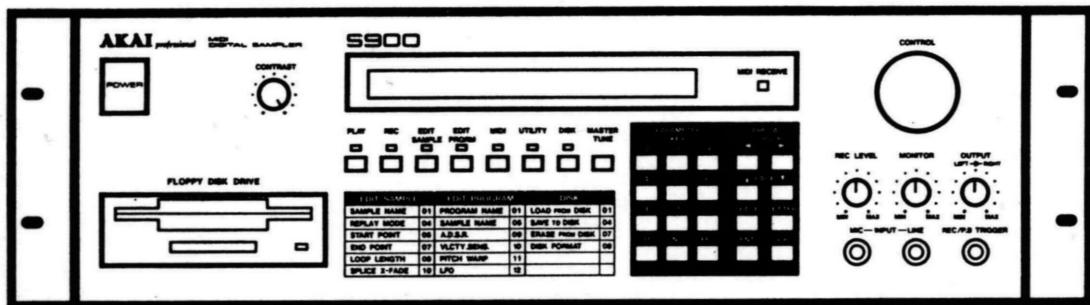


AKAI SERVICE MANUAL

S 600



MIDI DIGITAL SAMPLER

MODEL S900

DRUM INTERFACE

MODEL ASK90

SPECIFICATIONS

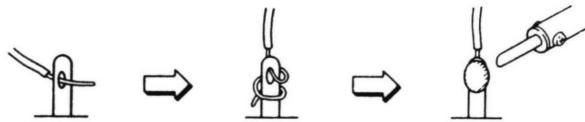
System	Digital sampling Sampling frequency: 7.5 kHz ~ 40 kHz (MIN ~ MAX) Sampling time: 63.3 sec. ~ 11.75 sec. (MAX ~ MIN) Voice: 8 Voice Range: 6 Octave	Communication RS-232C or EQUIVALENT External jack MIDI (IN, OUT, THRU) REC trigger x 1 Mic input/P.B trigger x 1 Line input/P.B trigger x 1 Line output x 8 Stereo output x 2 (L,R) Mix output x 1 Voice output x 1 (13 PIN/DIN)
Storage	Built-in FLOPPY DISK DRIVE Memory capacity: 1M byte Memory Medium: 3.5 inch (2DD) BOTH SIDE, DOUBLE TRACK, DOUBLE DENSITY Internal memory: 750K byte	Dimensions 482.6 (W) x 132.6 (H) x 410 (D) mm (EIA Rack mount/3U) Weight 10.8 kg
Multi sampling	32	
Edit	Scanning (ONE SHOT, LOOPING, ALTERNATING) A.D.S.R (Velocity-Attack, Velocity-Release) Velocity cross fade Velocity switch Positional cross fade Attack pitch offset (- Velocity) LFO (delay, rate, depth) Filter (Key tracking, Velocity) Sample merge	

* For improvement purposes, specifications and design are subject to change without notice.

★SAFETY INSTRUCTIONS

PRECAUTIONS DURING SERVICING

1. Parts identified by the Δ symbol parts are critical for safety. Replace only with parts number specified.
2. In addition to safety, other parts and assemblies are specified for conformance with such regulations as those applying to spurious radiation. These must also be replaced only with specified replacements.
Examples: RF converters, tuner units, antenna selector switches, RF cables, noise blocking capacitors, noise blocking filters, etc.
3. Use specified internal wiring. Note especially:
 - 1) Wires covered with PVC tubing
 - 2) Double insulated wires
 - 3) High voltage leads
4. Use specified insulating materials for hazardous live parts. Note especially:
 - 1) Insulation Tape
 - 2) PVC tubing
 - 3) Spacers (Insulating Barriers)
 - 4) Insulation sheets for transistors
 - 5) Plastic screws for fixing microswitch (especially in turntable)
5. When replacing AC primary side components (transformers, power cords, noise blocking capacitors, etc.), wrap ends of wires securely about the terminals before soldering.



6. Observe that wires do not contact heat producing parts (heatsinks, oxide metal film resistors, fusible resistors, etc.).

7. Check that replaced wires do not contact sharp edged or pointed parts.
8. Also check areas surrounding repaired locations.
9. Use care that foreign objects (screws, solder droplets, etc.) do not remain inside the set.

SAFETY CHECK AFTER SERVICING

Confirm the specified insulation resistance between power cord plug prongs and externally exposed parts of the set is greater than 10 M ohms. but for equipment with external antenna terminals (tuner, receiver, etc.) and is intended for **C** or **A**, specified insulation resistance should be headphone jacks line-in/out jacks etc. more than 2.2 M ohms (ground terminals, microphone jacks).

PRECAUTION FOR THE LITHIUM BATTERY

The LITHIUM BATTERY employed for memory Back up has a explosive probability when the BATTERY itself is excessive heated.

IN CASE OF REPLACING: RESOLDER and SOLDER AS RECOMMENDED WAY.



(DANGER)



(RECOMMENDED WAY)

★INFORMATION

SYMBOLS FOR PRIMARY DESTINATION

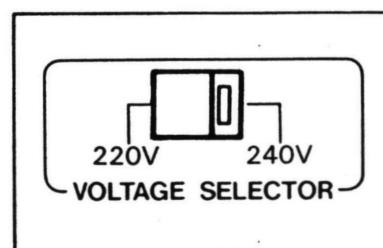
Alphabet indicates the destination of the units as listed below.

Symbols	Principal Destinations
A	USA
B	UK
C	Canada
E	Europe (except UK)
J	Japan
S	Australia
V	W. Germany only
U	Universal Area
Y*	Custom version

VOLTAGE CONVERSION

(**E, V, B, S** Model only)

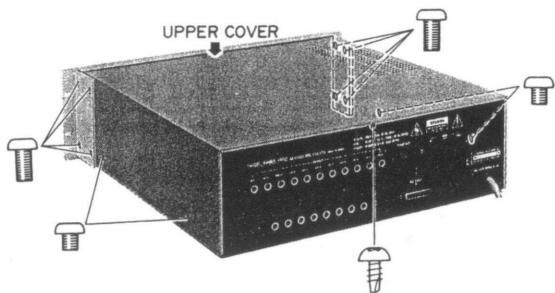
Before connecting the power cord. SET the VOLTAGE SELECTOR located on the rear panel with a screwdriver so that the correct voltage is indicated.



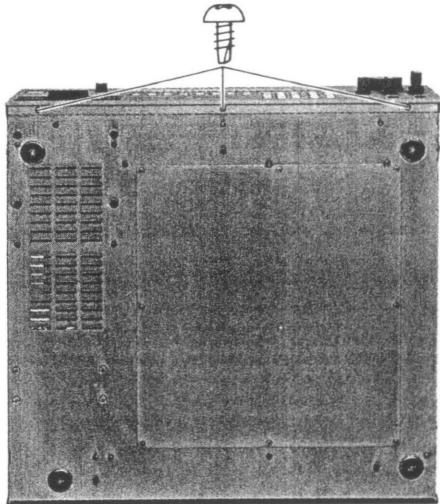
I. DISMANTLING OF UNIT

In case of trouble, etc. necessitating dismantling, please dismantle in the order shown in the photographs. Reassemble in reverse order.

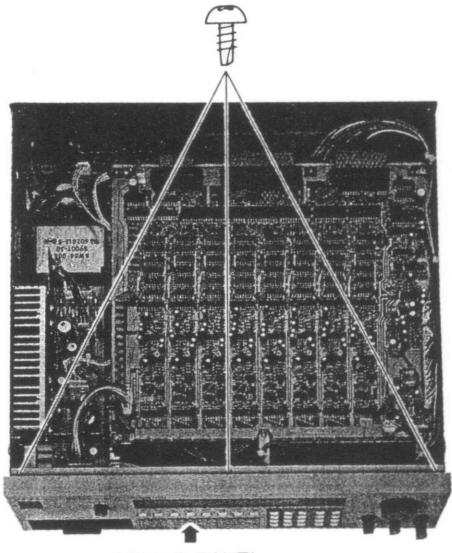
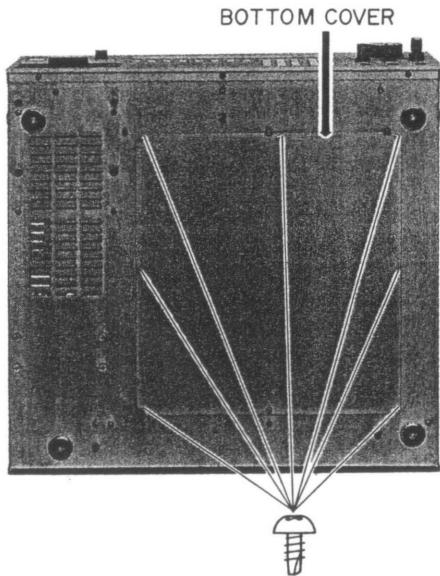
1. REMOVAL OF UPPER COVER



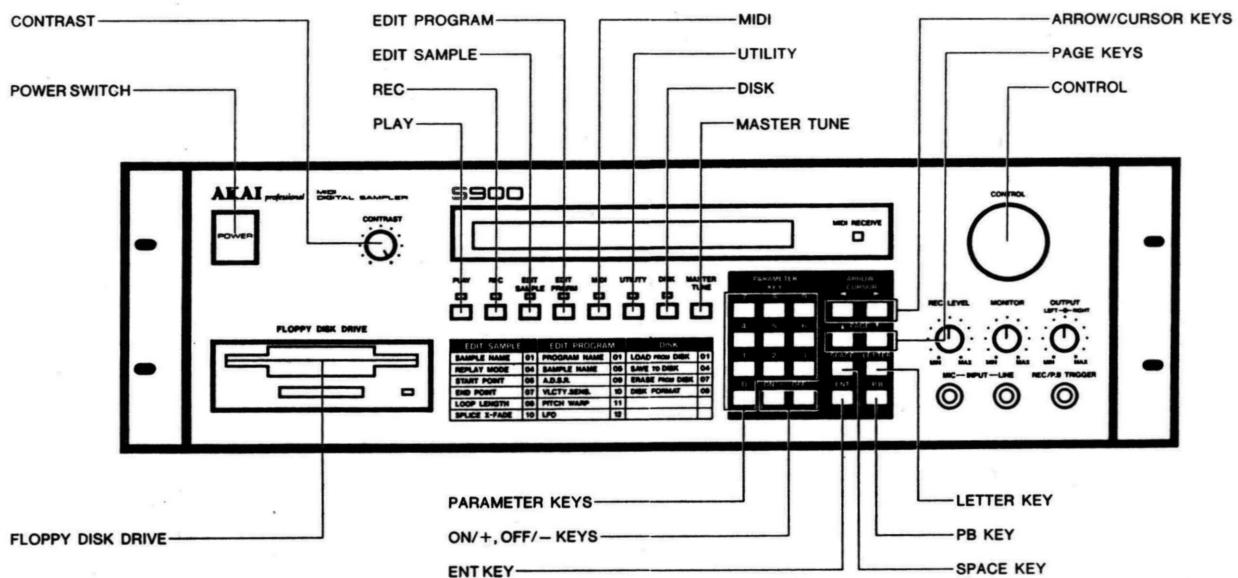
3. REMOVAL OF FRONT PANEL



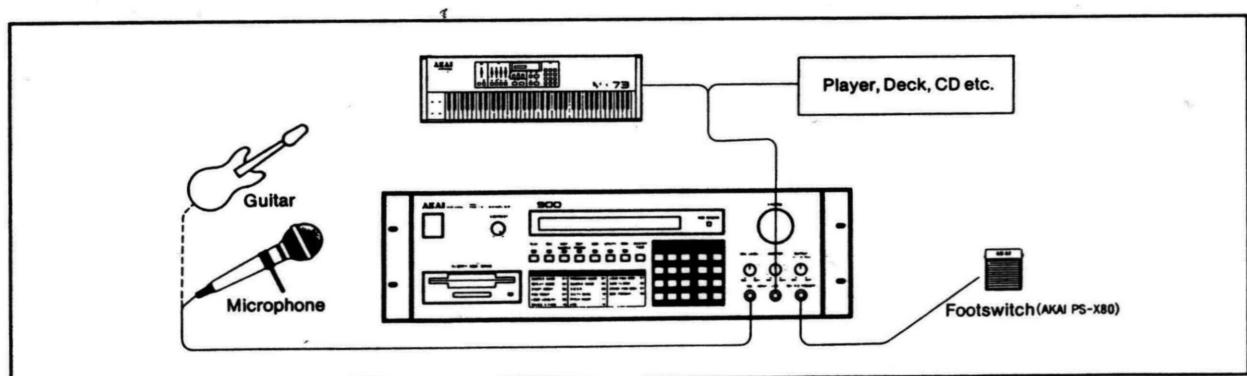
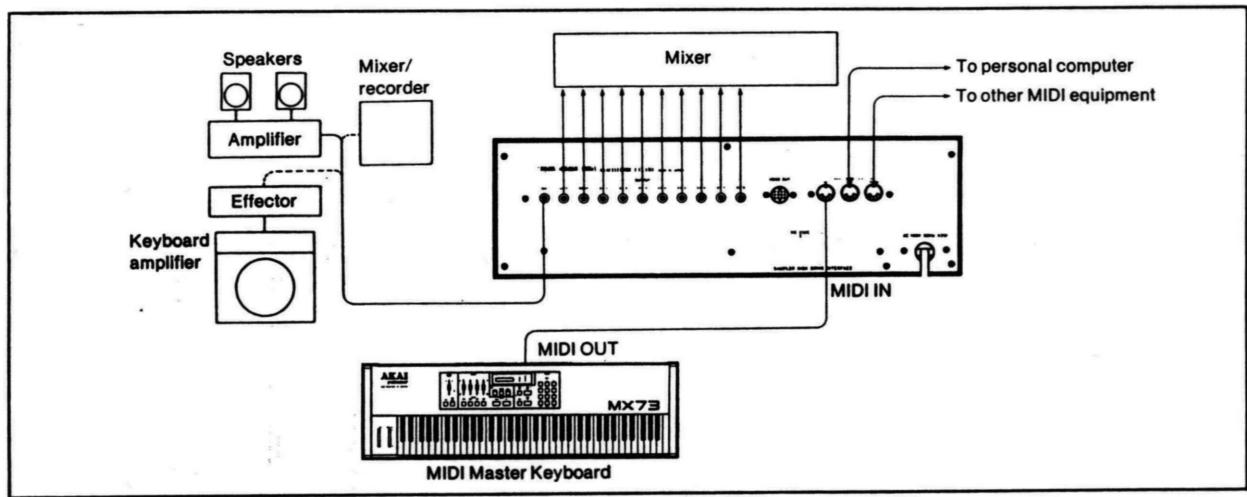
2. REMOVAL OF BOTTOM COVER



II. CONTROLS



III. CONNECTIONS



IV. PRINCIPAL PARTS LOCATION

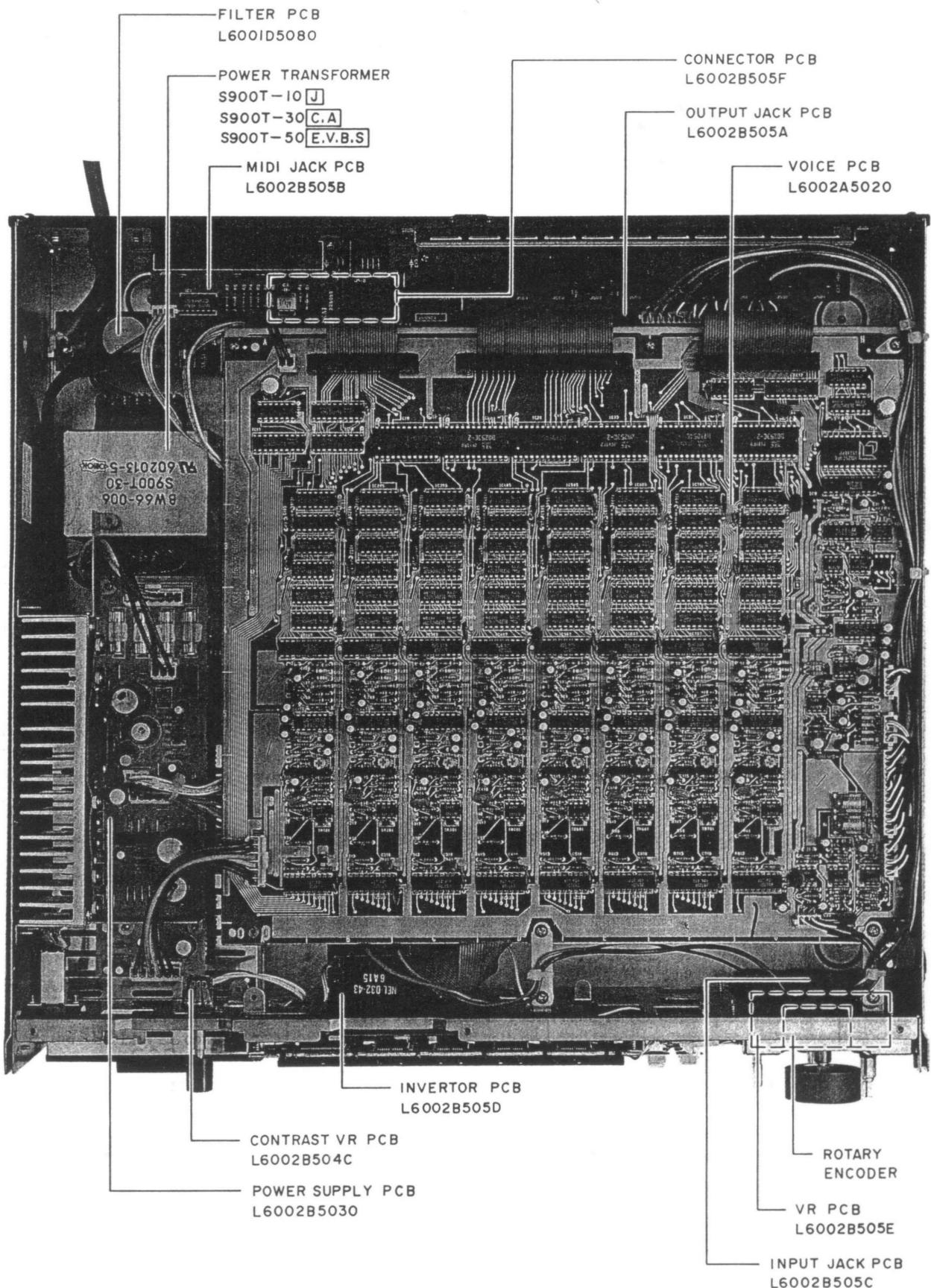


Fig. 4-1

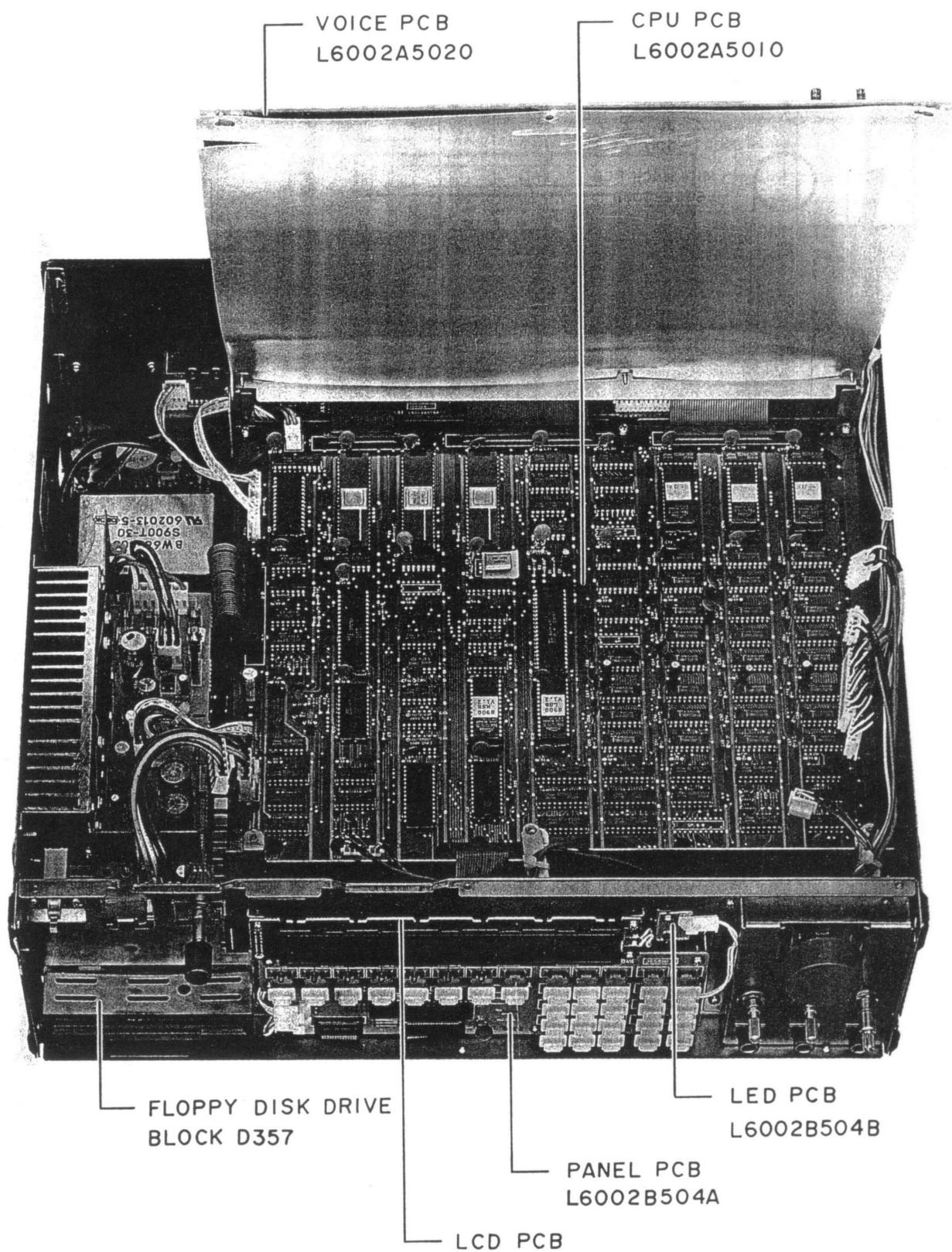


Fig. 4-2

V. ADJUSTMENT

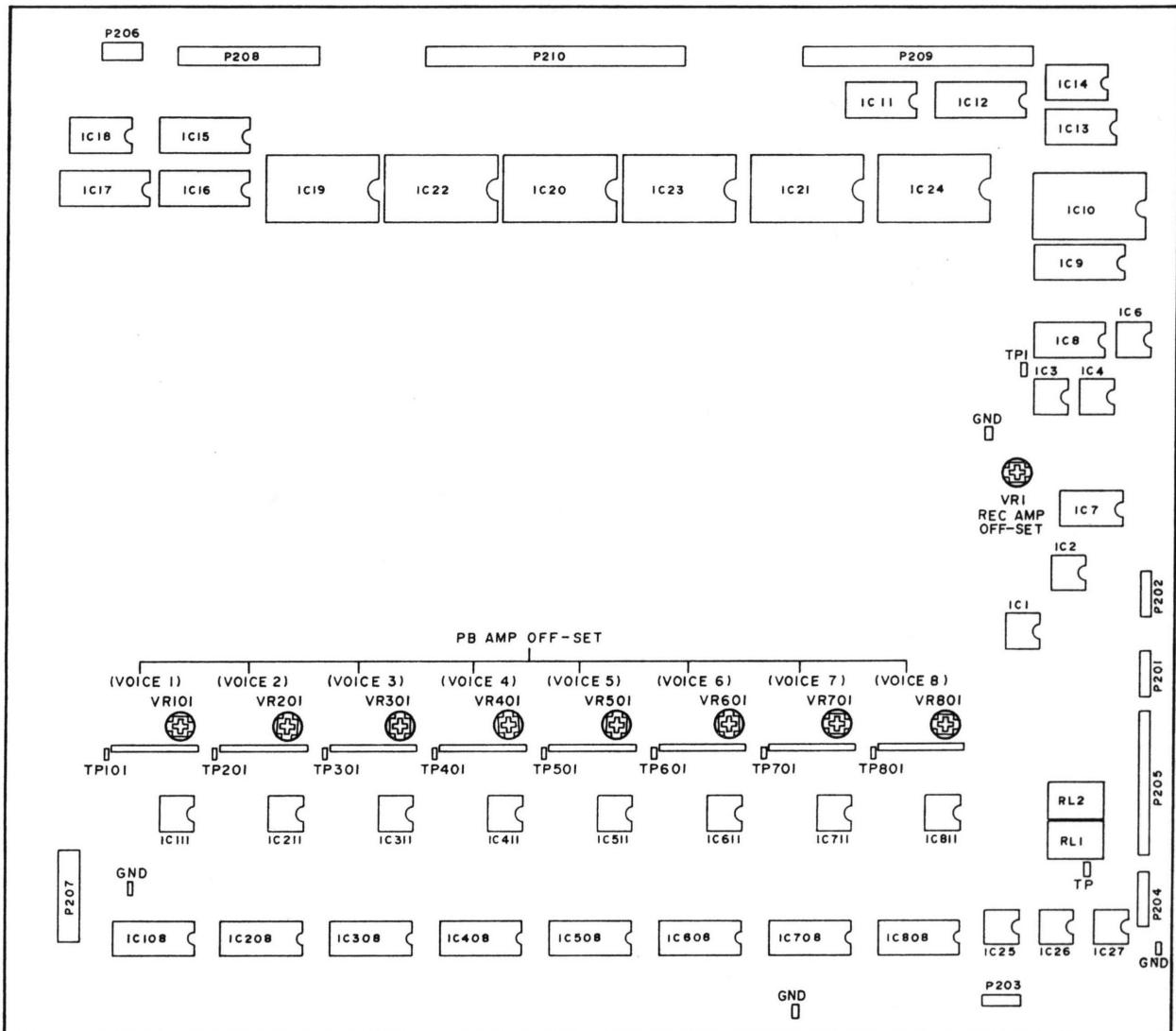


Fig. 5-1 Adjustment points of VOICE PC Board

5-1. ADJUSTMENT OF REC AMP OFF-SET

- 1) Connect the digital DC voltmeter between TP1 (REC AMP OFF-SET) and TP (GND).
- 2) Adjust VR1 (REC AMP OFF-SET) so that the reading on the digital DC voltmeter is DC 0 ± 1 mV.

5-2. ADJUSTMENT OF PB AMP OFF-SET

- 1) Connect the digital DC voltmeter between TP101 (PB AMP OFF-SET) and TP (GND).
- 2) Set the REC LEVEL control to "MIN" position, and record with no signal input condition.
- 3) After recording, read the voltage on the digital DC voltmeter, then push the PB button on the front panel and read the voltage again.
- 4) Adjust VR101 (VOICE 1 PB AMP OFF-SET) so that the both reading voltages are equal or the voltages difference is within ± 5 mV.
- 5) Adjust VR201 (VOICE 2 PB AMP OFF-SET) to VR801 (VOICE 8 PB AMP OFF-SET) as same maner as 1) to 4).

VI. DISASSEMBLY AND ASSEMBLY OF FDD BLOCK

6-1. FDD COVER

6-1-1. REMOVAL

- 1) Set up the FDD as shown Fig. 6-1 then insert a regular screwdriver a little into position A and B and try to slightly lift it in order to remove the FDD cover.

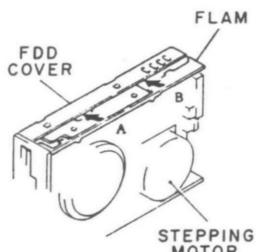


Fig. 6-1

6-1-2. INSTALLATION

- 1) Catching one side of the FDD cover on the side plate as shown Fig. 6-2, install it to main body.

NOTE: When installing, be careful not to damage the FRONT BEZEL and other parts.

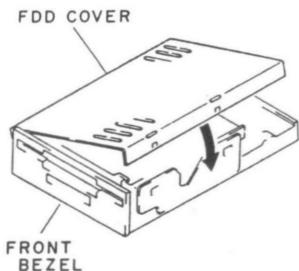


Fig. 6-2

6-2. DISK HOLDER ASSY

6-2-1. REMOVAL

- 1) Remove the FDD COVER as in 6-1-1.
- 2) Install the FRONT BEZEL assy from the FDD front side (Disk holder side). Remove two screws (Bind 2.6 x 5) and remove FRONT BEZEL assy. (Refer to Fig. 6-3)

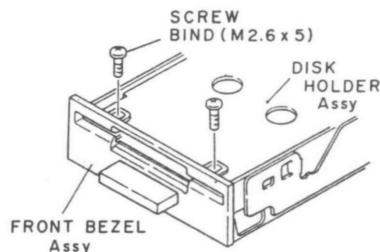


Fig. 6-3

- 3) Unlock the eject hook and remove the disk holder assy by trying to lift up its front portion while pressing the button to near the middle. (Refer to Fig. 6-4)

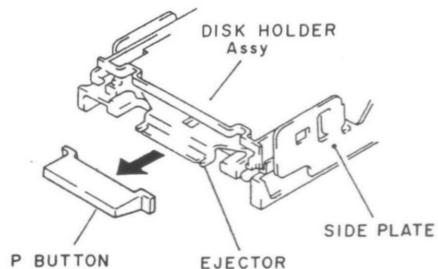


Fig. 6-4

6-2-2. INSTALLATION

- 1) Press the P button in order to lock the eject hook.
- 2) Install the disk holder assy from behind and unlock the eject hook. At this time, press P button near the middle with hand.

6-3. INSERT SPRING, EJECT LEVER AND EJECT LEVER SPRING

6-3-1. REMOVAL

- 1) Remove the FDD cover. (Refer to 6-1-1)
- 2) Remove the disk holder assy. (Refer to 6-2-1)
- 3) Remove the insert spring, eject lever and eject lever spring from the disk holder assy. (Refer to Fig. 6-5)

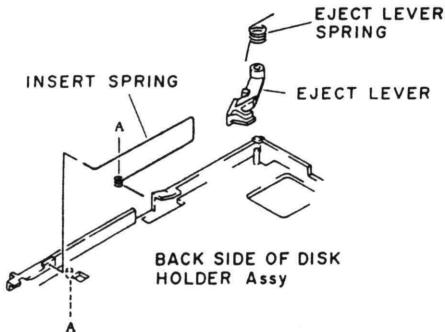


Fig. 6-5

6-3-2. INSTALLATION

- 1) Install the insert spring to the disk holder. At this time, use a plier to bend the tip of the spring A, as shown in Fig. 6-6.

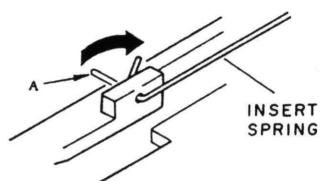


Fig. 6-6

- 2) Install the eject lever and eject lever spring to the disk holder. (At this time, pay attention to the length of the spring.)
- 3) Install the disk holder assy into the FDD. (Refer to 6-2-1)
- 4) Install the FDD cover. (Refer to 6-1-1)

6-4. ROLLER

6-4-1. REMOVAL

- 1) Remove the FDD cover. (Refer to 6-1-1)
- 2) Remove the disk holder assy. (Refer to 6-2-1)
- 3) Remove the roller from the disk holder assy. (Refer to Fig. 6-7)

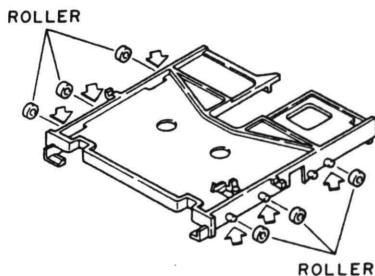


Fig. 6-7

6-4-2. INSTALLATION

- 1) Apply grease to the disk holder assy at six places (Refer to Fig. 6-7) and install the roller.
- 2) Install the disk holder to the FDD. (Refer to 2-2)
- 3) Install the FDD cover. (Refer to 6-1-2)

6-5. EJECTOR AND EJECTOR SPRING

6-5-1. REMOVAL

- 1) Remove the FDD cover. (Refer to 6-1-1)
- 2) Remove the disk holder assy. (Refer to 6-2-1)
- 3) Remove the ejector spring.
- 4) Remove the thrust washers from three places and remove the ejector.

6-5-2. INSTALLATION

- 1) As shown in Fig. 6-8, install the thrust washer to the frame and install the ejector and then use the thrust washer and cut washer to secure.

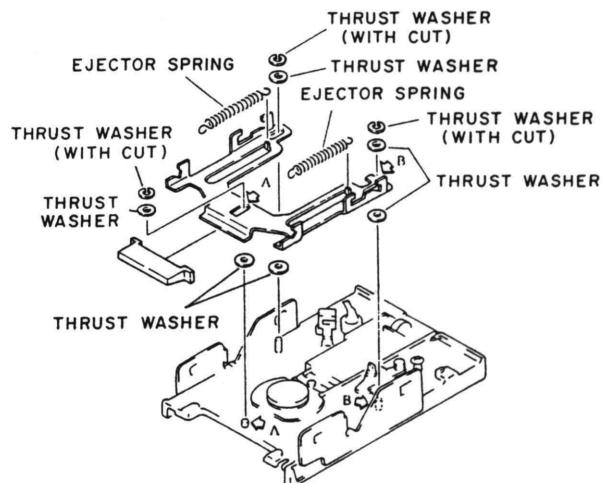


Fig. 6-8

- 2) Install the ejector spring.
- 3) Install the P button the ejector.
- 4) Apply grease to two places, A and B in Fig. 6-8.
- 5) Install the disk holder assy to the FDD. (Refer to 6-2-2)
- 6) Install the FDD cover. (Refer to 6-1-2)

VII. MIDI IMPLEMENTATION CHART

[MIDI DIGITAL SAMPLER]

Model S900 MIDI Implementation Chart Version: 1.0

Function ...		Transmitted	Recognized	Remarks
Basic Channel	Default Changed	×	1 1 - 16	Without Disk Memorized (Disk)
Mode	Default Messages Altered	×	Mode 1 Mode 1 - 4 Omni on/off, P/M ×	Without Disk Memorized (Disk)
Note Number : True voice		×	0 - 127 24 - 96	
Velocity Note ON Note OFF		×	○ 9n V = 1 - 127 ○ 9n V = 0 or 8n V = 1 - 127	Used Velocity release
After Touch	Key's Ch's	×	×	
Pitch Bender		×	○	0 - 12: Half tone step (7 bit)
Control Change	1 64	×	○ ○	Modulation wheel Damper pedal
Prog Change : True #		×	1 - 32 1 - 32	by Preset number value
System Exclusive		○	○	ID: 47
System Common : Song Pos : Song Sel : Tune		×	×	
System Real Time : Clock : Commands		×	×	
Aux Messages	: Local ON/OFF : All Notes OFF : Active Sense : Reset	×	×	○ (123)
Notes				

Mode 1: OMNI ON, POLY
Mode 3: OMNI OFF, POLY

Mode 2: OMNI ON, MONO
Mode 4: OMNI OFF, MONO

○: Yes
×: No

VIII. PARTS LIST

ATTENTION

1. When placing an order for parts, be sure to list Part No., Model No. and the description of each part. Otherwise, the non-delivery of the part or the delivery of a wrong part may result.
2. Please make sure that Part No. is correct when ordering. If not, a part different from the one you ordered may be delivered.
3. Since the parts shown in Parts List of Preliminary Service Manual may have been the subject of changes, please use this Parts List for all future reference.

HOW TO USE THIS PARTS LIST

1. This Parts List lists those parts which are considered necessary for repairs. Other common parts, such as resistors and capacitors, are listed in the "Common List for Service Parts" from which these parts should be selected and stocked.
2. The Recommended Spare Parts List shows those parts in the Parts List which are considered particularly important for service.
3. Parts not shown in the Parts List and "Common List for Service Parts" will not in principle be supplied.
4. How to read the Parts List.

a) Mechanism Block

b) PC Board

2. HEAD BASE BLOCK

REF. NO.	PART NO.	DESCRIPTION
2-1x	BH-T2023A320A	HEAD BASE BLOCK
2-2	HP-H2206A010A	HEAD R/P PR4-8FU C
2-3	ZS-477876	PAN20x03STL CMT
2-4	ZS-536488	BID20x08STL CMT
2-5	ZG-402895	SP CS ANGLE ADJUST

SP (Service Parts) Classification
A small "x" indicates that this part is not shown in the Photo or Illustration.
This number corresponds with the individual parts index number in that figure.
This number corresponds with the Figure Number.

6. MAIN PC BOARD

REF. NO.	PART NO.	DESCRIPTION
6-IC1	EI-324536	IC HD14049BP
6-IC2	EI-336801	IC MB8841-564M
6-C1A	EC-338399	C MMY V 223M 250AC [U,E,B,S]
6-C1B	EC-350949	C MMY V 223M 250DC [J]
6-C1C	EC-338397	C MMY V 223M 125AC [C,A]
6-X1	EI-318384	OSC X'TAL NC-18C

Symbols for primary destination
[A]: AAL(U.S.A.) [S]: SAA(Australia)
[B]: BEAB(England) [U]: U/T(Universal Area)
[C]: CSA(Canada) [V]: VDE(W. Germany)
[E]: CEE(Europe) [Y]: Custom Version
[J]: JPN(Japan)

SP (Service Parts) Classification
These reference symbols correspond with component symbols in the Schematic Diagrams.

The available PC Board Blocks are listed separately.

5. When Part No. is known, Parts Index at end of Parts List can be used to locate where that part is shown in Parts List by its Reference No. listed at right of Part No.

WARNING

△ (*) INDICATES SAFETY CRITICAL COMPONENTS. FOR CONTINUED SAFETY, REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURE'S RECOMMENDED PARTS.

AVERTISSEMENT

△ (*) IL INDIQUE LES COMPOSANTS CRITIQUES DE SÉCURITÉ. POUR MAINTENIR LE DÉGRÉ DE SÉCURITÉ DE L'APPAREIL, NE REMPLACER QUE DES PIÈCES RECOMMANDÉES PAR LE FABRICANT.

RECOMMENDED SPARE PARTS LIST

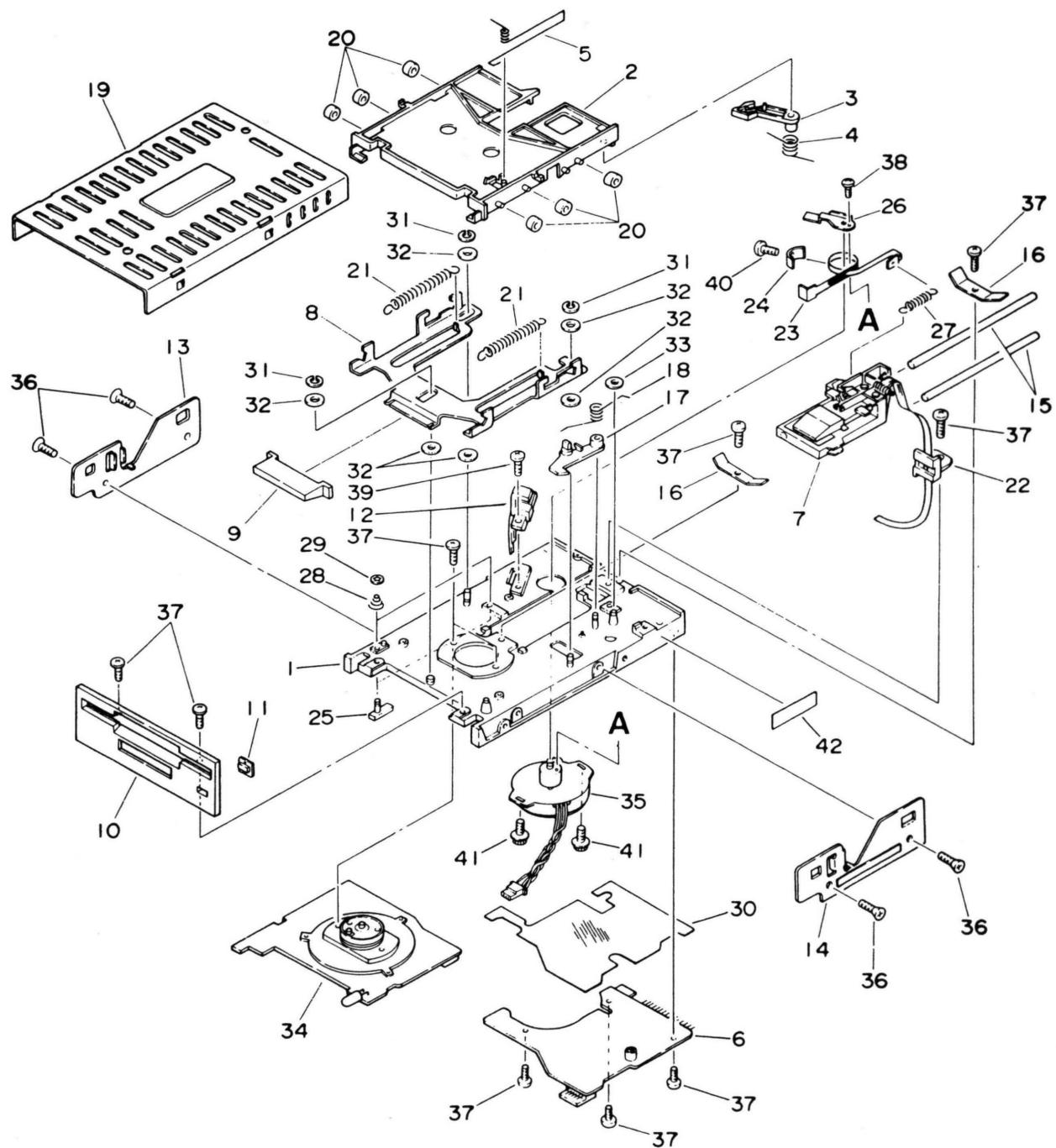
Because, if the parts listed below are on hand, almost any repair can be accomplished, we suggest that you stock these Recommended Spare Parts Items.

REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION
1	BM-718237	MOTOR DD D355 BLK	71	EI-365802	IC TC74HC191P
2	BT-365907	△ TRANS POWER S900T-10 (J)	72	EI-360029	IC TC74HC244P
3	BT-365908	△ TRANS POWER S900T-30 (A, C)	73	EI-360032	IC TC74HC245P
4	BT-365909	△ TRANS POWER S900T-50 (E, V, B, S)	74	EI-365801	IC TC74HC257P
5	ED-365819	△ D SILICON CTU-12R	75	EI-360042	IC TC74HC259P
6	ED-365818	△ D SILICON CTU-12S	76	EI-365809	IC TC74HC283P
7	ED-330319	△ D SILICON DBA10B 100/1.0A	77	EI-360036	IC TC74HC32P
8	ED-357038	△ D SILICON DBB10B 100/1.0A	78	EI-360030	IC TC74HC373P
9	ED-346261	D LED SLP-981C-50	79	EI-360047	IC TC74HC374P
10	ED-301911	D SILICON H DS448	80	EI-365831	IC TC74HC393P
11	ED-346617	D ZENER H HZ12 C2	81	EI-365803	IC TC74HC4002P
12	EF-355226	△ FUSE BET T 1.00A 250V [B]	82	EI-365830	IC TC74HC670P
13	EF-359225	△ FUSE BET T 3.15A 250V [B]	83	EI-360027	IC TC74HC86P
14	EF-358974	△ FUSE BET T 630MA 250V [B]	84 N	EI-367331-C	IC TMM27128AD-20 S900LSB-V 1.2A
15	EF-358641	△ FUSE BET T 800MA 250V [B]	85 N	EI-367330-C	IC TMM27128AD-20 S900MSB-V 1.2A
16	EF-623103	△ FUSE SEMKO T 1.00A 250V [E,V,S]	86 N	EI-367194	IC TMM2764D-2-S900-V 1.0 Custom
17	EF-691007	△ FUSE SEMKO T 3.15A 250V [E,V,S]	87	EI-365829	IC μPC812C-AK
18	EF-601942	△ FUSE SEMKO T 630MA 250V [E,V,S]	88	EI-361275	IC μPD71054C
19	EF-258344	△ FUSE SEMKO T 800MA 250V [E,V,S]	89	EI-365813	IC μPD71055C
20	EF-309387	△ FUSE TSC A 250V 1.00A [J]	90	EI-365797	IC μPD7265C
21	EF-306951	△ FUSE TSC A 250V 2.50A [J]	91	EI-354146	IC μPD8253C-2
22	EF-306952	△ FUSE TSC A 250V 4.00A [J]	92	EI-718241	IC 74LS93
23	EF-306124	△ FUSE TSC A 250V 630MA [J]	93	EI-365811	OSC X'TAL NR18 16.000MHz
24	EF-310229	△ FUSE TSC 125V 1.00A [C,A]	94	EM-365844	IND LCD DMC40218UE
25	EF-306954	△ FUSE TSC 125V 2.00A [C,A]	95	EQ-348929	RELAY SIGNAL G5A-232P 2TR 12V
26	EF-306957	△ FUSE TSC 125V 4.00A [C,A]	96	ER-326169	△ R FUSE ERD2FC S10 1/4W 22R0G
27	EF-305703	△ FUSE TSC 125V 630MA [C,A]	97	ER-337754	△ R OMF H S15 FS 1W 100J
28	EI-348123	△ IC M5230L	98	ER-356747	△ R OMF H S15 FS 1W 820J
29	EI-365822	△ IC NJM78M06A	99	ES-337902	△ SW PUSH SDLD1P 01-1
30	EI-365823	△ IC NJM79M06A	100	ES-306430	△ SW SLIDE J-S4013 #01 01-2 [E,V,B,S]
31	EI-365820	△ IC STR9005	101	ES-718243	SW REED
32	EI-347758	△ IC TA78012AP	102	ET-356817	△ TR 2SB891 Q, R
33	EI-360049	IC AM2504PC	103	ET-354083	△ TR 2SD1189 Q, R
34	EI-354283	IC BA6110	104 N	ET-354167	PHOTO SENSOR NJL5127D
35	EI-390060	IC BA9201	105	ET-353899	TR 2SA1317 S, T, U
36	EI-360050	IC BA9221	106	ET-360067	TR 2SC3330 T, U F05
37	EI-360045	IC DG211CJ	107	ET-360067	TR 2SC3330 T, U F05
38	EI-718240	IC HA13421	108	EV-307695	R S-FIX H RH0651C15 3P 0.05W 104
39	EI-360021	IC HD6850P	109	EV-718242	R S-FIX VRP0016-204BIM
40	EI-355887	IC HD74LS04P	110	EV-365817	VR ROTARY 16P10x2G B102
41	EI-355888	IC HD74LS08P	111	EV-365952	VR ROTARY 16P10x2H B103
42	EI-355892	IC HD74LS38P	112	EV-366285	VR ROTARY 16P10x21 A103
43	EI-365804	IC HD7406P	113	EV-365953	VR ROTARY 16P22x0Z B103 B103
44	EI-365806	IC HD75188P			
45	EI-365805	IC HD75189P			
46	EI-360954	IC IR9311			
47	EI-360058	IC MF6CN-50			
48	EI-365239	IC MN41256-12			
49	EI-718239	IC M51017P			
50	EI-360043	IC M5220P			
51	EI-360565	IC M5223P			
52	EI-362588	IC M5238P			
53	EI-365798	IC SED9420CAC			
54	EI-310044	IC SN74LS05N			
55	EI-365792	IC S900 A			
56	EI-365793	IC S900 B			
57	EI-365794	IC S900 C			
58	EI-365795	IC S900 D			
59	EI-365796	IC S900 E			
60	EI-360037	IC TC74HC00P			
61	EI-360038	IC TC74HC02P			
62	EI-360026	IC TC74HC04P			
63	EI-360039	IC TC74HC08P			
64	EI-365846	IC TC74HC109P			
65	EI-360025	IC TC74HC138P			
66	EI-356049	IC TC74HC139P			
67	EI-360035	IC TC74HC157P			
68	EI-365810	IC TC74HC158P			
69	EI-360048	IC TC74HC173P			
70	EI-360053	IC TC74HC175P			

1. FLOPPY DISK DRIVE BLOCK

Ref. No.	Part No.	Description
1-1	BB-365944-A	FDD D357 (FLOPPY DISK DRIVE UNIT)
1-2	MZ-718224	HOLDER DISK D350
1-3	ML-718225	LEVER EJECT
1-4	ZG-718226	SP LEVER EJECT
1-5	ZG-718227	SP INSERT
1-6	BA-718228	PC D355 BLK
1-9	SK-718229	KNOB P
1-10	SP-718230	PANEL FRONT D350
1-11	SZ-718231	LENZ LED(B)
1-17	MZ-718232	HOOK EJECT
1-18	ZG-718234	SP HOOK EJECT(B)
1-20	MR-718235	ROLLER
1-21	ZG-718236	SP EJECTOR
1-34	BM-718237	MOTOR DD D355 BLK
1-37	ZS-718238	SCREW BIND

FLOPPY DISK DRIVE BLOCK



Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
3-R121	ER-324185	R CB H S10 FS RDS 1/4W 221J	4-IC32	EI-360026	IC TC74HC04P
3-R202	ER-365788	R MF H F10 1/4W 2491F	4-IC33	EI-360036	IC TC74HC32P
3-R203	ER-365789	R MF H F10 1/4W 4991F	4-IC34	EI-360036	IC TC74HC32P
3-R221	ER-324185	R CB H S10 FS RDS 1/4W 221J	4-IC35	EI-360037	IC TC74HC00P
3-R302	ER-365788	R MF H F10 1/4W 2491F	4-IC36	EI-360037	IC TC74HC00P
3-R303	ER-365789	R MF H F10 1/4W 4991F	4-IC37	EI-360039	IC TC74HC08P
3-R321	ER-324185	R CB H S10 FS RDS 1/4W 221J	4-IC38	EI-365804	IC HD7406P
3-R402	ER-365788	R MF H F10 1/4W 2491F	4-IC39	EI-355889	IC HD74LS14P
3-R403	ER-365789	R MF H F10 1/4W 4991F	4-IC40	EI-355892	IC HD74LS38P
3-R421	ER-324185	R CB H S10 FS RDS 1/4W 221J	4-IC41	EI-355888	IC HD74LS08P
3-R502	ER-365788	R MF H F10 1/4W 2491F	4-IC42	EI-355887	IC HD74LS04P
3-R503	ER-365789	R MF H F10 1/4W 4991F	4-IC43	EI-365805	IC HD75189P
3-R521	ER-324185	R CB H S10 FS RDS 1/4W 221J	4-IC44	EI-365806	IC HD75188P
3-R602	ER-365788	R MF H F10 1/4W 2491F	4-IC45	EI-365239	IC MN41256-12
3-R603	ER-365789	R MF H F10 1/4W 4991F	4-IC46	EI-365239	IC MN41256-12
3-R621	ER-324185	R CB H S10 FS RDS 1/4W 221J	4-IC47	EI-365239	IC MN41256-12
3-R702	ER-365788	R MF H F10 1/4W 2491F	4-IC48	EI-365239	IC MN41256-12
3-R703	ER-365789	R MF H F10 1/4W 4991F	4-IC49	EI-365239	IC MN41256-12
3-R721	ER-324185	R CB H S10 FS RDS 1/4W 221J	4-IC50	EI-365239	IC MN41256-12
3-R802	ER-365788	R MF H F10 1/4W 2491F	4-IC51	EI-365239	IC MN41256-12
3-R803	ER-365789	R MF H F10 1/4W 4991F	4-IC52	EI-365239	IC MN41256-12
3-R821	ER-324185	R CB H S10 FS RDS 1/4W 221J	4-IC53	EI-365239	IC MN41256-12
3-TR1	ET-360067	TR 2SC3330 T.U F05	4-IC54	EI-365239	IC MN41256-12
3-TR101	ET-353899	TR 2SA1317 S.T.U	4-IC55	EI-365239	IC MN41256-12
3-TR201	ET-353899	TR 2SA1317 S.T.U	4-IC56	EI-365239	IC MN41256-12
3-TR301	ET-353899	TR 2SA1317 S.T.U	4-IC57	EI-365239	IC MN41256-12
3-TR401	ET-353899	TR 2SA1317 S.T.U	4-IC58	EI-365239	IC MN41256-12
3-TR501	ET-353899	TR 2SA1317 S.T.U	4-IC59	EI-365239	IC MN41256-12
3-TR601	ET-353899	TR 2SA1317 S.T.U	4-IC60	EI-365239	IC MN41256-12
3-TR701	ET-353899	TR 2SA1317 S.T.U	4-IC61	EI-365239	IC MN41256-12
3-TR801	ET-353899	TR 2SA1317 S.T.U	4-IC62	EI-365239	IC MN41256-12
3-VR1	EV-307695	R S-FIX H RH0651C15 3P 0.05W 104	4-IC63	EI-365239	IC MN41256-12
3-VR101	EV-307695	R S-FIX H RH0651C15 3P 0.05W 104	4-IC64	EI-365239	IC MN41256-12
3-VR201	EV-307695	R S-FIX H RH0651C15 3P 0.05W 104	4-IC65	EI-365239	IC MN41256-12
3-VR301	EV-307695	R S-FIX H RH0651C15 3P 0.05W 104	4-IC66	EI-365239	IC MN41256-12
3-VR401	EV-307695	R S-FIX H RH0651C15 3P 0.05W 104	4-IC67	EI-365239	IC MN41256-12
3-VR501	EV-307695	R S-FIX H RH0651C15 3P 0.05W 104	4-IC68	EI-365239	IC MN41256-12
3-VF601	EV-307695	R S-FIX H RH0651C15 3P 0.05W 104	4-IC69	EI-365239	IC MN41256-12
3-VR701	EV-307695	R S-FIX H RH0651C15 3P 0.05W 104	4-IC70	EI-365239	IC MN41256-12
3-VR801	EV-307695	R S-FIX H RH0651C15 3P 0.05W 104	4-IC71	EI-365239	IC MN41256-12
			4-IC72	EI-365239	IC MN41256-12
			4-IC73	EI-367194	IC TMM2764D-2-S900-V1.0
			4-IC74	EI-367194	IC TMM2764D-2-S900-V1.0
			4-IC75	EI-367194	IC TMM2764D-2-S900-V1.0

4. CPU P.C BOARD

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
4-D1	ED-301911	D SILICON H DS448	4-IC76	EI-365809	IC TC74HC283P
4-IC1	EI-365792	IC S900 A	4-IC77	EI-365809	IC TC74HC283P
4-IC2	EI-365793	IC S900 B	4-IC78	EI-365809	IC TC74HC283P
4-IC3	EI-365794	IC S900 C	4-IC79	EI-365801	IC TC74HC257P
4-IC4	EI-365794	IC S900 C	4-IC80	EI-365801	IC TC74HC257P
4-IC5	EI-365794	IC S900 C	4-IC81	EI-365801	IC TC74HC257P
4-IC6	EI-365795	IC S900 D	4-IC82	EI-360035	IC TC74HC157P
4-IC7	EI-365796	IC S900 E	4-IC83	EI-365810	IC TC74HC158P
4-IC8	EI-360021	IC HD6850P	4-IC84	EI-365810	IC TC74HC158P
4-IC9	EI-365797	IC UPD7265C	4-IC85	EI-360039	IC TC74HC08P
4-IC10	EI-365798	IC SED9420CAC	4-IC86	EI-360026	IC TC74HC04P
4-IC11	EI-367330-C	IC TMM27128AD-20 S900MSB-V1.2A	4-IC87	EI-360038	IC TC74HC02P
4-IC12	EI-367331-C	IC TMM27128AD-20 S900LSB-V1.2A	4-IC88	EI-360036	IC TC74HC32P
4-IC13	EI-360030	IC TC74HC373P	4-IC89	EI-360053	IC TC74HC175P
4-IC14	EI-360030	IC TC74HC373P	4-IC90	EI-360039	IC TC74HC08P
4-IC15	EI-360030	IC TC74HC373P	4-R30	ER-200939	R CB H S10 FS RDS 1/4W 181J
4-IC16	EI-360030	IC TC74HC373P	4-R31	ER-200939	R CB H S10 FS RDS 1/4W 181J
4-IC17	EI-360030	IC TC74HC373P	4-X1	EI-365811	OSC X'TAL NR18 16.000MHZ
4-IC18	EI-360032	IC TC74HC245P	4-1	EJ-358691	SOCKET IC DILB28P-8J
4-IC19	EI-365831	IC TC74HC393P			
4-IC20	EI-365801	IC TC74HC257P			
4-IC21	EI-360053	IC TC74HC175P			
4-IC22	EI-360025	IC TC74HC138P			
4-IC23	EI-360025	IC TC74HC138P			
4-IC24	EI-360025	IC TC74HC138P			
4-IC25	EI-360042	IC TC74HC259P			
4-IC26	EI-360029	IC TC74HC244P			
4-IC27	EI-365801	IC TC74HC257P			
4-IC28	EI-365802	IC TC74HC191P			
4-IC29	EI-356049	IC TC74HC139P			
4-IC30	EI-360053	IC TC74HC175P			
4-IC31	EI-365803	IC TC74HC4002P			

5. PANEL P.C BOARD

Ref. No.	Part No.	Description
5-CR1	EH-347688	COMP R EXB-P88472K
5-CR2	EH-347688	COMP R EXB-P88472K
5-D1	ED-364261	D LED SLP-981C-50
5-D2	ED-364261	D LED SLP-981C-50
5-D3	ED-364261	D LED SLP-981C-50
5-D4	ED-364261	D LED SLP-981C-50
5-D5	ED-364261	D LED SLP-981C-50
5-D6	ED-364261	D LED SLP-981C-50
5-D7	ED-364261	D LED SLP-981C-50
5-IC1	EI-365813	IC UPD71055C
5-SW1	ES-365851	SW TACT SPPQ19
5-SW2	ES-365851	SW TACT SPPQ19
5-SW3	ES-365851	SW TACT SPPQ19
5-SW4	ES-365851	SW TACT SPPQ19
5-SW6	ES-365851	SW TACT SPPQ19
5-SW7	ES-365851	SW TACT SPPQ19
5-SW8	ES-365851	SW TACT SPPQ19
5-SW9	ES-365851	SW TACT SPPQ19
5-SW10	ES-365851	SW TACT SPPQ19
5-SW11	ES-365851	SW TACT SPPQ19
5-SW12	ES-365851	SW TACT SPPQ19
5-SW13	ES-365851	SW TACT SPPQ19
5-SW14	ES-365851	SW TACT SPPQ19
5-SW16	ES-365851	SW TACT SPPQ19
5-SW17	ES-365851	SW TACT SPPQ19
5-SW18	ES-365851	SW TACT SPPQ19
5-SW19	ES-365851	SW TACT SPPQ19
5-SW20	ES-365851	SW TACT SPPQ19
5-SW21	ES-365851	SW TACT SPPQ19
5-SW22	ES-365851	SW TACT SPPQ19
5-SW23	ES-365851	SW TACT SPPQ19
5-SW24	ES-365851	SW TACT SPPQ19
5-SW25	ES-365851	SW TACT SPPQ19
5-SW26	ES-365851	SW TACT SPPQ19
5-SW27	ES-365851	SW TACT SPPQ19
5-SW28	ES-365851	SW TACT SPPQ19

6. OUTPUT JACK P.C BOARD

Ref. No.	Part No.	Description
6-J501	EJ-354269	PHONE J 3P HLJ0540-110 6.3
6-J502	EJ-354269	PHONE J 3P HLJ0540-110 6.3
6-J503	EJ-354269	PHONE J 3P HLJ0540-110 6.3
6-J505	EJ-354269	PHONE J 3P HLJ0540-110 6.3
6-J505	EJ-354269	PHONE J 3P HLJ0540-110 6.3
6-J506	EJ-354269	PHONE J 3P HLJ0540-110 6.3
6-J507	EJ-354269	PHONE J 3P HLJ0540-110 6.3
6-J508	EJ-354269	PHONE J 3P HLJ0540-110 6.3
6-J509	EJ-354269	PHONE J 3P HLJ0540-110 6.3
6-J510	EJ-354269	PHONE J 3P HLJ0540-110 6.3
6-J511	EJ-354269	PHONE J 3P HLJ0540-110 6.3
6-J512	EJ-360771	DIN J TCS5037-01-241 13P

7. INPUT JACK P.C BOARD

Ref. No.	Part No.	Description
7-J514	EJ-354269	PHONE J 3P HLJ0540-110 6.3
7-J515	EJ-354269	PHONE J 3P HLJ0540-110 6.3
7-J516	EJ-354269	PHONE J 3P HLJ0540-110 6.3

8. MIDI JACK P.C BOARD

Ref. No.	Part No.	Description
8-D1	ED-301911	D SILICON H DS448
8-IC1	EI-310044	IC SN74LS05N
8-J513	EJ-364256	DIN J M1704 3P
8-PH1	ET-354167	DETECTOR PC900

9. INVERTER P.C BOARD

Ref. No.	Part No.	Description
9-R1	ER-333372	R CB H S10 FS RDS 1/4W 150J
9-1	VT-365945	MULTI BLK INVERTER NEL-D32-43

10. VOLUME P.C BOARD

Ref. No.	Part No.	Description
10-VR1	EV-366285	VR ROTARY 16P10X2I A103
10-VR2	EV-365952	VR ROTARY 16P10X2H B103
10-VR3	EV-365953	VR ROTARY 16P22X0Z B103 B103

11. CONTRAST P.C BOARD

Ref. No.	Part No.	Description
11-VR1	EV-365817	VR ROTARY 16P10X2G B102

12. LED P.C BOARD

Ref. No.	Part No.	Description
12-D1	ED-364261	D LED SLP-981C-50

13. POWER SUPPLY P.C BOARD

Ref. No.	Part No.	Description
13-C1	EC-201650	C EC V CUT AS1 472M 10DC
13-C5	EC-316188	C EC V CUT SM 102M 25DC
13-C6	EC-316188	C EC V CUT SM 102M 25DC
13-TR1	ET-360067	TR 2SC3330 T,U F05
13-D1	*ED-357038	D SILICON DBB10B 100//1.0A
13-D2	*ED-330319	D SILICON DBA10B 100//1.0A
13-D3	*ER-337754	R OMF H S15 FS 1W 100J
13-D4	*ER-337754	R OMF H S15 FS 1W 100J
13-D5	*ER-337754	R OMF H S15 FS 1W 100J
13-D6	*ER-337754	R OMF H S15 FS 1W 100J
13-D7	*ER-337754	R OMF H S15 FS 1W 100J
13-D8	ED-301911	D SILICON H DS448
13-D9	ED-346617	D ZENER H HZ12 C2
13-IC1	*EI-348123	IC M5230L
13-R1	ER-324185	R CB H S10 FS RDS 1//4W 221J
13-R2	ER-324185	R CB H S10 FS RDS 1//4W 221J
13-TR1	ET-360067	TR 2SC3330 T,U F05
13-F2	*EF-306952	FUSE TSC A 250V 4.00A [J]
13-F2A	*EF-306957	FUSE TSC 125V 4.00A [C,A]
13-F2B	*EF-691007	FUSE SEMKO T 3.15A 250V [E,V,S]
13-F2C	*EF-359225	FUSE BET T 3.15A 250V [B]
13-F3	*EF-306124	FUSE TSC A 250V 630MA [J]
13-F3A	*EF-305703	FUSE TSC 125V 630MA [C,A]
13-F3B	*EF-601942	FUSE SEMKO T 630MA 250V [E,V,S]
13-F3C	*EF-358974	FUSE BET T 630MA 250V [B]
13-F4	*EF-309387	FUSE TSC A 250V 1.00A [J]
13-F4A	*EF-310229	FUSE TSC 125V 1.00A [C,A]
13-F4B	*EF-258344	FUSE SEMKO T 800MA 250V [E,V,S]
13-F4C	*EF-358641	FUSE BET T 800MA 250V [B]
13-F5	*EF-309387	FUSE TSC A 250V 1.00A [J]
13-F5A	*EF-310229	FUSE TSC 125V 1.00A [C,A]
13-F5B	*EF-258344	FUSE SEMKO T 800MA 250V [E,V,S]
13-F5C	*EF-358641	FUSE BET T 800MA 250V [B]
13-D901	*ED-365818	D SILICON CTU-12S
13-D902	*ED-365819	D SILICON CTU-12R
13-IC901	*EI-365820	IC STR9005
13-IC902	*EI-347758	IC TA78012AP
13-IC903	*EI-365822	IC NJM78M06A
13-IC904	*EI-365823	IC NJM79M06A
13-TR901	*ET-356817	TR 2SB891 Q,R
13-TR902	*ET-354083	TR 2SD1189 Q,R
13-1	ZW-632226	WASHER INSULATOR (BUSH M)

14. FILTER P.C BOARD

Ref. No.	Part No.	Description
14-C2	*EC-358450	C CE V DNS102MBE B 102M 400AC [A,V]
14-C3	*EC-358450	C CE V DNS102MBE B 102M 400AC [A,V]
14-C4	*EC-369670	C MY V XE 683M 250V [A,V]
14-FL1	EO-360068	COIL LF LF-2 B
14-F1	*EF-306951	FUSE TSC A 250V 2.50A [J]
14-F1A	*EF-306954	FUSE TSC 125V 2.00A [C,A]
14-F1B	*EF-623103	FUSE SEMKO T 1.00A 250V [E,V,S]
14-F1C	*EF-355226	FUSE BET T 1.00A 250V [B]

15. LCD P.C BOARD

Ref. No.	Part No.	Description
15-1	EM-365844	IND LCD DMC40218UE [INC. PCB]

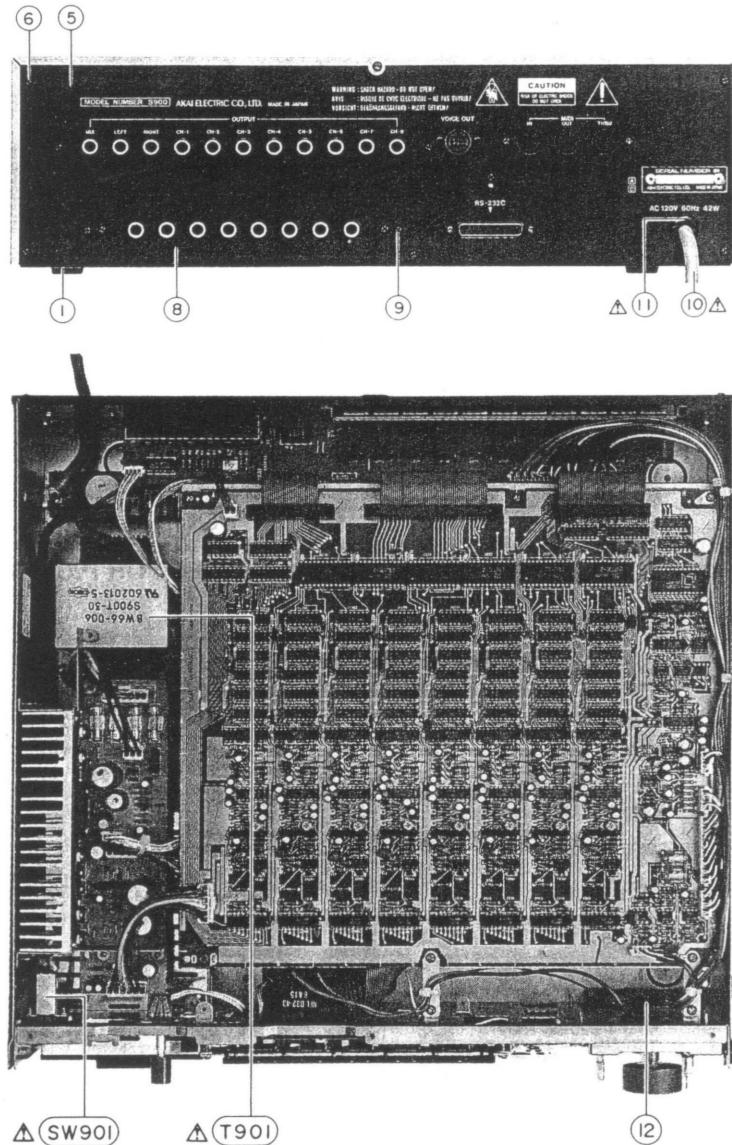
16. CONNECTOR P.C BOARD

Ref. No.	Part No.	Description
16-J522	EJ-365932	CONNECTOR HDB0001-01-2131 25P

17. FDD

Ref. No.	Part No.	Description
17-IC1	EI-718239	IC M51017P
17-IC2	EI-718240	IC HA13421
17-IC3	EI-718241	IC 74LS93
17-RSW1	ES-718243	SW REED
17-SP2	EJ-718245	PLUG SHORT
17-VR2	EV-718242	R S-FIX VRP0016-204BIM

ASSEMBLY BLOCK

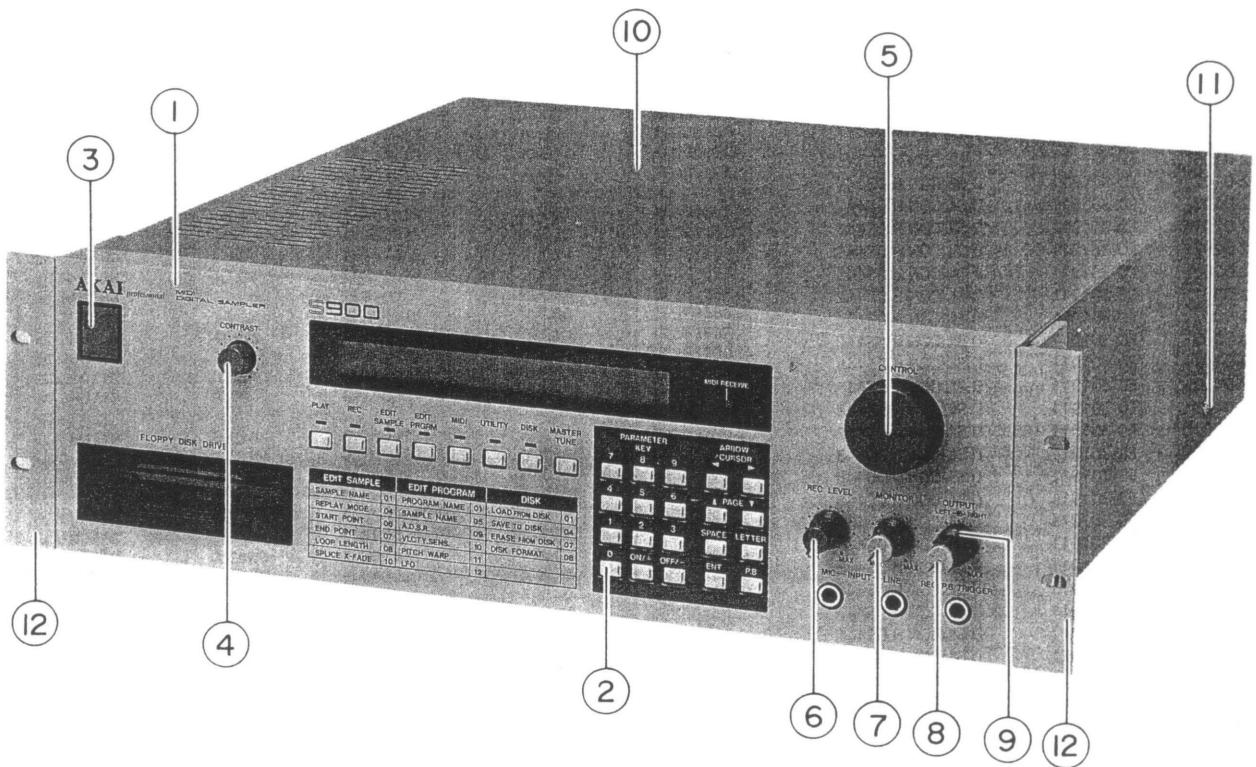


18. ASSEMBLY BLOCK

Ref. No.	Part No.	Description
18-1	SA-349332	FOOT
18-2X	ZS-360715	ST PAN30X08STL CMT C080 [FOOT FIX]
18-3X	ZS-314702	ST BID40X10STL CMT [TRANS POWER FIX]
18-4X	ZW-273892	TW40 [TRANS POWER FIX]
18-5	SP-362368A	PANEL REAR (J)
18-5A	SP-362368B	PANEL REAR (C.A)
18-5B	SP-362368C	PANEL REAR (E.V.B.S)
18-6	ZS-366240	T2BR30X06STL BNI PROJECTION [PANEL REAR FIX]
18-7X	ZW-698308	RV NYL30X055 BL
18-8	SC-362359A	COVER REAR (A)
18-9	ZS-366240	T2BR30X06STL BNI PROJECTION [COVER REAR FIX]
18-10	*EW-365947	AC CORD 250 SKP210KS17B A J [J]
18-10A	*EW-366055	AC CORD 250 KP11WSJT18 UC [C.A]

Ref. No.	Part No.	Description
18-10B	*EW-359641	AC CORD 2 CORES KP-419C/KS-17 EV [E.V]
18-10C	*EW-358631	AC CORD 2 CORES KS-17 LTBS2F BS [B]
18-10D	*EW-358630	AC CORD 2 CORES KP560 LTS2F KS17 S [S]
18-11	*EZ-302906	STRAIN RELIEF SR-6N-4 [C.A]
18-12	ES-365943	SW EWT-XDFK2550B
18-C901	*EC-361942	C CE V DNS1032V V 103Z 400AC
18-J901	*EJ-358633	SOCKET INLET SOT017 2P [J.E.V.B.S]
18-SW901	*ES-337902	SW PUSH SDLD1P 01-1
18-VS901	*ES-306430	SW SLIDE J-S4013#01 01-2 [E.V.B.S]
18-T901	*BT-365907	TRANS POWER S900T-10(J)
18-T901A	*BT-365908	TRANS POWER S900T-30(A.C)
18-T901B	*BT-365909	TRANS POWER S900T-50(E.V.B.S)

FINAL ASSEMBLY BLOCK



19. FINAL ASSEMBLY BLOCK

Ref. No.	Part No.	Description
19-1	BD-B362369	PANEL FRONT PART
19-2	SK-362347A-A	KNOB PUSH (1)
19-3	SK-343017J	KNOB POWER (C)
19-4	SK-331108E	KNOB (A-5)
19-5	SK-362353	KNOB ROTARY (A)
19-6	SK-B364611	KNOB MONITOR RED (2) PART
19-7	SK-B364614	KNOB MONITOR WHITE (2) PART
19-8	SK-B364607	KNOB UPPER WHITE (3) PART
19-9	SK-352755C	KNOB LOWER (3)
19-10	SP-362371-A	COVER UPPER
19-11	ZS-341959	ST BID40X06STL NI3 [COVER UPPER FIX]
19-12	SH-362361	HANDLE RACK
19-13X	ZS-321783	ST BID40X10STL NI3 [HANDLE RACK FIX]

ASK90

1. P.C BOARD BLOCK

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
1-1	BA-L5012A020A	PC DRUM BLK ASK90	2-TR802	ET-360067	TR 2SC3330 T.U F05
			2-1	SC-362359B	COVER REAR (B)
			2-2	ZS-447761	T2BR30X06STL BNI

2. DRUM P.C BOARD

Ref. No.	Part No.	Description
2-D101	ED-301911	D SILICON H DS448
2-D102	ED-301911	D SILICON H DS448
2-D103	ED-301911	D SILICON H DS448
2-D201	ED-301911	D SILICON H DS448
2-D202	ED-301911	D SILICON H DS448
2-D203	ED-301911	D SILICON H DS448
2-D301	ED-301911	D SILICON H DS448
2-D302	ED-301911	D SILICON H DS448
2-D303	ED-301911	D SILICON H DS448
2-D401	ED-301911	D SILICON H DS448
2-D402	ED-301911	D SILICON H DS448
2-D403	ED-301911	D SILICON H DS448
2-D501	ED-301911	D SILICON H DS448
2-D502	ED-301911	D SILICON H DS448
2-D503	ED-301911	D SILICON H DS448
2-D601	ED-301911	D SILICON H DS448
2-D602	ED-301911	D SILICON H DS448
2-D603	ED-301911	D SILICON H DS448
2-D701	ED-301911	D SILICON H DS448
2-D702	ED-301911	D SILICON H DS448
2-D703	ED-301911	D SILICON H DS448
2-D801	ED-301911	D SILICON H DS448
2-D802	ED-301911	D SILICON H DS448
2-D803	ED-301911	D SILICON H DS448
2-IC1	EI-360051	IC ADC0809CCN
2-IC2	EI-360026	IC TC74HC04P
2-IC3	EI-365839	IC HD74LS92P
2-IC4	EI-365840	IC TC74HC155P
2-IC5	EI-365801	IC TC74HC257P
2-IC6	EI-360053	IC TC74HC175P
2-IC7	EI-360042	IC TC74HC259P
2-IC8	EI-336995	IC NJM78L05A
2-IC101	EI-367225	IC M5238P-13
2-IC102	EI-367225	IC M5238P-13
2-IC201	EI-367225	IC M5238P-13
2-IC202	EI-367225	IC M5238P-13
2-IC301	EI-367225	IC M5238P-13
2-IC302	EI-367225	IC M5238P-13
2-IC401	EI-367225	IC M5238P-13
2-IC402	EI-367225	IC M5238P-13
2-IC501	EI-367225	IC M5238P-13
2-IC502	EI-367225	IC M5238P-13
2-IC601	EI-367225	IC M5238P-13
2-IC602	EI-367225	IC M5238P-13
2-IC701	EI-367225	IC M5238P-13
2-IC702	EI-367225	IC M5238P-13
2-IC801	EI-367225	IC M5238P-13
2-IC802	EI-362588	IC M5238P
2-J601	EJ-354269	PHONE J 3P HLJ0540-110 6.3
2-J602	EJ-354269	PHONE J 3P HLJ0540-110 6.3
2-J603	EJ-354269	PHONE J 3P HLJ0540-110 6.3
2-J604	EJ-354269	PHONE J 3P HLJ0540-110 6.3
2-J605	EJ-354269	PHONE J 3P HLJ0540-110 6.3
2-J606	EJ-354269	PHONE J 3P HLJ0540-110 6.3
2-J607	EJ-354269	PHONE J 3P HLJ0540-110 6.3
2-J608	EJ-354269	PHONE J 3P HLJ0540-110 6.3
2-TR101	ET-360067	TR 2SC3330 T.U F05
2-TR102	ET-360067	TR 2SC3330 T.U F05
2-TR201	ET-360067	TR 2SC3330 T.U F05
2-TR202	ET-360067	TR 2SC3330 T.U F05
2-TR301	ET-360067	TR 2SC3330 T.U F05
2-TR302	ET-360067	TR 2SC3330 T.U F05
2-TR401	ET-360067	TR 2SC3330 T.U F05
2-TR402	ET-360067	TR 2SC3330 T.U F05
2-TR501	ET-360067	TR 2SC3330 T.U F05
2-TR502	ET-360067	TR 2SC3330 T.U F05
2-TR601	ET-360067	TR 2SC3330 T.U F05
2-TR602	ET-360067	TR 2SC3330 T.U F05
2-TR701	ET-360067	TR 2SC3330 T.U F05
2-TR702	ET-360067	TR 2SC3330 T.U F05
2-TR801	ET-360067	TR 2SC3330 T.U F05

Part No.	Ref. No.	Part No.	Ref. No.	Part No.	Ref. No.	Part No.	Ref. No.
ER-324185	13-R1	EV-307695	3-VR801				
ER-324185	13-R2	EV-365817	11-VR1				
ER-326169	3-R30	EV-365952	10-VR2				
ER-333372	9-R1	EV-365953	10-VR3				
ER-337754	13-D3	EV-366285	10-VR1				
ER-337754	13-D4	EV-718242	17-VR2				
ER-337754	13-D5	EW-358630	18-10D				
ER-337754	13-D6	EW-358631	18-10C				
ER-337754	13-D7	EW-359641	18-10B				
ER-356747	3-R58	EW-365947	18-10				
ER-362495	3-R7	EW-366055	18-10A				
ER-362495	3-R8	EZ-302906	18-11				
ER-365788	3-R31	ML-718225	1-3				
ER-365788	3-R202	MR-718235	1-20				
ER-365788	3-R302	MZ-718224	1-2				
ER-365788	3-R402	MZ-718232	1-17				
ER-365788	3-R502	SA-349332	18-1				
ER-365788	3-R602	SC-362359A	18-8				
ER-365788	3-R702	SH-362361	19-12				
ER-365788	3-R802	SK-B364607	19-8				
ER-365789	3-R32	SK-B364611	19-6				
ER-365789	3-R203	SK-B364614	19-7				
ER-365789	3-R303	SK-331108E	19-4				
ER-365789	3-R403	SK-343017J	19-3				
ER-365789	3-R503	SK-352755C	19-9				
ER-365789	3-R603	SK-362347A-A	19-2				
ER-365789	3-R703	SK-362353	19-5				
ER-365789	3-R803	SK-718229	1-9				
ES-306430	18-VS901	SP-362368A	18-5				
ES-337902	18-SW901	SP-362368B	18-5A				
ES-365851	5-SW1	SP-362368C	18-5B				
ES-365851	5-SW2	SP-362371-A	19-10				
ES-365851	5-SW3	SP-718230	1-10				
ES-365851	5-SW4	SZ-718231	1-11				
ES-365851	5-SW6	VT-365945	9-1				
ES-365851	5-SW7	ZG-718226	1-4				
ES-365851	5-SW8	ZG-718227	1-5				
ES-365851	5-SW9	ZG-718234	1-18				
ES-365851	5-SW10	ZG-718236	1-21				
ES-365851	5-SW11	ZS-314702	18-3X				
ES-365851	5-SW12	ZS-321783	19-13X				
ES-365851	5-SW13	ZS-341959	19-11				
ES-365851	5-SW14	ZS-360715	18-2X				
ES-365851	5-SW16	ZS-366240	18-6				
ES-365851	5-SW17	ZS-366240	18-9				
ES-365851	5-SW18	ZS-718238	1-37				
ES-365851	5-SW19	ZW-273892	18-4X				
ES-365851	5-SW20	ZW-632226	13-1				
ES-365851	5-SW21	ZW-698308	18-7X				
ES-365851	5-SW22						
ES-365851	5-SW23						
ES-365851	5-SW24						
ES-365851	5-SW25						
ES-365851	5-SW26						
ES-365851	5-SW27						
ES-365851	5-SW28						
ES-365943	18-12						
ES-718243	17-RSW1						
ET-353899	3-TR101						
ET-353899	3-TR201						
ET-353899	3-TR301						
ET-353899	3-TR401						
ET-353899	3-TR501						
ET-353899	3-TR601						
ET-353899	3-TR701						
ET-353899	3-TR801						
ET-354083	13-TR902						
ET-354167	8-PH1						
ET-356817	13-TR901						
ET-360067	3-TR1						
ET-360067	13-TR1						
EV-307695	3-VR1						
EV-307695	3-VR101						
EV-307695	3-VR201						
EV-307695	3-VR301						
EV-307695	3-VR401						
EV-307695	3-VR501						
EV-307695	3-VF601						
EV-307695	3-VR701						

ASK90

Part No.	Ref. No.	Part No.	Ref. No.	Part No.	Ref. No.	Part No.	Ref. No.
BA-L5012A020A	1-1						
ED-301911	2-D101						
ED-301911	2-D102						
ED-301911	2-D103						
ED-301911	2-D201						
ED-301911	2-D202						
ED-301911	2-D203						
ED-301911	2-D301						
ED-301911	2-D302						
ED-301911	2-D303						
ED-301911	2-D401						
ED-301911	2-D402						
ED-301911	2-D403						
ED-301911	2-D501						
ED-301911	2-D502						
ED-301911	2-D503						
ED-301911	2-D601						
ED-301911	2-D602						
ED-301911	2-D603						
ED-301911	2-D701						
ED-301911	2-D702						
ED-301911	2-D703						
ED-301911	2-D801						
ED-301911	2-D802						
ED-301911	2-D803						
EI-336995	2-IC8						
EI-360026	2-IC2						
EI-360042	2-IC7						
EI-360051	2-IC1						
EI-360053	2-IC6						
EI-362588	2-IC802						
EI-365801	2-IC5						
EI-365839	2-IC3						
EI-365840	2-IC4						
EI-367225	2-IC101						
EI-367225	2-IC102						
EI-367225	2-IC201						
EI-367225	2-IC202						
EI-367225	2-IC301						
EI-367225	2-IC302						
EI-367225	2-IC401						
EI-367225	2-IC402						
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EI-367225	2-IC502						
EI-367225	2-IC601						
EI-367225	2-IC602						
EI-367225	2-IC701						
EI-367225	2-IC702						
EI-367225	2-IC801						
EJ-354269	2-J601						
EJ-354269	2-J602						
EJ-354269	2-J603						
EJ-354269	2-J604						
EJ-354269	2-J605						
EJ-354269	2-J606						
EJ-354269	2-J607						
EJ-354269	2-J608						
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ET-360067	2-TR102						
ET-360067	2-TR201						
ET-360067	2-TR202						
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ET-360067	2-TR602						
ET-360067	2-TR701						
ET-360067	2-TR702						
ET-360067	2-TR801						
ET-360067	2-TR802						
SC-362359B	2-1						
ZS-447761	2-2						

AKAI

MODEL S900

SCHEMATIC DIAGRAM AND PC BOARDS

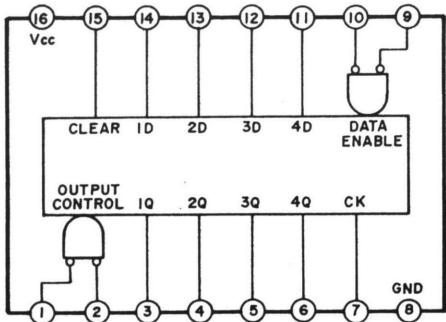
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INFORMATION OF ICs

NAME OF IC	FUNCTION
74HC02P	Quad 2 Input NOR
74HC04P	Hex Inverters
74LS05P	Hex OC Inverters
74HC86P	Quad 2 Input EX-OR
74HC109P	Dual JK-FFs with Preset and Clear
74HC173P	4 Bit Register 3 state
74HC244	Octal 3 state Bus Buffers
74HC374P	Octal 3 state D-FFs
74HC670P	4-4 Register Files (3 states)
AM2504PC	8 Bit/12 Bit Successive Approximation Registers
BA6110	Voltage Controlled Low Noise OP-Amp
BA9201	8 Bit D/A Convertor with Latch
BA9221	12 Bit D/A Convertor
DG211CJ	Quad Analog Switch
IR9311	Comparator
M5220P	Dual Low Noise Voltage Amplifier
M5223P	Dual J-FET Input OP-Amp
M5230P	Regulator (Variable output, + - tracking type)
M5238P	Dual FET Input OP Amp
MF6CN-50	6th order switched capacitor Butter worth Low pass filter
SRT9005	Molded Series Regulator
TA78012P	+12V Regulator
TA78M06P	+6V Regulator
TA79M06P	-6V Regulator
μ PC812C-AK	Dual Low drift J-FET Input OP-Amp
μ PD71054C	Programmable timer counter
μ PD71055C	Parallel Interface unit
μ PD7265C	Programmable Floppy Disk Drive
μ PD8253C	Programmable Interval timer

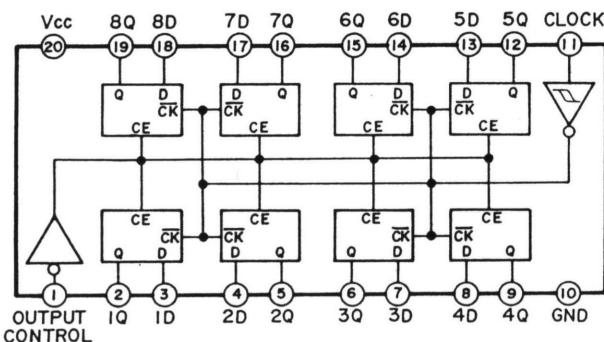
74HC173P



TRUTH TABLE

INPUT				OUTPUT QA ~ QD	OPERATION
CLEAR	CK	ENABLE			
		G1	G2	M	N
L		L	L	—	1D ~ 4D DATA SET
L		H	X	—	— HOLD
		X	H	—	—
	H	X	X	—	LLLL CLEAR
				H X	Z
				X H	

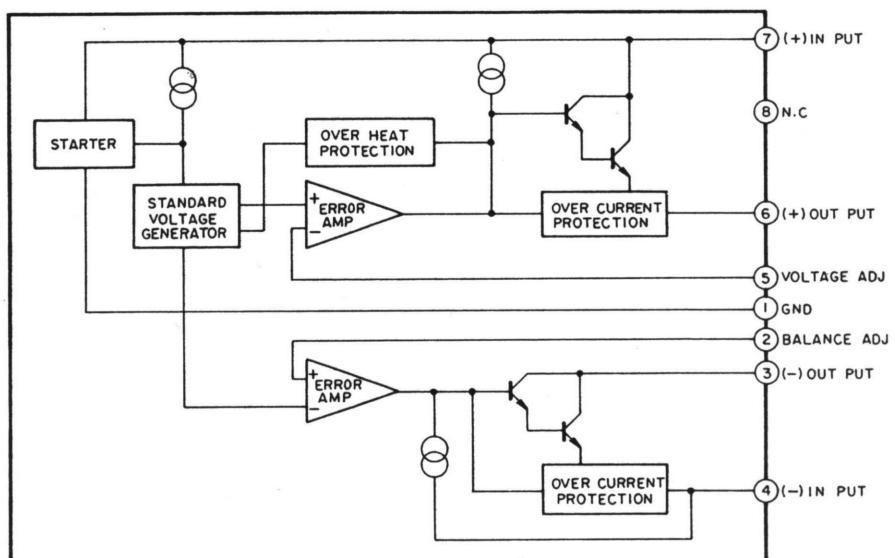
74HC374P



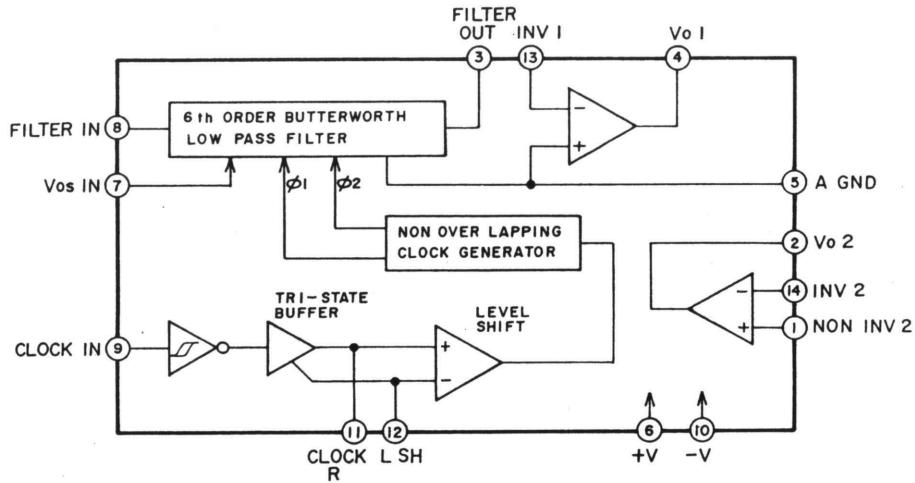
TRUTH TABLE

INPUT		OUTPUT
OUTPUT CONTROL	CK	
X		DATA SET
H	X	OUTPUT HIGH IMPEDANCE

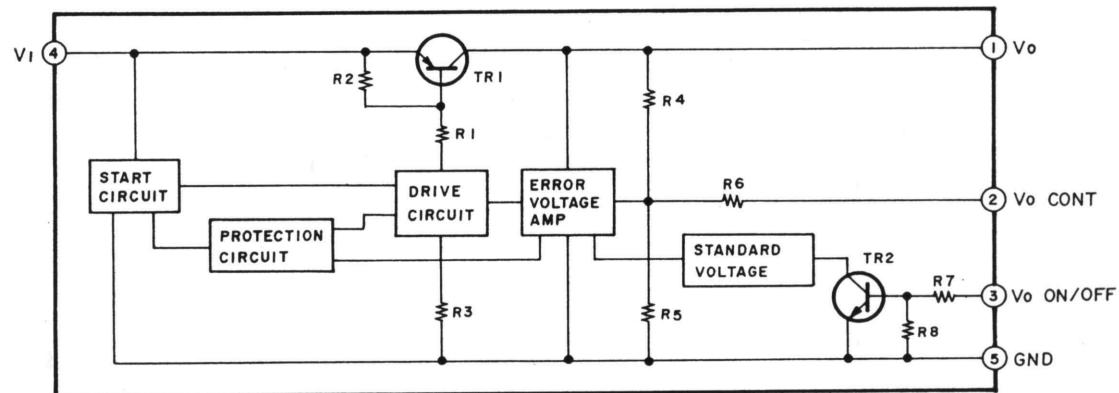
M5230L



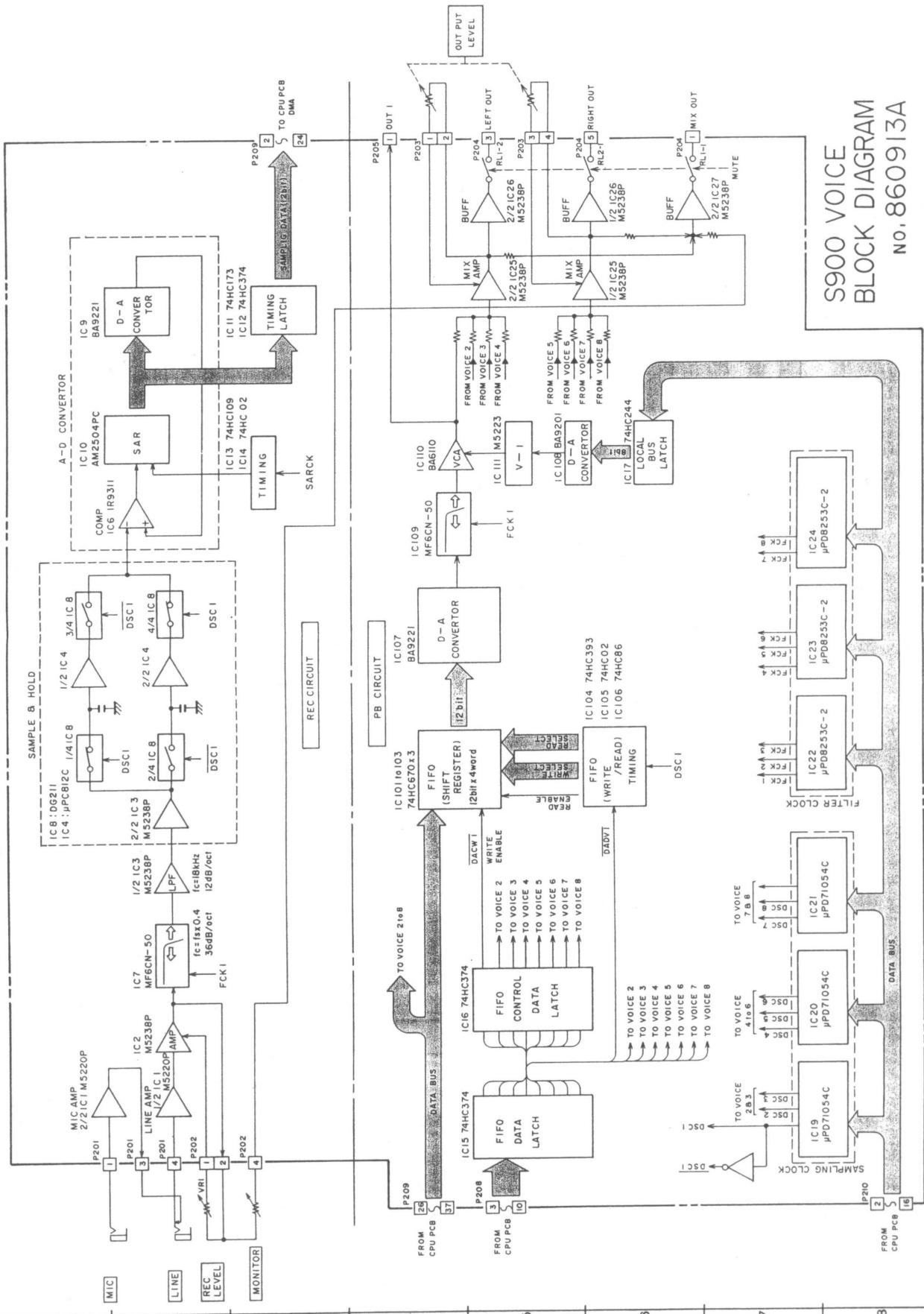
MF6CN-50



STR9005



S900 VOICE
BLOCK DIAGRAM
NO. 860913A



CONNECTION DIAGRAM NO. 6-1 860914A

S900

MIDI JACK PCB L6002B505B

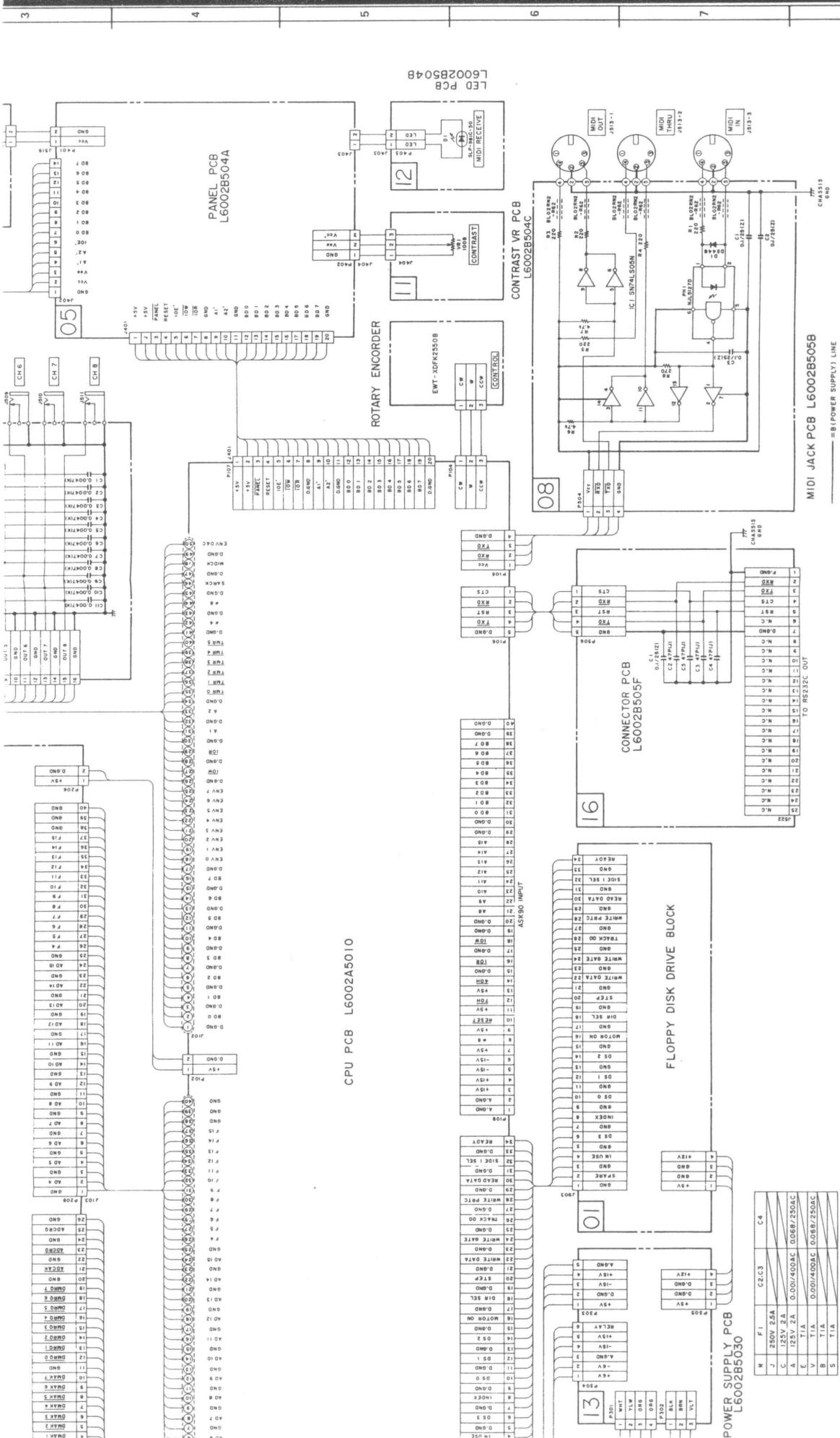
— = B POWER SUPPLY LINE

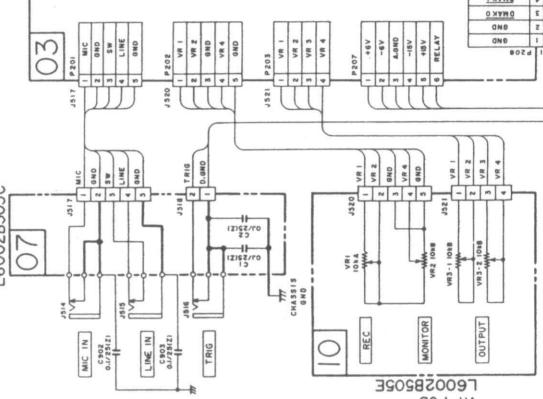
WARNING: INDICATES SAFETY CRITICAL COMPONENTS FOR CONTINUED SAFETY.

REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS.

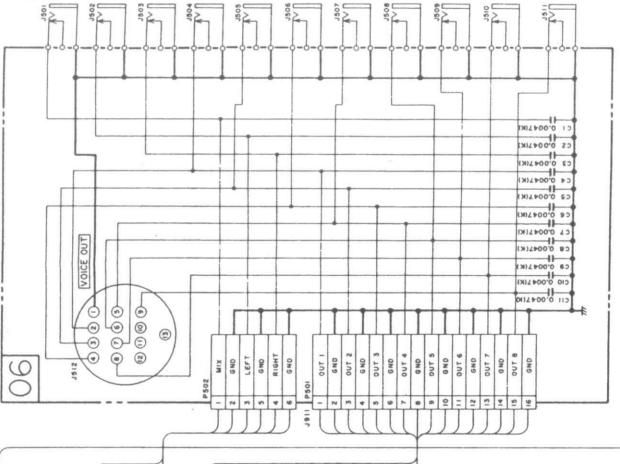
Avertissement: tous les composants critiques de sûreté doivent être remplacés par des pièces recommandées par le fabricant.

NOTE UNLESS OTHERWISE SPECIFIED
ALL RESISTORS IN OHM (KAWUJ)
ALL CAPACITORS IN UF (SOUPUJ)
POWER TRANSFORMER IS DIFFERENT
ACCORDING TO AREA A

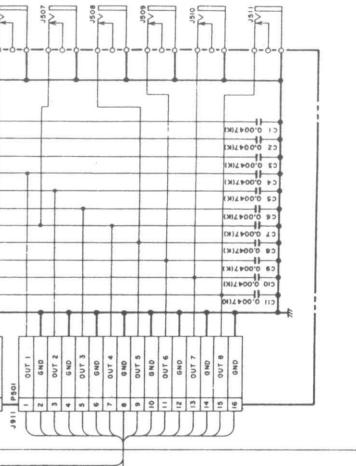


INPUT JACK PCB
L6002BS05C

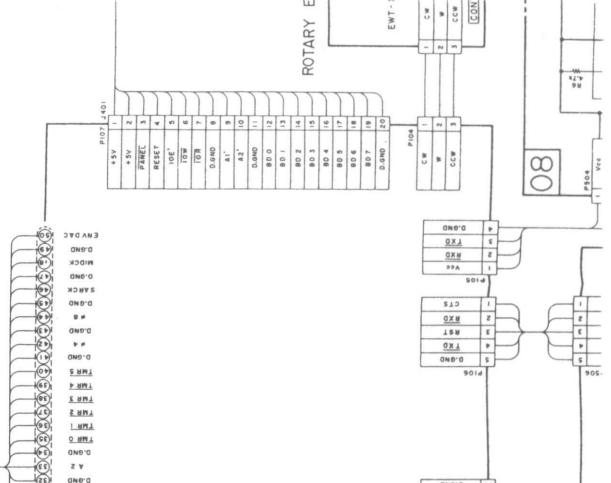
OUTPUT JACK PCB L6002B505A



VOICE PCB L6002A5020



CPU PCB L6002A5010



CPU PCB L6002A5010



CPU PCB L6002A5010



CPU PCB L6002A5010



CPU PCB L6002A5010



CPU PCB L6002A5010



CPU PCB L6002A5010



CPU PCB L6002A5010



CPU PCB L6002A5010



CPU PCB L6002A5010



CPU PCB L6002A5010



CPU PCB L6002A5010



CPU PCB L6002A5010



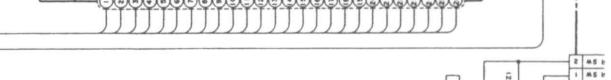
CPU PCB L6002A5010



CPU PCB L6002A5010



CPU PCB L6002A5010



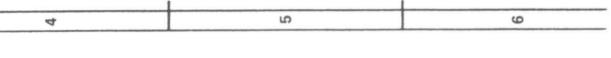
CPU PCB L6002A5010

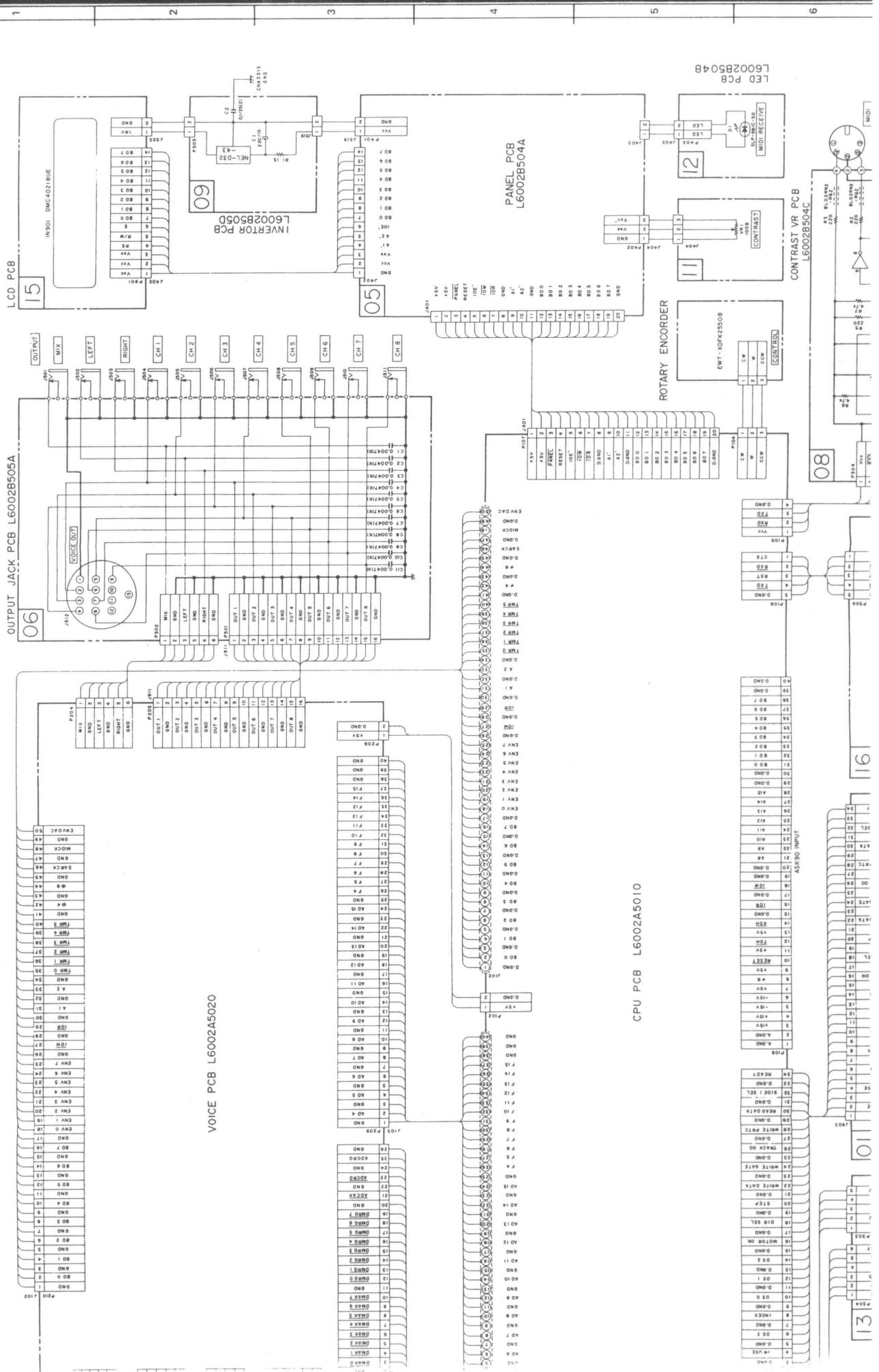


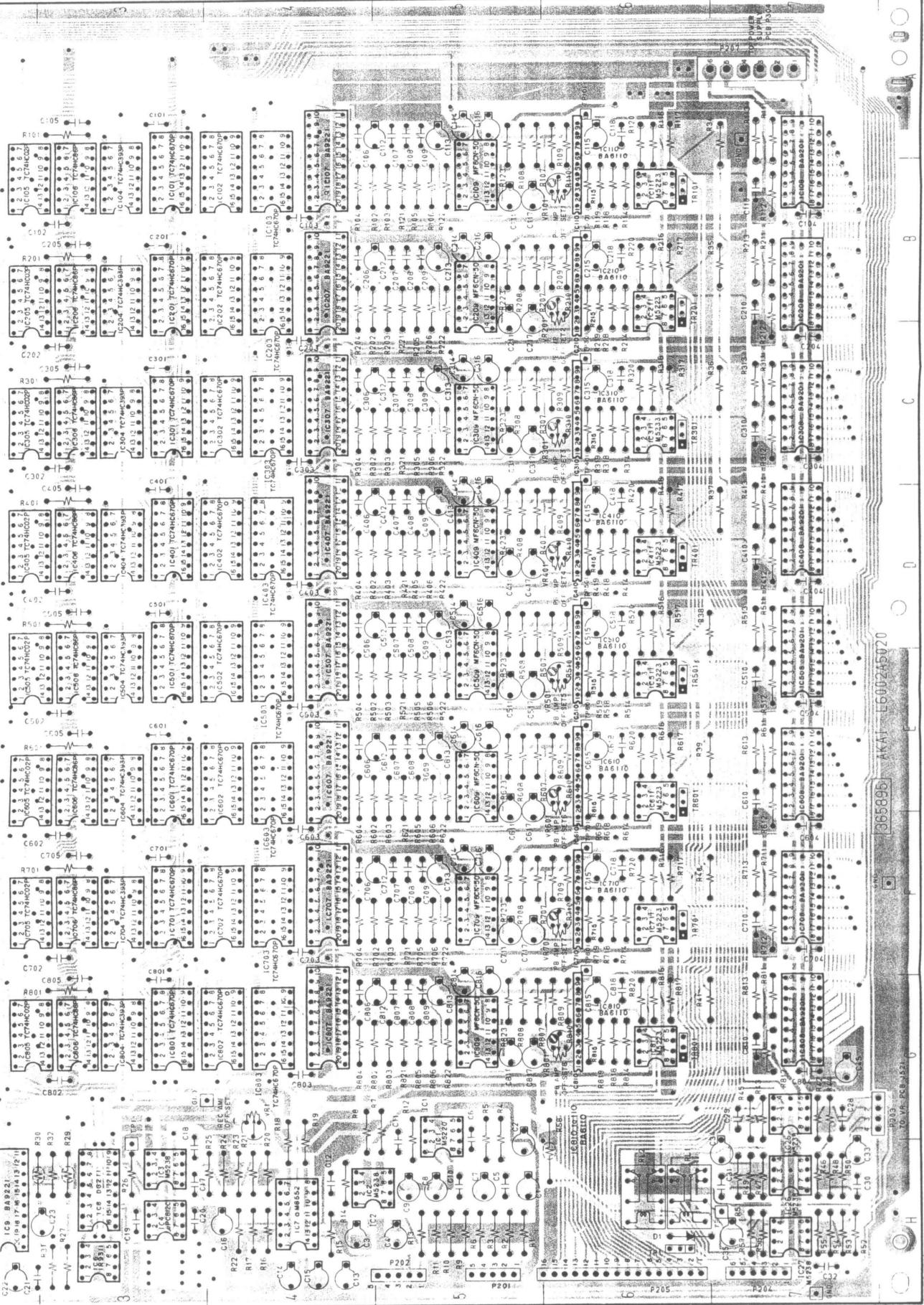
CPU PCB L6002A5010



CPU PCB L6002A5010







H

G

C

B

D

E

P210

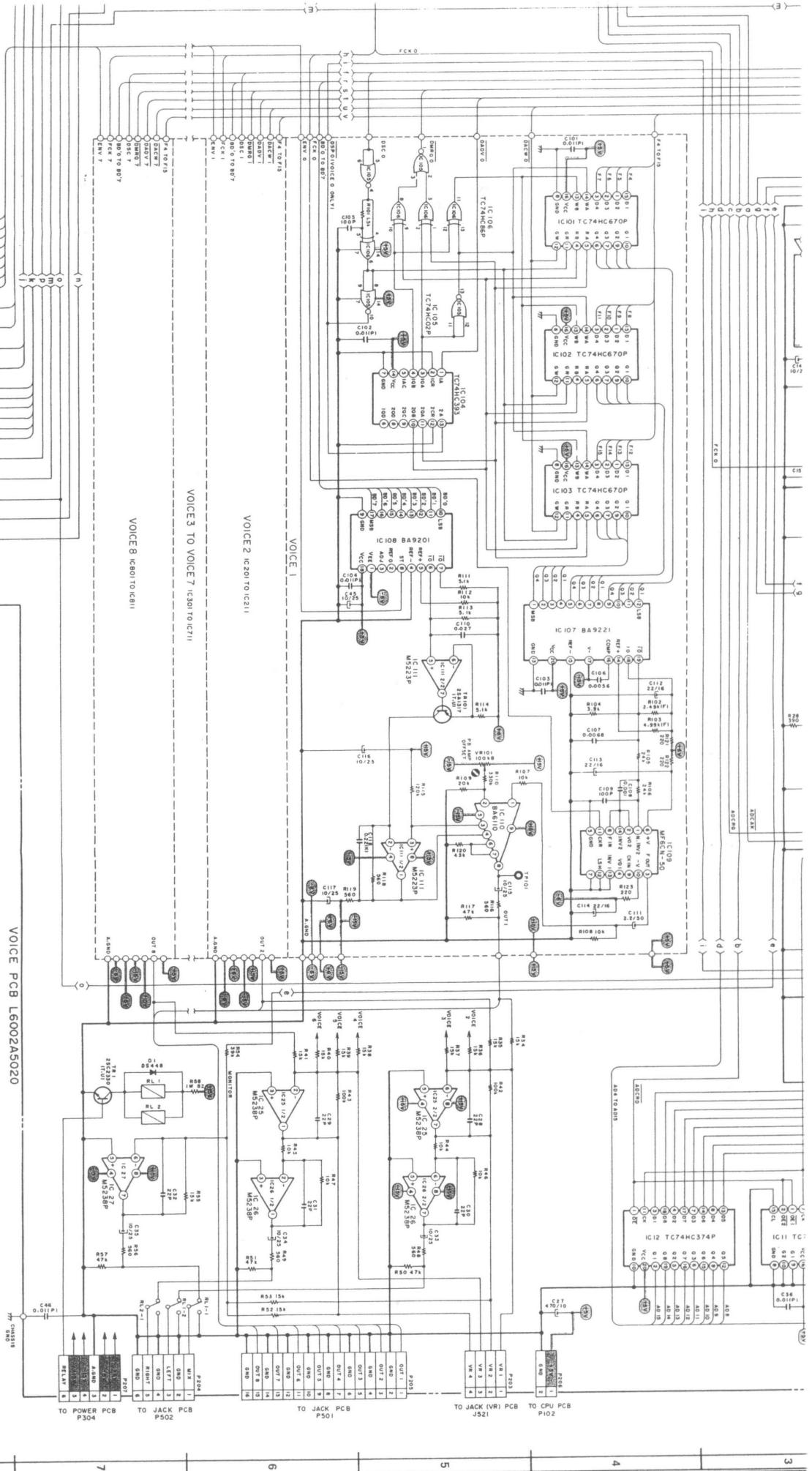
- GND
- 0.0
- GND
- BG 1
- GND
- BG 2
- GND
- BG 3
- GND
- BG 4
- GND
- BG 5
- GND
- BG 6
- GND
- BG 7
- GND
- ENV 1
- ENV 2
- ENV 3
- ENV 4
- ENV 5
- ENV 6
- ENV 7
- ENV 8
- ENV 9
- ENV 10
- ENV 11
- ENV 12
- ENV 13
- ENV 14
- ENV 15
- ENV 16
- ENV 17
- ENV 18
- ENV 19
- ENV 20
- ENV 21
- ENV 22
- ENV 23
- ENV 24
- ENV 25
- ENV 26
- ENV 27
- ENV 28
- ENV 29
- ENV 30
- SARX
- GND
- MIDCK
- GND
- ENV.DAC

TO CPU PCB J102

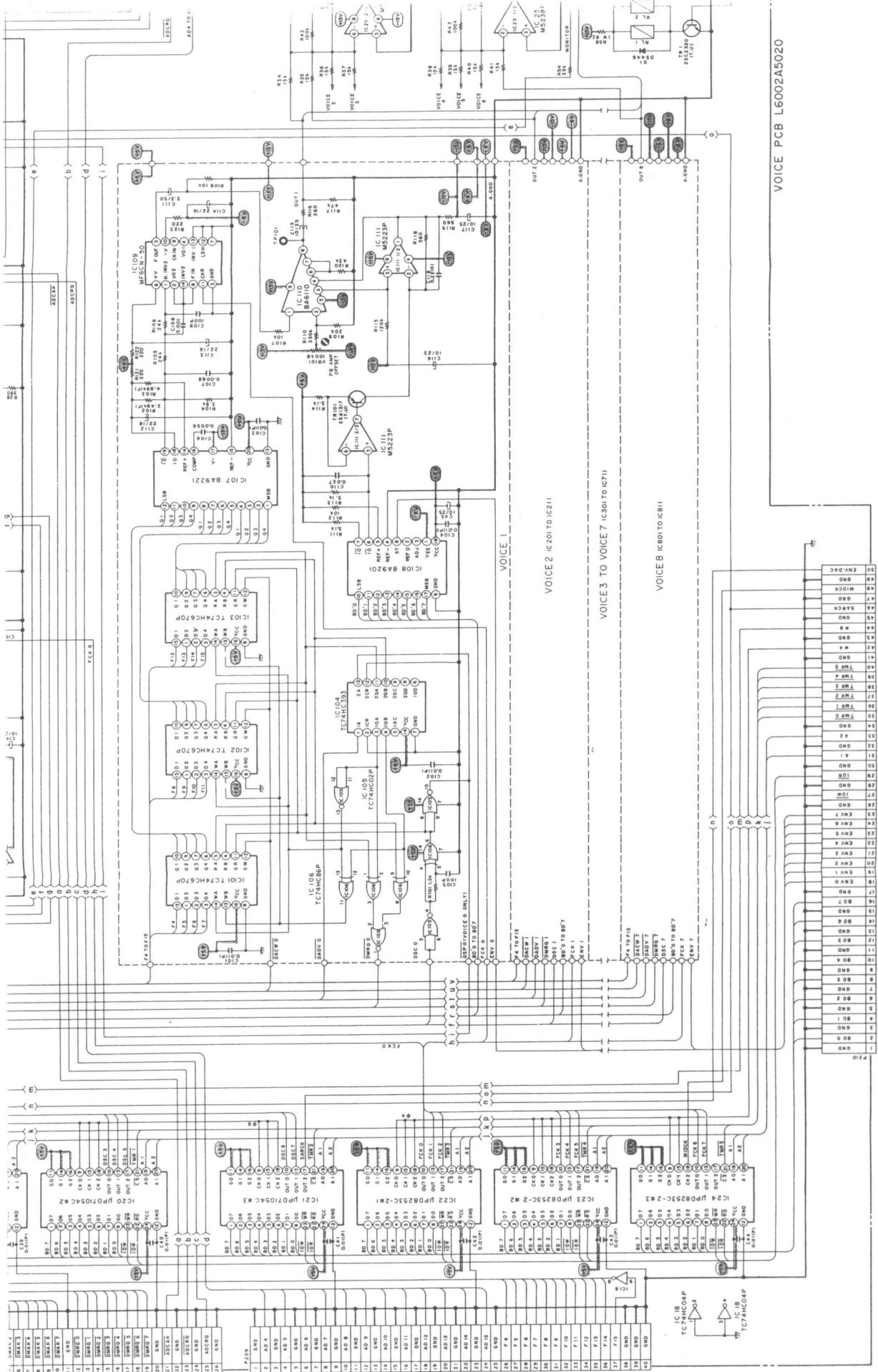
VOICE PCB L6002A5020

NOTE
UNLESS OTHERWISE SPECIFIED
ALL RESISTORS IN OHMS (KΩ/MΩ)
ALL CAPACITORS IN μF (nF/PF)

S900 VOICE SCHEMATIC DIAGRAM NO. 6-2 860916A



VOICE PCB L6002A5020



H

G

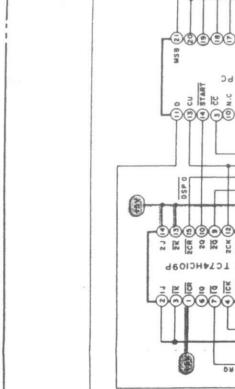
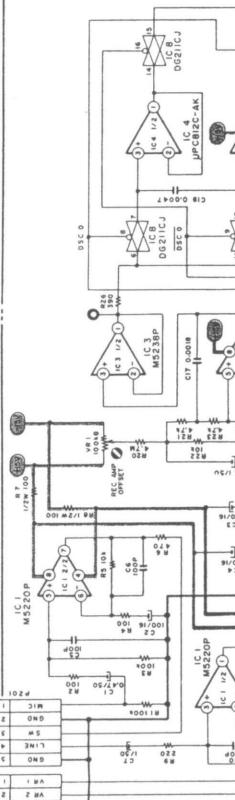
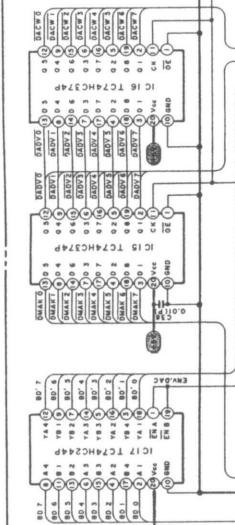
F

D

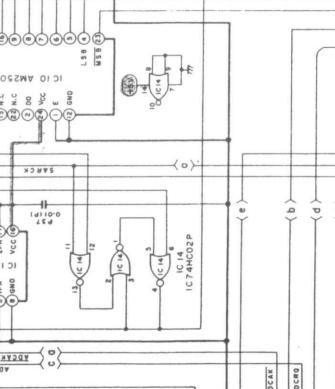
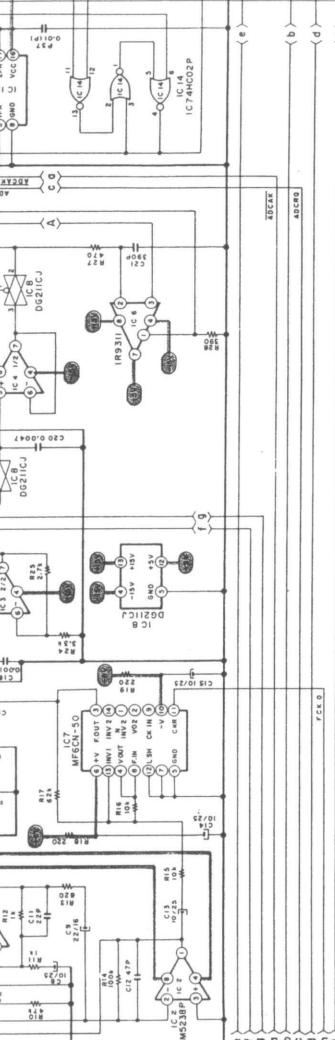
B

A

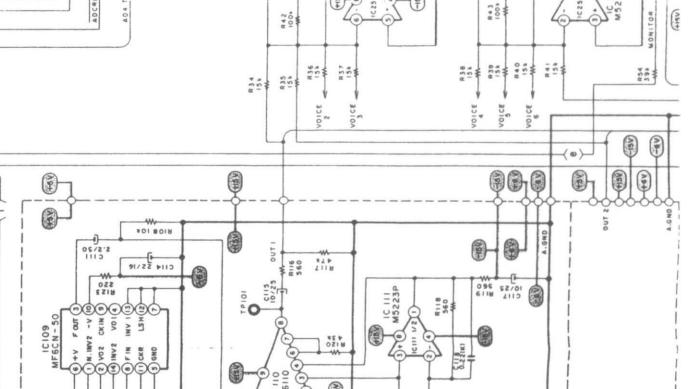
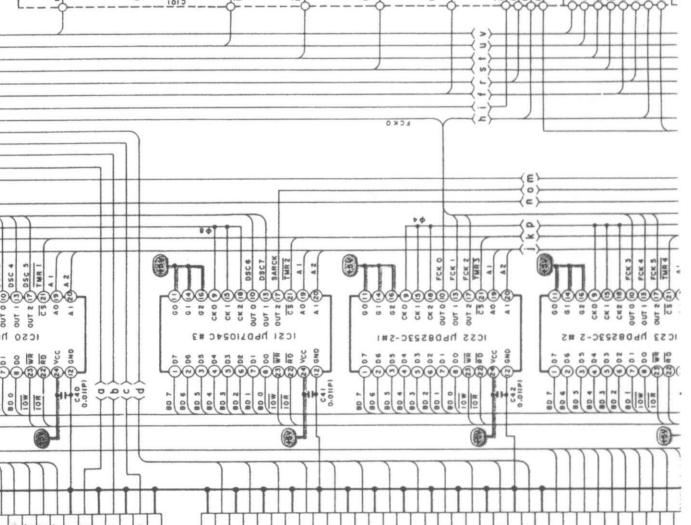
Q3



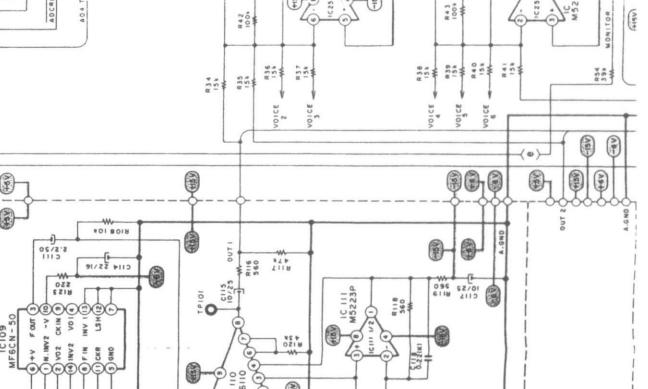
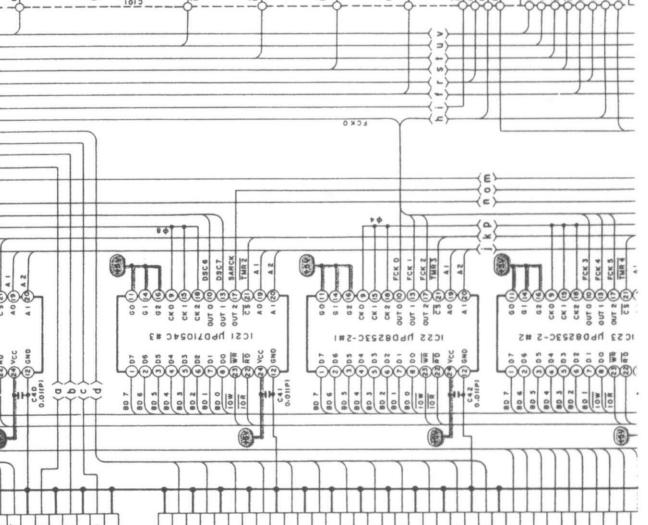
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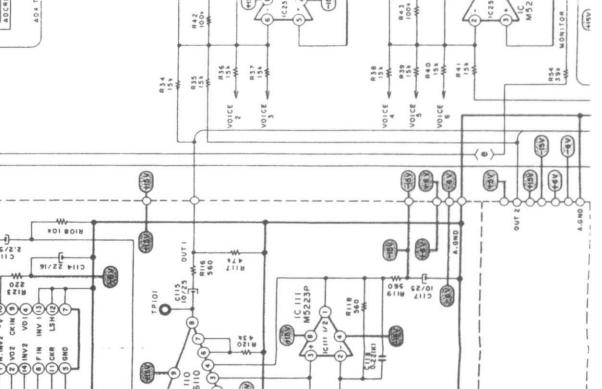
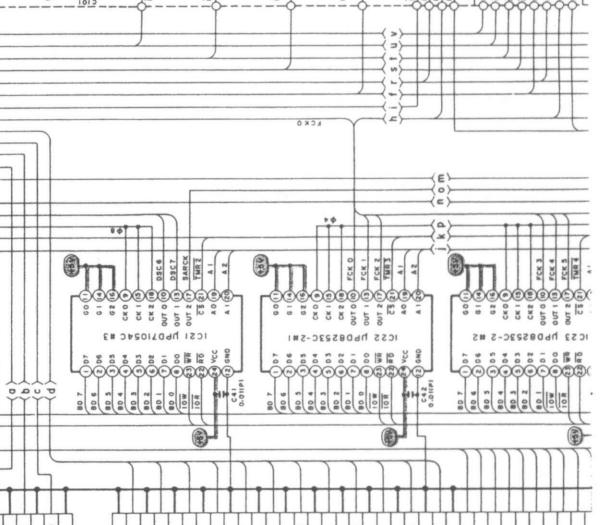
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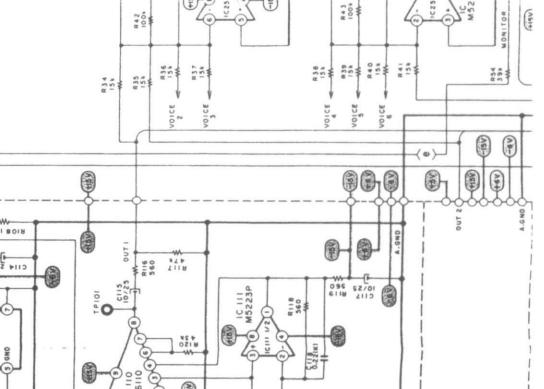
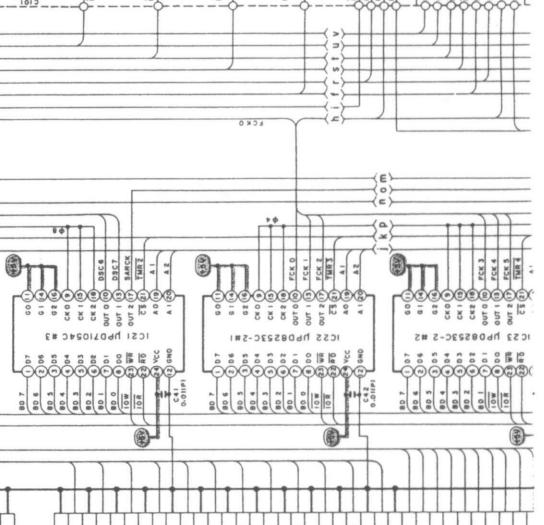
4



5



6



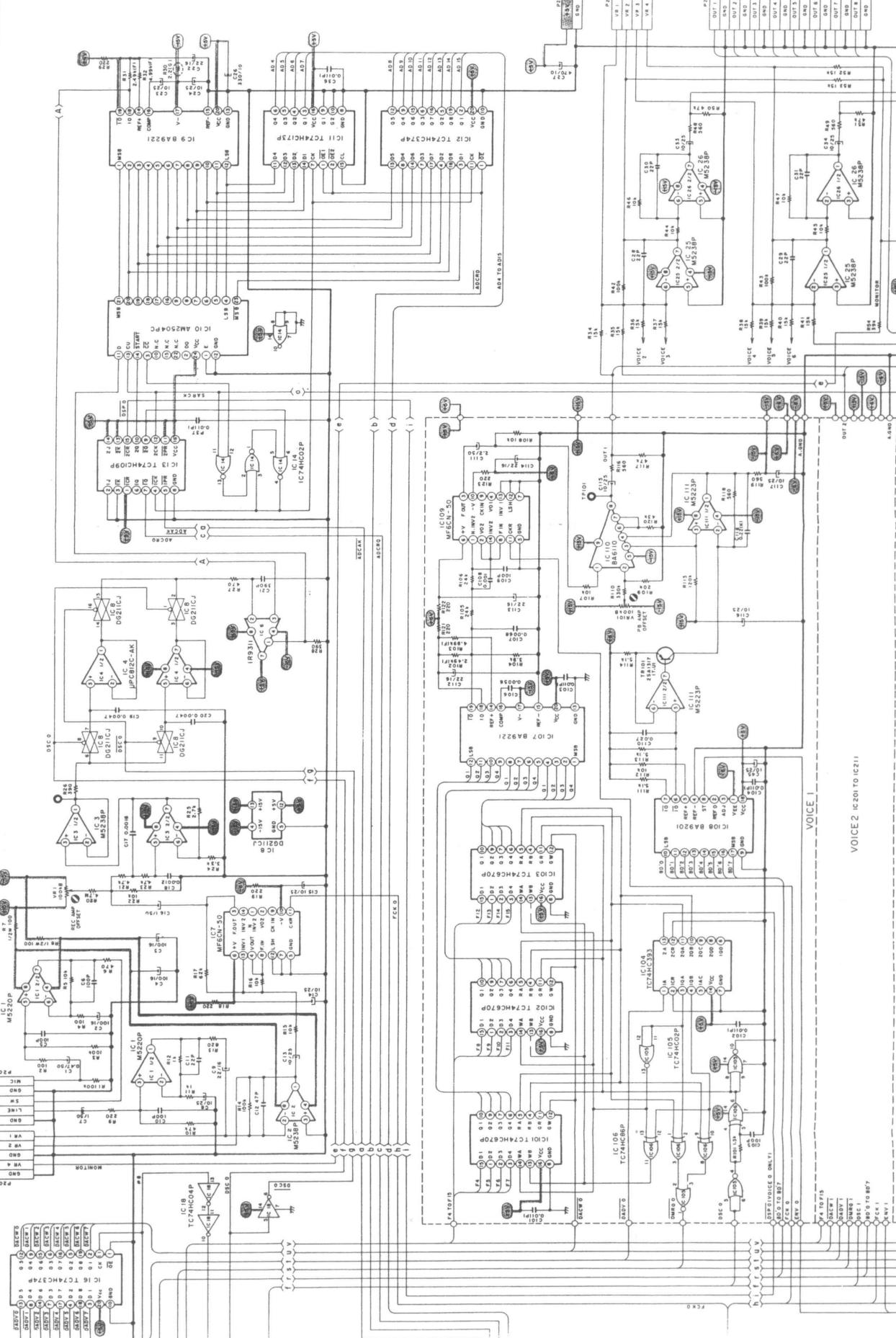
VOICE 1

TO IC201 TO IC211

TO JACK(VR) PCB J510

TO JACK(MIC) PCB J20

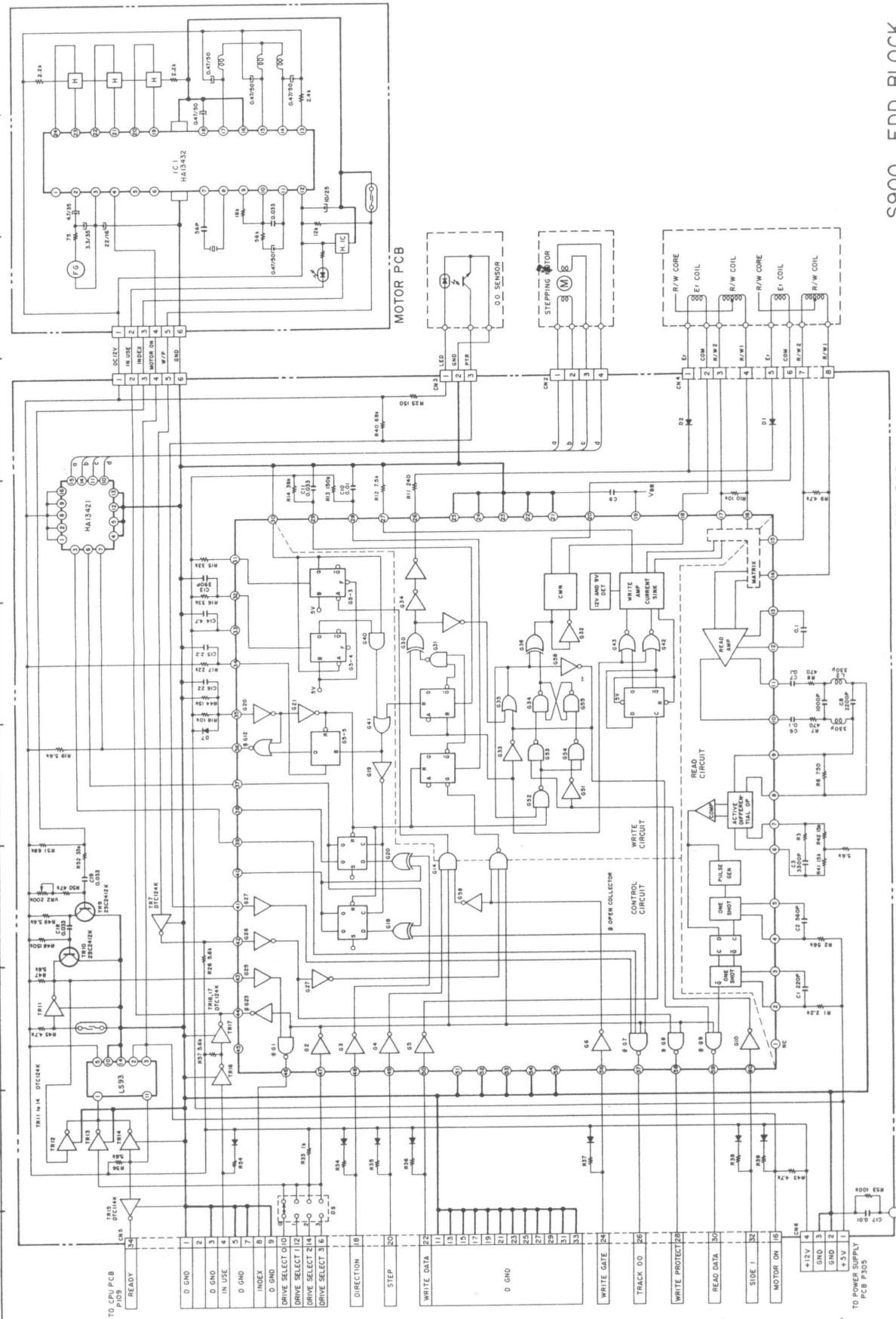
MONITOR



VOICE 1
TO ICE 2 (IC 201 TO IC 211)

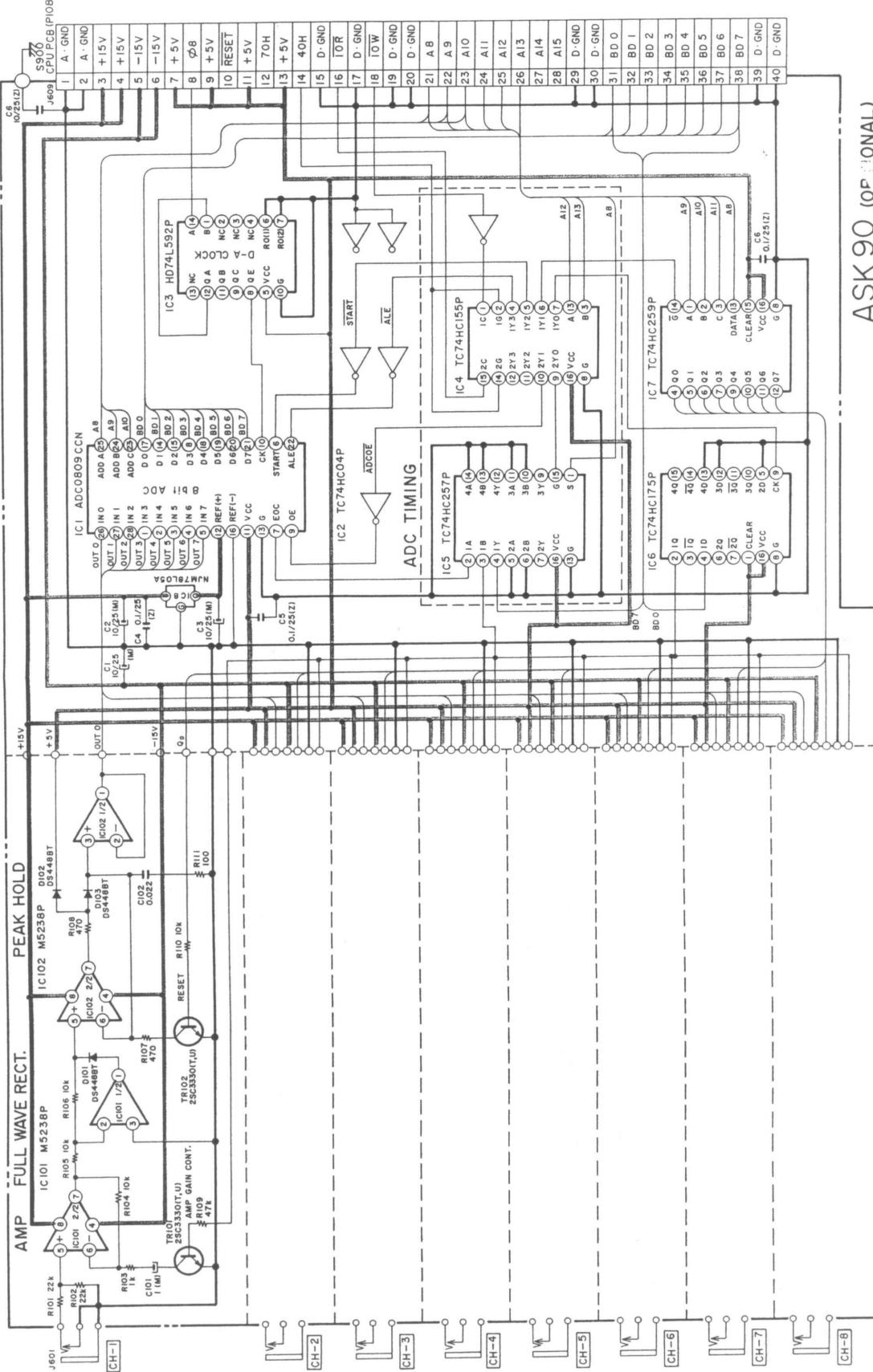
S900 FDD BLOCK
SCHEMATIC DIAGRAM
NO.6-5 860921A

FDD PCB



**ASK 90 (OPTIONAL)
DRUM INTERFACE
SCHEMATIC DIAGRAM**
NO. 6-6 860918A

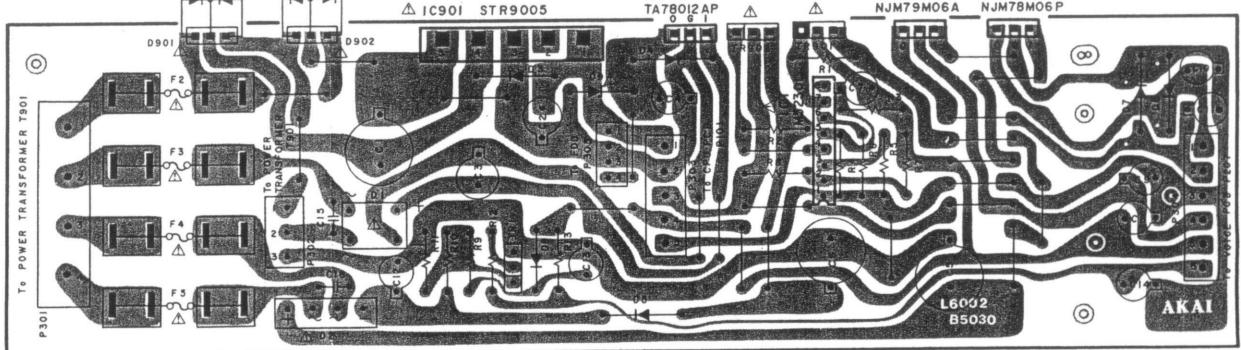
NOTES UNLESS OTHERWISE SPECIFIED
ALL RESISTORS IN OHMS 1/4W (1)
ALL CAPACITORS IN μ F 50 WV (J)



DRUM PCB L5012B5010

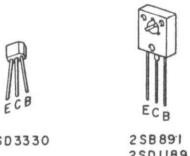
B (POWER SUPPLY LINE)

NOTES UNLESS OTHERWISE SPECIFIED
ALL RESISTORS IN OHMS 1/4W (1)
ALL CAPACITORS IN μ F 50 WV (J)



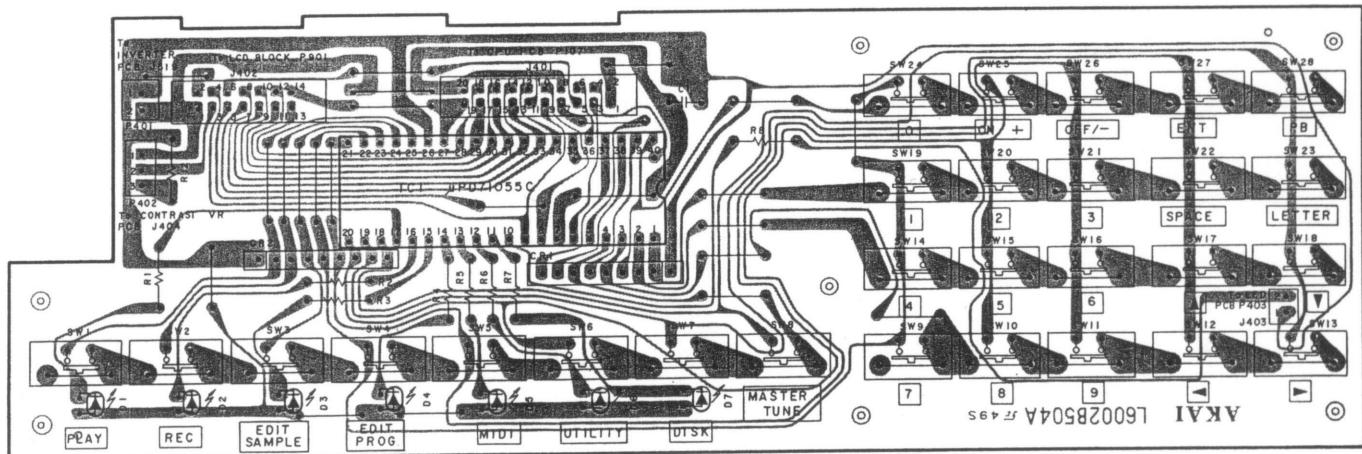
POWER SUPPLY PCB L6002B5030

B = PNP TRANSISTOR
B = NPN TRANSISTOR

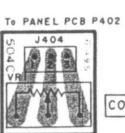


WARNING: INDICATES SAFETY CRITICAL COMPONENTS. FOR CONTINUED SAFETY, REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS

AVERTISSEMENT: IL INDIQUE LES COMPOSANTS CRITIQUES DE SURETE. POUR MAINTENIR LE DEGRE DE SECURITE DE L'APPAREIL NE REMPLACER LES COMPOSANTS DONT LE FONCTIONNEMENT EST CRITIQUE POUR LA SECURITE QUE PAR DES PIECES RECOMMANDÉES PAR LE FABRICANT



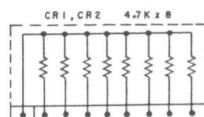
PANEL PCB L6002B504 A



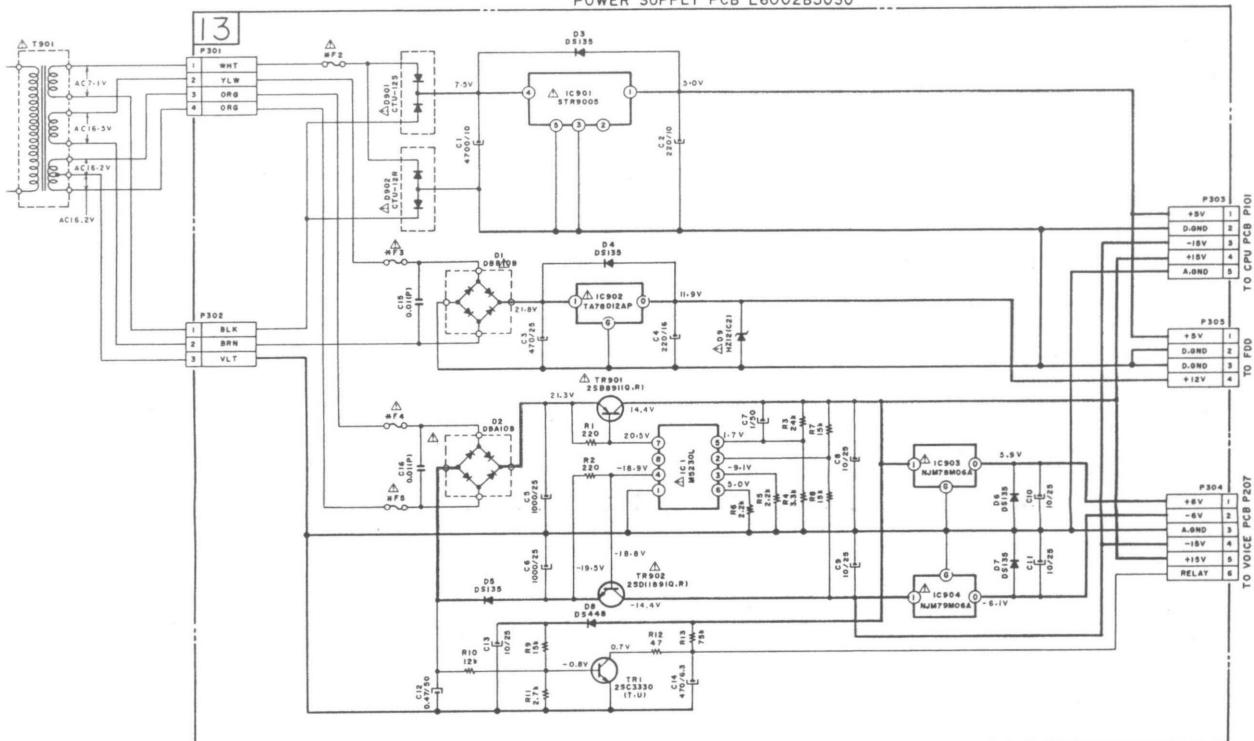
CONTRAST VR PCB
L6002B504C



LED PCB
L6002B504B



MIDI
RECEIVE



N	F2	F3	F4	F5
J	250V 4A	250V 630mA	250V 1A	250V 1A
C_A	125V 4A	125V 630mA	125V 1A	125V 1A
E_V_B_S	T3.15A	T630mA	T800mA	T800mA

NOTES

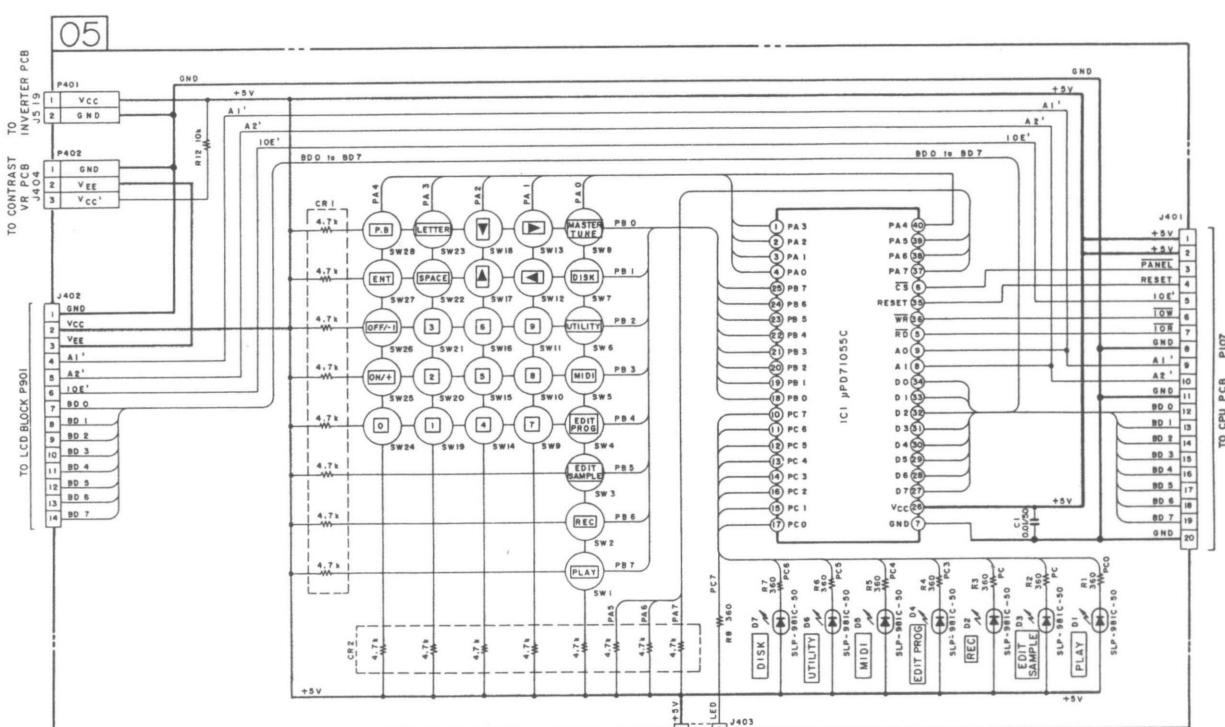
UNLESS OTHERWISE SPECIFIED
ALL RESISTORS IN OHMS 1/4W(J)
ALL CAPACITORS IN μ F 50 WV(J)
(FS) = FAIL SAFE RESISTORS

WARNING: Δ INDICATES SAFETY CRITICAL COMPONENTS. FOR CONTINUED SAFETY,
REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S
RECOMMENDED PARTS.

AVERTISSEMENT: Δ INDIQUE LES COMPOSANTS CRITIQUES DE SÉCURITÉ. POUR
MAINTENIR LA SÉCURITÉ DE L'APPAREIL, NE remplacer les
COMPOSANTS DONT LE Fonctionnement EST CRITIQUE POUR LA SÉCURITÉ
QUE PAR DES PIÈCES RECOMMANDÉES PAR LE FABRICANT

S900
POWER SUPPLY
SCHEMATIC DIAGRAM
NO.6-3 860915A

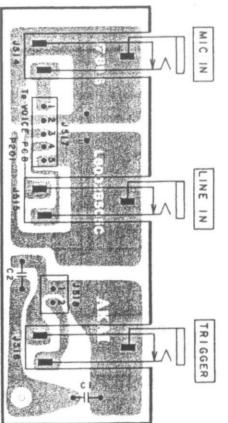
S900



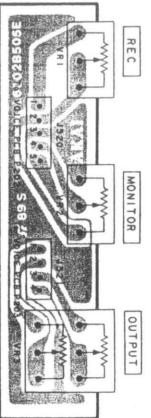
B (POWER SUPPLY) LINE

NOTES
UNLESS OTHERWISE SPECIFIED
ALL RESISTORS IN OHMS 1/4W(J)
ALL CAPACITORS IN μ F 50 WV(J)

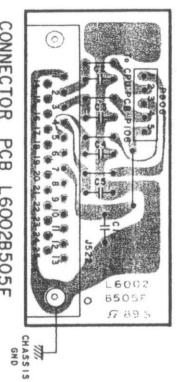
S900 PANEL
SCHEMATIC DIAGRAM
NO.6-4 860917A



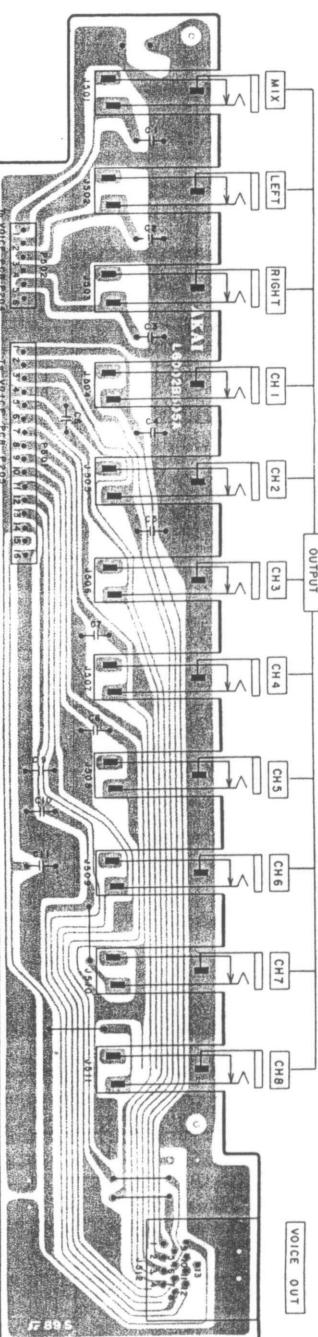
INPUT JACK PCB L6002B505C



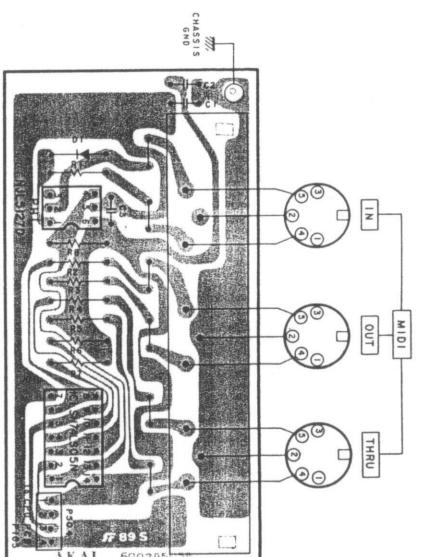
VR PCB L6002B505E



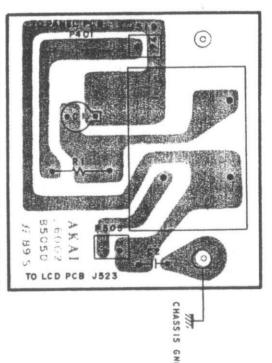
CONNECTOR PCB L6002B505F



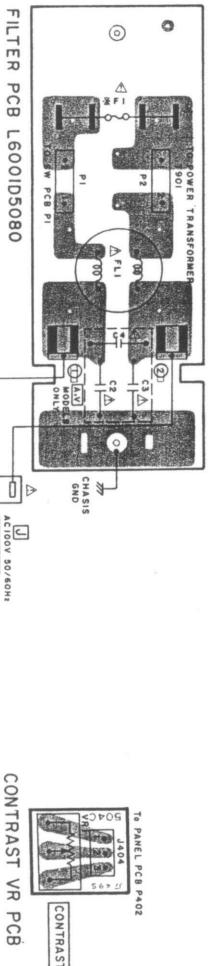
OUTPUT JACK PCB L6002B505A



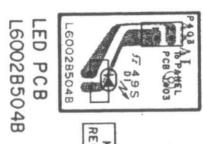
MIDI JACK PCB L6002B505B



INVERTOR PCB L6002B505D

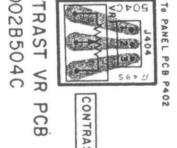


FILTER PCB L6001D5080



LED PCB
L6002B504B

CONTRAST VR PCB
L6002B504C



CONTRAST VR PCB
L6002B504C

AC 120V 60Hz
AC 220/240V 50Hz

AC 120V 60Hz
AC 220/240V 50Hz

AC 120V 60Hz
AC 220/240V 50Hz

WARNING: Δ INDICATES SAFETY CRITICAL COMPONENTS. FOR CONTINUED SAFETY, REPLACE ALL CRITICAL COMPONENTS WITH MANUFACTURER'S RECOMMENDED PARTS.

AVERTISSEMENT: Δ INDIQUE LES COMPOSANTS CRITIQUES DE SÉCURITÉ. POUR MAINTENIR LE DÉGRÉ DE SÉCURITÉ DE L'APPAREIL, NE REMPLACER QUE DES PIÈCES RECOMMANDÉES PAR LE FABRICANT.