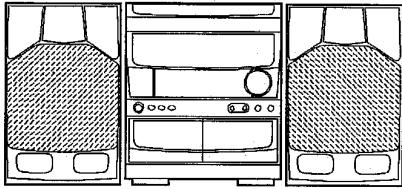


# aiwa



## NSX-K77 NSX-K700



COMPACT DISC STEREO  
CASSETTE RECEIVER

- BASIC TAPE MECHANISM : 2ZM-3MK2 PR3, PR5
- BASIC CD MECHANISM : 4ZG-1 GDFRV5NM
- TYPE: 700:HE  
77:HK,EZ

CD-CASSEIVER	SPEAKER	REMOTE CONTROLLER
CX-NK77 (TYPE: HK)	SX-FNV800	RC-6AS08
CX-NK700 (TYPE: HE)	SX-NAV80	
CX-NK77 (TYPE: EZ)	SX-NAV70	

- If requiring information about the CD mechanism, see Service Manual of 4ZG-1, S/M Code No.09-965-128-10T

## TABLE OF CONTENTS

SPECIFICATIONS .....	3
PROTECTION OF EYES FROM LASER BEAM DURING SERVICING .....	4
PRECAUTION TO REPLACE OPTICAL BLOCK .....	4
ELECTRICAL MAIN PARTS LIST .....	5~9
TRANSISTOR ILLUSTRATION .....	10
BLOCK DIAGRAM - 1 (MAIN / FRONT : HK,EZ) .....	11,12
BLOCK DIAGRAM - 2 (MAIN / FRONT : HE) .....	13,14
BLOCK DIAGRAM - 3 (TUNER : HK,HE) .....	15
BLOCK DIAGRAM - 4 (TUNER : EZ) .....	16
WIRING - 1 (MAIN : HK,HE) .....	17,18
SCHEMATIC DIAGRAM - 1 (MAIN : HK,HE) .....	19~21
SCHEMATIC DIAGRAM - 2 (MAIN : EZ) .....	22~24
WIRING - 2 (MAIN : EZ) .....	25,26
WIRING - 3 (FRONT : HK,EZ) .....	27,28
SCHEMATIC DIAGRAM - 3 (FRONT : HK,EZ) .....	29~31
SCHEMATIC DIAGRAM - 4 (FRONT : HE) .....	32~34
WIRING - 4 (FRONT : HE) .....	35,36
WIRING - 5 (PT : HK) .....	37
WIRING - 5 (PT : EZ,HE) .....	38
WIRING - 6 (DECK) .....	39
FL GRID ASSIGNMENT / ANODE CONNECTION .....	40,41
IC BLOCK DIAGRAM .....	42~46
IC DESCRIPTION .....	47~51
ADJUSTMENT <TUNER / DECK> .....	52,53
PRACTICAL SERVICE FIGURE .....	54
MECHANICAL EXPLODED VIEW 1 / 1 .....	55,56
MECHANICAL PARTS LIST 1 / 1 .....	57
TAPE MECHANISM EXPLODED VIEW 1 / 1 .....	58,59
TAPE MECHANISM PARTS LIST 1 / 1 .....	60
SPRING APPLICATION POSITION .....	61
SPEAKER DISASSEMBLY INSTRUCTIONS .....	62
SPEAKER EXPLODED VIEW 1 / 1 .....	62
ACCESSORIES / PACKAGE LIST .....	64
REFERENCE NAME LIST .....	65

# SPECIFICATIONS

## <FM tuner section>

**Tuning range** 87.5 MHz to 108 MHz  
**Usable sensitivity(IHF)** 13.2 dBf  
**Antenna** 75 ohms (unbalanced)

## <AM (MW) tuner section>

**Tuning range** 531 kHz to 1602 kHz (9 kHz step)  
 530 kHz to 1710 kHz (10 kHz step)  
**Usable sensitivity** 350  $\mu$ V/m  
**Antenna** Loop antenna

## <SW tuner section><HK,HE>

**Tuning range** 5.900 MHz ~ 17.900 MHz  
**Antenna** Wire antenna

## <LW tuner section><EZ>

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

## <Amplifier section>

**Power output** (without connecting to the SURROUND SPEAKERS)  
 HK : Rated 70 W + 70 W  
 HE : Rated 40 W + 40 W  
 (6 ohms, T.H.D. 1%, 1 kHz)  
 HK : Reference: 85 W + 85 W  
 HE : Reference: 50 W + 50 W  
 (6 ohms, T.H.D. 10%, 1 kHz)  
 EZ :  
 Rated 30 W + 30 W  
 (6 ohms, T.H.D. 1%, 1 kHz/DIN 45500)  
 Reference: 38 W + 38 W  
 (6 ohms, T.H.D. 10%, 1 kHz/DIN45324)  
**Total Harmonic distortion** DIN MUSIC POWER : 60 W + 60 W  
 HK : 0.05% (40 W, 1 kHz, 6 ohms, DIN AUDIO)  
 HE : 0.05% (25 W, 1 kHz, 6 ohms, DIN AUDIO)  
 EZ : 0.05% (15 W, 1 kHz, 6 ohms, DIN AUDIO)  
**Inputs** HK, HE : VIDEO/AUX: 400mV  
 EZ : VIDEO/AUX: 150mV  
 MIC 1, MIC 2: 1 mV (10 kohms)  
**Outputs** HK,HE : SUPER WOOFER: 1.7 V  
 EZ : SUPER WOOFER: 1.2 V  
 SPEAKERS: accept speakers of 6 ohms or more  
 SURROUND SPEAKERS: accept speakers of 16 ohms or more  
 PHONES (stereo jack): accepts headphones of 32 ohms or more  
 HK,HE : VIDEO OUT : 1.0Vp-p (75 ohms)

## <Cassette deck section>

**Track format** 4 tracks, 2 channels stereo  
**Frequency response** CrO<sub>2</sub> tape: 50 Hz – 16000 Hz  
 Normal tape: 50 Hz – 15000 Hz  
**Signal-to-noise ratio** HK,HE : 48 dB (CrO<sub>2</sub> tape peak level)  
 EZ : 60 dB (DOLBY NR ON, CrO<sub>2</sub> tape peak level)  
**Recording system** AC bias  
**Heads** Deck 1: Playback head x 1  
 Deck 2: Recording/playback/erase head x 1

## <Compact disc player section>

**Laser** Semiconductor laser ( $\lambda$  = 780 nm)  
**D-A converter** 1 bit dual  
**Signal-to-noise ratio** 85 dB (1 kHz, 0 dB)  
**Harmonic distortion** 0.03% (1 kHz, 0 dB)  
**Wow and flutter** Unmeasurable  
**Video signal** NTSC/PAL color format (selectable)  
**Video data** MPEG 1  
**Audio data** MPEG 1, LAYER 2


## <Speaker system SX-FNV800<HK>,SX-NAV80<HE>,SX-NAV70<EZ>>

**Cabinet type** 3way, bass reflex with surround speaker (Magnetic sealed type)  
**Speakers** Woofer:  
 140 mm cone type  
 Tweeter:  
 HK : 80mm cone type  
 HE,EZ : 60mm cone type  
 Super tweeter:  
 20 mm ceramic type  
 HK :  
 Surround speaker:  
 80mm cone type  
 Front speaker: 6 ohms  
 HK :  
 Surround speaker: 16 ohms  
**Impedance** 87 dB/W/m  
**Output sound pressure level** HK : 235 x 302 x 270 mm  
 HE,EZ : 235 x 302 x 250 mm  
**Dimensions (W x H x D)** HK : 3.8 kg  
 HE,EZ : 3.3 kg  
**Weight**

## <General>

**Power requirements** HE,HK : 120 V / 220 – 230 V/240 V AC, switchable 50/60 Hz  
 EZ : 230 V AC, 50 Hz  
**Power consumption** HK : 170 W  
 HE : 130 W  
 EZ : 200 W  
**Dimensions of main unit (W x H x D)** 260 x 308 x 328 mm  
**Weight of main unit** HK : 8.9 kg  
 HE, EZ : 7.3 kg

• Design and specifications are subject to change without notice.

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

# PROTECTION OF EYES FROM LASER BEAM DURING SERVICING

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

## WARNING!!

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



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

## VAROITUS!

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

## WARNING!

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

## CAUTION

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

## ATTENTION

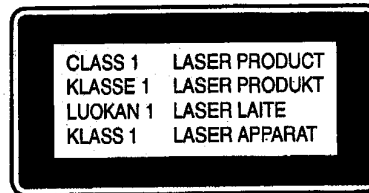
L'utilisation de commandes, réglages ou procédures autres que ceux spécifiés peut entraîner une dangereuse exposition aux radiations.

## ADVARSEL!

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

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

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

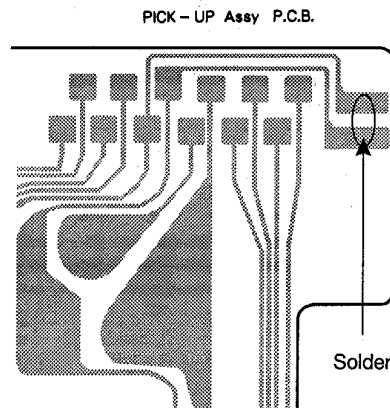


Precaution to replace Optical block

## (KSS – 213B)

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

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



# ELECTRICAL MAIN PARTS LIST

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

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION	REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
IC				C132	87-010-260-089		CAP,E 47-25 SME<HK>
				C141	87-010-384-089		CAP,E 100-25 SME
	86-NF6-671-010		C-IC UPD78044HGF-019<700HE>	C142	87-010-384-089		CAP,E 100-25 SME
	86-NF6-672-010		C-IC UPD78045HGF-015<HK,EZ>	C143	87-010-764-089		CAP,E 47-63V
	87-A20-101-019		IC,STK405-070A<EZ>	C144	87-010-196-089		C-CAP,S 0.1-25 F
	87-A20-102-019		IC,STK405-090A<700HE>				
	87-A20-103-019		IC,STK405-110A<HK>	C145	87-010-196-089		C-CAP,S 0.1-25 F
				C146	87-010-390-099		CAP,E 3300-25 SME<HK,EZ>
	87-070-453-010		IC,SPS-442-1<700HE>	C146	87-016-565-099		CAP,E 4700-25 SME<700HE>
	87-070-083-019		IC,GPIU281X<HK,EZ>	C151	87-012-368-089		C-CAP,S 0.1-50F
	87-070-121-010		IC,HAL2185NT	C152	87-012-368-089		C-CAP,S 0.1-50F
	87-001-874-010		IC,HAL2134A<EZ>				
	87-017-915-019		C-IC,BU4094 BCF	C153	87-016-474-099		CAP,E 3300-50
				C154	87-016-474-099		CAP,E 3300-50
	87-017-914-019		IC,BU4094 BC	C161	87-010-401-089		CAP,E 1-50 SME
	87-017-804-019		IC,BU4052BC	C172	87-012-140-089		C-CAP,S 470P-50 CH
	87-A20-107-019		IC,BA3836	C173	87-010-405-089		CAP,E 10-50 SME
	87-017-888-089		IC,NJM4558MD				
	87-A20-069-049		C-IC,BA3842F	C181	87-010-101-089		CAP,E 220-16 SME
				C182	87-010-381-089		CAP,E 330-16 SME
	87-070-127-119		IC,LC72131D	C197	87-010-196-089		C-CAP,S 0.1-25 F
	87-017-714-119		IC,LA1836L	C198	87-010-196-089		C-CAP,S 0.1-25 F
	87-A20-070-019		IC-LV1100	C201	87-010-400-089		CAP,E 0.47-50 SME
	87-020-454-010		IC,DN6851				
	87-070-232-019		IC,BA3834S	C202	87-010-400-089		CAP,E 0.47-50 SME
				C203	87-010-181-089		C-CAP,S 1800P-50 B<HK>
	87-A20-068-049		C-IC,M65847FP	C203	87-010-177-089		C-CAP,S 820P-50 SL<700HE,EZ>
				C204	87-010-181-089		C-CAP,S 1800P-50 B<HK>
				C204	87-010-177-089		C-CAP,S 820P-50 SL<700HE,EZ>
TRANSISTOR				C205	87-010-180-089		C-CAP,S 1500P-50 B<HK>
	87-026-610-089		TR,KTC3198GR	C205	87-010-181-089		C-CAP,S 1800P-50 B<700HE>
	89-327-125-089		C-TR,2SC2712GR	C205	87-010-182-089		C-CAP,S 2200P-50 B<EZ>
	89-111-625-089		C-TR,2SA1162GR	C206	87-010-180-089		C-CAP,S 1500P-50 B<HK>
	87-026-609-089		TR,KTA1266GR	C206	87-010-181-089		C-CAP,S 1800P-50 B<700HE>
	89-213-702-019		TR 2SB1370E				
				C206	87-010-182-089		C-CAP,S 2200P-50 B<EZ>
	89-332-665-089		TR,2SC3266GR	C207	87-010-402-089		CAP,E 2.2-50 SME
	89-406-555-089		TR,2SD655E	C208	87-010-402-089		CAP,E 2.2-50 SME
	87-026-218-089		TR,DTC144ES	C209	87-010-402-089		CAP,E 2.2-50 SME
	87-026-286-089		TR,DTA143ES	C210	87-010-402-089		CAP,E 2.2-50 SME
	89-502-466-089		TR FET 2SK246-BL (TPE2)				
				C211	87-010-318-089		C-CAP,S 47P-50 CH<EZ>
	89-333-317-089		TR,2SC3331T	C212	87-010-318-089		C-CAP,S 47P-50 CH<EZ>
	87-026-216-089		TR,DTA124ES	C213	87-010-147-089		C-CAP,S 3P-50 CH
	89-109-521-089		TR,2SA952K	C214	87-010-147-089		C-CAP,S 3P-50 CH
	89-112-965-089		TR,2SA1296GR	C215	87-010-196-089		C-CAP,S 0.1-25 F
	87-026-219-089		TR,DTA144ES				
				C216	87-010-196-089		C-CAP,S 0.1-25 F
	89-327-143-089		C-TR,2SC2714 (O)	C217	87-010-196-089		C-CAP,S 0.1-25 F
	89-328-785-089		TR 2SC2878-A (EZ-M)	C218	87-010-196-089		C-CAP,S 0.1-25 F
	87-026-269-089		TR,DTA114ES	C219	87-010-198-089		C-CAP,S 0.022-25 B
	89-503-602-089		C-FET,2SK360E	C220	87-010-198-089		C-CAP,S 0.022-25 B
	87-026-214-089		TR,DTA114YS				
				C221	87-010-194-089		C-CAP,S 0.047-25 F
	89-505-434-549		C-FET,2SK543(4/5)	C261	87-010-197-089		C-CAP,S 0.01-25 B<EZ>
	87-026-463-089		TR,2SA933S(RS)	C262	87-010-197-089		C-CAP,S 0.01-25 B<EZ>
	87-A30-047-089		TR,CSD655E	C263	87-010-197-089		C-CAP,S 0.01-25 B<EZ>
	89-320-011-089		TR,2SC2001K<EZ>	C264	87-010-197-089		C-CAP,S 0.01-25 B<EZ>
	87-A30-065-089		TR,2SC2785FE				
				C301	87-010-197-089		C-CAP,S 0.01-25 B
	87-A30-066-089		TR,2SA1175FE	C311	87-012-155-089		C-CAP,S 180P-50 CH
				C312	87-012-155-089		C-CAP,S 180P-50 CH
				C313	87-010-180-089		C-CAP,S 1500P-50 B<EXCEPT EZ>
				C313	87-010-181-089		C-CAP,S 1800P-50 B<EZ>
DIODE				C314	87-010-180-089		C-CAP,S 1500P-50 B<EXCEPT EZ>
	87-020-027-089		C-DIODE,1SS184	C314	87-010-181-089		C-CAP,S 1800P-50 B<EZ>
	87-020-125-089		C-DIODE,1SS181	C321	87-012-145-089		C-CAP,S 270P-50CH
	87-017-978-089		DIODE,1N4003	C322	87-012-145-089		C-CAP,S 270P-50CH
	87-017-437-089		DIODE,1N4148M	C323	87-012-154-089		C-CAP,S 150P-50 CH
	87-A40-116-069		DIODE,RS403L-B-D-51				
				C324	87-012-154-089		C-CAP,S 150P-50 CH
	87-A40-202-089		ZENER UZ 5.1BSB	C325	87-010-179-089		C-CAP,S 1200P-50 B
	87-A40-201-089		ZENER UZ 4.7BSA	C326	87-010-179-089		C-CAP,S 1200P-50 B
	87-A40-200-089		ZENER UZL 11L3	C331	87-010-392-089		CAP,E 33-35 SME<EXCEPT EZ>
	87-A40-199-089		ZENER,UZL 6H2	C332	87-010-392-089		CAP,E 33-35 SME<EXCEPT EZ>
	87-A40-209-089		ZENER,UT 27BSD				
				C333	87-010-198-089		C-CAP,S 0.22-25 B
				C334	87-010-198-089		C-CAP,S 0.22-25 B
				C335	87-010-189-089		C-CAP,S 8200P-50 B<EXCEPT EZ>
MAIN C.B				C336	87-010-189-089		C-CAP,S 8200P-50 B<EXCEPT EZ>
	BPF831	87-030-105-019	FLTR,BPM B6A<EZ>	C337	87-010-400-089		CAP,E 0.47-50 SME
	C131	87-010-403-089	CAP,E 3.3-50 SME				

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION	REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C338	87-010-400-089		CAP,E 0.47-50 SME	C583	87-A10-060-089		C-CAP,S 0.18-16 KB
C339	87-010-371-089		CAP,E 470-6.3 1LL	C584	87-A10-060-089		C-CAP,S 0.18-16 KB
C340	87-010-196-089		C-CAP,S 0.1-25 F	C585	87-010-177-089		C-CAP,S 820P-50 SL
C351	87-010-546-089		CAP,E 0.33-50 SME<EXCEPT EZ>	C586	87-012-145-089		C-CAP,S 270P-50 CH
C352	87-010-546-089		CAP,E 0.33-50 SME<EXCEPT EZ>	C590	87-010-177-089		C-CAP,S 820P-50 SL
C353	87-010-401-089		CAP,E 1-50 SME<EXCEPT EZ>	C591	87-012-145-089		C-CAP,S 270P-50 CH
C354	87-010-401-089		CAP,E 1-50 SME<EXCEPT EZ>	C592	87-010-196-089		C-CAP,S 0.1-25 F
C355	87-010-401-089		CAP,E 1-50 SME	C593	87-012-154-089		C-CAP,S 150P-50 CH
C356	87-010-401-089		CAP,E 1-50 SME	C594	87-010-183-089		C-CAP,S 2700P-50 B
C357	87-010-178-089		C-CAP,S 1000P-50 B	C595	87-010-196-089		C-CAP,S 0.1-25 F
C359	87-010-196-089		C-CAP,S 0.1-25 F<EZ>	C596	87-018-209-019		CAP,TC-U 0.1-50 2F UP
C360	87-010-196-089		C-CAP,S 0.1-25 F<EZ>	C601	87-010-198-089		C-CAP,S 0.022-25 B
C371	87-012-156-089		C-CAP,S 220P-50 CH	C701	87-010-404-089		CAP,E 4.7-50 SME
C372	87-012-156-089		C-CAP,S 220P-50 CH	C702	87-010-197-089		C-CAP,S 0.01-25 B
C373	87-010-178-089		C-CAP,S 1000P-50 B<EXCEPT EZ>	C703	87-010-197-089		C-CAP,S 0.01-25 B
C373	87-010-177-089		C-CAP,S 820P-50 SL<EZ>	C704	87-010-178-089		C-CAP,S 1000P-50 B
C374	87-010-178-089		C-CAP,S 1000P-50 B<EXCEPT EZ>	C707	87-010-402-089		CAP,E 2.2-50 SME
C374	87-010-175-089		C-CAP,S 560P-50 UJ<EZ>	C708	87-010-402-089		CAP,E 2.2-50 SME
C376	87-010-392-089		CAP,E 33-35 SME	C711	87-010-263-089		CAP,E 100-10 SME 5X11
C377	87-010-198-089		C-CAP,S 0.022-25 B	C712	87-010-112-089		CAP,E 100-16 1LL
C378	87-010-197-089		C-CAP,S 0.01-25 B	C722	87-010-152-089		C-CAP,S 8P-50 CH
C379	87-010-183-089		C-CAP,S 2700P-50 B	C723	87-010-178-089		C-CAP,S 1000P-50 B
C380	87-010-183-089		C-CAP,S 2700P-50 B	C725	87-010-178-089		C-CAP,S 1000P-50 B
C381	87-010-183-089		C-CAP,S 2700P-50 B	C727	87-010-196-089		C-CAP,S 0.1-25 F
C401	87-012-142-089		C-CAP,S 0.33-16 F<EZ>	C728	87-010-248-089		CAP,E 220-10 SME
C402	87-012-142-089		C-CAP,S 0.33-16 F<EZ>	C729	87-010-197-089		C-CAP,S 0.01-25 B
C403	87-010-177-089		C-CAP,S 820P-50 SL<EZ>	C730	87-018-134-089		CAP,TC-U 0.01-16 Y
C404	87-010-177-089		C-CAP,S 820P-50 SL<EZ>	C770	87-010-197-089		C-CAP,S 0.01-25 B
C405	87-010-545-089		CAP,E 0.22-50 SME<EZ>	C771	87-010-405-089		CAP,E 10-50 SME
C406	87-010-545-089		CAP,E 0.22-50 SME<EZ>	C772	87-010-194-089		C-CAP,S 0.047-25 F
C407	87-010-400-089		CAP,E 0.47-50 SME<EZ>	C773	87-010-196-089		C-CAP,S 0.1-25 F
C408	87-010-400-089		CAP,E 0.47-50 SME<EZ>	C774	87-010-263-089		CAP,E 100-10 SME 5X11
C409	87-010-405-089		CAP,E 10-50 SME	C775	87-010-405-089		CAP,E 10-50 SME
C451	87-010-197-089		C-CAP,S 0.01-25 B<EXCEPT EZ>	C776	87-010-197-089		C-CAP,S 0.01-25 B<EZ>
C452	87-010-184-089		C-CAP,S 3300P-50 B<EZ>	C777	87-010-400-089		CAP,E 0.47-50 SME
C453	87-010-312-089		C-CAP,S 15P-50 CH	C778	87-010-401-089		CAP,E 1-50 SME
C454	87-012-145-089		C-CAP,S 270P-50CH<EXCEPT EZ>	C779	87-010-401-089		CAP,E 1-50 SME
C455	87-010-197-089		C-CAP,S 0.01-25 B	C780	87-010-197-089		C-CAP,S 0.01-25 B
C456	87-010-402-089		CAP,E 2.2-50 SME	C787	87-010-184-089		C-CAP,S 3300P-50 B<EZ>
C521	87-010-181-089		C-CAP,S 1800P-50 B	C788	87-010-184-089		C-CAP,S 3300P-50 B<EZ>
C522	87-010-181-089		C-CAP,S 1800P-50 B	C789	87-012-365-089		C-CAP,S 0.027-25 B<EXCEPT EZ>
C523	87-010-178-089		C-CAP,S 1000P-50 B	C789	87-010-179-089		C-CAP,S 1200P-50 B<EZ>
C524	87-010-178-089		C-CAP,S 1000P-50 B	C790	87-010-179-089		C-CAP,S 1200P-50 B<EZ>
C527	87-010-197-089		C-CAP,S 0.01-25 B<EXCEPT EZ>	C790	87-012-365-089		C-CAP,S 0.027-25 B<EXCEPT EZ>
C527	87-010-220-089		C-CAP,S 0.018-25 B<EZ>	C791	87-010-401-089		CAP,E 1-50 SME
C528	87-010-197-089		C-CAP,S 0.01-25 B<EXCEPT EZ>	C792	87-018-196-089		CAP,TC-U 1500P-16 Y<EXCEPT EZ>
C528	87-010-220-089		C-CAP,S 0.018-25 B<EZ>	C792	87-010-183-089		C-CAP,S 2700P-50 B<EZ>
C529	87-010-400-089		CAP,E 0.47-50 SME	C793	87-010-189-089		C-CAP,S 8200P-50 B
C530	87-010-400-089		CAP,E 0.47-50 SME	C794	87-010-260-089		CAP,E 47-25 SME
C531	87-010-382-089		CAP,E 22-25 SME	C795	87-010-194-089		C-CAP,S 0.047-25 F
C532	87-010-198-089		C-CAP,S 0.022-25 B	C796	87-010-403-089		CAP,E 3.3-50 SME
C551	87-010-403-089		CAP,E 3.3-50 SME<HK>	C797	87-010-197-089		C-CAP,S 0.01-25 B
C551	87-010-546-089		CAP,E 0.33-50 SME<700HE>	C798	87-018-134-089		CAP,TC-U 0.01-16 Y<EXCEPT EZ>
C551	87-010-401-089		CAP,E 1-50 SME<EZ>	C799	87-010-405-089		CAP,E 10-50 SME
C552	87-010-403-089		CAP,E 3.3-50 SME<HK>	C801	87-010-197-089		C-CAP,S 0.01-25 B
C552	87-010-546-089		CAP,E 0.33-50 SME<700HE>	C802	87-010-312-089		C-CAP,S 15P-50 CH<EZ>
C552	87-010-401-089		CAP,E 1-50 SME<EZ>	C802	87-010-311-089		C-CAP,S 12P-50 CH<EXCEPT EZ>
C553	87-010-194-089		C-CAP,S 0.047-25 F	C803	87-018-134-089		CAP,TC-U 0.01-16 Y
C554	87-010-183-089		C-CAP,S 2700P-50 B	C804	87-010-151-089		C-CAP,S 7P-50 CH<EXCEPT EZ>
C556	87-010-263-089		CAP,E 100-10 SME 5X11	C805	87-010-146-089		C-CAP,S 2P-50 CH<EZ>
C557	87-010-596-089		C-CAP,S 0.047-16 RK	C805	87-010-150-089		C-CAP,S 6P-50 CH<EXCEPT EZ>
C558	87-010-545-089		CAP,E 0.22-50 SME	C806	87-010-147-089		C-CAP,S 3P-50 CH<EZ>
C559	87-010-196-089		C-CAP,S 0.1-25 F	C806	87-010-145-089		C-CAP,S 1P-50 CH<EXCEPT EZ>
C562	87-010-596-089		C-CAP,S 0.047-16 RK	C807	87-010-312-089		C-CAP,S 15P-50 CH<EZ>
C577	87-010-374-089		CAP,E 47-10 SME	C807	87-010-149-089		C-CAP,S 5P-50 CH<EXCEPT EZ>
C578	87-010-196-089		C-CAP,S 0.1-25 F	C808	87-010-322-089		C-CAP,S 100P-50 CH
C579	87-010-263-089		CAP,E 100-10 SME 5X11	C809	87-010-197-089		C-CAP,S 0.01-25 B
C580	87-010-196-089		C-CAP,S 0.1-25 F	C810	87-010-197-089		C-CAP,S 0.01-25 B
C581	87-010-183-089		C-CAP,S 2700P-50 B	C811	87-010-149-089		C-CAP,S 5P-50 CH
C582	87-012-154-089		C-CAP,S 150P-50 CH	C812	87-010-314-089		C-CAP,S 22P-50 CH



REF. NO.	PART NO.	KANRI NO.	DESCRIPTION	REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C275	87-010-196-089		C-CAP,S 0.1-25 F<HK,EZ>	L204	87-003-098-089		COIL,2.2UH M LAL02<HK,EZ>
C276	87-010-553-089		CAP,E 47-16 5L<HK,EZ>	L205	87-003-098-089		COIL,2.2UH M LAL02<HK,EZ>
C277	87-018-119-089		CAP,TC-U 100P-50 KBU<HK,EZ>	L801	87-005-446-089		COIL,150UH FLR50<700HE>
C351	87-010-490-049		CAP ELECT 0.1-50	LED401	87-070-201-089		LED,SLP9118C-51-S-T1
C352	87-010-490-049		CAP ELECT 0.1-50	LED402	87-070-201-089		LED,SLP9118C-51-S-T1
C353	87-010-408-049		CAP,E 47-50 SME	LED403	87-070-201-089		LED,SLP9118C-51-S-T1
C401	87-010-198-089		C-CAP,S 0.022-25 B	LED404	87-070-201-089		LED,SLP9118C-51-S-T1
C508	87-010-060-049		CAP,E 100-16 7L	LED411	87-070-199-089		LED,SLP738F-81-S-T1
C601	87-010-405-049		CAP,E 10-50 SME	LED412	87-070-199-089		LED,SLP738F-81-S-T1
C602	87-010-248-049		CAP,E 220-10 SME	LED413	87-070-199-089		LED,SLP738F-81-S-T1
C603	87-010-196-089		C-CAP,S 0.1-25 F	LED414	87-070-199-089		LED,SLP738F-81-S-T1
C604	87-010-186-089		C-CAP,S 4700P-50 B	LED415	87-070-199-089		LED,SLP738F-81-S-T1
C605	87-010-545-049		CAP,E 0.22-50 SME	LED416	87-070-199-089		LED,SLP738F-81-S-T1
C606	87-010-321-089		C-CAP,S 82P-50 CH	LED417	87-070-199-089		LED,SLP738F-81-S-T1
C607	87-010-196-089		C-CAP,S 0.1-25 F	LED418	87-070-199-089		LED,SLP738F-81-S-T1
C608	87-010-196-089		C-CAP,S 0.1-25 F	LED421	87-017-784-080		LED,SEL 1550CM TP8
C609	87-010-177-089		C-CAP,S 820P-50 SL	LED422	87-017-784-080		LED,SEL 1550CM TP8
C651	87-010-494-049		CAP,E 1-50 GAS	LED423	87-017-784-080		LED,SEL 1550CM TP8
C652	87-010-196-089		C-CAP,S 0.1-25 F	LED424	87-017-784-080		LED,SEL 1550CM TP8
C653	87-010-491-049		CAP,E 0.22-50 GAS	LED425	87-017-784-080		LED,SEL 1550CM TP8
C654	87-010-196-089		C-CAP,S 0.1-25 F	LED426	87-017-784-080		LED,SEL 1550CM TP8
C655	87-010-404-049		CAP,E 4.7-50 SME<HK,EZ>	LED431	87-070-278-019		LED,SLZ-738A-24-S
C656	87-010-404-049		CAP,E 4.7-50 SME<HK,EZ>	LED432	87-070-278-019		LED,SLZ-738A-24-S
C701	87-010-993-089		C-CAP,S0.056-25 B K<700HE>	LED433	87-070-278-019		LED,SLZ-738A-24-S
C702	87-010-993-089		C-CAP,S0.056-25 B K<700HE>	LED434	87-070-278-019		LED,SLZ-738A-24-S
C703	87-016-460-089		C-CAP,S0.022-16 R K<700HE>	LED435	87-070-290-019		LED,SLZ 936-30-S
C704	87-010-598-089		C-CAP,S0.022-16 R K<700HE>	LED436	87-070-290-019		LED,SLZ 936-30-S
C705	87-016-081-089		C-CAP,S 0.1-16 RK<700HE>	S301	87-A90-095-089		SW,TACT EVQ11GD4M
C706	87-010-260-049		CAP,E 47-25 SME<700HE>	S302	87-A90-095-089		SW,TACT EVQ11GD4M
C707	87-010-182-089		C-CAP,S 2200P-50 B<700HE>	S303	87-A90-095-089		SW,TACT EVQ11GD4M
C708	87-010-182-089		C-CAP,S 2200P-50 B<700HE>	S304	87-A90-095-089		SW,TACT EVQ11GD4M
C709	87-010-491-049		CAP,E 0.22-50 GAS<700HE>	S305	87-A90-095-089		SW,TACT EVQ11GD4M
C710	87-010-491-049		CAP,E 0.22-50 GAS<700HE>	S306	87-A90-095-089		SW,TACT EVQ11GD4M
C711	87-010-494-049		CAP,E 1-50 GAS<700HE>	S307	87-A90-095-089		SW,TACT EVQ11GD4M
C712	87-010-494-049		CAP,E 1-50 GAS<700HE>	S313	87-A90-095-089		SW,TACT EVQ11GD4M
C713	87-010-260-049		CAP,E 47-25 SME<700HE>	S314	87-A90-095-089		SW,TACT EVQ11GD4M
C714	87-010-405-049		CAP,E 10-50 SME<700HE>	S315	87-A90-095-089		SW,TACT EVQ11GD4M
C715	87-010-384-049		CAP,E 100-25 SME	S316	87-A90-095-089		SW,TACT EVQ11GD4M
C716	87-010-196-089		C-CAP,S 0.1-25 F<700HE>	S317	87-A90-095-089		SW,TACT EVQ11GD4M
C801	87-010-494-049		CAP,E 1-50 GAS<700HE>	S318	87-A90-095-089		SW,TACT EVQ11GD4M
C802	87-010-494-049		CAP,E 1-50 GAS<700HE>	S319	87-A90-095-089		SW,TACT EVQ11GD4M
C805	87-010-248-049		CAP,E 220-10 SME<700HE>	S320	87-A90-095-089		SW,TACT EVQ11GD4M
C806	87-010-494-049		CAP,E 1-50 GAS<700HE>	S321	87-A90-095-089		SW,TACT EVQ11GD4M
C807	87-010-494-049		CAP,E 1-50 GAS<700HE>	S322	87-A90-095-089		SW,TACT EVQ11GD4M
C808	88-700-860-819		CAP,M 0.068-50 J<700HE>	S323	87-A90-095-089		SW,TACT EVQ11GD4M
C809	87-010-186-089		C-CAP,S 4700P-50 B<700HE>	S324	87-A90-095-089		SW,TACT EVQ11GD4M
C810	88-700-860-819		CAP,M 0.068-50 J<700HE>	S325	87-A90-095-089		SW,TACT EVQ11GD4M
C811	87-010-101-049		CAP,E 220-16 SME<700HE>	S326	87-A90-095-089		SW,TACT EVQ11GD4M
C812	87-010-152-089		C-CAP,S 8P-50 CH<700HE>	S327	87-A90-095-089		SW,TACT EVQ11GD4M
C813	87-010-152-089		C-CAP,S 8P-50 CH<700HE>	S328	87-A90-095-089		SW,TACT EVQ11GD4M
C814	87-010-101-049		CAP,E 220-16 SME<700HE>	S329	87-A90-095-089		SW,TACT EVQ11GD4M
C816	87-010-177-089		C-CAP,S 820P-50 SL<700HE>	S330	87-A90-095-089		SW,TACT EVQ11GD4M
C817	87-010-196-089		C-CAP,S 0.1-25 F<700HE>	S332	87-A90-095-089		SW,TACT EVQ11GD4M
C818	87-010-186-089		C-CAP,S 4700P-50 B<700HE>	S333	87-A90-095-089		SW,TACT EVQ11GD4M
C819	87-010-196-089		C-CAP,S 0.1-25 F<700HE>	VR601	81-MX4-637-019		VR 10KA RK11K1130
C820	87-018-122-089		CAP,TC-U 180P-50B<700HE>	VR801	83-NM1-627-019		VR,10KB RK11K1
C851	87-010-196-089		C-CAP,S 0.1-25 F				
C852	87-010-194-089		C-CAP,S 0.047-25 F				
C853	87-010-406-049		CAP,E 22-50 SME				
C854	87-010-560-049		CAP,E 10-50 GAS				
EMI600	87-008-372-089		FLIR EMI BLOIRNI	C701	87-010-993-089		C-CAP,S0.056-25 B<HK,EZ>
FL301	86-NF6-660-019		FL,BJ478GK<HK,EZ>	C702	87-010-993-089		C-CAP,S0.056-25 B<HK,EZ>
FL301	86-NF6-609-019		FL,8-ST-18GK<700HE>	C703	87-016-460-089		C-CAP,S0.22-16 KB<HK,EZ>
FT101	85-NF5-615-019		CABLE,FFC 15P-1.25	C704	87-016-460-089		C-CAP,S0.22-16 KB<HK,EZ>
FT102	88-913-261-119		CABLE FFC,13P-1.25	C705	87-016-081-089		C-CAP,S 0.1-16 RK<HK,EZ>
J601	87-A60-284-019		JACK,3.5 MO(MSC)	C706	87-010-260-049		CAP,E 47-25 SME<HK,EZ>
J602	87-A60-284-019		JACK,3.5 MO(MSC)	C707	87-010-182-089		C-CAP,S 2200P-50 B<HK,EZ>
L201	87-007-340-019		COIL,CLOCK 4.19MHZ	C708	87-010-182-089		C-CAP,S 2200P-50 B<HK,EZ>
L202	87-003-098-089		COIL,2.2UH M LAL02<700HE>	C709	87-010-491-049		CAP,E 0.22-50 GAS<HK,EZ>
L203	87-003-098-089		COIL,2.2UH M LAL02	C710	87-010-491-049		CAP,E 0.22-50 GAS<HK,EZ>



REF. NO.	PART NO.	KANRI NO.	DESCRIPTION	REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C711	87-010-401-049		CAP,E 1-50 GAS<HK,EZ>	AC C.B			
C712	87-010-401-049		CAP,E 1-50 GAS<HK,EZ>				
C713	87-010-260-049		CAP,E 47-25 SME<HK,EZ>	C101	87-010-428-089		C-CAP,S 0.015-25 B<EZ>
C714	87-010-405-049		CAP,E 10-50 SME<HK,EZ>	R111	87-022-184-089		RES,METAL 0.33-1W
C716	87-010-196-089		C-CAP,S 0.1-25 F<HK,EZ>	R112	87-022-184-089		RES,METAL 0.33-1W
C719	87-018-205-089		CAP,TC-U 0.022-25 ZF<HK>	PT C.B			
C720	87-018-205-089		CAP,TC-U 0.022-25 ZF<HK>	△	82-304-743-019		TERMINAL,1P
C751	87-010-196-089		C-CAP,S 0.1-25 F<HK,EZ>	△ F101	87-035-363-019		FUSE,1.25A 250V T
C801	87-010-494-049		CAP,E 1-50 GAS<HK,EZ>	△ F101	87-035-366-019		FUSE,2.5A 250V T 700HF
C802	87-010-494-049		CAP,E 1-50 GAS<HK,EZ>	△ F101	87-035-367-019		FUSE,3.15A 250V T E<HK>
C803	87-010-185-089		C-CAP,S 3900P-50 KB<HK>	△ FC101	87-033-213-089		CLAMP FUSE SMK
C804	87-010-185-089		C-CAP,S 3900P-50 KB<HK>	△ FC102	87-033-213-089		CLAMP FUSE SMK
C805	87-010-248-049		CAP,E 220-10 SME<HK,EZ>	△ PT101	86-NF6-631-019		PT,6NF-6 H<HK>
C806	87-010-494-049		CAP,E 1-50 GAS<HK,EZ>	△ PT101	86-NF6-632-019		PT,6NF-6 EK<EZ>
C807	87-010-494-049		CAP,E 1-50 GAS<HK,EZ>	△ PT101	86-NF6-633-019		PT,6NF-6 HR<700HE>
C808	88-700-860-819		CAP,M 0.068-50 J<HK,EZ>	△ SW101	87-A90-165-019		SW,SL 1-2-3<EXCEPT EZ>
C809	87-010-186-089		C-CAP,S 4700P-50 B<HK,EZ>	DECK C.B			
C810	88-700-860-819		CAP,M 0.068-50 J<HK,EZ>	SFR1	87-024-581-089		SFR,3.3K DIA 6H
C811	87-010-101-049		CAP,E 220-16 SME<HK,EZ>	SOL1	82-ZM1-618-310		SOL ASSY,27
C812	87-010-152-089		C-CAP,S 8P-50 CH<HK,EZ>	SOL2	82-ZM1-626-310		SOL ASSY,27K
C813	87-010-152-089		C-CAP,S 8P-50 CH<HK,EZ>	SW1	87-036-378-019		SW,PUSH 1-1-1 SH2
C814	87-010-101-049		CAP,E 220-16 SME<HK,EZ>	SW2	87-036-378-019		SW,PUSH 1-1-1 SH2
C816	87-010-177-089		C-CAP,S 820P-50 SL<HK,EZ>	SW3	87-036-378-019		SW,PUSH 1-1-1 SH2
C817	87-010-196-089		C-CAP,S 0.1-25 F<HK,EZ>	SW4	87-036-378-019		SW,PUSH 1-1-1 SH2
C818	87-010-186-089		C-CAP,S 4700P-50 B<HK,EZ>	SW5	87-036-378-019		SW,PUSH 1-1-1 SH2
C820	87-012-155-089		C-CAP,S 180P-50 CH<HK,EZ>	SW6	87-036-378-019		SW,PUSH 1-1-1 SH2
L801	87-005-446-089		COIL,150UH FLR50<HK,EZ>	SW8	87-036-378-019		SW,PUSH 1-1-1 SH2
MVR701	86-NF6-652-019		VR,MOT EUWVGJ035B5<HK,EZ>	HEAD-1 C.B			
MVR701	86-NF6-650-019		VR,MOT 50KBX2 RK 16812<700HE>	HEAD-2 C.B			
KEY C.B							
S308	87-A90-095-089		SW,TACT EVQ11GD4M				
S309	87-A90-095-089		SW,TACT EVQ11GD4M				
S310	87-A90-095-089		SW,TACT EVQ11GD4M				
S311	87-A90-095-089		SW,TACT EVQ11GD4M				
S312	87-A90-095-089		SW,TACT EVQ11GD4M				

# TRANSISTOR ILLUSTRATION



E C B

2SA1296GR  
2SC3266GR  
2SC2878A  
KTA1266GR  
KTC3198GR



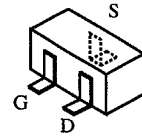
E C B

2SA952K  
2SD655E  
CSD655E  
2SC2001K



E C B

DTA114YS    DTA124ES  
DTA114ES    2SA933S  
DTA144ES    2SC2785FE  
DTA143ES    2SA1175FE  
DTC144ES



2SK543  
2SK360E



S G D

2SK246BL



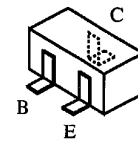
E C B

2SC3331T



B C E

2SB1370E

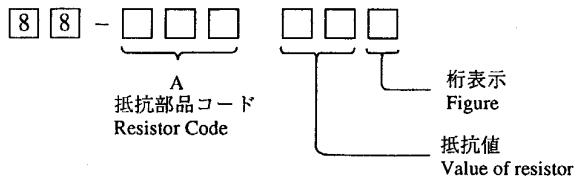


C B E

2SA1162GR  
2SC2712GR  
2SC2714(O)

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

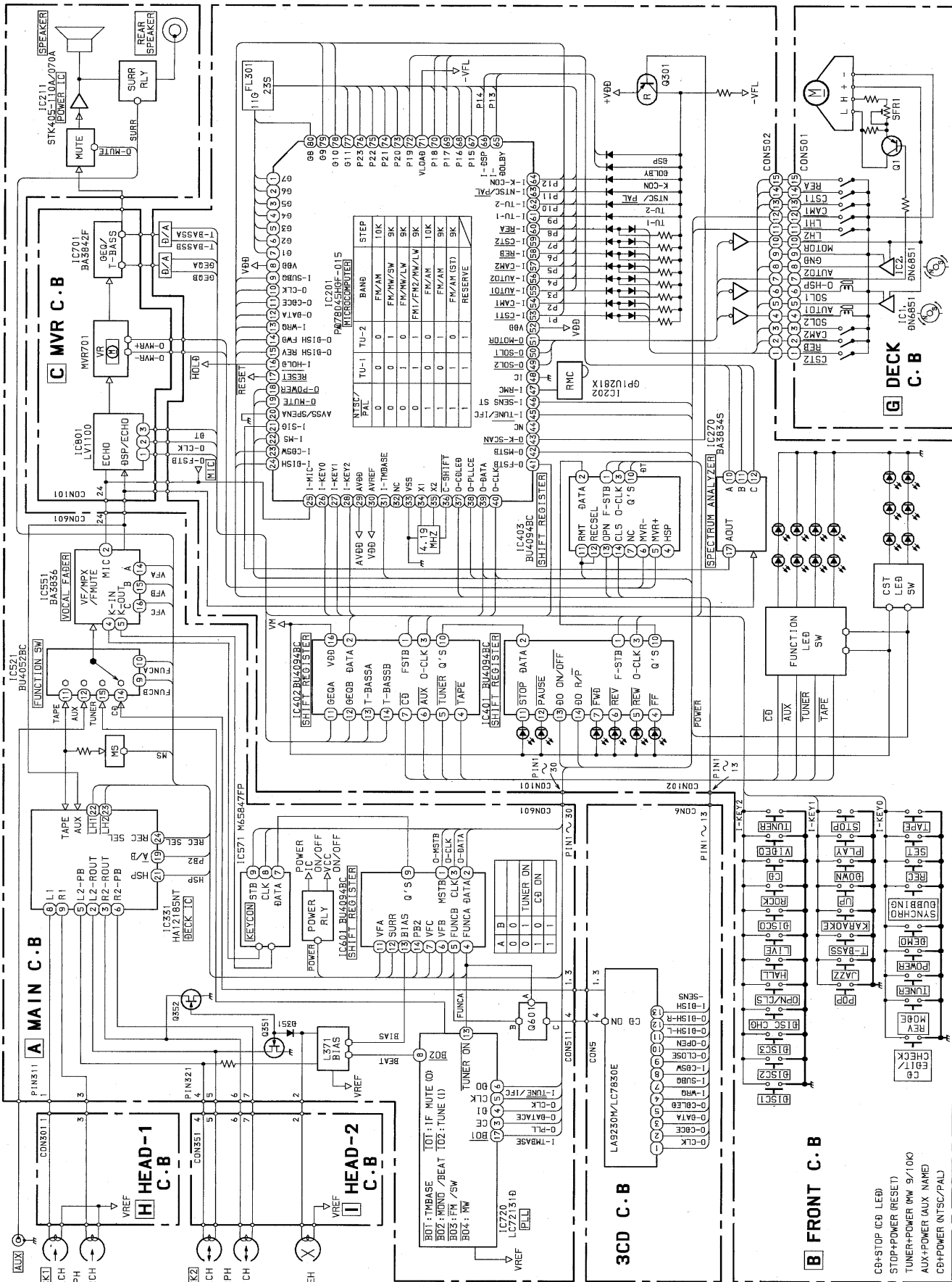
チップ抵抗部品コードの成り立ち  
Chip Resistor Part Coding



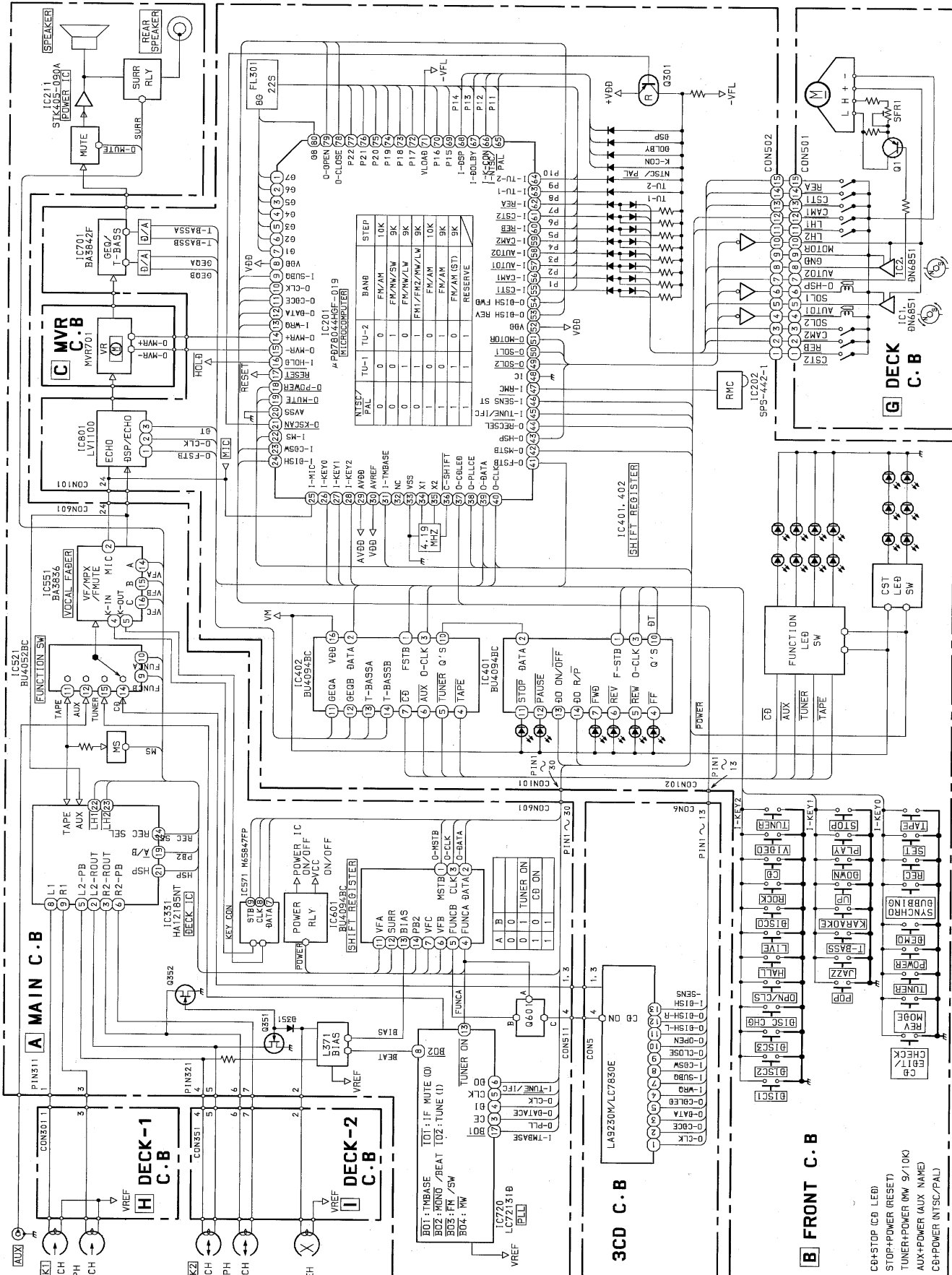
チップ抵抗  
Chip resistor

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

BLOCK DIAGRAM - 1 (MAIN / FRONT : HK, EZ)

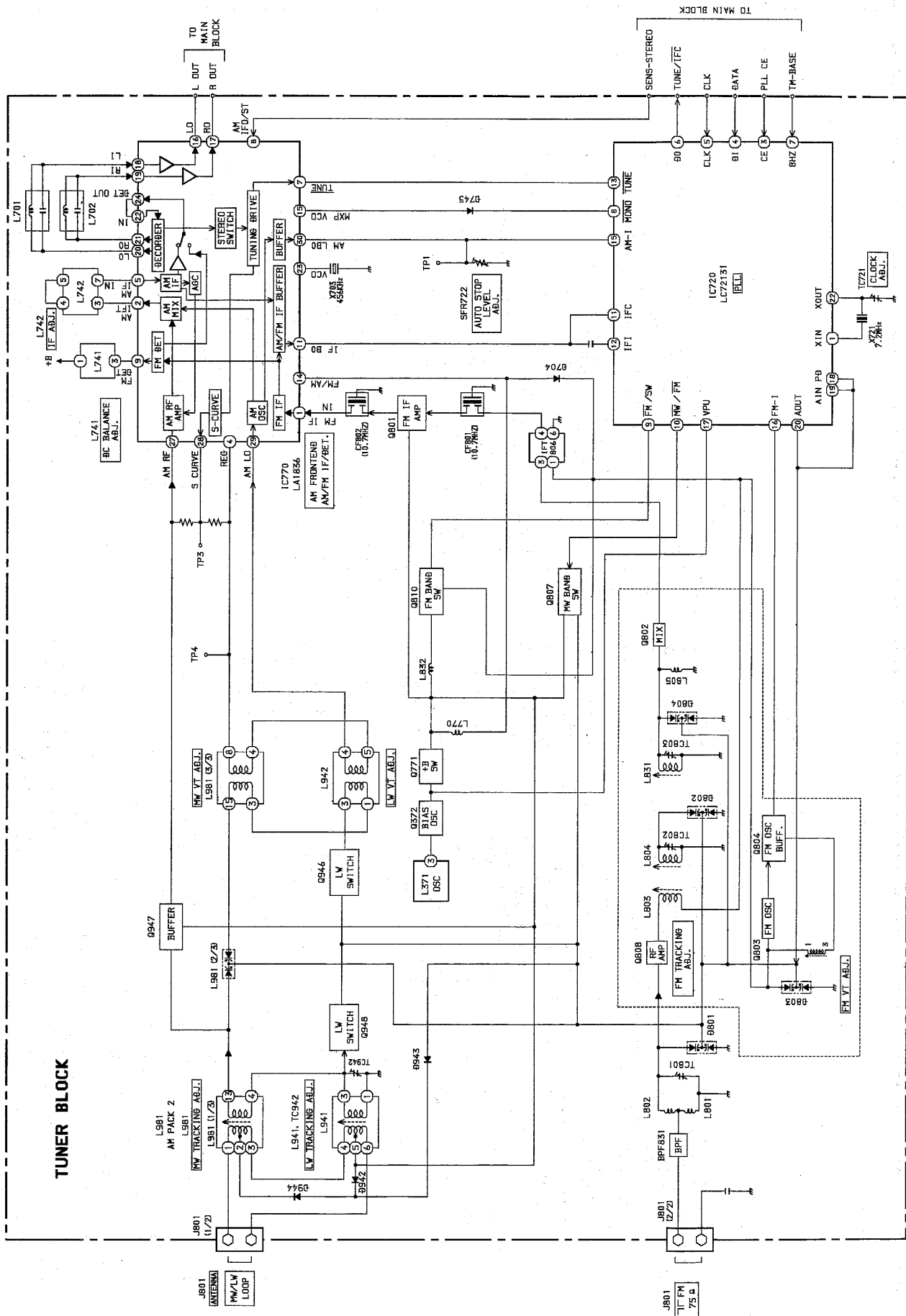


BLOCK DIAGRAM - 2 (MAIN / FRONT : HE)





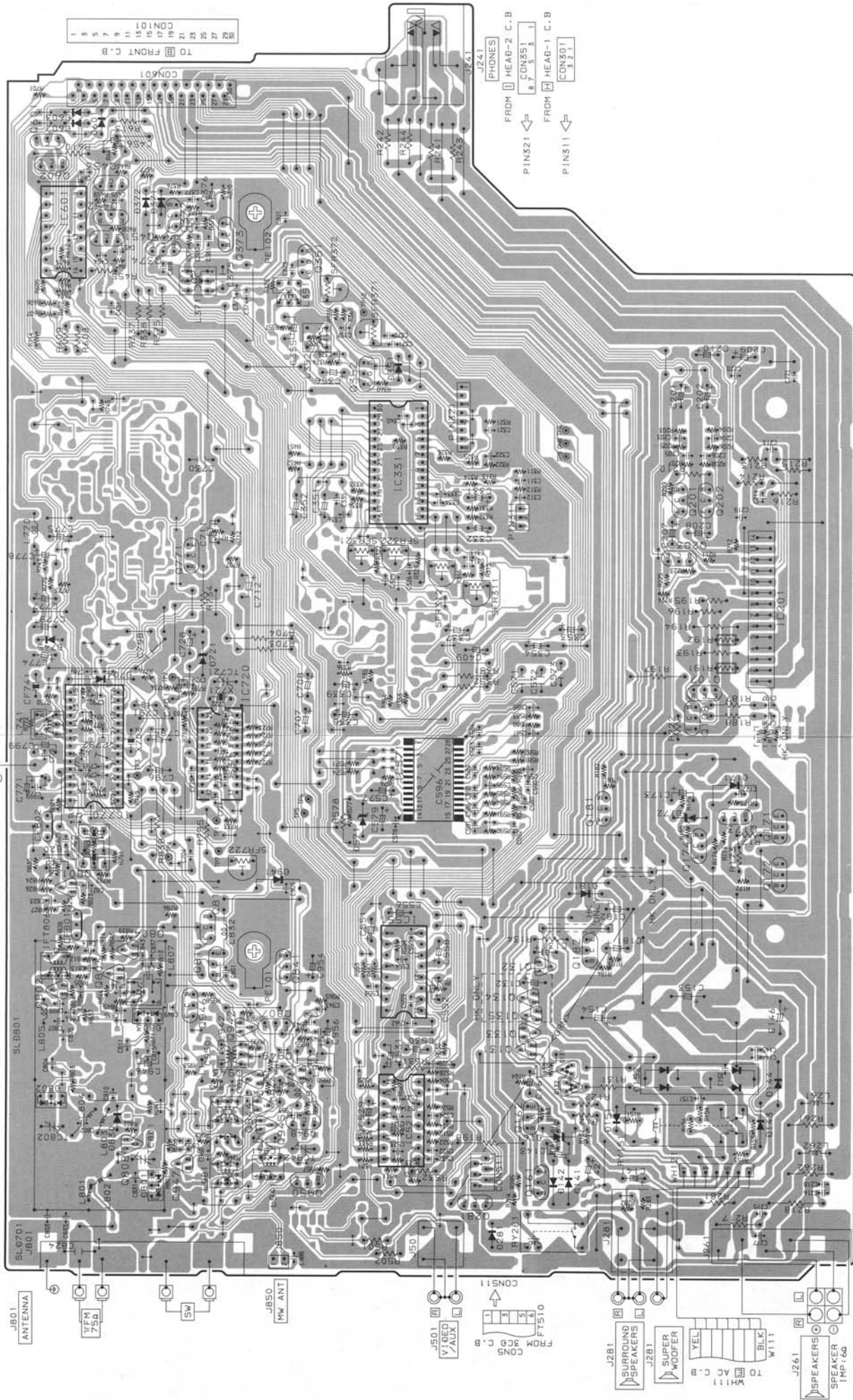
# BLOCK DIAGRAM - 4 (TUNER : EZ)



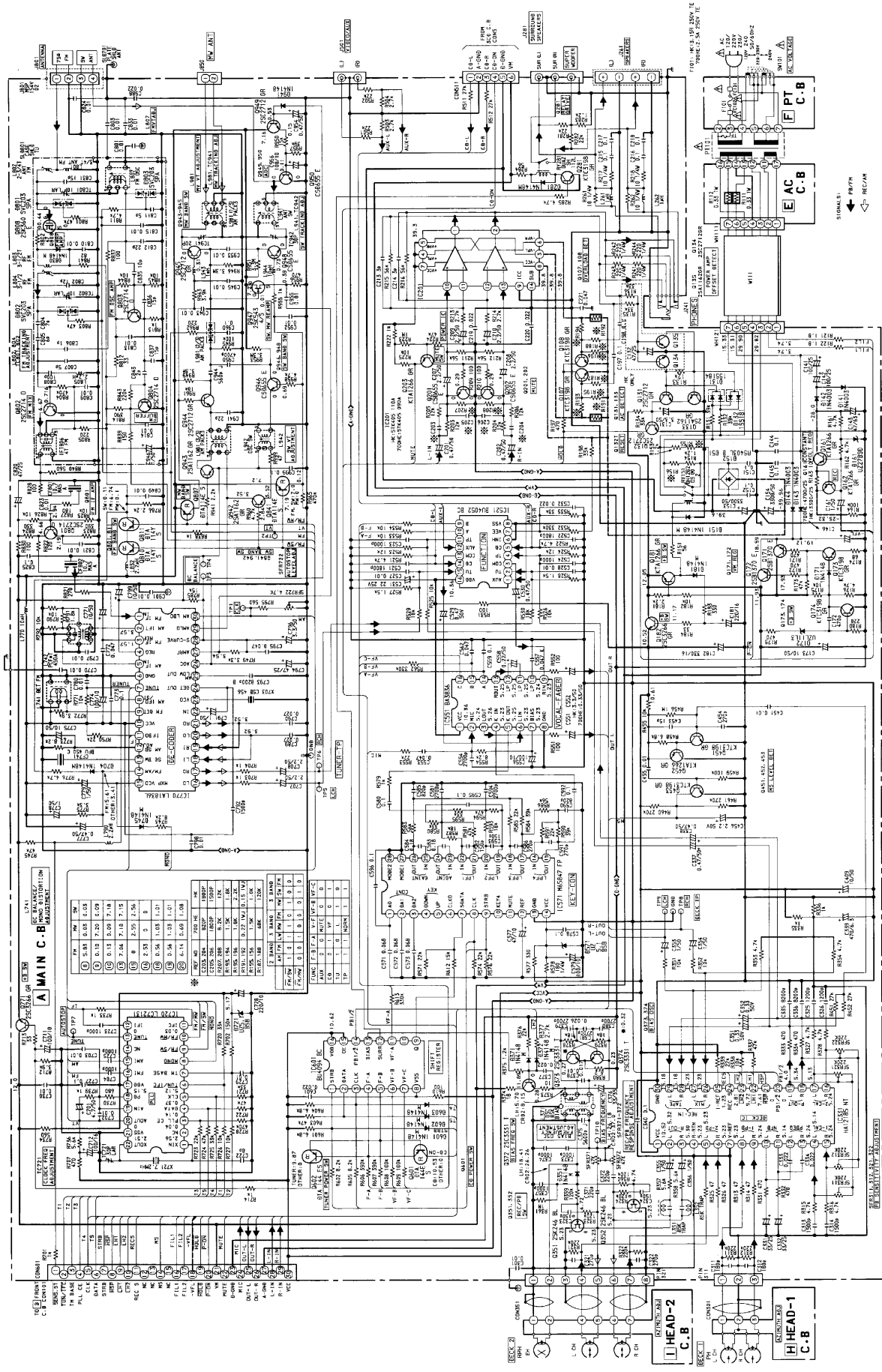
1 2 3 4 5 6 7 8 9 10 11 12 13 14

A B C D E F G H I J

A MAIN C.B



SCHEMATIC DIAGRAM - 1 (MAIN: HK, HE)





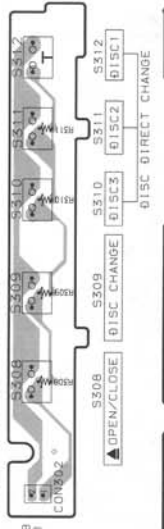




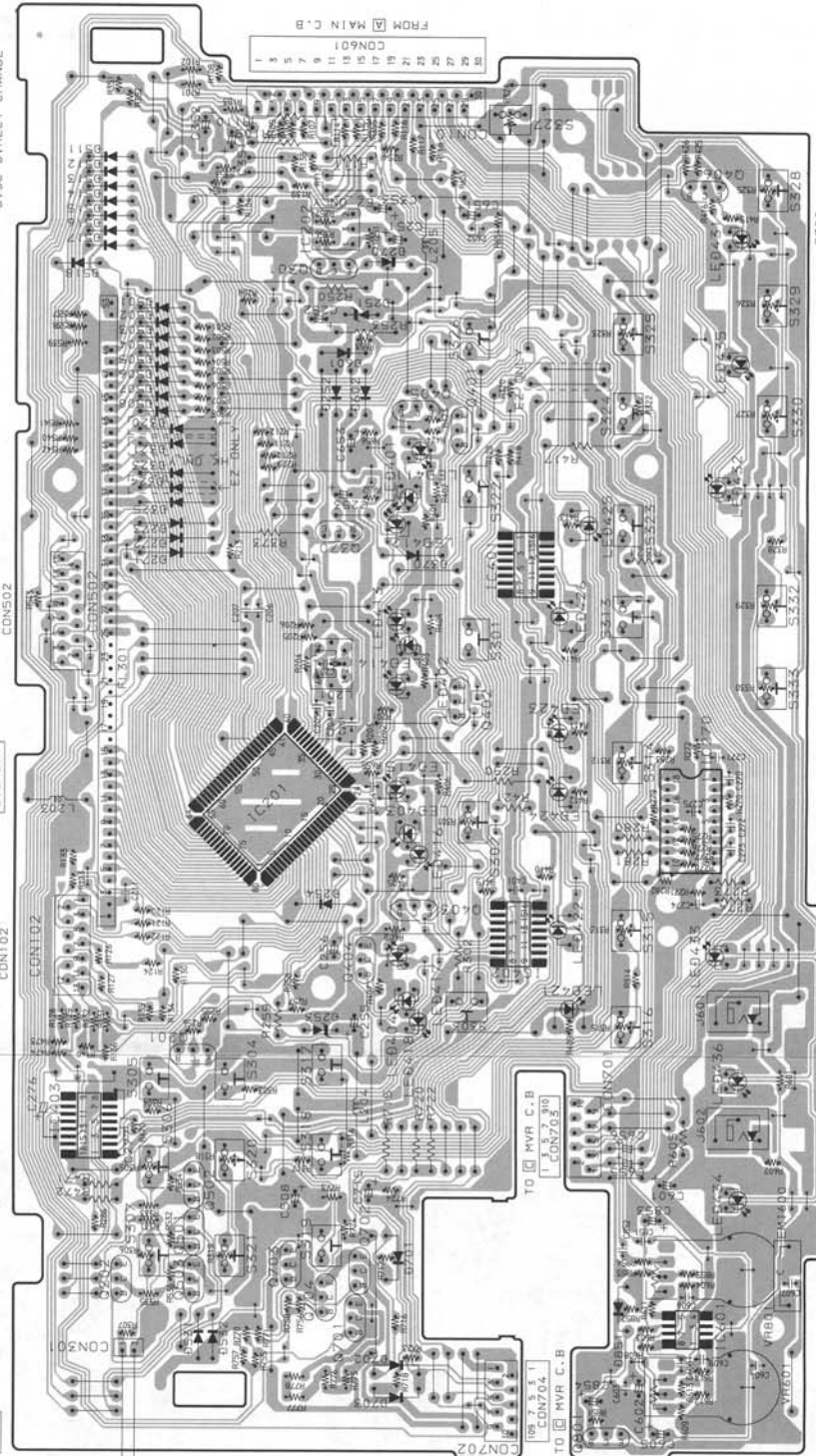
1 2 3 4 5 6 7 8 9 10 11 12 13 14

A B C D E F G H I J

**D KEY C.B**

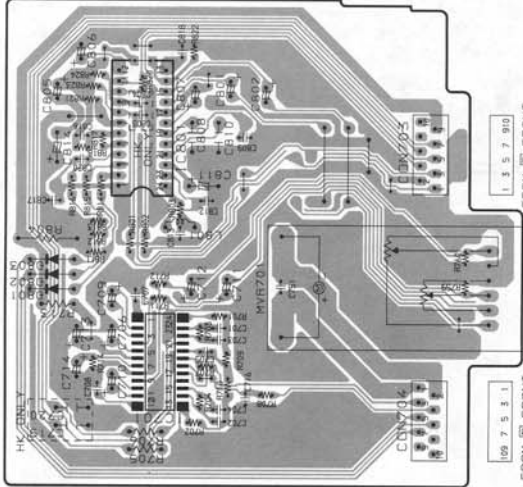


**B FRONT C.B**



- FROM **D** KEY C.B. CON502
- FROM **E** FRONT SURROUND
- FROM **F** HALL LIVE DISCO
- FROM **G** ELECTRONIC GRAPHIC EQUALIZER
- FROM **H** KARAOKE T-BASS
- FROM **I** MVR C.B. CON70.1
- FROM **J** MVR C.B. CON70.2
- FROM **K** MVR C.B. CON70.3
- FROM **L** MVR C.B. CON70.4
- FROM **M** MVR C.B. CON70.5
- FROM **N** MVR C.B. CON70.6
- FROM **O** MVR C.B. CON70.7
- FROM **P** MVR C.B. CON70.8
- FROM **Q** MVR C.B. CON70.9
- FROM **R** MVR C.B. CON70.10
- FROM **S** MVR C.B. CON70.11
- FROM **T** MVR C.B. CON70.12
- FROM **U** MVR C.B. CON70.13
- FROM **V** MVR C.B. CON70.14
- FROM **W** MVR C.B. CON70.15
- FROM **X** MVR C.B. CON70.16
- FROM **Y** MVR C.B. CON70.17
- FROM **Z** MVR C.B. CON70.18
- FROM **AA** MVR C.B. CON70.19
- FROM **AB** MVR C.B. CON70.20
- FROM **AC** MVR C.B. CON70.21
- FROM **AD** MVR C.B. CON70.22
- FROM **AE** MVR C.B. CON70.23
- FROM **AF** MVR C.B. CON70.24
- FROM **AG** MVR C.B. CON70.25
- FROM **AH** MVR C.B. CON70.26
- FROM **AI** MVR C.B. CON70.27
- FROM **AJ** MVR C.B. CON70.28
- FROM **AK** MVR C.B. CON70.29
- FROM **AL** MVR C.B. CON70.30
- FROM **AM** MVR C.B. CON70.31
- FROM **AN** MVR C.B. CON70.32
- FROM **AO** MVR C.B. CON70.33
- FROM **AP** MVR C.B. CON70.34
- FROM **AQ** MVR C.B. CON70.35
- FROM **AR** MVR C.B. CON70.36
- FROM **AS** MVR C.B. CON70.37
- FROM **AT** MVR C.B. CON70.38
- FROM **AU** MVR C.B. CON70.39
- FROM **AV** MVR C.B. CON70.40
- FROM **AW** MVR C.B. CON70.41
- FROM **AX** MVR C.B. CON70.42
- FROM **AY** MVR C.B. CON70.43
- FROM **AZ** MVR C.B. CON70.44
- FROM **BA** MVR C.B. CON70.45
- FROM **BB** MVR C.B. CON70.46
- FROM **BC** MVR C.B. CON70.47
- FROM **BD** MVR C.B. CON70.48
- FROM **BE** MVR C.B. CON70.49
- FROM **BF** MVR C.B. CON70.50
- FROM **BG** MVR C.B. CON70.51
- FROM **BH** MVR C.B. CON70.52
- FROM **BI** MVR C.B. CON70.53
- FROM **BJ** MVR C.B. CON70.54
- FROM **BK** MVR C.B. CON70.55
- FROM **BL** MVR C.B. CON70.56
- FROM **BM** MVR C.B. CON70.57
- FROM **BN** MVR C.B. CON70.58
- FROM **BO** MVR C.B. CON70.59
- FROM **BP** MVR C.B. CON70.60
- FROM **BQ** MVR C.B. CON70.61
- FROM **BR** MVR C.B. CON70.62
- FROM **BS** MVR C.B. CON70.63
- FROM **BT** MVR C.B. CON70.64
- FROM **BU** MVR C.B. CON70.65
- FROM **BV** MVR C.B. CON70.66
- FROM **BW** MVR C.B. CON70.67
- FROM **BX** MVR C.B. CON70.68
- FROM **BY** MVR C.B. CON70.69
- FROM **BZ** MVR C.B. CON70.70
- FROM **CA** MVR C.B. CON70.71
- FROM **CB** MVR C.B. CON70.72
- FROM **CC** MVR C.B. CON70.73
- FROM **CD** MVR C.B. CON70.74
- FROM **CE** MVR C.B. CON70.75
- FROM **CF** MVR C.B. CON70.76
- FROM **CG** MVR C.B. CON70.77
- FROM **CH** MVR C.B. CON70.78
- FROM **CI** MVR C.B. CON70.79
- FROM **CJ** MVR C.B. CON70.80
- FROM **CK** MVR C.B. CON70.81
- FROM **CL** MVR C.B. CON70.82
- FROM **CM** MVR C.B. CON70.83
- FROM **CN** MVR C.B. CON70.84
- FROM **CO** MVR C.B. CON70.85
- FROM **CP** MVR C.B. CON70.86
- FROM **CQ** MVR C.B. CON70.87
- FROM **CR** MVR C.B. CON70.88
- FROM **CS** MVR C.B. CON70.89
- FROM **CT** MVR C.B. CON70.90
- FROM **CU** MVR C.B. CON70.91
- FROM **CV** MVR C.B. CON70.92
- FROM **CV** MVR C.B. CON70.93
- FROM **CV** MVR C.B. CON70.94
- FROM **CV** MVR C.B. CON70.95
- FROM **CV** MVR C.B. CON70.96
- FROM **CV** MVR C.B. CON70.97
- FROM **CV** MVR C.B. CON70.98
- FROM **CV** MVR C.B. CON70.99
- FROM **CV** MVR C.B. CON70.100

**C MVR C.B**



- FROM **D** FRONT C.B. CON70.1
- FROM **E** FRONT C.B. CON70.2
- FROM **F** FRONT C.B. CON70.3
- FROM **G** FRONT C.B. CON70.4
- FROM **H** FRONT C.B. CON70.5
- FROM **I** FRONT C.B. CON70.6
- FROM **J** FRONT C.B. CON70.7
- FROM **K** FRONT C.B. CON70.8
- FROM **L** FRONT C.B. CON70.9
- FROM **M** FRONT C.B. CON70.10
- FROM **N** FRONT C.B. CON70.11
- FROM **O** FRONT C.B. CON70.12
- FROM **P** FRONT C.B. CON70.13
- FROM **Q** FRONT C.B. CON70.14
- FROM **R** FRONT C.B. CON70.15
- FROM **S** FRONT C.B. CON70.16
- FROM **T** FRONT C.B. CON70.17
- FROM **U** FRONT C.B. CON70.18
- FROM **V** FRONT C.B. CON70.19
- FROM **W** FRONT C.B. CON70.20
- FROM **X** FRONT C.B. CON70.21
- FROM **Y** FRONT C.B. CON70.22
- FROM **Z** FRONT C.B. CON70.23
- FROM **AA** FRONT C.B. CON70.24
- FROM **AB** FRONT C.B. CON70.25
- FROM **AC** FRONT C.B. CON70.26
- FROM **AD** FRONT C.B. CON70.27
- FROM **AE** FRONT C.B. CON70.28
- FROM **AF** FRONT C.B. CON70.29
- FROM **AG** FRONT C.B. CON70.30
- FROM **AH** FRONT C.B. CON70.31
- FROM **AI** FRONT C.B. CON70.32
- FROM **AJ** FRONT C.B. CON70.33
- FROM **AK** FRONT C.B. CON70.34
- FROM **AL** FRONT C.B. CON70.35
- FROM **AM** FRONT C.B. CON70.36
- FROM **AN** FRONT C.B. CON70.37
- FROM **AO** FRONT C.B. CON70.38
- FROM **AP** FRONT C.B. CON70.39
- FROM **AQ** FRONT C.B. CON70.40
- FROM **AR** FRONT C.B. CON70.41
- FROM **AS** FRONT C.B. CON70.42
- FROM **AT** FRONT C.B. CON70.43
- FROM **AU** FRONT C.B. CON70.44
- FROM **AV** FRONT C.B. CON70.45
- FROM **AW** FRONT C.B. CON70.46
- FROM **AX** FRONT C.B. CON70.47
- FROM **AY** FRONT C.B. CON70.48
- FROM **AZ** FRONT C.B. CON70.49
- FROM **BA** FRONT C.B. CON70.50
- FROM **BB** FRONT C.B. CON70.51
- FROM **BC** FRONT C.B. CON70.52
- FROM **BD** FRONT C.B. CON70.53
- FROM **BE** FRONT C.B. CON70.54
- FROM **BF** FRONT C.B. CON70.55
- FROM **BF** FRONT C.B. CON70.56
- FROM **BF** FRONT C.B. CON70.57
- FROM **BF** FRONT C.B. CON70.58
- FROM **BF** FRONT C.B. CON70.59
- FROM **BF** FRONT C.B. CON70.60
- FROM **BF** FRONT C.B. CON70.61
- FROM **BF** FRONT C.B. CON70.62
- FROM **BF** FRONT C.B. CON70.63
- FROM **BF** FRONT C.B. CON70.64
- FROM **BF** FRONT C.B. CON70.65
- FROM **BF** FRONT C.B. CON70.66
- FROM **BF** FRONT C.B. CON70.67
- FROM **BF** FRONT C.B. CON70.68
- FROM **BF** FRONT C.B. CON70.69
- FROM **BF** FRONT C.B. CON70.70
- FROM **BF** FRONT C.B. CON70.71
- FROM **BF** FRONT C.B. CON70.72
- FROM **BF** FRONT C.B. CON70.73
- FROM **BF** FRONT C.B. CON70.74
- FROM **BF** FRONT C.B. CON70.75
- FROM **BF** FRONT C.B. CON70.76
- FROM **BF** FRONT C.B. CON70.77
- FROM **BF** FRONT C.B. CON70.78
- FROM **BF** FRONT C.B. CON70.79
- FROM **BF** FRONT C.B. CON70.80
- FROM **BF** FRONT C.B. CON70.81
- FROM **BF** FRONT C.B. CON70.82
- FROM **BF** FRONT C.B. CON70.83
- FROM **BF** FRONT C.B. CON70.84
- FROM **BF** FRONT C.B. CON70.85
- FROM **BF** FRONT C.B. CON70.86
- FROM **BF** FRONT C.B. CON70.87
- FROM **BF** FRONT C.B. CON70.88
- FROM **BF** FRONT C.B. CON70.89
- FROM **BF** FRONT C.B. CON70.90
- FROM **BF** FRONT C.B. CON70.91
- FROM **BF** FRONT C.B. CON70.92
- FROM **BF** FRONT C.B. CON70.93
- FROM **BF** FRONT C.B. CON70.94
- FROM **BF** FRONT C.B. CON70.95
- FROM **BF** FRONT C.B. CON70.96
- FROM **BF** FRONT C.B. CON70.97
- FROM **BF** FRONT C.B. CON70.98
- FROM **BF** FRONT C.B. CON70.99
- FROM **BF** FRONT C.B. CON70.100

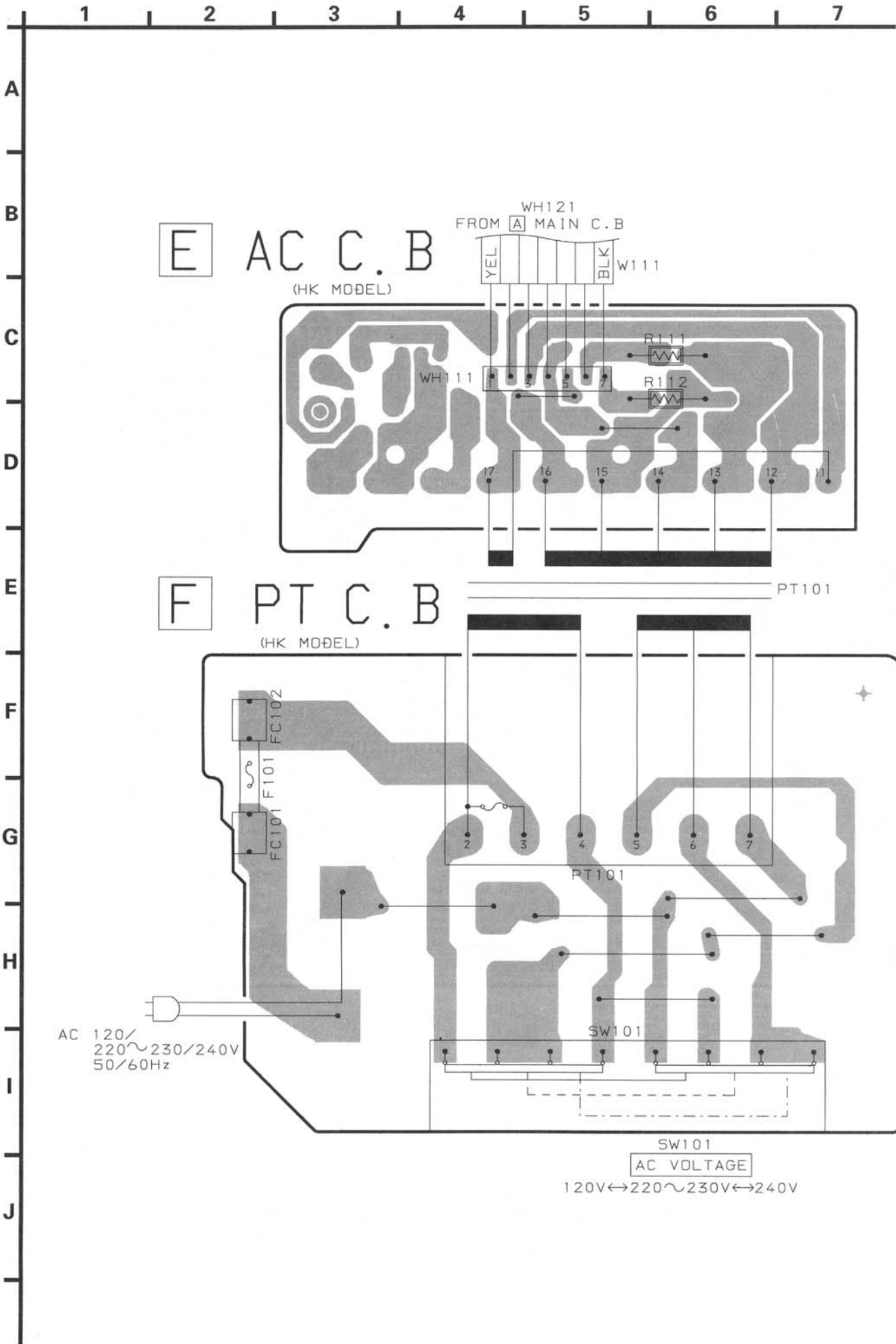
- VR601 MIC MIXING MAX←MIN
- VR801 DIGITAL ECHO MAX←MIN
- J601 MIC
- J602 MIC
- LED417, 41B, 404
- LED415, 41A, 403
- LED413, 41A, 402
- LED411, 41A, 401
- S322 TAPE/DECK CHECK
- S323 LED425
- S324 LED426
- S325 LED427
- S326 LED428
- S327 LED429
- S328 LED430
- S329 LED431
- S330 LED432
- S331 LED433
- S332 LED434
- S333 LED435
- S334 LED436
- S335 LED437
- S336 LED438
- S337 LED439
- S338 LED440
- S339 LED441
- S340 LED442
- S341 LED443
- S342 LED444
- S343 LED445
- S344 LED446
- S345 LED447
- S346 LED448
- S347 LED449
- S348 LED450
- S349 LED451
- S350 LED452
- S351 LED453
- S352 LED454
- S353 LED455
- S354 LED456
- S355 LED457
- S356 LED458
- S357 LED459
- S358 LED460
- S359 LED461
- S360 LED462
- S361 LED463
- S362 LED464
- S363 LED465
- S364 LED466
- S365 LED467
- S366 LED468
- S367 LED469
- S368 LED470
- S369 LED471
- S370 LED472
- S371 LED473
- S372 LED474
- S373 LED475
- S374 LED476
- S375 LED477
- S376 LED478
- S377 LED479
- S378 LED480
- S379 LED481
- S380 LED482
- S381 LED483
- S382 LED484
- S383 LED485
- S384 LED486
- S385 LED487
- S386 LED488
- S387 LED489
- S388 LED490
- S389 LED491
- S390 LED492
- S391 LED493
- S392 LED494
- S393 LED495
- S394 LED496
- S395 LED497
- S396 LED498
- S397 LED499
- S398 LED500
- S399 LED501
- S400 LED502
- S401 LED503
- S402 LED504
- S403 LED505
- S404 LED506
- S405 LED507
- S406 LED508
- S407 LED509
- S408 LED510
- S409 LED511
- S410 LED512
- S411 LED513
- S412 LED514
- S413 LED515
- S414 LED516
- S415 LED517
- S416 LED518
- S417 LED519
- S418 LED520
- S419 LED521
- S420 LED522
- S421 LED523
- S422 LED524
- S423 LED525
- S424 LED526
- S425 LED527
- S426 LED528
- S427 LED529
- S428 LED530
- S429 LED531
- S430 LED532
- S431 LED533
- S432 LED534
- S433 LED535
- S434 LED536
- S435 LED537
- S436 LED538
- S437 LED539
- S438 LED540
- S439 LED541
- S440 LED542
- S441 LED543
- S442 LED544
- S443 LED545
- S444 LED546
- S445 LED547
- S446 LED548
- S447 LED549
- S448 LED550
- S449 LED551
- S450 LED552
- S451 LED553
- S452 LED554
- S453 LED555
- S454 LED556
- S455 LED557
- S456 LED558
- S457 LED559
- S458 LED560
- S459 LED561
- S460 LED562
- S461 LED563
- S462 LED564
- S463 LED565
- S464 LED566
- S465 LED567
- S466 LED568
- S467 LED569
- S468 LED570
- S469 LED571
- S470 LED572
- S471 LED573
- S472 LED574
- S473 LED575
- S474 LED576
- S475 LED577
- S476 LED578
- S477 LED579
- S478 LED580
- S479 LED581
- S480 LED582
- S481 LED583
- S482 LED584
- S483 LED585
- S484 LED586
- S485 LED587
- S486 LED588
- S487 LED589
- S488 LED590
- S489 LED591
- S490 LED592
- S491 LED593
- S492 LED594
- S493 LED595
- S494 LED596
- S495 LED597
- S496 LED598
- S497 LED599
- S498 LED600
- S499 LED601
- S500 LED602
- S501 LED603
- S502 LED604
- S503 LED605
- S504 LED606
- S505 LED607
- S506 LED608
- S507 LED609
- S508 LED610
- S509 LED611
- S510 LED612
- S511 LED613
- S512 LED614
- S513 LED615
- S514 LED616
- S515 LED617
- S516 LED618
- S517 LED619
- S518 LED620
- S519 LED621
- S520 LED622
- S521 LED623
- S522 LED624
- S523 LED625
- S524 LED626
- S525 LED627
- S526 LED628
- S527 LED629
- S528 LED630
- S529 LED631
- S530 LED632
- S531 LED633
- S532 LED634
- S533 LED635
- S534 LED636
- S535 LED637
- S536 LED638
- S537 LED639
- S538 LED640
- S539 LED641
- S540 LED642
- S541 LED643
- S542 LED644
- S543 LED645
- S544 LED646
- S545 LED647
- S546 LED648
- S547 LED649
- S548 LED650
- S549 LED651
- S550 LED652
- S551 LED653
- S552 LED654
- S553 LED655
- S554 LED656
- S555 LED657
- S556 LED658
- S557 LED659
- S558 LED660
- S559 LED661
- S560 LED662
- S561 LED663
- S562 LED664
- S563 LED665
- S564 LED666
- S565 LED667
- S566 LED668
- S567 LED669
- S568 LED670
- S569 LED671
- S570 LED672
- S571 LED673
- S572 LED674
- S573 LED675
- S574 LED676
- S575 LED677
- S576 LED678
- S577 LED679
- S578 LED680
- S579 LED681
- S580 LED682
- S581 LED683
- S582 LED684
- S583 LED685
- S584 LED686
- S585 LED687
- S586 LED688
- S587 LED689
- S588 LED690
- S589 LED691
- S590 LED692
- S591 LED693
- S592 LED694
- S593 LED695
- S594 LED696
- S595 LED697
- S596 LED698
- S597 LED699
- S598 LED700
- S599 LED701
- S600 LED702

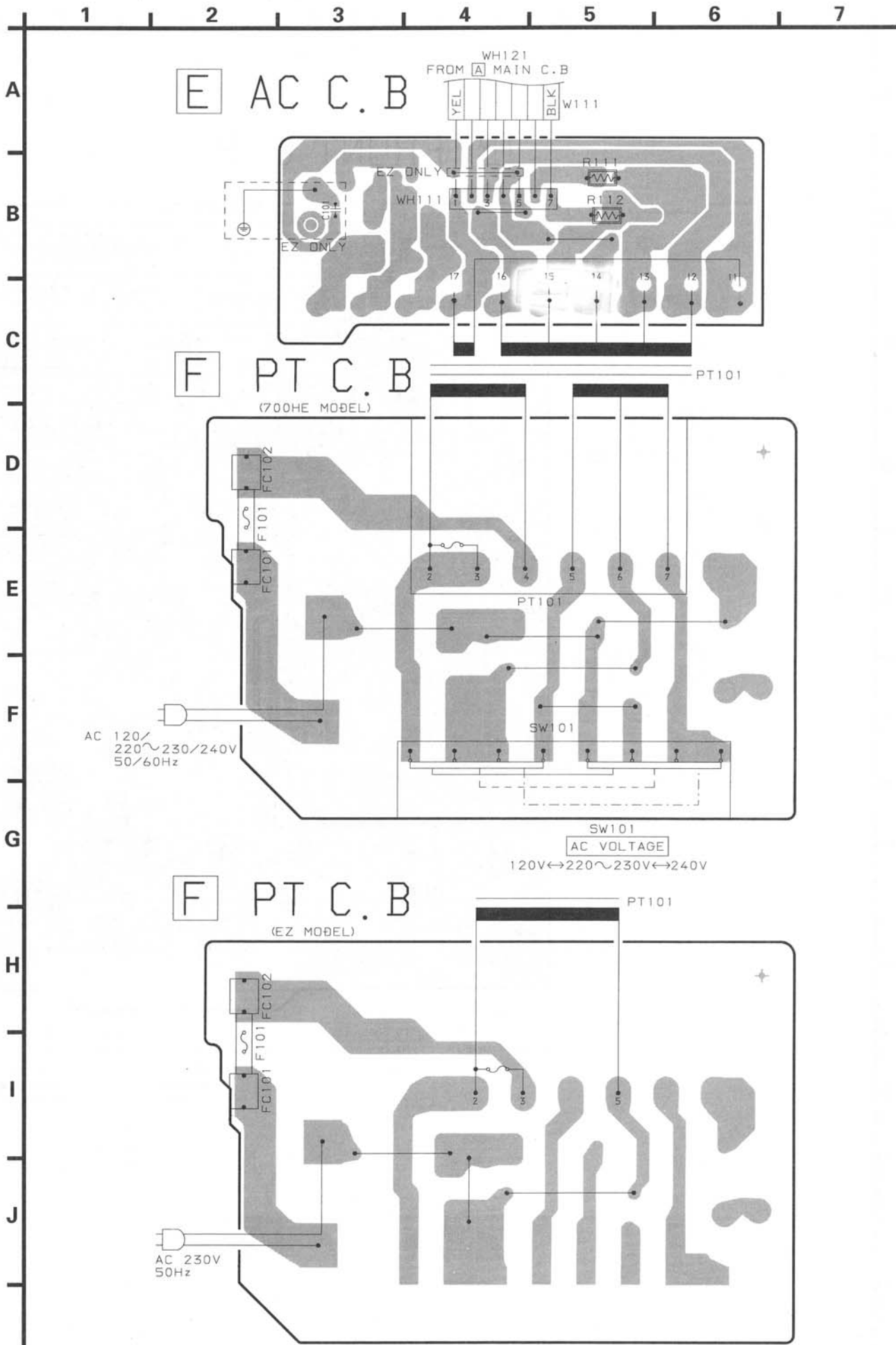






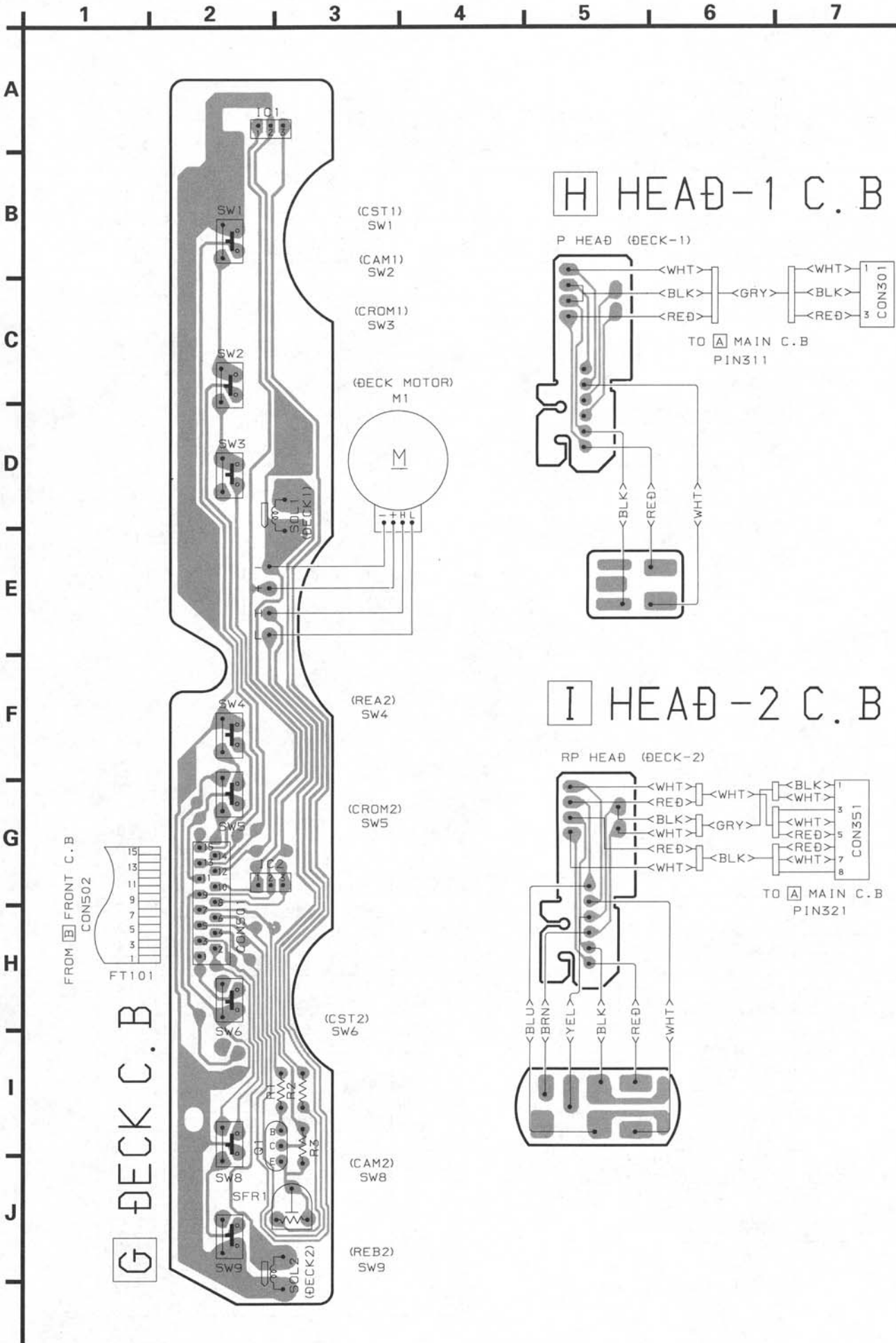




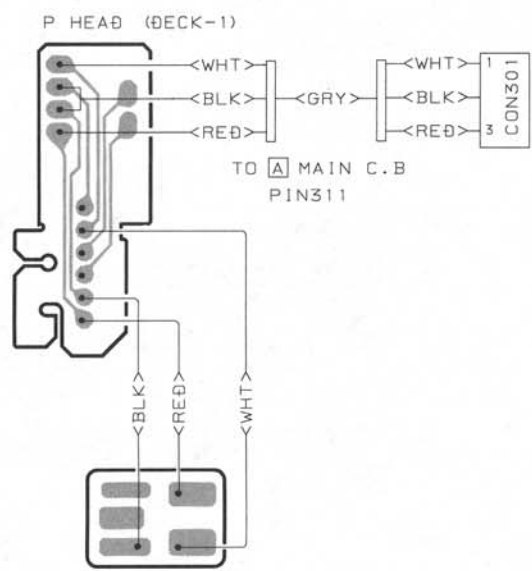




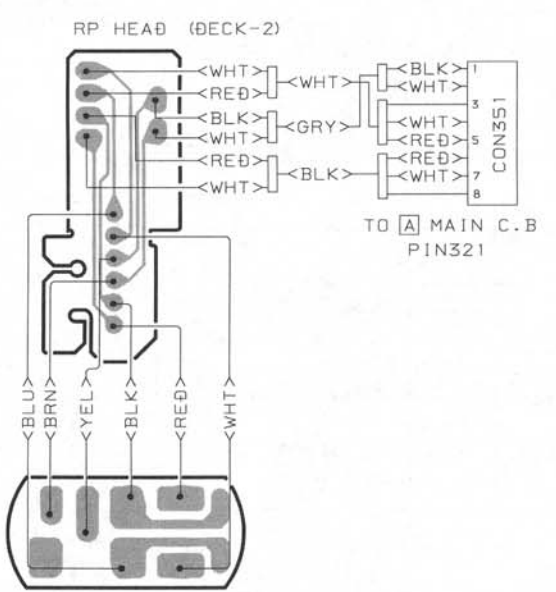
WIRING - 7 (DECK)



**H HEAD-1 C.B**

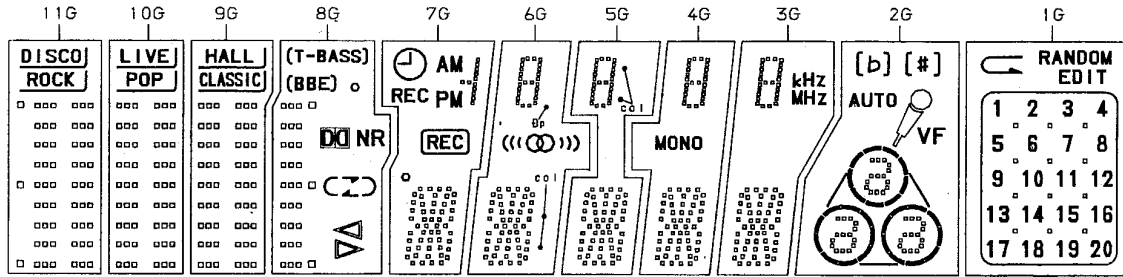


**I HEAD-2 C.B**



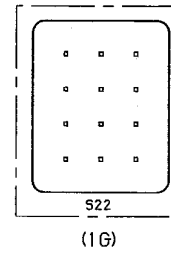
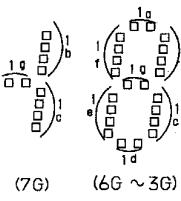
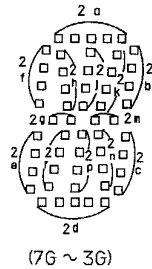
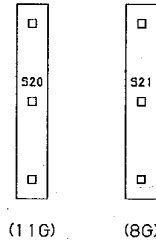
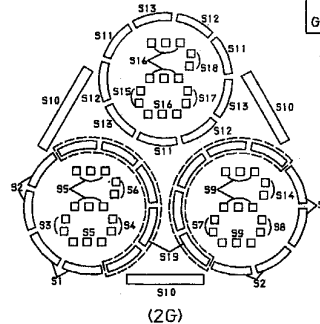
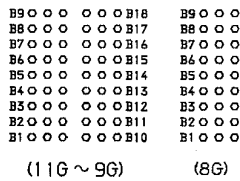
# FL GRID ASSIGNMENT & ANODE CONNECTION

FL, BJ478GK  
GRID ASSIGNMENT



BJ478GK  
GRID ASSIGNMENT

### SEGMENT DESIGNATION



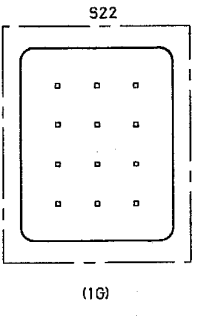
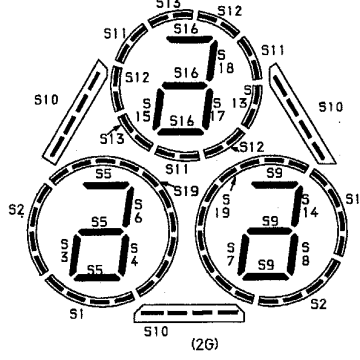
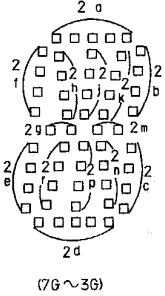
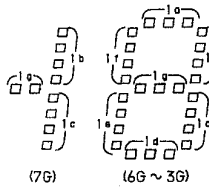
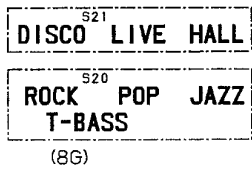
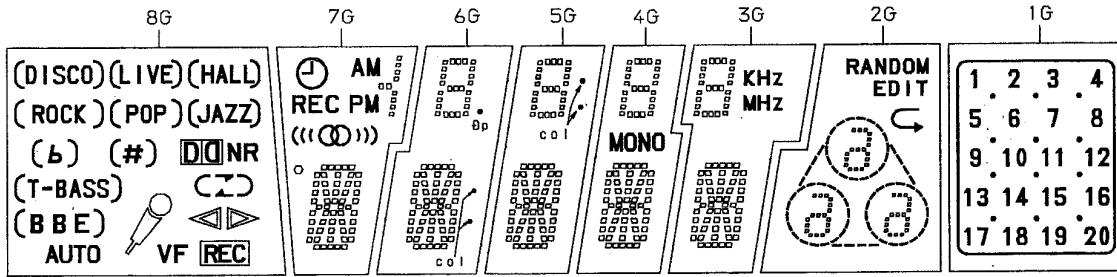
### ANODE CONNECTION

	11G	10G	9G	8G	7G
P1	B1	B1	B1	B1	2d
P2	B10	B10	B10	▷	2n
P3	B2	B2	B2	B2	2j, 2p
P4	B11	B11	B11	◁	2r
P5	B3	B3	B3	B3	2e
P6	B12	B12	B12	◡	2c
P7	B4	B4	B4	B4	2g
P8	B13	B13	B13	≡	2m
P9	B5	B5	B5	B5	2f
P10	B14	B14	B14	◤	2b
P11	B6	B6	B6	B6	2k
P12	B15	B15	B15	DNR	2h
P13	B7	B7	B7	B7	2a
P14	B16	B16	B16	○	○
P15	B8	B8	B8	B8	—
P16	B17	B17	B17	BBE	(REC)
P17	B9	B9	B9	B9	REC
P18	B18	B18	B18	T-BASS	⊖
P19	ROCK	POP	HALL	(BBE)	PM
P20	DISCO	LIVE	HALL	(T-BASS)	AM
P21	(ROCK)	(POP)	(CLASSIC)	—	1g
P22	(DISCO)	(HALL)	(HALL)	—	1b, 1c
P23	—	—	—	—	—
P24	S20	—	—	S21	—
P25	—	—	—	—	—

### ANODE CONNECTION

	6G	5G	4G	3G	2G	1G
P1	2d	2d	2d	2d	S1	20
P2	2n	2n	2n	2n	S2	19
P3	2j, 2p	2j, 2p	2j, 2p	2j, 2p	S3	18
P4	2r	2r	2r	2r	S4	17
P5	2e	2e	2e	2e	S5	16
P6	2c	2c	2c	2c	S6	15
P7	2g	2g	2g	2g	S7	14
P8	2m	2m	2m	2m	S8	13
P9	2f	2f	2f	2f	S9	12
P10	2b	2b	2b	2b	S10	11
P11	2k	2k	2k	2k	S11	10
P12	2h	2h	2h	2h	S12	9
P13	2a	2a	2a	2a	S13	8
P14	col	CO1 (UPPER)	—	—	S14	7
P15	((((O)))	CO1 (BELOW)	—	MHz	S15	6
P16	⊖p	—	MONO	KHz	S16	5
P17	1d	1d	1d	1d	S17	4
P18	1e	1e	1e	1e	S18	3
P19	1c	1c	1c	1c	S19	2
P20	1g	1g	1g	1g	VF	1
P21	1f	1f	1f	1f	AUTO	↶
P22	1b	1b	1b	1b	{(b)}	RANDOM
P23	1a	1a	1a	1a	{(#)}	EDIT
P24	—	—	—	—	—	S22
P25	—	—	—	—	b #	—

FL, 8-ST-18GK  
GRID ASSIGNMENT

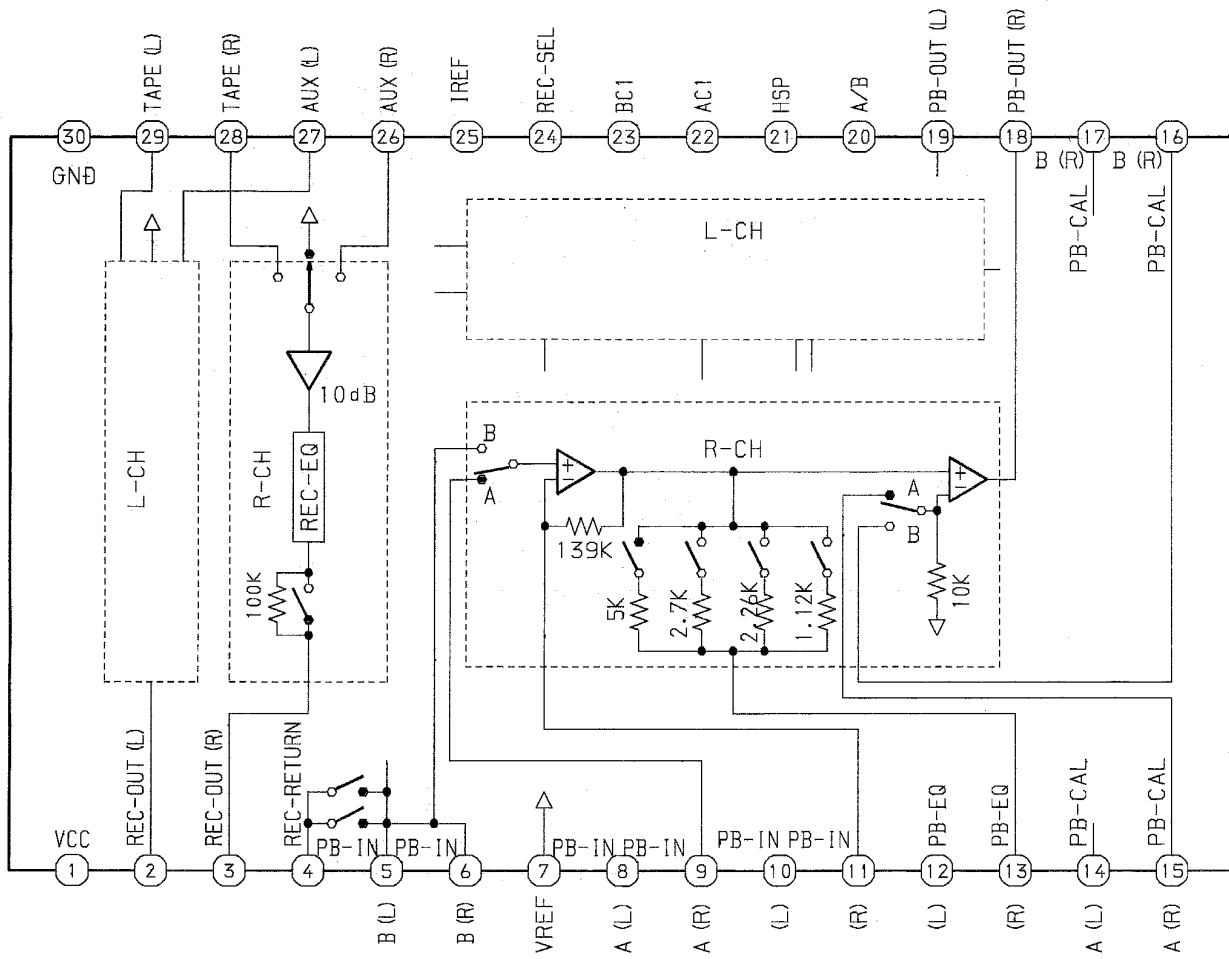


ANODE CONNECTION

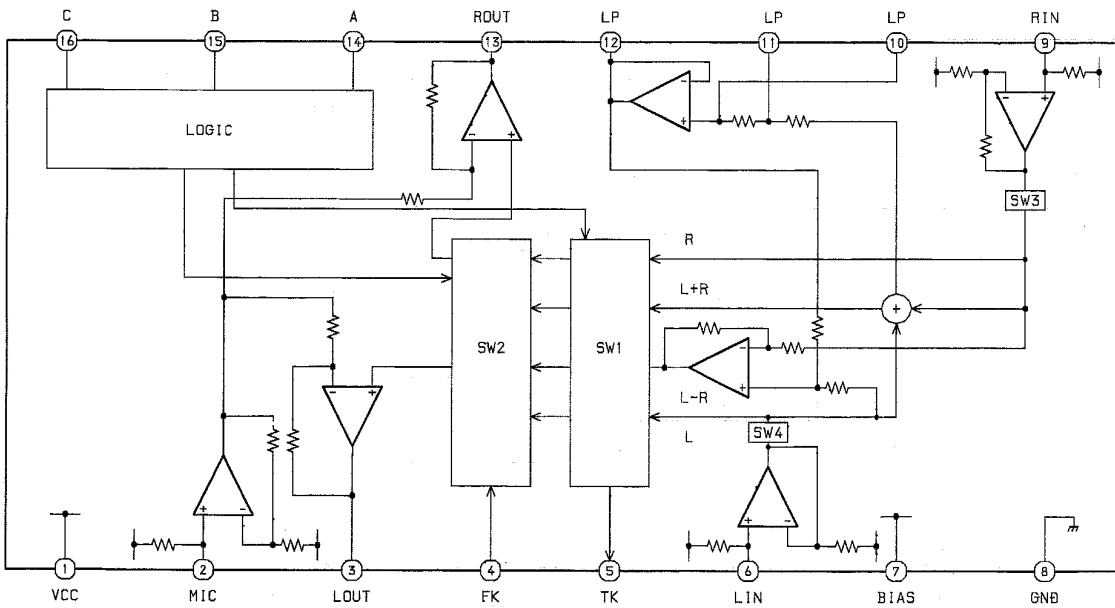
	8G	7G	6G	5G	4G	3G	2G	1G
P1	(T-BASS)	2d	2d	2d	2d	2d	S1	<b>20</b>
P2	(BBE)	2j, 2p	2j, 2p	2j, 2p	2j, 2p	2j, 2p	S2	<b>19</b>
P3	(b)	2n	2n	2n	2n	2n	S3	<b>18</b>
P4	AUTO	2r	2r	2r	2r	2r	S4	<b>17</b>
P5	VF	2c	2c	2c	2c	2c	S5	<b>16</b>
P6	(DISCO)	2e	2e	2e	2e	2e	S6	<b>15</b>
P7	(LIVE)	2m	2m	2m	2m	2m	S7	<b>14</b>
P8	(HALL)	2g	2g	2g	2g	2g	S8	<b>13</b>
P9	REC	2f	2f	2f	2f	2f	S9	<b>12</b>
P10	(#)	2b	2b	2b	2b	2b	S10	<b>11</b>
P11	b #	2k	2k	2k	2k	2k	S11	<b>10</b>
P12	▷	2h	2h	2h	2h	2h	S12	<b>9</b>
P13	▷	2a	2a	2a	2a	2a	S13	<b>8</b>
P14	(	o	col	col (below)	MONO	MH Z	S14	<b>7</b>
P15	↔	((O))	∅p	col (upper)	-	KH Z	S15	<b>6</b>
P16	)	REC	1d	1d	1d	1d	S16	<b>5</b>
P17	NR	⌚	1e	1e	1e	1e	S17	<b>4</b>
P18	(ROCK)	PM	1c	1c	1c	1c	S18	<b>3</b>
P19	(POP)	AM	1g	1g	1g	1g	S19	<b>2</b>
P20	(JAZZ)	1q	1f	1f	1f	1f	↪	<b>1</b>
P21	S20	1b, 1c	1b	1b	1b	1b	EDIT	S22
P22	S21	-	1a	1a	1a	1a	RANDOM	-
P23	BBE	-	-	-	-	-	-	-

# IC BLOCK DIAGRAM

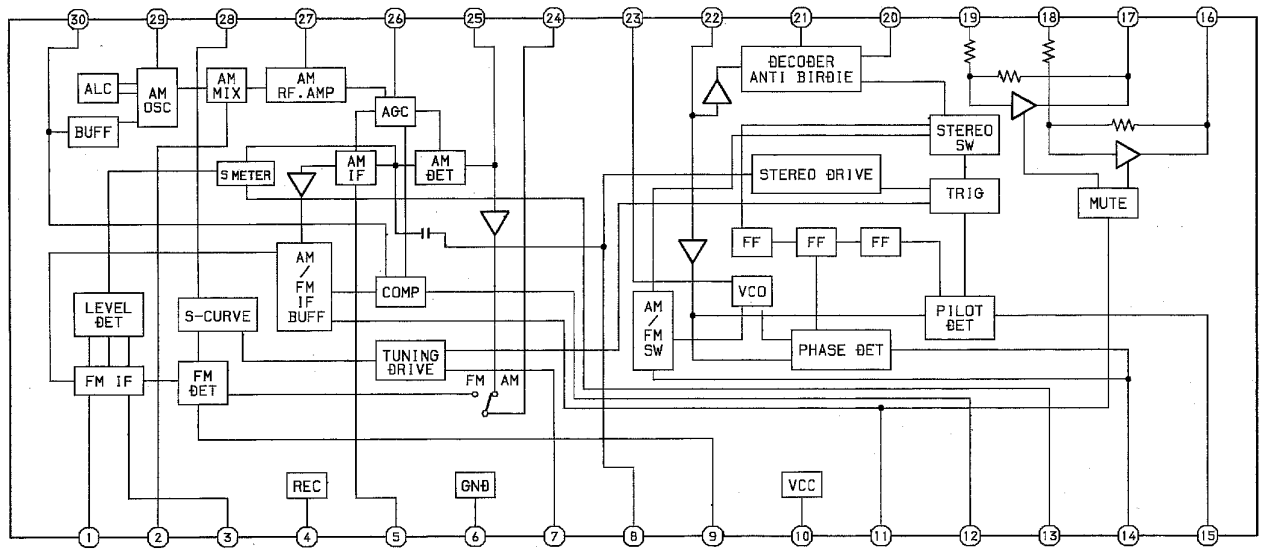
IC, HA12185NT



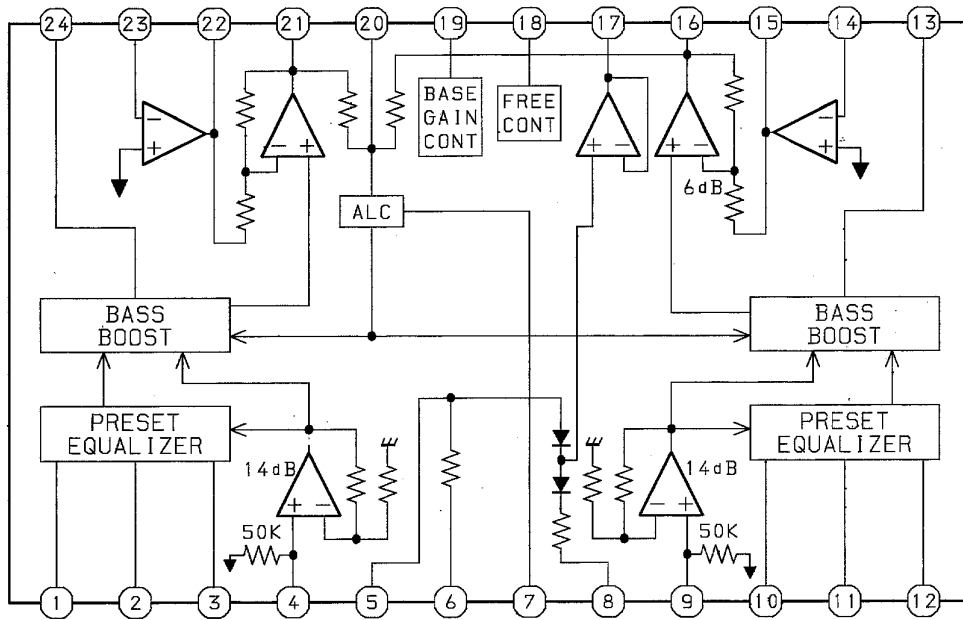
IC, BA3836



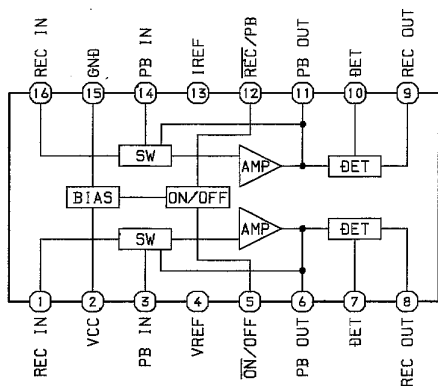
IC, LA1836L



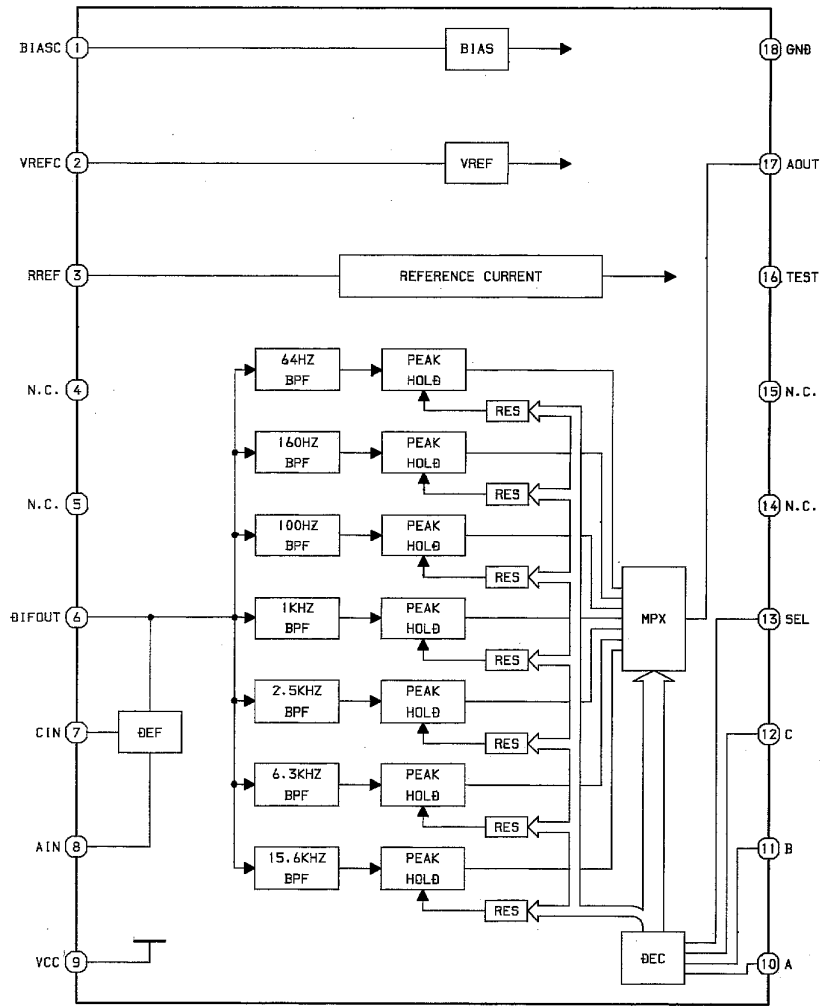
IC, BA3842F



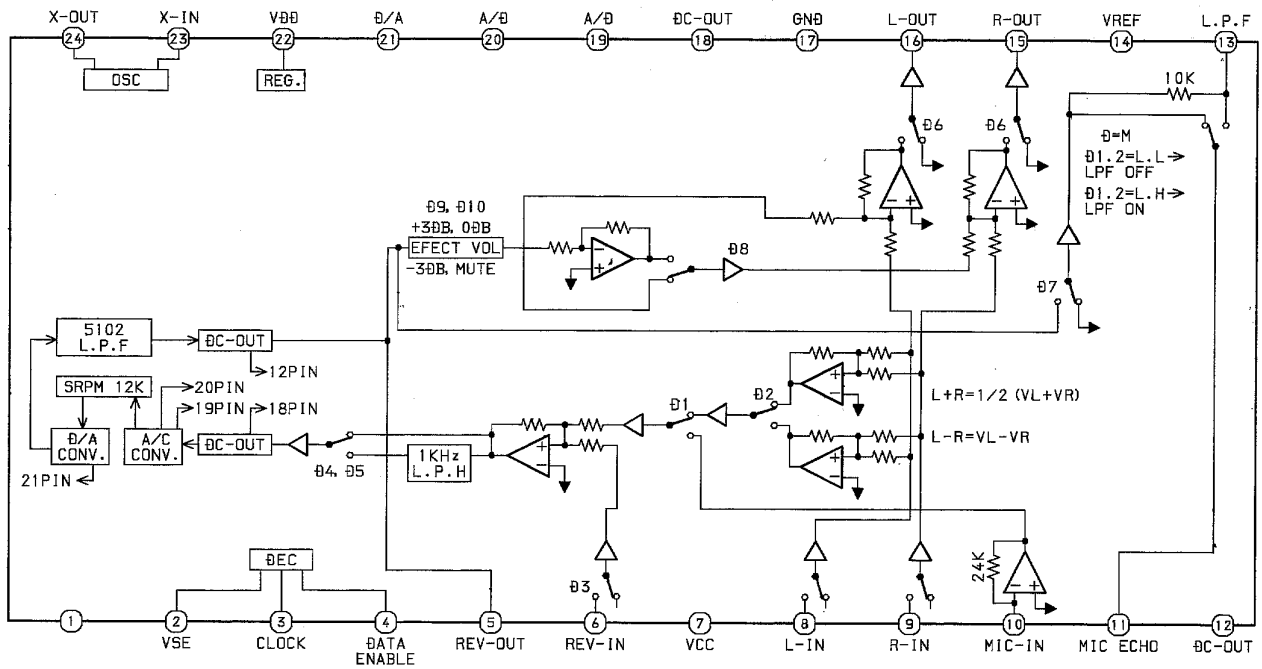
IC, HA12134A



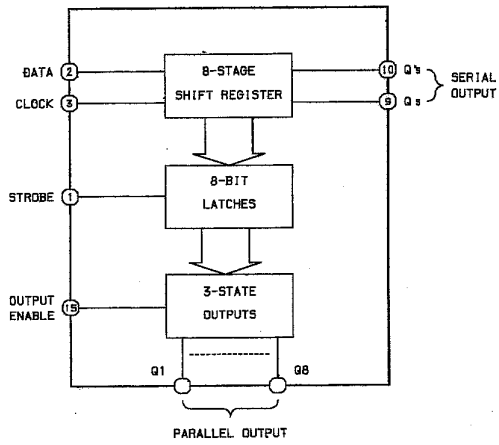
IC, BA3834S



IC, LV1100



IC, BU4094BC/BCF

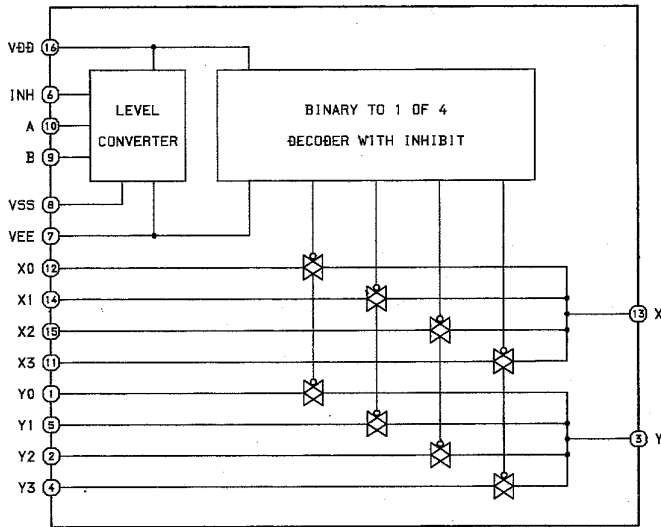


TRUTH TABLE

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

Z=High Impedance  
X=Don't Care

IC, BU4052BC

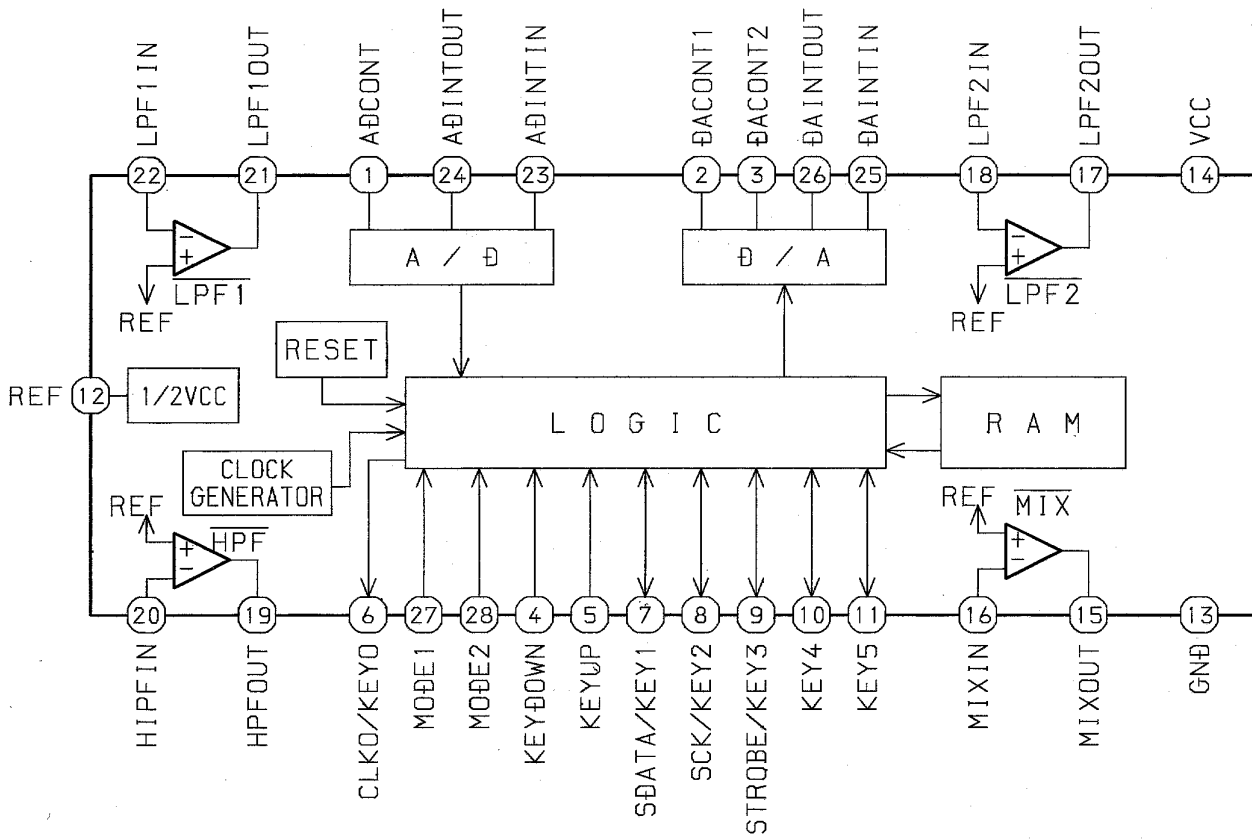


TRUTH TABLE

INHIBIT	A	B	ON SWITCH
L	L	L	X0 Y0
L	H	L	X1 Y1
L	L	H	X2 Y2
L	H	H	X3 Y3
H	X	X	NONE

X: DON'T CARE.

IC, M65847FP





IC DESCRIPTION  
IC,  $\mu$ PD78044HGF-019

Pin No.	Pin Name	I/O	Description																					
1~7	G7 ~G1	O	FL grid output. (G1~G7)																					
8	VDD	-	Power supply terminal. (+5V)																					
9	I-SUBQ	I/O	CD IC control input/output.																					
10	O-CLK																							
11	O-CD-CE																							
12	O-DATA																							
13	I-WRQ																							
14	O-MVR+	O	Motor volume up output.																					
15	O-MVR-	O	Motor volume down output.																					
16	I-HOLD	I	Power failure detected input. (Low when Hold)																					
17	RESET	I	System reset input.																					
18	O-POWER	O	System power supply ON/OFF output.																					
19	O-MUTE	O	System mute ON/OFF output.																					
20	AVSS	-	GND.																					
21	O-KSCAN	O	Segment input permitted output. (Active low)																					
22	I-MS	I	DECK MS detected A/D input.																					
23	I-CD SW	I	CD Mechanical switch AD input.																					
24	I-DISH	I	CD turntable photo sensor A/D input.																					
25	I-MIC	I	Mic level A/D input for auto vocal fader.																					
26	I-KEY0	I	KEY0 A/D input.																					
27	I-KEY 1	I	KEY1 A/D input.																					
28	I-KEY 2	I	KEY2 A/D input.																					
29	AVDD	-	Power supply terminal.																					
30	AVREF	-	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	I	4.19MHz clock oscillator input.																					
36	O-C-SHIFT	O	Micro clock shift output. LC oscillator, "L" clock shift. <table border="1" style="margin-left: 20px;"> <thead> <tr> <th></th> <th>SHIFT FREQUENCY</th> <th>REQUIRED STEP</th> </tr> </thead> <tbody> <tr> <td rowspan="3">SW</td> <td>8.337 ~ 8.423 MHz</td> <td rowspan="3">1 kHz</td> </tr> <tr> <td>12.506 ~ 12.634 MHz</td> </tr> <tr> <td>16.675 ~ 16.845 MHz</td> </tr> <tr> <td rowspan="2">FM (OIRT)</td> <td>66.70 ~ 67.40 MHz</td> <td rowspan="2">10 kHz</td> </tr> <tr> <td>70.85 ~ 71.60 MHz</td> </tr> <tr> <td rowspan="6">FM</td> <td>79.20 ~ 80.05 MHz</td> <td rowspan="6">50 kHz</td> </tr> <tr> <td>83.35 ~ 84.25 MHz</td> </tr> <tr> <td>87.50 ~ 88.45 MHz</td> </tr> <tr> <td>91.70 ~ 92.65 MHz</td> </tr> <tr> <td>95.85 ~ 96.90 MHz</td> </tr> <tr> <td>100.05 ~ 101.10 MHz</td> </tr> <tr> <td>104.20 ~ 105.30 MHz</td> </tr> </tbody> </table>		SHIFT FREQUENCY	REQUIRED STEP	SW	8.337 ~ 8.423 MHz	1 kHz	12.506 ~ 12.634 MHz	16.675 ~ 16.845 MHz	FM (OIRT)	66.70 ~ 67.40 MHz	10 kHz	70.85 ~ 71.60 MHz	FM	79.20 ~ 80.05 MHz	50 kHz	83.35 ~ 84.25 MHz	87.50 ~ 88.45 MHz	91.70 ~ 92.65 MHz	95.85 ~ 96.90 MHz	100.05 ~ 101.10 MHz	104.20 ~ 105.30 MHz
	SHIFT FREQUENCY	REQUIRED STEP																						
SW	8.337 ~ 8.423 MHz	1 kHz																						
	12.506 ~ 12.634 MHz																							
	16.675 ~ 16.845 MHz																							
FM (OIRT)	66.70 ~ 67.40 MHz	10 kHz																						
	70.85 ~ 71.60 MHz																							
FM	79.20 ~ 80.05 MHz	50 kHz																						
	83.35 ~ 84.25 MHz																							
	87.50 ~ 88.45 MHz																							
	91.70 ~ 92.65 MHz																							
	95.85 ~ 96.90 MHz																							
	100.05 ~ 101.10 MHz																							
104.20 ~ 105.30 MHz																								
37	O-CD LED	O	CD flash window LED ON/OFF output.																					
38	O-PLL-CE	O	PLL IC chip enable output.																					
39	O-DATA	O	Main and front PLL shift register data output.																					

Pin No.	Pin Name	I/O	Description								
40	O-CLK	O	Main and front PLL shift register clock output.								
41	O-FSTB	O	Front shift register data latch strobe output.								
42	O-MSTB	O	Main shift register data latch strobe output.								
43	O-HSP	O	Deck motor high speed ON/OFF output.								
44	O-REC SEL	O	Deck recording input switch.(HiZ-RMT, H-MIX, L-TAPE) <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">"HiZ" (MUTE)</td> <td style="text-align: center;">"H" (MIX)</td> <td style="text-align: center;">"L" (TAPE)</td> <td style="text-align: center;">Dolby On : "L"(TAPE) Dolby Off : "H" (MIX)</td> </tr> <tr> <td style="text-align: center;">REC muting</td> <td style="text-align: center;">Manual dubbing</td> <td style="text-align: center;">Synchronize dubbing</td> <td style="text-align: center;">Tuner/Aux/CD Recording</td> </tr> </table>	"HiZ" (MUTE)	"H" (MIX)	"L" (TAPE)	Dolby On : "L"(TAPE) Dolby Off : "H" (MIX)	REC muting	Manual dubbing	Synchronize dubbing	Tuner/Aux/CD Recording
"HiZ" (MUTE)	"H" (MIX)	"L" (TAPE)	Dolby On : "L"(TAPE) Dolby Off : "H" (MIX)								
REC muting	Manual dubbing	Synchronize dubbing	Tuner/Aux/CD Recording								
45	I-TUNE/IFT	I	SD detected input or serial data input of IF count to and from Tuner.								
46	I-SENS ST	I	Stereo detected input to and from Tuner. (Active low)								
47	I-RMC	I	System remote controller input. (Active low)								
48	IC	-	Internal connection. (connected to GND)								
49	O-SOL2	O	DECK 2 solenoid ON/OFF output.								
50	O-SOL1	O	DECK 1 solenoid ON/OFF output.								
51	O-MOTOR	O	DECK motor ON/OFF output.								
52	VDD	-	Power supply terminal. (+5V)								
53	O-DISH RVS	O	3 disc table slet rotation output.								
54	O-DISH FWD	O	3 disc table slet rotation output.								
55	P1 /SCTI	O	FL segment output. (P1, DECK 1 cassette detection switch input)								
56	P2/CAM1	O	FL segment output. (P2, DECK 1 cam switch input)								
57	P3/AUTO1	O	FL segment output. (P3, DECK 1 auto stop input)								
58	P4/AUTO2	O	FL segment output. (P4, DECK 2 auto stop input)								
59	P5/CAM2	O	FL segment output. (P5, DECK 2 cam switch input)								
60	P6/REB	O	FL segment output. (P6, DECK 2 B side recording permission switch input)								
61	P7/CST2	O	FL segment output. (P7, DECK 2 cassette detection switch input)								
62	P8/REA	O	FL segment output. (P8, DECK 2 A side recording permission switch input)								
63	P9/TU1	O	FL segment output. (P9, Diode (TU1) input)								
64	P10/TU2	O	FL segment output. (P10, Diode (TU2) input)								
65	P11/NTSC/PAL	O	FL segment output. (P11, NTSC initial diode input)								
66	P12/KEYCON	O	FL segment output. (P12, Key con diode input)								
67	P13/DOLBY	O	FL segment output. (P13, Dolby diode input)								
68	P14/DSP	O	FL segment output. (P14, DSP diode input)								
69~77	P15~22	O	FL segment output. (P15~22)								
78	O-CLOSE	O	CD tray close output.								
79	O-OPEN	O	CD tray open output.								
80	G8	O	FL grid output. (G8)								

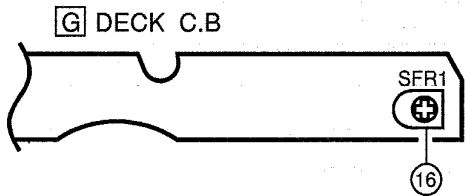
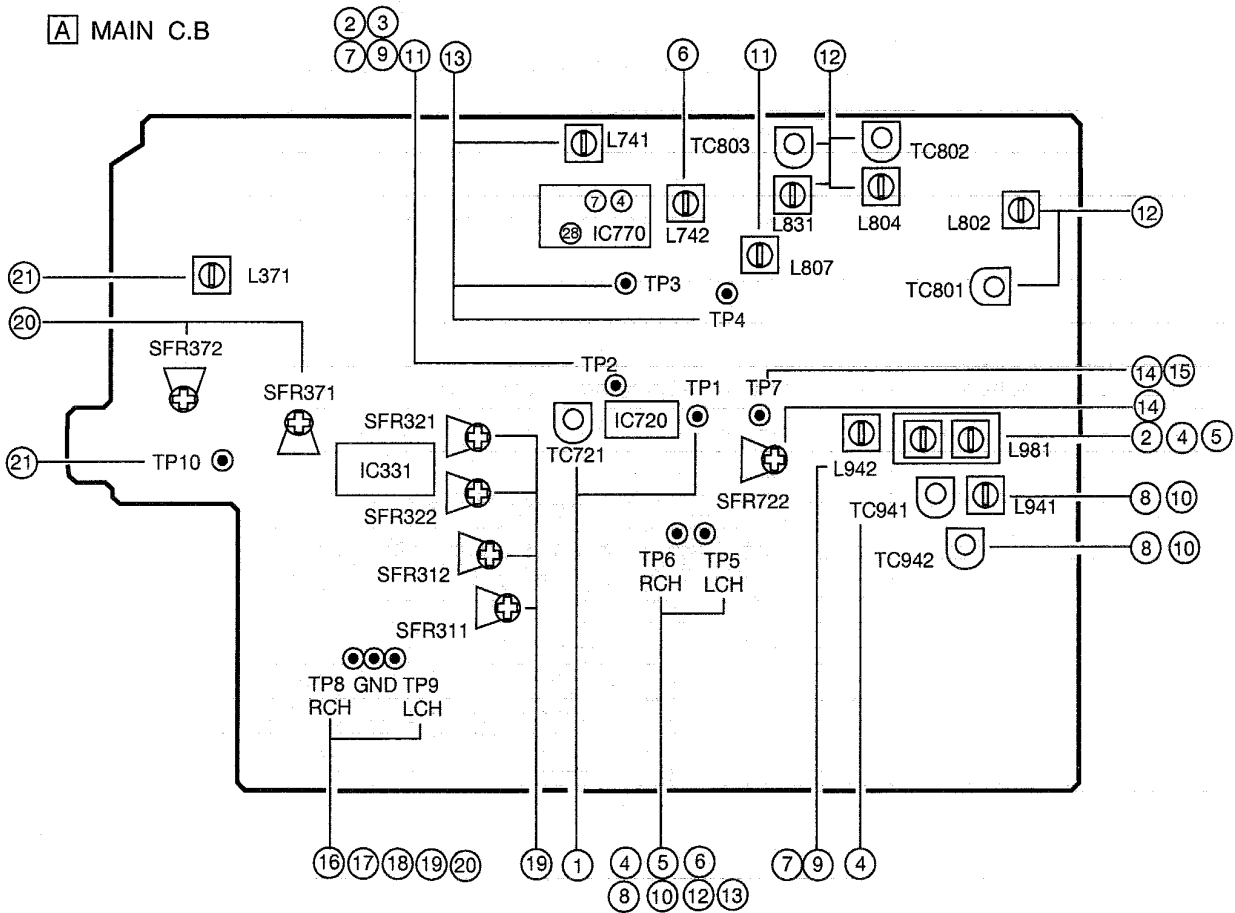
Pin No.	Pin Name	I/O	Description																						
1~7	G7 ~G1	O	FL grid output. (G1~G7)																						
8	VDD	-	Power supply terminal. (+5V)																						
9	I-SUBQ	I/O	CD IC control input/output.																						
10	O-CLK																								
11	O-CD-CE																								
12	O-DATA																								
13	I-WRQ																								
14	O-DISH FWD	O	3 disc table slet rotation output.																						
15	O-DISH RVS	O	3 disc table slet rotation output.																						
16	$\overline{\text{I-HOLD}}$	I	Power failure detected input. (Low when Hold)																						
17	$\overline{\text{RESET}}$	I	System reset input.																						
18	$\overline{\text{O-POWER}}$	O	System power supply ON/OFF output.																						
19	O-MUTE	O	System mute ON/OFF output.																						
20	AVSS	-	GND.																						
21	I-SPEANA	I	Level input.																						
22	I-MS	I	DECK MS detected A/D input.																						
23	I-CD SW	I	CD Mechanical switch AD input.																						
24	I-DISH	I	CD turntable photo sensor A/D input.																						
25	I-MIC	I	Mic level A/D input for auto vocal fader.																						
26	I-KEY0	I	KEY0 A/D input.																						
27	I-KEY 1	I	KEY1 A/D input.																						
28	I-KEY 2	I	KEY2 A/D input.																						
29	AVDD	-	Power supply terminal.																						
30	AVREF	-	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	I	4.19MHz clock oscillator input.																						
36	$\overline{\text{O-C-SHIFT}}$	O	Micro clock shift output.																						
			LC oscillator, "L" clock shift.																						
				<table border="1"> <thead> <tr> <th></th> <th>SHIFT FREQUENCY</th> <th>REQUIRED STEP</th> </tr> </thead> <tbody> <tr> <td rowspan="3">SW</td> <td>8.337 ~ 8.423 MHz</td> <td rowspan="3">1 kHz</td> </tr> <tr> <td>12.506 ~ 12.634 MHz</td> </tr> <tr> <td>16.675 ~ 16.845 MHz</td> </tr> <tr> <td rowspan="2">FM (OIRT)</td> <td>66.70 ~ 67.40 MHz</td> <td rowspan="2">10 kHz</td> </tr> <tr> <td>70.85 ~ 71.60 MHz</td> </tr> <tr> <td rowspan="6">FM</td> <td>79.20 ~ 80.05 MHz</td> <td rowspan="6">50 kHz</td> </tr> <tr> <td>83.35 ~ 84.25 MHz</td> </tr> <tr> <td>87.50 ~ 88.45 MHz</td> </tr> <tr> <td>91.70 ~ 92.65 MHz</td> </tr> <tr> <td>95.85 ~ 96.90 MHz</td> </tr> <tr> <td>100.05 ~ 101.10 MHz</td> </tr> <tr> <td>104.20 ~ 105.30 MHz</td> </tr> </tbody> </table>		SHIFT FREQUENCY	REQUIRED STEP	SW	8.337 ~ 8.423 MHz	1 kHz	12.506 ~ 12.634 MHz	16.675 ~ 16.845 MHz	FM (OIRT)	66.70 ~ 67.40 MHz	10 kHz	70.85 ~ 71.60 MHz	FM	79.20 ~ 80.05 MHz	50 kHz	83.35 ~ 84.25 MHz	87.50 ~ 88.45 MHz	91.70 ~ 92.65 MHz	95.85 ~ 96.90 MHz	100.05 ~ 101.10 MHz	104.20 ~ 105.30 MHz
				SHIFT FREQUENCY	REQUIRED STEP																				
			SW	8.337 ~ 8.423 MHz	1 kHz																				
				12.506 ~ 12.634 MHz																					
				16.675 ~ 16.845 MHz																					
			FM (OIRT)	66.70 ~ 67.40 MHz	10 kHz																				
				70.85 ~ 71.60 MHz																					
			FM	79.20 ~ 80.05 MHz	50 kHz																				
83.35 ~ 84.25 MHz																									
87.50 ~ 88.45 MHz																									
91.70 ~ 92.65 MHz																									
95.85 ~ 96.90 MHz																									
100.05 ~ 101.10 MHz																									
104.20 ~ 105.30 MHz																									
37	O-CD LED	O	CD flash window LED ON/OFF output.																						
38	O-PLL-CE	O	PLL IC chip enable output.																						
39	O-DATA	O	Main and front PLL shift register data output.																						

Pin No.	Pin Name	I/O	Description
40	O-CLK	O	Main and front PLL shift register clock output.
41	O-FSTB	O	Front shift register data latch strobe output.
42	O-MSTB	O	Main shift register data latch strobe output.
43	$\overline{\text{O-KSCAN}}$	O	Segment input permitted output.
44	NC	-	NC.
45	$\overline{\text{I-TUNE/IFT}}$	O	SD detected input or serial data input of IF count to and from Tuner.
46	$\overline{\text{I-SENS ST}}$	O	Stereo detected input to and from Tuner. (Active low)
47	$\overline{\text{I-RMC}}$	I	System remote controller input. (Active low)
48	IC	-	Internal connection. (connected to GND)
49	$\overline{\text{O-SOL2}}$	O	DECK 2 solenoid $\overline{\text{ON/OFF}}$ output.
50	$\overline{\text{O-SOL1}}$	O	DECK 1 solenoid $\overline{\text{ON/OFF}}$ output.
51	$\overline{\text{O-MOTOR}}$	O	DECK motor $\overline{\text{ON/OFF}}$ output.
52	VDD	-	Power supply terminal. (+5V)
53	P1/ $\overline{\text{SCTI}}$	O	FL segment output. (P1, DECK 1 cassette detection switch input)
54	P2/ $\overline{\text{CAM1}}$	O	FL segment output. (P2, DECK 1 cam switch input)
55	P3/AUTO1	O	FL segment output. (P3, DECK 1 auto stop input)
56	P4/AUTO2	O	FL segment output. (P4, DECK 2 auto stop input)
57	P5/ $\overline{\text{CAM2}}$	O	FL segment output. (P5, DECK 2 cam switch input)
58	P6/REB	O	FL segment output. (P6, DECK 2 B side recording permission switch input)
59	P7/ $\overline{\text{CST2}}$	O	FL segment output. (P7, DECK 2 cassette detection switch input)
60	P8/REA	O	FL segment output. (P8, DECK 2 A side recording permission switch input)
61	P9/TU1	O	FL segment output. (P9, Diode (TU1) input)
62	P10/TU2	O	FL segment output. (P10, Diode (TU2) input)
63	P11/ $\overline{\text{NTSC/PAL}}$	O	FL segment output. (P11, NTSC initial diode input)
64	P12/KEYCON	O	FL segment output. (P12, Key con diode input)
65	P13/DOLBY	O	FL segment output. (P13, Dolby diode input)
66	P14/DSP	O	FL segment output. (P14, DSP diode input)
67~76	P15~23	O	FL segment output. (P15~23)
77~80	G11~8	O	FL grid output. (G11~8)

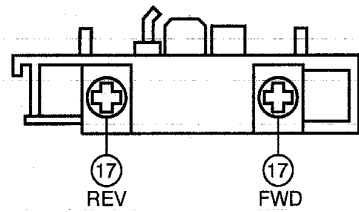
IC, LC72131D

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

# ELECTRICAL ADJUSTMENT <TUNER / DECK>



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



## < TUNER SECTION >

1. Clock Frequency Adjustment  
 Settings : • Test point : TP1  
 • Adjustment location : TC721  
 Method : Set to MW 1710kHz<HE,HK>, MW 1602kHz <EZ> and adjust TC721 so that the test point becomes 2160kHz  $\pm$  0.01kHz<HE,HK>, 2052kHz  $\pm$  0.01kHz<EZ>.
2. MW VT Adjustment<HE,HK>  
 Settings : • Test point : TP2 (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<EZ>  
 Settings : • Test point : TP2 (VT)  
 Method : Set to MW 1602kHz and check that the test point is 6.8V  $\pm$  1.0V.
4. MW Tracking Adjustment<HE,HK>  
 Settings : • Test point : TP-5, TP-6  
 • Adjustment location :  
 L981 ..... 600kHz  
 TC941 ..... 1400kHz  
 Method : 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.
5. MW Tracking Adjustment<EZ>  
 Settings : • Test point : TP-5, TP-6  
 • Adjustment location :  
 L981 ..... 999kHz  
 Method : The level at 999kHz is adjusted to MAX by L981.
6. AM IF Adjustment  
 Settings : • Test point : TP-5, TP-6  
 • Adjustment location : L742  
 L742 ..... 450kHz

7. LW VT Adjustment<EZ>  
 Settings : • Test point : TP2 (VT)  
 • Adjustment location : L942  
 Method : Set to LW 144kHz and adjust L942 so that the test point becomes  $1.5V \pm 0.05V$ .
8. LW Tracking Adjustment<EZ>  
 Settings : • Test point : TP-5, TP-6  
 • 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.
9. SW VT Adjustment <HE,HK>  
 Settings : • Test point : TP2 (VT)  
 • Adjustment location : L942  
 Method : Set to SW 17.9MHz and adjust L942 so that the test point becomes  $7.0V \pm 0.05V$ .
10. SW Tracking Adjustment<HE,HK>  
 Settings : • Test point : TP-5, TP-6  
 • Adjustment location :  
 L941..... 5.95MHz  
 TC942 ..... 17.9MHz  
 Method : Set up TC942 to center before adjustment. The level at 5.9MHz is adjusted to MAX by L941. Then the level at 17.9MHz is adjusted to MAX by TC942.
11. FM VT Adjustment  
 Settings : • Test point : TP2 (VT)  
 • Adjustment location : L807  
 Method : Set to FM 108.0MHz and adjust L807 so that test point is  $8.0V \pm 0.05V$ . Then set to FM 87.5MHz and check that the test point is more than 1.5V.
12. FM Tracking Adjustment  
 Settings : • Test point : TP5, TP6  
 • Adjustment location :  
 L802,L804,L831<EZ>..... 87.5MHz  
 TC801,TC802,TC803<EZ>..... 108.0MHz  
 Method : • The level at 87.5MHz is adjusted by L802, L804, L831<EZ>. Then the level at 108.0MHz is adjusted by TC801, TC802, TC803<EZ>, so that the distortion is less than 3%.
13. DC Balance / Mono Distortion Adjustment  
 Settings : • Test point : TP3, TP4 (DC balance)  
 TP5, TP6 (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%.
14. Auto Stop Level Adjustment  
 Settings : • Test point : TP7  
 • Adjustment location : SFR722  
 • Input level : 18dB  
 Method : Set to FM 98.0 MHz and adjust voltage low (about 0.1V) by SFR722. After that voltage high (about 7.0V) by 2dB down.

15. Auto Stop Level Check  
 MW  
 Settings : • Test point : TP7  
 • Input level : Variable  
 Method : Set to MW 999kHz and check that the test point is  $58 \pm 10$  dB.
- FM  
 Settings : • Test point : TP7  
 • Input level : Variable  
 Method : Set to FM 98.0MHz and check that the test point is  $20 \text{ dB} \pm 5$  dB.
- SW<HE,HK>  
 Settings : • Test point : TP7  
 • Input level : Variable  
 Method : Set to SW 12.0MHz and check that the test point is less than 60 dB.

< DECK SECTION >

16. 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  $\pm 5$ Hz.
17. 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.
18. PB Frequency Response Check (DECK 1, DECK 2)  
 Settings : • Test tape : TTA-300  
 • Test point : TP8, TP9  
 Method : Play back the 315Hz and 10kHz signals of the test tape and check that the output ratio of the 10kHz signal is with respect to that of the 315Hz signal is  $\pm 2$ dB.
19. PB Sensitivity Adjustment  
 Settings : • Test tape : TTA-200  
 • Test point : TP8, TP9  
 • Adjustment location :  
 SFR311 (DECK 1, Lch)  
 SFR312 (DECK 1, Rch)  
 SFR321 (DECK 2, Lch)  
 SFR322 (DECK 2, Rch)  
 Method : Play back the test tape and adjust SFRs so that the output level of the test point becomes 300mV.

## 20. REC/PB Frequency Response Adjustment

- Settings : • Test tape : TTA-602  
• Test point : TP8, TP9  
• Input signal : 1kHz / 10kHz (LINE IN)  
• Adjustment location : SFR371 (Lch)  
SFR372 (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 and 10kHz signals and adjust SFRs so that the output of the 10kHz signals becomes 0dB  $\pm$  0.5dB with respect to that of the 1kHz signal.

## 21. Bias OSC Frequency Adjustment

- Settings : • Test tape : TTA-601  
• Test point : TP10  
• Adjustment location : L371

Method : Set to the REC mode. Adjust L371 so that the frequency counter of the test point becomes 85kHz  $\pm$  0.1kHz.

## PRACTICAL SERVICE FIGURE

### <TUNER SECTION>

#### <FM SECTION>

IHF Sensitivity : <HE,HK>  
(THD 3%) 6dB  $\pm$  6dB  
[at 87.5 / 98.0MHz]  
8dB  $\pm$  6dB  
[at 108.0MHz ]  
<EZ>  
8dB  $\pm$  6dB  
[at 87.5MHz]  
7dB  $\pm$  6dB  
[at 98.0 / 108.0MHz ]

S/N 50dB<HE,HK>, 46dB<EZ>

Quieting sensitivity : <HE,HK>  
31dB  $\pm$  5dB  
[at 87.5 / 98.0 / 108.0MHz]  
<EZ>  
34dB  $\pm$  5dB

Signal to noise ratio : (STEREO) More than 64dB<HE,HK>  
(STEREO) More than 59dB<EZ>  
(MONO) More than 65dB  
[at 98.0MHz ]

Distortion : (STEREO) Less than 2.0%  
(MONO) 1.3 %  
[at 98.0MHz]

Auto stop level : 22dB  $\pm$  10dB [at 98.0MHz]

Stereo separation : More than 25dB<HE,HK>  
More than 20dB<EZ>  
[at 98.0MHz]

Intermediate frequency : 10.7MHz

#### <AM(MW) SECTION>

Sensitivity : 52 ~ 64dB  
(S/N 20 dB) [at 603kHz]  
50 ~ 62dB  
[at 999 / 1404kHz]

Signal to noise ratio : More than 36dB  
[at 999kHz]

Distortion : Less than 1.5%  
[at 999kHz]

Auto stop level : 40dB ~ 65dB  
[at 999kHz]

Intermediate frequency : 450kHz

#### <SW SECTION><HE,HK>

Sensitivity : 35 ~ 45dB (5.90MHz)  
(S/N 20dB) 28 ~ 38dB (12.0MHz)  
28 ~ 38dB (17.9MHz)  
Distortion : Less than 1.5% (12.0MHz)  
Intermediate frequency : 450kHz

#### <LW SECTION><EZ>

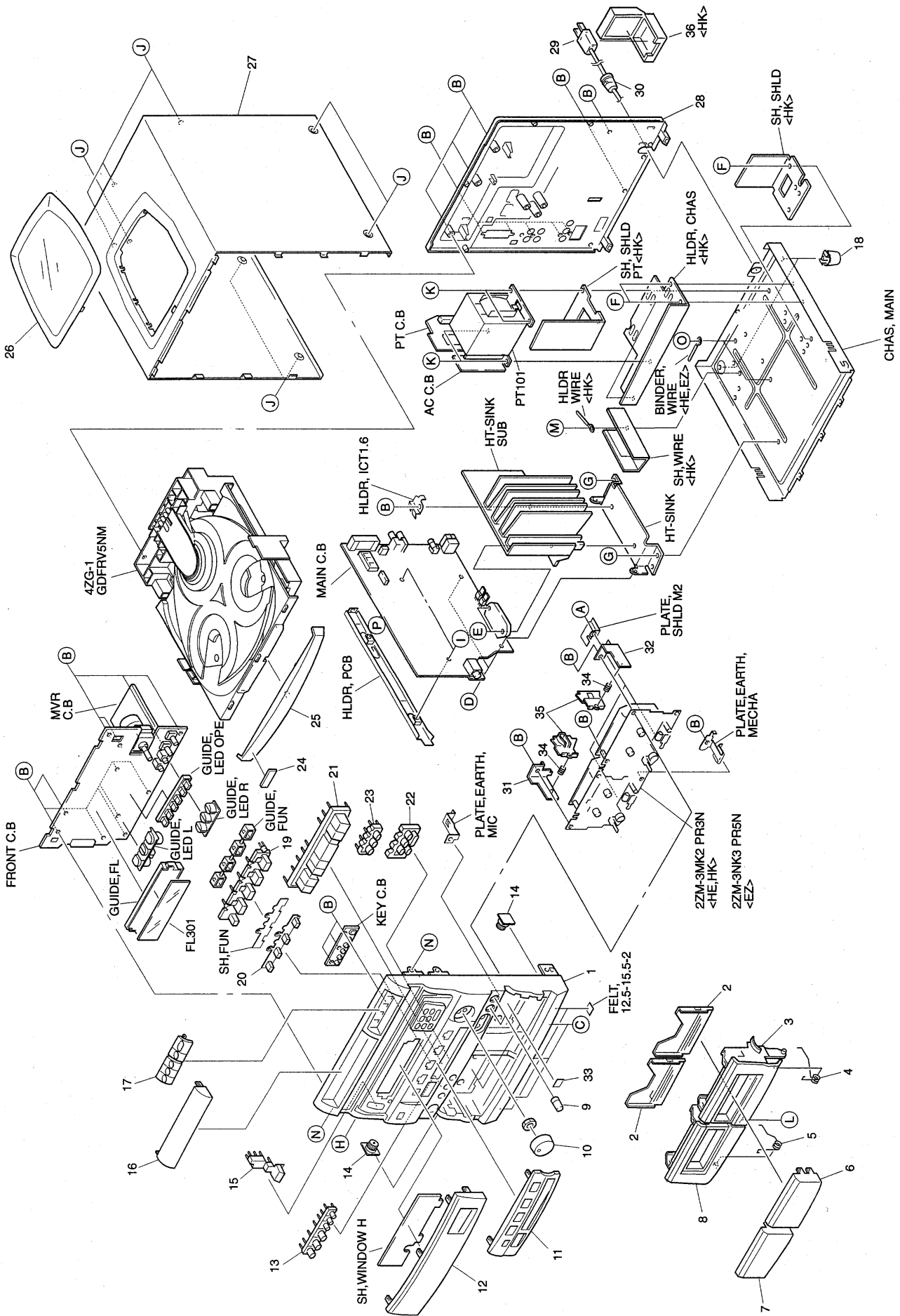
Sensitivity : 68dB  $\pm$  5dB (144kHz)  
(S/N 20dB) 65dB  $\pm$  5dB (198kHz)  
65dB  $\pm$  5dB (290kHz)  
Distortion : Less than 1.5% (198kHz)  
Intermediate frequency : 450kHz

#### <DECK SECTION>

Tape speed : 3000Hz  $\pm$  45Hz  
Wow & flutter : Less than 0.4%  
(R.M.S)  
Take-up torque : 30 ~ 55g-cm  
(FWD, REV)  
F.F & REW torque : 75 ~ 180g-cm  
Back tension : 2 ~ 7g-cm  
(FWD, REV)  
PB output level : 2.8V  $\pm$  3dB  
(SP OUT 2V)  
REC/PB output level : 1.6V  $\pm$  3dB  
(SP OUT 2V)  
Distortion (REC/PB) : Less than 2.0%  
Noise level (PB) : Less than 300mV  
(NORM, SP OUT 2V, DOLBY OFF )  
Less than 150mV  
(CrO<sub>2</sub>, SP OUT 2V, DOLBY OFF)  
Noise level (REC/PB) : Less than 25mV/12mV  
( NORM, DOLBY OFF / WTD)  
Less than 18mV/10mV  
( CrO<sub>2</sub>, DOLBY OFF / WTD)  
Crosstalk : More than 55dB  
(1kHz, 0VU)  
Channel separation : More than 40dB  
(1kHz, 0VU)  
Erasing ratio : More than 60dB  
(at 125Hz)  
Test tape : TTA-602 (NORMAL)  
TTA-610 (CrO<sub>2</sub>)



MECHANICAL EXPLODED VIEW 1/1

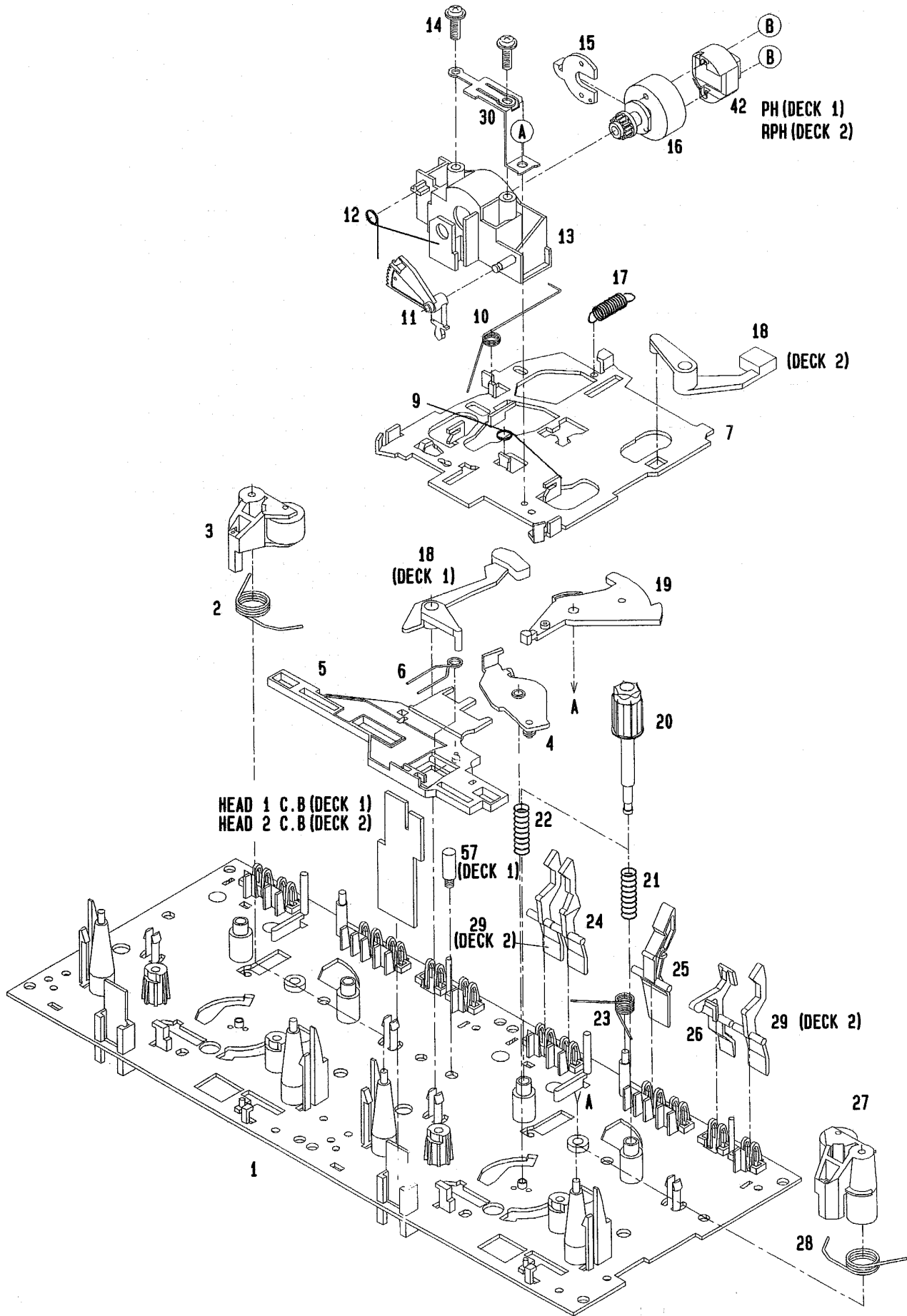


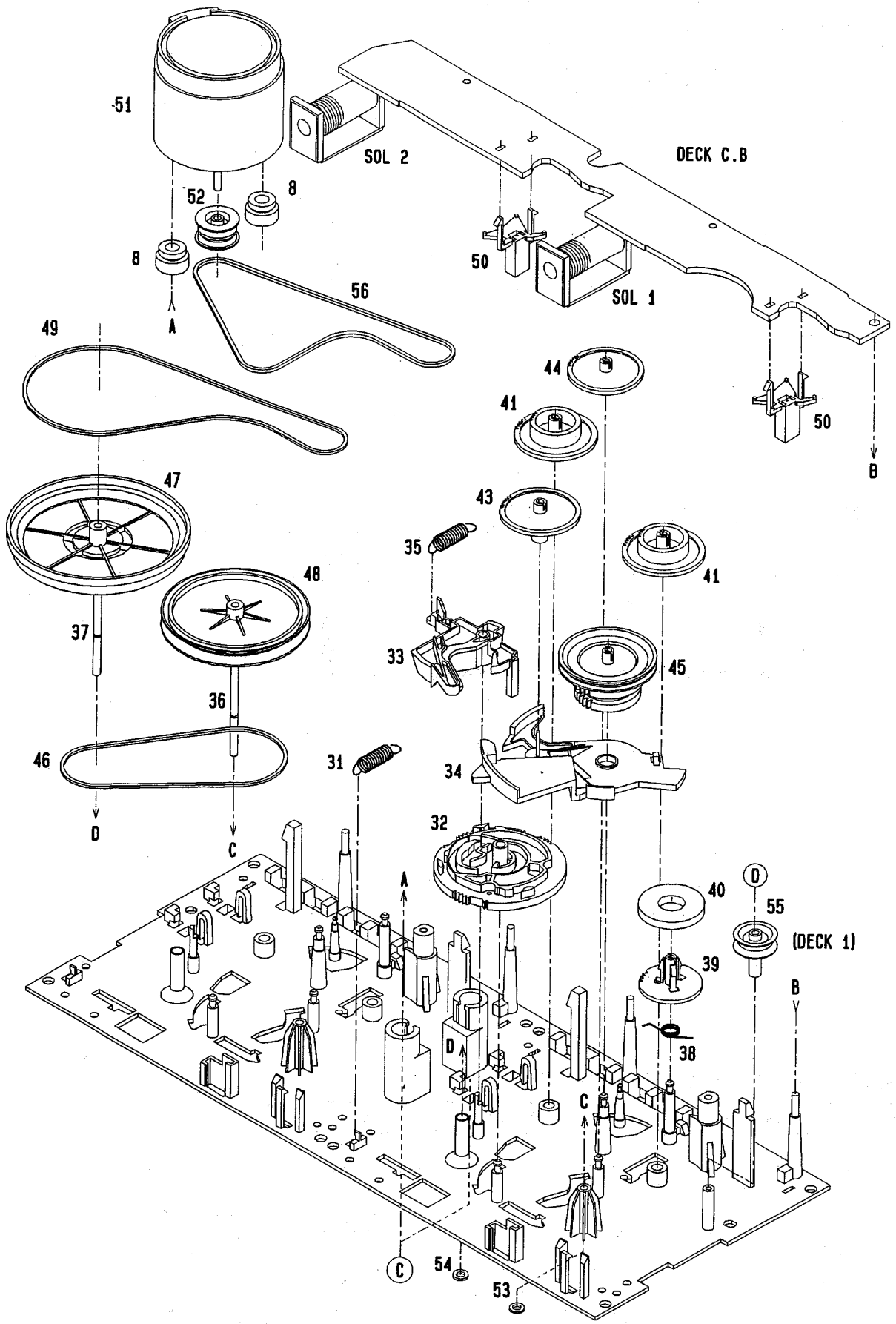
# MECHANICAL PARTS LIST 1/1

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

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION	REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	86-NH6-002-010		CABI,FR E<77EZ>	23	86-NF6-014-010		KEY,DSP
1	86-NH6-001-110		CABI,FR H<77HK>	24	82-NE6-067-010		BADGE,AIWA 30N
1	86-NH6-021-010		CABI,FR H K700<700HE>	25	86-NH6-005-010		PANEL,TRAY E<77EZ>
2	86-NF6-061-010		REFLECTOR,CASS	25	86-NH6-003-010		PANEL,TRAY H<77HK>
3	86-NF6-004-010		BOX,CASS 2<700HE>	25	86-NH6-023-010		PANEL,TRAY H K700<700HE>
3	86-NH6-010-010		BOX,CASS 2H<77HK>	26	86-NF6-007-010		WINDOW, TOP
3	86-NFT-022-010		BOX,CASS 2TS<77EZ>	27	86-NF6-048-010		CABI,STEEL H-S<700HE>
4	82-NF5-219-010		SPR-T,EJECT 2(SIN)	27	86-NFT-005-010		CABI,STEEL TS<77HK,77EZ>
5	82-NF5-218-010		SPR-T,EJECT 1(SIN)	28	86-NH6-014-010		PANEL,REAR EZSTNM<77EZ>
6	86-NF6-020-010		WINDOW,CASS 2	28	86-NH6-026-010		PANEL,REAR HEJBNM K700<700HE>
7	86-NF6-019-010		WINDOW,CASS 1	28	86-NH6-015-010		PANEL,REAR HKJSTNM<77HK>
8	86-NF6-003-010		BOX,CASS 1<700HE>	△	29	87-050-079-010	AC CORD ASSY,E
8	86-NH6-009-010		BOX,CASS 1H<77HK>	30	87-085-185-010		BUSHING AC CORD
8	86-NFT-021-010		BOX,CASS 1TS<77EZ>	31	82-NF5-226-010		HLDR,LOCK 1N(*)
9	86-NF6-050-010		KNOB,RTRY MIC M	32	82-NF5-227-010		HLDR,LOCK 2N(*)
10	86-NF6-063-010		KNOB,RTRY VOL<700HE>	33	81-532-080-010		LBL,CASS-COMPT
10	86-NFT-032-010		KNOB,RTRY VOL TS<77HK,77EZ>	34	82-NF5-228-010		SPR-C,LOCK
11	86-NF6-006-010		PANEL,CONTROL	35	82-NF5-229-010		PLATE,LOCK(*)
12	86-NH6-008-010		WINDOW,DISP E<77EZ>	△	36	87-099-811-010	PLUG,ADPTR CONV(K)<77HK>
12	86-NH6-007-010		WINDOW,DISP H<77HK>	A	87-571-032-410		VIT+2-3
12	86-NH6-024-010		WINDOW,DISP H K700<700HE>	B	87-067-703-010		BVT2+3-10 W/O SLOT
13	86-NFG-013-010		KEY,CONTROL<700HE>	C	87-067-673-010		BVTT+3-8 BLK
13	86-NH6-025-010		KEY,CONTROL TS<77HK,77EZ>	D	87-067-633-010		BVT2+3-8 W/O SLOT W/CONVEX
14	87-063-165-010		OIL-DMPR,150	E	87-067-698-010		BVT2+3-18 W/O SLOT
15	86-NF6-009-010		KEY,POWER<700HE>	F	87-571-092-410		VIT+3-4<77HK>
15	86-NFT-033-010		KEY,POWER TS<77HK,77EZ>	G	87-067-689-010		BVTT+3-8
16	86-NF6-018-010		WINDOW,CD	H	87-591-094-410		QIT+3-6
17	86-NF6-015-010		KEY,CD<700HE>	I	87-078-084-010		BVTT+3-6 W/CONVEX
17	86-NFT-031-010		KEY,CD TS<77HK,77EZ>	J	87-067-641-010		UTT2+3-8 W/O SLOT BLK
18	87-085-221-010		FOOT, H 13.5	K	87-078-083-010		BVTT+4-8 SWCH16A SEMS<700HE,77EZ>
19	86-NF6-011-010		KEY,FUN	K	87-067-975-010		S-SCREW,IT+4-8 SWCH12A<77HK>
20	86-NF6-016-010		REFLECTOR,FUN	L	82-NE8-215-010		W,4.2-6.8-0.18
21	86-NH6-004-010		KEY,OPE VCD	M	87-067-585-010		BVTT+4-6<77HK>
22	86-NH6-006-110		KEY,VCD<700HE>	N	87-721-097-410		QT2+3-12 W/O SLOT
22	86-NH6-027-010		KEY,VCD HIGH<77HK,77EZ>	O	87-067-584-010		BVT2+3-6 W/O SLOT<700HE,77EZ>
				P	87-067-508-010		W-F,3.5-8-0.8 W/ADH

TAPE MECHANISM EXPLODED VIEW 1/1



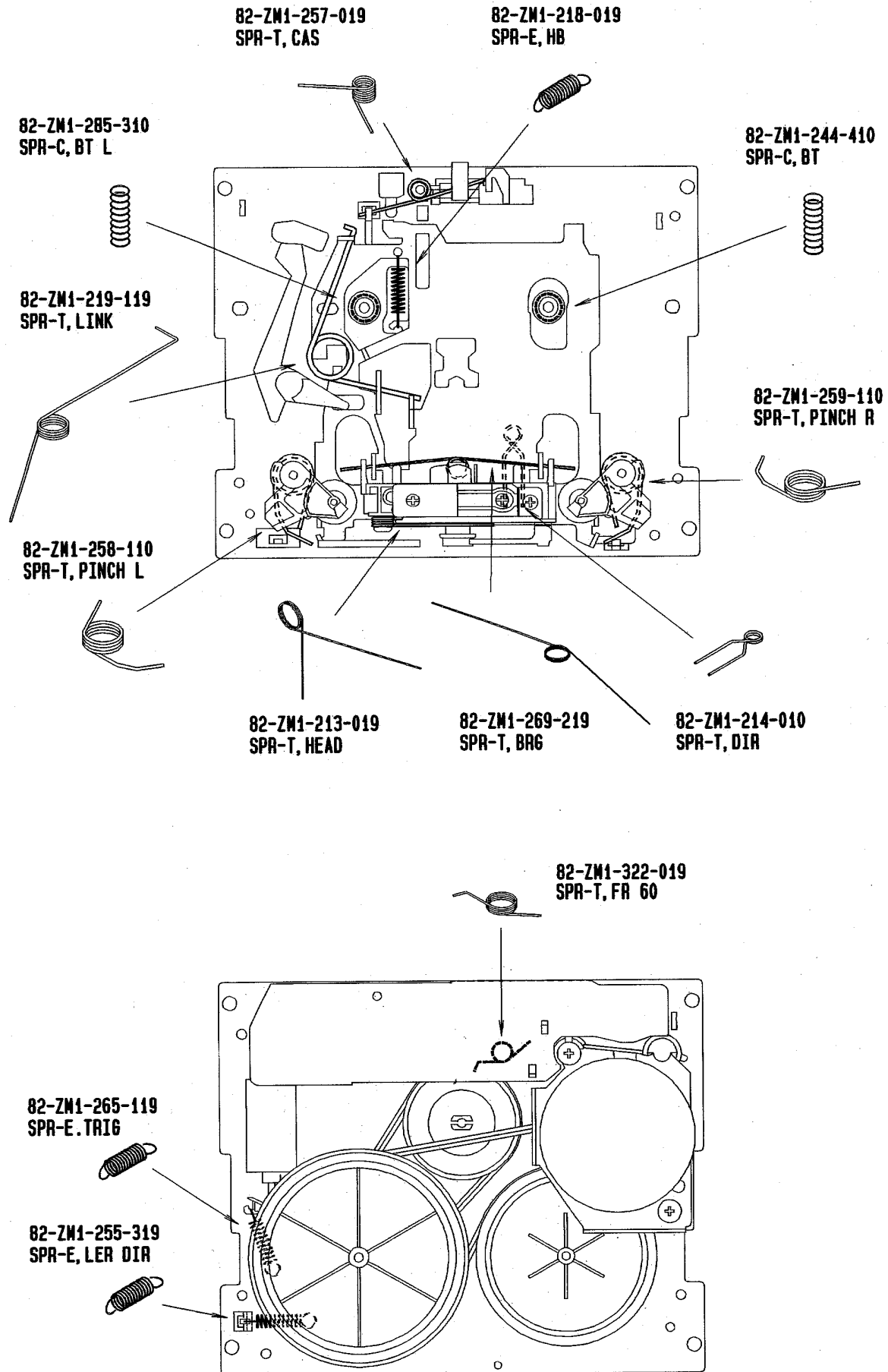


TAPE MECHANISM PARTS LIST 1/1 <PR3 : 77HK,700HE> <PR5 : 77EZ>

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

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION	REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	82-ZM3-301-519		CHAS ASSY,M2	32	82-ZM3-305-01K		GEAR,CAM M2
2	82-ZM1-258-110		SPR-T,PINCH L	33	82-ZM1-227-21K		LVR,TRIG
3	82-ZM1-248-519		LVR ASSY,PINCH L<PR3>	34	82-ZM3-306-11K		LVR,FR M2
3	82-ZM1-345-019		LVR ASSY,PINCH L W<PR5 >	35	82-ZM1-265-119		SPR-E,TRIG
4	82-ZM1-295-31K		PLATE ASSY,LINK<PR3>	36	82-ZM1-236-019		CAPSTAN N 2-41.5
4	82-ZM1-333-010		PLATE,LINK 2<PR5 >	37	82-ZM1-239-019		CAPSTAN N 2.2-41.7
5	82-ZM1-266-11K		LVR,DIR	38	82-ZM1-322-019		SPR-T,FR60
6	82-ZM1-214-010		SPR-T,DIR	39	82-ZM1-220-219		GEAR,IDLER
7	82-ZM1-206-81K		CHAS,HEAD	40	82-ZM1-316-010		RING MAGNET 3
8	82-ZM3-307-019		CUSH-G,DIA3.7-8-3.2	41	82-ZM1-216-31K		GEAR,REEL
9	82-ZM1-269-219		SPR-T,BRG	42	87-046-398-019		HEAD,PH YK50P-BS409(PH)
10	82-ZM1-219-119		SPR-T,LINK	42	87-046-399-019		HEAD,RPH YK56R-BS409(RPH)
11	82-ZM1-210-119		GEAR,H T	43	82-ZM1-225-21K		GEAR,FR
12	82-ZM1-213-019		SPR-T,HEAD	44	82-ZM1-226-019		GEAR,REW
13	82-ZM1-207-619		GUIDE,TAPE	45	82-ZM1-228-810		SLIP DISK ASSY
14	82-ZM1-283-310		S-SCREW,AZIMUTH	46	82-ZM1-338-010		BELT FR4
15	82-ZM1-314-119		PLATE,HEAD	47	82-ZM1-238-81K		FLY-WHL ASSY,R (DECK 2)
16	82-ZM1-208-119		HLDL,HEAD	47	82-ZM3-210-71K		FLY-WHL ASSY,R2 (DECK 1)
17	82-ZM1-218-019		SPR-E,HB	48	82-ZM1-235-51K		FLY-WHL ASSY,L (DECK 2)
18	82-ZM1-263-110		LVR,EJECT L (DECK 1)	48	82-ZM3-208-61K		FLY-WHL ASSY,L2 (DECK 1)
18	82-ZM1-264-010		LVR,EJECT R (DECK 2)	49	82-ZM3-313-019		BELT R10<PR3>
19	82-ZM1-222-21K		LVR,PLAY	49	82-ZM3-329-210		BELT,SBU R2<PR5 >
20	82-ZM1-217-319		REEL TABLE	50	82-ZM1-245-210		HLDL,IC
21	82-ZM1-244-510		SPR-C,BT	51	87-045-347-019		MOT,SHU2L 70(M1)
22	82-ZM1-285-310		SPR-C,BT L	52	82-ZM3-202-019		PULLEY,MOT 2M<PR3>
23	82-ZM1-257-019		SPR-T,CAS	52	82-ZM3-221-010		PULLEY,MOT 2M<PR5 >
24	82-ZM1-241-319		LVR,MC	53	82-ZM1-288-019		SH,1.63-3.2-0.5 SLT
25	82-ZM1-242-019		LVR,CAS	54	80-ZM6-243-019		SH,1.75-3.6-0.5 SLT
26	82-ZM1-243-019		LVR,STOP	55	82-ZM3-304-110		PULLEY,COUPLER (DECK 1)
27	82-ZM1-253-519		LVR ASSY,PINCH R<PR3>	56	82-ZM3-312-019		BELT P10<PR3>
27	82-ZM1-346-019		LVR ASSY,PINCH R W<PR5 >	56	82-ZM3-328-110		BELT,SBU P2<PR5 >
28	82-ZM1-259-110		SPR-T,PINCH R	57	82-ZM3-216-019		SHAFT,COUPLER N(DECK 1)
29	82-ZM1-240-11K		LVR,REC (DECK 2)	A	82-ZM1-315-010		S-SCREW,GVIDE TAPE
30	82-ZM1-298-010		SPR-P,EARTH	B	80-ZM6-207-019		V+1.6-7
31	82-ZM1-255-319		SPR-E,LVR DIR	C	82-ZM3-318-019		S-SCRW MOTOR M2
				D	87-067-972-019		PW,1.05-3-0.25 SLT

SPRING APPLICATION POSITION

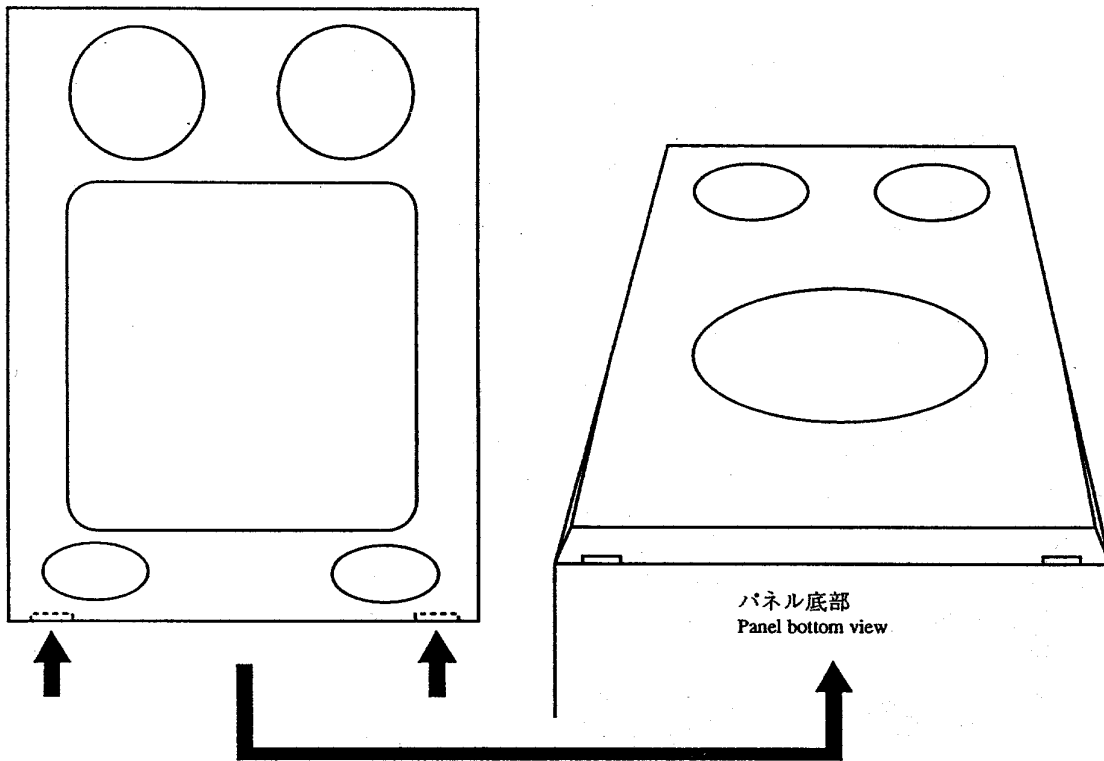


# SPEAKER DISASSEMBLY INSTRUCTIONS

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 1/2 (SX-NAV70 / 80)

If cant understand for Description please kindly refer to "REFERENCE NAME LIST".

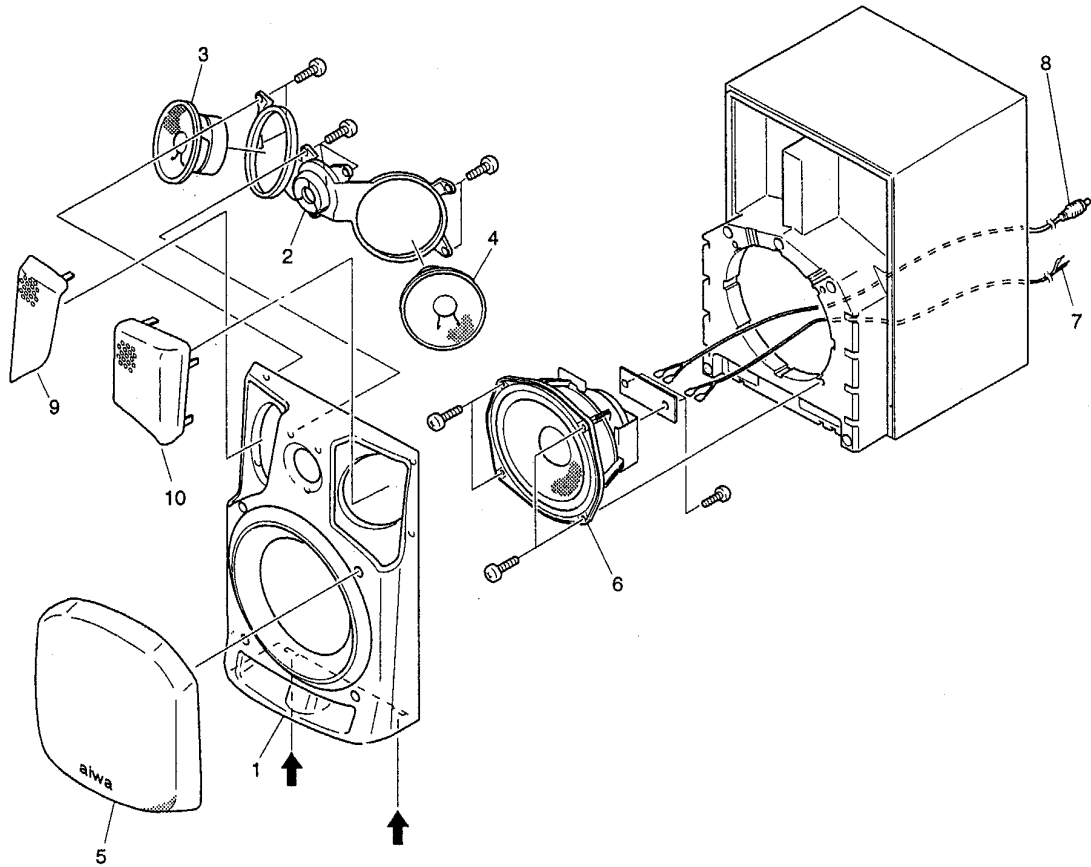
REF. NO.	PART NO.	KANRI NO.	DESCRIPTION	REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	86-NST-001-010		PANEL FR R<70Y>	8	86-NST-604-010		SPEAKER T 60<70Y>
1	86-NSS-009-010		PANEL FR 80 R<80YJ>	8	86-NSR-604-010		SPEAKER TW 60<80YJ>
2	86-NST-002-010		PANEL FR L<70Y>	9	82-NSE-610-010		CERAMIC<70Y>
2	86-NSS-010-010		PANEL FR 80 L<80YJ>	9	82-NSE-610-010		CERAMIC<80YJ>
3	86-NST-003-010		PANEL BA<70Y>	10	83-NS8-009-010		DIAPHRAGM<70Y>
4	86-NST-006-010		GRILLE FRAME ASSY<70Y>	10	83-NS8-009-010		DIAPHRAGM<80YJ>
5	86-NSR-005-010		GRILLE FRAME ASSY R<80YJ>	11	83-096-614-010		SPEAKER CORD<70Y>
6	86-NSR-006-010		GRILLE FRAME ASSY L<80YJ>	11	83-096-614-010		SPEAKER CORD<80YJ>
7	86-NS5-608-010		SPEAKER W 140<70Y>				
7	86-NSS-602-010		SPEAKER W 140 H<80YJ>				

## SPEAKER DISASSEMBLY INSTRUCTIONS

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 2/2 (SX-FNV800)

If cant understand for Description please kindly refer to "REFERENCE NAME LIST".

REF.NO.	PART NO.	KANRI NO.	DESCRIPTION
1	86-NS5-027-019		PANEL FR ST
2	86-NS5-028-019		HLDR SQ ASSY
3	86-NS5-604-019		SPEAKER TWEETER
4	86-NS5-606-019		SPEAKER
5	86-NS5-007-019		GRILLE FRAME ASSY
6	86-NS5-602-019		SPEAKER WOOFER
7	83-NS5-613-019		SPEAKER CORD ASSY
8	85-NS6-611-019		SPEAKER CORD Y/B
9	86-NS5-011-019		PROTECTOR TW L
10	86-NS5-010-019		PROTECTOR TW R



# ACCESSORIES / PACKAGE LIST

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

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	86-NH6-901-119		IB,H(ECA)-M<HK>
1	86-NH6-902-019		IB,H(ECA)-M NK700<HE>
1	86-NH6-904-019		IB,E(EGFSI)-M<EZ>
2	86-MG3-701-119		RC UNIT,6AS08
3	87-A90-054-019		ANT,LOOP AM-CON C<HK,HE>
3	87-006-225-019		ANT,LOOP ANT NC2<EZ>
4	87-A90-064-019		FEEDER-ANT,FM(SHS)<HK,HE>
4	87-043-106-019		ANT,FM 1007AWG<EZ>
5	87-043-095-019		ANTENNA WIRE<HK,HE>
6	87-050-050-019		CORD-1.5M PIN-PIN M<HK,HE>
6	87-050-073-119		CORD,EURO<EZ>
△7	87-099-789-019		PLUG,ADPTR IR44<HK,HE>

# REFERENCE NAME LIST

## ELECTRICAL SECTION

DESCRIPTION	REFERENCE NAME
ANT	ANTENNAS
C-	CHIP
C-CAP	CAP, CHIP
C-CAP TN	CAP, CHIP TANTALUM
C-COIL	COIL, CHIP
C-DI	DIODE, CHIP
C-DIODE	DIODE, CHIP
C-FET	FET, CHIP
C-FOTR	FILTER, CHIP
C-JACK	JACK, CHIP
C-LED	LED, CHIP
C-RES	RES, CHIP
C-SFR	SFR, CHIP
C-SLIDE SW	SLIDE SWITCH, CHIP
C-SW	SWITCH, CHIP
C-TR	TRANSISTOR, CHIP
C-VR	VOLUME, CHIP
C-ZENER	ZENER, CHIP
CAP, CER	CAP, CERA-SOL
CAP, E	CAP, ELECT
CAP, M/F	CAP, FILM
CAP, TC	CAP, CERA-SOL
CAP, TC-U	CAP, CERA-SOL SS
CAP, TN	CAP, TANTALUM
CERA FIL	FILTER, CERAMIC
CF	FILTER, CERAMIC
DL	DELAY LINE
E/CAP	CAP, ELECT
FILT	FILTER
FLTR	FILTER
FUSE RES	RES, FUSE
MOT	MOTOR
P-DIODE	PHOTO DIODE
P-SNSR	PHOTO SENSER
P-TR	PHOTO TRANSISTOR
POLY VARI	VARIABLE CAPACITOR
PPCAP	CAP, PP
PT	POWER TRANSFORMER
PTR, RES	PTR, MELF
RC	REMOTE CONTROLLER
RES NF	RES, NON-FLAMMABLE
RESO	RESONATOR
SHLD	SHIELD
SOL	SOLENOID
SPKR	SPEAKER
SW, LVR	SWITCH, LEVER
SW, RTRY	SWITCH, ROTARY
SW, SL	SWITCH, SLIDE
TC CAP	CAP, CERA-SOL
THMS	THERMISTOR
TR	TRANSISTOR
TRIMER	CAP, TRIMMER
TUN-CAP	VARIABLE CAPACITOR
VIB, CER	RESONATOR, CERAMIC
VIB, XTAL	RESONATOR, CRYSTAL
VR	VOLUME
ZENER	DIODE, ZENER

## MECHANICAL SECTION

DESCRIPTION	REFERENCE NAME
ADHESHIVE	SHEET ADHESHIVE
AZ	AZIMUTH
BAR-ANT	BAR-ANTENNA
BAT	BATTERY
BATT	BATTERY
BRG	BEARING
BTN	BUTTON
CAB	CABINET
CASS	CASSETTE
CHAS	CHASSIS
CLR	COLLAR
CONT	CONTROL
CRSR	CURSOR
CU	CUSHION
CUSH	CUSHION
DIR	DIRECTION
DUBB	DUBBING
FL	FRONT LOADING
FLY-WHL	FLYWHEEL
FR	FRONT
FUN	FUNCTION
G-CU	G-CUSHION
HDL	HANDOL
HIMERON	CLOTH
HINGE, BAT	HINGE, BATTERY
HLDR	HOLDER
HT-SINK	HEAT SINK
IB	INSTRUCTION BOOKLET
IDLE	IDLER
IND, L-R	INDICATOR, L-R
KEY, CONT	KEY, CONTROL
KEY, PRGM	KEY, PROGRAM
KNOB, SL	KNOB, SLIDE
LBL	LABEL
LID, BATT	LID, BATTERY
LID, CASS	LID, CASSETTE
LVR	LEVER
P-SP	P-SPRING
PANEL, CONT	PANEL, CONTROL
PANEL, FR	PANEL, FRONT
PRGM	PROGRAM
PULLY, LOAD MO	PULLY, LOAD MOTOR
RBN	RIBBON
S-	SPECIAL
SEG	SEGMENT
SH	SHEET
SHLD-SH	SHIELD-SHEET
SL	SLIDE
SP	SPRING
SP-SCREW	SPECIAL-SCREW
SPACER, BAT	SPACER, BATTERY
SPR	SPRING
SPR-P	P-SPRING
SPR-PC-PUSH	P-SPRING, C-PUSH
T-SP	T-SPRING
TERM	TERMINAL
TRIG	TRIGGER
TUN	TUNING
VOL	VOLUME
W	WASHER
WHL	WHEEL
WORM-WHL	WORM-WHEEL

サービス技術ニュース	
番号	連絡内容
G- -	
G- -	
G- -	

**アイワ株式会社**  
**AIWA CO.,LTD.**

9420208, 750038

Tokyo Japan