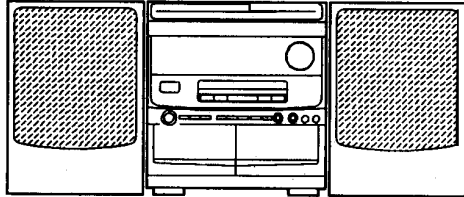


## NSX-AV90



COMPACT DISC STEREO  
CASSETTE RECEIVER

- BASIC TAPE MECHANISM : 2ZM-3MK2 PR4N
- BASIC CD MECHANISM : 4ZG-1 BDNM

• TYPE : EZ,K

SYSTEM	CD - CASSEIVER	SPEAKER
NSX-AV90 (TYPE : EZ, K)	CX-AV90	SX-NAV90

- If requiring information about the CD mechanism, see Service Manual of 4ZG-1, S/M Code No. 09-963-128-10T.
- If requiring information about the Speaker, see Service Manual of SX-ANV900/SX-NAV900, S/M Code No. 09-964-137-8FP.

# 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  $\mu$ V/m  
**Antenna** Loop antenna

## <LW Tuner section>

**Tuning range** 144 kHz to 290 kHz  
**Usable sensitivity** 1400  $\mu$ V/m  
**Antenna** Loop antenna

## <Amplifier section>

**Power output**

**Front**  
 Rated : 80 W + 80 W  
 (6 ohms, T.H.D. 1%, 1 kHz/  
 DIN45500)  
 Reference : 100 W + 100 W  
 (6 ohms, T.H.D. 10%, 1 kHz/  
 DIN45324)  
 EZ:  
 DIN MUSIC POWER: 175 W + 175 W

**Rear (Surround)**  
 Rated : 10 W + 10 W  
 (16 ohms, T.H.D 1%, 1 kHz/  
 DIN45500)  
 Reference : 12.5 W + 12.5 W  
 (16 ohms, T.H.D 10%, 1 kHz/  
 DIN45324)  
 EZ:  
 DIN MUSIC POWER: 25 W + 25 W

**Center**  
 Rated : 20 W  
 (8 ohms, T.H.D 1%, 1 kHz/  
 DIN45500)  
 Reference : 25 W  
 (8 ohms, T.H.D 10%, 1 kHz/  
 DIN45324)  
 EZ:  
 DIN MUSIC POWER: 50 W

**Total harmonic distortion** 0.1% (40 W, 1 kHz, 6 ohms,  
 DIN AUDIO/Front)

**Inputs** VIDEO/AUX : 150 mV (adjustable)  
 MIC 1, MIC 2 : 1 mV (10 kohms)  
 LINE OUT : 200 mV

**Outputs** SUPER WOOFER : 2.2 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** CrO<sub>2</sub> tape : 50 Hz - 16000 Hz  
 Normal tape : 50 Hz - 15000 Hz  
 60 dB (Dolby B NR ON, CrO<sub>2</sub> tape  
 peak level)  
**Signal-to-noise ratio** AC bias  
 Deck 1 : Playback head x1  
 Deck 2 : Recording/playback/  
 erase head x 1

## <Compact disc player section>

**Laser** Semiconductor laser ( $\lambda = 780$  nm)  
**D-A converter** 1 bit dual  
**Signal-to-noise ratio** 90 dB (1 kHz, 0 dB)  
**Harmonic distortion** 0.03% (1 kHz, 0 dB)  
**Wow and flutter** Unmeasurable

## <Speaker system SX-NAV90>



**Cabinet type** 3 way, bass reflex  
 (magnetic sealed type)

**Speakers**  
 Woofer :  
 140 mm (5<sup>5</sup>/<sub>8</sub> in.) cone type  
 Tweeter :  
 60 mm (2<sup>3</sup>/<sub>8</sub> in.) cone type  
 Super tweeter :  
 20 mm (1<sup>3</sup>/<sub>16</sub> in.) ceramic type

**Impedance** 6 ohms  
**Output sound pressure level** 87 dB/W/m  
**Dimensions (W x H x D)** 235 x 302 x 250 mm  
**Weight** 3.5 kg

## <General>

**Power requirements** 230 V AC, 50 Hz  
**Power consumption** 530 W  
**Dimensions of main unit** 260 x 308 x 339 mm  
 (W x H x D)  
**Weight of main unit** 8.7 kg

- Design and specifications are subject to change without notice.
- Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.  
 "DOLBY" and the double-D symbol  are trademarks of Dolby Laboratories Licensing Corporation.
- The word "BBE" and the "BBE symbol" are trademarks of BBE Sound, Inc.  
 Under license from BBE Sound, Inc.
- Manufactured under license from Dolby Laboratories Licensing Corporation.  
 "DOLBY", the double-D symbol  and "PRO LOGIC" are trademarks of Dolby Laboratories Licensing Corporation.

# PROTECTION OF EYES FROM LASER BEAM DURING SERVICING

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

## WARNING!!

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



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

## VAROITUS!

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

## WARNING!

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

## CAUTION

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

## ATTENTION

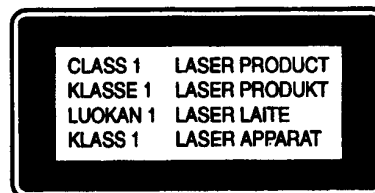
L'utilisation de commandes, réglages ou procédures autres que ceux spécifiés peut entraîner une dangereuse exposition aux radiations.

## ADVARSEL!

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

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

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

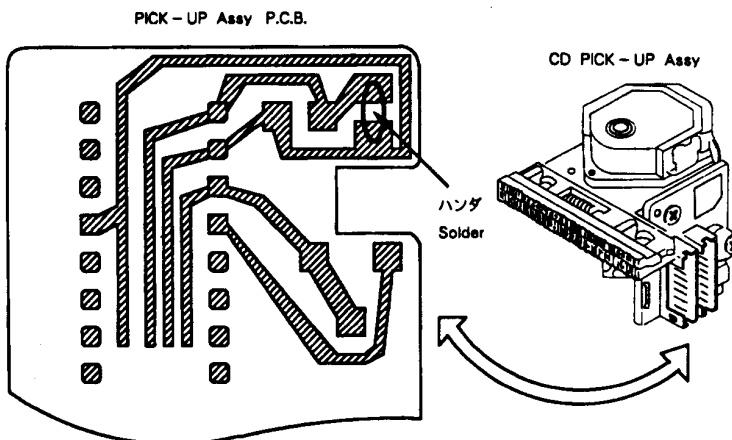


## Precaution to replace Optical block

### (KSS - 210A)

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 figure below.



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							
	87-020-454-010	IC, DN6851		87-001-731-089	ZENER, HZS6C2L		
	86-NF4-620-010	IC, LC866440W-5B18		87-017-091-089	ZENER, HZS5C1		
	87-070-083-019	IC, GP1U281X		87-020-331-089	C-DIODE, DAN202K		
	87-A20-062-019	IC, STK-419-130		87-020-330-088	C-DIODE, DAP202K		
	87-070-121-010	IC, HA12185NT		87-001-290-089	ZENER, HZS6B1L		
	87-070-232-019	IC, BA3834S		87-017-148-089	ZENER, HZS6A1L		
	87-017-375-089	IC, TC4094BF					
	87-001-874-019	IC, HA12134A	MAIN C.B				
	87-A20-107-019	IC, BA3836	C101	87-016-520-099	CAP, E 3300-65 SMG		
	87-027-666-019	IC, TC4052BP	C102	87-016-520-099	CAP, E 3300-65 SMG		
	87-A20-056-019	IC, BA3880S	C104	87-010-235-089	CAP, E 470-16 SME		
	87-017-374-019	IC, TC4094BP	C105	87-010-235-089	CAP, E 470-16 SME		
	87-017-888-089	IC, NJM4558MD	C106	87-010-409-089	CAP, E 220-50 SME		
	87-070-184-040	IC, M65846FP-600D	C107	87-010-247-089	CAP, E 100-50 SME		
	87-A20-105-049	C-IC, BU1921FS	C108	87-010-247-089	CAP, E 100-50 SME		
	87-A20-069-049	C-IC, BA3842F	C109	87-010-263-089	CAP, E 100-10 SME 5X11		
	87-070-127-119	IC, LC72131	C112	87-010-382-089	CAP, E 22-25 SME		
	87-017-714-119	IC, LA1836	C113	87-010-403-089	CAP, E 3.3-50 SME		
	87-A20-082-010	C-IC, NJW1102AFG1	C116	87-012-140-089	C-CAP, S 470P-50 CH		
	87-070-267-019	IC, STK405-050	C121	87-012-368-089	C-CAP, S 0.1-50		
	87-001-792-089	IC, NJM2100M	C122	87-012-368-089	C-CAP, S 0.1-50		
TRANSISTOR			C123	87-018-209-089	CAP, TC-U 0.1-50 F		
	87-026-463-089	TR, 2SA933S (RS)	C124	87-012-368-089	C-CAP, S 0.1-50		
	89-213-702-019	TR, 2SB1370E	C145	87-018-133-089	CAP, TC-U 4700P-16X		
	89-113-187-089	TR, 2SA1318TU	C146	87-018-133-089	CAP, TC-U 4700P-16X		
	87-026-610-089	TR, KTC3198GR	C152	87-010-260-089	CAP, E 47-25 SME		
	89-332-665-089	TR, 2SC3266GR	C171	87-016-565-099	CAP, E 4700-25(JAM1)		
	89-337-221-389	C-TR, 2SC3722K	C172	87-016-565-099	CAP, E 4700-25(JAM1)		
	89-327-125-089	C-TR, 2SC2712GR	C173	87-010-196-089	C-CAP, S 0.1-25 F		
	89-111-625-089	C-TR, 2SA1162GR	C174	87-010-196-089	C-CAP, S 0.1-25 F		
	87-026-210-089	C-TR, DTC144EK T147	C175	87-010-196-089	C-CAP, S 0.1-25 F		
	87-026-211-089	C-TR, DTA144EK T147	C176	87-015-785-089	C-CAP, 0.1-25 F		
	89-333-266-089	C-TR, 2SC3326B	C220	87-010-194-089	C-CAP, S 0.047-25 F		
	87-026-609-089	TR, KTA1266GR	C221	87-010-401-089	CAP, E 1-50 SME		
	89-109-705-089	TR, 2SA970GR	C222	87-010-401-089	CAP, E 1-50 SME		
	87-026-297-089	C-TR, DTA144TK	C223	87-010-187-089	C-CAP, S 5600P-50 B		
	87-026-226-089	C-TR, DTA143EK	C224	87-010-187-089	C-CAP, S 5600P-50 B		
	89-502-466-089	TR, FET 2SK246-BL (TPE2)	C225	87-015-826-089	C-CAP, S 1200P-50 BK		
	89-112-965-089	TR, 2SA1296GR	C226	87-015-826-089	C-CAP, S 1200P-50 BK		
	87-026-228-089	C-TR, DTA124EK	C227	87-010-405-089	CAP, E 10-50 SME		
	89-333-317-089	TR, 2SC3331T	C228	87-010-405-089	CAP, E 10-50 SME		
	89-109-521-089	TR, 2SA952K	C229	87-010-405-089	CAP, E 10-50 SME		
	89-406-555-089	TR, 2SD655E	C230	87-010-405-089	CAP, E 10-50 SME		
	87-026-238-089	C-TR, DTC144WK	C231	87-010-147-089	C-CAP, S 3P-50 CH		
	87-026-214-089	TR, DTA114YS	C232	87-018-098-089	CAP, TC-U 3.3P-50 SL		
	89-327-143-089	C-TR, 2SC2714 (O)	C233	87-010-196-089	C-CAP, S 0.1-25 F		
	87-026-269-089	TR, DTC114YK	C234	87-010-196-089	C-CAP, S 0.1-25 F		
	89-505-434-549	C-FET, 2SK543(4/5)	C235	87-010-196-089	C-CAP, S 0.1-25 F		
	87-026-325-089	C-TR, DTA114EU	C236	87-010-196-089	C-CAP, S 0.1-25 F		
	87-026-235-089	C-TR, DTC114EK T147	C239	87-018-134-089	CAP, TC-U 0.01-16 Y		
	87-026-236-089	C-TR, DTC124EK	C240	87-018-134-089	CAP, TC-U 0.01-16 Y		
	89-110-155-089	TR, 2SA1015GR	C241	87-010-197-089	C-CAP, S 0.01-25 B		
			C242	87-010-197-089	C-CAP, S 0.01-25 B		
DIODE			C243	87-010-322-089	C-CAP, S 100P-50 CH		
	87-A40-115-069	DIODE, RS603M	C244	87-010-322-089	C-CAP, S 100P-50 CH		
	87-017-978-089	DIODE, 1N4003	C245	87-010-318-089	C-CAP, S 47P-50 CH		
	87-020-027-089	C-DIODE, 1SS184	C246	87-010-293-089	C-CAP 47P-50CH		
	87-020-125-089	C-DIODE, 1SS181	C249	87-018-209-089	CAP, TC-U 0.1-50F		
	87-017-437-089	DIODE, 1N4148M	C250	87-A10-200-080	CAP, E 10-100 BP		
	87-017-174-089	ZENER, HZS11A3L	C260	87-015-785-089	C-CAP, 0.1-25 F		
	87-017-147-089	ZENER, HZS33-2	C301	87-010-318-089	C-CAP, S 47P-50 CH		
	87-017-127-089	ZENER, HZS11C1	C302	87-010-318-089	C-CAP, S 47P-50 CH		
	87-020-339-089	C-DIODE, 1SS226	C303	87-012-157-089	C-CAP, S 330P-50 CH		
	87-017-093-089	ZENER, HZS5C3	C304	87-012-157-089	C-CAP, S 330P-50 CH		
	87-A40-116-069	DIODE RS403L-B-D-51	C305	87-012-145-089	C-CAP S 270P-50CH		
	87-A40-184-090	DIODE, RK34F	C306	87-012-145-089	C-CAP S 270P-50CH		
			C307	87-010-196-089	C-CAP, S 0.1-25 F		
			C311	87-010-198-089	C-CAP, S 0.022-25 B		

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION	REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C312	87-010-198-089		C-CAP,S 0.022-25 B	C554	87-015-627-089		C-CAP,1000P-50 B
C313	87-010-181-089		C-CAP,S 1800P-50 B	C557	87-010-178-089		C-CAP,S 1000P-50 B
C314	87-010-181-089		C-CAP,S 1800P-50 B	C558	87-010-178-089		C-CAP,S 1000P-50 B
C315	87-010-179-089		C-CAP,S 1200P-50 B	C597	87-010-404-089		CAP,E 4.7-50 SME
C316	87-010-179-089		C-CAP,S 1200P-50 B	C598	87-010-404-089		CAP,E 4.7-50 SME
C317	87-012-142-089		C-CAP,S 0.33-16 F	C601	87-010-178-089		C-CAP,S 1000P-50 B
C318	87-012-142-089		C-CAP,S 0.33-16 F	C602	87-010-178-089		C-CAP,S 1000P-50 B
C319	87-012-141-089		C-CAP,S 0.22-16 F	C603	87-010-405-089		CAP,E 10-50 SME
C320	87-012-141-089		C-CAP,S 0.22-16 F	C604	87-010-405-089		CAP,E 10-50 SME
C321	87-010-196-089		C-CAP,S 0.1-25 F	C605	87-010-260-089		CAP,E 47-25 SME
C322	87-010-196-089		C-CAP,S 0.1-25 F	C606	87-010-101-089		CAP,E 220-16 SME
C324	87-010-260-089		CAP,E 47-25 SME	C607	87-010-188-089		C-CAP,S 6800P-50 B
C325	87-010-370-089		CAP,E 330-6.3 SME	C608	87-010-188-089		C-CAP,S 6800P-50 B
C326	87-010-196-089		C-CAP,S 0.1-25 F	C609	87-018-127-089		CAP,TC-U 470P-50 B
C330	87-010-401-089		CAP,E 1-50 SME	C610	87-018-127-089		CAP,TC-U 470P-50 B
C332	87-015-785-089		C-CAP,0.1-25 F	C611	87-010-197-089		C-CAP,S 0.01-25 B
C335	87-010-805-089		C-CAP,S 1-16F	C612	87-010-197-089		C-CAP,S 0.01-25 B
C336	87-010-805-089		C-CAP,S 1-16F	C613	87-010-195-089		C-CAP,S 0.068-25 F
C337	87-010-196-089		C-CAP,S 0.1-25 F	C614	87-010-195-089		C-CAP,S 0.068-25 F
C338	87-010-196-089		C-CAP,S 0.1-25 F	C615	87-010-404-089		CAP,E 4.7-50 SME
C339	87-010-196-089		C-CAP,S 0.1-25 F	C616	87-010-404-089		CAP,E 4.7-50 SME
C340	87-015-785-089		C-CAP,0.1-25 F	C617	87-010-404-089		CAP,E 4.7-50 SME
C351	87-012-154-089		C-CAP,S 150P-50 CH	C618	87-010-404-089		CAP,E 4.7-50 SME
C352	87-012-154-089		C-CAP,S 150P-50 CH	C620	87-018-209-089		CAP,TC-U 0.1-50 F
C451	87-012-140-089		C-CAP,S 470P-50 CH	C641	87-010-196-089		C-CAP,S 0.1-25 F
C452	87-012-140-089		C-CAP,S 470P-50 CH	C642	87-010-196-089		C-CAP,S 0.1-25 F
C453	87-010-178-089		C-CAP,S 1000P-50 B	C673	87-010-316-089		C-CAP,S 33P-50 CH
C454	87-010-175-089		C-CAP,S 560P-50 SL	C674	87-010-316-089		C-CAP,S 33P-50 CH
C455	87-010-178-089		C-CAP,S 1000P-50 B	C675	87-010-318-089		C-CAP,S 47P-50 CH
C456	87-010-260-089		CAP,E 47-25 SME	C676	87-010-318-089		C-CAP,S 47P-50 CH
C457	87-010-197-089		C-CAP,S 0.01-25 B	C701	87-010-381-089		CAP,E 330-16 SME
C458	87-010-183-089		C-CAP,S 2700P-50 B	C702	87-010-404-089		CAP,E 4.7-50 SME
C459	87-010-183-089		C-CAP,S 2700P-50 B	C703	87-010-197-089		C-CAP,S 0.01-25 B
C460	87-010-183-089		C-CAP,S 2700P-50 B	C704	87-010-197-089		C-CAP,S 0.01-25 B
C470	87-010-196-089		C-CAP,S 0.1-25 F	C711	87-010-263-089		CAP,E 100-10 SME 5X11
C501	87-010-179-089		C-CAP,S 1200P-50 B	C712	87-010-196-089		C-CAP,S 0.1-25 F
C502	87-010-179-089		C-CAP,S 1200P-50 B	C722	87-010-152-089		C-CAP,S 8P-50 CH
C503	87-012-155-089		C-CAP,S 180P-50 CH	C723	87-010-178-089		C-CAP,S 1000P-50 B
C504	87-012-155-089		C-CAP,S 180P-50 CH	C725	87-010-178-089		C-CAP,S 1000P-50 B
C515	87-010-545-089		CAP,E 0.22-50 SME	C727	87-010-196-089		C-CAP,S 0.1-25 F
C516	87-010-545-089		CAP,E 0.22-50 SME	C728	87-010-248-089		CAP,E 220-10 SME
C519	87-015-785-089		C-CAP,0.1-25 F	C770	87-010-405-089		CAP,E 10-50 SME
C521	87-010-197-089		C-CAP,S 0.01-25 B	C771	87-010-405-089		CAP,E 10-50 SME
C522	87-010-318-089		C-CAP,S 47P-50 CH	C772	87-010-194-089		C-CAP,S 0.047-25 F
C523	87-010-197-089		C-CAP,S 0.01-25 B	C773	87-015-785-089		C-CAP,0.1-25 F
C524	87-010-402-089		CAP,E 2.2-50 SME	C774	87-010-263-089		CAP,E 100-10 SME 5X11
C525	87-010-184-089		C-CAP,S 3300P-50 B	C775	87-010-405-089		CAP,E 10-50 SME
C526	87-010-196-089		C-CAP,S 0.1-25 F	C776	87-010-197-089		C-CAP,S 0.01-25 B
C527	87-010-401-089		CAP,E 1-50 SME	C777	87-010-400-089		CAP,E 0.47-50 SME
C528	87-010-401-089		CAP,E 1-50 SME	C778	87-010-401-089		CAP,E 1-50 SME
C529	87-010-384-089		CAP,E 100-25 SME	C779	87-010-401-089		CAP,E 1-50 SME
C530	87-010-197-089		C-CAP,S 0.01-25 B	C780	87-010-197-089		C-CAP,S 0.01-25 B
C531	87-010-183-089		C-CAP,S 2700P-50 B	C781	87-010-405-089		CAP,E 10-50 SME
C532	87-010-194-089		C-CAP,S 0.047-25 F	C782	87-010-405-089		CAP,E 10-50 SME
C533	87-010-196-089		C-CAP,S 0.1-25 F	C785	87-010-197-089		C-CAP,S 0.01-25 B
C534	87-010-263-089		CAP,E 100-10 SME 5X11	C787	87-010-184-089		C-CAP,S 3300P-50 B
C535	87-010-401-089		CAP,E 1-50 SME	C788	87-010-184-089		C-CAP,S 3300P-50 B
C536	87-010-401-089		CAP,E 1-50 SME	C789	87-015-826-089		C-CAP,1200-50 B K
C537	87-010-545-089		CAP,E 0.22-50 SME	C790	87-010-179-089		C-CAP,S 1200P-50 B
C540	87-010-196-089		C-CAP,S 0.1-25 F	C791	87-010-401-089		CAP,E 1-50 SME
C541	87-010-196-089		C-CAP,S 0.1-25 F	C792	87-010-183-089		C-CAP,S 2700P-50 B
C542	87-010-405-089		CAP,E 10-50 SME	C793	87-010-189-089		C-CAP,S 8200P-50 B
C543	87-010-546-089		CAP,E 0.33-50 SME	C794	87-010-408-089		CAP,E 47-50 SME
C544	87-010-546-089		CAP,E 0.33-50 SME	C795	87-010-194-089		C-CAP,S 0.047-25 F
C545	87-010-400-089		CAP,E 0.47-50 SME	C796	87-010-403-089		CAP,E 3.3-50 SME
C546	87-010-400-089		CAP,E 0.47-50 SME	C802	87-010-197-089		C-CAP,S 0.01-25 B
C547	87-015-632-089		C-CAP,0.015-50 BK	C814	87-010-196-089		C-CAP,S 0.1-25 F
C548	87-015-632-089		C-CAP,0.015-50 BK	C817	87-010-197-089		C-CAP,S 0.01-25 B
C550	87-018-208-089		CAP,TC-U 0.047-50	C818	87-010-197-089		C-CAP,S 0.01-25 B
C553	87-015-627-089		C-CAP,1000P-50 B				

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION	REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C819	87-010-197-089		C-CAP,S 0.01-25 B	SFR301	87-024-355-089		SFR,33K DIA6 H
C820	87-010-408-089		CAP,E 47-50 SME	SFR302	87-024-355-089		SFR,33K DIA6 H
C821	87-010-197-089		C-CAP,S 0.01-25 B	SFR303	87-024-355-089		SFR,33K DIA6 H
C823	87-010-197-089		C-CAP,S 0.01-25 B	SFR304	87-024-355-089		SFR,33K DIA6 H
C828	87-010-197-089		C-CAP,S 0.01-25 B	SFR305	87-024-356-089		SFR,47K DIA6 H
C829	87-010-197-089		C-CAP,S 0.01-25 B	SFR306	87-024-356-089		SFR,47K DIA6 H
C830	87-015-819-089		CHIP CAP 0.01	SFR451	87-024-356-089		SFR,47K DIA6 H
C835	87-010-197-089		C-CAP,S 0.01-25 B	SFR452	87-024-356-089		SFR,47K DIA6 H
C860	87-010-248-089		CAP,E 220-10 SME	SFR722	87-024-352-089		SFR,4.7K DIA6 H
C861	87-010-196-089		C-CAP,S 0.1-25 F	TC701	87-011-253-089		TRIMER,30P LAR
C862	87-010-182-089		C-CAP,S 2200P-50 B	TC942	87-011-253-089		TRIMER,30P LAR
C863	87-010-178-089		C-CAP,S 1000P-50 B	VR651	87-A90-153-019		VR,RTRY 50KBX2
C864	87-010-315-089		C-CAP,S 27P-50 CH	W101	85-NF5-628-019		F-CABLE 7P-2.5
C865	87-010-315-089		C-CAP,S 27P-50 CH	W604	85-NF5-617-019		CABLE,FFC 6P-1.25
C866	87-010-197-089		C-CAP,S 0.01-25 B	X703	84-508-618-019		VIB,CER CSB 456 F/5
C867	87-012-140-089		C-CAP,S 470P-50 CH	X721	87-030-372-019		VIB,XTAL 7.2MHZ
C868	87-010-405-089		CAP,E 10-50 SME	X850	89-KT1-608-019		X,TAL 4.332MHZ
C869	87-010-196-089		C-CAP,S 0.1-25 F				
C871	87-010-196-089		C-CAP,S 0.1-25 F				
C872	87-010-197-089		C-CAP,S 0.01-25 B				
				FRONT C.B			
C901	87-010-197-089		C-CAP,S 0.01-25 B	C201	87-010-497-049		CAP,E 4.7-35 GAS
C902	87-010-196-089		C-CAP,S 0.1-25 F	C202	87-010-497-049		CAP,E 4.7-35 GAS
C903	87-018-119-089		CAP,TC-U 100P-50B	C203	87-010-281-049		CAP,E 22-35 5L
C942	87-010-154-089		C-CAP,S 10P-50 CH	C204	87-010-494-049		CAP,E 1-50 GAS
C946	87-010-401-089		CAP,E 1-50 SME	C205	87-010-263-049		CAP,E 100-10
C949	87-014-049-089		CAP,PP 470P-100 J	C206	87-010-550-049		CAP,E 100-6.3 GAS
C952	87-010-197-089		C-CAP,S 0.01-25 B	C207	87-010-494-049		CAP,E 1-50 GAS
C957	87-010-315-089		C-CAP,S 27P-50 CH	C208	87-018-209-089		CAP,TC-U 0.1-50 F
C958	87-010-197-089		C-CAP,S 0.01-25 B	C209	87-010-550-049		CAP,E 100-6.3 GAS
C960	87-010-196-089		C-CAP,S 0.1-25 F	C212	87-010-560-049		CAP,E 10-50 GAS
C987	87-018-134-089		CAP,TC-U 0.01-16 Y	C213	87-010-196-089		C-CAP,S 0.1-25 F
C988	87-018-134-089		CAP,TC-U 0.01-16 Y	C214	87-010-196-089		C-CAP,S 0.1-25 F
C990	87-010-197-089		C-CAP,S 0.01-25 B	C215	87-010-196-089		C-CAP,S 0.1-25 F
C993	87-018-134-089		CAP,TC-U 0.01-16 Y	C221	87-010-154-089		C-CAP,S 10P-50 CH
C995	87-010-197-089		C-CAP,S 0.01-25 B	C222	87-010-314-089		C-CAP,S 22P-50 CH
C999	87-010-196-089		C-CAP,S 0.1-25 F	C223	87-010-178-089		C-CAP,S 1000P-50 B
CP801	87-008-423-019		CF,SFE10.7MS3G-A	C250	87-010-178-089		C-CAP,S 1000P-50 B
CF802	82-785-747-019		CF,MS2 GHY,R	C251	87-010-196-089		C-CAP,S 0.1-25 F
FFE801	A8-62A-195-039		6ZA-1 YFEENM	C381	87-010-196-089		C-CAP,S 0.1-25 F
J252	87-099-678-019		JACK 6.3W/S BLK	C382	87-010-196-089		C-CAP,S 0.1-25 F
J253	87-099-802-019		JACK,PIN 3P BRW	C383	87-010-196-089		C-CAP,S 0.1-25 F
J254	87-A60-238-019		TERMINAL,SP 4P(MSC)	C384	87-010-196-089		C-CAP,S 0.1-25 F
J652	87-099-625-019		JACK PIN 4P,RVS (KM)	C385	87-010-322-089		C-CAP,S 100P-50 CH
J653	87-099-625-019		JACK PIN 4P,RVS (KM)	C389	87-010-196-089		C-CAP,S 0.1-25 F
J801	87-033-241-019		TERMINAL,ANT AJ-2039	C401	87-010-196-089		C-CAP,S 0.1-25 F
L101	87-003-383-019		COIL,1UH-S	C402	87-010-196-089		C-CAP,S 0.1-25 F
L102	87-003-383-019		COIL,1UH-S	C403	87-010-196-089		C-CAP,S 0.1-25 F
L403	87-A50-049-019		COIL,TRAP 85KHZ	C404	87-018-209-089		CAP,TC-U 0.1-50 F
L404	87-A50-049-019		COIL,TRAP 85KHZ	C501	87-010-060-049		CAP,E 100-16 7L
L451	87-007-342-019		COIL,OSC 85K BIAS	C601	87-010-405-049		CAP,E 10-50 SME
L701	87-A50-027-019		COIL,1 POLE MPX(TOK)	C602	87-010-176-089		C-CAP,S 680P-50 SL
L702	87-A50-027-019		COIL,1 POLE MPX(TOK)	C603	87-010-186-089		C-CAP,S 4700P-50 B
L741	87-A50-015-019		COIL,FM DET(TOK)	C604	87-010-322-089		C-CAP,S 100P-50 CH
L742	87-A90-051-019		FLTR,CPAZ-450(TOK)	C605	87-010-321-089		C-CAP,S 82P-50 CH
L743	87-005-564-089		C-COIL,2.2UH	C606	87-010-401-049		CAP,E 1-50 SME
L770	87-003-102-089		COIL,10UH	C607	87-010-196-089		C-CAP,S 0.1-25 F
L832	87-005-847-089		COIL,2.2UH(CECS)	C608	87-010-322-089		C-CAP,S 100P-50 CH
L850	87-005-847-089		COIL,2.2UH(CECS)	C609	87-010-491-049		CAP E 0.22-50 GAS
L941	87-A50-020-019		COIL,ANT LW(COI)	C610	87-010-177-089		C-CAP,S 820P-50 SL
L942	87-A50-019-019		COIL,OSC LW(COI)	C611	87-010-406-049		CAP,E 22-50 SME
L981	86-NF4-665-019		AM PACK 1(TOK)	C612	87-010-196-089		C-CAP,S 0.1-25 F
△ PR110	87-026-689-089		PROTECTOR 1A 60V 491	C614	87-010-562-049		CAP,E 220-10 GAS
△ PR113	87-026-681-089		PROTECTOR 5A 60V 491	C615	87-010-560-049		CAP,E 10-50 GAS
△ PR114	87-026-681-089		PROTECTOR 5A 60V 491	C646	87-010-196-089		C-CAP,S 0.1-25 F
R100	87-029-060-089		RES,FUSE 33-1/4WJ	FB601	87-008-474-019		F-BEAD,EMI BL02RN1
R101	87-029-060-089		RES,FUSE 33-1/4WJ	FB602	87-008-372-019		FLTR,EMI BL01RN1
R105	87-022-600-089		RES,M/F 0.1-2W J	FL101	86-NF4-610-019		FL,BJ461GK
R106	87-022-600-089		RES,M/F 0.1-2W J	J601	82-NF7-630-019		JACK,3.5 MO
RY101	87-045-361-019		RELAY,DH12D2-OS(M)-2	J621	82-NF7-630-019		JACK,3.5 MO
RY102	87-045-382-019		RELAY,OUAZ-SH-112L	L202	87-A50-052-019		COIL,CLOCK 5.76MHZ T1

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION	REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
LED401	87-070-281-089	LED,SLZ736A-25-S-T		MVR C.B			
LED402	87-070-281-089	LED,SLZ736A-25-S-T					
LED403	87-070-281-089	LED,SLZ736A-25-S-T					
LED404	87-070-281-089	LED,SLZ736A-25-S-T		C281	87-010-402-089	CAP,E 2.2-50 SME	
LED405	87-070-281-089	LED,SLZ736A-25-S-T		C282	87-010-402-089	CAP,E 2.2-50 SME	
				C283	87-010-401-089	CAP,E 1-50 SME	
				C284	87-010-401-089	CAP,E 1-50 SME	
				C285	87-010-263-089	CAP, E 100-10 SME 5X11	
LED406	87-070-281-089	LED,SLZ736A-25-S-T					
LED407	87-070-199-089	LED,SLP738F-81-S-T1					
LED408	87-070-199-089	LED,SLP738F-81-S-T1		C286	87-010-384-089	CAP,E 100-25 SME	
LED409	87-070-199-089	LED,SLP738F-81-S-T1		C622	87-010-194-089	C-CAP,S 1200P-50 F	
LED410	87-070-199-089	LED,SLP738F-81-S-T1		C648	87-012-156-089	C-CAP,S 220P-50 CH	
				C650	87-010-319-089	C-CAP,S 56P-50 CH	
				C651	87-010-319-089	C-CAP,S 56P-50 CH	
LED411	87-070-199-089	LED,SLP738F-81-S-T1					
LED412	87-070-199-089	LED,SLP738F-81-S-T1					
LED413	87-070-199-089	LED,SLP738F-81-S-T1		C653	87-012-358-089	C-CAP S 0.47-10PZ	
LED414	87-070-199-089	LED,SLP738F-81-S-T1		C654	87-015-826-089	C-CAP,S 1200P-50 B	
LED420	87-070-201-089	LED,SLP9118C-51-S-T1		C655	88-700-910-819	CAP,M 0.1-50 J	
				C656	87-010-196-089	C-CAP,S 0.1-25 F	
				C657	87-010-263-049	CAP,E 100-10	
LED421	87-070-201-089	LED,SLP9118C-51-S-T1					
LED422	87-070-201-089	LED,SLP9118C-51-S-T1					
LED423	87-070-201-089	LED,SLP9118C-51-S-T1		C658	88-700-910-819	CAP,M 0.1-50 J	
LED437	87-070-278-019	LED,SLZ-738A-24-S		C659	87-010-181-089	C-CAP,S 1800P-50 B	
LED438	87-070-278-019	LED,SLZ-738A-24-S		C660	87-010-426-089	C-CAP,S 0.012-25 B	
				C661	87-012-358-089	C-CAP S 0.47-10PZ	
				C663	87-010-263-089	CAP,E 100-10 SME 5X11	
LED439	87-070-278-019	LED,SLZ-738A-24-S					
LED440	87-070-278-019	LED,SLZ-738A-24-S					
LED441	87-070-290-019	LED,SLZ 936-30-S		C664	87-012-141-089	C-CAP,S 0.22-16 F	
LED442	87-070-290-019	LED,SLZ 936-30-S		C665	87-010-180-089	C-CAP,S 1500P-50 B	
LED443	87-070-201-089	LED,SLP9118C-51-S-T1		C666	87-010-180-089	C-CAP,S 1500P-50 B	
				C667	87-010-177-089	C-CAP,S 820P-50 SL	
				C668	87-010-180-089	C-CAP,S 1500P-50 B	
LED444	87-070-201-089	LED,SLP9118C-51-S-T1					
LED445	87-070-201-089	LED,SLP9118C-51-S-T1		C669	87-010-497-049	CAP,E 4.7-35 SME	
LED446	87-070-201-089	LED,SLP9118C-51-S-T1		C671	87-010-197-089	C-CAP,S 0.01-25 B	
LED447	87-070-201-089	LED,SLP9118C-51-S-T1		C672	87-010-196-089	C-CAP,S 0.1-25 F	
LED448	87-070-201-089	LED,SLP9118C-51-S-T1		C700	87-010-198-089	C-CAP,S 0.022-25 B	
				C703	87-010-402-049	CAP E2.2-50 SME	
LED449	87-A90-189-089	LED,SEL1213 CM					
LED450	87-A90-189-089	LED,SEL1213 CM					
LED451	87-A90-189-089	LED,SEL1213 CM		C704	87-010-402-089	CAP,E 2.2-50 SME	
LED452	87-A90-189-089	LED,SEL1213 CM		C705	87-010-545-049	CAP E 0.22-50 SME	
LED453	87-A90-189-089	LED,SEL1213 CM		C706	87-010-401-049	CAP,E 1-50 SME	
				C707	87-010-260-049	CAP,E 47-25 SME	
				C708	87-010-405-049	CAP,E 10-50 SME	
LED454	87-A90-189-089	LED,SEL1213 CM					
LED455	87-A90-189-089	LED,SEL1213 CM					
LED456	87-A90-189-089	LED,SEL1213 CM		C709	87-010-545-049	CAP E 0.22-50 SME	
S301	87-036-397-089	SW,TACT SKQNAB		C710	87-010-263-049	CAP,E 100-10	
S302	87-036-397-089	SW,TACT SKQNAB		C711	87-010-993-089	C-CAP,S 0.056-25 B	
				C712	87-016-460-089	C-CAP,S 0.22-16 B	
				C713	87-016-460-089	C-CAP,S 0.22-16 B	
S303	87-036-397-089	SW,TACT SKQNAB					
S304	87-036-397-089	SW,TACT SKQNAB					
S305	87-036-397-089	SW,TACT SKQNAB		C714	87-010-993-089	C-CAP,S 0.056-25 B	
S308	87-036-397-089	SW,TACT SKQNAB		C715	87-010-182-089	C-CAP,S 2200P-50 B	
S309	87-036-397-089	SW,TACT SKQNAB		C716	87-010-182-089	C-CAP,S 2200P-50 B	
				C717	87-010-196-089	C-CAP,S 0.1-25 F	
				C719	87-010-401-089	CAP,E 1-50 SME	
S310	87-036-397-089	SW,TACT SKQNAB					
S321	87-036-397-089	SW,TACT SKQNAB					
S322	87-036-397-089	SW,TACT SKQNAB		C720	87-010-401-089	CAP,E 1-50 SME	
S323	87-036-397-089	SW,TACT SKQNAB		C801	87-010-176-089	C-CAP,S 680P-50 SL	
S324	87-036-397-089	SW,TACT SKQNAB		C802	87-010-176-089	C-CAP,S 680P-50 SL	
				C807	87-010-405-089	CAP,E 10-50 SME	
				C808	87-010-405-089	CAP,E 10-50 SME	
S325	87-036-397-089	SW,TACT SKQNAB					
S326	87-036-397-089	SW,TACT SKQNAB					
S327	87-036-397-089	SW,TACT SKQNAB		C809	87-016-456-089	CAP,E 22-16 LLA	
S328	87-036-397-089	SW,TACT SKQNAB		C810	87-010-112-089	CAP,E 100-16	
S329	87-036-397-089	SW,TACT SKQNAB		C811	87-010-196-089	C-CAP,S 0.1-25 F	
				C812	87-010-260-089	CAP,E 47-25 SME	
				C814	87-016-472-089	CAP,E 22-16,SME (K)	
S330	87-036-397-089	SW,TACT SKQNAB					
S342	87-036-397-089	SW,TACT SKQNAB					
S343	87-036-397-089	SW,TACT SKQNAB		C815	87-010-263-089	CAP, E 100-10 SME 5X11	
S344	87-036-397-089	SW,TACT SKQNAB		C816	87-016-081-089	C-CAP,S 0.1-16 RK	
S345	87-036-397-089	SW,TACT SKQNAB		C817	87-010-378-089	CAP,E 10-16	
				C818	87-010-378-089	CAP,E 10-16	
				C819	87-010-378-089	CAP,E 10-16	
S346	87-036-397-089	SW,TACT SKQNAB					
S347	87-036-397-089	SW,TACT SKQNAB					
S348	87-036-397-089	SW,TACT SKQNAB		C820	87-010-378-089	CAP,E 10-16	
VR600	86-NT1-634-019	VR,RTRY 100KW-L20		C821	87-010-378-089	CAP,E 10-16	
VR601	87-A90-124-019	VR,RTRY 10KAL20		C822	87-010-101-089	CAP,E 220-16 SME	
				C823	87-012-140-089	C-CAP,S 470P-50 CH	
				C824	87-010-187-089	C-CAP,S 5600P-50 B	
W104	85-NF5-618-019	CABLE,FFC 13P-1.25					
W301	86-NF4-661-019	CABLE,FFC 6P-1.25(F)					
W501	85-NF5-615-019	CABLE,FFC 15P-1.25					
				C825	87-010-186-089	C-CAP,S 4700P-50 B	
				C828	87-016-465-089	C-CAP,0.68-16 B	
				C829	87-012-393-089	C-CAP,S 0.22-16,R,K	

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION	REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C830	87-012-393-089		C-CAP,S 0.22-16,R,K	DECK C.B			
C831	87-010-404-089		CAP,E 4.7-50 SME	SFR1	87-024-581-089		SFR,3.3K DIA 6H
C832	87-010-404-089		CAP,E 4.7-50 SME	SOL1	82-ZM1-618-010		SOL ASSY, 27
C833	87-012-393-089		C-CAP,S 0.22-16,R,K	SOL2	82-ZM1-618-010		SOL ASSY, 27
C834	87-012-393-089		C-CAP,S 0.22-16,R,K	SW1	87-036-378-010		SW, PUSH 1-1-1 SH2
C835	87-016-081-089		C-CAP,S 0.1-16 RK	SW2	87-036-378-010		SW, PUSH 1-1-1 SH2
C838	87-016-081-089		C-CAP,S 0.1-16 RK	SW3	87-036-378-010		SW, PUSH 1-1-1 SH2
C839	87-016-081-089		C-CAP,S 0.1-16 RK	SW4	87-036-378-010		SW, PUSH 1-1-1 SH2
C842	87-016-081-089		C-CAP,S 0.1-16 RK	SW5	87-036-378-010		SW, PUSH 1-1-1 SH2
FB640	87-008-474-019		F-BEAD,EMI BLO2RN1	SW6	87-036-378-019		SW, PUSH 1-1-1 SH2
L650	87-005-481-089		COIL,47UH J FLR50	SW8	87-036-378-019		SW, PUSH 1-1-1 SH2
MVR741	85-NF4-660-019		VOL,50KBX4 (M)	HEAD-1 C.B			
W280	86-NFR-623-019		CABLE,FFC 6P-1.25	HEAD-2 C.B			
KEY C.B							
LED415	87-070-197-089		LED,SLP7118C-51-S-T1				
LED416	87-070-197-089		LED,SLP7118C-51-S-T1				
LED417	87-070-197-089		LED,SLP7118C-51-S-T1				
S349	87-036-397-089		SW,TACT SKQNAB				
S350	87-036-397-089		SW,TACT SKQNAB				
S351	87-036-397-089		SW,TACT SKQNAB				
S352	87-036-397-089		SW,TACT SKQNAB				
S353	87-036-397-089		SW,TACT SKQNAB				
AMP C.B							
C901	87-010-177-089		C-CAP,S 820P-50 SL				
C902	87-010-177-089		C-CAP,S 820P-50 SL				
C903	87-010-402-089		CAP,E 2.2-50 SME				
C904	87-010-402-089		CAP,E 2.2-50 SME				
C905	87-010-378-089		CAP,E 10-16				
C906	87-010-378-089		CAP,E 10-16				
C909	87-010-147-089		C-CAP,S 3P-50 CH				
C910	87-010-147-089		C-CAP,S 3P-50 CH				
C911	87-010-993-089		C-CAP,S 0.056-25 B				
C912	87-010-993-089		C-CAP,S 0.056-25 B				
C913	87-010-196-089		C-CAP,S 0.1-25 F				
C914	87-010-196-089		C-CAP,S 0.1-25 F				
C915	87-010-193-089		C-CAP,S 0.033-25 F				
C916	87-010-193-089		C-CAP,S 0.033-25 F				
C917	87-010-197-089		C-CAP,S 0.01-25 B				
C918	87-010-194-089		C-CAP,S 0.047-25 F				
C921	87-010-405-089		CAP,E 10-50 SME				
C922	87-010-398-099		CAP,E 2200-35V SME				
C923	87-010-398-099		CAP,E 2200-35V SME				
C924	87-012-368-089		C-CAP,S 0.1-50 F				
C925	87-012-368-089		C-CAP,S 0.1-50 F				
C926	87-010-197-089		C-CAP,S 0.01-25 B				
CON901	87-049-919-019		CONN,3P EH V WHT				
J901	87-099-803-019		JACK,PIN 3P OWR				
L901	87-003-383-019		COIL,1UH-S				
L902	87-003-383-019		COIL,1UH-S				
R921	87-022-050-089		RESIS METAL 1W-0.22J				
R922	87-022-050-089		RESIS METAL 1W-0.22J				
AC C.B							
△ C103	87-010-197-089		C-CAP,S 0.01-25 B				
△ PR101	86-026-682-089		PROTECTOR,10A 125V 251				
△ PR102	86-026-682-089		PROTECTOR,10A 125V 251				
△ PR103	86-026-681-089		PROTECTOR,5A 60V 491				
△ PR104	86-026-681-089		PROTECTOR,5A 60V 491				
PT C.B							
△	82-304-743-019		TERMINAL,1P				
△ CF101	87-033-213-089		CLAMP FUSE SMK				
△ CF102	87-033-213-089		CLAMP FUSE SMK				
△ F109	87-035-366-019		FUSE,2.5A 250V T E/K				
△ PT1	86-NF4-657-019		PT,6NF-4 EKZ				



# TRANSISTOR ILLUSTRATION



E C B

2SA1296  
2SC3266  
KTA1266  
KTC3198



E C B

2SA952  
2SA970  
2SD655  
2SA1015



E C B

DTA114  
2SA933



E C B

2SA1318  
2SC3331



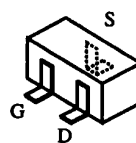
B C E

2SB1370



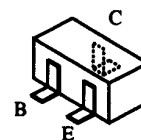
S G D

2SK246



S  
G D

2SK543



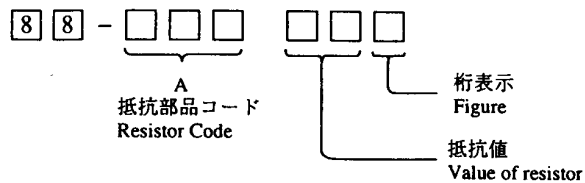
C  
B E

2SA1162  
2SC2712  
2SC2714  
2SC3722  
2SC3326  
2SD2114  
DTA144

DTA143  
DTA124  
DTC144  
DTC144  
DTA114  
DTC114  
DTC124

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

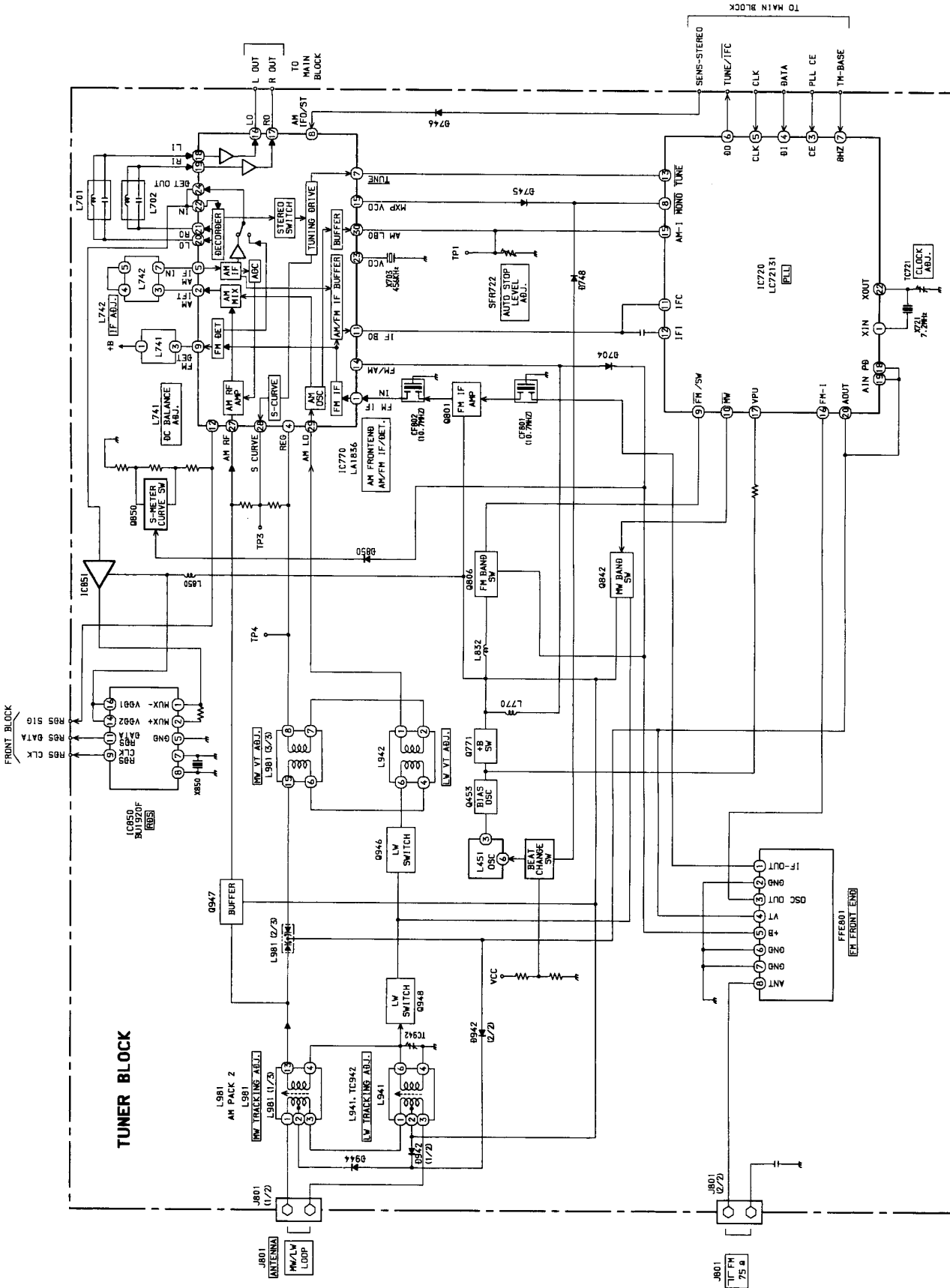
チップ抵抗部品コードの成り立ち  
Chip Resistor Part Coding



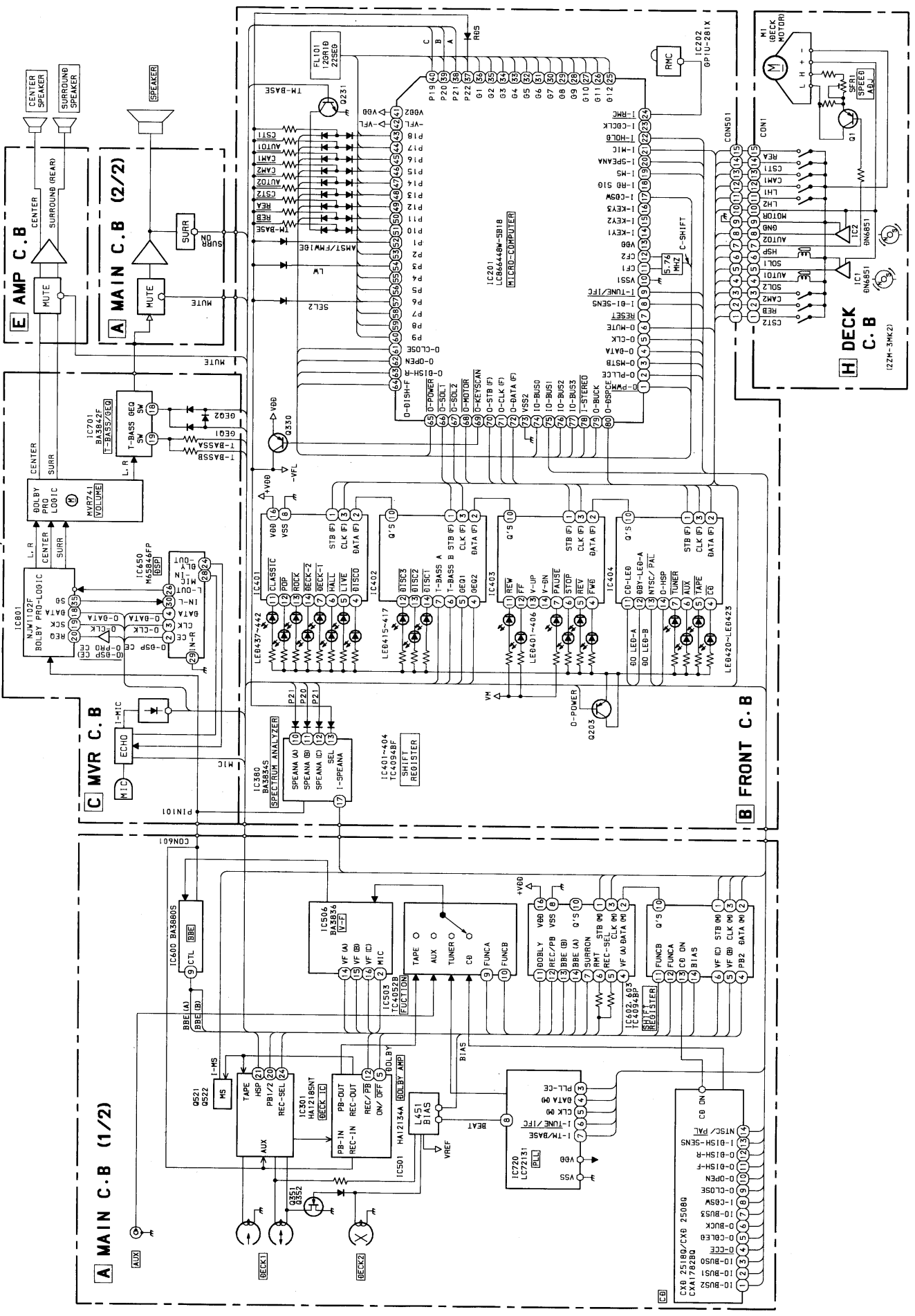
チップ抵抗  
Chip resistor

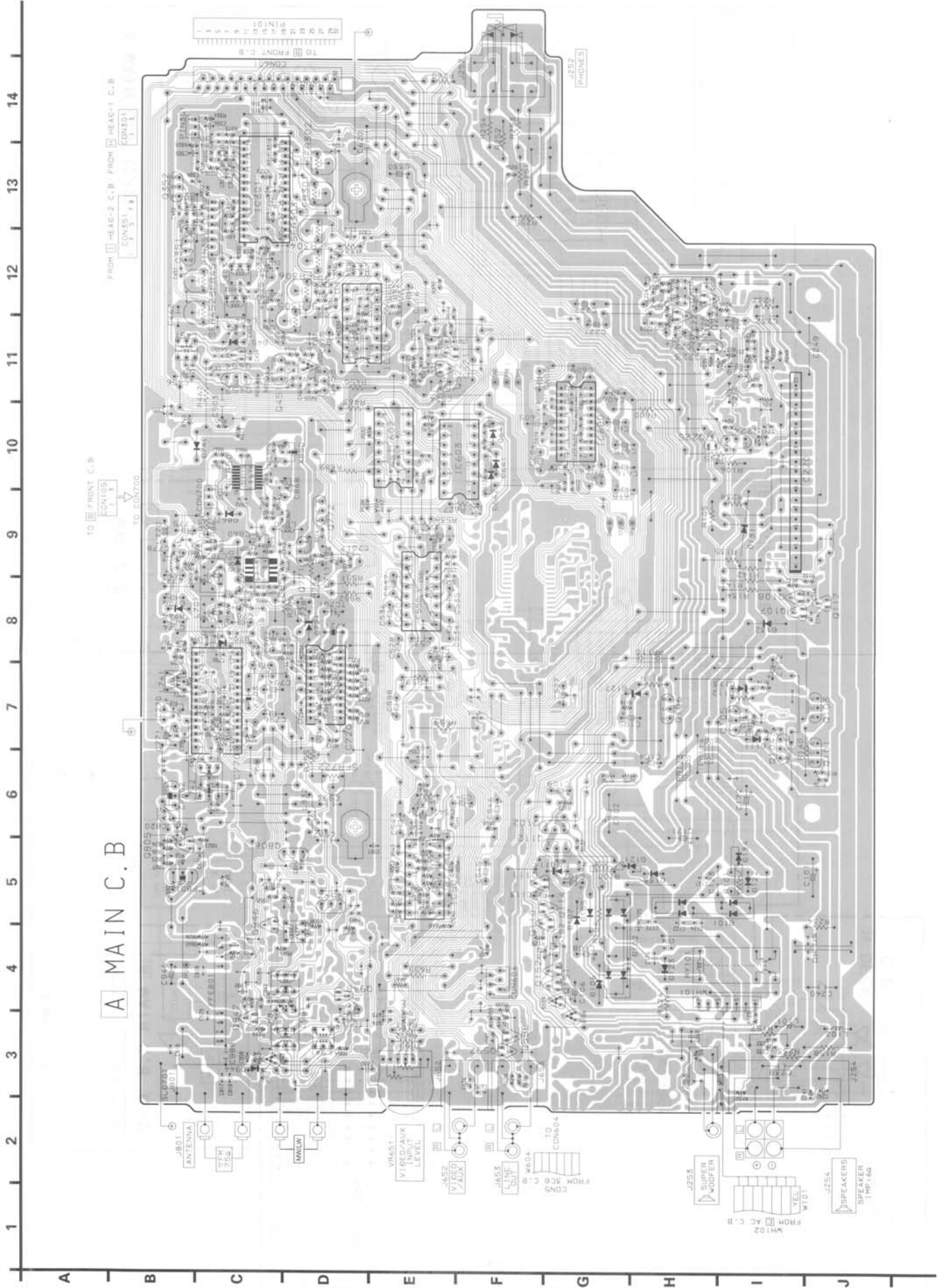
容量 Wattage	種類 Type	許容誤差 Tolerance	記号 Symbol	寸法 / Dimensions (mm)			抵抗コード : A Resistor Code: A	
				外形 / Form	L	W		t
1/16W	1608	±5%	CJ		1.6	0.8	0.45	108
1/10W	2125	±5%	CJ		2	1.25	0.45	118
1/8W	3216	±5%	CJ		3.2	1.6	0.55	128

# BLOCK DIAGRAM - 1 (TUNER)



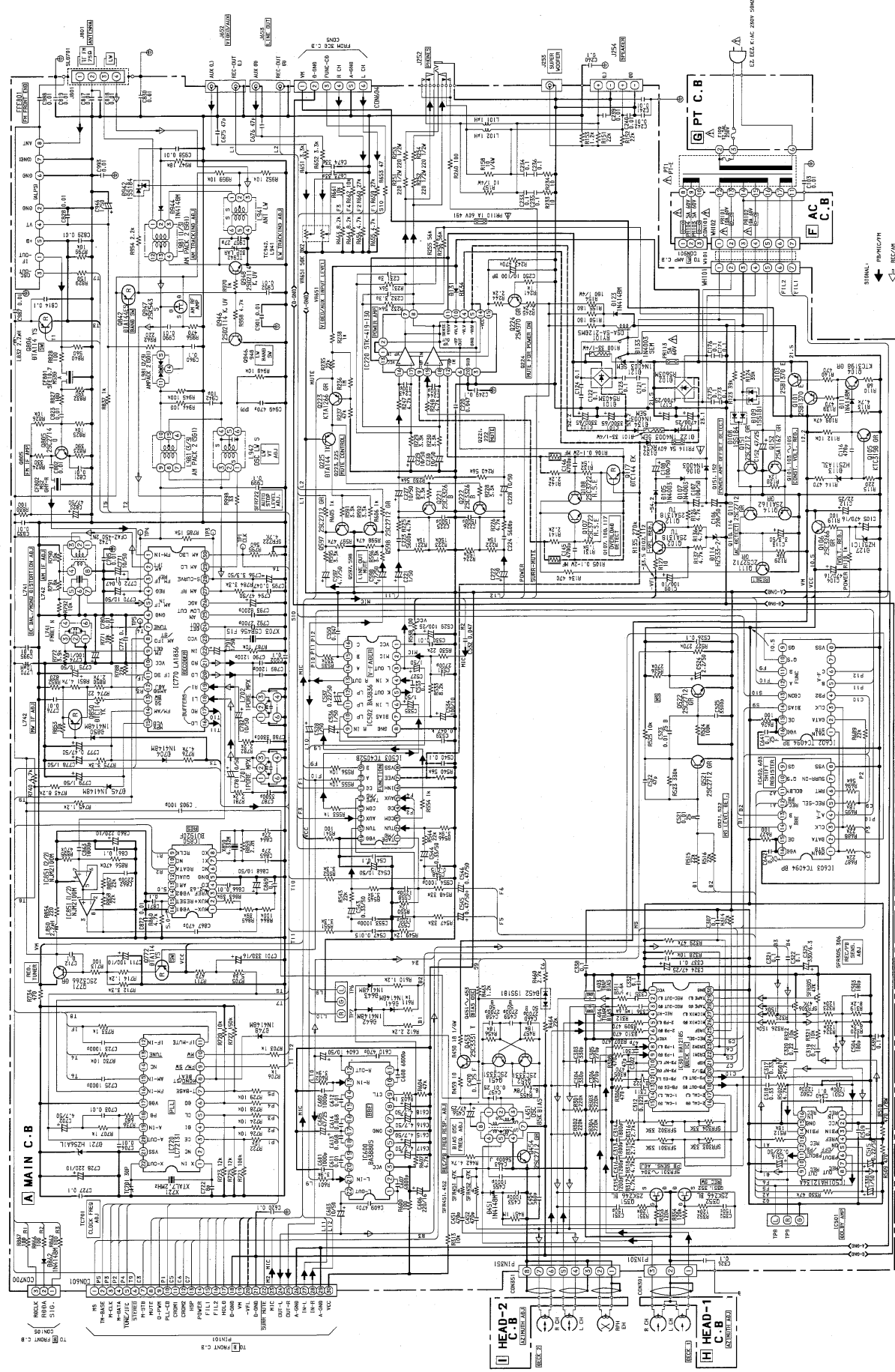
BLOCK DIAGRAM - 2 (MAIN/FRONT)



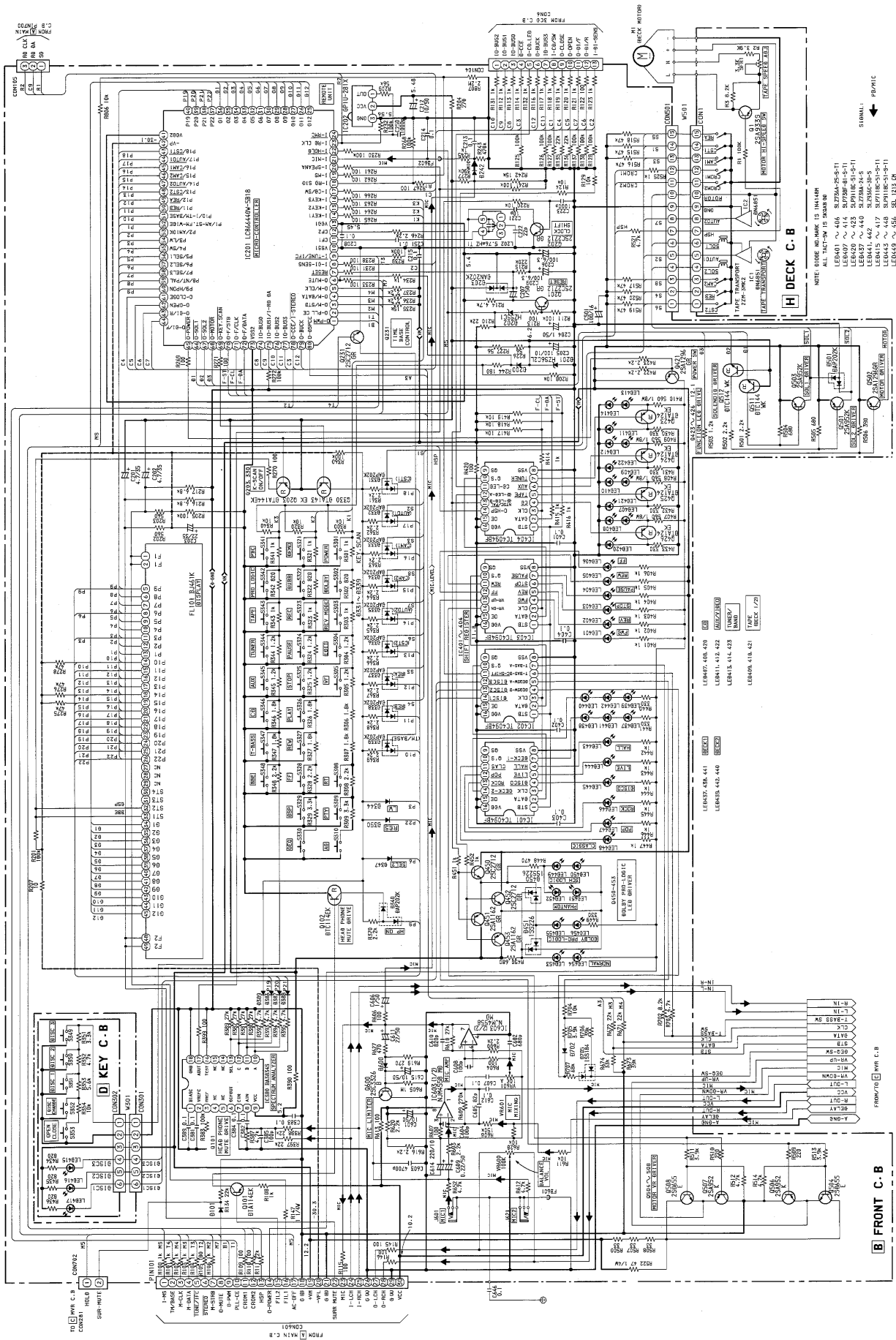


A MAIN C.B.

SCHEMATIC DIAGRAM - 1 (MAIN)

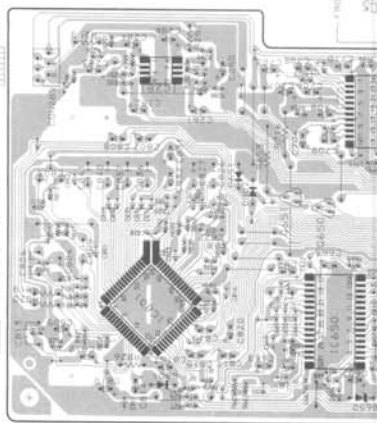


SCHEMATIC DIAGRAM - 1 (FRONT)

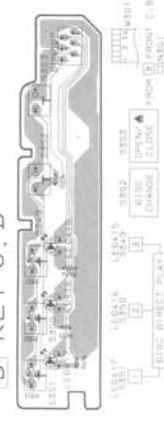


1 2 3 4 5 6 7 8 9 10 11 12 13 14

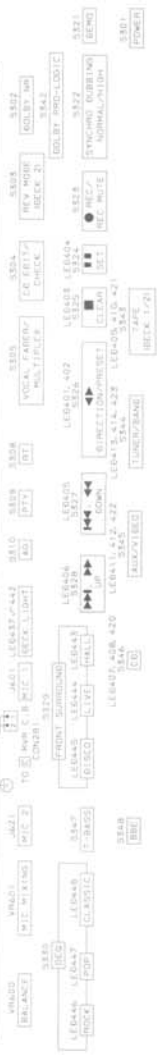
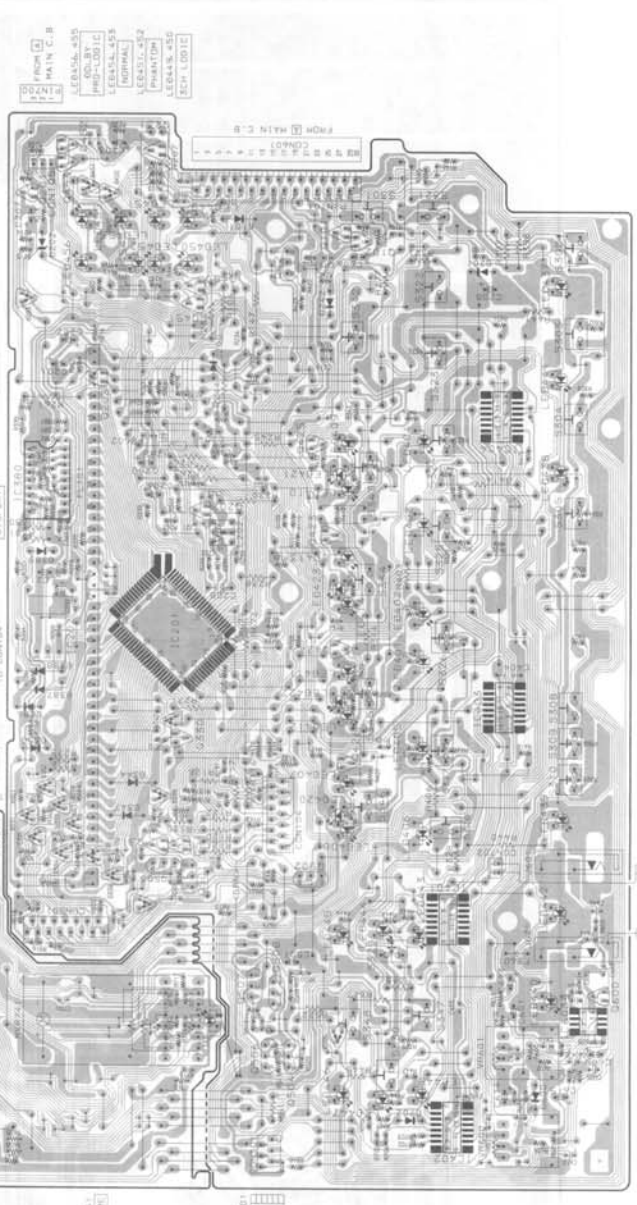
C MVR C. B



D KEY C. B



B FRONT C. B

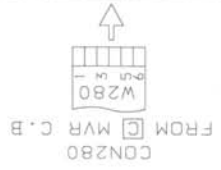
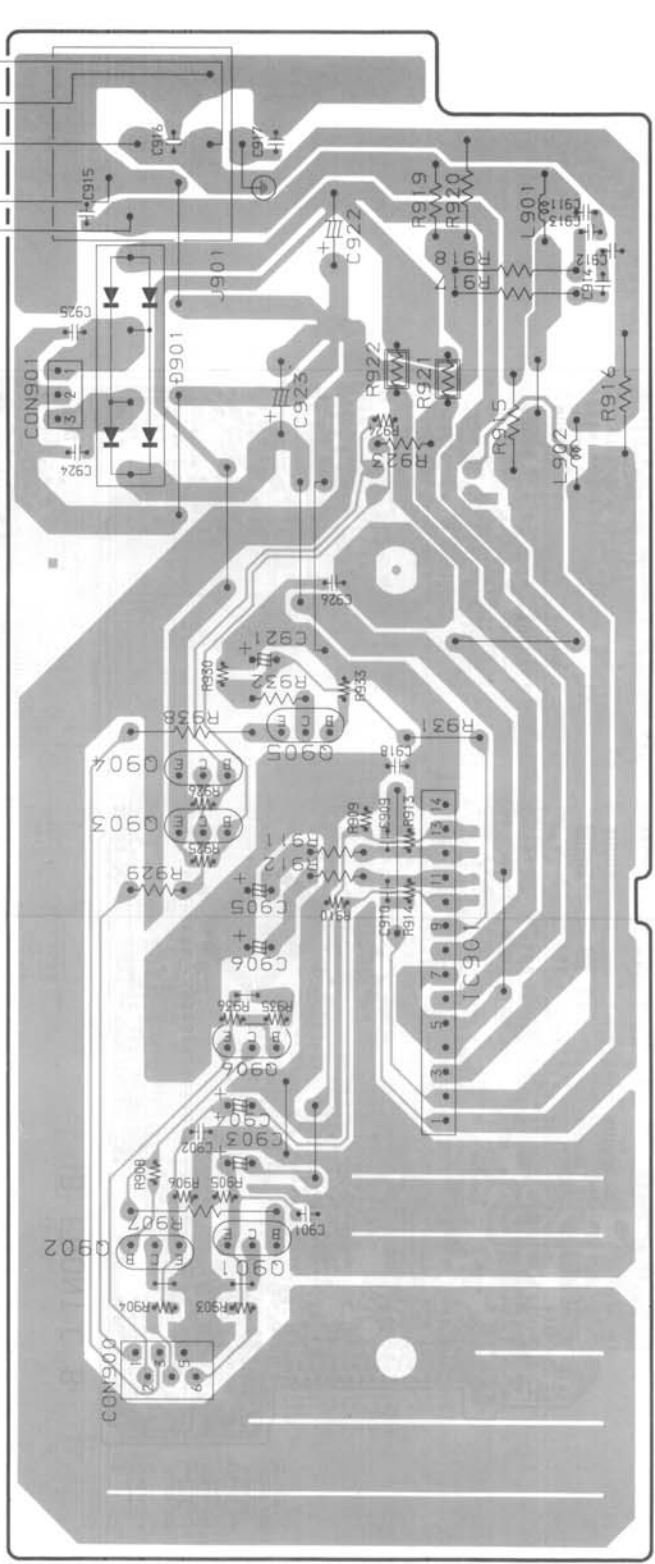


1 2 3 4 5 6 7 8 9 10 11 12 13 14

A B C D E F G H I J

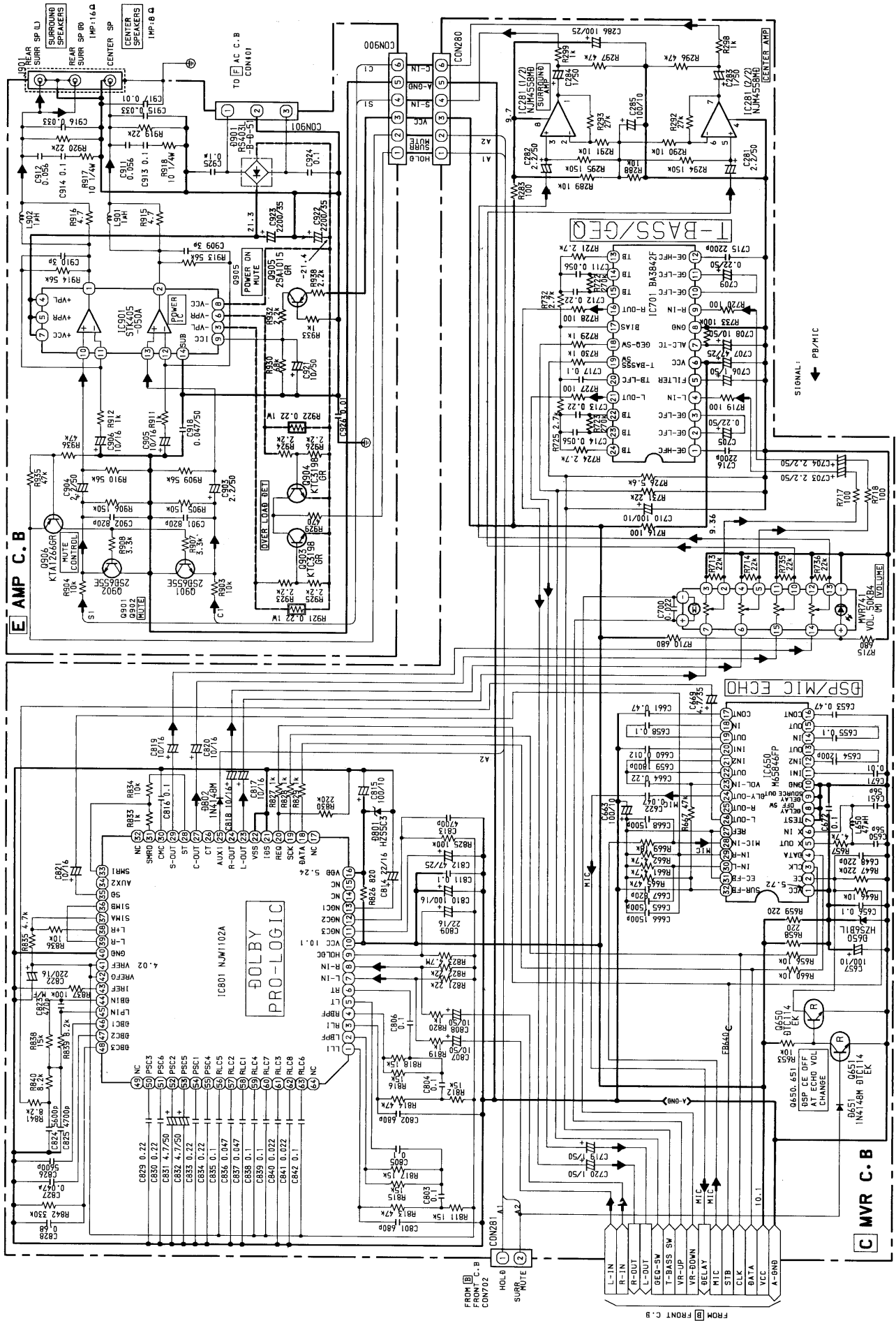


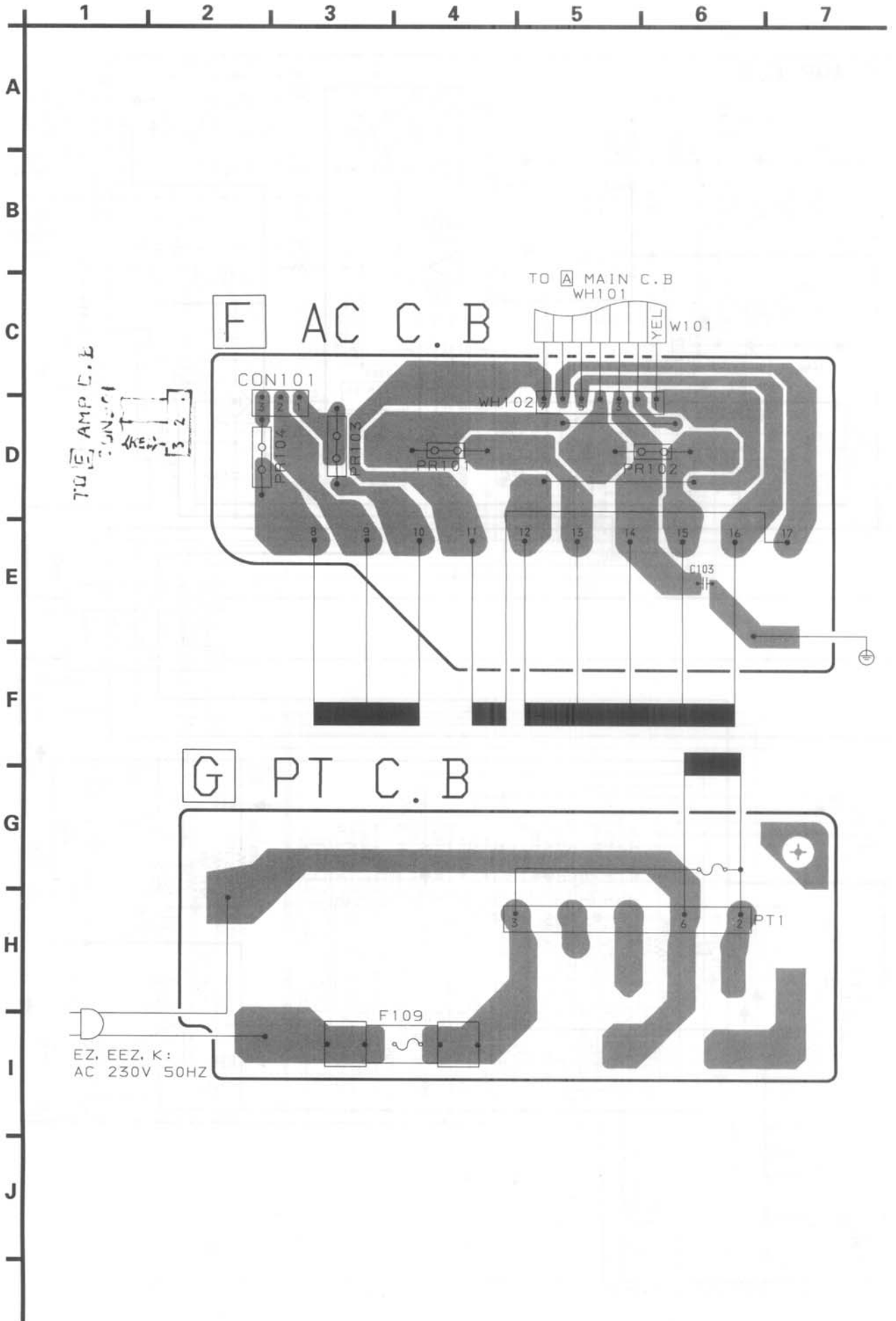
# E AMP C.B.

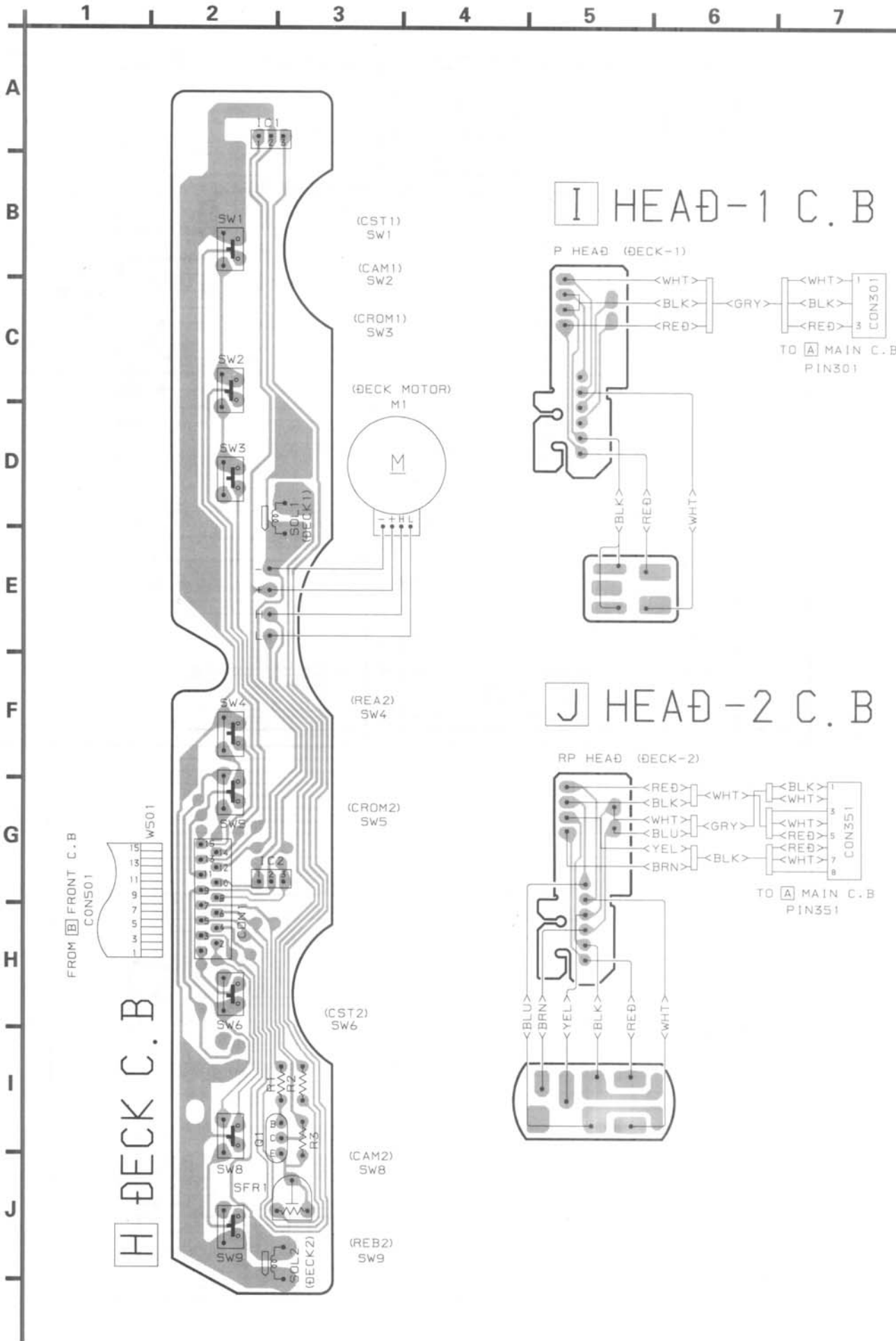




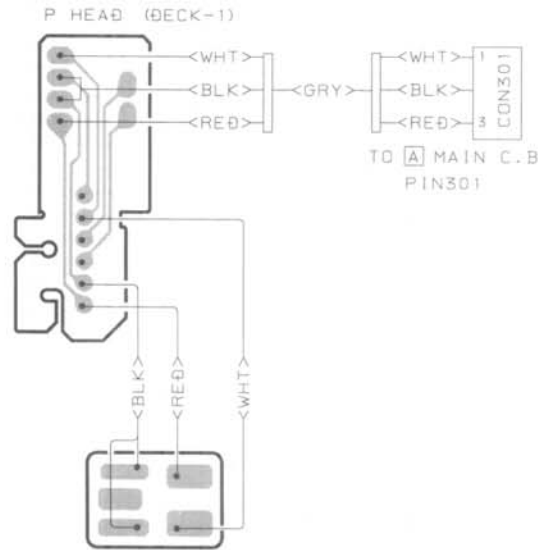
SCHEMATIC DIAGRAM - 3 (AMP)



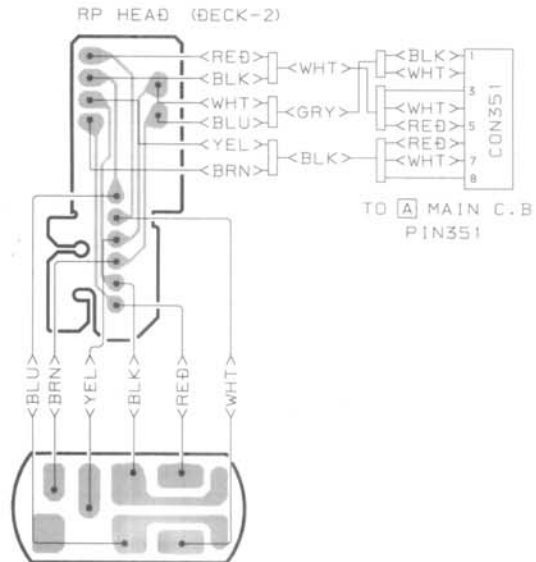




**I HEAD-1 C.B.**

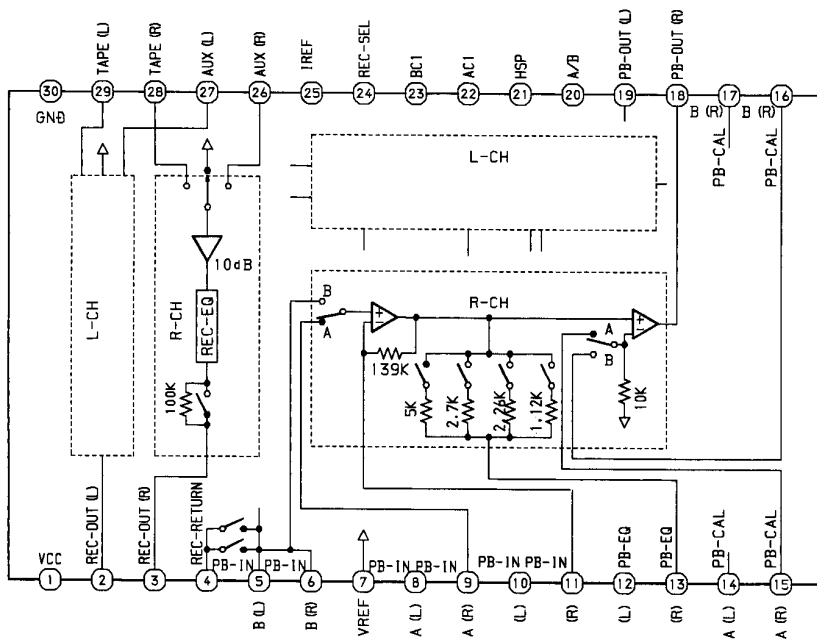


**J HEAD-2 C.B.**

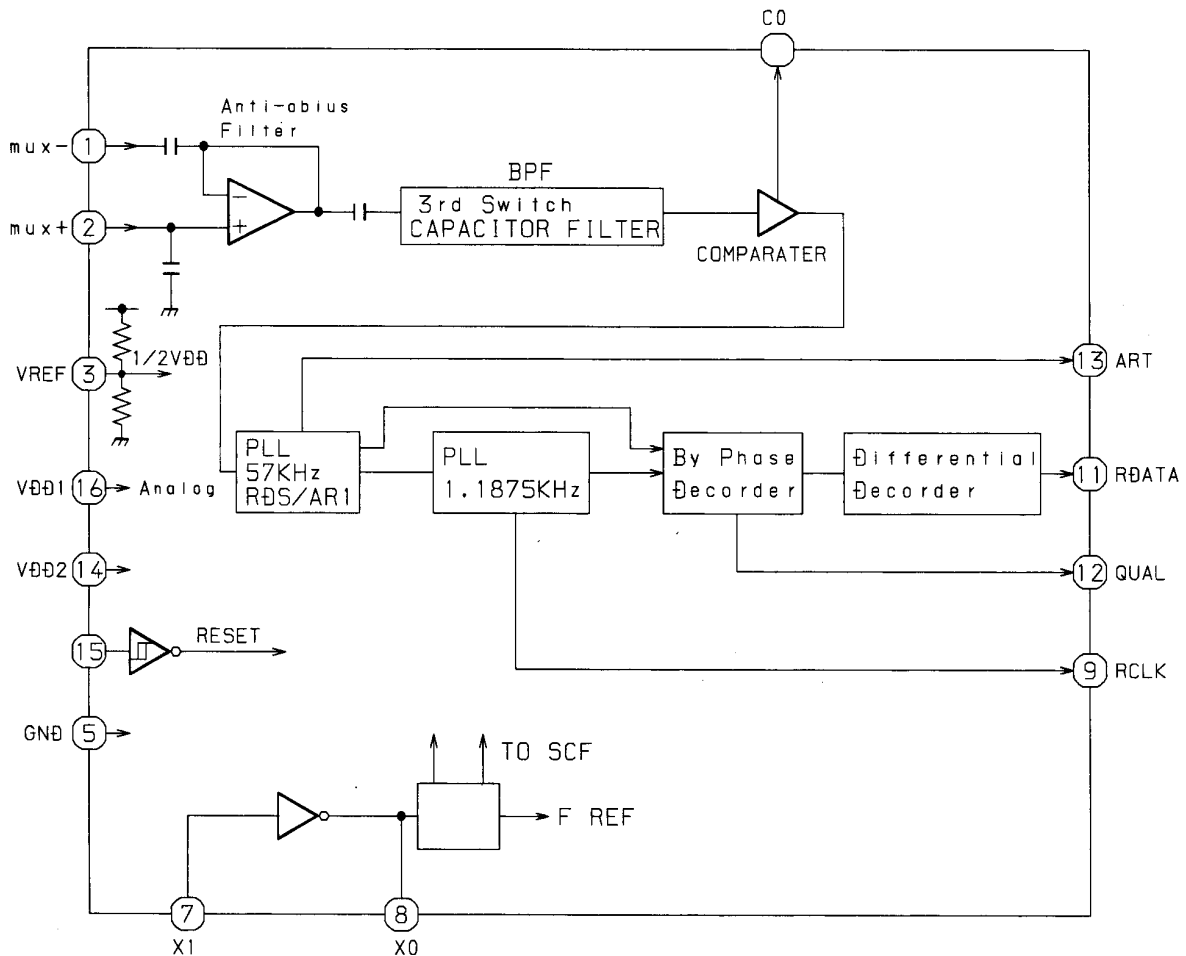


# IC BLOCK DIAGRAM

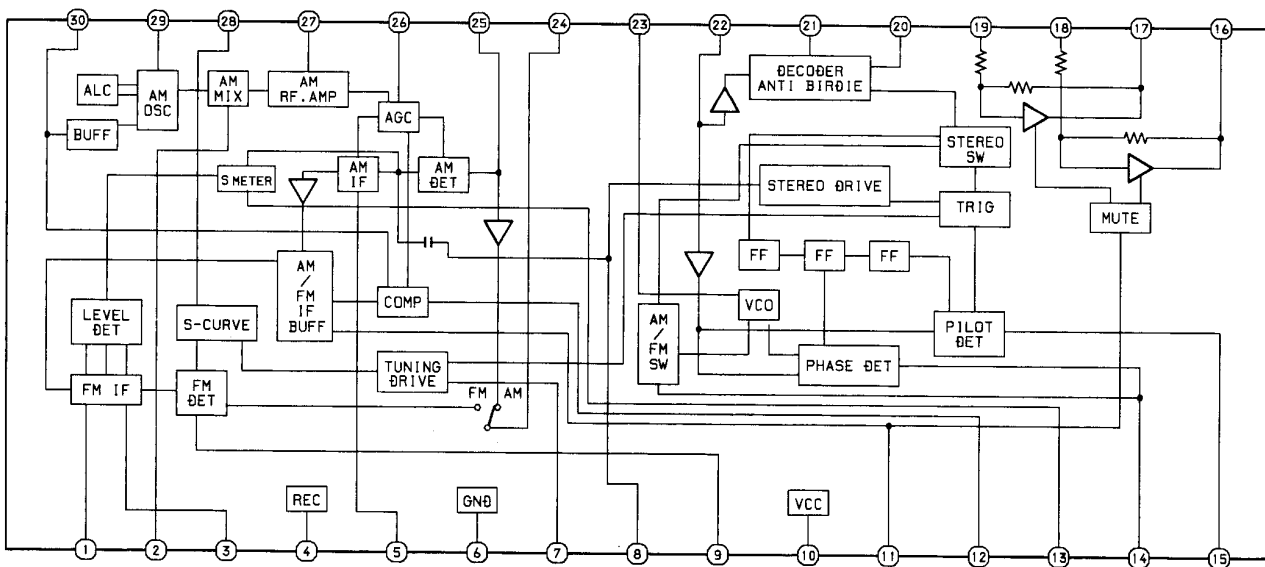
## IC, HA12185NT



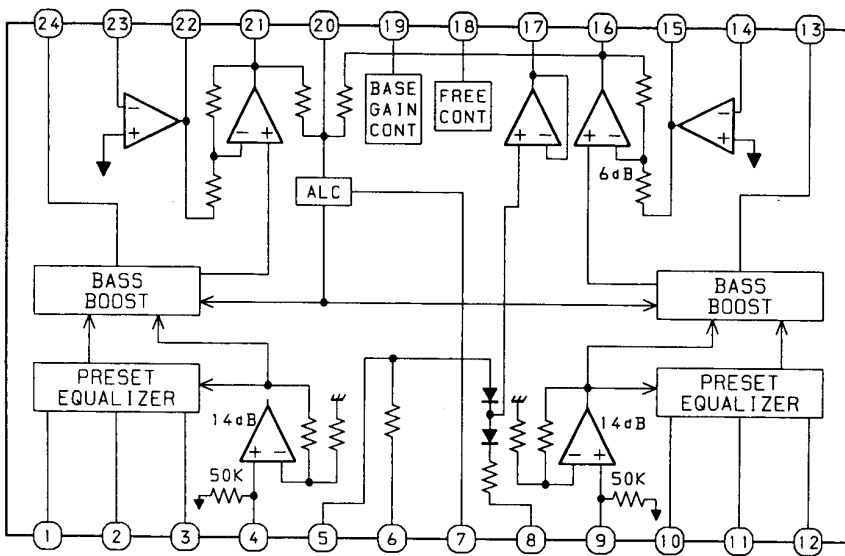
## IC, BU1921FS



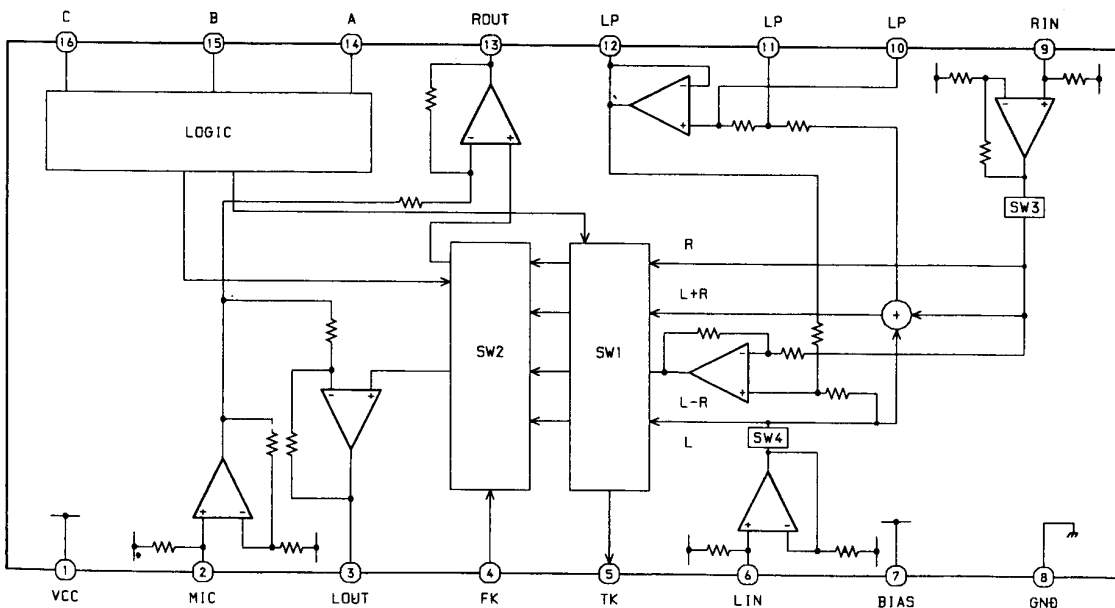
IC, LA1836



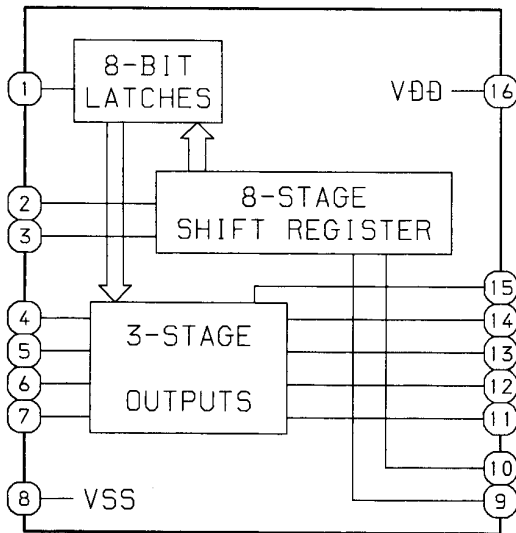
IC, BA3842F



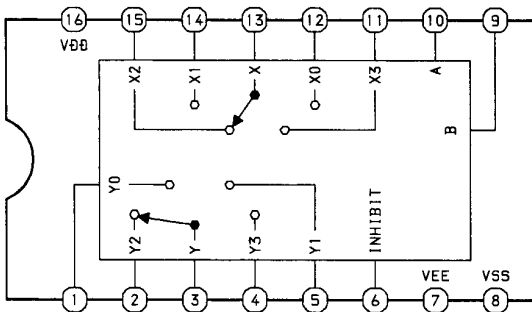
IC, B3836



IC, TC4094BP



IC, TC4052BP

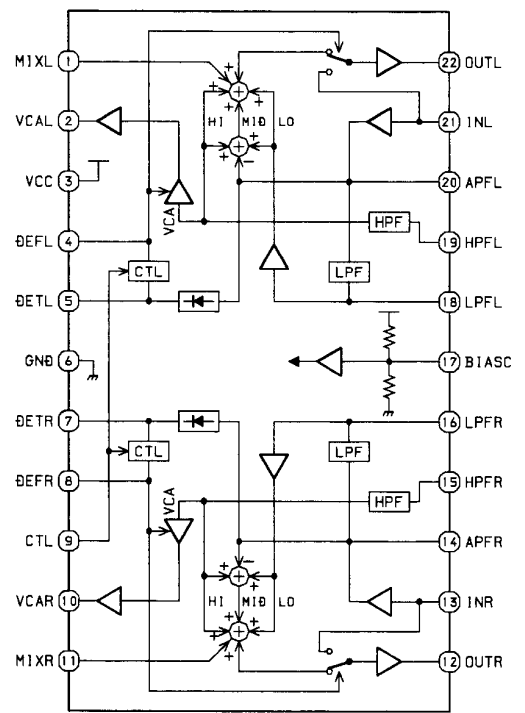


TRUTH TABLE

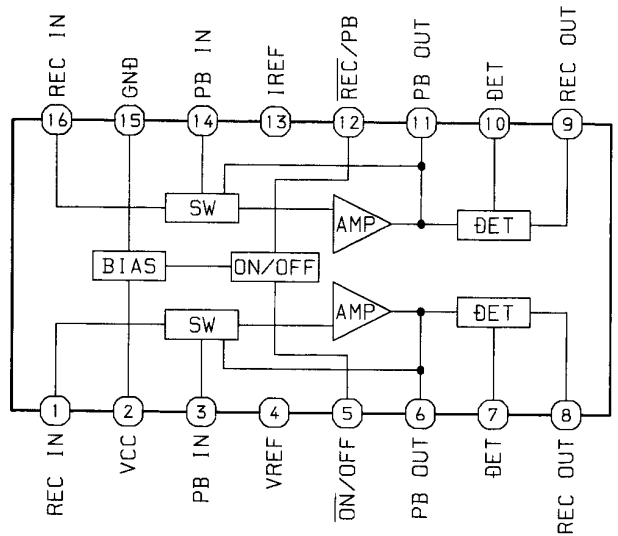
INHIBIT	CONTROL INPUTS		ON SWITCH	
	B	A	Y0	X0
L	L	L	Y0	X0
L	L	H	Y1	X1
L	H	L	Y2	X2
L	H	H	Y3	X3
H	X	X	-	-

L: LOW LEVEL  
H: HIGH LEVEL  
X: IRRELEVANT

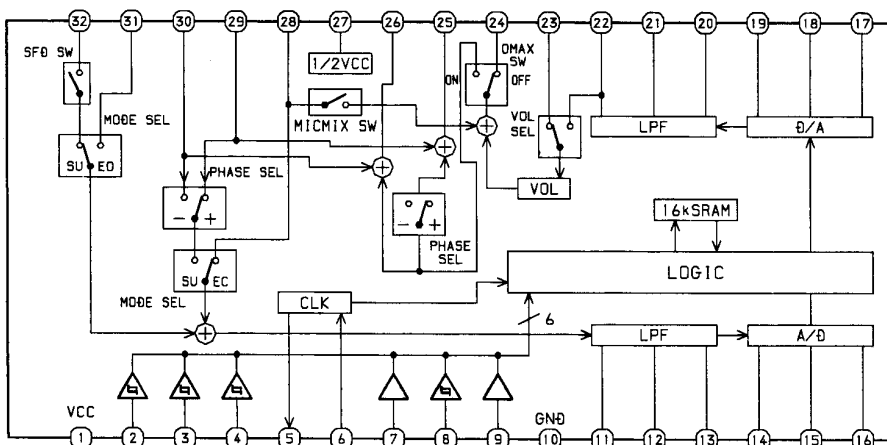
IC, BA3880S



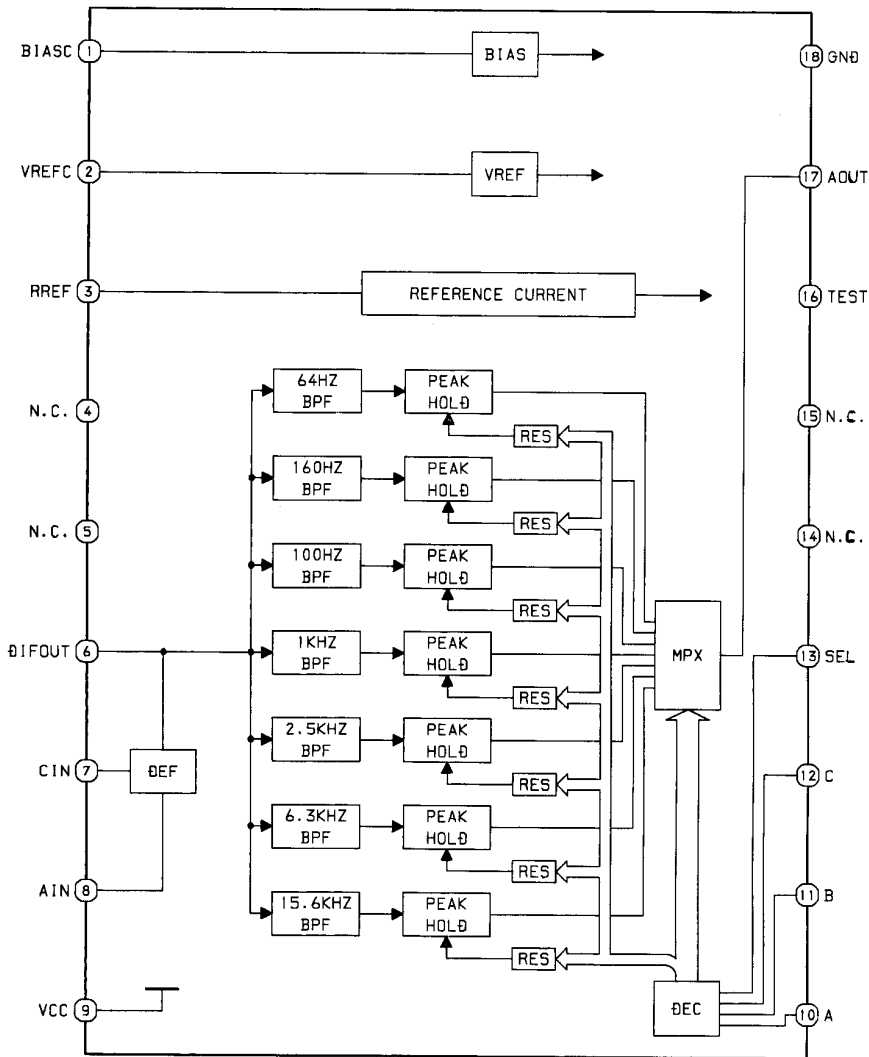
IC, HA12134A



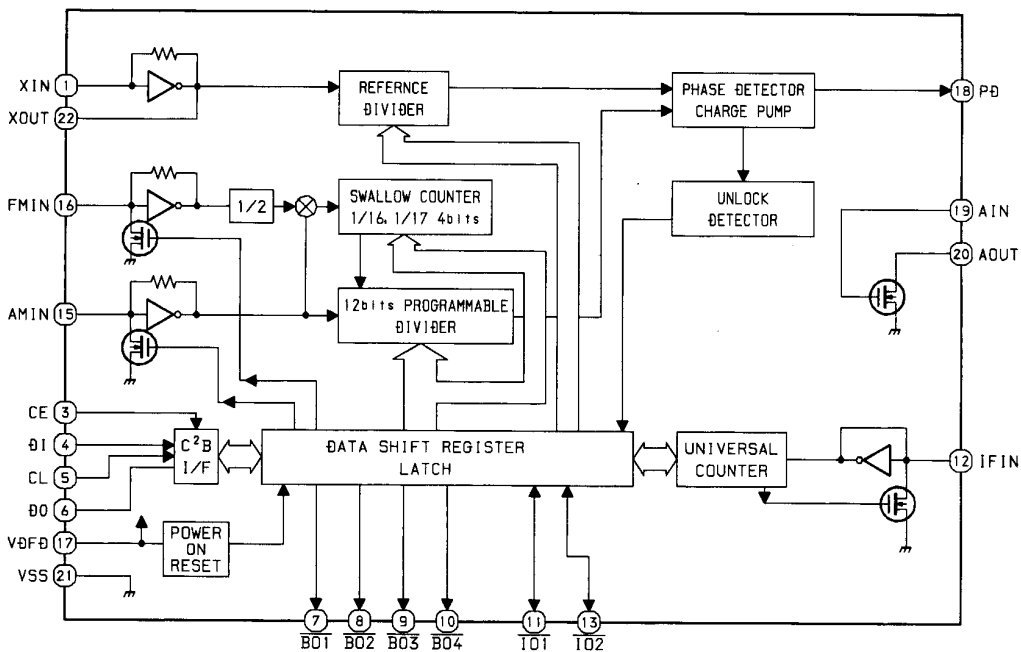
IC, M65846FP-600D



IC, BA3834S

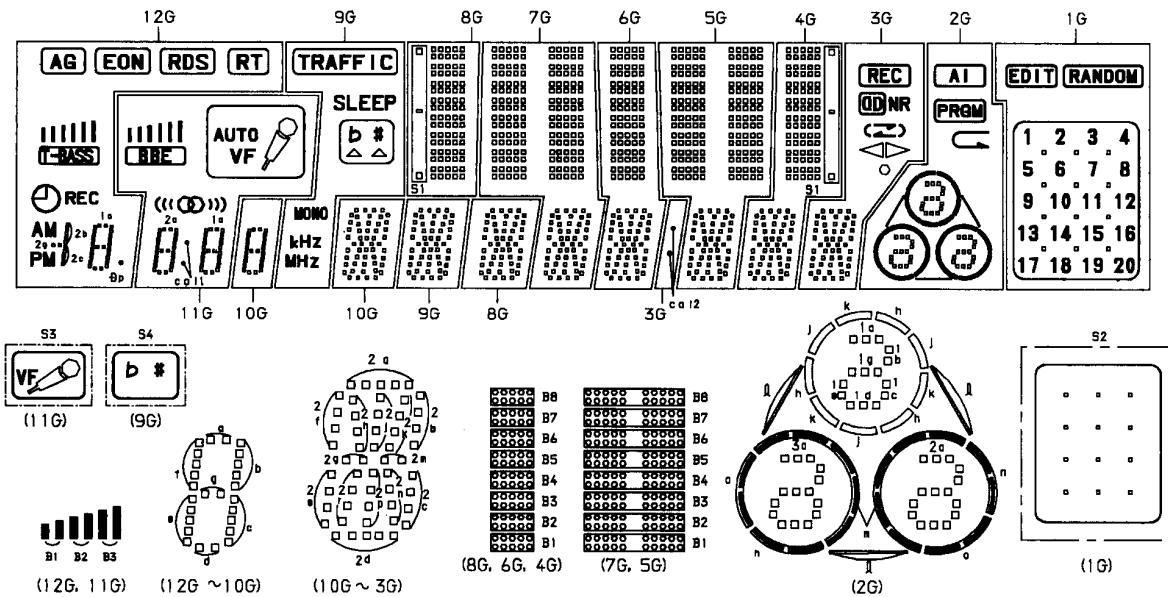


IC, LC72131



# FL GRID ASSIGNMENT & ANODE CONNECTION

FL, BJ461GK  
GRID ASSIGNMENT



## ANODE CONNECTION

	12G	11G	10G	9G	8G	7G	6G	5G	4G	3G	2G	1G
P1	B1	B1	2d	2d	2d	2d	2d	2d	2d	2d	n	<b>20</b>
P2	B2	B2	2n	2n	2n	2n	2n	2n	2n	2n	o	<b>19</b>
P3	B3	B3	2p	2p	2p	2p	2p	2p	2p	2p	3e	<b>18</b>
P4	<b>RT</b>	<b>AUTO</b>	2r	2r	2r	2r	2r	2r	2r	2r	3c	<b>17</b>
P5	<b>RDS</b>	S3	2e	2e	2e	2e	2e	2e	2e	2e	3a, 3d, 3g	<b>16</b>
P6	<b>EOM</b>	coil (DOWN)	2c	2c	2c	2c	2c	2c	2c	2c	3b	<b>15</b>
P7	<b>AG</b>	2d	2g	2g	2g	2g	2g	2g	2g	2g	2e	<b>14</b>
P8		2e	2m	2m	2m	2m	2m	2m	2m	2m	2c	<b>13</b>
P9	<b>REC</b>	2c	2f	2f	2f	2f	2f	2f	2f	2f	2a, 2d, 2g	<b>12</b>
P10	<b>AM</b>	2g	2b	2b	2b	2b	2b	2b	2b	2b	l	<b>11</b>
P11	2g	2f	2k	2k	2k	2k	2k	2k	2k	2k	j	<b>10</b>
P12	2b, 2c	2b	2j	2j	2j	2j	2j	2j	2j	2j	h	<b>9</b>
P13	<b>PM</b>	2a	2h	2h	2h	2h	2h	2h	2h	2h	k	<b>8</b>
P14		coil (UP)	2a	2a	2a	2a	2a	2a	2a	2a	2b	<b>7</b>
P15	1d	1d	1d	<b>MHz</b>	B1	B1	B1	B1	B1	○	1e	<b>6</b>
P16	1e	1e	1e	<b>KHz</b>	B2	B2	B2	B2	B2		1a, 1d, 1g	<b>5</b>
P17	1c	1c	1c	<b>MONO</b>	B3	B3	B3	B3	B3		1c	<b>4</b>
P18	1g	1g	1g	(b)	B4	B4	B4	B4	B4		1b	<b>3</b>
P19	1f	1f	1f	(#)	B5	B5	B5	B5	B5		m	<b>2</b>
P20	1b	1b	1b	<b>SLEEP</b>	B6	B6	B6	B6	B6		<b>AI</b>	<b>1</b>
P21	1a	1a	1a	<b>TRAFFIC</b>	B7	B7	B7	B7	B7	<b>REC</b>		<b>EDIT</b>
P22	-		-	-	B8	B8	B8	B8	B8	coil 2	<b>PRGM</b>	<b>RANDOM</b>
P23	<b>T-BASS</b>	-	-	-	S1	-	-	-	S1		-	S2
P24	-	<b>BBE</b>	-	-	-	-	-	-	-	-	-	-
P25	-	-	-	S4	-	-	-	-	-	-	-	-



IC DESCRIPTION  
IC, LC866440W-5B18

Pin No.	Pin Name	I/O	Description
1	$\overline{\text{O-PWM}}$	O	Not used.
2	O-PLL CE	O	PLL IC chip enable.
3	O-M/STB	O	Main shift register data latch strobe output.
4	O-M/DATA	O	Main shift register, PLL/Key control/DSP related data output.
5	O-M/CLK	O	Main shift register, PLL/Key control/DSP related clock.
6	O-MUTE	O	System mute output.
7	$\overline{\text{RESET}}$	I	Reset input.
8	I-DI-SENS	I	CD turntable photo sensor A/D converter input.
9	$\overline{\text{I-TUNE/IFC}}$	I	Tuner $\overline{\text{SD}}$ detected input. IF count serial data input.
10	VSS1	-	GND.
11,12	CF1, 2	-	5.76 MHz oscillator circuit.
13	VDD1	-	Power supply input.
14~16	I-KEY1 - 3	I	Key input. (A/D)
17	I-CD/SW	I	CD mechanical switch A/D converter input.
18	I-RD SIG	I	RDS signal input. (Tuner)
19	I-MS	I	Deck music sensor signal input.
20	I-SPEANA	I	A/D input for spectrum analyzer display.
21	I-MIC	I	Microphone input for auto VF display.
22	$\overline{\text{I-HOLD}}$	I	Power failure detected input "L" to stop clock and maintain memory.
23	I-RD CLK	I	RDS clock input. (Tuner)
24	I-RMC	I	System remote control signal input.
25~36	G12~G1	O	FL grid output G12~G1.
37	P22	O	FL segment output P22.
38	P21/O-SPEANA A	O	FL segment output P21, spectrum analyzer band switching output.
39	P20/O-SPEANA B	O	FL segment output P20, spectrum analyzer band switching output.
40	P19/O-SPEANA C	O	FL segment output P19, spectrum analyzer band switching output.
41	VDD2	-	Power supply input.
42	-VP	-	Power supply input (-34.5V) for FL display.
43	P18	O/I	FL segment output P18.
44	P17	O/I	FL segment output P17.
45	P16	O/I	FL segment output P16.
46	P15/CSM2	O/I	FL segment output P15, DECK2 cam switch data input.
47	P14/AUTO2	O/I	FL segment output P14, DECK2 auto stop signal input.
48	P13/CST2	O/I	FL segment output P13, DECK2 cassette detect switch data input.
49	P12/REA	O/I	FL segment output P12, DECK2 side-A record OK switch data input.
50	P11/REB	O/I	FL segment output P11, DECK2 side-B record OK switch data input.
51	P10/I-TM/BASE	O/I	FL segment output P10, reference clock input for timer watch.
52	P1/AM-ST,FM-W	O/I	FL segment output P1, AM stereo, FM-WIDE mode data input to diode.
53	P2/AM10K	O/I	FL segment output P2, AM 10kHz step data input to diode.
54	P3/LW	O/I	FL segment output P3, LW mode data input to diode.
55	P4/SW	O/I	FL segment output P4, SW mode data input to diode.

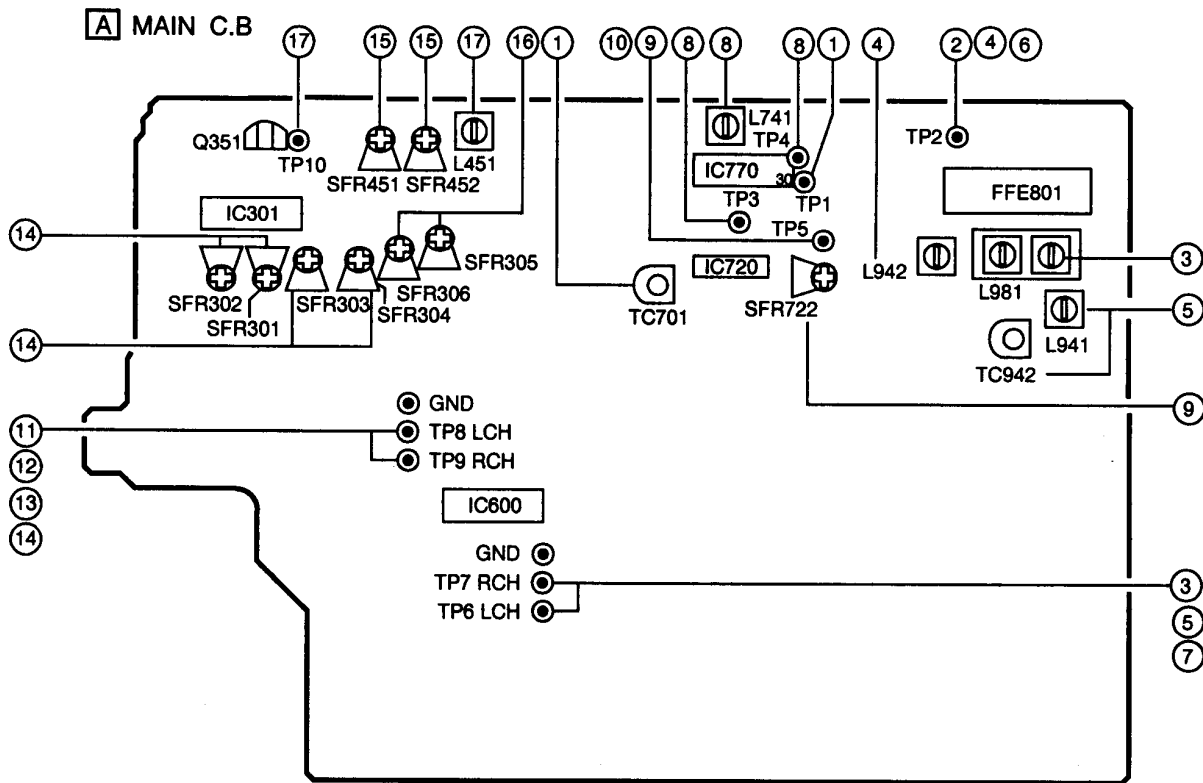
Pin No.	Pin Name	I/O	Description
56	P5	O	FL segment output P5.
57	P6	O	FL segment output P6.
58	P7	O	FL segment output P7.
59	P8	O	FL segment output P8.
60	P9	O	FL segment output P9.
61	O-CLOSE	O	CD tray close data output.
62	O-OPEN	O	CD tray open data output.
63	O-DI/R	O	CD turntable reverse rotation output.
64	O-DI/F	O	CD turntable forward rotation output.
65	O-POWER	O	System power supply ON/OFF output.
66	O-SOL1	O	DECK1 solenoid output (DECK 1).
67	O-SOL2	O	DECK2 solenoid output (DECK 2).
68	O-MOTOR	O	DECK motor output.
69	O-KEY-SCAN	O	Switch scan timing output.
70	O-F/STB	O	Front shift register, data latch strobe output.
71	O-F/CLK	O	Front shift register, data transfer clock output.
72	O-F/DATA	O	Front shift register, data output.
73	VSS2	-	GND.
74	IO-BUS 0	I/O	CD IC control and data bus input output.
75	IO-BUS 1/I-RD DA	I/O	CD IC control and data bus input output. RDS data input (TUNER).
76	IO-BUS 2	I/O	CD IC control and data bus input output.
77	IO-BUS 3	I/O	CD IC control and data bus input output.
78	O-CCE/I-STEREO	I/O	CD IC control chip enable output. Tuner stereo detected input.
79	O-BUCK	O	CD IC control and data bus clock output.
80	O-DSP CE	O	DSP data latch strobe output.

Pin No.	Pin Name	I/O	Description																								
1	XIN	-	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 (LC866432V-5A45) when relevant key is operated. Active "H".																								
5	CLK	I	To clock in the data DI.																								
6	DO	O	Digital data output to CPU (LC866432V-5A45).																								
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	$\overline{\text{FM}} / \text{AM}$	O	Output "L" or "H" as follows: <table border="1" style="margin-left: 20px;"> <thead> <tr> <th colspan="2">2 BAND</th> <th colspan="3">3 BAND</th> <th colspan="3">3 BAND</th> </tr> <tr> <th>AM</th> <th>FM</th> <th>LW</th> <th>MW</th> <th>FM</th> <th>MW</th> <th>SW</th> <th>FM</th> </tr> </thead> <tbody> <tr> <td>H</td> <td>L</td> <td>H</td> <td>H</td> <td>L</td> <td>H</td> <td>L</td> <td>L</td> </tr> </tbody> </table>	2 BAND		3 BAND			3 BAND			AM	FM	LW	MW	FM	MW	SW	FM	H	L	H	H	L	H	L	L
2 BAND		3 BAND			3 BAND																						
AM	FM	LW	MW	FM	MW	SW	FM																				
H	L	H	H	L	H	L	L																				
10	$\overline{\text{MW}}$	O	Outputs "L" or "H" as follows: <table border="1" style="margin-left: 20px;"> <thead> <tr> <th colspan="2">2 BAND</th> <th colspan="3">3 BAND</th> <th colspan="3">3 BAND</th> </tr> <tr> <th>AM</th> <th>FM</th> <th>LW</th> <th>MW</th> <th>FM</th> <th>MW</th> <th>SW</th> <th>FM</th> </tr> </thead> <tbody> <tr> <td>L</td> <td>L</td> <td>H</td> <td>L</td> <td>L</td> <td>L</td> <td>H</td> <td>L</td> </tr> </tbody> </table>	2 BAND		3 BAND			3 BAND			AM	FM	LW	MW	FM	MW	SW	FM	L	L	H	L	L	L	H	L
2 BAND		3 BAND			3 BAND																						
AM	FM	LW	MW	FM	MW	SW	FM																				
L	L	H	L	L	L	H	L																				
11	IF-MUTE	O	To control internal counter.																								
12	IFIN	I	General purpose counter input.																								
13	$\overline{\text{TUNE}}$	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.																								

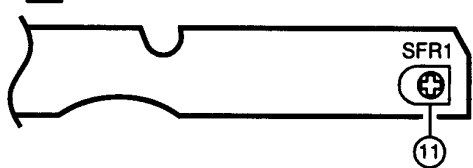
## IC, NJW1102AFG1

Pin No.	Pin Name	I/O	Description
1	LLI	I	Lch BPF in.
2	LBPF	O	Lch BPF feed back out.
3	RLI	I	Rch BPF in.
4	RBPF	O	Rch BPF feed back out.
5	LT	O	Lch selector #1 out.
6	RT	O	Rch selector #1 out.
7	LIN	I	Lch signal input.
8	RIN	I	Rch signal input.
9	HOLDC	I	Auto input balance control.
10	VCC	-	Power supply.
11~13	NGC 3~1	I	Noise sequencer control.
14,15	NC	-	Not connect.
16	VDD	-	Power supply.
17	NC	-	Not used.
18	DATA	I	Serial data input.
19	SCK	I	Serial clock input.
20	REQ	I	Serial request (strobe) input.
21	IDS	I	IC select sw.
22	VSS	-	GND.
23	LOUT	O	Lch serial output.
24	ROUT	O	Rch serial output.
25	AUX1	O	AUX1 output (serial data change parallel output).
26	CT	O	Cch output (before trimmer).
27	C-OUT	O	Cch output (after trimmer).
28	ST	O	Sch output (before trimmer).
29	S-OUT	O	Sch output (after trimmer).
30	CMC	I	Center mode control.
31	SMRO	O	Sch amp (front L,R mix) output.
32	NC	-	Not used.
33	SMRI	I	Sch amp (front L,R mix) input.
34	AUX2	O	AUX2 output (serial data change parallel output).
35	SD	O	Selector #2 out (to delay IC).
36	SIMBB	I	Selector #2 input B (L-R).
37	SIMBA	I	Selector #2 input A (L+R).
38	L+R	O	L+R ch output.
39	L-R	O	L-R ch output.
40	GND	-	Gnd.
41	VREF	I	VREF in.
42	VREFG	O	Vref out.
43	IREF	I	Iref in.
44	DBIBN	O	Output to modify dolby B IC (included NJW1102).
45	LPIN	I	From delay input.
46~48	DBC 1~3	I	Dolby B NR control.
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.

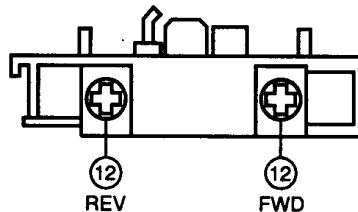
# ADJUSTMENT <TUNER / DECK>



**H** DECK C.B



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



## < TUNER SECTION >

### 1. Clock Frequency Adjustment

Settings : • Test point : TP1 (CLK IC770 pin30)  
 • Adjustment location : TC701

Method : Set to MW 1602kHz and adjust TC701 so that the test point becomes 2052kHz  $\pm$  0.01kHz.

### 2. MW VT Check

Settings : • Test point : TP2 (VT)

Method : Set to MW 1602kHz and check that the test point is less than 7.5V.

### 3. MW Tracking Adjustment

Settings : • Test point : TP6, TP7

• Adjustment location : L981

Method : The level at 999kHz is adjusted to MAX by L981.

### 4. LW VT Adjustment

Settings : • Test point : TP2 (VT)

• Adjustment location : L942

Method : Set to LW 144kHz and adjust L942 so that the test point becomes 1.3V  $\pm$  0.05V.

### 5. LW Tracking Adjustment

Settings : • Test point : TP6, TP7

• Adjustment location :

L941 ..... 144kHz

TC942 ..... 290kHz

Method : Set up TC942 to center before adjustment. The level at 144kHz is adjusted to MAX by L941. Then the level at 290kHz is adjusted to MAX 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 8.2V(108.0MHz).

7. FM Tracking Check  
 Settings : • Test point : TP6, TP7  
 Method : Set to FM 98.0MHz and check that the test point is  $6\text{dB} \pm 6\text{dB}$ .
8. DC Balance / Mono Distortion Adjustment  
 Settings : • Test point : TP3, TP4  
 • Adjustment location : L741  
 • Input level : 54dB  
 Method : Set to FM 98.0MHz and adjust L741 so that the voltage between TP3 and TP4 becomes  $0\text{V} \pm 0.04\text{V}$ .  
 Next, check that the distortion is less than 1.3%.
9. Auto Stop Level Adjustment  
 Settings : • Test point : TP5  
 • Adjustment location : SFR722  
 • Input level : 25dB  
 Method : Set to FM 98.0 MHz and adjust voltage low (about 0.01V) by SFR722. After that voltage high (about 7.0V) out by 4dB down.
10. Auto Stop Level Check  
 MW  
 Settings : • Test point : TP5  
 • Input level : 50dB  
 Method : Set to MW 999kHz and check that the test point is 40 ~ 65 dB.
- FM  
 Settings : • Test point : TP5  
 • Input level : 20dB  
 Method : Set to FM 98.0MHz and check that the test point is  $30\text{dB} \pm 4\text{dB}$ .

< DECK SECTION >

11. 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  $3000\text{Hz} \pm 5\text{Hz}$ .
12. Head Azimuth Adjustment  
 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.  
 Next, perform on each FWD PLAY and REV PLAY mode.
13. 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  $\pm 2\text{dB}$ .
14. 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 300mV.
15. REC/PB Frequency Response Adjustment  
 Settings : • Test tape : TTA-602  
 • Test point : TP8, TP9  
 • Input signal : 1kHz / 10kHz (LINE IN)  
 • Adjustment location : SFR451 (Lch)  
 SFR452 (Rch)  
 Method : Apply a 1kHz signal and REC mode. Then adjust OSC attenuator so that the output level at the TP8, TP9 becomes 210mV. Record and play back the 1kHz and 10kHz signals and adjust SFRs so that the output of the 10kHz signals becomes  $0\text{dB} \pm 0.5\text{dB}$  with respect to that of the 1kHz signal.
16. 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 21mV. Record and play back the 1kHz signals and adjust SFRs so that the output is  $21\text{mV} \pm 0.5\text{dB}$ .
17. Bias OSC Frequency Adjustment  
 Settings : • Test tape : TTA-601  
 • Test point : TP10  
 • Adjustment location : L451  
 Method : Set to the REC mode. Adjust L451 so that the frequency counter of the test point becomes minimum.

# PRACTICAL SERVICE FIGURE

## <TUNER SECTION>

### <FM SECTION>

S/N 46dB Quieting sensitivity : 34dB  $\pm$  6dB  
[ 87.5 / 98.0 / 108.0 MHz ]  
Signal to noise ratio : More than 64dB (98.0 MHz)  
Distortion : Less than 2.0% (98.0 MHz)  
Stereo separation : More than 20dB (98.0 MHz)  
Intermediate frequency : 10.7MHz

### <MW SECTION>

Sensitivity : 57dB  $\pm$  5dB (at 603 kHz)  
(S/N 20 dB) 53dB  $\pm$  5dB (at 999 / 1404 kHz)  
Signal to noise ratio : More than 36dB (999 kHz)  
Distortion : Less than 1.5% (at 999 kHz)  
Intermediate frequency : 450 kHz

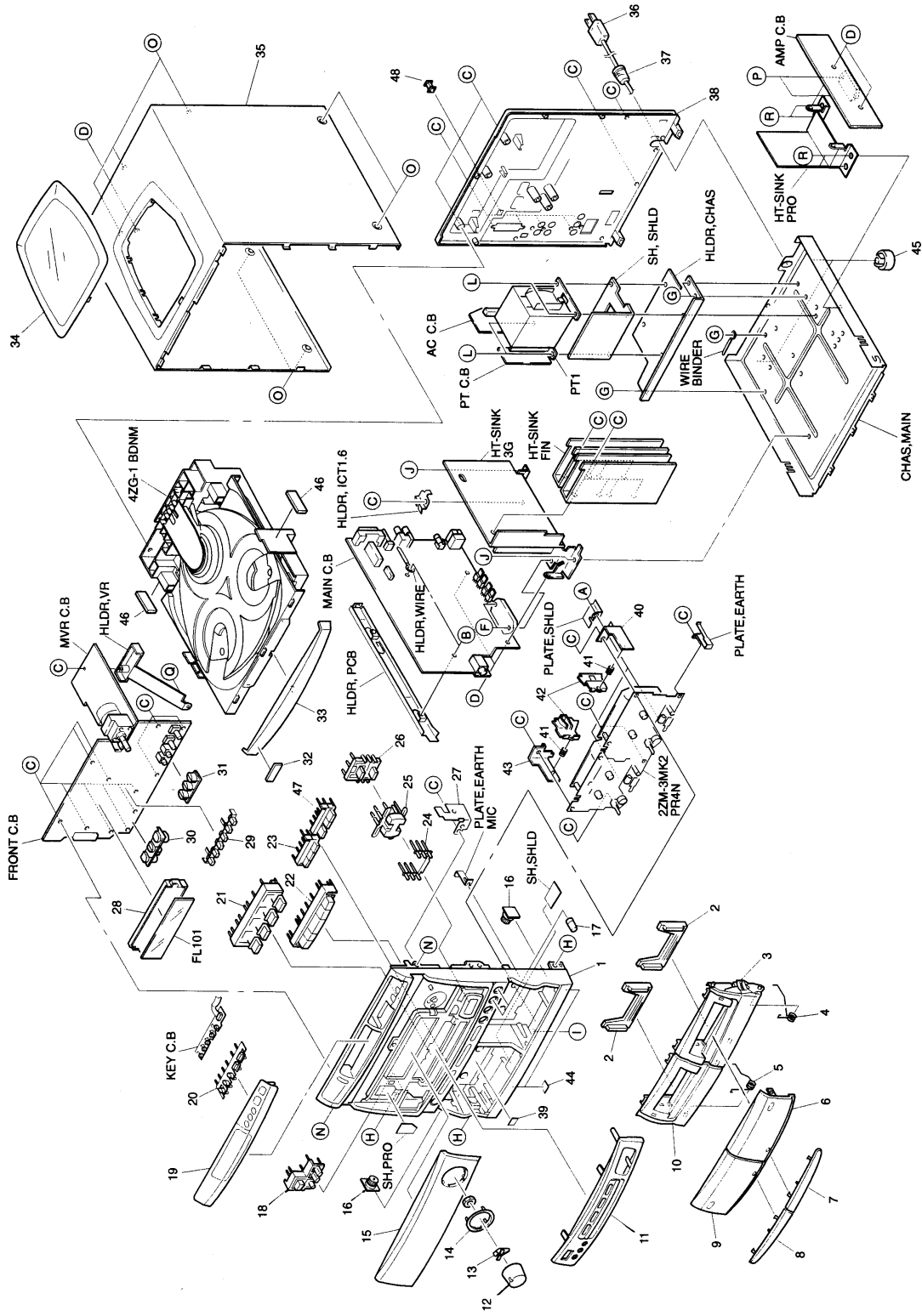
### <LW SECTION>

Sensitivity : 64dB  $\pm$  5dB (at 144 kHz)  
(S/N 20dB) 62dB  $\pm$  5dB (at 198 kHz)  
60dB  $\pm$  5dB (at 290 kHz)  
Signal to noise ratio : More than 36dB (198 kHz)  
Distortion : Less than 1.4% (at 198 kHz)  
Intermediate frequency : 450kHz

## <DECK SECTION>

Tape speed : 3000Hz  $\pm$  45Hz  
Wow & flutter : Less than 0.15% (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 : 210mV  $\pm$  1dB (SP OUT 2V)  
Distortion (REC/PB) : Less than 2.0% (NORM, CrO2)  
Noise level (PB) : Less than 1.1mV  
(DOLBY NR ON / OFF  
CrO2 Vol MAX.)  
Less than 1.8mV  
(DOLBY NR ON / OFF  
NORM. Vol MAX.)  
Noise level (REC/PB) : Less than 1.2mV  
(DOLBY NR ON / OFF  
CrO2 SP OUT 2V)  
Less than 2.0mV  
(DOLBY NR ON / OFF  
NORM. SP OUT 2V)  
Crosstalk : More than 60dB (1kHz, 0VU)  
Channel separation : More than 30dB (1kHz, 0VU)  
Erasing ratio : More than 60dB (at 125Hz)  
Test tape : NORMAL : TTA-602  
CrO2 : TTA-615

MECHANICAL EXPLODED VIEW 1/1



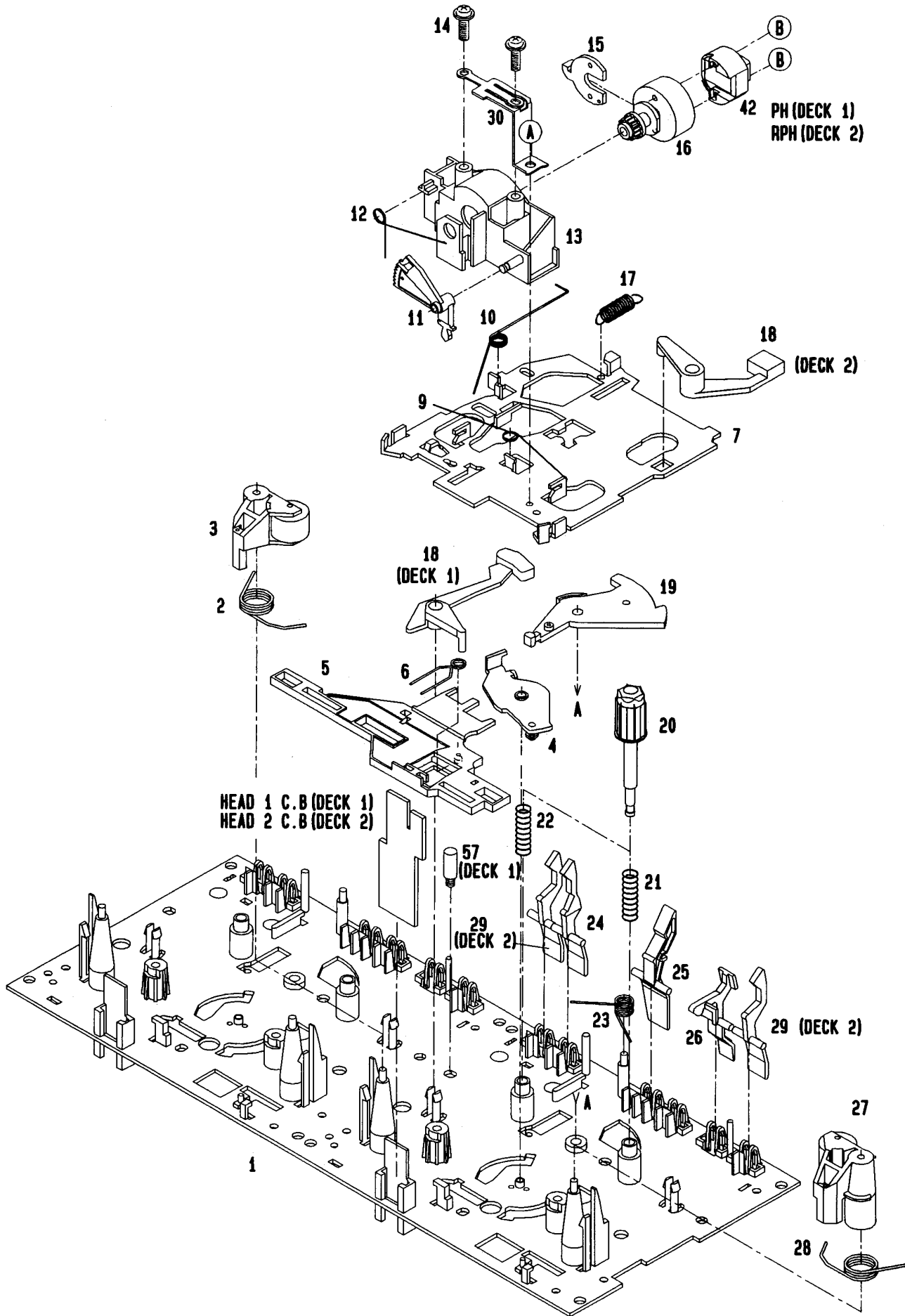


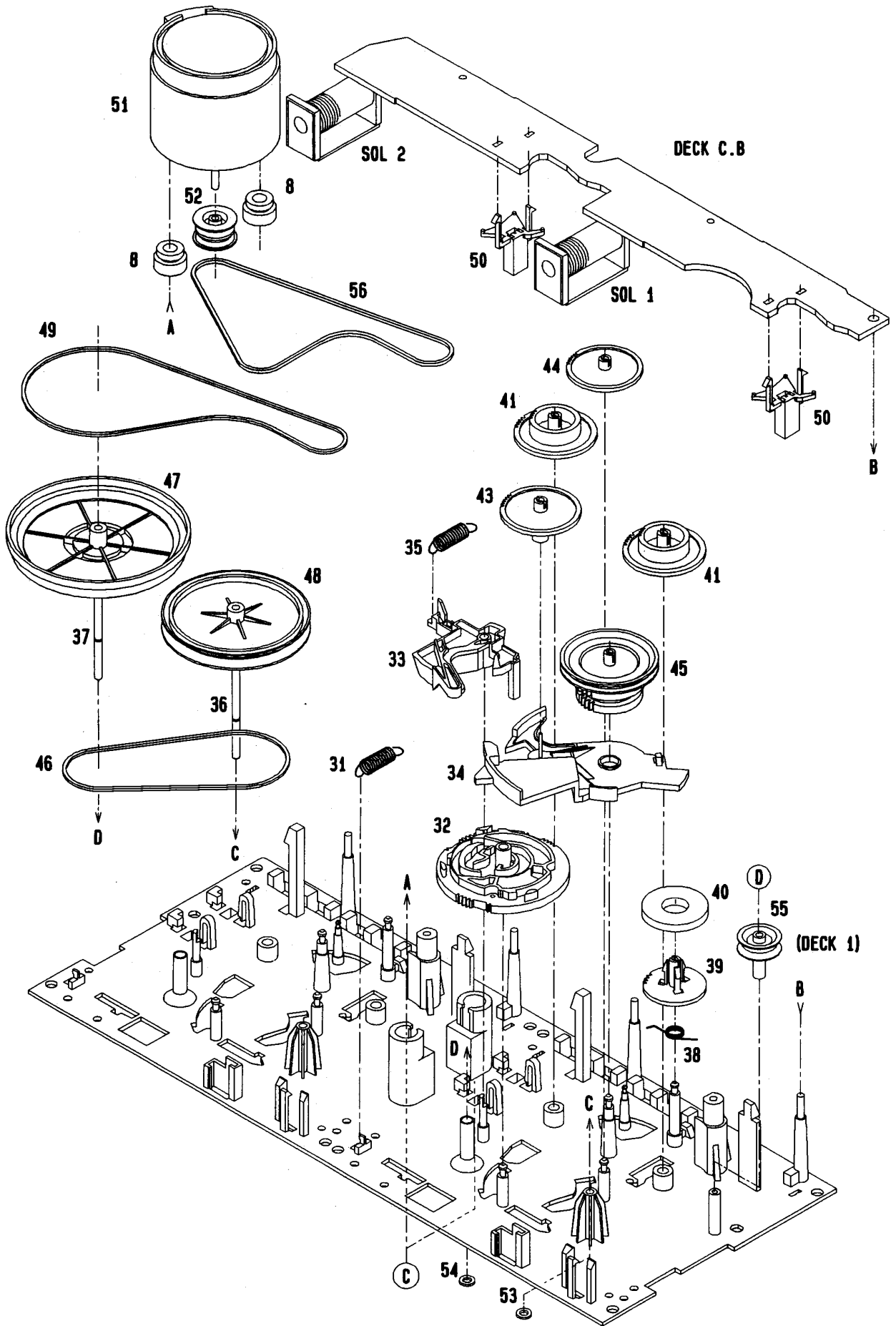
# MECHANICAL PARTS LIST 1/1

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-NFR-015-01S		CABI,FR K[B]<K>	35	86-NFT-005-01S		CABI,STEEL TS<EXCEPT [B]K>
1	86-NFR-001-01S		CABI,FR TS<EXCEPT [B]K>	△ 36	87-050-016-010		AC CORD ASSY,E<EXCEPT [B]K>
2	86-NF6-061-019		REFLECTOR,CASS	△ 36	87-A80-023-010		AC CORD ASSY,K[B]<K>
3	86-NF4-051-01S		BOX,CASS 2EU[B]<K>	37	87-085-185-010		BUSHING,AC CORD E
3	86-NFR-004-01S		BOX,CASS 2TS<EXCEPT [B]K>	38	86-NFR-085-01S		PANEL,REAR EZBNE<EXCEPT [B]K>
4	82-NF5-219-019		SPR-T,EJECT 2 (SIN)	38	86-NFR-086-01S		PANEL,REAR KBNE[B]<K>
5	82-NF5-218-019		SPR-T,EJECT 1 (SIN)	39	81-532-080-019		LBL,CASS-COMPT
6	86-NF4-033-01S		WINDOW,BOX 2	40	82-NF5-227-019		HLDR,LOCK 2N
7	86-NF4-008-01S		PANEL,CASS 2	41	82-NF5-228-019		SPR-C,LOCK
8	86-NF4-007-01S		PANEL,CASS 1	42	82-NF5-229-019		PLATE,LOCK
9	86-NF4-032-01S		WINDOW,BOX 1	43	82-NF5-226-019		HLDR,LOCK 1N
10	86-NF4-050-01S		BOX,CASS 1EU[B]<K>	44	80-VT1-202-019		FELT,12.5-15.5-2
10	86-NFR-003-01S		BOX,CASS 1TS<EXCEPT [B]K>	45	87-085-221-019		FOOT,H 13.5
11	86-NFR-006-01S		PANEL,FR PRO	46	87-063-173-019		CLOTH,30-10-0.35
12	86-NF4-017-01S		KNOB,RTRY VOL	47	86-NF4-020-01S		KEY,RDS[B]<K>
13	86-NF4-035-019		LENS,VOL	47	86-NFR-008-01S		KEY,RDS TS<EXCEPT [B]K>
14	86-NF4-009-01S		RING,VOL	48	84-ZG1-245-019		CAP,OPTICAL
15	86-NFR-011-01S		WINDOW,DISP EX	A	87-571-032-419		VIT+2-3
16	87-063-165-019		OIL-DMPR 150	B	87-078-084-019		BVTT+3-6 W/CONVEX
17	86-NF4-049-019		KNOB,RTRY MIC	C	87-067-703-019		BVT2+3-10 (W/O SLOT)
18	86-NFR-016-01S		KEY,PRO	D	87-067-633-019		BVT2+3-8 W/CONVEX
19	86-NF4-030-01S		WINDOW,CD	F	87-067-698-019		BVT 2+3-18 (W/O SLOT)
20	86-NF4-013-01S		KEY,CD	G	87-571-092-410		VIT+3-4
21	86-NF4-021-01S		KEY ASSY,FUN	H	87-591-094-419		QIT + 3 - 6 GOLD
22	86-NF4-014-01S		KEY,PLAY	I	87-067-689-010		BVTT+3-8
23	86-NF4-016-01S		KEY,DOLBY[B]<K>	L	87-067-975-019		S-SCREW IT+4-8
23	86-NFR-007-01S		KEY,DOLBY TS<EXCEPT [B]K>	N	87-721-097-419		QT2+3-12 GLD
24	86-NF4-037-01S		LENS,GEQ	O	87-067-641-019		UTT2+3-8 W/O SLOT BLK
25	86-NF4-015-01S		KEY,DSP	P	87-067-581-010		BVT2+3-15 W/O SLOT
26	86-NF4-019-01S		KEY,BBE	Q	87-067-758-010		BVT2+3-12 W/O SLOT
27	83-NF5-208-019		HLDR,FFC G	R	87-067-688-010		BVTT+3-6
28	83-NF5-202-019		GUIDE FL				
29	86-NF4-202-019		GUIDE,PLAY				
30	85-NF5-210-119		GUIDE,LED L				
31	85-NF5-211-119		GUIDE,LED R				
32	82-NE6-067-019		BADGE AIWA 30N				
33	86-NF4-053-01S		PANEL TRAY EX[B]<K>				
33	86-NFR-005-01S		PANEL,TRAY TS<EXCEPT [B]K>				
34	86-NF6-007-01S		WINDOW,TOP				
35	86-NF6-058-018		CABI,STEEL H-G[B]<K>				

TAPE MECHANISM EXPLODED VIEW 1/1



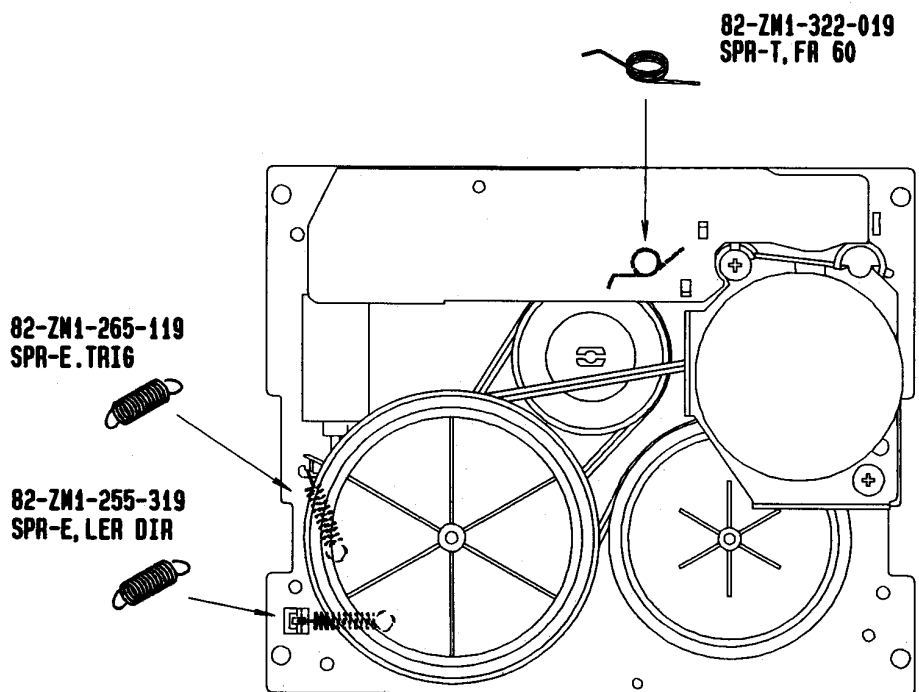
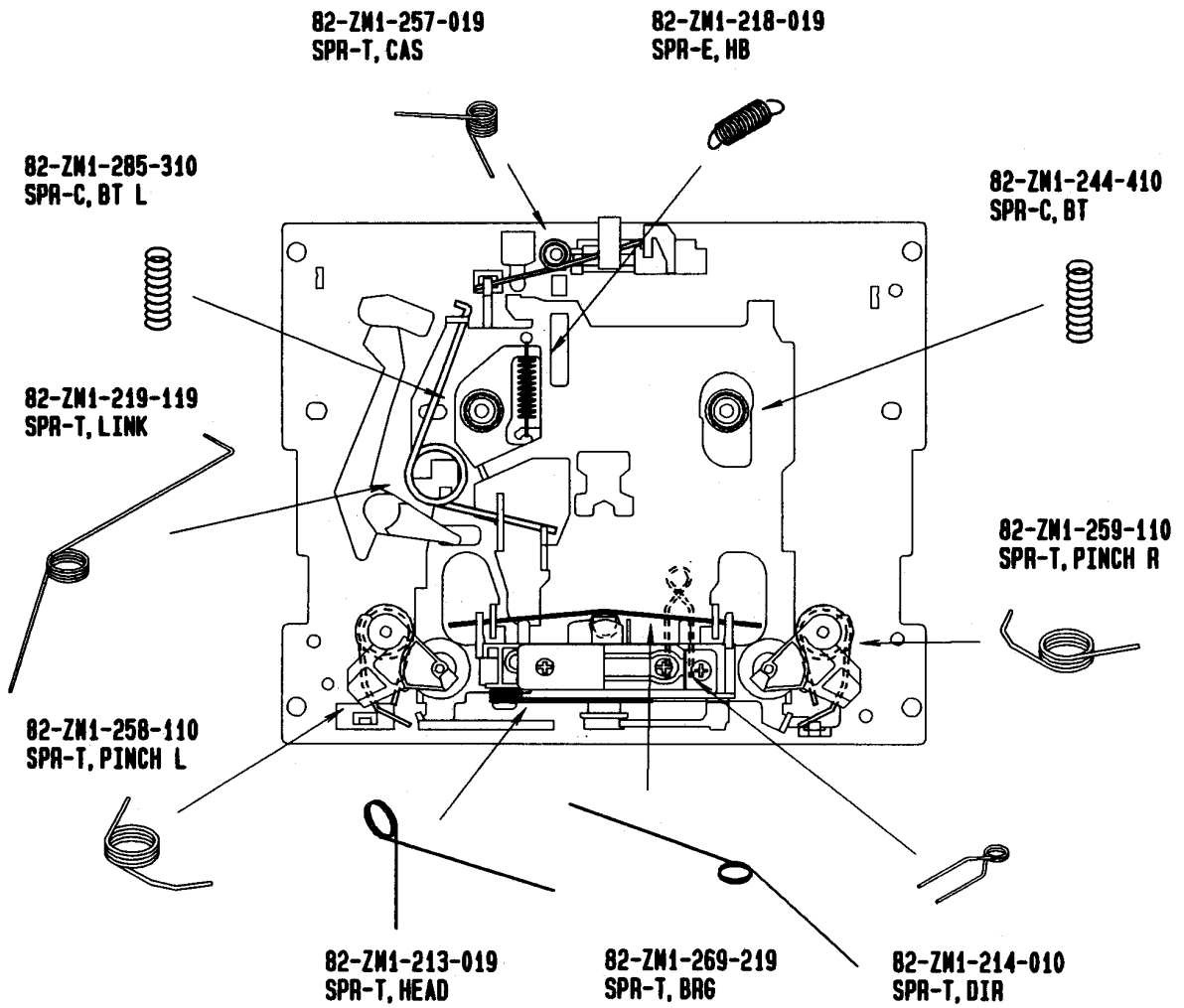


# TAPE MECHANISM PARTS LIST 1/1

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	35	82-ZM1-265-119		SPR-E,TRIG
2	82-ZM1-258-110		SPR-T,PINCH L	36	82-ZM1-236-019		CAPSTAN N 2-41.5
3	82-ZM1-345-019		LVR ASSY,PINCH L W	37	82-ZM1-239-019		CAPSTAN N 2.2-41.7
4	82-ZM1-333-010		PLATE,LINK 2	38	82-ZM1-322-019		SPR-T,FR60
5	82-ZM1-266-11K		LVR,DIR	39	82-ZM1-220-219		GEAR, IDLER
6	82-ZM1-214-010		SPR-T,DIR	40	82-ZM1-316-010		RING MAGNET 3
7	82-ZM1-206-81K		CHAS,HEAD	41	82-ZM1-216-31K		GEAR,REEL
8	82-ZM3-307-019		CUSH-G,DIA3.7-8-3.2	42	87-046-398-019		HEAD,PH YK50P-BS409(PH)
9	82-ZM1-269-219		SPR-T,BRG	42	87-046-399-019		HEAD,RPH YK56R-BS409(RPH)
10	82-ZM1-219-119		SPR-T,LINK	43	82-ZM1-225-21K		GEAR,FR
11	82-ZM1-210-119		GEAR,H T	44	82-ZM1-226-019		GEAR,REW
12	82-ZM1-213-019		SPR-T,HEAD	45	82-ZM1-228-810		SLIP DISK ASSY
13	82-ZM1-207-619		GUIDE,TAPE	46	82-ZM1-338-010		BELT FR4
14	82-ZM1-283-310		S-SCREW,AZIMUTH	47	82-ZM1-238-81K		FLY-WHL ASSY,R (DECK 2)
15	82-ZM1-314-119		PLATE,HEAD	47	82-ZM3-210-71K		FLY-WHL ASSY,R2 (DECK 1)
16	82-ZM1-208-119		HLDR,HEAD	48	82-ZM1-235-51K		FLY-WHL ASSY,L (DECK 2)
17	82-ZM1-218-019		SPR-E,HB	48	82-ZM3-208-61K		FLY-WHL ASSY,L2 (DECK 1)
18	82-ZM1-263-110		LVR,EJECT L (DECK 1)	49	82-ZM3-329-210		BELT,SBU R2
18	82-ZM1-264-010		LVR,EJECT R (DECK 2)	50	82-ZM1-245-210		HLDR,IC
19	82-ZM1-222-21K		LVR,PLAY	51	87-045-347-019		MOT,SHU2L 70(M1)
20	82-ZM1-217-319		REEL TABLE	52	82-ZM3-221-010		PULLEY,MOT 2M
21	82-ZM1-244-510		SPR-C,BT	53	82-ZM1-288-019		SH,1.63-3.2-0.5 SLT
22	82-ZM1-285-310		SPR-C,BT L	54	80-ZM6-243-019		SH,1.75-3.6-0.5 SLT
23	82-ZM1-257-019		SPR-T,CAS	55	82-ZM3-304-110		PULLEY,COUPLER (DECK 1)
24	82-ZM1-241-319		LVR,MC	56	82-ZM3-328-110		BELT,SBU P2
25	82-ZM1-242-019		LVR,CAS	57	82-ZM3-216-019		SHAFT,COUPLER N(DECK 1)
26	82-ZM1-243-019		LVR,STOP	A	82-ZM1-315-010		S-SCREW,GVIDE TAPE
27	82-ZM1-346-019		LVR ASSY,PINCH R W	B	80-ZM6-207-019		V+1.6-7
28	82-ZM1-259-110		SPR-T,PINCH R	C	82-ZM3-318-019		S-SCRW MOTOR M2
29	82-ZM1-240-11K		LVR,REC (DECK 2)	D	87-067-972-019		PW,1.05-3-0.25 SLT
30	82-ZM1-298-010		SPR-P,EARTH				
31	82-ZM1-255-319		SPR-E,LVR DIR				
32	82-ZM3-305-01K		GEAR,CAM M2				
33	82-ZM1-227-21K		LVR,TRIG				
34	82-ZM3-306-11K		LVR,FR M2				

SPRING APPLICATION POSITION



# 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-NFR-903-018	IB,E(EGFSI)E<EZ>	
1	86-NFR-904-018	IB,K(E)E<K>	
2	85-NT3-662-019	RC UNIT,RC-T506	
3	87-006-225-019	ANT,LOOP ANT NC2	
4	87-043-106-019	ANT,FM 1007AWG	

# 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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