PIONEER®
The Art of Entertainment

Service Manual

ORDER NO.
RRV1374

CD CDV LD PLAYER
CLD-V760

● Refer to the service manual RRV1310 for CLD-V760/KC.

THIS MANUAL IS APPLICABLE TO THE FOLLOWING MODEL(S) AND TYPE(S).

Type	Model	Power Requirement	Remarks
	CLD-V760		
KU	O	AC120V	

CONTENTS

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1. CONTRAST OF MISCELLANEOUS PARTS

NOTES:

- *Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *Parts marked by "◉" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.*
- *When ordering resistors, first convert resistance values into code form as shown in the following examples.*

Ex.1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J = 5%, and K = 10%).

560Ω	→	*56 × 10¹* →	*561*	*RD1/8PM[5][6][1]J*
47kΩ	→	*47 × 10³* →	*473*	*RD1/4PS[4][7][3]J*
0.5Ω	→	*0R5*		*RN2H[0][R][5]K*
1Ω	→	*010*		*RS1P[0][1][0]K*

Ex.2 When there are 3 effective digits (such as in high precision metal film resistors).

5.62kΩ	→	*562 × 10¹* →	*5621*	*RN1/4PC[5][6][2][1]F*

CLD-V760/KU and CLD-V760/KC have the same construction except for the following:

Mark	Symbol & Description	Part No.		Remarks
		CLD-V760/KC	CLD-V760/KU	
	MOTHER ASSY	VWS1201	VWS1237	
	FLKB ASSY	VWG1634	VWG1718	
	KALB ASSY	VWG1636	VWG1666	
	GYCB ASSY	Not used	VWV1434	No.1
	Rear panel (L)	VNA1593	VNA1631	
	Decoration panel	VNK3404	VNK3545	
	L key B	Not used	VNK3379	No.2
	CD door ASSY	VXA2250	VXA2235	
	65 label	Not used	ORW1069	No.3
	Operating instructions (English / French)	VRD1035	Not used	
	Operating instructions (English)	Not used	VRB1160	
	Remote control unit	VXX2280	VXX2390	
NSP	Warranty card	ARY1039	ARY1044	
	Packing case	VHG1462	VHG1532	

Note : The numbers in the remarks column correspond to the numbers on the exploded diagram.
Refer to "EXPLODED VIEWS".

FLKB ASSY

VWG1718 and VWG1634 have the same construction except for the following:

Mark	Symbol & Description	Part No.		Remarks
		VWG1634	VWG1718	
	R120	Not used	RD1/6PM102J	*
	R121	Not used	RD1/6PM361J	*

Note *: Refer to 2. SCHEMATIC AND PCB CONNECTION DIAGRAMS.

KALB ASSY

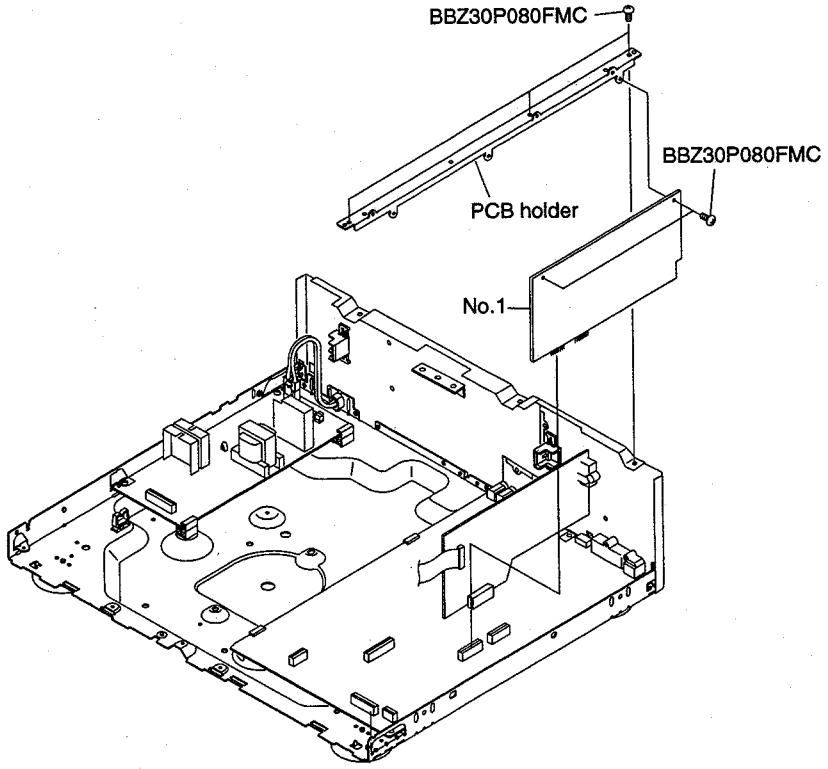
VWG1666 and VWG1636 have the same construction except for the following:

Mark	Symbol & Description	Part No.		Remarks
		VWG1636	VWG1666	
	D207	Not used	SLR-342MCT31	*
	R207	Not used	RD1/6PM181J	*
	S207	Not used	VSG1008	*

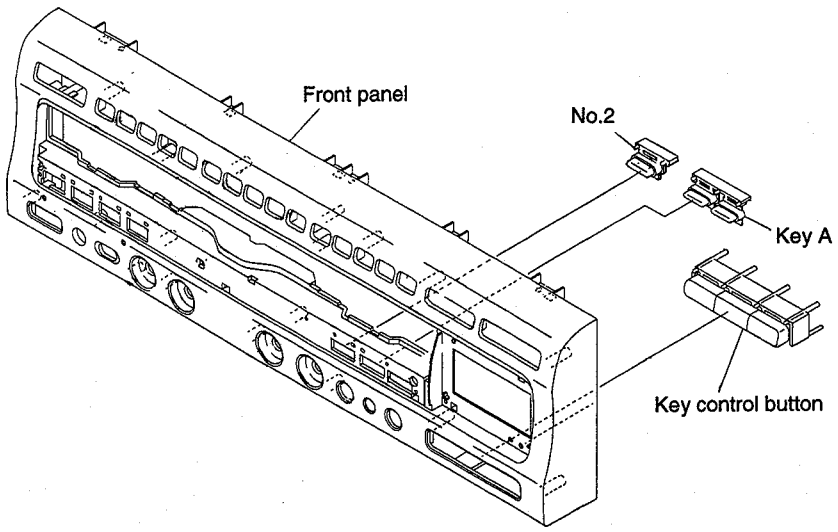
Note *: Refer to 2. SCHEMATIC AND PCB CONNECTION DIAGRAMS.

■ EXPLODED VIEWS

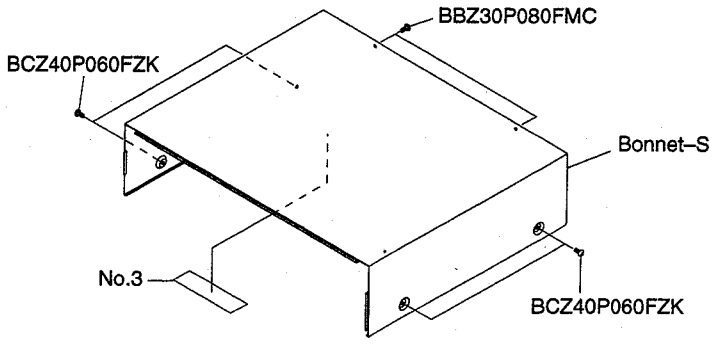
● TOP VIEW SECTION



● FRONT PANEL SECTION



● EXTERIOR AND DISC TRAY SECTION



■ PCB PARTS LIST

Mark	No.	Description	Parts No.
● MOTHER ASSY (VWS1237)			
SEMICONDUCTORS			
	IC904		BA10393F
	IC202, IC205, IC903, IC905		BA4560F
	IC351		CA0002AM
	IC803		LA6510
	IC802		LC78681KE
	IC206		NJM78L08A
	IC207		NJM79L08A
	IC801		PAC002A
	IC901		PAC003A
	IC400		PAC005B
	IC500		PD0192A
	IC101		PD0196D
	IC201		PD2026B(L)
	IC902		TA8410AK
	IC501		TC7S04F
	Q102, Q916		2PB709A
	Q201, Q202, Q451, Q475, Q805		2PD601A
	Q840, Q903, Q904, Q907, Q908		2PD601A
	Q915, Q917		2PD601A
	Q834		2SA854S
	Q411, Q803		2SC2412K
	Q152		2SC3802K
	Q204, Q205, Q231		2SD2144S
	Q208, Q209		UN2112
	Q103, Q207, Q901, Q910		UN2212
	D202		11EQS06
	D102, D180, D203, D204, D801		1SS254
	D901, D902, D905, D963		1SS254
	D201		KV1851
	D110		MTZJ5.1B
COILS AND FILTERS			
	L413		LAU100J
	L410		LAU101J
	L351, L802 – L804		LAU181J
	L202, L204, L205, L352, L412		LAU220J
	L461, L470, L800, L801		LAU220J
	L411, L571		LAU270J
	L420, L421, L580		LAU430J
	L462		LAU560J
	L414		LAU8R2J
	L460		LFA561J
	F501		VTF1055
	F575		VTH1005
	L200, L201, L590		VTH1020
SWITCH			
	S12		VSH1009
CAPACITORS			
	C562		CCSQCH050C50
	C436, C809, C811		CCSQCH070D50
	C159, C420, C421, C438, C466		CCSQCH100D50
	C583		CCSQCH100D50
	C258, C259, C370, C810, C846		CCSQCH101J50
	C848, C944		CCSQCH101J50
	C437, C474		CCSQCH120J50
	C416		CCSQCH121J50
	C415, C418, C434, C475		CCSQCH150J50
	C161, C353, C812		CCSQCH151J50
	C352, C552		CCSQCH180J50
	C220, C232, C579, C813, C950		CCSQCH220J50
	C162, C417, C591, C935		CCSQCH221J50
	C371, C419, C433, C467, C931		CCSQCH270J50
	C106, C107, C354, C435, C452		CCSQCH330J50
	C553, C563, C580		CCSQCH330J50
	C351, C425, C476		CCSQCH390J50
	C260 – C263, C464, C468		CCSQCH470J50
	C787		CCSQCH471J50
	C375, C561, C806		CCSQCH680J50
	C374, C814		CCSQCH820J50
	C460, C462		CCSQCH910J50
	C439		CEAL100M16
	C836		CEAL470M16
	C450, C838		CEALNP470M6R3
	C972		CEANP220M10
	C227, C281, C904		CEAS010M50
	C228, C274, C275, C367		CEAS100M50
	C364, C424, C917		CEAS101M10
	C922, C967		CEAS220M25
	C845, C902, C926		CEAS2R2M50
	C101, C207, C225, C226		CEAS470M10
	C252, C253, C256, C270, C271		CEAS470M10
	C279, C363, C369, C412, C484		CEAS470M10
	C491, C493, C530, C534, C538		CEAS470M10
	C550, C572, C585, C588, C801		CEAS470M10
	C803, C833, C842, C844, C893		CEAS470M10
	C927, C933, C974, C975		CEAS470M10
	C255, C257		CEAS471M10
	C850, C870		CEAS4R7M50
	C368, C913, C943		CEASR47M50
	C968, C987		CEHAQ220M50
	C490, C891, C907, C914, C936		CKSQYB102K50
	C919		CKSQYB332K50
	C361, C362		CKSQYB392K50
	C355 – C358, C377, C909		CKSQYB472K50
	C104, C110, C160, C196 – C198		CKSQYF103Z50
	C213 – C215, C231, C234, C251		CKSQYF103Z50
	C254, C286, C288, C372, C373		CKSQYF103Z50
	C376, C413, C451, C454, C485		CKSQYF103Z50
	C531 – C533, C539, C570, C571		CKSQYF103Z50
	C577, C578, C581, C589, C788		CKSQYF103Z50
	C802, C804, C807, C831, C832		CKSQYF103Z50
	C834, C835, C843, C872, C876		CKSQYF103Z50
	C888, C892, C894, C918		CKSQYF103Z50
	C928, C929, C932, C937, C938		CKSQYF103Z50
	C941, C961, C962, C964, C971		CKSQYF103Z50
	C982		CKSQYF103Z50
	C102, C103, C122, C151		CKSQYF104Z25
	C284, C285, C305, C365, C366		CKSQYF104Z25

Mark	No.	Description	Parts No.
	C422, C423, C453, C457, C458		CKSQYF104Z25
	C492, C494, C551, C574, C582		CKSQYF104Z25
	C587, C592, C840, C841, C847		CKSQYF104Z25
	C873, C874, C901, C910 – C912		CKSQYF104Z25
	C915, C976, C981, C983		CKSQYF104Z25
	C837, C921, C930		CKSQYF223Z50
	C359, C360, C905, C951		CKSQYF224Z25
	C280		CKSQYF333Z25
	C465, C808, C815, C875, C877		CKSQYF473Z25
	C924, C925		CKSQYF473Z25
	C942		CQMA103J50
	C920		CQMA104J50
	C278, C282		CQMA152J50
	C479, C908		CQMA154J50
	C903		CQMA222J50
	C973		CQMA224J50
	C934		CQMA681J50
	C483, C923		CQMA683J50
	C871	(10μF, 16V)	VCH1152
	VC901		VCM – 008
RESISTORS			
	R521		RD1/6PM100J
	R581		RD1/6PM103J
	R259, R260		RD1/6PM183J
	R420		RD1/6PM470J
	R261, R262		RD1/6PM473J
	R619, R625		RN1/10SC750D
	R490, R987, R989		RN1/10SE103D
	R986, R990		RN1/10SE333D
	VR450	(2.2KΩ, 0.1W)	PCP1025
	VR603	(4.7KΩ, 0.1W)	PCP1028
	VR604, VR607, VR612	(47KΩ, 0.1W)	PCP1031
		Other Resistors	RS1/10S□□□J
OTHERS			
	CN101	10P FFC Connector	52045 – 1045
	CN102, CN104	21P FFC Connector	52045 – 2145
	CN103	23P FFC Connector	52233 – 2310
	CN106	11P Top post	B11P – SHF – 1AA
	CN110, CN203	B to B connector 20P	BTFN20S – 3SB7
	CN113	B to B connector 6P	BTFN6S – 3SB7
	JA3, JA4	Remote control jack	RKN1004
		PCB Binder	VEF1040
	JA15	1P Pin jack	VKB1063
	JA6	4P Pin jack	VKB1065
	JA13	RF Pin jack	VKB1068
		Screw terminal	VNE1948
	KN101, KN102	Earth metal fitting	VNF1084
	X101	Ceramic resonator	VSS1040
	X201	Crystal resonator(16MHZ)	VSS1057
	X550	Crystal resonator	VSS1073

Mark	No.	Description	Parts No.
● GYCB ASSY (VWV1434)			
SEMICONDUCTORS			
	IC104		LC32464P – 80
	IC106		MC14577CP
	IC105		PD0198A
	IC103		PDC016A
	Q170, Q171		2PD601A
COILS			
	L105, L106		LFA220J
	L107		LFA4R7J
CAPACITORS			
	C180		CCSQCH060D50
	C201 – C204		CCSQCH150J50
	C181, C182		CCSQCH220J50
	C184		CCSQCH330J50
	C183		CCSQCH680J50
	C186, C188		CEAL470M6R3
	C136, C138, C170, C172, C175		CEAS470M10
	C177, C178, C190		CEAS470M10
	C135, C137, C150, C171		CKSQYF103Z50
	C173, C174, C176, C179, C185		CKSQYF103Z50
	C187, C189, C191, C205, C206		CKSQYF103Z50
	C192		CKSQYF104Z25
RESISTORS			
	R118		RS1/10S112F
	R119		RS1/10S123F
	R190		RS1/10S132F
	R121		RS1/10S222F
	R123		RS1/10S301F
	R172		RS1/10S681F
		Other Resistors	RS1/10S□□□J
OTHERS			
	CN101	B to B connector 20P	BTFN20P – 3RD7
	CN102	B to B connector 6P	BTFN6P – 3RD7
		Screw terminal	VNE1948

2. SCHEMATIC AND PCB CONNECTION DIAGRAMS

NOTE FOR SCHEMATIC DIAGRAMS (Type 4A)

1. **When ordering service parts, be sure to refer to "PARTS LIST of EXPLODED VIEWS" or "PCB PARTS LIST".**
2. **Since these are basic circuits, some parts of them or the values of some components may be changed for improvement.**
3. **RESISTORS:**
   Unit: k:kΩ, M:MΩ, or Ω unless otherwise noted.
   Rated power: 1/4W, 1/6W, 1/8W, 1/10W unless otherwise noted.
   Tolerance: (F): ±1%, (G): ±2%, (K): ±10%, (M): ±20% or ±5% unless otherwise noted.
4. **CAPACITORS:**
   Unit: p:pF or μF unless otherwise noted.
   Ratings: capacitor (μF)/ voltage (V) unless otherwise noted.
   Rated voltage: 50V except for electrolytic capacitors.
5. **COILS:**
   Unit: m:mH or μH unless otherwise noted.
6. **VOLTAGE AND CURRENT:**
   ▭ or ← V :
   DC voltage (V) in PLAY mode unless otherwise noted.
   ⇦ mA or ← mA :
   DC current in PLAY mode unless otherwise noted.
   Value in ( ) is DC current in STOP mode.
7. **OTHERS:**
   - ⊘ or ⊘ : Adjusting point.
   - : Measurement point.
   - The ⚠ mark found on some component parts indicates the importance of the safety factor of the parts. Therefore, when replacing, be sure to use parts of identical designation.
8. **SCH—□ ON THE SCHEMATIC DIAGRAM:**
   - SCH—□ indicates the drawing number of the schematic diagram. (SCH stands for schematic diagram.)
9. **SWITCHES** (Underline indicates switch position):

LMSB ASSY
- S101 : SW1
- S102 : SW2
- S103 : SW3

PKSB ASSY
- S104 : OUTER
- S105 : INNER

FLKB ASSY
- S101 : STOP
- S102 : PLAY
- S103 : CD
- S104 : LD
- S105 : FLAT
- S106 : NATURAL
- S107 : SHARP

KALB ASSY
- S201 : POWER ON
- S202 : SINGLE PLAY
- S203 : VOCAL PARTNER
- S204 : ONE TOUCH KARAOKE
- S205 : GUIDE VOCAL
- S207 : GRAPHICS
- S208 : COMPETITION
- S209 : SCORING

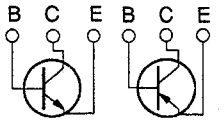
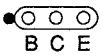
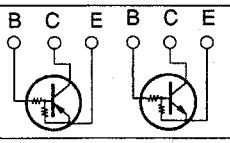
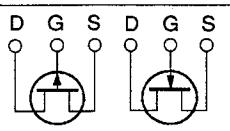
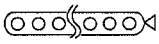
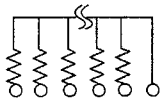
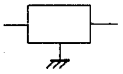
DIKB ASSY
- S301 : ⏮
- S302 : ⏭
- S303 : 1
- S304 : 2
- S305 : 3
- S306 : 4
- S307 : 5
- S308 : 6
- S309 : 7
- S310 : 8
- S311 : 9
- S312 : 10
- S313 : 11
- S314 : 12
- S315 : 13
- S316 : 14
- S317 : 15

VRSB ASSY
- S601 : MODE SELECTION

MOTHER ASSY
- S12 : ATTENUATOR

NOTE FOR PCB DIAGRAMS:

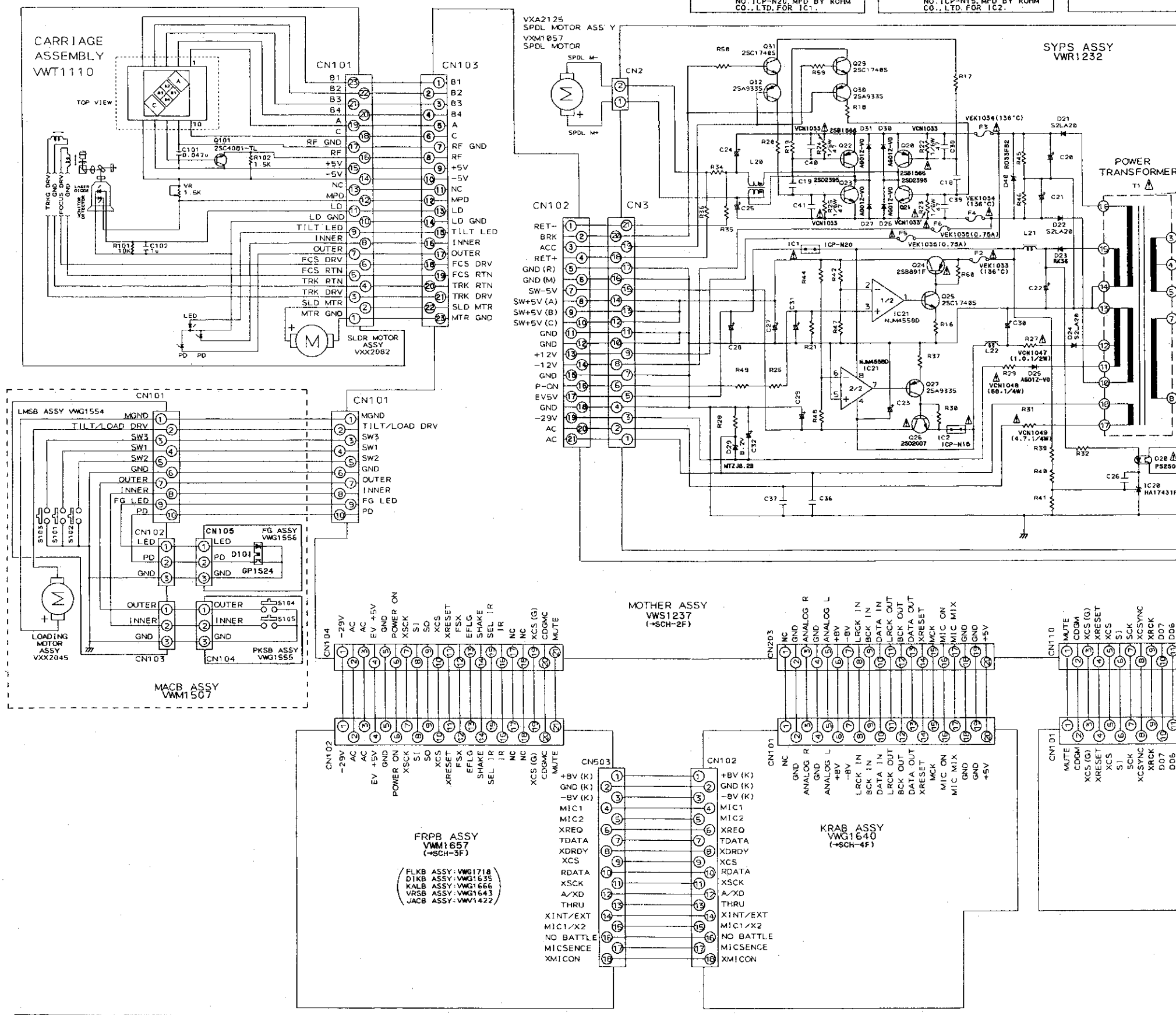
1. Part numbers in PCB diagrams match those in the schematic diagrams.
2. A comparison between the main parts of PCB and schematic diagrams is shown below.

Symbol in PCB Diagrams	Symbol in Schematic Diagrams	Part Name
		Transistor
		Transistor with resistor
		Field effect transistor
		Resistor array
		3- terminal regulator

3. The parts mounted on this PCB include all necessary parts for several destinations.
   For further information for respective destinations, be sure to check with the schematic diagram.

2.1 OVERALL CONNECTIONS, SYPS, LMSB, FG, PKSB AND CARRIAGE ASSEMBLIES

● NOTE FC



SCH-1F OVERALL CONNECTIONS, SYPS ASSY, LMSB ASSY, FG ASSY, PKSB ASSY, CARRIAGE ASSY

● NOTE FOR FUSE REPLACEMENT

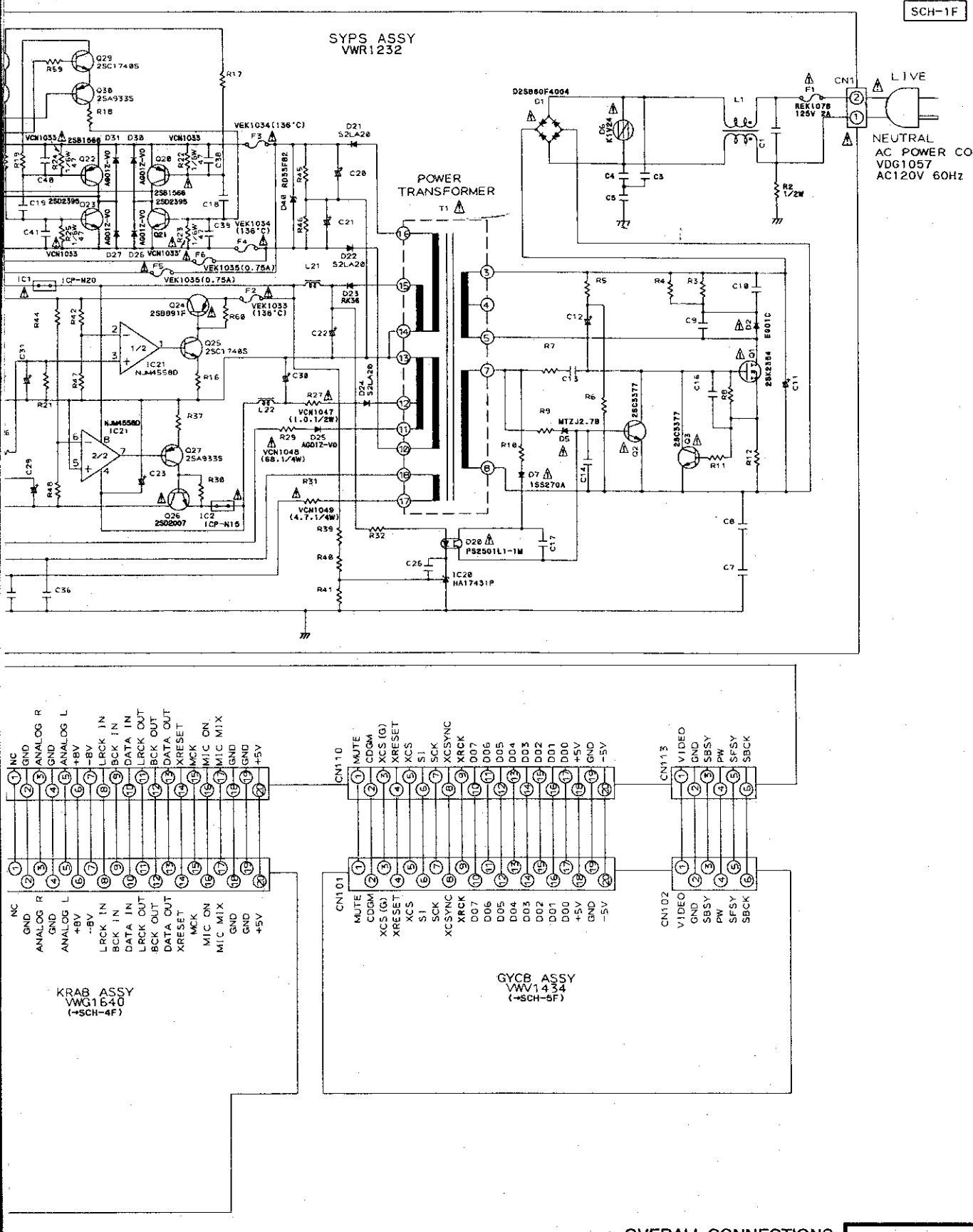
INUED PROTECTION
RISK OF FIRE,
WITH SAME TYPE
20, MFD BY ROHM
FOR IC1.

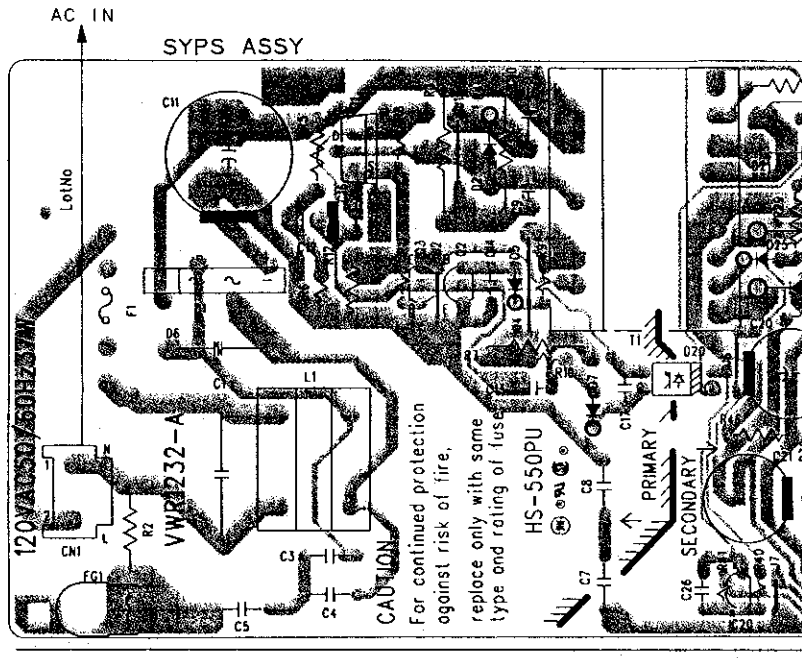
CAUTION: FOR CONTINUED PROTECTION AGAINST RISK OF FIRE, REPLACE WITH SAME TYPE NO. ICP-N15, MFD BY ROHM CO., LTD. FOR IC2.

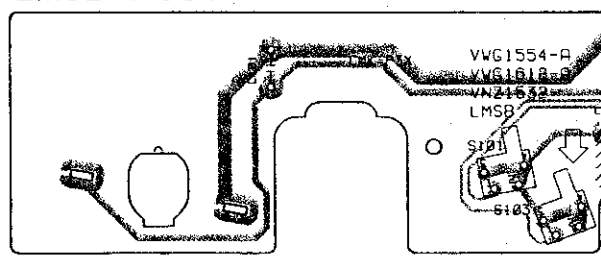
CAUTION — FOR CONTINUED PROTECTION AGAINST RISK OF FIRE, REPLACE ONLY WITH SAME TYPE AND RATINGS ONLY.

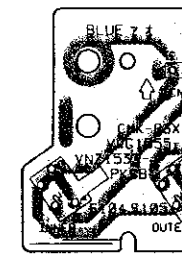
SCH-1F

● This diagram is viewed from the m









KRAB ASSY
VWG1640
(→SCH-4F)

GYCB ASSY
VWV1434
(→SCH-5F)

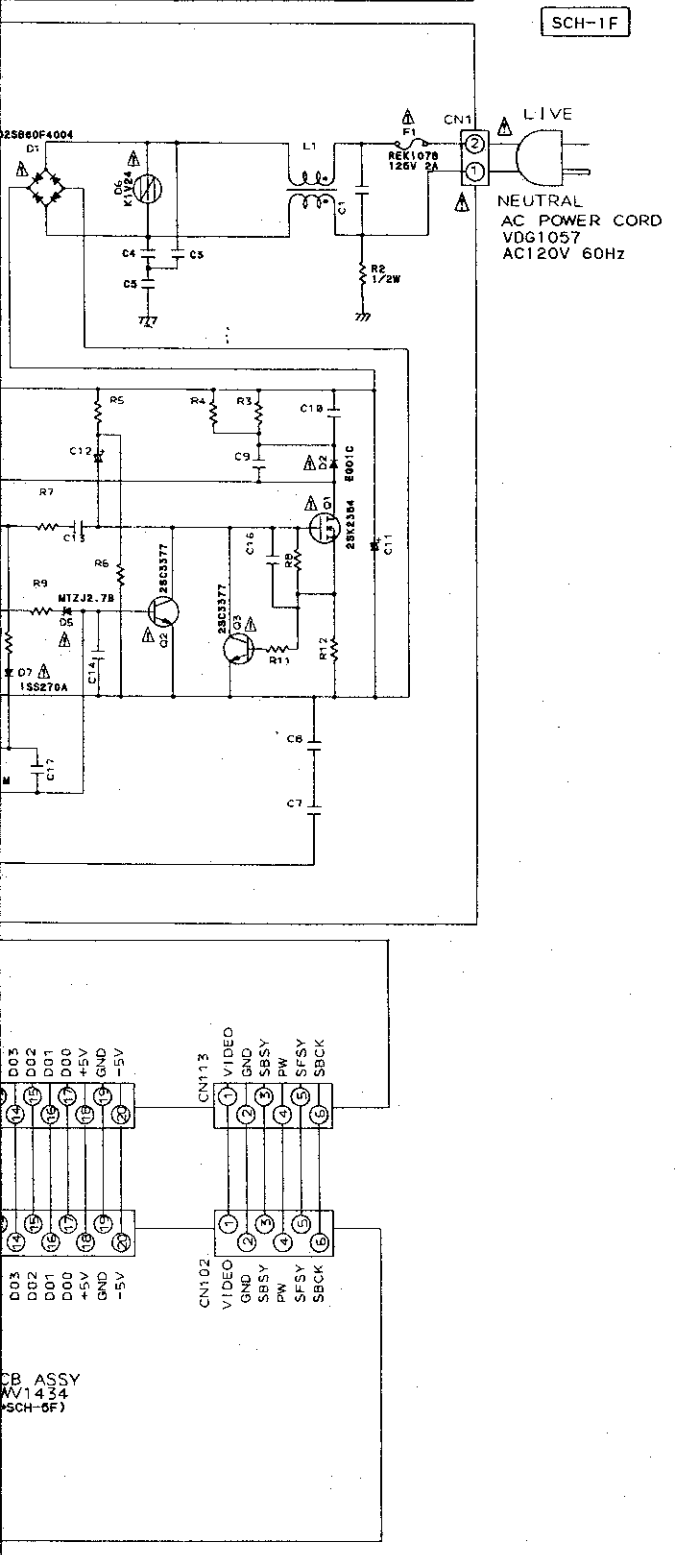
OVERALL CONNECTIONS,
SYPS ASSY, LMSB ASSY, FG ASSY,
PKSB ASSY, CARRIAGE ASSY

SCH-1F

FUSE REPLACEMENT

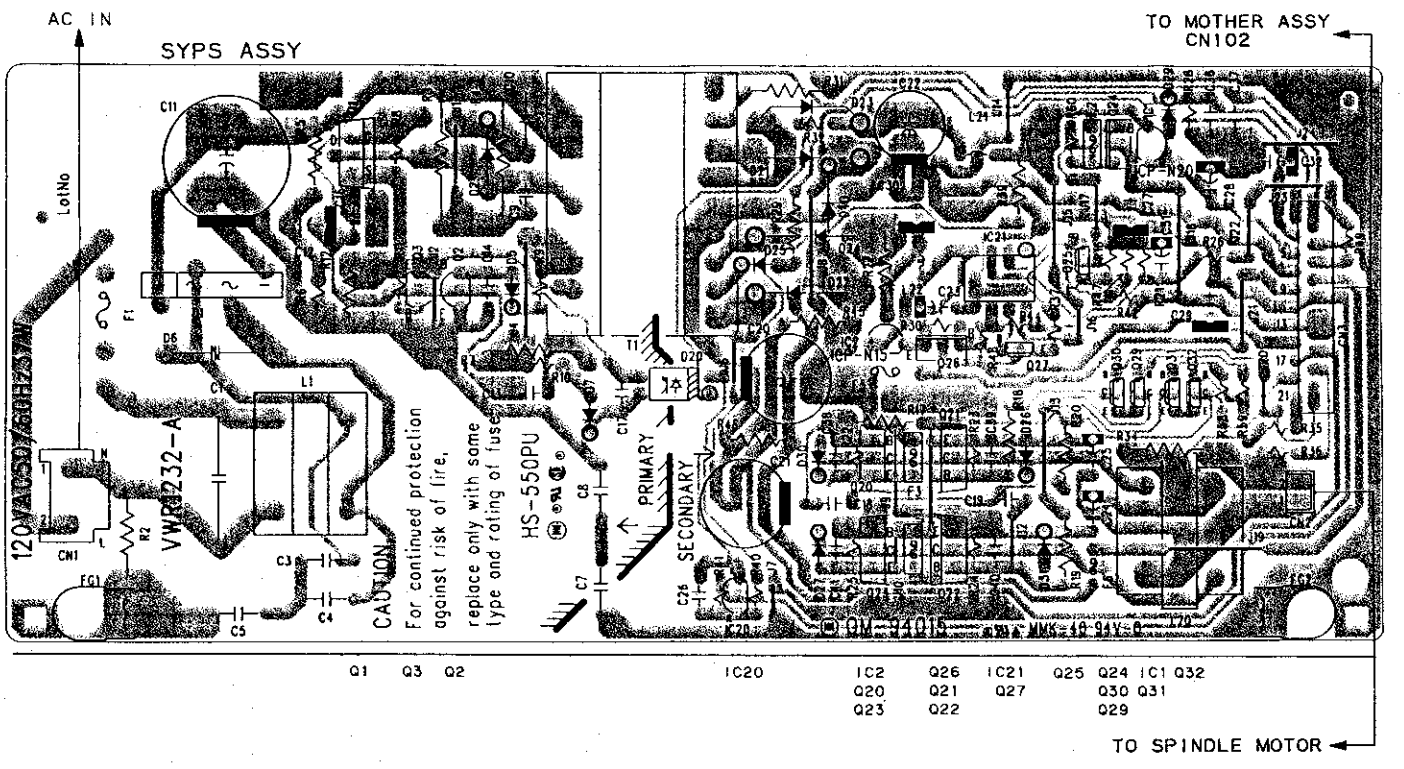
R CONTINUED PROTECTION AGAINST RISK OF FIRE,
PLACE ONLY WITH SAME TYPE AND RATINGS ONLY.

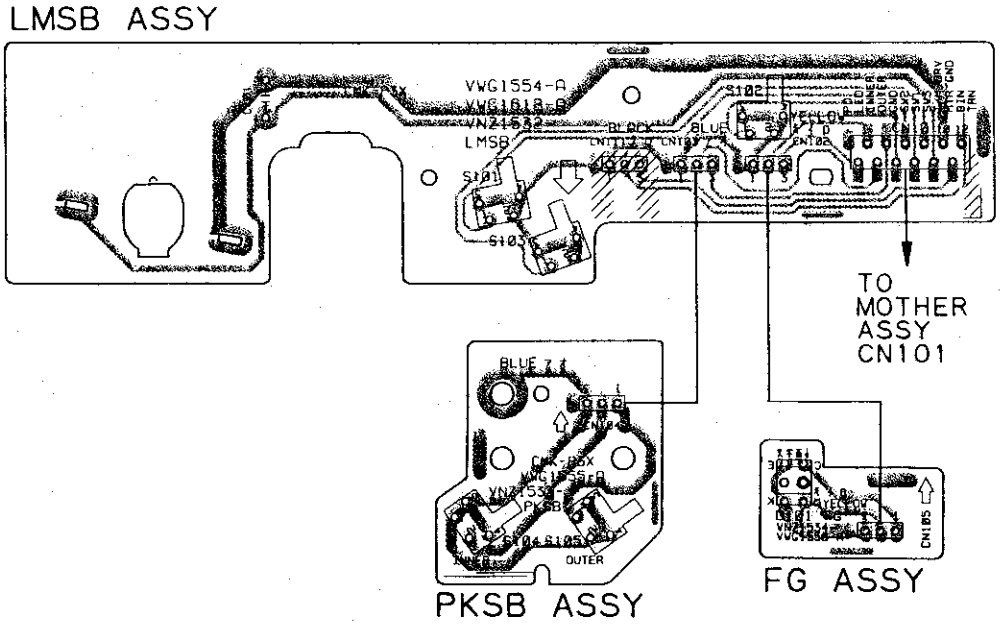
SCH-1F



● This diagram is viewed from the mounted parts side.

PCB-1F



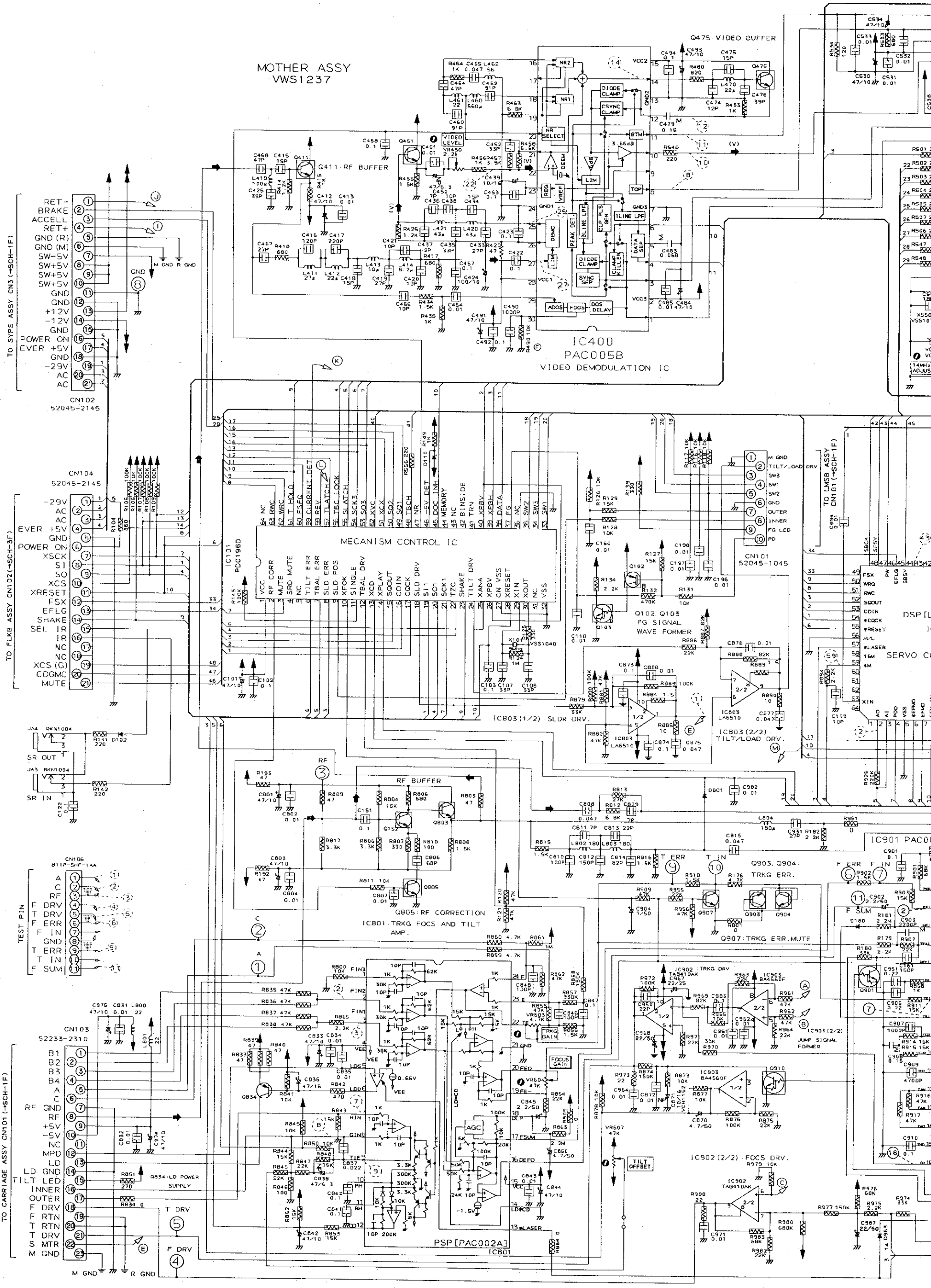


VNP1479-E

OVERALL CONNECTIONS,
SYPS ASSY, LMSB ASSY, FG ASSY,
PKSB ASSY, CARRIAGE ASSY

SCH-1F

2.2 MOTHER ASSEMBLY



SCH-2F MOTHER ASSY

Q475 : VIDEO BUFFER

IC500 : DIGITAL VIDEO PROCESSOR

: RF SIGNAL LINE
(V) : VIDEO SIGNAL LINE
(D) : AUDIO SIGNAL LINE (D
(A) : AUDIO SIGNAL LINE (A

IC500 PD0192A

IC501 TC7S04F

TO GYCB ASSY CN101 (→SCH-5F)

IC400 PAC005B DEMODULATION IC

TO LMSB ASSY CN101 (→SCH-1F)

TO KRAB ASSY CN101 (→SCH-4F)

CN101 52045-1045

Q102, Q103 : FG SIGNAL WAVE FORMER

CN203 BTFN20S-3SB7

DSP [LC78681KE] IC802 SERVO CONTROL IC

IC201 PD20268(L) D/A CONVERTER

Q201, Q202, Q208 DIG/ANA SWITCH

IC202 : LOW PASS

IC803 (2/2) TILT/LOAD DRV.

Q231 : MIC ON/OFF SW

Q917 LIMITTER

Q908 : GAIN CONTROL

IC901 PAC003A

Q903, Q904 : TRKG ERR.

Q907 : TRKG ERR.MUTE

IC902 : TRKG DRV.

IC902 (2/2) : FOCS DRV.

IC903 (2/2) : JUMP SIGNAL FORMER

2SC3802K	Q152
2PB709A Q/R	Q102 916
2PD601A Q/R	Q201 202 451 475 805 840 903 904 907 Q908 915 917
2SC2412K Q/R	Q411 803
UN2112	Q208 209
UN2212	Q103 207 901 910
2SD2144S U/V	Q204 205 231
2SA854S Q/R	Q834
KV1851	D201
11EQ506	D202
1SS254	D102 180 203 204 801 901 D902 905 963
MTZJ5.1B	D110

SCH-2F

: RF SIGNAL LINE
(V) : VIDEO SIGNAL LINE
(D) : AUDIO SIGNAL LINE (Digital)
(A) : AUDIO SIGNAL LINE (Analog)

IC500 DIGITAL VIDEO PROCESSOR

IC500 PD0192A

IC501 TC7SO4F

TO GYCB ASSY CN101 (→SCH-5F)

TO GYCB ASSY CN102 (→SCH-5F) (V)

CN110 BTFN20S-3SB7

CN113 BTFN6S-3SB7

JA13 VKB1068

JA15 VKB1063

TO KRAB ASSY CN101 (→SCH-4F)

CN203 BTFN20S-3SB7

Q201, Q202, Q208 DIG/ANA SWITCH

IC201 PD2026B(L) D/A CONVERTER

IC202 LOW PASS FILTER

Q204, Q205, Q207, Q209 MUTE SWITCH

IC205 HEAD PHONE AMP.

Q231 : MIC ON/OFF SW

Q917 LIMITTER Q908 GAIN CONTROL

IC351 FM AUDIO DECODER

2SC3802K	Q152	
2PB709A Q/R	Q102	916
2PD601A Q/R	Q201 202 451 475 805 840 903 904 907 Q908 915 917	
2SC2412K Q/R	Q411 803	
UN2112	Q208 209	
UN2212	Q103 207 901 910	
2SD2144S U/V	Q204 205 231	
2SA854S Q/R	Q834	
KV1851	D201	
11EQS06	D202	
1SS254	D102 180 203 204 801 901 D902 905 963	
MTZJ5.1B	D110	

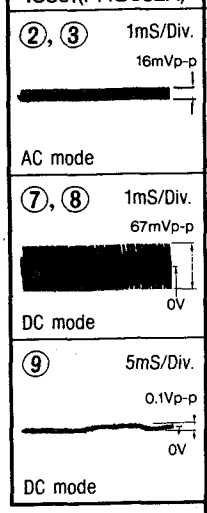
MOTHER ASSY SCH-2F

WAVEFORMS AND VOLTAGE
MOTHER ASSEMBLY

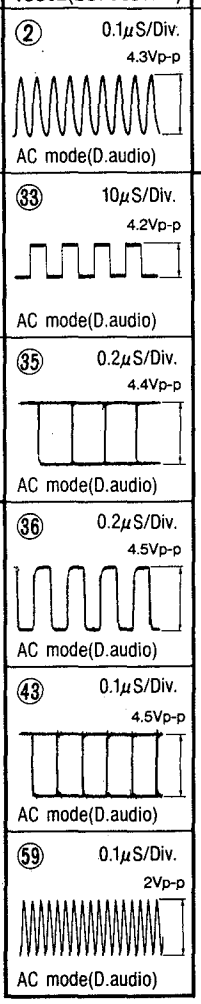
Note: (No.) in the table correspond to the pin number.

Measurement condition: In case when (D.audio) is written, at time when disc that has digital audio recording is played.

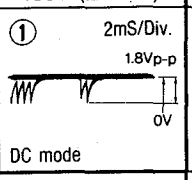
IC801(PAC002A)



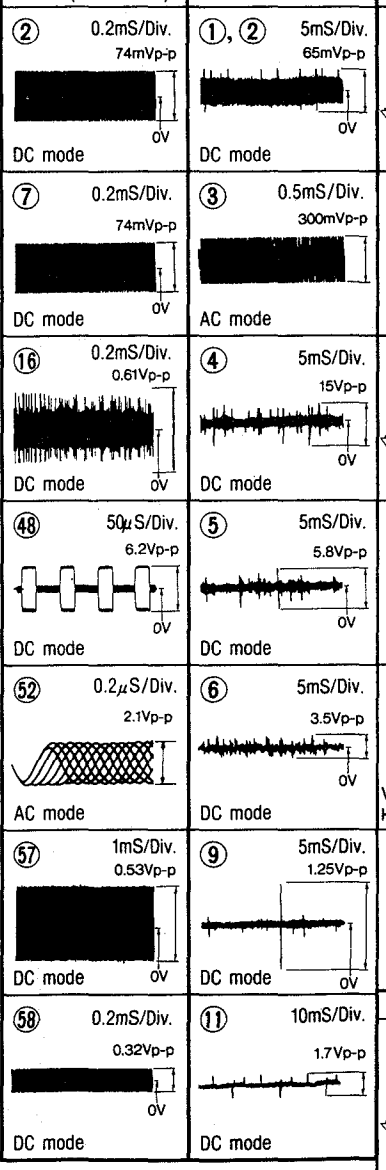
IC802(LC78681KE)



IC803(LA6510)

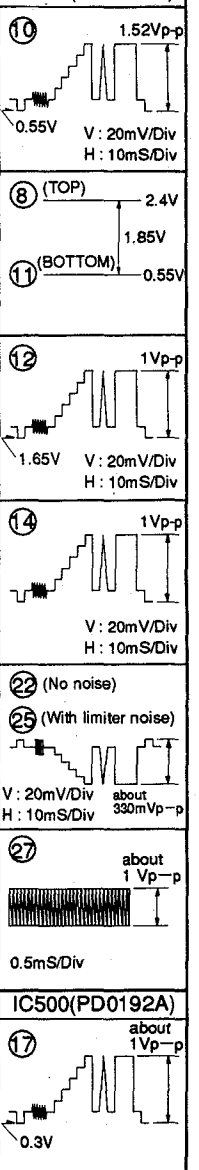


IC901(PAC003A)



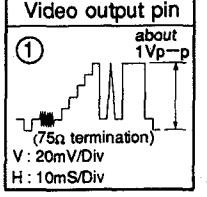
CN106

IC400 (PAC005B)

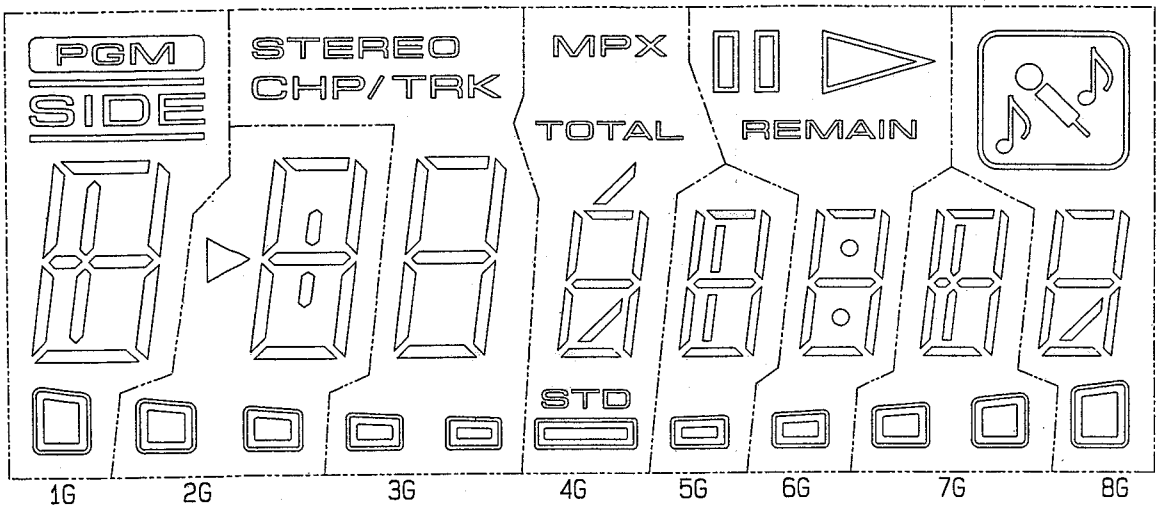


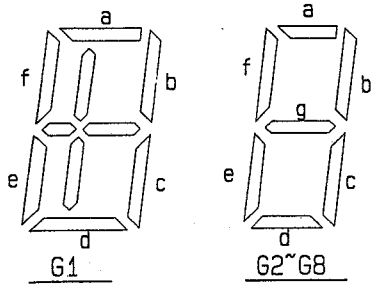
IC500(PD0192A)

Video output pin



● FL INFORMATION (V101, VAW1039)





ANODE GRID ASSIGNMENT & PIN ASSIGNMENT

	G1	G2	G3	G4	G5	G6	G7	G8
S1	a	a	a	a	a	a	a	a
S2	b	b	b	b	b	b	b	b
S3	c	c	c	c	c	c	c	c
S4	d	d	d	d	d	d	d	d
S5	e	e	e	e	e	e	e	e
S6	f	f	f	f	f	f	f	f
S7	g	g	g	g	g	g	g	g
S8			STEREO	(Upper)				
S9			CHP/TRK	(Lower)				
S10	PGM	(R)	(R)	MPX			(R)	
S11	SIDE	(L)	(L)	TOTAL		REMAIN	(L)	
S12		(R)	(R)	STD			(R)	
S13		(L)	(L)				(L)	

PIN ASSIGNMENT

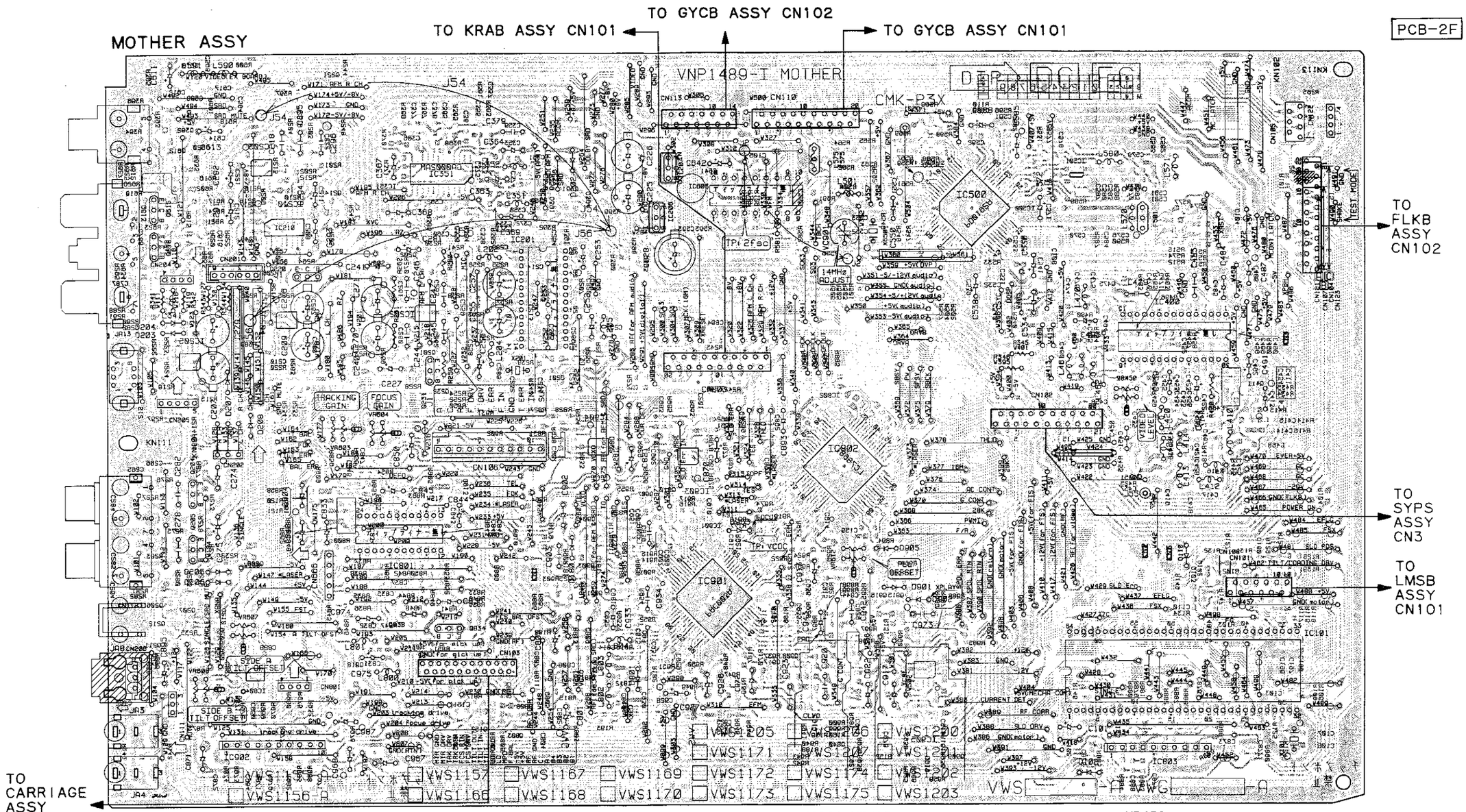
Pin No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Assignment	F	F	NP	S13	S12	S11	S10	S9	S8	S7	S6	S5	S4	S3	S2	S1	G1	G2	G3	G4

Pin No.	21	22	23	24	25	26	27
Assignment	G5	G6	G7	G8	NP	F	F

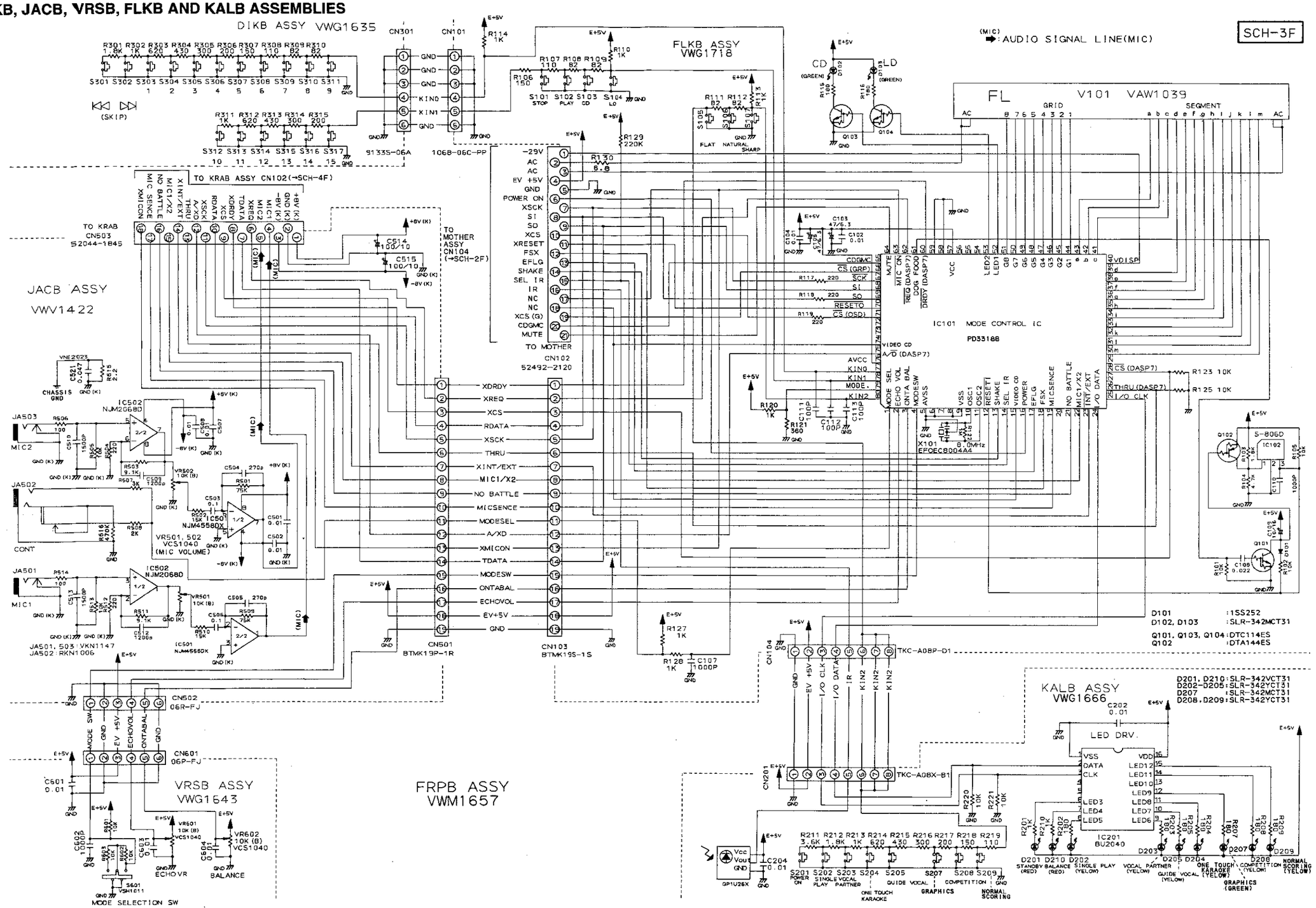
F:Filament G1~G8:Grid S1~S13:Anode NP:No pin

● This diagram is viewed from the mounted parts side.

PCB-2F



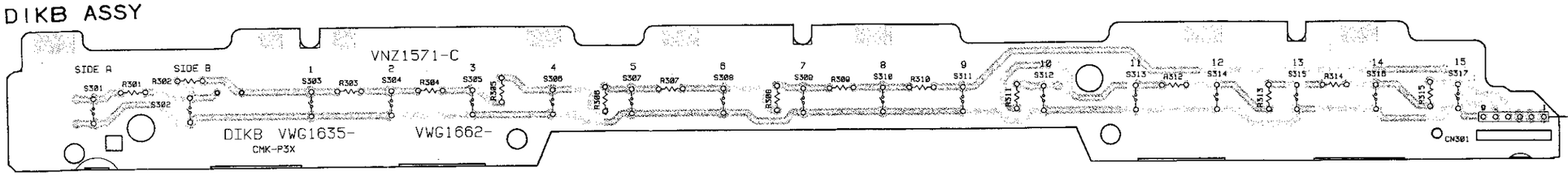
2.3 DIKB, JACB, VRSB, FLKB AND KALB ASSEMBLIES



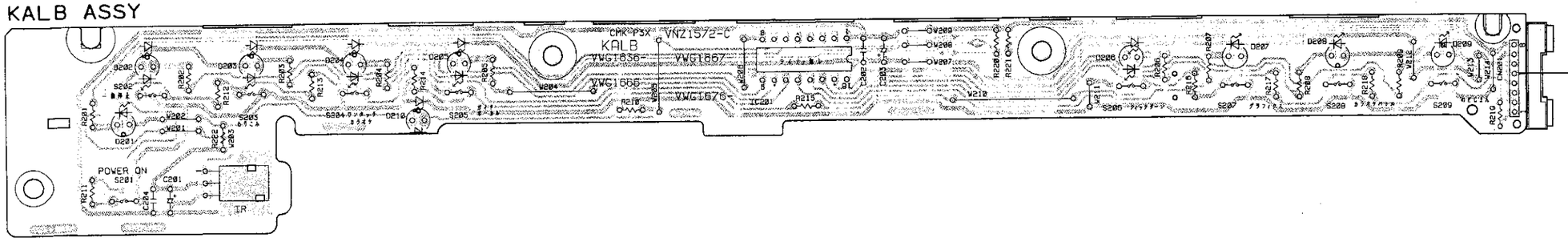
● This diagram is viewed from the mounted parts side.

PCB-3F

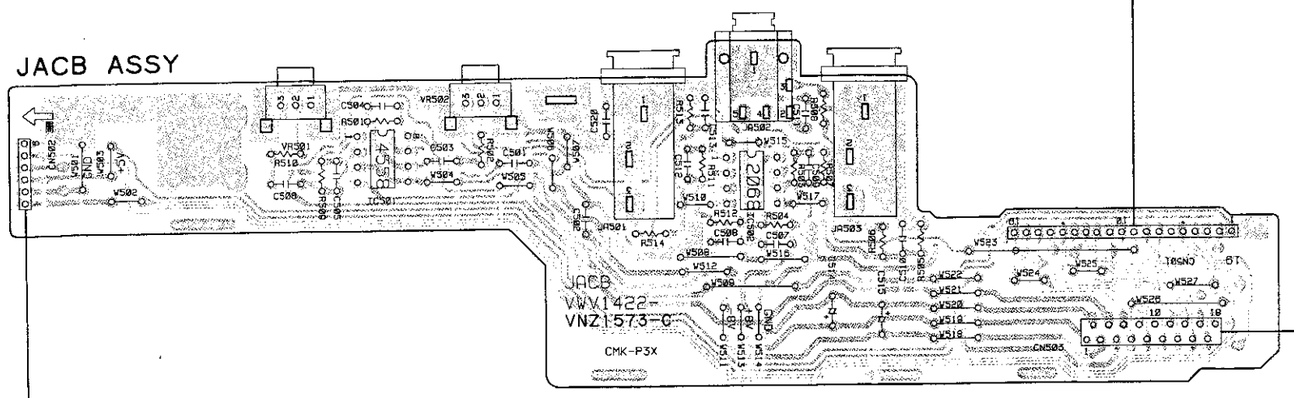
DIKB ASSY



KALB ASSY



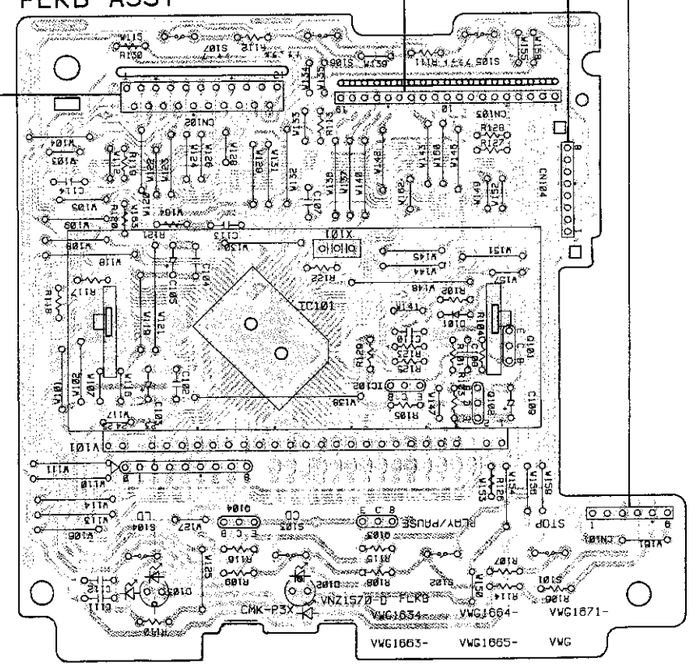
JACB ASSY



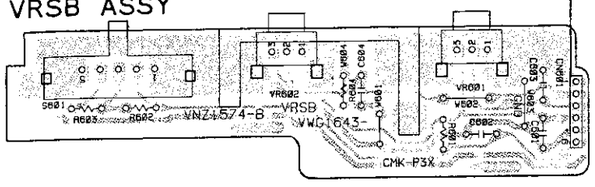
TO MOTHER ASSY CN104

TO KRAB ASSY CN102

FLKB ASSY

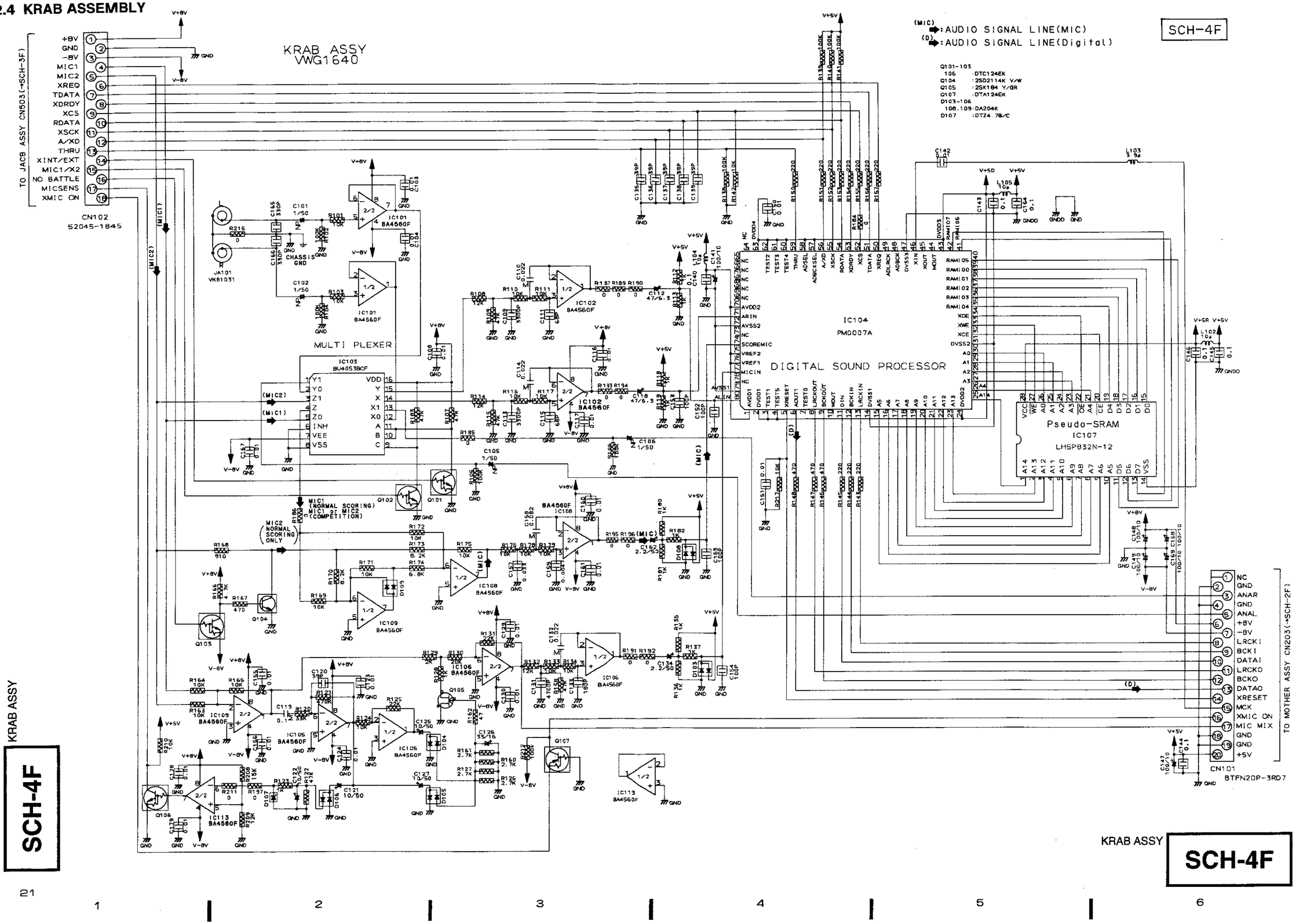


VRSB ASSY



VNP1512-D

2.4 KRAB ASSEMBLY



KRAB ASSY SCH-4F

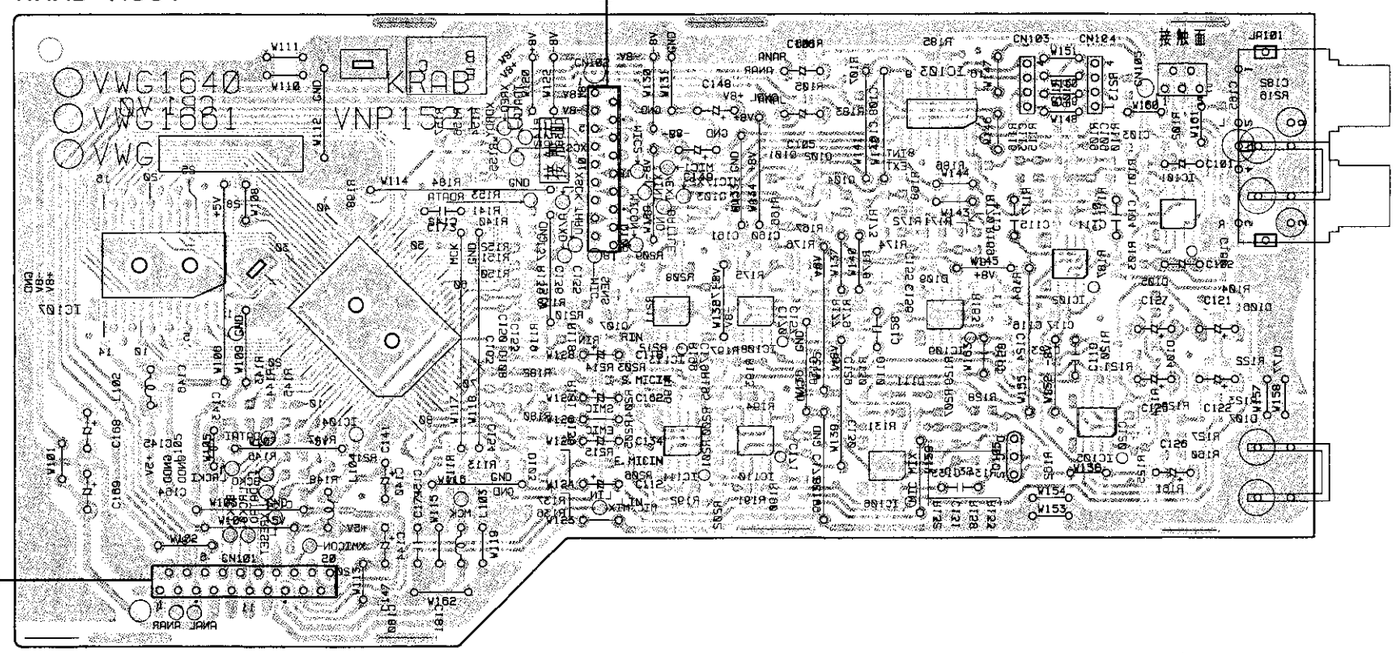
KRAB ASSY SCH-4F

● This diagram is viewed from the mounted parts side.

KRAB ASSY

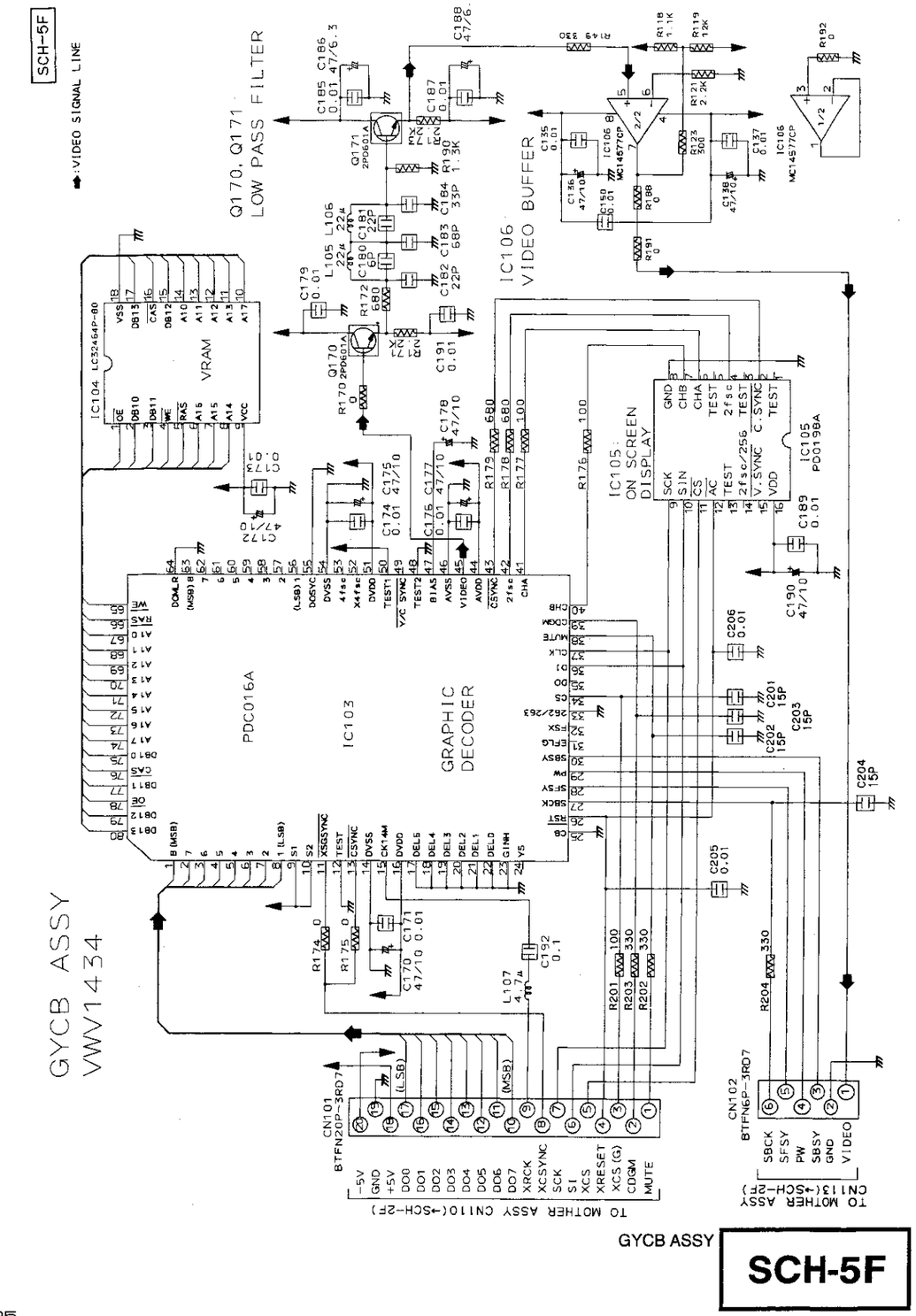
TO JACB ASSY CN503

PCB-4F

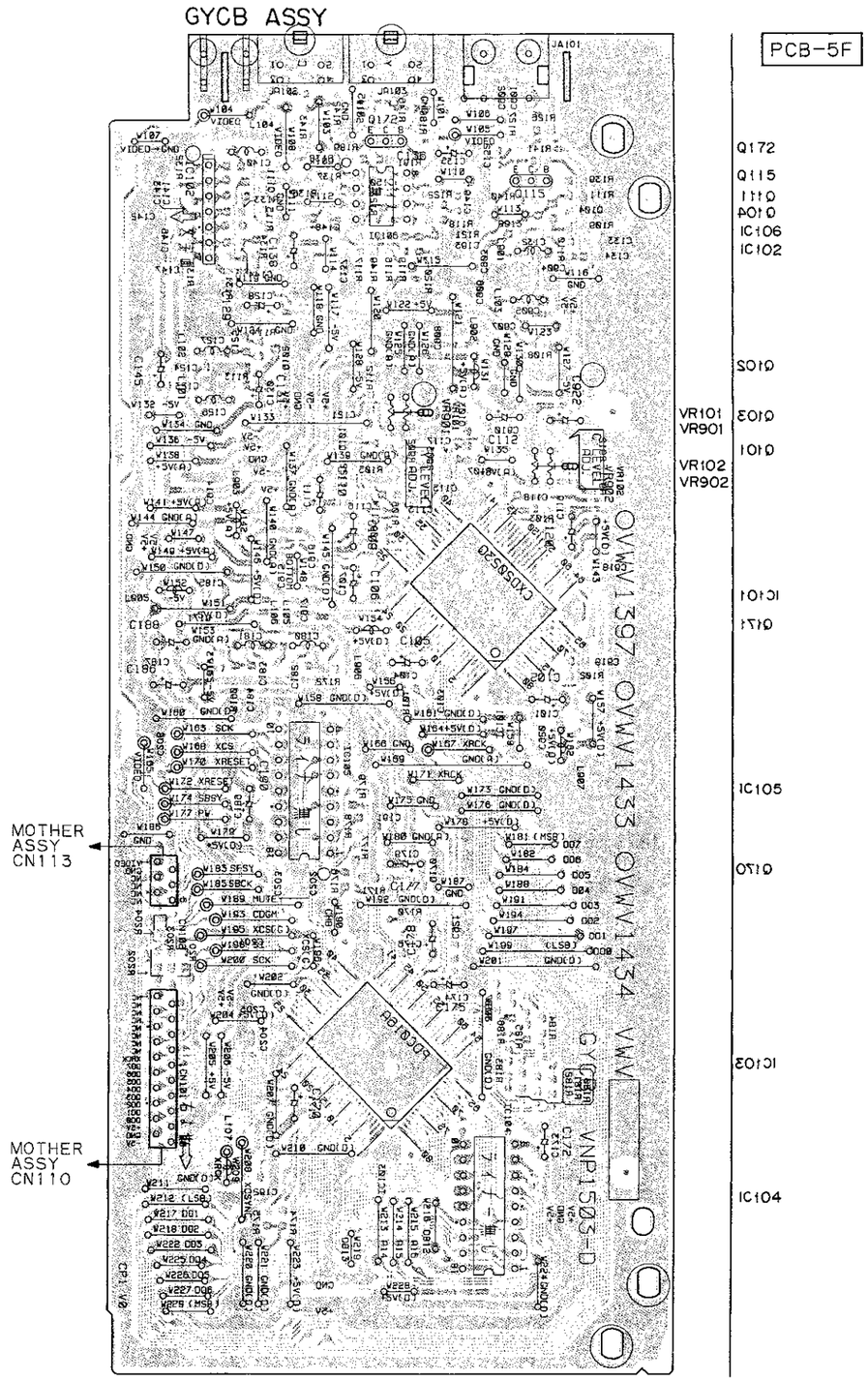


IC101 IC102 IC103 IC104 IC105 IC106 IC107 IC108 IC109 IC110 IC111 IC113 Q101–Q104 Q105 Q106 Q107

2.5 GYCB ASSEMBLY



● This diagram is viewed from the mounted parts side.



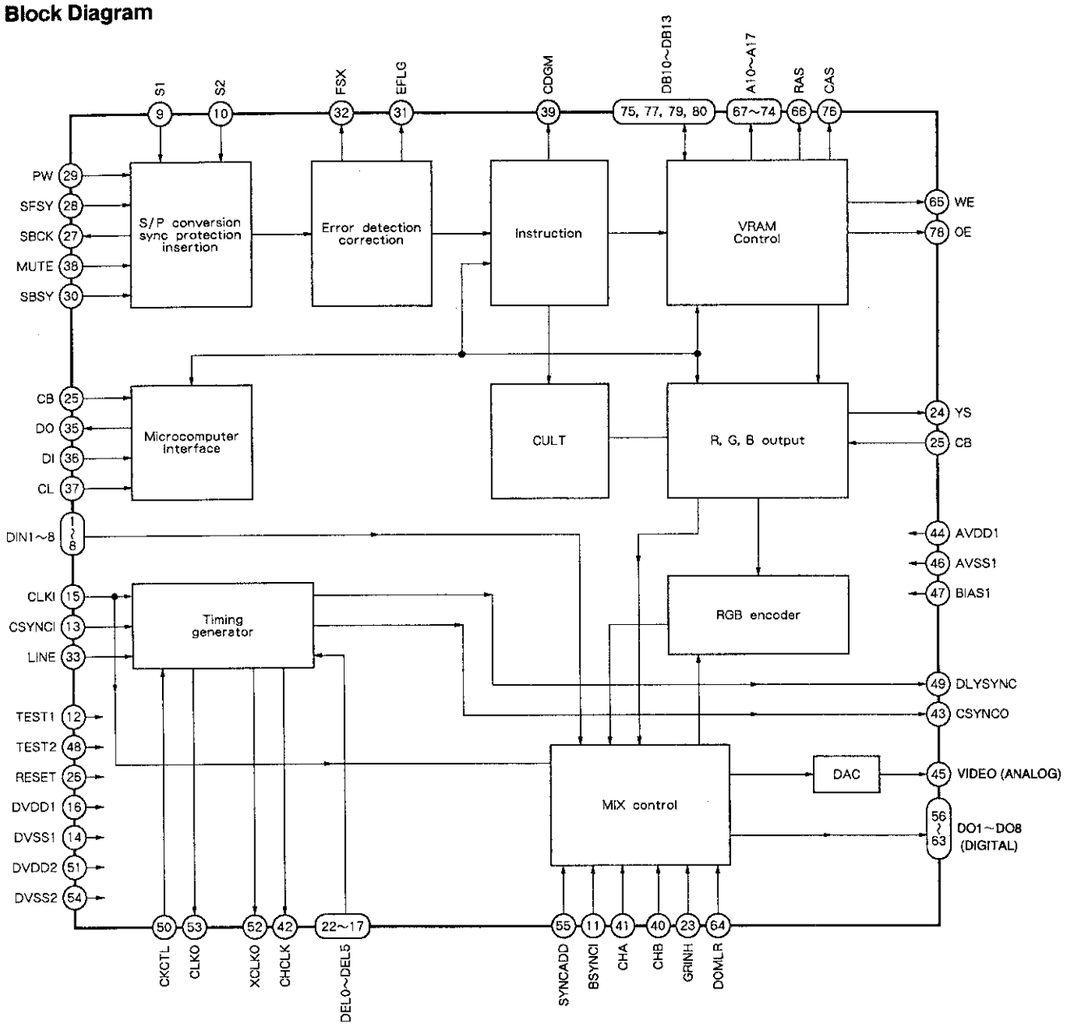
3. IC INFORMATION

● The information shown in the list is basic information and may not correspond exactly to that shown in the schematic diagrams.

■ PDC016A (GYCB ASSY IC103)

• DIGITAL GRAPHICS DECODER for LD

• Block Diagram



• Pin Function

No.	Name	Pin Name	I/O	Function
1	DIN8	Video data input pin	I	Digital video data input. (MSB)
2 ~ 7	DIN7 ~ DIN2			Digital video data input.
8	DIN1			Digital video data input.(LSB)
9	S1	DSP selection pin	I	S1 S2 Select DSP: 0 0 LC7861N/67; 0 1; 1 0 LC7860K/63; 1 1 LC7868/69/681/681KE
10	S2			
11	$\overline{BSYNCI}$	Ref. SYNC input pin	I	Reference SYNC signal input for burst phase judgment.
12	TEST1	Test input pin	I	Test input. Normally, fix to "L".
13	$\overline{CSYNCI}$	Composite sync signal input pin	I	Composite sync signal input.
14	DVssi	Ground pin	–	Digital system GND.
15	CLKI	Clock input pin	I	4fsc clock input. (self bias input)
16	DVddi	Power supply pin (+5V)	–	Digital system power supply.
17	DEL5	Amount of delay setting input pin	I	Set the amount of the delay of composite sync signal. (MSB)
18 ~ 21	DEL4 ~ DEL1			Set the amount of the delay of composite sync signal.
22	DEL0			Set the amount of the delay of composite sync signal. (LSB)
23	GRINH	Graphic INH pin	I	Graphic display INHIBIT control input.
24	YS	Super impose output pin	O	Super impose control output.
25	CB	Color bar selection pin	I	"L" : Normal mode, "H" : Color bar output
26	$\overline{RESET}$	Reset input pin	I	Reset signal input.
27	SBCK	Clock output pin	O	Subcode R-W reading clock output.
28	SFSY	Sync signal input pin	I	Subcode frame sync signal input.
29	PW	Data input pin	I	Subcode R-W data input.
30	SBSY	Sync signal input pin	I	Subcode block sync signal input.
31	EFLG	Error state monitor output pin	O	Error state monitor signal output.
32	FSX	Error state monitor trigger pin	O	Error state monitor trigger signal output.
33	LINE	LINE number selection pin	I	Line number selection input. "H"=263H, "L"=262H(at noninterlace)
34	CE	Enable input pin	I	Control input of serial input/output data.
35	DO	Data output pin	O	Serial data output.
36	DI	Data input pin	I	Serial data input.
37	CL	Clock input pin	I	Clock input for serial data input/output.
38	MUTE	Mute pin	I	Control signal input for invaliding the subcode data.
39	CDGM	Graphic data discrimination output pin	O	This pin becomes "H" when graphic instruction is input. (Reset "L" for command control.)
40	CHB	OSD data input pin	I	OSD edge data input.
41	CHA			OSD character data input.
42	CHCLK	Clock output pin	O	2fsc clock output. (Lock by burst signal)
43	$\overline{CSYNCO}$	Composite sync output pin	O	Composite sync signal output.
44	AVddi	Power supply pin (+5V)	–	Analog system power supply.
45	VIDEO	Composite video signal output	O	Composite video signal output. (8 bit DAC output)
46	AVssi	Ground	–	Analog system GND.
47	BIAS1	Capacitor connection pin	O	Connect a capacitor for eliminating the ripple.

• Pin Function

No.	Name	Pin Name	I/O	Function
1	DIN8	Video data input pin	I	Digital video data input. (MSB)
2	DIN7			Digital video data input.
|	|			
7	DIN2			
8	DIN1			Digital video data input.(LSB)
9	S1	DSP selection pin	I	S1 S2 Select DSP: 0 0 LC7861N/67; 0 1 ; 1 0 LC7860K/63; 1 1 LC7868/69/681/681KE
10	S2			
11	$\overline{BSYNCI}$	Ref. SYNC input pin	I	Reference SYNC signal input for burst phase judgment.
12	TEST1	Test input pin	I	Test input. Normally, fix to "L".
13	$\overline{CSYNCI}$	Composite sync signal input pin	I	Composite sync signal input.
14	DVSSI	Ground pin	–	Digital system GND.
15	CLKI	Clock input pin	I	4fsc clock input. (self bias input)
16	DVDDI	Power supply pin (+5V)	–	Digital system power supply.
17	DEL5	Amount of delay setting input pin	I	Set the amount of the delay of composite sync signal. (MSB)
18	DEL4			Set the amount of the delay of composite sync signal.
|	|			
21	DEL1			
22	DEL0			Set the amount of the delay of composite sync signal. (LSB)
23	GRINH	Graphic INH pin	I	Graphic display INHIBIT control input.
24	YS	Super impose output pin	O	Super impose control output.
25	CB	Color bar selection pin	I	"L" : Normal mode, "H" : Color bar output
26	$\overline{RESET}$	Reset input pin	I	Reset signal input.
27	SBCK	Clock output pin	O	Subcode R-W reading clock output.
28	SFSY	Sync signal input pin	I	Subcode frame sync signal input.
29	PW	Data input pin	I	Subcode R-W data input.
30	SBSY	Sync signal input pin	I	Subcode block sync signal input.
31	EFLG	Error state monitor output pin	O	Error state monitor signal output.
32	FSX	Error state monitor trigger pin	O	Error state monitor trigger signal output.
33	LINE	LINE number selection pin	I	Line number selection input. "H"=263H, "L"=262H(at noninterlace)
34	CE	Enable input pin	I	Control input of serial input/output data.
35	DO	Data output pin	O	Serial data output.
36	DI	Data input pin	I	Serial data input.
37	CL	Clock input pin	I	Clock input for serial data input/output.
38	MUTE	Mute pin	I	Control signal input for invaliding the subcode data.
39	CDGM	Graphic data discrimination output pin	O	This pin becomes "H" when graphic instruction is input. (Reset "L" for command control.)
40	CHB	OSD data input pin	I	OSD edge data input.
41	CHA			OSD character data input.
42	CHCLK	Clock output pin	O	2fsc clock output. (Lock by burst signal)
43	$\overline{CSYNCO}$	Composite sync output pin	O	Composite sync signal output.
44	AVDDI	Power supply pin (+5V)	–	Analog system power supply.
45	VIDEO	Composite video signal output	O	Composite video signal output. (8 bit DAC output)
46	AVSSI	Ground	–	Analog system GND.
47	BIAS1	Capacitor connection pin	O	Connect a capacitor for eliminating the ripple.

No.	Name	Pin Name	I/O	Function
48	TEST2	Input pin for test	I	Test input. In the normal operation, Error correction logical selection pin. ("H"=PQPQ, "L"=QPQ)
49	$\overline{DLYSYNC}$	Delayed composite sync output pin	O	Delayed composite sync signal output.
50	CKCTL	Clock polarity selection pin	I	BSYNCI latch selection pin. "H"=FSC4, "L"=$\overline{FSC4}$ (This pin will be input pin for test at test.)
51	DVDD2	Power supply pin (+5V)	–	Digital system power supply.
52	XCLKO	Inversion clock output pin	O	4fsc inversion clock output.
53	CLKO	Clock output pin	O	4fsc clock output.
54	DVSS2	Ground pin	–	Digital system GND.
55	SYNCADD	CSYNC selection input pin	I	Additional selection input of the composite sync signal to 8 bit input data. "H"=Add, "L"=Not add
56	DO1	Video data output pins	O	Digital composite video signal output. (LSB)
57	DO2			Digital composite video signal output.
|	|			
62	DO7			
63	DO8			Digital composite video signal output. (MSB)
64	DOMLR	Data inversion selection input pin	I	Inverting selection input of the video digital signal output pin. "H"=Invert (LSB→MSB), "L"=Not invert
65	$\overline{WE}$	Output pins for DRAM	O	Writing enable signal output of DRAM.
66	$\overline{RAS}$		O	Line address strobe signal output of DRAM.
67	A10		O	DRAM address (A0) output.
68	A11			DRAM address (A1) output.
69	A12			DRAM address (A2) output.
70	A13			DRAM address (A3) output.
71	A14			DRAM address (A4) output.
72	A15			DRAM address (A5) output.
73	A16			DRAM address (A6) output.
74	A17			DRAM address (A7) output.
75	DB10		I/O	DRAM address (D0) input/output.
76	$\overline{CAS}$		O	Row address strobe signal output of DRAM.
77	DB11		I/O	DRAM address (D1) input/output.
78	$\overline{OE}$		O	DRAM reading enable signal output.
79	DB12		I/O	DRAM address (D2) input/output.
80	DB13		I/O	DRAM address (D3) input/output.

4. BLOCK DIAGRAM