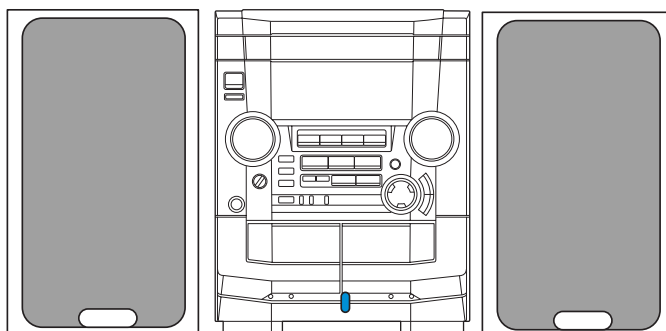


NSX-SZ50 EZ, K

NSX-SZ52 EZ



SERVICE MANUAL

COMPACT DISC STEREO
SYSTEM

BASIC TAPE MECHANISM : 6ZM-3 PR2NM
BASIC CD MECHANISM : AZG-1 ZA3RDM

SYSTEM	CD CASSEIVER	SPEAKER	REMOTE CONTROLLER
NSX-SZ50	CX-NSZ50	SX-WNSZ50	RC-ZAS01
NSX-SZ52	CX-NSZ52	SX-WNSZ52	RC-ZAS01

- This Service Manual is the "Revision Publishing" and replaces "Simple Manual", (S/M Code No. 09-002-424-6T2).
- If requiring information about the CD mechanism, see Service Manual of AZG-1, (S/M Code No. 09-001-335-3NC).

SPECIFICATIONS

Main unit CX-NSZ50(EZ, K)/CX-NSZ52(EZ)

<FM tuner section>

Tuning range	87.5 MHz to 108 MHz
Usable sensitivity (IHF)	16.8 dBf
Antenna terminals	75 ohms (unbalanced)

<MW 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

<LW tuner section>

Tuning range	144 kHz to 290 kHz
Usable sensitivity	1400 μ V/m
Antenna	Loop antenna

<Amplifier section>

Mid-high frequency amplifier

Power output	Rated : 20 W + 20 W (8 ohms, T.H.D. 1 %, 1 kHz/DIN 45500) Reference : 25 W + 25 W (8 ohms, T.H.D. 10 %, 1 kHz/DIN 45324)
Total harmonic distortion	0.1 % (10W, 1 kHz, 8 ohms, DIN AUDIO)

Low frequency amplifier

Power output	Rated : 60 W + 60 W (6 ohms, T.H.D. 1 %, 130 Hz/DIN 45500) Reference : 75 W + 75 W (6 ohms, T.H.D. 10 %, 130 Hz/DIN 45324)
Total harmonic distortion	0.1 % (30W, 130 kHz, 6 ohms, DIN AUDIO)

Inputs

Outputs

VIDEO / AUX: 500 mV
SPEAKERS HIGH FREQ:
accept speakers of 8 ohms or more
SPEAKERS LOW FREQ:
accept speakers of 6 ohms or more
SURROUND SPEAKERS:
accept speakers of 8 ohms to 16 ohms
PHONES (stereo jack): accepts
headphones of 32 ohms or more

<Cassette deck section>

Track format	4 tracks, 2 channels stereo
Frequency response	50 Hz – 16000 Hz
Recording system	AC bias
Heads	Deck 1 : Playback head x 1 Deck 2 : Recording / Playback head x 1, erase head x 1

<Compact disc player section>

Laser	Semiconductor laser ($\lambda = 780$ nm)
D-A converter	1 bit dual
Signal-to-noise ratio	85 dB (1 kHz, 0 dB)
Harmonic distortion	0.05 % (1 kHz, 0 dB)

<General>

Power requirements	230 V AC, 50 Hz
Power consumption	150 W
Standby power consumption	20 W (power-economizing mode set to OFF) 0.9 W (power-economizing mode set to ON)
Dimensions of main unit (W x H x D)	260 x 326 x 345 mm
Weight of main unit	9.0 kg

Speaker system SX-WNSZ50(EZ, K)/SX-WNSZ52(EZ)

Speaker system	3 way, Built-in subwoofer (magnetic shielded type)
Speaker units	Subwoofer : 160 mm cone type Full range : 100 mm cone type Super tweeter: 20 mm ceramic type
Impedance	6 ohms/8 ohms
Sensitivity	86 dB/W/m
Dimensions (W x H x D)	240 x 324 x 271 mm
Weight	4.8 kg

• Design and specifications are subject to change without notice.

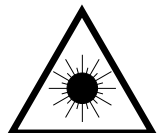
• The word "BBE" and the "BBE symbol" are trademarks of BBE Sound, Inc.
Under license from BBE Sound, Inc.

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 ylitävälle näkymättömälle lasersäteilylle.

WARNING!

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

CAUTION

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

ATTENTION

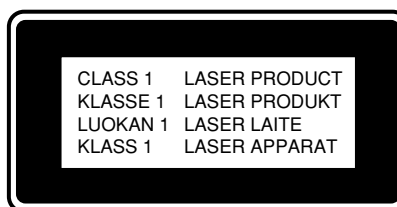
L'utilisation de commandes, réglages ou procédures autres que ceux spécifiés peut entraîner une dangereuse exposition aux radiations.

ADVARSEL!

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

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

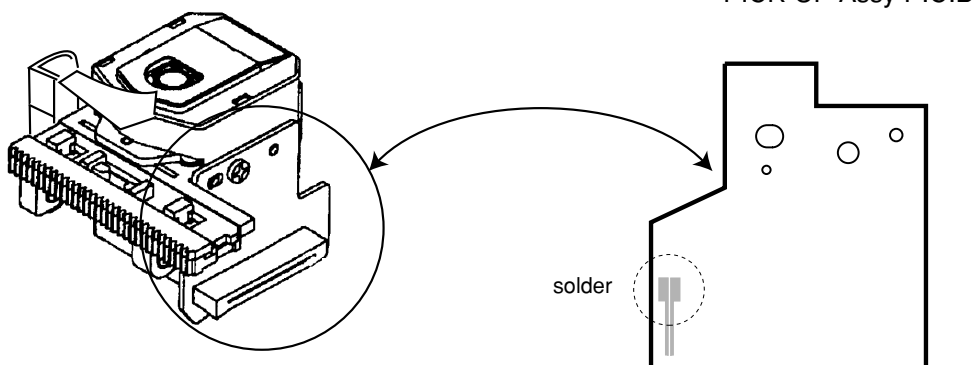
The CLASS 1 LASER PRODUCT label is located on the rear exterior.



Precaution to replace Optical block (KSM-880CAB)

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 the 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, 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 to 1 V or less using a multimeter or an oscilloscope.

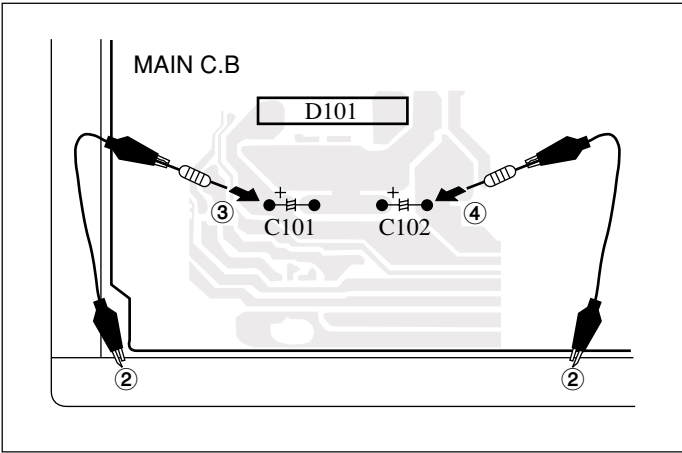


Fig-1

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.

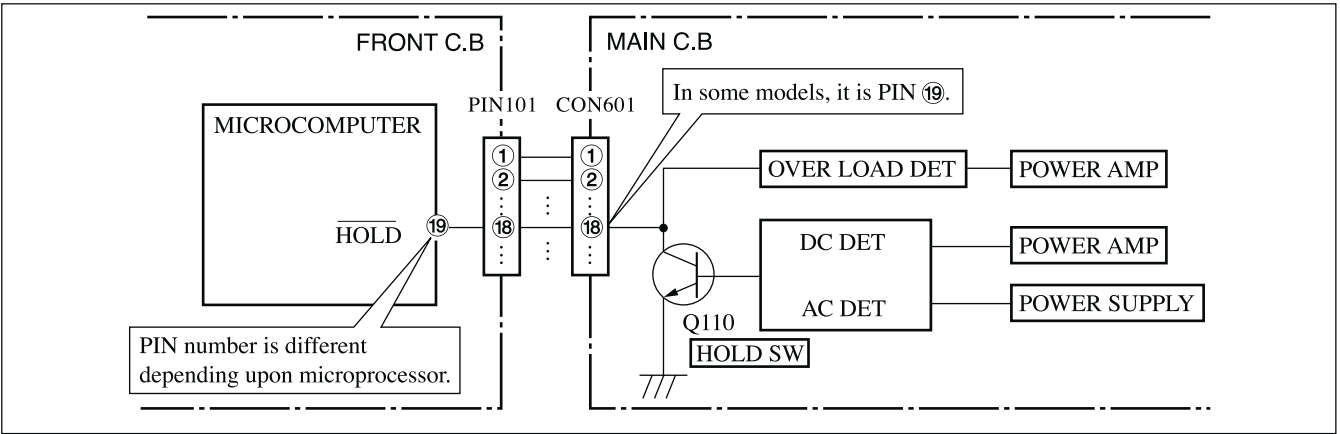


Fig-2-1

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.

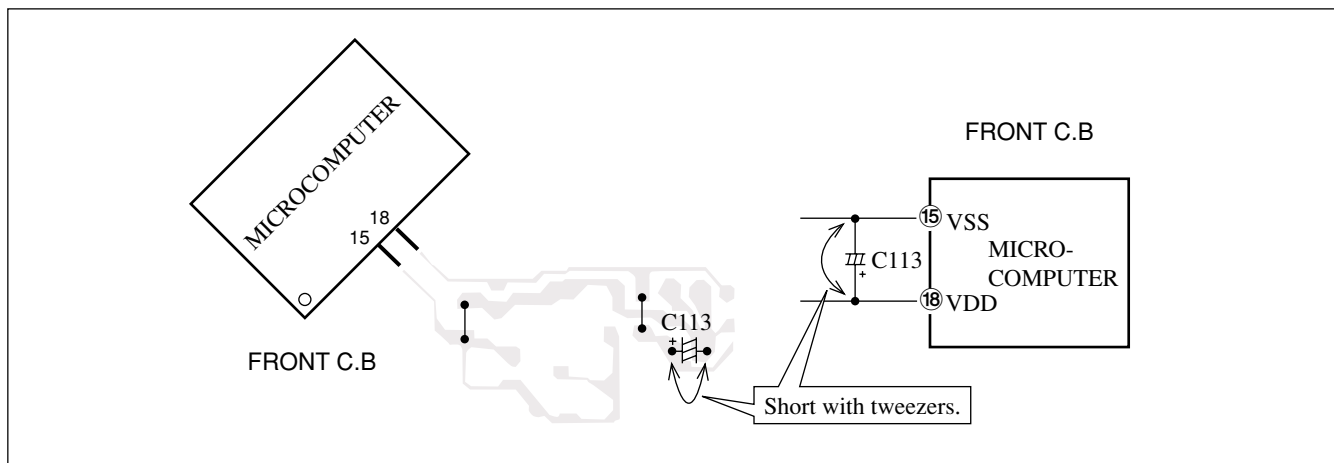


Fig-2-2

- 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

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION	REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
IC				C10	87-012-368-080		C-CAP,S 0.1-50 F
	87-A21-417-010		IC,STK490-310	C11	87-012-368-080		C-CAP,S 0.1-50 F
	8A-NF8-611-010		C-IC,LC866560W-5P19<52EZ>	C12	87-012-368-080		C-CAP,S 0.1-50 F
	8A-NF8-612-010		C-IC,LC866548V-5P03<EXCEPT 52EZ>	C15	87-012-368-080		C-CAP,S 0.1-50 F
	87-A21-396-010		IC,STK490-040	C16	87-012-368-080		C-CAP,S 0.1-50 F
	87-A21-482-010		IC,RPM6938-H4				
	87-A21-419-040		IC,NJM14558MD-TE2	C17	87-012-368-080		C-CAP,S 0.1-50 F
	87-A21-023-040		C-IC,BA3835F	C18	87-012-368-080		C-CAP,S 0.1-50 F
	87-A21-401-040		C-IC,M61503FP	C19	87-016-520-000		CAP,E 3300-65 M SMG
	87-070-289-040		IC,BU 2092F	C20	87-016-520-000		CAP,E 3300-65 M SMG
	87-070-127-110		IC,LC72131 D	C21	87-016-051-000		CAP,E 2200-35 M SMG
	87-A21-415-010		IC,LA1843				
	87-020-454-010		IC,DM6851	C22	87-016-051-000		CAP,E 2200-35 M SMG
	87-A20-440-040		C-IC,BU1920FS<52EZ>	C23	87-016-658-000		CAP,E 4700-35 M SMG
				C24	87-016-658-000		CAP,E 4700-35 M SMG
				C25	87-010-408-080		CAP, ELECT 47-50V
				C26	87-010-247-080		CAP, ELECT 100-50V
TRANSISTOR							
	87-026-609-080		TR,KTA1266GR	C30	87-010-430-080		CAP, ELECT 100-63
	89-213-702-010		TR,2SB1370 (1.8W)	C31	87-010-263-080		CAP, ELECT 100-10V
	87-026-610-080		TR,KTC3198GR	C32	87-010-197-080		CAP, CHIP 0.01 DM
	87-A30-076-080		C-TR,2SC3052F	C33	87-010-263-080		CAP, ELECT 100-10V
	87-A30-075-080		C-TR,2SA1235F	C34	87-010-260-080		CAP, ELECT 47-25V
	87-026-245-080		TR,DTC114ES				
	87-A30-198-080		TR,KTC3199GR	C35	87-010-380-080		CAP,E 47-16 M 11L
	87-A30-107-070		C-TR,CMBT5401	C36	87-010-381-080		CAP, ELECT 330-16V
	87-A30-106-040		C-TR,CMBT5551	C38	87-010-197-080		CAP, CHIP 0.01 DM
	87-A30-087-080		C-FET,2SK2158	C60	87-010-403-080		CAP, ELECT 3.3-50V
	87-A30-074-080		C-TR,RT1P 141C	C61	87-010-260-080		CAP, ELECT 47-25V
	87-A30-091-080		FET,2SJ460				
	87-A30-318-080		TR,CSA952K	C101	87-010-183-080		C-CAP,S 2700P-50 B
	87-A30-090-080		FET,2SK2541	C102	87-010-183-080		C-CAP,S 2700P-50 B
	87-A30-329-080		TR,CD1585BC	C103	87-010-545-080		CAP, ELECT 0.22-50V
	87-A30-104-080		C-TR,RT1N 441C	C104	87-010-545-080		CAP, ELECT 0.22-50V
	87-A30-073-080		C-TR,RT1N 141C	C107	87-010-405-080		CAP, ELECT 10-50V
	89-333-317-880		TR,2SC3331 (0.5W)				
	87-A30-269-040		C-FET,2SJ461-T1	C108	87-010-405-080		CAP, ELECT 10-50V
	89-327-143-080		C-TR,2SC27140 (0.1W)	C111	87-010-405-080		CAP, ELECT 10-50V
	87-A30-072-080		C-TR,RT1P 144C	C112	87-010-405-080		CAP, ELECT 10-50V
	87-A30-234-080		TR,CSC4115BC	C113	87-010-866-080		CAP, ELECT 10-63
	87-A30-489-080		C-TR,KRA107S	C114	87-010-866-080		CAP, ELECT 10-63
	87-A30-086-070		C-TR,CSD1306E				
	89-503-602-080		TR,CSC4115BC	C119	87-010-197-080		CAP, CHIP 0.01 DM
	87-A30-468-080		C-TR,KRC102S-RTK	C120	87-010-197-080		CAP, CHIP 0.01 DM
				C123	87-010-176-080		C-CAP,S 680P-50 J SL
				C124	87-010-176-080		C-CAP,S 680P-50 J SL
				C125	87-012-368-080		C-CAP,S 0.1-50 F
				C126	87-012-368-080		C-CAP,S 0.1-50 F
				C127	87-012-368-080		C-CAP,S 0.1-50 F
				C128	87-012-368-080		C-CAP,S 0.1-50 F
				C129	87-010-191-080		C-CAP,S 0.015-50 Z F
				C130	87-010-191-080		C-CAP,S 0.015-50 Z F
DIODE							
	87-A40-393-090		DIODE,1N5402GW(F20)	C131	87-010-197-080		CAP, CHIP 0.01 DM
	87-A40-736-080		DIODE,1N4148M(SEM)	C132	87-010-197-080		CAP, CHIP 0.01 DM
	87-A40-547-090		DIODE,D5SBA20	C133	87-010-186-080		CAP,CHIP 4700P
	87-A40-455-080		DIODE,RL203 GW	C140	87-010-182-080		C-CAP,S 2200P-50 B
	87-A40-553-080		DIODE,1N4003 LES	C141	87-010-196-080		CHIP CAPACITOR,0.1-25
	87-A40-776-080		ZENER,UZ27BSD				
	87-A40-764-080		ZENER,UZ10BSC	C203	87-010-182-080		C-CAP,S 2200P-50 B
	87-A40-313-080		C-DIODE,MC 2840	C204	87-010-182-080		C-CAP,S 2200P-50 B
	87-A40-270-080		C-DIODE,MC2838	C205	87-012-140-080		C-CAP,S 470P-50 J CH
	87-A40-269-080		C-DIODE,MC2836	C206	87-012-140-080		C-CAP,S 470P-50 J CH
	87-A40-768-080		ZENER,UZ16BSA	C209	87-010-402-080		CAP, ELECT 2.2-50V
	87-A40-752-080		ZENER,UZ6.2BSC				
	87-A40-802-080		ZENER,UZ5.1BSC	C210	87-010-402-080		CAP, ELECT 2.2-50V
	87-A40-739-080		ZENER,UZ2.7BSA	C211	87-010-184-080		CHIP CAPACITOR 3300P(K)
	87-017-149-080		ZENER,HZS6A2L	C212	87-010-184-080		CHIP CAPACITOR 3300P(K)
				C213	87-010-402-080		CAP, ELECT 2.2-50V
				C214	87-010-402-080		CAP, ELECT 2.2-50V
				C217	87-010-405-080		CAP, ELECT 10-50V
				C218	87-010-405-080		CAP, ELECT 10-50V
				C220	87-010-405-080		CAP, ELECT 10-50V
				C223	87-010-190-080		S CHIP F 0.01
				C224	87-010-190-080		S CHIP F 0.01
MAIN C.B							
C3	87-012-368-080		C-CAP,S 0.1-50 F				
C4	87-012-368-080		C-CAP,S 0.1-50 F	C228	87-010-405-080		CAP, ELECT 10-50V
C5	87-012-368-080		C-CAP,S 0.1-50 F	C229	87-010-993-080		C-CAP,S 0.056-25 B
C6	87-012-368-080		C-CAP,S 0.1-50 F	C230	87-010-196-080		CHIP CAPACITOR,0.1-25
C9	87-012-368-080		C-CAP,S 0.1-50 F	C231	87-010-196-080		CHIP CAPACITOR,0.1-25
				C232	87-010-196-080		CHIP CAPACITOR,0.1-25

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C233	87-010-190-080	S	CHIP F 0.01
C234	87-010-190-080	S	CHIP F 0.01
C237	87-010-322-080	C-CAP,S	100P-50 CH
C238	87-010-322-080	C-CAP,S	100P-50 CH
C239	87-010-196-080	CHIP	CAPACITOR,0.1-25
C270	87-010-197-080	CAP, CHIP	0.01 DM
C301	87-010-178-080	CHIP CAP	1000P
C302	87-010-178-080	CHIP CAP	1000P
C303	87-010-178-080	CHIP CAP	1000P
C304	87-010-178-080	CHIP CAP	1000P
C307	87-010-263-080	CAP, ELECT	100-10V
C308	87-010-263-080	CAP, ELECT	100-10V
C309	87-010-318-080	C-CAP,S	47P-50 CH
C310	87-010-318-080	C-CAP,S	47P-50 CH
C313	87-010-188-080	CAP,CHIP	6800P
C314	87-010-188-080	CAP,CHIP	6800P
C315	87-010-263-080	CAP, ELECT	100-10V
C317	87-010-546-080	CAP, ELECT	0.33-50V
C318	87-010-546-080	CAP, ELECT	0.33-50V
C326	87-010-198-080	CAP, CHIP	0.022
C327	87-012-368-080	C-CAP,S	0.1-50 F
C360	87-010-401-080	CAP, ELECT	1-50V
C365	87-010-197-080	CAP, CHIP	0.01 DM
C399	87-012-140-080	CAP	470P
C401	87-010-544-080	CAP, ELECT	0.1-50V
C402	87-010-544-080	CAP, ELECT	0.1-50V
C403	87-010-321-080	CHIP CAPACITOR,82P(J)	
C404	87-010-321-080	CHIP CAPACITOR,82P(J)	
C405	87-010-197-080	CAP, CHIP	0.01 DM
C406	87-010-197-080	CAP, CHIP	0.01 DM
C407	87-010-197-080	CAP, CHIP	0.01 DM
C408	87-010-197-080	CAP, CHIP	0.01 DM
C409	87-010-182-080	C-CAP,S	2200P-50 B
C410	87-010-182-080	C-CAP,S	2200P-50 B
C411	87-010-405-080	CAP, ELECT	10-50V
C412	87-010-405-080	CAP, ELECT	10-50V
C452	87-010-382-080	CAP, ELECT	22-25V
C453	87-010-183-080	C-CAP,S	2700P-50 B
C454	87-010-183-080	C-CAP,S	2700P-50 B
C455	87-010-183-080	C-CAP,S	2700P-50 B
C456	87-010-197-080	CAP, CHIP	0.01 DM
C458	87-010-178-080	CHIP CAP	1000P
C459	87-010-175-080	CAP	560P
C460	87-010-196-080	CHIP CAPACITOR,0.1-25	
C461	87-012-158-080	C-CAP,S	390P-50 CH
C462	87-012-158-080	C-CAP,S	390P-50 CH
C507	87-010-196-080	CHIP CAPACITOR,0.1-25	
C508	87-010-178-080	CHIP CAP	1000P
C509	87-A10-300-080	CAP,M	0.027-50 J
C510	87-A10-300-080	CAP,M	0.027-50 J
C515	87-A10-300-080	CAP,M	0.027-50 J
C516	87-A10-300-080	CAP,M	0.027-50 J
C518	87-010-196-080	CHIP CAPACITOR,0.1-25	
C519	87-010-401-080	CAP,E	1-50 M
C520	87-010-401-080	CAP,E	1-50 M
C521	87-010-546-080	CAP, ELECT	0.33-50V
C522	87-010-546-080	CAP, ELECT	0.33-50V
C523	87-010-545-080	CAP, ELECT	0.22-50V
C524	87-010-545-080	CAP, ELECT	0.22-50V
C525	87-010-545-080	CAP, ELECT	0.22-50V
C526	87-010-545-080	CAP, ELECT	0.22-50V
C605	87-010-179-080	CAP,CHIP S	B1200P
C606	87-010-179-080	CAP,CHIP S	B1200P
C609	87-010-213-080	C-CAP,S	0.015-50 B
C610	87-010-213-080	C-CAP,S	0.015-50 B
C611	87-010-545-080	CAP, ELECT	0.22-50V
C612	87-010-545-080	CAP, ELECT	0.22-50V
C613	87-010-545-080	CAP, ELECT	0.22-50V
C614	87-010-545-080	CAP, ELECT	0.22-50V
C615	87-010-154-080	CAP CHIP	10P

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C616	87-010-385-080	CAP, ELECT	220-25V
C617	87-010-385-080	CAP, ELECT	220-25V
C618	87-010-405-080	CAP, ELECT	10-50V
C620	87-010-263-080	CAP, ELECT	100-10V
C630	87-016-669-080	C-CAP,S	0.1-25 K B
C631	87-010-185-080	C-CAP,S	3900P-50 B
C632	87-010-185-080	C-CAP,S	3900P-50 B
C633	87-016-369-080	C-CAP,S	0.033-25 B K
C634	87-016-369-080	C-CAP,S	0.033-25 B K
C661	87-012-157-080	C-CAP,S	330P-50 CH
C662	87-012-157-080	C-CAP,S	330P-50 CH
C669	87-010-180-080	C-CAP,S	1500P-50 K B
C670	87-010-180-080	C-CAP,S	1500P-50 K B
C677	87-010-197-080	CAP, CHIP	0.01 DM
C678	87-010-197-080	CAP, CHIP	0.01 DM
C771	87-010-263-080	CAP, ELECT	100-10V
C772	87-010-197-080	CAP, CHIP	0.01 DM
C779	87-010-186-080	C-CAP,S	4700P-50 K B
C780	87-010-186-080	C-CAP,S	4700P-50 K B
C782	87-010-197-080	CAP, CHIP	0.01 DM
C783	87-010-197-080	CAP, CHIP	0.01 DM
C784	87-010-197-080	CAP, CHIP	0.01 DM
C785	87-010-197-080	CAP, CHIP	0.01 DM
C786	87-010-197-080	CAP, CHIP	0.01 DM
C788	87-010-149-080	C-CAP,S	5P-50 CH
C789	87-A11-532-080	C-CAP,S	0.022-50 J B
C790	87-A12-052-080	C-CAP,S	0.033-25 J B
C791	87-010-196-080	CHIP CAPACITOR,0.1-25	
C792	87-010-197-080	CAP, CHIP	0.01 DM
C793	87-010-404-080	CAP, ELECT	4.7-50V
C795	87-010-197-080	CAP, CHIP	0.01 DM
C796	87-010-197-080	CAP, CHIP	0.01 DM
C797	87-010-405-080	CAP, ELECT	10-50V
C798	87-010-197-080	CAP, CHIP	0.01 DM
C799	87-010-407-080	CAP, ELECT	33-50V
C800	87-012-369-080	C-CAP,S	0.047-50F
C801	87-010-403-080	CAP, ELECT	3.3-50V
C802	87-010-194-080	CAP, CHIP	0.047
C803	87-010-198-080	CAP, CHIP	0.022
C804	87-010-263-080	CAP, ELECT	100-10V
C807	87-010-400-080	CAP, ELECT	0.47-50V
C808	87-010-401-080	CAP, ELECT	1-50V
C809	87-010-401-080	CAP, ELECT	1-50V
C810	87-010-196-080	CHIP CAPACITOR,0.1-25	
C814	87-010-197-080	CAP, CHIP	0.01 DM
C815	87-010-400-080	CAP, ELECT	0.47-50 M
C816	87-010-400-080	CAP, ELECT	0.47-50 M
C818	87-010-180-080	C-CAP,S	1500P-50 K B
C821	87-010-405-080	CAP, ELECT	10-50V
C823	87-012-349-080	C-CAP,S	1000P-50 J
C824	87-010-405-080	CAP, ELECT	10-50V
C825	87-010-596-080	CAP, S	0.047-16
C831	87-010-406-080	CAP, ELECT	22-50 M
C842	87-010-197-080	CAP, CHIP	0.01 DM
C844	87-010-197-080	CAP, CHIP	0.01 DM
C850	87-010-260-080	CAP, ELECT	47-25 M
C851	87-010-197-080	CAP, CHIP	0.01 DM
C852	87-010-197-080	CAP, CHIP	0.01 DM
C853	87-010-197-080	CAP, CHIP	0.01 DM
C858	87-010-196-080	CHIP CAPACITOR,0.1-25	
C859	87-010-196-080	CHIP CAPACITOR,0.1-25	
C860	87-010-197-080	CAP, CHIP	0.01 DM
C869	87-010-197-080	CAP, CHIP	0.01 DM<52EZ>
C871	87-012-156-080	C-CAP,S	220P-50 CH<52EZ>
C872	87-012-156-080	C-CAP,S	220P-50 CH<52EZ>
C873	87-012-140-080	C-CAP,S	470P-50 CH<52EZ>
C874	87-010-405-080	CAP, ELECT	10-50V<52EZ>
C875	87-010-196-080	CHIP CAPACITOR,0.1-25<52EZ>	
C876	87-010-405-080	CAP, ELECT	10-50V<52EZ>
C877	87-010-197-080	CAP, CHIP	0.01 DM<52EZ>

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION	REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C878	87-010-316-080		C-CAP,S 33P-50 CH<52EZ>	SFR452	87-A90-432-080		SFR,30K H NVZ6TLTA
C879	87-010-314-080		C-CAP,S 22P-50 CH<52EZ>	TC942	87-011-253-080		TRIMMER,CER 30P 4.0X4.5 ECRLA
C940	87-010-197-080		CAP, CHIP 0.01 DM	WH1	87-A91-179-010		HLDR,WIRE 2.5-11P
C942	87-010-149-080		C-CAP,S 5P-50 CH	X861	87-A70-091-010		VIB,XTAL 4.332MHZ CSA-309<52EZ>
C947	87-010-197-080		CAP, CHIP 0.01 DM	X991	87-A70-061-010		VIB,XTAL 4.500MHZ CSA-309
C948	87-012-140-080		C-CAP,S 470P-50 CH				
C952	87-010-197-080		CAP, CHIP 0.01 DM	FRONT C.B			
C957	87-010-311-080		C-CAP,S 12P-50 CH	C201	87-010-322-080		C-CAP,S 100P-50 CH
C959	87-010-196-080		CHIP CAPACITOR,0.1-25	C202	87-010-322-080		C-CAP,S 100P-50 CH
C960	87-010-196-080		CHIP CAPACITOR,0.1-25	C203	87-010-322-080		C-CAP,S 100P-50 CH
C962	87-010-401-080		CAP, ELECT 1-50V	C204	87-010-322-080		C-CAP,S 100P-50 CH
C963	87-015-785-080		CHIP CAPACITOR, 0.1FZ-25Z	C205	87-010-322-080		C-CAP,S 100P-50 CH
C971	87-010-381-080		CAP, ELECT 330-16V	C206	87-010-322-080		C-CAP,S 100P-50 CH
C972	87-010-404-080		CAP, ELECT 4.7-50V	C207	87-010-322-080		C-CAP,S 100P-50 CH
C973	87-010-197-080		CAP, CHIP 0.01 DM	C208	87-010-322-080		C-CAP,S 100P-50 CH
C974	87-010-197-080		CAP, CHIP 0.01 DM	C209	87-010-322-080		C-CAP,S 100P-50 CH
C979	87-010-322-080		C-CAP,S 100P-50 CH	C210	87-010-322-080		C-CAP,S 100P-50 CH
C981	87-010-260-080		CAP, ELECT 47-25V				
C982	87-010-196-080		CHIP CAPACITOR,0.1-25	C211	87-010-322-080		C-CAP,S 100P-50 CH
C983	87-010-197-080		CAP, CHIP 0.01 DM	C251	87-010-405-040		CAP,E 10-50
C984	87-010-197-080		CAP, CHIP 0.01 DM	C253	87-010-196-080		CHIP CAPACITOR,0.1-25
C985	87-010-322-080		C-CAP,S 100P-50 CH	C254	87-012-369-080		C-CAP,S 0.047-50F
C987	87-010-197-080		CAP, CHIP 0.01 DM	C255	87-010-560-040		CAP,E 10-50
C989	87-010-197-080		CAP, CHIP 0.01 DM				
C991	87-010-312-080		C-CAP,S 15P-50 CH	C256	87-010-405-040		CAP,E 10-50
C992	87-010-312-080		C-CAP,S 15P-50 CH	C259	87-010-405-040		CAP,E 10-50
C993	87-010-178-080		CHIP CAP 1000P	C273	87-010-178-080		CHIP CAP 1000P
C995	87-010-178-080		CHIP CAP 1000P	C274	87-010-178-080		CHIP CAP 1000P
C997	87-010-196-080		CHIP CAPACITOR,0.1-25	C301	87-010-182-080		C-CAP,S 2200P-50 B
C998	87-010-260-080		CAP, ELECT 47-25V				
C999	87-A11-132-080		CAP,TC U 0.01-50 K B	C302	87-010-196-080		CHIP CAPACITOR,0.1-25
CF831	87-008-423-010		FLTR,CF SFE10.7MS3G-A	C312	87-010-498-040		CAP,E 10-16 GAS
CF832	82-785-747-010		CF,MS2 GHY,R	C314	87-010-196-080		CHIP CAPACITOR,0.1-25
CN301	87-A60-620-010		CONN,3P V 2MM JMT	C315	87-010-196-080		CHIP CAPACITOR,0.1-25
CN351	87-A60-625-010		CONN,8P V 2MM JMT	C316	87-010-196-080		CHIP CAPACITOR,0.1-25
CN601	87-099-719-010		CONN,30P TYK-B(X)	C321	87-012-393-080		C-CAP,S 0.22-16 K
CN602	87-A60-131-010		CONN,6P V FE	C322	87-010-400-040		CAP,E 0.47-50
CNA1	8A-NF8-654-010		CONN ASSY,11P TID-A(480)	C325	87-A10-189-040		CAP,E 220-10
FFE831	A8-6ZA-191-130		6ZA-1 FENM	C326	87-A10-189-040		CAP,E 220-10
J202	87-A60-483-010		JACK,DIA6.3 BLK ST W/S KM	C332	87-010-178-080		CHIP CAP 1000P
J203	87-A60-238-010		TERMINAL,SP 4P (MSC)	C334	87-010-312-080		C-CAP,S 15P-50 CH
J204	87-A61-153-010		JACK,PIN 4P R/W(BL) (SEPA) KM	C335	87-012-140-080		CAP 470P
J602	87-A60-881-010		JACK,PIN 2P MSP 242V05 PBSN	C336	87-012-155-080		C-CAP 180P-50CH
J832	87-A60-403-010		TERMINAL,ANT PAL 2P HSP-312V05	C339	87-012-156-080		C-CAP,S 220P-50 CH
L101	87-003-383-010		COIL,1UH-S	C340	87-010-197-080		CAP, CHIP 0.01 DM
L102	87-003-383-010		COIL,1UH-S				
L201	87-003-383-010		COIL,1UH-S	C341	87-010-194-080		CAP, CHIP 0.047
L202	87-003-383-010		COIL,1UH-S	C351	87-010-382-040		CAP,E 22-25 SME
L451	87-007-342-010		COIL,OSC 85K BIAS	C401	87-010-197-080		CAP, CHIP 0.01 DM
L801	87-A50-540-010		COIL,FM DET(TOK)	C451	87-010-196-080		CHIP CAPACITOR,0.1-25
L802	87-A91-551-010		FLTR,PCFJZH-450 L(TOK)	C452	87-010-196-080		CHIP CAPACITOR,0.1-25
L811	87-005-847-080		COIL,2.2UH(CECS)	C453	87-010-196-080		CHIP CAPACITOR,0.1-25
L832	87-005-847-080		COIL,2.2UH(CECS)	C454	87-010-196-080		CHIP CAPACITOR,0.1-25
L861	87-005-847-080		COIL,2.2UH(CECS)<52EZ>	C455	87-010-196-080		CHIP CAPACITOR,0.1-25
L941	87-A50-020-010		COIL,ANT LW(COI)252KHZ	C602	87-010-322-080		C-CAP,S 100P-50 CH
L942	87-A50-019-010		COIL,OSC LW(COI)856KHZ	C603	87-010-322-080		C-CAP,S 100P-50 CH
L951	8A-NF8-668-010		COIL,AM PACK 2(TOK)	C604	87-010-322-080		C-CAP,S 100P-50 CH
R129	87-A00-257-080		RES,M/F 0.15-1W J	C650	87-010-196-080		CHIP CAPACITOR,0.1-25
R130	87-A00-257-080		RES,M/F 0.15-1W J	C699	87-010-196-080		CHIP CAPACITOR,0.1-25
R143	87-A00-439-050		RES,180-1/2W J RP	CN101	87-099-720-010		CONN,30P TYK-B(P)
R144	87-A00-439-050		RES,180-1/2W J RP	CN102	87-099-015-010		CONN,13P 6216V
R145	87-A00-439-050		RES,180-1/2W J RP				
R146	87-A00-439-050		RES,180-1/2W J RP	CN302	87-A60-136-010		CONN,11P V FE
R233	87-A00-258-080		RES,M/F 0.22-1W J	FB301	87-008-372-080		FILTER, EMI BL OIRNI
R234	87-A00-258-080		RES,M/F 0.22-1W J	FL401	8A-NF8-601-010		FL,HNA-11MM30 (ANF-8)
R790	87-010-197-080		CAP, CHIP 0.01 DM	L331	87-A50-408-010		COIL,OSC 5.76MHZ
R991	87-010-322-080		C-CAP,S 100P-50 CH	LED311	87-A40-589-040		LED,SLR-56VCT31 RED
R993	87-010-322-080		C-CAP,S 100P-50 CH				
R995	87-010-322-080		C-CAP,S 100P-50 CH	LED601	87-A40-803-010		LED,SELU1E10CXM-S LF38 BLUE
SFR451	87-A90-432-080		SFR,30K H NVZ6TLTA	LED602	87-A40-619-080		LED,SLR-56PT-TE7-W GRN
				LED603	87-A40-619-080		LED,SLR-56PT-TE7-W GRN
				LED604	87-A40-619-080		LED,SLR-56PT-TE7-W GRN
				LED606	87-A40-619-080		LED,SLR-56PT-TE7-W GRN
				LED607	87-A40-619-080		LED,SLR-56PT-TE7-W GRN
				LED608	87-A40-619-080		LED,SLR-56PT-TE7-W GRN

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
S401	87-A91-024-180	SW, TACT	KSH0611BT
S402	87-A91-024-180	SW, TACT	KSH0611BT
S403	87-A91-024-180	SW, TACT	KSH0611BT
S404	87-A91-024-180	SW, TACT	KSH0611BT
S405	87-A91-024-180	SW, TACT	KSH0611BT
S406	87-A91-024-180	SW, TACT	KSH0611BT
S407	87-A91-024-180	SW, TACT	KSH0611BT
S408	87-A91-024-180	SW, TACT	KSH0611BT
S409	87-A91-024-180	SW, TACT	KSH0611BT
S410	87-A91-024-180	SW, TACT	KSH0611BT
S411	87-A91-024-180	SW, TACT	KSH0611BT
S412	87-A91-024-180	SW, TACT	KSH0611BT<52EZ>
S413	87-A91-024-180	SW, TACT	KSH0611BT
S414	87-A91-024-180	SW, TACT	KSH0611BT
S415	87-A91-024-180	SW, TACT	KSH0611BT
S416	87-A91-024-180	SW, TACT	KSH0611BT
S417	87-A91-024-180	SW, TACT	KSH0611BT
S418	87-A91-024-180	SW, TACT	KSH0611BT
S419	87-A91-024-180	SW, TACT	KSH0611BT
S420	87-A91-024-180	SW, TACT	KSH0611BT<52EZ>
S421	87-A91-024-180	SW, TACT	KSH0611BT<52EZ>
S425	87-A91-024-180	SW, TACT	KSH0611BT
S426	87-A91-024-180	SW, TACT	KSH0611BT
S430	87-A91-024-180	SW, TACT	KSH0611BT
S431	87-A91-024-180	SW, TACT	KSH0611BT
S432	87-A91-024-180	SW, TACT	KSH0611BT
S433	87-A91-024-180	SW, TACT	KSH0611BT
S434	87-A91-024-180	SW, TACT	KSH0611BT
S435	87-A91-024-180	SW, TACT	KSH0611BT
SW252	87-A91-555-010	SW, RTRY	EC12E24504
SW253	87-A91-542-010	SW, RTRY	EC12E12504

PT C.B

C1	87-010-387-080	CAP, E 470-25 SME
C31	87-010-403-040	CAP, E 3.3-50 SME
CN1	87-A61-122-010	CONN, 11P V TID-A
△ PT2	8A-NF8-662-010	PT, SUB ANF-8 (E)
△ RY2	87-A91-418-010	RELAY, AC12V G5PA-1-M
△ T1	87-A60-317-010	TERMINAL, 1P MSC
△ T2	87-A60-317-010	TERMINAL, 1P MSC

DECK C.B

CON105	87-099-753-019	CONN, 11P 9604
SFR1	87-024-581-019	SFR, 3.3K DIA 6H
SOL1	82-ZM1-618-410	SOL ASSY, 27
SOL2	82-ZM1-618-410	SOL ASSY, 27
SW1	87-A90-248-019	SW, MICRO ESE11SH2CXQ
SW2	87-A90-248-019	SW, MICRO ESE11SH2CXQ
SW3	87-A90-248-019	SW, MICRO ESE11SH2CXQ
SW4	87-036-110-019	SW, MICRO SPPB62
SW5	87-036-110-019	SW, MICRO SPPB62
W1	82-ZM3-601-019	RBN, CORD, 4P-75

HEAD-1 C.B

CON301	85-ZM3-602-010	PWB, FLEX A
	85-MA2-615-010	CONN, ASSY 3P

TRANSISTOR ILLUSTRATION



E C B

KTA1266GR
KTC3198GR
CD1585BC
CSA952K



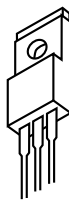
E C B

2SC3331(T/U)



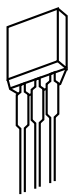
E C B

CSC4115BC



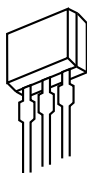
B C E

2SB1370



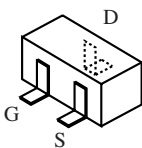
E C B

DTC114ES
KTC3199GR

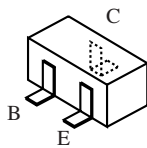


S D G

2SJ460
2SK2541

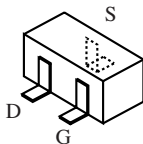


2SK2158
2SJ461-T1



2SA1235F
2SC3052F
CMBT5551
CMBT5401
RT1P141C
RT1N441C

RT1N141C
RT1P144C
2SC2714O
KRA107S
CSD1306
KRC102S



2SK360E

○チップ抵抗部品コード／CHIP RESISTOR PART CODE

チップ抵抗部品コードの成り立ち

Chip Resistor Part Coding



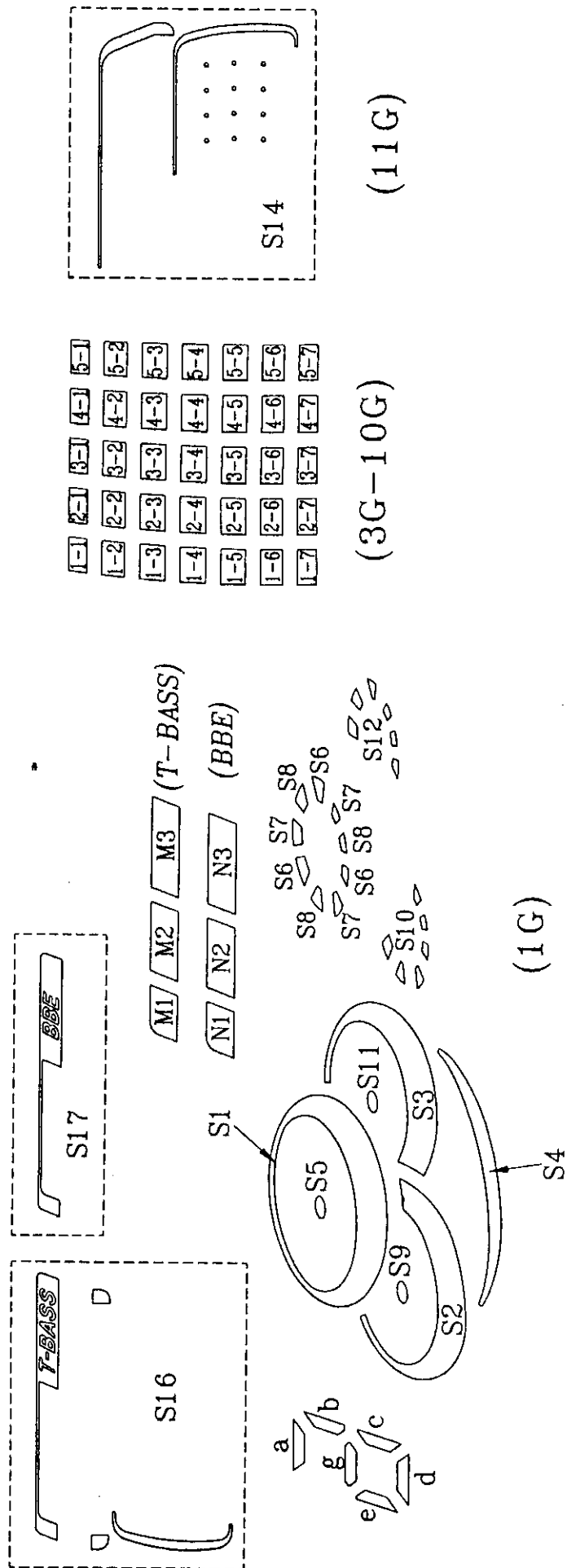
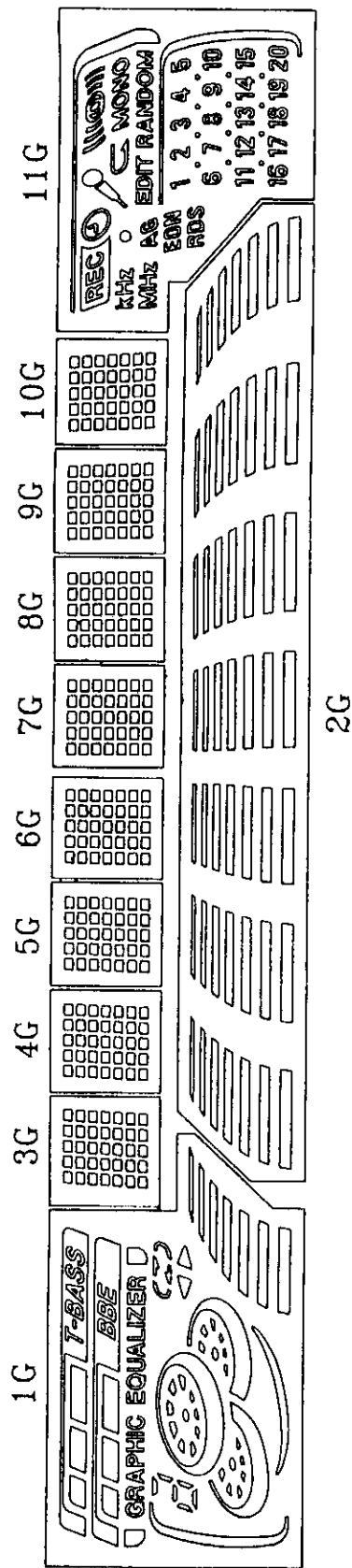
A
抵抗部品コード
Resistor Code

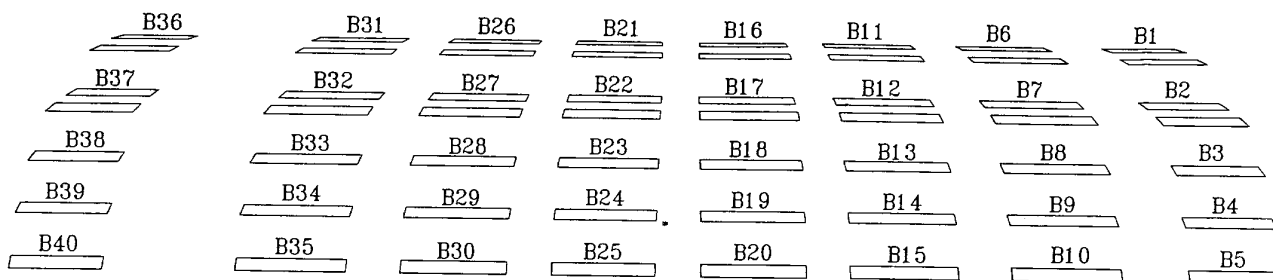
桁表示
Figure
抵抗値
Value of resistor

チップ抵抗
Chip resistor

容量 Wattage	種類 Type	許容誤差 Tolerance	記号 Symbol	寸法／Dimensions (mm)				抵抗コード : A Resistor Code : A
				外形／Form	L	W	t	
1/16W	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

GRID ASSIGNMENT





(1G)

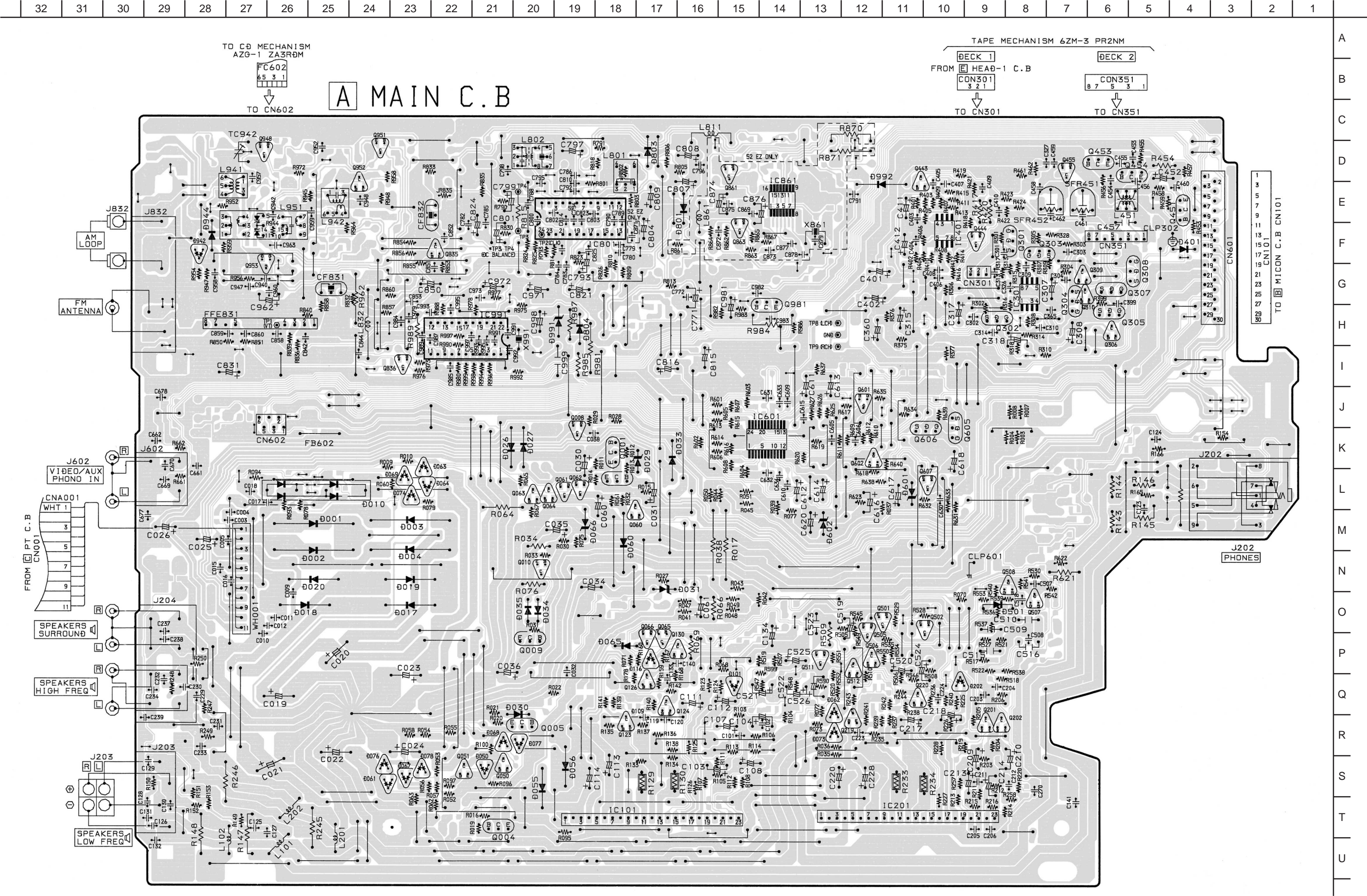
(2G)

ANODE CONNECTION

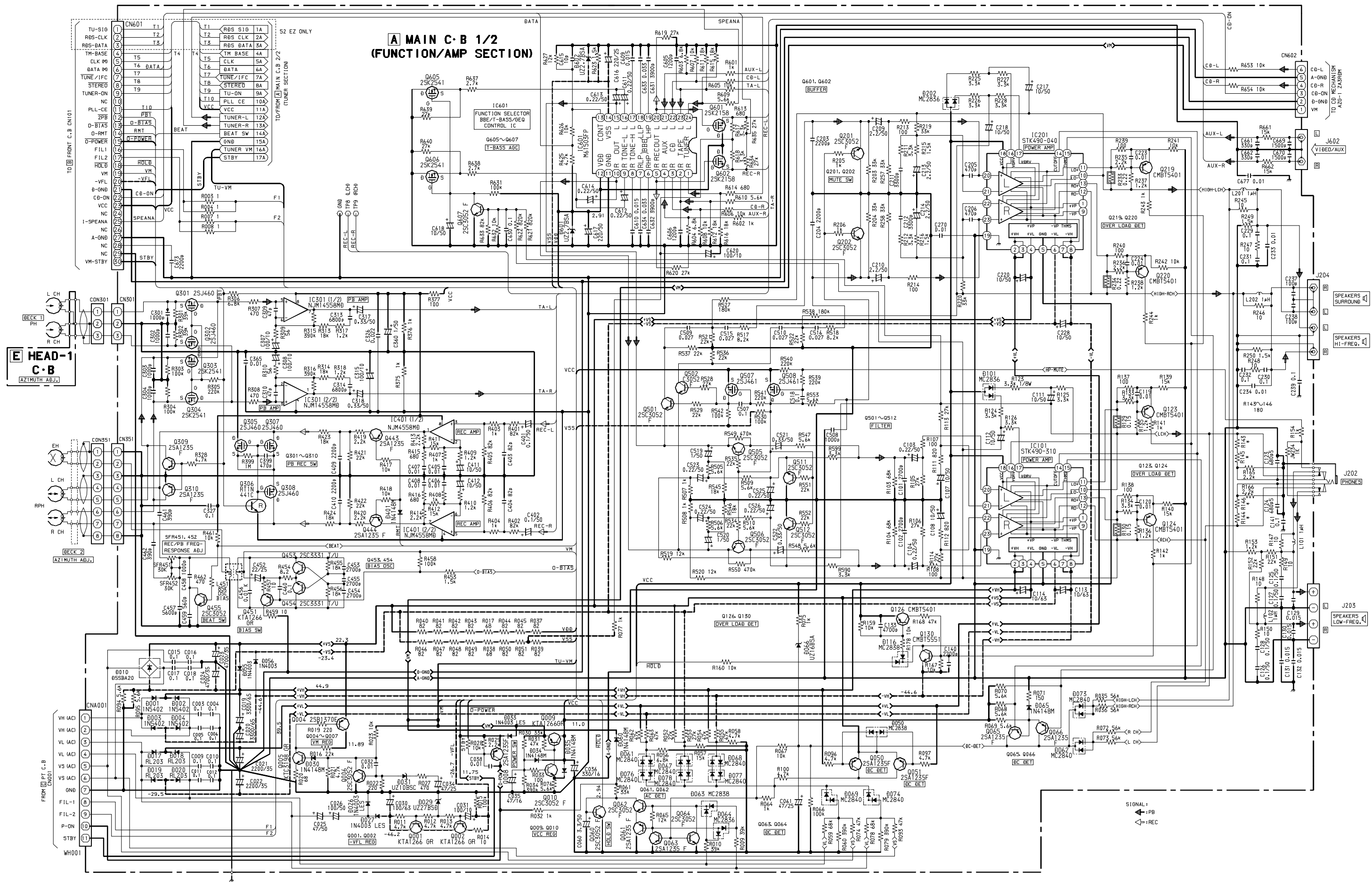
	1G	2G	3G-10G	11G
P1	S17	B35	1-1	
P2	N1	B30	2-1	MONO
P3	N2	B25	3-1	RANDOM
P4	N3	B20	4-1	
P5	GRAPHIC EQUALIZER	B15	5-1	EDIT
P6		B10	1-2	
P7		B5	2-2	REC
P8		B34	3-2	KHz
P9		B29	4-2	MHz
P10		B24	5-2	o
P11	S4	B19	1-3	AG
P12	S2	B14	2-3	EON
P13	S10	B9	3-3	RDS
P14	S9	B4	4-3	S14
P15	S3	B33	5-3	20
P16	S12	B28	1-4	19
P17	S11	B23	2-4	18
P18	S1	B18	3-4	17

	1G	2G	3G-10G	11G
P19	S6	B13	4-4	16
P20	S7	B8	5-4	15
P21	S8	B3	1-5	14
P22	S5	B32	2-5	13
P23	S16	B27	3-5	12
P24	M1	B22	4-5	11
P25	M2	B17	5-5	10
P26	M3	B12	1-6	9
P27	e	B7	2-6	8
P28	a,g,d	B2	3-6	7
P29	b	B31	4-6	6
P30	c	B26	5-6	5
P31	B40	B21	1-7	4
P32	B39	B16	2-7	3
P33	B38	B11	3-7	2
P34	B37	B6	4-7	1
P35	B36	B1	5-7	

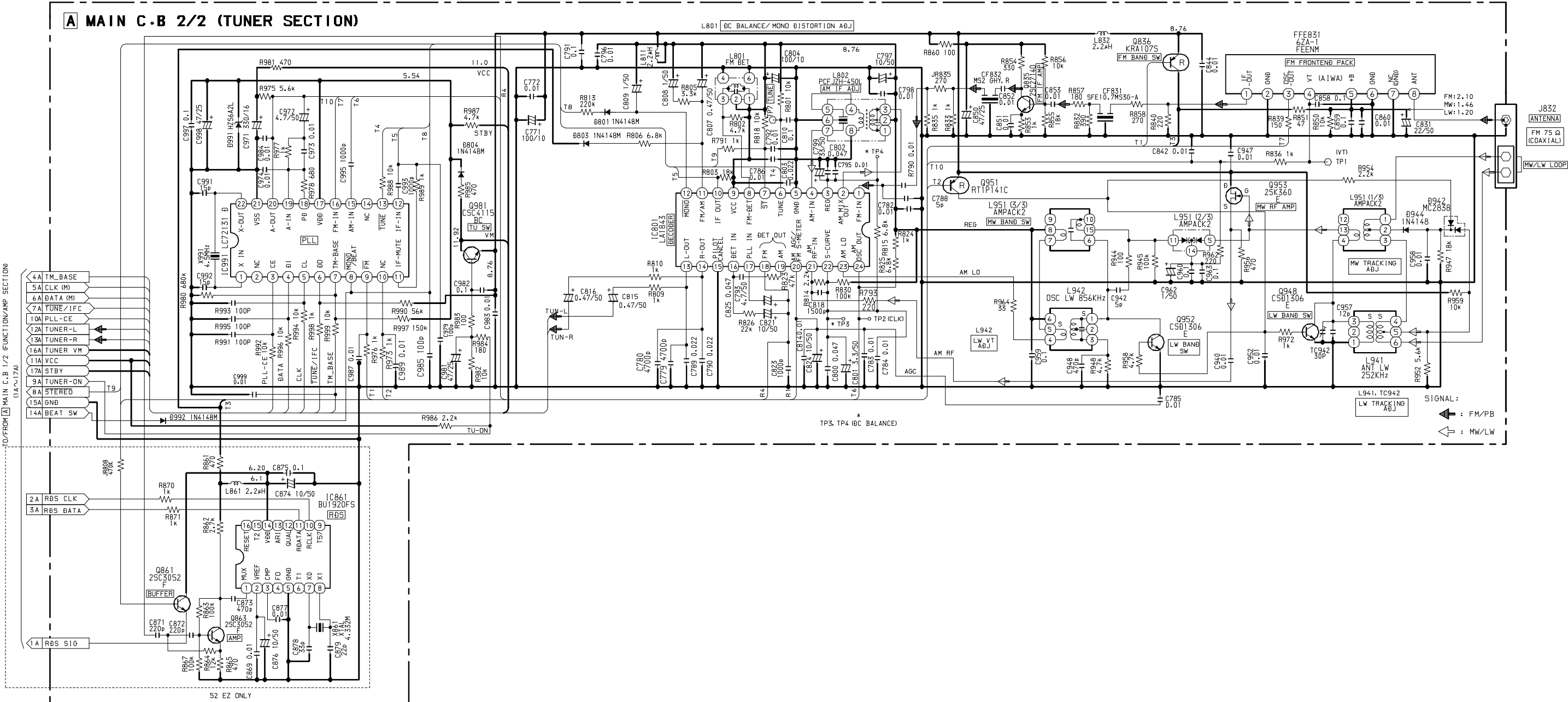
WIRING - 1 (MAIN)



SCHEMATIC DIAGRAM -1 (MAIN 1/2 : AMP / HEAD-1)

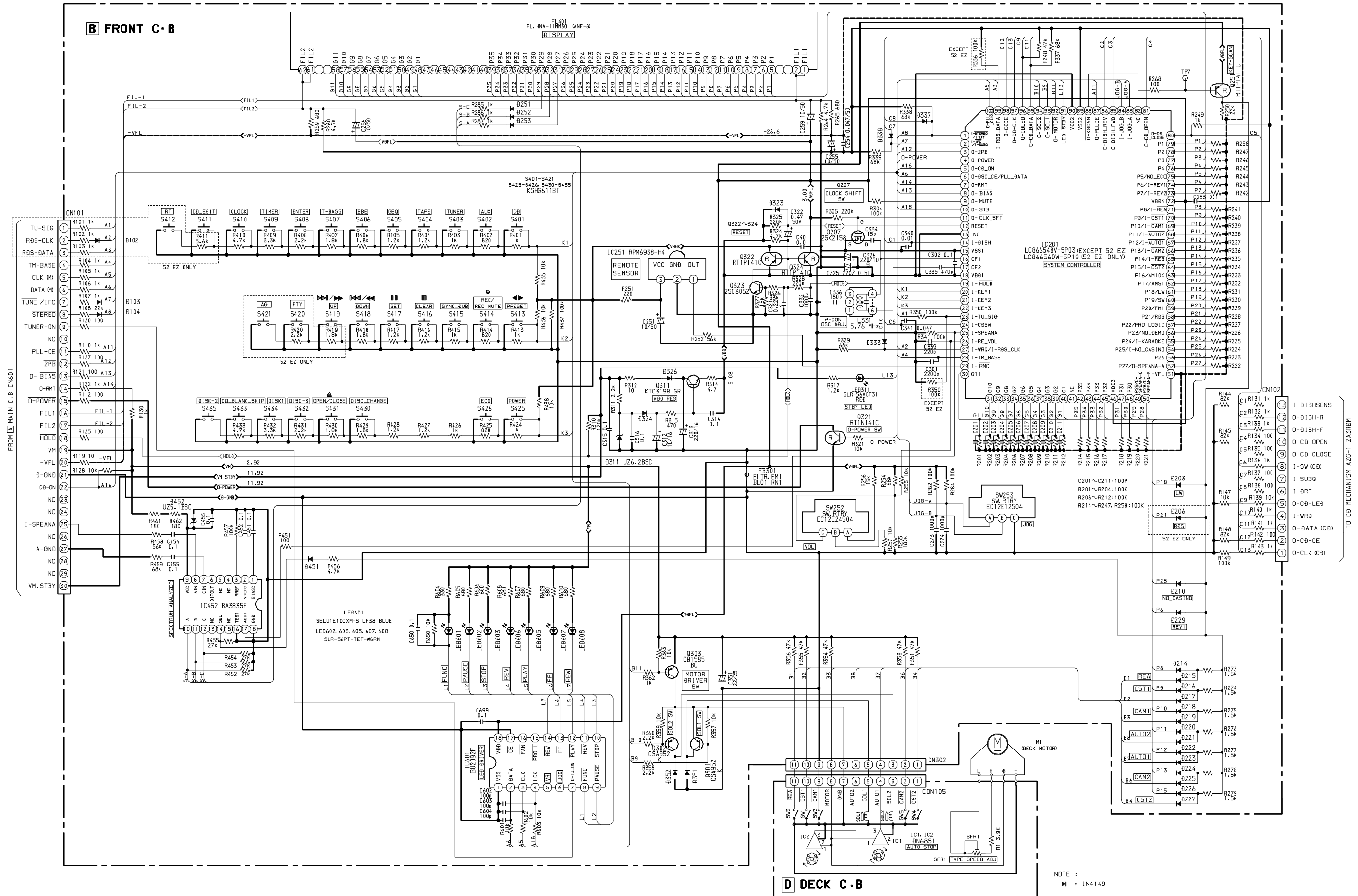


SCHEMATIC DIAGRAM -2 (MAIN 2 / 2 : TUNER)



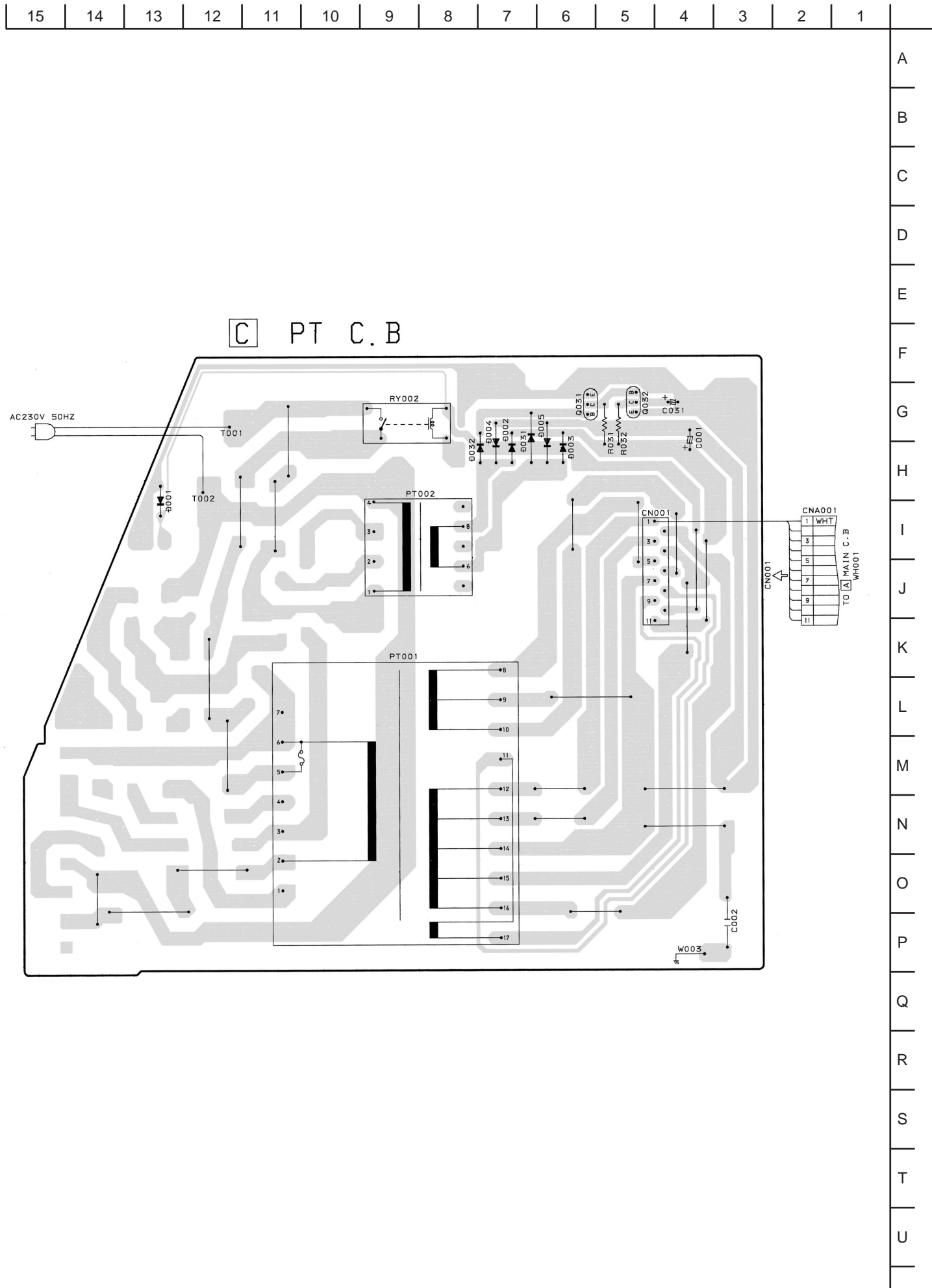


SCHEMATIC DIAGRAM -3 (FRONT / DECK)

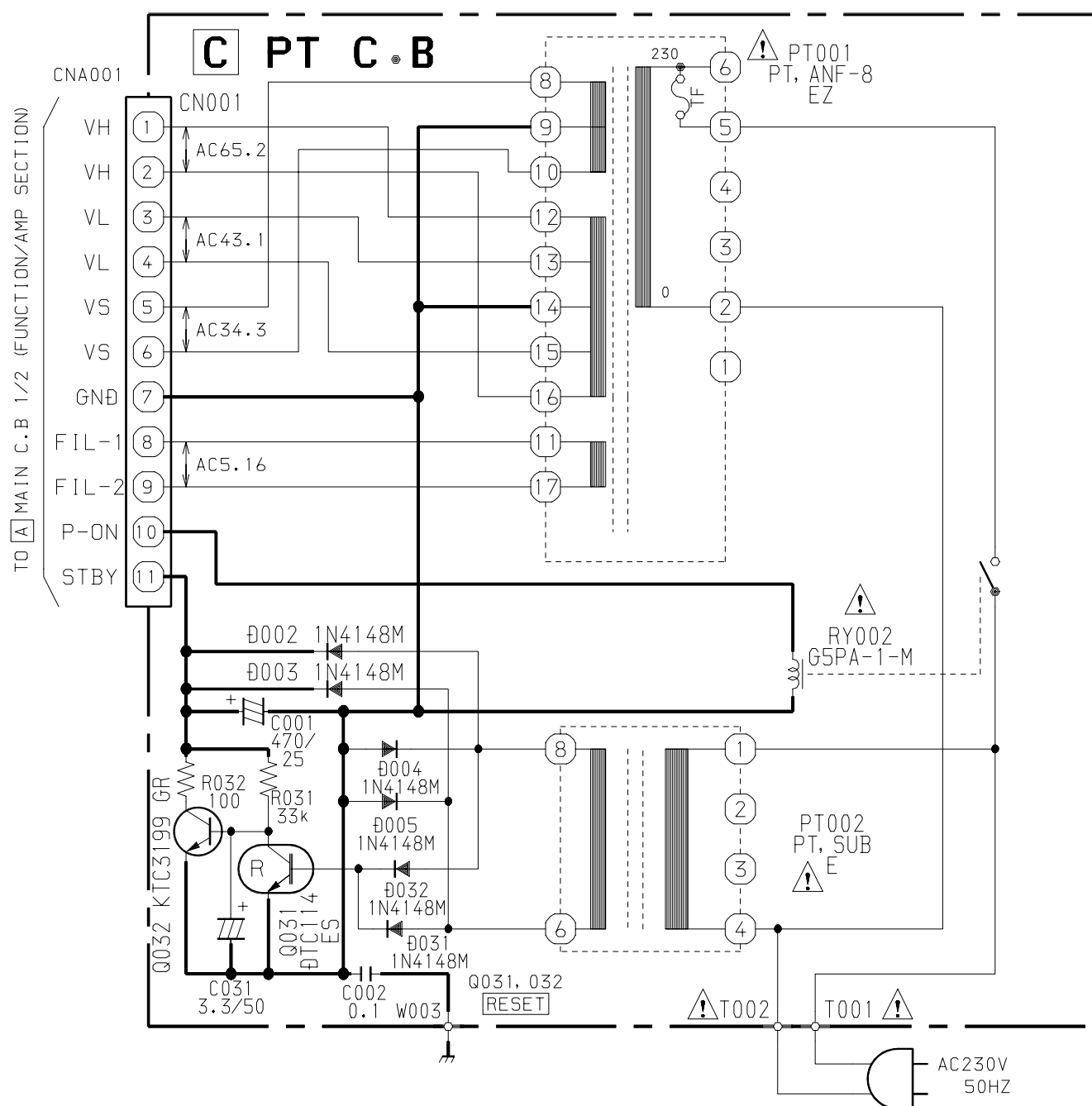


NOTE :
- : IN4148

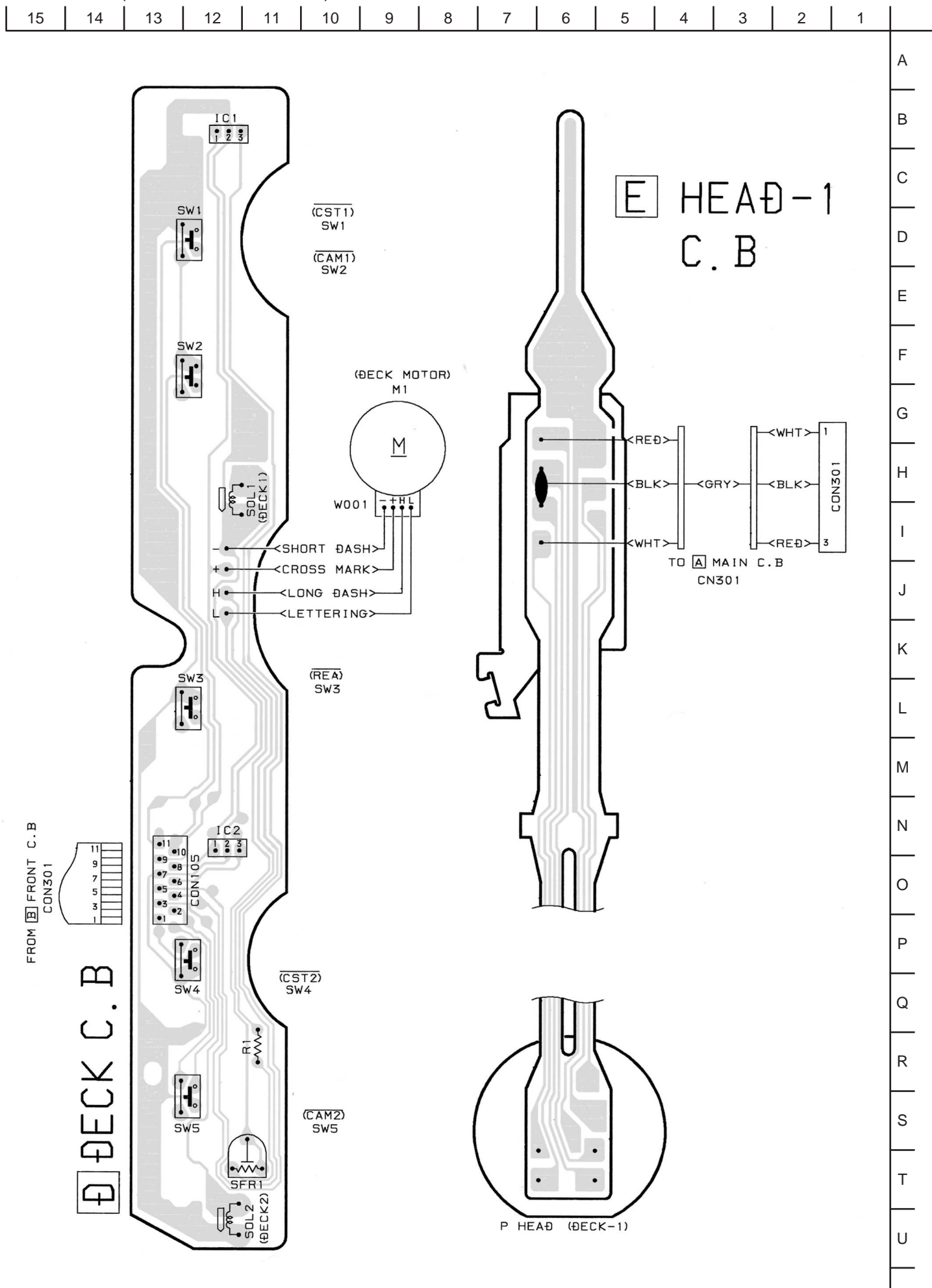
WIRING - 3 (PT)

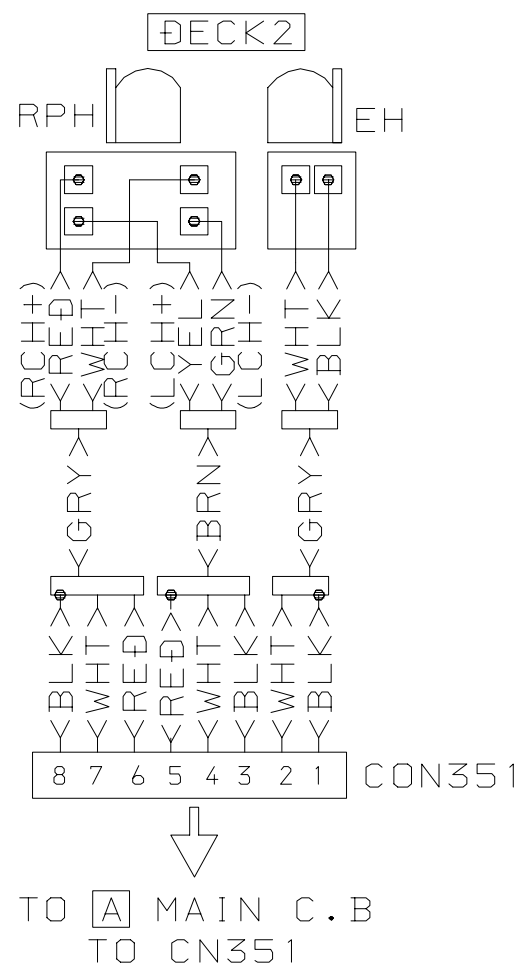


SCHEMATIC DIAGRAM – 4 (PT)



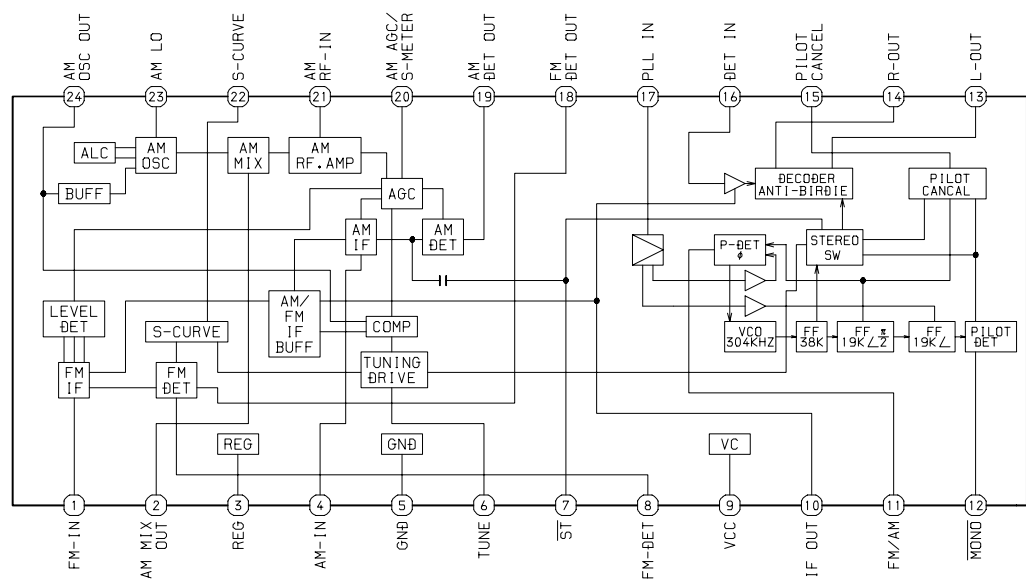
WIRING - 4 (DECK 1 / 2 / HEAD-1)



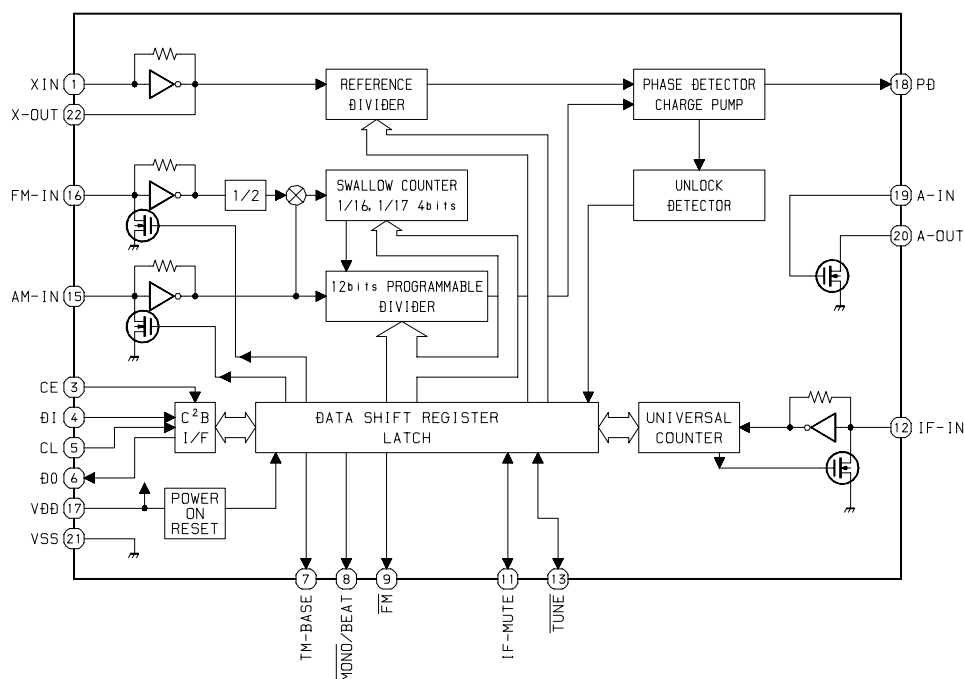


IC BLOCK DIAGRAM

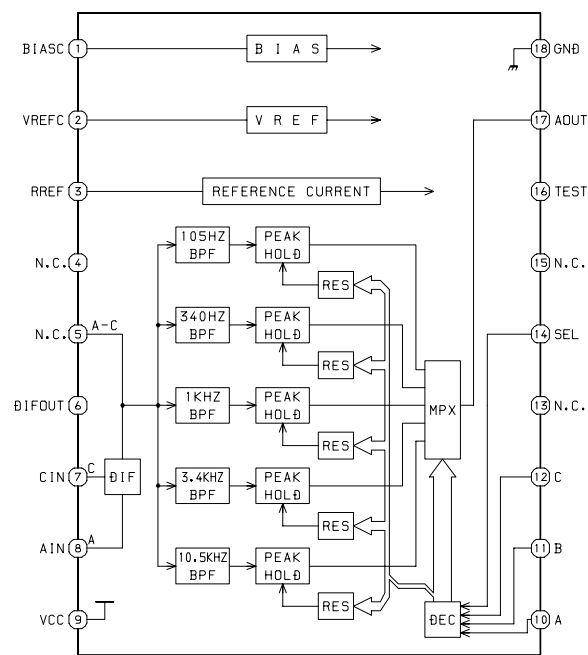
IC, LA1843



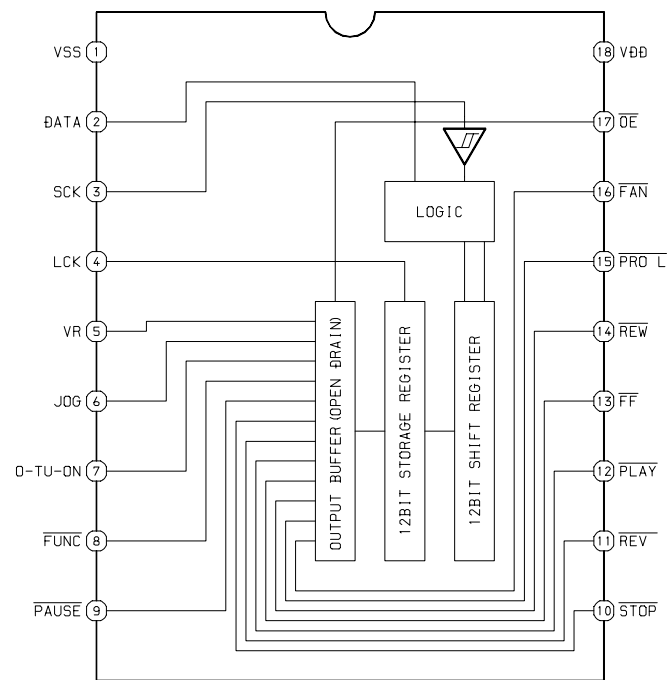
IC, LC72131D



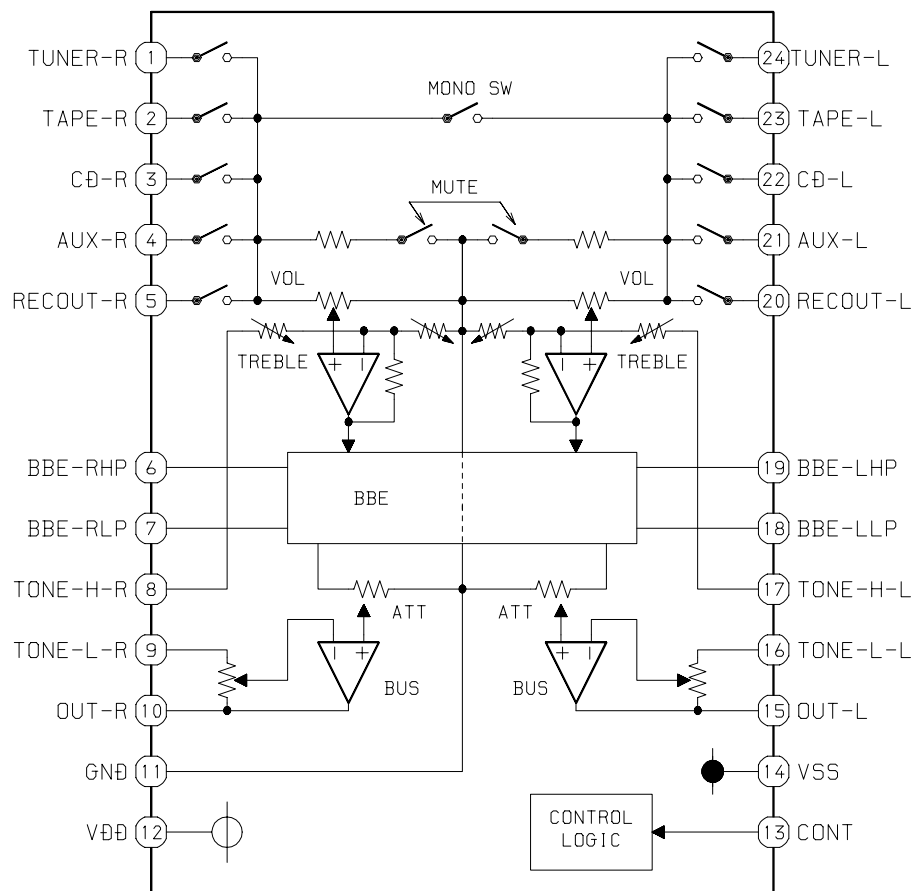
IC, BA3835S



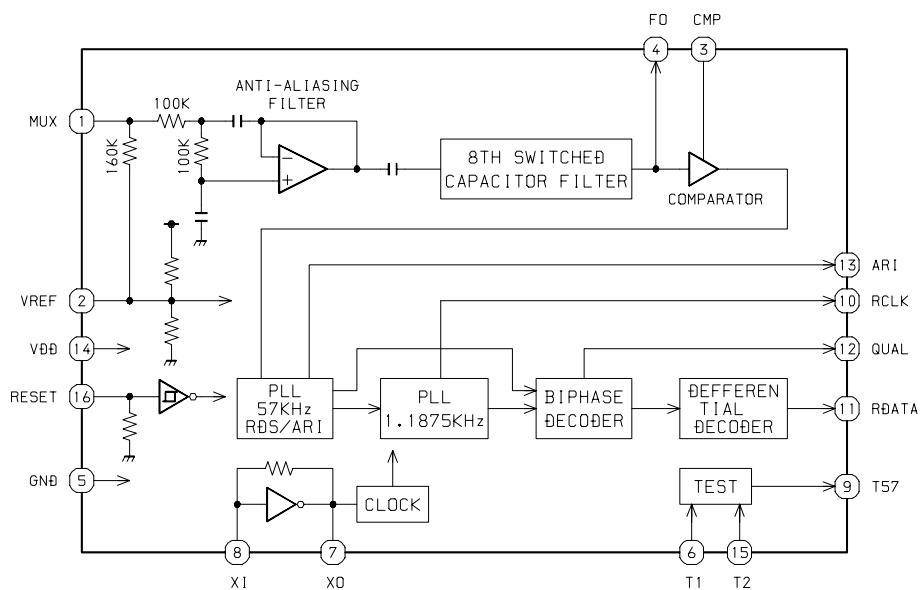
IC, BU2092F



IC, M61503FP



IC, BU1920FS <52EZ ONLY>



IC DESCRIPTION

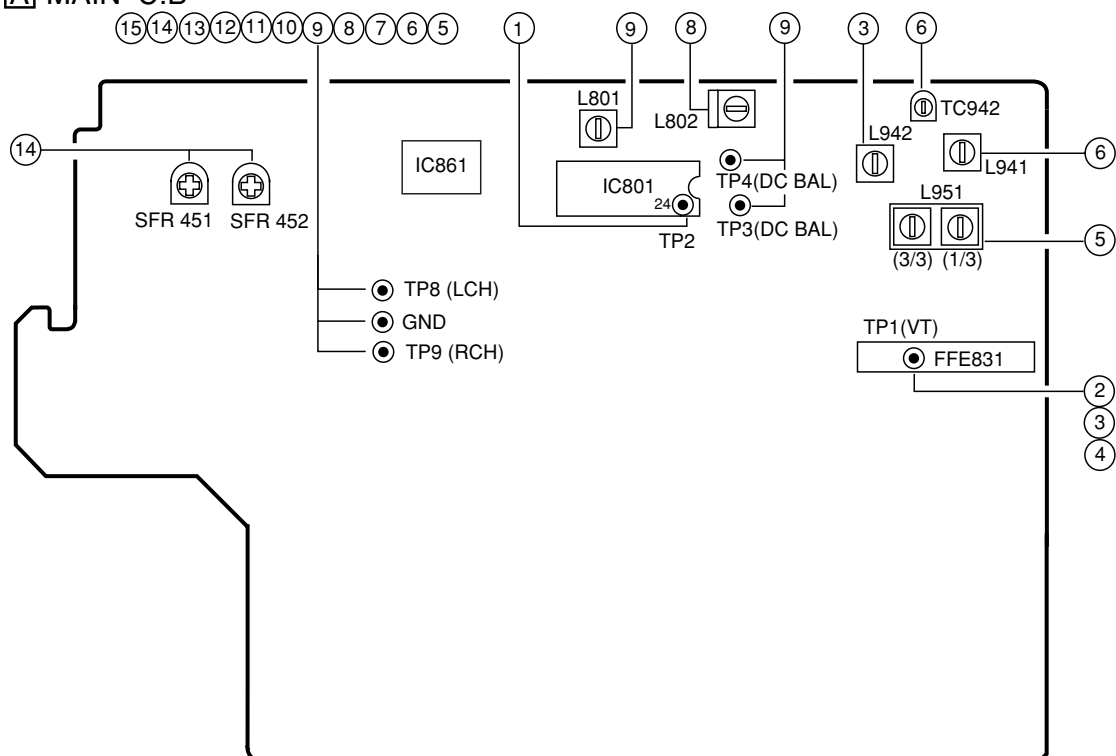
IC, LC866548V-5P03 (Except 52EZ), IC, LC866560W-5P19 (52EZ Only)

Pin No.	Pin Name	I/O	Description
1	I-STEREO/I-DRF	I	Stereo detected input / CD DRF input.
2	I-IFC/I-SUBQ	I	Tune IF count serial data input / CD SUBQ input.
3	O-2PB	O	DECK2 playback switch output.
4	O-POWER	O	System power supply ON/OFF output.
5	O-CD-ON	O	CD power ON/OFF output.
6	O-PLL-DATA	O	LED driver, TUNER IC, FUNCTION IC data output.
7	O-RMT	O	DECK2 record mute output.
8	O-BIAS	O	DECK2 bias ON/OFF output.
9	O-MUTE	O	System mute ON/OFF output.
10	O-STB	O	Latch strobe output for LED driver IC.
11	O-CLK-SFT	O	Micon clock shift output.
12	RESET	I	System reset.
13	NC	-	Not connected.
14	I-DISH	I	Latch strobe output for FRONT shift register.
15	VSS1	-	GND.
16	CF1	-	5.76MHz oscillator circuit.
17	CF2	-	5.76MHz oscillator circuit.
18	VDD1	-	Power supply input.
19	I-HOLD	I	Power failure detected input.
20	I-KEY1	I	KEY input (A/D).
21	I-KEY2	I	KEY input (A/D).
22	I-KEY3	I	KEY input (A/D).
23	I-TU-SIG	I	Tuner signal input (52EZ Only).
24	I-CDSW	I	CD mechanical switch A/D converter input.
25	I-SPEANA	I	A/D input for spectrum analyzer display.
26	I-RE-VOL	I	Rotary encoder input (VOL).
27	I-WRQ/I-RDS-CLK	I	CD WRQ input / Tune RDS clock input (52EZ Only).
28	I-TM-BASE	I	Reference clock input for timer watch.
29	I-RMC	I	System remote control signal input.
30 ~ 40	G11 ~ G1	O	FL grid output G11 ~ G1
41	NC	-	Not connected.
42 ~ 45	P35 ~ P32	O	FL segment output P35 ~ P32.
46	VDD3	-	Power supply input.
47 ~ 48	P31 ~ P30	O	FL segment output P31 ~ P30.
49	P29/O-SPEANA-C	O	FL segment output P29 / Spectrum analyzer band switching output.
50	P28/O-SPEANA-B	O	FL segment output P28 / Spectrum analyzer band switching output.
51	-VFL	-	Power supply input for FL display.
52	P27/O-SPEANA-A	O	FL segment output P27 / Spectrum analyzer band switching output.
53	P26	O	FL segment output P26.
54	P25/I-NO-CASINO	O/I	FL segment output P25 / NO CASINO DEMO input to diode.
55	P24/I-KARAOKE	O/I	FL segment output P24 / KARAOKE input to diode (Not used).
56	P23/NO-DEMO	O/I	FL segment output P23 / NO DEMO input to diode (Not used).
57	P22/PRO LOGIC	O/I	FL segment output P22 / PRO LOGIC input to diode.(Not used)

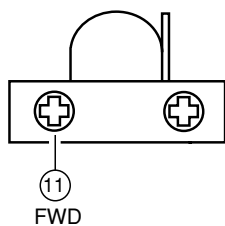
Pin No.	Pin Name	I/O	Description
58	P21/RDS	O/I	FL segment output P21 / RDS input to diode (52EZ Only).
59	P20/FM1	O/I	FL segment output P20 / FM1 input to diode (Not used).
60	P19/SW	O/I	FL segment output P19 / SW input to diode (Not used).
61	P18/LW	O/I	FL segment output P18 / LW input to diode.
62	P17/AMST	O/I	FL segment output P17 / AMST input to diode (Not used).
63	P16/AM10K	O/I	FL segment output P16 / AM10K input to diode.
64	P15/I-CST2	O/I	FL segment output P15 / DECK2 cassette detect switch data input.
65	P14/I-REB	O/I	FL segment output P14 / DECK2 side-B record OK switch data input (Not used).
66	P13/I-CAM2	O/I	FL segment P13 output / DECK2 CAM switch data input.
67	P12/I-AUTO1	O/I	FL segment P12 output / DECK1 AUTO STOP switch data input.
68	P11/I-AUTO2	O/I	FL segment P11 output / DECK2 AUTO STOP switch data input.
69	P10/I-CAM1	O/I	FL segment P10 output / DECK1 CAM STOP switch data input.
70	P9/I-CST1	O/I	FL segment P9 output / DECK1 cassette detect switch data input.
71	P8/I-REA	O/I	FL segment P8 output / DECK2 side A record OK switch data input.
72	VDD4	-	Power supply input.
73	P7/I-REV2	O/I	FL segment P7 output / DECK2 REVERSE mode input (Not used).
74	P6/I-REV1	O/I	FL segment P6 output / DECK1 REVERSE mode input.
75	P5/NO-ECO	O/I	FL segment P5 output / NO ECO mode input (Not used).
76 ~ 79	P4 ~ P1	O	FL segment output P4 ~ P1.
80	O-CD-CLOSE	O	CD TRAY CLOSE data input.
81	O-CD-OPEN	O	CD TRAY OPEN data input.
82	NC	-	Not connected.
83	I-JOG-A	I	Rotary encoder A input.
84	I-JOG-B	I	Rotary encoder B input.
85	O-DISH-FWD	O	CD turntable forward rotation output.
86	O-DISH-REV	O	CD turntable reverse rotation output.
87	O-PLL-CE	O	PLL IC chip enable output.
88	O-KSCAN	O	Switch scan timing output.
89	VSS2	-	GND.
90	VDD2	-	Power supply input.
91	LED-STBY	O	STANDBY LED output.
92	O-MOTOR	O	DECK MOTOR ON/OFF output.
93	O-SOL1	O	DECK1 solenoid output.
94	O-SOL2	O	DECK2 solenoid output.
95	O-CD-DATA	O	CD DATA output.
96	O-CD LED	O	CD LED output.
97	O-CD-CLK	O	CD clock output.
98	O-CD CE	O	CD chip enable output.
99	I-RDS-DATA	I	RDS data input(52EZ Only).
100	O-PLL-CLK	O	PLL IC clock output.

ADJUSTMENT <TUNER / DECK / FRONT>

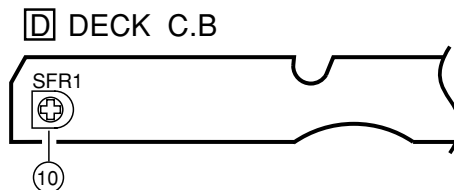
A MAIN C.B



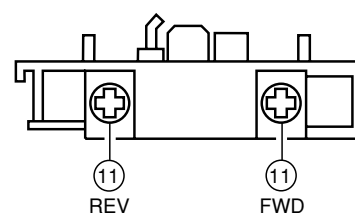
DECK—2 R/P/E HEAD



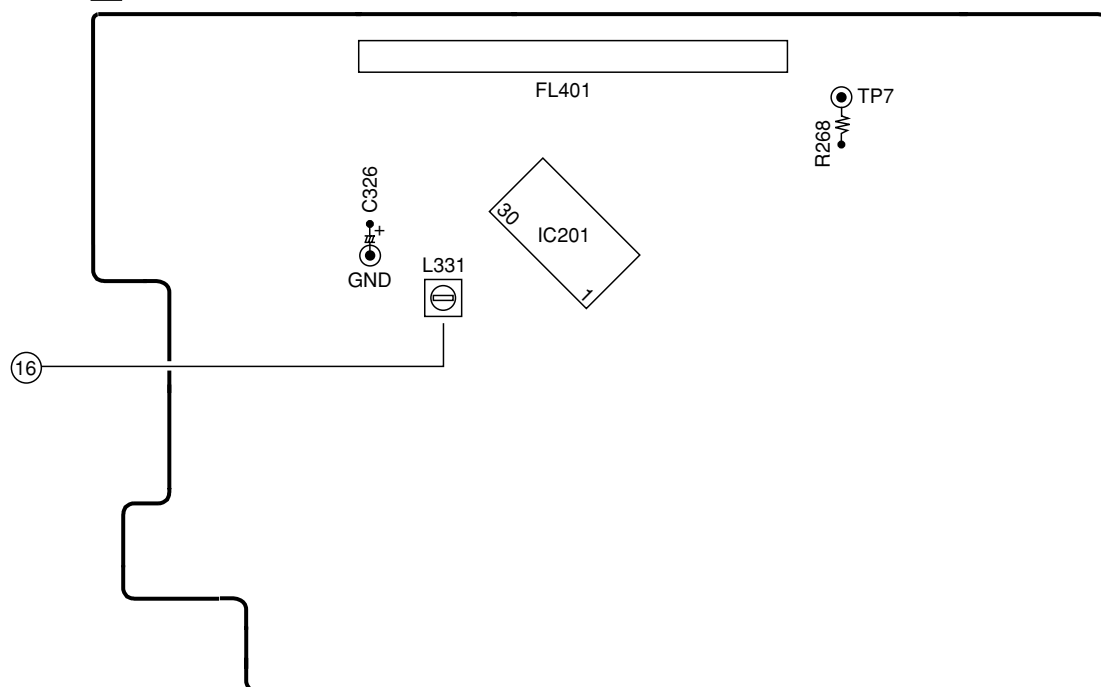
D DECK C.B



DECK—1 P HEAD



B FRONT C.B

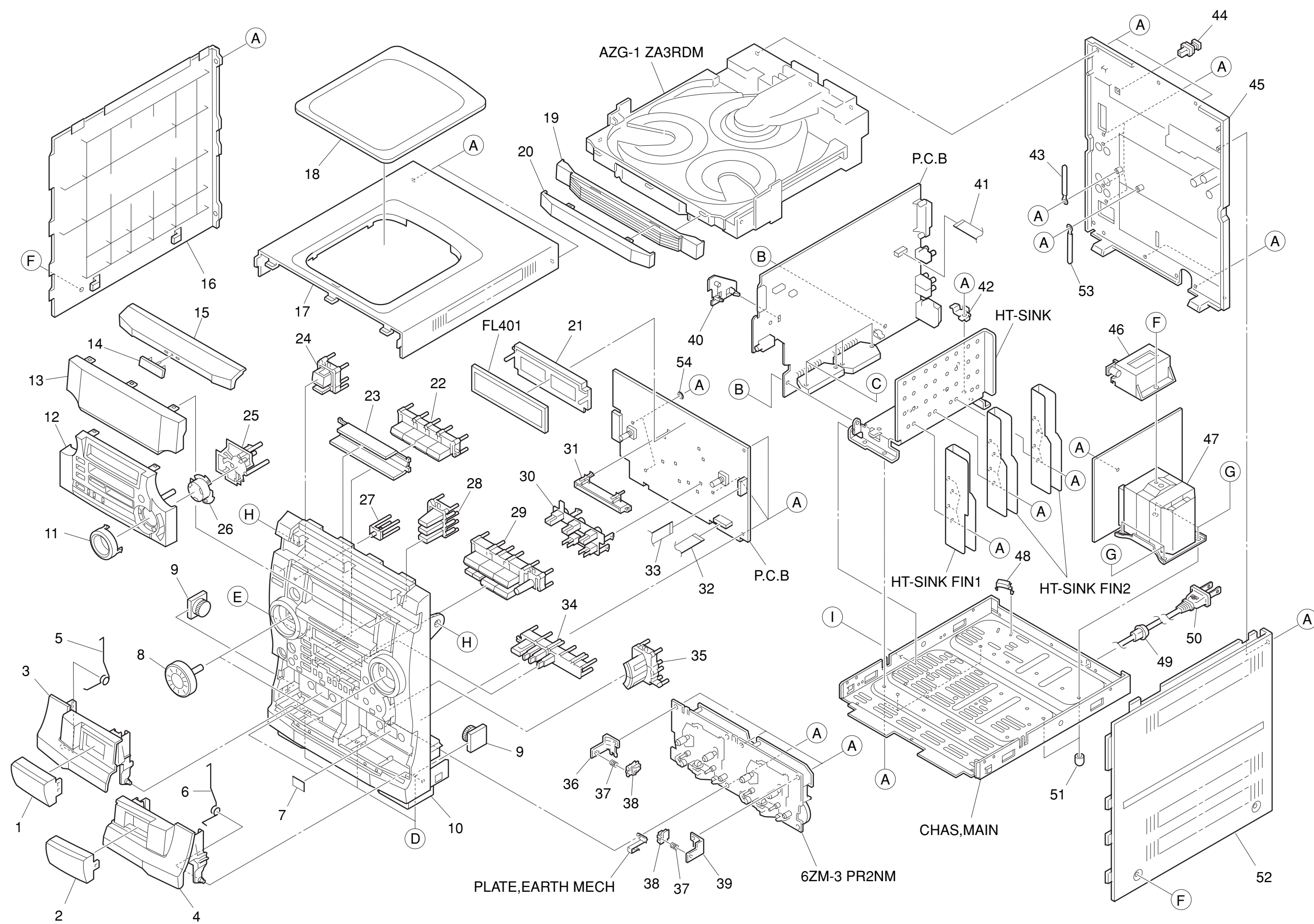


< TUNER SECTION >

1. Clock frequency Check
Settings : • Test point : TP2 (CLK)
Method : Set to MW 1602kHz and check that the test point is 2052kHz \pm 45Hz.
2. MW VT Check
Settings : • Test point : TP1 (VT)
Method : Set to MW 1602kHz, 531kHz and check that the test point is less than 8.0V (1602kHz) and more than 0.6V (531kHz).
3. LW VT Adjustment
Settings : • Test point : TP1 (VT)
• Adjustment location : L942
Method : Set to LW 144kHz and adjust L942 so that the test point becomes 1.5V \pm 0.05V. Then set to LW 290kHz and check that the test point is less than 8.0V.
4. FM VT Check
Settings : • Test point : TP1 (VT)
Method : Set to FM 87.5MHz, 108.0MHz and check that the test point is more than 0.5V (87.5MHz) and less than 8.0V (108.0MHz).
5. MW Tracking Adjustment
Settings : • Test point : TP8(Lch), TP9(Rch)
• Adjustment location :
L951(1/3) 999kHz
Method : Set to MW 999kHz and adjust L951(1/3) so that the level at the test point becomes maximum.
6. LW Tracking Adjustment
Settings : • Test point : TP8 (Lch), TP9 (Rch)
• Adjustment location :
L941 144kHz
TC942 290kHz
Method : Set up TC942 to center before adjustment.
Adjust L941 so that the level at 144kHz becomes maximum. Then adjust TC942 so that the level at 290kHz becomes maximum.
7. 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 13dB μ V.
8. AM IF Adjustment
Settings : • Test point : TP8(Lch), TP9(Rch)
• Adjustment location :
L802 999kHz
9. DC Balance / Mono Distortion Adjustment
Settings : • Test point : TP3, TP4 (DC Balance)
TP8(Lch), TP9(Rch) (Distortion)
• Adjustment location : L801
• Input level : 60dB μ V
Method : Set to FM 98.0MHz and adjust L801 so that the voltage between TP3 and TP4 becomes 0V \pm 0.3V.
Next, check that the distortion is less than 1.3%.

< DECK SECTION >

10. Tape Speed Adjustment (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.
 11. 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.
 12. PB Frequency Response Check (DECK 1, DECK 2)
Settings : • Test tape : TTA-300
• Test point : TP8(Lch), TP9(Rch)
Method : Play back the 315Hz and 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.
 13. 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 130mV \pm 3dB.
 14. REC/PB Frequency Response Adjustment (DECK 2)
Settings : • Test tape : TTA-602
• Test point : TP8(Lch), TP9(Rch)
• Input signal : 1kHz / 8kHz (LINE IN)
• Adjustment location : SFR451 (Lch)
SFR452 (Rch)
Method : Apply a 1kHz signal and REC mode. Then adjust OSC attenuator so that the output level at the TP8, TP9 becomes -20VU. Record and play back the 1kHz and 8kHz signals and adjust SFRs so that the output of the 8kHz signals becomes 0dB \pm 0.5dB with respect to that of the 1kHz signal.
 15. 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 adjust OSC attenuator so that the output level at TP8, TP9 becomes 0VU. Record and play back the 1kHz signals and check that the output is -2dB \pm 3.0dB.
- ## < FRONT SECTION >
16. μ -CON OSC Adjustment
Settings : • Test point : TP7 and GND
• Adjustment location : L331
Method : Insert AC plug while pressing POWER and TUNER function keys. Adjust L331 so that the frequency at the test point is 153.84Hz \pm 0.15Hz.

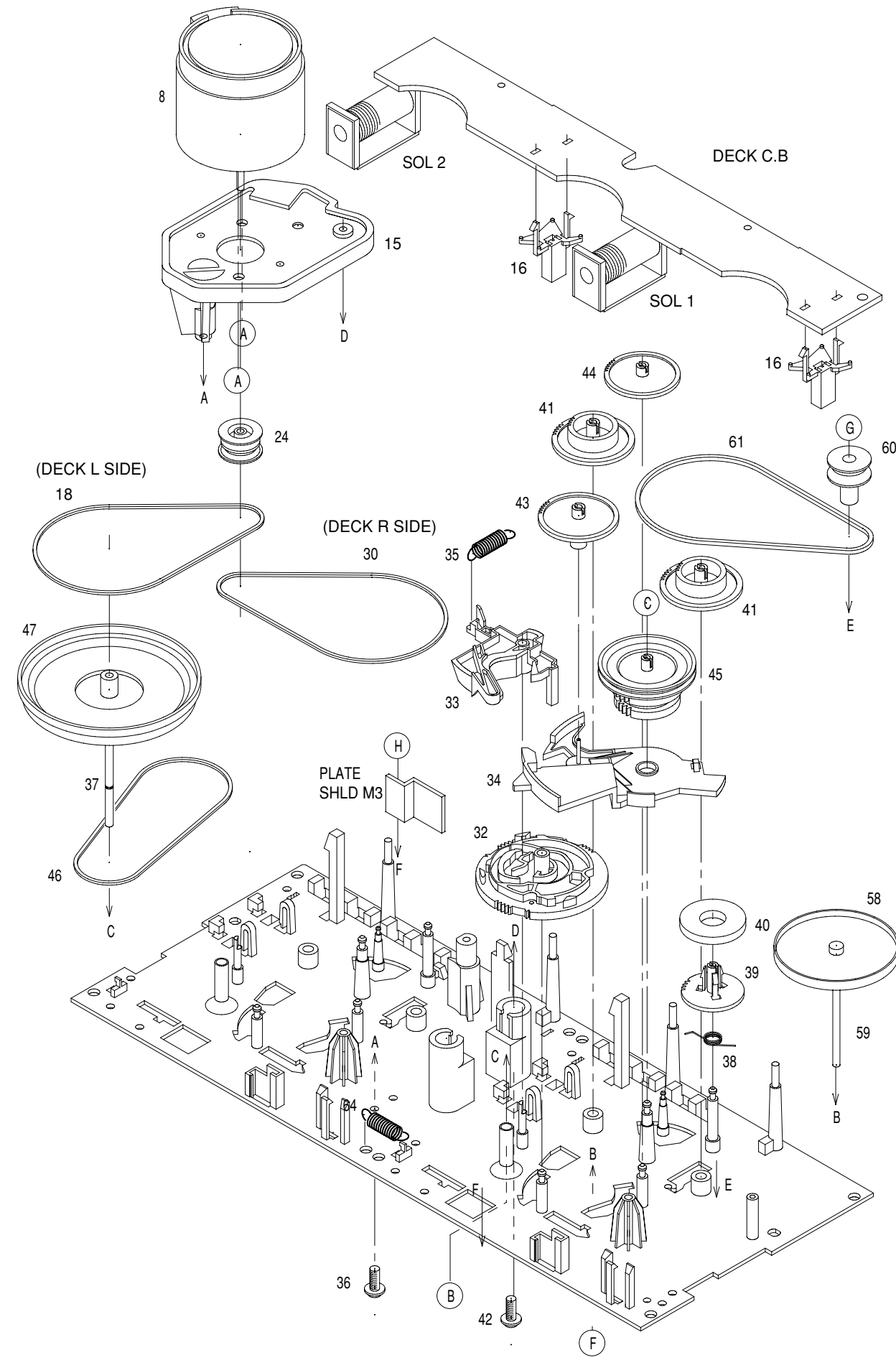
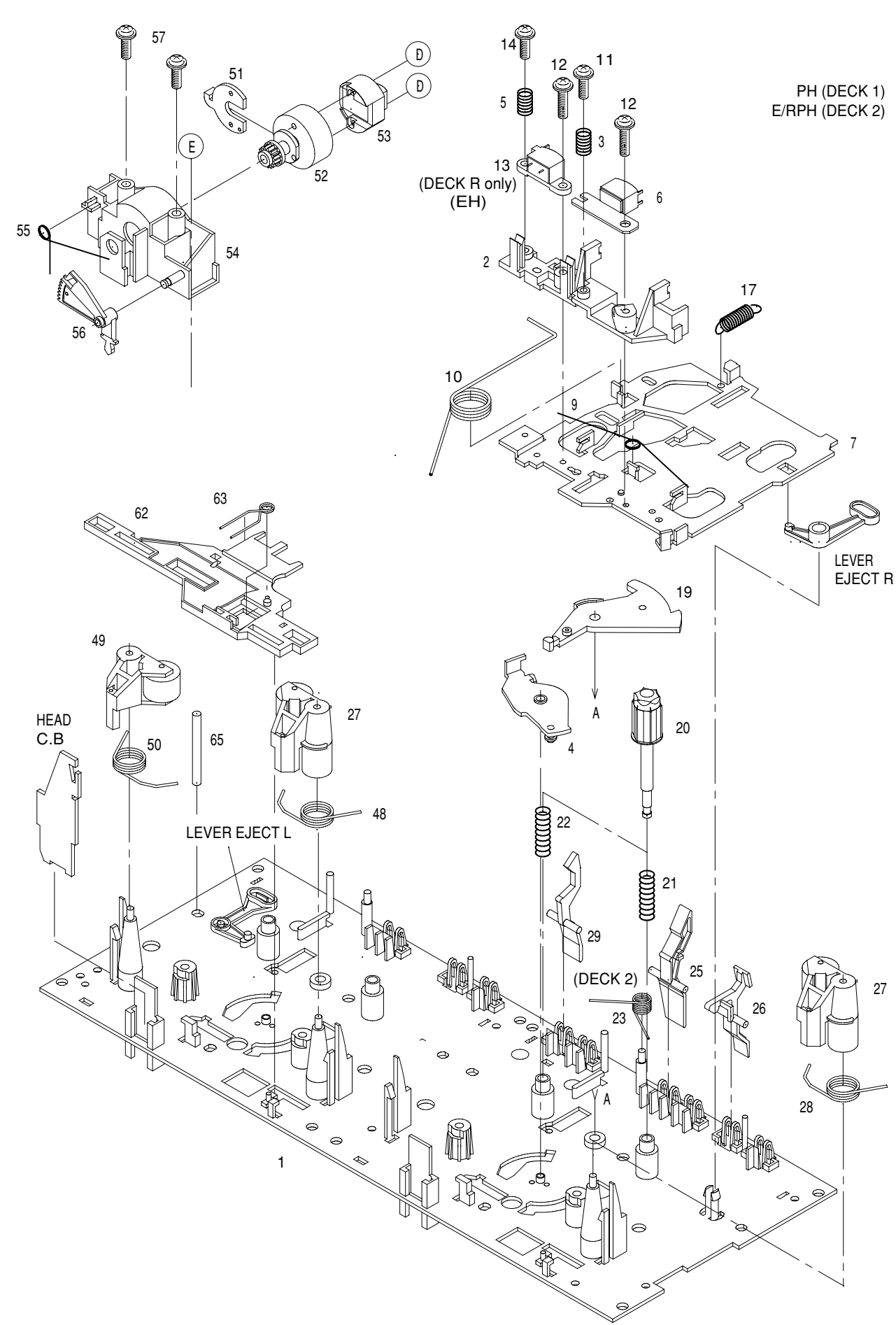


MECHANICAL PARTS LIST 1 / 1

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION	REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	8A-NF8-014-010		WINDOW, CASS 1	34	8A-NF8-038-010		KEY, CD EDIT E<52EZSM>
2	8A-NF8-015-010		WINDOW, CASS 2	34	8A-NF8-028-010		KEY, CD EDIT U<50EZSM>
3	8A-NF8-042-010		BOX, CASS 1H	35	8A-NF8-029-010		KEY, OPEN
4	8A-NF8-004-010		BOX, CASS 2 U	36	87-NF4-216-010		HLDR, LOCK 1
5	8A-NF8-207-010		SPR-T, EJECT 1	37	86-NF9-224-010		SPR-C, LOCK
6	8A-NF8-208-010		SPR-T, EJECT 2	38	82-NF5-229-010		PLATE, LOCK
7	81-532-080-010		LABEL, CASS. COMPT	39	87-NF4-217-110		HLDR, LOCK 2
8	8A-NF8-019-010		KNOB, RTRY JOG	40	8A-NF8-206-010		HLDR, PWB M
9	8A-NF8-209-010		OIL-DMPR, 120	41	88-906-251-110		FF-CABLE, 6P 1.25
10	8A-NF8-001-010		CABI, FR U	42	8A-NF8-205-010		HLDR, IC
11	8A-NF8-034-010		PANEL, DIRECT	43	87-064-185-010		HLDR, WIRE
12	8A-NF8-045-010		PANEL, FR E<52EZSM>	44	84-ZG1-245-210		CAP, OPTICAL
12	8A-NF8-048-010		PANEL, FR K<50EZSM>	45	8A-NF8-069-110		CABI, REAR EZSM<50EZSM>
13	8A-NF8-047-010		WINDOW, DISP E<52EZSM>	45	8A-NF8-070-110		CABI, REAR EZSM R<52EZSM>
13	8A-NF8-046-010		WINDOW, DISP H<50EZSM>	45	8A-NF8-063-110		CABI, REAR KSE<50KSE>
14	87-CE3-023-010		BADGE, AIWA 30N SILV	46	8A-DB8-209-010		HLDR, PWB PT
15	8A-NF8-009-010		PANEL, CD	47	8A-NF8-608-010		PT, ANF-8 EZ
16	8A-NF8-007-010		PANEL, LEFT V-2	48	87-NF4-221-010		HLDR, CABLE
17	8A-NF8-005-010		PANEL, TOP	49	87-085-185-010		BUSHING, AC CORD (E)
18	8A-NF8-006-010		WINDOW, TOP	50	87-A80-143-010		AC CORD ASSY, E BLK<50KSE>
19	8A-NF8-010-010		PANEL, TRAY	50	87-A80-092-010		AC CORD ASSY, E BLK SUN<EXCEPT 50KSE>
20	8A-NF8-011-010		WINDOW, TRAY	51	8Z-NB8-240-010		COVER, PL
21	88-NF8-205-010		GUIDE, FL	52	8A-NF8-008-010		PANEL, RIGHT V-2
22	8A-NF8-020-010		KEY, FUN	53	87-064-080-010		WIRE, BINDER
23	8A-NF8-018-010		REFLECTOR, FUN	54	85-NF7-599-010		PVC W 3.2-8-0.3
24	8A-NF8-016-010		KEY, POWER	A	87-067-703-010		TAPPING SCREW, BVT2+3-10
25	8A-NF8-031-010		KEY, DISC	B	87-NF4-224-010		S-SCREW, IT3B+3-8 CU
26	8A-NF8-032-010		CAP, DISC	C	87-067-581-010		TAPPING SCREW, BVT2+3-15
27	8A-NF8-017-010		REFLECTOR, ECO	D	87-067-688-010		BVTT+3-6
28	8A-NF8-022-010		KEY, GEQ	E	87-723-096-410		QT2+3-10W/O SLOT BL
29	8A-NF8-036-010		KEY, ASSY OPE REV	F	87-067-641-010		UTT2+3-8 (W/O SLOT) BL
30	8A-NF8-203-010		GUIDE, OPE REV	G	87-078-191-010		S-SCREW, IT+4-10
31	8A-NF8-201-010		GUIDE, FUN	H	87-721-097-410		QT2+3-12 GLD
32	88-911-101-110		FF-CABLE, 11P 1.25	I	87-721-096-410		QT2+3-10 GLD<50EZSE, 52EZSE>
33	88-913-301-110		FF-CABLE, 13P-1.25				

COLOR NAME TABLE

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



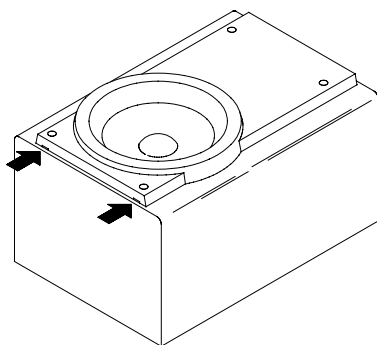
TAPE MECHANISM PARTS LIST 1 / 1

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				

SPEAKER DISASSEMBLY INSTRUCTIONS

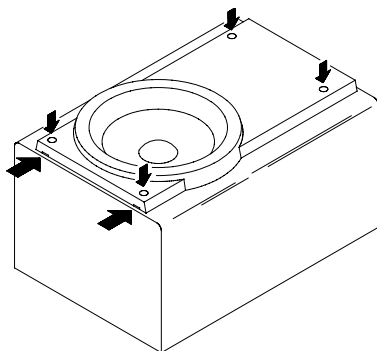
Type.1

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.



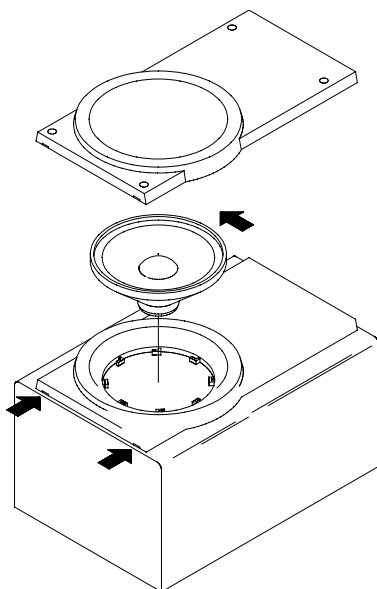
Type.2

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.

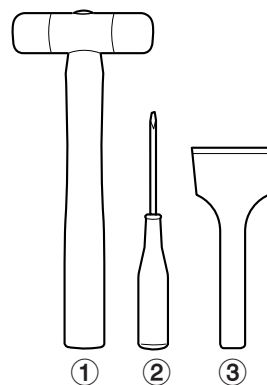


Type.3

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.

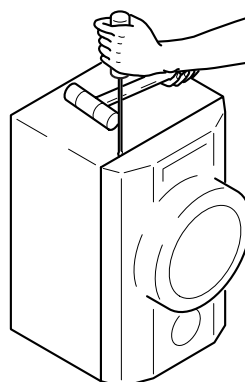


Fig-1

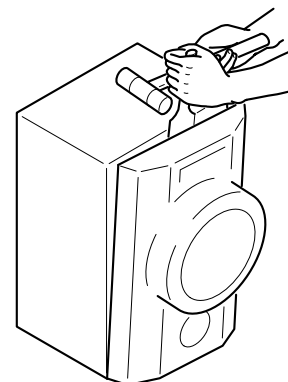


Fig-2

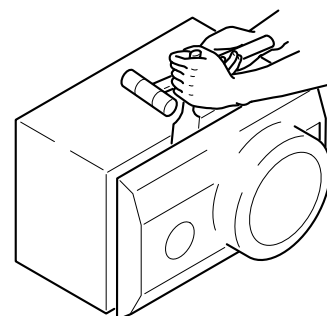


Fig-3

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 PARTS LIST

SX-WNSZ50 (YSL, YSY1, YSY2), SX-WNSZ52 (YSL)

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	8A-DS8-001-010		PANEL, FR
2	8A-DS8-004-010		PANEL, DUCT
3	8A-DS8-005-010		GRILLE, FRAME ASSY
4	8A-DS8-009-010		PROTECTOR
5	88-NS5-610-010		CORD, SPKR
6	88-NS5-611-010		CORD, SPKR B/L
7	8Z-NSY-003-010		CORD, BUSH
8	88-NS3-029-010		CORD, BUSH L
9	8Z-NS7-602-010		SPKR, W 160<YSL>
9	8A-NS8-602-010		SPKR, W 160<EXCEPT YSL>
10	8Z-NSY-604-010		SPKR, M 100<YSL>
10	8A-NS8-604-010		SPKR, M 100<EXCEPT YSL>
11	8Z-NSY-608-010		SPKR, CERAMIC ASSY

ACCESSORIES / PACKAGE LIST

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	8A-NF8-926-010		IB, EZ (9L) M<50EZ>
1	8A-NF8-936-010		IB, EZ (9L) M-RDS<52EZ>
1	8A-NF8-905-010		IB, K (E) E<52K>
2	87-006-225-010		AM LOOP ANT NC2
3	87-A90-118-010		ANT, WIRE FM (Z)
4	8Z-NF8-702-010		RC UNIT, RC-ZAS01

アイワ株式会社 〒110-8710 東京都台東区池之端1-2-11 ☎03(3827)3111 (代表)
AIWA CO.,LTD. 2-11, IKENOHATA 1-CHOME, TAITO-KU, TOKYO 110, JAPAN TEL:03 (3827) 3111