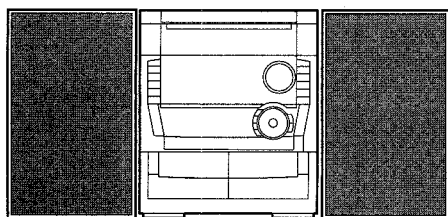


aiwa



NSX-MT960 NSX-AVF960



CD STEREO SYSTEM

- BASIC TAPE MECHANISM : 2ZM-3MK2 PR4
- BASIC CD MECHANISM : 6ZG-1 S2DSH

- TYPE : U,LH

SYSTEM	CD - CASSEIVER	SPEAKER
NSX-MT960 (TYPE : U)	CX-NMT960	SX-NA952 SX-CR675
NSX-AVF960 (TYPE : LH)	CX-AVF960	SX-NF952 SX-CR675

- If requiring information about the CD mechanism, see Service Manual of 6ZG-1, S/M Code No. 09-984-249-90T.

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PROTECTION OF EYES FROM LASER BEAM DURING SERVICING

This set employs laser. Therefore, be sure to follow carefully the instructions below when servicing.

WARNING!!

WHEN SERVICING, DO NOT APPROACH THE LASER EXIT WITH THE EYE TOO CLOSELY. IN CASE IT IS NECESSARY TO CONFIRM LASER BEAM EMISSION. BE SURE TO OBSERVE FROM A DISTANCE OF MORE THAN 30cm FROM THE SURFACE OF THE OBJECTIVE LENS ON THE OPTICAL PICK-UP BLOCK.



- Caution: Invisible laser radiation when open and interlocks defeated avoid exposure to beam.
- Advarsel: Usynlig laserstråling ved åbning, når sikkerhedsafbrydere er ude af funktion. Undgå udsættelse for stråling.

VAROITUS!

Laiteen Käyttäminen muulla kuin tässä käyttöohjeessa mainitulla tavalla saattaa altistaa käyt-täjän turvallisuusluokan 1 ylittävälle näkymättömälle lasersäteilylle.

WARNING!

Om apparaten används på annat sätt än vad som specificeras i denna bruksanvising, kan användaren utsättas för osynlig laserstrålning, som överskrider gränsen för laserklass 1.

CAUTION

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

ATTENTION

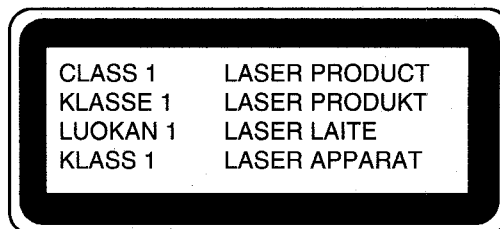
L'utilisation de commandes, réglages ou procédures autres que ceux spécifiés peut entraîner une dangereuse exposition aux radiations.

ADVARSEL

Usynlig laserstråling ved åbning, når sikkerhedsafbrydereer ude af funktion. Undgå udsættelse for stråling.

This Compact Disc player is classified as a CLASS 1 LASER product.

The CLASS 1 LASER PRODUCT label is located on the rear exterior.

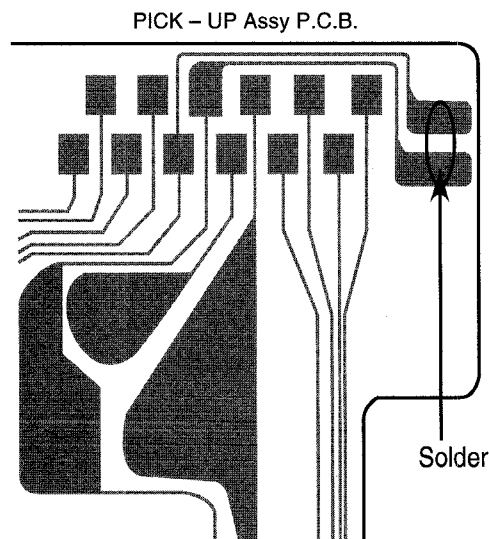


Precaution to replace Optical block

(KSS-213F)

Body or clothes electrostatic potential could ruin laser diode in the optical block. Be sure to ground body and workbench, and ensure clothes do not touch the diode.

- 1) After the connection, remove solder shown in right figure.



NOTE ON BEFORE STARTING REPAIR

1. Forced discharge of electrolytic capacitor of power supply block

When repair is going to be attempted in the set that uses relay circuit in the power supply block, electric potential is kept charged across the electrolytic capacitors (C101, 102) even though AC power cord is removed. If repair is attempted in this condition, the secondary defect can occur.

In order to prevent the secondary trouble, perform the following measures before starting repair work.

Discharge procedure

- ① Remove the AC power cord.
- ② Connect a discharging resistor at an end of lead wire that has clips at both ends. Connect the other end of the lead wire to metal chassis.
- ③ Contact the other end of the discharging resistor to the positive (+) side (+VH) of C101. (For two seconds)
- ④ Contact the same end of the discharging resistor as step ③ to the negative (-) side (-VH) of C102 in the same way. (For two seconds)
- ⑤ Check that voltage across C101 and C102 has decreased 1 V or less using a multimeter or an oscilloscope.

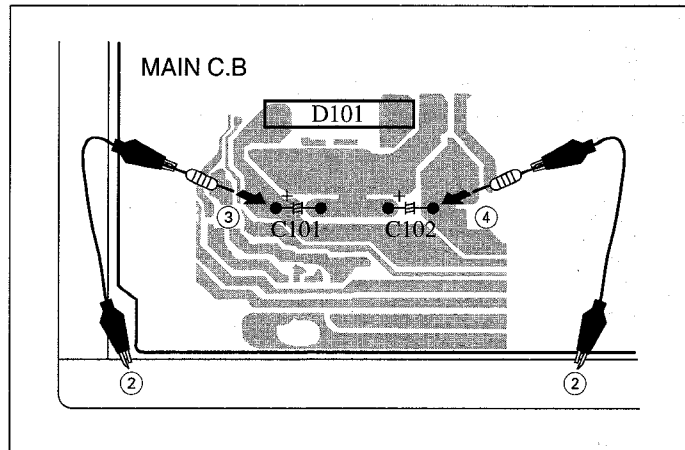


Fig-1

Select a discharging resistor referring to the following table.

Charging voltage (V) (C101, 102)	Discharging resistor (Ω)	Rated power (W)	Parts number
25-48	100	3	87-A00-247-090
49-140	220	5	87-A00-232-090

Note: The reference numbers (C101, C102) of the electrolytic capacitors can change depending on the models. Be sure to check the reference numbers of the charging capacitors on schematic diagram before starting the discharging work.

2. Check items before exchanging the MICROCOMPUTER

Be sure to check the following items before exchanging the MICROCOMPUTER. Exchange the MICROCOMPUTER after confirming that the MICROCOMPUTER is surely defective.

2-1. Regarding the HOLD terminal of the MICROCOMPUTER

When the HOLD terminal (INPUT) of the MICROCOMPUTER is "H", the MICROCOMPUTER is judged to be operating correctly. When this terminal is "L", the main power cannot be turned on. Therefore, be sure to check the terminal voltage of the HOLD terminal before exchange.

When the MICROCOMPUTER is not defective, the HOLD terminal can also go "L" when the POWER AMPLIFIER has any abnormalities that triggers the abnormality detection circuit on the MAIN C. B. that sets the HOLD terminal to "L".

• Good or no good judgement of the MICROCOMPUTER

- ① Turn on the AC main power.
- ② Confirm that the main power is turned on and the HOLD terminal of the MICROCOMPUTER keeps the "H" level or not.
- ③ When the HOLD terminal is "L" level, the abnormality detection circuit is judged to be working correctly and the MICROCOMPUTER is judged to be good.

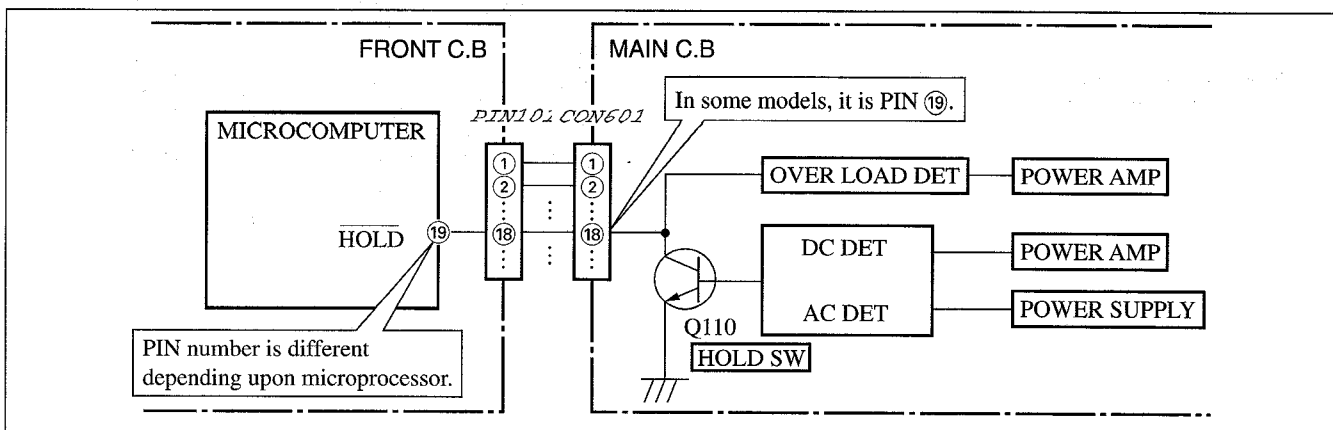


Fig-2-1

In such a case, check also if the POWER AMPLIFIER circuit or power supply circuit has any abnormalities or not.

2-2. Regarding reset

There are cases that the machine does not work correctly because the MICROCOMPUTER is not reset even though the AC power cord is re-inserted, or the software reset (pressing the STOP key + POWER key) is performed.

When the above described phenomenon occurs, it can lead to wrong judgement as if the MICROCOMPUTER is defective and to exchange the MICROCOMPUTER. In such a case, perform the forced-reset by the following procedure and check good or no good of the MICROCOMPUTER.

- ① Remove the AC power cord.

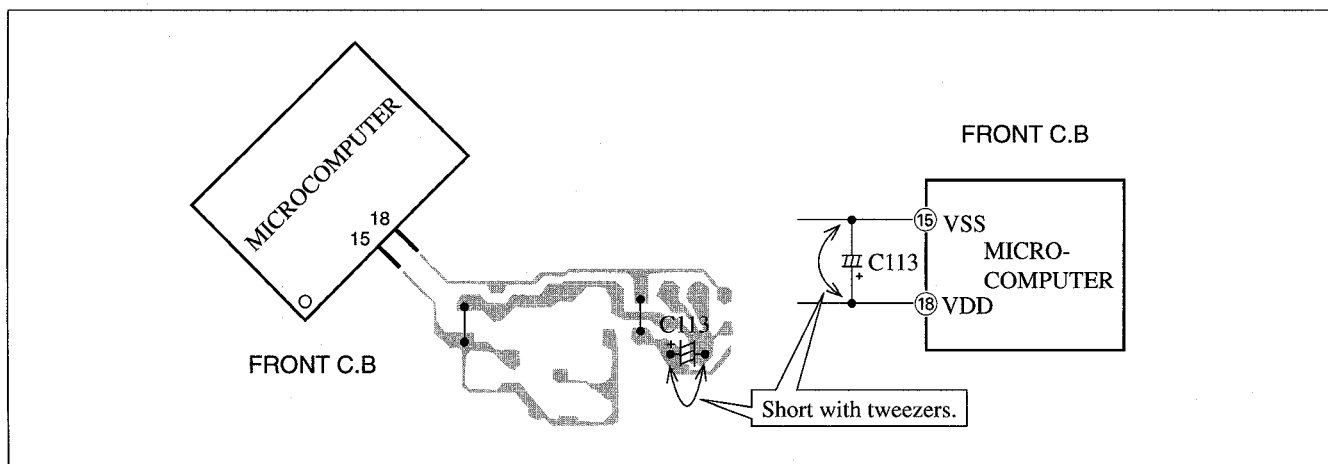


Fig-2-2

- ② Short both ends of the electrolytic capacitor C113 that is connected to VDD of the MICROCOMPUTER with tweezers.
- ③ Connect the AC power cord again. If the MICROCOMPUTER returns to the normal operation, the MICROCOMPUTER is good.

Note: The reference number or MICROCOMPUTER pin number of transistor (Q110) and electrolytic capacitor (C113) can change depending on the models. Be sure to check the reference numbers on schematic diagram before starting the discharging work.

2-3. Confirmation of soldering state of MICROCOMPUTER

Check soldering state of the MICROCOMPUTER in addition to the above described procedures. Be sure to exchange the MICROCOMPUTER after surely confirming that the trouble is not caused by poor soldering but the MICROCOMPUTER itself.

SPECIFICATIONS

<FM Tuner section>

Tuning range 87.5 MHz to 108 MHz
Usable sensitivity(IHF) 13.2 dBf
Antenna terminals 75 ohms (unbalanced)

<MW Tuner section>

Tuning range 531 kHz to 1602 kHz (9 kHz step)
 530 kHz to 1710 kHz (10 kHz step)
Usable sensitivity 350 μ V/m
Antenna Loop antenna

<Amplifier section>

Power output
Front
 U : 145 W + 145 W (50 Hz - 20 kHz,
 T.H.D. less than 1%, 6 ohms)
 LH : 170 W + 170 W (1 kHz,
 T.H.D.10%, 6 ohms)
Rear (surround)
 U : 33 W + 33 W (50 Hz - 20 kHz,
 T.H.D. less than 1%, 8 ohms)
 LH : 40 W + 40 W (1kHz, T.H.D.
 10%, 8 ohms)
Center
 U : 33 W (50 Hz - 20 kHz, T.H.D.
 less than 1%, 8 ohms)
 LH : 40 W (1 kHz, T.H.D. 10%,
 8 ohms)

Total harmonic distortion
 U : 0.1% (130 W, 1 kHz, 6 ohms,
 DIN AUDIO)
 LH : 0.1% (110 W, 1 kHz, 6 ohms,
 DIN AUDIO/Front)
Inputs
 VIDEO/AUX : 210 mV (adjustable)
 MD : 210mV (adjustable)
 MIC1, MIC2 : 1.4mV (10 kohms)
 5.1CH INPUT :

FRONT (L, R) : 400 mV
 REAR (L, R) : 400 mV
 CENTER : 400 mV
 WOOFER : 400 mV

Outputs
 LINE OUT: 280mV
 SUPER WOOFER : 1V
 SPEAKERS: accept speakers of
 6 ohms or more
 SURROUND SPEAKERS:
 accept speakers of 8 ohms to 16
 ohms PHONES (stereo jack) :
 accepts headphones of 32 ohms
 or more

<Cassette deck section>

Track format 4 tracks, 2 channels stereo
Frequency response CrO₂ tape : 50 Hz – 16000 Hz
 Normal tape : 50 Hz – 15000 Hz
Signal-to-noise ratio 60 dB (Dobly B NR ON, CrO₂ tape
 peak level)
Recording system AC bias
Heads Deck 1 : playback head x 1
 Deck 2 : Recording/Playback head
 x 1/erase head x 1

<Compact disc player section>

Laser Semiconductor laser ($\lambda = 780$ nm)
D-A converter 1 bit dual
Signal-to-noise ratio 83 dB (1 kHz, 0 dB)
Harmonic distortion 0.05 % (1 kHz, 0 dB)
Wow and flutter Unmeasurable

<Speaker system SX-NA952>

Cabinet type 3 way bass reflex (magnetic
 shielded type)
Speakers Woofer :
 160 mm cone type
 Tweeter :
 80 mm ceramic type
 Super tweeter:
 20 mm ceramic type
Impedance 6 ohms
Output sound pressure level 87 dB/W/m
Dimensions (W x H x D) 250 x 353 x 290 mm
Weight 5.5 kg

<Speaker system SX-NF952>

Cabinet type 3 way bass reflex (magnetic
 shielded type)
Speakers Woofer :
 160 mm cone type
 Tweeter :
 80 mm ceramic type
 Super tweeter:
 20 mm ceramic type
Impedance 6 ohms
Output sound pressure level 87 dB/W/m
Dimensions (W x H x D) 250 x 353 x 290 mm
Weight 5.5 kg

<General>

Power requirements U : 120 V AC, 60 Hz
 LH : 120 V/220-230 V/240 V AC
 (switchable), 50/60 Hz
Power consumption U : 200 W
 LH : 250 W
Dimensions of main unit 300 x 357.5 x 376 mm
Weight 12.8 kg

- Design and specifications are subject to change without notice.
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- Manufactured under license from Dolby Laboratories Licensing Corporation.
 "DOLBY" and "PRO LOGIC" are trademarks of Dolby Laboratories Licensing Corporation.

ELECTRICAL MAIN PARTS LIST

If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION	REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
IC							
	88-NF3-642-010		C-IC, LC866560W-5H39		87-A40-004-080		ZENER, MTZJ16A
	87-NF8-614-010		IC, SPS-442-1-W		87-A40-274-010		DIODE, FMB-G16L
	87-017-915-080		IC, BU4094BCF		87-A40-488-080		DIODE, 1SS244
	87-A20-355-010		IC, CXA1553P		87-070-136-080		ZENER, MTZJ5.1B
	87-A20-783-040		C-IC, BA7762AFS		87-A40-234-080		ZENER, MTZJ5.6A
	87-A20-083-010		IC, BA3835S		87-A40-002-080		ZENER, MTZJ5.1C
	87-A20-804-040		C-IC, NJM2152M		87-A40-392-010		DIODE, 1N5818
	87-070-289-040		IC, BU 2092F		87-A40-442-080		ZENER, MTZJ9.1A
	87-A20-954-040		C-IC, M62445FP-601		87-A40-348-080		ZENER, MTZJ3.3A
	87-017-888-080		IC, NJM4558MD		87-002-225-010		DIODE, DBF40C-K10
	86-NFZ-655-010		IC, LC72131D(Z)	MAIN C.B			
	87-A20-438-010		IC, LA1837	C101	87-A10-231-090		CAP, E 3300-80
	88-NF5-615-040		C-IC, MSM6654A-521GS-KR1	C102	87-A10-231-090		CAP, E 3300-80
	87-A20-437-010		C-IC, M62431FP	C103	87-016-658-090		CAP, E 4700-35 SMG
	87-020-454-010		IC, DN6851	C104	87-016-658-090		CAP, E 4700-35 SMG
	87-017-726-080		C-IC, BU4052BCF	C105	87-012-368-080		C-CAP, S 0.1-50 F
	87-017-917-080		C-IC, BU4066BCF	C106	87-012-368-080		C-CAP, S 0.1-50 F
	87-A20-715-010		IC, M62439SP	C107	87-012-368-080		C-CAP, S 0.1-50 F
	87-A20-853-010		C-IC, M62463FP	C108	87-012-368-080		C-CAP, S 0.1-50 F
				C109	87-010-196-080		CHIP CAPACITOR, 0.1-25
				C110	87-010-196-080		CHIP CAPACITOR, 0.1-25
TRANSISTOR							
	87-A30-107-070		C-TR, CMBT5401	C111	87-010-196-080		CHIP CAPACITOR, 0.1-25
	87-026-263-080		C-TR, RN1410	C112	87-010-196-080		CHIP CAPACITOR, 0.1-25
	89-213-702-010		TR, 2SB1370 (1.8W)	C113	87-010-247-080		CAP, ELECT 100-50V
	87-A30-087-080		C-FET, 2SK2158	C114	87-010-385-080		CAP, ELECT 220-25V
	87-026-232-080		TR, DTA144WK	C115	87-010-385-080		CAP, ELECT 220-25V
	87-A30-075-080		C-TR, 2SA1235F	C116	87-010-247-080		CAP, ELECT 100-50V
	87-026-610-080		TR, KTC3198GR	C117	87-010-430-080		CAP, ELECT 100-63
	87-A30-076-080		C-TR, 2SC3052F	C118	87-010-263-080		CAP, ELECT 100-10V
	87-A30-073-080		C-TR, RT1N 141C	C119	87-010-260-080		CAP, ELECT 47-25V
	87-A30-196-080		TR, 2SC4115SRS	C120	87-010-403-080		CAP, ELECT 3.3-50V
	87-A30-071-080		C-TR, RT1N 144C	C121	87-012-140-080		CAP 470P
	87-026-609-080		TR, KTA1266GR	C122	87-010-263-080		CAP, ELECT 100-10V<US>
	87-A30-086-070		C-TR, CSD1306E	C123	87-010-247-080		CAP, ELECT 100-50V
	87-A30-190-080		TR, CC5551	C124	87-010-112-080		CAP, ELECT 100-16V
	87-A30-204-010		TR, 2SD2439	C125	87-010-235-080		CAP, E 470-16 SME
	87-A30-205-010		TR, 2SB1588	C209	87-010-401-080		CAP, ELECT 1-50V
	87-A30-106-070		C-TR, CMBT5551	C210	87-010-401-080		CAP, ELECT 1-50V
	87-A30-162-010		FET, 2SK2937	C211	87-010-183-080		CAP, CHIP 2700P
	87-A30-072-080		C-TR, RT1P 144C	C212	87-010-183-080		CAP, CHIP 2700P
	87-A30-137-010		TR, 2SD2494	C213	87-010-186-080		CAP, CHIP 4700P
	87-A30-138-010		TR, 2SB1625	C214	87-010-186-080		CAP, CHIP 4700P
	87-A30-074-080		C-TR, RT1P 141C	C215	87-010-404-080		CAP, ELECT 4.7-50V
	87-A30-221-040		C-TR, DTA114WK	C216	87-010-404-080		CAP, ELECT 4.7-50V
	87-026-226-080		CHIP-TR, DTA143EK	C217	87-010-913-080		CAP, E 47-25 ASF BP
	87-A30-105-080		C-TR, RT1P 441C	C218	87-010-913-080		CAP, E 47-25 ASF BP
	87-A30-084-080		TR, CSB1058B	C223	87-010-197-080		CAP, CHIP 0.01 DM
	89-109-521-080		TR, 2SA952 (0.6W)	C224	87-010-197-080		CAP, CHIP 0.01 DM
	89-327-143-080		TR, 2SC2714 (0.1W)	C229	87-A10-516-080		C-CAP, S 100P-200 J CH
	87-026-463-080		TR, 2SA933S	C230	87-A10-516-080		C-CAP, S 100P-200 J CH
	87-026-608-080		C-TR, DTC123JK	C233	87-010-544-080		CAP, ELECT 0.1-50V
	87-A30-108-010		TR, 2SB1626	C234	87-010-544-080		CAP, ELECT 0.1-50V
	87-A30-109-010		TR, 2SD2495	C235	87-010-196-080		CHIP CAPACITOR, 0.1-25
	87-A30-104-080		C-TR, RT1N441C	C237	87-012-368-080		C-CAP, S 0.1-50 F
				C238	87-012-368-080		C-CAP, S 0.1-50 F
				C239	87-012-368-080		C-CAP, S 0.1-50 F
DIODE							
	87-A40-470-080		DIODE, 1SS254	C240	87-012-368-080		C-CAP, S 0.1-50 F
	87-017-447-010		DIODE, GBU4DL	C243	87-010-322-080		C-CAP, S 100P-50 CH
	87-017-654-060		DIODE, GBU6J	C244	87-010-322-080		C-CAP, S 100P-50 CH
	87-A40-269-080		C-DIODE, MC2836	C247	87-012-154-080		C-CAP, S 150P-50 CH
	87-A40-270-080		C-DIODE, MC2838	C248	87-012-186-080		C-CAP, 4700P-50 BK
	87-070-274-080		DIODE, 1N4003 SEM	C280	87-010-188-080		CAP, CHIP 6800P
	87-A40-440-080		ZENER, MTZJ7.5A	C301	87-010-318-080		C-CAP, S 47P-50 CH
	87-A40-503-080		ZENER, MTZJ39B	C302	87-010-318-080		C-CAP, S 47P-50 CH
	87-A40-345-080		ZENER, MTZJ10C	C303	87-012-157-080		C-CAP, S 330P-50 CH
	87-A40-438-080		ZENER, MTZJ4.7A	C304	87-012-157-080		C-CAP, S 330P-50 CH

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION	REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C305	87-012-145-080		CAP, CHIP S 270P CH	C619	87-010-185-080		C-CAP,S 3900P-50 B
C306	87-012-145-080		CAP, CHIP S 270P CH	C620	87-010-185-080		C-CAP,S 3900P-50 B
C307	87-010-196-080		CHIP CAPACITOR,0.1-25	C621	87-010-401-080		CAP, ELECT 1-50V
C311	87-010-198-080		CAP, CHIP 0.022	C622	87-010-401-080		CAP, ELECT 1-50V
C312	87-010-198-080		CAP, CHIP 0.022	C625	87-010-405-080		CAP, ELECT 10-50V
C313	87-010-179-080		CAP,CHIP S B1200P	C626	87-010-405-080		CAP, ELECT 10-50V
C314	87-010-179-080		CAP,CHIP S B1200P	C629	87-010-405-080		CAP, ELECT 10-50V
C315	87-010-178-080		CHIP CAP 1000P	C630	87-010-213-080		C-CAP,S 0.015-50 B
C316	87-010-178-080		CHIP CAP 1000P	C631	87-010-194-080		CAP, CHIP 0.047
C317	87-012-142-080		CAP, S 0.33-16	C632	87-010-263-080		CAP, ELECT 100-10V
C318	87-012-142-080		CAP, S 0.33-16	C633	87-010-263-080		CAP, ELECT 100-10V
C319	87-012-141-080		CHIP-CAPACITOR,0.22-16F	C634	87-010-196-080		CHIP CAPACITOR,0.1-25
C320	87-012-141-080		CHIP-CAPACITOR,0.22-16F	C635	87-010-196-080		CHIP CAPACITOR,0.1-25
C321	87-012-141-080		CHIP-CAPACITOR,0.22-16F	C636	87-010-194-080		CAP, CHIP 0.047
C322	87-012-141-080		CHIP-CAPACITOR,0.22-16F	C637	87-010-183-080		C-CAP,S 2700P-50 B
C324	87-010-260-080		CAP, ELECT 47-25V	C641	87-012-368-080		C-CAP,S 0.1-50 F
C325	87-010-370-080		CAP,E 330-6.3 SME	C667	87-012-368-080		C-CAP,S 0.1-50 F
C327	87-010-404-080		CAP, ELECT 4.7-50V	C701	87-010-381-080		CAP, ELECT 330-16V
C328	87-010-404-080		CAP, ELECT 4.7-50V	C702	87-010-404-080		CAP, ELECT 4.7-50V
C332	87-010-196-080		CHIP CAPACITOR,0.1-25	C703	87-010-197-080		CAP, CHIP 0.01 DM
C335	87-010-401-080		CAP, ELECT 1-50V	C704	87-010-197-080		CAP, CHIP 0.01 DM
C336	87-010-401-080		CAP, ELECT 1-50V	C709	87-010-322-080		C-CAP,S 100P-50 CH
C337	87-010-196-080		CHIP CAPACITOR,0.1-25	C711	87-010-263-080		CAP, ELECT 100-10V
C339	87-010-196-080		CHIP CAPACITOR,0.1-25	C712	87-010-196-080		CHIP CAPACITOR,0.1-25
C340	87-010-196-080		CHIP CAPACITOR,0.1-25	C713	87-010-197-080		CAP, CHIP 0.01 DM
C351	87-012-140-080		CAP 470P	C714	87-010-197-080		CAP, CHIP 0.01 DM
C352	87-012-140-080		CAP 470P	C721	87-010-312-080		C-CAP,S 15P-50 CH
C354	87-010-175-080		CAP 560P	C722	87-010-312-080		C-CAP,S 15P-50 CH
C355	87-010-178-080		CHIP CAP 1000P	C723	87-010-178-080		CHIP CAP 1000P
C356	87-010-260-080		CAP, ELECT 47-25V	C725	87-010-178-080		CHIP CAP 1000P
C357	87-010-197-080		CAP, CHIP 0.01 DM	C727	87-010-196-080		CHIP CAPACITOR,0.1-25
C358	87-010-183-080		C-CAP,S 2700P-50 B	C728	87-010-248-080		CAP, ELECT 220-10V
C359	87-010-183-080		C-CAP,S 2700P-50 B	C755	87-010-197-080		CAP, CHIP 0.01 DM
C360	87-010-183-080		C-CAP,S 2700P-50 B	C756	87-010-197-080		CAP, CHIP 0.01 DM
C363	87-A10-772-080		CAP,M 5600P-50 J	C757	87-010-318-080		C-CAP,S 47P-50 CH
C370	87-010-196-080		CHIP CAPACITOR,0.1-25	C758	87-010-149-080		C-CAP,S 5P-50 CH
C371	87-010-177-080		C-CAP,S 820P-50 SL	C761	87-010-196-080		CHIP CAPACITOR,0.1-25
C372	87-010-177-080		C-CAP,S 820P-50 SL	C762	87-010-197-080		CAP, CHIP 0.01 DM
C373	87-010-179-080		CAP,CHIP S B1200P	C763	87-010-194-080		CAP, CHIP 0.047
C374	87-010-179-080		CAP,CHIP S B1200P	C764	87-010-319-080		C-CAP,S 56P-50 CH
C375	87-010-545-080		CAP, ELECT 0.22-50V	C765	87-010-197-080		CAP, CHIP 0.01 DM
C376	87-010-545-080		CAP, ELECT 0.22-50V	C766	87-010-197-080		CAP, CHIP 0.01 DM
C378	87-010-196-080		CHIP CAPACITOR,0.1-25	C767	87-010-405-080		CAP, ELECT 10-50V
C381	87-010-197-080		CAP, CHIP 0.01 DM	C768	87-010-197-080		CAP, CHIP 0.01 DM
C382	87-010-318-080		C-CAP,S 47P-50 CH	C769	87-010-408-080		CAP, ELECT 47-50V
C383	87-010-197-080		CAP, CHIP 0.01 DM	C770	87-015-821-080		C-CAP 0.047
C384	87-010-402-080		CAP, ELECT 2.2-50V	C771	87-010-407-080		CAP, ELECT 33-50V
C385	87-010-184-080		CHIP CAPACITOR 3300P(K)	C772	87-010-194-080		CAP, CHIP 0.047
C386	87-010-196-080		CHIP CAPACITOR,0.1-25	C773	87-010-196-080		CHIP CAPACITOR,0.1-25
C401	87-010-405-080		CAP, ELECT 10-50V	C774	87-010-263-080		CAP, ELECT 100-10V
C402	87-010-405-080		CAP, ELECT 10-50V	C775	87-010-404-080		CAP, ELECT 4.7-50V
C403	87-010-184-080		CHIP CAPACITOR 3300P(K)	C776	87-010-197-080		CAP, CHIP 0.01 DM
C404	87-010-184-080		CHIP CAPACITOR 3300P(K)	C777	87-010-400-080		CAP, ELECT 0.47-50V
C405	87-010-193-080		CHIP CAPACITOR,0.033	C778	87-010-401-080		CAP, ELECT 1-50V
C406	87-010-193-080		CHIP CAPACITOR,0.033	C779	87-010-401-080		CAP, ELECT 1-50V
C407	87-010-405-080		CAP, ELECT 10-50V	C780	87-010-196-080		CHIP CAPACITOR,0.1-25
C408	87-010-405-080		CAP, ELECT 10-50V	C781	87-010-405-080		CAP, ELECT 10-50V
C409	87-010-380-080		CAP, ELECT 47-16V	C782	87-010-405-080		CAP, ELECT 10-50V
C410	87-010-380-080		CAP, ELECT 47-16V	C783	87-015-819-080		CAPACITOR,0.01
C411	87-010-405-080		CAP, ELECT 10-50V	C784	87-010-197-080		CAP, CHIP 0.01 DM
C412	87-010-112-080		CAP, ELECT 100-16V	C785	87-010-403-080		CAP, ELECT 3.3-50V
C415	87-010-184-080		CHIP CAPACITOR 3300P(K)	C786	87-010-403-080		CAP, ELECT 3.3-50V
C416	87-010-184-080		CHIP CAPACITOR 3300P(K)	C787	87-010-184-080		CHIP CAPACITOR 3300P(K)
C516	87-010-196-080		CHIP CAPACITOR,0.1-25	C788	87-010-184-080		CHIP CAPACITOR 3300P(K)
C551	87-010-401-080		CAP, ELECT 1-50V	C789	87-010-179-080		CAP,CHIP S B1200P
C552	87-010-263-080		CAP, ELECT 100-10V	C790	87-010-179-080		CAP,CHIP S B1200P
C553	87-010-380-080		CAP, ELECT 47-16V	C791	87-010-405-080		CAP, ELECT 10-50V
C601	87-010-180-080		C-CER 1500P	C793	87-010-177-080		C-CAP,S 820P-50 SL
C602	87-010-180-080		C-CER 1500P	C794	87-010-406-080		CAP, ELECT 22-50
C613	87-016-081-080		C-CAP,S 0.1-16 RK	C795	87-010-596-080		CAP, S 0.047-16
C614	87-016-081-080		C-CAP,S 0.1-16 RK				

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION	REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C796	87-010-403-080		CAP, ELECT 3.3-50V	C110	87-A10-369-080		C-CAP,S 0.47-16 K B
C797	87-010-182-080		C-CAP,S 2200P-50 B	C111	87-010-196-080		CHIP CAPACITOR,0.1-25
C798	87-010-182-080		C-CAP,S 2200P-50 B	C112	87-010-196-080		CHIP CAPACITOR,0.1-25
C799	87-010-194-080		CAP, CHIP 0.047	C113	87-A10-189-040		CAP,E 220-10
C812	87-010-197-080		CAP, CHIP 0.01 DM	C114	87-010-196-080		CHIP CAPACITOR,0.1-25
C814	87-010-197-080		CAP, CHIP 0.01 DM	C115	87-010-178-080		CHIP CAP 1000P
C820	87-010-408-080		CAP, ELECT 47-50V	C116	87-010-494-040		CAP,E 1-50 GAS
C821	87-010-197-080		CAP, CHIP 0.01 DM	C117	87-010-263-040		CAP,E 100-10
C822	87-010-197-080		CAP, CHIP 0.01 DM	C118	87-010-194-080		CAP, CHIP 0.047
C823	87-010-197-080		CAP, CHIP 0.01 DM	C119	87-010-408-040		CAP,E 47-50 SME
C828	87-010-196-080		CHIP CAPACITOR,0.1-25	C120	87-010-404-040		CAP,E 4.7-50 SME
C829	87-010-196-080		CHIP CAPACITOR,0.1-25	C121	87-010-404-040		CAP,E 4.7-50 SME
C959	87-010-196-080		CHIP CAPACITOR,0.1-25	C122	87-010-194-080		CAP, CHIP 0.047
C960	87-010-196-080		CHIP CAPACITOR,0.1-25	C123	87-010-196-080		CHIP CAPACITOR,0.1-25
C961	87-010-152-080		C-CAP,S 8P-50 CH	C124	87-010-196-080		CHIP CAPACITOR,0.1-25
CF801	87-008-261-010		FILTER, SFE10.7MA5-A	C125	87-010-196-080		CHIP CAPACITOR,0.1-25
CF802	87-008-261-010		FILTER, SFE10.7MA5-A	C126	87-010-263-040		CAP,E 100-10
CN351	88-NF3-666-010		CONN ASSY,8P RPB	C127	87-010-196-080		CHIP CAPACITOR,0.1-25
FB601	87-A50-190-080		C-COIL,S BLM21A102S	C128	87-010-309-080		C-CAP,1000P-50 CH
FC451	88-905-451-110		FF-CABLE, 5P 1.25	C129	87-012-157-080		C-CAP,S 330P-50 CH
FC602	88-906-261-110		FF-CABLE,6P 1.25 260MM	C130	87-A10-189-040		CAP,E 220-10
FFE801	A8-8ZA-190-030		8ZA-1 FEUNM	C150	87-010-194-080		CAP, CHIP 0.047
J203	87-033-240-010		TERMINAL,SP 4P32SV1-05	C151	87-010-194-080		CAP, CHIP 0.047
J211	87-A60-483-010		JACK,DIA6.3 BLK ST W/S KM	C240	87-010-176-080		C-CAP,S 680P-50 SL
J601	87-A60-402-010		JACK,PIN 6P R/W HSP-246V30	C249	87-010-176-080		C-CAP,S 680P-50 SL
J801	87-A60-202-010		TERMINAL,ANT 4P MSP-154V-02	C250	87-010-176-080		C-CAP,S 680P-50 SL
L201	87-003-383-010		COIL,1UH-S	C251	87-010-176-080		C-CAP,S 680P-50 SL
L202	87-003-383-010		COIL,1UH-S	C252	87-010-178-080		CHIP CAP 1000P
L301	87-A50-049-010		COIL,TRAP 85K(COI)	C281	87-010-182-080		C-CAP,S 2200P-50 B
L302	87-A50-049-010		COIL,TRAP 85K(COI)	C282	87-010-182-080		C-CAP,S 2200P-50 B
L351	87-007-342-010		COIL,OSC 85K BIAS	C301	87-010-196-080		CHIP CAPACITOR,0.1-25
L771	87-A50-266-010		COIL,FM DET-2N(TOK)	C302	87-010-196-080		CHIP CAPACITOR,0.1-25
L772	87-A90-733-010		FLTR,PCFAZH-450 (TOK)	C303	87-010-196-080		CHIP CAPACITOR,0.1-25
L781	87-005-847-080		COIL,2.2UH(CECS)	C351	87-012-158-080		C-CAP,S 390P-50 CH
L791	87-A50-209-010		COIL,1POLE MPX(MIT)	C352	87-010-196-080		CHIP CAPACITOR,0.1-25
L792	87-A50-209-010		COIL,1POLE MPX(MIT)	C353	87-010-196-080		CHIP CAPACITOR,0.1-25
L832	86-NF2-694-080		COIL,2.2UH K CECS	C354	87-010-196-080		CHIP CAPACITOR,0.1-25
L981	87-NF4-650-010		COIL,AM PACK 4N(TOK)	C355	87-010-196-080		CHIP CAPACITOR,0.1-25
R123	87-022-200-080		RESISTOR, METAL 0.56 1W<US>	C356	87-010-196-080		CHIP CAPACITOR,0.1-25
R237	87-A00-262-080		RES,M/F 0.15-2W J	C357	87-010-196-080		CHIP CAPACITOR,0.1-25
R238	87-A00-262-080		RES,M/F 0.15-2W J	C601	87-010-405-040		CAP,E 10-50
R239	87-A00-262-080		RES,M/F 0.15-2W J	C602	87-010-186-080		CAP,CHIP 4700P
R240	87-A00-262-080		RES,M/F 0.15-2W J	C603	87-010-498-040		CAP,E 10-16 GAS
RY101	87-A90-464-010		RELAY, DG12D2-O(M)	C604	87-010-499-040		CAP,E 22-6.3 GAS
SFR301	87-A90-636-080		SFR,33K H RH0638C LG	C605	87-010-196-080		CHIP CAPACITOR,0.1-25
SFR302	87-A90-636-080		SFR,33K H RH0638C LG	C607	87-010-321-080		CHIP CAPACITOR,82P(J)
SFR303	87-A90-636-080		SFR,33K H RH0638C LG	C608	87-010-196-080		CHIP CAPACITOR,0.1-25
SFR304	87-A90-636-080		SFR,33K H RH0638C LG	C609	87-010-545-040		CAP,E 0.22-50 SME
SFR305	87-A90-637-080		SFR,47K H RH0638C LG	C611	87-010-177-080		C-CAP,S 820P-50 SL
SFR306	87-A90-637-080		SFR,47K H RH0638C LG	C613	87-010-322-080		C-CAP,S 100P-50 CH
SFR351	87-A90-637-080		SFR,47K H RH0638C LG	C614	87-010-248-040		CAP,E 220-10 SME
SFR352	87-A90-637-080		SFR,47K H RH0638C LG	C621	87-010-405-040		CAP,E 10-50
TH201	87-A90-221-080		C-THMS,100K<LHS>	C634	87-015-678-040		CAP,E 22-10 M 7L SRA
TH202	87-A90-221-080		C-THMS,100K<LHS>	C801	87-010-263-040		CAP,E 100-10
WL04	88-NF3-665-010		F-CABLE,7P -2.5 (GETA)	C802	87-010-196-080		CHIP CAPACITOR,0.1-25
WL04	88-NF3-665-010		F-CABLE,7P -2.5 (GETA)	C901	87-010-421-040		CAP,E 4.7-50 5L
WH102	87-A90-142-010		HOLDER,51052-0710 V0	C902	87-A10-818-040		CAP,E 100-16 7LSRA SERIES
WH102	87-A90-142-010		HOLDER,51052-0710 V0	C905	87-010-493-040		CAP,E 0.47-50 GAS
X721	87-A70-061-010		VIB,XTAL 4.500MHZ CSA-309	C906	87-010-196-080		CHIP CAPACITOR,0.1-25
				C907	87-010-196-080		CHIP CAPACITOR,0.1-25
FRONT C.B				C908	87-010-400-040		CAP,E 0.47-50
				C909	87-010-178-080		CHIP CAP 1000P
C101	87-010-182-080		C-CAP,S 2200P-50 B	C910	87-A10-369-080		C-CAP,S 0.47-16 K B
C102	87-010-182-080		C-CAP,S 2200P-50 B	C911	87-010-197-080		CAP, CHIP 0.01 DM
C104	87-010-312-080		C-CAP,S 15P-50 CH	C912	87-010-196-080		CHIP CAPACITOR,0.1-25
C105	87-010-316-080		C-CAP,S 33P-50 CH				
C106	87-010-320-080		CHIP CAP 68P	C913	87-010-185-080		C-CAP,S 3900P-50 B
				C914	87-010-596-080		CAP, S 0.047-16
C107	87-012-157-080		C-CAP,S 330P-50 CH	C915	87-010-181-080		CAP,CHIP S 1800P
C108	87-010-498-040		CAP,E 10-16 GAS	C916	87-010-198-080		CAP, CHIP 0.022
C109	87-010-401-040		CAP,E 1-50 SME	C917	87-010-176-080		C-CAP,S 680P-50 SL

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION	REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C918	87-010-188-080		CAP,CHIP 6800P	S321	87-A90-756-080		SW,TACT SINKO
C919	87-012-145-080		CAP, CHIP S 270P CH	S322	87-A90-756-080		SW,TACT SINKO
C920	87-010-183-080		C-CAP,S 2700P-50 B	S323	87-A90-756-080		SW,TACT SINKO
C921	87-015-696-040		CAP,E 2.2-50 SRA	S324	87-A90-756-080		SW,TACT SINKO
C922	87-015-696-040		CAP,E 2.2-50 SRA	S325	87-A90-756-080		SW,TACT SINKO
C924	87-010-198-080		CAP, CHIP 0.022	S326	87-A90-756-080		SW,TACT SINKO
C925	87-A10-369-080		C-CAP,S 0.47-16 K B	S327	87-A90-756-080		SW,TACT SINKO
C926	87-010-197-080		CAP, CHIP 0.01 DM	S328	87-A90-756-080		SW,TACT SINKO
C927	87-010-196-080		CHIP CAPACITOR,0.1-25	S329	87-A90-756-080		SW,TACT SINKO
C928	87-010-185-080		C-CAP,S 3900P-50 B	S330	87-A90-756-080		SW,TACT SINKO
C929	87-010-596-080		CAP, S 0.047-16	S331	87-A90-756-080		SW,TACT SINKO
C930	87-010-181-080		CAP,CHIP S 1800P	S332	87-A90-756-080		SW,TACT SINKO
C931	87-010-198-080		CAP, CHIP 0.022	S333	87-A90-756-080		SW,TACT SINKO
C932	87-010-176-080		C-CAP,S 680P-50 SL	S334	87-A90-756-080		SW,TACT SINKO
C933	87-010-188-080		CAP,CHIP 6800P	S335	87-A90-756-080		SW,TACT SINKO
C934	87-012-145-080		CAP, CHIP S 270P CH	S336	87-A90-756-080		SW,TACT SINKO
C935	87-010-183-080		C-CAP,S 2700P-50 B	S337	87-A90-756-080		SW,TACT SINKO
C965	87-010-313-080		CAP, CHIP 18P	S338	87-A90-756-080		SW,TACT SINKO
C966	87-010-313-080		CAP, CHIP 18P	S339	87-A90-756-080		SW,TACT SINKO
CN302	87-099-201-010		CONN,8P 6216 H	S340	87-A90-756-080		SW,TACT SINKO
CN502	87-099-209-010		COMM,4P 6216H	S341	87-A90-756-080		SW,TACT SINKO
FC102	88-912-201-110		FF-CABLE,12P-1.25	S342	87-A90-756-080		SW,TACT SINKO
FC501	88-918-161-110		FF-CABLE, 18P 1.25 160MM	S343	87-A90-756-080		SW,TACT SINKO
FC701	88-915-181-110		FF-CABLE,15P 1.25	S344	87-A90-756-080		SW,TACT SINKO
FL101	88-NF3-611-010		FL,150X60X12.5 8NF-3	S345	87-A90-756-080		SW,TACT SINKO
J601	87-A60-284-010		JACK,3.5MO (MSC)	S370	87-A90-756-080		SW,TACT SINKO
J602	87-A60-284-010		JACK,3.5MO (MSC)	S371	87-A90-756-080		SW,TACT SINKO
L901	87-007-340-010		COIL,CLOCK 4.19MHZ	S372	87-A90-756-080		SW,TACT SINKO
LED401	87-A40-259-080		LED,SLR-342VCT31 RED	S373	87-A90-756-080		SW,TACT SINKO
LED402	87-A40-259-080		LED,SLR-342VCT31 RED	S374	87-A90-756-080		SW,TACT SINKO
LED403	87-A40-259-080		LED,SLR-342VCT31 RED	S375	87-A90-756-080		SW,TACT SINKO
LED404	87-A40-259-080		LED,SLR-342VCT31 RED	SW101	87-A90-535-010		SW,RTRY EC16B24304
LED405	87-A40-259-080		LED,SLR-342VCT31 RED	X101	87-A70-070-080		VIB,CER 5.76MHZ CRHF
LED406	87-070-197-080		LED,SLP7118C-51-S-T1				
LED407	87-070-197-080		LED,SLP7118C-51-S-T1				
LED408	87-070-197-080		LED,SLP7118C-51-S-T1				
LED409	87-070-197-080		LED,SLP7118C-51-S-T1				
LED410	87-070-197-080		LED,SLP7118C-51-S-T1				
LED411	87-070-197-080		LED,SLP7118C-51-S-T1				
LED412	87-070-197-080		LED,SLP7118C-51-S-T1				
LED413	87-070-197-080		LED,SLP7118C-51-S-T1				
LED414	87-070-197-080		LED,SLP7118C-51-S-T1	C106	87-010-196-080		C-CAP,S 0.1-25 Z F
LED415	87-070-197-080		LED,SLP7118C-51-S-T1	C111	87-010-178-080		C-CAP,S 1000P-50 K B
LED416	87-070-281-080		LED,SLZ736A-25-S-T1	C207	87-010-402-080		CAP,E 2.2-50 M SME
LED417	87-070-281-080		LED,SLZ736A-25-S-T1	C208	87-010-402-080		CAP,E 2.2-50 M SME
LED418	87-070-281-080		LED,SLZ736A-25-S-T1	C209	87-010-183-080		C-CAP,S 2700P-50 K B
LED419	87-070-281-080		LED,SLZ736A-25-S-T1	C210	87-010-183-080		C-CAP,S 2700P-50 K B
LED420	87-070-281-080		LED,SLZ736A-25-S-T1	C211	87-010-404-080		CAP,E 4.7-50 M SME
LED421	87-070-281-080		LED,SLZ736A-25-S-T1	C212	87-010-404-080		CAP,E 4.7-50 M SME
LED431	87-070-278-010		LED,SLZ-738A-24-S	C217	87-010-408-080		CAP,E 47-50 M SME
LED432	87-070-278-010		LED,SLZ-738A-24-S	C218	87-010-408-080		CAP,E 47-50 M SME
LED433	87-070-290-010		LED,SLZ 936-30-S	C219	87-A10-596-080		C-CAP,S 100P-100 J CH
LED434	87-070-290-010		LED,SLZ 936-30-S	C220	87-A10-596-080		C-CAP,S 100P-100 J CH
LED435	87-070-278-010		LED,SLZ-738A-24-S	C221	87-A10-899-080		CAP,E 47-25 M BP
LED436	87-070-278-010		LED,SLZ-738A-24-S	C222	87-A10-899-080		CAP,E 47-25 M BP
PR107	87-A90-410-080		FUSE,0.5A 125V 251<US>	C223	87-010-544-080		CAP,E 0.1-50 M SME
PR107	87-A90-560-080		PROTECTOR,0.630A 60V<LHS>	C224	87-010-544-080		CAP,E 0.1-50 M SME
R243	87-A00-258-080		RES,M/F 0.22-1W J	C225	87-010-993-080		C-CAP,S 0.056-25 K B
R244	87-A00-258-080		RES,M/F 0.22-1W J	C226	87-010-993-080		C-CAP,S 0.056-25 K B
R245	87-A00-258-080		RES,M/F 0.22-1W J	C227	87-010-196-080		C-CAP,S 0.1-25 Z F
R246	87-A00-258-080		RES,M/F 0.22-1W J	C228	87-010-196-080		C-CAP,S 0.1-25 Z F
S302	87-A90-756-080		SW,TACT SINKO	C233	87-010-263-080		CAP,E 100-10 SME
S306	87-A90-756-080		SW,TACT SINKO	C234	87-010-263-080		CAP,E 100-10 SME
S307	87-A90-756-080		SW,TACT SINKO	C307	87-010-402-080		CAP,E 2.2-50 M SME
S308	87-A90-756-080		SW,TACT SINKO	C309	87-010-183-080		C-CAP, 2700P-50 K B
S316	87-A90-756-080		SW,TACT SINKO	C311	87-010-404-080		CAP,E 4.7-50 M SME
S317	87-A90-756-080		SW,TACT SINKO	C317	87-010-408-080		CAP,E 47-50 M SME
S318	87-A90-756-080		SW,TACT SINKO	C319	87-A10-596-080		C-CAP,S 100P-100 J CH
S319	87-A90-756-080		SW,TACT SINKO				
S320	87-A90-756-080		SW,TACT SINKO				

REF. NO.	PART NO.	KANRI NO	DESCRIPTION	REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C321	87-A10-899-080		CAP,E 47-25 M BP	C603	87-010-196-080		C-CAP,S 0.1-25 Z F
C323	87-010-544-080		CAP,E 0.1-50 M SME	C604	87-010-196-080		C-CAP,S 0.1-25 Z F
C325	87-010-993-080		C-CAP,S 0.056-25 K B	J201	87-A60-561-010		JACK,PIN 4P W/R,B/O
C327	87-010-196-080		C-CAP,S 0.1-25 Z F	J601	87-A60-562-010		JACK,PIN 6P W/R
C333	87-010-263-080		CAP,E 100-10 SME	L201	87-003-383-010		COIL,1UH K
C401	87-010-374-080		CAP,E 47-10 M SME	L202	87-003-383-010		COIL,1UH K
C402	87-010-196-080		C-CAP,S 0.1-25 Z F	L301	87-003-383-010		COIL,1UH K
C403	87-010-154-080		C-CAP,S 10P-50 D CH	R243	87-A00-258-080		RES,M/F 0.22-1W J
C404	87-010-374-080		CAP,E 47-10 M SME	R244	87-A00-258-080		RES,M/F 0.22-1W J
C405	87-010-196-080		C-CAP,S 0.1-25 Z F	R245	87-A00-258-080		RES,M/F 0.22-1W J
C407	87-010-154-080		C-CAP,S 10P-50 D CH	R246	87-A00-258-080		RES,M/F 0.22-1W J
C408	87-010-545-080		CAP,E 0.22-50 M SME	R343	87-A00-258-080		RES,M/F 0.22-1W J
C410	87-010-546-080		CAP,E 0.33-50 SME	R345	87-A00-258-080		RES,M/F 0.22-1W J
C413	87-010-196-080		C-CAP,S 0.1-25 Z F	R509	87-022-214-080		C-RES,S 100K-1/10W F
C415	87-010-400-080		CAP,E 0.47-50 M SME				
C416	87-010-400-080		CAP,E 0.47-50 M SME	KEY C.B			
C418	87-010-401-080		CAP,E 1-50 M SME				
C419	87-010-260-080		CAP,E 47-25 SME	FC302	88-908-231-110		FF-CABLE,8P 1.25
C421	87-010-378-080		CAP,E 10-16 M SME	LED447	87-070-197-080		LED,SLP7118C-51-S-T1
C422	87-010-378-080		CAP,E 10-16 M SME	LED448	87-070-197-080		LED,SLP7118C-51-S-T1
C501	87-010-176-080		C-CAP,S 680P-50 J SL	LED449	87-070-197-080		LED,SLP7118C-51-S-T1
C502	87-010-176-080		C-CAP,S 680P-50 J SL	LED450	87-070-197-080		LED,SLP7118C-51-S-T1
C503	87-A10-804-080		C-CAP,S 0.1-25 J B	LED451	87-070-197-080		LED,SLP7118C-51-S-T1
C504	87-A10-804-080		C-CAP,S 0.1-25 J B	LED452	87-070-197-080		LED,SLP7118C-51-S-T1
C505	87-A10-804-080		C-CAP,S 0.1-25 J B	LED453	87-070-197-080		LED,SLP7118C-51-S-T1
C506	87-A10-804-080		C-CAP,S 0.1-25 J B	LED454	87-070-197-080		LED,SLP7118C-51-S-T1
C509	87-010-112-080		CAP,E 100-16 M SME	LED455	87-070-197-080		LED,SLP7118C-51-S-T1
C510	87-010-265-080		CAP,E 33-16 M SME	LED456	87-070-197-080		LED,SLP7118C-51-S-T1
C511	87-A10-891-080		CAP,E 4.7-25 SME(K)	LED472	87-070-197-080		LED,SLP7118C-51-S-T1
C512	87-A10-800-080		C-CAP,S 6800P-16 J B	LED473	87-070-197-080		LED,SLP7118C-51-S-T1
C513	87-010-374-080		CAP,E 47-10 M SME	LED474	87-070-197-080		LED,SLP7118C-51-S-T1
C514	87-010-196-080		C-CAP,S 0.1-25 Z F	LED475	87-070-197-080		LED,SLP7118C-51-S-T1
C515	87-010-401-080		CAP,E 1-50 M SME	LED476	87-070-197-080		LED,SLP7118C-51-S-T1
C516	87-010-401-080		CAP,E 1-50 M SME	S309	87-A90-756-080		SW,TACT SINKO
C518	87-010-546-080		CAP,E 0.33-50 SME	S310	87-A90-756-080		SW,TACT SINKO
C519	87-010-545-080		CAP,E 0.22-50 M SME	S311	87-A90-756-080		SW,TACT SINKO
C520	87-010-546-080		CAP,E 0.33-50 SME	S312	87-A90-756-080		SW,TACT SINKO
C521	87-010-546-080		CAP,E 0.33-50 SME	S313	87-A90-756-080		SW,TACT SINKO
C522	87-018-209-080		CAP,TC U 0.1-50 Z F	S314	87-A90-756-080		SW,TACT SINKO
C524	87-010-374-080		CAP,E 47-10 M SME	S315	87-A90-756-080		SW,TACT SINKO
C526	87-010-196-080		C-CAP,S 0.1-25 Z F	DIAL C.B			
C530	87-010-544-080		CAP,E 0.1-50 M SME				
C531	87-010-546-080		CAP,E 0.33-50 SME	C287	87-010-196-080		CHIP CAPACITOR,0.1-25
C532	87-010-971-080		C-CAP,S 4700P-50 J B	FC802	88-910-131-110		FF-CABLE,10P 1.25
C533	87-012-349-080		C-CAP,S 1000P-50 J CH	LED460	87-017-368-080		LED,SEL4514C TP-5
C538	87-010-971-080		C-CAP,S 4700P-50 J B	LED461	87-017-368-080		LED,SEL4514C TP-5
C539	87-012-349-080		C-CAP,S 1000P-50 J CH	LED462	87-017-368-080		LED,SEL4514C TP-5
C540	87-010-401-080		CAP,E 1-50 M SME	LED463	87-017-368-080		LED,SEL4514C TP-5
C541	87-010-401-080		CAP,E 1-50 M SME	LED464	87-017-368-080		LED,SEL4514C TP-5
C542	87-A10-799-080		C-CAP,S 5600P-16 J B	LED465	87-017-368-080		LED,SEL4514C TP-5
C543	87-A10-802-080		C-CAP,S 0.047-16 J B	LED466	87-017-368-080		LED,SEL4514C TP-5
C544	87-A10-229-080		C-CAP,S 0.68-10 K	LED467	87-017-368-080		LED,SEL4514C TP-5
C545	87-012-393-080		C-CAP,S 0.22-16 K	LED468	87-017-368-080		LED,SEL4514C TP-5
C546	87-012-393-080		C-CAP,S 0.22-16 K	LED469	87-017-368-080		LED,SEL4514C TP-5
C547	87-010-404-080		CAP,E 4.7-50 M SME	LED470	87-017-368-080		LED,SEL4514C TP-5
C548	87-010-404-080		CAP,E 4.7-50 M SME	LED471	87-017-368-080		LED,SEL4514C TP-5
C549	87-012-393-080		C-CAP,S 0.22-16 K	SW102	87-A90-784-010		SW,RTRY EC12E 20MM
C550	87-012-393-080		C-CAP,S 0.22-16 K				
C551	87-016-081-080		C-CAP,S 0.1-16 K R	RELAY C.B			
C552	87-A10-802-080		C-CAP,S 0.047-16 J B				
C553	87-A10-802-080		C-CAP,S 0.047-16 J B	M451	87-A90-796-010		FAN,F614R-12MC-15-300MM
C554	87-016-081-080		C-CAP,S 0.1-16 K R	RY950	87-A90-143-010		RELAY,DG12D-OS(M)<US>
C555	87-016-081-080		C-CAP,S 0.1-16 K R				
C556	87-A10-801-080		C-CAP,S 0.022-16 J B	AC1 C.B			
C557	87-A10-801-080		C-CAP,S 0.022-16 J B				
C558	87-016-081-080		C-CAP,S 0.1-16 K R	△ F101	87-035-493-010		FUSE,8A 125V<US>
C579	87-010-402-080		CAP,E 2.2-50 M SME	△ FC101	87-A90-505-080		FUSE CLAMP,TP00351-51<US>
C580	87-010-402-080		CAP,E 2.2-50 M SME	△ FC102	87-A90-505-080		FUSE CLAMP,TP00351-51<US>
C601	87-010-196-080		C-CAP,S 0.1-25 Z F	△ PT101	88-NFP-601-010		PT,U EI96-60 8NF-23<US>
C602	87-010-196-080		C-CAP,S 0.1-25 Z F	△ T101	87-A60-317-010		TERMINAL, 1P MSC<US>

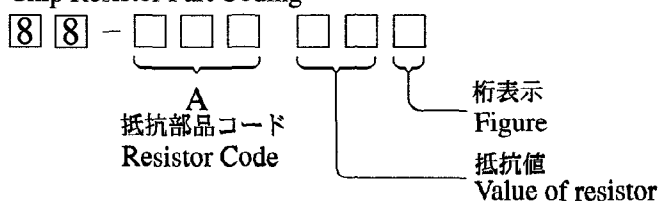
REF. NO.	PART NO.	KANRI NO.	DESCRIPTION	REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
△ T102	87-A60-317-010		TERMINAL, 1P MSC<US>				DECK C.B
	AC2 C.B			CON105	87-099-756-019		CONN, 15P 9604 S F
△ PR101	87-026-691-080		FUSE, 10A 125V 251<US>	SFR1	87-024-581-019		SFR, 3.3K DIA 6H
△ PR101	87-026-682-080		PROTECTOR, 10A 60V491<LHS>	SOL1	82-ZM1-618-010		SOL ASSY, 27
△ PR102	87-026-691-080		FUSE, 10A 125V 251<US>	SOL2	82-ZM1-618-010		SOL ASSY, 27
△ PR102	87-026-682-080		PROTECTOR, 10A 60V491<LHS>	SW1	87-A90-248-019		SW, MICRO ESE11SH2CXQ
△ PR103	87-026-691-080		FUSE, 10A 125V 251<US>	SW2	87-A90-248-019		SW, MICRO ESE11SH2CXQ
△ PR103	87-026-682-080		PROTECTOR, 10A 60V491<LHS>	SW3	87-A90-248-019		SW, MICRO ESE11SH2CXQ
△ PR104	87-026-691-080		FUSE, 10A 125V 251<US>	SW4	87-036-110-010		SW, MICRO SPPB62
△ PR104	87-026-682-080		PROTECTOR, 10A 60V491<LHS>	SW5	87-036-110-010		SW, MICRO SPPB62
△ PR105	87-A90-210-080		FUSE, 7A 125V 251<US>	SW6	87-036-110-010		SW, MICRO SPPB62
△ PR105	87-A90-195-080		PROTECTOR 7A 125V 49<LHS>	SW8	87-A90-248-019		SW, MICRO ESE11SH2CXQ
△ PR106	87-A90-210-080		FUSE, 7A 125V 251<US>	SW9	87-036-110-010		SW, MICRO SPPB62
△ PR106	87-A90-195-080		PROTECTOR 7A 125V 49<LHS>	W001	82-ZM3-601-019		RBN, CORD, 4P-75
WH101	87-A90-142-010		HOLDER, 51052-0710 V0				HEAD-1 C.B
	PT C.B<LHS>						HEAD-2 C.B
△ F101	87-035-458-010		FUSE, 4A 250V T W/C<LHS>				
△ F102	87-035-458-010		FUSE, 4A 250V T W/C<LHS>				
△ FC101	87-033-147-010		FUSE CLAMP, MT-20<LHS>				
△ FC102	87-033-147-010		FUSE CLAMP, MT-20<LHS>				
△ FC103	87-033-147-010		FUSE CLAMP, MT-20<LHS>				
△ FC104	87-033-147-010		FUSE CLAMP, MT-20<LHS>				
△ PT101	88-NFP-602-010		PT, LH EI96-60 8NF23<LHS>				
△ SW101	87-A90-165-010		SW, SL 1-2-3 SWS2301<LHS>				
△ T101	87-A60-317-010		TERMINAL, 1P MSC<LHS>				
△ T102	87-A60-317-010		TERMINAL, 1P MSC<LHS>				

CHIP RESISTOR PART CODE

○チップ抵抗部品コード/CHIP RESISTOR PART CODE

チップ抵抗部品コードの成り立ち

Chip Resistor Part Coding



チップ抵抗
Chip resistor

容量 Wattage	種類 Type	許容誤差 Tolerance	記号 Symbol	寸法/Dimensions (mm)			抵抗コード : A Resistor Code : A	
				外形/Form	L	W		t
1/16W	1608	± 5%	CJ		1.6	0.8	0.45	108
1/10W	2125	± 5%	CJ		2	1.25	0.45	118
1/8W	3216	± 5%	CJ		3.2	1.6	0.55	128

TRANSISTOR ILLUSTRATION



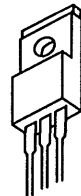
E C B

2SA952
CSB1058
CC5551



E C B

KTA1266
KTC3198



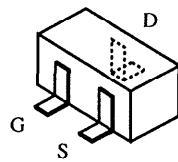
B C E

2SB1370

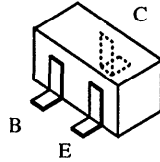


E C B

2SA933
DTA144



2SK2158



2SB1588
2SA1235
2SC2714
2SC3052
2SC4115
CMBT5401
CMBT5551
CSA1362
CSD1306
DTA114
DTA143

DTC123
RN1410
RT1N141C
RT1N144C
RT1N441C
RT1P144C
RT1P141C
RT1P441C



G D S

2SK2937

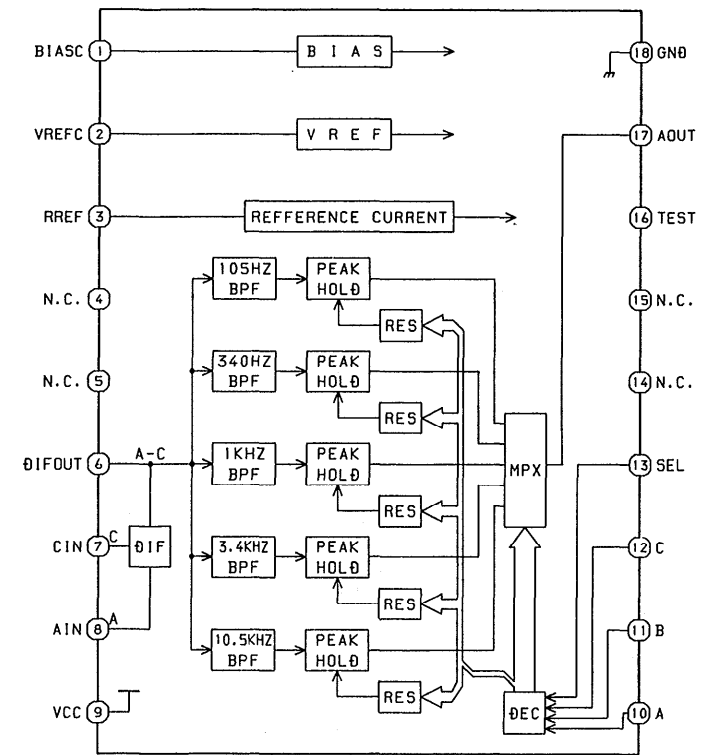


B C E

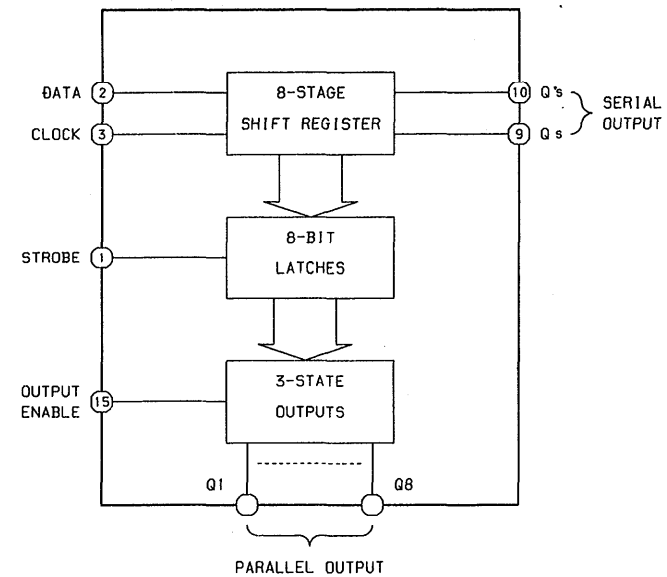
2SB1625
2SB1626
2SD2439
2SD2494
2SD2495

IC BLOCK DIAGRAM - 1

BA3835S



IC, BU4094BCF

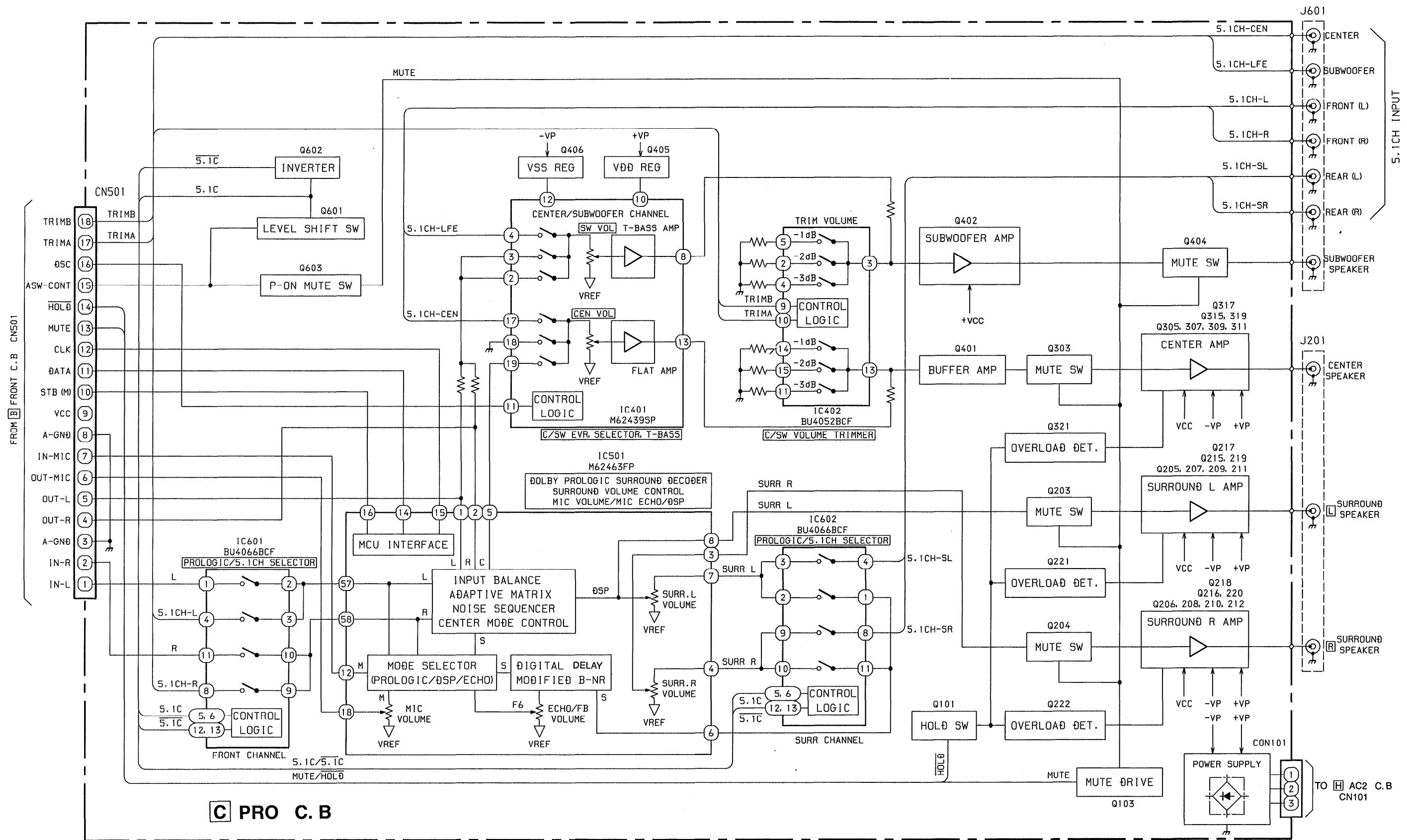


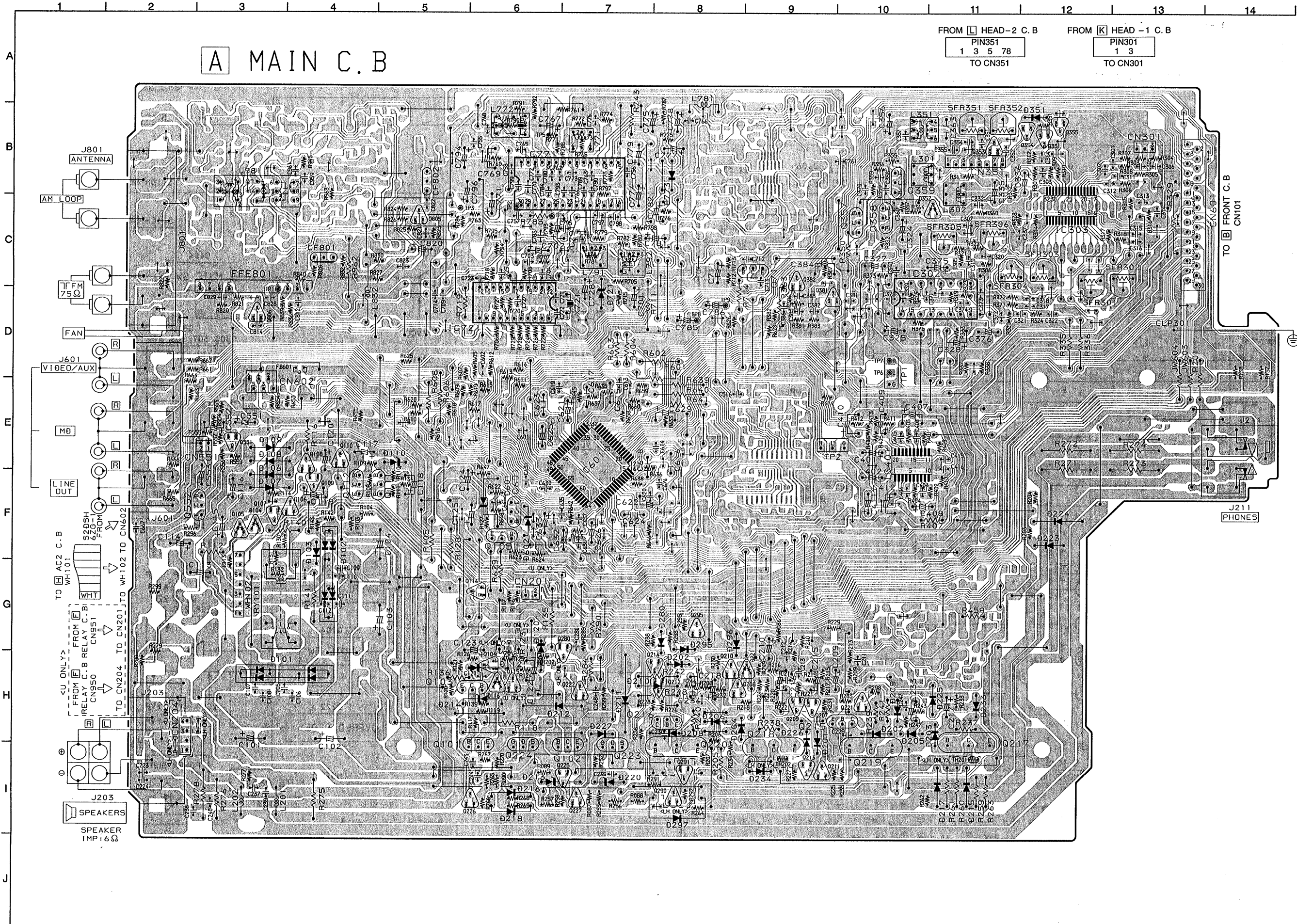
TRUTH TABLE

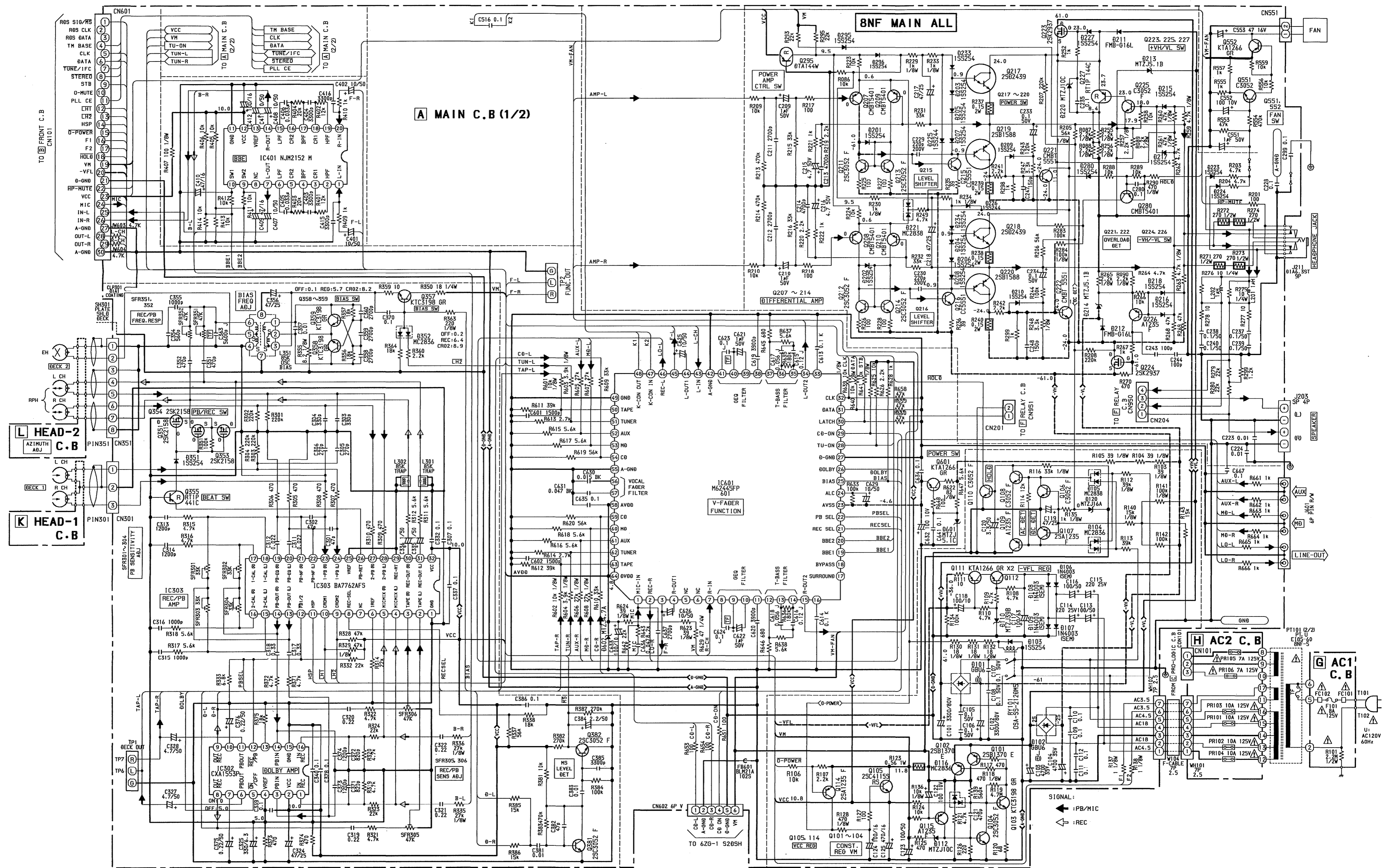
CLOCK	OUTPUT ENABLE	STROBE	DATA	PARALLEL OUTPUTS		SERIAL OUTPUTS	
				Q1	Qn	Qs	Q's
	L	X	X	Z	Z	Q7	NO Chg.
	L	X	X	Z	Z	No Chg.	Qs
	H	L	X	No Chg.	No Chg.	Q7	No Chg.
	H	H	L	L	Qn-1	Q7	No Chg.
	H	H	H	H	Qn-1	Q7	No Chg.
	H	X	X	No Chg.	No Chg.	No Chg.	Qs

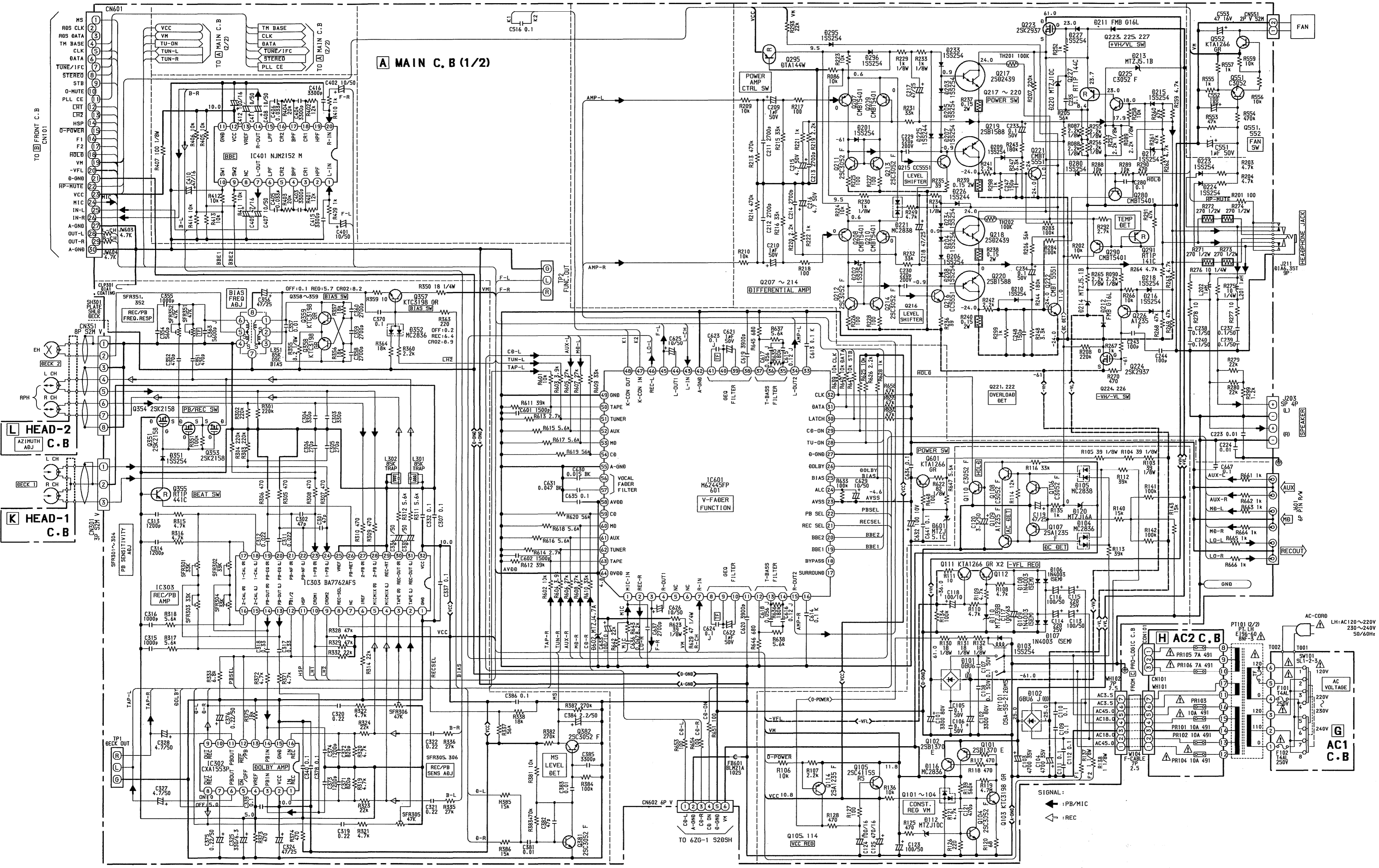
Z=High Impedance
X=Don't Care

BLOCK DIAGRAM - 2 (PRO - LOGIC)

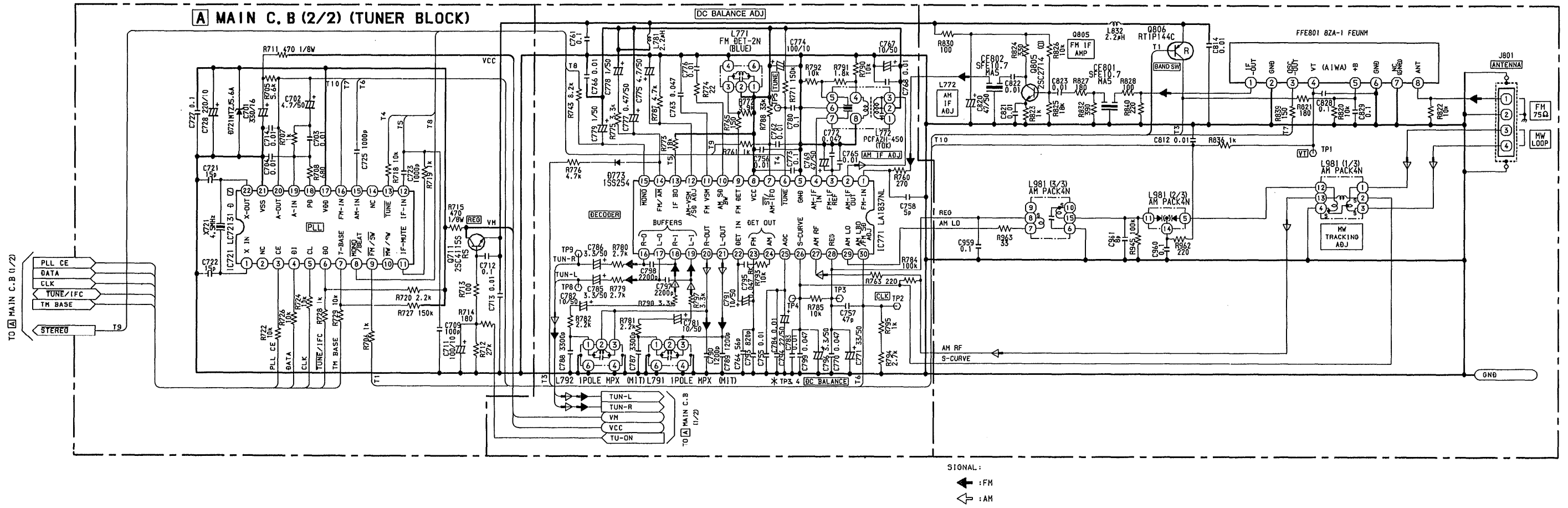






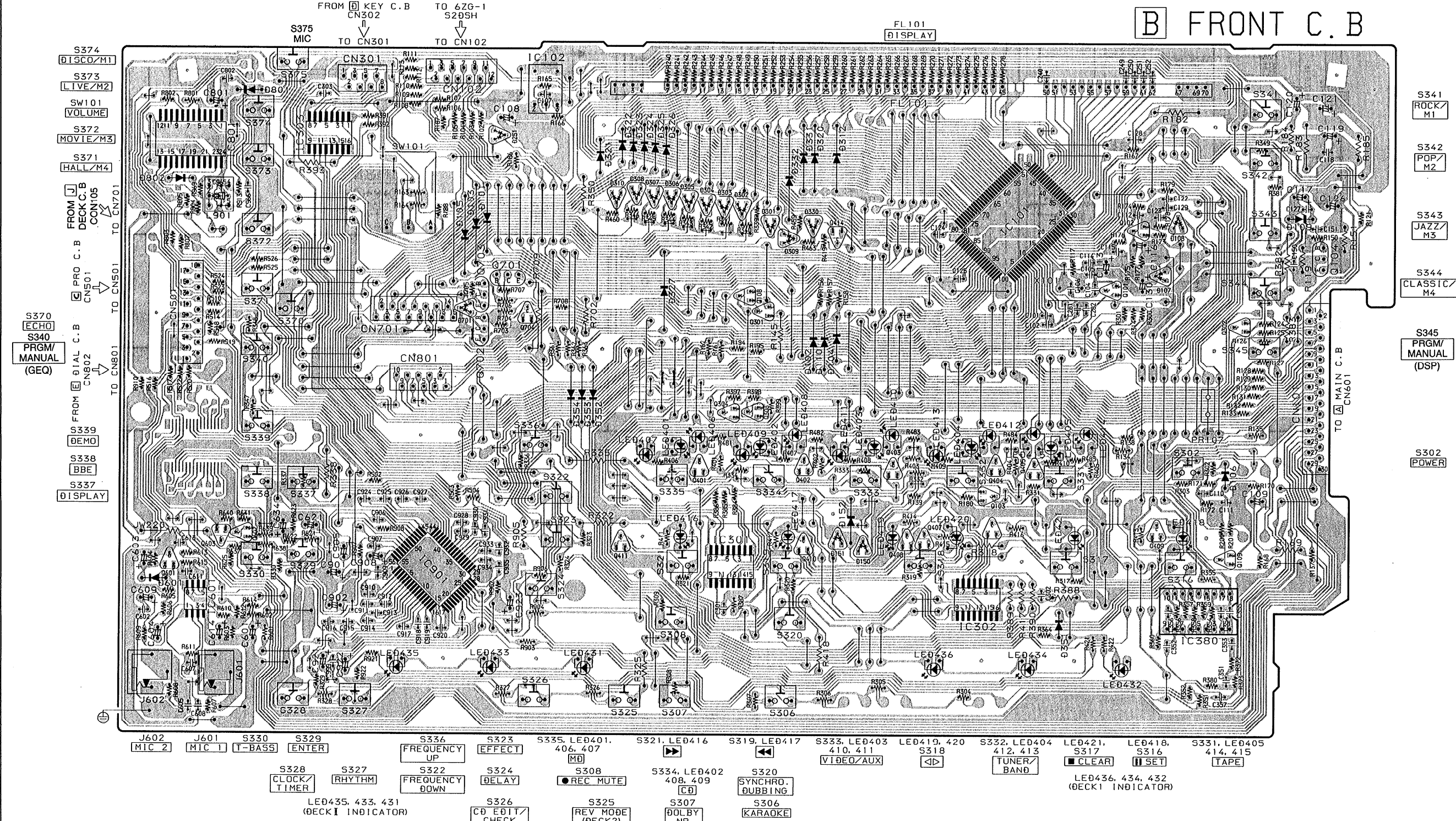


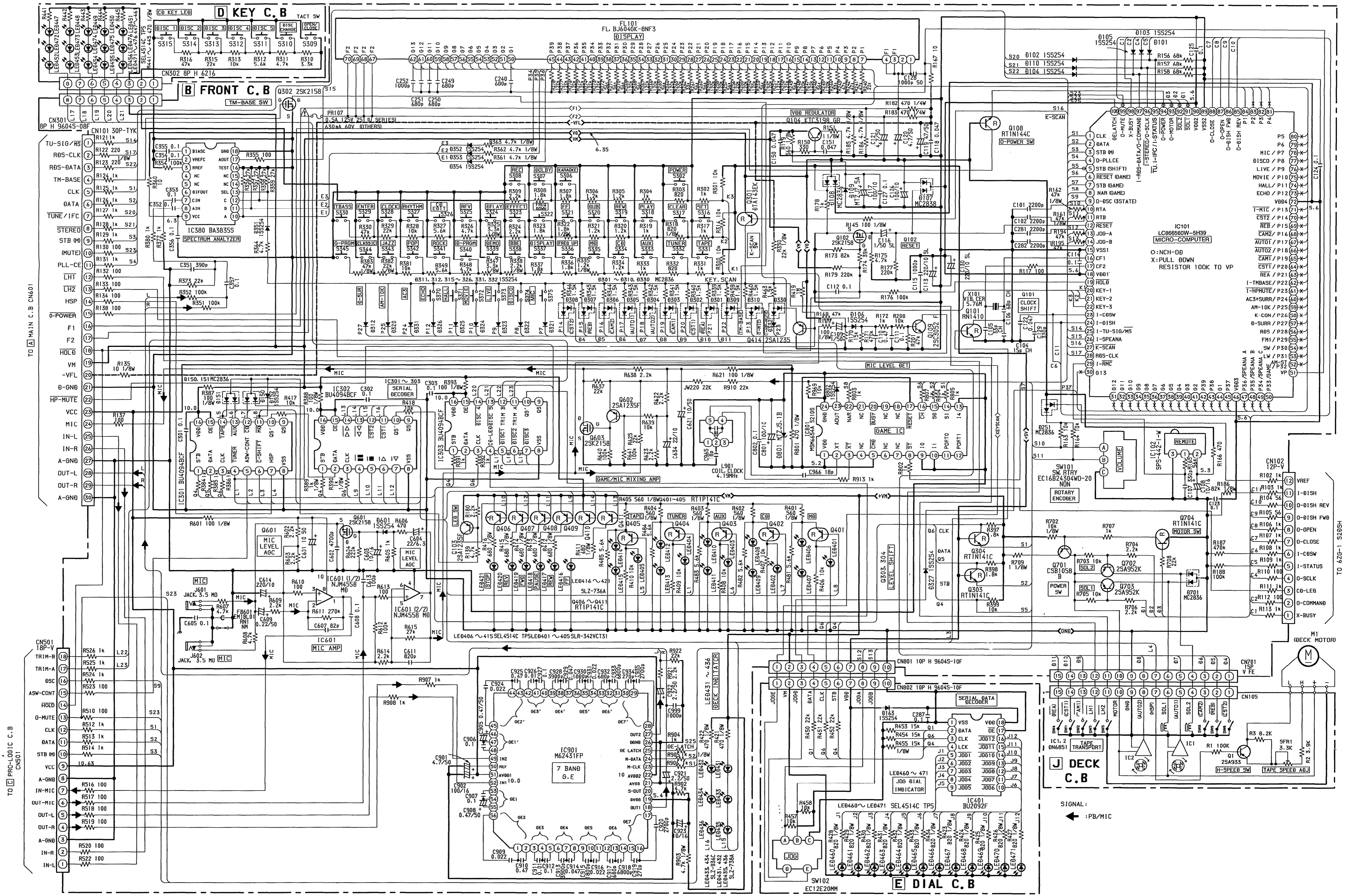
SCHEMATIC DIAGRAM - 3 (TUNER)



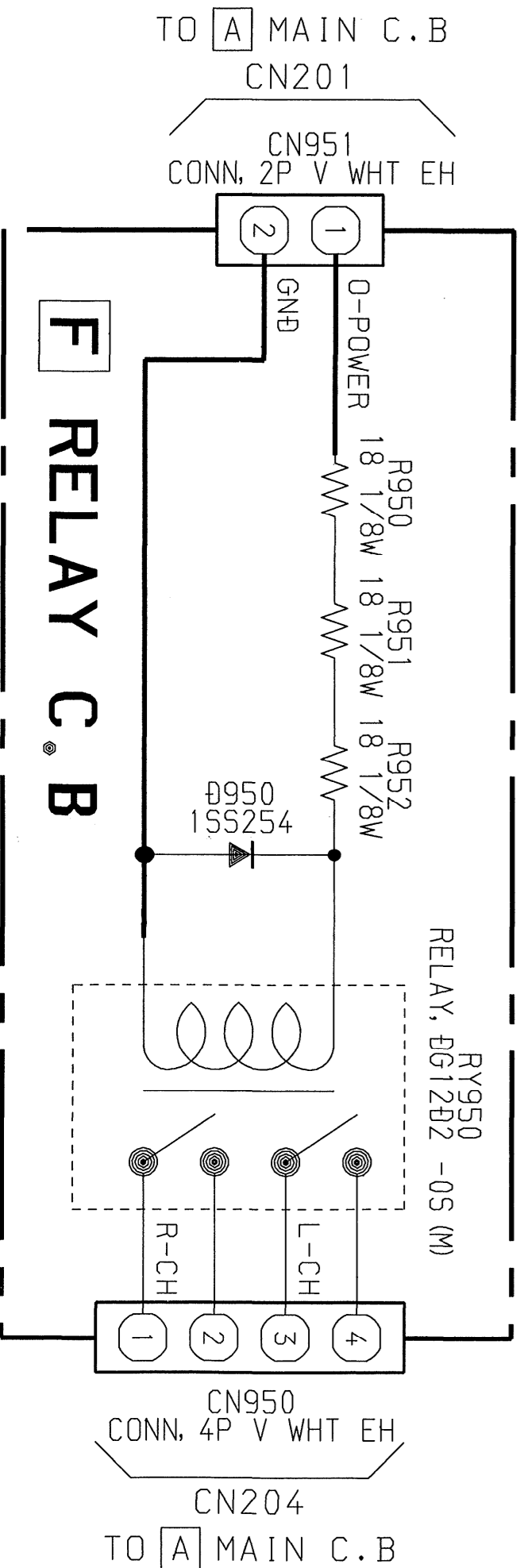
A
B
C
D
E
F
G
H
I
J

B FRONT C.B

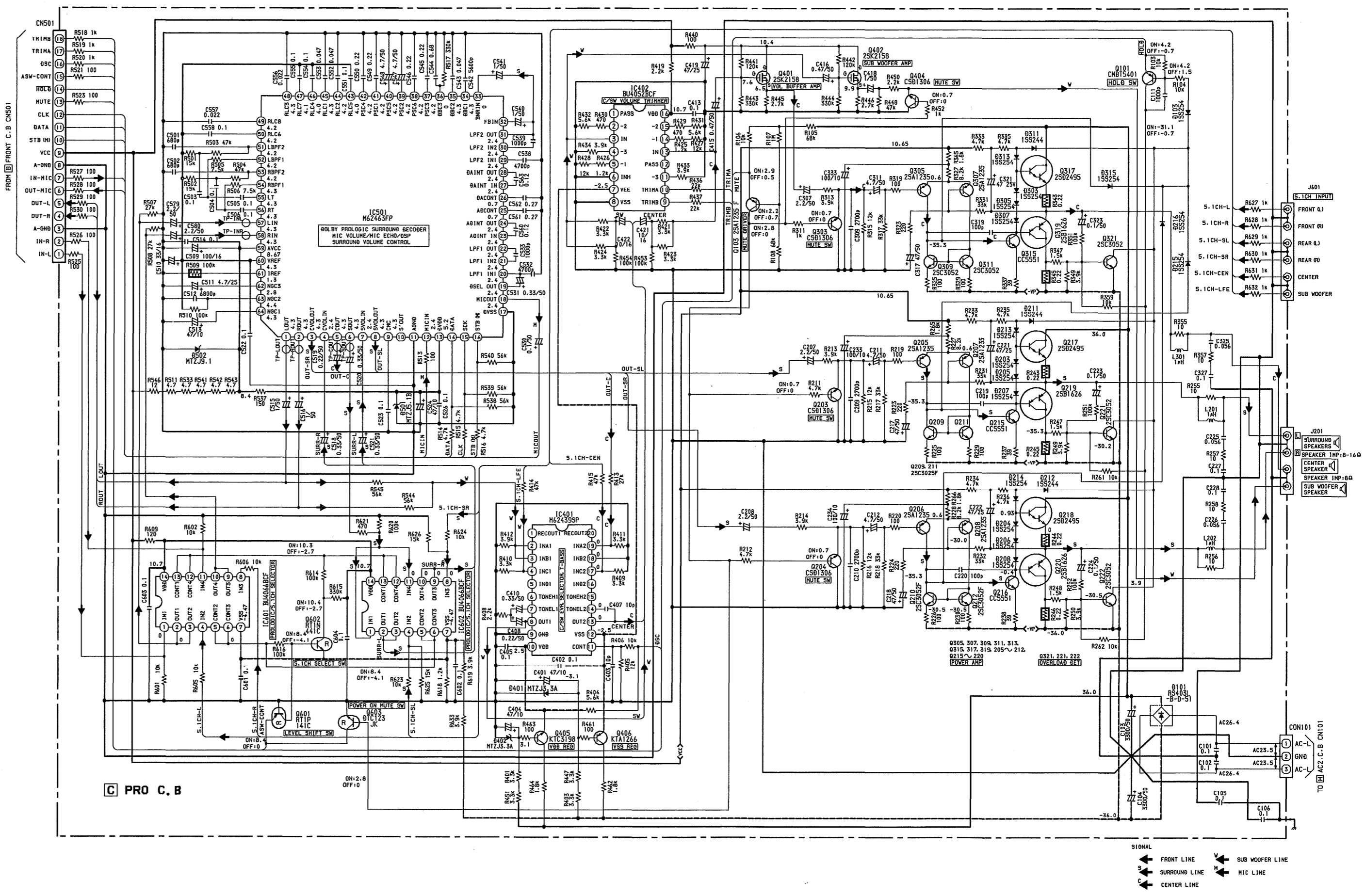


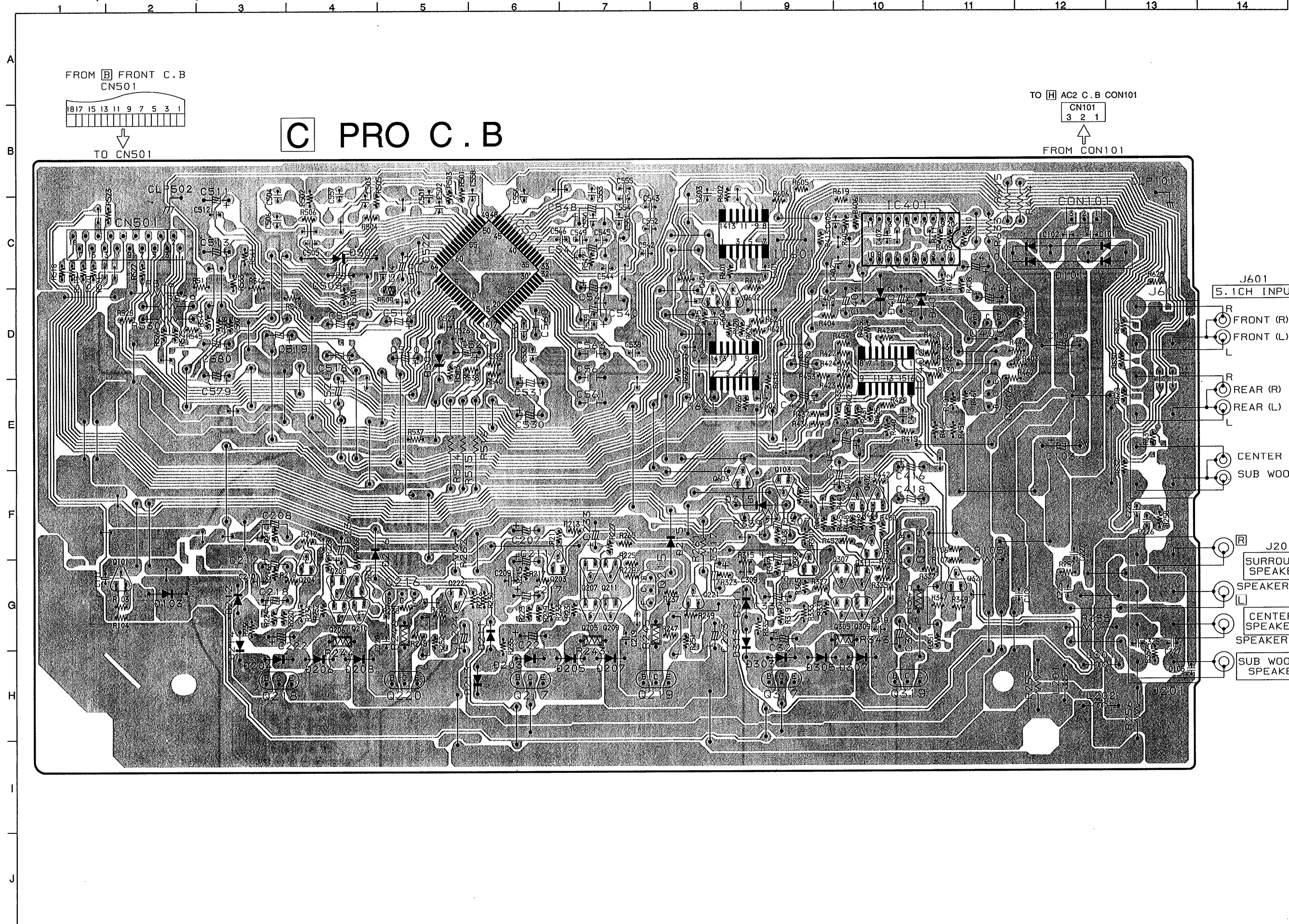


SCHEMATIC DIAGRAM - 5 (RELAY : U)

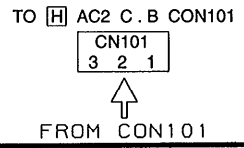
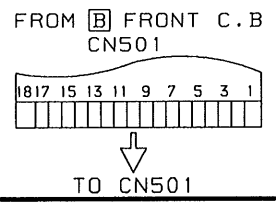


SCHEMATIC DIAGRAM - 6 (PRO - LOGIC)





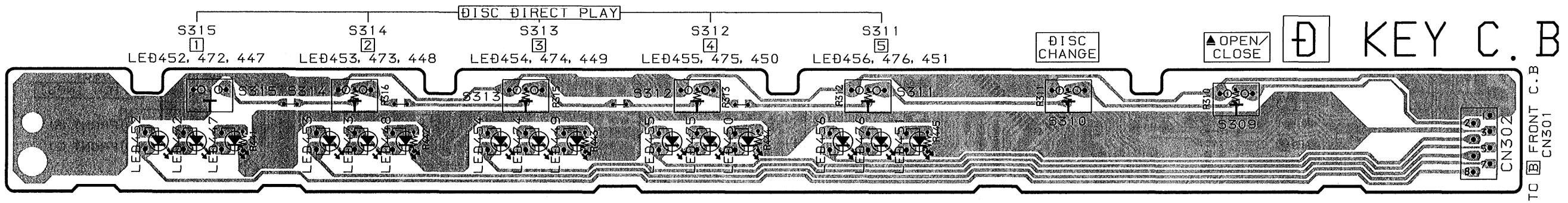
C PRO C.B



- J601
5.1CH INPUT
- R FRONT (R)
- L FRONT (L)
- R REAR (R)
- L REAR (L)
- CENTER
SUB WOOFER
- R J201
SURROUND
SPEAKER
- L SPEAKER IMP: 8-16Ω
- CENTER
SPEAKER
- L SPEAKER IMP: 8Ω
- SUB WOOFER
SPEAKER

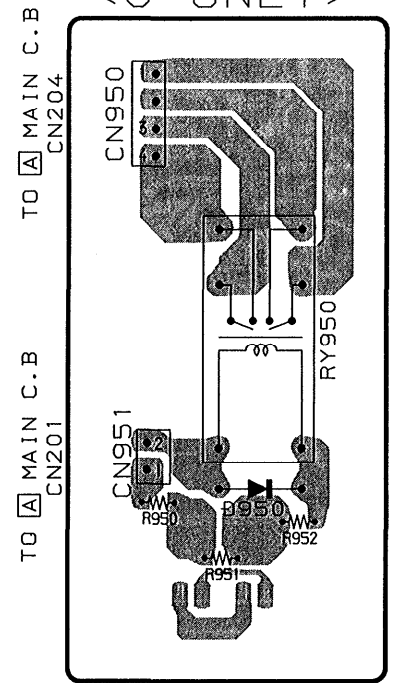
1 2 3 4 5 6 7 8 9 10 11 12 13 14

A
B
C
D
E
F
G
H
I
J

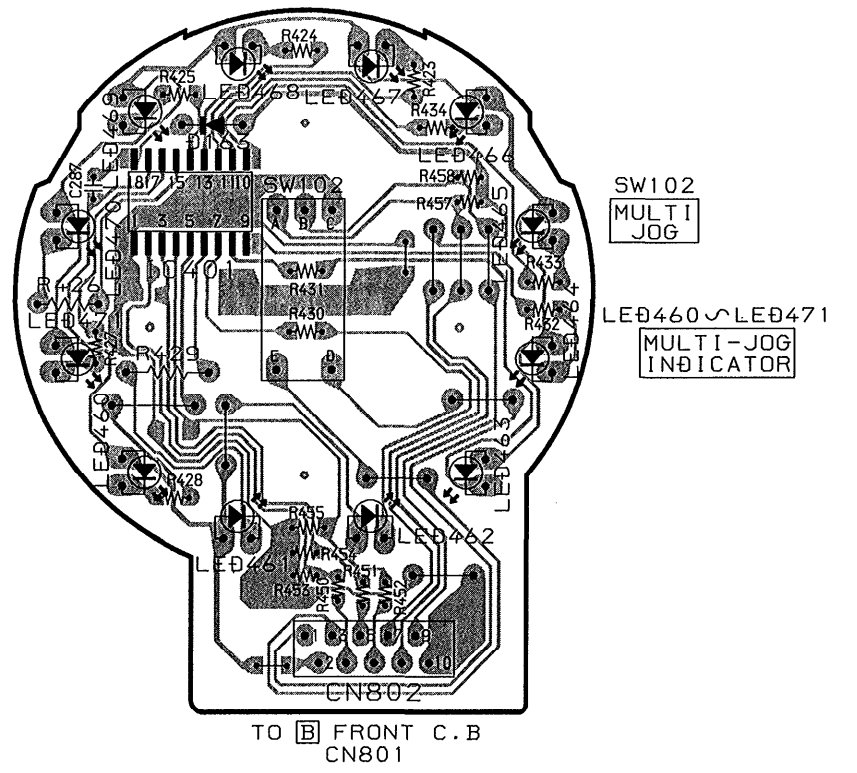


F RELAY C. B

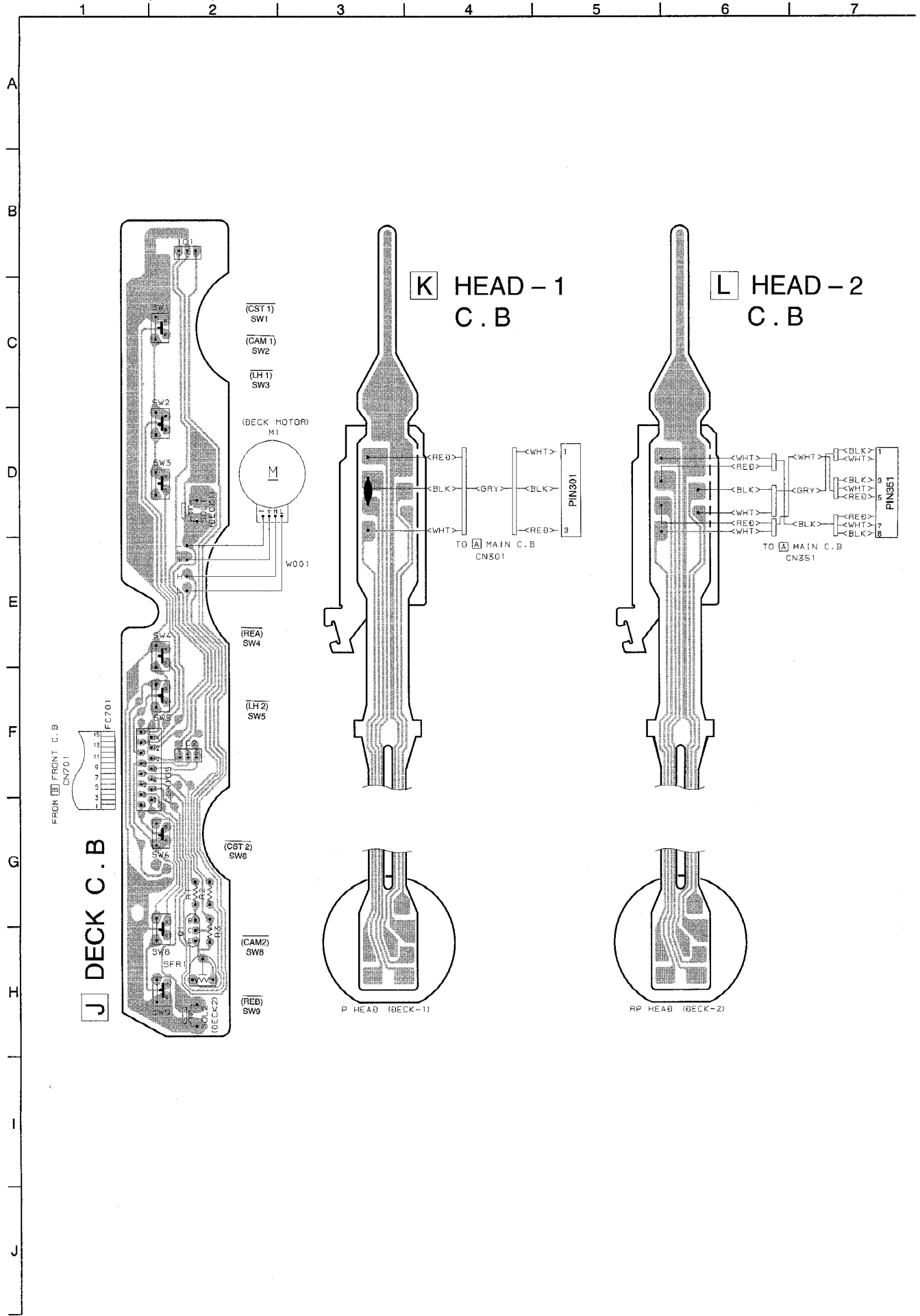
<U ONLY>



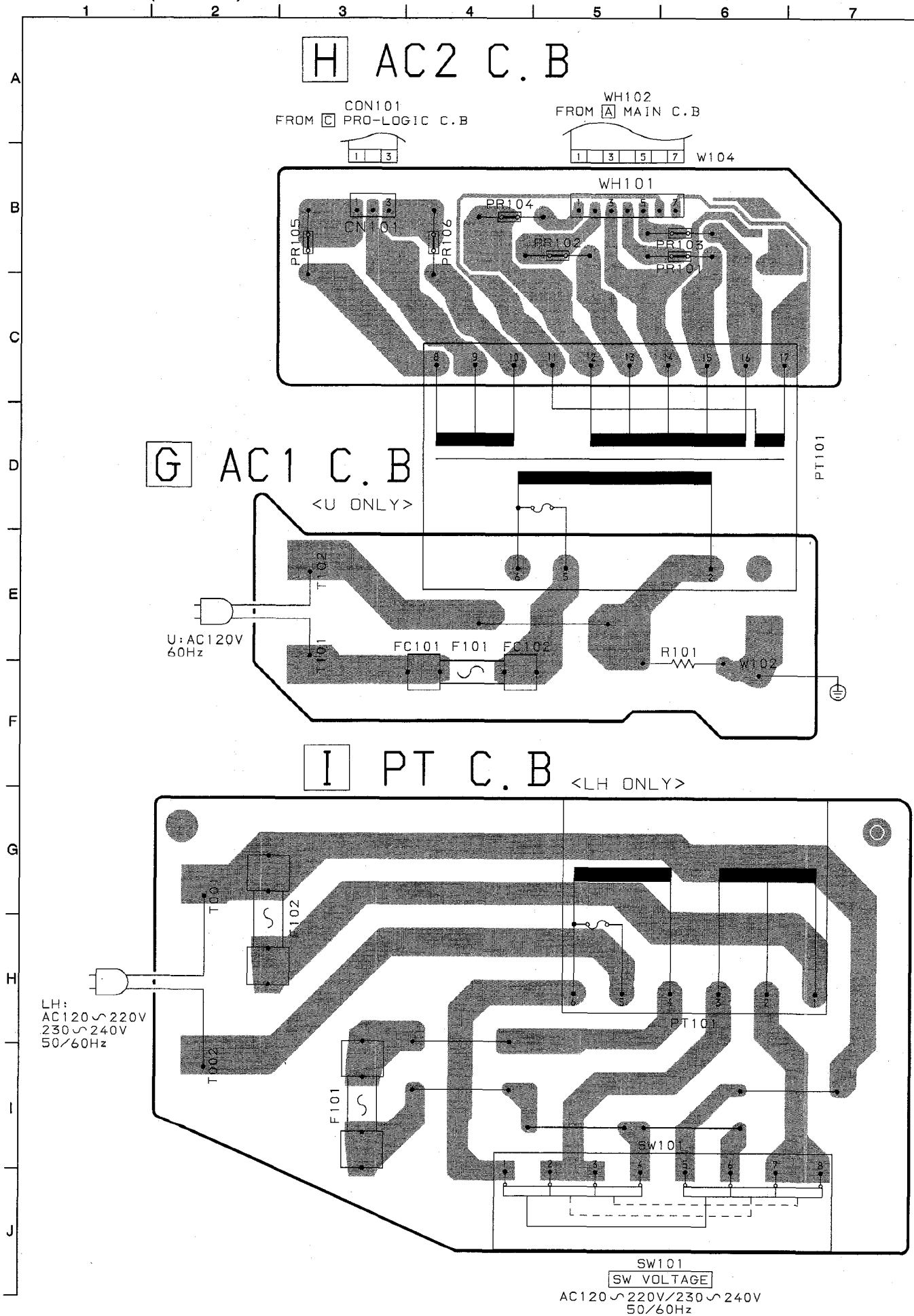
E DIAL C. B



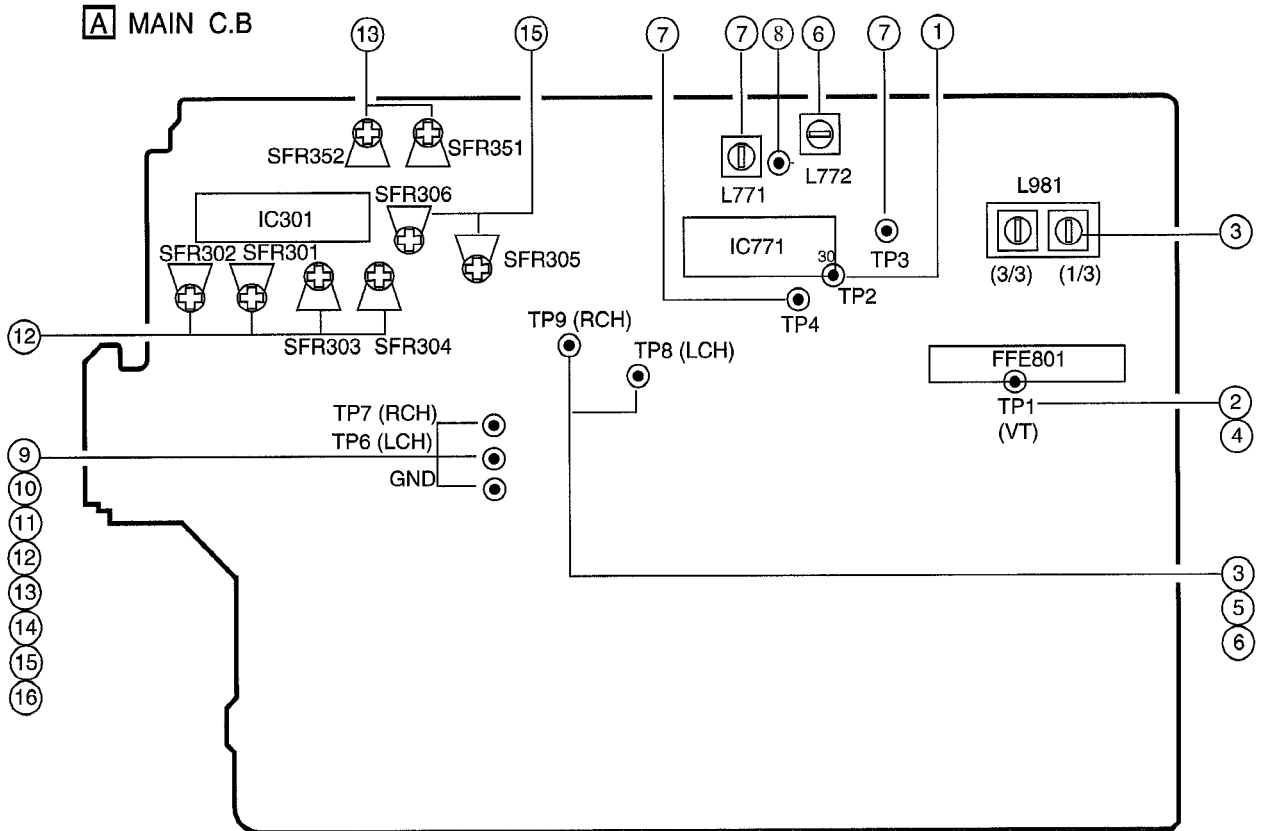
WIRING - 5 (DECK)



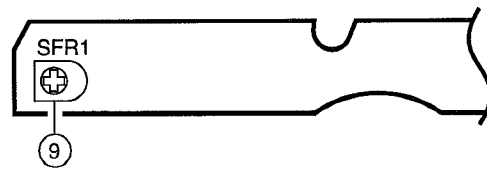
WIRING - 6 (POWER)



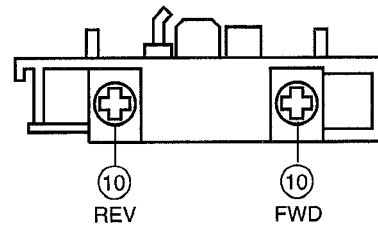
ADJUSTMENT <TUNER / DECK>



J DECK C.B



DECK-1 P, DECK-2 R/P/E HEAD



< TUNER SECTION >

1. Clock Frequency Check
 Settings : • Test point : TP2
 Method : Set to AM 1710kHz and check that the test point is 2160kHz \pm 45Hz.
2. MW VT Check
 Settings : • Test point : TP1
 Method : Set to AM 1710kHz and AM 530kHz and check that the test point is less than 8.5V(1710kHz) and more than 0.6V(530kHz).
3. MW Tracking Adjustment
 Settings : • Test point : TP8(Lch), TP9(Rch)
 • Adjustment location :
 L981(1/3) 1000kHz
 Method : Set to AM 1000kHz and adjust L981 so that the test point become maximum.
4. FM VT Check
 Settings : • Test point : TP1
 Method : Set to FM 108.0MHz and check that the test point is less than 8.0V.
 Set to FM 87.5MHz and check that the test point is more than 0.5V.
5. FM Tracking Check
 Settings : • Test point : TP8(Lch), TP9(Rch)
 Method : • Set to FM 98.0MHz and check that the test point is less than 9.0dB.
6. AM IF Adjustment
 Settings : • Test point : TP8(Lch), TP9(Rch)
 • Adjustment location :
 L772 450kHz

7. DC Balance / Mono Distortion Adjustment
 Settings : • Test point : TP3, TP4 (DC Balance)
 • Test point : TP8, TP9 (Distortion)
 • Adjustment location : L771
 • Input level : 54dB
 Method : Set to FM 98.0MHz and adjust L771 so that the voltage between TP3 and TP4 becomes $0V \pm 0.04V$.
 Next, check that the distortion is less than 1.3%
8. Auto Stop Level Check
 MW
 Settings : • Test point : TP5
 • Input level : 52dB
 Method : Set to AM 1000kHz and check that the auto stop is at 52dB +10dB / -15dB.
- FM
 Settings : • Test point : TP5
 • Input level : 25dB
 Method : Set to FM 98.0MHz and check that the auto stop is at 25dB \pm 10dB.
- < DECK SECTION >
9. Tape Speed Adjustment (DECK 1, DECK 2)
 Settings : • Test tape : TTA-100
 • Test point : TP6(Lch), TP7(Rch)
 • Adjustment location : SFR1
 Method : Play back the test tape and adjust SFR1 so that the frequency counter reads 3000Hz \pm 5Hz.
10. Head Azimuth Adjustment (DECK 1, DECK 2)
 Settings : • Test tape : TTA-300
 • Test point : TP6(Lch), TP7(Rch)
 • Adjustment location : Head azimuth adjustment screw
 Method : Play back (FWD) the 10kHz signal of the test tape and adjust screw so that the output becomes maximum.
 Next, perform on REV PLAY mode.
11. PB Frequency Response Check (DECK 1, DECK 2)
 Settings : • Test tape : TTA-300
 • Test point : TP6(Lch), TP7(Rch)
 Method : Play back the 315Hz and 10kHz signals of the test tape and check that the output ratio of the 10kHz signal with respect to that of the 315Hz signal is within 2dB.
12. PB Sensitivity Adjustment (DECK 1, DECK 2)
 Settings : • Test tape : TTA-200
 • Test point : TP6(Lch), TP7(Rch)
 • Adjustment Location : SFR301 (DECK1,Lch)
 SFR302 (DECK1,Rch)
 SFR303 (DECK2,Lch)
 SFR304 (DECK2,Rch)
 Method : Play back the test tape and adjust SFRs so that the output level at TP6,TP7 becomes 245mV \pm 10mV.
13. REC/PB Frequency Response Adjustment
 Settings : • Test tape : TTA-602
 • Test point : TP6(Lch), TP7(Rch)
 • Input signal : 1kHz / 10kHz (LINE IN)
 • Adjustment location : SFR351 (Lch)
 SFR352 (Rch)
 Method : Apply a 1kHz signal and REC mode. Then adjust OSC attenuator so that the output level at the TP6, TP7 becomes 17mV. Record and play back the 1kHz and 10kHz signals and adjust SFRs so that the output of the 10kHz signals becomes 0dB \pm 0.5dB with respect to that of the 1kHz signal.
14. REC/PB Frequency Response Check
 Settings : • Test tape : TTA-615
 • Test point : TP6(Lch), TP7(Rch)
 • Input signal : 1kHz / 10kHz (LINE IN)
 Method : Apply a 1kHz signal and REC mode. Then adjust OSC attenuator so that the output level at the TP6, TP7 becomes 17mV. Record and play back the 1kHz and 10kHz signals and check that the output is 0dB \pm 2dB.
15. REC/PB Sensitivity Adjustment
 Settings : • Test tape : TTA-602
 • Test point : TP6(Lch), TP7(Rch)
 • Input signal : 1kHz (LINE IN)
 • Adjustment location : SFR305 (Lch)
 SFR306 (Rch)
 Method : Apply a 1kHz signal and REC mode. Then adjust OSC attenuator so that the output level at the TP6, TP7 becomes 170mV. Record and play back the 1kHz signals and adjust SFRs so that the output of the 1kHz signals becomes 0 \pm 0.5dB.
16. REC/PB Sensitivity Check
 Settings : • Test tape : TTA-615
 • Test point : TP6(Lch), TP7(Rch)
 • Input signal : 1kHz (LINE IN)
 Method : Apply a 1kHz signal and REC mode. Then adjust OSC attenuator so that the output level at the TP6, TP7 becomes 170mV. Record and play back the 1kHz signals and check that the output is 0 \pm 1.5dB.

PRACTICAL SERVICE FIGURE

<TUNER SECTION>

<FM SECTION>

IHF Sensitivity : Less than 10 / 9 / 9dB
(THD 3%) [at 87.5 / 98.0 / 108.0MHz]
S/N 50dB Quieting sensitivity :
Less than 35dB
[at 98.0MHz]
Signal to noise ratio : Mono : More than 72dB
Stereo : More than 66dB
[at 98.0MHz]
Distortion : Mono : Less than 1.2%
Stereo : Less than 2.0%
[at 98.0MHz]
Auto stop level : 25dB ± 10dB [at 98.0MHz]
Stereo separation : More than 30dB [at 98.0MHz]
Intermediate frequency : 10.7MHz

<MW SECTION>

Sensitivity : Less than 60 / 58 / 58dB
(S/N 20 dB) [at 600 / 1000 / 1400kHz]
Signal to noise ratio : Mono : More than 36dB [at 1000kHz]
Stereo : More than 34dB [at 1000kHz]
Distortion : Mono : Less than 1.5% [at 1000kHz]
Stereo : Less than 4.0% [at 1000kHz]
Auto stop level : 52dB +10/-15dB
[at 1000kHz]
Stereo separation : More than 15dB [at 1000kHz]
Intermediate frequency : 450kHz

<DECK SECTION>

Tape speed : 3000Hz ± 45Hz
Wow & flutter : Less than 0.15% (W.R.M.S)
Take-up torque : 30 ~ 55g-cm (FWD, REV)
F.F torque : 75 ~ 160g-cm
REW torque : 75 ~ 160g-cm
Back tension : 2 ~ 7g-cm (FWD, REV)
PB output level : 245mV ± 1dB (SP OUT 2V)
REC/PB output level : -3.0dB ± 1dB (NORM)
-3.5dB ± 1dB (CrO₂)
(SP OUT 2V)
Distortion (REC/PB) : Less than 2.0% (NORM, CrO₂)
Noise level (PB) : Less than 2.0mV(NORM, SP OUT 2V)
Noise level (REC/PB) : Less than 3.0mV(NORM, SP OUT 2V)
Erasing ratio : More than 60dB (at 125Hz, +10VU)
Test tape : TTA-602 (NORMAL)
TTA-615 (CrO₂)

IC DESCRIPTION

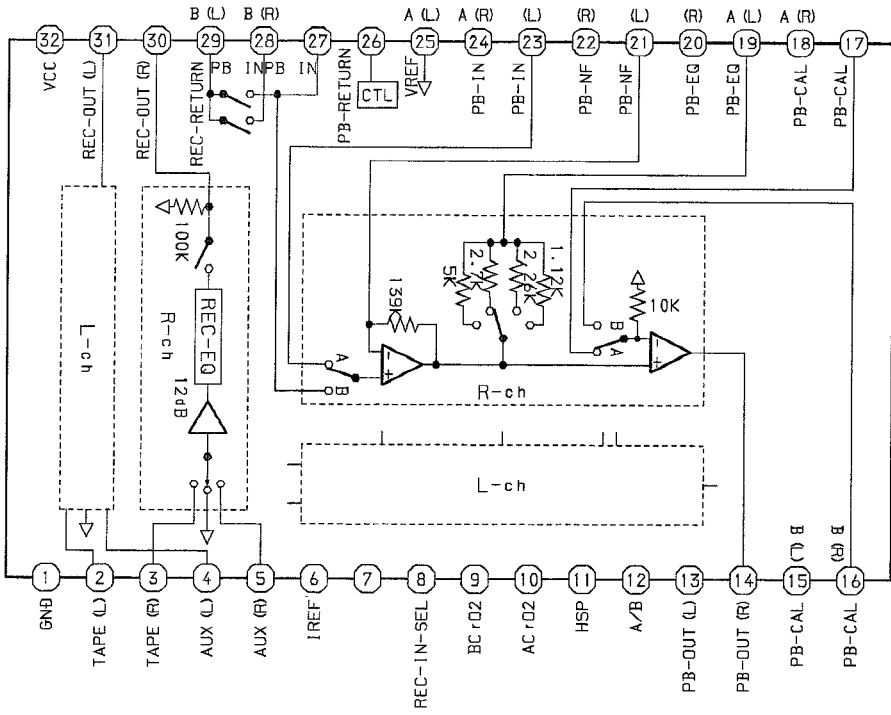
IC, LC866560W-5H39

Pin No.	Pin Name	I/O	Description
1	CLK	O	CLOCK output for MAIN,FRONT PWB.
2	DATA	O	DATA output for MAIN. FRONT PWB.
3	STB	O	Latch strobe output for MAIN PWB.
4	O-PLL CE	O	PLL IC chip enable.
5	STB (SHIFT)	O	Latch strobe output for FRONT shift register.
6	$\overline{\text{RESET}}$ (GAME)	I	Reset input for Sound IC.
7	STB (GAME)	O	Latch strobe output for Sound IC.
8	I-NAR (GAME)	I	Sound IC NAR input.
9	O-DSC	O	Serial data output for PROLOGIC PWB.
10	RT A	I	Main volume rotary encoder input A.
11	RT B	I	Main volume rotary encoder input B.
12	$\overline{\text{RESET}}$	I	Reset input.
13	JOG A	I	Dial jog rotary encoder input A.
14	JOG B	I	Dial jog rotary encoder input B.
15	VSS 1	-	GND.
16	CF 1	-	5.76MHz oscillator circuit.
17	CF 2	-	
18	VDD 1	-	Power supply input.
19	$\overline{\text{HOLD}}$	I	Power failure detected input "L" to stop clock and main memory."H" normal operation.
20	KEY-1	I	KEY input.(A/D)
21	KEY-2	I	
22	KEY-3	I	
23	I-CD SW	I	CD mechanical switch A/D converter input.
24	I-DISH	I	CD turntable sensor input.
25	I-RDS SIG/ $\overline{\text{MS}}$	I	RDS signal and deck music sensor signal input.
26	I-SPEANA	I	A/D input for spectrum analyzer display.
27	$\overline{\text{K-SCAN}}$	O	Key scan output (active low).
28	I-RDS-CLK	I	Tuner RDS clock input.
29	$\overline{\text{I-RMC}}$	I	System remote control signal input.
30 ~ 41	G13 ~ G2	O	FL GRID output G2~G13.
42, 43	P39 ~ P38	O	FL SEGMENT output P39, P38.
44	G1	O	FL GRID output G1.
45	P37	O	FL SEGMENT output P37.
46	VDD3	-	Power supply input.
47	SPEANA-A/P36	O	Spectrum analyzer band switching output /FL segment P36 output.
48	SPEANA-B/P35	O	Spectrum analyzer band switching output /FL segment P35 output.
49	SPEANA-C/P34	O	Spectrum analyzer band switching output /FL segment P34 output.
50	P33/GAME	I/O	FL segment P33 output / GAME key input.
51	-VFL	-	Power supply input for FL display.
52	P32/AM-ST	I/O	FL segment P32 output / AM-ST input to diode.
53	P31/LW	I/O	FL segment P31 output / LW input to diode.
54	P30/SW	I/O	FL segment P30 output / SW input to diode.

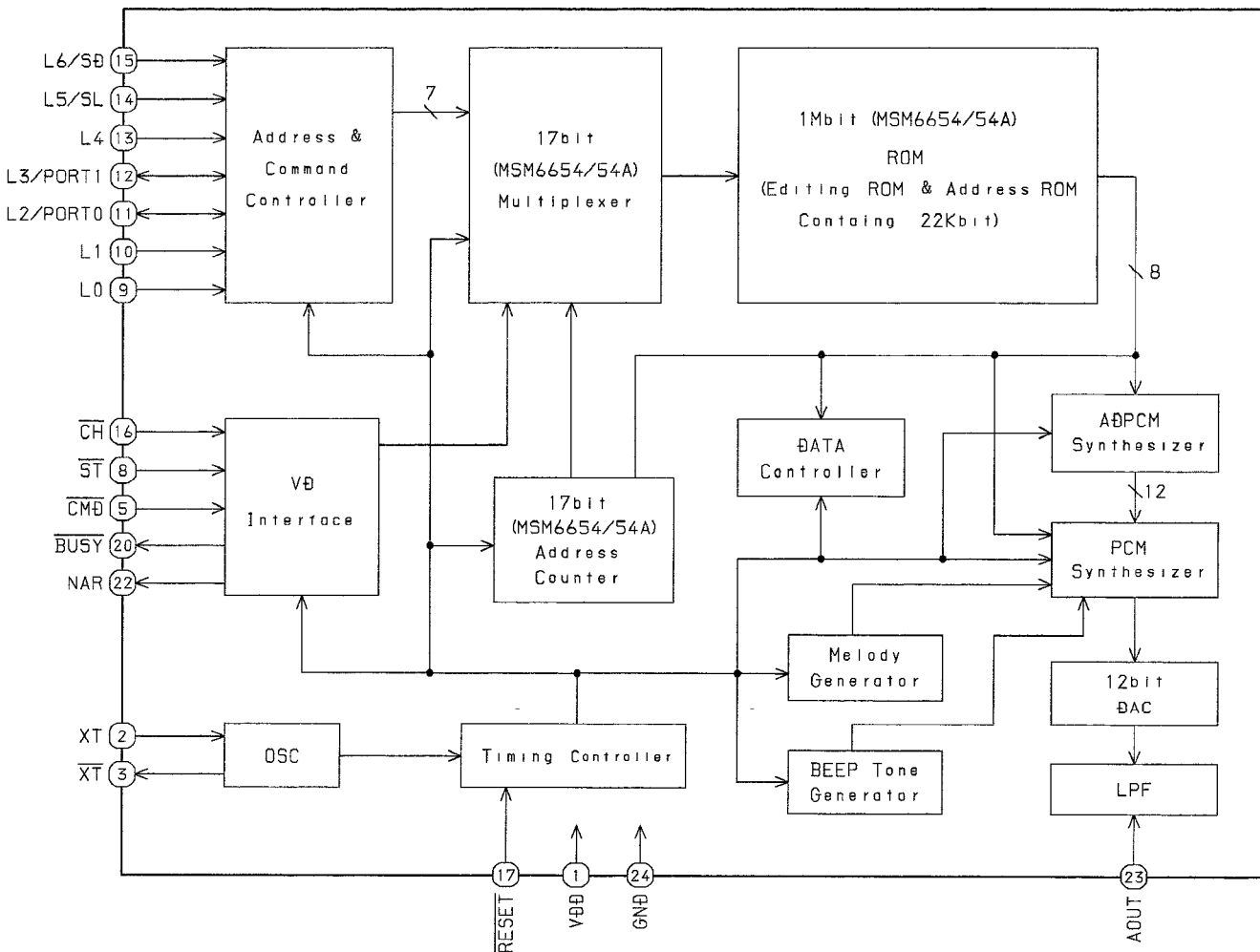
Pin No.	Pin Name	I/O	Description
55	P29/FM 1	I/O	FL segment P29 output / FM1 (OIRT) input to diode.
56	P28/RDS	I/O	FL segment P28 output / RDS input to diode.
57	P27/D-SURR	I/O	FL segment P27 output / SURR input to diode.
58	P26/K-CON	I/O	FL segment P26 output / K-CON input to diode.
59	P25/AM10K	I/O	FL segment P25 output / AM 10kHz input to diode.
60	P24/AC-3 SURR	I/O	FL segment P24 output / AC3 SURR input to diode.
61	P23/I-HP MUTE	I/O	FL segment P23 output / Headphone insert detect input (active low)
62	P22/I-TM BASE	I/O	FL segment P22 output / Time-base clock (8Hz) input.
63	P21/REA	I/O	FL segment P21 output / DECK2 side A record OK switch data input.
64	P20/CST 1	I/O	FL segment P20 output / DECK1 cassette detect switch data input.
65	P19/CAM 1	I/O	FL segment P19 output / DECK1 CAM switch data input.
66	P18/AUTO 2	I/O	FL segment P18 output / DECK2 AUTO stop signal input.
67	P17/AUTO 1	I/O	FL segment P17 output / DECK1 AUTO stop signal input.
68	P16/CAM 2	I/O	FL segment P16 output / DECK2 CAM switch data input.
69	P15/REB	I/O	FL segment P15 output / DECK2 side-B record OK switch data input.
70	P14/CST 2	I/O	FL segment P14 output / DECK2 cassette detect switch data input.
71	P13/I-MIC	I/O	FL segment P13 output / For AUTO VF use, Mic input detect.
72	VDD 4	-	Power supply input.
73	P12/ECHO	I/O	FL segment P12 output / ECHO key detect.
74	P11/HALL	I/O	FL segment P11 output / HALL key detect.
75	P10/MOVIE	I/O	FL segment P10 output / MOVIE key detect.
76	P9/LIVE	I/O	FL segment P9 output / LIVE key detect.
77	P8/DISCO	I/O	FL segment P8 output / DISCO key detect.
78	P7/MIC	I/O	FL segment P7 output / MIC key detect.
79 ~ 84	P6 ~ P1	O	FL segment P1 ~ P6 output.
85	O-DISH-REV	O	CD turntable reverse rotation output.
86	O-DISH-FWD	O	CD turntable forward rotation output.
87	O-OPEN	O	CD TRAY OPEN data output.
88	O-CLOSE	O	CD TRAY CLOSE data output.
89	VSS2	-	GND.
90	VDD2	-	Power supply input.
91	SOL 1	O	DECK 1 solenoid output.
92	SOL 2	O	DECK 2 solenoid output.
93	O-MOTOR	O	DECK MOTOR ON/OFF output.
94	O-POWER	O	System power supply ON/OFF output.
95	I-IFC.TU/I-STATUS	I	Tune IF count serial data input /Tune input/CD STATUS data input.
96	I-STEREO/SCLK	I/O	Tuner stereo detected input / CD serial clock output.
97	I-RDS-DATA/ O-COMMAND	I/O	RDS data input/CD command output.
98	X-BUSY	I/O	CD I/O busy line.
99	O-MUTE	O	System mute ON/OFF output.
100	GE-LATCH	O	GEQ IC M62431FP latch.

IC BLOCK DIAGRAM - 2

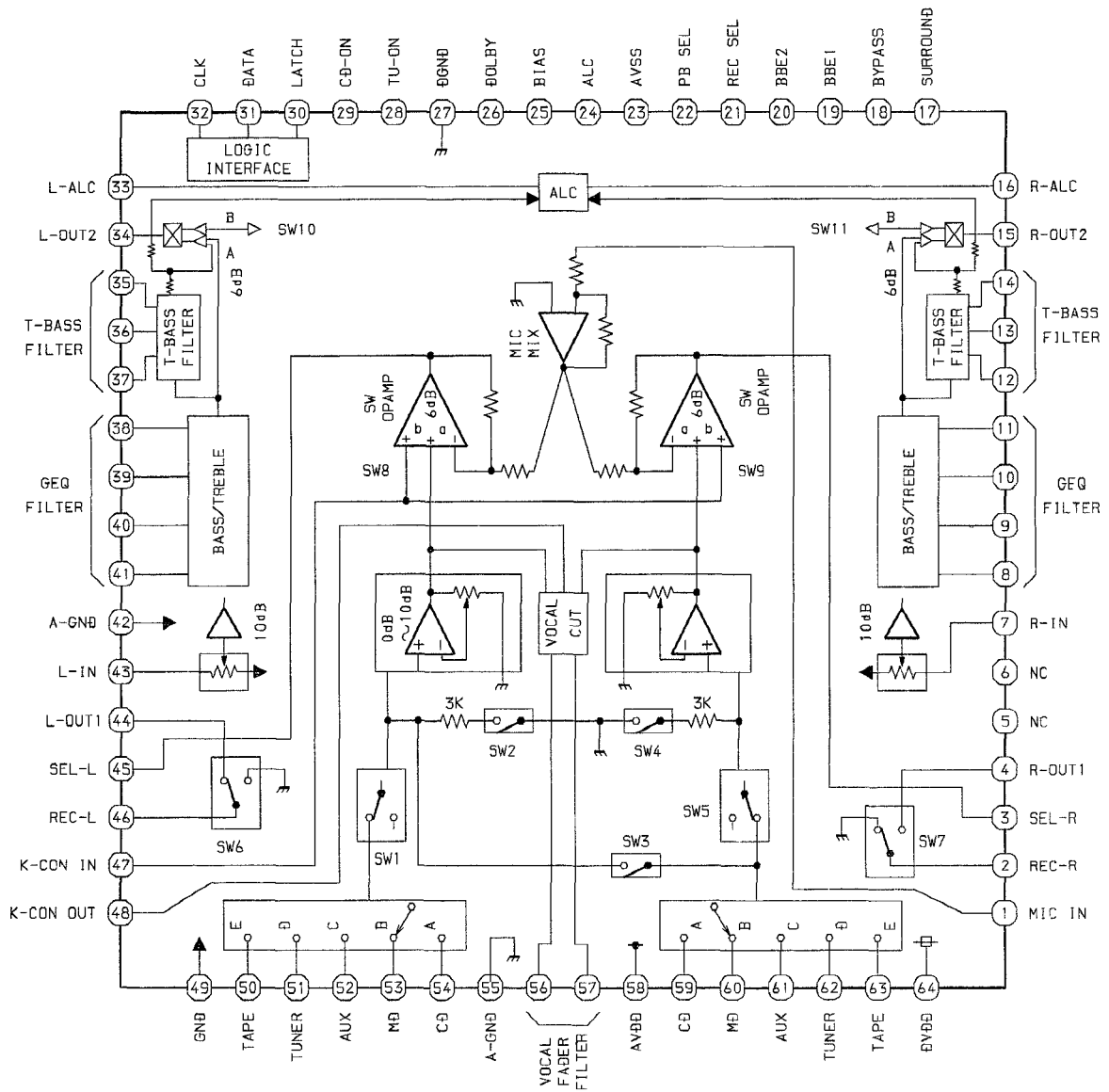
BA7762FS



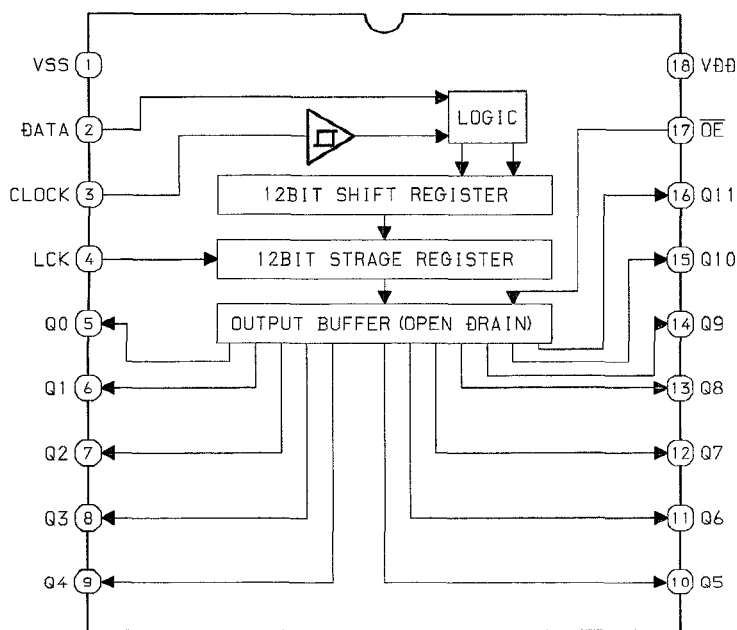
MSM6654A-521GS-K



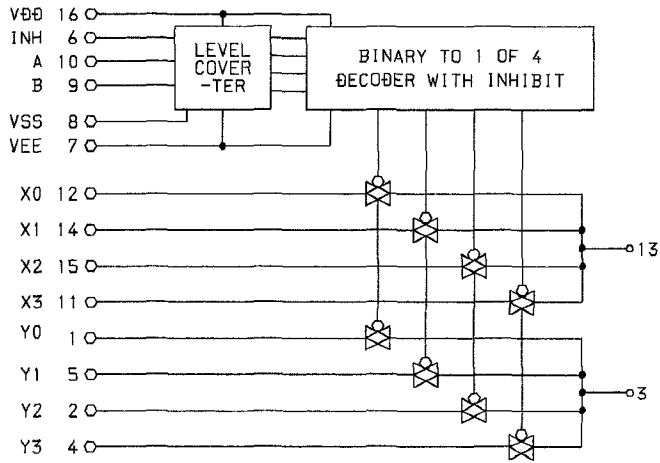
M62445FP-601



BU2092F

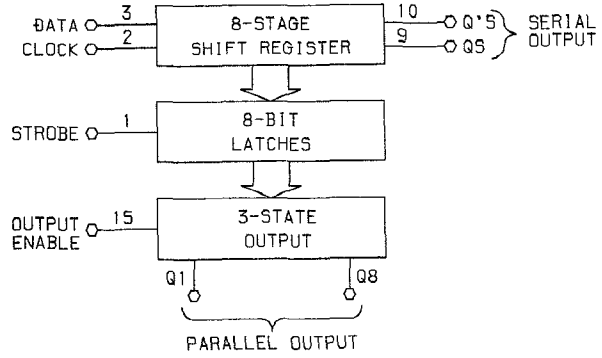


BU4052BCF

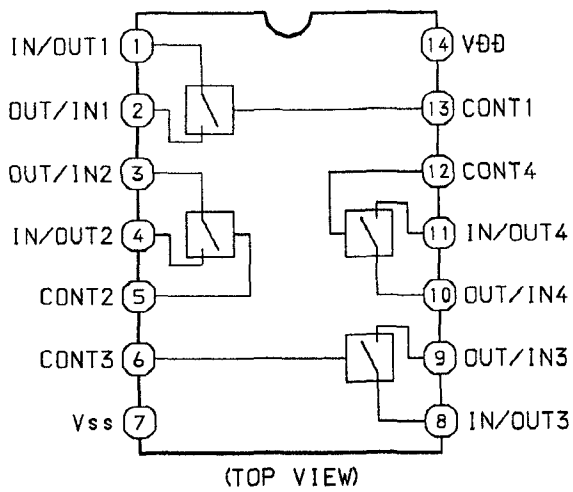


TRUTH TABLE

INHIBIT	A	B	ON SWITCH
L	L	L	X0 Y0
L	H	L	X1 Y1
L	L	H	X2 Y2
L	H	H	X3 Y3
H	X	X	NONE



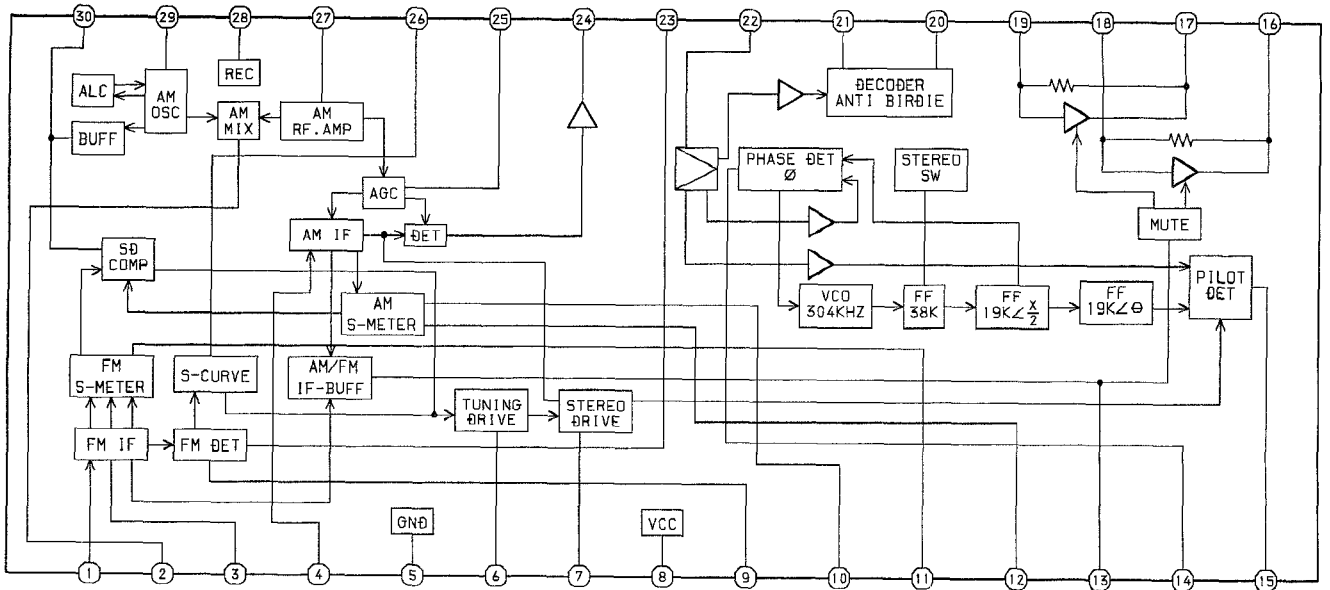
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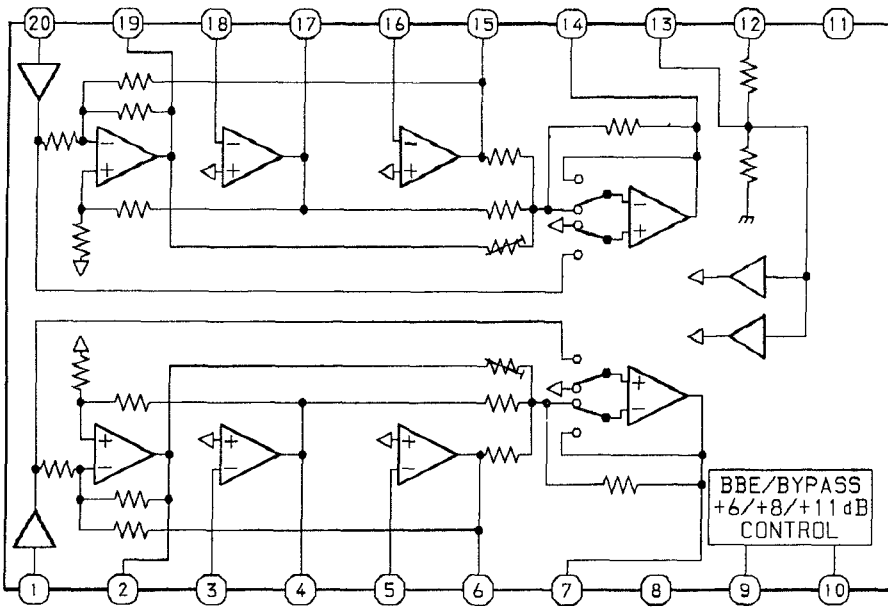
TRUTH TABLE

CONTROL	Impedance Between IN/OUT-OUT/IN
H	$0.5 \sim 5 \times 10^2 \Omega$
L	$> 10^9 \Omega$

LA1837

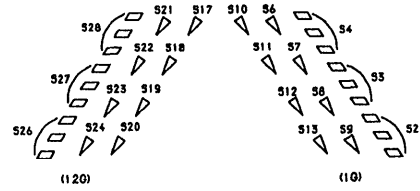
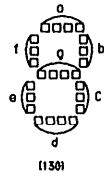
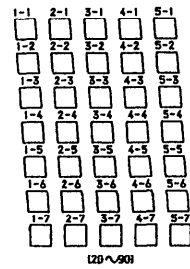
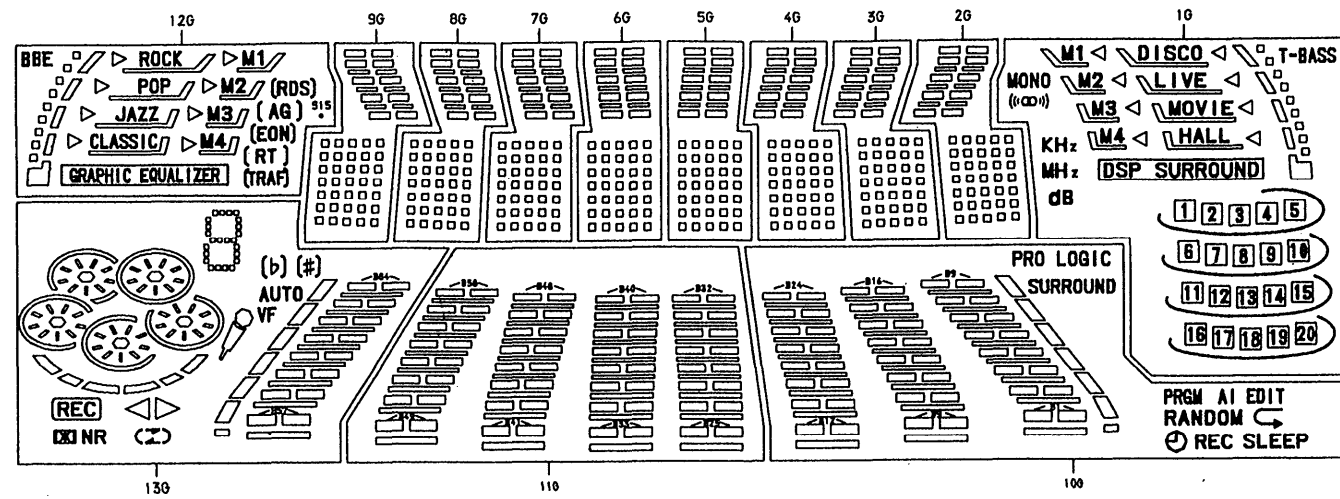


IC, NJM2152M

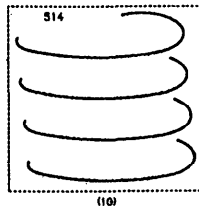
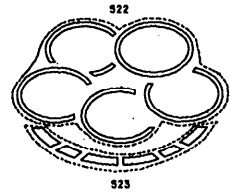
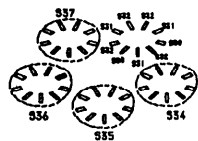
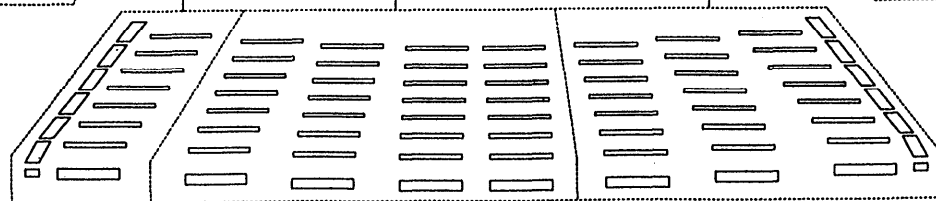
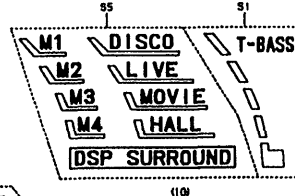
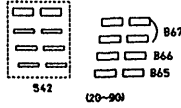
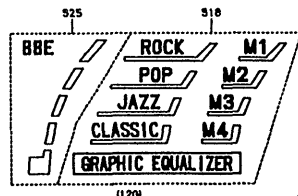


FL GRID ASSIGNMENT & ANODE CONNECTION

GRID ASSIGNMENT



SEGMENT DESIGNATION



BJ6040K
SEGMENT DESIGNATION

ANODE CONNECTION

	13G	12G	11G	10G	9G~2G	1G
P1	VF	TRAF	S40	AI	5-7	S1
P2	AUTO	(TRAF)	B32	PRGM	4-7	S2
P3	#	RT	B40	EDIT	3-7	S3
P4	(#)	(RT)	B48	RANDOM	2-7	S4
P5	b	EON	B56	↶	1-7	S5
P6	(b)	(EON)	B31	⌚	5-6	S6
P7	S39	AG	B39	REC	4-6	S7
P8	▷	(AG)	B47	SLEEP	3-6	S8
P9	▷	RDS	B55	PRO LOGIC SURROUND	2-6	S9
P10	⌋	(RDS)	B30	S41	1-6	S10
P11	⌋	S17	B38	B8	5-5	S11
P12	⌋	S18	B46	B16	4-5	S12
P13	REC	S19	B54	B24	3-5	S13
P14	▷ NR	S20	B29	B7	2-5	MONO
P15	B57	S21	B37	B15	1-5	((∞))
P16	B58	S22	B45	B23	5-4	KHz
P17	B59	S23	B53	B6	4-4	MHz
P18	B60	S24	B28	B14	3-4	dB
P19	B61	S25	B36	B22	2-4	5
P20	B62	S26	B44	B5	1-4	4
P21	B63	S27	B52	B13	5-3	3
P22	B64	S28	B27	B21	4-3	2
P23	S30	S16	B35	B4	3-3	1
P24	S31	S15	B43	B12	2-3	10
P25	S32	—	B51	B20	1-3	9
P26	S33	—	B26	B3	5-2	8
P27	S34	—	B34	B11	4-2	7
P28	S35	—	B42	B19	3-2	6
P29	S36	—	B50	B2	2-2	15
P30	S37	—	B25	B10	1-2	14
P31	S38	—	B33	B18	5-1	13
P32	a	—	B41	B1	4-1	12
P33	b	—	B49	B9	3-1	11
P34	f	—	—	B17	2-1	20
P35	g	—	—	—	1-1	19
P36	c	—	—	—	B65	18
P37	e	—	—	—	B66	17
P38	d	—	—	—	B67	16
P39	—	—	—	—	S42	S14

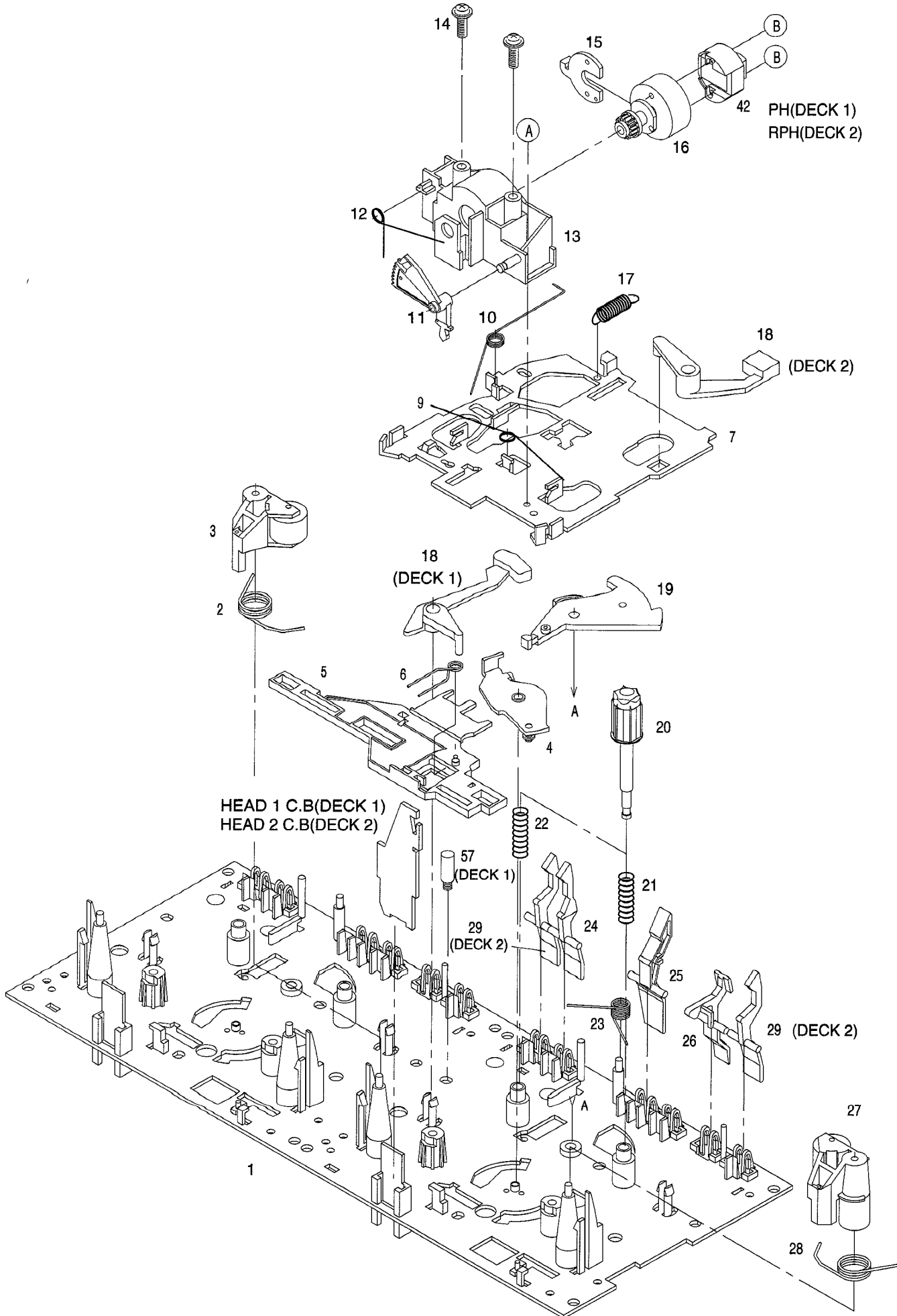
BJ6040K
ANODE CONNECTION

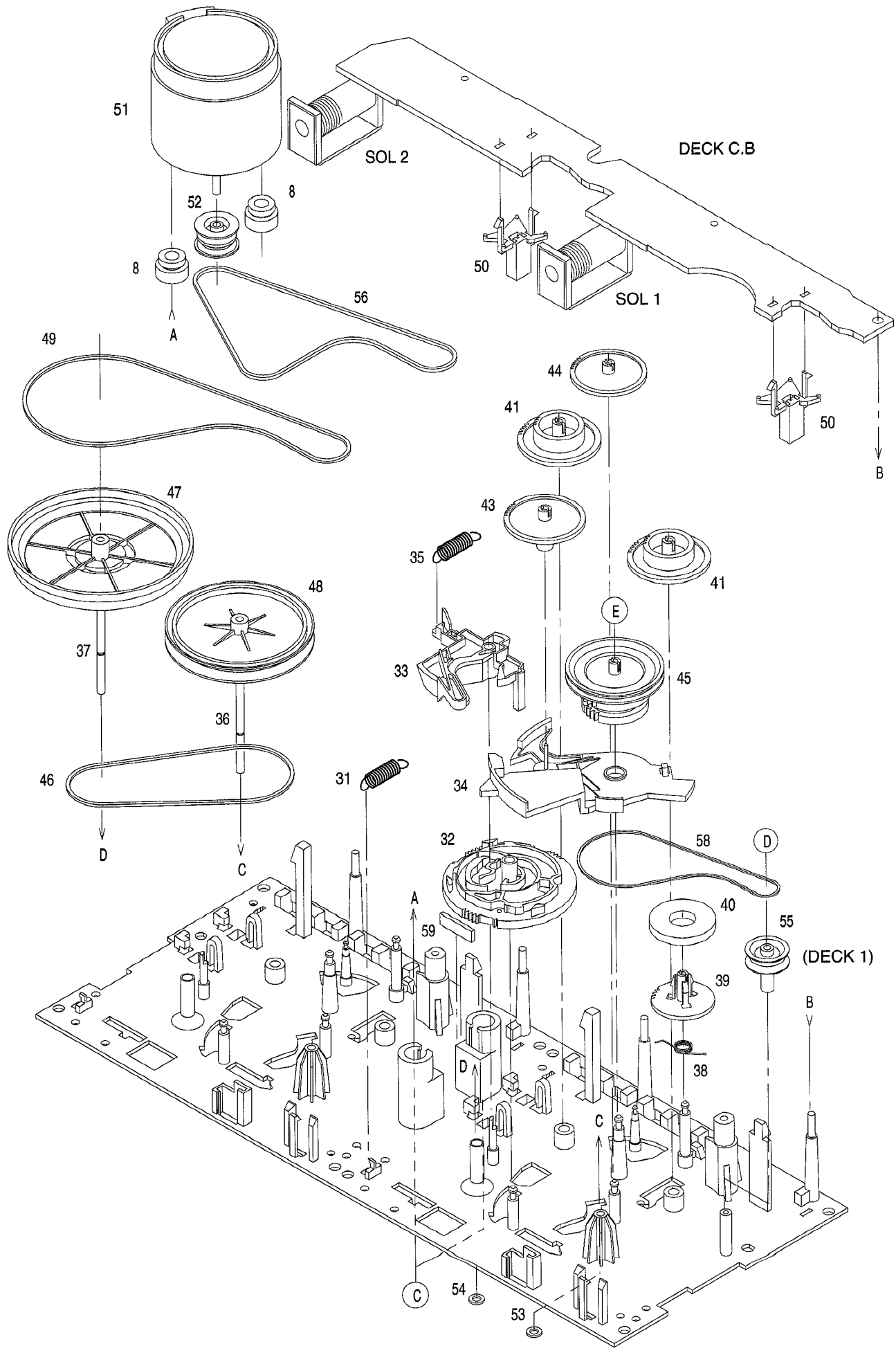
MECHANICAL PARTS LIST 1 / 1

If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	86-MA3-042-010		WINDOW, TOP<LHS>
1	87-MAT-009-010		WINDOW, TOP (U) <US>
2	88-NF3-025-010		CABI, STEEL
3	87-084-077-010		NYLON RIVET, 3.5-4.5
△	4	87-050-053-010	AC CORD ASSY, U-2<US>
△	4	87-050-079-010	AC-CORD ASSY, E<LHS>
5	87-085-185-010		BUSHING, AC CORD (E) <LHS>
5	87-085-189-010		BUSHING, CORD (U) <US>
6	88-NFP-013-010		PANEL, REAR LHSTNM<LHS>
6	88-NFP-012-010		PANEL, REAR USTNM<US>
7	84-ZG1-245-210		CAP, OPTICAL
8	88-NF3-040-010		PANEL, TRAY
9	82-NE6-067-010		BADGE, AIWA 30N
10	86-NF9-224-010		SPR-C, LOCK
11	87-NF4-216-010		HLDR, LOCK 1
12	87-NF4-217-010		HLDR, LOCK 2
13	82-NF5-229-010		PLATE, LOCK
14	88-NF3-050-010		WINDOW, CD
15	88-NFP-050-010		WINDOW, DISP PRO<LHS>
15	88-NFP-052-010		WINDOW, DISP PRO U<US>
16	88-NF3-064-010		KNOB, RTRY MAIN
17	88-NF3-083-010		KNOB, RTRY JOG
18	88-NFP-040-010		PANEL, FR PRO
19	88-NF3-091-010		RING, JOG ASSY
20	88-NF3-090-010		RING, FOOT
21	88-NF3-001-010		CABI, FR H<LHS>
21	88-NF3-004-010		CABI, FR U<US>
22	87-NF8-220-010		DMPR, 150
23	88-NF3-081-010		KEY, ENTER
24	88-NF3-063-010		KEY, DSP
25	88-NF3-080-110		KEY, JOG
26	88-NF3-086-010		KEY, DUBB
27	88-NF3-066-010		KEY, MIC
28	88-NF3-082-010		KEY, KARAOKE
29	88-NF3-073-110		KEY, PLAY ASSY
30	88-NF3-067-110		KEY, FUN ASSY
31	88-NFP-060-010		KEY, GEQ PRO
32	88-NF3-060-010		KEY, CD
33	86-NF6-061-010		REFLECTOR, CASS
34	88-NF3-030-010		BOX, CASS L
35	88-NF3-031-010		BOX, CASS R
36	88-NF3-052-010		WINDOW, CASS L
37	88-NF3-053-010		WINDOW, CASS R
38	88-NF3-042-010		PANEL, CASS L
39	88-NF3-043-010		PANEL, CASS R
40	82-NF5-218-010		SPR-T, EJECT 1 (SIN)
41	82-NF5-219-010		SPR-T, EJECT 2 (SIN)
42	88-NF3-061-010		REFLECTOR, CD
43	88-NF3-203-010		GUIDE, LED CD
44	88-NF3-065-010		RING, MAIN
45	88-NF3-206-010		GUIDE, FL
46	88-NF3-205-010		GUIDE, LED PLAY
A	87-067-873-010		BVT2+3-25 W/O SLOT
B	87-067-641-010		UTT2+3-8 (W/O SLOT) BL
C	87-078-191-010		S-SCREW, IT+4-10
D	87-067-688-010		BVTT+3-6
E	87-067-758-010		BVT2+3-12 W/O SLOT
F	87-067-703-010		TAPPING SCREW, BVT2+3-10
G	87-067-689-010		TAPPING SCREW, BVTT+3-8
H	87-NF4-224-010		S-SCREW, IT3B+3-8 CU
I	87-591-095-410		TAPPING SCREW, QIT+3-8 (GLD)
J	87-721-097-410		QT2+3-12 GLD
K	87-067-584-010		TAPPING SCREW, BVT2+3-6
L	87-067-673-010		TAPPING SCREW, BUTT+3-8 (B)
M	87-067-579-010		TAPPING SCREW, BVT2+3-8

TAPE MECHANISM EXPLODED VIEW 1 / 1



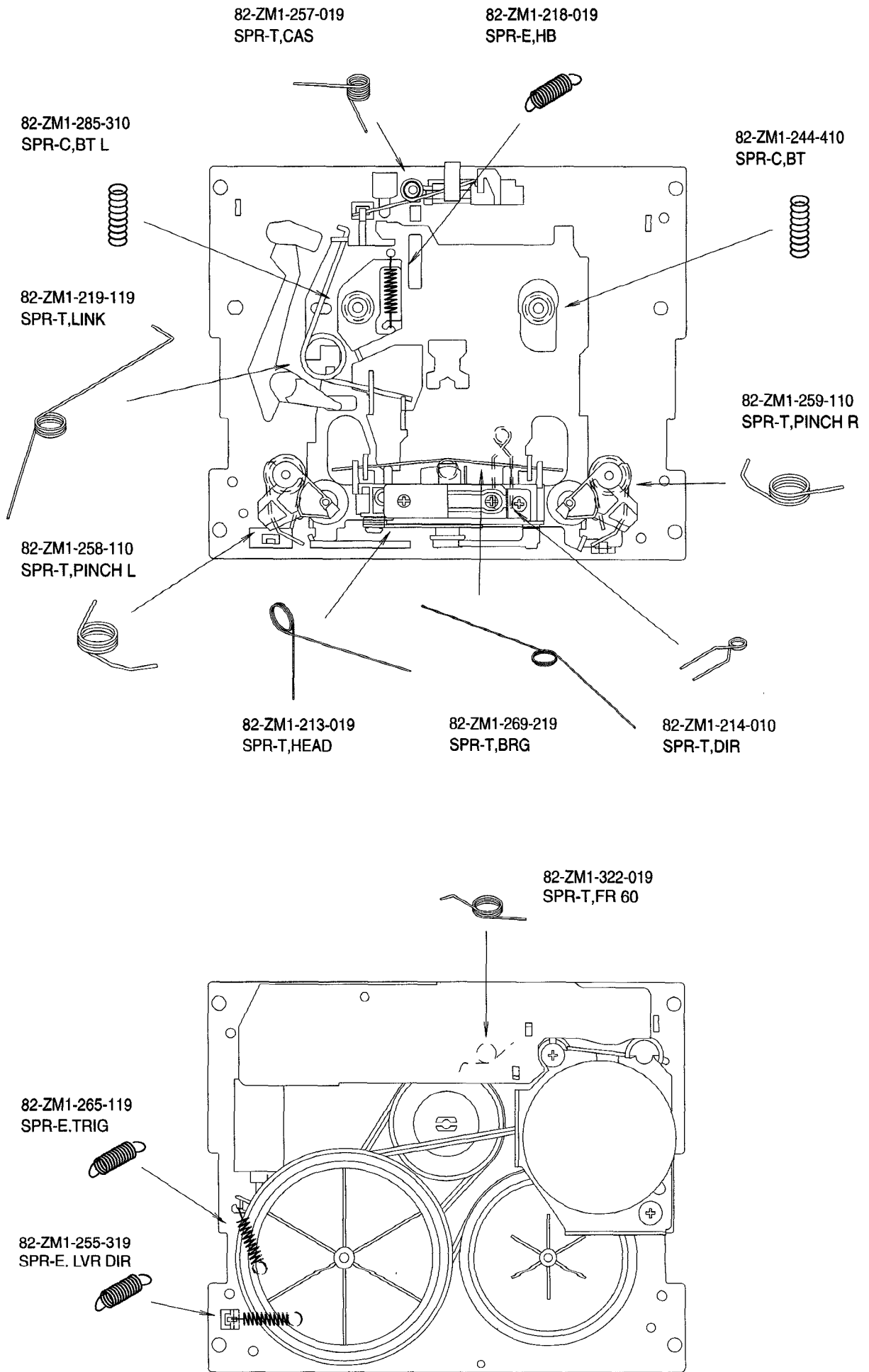


TAPE MECHANISM PARTS LIST 1 / 1

DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。
 If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

REF. NO	PART NO.	KANRI NO.	DESCRIPTION	REF. NO	PART NO	KANRI NO.	DESCRIPTION
1	82-ZM3-301-519		CHAS ASSY, M2	36	82-ZM1-236-019		CAPSTAN N 2-41.5
2	82-ZM1-258-110		SPR-T, PINCH L	37	82-ZM1-239-019		CAPSTAN N 2.2-41.7
3	82-ZM1-341-110		LVR ASSY, PINCH L2	38	82-ZM1-322-019		SPR-T, FR60
4	82-ZM1-333-010		PLATE, LINK 2	39	82-ZM1-220-219		GEAR, IDLER
5	82-ZM1-266-11K		LVR, DIR	40	82-ZM3-616-019		RING MAGNET 4
6	82-ZM1-214-010		SPR-T, DIR	41	82-ZM1-216-31K		GEAR, REEL
7	82-ZM1-206-81K		CHAS, HEAD	42	87-A90-319-010		HEAD, PH HADKH2 FPC
8	82-ZM3-307-019		CUSH-G, DIA3.7-8-3.2	42	87-A90-320-010		HEAD, RPH HADKH5 FPC
9	82-ZM1-269-219		SPR-T, BRG	43	82-ZM1-225-21K		GEAR, FR
10	82-ZM1-219-119		SPR-T, LINK	44	82-ZM1-226-019		GEAR, REW
11	82-ZM1-210-119		GEAR, H T	45	82-ZM3-333-310		SLIP DISK ASSY 2
12	82-ZM1-213-019		SPR-T, HEAD	46	82-ZM1-338-010		BELT FR4
13	82-ZM1-207-619		GUIDE, TAPE	47	82-ZM1-349-110		FLY-WHL, R W(DECK 2)
14	86-ZM4-206-010		S-SCREW, AZIMUTH	47	82-ZM3-338-110		FLY-WHL, R3 W(DECK 1)
15	82-ZM1-314-119		PLATE, HEAD	48	82-ZM1-348-010		FLY-WHL, L W(DECK 2)
16	82-ZM1-208-119		HLDR, HEAD	48	82-ZM1-348-010		FLY-WHL, L W(DECK 1)
17	82-ZM1-218-019		SPR-E, HB	49	82-ZM3-329-210		BELT, SBU R2
18	82-ZM1-263-110		LVR, EJECT L (DECK 1)	50	82-ZM1-245-210		HLDR, IC
18	82-ZM1-264-010		LVR, EJECT R (DECK 2)	51	87-045-347-019		MOT, SHU2L 70 (M1)
19	82-ZM1-222-21K		LVR, PLAY	52	82-ZM3-221-010		PULLEY, MOT 2M
20	82-ZM1-217-319		REEL TABLE	53	82-ZM1-288-019		SH, 1.63-3.2-0.5 SLT
21	82-ZM1-244-510		SPR-C, BT	54	80-ZM6-243-019		SH, 1.75-3.6-0.5 SLT
22	82-ZM1-285-310		SPR-C, BT L	55	82-ZM3-335-210		PULLEY, COUPLER M3 (DECK 1)
23	82-ZM1-257-019		SPR-T, CAS	56	82-ZM3-337-010		BELT, SBU MOT 2
24	82-ZM1-241-319		LVR, MC	57	82-ZM3-339-010		SHAFT, COUPLER N3 (DECK 1)
25	82-ZM1-242-019		LVR, CAS	58	86-ZM1-206-010		BELT, MAIN L
26	82-ZM1-243-019		LVR, STOP	59	82-ZM3-340-010		SH, BELT D2
27	82-ZM1-344-110		LVR ASSY, PINCH R2	A	85-ZM3-202-010		S-SCREW, TG
28	82-ZM1-259-110		SPR-T, PINCH R	B	80-ZM6-207-019		V+1.6-7
29	82-ZM1-240-11K		LVR, REC (DECK 2)	C	82-ZM3-318-019		S-SCRW MOTOR M2
31	82-ZM1-255-319		SPR-E, LVR DIR	D	87-B10-043-010		W-P, 0.99-4-0.25 SLT
32	82-ZM3-305-01K		GEAR, CAM M2	E	82-ZM3-334-010		PW, 2.16-6-0.4
33	82-ZM1-227-21K		LVR, TRIG				
34	82-ZM3-306-11K		LVR, FR M2				
35	82-ZM1-265-119		SPR-E, TRIG				

SPRING APPLICATION POSITION

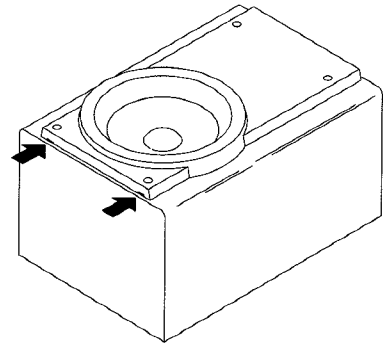


SPEAKER DISASSEMBLY INSTRUCTIONS

Type.1

矢印の位置にマイナスドライバーを差し込んで、パネルを外します。各々のスピーカーユニットのビスを取り、スピーカーユニットを外してください。

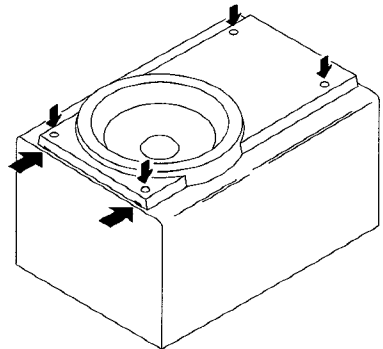
Insert a flat-bladed screwdriver into the position indicated by the arrows and remove the panel, remove the screws of each speaker unit and then remove the speaker units.



Type.2

グリルフレームを外し、4個のゴムキャップをマイナスドライバーで端の方から持ち上げて外すと中にビスが有りますので、ビスを取り外します。矢印の位置にマイナスドライバーを差し込んで、パネルを外します。各々のスピーカーユニットのビスを取り、スピーカーユニットを外してください。

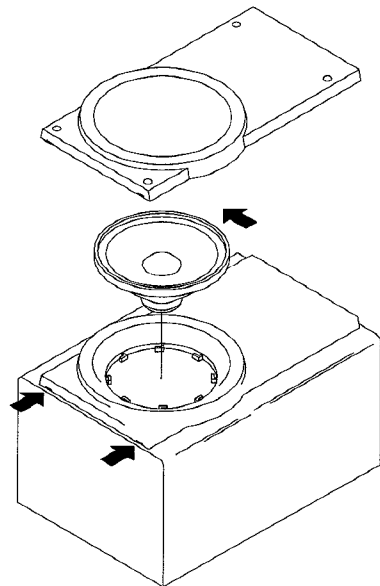
Remove the grill frame and four pieces fo rubber caps by pulling out with a flat-bladed screwdriver. Remove the screws from hole where installed rubber caps. Insert a flat-bladed screwdriver into the position indicated by the arrows and remove the panel. Remove the screws of each speaker unit and then remove the speaker units.



Type.3

矢印の位置にマイナスドライバーを差し込んで、パネルを外します。各々のスピーカーユニットの凹にマイナスドライバーを差し込んで、反時計方向に回転させスピーカーユニットを外してください。スピーカーユニット交換後は時計方向にクリック音がするまで、回転させて取り付けます。

Insert a flat-bladed screwdriver into the position indicated by the arrows and remove the panel. Turn the speaker unit to counter-clockwise direction while inserting a flat-bladed screwdriver into one of the hollows around speaker unit, and then remove the speaker unit. After replacing the speaker unit, install it turning to clockwise direction until "click" sound comes out.



SPEAKER PARTS LIST (SX-NA952)

If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

REF. NO.	PART NO	KANRI NO.	DESCRIPTION
1	87-NSL-002-010		PANEL SPKR
2	88-NSD-001-010		PANEL, FR
3	88-NSD-002-010		PANEL, BA
4	88-NSD-003-010		GRILLE, FRAME ASSY
5	88-NSD-602-010		SPKR, W 160
6	88-NSD-604-010		SPKR, TW 80
7	88-NSD-610-010		SPKR, CERAMIC ASSY
8	88-NSD-605-010		SPKR, CORD
9	88-NSD-607-010		TERMINAL, ASSY
10	88-NSD-009-010		PROTECTOR, TW

SPEAKER PARTS LIST (SX-R275)

If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	87-YS1-001-010		CABI, REAR
2	87-YS1-004-010		GRILLE FRAME ASSY
3	87-YS1-002-010		GRILLE, FRAME
4	81-VSA-009-010		CORD BUSH
5	87-YS6-002-010		SPKR, CORD Y
6	87-YS6-601-010		SPKR, 100

SPEAKER PARTS LIST (SX-C605)

If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	83-NSM-010-010		SPEAKER CORD
2	87-YS3-001-010		PANEL, FRONT ST(C600)
3	87-YS3-003-010		GRILL FRAME ASSY(C600)
4	87-YS7-602-010		SPKR, 100

ACCESSORIES / PACKAGE LIST

If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

REF.NO.	PART NO.	KANRI NO.	DESCRIPTION
1	88-NFP-902-010		IB,LH (ESP) -M<LHS>
1	88-NFP-901-010		IB,U (ESF)-M<US>
2	87-006-225-010		AM LOOP ANT NC2
3	87-043-115-010		FEEDER-ANT, FM
4	87-099-789-010		PLUG,ADPTR IR44<LHS>
5	87-NFR-610-010		RC UNIT,RC-7AS09

REFERENCE NAME LIST

ELECTRICAL SECTION

DESCRIPTION	REFERENCE NAME
ANT	ANTENNAS
C-	CHIP
C-CAP	CAP, CHIP
C-CAP TN	CAP, CHIP TANTALUM
C-COIL	COIL, CHIP
C-DI	DIODE, CHIP
C-DIODE	DIODE, CHIP
C-FET	FET, CHIP
C-FOTR	FILTER, CHIP
C-JACK	JACK, CHIP
C-LED	LED, CHIP
C-RES	RES, CHIP
C-SFR	SFR, CHIP
C-SLIDE SW	SLIDE SWITCH, CHIP
C-SW	SWITCH, CHIP
C-TR	TRANSISTOR, CHIP
C-VR	VOLUME, CHIP
C-ZENER	ZENER, CHIP
CAP, CER	CAP, CERA-SOL
CAP, E	CAP, ELECT
CAP, M/F	CAP, FILM
CAP, TC	CAP, CERA-SOL
CAP, TC-U	CAP, CERA-SOL SS
CAP, TN	CAP, TANTALUM
CERA FIL	FILTER, CERAMIC
CF	FILTER, CERAMIC
DL	DELAY LINE
E/CAP	CAP, ELECT
FILT	FILTER
FLTR	FILTER
FUSE RES	RES, FUSE
MOT	MOTOR
P-DIODE	PHOTO DIODE
P-SNSR	PHOTO SENSER
P-TR	PHOTO TRANSISTOR
POLY VARI	VARIABLE CAPACITOR
PPCAP	CAP, PP
PT	POWER TRANSFORMER
PTR, RES	PTR, MELF
RC	REMOTE CONTROLLER
RES NF	RES, NON-FLAMMABLE
RESO	RESONATOR
SHLD	SHIELD
SOL	SOLENOID
SPKR	SPEAKER
SW, LVR	SWITCH, LEVER
SW, RTRY	SWITCH, ROTARY
SW, SL	SWITCH, SLIDE
TC CAP	CAP, CERA-SOL
THMS	THERMISTOR
TR	TRANSISTOR
TRIMER	CAP, TRIMMER
TUN-CAP	VARIABLE CAPACITOR
VIB, CER	RESONATOR, CERAMIC
VIB, XTAL	RESONATOR, CRYSTAL
VR	VOLUME
ZENER	DIODE, ZENER

MECHANICAL SECTION

DESCRIPTION	REFERENCE NAME
ADHESHIVE	SHEET ADHESHIVE
AZ	AZIMUTH
BAR-ANT	BAR-ANTENNA
BAT	BATTERY
BATT	BATTERY
BRG	BEARING
BTN	BUTTON
CAB	CABINET
CASS	CASSETTE
CHAS	CHASSIS
CLR	COLLAR
CONT	CONTROL
CRSR	CURSOR
CU	CUSHION
CUSH	CUSHION
DIR	DIRECTION
DUBB	DUBBING
FL	FRONT LOADING
FLY-WHL	FLYWHEEL
FR	FRONT
FUN	FUNCTION
G-CU	G-CUSHION
HDL	HANDOL
HIMERON	CLOTH
HINGE, BAT	HINGE, BATTERY
HLDR	HOLDER
HT-SINK	HEAT SINK
IB	INSTRUCTION BOOKLET
IDLE	IDLER
IND, L-R	INDICATOR, L-R
KEY, CONT	KEY, CONTROL
KEY, PRGM	KEY, PROGRAM
KNOB, SL	KNOB, SLIDE
LBL	LABEL
LID, BATT	LID, BATTERY
LID, CASS	LID, CASSETTE
LVR	LEVER
P-SP	P-SPRING
PANEL, CONT	PANEL, CONTROL
PANEL, FR	PANEL, FRONT
PRGM	PROGRAM
PULLY, LOAD MO	PULLY, LOAD MOTOR
RBN	RIBBON
S-	SPECIAL
SEG	SEGMENT
SH	SHEET
SHLD-SH	SHIELD-SHEET
SL	SLIDE
SP	SPRING
SP-SCREW	SPECIAL-SCREW
SPACER, BAT	SPACER, BATTERY
SPR	SPRING
SPR-P	P-SPRING
SPR-PC-PUSH	P-SPRING, C-PUSH
T-SP	T-SPRING
TERM	TERMINAL
TRIG	TRIGGER
TUN	TUNING
VOL	VOLUME
W	WASHER
WHL	WHEEL
WORM-WHL	WORM-WHEEL

サービス技術ニュース	
番号	連絡内容
G-	-
G-	-
G-	-

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