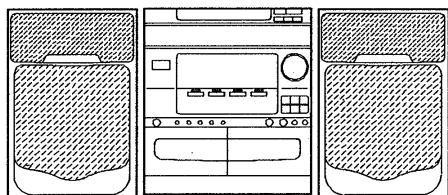


# aiwa



## 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<br>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 :  
 VIDEO/AUX : 150mV (adjustable)  
 MIC 1,MIC 2 : 1.7mV(10 kohms)  
 VIDEO OUT: 1.0Vp-p(75 ohms)  
**Output** 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 (CrO2 tape)  
 EEZ :  
 60 dB (DOLBY B NR ON, CrO2  
 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  
 Surround speaker : 80mm (3 1/4 in.)  
**Impedance** Front speaker : 6 ohms  
 Surround speaker : 16 ohms  
**Output sound pressure level** 87 dB/W/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)

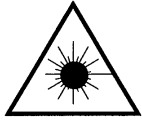
- Design and specifications are subject to change without notice.
- Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation. "DOLBY" and the double-D symbol  are trademarks of Dolby Laboratories Licensing Corporation.

## 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 bruksanvisning, kan användaren utsättas för osynlig laserstråling, som överskrider gränsen för laserklass 1.

### CAUTION

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

### ATTENTION

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

### ADVARSEL!

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

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

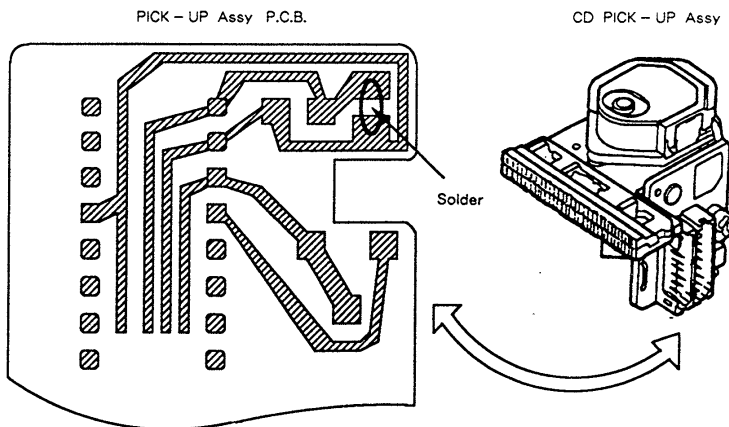
The CLASS 1 LASER PRODUCT label is located on the rear exterior.

|          |               |
|----------|---------------|
| CLASS 1  | LASER PRODUCT |
| KLASSE 1 | LASER PRODUKT |
| LUOKAN 1 | LASER LAITE   |
| KLASS 1  | LASER APPARAT |

## 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<br>NO. | DESCRIPTION                   | REF. NO | PART NO.       | カリ<br>NO. | DESCRIPTION                     |
|------------|----------------|-----------|-------------------------------|---------|----------------|-----------|---------------------------------|
| IC         |                |           |                               | C104    | 87-010-381-080 |           | CAP,E 330-16 SME                |
|            | 87-020-454-010 |           | IC, DN 6851                   | C105    | 87-010-101-080 |           | CAP,E 220-16 SME                |
|            | 85-NFH-606-010 |           | IC, UPD78044BGF-017           | C109    | 87-010-401-080 |           | CAP,E 1-50 SME                  |
|            | 87-070-343-010 |           | IC, SPS-440-1                 | C112    | 87-010-405-080 |           | CAP,E 10-50 SME                 |
|            | 87-070-163-019 |           | IC, STK405-030<EEZ>           | C113    | 87-010-403-080 |           | CAP,E 3.3-50 SME                |
|            | 87-070-267-010 |           | IC, STK405-050<HE, HR, HK>    | C116    | 87-018-127-080 |           | CAP, TC-U 470P-50 B             |
|            | 87-070-121-010 |           | IC, HA12185NT                 | C200    | 87-018-208-089 |           | CAP, TC-U 0.047-25 F            |
|            | 87-017-374-010 |           | IC, TC4094BP                  | C201    | 87-010-404-080 |           | CAP,E 4.7-50 SME                |
|            | 87-001-874-019 |           | IC, HA12134A<EEZ>             | C202    | 87-010-404-080 |           | CAP,E 4.7-50 SME                |
|            | 87-070-277-010 |           | IC, BA3839                    | C203    | 87-018-129-089 |           | CAP, TC-U 680P-50 SL            |
|            | 87-017-675-080 |           | IC, M65840FP                  | C204    | 87-018-129-089 |           | CAP, TC-U 680P-50 SL            |
|            | 87-002-727-010 |           | IC, NJM4558L                  | C205    | 87-010-544-040 |           | CAP,E 0.1-50 SME                |
|            | 87-070-272-010 |           | IC, TA2078P                   | C206    | 87-010-544-040 |           | CAP,E 0.1-50 SME                |
|            | 87-027-666-010 |           | IC, TC4052BP                  | C207    | 87-010-402-080 |           | CAP,E 2.2-50 SME                |
|            | 87-070-184-040 |           | IC, M65846FP-600D             | C208    | 87-010-402-080 |           | CAP,E 2.2-50 SME                |
|            | 87-070-127-010 |           | IC, LC72131                   | C209    | 87-010-405-080 |           | CAP,E 10-50 SME                 |
|            | 87-017-714-010 |           | IC, LA1836                    | C210    | 87-010-405-080 |           | CAP,E 10-50 SME                 |
| TRANSISTOR |                |           |                               | C213    | 87-018-100-089 |           | CAP, TC-U 4.7P-50 SL            |
|            | 87-026-463-080 |           | TR, 2SA933S                   | C214    | 87-018-100-089 |           | CAP, TC-U 4.7P-50 SL            |
|            | 89-213-702-010 |           | TR, 2SB1370E                  | C221    | 87-010-197-089 |           | C-CAP, S 0.01-25 B<EEZ>         |
|            | 89-113-187-080 |           | TR, 2SA1318TU                 | C222    | 87-010-197-089 |           | C-CAP, S 0.01-25 B<EEZ>         |
|            | 89-213-702-019 |           | TR, 2SB1370E                  | C225    | 87-018-205-080 |           | CAP, TC-U 0.022-25 F            |
|            | 87-026-610-089 |           | TR, KTC3198GR                 | C230    | 87-010-247-080 |           | CAP,E 100-50 SME                |
|            | 89-332-665-080 |           | TR, 2SC3266GR                 | C231    | 87-018-205-080 |           | CAP, TC-U 0.022-25 F            |
|            | 87-026-609-089 |           | TR, KTA1266GR                 | C251    | 87-010-177-080 |           | C-CAP, S 820P-50 SL             |
|            | 87-026-462-080 |           | TR, 2SC1740S (RS)             | C252    | 87-010-177-080 |           | C-CAP, S 820P-50 SL             |
|            | 89-406-555-080 |           | TR, 2SD655E                   | C301    | 87-010-392-080 |           | CAP,E 33-35 SME                 |
|            | 87-026-286-080 |           | TR, DTA143ES                  | C302    | 87-010-392-080 |           | CAP,E 33-35 SME                 |
|            | 89-502-466-080 |           | FET 2SK246BL                  | C303    | 87-012-145-080 |           | C-CAP, S 270P-50 CH             |
|            | 89-333-317-080 |           | TR, 2SC3331 T                 | C304    | 87-012-145-080 |           | C-CAP, S 270P-50 CH             |
|            | 87-026-462-089 |           | TR, 2SC1740S (RS)             | C305    | 87-012-155-080 |           | C-CAP, S 180P-50 CH             |
|            | 89-109-521-080 |           | TR, 2SA952K                   | C306    | 87-012-155-080 |           | C-CAP, S 180P-50 CH             |
|            | 89-112-965-080 |           | TR, 2SA1296GR                 | C307    | 87-010-401-080 |           | CAP,E 1-50 SME                  |
|            | 87-026-293-080 |           | TR, DTC144WS                  | C308    | 87-010-401-080 |           | CAP,E 1-50 SME                  |
|            | 87-026-219-080 |           | TR, DTA144ES                  | C313    | 87-010-180-080 |           | C-CAP, S 1500P-50 B<HE, HR, HK> |
|            | 89-328-785-080 |           | TR, 2SC2878 (A) TPE2          | C313    | 87-010-181-089 |           | C-CAP, S 1800P-50 B<EEZ>        |
|            | 87-026-214-080 |           | TR, DTA114YS                  | C314    | 87-010-180-080 |           | C-CAP, S 1500P-50 B<HE, HR, HK> |
|            | 89-319-233-080 |           | TR, 2SC1923 (O)               | C314    | 87-010-181-089 |           | C-CAP, S 1800P-50 B<EEZ>        |
|            | 89-327-143-080 |           | TR, 2SC2714 (O)               | C315    | 87-010-179-080 |           | C-CAP, S 1200P-50 B             |
|            | 87-026-269-089 |           | TR, DTA114ES                  | C316    | 87-010-179-080 |           | C-CAP, S 1200P-50 B             |
|            | 89-503-602-080 |           | C-FET, 2SK360E                | C317    | 87-010-401-080 |           | CAP,E 1-50 SME                  |
|            | 89-503-602-089 |           | C-FET, 2SK360E<EEZ>           | C318    | 87-010-401-080 |           | CAP,E 1-50 SME                  |
|            | 87-026-214-089 |           | TR, DTA114YS<HE, HR, HK>      | C319    | 87-010-400-089 |           | CAP,E 0.47-50 SME<EEZ>          |
|            | 87-026-463-089 |           | TR, 2SA933S (RS) <HE, HR, HK> | C320    | 87-010-400-089 |           | CAP,E 0.47-50 SME<EEZ>          |
|            | 89-406-555-089 |           | TR, 2SD655E                   | C321    | 87-010-544-089 |           | CAP,E 0.1-50<EEZ>               |
|            | 89-505-446-080 |           | FET, 2SK544 F                 | C321    | 87-010-401-080 |           | CAP,E 1-50 SME<HE, HR, HK>      |
| DIODE      |                |           |                               | C322    | 87-010-544-089 |           | CAP,E 0.1-50<EEZ>               |
|            | 87-020-465-080 |           | DIODE, 1SS133                 | C322    | 87-010-401-080 |           | CAP,E 1-50 SME<HE, HR, HK>      |
|            | 87-001-916-080 |           | ZENER, UTZJ10B                | C325    | 87-010-546-080 |           | CAP,E 0.33-50 SME<HE, HR, HK>   |
|            | 87-001-909-080 |           | ZENER, UTZJ 24B               | C326    | 87-010-546-080 |           | CAP,E 0.33-50 SME<HE, HR, HK>   |
|            | 87-002-225-010 |           | DIODE, DBF 40C-K10            | C350    | 87-010-197-080 |           | C-CAP, S 0.01-25 B              |
|            | 87-001-914-080 |           | ZENER, UTZJ6.2B               | C351    | 87-012-154-080 |           | C-CAP, S 150P-50 CH             |
|            | 87-001-911-080 |           | ZENER, UTZJ 4.7A              | C352    | 87-012-154-080 |           | C-CAP, S 150P-50 CH             |
|            | 87-001-559-080 |           | DIODE, 1SS131                 | C360    | 87-010-196-089 |           | C-CAP, S 0.1-25 F<EEZ>          |
|            | 87-001-912-080 |           | ZENER, UTZJ 5.1B              | C360    | 87-018-209-080 |           | CAP, TC-U 0.1-50 F<HE, HR, HK>  |
|            | 87-001-913-080 |           | ZENER, UTZJ5.6B               | C381    | 87-010-189-080 |           | C-CAP, S 8200P-50 B<HE, HR, HK> |
|            | 87-027-393-080 |           | ZENER, HZ4C-2                 | C382    | 87-010-189-080 |           | C-CAP, S 8200P-50 B             |
|            | 87-020-339-080 |           | C-DIODE, 1SS226<EEZ>          | C451    | 87-018-123-080 |           | CAP, TC-U 220P-50 B             |
|            | 87-020-465-089 |           | DIODE, 1SS133                 | C452    | 87-018-123-080 |           | CAP, TC-U 220P-50 B             |
| MAIN C.B   |                |           |                               | C453    | 87-010-178-080 |           | C-CAP, S 1000P-50 B             |
| BPF831     | 87-030-105-010 |           | FLTR, BPMB6A<EEZ>             | C454    | 87-010-178-080 |           | C-CAP, S 1000P-50 B             |
| C102       | 87-010-399-090 |           | CAP,E 3300-35 SME             | C456    | 87-010-405-080 |           | CAP,E 10-50 SME                 |
| C103       | 87-010-398-090 |           | CAP,E 2200-35 SME             | C457    | 87-010-198-080 |           | C-CAP, S 0.022-25 B             |
|            |                |           |                               | C459    | 87-010-178-080 |           | C-CAP, S 1000P-50 B             |
|            |                |           |                               | C461    | 87-010-183-080 |           | C-CAP, S 2700P-50 B             |
|            |                |           |                               | C462    | 87-010-183-080 |           | C-CAP, S 2700P-50 B             |
|            |                |           |                               | C463    | 87-010-183-080 |           | C-CAP, S 2700P-50 B             |
|            |                |           |                               | C501    | 87-010-177-089 |           | C-CAP, S 820P-50 SL<EEZ>        |
|            |                |           |                               | C502    | 87-010-177-089 |           | C-CAP, S 820P-50 SL<EEZ>        |
|            |                |           |                               | C503    | 87-010-401-089 |           | CAP,E 1-50 SME<EEZ>             |

| REF. NO | PART NO.       | カリ<br>NO. | DESCRIPTION                  | REF. NO | PART NO.       | カリ<br>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           |         |                |           |                                 |

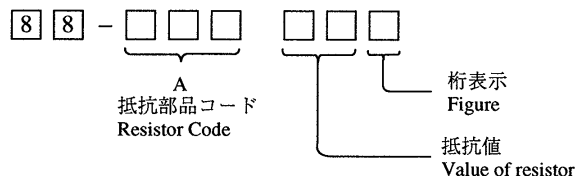
| REF. NO | PART NO.       | カンリ<br>NO. | DESCRIPTION                     | REF. NO | PART NO.       | カンリ<br>NO. | DESCRIPTION          |
|---------|----------------|------------|---------------------------------|---------|----------------|------------|----------------------|
| C957    | 87-010-316-089 |            | 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>   |         |                |            |                      |
| 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    | 87-006-320-019 |            | 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<br>NO. | DESCRIPTION          | REF. NO     | PART NO.       | カンリ<br>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     | C692        | 87-010-401-040 |            | CAP,E 1-50 SME          |
| FL101   | 85-NFH-609-010 |            | FL,8-BT-187GK        | C800        | 87-018-205-080 |            | CAP,TC-U 0.022-25 F     |
| J600    | 82-NF7-630-010 |            | JACK,3.5 MO          | MVR801      | 81-MX4-635-010 |            | VR,50KBX2 RK16812 MG    |
| J601    | 82-NF7-630-010 |            | JACK,3.5 MO          |             |                |            |                         |
| L201    | 87-007-340-010 |            | COIL,CLOCK 4.19MHZ   | KEY C.B     |                |            |                         |
| L670    | 87-005-446-080 |            | COIL,150UH FLR50     | S301        | 87-036-397-080 |            | SW,TACT SKQNAB          |
| LED322  | 87-070-201-080 |            | LED,SLP9118C-51-S-T1 | S304        | 87-036-397-080 |            | SW,TACT SKQNAB          |
| LED323  | 87-070-201-080 |            | LED,SLP9118C-51-S-T1 | S305        | 87-036-397-080 |            | SW,TACT SKQNAB          |
| LED324  | 87-070-201-080 |            | LED,SLP9118C-51-S-T1 | S306        | 87-036-397-080 |            | SW,TACT SKQNAB          |
|         |                |            |                      | S307        | 87-036-397-080 |            | SW,TACT SKQNAB          |
| LED325  | 87-070-201-080 |            | LED,SLP9118C-51-S-T1 | AC2 C.B     |                |            |                         |
| LED330  | 87-017-784-080 |            | LED,SEL1550CM TP8    | △PT101      | 82-NF7-655-010 |            | PT,2NF7 HM<HE,HR,HK>    |
| LED331  | 87-017-784-080 |            | LED,SEL1550CM TP8    | △PT101      | 83-NF2-611-010 |            | PT,3NE3 EKZ<EEZ>        |
| LED332  | 87-017-784-080 |            | LED,SEL1550CM TP8    |             |                |            |                         |
| LED333  | 87-017-784-080 |            | LED,SEL1550CM TP8    | AC1 C.B     |                |            |                         |
| LED334  | 87-017-784-080 |            | LED,SEL1550CM TP8    | △           | 87-033-213-080 |            | CLAMP,FUSE SMK          |
| LED335  | 87-017-784-080 |            | LED,SEL1550CM TP8    | △           | 82-304-743-010 |            | TERMINAL,1P             |
| S302    | 87-036-397-080 |            | SW,TACT SKQNAB       | △F101       | 87-035-237-010 |            | FUSE 2A 250V<HE,HR,HK>  |
| S303    | 87-036-397-080 |            | SW,TACT SKQNAB       | △F101       | 87-035-359-010 |            | FUSE 500mA 250V TE<EEZ> |
| S308    | 87-036-397-080 |            | SW,TACT SKQNAB       | △SW101      | 87-036-388-010 |            | SW,SL 1-2-2<HE,HR,HK>   |
| S309    | 87-036-397-080 |            | SW,TACT SKQNAB       | DECK C.B    |                |            |                         |
| S310    | 87-036-397-080 |            | SW,TACT SKQNAB       | SFR1        | 87-024-581-010 |            | SFR,3.3K DIA 6H         |
| S311    | 87-036-397-080 |            | SW,TACT SKQNAB       | SOL1        | 82-ZM1-618-310 |            | SOL ASSY,27             |
| S312    | 87-036-397-080 |            | SW,TACT SKQNAB       | SOL2        | 82-ZM1-618-310 |            | SOL ASSY,27             |
| S313    | 87-036-397-080 |            | SW,TACT SKQNAB       | SW1         | 87-036-378-010 |            | SW,PUSH 1-1-1 SH2       |
| S314    | 87-036-397-080 |            | SW,TACT SKQNAB       | SW2         | 87-036-378-010 |            | SW,PUSH 1-1-1 SH2       |
| S315    | 87-036-397-080 |            | SW,TACT SKQNAB       | SW3         | 87-036-378-010 |            | SW,PUSH 1-1-1 SH2       |
| S316    | 87-036-397-080 |            | SW,TACT SKQNAB       | SW4         | 87-036-378-010 |            | SW,PUSH 1-1-1 SH2       |
| S317    | 87-036-397-080 |            | SW,TACT SKQNAB       | SW5         | 87-036-378-010 |            | SW,PUSH 1-1-1 SH2       |
| S318    | 87-036-397-080 |            | SW,TACT SKQNAB       | SW6         | 87-036-378-010 |            | SW,PUSH 1-1-1 SH2       |
| S319    | 87-036-397-080 |            | SW,TACT SKQNAB       | SW8         | 87-036-378-010 |            | SW,PUSH 1-1-1 SH2       |
| S320    | 87-036-397-080 |            | SW,TACT SKQNAB       | SW9         | 87-036-378-010 |            | SW,PUSH 1-1-1 SH2       |
| S321    | 87-036-397-080 |            | SW,TACT SKQNAB       | RELAY-1 C.B |                |            |                         |
| S322    | 87-036-397-080 |            | SW,TACT SKQNAB       | W106        | 85-NF5-609-019 |            | CONN ASSY,3P-PB         |
| S323    | 87-036-397-080 |            | SW,TACT SKQNAB       | RELAY-2 C.B |                |            |                         |
| S324    | 87-036-397-080 |            | SW,TACT SKQNAB       | W105        | 83-NEG-608-019 |            | CONN ASSY 8P-RPB        |
| 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    |             |                |            |                         |
| VR601   | 81-MX4-637-010 |            | VR,10KA RK11K1130    |             |                |            |                         |
| W103    | 88-914-301-210 |            | FF-CABLE,14P 1.25    |             |                |            |                         |
| W104    | 85-NF5-615-010 |            | CABLE,FFC 15P-1.25   |             |                |            |                         |

○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

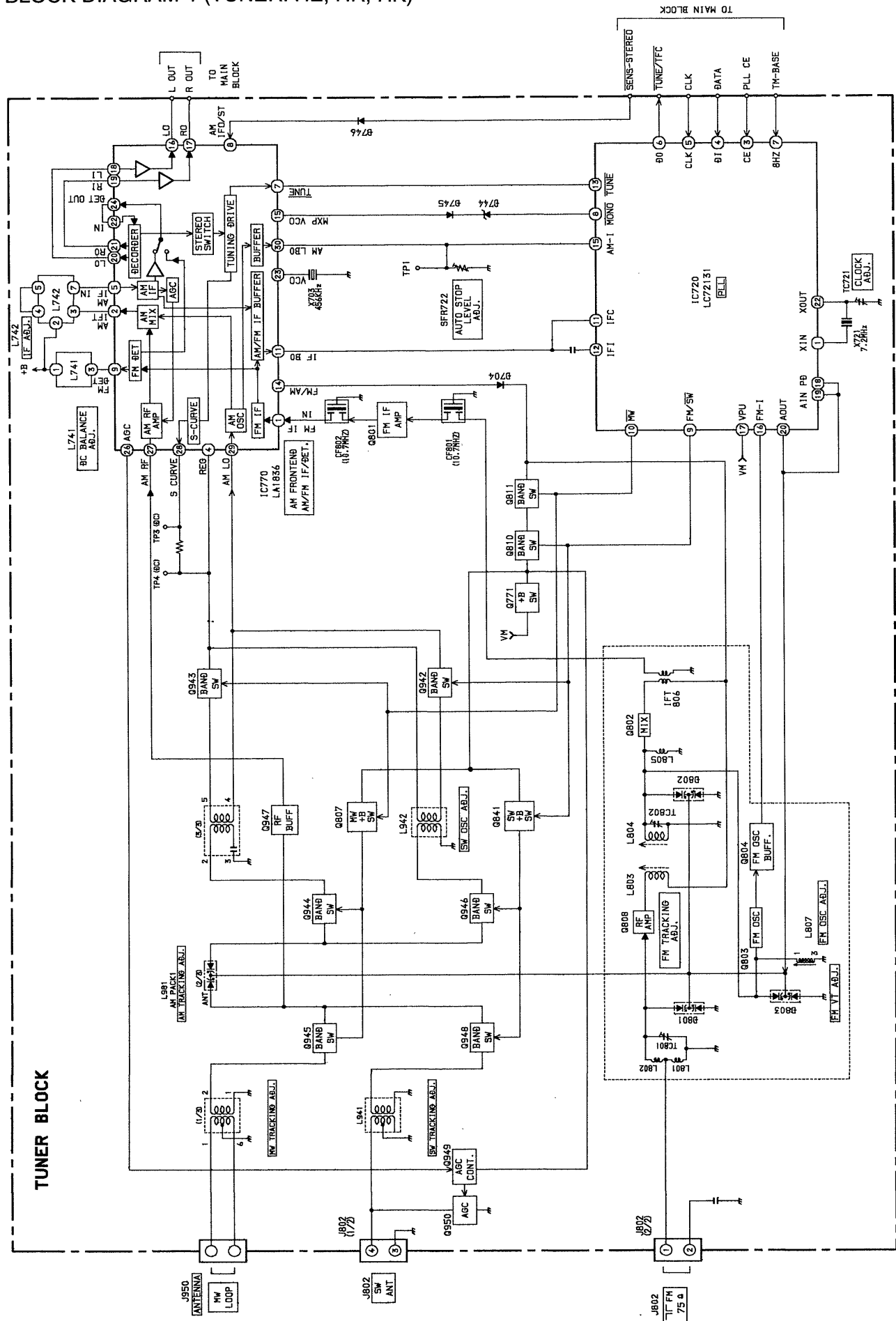
Chip Resistor Part Coding



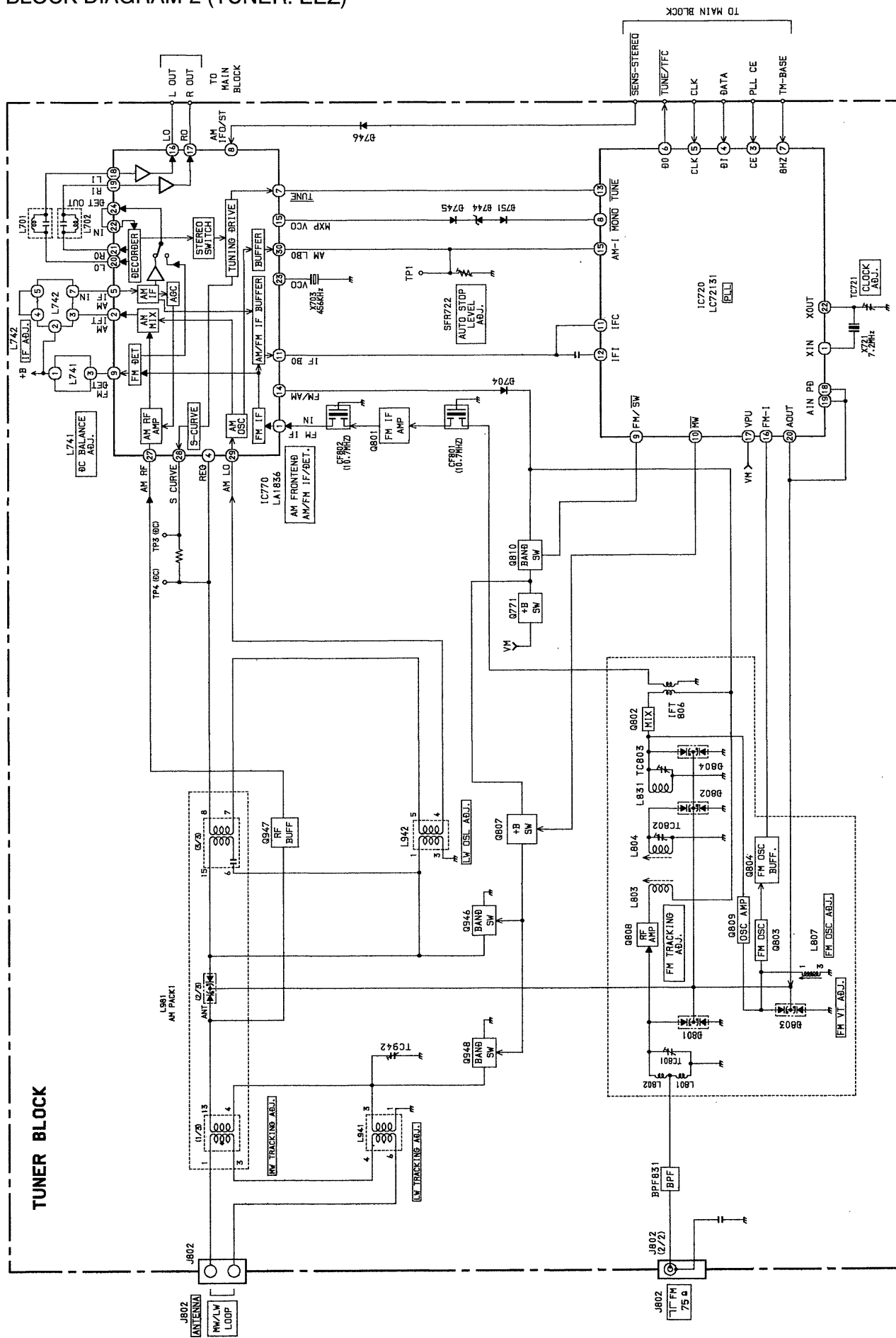
チップ抵抗  
Chip resistor

| Wattage<br>容量 | Type<br>種類 | Tolerance<br>許容誤差 | Symbol<br>記号 | Dimensions／寸法 (mm)                                                                  |     |      |             | Resistor Code: A<br>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<br>~0.7 | 128                           |

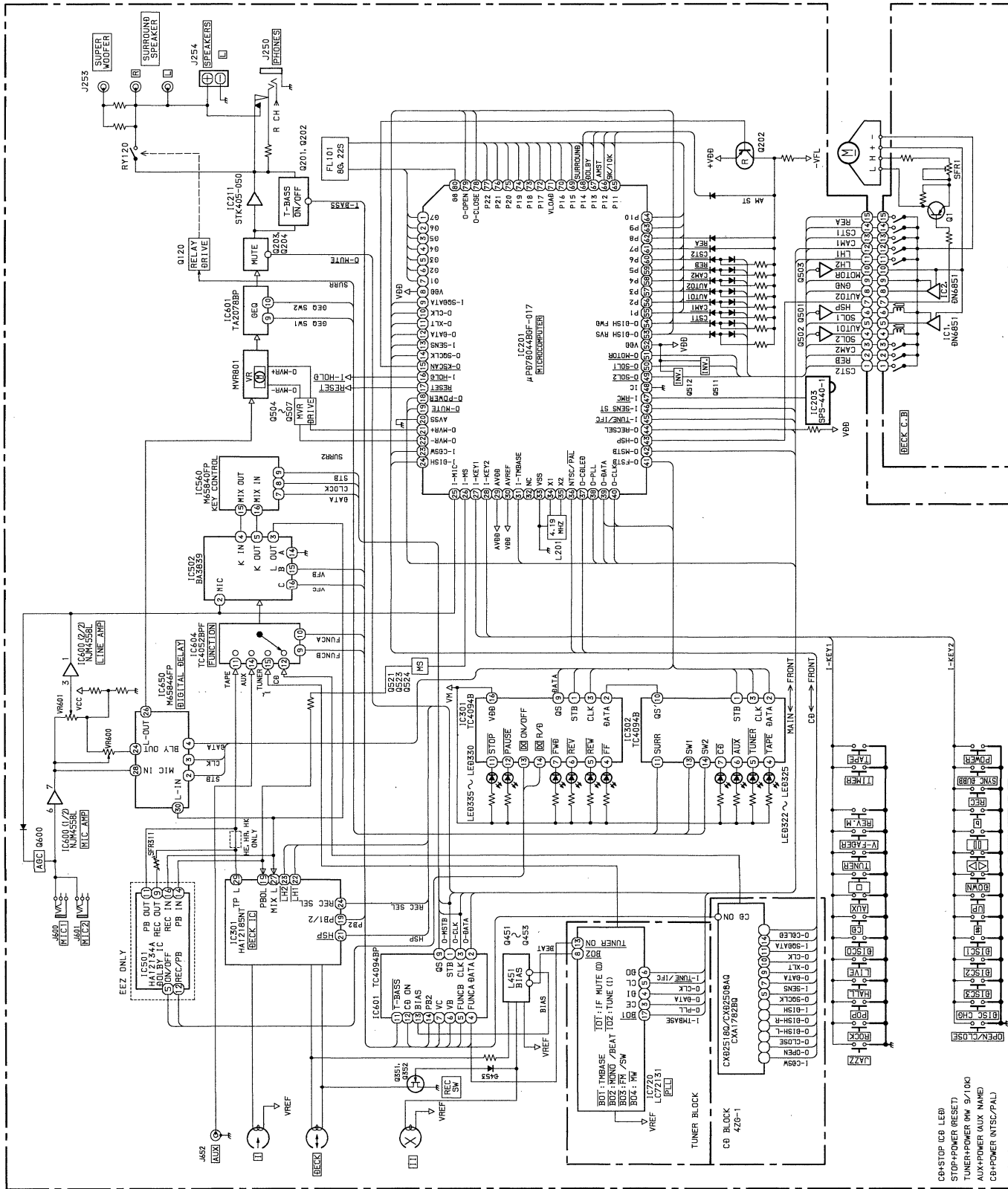
# BLOCK DIAGRAM-1 (TUNER: HE, HR, HK)

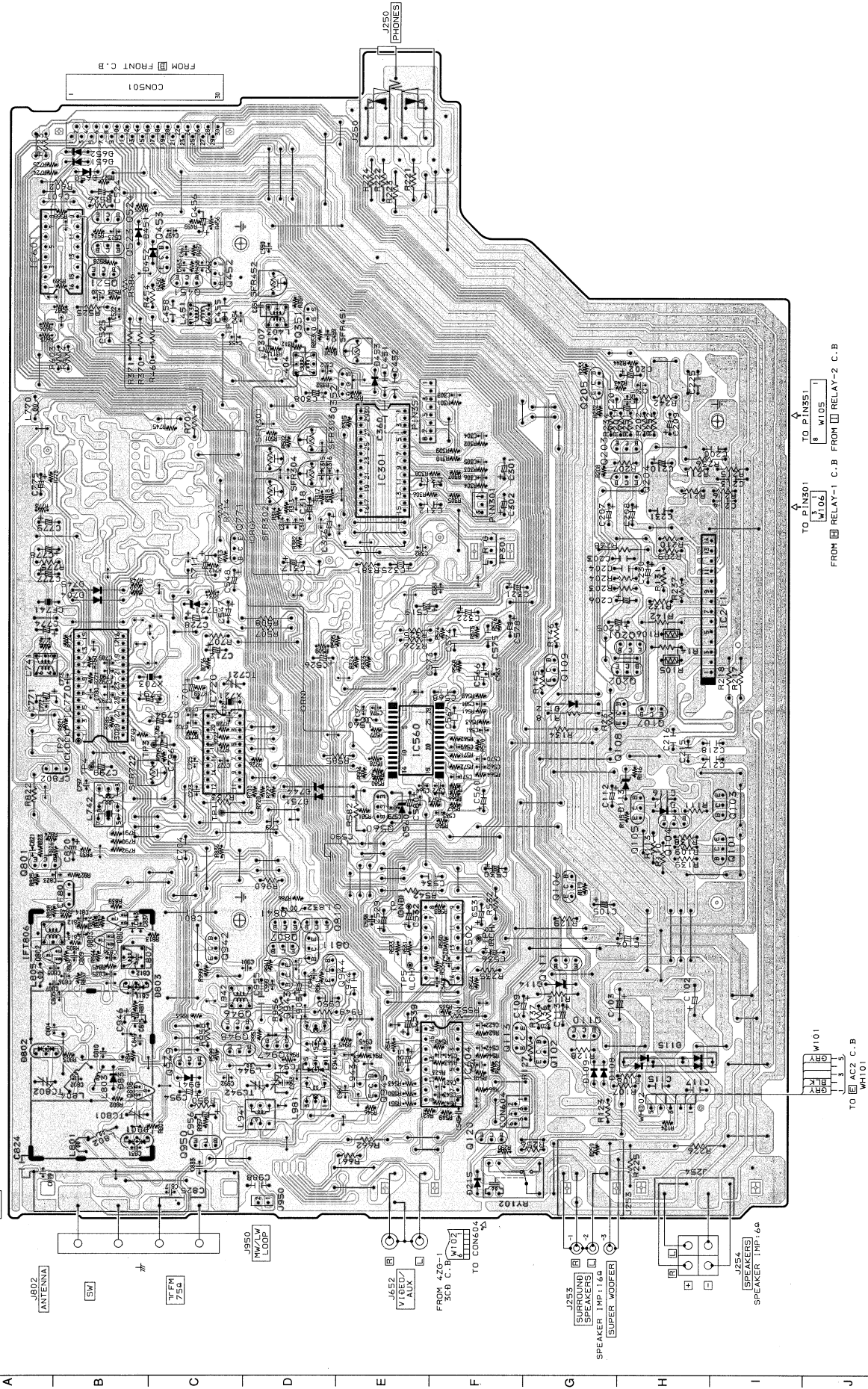


### BLOCK DIAGRAM-2 (TUNER: EEZ)



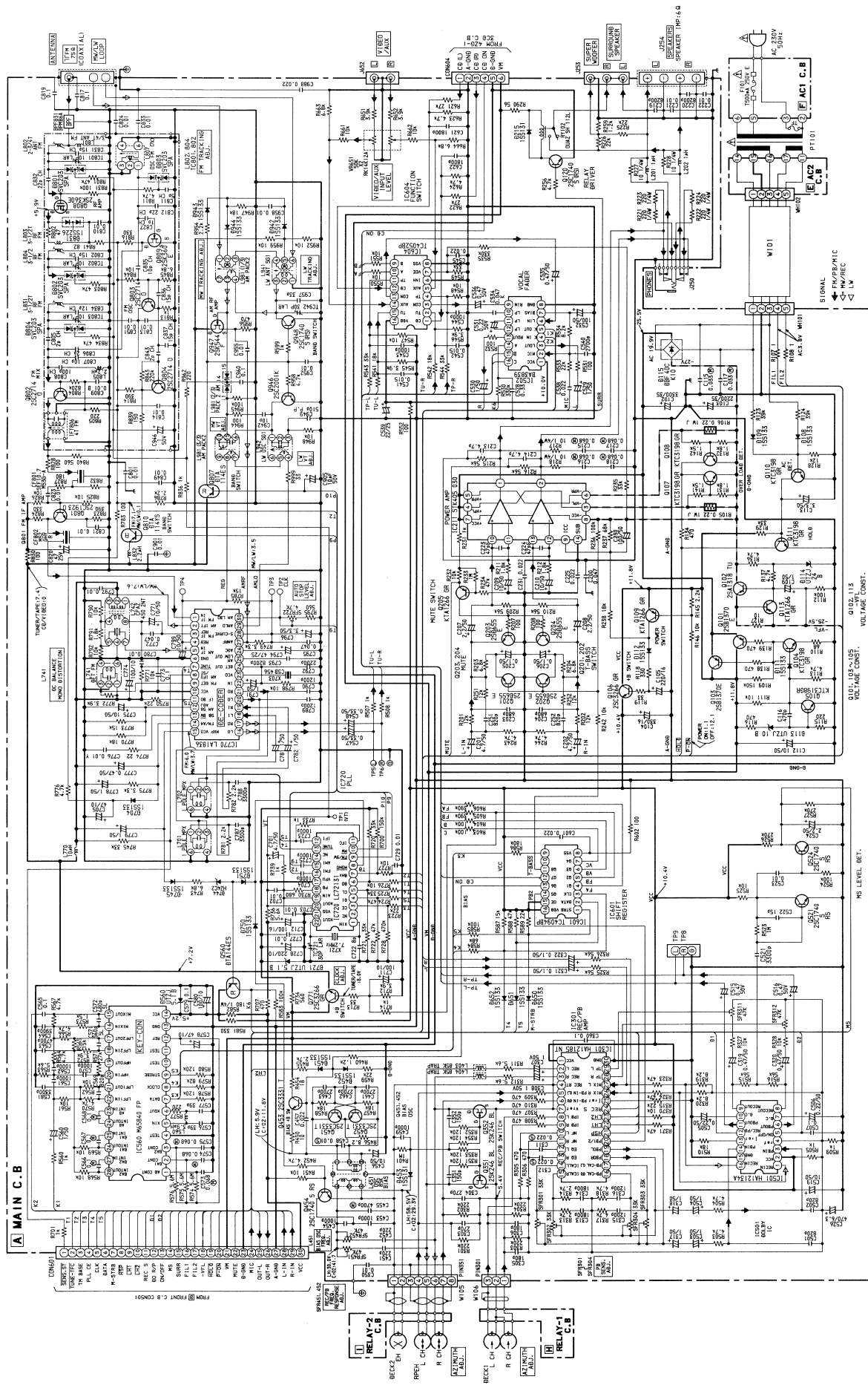
BLOCK DIAGRAM-3 (MAIN / FRONT)

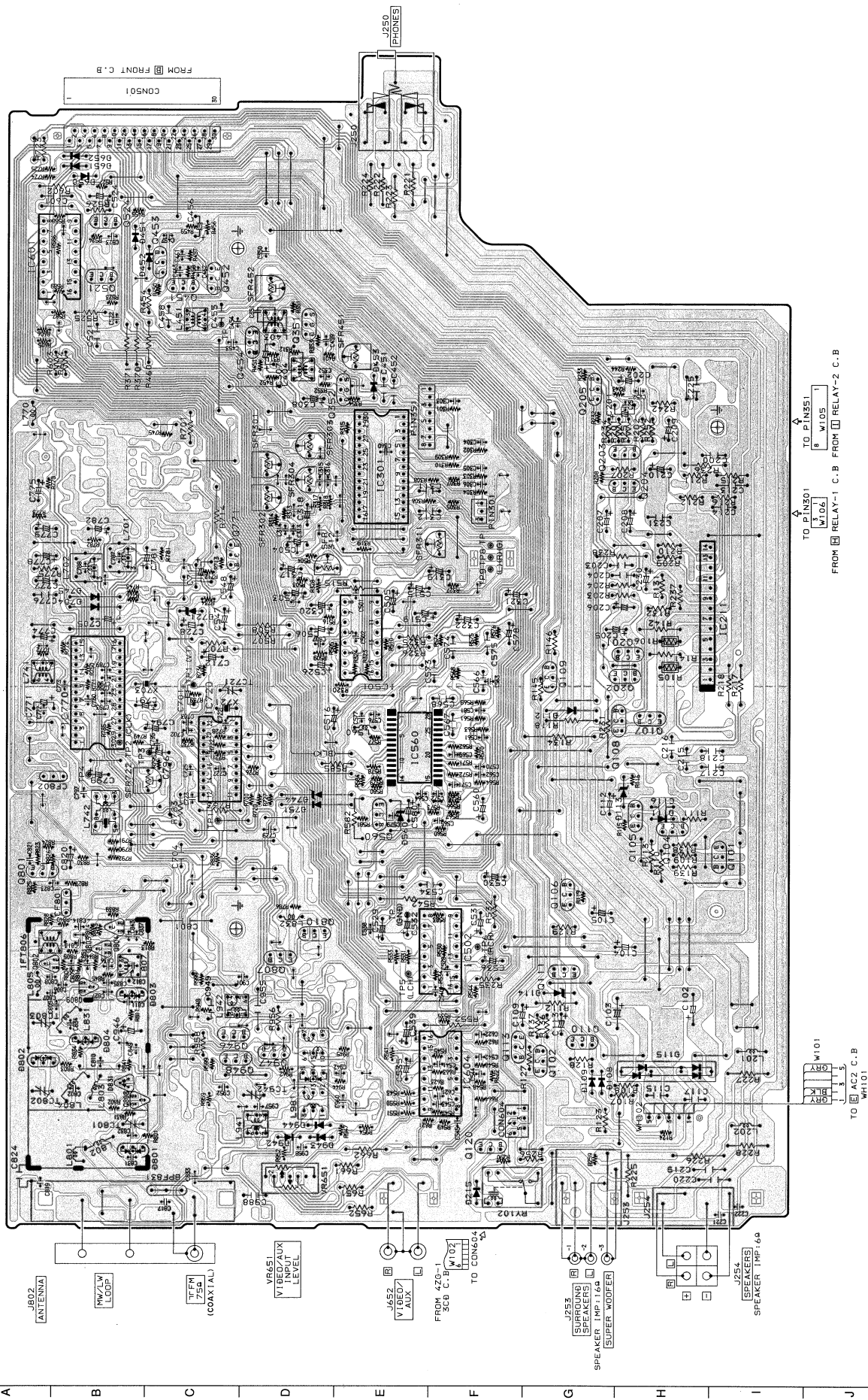




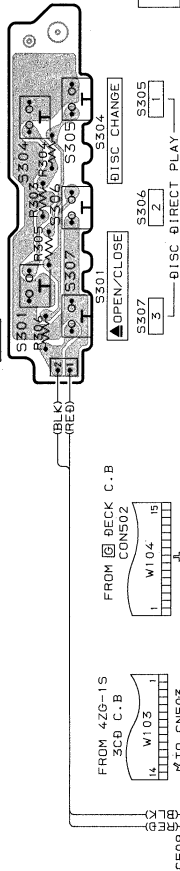


SCHEMATIC DIAGRAM-2 (MAIN: EEZ)



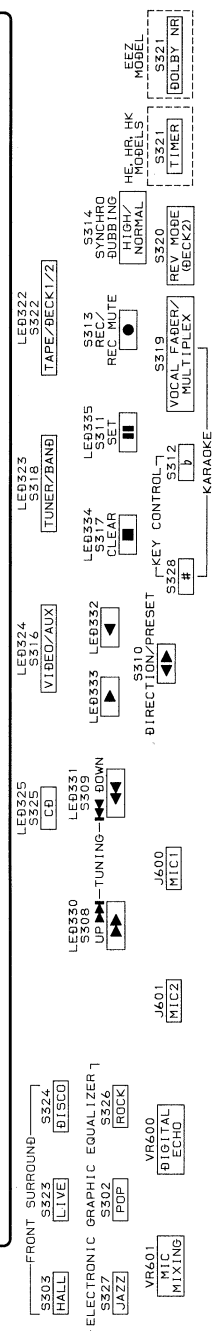
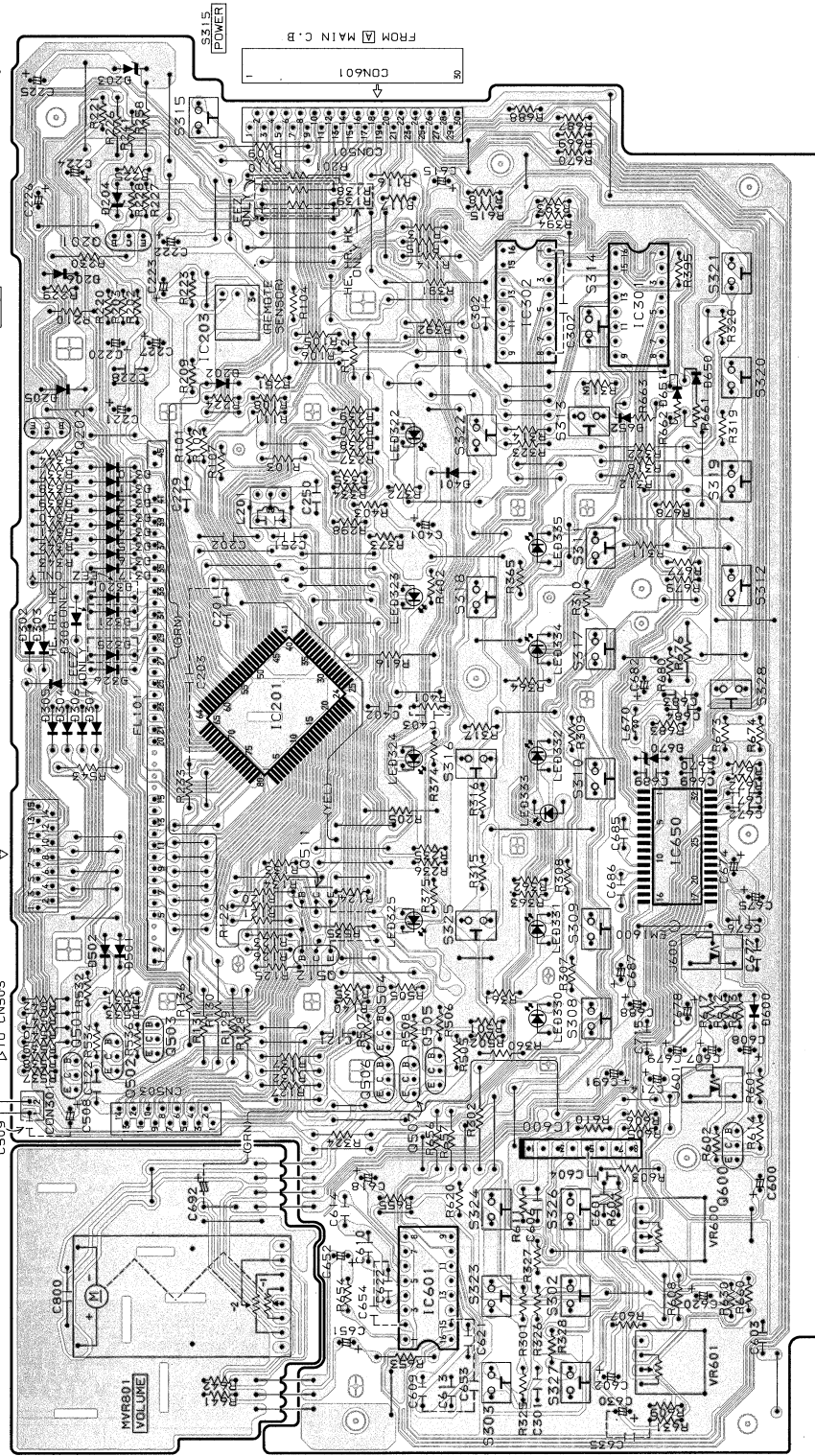


# KEY C.B

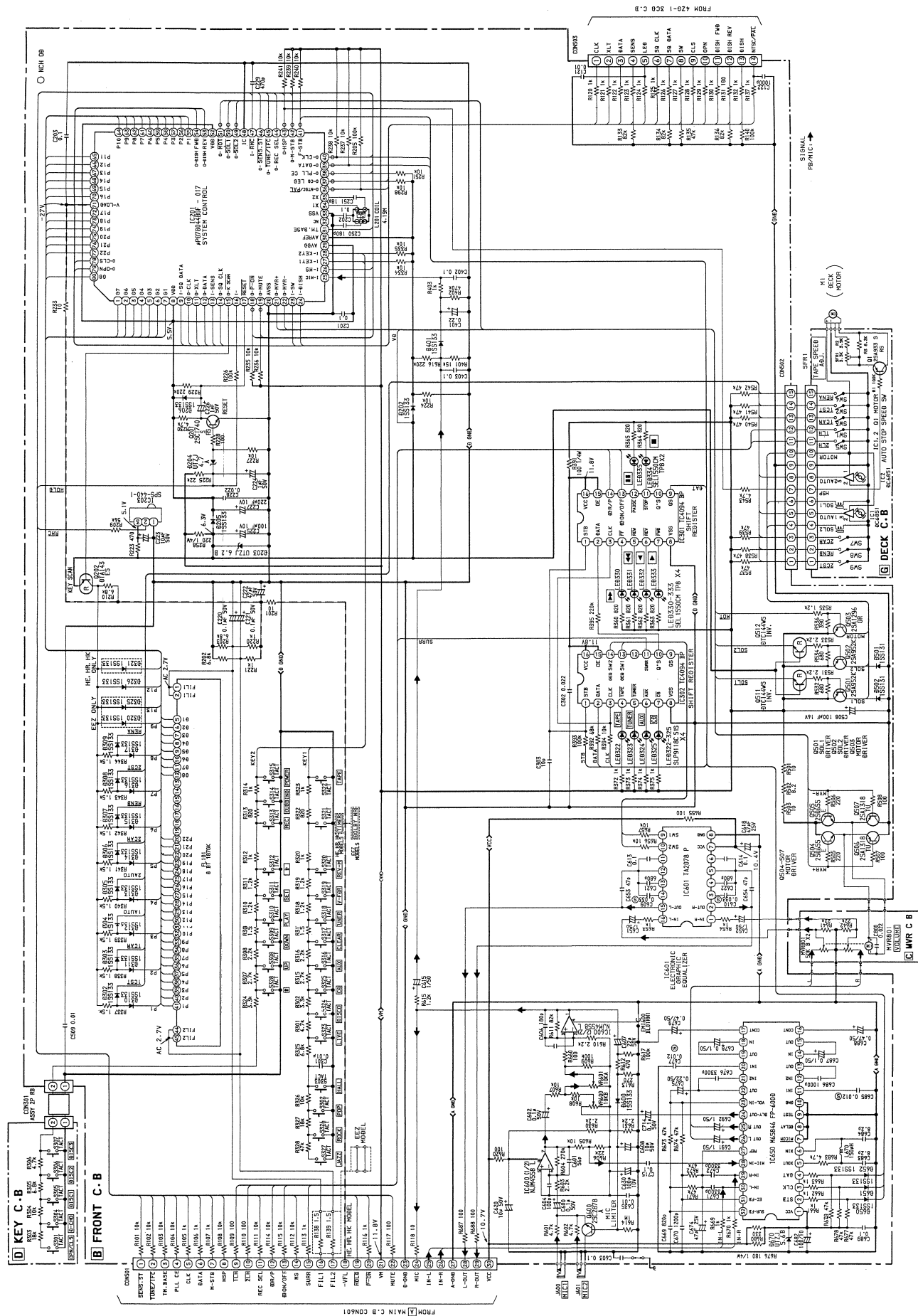


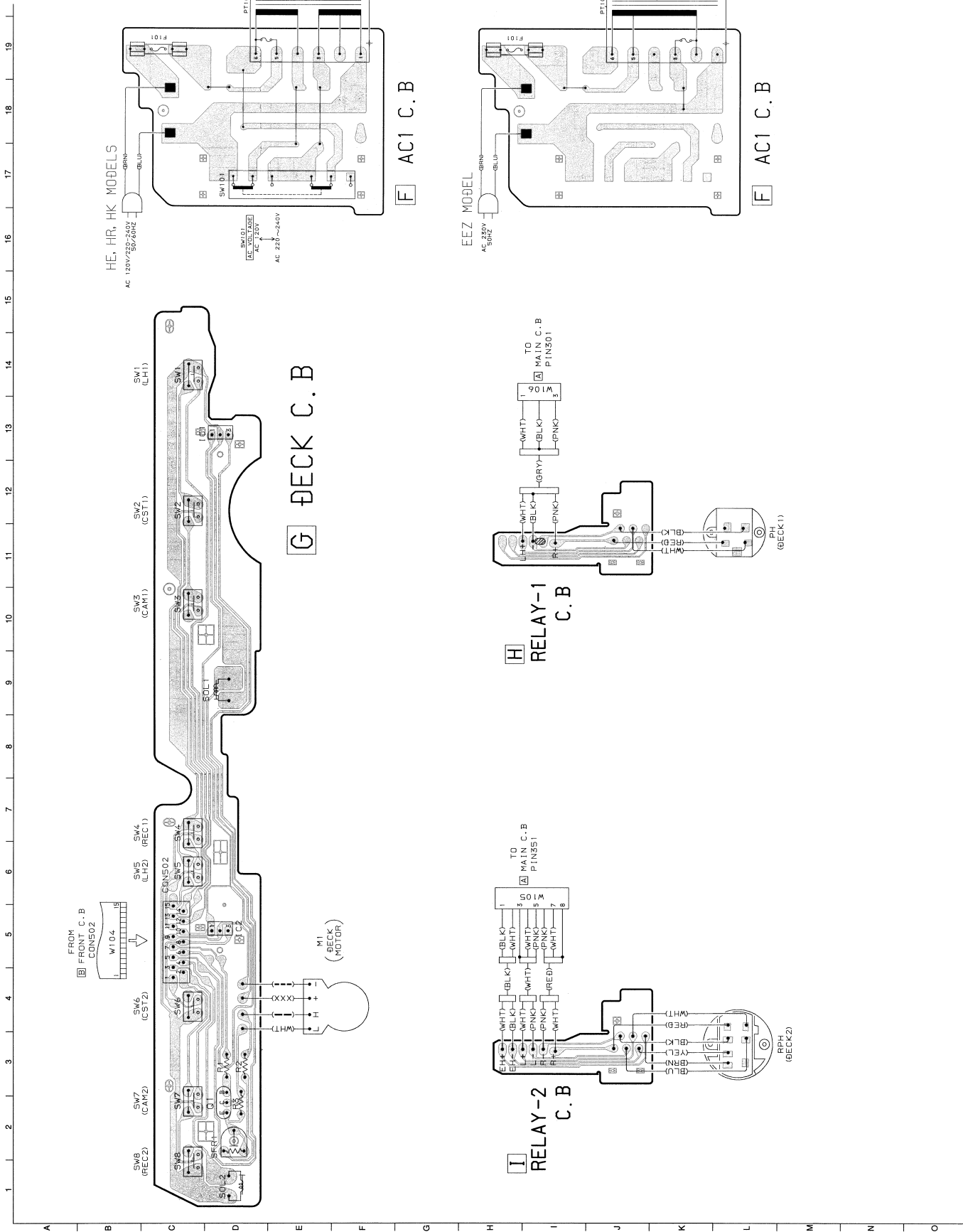
## MVR C.B

## FRONT C.B



SCHEMATIC DIAGRAM-3 (FRONT)





# 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><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><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></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><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><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></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"<br>(MUTE)<br>REC<br>muting                                                   | "H"<br>(MIX)<br>Manual<br>dubbing | "L"<br>(TAPE)<br>Synchronize<br>dubbing | Dolby On : "L"(TAPE)<br>Dolby Off : "H" (MIX)<br>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



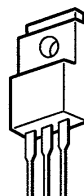
ECB

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



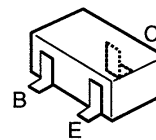
ECB

2SC1740S  
DTA114ES  
DTA114YS  
DTA143ES  
DTA144ES  
DTC144WS



BCE

2SB1370

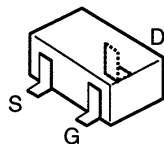


2SC2714



SGD

2SK246



2SK360

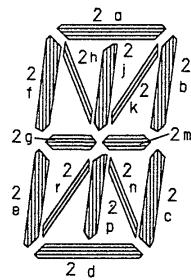
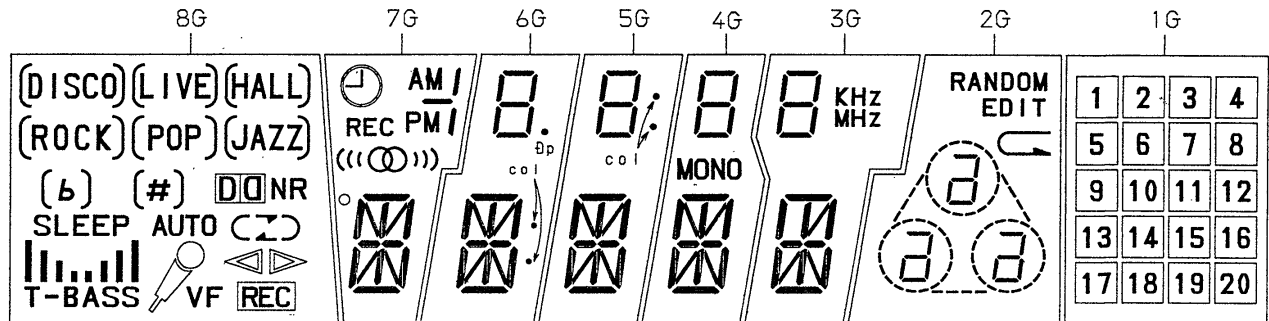


SGD

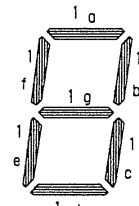
2SK544

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

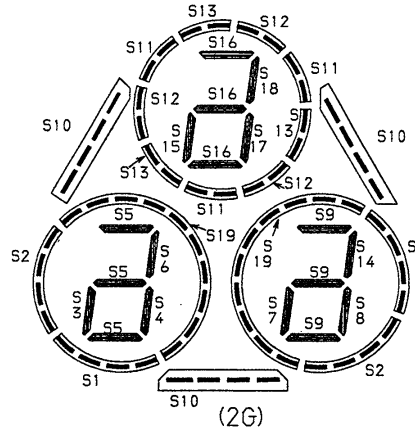
## GRID ASSIGNMENT



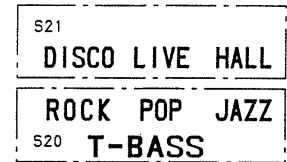
(7G ~ 3G)



(6G ~ 3G)



(2G)

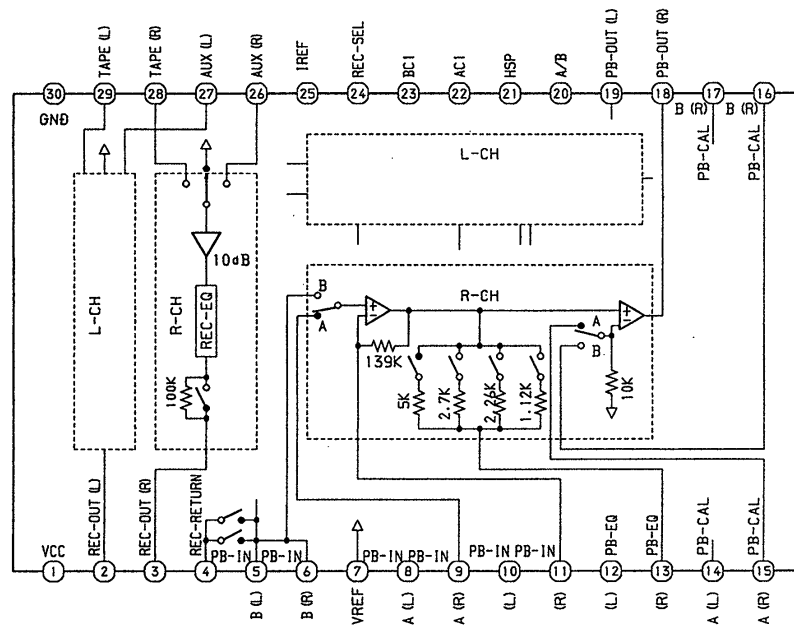


(8G)

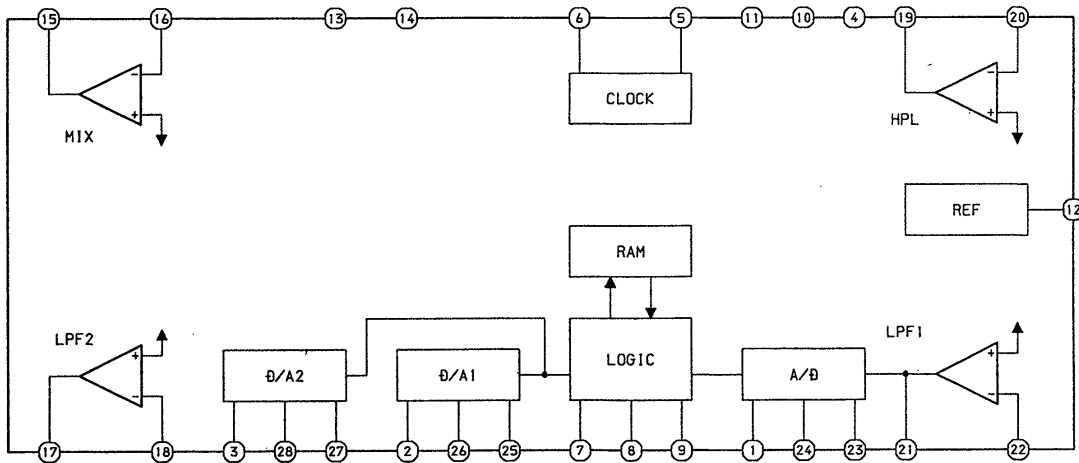
## ANODE CONNECTION

|     | 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  | ( ) (b) | 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 | ( ) (#) | 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       | O          | col    | col (T) | MONO   | MHZ    | S14    | 7  |
| P15 | ↔       | (((((O)))) | dp     | col (L) | -      | KHZ    | S15    | 6  |
| P16 | )       | REC        | 1d     | 1d      | 1d     | 1d     | S16    | 5  |
| P17 | DO NR   | ⌚          | 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 | -  |

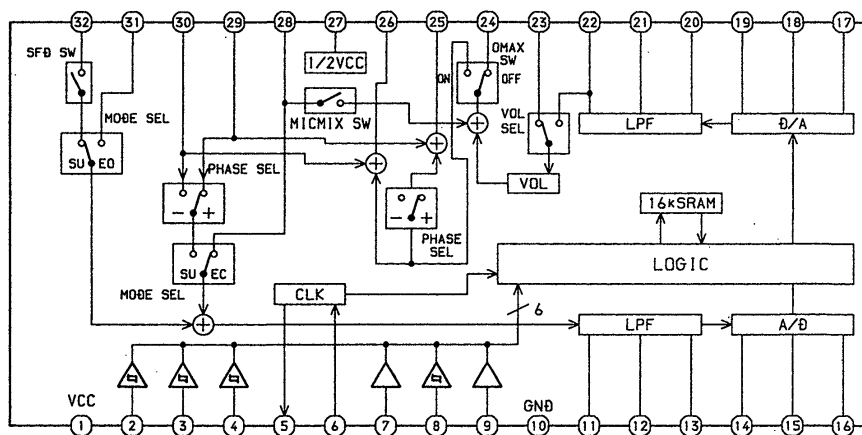
## IC, HA12185NT



## IC, M65840FP

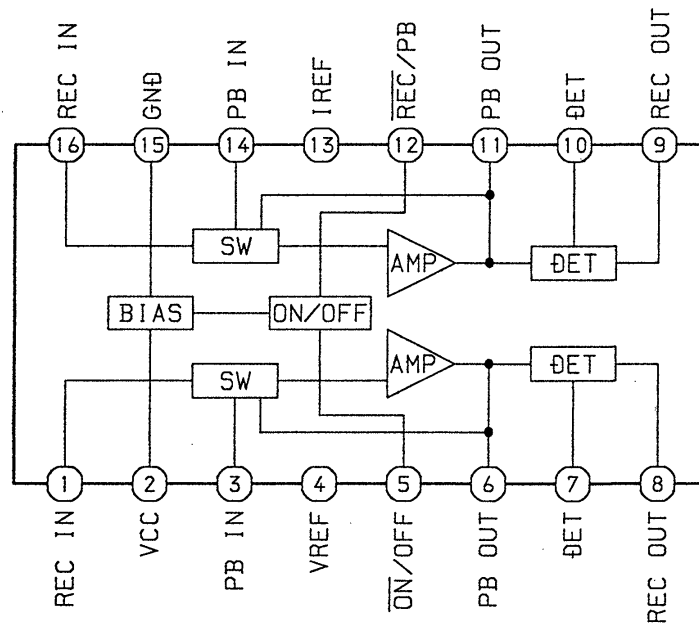


## IC, M65846FP-600D

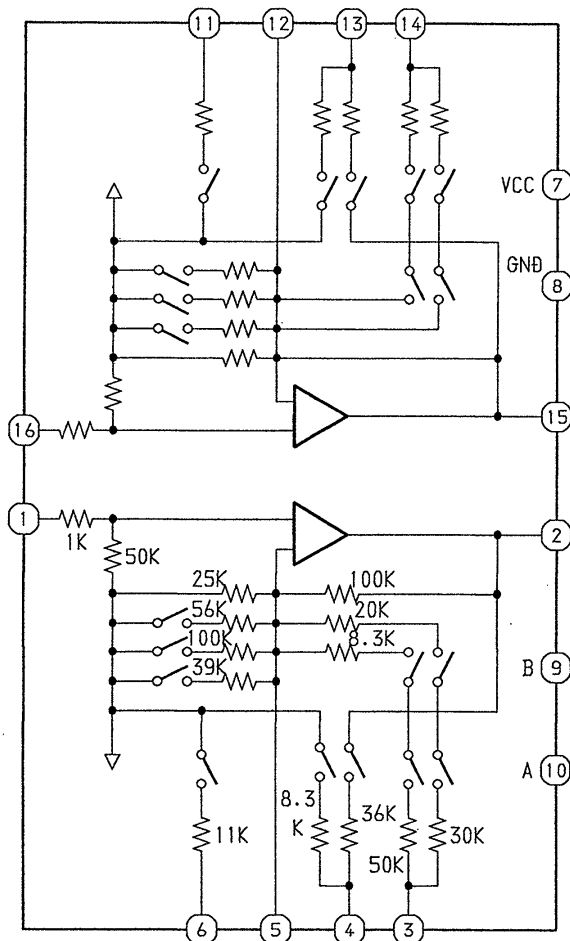




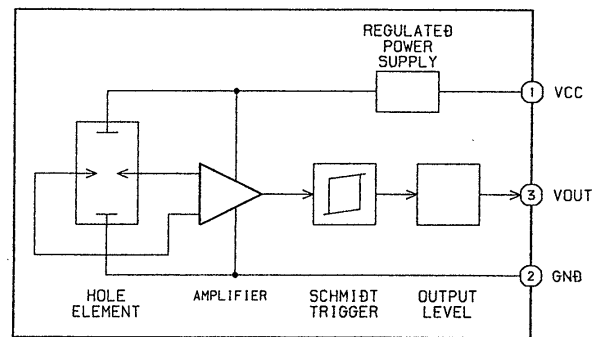
IC, HA12134A



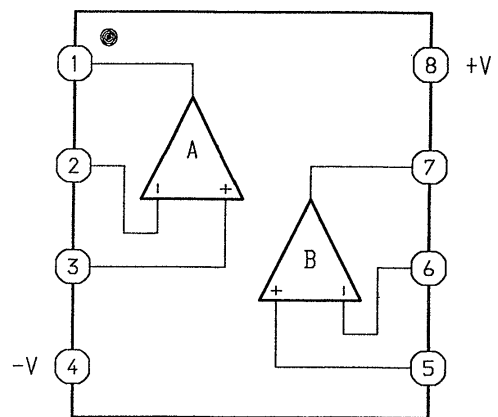
IC, TA2078P



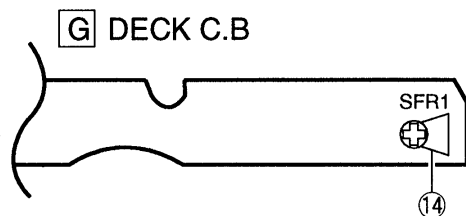
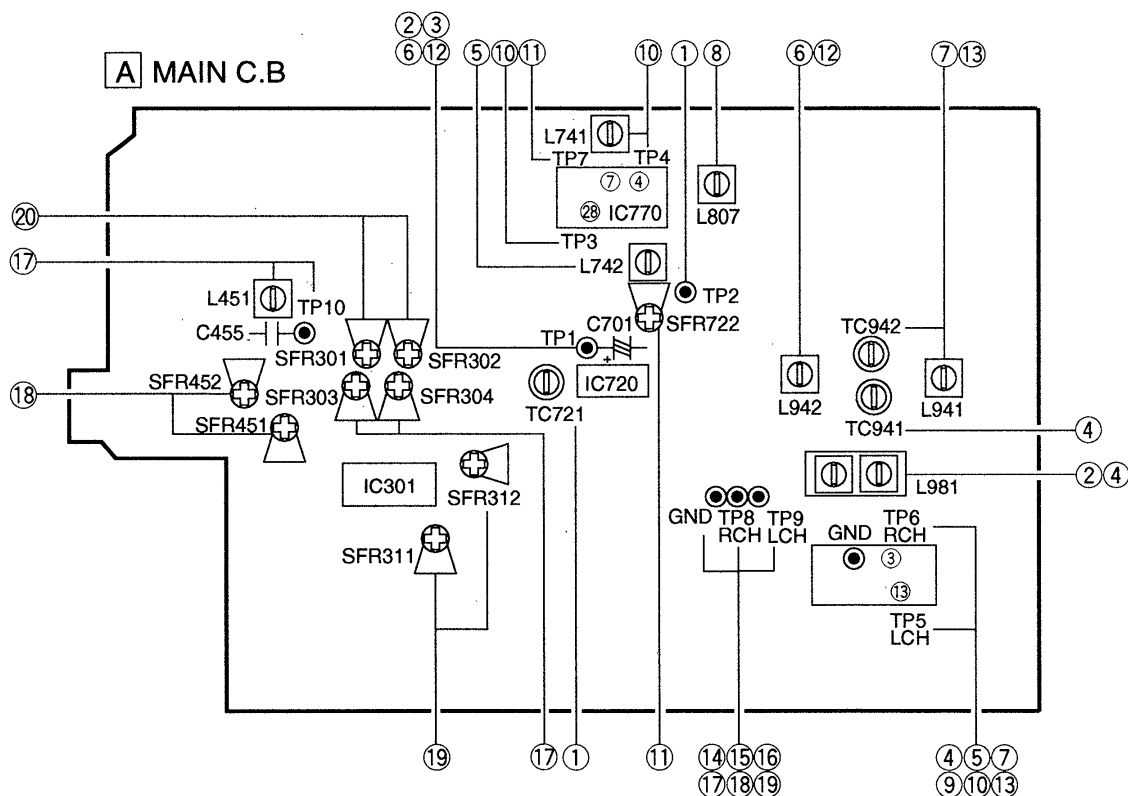
IC, DN6851



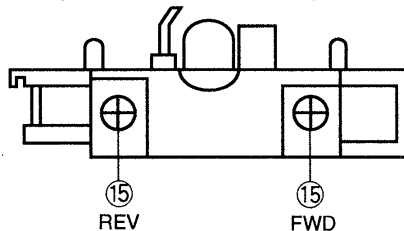
IC, NJM4558L



## 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 $\pm$ 0.01kHz (HE,HR,HK), 2052kHz $\pm$ 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 $\pm$ 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 $\pm$ 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.)

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)

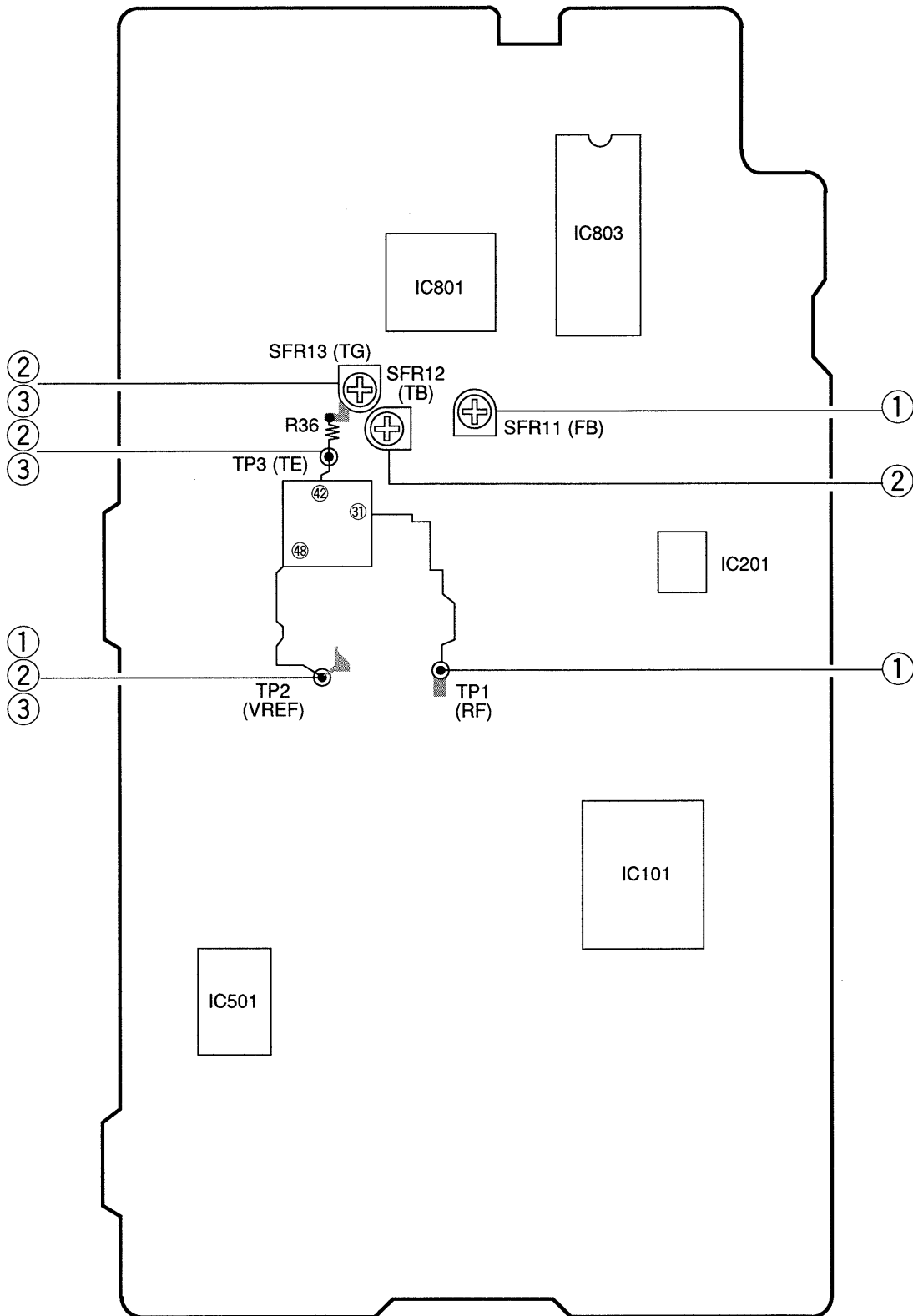
Erasing ratio: More then 60dB(125Hz)

Channel separation: More then 40dB(1kHz, 0VU)

Test tape: NORMAL TTA-602

CrO<sub>2</sub> TTA-610

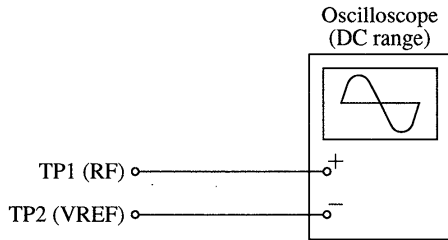
**A** 3CD C.B



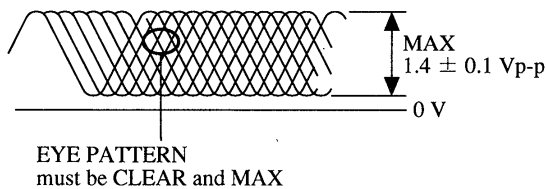
Note: Connect a probe (10: 1) of the oscilloscope or the frequency counter to a test point.

### 1. Focus Bias Adjustment

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

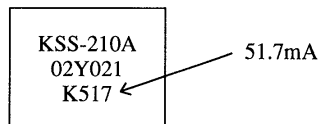


- 1) Connect an oscilloscope to test points TP1 (RF) and TP2 (VREF).
- 2) Turn on the power switch.
- 3) Insert test disc TCD-782 (YEDS-18) and play back the second composition.
- 4) Adjust SFR11 so that RF signal of test point TP1 (RF) is MAX and CLEARREST.



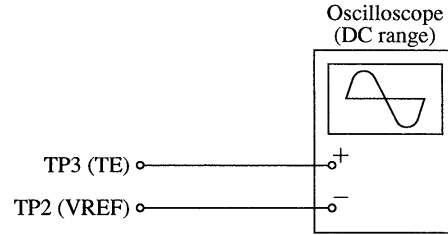
VOLT/DIV : 0.5 V  
TIME/DIV : 1  $\mu$  S

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.

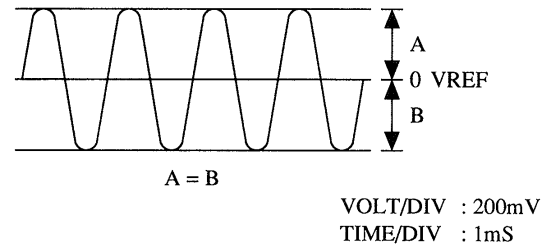


$$\text{Laser current Iop} = \frac{\text{Voltage across R28}}{10\Omega}$$

### 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.



### 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.

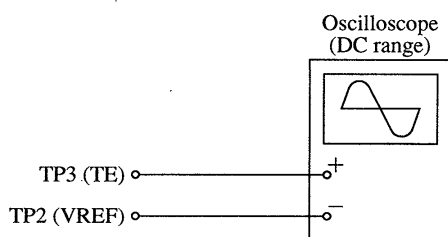
| Symptoms \ Gain                                                                                                                                | (Focus)     | Tracking    |
|------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-------------|
| ● 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.

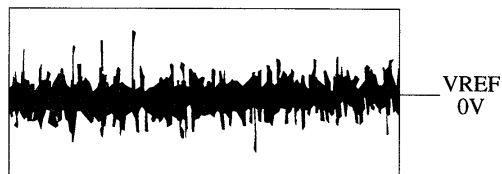
— Simple adjustment —

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)

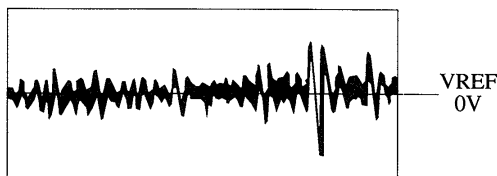


VOLT/DIV: 50 mV  
TIME/DIV: 1 mS

- Incorrect example

Low tracking gain

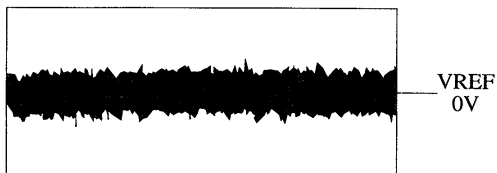
The fundamental wave appears as compared with the waveform adjusted.



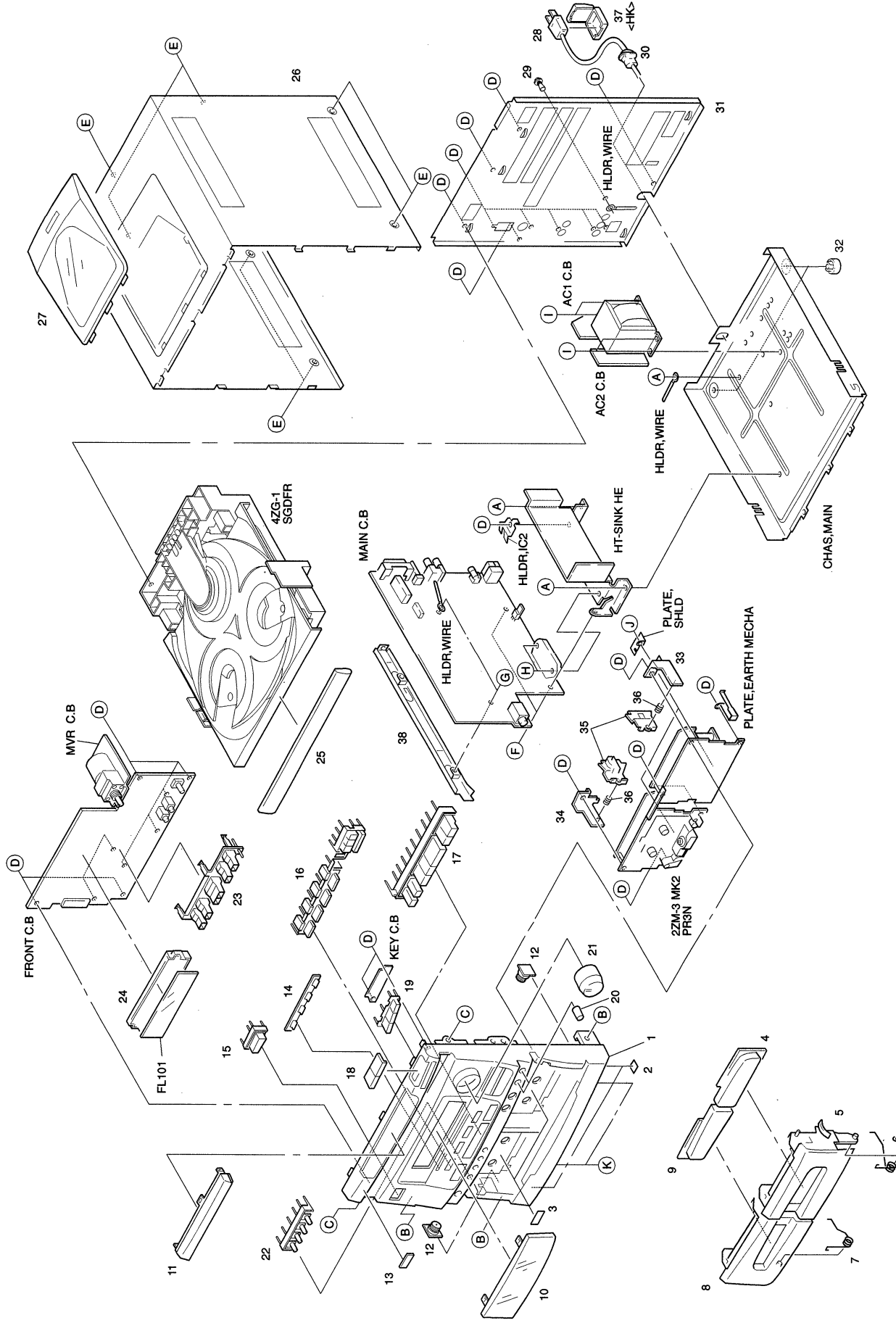
VOLT/DIV: 50 mV  
TIME/DIV: 1 mS

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”.

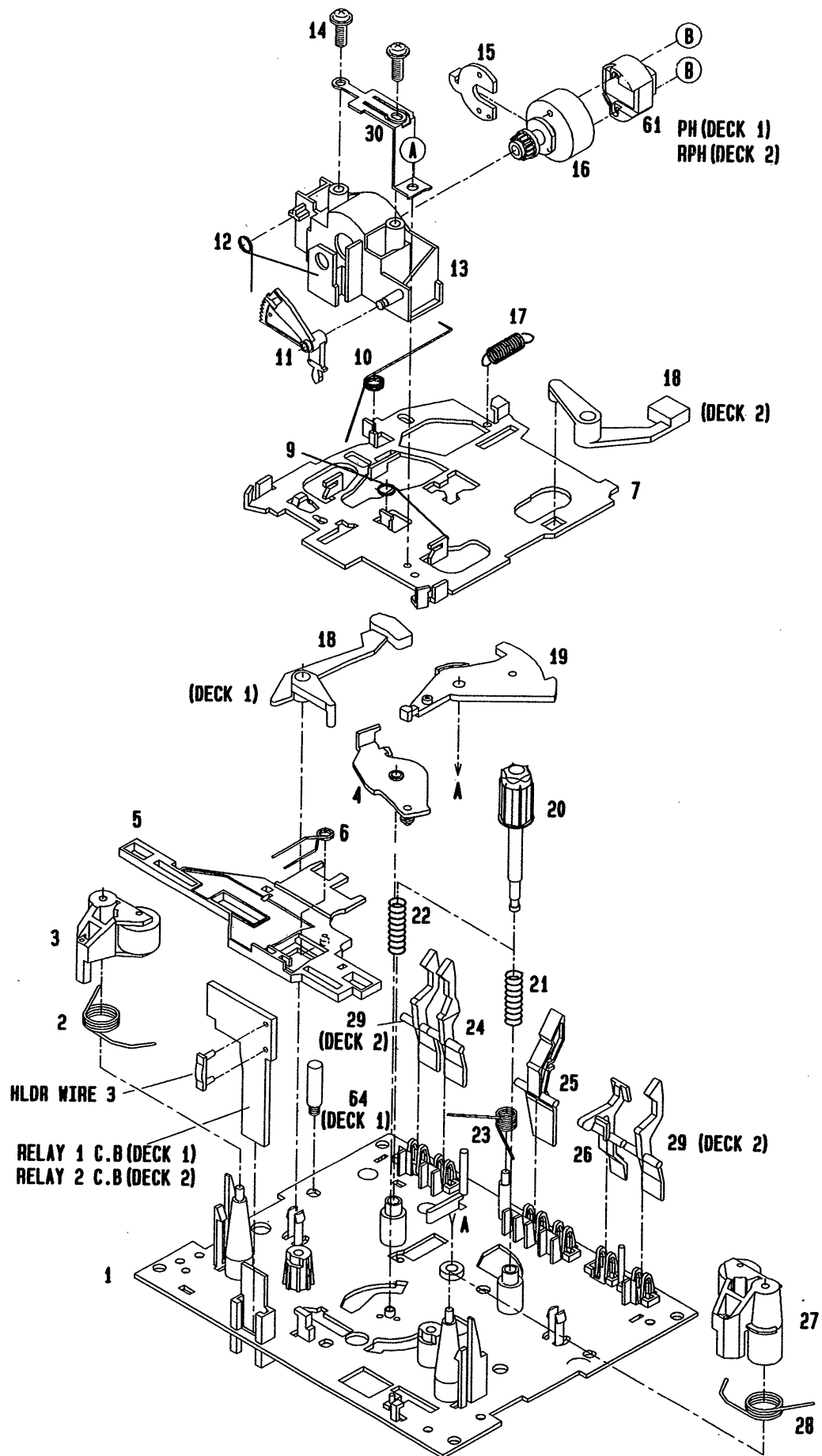
| REF. NO | PART NO.       | カンリ<br>NO. | DESCRIPTION             | REF. NO | PART NO.       | カンリ<br>NO. | DESCRIPTION              |
|---------|----------------|------------|-------------------------|---------|----------------|------------|--------------------------|
| 1       | 85-NFH-013-019 |            | 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              |         |                |            |                          |

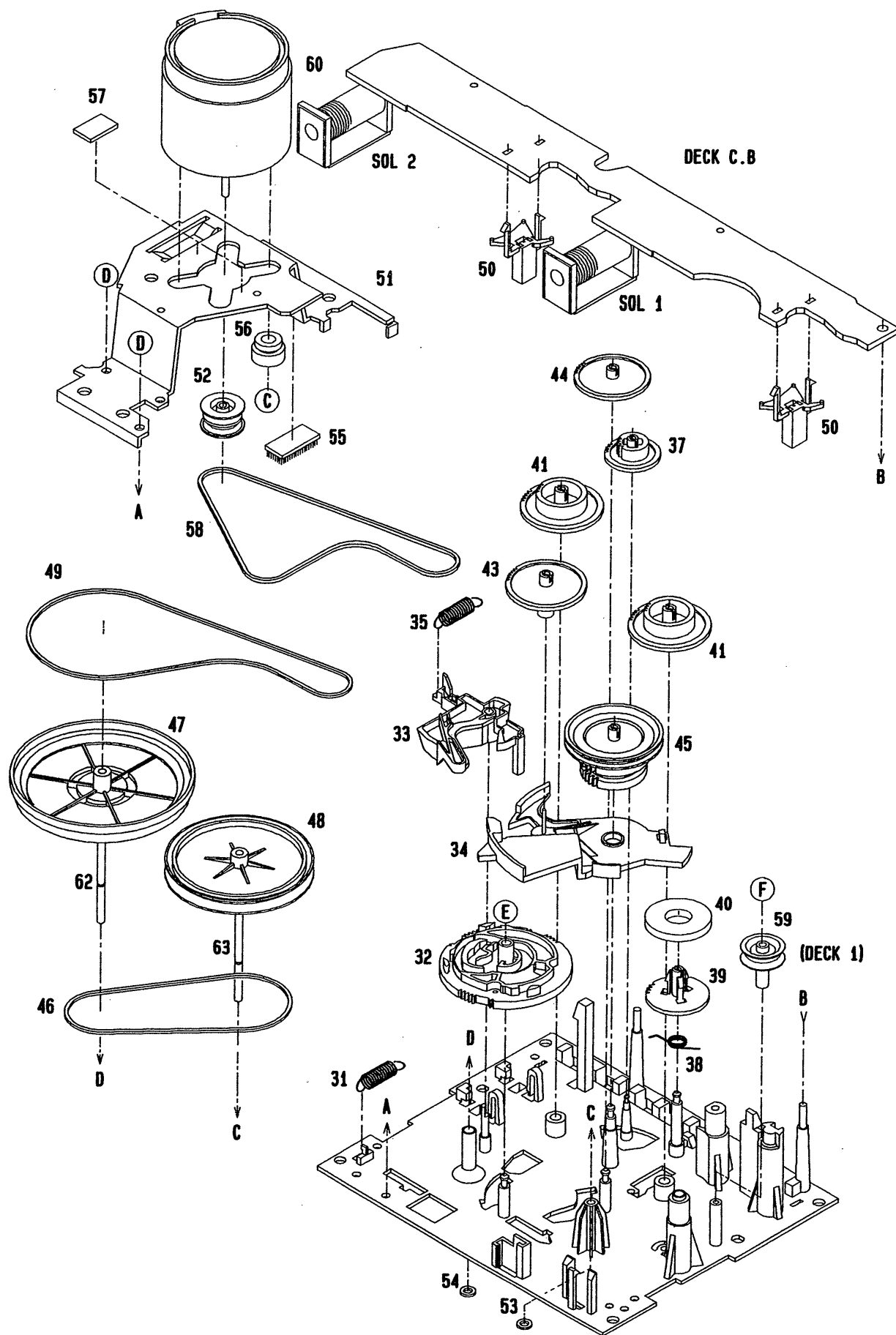
# TAPE MECHANISM PARTS LIST 1 / 1

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”.

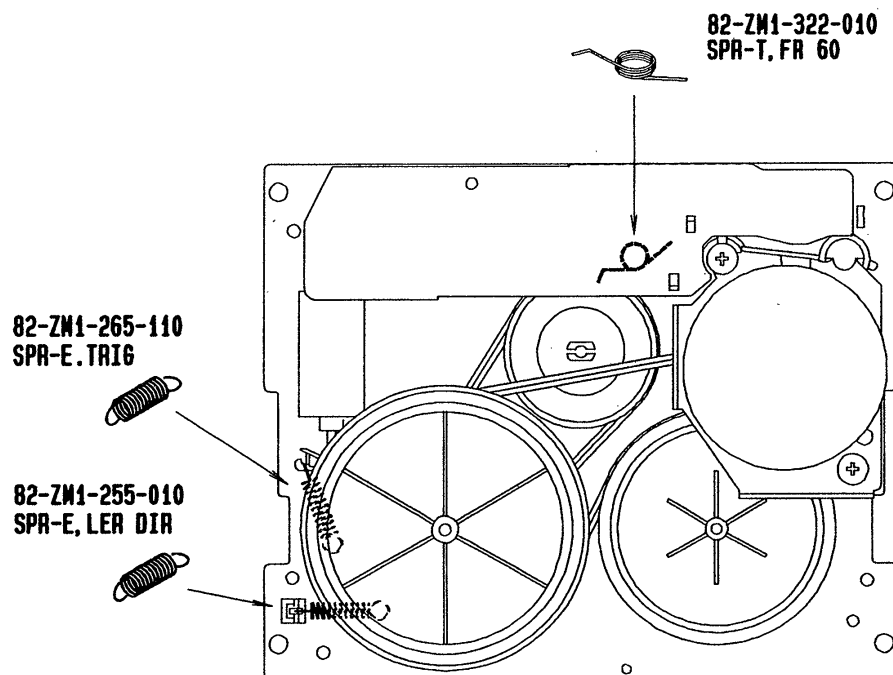
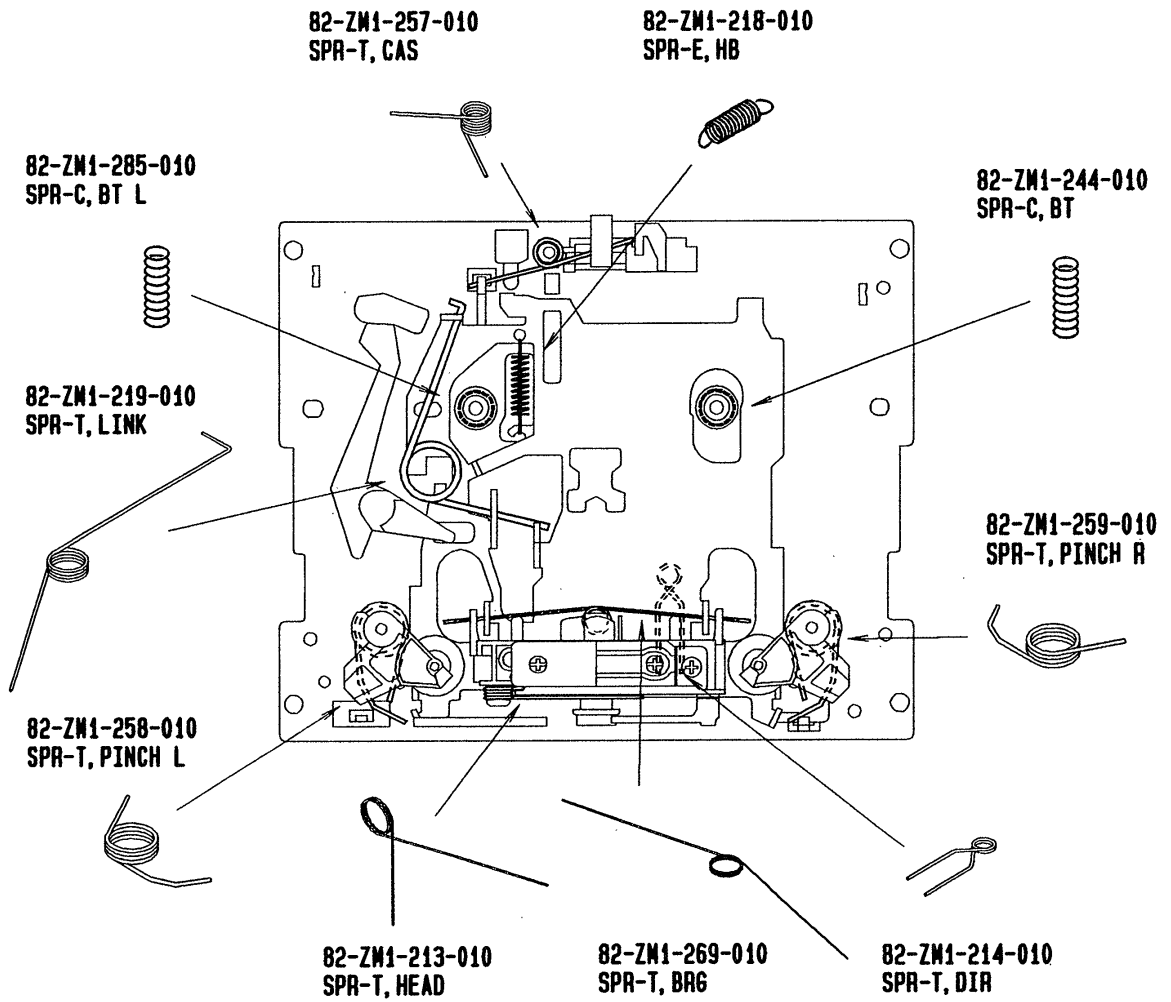
| REF. NO | PART NO.       | カリ<br>NO. | DESCRIPTION            | REF. NO | PART NO.       | カリ<br>NO. | DESCRIPTION                 |
|---------|----------------|-----------|------------------------|---------|----------------|-----------|-----------------------------|
| 1       | 82-ZM1-327-210 |           | 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

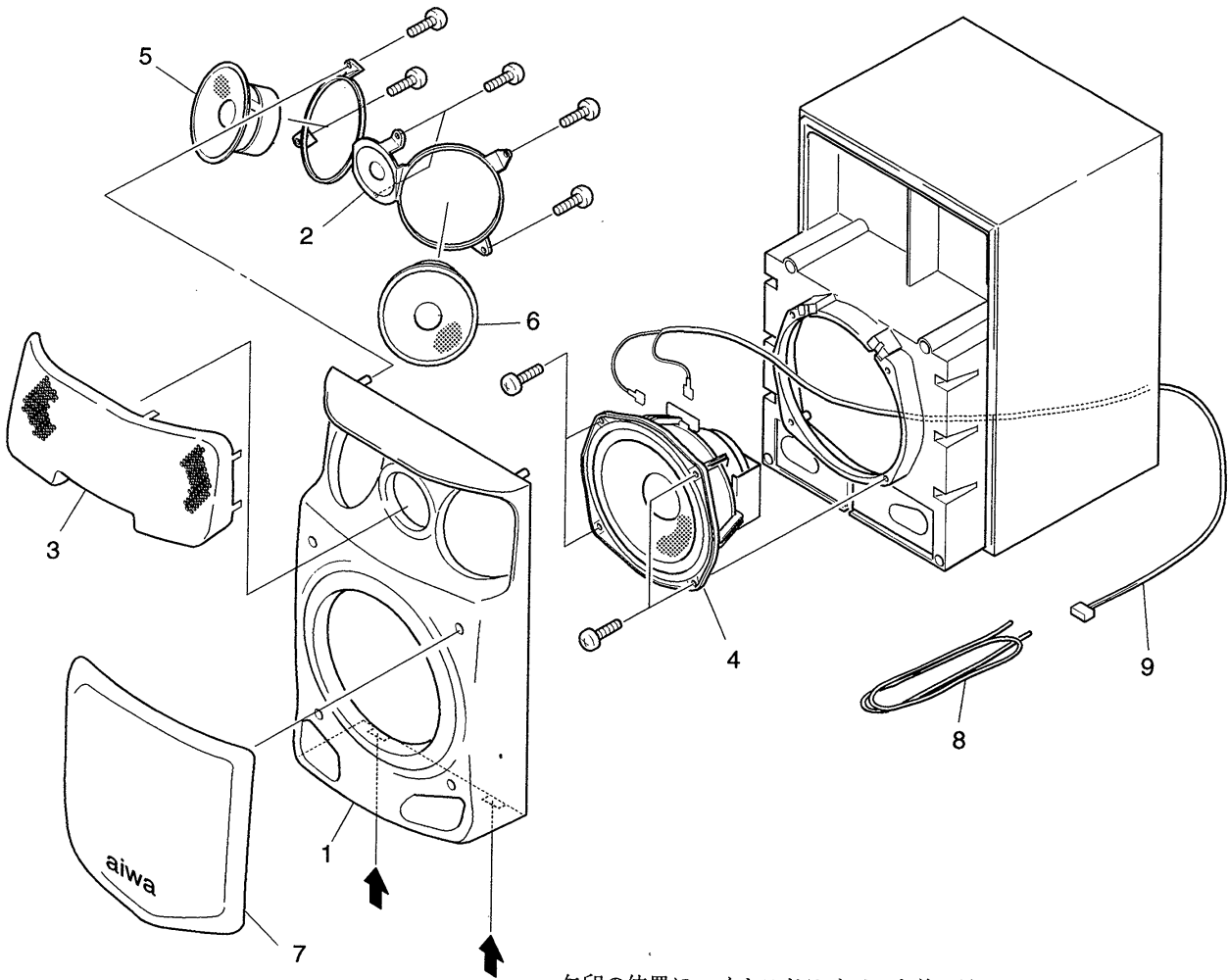




# SPRING APPLICATION POSITION



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<br>NO. | DESCRIPTION    | REF.NO | PART NO.       | カリ<br>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<br>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 SENSOR       |
| P-TR        | PHOTO TRANSISTOR   |
| POLY VARI   | VARIABLE CAPACITOR |
| PPCAP       | CAP, PP            |
| PT          | POWER TRANSFORMER  |
| PTR, RES    | PT, 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             |
| ビスセレクト         | 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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