

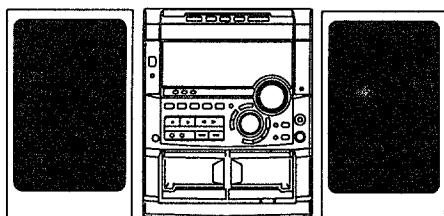
aiwa



NSX-A777

NSX-S777

NSX-A767



COMPACT DISC STEREO
CASSETTE RECEIVER

- BASIC TAPE MECHANISM : 2ZM-3MK2 PR4NM
- BASIC CD MECHANISM : 4ZG-1 Z3RDSHM

- TYPE : U (A777, A767)
LH (S777)

REVISION PUBLISHING

SYSTEM	CD CASSEIVER	SPEAKER	REMOTE CONTROLLER
NSX-A777	CX-NA777	SX-WNA777	RC - ZAS01
NSX-S777	CX-NS777	SX-WNS777	
NSX-A767	CX-NA767	SX-NA772 SX-R275	

- This Service Manual is the "Revision Publishing" and replaces "Simple Manual" NSX-A777/S777/A767 (U, LH) (S/M Code No. 09-991-403-5T1).
- If requiring information about the CD mechanism, see Service Manual of 4ZG-1, S/M Code No. 09-983-249-3S2.

SERVICE MANUAL

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SPECIFICATIONS

<FM Tuner section>		<Cassette deck section>	
Tuning range	87.5 MHz to 108 MHz	Track format	4 tracks, 2 channels stereo
Usable sensitivity(IHF)	13.2 dBf	Frequency response	CrO ₂ tape: 50 Hz – 16000 Hz Normal tape: 50 Hz – 15000Hz
Antenna terminals	75 ohms (unbalanced)	Recording system	AC bias
<AM Tuner section>		Heads	Deck 1 : Playback head x 1 Deck 2 : Recording/Playback head x 1, erase head x 1
Tuning range	531 kHz to 1602 kHz (9 kHz step) 530 kHz to 1710 kHz (10 kHz step)	<Compact disc player section>	
Usable sensitivity	350 uV/m	Laser	Semiconductor laser ($\lambda = 780$ nm)
Antenna	Loop antenna	D-A converter	1 bit dual
<Amplifier section><777U, LH>		Signal-to-noise ratio	85 dB (1 kHz, 0 dB)
Mid-high frequency amplifier		Harmonic distortion	0.05 % (1 kHz, 0 dB)
Power output	777U : 15 W + 15 W (6 ohms, T.H.D less than 1 %, 200 Hz – 20 kHz) LH : 16 W + 16 W (6 ohms, T.H.D 1 %, 1 kHz) Reference: 20 W + 20 W (6 ohms, T.H.D 10 %, 1 kHz)	Wow and flutter	Unmeasurable
Total harmonic distortion	0.1 % (10 W, 1 kHz, 6 ohms, DIN AUDIO)	<General>	
Low frequency amplifier	777U : 65 W + 65 W (6 ohms, T.H.D less than 1 %, 30 Hz – 200 Hz) LH : 80 W + 80 W (6 ohms, T.H.D 1 %, 135 Hz) Reference: 100 W + 100 W (6 ohms, T.H.D 10 %, 135 Hz)	Power requirements	777U, 767U: 120 V AC, 60 Hz LH: 120 V/220 – 230 V/240 V AC switchable, 50/60 Hz
Total harmonic distortion	0.1 % 777U : (40 W, 135 Hz, 6 ohms, DIN AUDIO) LH : (50 W, 135 Hz, 6 ohms, DIN AUDIO)	Power consumption	777U, 767U: 110 W LH: 145 W
Inputs	VIDEO/AUX: 316 mV (adjustable) MD: 316 mV (adjustable) MIC: 1.8 mV (10 kohms)	Dimensions of main unit	260 x 330 x 360 mm (10 $\frac{1}{4}$ x 13 x 14 $\frac{1}{4}$ in.)
Outputs	SPEAKERS HIGH FREQ: accept speakers of 6 ohms or more SPEAKERS LOW FREQ: accept speakers of 6 ohms or more SURROUND SPEAKERS: accept speakers of 8 – 16 ohms LINE OUT: 150 mV PHONES (stereo jack) : accepts headphones of 32 ohms or more	Weight of main unit	777U: 7.5 kg (16 lbs. 9 oz) 767U: 7.7 kg (17 lbs) LH: 8.7 kg
<Amplifier section><767U>		Standby power consumption	If the power – economizing mode is OFF: 777U, 767U: 20 W LH: 21 W If the power – economizing mode is ON: 1.5 W
Power output	80 W + 80 W (6 ohms, T.H.D less than 1 %, 50 Hz – 20 kHz)	<Speaker system SX-NA772<767U>>	
Total harmonic distortion	0.1 % (50 W, 1 kHz, 6 ohms, DIN AUDIO)	Cabinet type	3 way, Bass reflex (magnetic shielded type)
Inputs	VIDEO/AUX: 316 mV (adjustable) MD: 316 mV (adjustable) MIC: 1.8 mV (10 kohms)	Speakers	Woofer: 160 mm (6 $\frac{3}{8}$ in.) cone type Tweeter: 50 mm (2 in.) cone type Super Tweeter : 20 mm (1 $\frac{1}{16}$ in.) ceramic type
Outputs	SPEAKERS: accept speakers of 6 ohms or more SURROUND SPEAKERS: accept speakers of 8 – 16 ohms SUPER WOOFERS: 2.2 V LINE OUT: 150 mV PHONES (stereo jack) : accepts headphones of 32 ohms or more	Impedance	6 ohms
<Speaker system SX-WNA777<777U>, SX-WNS777<LH>>		Output sound pressure level	87 dB/W/m
Power output	80 W + 80 W (6 ohms, T.H.D less than 1 %, 50 Hz – 20 kHz)	Dimensions (W x H x D)	234 x 324 x 270 mm (9 $\frac{1}{4}$ x 12 $\frac{7}{8}$ x 10 $\frac{3}{4}$ in.)
Total harmonic distortion	0.1 % (50 W, 1 kHz, 6 ohms, DIN AUDIO)	Weight	4.2 kg (9 lbs. 4 oz)
Inputs	VIDEO/AUX: 316 mV (adjustable) MD: 316 mV (adjustable) MIC: 1.8 mV (10 kohms)	<Speaker system SX-WNA777<777U>, SX-WNS777<LH>>	
Outputs	SPEAKERS: accept speakers of 6 ohms or more SURROUND SPEAKERS: accept speakers of 8 – 16 ohms SUPER WOOFERS: 2.2 V LINE OUT: 150 mV PHONES (stereo jack) : accepts headphones of 32 ohms or more	Cabinet type	3 way, built-in subwoofer (magnetic shielded type)
		Speakers	Subwoofer : 160 mm (6 $\frac{3}{8}$ in.) cone type Full range : 777U: 120 mm (4 $\frac{3}{4}$ in.) cone type LH: 100 mm cone type Super Tweeter : 20 mm (1 $\frac{1}{16}$ in.) ceramic type
		Impedance	6 ohms / 6 ohms
		Output sound pressure level	87 dB/W/m
		Dimensions (W x H x D)	240 x 324 x 270 mm (9 $\frac{1}{2}$ x 12 $\frac{7}{8}$ x 10 $\frac{3}{4}$ in.)
		Weight	5.0 kg (11 lbs.)

• Design and specifications are subject to change without notice.

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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.

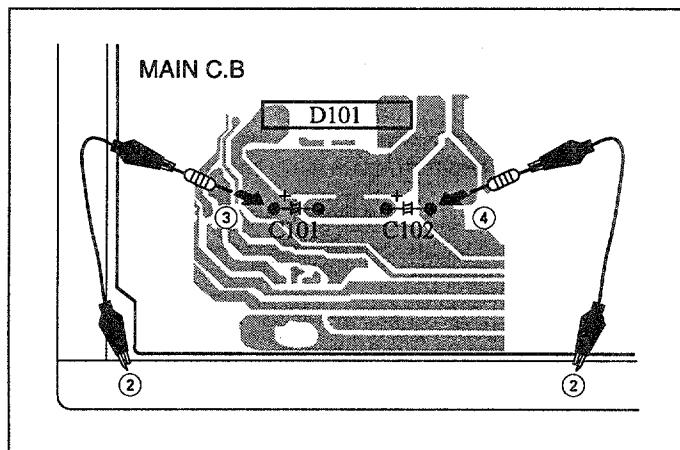


Fig-1

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.

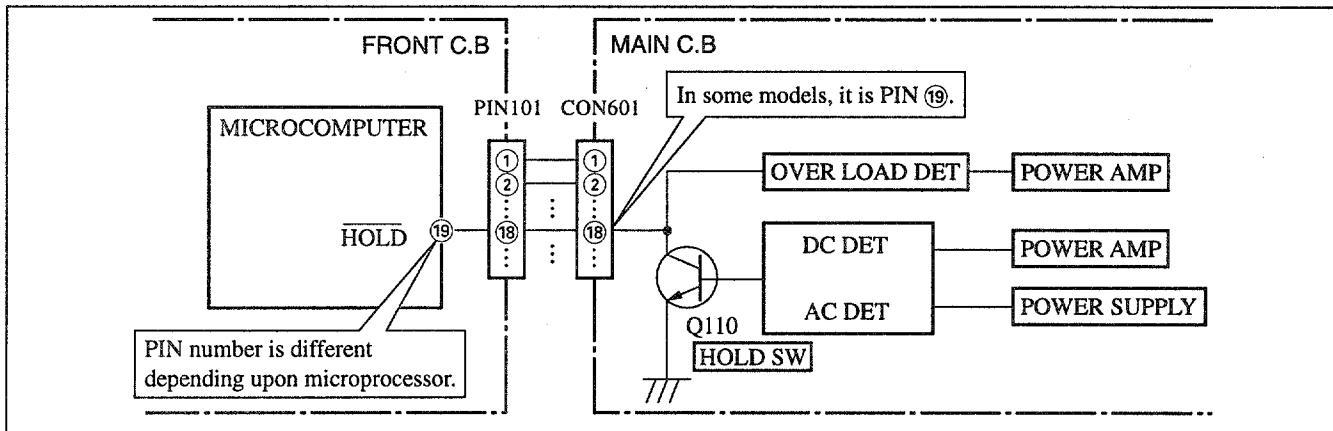


Fig-2-1

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 leads 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.

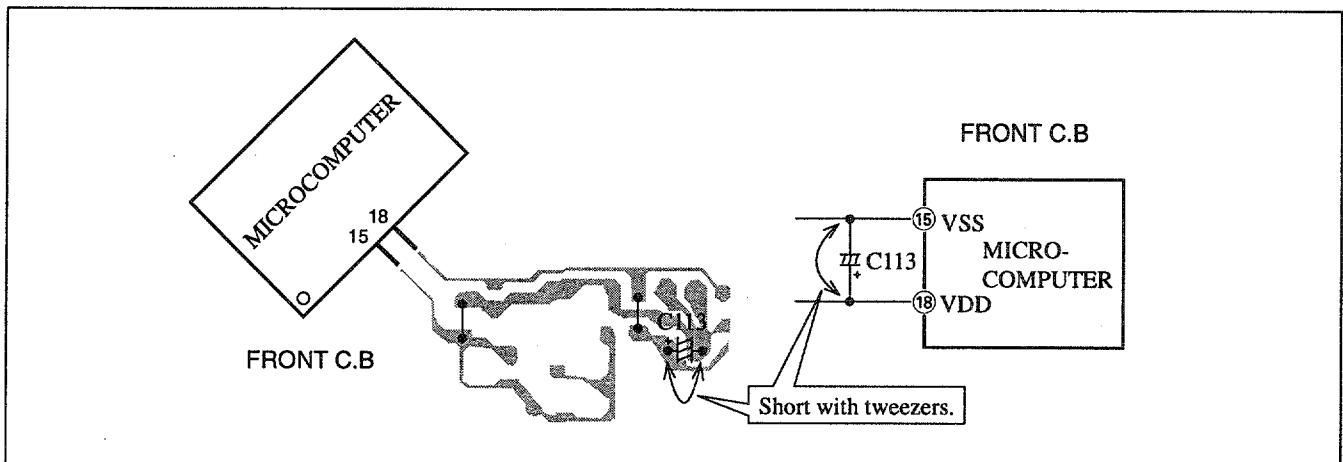


Fig-2-2

- 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

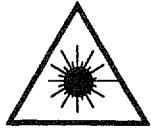
Check the soldering state of the MICROCOMPUTER in addition to the above described procedures. Be sure to exchange the MICROCOMPUTER after surely confirming that the trouble is not caused by poor soldering but the MICROCOMPUTER itself.

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!

Laitteen Käyttäminen muulla kuin tässä käyttöohjeessa mainitulla tavalla saattaa altistaa käytäjän turvallisuusluokan 1 ylitävälle näkymättömälle lasersäteilylle.

VARNING!

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

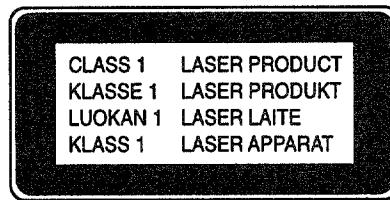
L'utilisation de commandes, réglages ou procédures autres que ceux spécifiés peut entraîner une dangereuse exposition aux radiations.

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.



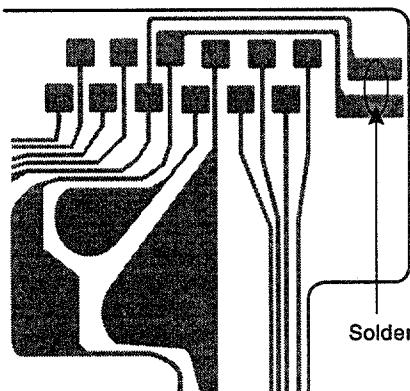
Precaution to replace Optical block

(KSS - 213B)

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

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

PICK-UP Assy P.C.B



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							87-017-931-080 ZENER, MTZJ5.6B
87-020-454-010	IC, DN6851			MAIN C.B			
8Z-NF7-605-010	C-IC, LC876572V-5K54			C1	87-012-369-080	C-CAP, S 0.047-50F	
87-A20-914-010	IC, SPS-442-1-F			C2	87-012-369-080	C-CAP, S 0.047-50F	
87-A20-783-040	C-IC, BA7762AFS			C3	87-012-368-080	C-CAP, S 0.1-50 F	
87-A21-023-040	C-IC, BA3835F			C4	87-012-368-080	C-CAP, S 0.1-50 F	
87-A21-022-040	C-IC, BA3880FS			C5	87-012-368-080	C-CAP, S 0.1-50 F	
87-A21-021-040	C-IC, BU2099FV			C6	87-012-368-080	C-CAP, S 0.1-50 F	
87-A21-031-040	C-IC, BU4551BF<LH, 777U>			C9	87-010-928-090	CAP, E 4700-25 SMG	
87-A21-011-040	C-IC, M62445FP-600D			C10	87-010-928-090	CAP, E 4700-25 SMG	
87-070-127-110	IC, LC72131D			C21	87-010-385-080	CAP, ELECT 220-25V	
87-A20-913-010	IC, LA1837NL			C22	87-010-385-080	CAP, ELECT 220-25V	
87-A21-051-040	C-IC, BU9990-03FS			C23	87-010-385-080	CAP, ELECT 220-25V	
TRANSISTOR				C24	87-010-385-080	CAP, ELECT 220-25V	
87-026-609-080	TR, KTA1266GR			C25	87-010-409-080	CAP, ELECT 220-50	
89-213-702-010	TR, 2SB1370 (1.8W)			C26	87-010-263-080	CAP, ELECT 100-10V	
87-026-610-080	TR, KTC3198GR			C27	87-012-140-080	CAP 470P	
87-A30-076-080	C-TR, 2SC3052F			C28	87-010-263-080	CAP, ELECT 100-10V<777U, 767U>	
87-A30-075-080	C-TR, 2SA1235F			C29	87-010-384-080	CAP, ELECT 100-25V	
87-A30-234-080	TR, CSC4115BC			C30	87-010-112-080	CAP, ELECT 100-16V	
87-A30-072-080	C-TR, RT1P 144C			C31	87-010-235-080	CAP, E 470-16 SME	
87-A30-186-010	FET, 2SK3053			C32	87-012-368-080	C-CAP, S 0.1-50 F	
87-026-245-080	TR, DTC114ES			C33	87-016-299-080	CAP, E 10-100 SME	
87-A30-198-080	TR, KTC3199GR			C34	87-016-299-080	CAP, E 10-100 SME	
87-A30-074-080	C-TR, RT1P 141C			C61	87-010-260-080	CAP, ELECT 47-25V	
87-A30-268-040	C-TR, 2SA1514K(S)			C62	87-010-496-080	CAP, E 3.3-50 5L	
87-026-463-080	TR, 2SA933SR			C101	87-010-183-080	C-CAP, S 2700P-50 B<767U>	
87-A30-087-080	C-FET, 2SK2158			C102	87-010-178-080	CHIP CAP 1000P<LH, 777U>	
87-A30-257-080	C-TR, 2SD1306E			C102	87-010-178-080	C-CAP, S 2700P-50 B<767U>	
87-A30-073-080	C-TR, RT1N 141C			C103	87-010-400-080	CAP, ELECT 0.47-50V<767U>	
87-A30-190-080	TR, CC555I			C103	87-010-405-080	CAP, ELECT 10-50V<LH, 777U>	
87-A30-137-010	TR, 2SD2494<LH, 777U>			C104	87-010-400-080	CAP, ELECT 0.47-50V<767U>	
87-A30-097-010	TR, FN 1016<767U>			C104	87-010-405-080	CAP, ELECT 10-50V<LH, 777U>	
87-A30-138-010	TR, 2SB1625<LH, 777U>			C105	87-010-186-080	CAP, CHIP 4700P<767U>	
87-A30-098-010	TR, FP 1016<767U>			C106	87-010-186-080	CAP, CHIP 4700P<767U>	
87-A30-106-070	C-TR, CMBT5551			C107	87-010-403-080	CAP, ELECT 3.3-50V<767U>	
87-A30-256-010	TR, 2SD1933<LH, 777U>			C107	87-010-408-080	CAP, ELECT 47-50V<LH, 777U>	
87-A30-255-010	TR, 2SB1342<LH, 777U>			C108	87-010-403-080	CAP, ELECT 3.3-50V<767U>	
87-A30-119-040	C-TR, 2SC3906K R<LH, 777U>			C108	87-010-408-080	CAP, ELECT 47-50V<LH, 777U>	
87-A30-159-080	C-TR, KTA1298Y			C111	87-010-260-080	CAP, ELECT 47-25V	
87-A30-105-080	C-TR, RT1P 441C			C112	87-010-260-080	CAP, ELECT 47-25V	
87-A30-142-040	C-TR, DTA123EKA			C113	87-A10-812-080	C-CAP, S 220P-200 J CH	
87-A30-240-080	TR, CSA1585BC			C114	87-A10-812-080	C-CAP, S 220P-200 J CH	
87-A30-196-080	TR, 2SC4115SR			C117	87-016-247-080	C-CAP, 0.1-50 F	
89-327-143-080	TR, 2SC2714 (0.1W)			C118	87-016-247-080	C-CAP, 0.1-50 F	
DIODE				C121	87-010-178-080	CHIP CAP 1000P	
87-020-465-080	DIODE, 1SS133 (110MA)			C122	87-010-178-080	CHIP CAP 1000P	
87-017-654-060	DIODE, GBU6JL6131			C125	87-012-368-080	C-CAP, S 0.1-50 F	
87-070-274-080	DIODE, IN4003 SEM			C126	87-012-368-080	C-CAP, S 0.1-50 F	
87-A40-547-090	DIODE, D55BA20<767U>			C127	87-012-368-080	C-CAP, S 0.1-50 F	
87-017-447-010	DIODE, GBU4DL-6419<777U>			C128	87-012-368-080	C-CAP, S 0.1-50 F	
87-A40-341-080	ZENER, MTZJ 36 A			C133	87-010-197-080	CAP, CHIP 0.01 DM	
87-A40-345-080	ZENER, MTZJ10C			C136	87-010-196-080	CHIP CAPACITOR, 0.1-25	
87-A40-183-090	DIODE, RK36(F)			C203	87-010-177-080	C-CAP, S 820P-50 SL<LH, 777U>	
87-070-136-080	ZENER, MTZJ5.1B			C204	87-010-177-080	C-CAP, S 820P-50 SL<LH, 777U>	
87-A40-442-080	ZENER, MTZJ9.1A<LH>			C209	87-010-403-080	CAP, ELECT 3.3-50V<LH, 777U>	
87-A40-270-080	C-DIODE, MC2838			C210	87-010-403-080	CAP, ELECT 3.3-50V<LH, 777U>	
87-A40-269-080	C-DIODE, MC2836			C211	87-010-181-080	CAP, CHIP S 1800P<LH, 777U>	
87-A40-488-080	DIODE, 1SS244			C212	87-010-181-080	CAP, CHIP S 1800P<LH, 777U>	
87-A40-509-080	ZENER, MTZJ6.8C			C213	87-010-403-080	CAP, ELECT 3.3-50V<LH, 777U>	
87-020-331-080	CHIP-DIODE, DAN202K			C214	87-010-403-080	CAP, ELECT 3.3-50V<LH, 777U>	
87-017-932-080	ZENER, MTJ6.2B			C217	87-010-260-080	CAP, ELECT 47-25V<LH, 777U>	
87-A40-002-080	ZENER, MTZJ5.1C			C218	87-010-260-080	CAP, ELECT 47-25V<LH, 777U>	
87-A40-438-080	ZENER, MTZJ4.7A			C219	87-A10-946-080	C-CAP, S 220P-100 J CH<LH, 777U>	
87-A40-234-080	ZENER, MTZJ5.6A			C220	87-A10-946-080	C-CAP, S 220P-100 J CH<LH, 777U>	
				C225	87-012-368-080	C-CAP, S 0.1-50 F<LH, 777U>	

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION	REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C226	87-012-368-080	C-CAP,S 0.1-50 F<LH,777U>		C408	87-010-188-080	CAP,CHIP 6800P	
C227	87-010-186-080	CAP,CHIP 4700P<LH,777U>		C409	87-012-140-080	CAP 470P	
C228	87-010-186-080	CAP,CHIP 4700P<LH,777U>		C410	87-012-140-080	CAP 470P	
C229	87-010-993-080	C-CAP,S 0.056-25 B<LH,777U>		C411	87-010-404-080	CAP, ELECT 4.7-50V	
C230	87-010-993-080	C-CAP,S 0.056-25 B<LH,777U>		C412	87-010-404-080	CAP, ELECT 4.7-50V	
C231	87-010-196-080	CHIP CAPACITOR, 0.1-25<LH,777U>		C413	87-010-404-080	CAP, ELECT 4.7-50V	
C232	87-010-196-080	CHIP CAPACITOR, 0.1-25<LH,777U>		C414	87-010-404-080	CAP, ELECT 4.7-50V	
C235	87-016-285-080	CAP,E 47-100SME<LH,777U>		C415	87-010-197-080	CAP, CHIP 0.01 DM	
C236	87-016-285-080	CAP,E 47-100SME<LH,777U>		C416	87-010-197-080	CAP, CHIP 0.01 DM	
C301	87-010-318-080	C-CAP,S 47P-50 CH		C417	87-010-956-080	CHIP-CAP,S 0.068-25B	
C302	87-010-318-080	C-CAP,S 47P-50 CH		C418	87-010-956-080	CHIP-CAP,S 0.068-25B	
C303	87-012-157-080	C-CAP,S 330P-50 CH		C419	87-010-260-080	CAP, ELECT 47-25V	
C304	87-012-157-080	C-CAP,S 330P-50 CH		C451	87-010-401-080	CAP, ELECT 1-50V<LH,777U>	
C305	87-012-145-080	CAP, CHIP S 270P CH		C451	87-010-404-080	CAP, ELECT 4.7-50V<767U>	
C306	87-012-145-080	CAP, CHIP S 270P CH		C452	87-010-401-080	CAP, ELECT 1-50V<LH,777U>	
C307	87-010-196-080	CHIP CAPACITOR, 0.1-25		C452	87-010-404-080	CAP, ELECT 4.7-50V<767U>	
C309	87-010-196-080	CHIP CAPACITOR, 0.1-25		C455	87-A10-305-080	CAP,M 0.068-50 J<LH,777U>	
C310	87-010-196-080	CHIP CAPACITOR, 0.1-25		C456	87-A10-305-080	CAP,M 0.068-50 J<LH,777U>	
C311	87-010-198-080	CAP, CHIP 0.022		C457	87-010-196-080	CHIP CAPACITOR, 0.1-25<LH,777U>	
C312	87-010-198-080	CAP, CHIP 0.022		C458	87-010-196-080	CHIP CAPACITOR, 0.1-25<LH,777U>	
C313	87-010-179-080	CAP,CHIP S B1200P		C459	87-A10-299-080	CAP,M 0.022-50 J<LH,777U>	
C314	87-010-179-080	CAP,CHIP S B1200P		C460	87-A10-299-080	CAP,M 0.022-50 J<LH,777U>	
C315	87-010-179-080	CHIP CAP 1200P		C461	87-018-119-080	CAP,TC-U 100P-50 B<LH,777U>	
C316	87-010-179-080	CHIP CAP 1200P		C465	87-A10-299-080	CAP,M 0.022-50 J<LH,777U>	
C321	87-016-492-080	C-CAP,S 0.33-16 FZ		C466	87-A10-299-080	CAP,M 0.022-50 J<LH,777U>	
C322	87-016-492-080	C-CAP,S 0.33-16 FZ		C601	87-010-183-080	C-CAP,S 2700P-50 B	
C324	87-010-260-080	CAP, ELECT 47-25V		C602	87-010-183-080	C-CAP,S 2700P-50 B	
C325	87-010-370-080	CAP,E 330-6.3 SME		C611	87-010-197-080	CAP, CHIP 0.01 DM	
C327	87-010-404-080	CAP, ELECT 4.7-50V		C613	87-016-081-080	C-CAP,S 0.1-16 RK	
C328	87-010-404-080	CAP, ELECT 4.7-50V		C614	87-016-081-080	C-CAP,S 0.1-16 RK	
C332	87-010-196-080	CHIP CAPACITOR, 0.1-25		C617	87-A10-304-080	CAP,M 0.056-50 J	
C335	87-010-401-080	CAP, ELECT 1-50V		C618	87-A10-304-080	CAP,M 0.056-50 J	
C336	87-010-401-080	CAP, ELECT 1-50V		C619	87-010-185-080	C-CAP,S 3900P-50 B	
C337	87-010-196-080	CHIP CAPACITOR, 0.1-25		C620	87-010-185-080	C-CAP,S 3900P-50 B	
C339	87-010-196-080	CHIP CAPACITOR, 0.1-25		C621	87-010-401-080	CAP, ELECT 1-50V	
C340	87-010-196-080	CHIP CAPACITOR, 0.1-25		C622	87-010-401-080	CAP, ELECT 1-50V	
C351	87-012-140-080	CAP 470P		C623	87-A10-307-080	CAP,M 0.1-50 J	
C352	87-012-140-080	CAP 470P		C624	87-A10-307-080	CAP,M 0.1-50 J	
C354	87-010-175-080	CAP 560P		C625	87-010-401-080	CAP, ELECT 1-50V	
C355	87-012-349-080	C-CAP,S 1000P-50 CH		C626	87-010-401-080	CAP, ELECT 1-50V	
C356	87-010-260-080	CAP, ELECT 47-25V		C627	87-010-196-080	CHIP CAPACITOR, 0.1-25	
C357	87-010-197-080	CAP, CHIP 0.01 DM		C629	87-010-405-080	CAP, ELECT 10-50V	
C358	87-010-183-080	C-CAP,S 2700P-50 B		C630	87-010-213-080	C-CAP,S 0.015-50 B	
C359	87-010-183-080	C-CAP,S 2700P-50 B		C631	87-010-992-080	C-CAP,S 0.047-25 B	
C360	87-010-183-080	C-CAP,S 2700P-50 B		C632	87-010-263-080	CAP, ELECT 100-10V	
C363	87-A10-292-080	CAP,M 5600P-50 J		C633	87-010-263-080	CAP, ELECT 100-10V	
C370	87-010-196-080	CHIP CAPACITOR, 0.1-25		C634	87-010-196-080	CHIP CAPACITOR, 0.1-25	
C373	87-016-083-080	C-CAP,S 0.15-16 RK		C635	87-010-196-080	CHIP CAPACITOR, 0.1-25	
C374	87-016-083-080	C-CAP,S 0.15-16 RK		C636	87-010-992-080	C-CAP,S 0.047-25 B	
C378	87-010-196-080	CHIP CAPACITOR, 0.1-25		C637	87-010-183-080	C-CAP,S 2700P-50 B	
C379	87-010-382-080	CAP, ELECT 22-25V		C640	87-010-314-080	C-CAP,S 22P-50V	
C380	87-010-382-080	CAP, ELECT 22-25V		C641	87-010-196-080	CHIP CAPACITOR, 0.1-25	
C381	87-010-197-080	CAP, CHIP 0.01 DM		C736	87-010-196-080	CHIP CAPACITOR, 0.1-25	
C382	87-010-312-080	C-CAP,S 15P-50 CH		CN301	87-099-827-010	CONN,3P S2M-3W	
C383	87-010-197-080	CAP, CHIP 0.01 DM		CN351	87-099-832-010	CONN,8P S2M-8W	
C384	87-010-402-080	CAP, ELECT 2.2-50V		CN601	87-099-719-010	CONN,30P TYK-B(X)	
C386	87-010-196-080	CHIP CAPACITOR, 0.1-25		CN602	87-A60-131-010	CONN,6P V FE	
C387	87-012-145-080	CAP, CHIP S 270P CH		CN604	87-099-570-010	CONN,13P TUC-P13P-B1	
C388	87-012-156-080	C-CAP,S 220P-50 CH		CNA1	87-NF8-669-010	CONN ASSY,9P VH	
C391	87-010-319-080	C-CAP,S 56P-50 CH		CON351	87-NF6-616-010	CONN ASSY,8P RPB	
C392	87-010-319-080	C-CAP,S 56P-50 CH		J201	87-A60-483-010	JACK,DIA6.3 BLK ST W/S<LH,777U>	
C393	87-010-319-080	C-CAP,S 56P-50 CH		J201	87-A60-488-010	JACK,DIA6.3 BLK ST W/SW<767U>	
C394	87-010-319-080	C-CAP,S 56P-50 CH		J203	87-033-240-010	TERMINAL,SP 4P32SV1-05	
C401	87-010-196-080	CHIP CAPACITOR, 0.1-25		J204	87-A60-750-010	JACK,PIN 4P R/W BLUE<LH,777U>	
C402	87-010-260-080	CAP, ELECT 47-25V		J204	87-A60-641-010	JACK,PIN 4P R/W/B JALCO<767U>	
C403	87-010-404-080	CAP, ELECT 4.7-50V		J601	87-A60-402-010	JACK, PIN 6P R/W HSP-246V30	
C404	87-010-404-080	CAP, ELECT 4.7-50V		L101	87-003-383-010	COIL,1UH-S	
C405	87-010-404-080	CAP, ELECT 4.7-50V		L102	87-003-383-010	COIL,1UH-S	
C406	87-010-404-080	CAP, ELECT 4.7-50V		L201	87-003-383-010	COIL,1UH-S<LH,777U>	
C407	87-010-188-080	CAP,CHIP 6800P		L202	87-003-383-010	COIL,1UH-S<LH,777U>	

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION	REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
L301	87-A50-049-010		COIL,TRAP 85K(COI)	C383	87-010-196-080		CHIP CAPACITOR,0.1-25
L302	87-A50-049-010		COIL,TRAP 85K(COI)	C384	87-010-196-080		CHIP CAPACITOR,0.1-25
L351	87-007-342-010		COIL,OSC 85K BIAS	C385	87-010-196-080		CHIP CAPACITOR,0.1-25
R20	87-A00-261-080		RES,M/F 0.56-1W J<777U, 767U>	C386	87-010-196-080		CHIP CAPACITOR,0.1-25
R129	87-A00-257-080		RES,M/F 0.15-1W J<777U>	C387	87-010-196-080		CHIP CAPACITOR,0.1-25
R129	87-A00-262-080		RES,M/F 0.15-2W J<LH, 767U>	C401	87-010-196-080		CHIP CAPACITOR,0.1-25
R130	87-A00-257-080		RES,M/F 0.15-1W J<777U>	C402	87-010-196-080		CHIP CAPACITOR,0.1-25
R130	87-A00-262-080		RES,M/F 0.15-2W J<LH, 767U>	C403	87-010-322-080		C-CAP,S 100P-50 CH
R131	87-A00-257-080		RES,M/F 0.15-1W J<777U>	C404	87-010-322-080		C-CAP,S 100P-50 CH
R131	87-A00-262-080		RES,M/F 0.15-2W J<LH, 767U>	C405	87-010-322-080		C-CAP,S 100P-50 CH
R132	87-A00-257-080		RES,M/F 0.15-1W J<777U>	C406	87-010-322-080		C-CAP,S 100P-50 CH
R132	87-A00-262-080		RES,M/F 0.15-2W J<LH, 767U>	C407	87-010-322-080		C-CAP,S 100P-50 CH
R143	87-A00-440-050		RES,220-1/2W J RP	C408	87-010-322-080		C-CAP,S 100P-50 CH
R144	87-A00-440-050		RES,220-1/2W J RP	C411	87-010-401-040		CAP,E 1-50 SME
R145	87-A00-440-050		RES,220-1/2W J RP	C501	87-010-544-040		CAP,E 0.1-50 SME
R146	87-A00-440-050		RES,220-1/2W J RP	C502	87-010-196-080		CHIP CAPACITOR,0.1-25
R165	87-A00-257-080		RES,M/F 0.15-1W J<777U>	C503	87-010-544-040		CAP,E 0.1-50 SME
R165	87-A00-262-080		RES,M/F 0.15-2W J<LH, 767U>	C504	87-012-156-080		C-CAP,S 220P-50 CH
R166	87-A00-257-080		RES,M/F 0.15-1W J<777U>	C505	87-010-178-080		CHIP CAP 1000P
R166	87-A00-262-080		RES,M/F 0.15-2W J<LH, 767U>	C601	87-010-186-080		CAP,CHIP 4700P
R231	87-A00-258-080		RES,M/F 0.22-1W J<LH, 777U>	C603	87-010-320-080		CHIP CAP 68P
R232	87-A00-258-080		RES,M/F 0.22-1W J<LH, 777U>	C604	87-010-546-040		CAP,E 0.33-50
R233	87-A00-258-080		RES,M/F 0.22-1W J<LH, 777U>	C605	87-010-196-080		CHIP CAPACITOR,0.1-25
R234	87-A00-258-080		RES,M/F 0.22-1W J<LH, 777U>	C606	87-010-112-040		CAP,E 100-16
R265	87-A00-258-080		RES,M/F 0.22-1W J<LH, 777U>	C607	87-010-196-080		CHIP CAPACITOR,0.1-25
R266	87-A00-258-080		RES,M/F 0.22-1W J<LH, 777U>	C652	87-010-183-080		C-CAP,S 2700P-50 B
SFR351	87-A90-433-080		SFR,50K H NVZ6TLTA	C653	87-010-213-080		C-CAP,S 0.015-50 B
SFR352	87-A90-433-080		SFR,50K H NVZ6TLTA	C802	87-010-168-080		C-CAP,S 150P-50 SL
TH101	87-A91-042-080		C-THMS,100K 55001	C804	87-010-187-080		C-CAP,S 5600P-50 B
TH102	87-A91-042-080		C-THMS,100K 55001	C806	87-010-401-040		CAP,E 1-50 SME
WH1	87-A90-510-010		HLDR, WIRE 2.5-9P	C807	87-010-196-080		CHIP CAPACITOR,0.1-25
FRONT C.B				C809	87-012-155-080		C-CAP 180P-50CH
C103	87-010-178-080		CHIP CAP 1000P	C810	87-010-263-040		CAP,E 100-10
C105	87-010-322-080		C-CAP,S 100P-50 CH	C811	87-010-382-040		CAP,E 22-25 SME
C106	87-010-312-080		C-CAP,S 15P-50 CH	C812	87-010-405-040		CAP,E 10-50
C107	87-012-157-080		C-CAP,S 330P-50 CH	CN101	87-099-720-010		CONN,30P TYK-B(P)
C108	87-010-405-040		CAP,E 10-50	CN104	87-A60-140-010		CONN,15P V FE
C111	87-A11-242-040		CAP,E 220-10 M 5L SRM	CN301	87-A60-131-010		CONN,6P V FE
C112	87-016-081-080		C-CAP,S 0.1-16 RK	CN901	87-A60-138-010		CONN,13P V FE
C113	87-A11-242-040		CAP,E 220-10 M 5L SRM	FB601	87-A50-190-080		C-COIL,S BLM21A102S
C114	87-010-196-080		CHIP CAPACITOR,0.1-25	FC104	88-915-121-110		FF-CABLE, 15P 1.25
C115	87-010-198-080		CAP, CHIP 0.022	FC301	85-NF5-617-010		CABLE, FFC 6P-1.25
C116	87-010-493-040		CAP,E 0.47-50 GAS	FC901	85-NF5-618-010		CABLE, FFC 13P-1.25
C117	87-010-498-040		CAP,E 10-16 GAS	FL201	82-NF7-610-010		FL,BJ679GK
C121	87-012-368-080		C-CAP,S 0.1-50 F	J601	87-A60-651-010		JACK, 3.5MONO
C122	87-010-178-080		CHIP CAP 1000P	L101	87-A50-333-010		COIL,OSC 9.43MHZ
C123	87-010-196-080		CHIP CAPACITOR,0.1-25	L801	87-A50-093-010		COIL,CLOCK 5.76MHZ
C124	87-010-196-080		CHIP CAPACITOR,0.1-25	LED293	87-A40-589-040		LED,SLR-56VCT31 RED
C125	87-010-196-080		CHIP CAPACITOR,0.1-25	LED401	87-A40-317-080		LED,SLR-342VCT31 RED
C126	87-012-145-080		CAP, CHIP S 270P CH	LED402	87-A40-317-080		LED,SLR-342VCT31 RED
C151	87-010-194-080		CAP, CHIP 0.047	LED403	87-A40-317-080		LED,SLR-342MCT31 GRN
C153	87-010-196-080		CHIP CAPACITOR,0.1-25	LED404	87-A40-317-080		LED,SLR-342MCT31 GRN
C154	87-010-264-040		CAP,E 100-10 5L	LED405	87-A40-317-080		LED,SLR-342MCT31 GRN
C181	87-012-157-080		C-CAP,S 330P-50 CH	LED406	87-A40-496-040		LED,SLR-342MCT31 GRN
C182	87-010-197-080		CAP, CHIP 0.01 DM	LED407	87-A40-496-040		LED,SLR-342MCT31 GRN
C183	87-010-182-080		C-CAP,S 2200P-50 B	LED408	87-A40-496-040		LED,SLR-342MCT31 GRN
C202	87-012-140-080		CAP 470P	LED409	87-A40-496-040		LED,SLR-342MCT31 GRN
C211	87-012-157-080		C-CAP,S 330P-50 CH	LED410	87-A40-496-040		LED,SLR-342MCT31 GRN
C212	87-012-157-080		C-CAP,S 330P-50 CH	LED411	87-A40-496-040		LED,SLR-342MCT31 GRN
C213	87-012-157-080		C-CAP,S 330P-50 CH	LED412	87-A40-496-040		LED,SLR-342MCT31 GRN
C214	87-012-157-080		C-CAP,S 330P-50 CH	LED413	87-A40-496-040		LED,SLR-342MCT31 GRN
C221	87-010-404-040		CAP,E 4.7-50 SME	LED414	87-A40-496-040		LED,SLR-342MCT31 GRN
C222	87-010-404-040		CAP,E 4.7-50 SME	LED415	87-A40-496-040		LED,SLR-342MCT31 GRN
C223	87-010-408-040		CAP,E 47-50 SME	LED416	87-A40-619-080		LED,SLR-56PT-TE7-W GRN
C224	87-012-369-080		C-CAP,S 0.047-50F	LED417	87-A40-619-080		LED,SLR-56PT-TE7-W GRN
C381	87-010-196-080		CHIP CAPACITOR,0.1-25	LED418	87-A40-619-080		LED,SLR-56PT-TE7-W GRN
C382	87-012-158-080		C-CAP,S 390P-50 CH	LED419	87-A40-619-080		LED,SLR-56PT-TE7-W GRN
				LED420	87-A40-619-080		LED,SLR-56PT-TE7-W GRN
				LED421	87-A40-619-080		LED,SLR-56PT-TE7-W GRN
				LED433	87-A40-631-010		LED,SEL1550CM-LF55 GRN

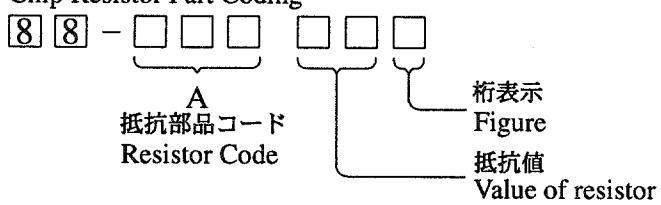
REF. NO.	PART NO.	KANRI NO.	DESCRIPTION	REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
LED434	87-A40-631-010		LED, SEL1550CM-LF55 GRN	C731	87-012-286-080	CAP, U 0.01-25	
LED435	87-A40-631-010		LED, SEL1550CM-LF55 GRN	C733	87-010-987-080	C-CAP,S 1500P-50 CH	
LED436	87-A40-631-010		LED, SEL1550CM-LF55 GRN	C734	87-010-987-080	C-CAP,S 1500P-50 CH	
LED461	87-A40-632-010		LED, SEL1250SM-LF55 RED	C735	87-010-987-080	C-CAP,S 1500P-50 CH	
LED462	87-A40-632-010		LED, SEL1250SM-LF55 RED	C736	87-010-987-080	C-CAP,S 1500P-50 CH	
LED481	87-A40-619-040		LED, SLR-56PT-T31-W GRN	C737	87-A10-592-080	C-CAP,S 0.015-50 J B	
LED482	87-A40-619-040		LED, SLR-56PT-T31-W GRN	C738	87-A10-592-080	C-CAP,S 0.015-50 J B	
LED483	87-A40-619-040		LED, SLR-56PT-T31-W GRN	C751	87-012-365-080	C-CAP,S 0.027-25VBK	
LED484	87-A40-619-040		LED, SLR-56PT-T31-W GRN	C752	87-012-365-080	C-CAP,S 0.027-25VBK	
LED485	87-A40-619-040		LED, SLR-56PT-T31-W GRN	C756	87-012-286-080	CAP, U 0.01-25	
LED486	87-A40-619-040		LED, SLR-56PT-T31-W GRN	C757	87-012-188-080	C-CAP,U 47P-50 CH	
LED487	87-A40-619-040		LED, SLR-56PT-T31-W GRN	C758	87-012-167-080	C-CAP,U 5P-50 CH	
LED488	87-A40-619-040		LED, SLR-56PT-T31-W GRN	C763	87-010-829-080	CAP, U 0.047-16	
S101	87-A90-471-010		SW, RTRY EC16B24304-25 NON	C764	87-012-337-080	C-CAP,U 56P-50 CH	
S102	87-A91-018-010		SW, RTRY EC12E12504ENC-30	C765	87-012-286-080	CAP, U 0.01-25	
S301	87-A90-095-080		SW, TACT EVQ11G04M	C768	87-012-286-080	CAP, U 0.01-25	
S302	87-A90-095-080		SW, TACT EVQ11G04M	C769	87-010-260-080	CAP, ELECT 47-25V	
S303	87-A90-095-080		SW, TACT EVQ11G04M	C770	87-010-829-080	CAP, U 0.047-16	
S308	87-A90-095-080		SW, TACT EVQ11G04M	C771	87-010-383-080	CAP, ELECT 33-25V	
S309	87-A90-095-080		SW, TACT EVQ11G04M	C772	87-010-829-080	CAP, U 0.047-16	
S310	87-A90-095-080		SW, TACT EVQ11G04M	C773	87-010-196-080	CHIP CAPACITOR,0.1-25	
S311	87-A90-095-080		SW, TACT EVQ11G04M	C774	87-010-263-080	CAP, ELECT 100-10V	
S312	87-A90-095-080		SW, TACT EVQ11G04M	C775	87-010-404-080	CAP, ELECT 4.7-50V	
S313	87-A90-095-080		SW, TACT EVQ11G04M	C776	87-012-286-080	CAP, U 0.01-25	
S321	87-A90-095-080		SW, TACT EVQ11G04M	C777	87-010-400-080	CAP, ELECT 0.47-50V	
S322	87-A90-095-080		SW, TACT EVQ11G04M	C778	87-010-401-080	CAP, ELECT 1-50V	
S323	87-A90-095-080		SW, TACT EVQ11G04M	C779	87-010-401-080	CAP, ELECT 1-50V	
S324	87-A90-095-080		SW, TACT EVQ11G04M	C780	87-010-196-080	CHIP CAPACITOR,0.1-25	
S325	87-A90-095-080		SW, TACT EVQ11G04M	C781	87-010-405-080	CAP, ELECT 10-50V	
S326	87-A90-095-080		SW, TACT EVQ11G04M	C782	87-010-405-080	CAP, ELECT 10-50V	
S327	87-A90-095-080		SW, TACT EVQ11G04M	C783	87-012-286-080	CAP, U 0.01-25	
S329	87-A90-095-080		SW, TACT EVQ11G04M	C784	87-012-286-080	CAP, U 0.01-25	
S332	87-A90-095-080		SW, TACT EVQ11G04M	C785	87-010-401-080	CAP, ELECT 1-50V	
S333	87-A90-095-080		SW, TACT EVQ11G04M	C786	87-010-401-080	CAP, ELECT 1-50V	
S334	87-A90-095-080		SW, TACT EVQ11G04M	C789	87-012-275-080	C-CAP,U 1200P-50 B	
S335	87-A90-095-080		SW, TACT EVQ11G04M	C790	87-012-275-080	C-CAP,U 1200P-50 B	
S341	87-A90-095-080		SW, TACT EVQ11G04M	C791	87-010-405-080	CAP, ELECT 10-50V	
S342	87-A90-095-080		SW, TACT EVQ11G04M	C793	87-012-273-080	C-CAP,U 820P-50 B	
S343	87-A90-095-080		SW, TACT EVQ11G04M	C794	87-010-406-080	CAP, ELECT 22-50	
S344	87-A90-095-080		SW, TACT EVQ11G04M	C795	87-010-596-080	CAP, S 0.047-16	
S345	87-A90-095-080		SW, TACT EVQ11G04M	C796	87-010-403-080	CAP, ELECT 3.3-50V	
S346	87-A90-095-080		SW, TACT EVQ11G04M	C799	87-010-829-080	CAP, U 0.047-16	
S348	87-A90-095-080		SW, TACT EVQ11G04M	C812	87-012-286-080	CAP, U 0.01-25	
S349	87-A90-095-080		SW, TACT EVQ11G04M	C820	87-010-260-080	CAP, ELECT 47-25V	
S350	87-A90-095-080		SW, TACT EVQ11G04M	C821	87-012-286-080	CAP, U 0.01-25	
VR501	86-NFA-607-010		VR, RTRY 10K15AX1 1 V XV0121PVN	C822	87-012-286-080	CAP, U 0.01-25	
TUNER C.B				C823	87-012-286-080	CAP, U 0.01-25	
C701	87-010-381-080		CAP, ELECT 330-16V	C828	87-010-196-080	CHIP CAPACITOR,0.1-25	
C702	87-010-404-080		CAP, ELECT 4.7-50V	C829	87-010-196-080	CHIP CAPACITOR,0.1-25	
C703	87-012-286-080		CAP, U 0.01-25	C959	87-010-196-080	CHIP CAPACITOR,0.1-25	
C704	87-012-286-080		CAP, U 0.01-25				
C705	87-A10-592-080		C-CAP,S 0.015-50 J B	C960	87-010-196-080	CHIP CAPACITOR,0.1-25	
C706	87-A10-592-080		C-CAP,S 0.015-50 J B	C961	87-012-170-080	C-CAP,U 8P-50 CH	
C709	87-012-195-080		C-CAP,U 100P-50CH	C963	87-010-196-080	CHIP CAPACITOR,0.1-25	
C711	87-010-260-080		CAP, ELECT 47-25V	FFE801	A8-8ZA-190-030	8ZA-1 FEUNM	
C712	87-010-831-080		C-CAP,U 0.1-16F	J801	87-A60-702-010	TERMINAL,ANT 4P CJ-9036	
C714	87-012-286-080		CAP, U 0.01-25	L771	87-A50-266-010	COIL,FM DET-2N(TOK)	
C717	87-012-286-080		CAP, U 0.01-25	L772	87-A90-733-010	FLTR,PCFAZH-450 (TOK)	
C718	87-012-179-080		C-CAP,U 20P-50 CH	L981	87-NF4-650-010	COIL,AM PACK 4N(TOK)	
C719	87-012-286-080		CAP, U 0.01-25	X721	87-A70-061-010	VIB,XTAL 4.500MHZ CSA-309PT C.B	
C720	87-012-195-080		C-CAP,U 100P-50CH				
C721	87-012-176-080		CAP 15P	SW C.B			
C722	87-012-176-080		CAP 15P				
C723	87-012-274-080		CHIP CAP,U 1000P-50B	CN302	87-A60-131-010	CONN,6P V FE	
C725	87-012-274-080		CHIP CAP,U 1000P-50B	LED438	87-A40-317-080	LED,SLR-342VCT31 RED	
C727	87-010-196-080		CHIP CAPACITOR,0.1-25	LED439	87-A40-317-080	LED,SLR-342VCT31 RED	
C728	87-010-248-080		CAP, ELECT 220-10V	LED440	87-A40-317-080	LED,SLR-342VCT31 RED	
C729	87-012-274-080		CHIP CAP,U 1000P-50B	LED441	87-A40-637-040	LED,SLV-312MC GRN	

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION	REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
LED442	87-A40-637-040		LED, SLV-312MC GRN				DECK C.B
LED443	87-A40-637-040		LED, SLV-312MC GRN	CON105	87-099-756-019		CONN, 15P 9604 S F
LED444	87-A40-637-040		LED, SLV-312MC GRN	SFR1	87-024-581-019		SFR, 3.3K DIA 6H
LED445	87-A40-637-040		LED, SLV-312MC GRN	SOL1	82-ZM1-618-410		SOL ASSY, 27
S351	87-A90-095-080		SW, TACT EVQ11G04M	SOL2	82-ZM1-618-410		SOL ASSY, 27
S352	87-A90-095-080		SW, TACT EVQ11G04M	SW1	87-A90-248-019		SW, MICRO ESE11SH2CXQ
S353	87-A90-095-080		SW, TACT EVQ11G04M	SW2	87-A90-248-019		SW, MICRO ESE11SH2CXQ
S354	87-A90-095-080		SW, TACT EVQ11G04M	SW3	87-A90-248-019		SW, MICRO ESE11SH2CXQ
S355	87-A90-095-080		SW, TACT EVQ11G04M	SW4	87-036-110-010		SW, MICRO SPPB62
				SW5	87-036-110-010		SW, MICRO SPPB62
				SW6	87-036-110-010		SW, MICRO SPPB62
PT C.B							
C1	87-010-387-080		CAP, E 470-25 SME	SW8	87-A90-248-019		SW, MICRO ESE11SH2CXQ
C3	87-018-209-080		CAP, CER 0.1-50V	SW9	87-A90-248-019		SW, MICRO ESE11SH2CXQ
C4	87-018-209-080		CAP, CER 0.1-50V	W001	82-ZM3-601-019		RBN, CORD, 4P-75
C5	87-018-209-080		CAP, CER 0.1-50V				
C6	87-018-209-080		CAP, CER 0.1-50V				
C8	87-016-520-090		CAP, E 3300-65				HEAD-1 C.B
C9	87-016-520-090		CAP, E 3300-65				
C31	87-010-403-040		CAP, E 3.3-50 SME				
CN1	87-A60-851-010		CONN, 9P V VH				
△ PR1	87-026-691-080		FUSE, 10A 125V 251<777U, 767U>				HEAD-2 C.B
△ PR1	87-026-682-080		PROTECTOR, 10A 60V491<LH>				
△ PR2	87-026-691-080		FUSE, 10A 125V 251<777U, 767U>	85-ZM3-602-010			PWB, FLEX A
△ PR2	87-026-682-080		PROTECTOR, 10A 60V491<LH>				
△ PR3	87-A91-276-080		FUSE, 125MA 125V F 251<777U, 767U>				
△ PT1	82-NF7-622-010		PT, LH ZNF-7<LH>				
△ PT1	82-NF7-621-010		PT, U ZNF-7<777U>				
△ PT2	82-NF8-663-010		PT, SUB ZNF-8(H)<LH>				
△ PT2	82-NF8-661-010		PT, SUB ZNF-8(U)<777U, 767U>				
△ RY1	87-A91-281-010		RELAY, AC DC12V OSA-SS-212DM5<LH>				
△ RY2	87-A90-976-010		RELAY, AC12V SDT-S-112LMR<777U, 767U>				
△ S1	87-A90-165-010		SW, SL 1-2-3 SWS2301<LH>				
△ T1	87-A60-317-010		TERMINAL, 1P MSC				
△ T2	87-A60-317-010		TERMINAL, 1P MSC				

O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 Resistor Code : A
				外形/Form	L	W	
1/16W	1005	± 5%	CJ		1.0	0.5	0.35 104
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



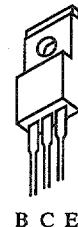
KTA1266GR
KTC3198GR
KTC3199GR



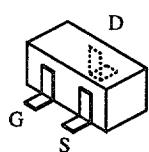
CC5551



CSC4115BC
CSA1585BC



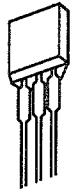
2SB1370
FN1016
FP1016
2SB1625
2SD2494
2SB1342
2SD1933



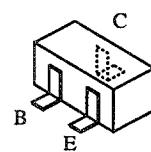
2SK2158



2SK3053

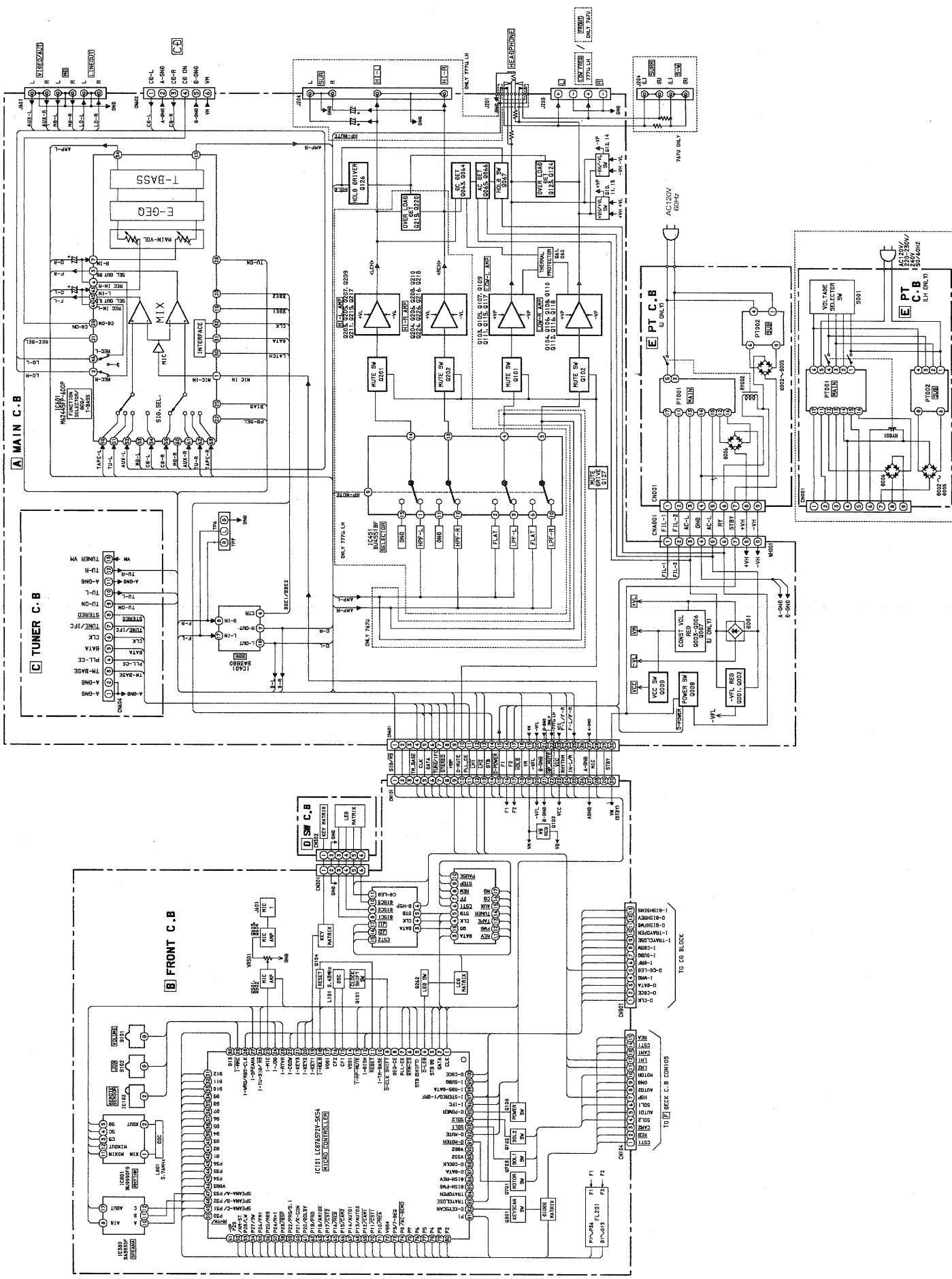


E C B

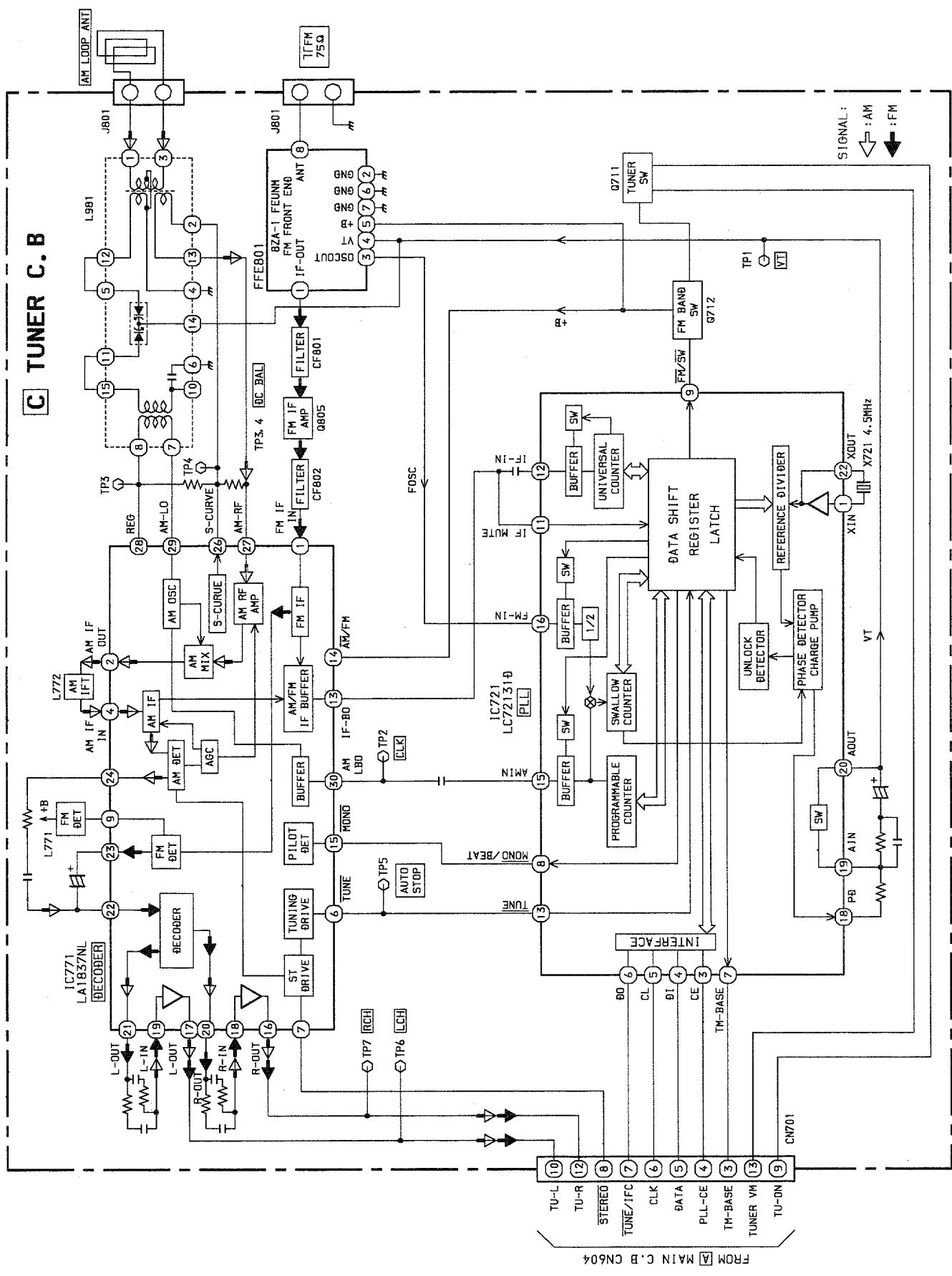


DTC114ES	2SA1235F	KTA1298Y
2SA933SRS	2SC2714	RT1N141C
2SC4115SRS	2SC3052F	RT1P144C
	2SC3906KR	RT1P441C
	2SD1306E	RT1P141C
	2SA1514K	DTA123EKA
	CMBT5551	

BLOCK DIAGRAM - 1 (MAIN / FRONT)

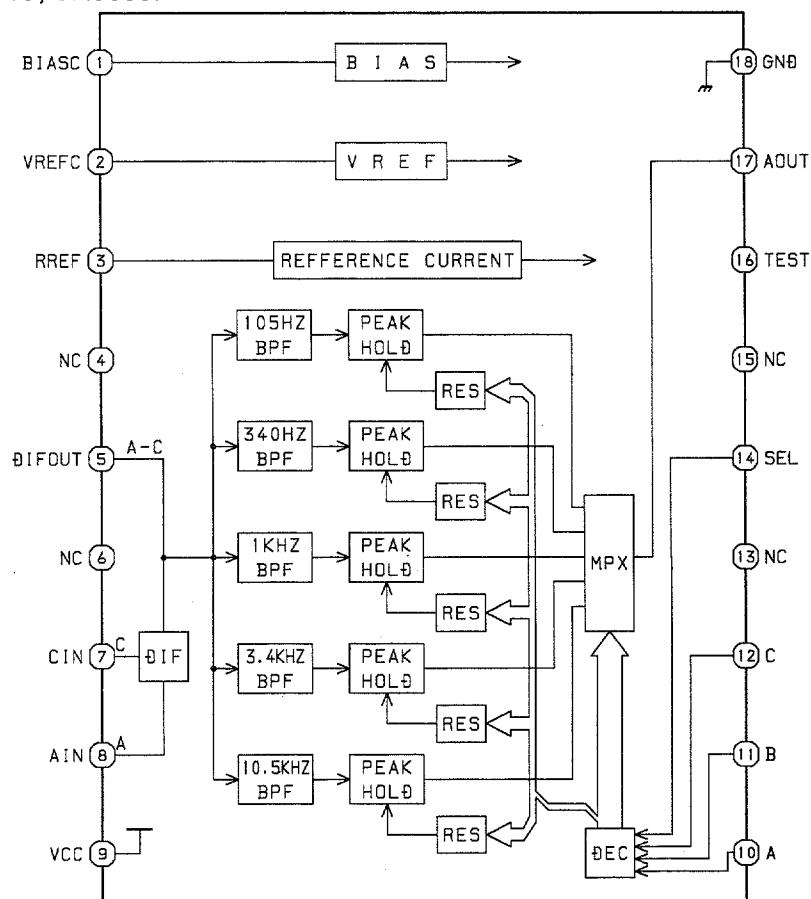


BLOCK DIAGRAM – 2 (TUNER)

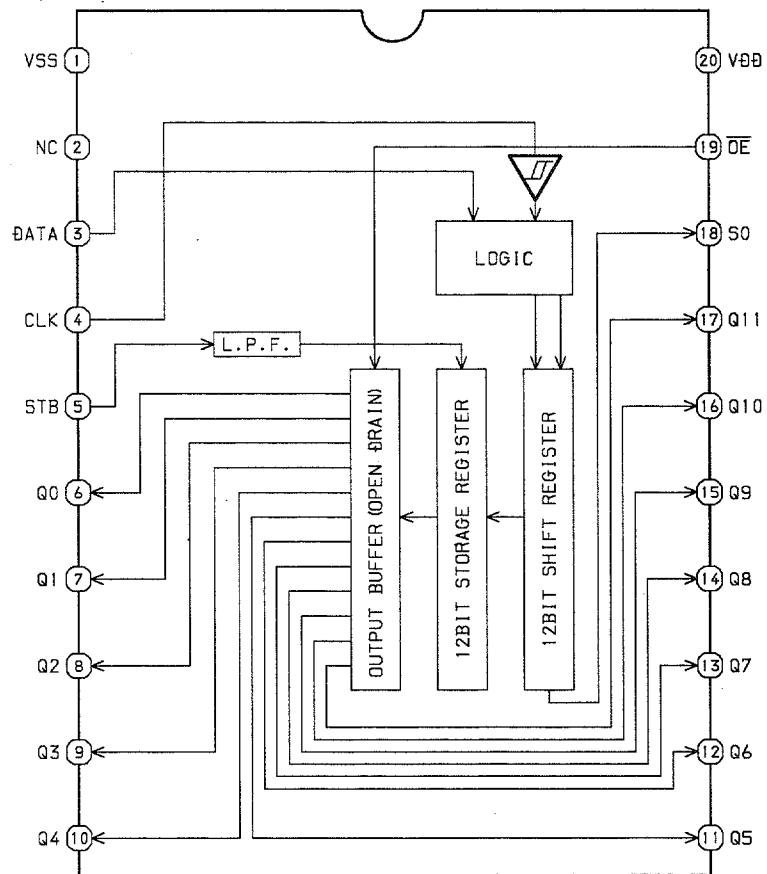


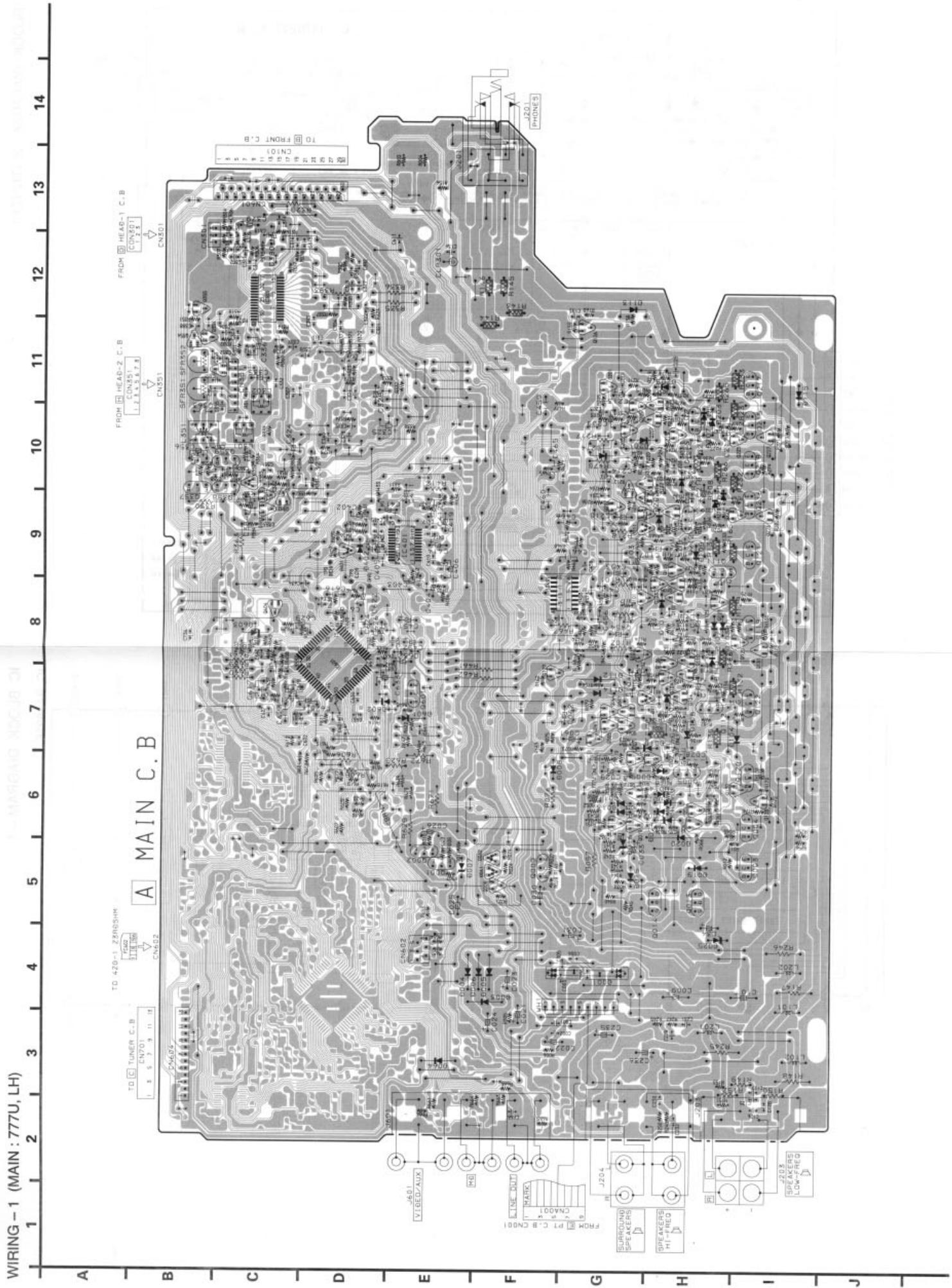
IC BLOCK DIAGRAM – 1

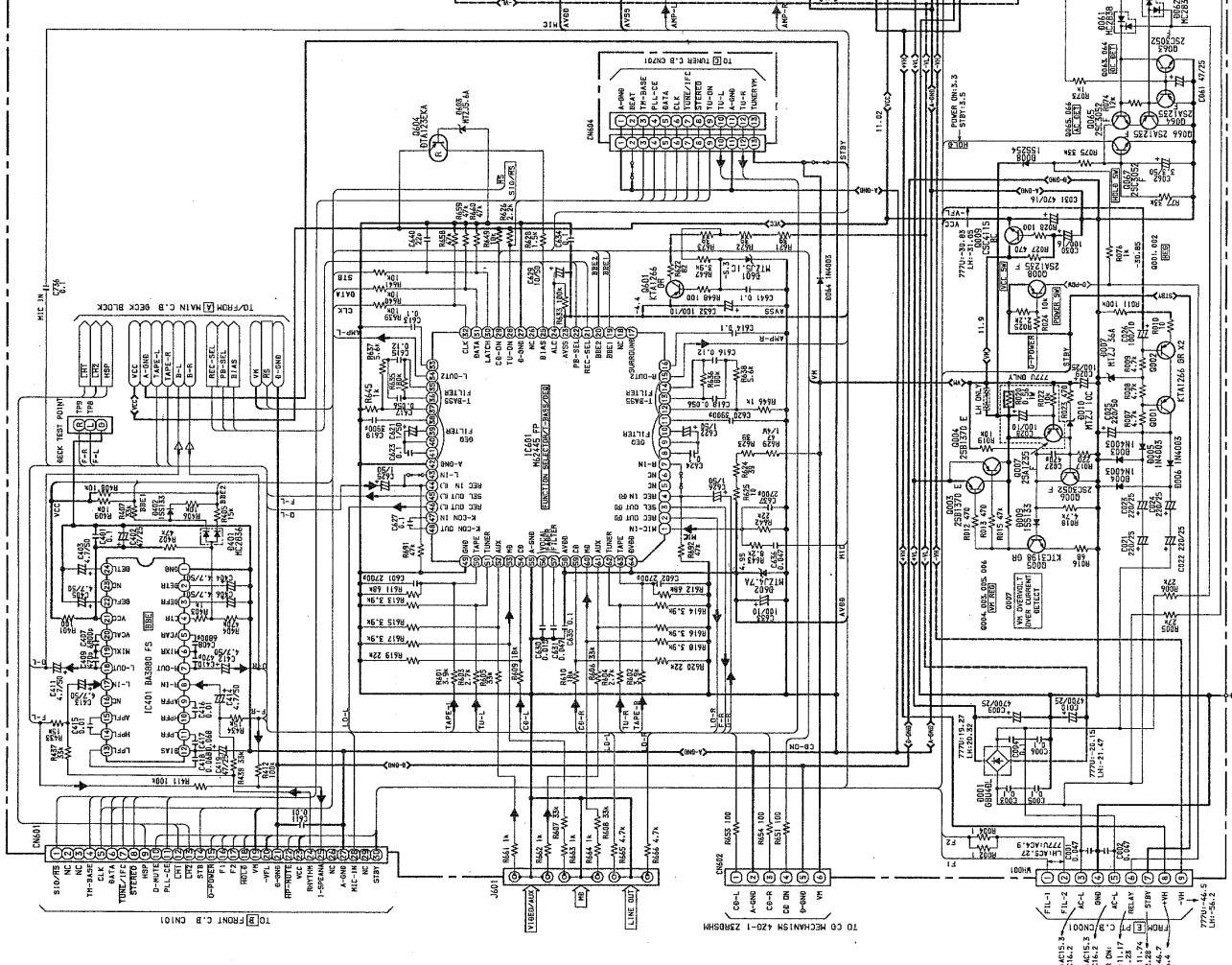
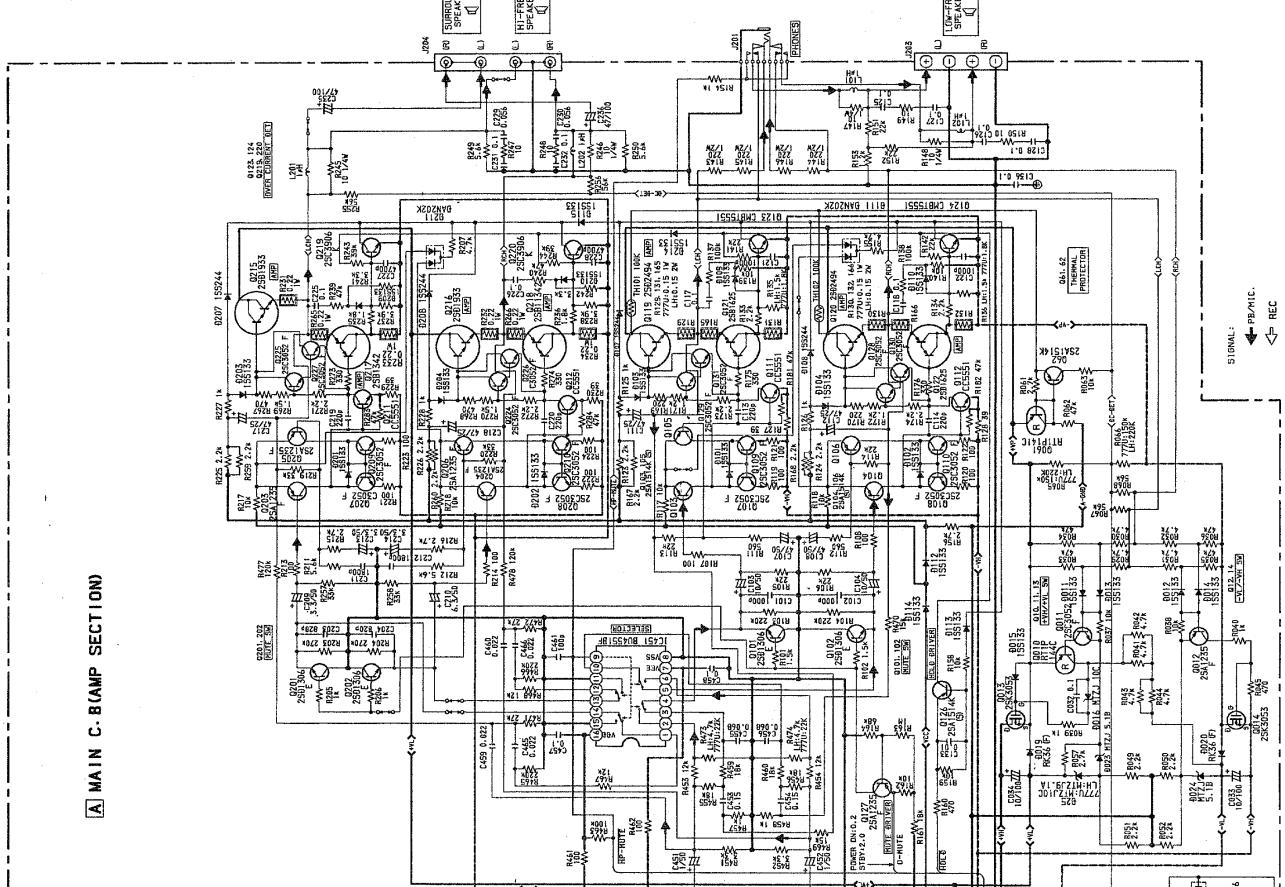
IC, BA3835F



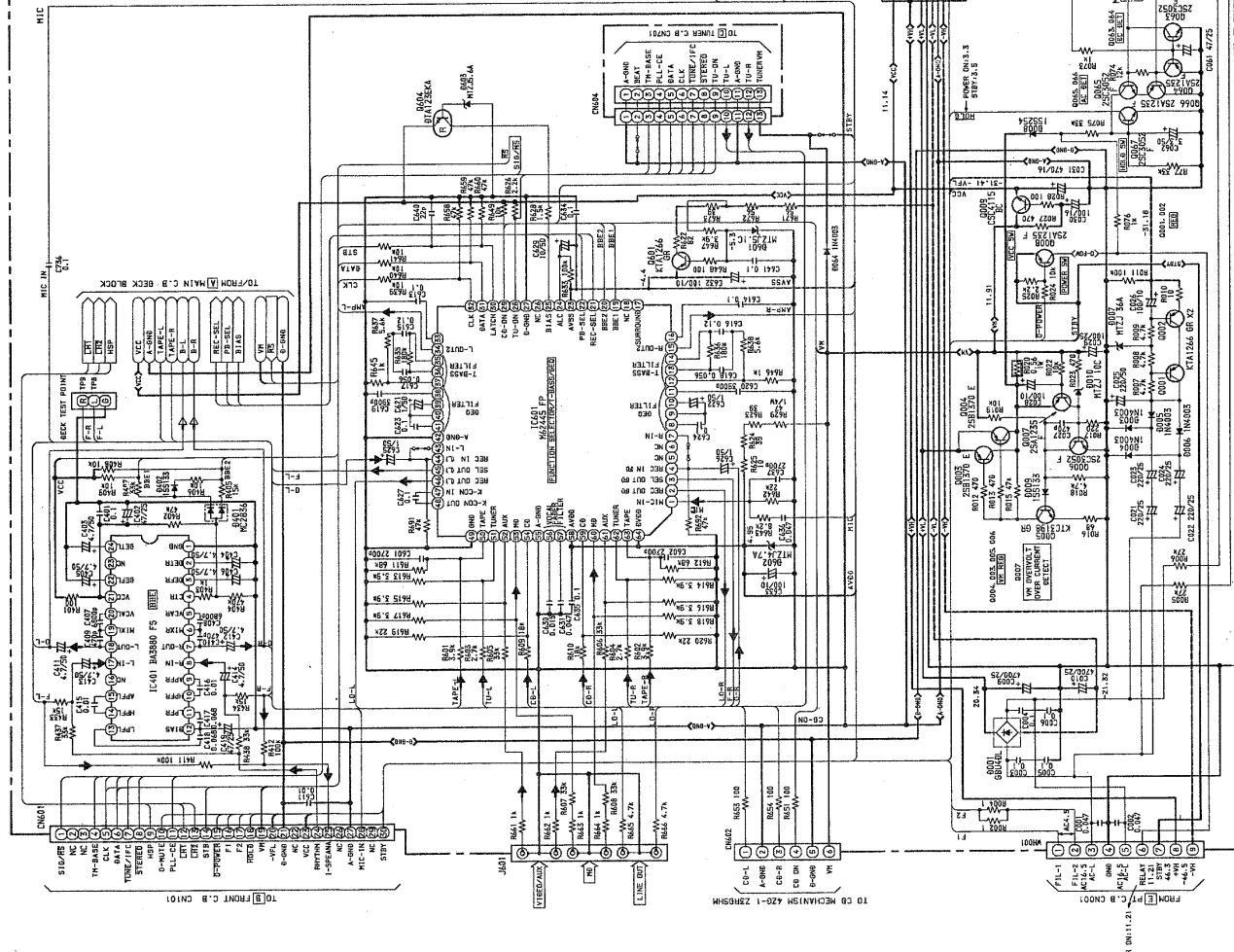
IC, BU2099FV



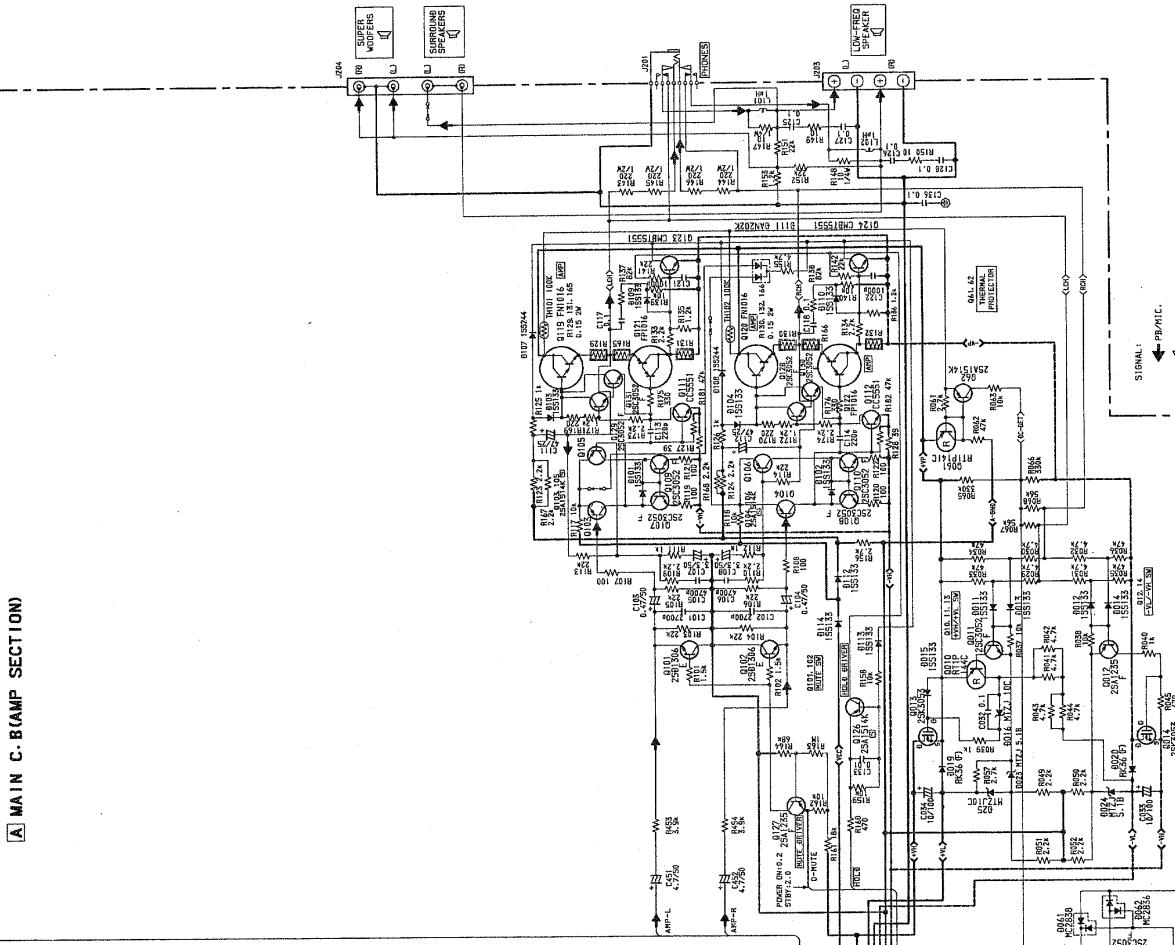


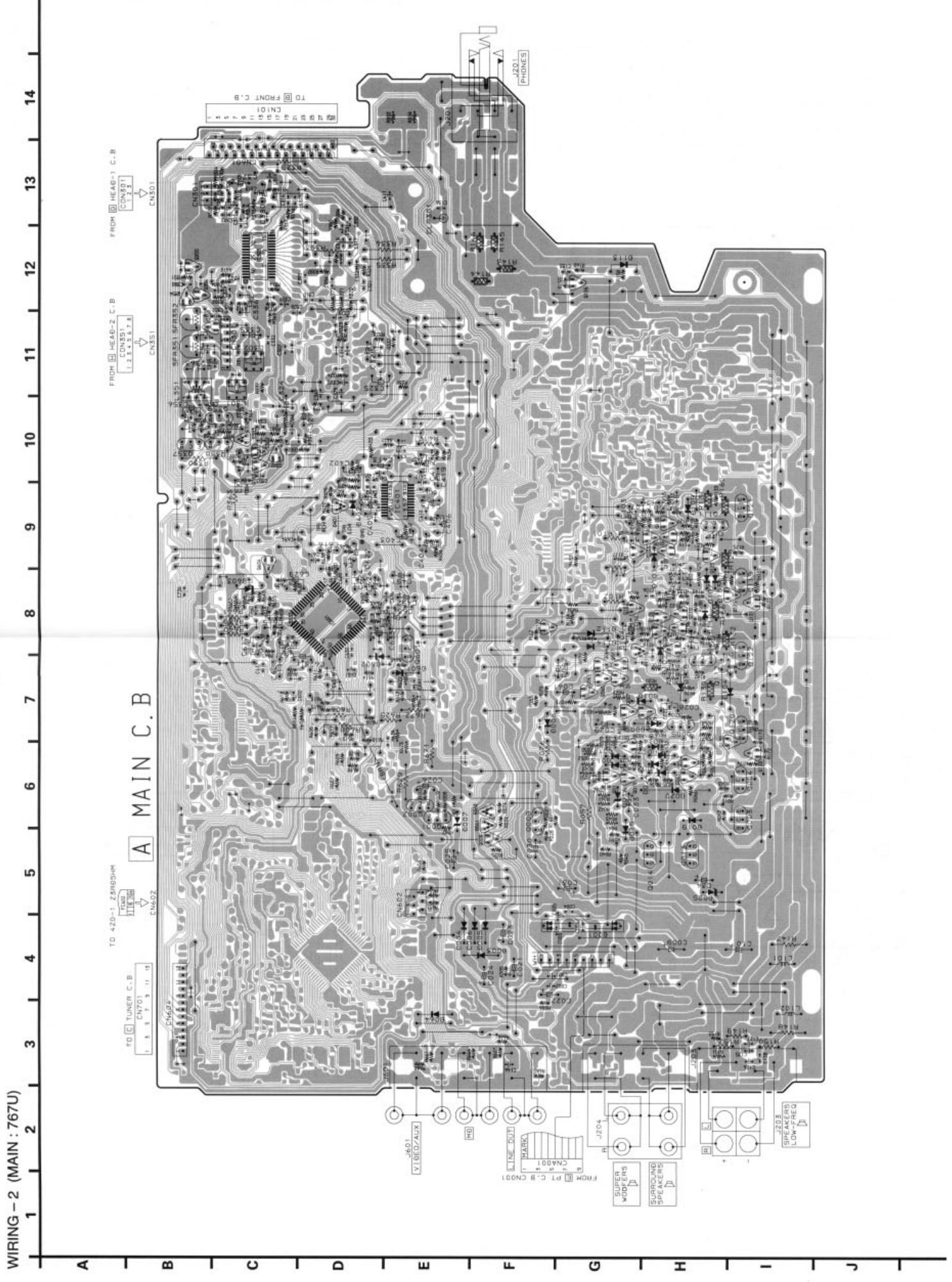
**A MAIN C. B (AMP SECTION)**

REC



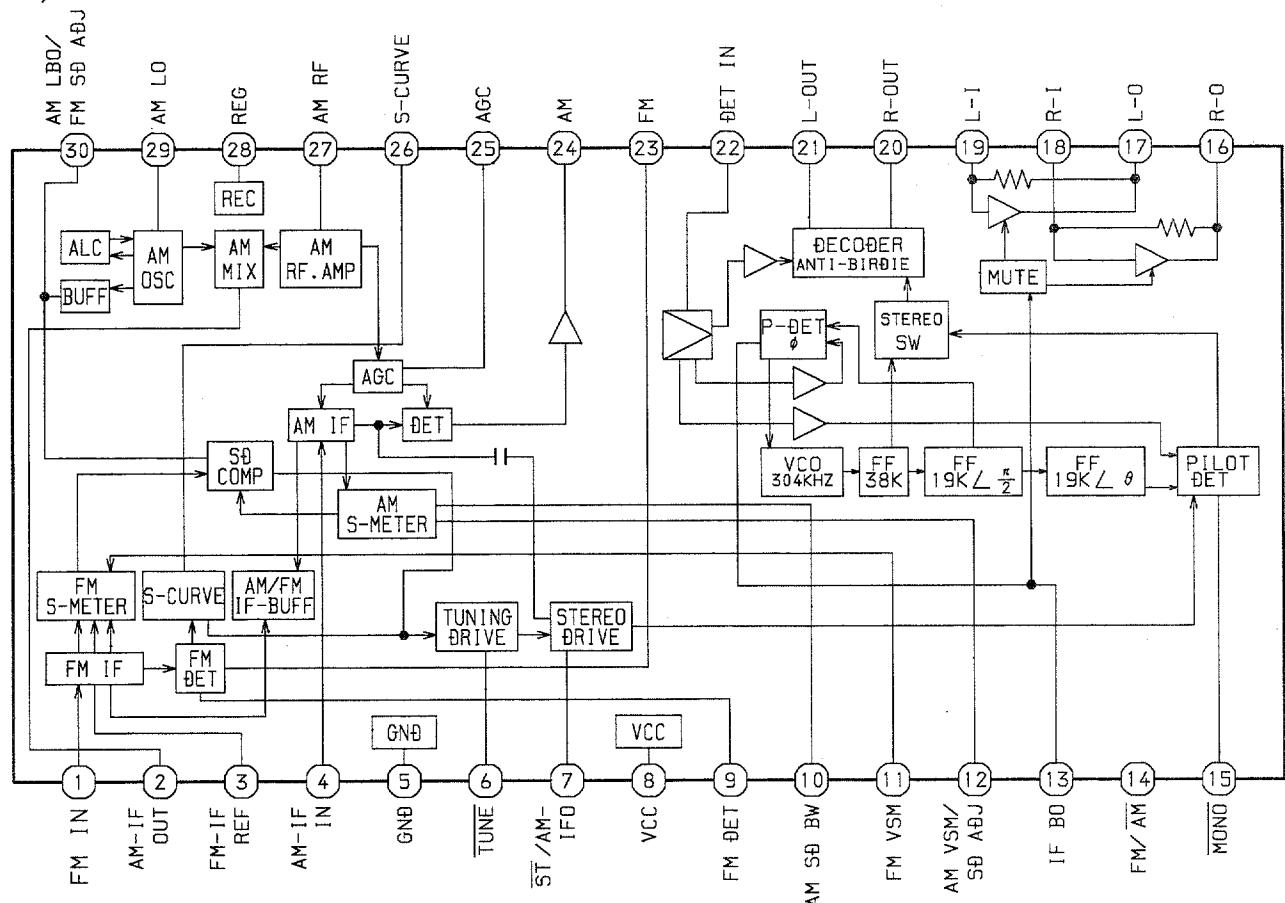
A MAIN C. B(AMP SECTION)



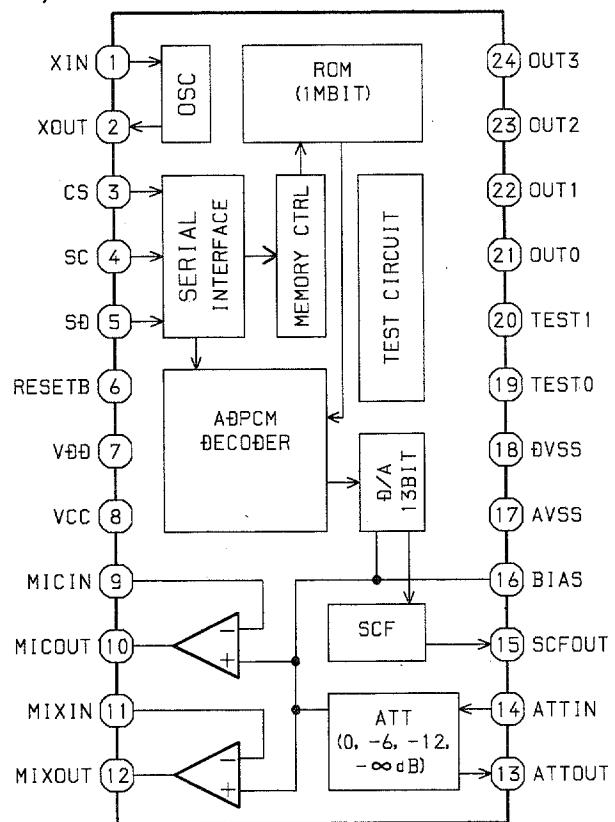


IC BLOCK DIAGRAM – 2

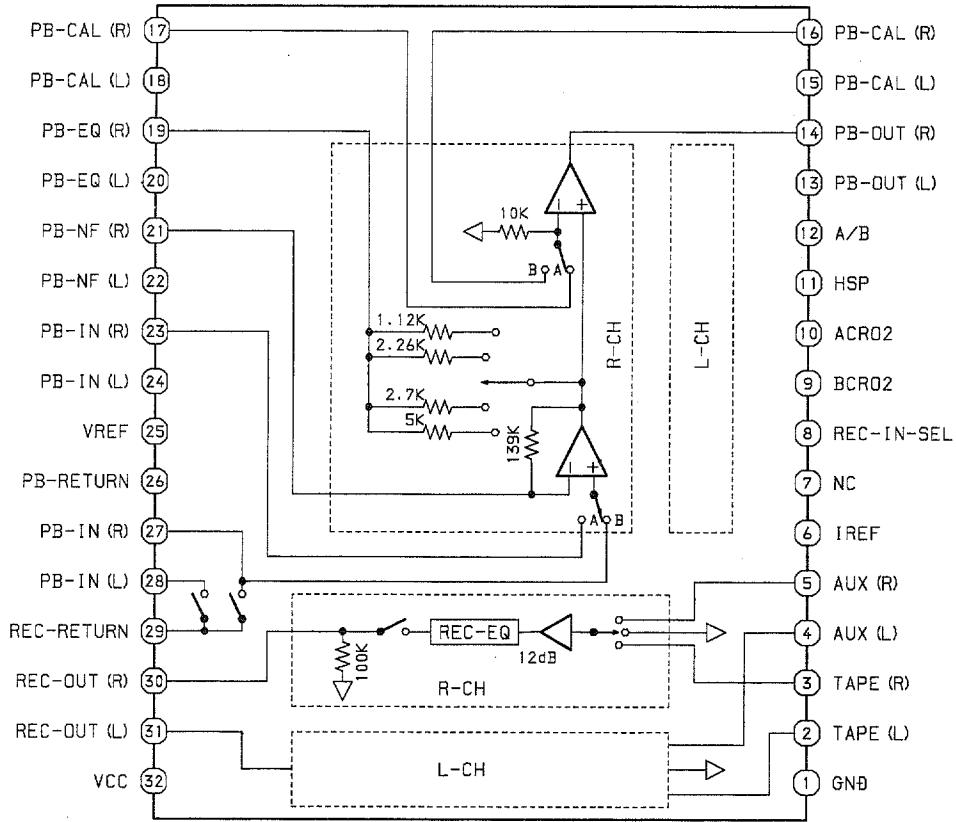
IC, LA1837NL



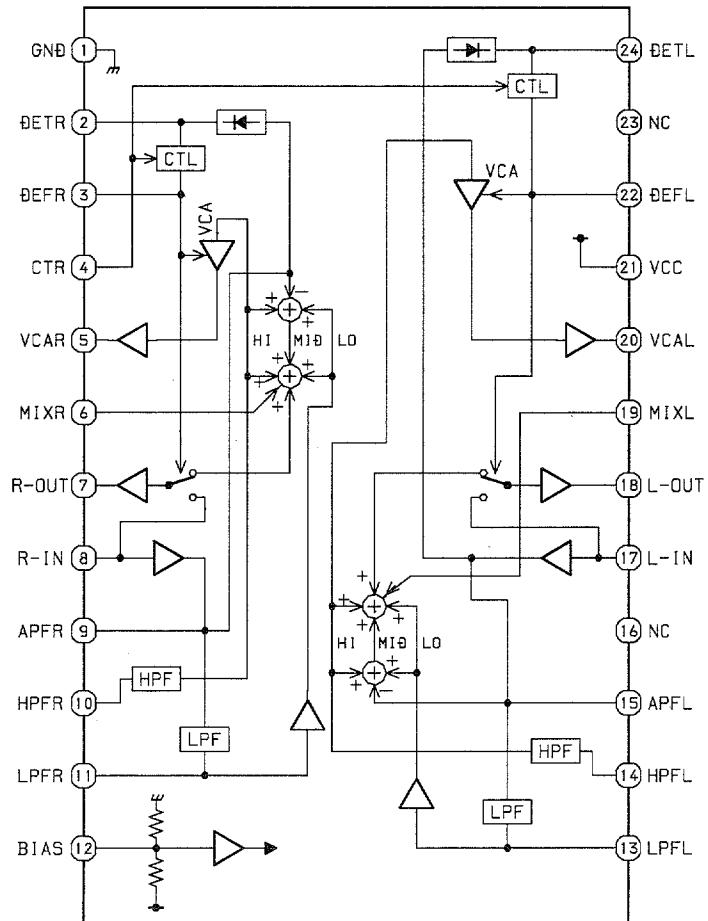
IC, BU9990-03FS



IC, BA7762AFS

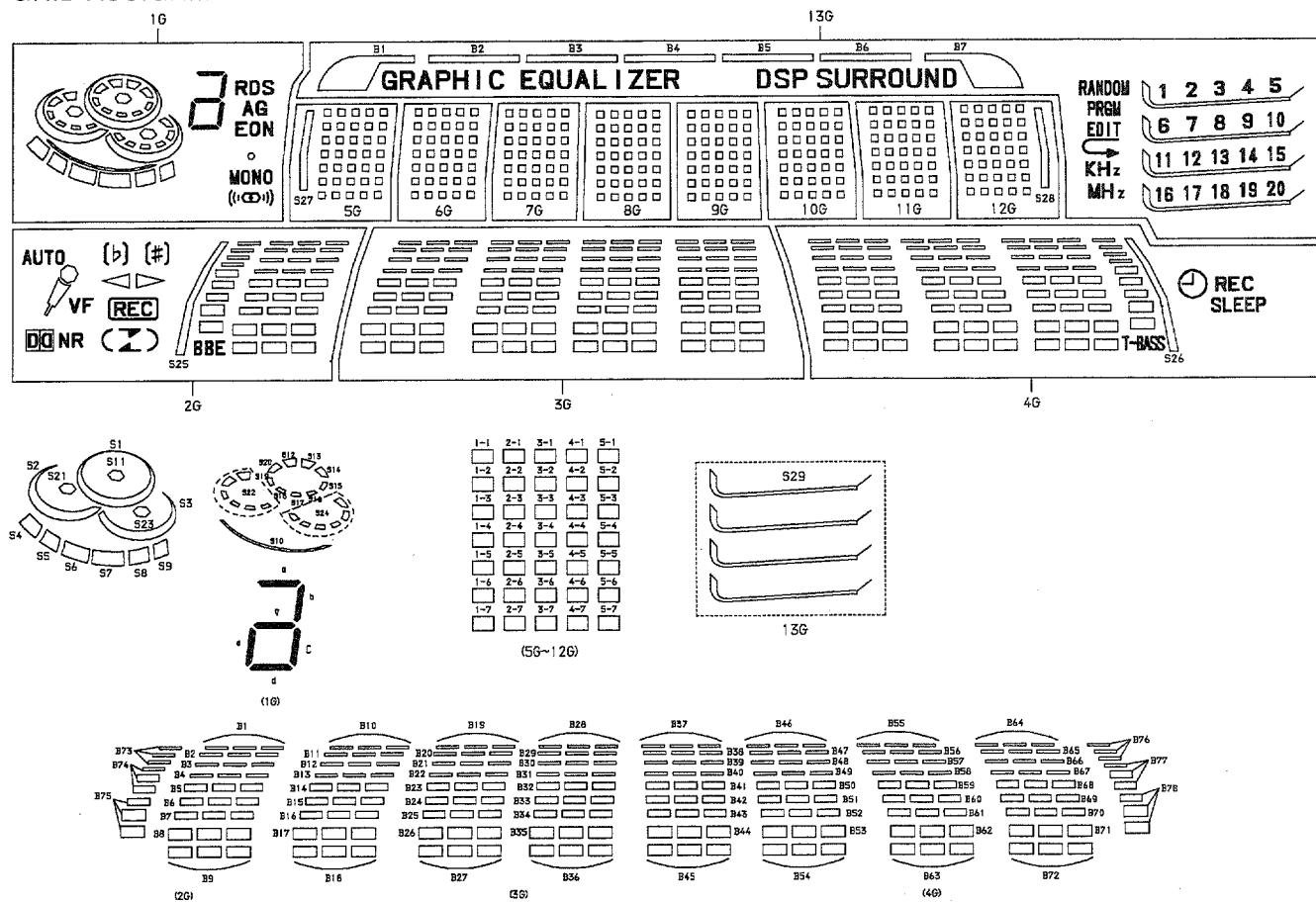


IC, BA3880FS



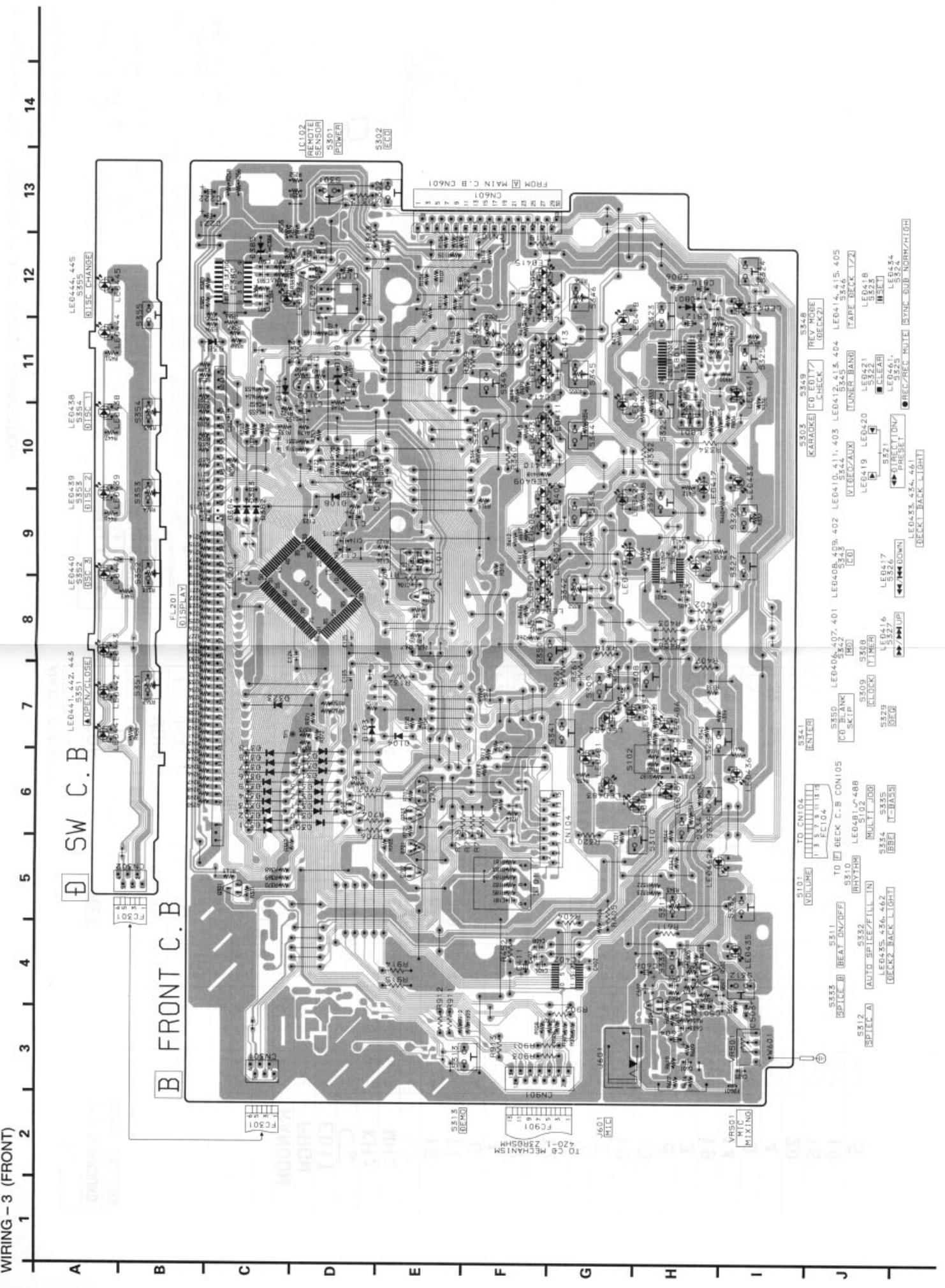
FL (BJ679GK) GRID ASSIGNMENT AND ANODE CONNECTION

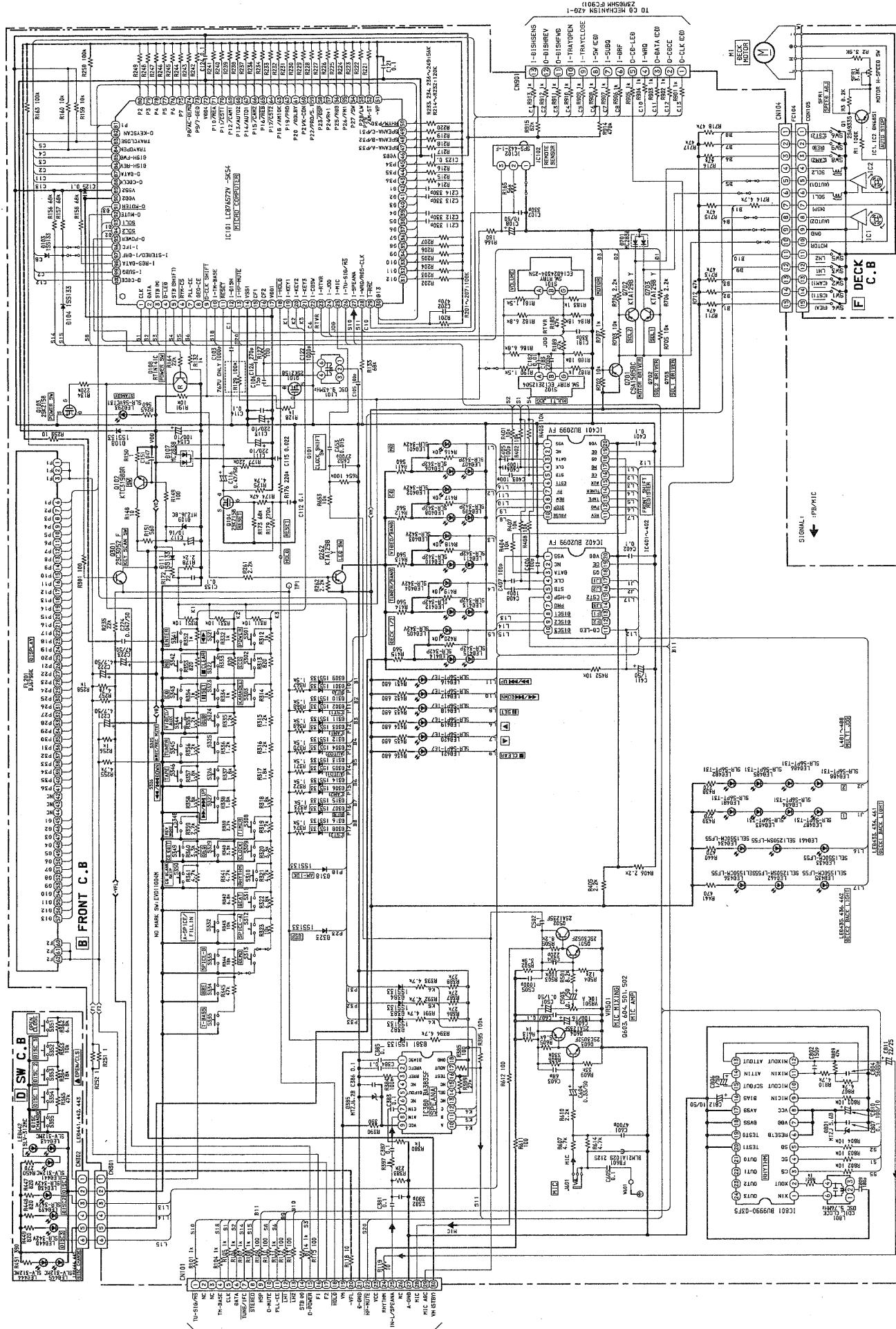
GRID ASSIGNMENT

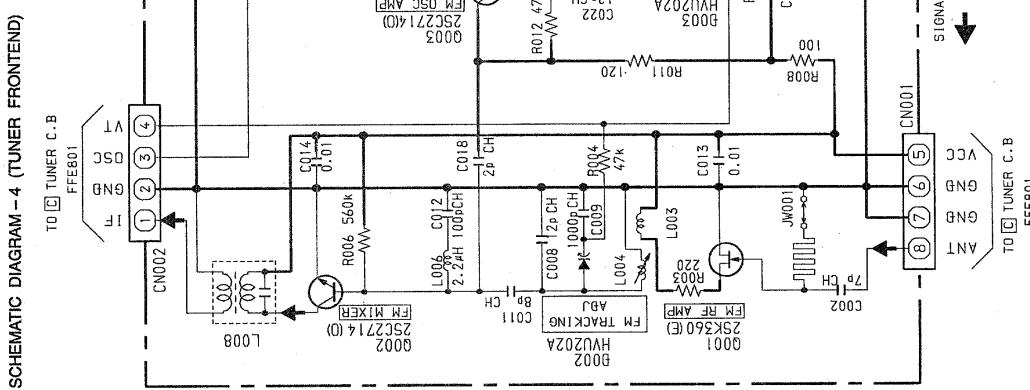


ANODE CONNECTION

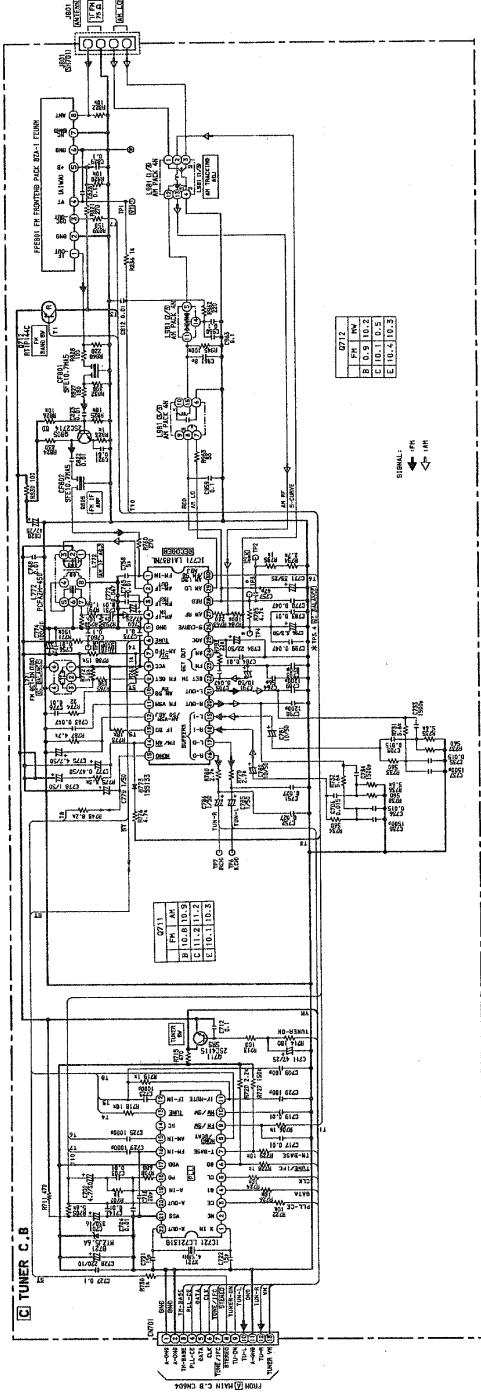
	1G	2G	3G	4G	5G	6G~11G	12G	13G
P1	EON	B9	B45	REC	1-1	1-1	1-1	DSP SURROUND
P2	AG	DNR	B36	B72	2-1	2-1	2-1	GRAPHIC EQUALIZER
P3	○	BBE	B27	B63	3-1	3-1	3-1	B7
P4	MONO	S25	B18	B54	4-1	4-1	4-1	B6
P5	((∞))	B8	B44	⌚	5-1	5-1	5-1	B5
P6	RDS	⌚,	B35	B71	1-2	1-2	1-2	B4
P7	b	⌚,	B26	B62	2-2	2-2	2-2	B3
P8	c	⌚	B17	B53	3-2	3-2	3-2	B2
P9	a, g, d	B7	B43	SLEEP	4-2	4-2	4-2	B1
P10	e	REC	B34	B70	5-2	5-2	5-2	RANDOM
P11	S1	◀	B25	B61	1-3	1-3	1-3	PRGM
P12	S12	▶	B16	B52	2-3	2-3	2-3	EDIT
P13	S13	B6	B42	T-BASS	3-3	3-3	3-3	➡
P14	S20	b #	B33	B69	4-3	4-3	4-3	KHz
P15	S14	[(b)]	B24	B60	5-3	5-3	5-3	MHz
P16	S11	[(#)]	B15	B51	1-4	1-4	1-4	S29
P17	S19	B5	B41	B78	2-4	2-4	2-4	16
P18	S15	B75	B32	B68	3-4	3-4	3-4	11
P19	S18	B74	B23	B59	4-4	4-4	4-4	6
P20	S16	B73	B14	B50	5-4	5-4	5-4	1
P21	S17	B4	B40	B77	1-5	1-5	1-5	17
P22	S3	VF	B31	B67	2-5	2-5	2-5	12
P23	S24	AUTO	B22	B58	3-5	3-5	3-5	7
P24	S23	—	B13	B49	4-5	4-5	4-5	2
P25	S9	B3	B39	B76	5-5	5-5	5-5	18
P26	S8	—	B30	B66	1-6	1-6	1-6	13
P27	S7	—	B21	B57	2-6	2-6	2-6	8
P28	S6	—	B12	B48	3-6	3-6	3-6	3
P29	S5	B2	B38	B26	4-6	4-6	4-6	19
P30	S4	—	B29	B65	5-6	5-6	5-6	14
P31	S2	—	B20	B56	1-7	1-7	1-7	9
P32	S22	—	B11	B47	2-7	2-7	2-7	4
P33	S21	B1	B37	—	3-7	3-7	3-7	20
P34	S10	—	B28	S64	4-7	4-7	4-7	15
P35	—	—	B19	S55	5-7	5-7	5-7	10
P36	—	—	B10	S46	S27	—	S28	5







SCHEMATIC DIAGRAM -5 (TUNER)



WIRING – 4 (TUNER)

1 _____ 2 _____ 3 _____ 4 _____ 5 _____ 6 _____ 7 _____

A

B

C

D

F

F

G

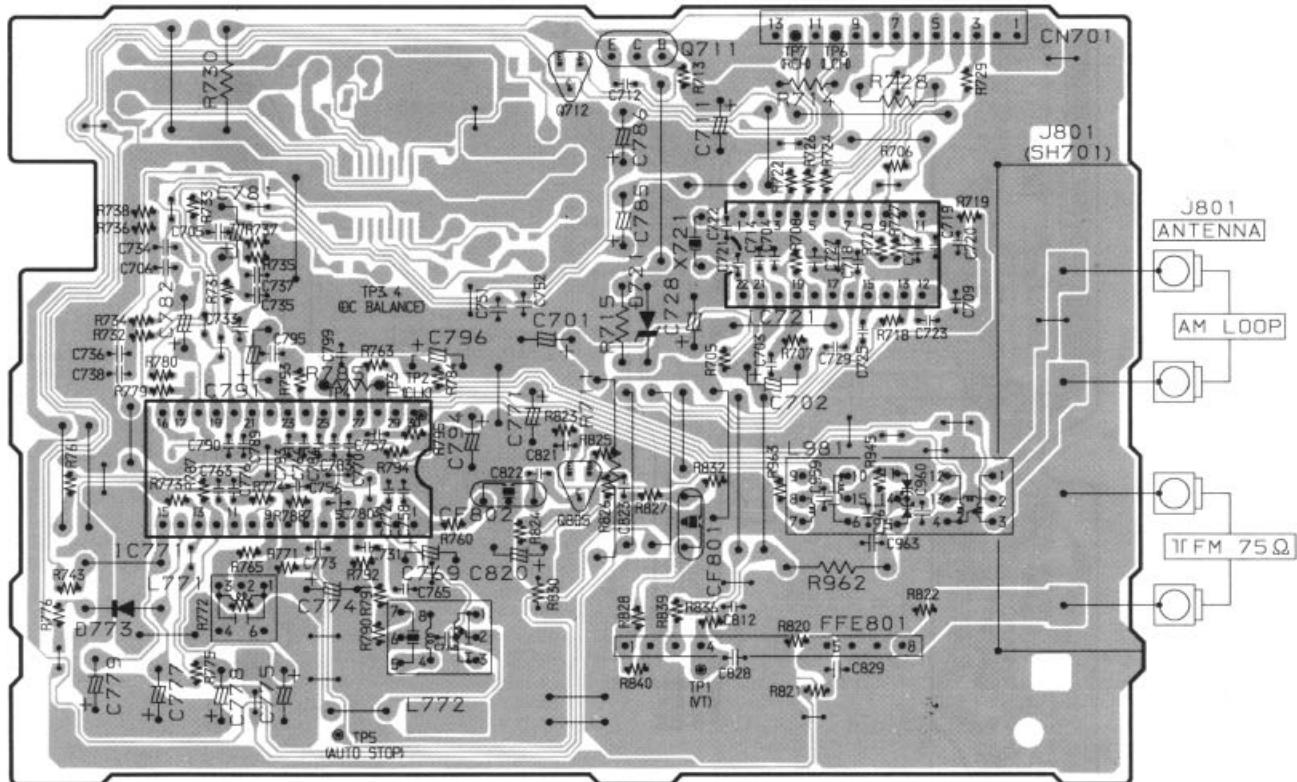
H

1

1

TUNER C. B

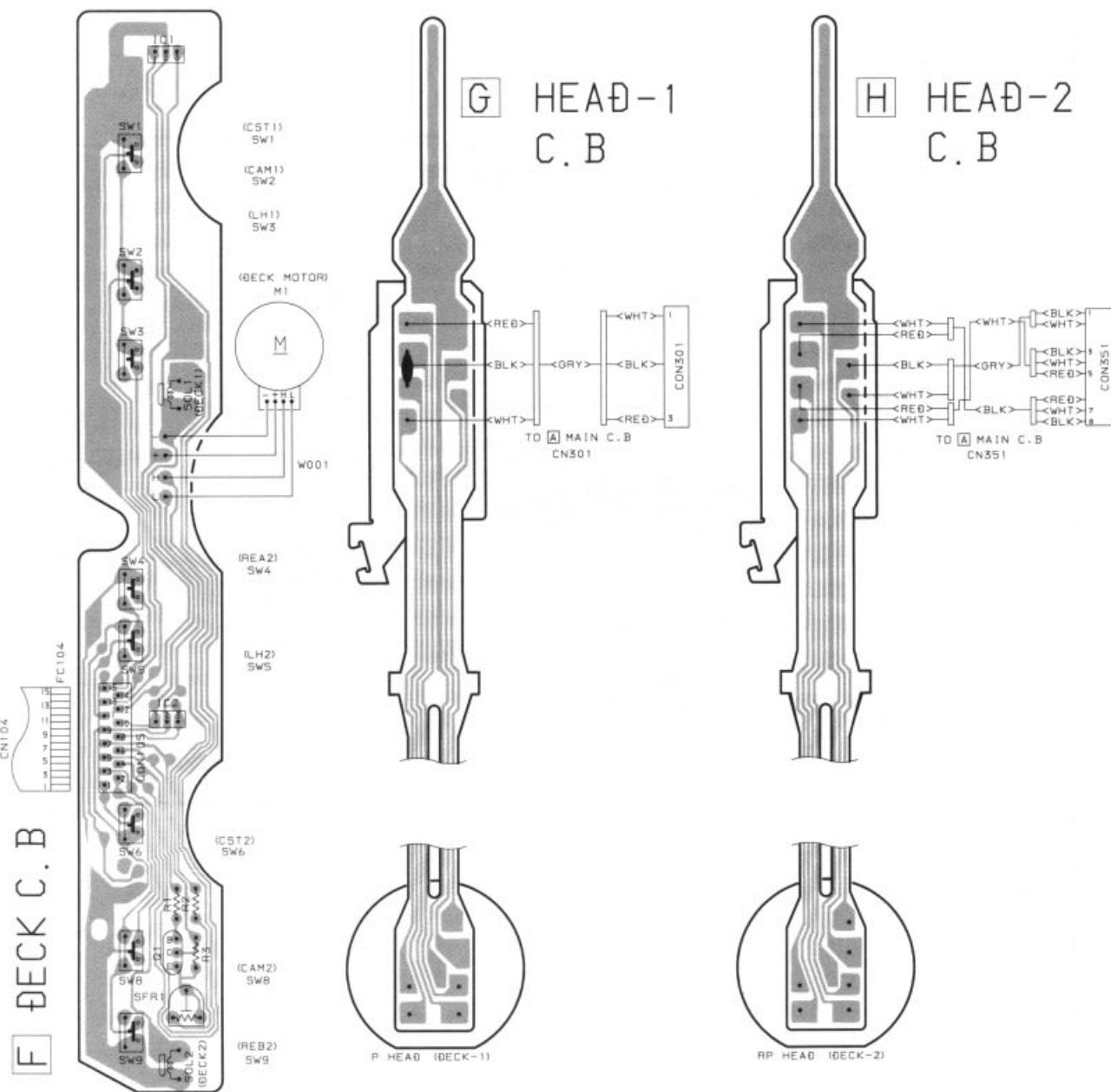
FROM [A] MAIN C.B CN604



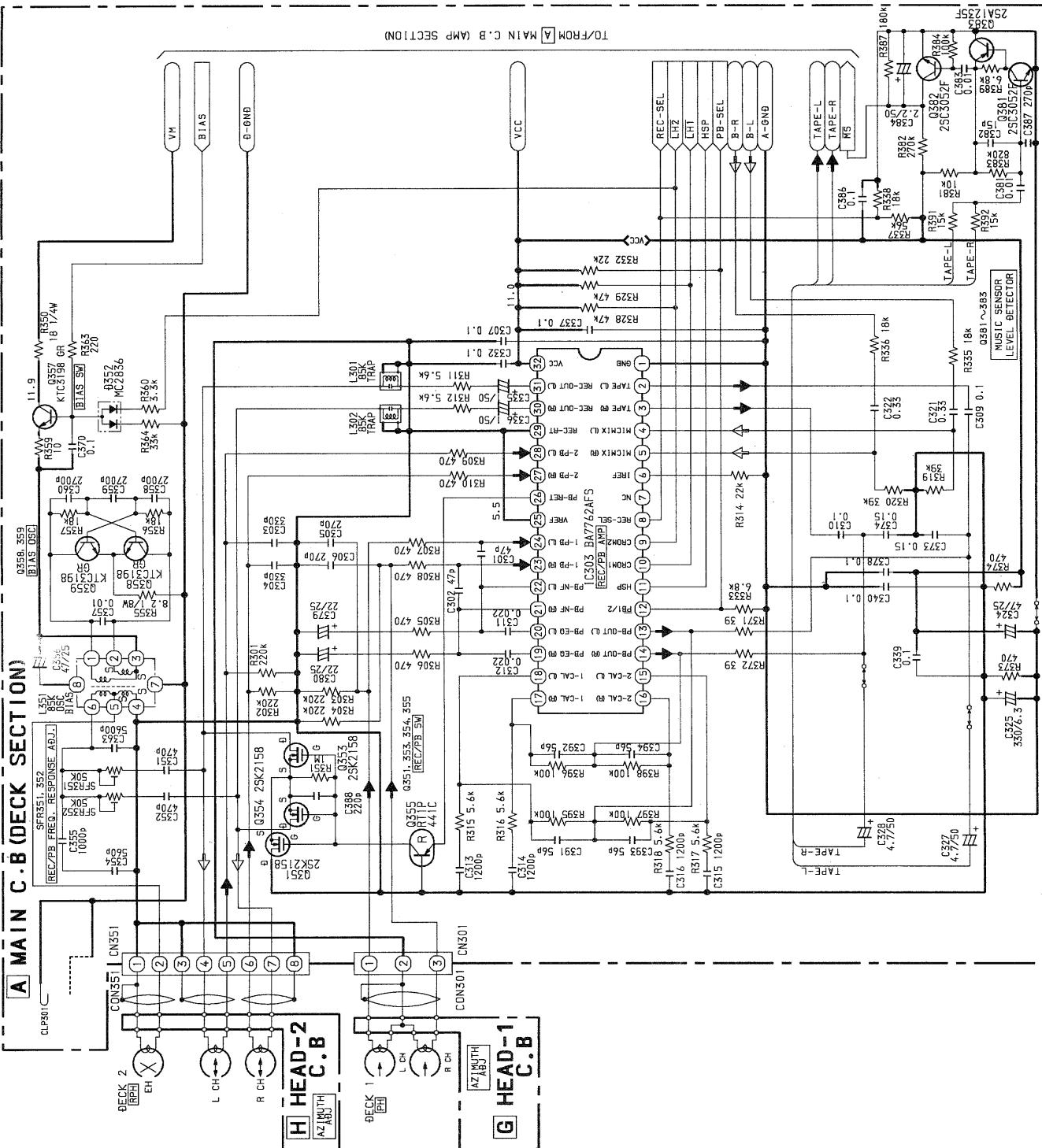
WIRING – 5 (DECK)

1 2 3 4 5 6 7

A
B
C
D
E
F
G
H
I
J



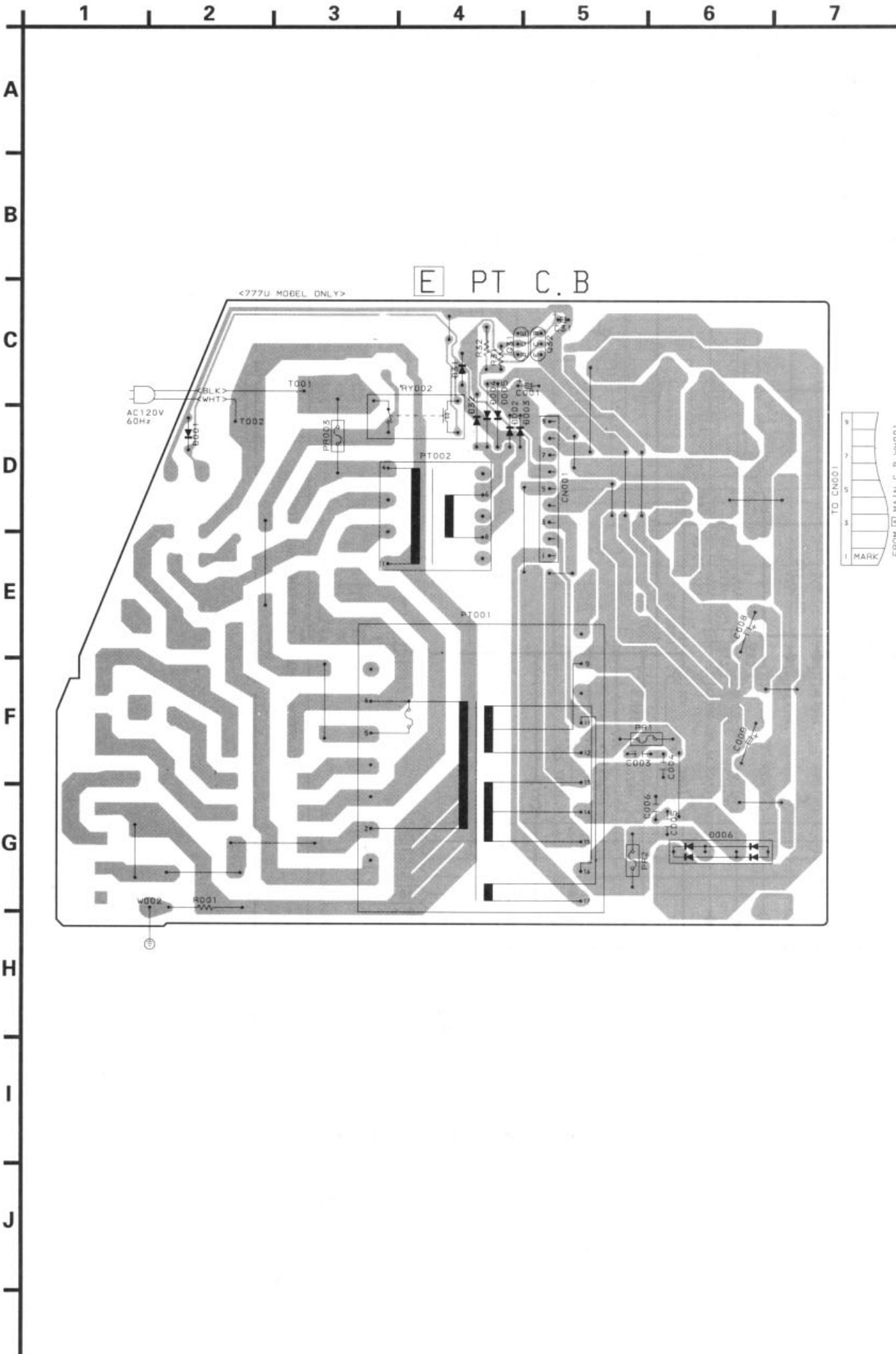
MAIN C. B. (DECK SECTION)



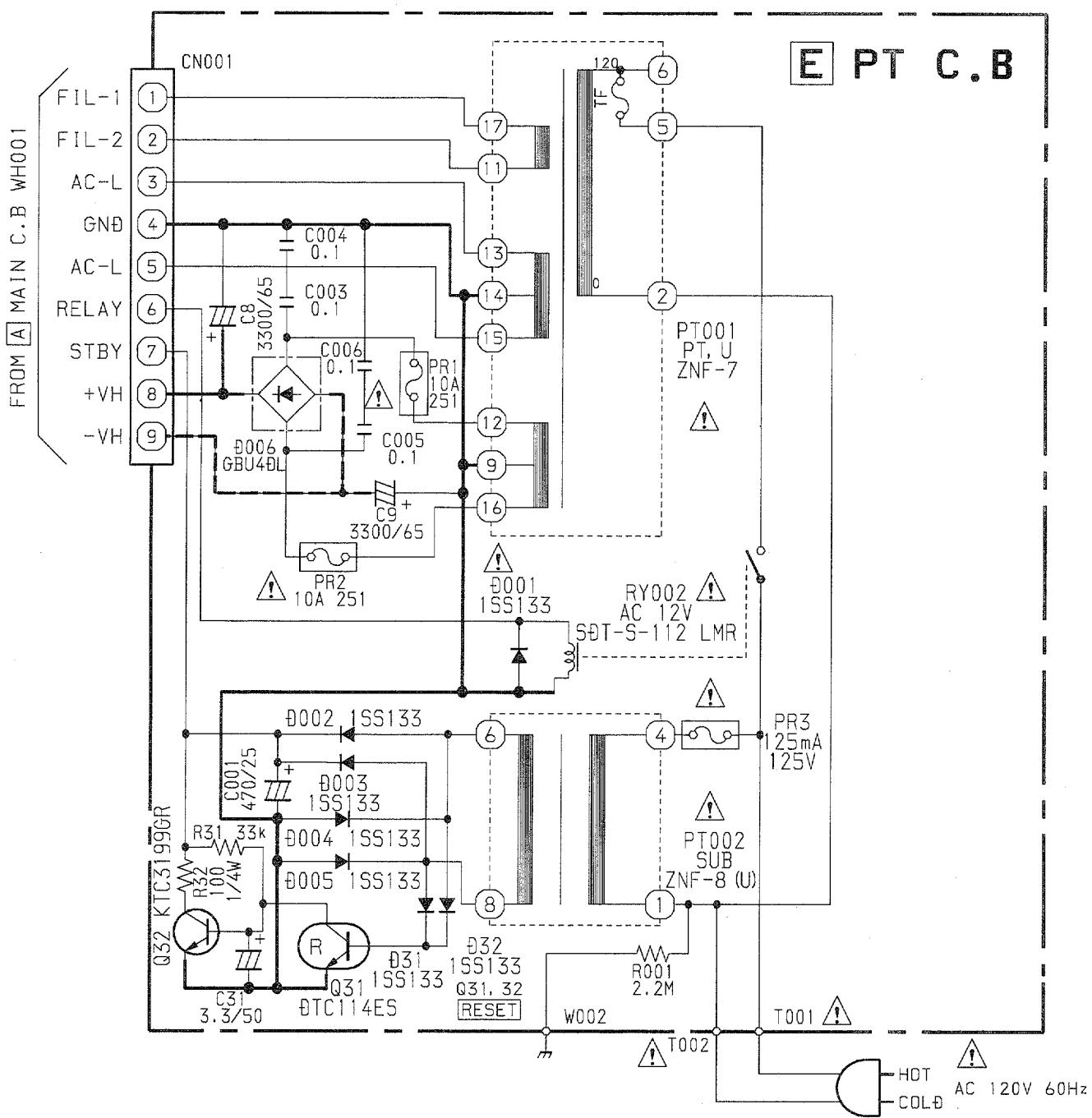
TO/FROM A MAIN C.B. (AMP SECTION)

REC

WIRING – 6 (PT : 777U)



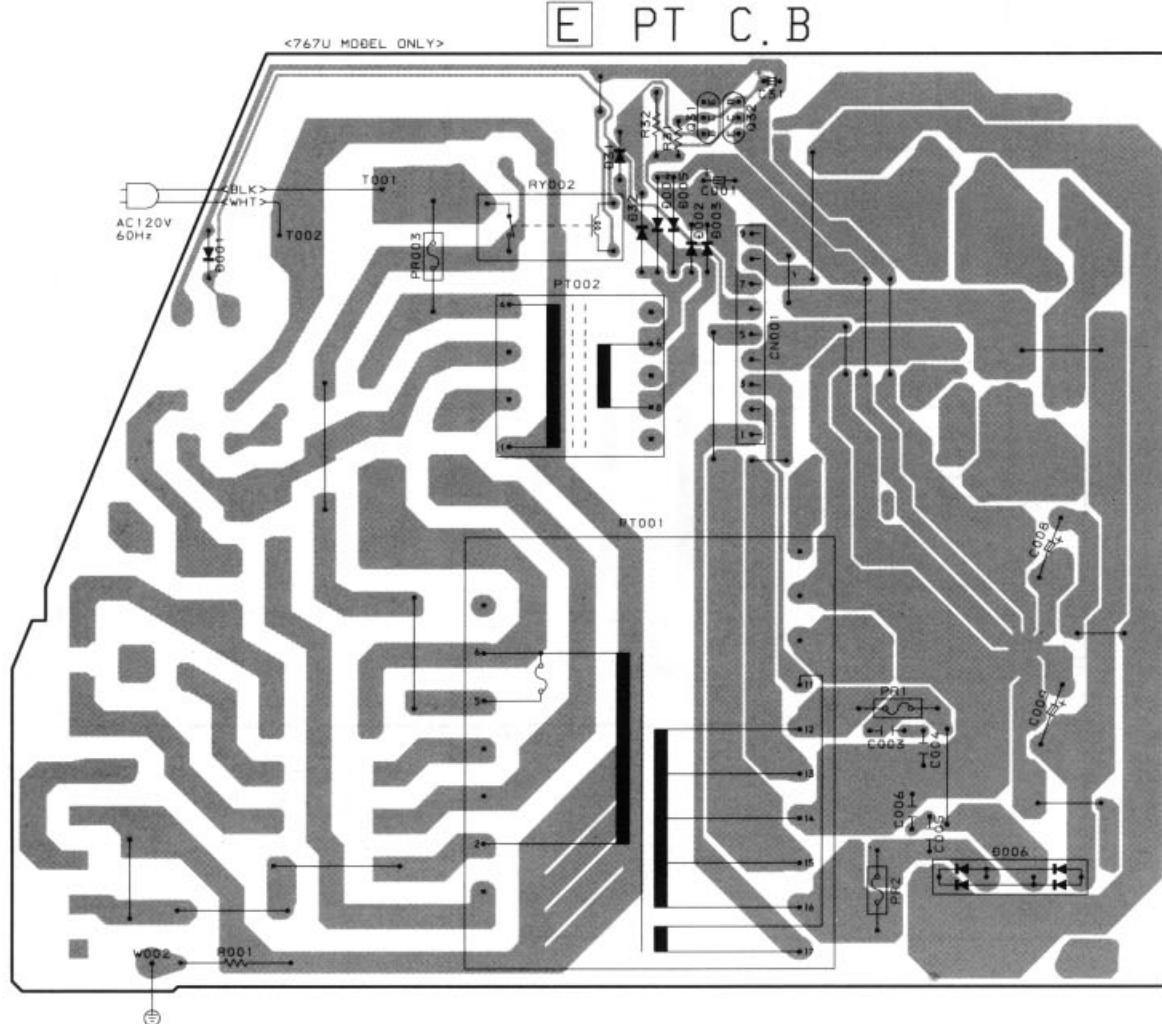
SCHEMATIC DIAGRAM – 7 (PT : 777U)



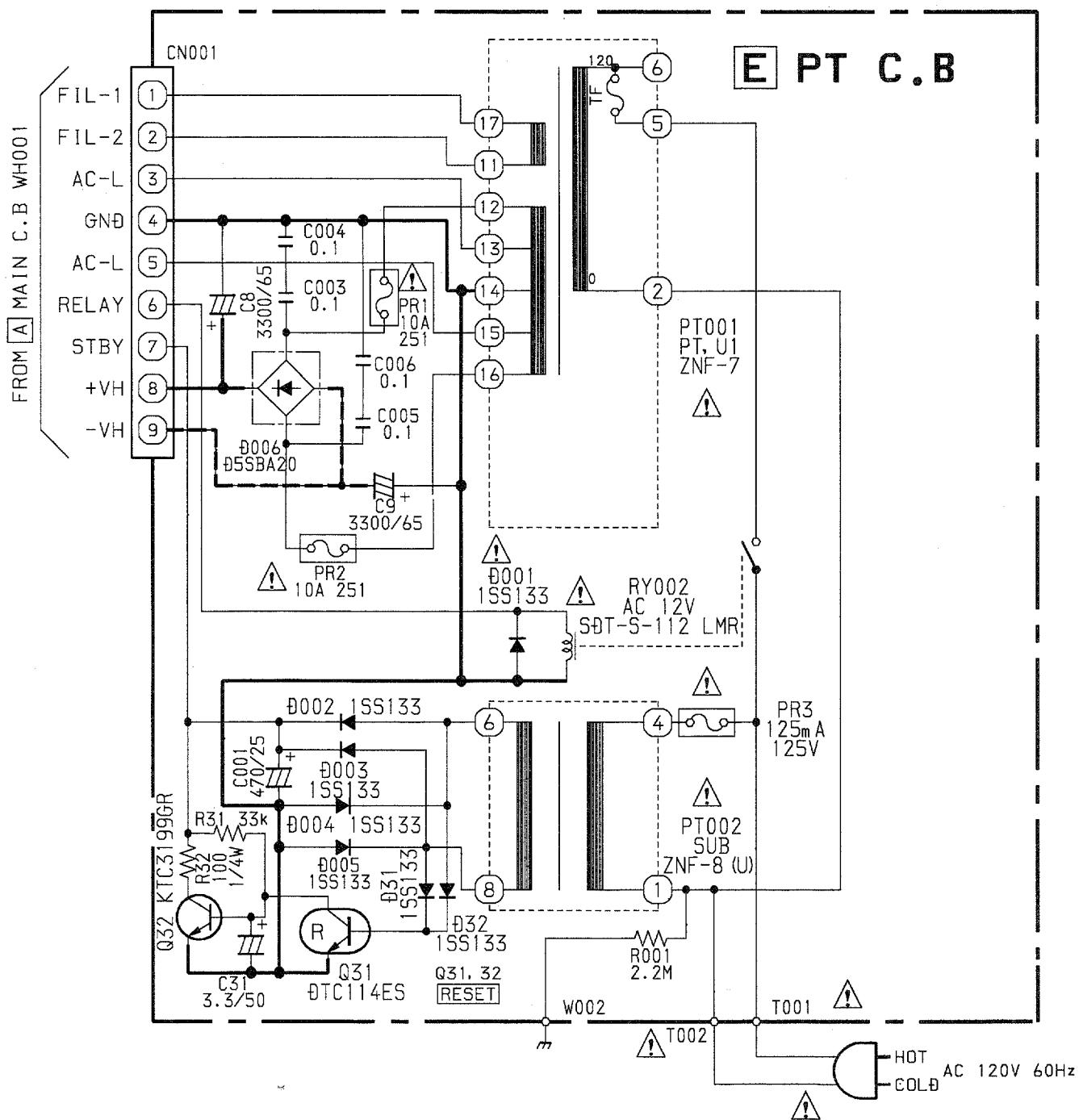
WIRING – 7 (PT : 767U)

1 2 3 4 5 6 7

A
B
C
D
E
F
G
H
I
J

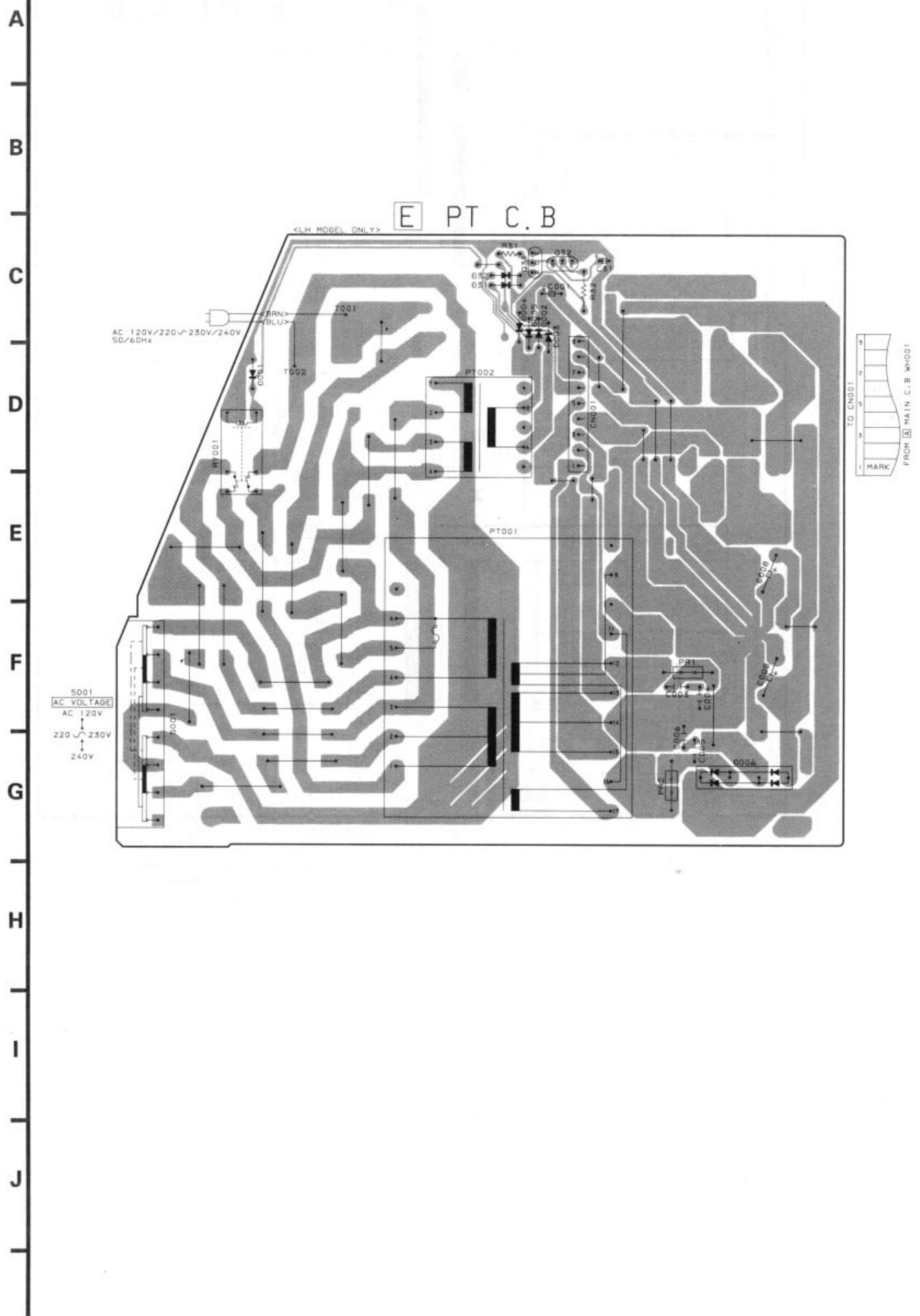


SCHEMATIC DIAGRAM – 8 (PT : 767U)

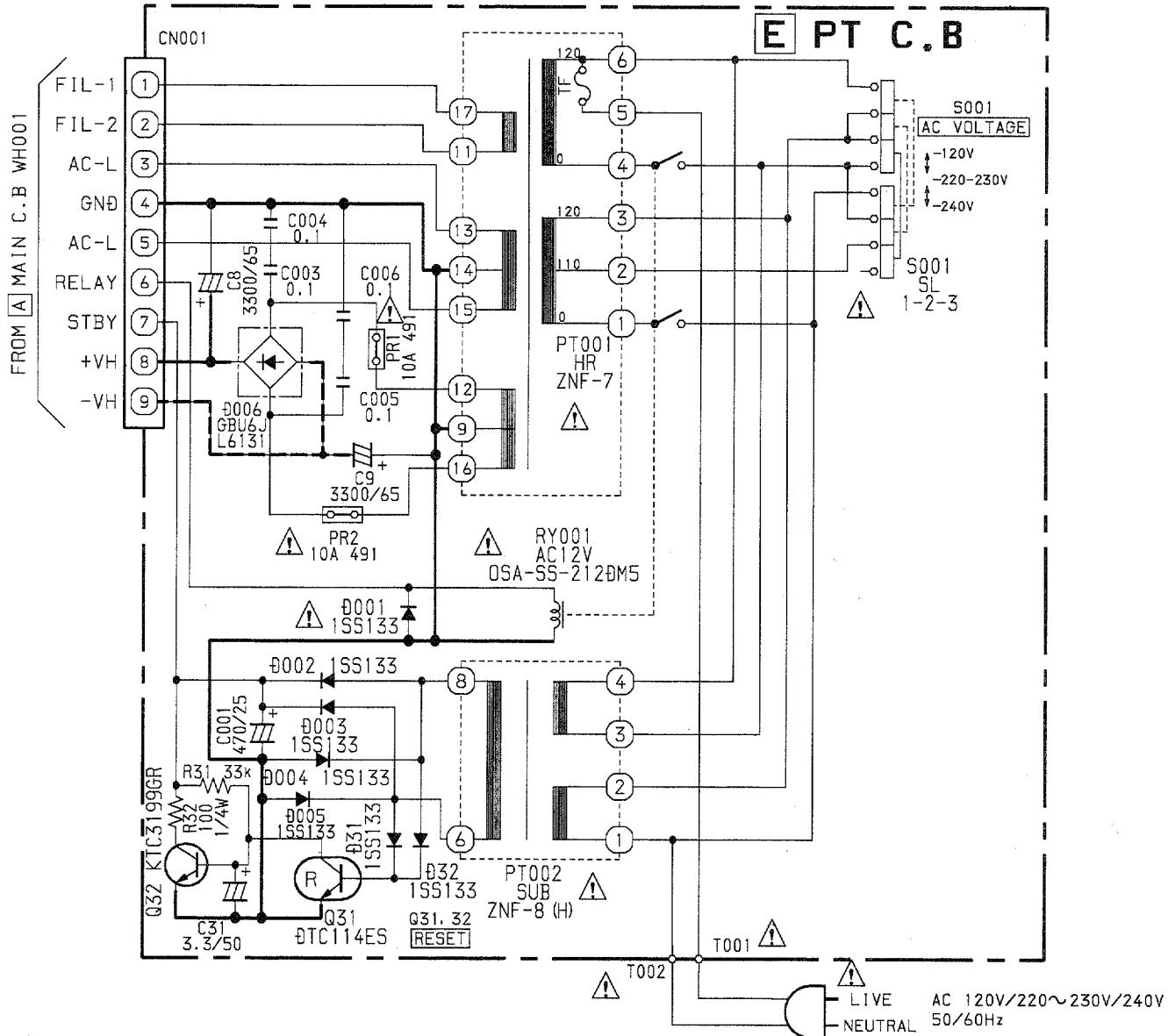


WIRING – 8 (PT : LH)

1 **2** **3** **4** **5** **6** **7**



SCHEMATIC DIAGRAM – 9 (PT : LH)



IC DESCRIPTION

IC, LC876572V-5K54

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 (M)	O	Data latch strobe output for MAIN PWB.
4	O-LED	O	LED ON/OFF output.
5	STB (SHIFT)	O	Latch strobe output for FRONT shift register.
6	RYM-CS	O	Latch strobe output for RHYTHM IC.
7	PLL-CE	O	PLL IC chip enable output.
8	GEQ-CE	O	GEQ IC chip enable output. (Not connected)
9	O-CLK SHIFT	O	TUNER CLOCK SHIFT output.
10	I-TM-BASE	I	REFERENCE CLOCK input for timer watch.
11	RESET	I	Reset input.
12	I-DISH	I	CD turntable photo sensor A/D converter input.
13	I-HP-MUTE	I	Headphone input for MUTE by PROLOGIC.
14	VSS 1	-	GND.
15	CF 1	-	9.43MHz oscillator circuit.
16	CF 2	-	
17	VDD 1	-	Power supply input.
18	I-HOLD	I	Power failure detection input.
19	I-KEY-1	I	KEY input.(A/D)
20	I-KEY-2	I	
21	I-KEY-3	I	
22	I-CD SW	I	CD mechanical switch A/D converter input.
23	I-RTVR	I	Rotary volume A/D level input.
24	I-JOG	I	JOG dial A/D level input.
25	I-MIC	I	Microphone input for AUTO VF.
26	I-TU-SIG / MS	I	Tuner signal and deck music sensor signal input.
27	I-SPEANA	I	A/D input for spectrum analyzer display.
28	I-WRQ / RDS-CLK	I	CD WRQ input / Tuner RDS clock input (Not used).
29	I-RMC	I	System remote control signal input.
30 ~ 42	G13 ~ G1	O	FL GRID output G13 ~ G1.
43 ~ 45	P36 ~ P34	O	FL SEGMENT output P36 ~ P34.
46	VDD3	-	Power supply input.
47	SPEANA-A / P33	O	Spectrum analyzer band switching output A / FL segment P33 output.
48	SPEANA-B / P32	O	Spectrum analyzer band switching output B / FL segment P32 output.
49	SPEANA-C / P31	O	Spectrum analyzer band switching output C / FL segment P31 output.
50	RHYM / P30	I/O	RHYTHM input to diode / FL segment P30 output.
51	-VP	-	Power supply input for FL display.
52	P29 / AM-ST	O	FL segment P29 output / AM-ST input to diode (Not connected).
53	P28 / LW	O	FL segment P28 output / LW input to diode (Not connected).
54	P27 / SW	O	FL segment P27 output / SW input to diode (Not connected).

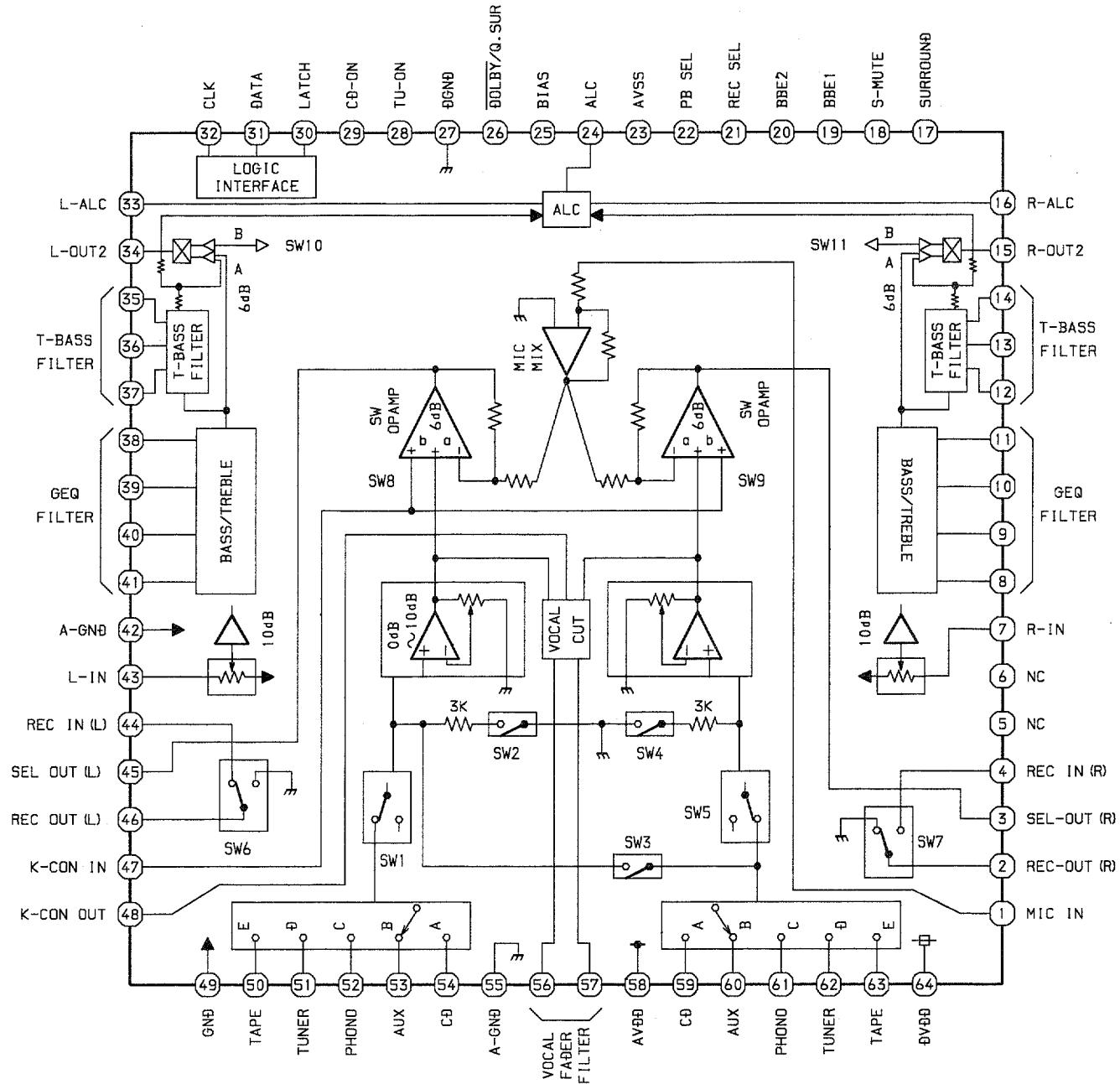
Pin No.	Pin Name	I/O	Description
55	P26 / FM1	O	FL segment P26 output / FM1 (OIRT) input to diode (Not connected).
56	P25 / RDS	O	FL segment P25 output / RDS input to diode (Not connected).
57	P24 / R+1	O	FL segment P24 output / RVS+1 way input to diode (Not connected).
58	P23 / <u>DSP</u>	I/O	FL segment P23 output / <u>DSP</u> input to diode.
59	P22 / PRO / 5.1	O	FL segment P22 output / PRO/5.1 input to diode (Not connected).
60	P21 / K-CON	O	FL segment P21 output / K-CON input to diode (Not connected).
61	P20 / DOLBY	O	FL segment P20 output / DOLBY input to diode (Not connected).
62	P19 / PRO	O	FL segment P19 output / PRO input to diode (Not connected).
63	P18 / AM10K	I/O	FL segment P18 output / AM 10KHz input to diode.
64	P17 / <u>CTS2</u>	I/O	FL segment P17 output / DECK2 cassette detect switch data input.
65	P16 / <u>REB</u>	I/O	FL segment P16 output / DECK2 sideB record OK switch data input.
66	P15 / <u>CAM2</u>	I/O	FL segment P15 output / DECK2 CAM switch data input.
67	P14 / AUTO1	I/O	FL segment P14 output / DECK1 AUTO stop signal input.
68	P13 / AUTO2	I/O	FL segment P13 output / DECK2 AUTO stop signal input.
69	P12 / <u>CAM1</u>	I/O	FL segment P12 output / DECK1 CAM switch data input.
70	P11 / <u>CTS1</u>	I/O	FL segment P11 output / DECK1 cassette detect switch data input.
71	P10 / <u>REA</u>	I/O	FL segment P10 output / DECK2 sideA record OK switch data input.
72	VDD4	-	Power supply input.
73	P9 / 7-GEQ	I/O	FL segment P9 output / 7-GEQ input to diode.
74	P8 / <u>AC-DEMO</u>	I/O	FL segment P8 output / AC-DEMO input to diode.
75 ~ 81	P7 ~ P1	O	FL segment P7 ~ P1 output.
82	O-KEYSCAN	O	Switch SCAN timing output.
83	TRAYCLOSE	O	CD tray close data output.
84	TRAYOPEN	O	CD tray open data output.
85	DISH-FWD	O	CD turntable forward rotation output.
86	DISH-REV	O	CD turntable reverse rotation output.
87	O-DATA	O	CD data output.
88	O-CDCLK	O	CD clock output.
89	VSS2	-	GND.
90	VDD2	-	Power supply input.
91	O-MOTOR	O	Deck motor <u>ON</u> / OFF output.
92	O-MUTE	O	System mute ON / <u>OFF</u> output.
93	<u>SOL1</u>	O	Deck1 solenoid output.
94	<u>SOL2</u>	O	Deck2 solenoid output.
95	O-POWER	O	System power supply ON / <u>OFF</u> output.
96	I-IFC	I	Tune IF count serial data input.
97	I-STEREO / I-DRF	I	Tuner stereo detected input / DRF input.
98	I-RDS-DATA	I	RDS data input (Not used).
99	I-SUBQ	I	CD SUBQ data input.
100	O-CDCE	O	CD chip enable output.

IC, LC72131D

Pin No.	Pin Name	I/O	Description																														
1	XIN	I/O	A crystal oscillator (7.2MHz) is connected between these pins.																														
22	XOUT																																
2	NC	-	Not used.																														
3	CE	I	To enable the IC. Active "H".																														
4	DI	I	Digital data input from CPU when relevant key is operated. Active "H".																														
5	CL	I	To clock in the data DI.																														
6	DO	O	Digital data output to CPU.																														
7	T-BASE	O	Outputs a reference clock signal (8Hz) for the clock.																														
8	MONO / BEAT	O	Outputs "H" when BEAT is switched.																														
9	<u>FM / SW</u>	O	Outputs "L" or "H" as follows:																														
			<table border="1"> <thead> <tr> <th colspan="2">2 BAND</th> <th colspan="3">3 BAND</th> <th colspan="3">3 BAND</th> </tr> <tr> <th>AM</th> <th>FM</th> <th>LW</th> <th>MW</th> <th>FM</th> <th>MW</th> <th>SW</th> <th>FM</th> </tr> </thead> <tbody> <tr> <td>H</td> <td>L</td> <td>H</td> <td>H</td> <td>L</td> <td>H</td> <td>L</td> <td>L</td> </tr> </tbody> </table>							2 BAND		3 BAND			3 BAND			AM	FM	LW	MW	FM	MW	SW	FM	H	L	H	H	L	H	L	L
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2 BAND		3 BAND			3 BAND																												
AM	FM	LW	MW	FM	MW	SW	FM																										
L	L	H	L	L	L	H	L																										
11	IF-MUTE	O	To control internal counter.																														
12	IFIN	I	General purpose counter input.																														
13	<u>TUNE</u>	I	Receives "L" when station is tuned.																														
14	NC	-	Not used.																														
15	AM IN	I	Receives the AM local oscillator frequency signal.																														
16	FM IN	I	Receives the FM local oscillator frequency signal.																														
17	VDD	-	Supply power to IC (+5V).																														
18	PD	O	PLL charge pump output.																														
19	AIN	I	The MOS transistor for PLL active low pass filter.																														
20	AOUT	O																															
21	VSS	-	Ground.																														

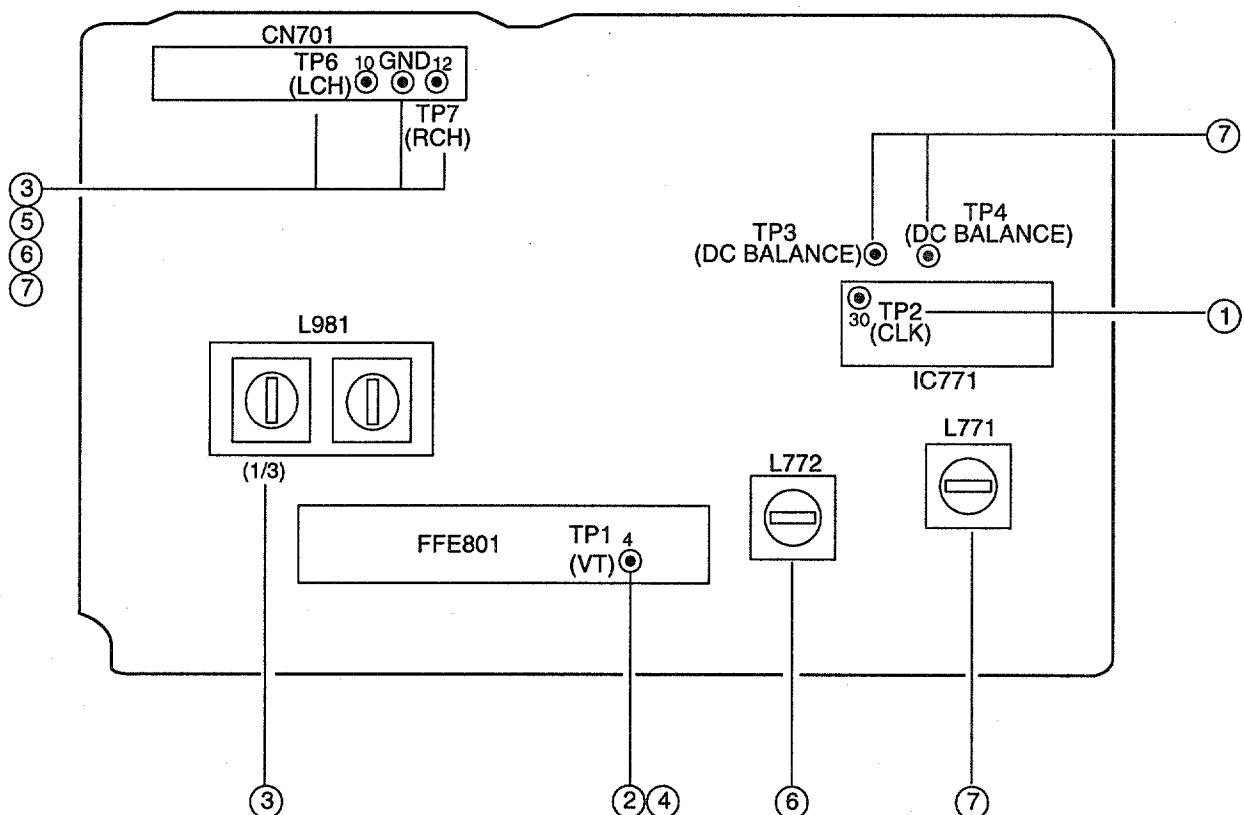
IC BLOCK DIAGRAM – 3

IC, M62445FP-600D



ADJUSTMENT < TUNER / DECK / FRONT >

C TUNER C.B



< TUNER SECTION >

1. Clock Frequency Check

Settings : • Test point : TP2

Method : Set to AM 1710kHz and check that the test point is $2160\text{kHz} \pm 45\text{Hz}$.

2. AM 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. AM Tracking Adjustment

Settings : • Test point : TP6(Lch), TP7(Rch)

• Adjustment location :

L981(1/3) 1000kHz

Method : Set to AM 1000kHz and adjust L981(1/3) so that the test point is max.

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 : TP6(Lch), TP7(Rch)

Method : Set to FM 98.0MHz and check that the test point is less than $9.0\text{dB}\mu\text{V}$.

6. AM IF Adjustment

Settings : • Test point : TP6(Lch), TP7(Rch)

• Adjustment location :

L772 450kHz

7. DC Balance / Mono Distortion Adjustment

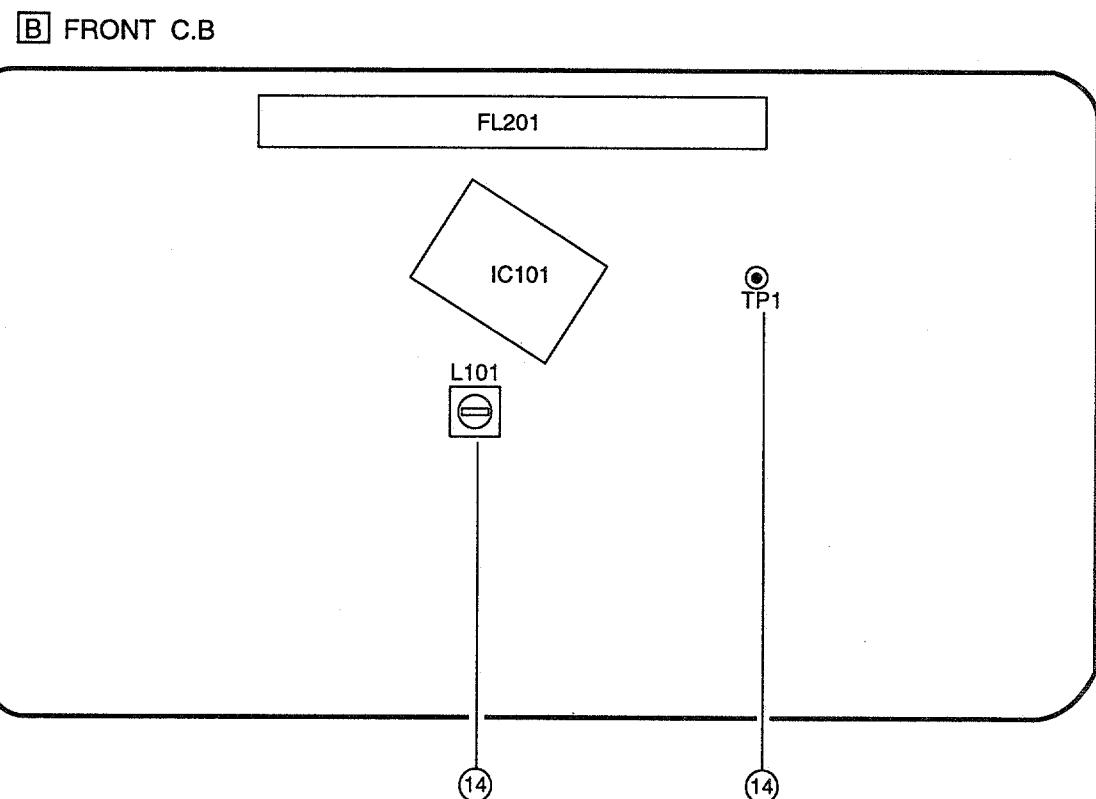
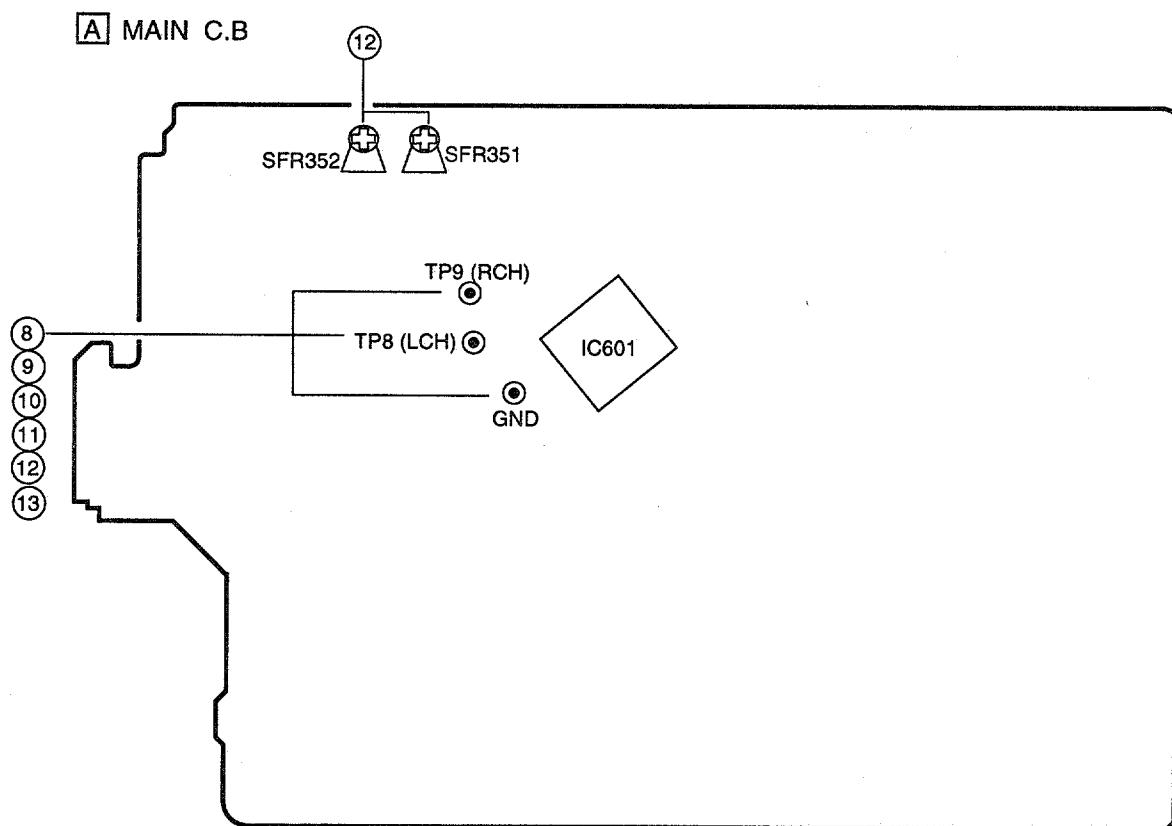
Settings : • Test point : TP3, TP4 (DC Balance)

TP6(Lch), TP7(Rch) (Distortion)

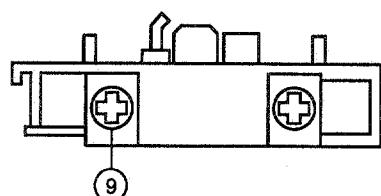
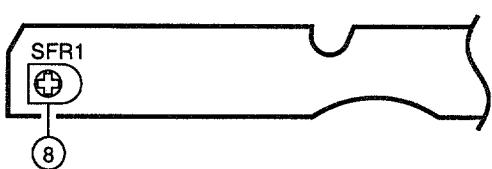
• Adjustment location : L771

• Input level : $60\text{dB}\mu\text{V}$

Method : Set to FM 98.0MHz and adjust L771 so that the voltage between TP3 and TP4 becomes $0\text{V} \pm 0.04\text{V}$. Next, check that the distortion is less than 1.3%.



C DECK C.B **DECK-1 P,DECK-2 R/P/E HEAD**



< DECK SECTION >

8. Tape Speed Adjustment (DECK 1, DECK 2)

Settings : • Test tape : TTA-100

- Test point : TP8(Lch), TP9(Rch)
- Adjustment location : SFR1

Method : Play back the test tape and adjust SFR1 so that the frequency counter reads $3000\text{Hz} \pm 5\text{Hz}$ and $\pm 45\text{Hz}$ (REV) with respect to forward speed.

9. Head Azimuth Adjustment (DECK 1, DECK 2)

Settings : • Test tape : TTA-300

- Test point : TP8(Lch), TP9(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.

10. PB Frequency Response Check (DECK 1, DECK 2)

Settings : • Test tape : TTA-300

- Test point : TP8(Lch), TP9(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 3dB.

11. PB Sensitivity Check (DECK 1, DECK 2)

Settings : • Test tape : TTA-200

- Test point : TP8(Lch), TP9(Rch)

Method : Play back the test tape and check that the output level of the test point is $400\text{mV} \pm 3\text{dB}$.

12. REC/PB Frequency Response Adjustment

Settings : • Test tape : TTA-602

- Test point : TP8(Lch), TP9(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 TP8, TP9 becomes 0dB(28mV). Record and play back the 1kHz and 10kHz signals and adjust SFRs so that the output of the 10kHz signals becomes 0dB $\pm 0.5\text{dB}$ with respect to that of the 1kHz signal.

13. REC/PB Sensitivity Check

Settings : • Test tape : TTA-602

- Test point : TP8(Lch), TP9(Rch)
- Input signal : 1kHz (LINE IN)

Method : Apply a 1kHz signal and REC mode. Then adjust OSC attenuator so that the output level at TP8, TP9 becomes 0dB (280mV). Record and play back the 1kHz signals and check that the output is $280\text{mV} \pm 3.0\text{dB}$.

< FRONT SECTION >

14. μ -CON OSC Adjustment

Settings : • Test point : TP1

- Adjustment location : L101

Method : Insert AC plug with pressing TUNER function key. Adjust L101 so that the frequency across the test point is $209.5\text{Hz} \pm 0.5\text{Hz}$.

PRACTICAL SERVICE FIGURE

<TUNER SECTION>

<FM SECTION>

IHF Sensitivity : Less than 10 / 9 / 9dB μ V
 (THD 3%) [at 87.5 / 98.0 / 108.0MHz]

S/N 50dB Quieting sensitivity : Less than 35dB μ V
 [at 98.0MHz]

Signal to noise ratio : Mono : More than 68dB
 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 μ V ± 10dB
 [at 98.0MHz]

Stereo separation : More than 22dB
 [at 98.0MHz]

Intermediate frequency : 10.7MHz

<AM SECTION>

Sensitivity : Less than 62dB μ V
 [at 600kHz]
 Less than 58dB μ V
 [at 1000 / 1400kHz]

Signal to noise ratio : More than 36dB
 [at 1000kHz]

Distortion : Less than 1.5%
 [at 1000kHz]

Auto stop level : 52dB μ V +10/-15dB
 [at 1000kHz]

Intermediate frequency : 450kHz

<DECK SECTION>

Tape speed : 3000Hz ± 45Hz
 Wow & flutter : Less than 0.25%
 (W.R.M.S)

Take-up torque : 30 ~ 55g-cm
 (FWD, REV)

F.F & REW torque : 75 ~ 180g-cm
 Back tension : 2 ~ 7g-cm
 (FWD, REV)

PB output level : 200mV ± 3dB
 REC/PB output level : -1.0dB ± 3.0dB
 (OVU, NORM, CrO2)

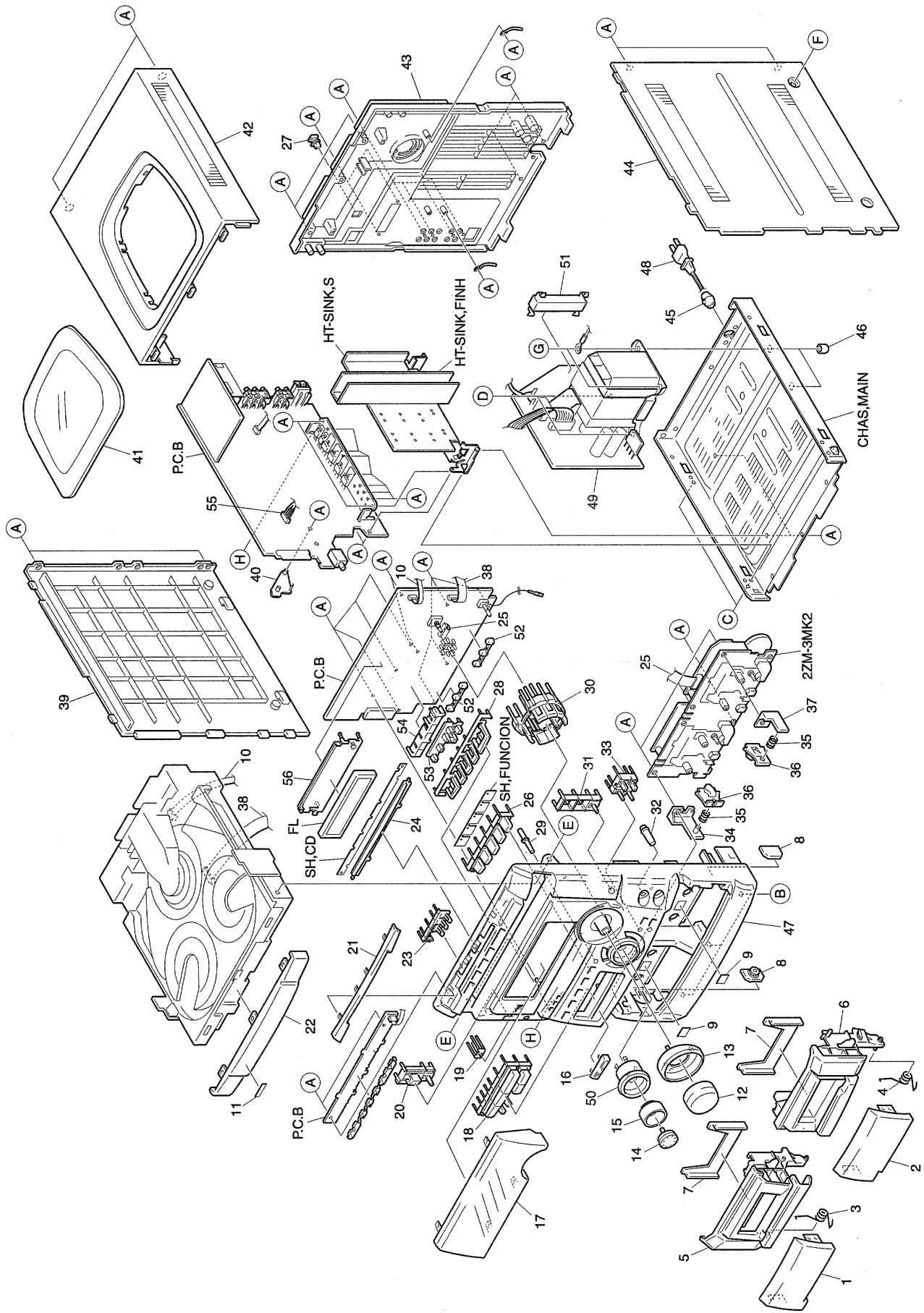
Distortion (REC/PB) : Less than 2.0%
 (OVU, NORM, CrO2)

Noise level (PB) : Less than 1.5mV
 (NORM, FILTER DIN AUDIO)

Noise level (REC/PB) : Less than 1.0mV
 (NORM, FILTER DIN AUDIO)

Erasing ratio : More than 60dB
 (at 125Hz, +10VU, CrO2)

Test tape : TTA-602 (NORMAL)
 TTA-615 (CrO2)



MECHANICAL PARTS LIST 1 / 1

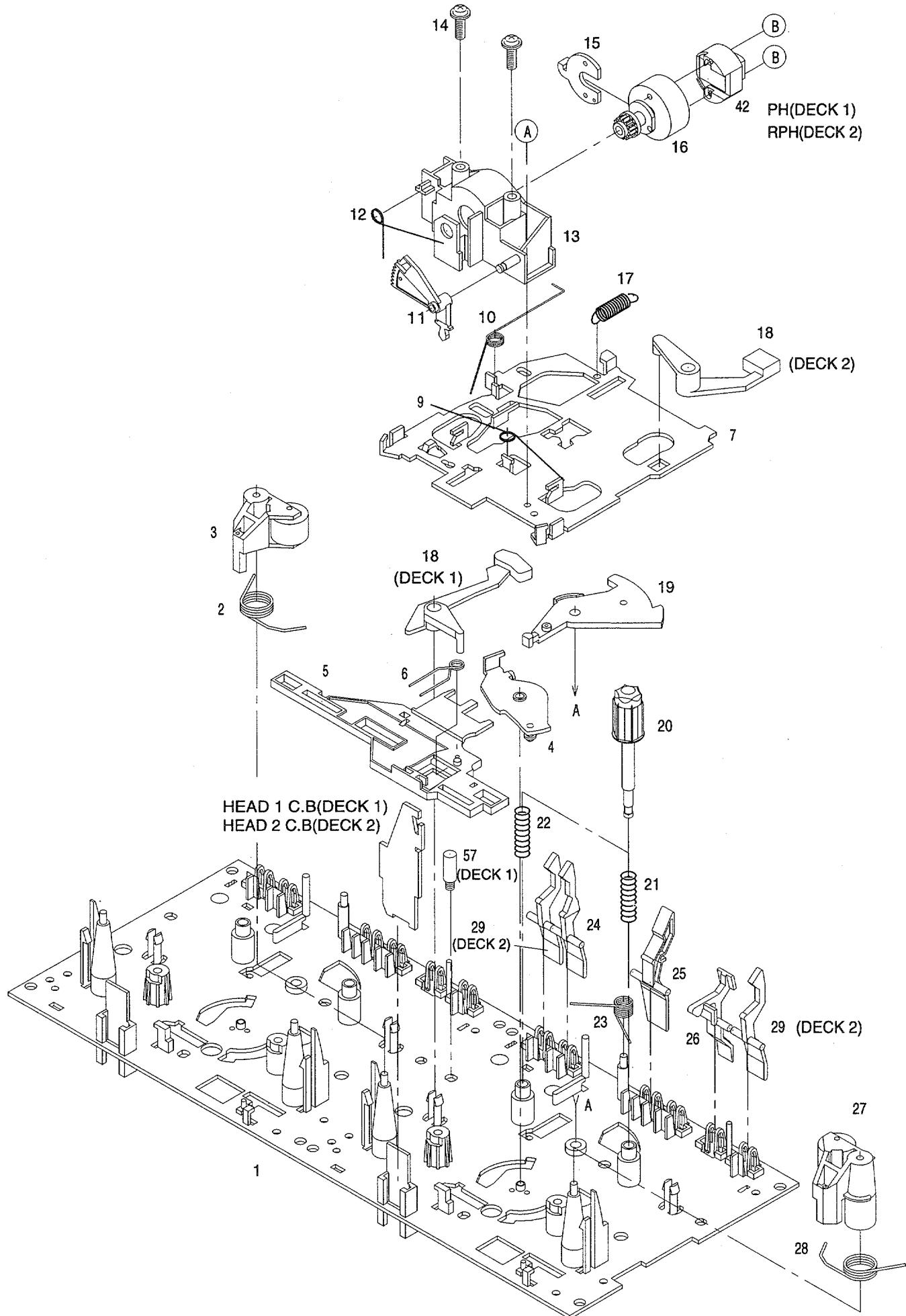
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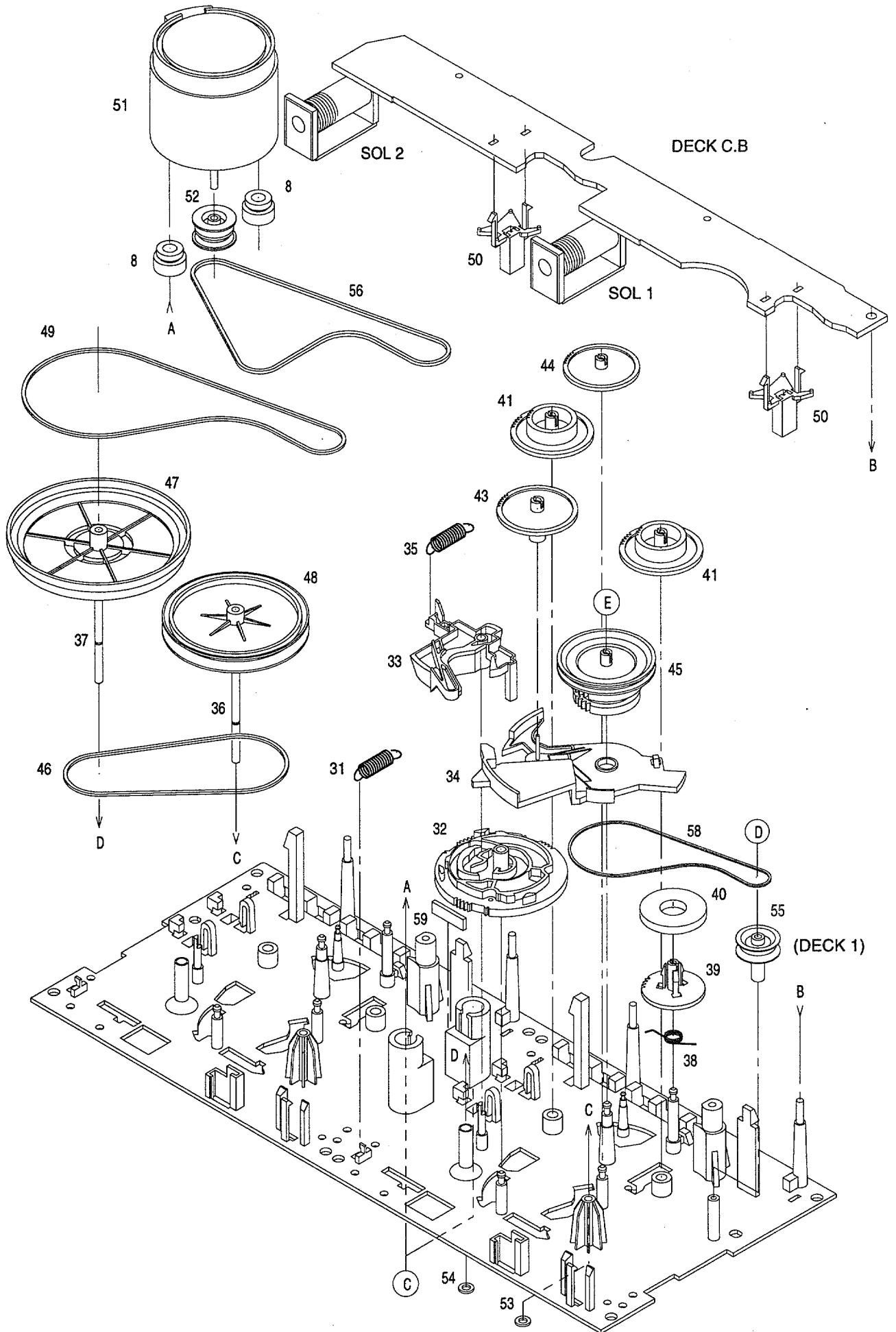
REF. NO.	PART NO.	KANRI NO.	DESCRIPTION	REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	8Z-NF7-009-010		WINDOW,CASS 1	39	8Z-NB8-011-110		PANEL, LEFT V-2
2	8Z-NF7-010-010		WINDOW,CASS 2	40	8Z-NB8-215-010		HLDR,PWB M
3	82-NF5-218-010		SPR-T,EJECT 1 (SIN)	41	86-NF6-007-010		WINDOW, TOP<777LH>
4	82-NF5-219-010		SPR-T,EJECT 2 (SIN)	41	86-NF6-101-110		WINDOW, TOP UL<777U, 767U>
5	8Z-NF7-003-010		BOX,CASS 1	42	8Z-NB8-013-010		PANEL, TOP V-2
6	8Z-NF7-004-010		BOX,CASS 2	43	8Z-NF7-062-010		CABI, REAR LHSTM<777LH>
7	86-NF6-061-010		REFLECTOR,CASS	43	8Z-NF7-066-010		CABI, REAR U2STM<767U>
8	87-NF8-220-010		DMPR, 150	43	8Z-NF7-002-010		CABI, REAR USTNM<777U>
9	81-532-080-010		LABEL, CASS. COMPT	44	8Z-NF9-043-010		PANEL, RIGHT S V-2
10	85-NF5-617-010		CABLE, FFC 6P-1.25	45	87-085-185-010		BUSHING, AC CORD (E)<777LH>
11	82-NE6-067-010		BADGE, AIWA 30N	45	87-085-189-010		BUSHING, CORD (U)<777U, 767U>
12	8Z-NF7-011-010		KNOB,RTRY VOL	46	8Z-NB8-240-010		COVER, PL
13	8Z-NF7-014-010		RING,VOL	47	8Z-NF7-042-010		CABI, FR LH<777LH>
14	8Z-NF7-012-010		KNOB,RTRY JOG	47	8Z-NF7-001-010		CABI, FR U<777U>
15	8Z-NF7-016-010		REFLECTOR, JOG	47	8Z-NF7-045-010		CABI, FR U2<767U>
16	8Z-NF7-026-010		PANEL, PLAY	▲ 48	87-A80-110-010		AC CORD ASSY, U SPT-2W<777U, 767U>
17	8Z-NF7-051-010		WINDOW, DISPLAY H<777LH>	▲ 48	87-050-079-010		AC-CORD ASSY, E<777LH>
17	8Z-NF7-008-010		WINDOW, DISPLAY U<777U>	49	8Z-NF7-203-010		GUIDE, CD
17	8Z-NF7-054-010		WINDOW, DISPLAY U2<767U>	50	8Z-NF7-015-010		RING, JOG
18	8Z-NF7-023-010		KEY, ASSY PLAY	▲ 51	87-A90-165-010		SW, SL 1-2-3 SWS2301<777LH>
19	8Z-NF7-036-010		REFLECTOR, ECO	52	87-NF6-205-010		GUIDE, LED
20	8Z-NF7-018-010		KEY, POWER	53	8Z-NF7-202-010		GUIDE, PLAY
21	8Z-NF7-006-010		PANEL, CD	54	8Z-NF7-201-010		GUIDE, FUNCTION
22	8Z-NF7-005-010		PANEL, TRAY	55	87-NF6-616-010		CONN ASSY, 8P RPB
23	8Z-NF7-021-010		KEY, KARAOKE U	56	87-NF5-203-010		GUIDE, FL
24	8Z-NF7-007-010		REFLECTOR, CD	A	87-067-703-010		TAPPING SCREW, BVT2+3-10
25	88-915-121-110		FF-CABLE, 15P 1.25	B	87-067-688-010		BVTT+3-6
26	8Z-NF7-022-010		KEY, FUNCTION	C	87-721-096-410		QT2+3-10 GLD
27	84-ZG1-245-210		CAP, OPTICAL	D	87-078-191-010		S-SCREW, IT+4-10
28	8Z-NF7-019-010		KEY, CD	E	87-721-097-410		QT2+3-12 GLD
29	8Z-NF7-027-010		KEY, NSP	F	87-067-641-010		UTT2+3-8(W/O SLOT)BL
30	8Z-NF7-028-010		KEY, JOG U	H	87-723-096-410		QT2+3-10W/O SLOT BL
31	8Z-NF7-020-010		KEY, DEMO U				
32	8Z-NF7-013-010		KNOB,RTRY MIC				
33	8Z-NF7-029-010		KEY, PAD				
34	87-NF4-216-010		HLDL,LOCK 1				
35	86-NF9-224-010		SPR-C,LOCK				
36	82-NF5-229-010		PLATE,LOCK				
37	87-NF4-217-010		HLDL,LOCK 2				
38	85-NF5-618-010		CABLE, FFC 13P-1.25				

COLOR NAME TABLE

Basic color symbol	Color	Basic color symbol	Color	Basic color symbol	Color
B	Black	C	Cream	D	Orange
G	Green	H	Gray	L	Blue
LT	Transparent Blue	N	Gold	P	Pink
R	Red	S	Silver	ST	Titan Silver
T	Brown	V	Violet	W	White
WT	Transparent White	Y	Yellow	YT	Transparent Yellow
LM	Metallic Blue	LL	Light Blue	GT	Transparent Green
LD	Dark Blue	DT	Transparent Orange		

TAPE MECHANISM EXPLODED VIEW 1 / 1



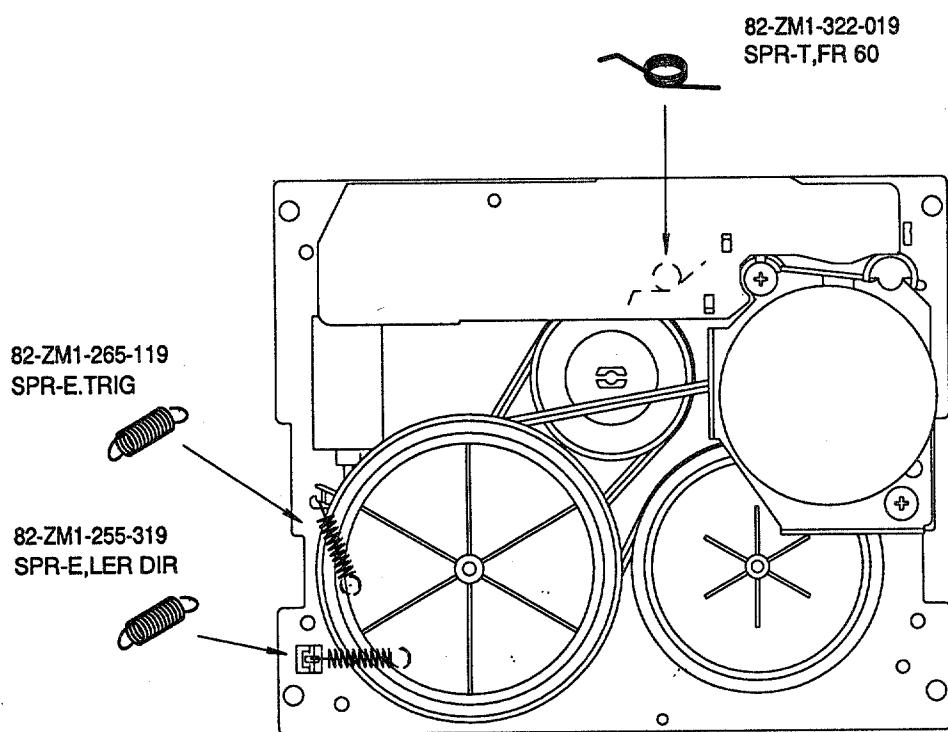
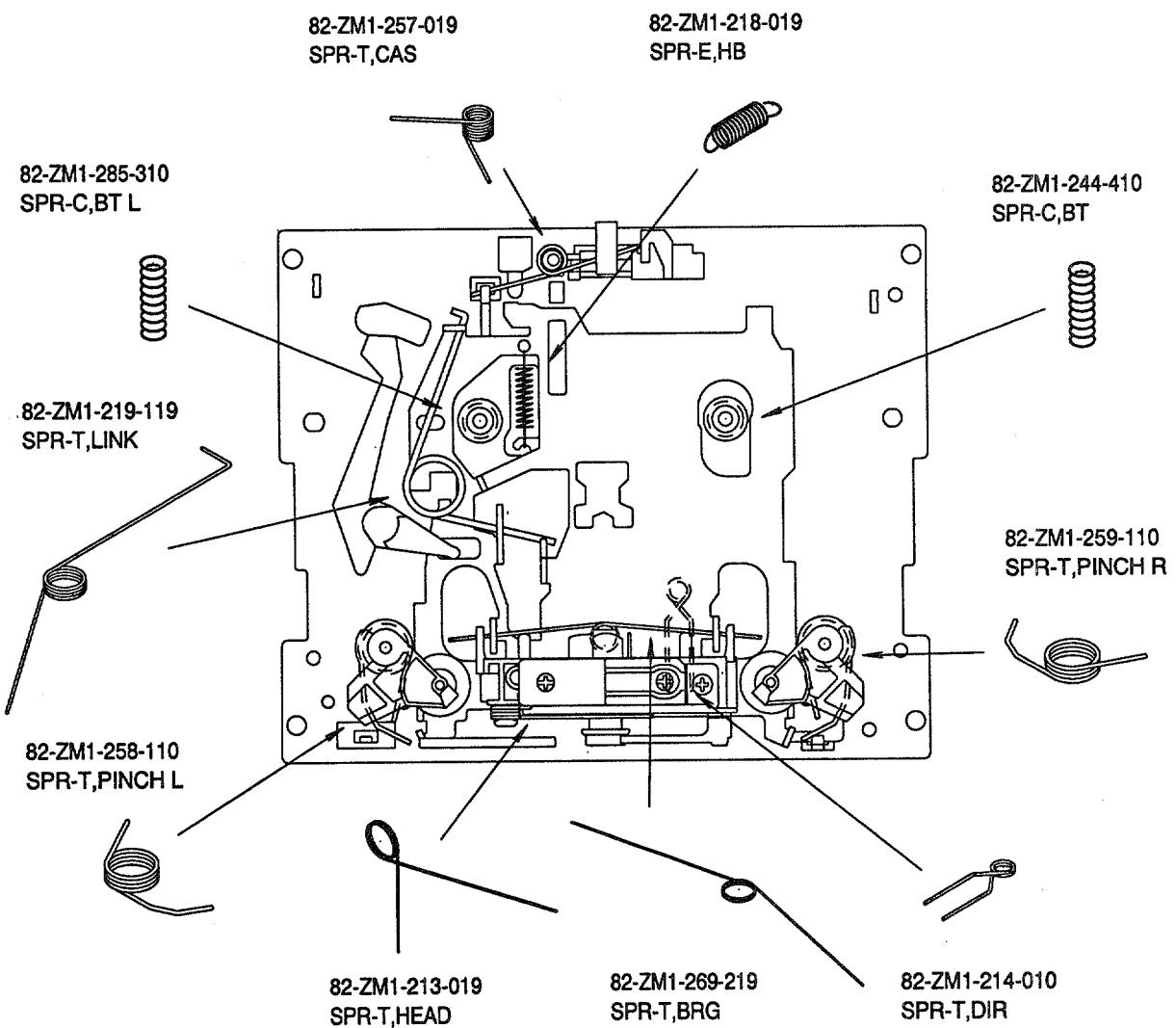


TAPE MECHANISM PARTS LIST 1 / 1

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

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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				

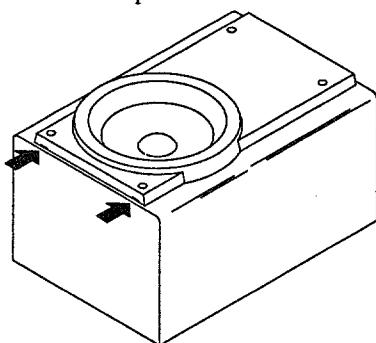
SPRING APPLICATION POSITION



SPEAKER DISASSEMBLY INSTRUCTIONS

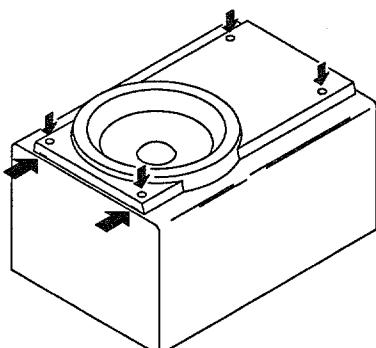
Type.1

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.



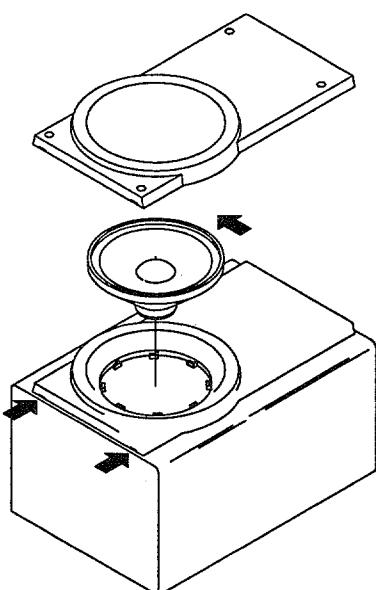
Type.2

Remove the grill frame and four pieces of 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.

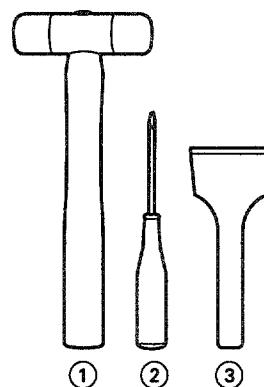


Type.3

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.



Type.4



TOOLS

- ① Plastic head hammer
- ② (⊖) flat head screwdriver
- ③ Cut chisel

How to Remove the PANEL, FR

1. Insert the (⊖) flat head screwdriver tip into the gap between the PANEL, FR and the PANEL, SPKR. Tap the head of the (⊖) flat head screwdriver with the plastic hammer head, and create the clearance as shown in Fig-1.
2. Insert the cut chisel in the clearance, and tap the head of the cut chisel with plastic hammer as shown in Fig-2, to remove the PANEL, FR.
3. Place the speaker horizontally. Tap head of the cut chisel with plastic hammer as shown in Fig-3, and remove the PANEL, FR completely.

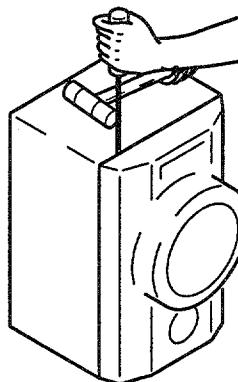


Fig-1

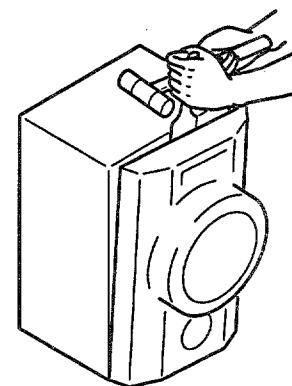


Fig-2

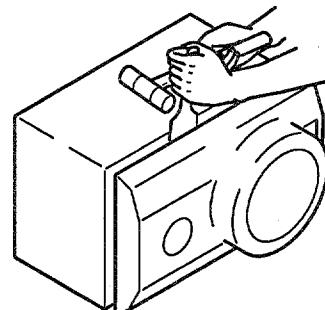


Fig-3

How to Attach the PANEL, FR

Attach the PANEL, FR to the PANEL, SPKR. Tap the four corners of the PANEL, FR with the plastic hammer to fit the PANEL, FR into the PANEL, SPKR completely.

SX-WNA777 (YUSTL), SX-WNS777 (YLSTCC, YLSTL) SPEAKER 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
1	8Z-NS7-604-010		SPKR, W 160<YLSTL>	7	88-NS5-610-010		CORD, SPKR
1	8Z-NS7-606-010		SPKR, W 160<YLSTCC>	8	88-NS5-611-010		CORD, SPKR B/L
1	8Z-NS7-602-010		SPKR, W 160 WNS777<YUSTL>	9	8Z-NSY-608-010		SPKR, CERAMIC ASSY (SWNH33)
2	8Z-NSY-604-010		SPKR, M 100<YLSTL, YUSTL>	10	88-NS3-029-010		CORD, BUSH L
2	8Z-NS7-608-010		SPKR, M 100<YLSTCC>	11	8Z-NS7-007-010		GRILLE, FRAME ASSY<YUSTL>
3	8Z-NSY-001-010		PANEL, FR<YLSTL, YLSTCC>				
3	8Z-NS7-006-010		PANEL, FR N<YUSTL>				
4	8Z-NSY-002-010		PANEL, BA				
5	8Z-NSY-003-010		CORD, BUSH				
6	8Z-NSY-004-010		PROTECTOR, TW				

SX-NA772 (YUSTL) SPEAKER PARTS LIST

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

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	8Z-NSH-001-010		PANEL, FR
2	8Z-NSH-003-010		PANEL, RING(W)
3	8Z-NSH-004-010		GRILLE, FRAME ASSY
4	8Z-NSH-007-010		PROTECTOR,
5	87-NSH-612-010		CERAMIC ASSY
6	87-NS7-611-010		CORD, SPKR
7	83-NSL-602-010		SPEAKER WOOFER
8	83-NS8-606-010		SPEAKER MID

SX-R275 (YUSTNL) SPEAKER PARTS LIST

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	81-VSA-009-010		CORD BUSH
4	87-YS6-002-010		SPKR, CORD Y
5	87-YS6-601-010		SPKR, 100
6	87-010-384-010		CAP, E 100-25 SME(R275)
7	87-YS6-913-010		IB, YU(ESF)T

ACCESSORIES / PACKAGE LIST

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

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	8Z-NF7-902-010		IB, LH(ESP)M<LH>
1	8Z-NF7-913-010		IB, U(ESF)M A767<767U>
1	8Z-NF7-903-010		IB, U(ESF)M A777<777U>
2	8Z-NF8-701-110		RC UNIT, RC-ZAS01
3	87-006-225-010		AM LOOP ANT NC2
4	87-043-115-010		ANT, FEEDER FM
▲ 5	87-A91-017-010		PLUG, CONVERSION JT-0476<LH>

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
ADHESIVE	SHEET ADHESIVE
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
HLDRL	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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