aiwa

NSX-AVF9

M A N U A L

COMPACT DISC STEREO
CASSETTE RECEIVER

- BASIC TAPE MECHANISM : 2ZM–3MK2 PR4NM
- BASIC CD MECHANISM : 6ZG–1 SDFNM

- TYPE : HR

SYSTEM	CD – CASSEIVER	SPEAKER	REMOTE CONTROLLER
NSX-AVF9	CX-NAVF9	SX–NAVF9 SX-C600 SX-R270	RC - 6AS02

- If requiring information about the CD mechanism, see Service Manual of 6ZG-1, S/M Code No. 09-975-198-00T.

S E R V I C E

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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 µV/m
Antenna	Loop antenna

<SW Tuner section>

Tuning range	5.900 MHz - 17.900 MHZ
Antenna	Wire antenna

<Amplifier section>

Power output

Front
Rated: 160 W + 160 W
(6 ohms, T.H.D 1 %, 1 kHz)
Reference: 200 W + 200 W
(6 ohms, T.H.D 10 %, 1 kHz)
Rear (Surround)
Rated: 10 W + 10 W
(16 ohms, T.H.D 1 %, 1kHz)
Reference: 12.5 W + 12.5 W
(16 ohms, T.H.D 10 %, 1 kHz)
Center
Rated: 20 W
(8 ohms, T.H.D 1 %, 1 kHz)
Reference: 25 W
(8 ohms, T.H.D 10 %, 1 kHz)

Total harmonic distortion 0.1 % (20 W, 1 kHz, 6 ohms, DIN AUDIO)

Inputs VIDEO/AUX : 210 mV (adjustable)
MIC 1, MIC 2 : 1.4 mV (10 kohms)

Outputs LINE OUT : 200 mV
SUPER WOOFER : 3.1 V
SPEAKERS: accept speakers of 6 ohms or more
SURROUND SPEAKERS : accept speakers of 16 ohms or more
CENTER SPEAKERS : accept speakers of 8 ohms or more
PHONES (stereo jack) : accepts headphones of 32 ohms or more

<Cassette deck section>

Track format	4 tracks, 2 channels stereo
Frequency response	CrO2 tape : 50 Hz – 16000 Hz
	Normal tape : 50 Hz –15000 Hz
Signal-to-noise ratio	60 dB (Dolby B NR ON, CrO2 tape peak level)
Recording system	AC bias
Heads	Deck 1 : Playback head x1
	Deck 2 : Recording/playback/ erase head x 1

<Compact disc player section>

Laser	Semiconductor laser (λ =780 nm)
D-A converter	1 bit dual
Signal-to-noise ratio	83 dB (1 kHz, 0 dB)
Harmonic distortion	0.05 % (1 kHz, 0 dB)
Wow and flutter	Unmeasurable

<Speaker system SX–NAVF9>

Cabinet type	3 way, bass reflex (magnetic shielded type)
Speakers	Woofer :
	160 mm cone type
	Tweeter :
	80 mm cone type
	Super tweeter :
	20 mm ceramic type
Impedance	6 ohms
Output sound pressure level	87 dB/W/m
Dimensions (W x H x D)	260 x 353 x 330 mm
Weight	5.9 kg

<General>

Power requirements	120 V/220 -230 V/240 V AC, switchable 50/60 Hz
Power consumption	220 W
Dimensions of main unit (W x H x D)	300 x 357.5 x 374 mm
Weight of main unit	12.6 kg

• Design and specifications are subject to change without notice.

• Manufactured under license from Dolby Laboratories Licensing Corporation.
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• 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.
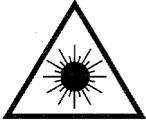
■ Caution: Invisible laser radiation when open and interlocks defeated avoid exposure to beam.
■ Advarsel: Usynlig laserståling ved åbning, når sikkerhedsafbrydere er ude af funktion. Undgå udsættelse for stråling.

VAROITUS!

Laiteen Käyttäminen muulla kuin tässä käyttöohjeessa mainitulla tavalla saataa altistaa käyt-täjän turvallisuusluokan 1 ylittävälle näkymättömälle lasersäteilylle.

VARNING!

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

CAUTION

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

ATTENTION

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

ADVARSEL

Usynlig laserståling ved åbning, når sikkerhedsafbrydereer ude af funktion. Undgå udsættelse for stråling.

This Compact Disc player is classified as a CLASS 1 LASER product.
The CLASS 1 LASER PRODUCT label is located on the rear exterior.

CLASS 1	LASER PRODUCT
KLASSE 1	LASER PRODUKT
LUOKAN 1	LASER LAITE
KLASS 1	LASER APPARAT
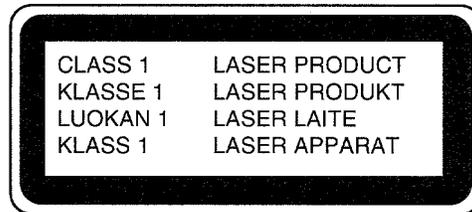
Precaution to replace Optical block

(KSS-213B)

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

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

PICK – UP Assy P.C.B.

Solder

4
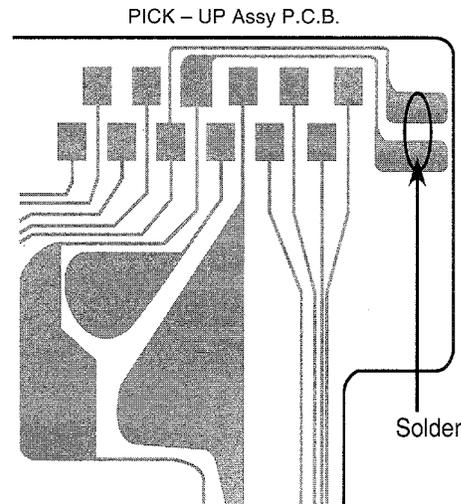
ELECTRICAL MAIN PARTS LIST

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-A40-239-080		ZENER,UZ5.6 BSA
	87-020-454-010		IC,DN6851					
	86-NFW-620-010		IC,LC866556W-5E74		**MAIN C.B**			
	87-A20-154-010		IC,SPS-444-1					
	87-A20-455-010		IC,HA12211		C101	87-A10-231-090		CAP,E 3300-80
	87-A20-355-010		IC,CXA1553P		C102	87-A10-231-090		CAP,E 3300-80
					C103	87-016-658-090		CAP,E 4700-35 SMG
	87-070-232-010		IC,BA3834S		C104	87-016-658-090		CAP,E 4700-35 SMG
	87-A20-056-010		IC,BA3880S		C105	87-012-368-080		C-CAP,S 0.1-50 F
	87-017-915-080		IC,BU4094BCF					
	87-A20-453-010		C-IC,NJW1102B		C106	87-012-368-080		C-CAP,S 0.1-50 F
	87-A20-456-040		C-IC,BH3810 FS		C107	87-012-368-080		C-CAP,S 0.1-50 F
					C108	87-012-368-080		C-CAP,S 0.1-50 F
	87-A20-560-040		C-IC,M65849BFP		C109	87-010-196-080		CHIP CAPACITOR,0.1-25
	87-017-888-080		IC,NJM4558MD		C110	87-010-196-080		CHIP CAPACITOR,0.1-25
	87-A20-437-010		C-IC,M62431FP					
	87-A20-452-040		C-IC,TC9260FS		C111	87-010-196-080		CHIP CAPACITOR,0.1-25
	86-NFZ-655-010		IC,LC27131D(Z)		C112	87-010-196-080		CHIP CAPACITOR,0.1-25
					C113	87-010-247-080		CAP, ELECT 100-50V
	87-A20-438-010		IC,LA1837		C114	87-010-384-080		CAP,E 100-25 M SME
	87-A20-450-040		C-IC,BH 3864 F		C115	87-010-384-080		CAP,E 100-25 M SME
					C116	87-010-247-080		CAP, ELECT 100-50V
TRANSISTOR					C117	87-010-430-080		CAP, ELECT 100-63
					C118	87-010-263-080		CAP, ELECT 100-10V
	87-026-463-080		TR,2SA933SRS		C119	87-010-260-080		CAP, ELECT 47-25V
	89-213-702-010		TR,2SB1370 (1.8W)		C120	87-010-403-080		CAP, ELECT 3.3-50V
	87-A30-075-080		C-TR,2SA1235F					
	87-026-610-080		TR,KTC3198GR		C121	87-012-140-080		CAP 470P
	87-A30-076-080		C-TR,2SC3052F		C123	87-010-247-080		CAP, ELECT 100-50V
					C124	87-010-112-080		CAP, ELECT 100-16V
	87-A30-073-080		C-TR,RT1N 141C		C125	87-010-235-080		CAP,E 470-16 SME
	87-A30-083-080		TR,CSD1489B		C129	87-010-393-080		CAP, ELECT 100-35V
	87-026-609-080		TR,KTA1266GR					
	87-A30-086-070		C-TR,CSD1306E		C200	87-012-368-080		C-CAP,S 0.1-50 F
	87-A30-106-070		C-TR,CMBT5551		C201	87-010-401-080		CAP, ELECT 1-50V
					C202	87-010-401-080		CAP, ELECT 1-50V
	87-026-263-080		C-TR,RN1410		C205	87-010-178-080		C-CAP,S 1000P-50 B
	87-A30-111-080		TR,C2N5401		C206	87-010-178-080		C-CAP,S 1000P-50 B
	87-A30-112-080		TR,C2N5551					
	89-420-612-010		TR,2SD2061 (2W)		C207	87-010-404-080		CAP, ELECT 4.7-50V
	87-A30-097-010		TR,FN 1016		C208	87-010-404-080		CAP, ELECT 4.7-50V
					C209	87-010-404-080		CAP, ELECT 4.7-50V
	87-A30-098-010		TR,FP 1016		C210	87-010-404-080		CAP, ELECT 4.7-50V
	87-A30-089-010		FET,2SK2723		C211	87-010-186-080		CAP,CHIP 4700P
	87-A30-072-080		C-TR,RT1P 144C					
	87-A30-087-080		C-FET,2SK2158		C212	87-010-186-080		CAP,CHIP 4700P
	87-A30-074-080		C-TR,RT1P 141C		C213	87-010-260-080		CAP, ELECT 47-25V
					C214	87-010-260-080		CAP, ELECT 47-25V
	89-112-965-080		TR,2SA1296 (0.75W)		C215	87-010-196-080		C-CAP,S 0.1-25 Z F
	87-A30-071-080		C-TR,RT1N 144C		C219	87-012-368-080		C-CAP,S 0.1-50 F
	87-026-228-080		TR,DTA124EK					
	87-A30-084-080		TR,CSB1058B		C220	87-012-368-080		C-CAP,S 0.1-50 F
	87-026-232-080		TR,DTA144WK		C221	87-012-368-080		C-CAP,S 0.1-50 F
					C222	87-012-368-080		C-CAP,S 0.1-50 F
	87-A30-085-070		C-TR,CSA1362GR		C223	87-010-194-080		CAP, CHIP 0.047
	89-327-143-080		TR,2SC2714 (0.1W)		C225	87-A10-516-080		C-CAP,S 100P-200 J CH
					C226	87-A10-516-080		C-CAP,S 100P-200 J CH
DIODE					C229	87-016-461-080		C-CAP,S 0.47-16 Z F
					C230	87-016-461-080		C-CAP,S 0.47-16 Z F
	87-A40-003-080		ZENER,MTZJ4.3A		C242	87-010-405-080		CAP, ELECT 10-50V
	87-A40-246-080		DIODE,IN4148 T-72		C243	87-016-461-080		C-CAP,S 0.47-16 Z F
	87-017-654-060		DIODE,GBU6J					
	87-A40-116-060		DIODE,RS403L-B-D-51		C301	87-010-318-080		C-CAP,S 47P-50 CH
	87-A40-269-080		C-DIODE,MC2836		C302	87-010-318-080		C-CAP,S 47P-50 CH
					C303	87-012-157-080		C-CAP,S 330P-50 CH
	87-017-437-080		DIODE,1N4148M		C304	87-012-157-080		C-CAP,S 330P-50 CH
	87-A40-270-080		C-DIODE,MC2838		C305	87-012-145-080		CAP, CHIP S 270P CH
	87-070-274-080		DIODE,1N4003 SEM					
	87-A40-211-080		ZENER UZ36BSA		C306	87-012-145-080		CAP, CHIP S 270P CH
	87-A40-206-080		ZENER,UZ10BSC		C307	87-010-196-080		CHIP CAPACITOR,0.1-25
					C311	87-010-198-080		CAP, CHIP 0.022
	87-A40-004-080		ZENER,MTZJ16A		C312	87-010-198-080		CAP, CHIP 0.022
	87-A40-382-080		C-DIODE,RB705D		C313	87-010-180-080		C-CER 1500P
	87-A40-205-080		ZENER,UZ6.2BSC					
	87-A40-202-080		ZENER,UZ5.1BSB		C314	87-010-180-080		C-CER 1500P
	87-A40-274-010		DIODE,FMB-G16L		C315	87-010-178-080		CHIP CAP 1000P
					C316	87-010-178-080		CHIP CAP 1000P
	87-A40-186-080		ZENER,UZ5.1BSC		C317	87-012-142-080		CAP, S 0.33-16
	87-017-481-080		ZENER,UZ5.6BSB		C318	87-012-142-080		CAP, S 0.33-16
	87-A40-192-080		ZENER,UZ4.3BSA					

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C319	87-012-141-080		CHIP-CAPACITOR,0.22-16F
C320	87-012-141-080		CHIP-CAPACITOR,0.22-16F
C321	87-012-141-080		CHIP-CAPACITOR,0.22-16F
C322	87-012-141-080		CHIP-CAPACITOR,0.22-16F
C324	87-010-260-080		CAP, ELECT 47-25V
C325	87-010-370-080		CAP,E 330-6.3 SME
C327	87-010-404-080		CAP, ELECT 4.7-50V
C328	87-010-404-080		CAP, ELECT 4.7-50V
C332	87-010-196-080		CHIP CAPACITOR,0.1-25
C335	87-010-401-080		CAP, ELECT 1-50V
C336	87-010-401-080		CAP, ELECT 1-50V
C337	87-010-196-080		CHIP CAPACITOR,0.1-25
C339	87-010-196-080		CHIP CAPACITOR,0.1-25
C340	87-010-196-080		CHIP CAPACITOR,0.1-25
C351	87-012-140-080		CAP 470P
C352	87-012-140-080		CAP 470P
C354	87-010-175-080		CAP 560P
C355	87-010-178-080		CHIP CAP 1000P
C356	87-010-260-080		CAP, ELECT 47-25V
C357	87-010-197-080		CAP, CHIP 0.01 DM
C358	87-010-183-080		C-CAP,S 2700P-50 B
C359	87-010-183-080		C-CAP,S 2700P-50 B
C360	87-010-183-080		C-CAP,S 2700P-50 B
C370	87-010-196-080		CHIP CAPACITOR,0.1-25
C371	87-010-179-080		CAP,CHIP S B1200P
C372	87-010-179-080		CAP,CHIP S B1200P
C373	87-010-179-080		CAP,CHIP S B1200P
C374	87-010-179-080		CAP,CHIP S B1200P
C375	87-010-545-080		CAP, ELECT 0.22-50V
C376	87-010-545-080		CAP, ELECT 0.22-50V
C378	87-010-196-080		CHIP CAPACITOR,0.1-25
C381	87-010-197-080		CAP, CHIP 0.01 DM
C382	87-010-318-080		C-CAP,S 47P-50 CH
C383	87-010-197-080		CAP, CHIP 0.01 DM
C384	87-010-402-080		CAP, ELECT 2.2-50V
C385	87-010-184-080		CHIP CAPACITOR 3300P(K)
C386	87-010-196-080		CHIP CAPACITOR,0.1-25
C388	87-010-154-080		CAP CHIP 10P
C401	87-010-187-080		CAP CHIP S5600P
C402	87-010-187-080		CAP CHIP S5600P
C403	87-010-405-080		CAP, ELECT 10-50V
C404	87-010-405-080		CAP, ELECT 10-50V
C405	87-010-260-080		CAP, ELECT 47-25V
C406	87-010-101-080		CAP, ELECT 220-16
C407	87-010-188-080		CAP,CHIP 6800P
C408	87-010-188-080		CAP,CHIP 6800P
C409	87-012-140-080		CAP 470P
C410	87-012-140-080		CAP 470P
C411	87-010-197-080		CAP, CHIP 0.01 DM
C412	87-010-197-080		CAP, CHIP 0.01 DM
C413	87-010-195-080		C-CAP,S 0.068-25 F
C414	87-010-195-080		C-CAP,S 0.068-25 F
C415	87-010-404-080		CAP, ELECT 4.7-50V
C416	87-010-404-080		CAP, ELECT 4.7-50V
C417	87-010-404-080		CAP, ELECT 4.7-50V
C418	87-010-404-080		CAP, ELECT 4.7-50V
C421	87-010-401-080		CAP, ELECT 1-50V
C422	87-010-401-080		CAP, ELECT 1-50V
C516	87-010-196-080		CHIP CAPACITOR,0.1-25
C605	87-010-180-080		C-CER 1500P
C606	87-010-180-080		C-CER 1500P
C611	87-010-196-080		CHIP CAPACITOR,0.1-25
C613	87-010-404-080		CAP, ELECT 4.7-50V
C614	87-010-404-080		CAP, ELECT 4.7-50V
C615	87-010-183-080		C-CAP,S 2700P-50 B
C619	87-010-263-080		CAP, ELECT 100-10V
C620	87-010-196-080		CHIP CAPACITOR,0.1-25
C621	87-010-263-080		CAP, ELECT 100-10V
C622	87-010-196-080		CHIP CAPACITOR,0.1-25
C623	87-010-194-080		CAP, CHIP 0.047
C629	87-012-368-080		C-CAP,S 0.1-50 F
C646	87-010-322-080		C-CAP,S 100P-50 CH
C647	87-010-322-080		C-CAP,S 100P-50 CH
C699	87-018-209-080		CAP,TC-U 0.1-50 Z F
C701	87-010-381-080		CAP, ELECT 330-16V
C702	87-010-404-080		CAP, ELECT 4.7-50V
C703	87-010-197-080		CAP, CHIP 0.01 DM
C704	87-010-197-080		CAP, CHIP 0.01 DM
C711	87-010-263-080		CAP, ELECT 100-10V
C712	87-010-196-080		CHIP CAPACITOR,0.1-25
C713	87-010-197-080		CAP, CHIP 0.01 DM
C714	87-010-197-080		CAP, CHIP 0.01 DM
C721	87-010-312-080		C-CAP,S 15P-50 CH
C722	87-010-312-080		C-CAP,S 15P-50 CH
C723	87-010-178-080		CHIP CAP 1000P
C725	87-010-178-080		CHIP CAP 1000P
C727	87-010-196-080		CHIP CAPACITOR,0.1-25
C728	87-010-248-080		CAP, ELECT 220-10V
C755	87-010-197-080		CAP, CHIP 0.01 DM
C756	87-010-197-080		CAP, CHIP 0.01 DM
C757	87-010-318-080		C-CAP,S 47P-50 CH
C758	87-010-149-080		C-CAP,S 5P-50 CH
C761	87-010-196-080		CHIP CAPACITOR,0.1-25
C762	87-010-197-080		CAP, CHIP 0.01 DM
C763	87-010-194-080		CAP, CHIP 0.047
C765	87-010-197-080		CAP, CHIP 0.01 DM
C766	87-010-197-080		CAP, CHIP 0.01 DM
C767	87-010-405-080		CAP, ELECT 10-50V
C768	87-010-197-080		CAP, CHIP 0.01 DM
C769	87-010-408-080		CAP, ELECT 47-50V
C770	87-015-821-080		C-CAP 0.047
C771	87-010-407-080		CAP, ELECT 33-50V
C772	87-010-194-080		CAP, CHIP 0.047
C773	87-010-196-080		CHIP CAPACITOR,0.1-25
C774	87-010-263-080		CAP, ELECT 100-10V
C775	87-010-404-080		CAP, ELECT 4.7-50V
C776	87-010-197-080		CAP, CHIP 0.01 DM
C777	87-010-400-080		CAP, ELECT 0.47-50V
C778	87-010-401-080		CAP, ELECT 1-50V
C779	87-010-401-080		CAP, ELECT 1-50V
C780	87-010-196-080		CHIP CAPACITOR,0.1-25
C781	87-010-405-080		CAP, ELECT 10-50V
C782	87-010-405-080		CAP, ELECT 10-50V
C783	87-015-819-080		CAPACITOR,0.01
C784	87-010-197-080		CAP, CHIP 0.01 DM
C785	87-010-400-080		CAP, ELECT 0.47-50V
C786	87-010-400-080		CAP, ELECT 0.47-50V
C787	87-010-184-080		CHIP CAPACITOR 3300P(K)
C788	87-010-184-080		CHIP CAPACITOR 3300P(K)
C789	87-010-179-080		CAP,CHIP S B1200P
C790	87-010-179-080		CAP,CHIP S B1200P
C791	87-010-405-080		CAP, ELECT 10-50V
C793	87-010-178-080		CHIP CAP 1000P
C794	87-010-406-080		CAP, ELECT 22-50
C795	87-010-596-080		CAP, S 0.047-16
C796	87-010-403-080		CAP, ELECT 3.3-50V
C797	87-010-180-080		C-CAP,S 1500P-50 B K
C798	87-010-180-080		C-CAP,S 1500P-50 B K
C799	87-010-194-080		CAP, CHIP 0.047
C812	87-010-197-080		CAP, CHIP 0.01 DM
C813	87-010-197-080		CAP, CHIP 0.01 DM
C814	87-010-197-080		CAP, CHIP 0.01 DM
C815	87-010-197-080		CAP, CHIP 0.01 DM
C816	87-010-197-080		CAP, CHIP 0.01 DM
C819	87-010-197-080		CAP, CHIP 0.01 DM
C820	87-010-408-080		CAP, ELECT 47-50V
C821	87-010-197-080		CAP, CHIP 0.01 DM
C822	87-010-197-080		CAP, CHIP 0.01 DM
C823	87-010-197-080		CAP, CHIP 0.01 DM
C828	87-010-196-080		CHIP CAPACITOR,0.1-25

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C829	87-010-196-080		CHIP CAPACITOR,0.1-25
C940	87-010-197-080		C-CAP,S 0.01-25 B K
C941	87-010-314-080		C-CAP,S 22P-50 C H
C943	87-010-197-080		C-CAP,S 0.01-25 B K
C944	87-014-051-080		CAP,PP 560P-100 J
C945	87-010-197-080		C-CAP,S 0.01-25 B K
C947	87-010-197-080		C-CAP,S 0.01-25 B K
C950	87-014-073-080		CAP,PP 4700P-100 J
C952	87-010-197-080		C-CAP,S 0.01-25 B K
C953	87-010-197-080		C-CAP,S 0.01-25 B K
C954	87-010-400-080		CAP,E 0.47-50 M SME
C956	87-010-263-080		CAP,E 100-10 SME
C959	87-010-196-080		CHIP CAPACITOR,0.1-25
C960	87-010-196-080		CHIP CAPACITOR,0.1-25
C962	87-010-401-080		CAP,E 1-50 M SME
CF801	87-008-261-010		FILTER, SFE10.7MA5-A
CF802	87-008-261-010		FILTER, SFE10.7MA5-A
CON102	87-NF4-645-010		CONN ASSY 4P SP
CON351	86-NF5-618-110		CONN ASSY,8P RPB
FB616	87-008-372-080		FLTR,EM1BLO1 RN1
FB617	87-008-372-080		FLTR,EM1BLO1 RN1
FB646	87-008-372-080		FLTR,EM1BLO1 RN1
FFE801	A8-7ZA-290-030		7ZA-2 FEUNM
J252	87-A60-031-010		JACK,6.3 BLK ST W/S
J253	87-099-801-010		JACK,PIN 1P BLK
J254	87-A60-238-010		TERMINAL,SP 4P (MSC)
J601	87-099-625-010		JACK PIN 4P,RVS (KM)
J801	87-A60-202-010		TERMINAL,ANT 4P MSP-154V-02
J940	81-754-629-010		CONNECTOR,XH 2P (UL)
L201	87-003-383-010		COIL,1UH-S
L202	87-003-383-010		COIL,1UH-S
L301	87-A50-049-010		COIL,TRAP 85K(COI)
L302	87-A50-049-010		COIL,TRAP 85K(COI)
L351	87-007-342-010		COIL,OSC 85K BIAS
L601	87-003-231-080		C-COIL,2125 1UH
L770	87-005-847-080		COIL,2.2UH(CECS)
L771	87-A50-165-010		COIL,FM DET-N(TOK)
L772	87-A90-052-010		FLTR,CFMT-450A
L791	87-A50-027-010		COIL,1 POLE MPX (TOK)
L792	87-A50-027-010		COIL,1 POLE MPX (TOK)
L832	87-005-847-080		COIL,2.2UH(CECS)
L941	87-A50-022-010		COIL,ANT SW (COI) 7.96MHZ
L942	87-A50-173-010		COIL,OSC SW-N (COI)
L943	87-005-372-080		COIL,1MH
L944	87-A50-159-010		COIL,10MH
L981	86-NF4-666-010		COIL, AM PACK 3(TOK)
⚠ PR201	87-026-682-080		PROTECTOR,10A 491 SERIES 60 V
⚠ PR202	87-026-682-080		PROTECTOR,10A 491 SERIES 60 V
R123	87-022-200-080		RESISTOR, METAL 0.56 1W
R231	87-A00-262-080		RES,M/F 0.15-2W J
R232	87-A00-262-080		RES,M/F 0.15-2W J
RY101	87-045-389-010		RELAY,OSA-SS-212DM5
SFR301	87-024-435-080		SFR 33K RH 063EC
SFR302	87-024-435-080		SFR 33K RH 063EC
SFR303	87-024-435-080		SFR 33K RH 063EC
SFR304	87-024-435-080		SFR 33K RH 063EC
SFR305	87-024-436-080		SFR,47K RH063EC
SFR306	87-024-436-080		SFR,47K RH063EC
SFR351	87-024-436-080		SFR,47K RH063EC
SFR352	87-024-436-080		SFR,47K RH063EC
TC941	87-011-220-080		TRIMMER,CER 20P 6.15X5.9 VCT5
TC942	87-011-221-080		TRIMMER,CER 30P 6.15X5.9 VCT5
TH201	87-A90-221-080		C-THMS,100K
TH202	87-A90-221-080		C-THMS,100K
W4	88-906-261-110		FF-CABLE,6P 1.25 260MM
X721	87-A70-061-010		VIB,XTAL 4.500MHZ CSA-309
X771	87-030-354-010		VIB,CER 450.0KHZ BFU

FRONT C.B

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C121	87-010-196-080		CHIP CAPACITOR,0.1-25
C201	87-010-197-080		CAP, CHIP 0.01 DM
C202	87-010-197-080		CAP, CHIP 0.01 DM
C203	87-010-198-080		CAP, CHIP 0.022
C204	87-010-198-080		CAP, CHIP 0.022
C205	87-010-198-080		CAP, CHIP 0.022
C206	87-010-198-080		CAP, CHIP 0.022
C208	87-010-555-040		CAP,E 100-10 GAS
C209	87-010-196-080		CHIP CAPACITOR,0.1-25
C210	87-010-494-040		CAP,E 1-50 GAS
C211	87-010-196-080		CHIP CAPACITOR,0.1-25
C212	87-A10-189-040		CAP,E 220-10
C213	87-010-178-080		CHIP CAP 1000P
C214	87-010-196-080		CHIP CAPACITOR,0.1-25
C215	87-010-194-080		CAP, CHIP 0.047
C216	87-010-197-080		CAP, CHIP 0.01 DM
C217	87-010-494-040		CAP,E 1-50 GAS
C218	87-010-196-080		CHIP CAPACITOR,0.1-25
C219	87-010-196-080		CHIP CAPACITOR,0.1-25
C220	87-010-320-080		CHIP CAP 68P
C221	87-010-312-080		C-CAP,S 15P-50 CH
C222	87-010-316-080		C-CAP,S 33P-50 CH
C224	87-010-112-040		CAP,E 100-16
C225	87-010-560-040		CAP,E 10-50 GAS
C226	87-010-178-080		CHIP CAP 1000P
C351	87-010-497-040		CAP,E 4.7-35 GAS
C352	87-010-497-040		CAP,E 4.7-35 GAS
C353	87-010-981-040		CAP,E 22-35 5L SRE
C363	87-012-156-080		C-CAP,S 220P-50 CH
C364	87-012-156-080		C-CAP,S 220P-50 CH
C381	87-010-196-080		CHIP CAPACITOR,0.1-25
C382	87-010-196-080		CHIP CAPACITOR,0.1-25
C383	87-010-196-080		CHIP CAPACITOR,0.1-25
C384	87-010-196-080		CHIP CAPACITOR,0.1-25
C385	87-010-322-080		C-CAP,S 100P-50 CH
C386	87-015-694-040		E/CAP 0.47-50
C387	87-010-400-040		CAP,E 0.47-50
C389	87-010-196-080		CHIP CAPACITOR,0.1-25
C401	87-010-196-080		CHIP CAPACITOR,0.1-25
C402	87-010-196-080		CHIP CAPACITOR,0.1-25
C403	87-010-196-080		CHIP CAPACITOR,0.1-25
C601	87-010-405-040		CAP,E 10-50
C602	87-010-176-080		C-CAP,S 680P-50 SL
C603	87-010-186-080		CAP,CHIP 4700P
C604	87-010-322-080		C-CAP,S 100P-50 CH
C605	87-010-321-080		CHIP CAPACITOR,82P(J)
C606	87-010-196-080		CHIP CAPACITOR,0.1-25
C607	87-010-196-080		CHIP CAPACITOR,0.1-25
C608	87-010-322-080		C-CAP,S 100P-50 CH
C609	87-010-545-040		CAP,E 0.22-50 SME
C610	87-010-177-080		C-CAP,S 820P-50 SL
C611	87-010-406-040		CAP,E 22-50 SME
C614	87-010-248-040		CAP,E 220-10 SME
C615	87-010-498-040		CAP,E 10-16 GAS
C619	87-016-461-080		CHIP-CAPACITOR,0.47-16F
C701	87-010-421-040		CAP,E 4.7-50 5L
C702	87-010-112-040		CAP,E 100-16
C705	87-010-493-040		CAP,E 0.47-50 GAS
C706	87-010-196-080		CHIP CAPACITOR,0.1-25
C707	87-010-196-080		CHIP CAPACITOR,0.1-25
C708	87-010-400-040		CAP,E 0.47-50
C709	87-010-198-080		CAP, CHIP 0.022
C710	87-010-400-040		CAP,E 0.47-50
C711	87-010-197-080		CAP, CHIP 0.01 DM
C712	87-010-196-080		CHIP CAPACITOR,0.1-25
C713	87-010-185-080		C-CAP,S 3900P-50 B
C714	87-010-596-080		CAP, S 0.047-16
C715	87-010-181-080		CAP,CHIP S 1800P
C716	87-010-198-080		CAP, CHIP 0.022
C717	87-010-176-080		C-CAP,S 680P-50 SL

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C718	87-010-188-080		CAP,CHIP 6800P
C719	87-012-145-080		CAP, CHIP S 270P CH
C720	87-010-183-080		C-CAP,S 2700P-50 B
C721	87-015-696-040		CAP,E 2.2-50 SRA
C722	87-015-696-040		CAP,E 2.2-50 SRA
C723	87-015-681-040		E/CAP 10-16
C724	87-010-198-080		CAP, CHIP 0.022
C725	87-010-493-040		CAP,E 0.47-50 GAS
C726	87-010-197-080		CAP, CHIP 0.01 DM
C727	87-010-196-080		CHIP CAPACITOR,0.1-25
C728	87-010-185-080		C-CAP,S 3900P-50 B
C729	87-010-596-080		CAP, S 0.047-16
C730	87-010-181-080		CAP,CHIP S 1800P
C731	87-010-198-080		CAP, CHIP 0.022
C732	87-010-176-080		C-CAP,S 680P-50 SL
C733	87-010-188-080		CAP,CHIP 6800P
C734	87-012-145-080		CAP, CHIP S 270P CH
C735	87-010-183-080		C-CAP,S 2700P-50 B
C809	87-012-365-080		C-CAP,S 0.027-25VBK
C810	87-012-365-080		C-CAP,S 0.027-25VBK
C811	87-A10-201-080		C-CAP,S0.33-16 KB
C812	87-A10-201-080		C-CAP,S0.33-16 KB
C813	87-010-196-080		CHIP CAPACITOR,0.1-25
C814	87-015-680-040		CAP,E 47-10 7L
C815	87-010-234-040		CAP,E 47-16 5L
C816	87-010-196-080		CHIP CAPACITOR,0.1-25
C817	87-016-081-080		C-CAP,S 0.1-16 RK
C818	87-010-560-040		CAP,E 10-50 GAS
FB601	87-008-372-080		FILTER, EMI BL OIRNI
FL301	86-NF9-653-010		FL,BJ539GK
FL302	86-NF9-616-010		FL,BJ504GK
J601	87-A60-284-010		JACK,3.5MO (MSC)
J621	87-A60-284-010		JACK,3.5MO (MSC)
LED401	87-070-281-080		LED,SLZ736A-25-S-T1
LED402	87-070-281-080		LED,SLZ736A-25-S-T1
LED403	87-070-281-080		LED,SLZ736A-25-S-T1
LED404	87-070-281-080		LED,SLZ736A-25-S-T1
LED405	87-070-281-080		LED,SLZ736A-25-S-T1
LED406	87-070-281-080		LED,SLZ736A-25-S-T1
LED407	87-017-979-010		LED, SEL2413E
LED408	87-017-979-010		LED, SEL2413E
LED409	87-017-979-010		LED, SEL2413E
LED410	87-017-979-010		LED, SEL2413E
LED411	87-017-979-010		LED, SEL2413E
LED412	87-017-979-010		LED, SEL2413E
LED413	87-017-979-010		LED, SEL2413E
LED414	87-017-979-010		LED, SEL2413E
LED420	87-A40-259-080		LED, SLR-342VCT31 RED
LED421	87-A40-259-080		LED, SLR-342VCT31 RED
LED422	87-A40-259-080		LED, SLR-342VCT31 RED
LED423	87-A40-259-080		LED, SLR-342VCT31 RED
LED425	87-070-278-010		LED, SLZ-738A-24-S
LED426	87-070-278-010		LED, SLZ-738A-24-S
LED427	87-070-290-010		LED, SLZ 936-30-S
LED428	87-070-290-010		LED, SLZ 936-30-S
LED429	87-070-278-010		LED, SLZ-738A-24-S
LED430	87-070-278-010		LED, SLZ-738A-24-S
⚠ PR101	87-026-689-080		PROTECTOR,1A 491 SERIES 60 V
R341	87-022-355-080		C-RES,S10K-1/10W F
R342	87-022-355-080		C-RES,S10K-1/10W F
R343	87-022-355-080		C-RES,S10K-1/10W F
S301	87-A90-095-080		SW,TACT EVQ11G04M
S302	87-A90-095-080		SW,TACT EVQ11G04M
S303	87-A90-095-080		SW,TACT EVQ11G04M
S304	87-A90-095-080		SW,TACT EVQ11G04M
S305	87-A90-095-080		SW,TACT EVQ11G04M
S306	87-A90-095-080		SW,TACT EVQ11G04M
S307	87-A90-095-080		SW,TACT EVQ11G04M
S308	87-A90-095-080		SW,TACT EVQ11G04M
S309	87-A90-095-080		SW,TACT EVQ11G04M

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
S310	87-A90-095-080		SW,TACT EVQ11G04M
S311	87-A90-095-080		SW,TACT EVQ11G04M
S312	87-A90-095-080		SW,TACT EVQ11G04M
S313	87-A90-095-080		SW,TACT EVQ11G04M
S314	87-A90-095-080		SW,TACT EVQ11G04M
S315	87-A90-095-080		SW,TACT EVQ11G04M
S316	87-A90-095-080		SW,TACT EVQ11G04M
S317	87-A90-095-080		SW,TACT EVQ11G04M
S318	87-A90-095-080		SW,TACT EVQ11G04M
S319	87-A90-095-080		SW,TACT EVQ11G04M
S320	87-A90-095-080		SW,TACT EVQ11G04M
S321	87-A90-095-080		SW,TACT EVQ11G04M
S322	87-A90-095-080		SW,TACT EVQ11G04M
S323	87-A90-095-080		SW,TACT EVQ11G04M
S324	87-A90-095-080		SW,TACT EVQ11G04M
S325	87-A90-095-080		SW,TACT EVQ11G04M
S326	87-A90-095-080		SW,TACT EVQ11G04M
S327	87-A90-095-080		SW,TACT EVQ11G04M
S328	87-A90-095-080		SW,TACT EVQ11G04M
S329	87-A90-095-080		SW,TACT EVQ11G04M
S330	87-A90-095-080		SW,TACT EVQ11G04M
S331	87-A90-095-080		SW,TACT EVQ11G04M
S332	87-A90-095-080		SW,TACT EVQ11G04M
S333	87-A90-095-080		SW,TACT EVQ11G04M
S334	87-A90-095-080		SW,TACT EVQ11G04M
S335	87-A90-095-080		SW,TACT EVQ11G04M
S336	87-A90-095-080		SW,TACT EVQ11G04M
S337	87-A90-095-080		SW,TACT EVQ11G04M
SW201	87-A90-392-010		SW, RTRY EC16B24304-20 NON
VR601	86-NFA-607-010		VR, RTRY 10K15AX1 1 V XV0121PVN
W2	87-A80-052-010		FF-CABLE, 14P 1.25 280MM BLK
W3	87-A80-053-010		FF-CABLE, 8P 1.25 200MM BLK
W5	88-913-191-110		FF-CABLE,13P 1.25
W6	88-915-161-110		FF-CABLE, 15P 1.25
X201	87-A70-070-080		VIB,CER 5.76MHZ CRHF

VR C.B

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
SW202	87-A90-340-010		SW, RTRY EC16B24204-15

CD KEY C.B

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
LED451	87-017-979-010		LED,SEL2413E
LED452	87-017-979-010		LED,SEL2413E
LED453	87-017-979-010		LED,SEL2413E
LED454	87-017-979-010		LED,SEL2413E
LED455	87-017-979-010		LED,SEL2413E
LED456	87-017-979-010		LED,SEL2413E
LED457	87-017-979-010		LED,SEL2413E
LED458	87-017-979-010		LED,SEL2413E
LED459	87-017-979-010		LED,SEL2413E
LED460	87-017-979-010		LED,SEL2413E
S451	87-A90-095-080		SW,TACT EVQ11G04M
S452	87-A90-095-080		SW,TACT EVQ11G04M
S453	87-A90-095-080		SW,TACT EVQ11G04M
S454	87-A90-095-080		SW,TACT EVQ11G04M
S455	87-A90-095-080		SW,TACT EVQ11G04M
S456	87-A90-095-080		SW,TACT EVQ11G04M
S457	87-A90-095-080		SW,TACT EVQ11G04M

AC2 C.B

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
⚠ PR1	87-026-682-080		PROTECTOR,10A 491 SERIES 60 V
⚠ PR2	87-026-682-080		PROTECTOR,10A 491 SERIES 60 V
⚠ PR3	87-026-681-080		PROTECTOR,5A 491 SERIES 60 V
⚠ PR4	87-026-681-080		PROTECTOR,5A 491 SERIES 60 V
⚠ PR5	87-026-682-080		PROTECTOR,10A 491 SERIES 60 V
⚠ PR6	87-026-682-080		PROTECTOR,10A 491 SERIES 60 V
W1	85-NF5-628-010		F-CABLE 7P-2.5

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
PT C.B			
⚠ F101	87-035-368-010		FUSE,4A 250V T
⚠ F102	87-035-368-010		FUSE,4A 250V T
⚠ FC001	87-033-213-080		CLAMP, FUSE
⚠ FC002	87-033-213-080		CLAMP, FUSE
⚠ FC003	87-033-213-080		CLAMP, FUSE
⚠ FC004	87-033-213-080		CLAMP, FUSE
⚠ SW101	87-A90-165-010		SW,SL 1-2-3 SWS2301
⚠ PT101	86-NFW-631-010		PT,6NF-W HR
⚠ T001	87-A60-317-010		TERMINAL, 1P MSC
⚠ T002	87-A60-317-010		TERMINAL, 1P MSC
PRO 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	87-010-398-090		CAP,E 2200-35V
C104	87-010-398-090		CAP,E 2200-35V
C106	87-010-382-080		CAP, ELECT 22-25V
C109	87-016-369-080		C-CAP,S 0.033-25 B K
C110	87-010-194-080		CAP, CHIP 0.047
C112	87-010-196-080		CHIP CAPACITOR,0.1-25
C201	87-010-186-080		CAP,CHIP 4700P
C202	87-010-402-080		CAP, ELECT 2.2-50V
C204	87-010-405-080		CAP, ELECT 10-50V
C205	87-A10-596-080		C-CAP,S 100P-100 J CH
C208	87-010-260-080		CAP, ELECT 47-25V
C209	87-010-993-080		C-CAP,S 0.056-25 B
C210	87-010-196-080		CHIP CAPACITOR,0.1-25
C211	87-010-197-080		CAP, CHIP 0.01 DM
C212	87-010-196-080		CHIP CAPACITOR,0.1-25
C213	87-010-406-080		CAP, ELECT 22-50
C301	87-010-183-080		C-CAP,S 2700P-50 B
C302	87-010-402-080		CAP, ELECT 2.2-50V
C304	87-010-382-080		CAP, ELECT 22-25V
C305	87-A10-596-080		C-CAP,S 100P-100 J CH
C308	87-010-260-080		CAP, ELECT 47-25V
C309	87-010-993-080		C-CAP,S 0.056-25 B
C310	87-010-196-080		CHIP CAPACITOR,0.1-25
C311	87-010-197-080		CAP, CHIP 0.01 DM
C312	87-010-196-080		CHIP CAPACITOR,0.1-25
C313	87-010-406-080		CAP, ELECT 22-50
C501	87-010-176-080		C-CAP,S 680P-50 SL
C502	87-010-176-080		C-CAP,S 680P-50 SL
C507	87-016-456-080		CAP,E 22-16 LLA
C508	87-010-196-080		CHIP CAPACITOR,0.1-25
C509	87-010-112-080		CAP, ELECT 100-16V
C510	87-010-380-080		CAP, ELECT 47-16V
C512	87-016-472-080		CAP,E 22-16 SME(K)
C513	87-010-196-080		CHIP CAPACITOR,0.1-25
C514	87-010-263-080		CAP, ELECT 100-10V
C517	87-010-314-080		C-CAP,S 22P-50 J CH
C518	87-010-378-080		CAP, ELECT 10-16V
C519	87-010-404-080		CAP, ELECT 4.7-50V
C520	87-010-404-080		CAP, ELECT 4.7-50V
C521	87-010-400-080		CAP, ELECT 0.47-50V
C522	87-010-378-080		CAP, ELECT 10-16V
C523	87-010-400-080		CAP, ELECT 0.47-50V
C524	87-016-081-080		C-CAP,S 0.1-16 RK
C525	87-010-248-080		CAP, ELECT 220-10V
C526	87-012-140-080		CAP 470P
C527	87-010-186-080		CAP,CHIP 4700P
C528	87-010-186-080		CAP,CHIP 4700P
C529	87-010-404-080		CAP, ELECT 4.7-50V
C532	87-A10-229-080		C-CAP,S 0.68-10 K W5
C533	87-012-393-080		C-CAP,S 0.22-16 R K
C534	87-012-393-080		C-CAP,S 0.22-16 R K
C535	87-010-404-080		CAP, ELECT 4.7-50V
C536	87-010-404-080		CAP, ELECT 4.7-50V
C537	87-012-393-080		C-CAP,S 0.22-16 R K
C538	87-012-393-080		C-CAP,S 0.22-16 R K
C539	87-016-081-080		C-CAP,S 0.1-16 RK
C542	87-016-081-080		C-CAP,S 0.1-16 RK
C543	87-016-081-080		C-CAP,S 0.1-16 RK
C546	87-016-081-080		C-CAP,S 0.1-16 RK
C600	87-018-209-080		CAP,TC-U 0.1-50 Z F
C602	87-010-314-080		C-CAP,S 22P-50 J CH
C604	87-016-460-080		C-CAP,S 0.22-16 KB
C605	87-016-460-080		C-CAP,S 0.22-16 KB
C606	87-016-526-080		C-CAP,S 0.47-16 BK
C607	87-010-183-080		C-CAP,S 2700P-50 KB
C608	87-010-176-080		C-CAP,S 680P-50 J SL
C609	87-016-552-080		C-CAP,S 0.082-16 KB
C610	87-016-552-080		C-CAP,S 0.082-16 KB
C611	87-010-183-080		C-CAP,S 2700P-50 KB
C612	87-010-176-080		C-CAP,S 680P-50 J SL
C613	87-A10-201-080		C-CAP,S 0.33-16 KB
C615	87-010-263-080		CAP, ELECT 100-10V
C616	87-010-404-080		CAP, ELECT 4.7-50V
C618	87-010-263-080		CAP, ELECT 100-10V
C621	87-010-403-080		CAP, ELECT 3.3-50V
C622	87-012-141-080		C-CAP,S 0.22-16 ZF
C623	87-010-196-080		C-CAP,S 0.1-25 ZF
C701	87-010-401-080		CAP, ELECT 1-50V
C702	87-010-401-080		CAP, ELECT 1-50V
C703	87-010-263-080		CAP, ELECT 100-10V
C706	87-010-314-080		C-CAP,S 22P-50 J CH
C707	87-016-526-080		C-CAP,S 0.47-16 BK
C708	87-016-526-080		C-CAP,S 0.47-16 BK
C709	87-010-380-080		CAP, ELECT 47-16V
FB106	87-008-372-080		FILTER, EMI BL01 RN1
J201	87-A60-380-010		JACK,PIN 3P O/W/R YKC21-3
L201	87-003-383-010		COIL,1UH-S
L301	87-003-383-010		COIL,1UH-S
R215	87-A00-257-080		RES,M/F 0.15-1W J
R315	87-A00-257-080		RES,M/F 0.15-1W J
R524	87-022-365-080		C-RES,S 100K-1/10W F
DECK C.B			
W001	82-ZM3-601-019		RBN,CORD,4P-75
SFR1	87-024-581-019		SFR,3.3K DIA 6H
SOL1	82-ZM1-618-310		SOL ASSY, 27
SOL2	82-ZM1-618-310		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	87-036-110-010		SW,MICRO SPPB62
CON502	87-099-756-019		CONN, 15P 9604 S F
HEAD-1 C.B			
	85-ZM3-602-010		PWB,FLEX A
HEAD-2 C.B			
	85-ZM3-602-010		PWB,FLEX A

2

TRANSISTOR ILLUSTRATION

E C B

2SA1296GR
KTA1266GR
KTC3198GR

E C B

CSD1489B
CSB1058B

E B C

C2N5401
C2N5551

E C B

2SA933S

B C E

2SB1370
FN1016
FP1016
2SD2061

G D S

2SK2723

G   D   S

2SK2158

B   E   C
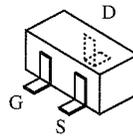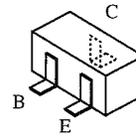
2SA1235F	RN1410
2SC2714	RT1P144C
2SC3052F	RT1N141C
CMBT5551	RT1N144C
CSA1362GR	RT1P141C
CSD1306E	DTA124EK
	DTA144WK

○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

8 8 − □□□ □□□
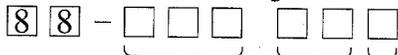
A
抵抗部品コード
Resistor Code

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
				外形／Form	L	W	t	Resistor Code : A
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

BLOCK DIAGRAM – 1 (MAIN / FRONT)
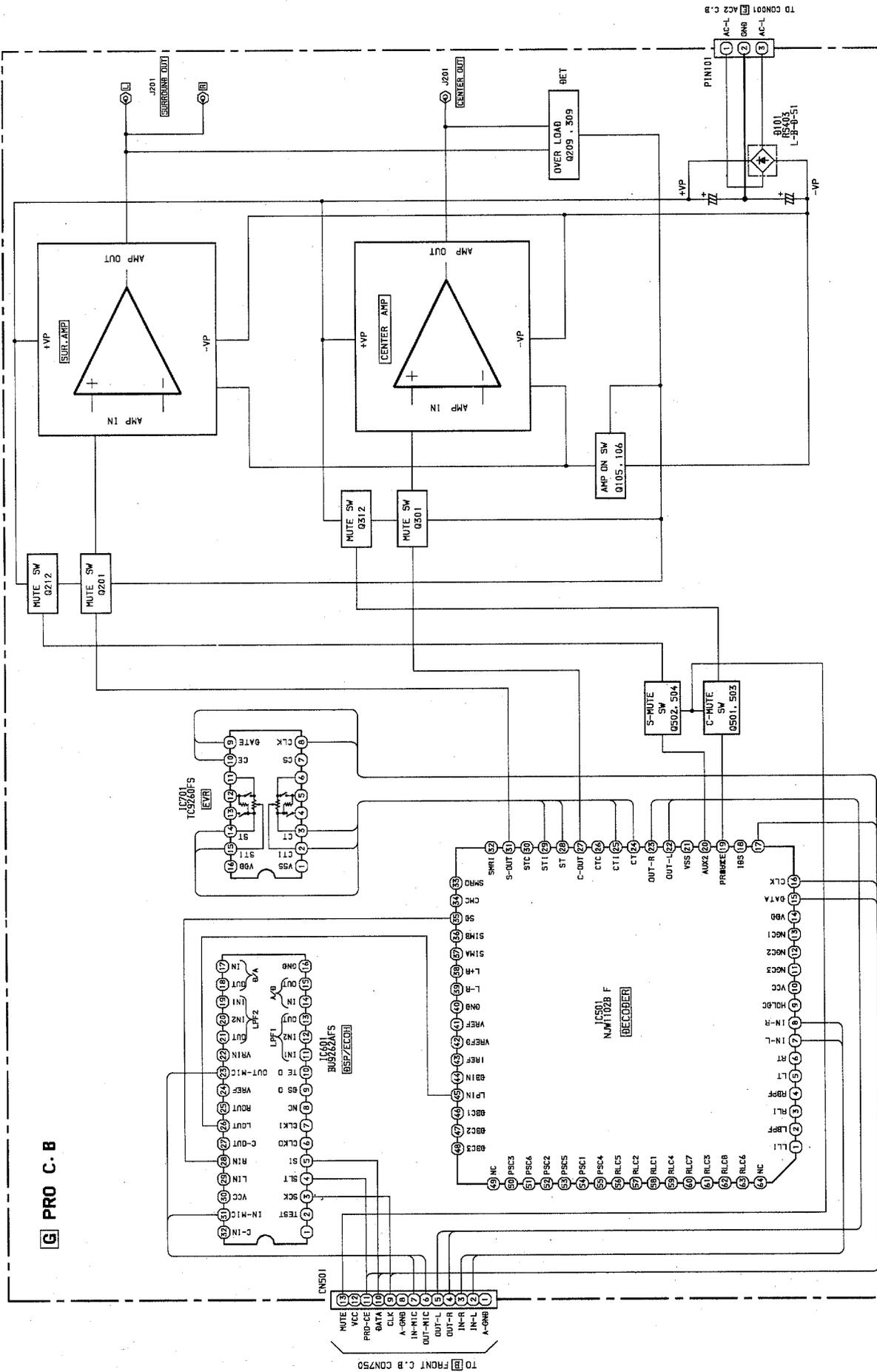
BLOCK DIAGRAM – 2 (TUNER)

BLOCK DIAGRAM – 3 (PROLOGIC)

WIRING – 1 (MAIN)

A MAIN C.B

SCHEMATIC DIAGRAM-1 (MAIN)
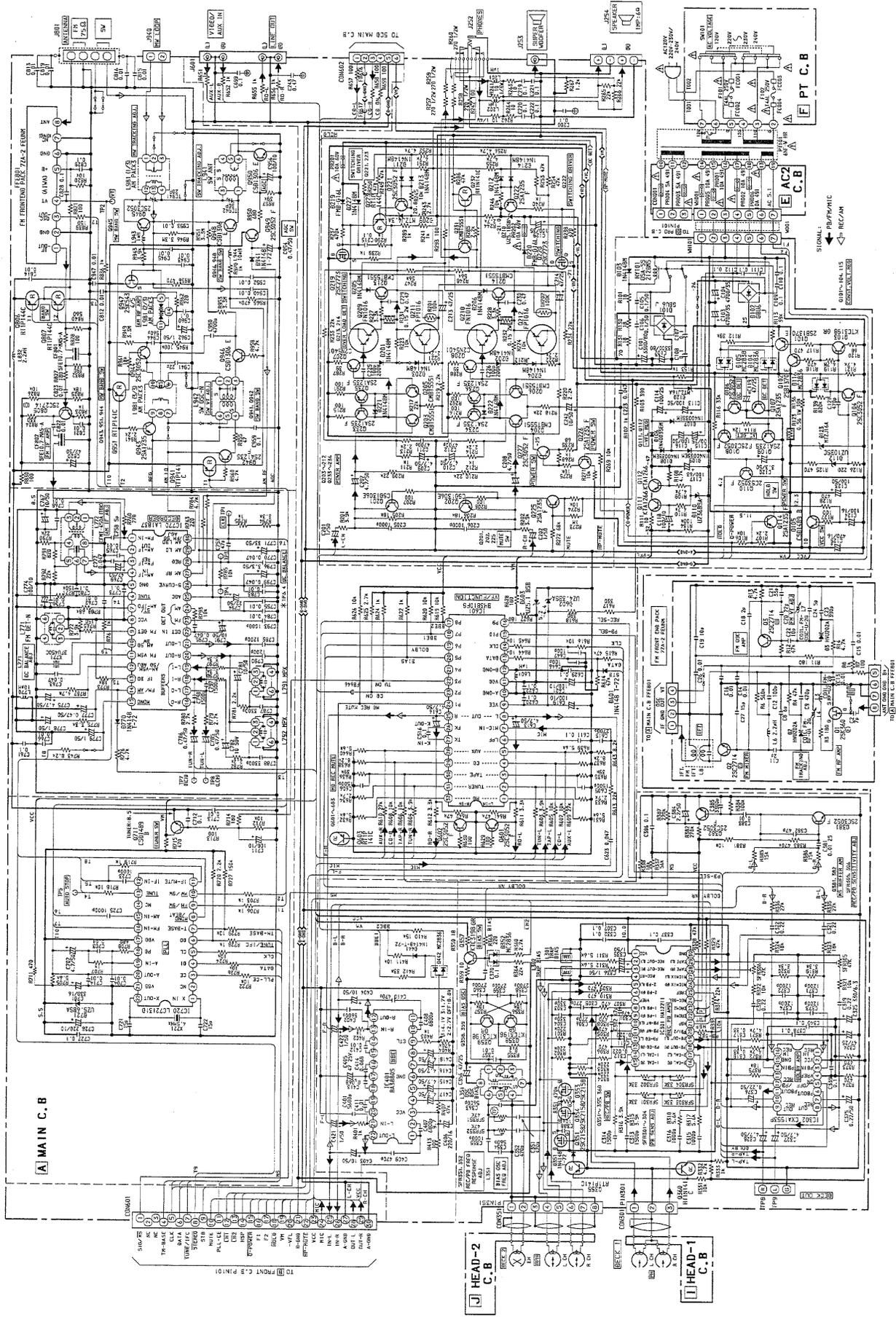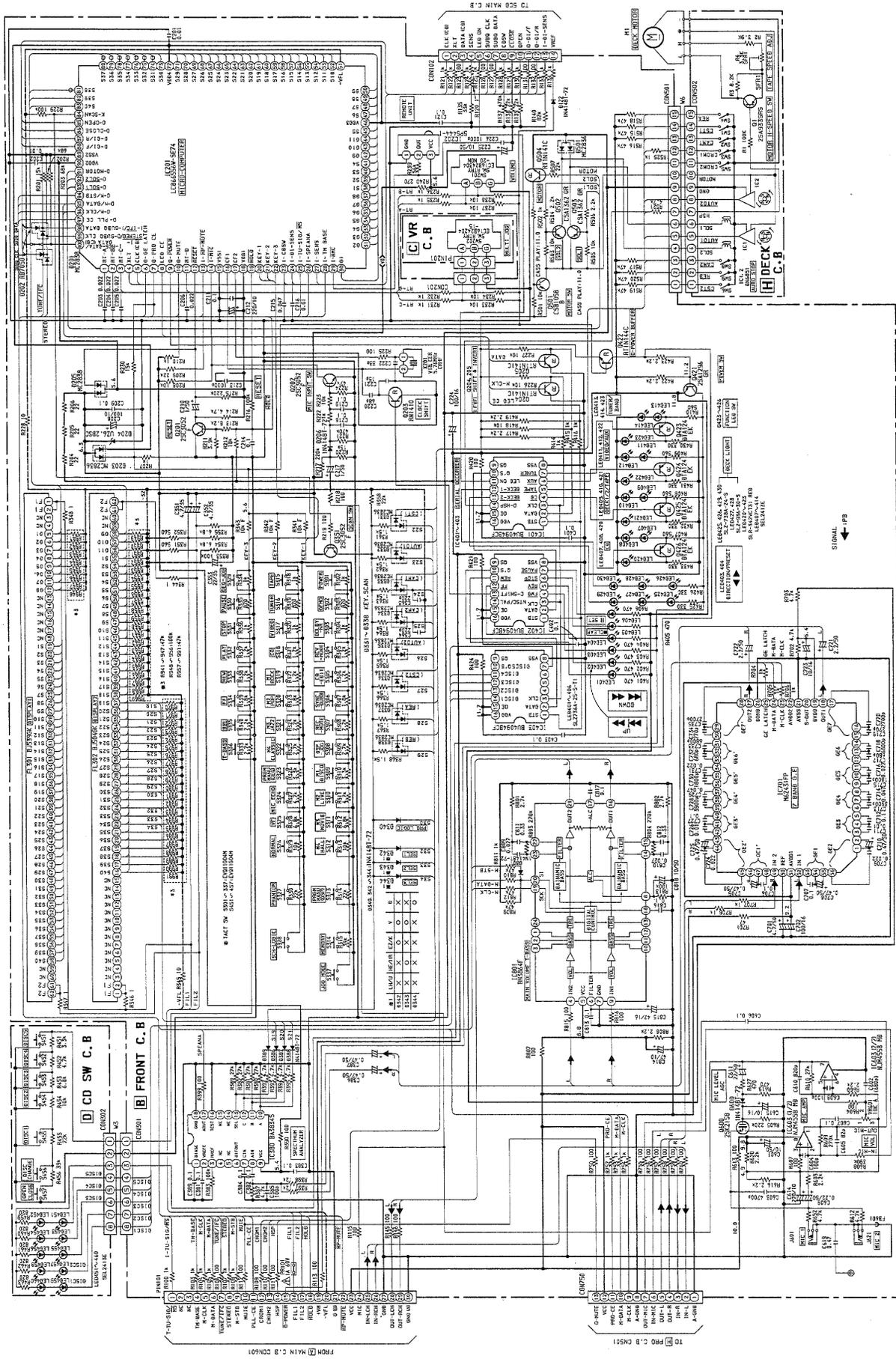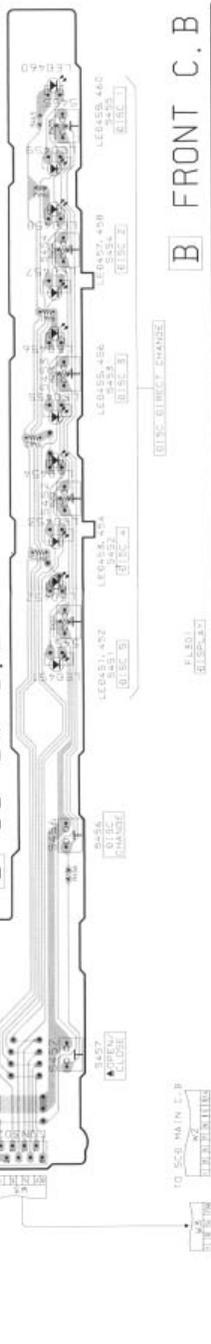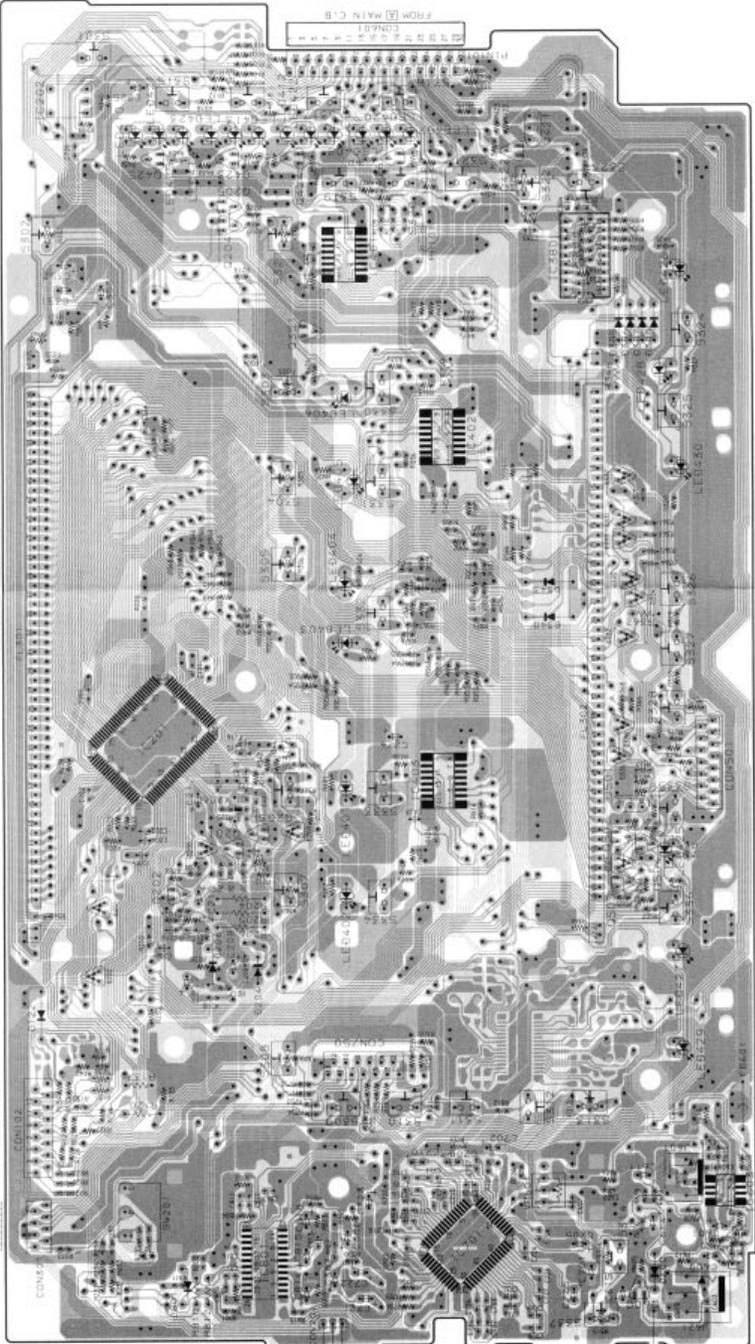
WIRING – 2 (FRONT)

A CD SW C.B

B FRONT C.B

C VR C.B

FUNCTION

GRAPHIC EQUALIZER

23

24

5

WIRING—3 (PROLOGIC)

G PRO C.B

FROM E AC2 C.B
<RED>
<RED>
CON1
3 2 1
TO P1N101

J201
CENTER
SPEAKERS

J201
SURROUND
SPEAKERS

R
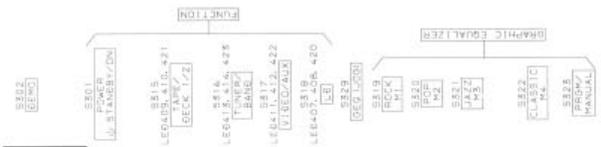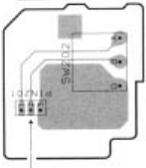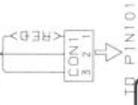
FROM B FRONT C.B
CON750

IC501

25

26
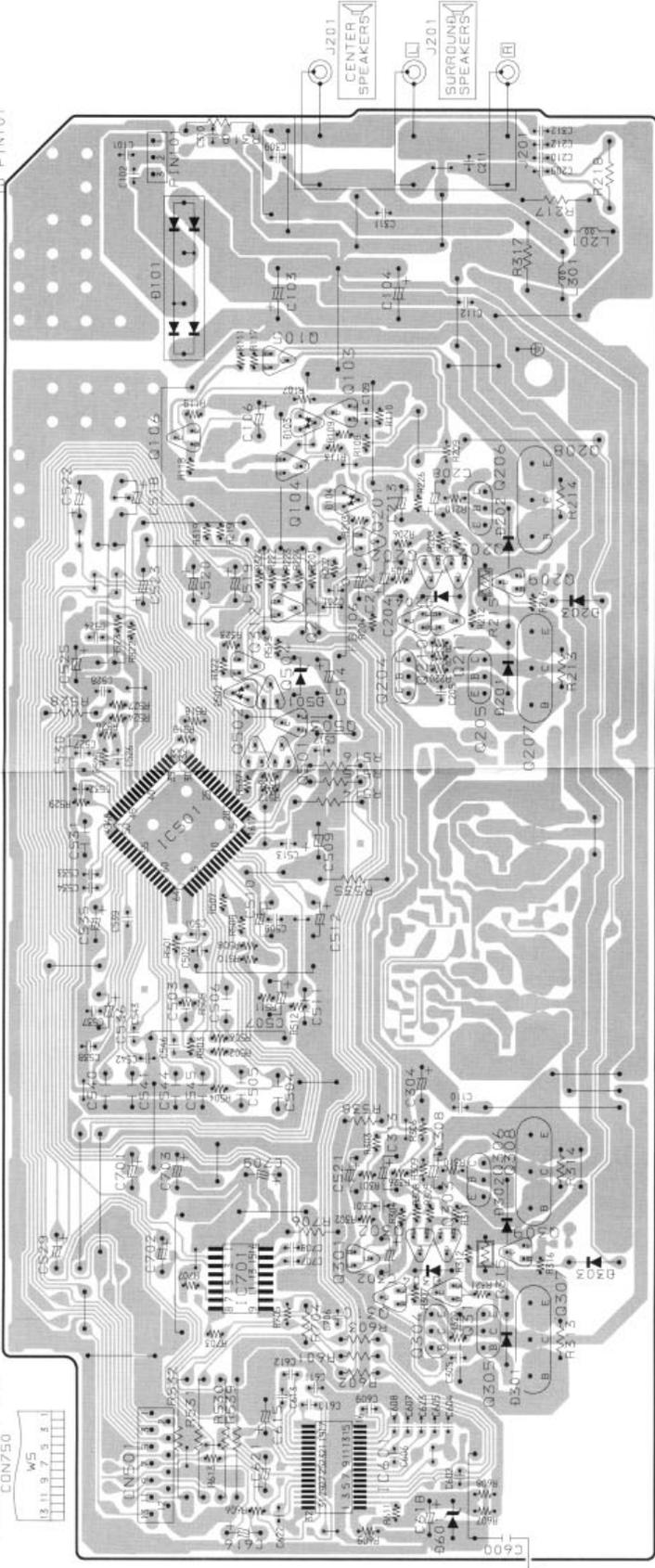
SCHEMATIC DIAGRAM – 3 (PROLOGIC)

E AC2 C.B

F PT C.B

I HEAD-1 C.B

J HEAD-2 C.B

H DECK C.B

(CST1) SW1
(CAM1) SW2
(LH1) SW3
(DECK MOTOR) M1
(REA2) SW4
(LH2) SW5
(CST2) SW6
(CAM2) SW8
(REB2) SW9

FROM B FRONT C.B CN501

<RED> <WHT>
<BLK> <GRY> <BLK> CON501
<WHT> <RED>

TO A MAIN C.B PIN301

P HEAD (DECK-1)

<WHT> <WHT> <BLK>
<RED> <WHT>
<BLK> <GRY> <WHT>
<RED>
<WHT> <RED>
<RED> <BLK> <WHT>
<WHT>

CON551

TO A MAIN C.B PIN351

RP HEAD (DECK-2)
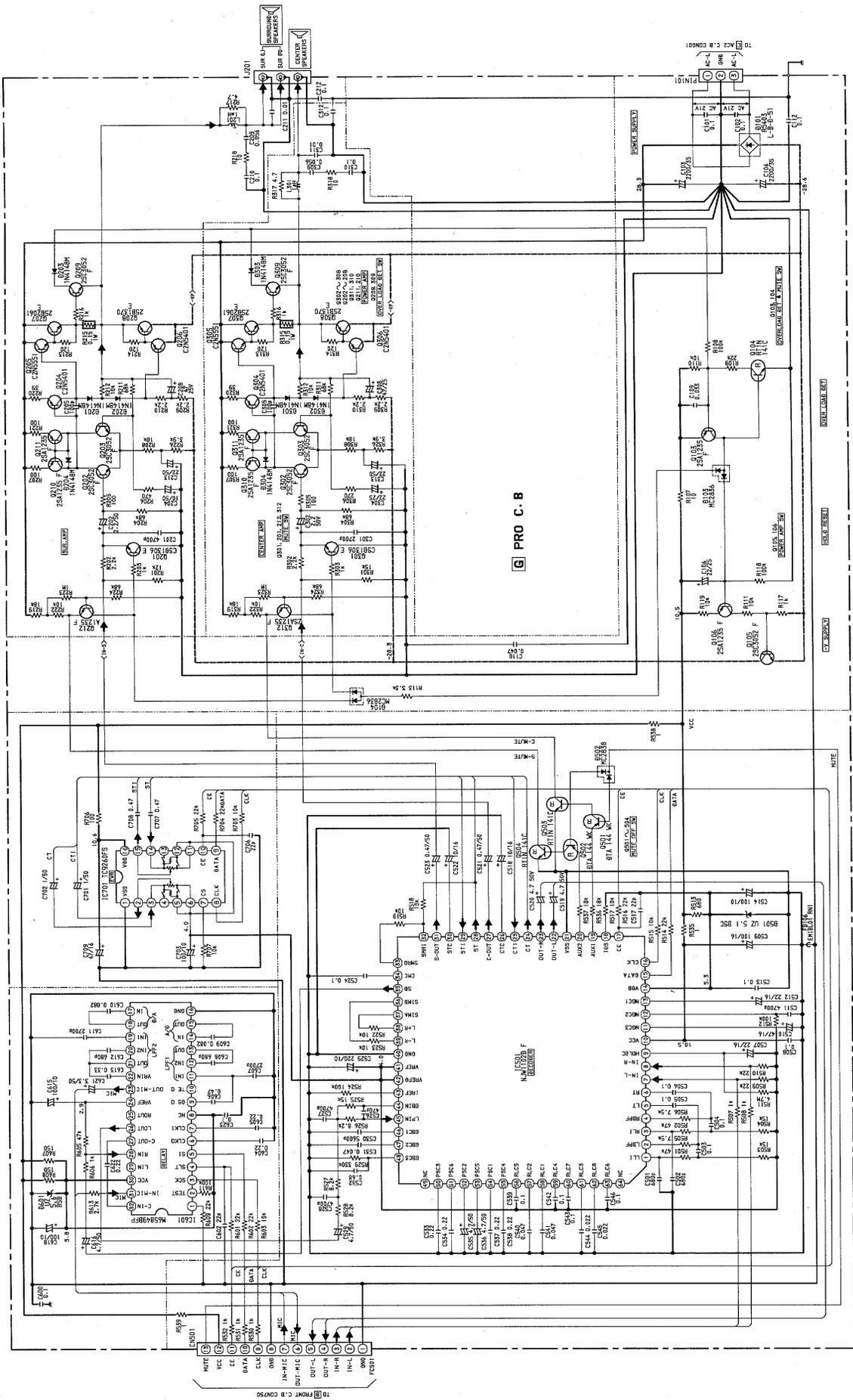
FL GRID ASSIGNMENT & ANODE CONNECTION
FL, BJ504GK

GRID ASSIGNMENT

GRAPHIC EQUALIZER
ROCK : M1
POP : M2
JAZZ : M3
CLASSIC : M4

60 S10 150 400 1K 59 2 5K 6K 15K Hz S8

BBE T-BASS

DSP SURROUND
M1 : DISCO
M2 : LIVE
M3 : MOVIE
M4 : HALL
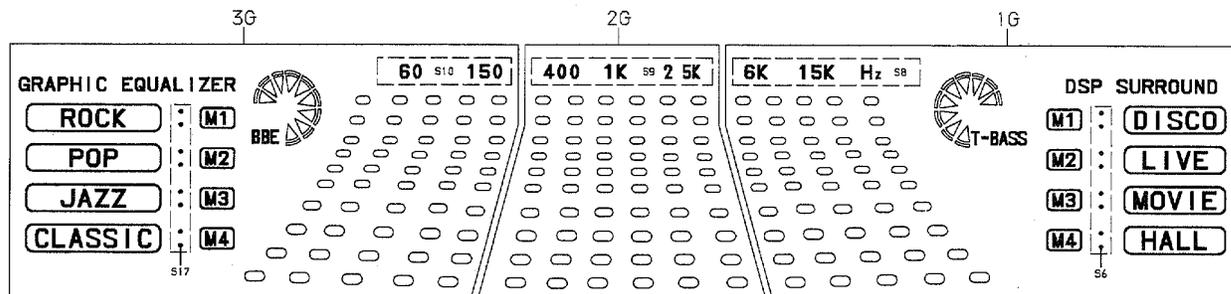
BJ504GK
GRID ASSIGNMENT

SEGMENT DESIGNATION
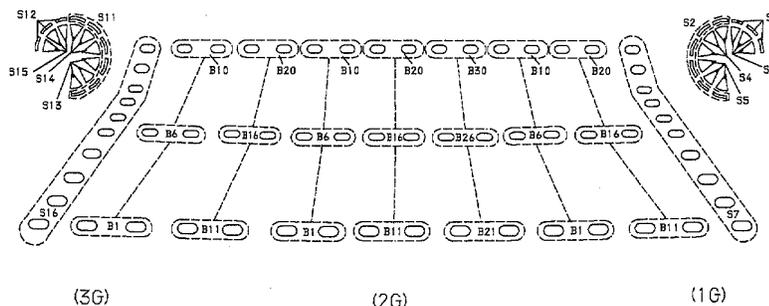
(3G)　　　(2G)　　　(1G)

ANODE CONNECTION

	3G	2G	1G
P1	GRAPHIC EQUALIZER	—	DSP SURROUND
P2	ROCK POP JAZZ CLASSIC	—	DISCO LIVE MOVIE HALL
P3	(ROCK)	—	(DISCO)
P4	(POP)	—	(LIVE)
P5	(JAZZ)	—	(MOVIE)
P6	(CLASSIC)	—	(HALL)
P7	S10	S9	S8
P8	M1 M3 M2 M4	—	M1 M3 M2 M4
P9	(M1)	—	(M1)
P10	(M2)	—	(M2)
P11	(M3)	B30	(M3)
P12	(M4)	B29	(M4)
P13	S11	B28	S1
P14	S12	B27	S2
P15	S13	B26	S3
P16	S14	B25	S4
P17	S15	B24	S5
P18	BBE	B23	T-BASS
P19	S16	B22	S7
P20	S17	B21	S8

	3G	2G	1G
P21	B20	B20	B20
P22	B19	B19	B19
P23	B18	B18	B18
P24	B17	B17	B17
P25	B16	B16	B16
P26	B15	B15	B15
P27	B14	B14	B14
P28	B13	B13	B13
P29	B12	B12	B12
P30	B11	B11	B11
P31	B10	B10	B10
P32	B9	B9	B9
P33	B8	B8	B8
P34	B7	B7	B7
P35	B6	B6	B6
P36	B5	B5	B5
P37	B4	B4	B4
P38	B3	B3	B3
P39	B2	B2	B2
P40	B1	B1	B1

FL, BJ539GK

GRID ASSIGNMENT
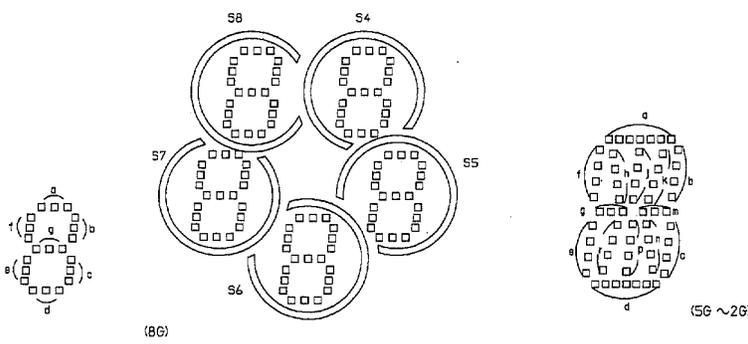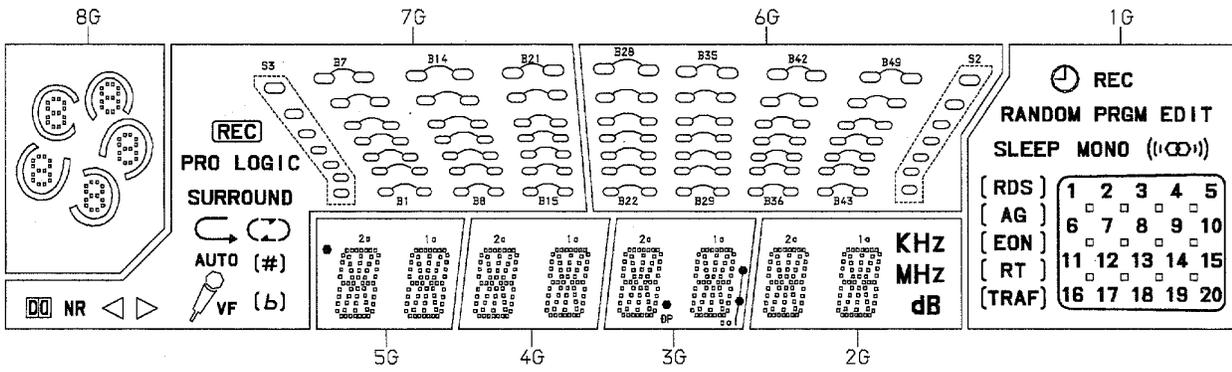
ANODE CONNECTION

	8G	7G	6G	5G	4G	3G	2G	1G
P1	5a	—	—	—	—	—	—	REC
P2	5b	DD	—	—	—	—	—	(clock)
P3	5f	NR	—	—	—	—	—	EDIT
P4	5g	◁	—	—	—	—	—	AI
P5	5c	▷	—	—	—	—	—	PRGM
P6	5e	VF	—	—	—	—	—	MONO
P7	5d	REC	—	—	—	—	—	RANDOM
P8	S8	S3	S2	—	—	—	—	SLEEP
P9	S6	)	—	○	—	—	—	((ΦΦ))
P10	3d	↙	—	2a	2a	2a	2a	RDS
P11	3e	(	—	2h	2h	2h	2h	(RDS)
P12	3c	⇨	—	2j	2j	2j	2j	AG
P13	3g	(#)	B22	2k	2k	2k	2k	(AG)
P14	3f	B1	B29	2f	2f	2f	2f	EON
P15	3b	B8	B36	2b	2b	2b	2b	(EON)
P16	3a	B15	B43	2m	2m	2m	2m	RT
P17	S5	#	B23	2g	2g	2g	2g	(RT)
P18	2d	B2	B30	2c	2c	2c	2c	TRAF
P19	2e	B9	B37	2e	2e	2e	2e	(TRAF)
P20	2c	B16	B44	2r	2r	2r	2r	1

	8G	7G	6G	5G	4G	3G	2G	1G
P21	2g	AUTO	B24	2p	2p	2p	2p	2
P22	2f	B3	B31	2n	2n	2n	2n	3
P23	2b	B10	B38	2d	2d	2d	2d	4
P24	2a	B17	B45	—	—	col(L)	KHz	5
P25	S7	SURROUND	B25	—	—	col(T)	MHz	6
P26	4d	B4	B32	—	—	ÐP	dB	7
P27	4e	B11	B39	1a	1a	1a	1a	8
P28	4c	B18	B46	1h	1h	1h	1h	9
P29	4g	PRO LOGIC	B26	1j	1j	1j	1j	10
P30	4f	B5	B33	1k	1k	1k	1k	11
P31	4b	B12	B40	1f	1f	1f	1f	12
P32	4a	B19	B47	1b	1b	1b	1b	13
P33	S4	(b)	B27	1m	1m	1m	1m	14
P34	1d	B6	B34	1g	1g	1g	1g	15
P35	1e	B13	B41	1c	1c	1c	1c	16
P36	1c	B20	B48	1e	1e	1e	1e	17
P37	1g	♭	B28	1r	1r	1r	1r	18
P38	1f	B7	B35	1p	1p	1p	1p	19
P39	1b	B14	B42	1n	1n	1n	1n	20
P40	1a	B21	B49	1d	1d	1d	1d	S1

32

IC BLOCK DIAGRAM – 1
IC, BU4094BCF

```
DATA ②ーーー┌──────────────┐ーーー⑩ Q's ┐
           │   8-STAGE    │             ├ SERIAL
CLOCK ③ーーー│ SHIFT REGISTER│ーーー⑨ Qs  ┘ OUTPUT
           └──────────────┘

           ┌──────────────┐
STROBE ①ーーー│   8-BIT      │
           │   LATCHES    │
           └──────────────┘

OUTPUT     ┌──────────────┐
ENABLE ⑮ーー│   3-STATE    │
           │   OUTPUTS    │
           └──────────────┘
        Q1  ------------  Q8
```
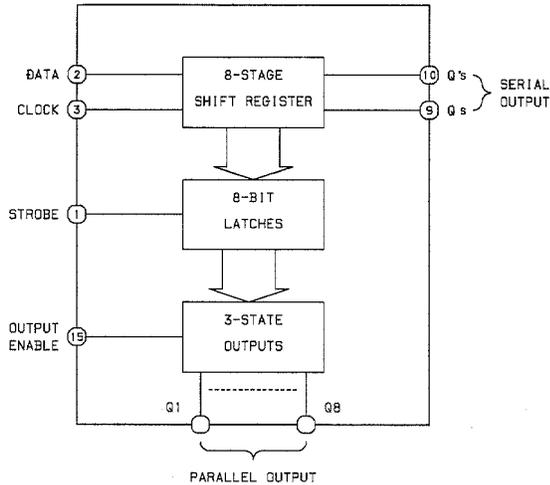
PARALLEL OUTPUT

TRUTH TABLE

CLOCK	OUTPUT ENABLE	STROBE	DATA	PARALLEL OUTPUTS		SERIAL OUTPUTS	
				Q1	Qn	Qs	Q's
▲	L	×	×	Z	Z	Q7	No Chg.
▼	L	×	×	Z	Z	No Chg.	Qs
▲	H	L	×	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	×	×	No Chg.	No Chg.	No Chg.	Qs

Z=High Impedance

X=Don't Care

IC, BA3834S

```
BIASC ①ーーーーー→┌──────┐→
              │ BIAS │
              └──────┘              ⑱ GND

VREFC ②ーーーーー→┌──────┐→
              │ VREF │              ⑰ AOUT
              └──────┘

RREF ③ーーーー→┌────────────────┐→   ⑯ TEST
            │REFERENCE CURRENT│
            └────────────────┘

N.C. ④      ┌──────┐  ┌──────┐      ⑮ N.C.
            │ 64HZ │→ │ PEAK │
            │ BPF  │  │ HOLD │
            └──────┘  └──────┘
                       ┌─────┐
                       │ RES │
                       └─────┘
N.C. ⑤      ┌──────┐  ┌──────┐      ⑭ N.C.
            │160HZ │→ │ PEAK │
            │ BPF  │  │ HOLD │
            └──────┘  └──────┘
                       ┌─────┐
                       │ RES │
                       └─────┘
            ┌──────┐  ┌──────┐
            │100HZ │→ │ PEAK │
            │ BPF  │  │ HOLD │
            └──────┘  └──────┘
                       ┌─────┐
                       │ RES │
                       └─────┘
DIFOUT ⑥    ┌──────┐  ┌──────┐      ⑬ SEL
            │ 1KHZ │→ │ PEAK │  MPX
            │ BPF  │  │ HOLD │
            └──────┘  └──────┘
                       ┌─────┐
                       │ RES │
                       └─────┘
            ┌──────┐  ┌──────┐
            │2.5KHZ│→ │ PEAK │
            │ BPF  │  │ HOLD │
CIN ⑦ ┌───┐ └──────┘  └──────┘      ⑫ C
      │DEF│            ┌─────┐
      └───┘            │ RES │
                       └─────┘
            ┌──────┐  ┌──────┐
            │6.3KHZ│→ │ PEAK │
            │ BPF  │  │ HOLD │
            └──────┘  └──────┘
AIN ⑧                  ┌─────┐      ⑪ B
                       │ RES │
                       └─────┘
            ┌──────┐  ┌──────┐
            │15.6KHZ│→│ PEAK │
            │ BPF  │  │ HOLD │
            └──────┘  └──────┘
                       ┌─────┐
VCC ⑨                  │ RES │  ┌───┐
                       └─────┘  │DEC│  ⑩ A
                                └───┘
```

33
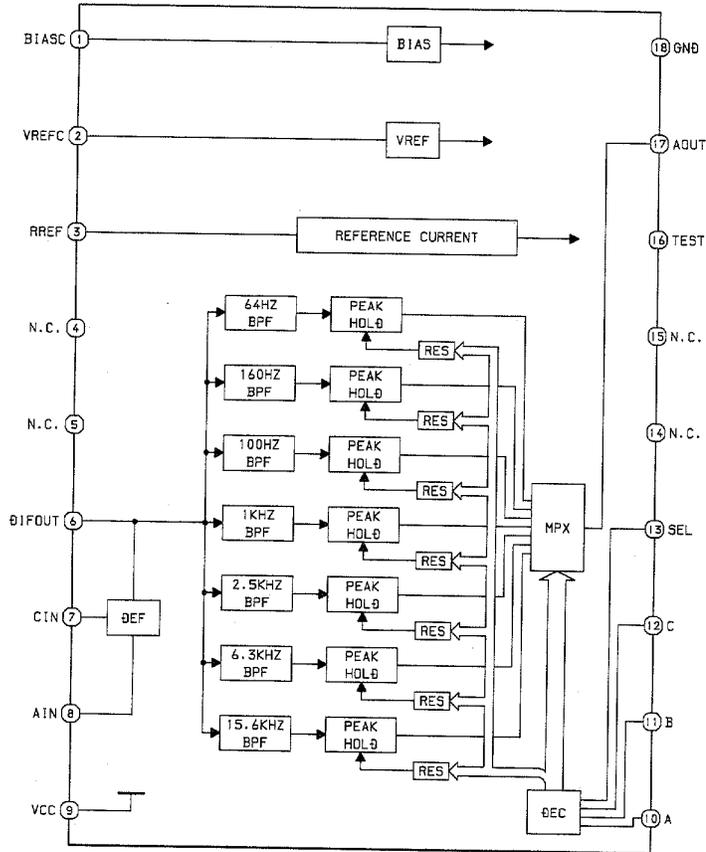
IC, M62431FP
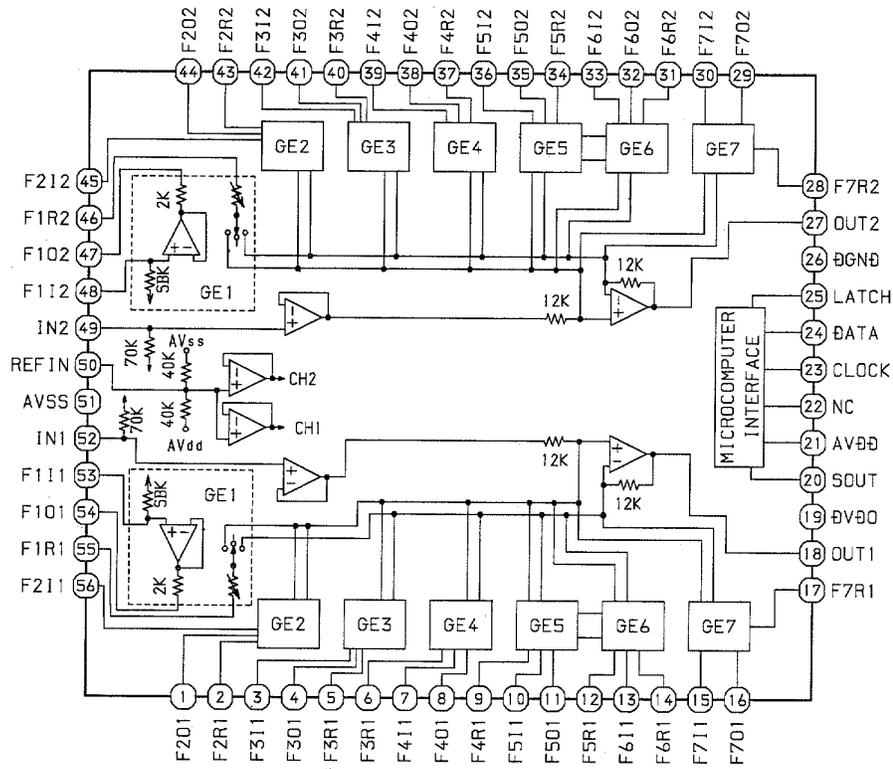
IC, BH3810FS
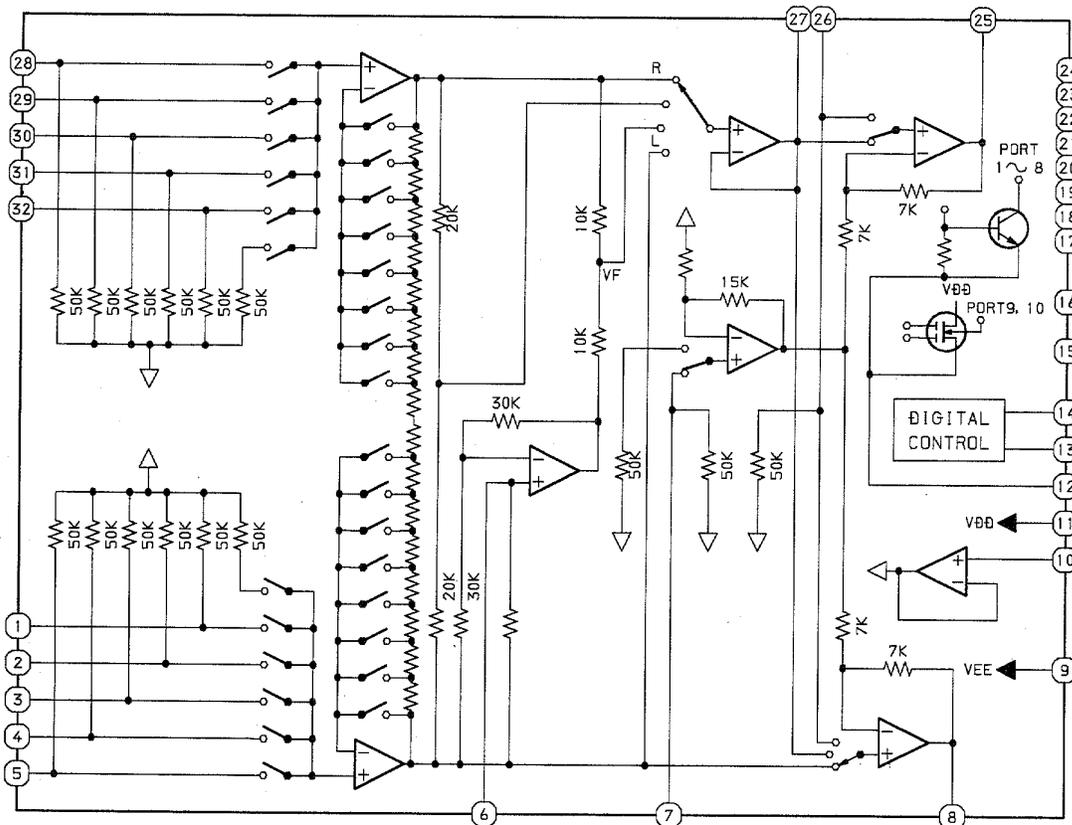
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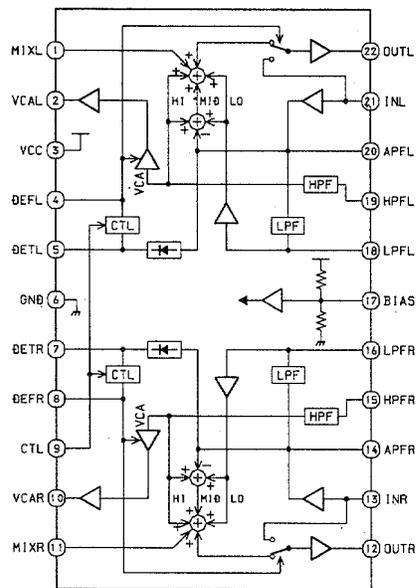
IC, LA1837

IC, HA1211NT

35
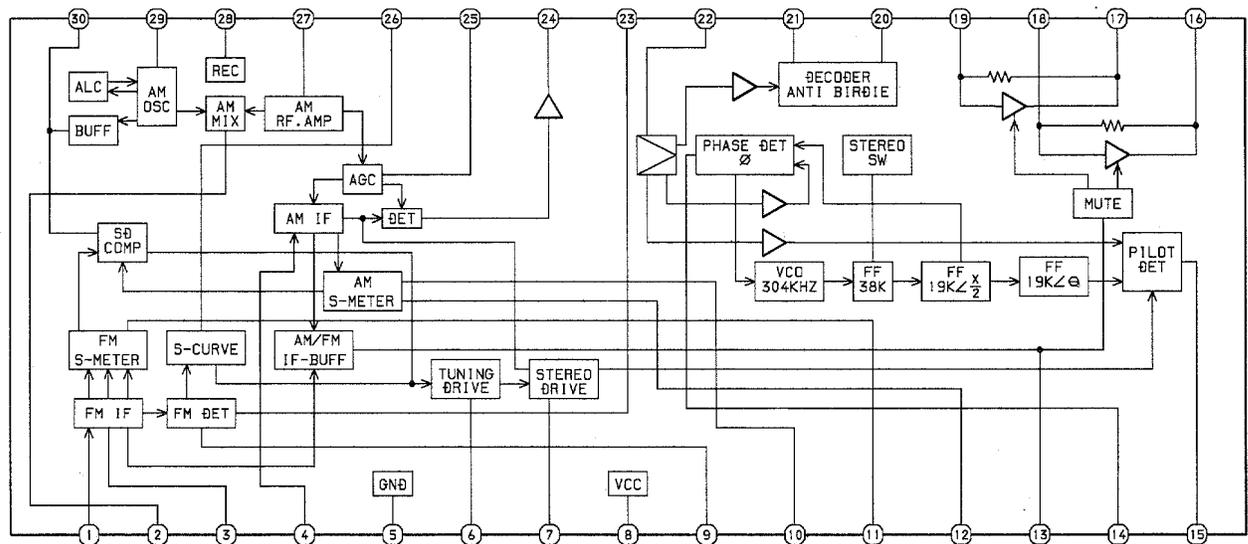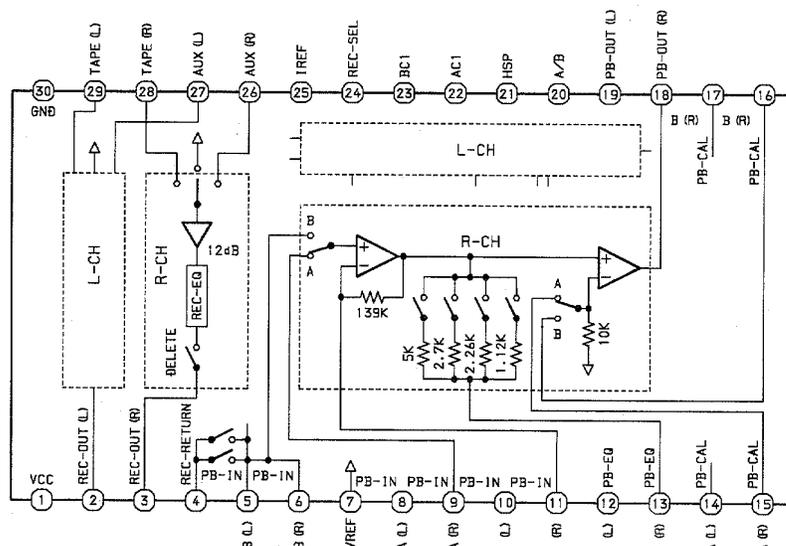
IC DESCRIPTION

IC, LC866556W-5E74

Pin No.	Pin Name	I/O	Description
1	RT-A	I	Rotary encorder input (electric volume).
2	RT-B	I	Rotary encorder input (electric volume).
3	RT-C	I	Rotary encorder input (multi jog switch).
4	XLT (CD)	O	XLT (CD) output.
5	CLK (CD)	O	CLOCK (CD) output.
6	O-GE LATCH	O	G.E data latch strobe output.
7	O-PRO CE	O	Pro logic chip enable.
8	LED CE	O	LED shift resistor chip enable.
9	O-POWER	O	Power on signal output.
10	O-MUTE	O	System mute output.
11	RT-D	I	Rotary encorder input (multi jog switch).
12	RESET	I	Reset input.
13	I-HP-MUTE	I	Headphone switch data input.
14	I-MIC	I	Microphone input for auto vocal fader display .
15	VSS1	–	GND.
16	CF1	I	5.76 MHz oscillator circuit.
17	CF2	O	5.76 MHz oscillator circuit.
18	VDD1	–	Power supply input.
19	HOLD	I	Power failure detected input "L" to stop lock & maintain memory.
20	KEY 1 ~ 3	I	Key input 1 ~ 3 (A/D).
23	I-CDSW	I	CD mechanical switch A/D converter input.
24	I-DI-SENS	I	CD turntable photo sensor A/D converter input.
25	I-TU-SIG/MS	I	Tuner signal input & deck music sensor signal input.
26	I-SPEANA	I	A/D input for spectrum analyzer display.
27	I-SENS	I	CD sens input.
28	I-TM BASE	I	Reference clock input for timer watch.
29	I-RMC	I	System remote control signal input.
30 ~ 37	G1 ~ G8	O	FL grid output G1 ~ G8.
38 ~ 41	S1 ~ S4	O	FL segment output S1 ~ S4.
42 ~ 44	G9 ~ G11	O	FL grid output G9 ~ G11.
45	S5	O	FL segment output S5.
46	VDD3	–	Power supply input.
47 ~ 50	S6 ~ S9	O	FL segment output S6 ~ S9.
51	-VFL	–	Power supply input for FL display.
52 ~ 60	S10 ~ S18	O	FL segment output S10 ~ S18.
61	S19/O-SPEANA C	I/O	FL segment output S19 / SPEANA band changing C output.
62	S20/O-SPEANA B	I/O	FL segment output S20 / SPAENA band changing B output.
63	S21/O-SPEANA A	I/O	FL segment output S21 / SPEANA band changing A output.
64	S22/CST-1	I/O	FL segment output S22 / DECK1 cassette detect switch data input.
65	S23/AUTO1	I/O	FL segment output S23 / DECK1 auto stop signal input.
66	S24/CAM1	I/O	FL segment output S24 / DECK1 cam switch data input.
67	S25/CAM2	I/O	FL segment output S25 / DECK2 cam switch data input.

| Pin No.	Pin Name	I/O	Description
68	S26/AUTO2	I/O	FL segment output S26 / DECK2 auto stop signal input.
69	S27/CST2	I/O	FL segment output S27 / DECK2 cassette detect switch data input.
70	S28/REA	I/O	FL segment output S28 / DECK2 side-A record ok switch data input.
71	S29/REB	I/O	FL segment output S29 / DECK2 side-B record ok switch data input.
72	VDD4	–	Power supply input.
73	S30/PRO LOGIC	I/O	FL segment output S30 / Pro logic diode data input to diode.
74	S31/D-TG	I/O	FL segment output S31 / Tracking gain +2dB up switch.
75	S32/SEL1	I/O	FL segment output S32 / Tuner model select mode data1 input to diode.
76	S33/SEL2	I/O	FL segment output S33 / Tuner model select mode data2 input to diode.
77	S34/SEL3	I/O	FL segment output S34 / Tuner model select mode data3 input to diode.
78	S35/C-ATG	I/O	FL segment output S35 / Switch of cancel auto tracking gain.
79	S36/C-ATB	I/O	FL segment output S36 / Switch of cancel auto tracking balance.
80	S37/C-FB	I/O	FL segment output S37 / Switch of adjust focus bias center.
81	S38/+3dB	I/O	FL segment output S38 / Switch of increase +3dB for E-VR.
82	S39	O	FL segment output S39
83	S40	O	FL segment output S40.
84	K-SCAN	O	Switch scan timing output.
85	O-OPEN	O	CD tray open data output.
86	O-CLOSE	O	CD tray close data output.
87	O-DI/R	O	CD turntable reverse rotation output.
88	O-DI/F	O	CD turntable forward rotation output.
89	VSS2	–	GND.
90	VDD2	–	Power supply input.
91	O-MOTOR	O	Deck motor output.
92	O-SOL2	O	DECK2 solenoid output (DECK2).
93	O-SOL1	O	DECK1 solenoid output (DECK1).
94	O-M/STB	O	Main shift register data latch strobe output.
95	O-M/DATA	O	Main shift register, PLL / DSP / E-VR / GE / FUNC / PRO LOGIC related data output.
96	O-M/CLK	O	Main shift register, PLL / DSP / E-VR / GE / FUNC / PRO LOGIC related clock.
97	O-PLL-CE	O	PLL IC chip enable.
98	I-TUNER IFC/ I-SUBQ DATA	I	Tuner SD detected input. IF count serial data input / CD.SUBQ input.
99	I-STEREO/ O-SUBQ CLK	I/O	Tuner stereo detected input / SUBQ clock (CD) output.
100	I-RDS-DATA/ DATA (CD)	I/O	RDS data input (TUNER) / Data CD output.

Pin No.	Pin Name	I/O	Description
1	XIN	I/O	A crystal oscillator (7.2MHz) is connected between these pins.
22	XOUT		
2	NC	–	Not used.
3	CE	I	To enable the IC. Active "H".
4	DI	I	Digital data input from CPU (LC866556W-5E74) when relevant key is operated. Active "H".
5	CLK	I	To clock in the data DI.
6	DO	O	Digital data output to CPU (LC866556W-5E74).
7	TM-BASE	O	Outputs a reference clock signal (8Hz) for the clock.
8	MONO / BEAT	O	Outputs "H" when MONO / BEAT is switched.
9	FM / AM	O	Output "L" or "H" as follows: (table below)
10	MW	O	Outputs "L" or "H" as follows: (table below)
11	IF-MUTE	O	To control internal counter.
12	IFIN	I	General purpose counter input.
13	TUNE	I	Receives "L" when station is tuned.
14	NC	–	Not used.
15	A MIN	I	Receives the AM local oscillator frequency signal.
16	F MIN	I	Receives the FM local oscillator frequency signal.
17	VDD	–	Supply power to IC (+5V).
18	PD	O	PLL charge pump output.
19	AIN	I	The MOS transistor for PLL active low pass filter.
20	AOUT	O	
21	VSS	–	Ground.

Pin 9 (FM / AM) output table:

2 BAND		3 BAND			3 BAND		
AM	FM	LW	MW	FM	MW	SW	FM
H	L	H	H	L	H	L	L

Pin 10 (MW) output table:

2 BAND		3 BAND			3 BAND		
AM	FM	LW	MW	FM	MW	SW	FM
L	L	H	L	L	L	H	L

IC, NJW1102B

Pin No.	Pin Name	I/O	Description
1	LLI	I	L channel BPF in.
2	LBPF	O	L channel BPF feed back out.
3	RLI	I	R channel BPF in.
4	RBPF	O	R channel BPF feed back out.
5	LT	O	L channel selector #1 out.
6	RT	O	R channel selector #1 out·
7	LIN	I	L channel signal input.
8	RIN	I	R channel signal input.
9	HOLDC	I	Auto input balance control.
10	VCC	–	Power supply.
11~13	NGC 3~1	I	Noise sequencer control.
14	VDD	–	Power supply.
15	DATA	I	Serial data input.
16	SCK	I	Serial clock input.
17	REQ	I	Serial request (strobe) input.
18	IDS	I	ID select sw.
19	AUX1	O	AUX1 output (serial data change parallel output).
20	AUX2	O	AUX2 output (serial data change parallel output).
21	VSS	–	GND.
22	LOUT	O	L channel signal output.
23	ROUT	O	R channel signal output.
24	CT	O	Center channel output (before trimmer).
25	CTI	I	Center channel trimmer input.
26	CTC	O	Center channel trimmer coupling capacitor out.
27	COUT	O	Center channel trimmer output.
28	ST	O	Surround channel output (before trimmer).
29	STI	I	Surround channel trimmer input.
30	STC	O	Surround channel trimmer coupling capacitor out.
31	SOUT	O	Surround channel trimmer output.
32	SMRI	I	Surround channel amp (front L,R mix) input.
33	SMRO	O	Surround channel amp (front L,R mix) output.
34	CMC	O	Center mode control.
35	SD	O	Selector #2 output (to surround channel delay).
36	SIMB	I	Selector #2 input B (L-R).
37	SIMA	I	Selector #2 input A (L+R).
38	L+R	O	L+R channel output.
39	L-R	O	L-R channel output.
40	GND	–	Ground.
41	VREF	I	VREF in.
42	VREFG	O	Vref out.
43	IREF	I	Iref in.

44	DBIN	I	To modify B NR decoder input.
45	LPIN	I	From surround channel delay input.
46~48	DBC 1~3	I	Dolby B NR control 1~3.
49	NC	–	Not used.
50~55	PSC 1~6	I	Dual time constant and threshold switches control.
56~63	RLC 1~8	I	Full wave rectifier and log difference amp control.
64	NC	–	Not used.

IC BLOCK DIAGRAM – 2

IC, M65849BFP
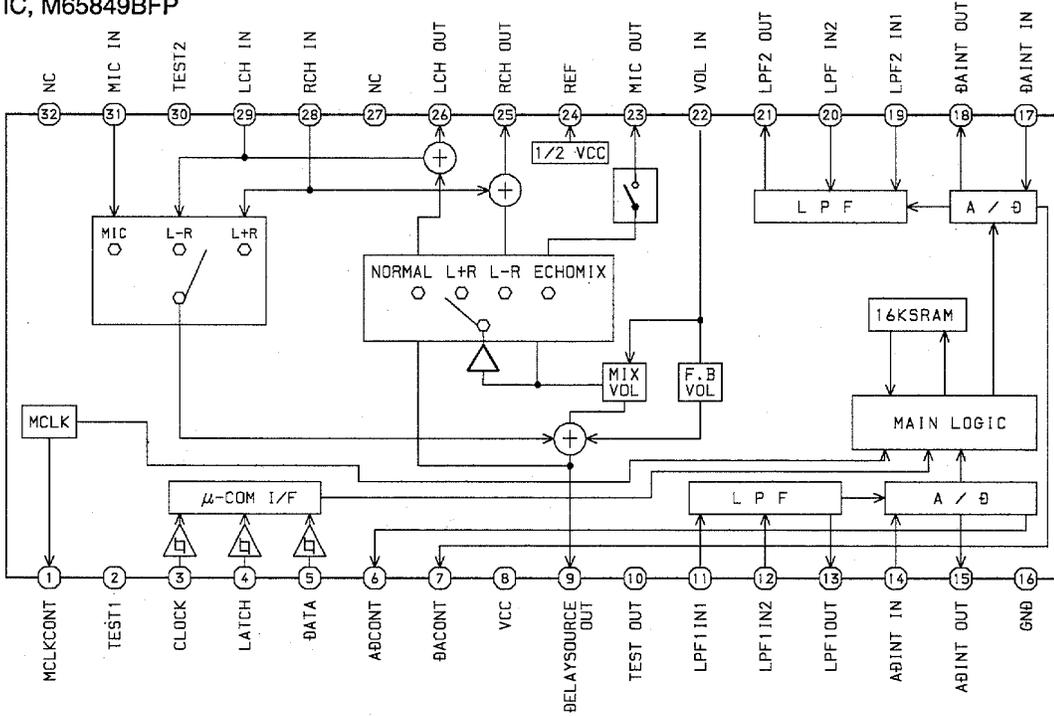
IC, CXA1553P
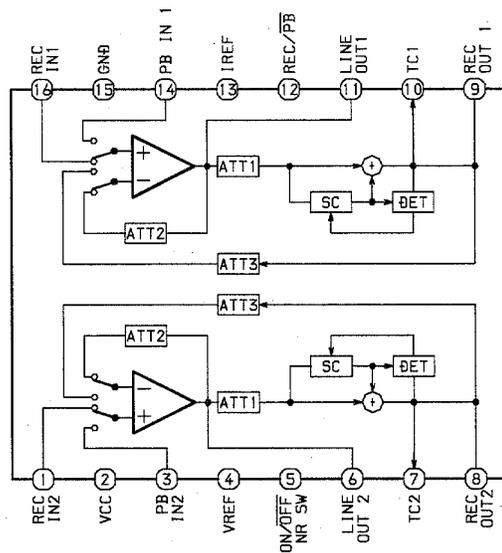
ATT:Attenuator
SC:Side Chain
DET:Detector

ADJUSTMENT <TUNER / DECK>

A MAIN C.B

H DECK C.B
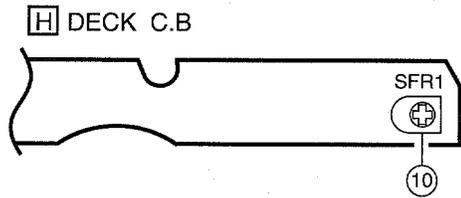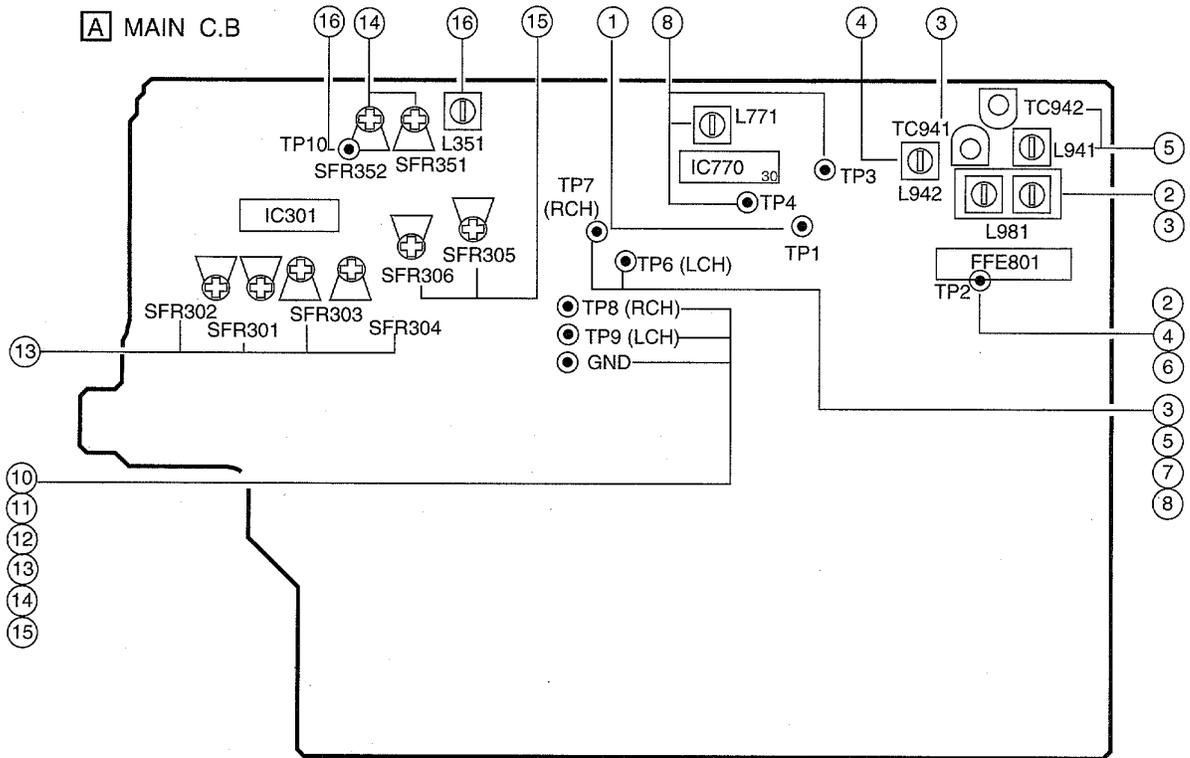
DECK–1 P, DECK–2 R / P / E HEAD

REV   FWD
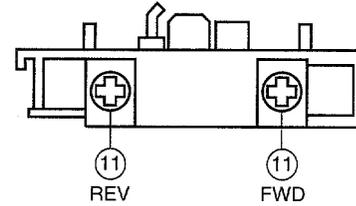
< TUNER SECTION >

1. Clock Frequency Check
   Settings : • Test point : TP1 (CLK IC770 pin30)
   Method : Set to MW 1710kHz and check that the test
   point is 2160kHz ± 45Hz.

2. MW VT Adjustment
   Settings : • Test point : TP2 (VT)
   • Adjustment location : L981
   Method : Set to MW 1710kHz and adjust L981 so that
   the test point is 8.5V ± 0.05V. Then set to
   MW 530kHz and check that the test point is
   more than 0.3V.

3. MW Tracking Adjustment
   Settings : • Test point : TP6,TP7
   • Adjustment location :
   L981 .... 600kHz
   TC941 .... 1400kHz
   Method : Set up TC941 to center before adjustment,
   the level at 600kHz is adjust to maximum by
   L981. Then the level at 1400kHz is adjust to
   maximum by TC941.

4. SW VT Adjustment
   Settings : • Test point : TP2 (VT)
   • Adjustment location : L942
   Method : Set to SW 17.9MHz and adjust L942 so that
   the test point is 7.0V ± 0.05V.

5. SW Tracking Adjustment
   Settings : • Test point : TP6,TP7
   • Adjustment location :
   L941 .... 5.9MHz
   TC942 .... 17.9MHz
   Method : Set up TC942 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 TC942.

6. FM VT Check
   Settings : • Test point : TP2 (VT)
   Method : Set to FM 87.5MHz, 108.0MHz and check
   that the test point is more than 1.5V
   (87.5MHz) and less than 8.5V (108.0MHz).

7. FM Tracking Check
   Settings : • Test point : TP6(Lch), TP7(Rch)
   Method : • Set to FM 98.0MHz and check that the test
             point is 2dB ± 6dB

8. DC Balance / Mono Distortion Adjustment
   Settings : • Test point : TP3, TP4 (DC balance)
                     : TP6, TP7 (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 ± 0.04V.
            Next, check that the distortion is less than
            1.3%.

9. Auto Stop Level Check

   MW
   Settings : • Input level : Variable
   Method : Check the auto stop at MW 999kHz and the input
            level is 50dB+10/-15dB.

   FM
   Settings : • Input level : Variable
   Method : Check the auto stop at FM 98.0MHz and the input
            level is 25dB ± 10dB.

   SW
   Settings : • Input level : Variable
   Method : Check the auto stop at SW 12.0MHz and the input
            level is less than 60dB.

< DECK SECTION >

10. Tape Speed Adjustment
    Settings : • Test tape : TTA–100
              • Test point : TP8, TP9
              • Adjustment location : SFR1
    Method : Play back the test tape and adjust SFR1
             so that the frequency counter reads 3000Hz
             ± 5Hz.

11. Head Azimuth Adjustment (DECK1, DECK2)
    Settings : • Test tape : TTA–300
              • Test point : TP8, TP9
              • Adjustment location : Head azimuth
                                  adjustment screw
    Method : Play back the 10kHz signal of the test tape
             and adjust screw so that the output becomes
             maximum.

12. PB Frequency Response Check (DECK 1, DECK 2)
    Settings : • Test tape : TTA–300
              • Test point : TP8, TP9
    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 0 ± 2dB. Lch and Rch
             difference level of 10kHz is less than 2.0dB.

13. PB Sensitivity Adjustment (DECK 1, DECK 2)
    Settings : • Test tape : TTA–200
              • Test point : TP8, TP9
              • 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.

14. REC/PB Frequency Response Adjustment
    Settings : • Test tape : TTA–602
              • Test point : TP8, TP9
              • Input signal : 1kHz / 10kHz (LINE IN)
              • Adjustment location : SFR351 (Lch)
                                       SFR352 (Rch)
    Method : Apply a 1kHz signal and REC mode. Then adjust
             OSC attenuator so that the output level at the TP8,
             TP9 becomes 170mV. Record and play back the
             1kHz and 10kHz signals and adjust SFRs so that the
             output of the 10kHz signals becomes 0dB ± 0.5dB
             with respect to that of the 1kHz signal.

15. REC/PB Sensitivity Adjustment
    Settings : • Test tape : TTA–602
              • Test point : TP8, TP9
              • 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 the TP8,
             TP9 becomes 17mV. Record and play back the 1kHz
             signals and check that the output is 17mV ± 0.5dB.

16. Bias OSC Frequency Adjustment
    Settings : • Test tape : TTA–615
              • Test point : TP10
              • Adjustment location : L351
    Method : Set to the REC mode. Adjust L351 so that the
             frequency at the test point is 85kHz ± 1kHz.

PRACTICAL SERVICE FIGURE

<TUNER SECTION>

<FM SECTION>
IHF Sensitivity :	4dB ± 6dB
(THD 3%)	[at 87.5 / 98.0 / 108.0MHz]
S/N 50dB Quieting sensitivity :	
	30dB ± 6dB
	[at 87.5 / 98.0 / 108.0MHz]
Signal to noise ratio :	More than 64dB (STEREO)
	More than 65dB (MONO)
	[at 98.0MHz]
Distortion :	Less than 1.3% (MONO)
	Less than 2.0% (STEREO)
	[at 98.0MHz]
Auto stop level :	25dB ± 10dB [at 98.0MHz]
Stereo separation :	More than 25dB [at 98.0MHz]
Intermediate frequency :	10.7MHz

<AM(MW) SECTION>
Sensitivity :	55dB ± 5dB
(S/N 20 dB)	[at 603kHz]
	53dB +5/-7dB
	[at 999 / 1404kHz]
Signal to noise ratio :	More than 36dB
	[at 999kHz]
Distortion :	Less than 1.5%
	[at 999kHz]
Auto stop level :	50dB +10/-15dB
	[at 999kHz]
Intermediate frequency :	450kHz

<AM(SW) SECTION>
Sensitivity :	38dB ± 5dB
(S/N 20 dB)	[at 5.9MHz]
	34dB ± 5dB
	[at 12.0MHz]
	30dB ± 8dB
	[at 17.9MHz]
Signal to noise ratio :	More than 36dB
	[at 12.0MHz]
Distortion :	Less than 1.5%
	[at 12.0MHz]
Intermediate frequency :	450kHz

<DECK SECTION>

Tape speed :	3000Hz ± 45Hz
Wow & flutter :	Less than 0.15%
	(W.R.M.S)
Take-up torque :	45g-cm +10/-15g-cm
	(FWD, REV)
F.F torque :	100g-cm +80/-25g-cm
REW torque :	100g-cm +30/-25g-cm
Back tension :	3g-cm +4/-1g-cm
	(FWD, REV)
PB output level :	330mV ± 1dB
	(SP OUT 2V)
REC/PB output level :	150mV ± 1dB
	(SP OUT 2V)
Distortion (REC/PB) :	Less than 2.0%
	(NORM, CrO2)
Noise level (PB) :	Less than 2.0mV
	(NORM, SP OUT 2V, DOLBY OFF)
	Less than 1.2mV
	(CrO2, SP OUT 2V, DOLBY ON)
Noise level (REC/PB) :	Less than 2.4mV
	(DOLBY OFF, NORM, SP OUT 2V)
	Less than 1.4mV
	(DOLBY ON, CrO2, SP OUT 2V)
Crosstalk :	More than 60dB
	(1kHz)
Channel separation :	More than 35dB
	(1kHz)
Erasing ratio :	More than 60dB
	(at 125Hz,+10VU)
Test tape :	TTA–602 (NORMAL)
	TTA–615 (CrO2)

14

15

B
B

PH(DECK 1)
RPH(DECK 2)

42

16

A

12

13

17

11

10

18
(DECK 2)

9

7

3

18
(DECK 1)

19

2

5

6

4

A

20

HEAD 1 C.B(DECK 1)
HEAD 2 C.B(DECK 2)

22

57
(DECK 1)

21

29
(DECK 2)

24

25

23

29 (DECK 2)

26

27

1

A

28

SOL 2

DECK C.B

SOL 1

51

52

8

8

A

50

50

B

56

49

44

41

47

43

35

41

37

48

E

33

45

36

31

34

46

D

C

32

58

D

A

40

55

59

(DECK 1)

39

B

D

38

C

54

C

53

45
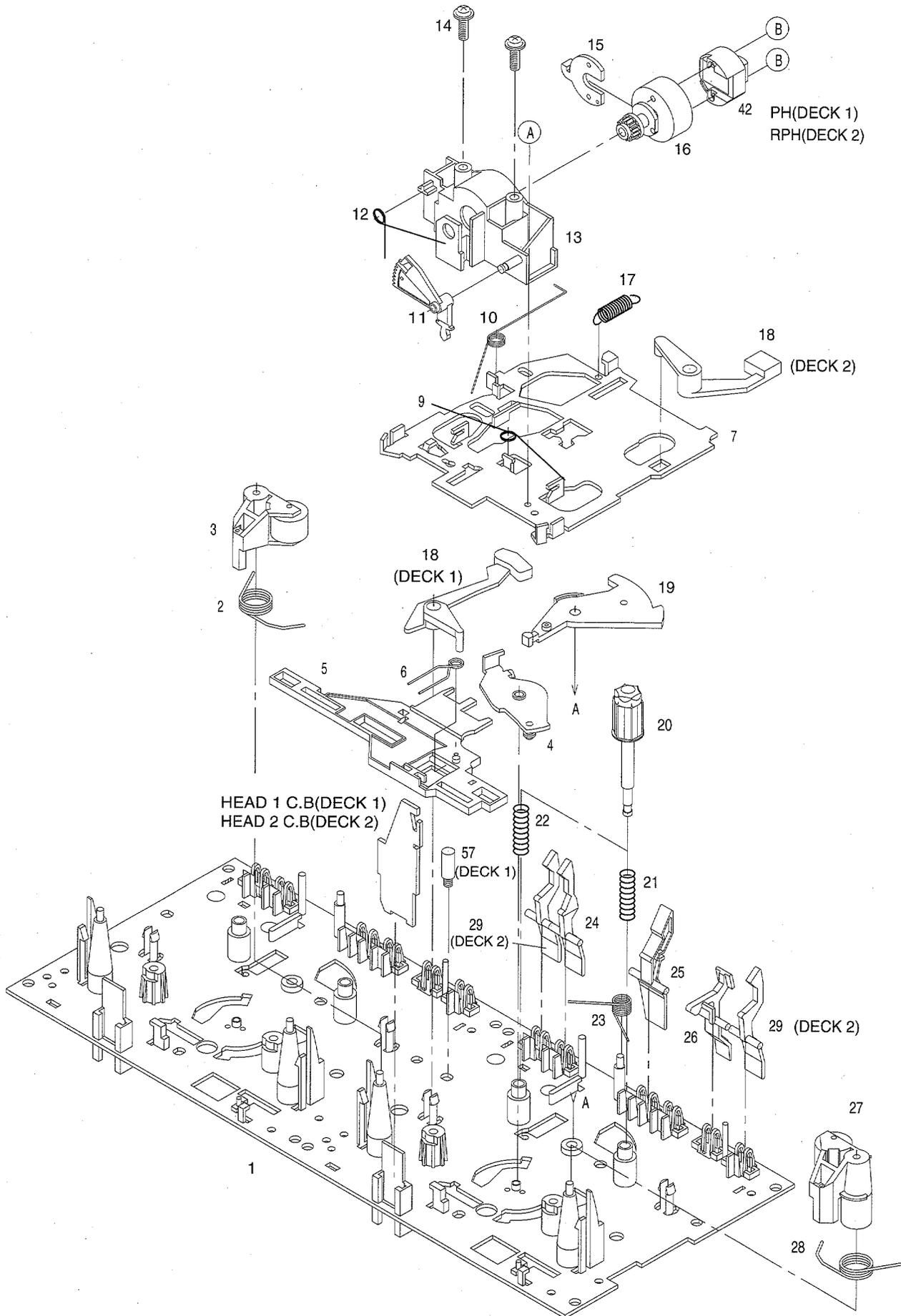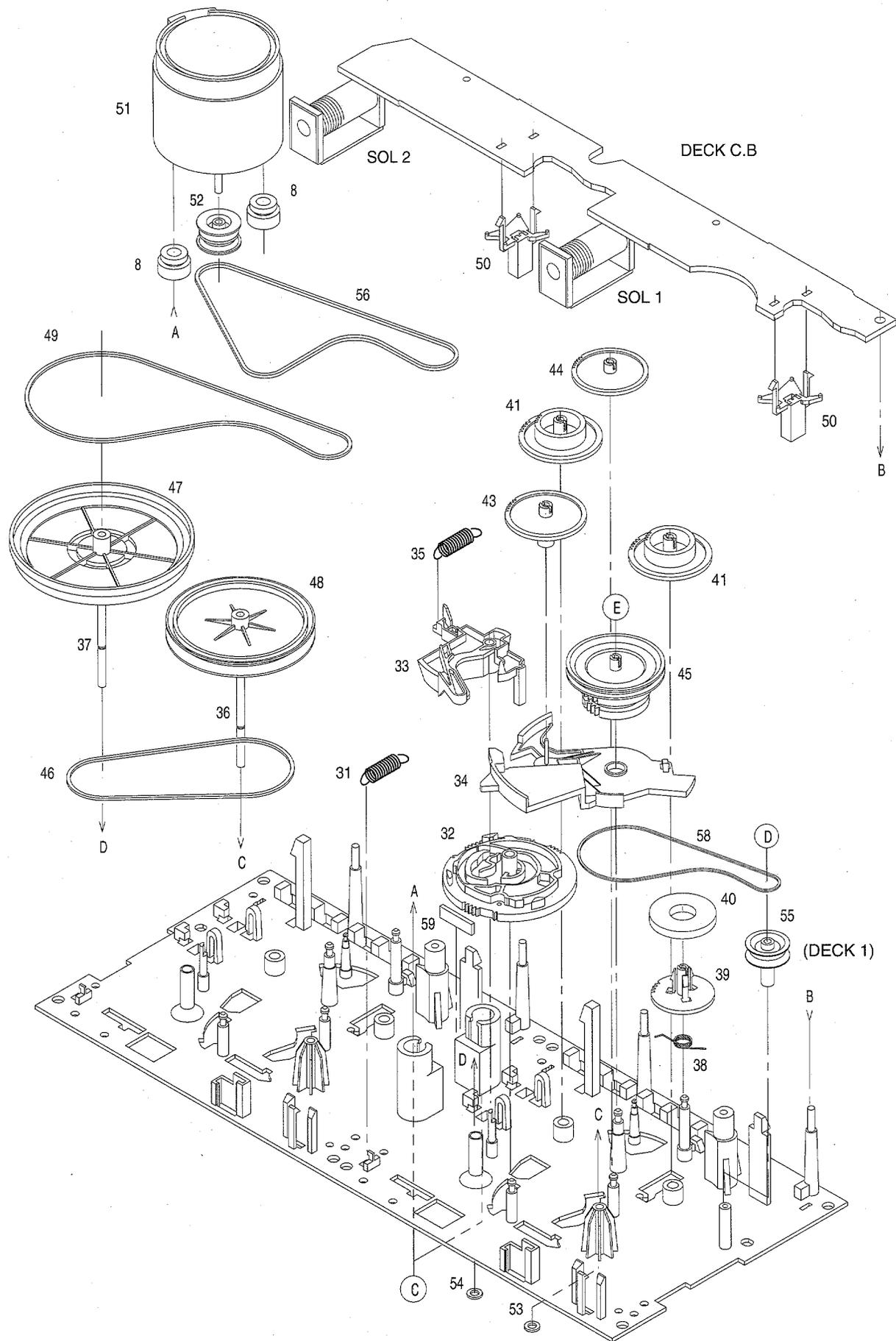
TAPE MECHANISM PARTS LIST 1 / 1

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				

MECHANICAL EXPLODED VIEW 1/1

CAP, OPTICAL

HLDR, PCB (A)

HLDR
WIRE

PRO C.B

HT-SINK
PRO1

HLDR
WIRE

PLATE
PT N

BINDER
WIRE
AC1C.B
AC2CB   P.T 101

48

HT,SINK
SUB/M

HT-SINK,
FIN (F4)

CHAS MAIN N

6ZG-1 SDFNM

MAIN C.B

TERMINAL, LB4N1

WIRE ASSY
FASTON GN

2ZM-3MK2
PR4NM

HLDR
WIRE

HLDR, HT-SINK
SUB/M

HLDR,
PWB

SHLD-PLATE
MAIN

HLDR,
PWB-M

FRONT C.B

GUIDE
LED,PLAY

GUIDE
LED,R

GUIDE
LED,R

GUIDE FL

GUIDE FL

VR C.B

FL302

FL301

CD SW C.B

GUIDE FL

SH,FUN

SH,GEQ

SH,DISPLAY

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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	86-MA3-042-010		WINDOW,TOP	31	86-NF9-025-010		KEY,GEQ
2	86-NFW-014-010		CABI,STEEL	32	82-NE6-067-010		BADGE,AIWA 30N
3	87-084-077-010		NYLON RIVET, 3.5-4.5	33	86-NF9-037-010		KEY,GEQ OFF
4	86-NFW-002-110		PANEL,REAR HRJBNM	34	86-NF9-007-010		PANEL,FR
5	87-050-079-010		AC CORD ASSY,E BLK	35	86-NF9-042-010		KEY,ASSY POWER
6	87-085-185-010		BUSHING,AC CORD (E)CM22B	36	86-NH9-009-010		KEY,FUN
7	87-085-221-010		FOOT,H13.5	37	86-NF9-043-110		KEY,ASSY PLAY
8	82-NF5-228-010		SPR-C,LOCK	38	86-NH9-008-010		KEY,OPEN
9	82-NF5-229-010		PLATE,LOCK	39	86-NF9-039-110		KEY,REC
10	86-NFW-009-010		PANEL,TRAY ASSY	40	86-NH9-017-010		KEY,MEMORY
11	86-NF6-061-010		REFLECTOR,CASS	41	86-NFW-001-110		CABI,FR
12	86-NH9-004-010		BOX,CASS 2	42	81-532-080-010		LABEL, CASS. COMPT
13	82-NF5-219-010		SPR-T,EJECT 2 (SIN)	43	82-NF5-226-010		HLDR,LOCK 1N
14	86-NF9-014-010		WINDOW,CASS 2	44	82-NF5-227-010		HLDR,LOCK 2N
15	86-NF9-013-010		WINDOW,CASS 1	A	87-B10-090-010		BVIT3B+3-12 GOLD
16	82-NF5-218-010		SPR-T,EJECT 1 (SIN)	B	87-067-703-010		TAPPING SCREW, BVT2+3-10
17	86-NH9-003-010		BOX,CASS 1	C	87-741-094-410		UT2+3-6
18	86-NF9-038-010		KEY,DSP OFF	D	87-NF4-224-010		S-SCREW,IT3B+3-8 CU
19	86-NF9-034-010		RING,FOOT	E	87-591-095-410		TAPPING SCREW, QIT+3-8 (GLD)
20	86-NT1-023-010		KNOB,RTRY MIC	F	87-067-975-010		S-SCREW,IT+4-8
21	87-063-165-010		OIL-DMPR 150	G	87-078-191-010		S-SCREW,IT+4-10
22	86-NF9-032-010		RING,VOL	H	87-067-641-010		UTT2+3-8(W/O SLOT)BL
23	86-NF9-026-010		KEY,DSP	I	87-067-581-010		BVT2+3-15 W/O SLOT
24	86-NH9-013-010		KNOB,RTRY JOG	J	87-723-096-410		QT2+3-10W/O SLOT BL
25	86-NH9-012-010		KNOB,RTRY VOL	K	87-067-579-010		TAPPING SCREW, BVT2+3-8
26	86-NFW-013-010		WINDOW,GEQ PRO	L	87-067-673-010		TAPPING SCREW, BUTT+3-8 (B)
27	86-NFW-004-010		KEY,PRO	M	87-721-097-410		QT2+3-12 GLD
28	86-NF9-008-010		PANEL,CONTROL	N	87-067-584-010		BVT2+3-6 W/O SLOT
29	86-NFW-003-010		WINDOW,DISPLAY PRO				
30	86-NF9-010-010		WINDOW,CD				

SPRING APPLICATION POSITION

82-ZM1-257-019
SPR-T,CAS

82-ZM1-218-019
SPR-E,HB

82-ZM1-285-310
SPR-C,BT L

82-ZM1-244-410
SPR-C,BT

82-ZM1-219-119
SPR-T,LINK

82-ZM1-259-110
SPR-T,PINCH R

82-ZM1-258-110
SPR-T,PINCH L

82-ZM1-213-019
SPR-T,HEAD

82-ZM1-269-219
SPR-T,BRG

82-ZM1-214-010
SPR-T,DIR

82-ZM1-322-019
SPR-T,FR 60

82-ZM1-265-119
SPR-E.TRIG

82-ZM1-255-319
SPR-E,LER DIR
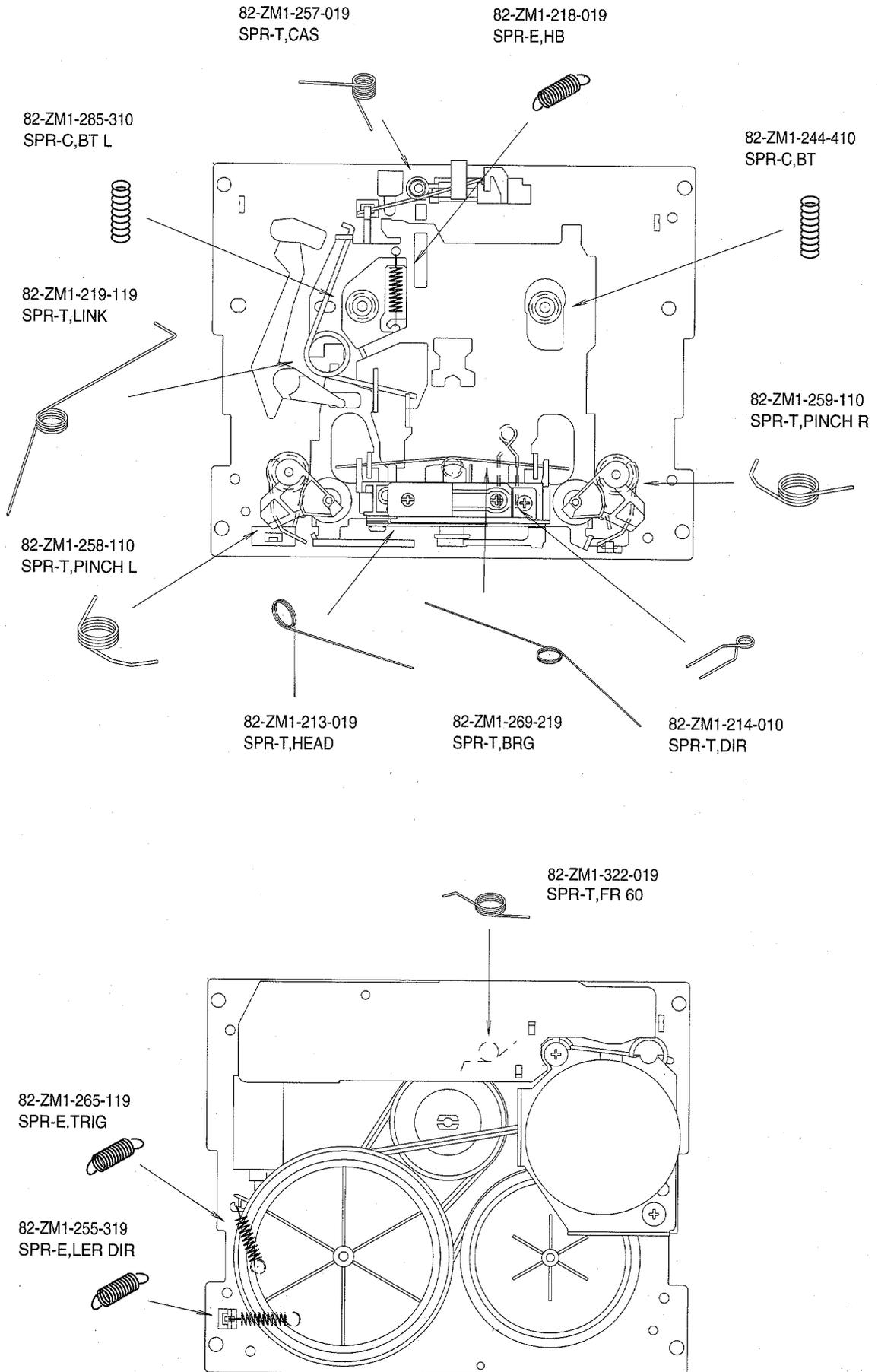
SPEAKER DISASSEMBLY INSTRUCTIONS

Type.1

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

Insert a flat-bladed screwdriver into the position indicated by the arrows and remove the panel. remove the screws of each speaker unit and then remove the speaker units.
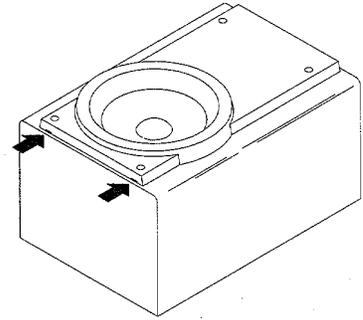
Type.2

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

Remove the grill frame and four pieces fo rubber caps by pulling out with a flat-bladed screwdriver. Remove the screws from hole where installed rubber caps. Insert a flat-bladed screwdriver into the position indicated by the arrows and remove the panel. Remove the screws of each speaker unit and then remove the speaker units.
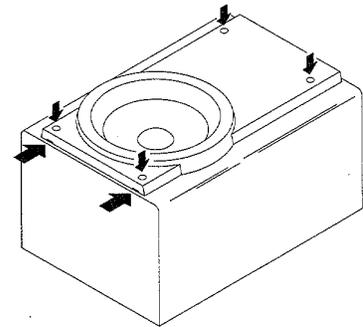
Type.3

矢印の位置にマイナスドライバーを差し込んで、パネルを外します。各々のスピーカーユニットの凹にマイナスドライバーを差し込んで、反時計方向に回転させスピーカーユニットを外してください。スピーカーユニット交換後は時計方向にクリック音がするまで、回転させて取り付けます。

Insert a flat-bladed screwdriver into the position indicated by the arrows and remove the panel. Turn the speaker unit to counter-clockwise direction while inserting a flat-bladed screwdriver into one of the hollows around speaker unit, and then remove the speaker unit. After replacing the speaker unit, install it turning to clockwise direction until "click" sound comes out.
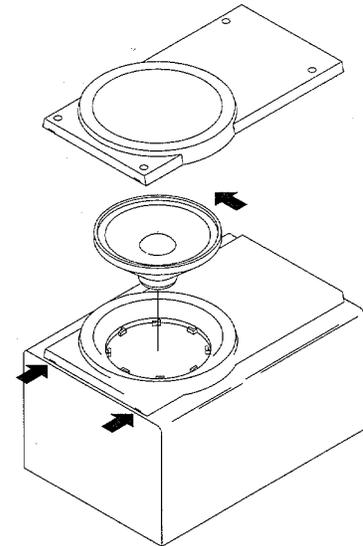
SPEAKER PARTS LIST
SX-NAVF9 <YJ>

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

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION		REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	86-NSW-004-010		PANEL,BA		6	86-NSW-008-010		GRILLE,FRAME ASSY
2	86-NSW-017-010		PANEL,FR R ST		7	86-NSW-602-010		SPKR,W
3	86-NSW-018-010		PANEL,FR L ST		8	86-NSW-604-010		SPKR,TW
4	86-NSW-005-010		HLDR,TW		9	86-NSW-610-010		TERMINAL,ASSY
5	86-NSW-010-010		PROTECTER,TW		10	83-096-614-010		SPEAKER CODE

SPEAKER PARTS LIST (SX-R270 <YS,YU>)

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

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	87-YS1-004-019		GRILLE,FRAME ASSY
2	81-VSA-010-019		SPKR,CORD
3	85-NSX-601-019		SPKR,100

SPEAKER PARTS LIST (SX-C600 <YU>)

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

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	87-YS3-001-019		PANEL,FR ST
2	87-YS3-002-019		PANEL,REAR ST
3	87-YS3-003-019		GRILLE,FRAME ASSY
4	85-NSY-602-019		SPKR,10
5	83-NSM-010-019		SPKR,CORD

ACCESSORIES / PACKAGE LIST

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

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	86-NFW-902-010		IB,H(ECA)M
2	86-MAP-702-010		RC UNIT,6AS02
3	87-A90-054-010		ANT,LOOP AM-CON C
4	87-043-115-010		ANT,FEEDER FM
5	87-043-095-010		WIRE ANTENNA
⚠ 6	87-A90-312-010		PLUG,CONVERSION WTN-1157R1

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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