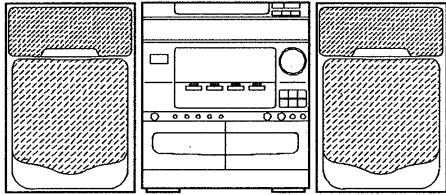


# aiwa



## NSX-V31G CX-NV31G



COMPACT DISC STEREO  
CASSETTE SYSTEM

- BASIC TAPE MECHANISM: 2ZM-3 PR7
- BASIC CD MECHANISM: 4ZG-1GFR

- TYPE: HE,HR,HK(NSX-V31G)  
EEZ(CX-NV31G)

SYSTEM	CENTER UNIT	REMOTE CONTROLLER	SPEAKER
NSX-V31G	CX-NV31G	RC-T503	SX-FNV50
—	CX-NV31G	RC-T503	SX-FNV50

- If requiring information about the CD mechanism, see Service Manual of 4ZG-1.  
(S/M Code No. 09-949-070-40T)

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# SPECIFICATIONS

## TUNER / AMPLIFIER

### <FM section>

**Frequency range** 87.5 MHz to 108 MHz  
**Usable sensitivity (IHF)** 16.2 dBf (75 ohms, 1.8µV)  
**Antenna** 75 ohms (unbalanced)

### <MW section>

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

### <SW section> (HE,HR,HK)

**Frequency range** 5.95 MHz to 17.90 MHz (1 kHz step)  
**Antenna** Wire antenna

### <LW section> (EEZ)

**Frequency range** 144 kHz to 290 kHz  
**Usable sensitivity** 1400 µV/m  
**Antenna** Loop antenna

### <Amplifier section>

**Power output** HR :  
 ( Without connecting to the SURROUND SPEAKERS )  
 Rated 22 W + 22 W  
 (6 ohms, T.H.D. 1%, 1kHz)  
 Reference 30 W + 30 W  
 (6 ohms, T.H.D. 10%, 1kHz)  
 HE,HK :  
 30 W + 30 W  
 (6 ohms, T.H.D. 10%, 1kHz)  
 EEZ:  
 Rated 20 W + 20 W  
 (6 ohms, T.H.D. 1%, 1kHz/DIN 45500)  
 Reference 24 W + 24 W  
 (6 ohms, T.H.D. 10%, 10kHz/DIN 45324)  
 DIN MUSIC POWER 45 W + 45 W

### Harmonic distortion

HE,HR,HK :  
 0.1% (15W,1kHz, 6 ohms)  
 EEZ :  
 0.1% (10W,1kHz, 6 ohms)

### Input

HE,HR,HK :  
 VIDEO/AUX : 400mV (21 kohms)  
 MIC 1,MIC 2 : 1mV(10 kohms)  
 EEZ :

### Output

VIDEO/AUX : 150mV (adjustable)  
 MIC 1,MIC 2 : 1.7mV(10 kohms)  
 VIDEO OUT: 1.0Vp-p(75 ohms)  
 SUPER WOOFER : 1.3V(HE,HR,HK)  
 : 1.1V(EEZ)

**SPEAKERS** : accepts speakers of 6 ohms or more  
**SURROUND SPEAKERS** : accepts speakers of 16 ohms or more  
**PHONES** (stereo minijack) : 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 – 16000 Hz  
 Normal tape : 50 – 15000 Hz  
 HE,HR,HK :  
 48 dB (CrO<sub>2</sub> tape)  
 EEZ :  
 60 dB (DOLBY B NR ON, CrO<sub>2</sub> tape peak level above 5kHz)  
**Recording system** AC bias  
**Heads** DECK 1 : Playback head x 1  
 DECK 2 : Recording / playback / erasure head x 1

### <CD player section>


**Laser** Semiconductor laser (λ =780 nm)  
**D-A conversion** 1-bit dual  
**Wow and flutter** Unmeasurable  
**Signal-to-noise ratio** 85 dB (1 kHz, 0dB)  
**Harmonic distortion** 0.03% (1 kHz, 0dB)  
**Video signal** NTSC/PAL color format

### <Speaker system> SX-FNV50

**Cabinet type** 3 way, bass reflex (magnetic sealed type)  
**Speaker** Woofer : 140 mm (5 5/8 in.) cone type  
 Tweeter : 80mm (3 1/4 in.) cone type  
 Super tweeter : 50mm (2 in.) ceramic type  
**Impedance** Surround speaker : 80mm (3 1/4 in.)  
 Front speaker : 6 ohms  
 Surround speaker : 16 ohms  
**Output sound pressure level** 87 dBW/m  
**Dimensions (W x H x D)** 206 x 302 x 265 mm  
 (8 1/8 x 12 x 10 1/2 in.)  
**Weight** 3.6 kg (7 lbs. 15oz)

### <General>

**Power requirements** HE,HR,HK : AC 120V/ 220V-240V, switchable 50/60 Hz  
 EEZ : AC 230 V, 50 Hz  
**Power consumption** HE,HR,HK : 90 W  
 EEZ : EEZ :140 W  
 U : 125 W  
**Dimensions (W x H x D)** 260 x 308 x 339 mm  
 (10 1/4 x 12 1/4 x 13 3/8 in.)  
**Weight** 6.5 kg (14 lbs. 5 oz)

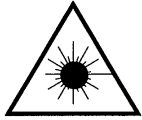
- Design and specifications are subject to change without notice.
- Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation. "DOLBY" and the double-D symbol  are trademarks of Dolby Laboratories Licensing Corporation.

## 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 käyt-täjän turvallisuusluokan 1 ylit-tävälle näkymättömälle lasersäteilylle.

### WARNING!

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

### CAUTION

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

### ATTENTION

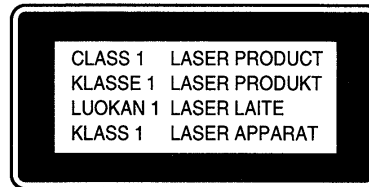
L'utilisation de commandes, réglages ou procédures autres que ceux spécifiés peut entraîner une dangereuse exposition aux radiations.

### ADVARSEL!

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

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

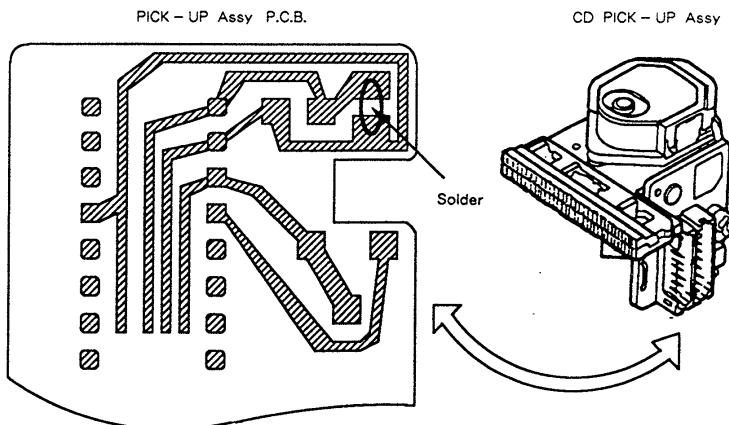
The CLASS 1 LASER PRODUCT label is located on the rear exterior.



## Precaution to replace Optical block (KSS-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 the right figure.



# ELECTRICAL MAIN PARTS LIST

DESCRIPTIONで判断できない物は“REFERENCE NAME LIST”を参照してください。  
If can't understand for Description please kindly refer to “REFERENCE NAME LIST”.

REF. NO	PART NO.	カリ NO.	DESCRIPTION	REF. NO	PART NO.	カリ NO.	DESCRIPTION
IC				C104	87-010-381-080		CAP,E 330-16 SME
				C105	87-010-101-080		CAP,E 220-16 SME
	87-020-454-010		IC, DN 6851	C109	87-010-401-080		CAP,E 1-50 SME
	85-NFH-606-010		IC, UPD78044BGF-017	C112	87-010-405-080		CAP,E 10-50 SME
	87-070-343-010		IC, SPS-440-1	C113	87-010-403-080		CAP,E 3.3-50 SME
	87-070-163-019		IC, STK405-030<EEZ>				
	87-070-267-010		IC, STK405-050<HE, HR, HK>	C116	87-018-127-080		CAP, TC-U 470P-50 B
				C200	87-018-208-089		CAP, TC-U 0.047-25 F
	87-070-121-010		IC, HA12185NT	C201	87-010-404-080		CAP,E 4.7-50 SME
	87-017-374-010		IC, TC4094BP	C202	87-010-404-080		CAP,E 4.7-50 SME
	87-001-874-019		IC, HA12134A<EEZ>	C203	87-018-129-089		CAP, TC-U 680P-50 SL
	87-070-277-010		IC, BA3839				
	87-017-675-080		IC, M65840FP	C204	87-018-129-089		CAP, TC-U 680P-50 SL
				C205	87-010-544-040		CAP,E 0.1-50 SME
	87-002-727-010		IC, NJM4558L	C206	87-010-544-040		CAP,E 0.1-50 SME
	87-070-272-010		IC, TA2078P	C207	87-010-402-080		CAP,E 2.2-50 SME
	87-027-666-010		IC, TC4052BP	C208	87-010-402-080		CAP,E 2.2-50 SME
	87-070-184-040		IC, M65846FP-600D				
	87-070-127-010		IC, LC72131	C209	87-010-405-080		CAP,E 10-50 SME
				C210	87-010-405-080		CAP,E 10-50 SME
	87-017-714-010		IC, LA1836	C213	87-018-100-089		CAP, TC-U 4.7P-50 SL
				C214	87-018-100-089		CAP, TC-U 4.7P-50 SL
				C221	87-010-197-089		C-CAP, S 0.01-25 B<EEZ>
TRANSISTOR				C222	87-010-197-089		C-CAP, S 0.01-25 B<EEZ>
	87-026-463-080		TR, 2SA933S	C225	87-018-205-080		CAP, TC-U 0.022-25 F
	89-213-702-010		TR, 2SB1370E	C230	87-010-247-080		CAP,E 100-50 SME
	89-113-187-080		TR, 2SA1318TU	C231	87-018-205-080		CAP, TC-U 0.022-25 F
	89-213-702-019		TR, 2SB1370E	C251	87-010-177-080		C-CAP, S 820P-50 SL
	87-026-610-089		TR, KTC3198GR				
				C252	87-010-177-080		C-CAP, S 820P-50 SL
	89-332-665-080		TR, 2SC3266GR	C301	87-010-392-080		CAP,E 33-35 SME
	87-026-609-089		TR, KTA1266GR	C302	87-010-392-080		CAP,E 33-35 SME
	87-026-462-080		TR, 2SC1740S (RS)	C303	87-012-145-080		C-CAP, S 270P-50 CH
	89-406-555-080		TR, 2SD655E	C304	87-012-145-080		C-CAP, S 270P-50 CH
	87-026-286-080		TR, DTA143ES				
				C305	87-012-155-080		C-CAP, S 180P-50 CH
	89-502-466-080		FET 2SK246BL	C306	87-012-155-080		C-CAP, S 180P-50 CH
	89-333-317-080		TR, 2SC3331 T	C307	87-010-401-080		CAP,E 1-50 SME
	87-026-462-089		TR, 2SC1740S (RS)	C308	87-010-401-080		CAP,E 1-50 SME
	89-109-521-080		TR, 2SA952K	C313	87-010-180-080		C-CAP, S 1500P-50 B<HE, HR, HK>
	89-112-965-080		TR, 2SA1296GR				
				C313	87-010-181-089		C-CAP, S 1800P-50 B<EEZ>
	87-026-293-080		TR, DTC144WS	C314	87-010-180-080		C-CAP, S 1500P-50 B<HE, HR, HK>
	87-026-219-080		TR, DTA144ES	C314	87-010-181-089		C-CAP, S 1800P-50 B<EEZ>
	89-328-785-080		TR, 2SC2878 (A) TPEZ	C315	87-010-179-080		C-CAP, S 1200P-50 B
	87-026-214-080		TR, DTA114YS	C316	87-010-179-080		C-CAP, S 1200P-50 B
	89-319-233-080		TR, 2SC1923 (O)				
				C317	87-010-401-080		CAP,E 1-50 SME
	89-327-143-080		TR, 2SC2714 (O)	C318	87-010-401-080		CAP,E 1-50 SME
	87-026-269-089		TR, DTA114ES	C319	87-010-400-089		CAP,E 0.47-50 SME<EEZ>
	89-503-602-080		C-FET, 2SK360E	C320	87-010-400-089		CAP,E 0.47-50 SME<EEZ>
	89-503-602-089		C-FET, 2SK360E<EEZ>	C321	87-010-544-089		CAP,E 0.1-50<EEZ>
	87-026-214-089		TR, DTA114YS<HE, HR, HK>				
				C321	87-010-401-080		CAP,E 1-50 SME<HE, HR, HK>
	87-026-463-089		TR, 2SA933S (RS) <HE, HR, HK>	C322	87-010-544-089		CAP,E 0.1-50<EEZ>
	89-406-555-089		TR, 2SD655E	C322	87-010-401-080		CAP,E 1-50 SME<HE, HR, HK>
	89-505-446-080		FET, 2SK544 F	C325	87-010-546-080		CAP,E 0.33-50 SME<HE, HR, HK>
				C326	87-010-546-080		CAP,E 0.33-50 SME<HE, HR, HK>
DIODE				C350	87-010-197-080		C-CAP, S 0.01-25 B
				C351	87-012-154-080		C-CAP, S 150P-50 CH
	87-020-465-080		DIODE, 1SS133	C352	87-012-154-080		C-CAP, S 150P-50 CH
	87-001-916-080		ZENER, UTZJ10B	C360	87-010-196-089		C-CAP, S 0.1-25 F<EEZ>
	87-001-909-080		ZENER, UTZJ 24B	C360	87-018-209-080		CAP, TC-U 0.1-50 F<HE, HR, HK>
	87-002-225-010		DIODE, DBF 40C-K10				
	87-001-914-080		ZENER, UTZJ6.2B	C381	87-010-189-080		C-CAP, S 8200P-50 B<HE, HR, HK>
				C382	87-010-189-080		C-CAP, S 8200P-50 B
	87-001-911-080		ZENER, UTZJ 4.7A	C451	87-018-123-080		CAP, TC-U 220P-50 B
	87-001-559-080		DIODE, 1SS131	C452	87-018-123-080		CAP, TC-U 220P-50 B
	87-001-912-080		ZENER, UTZJ 5.1B	C453	87-010-178-080		C-CAP, S 1000P-50 B
	87-001-913-080		ZENER, UTZJ5.6B				
	87-027-393-080		ZENER, HZ4C-2	C454	87-010-178-080		C-CAP, S 1000P-50 B
				C456	87-010-405-080		CAP,E 10-50 SME
	87-020-339-080		C-DIODE, 1SS226<EEZ>	C457	87-010-198-080		C-CAP, S 0.022-25 B
	87-020-465-089		DIODE, 1SS133	C459	87-010-178-080		C-CAP, S 1000P-50 B
				C461	87-010-183-080		C-CAP, S 2700P-50 B
MAIN C.B				C462	87-010-183-080		C-CAP, S 2700P-50 B
				C463	87-010-183-080		C-CAP, S 2700P-50 B
BPF831	87-030-105-010		FLTR, BPMB6A<EEZ>	C501	87-010-177-089		C-CAP, S 820P-50 SL<EEZ>
C102	87-010-399-090		CAP,E 3300-35 SME	C502	87-010-177-089		C-CAP, S 820P-50 SL<EEZ>
C103	87-010-398-090		CAP,E 2200-35 SME	C503	87-010-401-089		CAP,E 1-50 SME<EEZ>

REF. NO	PART NO.	カリ NO.	DESCRIPTION	REF. NO	PART NO.	カリ NO.	DESCRIPTION
C505	87-010-545-089		CAP,E 0.22-50 SME<EEZ>	C777	87-010-400-080		CAP,E 0.47-50 SME
C506	87-010-545-089		CAP,E 0.22-50 SME<EEZ>	C778	87-010-401-080		CAP,E 1-50 SME
C507	87-010-196-089		C-CAP,S 0.1-25 F<EEZ>	C779	87-010-401-080		CAP,E 1-50 SME
C516	87-010-400-089		CAP,E 0.47-50 SME<EEZ>	C780	87-010-197-080		C-CAP,S 0.01-25 B
C519	87-010-405-080		CAP,E 10-50 SME	C781	87-010-401-089		CAP,E 1-50 SME<EEZ>
C521	87-018-199-089		CAP,TC-U 3300P-16 X<EEZ>	C782	87-010-401-089		CAP,E 1-50 SME<EEZ>
C522	87-010-312-080		C-CAP,S 15P-50 CH	C787	87-010-184-089		C-CAP,S 3300P-50 B<EEZ>
C523	87-010-197-080		C-CAP,S 0.01-25 B	C788	87-010-184-089		C-CAP,S 3300P-50 B<EEZ>
C524	87-010-402-080		CAP,E 2.2-50 SME	C789	87-012-365-080		C-CAP,S 0.027-25V BK<HE,HR,HK>
C525	87-018-134-080		CAP,TC-U 0.01-16 Y	C789	87-010-179-089		C-CAP,S 1200P-50 B<EEZ>
C526	87-010-371-080		CAP,E 470-6.3	C790	87-012-365-080		C-CAP,S 0.027-25V BK<HE,HR,HK>
C528	87-012-142-080		C-CAP,S 0.33-16 F	C790	87-010-179-089		C-CAP,S 1200P-50 B<EEZ>
C529	87-010-401-080		CAP,E 1-50 SME	C791	87-010-401-080		CAP,E 1-50 SME
C530	87-010-401-080		CAP,E 1-50 SME	C792	87-010-180-080		C-CAP,S 1500P-50 B<HE,HR,HK>
C531	87-010-545-080		CAP,E 0.22-50 SME	C792	87-010-182-089		C-CAP,S 2200P-50 B<EEZ>
C532	87-010-263-080		CAP,E 100-10	C793	87-010-189-080		C-CAP,S 8200P-50 B
C535	87-010-400-080		CAP,E 0.47-50 SME	C794	87-010-260-080		CAP,E 47-25 SME
C536	87-010-400-080		CAP,E 0.47-50 SME	C795	87-010-194-080		C-CAP,S 0.047-25 F
C538	87-010-198-080		C-CAP,S 0.022-25 B	C796	87-010-403-080		CAP,E 3.3-50 SME
C539	87-010-382-080		CAP,E 22-25 SME	C797	87-010-197-080		C-CAP,S 0.01-25 B
C540	87-010-183-080		C-CAP,S 2700P-50 B	C799	87-010-405-080		CAP,E 10-50 SME<HE,HR,HK>
C541	87-010-197-080		C-CAP,S 0.01-25 B<HE,HR,HK>	C801	87-018-134-080		CAP,TC-U 0.01-16 Y
C541	87-010-213-089		C-CAP,S 0.015-50 B<EEZ>	C802	87-010-311-089		C-CAP,S 12P-50 CH<HE,HR,HK>
C542	87-010-197-080		C-CAP,S 0.01-25 B<HE,HR,HK>	C802	87-010-312-089		C-CAP,S 15P-50 CH<EEZ>
C542	87-010-213-089		C-CAP,S 0.015-50 B<EEZ>	C804	87-010-151-080		C-CAP,S 7P-50 CH<HE,HR,HK>
C543	87-010-178-080		C-CAP,S 1000P-50 B	C805	87-010-146-089		C-CAP,S 2P-50 CH<EEZ>
C544	87-010-178-080		C-CAP,S 1000P-50 B	C805	87-010-150-080		C-CAP,S 6P-50 CH<HE,HR,HK>
C545	87-010-198-080		C-CAP,S 0.022-25 B	C806	87-010-145-080		C-CAP,S 1P-50 CH<HE,HR,HK>
C547	87-010-546-080		CAP,E 0.33-50 SME	C806	87-010-146-089		C-CAP,S 2P-50 CH<EEZ>
C548	87-010-546-080		CAP,E 0.33-50 SME	C807	87-010-154-080		C-CAP,S 10P-50 CH
C560	87-010-401-080		CAP,E 1-50 SME	C808	87-010-322-080		C-CAP,S 100P-50 CH
C561	87-010-178-080		C-CAP,S 1000P-50 B	C809	87-010-197-080		C-CAP,S 0.01-25 B
C562	87-010-178-080		C-CAP,S 1000P-50 B	C810	87-010-197-080		C-CAP,S 0.01-25 B
C563	87-010-186-080		C-CAP,S 4700P-50 B	C811	87-010-149-080		C-CAP,S 5P-50 CH
C564	87-010-185-080		C-CAP,S 3900P-50 B	C812	87-010-314-089		C-CAP,S 22P-50 CH
C565	87-010-196-080		C-CAP,S 0.1-25 F	C813	87-010-197-080		C-CAP,S 0.01-25 B
C569	87-010-177-080		C-CAP,S 820P-50 SL	C814	87-010-197-080		C-CAP,S 0.01-25 B
C570	87-010-178-080		C-CAP,S 1000P-50 B	C815	87-010-197-080		C-CAP,S 0.01-25 B<HE,HR,HK>
C571	87-010-175-080		C-CAP,S 560P-50 SL	C817	87-015-785-080		C-CAP,0.1-25 F
C572	87-010-176-080		C-CAP,S 680P-50 SL	C819	87-015-785-080		C-CAP,0.1-25 F
C576	87-010-317-080		C-CAP,S 39P-50 CH	C820	87-010-260-080		CAP,E 47-25 SME
C577	87-010-317-080		C-CAP,S 39P-50 CH<EEZ>	C821	87-010-197-080		C-CAP,S 0.01-25 B
C577	87-010-320-089		C-CAP,S 68P<HE,HR,HK>	C823	87-010-197-080		C-CAP,S 0.01-25 B
C578	87-010-374-080		CAP,E 47-10	C825	87-018-134-080		CAP,TC-U 0.01-16 Y<HE,HR,HK>
C579	87-010-196-080		C-CAP,S 0.1-25 F	C827	87-010-145-089		C-CAP,S 1P-50 CH<EEZ>
C580	87-010-263-080		CAP,E 100-10	C831	87-010-312-089		C-CAP,S 15P-50 CH
C581	87-010-184-080		C-CAP,S 3300P-50 B	C832	87-010-314-089		C-CAP,S 22P-50 CH<EEZ>
C590	87-018-134-080		CAP,TC-U 0.01-16 Y<HE,HR,HK>	C833	87-015-819-080		C-CAP,0.01-50 B K
C601	87-018-205-080		CAP,TC-U 0.022-25 F	C834	87-010-311-080		C-CAP,S 12P-50 CH<EEZ>
C621	87-010-081-080		C-CAP,S 1800P-50 B	C835	87-010-154-089		C-CAP,S 10P-50 CH
C622	87-010-081-080		C-CAP,S 1800P-50 B	C836	87-010-312-089		C-CAP,S 15P-50 CH
C701	87-010-404-080		CAP,E 4.7-50 SME	C837	87-010-312-089		C-CAP,S 15P-50 CH
C702	87-010-197-080		C-CAP,S 0.01-25 B	C843	87-010-146-080		C-CAP,S 2P-50 CH
C703	87-010-197-080		C-CAP,S 0.01-25 B	C849	87-010-197-080		C-CAP,S 0.01-25 B
C704	87-018-131-080		CAP,TC-U 1000P-50 B	C851	87-010-197-089		C-CAP,S 0.01-25 B<EEZ>
C705	87-010-374-080		CAP,E 47-10	C901	87-010-197-089		C-CAP,S 0.01-25 B
C711	87-010-263-080		CAP,E 100-10	C905	87-010-405-080		CAP,E 10-50 SME<HE,HR,HK>
C712	87-010-112-080		CAP,E 100-16	C941	87-010-313-080		C-CAP,S 18P-50 CH<HE,HR,HK>
C722	87-010-152-080		C-CAP,S 8P-50 CH	C942	87-010-154-089		C-CAP,S 10P-50 CH<EEZ>
C723	87-010-178-080		C-CAP,S 1000P-50 B	C943	87-010-197-089		C-CAP,S 0.01-25 B<HE,HR,HK>
C725	87-010-178-080		C-CAP,S 1000P-50 B	C944	87-014-051-089		CAP,PP 560P-100 J<HE,HR,HK>
C727	87-010-197-080		C-CAP,S 0.01-25 B	C945	87-010-197-089		C-CAP,S 0.01-25 B<HE,HR,HK>
C728	87-010-248-080		CAP,E 220-10 SME	C946	87-010-401-080		CAP,E 1-50 SME
C729	87-015-819-080		C-CAP,0.01-50 B K	C950	87-014-073-089		CAP,PP 4700P-100 J<HE,HR,HK>
C771	87-010-405-080		CAP,E 10-50 SME	C952	87-010-197-089		C-CAP,S 0.01-25 B
C772	87-010-194-080		C-CAP,S 0.047-25 F	C953	87-010-197-089		C-CAP,S 0.01-25 B<HE,HR,HK>
C773	87-010-196-080		C-CAP,S 0.1-25 F	C954	87-010-400-089		CAP,E 0.47-50 SME<HE,HR,HK>
C774	87-010-263-080		CAP,E 100-10	C955	87-018-134-080		CAP,TC-U 0.01-16 Y
C775	87-010-405-080		CAP,E 10-50 SME	C956	87-010-263-089		CAP,E 100-10 SME 5X11<HE,HR,HK>
C776	87-018-134-080		CAP,TC-U 0.01-16 Y				

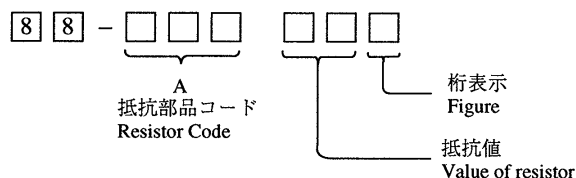
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C957	87-010-316-089		C-CAP, S 33P-50 CH<EEZ>	W102	83-NF5-632-010		CABLE FFC, 6P-1.25
C958	87-010-197-089		C-CAP, S 0.01-25 B<EEZ>	X703	84-508-618-010		VIB, CER CSB 456 F15
C960	87-015-785-080		C-CAP, 0.1-25 F	X721	87-030-372-019		VIB, XTAL 7.2MHZ
C988	87-018-205-080		CAP, TC-U 0.022-25 F				
C999	87-010-196-089		C-CAP, S 0.1-25 F<HE, HR, HK>				
							FRONT C. B
CF741	87-030-354-019		VIB, CF BFU450C<HE, HR, HK>				
CF801	87-008-423-089		CF, SFE10.7 MS3G-A<EEZ>	C121	87-018-134-080		CAP, TC-U 0.01-16 Y
CF801	87-008-261-080		FLTR, SFE 10.7MA5-A<HE, HR, HK>	C122	87-018-131-080		CAP, TC-U 1000P-50 B
CF802	82-785-747-089		CF, MS2 GHY, R<EEZ>	C201	87-018-209-080		CAP, TC-U 0.1-50 F
CF802	87-008-261-080		FLTR, SFE 10.7MA5-A<HE, HR, HK>	C202	87-018-209-080		CAP, TC-U 0.1-50 F
				C203	87-018-209-080		CAP, TC-U 0.1-50 F
D801	87-002-730-080		VARI-CAP, SVC203 SPA				
D802	87-002-730-080		VARI-CAP, SVC203 SPA	C220	87-010-544-040		CAP, E 0.1-50 SME
D803	87-002-730-080		VARI-CAP, SVC203 SPA	C221	87-010-544-040		CAP, E 0.1-50 SME
D804	87-002-730-080		VARI-CAP, SVC203 SPA<EEZ>	C222	87-010-408-040		CAP, E 47-50 SME
IFT806	87-008-427-010		COIL, FM IFT	C223	87-010-405-040		CAP, E 10-50 SME
				C224	87-010-401-040		CAP, E 1-50 SME
J250	87-099-678-010		JACK, 6.3W/S BLK				
J253	87-099-474-010		JACK, PIN 3P BLK	C225	87-010-263-040		CAP, E 100-10
J254	87-033-227-019		TERMINAL, SP 4P R(Z)*	C226	87-010-401-040		CAP, E 1-50 SME
J652	87-099-715-010		JACK, PIN 2P	C227	87-010-248-040		CAP, E 220-10 SME
J802	87-033-230-019		TERMINAL, ANT AJ-2016<EEZ>	C228	87-018-205-080		CAP, TC-U 0.022-25 F
				C229	87-018-127-080		CAP, TC-U 470P-50 B
J802	87-033-235-019		TERMINAL, ANT(H) <HE, HR, HK>				
L403	87-007-341-010		COIL, TRAP 85K	C250	87-018-122-080		CAP, TC-U 180P-50 B
L404	87-007-341-010		COIL, TRAP 85K	C251	87-018-107-080		CAP, TC-U 18P-50 SL
L451	87-007-336-010		COIL, OSC 85K BIAS	C301	87-018-134-080		CAP, TC-U 0.01-16 Y
L560	87-005-427-080		COIL, 3.9UH FLR50	C302	87-018-205-080		CAP, TC-U 0.022-25 F
				C303	87-018-104-080		CAP, TC-U 10P-50 SL
L701	81-631-643-019		COIL, 1 POLE MPX<EEZ>				
L702	81-631-643-019		COIL, 1 POLE MPX<EEZ>	C401	87-010-545-040		CAP, E 0.22-50 SME
L741	87-006-321-010		COIL, FM DET SAG	C402	87-018-209-080		CAP, TC-U 0.1-50 F
L742	81-631-612-019		CFMT, 450A<HE, HR, HK>	C403	87-018-209-080		CAP, TC-U 0.1-50 F
L742	82-NT1-659-019		FLTR, CFAZ-450 2NT<EEZ>	C508	87-010-112-040		CAP, E 100-16
				C509	87-018-134-080		CAP, TC-U 0.01-16 Y
L770	87-003-102-080		COIL, 10UH				
L801	87-006-249-010		COIL, ANT FM 3/4TS, L4	C600	87-010-490-040		CAP, E 0.1-50 5L
L802	87-006-251-019		COIL, ANT FM2-3/4TS, L4	C601	87-018-116-080		CAP, TC-U 56P-50 SL
L803	87-006-244-010		COIL, RF FM 3-1/2T, L4	C602	87-010-544-040		CAP, E 0.1-50 SME
L804	87-006-250-019		COIL, RF FM 3-1/2TS, L4	C603	87-018-209-080		CAP, TC-U 0.1-50 F
				C604	87-018-119-080		CAP, TC-U 100P-50 B
L805	87-003-098-080		COIL, 2.2UH				
L807	87-006-205-019		COIL, OSC FM (7K)	C606	87-018-122-080		CAP, TC-U 180P-50 B
L831	87-006-250-019		COIL, RF FM 3-1/2TS, L4<EEZ>	C607	87-010-406-040		CAP, E 22-50 SME
L832	87-003-098-080		COIL, 2.2UH	C608	87-010-405-040		CAP, E 10-50 SME
L941	87-006-319-019		COIL, ANT LW(SG1) <EEZ>	C613	87-018-209-080		CAP, TC-U 0.1-50 F
				C614	87-018-209-080		CAP, TC-U 0.1-50 F
L941	87-006-319-019		COIL, ANT SW(SG1) <HE, HR, HK>				
L942	87-007-338-019		COIL, OSC LW(SG1) <EEZ>	C615	87-010-401-040		CAP, E 1-50 SME
L942	87-007-337-019		COIL, OSC SW(SG1) <HE, HR, HK>	C618	87-010-260-040		CAP, E 47-25 SME
L943	87-005-372-089		COIL, S 1MH<HE, HR, HK>	C620	87-010-405-040		CAP, E 10-50 SME
L944	87-005-372-089		COIL, S 1MH<HE, HR, HK>	C621	87-018-127-080		CAP, TC-U 680P-50 B
				C622	87-018-127-080		CAP, TC-U 680P-50 B
L981	85-NF7-619-019		AM PACK 2, (SG1) <EEZ>				
L981	85-NF7-620-019		AM PACK 3, (SG1) <HE, HR, HK>	C630	87-010-263-040		CAP, E 100-10
R105	87-022-050-080		RES, M/F 0.22-1W	C635	87-018-134-080		CAP, TC-U 0.01-16 Y
R106	87-022-050-080		RES, M/F 0.22-1W	C651	87-010-401-040		CAP, E 1-50 SME
RY102	87-045-382-019		RELAY, OUAZ-SH-112L	C652	87-010-401-040		CAP, E 1-50 SME
				C653	87-018-115-080		CAP, TC-U 47P-50 SL
SFR301	87-024-177-080		SFR, 220K DIA6 V<HE, HR, HK>				
SFR301	87-024-174-089		SFR, 33K DIA6 V<EEZ>	C654	87-018-115-080		CAP, TC-U 47P-50 SL
SFR302	87-024-177-080		SFR, 220K DIA6 V<HE, HR, HK>	C669	87-018-130-080		CAP, TC-U 820P-50 B
SFR302	87-024-174-089		SFR, 33K DIA6 V<EEZ>	C670	87-018-195-080		CAP, TC-U 1200P-16 X
SFR303	87-024-177-080		SFR, 220K DIA6 V<HE, HR, HK>	C671	87-018-199-080		CAP, TC-U 3300P-16 X
				C672	87-018-199-080		CAP, TC-U 3300P-16 X
SFR303	87-024-174-089		SFR, 33K DIA6 V<EEZ>				
SFR304	87-024-177-080		SFR, 220K DIA6 V<HE, HR, HK>	C674	87-010-260-040		CAP, E 47-25 SME
SFR304	87-024-174-089		SFR, 33K DIA6 V<EEZ>	C675	87-010-545-040		CAP, E 0.22-50 SME
SFR311	87-024-175-089		SFR, 47K DIA6 V<EEZ>	C676	87-018-199-080		CAP, TC-U 3300P-16 X
SFR312	87-024-175-089		SFR, 47K DIA6 V<EEZ>	C678	87-010-544-040		CAP, E 0.1-50 SME
				C679	87-010-400-040		CAP, E 0.47-50 SME
SFR451	87-024-175-080		SFR, 47K DIA6 V				
SFR452	87-024-175-080		SFR, 47K DIA6 V	C682	87-010-263-040		CAP, E 100-10
SFR722	87-024-352-080		SFR, 4.7K DIA6 H	C683	87-018-103-080		CAP, TC-U 8.2P-50 SL
TC721	87-011-253-080		TRIMER, 30P LAR	C684	87-018-103-080		CAP, TC-U 8.2P-50 SL
TC801	87-011-252-080		TRIMER, 10P LAR	C686	87-018-131-080		CAP, TC-U 1000P-50 B
				C687	87-010-544-040		CAP, E 0.1-50 SME
TC802	87-011-252-080		TRIMER, 10P LAR				
TC803	87-011-252-089		TRIMER, 10P LAR<EEZ>	C688	87-010-400-040		CAP, E 0.47-50 SME
TC942	87-011-253-089		TRIMER, 30P LAR	C689	87-018-209-080		CAP, TC-U 0.1-50 F
VR651	82-NF5-660-019		VR, 50KBX2 RK14K12A<EEZ>	C691	87-010-401-040		CAP, E 1-50 SME
W101	83-NEG-679-010		F-CABLE, 5P-2.5	C714	87-010-544-040		CAP, E 0.1-50 SME

REF. NO	PART NO.	カンリ NO.	DESCRIPTION	REF. NO	PART NO.	カンリ NO.	DESCRIPTION
C715	87-018-209-080		CAP,TC-U 0.1-50 F	MVR C.B			
EMI600	87-008-372-080		FLTR,EMI BL01RNI				
FL101	85-NFH-609-010		FL,8-BT-187GK	C692	87-010-401-040		CAP,E 1-50 SME
J600	82-NF7-630-010		JACK,3.5 MO	C800	87-018-205-080		CAP,TC-U 0.022-25 F
J601	82-NF7-630-010		JACK,3.5 MO	MVR801	81-MX4-635-010		VR,50KBX2 RK16812 MG
L201	87-007-340-010		COIL,CLOCK 4.19MHZ				
L670	87-005-446-080		COIL,150UH FLR50	KEY C.B			
LED322	87-070-201-080		LED,SLP9118C-51-S-T1	S301	87-036-397-080		SW,TACT SKQNAB
LED323	87-070-201-080		LED,SLP9118C-51-S-T1	S304	87-036-397-080		SW,TACT SKQNAB
LED324	87-070-201-080		LED,SLP9118C-51-S-T1	S305	87-036-397-080		SW,TACT SKQNAB
LED325	87-070-201-080		LED,SLP9118C-51-S-T1	S306	87-036-397-080		SW,TACT SKQNAB
LED330	87-017-784-080		LED,SEL1550CM TP8	S307	87-036-397-080		SW,TACT SKQNAB
LED331	87-017-784-080		LED,SEL1550CM TP8				
LED332	87-017-784-080		LED,SEL1550CM TP8	AC2 C.B			
LED333	87-017-784-080		LED,SEL1550CM TP8	△PT101	82-NF7-655-010		PT,2NF7 HM<HE,HR,HK>
LED334	87-017-784-080		LED,SEL1550CM TP8	△PT101	83-NF2-611-010		PT,3NE3 EKZ<EEZ>
LED335	87-017-784-080		LED,SEL1550CM TP8				
S302	87-036-397-080		SW,TACT SKQNAB	AC1 C.B			
S303	87-036-397-080		SW,TACT SKQNAB	△	87-033-213-080		CLAMP,FUSE SMK
S308	87-036-397-080		SW,TACT SKQNAB	△	82-304-743-010		TERMINAL,1P
S309	87-036-397-080		SW,TACT SKQNAB	△F101	87-035-237-010		FUSE 2A 250V<HE,HR,HK>
S310	87-036-397-080		SW,TACT SKQNAB	△F101	87-035-359-010		FUSE 500mA 250V TE<EEZ>
S311	87-036-397-080		SW,TACT SKQNAB	△SW101	87-036-388-010		SW,SL 1-2-2<HE,HR,HK>
S312	87-036-397-080		SW,TACT SKQNAB				
S313	87-036-397-080		SW,TACT SKQNAB	DECK C.B			
S314	87-036-397-080		SW,TACT SKQNAB	SFR1	87-024-581-010		SFR,3.3K DIA 6H
S315	87-036-397-080		SW,TACT SKQNAB	SOL1	82-ZM1-618-310		SOL ASSY,27
S316	87-036-397-080		SW,TACT SKQNAB	SOL2	82-ZM1-618-310		SOL ASSY,27
S317	87-036-397-080		SW,TACT SKQNAB	SW1	87-036-378-010		SW,PUSH 1-1-1 SH2
S318	87-036-397-080		SW,TACT SKQNAB	SW2	87-036-378-010		SW,PUSH 1-1-1 SH2
S319	87-036-397-080		SW,TACT SKQNAB	SW3	87-036-378-010		SW,PUSH 1-1-1 SH2
S320	87-036-397-080		SW,TACT SKQNAB	SW4	87-036-378-010		SW,PUSH 1-1-1 SH2
S321	87-036-397-080		SW,TACT SKQNAB	SW5	87-036-378-010		SW,PUSH 1-1-1 SH2
S322	87-036-397-080		SW,TACT SKQNAB	SW6	87-036-378-010		SW,PUSH 1-1-1 SH2
S323	87-036-397-080		SW,TACT SKQNAB	SW8	87-036-378-010		SW,PUSH 1-1-1 SH2
S324	87-036-397-080		SW,TACT SKQNAB	SW9	87-036-378-010		SW,PUSH 1-1-1 SH2
S325	87-036-397-080		SW,TACT SKQNAB				
S326	87-036-397-080		SW,TACT SKQNAB				
S327	87-036-397-080		SW,TACT SKQNAB				
S328	87-036-397-080		SW,TACT SKQNAB				
VR600	83-NM1-627-010		VR,10KB RK11K1130	RELAY-1 C.B			
VR601	81-MX4-637-010		VR,10KA RK11K1130				
W103	88-914-301-210		FF-CABLE,14P 1.25	W106	85-NF5-609-019		CONN ASSY,3P-PB
W104	85-NF5-615-010		CABLE,FFC 15P-1.25	RELAY-2 C.B			
				W105	83-NEG-608-019		CONN ASSY 8P-RPB

○ 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

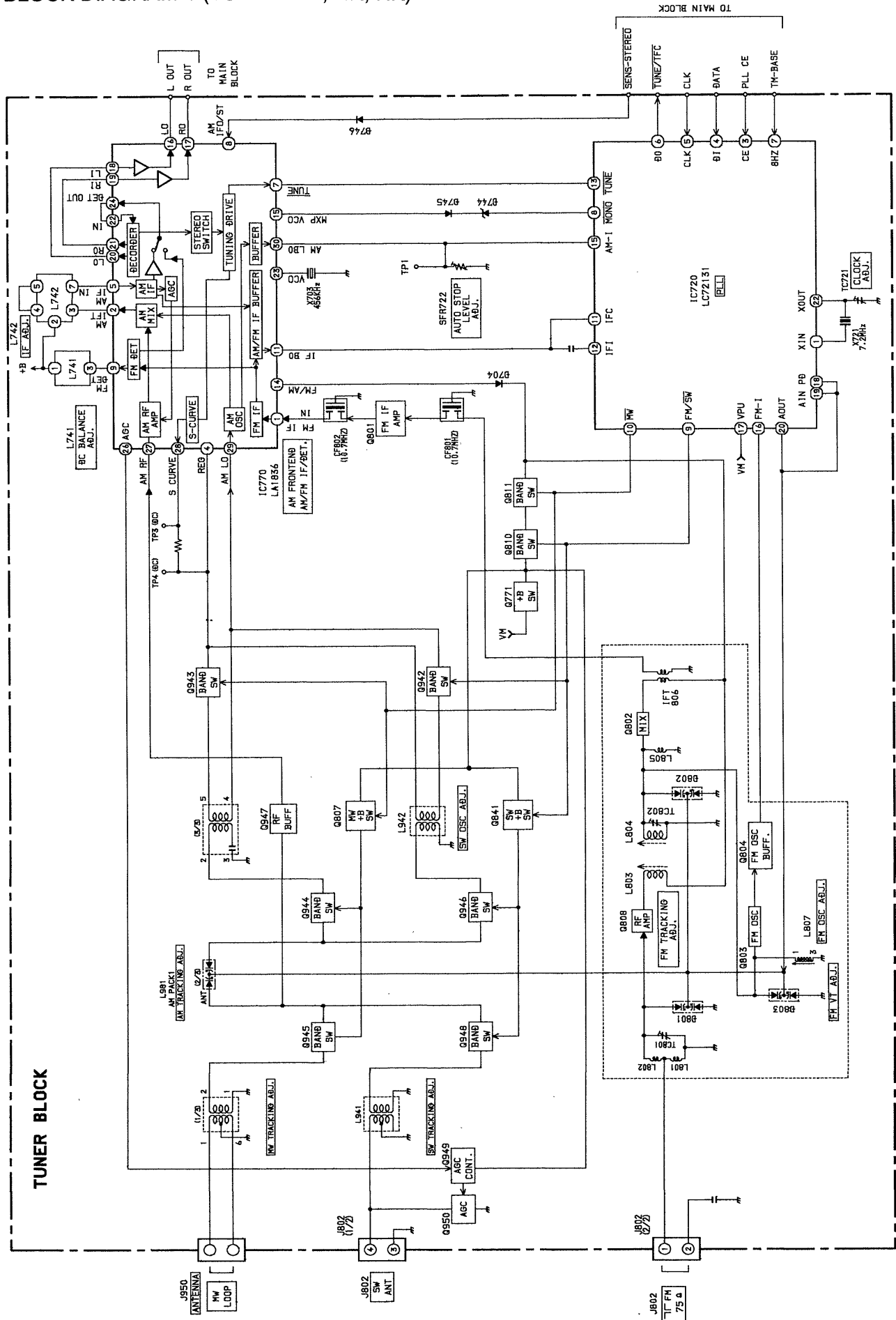


チップ抵抗  
Chip resistor

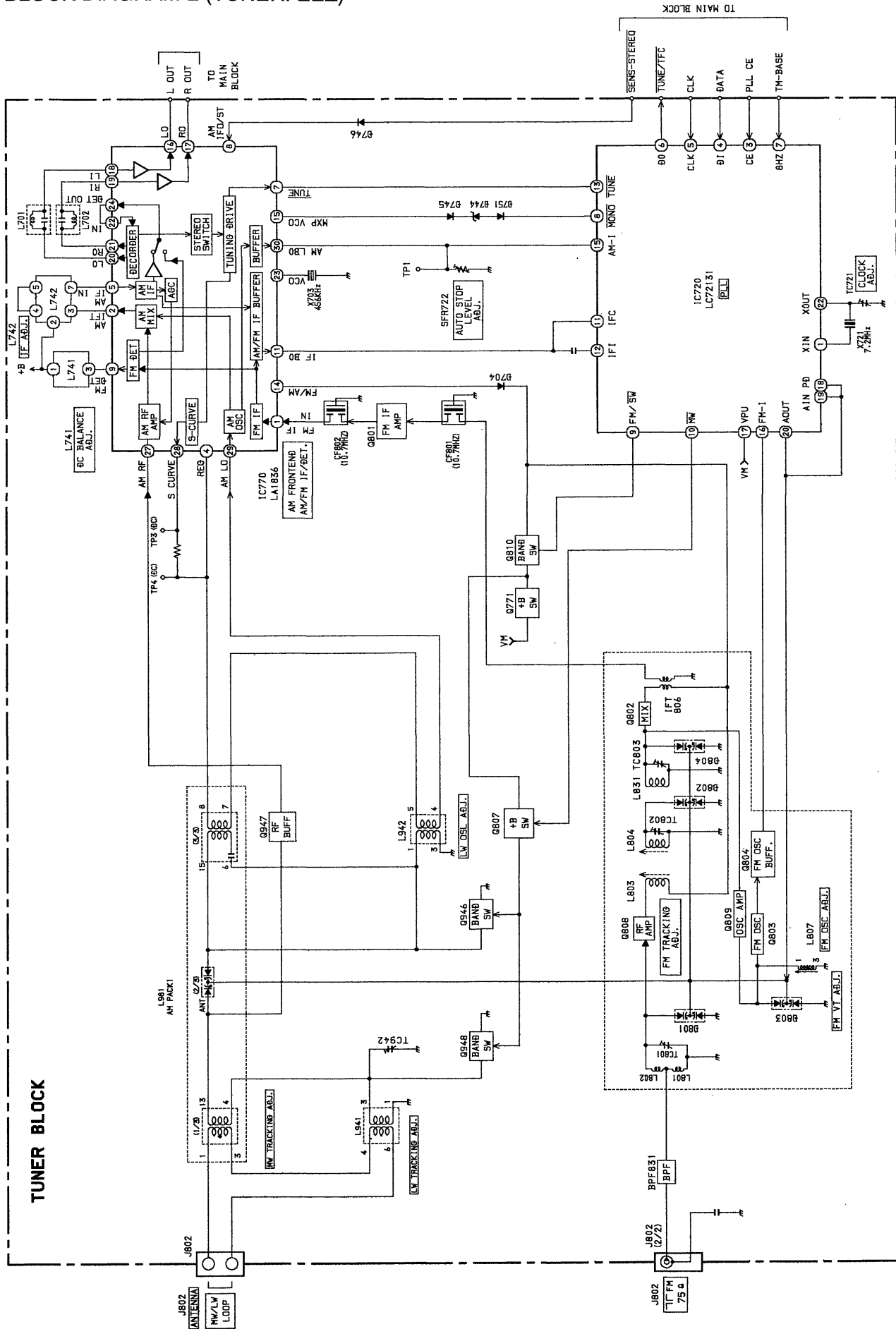
Wattage 容量	Type 種類	Tolerance 許容誤差	Symbol 記号	Dimensions / 寸法 (mm)			Resistor Code: A 抵抗コード : A	
				Form / 外形	L	W		t
1/32W	1608	±5%	CJ		1.6	0.8	0.35	108
1/10W	2125	±5%	CJ		2	1.25	1.45	118
1/8W	3216	±5%	CJ		3.2	1.6	0.5 ~0.7	128



# BLOCK DIAGRAM-1 (TUNER: HE, HR, HK)



# BLOCK DIAGRAM-2 (TUNER: EEZ)

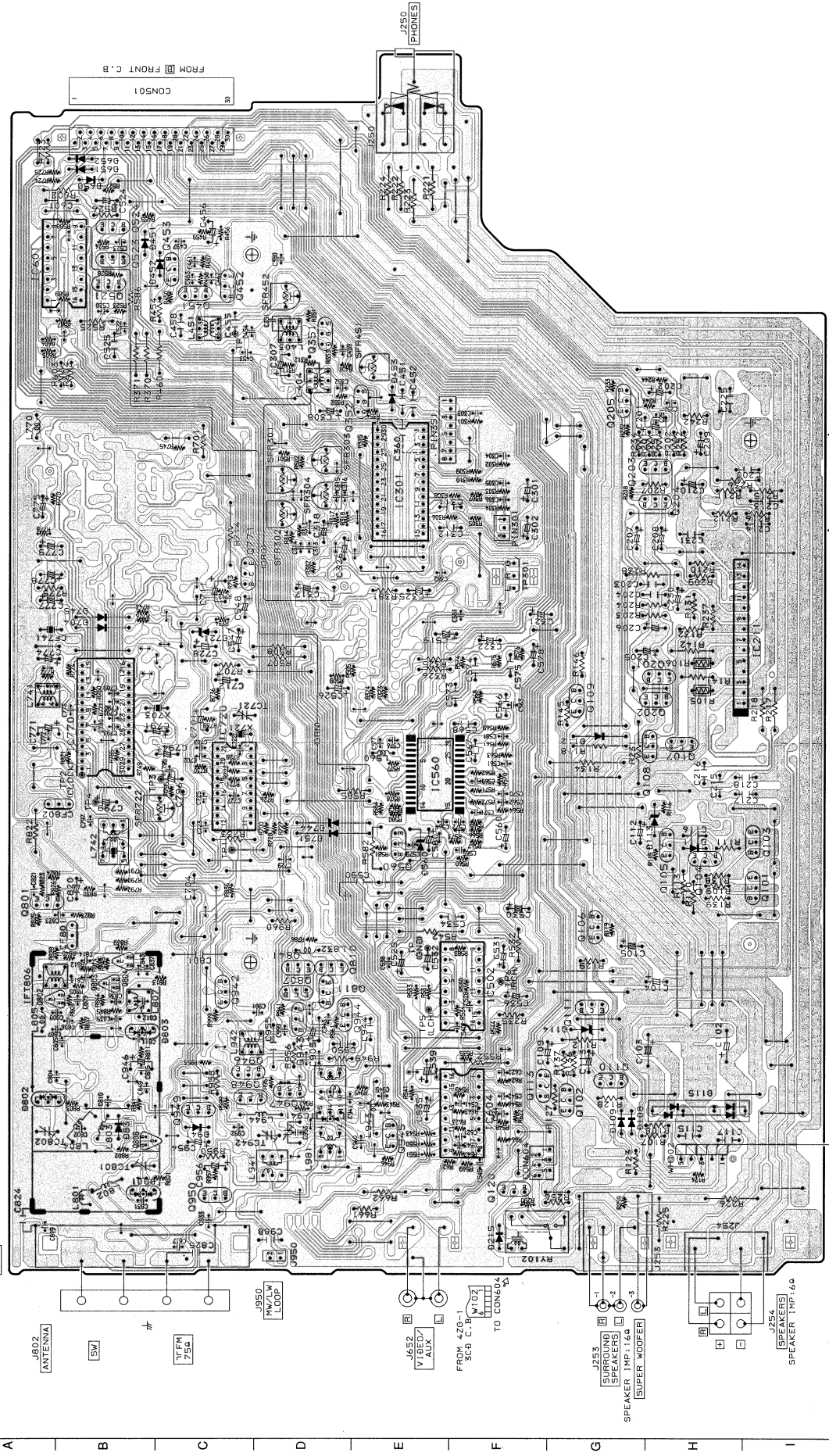




WIRING-1 (MAIN: HE, HR, HK)

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

A MAIN C.B

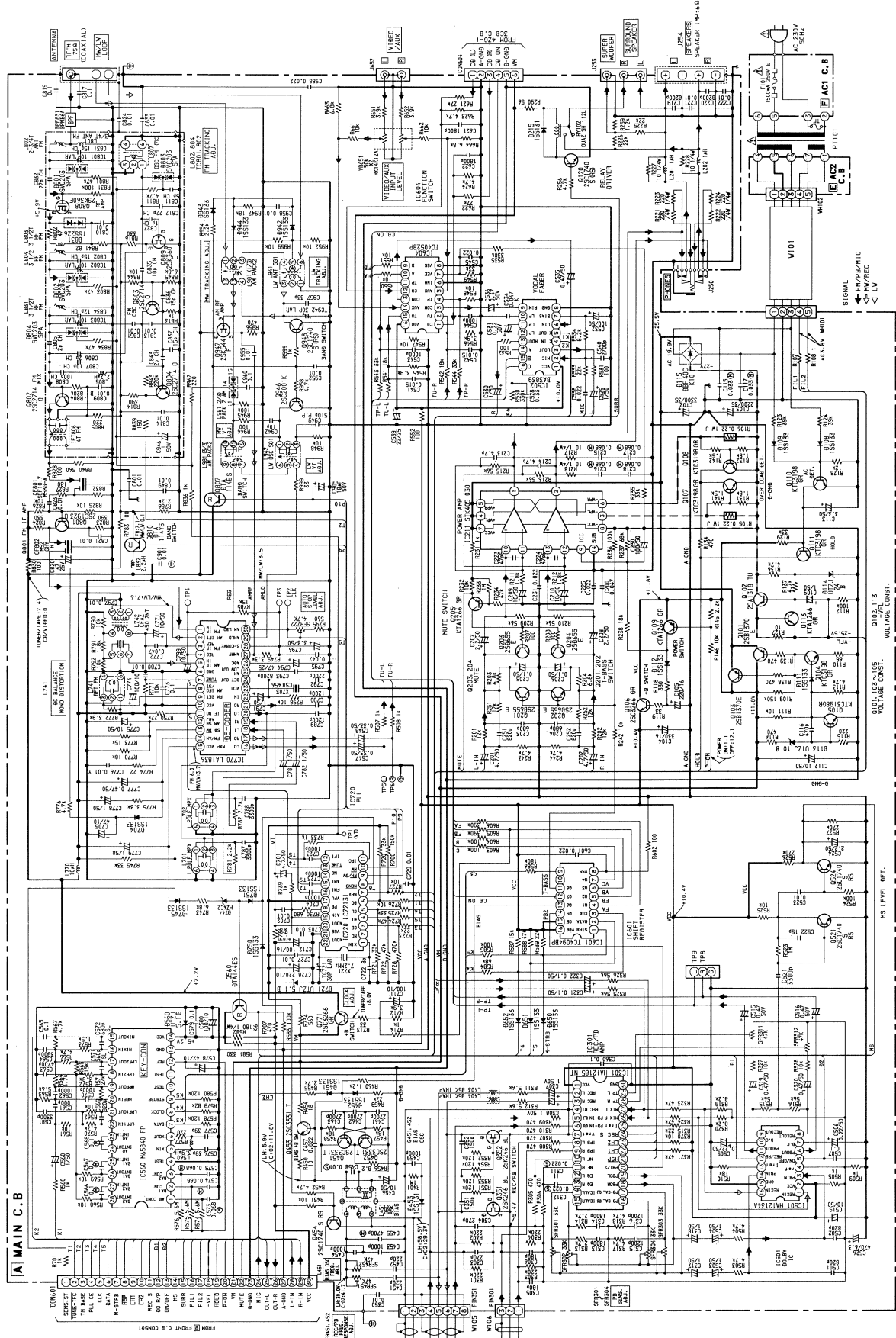


TO IC2 C.B.  
WH101  
W101  
GRY  
BLK  
GRY  
W101

TO PINS1  
W102  
FROM RELAY-1 C.B FROM RELAY-2 C.B

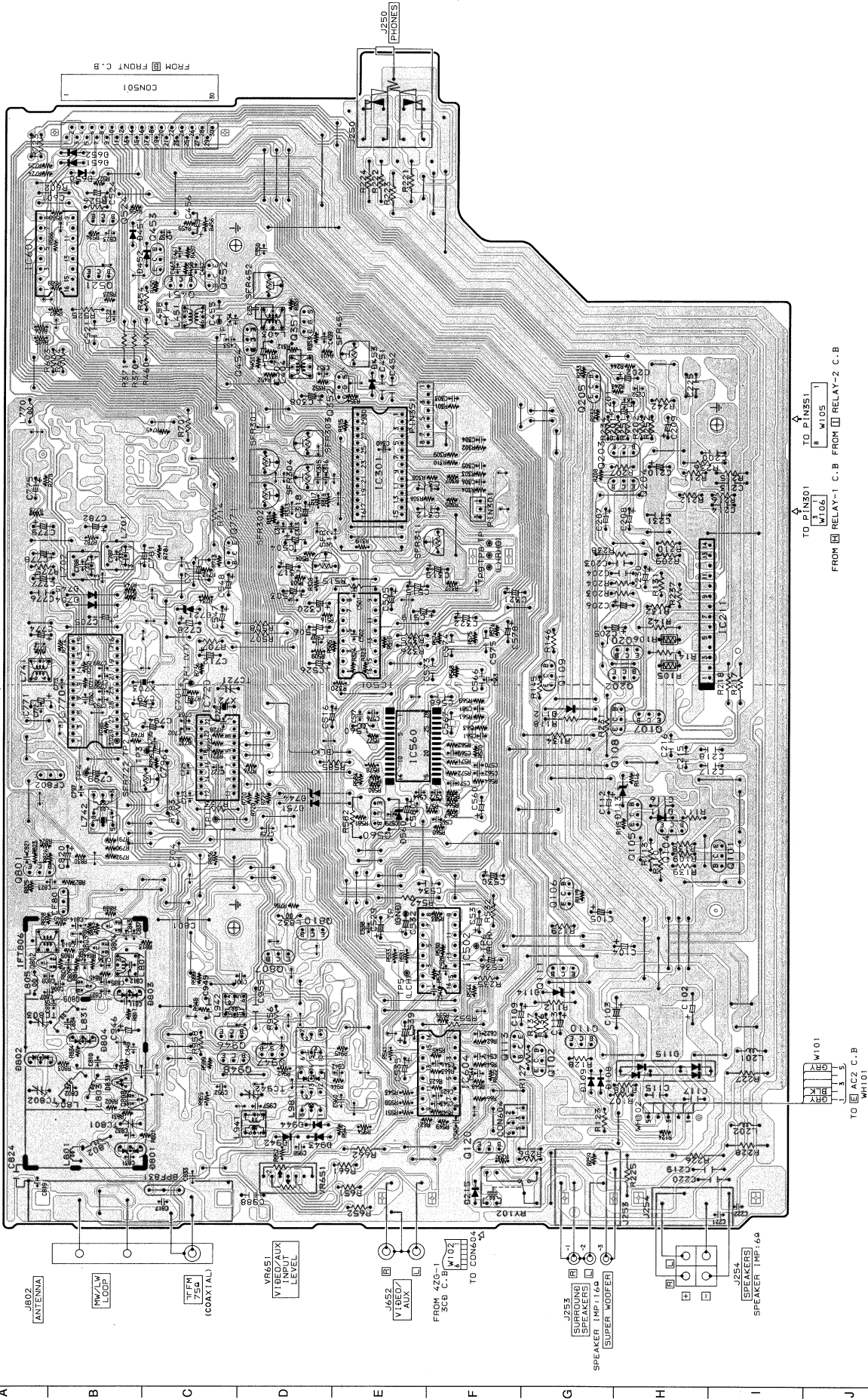


SCHEMATIC DIAGRAM-2 (MAIN: EEZ)



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

A MAIN C.B



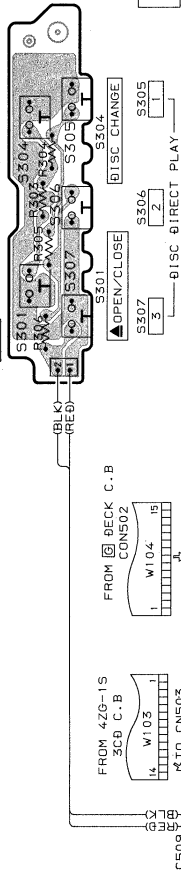
TO ACZ C.B  
WH101  
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WH91  
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TO PIN301  
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W2  
W1

FROM FRONT C.B  
CON501

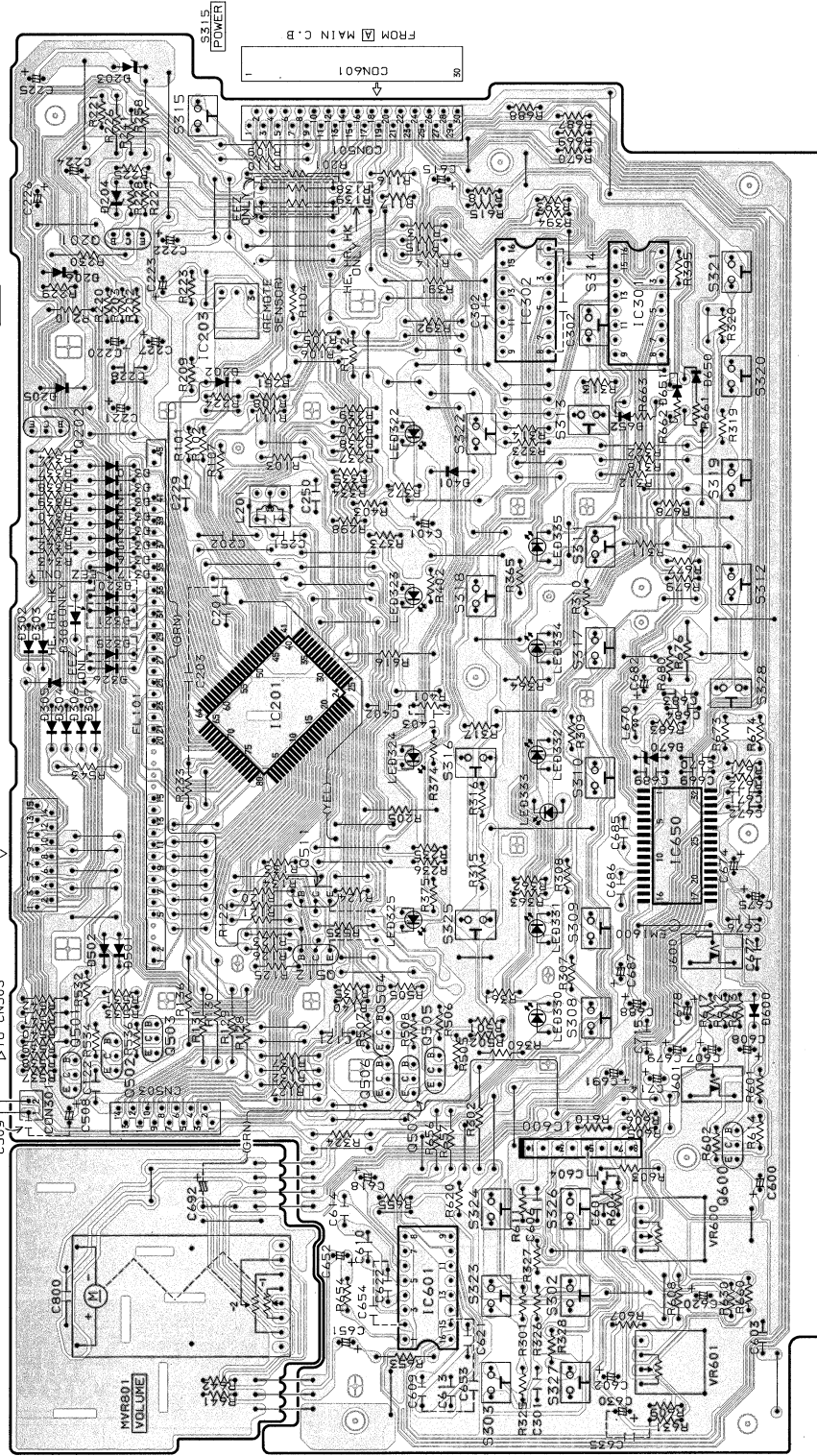
J250  
PHONES

KEY C.B.



FRONT C.B.

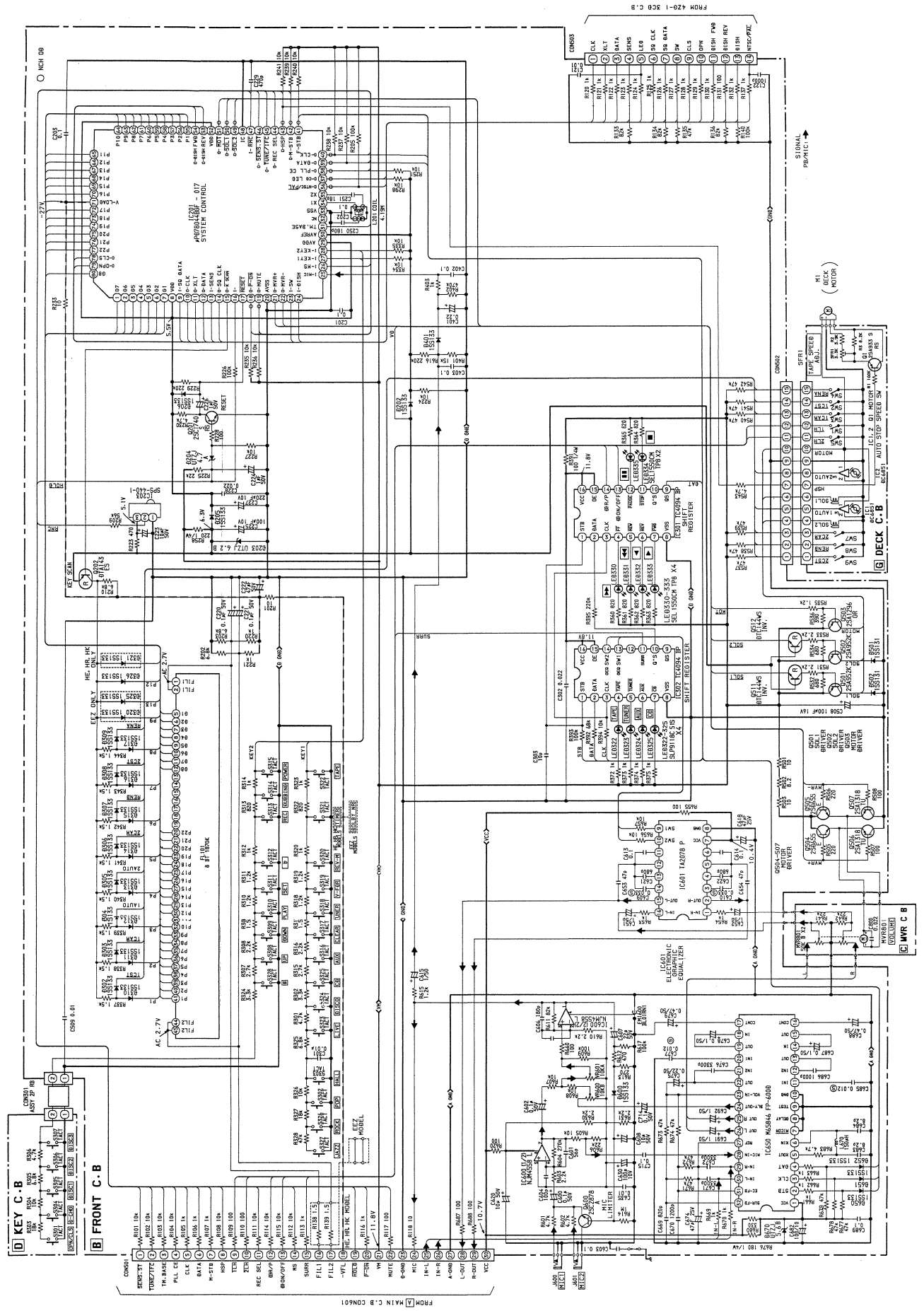
MVR C.B.



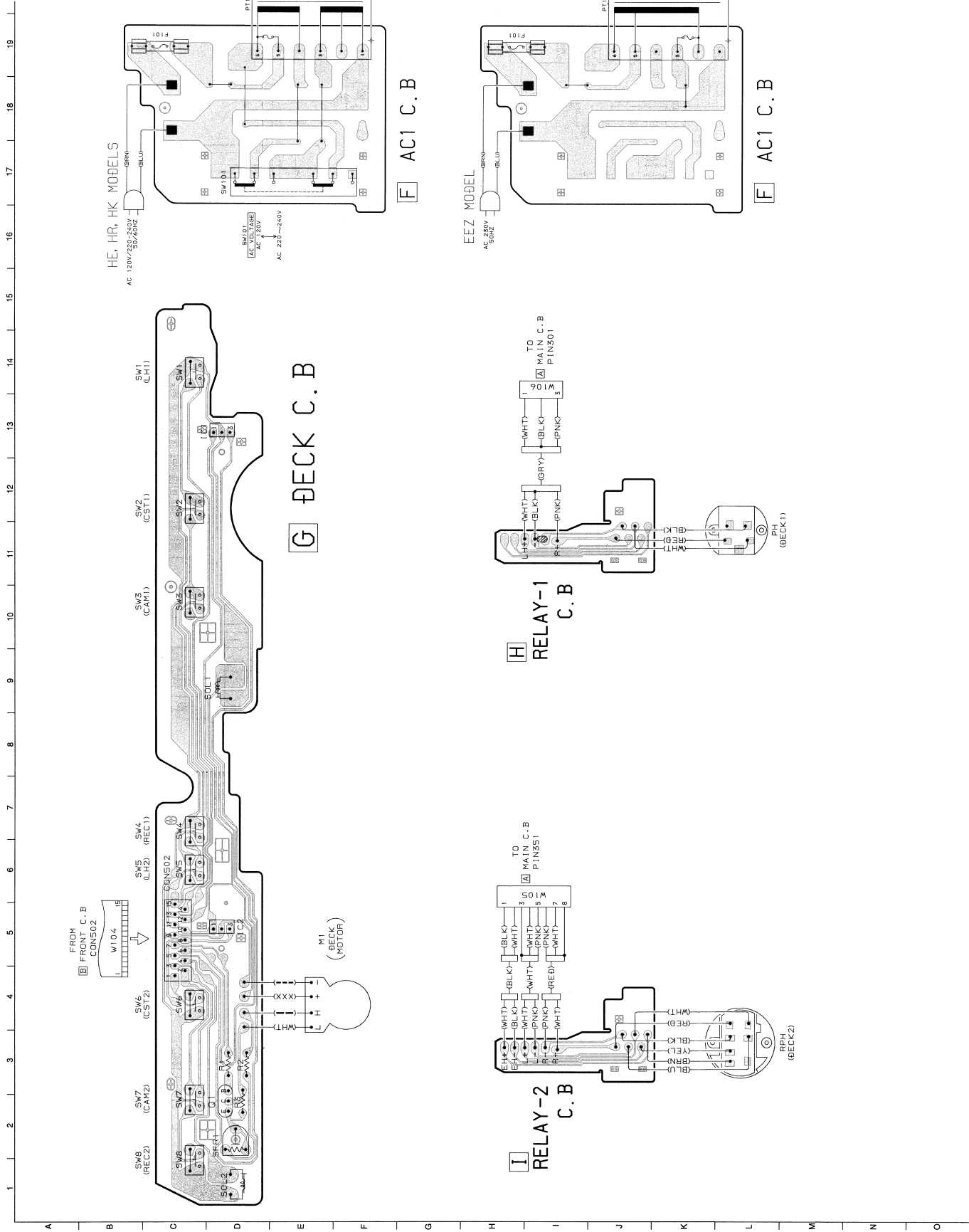
- FRONT SURROUND S324
- S303 HALL
- S323 LIVE
- ELECTRONIC GRAPHIC EQUALIZER 1 S302
- S327 JAZZ
- S326 POP
- VR600 DIGITAL ECHO
- VR601 MTX MIXING
- J401 MIC2
- J400 MIC1
- LE0330 UP
- S308 TUNING
- DOWN
- LE0325 CB
- LE0324 VIDEO/AUX
- LE0333
- LE0332
- LE0334 CLEAR
- LE0335 SET
- RECALL
- S315 RECALL
- S314 RUBBING
- NORMAL
- HE HR HK MODELS
- S320
- REV MODE (BECK2)
- S321
- DOLBY NR
- KEY CONTROL 1
- S319
- VOCAL FABER/ MULTIPLEX
- S312
- KARAOKE
- S328
- #
- LE0323 TUNER/BAND
- LE0324
- LE0325
- LE0326
- LE0327
- LE0328
- LE0329
- LE0330
- LE0331
- LE0332
- LE0333
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- LE0364
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- LE0380
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- LE0382
- LE0383
- LE0384
- LE0385
- LE0386
- LE0387
- LE0388
- LE0389
- LE0390
- LE0391
- LE0392
- LE0393
- LE0394
- LE0395
- LE0396
- LE0397
- LE0398
- LE0399
- LE0400



SCHEMATIC DIAGRAM-3 (FRONT)



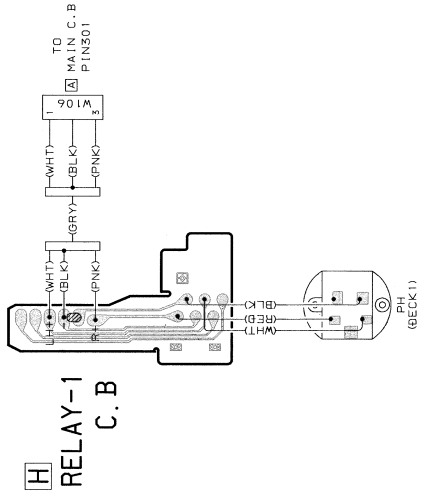
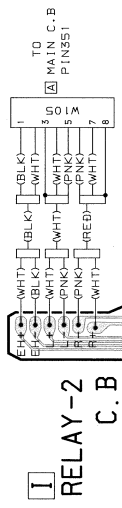
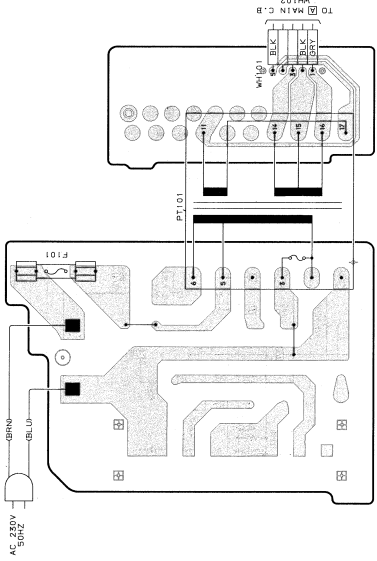
WIRING-4 (DECK / POWER)



**E AC1 C.B.**

**E AC2 C.B.**

EEZ MODEL



# IC DESCRIPTION

## IC, LC72131

Pin No.	Pin Name	I/O	Description																											
1	XI	-	A crystal oscillator (7.2MHz) is connected between these pins.																											
22	XO	-																												
2	NC	-	Not used.																											
3	CE	I	To enable the IC. Active "H".																											
4	DI	I	Digital data input from CPU (LC866432V-5751) 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-5751).																											
7	TM-BASE	O	Outputs a reference clock signal (8Hz) for the clock.																											
8	MONO/ST BEAT	O	Outputs "H" when MONO/ST BEAT is switched.																											
9	FM/SW1	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="4">4 BAND</th> </tr> <tr> <th>AM</th> <th>FM</th> <th>LW</th> <th>MW</th> <th>FM</th> <th>LW</th> <th>SW1</th> <th>SW2</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>H</td> <td>L</td> </tr> </tbody> </table>	2 BAND		3 BAND			4 BAND				AM	FM	LW	MW	FM	LW	SW1	SW2	FM	H	L	H	H	L	H	L	H	L
2 BAND		3 BAND			4 BAND																									
AM	FM	LW	MW	FM	LW	SW1	SW2	FM																						
H	L	H	H	L	H	L	H	L																						
10	MW/SW2	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="4">4 BAND</th> </tr> <tr> <th>AM</th> <th>FM</th> <th>LW</th> <th>MW</th> <th>FM</th> <th>LW</th> <th>SW1</th> <th>SW2</th> <th>FM</th> </tr> </thead> <tbody> <tr> <td>L</td> <td>L</td> <td>H</td> <td>L</td> <td>L</td> <td>H</td> <td>H</td> <td>L</td> <td>L</td> </tr> </tbody> </table>	2 BAND		3 BAND			4 BAND				AM	FM	LW	MW	FM	LW	SW1	SW2	FM	L	L	H	L	L	H	H	L	L
2 BAND		3 BAND			4 BAND																									
AM	FM	LW	MW	FM	LW	SW1	SW2	FM																						
L	L	H	L	L	H	H	L	L																						
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	AM-I	I	Receives the AM local oscillator frequency signal.																											
16	FM-I	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	Nch MOS transistor for PLL active low pass filter.																											
20	AOUT	O																												
21	VSS	-	Ground.																											

IC, M65840FP

Pin No.	Pin Name	I/O	Description
1	ADC	-	ADM A/D adaptive control.
2	DA1C	-	ADM D/A1 adaptive control.
3	DA2C	-	ADM D/A2 adaptive control.
4	TEST1	I	L: Normal function mode, H: test mode.
5	X-I	I	16MHz Ceramic resonator.
6	X-O	O	
7	DATA	I	Clocked serial bus data input.
8	CLK	I	Clocked serial bus clock input.
9	STB	I	Clocked serial bus strobe input.
10	TEST2	O	Test output.
11	TEST3	O	Test output.
12	REF	-	Analog 1/2Vcc, connect filter capacitor.
13	GND	-	Ground.
14	VCC	-	Nominally 5V.
15	M-O	O	Mixing key controlled low frequency signal and through outputted high frequency signal.
16	M-I	I	
17	LPF2-O	O	Forms post lowpass filter with external CR for digital key control.
18	LPF2-I	I	
19	HPF-O	O	Forms highpass filter with external CR for through outputting high frequency signal.
20	HPF-I	I	
21	LPF1-O	O	Forms pre lowpass filter with external CR for digital key control.
22	LPF1-I	I	
23	ADI-I	I	Forms integrator with external C.
24	ADI-O	O	
25	DA1I-I	I	Forms integrator with external C.
26	DA1I-O	O	
27	DA2I-I	I	Forms integrator with external C.
28	DA2I-O	O	

IC,  $\mu$ PD78044BGF-017

Pin No.	Pin Name	I/O	Description
1~7	G7 ~G1	O	Digit output for FL display.
8	VDD	-	Power supply terminal. (+5V)
9	I-SQDATA	I/O	CD IC control input/output.
10	O-CLK		
11	O-XLT		
12	O-DATA		
13	I-SENS		
14	O-SQCLK	I/O	Serial data output to control the signal processing IC for CD.
15	$\overline{\text{O-KSCAN}}$	I/O	Segment input permitted output. (Low active)
16	$\overline{\text{I-HOLD}}$	I/O	Power failure detected input. (Low when Hold)
17	$\overline{\text{RESET}}$	I	System reset input.
18	$\overline{\text{O-POWER}}$	I/O	System power supply ON/OFF output.
19	O-MUTE	I/O	System mute ON/OFF output.
20	AVSS	-	GND.
21	O-MVR +	I/O	Motor volume up output.
22	O-MVR -	I/O	Motor volume down output.
23	I-CD SW	I/O	CD Mechanical switch AD input.
24	I-DISH	I/O	CD turntable photo sensor A/D input.
25	I-MIC	I/O	Mic level A/D input for auto vocal fader.
26	I-MS	I/O	A/D input of key data from DECK button.
27	I-KEY 1	I/O	KEY1 A/D input.
28	I-KEY 2	I/O	KEY2 A/D input.
29	AVDD	-	Power supply terminal.
30	AVREF	I	Reference voltage. (+5V)
31	I-TMBASE	I	Input a reference clock signal (8Hz) to the clock.
32	NC	-	-
33	VSS	-	GND.
34	X1	I	4.19MHz clock oscillator input.
35	X2	-	4.19MHz clock oscillator input.
36	O-NTSC/PAL	O	CD graphic control signal. NTSC mode when "H" (+5V) is input.
37	O-CD LED	I/O	CD flash window LED ON/OFF output.
38	O-PLL	I/O	PLL IC chip enable output.
39	O-DATA	I/O	PLL shift register data output.
40	O-CLK	I/O	PLL shift register clock output.
41	O-FSTB	I/O	Shift register data latch strobe output.
42	O-MSTB	I/O	Shift register data latch strobe output.
43	O-HSP	I/O	Deck motor high speed ON/OFF output.
44	O-REC SEL	I/O	Deck recording input switch. (HiZ-RMT, H-MIX, L-TAPE)

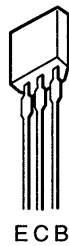
Pin No.		I/O	Description			
44	O-REC SEL	I/O	"HiZ" (MUTE)	"H" (MIX)	"L" (TAPE)	Dolby On : "L"(TAPE)
			REC muting	Manual dubbing	Synchronize dubbing	Dolby Off : "H" (MIX) Tuner/Aux/CD Recording
45	I-TUNE/IFT	I/O	SD detected input or serial data input of IF count to and from Tuner. (Active low)			
46	I-SENS ST	I/O	Stereo detected input to and from Tuner. (Active low)			
47	I-RMC	I/O	System remote controller input.			
48	IC	-	Internal connection. (connected to GND)			
49	O-SOL2	O	Mechanism solenoid drive control output to DECK 2. "L" when ON.			
50	O-SOL1	O	Mechanism solenoid drive control output to DECK 1. "L" when ON.			
51	O-MOTOR	O	Mechanism main motor drive control output to DECKS. "L" when ON.			
52	VDD	-	Power supply terminal. (+5V)			
53	O-DISH RVS	O	Mechanism 3 disc table drive control output to IC203. "H" during forward rotation.			
54	O-DISH FWD	O	Mechanism 3 disc table drive control output to IC203. "H" during reverse rotation.			
55 ~ 70	P1 ~ P16	O	Segment output for FL display.			
71	VLOAD	-	-27V power supply for FL pull down.			
72~77	P17~22	O	Segment output for FL display.			
78	O-CLOSE	O	CD tray close.			
79	O-OPEN	O	CD tray open.			
80	G8	O	Digit output for FL display.			

### TRANSISTOR ILLUSTRATION



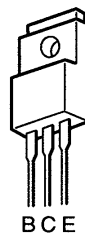
ECB

2SA933    2SC3266  
 2SA952    2SC3331  
 2SA1296   2SD655  
 2SA1318   KTA1266  
 2SC1923   KTC3198  
 2SC2878



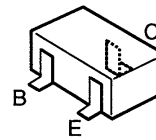
ECB

2SC1740S  
 DTA114ES  
 DTA114YS  
 DTA143ES  
 DTA144ES  
 DTC144WS



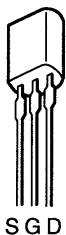
BCE

2SB1370



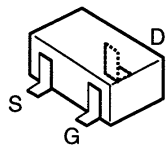
C

2SC2714



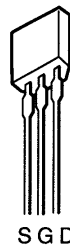
SGD

2SK246



S

2SK360

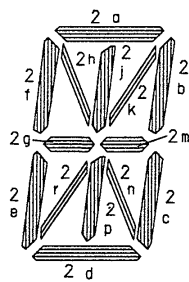
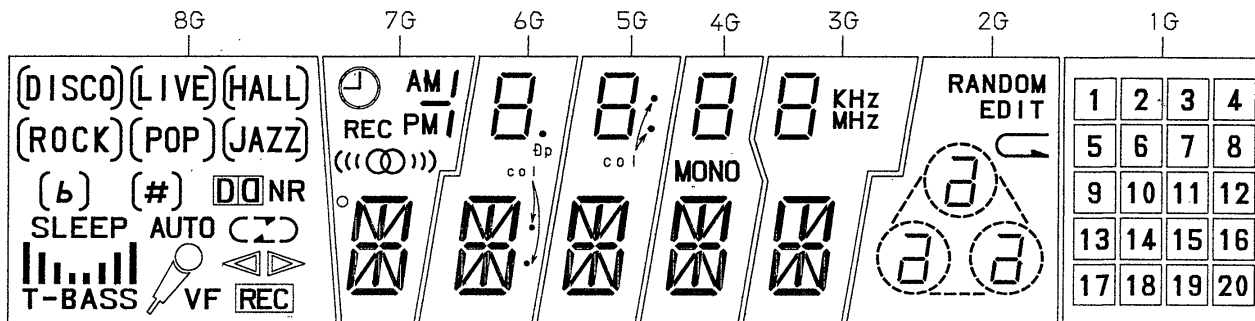


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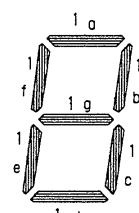
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# FL DISPLAY (8-BT-187GK) GRID ASSIGNMENT / ANODE CONNECTION

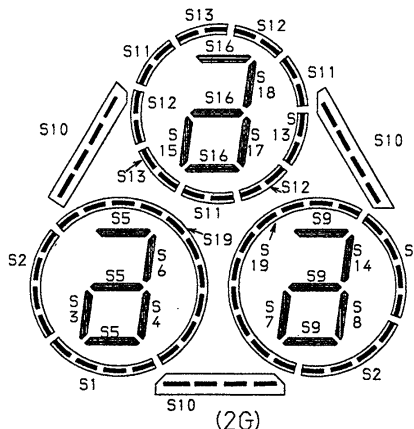
## GRID ASSIGNMENT



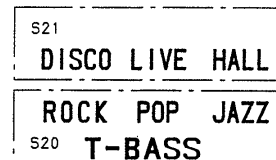
(7G ~ 3G)



(6G ~ 3G)



(2G)

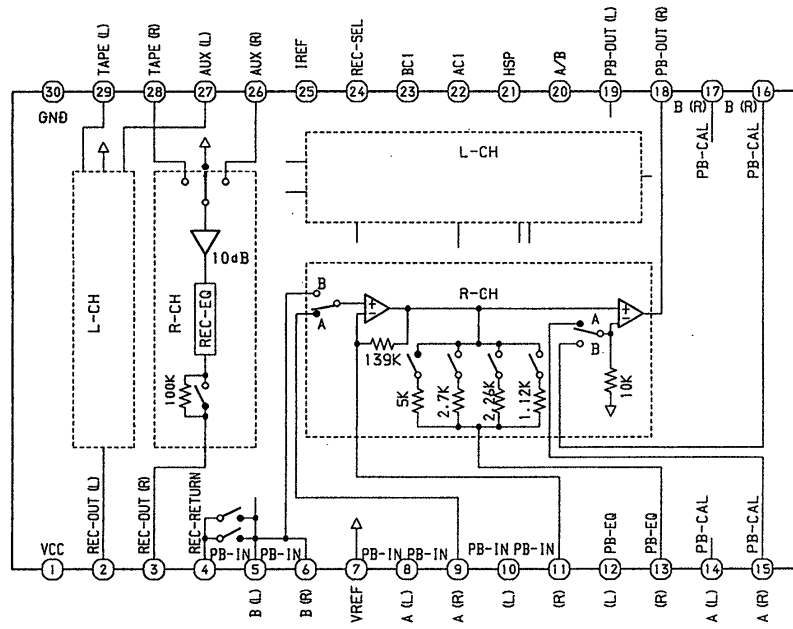


(8G)

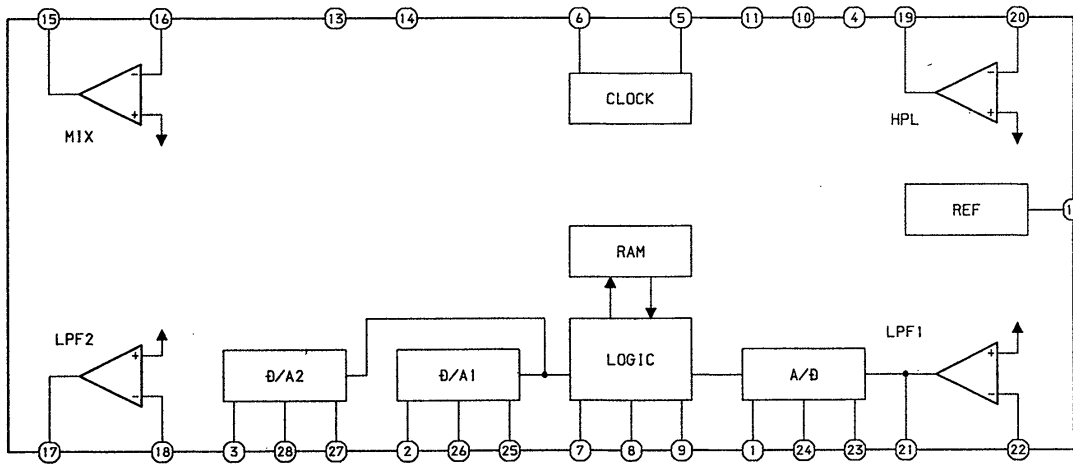
## ANODE CONNECTION

	8G	7G	6G	5G	4G	3G	2G	1G
P1	SLEEP	2d	2d	2d	2d	2d	S1	20
P2		2j, 2p	2j, 2p	2j, 2p	2j, 2p	2j, 2p	S2	19
P3	( ) <sub>(b)</sub>	2n	2n	2n	2n	2n	S3	18
P4	AUTO	2r	2r	2r	2r	2r	S4	17
P5	VF	2c	2c	2c	2c	2c	S5	16
P6	(DISCO)	2e	2e	2e	2e	2e	S6	15
P7	(LIVE)	2m	2m	2m	2m	2m	S7	14
P8	(HALL)	2g	2g	2g	2g	2g	S8	13
P9	REC	2f	2f	2f	2f	2f	S9	12
P10	( ) <sub>(#)</sub>	2b	2b	2b	2b	2b	S10	11
P11	b #	2k	2k	2k	2k	2k	S11	10
P12	◁	2h	2h	2h	2h	2h	S12	9
P13	▷	2a	2a	2a	2a	2a	S13	8
P14	C	○	col	col (T)	MONO	MHZ	S14	7
P15	↔	((⊙))	∅p	col (L)	-	KHZ	S15	6
P16	)	REC	1d	1d	1d	1d	S16	5
P17	DNR	⌚	1e	1e	1e	1e	S17	4
P18	(ROCK)	PM	1c	1c	1c	1c	S18	3
P19	(POP)	AM	1g	1g	1g	1g	S19	2
P20	(JAZZ)	-	1f	1f	1f	1f	↶	1
P21	S20	/	1b	1b	1b	1b	EDIT	⌨
P22	S21	-	1a	1a	1a	1a	RANDOM	-

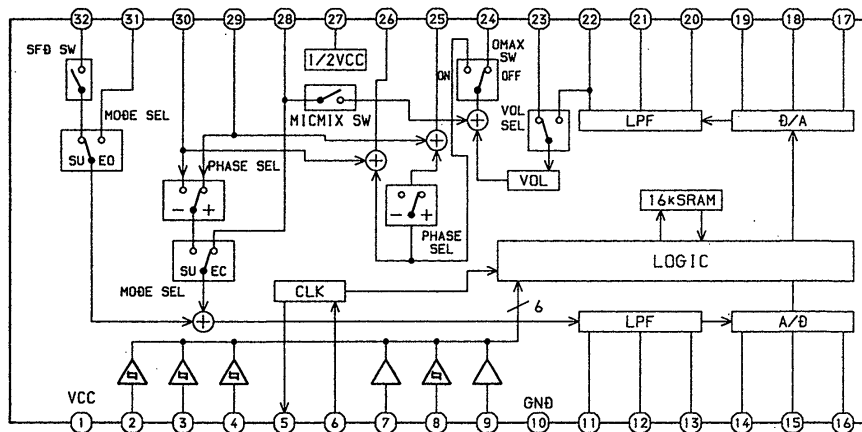
IC, HA12185NT



IC, M65840FP

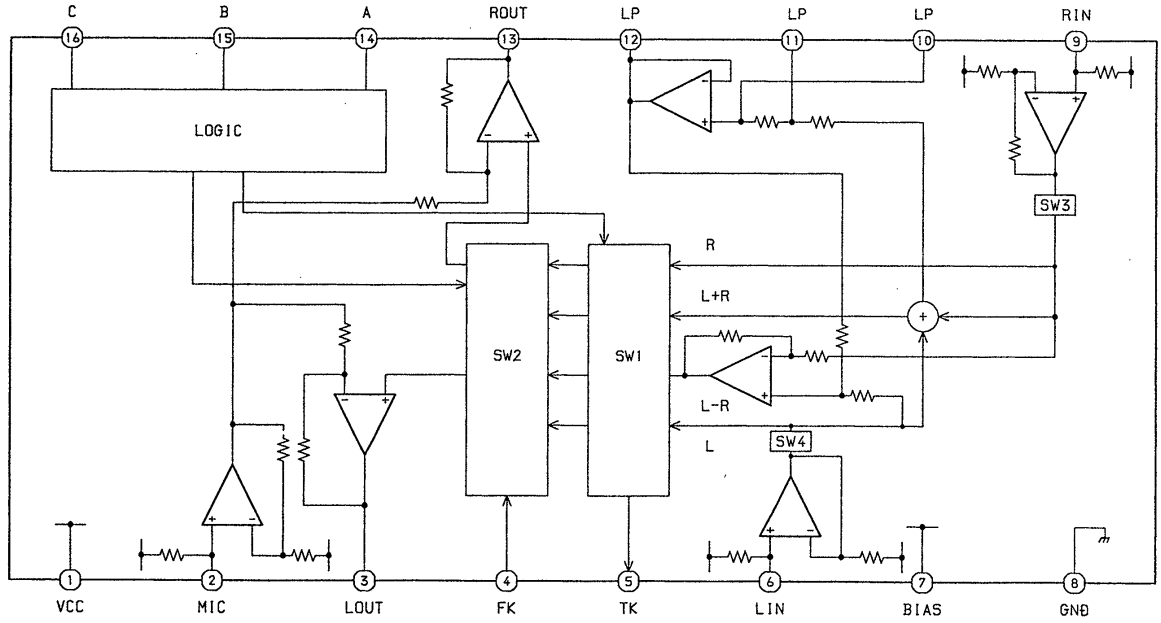


IC, M65846FP-600D

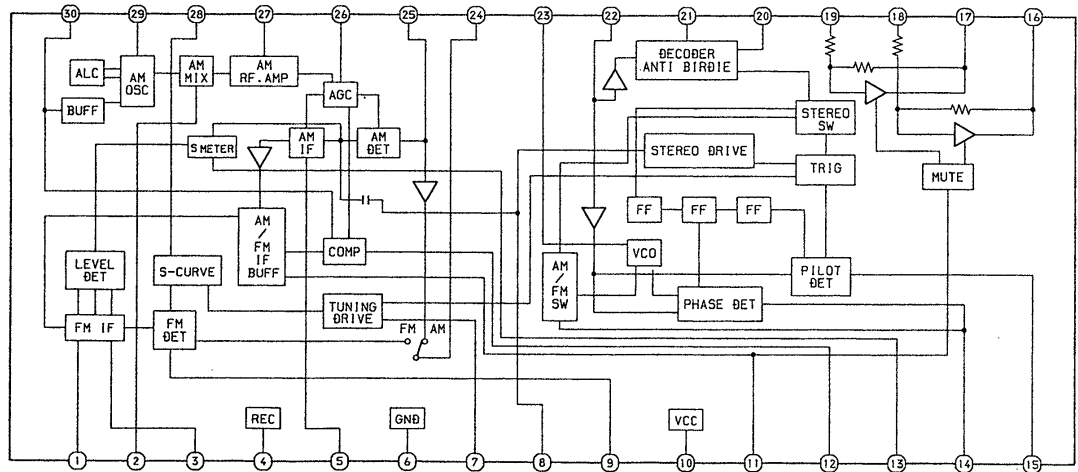




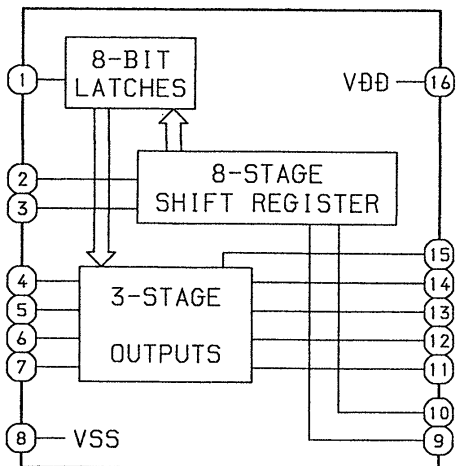
IC, BA3839



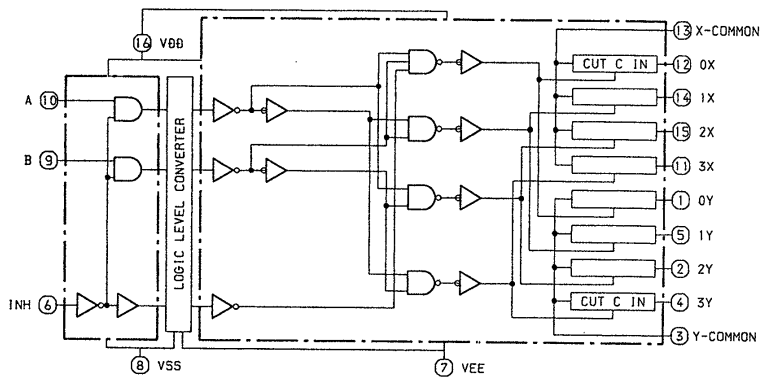
IC, LA1836



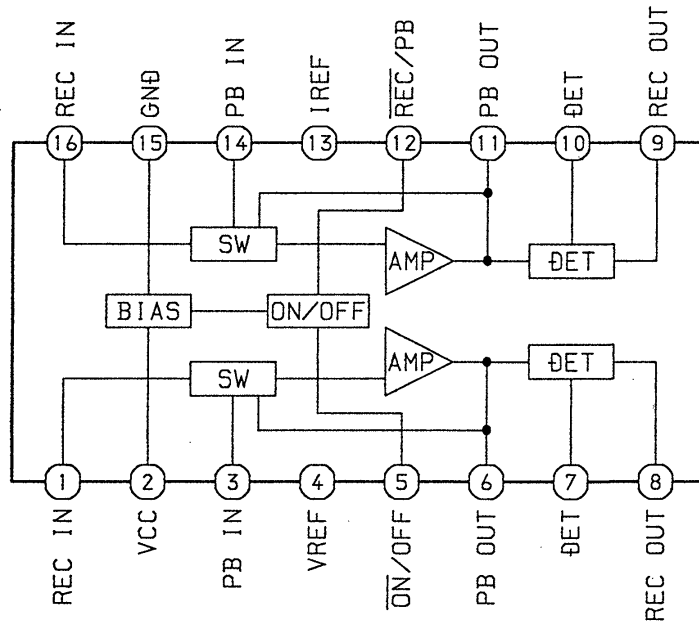
IC, TC4094BP



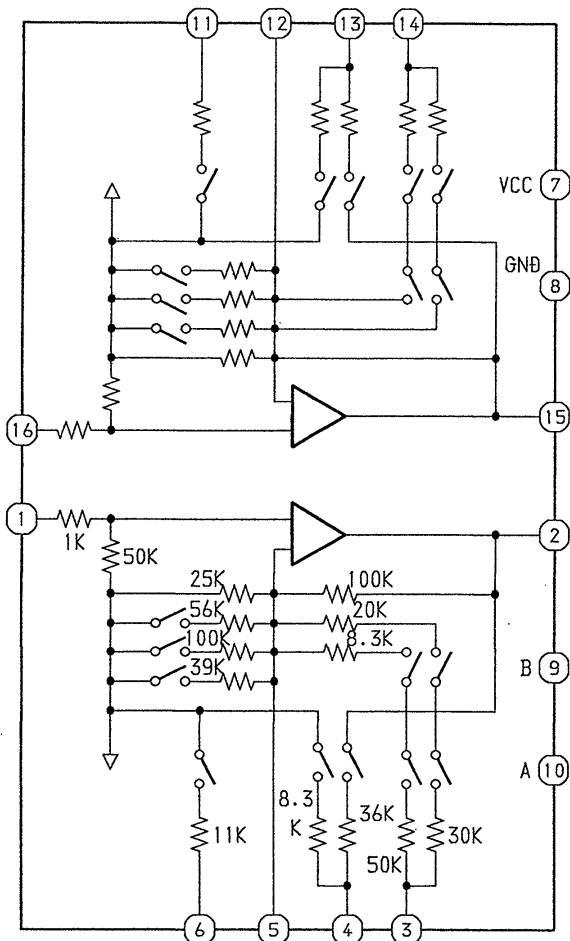
IC, TC4052BP



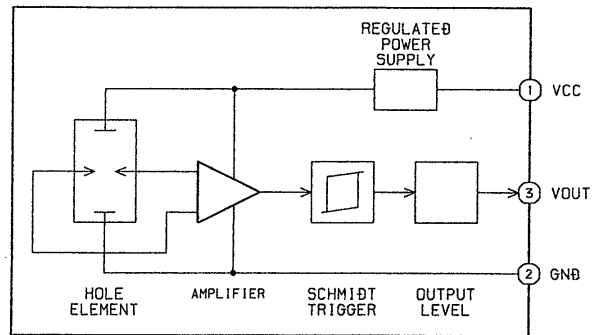
IC, HA12134A



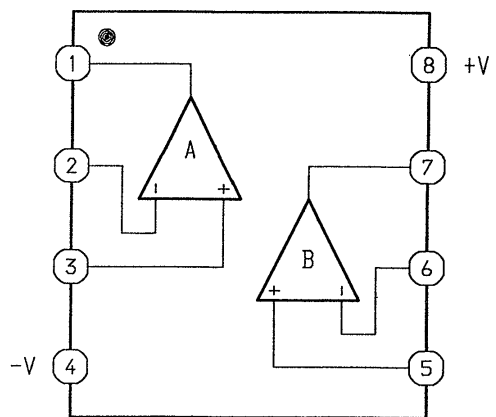
IC, TA2078P



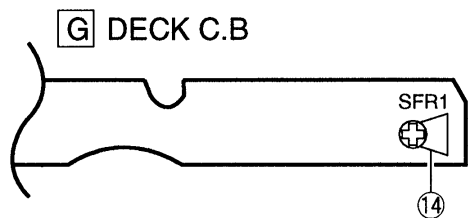
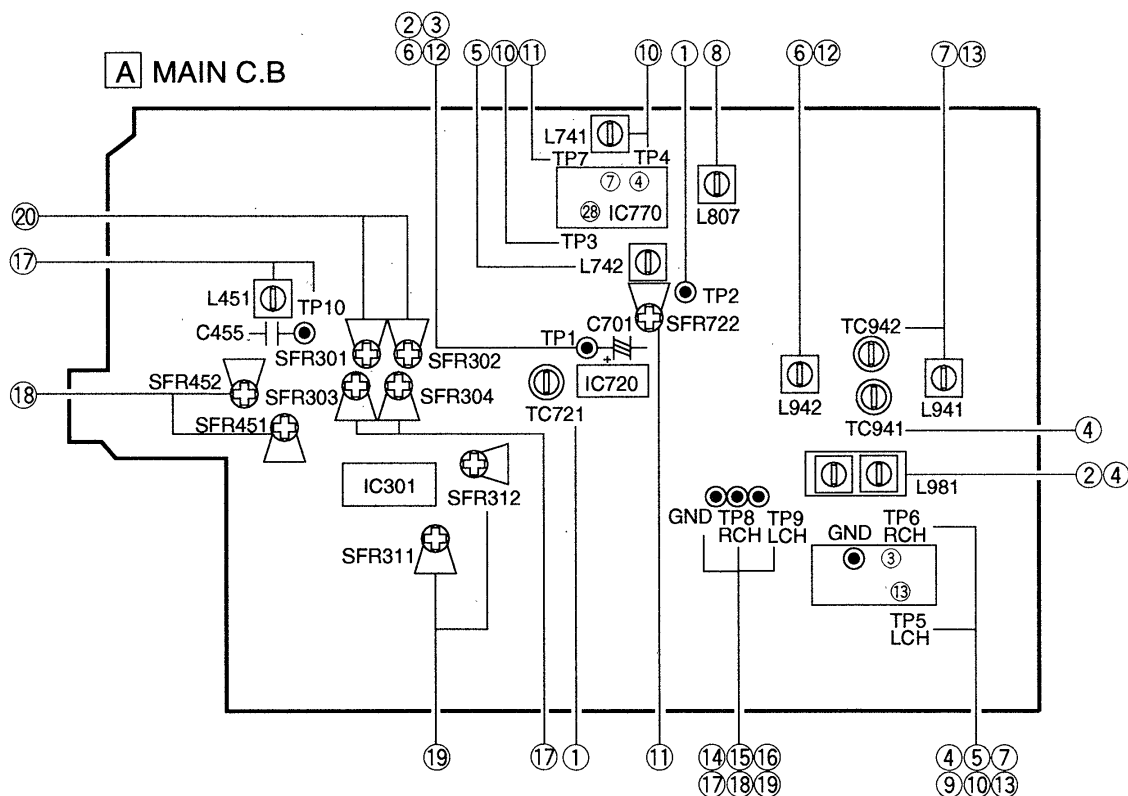
IC, DN6851



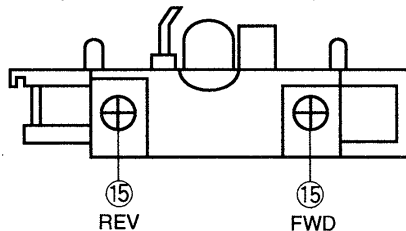
IC, NJM4558L



# ELECTRICAL ADJUSTMENT



DECK1 P DECK 2 R/P/E HEAD



## <TUNER SECTION>

### 1. Clock Frequency Adjustment

- Settings: · Test point : TP2
- Adjustment location : TC721

Method: Set to MW 1710kHz(HE,HR,HK), 1602kHz (EEZ) and adjust TC721 so that the test point becomes 2160kHz±0.01kHz (HE,HR,HK), 2052kHz±0.01kHz (EEZ).

### 2. MW VT Adjustment<HE,HR,HK>

- Settings: · Test point : TP1(VT)
- Adjustment location : L981

Method: Set to MW 1710kHz and adjust L981 so that the test point becomes 8.5V±0.05V. Then set to MW 530kHz and check that the test point is more than 0.3V.

### 3. MW VT Check<EEZ>

- Setting: · Test point : TP1(VT)
- Method: Set to MW 1602kHz and check that the test point is 6.8V±1.0V.

### 4. MW Tracking Adjustment

- Settings: · Test point : TP5(Lch), TP6(Rch)
- Adjustment location :  
L981 ..... 600kHz  
TC941 ..... 1400kHz

Method: <HE,HR,HK>

Set up TC941 to center before adjustment. The level at 600kHz is adjusted to MAX by L981. Then the level at 1400kHz is adjusted to MAX by TC941.

<EEZ>

Set to MW 600kHz and adjust L981 so that the test point becomes maximum. Then set to MW 1400kHz and adjust TC941 so that the test point becomes maximum.

### 5. AM IF Adjustment

- Setting: · Test point : TP5(Lch), TP6(Rch)
- L742 ..... 999kHz(EEZ)
- L742 ..... 1000kHz(HE,HR,HK)
- Method: Set to MW 999kHz(EEZ), 1000kHz(HE,HR,HK) and adjust L742 so that the test point becomes maximum.

6. SW VT Adjustment<HE,HR,HK>  
 Settings: · Test point : TP1(VT)  
 · Adjustment location : L942  
 Method: Set to SW 17.9MHz and adjust L942 so that the test point becomes  $8.0V \pm 0.05V$ .
7. SW Tracking Adjustment<HE,HR,HK>  
 Settings: · Test point : TP5(Lch), TP6(Rch)  
 · Adjustment location :  
 L941 ..... 5.95MHz  
 TC942 ..... 17.9MHz  
 Method: Set up TC942 to center before adjustment. The level at 5.95MHz is adjusted to MAX by L941. Then the level at 17.9MHz is adjusted to MAX by TC942.
8. FM VT Adjustment  
 Settings: · Test point : TP1(TV)  
 · Adjustment location : L807  
 Method: Set to FM 87.5MHz and adjust L807 so that the test point is  $1.7V \pm 0.05V$ .
9. FM Tracking Check  
 Setting: Test point : TP5(Lch), TP6(Rch)  
 Method: Check that the test point is  $4 \pm 6dB$ (HE,HR,HK),  $9 \pm 6dB$ (EEZ) and distortion is less than 3% at FM 98.0MHz.
10. DC Balance/MONO Distortion Adjustment  
 Settings: · Test point : TP3,TP4 (DC Balance)  
 TP5(Lch), TP6(Rch) (Distortion)  
 · Adjustment location : L741  
 · Input level : 54dB  
 Method: Set to FM 98.0MHz and adjust L741 so that the voltage between TP3 and TP4 becomes  $0V \pm 0.04V$ .  
 Next check that the distortion is less than 1.3%.
11. Auto Stop Level Adjustment  
 Settings: · Test point : TP7  
 · Adjustment location : SFR722  
 · Input level : 18dB(HE,HR,HK)  
 · Input level : 20dB(EEZ)  
 Method: Set to FM 98.0MHz and adjust voltage low (about 0.01V) by SFR722. After that voltage high(about 7.0V) out by 2dB down.
12. LW VT Adjustment<EEZ>  
 Settings: · Test point : TP1(VT)  
 · Adjustment location : L942  
 Method: Set to LW 144kHz and adjust L942 that the test point becomes  $1.50V \pm 0.05V$ .
13. LW Tracking Adjustment<EEZ>  
 Settings: · Test point : TP5(Lch), TP6(Rch)  
 · 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.

<TAPE SECTION>

14. Tape Speed Adjustment  
 Settings: · Test tape : TTA-100  
 · Test point : TP8,TP9  
 · Adjustment location : SFR1  
 Method: Play back the test tape by DECK 2 and adjust SFR1 so that the frequency counter reads  $3000Hz \pm 5Hz$ .
15. 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.
16. PB Sensitivity Response Check (DECK1, DECK2)  
 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 is with respect to that of the 315Hz signal is 2dB.
17. PB Sensitivity Adjustment (DECK1, DECK2)  
 Settings: · Test tape : TTA-200  
 · Test point : TP8,TP9  
 · Adjustment location : (DECK1)  
 SFR301 (Lch)  
 SFR302 (Rch)  
 (DECK2)  
 SFR303 (Lch)  
 SFR304 (Rch)  
 Method: Play back the test tape and adjust SFRs so that the output level of the test point becomes 300mV.
18. 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 signal and adjust SFRs so that the output level of 10kHz signal becomes  $0dB \pm 0.5dB$  with respect to that of the 1kHz signal.
19. REC/PB Sensitivity Adjustment <EEZ>  
 Settings: · Test tape : TTA-602  
 · Test point : TP8,TP9  
 · Input signal : 1kHz/10kHz (LINE IN)  
 · Adjustment location : SFR311 (Lch)  
 SFR312 (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 signal and adjust SFRs so that the output level is  $21mV \pm 0.5dB$ .
20. Bias OSC Frequency Adjustment  
 Settings: · Test tape : TTA-601  
 · Test point : TP10(C455)  
 · 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 50dB Quieting sensitivity:	35dB±5dB (87.5 / 98.0 / 108.0MHz)
Signal to noise ratio:	More than 64dB(98.0MHz)
Distortion:	Less than 2.0%(98.0MHz)
Stereo separation:	More than 25dB(98.0MHz) (HE,HR,HK) More than 20dB(98.0MHz) (EEZ)
Intermediate frequency:	10.7MHz

### <MW SECTION>

Sensitivity:	58dB±6dB(603kHz)
(S/N 20dB)	56dB±6dB(999/1404kHz)
Distortion:	Less than 1.5%(999kHz)
Stereo separation:	More than 12dB(1000kHz)
Intermediate frequency:	450kHz

### <SW SECTION> (HE,HR,HK)

Sensitivity:	37~45dB(5.95MHz)
(S/N 20dB)	30~38dB(12MHz) 30~38dB(17.97MHz)
Distortion:	More than 1.5%(12MHz)
Intermediate frequency:	450kHz

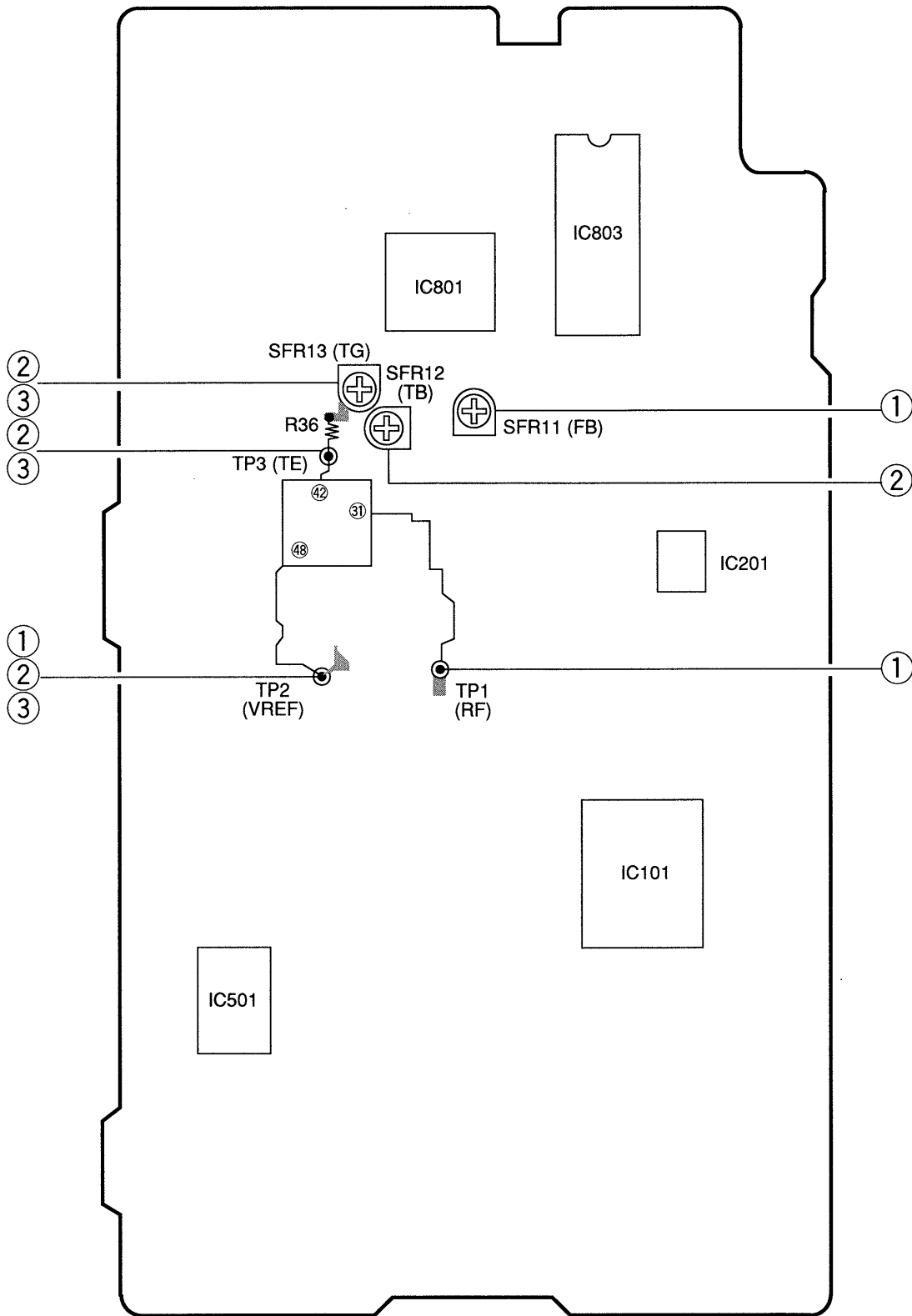
### <LW SECTION> (EEZ)

Sensitivity:	68dB±5dB(144kHz)
(S/N 20dB)	65dB±5dB(198/290kHz)
Distortion:	Less than 1.5%(198kHz)
Intermediate frequency:	450kHz

## TAPE SECTION

Tape speed:	3000Hz±45Hz
Wow & flutter:	Less than 0.4%(RMS)
Take-up torque:	25~55g-cm(FWD, REV)
F.F torque:	75~180g-cm
Rew torque:	75~180g-cm
Back tension:	2.0~7.0g-cm
PB Output level:	2.6V±3dB(HE,HR,HK) 2.7V±3dB(EEZ)
REC / PB Output level:	2.0V±3dB(SP OUT)
Distortion(REC / PB):	Less than 3.0%(NORM,CrO <sub>2</sub> )
Nois level(PB):	Less than 15mV(HE,HR,HK) Less than 8mV(EEZ) (DOLBY NR ON/OFF CrO <sub>2</sub> , Vol MAX.) Less than 20mV(HE,HR,HK) Less than 12mV(EEZ) (DOLBY NR ON/OFF NORM, Vol MAX.) Less than 15mV(HE,HR,HK) Less than 9mV(EEZ) (DOLBY NR ON/OFF CrO <sub>2</sub> ) Less than 20mV(HE,HR,HK) Less than 13mV(EEZ) (DOLBY B NR ON/OFF NORM)
Nois level(REC / PB):	Less than 15mV(HE,HR,HK) Less than 9mV(EEZ) (DOLBY NR ON/OFF CrO <sub>2</sub> ) Less than 20mV(HE,HR,HK) Less than 13mV(EEZ) (DOLBY B NR ON/OFF NORM)
Crosstalk:	More then 60dB(1kHz, 0VU)
Erasing ratio:	More then 60dB(125Hz)
Channel separation:	More then 40dB(1kHz, 0VU)
Test tape:	NORMAL TTA-602 CrO <sub>2</sub> TTA-610

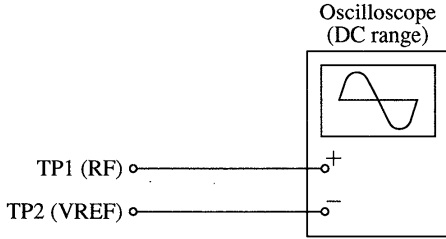
**A** 3CD C.B



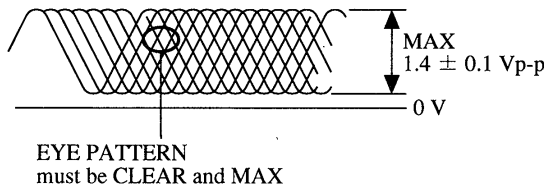
Note: Connect a probe (10: 1) of the oscilloscope or the frequency counter to a test point.

### 1. Focus Bias Adjustment

Make the focus bias adjustment when replacing and repairing the optical block.

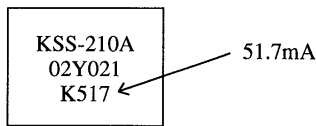


- 1) Connect an oscilloscope to test points TP1 (RF) and TP2 (VREF).
- 2) Turn on the power switch.
- 3) Insert test disc TCD-782 (YEDS-18) and play back the second composition.
- 4) Adjust SFR11 so that RF signal of test point TP1 (RF) is MAX and CLEARREST.



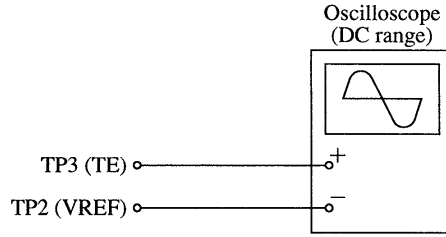
VOLT/DIV : 0.5 V  
TIME/DIV : 1  $\mu$  S

Note: The current of the laser signal can be checked with the voltages on both sides of R28 (10 $\Omega$ ). The difference for the specified value shown on the level must be within  $\pm$  6.0mA.

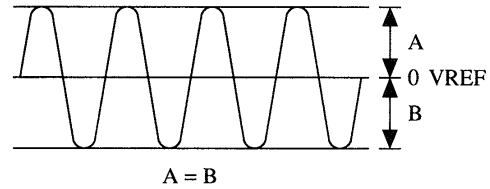


$$\text{Laser current } I_{op} = \frac{\text{Voltage across R28}}{10\Omega}$$

### 2. Tracking Balance Adjustment



- 1) Connect an oscilloscope to test points TP3 (TE) and TP2 (VREF).
- 2) Turn on the power switch.
- 3) Insert test disc TCD-782 (YEDS-18) and press the PLAY button.
- 4) Connect the intermediate point of SFR13 to TP2 (VREF).
- 5) Adjust SFR12 so that the waveform on the oscilloscope is vertically symmetrical as shown in the figure below.
- 6) After the adjustment is completed, remove the connected lead wires from the terminals.



VOLT/DIV : 200mV  
TIME/DIV : 1mS

### 3. Tracking Gain Adjustment

A servo analyzer is necessary in order to perform this adjustment exactly. However, this gain has a margin, so even if it is slightly off, there is no problem. Therefore, do not perform this adjustment.

Focus/tracking gain determines the pick-up follow-up (vertical and horizontal) relative to mechanical noise and mechanical shock when 2-axis device operates. However, as these reciprocate, the adjustment is at the point where both are satisfied.

- When gain is raised, the noise increases when the 2-axis device operates.
- When gain is lowered, it is more susceptible to mechanical shock and skipping occurs more easily.

When the gain adjustment is off, the symptoms below appear.

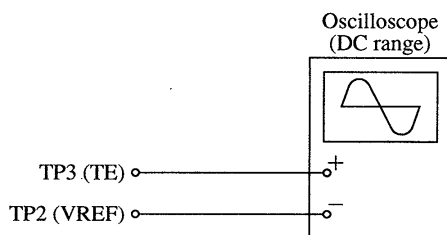
Symptoms \ Gain	(Focus)	Tracking
● The time until music starts becomes longer for STOP → ▶PLAY or automatic selection (◀◀, ▶▶ buttons pressed.) (Normally takes about 2 seconds.)	low	low or high
● Music does not start and disc continues to rotate for STOP → ▶PLAY or automatic selection (◀◀, ▶▶ buttons pressed.)	—	low
● Disc stops to rotate shortly after STOP → ▶PLAY.	low or high	—
● Sound is interrupted during PLAY. Or time counter display stops.	—	low
● More noises during the 2-axis device operation.	high	high

The following is simple adjustment method.

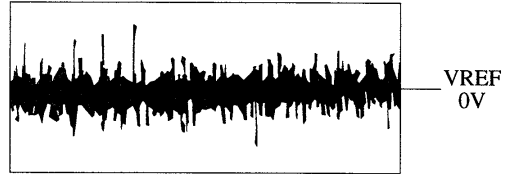
— Simple adjustment —

Note: Since the exact adjustment cannot be performed, remember the positions of the controls before the performing the adjustment. If the positions after the simple adjustment are only a little different, return the controls to the original position.

Procedure:



- 1) Keep the set horizontal. (If the set is not kept horizontally, this adjustment cannot be performed due to the gravity against the 2-axis device.)
- 2) Insert test disc TCD-782 (YEDS-18) and play back the second composition.
- 3) Connect an oscilloscope to TP3 (TE), TP2 (VREF) of the CD C.B.
- 4) Adjust SFR13 so that the waveform appears as shown in the figure below. (tracking gain adjustment)

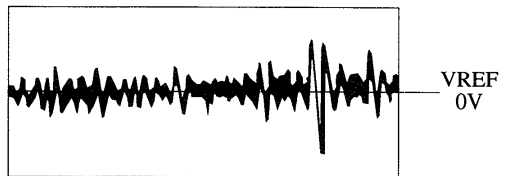


VOLT/DIV: 50 mV  
TIME/DIV: 1 mS

- Incorrect example

Low tracking gain

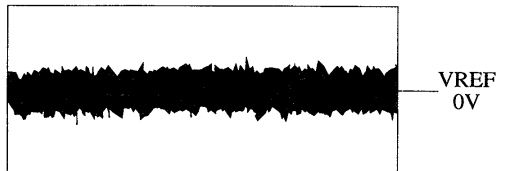
The fundamental wave appears as compared with the waveform adjusted.



VOLT/DIV: 50 mV  
TIME/DIV: 1 mS

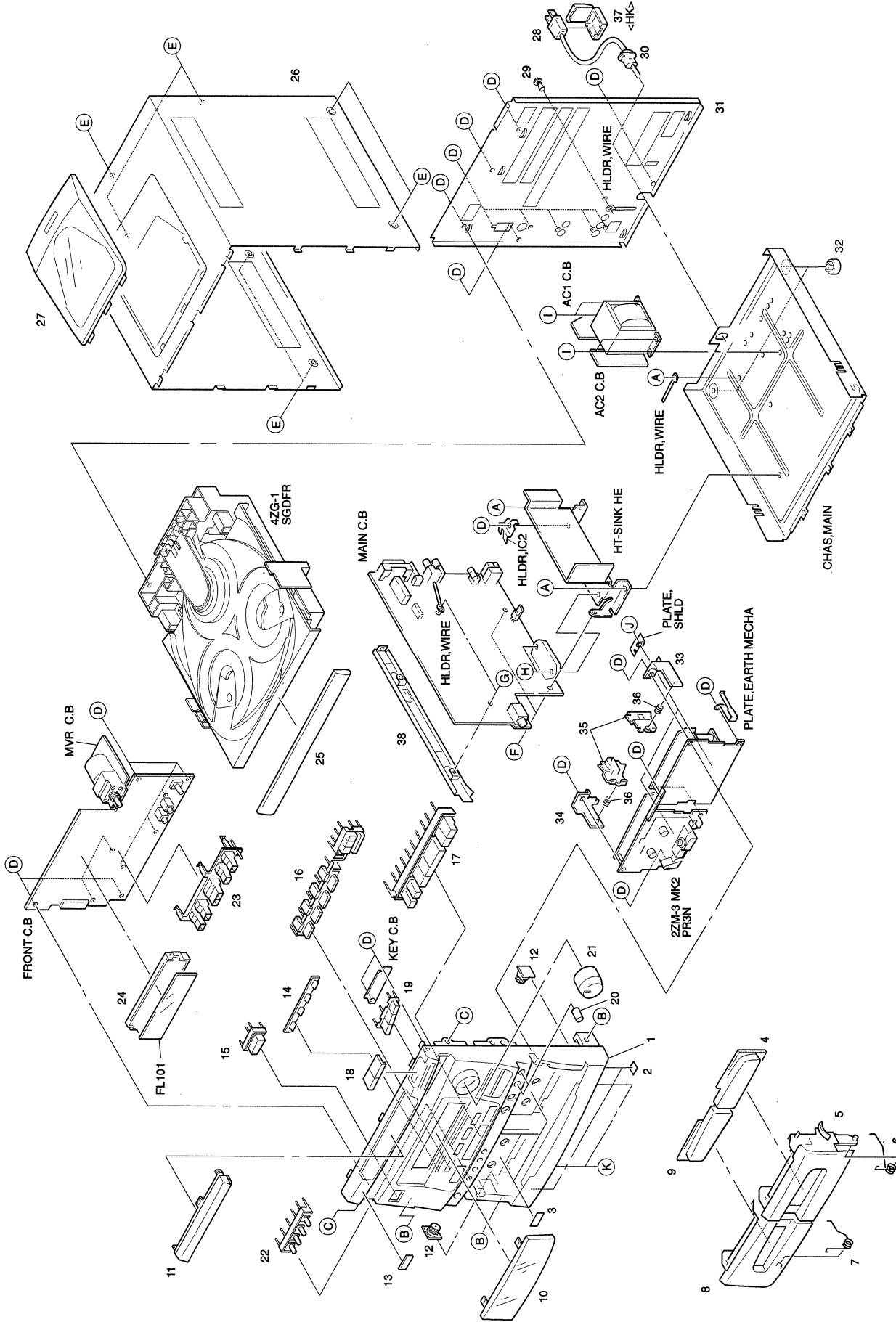
High tracking gain

The frequency of the fundamental wave is higher than that in low gain.



VOLT/DIV: 50 mV  
TIME/DIV: 1 mS





# MECHANICAL PARTS LIST 1 / 1

DESCRIPTIONで判断できない物は“REFERENCE NAME LIST”を参照してください。  
If can't understand for Description please kindly refer to “REFERENCE NAME LIST”.

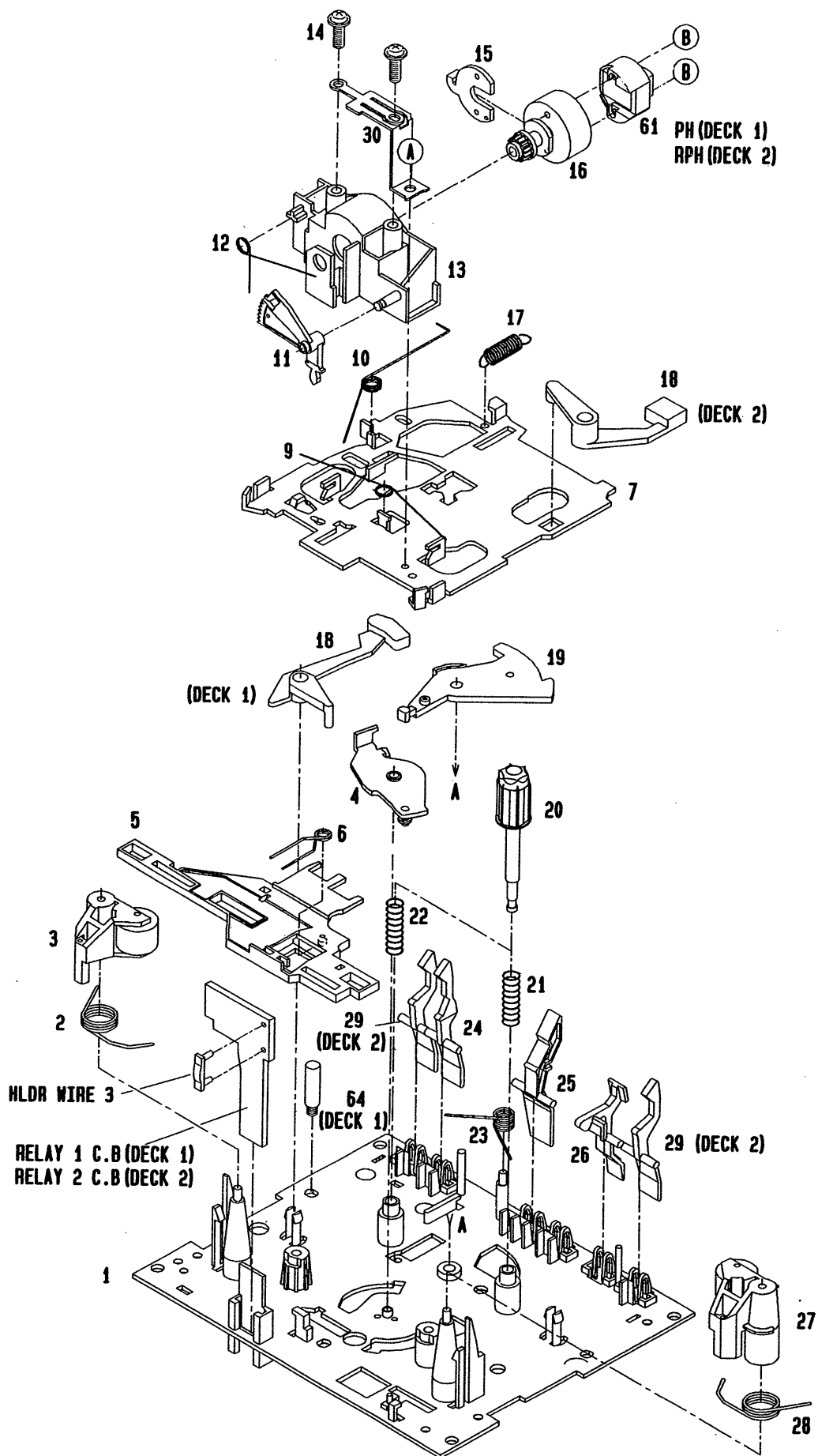
REF. NO	PART NO.	カリ NO.	DESCRIPTION	REF. NO	PART NO.	カリ NO.	DESCRIPTION
1	85-NFH-013-019		CAB,FR EZ<EEZ>	27	85-NF5-031-019		WINDOW, TOP
1	85-NFH-001-019		CAB,FR HE<HE, HK, HR>	28	87-050-079-019		AC CORD ASSY, E
2	80-VT1-202-019		FELT, 12.5-15.5-2	29	87-084-077-010		NYLON RIVET
3	81-532-080-019		LBL, CASS-COMPT	30	87-085-185-010		BUSHING, AC CORD E
4	85-NE8-016-019		WINDOW, CASS R	31	85-NFH-009-019		PANEL, REAR EEZBNM<EEZ>
5	85-NE8-004-019		BOX, CASS R<HE, HK, HR>	31	85-NFH-002-019		PANEL, REAR HEJBNM<HE>
5	85-NE8-030-019		BOX, CASS R E<EEZ>	31	85-NFH-015-019		PANEL, REAR HKJBNM<HK>
6	82-NF5-219-019		SPR-T, EJECT 2 (SIN)	31	85-NFH-003-019		PANEL, REAR HRJBNM<HR>
7	82-NF5-218-019		SRT-T, EJECT 1 (SIN)	32	87-085-221-019		FOOT, H 13.5
8	85-NE8-003-019		BOX, CASS L<HE, HK, HR>	33	82-NF5-227-019		HLDR, LOCK 2N
8	85-NE8-029-019		BOX, CASS L E<EEZ>	34	82-NF5-226-019		HLDR LOCK 1N
9	85-NE8-015-019		WINDOW, CASS L	35	82-NF5-229-019		PLATE, LOCK
10	85-NE8-013-019		WINDOW, DISPLAY	36	82-NF5-228-019		SPR-C, LOCK
11	85-NE8-014-019		WINDOW, CD	37	87-099-811-018		PLUG, ADPTR CONV(K) <HK>
12	87-063-165-019		OIL-DMPR 150	38	85-NF5-208-019		HLDR, PCB S
13	82-NE6-067-019		BADGE AIWA 30N	A	87-067-688-019		BVTT+3-6
14	85-NF7-020-019		IND, FN	B	87-591-094-419		QIT+3-6 GOLD
15	85-NE8-005-019		KEY, POWER	C	87-721-097-419		QT2+3-12 GLD
16	85-NF7-009-019		KEY, ASP	D	87-067-703-019		BVT2+3-10 (W/O SLOT)
17	85-NF7-010-010		KEY, PLAY	E	87-067-641-019		UTT2+3-8 W/O SLOT BLK
18	85-NF7-007-119		KEY, OPEN	F	87-067-633-019		BVT2+3-8 W/CONVEX
19	85-NF7-006-019		KEY, CD	G	87-078-084-019		BVTT+3-6 W, CONVEX
20	85-NE8-011-019		KNOB, MIC	H	87-067-581-019		BVT2+3-15 W/O SLOT
21	85-NE8-012-019		KNOB, VOL	I	87-078-019-019		S-SCREW, IT+4-6
22	85-NF7-011-019		KEY, VF	J	87-571-032-419		VIT+2-3
23	85-NF7-201-019		GUIDE, PLAY	K	87-067-716-010		BVTT+3-6 BLK
24	82-NF7-210-010		GUIDE, FL				
25	85-NFH-018-019		PANEL, TRAY<HE, HK, HR>				
25	85-NFH-020-019		PANEL, TRAY E<EEZ>				
26	85-NF5-007-019		CAB, STEEL				

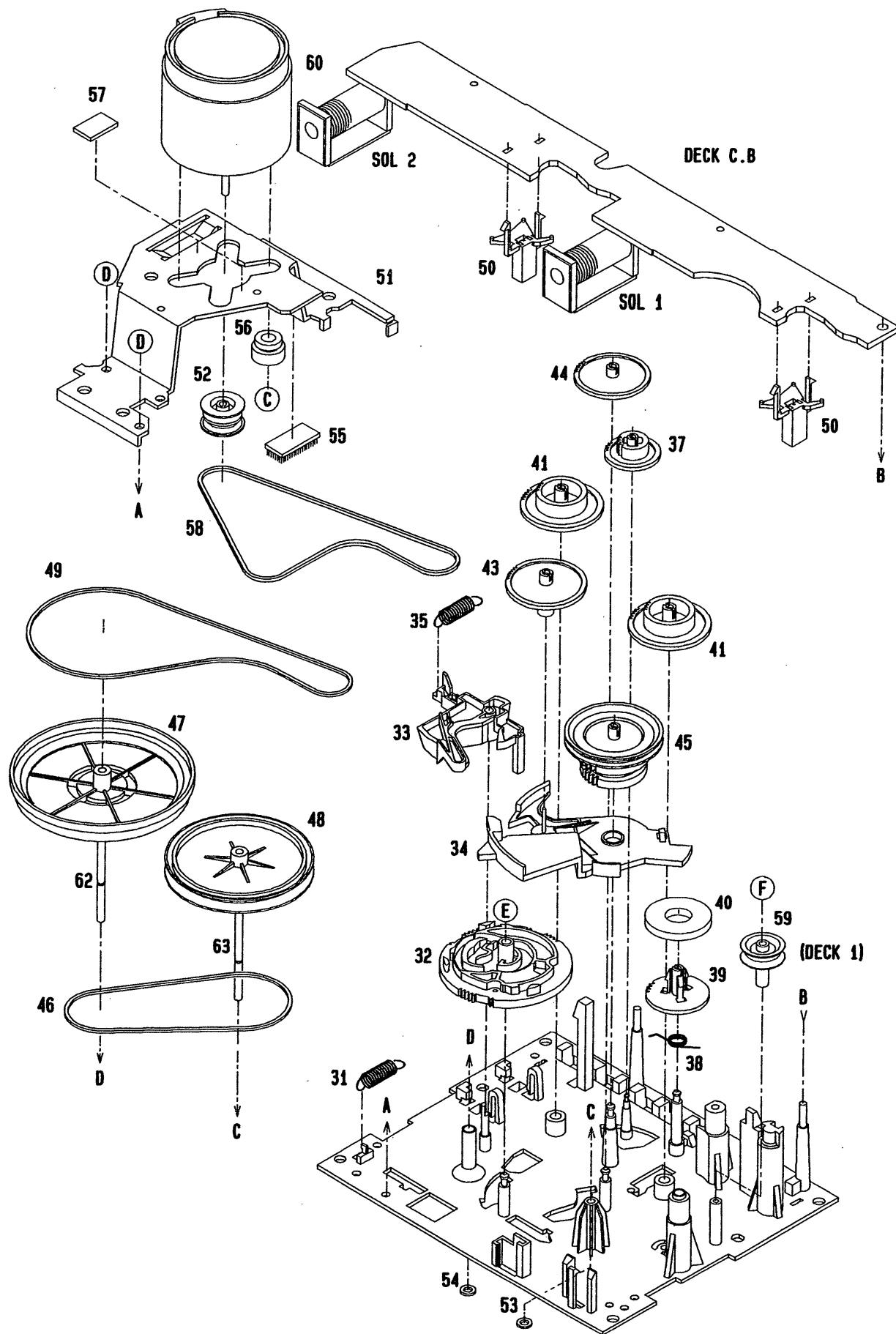
# TAPE MECHANISM PARTS LIST 1 / 1

DESCRIPTIONで判断できない物は“REFERENCE NAME LIST”を参照してください。  
 If can't understand for Description please kindly refer to “REFERENCE NAME LIST”.

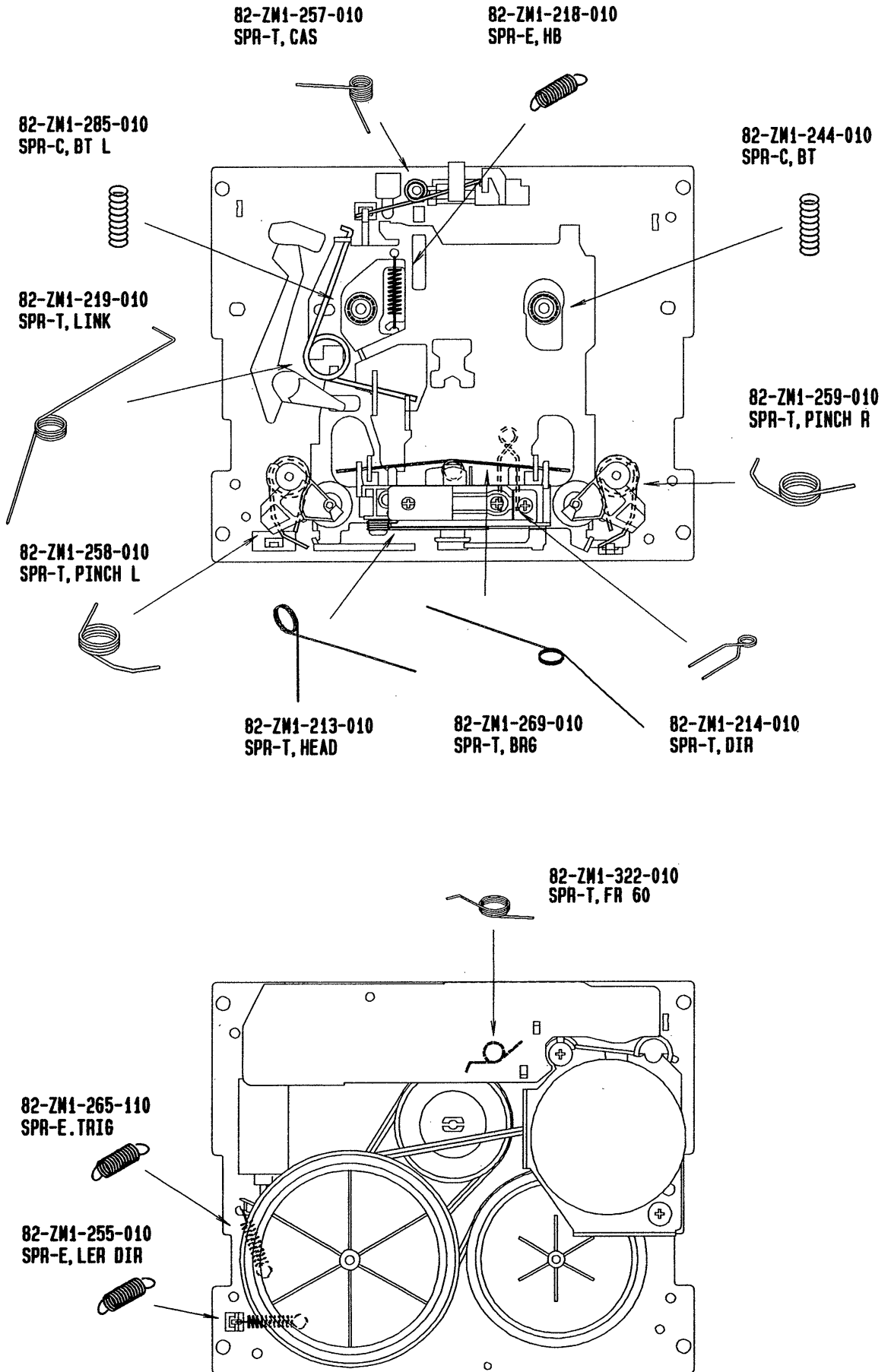
REF. NO	PART NO.	カリ NO.	DESCRIPTION	REF. NO	PART NO.	カリ NO.	DESCRIPTION
1	82-ZM1-327-210		CHAS ASSY,RN (DECK 1)	41	82-ZM1-216-210		GEAR, REEL
1	82-ZM3-219-010		CHAS ASSY,PR6 (DECK 2)	43	82-ZM1-225-010		GEAR, FR
2	82-ZM1-258-010		SPR-T, PINCH L	44	82-ZM1-226-010		GEAR, REW
3	82-ZM1-248-110		LVR ASSY, PINCH L	45	82-ZM1-228-210		SLIP DISK ASSY
4	82-ZM1-295-210		PLATE ASSY, LINK	46	82-ZM1-328-010		BELT, FR 2 (DECK 1)
5	82-ZM1-266-010		LVR, DIR	46	82-ZM1-335-010		BELT, FR 2 (DECK 2)
6	82-ZM1-214-010		SPR-T, DIR	47	82-ZM1-238-610		FLY-WHL ASSY, R (DECK 2)
7	82-ZM1-206-210		CHAS, HEAD	47	82-ZM3-210-510		FLY-WHL ASSY, R2 (DECK 1)
9	82-ZM1-269-010		SPR-T, BRG	48	82-ZM1-235-310		FLY-WHL ASSY, L (DECK 2)
10	82-ZM1-219-010		SPR-T, LINK	48	82-ZM3-208-410		FLY-WHL ASSY, L2 (DECK 1)
11	82-ZM1-210-010		GEAR, H T	49	82-ZM3-206-010		BELT, R
12	82-ZM1-213-010		SPR-T, HEAD	50	82-ZM1-245-210		HLDR, IC
13	82-ZM1-207-010		GUIDE, TAPE	51	82-ZM3-215-010		HLDR, MC
14	82-ZM1-283-210		S-SCREW, AZIMUTH	52	82-ZM3-202-010		PULLEY, MOT 2M
15	82-ZM1-314-110		PLATE, HEAD	53	82-ZM1-288-010		SH, 1.63-3.2-0.5 SLT
16	82-ZM1-208-010		HLDR, HEAD	54	80-ZM6-243-010		SH, 1.75-3.6-0.5 SLT
17	82-ZM1-218-010		SPR-E, HB	55	80-ZM6-230-010		SH, BELT
18	82-ZM1-263-110		LVR, EJECT L (DECK 1)	56	82-ZM1-308-110		CUSH-G DIA3.7-9-3.2
18	82-ZM1-264-010		LVR, EJECT R (DECK 2)	57	86-575-361-010		CUSH-G, 6-8-0.8
19	82-ZM1-222-010		LVR, PLAY	58	82-ZM3-205-010		BELT, L
20	82-ZM1-217-110		REEL TABLE	59	82-ZM3-204-010		PULLEY, COUPLER (DECK 1)
21	82-ZM1-244-110		SPR-C, BT	60	87-045-347-010		MOT, SHU2L 70(M1)
22	82-ZM1-285-110		SPR-C, BT L	61	87-046-398-010		HEAD, PH YK50P-BS409 (PH)
23	82-ZM1-257-010		SPR-T, CAS	61	87-046-399-010		HEAD, RPH YK56R-BS409 (RPH)
24	82-ZM1-241-110		LVR, MC	62	82-ZM1-312-010		CAPSTAN N 2.2-41.7
25	82-ZM1-242-010		LVR, CAS	63	82-ZM1-313-010		CAPSTAN N 2-41.5
26	82-ZM1-243-010		LVR, STOP	64	82-ZM3-216-019		SHAFT T COUPLER N
27	82-ZM1-253-110		LVR ASSY, PINCH R	A	82-ZM1-315-010		S-SCREW, GVIDE TAPE
28	82-ZM1-259-010		SPR-T, PINCH R	B	80-ZM6-207-010		V+1.6-7
29	82-ZM1-240-110		LVR, REC (DECK 2)	C	82-ZM1-309-010		S-SCRW, MOTOR
30	82-ZM1-298-010		SPR-P, EARTH	D	87-067-178-010		VTT+2.6-3
31	82-ZM1-255-110		SPR-E, LVR DIR	E	82-ZM1-597-019		PW, 2.15-6.8-0.4 SLT
32	82-ZM1-221-110		GEAR, CAM	F	87-067-972-010		PW, 1.05-3-0.25 SLT
33	82-ZM1-227-110		LVR, TRIG				
34	82-ZM1-224-110		LVR, FR				
35	82-ZM1-265-110		SPR-E, TRIG				
37	82-ZM1-223-010		GEAR, PLAY				
38	82-ZM1-322-019		SPR-T, FR60				
39	82-ZM1-220-210		GEAR, IDLER				
40	82-ZM1-316-010		RING MAGNET 3				

TAPE MECHANISM EXPLODED VIEW 1 / 1

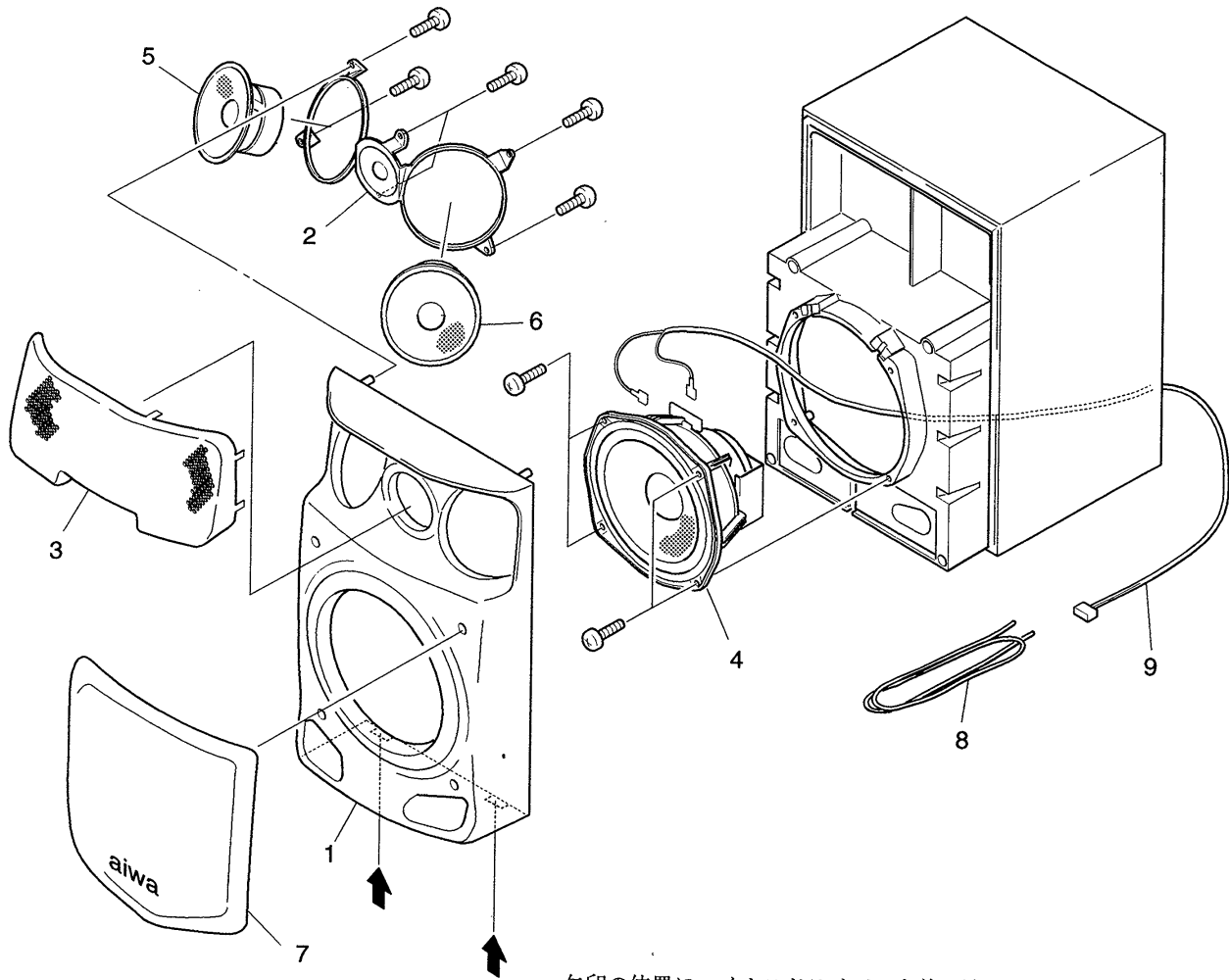




SPRING APPLICATION POSITION



# SPEAKER EXPLODED VIEW 1 / 1



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

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.

# SPEAKER PARTS LIST 1 / 1

DESCRIPTIONで判断できない物は“REFERENCE NAME LIST”を参照してください。  
If can't understand for Description please kindly refer to “REFERENCE NAME LIST”.

REF. NO	PART NO.	カリ NO.	DESCRIPTION	REF. NO	PART NO.	カリ NO.	DESCRIPTION
1	85-NS6-001-019		PANEL FR	6	83-NS8-608-019		SPEAKER
2	85-NS5-011-019		ADAPTOR ASSY	7	85-NS6-011-019		GRILL FRAME ASSY
3	85-NS6-010-019		SPEAKER GRILL	8	85-NS6-611-019		SPEAKER CORD Y/B
4	85-NS6-602-019		SPEAKER WOOFER	9	83-NS5-613-010		SPEAKER CORD ASSY
5	83-NS8-606-019		SPEAKER MID				

## ■ ACCESSORIES / PACKAGE LIST

DESCRIPTIONで判断できない物は“REFERENCE NAME LIST”を参照してください。  
If can't understand for Description please kindly refer to “REFERENCE NAME LIST”.

REF. NO	PART NO.	カリ NO.	DESCRIPTION
1	85-NFH-905-019		IB<EEZ>
1	85-NFH-902-019		IB, H-ECA (M) <HE, HK, HR>
2	85-NF7-641-019		RC, RC-T503
3	87-050-050-019		CORD-1.5M PIN-PIN M
4	87-006-240-019		AM LOOP ANT CON(KO) <HE, HK, HR>
4	87-006-225-019		AM LOOP ANT NC2<EEZ>
5	87-043-115-01B		ANT, FEEDER FM<HE, HK, HR>
5	87-043-106-019		FM, WIRE ANT (Z) <EEZ>
6	87-043-095-019		ANTENNA WIRE<HE, HK, HR>
6	81-ED1-024-019		DM-H15BYUBNCS<EEZ>
7	87-050-072-018		CORD, EURO CABLE<EEZ>
7	87-099-789-019		PLUG, ADPTR IR44<HE, HR>



# 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
TRIMMER	CAP, TRIMMER
TUN-CAP	VARIABLE CAPACITOR
VIB, CER	RESONATOR, CERAMIC
VIB, XTAL	RESONATOR, CRYSTAL
VR	VOLUME
ZENER	DIODE, ZENER
サージサプレッサ	SERGESUPPRESSOR
セラコン	CAP,CERA

## 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
ジグアーム	ARM,SHAFT
ジグガイド	GUIDE,SHAFT
ストラップ	STRAP
トクナベ	S-SCREW
ヒンジ	HINGE
ヒンジビス	S-SCREW
ビスセレート	SCREW,SERRART

サービス技術ニュース	
番号	連絡内容
G - -	
G - -	
G - -	

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