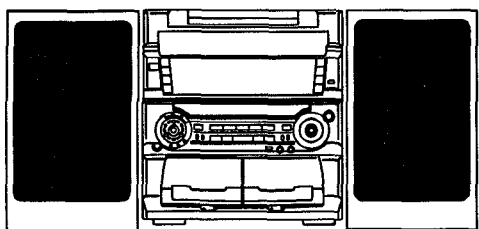


aiwa



Z-L70



COMPACT DISC STEREO
CASSETTE RECEIVER

- BASIC TAPE MECHANISM: 2ZM-3MK2 PR5NM
- BASIC CD MECHANISM: 6ZG-1 SDSHNM

• TYPE: U

REVISION PUBLISHING

SYSTEM	CD CASSEIVER	SPEAKER	STEREO TURNTABLE
Z-L70	CX-ZL70	SX-WZL70	PX-E860

- This Service Manual is the "Revision Publishing" and replaces "Simple Manual" (S/M Code No. 09-991-321-4T1).
- If requiring information about the CD mechanism, see Service Manual of 6ZG-1 (S/M Code No.09-984-249-9OT).
- If requiring information about the Stereo Turntable, see Service Manual of PX-E860 (U) (S/M Code No. 09-993-322-0R1).

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

<Amplifier section>

Mid-high frequency amplifier power output 30 W + 30 W (200 Hz ~ 20 kHz, THD less than 1 %, 6 ohms)
Total harmonic distortion 0.15 % (15 W, 1 kHz, 6ohms)
Low frequency amplifier power output 90 W + 90 W (50 Hz ~ 200 Hz, THD less than 1 %, 6 ohms)
Total harmonic distortion 0.15 % (45 W, 135 Hz, 6 ohms)
Inputs VIDEO/AUX: 310 mV (adjustable)
 PHONO: 400 mV (47 kohms)
 MIC1, MIC2: 1.4mV (20 kohms)
 CD DIGITAL OUT (OPTICAL)
Outputs SPEAKERS: accept speakers of 6 ohms or more
 SURROUND SPEAKERS: accept speakers of 8 -16 ohms or more
 PHONES (stereo jack) : accept headphones of 32 ohms or more

<Cassette deck section>

Track format 4 tracks, 2 channels stereo
Frequency response CrO₂ tape: 50 Hz – 16000 Hz
 Normal tape: 50 Hz –15000 Hz
Signal-to-noise ratio 50 dB (CrO₂ tape peak level, above 400Hz)
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 0.05 % (1 kHz, 0 dB)
Wow and flutter Unmeasurable

<Speaker system SX-WZL70>

Cabinet type 3 way, built-in subwoofer
Speakers Subwoofer:
 220 mm (8 ³/₄ in.) cone type
 Full range:
 120 mm (4 ³/₄ in.) cone type
 Super tweeter:
 20 mm (¹³/₁₆ in.) ceramic type
Impedance 6 ohms
Output sound pressure level 89 dB/W/m
Dimensions (W x H x D) 290 x 444 x 296 mm
 (11¹/₂ x 17 ¹/₂ x 11 ³/₄ in.)
Weight 6.8 kg (14 lbs. 16 oz.)

<General>

Power requirements 120 V AC 60 Hz
Power consumption 180 W
Dimensions of main unit (W x H x D) 360 x 394.5 x 387.5 mm
 (14¹/₄ x 15 ⁵/₈ x 15 ³/₈ in.)
Weight of main unit 10.5kg (23 lbs. 2 oz)

- Design and specifications are subject to change without notice.
- The word "BBE"and the "BBE symbol" are trademarks of BBE Sound, Inc.
 Under license from BBE Sound,Inc.

ACCESSORIES / PACKAGE LIST

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

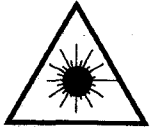
REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	8Z-MA3-903-010	IB, U(BSF)M	
2	87-043-115-010	ANT, FEEDER FM	
3	87-A90-030-010	ANT, LOOP AM-NC C	
4	8Z-MA1-702-010	RC UNIT, ZAS12	

PROTECTION OF EYES FROM LASER BEAM DURING SERVICING

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

WARNING!!

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



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

VAROITUS!

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

WARNING!

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

CAUTION

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

ATTENTION

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

ADVARSEL!

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

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

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

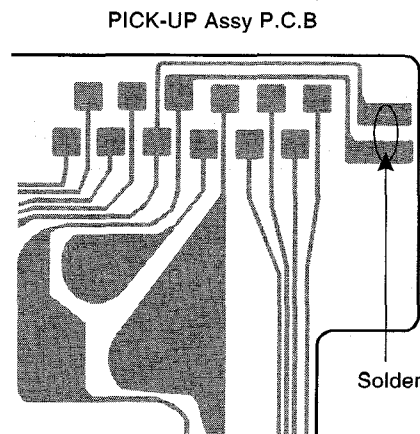
CLASS 1	LASER PRODUCT
KLASSE 1	LASER PRODUKT
LUOKAN 1	LASER LAITE
KLASS 1	LASER APPARAT

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.

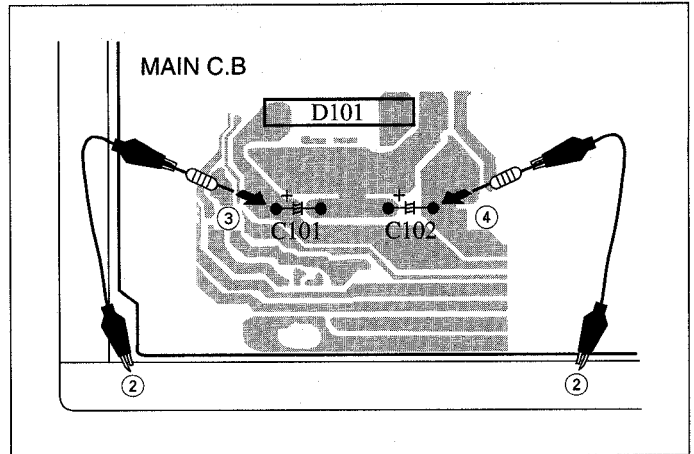


Fig-1

Select a discharging resistor referring to the following table.

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

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

2. Check items before exchanging the MICROCOMPUTER

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

2-1. Regarding the HOLD terminal of the MICROCOMPUTER

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

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

- Good or no good judgement of the MICROCOMPUTER

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

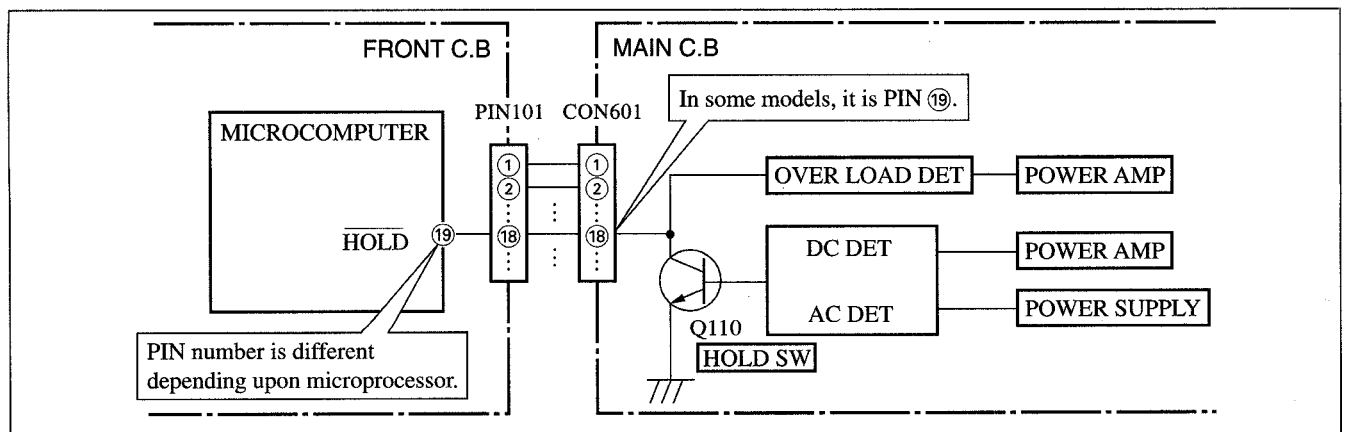


Fig-2-1

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

2-2. Regarding reset

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

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

- ① Remove the AC power cord.

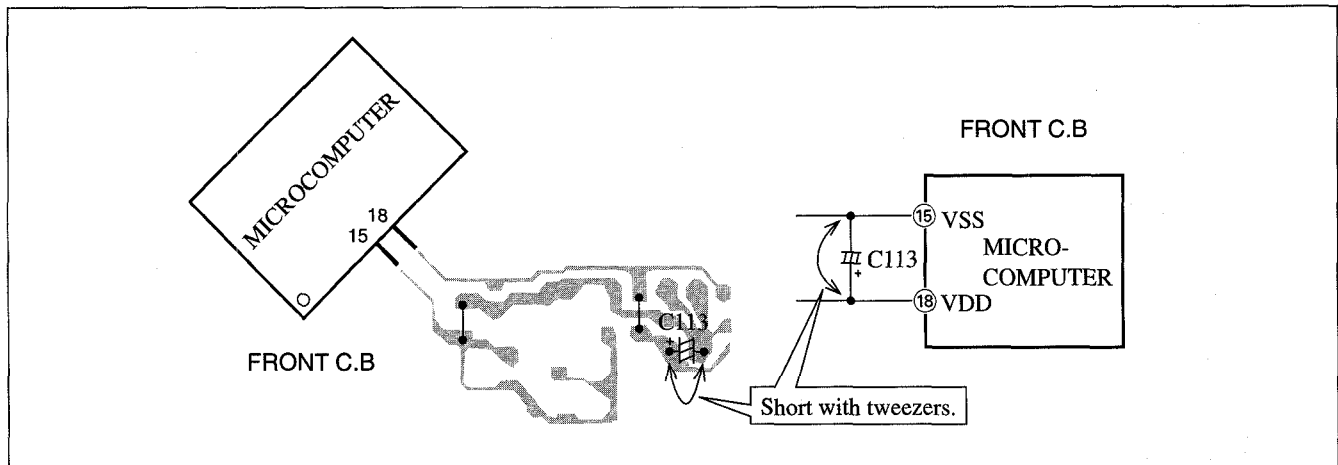


Fig-2-2

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

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

2-3. Confirmation of soldering state of MICROCOMPUTER

Check 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				C2	87-012-369-080		C-CAP,S 0.047-50F
	8Z-MA1-601-010		C-IC,LC876580W-5K53	C3	87-012-368-080		C-CAP,S 0.1-50 F
	87-A20-914-010		IC,SPS-442-1-F	C4	87-012-368-080		C-CAP,S 0.1-50 F
	87-A21-021-040		C-IC,BU2099FV	C5	87-012-368-080		C-CAP,S 0.1-50 F
	87-A20-455-010		IC,HA12211	C6	87-012-368-080		C-CAP,S 0.1-50 F
	87-A21-023-040		C-IC,BA3835F	C9	87-016-658-090		CAP,E 4700-35 SMG
				C10	87-016-658-090		CAP,E 4700-35 SMG
	87-A21-022-040		C-IC,BA3880FS	C21	87-010-385-080		CAP, ELECT 220-25V
	87-A21-011-040		C-IC,M62445FP-600D	C22	87-010-385-080		CAP, ELECT 220-25V
	87-A21-031-040		C-IC,BU4551BF	C23	87-010-247-080		CAP, ELECT 100-50V
	87-070-127-110		IC,LC72131 D	C24	87-010-247-080		CAP, ELECT 100-50V
	87-A20-913-010		IC,LA1837NL	C25	87-010-430-080		CAP, ELECT 100-63
				C26	87-010-263-080		CAP, ELECT 100-10V
	87-020-454-010		IC,DN 6851	C27	87-012-140-080		C-CAP,S 470P-50 J CH
				C28	87-010-263-080		CAP, ELECT 100-10V
TRANSISTOR				C29	87-010-247-080		CAP, ELECT 100-50V
	87-026-245-080		TR,DTC114ES	C30	87-010-112-080		CAP, ELECT 100-16V
	87-026-609-080		TR,KTA1266GR	C31	87-010-235-080		CAP,E 470-16 SME
	87-A30-198-080		TR,KTC3199GR	C61	87-010-260-080		CAP, ELECT 47-25V
	87-026-610-080		TR,KTC3198GR	C62	87-010-496-080		CAP,E 3.3-50 5L
	87-A30-076-080		C-TR,2SC3052F	C091	87-010-401-080		CAP,E 1-50 M
				C092	87-010-263-080		CAP,E 100-10 M
	87-A30-075-080		C-TR,RT1N441C	C093	87-010-380-080		CAP,E 47-16 M
	87-A30-104-080		C-FET,2SK2158	C101	87-010-178-080		C-CAP,S 1000P-50 K B
	87-A30-087-080		C-TR,2SD1306E	C102	87-010-178-080		C-CAP,S 1000P-50 K B
	87-A30-257-080		C-TR,2SD1306E				
	87-A30-159-080		C-TR,KTA1298Y	C125	87-012-368-080		C-CAP,S 0.1-50 F
				C126	87-012-368-080		C-CAP,S 0.1-50 F
	89-112-965-080		TR,2SA1296 (0.75W)	C127	87-012-368-080		C-CAP,S 0.1-50 F
	87-A30-073-080		C-TR,RT1N 141C	C128	87-012-368-080		C-CAP,S 0.1-50 F
	87-A30-268-040		C-TR,2SA1514K(S)	C131	87-010-197-080		C-CAP,S 0.01-25 K B
	87-A30-190-080		TR,CC5551				
	87-A30-106-070		C-TR,CMBT5551	C132	87-010-197-080		C-CAP,S 0.01-25 K B
				C134	87-010-553-080		CAP,E 47-16
	87-A30-105-080		C-TR,RT1P 441C	C136	87-012-368-080		C-CAP,S 0.1-50 F
	87-A30-074-080		C-TR,RT1P 141C	C203	87-010-174-080		C-CAP,S 470P-50 B
	87-A30-119-080		C-TR,2SC3906K R	C204	87-010-174-080		C-CAP,S 470P-50 B
	87-A30-186-010		FET,2SK3053				
	87-A30-086-070		C-TR,CSD1306E	C229	87-010-993-080		C-CAP,S 0.056-25 B
				C230	87-010-993-080		C-CAP,S 0.056-25 B
	87-A30-234-080		TR,CSC4115BC	C231	87-010-196-080		C-CAP,S 0.01-25 Z F
	87-026-230-080		C-TR,DTA114YK	C232	87-010-196-080		C-CAP,S 0.01-25 Z F
	87-A30-214-010		TR,2SB1344	C233	87-015-819-080		C-CAP,0.01-50 K B
	87-A30-215-010		TR,2SD2025				
	87-A30-098-010		TR,FP1016	C234	87-015-819-080		C-CAP,0.01-50 K B
				C235	87-016-285-080		CAP,E 47-100 M
	89-213-702-010		TR,2SB1370E	C236	87-016-285-080		CAP,E 47-100 M
	87-A30-097-010		TR,FN1016	C239	87-010-196-080		C-CAP,S 0.1-25 Z F
	87-026-444-040		C-TR,DTA123EK	C301	87-010-318-080		C-CAP,S 47P-50 CH
	87-026-463-080		TR,2SA933S				
DIODE				C302	87-010-318-080		C-CAP,S 47P-50 CH
	87-017-654-060		DIODE,GBU6J	C303	87-012-157-080		C-CAP,S 330P-50 CH
	87-070-274-080		DIODE,1N4003 SEM	C304	87-012-157-080		C-CAP,S 330P-50 CH
	87-A40-341-080		ZENER,MTZJ 36 A	C305	87-012-145-080		C-CAP,S 270P-50 J CH
	87-A40-435-080		ZENER,MTZJ30D	C306	87-012-145-080		C-CAP,S 270P-50 J CH
	87-020-465-080		DIODE,1SS133 (110MA)	C307	87-010-196-080		C-CAP,S 0.1-25 Z F
				C309	87-010-196-080		C-CAP,S 0.1-25 Z F
	87-A40-345-080		ZENER,MTZJ10C	C310	87-010-196-080		C-CAP,S 0.1-25 Z F
	87-A40-270-080		C-DIODE,MC2838	C311	87-010-198-080		C-CAP,S 0.022-25 K B
	87-A40-269-080		C-DIODE,MC2836	C312	87-010-198-080		C-CAP,S 0.022-25 K B
	87-A40-004-080		ZENER,MTZJ16A				
	87-A40-509-080		ZENER,MTZJ6.8C	C313	87-010-180-080		C-CAP,S 1500P-50 B
				C314	87-010-180-080		C-CAP,S 1500P-50 B
	87-A40-488-080		DIODE,1SS244	C315	87-010-179-080		C-CAP,S 1200P-50 K B
	87-020-331-080		CHIP-DIODE,DAN202K	C316	87-010-179-080		C-CAP,S 1200P-50 K B
	87-017-932-080		ZENER,MTJ6.2B	C321	87-012-142-080		CAP, S 0.33-16
	87-070-136-080		ZENER,MTZJ5.1B				
	87-A40-438-080		ZENER,MTZJ4.7A	C322	87-012-142-080		CAP, S 0.33-16
				C324	87-010-260-080		CAP, ELECT 47-25V
	87-A40-184-090		DIODE,RK34(F)	C325	87-010-370-080		CAP,E 330-6.3 SME
	87-A40-002-080		ZENER,MTZJ5.1C	C327	87-010-404-080		CAP, ELECT 4.7-50V
	87-A40-234-080		ZENER,MTZJ5.6A	C328	87-010-404-080		CAP, ELECT 4.7-50V
MAIN C.B				C332	87-010-196-080		C-CAP,S 0.1-25 Z F
				C335	87-010-401-080		CAP, ELECT 1-50V
				C336	87-010-401-080		CAP, ELECT 1-50V
				C337	87-010-196-080		C-CAP,S 0.1-25 Z F
C1	87-012-369-080		C-CAP,S 0.047-50F	C339	87-010-196-080		C-CAP,S 0.1-25 Z F

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION	REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C340	87-010-196-080		C-CAP,S 0.1-25 Z F	C733	87-010-196-080		CHIP CAPACITOR,0.1-25
C351	87-012-140-080		C-CAP,S 470P-50 J CH	C734	87-012-157-080		C-CAP,S 330P-50 CH
C352	87-012-140-080		C-CAP,S 470P-50 J CH	C735	87-010-178-080		C-CAP,S 1000P-50 K B
C354	87-010-175-080		C-CAP,S 560P-50 J SL	C736	87-010-196-080		CHIP CAPACITOR,0.1-25
C355	87-012-349-080		C-CAP,S 1000P-50 CH	CN001	87-A60-739-010		CONN,13P JL-BT
C356	87-010-260-080		CAP, ELECT 47-25V	CN201	87-A60-739-010		CONN,13P JL-BT
C357	87-010-197-080		C-CAP,S 0.01-25 K B	CN301	87-099-827-010		CONN,3P S2M-3W
C358	87-010-183-080		C-CAP,S 2700P-50 B	CN351	87-099-832-010		CONN,8P S2M-8W
C359	87-010-183-080		C-CAP,S 2700P-50 B	CN601	87-099-719-010		CONN,30P TYK-B(X)
C360	87-010-183-080		C-CAP,S 2700P-50 B	CN602	87-A60-131-010		CONN,6P V FE
C370	87-010-196-080		C-CAP,S 0.1-25 Z F	CN604	87-099-570-010		CONN,13P TUC-P13P-B1
C373	87-016-083-080		C-CAP,S 0.15-16 RK	CN091	87-A60-109-010		CONN,2P V S2M-2W
C374	87-016-083-080		C-CAP,S 0.15-16 RK	J202	87-A60-483-010		JACK,DIA6.3 BLK ST W/S KM
C378	87-010-196-080		C-CAP,S 0.1-25 Z F	J203	87-033-240-010		TERMINAL,SP 4P32SV1-05
C379	87-010-382-080		CAP, ELECT 22-25V	J204	87-A60-752-010		JACK, PIN 4P R/W, O/B
C380	87-010-382-080		CAP, ELECT 22-25V	J603	87-099-625-010		JACK PIN 4P,RVS (KM)
C386	87-010-196-080		C-CAP,S 0.1-25 Z F	L101	87-003-383-010		COIL,1UH-S
C388	87-012-156-080		C-CAP,S 220P-50 CH	L102	87-003-383-010		COIL,1UH-S
C391	87-010-319-080		C-CAP,S 56P-50 CH	L201	87-003-383-010		COIL,1UH-S
C392	87-010-319-080		C-CAP,S 56P-50 CH	L202	87-003-383-010		COIL,1UH-S
C393	87-010-319-080		C-CAP,S 56P-50 CH	L301	87-A50-049-010		COIL,TRAP 85K(COI)
C394	87-010-319-080		C-CAP,S 56P-50 CH	L302	87-A50-049-010		COIL,TRAP 85K(COI)
C401	87-010-196-080		CHIP CAPACITOR,0.1-25	L351	87-007-342-010		COIL,OSC 85K BIAS
C402	87-010-260-080		CAP, ELECT 47-25V	R20	87-A00-261-080		RES,M/F 0.56-1W
C403	87-010-404-080		CAP, ELECT 4.7-50V	R143	87-A00-440-080		RES,M/F 220-1/2W
C404	87-010-404-080		CAP, ELECT 4.7-50V	R144	87-A00-440-080		RES,M/F 220-1/2W
C405	87-010-404-080		CAP, ELECT 4.7-50V	R145	87-A00-440-080		RES,M/F 220-1/2W
C406	87-010-404-080		CAP, ELECT 4.7-50V	R146	87-A00-440-080		RES,M/F 220-1/2W
C407	87-010-188-080		C-CAP,S 6800P-50 K B	SFR351	87-024-356-080		SFR,47K DIA6 H
C408	87-010-188-080		C-CAP,S 6800P-50 K B	SFR352	87-024-356-080		SFR,47K DIA6 H
C409	87-012-140-080		C-CAP,S 470P-50 J CH	WH001	87-A90-510-010		HLDR,WIRE 2.5-9P
C410	87-012-140-080		C-CAP,S 470P-50 J CH				
C411	87-010-404-080		CAP, ELECT 4.7-50V				
C412	87-010-404-080		CAP, ELECT 4.7-50V				
C413	87-010-404-080		CAP, ELECT 4.7-50V				
C414	87-010-404-080		CAP, ELECT 4.7-50V				
C415	87-010-197-080		C-CAP,S 0.01-25 K B	C101	87-A10-189-040		CAP,E 220-10 M
C416	87-010-197-080		C-CAP,S 0.01-25 K B	C103	87-010-197-080		C-CAP,S 0.01-25 K B
C417	87-010-956-080		CHIP-CAP,S 0.068-25B	C105	87-010-316-080		C-CAP,S 33P-50 CH
C418	87-010-956-080		CHIP-CAP,S 0.068-25B	C106	87-010-157-080		C-CAP,S 18P-50 J SL
C419	87-010-260-080		CAP, ELECT 47-25V	C107	87-012-157-080		C-CAP,S 330P-50 CH
C451	87-010-401-080		CAP,E 1-50 M				
C452	87-010-401-080		CAP,E 1-50 M				
C457	87-010-196-080		CHIP CAPACITOR,0.1-25	C108	87-010-405-040		CAP,E 10-50
C458	87-010-196-080		CHIP CAPACITOR,0.1-25	C110	87-010-183-080		C-CAP,S 2700P-50 K B
C461	87-010-544-080		CAP,E 0.1-50	C111	87-010-213-080		C-CAP,S 0.015-25 K B
C601	87-010-180-080		C-CAP,S 1500P-50 K B	C112	87-010-196-080		C-CAP,S 0.1-25 Z F
C602	87-010-180-080		C-CAP,S 1500P-50 K B	C113	87-A10-189-040		CAP,E 220-10
C611	87-010-197-080		C-CAP,S 0.01-25 K B				
C612	87-010-322-080		C-CAP,S 100P-50 J CH	C114	87-010-196-080		C-CAP,S 0.1-25 Z F
C613	87-016-081-080		C-CAP,S 0.1-16 RK	C115	87-010-198-080		C-CAP,S 0.022-25 K B
C614	87-016-081-080		C-CAP,S 0.1-16 RK	C116	87-010-493-080		CAP,E 0.47-50 M 5L
C619	87-010-185-080		C-CAP,S 3900P-50 B	C117	87-010-498-040		CAP,E 10-16 GAS
C620	87-010-185-080		C-CAP,S 3900P-50 B	C118	87-012-369-080		C-CAP,S 0.047-50F
C621	87-010-401-080		CAP, ELECT 1-50V				
C622	87-010-401-080		CAP, ELECT 1-50V				
C627	87-010-196-080		CHIP CAPACITOR,0.1-25	C119	87-010-408-040		CAP,E 47-50 SME
C628	87-010-322-080		C-CAP,S 100P-50 J CH	C120	87-010-421-040		CAP,E 4.7-50 5L
C629	87-010-405-080		CAP, ELECT 10-50V	C121	87-010-421-040		CAP,E 4.7-50 5L
C630	87-010-213-080		C-CAP,S 0.015-50 B	C122	87-010-194-080		C-CAP,S 0.047-25 Z F
C631	87-010-992-080		C-CAP,S 0.047-25 B	C123	87-010-196-080		C-CAP,S 0.1-25 Z F
C632	87-010-263-080		CAP, ELECT 100-10V				
C633	87-010-263-080		CAP, ELECT 100-10V				
C634	87-010-196-080		C-CAP,S 0.1-25 Z F	C124	87-010-196-080		C-CAP,S 0.1-25 Z F
C635	87-010-196-080		C-CAP,S 0.1-25 Z F	C125	87-010-196-080		C-CAP,S 0.1-25 Z F
C636	87-010-992-080		C-CAP,S 0.047-25 B	C127	87-010-194-080		C-CAP,S 0.047-25 Z F
C637	87-010-183-080		C-CAP,S 2700P-50 B	C128	87-010-301-080		C-CAP,220P-50 J CH
C641	87-010-196-080		C-CAP,S 0.1-25 Z F	C130	87-010-194-080		C-CAP,S 0.047-25 Z F
C731	87-010-560-080		CAP,E 10-50 GAS				
C732	87-010-196-080		CHIP CAPACITOR,0.1-25	C131	87-010-079-040		CAP,E 100-6.3 5L
				C201	87-010-196-080		C-CAP,S 0.1-25 Z F
				C202	87-010-196-080		C-CAP,S 0.1-25 Z F
				C204	87-010-301-080		C-CAP,220P-50 J CH
				C206	87-010-301-080		C-CAP,220P-50 J CH
				C207	87-010-297-080		C-CAP,100P-50 J CH
				C281	87-010-197-080		C-CAP,S 0.01-25 K B
				C282	87-010-197-080		C-CAP,S 0.01-25 K B
				C282	87-010-197-080		C-CAP,S 0.01-25 K B
				C283	87-010-182-080		C-CAP,S 2200P-50 K B

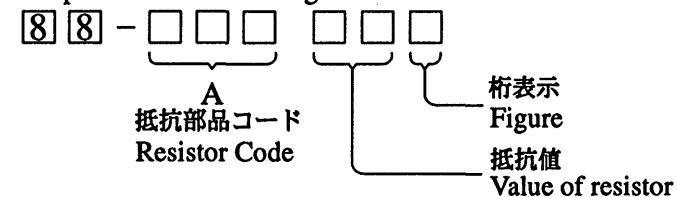
REF. NO.	PART NO.	KANRI NO.	DESCRIPTION	REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C284	87-010-182-080		C-CAP,S 2200P-50 K B	LED250	87-A40-317-080		LED,SLR-342VCT31 RED
C381	87-010-196-080		C-CAP,S 0.1-25 Z F	LED251	87-A40-317-080		LED,SLR-342VCT31 RED
C382	87-012-158-080		C-CAP,S 390P-50 CH	LED254	87-A40-317-080		LED,SLR-342VCT31 RED
C383	87-010-196-080		C-CAP,S 0.1-25 Z F	LED256	87-A40-317-080		LED,SLR-342VCT31 RED
C384	87-010-196-080		C-CAP,S 0.1-25 Z F	LED281	87-A40-619-040		LED,SLR-56PT-T31-W GRN
C385	87-010-196-080		C-CAP,S 0.1-25 Z F	LED282	87-A40-619-040		LED,SLR-56PT-T31-W GRN
C386	87-010-196-080		C-CAP,S 0.1-25 Z F	LED283	87-A40-619-040		LED,SLR-56PT-T31-W GRN
C387	87-010-196-080		C-CAP,S 0.1-25 Z F	LED284	87-A40-619-040		LED,SLR-56PT-T31-W GRN
C388	87-010-405-040		CAP,E 10-50	LED285	87-A40-619-040		LED,SLR-56PT-T31-W GRN
C389	87-010-405-040		CAP,E 10-50 M	LED286	87-A40-619-040		LED,SLR-56PT-T31-W GRN
C501	87-010-544-080		CAP,E 0.1-50 M	LED287	87-A40-619-040		LED,SLR-56PT-T31-W GRN
C503	87-010-196-080		C-CAP,S 0.1-25 Z F	LED288	87-A40-619-040		LED,SLR-56PT-T31-W GRN
C601	87-010-112-080		CAP, ELECT 100-16V	LED289	87-A40-619-040		LED,SLR-56PT-T31-W GRN
C602	87-010-320-080		C-CAP,S 68P-50 J CH	LED290	87-A40-619-040		LED,SLR-56PT-T31-W GRN
C603	87-010-546-040		CAP,E 0.33-50	LED291	87-A40-619-040		LED,SLR-56PT-T31-W GRN
C607	87-010-405-040		CAP,E 10-50	LED292	87-A40-619-040		LED,SLR-56PT-T31-W GRN
C608	87-010-186-080		C-CAP,S 4700P-50 K B	LED293	87-A40-317-080		LED,SLR-342VCT31 RED
C610	87-010-196-080		C-CAP,S 0.1-25 Z F	PR201	87-A90-393-080		PROTECTOR,0.5A 491SERISE 60V
C611	87-010-178-080		C-CAP,S 1000P-50 K B	R301	87-022-355-080		C-RES,S10K-1/10W F
C938	87-012-145-080		C-CAP,S 270P-50 J CH	R321	87-022-355-080		C-RES,S10K-1/10W F
C941	87-012-145-080		C-CAP,S 270P-50 J CH	R341	87-022-355-080		C-RES,S10K-1/10W F
C942	87-012-145-080		C-CAP,S 270P-50 J CH	S102	87-A90-982-010		SW,RTRY RE0121-30
C943	87-012-145-080		C-CAP,S 270P-50 J CH	S301	87-A90-095-080		SW,TACT EVQ11G04M
C944	87-012-145-080		C-CAP,S 270P-50 J CH	S302	87-A90-095-080		SW,TACT EVQ11G04M
C945	87-012-145-080		C-CAP,S 270P-50 J CH	S303	87-A90-095-080		SW,TACT EVQ11G04M
C946	87-012-145-080		C-CAP,S 270P-50 J CH	S304	87-A90-095-080		SW,TACT EVQ11G04M
C947	87-012-145-080		C-CAP,S 270P-50 J CH	S305	87-A90-095-080		SW,TACT EVQ11G04M
C948	87-012-145-080		C-CAP,S 270P-50 J CH	S306	87-A90-095-080		SW,TACT EVQ11G04M
C949	87-012-145-080		C-CAP,S 270P-50 J CH	S308	87-A90-095-080		SW,TACT EVQ11G04M
C950	87-012-145-080		C-CAP,S 270P-50 J CH	S309	87-A90-095-080		SW,TACT EVQ11G04M
C951	87-012-145-080		C-CAP,S 270P-50 J CH	S311	87-A90-095-080		SW,TACT EVQ11G04M
C952	87-012-145-080		C-CAP,S 270P-50 J CH	S312	87-A90-095-080		SW,TACT EVQ11G04M
CN101	87-099-720-010		CONN,30P TYK-B(P)	S321	87-A90-095-080		SW,TACT EVQ11G04M
CN102	87-099-031-010		CONN,14P 6216 H	S322	87-A90-095-080		SW,TACT EVQ11G04M
CN104	87-099-017-010		CONN, 15P 6216 V	S323	87-A90-095-080		SW,TACT EVQ11G04M
CN301	87-A60-156-010		CONN,8P H FE	S324	87-A90-095-080		SW,TACT EVQ11G04M
FB601	87-A50-190-080		C-COIL,S BLM21A102S	S325	87-A90-095-080		SW,TACT EVQ11G04M
FL101	8Z-MA2-605-010		FL,BJ683GK	S326	87-A90-095-080		SW,TACT EVQ11G04M
L101	87-A50-333-010		COIL,OSC 9.43MHZ	S327	87-A90-095-080		SW,TACT EVQ11G04M
LED201	87-A40-317-080		LED,SLR-342VCT31 RED	S328	87-A90-095-080		SW,TACT EVQ11G04M
LED202	87-A40-317-080		LED,SLR-342VCT31 RED	S329	87-A90-095-080		SW,TACT EVQ11G04M
LED203	87-A40-317-080		LED,SLR-342VCT31 RED	S330	87-A90-095-080		SW,TACT EVQ11G04M
LED204	87-A40-317-080		LED,SLR-342VCT31 RED	S332	87-A90-095-080		SW,TACT EVQ11G04M
LED205	87-A40-317-080		LED,SLR-342VCT31 RED	S333	87-A90-095-080		SW,TACT EVQ11G04M
LED206	87-A40-496-040		LED,SLR-342MCT31 GRN	S334	87-A90-095-080		SW,TACT EVQ11G04M
LED207	87-A40-496-040		LED,SLR-342MCT31 GRN	S341	87-A90-095-080		SW,TACT EVQ11G04M
LED208	87-A40-496-040		LED,SLR-342MCT31 GRN	S343	87-A90-095-080		SW,TACT EVQ11G04M
LED209	87-A40-496-040		LED,SLR-342MCT31 GRN	S346	87-A90-095-080		SW,TACT EVQ11G04M
LED210	87-A40-496-040		LED,SLR-342MCT31 GRN	S347	87-A90-095-080		SW,TACT EVQ11G04M
LED211	87-A40-496-040		LED,SLR-342MCT31 GRN	S348	87-A90-095-080		SW,TACT EVQ11G04M
LED212	87-A40-496-040		LED,SLR-342MCT31 GRN	S349	87-A90-095-080		SW,TACT EVQ11G04M
LED213	87-A40-496-040		LED,SLR-342MCT31 GRN	S350	87-A90-095-080		SW,TACT EVQ11G04M
LED214	87-A40-496-040		LED,SLR-342MCT31 GRN	S351	87-A90-095-080		SW,TACT EVQ11G04M
LED215	87-A40-496-040		LED,SLR-342MCT31 GRN	S352	87-A90-095-080		SW,TACT EVQ11G04M
LED216	87-A40-619-040		LED,SLR-56PT-T31-W GRN	S353	87-A90-095-080		SW,TACT EVQ11G04M
LED217	87-A40-619-040		LED,SLR-56PT-T31-W GRN	S355	87-A90-095-080		SW,TACT EVQ11G04M
LED218	87-A40-619-040		LED,SLR-56PT-T31-W GRN	VR501	8Z-MA3-603-010		VR,SL 10KB RSA15111
LED219	87-A40-619-040		LED,SLR-56PT-T31-W GRN				
LED220	87-A40-619-040		LED,SLR-56PT-T31-W GRN				
LED221	87-A40-619-040		LED,SLR-56PT-T31-W GRN				
LED233	87-070-270-010		LED,SEL1510CM2 LF34	CN1	87-099-201-010		CONN,8P 6216 H
LED234	87-070-270-010		LED,SEL1510CM2 LF34	LED6	87-A40-317-080		LED,SLR-342VCT31 RED
LED235	87-070-270-010		LED,SEL1510CM2 LF34	LED7	87-A40-317-080		LED,SLR-342VCT31 RED
LED236	87-070-270-010		LED,SEL1510CM2 LF34	LED8	87-A40-317-080		LED,SLR-342VCT31 RED
LED237	87-070-300-010		LED,SEL1250SM LF34	LED9	87-A40-317-080		LED,SLR-342VCT31 RED
LED238	87-070-300-010		LED,SEL1250SM LF34	LED10	87-A40-317-080		LED,SLR-342VCT31 RED
LED242	87-A40-317-080		LED,SLR-342VCT31 RED	S8	87-A90-095-080		SW,TACT EVQ11G04M
LED243	87-A40-317-080		LED,SLR-342VCT31 RED	S9	87-A90-095-080		SW,TACT EVQ11G04M
LED246	87-A40-317-080		LED,SLR-342VCT31 RED	S10	87-A90-095-080		SW,TACT EVQ11G04M
LED248	87-A40-317-080		LED,SLR-342VCT31 RED	S11	87-A90-095-080		SW,TACT EVQ11G04M

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION	REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
S12	87-A90-095-080		SW,TACT EVQ11G04M	C217	87-010-186-080		C-CAP,S 4700P-50 K B
S13	87-A90-095-080		SW,TACT EVQ11G04M	C218	87-010-186-080		C-CAP,S 4700P-50 K B
S14	87-A90-095-080		SW,TACT EVQ11G04M	C219	87-012-368-080		C-CAP,S 0.1-50 F
				C220	87-012-368-080		C-CAP,S 0.1-50 F
				C221	87-010-178-080		CHIP CAP 1000P
MIC C.B							
C609	87-010-196-080		C-CAP,S 0.1-25 Z F	C222	87-010-178-080		CHIP CAP 1000P
J601	87-099-659-010		JACK,6.3 JY-6314-01130	C299	87-010-197-080		C-CAP,S 0.01-25 K B
J602	87-099-659-010		JACK,6.3 JY-6314-01130	C304	87-010-403-080		CAP, ELECT 3.3-50V
				C306	87-010-185-080		C-CAP,S 3900P-50 K B
				C308	87-010-403-080		CAP, ELECT 3.3-50V
AC C.B							
C1	87-010-387-080		CAP,E 470-25 M	C310	87-010-322-080		C-CAP,S 100P-50 J CH
C2	87-018-214-080		CAP, TC U 0.1-25 Z F	C312	87-A10-946-080		C-CAP,S 220P-100 J CH
C7	87-A10-479-080		CAP,CER 2200P-50	C314	87-010-260-080		CAP, ELECT 47-25V
C10	87-010-917-090		CAP,E 3300-50 M SMG	C320	87-012-368-080		C-CAP,S 0.1-50 F
C11	87-010-917-090		CAP,E 3300-50 M SMG	C322	87-010-186-080		CAP,CHIP 4700P-50 K B
C12	87-018-214-080		CAP, TC U 0.1-25 Z F	C403	87-010-404-080		CAP, ELECT 4.7-50V
C13	87-018-214-080		CAP, TC U 0.1-25 Z F	C407	87-010-403-080		CAP, ELECT 3.3-50
C14	87-018-214-080		CAP, TC U 0.1-25 Z F	C409	87-010-322-080		C-CAP,S 100P-50 J CH
C15	87-018-214-080		CAP, TC U 0.1-25 Z F	C411	87-A10-946-080		C-CAP,S 220P-100 J CH
C20	87-010-403-080		CAP,E 3.3-50 M	C413	87-010-260-080		CAP, ELECT 47-25V
CN1	87-A60-851-010		CONN,9P V VH	C419	87-012-368-080		C-CAP,S 0.1-50 F
F1	87-A91-276-080		FUSE,125MA 125V F	C421	87-010-186-080		C-CAP,S 4700P-50 K B
PR1	87-026-682-080		PROTECTOR,10A 491 SREIES 60V	C501	87-016-299-080		CAP,E 10-100 SME
PR2	87-026-682-080		PROTECTOR,10A 491 SREIES 60V	C502	87-012-368-080		C-CAP,S 0.1-50 F
PT1	8Z-MAP-610-010		PT,ZMA-P U	C503	87-016-299-080		CAP,E 10-100 SME
PT2	8Z-NF8-661-010		PT,SUB ZNF-8 (U)	CN101	87-A60-727-010		CONN,13P JL-R
RY2	87-A90-976-010		RELAY,AC12V	CN102	87-A60-727-010		CONN,13P JL-R
T1	87-A60-317-010		TERMINAL,1P MSC	R225	87-A00-262-080		RES,M/F 0.15-2W J
T2	87-A60-317-010		TERMINAL,1P MSC	R226	87-A00-262-080		RES,M/F 0.15-2W J
				R227	87-A00-262-080		RES,M/F 0.15-2W J
DECK C.B							
CON502	87-099-756-019		CONN,15P 9604S F	R228	87-A00-262-080		RES,M/F 0.15-2W J
SFR1	87-024-581-010		SFR,3.3K DIA 6H	R239	87-A00-262-080		RES,M/F 0.15-2W J
SOL1	82-ZM1-626-010		SOL ASSY,27K	R242	87-A00-262-080		RES,M/F 0.15-2W J
SOL2	82-ZM1-626-010		SOL ASSY,27K	R326	87-A00-258-080		RES,M/F 0.22-1W J
SW1	87-A90-248-010		SW,MICRO ESE11SH2CXQ	R328	87-A00-258-080		RES,M/F 0.22-1W J
SW2	87-A90-248-010		SW,MICRO ESE11SH2CXQ	R340	87-A00-258-080		RES,M/F 0.22-1W J
SW3	87-A90-248-010		SW,MICRO ESE11SH2CXQ	R427	87-A00-258-080		RES,M/F 0.22-1W J
SW4	87-036-110-010		SW,MICRO SPPB62	R429	87-A00-258-080		RES,M/F 0.22-1W J
SW5	87-036-110-010		SW,MICRO SPPB62	R441	87-A00-258-080		RES,M/F 0.22-1W J
SW6	87-036-110-010		SW,MICRO SPPB62	TH201	87-A91-042-080		C-THMS,100K 55001
SW8	87-A90-248-010		SW,MICRO ESE11SH2CXQ	TH202	87-A91-042-080		C-THMS,100K 55001
SW9	87-A90-248-010		SW,MICRO ESE11SH2CXQ	TH301	87-A91-042-080		C-THMS,100K 55001
W1	82-ZM3-601-010		RBN-CORD,4P-75	TH302	87-A91-042-080		C-THMS,100K 55001
				TH401	87-A91-042-080		C-THMS,100K 55001
HEAD-1 C.B				TUNER C.B			
	85-ZM3-601-010		PWB,FLEX I	C701	87-010-381-080		CAP, ELECT 330-16V
				C702	87-010-404-080		CAP, ELECT 4.7-50V
				C703	87-012-286-080		CAP, U 0.01-25
				C704	87-012-286-080		CAP, U 0.01-25
				C705	87-A10-592-080		C-CAP,S 0.015-50 J B
HEAD-2 C.B							
	85-ZM3-601-010		PWB,FLEX I	C706	87-A10-592-080		C-CAP,S 0.015-50 J B
				C709	87-012-195-080		C-CAP,U 100P-50CH
				C711	87-010-260-080		CAP, ELECT 47-25V
				C712	87-010-831-080		C-CAP,U,0.1-16F
				C714	87-012-286-080		CAP, U 0.01-25
PRO C.B							
C203	87-010-405-080		CAP, ELECT 10-50V	C717	87-012-286-080		CAP, U 0.01-25
C204	87-010-405-080		CAP, ELECT 10-50V	C718	87-012-179-080		C-CAP,U 20P-50 CH
C205	87-010-183-080		C-CAP,S 2700P-50 K B	C719	87-012-286-080		CAP, U 0.01-25
C206	87-010-183-080		C-CAP,S 2700P-50 K B	C720	87-012-195-080		C-CAP,U 100P-50CH
C207	87-010-408-080		CAP, ELECT 47-50V	C721	87-012-176-080		CAP 15P
C208	87-010-408-080		CAP, ELECT 47-50V	C722	87-012-176-080		CAP 15P
C209	87-010-322-080		C-CAP,S 100P-50 J CH	C723	87-012-274-080		CHIP CAP,U 1000P-50B
C210	87-010-322-080		C-CAP,S 100P-50 J CH	C725	87-012-274-080		CHIP CAP,U 1000P-50B
C211	87-010-260-080		CAP, ELECT 47-25V	C727	87-010-196-080		CHIP CAPACITOR,0.1-25
C212	87-010-260-080		CAP, ELECT 47-25V	C728	87-010-248-080		CAP, ELECT 220-10V
C213	87-A10-946-080		C-CAP,S 220P-100 J CH	C729	87-012-274-080		CHIP CAP,U 1000P-50B
C214	87-A10-946-080		C-CAP,S 220P-100 J CH	C731	87-012-286-080		CAP, U 0.01-25
				C733	87-010-987-080		C-CAP,S 1500P-50 CH

REF.NO.	PART NO.	KANRI NO.	DESCRIPTION	REF.NO.	PART NO.	KANRI NO.	DESCRIPTION
C734	87-010-987-080		C-CAP,S 1500P-50 CH	C785	87-010-401-080		CAP, ELECT 1-50V
C735	87-010-987-080		C-CAP,S 1500P-50 CH	C786	87-010-401-080		CAP, ELECT 1-50V
C736	87-010-987-080		C-CAP,S 1500P-50 CH	C789	87-012-275-080		C-CAP,U 1200P-50 B
C737	87-A10-592-080		C-CAP,S 0.015-50 J B	C790	87-012-275-080		C-CAP,U 1200P-50 B
C738	87-A10-592-080		C-CAP,S 0.015-50 J B	C791	87-010-405-080		CAP, ELECT 10-50V
C751	87-012-365-080		C-CAP,S 0.027-25VBK	C793	87-012-273-080		C-CAP,U 820P-50 B
C752	87-012-365-080		C-CAP,S 0.027-25VBK	C794	87-010-406-080		CAP, ELECT 22-50
C756	87-012-286-080		CAP, U 0.01-25	C795	87-010-596-080		CAP, S 0.047-16
C757	87-012-188-080		C-CAP,U 47P-50 CH	C796	87-010-403-080		CAP, ELECT 3.3-50V
C758	87-012-167-080		C-CAP,U 5P-50 CH	C799	87-010-829-080		CAP, U 0.047-16
C763	87-010-829-080		CAP U 0.047-16	C812	87-012-286-080		CAP, U 0.01-25
C764	87-012-337-080		C-CAP,U 56P-50 CH	C820	87-010-260-080		CAP, ELECT 47-25V
C765	87-012-286-080		CAP, U 0.01-25	C821	87-012-286-080		CAP, U 0.01-25
C768	87-012-286-080		CAP, U 0.01-25	C822	87-012-286-080		CAP, U 0.01-25
C769	87-010-260-080		CAP, ELECT 47-25V	C823	87-012-286-080		CAP, U 0.01-25
C770	87-010-829-080		CAP, U 0.047-16	C828	87-010-196-080		CHIP CAPACITOR,0.1-25
C771	87-010-383-080		CAP, ELECT 33-25V	C829	87-010-196-080		CHIP CAPACITOR,0.1-25
C772	87-010-829-080		CAP, U 0.047-16	C959	87-010-196-080		CHIP CAPACITOR,0.1-25
C773	87-010-196-080		CHIP CAPACITOR,0.1-25	C960	87-010-196-080		CHIP CAPACITOR,0.1-25
C774	87-010-263-080		CAP, ELECT 100-10V	C961	87-012-170-080		C-CAP,U 8P-50 CH
C775	87-010-404-080		CAP, ELECT 4.7-50V	C963	87-010-196-080		CHIP CAPACITOR,0.1-25
C776	87-012-286-080		CAP, U 0.01-25	CF801	87-008-261-010		FILTER, SPE10.7MA5-A
C777	87-010-400-080		CAP, ELECT 0.47-50V	CF802	87-008-261-010		FILTER, SPE10.7MA5-A
C778	87-010-401-080		CAP, ELECT 1-50V	CN701	87-A60-700-010		CONN,13P H GRY TUC-P13X-C1
C779	87-010-401-080		CAP, ELECT 1-50V	FFE801	A8-8ZA-190-030		8ZA-1 FEUNM
C780	87-010-196-080		CHIP CAPACITOR,0.1-25	J801	87-A60-702-010		TERMINAL,ANT 4P CJ-9036
C781	87-010-405-080		CAP, ELECT 10-50V	L771	87-A50-266-010		COIL,FM DET-2N(TOK)
C782	87-010-405-080		CAP, ELECT 10-50V	L772	87-A90-733-010		FLTR,PCFAZH-450 (TOK)
C783	87-012-286-080		CAP, U 0.01-25	L981	87-NF4-650-010		COIL,AM PACK 4N(TOK)
C784	87-012-286-080		CAP, U 0.01-25	X721	87-A70-061-010		VIB,XTAL 4.500MHZ CSA-309

○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		t
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



E C B

2SA1296
KTA1266
KTC3198



E C B

2SA933
CSC4115
DTC114ES
KTC3199



B C E

2SB1344
2SB1370
2SD2025
FN1016
FP1016



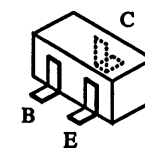
E C B

CC5551



G D S

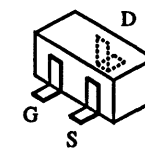
2SK3053



B E C

2SA1514
2SA1235
2SC3052
2SC3906
2SD1306
CMBT5551
CSD1306

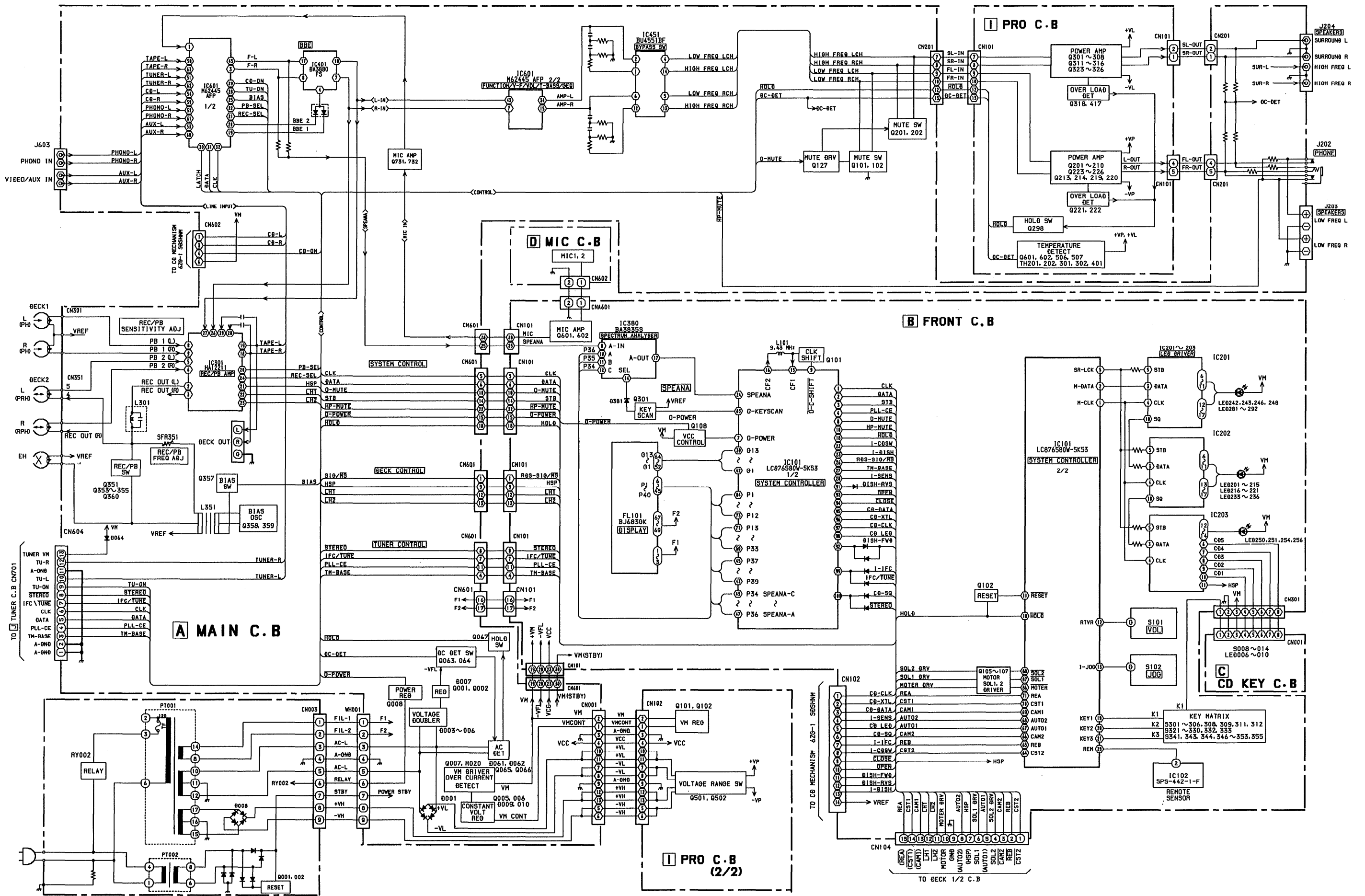
DTA114YK
DTA123EK
KTA1298Y
RT1N141C
RT1N441C
RT1P141C
RT1P441C



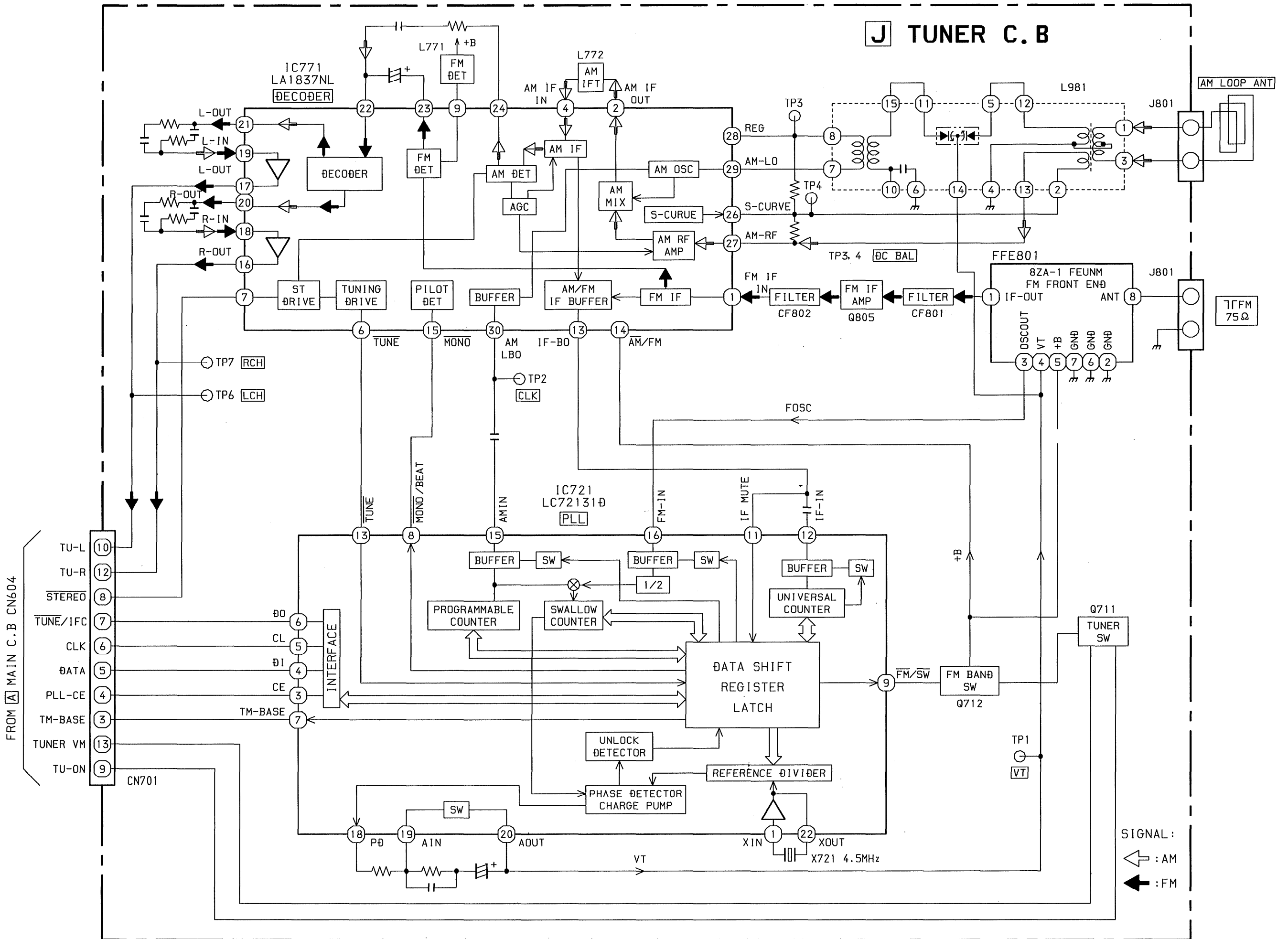
G S D

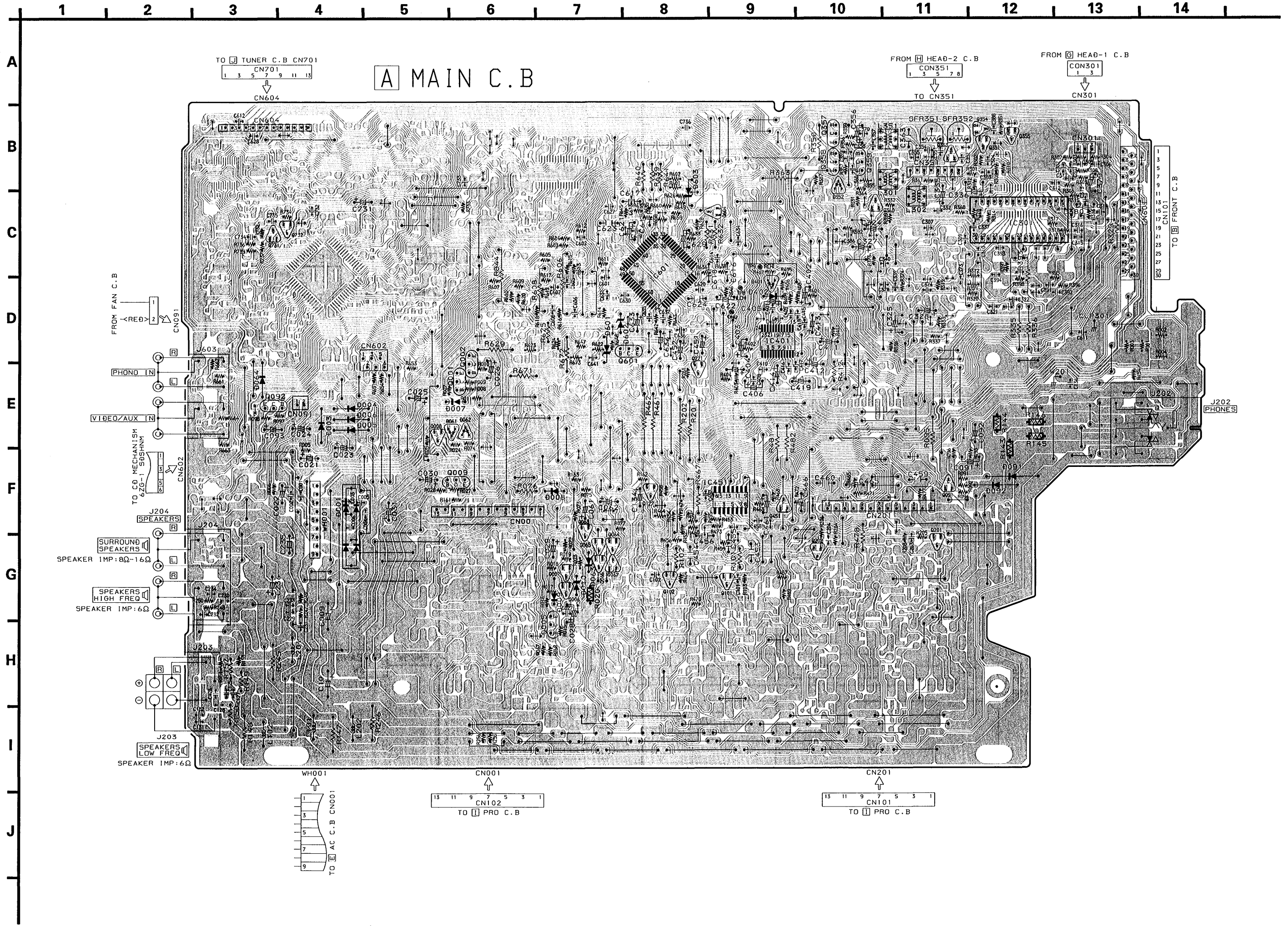
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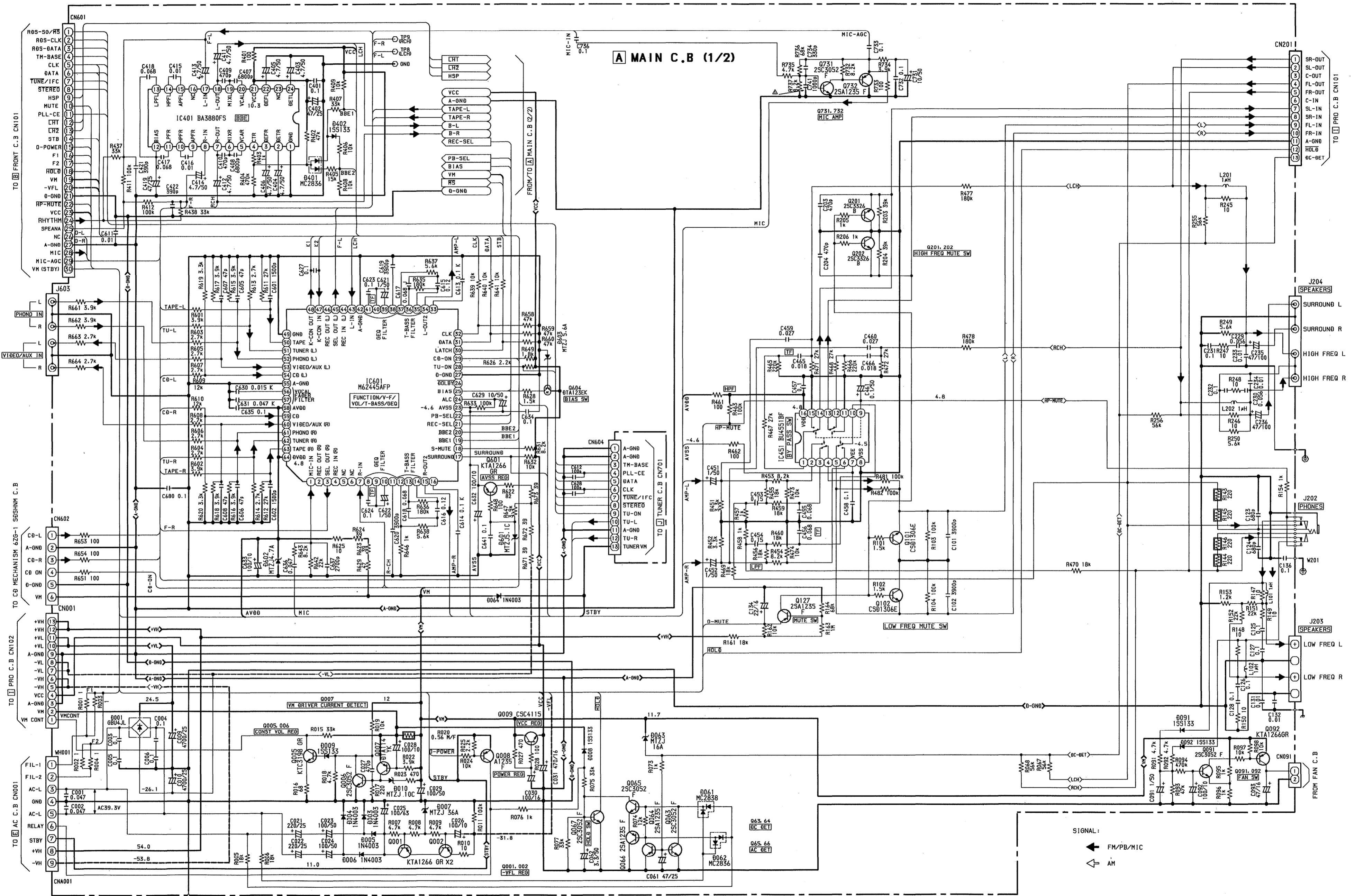
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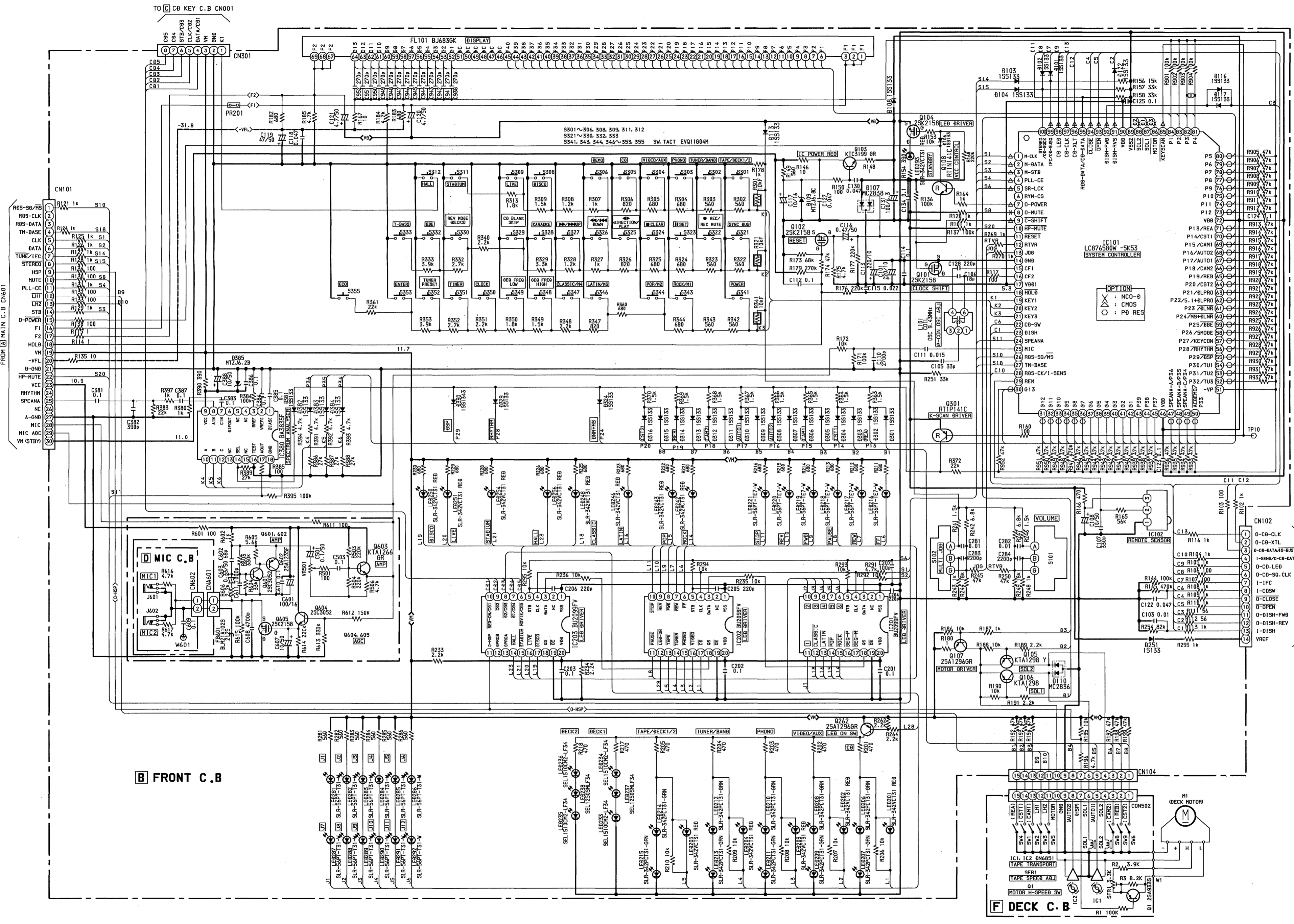


BLOCK DIAGRAM - 2 (TUNER SECTION)



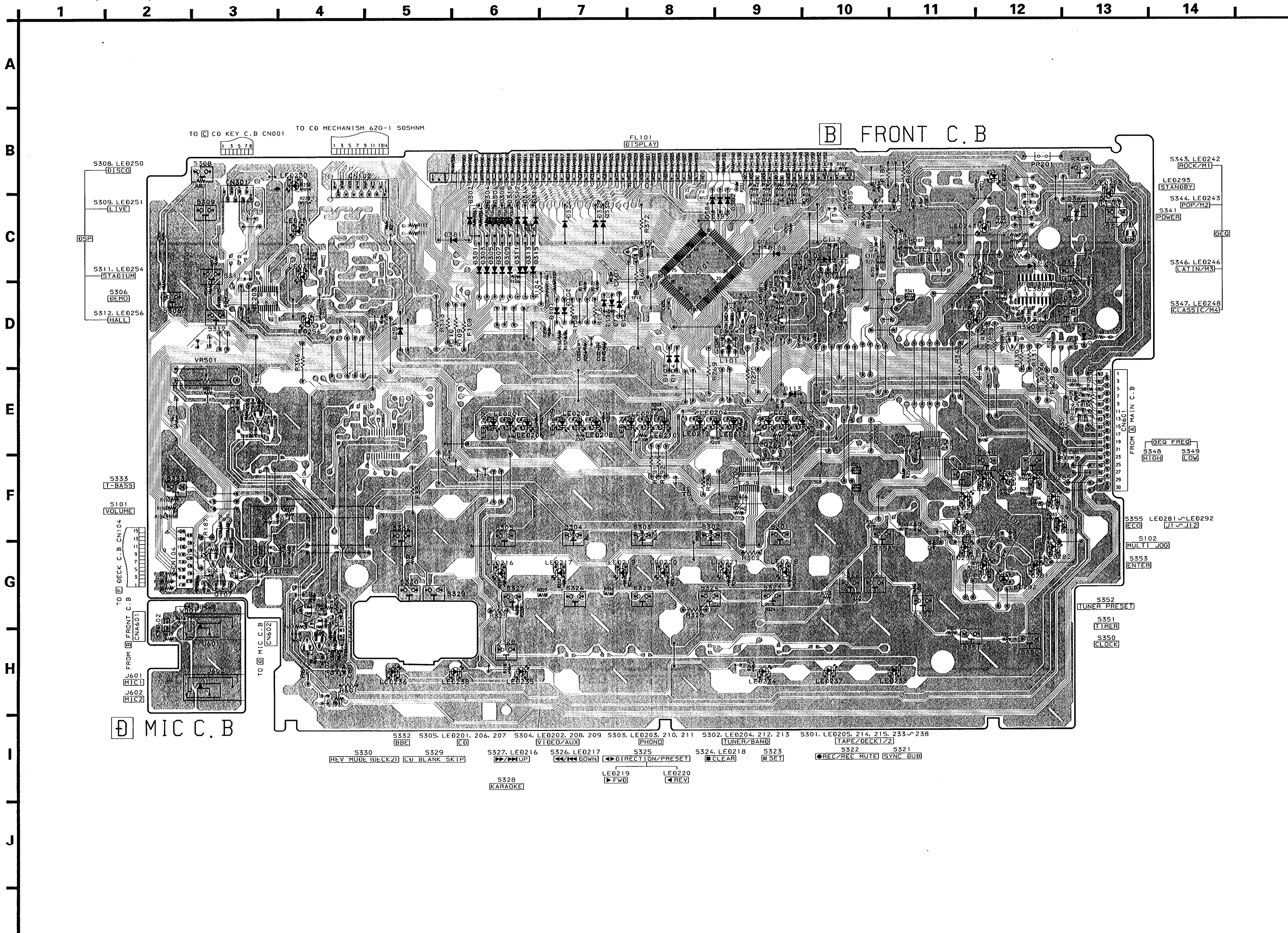






B FRONT C.B

F DECK C.B



ⓓ MIC C. B

ⓑ FRONT C. B

- S332 S305, LE0201, 206, 207 S304, LE0202, 208, 209 S303, LE0203, 210, 211 S302, LE0204, 212, 213 S301, LE0205, 214, 215, 233, 238
- BBE CD VIDEO/AUX PHONO TUNER/BAND TAPE/DECK1/2
- S330 S329 S327, LE0216 S326, LE0217 S325 S324, LE0218 S323
- REV MODE (DECK2) CD BLANK SKIP <PP> UP <DD> DOWN <D> DIRECTION/PRESET CLEAR M SET
- S328 LE0219 LE0220
- KARAOKE <FWD> <REV>
- S322 S321
- REC/REC MUTE SYNC DUB

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

A

B

C

D

E

F

G

H

I

J

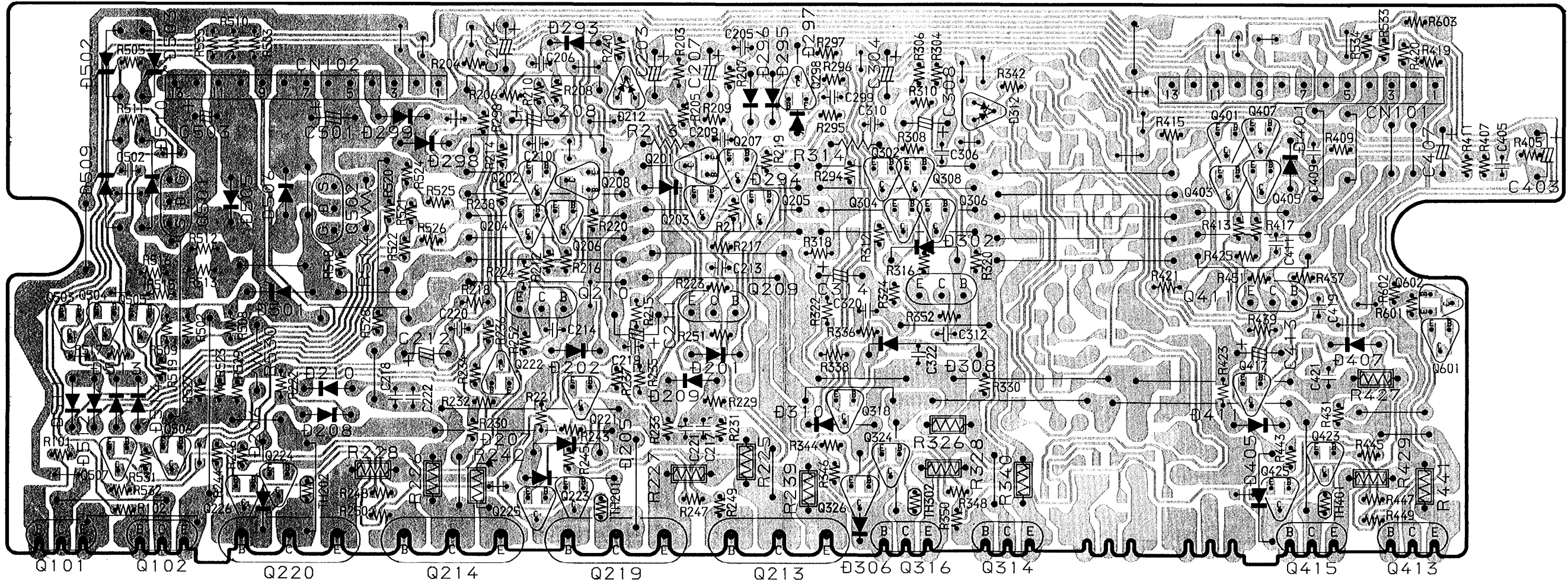
FROM MAIN C.B

CN001
13 11 9 7 5 3 1

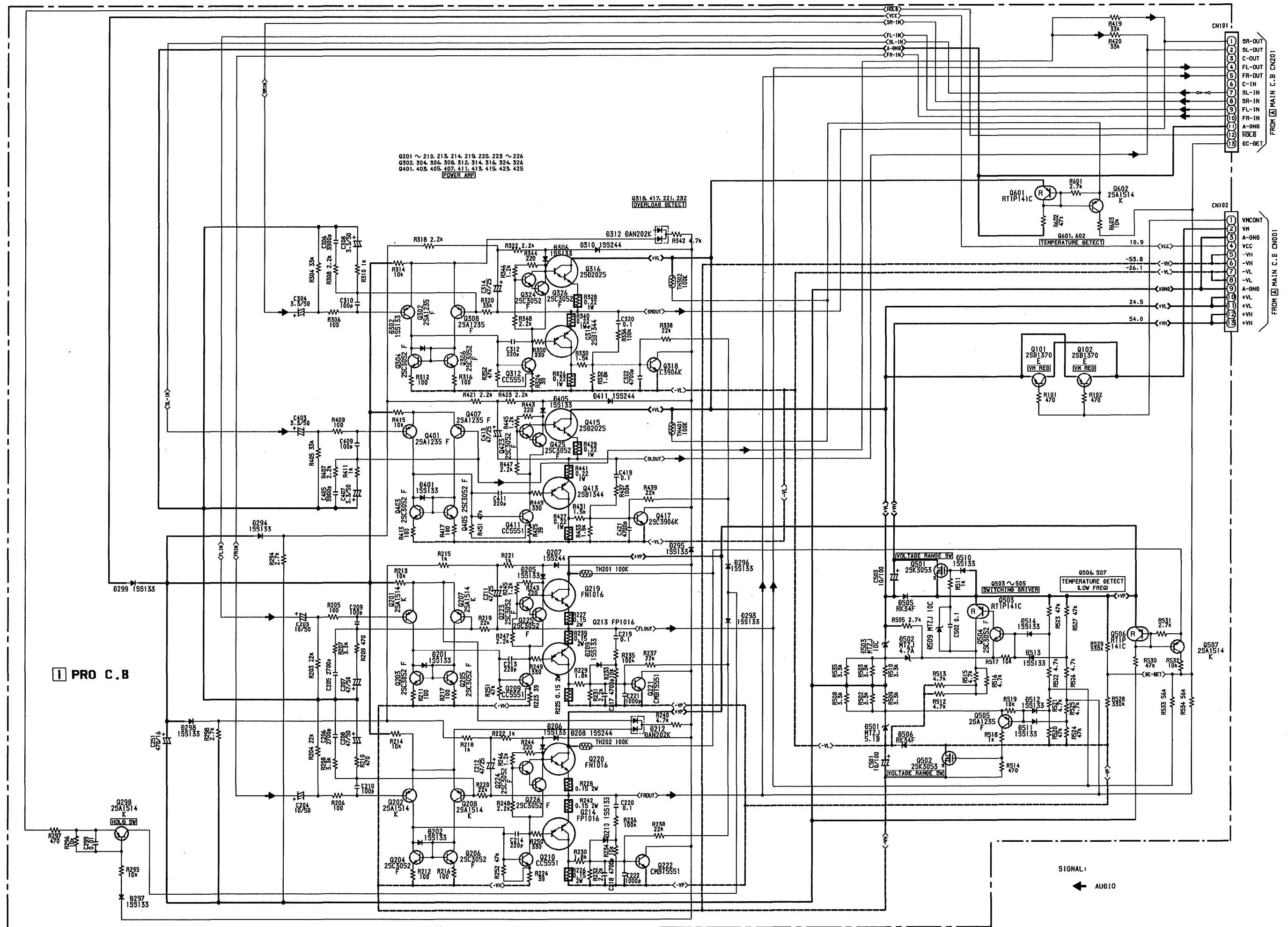
I PRO C.B

FROM MAIN C.B

CN201
13 11 9 7 5 3 1



SCHEMATIC DIAGRAM - 3 (PRO)



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

A

B

C

D

E

F

G

H

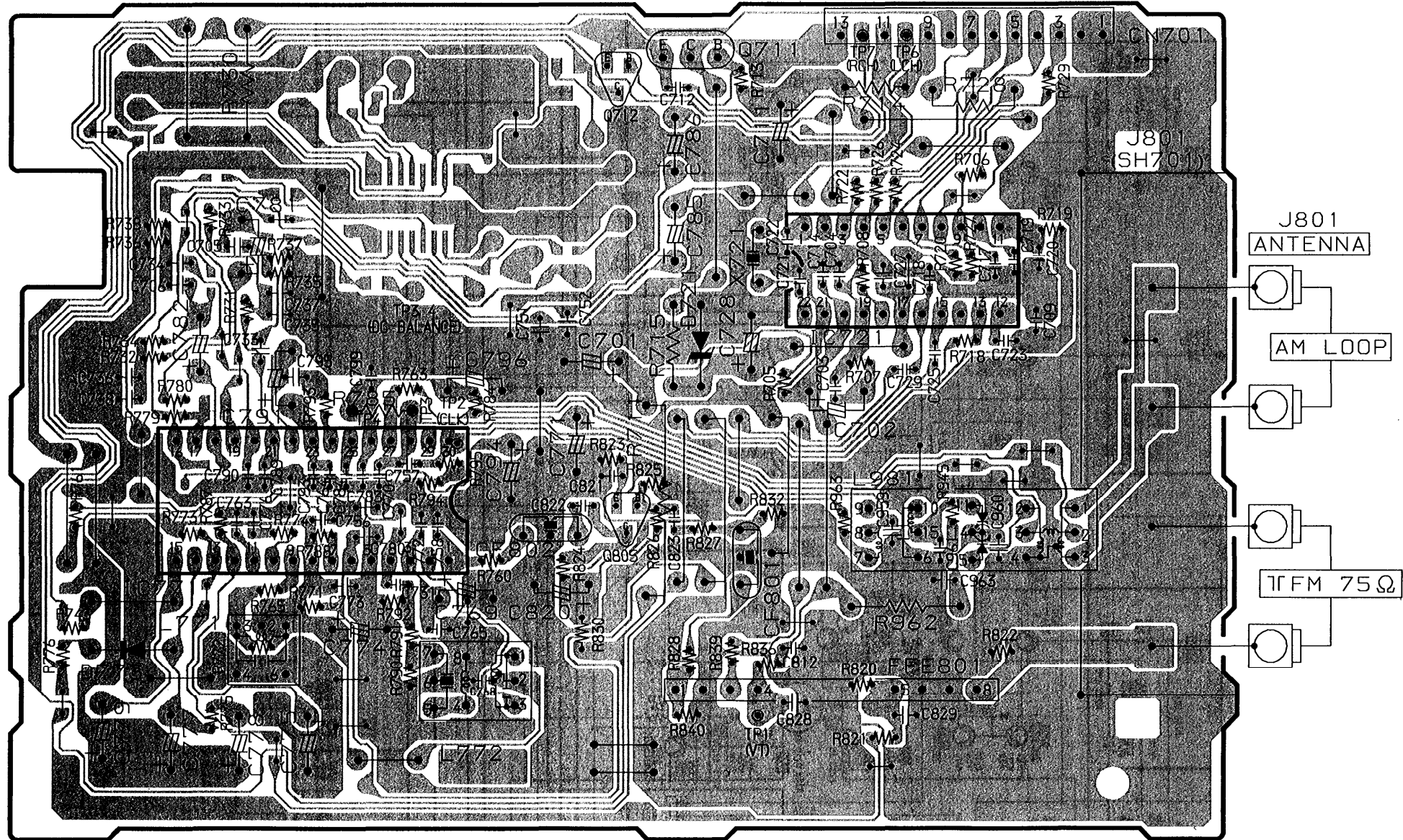
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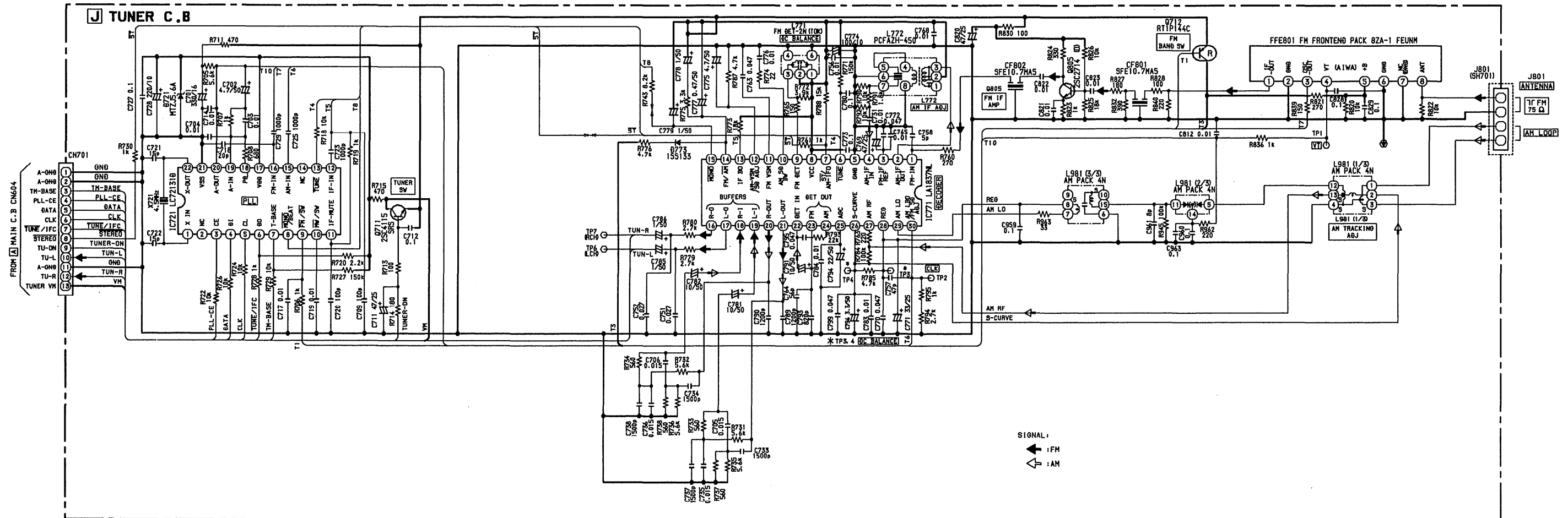
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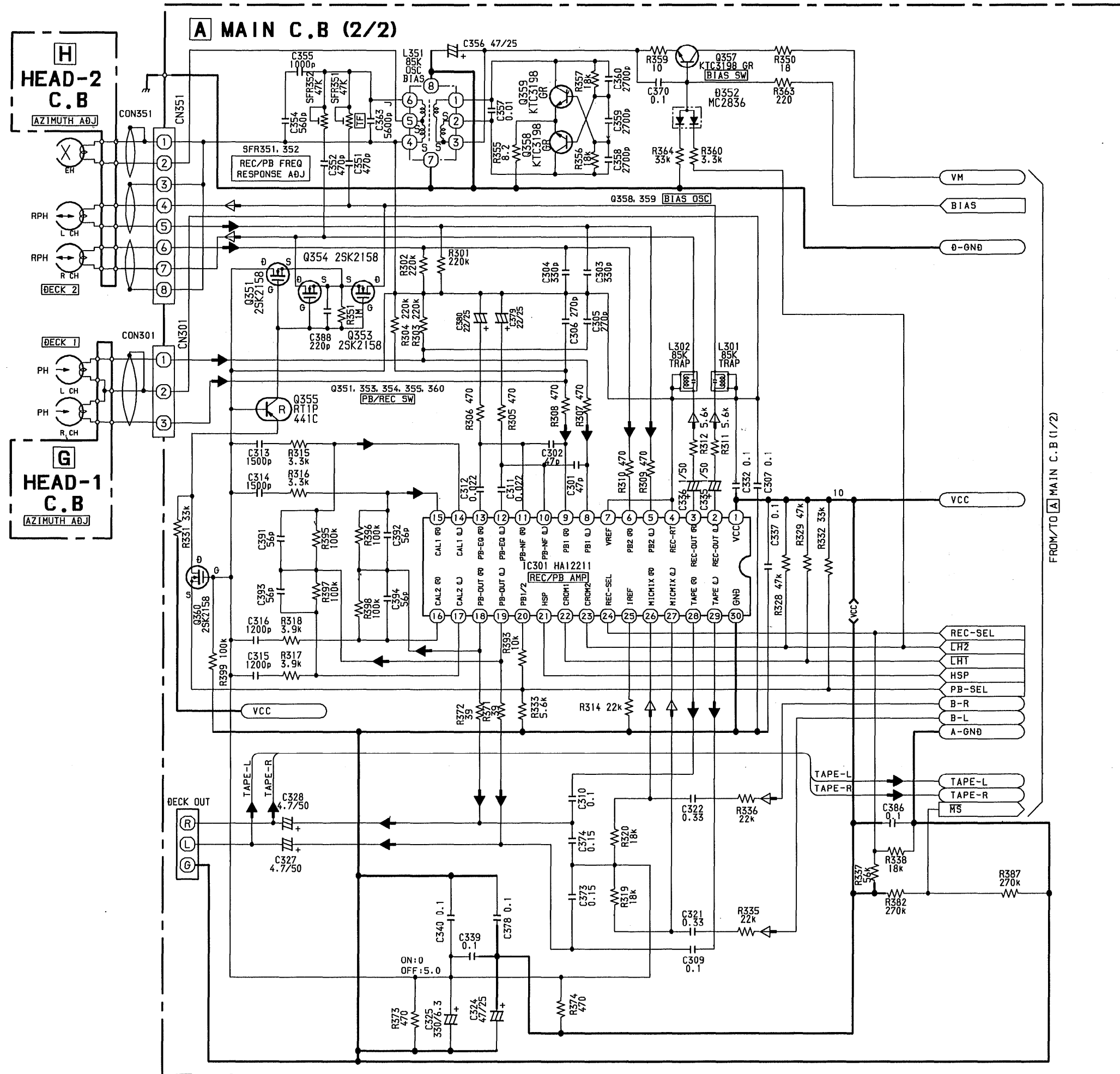
J TUNER C.B

FROM A MAIN C.B CN604

13 11 9 7 5 3 1







1 | 2 | 3 | 4 | 5 | 6 | 7

A

B

C

D

E

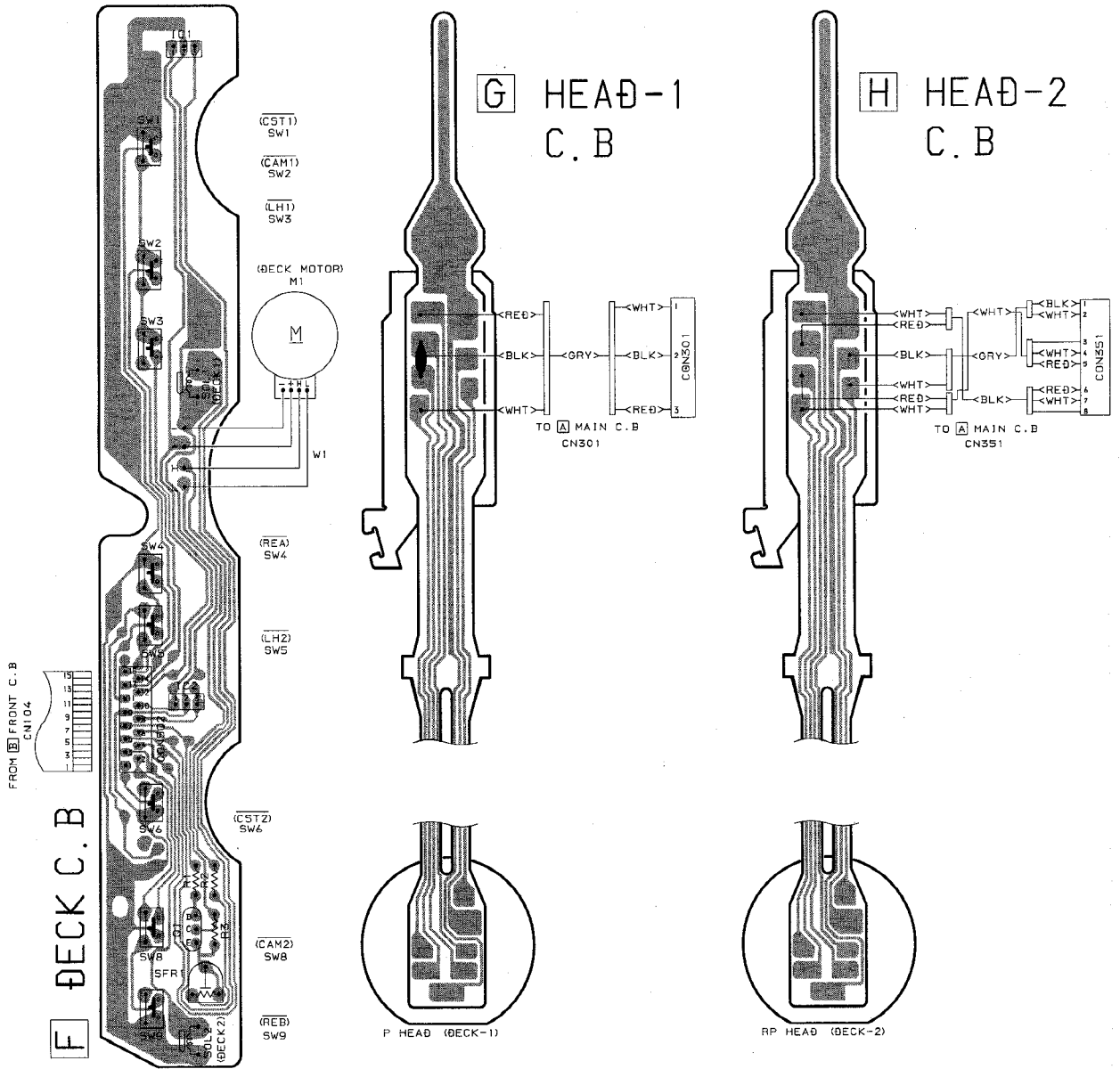
F

G

H

I

J



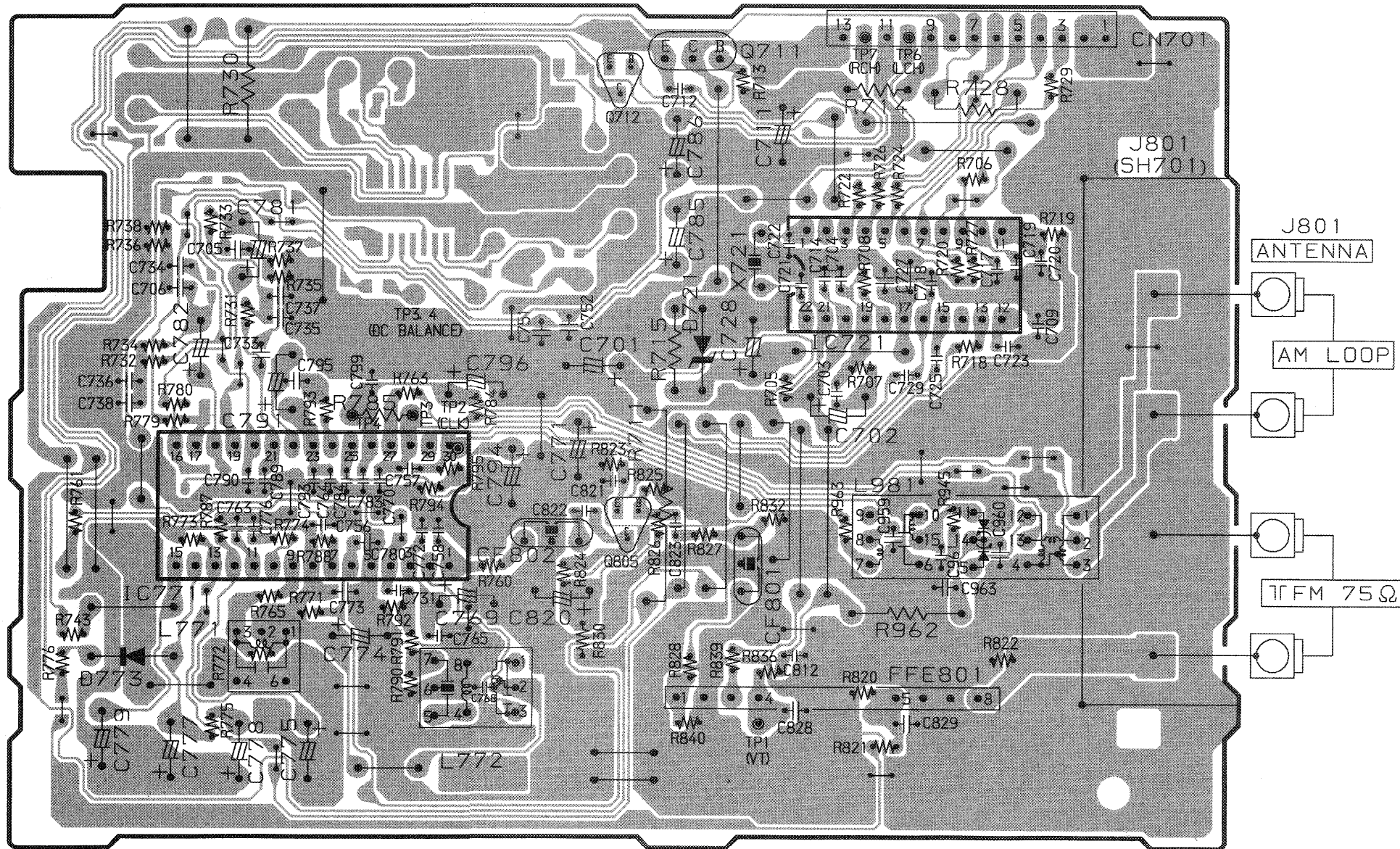
1 2 3 4 5 6 7 8 9 10 11 12 13 14

A
B
C
D
E
F
G
H
I
J

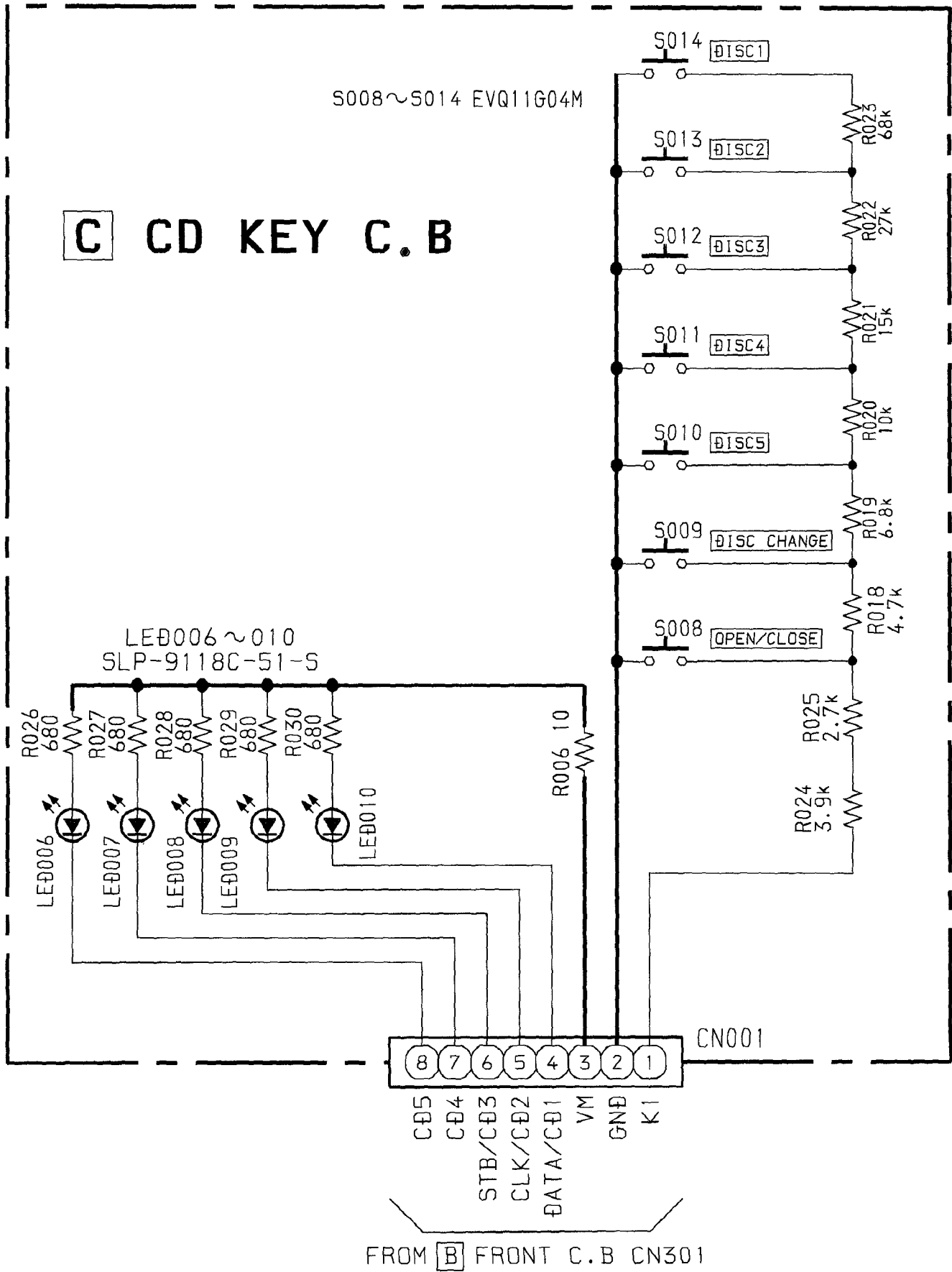
J TUNER C.B

FROM [A] MAIN C.B CN604

13 11 9 7 5 3 1



SCHEMATIC DIAGRAM - 6 (CD KEY)



WIRING - 7 (AC)

1

2

3

4

5

6

7

A

B

C

D

E

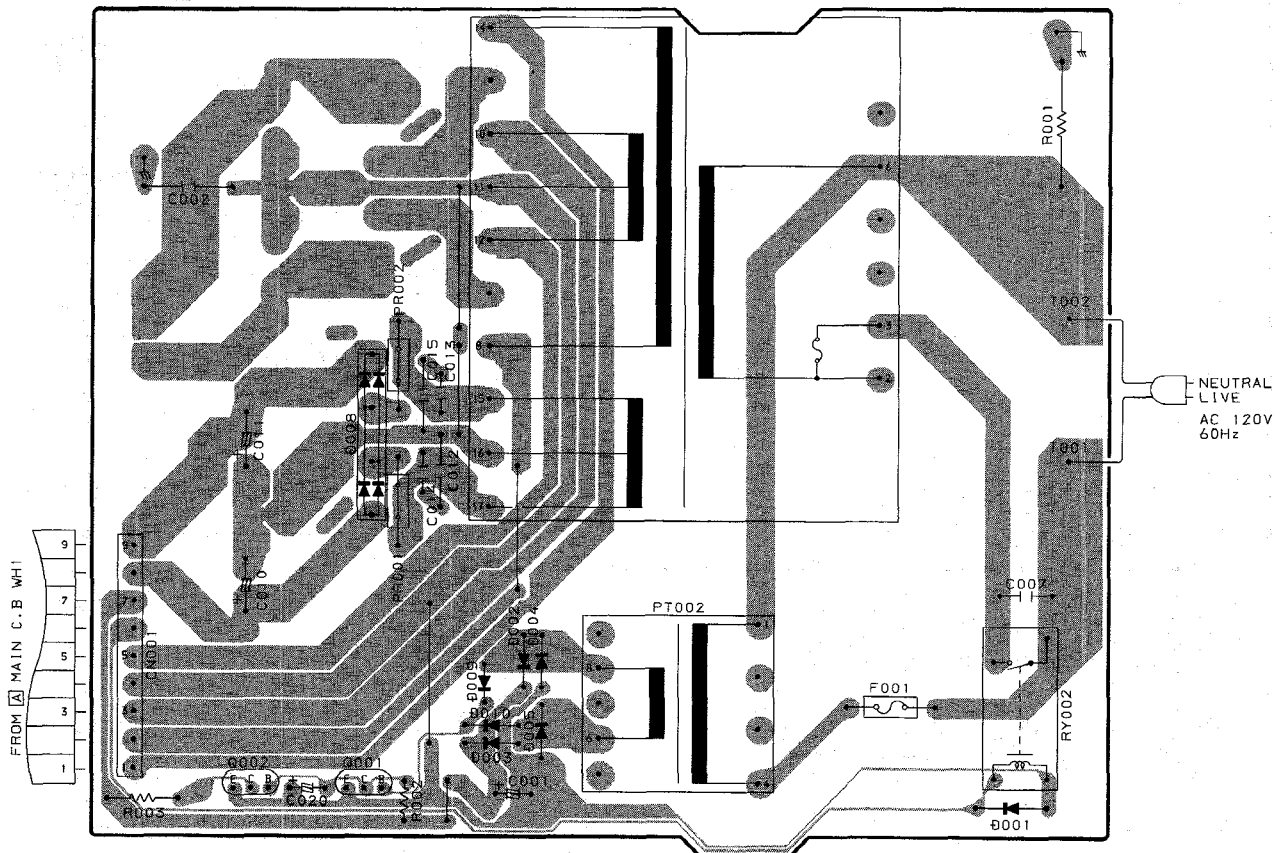
F

G

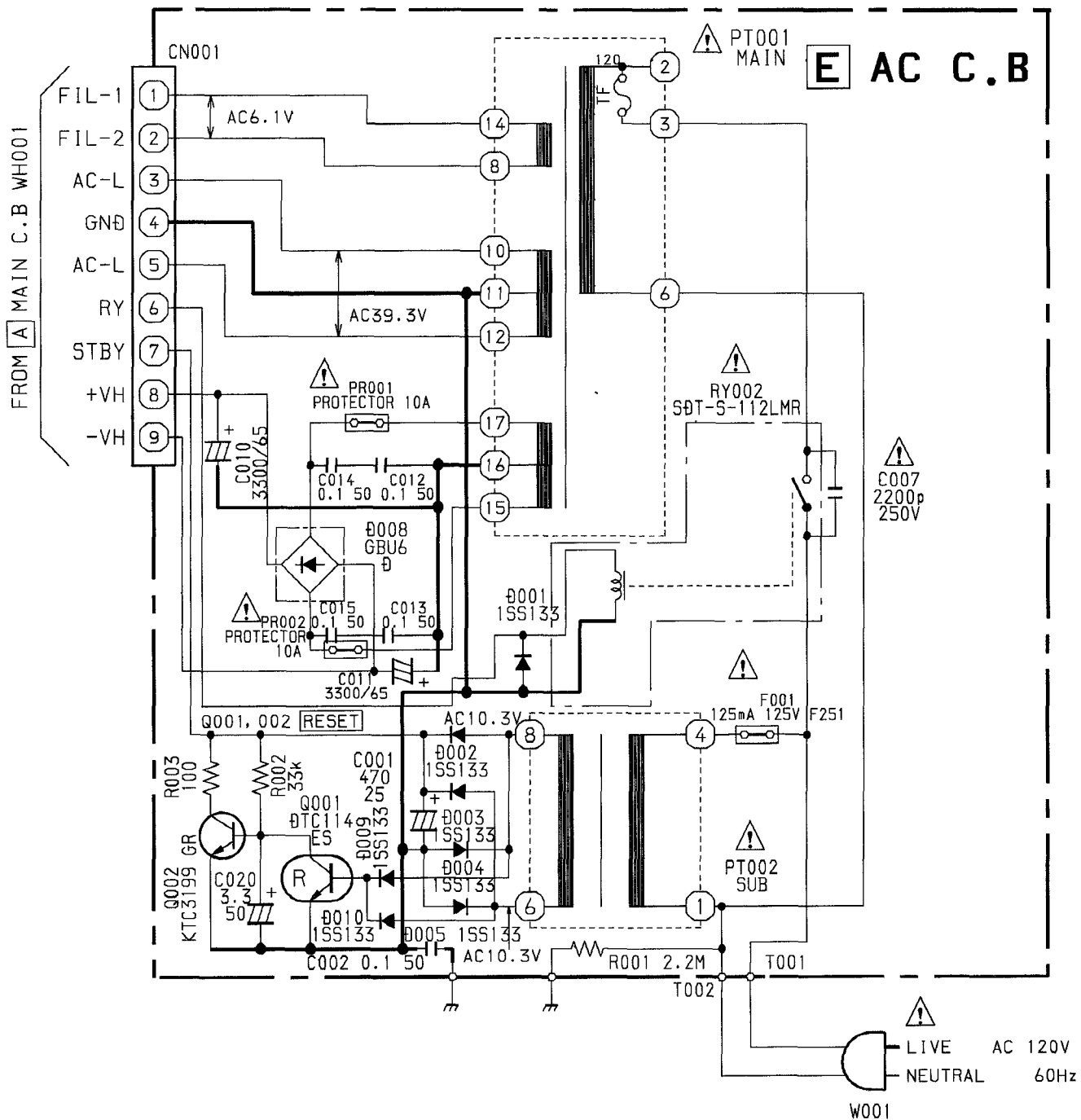
H

J

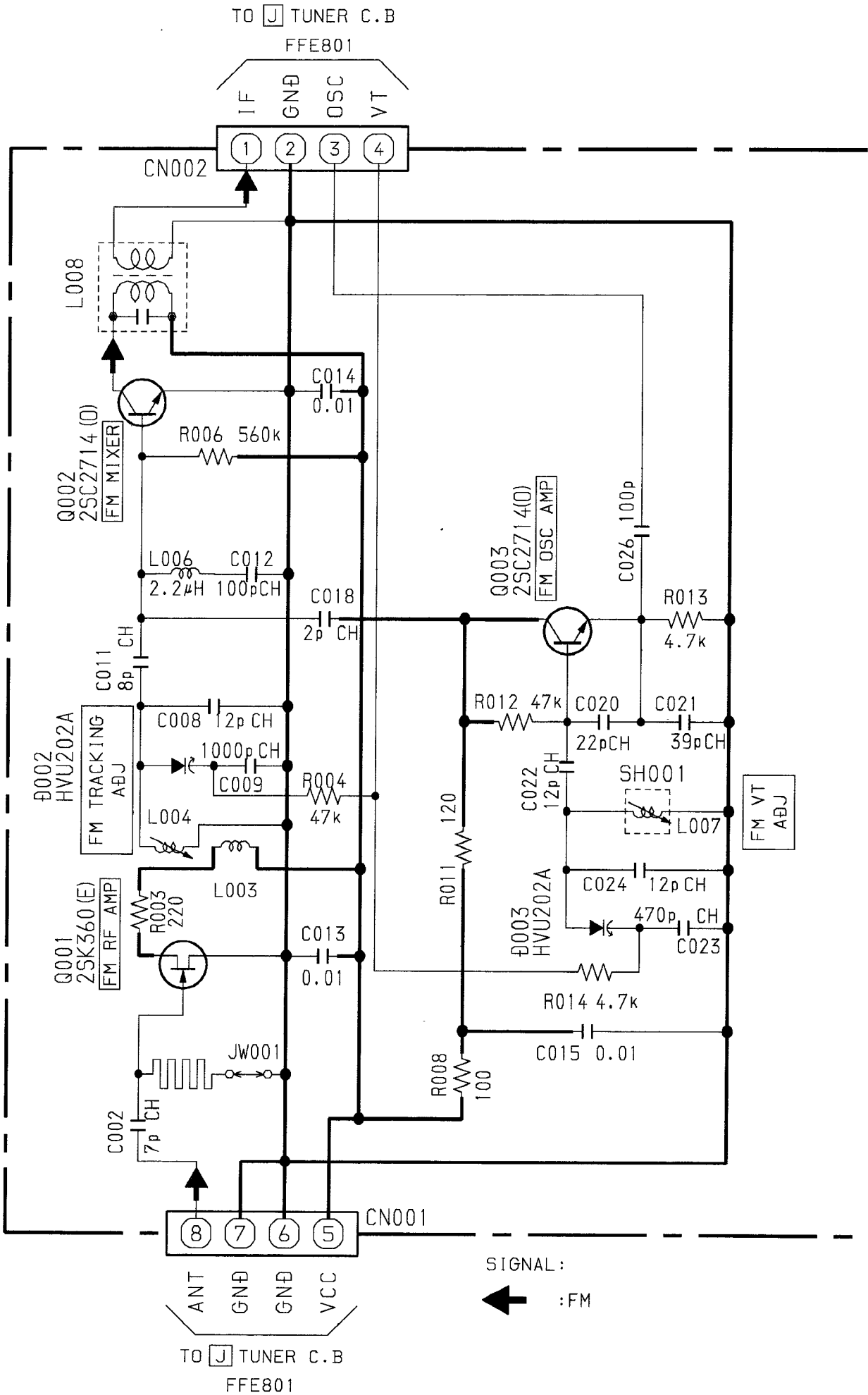
E AC C.B



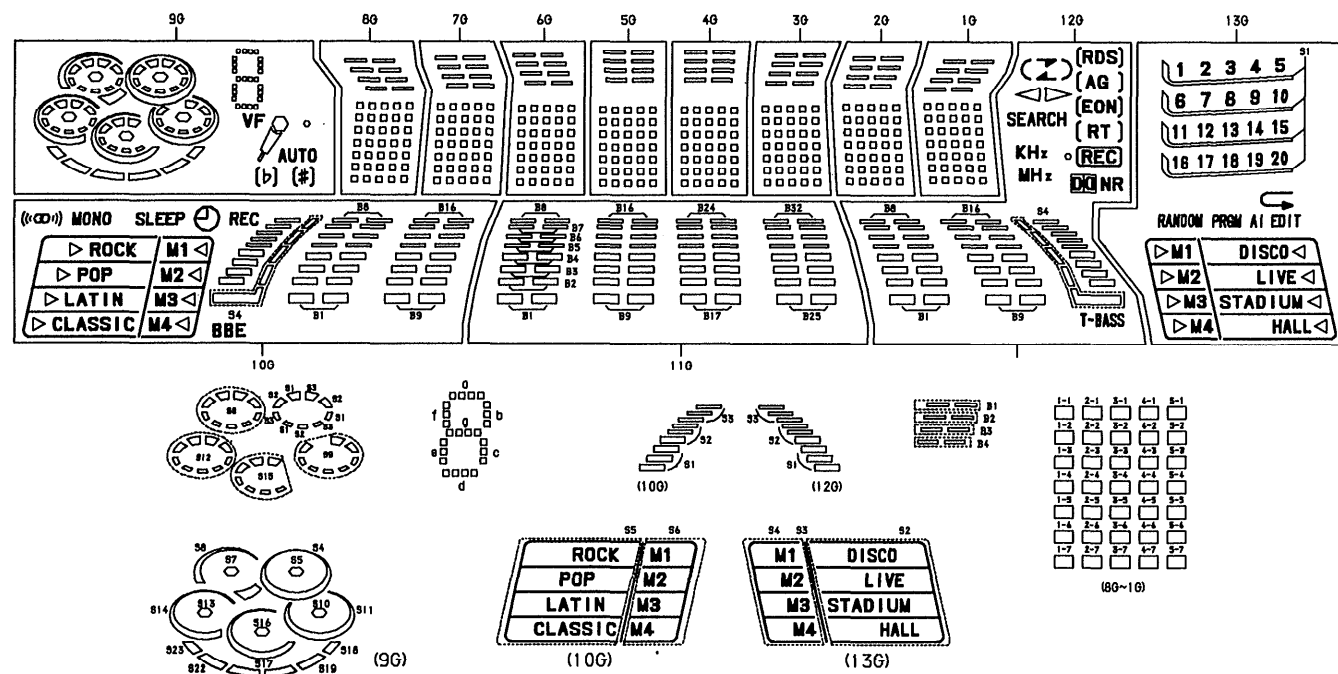
SCHEMATIC DIAGRAM - 7 (AC)



SCHEMATIC DIAGRAM - 8 (TUNER FRONT END)



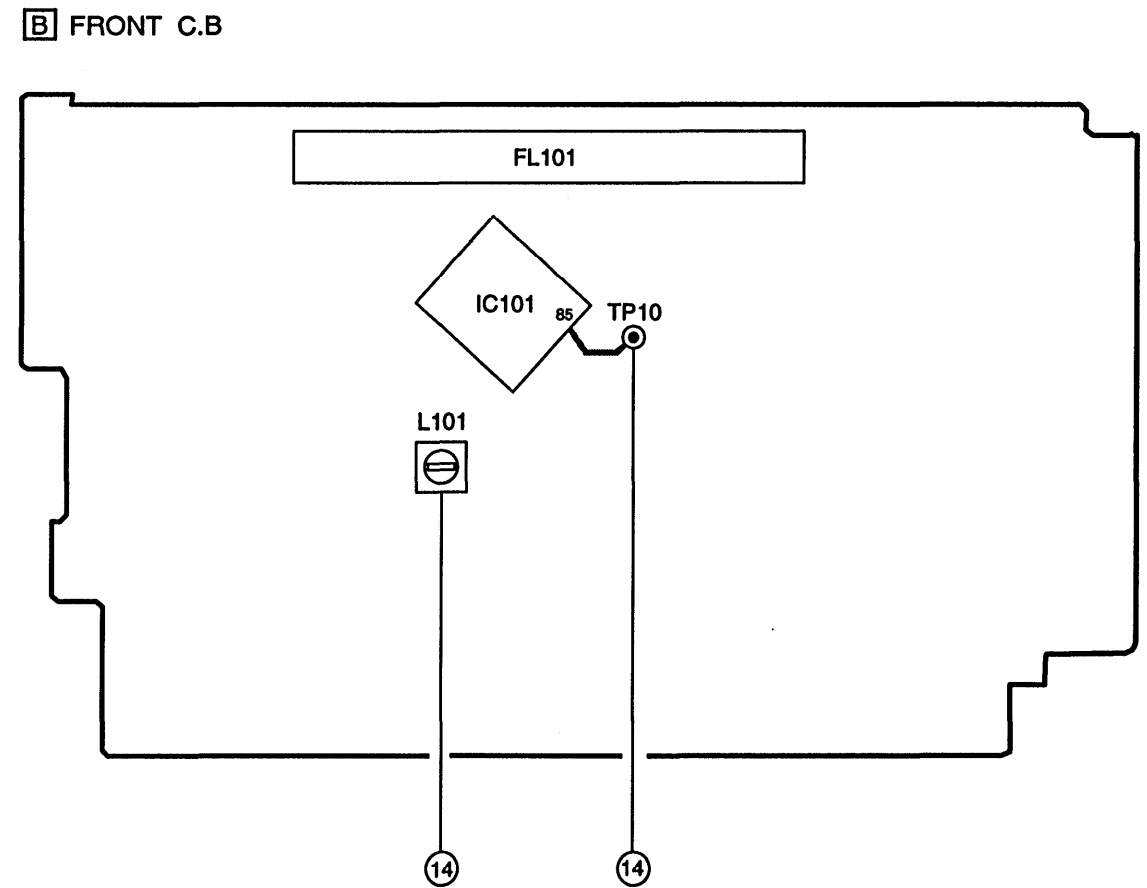
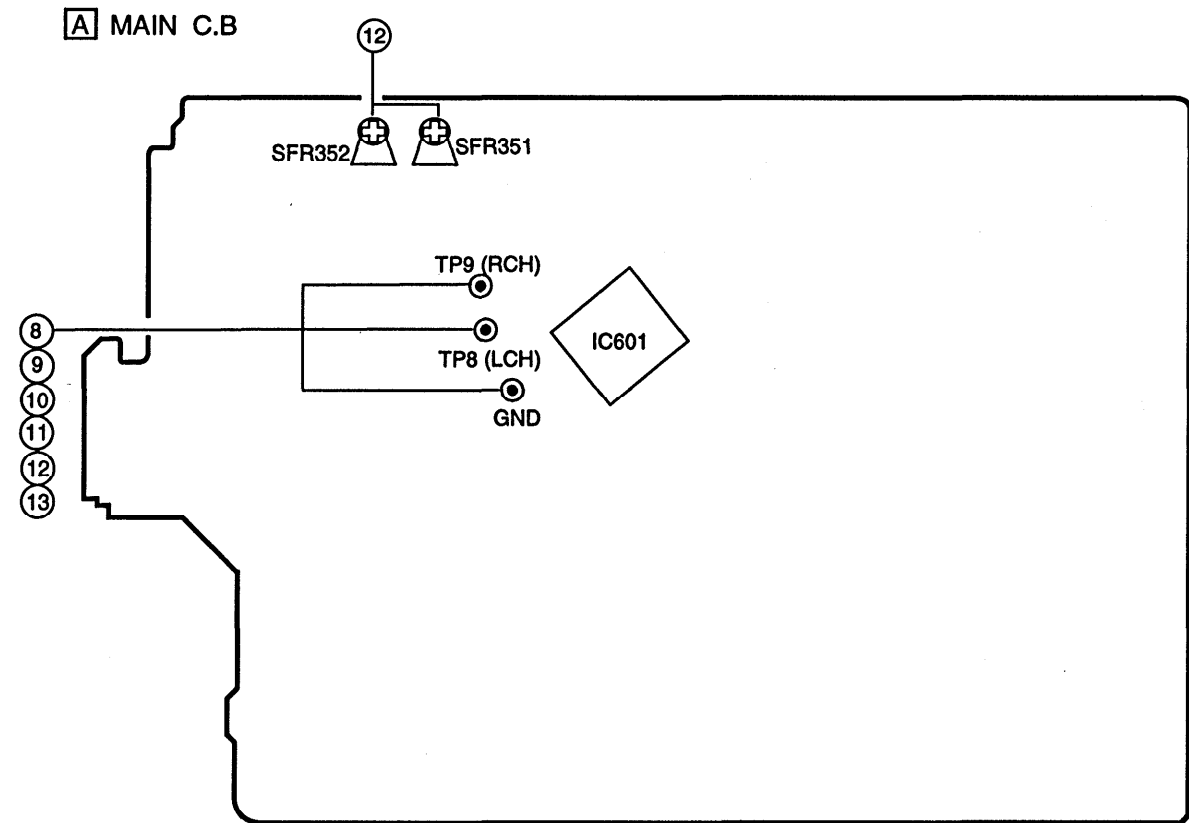
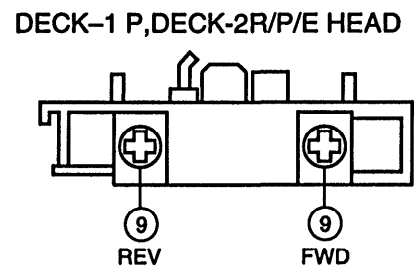
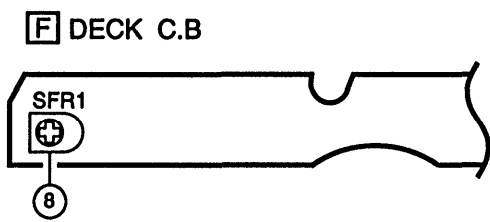
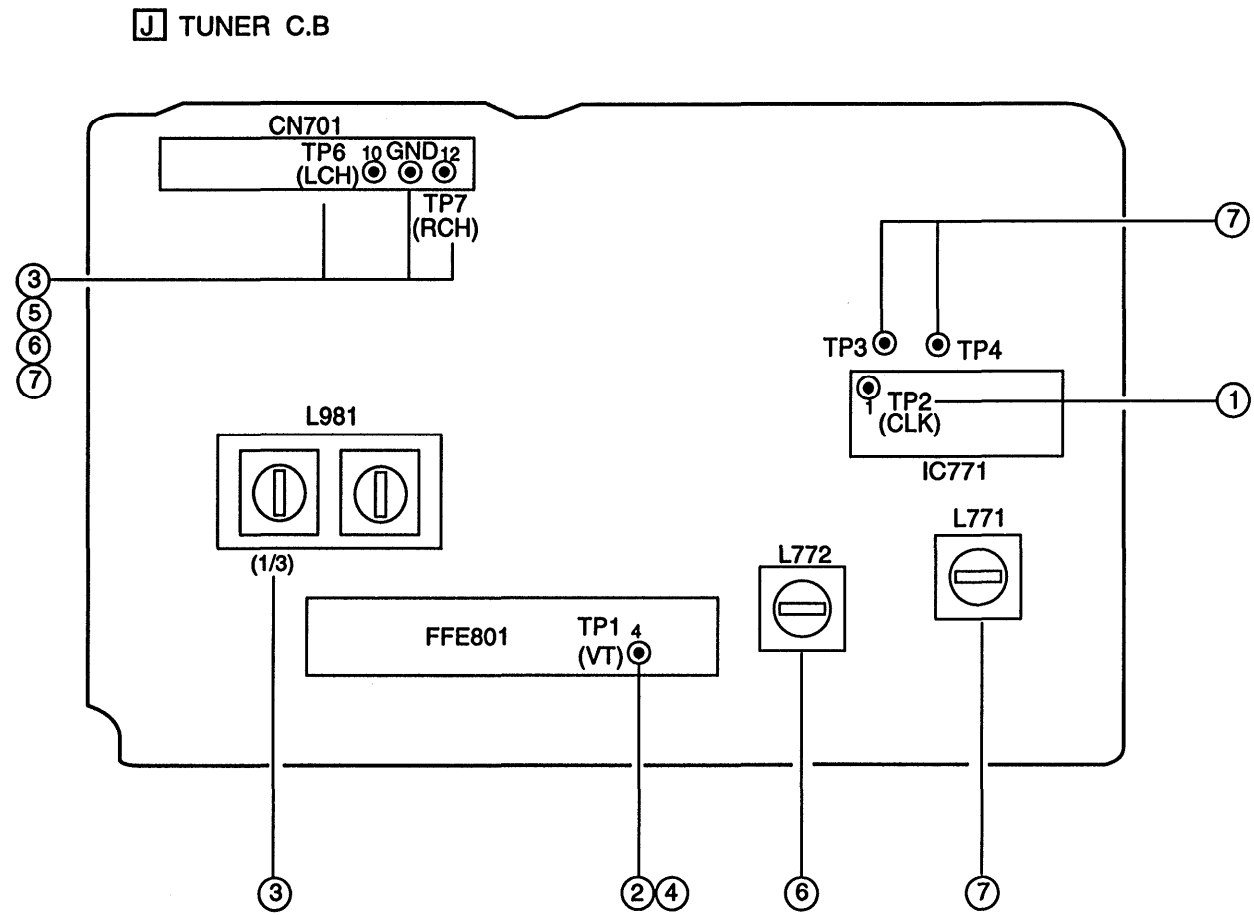
GRID ASSIGNMENT



ANODE CONNECTION

	13G	12G	11G	10G	9G	1G-8G
P1	S1	SEARCH	—	—	—	B4
P2	S3	RDS AG EON	—	—	○	B3
P3	S2	RT	—	▷ (LATIN)	—	B2
P4	—	—	—	(100)	S23	B1
P5	—	(RDS)	—	MONO	S22	1-1
P6	◁ (HALL)	(AG)	—	S5	S21	2-1
P7	◁ (STADIUM)	(EON)	—	—	S20	3-1
P8	◁ (LIVE)	(RT)	B1	▷ (CLASSIC)	S19	4-1
P9	◁ (DISCO)	◌	B9	▷ (POP)	S18	5-1
P10	S4	B1	B17	B1	S16	1-2
P11	▷ (M4)	B9	B25	B9	S15	2-2
P12	▷ (M3)	⌂	B2	▷ (ROCK)	S17	3-2
P13	▷ (M2)	◌	B10	S6	S13	4-2
P14	▷ (M1)	B2	B18	B2	S12	5-2
P15	↶	B10	B26	B10	S14	1-3
P16	EDIT	▷	B3	◁ (M4)	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



PRACTICAL SERVICE FIGURE

< TUNER SECTION >

1. Clock Frequency Check
Settings : • Test point : TP2 (CLK)
Method : Set to AM 1710kHz and check that the test point is 2160kHz \pm 45Hz.
2. AM VT Check
Settings : • Test point : TP1 (VT)
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 maximum.
4. FM VT Check
Settings : • Test point : TP1 (VT)
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 9.0dB μ 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 : 60dB μ V
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%

< 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 3000Hz \pm 5Hz and \pm 45Hz (REV) with respect to forward speed.

9. Head Azimuth Adjustment (DECK 1, DECK 2)
Settings : • Test tape : TTA-330
• Test point : TP8(Lch), TP9(Rch)
• Adjustment location : Head azimuth adjustment screw
Method : Play back (FWD) the 8kHz 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-330
• Test point : TP8(Lch), TP9(Rch)
Method : Play back the 315Hz and 8kHz signals of the test tape and check that the output ratio of the 8kHz signal with respect to that of the 315Hz signal is within 5dB.
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 250mV \pm 3dB.
12. REC/PB Frequency Response Adjustment (DECK 2)
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 21mV. Record and play back the 1kHz and 10kHz signals and adjust SFRs so that the output level of the 10kHz signals becomes 0dB \pm 0.5dB with respect to that of the 1kHz signal.
13. REC/PB Sensitivity Check (DECK 2)
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 check the output level at the TP8, TP9 becomes 210mV.
Record and play back the 1kHz signals and adjust SFRs so that the output is -2dB \pm 3.5dB.
14. μ -CON OSC Adjustment
Settings : • Test point : TP10 (IC101 Pin 85)
• Adjustment location : L101
Method : Insert AC plug with pressing TUNER function key. Adjust L101 so that the frequency across the test point is 130.430Hz \pm 1.3Hz.

<TUNER SECTION>

<FM SECTION>

- IHF Sensitivity : Less than 10dB
[at 87.5MHz]
(THD 3%) Less than 9dB
[at 98.0 / 108.0MHz]
- S/N 50dB Quieting sensitivity (L-R) : 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 \pm 10dB
[at 98.0MHz]
- Stereo separation : More than 22dB
[at 98.0MHz]
- Intermediate frequency : 10.7MHz

<AM SECTION>

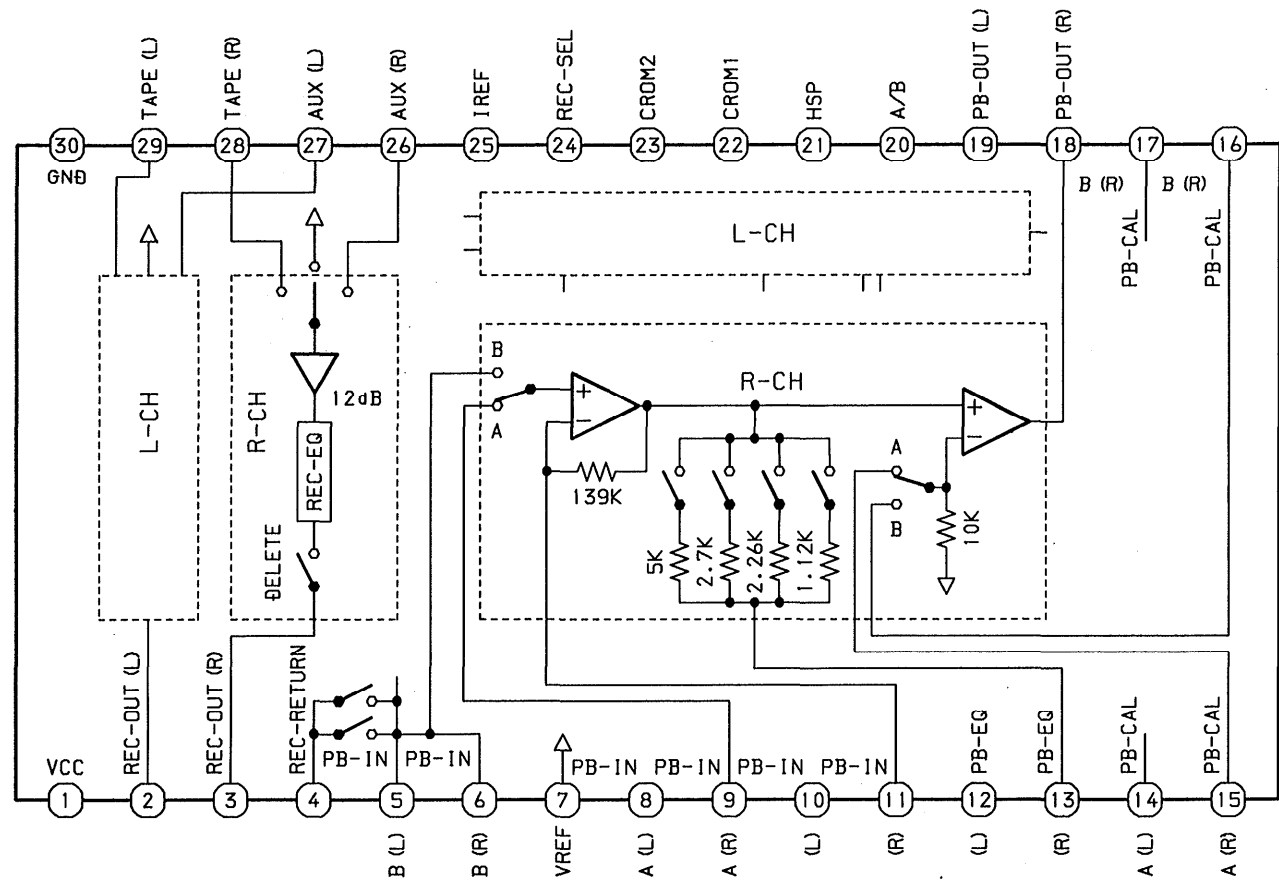
- Sensitivity : Less than 60dB
(S/N 20 dB) [at 600kHz]
Less than 58dB
[at 1000 / 1400kHz]
- Signal to noise ratio : MONO : More than 36dB
STEREO : More than 34dB
[at 1000kHz]
- Distortion : MONO : Less than 1.5%
STEREO : Less than 4%
[at 1000kHz]
- Auto stop level : 52dB + 10/-15dB
[at 1000kHz]
- Stereo separation : More than 15dB
[at 1000kHz]
- Intermediate frequency : 450kHz

<DECK SECTION>

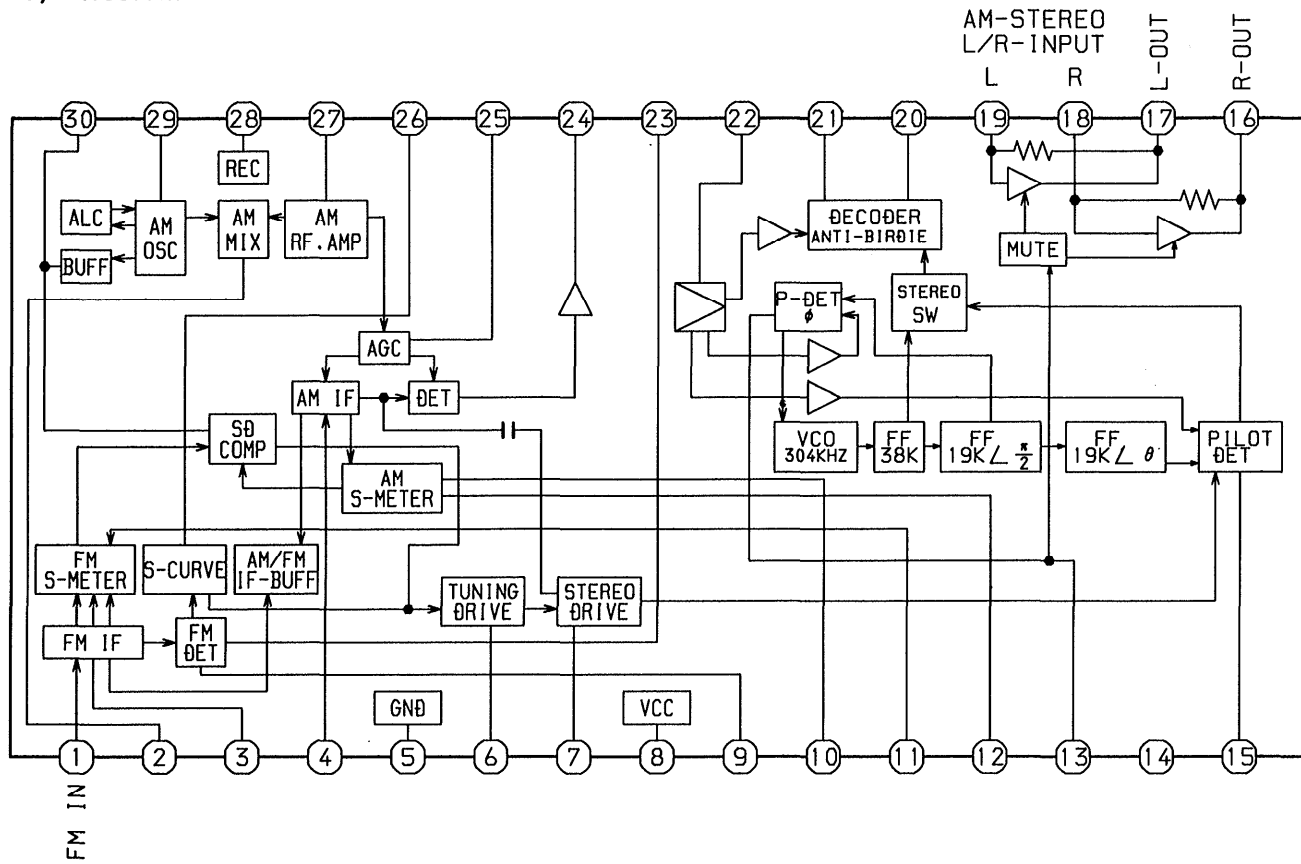
- Tape speed : 3000Hz \pm 45Hz
Wow & flutter : Less than 0.15% (W.R.M.S)
Pinch roller pressure : 270 ~ 330g (FWD, REV)
Take-up torque : 30 ~ 55g-cm (FWD, REV)
F.F & REW torque : 75 ~ 160g-cm
Back tension : 2 ~ 7g-cm (FWD, REV)
PB Output level : 250mV \pm 3dB
Distortion (REC/PB) : Less than 2.0% (NORMAL, CrO2)
Noise level (PB) : Less than 1.0mV (NORMAL)
Noise level (REC/PB) : Less than 1.2mV (NORMAL)
Erasing ratio : More than 60dB (at 125Hz, 10VU)
Test tape : NORMAL : TTA-602
CrO2 : TTA-615

IC BLOCK DIAGRAM

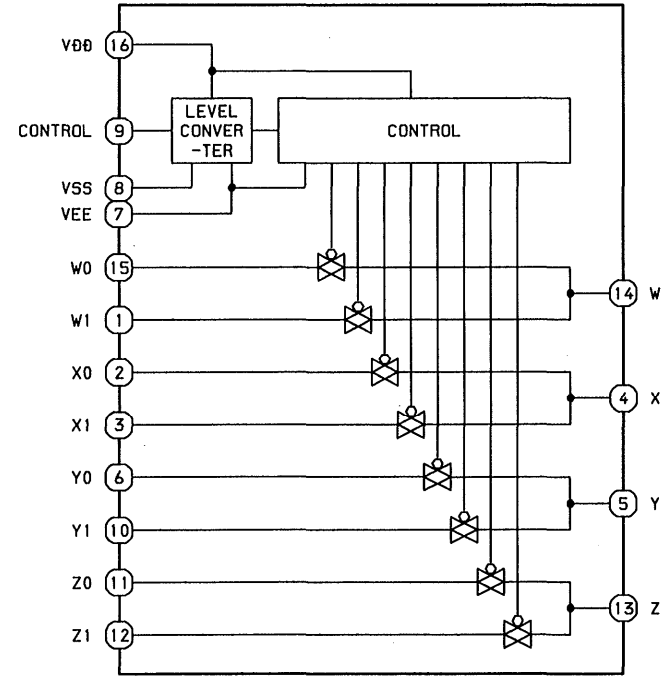
IC, HA12211



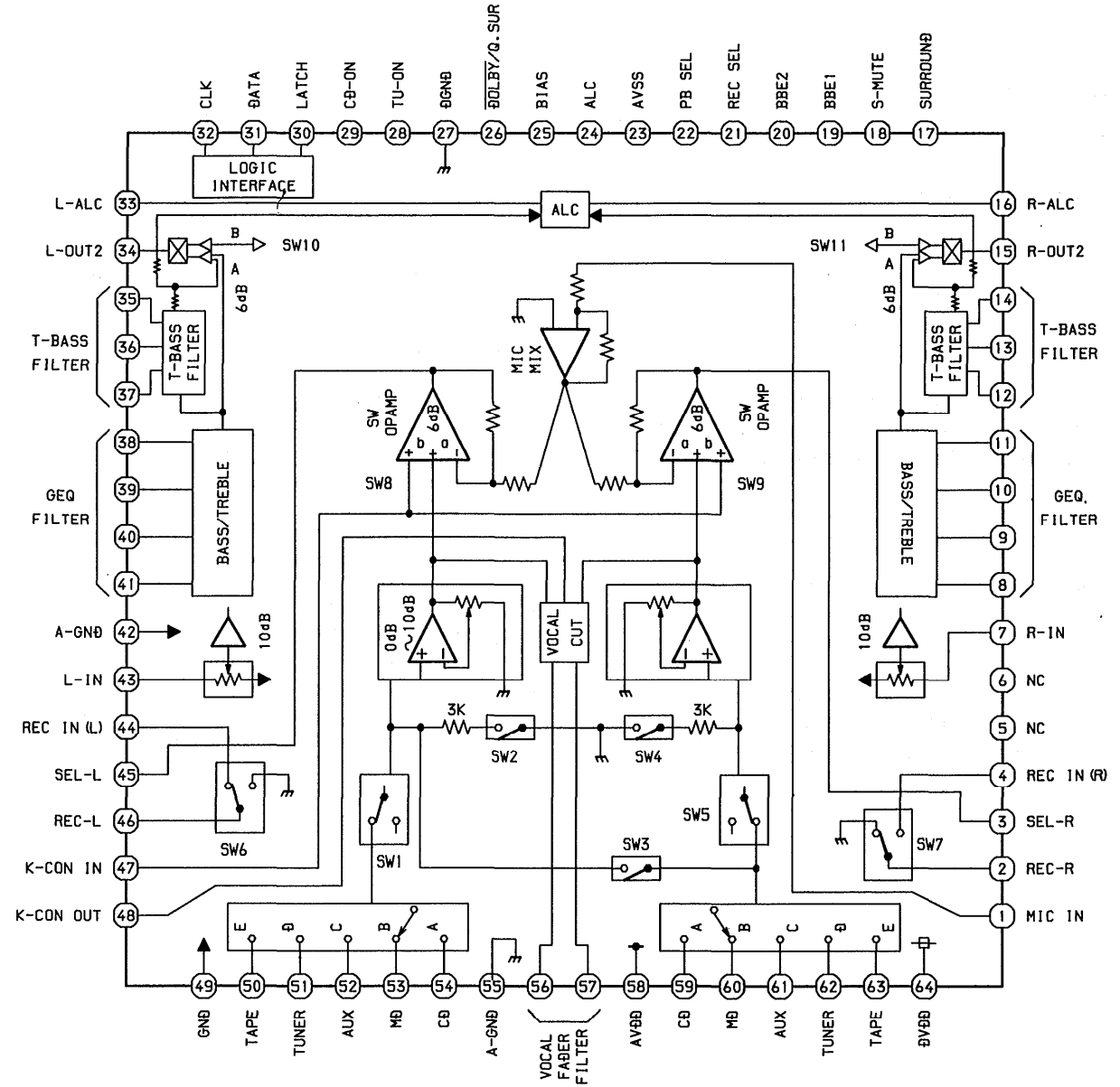
IC, LA1837NL



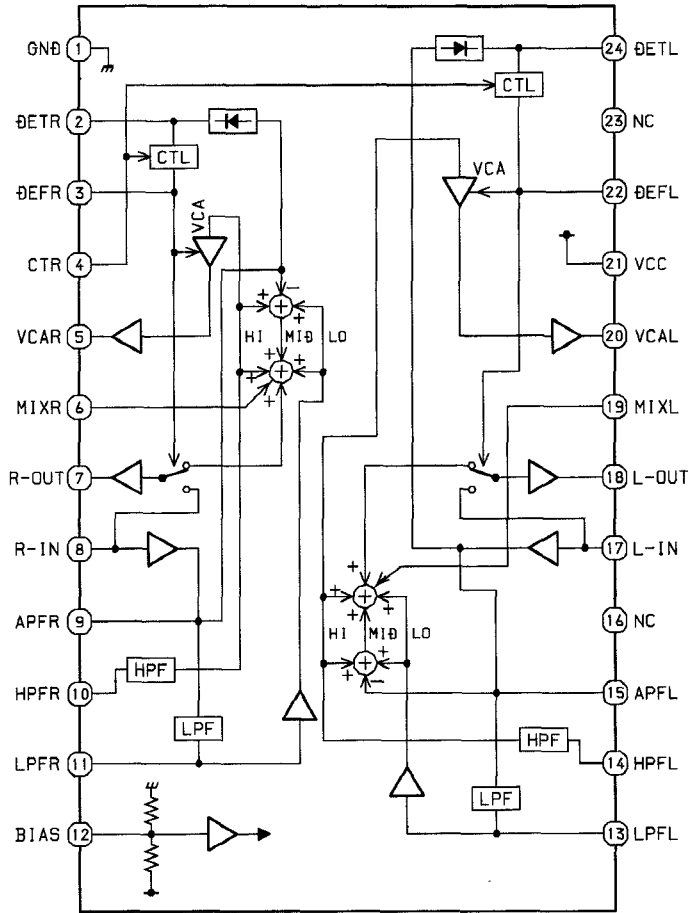
IC, BU4551BF



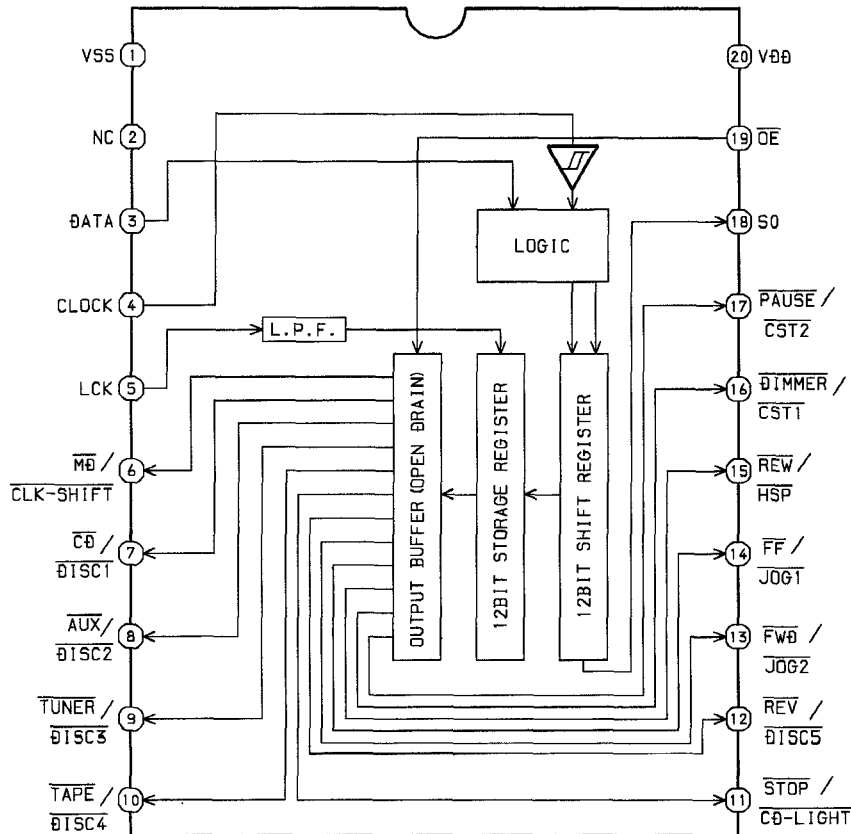
IC, M62445FP-600D



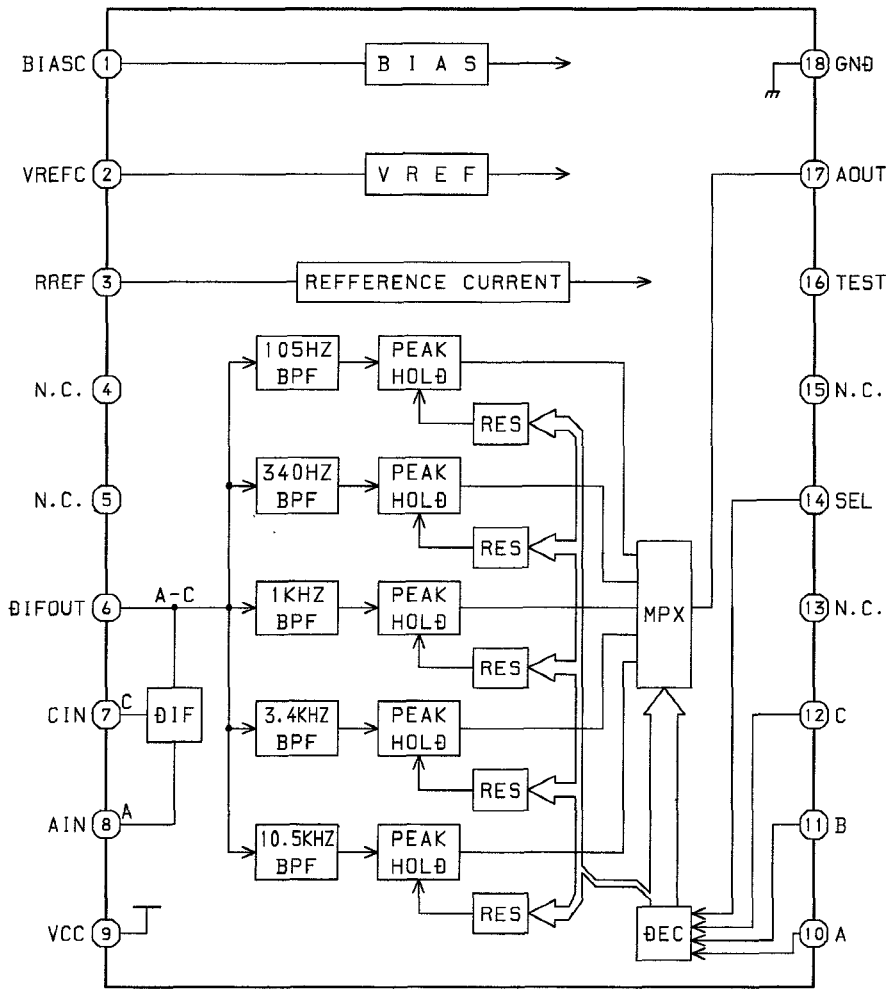
IC, BA3880FS



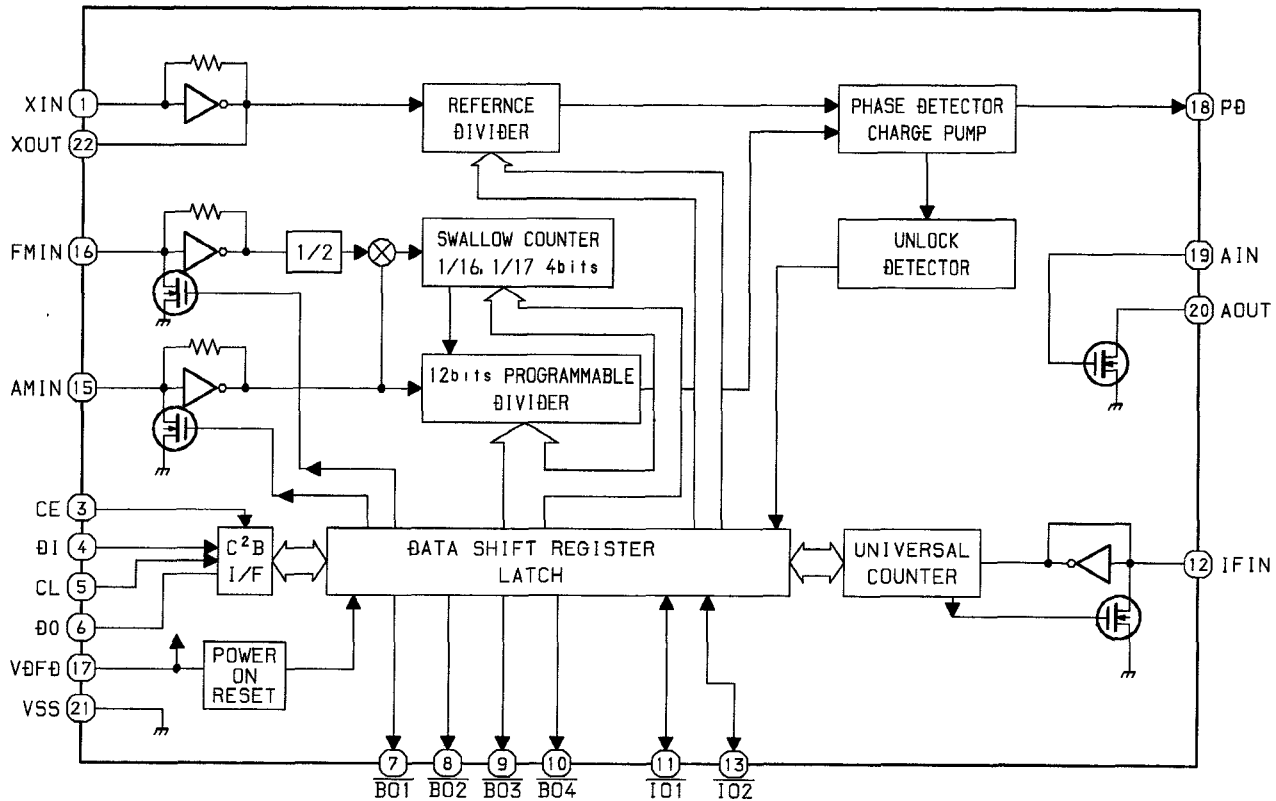
IC, BU2099FV



IC, BA3835F



IC, LC72131D

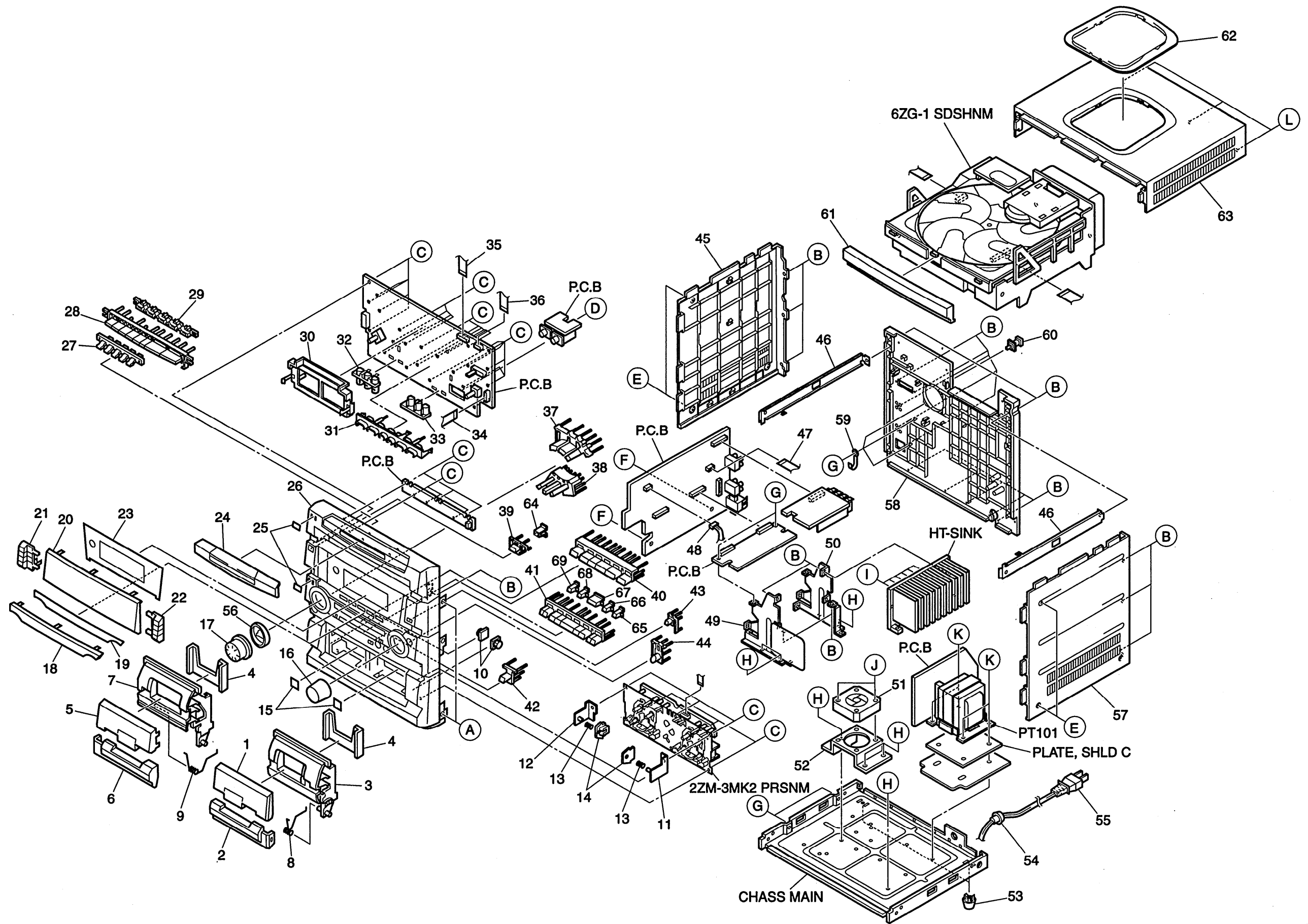


IC DESCRIPTION

IC, LC876580W-5K53

Pin No.	Pin Name	I/O	Description
1	M-CLK	O	Main IC control serial CLOCK output.
2	M-DATA	O	Main IC control serial DATA output.
3	M-STB	O	Main IC control serial STROBE output.
4	PLL-CE	O	TUNER PLL IC control CHIP ENABLE output.
5	SR-LCK	O	SHIFT REGISTER IC control LATCH CLOCK output.
6	RYM-CS	O	RHYTHM IC control CHIP SELECT output (Not connected).
7	O-POWER	O	System power control output. H: POWER ON.
8	O-MUTE	O	System mute control output. H: MUTE ON.
9	C-SHIFT	O	Microcomputer CLOCK SHIFT control output. L: SHIFT UP (initial H).
10	HP-MUTE	I	During PROLOGIC, HEAD PHONE JACK insertion detection input. L: IN.
11	RESET	I	Reset input.
12	RTVR	I	Waveform input for VOL rotary encoder.
13	JOG	I	Waveform input for JOG rotary encoder.
14	GND	-	Connected to GND.
15	CF1	I	Oscillator input for system clock (9.43MHz).
16	CF2	O	Oscillator output for system clock (9.43MHz).
17	VDD	-	Power supply.
18	HOLD	I	Power failure overcharge detection input.
19	KEY1	I	Tact key matrix 1 input.
20	KEY2	I	Tact key matrix 2 input.
21	KEY3	I	Tact key matrix 3 input.
22	CD-SW	I	CD MECHA SW matrix input.
23	DISH	I	CD turntable photo sensor input.
24	SPEANA	I	Spectrum analyser level detection input.
25	MIC	I	MIC level detection input.
26	MS/ RDS_SG	I	During TAPE FUNC, MUSIC SENSOR detection input./ During TUNER FUNC, RDS Signal level input.
27	TM-BASE	I	Reference signal input for clock.
28	I-SENS/ RDS-CK	I	During CD FUNC, CD DSP SENS input / During TUNER FUNC, RDS serial CLOCK input.
29	REM	I	Remote control signal input.
30 ~ 42	G13 ~ G1	O	FL grid G13 ~ G1 output.
43 ~ 45	P39 ~ P37	O	FL segment P39 ~ P37 output.
46	VDD	-	Power supply.
47	P36/SPEANA-A	O	FL segment P36 output/Spectrum analyser BPF switching control A output.
48	P35/SPEANA-B	O	FL segment P35 output/Spectrum analyser BPF switching control B output.
49	P34/SPEANA-C	O	FL segment P34 output/Spectrum analyser BPF switching control C output.
50	P33/ACDEMO	O/I	FL segment P33 output/While initializing, DEMO MODE switching input. H: DEMO OFF
51	-VP	-	Power supply for FL input.
52	P32/TU3	O/I	FL segment P32 output/TUNER location switching 3 input.
53	P31/TU2	O/I	FL segment P31 output/TUNER location switching 2 input.
54	P30/TU1	O/I	FL segment P30 output/TUNER location switching 1 input.
55	P29/DSP	O/I	FL segment P29 output/DSP setting switching input. H: Absent.

Pin No.	Pin Name	I/O	Description
56	P28/RHYTHM	O/I	FL segment P28 output/RHYTHM setting switching input. H: Absent.
57	P27/KEYCON	O/I	FL segment P27 output/KEYCON setting switching input. H: Existent.
58	P26/5 MODE	O/I	FL segment P26 output/GEQ&DSP 5MODE/4MODE setting input. H: 5 MODE.
59	P25/BBE	O/I	FL segment P25 output/BBE setting switching input. H: Absent.
60	P24/MS+DLNR	O/I	FL segment P24 output/MUSIC SENSOR+DOLBY NR setting switching input. H: Absent.
61	P23/DLNR	O/I	FL segment P23 output/DOBY NR setting switching input. H: Absent.
62	P22/5.1+DLPRO	O/I	FL segment P22 output/5.1CH+DOLBY PROLOGIC setting switching input. H: Existent.
63	P21/DLPRO	O/I	FL segment P21 output/DOLBY PROLOGIC setting switching input. H: Existent.
64	P20/CST2	O/I	FL segment P20 output/Deck 2 cassette existence detection SW input. L: Existent.
65	P19/REB	O/I	FL segment P19 output/Deck 2 side-B recording able/disable detection SW output. L: Able.
66	P18/CAM2	O/I	FL segment P18 output/Deck 2 cam-operation detection SW input. L: ON.
67	P17/AUTO1	O/I	FL segment P17 output/Deck 1 reel-rotation detection signal input.
68	P16/AUTO2	O/I	FL segment P16 output/Deck 2 reel-rotation detection signal input.
69	P15/CAM1	O/I	FL segment P15 output/Deck 1 cam-operation detection SW input. L: ON.
70	P14/CST1	O/I	FL segment P14 output/Deck 2 cassette existence detection SW input. L: Existent.
71	P13/REA	O/I	FL segment P13 output/Deck 2 side-A recording able/disable detection SW input. L: Able.
72	VDD	-	Power supply.
73 ~ 84	P12 ~ P1	O	FL segment P12 ~ P1 output.
85	KEYSCAN	O	Segment input timing output. L: Input timing.
86	MOTOR	O	DECK MECHA motor control output. L: ON.
87	SOL1	O	DECK 1 MECHA plunger control output. L: ON.
88	SOL2	O	DECK 2 MECHA plunger control output. L: ON.
89	VSS2	-	Connected to GND.
90	VDD	-	Power supply.
91	DISH-RVS	O	CD turntable control output. H: Reverse rotation.
92	DISH-FWD	O	CD turntable control output. H: Forward rotation.
93	OPEN	O	CD tray control output. L: OPEN.
94	CLOSE	O	CD tray control output. L: CLOSE.
95	CD-DATA/ RDS-DATA	O/I	During CD FUNC, CD DSP control serial data output/ During TUNER FUNC, RDS serial data input.
96	CD-XLT	O	CD DSP control serial LATCH output. LATCH when drop.
97	CD-CLK	O	CD DSP control serial CLOCK output.
98	CD-LED	O	CD flash window LED control output. H: ON
99	CD-SUBQ/ IFC	O/I	During CD FUNC, SUBQ serial data input/ During TUNER FUNC, IF COUNT DATA input.
100	CD-SQCK/ STEREO	O/I	During CD FUNC, CLOCK output for SUBQ READ OUT/ During TUNER STEREO signal input.



MECHANICAL PARTS LIST 1 / 1

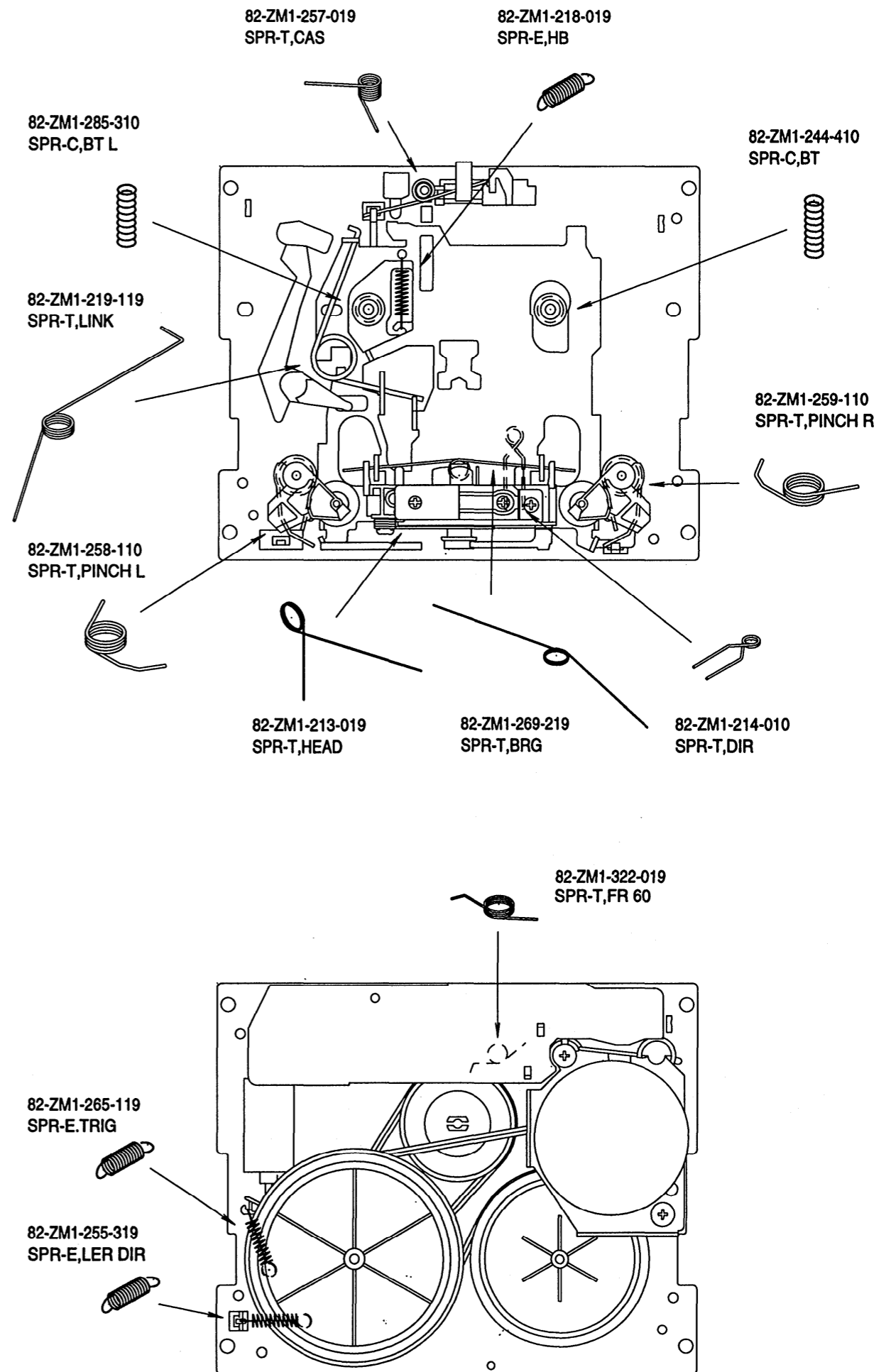
SPRING APPLICATION POSITION

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

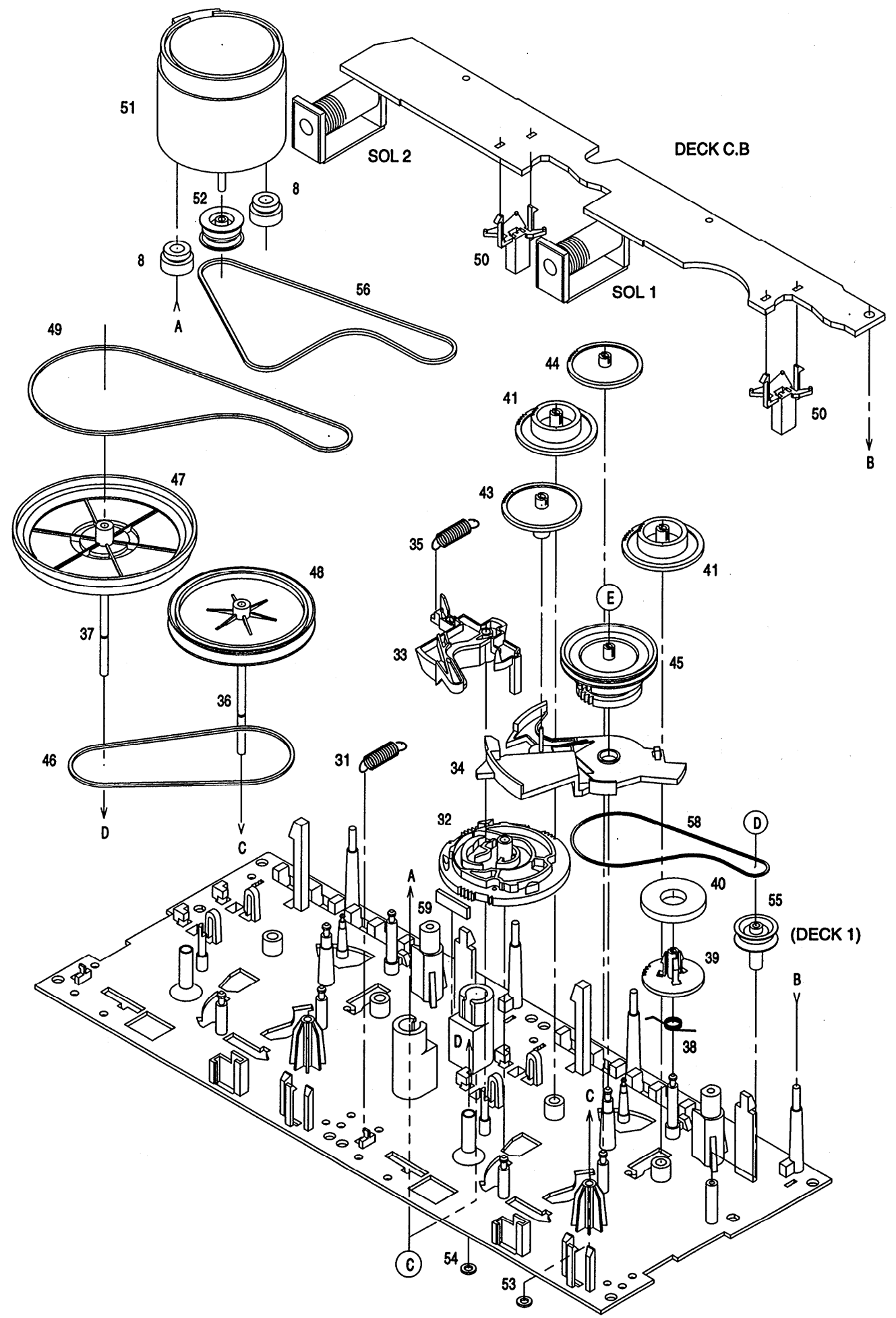
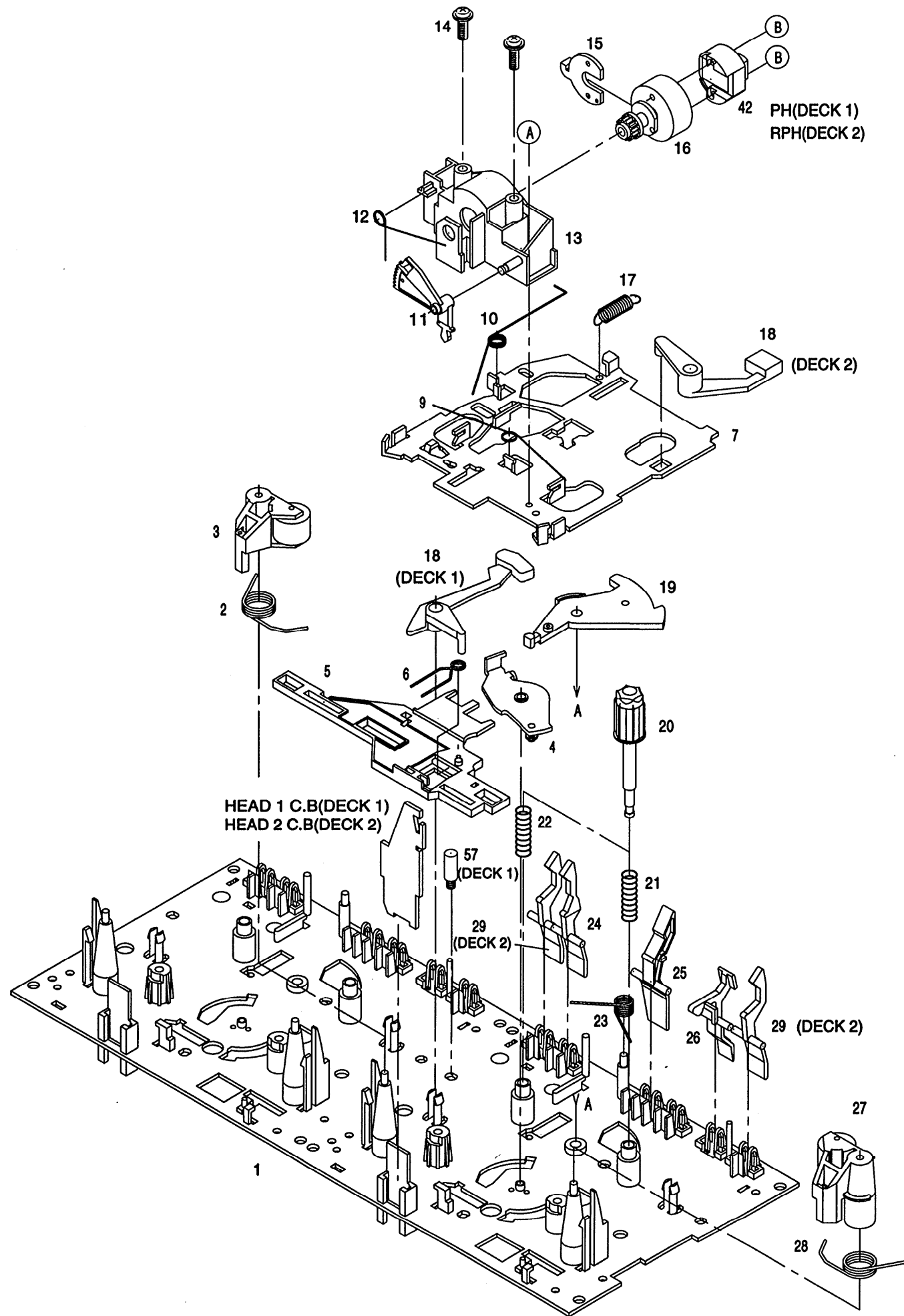
REF. NO.	PART NO.	KANRI NO.	DESCRIPTION	REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	8Z-MA1-016-010		WINDOW, CASS R	46	88-MA1-208-110		JOINT, CABI
2	8Z-MA1-007-010		BOX, CASS R	47	88-906-281-110		FF-CABLE, 6P 1.25 280MM
3	8Z-MA3-025-010		PANEL, CASS (A3) R	48	83-NEG-608-010		CONN ASSY 8P-RPB
4	86-NF6-061-010		REFLECTOR, CASS	49	8Z-MA1-205-010		HLDR, HT-SINK B
5	8Z-MA1-015-010		WINDOW, CASS L	50	8Z-MA1-204-010		HLDR, HT-SINK A
6	8Z-MA1-006-010		BOX, CASS L	51	87-A90-796-010		FAN, F614R-12MC-19-240MM
7	8Z-MA3-024-010		PANEL, CASS (A3) L	52	8Z-MA1-210-010		HLDR, FAN
8	82-NF5-219-010		SPR-T, EJECT 2 (SIN)	53	87-MA3-062-010		FOOT, H17
9	82-NF5-218-010		SPR-T, EJECT 1 (SIN)	54	87-085-189-010		BUSHING, CORD (U)
10	87-NF8-220-010		DMPR, 150	55	87-A80-110-010		AC CORD ASSY, U SPT-2W
11	87-NF4-217-010		HLDR, LOCK 2	56	8Z-MA1-025-010		REFLECTOR, JOG
12	87-NF4-216-010		HLDR, LOCK 1	57	8Z-MA4-049-010		PANEL, SIDE R (U)
13	86-NF9-224-010		SPR-C, LOCK	58	8Z-MA3-007-010		CABI, REAR (A3) USTNM
14	82-NF5-229-010		PLATE, LOCK	59	87-064-185-010		HLDR, WIRE
15	81-532-080-010		LABEL, CASS. COMPT	60	84-ZG1-245-210		CAP, OPTICAL
16	8Z-MA1-039-010		KNOB, RTRY MAIN	61	8Z-MA1-010-010		PANEL, TRAY
17	8Z-MA1-027-010		KNOB, RTRY JOG	62	87-MAT-009-010		WINDOW, TOP (U)
18	8Z-MA1-014-010		WINDOW, FUN LH	63	8Z-MA4-058-010		PANEL, TOP U
19	8Z-MA3-031-010		PLATE, FUN (A3)	64	8Z-MA1-045-010		REFLECTOR, POWER
20	8Z-MA3-029-010		WINDOW, AMP (A3) U	65	8Z-MA1-033-010		REFLECTOR, PAUSE
21	8Z-MA3-023-010		KEY, GEQ (PRGM)	66	8Z-MA1-034-010		REFLECTOR, STOP
22	8Z-MA3-022-010		KEY, GEQ (MANU)	67	8Z-MA1-032-010		REFLECTOR, PLAY
23	8Z-MA3-027-010		PLATE, GEQ (A3) U	68	8Z-MA1-035-010		REFLECTOR, REW
24	8Z-MA1-012-010		PANEL, CD	69	8Z-MA1-036-010		REFLECTOR, FF
25	82-NE6-067-010		BADGE, AIWA 30N	A	87-591-095-410		TAPPING SCREW, QIT+3-8 (GLD)
26	8Z-MA3-002-010		CABI, FR (A3) U	B	87-067-703-010		TAPPING SCREW, BVT2+3-10
27	8Z-MA1-018-010		REFLECTOR, CD	C	87-078-060-010		BVIT3PB+3-10
28	8Z-MA1-017-010		KEY, DIRECT	D	81-MK1-210-010		S-SCREW, VFT2+3-16
29	8Z-MA1-206-010		GUIDE, CD	E	87-067-641-010		UTT2+3-8 (W/O SLOT) BL
30	88-MA2-202-010		GUIDE, FL (2)	F	87-NF4-224-010		S-SCREW, IT3B+3-8 CU
31	8Z-MA1-201-010		GUIDE, LED PLAY	G	87-067-579-010		TAPPING SCREW, BVT2+3-8
32	85-NF5-210-110		GUIDE, LED L	H	87-067-688-010		BVTT+3-6
33	85-NF5-211-110		GUIDE, LED R	I	87-067-001-010		S-SCREW, BVWST2+3-12
34	85-MA2-602-010		CABLE, FFC 15P-1.25	J	87-067-822-010		BVT2+3-20 W/O SLOT
35	88-914-251-110		FF-CABLE, 14P 1.25 250	K	87-067-975-010		S-SCREW, IT+4-8
36	88-908-231-110		FF-CABLE, 8P 1.25	L	87-067-758-010		BVT2+3-12 W/O SLOT
37	8Z-MA3-028-010		KEY, JOG (A3)				
38	8Z-MA3-035-010		KEY, TIMER (A3)				
39	8Z-MA3-021-010		KEY, POWER (A3) U				
40	8Z-MA1-028-010		KEY, FUN				
41	8Z-MA1-031-010		KEY, PLAY				
42	8Z-MA1-042-010		KEY, VF				
43	8Z-MA1-044-010		KEY, DEMO				
44	8Z-MA1-040-010		KEY, T-BASS				
45	8Z-MA4-048-010		PANEL, SIDE L (U)				

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

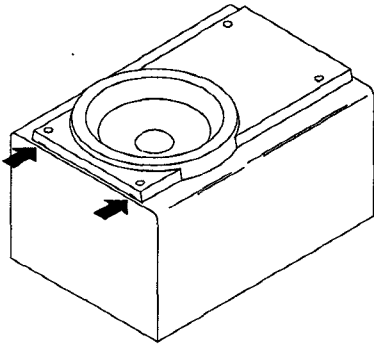
If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION	REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	82-ZM3-301-519		CHAS ASSY, M2	36	82-ZM1-236-019		CAPSTAN N 2-41.5
2	82-ZM1-258-110		SPR-T, PINCH L	37	82-ZM1-239-019		CAPSTAN N 2.2-41.7
3	82-ZM1-341-110		LVR ASSY, PINCH L2	38	82-ZM1-322-019		SPR-T, FR60
4	82-ZM1-333-010		PLATE, LINK 2	39	82-ZM1-220-219		GEAR, IDLER
5	82-ZM1-266-11K		LVR, DIR	40	82-ZM3-616-019		RING MAGNET 4
6	82-ZM1-214-010		SPR-T, DIR	41	82-ZM1-216-31K		GEAR, REEL
7	82-ZM1-206-81K		CHAS, HEAD	42	87-A90-366-010		HEAD, PH YK50P-BF414 FPC
8	82-ZM3-307-019		CUSH-G, DIA3.7-8-3.2	42	87-A90-367-010		HEAD, RPH YK56R-BF414 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				

SPEAKER DISASSEMBLY INSTRUCTIONS

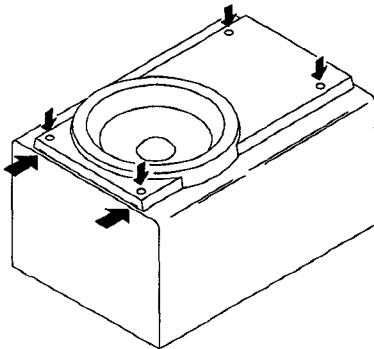
Type.1

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.



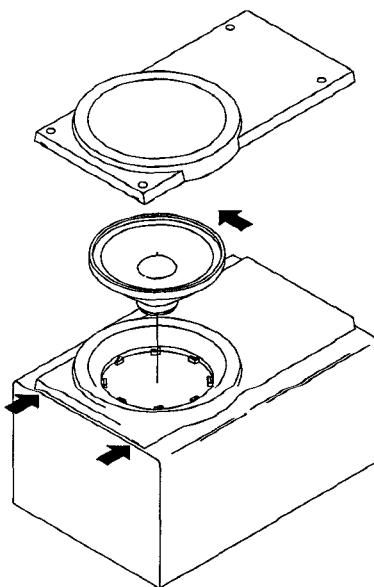
Type.2

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.

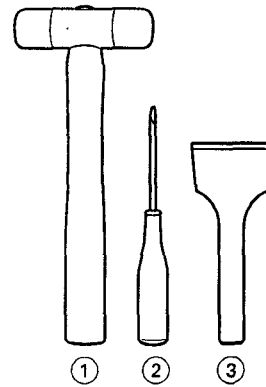


Type.3

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.

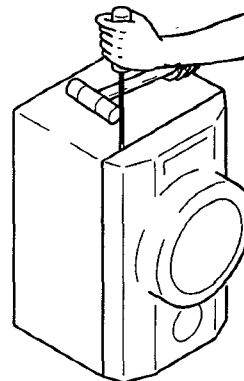


Fig-1

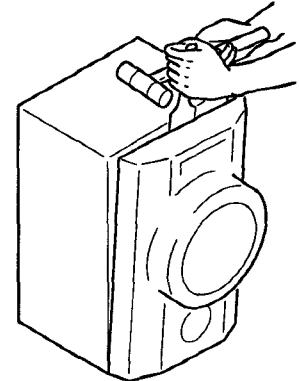


Fig-2

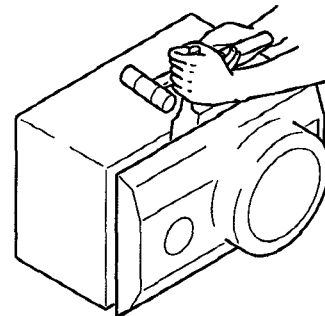


Fig-3

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.

SPEAKER (SX-WZL70) PARTS LIST

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

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	88-MS1-608-010		SPKR, CERAMIC
2	88-MS1-610-010		CORD, SPKR
3	88-NS3-605-010		CAP,
4	88-NS5-611-010		CORD, SPKR B/L
5	8Z-MS3-601-010		SPKR, W 200
6	8Z-MS3-603-010		SPKR, M 120
7	8Z-MS4-001-010		PANEL, FR
8	8Z-MS4-003-010		PROTECTOR

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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