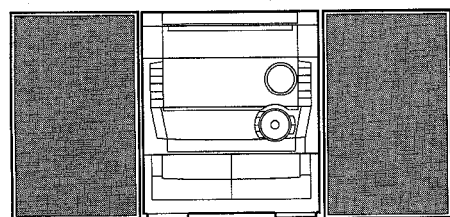


aiwa



NSX-A959 NSX-F959



CD STEREO SYSTEM

- BASIC TAPE MECHANISM : 2ZM-3MK2 YPR4
- BASIC CD MECHANISM : 6ZG-1 S2DSH

- TYPE : U,LH

SYSTEM	CD - CASSEIVER	SPEAKER
NSX-A959 (TYPE : U)	CX-NA959	SX-WNA958
NSX-F959 (TYPE : LH)	CX-NF959	SX-WNF959

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

MANUAL
SERVICE

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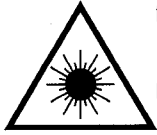
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PROTECTION OF EYES FROM LASER BEAM DURING SERVICING

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 käyttäjän turvallisuusluokan 1 ylittävälle näkymättömälle lasersäteilylle.

WARNING!

Om apparaten används på annat sätt än vad som specificeras i denna bruksanvisning, 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

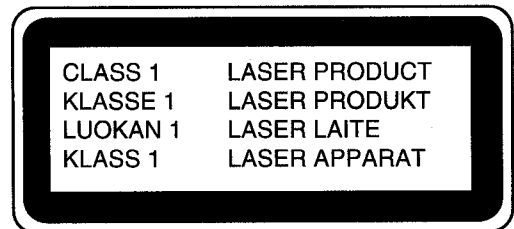
L'utilisation de commandes, réglages ou procédures autres que ceux spécifiés peut entraîner une dangereuse exposition aux radiations.

ADVARSEL

Usynlig laserstråling ved åbning, når sikkerhedsafbrydere er 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.

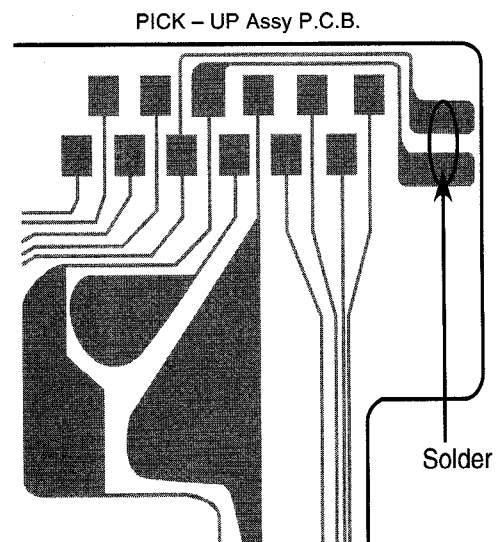


Precaution to replace Optical block

(KSS-213F)

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

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



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 uV/m
Antenna	Loop antenna

<Amplifier section>

Mid-high frequency amplifier

Power output	U : 30 W + 30 W (200 Hz - 20 kHz, T.H.D. less than 1%, 6 ohms) LH : 40 W + 40 W (1 kHz, T.H.D.10%, 6 ohms)
Total harmonic distortion	0.3% (6 W, 1 kHz, 6 ohms, DIN AUDIO)

Low-high frequency amplifier

Power output	U : 130 W + 130 W (20 Hz - 200 Hz, T.H.D. less than 1%, 6 ohms) LH : 170 W + 170 W (75 Hz, T.H.D. 10%, 6 ohms)
Total harmonic distortion	0.3% (13.5 W, 75 Hz, 6 ohms, DIN AUDIO)

Inputs

VIDEO/AUX : 210 mV(adjustable)
MD : 210mV (adjustable)
MIC1, MIC2 : 1.4mV (10 kohms)

Outputs

LINE OUT: 200mV
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	CrO ₂ tape : 50 Hz – 16000 Hz Normal tape : 50 Hz – 15000 Hz
Signal-to-noise ratio	60 dB (Dobly B NR ON, CrO ₂ 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–WNA958>


Cabinet type	4 way (magnetic shielded type)
Speakers	Subwoofer : 200 mm cone type Woofer : 120 mm cone type Tweeter : 60 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)	260 x 353 x 387 mm (10 ¹ / ₄ X 14 X 15 ¹ / ₄ in.)
Weight	6.5 kg (14 lbs 5 oz.)

<Speaker system SX–WNF959>

Cabinet type	4 way (magnetic shielded type)
Speakers	Subwoofer : 200 mm cone type Woofer : 120 mm cone type Tweeter : 60 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)	270 x 440 x 316 mm
Weight	6.8 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 : 195 W LH : 250 W
Dimensions of main unit	300 x 357.5 x 376 mm (11 ⁷ / ₈ X 14 ¹ / ₈ X 14 ⁷ / ₈ in.)
Weight	12.8 kg (28 lbs 4 oz.)

- Design and specifications are subject to change without notice.
- The word "BBE"and the "BBE symbol" are trademarks of BBE Sound, Inc.
Under license from BBE Sound,Inc.
- Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.
"DOLBY" and the double-D symbol  are trademarks of Dolby Laboratories Licensing Corporation.

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. Connector 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.

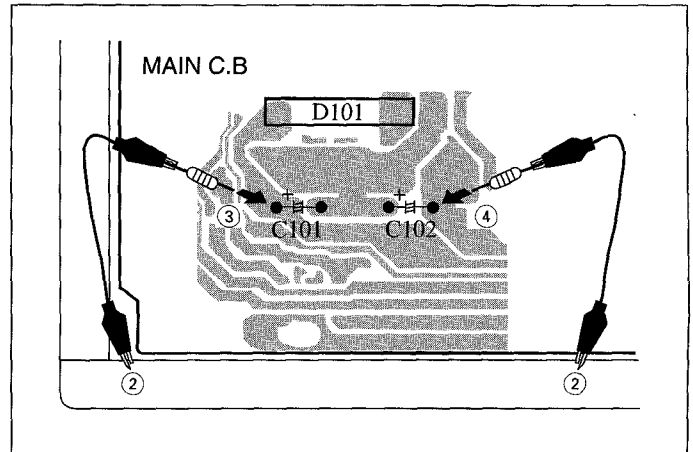


Fig-1

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 capacitor 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 judgment 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.

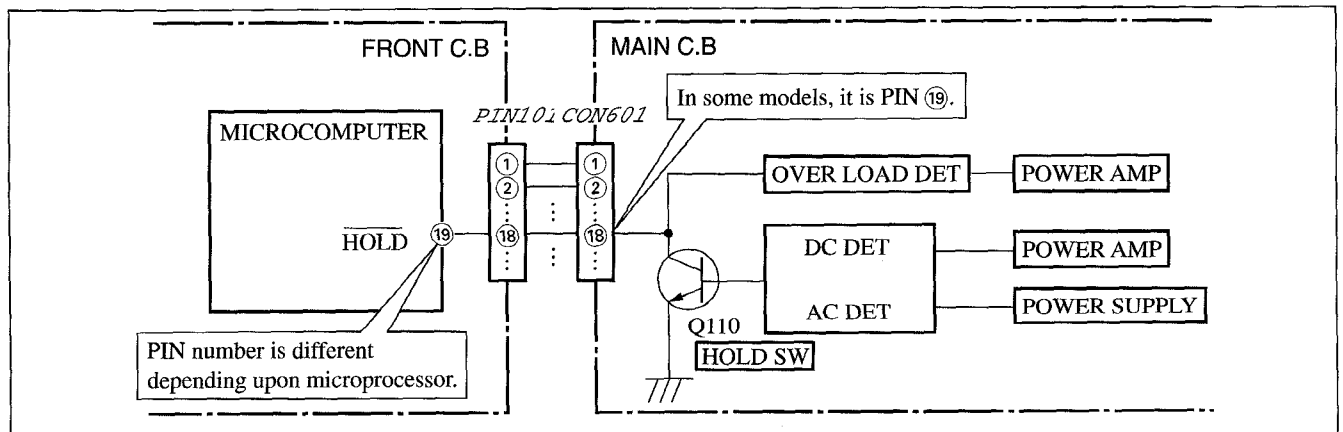


Fig-2-1

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 judgment 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.

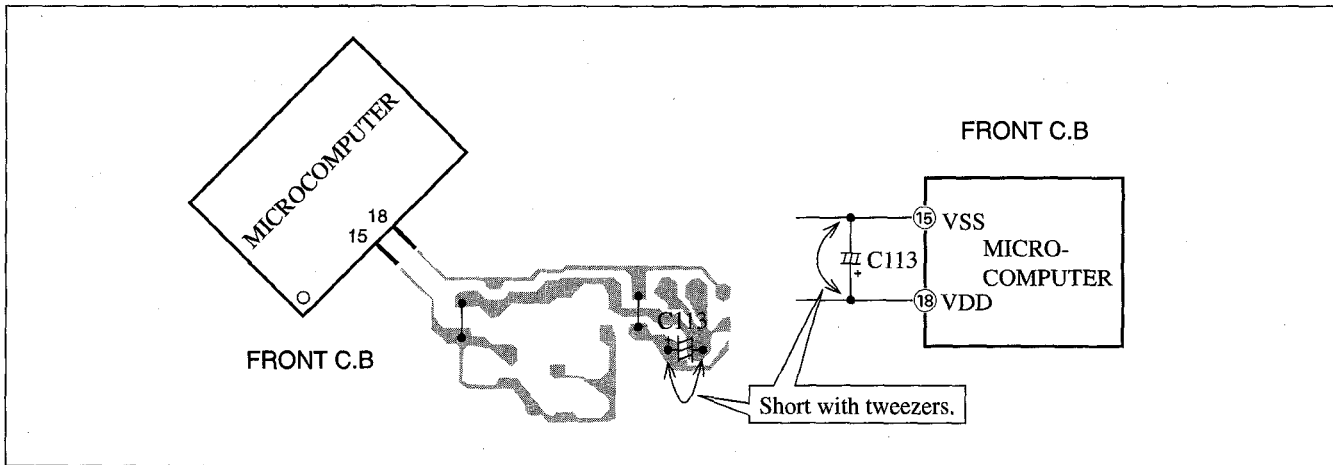


Fig-2-2

- ② Short the 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 the 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.

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				MAIN C.B			
	88-NF3-640-010		C-IC, LC866560W-5G72	C101	87-A10-231-090		CAP, E 3300-80
	87-NF8-614-010		IC, SPS-442-1-W	C102	87-A10-231-090		CAP, E 3300-80
	87-017-915-080		IC, BU4094BCF	C103	87-016-658-090		CAP, E 4700-35 SMG
	87-A20-355-010		IC, CXA1553P	C104	87-016-658-090		CAP, E 4700-35 SMG
	87-A20-783-040		C-IC, BA7762AFS	C105	87-012-368-080		C-CAP, S 0.1-50 F
	87-A20-083-010		IC, BA3835S	C106	87-012-368-080		C-CAP, S 0.1-50 F
	87-A20-804-040		C-IC, NJM2152M	C107	87-012-368-080		C-CAP, S 0.1-50 F
	87-070-289-040		IC, BU 2092F	C108	87-012-368-080		C-CAP, S 0.1-50 F
	87-A20-560-040		C-IC, M65849BFP	C109	87-010-196-080		CHIP CAPACITOR, 0.1-25
	87-A20-954-040		C-IC, M62445FP-601	C110	87-010-196-080		CHIP CAPACITOR, 0.1-25
	87-017-888-080		IC, NJM4558MD	C111	87-010-196-080		CHIP CAPACITOR, 0.1-25
	86-NFZ-655-010		IC, LC72131D(Z)	C112	87-010-196-080		CHIP CAPACITOR, 0.1-25
	87-A20-438-010		IC, LA1837	C113	87-010-247-080		CAP, ELECT 100-50V
	88-NF5-615-040		C-IC, MSM6654A-521GS-KR1	C114	87-010-385-080		CAP, ELECT 220-25V
	87-A20-437-010		C-IC, M62431FP	C115	87-010-385-080		CAP, ELECT 220-25V
	87-020-454-010		IC, DN6851	C116	87-010-247-080		CAP, ELECT 100-50V
				C117	87-010-430-080		CAP, ELECT 100-63
				C118	87-010-263-080		CAP, ELECT 100-10V
				C119	87-010-260-080		CAP, ELECT 47-25V
				C120	87-010-403-080		CAP, ELECT 3.3-50V
TRANSISTOR							
	87-A30-107-070		C-TR, CMBT5401	C121	87-012-140-080		CAP 470P
	87-026-263-080		C-TR, RN1410	C122	87-010-263-080		CAP, ELECT 100-10V<US>
	89-213-702-010		TR, 2SB1370 (1.8W)	C123	87-010-247-080		CAP, ELECT 100-50V
	87-A30-087-080		C-FET, 2SK2158	C124	87-010-112-080		CAP, ELECT 100-16V
	87-026-232-080		TR, DTA144WK	C125	87-010-235-080		CAP, E 470-16 SME
	87-A30-075-080		C-TR, 2SA1235F	C209	87-010-401-080		CAP, ELECT 1-50V
	87-026-610-080		TR, KTC3198GR	C210	87-010-401-080		CAP, ELECT 1-50V
	87-A30-076-080		C-TR, 2SC3052F	C215	87-010-404-080		CAP, ELECT 4.7-50V
	87-A30-073-080		C-TR, RT1N 141C	C216	87-010-404-080		CAP, ELECT 4.7-50V
	87-A30-196-080		TR, 2SC4115SRS	C217	87-010-913-080		CAP, E 47-25 ASF BP
	87-A30-071-080		C-TR, RT1N 144C	C218	87-010-913-080		CAP, E 47-25 ASF BP
	87-026-609-080		TR, KTA1266GR	C223	87-010-197-080		CAP, CHIP 0.01 DM
	87-A30-086-070		C-TR, CSD1306E	C224	87-010-197-080		CAP, CHIP 0.01 DM
	87-A30-190-080		TR, CC5551	C229	87-A10-516-080		C-CAP, S 100P-200 J CH
	87-A30-204-010		TR, 2SD2439	C230	87-A10-516-080		C-CAP, S 100P-200 J CH
	87-A30-205-010		TR, 2SB1588	C231	87-010-186-080		CAP, CHIP 4700P
	87-A30-106-070		C-TR, CMBT5551	C232	87-010-186-080		CAP, CHIP 4700P
	87-A30-162-010		FET, 2SK2937	C233	87-010-544-080		CAP, ELECT 0.1-50V
	87-A30-072-080		C-TR, RT1P 144C	C234	87-010-544-080		CAP, ELECT 0.1-50V
	87-A30-137-010		TR, 2SD2494	C235	87-010-196-080		CHIP CAPACITOR, 0.1-25
	87-A30-138-010		TR, 2SB1625	C237	87-012-368-080		C-CAP, S 0.1-50 F
	87-A30-074-080		C-TR, RT1P 141C	C238	87-012-368-080		C-CAP, S 0.1-50 F
	87-A30-221-040		C-TR, DTA114WK	C239	87-012-368-080		C-CAP, S 0.1-50 F
	87-026-226-080		CHIP-TR, DTA143EK	C240	87-012-368-080		C-CAP, S 0.1-50 F
	87-A30-105-080		C-TR, RT1P 441C	C243	87-010-322-080		C-CAP, S 100P-50 CH
	87-A30-084-080		TR, CSB1058B	C244	87-010-322-080		C-CAP, S 100P-50 CH
	89-109-521-080		TR, 2SA952 (0.6W)	C247	87-012-154-080		C-CAP, S 150P-50 CH
	89-327-143-080		TR, 2SC2714 (0.1W)	C248	87-012-154-080		C-CAP, S 150P-50 CH
	87-026-463-080		TR, 2SA933S	C280	87-010-188-080		CAP, CHIP 6800P
				C301	87-010-318-080		C-CAP, S 47P-50 CH
DIODE							
	87-A40-470-080		DIODE, 1SS254	C302	87-010-318-080		C-CAP, S 47P-50 CH
	87-017-447-010		DIODE, GBU4DL	C303	87-012-157-080		C-CAP, S 330P-50 CH
	87-017-654-060		DIODE, GBU6J	C304	87-012-157-080		C-CAP, S 330P-50 CH
	87-A40-269-080		C-DIODE, MC2836	C305	87-012-145-080		CAP, CHIP S 270P CH
	87-A40-270-080		C-DIODE, MC2838	C306	87-012-145-080		CAP, CHIP S 270P CH
	87-070-274-080		DIODE, 1N4003 SEM	C307	87-010-196-080		CHIP CAPACITOR, 0.1-25
	87-A40-440-080		ZENER, MTZJ7.5A	C311	87-010-198-080		CAP, CHIP 0.022
	87-A40-503-080		ZENER, MTZJ39B	C312	87-010-198-080		CAP, CHIP 0.022
	87-A40-345-080		ZENER, MTZJ10C	C313	87-010-179-080		CAP, CHIP S B1200P
	87-A40-438-080		ZENER, MTZJ4.7A	C314	87-010-179-080		CAP, CHIP S B1200P
	87-A40-004-080		ZENER, MTZJ16A	C315	87-010-178-080		CHIP CAP 1000P
	87-A40-274-010		DIODE, FMB-G16L	C316	87-010-178-080		CHIP CAP 1000P
	87-A40-488-080		DIODE, 1SS244	C317	87-012-142-080		CAP, S 0.33-16
	87-070-136-080		ZENER, MTZJ5.1B	C318	87-012-142-080		CAP, S 0.33-16
	87-A40-234-080		ZENER, MTZJ5.6A	C319	87-012-141-080		CHIP-CAPACITOR, 0.22-16F
	87-A40-002-080		ZENER, MTZJ5.1C	C320	87-012-141-080		CHIP-CAPACITOR, 0.22-16F
	87-A40-392-010		DIODE, 1N5818	C321	87-012-141-080		CHIP-CAPACITOR, 0.22-16F
				C322	87-012-141-080		CHIP-CAPACITOR, 0.22-16F

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION	REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C324	87-010-260-080		CAP, ELECT 47-25V	C626	87-010-405-080		CAP, ELECT 10-50V
C325	87-010-370-080		CAP, E 330-6.3 SME	C629	87-010-405-080		CAP, ELECT 10-50V
C327	87-010-404-080		CAP, ELECT 4.7-50V	C630	87-010-213-080		C-CAP,S 0.015-50 B
C328	87-010-404-080		CAP, ELECT 4.7-50V	C631	87-010-194-080		CAP, CHIP 0.047
C332	87-010-196-080		CHIP CAPACITOR, 0.1-25	C632	87-010-263-080		CAP, ELECT 100-10V
C335	87-010-401-080		CAP, ELECT 1-50V	C633	87-010-263-080		CAP, ELECT 100-10V
C336	87-010-401-080		CAP, ELECT 1-50V	C634	87-010-196-080		CHIP CAPACITOR, 0.1-25
C337	87-010-196-080		CHIP CAPACITOR, 0.1-25	C635	87-010-196-080		CHIP CAPACITOR, 0.1-25
C339	87-010-196-080		CHIP CAPACITOR, 0.1-25	C636	87-010-194-080		CAP, CHIP 0.047
C340	87-010-196-080		CHIP CAPACITOR, 0.1-25	C637	87-010-183-080		C-CAP,S 2700P-50 B
C351	87-012-140-080		CAP 470P	C641	87-012-368-080		C-CAP,S 0.1-50 F
C352	87-012-140-080		CAP 470P	C667	87-012-368-080		C-CAP,S 0.1-50 F
C354	87-010-175-080		CAP 560P	C701	87-010-381-080		CAP, ELECT 330-16V
C355	87-010-178-080		CHIP CAP 1000P	C702	87-010-404-080		CAP, ELECT 4.7-50V
C356	87-010-260-080		CAP, ELECT 47-25V	C703	87-010-197-080		CAP, CHIP 0.01 DM
C357	87-010-197-080		CAP, CHIP 0.01 DM	C704	87-010-197-080		CAP, CHIP 0.01 DM
C358	87-010-183-080		C-CAP,S 2700P-50 B	C709	87-010-322-080		C-CAP,S 100P-50 CH
C359	87-010-183-080		C-CAP,S 2700P-50 B	C711	87-010-263-080		CAP, ELECT 100-10V
C360	87-010-183-080		C-CAP,S 2700P-50 B	C712	87-010-196-080		CHIP CAPACITOR, 0.1-25
C363	87-A10-772-080		CAP,M 5600P-50 J	C713	87-010-197-080		CAP, CHIP 0.01 DM
C370	87-010-196-080		CHIP CAPACITOR, 0.1-25	C714	87-010-197-080		CAP, CHIP 0.01 DM
C371	87-010-177-080		C-CAP,S 820P-50 SL	C721	87-010-312-080		C-CAP,S 15P-50 CH
C372	87-010-177-080		C-CAP,S 820P-50 SL	C722	87-010-312-080		C-CAP,S 15P-50 CH
C373	87-010-179-080		CAP,CHIP S B1200P	C723	87-010-178-080		CHIP CAP 1000P
C374	87-010-179-080		CAP,CHIP S B1200P	C725	87-010-178-080		CHIP CAP 1000P
C375	87-010-545-080		CAP, ELECT 0.22-50V	C727	87-010-196-080		CHIP CAPACITOR, 0.1-25
C376	87-010-545-080		CAP, ELECT 0.22-50V	C728	87-010-248-080		CAP, ELECT 220-10V
C378	87-010-196-080		CHIP CAPACITOR, 0.1-25	C755	87-010-197-080		CAP, CHIP 0.01 DM
C381	87-010-197-080		CAP, CHIP 0.01 DM	C756	87-010-197-080		CAP, CHIP 0.01 DM
C382	87-010-318-080		C-CAP,S 47P-50 CH	C757	87-010-318-080		C-CAP,S 47P-50 CH
C383	87-010-197-080		CAP, CHIP 0.01 DM	C758	87-010-149-080		C-CAP,S 5P-50 CH
C384	87-010-402-080		CAP, ELECT 2.2-50V	C761	87-010-196-080		CHIP CAPACITOR, 0.1-25
C385	87-010-184-080		CHIP CAPACITOR 3300P(K)	C762	87-010-197-080		CAP, CHIP 0.01 DM
C386	87-010-196-080		CHIP CAPACITOR, 0.1-25	C763	87-010-194-080		CAP, CHIP 0.047
C401	87-010-405-080		CAP, ELECT 10-50V	C764	87-010-319-080		C-CAP,S 56P-50 CH
C402	87-010-405-080		CAP, ELECT 10-50V	C765	87-010-197-080		CAP, CHIP 0.01 DM
C403	87-010-184-080		CHIP CAPACITOR 3300P(K)	C766	87-010-197-080		CAP, CHIP 0.01 DM
C404	87-010-184-080		CHIP CAPACITOR 3300P(K)	C767	87-010-405-080		CAP, ELECT 10-50V
C405	87-010-193-080		CHIP CAPACITOR, 0.033	C768	87-010-197-080		CAP, CHIP 0.01 DM
C406	87-010-193-080		CHIP CAPACITOR, 0.033	C769	87-010-408-080		CAP, ELECT 47-50V
C407	87-010-405-080		CAP, ELECT 10-50V	C770	87-015-821-080		C-CAP 0.047
C408	87-010-405-080		CAP, ELECT 10-50V	C771	87-010-407-080		CAP, ELECT 33-50V
C409	87-010-380-080		CAP, ELECT 47-16V	C772	87-010-194-080		CAP, CHIP 0.047
C410	87-010-380-080		CAP, ELECT 47-16V	C773	87-010-196-080		CHIP CAPACITOR, 0.1-25
C411	87-010-405-080		CAP, ELECT 10-50V	C774	87-010-263-080		CAP, ELECT 100-10V
C412	87-010-112-080		CAP, ELECT 100-16V	C775	87-010-404-080		CAP, ELECT 4.7-50V
C415	87-010-184-080		CHIP CAPACITOR 3300P(K)	C776	87-010-197-080		CAP, CHIP 0.01 DM
C416	87-010-184-080		CHIP CAPACITOR 3300P(K)	C777	87-010-400-080		CAP, ELECT 0.47-50V
C453	87-010-544-080		CAP, ELECT 0.1-50V	C778	87-010-401-080		CAP, ELECT 1-50V
C454	87-010-544-080		CAP, ELECT 0.1-50V	C779	87-010-401-080		CAP, ELECT 1-50V
C457	87-010-402-080		CAP, ELECT 2.2-50V	C780	87-010-196-080		CHIP CAPACITOR, 0.1-25
C458	87-010-402-080		CAP, ELECT 2.2-50V	C781	87-010-405-080		CAP, ELECT 10-50V
C459	87-010-402-080		CAP, ELECT 2.2-50V	C782	87-010-405-080		CAP, ELECT 10-50V
C460	87-010-402-080		CAP, ELECT 2.2-50V	C783	87-015-819-080		CAPACITOR, 0.01
C461	87-010-545-080		CAP, ELECT 0.22-50V	C784	87-010-197-080		CAP, CHIP 0.01 DM
C463	87-010-402-080		CAP, ELECT 2.2-50V	C785	87-010-403-080		CAP, ELECT 3.3-50V
C464	87-010-402-080		CAP, ELECT 2.2-50V	C786	87-010-403-080		CAP, ELECT 3.3-50V
C516	87-010-196-080		CHIP CAPACITOR, 0.1-25	C787	87-010-184-080		CHIP CAPACITOR 3300P(K)
C551	87-010-401-080		CAP, ELECT 1-50V	C788	87-010-184-080		CHIP CAPACITOR 3300P(K)
C552	87-010-263-080		CAP, ELECT 100-10V	C789	87-010-179-080		CAP,CHIP S B1200P
C553	87-010-380-080		CAP, ELECT 47-16V	C790	87-010-179-080		CAP,CHIP S B1200P
C601	87-010-180-080		C-CER 1500P	C791	87-010-405-080		CAP, ELECT 10-50V
C602	87-010-180-080		C-CER 1500P	C793	87-010-177-080		C-CAP,S 820P-50 SL
C613	87-016-081-080		C-CAP,S 0.1-16 RK	C794	87-010-406-080		CAP, ELECT 22-50
C614	87-016-081-080		C-CAP,S 0.1-16 RK	C795	87-010-596-080		CAP, S 0.047-16
C619	87-010-185-080		C-CAP,S 3900P-50 B	C796	87-010-403-080		CAP, ELECT 3.3-50V
C620	87-010-185-080		C-CAP,S 3900P-50 B	C797	87-010-182-080		C-CAP,S 2200P-50 B
C621	87-010-401-080		CAP, ELECT 1-50V	C798	87-010-182-080		C-CAP,S 2200P-50 B
C622	87-010-401-080		CAP, ELECT 1-50V	C799	87-010-194-080		CAP, CHIP 0.047
C625	87-010-405-080		CAP, ELECT 10-50V	C812	87-010-197-080		CAP, CHIP 0.01 DM

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION	REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
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	C501	87-A10-804-080		C-CAP,S 0.1-25 J B
R239	87-A00-262-080		RES,M/F 0.15-2W J	C502	87-A10-804-080		C-CAP,S 0.1-25 J B
R240	87-A00-262-080		RES,M/F 0.15-2W J	C503	87-012-141-080		CHIP-CAPACITOR,0.22-16F
RY101	87-A90-464-010		RELAY, DG12D2-0(M)	C504	87-010-186-080		CAP,CHIP 4700P
SFR301	87-A90-636-080		SFR,33K H RH0638C LG	C505	87-010-178-080		CHIP CAP 1000P
SFR302	87-A90-636-080		SFR,33K H RH0638C LG	C506	87-A10-803-080		C-CAP,S 0.068-16 J B CM
SFR303	87-A90-636-080		SFR,33K H RH0638C LG	C507	87-A10-803-080		C-CAP,S 0.068-16 J B CM
SFR304	87-A90-636-080		SFR,33K H RH0638C LG	C508	87-010-186-080		CAP,CHIP 4700P
SFR305	87-A90-637-080		SFR,47K H RH0638C LG	C509	87-010-178-080		CHIP CAP 1000P
SFR306	87-A90-637-080		SFR,47K H RH0638C LG	C510	87-012-141-080		CHIP-CAPACITOR,0.22-16F
SFR351	87-A90-637-080		SFR,47K H RH0638C LG	C511	87-010-196-080		CHIP CAPACITOR,0.1-25
SFR352	87-A90-637-080		SFR,47K H RH0638C LG	C512	87-010-263-040		CAP,E 100-10
TH201	87-A90-221-080		C-THMS,100K<LHS>	C513	87-A10-723-040		CAP,E 2.2-35 5L SSE
TH202	87-A90-221-080		C-THMS,100K<LHS>	C514	87-A10-723-040		CAP,E 2.2-35 5L SSE
W104	88-NF3-665-010		F-CABLE,7P -2.5 (GETA)	C515	87-010-183-080		C-CAP,S 2700P-50 B
W104	88-NF3-665-010		F-CABLE,7P -2.5 (GETA)	C516	87-010-183-080		C-CAP,S 2700P-50 B
WH102	87-A90-142-010		HOLDER,51052-0710 V0	C518	87-010-196-080		CHIP CAPACITOR,0.1-25
WH102	87-A90-142-010		HOLDER,51052-0710 V0	C519	87-010-263-040		CAP,E 100-10
X721	87-A70-061-010		VIB,XTAL 4.500MHZ CSA-309	C601	87-010-405-040		CAP,E 10-50
				C602	87-010-186-080		CAP,CHIP 4700P
FRONT C.B				C603	87-010-498-040		CAP,E 10-16 GAS
				C604	87-010-499-040		CAP,E 22-6.3 GAS
C101	87-010-182-080		C-CAP,S 2200P-50 B	C605	87-010-196-080		CHIP CAPACITOR,0.1-25
C102	87-010-182-080		C-CAP,S 2200P-50 B	C607	87-010-321-080		CHIP CAPACITOR,82P(J)
C104	87-010-312-080		C-CAP,S 15P-50 CH	C608	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	C609	87-010-545-040		CAP,E 0.22-50 SME
				C611	87-010-177-080		C-CAP,S 820P-50 SL
C107	87-012-157-080		C-CAP,S 330P-50 CH	C613	87-010-322-080		C-CAP,S 100P-50 CH
C108	87-010-498-040		CAP,E 10-16 GAS	C614	87-010-248-040		CAP,E 220-10 SME
C109	87-010-401-040		CAP,E 1-50 SME	C621	87-010-405-040		CAP,E 10-50
C110	87-A10-369-080		C-CAP,S 0.47-16 K B				
C111	87-010-196-080		CHIP CAPACITOR,0.1-25	C634	87-015-678-040		CAP,E 22-10 M 7L SRA
				C801	87-010-263-040		CAP,E 100-10
C112	87-010-196-080		CHIP CAPACITOR,0.1-25	C802	87-010-196-080		CHIP CAPACITOR,0.1-25
C113	87-A10-189-040		CAP,E 220-10	C803	87-010-400-040		CAP,E 0.47-50
C114	87-010-196-080		CHIP CAPACITOR,0.1-25	C901	87-010-421-040		CAP,E 4.7-50 5L

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION	REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C902	87-A10-818-040		CAP,E 100-16 7LSRA SERIES	R243	87-A00-258-080		RES,M/F 0.22-1W J
C905	87-010-493-040		CAP,E 0.47-50 GAS	R244	87-A00-258-080		RES,M/F 0.22-1W J
C906	87-010-196-080		CHIP CAPACITOR,0.1-25	R245	87-A00-258-080		RES,M/F 0.22-1W J
C907	87-010-196-080		CHIP CAPACITOR,0.1-25	R246	87-A00-258-080		RES,M/F 0.22-1W J
C908	87-010-400-040		CAP,E 0.47-50	S302	87-A90-756-080		SW,TACT SINKO
C910	87-A10-369-080		C-CAP,S 0.47-16 K B	S306	87-A90-756-080		SW,TACT SINKO
C911	87-010-197-080		CAP, CHIP 0.01 DM	S307	87-A90-756-080		SW,TACT SINKO
C912	87-010-196-080		CHIP CAPACITOR,0.1-25	S308	87-A90-756-080		SW,TACT SINKO
C913	87-010-185-080		C-CAP,S 3900P-50 B	S316	87-A90-756-080		SW,TACT SINKO
C914	87-010-596-080		CAP, S 0.047-16	S317	87-A90-756-080		SW,TACT SINKO
C915	87-010-181-080		CAP,CHIP S 1800P	S318	87-A90-756-080		SW,TACT SINKO
C916	87-010-198-080		CAP, CHIP 0.022	S319	87-A90-756-080		SW,TACT SINKO
C917	87-010-176-080		C-CAP,S 680P-50 SL	S320	87-A90-756-080		SW,TACT SINKO
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
FC502	88-904-261-110		FF-CABLE, 4P 1.25 260MM	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,BJ604GK-8NF3	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				
LED415	87-070-197-080		LED,SLP7118C-51-S-T1				
LED416	87-070-281-080		LED,SLZ736A-25-S-T1				
LED417	87-070-281-080		LED,SLZ736A-25-S-T1				
LED418	87-070-281-080		LED,SLZ736A-25-S-T1				
LED419	87-070-281-080		LED,SLZ736A-25-S-T1				
LED420	87-070-281-080		LED,SLZ736A-25-S-T1				
LED421	87-070-281-080		LED,SLZ736A-25-S-T1				
LED431	87-070-278-010		LED,SLZ-738A-24-S				
LED432	87-070-278-010		LED,SLZ-738A-24-S				
LED433	87-070-290-010		LED,SLZ 936-30-S				
LED434	87-070-290-010		LED,SLZ 936-30-S				
LED435	87-070-278-010		LED,SLZ-738A-24-S				
LED436	87-070-278-010		LED,SLZ-738A-24-S				
PR107	87-A90-410-080		FUSE,0.5A 125V 251<US>				
PR107	87-A90-560-080		PROTECTOR,630A 60V<LHS>				
				C101	87-012-368-080		C-CAP,S 0.1-50 F
				C102	87-012-368-080		C-CAP,S 0.1-50 F
				C103	87-010-917-090		CAP,E 3300-50 M SMG
				C104	87-010-917-090		CAP,E 3300-50 M SMG
				C106	87-010-182-080		C-CAP,S 2200P-50 B
				C201	87-010-112-080		CAP, ELECT 100-16V
				C202	87-010-378-080		CAP, ELECT 10-16V
				C207	87-010-401-080		CAP, ELECT 1-50V
				C208	87-010-401-080		CAP, ELECT 1-50V
				C209	87-010-181-080		CAP,CHIP S 1800P
				C210	87-010-181-080		CAP,CHIP S 1800P
				C211	87-010-545-080		CAP, ELECT 0.22-50V
				C212	87-010-545-080		CAP, ELECT 0.22-50V
				C213	87-010-184-080		CHIP CAPACITOR 3300P(K)
				C214	87-010-184-080		CHIP CAPACITOR 3300P(K)
				C217	87-010-402-080		CAP, ELECT 2.2-50V
				C218	87-010-402-080		CAP, ELECT 2.2-50V
				C219	87-A10-812-080		C-CAP,S 220P-200 J CH
				C220	87-A10-812-080		C-CAP,S 220P-200 J CH
				C221	87-010-913-080		CAP,E 47-25 ASF BP

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION	REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C222	87-010-913-080		CAP,E 47-25 ASF BP	△ F102	87-A90-505-080		FUSE CLAMP,TP00351-51<US>
C223	87-010-544-080		CAP, ELECT 0.1-50V	△ PT101	88-NF3-601-010		PT,U EI96-60 8NF-3<US>
C224	87-010-544-080		CAP, ELECT 0.1-50V	△ T101	87-A60-317-010		TERMINAL, 1P MSC<US>
C225	87-010-993-080		C-CAP,S 0.056-25 B	△ T102	87-A60-317-010		TERMINAL, 1P MSC<US>
C226	87-010-993-080		C-CAP,S 0.056-25 B				
C227	87-010-196-080		CHIP CAPACITOR,0.1-25				
C228	87-010-196-080		CHIP CAPACITOR,0.1-25				
C231	87-012-153-080		C-CAP,S 120P-50 CH	△ AC2 C.B			
C232	87-012-153-080		C-CAP,S 120P-50 CH	△ PR101	87-026-691-080		FUSE,10A 125V 251<US>
C234	87-016-285-080		CAP,E 47-100SME	△ PR101	87-026-682-080		PROTECTOR,10A 60V491<LHS>
				△ PR102	87-026-691-080		FUSE,10A 125V 251<US>
C235	87-016-285-080		CAP,E 47-100SME	△ PR102	87-026-682-080		PROTECTOR,10A 60V491<LHS>
C240	87-010-322-080		C-CAP,S 100P-50 CH	△ PR103	87-026-691-080		FUSE,10A 125V 251<US>
J201	87-A60-545-010		JACK,PIN 4P W/R	△ PR103	87-026-682-080		PROTECTOR,10A 60V491<LHS>
L201	87-003-383-010		COIL,1UH-S	△ PR104	87-026-691-080		FUSE,10A 125V 251<US>
L202	87-003-383-010		COIL,1UH-S	△ PR104	87-026-682-080		PROTECTOR,10A 60V491<LHS>
				△ PR105	87-A90-210-080		FUSE,7A 125V 251<US>
RY101	87-045-382-010		RELAY,OUAZ-SH-112L	△ PR105	87-A90-195-080		PROTECTOR 7A 125V 49<LHS>
				△ PR106	87-A90-210-080		FUSE,7A 125V 251<US>
KEY C.B				△ PR106	87-A90-195-080		PROTECTOR 7A 125V 49<LHS>
FC302	88-908-231-110		FF-CABLE,8P 1.25	WH101	87-A90-142-010		HOLDER,51052-0710 V0
LED447	87-070-197-080		LED,SLP7118C-51-S-T1	WH101	87-A90-142-010		HOLDER,51052-0710 V0
LED448	87-070-197-080		LED,SLP7118C-51-S-T1				
LED449	87-070-197-080		LED,SLP7118C-51-S-T1				
LED450	87-070-197-080		LED,SLP7118C-51-S-T1				
LED451	87-070-197-080		LED,SLP7118C-51-S-T1				
LED452	87-070-197-080		LED,SLP7118C-51-S-T1				
LED453	87-070-197-080		LED,SLP7118C-51-S-T1				
LED454	87-070-197-080		LED,SLP7118C-51-S-T1				
LED455	87-070-197-080		LED,SLP7118C-51-S-T1				
LED456	87-070-197-080		LED,SLP7118C-51-S-T1				
LED472	87-070-197-080		LED,SLP7118C-51-S-T1				
LED473	87-070-197-080		LED,SLP7118C-51-S-T1				
LED474	87-070-197-080		LED,SLP7118C-51-S-T1				
LED475	87-070-197-080		LED,SLP7118C-51-S-T1				
LED476	87-070-197-080		LED,SLP7118C-51-S-T1				
S309	87-A90-756-080		SW,TACT SINKO				
S310	87-A90-756-080		SW,TACT SINKO				
S311	87-A90-756-080		SW,TACT SINKO				
S312	87-A90-756-080		SW,TACT SINKO				
S313	87-A90-756-080		SW,TACT SINKO				
S314	87-A90-756-080		SW,TACT SINKO				
S315	87-A90-756-080		SW,TACT SINKO				
DIAL C.B							
C287	87-010-196-080		CHIP CAPACITOR,0.1-25				
FC802	88-910-131-110		FF-CABLE,10P 1.25				
LED460	87-017-368-080		LED,SEL4514C TP-5				
LED461	87-017-368-080		LED,SEL4514C TP-5				
LED462	87-017-368-080		LED,SEL4514C TP-5				
LED463	87-017-368-080		LED,SEL4514C TP-5				
LED464	87-017-368-080		LED,SEL4514C TP-5				
LED465	87-017-368-080		LED,SEL4514C TP-5				
LED466	87-017-368-080		LED,SEL4514C TP-5				
LED467	87-017-368-080		LED,SEL4514C TP-5				
LED468	87-017-368-080		LED,SEL4514C TP-5				
LED469	87-017-368-080		LED,SEL4514C TP-5				
LED470	87-017-368-080		LED,SEL4514C TP-5				
LED471	87-017-368-080		LED,SEL4514C TP-5				
SW102	87-A90-784-010		SW,RTRY EC12E 20MM				
RELAY C.B							
M451	87-A90-796-010		FAN,F614R-12MC-15-300MM				
RY950	87-A90-143-010		RELAY,DG12D-OS (M) <US>				
AC1 C.B<US>							
△ F101	87-035-493-010		FUSE,8A 125V<US>				
△ FC101	87-A90-505-080		FUSE CLAMP,TP00351-51<US>				

TRANSISTOR ILLUSTRATION



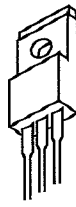
E C B

2SA952
CSB1058



E C B

KTA1266
KTC3198



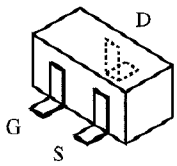
B C E

2SB1370

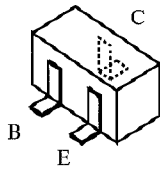


E C B

2SA933
DTA144



2SK2158



2SB1588 DTA143
2SA1235 RN1410
2SC2714 RN1305
2SC3052 RN2305
2SC4115 RT1N141C
CMBT5401 RT1N144C
CMBT5551 RT1P144C
CSA1362 RT1P141C
CSD1306 RT1P441C
DTA114



G D S

2SK2937



B C E

2SB1375
2SB1625
2SD2439
2SD2494

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



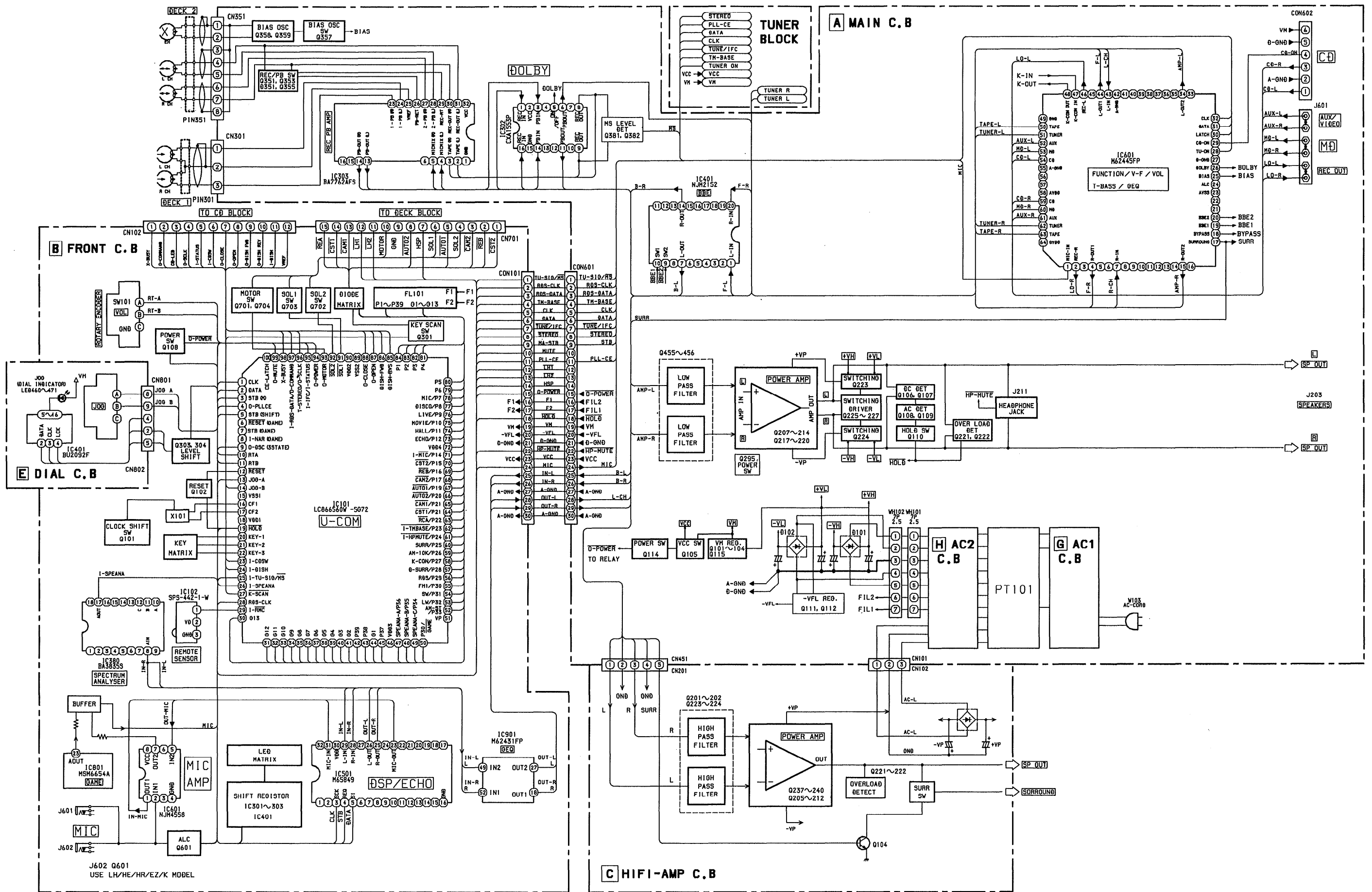
A
抵抗部品コード
Resistor Code

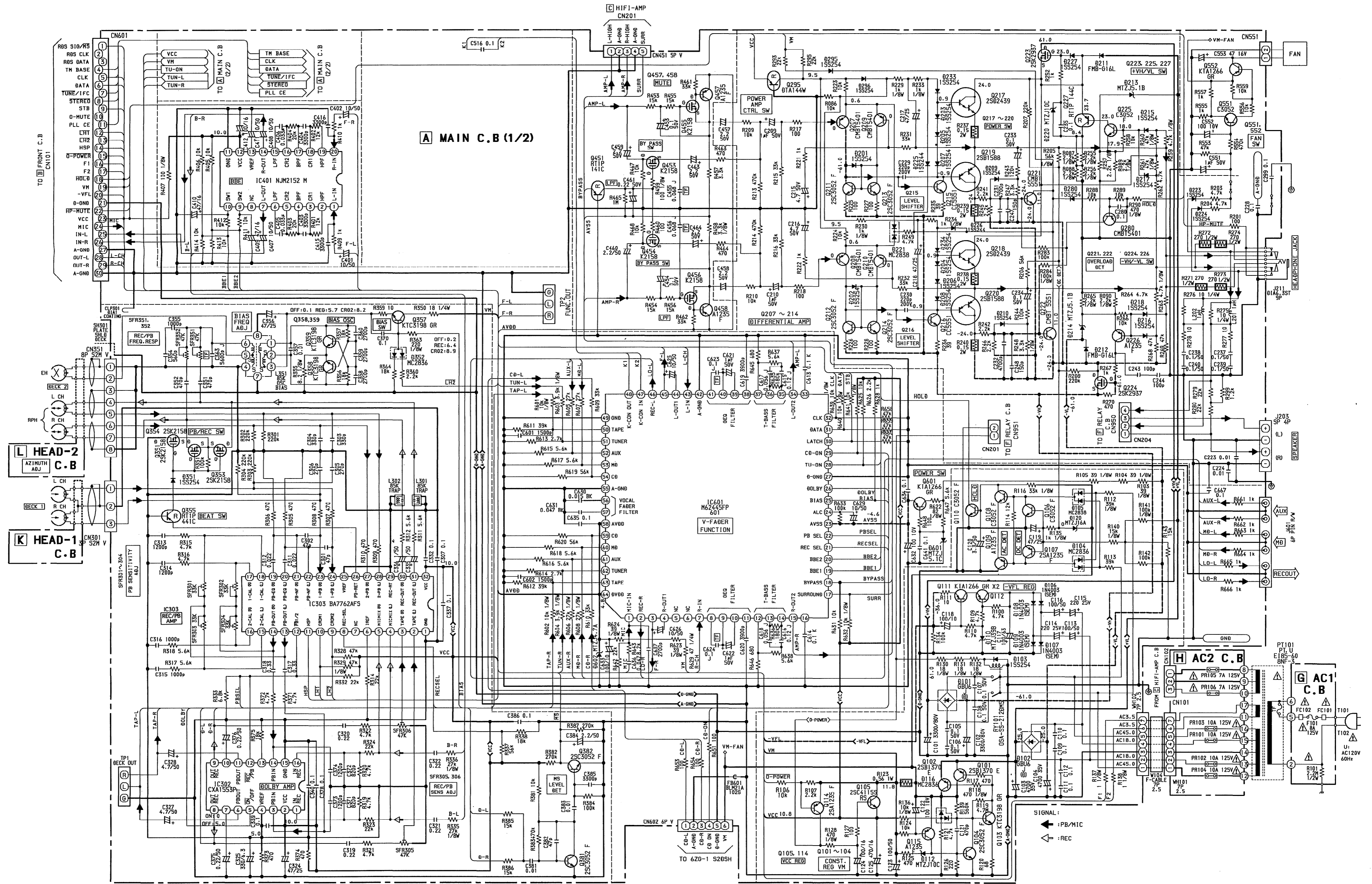
桁表示
Figure
抵抗値
Value of resistor

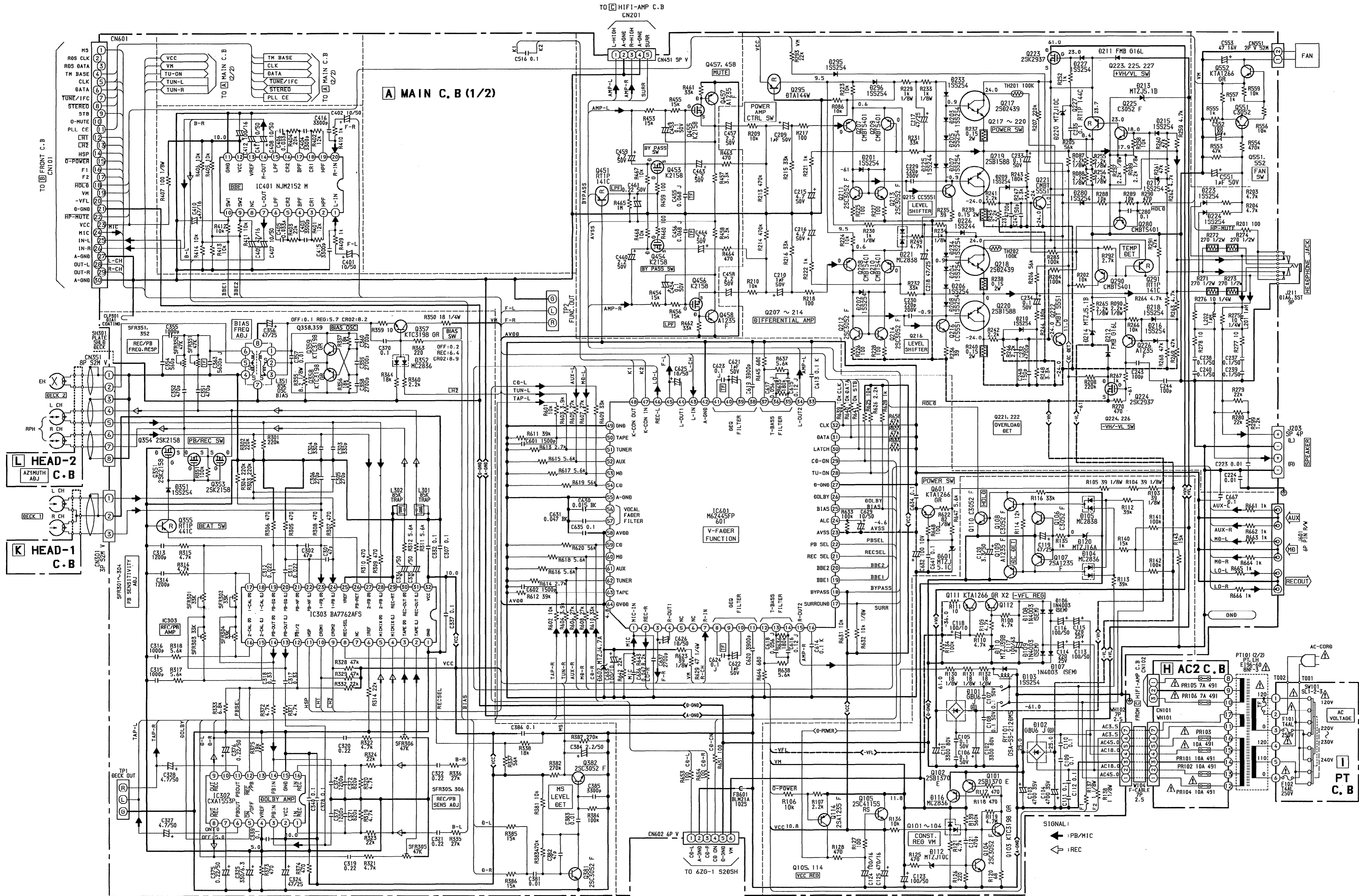
チップ抵抗 Chip resistor

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

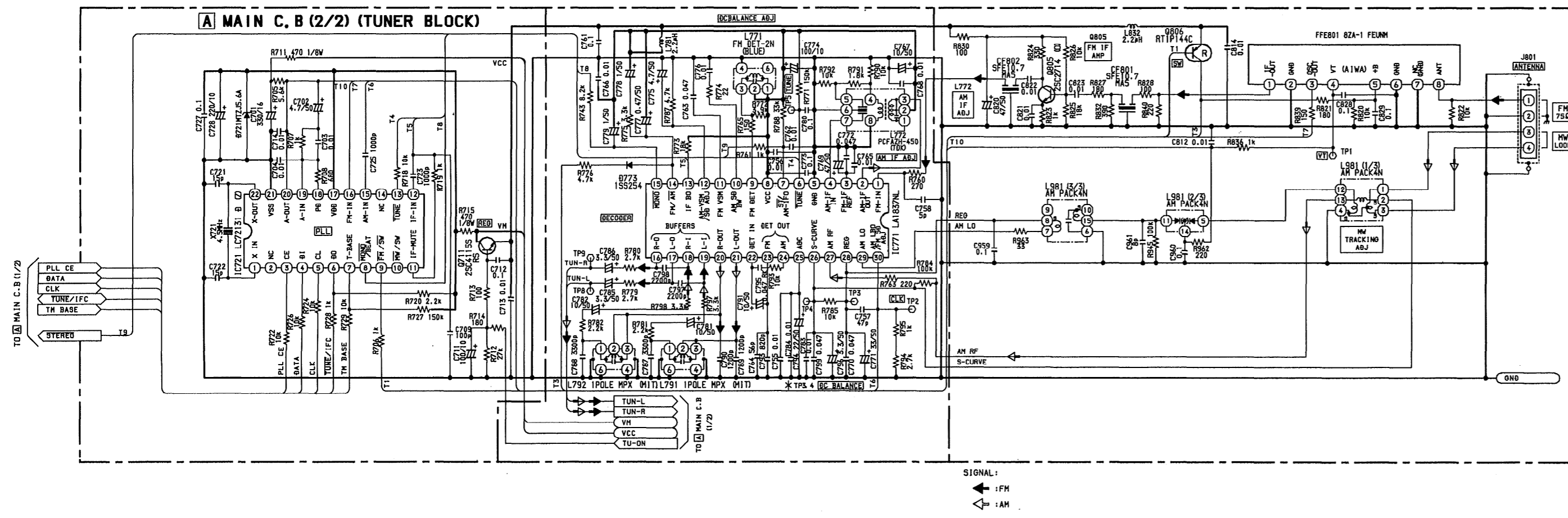
BLOCK DIAGRAM - 1 (MAIN / FRONT)





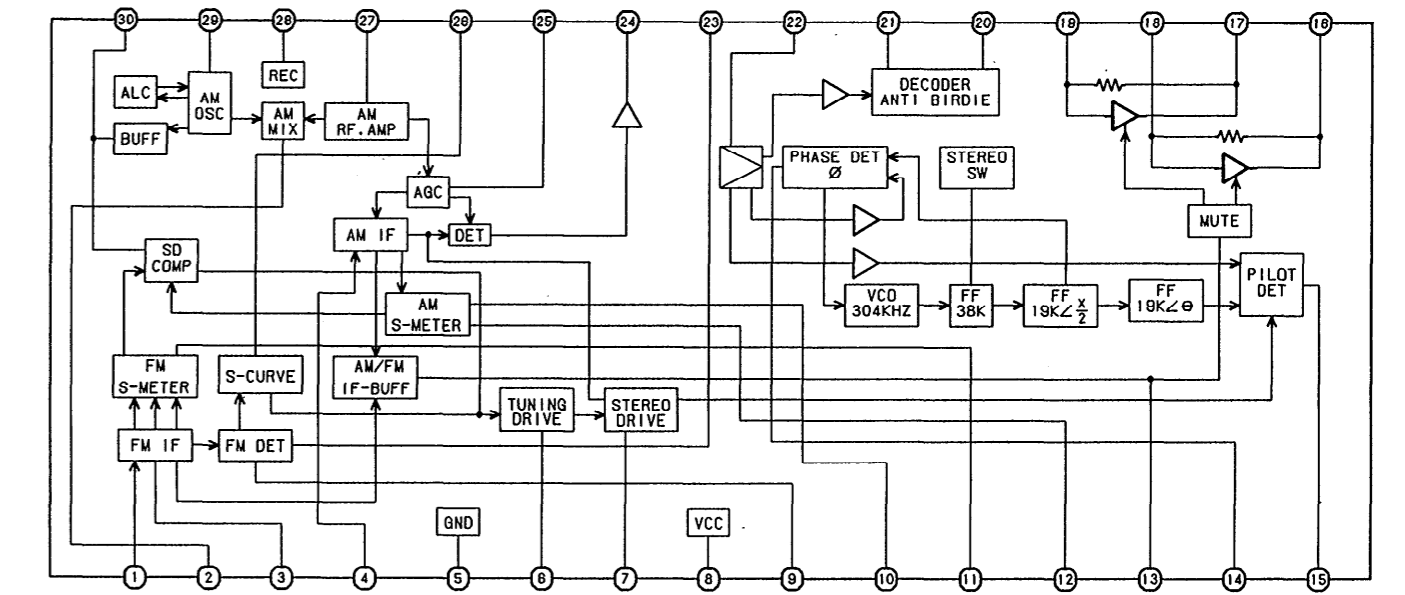


SCHEMATIC DIAGRAM - 3 (TUNER)

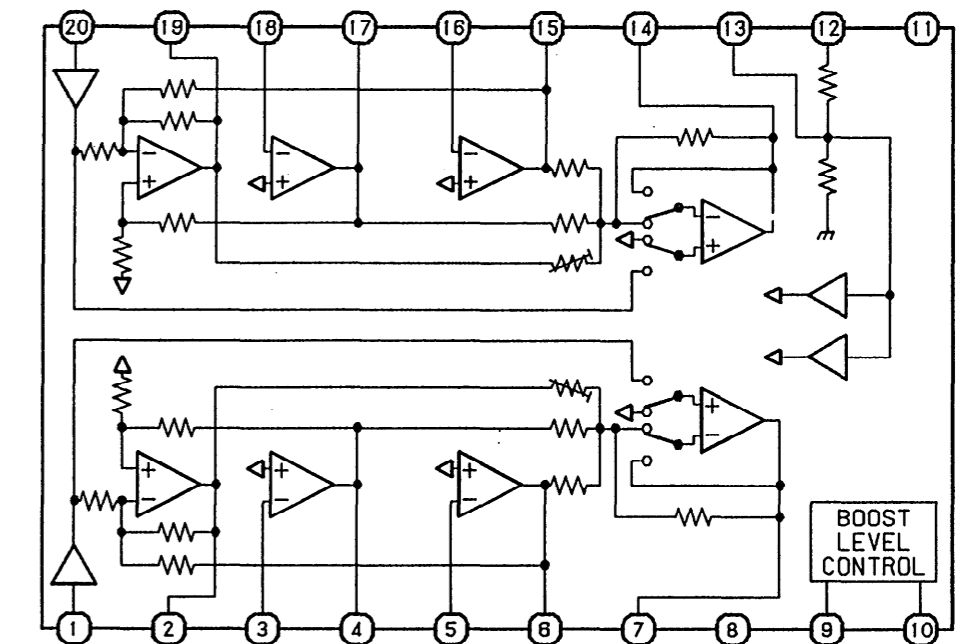


IC BLOCK DIAGRAM - 1

IC, LA1837

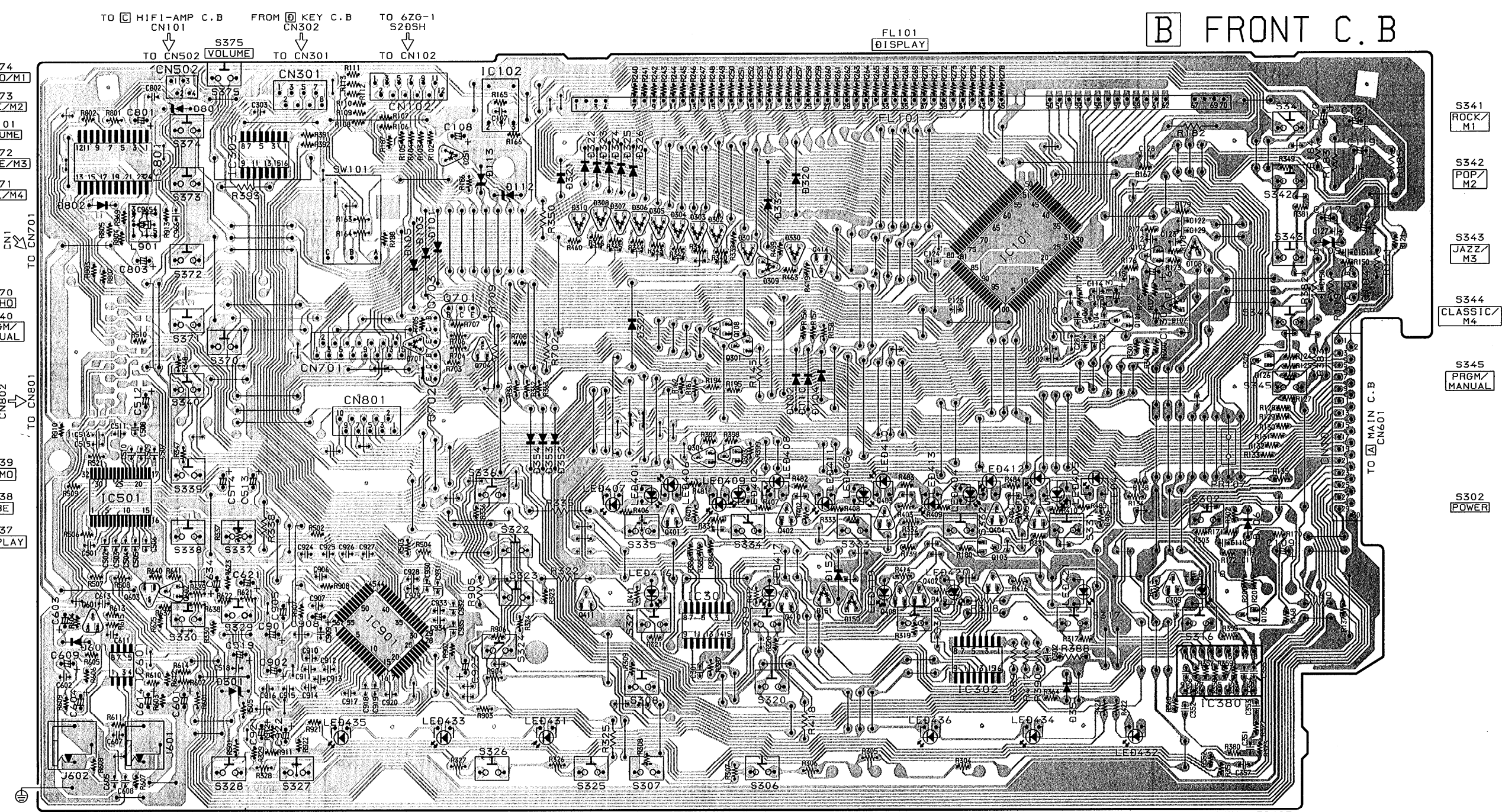


IC, NJM2152M



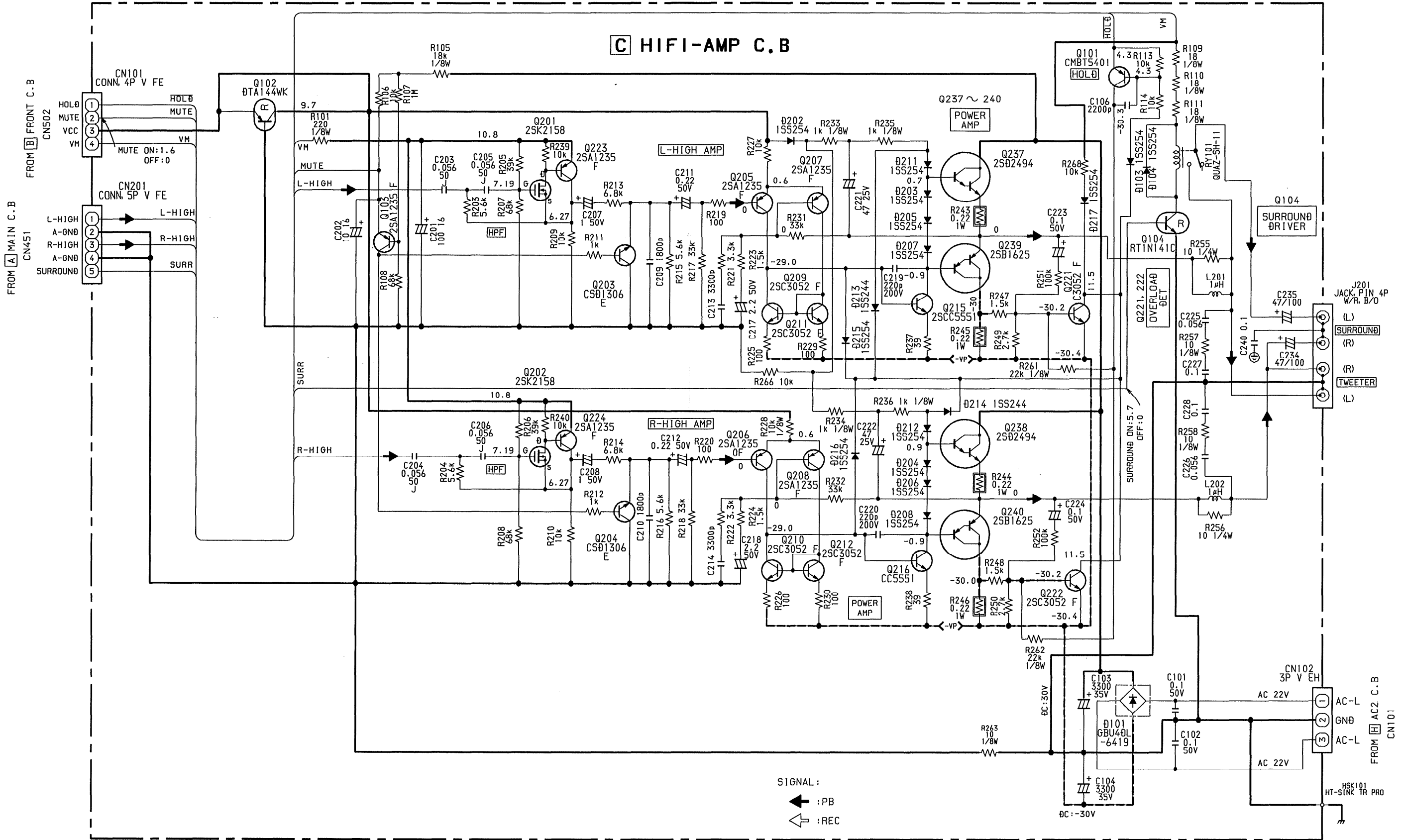
A
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I
J

B FRONT C.B



- J602 MIC 2
- J601 MIC 1
- S330 T-BASS
- S329 ENTER
- S336 FREQUENCY UP
- S323 EFFECT
- S335, LE0401, 406, 407 MD
- S321, LE0416
- S319, LE0417
- S333, LE0403, 410, 411 VIDEO/AUX
- LE0419, 420 S318
- S332, LE0404, 412, 413 TUNER/BAND
- LE0421, S317 CLEAR
- LE0418, S316 SET
- S331, LE0405, 414, 415 TAPE
- S328 CLOCK/TIMER
- S327 RHYTHM
- S322 FREQUENCY DOWN
- S324 DELAY
- S308 REC MUTE
- S334, LE0402, 408, 409 CD
- S320 SYNCHRD. DUBBLING
- S306 KARAOKE
- LE0435, 433, 431 (DECK1 INDICATOR)
- S326 CD EDIT/CHECK
- S325 REV MODE (DECK2)
- S307 DOLBY NR
- LE0436, 434, 432 (DECK1 INDICATOR)

- S341 ROCK/M1
- S342 POP/M2
- S343 JAZZ/M3
- S344 CLASSIC/M4
- S345 PRGM/MANUAL
- S302 POWER



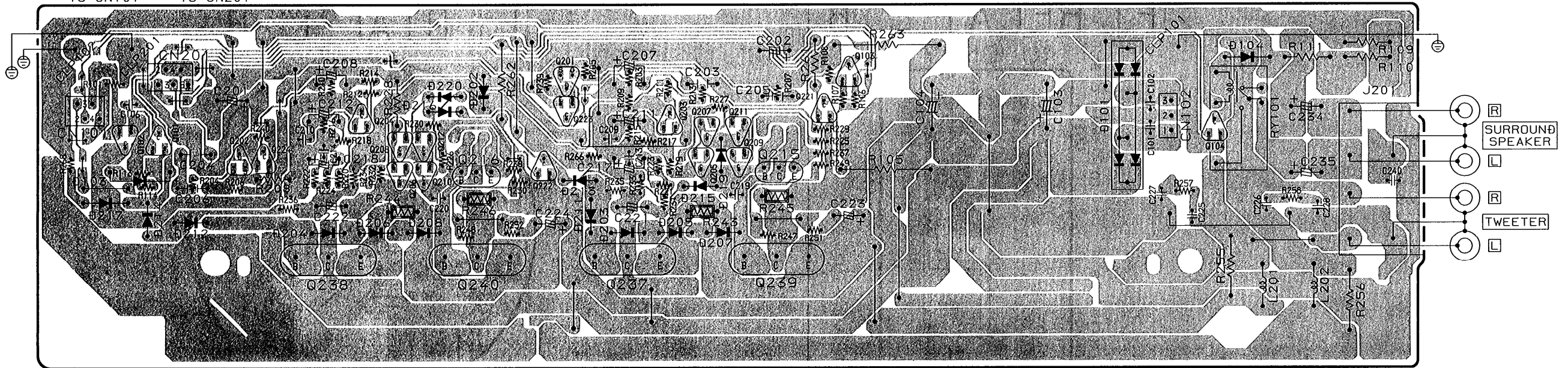
A
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FROM **B** FRONT C.B
CN502
↓
TO CN101

FROM **A** MAIN C.B
CN451
↓
TO CN201

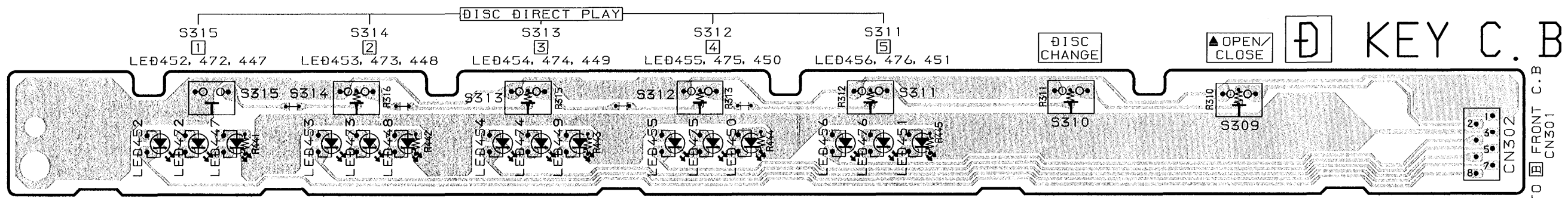
C HIFI-AMP C.B

FROM **H** AC2 C.B
CN101
↓
TO CN102

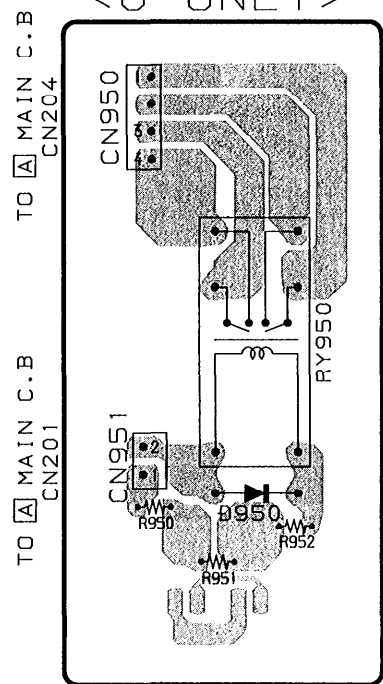


1 2 3 4 5 6 7 8 9 10 11 12 13 14

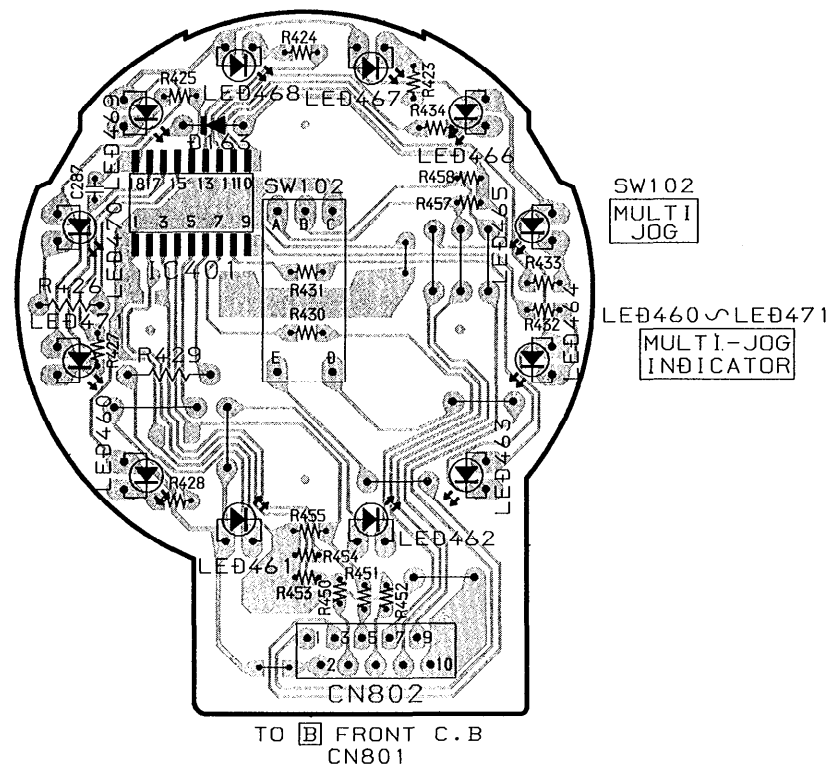
A
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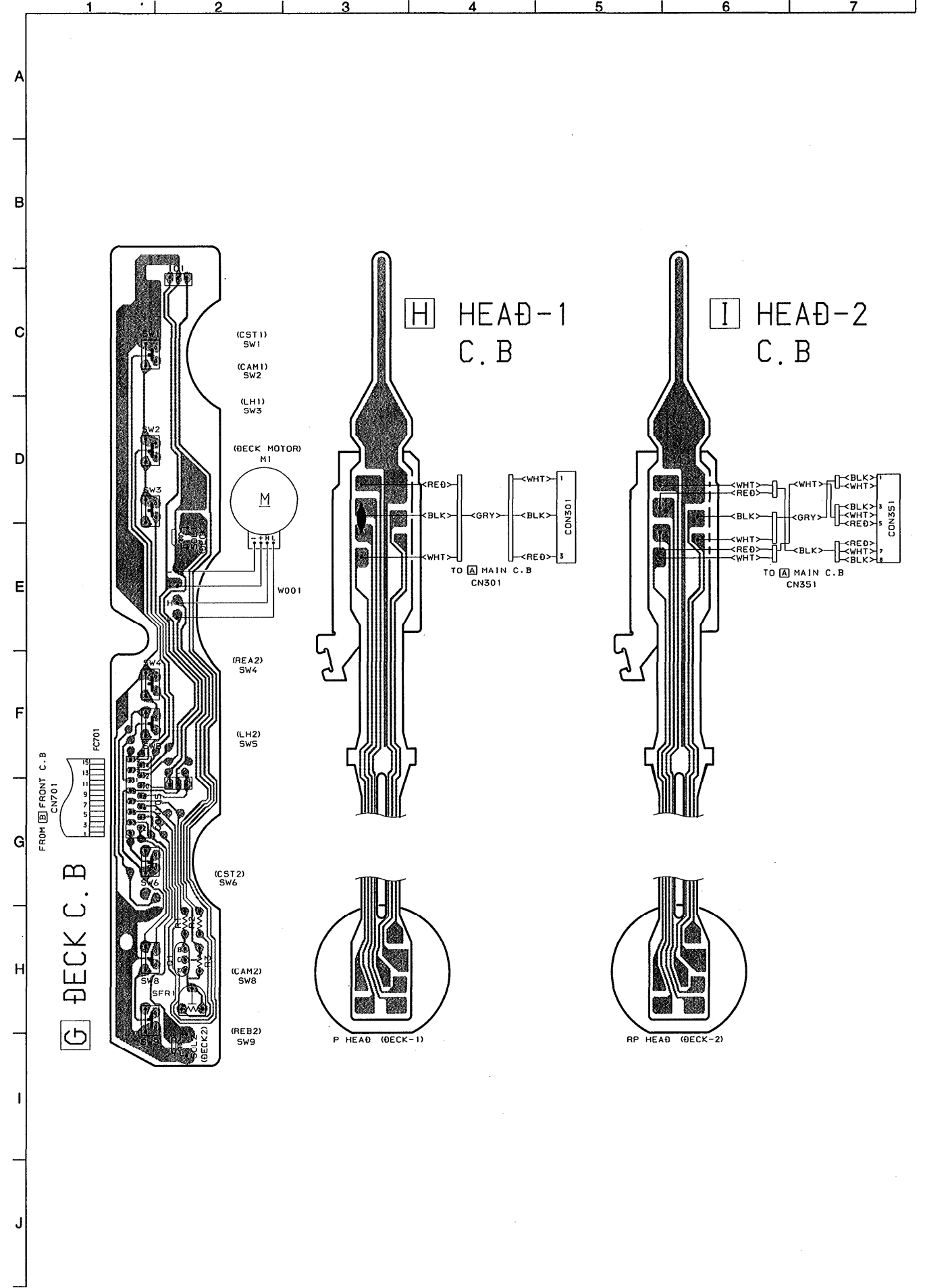
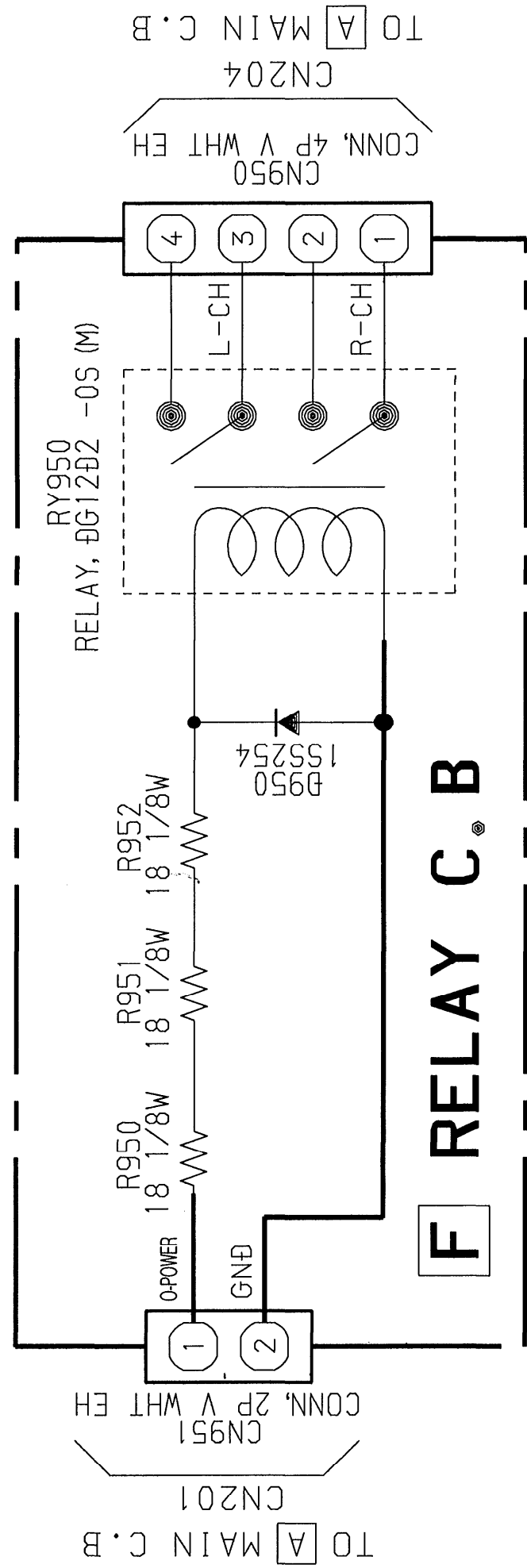


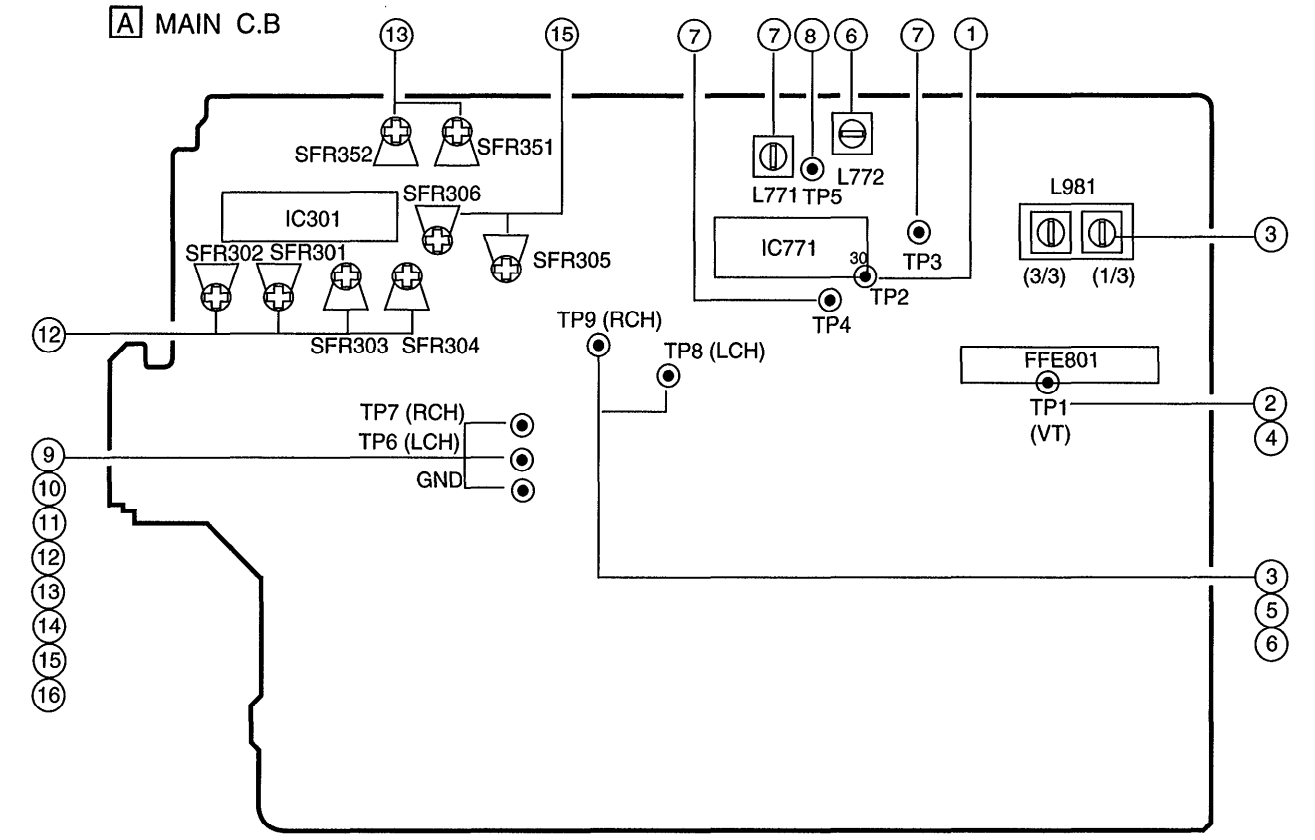
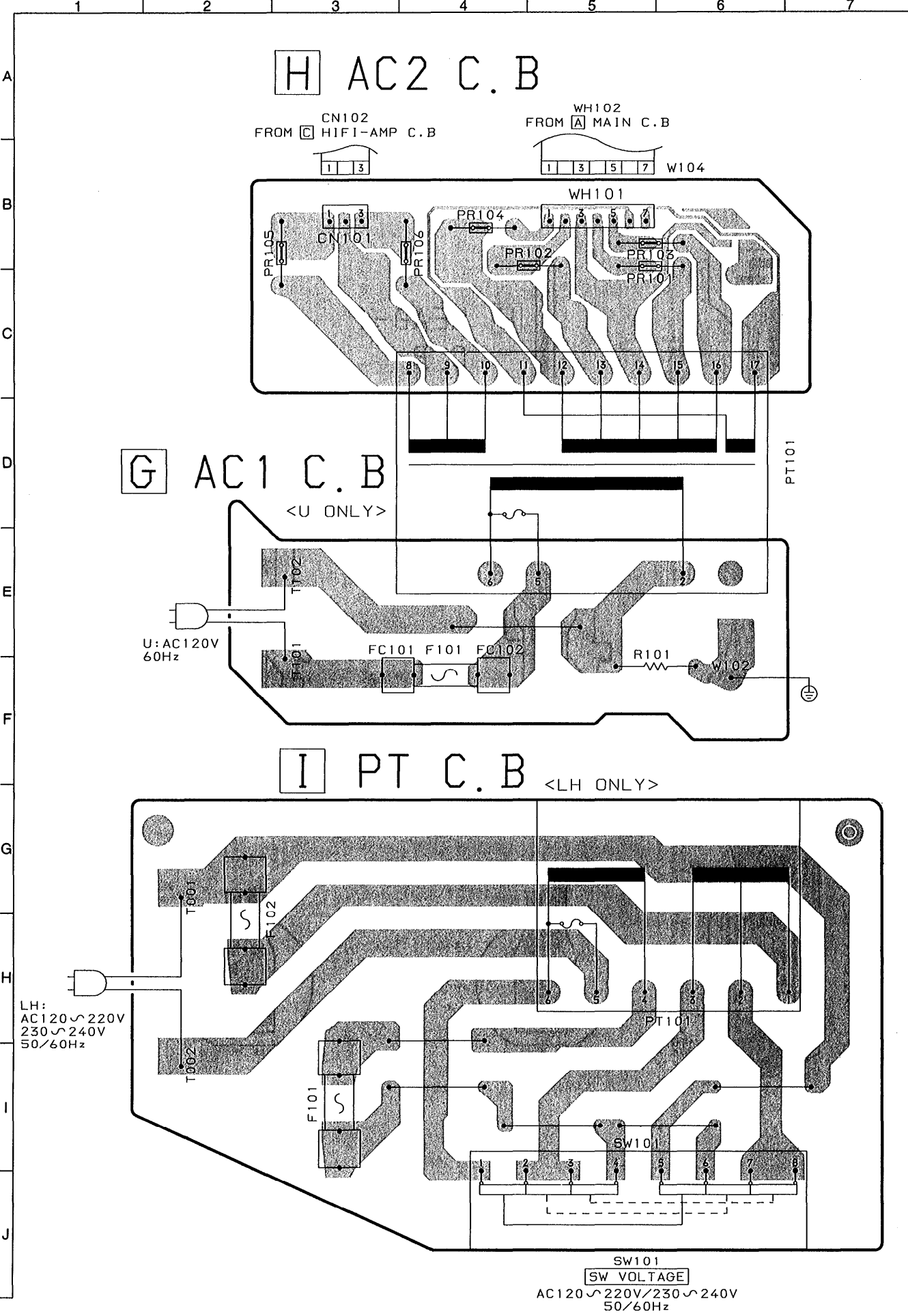
F RELAY C.B.
<U ONLY>



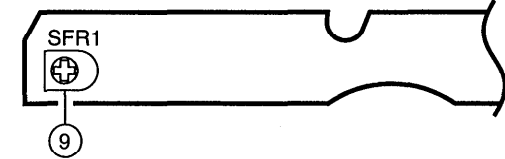
E DIAL C.B.



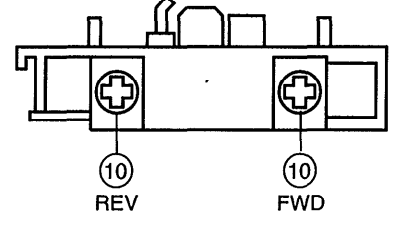




G DECK C.B.



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



< TUNER SECTION >

1. Clock Check
Settings : • Test point : TP2
Method : Set to AM 1710kHz and check that the test point is 2160kHz ± 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 test point becomes 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)
 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

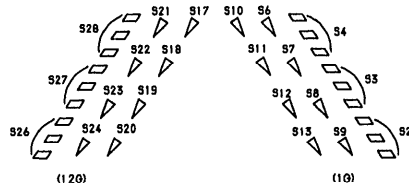
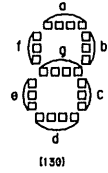
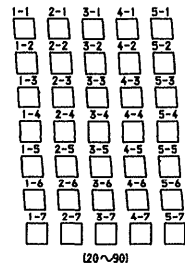
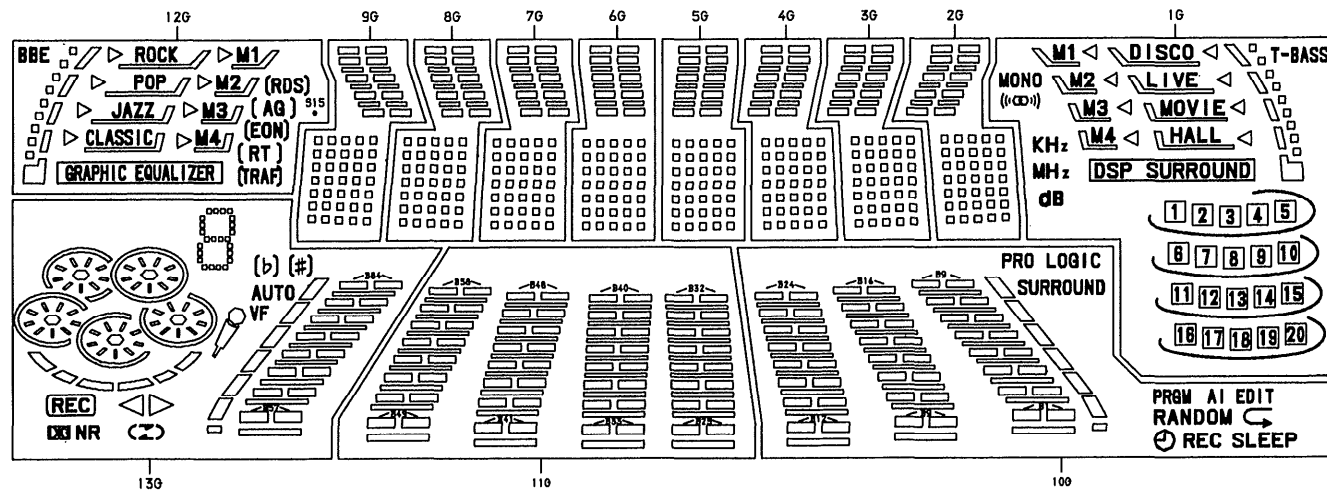
IC, LC866560W-5G72

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	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. (Not connected)
10	RT A	I	Main volume rotary encoder input A.
11	RT B	I	Main volume rotary encoder input B.
12	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	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/MS	I	RDS signal and deck music sensor signal input.
26	I-SPEANA	I	A/D input for spectrum analyzer display.
27	K-SCAN	O	Key scan output (active low).
28	I-RDS-CLK	I	Tuner RDS clock input.
29	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 P38, P39.
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	VP	-	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-RVS	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.

FL GRID ASSIGNMENT AND ANODE CONNECTION

GRID ASSIGNMENT

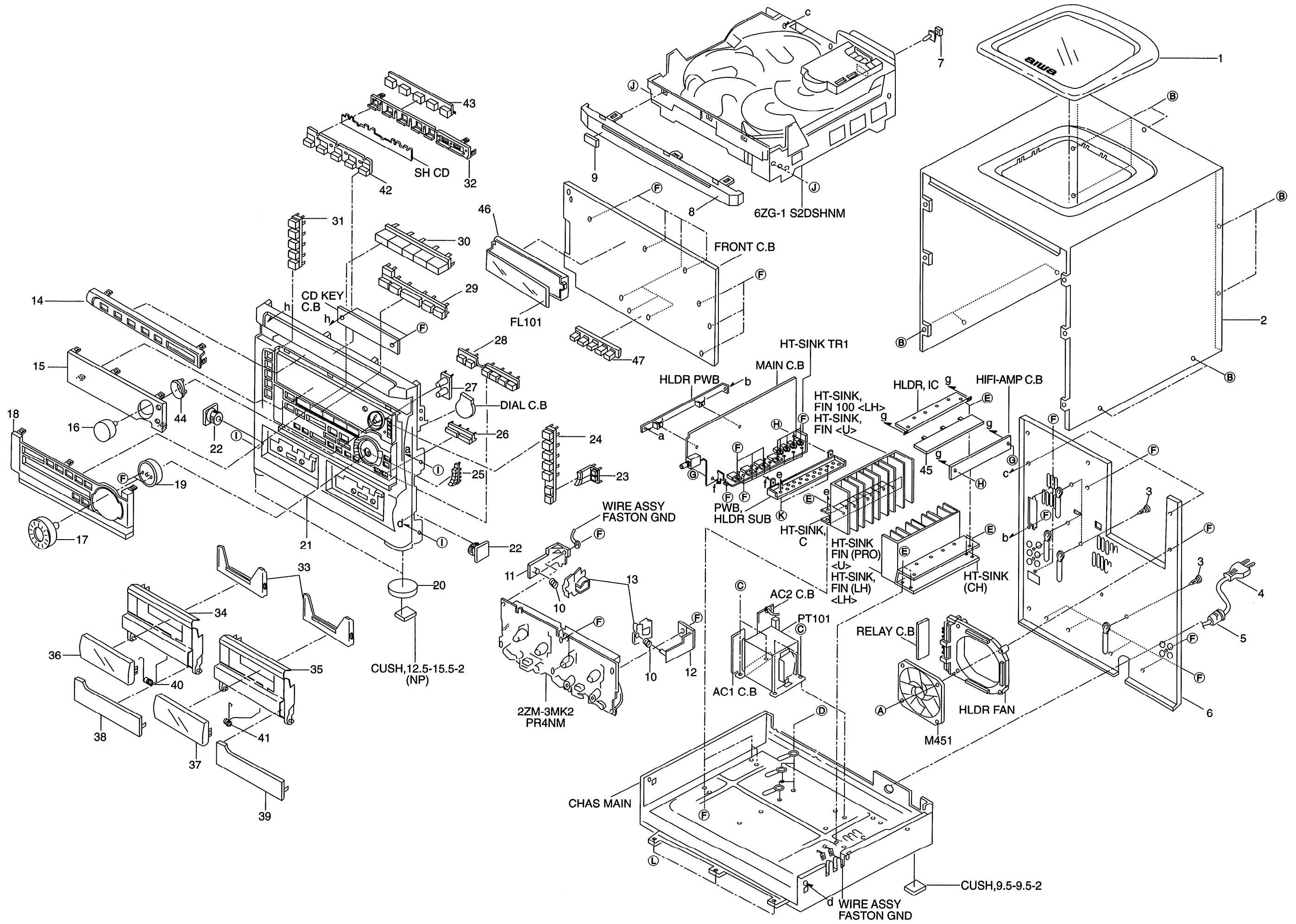


BJ6040K
GRID ASSIGNMENT

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	KH z
P17	B59	S23	B53	B6	4-4	MH z
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	o	—	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

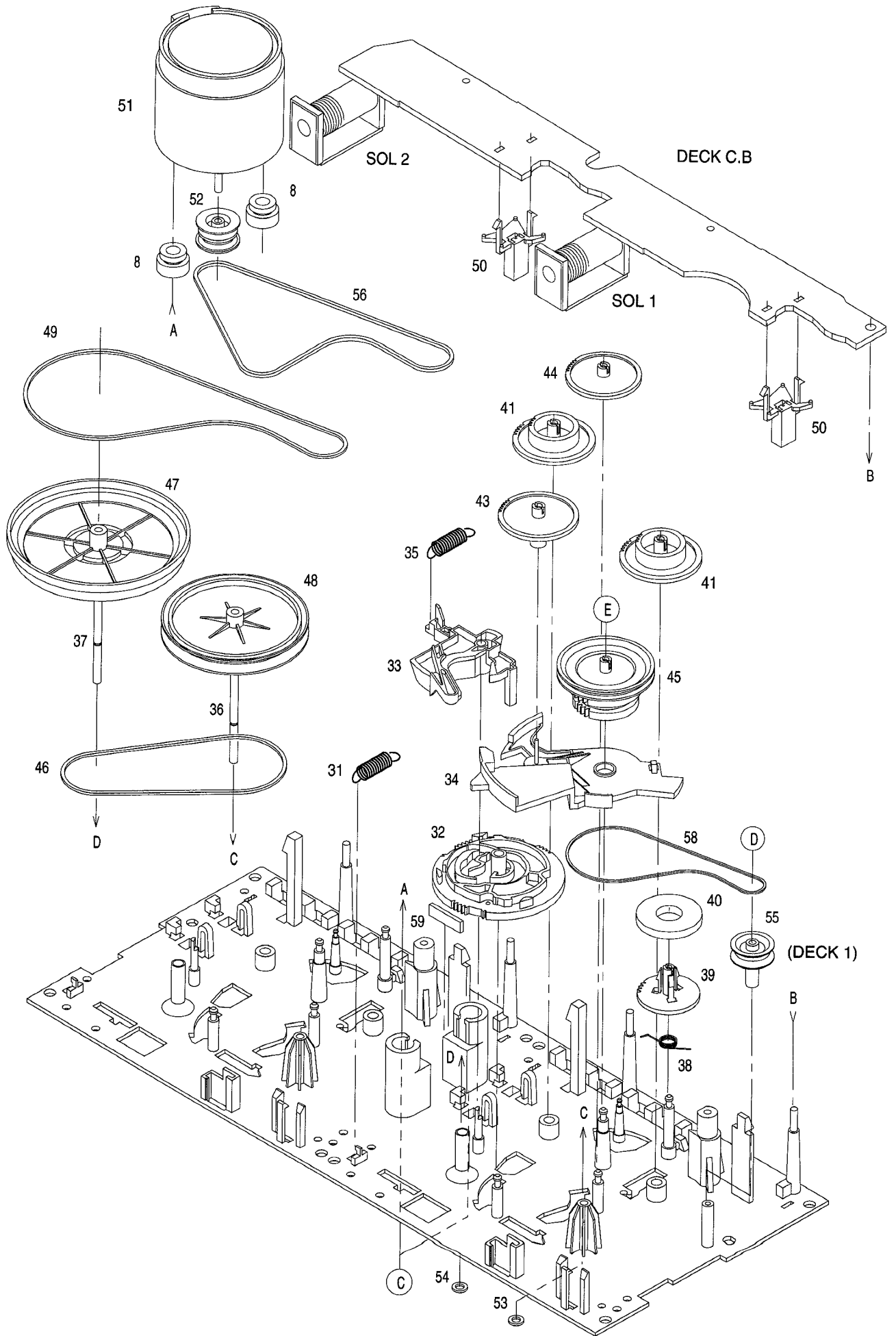
BJ6040K
ANODE CONNECTION



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-MA7-009-010		WINDOW, TOP (U) <US>
2	86-NFW-014-010		CABL, 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-NF3-011-110		PANEL, REAR LHSTNM<LHS>
6	88-NF3-013-110		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-NF3-051-010		WINDOW, DISP<LHS>
15	88-NF3-055-010		WINDOW, DISP U<US>
16	88-NF3-064-010		KNOB, RTRY MAIN
17	88-NF3-083-010		KNOB, RTRY JOG
18	88-NF3-041-010		PANEL, FR
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-NF3-062-010		KEY, GEQ
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-NF3-216-010		GUIDE, IC (H)
46	88-NF3-206-010		GUIDE, FL
47	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

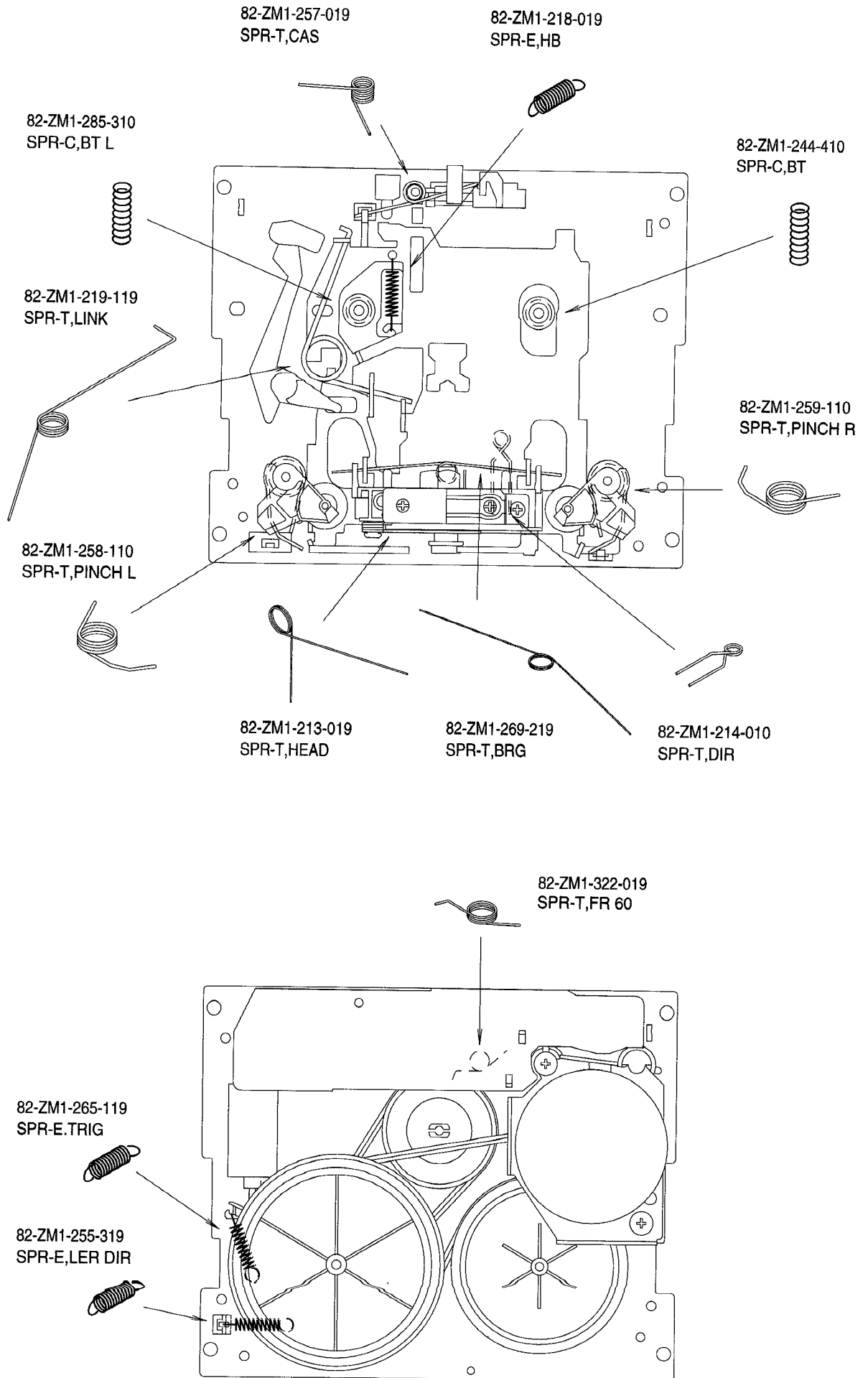


TAPE MECHANISM PARTS LIST 1 / 1

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

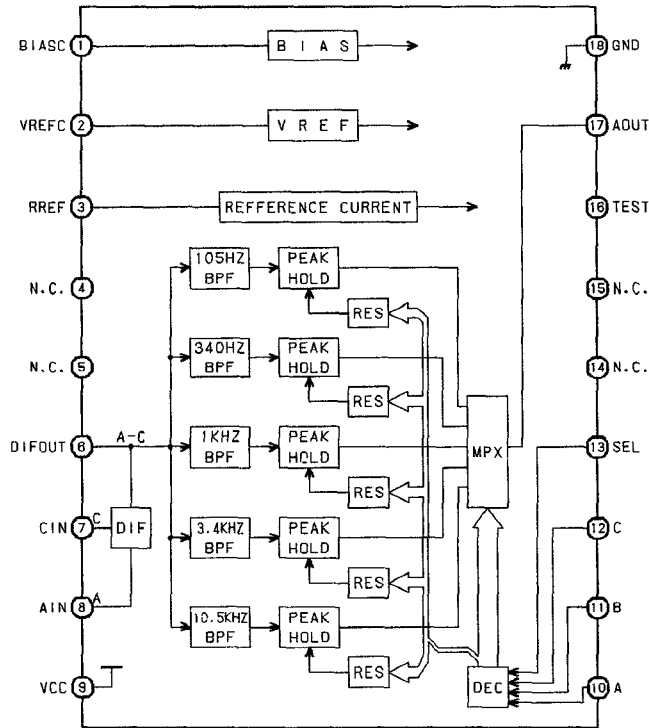
REF. NO.	PART NO.	KANRI NO.	DESCRIPTION	REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	82-ZM3-301-519	1H	CHAS ASSY,M2	36	82-ZM1-236-019	0E	CAPSTAN N 2-41.5
2	82-ZM1-258-110	0E	SPR-T, PINCH L	37	82-ZM1-239-019	0E	CAPSTAN N 2.2-41.7
3	82-ZM1-341-110	1A	LVR ASSY, PINCH L2	38	82-ZM1-322-019	0E	SPR-T, FR60
4	82-ZM1-333-010	0E	PLATE, LINK 2	39	82-ZM1-220-219	0E	GEAR, IDLER
5	82-ZM1-266-11K	0E	LVR, DIR	40	82-ZM3-616-019	0E	RING MAGNET 4
6	82-ZM1-214-010	0E	SPR-T, DIR	41	82-ZM1-216-31K	0E	GEAR, REEL
7	82-ZM1-206-81K	1A	CHAS, HEAD	42	87-A90-319-010	1D	HEAD, PH HADKH2 FPC
8	82-ZM3-307-019	0E	CUSH-G, DIA3.7-8-3.2	42	87-A90-320-010	1F	HEAD, RPH HADKH5 FPC
9	82-ZM1-269-219	0E	SPR-T, BRG	43	82-ZM1-225-21K	0E	GEAR, FR
10	82-ZM1-219-119	0E	SPR-T, LINK	44	82-ZM1-226-019	0E	GEAR, REW
11	82-ZM1-210-119	0E	GEAR, H T	45	82-ZM3-333-310	1B	SLIP DISK ASSY 2
12	82-ZM1-213-019	0E	SPR-T, HEAD	46	82-ZM1-338-010	0E	BELT FR4
13	82-ZM1-207-619	0E	GUIDE, TAPE	47	82-ZM1-349-110	1A	FLY-WHL, R W(DECK 2)
14	86-ZM4-206-010	0E	S-SCREW, AZIMUTH	47	82-ZM3-338-110	1A	FLY-WHL, R3 W(DECK 1)
15	82-ZM1-314-119	0E	PLATE, HEAD	48	82-ZM1-348-010	1A	FLY-WHL, L W(DECK 2)
16	82-ZM1-208-119	0E	HLDR, HEAD	48	82-ZM1-348-010	1A	FLY-WHL, L W(DECK 1)
17	82-ZM1-218-019	0E	SPR-E, HB	49	82-ZM3-329-210	0E	BELT, SBU R2
18	82-ZM1-263-110	0E	LVR, EJECT L (DECK 1)	50	82-ZM1-245-210	0E	HLDR, IC
18	82-ZM1-264-010	0E	LVR, EJECT R (DECK 2)	51	87-045-347-019	1H	MOT, SHU2L 70 (M1)
19	82-ZM1-222-21K	0E	LVR, PLAY	52	82-ZM3-221-010	0E	PULLEY, MOT 2M
20	82-ZM1-217-319	0E	REEL TABLE	53	82-ZM1-288-019	0E	SH, 1.63-3.2-0.5 SLT
21	82-ZM1-244-510	0E	SPR-C, BT	54	80-ZM6-243-019	0E	SH, 1.75-3.6-0.5 SLT
22	82-ZM1-285-310	0E	SPR-C, BT L	55	82-ZM3-335-210	0E	PULLEY, COUPLER M3 (DECK 1)
23	82-ZM1-257-019	0E	SPR-T, CAS	56	82-ZM3-337-010	0E	BELT, SBU MOT 2
24	82-ZM1-241-319	0E	LVR, MC	57	82-ZM3-339-010	0E	SHAFT, COUPLER N3 (DECK 1)
25	82-ZM1-242-019	0E	LVR, CAS	58	86-ZM1-206-010	0E	BELT, MAIN L
26	82-ZM1-243-019	0E	LVR, STOP	59	82-ZM3-340-010	0E	SH, BELT D2
27	82-ZM1-344-110	1A	LVR ASSY, PINCH R2	A	85-ZM3-202-010	0E	S-SCREW, TG
28	82-ZM1-259-110	0E	SPR-T, PINCH R	B	80-ZM6-207-019	0E	V+1.6-7
29	82-ZM1-240-11K	0E	LVR, REC (DECK 2)	C	82-ZM3-318-019	0E	S-SCRW MOTOR M2
31	82-ZM1-255-319	0E	SPR-E, LVR DIR	D	87-B10-043-010	0E	W-P, 0.99-4-0.25 SLT
32	82-ZM3-305-01K	0E	GEAR, CAM M2	E	82-ZM3-334-010	0E	PW, 2.16-6-0.4
33	82-ZM1-227-21K	0E	LVR, TRIG				
34	82-ZM3-306-11K	0E	LVR, FR M2				
35	82-ZM1-265-119	0E	SPR-E, TRIG				

SPRING APPLICATION POSITION

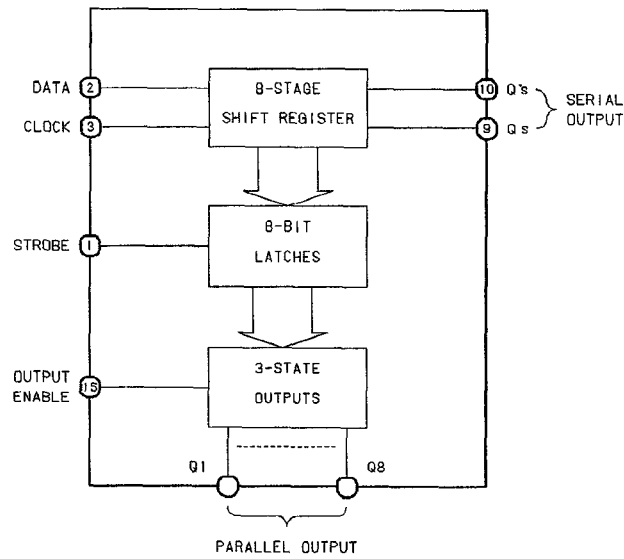


IC BLOCK DIAGRAM - 2

IC, BA3835S



IC, BU4094BCF



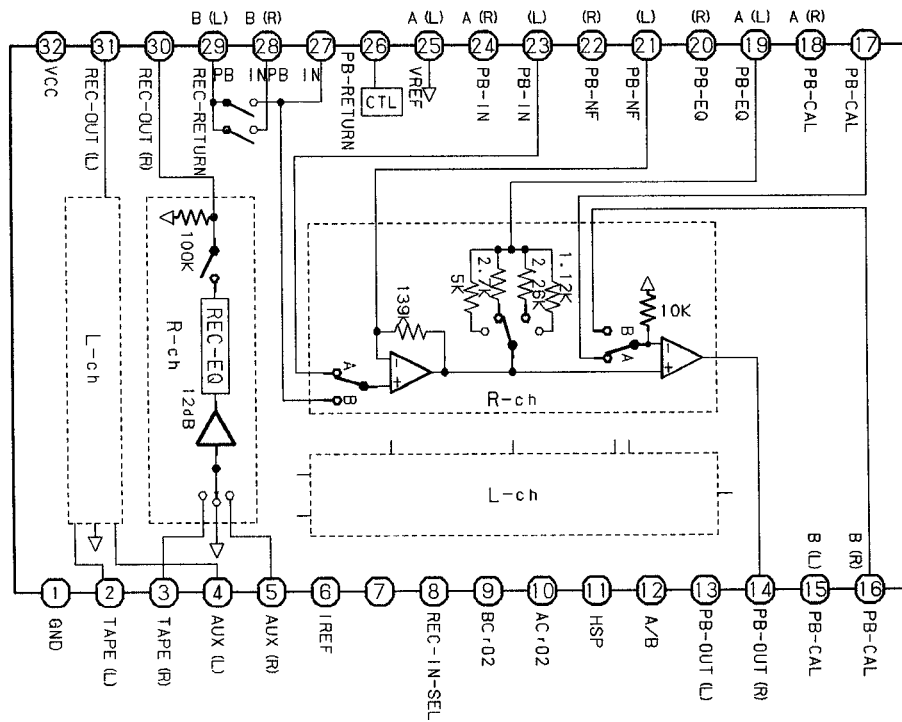
TRUTH TABLE

CLOCK	OUTPUT ENABLE	STROBE	DATA	PARALLEL OUTPUTS		SERIAL OUTPUTS	
				Q1	Qn	Q7s	Qs
	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

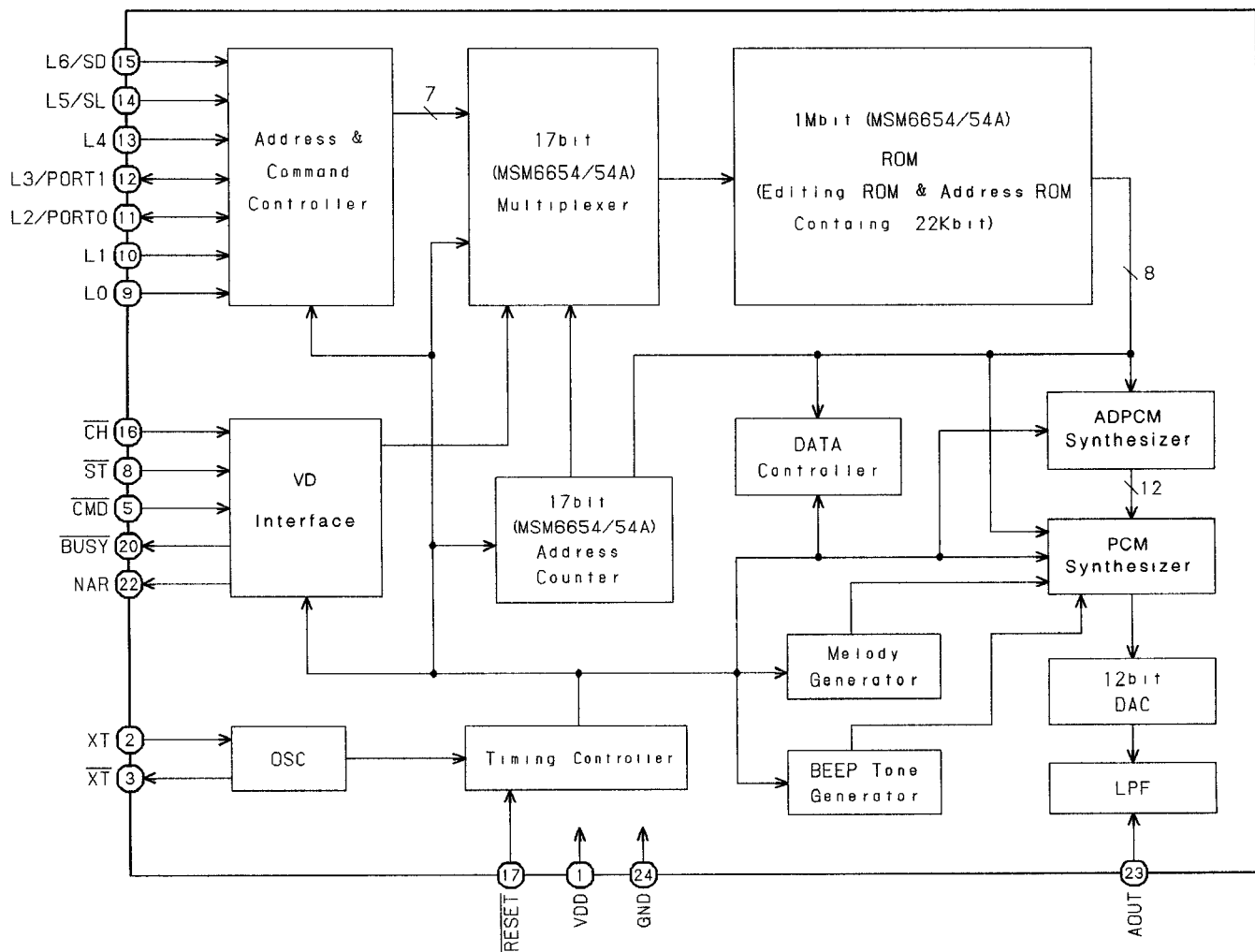
Z=High Impedance

X=Don't Care

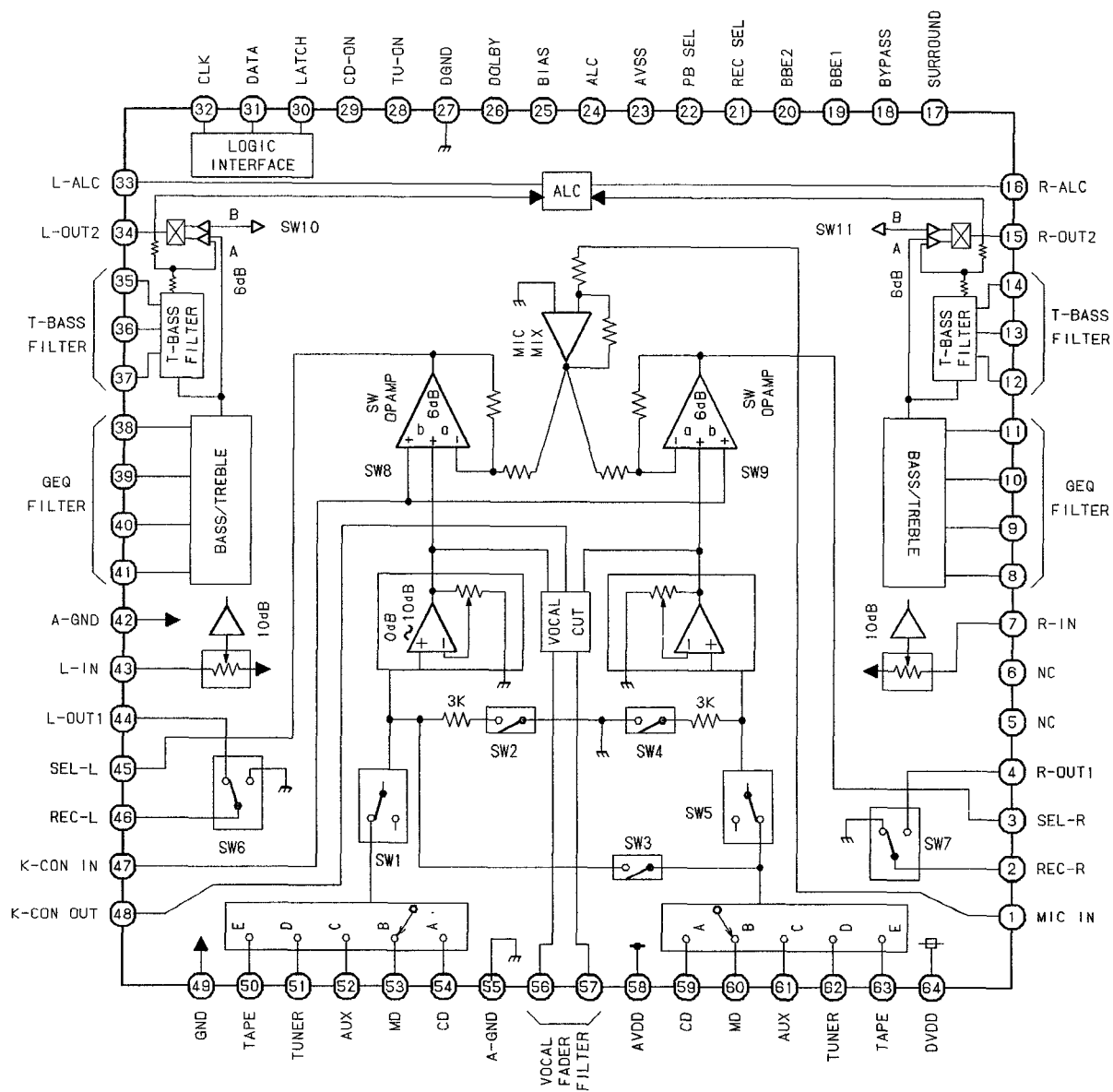
IC, BA7762FS



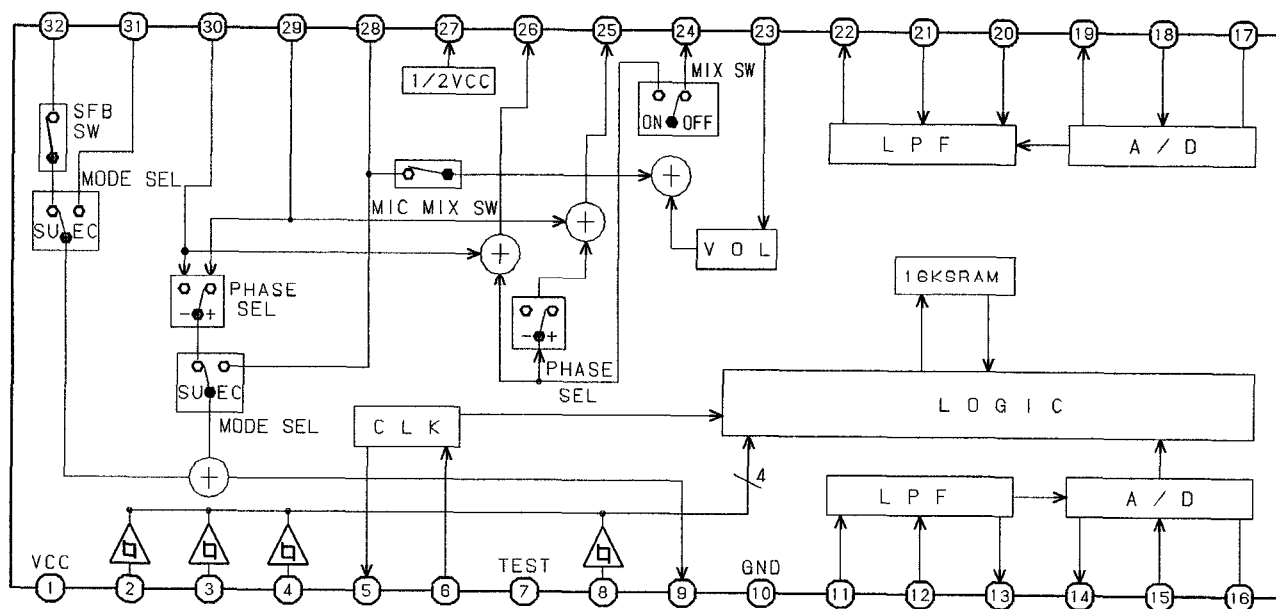
IC, MSM6654A-521GS-K



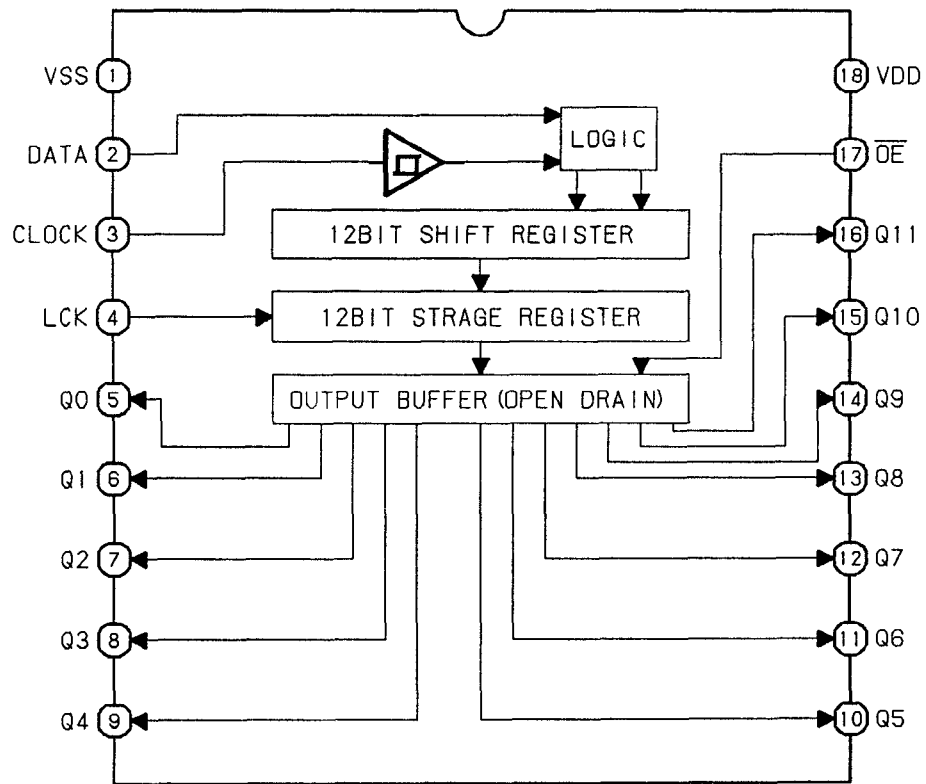
IC, M62445FP-601



IC, M65849FP



IC, BU2092F

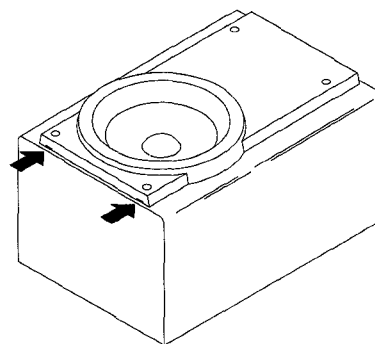


SPEAKER DISASSEMBLY INSTRUCTIONS

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。

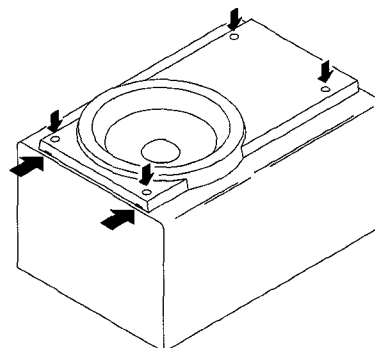
Insert a flat-bladed screwdriver into the position indicated by the arrows and remove the panel. remove the screws of each speaker unit and then remove the speaker units.



Type.2

グリルフレームを外し、4個のゴムキャブ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。

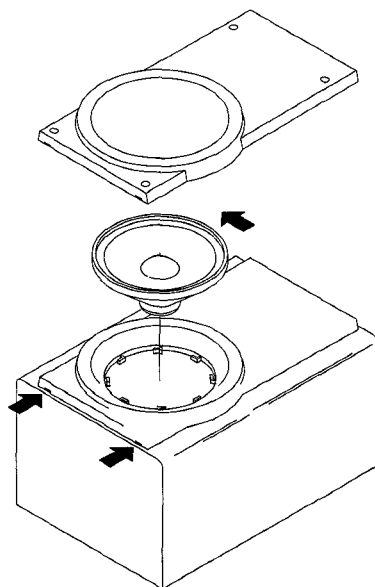
Remove the grill frame and four pieces fo rubber caps by pulling out with a flat-bladed screwdriver. Remove the screws from hole where installed rubber caps. Insert a flat-bladed screwdriver into the position indicated by the arrows and remove the panel. Remove the screws of each speaker unit and then 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-WNA958)

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

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	88-NS0-001-010		PANEL, FR
2	88-NS0-002-010		PANEL, TW R
3	88-NS0-003-010		PANEL, TW L
4	88-NS0-005-010		PANEL, COVER
5	88-NS0-006-010		GRILLE, FRAME ASSY A
6	88-NS5-610-010		SPKR, CORD
7	88-NS5-611-010		SPKR, CORD B/L
8	88-NS3-602-010		SPKR, W 200
9	88-NS5-604-010		SPKR, M 120
10	88-NS5-605-010		SPKR, T 60
11	88-NS0-006-010		GRILLE, FRAME ASSY A

SPEAKER PARTS LIST (SX-WNF959)

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

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	88-NS3-001-010		PANEL, FR
2	88-NS3-002-010		PANEL, TW R
3	88-NS3-003-010		PANEL, TW L
4	88-NS3-005-010		PANEL, DUCT
5	88-NS3-006-010		PANEL, COVER
6	88-NS3-007-010		PANEL, TOP
7	88-NS3-009-010		HLD, SP
8	88-NS0-014-010		GRILLE, FRAME ASSY
9	88-NS3-602-010		SPKR, W 200
10	88-NS5-604-010		SPKR, M 120
11	88-NS5-605-010		SPKR, T 60

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-NF3-903-010		IB,LH (ESP) -M<LHS>
1	88-NF3-901-010		IB,U (ESF) -M<US>
2	87-006-225-010		AM LOOP ANT NC2
3	87-A90-064-010		FEEDER-ANT, FM(SHS)
△ 4	87-099-789-010		PLUG,ADPTR IR44<LHS>
5	87-NF4-655-010		RC UNIT,RC-7AS08

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- -	
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アイワ株式会社
AIWA CO.,LTD.

9301946, 750038

Tokyo Japan

〒110-8710 東京都台東区池之端1-2-11 ☎03 (3827) 3111 (代表)

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