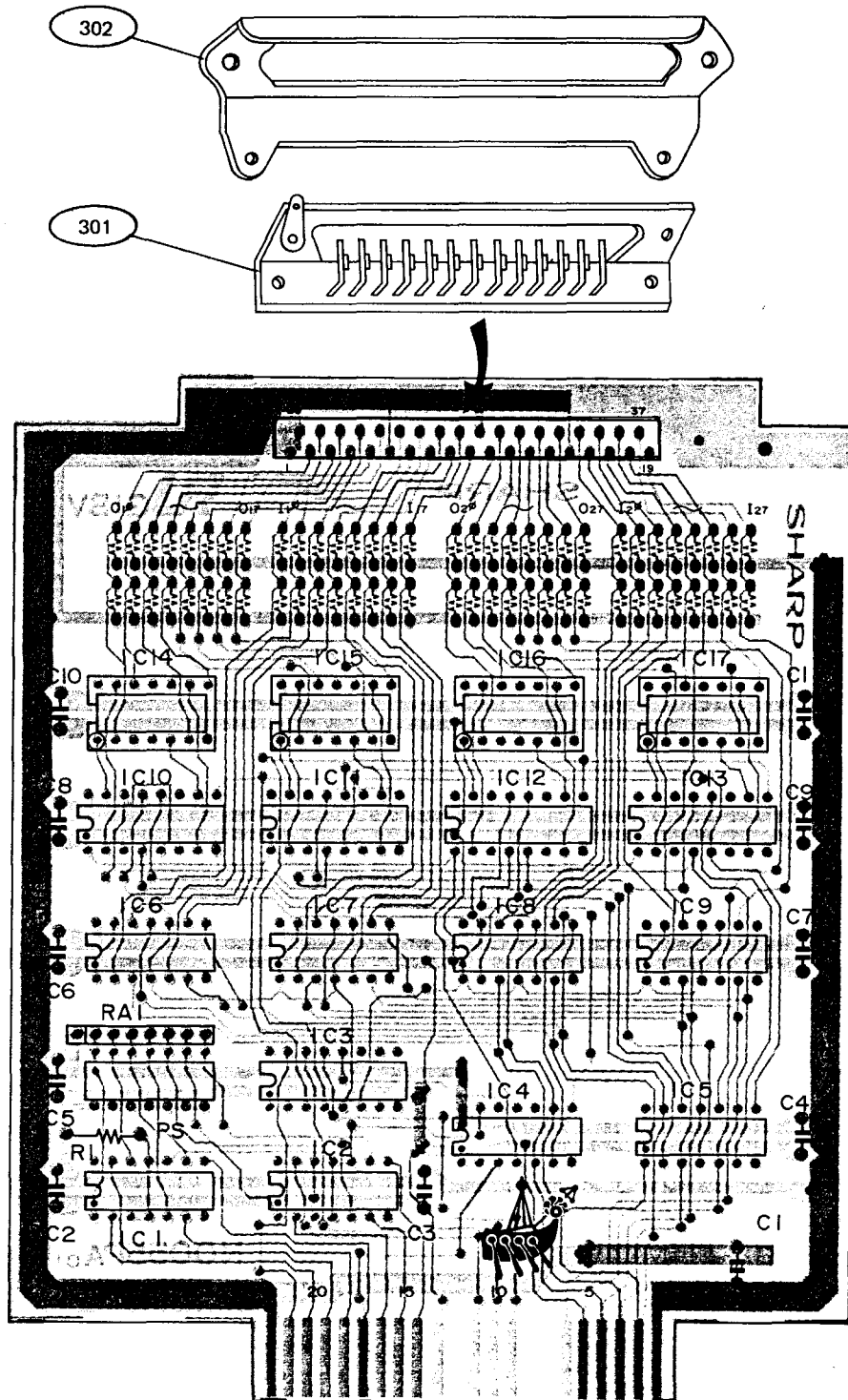
Universal I/O Card MZ-80IO2

■ Circuit Diagram



UNIVERSAL I/O CARD

■ PWB Section



Perspective View

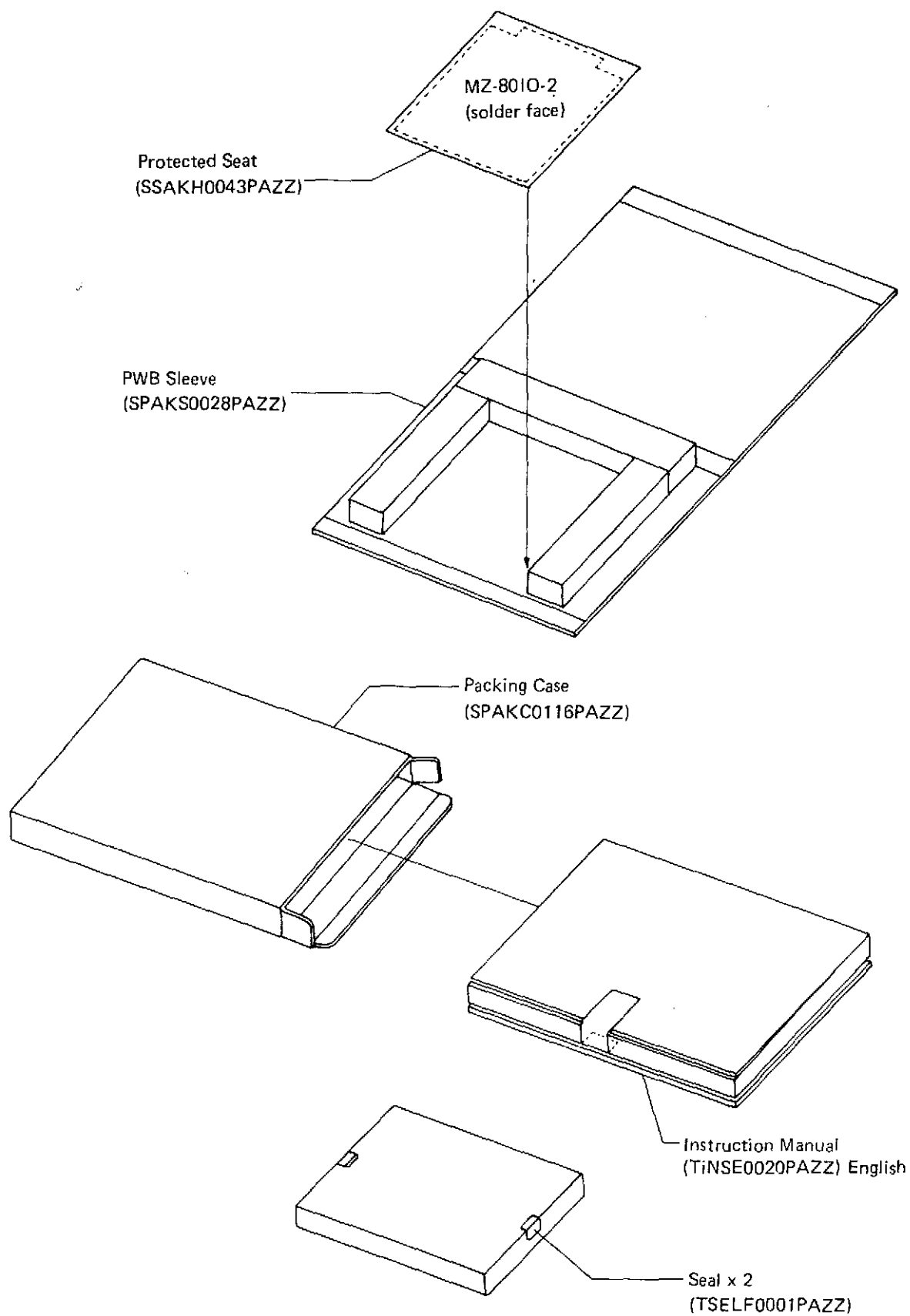


Parts-fitted face



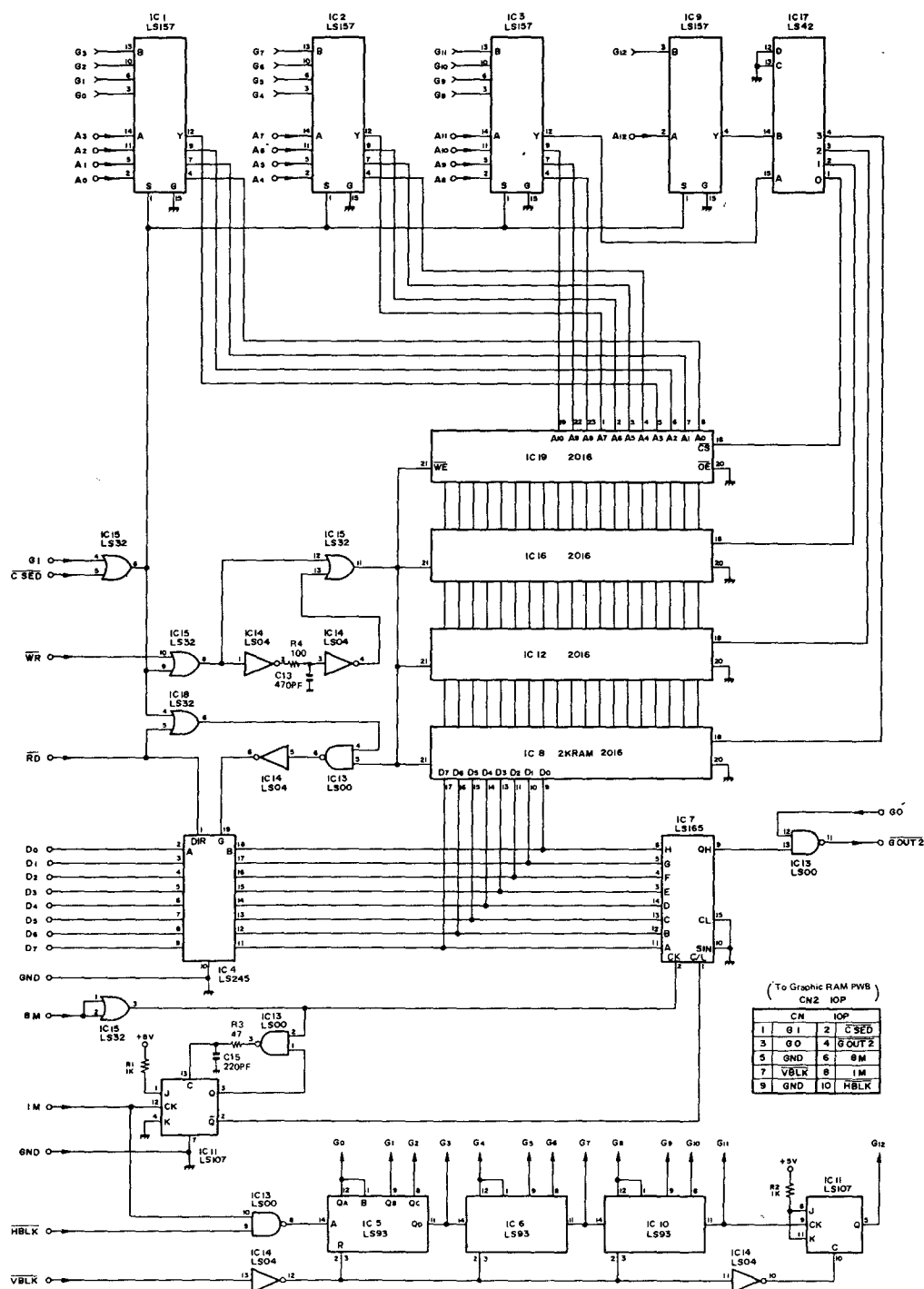
Opposite Side

■ Packing Method



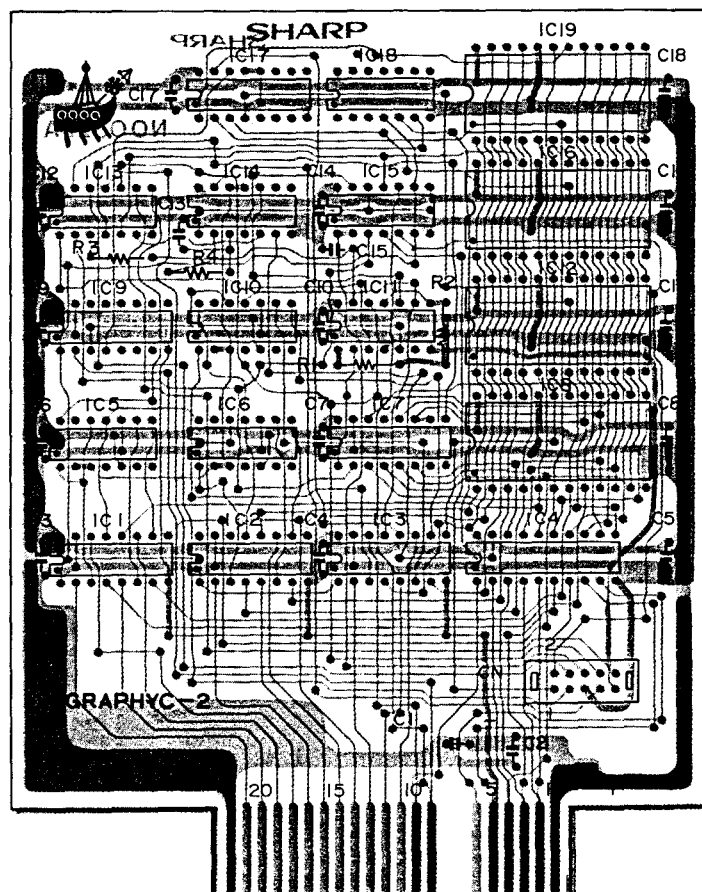
Expansion Graphic RAM MZ-80GMK

■ Circuit Diagram



MZ-80GMK

■ PWB Section

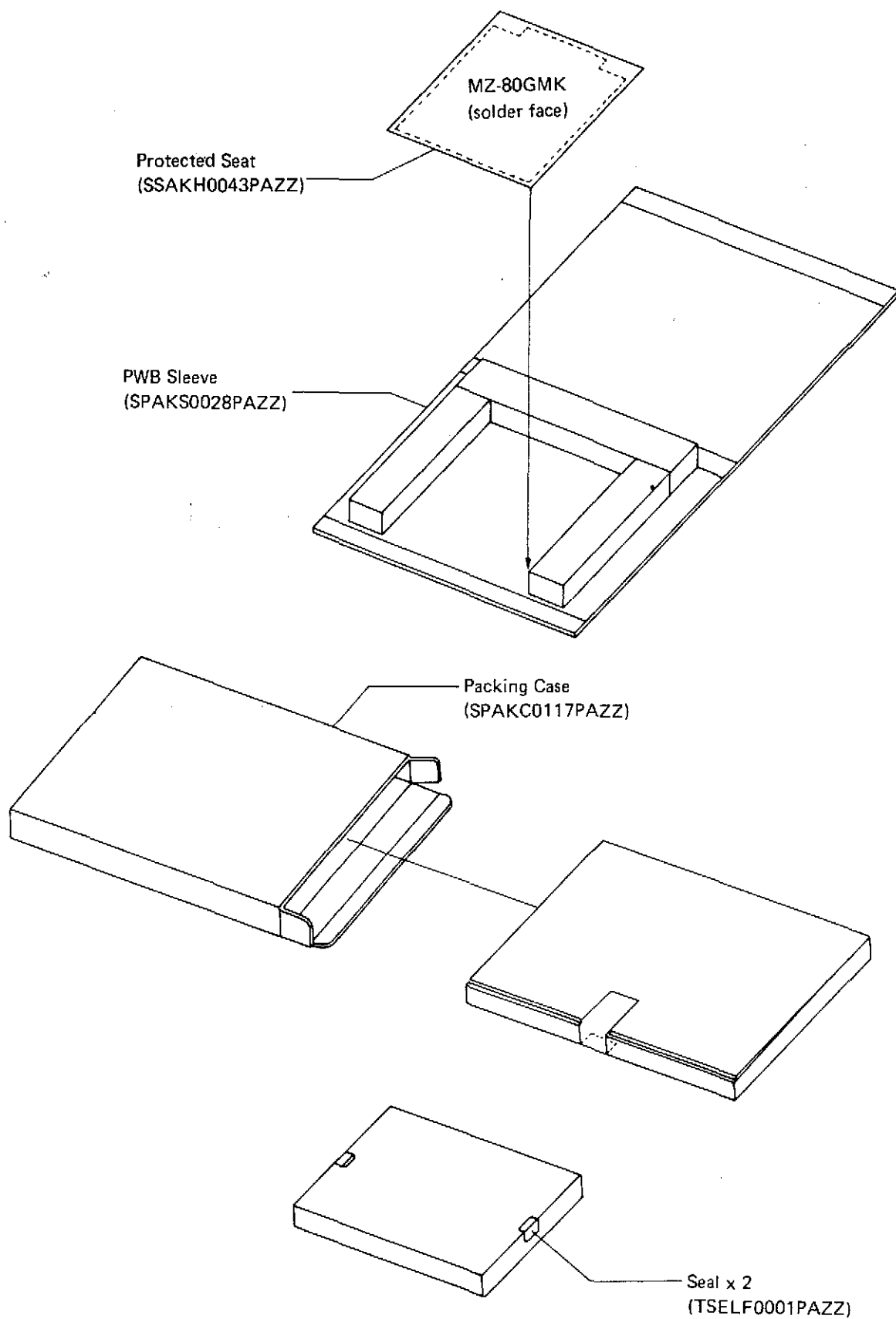


Perspective View

Parts-fitted face

Opposite Side

■ Packing Method



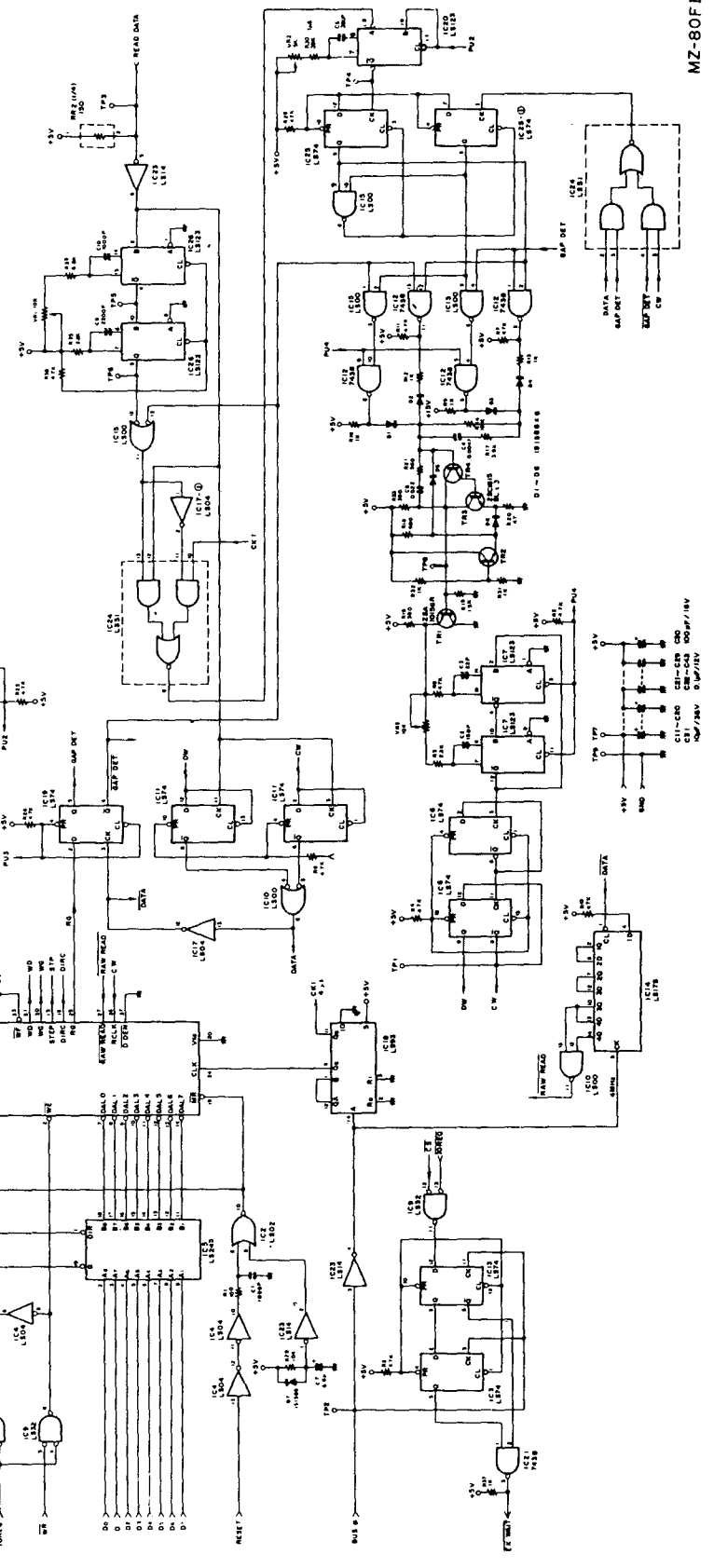
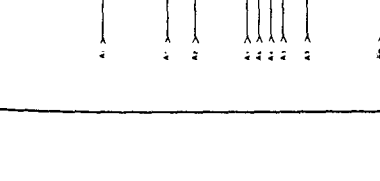
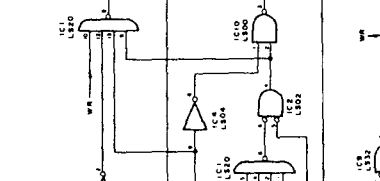
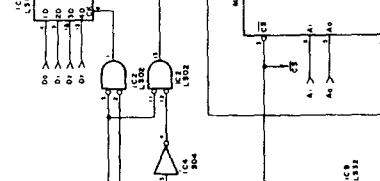
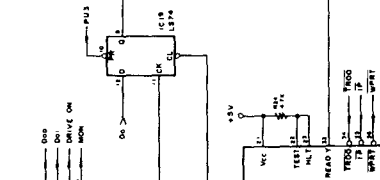
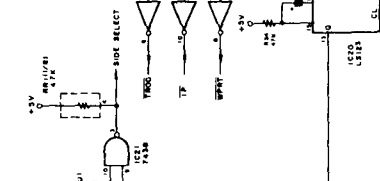
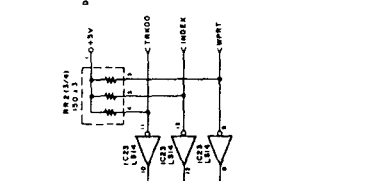
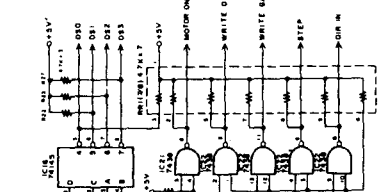
Floppy Disk I/O Card **MZ-80FI**

■ Circuit Diagram

NC	1	20	0
NC	2	21	0
DIS	3	22	0
INDEX	4	23	0
DIS	5	24	0
DIS	6	25	0
DIS	7	26	0
DIS	8	27	0
DIS	9	28	0
DIS	10	29	0
DIS	11	30	0
DIS	12	31	0
DIS	13	32	0
DIS	14	33	0
DIS	15	34	0
DIS	16	35	0
DIS	17	36	0
DIS	18	37	0
DIS	19	38	0

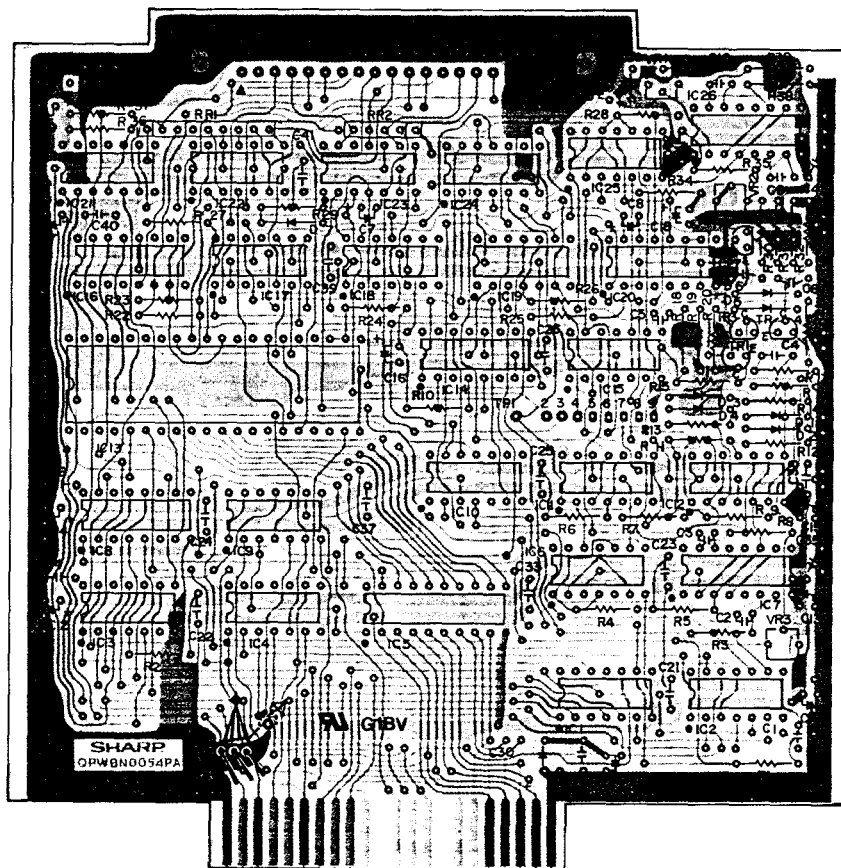
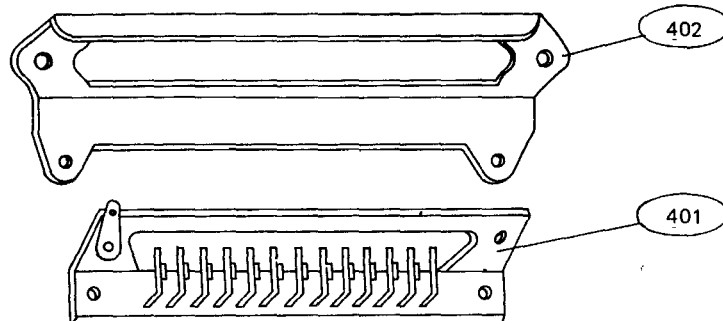
NC NO CONNECT

A	1	20	0
B	2	21	0
C	3	22	0
D	4	23	0
E	5	24	0
F	6	25	0
G	7	26	0
H	8	27	0
I	9	28	0
J	10	29	0
K	11	30	0
L	12	31	0
M	13	32	0
N	14	33	0
O	15	34	0
P	16	35	0
Q	17	36	0
R	18	37	0
S	19	38	0



MZ-80FI

■ PWB Section



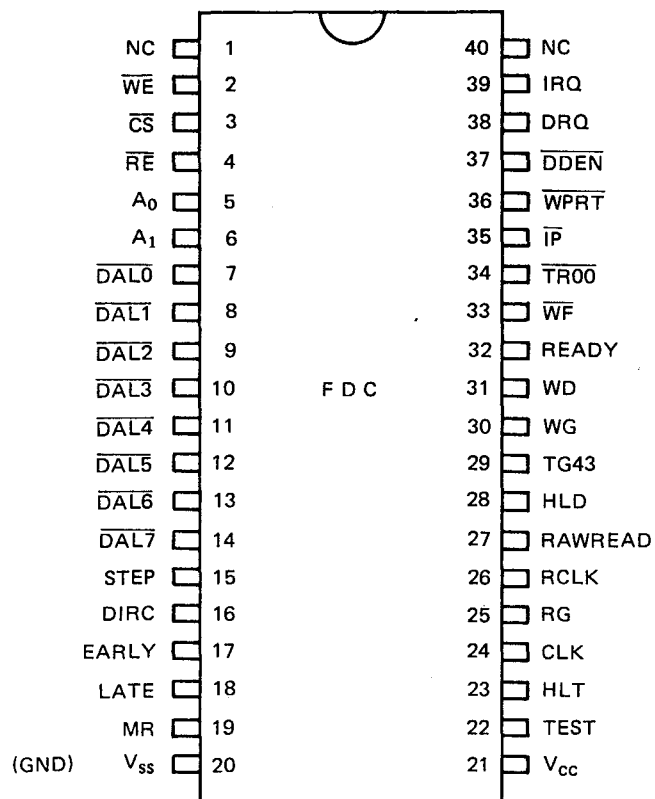
Perspective View

Parts-fitted face

Opposite Side

■ Explanation of Floppy Controller MB8866

Terminal Connection Chart



Terminal name and explanation of functions

Terminal No.	Terminal Name	Symbol	I/O	Explanation of Functions
20	POWER SUPPLY	V _{ss}	I	Ground
21		V _{cc}	I	+5V power terminal
19	MASTER RESET	MR	I	With MR = 0, MASTER RESET starts, STR7 bite ()0 is reset and becomes SCR (01) _H , CR (03) _H . The restore command is activated with a rise from MR low to high.
Computer Interface				
2	WRITE ENABLE	WE	I	It is the strobe input terminal only for data write-in to the inner register. With CS = 0 and WE = 0, write-in is possible.
3	CHIP SELECT	CS	I	It is the chip selection signal. With CS = 0, the chip is selected and sending and receiving of data with the computer is possible.
4	READ ENABLE	RE	I	It is the strobe input terminal for read-out of data in the inner register. With CS = 0 and RE = 0, read-out is possible.
5 6	REGISTER SELECT LINE	A ₀ A ₁	I	It is the input terminal for selection of the inner register. Selected registers are CR, STR, TR, SCR and DR.
7 14	DATA ACCESS LINE	DAL ₀ DAL ₇	I/O	It is an 8-bite, two-way data input terminal. When CS = 1, it is high impedance. Signal polarity is reverse. (Negative logic)
24	CLOCK	CLK	I	It is the input terminal for the 2MHz standard clock. In the case of a mini floppy disk, it is 1MHz.

Terminal No.	Terminal Name	Symbol	I/O	Explanation of Functions
38	DATA REQUEST	DRQ	O	It is the open drain output and, when DRQ = 1, it indicates byte data accumulated in DR in case of read-out. In case of write-in, DR is empty and it indicates a demand for data. DRQ is reset through the function of write-in or read-out. Connect a 10K Ω blew up resistance.
39	INTERRUPT REQUEST	IRQ	O	It is the open drain output and with generation of command end, stop or interruption of type IV command, IRQ = 1. It is reset with the write-in of the following command or read-out of STR. Blew up resistance is 10K Ω .
Floppy Interface				
15	STEP	STEP	O	The step output generates a step pulse for moving the head. There is 1 pulse for 1 step.
16	DIRECTION	DIRC	O	It is the terminal showing the direction of head movement. With DIRC = 0, the head moves outward and with DIRC = 1 the head moves inward.
17	EARLY	EARLY	O	It is the output terminal for write preconvension and when EARLY = 1 it indicates that serial data output from WD should be shifted faster.
18	LATE	LATE	O	It is the output terminal for write preconvension and when LATE = 1 it indicates that serial data output from WD should be shifted slower.
22	TEST	TEST	I	Input terminal used only for chip testing. (When TEST = 0, delay due to the inner timer is ignored) The user should connect this terminal to 5V or leave it open.
23	HEAD LOAD TIMING	HLT	I	It is the settle input signal for the head after a head load command (HLD = 1). It engages when HLT = 1.
25	READ GATE	RG	O	With RG = 1, it informs the external data separator of a check of the field only when FDC is 0 (in case of FM) or of the field only when it is 0 or 1 (in case of MFM). It is the signal for taking this simultaneously.
26	READ CLOCK	RCLK	I	This is a signal for making a window in the data. It is developed in response to external data flow and is input on the FDC side. Related to RAW READ, rising and falling is important but level (high or low) is not important.
27	RAW READ	RAW READ	I	This is raw data directly input from the disk drive. It is used when receiving a signal and data is indicated by a negative pulse.
28	HEAD LOAD	HLD	O	It is the output terminal for controlling whether the head is pressed down to the media or not. The head is pressed down to the media when HLD = 1. The head is separated when HLD = 0.
29	TRACK GREATER THAN 43	TG43	O	It indicates that the head is positioned from track 44 to 76 when TG43 = 1. It indicates that it is from track 00 to track 43 when TG43 = 0. This output signal is effective only at the time of read/write commands.
30	WRITE GATE	WG	O	Output indicating that data is being written into the disk. It indicates data write-in when WG = 1.
31	WRITE DATA	WD	O	It is an output for read-in data to the disk. Pulse width for MFM is 250ns and for FM it is 500ns. Both data and address mark are output together at the same time in the case of both FM and MFM.
32	READY	READY	I	It indicates that the disk drive is ready for operation when READY = 1 and read/write operations are performed. When READY = 0, it indicates that the disk drive is not ready for operation, read/write operations are not performed and IRQ = 1. Namely, seek is carried out without reference to the READY condition. It indicates the polarity of the READY input is inverted to STR 7.
33	WRITE FAULT	WF	I	It is the input for trouble checks during write-in to the disk. It indicates an error during write-in when WF = 0. The write command is stopped and the WRITE FAULT status bite set.
34	TRACK 00	TR00	I	Input indicating whether the head position is in track 00 or not. It indicates track 00 is being checked when TR00 = 0.
35	INDEX PULSE	IP	I	Input indicating that the index pulse of the disk is being checked. It indicates the index pulse is being checked when IP = 0.
36	WRITE PROTECT	WRPT	I	Input indicating that write-in to the disk is forbidden. When a write command is started, generally WPRT is sampled and if WPRT = 0 the command is stopped and WRITE PROTECT status bite is set.
37	DOUBLE DENSITY	DDEN	I	This input is for selection of single or double density operation. Double density is selected when DDEN = 0 and single when DDEN = 1.
40 1	NON CONNECTION	NC		

■ Adjustment

Adjust and check the following when exchanging IC7, 20, 26 (74LS123N), TR1 and their peripherals.

When adjusting, add power voltage 5V to TP7 (+5V) and TP9 (0V) and apply 4MHz clock (duty ratio 50%, TTL level) to TP2.

VR1 Adjustment

As shown in Fig. 1, apply a negative pulse with a period of more than $30\mu\text{s}$ ~ $50\mu\text{s}$ to TP3 (READ DATA). At this time, adjust VR1 so that the width of the negative pulse appearing at TP5 is $5\mu\text{s}$.

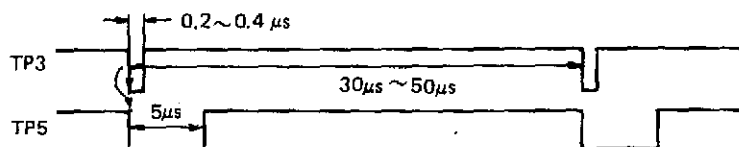


Fig. 1

VR2 Adjustment

Apply a negative pulse with a period of $5\mu\text{s}$ to TP3 (READ DATA). At this time, adjust VR2 so that the width of the negative pulse appearing at TP4 is $1\mu\text{s}$.

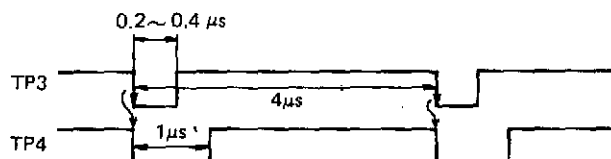


Fig. 2

VR3 Adjustment

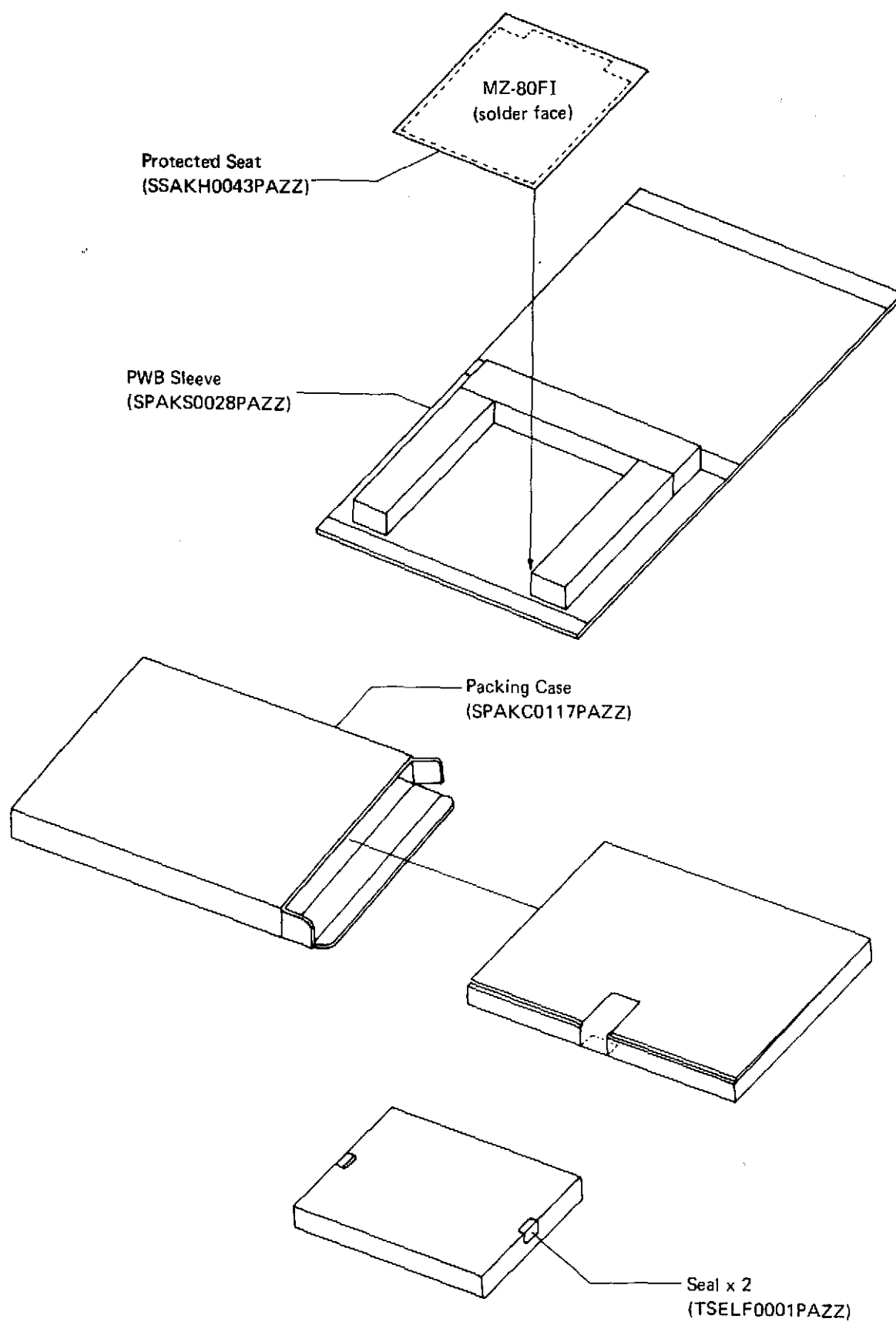
Apply a negative pulse with a period of $4\mu\text{s}$ to TP3. At this time, adjust VR3 so that the voltage of TP8 is 2.65V. After adjusting, change the period of the negative pulse added to TP3 and check that the VCO output is within a periodic range of $4\mu\text{s} \pm 1\mu\text{s}$.

Adjustment range

The following shows the adjustment range for each adjustment.

- VR1 adjustment $5\mu\text{s} \pm 0.2\mu\text{s}$
- VR2 adjustment $1\mu\text{s} \pm 0.04\mu\text{s}$
- VR3 adjustment $2.65\text{V} \pm 0.05\text{V}$

■ Packing Method

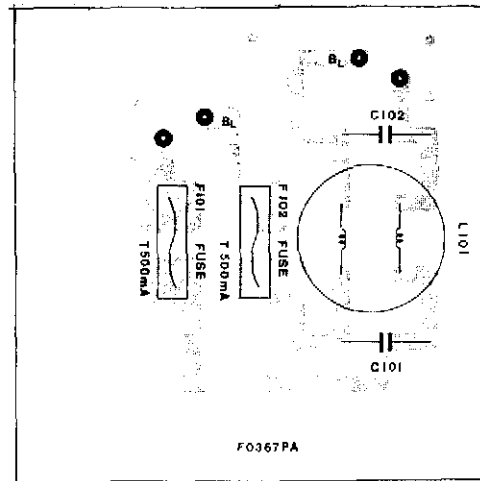


Floppy Disk **MZ-80FB**

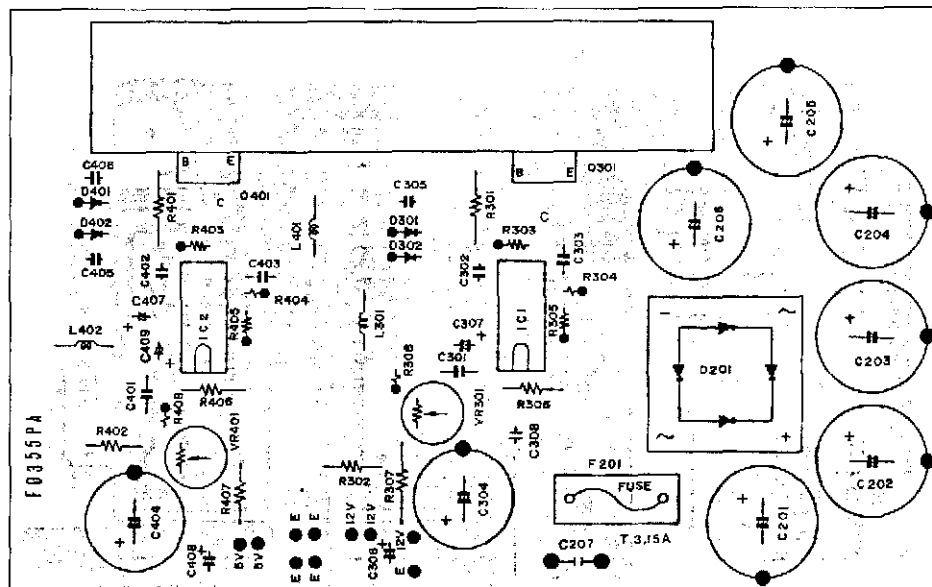
Expansion Floppy Disk **MZ-80FBK**

- For the system of MZ-80B, MZ-80FB/MZ-80FBK mechanically differ from MZ-80FD/MZ-80FDK (for the system of MZ-80K) in signal connector on the rear side and power supply circuit. However, the disk drive are the same as those of the MZ-80FD/MZ-80FDK in circuit design. Use the service manual of the MZ-80FD/MZ-80FDK for service.

■ Power Supply Circuit (PWB Section)

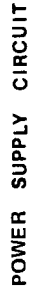


Primary



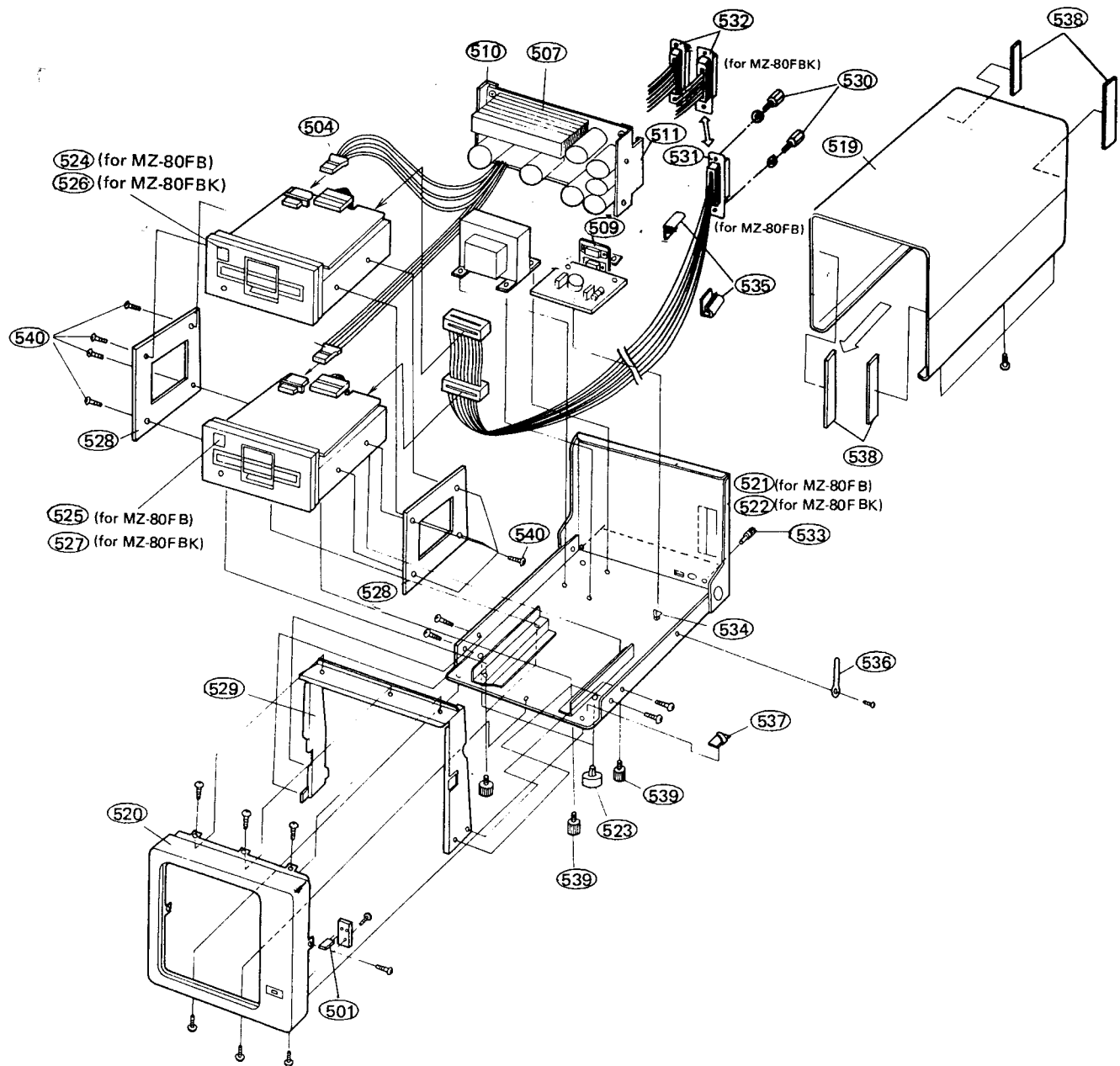
Secondary

A vertical scale with numbers 1 through 8. Each number is positioned to the left of a horizontal tick mark that extends to the right. The tick marks are evenly spaced along a vertical line.



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■ Disassembled Views



REPLACEMENT PARTS LIST

"HOW TO ORDER REPLACEMENT PARTS"

To have your order filled promptly and correctly, please furnish the following information:

1. MODEL NAME
2. REP. NO.
3. PART NO.
4. DESCRIPTION

NOTES: Be sure to use regular parts for securing the safety and reliability of the set. Parts marked with "△" () are important for maintaining the safety of the set. Be sure to replace these parts with specified ones for maintaining the safety and performance of the set.

MODEL MZ-80B

REF. NO.	PART NO.	DESCRIPTION	CODE	REF. NO.	PART NO.	DESCRIPTION	CODE
*** CPU BOARD UNIT SECTION***				TRANSISTORS AND DIODES			
	DCPU-0009PAZZ	Assembled CPU Board Unit (Not replacement item)	—	Q1 } Q2 } Q3 }	VS2SC373-G/-1	2SC373G	AC
				D1	VHD1S1555//1A	1S1555	AA
INTEGRATED CIRCUITS				RESISTORS			
ROM	DPR0M0005PAZZ	IPL MB 8516 (2K ROM)	BM	R1			
CG-ROM	DPR0M0006PAZZ	TMM323D-1 (2K ROM)	BK	R2			
RAM	RH-IX0145PAZZ	D-RAM 4116	BE	R3			
IC1 } IC33 }	RH-IX0070PAZZ	SN74LS00N	AE	R4			
IC2	RH-IX0240PAZZ	Gate array (14297)	BD	R5			
IC3	RH-IX0228PAZZ	LH0080A (CPU)	BG	R6			
IC4	RH-IX0104PAZZ	SN74LS42N	AH	R7			
IC5 } IC18 }	RH-IX0101PAZZ	SN74S04N	AG	R10 } R12 } R13 }	VRD-SC2EF102J	1K ohm 1/4W	AA
IC6 } IC7 } IC10 }	RH-IX0123PAZZ	SN74LS244N	AS	R27 } R34 } R36 }			
IC9 } IC21 }	RH-IX0040PAZZ	SN74121N	AG	R37 } R38 }			
IC11 } IC22 }	RH-IX0124PAZZ	SN74LS245N	AR	R4			
IC12 } IC28 }	RH-IX0074PAZZ	SN74LS04N	AE	R8 } R11 }	VRD-SC2EF331J	330 ohm 1/4W	AA
IC32 } IC40 }				R18 } R40 }	VRD-SC2EF222J	2.2K ohm 1/4W	AA
IC13 } IC20 }	RH-IX0078PAZZ	SN74LS32N	AF	R15 } R17 }	VRD-SC2EF472J	4.7K ohm 1/4W	AA
IC14 } IC15 }	RH-IX0148PAZZ	SN74S157N	AQ	R21 } R23 }	VRD-SC2EF101J	100 ohm 1/4W	AA
IC17 } IC35 }	RH-IX0075PAZZ	SN74LS08N	AE	R25 } R32 }	VRD-SC2EF221J	220 ohm 1/4W	AA
IC46 } IC19 }	RH-IX0146PAZZ	D8253C	BC	R16 } R35 }	VRD-SC2EF271J	270 ohm 1/4W	AA
IC23 } IC24 }	RH-IX0136PAZZ	D8255C	BA	R19 } R20 }			
IC25 } IC26 }	RH-IX0229PAZZ	LH0081A (Pi0)	BE	R22 } R24 }			
IC27 } IC29 }	RH-IX0045PAZZ	SN74154N	AN	R26 } R28 }	VRD-SC2EF103J	10K ohm 1/4W	AA
IC30 } IC31 }	RH-IX0102PAZZ	SN74LS14N	AM	R31 } R39 }			
IC33 } IC34 }	RH-IX0079PAZZ	SN74LS74AN	AG	R33	VRD-SC2EF822J	8.2K ohm 1/4W	AA
IC36 } IC37 }	RH-IX0247PAZZ	SN74LS86N	AG	RA5	RMPTC1014PAZZ	Resistor Array 10K ohm x 7	AD
IC38 } IC39 }	RH-IX0083PAZZ	SN74LS157N	AG	RA6	RMPTC1004PAZZ	Resistor Array 10K ohm x 8	AD
IC41	RH-IX0256PAZZ	S-RAM, TMM2016P-1	BP				
IC42	RH-IX0241PAZZ	Gate Array (14298)	BD				
IC43	RH-IX0242PAZZ	Gate Array (14299)	BD				
IC45	RH-IX0129PAZZ	SN74LS165N	AQ				

MODEL MZ-80B PARTS LIST

REF. NO.	PART NO.	DESCRIPTION	CODE	REF. NO.	PART NO.	DESCRIPTION	CODE		
CAPACITORS									
C3	RC-KZ0001PAZZ	0.1MFD, 50V	AE		QSÖCZ0010PAZZ	24-Pin IC Socket	AF		
C5					QSÖCZ0011PAZZ	28-Pin IC Socket	AN		
C7					QSÖCZ0012PAZZ	40-Pin IC Socket	AH		
C10					QSÖCZ0022PAZZ	16-Pin IC Socket	AE		
C12					CN1	QPLGZ0065PAZZ	20-Pin Terminal (for RAM Option)	AM	
C14					CN2				
C16					CN3				
C18					CN9	QPLGZ0020PAZZ	3-Pin Terminal	AD	
C23					CN10				
C25					CN4	QPLGZ0067PAZZ	40-Pin Terminal (for Bus lines)	AP	
C27					CN5				
C29	VCSACU1VE104M	0.1MFD, 35V Tantalum	AE	CN6	QPLGZ0048PAZZ	12-Pin Terminal (for Cassette)	AE		
C2				CN7	QPLGN0303CEZZ	3-Pin Terminal	AB		
C9				CN8	QPLGN0403CEZZ	4-Pin Terminal (for Power supply)	AB		
C11				CN11	QPLGZ0066PAZZ	20-Pin Terminal (for Keyboard)	AG		
C20				CN12	QPLGZ0057PAZZ	4-Pin Terminal (for LED)	AC		
C22				CN13	QPLGZ0068PAZZ	10-Pin Terminal (for Graphic)	AH		
C30				CN14	QPLGZ0069PAZZ	6-Pin Terminal (for Monitor TV)	AD		
C1				CN15	QPLGZ0078PAZZ	14-Pin Terminal	AH		
C4									
C6									
C8									
C13									
C15									
C17									
C19									
C21									
C26									
C28									
C31									
}									
C38									
C46									
}									
C49									
C54	VCTYPU1BD104Z	0.1MFD, 12V, Ceramic	AB						
C56									
C58									
}									
C65									
C69									
C70									
C74	VCQYKU1HM332K	0.0033MFD, 50V, Film	AA						
C39									
C40									
}									
C43	VCEAAU1CW106Y	10MFD, 16V, Aluminum	AB						
C45									
C55									
C57									
C50	VCEAAU1CW107Y	100MFD, 16V, Aluminum	AB						
}									
C53									
C66	VCCSPR1H6471J			470PF, 50V, Ceramic	AA				
C68	VCCSPR1H6331J	330PF, 50V, Ceramic	AA						
C71	VCQYKU1HM102K	0.001MFD, 50V, Film	AA						
*** MONITOR TV & CASSETTE TAPE RECORDER SECTION ***									
*MONITOR TV PWB									
				DPWB-0221PAZZ	Assembled Monitor TV PWB Unit (Not replacement item)				
INTEGRATED CIRCUITS									
				i2001	RH-IX0015TAZZ	µPC1031H, Vertical deflection	AN		
				i2002	RH-IX0243PAZZ	LA4200 Sound Amp.	AK		
TRANSISTORS AND DIODES									
				Q2001	VS2SC1213-C1A	2SC1213	AC		
				Q2005					
				Q2007					
				Q2002	VS2SC1514-1E	2SC1514	AF		
				Q2003	VS2SA673-C/1E	2SA673	AC		
				Q2004					
				Q2006	VS2SC681A-R1A	2SC681A-R	AM		
				D2001	VHD02Z7R5A//A	7.5V Zener	AC		
				D2002	RH-DX0039TAZZ	S1RECT208	AC		
				D2006					
				D2003					
				D2004	VHD1N34A///-1	1N-34A	AB		
				D2005					
				D2007	RH-DX0062CEZZ	RH1	AD		
				D2008					
				D2011	RH-DX0043TAZZ	SiR60	AC		
				D2012					
				D2009					
				D2010	VHD05Z20L//1A	20V Zener	AC		
				D2013	VHD1S1555//1A	1S1555	AA		
MISCELLANEOUS									
X'TAL	RCRSA0015PAZZ	Crystal, 16MHz	AM						

MODEL MZ-80B PARTS LIST

REF. NO.	PART NO.	DESCRIPTION	CODE	REF. NO.	PART NO.	DESCRIPTION	CODE
RESISTORS				C2004	VCEAAU1CW478M	4,700MFD, 16V, Aluminum	AH
R2001	VRD-SC2EF470J	47 ohm 1/4W	AA	C2005	VCEAAU1CW108M	1,000MFD, 16V, Aluminum	AD
R2002	RVR-M7003TAZZ	Variable Resistor 500 ohm	AC	C2045			
R2003	VRD-SC2EF153J	15K ohm 1/4W	AA	C2006	VCQYKU1HM333K	0.033MFD, 50V, Film	AB
R2004				C2031			
R2020				C2007	VCEAAU1EW475A	4,7MFD, 25V, Aluminum	AB
R2005				C2013			
R2006	VRD-SC2EF121J	120 ohm 1/4W	AA	C2008	VCEAAU1AW227Y	220 MFD, 10V, Aluminum	AB
R2007	VRC-MT2HG122J	1.2K ohm 1/2W	AA	C2009	VCEAAU1CW226Y	22MFD, 16V, Aluminum	AB
R2008	RVR-M0036PAZZ	Variable Resistor 500K ohm	AC	C2010	VCSACU1VE105K	1MFD, 35V, Tantalum	AC
R2009	RVR-B4010PAZZ	Variable Resistor 250K ohm	AD	C2011	VCQYKU1HM332K	0.0033MFD, 50V, Film	AA
R2010	VRD-SC2EF224J	220K ohm 1/4W	AA	C2012			
R2011	VRD-SC2EF472J	4.7K ohm 1/4W	AA	C2014	RC-EZ0029TAZZ	22MFD, 16V, Aluminum	AC
R2044				C2015	VCEABA1CW226M	22MFD, 16V, Aluminum	AC
R2012				C2016	VCEAAU1CW228M	2,200MFD, 16V, Aluminum	AF
R2027				C2017	RC-EZ0027TAZZ	10MFD, 25V, Nonpolar Alum.	AG
R2028	VRD-SC2EF102J	1K ohm 1/4W	AA	C2018	VCQYKU1HM153K	0.015MFD, 50V, Film	AB
R2038				C2019			
R2013	VRC-MT2HG3R3J	3.3 ohm 1/2W	AA	C2020	VCEAAU1CW227Y	220MFD, 16V, Aluminum	AC
R2014	VRD-SC2EF273J	27K ohm 1/4W	AA	C2036			
R2015	RVR-M7013TAZZ	Variable Resistor 50K ohm	AC	C2046	VCQYKU1HM683K	0.068MFD, 50V, Film	AB
R2016	VRD-SC2EF122J	1.2K ohm 1/4W	AA	C2021			
R2017	VRC-MT2HG1R5J	1.5 ohm 1/2W	AA	C2022	VCQYKU1HM223K	0.022MFD, 50V, Film	AB
R2018				C2023	VCQYKU1HM103K	0.01MFD, 50V, Film	AB
R2019	RVR-M7004TAZZ	Variable Resistor 300 ohm	AC	C2030			
R2021	VRD-SC2EF331J	330 ohm 1/4W	AA	C2024	VCEAAU1CW107Y	100MFD, 16V, Aluminum	AB
R2026				C2025	VCQYKU1HM473K	0.047MFD, 50V, Film	AB
R2053				C2026	VCEAAU1EW335Y	3.3MFD, 25V, Aluminum	AB
R2022				C2027	VCQYKU1HM123J	0.012MFD, 50V, Film	AB
R2023	VRD-SC2EF123J	12K ohm 1/4W	AA	C2028	VCQYKU1HM473J	0.047MFD, 50V, Film	AB
R2024	VRD-SC2EF272J	2.7K ohm 1/4W	AA	C2029	VCCSPR1H6101K	100PF, 50V, Ceramic	AA
R2025	RVR-M7052TAZZ	Variable Resistor 20K ohm	AC	C2032	VCKZPR1HF103P	0.01MF, 50V, Ceramic	AA
R2029	VRD-SC2EF821J	820 ohm 1/4W	AA	C2043			
R2030	VRD-SC2EF822J	8.2K ohm 1/4W	AA	C2033	VCQPSC2DA683K	0.068MFD, 200V, Film	AB
R2031	VRD-SC2EF682J	6.8K ohm 1/4W	AA	C2034	VCQPSC2DA333K	0.033MFD, 200V, Film	AB
R2032				C2035	VCQPSC2DA153K	0.015MFD, 200V, Film	AB
R2033	VRD-SC2EF392J	3.9K ohm 1/4W	AA	C2037	VCEAAU2AW227Y	220MFD, 100V, Aluminum	AF
R2037				C2038	VCEAAU2EW105Y	1MFD, 250V, Aluminum	AC
R2034				C2041	VCQYSU2JM104K	0.1MFD, 630V, Film	AE
R2035				C2042	VCQYSU2JM103K	0.01MFD, 630V, Film	AC
R2036	VRD-SC2EF332J	3.3K ohm 1/4W	AA	C2044	VCEAAU1HW475M	4.7MFD, 50V, Aluminum	AB
R2039	VRD-ST2EF680J	68 ohm 1/4W	AA	C2047	VCKZPR1HF102Z	1,000PF, 50V, Ceramic	AA
R2040	VRD-SC2EF221J	220 ohm 1/4W	AA	C2050			
R2041	VRC-MT2HG560J	56 ohm 1/2W	AA	C2048	VCTYPU18D104Z	0.1MFD, 12V, Ceramic	AB
R2042	VRC-MT2HG330J	33 ohm 1/2W	AA	C2049	VCEAAU1EW336Y	33MFD, 25V, Aluminum	AB
R2043				C2051	VCEAAU1CW476Y	47MFD, 16V, Aluminum	AB
R2045	VRD-SC2EF154J	150K ohm 1/4W	AA	C2052	VCEAAU1CW106Y	10MFD, 16V, Aluminum	AB
R2046	VRD-SC2EF471J	470 ohm 1/4W	AA	C2056			
R2047	RVR-B4009PAZZ	Variable Resistor 1M ohm	AD	C2053	VCEAAU1CW477M	470MFD, 16V, Aluminum	AC
R2050	RVR-A0003PAZZ	Variable Resistor 10K ohm	AD	C2054	VCKYPU2HE103P	0.01MFD, 500V, Ceramic	AB
R2051	VRD-ST2EF120J	12 ohm 1/4W	AA	C2055	VCQPSC2DA104K	0.1MFD, 200V, Film	AC
R2052	VRD-SC2EF104J	100K ohm 1/4W	AA	COILS AND TRANSFORMERS			
R2054				T2001	RTRNT0017TAZZ	H-Drive Transformer	AF
R2055	VRS-PU3D8222J	2.2K ohm 2W	AA	T2002	RTRNF2105TAZZ	FBT	AZ
R2056	VRD-SC2EF101J	100 ohm 1/4W	AA	L2001	RCILZ0057TAZZ	H-Line Coil	AG
R2057	VRD-ST2EF104J	100K ohm 1/4W	AA	L2002	RCILB0031TAZZ	H-Hold Coil	AG
R2060	VRD-ST2EF273J	27K ohm 1/4W	AA	MISCELLANEOUS			
CAPACITORS				1	PRDAF0147TAZZ	Radiator (for IC2001)	AB
C2001	VCEAAU1HW476Y	47MFD, 50V, Aluminum	AC	2	PRDAF0107TAZZ	Radiator (for 2 SC681A-R)	AB
C2039				3	QSÖCV0012VAZZ	CRT Socket	AF
C2040				4	QPLGN0207CEZZ	2-Pin Plug (for Speaker)	AA
C2002	VCCSPR1H6151J	150PF, 50V, Ceramic	AA	5	DSÖCN0099PAZZ	Lead Wire with 6-Pin Socket	AH
C2003	VCEAAU2EW106Y	10MFD, 250V, Aluminum	AD	6	OPLGN0404CEZZ	4-Pin Plug (for Refraction Coil)	AB

MODEL MZ-80B PARTS LIST

REF. NO. PART NO. DESCRIPTION
***CASSETTE TAPE RECORDER PWB**
 DPWB-0184PAZZ Assembled Cassette Tape Recorder PWB Unit
 (Not replacement item)

INTEGRATED CIRCUIT

IC3001 } RH-IX0038PAZZ SN7406N
 IC3009 }
 IC3002 }
 IC3003 } RH-IX0075PAZZ SN74LS08N
 IC3005 }
 IC3004 } RH-IX0078PAZZ SN74LS32N
 IC3006 }
 IC3010 } RH-IX0245PAZZ SN74LS123N
 IC3007 }
 IC3011 } RH-IX0079PAZZ SN74LS74AN
 IC3008 } RH-IX0040PAZZ SN74121N
 IC3101 } RH-IX0220PAZZ SN75452BP
 IC3102 } RH-IX0280PAZZ LM324N

TRANSISTORS AND DIODES

Q3001 }
 Q3005 }
 Q3007 } VS2SC373GTM-1 2SC373GTM
 Q3010 }
 Q3013 }
 Q3006 } VS2SB760Q/-1 2SB760Q
 Q3011 }
 Q3012 } VS2SC2562Y/-1 2SC2562Y
 Q3014 }
 Q3016 }
 Q3017 } VS2SC1959Y/-1 2SC1959Y
 Q3021 }
 Q3022 }
 Q3015 } VS2SB762P/-1 2SB762P
 Q3019 }
 Q3018 } VS2SB761Q/-1 2SB761Q
 Q3020 }
 D3001 } VHD1S1586//1A 1S1586
 D3003 }
 D3004 } VHD1S1885//1A 1S1885
 D3005 }
 D3101 } VHD1S1555//1A 1S1555
 D3104 }

RESISTORS

R3001 } VRD-RU2EE393J 39K ohm 1/4W
 R3008 }
 R3002 }
 R3007 }
 R3009 }
 R3010 } VRD-RU2EE102J 1K ohm 1/4W
 R3018 }
 R3019 }
 R3022 }

CODE	REF. NO.	PART NO.	DESCRIPTION	CODE
	R3003			
	R3005			
	R3011			
	R3014	VRD-RU2EE221J	220 ohm 1/4W	AA
	R3037			
AG	R3040			
	R3004	VRD-RU2EE223J	22K ohm 1/4W	AA
AE	R3006			
	R3015	VRD-RU2EE392J	3.9K ohm 1/4W	AA
AF	R3016			
	R3017			
AL	R3021	VRD-RU2EE103J	10K ohm 1/4W	AA
	R3023			
AG	R3030			
	R3031			
AG	R3049			
AK	R3050			
AK	R3020	VRD-RU2EE333J	33K ohm 1/4W	AA
	R3024	VRD-RU2EE562J	5.6K ohm 1/4W	AA
	R3025			
	R3029	VRD-RU2EE150J	15 ohm 1/4W	AA
	R3032	VRD-SC2EF102J	1K ohm 1/4W	AA
AC	R3033	VRD-SC2EF680J	68 ohm 1/4W	AA
	R3034	VRD-RU2EE472J	4.7K ohm 1/4W	AA
	R3045			
	R3035	VRD-RU2EE122J	1.2K ohm 1/4W	AA
	R3044			
AG	R3036	VRD-RU2EE121J	120 ohm 1/4W	AA
AH	R3043			
	R3038	VRD-RU2EE222J	2.2K ohm 1/4W	AA
	R3041			
AC	R3039	VRD-RU2EE822J	8.2K ohm 1/4W	AA
	R3042			
	R3101	VRD-SC2EF471J	470 ohm 1/4W	AA
	R3102	VRD-SC2EF822J	8.2K ohm 1/4W	AA
AH	R3103	VRD-SC2EF473J	47K ohm 1/4W	AA
	R3046	VRD-SC2EF271J	270 ohm 1/4W	AA
AG	R3047			
	R3048	VRD-RU2EE272J	2.7K ohm 1/4W	AA
AB	R3051			
	R3052	VRD-SC2EF681J	680 ohm 1/4W	AA
	R3053	VRD-RU2EE681J	680 ohm 1/4W	AA
AC	R3104			
	R3110	VRD-SC2EF472J	4.7K ohm 1/4W	AA
	R3111			
AA	R3105	VRD-SC2EF224J	220K ohm 1/4W	AA
	R3106	VRD-ST2HF470J	47 ohm 1/2W	AA
	R3107			
	R3109	VRD-SC2EF103J	10K ohm 1/4W	AA
AA	R3115			
	R3112	VRD-SC2EF153J	15K ohm 1/4W	AA
	R3113	VRD-SC2EF154J	150K ohm 1/4W	AA
	R3114	VRD-SC2EF222J	2.2K ohm 1/4W	AA
AA	R3116			
	R3118	VRD SC2EF103G	10K ohm (G) 1/4W	AA
	R3119			
	R3117	VRD-SC2EF205G	2M ohm (G) 1/4W	AA
	R3120	VRD-SC2EF562G	5.6K ohm (G) 1/4W	AA
	R3121	VRD-SC2EF560G	56 ohm (G) 1/4W	AA
	RA3001	RMPTC1006PAZZ	Resistor Array 2.2K ohm x 6	AC
	RA3002	RMPTC1005PAZZ	Resistor Array 10K ohm x 4	AC

MODEL MZ-80B PARTS LIST

REF. NO.	PART NO.	DESCRIPTION	CODE	REF. NO.	PART NO.	DESCRIPTION	CODE
CAPACITORS				13	DANG-0016PAZZ	Monitor TV Cabinet Mounting Plate	AY
C3001	VCTYPU1ED104Z	0.1MFD, 25V, Ceramic	AB	14	PGUMS1007PAZZ	Rubber Bush	AD
C3002				15	JBTN-0037PASA	Reset Button	AC
C3003				16	JBTN-0050PASA	Reset Button	AC
C3010				17	MSPRC0014PAZZ	Spring for Reset Button	AB
C3011				18	MARMM0001PAZZ	Arm	AN
C3014	VCEALA1AE476M	47MFD, 10V, Elec-Lytic	AB	19	LANGK0311PAZZ	Arm Fixing Plate	AB
C3004				20	DSÖCN0112PAZZ	Lead Wire with 2-Pin Socket (for Speaker)	AD
C3009				21	GCÖVZ0007PAZZ	Smoky Panel	AX
C3005				22	RH-PX0048PAZZ	LED (for Cassette)	AE
C3007				23	DSÖCN0102PAZZ	Lead Wire with 3-Pin Socket	AF
C3008	VCKZPR1HF102P	0.001PFD, 50V, Ceramic	AA	24	HBDGB3002GESA	SHARP Badge	AU
C3017				25	HBDGB0003PAZZ	Badge	AV
C3018				26	LHLDFO006PAZZ	Holder	AB
C3103				27	LHLDW9002CEZZ	Wire Holder	AA
C3006				28	LHLDW0007PAZZ	Wire Holder	AA
C3015	VCEALA1HW105M	1MFD, 50V, Elec-Lytic	AB		MSPRT0011PAZZ	Spring for CRT earth	AB
C3016	VCEALA1HW104M	0.1MFD, 50V, Elec-Lytic	AB				
C3016	VCEALA1AW107M	100MFD, 10V, Elec-Lytic	AC				
C3019	RC-AZ0001PAZZ	220µF, 10V, Aluminum	AF		KMEKA0002PAZZ	Cassette Tape Recorder Mechanical Unit (Refer to other table for detailed parts)	BR
C3020	VCKZPR1HF103P	0.01MFD, 50V, Ceramic	AA	29	DFTAC0003PASA	Flap	AU
C3024				30	LANGK0321PAZZ	Flap Fixing Plate	AD
C3025				31	MSPRB0036PAFJ	Spring	AC
C3026				32	PDMPÖ0001PAZZ	Damper	AE
C3101				35	DANG-0014PAZZ	Machinical Mounting Plate	AV
C3102	VCQYKU11M104K	0.1MFD, 50V, Film	AB	36	LANGK0283PAZZ	Mechinical Mounting Plate C	AB
C3106				37	LANGK0284PAZZ	Machinical Mounting Plate A	AC
C3107				38	LANGK0285PAZZ	Machinical Mounting Plate B	AC
C3104				39	LANGK0319PAZZ	PWB Mounting Plate	AD
C3108				40	KCÖUB0001PAZZ	Counter	AM
C3105				41	NBLTZ0003PAZZ	Counter Belt	AB
MISCELLANEOUS				42	HDECA0031PASA	Decoration Plate	AA
RY1	RRLYJ0028PAZZ	Relay G2V	AN	43	DSÖCN0100PAZZ	Lead Wire with 3-Pin Socket	AF
RY3				44	RH-IX0257PAZZ	DN6838 (HIC)	AG
RY2	RRLYJ0027PAZZ	Relay G2E	AN	45	MCRK-0001PAZZ	Crank	AD
CN3001	QPLGZ0020PAZZ	3-Pin Terminal	AD	46	MLÖKC0001PAZZ	Lock Lever	AD
CN3002				47	LANGK0320PAZZ	Lock Lever Fixing Plate	AH
CN3003	QPLGZ0088PAZZ	2-Pin Terminal	AC	48	LSFTZ0008PAZZ	Lock Lever Fixing Pin	AD
CN3004	QPLGN0511CEZZ	5-Pin Terminal	AC	49	RPLU-0001PAZZ	Plunger Coil	AS
J3001	DSÖCN0085PAZZ	Lead Wire with 6-Pin Socket (for Keyboard)	AG	50	MSPRT0002PAFJ	Lock Lever Spring	AA
J3002	DSÖCN0086PAZZ	Lead Wire with 3-Pin Socket (for LED)	AE	51	DSÖCN0113PAZZ	Lead Wire with 2-Pin Socket	AF
J3003	DSÖCN0080PAZZ	Lead Wire with 12-Pin Socket (for CPU Board)	AH	52	VHD1S1885//1A	1S1885	AC
J3004	DSÖCN0082PAZZ	Lead Wire with 6-Pin Socket (for Cassette)	AG	53	XPSSP25-10000	Spring Pin (φ 2.5 x 10)	AA
J3005	DSÖCN0081PAZZ	Lead Wire with 9-Pin Socket (for Cassette)	AG	54	DSÖCN0084PAZZ	Lead Wire with 5-Pin Socket (for Cassette Head)	AD
J3006	DSÖCN0083PAZZ	Lead Wire with 3-Pin + 1-Pin Socket (for Power Supply)	AF	55	LX-BZ0074PAZZ	Screw	AA
*MONITOR TV & CASSETTE TAPE RECORDER MISCELLANEOUS				*** KEY BOARD UNIT SECTION ***			
7	VBE2728B31/1E	CRT	BQ	DKEY-0007PAZZ	Assembled Key Board Unit (Not replacement item)		
8	VSP0080P-16YA	Speaker	AQ	MISCELLANEOUS			
9	RCILH4070TAZZ	Reflection Coil	AW	56	DANGK0318PAZZ	Key Switch Fixing Plate	AY
10	DCABC8173PASA	Monitor TV Cabinet (Front)	BB	57	QSW-P0016PAZZ	Push Switch (with LED)	AP
11	GCABD8173PASA	Monitor TV Cabinet (Rear)	AZ				
12	LANGK0282PAZZ	CRT Mounting Plate	AL				

MODEL MZ-80B PARTS LIST

REF. NO.	PART NO.	DESCRIPTION	CODE	REF. NO.	PART NO.	DESCRIPTION	CODE
58	QSW-P0017PAZZ	Push Switch	AE	R304	VRD-SU2EF563J	56K ohm 1/4W	AA
59	QSW-P0018PAZZ	Push Switch	AE	R404			
60	QSW-P0019PAZZ	Push Switch (with cushion)	AD	R306	VRD-ST2EF153J	15K ohm 1/4W	AA
61	LSTYM0008PAZZ	Stay for SPACE Key	AB	R307	VRD-SU2EF332J	3.3K ohm 1/4W	AA
62	PCUSG0010PAZZ	Cushion for SPACE Key	AA	R308	VRD-SU2EF101J	100 ohm 1/4W	AA
63	PGIDM0006PAZZ	Guide for SPACE Key	AC	R407			
64	MLEVP0005PAZZ	Lever for SPACE Key	AE	R405	VRD-SU2EF222J	2.2K ohm 1/4W	AA
65	DSOCN0107PAZZ	Lead Wire with 4-Pin Socket	AH	R409	VRD-SU2EF392J	3.9K ohm 1/4W	AA
66	DSOCN0108PAZZ	Lead Wire with 6-Pin Socket	AM	VR301	RVR-M0010PAZZ	Variable Resistor 1K ohm	AC
67	DSOCN0109PAZZ	Lead Wire with 20-Pin Socket	AT	VR401			
68	HPNLH0057VASA	Panel	AU	CAPACITORS			
69	PCOVP0007PAZZ	Cover	AE	Δ C101	RC-CZ0180PAZZ	0.047MFD, 250V	AH
70	MSPRC0015PAZZ	Spring	AB	Δ C102			
71	RH-PX0049PAZZ	LED	AE	C201	VCEAAU1CM228M	2,200MFD, 16V, Aluminum	AE
72	DSOCN0103PAZZ	Lead Wire with 3-Pin Socket	AF	C202	VCTYPU1ED104Z	0.1MFD, 25V, Ceramic	AB
(Refer to separate list for PART NO. of keyboard.)				C305	VCKYPU1NB104Z	0.1MFD, 12V, Ceramic	AB
				C408			
				C203	VCEAAU1AM107M	100MFD, 10V, Aluminum	AC
				C301	VCEAAU1VM338M	3,300MFD, 35V, Aluminum	AC
				C302			
				C303	VCQYKU1HM102K	0.001MFD, 50V, Film	AA
				C405			
				C304	VCEAAU1VM336M	33MFD, 35V, Aluminum	AB
				C407			
				C306	VCQYKU1HM183K	0.018MFD, 50V, Film	AB
				C409			
				C307	VCEAAU1CM338M	3,300MFD, 16V, Aluminum	AG
				C308	VCQYKU1HM103K	0.01MFD, 50V, Film	AB
				C406			
				C411	RC-QZ0003PAZZ	0.1MFD, 100V, Film	AB
				C309			
				C412	VCEAAU1EM478M	4,700MFD, 25V, Aluminum	AH
				C401			
				C404	VCEAAU1AM688M	6,800MFD, 10V, Aluminum	AG
				C410			
				COILS AND TRANSFORMER			
				Δ L101	RTRNZ0005PAZZ	Line Coil	AL
				L301	RTRNZ0021PAZZ	Choke Coil	AQ
				L401	RTRNZ0006PAZZ	Choke Coil	AR
				Δ T101	RTRNP0037PAZZ	Power Supply Transformer	BL
				MISCELLANEOUS			
				Δ SW101	QSW-C0003PAZZ	A.C. Switch	AQ
				Δ SO101	QSOCA0003PAZZ	Appliance Inlet	AF
				Δ F101	QFS-C0006PAZZ	Fuse, T 630mA	AD
				Δ F102			
				Δ F201	QFS-C0005PAZZ	Fuse, T 1A	AE
				Δ F301	QFS-C0003PAZZ	Fuse, T 1.6A	AD
				Δ F401	QFS-C0004PAZZ	Fuse, T 3.15A	AD
				Δ F402			
				75	QFSHA0001PAZZ	Fuse Holder	AA
				76	QPLGN0303CEZZ	3-Pin Terminal	AB
				77	QPLGN0103CEZZ	1-Pin Terminal	AA
				78	DSOCN0098PAZZ	Lead Wire with 4-Pin Socket	AF
				79	PRDAR0028PAZZ	Radiator (A)	AV
				80	PRDAR0029PAZZ	Radiator (B)	AH
				81	PRDAR0030PAZZ	Radiator (C)	AE
				82	PRDAR0031PAZZ	Radiator (D)	AH
				83	PRDAR0032PAZZ	Radiator (E)	AS

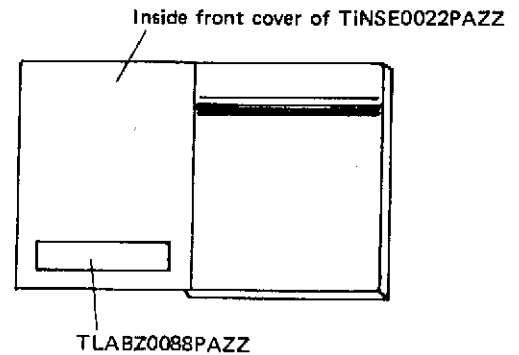
MODEL MZ-80B PARTS LIST

REF. NO.	PART NO.	DESCRIPTION	CODE	REF. NO.	PART NO.	DESCRIPTION	CODE
84	GCABA8195PAZZ	Cabinet (A) (for Power Supply)	BA	INTEGRATED CIRCUIT			
85	GCABB8195PAZZ	Cabinet (B) (for Power Supply)	AH	IC1	RH-IX0265PAZZ	TMM2016 (2K, S-RAM)	BP
86	LANGK0317PAZZ	Radiator Fixing Metal	AC	IC4			
*** RAM (III) (IV) BLOCK UNIT SECTION ***				IC5	RH-IX0083PAZZ	SN74LS157N	AH
	DPWB-0246PAZZ	Assembled RAM (III) (IV) Block Unit (Not replacement item)	—	IC8			
INTEGRATED CIRCUIT				IC9	RH-IX0104PAZZ	SN74LS42AN	AH
RAM	RH-IX0145PAZZ	D-RAM 4116	BE	IC10	RH-IX0125PAZZ	SN74LS93N	AK
RESISTORS				IC12			
R1	VRD-SC2EF102J	1K ohm 1/4W	AA	IC13	RH-IX0124PAZZ	SN74LS245N	AR
R4				IC14	RH-IX0129PAZZ	SN74LS165N	AQ
				IC15	RH-IX0181PAZZ	SN74LS175N	AM
				IC16	RH-IX0074PAZZ	SN74LS04N	AE
CAPACITORS				IC17	RH-IX0127PAZZ	SN74LS107N	AG
C1	VCTYPU1BD104Z	0.1MFD, 12V, Ceramic	AB	IC18	RH-IX0078PAZZ	SN74LS32N	AF
C3				IC20			
C5				IC19	RH-IX0075PAZZ	SN74LS08N	AE
C7				IC21	RH-IX0070PAZZ	SN74LS00N	AE
C10				RESISTORS			
C12				R1	VRD-SC2EF102J	1K ohm 1/4W	AA
C14				R4			
C16				R5	VRD-SC2EF470J	47 ohm, 1/4W	AA
C17				R6	VRD-SC2EF101J	100 ohm, 1/4W	AA
C19				CAPACITORS			
C21	VCTYPU1ED104Z	0.1MFD, 25V, Ceramic	AB	C1	VCTYPU1BD104Z	0.1MFD, 12V, Ceramic	AB
C23				C6			
C2				C8			
C4				C10			
C6				C14	VCCSPR1H6471J	470PF, 50V, Ceramic	AA
C8				C7			
C9				C9	VCEAAU1CW107Y	100MFD, 16V, Aluminum	AB
C11				C15	VCCSPR1H6221J	220PF, 50V, Ceramic	AA
C13				MISCELLANEOUS			
C15				VCSACU1VE104M	0.1MFD, 35V, Tantalum	AC	CN1
C18	CN2	QPLGZ0085PAZZ	10-Pin Plug				AH
C20	*** OTHER SECTION ***						
C22	87	DCABA8173PASA	Cabinet Complete				BR
C24	88	GCABB8173PASA	Cabinet Complete				BG
C25	89	DANG-0015PAZZ	CPU Board Mounting Plate				AX
C30	90	PFTA-0005PASA	Rear Cover E				AQ
MISCELLANEOUS				91	PFTA-0006PASA	Rear Cover F	AP
CN1	QPLGZ0080PAZZ	20-Pin Terminal	AD	92	LANGK0298PAZZ	I/O Connector Cover	AC
CN2	QSOCZ0022PAZZ	16-Pin IC Socket	AF	93	LX-BZ5002BCZZ	Screw	AC
*** GRAPHIC RAM (I) UNIT SECTION ***					TLABN0016PAZZ	Function Label	AE
	DPWB-0288PAZZ	Assembled Graphic RAM Unit (Not replacement item)	—	94	QTANN0002PAZZ	Frame Ground Terminal	AH
				95	GLEGP0007PAZZ	Foot	AB
				96	LBND0001PAZZ	Cord Keeper	AC
					UBAGS0002PAZZ	Bag	AW
					QACCB0001PAZZ	AC Cord	AO
				97	QSW-P0010PAZZ	Reset Switch	AD

MODEL MZ-80B PARTS LIST

REF. NO.	ART NO.	DESCRIPTION	CODE
98	DSÖCN0101PAZZ	Lead Wire with 3-Pin Socket (for Reset Switch)	AE
99	TSPCE0022PAZZ	Specification Panel	AG
100	TLABE0005PAZZ	Label	AC
	TLABH0002PAZZ	Label for A.C. Cord	AC
	TINSE0022PAZZ	Instruction Manual (English)	BB
	TINSE0023PAZZ	Instruction Manual (English)	BB
	TINSE0024PAZZ	Instruction Manual (English)	BA
	TLABZ0088PAZZ	Label for Manual (English)	AB

For U.K. a label (TLABZ0088PAZZ) shall be stuck on the inside front cover, (as shown below)



MZ-80EU PARTS LIST

MODEL MZ-80EU

REF. NO.	PART NO.	DESCRIPTION	CODE	REF. NO.	PART NO.	DESCRIPTION	CODE
INTEGRATED CIRCUIT				CN7,8	DSOCZ0006PAZZ	Lead Wire with 40-Pin Socket (for Bus Line)	BE
IC1 } IC2 }	RH-IX0075PAZZ	SN74LS08N	AE	201	QSOCN0155PAZZ	Lead Wire with 3-Pin Socket (for Power Supply)	AD
RESISTOR				202	DANG-0018PAZZ	I/O Code Fixing Metal	AQ
RA1	RMPTC1010PAZZ	Resistor Array 1K ohm x 4	AC	203	LRALP0001PAZZ	Guide Rail	AF
RA2	RMPTC1011PAZZ	Resistor Array 1K ohm x 5	AC	204	LRALP0002PAZZ	Guide Rail	AE
MISCELLANEOUS				205	LRALP0003PAZZ	Guide Rail	AE
CN1 } } } CN6 }	QSOCZ0021PAZZ	44-Pin Socket	AW		TINSE0025PAZZ	Reference Card	AD

MZ-80IO2 PARTS LIST

MODEL MZ-80IO2

REF. NO.	PART NO.	DESCRIPTION	CODE	REF. NO.	PART NO.	DESCRIPTION	CODE
INTEGRATED CIRCUIT				RESISTORS			
IC1 } IC2 }	RH-IX0190PAZZ	SN74LS266N	AF	R1	VRD-SC2EF102J	1K ohm 1/4W	AA
IC3	RH-IX0104PAZZ	SN74LS42N	AH	RA1	RR-KZ0037PAZZ	Resistor Array 3.3K ohm x 7	AG
IC4 } IC5 }	RH-IX0074PAZZ	SN74LS04N	AE	CAPACITORS			
IC6 } } }	RH-IX0141PAZZ	SN74LS125AN	AK	C1	VCEAAU1CW107Y	100MFD, 16V, Aluminium	AB
IC9 }				C2 } } }	VCTYPU18D104Z	0.1MFD, 12V, Ceramic	AB
IC10 } } }	RH-IX0181PAZZ	SN74LS175N	AM	MISCELLANEOUS			
IC13 }					QSOCZ0016PAZZ	14-Pin IC Socket	AD
IC14 } } }	RH-IX0012PAZZ	SN7404N	AF		QSW-D0001PAZZ	Dip Switch	AR
IC17 }				301	QPLGZ0081PAZZ	37-Pin Terminal (for Bus Lines)	BG
				302	LANGK0296PAZZ	37-Pin Terminal Fixing Metal	AF
					TINSE0020PAZZ	Instruction Manual (English)	AH

MZ-80GMK PARTS LIST

MODEL MZ-80GMK

REF. NO.	PART NO.	DESCRIPTION	CODE	REF. NO.	PART NO.	DESCRIPTION	CODE
INTEGRATED CIRCUIT				RESISTORS			
C1 } C3 } C9 }	RH-IX0083PAZZ	SN74LS157N	AH	R1 } R2 }	VRD-SC2EF102J	1K ohm 1/4W	AA
IC4 } IC5 }	RH-IX0124PAZZ	SN74LS245N	AR	R3 } R4 }	VRD-SC2EF470J	47 ohm 1/4W	AA
IC6 } IC10 }	RH-IX0125PAZZ	SN74LS93N	AK		VRD-SC2EF101J	100 ohm 1/4W	AA
IC7 } IC8 }	RH-IX0129PAZZ	SN74LS165N	AQ	CAPACITORS			
IC12 } IC16 }	RH-IX0265PAZZ	TMM2016P (2K, S-RAM)	BP	C1 } C2 }	VCEAAU1CW107Y	100MFD, 16V, Aluminum	AB
IC19 } IC11 }	RH-IX0127PAZZ	SN74LS107N	AG	C12 } C14 }	VCTYPU1BD104Z	0.1MFD, 12V, Ceramic	AB
IG13 } IC14 }	RH-IX0070PAZZ	SN74LS00N	AE	C16 } C17 }			
IC15 } IC18 }	RH-IX0074PAZZ	SN74LS04N	AE	C13 } C15 }	VCCSPR1H6471J	470PF, 50V, Ceramic	AA
IC17 }	RH-IX0078PAZZ	SN74LS32N	AF		VCCSPR1H6221J	220PF, 50V, Ceramic	AA
	RH-IX0104PAZZ	SN74LS42N	AH	MISCELLANEOUS			
				CN1	DSGCZ0007PAZZ	Lead Wire with 10 Pin Socket	BA

MZ-80FI PARTS LIST

MODEL MZ-80FI

REF. NO.	PART NO.	DESCRIPTION	CODE	REF. NO.	PART NO.	DESCRIPTION	CODE
INTEGRATED CIRCUIT							
IC1	RH-IX0128PAZZ	SN74LS20N		R14	VRD-SC2EF183J	18K ohm 1/4W	AA
IC2	RH-IX0071PAZZ	SN74LS02N		R15 } R33 }	VRD-SC2EF391J	390 ohm 1/4W	AA
IC3 } IC6 }			AE	R17 } R30 }	VRD-SC2EF392J	3.9K ohm 1/4W	AA
IC11 } IC19 }	RH-IX0079PAZZ	SN74LS74AN	AG	R18	VRD-SC2EF681J	680 ohm 1/4W	AA
IC25 }				R19	VRD-SC2EF152J	1.5K ohm 1/4W	AA
IC4 } IC17 }	RH-IX0074PAZZ	SN74LS04N	AE	R20	VRD-SC2EF470J	47 ohm 1/4W	AA
IC5 }	RH-IX0124PAZZ	SN74LS245N	AR	R21	VRD-SC2EF561J	560 ohm 1/4W	AA
IC7 }				R29	VRD-SC2EF103J	10K ohm 1/4W	AA
IC20 } IC26 }	RH-IX0245PAZZ	SN74LS123N	AK	R34	VRD-SC2EF473J	47K ohm 1/4W	AA
IC8 } IC14 }	RH-IX0181PAZZ	SN74LS175N	AM	R35	VRD-SC2EF223J	22K ohm 1/4W	AA
IC9 }	RH-IX0078PAZZ	SN74LS32N	AF	R39	VRD-SC2EF682J	6.8K ohm 1/4W	AA
IC10 } IC15 }	RH-IX0070PAZZ	SN74LS00N	AE	RR1	RMPTC1012PAZZ	Resistor Array 4.7K ohm x 8	AD
IC12 }				RR2	RMPTC1013PAZZ	Resistor Array 150 ohm x 4	AC
IC21 } IC22 }	RH-IX0103PAZZ	SN7438N	AF	VR1 } VR3 }	RVR-Z0003PAZZ	Variable Resistor 10K ohm	AL
IC13	RH-IX0262PAZZ	MB8866 (FDC)	BW	VR2	RVR-Z0002PAZZ	Variable Resistor 5KΩ	AL
IC16	RH-IX0217PAZZ	SN74145N	AM	CAPACITORS			
IC18	RH-IX0125PAZZ	SN74LS93N	AK	C1 } C10 }	VCQSMU1HM102J	1,000PF, 50V, Film	AC
IC23	RH-IX0102PAZZ	SN74LS14N	AM	C2	VCQSMU1HM151J	150PF, 50V, Film	AC
IC24	RH-IX0261PAZZ	SN74LS51N	AE	C3	VCMZSU1HC220G	22PF, 50V,	AC
TRANSISTORS AND DIODES				C4	VCQYKU1HM472K	0.0047MFD, 50V, Film	AA
TR1	VS2SA1015G/1E	2SA1015G	AB	C5	VCOSMU1HM301J	300PF, 50V, Film	AC
TR2 } TR4 }	VS2SC1815-B-A	2SC1815B	AB	C6	VCQYKU1HM223K	0.022MFD, 50V, Film	AB
D1 } D7 }	VHD1S1586/-1	1S1586	AB	C7	VCSACU1CE685K	6.8MFD, 16V, Tantalum	AD
RESISTORS				C8	VCSACU0JE476K	47MFD, 6.3V, Tantalum	AF
R1	VRD-SC2EF101J	100 ohm 1/4W	AA	C9	VCQSMU1HM222J	2,200PF, 50V, Film	AC
R2 } R4 }				C11 } C20 }	VCSACU1VE106M	10MFD, 35V, Tantalum	AE
R8 }				C31 } C21 }			
R10 } R11 }	VRD-SC2EF472J	4.7K ohm 1/4W	AA	C29 } C32 }	VCTYPU1BD104Z	0.1MFD, 12V, Ceramic	AD
R22 } R28 }				C43 }			
R36 }				C30	VCEAAU1CW107Y	100MFD, 16V, Aluminum	AB
R38 }				MISCELLANEOUS			
R3	VRD-SC2EF222J	2.2K ohm 1/4W	AA	QSOZCZ0012PAZZ	40-Pin IC Socket (for MB8116)	AH	
R9 }				401	QPLGZ0081PAZZ	37-Pin Terminal (for Bus Lines)	BH
R12 }				TP1 ~ 9	QPLGZ0082PAZZ	9-Pin Terminal (for Test Point)	AC
R13 }				402	LANGK0296PAZZ	37-Pin Terminal Fixing Metal	AF
R16 } R31 }	VRD-SC2EF102J	1K ohm 1/4W	AA				
R32 }							
R37 }							

MZ-80FB/MZ-80FBK PARTS LIST

REF. NO.	PART NO.	DESCRIPTION	CODE	REF. NO.	PART NO.	DESCRIPTION	CODE
MODEL MZ-80FB/MZ-80FBK							
*** POWER SUPPLY UNIT SECTION ***							
	DBOXD0029PAZZ	Assembled Power Supply unit (Not replacement item)		C305 } C406 } C306 } C307 } C407 } C409 } C308 } C402 } C405 } C404 }	VCQYKU1HM102K VCSACU1VE106M VCQYKU1HM682K VCQYKU1HM332K VCEAAU1AM338M	0.001MFD, 50V, Film 10MFD, 35V, Tantalum 0.0068MFD, 50V, Film 0.0033MFD, 50V, Film 3,300MFD, 10V, Aluminum	AB AE AA AB AF
INTEGRATED CIRCUIT				COILS AND TRANSFORMER			
IC1 } IC2 }	RH-IX0151PAZZ	SG3524	AW				
TRANSISTORS AND DIODES							
Q301 } Q401 } D201 } D301 } D302 } D401 } D402 } 501 }	VS2SA892///-1 VHDS5VB10///-1 VHDERB81-004/ RH-PX0033PAZZ	2SA892 S5VB10 ERB81-004 or RK-14 LED	AN AL AG AD				
RESISTORS				MISCELLANEOUS			
R301 } R401 } R302 } R402 } R303 } R403 } R304 } R404 } R305 } R405 } R306 } R406 } R407 } R307 } R308 } R309 } R408 } VR301 } VR401 }	VRD-ST2EF272J VRF-GV3DBR05K VRD-SU2EF563J VRD-SU2EF272J VRD-SU2EF472J VRD-ST2EF472J VRD-ST2EF153J VRD-SU2EF332J VRD-ST2EF102J VRD-SU2EF392J RVR-M0010PAZZ	2.7K ohm 1/4W 0.05 ohm 2W 56K ohm 1/4W 2.7K ohm 1/4W 4.7K ohm 1/4W 4.7K ohm 1/4W 15K ohm 1/4W 3.3K ohm 1/4W 1K ohm 1/4W 3.9K ohm 1/4W Variable Resistor 1K ohm	AA AD AA AA AA AA AA AA AA AA AA AC				
CAPACITORS				*** DISK DRIVE UNIT SECTION ***			
C101 } C102 } C201 } C206 } C207 } C301 } C401 } C302 } C303 } C403 } C304 }	RC-CZ0180PAZZ VCEAAU1VM258Y RC-QZ0003PAZZ VCKYPU1NB104Z VCQYKU1HM222K VCQYKU1HM183K VCEAAU1CM338M	0.047MFD, 250V, Line Capacitor 2,500MFD, 35V, Aluminum 0.1MFD, 100V, Film 0.1MFD, 12V, Ceramic 0.0022MFD, 50V, Film 0.018MFD, 50V, Film 3,300MFD, 16V, Aluminum	AH AF AB AB AA AB AG				
				*** OTHER SECTION ***			
				519 } 520 } 521 } 522 } 523 } 524 }	GCABA8121PASB GWAKP0006PASA LCHSM0097PASA LCHSM0098PASA GLEGR0001PAZZ TLABZ0029PAZZ	Cabinet Front Frame Chassis (for MZ-80FB) Chassis (for MZ-80FBK) Foot Drive Number Label DRIVE 1 (for MZ-80FB)	BF AR BH BH AB AB

PARTS LIST

REF. NO.	PART NO.	DESCRIPTION	CODE	REF. NO.	PART NO.	DESCRIPTION	CODE
525	TLABZ0033PAZZ	Drive Number Label DRIVE 2 (for MZ-80FB)	AB	534	LHLDFO016PAZZ	Filter PWB Fixing Holder	AC
				535	LHLDW0006PAZZ	Flat Cable Fixer	AD
526	TLABZ0034PAZZ	Drive Number Label DRIVE 3 (for MZ-80FBK)	AB	536	LHLDW9003CEZZ	Cord Fixer, HW-146	AA
				537	LBND00003PAZZ	Wire Band	AB
527	TLABZ0035PAZZ	Drive Number Label DRIVE 4 (for MZ-80FBK)	AB	538	PCUSG0005PAZZ	Cushion 5 x 100 x t1.0	AA
				△	QAGCF0011PAZZ	Angle	AG
528	LANGF0017PAZZ	Drive Fixing Angle	AE	539	LX-BZ0067PAFN	Screw for Disk Drive	AG
529	LANGF0023PAZZ	Front Frame Fixing Angle	AM	540	LX-BZ0068PAFN	Screw for Disk Drive Fixing	AH
530	LX-BZ0075PAZZ	Screw (for Flat Cable Ass'y)	AG			Angle	
531	DSÖCN0114PAZZ	Flat Cable Ass'y (for MZ-80FB)	BP		TiNSE0016PAZZ	Instruction Manual (English)	AS
				△	SPCE0020PAZZ	Specification Panel (for MZ-80FB)	AG
532	DSÖCN0115PAZZ	Flat Cable Ass'y (for MZ-80FBK)	BU	△	SPCE0019PAZZ	Specification Panel (for MZ-80FBK)	AE
				△	TLABH0002PAZZ	Label for A-C Cord	AC
533	QTANN0002PAZZ	Ground Terminal	AH				
	DTIP0046PAZZ	Braided Wire (for MZ-80FB)	AN	△			
	DTIP-0047PAZZ	Braided Wire (for MZ-80FBK)	AN				

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