

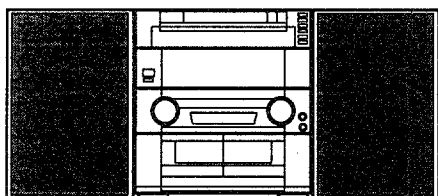
# aiwa



## Z-R770

## Z-R774

## Z-R775



COMPACT DISC STEREO  
CASSETTE RECEIVER

- BASIC TAPE MECHANISM : 6ZM-3 PR2NM
- BASIC CD MECHANISM : 6ZG-1 S2DSHNM

- TYPE : LH,U

SYSTEM	SPEAKER	STEREO TURNTABLE	CD - CASSEIVER	REMOTE CONTROLLER
Z-R770 (TYPE : LH)	SX-FZR77	-	CX - ZR770	RC-7AS01
Z-R774 (TYPE : U)	SX-ZR77 SX-R286	-	CX - ZR774	
Z-R775 (TYPE : U)	SX-ZR77	PX-E855		

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

•If requiring information about the Stereo turntable, see Service Manual of original.  
S/M Code No. 09-984-264-30I.

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# SPECIFICATIONS

## <FM Tuner section>

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

## <AM Tuner section>

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

## <Amplifier section>

**Power output** LH :  
 100 W + 100 W  
 (6 ohms, T.H.D. 10 %, 1 kHz)  
 U :  
 100 W + 100 W  
 (50 Hz - 20 kHz, THD less than  
 1%, 6 ohms)

**Total harmonic distortion** 0.15 % (50 W, 1 kHz, 6 ohms)  
**Inputs** VIDEO/AUX : 210 mV (adjustable)  
 PHONO : 350 mV (47 kohms)  
 MIC 1, MIC 2 : 1.4 mV (20 kohms)

**Outputs** CD DIGITAL OUT (OPTICAL)  
 SUPER WOOFER : 2.5V  
 SPEAKERS: accept speakers of  
 6 ohms or more  
 SURROUND SPEAKERS :  
 accept speakers of 8 ohms to  
 16 ohms or more  
 PHONES (stereo jack) :  
 accepts headphones of 32 ohms  
 or more

## <Cassette deck section>

**Track format** 4 tracks, 2 channels stereo  
**Frequency response** 50 Hz - 15000Hz  
**Recording system** AC bias  
**Heads** Deck 1 : Playback head x 1  
 Deck 2 : Recording/playback/  
 erase head x 1

## <Compact disc player section>

**Laser** Semiconductor laser ( $\lambda = 780$  nm)  
**D-A converter** 1 bit dual  
**Signal-to-noise ratio** 85 dB (1 kHz, 0 dB)  
**Harmonic distortion** 0.03% (1 kHz, 0 dB)  
**Wow and flutter** Unmeasurable

## <Speaker system SX-FZR77> (LH only)

**Cabinet type** 3 way, bass reflex with surround  
 speaker  
**Speakers** Woofer :  
 220 mm cone type  
 Tweeter :  
 80 mm cone type  
 Super tweeter :  
 20 mm ceramic type  
 Surround speaker : 80mm  
 Front speaker : 6 ohms  
 Surround speaker : 8 ohms  
**Impedance**  
**Output sound pressure level** 90 dB/W/m  
**Dimensions (W x H x D)** 290 x 444 x 320 mm  
**Weight** 5.5 kg

## <Speaker system SX-ZR77> (U only)

**Cabinet type** 3 way, bass reflex  
 (magnetic shielded type)  
**Speakers** Woofer :  
 220 mm (8<sup>3</sup>/<sub>4</sub> in.) cone type  
 Tweeter:  
 60 mm (2<sup>3</sup>/<sub>8</sub> in.) cone type  
 Super tweeter:  
 20 mm (1<sup>3</sup>/<sub>16</sub> in.) ceramic type  
**Impedance** 6 ohms  
**Output sound pressure level** 89 dB/W/m  
**Dimensions (W x H x D)** 280 x 444 x 272 mm  
 (11 <sup>1</sup>/<sub>8</sub> x 17 <sup>1</sup>/<sub>2</sub> x 10 <sup>3</sup>/<sub>4</sub> in.)  
**Weight** 4.5 kg (9 lbs 15oz)

## <General>

**Power requirements** LH :  
 120 V / 220 - 230 V / 240 V AC,  
 switchable ,50 / 60 Hz  
 U : 120V AC,60Hz  
**Power consumption** LH : 140W  
 U : 110W  
**Dimensions of main unit** 360 x 394.5 x 382.5 mm  
 (W x H x D) (14 <sup>1</sup>/<sub>4</sub> X 15 <sup>5</sup>/<sub>8</sub> X 15 <sup>1</sup>/<sub>8</sub> in.)  
**Weight of main unit** 9.5 kg (20lbs 15oz)

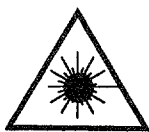
\*Design and specifications are subject to change without notice.

# PROTECTION OF EYES FROM LASER BEAM DURING SERVICING

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

## WARNING!!

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



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

## VAROITUS!

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

## WARNING!

Om apparaten används på annat sätt än vad som specificeras i denna bruksanvisning, kan användaren utsättas för osynlig laserstråling, 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

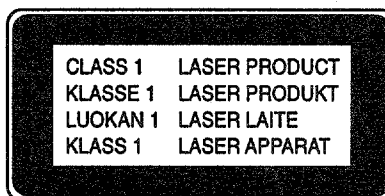
L'utilisation de commandes, réglages ou procédures autres que ceux spécifiés peut entraîner une dangereuse exposition aux radiations.

## 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.

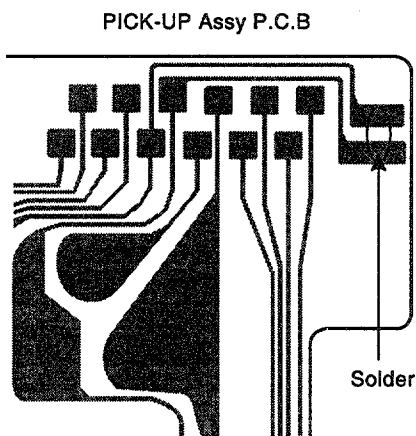


## Precaution to replace Optical block

### (KSS - 213F)

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

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



## NOTE ON BEFORE STARTING REPAIR

### 1. Forced discharge of electrolytic capacitor of power supply block

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

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

#### Discharge procedure

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

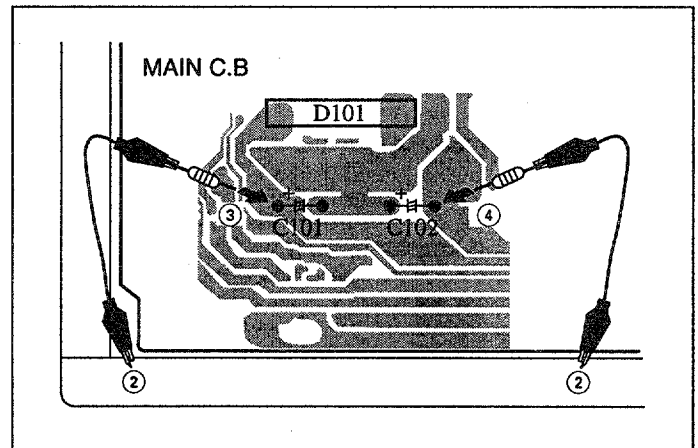


Fig-1

Select a discharging resistor referring to the following table.

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

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

### 2. Check items before exchanging the MICROCOMPUTER

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

#### 2-1. Regarding the HOLD terminal of the MICROCOMPUTER

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

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

#### • Good or no good judgement of the MICROCOMPUTER

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

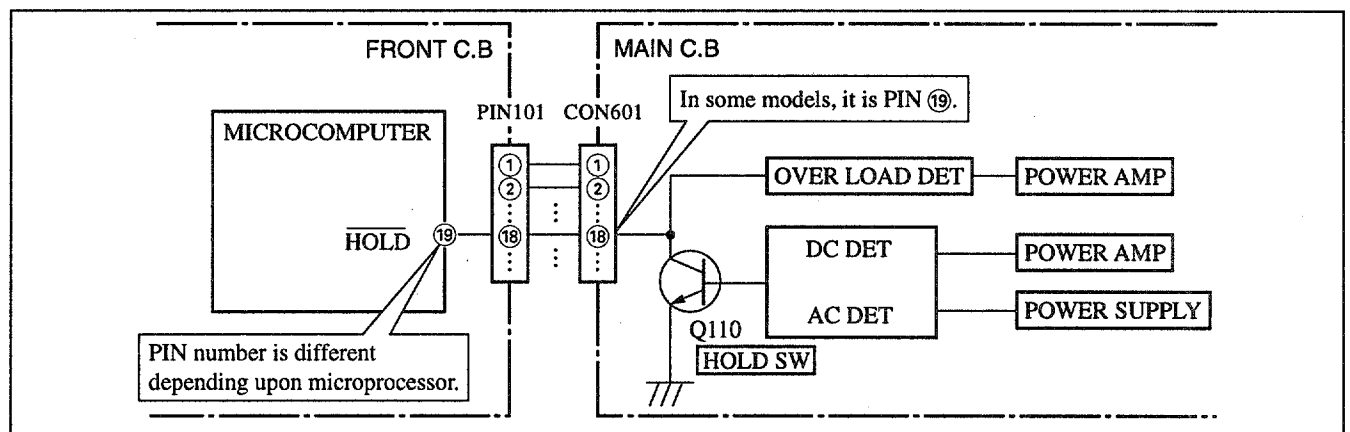


Fig-2-1

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

## 2-2. Regarding reset

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

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

- ① Remove the AC power cord.

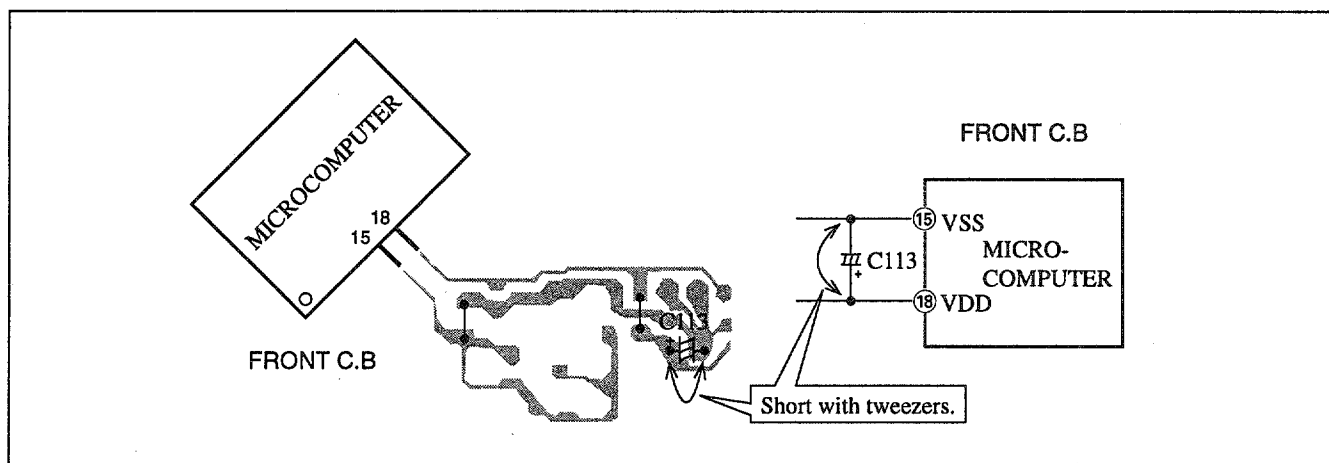


Fig-2-2

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

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

## 2-3. Confirmation of soldering state of MICROCOMPUTER

Check 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				C108	87-012-368-080		C-CAP,S 0.1-50 F
	87-020-454-010	IC, DN6851		C109	87-010-196-080		CHIP CAPACITOR, 0.1-25
	88-MA1-602-010	C-IC, LC866560W-5H04		C110	87-010-196-080		CHIP CAPACITOR, 0.1-25
	87-NF8-614-010	IC, SPS-442-1-W		C111	87-010-196-080		CHIP CAPACITOR, 0.1-25
	87-017-915-080	IC, BU4094BCF		C112	87-010-196-080		CHIP CAPACITOR, 0.1-25
	87-A20-083-010	IC, BA3835S		C113	87-010-247-080		CAP, ELECT 100-50V
	87-A20-613-040	C-IC, BU9262AFS<LH>		C114	87-010-385-080		CAP, E 220-25 M SME
	87-A20-954-040	C-IC, M62445FP-601		C115	87-010-385-080		CAP, E 220-25 M SME
	87-017-888-080	IC, NJM4558MD		C116	87-010-247-080		CAP, ELECT 100-50V
	86-NFZ-655-010	IC, LC72131D(Z)		C117	87-010-430-080		CAP, ELECT 100-63
	87-A20-438-010	IC, LA1837		C118	87-010-263-080		CAP, ELECT 100-10V
	88-NF5-615-040	C-IC, MSM6654A-521GS-KR1<LH>		C119	87-010-260-080		CAP, ELECT 47-25V
	87-A20-783-040	C-IC, BA7762AFS		C120	87-010-403-080		CAP, ELECT 3.3-50V
				C121	87-012-140-080		C-CAP, S 470P
				C122	87-010-263-080		CAP, E 100-10V
TRANSISTOR				C123	87-010-247-080		CAP, ELECT 100-50V
	87-A30-076-080	C-TR, 2SC3052F		C124	87-010-112-080		CAP, ELECT 100-16V
	89-213-702-010	TR, 2SB1370 (1.8W)		C125	87-010-235-080		CAP, E 470-16 SME
	87-026-610-080	TR, KTC3198GR		C209	87-010-546-080		CAP, ELECT 0.33-50V
	87-A30-073-080	C-TR, RT1N 141C		C210	87-010-546-080		CAP, ELECT 0.33-50V
	87-A30-085-070	C-TR, CSA1362GR		C211	87-010-185-080		C-CAP, S 3900P-50 B<U>
	87-A30-196-080	TR, 2SC4115SRS		C211	87-010-184-080		C-CAP, S 3300P-50 B<LH>
	87-A30-075-080	C-TR, 2SA1235F		C212	87-010-185-080		C-CAP, S 3900P-50 B<U>
	89-112-965-080	TR, 2SA1296 (0.75W)		C212	87-010-184-080		C-CAP, S 3300P-50 B<LH>
	87-A30-071-080	C-TR, RT1N 144C		C213	87-010-186-080		CAP, CHIP 4700P
	87-026-609-080	TR, KTA1266GR		C214	87-010-186-080		CAP, CHIP 4700P
	87-A30-105-080	C-TR, RT1P 441C		C215	87-010-403-080		CAP, ELECT 3.3-50V
	87-026-580-080	C-TR, DTA123JK		C216	87-010-403-080		CAP, ELECT 3.3-50V
	87-A30-107-070	C-TR, CMBT5401		C217	87-010-913-080		CAP, ELECT 47-25BP
	87-A30-190-080	TR, CC5551		C218	87-010-913-080		CAP, ELECT 47-25BP
	87-A30-097-010	TR, FN 1016		C229	87-A10-812-080		C-CAP, S 220P-200 J CH
	87-A30-098-010	TR, FP 1016		C230	87-A10-812-080		C-CAP, S 220P-200 J CH
	87-A30-106-070	C-TR, CMBT5551		C231	87-012-154-080		C-CAP, S 150P-50 CH
	87-A30-072-080	C-TR, RT1P 144C		C232	87-012-154-080		C-CAP, S 150P-50 CH
	87-A30-221-080	C-TR, DTA114WK		C233	87-010-544-080		CAP, ELECT 0.1-50V
	87-A30-087-080	C-FET, 2SK2158		C234	87-010-544-080		CAP, ELECT 0.1-50V
	89-327-143-080	C-TR, 2SC2714 (0.1W)		C235	87-010-196-080		CHIP CAPACITOR, 0.1-25
	87-A30-089-010	FET, 2SK2723		C237	87-012-368-080		C-CAP, S 0.1-50 F
				C238	87-012-368-080		C-CAP, S 0.1-50 F
				C239	87-012-368-080		C-CAP, S 0.1-50 F
DIODE				C240	87-012-368-080		C-CAP, S 0.1-50 F
	87-A40-470-080	DIODE, 1SS254		C280	87-010-188-080		C-CAP, S 6800P-50 KB
	87-A40-269-080	C-DIODE, MC2836		C298	87-010-196-080		CHIP CAPACITOR, 0.1-25
	87-A40-270-080	C-DIODE, MC2838		C301	87-010-318-080		C-CAP, S 47P-50 CH
	87-070-274-080	DIODE, 1N4003 SEM		C302	87-010-318-080		C-CAP, S 47P-50 CH
	87-A40-344-080	ZENER, MTZJ6.2C		C303	87-012-157-080		C-CAP, S 330P-50 CH
	87-A40-341-080	ZENER, MTZJ 36 A		C304	87-012-157-080		C-CAP, S 330P-50 CH
	87-A40-345-080	ZENER, MTZJ10C		C305	87-012-145-080		CAP, CHIP S 270P CH
	87-A40-004-080	ZENER, MTZJ16A		C306	87-012-145-080		CAP, CHIP S 270P CH
	87-A40-438-080	ZENER, MTZJ4.7A		C307	87-010-196-080		CHIP CAPACITOR, 0.1-25
	87-070-136-080	ZENER, MTZJ5.1B		C309	87-010-196-080		C-CAP, S 0.1-25FZ
	87-A40-488-080	DIODE, 1SS244		C310	87-010-196-080		C-CAP, S 0.1-25FZ
	87-017-931-080	ZENER, MTZJ5.6B		C311	87-010-198-080		CAP, CHIP 0.022
	87-A40-002-080	ZENER, MTZJ5.1C		C312	87-010-198-080		CAP, CHIP 0.022
	87-A40-234-080	ZENER, MTZJ5.6A		C313	87-010-178-080		C-CAP, S 1000P-50 KB
	87-A40-115-060	DIODE, RS603M		C314	87-010-178-080		C-CAP, S 1000P-50 KB
	87-A40-370-090	DIODE, RK46-P20<U>		C315	87-010-178-080		C-CAP S 1000P-50 KB
	87-A40-184-090	DIODE, RK34 (F) <LH>		C316	87-010-178-080		C-CAP, S 1000P-50 KB
				C321	87-016-492-080		CHIP-CAPACITOR, 0.33-16FZ
				C322	87-016-492-080		CHIP-CAPACITOR, 0.33-16FZ
MAIN C.B				C324	87-010-260-080		CAP, ELECT 47-25V
	88-906-251-110	FF-CABLE, 6P 1.25		C325	87-010-370-080		CAP, E 330-6.3 SME
C101	87-016-657-090	CAP, E 3300-71 M SMG		C327	87-010-404-080		CAP, ELECT 4.7-50V
C102	87-016-657-090	CAP, E 3300-71 M SMG		C328	87-010-404-080		CAP, ELECT 4.7-50V
C103	87-016-658-090	CAP, E 4700-35 SMG		C332	87-010-196-080		CHIP CAPACITOR, 0.1-25
C104	87-016-658-090	CAP, E 4700-35 SMG		C335	87-010-401-080		CAP, ELECT 1-50V
	87-012-368-080	C-CAP, S 0.1-50 F		C336	87-010-401-080		CAP, ELECT 1-50V
C105	87-012-368-080	C-CAP, S 0.1-50 F		C337	87-010-196-080		CHIP CAPACITOR, 0.1-25
C106	87-012-368-080	C-CAP, S 0.1-50 F		C339	87-010-196-080		CHIP CAPACITOR, 0.1-25
C107	87-012-368-080	C-CAP, S 0.1-50 F		C340	87-010-196-080		CHIP CAPACITOR, 0.1-25

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION	REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C351	87-012-140-080		C-CAP 470P	C766	87-010-197-080		CAP, CHIP 0.01 DM
C352	87-012-140-080		C-CAP 470P	C767	87-010-405-080		CAP, ELECT 10-50V
C354	87-010-175-080		C-CAP 560P	C768	87-010-197-080		CAP, CHIP 0.01 DM
C355	87-010-178-080		CHIP CAP 1000P	C769	87-010-408-080		CAP, ELECT 47-50V
C356	87-010-260-080		CAP, ELECT 47-25V	C770	87-015-821-080		C-CAP 0.047
C357	87-010-197-080		CAP, CHIP 0.01 DM	C771	87-010-407-080		CAP, ELECT 33-50V
C358	87-010-183-080		C-CAP,S 2700P-50 B	C772	87-010-194-080		CAP, CHIP 0.047
C359	87-010-183-080		C-CAP,S 2700P-50 B	C773	87-010-196-080		CHIP CAPACITOR,0.1-25
C360	87-010-183-080		C-CAP,S 2700P-50 B	C774	87-010-263-080		CAP, ELECT 100-10V
C370	87-010-196-080		CHIP CAPACITOR,0.1-25	C775	87-010-404-080		CAP, ELECT 4.7-50V
C373	87-016-083-080		C-CAP,S 0.15-16RK	C776	87-010-197-080		CAP, CHIP 0.01 DM
C374	87-016-083-080		C-CAP,S 0.15-16RK	C777	87-010-400-080		CAP, ELECT 0.47-50V
C378	87-010-196-080		CHIP CAPACITOR,0.1-25	C778	87-010-401-080		CAP, ELECT 1-50V
C379	87-010-382-080		CAP, ELECT 22-25V	C779	87-010-401-080		CAP, ELECT 1-50V
C380	87-010-382-080		CAP, ELECT 22-25V	C780	87-010-196-080		CHIP CAPACITOR,0.1-25
C391	87-010-319-080		C-CAP,S 56P-50 CH	C781	87-010-405-080		CAP, ELECT 10-50V
C392	87-010-319-080		C-CAP,S 56P-50 CH	C782	87-010-405-080		CAP, ELECT 10-50V
C393	87-010-319-080		C-CAP,S 56P-50 CH	C783	87-015-819-080		C-CAP,0.01
C394	87-010-319-080		C-CAP,S 56P-50 CH	C784	87-010-197-080		CAP, CHIP 0.01 DM
C401	87-010-405-080		CAP, ELECT 10-50V	C785	87-010-403-080		CAP, ELECT 3.3-50V
C402	87-010-405-080		CAP, ELECT 10-50V	C786	87-010-403-080		CAP, ELECT 3.3-50V
C457	87-010-404-080		CAP, ELECT 4.7-50 SME	C789	87-010-179-080		CAP,CHIP S B1200P
C458	87-010-404-080		CAP, ELECT 4.7-50 SME	C790	87-010-179-080		CAP,CHIP S B1200P
C516	87-010-196-080		CHIP CAPACITOR,0.1-25	C791	87-010-405-080		CAP, ELECT 10-50V
C601	87-010-180-080		C-CER 1500P	C793	87-010-177-080		C-CAP,S 820P-50 SL
C602	87-010-180-080		C-CER 1500P	C794	87-010-406-080		CAP, ELECT 22-50
C613	87-016-081-080		C-CAP,S 0.1-16 RK	C795	87-010-596-080		CAP, S 0.047-16
C614	87-016-081-080		C-CAP,S 0.1-16 RK	C796	87-010-403-080		CAP, ELECT 3.3-50V
C619	87-010-185-080		C-CAP,S 3900P-50 B	C797	87-010-181-080		C-CAP,S 1800P-50 B
C620	87-010-185-080		C-CAP,S 3900P-50 B	C798	87-010-181-080		C-CAP,S 1800P-50 B
C621	87-010-401-080		CAP, ELECT 1-50V	C799	87-010-194-080		CAP, CHIP 0.047
C622	87-010-401-080		CAP, ELECT 1-50V	C812	87-010-197-080		CAP, CHIP 0.01 DM
C625	87-010-405-080		CAP, ELECT 10-50V	C814	87-010-197-080		CAP, CHIP 0.01 DM
C626	87-010-405-080		CAP, ELECT 10-50V	C820	87-010-408-080		CAP, ELECT 47-50V
C629	87-010-405-080		CAP, ELECT 10-50V	C821	87-010-197-080		CAP, CHIP 0.01 DM
C630	87-010-213-080		C-CAP,S 0.015-50 B	C822	87-010-197-080		CAP, CHIP 0.01 DM
C631	87-010-992-080		C-CAP,S 0.047-25 B	C823	87-010-197-080		CAP, CHIP 0.01 DM
C632	87-010-263-080		CAP, ELECT 100-10V	C828	87-010-196-080		CHIP CAPACITOR,0.1-25
C633	87-010-263-080		CAP, ELECT 100-10V	C829	87-010-196-080		CHIP CAPACITOR,0.1-25
C634	87-010-196-080		CHIP CAPACITOR,0.1-25	C959	87-010-196-080		CHIP CAPACITOR,0.1-25
C635	87-010-196-080		CHIP CAPACITOR,0.1-25	C960	87-010-196-080		CHIP CAPACITOR,0.1-25
C636	87-010-196-080		CHIP CAPACITOR,0.1-25	C961	87-010-152-080		C-CAP,S 8P-50 CH
C637	87-010-183-080		C-CAP,S 2700P-50 B	CF801	87-008-261-010		FILTER, SFE10.7MA5-A
C641	87-010-196-080		CHIP CAPACITOR,0.1-25	CF802	87-008-261-010		FILTER, SFE10.7MA5-A
C701	87-010-381-080		CAP, ELECT 330-16V	FB601	87-A50-190-080		C-COIL,S BLM21A102S
C702	87-010-404-080		CAP, ELECT 4.7-50V	FFE801	A8-8ZA-190-030		8ZA-1 FEUNM
C703	87-010-197-080		CAP, CHIP 0.01 DM	J201	87-A60-488-010		JACK,DIA6.3 BLK ST W/SW KM16AT
C704	87-010-197-080		CAP, CHIP 0.01 DM	J202	87-A60-547-010		JACK,PIN 4P R/W/B
C709	87-010-322-080		C-CAP,S 100P-50 CH	J203	87-033-240-010		TERMINAL,SP 4P32SV1-05
C711	87-010-263-080		CAP, ELECT 100-10V	J602	87-099-625-010		JACK PIN 4P,RVS (KM)
C712	87-010-196-080		CHIP CAPACITOR,0.1-25	J801	87-033-239-010		TERMINAL,HSP-154V-2
C713	87-010-197-080		CAP, CHIP 0.01 DM	L201	87-003-383-010		COIL,1UH-S
C714	87-010-197-080		CAP, CHIP 0.01 DM	L202	87-003-383-010		COIL,1UH-S
C721	87-010-312-080		C-CAP,S 15P-50 CH	L301	87-A50-049-010		COIL,TRAP 85K(COI)
C722	87-010-312-080		C-CAP,S 15P-50 CH	L302	87-A50-049-010		COIL,TRAP 85K(COI)
C723	87-010-178-080		CHIP CAP 1000P	L351	87-007-342-010		COIL,OSC 85K BIAS
C725	87-010-178-080		CHIP CAP 1000P	L771	87-A50-266-010		COIL,FM DET-2N(TOK)
C727	87-010-196-080		CHIP CAPACITOR,0.1-25	L772	87-A90-733-010		FLTR,PCFAZH-450 (TOK)
C728	87-010-248-080		CAP, ELECT 220-10V	L781	87-005-847-080		COIL,2.2UH(CECS)
C755	87-010-197-080		CAP, CHIP 0.01 DM	L832	86-NFZ-694-080		COIL,2.2UH K CECS
C756	87-010-197-080		CAP, CHIP 0.01 DM	L981	87-NF4-650-010		COIL,AM PACK 4N(TOK)
C757	87-010-318-080		C-CAP,S 47P-50 CH	R123	87-022-200-080		RES,M/F 0.56-1W J <U>
C758	87-010-149-080		C-CAP,S 5P-50 CH	R237	87-A00-262-080		RES,M/F 0.15-2W J
C759	87-012-156-080		C-CAP,S 220P-50 CH	R238	87-A00-262-080		RES,M/F 0.15-2W J
C760	87-012-156-080		C-CAP,S 220P-50 CH	R239	87-A00-262-080		RES,M/F 0.15-2W J
C761	87-010-196-080		CHIP CAPACITOR,0.1-25	R240	87-A00-262-080		RES,M/F 0.15-2W J
C762	87-010-197-080		CAP, CHIP 0.01 DM	RY101	87-A90-464-010		RELAY,DG12D2-O(M)
C763	87-010-194-080		CAP, CHIP 0.047	RY201	87-A90-713-010		RELAY,12V DQ12D1-OS(M)<LH>
C764	87-010-319-080		C-CAP,S 56P-50 CH	SFR351	87-A90-433-080		SFR,50K H NVZ6TLTA
C765	87-010-197-080		CAP, CHIP 0.01 DM	SFR352	87-A90-433-080		SFR,50K H NVZ6TLTA

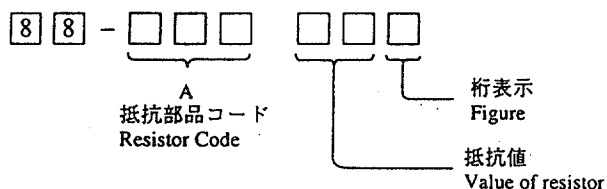


REF. NO.	PART NO.	KANRI NO.	DESCRIPTION	REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
X721	87-A70-061-010		VIB,XTAL 4.500MHZ CSA-309	C608	87-010-196-080		CHIP CAPACITOR,0.1-25
				C609	87-010-068-040		CAP E 0.22-50 5L
				C611	87-010-176-080		C-CAP,S 680P-50 SL <LH>
FRONT C.B				C611	87-010-180-080		C-CER 1500P <U>
				C612	87-010-176-080		C-CAP,S 680P-50 SL
	88-911-271-110		CABLE,FFC 11P-1.25	C614	87-010-248-040		CAP,E 220-10 SME
	88-912-281-110		FF-CABLE,12P 1.25	C801	87-010-263-040		CAP,E 100-10 <LH>
	88-908-231-110		FF-CABLE,8P 1.25	C802	87-010-196-080		CHIP CAPACITOR,0.1-25 <LH>
C101	87-010-198-080		CAP, CHIP 0.022	C803	87-010-400-040		CAP,E 0.47-50 <LH>
C102	87-010-198-080		CAP, CHIP 0.022	C804	87-010-315-080		C-CAP,S 27P-50 CH <LH>
C103	87-010-197-080		CAP, CHIP 0.01 DM	C805	87-010-315-080		C-CAP,S 27P-50 CH <LH>
C104	87-010-312-080		C-CAP,S 15P-50 CH	C852	87-012-156-080		C-CAP,S 220P-50 CH <LH>
C105	87-010-316-080		C-CAP,S 33P-50 CH	C853	87-010-404-040		CAP,E 4.7-50 SME <LH>
C106	87-010-320-080		CHIP CAP 68P	C854	87-010-196-080		CHIP CAPACITOR,0.1-25 <LH>
C107	87-012-157-080		C-CAP,S 330P-50 CH	C938	87-012-145-080		CAP, CHIP S 270P CH
C108	87-010-405-040		CAP,E 10-50	C941	87-012-145-080		CAP, CHIP S 270P CH
C109	87-010-071-040		CAP,E 1-50 5L	C942	87-012-145-080		CAP, CHIP S 270P CH
C110	87-010-196-080		CHIP CAPACITOR,0.1-25	C943	87-012-145-080		CAP, CHIP S 270P CH
C111	87-010-196-080		CHIP CAPACITOR,0.1-25	C944	87-012-145-080		CAP, CHIP S 270P CH
C112	87-010-196-080		CHIP CAPACITOR,0.1-25	C945	87-012-145-080		CAP, CHIP S 270P CH
C113	87-A10-189-040		CAP,E 220-10	C946	87-012-145-080		CAP, CHIP S 270P CH
C114	87-010-196-080		CHIP CAPACITOR,0.1-25	C947	87-012-145-080		CAP, CHIP S 270P CH
C115	87-010-178-080		CHIP CAP 1000P	C948	87-012-145-080		CAP, CHIP S 270P CH
C116	87-010-071-040		CAP,E 1-50 5L	C949	87-012-145-080		CAP, CHIP S 270P CH
C117	87-010-079-040		CAP,E 100-6.3 5L	C950	87-012-145-080		CAP, CHIP S 270P CH
C118	87-012-369-080		C-CAP,S 0.047-50F	C951	87-012-145-080		CAP, CHIP S 270P CH
C119	87-010-408-040		CAP,E 47-50 SME	C952	87-012-145-080		CAP, CHIP S 270P CH
C120	87-010-421-040		CAP,E 4.7-50 5L	CN301	87-099-196-010		CONN,8P, 6216V
C121	87-010-421-040		CAP,E 4.7-50 5L	FB601	87-A50-190-080		C-COIL,S BLM21A102S
C122	87-010-194-080		CAP, CHIP 0.047	FL101	88-MA2-604-010		FL,BJ607GK
C123	87-010-196-080		CHIP CAPACITOR,0.1-25	JR802	87-010-196-080		CHIP CAPACITOR, 0.1-25<LH>
C124	87-010-196-080		CHIP CAPACITOR,0.1-25	L501	87-005-448-080		COIL 220UH,K <LH>
C125	87-010-196-080		CHIP CAPACITOR,0.1-25	LED201	87-070-201-080		LED,SLP9118C-51-S RED
C127	87-010-196-080		CHIP CAPACITOR,0.1-25	LED202	87-070-201-080		LED,SLP9118C-51-S RED
C202	87-010-196-080		CHIP CAPACITOR,0.1-25	LED203	87-070-201-080		LED,SLP9118C-51-S RED
C203	87-010-196-080		CHIP CAPACITOR,0.1-25	LED204	87-070-201-080		LED,SLP9118C-51-S RED
C204	87-010-196-080		CHIP CAPACITOR,0.1-25	LED205	87-070-201-080		LED,SLP9118C-51-S RED
C281	87-010-198-080		CAP, CHIP 0.022	LED206	87-070-197-080		LED,SLP7118C-51-S RED
C282	87-010-198-080		CAP, CHIP 0.022	LED207	87-070-197-080		LED,SLP7118C-51-S RED
C381	87-010-196-080		CHIP CAPACITOR,0.1-25	LED208	87-070-197-080		LED,SLP7118C-51-S RED
C382	87-012-158-080		C-CAP,S 390P-50 CH	LED209	87-070-197-080		LED,SLP7118C-51-S RED
C383	87-010-196-080		CHIP CAPACITOR,0.1-25	LED210	87-070-197-080		LED,SLP7118C-51-S RED
C384	87-010-196-080		CHIP CAPACITOR,0.1-25	LED211	87-070-197-080		LED,SLP7118C-51-S RED
C385	87-010-196-080		CHIP CAPACITOR,0.1-25	LED212	87-070-197-080		LED,SLP7118C-51-S RED
C386	87-010-196-080		CHIP CAPACITOR,0.1-25	LED213	87-070-197-080		LED,SLP7118C-51-S RED
C387	87-010-196-080		CHIP CAPACITOR,0.1-25	LED214	87-070-197-080		LED,SLP7118C-51-S RED
C501	87-010-319-080		C-CAP,S 56P-50 CH <LH>	LED215	87-070-197-080		LED,SLP7118C-51-S RED
C502	87-010-319-080		C-CAP,S 56P-50 CH <LH>	LED216	87-A40-446-080		LED,SLP-7131F-81H-S-T1 P-GRN
C503	87-012-393-080		C-CAP,S 0.22-16 R K <LH>	LED217	87-A40-446-080		LED,SLP-7131F-81H-S-T1 P-GRN
C504	87-010-197-080		CAP, CHIP 0.01 DM <LH>	LED218	87-A40-446-080		LED,SLP-7131F-81H-S-T1 P-GRN
C505	87-010-180-080		C-CER 1500P <LH>	LED219	87-A40-446-080		LED,SLP-7131F-81H-S-T1 P-GRN
C506	87-010-213-080		C-CAP,S 0.015-50 B <LH>	LED220	87-A40-446-080		LED,SLP-7131F-81H-S-T1 P-GRN
C507	87-010-213-080		C-CAP,S 0.015-50 B <LH>	LED221	87-A40-446-080		LED,SLP-7131F-81H-S-T1 P-GRN
C508	87-010-197-080		CAP, CHIP 0.01 DM <LH>	LED233	87-070-278-010		LED,SLZ-738A-24-S P-GRN
C509	87-010-181-080		CAP,CHIP S 1800P <LH>	LED234	87-070-278-010		LED,SLZ-738A-24-S P-GRN
C510	87-010-196-080		CHIP CAPACITOR,0.1-25 <LH>	LED235	87-070-278-010		LED,SLZ-738A-24-S P-GRN
C511	87-010-067-040		CAP,E 0.1-50 5L <LH>	LED236	87-070-278-010		LED,SLZ-738A-24-S P-GRN
C512	87-010-503-040		CAP,E 220-4 GAS <LH>	LED237	87-070-290-010		LED,SLZ 936-30-S RED
C513	87-010-071-040		CAP,E 1-50 5L <LH>	LED238	87-070-290-010		LED,SLZ 936-30-S RED
C514	87-010-071-040		CAP,E 1-50 5L <LH>	LED239	87-070-201-080		LED,SLP9118C-51-S RED
C515	87-010-183-080		C-CAP,S 2700P-50 B <LH>	LED240	87-070-201-080		LED,SLP9118C-51-S RED
C516	87-010-183-080		C-CAP,S 2700P-50 B <LH>	LED241	87-070-201-080		LED,SLP9118C-51-S RED
C518	87-010-196-080		CHIP CAPACITOR,0.1-25 <LH>	LED242	87-070-201-080		LED,SLP9118C-51-S RED
C519	87-010-263-040		CAP,E 100-10 <LH>	LED243	87-070-201-080		LED,SLP9118C-51-S RED
C525	87-012-141-080		CHIP-CAPACITOR,0.22-16F <LH>	LED247	87-070-201-080		LED,SLP9118C-51-S RED <LH>
C601	87-010-405-040		CAP,E 10-50	LED249	87-070-201-080		LED,SLP9118C-51-S RED <LH>
C602	87-010-186-080		CAP,CHIP 4700P <LH>	LED250	87-070-201-080		LED,SLP9118C-51-S RED <LH>
C603	87-010-405-040		CAP,E 10-50 <LH>	R301	87-022-355-080		C-RES,S10K-1/10W F
C604	87-010-382-040		CAP,E 22-25 SME <LH>	R321	87-022-355-080		C-RES,S10K-1/10W F
C607	87-010-321-080		CHIP CAPACITOR,82P(J)				

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION	REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
R341	87-022-355-080		C-RES,S10K-1/10W F	S315	87-A90-095-080		SW,TACT EVQ11G04M
S101	87-A90-535-010		SW,RTRY EC16B24304	S316	87-A90-095-080		SW,TACT EVQ11G04M
S102	87-A90-791-010		SW,RTRY EC16B12204 ENCODER <U>	S317	87-A90-095-080		SW,TACT EVQ11G04M
S103	87-A90-792-010		SW,RTRY EC12E12244 ENCODER <LH>	S318	87-A90-095-080		SW,TACT EVQ11G04M
S301	87-A90-095-080		SW,TACT EVQ11G04M				
S303	87-A90-095-080		SW,TACT EVQ11G04M				
S304	87-A90-095-080		SW,TACT EVQ11G04M <LH>				
S305	87-A90-095-080		SW,TACT EVQ11G04M <LH>				
S307	87-A90-095-080		SW,TACT EVQ11G04M <LH>				
S309	87-A90-095-080		SW,TACT EVQ11G04M				
S310	87-A90-095-080		SW,TACT EVQ11G04M				
S311	87-A90-095-080		SW,TACT EVQ11G04M				
S321	87-A90-095-080		SW,TACT EVQ11G04M				
S322	87-A90-095-080		SW,TACT EVQ11G04M				
S323	87-A90-095-080		SW,TACT EVQ11G04M				
S324	87-A90-095-080		SW,TACT EVQ11G04M				
S325	87-A90-095-080		SW,TACT EVQ11G04M				
S326	87-A90-095-080		SW,TACT EVQ11G04M				
S327	87-A90-095-080		SW,TACT EVQ11G04M				
S328	87-A90-095-080		SW,TACT EVQ11G04M				
S329	87-A90-095-080		SW,TACT EVQ11G04M				
S330	87-A90-095-080		SW,TACT EVQ11G04M				
S331	87-A90-095-080		SW,TACT EVQ11G04M				
S332	87-A90-095-080		SW,TACT EVQ11G04M				
S334	87-A90-095-080		SW,TACT EVQ11G04M <LH>				
S341	87-A90-095-080		SW,TACT EVQ11G04M				
S343	87-A90-095-080		SW,TACT EVQ11G04M				
S345	87-A90-095-080		SW,TACT EVQ11G04M				
S346	87-A90-095-080		SW,TACT EVQ11G04M				
S347	87-A90-095-080		SW,TACT EVQ11G04M				
S348	87-A90-095-080		SW,TACT EVQ11G04M				
S349	87-A90-095-080		SW,TACT EVQ11G04M				
S350	87-A90-095-080		SW,TACT EVQ11G04M				
S351	87-A90-095-080		SW,TACT EVQ11G04M				
S353	87-A90-095-080		SW,TACT EVQ11G04M				
S355	87-A90-095-080		SW,TACT EVQ11G04M <LH>				
S356	87-A90-095-080		SW,TACT EVQ11G04M <LH>				
VR601	83-MA1-661-010		VR,SL 10KB <U>				
X101	87-A70-070-080		VIB,CER 5.76MHZ CRHF				
X801	87-A70-075-080		VIB,CER 4.19MHZ CRHF <LH>				
MIC C.B							
C605	87-010-196-080		CHIP CAPACITOR,0.1-25				
J601	87-099-659-010		JACK,6.3 JY-6314-01130				
J602	87-099-659-010		JACK,6.3 JY-6314-01130				
CD KEY C.B							
C287	87-010-196-080		CHIP CAPACITOR,0.1-25				
CN302	87-099-201-010		CONN,8P 6216 H				
LED258	87-070-201-080		LED,SLP-9118C-51-S RED				
LED259	87-070-201-080		LED,SLP-9118C-51-S RED				
LED260	87-070-201-080		LED,SLP-9118C-51-S RED				
LED261	87-070-201-080		LED,SLP-9118C-51-S RED				
LED262	87-070-201-080		LED,SLP-9118C-51-S RED				
S312	87-A90-095-080		SW,TACT EVQ11G04M				
S313	87-A90-095-080		SW,TACT EVQ11G04M				
S314	87-A90-095-080		SW,TACT EVQ11G04M				
				AC1 C.B			
				△ F101	87-035-491-010		FUSE,6A 125VT 237<U>
				△ F101	87-035-459-010		FUSE,5A 250V <LH>
				△ FC101	87-033-147-010		FUSE CLAMP <LH>
				△ FC101	87-A90-505-080		FUSE CLAMP,TP00351-51<U>
				△ FC102	87-033-147-010		FUSE CLAMP <LH>
				△ FC102	87-A90-505-080		FUSE CLAMP,TP00351-51<U>
				△ PT101	88-MA3-609-010		PT,8MA-3 LH <LH>
				△ PT101	88-MA3-607-010		PT,8MA-3 U <U>
				△ S101	87-A90-165-010		SW,SL 1-2-3 SWS2301 <LH>
				△ T101	87-A60-317-010		TERMINAL, 1P MSC
				△ T102	87-A60-317-010		TERMINAL, 1P MSC
				AC2 C.B			
				△ PR101	87-026-682-080		PROTECTOR,10A 60V491 <LH>
				△ PR101	87-026-691-080		FUSE,10A 125V 251 <U>
				△ PR102	87-026-682-080		PROTECTOR,10A 60V491 <LH>
				△ PR102	87-026-691-080		FUSE,10A 125V 251 <U>
				△ PR103	87-026-682-080		PROTECTOR,10A 60V491 <LH>
				△ PR103	87-026-691-080		FUSE,10A 125V 251 <U>
				△ PR104	87-026-682-080		PROTECTOR,10A 60V491 <LH>
				△ PR104	87-026-691-080		FUSE,10A 125V 251 <U>
				W104	85-NF5-628-010		F-CABLE 7P-2.5
				DECK C.B			
				CON105	87-099-753-019		CONN,11P H 9604
				CON301	86-ZM3-604-219		CON ASSY,3P-PB
				CON351	86-ZM3-605-119		CON ASSY,8P-RPB
				SFR1	87-024-581-089		SFR,3.3K DIA 6H
				SOL1	82-ZM1-618-410		SOL ASSY,27
				SOL2	82-ZM1-618-410		SOL ASSY,27
				SW1	87-A90-248-010		SW,MICRO ESE11SH2CX0
				SW2	87-A90-248-010		SW,MICRO ESE11SH2CX0
				SW3	87-A90-248-010		SW,MICRO ESE11SH2CX0
				SW4	87-A90-248-010		SW,MICRO ESE11SH2CX0
				SW5	87-A90-248-010		SW,MICRO ESE11SH2CX0
				W1	82-ZM3-601-019		RBN-CORD,4P-75
				HEAD-1 C.B			

○ チップ抵抗部品コード / CHIP RESISTOR PART CODE

チップ抵抗部品コードの成り立ち  
Chip Resistor Part Coding



チップ抵抗  
Chip resistor

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

TRANSISTOR ILLUSTRATION



E C B

KTA1266GR  
KTC3198GR



E C B

CC5551



B C E

2SB1370  
FN1016  
FP1016



B C E

2SC4115S



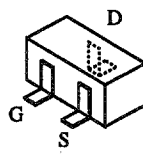
B C E

2SA1296

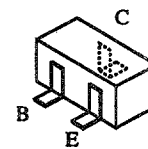


G D S

2SK2723



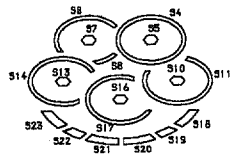
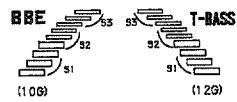
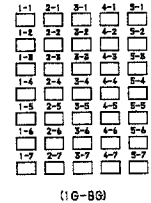
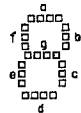
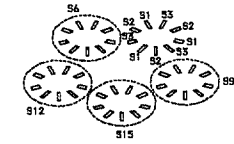
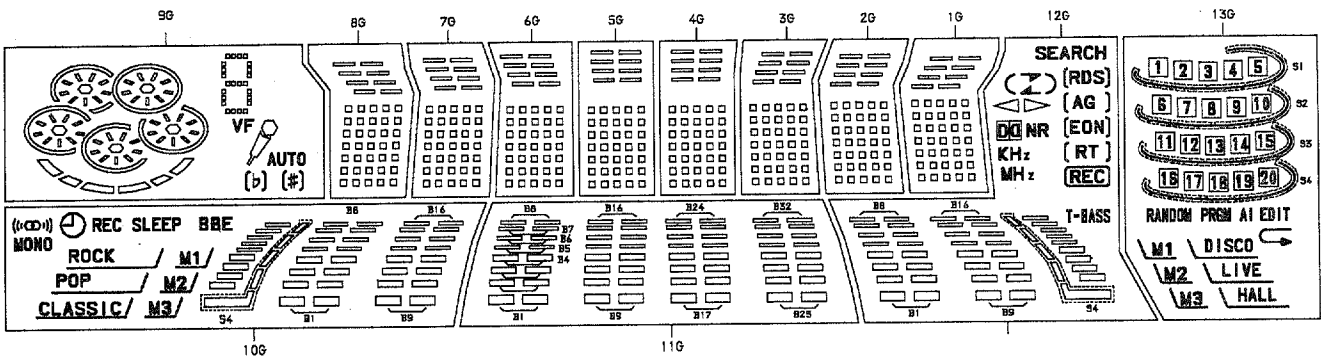
2SK2158



RT1N141C CSA1362GR  
2SA1235 RT1P441C  
2SC3052 DTA114WK  
RT1P144C CMBT5401  
CMBT5551 RT1N144C  
2SC2714  
DTA123JK

# FL GRID ASSIGNMENT AND ANODE CONNECTION

## GRID ASSIGNMENT

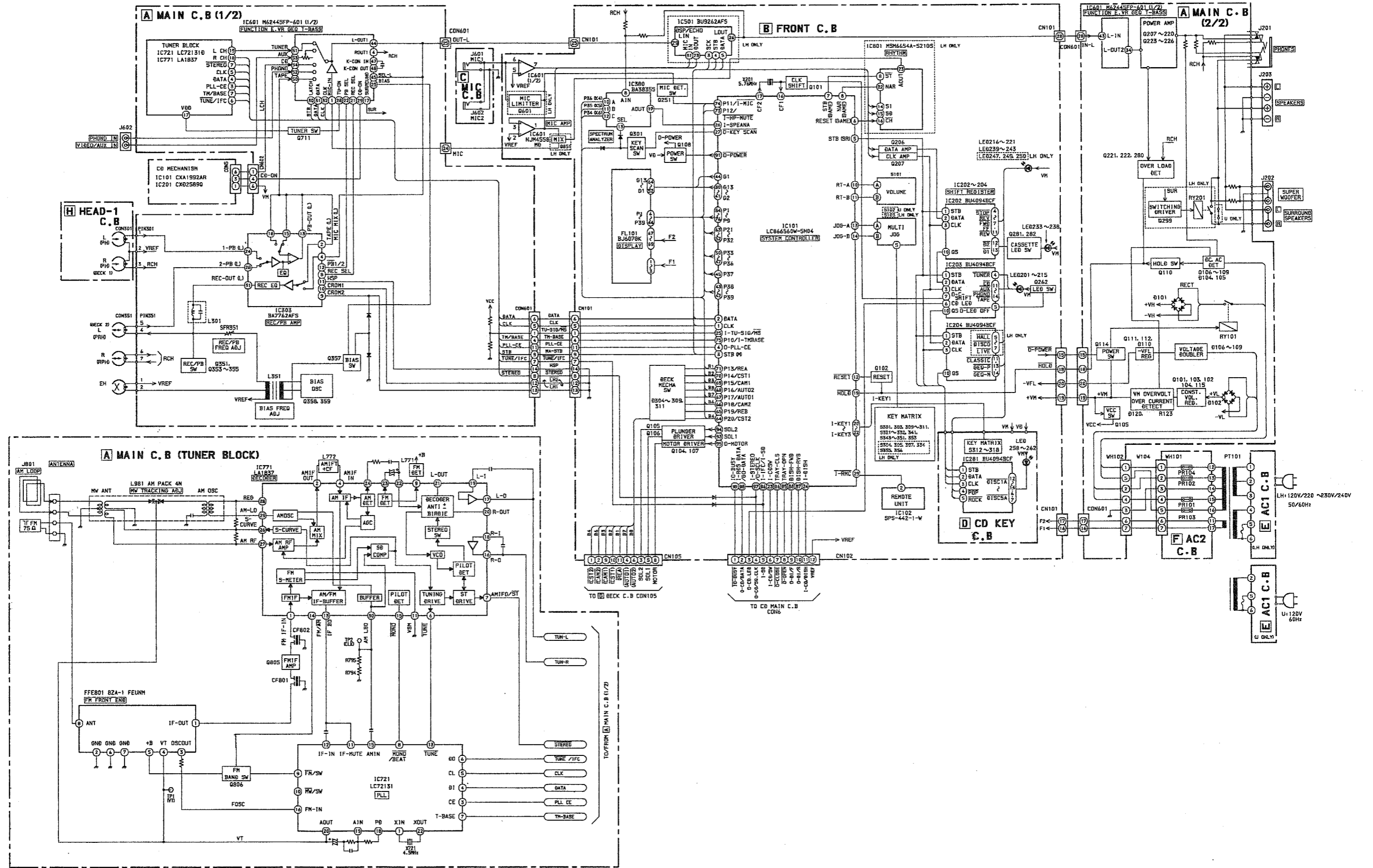


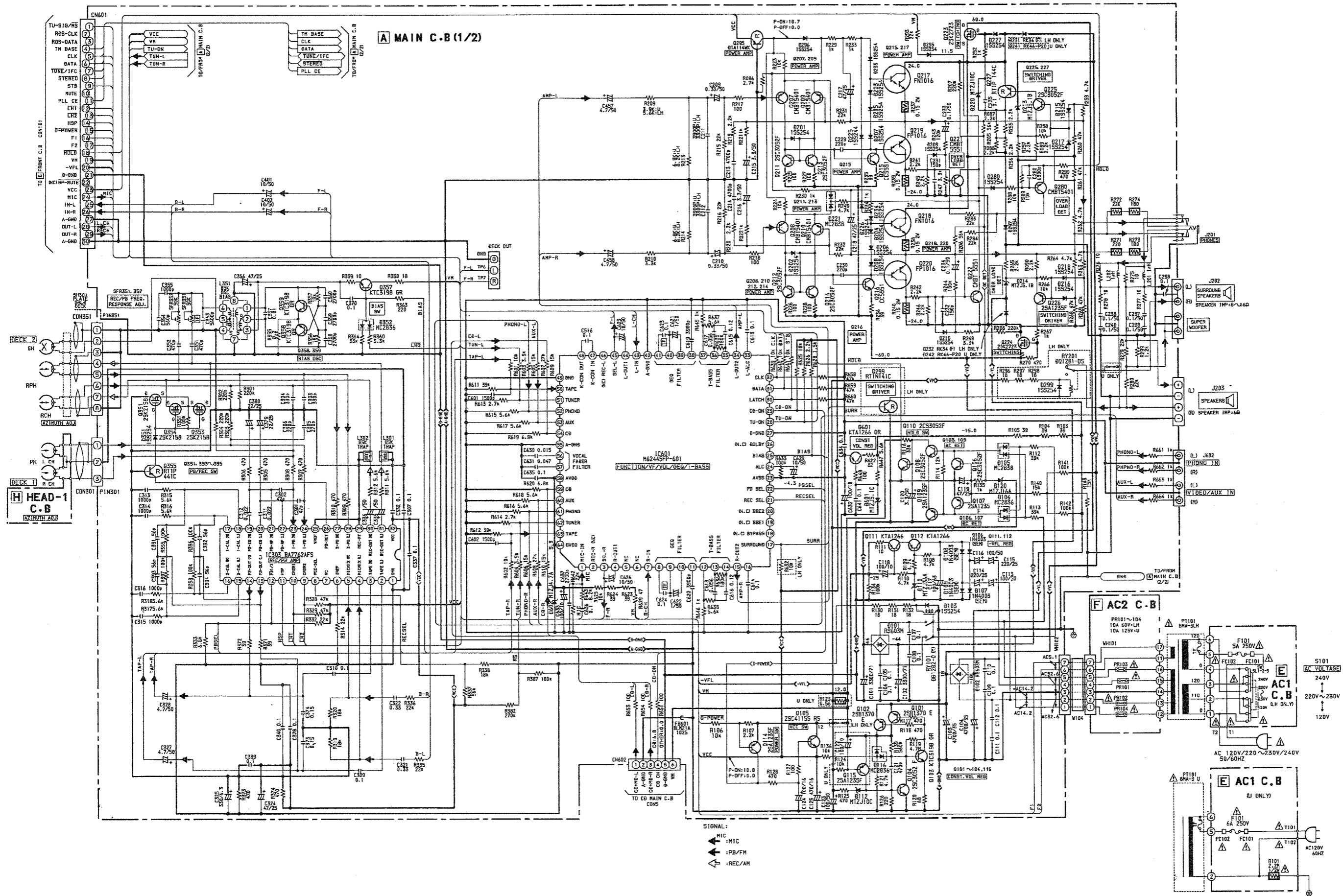
(9G)

## ANODE CONNECTION

	13G	12G	11G	10G	9G	1G-8G
P1	S1	SEARCH	—	—	—	B4
P2	S2	RDS AG EON	—	—	—	B3
P3	S3	RT	—	—	—	B2
P4	S4	—	—	((∞))	S23	B1
P5	DISCO LIVE HALL	((RDS))	—	MONO	S22	1-1
P6	—	((AG))	—	ROCK POP CLASSIC	S21	2-1
P7	((HALL))	((EON))	—	—	S20	3-1
P8	((LIVE))	((RT))	B1	((CLASSIC))	S19	4-1
P9	((DISCO))	)	B9	((POP))	S18	5-1
P10	M1 M2 M3	B1	B17	B1	S16	1-2
P11	—	B9	B25	B9	S15	2-2
P12	((M3))	⚡	B2	((ROCK))	S17	3-2
P13	((M2))	⤵	B10	M1 M2 M3	S13	4-2
P14	((M1))	B2	B18	B2	S12	5-2
P15	↪	B10	B26	B10	S14	1-3
P16	EDIT	▶	B3	—	S10	2-3
P17	AI	◀	B11	((M3))	S9	3-3
P18	PRGM	B3	B19	B3	S11	4-3
P19	RANDOM	B11	B27	B11	S7	5-3
P20	1	DO NR	B4	((M2))	S6	1-4

	13G	12G	11G	10G	9G	1G-8G
P21	2	REC	B12	((M1))	S8	2-4
P22	3	B4	B20	B4	S5	3-4
P23	4	B12	B28	B12	S2	4-4
P24	5	○	B5	REC	S3	5-4
P25	6	KHz	B13	⌚	S1	1-5
P26	7	B5	B21	B5	S4	2-5
P27	8	B13	B29	B13	d	3-5
P28	9	MHz	B6	SLEEP	e	4-5
P29	10	S4	B14	S4	c	5-5
P30	11	B6	B22	B6	g	1-6
P31	12	B14	B30	B14	f	2-6
P32	13	T-BASS	B7	BBE	b	3-6
P33	14	S1	B15	S1	a	4-6
P34	15	B7	B23	B7	VF	5-6
P35	16	B15	B31	B15	✍	1-7
P36	17	S2	B8	S2	AUTO	2-7
P37	18	S3	B16	S3	((b))	3-7
P38	19	B8	B24	B8	((#))	4-7
P39	20	B16	B32	B16	b #	5-7





WIRING - 1 (MAIN)

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

A

B

C

D

E

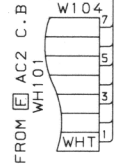
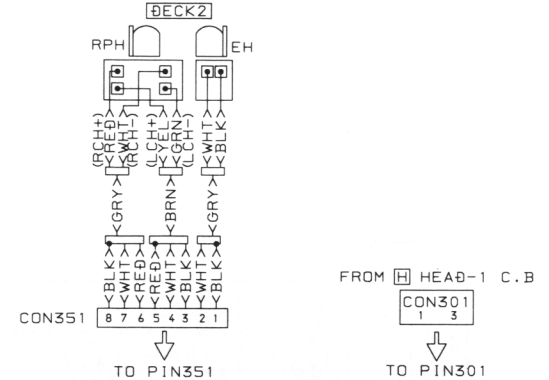
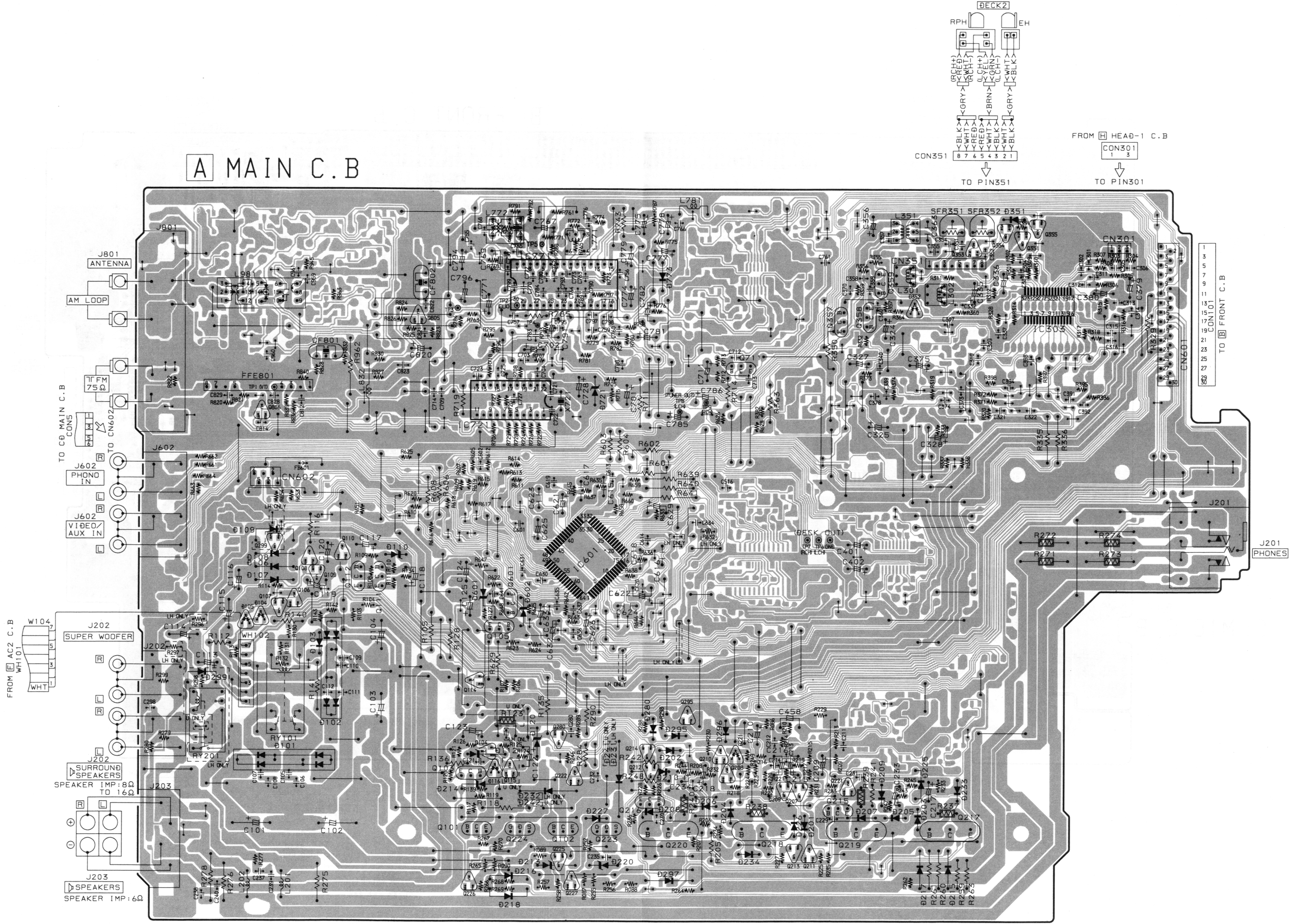
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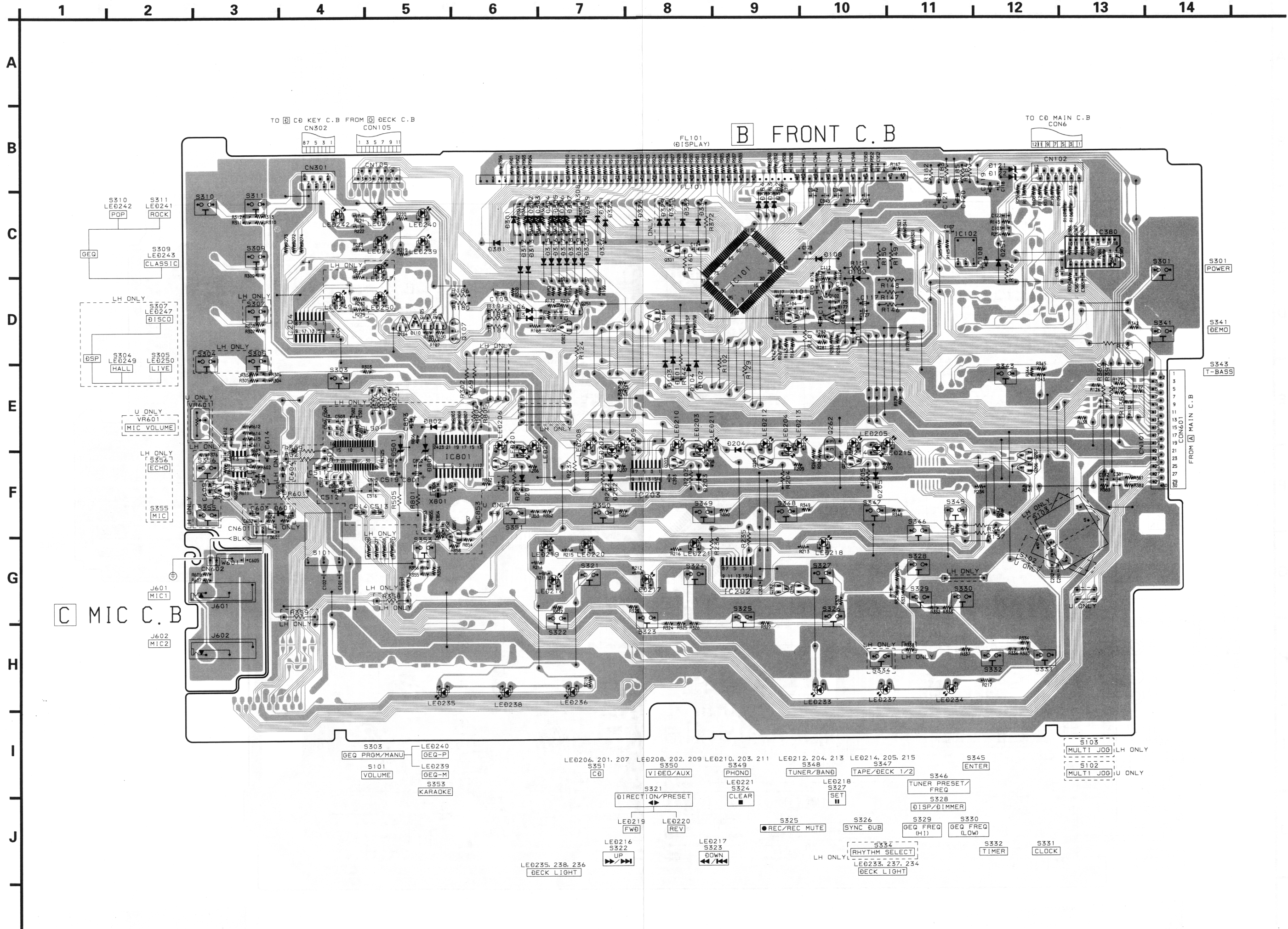
G

H

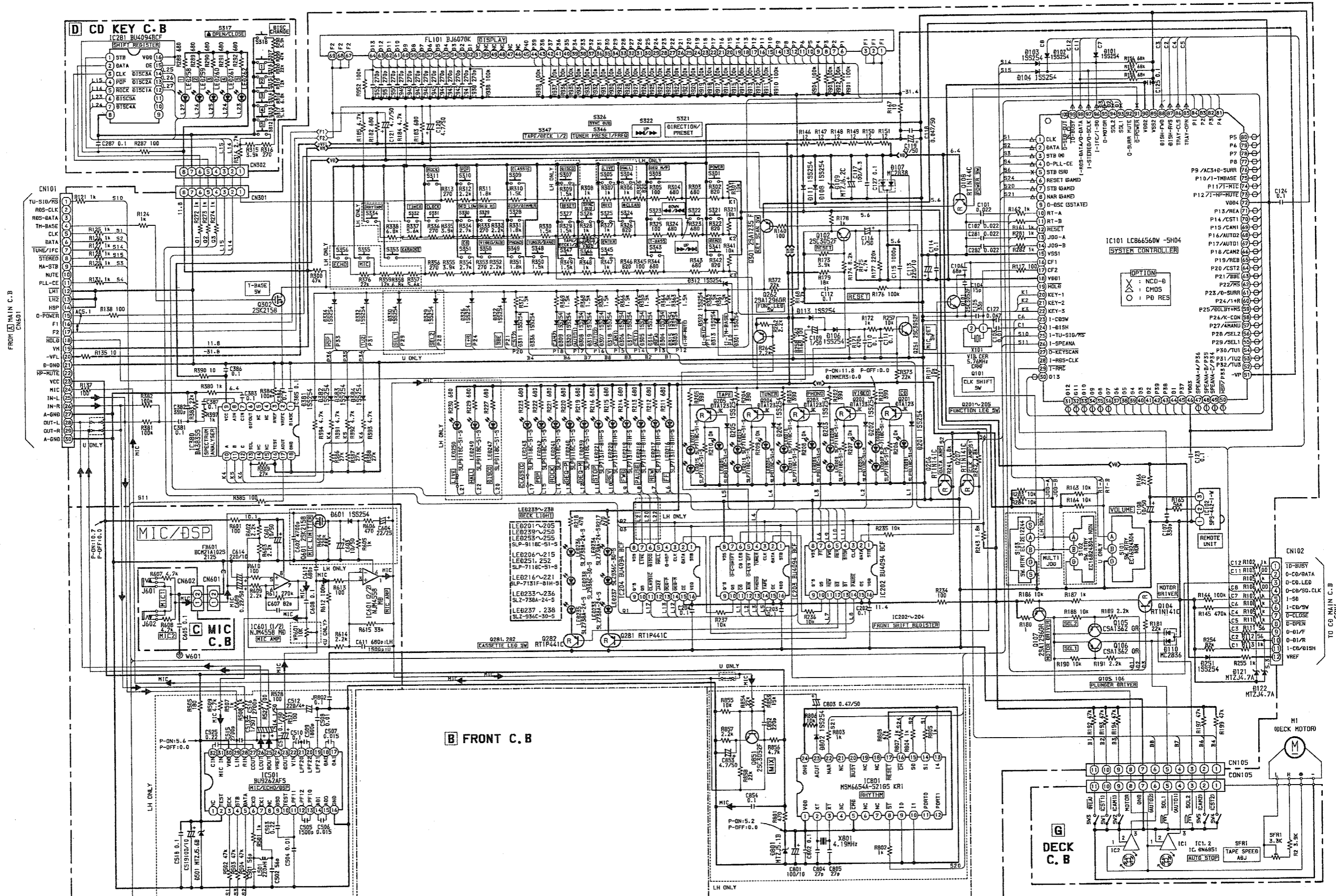
I

A MAIN C.B



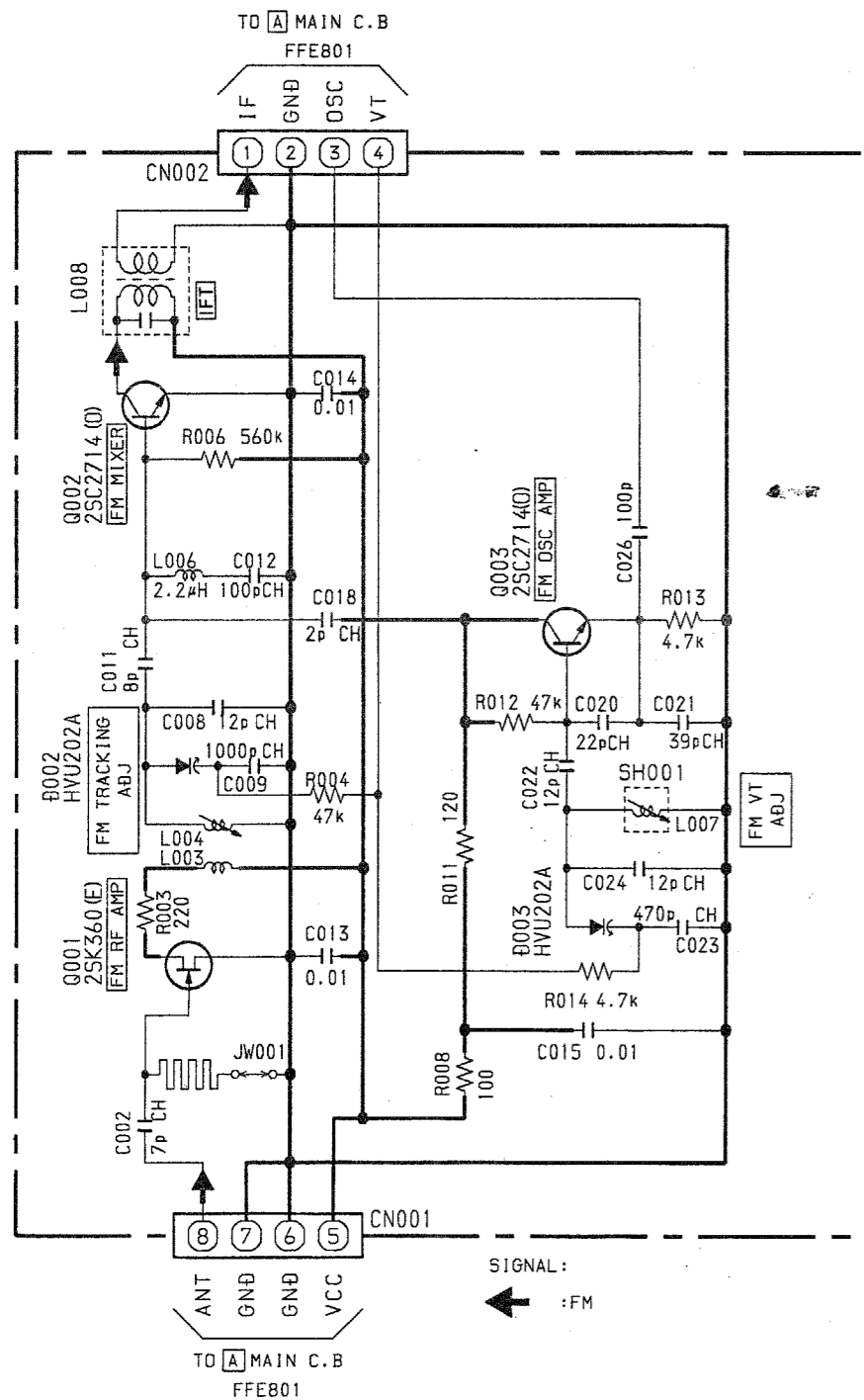




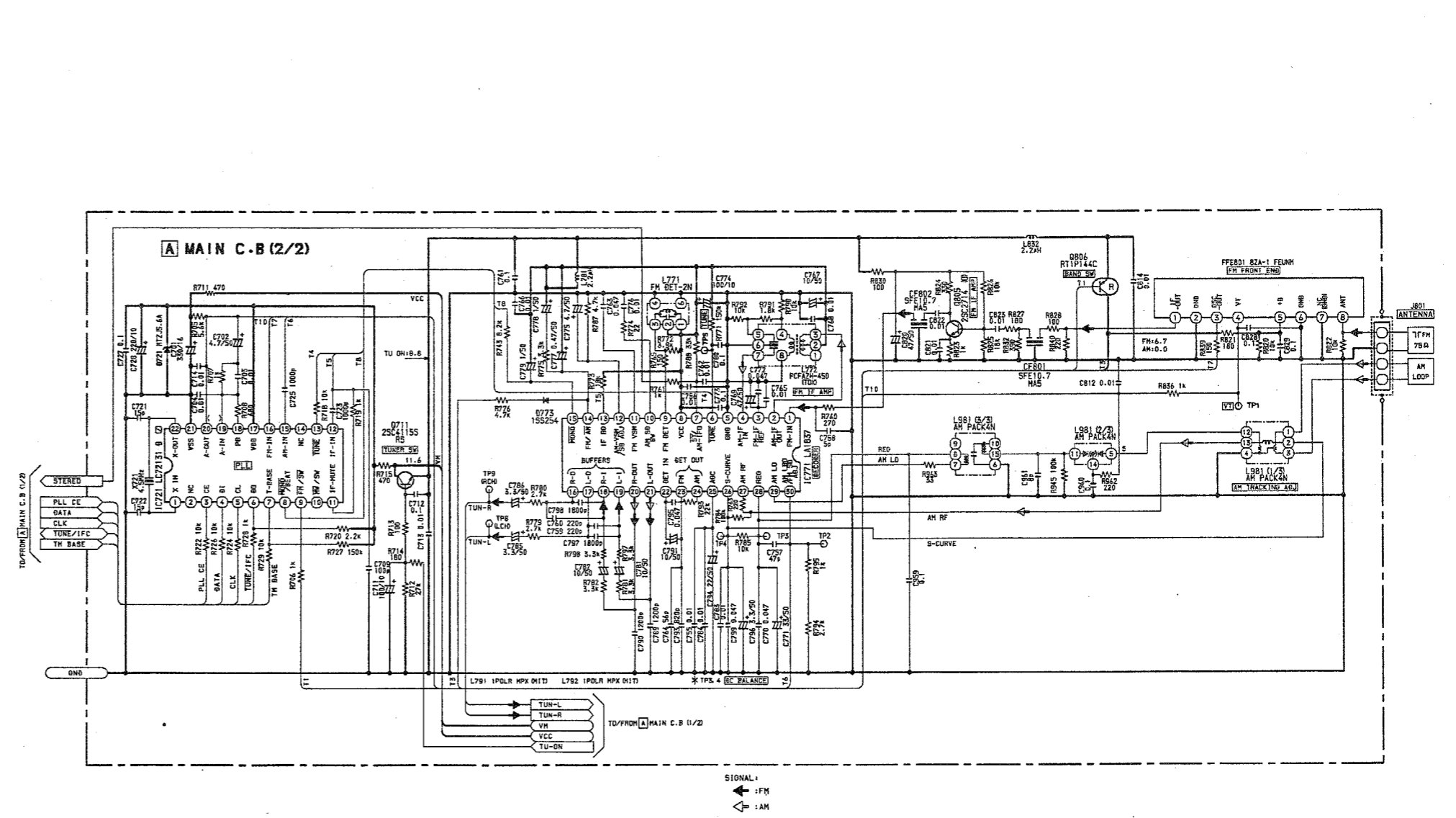


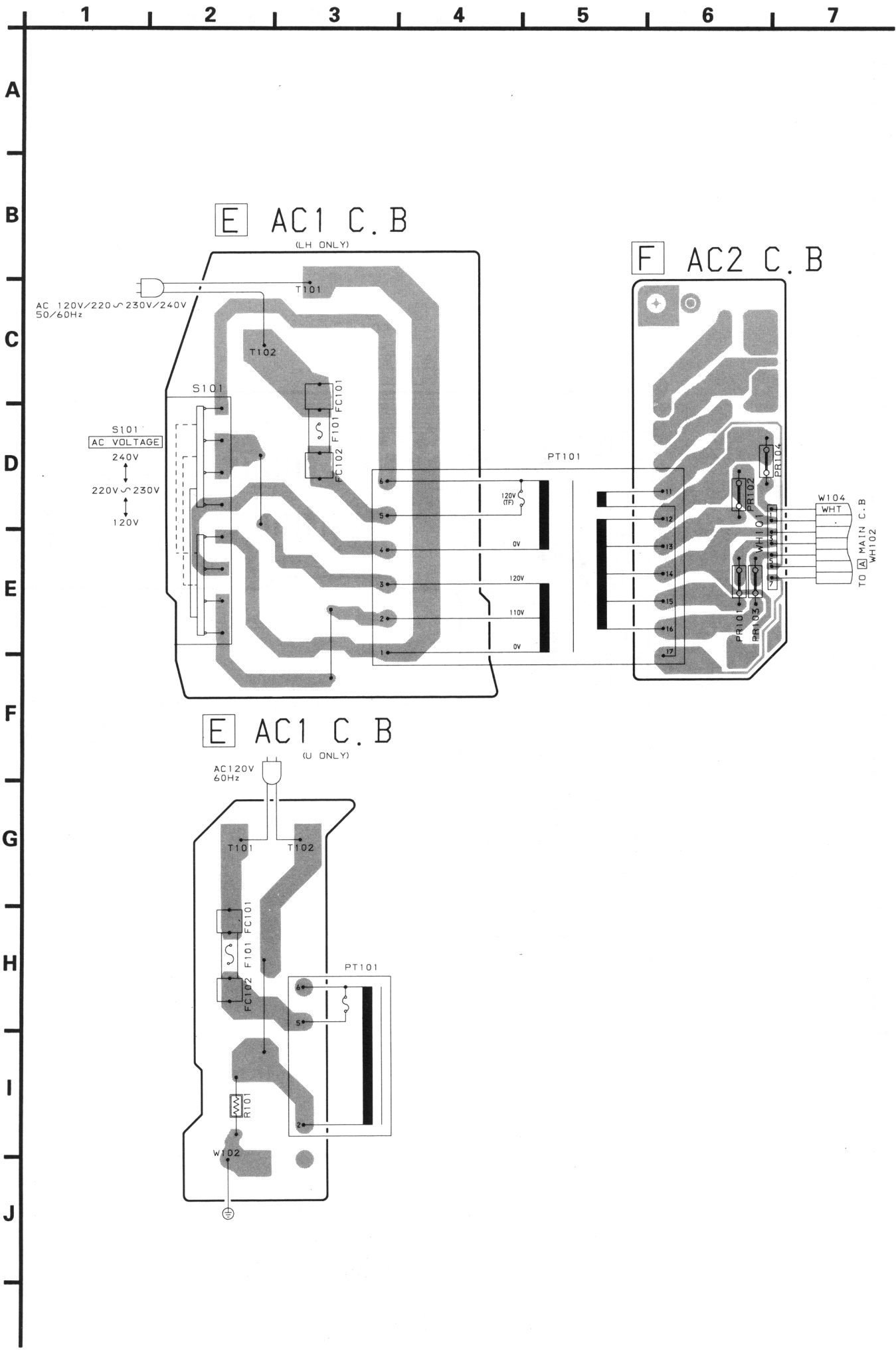
SIGNAL:  
 ← MIC  
 ← PB

SCHEMATIC DIAGRAM - 3 (TUNER FRONT END)

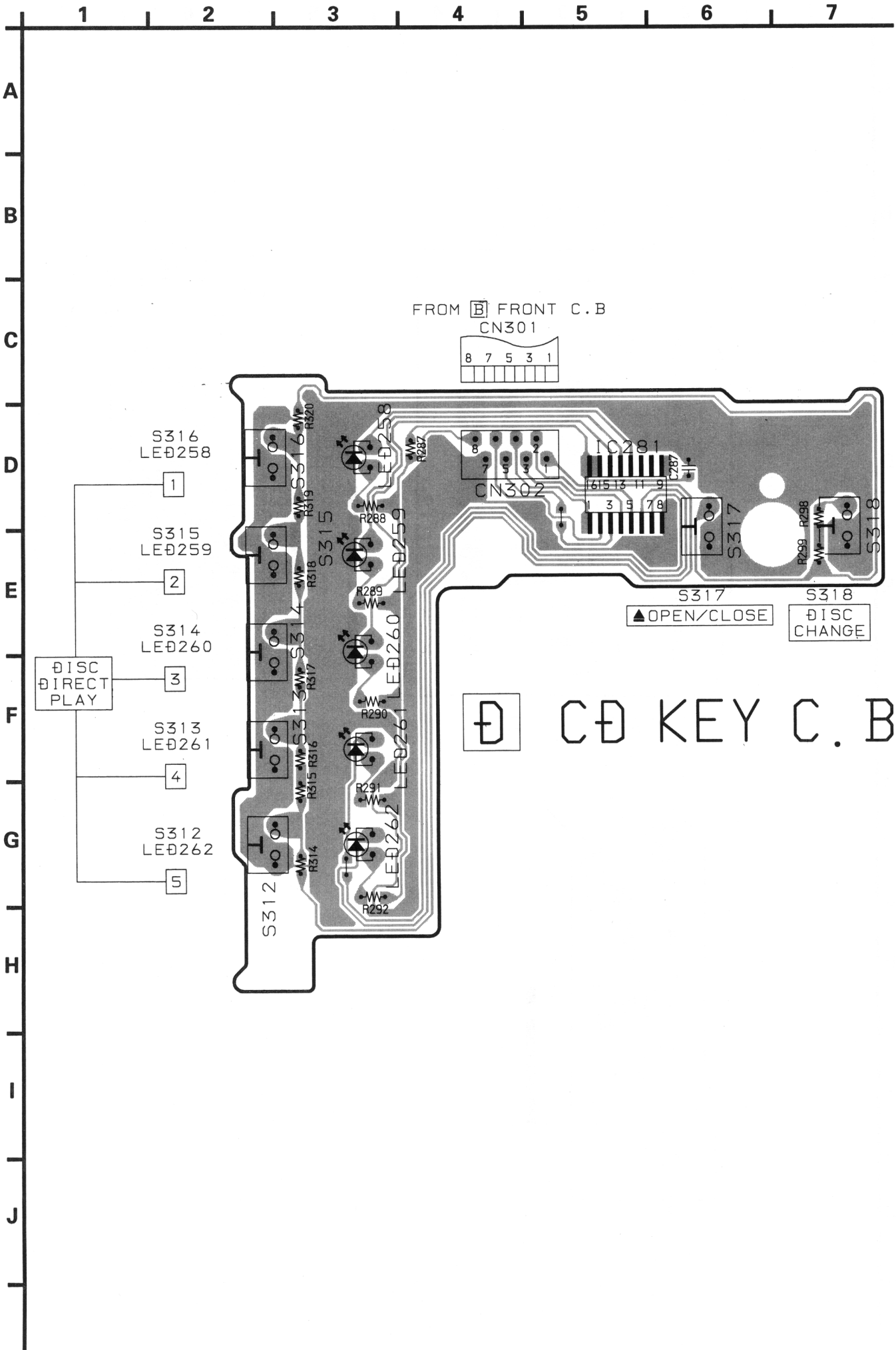


SCHEMATIC DIAGRAM - 4 (MAIN 2/2)





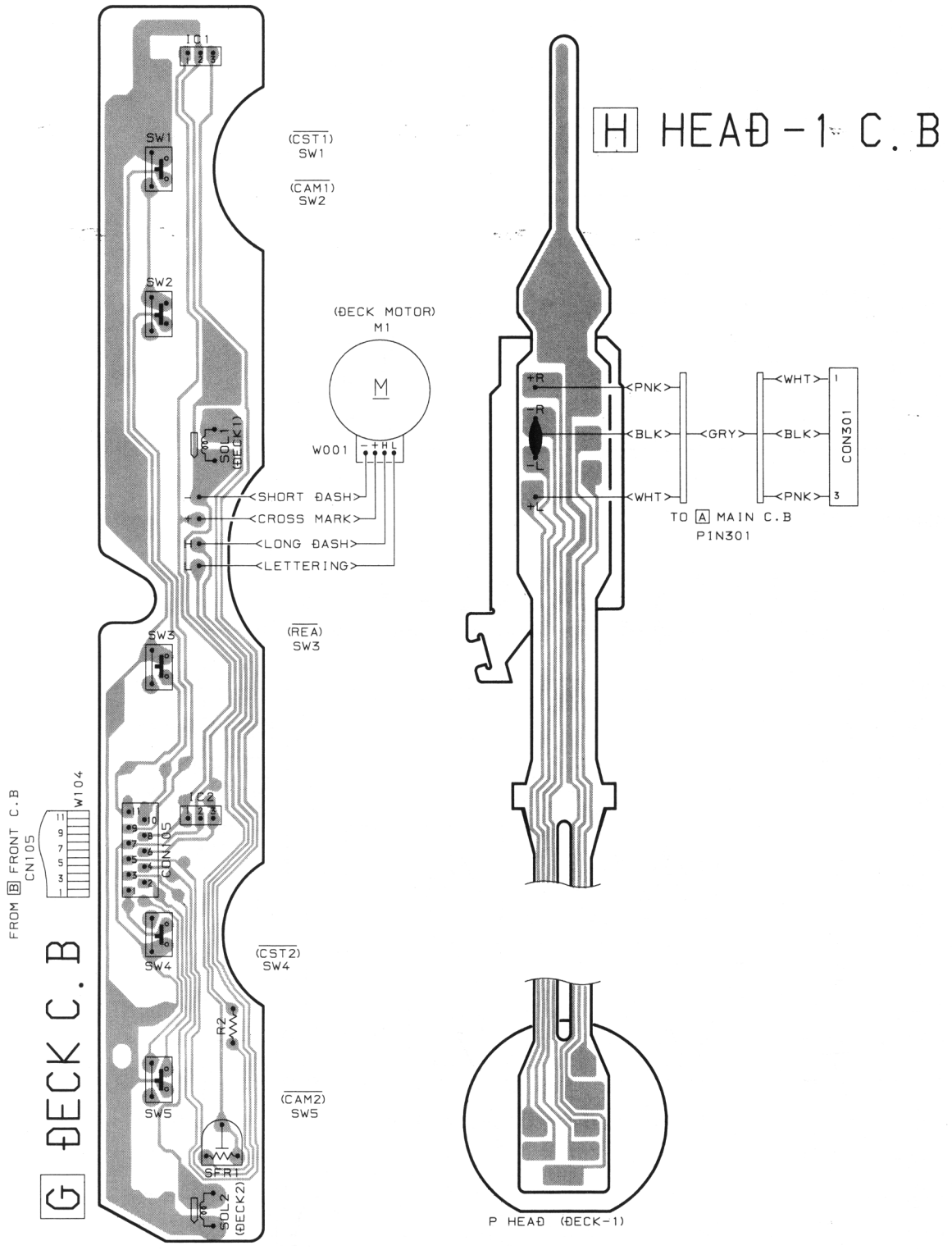
WIRING - 4 (CD KEY)



WIRING - 5 (DECK)

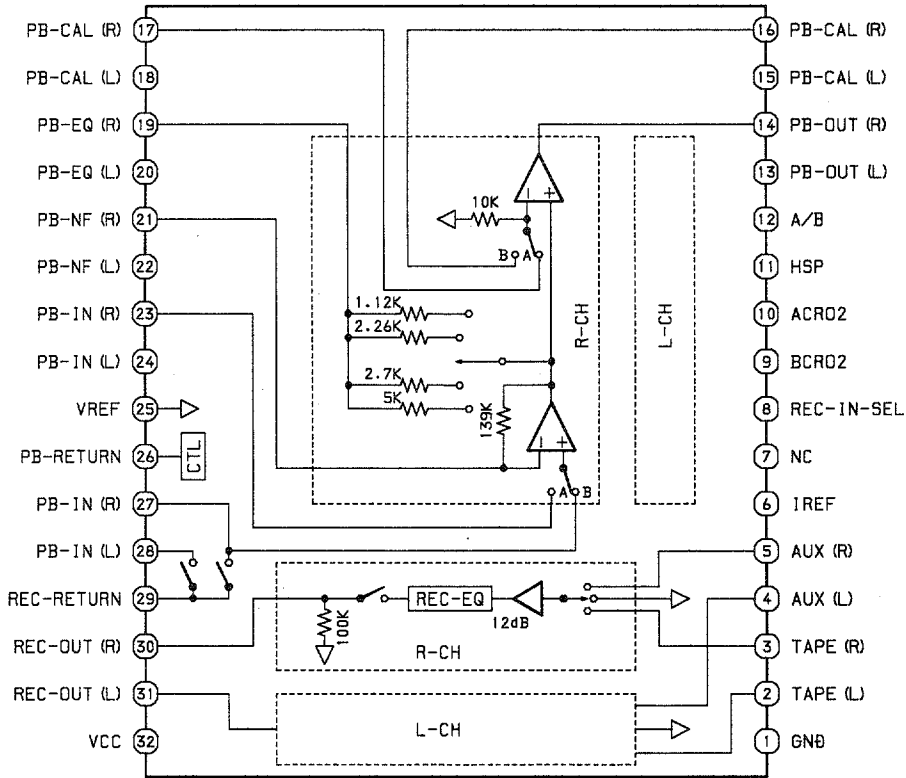
1 2 3 4 5 6 7

A  
B  
C  
D  
E  
F  
G  
H  
I  
J

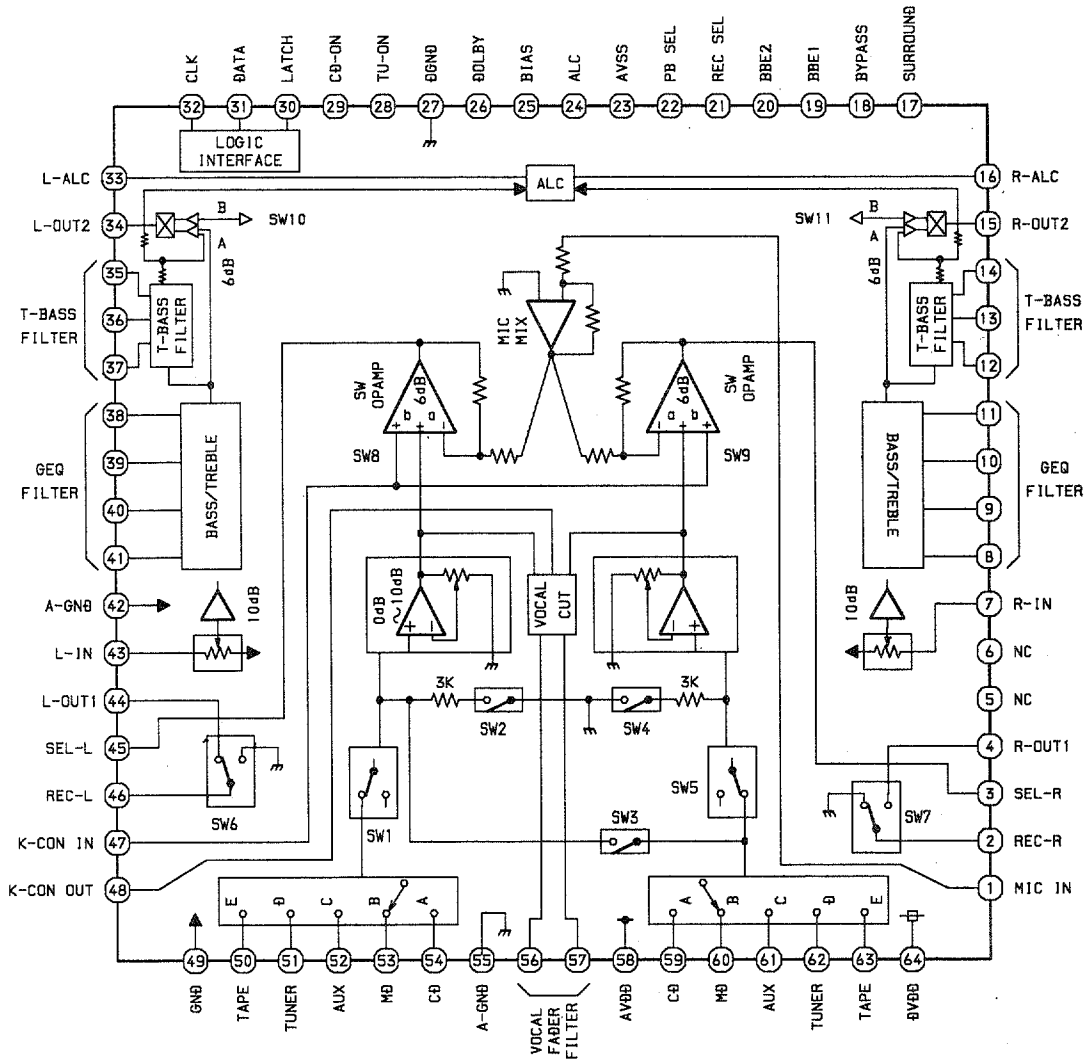


# IC BLOCK DIAGRAM

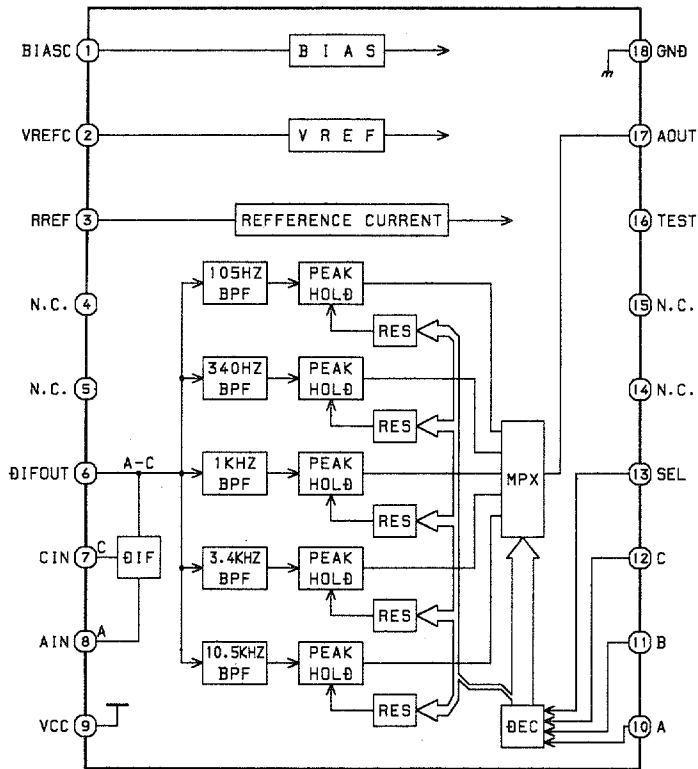
## IC, BA7762AFS



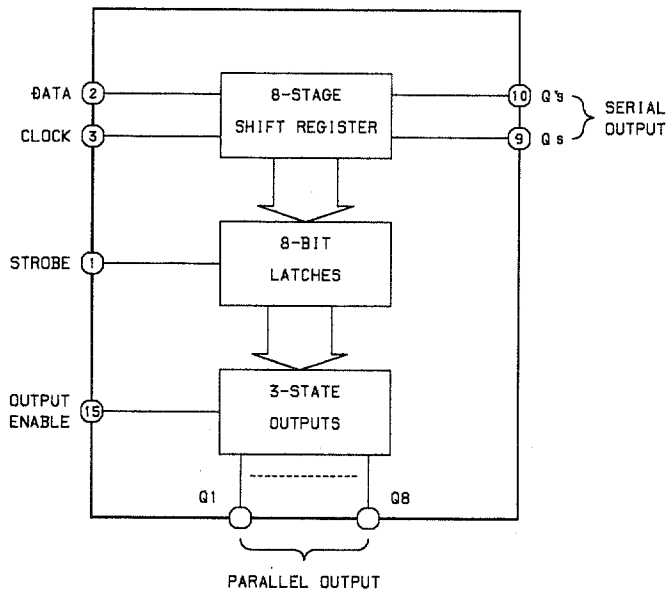
## IC, M62445FP-601



IC, BA3835S



IC, BU4094BCF



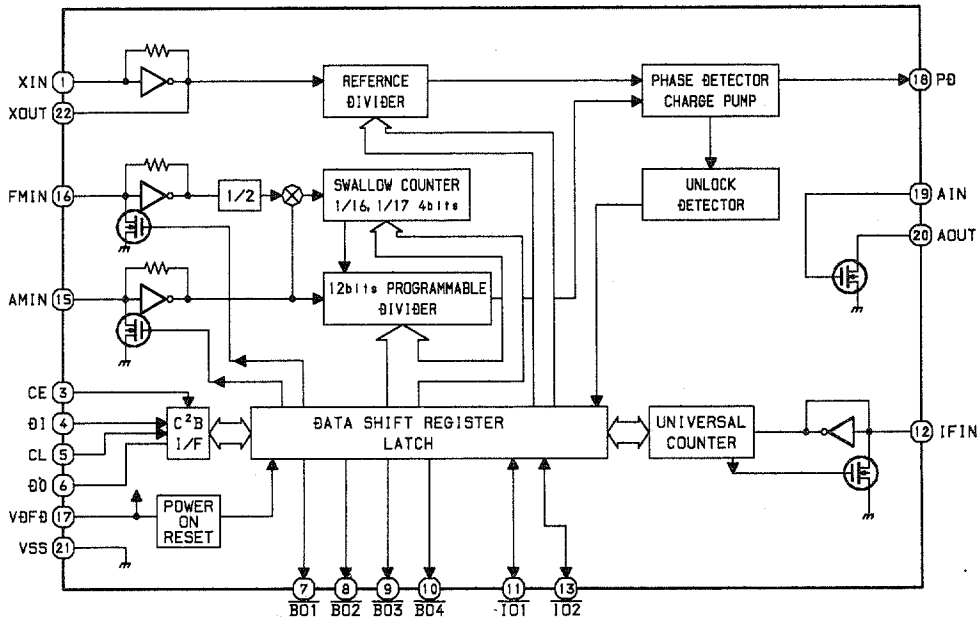
TRUTH TABLE

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

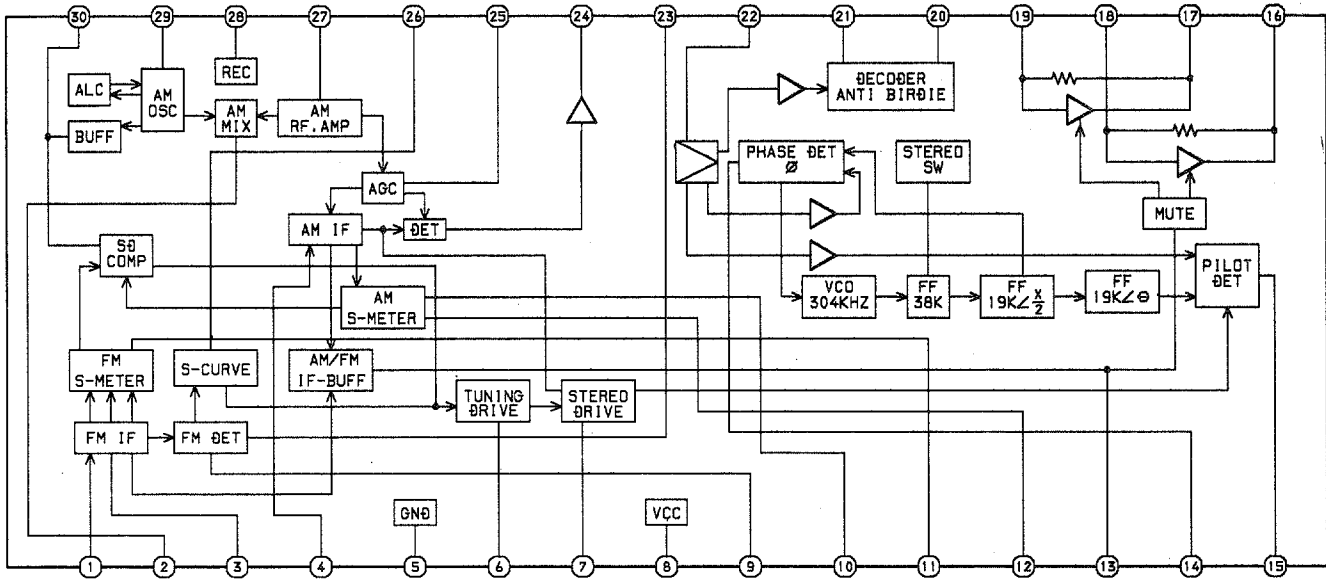
Z=High Impedance

X=Don't Care

IC, LC72131D

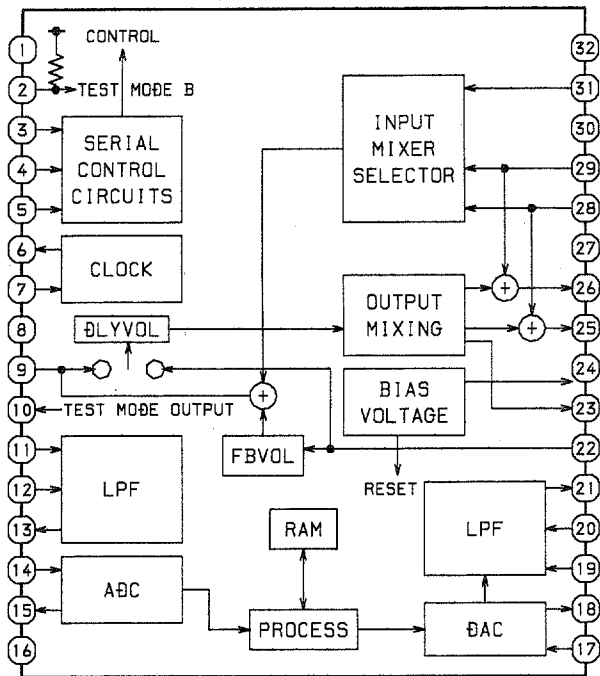


IC, LA1837

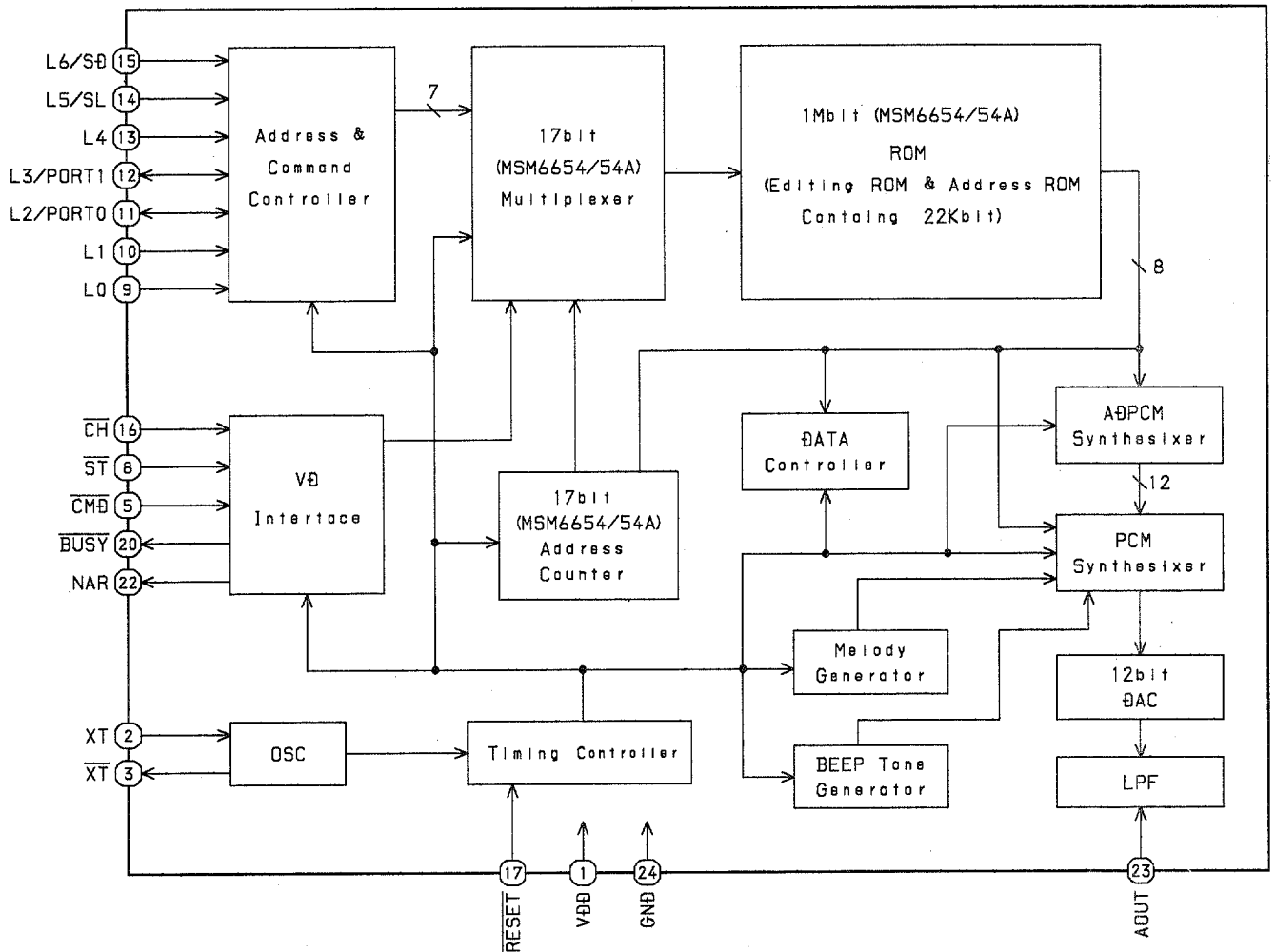




IC, BU9262AFS <LH>



IC, MSM6654A-521GS-KR1 <LH>



# IC DESCRIPTION

IC, LC866560W-5H04

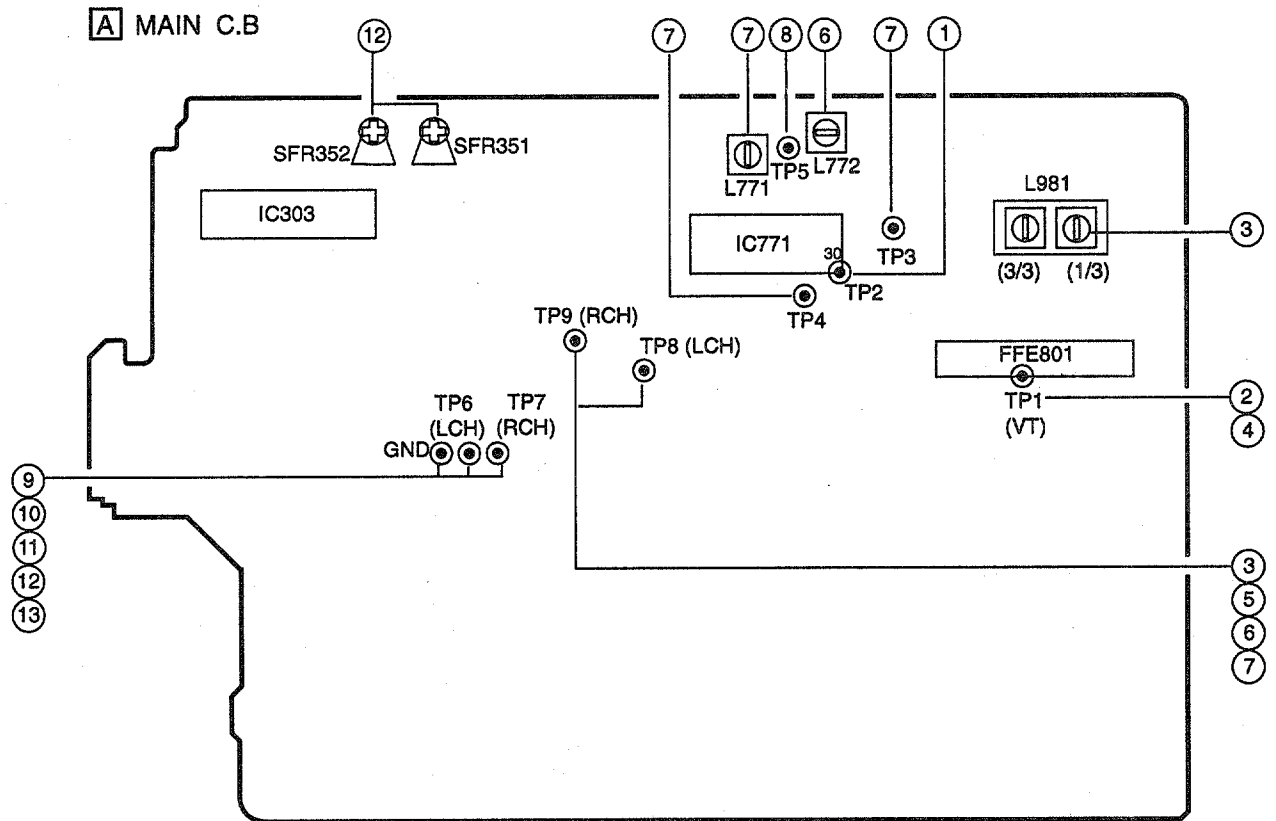
Pin No.	Pin Name	I/O	Description
1	CLK	O	All serial ICs clock output.
2	DATA	O	All serial ICs data output.
3	STB (M)	O	Main C.B IC data latch strobe output.
4	O-PLL-CE	O	PLL IC (LCD72131D) chip enable output.
5	STB (SR)	O	Shift register data latch strobe output.
6	RESET (GAME)	I	Reset input.
7	STB (GAME)	O	Rhythm IC data latch strobe output.
8	NAR (GAME)	I	Rhythm IC NAR input.
9	O-DSC (3STATE)	O	Serial data output for Prologic C.B.(Not connected.)
10	RT-A	I	Rotary encoder volume A input.
11	RT-B	I	Rotary encoder volume B input.
12	RESET	I	Reset input.
13	JOG-A	I	Rotary encoder multi jog A input.
14	JOG-B	I	Rotary encoder multi jog B input.
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" for normal operation.
20	KEY-1	I	KEY input 1~3.(A/D)
21	KEY-2		
22	KEY-3		
23	I-CD SW	I	CD mechanical switch A/D converter input.
24	I-DISH	I	CD turntable photo sensor A/D converter input.
25	I-TU-SIG/MS	I	Tuner signal and deck music sensor signal input.
26	I-SPEANA	I	A/D input for spectrum analyzer display.
27	O-KEYSCAN	O	Key scan timing output.
28	I-RDS-CLK	I	Tuner RDS clock input.(Not connected.)
29	I-RMC	I	System remote control signal input.
30~41	G13~G2	O	FL grid G13~G2 output .
42,43	P39~P38	O	FL Segment P39,P38 output .
44	G1	O	FL grid G1 output.
45	P37	-	FL Segment P37 output.
46	VDD3	-	Power supply input.
47	SPEANA-A/P36	I/O	Spectrum analyzer band pass filter control A / FL segment P36 output.
48	SPEANA-B/P35	I/O	Spectrum analyzer band pass filter control B / FL segment P35 output.
49	SPEANA-C/P34	I/O	Spectrum analyzer band pass filter control C / FL segment P34 output.
50	HSP/P33	I/O	HSP diode detect input / FL segment P33 output.
51	-VP	-	Power supply input for FL display.
52	P32/TU3	I/O	FL segment P32 output / Tuner band select 3 input.
53	P31/TU2	I/O	FL segment P31 output / Tuner band select 2 input.
54	P30/TU1	I/O	FL segment P30 output / Tuner band select 1 input.

Pin No.	Pin Name	I/O	Description
55	P29/SEL1	I/O	FL segment P29 output / SEL1 diode detect input.
56	P28/SEL2	I/O	FL segment P28 output / SEL2 diode detect input.
57	P27/4MANU	I/O	FL segment P27 output / 4MANU diode detect input.
58	P26/K-CON	I/O	FL segment P26 output / K-CON diode detect input.
59	P25/DOLBY+MS	I/O	FL segment P25 output / DOLBY+MS diode detect input.
60	P24/1+R	I/O	FL segment P24 output / 1+R diode detect input.
61	P23/D-SURR	I/O	FL segment P23 output / D-SURR diode detect input.
62	P22/MS	I/O	FL segment P22 output / MS diode detect input.
63	P21/BBE	I/O	FL segment P21 output / BBE diode detect input.
64	P20/CST 2	I/O	FL segment P20 output / DECK2 cassette detect switch input.
65	P19/REB	I/O	FL segment P19 output / DECK2 side-B record OK switch input.
66	P18/CAM 2	I/O	FL segment P18 output / DECK2 cam switch input.
67	P17/AUTO 1	I/O	FL segment P17 output / DECK1 auto stop signal input.
68	P16/AUTO 2	I/O	FL segment P16 output / DECK2 auto stop signal input.
69	P15/CAM 1	I/O	FL segment P15 output / DECK1 cam switch input.
70	P14/CST 1	I/O	FL segment P14 output / DECK1 cassette detect switch input.
71	P13/REA	I/O	FL segment P13 output / DECK2 side A record OK switch input.
72	VDD 4	-	Power supply input.
73	P12/I-HP-MUTE	I/O	FL segment P12 output / "L" input prologic DSP off.
74	P11/I-MIC	I/O	FL segment P11 output / Microphone input for auto vocal fader ON/OFF.
75	P10/I-TMBASE	I/O	FL segment P10 output / Reference clock input for timer watch.
76	P9/AC3+D-SURR	I/O	FL segment P9 output / AC3 +D-SURR diode detect input.
77-84	P8~P1	O	FL segment P8~P1 output.
85	TRAY-OPN	O	CD tray open data output.
86	TRAY-CLS	O	CD tray close data output.
87	DISH RVS	O	CD turntable reverse rotation output.
88	DISH-FWD	O	CD turntable forward rotation output.
89	VSS2	-	GND.
90	VDD2	-	Power supply input.
91	O-POWER	O	System power supply ON/OFF output.
92	O-SURR MUTE	O	Surround mute output.(Not connected.)
93	SOL1	O	Deck1 solenoid output.
94	SOL2	O	Deck2 solenoid output.
95	O-MOTOR	O	Deck motor output.
96	I-IFC/I-SD	I	Tuner SD detect input / Tuner IF count serial data input.
97	I-STEREO/O-SCLK	I/O	Clock output for CD SUB-Q data / Tuner stereo data input.
98	I-RDS-DA/O-DA	I/O	Clock control data output / Tuner RDS data input.
99	I-O-BUSY	I/O	CD IC data input/output.
100	O-SEG-OUT	O	FL segment control data output.

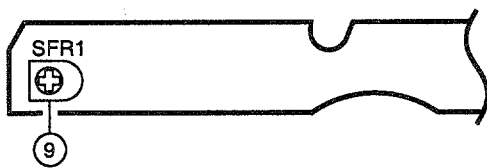
IC, LC72131

Pin No.	Pin Name	I/O	Description																								
1	X IN	I/O	A crystal oscillator (4.5MHz) is connected between these pins.																								
22	X-OUT																										
2	NC	-	Not used.																								
3	CE	I	To enable the IC. Active "H".																								
4	DI	I	Digital data input from CPU (LC866560W-5H04) when relevant key is operated. Active "H".																								
5	CL	I	To clock in the data DI.																								
6	DO	O	Digital data output to CPU (LC866560W-5H04).																								
7	TM-BASE	O	Outputs a reference clock signal (8Hz) for the clock.																								
8	$\overline{\text{MONO}} / \text{BEAT}$	O	Outputs "H" when $\overline{\text{MONO}} / \text{BEAT}$ is switched.																								
9	$\overline{\text{FM}} / \text{AM}$	O	Output "L" or "H" as follows: <table border="1" style="margin-left: 20px;"> <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
2 BAND		3 BAND			3 BAND																						
AM	FM	LW	MW	FM	MW	SW	FM																				
H	L	H	H	L	H	L	L																				
10	$\overline{\text{MW}}$	O	Outputs "L" or "H" as follows: <table border="1" style="margin-left: 20px;"> <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>L</td> <td>L</td> <td>H</td> <td>L</td> <td>L</td> <td>L</td> <td>H</td> <td>L</td> </tr> </tbody> </table>	2 BAND		3 BAND			3 BAND			AM	FM	LW	MW	FM	MW	SW	FM	L	L	H	L	L	L	H	L
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	IF-IN	I	General purpose counter input.																								
13	$\overline{\text{TUNE}}$	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	A-IN	I	The MOS transistor for PLL active low pass filter.																								
20	A-OUT	O																									
21	VSS	-	Ground.																								

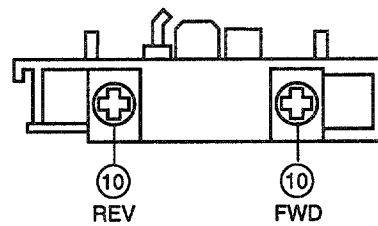
# ADJUSTMENT <TUNER / DECK>



**F DECK C.B**



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



**< TUNER SECTION >**

- 1. Clock Frequency Check**  
 Settings : • Test point : TP2  
 Method : Set to AM 1710kHz and check that the test point is 2160kHz  $\pm$  45Hz.
- 2. 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 : TP8(Lch), TP9(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 : 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  
 AM  
 Settings : • Input level : 52dB  
 • Test point : TP5  
 Method : Set to AM 1000kHz and check that the auto stop is at 37 ~ 62dB.
- FM  
 Settings : • Input level : 25dB  
 • Test point : TP5  
 Method : Set to FM 98.0MHz and check that the auto stop is at  $25dB \pm 10dB$ .

< DECK SECTION >

9. Tape Speed Adjustment  
 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  
 Settings : • Test tape : TTA-300(10kHz)/TTA-330(8kHz)  
 • Test point : TP6(Lch), TP7(Rch)  
 • Adjustment location : Head azimuth  
 adjustment screw  
 Method : Play back (FWD) the 10kHz/8kHz 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. 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 31mV. 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.
13. REC/PB Sensitivity Check  
 Settings : • Test tape : TTA-602  
 • 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 310mV. Record and play back the 1kHz signals and check that the output is  $0 \pm 3.0dB$ .

# 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 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 ± 10dB [at 98.0MHz]  
Stereo separation : More than 30dB [at 98.0MHz]  
Intermediate frequency : 10.7MHz

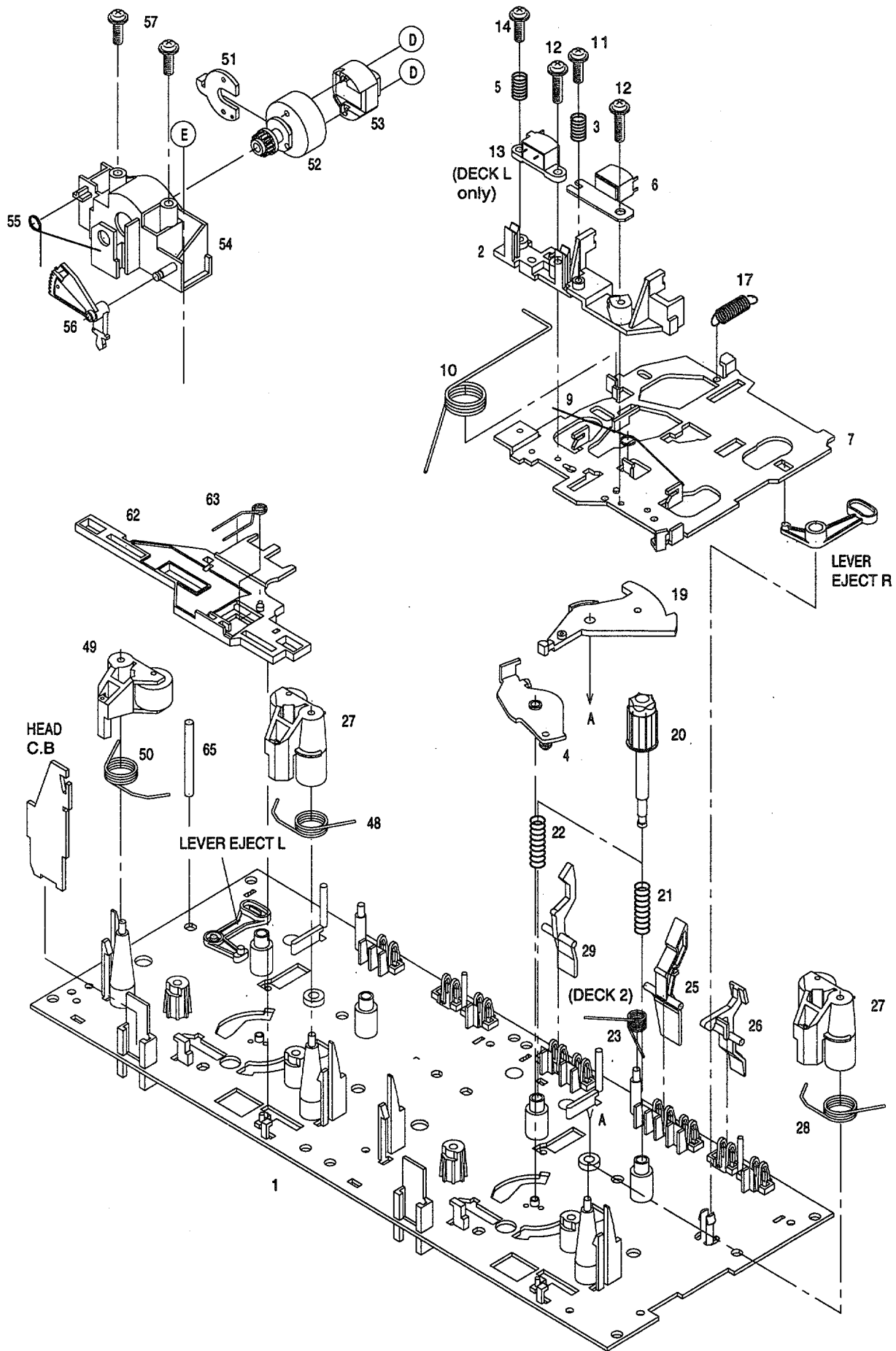
### <AM SECTION>

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

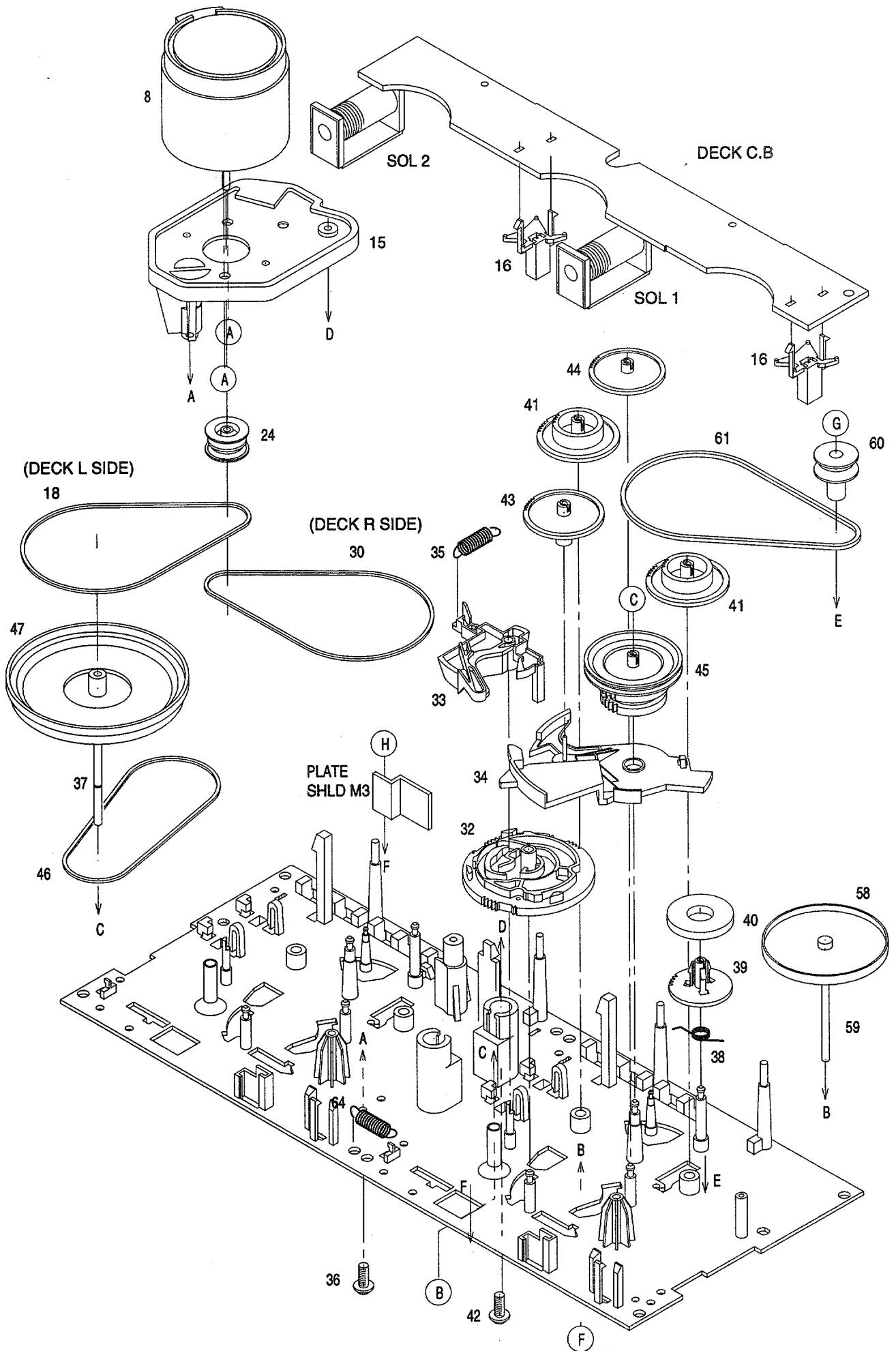
## <DECK SECTION>

Tape speed : 3000Hz ± 45Hz  
Wow & flutter : Less than 0.21%  
(W.R.M.S)  
Take-up torque : 30 ~ 55g-cm  
(FWD, REV)  
F.F torque : 75 ~ 180g-cm  
REW torque : 75 ~ 130g-cm  
Back tension : 2 ~ 7g-cm  
(FWD, REV)  
PB output level : 2.8V ± 3dB  
(SP OUT 6Ω)  
REC/PB output level : 0 ± 3dB  
(SP OUT 6Ω, NORM)  
Distortion (REC/PB) : Less than 2.0%  
(NORM)  
Noise level (PB) : Less than 20mV  
(NORM, SP OUT 6Ω)  
Noise level (REC/PB) : Less than 20mV  
(NORM, SP OUT 6Ω)  
Erasing ratio : More than 60dB  
(at 125Hz, +10VU, NORM)  
Test tape : TTA-602 (NORM)

# TAPE MECHANISM EXPLODED VIEW 1 / 1



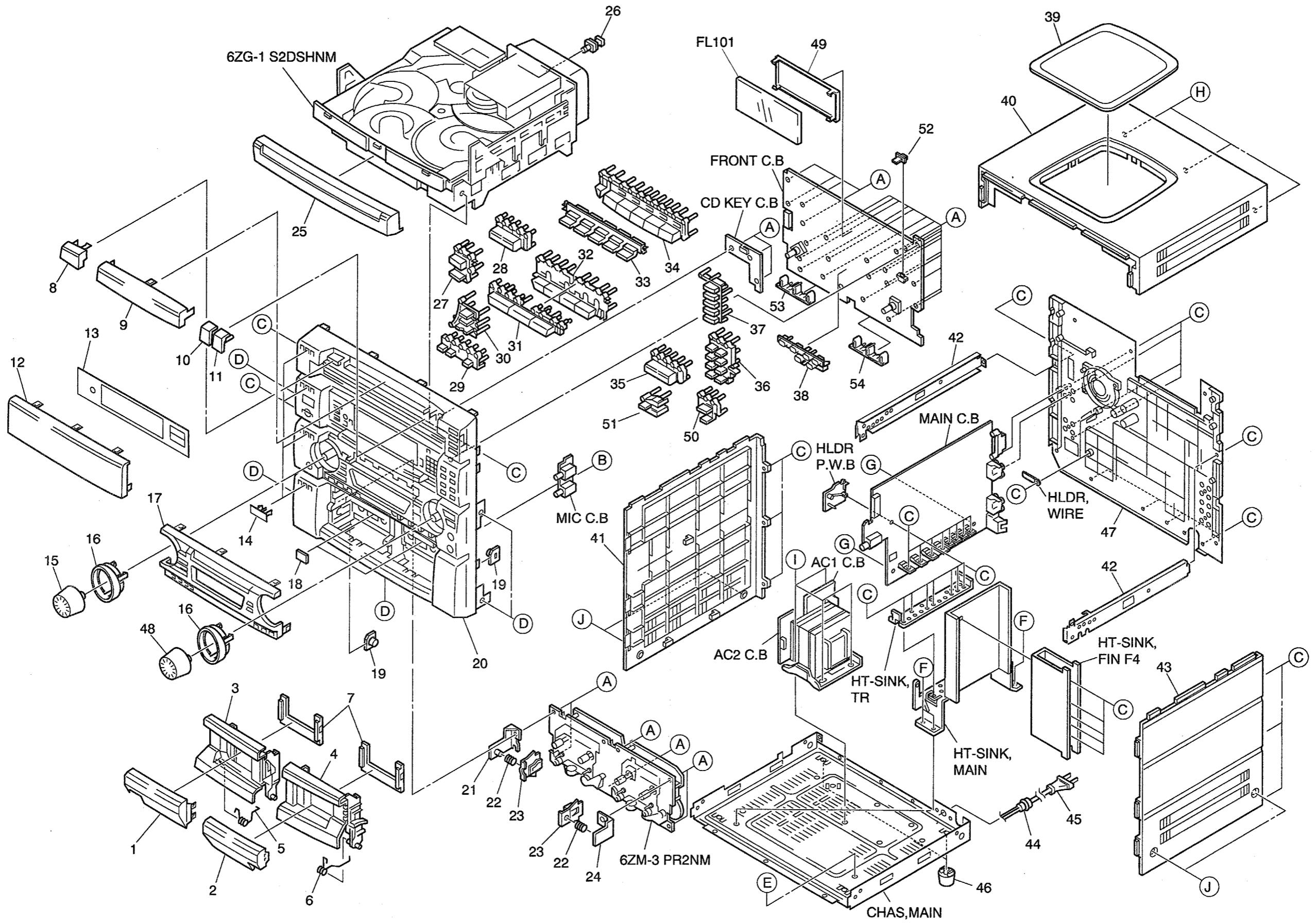




# TAPE MECHANISM PARTS LIST 1 / 1

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

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION	REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	86-ZM3-215-010		CHAS ASSY, RS	41	82-ZM1-216-319		GEAR, REEL
2	86-ZM3-202-010		BASE, HEAD S	42	86-ZM3-213-010		S-SCREW, HLDR, MOT 3
3	86-ZM3-205-010		SPR-C, RPH S	43	82-ZM1-225-219		GEAR, FR
4	82-ZM1-333-210		PLATE, LINK 2	44	82-ZM1-226-019		GEAR, REW
5	86-ZM3-206-010		SPR-C, EH S	45	82-ZM3-333-310		SLIP DISK ASSY 2
6	87-A90-403-019		HEAD, RPH MS15R	46	82-ZM1-338-010		BELT FR4
7	86-ZM3-201-010		CHAS, HEAD S (DECK L)	47	82-ZM1-349-019		FLY-WHL RW (DECK L)
7	82-ZM3-206-910		CHAS, HEAD (DECK R)	47	82-ZM3-338-010		FLY-WHL R3W (DECK R)
8	87-045-347-019		MOT, SHU2L 70 (M1)	48	82-ZM1-259-210		SPR-T, PINCH R
9	82-ZM1-269-219		SPR-T, BRG	49	82-ZM1-341-110		LVR ASSY, PINCH L2
10	82-ZM1-219-110		SPR-T, LINK	50	82-ZM1-258-210		SPR-T, PINCH L
11	86-ZM3-209-010		S-SCREW, ASIMUTHS	51	82-ZM1-314-110		PLATE, HEAD
12	86-ZM3-207-010		S-SCREW, RPH	52	82-ZM1-208-310		HLDR, HEAD
13	87-A90-404-019		HEAD, EH LE15B	53	87-A90-366-010		HEAD, PH YK50P-BF414
14	86-ZM3-208-010		S-SCREW, EH	54	82-ZM1-207-810		GUIDE TAPE
15	86-ZM3-203-010		HLDR, MOTS	55	82-ZM1-213-010		SPR-T, HEAD
16	82-ZM1-245-210		HLDR, IC	56	82-ZM1-210-110		GEAR, HT
17	82-ZM1-218-019		SPR-E, HB	57	86-ZM4-206-010		S-SCREW AZIMUTH L
18	86-ZM3-214-010		BELT, SUB RR	58	82-ZM1-348-010		FLY-WHL, LW
19	82-ZM1-222-219		LVR, PLAY	59	82-ZM1-236-019		CAPSTAN N 2-41.5
20	82-ZM1-217-419		REEL TABLE	60	82-ZM3-335-210		PULLEY, COUPLER M3
21	82-ZM1-244-519		SPR-C, BT	61	86-ZM1-206-010		BELT, MAIN L
22	82-ZM1-285-410		SPR-C, BT L	62	82-ZM1-266-110		LVR, DIR
23	82-ZM1-257-019		SPR-T, CAS	63	82-ZM1-214-010		SPR-T, DIR
24	82-ZM3-221-010		PULLEY, MOT 2M	64	82-ZM1-255-310		SPR-E, LVR DIR
25	82-ZM1-242-019		LVR, CAS	65	82-ZM3-339-010		SHAFT, COUPLER N3
26	82-ZM1-243-019		LVR, STOP	A	87-251-071-417		U+2.6-4
27	82-ZM1-344-119		LVR ASSY, PINCH	B	80-ZM6-243-019		SH, 1.75-3.6-0.5 SLT
28	86-ZM3-204-010		SPR-T, PINCHDS	C	82-ZM3-334-010		PW, 2.16-6-0.4
29	82-ZM1-240-119		LVR, REC (DECK 2)	D	80-ZM6-207-010		V+1.6-7
30	86-ZM3-210-010		BELT, RS	E	85-ZM3-202-010		S-SCREW TG
32	82-ZM3-305-119		GEAR, CAM M2	F	82-ZM1-288-010		SH, 1.63-3.2-0.5 SLT
33	82-ZM1-227-319		LVR, TRIG	G	87-B10-043-010		W-P, 0.99-4-0.25 SLT
34	82-ZM3-306-110		LVR, FR M2	H	87-571-032-410		VIT+2-3
35	82-ZM1-265-119		SPR-E, TRIG				
36	87-761-073-419		VFT2+2.6-6 W/O SLOT				
37	82-ZM1-239-019		CAPSTAN N 2.2-41.7				
38	82-ZM1-322-019		SPR-T, FR60				
39	82-ZM1-220-219		GEAR, IDLER				
40	82-ZM3-616-019		RING MAGNET 4				

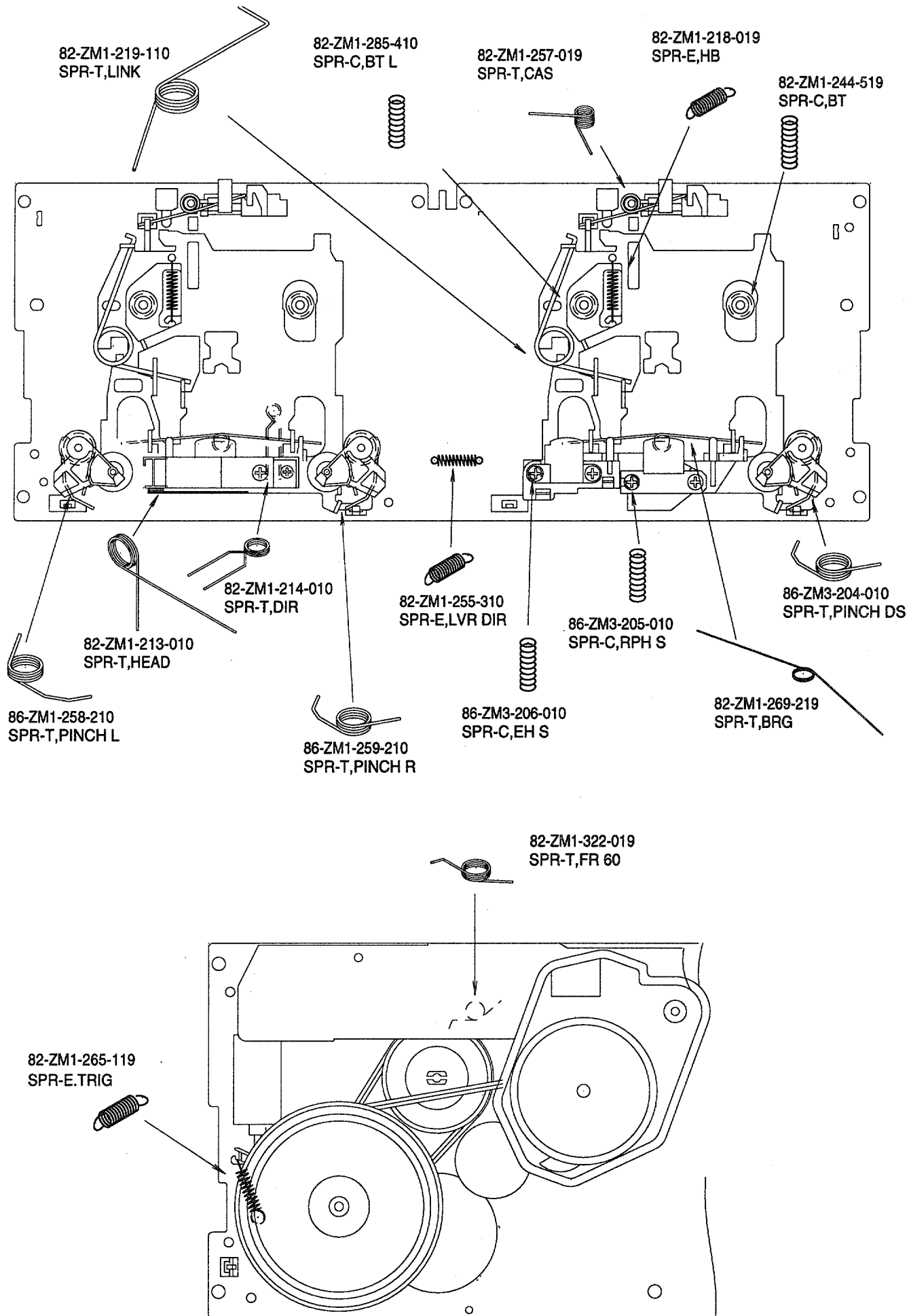


# MECHANICAL PARTS LIST 1/1

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

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION	REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	88-MA1-027-010		WINDOW, CASS L	35	88-MA2-015-010		KEY, PRGM(2)
2	88-MA1-028-010		WINDOW, CASS R	36	88-MA2-009-010		KEY, GEQ(2) <LH>
3	88-MA3-042-010		BOX, CASS L3	36	88-MA3-029-010		KEY, GEQ(3) U<U>
4	88-MA3-038-010		BOX, CASS R3	37	88-MA1-009-010		KEY, DIRECT
5	82-NF5-218-010		SPR-T, EJECT 1 (SIN)	38	88-MA1-201-010		GUIDE, PLAY
6	82-NF5-219-010		SPR-T, EJECT 2 (SIN)	39	86-MA3-042-010		WINDOW, TOP<LH>
7	86-NF6-061-010		REFLECTOR, CASS	39	87-MAT-009-010		WINDOW, TOP(U) <U>
8	88-MA3-045-010		PANEL, CD(2)	40	88-MA3-015-010		PANEL, TOP 3<LH>
9	88-MA1-025-010		WINDOW, CD	40	88-MA3-034-010		PANEL, TOP 3U<U>
10	88-MA3-044-010		KEY, CHANGE(2)	41	88-MA3-016-010		PANEL, SIDE L3<LH>
11	88-MA3-043-010		KEY, OPEN(2)	41	88-MA3-035-010		PANEL, SIDE L3U<U>
12	88-MA1-026-010		WINDOW, AMP<LH>	42	88-MA1-208-010		JOINT, CABI
12	88-MA3-037-010		WINDOW, AMP 3U<U>	43	88-MA3-017-010		PANEL, SIDE R3<LH>
13	88-MA2-010-010		PLATE, GEQ(2) <LH>	43	88-MA3-036-010		PANEL, SIDE R3U<U>
13	88-MA3-032-010		PLATE, GEQ(3) U<U>	44	87-085-185-010		BUSHING, AC CORD (E) <LH>
14	82-NE8-032-010		BADGE, AIWA 27.5	44	87-085-189-010		BUSHING, CORD (U) <U>
15	88-MA1-031-010		KNOB, RTRY JOG<U>	45	87-050-053-010		AC CORD ASSY, U-2<U>
15	88-MA1-060-010		KNOB, RTRY RHYTHM<LH>	45	87-050-079-010		AC-CORD ASSY, E<LH>
16	88-MA1-029-010		RING, VOL	46	87-MA3-062-010		FOOT, H17
17	88-MA3-027-010		PANEL, FR(3) H<LH>	47	88-MA3-007-010		CABI, REAR LH<LH>
17	88-MA3-039-010		PANEL, FR(3) U<U>	47	88-MA3-010-010		CABI, REAR UBNM<U>
18	81-532-080-010		LABEL, CASS. COMPT	48	88-MA1-030-010		KNOB, RTRY MAIN
19	87-NF8-220-010		DMPR, 150	49	88-MA2-202-010		GUIDE, FL(2)
20	88-MA3-001-010		CABI, FR H3<LH>	50	88-MA1-022-010		KEY, MIC<LH>
20	88-MA3-004-010		CABI, FR U3<U>	51	88-MA3-040-010		KEY, VF(3)
21	87-NF4-216-010		HLDR, LOCK 1	52	88-MA3-014-010		KNOB, SL MIC<U>
22	86-NF9-224-010		SPR-C, LOCK	53	85-NF5-210-110		GUIDE, LED L
23	82-NF5-229-010		PLATE, LOCK	54	85-NF5-211-110		GUIDE, LED R
24	87-NF4-217-010		HLDR, LOCK 2	A	87-078-060-010		BVIT3PB+3-10
25	88-MA1-013-010		PANEL, TRAY	B	81-MK1-210-010		S-SCREW, VFT2+3-16
26	84-ZG1-245-210		CAP, OPTICAL	C	87-067-703-010		TAPPING SCREW, BVT2+3-10
27	88-MA1-015-010		KEY, POWER	D	87-591-095-410		TAPPING SCREW, QIT+3-8 (GLD)
28	88-MA3-011-010		KEY, T-BASS	E	87-067-688-010		BVTT+3-6
29	88-MA2-023-010		KEY, DEMO(2) <LH>	F	87-067-579-010		TAPPING SCREW, BVT2+3-8
29	88-MA3-033-010		KEY, TIMER<U>	G	87-NF4-224-010		S-SCREW, IT3B+3-8 CU
30	88-MA1-019-010		KEY, JOG	H	87-067-758-010		BVT2+3-12 W/O SLOT
31	88-MA1-039-010		KEY, ASSY PLAY	I	87-067-975-010		S-SCREW, IT+4-8
32	88-MA3-047-010		KEY, ASSY FF(3)	J	87-067-641-010		UTT2+3-8(W/O SLOT)BL
33	88-MA1-045-010		REFLECTOR, FUN				
34	88-MA1-018-010		KEY, FUN				

# SPRING APPLICATION POSITION

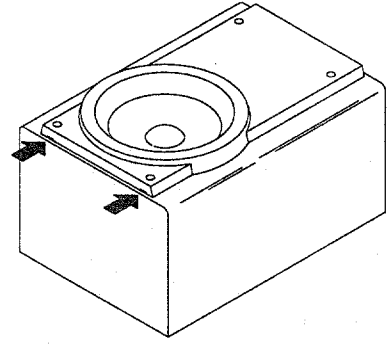


# SPEAKER DISASSEMBLY INSTRUCTIONS

## Type.1

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

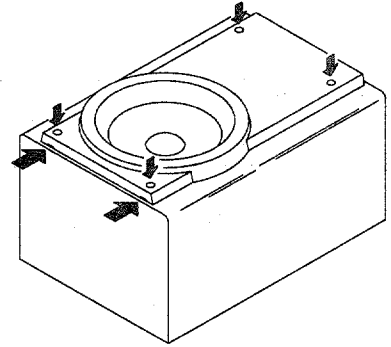
Insert a flat-bladed screwdriver into the position indicated by the arrows and remove the panel. Remove the screws of each speaker unit and then remove the speaker units.



## Type.2

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

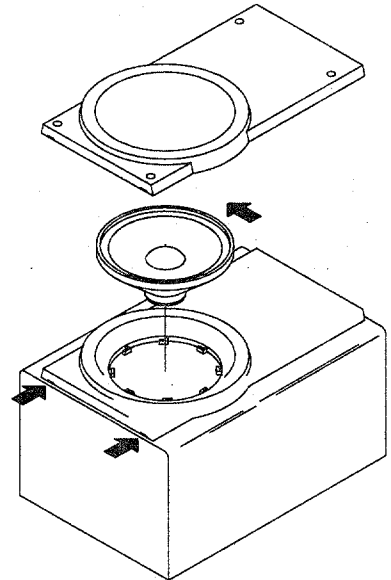
Remove the grill frame and four pieces of rubber caps by pulling out with a flat-bladed screwdriver. Remove the screws from hole where installed rubber caps. Insert a flat-bladed screwdriver into the position indicated by the arrows and remove the panel. Remove the screws of each speaker unit and then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



## Type.3

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-FZR77<YLB>)

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

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	87-MS4-611-010		SPKR, CORD Y/B
2	87-MS4-614-010		SPKR, CORD
3	87-MS5-601-010		SPKR W 200
4	87-MS6-607-010		SPKR SU 80
5	88-MS3-001-010		PANEL, FR
6	88-MS3-002-010		PANEL, SP
7	88-MS3-004-010		PROTECTOR, R
8	88-MS3-005-010		PROTECTOR, L
9	88-MS3-006-010		GRILLE, FRAME ASSY
10	88-MS3-601-010		SPKR, TW 80
11	88-MS3-609-010		SPKR, CERAMIC

## SPEAKER PARTS LIST (SX-ZR77<YUB>)

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

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	84-VS3-603-010		SPEAKER TWEETER
2	86-VSR-602-010		SPKR, W 200
3	88-MSP-001-010		PANEL, FR R
4	88-MSP-002-010		PANEL, SP
5	88-MSP-004-010		GRILLE, FRAME ASSY
6	88-MSP-007-010		PROTECTOR, TW
7	88-MSP-611-010		SPKR, CERAMIC ASSY
8	88-MSR-610-010		SPKR, CORD

## SPEAKER PARTS LIST (SX-R286<YUB>)

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

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	87-YS1-004-010		GRILLE FRAME ASSY
2	87-YS6-002-010		SPKR, CORD Y
3	87-YS9-601-010		SPKR, SPKR, 100

## ACCESSORIES / PACKAGE LIST

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

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	88-MA3-902-010		IB, LH(ESF)M<LH>
1	88-MA3-903-010		IB, U(ESF)M<U>
2	87-043-115-010		FEEDER-ANT, FM
3	87-A90-030-010		ANT, LOOP AM-NC C
△ 4	87-099-789-010		PLUG, CONVERSION IR44<LH>
5	87-MA6-702-010		RC UNIT, RC-7AS01

# REFERENCE NAME LIST

## ELECTRICAL SECTION

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

## MECHANICAL SECTION

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



サービス技術ニュース	
番号	連絡内容
G- -	
G- -	
G- -	

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