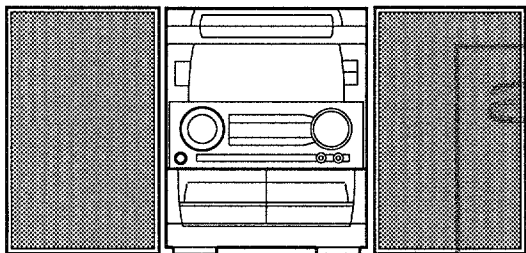


aiwa



NSX-K970



COMPACT DISC STEREO
CASSETTE RECEIVER

- BASIC TAPE MECHANISM : 2ZM-3MK2 (PR4NM,YPR4N)
- BASIC CD MECHANISM : 4ZG-1 (VOS1DSHNM,VOS1DSH)

- TYPE : HR,HC

REVISION PUBLISHING

SYSTEM	CD CASSEIVER	SPEAKER	REMOTE CONTROLLER
NSX-K970	CX-NK970	SX-WNS909	RC-7AS08

- If requiring information about the CD mechanism, see Service Manual of 4ZG-1, S/M Code No. 09-985-249-80T.
- This Service Manual is the "Revision Publishing" and replaces "Simple Manual", S/M Code No. 09-987-284-6FE (HR).

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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)

<MW Tuner section>

Tuning range	531 kHz to 1602 kHz (9 kHz step) 530 kHz to 1710 kHz (10 kHz step)
Usable sensitivity	350 uV/m
Antenna	Loop antenna

<SW Tuner section>

Tuning range	5.900 MHz to 17.900 MHz
Antenna	Wire antenna

<Amplifier section>

Mid-high frequency amplifier

Power output	Rated 33 W + 33 W (6 ohms, THD 1%, 1 kHz) Reference 40 W + 40 W (6 ohms, THD 10%, 1 kHz)
Total harmonic distortion	0.1% (17 W, 1 kHz, 6 ohms, DIN AUDIO)

Low frequency amplifier

Power output	Rated 115 W + 115 W (6 ohms, THD 1%, 70 kHz) Reference 140 W + 140 W (6 ohms, THD 10%, 70 kHz)
Total harmonic distortion	0.1% (70 W, 70 Hz, 6 ohms, DIN AUDIO)

Inputs

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

Outputs

LINE OUT: 280mV
VIDEO OUT: 1.0 Vp-p (75 ohms)
SPEAKERS: accept speakers of
6 ohms or more
SURROUND SPEAKERS:
accept speakers of 8 ohms to 16 ohms
PHONES (stereo jack) : accepts
headphones of 32 ohms or more

<Cassette deck section>

Track format	4 tracks, 2 channels stereo
Frequency response	CrO ₂ tape : 50 Hz – 16000 Hz Normal tape : 50 Hz – 15000 Hz
Signal to noise ratio	60 dB (Dolby B NR ON, CrO ₂ tape peak level)
Recording system	AC bias
Heads	Deck 1 : Playback head x 1 Deck 2 : Recording/Playback head x 1/ erase head x 1

<Compact disc player section>

Laser	Semiconductor laser (λ =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	Crystal accuracy
Video signal	NTSC/PAL color format (selectable)
Video data	MPEG 1
Audio data	MPEG 1, LAYER 2

<Speaker system SX-WNS909>

Cabinet type	4 way, built-in subwoofer (magnetic shielded type)
Speakers	Subwoofer : 200 mm cone type Woofer : 120 mm cone type Tweeter : 60 mm cone type Super tweeter : 20 mm ceramic type
Impedance	6 ohms/6 ohms
Output sound pressure level	87 dB/W/m
Dimensions (W x H x D)	240 x 324 x 330 mm
Weight	6 kg

<General>

Power requirements	120 V/220 - 230 V/240 V AC, switchable 50/60 Hz
Power consumption	235 W
Dimensions of main unit	260 x 329 x 369 mm
Weight of main unit	11.2 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.

• Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.
"DOLBY" and the double-D symbol  are trademarks of Dolby Laboratories Licensing Corporation.

NOTE ON BEFORE STARTING REPAIR

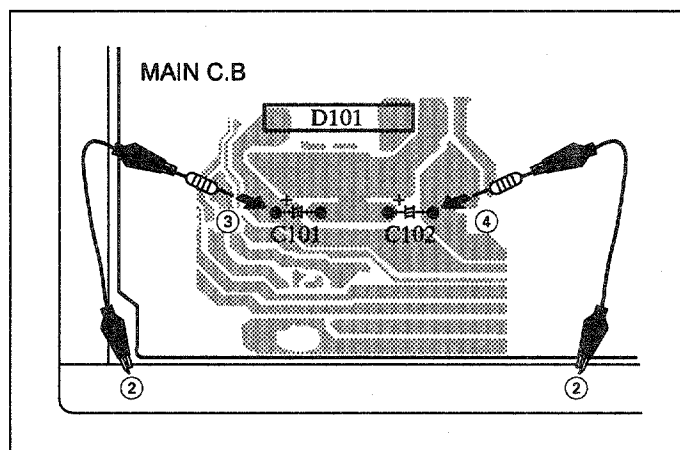
1. Forced discharge of electrolytic capacitor of power supply block

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

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

Discharge procedure

- ① Remove the AC power cord.
- ② Connect a discharging resistor at an end of lead wire that has clips at both ends. 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.



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.

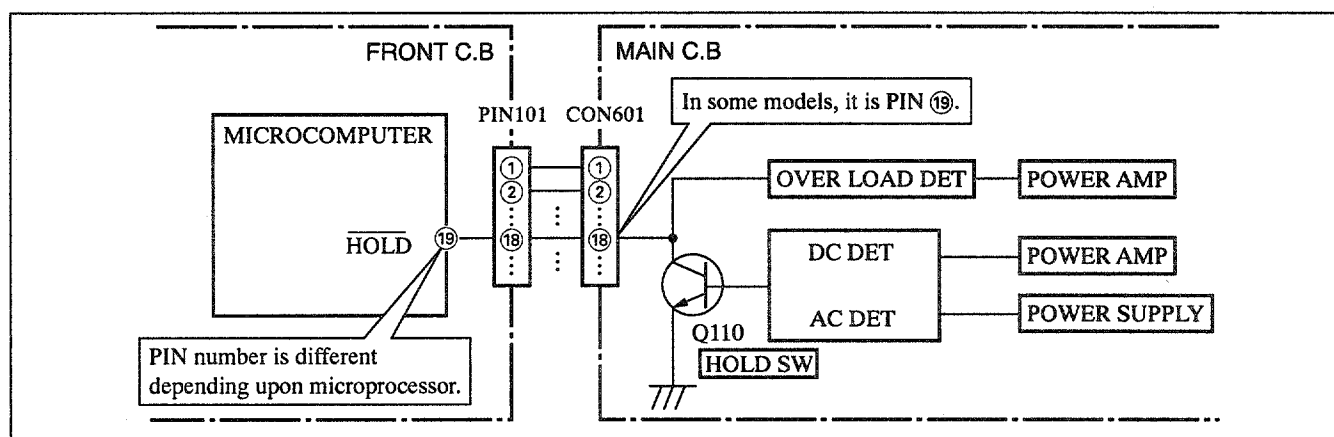


Fig-2-1

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.

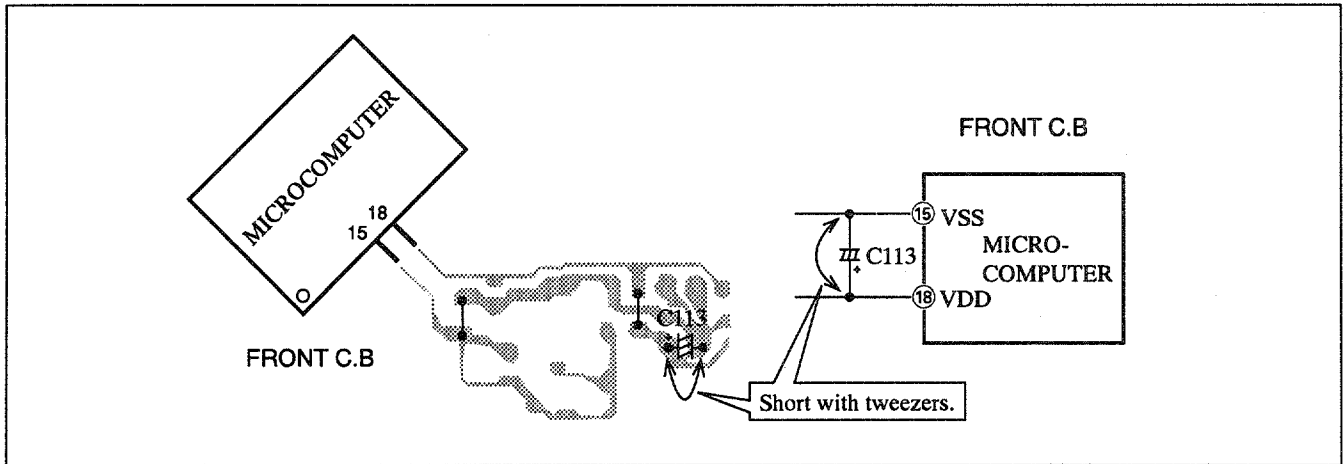


Fig-2-2

- 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.

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 laserstråling, som överskrider gränsen för laserklass 1.

CAUTION

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

ATTENTION

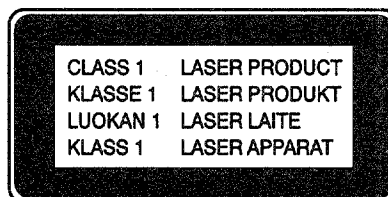
L'utilisation de commandes, réglages ou procédures autres que ceux spécifiés peut entraîner une dangereuse exposition aux radiations.

ADVARSEL!

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

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

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

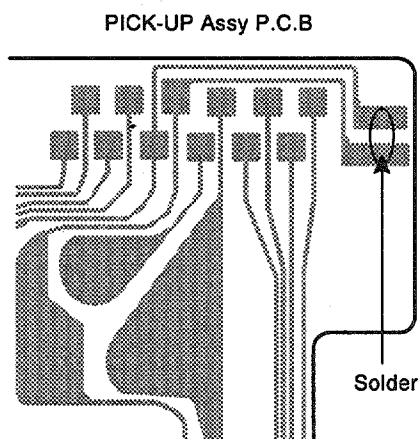


Precaution to replace Optical block

(KSS – 213F)

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

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



ELECTRICAL MAIN PARTS LIST

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

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION	REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
IC				87-A40-504-040			C-DIODE,KDS184
	88-NF5-615-040		C-IC,MSM6654A-521GS-KR1	87-A40-505-040			C-DIODE,KDS181
	88-NH7-630-010		C-IC,LC866560W-5J08	MAIN C.B			
	87-070-083-010		IC,GPIU281X	C101	87-016-657-090		CAP,E 3300-71
	87-A20-783-040		C-IC,BA7762AFS	C102	87-016-657-090		CAP,E 3300-71
	87-A20-083-010		IC,BA3835S	C103	87-016-658-090		CAP,E 4700-35 SMG
				C104	87-016-658-090		CAP,E 4700-35 SMG
	87-017-914-010		IC,BU4094BCP	C105	87-012-368-080		C-CAP,S 0.1-50 F
	87-A20-804-040		C-IC,NJM2152M	C106	87-012-368-080		C-CAP,S 0.1-50 F
	87-017-915-080		IC,BU4094BCF	C107	87-012-368-080		C-CAP,S 0.1-50 F
	87-A20-613-040		C-IC,BU9262AFS	C108	87-012-368-080		C-CAP,S 0.1-50 F
	87-A21-011-040		C-IC,M62445FP-600D	C109	87-010-196-080		CHIP CAPACITOR,0.1-25
				C110	87-010-196-080		CHIP CAPACITOR,0.1-25
	87-017-888-080		IC,NJM4558MD	C111	87-010-196-080		CHIP CAPACITOR,0.1-25
	87-070-127-110		IC,LC72131D	C112	87-010-196-080		CHIP CAPACITOR,0.1-25
	87-A20-913-010		IC,LA1837NL	C113	87-010-247-080		CAP, ELECT 100-50V
	87-020-454-010		IC,DN6851	C114	87-010-385-080		CAP, ELECT 220-25V
	87-A20-355-010		IC,CXA1553P	C115	87-010-385-080		CAP, ELECT 220-25V
	87-070-289-040		C-IC,BU2092F				
	87-A20-561-010		C-IC,M65847AFP	C116	87-010-247-080		CAP, ELECT 100-50V
TRANSISTOR				C117	87-010-430-080		CAP, ELECT 100-63
	87-A30-087-080		C-FET,2SK2158	C118	87-010-263-080		CAP, ELECT 100-10V
	89-213-702-010		TR,2SB1370 (1.8W)	C119	87-010-260-080		CAP, ELECT 47-25V
	87-026-263-080		C-TR,RN1410	C120	87-010-403-080		CAP, ELECT 3.3-50V
	87-A30-071-080		C-TR,RT1N 144C				
	87-026-610-080		TR,KTC3198GR	C121	87-012-140-080		CAP 470P
				C123	87-010-247-080		CAP, ELECT 100-50V
	87-A30-076-080		C-TR,2SC3052F	C124	87-010-112-080		CAP, ELECT 100-16V
	87-A30-196-080		TR,2SC4115SRS	C125	87-010-235-080		CAP,E 470-16 SME
	87-A30-075-080		C-TR,2SA1235F	C204	87-016-299-080		CAP,E 10-100 SME
	87-026-609-080		TR,KTA1266GR				
	87-A30-107-070		C-TR,CMBT5401	C205	87-010-805-080		C-CAP,S 1-16
				C206	87-010-805-080		C-CAP,S 1-16
	87-A30-190-080		TR,CC5551	C209	87-010-401-080		CAP, ELECT 1-50V
	87-A30-137-010		TR,2SD2494	C210	87-010-401-080		CAP, ELECT 1-50V
	87-A30-097-010		TR,FN 1016	C211	87-010-178-080		CHIP-CAP 1000P
	87-A30-138-010		TR,2SB1625	C212	87-010-178-080		CHIP-CAP 1000P
	87-A30-098-010		TR,FP 1016	C215	87-010-404-080		CAP, ELECT 4.7-50V
				C216	87-010-404-080		CAP, ELECT 4.7-50V
	87-A30-106-070		C-TR,CMBT5551	C217	87-A10-899-080		CAP, ELECT 47-25VMBP SME
	87-A30-072-080		C-TR,RT1P 144C	C218	87-A10-899-080		CAP, ELECT 47-25VMBP SME
	87-A30-074-080		C-TR,RT1P 141C				
	87-026-232-080		C-TR,DTA 144WK	C219	87-010-805-080		C-CAP,S 1-16
	87-A30-073-080		C-TR,RT1N 141C	C220	87-010-805-080		C-CAP,S 1-16
				C223	87-010-197-080		CAP,CHIP 0.01 DM
	87-A30-105-080		C-TR,RT1P 441C	C224	87-010-197-080		CAP,CHIP 0.01 DM
	87-A30-086-070		C-TR,CSD1306E	C229	87-A10-812-080		C-CAP,S 220P-200 J CH
	89-112-965-080		TR,2SA1296 (0.75W)				
	87-A30-085-070		C-TR,CSA1362GR	C230	87-A10-812-080		C-CAP,S 220P-200 J CH
	89-327-143-080		TR,2SC2714 (0.1W)	C231	87-010-178-080		CHIP-CAP, 1000P
				C232	87-010-178-080		CHIP-CAP, 1000P
	87-026-463-080		TR,2SA933SRS	C233	87-010-544-080		CAP, ELECT 0.1-50V
	87-A30-162-010		FET,2SK2937	C234	87-010-544-080		CAP, ELECT 0.1-50V
	87-026-580-080		C-TR,DTA123JK				
	89-505-434-040		C-FET,2SK543-TB (4/5)	C235	87-010-196-080		CHIP CAPACITOR,0.1-25
	87-A30-159-080		C-TR,KTA1298Y	C237	87-012-368-080		C-CAP,S 0.1-50 F
				C238	87-012-368-080		C-CAP,S 0.1-50 F
	87-A30-142-040		C-TR,DTA123EKA	C239	87-012-368-080		C-CAP,S 0.1-50 F
				C240	87-012-368-080		C-CAP,S 0.1-50 F
DIODE				C280	87-010-188-080		CAP,CHIP 6800P
	87-A40-470-080		DIODE,1SS254	C298	87-010-196-080		CHIP CAPACITOR,0.1-25
	87-017-654-060		DIODE,GBU6JL 6131	C301	87-010-318-080		C-CAP,S 47P-50 CH
	87-A40-509-080		ZENER,MTZJ6.8C	C302	87-010-318-080		C-CAP,S 47P-50 CH
	87-070-136-080		ZENER,MTZJ5.1B	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		CAP, CHIP S 270P CH
	87-A40-004-080		ZENER,MTZJ16A	C306	87-012-145-080		CAP, CHIP S 270P CH
	87-A40-488-080		DIODE,1SS244	C307	87-010-196-080		CHIP CAPACITOR,0.1-25
	87-A40-345-080		ZENER,MTZJ10C	C311	87-010-198-080		CAP, CHIP 0.022
	87-A40-002-080		ZENER,MTZJ5.1C				
				C312	87-010-198-080		CAP, CHIP 0.022
	87-A40-438-080		ZENER,MTZJ4.7A	C313	87-010-179-080		CAP,CHIP S B1200P
	87-A40-234-080		ZENER,MTZJ5.6A	C314	87-010-179-080		CAP,CHIP S B1200P
	87-A40-274-010		DIODE,FMB-G16L	C315	87-010-178-080		CHIP CAP 1000P
	87-017-447-010		DIODE,GBU4DL-6419	C316	87-010-178-080		CHIP CAP 1000P

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION	REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C317	87-012-142-080		CAP,S 0.33-16	C512	87-010-196-080		CHIP CAPACITOR,0.1-25
C318	87-012-142-080		CAP,S 0.33-16	C513	87-010-374-080		CAP,ELECT 47-10V
C319	87-012-141-080		CHIP-CAPACITOR,0.22-16F	C514	87-010-196-080		CHIP CAPACITOR,0.1-25
C320	87-012-141-080		CHIP-CAPACITOR,0.22-16F	C515	87-010-263-080		CAP,ELECT 100-10V
C321	87-012-141-080		CHIP-CAPACITOR,0.22-16F	C517	87-010-183-080		CAP CHIP,S 2700P-50 B
C322	87-012-141-080		CHIP-CAPACITOR,0.22-16F	C521	87-016-460-080		C-CAP,S 0.22-16 B
C324	87-010-260-080		CAP, ELECT 47-25V	C522	87-016-460-080		C-CAP,S 0.22-16 B
C325	87-010-370-080		CAP,E 330-6.3 SME	C523	87-016-460-080		C-CAP,S 0.22-16 B
C327	87-010-404-080		CAP, ELECT 4.7-50V	C527	87-010-196-080		CHIP CAPACITOR,0.1-25
C328	87-010-404-080		CAP, ELECT 4.7-50V	C551	87-010-401-080		CAP, ELECT 1-50V
C332	87-010-196-080		CHIP CAPACITOR,0.1-25	C552	87-010-263-080		CAP, ELECT 100-10V
C335	87-010-401-080		CAP, ELECT 1-50V	C553	87-010-380-080		CAP, ELECT 47-16V
C336	87-010-401-080		CAP, ELECT 1-50V	C601	87-010-180-080		C-CER 1500P
C337	87-010-196-080		CHIP CAPACITOR,0.1-25	C602	87-010-180-080		C-CER 1500P
C339	87-010-196-080		CHIP CAPACITOR,0.1-25	C613	87-016-081-080		C-CAP,S 0.1-16 RK
C340	87-010-196-080		CHIP CAPACITOR,0.1-25	C614	87-016-081-080		C-CAP,S 0.1-16 RK
C351	87-012-140-080		CAP 470P	C619	87-010-185-080		C-CAP,S 3900P-50 B
C352	87-012-140-080		CAP 470P	C620	87-010-185-080		C-CAP,S 3900P-50 B
C354	87-010-175-080		CAP 560P	C621	87-010-401-080		CAP, ELECT 1-50V
C355	87-012-349-080		C-CAP,S 1000P-50 CH	C622	87-010-401-080		CAP, ELECT 1-50V
C356	87-010-260-080		CAP, ELECT 47-25V	C625	87-010-405-080		CAP, ELECT 10-50V
C357	87-010-197-080		CAP, CHIP 0.01 DM	C626	87-010-405-080		CAP, ELECT 10-50V
C358	87-010-183-080		C-CAP,S 2700P-50 B	C629	87-010-405-080		CAP, ELECT 10-50V
C359	87-010-183-080		C-CAP,S 2700P-50 B	C630	87-010-213-080		CAP, CHIP 0.015-25 KB GRM
C360	87-010-183-080		C-CAP,S 2700P-50 B	C631	87-010-992-080		CHIP-CAP,S 0.047-25B
C370	87-010-196-080		CHIP CAPACITOR,0.1-25	C632	87-010-263-080		CAP, ELECT 100-10V
C371	87-010-177-080		C-CAP,S 820P-50 SL	C633	87-010-263-080		CAP, ELECT 100-10V
C372	87-010-177-080		C-CAP,S 820P-50 SL	C634	87-010-196-080		CHIP CAPACITOR,0.1-25
C373	87-010-179-080		CAP, CHIP S B1200P	C635	87-010-196-080		CHIP CAPACITOR,0.1-25
C374	87-010-179-080		CAP, CHIP S B1200P	C636	87-010-194-080		CAP, CHIP 0.047
C375	87-010-545-080		CAP, ELECT 0.22-50V	C637	87-010-183-080		C-CAP,S 2700P-50 B
C376	87-010-545-080		CAP, ELECT 0.22-50V	C641	87-010-196-080		CHIP CAPACITOR,0.1-25
C378	87-010-196-080		CHIP CAPACITOR,0.1-25	C651	87-010-197-080		C-CAP,S 0.01-25 BK
C381	87-010-197-080		CAP, CHIP 0.01 DM	C667	87-010-196-080		CHIP CAPACITOR,0.1-25
C382	87-010-318-080		C-CAP,S 47P-50 CH	C701	87-010-381-080		CAP, ELECT 330-16V
C383	87-010-197-080		CAP, CHIP 0.01 DM	C702	87-010-404-080		CAP, ELECT 4.7-50V
C384	87-010-402-080		CAP, ELECT 2.2-50V	C703	87-010-197-080		CAP, CHIP 0.01 DM
C385	87-010-184-080		CHIP CAPACITOR 3300P (K)	C704	87-010-197-080		CAP, CHIP 0.01 DM
C386	87-010-196-080		CHIP CAPACITOR,0.1-25	C709	87-010-322-080		C-CAP,S 100P-50 CH
C401	87-010-401-080		CAP, ELECT 1-50V	C711	87-010-263-080		CAP, ELECT 100-10V
C402	87-010-401-080		CAP, ELECT 1-50V	C712	87-010-196-080		CHIP CAPACITOR,0.1-25
C403	87-010-182-080		C-CAP,S 2200P-50 B	C713	87-010-197-080		CAP, CHIP 0.01 DM
C404	87-010-182-080		C-CAP,S 2200P-50 B	C714	87-010-197-080		CAP, CHIP 0.01 DM
C405	87-010-193-080		CHIP CAPACITOR,0.033	C721	87-010-312-080		C-CAP,S 15P-50 CH
C406	87-010-193-080		CHIP CAPACITOR,0.033	C722	87-010-312-080		C-CAP,S 15P-50 CH
C407	87-010-405-080		CAP, ELECT 10-50V	C723	87-010-178-080		CHIP CAP 1000P
C408	87-010-405-080		CAP, ELECT 10-50V	C725	87-010-178-080		CHIP CAP 1000P
C409	87-010-380-080		CAP, ELECT 47-16V	C727	87-010-196-080		CHIP CAPACITOR,0.1-25
C410	87-010-380-080		CAP, ELECT 47-16V	C728	87-010-248-080		CAP, ELECT 220-10V
C411	87-010-405-080		CAP, ELECT 10-50V	C755	87-010-197-080		CAP, CHIP 0.01 DM
C412	87-010-112-080		CAP, ELECT 100-16V	C756	87-010-197-080		CAP, CHIP 0.01 DM
C415	87-010-184-080		CHIP CAPACITOR,3300P (K)	C757	87-010-318-080		C-CAP,S 47P-50 CH
C416	87-010-184-080		CHIP CAPACITOR,3300P (K)	C758	87-010-149-080		C-CAP,S 5P-50 CH
C453	87-010-544-080		CAP, ELECT 0.1-50V	C761	87-010-196-080		CHIP CAPACITOR,0.1-25
C454	87-010-544-080		CAP, ELECT 0.1-50V	C762	87-010-197-080		CAP, CHIP 0.01 DM
C457	87-010-402-080		CAP, ELECT 2.2-50V	C763	87-010-194-080		CAP, CHIP 0.047
C458	87-010-402-080		CAP, ELECT 2.2-50V	C764	87-010-319-080		C-CAP,S 56P-50 CH
C459	87-010-401-080		CAP, ELECT 1-50V	C765	87-010-197-080		CAP, CHIP 0.01 DM
C460	87-010-401-080		CAP, ELECT 1-50V	C766	87-010-197-080		CAP, CHIP 0.01 DM
C461	87-010-545-080		CAP, ELECT 0.22-50V	C767	87-010-405-080		CAP, ELECT 10-50V
C501	87-A10-060-080		C-CAP,S 0.18-16 KB	C768	87-010-197-080		CAP, CHIP 0.01 DM
C502	87-A10-060-080		C-CAP,S 0.18-16 KB	C769	87-010-408-080		CAP, ELECT 47-50V
C503	87-012-154-080		C-CAP,S 150P-50 CH	C770	87-015-821-080		C-CAP 0.047
C504	87-012-154-080		C-CAP,S 150P-50 CH	C771	87-010-407-080		CAP, ELECT 33-50V
C505	87-012-145-080		CAP CHIP,S 270P CH	C772	87-010-194-080		CAP, CHIP 0.047
C506	87-012-145-080		CAP CHIP,S 270P CH	C773	87-010-196-080		CHIP CAPACITOR,0.1-25
C507	87-010-183-080		CAP CHIP,S 2700P-50 B	C774	87-010-263-080		CAP, ELECT 100-10V
C509	87-010-196-080		CHIP CAPACITOR,0.1-25	C775	87-010-404-080		CAP, ELECT 4.7-50V
C510	87-010-177-080		C-CAP,S 820P-50 SL	C777	87-010-400-080		CAP, ELECT 0.47-50V
C511	87-010-177-080		C-CAP,S 820P-50 SL	C778	87-010-401-080		CAP, ELECT 1-50V

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION	REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C779	87-010-401-080		CAP, ELECT 1-50V	L941	87-A50-022-010		COIL,ANT SW (COI)7.96MHZ
C780	87-010-196-080		CHIP CAPACITOR,0.1-25	L942	87-A50-173-010		COIL,OSC SW-N (COI)
C781	87-010-405-080		CAP, ELECT 10-50V	L943	87-005-372-080		COIL S 1MHM
C782	87-010-405-080		CAP, ELECT 10-50V	L944	87-A50-159-010		COIL,10 MH K C2B
C783	87-015-819-080		CAPACITOR,0.01	L981	88-NF8-625-010		COIL,AM PACK 3N(TOK)
C784	87-010-197-080		CAP, CHIP 0.01 DM	M451	87-A90-796-010		FAN,F614R-12MC-15-30MM
C785	87-010-403-080		CAP, ELECT 3.3-50V	R123	87-022-200-080		RESISTOR, METAL 0.56 1W
C786	87-010-403-080		CAP, ELECT 3.3-50V	R237	87-A00-262-080		RES,M/F 0.15-2W J
C787	87-010-184-080		CHIP CAPACITOR,3300P (K)	R238	87-A00-262-080		RES,M/F 0.15-2W J
C788	87-010-184-080		CHIP CAPACITOR,3300P (K)	R239	87-A00-262-080		RES,M/F 0.15-2W J
C789	87-010-179-080		CAP, CHIP S B1200P	R240	87-A00-262-080		RES,M/F 0.15-2W J
C790	87-010-179-080		CAP, CHIP S B1200P	RY101	87-A90-464-010		RELAY,DGI2D2-0(M)
C791	87-010-405-080		CAP, ELECT 10-50V	SFR301	87-A90-557-080		SFR,33K H HOKU
C793	87-010-177-080		C-CAP,S 820P-50 SL	SFR302	87-A90-557-080		SFR,33K H HOKU
C794	87-010-406-080		CAP, ELECT 22-50	SFR303	87-A90-557-080		SFR,33K H HOKU
C795	87-010-596-080		CAP, S 0.047-16	SFR304	87-A90-557-080		SFR,33K H HOKU
C796	87-010-403-080		CAP, ELECT 3.3-50V	SFR305	87-A90-433-080		SFR,50K H NV26TLTA
C797	87-010-180-080		C-CER 1500P	SFR306	87-A90-433-080		SFR,50K H NV26TLTA
C798	87-010-180-080		C-CER 1500P	SFR351	87-A90-433-080		SFR,50K H NV26TLTA
C799	87-010-194-080		CAP, CHIP 0.047	SFR352	87-A90-433-080		SFR,50K H NV26TLTA
C812	87-010-197-080		CAP, CHIP 0.01 DM	TC941	87-011-220-080		TRIMMER CAP 20P VTC
C814	87-010-197-080		CAP, CHIP 0.01 DM	TC943	87-011-221-080		CAP, TRIMMER 30P
C820	87-010-408-080		CAP, ELECT 47-50V	TH201	87-A90-221-080		C-THMS,100K
C821	87-010-197-080		CAP, CHIP 0.01 DM	TH202	87-A90-221-080		C-THMS,100K
C822	87-010-197-080		CAP, CHIP 0.01 DM	W104	85-NF5-628-010		F-CABLE 7P-2.5
C823	87-010-197-080		CAP, CHIP 0.01 DM	WH101	87-A90-460-010		HLDR,WIRE 2.5-7P
C828	87-010-196-080		CHIP CAPACITOR,0.1-25	X721	87-A70-061-010		VIB,XTAL 4.500MHZ CSA-309
C829	87-010-196-080		CHIP CAPACITOR,0.1-25	X771	87-030-354-010		VIB,CER 450.0KHZ BFU C
C940	87-010-197-080		CAP, CHIP 0.01 DM				
C941	87-010-314-080		C-CAP,S 22P-50V				
C943	87-010-197-080		CAP, CHIP 0.01 DM				
C944	87-014-051-080		CAP, PP 560P	C101	87-010-263-040		CAP,E 100-10
C945	87-010-197-080		CAP, CHIP 0.01 DM	C102	87-010-196-080		CHIP CAPACITOR,0.1-25
C947	87-010-197-080		CAP, CHIP 0.01 DM	C103	87-010-196-080		CHIP CAPACITOR,0.1-25
C950	87-014-073-080		CAP, PP 4700-100J	C104	87-010-494-040		CAP,E 1-50 GAS
C952	87-010-197-080		CAP, CHIP 0.01 DM	C105	87-010-178-080		CHIP CAP 1000P
C953	87-010-197-080		CAP, CHIP 0.01 DM	C106	87-A10-189-040		CAP,E 220-10
C954	87-010-400-080		CAP, E 0.47-50	C107	87-010-197-080		CAP, CHIP 0.01 DM
C956	87-010-263-080		CAP, E 100-10	C108	87-010-196-080		CHIP CAPACITOR,0.1-25
C959	87-010-196-080		CHIP CAPACITOR,0.1-25	C109	87-010-194-080		CAP, CHIP 0.047
C960	87-010-196-080		CHIP CAPACITOR,0.1-25	C110	87-012-157-080		C-CAP,S 330P-50 CH
C962	87-010-401-080		CAP, E 1-50V	C111	87-010-320-080		CHIP CAP 68P
CF801	87-008-261-010		FILTER, SFE10.7MA5-A	C112	87-010-312-080		C-CAP,S 15P-50 CH
CF802	87-008-261-010		FILTER, SFE10.7MA5-A	C113	87-010-316-080		C-CAP,S 33P-50 CH
CN301	87-099-827-010		CONN,3P S2M-3W	C114	87-010-182-080		C-CAP,S 2200P-50 B
CN351	87-099-832-010		CONN,8P S2M-8W	C115	87-010-182-080		C-CAP,S 2200P-50 B
CN451	87-A60-130-010		CONN,5P VFE	C116	87-010-075-040		CAP,E 10-16 5L
CN551	87-A60-109-010		CONN,2P V S2M-2W	C117	87-012-157-080		C-CAP,S 330P-50 CH
CN601	87-099-719-010		CONN,30P TYK-B(X)	C118	87-010-196-080		CHIP CAPACITOR,0.1-25
CN602	87-A60-131-010		CONN,6P VFE	C119	87-010-196-080		CHIP CAPACITOR,0.1-25
FB601	87-A50-190-080		C-COIL,S BLM21A102S	C120	87-010-196-080		CHIP CAPACITOR,0.1-25
FC451	88-905-361-110		FF-CABLE,5P 1.25 360MM	C121	87-010-194-080		CAP, CHIP 0.047
FC602	85-NF5-617-010		FF-CABLE,6P 1.25	C122	87-010-194-080		CAP, CHIP 0.047
FFE801	A8-8ZA-190-030		8ZA-1 FEUNM	C124	87-010-555-040		CAP,E 100-10 GAS
J211	87-A60-483-010		JACK,DIA6.3 BLK ST W/S KM	C125	87-010-196-080		CHIP CAPACITOR,0.1-25
J203	87-033-240-010		TERMINAL,SP 4P32SV1-05	C201	87-010-178-080		CHIP CAP 1000P
J601	87-A60-426-010		JACK,PIN 6P YKC21-3835	C202	87-010-194-080		CAP, CHIP 0.047
J801	87-A60-202-010		TERMINAL,ANT 4P MSP-154V02	C203	87-010-408-040		CAP,E 47-50 SME
J940	81-754-629-010		CONNECTOR XH 2P (UL)	C204	87-010-404-040		CAP,E 4.7-50 SME
L201	87-003-383-010		COIL,1UH-S	C205	87-010-404-040		CAP,E 4.7-50 SME
L202	87-003-383-010		COIL,1UH-S	C211	87-012-140-080		C-CAP,S 470P-50CH
L301	87-A50-049-010		COIL,TRAP 85K(COI)	C216	87-012-156-080		C-CAP,S 220P-50CH
L302	87-A50-049-010		COIL,TRAP 85K(COI)	C219	87-012-156-080		C-CAP,S 220P-50CH
L351	87-007-342-010		COIL,OSC 85K BIAS	C220	87-012-156-080		C-CAP,S 220P-50CH
L771	87-A50-266-010		COIL,FM DET-2N(TOK)	C221	87-012-156-080		C-CAP,S 220P-50CH
L772	87-A90-052-010		FLTR,CFMT-450A	C222	87-012-156-080		C-CAP,S 220P-50CH
L781	87-005-847-080		COIL,2.2UH(CECS)	C223	87-012-156-080		C-CAP,S 220P-50CH
L791	87-A50-027-010		COIL,1 POLE MPX (TOK)	C371	87-010-196-080		CHIP CAPACITOR,0.1-25
L792	87-A50-027-010		COIL,1 POLE MPX (TOK)	C372	87-010-196-080		CHIP CAPACITOR,0.1-25
L832	86-NFZ-694-080		COIL,2.2UH K CECS	C373	87-010-196-080		CHIP CAPACITOR,0.1-25

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION	REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C374	87-010-196-080		CHIP CAPACITOR,0.1-25	LED412	87-A90-931-080		LED,SLR-342VCTC7 RED
C375	87-010-196-080		CHIP CAPACITOR,0.1-25	LED413	87-A90-931-080		LED,SLR-342VCTC7 RED
C376	87-012-158-080		C-CAP,S 390P-50 CH	LED414	87-A90-931-080		LED,SLR-342VCTC7 RED
C377	87-010-196-080		CHIP CAPACITOR,0.1-25	LED415	87-A90-931-080		LED,SLR-342VCTC7 RED
C402	87-010-196-080		CHIP CAPACITOR,0.1-25	LED416	87-A40-446-040		LED,SLP-7131F-81H-S-T1 P-GRN
C404	87-010-196-080		CHIP CAPACITOR,0.1-25	LED417	87-A40-446-040		LED,SLP-7131F-81H-S-T1 P-GRN
C406	87-010-196-080		CHIP CAPACITOR,0.1-25	LED418	87-A40-446-040		LED,SLP-7131F-81H-S-T1 P-GRN
C408	87-010-196-080		CHIP CAPACITOR,0.1-25	LED419	87-A40-446-040		LED,SLP-7131F-81H-S-T1 P-GRN
C501	87-010-319-080		C-CAP,S 56P-50 CH	LED420	87-A40-446-040		LED,SLP-7131F-81H-S-T1 P-GRN
C502	87-010-319-080		C-CAP,S 56P-50 CH	LED421	87-A40-446-040		LED,SLP-7131F-81H-S-T1 P-GRN
C503	87-012-393-080		C-CAP,S 0.22-16 R K	LED422	87-A40-446-040		LED,SLP-7131F-81H-S-T1 P-GRN
C504	87-010-197-080		CAP, CHIP 0.01 DM	LED423	87-A40-446-040		LED,SLP-7131F-81H-S-T1 P-GRN
C505	87-010-180-080		C-CER 1500P	LED424	87-A40-446-040		LED,SLP-7131F-81H-S-T1 P-GRN
C506	87-010-213-080		C-CAP,S 0.015-50 B	LED425	87-A40-446-040		LED,SLP-7131F-81H-S-T1 P-GRN
C507	87-010-213-080		C-CAP,S 0.015-50 B	LED426	87-A40-446-040		LED,SLP-7131F-81H-S-T1 P-GRN
C508	87-010-197-080		CAP, CHIP 0.01 DM	LED427	87-A40-446-040		LED,SLP-7131F-81H-S-T1 P-GRN
C509	87-010-181-080		CAP,CHIP S 1800P	LED428	87-017-350-080		LED,SEL1550CM
C510	87-010-196-080		CHIP CAPACITOR,0.1-25	LED429	87-017-350-080		LED,SEL1550CM
C511	87-010-544-040		CAP,E 0.1-50 SME	LED430	87-017-350-080		LED,SEL1550CM
C512	87-010-374-040		CAP,E 47-10	LED431	87-017-350-080		LED,SEL1550CM
C513	87-010-401-040		CAP,E 1-50 SME	LED432	87-017-350-080		LED,SEL1550CM
C514	87-010-401-040		CAP,E 1-50 SME	LED433	87-017-350-080		LED,SEL1550CM
C515	87-010-183-080		C-CAP,S 2700P-50 B	LED434	87-017-350-080		LED,SEL1550CM
C516	87-010-183-080		C-CAP,S 2700P-50 B	LED435	87-017-350-080		LED,SEL1550CM
C518	87-010-196-080		CHIP CAPACITOR,0.1-25	LED436	87-017-350-080		LED,SEL1550CM
C519	87-010-264-040		CAP,E 100-10 5L	LED437	87-017-350-080		LED,SEL1550CM
C523	87-012-141-080		CHIP-CAPACITOR,0.22-16F	LED444	87-070-278-010		LED,SLZ-738A-24-S
C601	87-010-405-040		CAP,E 10-50	LED445	87-070-290-010		LED,SLZ 936-30-S
C602	87-010-186-080		CAP,CHIP 4700P	LED446	87-070-278-010		LED,SLZ-738A-24-S
C603	87-010-378-040		CAP,E 10-16	LED447	87-070-278-010		LED,SLZ-738A-24-S
C604	87-010-382-040		CAP,E 22-25 SME	LED448	87-070-290-010		LED,SLZ 936-30-S
C605	87-010-196-080		CHIP CAPACITOR,0.1-25	LED449	87-070-278-010		LED,SLZ-738A-24-S
C607	87-010-321-080		CHIP CAPACITOR,82P(J)	S101	87-A90-894-010		SW,RTRY EC12E12444 ENCODER
C608	87-010-196-080		CHIP CAPACITOR,0.1-25	S102	87-A90-535-010		SW,RTRY EC16B24304
C609	87-010-545-040		CAP,E 0.22-50 SME	S301	87-A90-095-080		SW,TACT EVQ11G04M
C611	87-010-177-080		C-CAP,S 820P-50 SL	S302	87-A90-095-080		SW,TACT EVQ11G04M
C614	87-A10-189-040		CAP,E 220-10	S303	87-A90-095-080		SW,TACT EVQ11G04M
C651	87-010-401-040		CAP,E 1-50 SME	S304	87-A90-095-080		SW,TACT EVQ11G04M
C652	87-010-196-080		CHIP CAPACITOR,0.1-25	S305	87-A90-095-080		SW,TACT EVQ11G04M
C653	87-010-196-080		CHIP CAPACITOR,0.1-25	S306	87-A90-095-080		SW,TACT EVQ11G04M
C901	87-010-263-040		CAP,E 100-10	S307	87-A90-095-080		SW,TACT EVQ11G04M
C902	87-010-196-080		CHIP CAPACITOR,0.1-25	S308	87-A90-095-080		SW,TACT EVQ11G04M
C903	87-010-313-080		CAP, CHIP 18P	S309	87-A90-095-080		SW,TACT EVQ11G04M
C904	87-012-155-080		C-CAP 180P-50CH	S310	87-A90-095-080		SW,TACT EVQ11G04M
C905	87-010-400-040		CAP,E 0.47-50	S311	87-A90-095-080		SW,TACT EVQ11G04M
CN301	87-A60-131-010		CONN,6P V FE	S312	87-A90-095-080		SW,TACT EVQ11G04M
CN502	87-A60-586-010		CONN,4P V FE	S313	87-A90-095-080		SW,TACT EVQ11G04M
CN701	87-A60-140-010		CONN,15P V FE	S314	87-A90-095-080		SW,TACT EVQ11G04M
CN801	87-A60-138-010		CONN,13P V FE	S321	87-A90-095-080		SW,TACT EVQ11G04M
FB601	87-008-372-080		FILTER, EMI BL OIRNI	S322	87-A90-095-080		SW,TACT EVQ11G04M
FC301	88-906-151-110		FF-CABLE,6P 1.25	S323	87-A90-095-080		SW,TACT EVQ11G04M
FC501	88-915-221-110		FF-CABLE,15P 1.25 220MM	S324	87-A90-095-080		SW,TACT EVQ11G04M
FC502	88-904-191-110		FF-CABLE,4P 1.25	S325	87-A90-095-080		SW,TACT EVQ11G04M
FC801	85-NF5-618-010		CABLE,FFC 13P-1.25	S326	87-A90-095-080		SW,TACT EVQ11G04M
FL201	88-NF5-611-010		FL,BJ609GK	S327	87-A90-095-080		SW,TACT EVQ11G04M
J601	87-A60-651-010		JACK,3.5MONO	S328	87-A90-095-080		SW,TACT EVQ11G04M
J602	87-A60-651-010		JACK,3.5MONO	S330	87-A90-095-080		SW,TACT EVQ11G04M
L501	87-005-448-080		COIL 220UH,K	S333	87-A90-095-080		SW,TACT EVQ11G04M
L901	87-A50-050-010		COIL,CLOCK 4.19M (COI)	S341	87-A90-095-080		SW,TACT EVQ11G04M
LED401	87-A90-930-080		LED,SLR-342PCTC7 GRN	S342	87-A90-095-080		SW,TACT EVQ11G04M
LED402	87-A90-930-080		LED,SLR-342PCTC7 GRN	S343	87-A90-095-080		SW,TACT EVQ11G04M
LED403	87-A90-930-080		LED,SLR-342PCTC7 GRN	S344	87-A90-095-080		SW,TACT EVQ11G04M
LED404	87-A90-930-080		LED,SLR-342PCTC7 GRN	S345	87-A90-095-080		SW,TACT EVQ11G04M
LED405	87-A90-930-080		LED,SLR-342PCTC7 GRN	S346	87-A90-095-080		SW,TACT EVQ11G04M
LED406	87-A90-930-080		LED,SLR-342PCTC7 GRN	S347	87-A90-095-080		SW,TACT EVQ11G04M
LED407	87-A90-930-080		LED,SLR-342PCTC7 GRN	S348	87-A90-095-080		SW,TACT EVQ11G04M
LED408	87-A90-930-080		LED,SLR-342PCTC7 GRN	S349	87-A90-095-080		SW,TACT EVQ11G04M
LED409	87-A90-930-080		LED,SLR-342PCTC7 GRN	S350	87-A90-095-080		SW,TACT EVQ11G04M
LED410	87-A90-930-080		LED,SLR-342PCTC7 GRN	X101	87-A70-070-080		VIB,CER 5.76MHZ CRHF
LED411	87-A90-931-080		LED,SLR-342VCTC7 RED				

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
KEY C.B			
CN302	87-A60-154-010	CONN,6P H FE	
S351	87-A90-095-080	SW,TACT EVQ11G04M	
S352	87-A90-095-080	SW,TACT EVQ11G04M	
S353	87-A90-095-080	SW,TACT EVQ11G04M	
S354	87-A90-095-080	SW,TACT EVQ11G04M	
S355	87-A90-095-080	SW,TACT EVQ11G04M	
LED438	87-070-201-080	LED,SLP9118C-51-S-T1	
LED439	87-070-201-080	LED,SLP9118C-51-S-T1	
LED440	87-070-201-080	LED,SLP9118C-51-S-T1	
LED441	87-070-201-080	LED,SLP9118C-51-S-T1	
LED442	87-070-201-080	LED,SLP9118C-51-S-T1	
LED443	87-070-201-080	LED,SLP9118C-51-S-T1	
HI-AMP C.B			
C101	87-012-368-080	C-CAP,S 0.1-50 F	
C102	87-012-368-080	C-CAP,S 0.1-50 F	
C103	87-A10-520-090	CAP,E 3300-35 M SMG	
C104	87-A10-520-090	CAP,E 3300-35 M SMG	
C106	87-010-178-080	CHIP CAP 1000P	
C201	87-010-112-080	CAP, ELECT 100-16V	
C202	87-010-378-080	CAP, ELECT 10-16V	
C207	87-010-401-080	CAP, ELECT 1-50V	
C208	87-010-401-080	CAP, ELECT 1-50V	
C209	87-010-179-080	CAP,CHIP S B1200P	
C210	87-010-179-080	CAP,CHIP S B1200P	
C211	87-010-545-080	CAP, ELECT 0.22-50V	
C212	87-010-545-080	CAP, ELECT 0.22-50V	
C213	87-010-184-080	CHIP CAPACITOR 3300P(K)	
C214	87-010-184-080	CHIP CAPACITOR 3300P(K)	
C217	87-010-402-080	CAP, ELECT 2.2-50V	
C218	87-010-402-080	CAP, ELECT 2.2-50V	
C219	87-A10-596-080	C-CAP,S 100P-100 J CH	
C220	87-A10-596-080	C-CAP,S 100P-100 J CH	
C221	87-A10-899-080	CAP, E 47-25 M BP SME	
C222	87-A10-899-080	CAP, E 47-25 M BP SME	
C223	87-010-544-080	CAP, ELECT 0.1-50V	
C224	87-010-544-080	CAP, ELECT 0.1-50V	
C225	87-010-993-080	C-CAP,S 0.056-25 B	
C226	87-010-993-080	C-CAP,S 0.056-25 B	
C227	87-010-196-080	CHIP CAPACITOR,0.1-25	
C228	87-010-196-080	CHIP CAPACITOR,0.1-25	
C231	87-010-186-080	CAP,CHIP 4700P	
C232	87-010-186-080	CAP,CHIP 4700P	
C234	87-016-285-080	CAP,E 47-100SME	
C235	87-016-285-080	CAP,E 47-100SME	
C237	87-010-196-080	CHIP CAPACITOR,0.1-25	
C240	87-010-196-080	CHIP CAPACITOR,0.1-25	
C243	87-010-196-080	CHIP CAPACITOR,0.1-25	
CN102	87-049-919-010	CONN,3P EH V WHT	
CN201	87-A60-130-010	CONN,5P V FE	
J201	87-A60-545-010	JACK,PIN 4P W/R	
L201	87-003-383-010	COIL,1UH-S	
L202	87-003-383-010	COIL,1UH-S	
R243	87-A00-258-080	RES,M/F 0.22-1W J	
R244	87-A00-258-080	RES,M/F 0.22-1W J	
R245	87-A00-258-080	RES,M/F 0.22-1W J	
R246	87-A00-258-080	RES,M/F 0.22-1W J	
RY101	87-045-382-010	RELAY,OUAZ-SH-112L	

AC1 C.B

△ F101	87-035-458-010	FUSE,4A 250V T W/C
△ F102	87-035-458-010	FUSE,4A 250V T W/C
△ FC1	87-033-147-010	FUSE CLAMP,MT-20
△ FC2	87-033-147-010	FUSE CLAMP,MT-20
△ FC3	87-033-147-010	FUSE CLAMP,MT-20
△ FC4	87-033-147-010	FUSE CLAMP,MT-20

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
△ PT101	88-NF5-603-010	PT,HE EI96-60 8NF-5	
△ SW101	87-A90-165-010	SW,SL 1-2-3 SWS2301	
△ T1	87-A60-317-010	TERMINAL, 1P MSC	
△ T2	87-A60-317-010	TERMINAL, 1P MSC	
AC2 C.B			
△ PR101	87-026-682-080	PROTECTOR,10A 60V491	
△ PR102	87-026-682-080	PROTECTOR,10A 60V491	
△ PR103	87-026-682-080	PROTECTOR,10A 60V491	
△ PR104	87-026-682-080	PROTECTOR,10A 60V491	
△ PR105	87-A90-195-080	PROTECTOR,7A 125V 49C	
△ PR106	87-A90-195-080	PROTECTOR,7A 125V 49C	
WH102	87-A90-460-010	HLDR.WIRE 2.5-7P	

DECK C.B

CON105	87-099-756-019	CONN, 15P 9604 S F
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	87-036-110-010	SW,MICRO SPPB62
SW5	87-036-110-010	SW,MICRO SPPB62
SW6	87-036-110-010	SW,MICRO SPPB62
SW8	87-A90-248-019	SW,MICRO ESE11SH2CXQ
SW9	87-A90-248-019	SW,MICRO ESE11SH2CXQ
W001	82-ZM3-601-019	RBN,CORD,4P-75

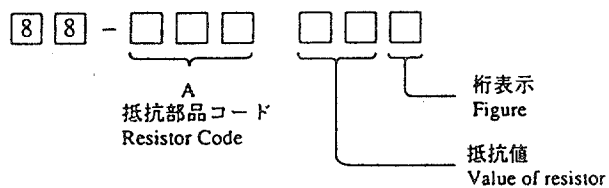
HEAD-1 C.B

HEAD-2 C.B

CON351	87-NF6-616-010	CONN ASSY,8P-RPB
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○ チップ抵抗部品コード／CHIP RESISTOR PART CODE

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



チップ抵抗
Chip resistor

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

TRANSISTOR ILLUSTRATION



E C B

KTA1266GR
KTC3198GR



E C B

CC5551



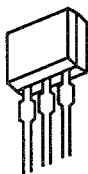
E C B

2SA1296



B C E

2SB1370
2SB1625
2SD2494
FN1016
FP1016



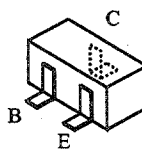
E C B

2SA933
2SC4115

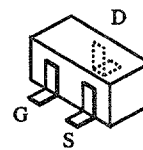


G D S

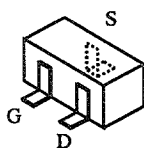
2SK2937



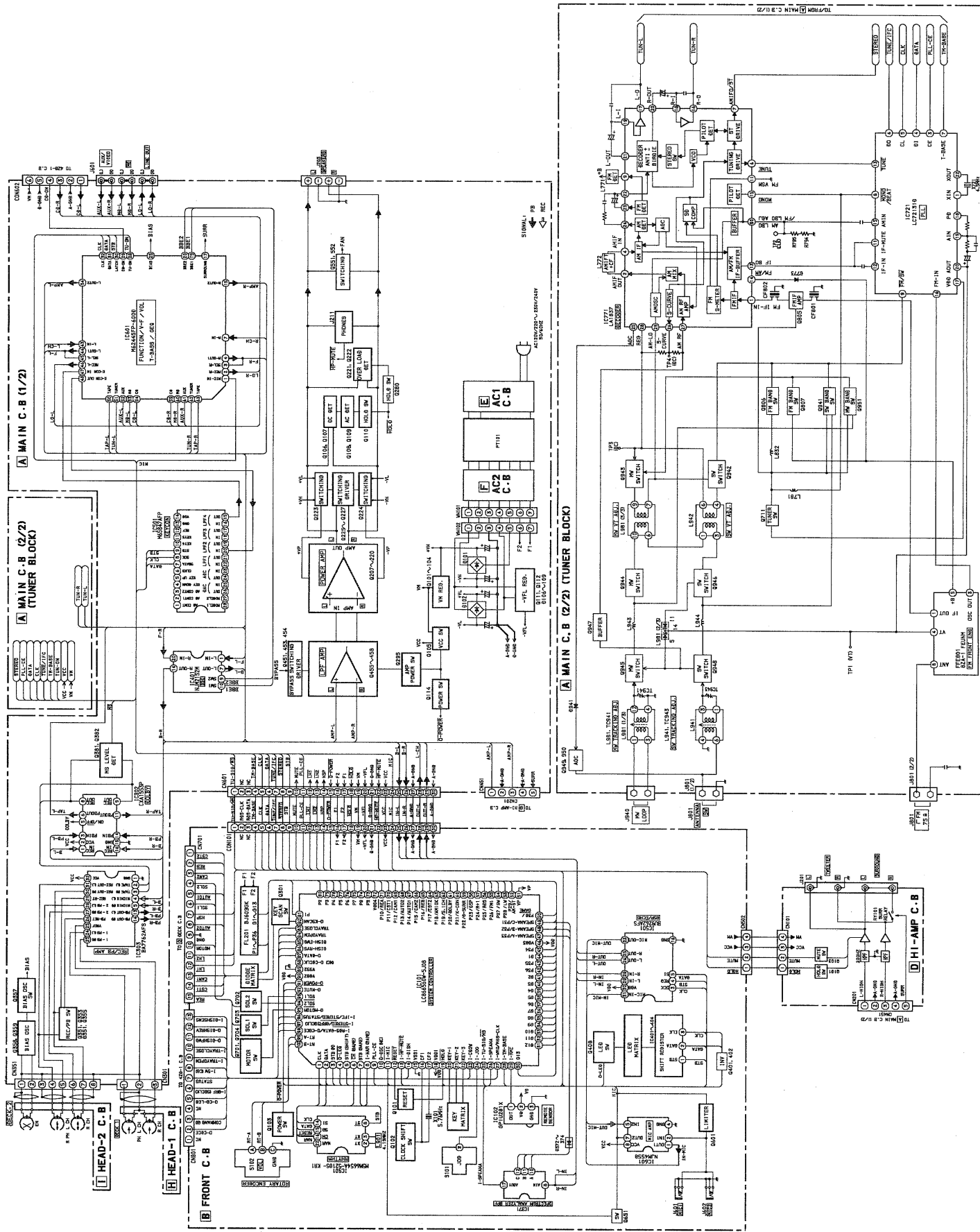
2SA1235F DTA144WK
2SC2714 KTA1298
2SC3052F RN1410
CMBT5401 RT1N141C
CMBT5551 RT1N144C
CSA1362GR RT1P141C
CSD1306E RT1P144C
DTA123EKA RT1P441C
DTA123JK



2SK2158



2SK543-TB(4/5)

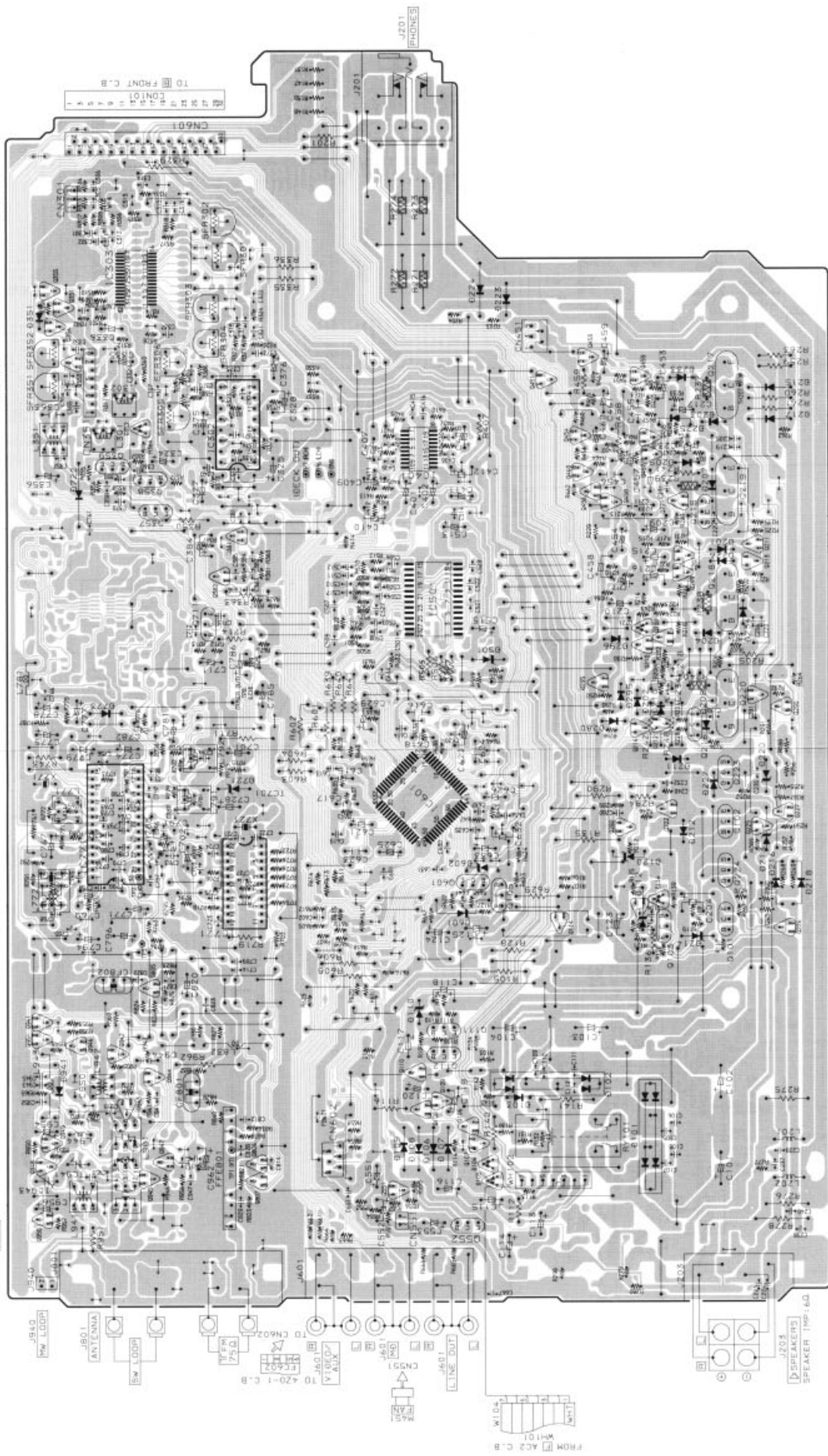


1 2 3 4 5 6 7 8 9 10 11 12 13 14

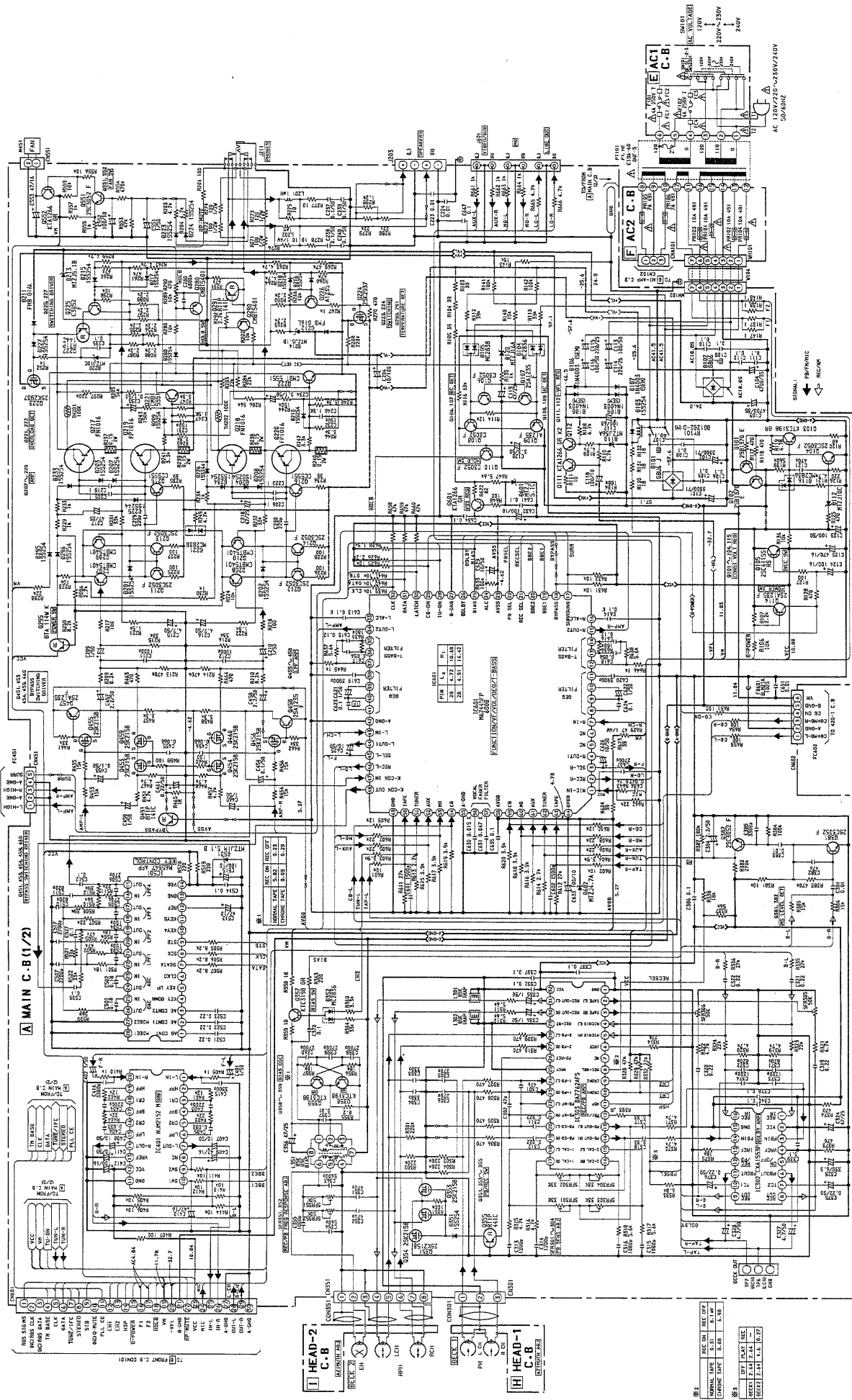
A MAIN C.B

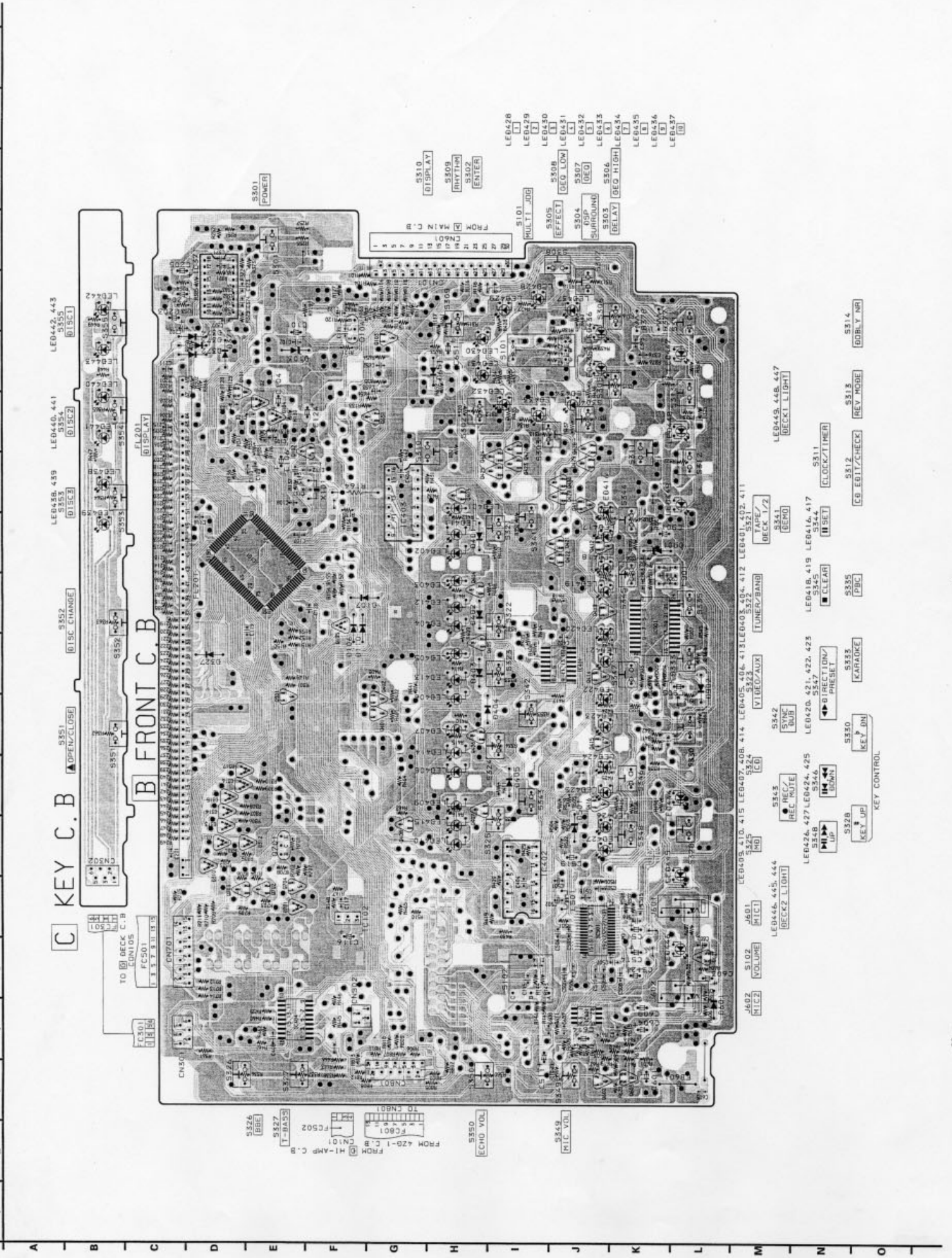
FROM HEAD-2 C.B
CN451
TO CN501

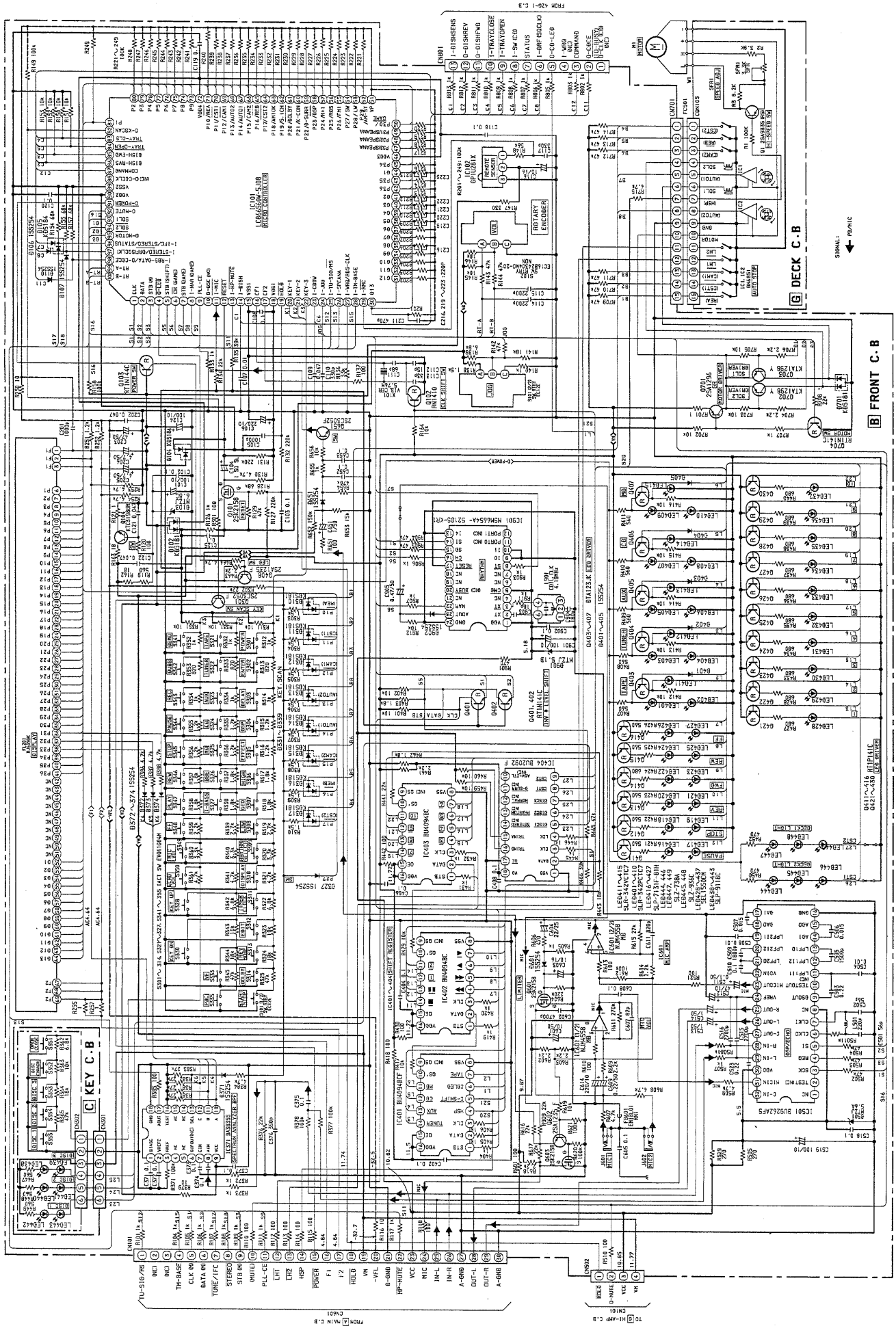
FROM HEAD-1 C.B
CN401
TO CN501



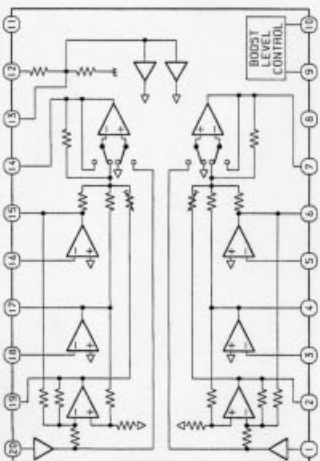
FROM HEAD-1 C.B
CN451
TO CN501



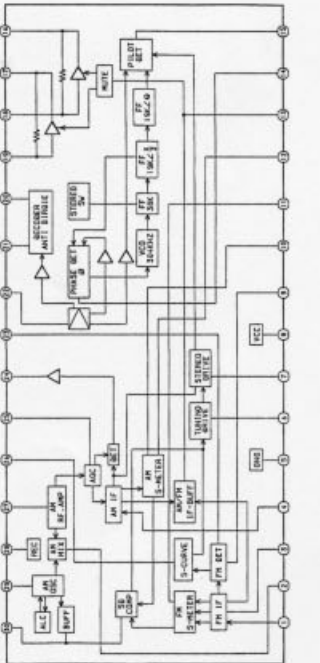




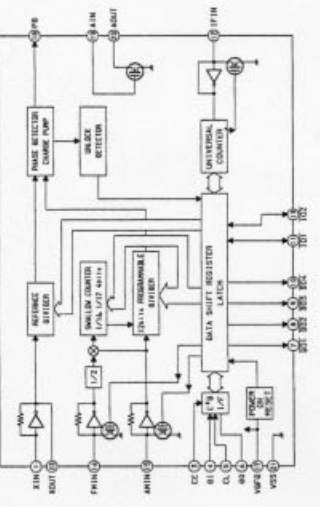
IC, NM2152M



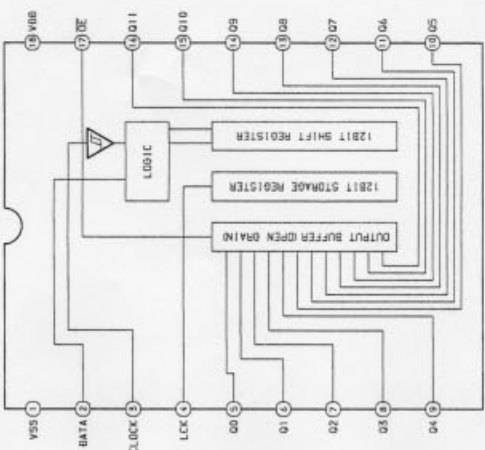
IC, LA1837NL



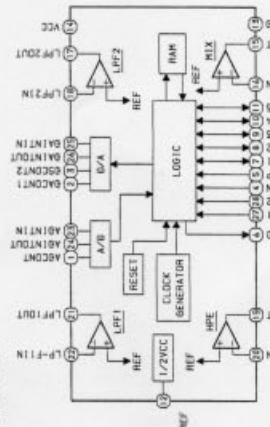
IC, LC72131D



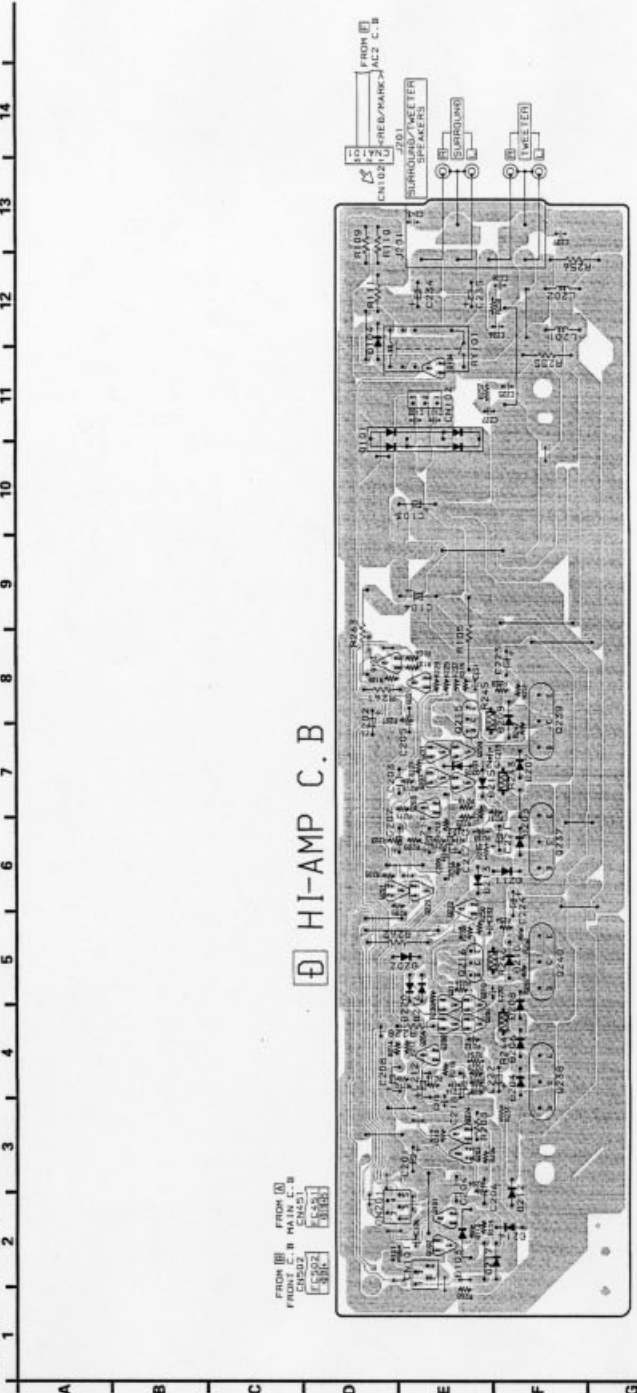
IC, BU2092F



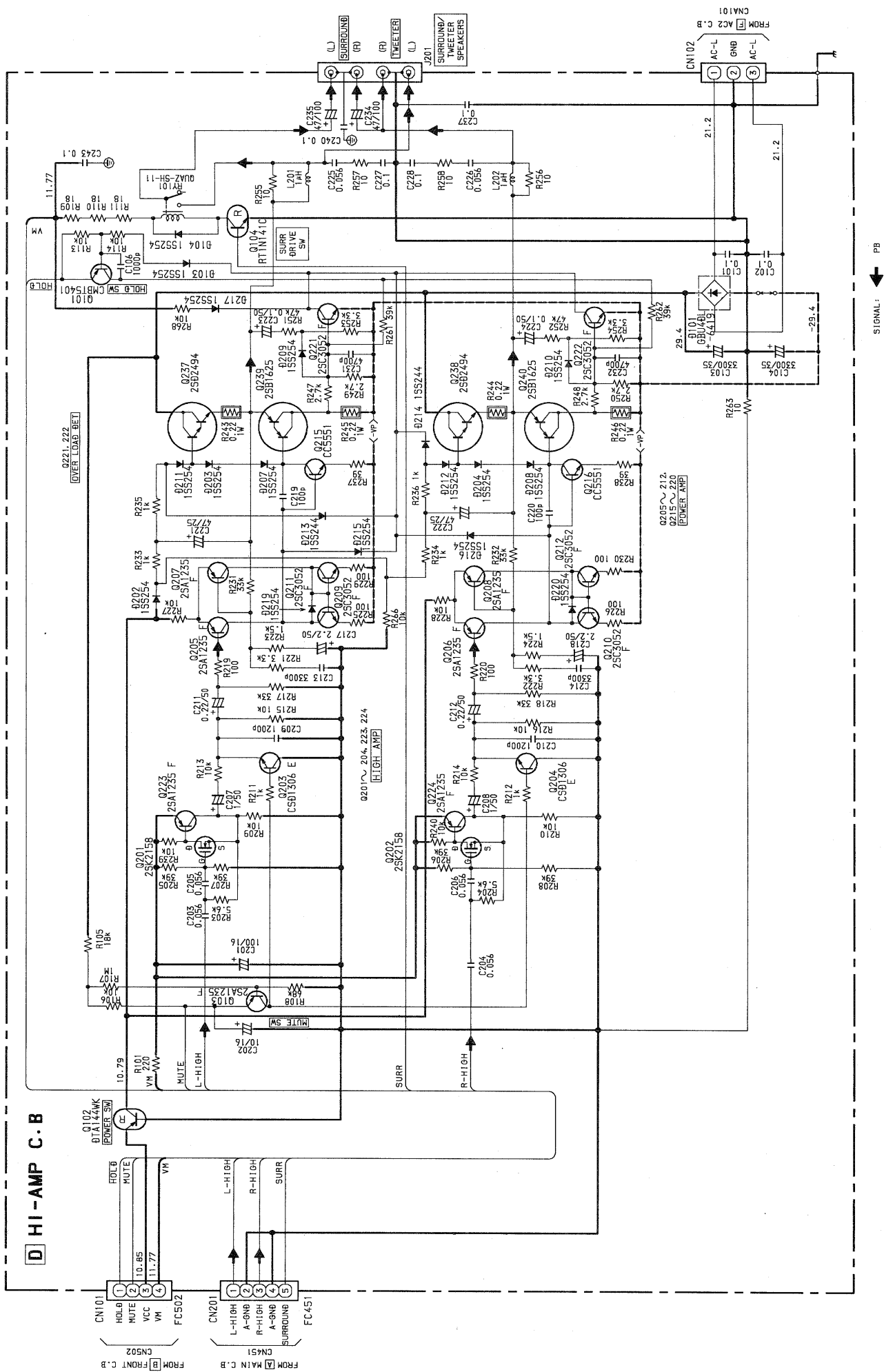
IC, M65847AFP

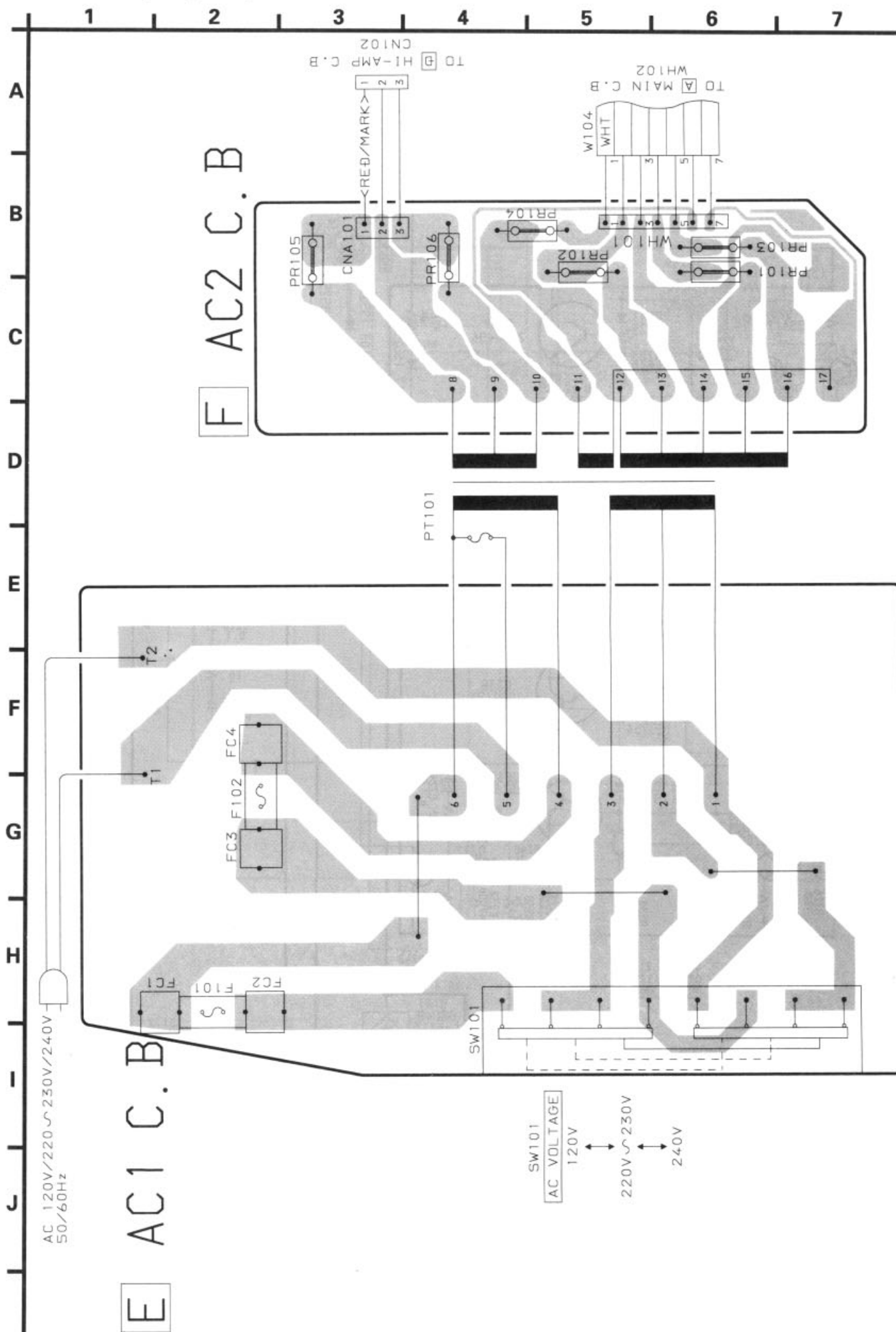


WIRING - 3 (HI - AMP)

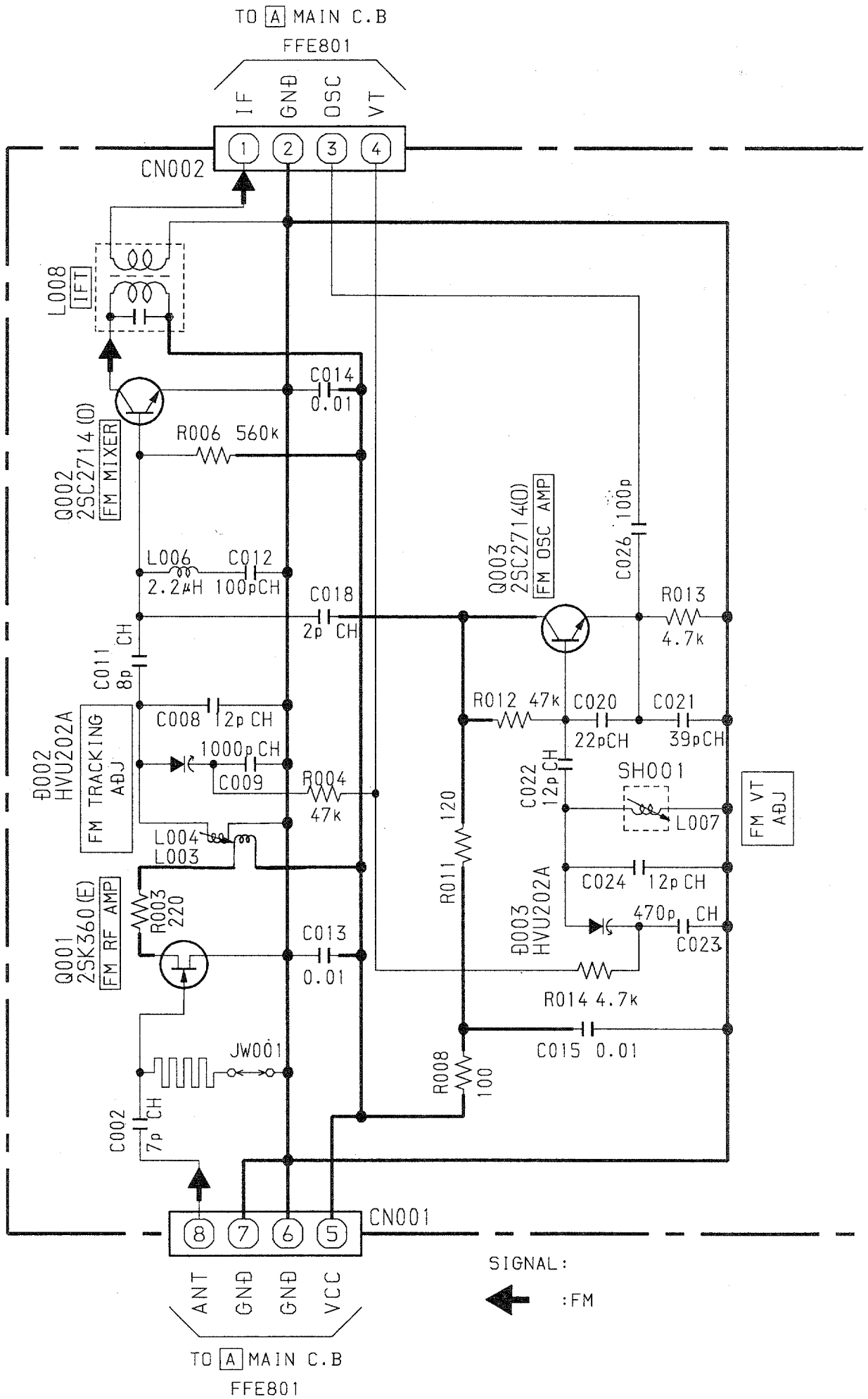


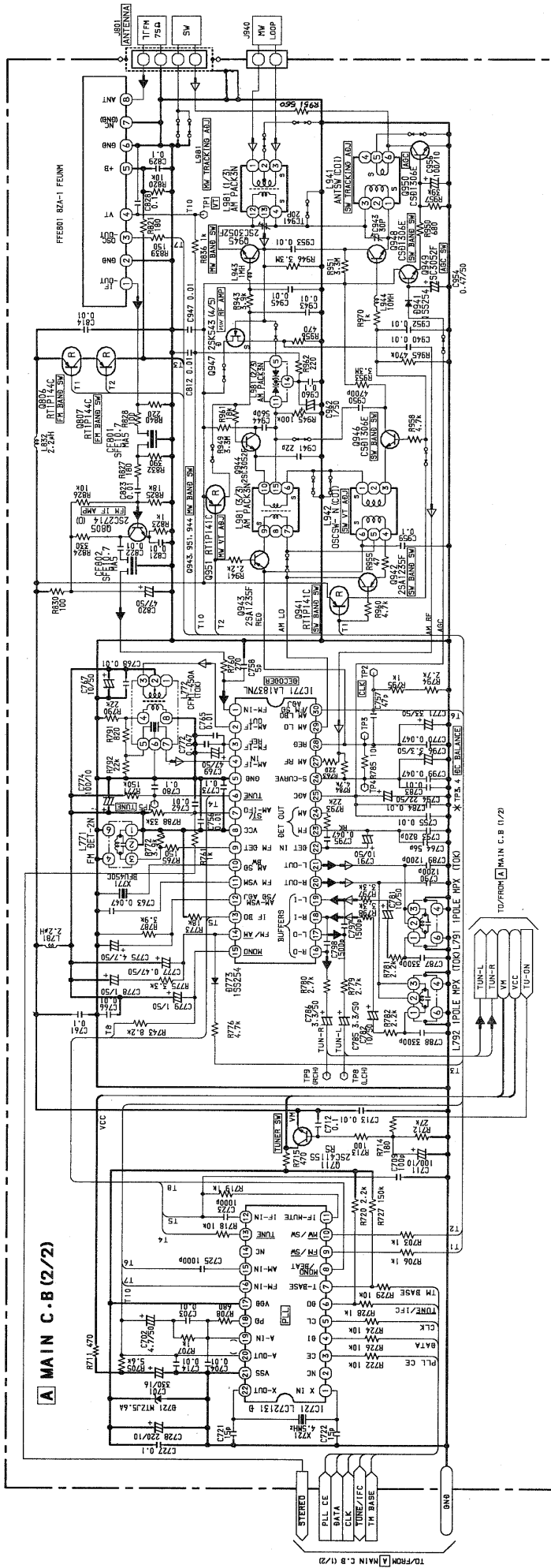
HI-AMP C.B





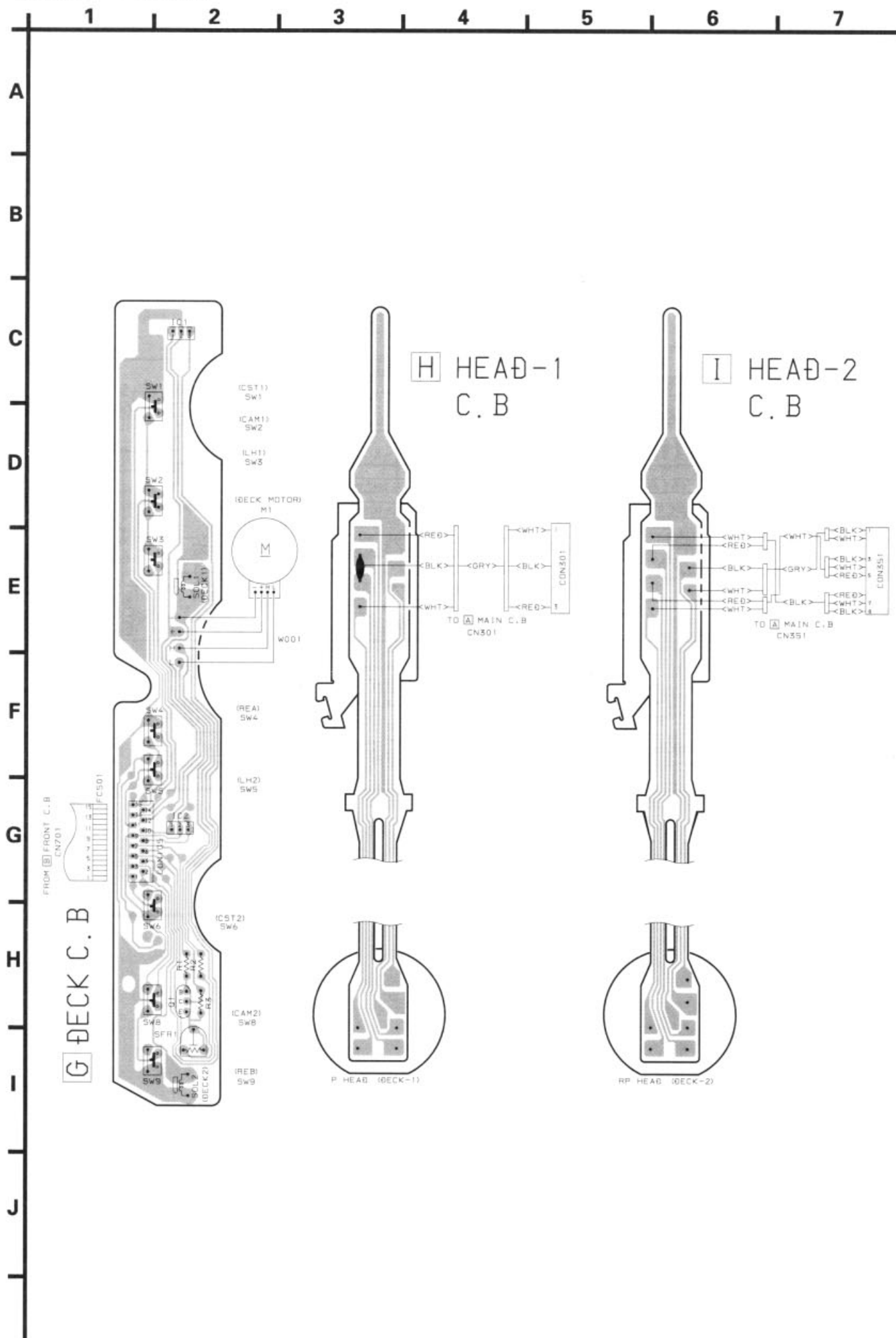
SCHEMATIC DIAGRAM – 4 (TUNER FRONT END)





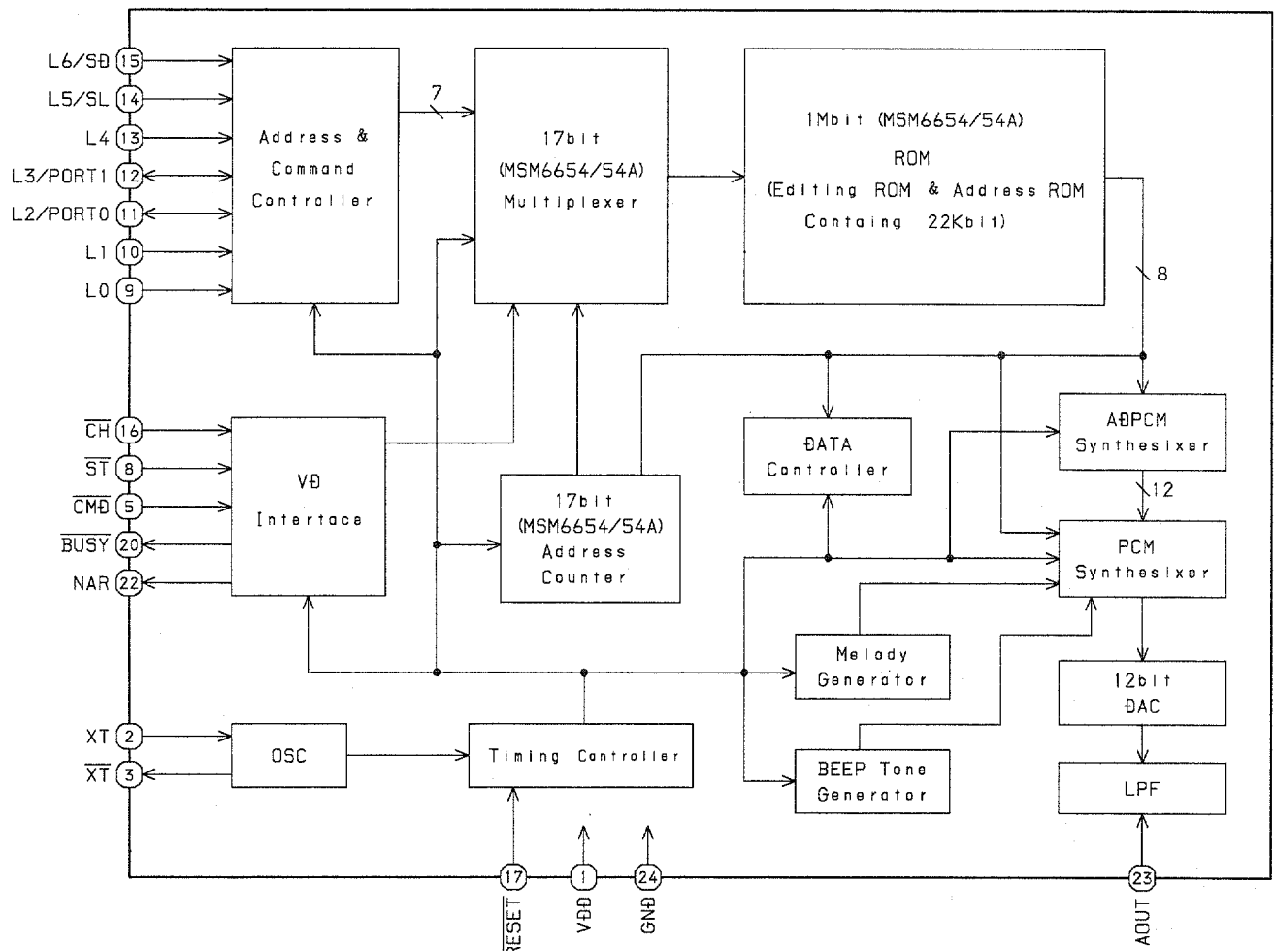
SIGNAL: FM AM

WIRING - 5 (DECK)

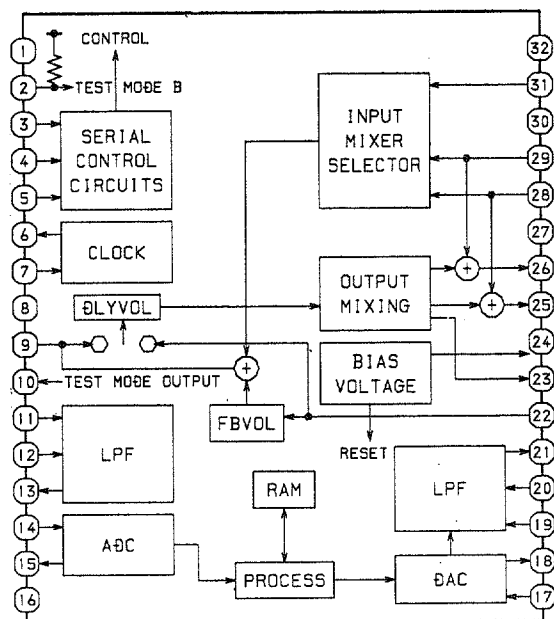


IC BLOCK DIAGRAM – 2

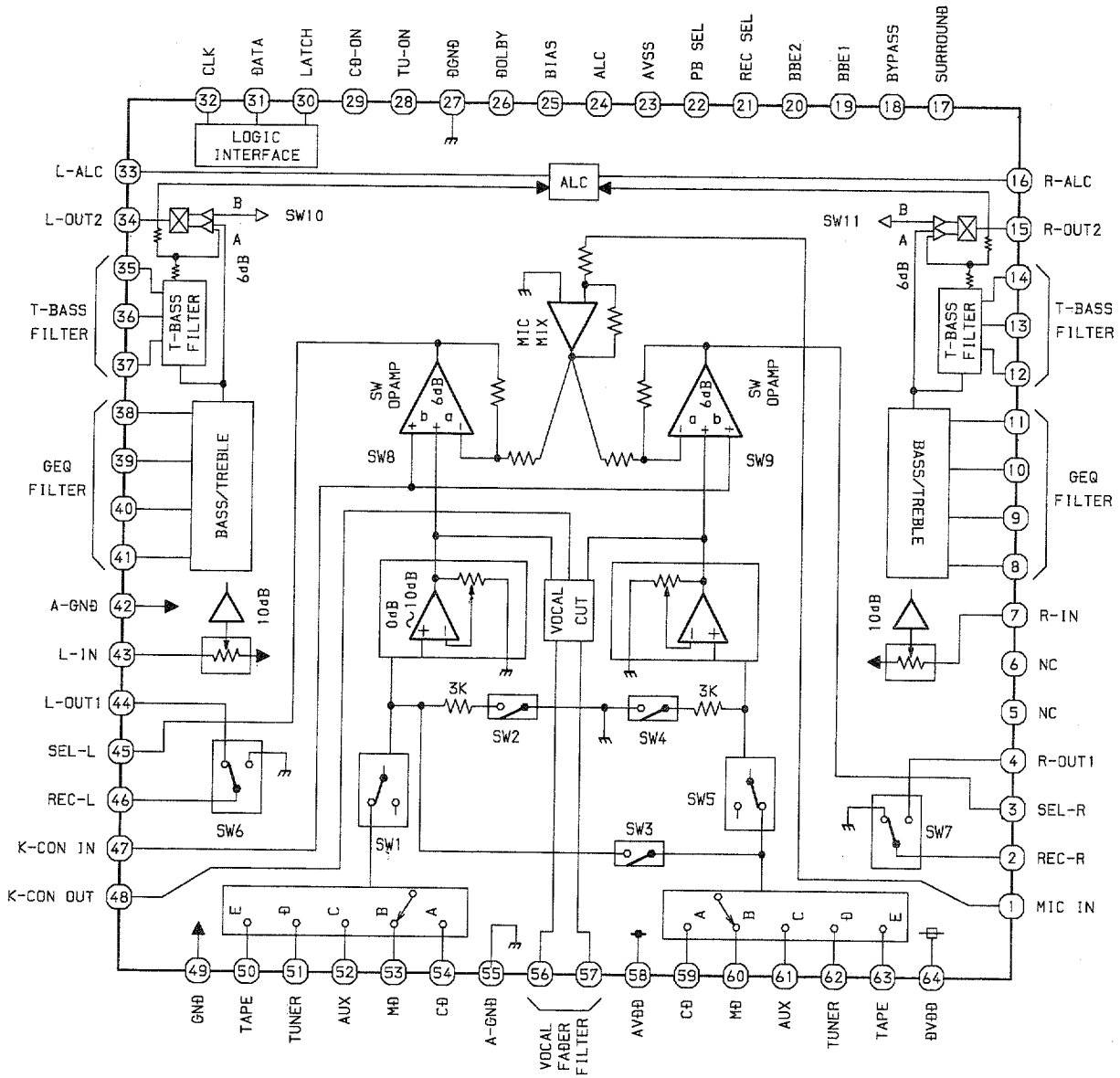
IC, MSM6654A-521GS-KR1



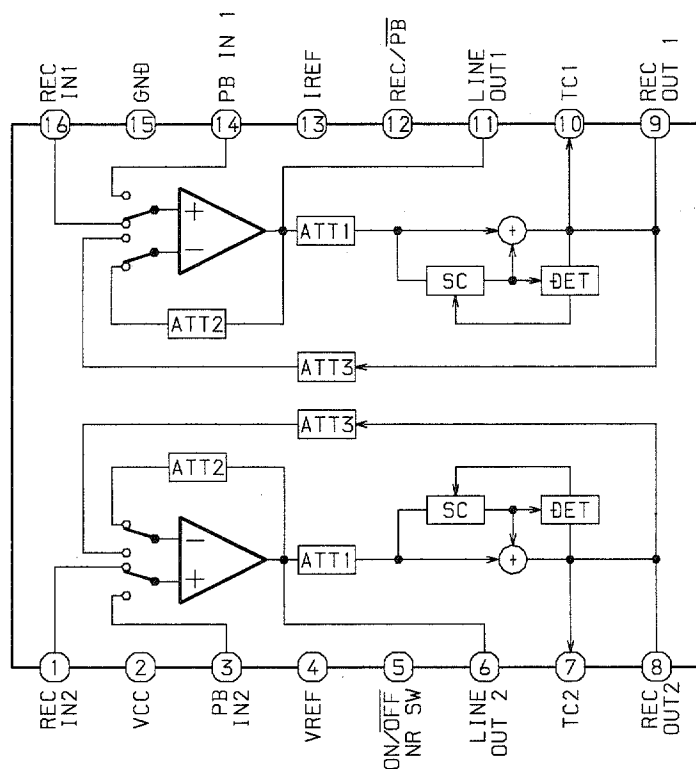
IC, BU9262AFS



IC, M62445FP-600D

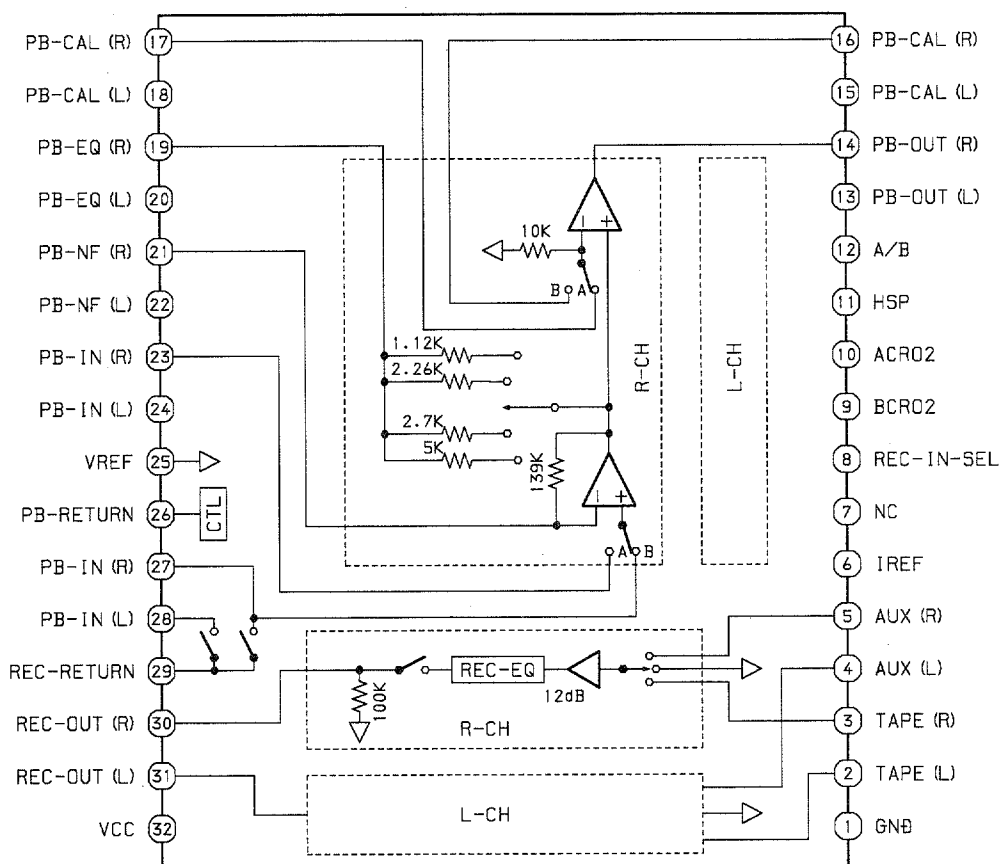


IC, CXA1533P

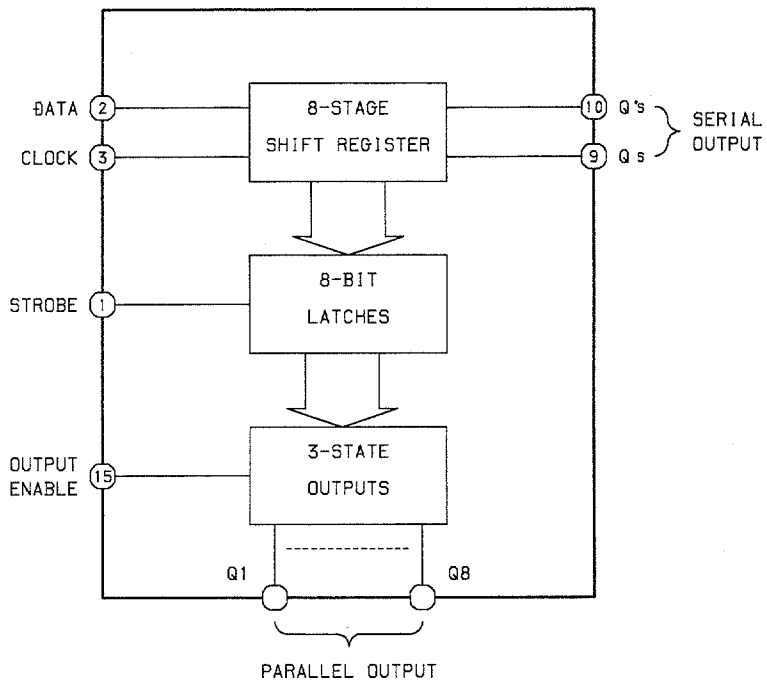


ATT:Attenuator
SC:Side Chain
DET:Detector

IC, BA7762AFS



IC, BU4094BCF/BCP



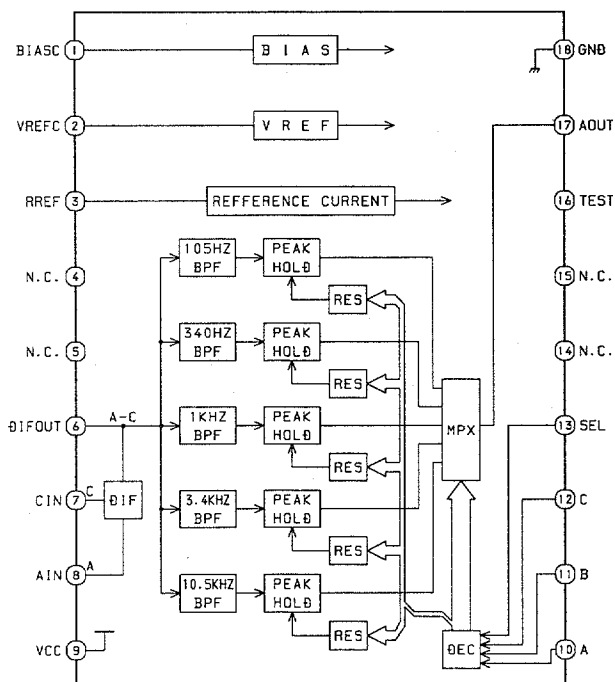
TRUTH TABLE

CLOCK	OUTPUT ENABLE	STROBE	DATA	PARALLEL OUTPUTS		SERIAL OUTPUTS	
				Q1	Qn	Qs	Q's
	L	X	X	Z	Z	Q7	No Chg.
	L	X	X	Z	Z	No Chg.	Qs
	H	L	X	No Chg.	No Chg.	Q7	No Chg.
	H	H	L	L	Qn-1	Q7	No Chg.
	H	H	H	H	Qn-1	Q7	No Chg.
	H	X	X	No Chg.	No Chg.	No Chg.	Qs

Z=High Impedance

X=Don't Care

IC, BA3835S



IC DESCRIPTION

IC, LC866560W-5J08

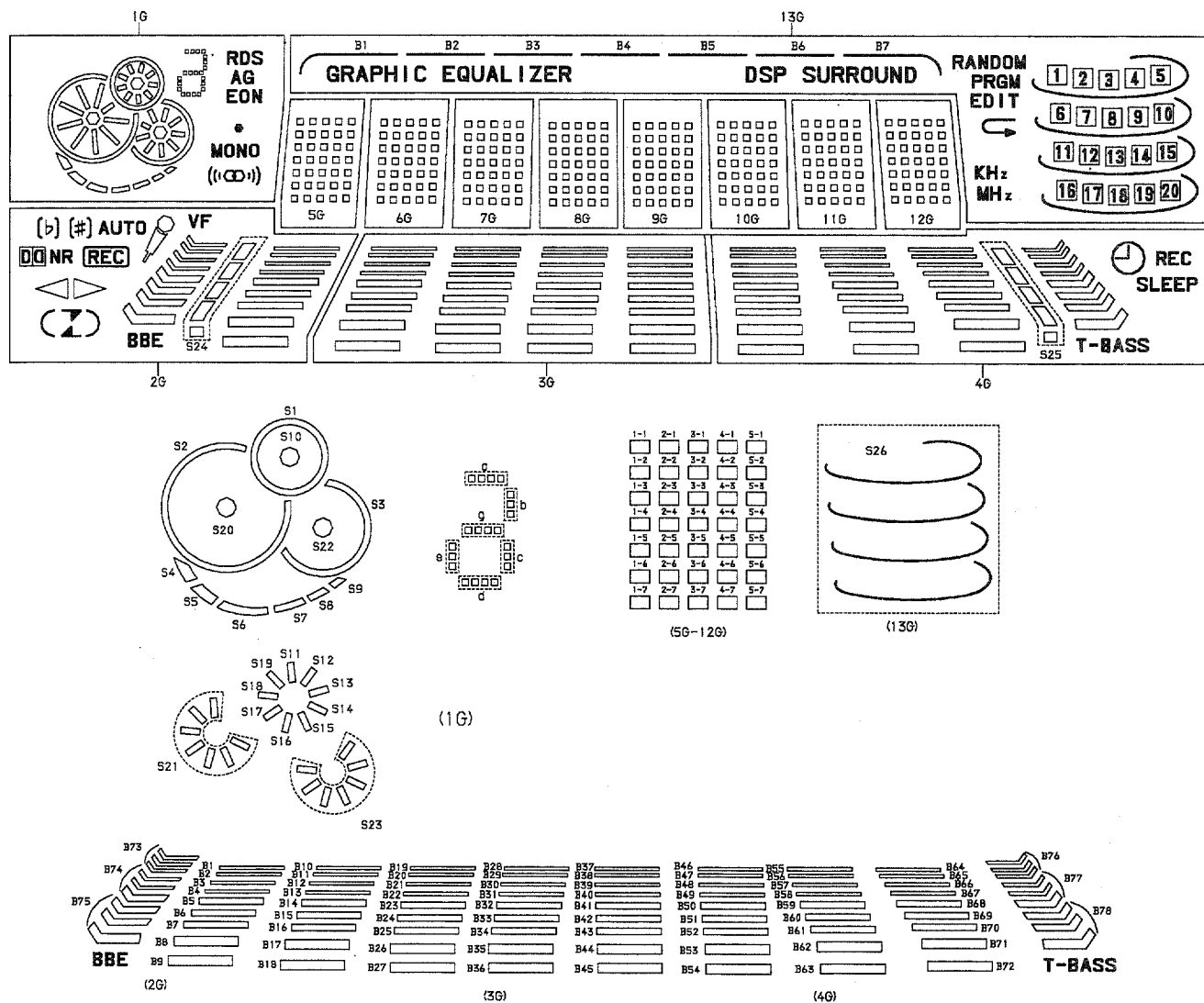
Pin No.	Pin Name	I/O	Description
1	CLK	O	CLOCK output for MAIN,FRONT PWB.
2	DATA	O	DATA output for MAIN, FRONT PWB.
3	STB(M)	O	Latch strobe output for MAIN PWB.
4	O-LED	O	LED ON/OFF output.
5	STB (SHIFT)	O	Latch strobe output for FRONT shift register.
6	CH (GAME)	O	Channel control output for Sound IC.
7	STB (GAME)	O	Latch strobe output for Sound IC.
8	I-NAR (GAME)	I	Sound IC NAR input.
9	PLL-CE	O	PLL IC chip enable output.
10	O-DSC	O	Serial data output for PROLOGIC PWB. (Not connected)
11	I-MIC	I	Microphone input for AUTO VF display.
12	RESET	I	Reset input.
13	I-HP-MUTE	I	Headphone input for MUTE by PROLOGIC.
14	I-DISH	I	CD turntable photo sensor A/D converter input.
15	VSS 1	—	GND.
16	CF 1	—	5.76MHz oscillator circuit.
17	CF 2	—	
18	VDD 1	—	Power supply input.
19	HOLD	I	Power failure detection input. "H" normal operation, "L" main power cannot be turned on.
20	KEY-1	I	KEY input.(A/D)
21	KEY-2	I	
22	KEY-3	I	
23	I-CD SW	I	CD mechanical switch A/D converter input.
24	I-JOG	I	JOG dial A/D level input.
25	I-TU-SIG/MS	I	Tuner signal and deck music sensor signal input.
26	I-SPEANA	I	A/D input for spectrum analyzer display.
27	I-WRQ/RDS-CLK	I	CD WRQ input. TUNER RDS CLOCK input.
28	I-TM-BASE	I	REFERENCE CLOCK input for timer watch.
29	I-RMC	I	System remote control signal input.
30~41	G13~G2	O	FL GRID output G2~G13.
42, 43	P36, P35	O	FL SEGMENT output P35, P36.
44	G1	O	FL GRID output G1.
45	P34	O	FL SEGMENT output P34.
46	VDD3	—	Power supply input.
47	P33/SPEANA-A	O	Spectrum analyzer band switching output /FL segment P33 output.
48	P32/SPEANA-B	O	Spectrum analyzer band switching output /FL segment P32 output.
49	P31/SPEANA-C	O	Spectrum analyzer band switching output /FL segment P31 output.
50	P30/GAME	I/O	FL segment P30 output / GAME input diode.
51	VP	—	Power supply input for FL display.
52	P29/AM-ST	I/O	FL segment P29 output / AM-ST input diode.
53	P28/LW	I/O	FL segment P28 output / LW input diode.
54	P27/SW	I/O	FL segment P27 output / SW input diode.

Pin No.	Pin Name	I/O	Description
55	P26/FM 1	I/O	FL segment P26 output / FM1 (OIRT) input diode.
56	P25/RDS	I/O	FL segment P25 output / RDS input diode.
57	P24/R+1	I/O	FL segment P24 output / RVS+1 way input diode.
58	P23/DSP	I/O	FL segment P23 output / DSP input diode.
59	P22/D-SURR	I/O	FL segment P22 output / SURR input diode.
60	P21/K-CON	I/O	FL segment P21 output / K-CON input diode.
61	P20/DOLBY	I/O	FL segment P20 output / DOLBY input diode.
62	P19/5.1CH	I/O	FL segment P19 output / 5.1CH input diode.
63	P18/AM10K	I/O	FL segment P18 output / AM 10kHz input diode.
64	P17/CST 2	I/O	FL segment P17 output / DECK2 cassette detect switch data input.
65	P16/REB	I/O	FL segment P16 output / DECK2 side-B record OK switch data input.
66	P15/CAM 2	I/O	FL segment P15 output / DECK2 CAM switch data input.
67	P14/AUTO 1	I/O	FL segment P14 output / DECK1 AUTO stop signal input.
68	P13/AUTO 2	I/O	FL segment P13 output / DECK2 AUTO stop signal input.
69	P12/CAM 1	I/O	FL segment P12 output / DECK1 CAM switch data input.
70	P11/CST 1	I/O	FL segment P11 output / DECK1 cassette detect switch data input.
71	P10/REA	I/O	FL segment P10 output / DECK2 side A record OK switch data input.
72	VDD 4	–	Power supply input.
73 ~ 81	P9 ~ P1	O	FL segment P1 ~ P9 output.
82	O-KSCAN	O	Switch SCAN timing output.
83	TRAY-CLS	O	CD TRAY CLOSE data output.
84	TRAY-OPEN	O	CD TRAY OPEN data output.
85	DISH-FWD	O	CD turntable forward rotation output.
86	DISH-RVS	O	CD turntable reverse rotation output.
87	COMMAND		CD command output.
88	O-CDCLK	O	CD clock output. (Not connected)
89	VSS2	-	GND.
90	VDD2	-	Power supply input.
91	O-POWER	O	System power supply ON/OFF output.
92	O-MUTE	O	System mute ON/OFF output.
93	SOL 1	O	DECK 1 solenoid output.
94	SOL 2	O	DECK 2 solenoid output.
95	O-MOTOR	O	DECK MOTOR ON/OFF output.
96	I-IFC/STEREO/ STATUS	I	Tune IF count serial data input / stereo detected input / CD status data input.
97	I-STEREO/ DRF(SQCLK)	I/O	Tuner stereo detected input / CD SQ CLOCK output.
98	I-RDS-DATA/ O-CDCE	I/O	RDS data input / CD chip enable output.
99	RT-A	I	Rotary encoder A input.
100	RT-B	I	Rotary encoder B input.

FL GRID ASSIGNMENT & ANODE CONNECTION

FL, BJ609GK

GRID ASSIGNMENT

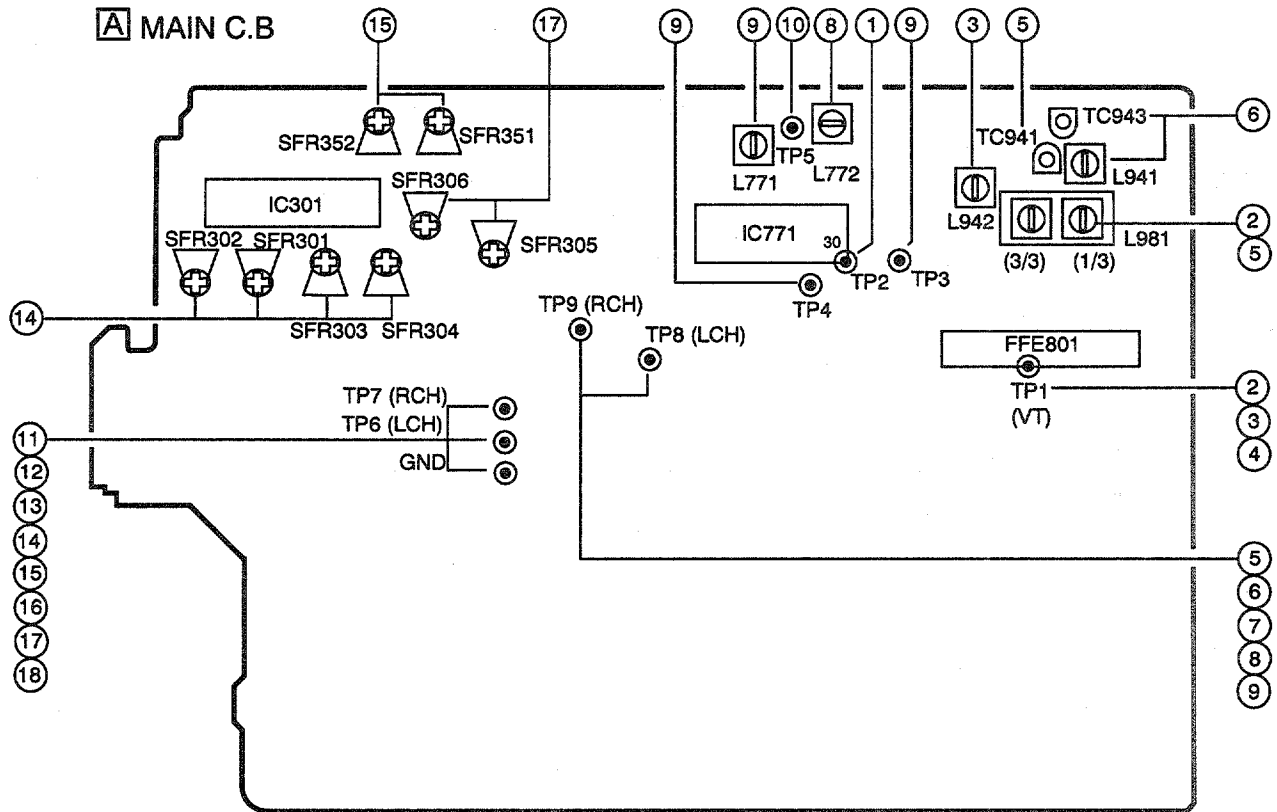


ANODE CONNECTION

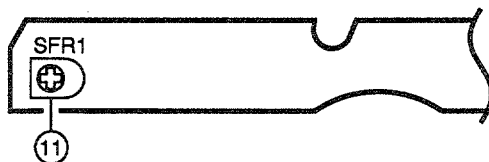
	1G	2G	3G	4G	5G-12G	13G
P1	EON	B9	B45	REC	1-1	DSP SURROUND
P2	AG	 NR	B36	B72	2-1	GRAPHIC EQUALIZER
P3		BBE	B27	B63	3-1	B7
P4	MONO	S24	B18	B54	4-1	B6
P5		B8	B44		5-1	B5
P6	RDS		B35	B71	1-2	B4
P7	b		B26	B62	2-2	B3
P8	c		B17	B53	3-2	B2
P9	a, d, g	B7	B43	SLEEP	4-2	B1
P10	e		B34	B70	5-2	RANDOM
P11	S1		B25	B61	1-3	PRGM
P12	S11		B16	B52	2-3	EDIT
P13	S12	B6	B42	T-BASS	3-3	
P14	S19	b #	B33	B69	4-3	KHz
P15	S13		B24	B60	5-3	MHz
P16	S10		B15	B51	1-4	S26
P17	S18	B5	B41	B78	2-4	16
P18	S14	B75	B32	B68	3-4	11

	1G	2G	3G	4G	5G-12G	13G
P19	S17	B74	B23	B59	4-4	6
P20	S15	B73	B14	B50	5-4	1
P21	S16	B4	B40	B77	1-5	17
P22	S3	 VF	B31	B67	2-5	12
P23	S23	AUTO	B22	B58	3-5	7
P24	S22	—	B13	B49	4-5	2
P25	S9	B3	B39	B76	5-5	18
P26	S8	—	B30	B66	1-6	13
P27	S7	—	B21	B57	2-6	8
P28	S6	—	B12	B48	3-6	3
P29	S5	B2	B38	S25	4-6	19
P30	S4	—	B29	B65	5-6	14
P31	S2	—	B20	B56	1-7	9
P32	S21	—	B11	B47	2-7	4
P33	S20	B1	B37	—	3-7	20
P34	—	—	B28	B64	4-7	15
P35	—	—	B19	B55	5-7	5
P36	—	—	B10	B46	—	10

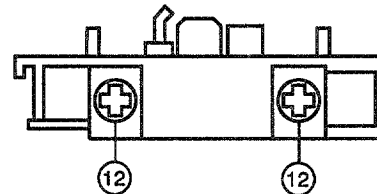
ADJUSTMENT <TUNER / DECK>



G DECK C.B



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



< TUNER SECTION >

1. Clock Frequency Check
Settings : • Test point : TP2
Method : Set to AM 1602kHz and check that the test point is 2052kHz $\pm$ 45Hz.
2. MW VT Adjustment
Settings : • Test point : TP1 (VT)
• Adjustment location : L981 (3/3)
Method : Set to MW 1710kHz and adjust L981 (3/3) so that the test point becomes 7.5V $\pm$ 0.05V. Then check that the test point is more than 0.3V (530kHz).
3. SW VT Adjustment
Settings : • Test point : TP1 (VT)
• Adjustment location : L942
Method : Set to SW 17.9MHz, 5.9MHz and adjust L942 so that the test point becomes 6.0V $\pm$ 0.05V. Then check that the test point is more than 0.3V (5.9MHz).
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 :
L981 (1/3) 603kHz
TC941 1404kHz
Method : Set up TC941 to center before adjustment, the level at 603kHz is adjust to maximum by L981 (1/3). Then the level at 1404kHz is adjust to maximum by TC941.
6. SW Tracking Adjustment
Settings : • Test point : TP8(Lch), TP9(Rch)
• Adjustment location :
L941 5.9MHz
TC943 17.9MHz
Method : Set up TC943 to center before adjustment. The level at 5.9MHz is adjust to maximum by L941. Then the level at 17.9MHz is adjust to maximum by TC943.
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 9dB.

8. AM(MW) IF Adjustment
 Settings : • Test point : TP8(Lch), TP9(Rch)
 • Adjustment location :
 L772 450kHz
9. DC Balance / Mono Distortion Adjustment
 Settings : • Test point : TP3, TP4 (DC Balance)
 : TP8(Lch), TP9(Rch) (Distortion)
 • Adjustment location : L771
 • Input level : 54dB
 Method : Set to FM 98.0MHz and adjust L771 so that the voltage between TP3 and TP4 becomes $0V \pm 0.04V$.
 Next, check that the distortion is less than 1.3%.
10. Auto Stop Level Check
- MW
- Input level : 52dB
 - Test point : TP5
- Method : Check auto stop at MW 999kHz and the level is $52 \pm 10/-15dB$.
- FM
- Input level : 25dB
 - Test point : TP5
- Method : Check auto stop at FM 98.0MHz and the level is $25 dB \pm 10 dB$.

< DECK SECTION >

11. Tape Speed Adjustment (DECK 1, DECK 2)
 Settings : • Test tape : TTA-100
 • Test point : TP6(Lch), TP7(Rch)
 • Adjustment location : SFR1
 Method : Play back the test tape and adjust SFR1 so that the frequency counter reads $3000Hz \pm 5Hz$.
12. Head Azimuth Adjustment (DECK 1, DECK 2)
 Settings : • Test tape : TTA-300
 • Test point : TP6(Lch), TP7(Rch)
 • Adjustment location : Head azimuth
 adjustment screw
 Method : Play back (FWD) the 10kHz signal of the test tape and adjust screw so that the output becomes maximum. Next, perform on REV PLAY mode.
13. PB Frequency Response Check (DECK 1, DECK 2)
 Settings : • Test tape : TTA-300
 • Test point : TP6(Lch), TP7(Rch)
 Method : Play back the 315Hz and 10kHz signals of the test tape and check that the output ratio of the 10kHz signal with respect to that of the 315Hz signal is within 2dB.
14. PB Sensitivity Adjustment (DECK 1, DECK 2)
 Settings : • Test tape : TTA-200
 • Test point : TP6(Lch), TP7(Rch)
 • Adjustment location : SFR301 (DECK 1, Lch)
 SFR302 (DECK 1, Rch)
 SFR303 (DECK 2, Lch)
 SFR304 (DECK 2, Rch)
 Method : Play back the test tape and adjust SFRs so that the output level of the test point becomes $245mV \pm 10mV$.
15. REC/PB Frequency Response Adjustment (DECK 2)
 Settings : • Test tape : TTA-602
 • Test point : TP6(Lch), TP7(Rch)
 • Input signal : 1kHz / 10kHz (LINE IN)
 • Adjustment location : SFR351 (Lch)
 SFR352 (Rch)
 Method : Apply a 1kHz signal and REC mode. Then adjust OSC attenuator so that the output level at the TP6, TP7 becomes 17mV. Record and play back the 1kHz and 10kHz signals and adjust SFRs so that the output of the 10kHz signals becomes $0dB \pm 0.5dB$ with respect to that of the 1kHz signal.
16. REC/PB Frequency Response Check (DECK 2)
 Settings : • Test tape : TTA-615
 • Test point : TP6(Lch), TP7(Rch)
 • Input signal : 1kHz / 10kHz (LINE IN)
 Method : Apply a 1kHz signal and REC mode. Then adjust OSC attenuator so that the output level at the TP6, TP7 becomes 17mV. Record and play back the 1kHz and 10kHz signals and check that the output of the 10kHz signals is $0dB \pm 2.0dB$ with respect to that of the 1kHz signal.
17. REC/PB Sensitivity Adjustment (DECK 2)
 Settings : • Test tape : TTA-602
 • Test point : TP6(Lch), TP7(Rch)
 • Input signal : 1kHz (LINE IN)
 • Adjustment location : SFR305 (Lch)
 SFR306 (Rch)
 Method : Apply a 1kHz signal and REC mode. Then adjust OSC attenuator so that the output level at TP8, TP9 becomes 170mV. Record and play back the 1kHz signals and adjust SFRs so that the output becomes $0dB \pm 0.5dB$ with respect to that of the 1kHz signal.
18. REC/PB Sensitivity Check (DECK 2)
 Settings : • Test tape : TTA-615
 • Test point : TP6(Lch), TP7(Rch)
 • Input signal : 1kHz (LINE IN)
 Method : Apply a 1kHz signal and REC mode. Then adjust OSC attenuator so that the output level at TP6, TP7 becomes 170mV. Record and play back the 1kHz signals and check that the output is $0 \pm 1.0dB$.

PRACTICAL SERVICE FIGURE

<TUNER SECTION>

<FM SECTION>

IHF Sensitivity : Less than 10 / 9 / 9dB
 (THD 3%) [at 87.5 / 98.0 / 108.0MHz]
 S/N 50dB Quieting sensitivity :
 Less than 35dB
 [at 98.0MHz]
 Signal to noise ratio : Mono : More than 68dB
 Stereo : More than 66dB
 [at 98.0MHz]
 Distortion : Mono : Less than 1.2%
 Stereo : Less than 2.0%
 [at 98.0MHz]
 Auto stop level : 25dB $\pm$ 10dB
 [at 98.0MHz]
 Stereo separation : More than 30dB
 [at 98.0MHz]
 Intermediate frequency : 10.7MHz

<AM(MW) SECTION>

Sensitivity : Less than 60dB
 [at 603kHz]
 Less than 58dB
 [at 999kHz]
 Less than 58dB
 [at 1404kHz]
 Signal to noise ratio : More than 36dB
 [at 999kHz]
 Distortion : Less than 1.5%
 [at 999kHz]
 Auto stop level : 52dB +10/-15dB
 [at 999kHz]
 Intermediate frequency : 450kHz

<SW SECTION>

Sensitivity : Less than 42dB
 [at 5.9MHz]
 Less than 38dB
 [at 12.0 MHz]
 Less than 38dB
 [at 17.9MHz]
 Overload signal Distortion :
 Less than 10.0%
 [at 12.0MHz]
 Intermediate frequency : 450kHz

<DECK SECTION>

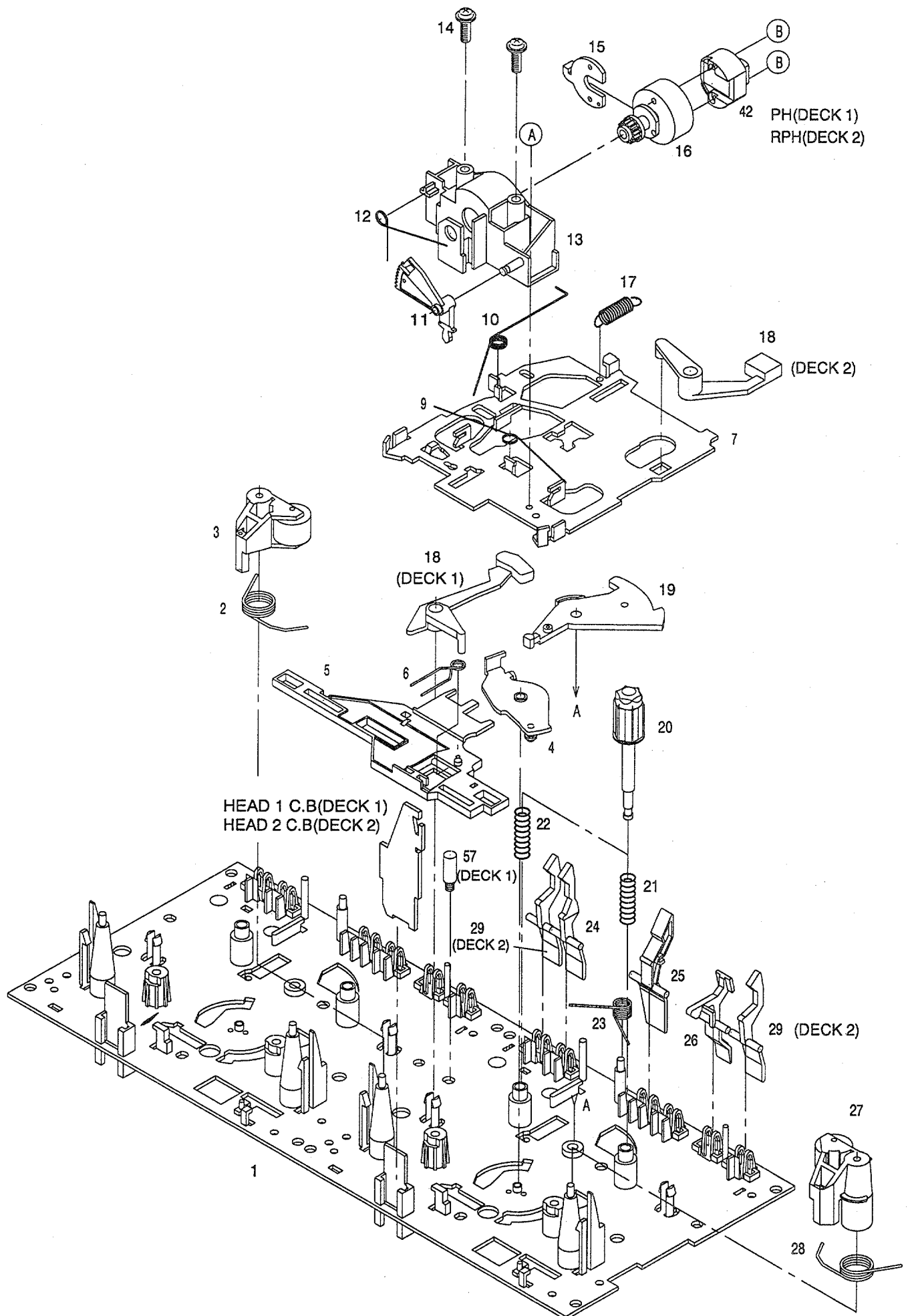
Tape speed : 3000Hz $\pm$ 45Hz
 Wow & flutter : Less than 0.15%
 (W.R.M.S)
 Take-up torque : 30 ~ 55g-cm
 (FWD, REV)
 F.F & REW torque : 75 ~ 160g-cm
 Back tension : 2 ~ 7g-cm
 (FWD, REV)
 PB output level : 300mV $\pm$ 1dB
 (SP OUT 2V)
 REC/PB output level : -3dB $\pm$ 1.0dB (NORM), -3.5dB $\pm$ 1.0dB (CrO₂)
 (SP OUT 2V)
 Distortion (REC/PB) : Less than 2.0%
 (NORM, CrO₂)
 Noise level (PB) : Less than 2.0mV
 (NORM, SP OUT 2V)
 Noise level (REC/PB) : Less than 3.0mV
 (NORM, SP OUT 2V)
 Erasing ratio : More than 60dB
 (at 125Hz, +10VU)
 Test tape : TTA-100
 TTA-200
 TTA-615 (CrO₂)
 TTA-602 (NORMAL)

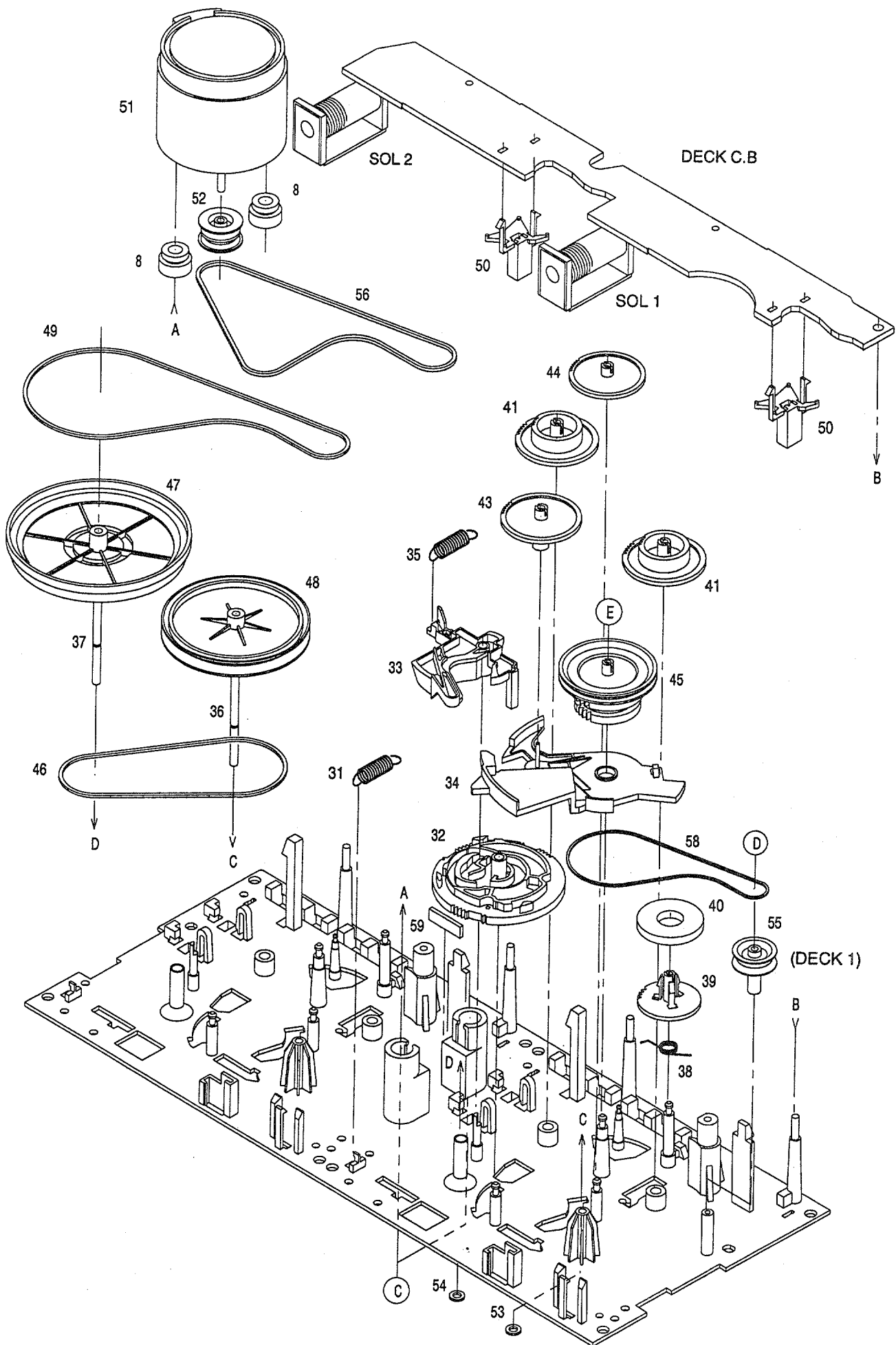
MECHANICAL PARTS LIST 1 / 1

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

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION	REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
△	1	87-A80-083-010	AC CORD,HC BLK<HC>	39	81-532-080-010		LABEL, CASS. COMPT
△	1	87-050-079-010	AC-CORD ASSY,E<EXCEPT HC>	40	86-NF9-224-010		SPR-C,LOCK
2	87-085-185-010		BUSHING, AC CORD (E)	41	87-NF4-217-010		HLDR,LOCK 2
3	86-NF6-007-010		WINDOW, TOP	42	87-NF4-216-010		HLDR,LOCK 1
4	88-NF5-008-010		CABI,STEEL S	43	82-NF5-229-010		PLATE,LOCK
5	84-2G1-245-210		CAP,OPTICAL	44	86-NF6-061-010		REFLECTOR,CASS
6	88-NF5-021-010		KNOB,RTRY VOL	45	88-NF5-039-010		PANEL,CASS 2U
7	88-NF5-022-110		KNOB,RTRY JOG	46	88-NF5-038-010		PANEL,CASS 1U
8	87-NF4-215-010		HLDR,FFC	47	88-NF5-019-010		WINDOW,CASS 2
9	87-A90-796-010		FAN,F614R-12MC-15-300MM	48	88-NF5-005-010		BOX,CASS 2U
10	88-NH5-073-010		CABI,REAR HCST<HC>	49	88-NF5-018-010		WINDOW,CASS 1
10	88-NH5-068-010		CABI,REAR HRJSTNM<EXCEPT HC>	50	88-NF5-004-010		BOX,CASS 1U
11	87-064-185-010		HLDR,WIRE	51	85-NF5-211-110		GUIDE,LED R
12	88-NH5-004-010		PANEL,TRAY H	52	88-NF5-206-010		GUIDE,CD
13	82-NE6-067-010		BADGE,AIWA 30N	53	88-NF5-201-010		GUIDE,FUN
14	88-NF5-208-010		HLDR,PWB-M N	54	88-NF5-205-010		GUIDE,ENTER
15	87-NF4-208-010		HLDR,HT-SINK	55	88-NF5-202-010		GUIDE,OPE
16	87-NF4-221-010		HLDR,CABLE	56	88-NF5-204-010		GUIDE,FL
17	82-NF5-218-010		SPR-T,EJECT 1 (SIN)	57	88-NH5-002-010		KEY,CON
18	82-NF5-219-010		SPR-T,EJECT 2 (SIN)	A	87-067-641-010		UTT2+3-8(W/O SLOT)BL
19	87-NF8-220-010		DMPR,150	B	87-721-097-410		QT2+3-12 GLD
20	88-NF5-035-010		KEY,POWER	C	87-B10-090-010		BVIT3B+3-12 GOLD
21	88-NF5-041-010		KEY,ASSY CD	D	87-067-822-010		BVT2+3-20 W/O SLOT
22	88-NF5-023-010		KEY,FUN	E	87-067-579-010		TAPPING SCREW, BVT2+3-8
23	88-NF5-026-010		KEY,MIC	F	87-721-096-410		QT2+3-10 GLD
24	88-NF5-025-010		KEY,BBE	G	87-067-703-010		TAPPING SCREW, BVT2+3-10
25	88-NF5-024-010		KEY,OPE	H	87-NF4-224-010		S-SCREW,IT3B+3-8 CU
26	88-NH5-006-010		KEY,PBC	I	87-078-191-010		S-SCREW,IT+4-10
27	88-NF5-027-010		KEY,DEMO	J	87-723-096-410		QT2+3-10W/O SLOT BL
28	88-NF5-048-010		KEY,TIMER	K	87-067-758-010		BVT2+3-12 W/O SLOT
29	88-NF5-017-010		PANEL,CD	L	87-591-094-410		TAPPING SCREW, QIT+3-6
30	88-NH5-003-010		WINDOW,DISP H	M	87-067-584-010		TAPPING SCREW, BVT2+3-6
31	88-NH5-008-010		PANEL,FR H	N	87-067-688-010		BVTT+3-6
32	88-NF5-043-110		PANEL,DSP				
33	88-NF5-029-010		REFLECTOR,JOG				
34	88-NF5-028-110		KEY,ENTER				
35	88-NF5-031-010		REFLECTOR,FUN				
36	88-NF5-030-010		REFLECTOR,OPE				
37	88-NF5-032-010		RING,VOL				
38	88-NH5-005-210		CABI,FR H				

TAPE MECHANISM EXPLODED VIEW 1 / 1



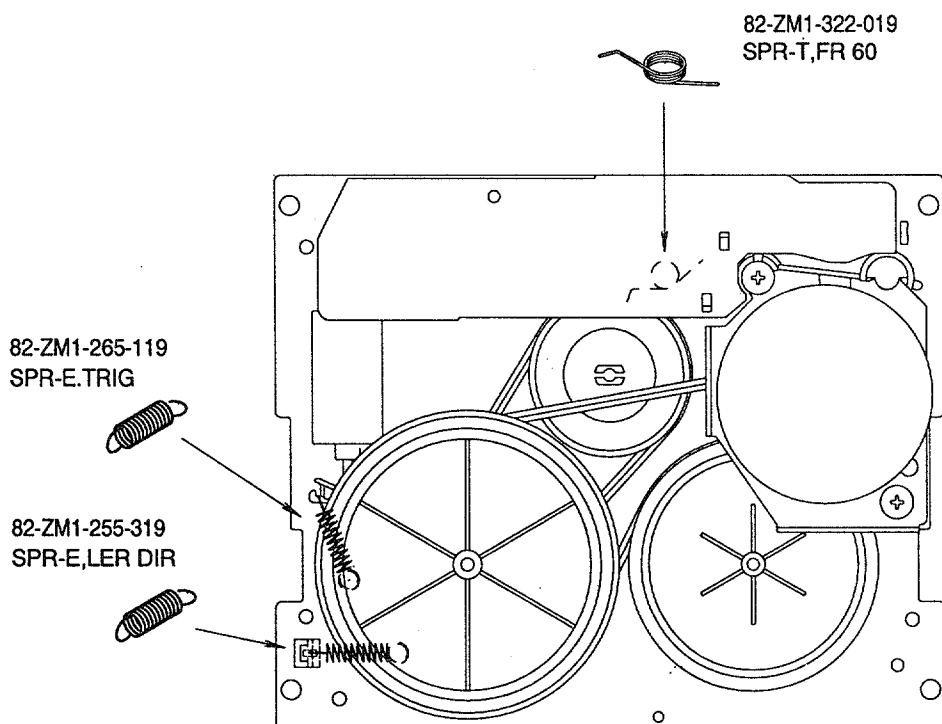
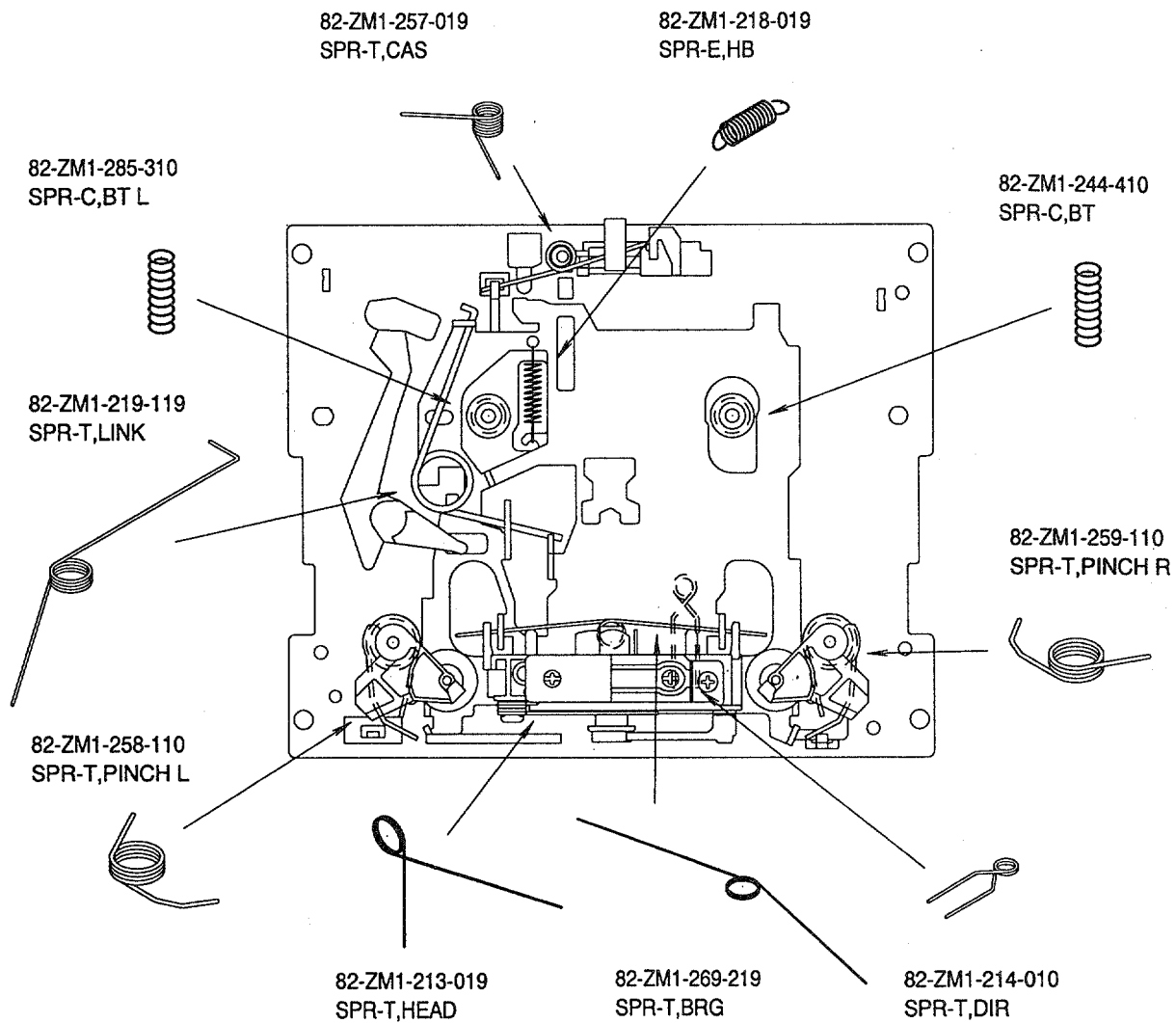


TAPE MECHANISM PARTS LIST 1 / 1

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-A90-319-010		HEAD,PH HADKH2 FPC
8	82-ZM3-307-019		CUSH-G,DIA3.7-8-3.2	42	87-A90-320-010		HEAD,RPH HADKH5 FPC
9	82-ZM1-269-219		SPR-T,BRG	43	82-ZM1-225-21K		GEAR,FR
10	82-ZM1-219-119		SPR-T,LINK	44	82-ZM1-226-019		GEAR,REW
11	82-ZM1-210-119		GEAR,H T	45	82-ZM3-333-310		SLIP DISK ASSY 2
12	82-ZM1-213-019		SPR-T,HEAD	46	82-ZM1-338-010		BELT FR4
13	82-ZM1-207-619		GUIDE,TAPE	47	82-ZM1-349-110		FLY-WHL,R W(DECK 2)
14	86-ZM4-206-010		S-SCREW,AZIMUTH	47	82-ZM3-338-110		FLY-WHL,R3 W(DECK 1)
15	82-ZM1-314-119		PLATE,HEAD	48	82-ZM1-348-010		FLY-WHL,L W(DECK 2)
16	82-ZM1-208-119		HLDR,HEAD	48	82-ZM1-348-010		FLY-WHL,L W(DECK 1)
17	82-ZM1-218-019		SPR-E,HB	49	82-ZM3-329-210		BELT,SBU R2
18	82-ZM1-263-110		LVR,EJECT L (DECK 1)	50	82-ZM1-245-210		HLDR,IC
18	82-ZM1-264-010		LVR,EJECT R (DECK 2)	51	87-045-347-019		MOT,SHU2L 70(M1)
19	82-ZM1-222-21K		LVR,PLAY	52	82-ZM3-221-010		PULLEY,MOT 2M
20	82-ZM1-217-319		REEL TABLE	53	82-ZM1-288-019		SH,1.63-3.2-0.5 SLT
21	82-ZM1-244-510		SPR-C,BT	54	80-ZM6-243-019		SH,1.75-3.6-0.5 SLT
22	82-ZM1-285-310		SPR-C,BT L	55	82-ZM3-335-210		PULLEY,COUPLER M3(DECK 1)
23	82-ZM1-257-019		SPR-T,CAS	56	82-ZM3-337-010		BELT,SBU MOT 2
24	82-ZM1-241-319		LVR,MC	57	82-ZM3-339-010		SHAFT,COUPLER N3(DECK 1)
25	82-ZM1-242-019		LVR,CAS	58	86-ZM1-206-010		BELT,MAIN L
26	82-ZM1-243-019		LVR,STOP	59	82-ZM3-340-010		SH,BELT D2
27	82-ZM1-344-110		LVR ASSY,PINCH R2	A	85-ZM3-202-010		S-SCREW,TG
28	82-ZM1-259-110		SPR-T,PINCH R	B	80-ZM6-207-019		V+1.6-7
29	82-ZM1-240-11K		LVR,REC (DECK 2)	C	82-ZM3-318-019		S-SCRW MOTOR M2
31	82-ZM1-255-319		SPR-E,LVR DIR	D	87-B10-043-010		W-P,0.99-4-0.25 SLT
32	82-ZM3-305-01K		GEAR,CAM M2	E	82-ZM3-334-010		PW,2.16-6-0.4
33	82-ZM1-227-21K		LVR,TRIG				
34	82-ZM3-306-11K		LVR,FR M2				
35	82-ZM1-265-119		SPR-E,TRIG				

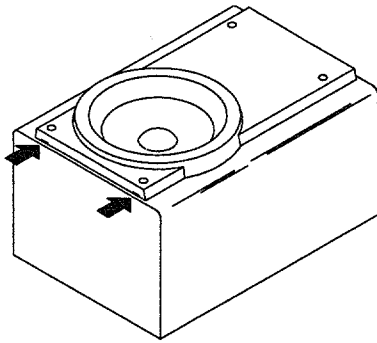
SPRING APPLICATION POSITION



SPEAKER DISASSEMBLY INSTRUCTIONS

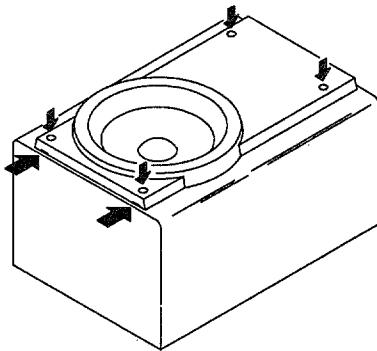
Type.1

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



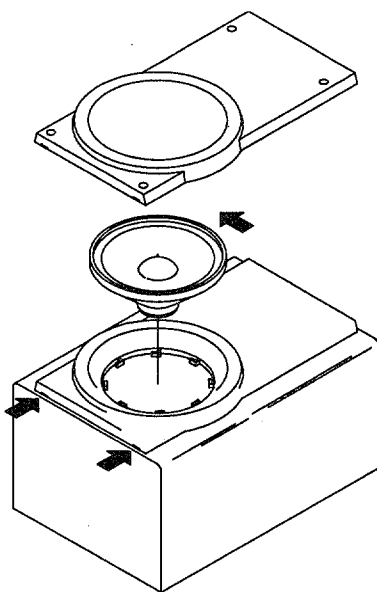
Type.2

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

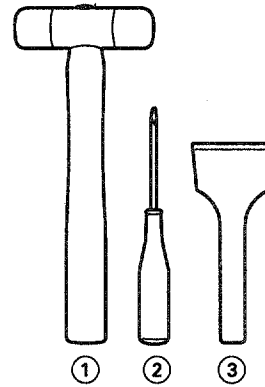


Type.3

Insert a flat-bladed screwdriver into the position indicated by the arrows and remove the panel. Turn the speaker unit to counter-clockwise direction while inserting a flat-bladed screwdriver into one of the hollows around speaker unit, and then remove the speaker unit. After replacing the speaker unit, install it turning to clockwise direction until "click" sound comes out.



Type.4



TOOLS

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

How to Remove the PANEL, FR

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

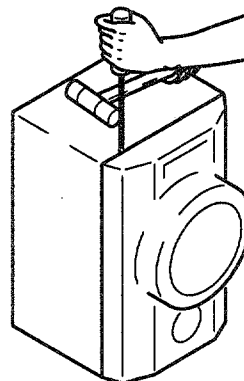


Fig-1

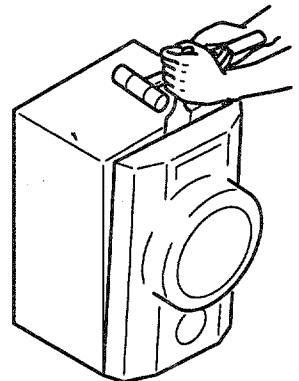


Fig-2

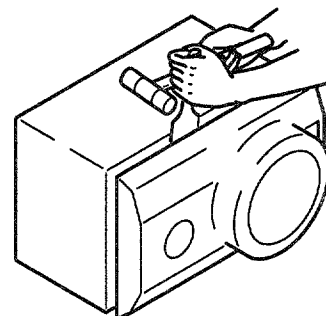


Fig-3

How to Attach the PANEL, FR

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

SX - WNS909 (YJSTNL, YSTNL) SPEAKER PARTS LIST

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

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	88-NS5-001-010		PANEL,FR R
2	88-NS5-002-010		PANEL,FR L
3	88-NS5-003-010		PANEL,BA
4	88-NS5-004-010		PANEL,DUCT
5	88-NS5-005-010		PANEL,COVER
6	88-NS5-006-010		GRILLE,FRAME ASSY A<YJSTNL>
6	88-NS5-010-010		GRILLE,FRAME ASSY B<YSTNL>
7	88-NS5-602-010		SPKR,W 200
8	88-NS5-604-010		SPKR,M 120
9	88-NS5-605-010		SPKR,T 60
10	88-NS5-610-010		CORD,SPKR
11	88-NS5-611-010		CORD,SPKR B/L
12	88-NS5-609-010		SPKR, CERAMIC

ACCESSORIES / PACKAGE LIST

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

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	88-NH5-911-010		IB,H(EC-K)I<HC>
1	88-NH5-901-010		IB,H(ECA)M<HR>
2	87-006-269-010		ANT,LOOP AM
3	87-043-115-010		FEEDER-ANT,FM
△	4	87-099-789-010	PLUG,CONVERSION IR44<HR>
△	4	87-099-724-010	PLUG,CONVERSION IR39<HC>
5	88-MG1-701-010		RC UNIT,RC-8AS02
6	87-043-095-010		ANT,WIRE
7	87-050-103-010		CORD,PIN 1 PY 1.5M

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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