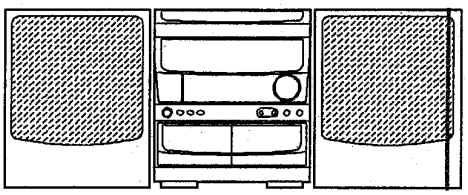
aiwa

aiwa SERVICE

NSX-V770

SERVICE MANUAL



COMPACT DISC STEREO
CASSETTE RECEIVER

- BASIC TAPE MECHANISM : 2ZM–3MK2 PR5N
- BASIC CD MECHANISM : 4ZG–1 ZDNM
- TYPE : EZ

SYSTEM	CD – CASSEIVER	SPEAKER	REMOTE CONTROLLER
NSX–V770	CX–NV770 (TYPE : EZ)	SX – FNV700	RC – T503

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

S/M Code No. 09–96A–159–4FE

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 μV/m
Antenna	Loop antenna

<LW tuner section>

Tuning range	144kHz ~ 290kHz
Usable sensitivity	1400 μV/m
Antenna	Loop antenna

<Amplifier section>

Power output	(without connecting to the SURROUND SPEAKERS) 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/ DIN 45324) DIN MUSIC POWER: 60 W + 60 W
Total Harmonic distortion	0.05% (15 W, 1 kHz, 6 ohms, DIN AUDIO)
Inputs	VIDEO/AUX: 150mV MIC 1, MIC 2: 1.0 mV (10 kohms)
Outputs	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

<Cassette deck section>

Track format	4 tracks, 2 channels stereo
Frequency response	CrO_2 tape: 50 Hz – 16000 Hz Normal tape: 50 Hz –15000 Hz
Signal-to-noise ratio	60 dB (DOLBY NR ON, CrO_2 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 (λ =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

<Speaker system SX–FNV700)>

Cabinet type	3way, bass reflex with surround speaker (Magnetic shielded type)
Speakers	Woofer: 140 mm (5⅝ in.) cone type Tweeter: 80mm (3¼ in.) cone type Super tweeter: 20 mm (13/16 in.) ceramic type Surround speaker: 80mm (3¼ in.) cone type
Impedance	Front speaker: 6 ohms Surround speaker: 16 ohms
Output sound pressure level	87 dB/W/m
Dimensions (W x H x D)	235 x 302 x 270 mm (9⅜ x 12 x 10¾ in.)
Weight	3.8 kg (8 lbs 6 oz.)(LH)

<General>

Power requirements	230 V AC, 50Hz
Power consumption	195 W
Dimensions of main unit (W x H x D)	260 x 307 x 328 mm (10¼ x 12⅛ x 13 in.)
Weight of main unit	7.3 kg (16 lbs 20 oz)

- Design and specifications are subject to change without notice.

- Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.
  "DOLBY", 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 laserståling 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 ylittävälle näkymättömälle lasersäteilylle.

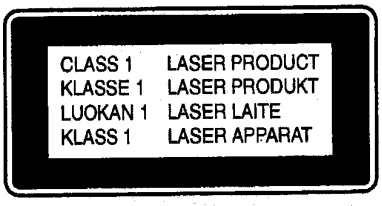
VARNING!
Om apparaten används på annat sätt än vad som specificeras i denna bruksanvising, kan användaren utsättas för osynling laserstrålning, som överskrider gränsen för laserklass 1.

CAUTION
Use of controls or adjustments or performance of procedures other than those specified 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 laserståling ved åbning, når sikkerhedsafbrydereer ude af funktion. Undgå udsættelse for stråling.

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



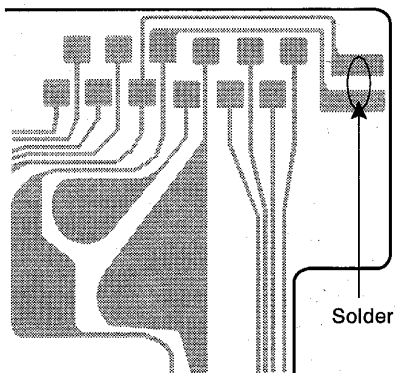
Precaution to replace Optical block

(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.

PICK-UP Assy P.C.B



ELECTRICAL MAIN PARTS LIST

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

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
IC			
	86-NF6-670-010		C-IC UPD78045HGF-014
	87-A20-101-019		IC,STK405-070A
	87-070-083-019		IC,GP1U281X
	87-070-121-010		IC,HA12185NT
	87-001-874-010		IC,HA12134A
	87-017-915-019		C-IC,BU4094 BCF
	87-017-914-019		IC,BU4094 BC
	87-017-804-019		IC,BU4052BC
	87-A20-107-019		IC,BA3836
	87-017-888-089		IC,NJM4558MD
	87-A20-069-049		C-IC,BA3842F
	87-070-127-119		IC,LC72131D
	87-017-714-119		IC,LA1836L
	87-A20-070-019		IC-LV1100
	87-020-454-010		IC,DN6851
	87-070-232-019		IC,BA3834S
TRANSISTOR			
	87-026-610-089		TR,KTC3198GR
	89-324-122-089		C-TR,2SC2412KR
	89-110-372-089		C-TR,2SA1037R
	87-026-609-089		TR,KTA1266GR
	89-213-702-019		TR 2SB1370E
	89-332-665-089		TR,2SC3266GR
	89-406-555-089		TR,2SD655E
	87-026-218-089		TR,DTC144ES
	87-026-286-089		TR,DTA143ES
	89-502-466-089		TR FET 2SK246-BL (TPE2)
	89-333-317-089		TR,2SC3331T
	87-026-216-089		TR,DTA124ES
	89-109-521-089		TR,2SA952K
	89-112-965-089		TR,2SA1296GR
	87-026-219-089		TR,DTA144ES
	89-327-143-089		C-TR,2SC2714 (O)
	89-328-785-089		TR 2SC2878-A (E2-M)
	87-026-269-089		TR,DTA114ES
	89-503-602-089		C-FET,2SK360E
	87-026-214-089		TR,DTA114YS
	89-505-434-549		C-FET,2SK543(4/5)
	87-026-463-089		TR,2SA933S(RS)
	87-A30-047-089		TR,CSD655E
	87-A30-065-089		TR,2SC2785FE
	87-A30-066-089		TR,2SA1175FE
	87-026-293-089		TR,DTC144WS
	89-320-011-089		TR,2SC2001K
DIODE			
	87-020-027-089		C-DIODE,1SS184
	87-020-125-089		C-DIODE,1SS181
	87-017-978-089		DIODE,1N4003
	87-017-437-089		DIODE,1N4148M
	87-A40-116-069		DIODE,RS403L-B-D-51
	87-A40-202-089		ZENER UZ 5.1BSB
	87-A40-201-089		ZENER UZ 4.7BSA
	87-A40-200-089		ZENER UZL 11L3
	87-A40-199-089		ZENER,UZL 6H2
	87-A40-209-089		ZENER,UT 27BSD
MAIN C.B			
BPF831	87-030-105-019		FLTR,BPM B6A
C131	87-010-403-089		CAP,E 3.3-50 SME
C141	87-010-384-089		CAP,E 100-25 SME
C142	87-010-384-089		CAP,E 100-25 SME
C143	87-010-764-089		CAP,E 47-63V
C144	87-010-196-089		C-CAP,S 0.1-25 F
C145	87-010-196-089		C-CAP,S 0.1-25 F
C146	87-010-390-099		CAP,E 3300-25 SME
C151	87-012-368-089		C-CAP,S 0.1-50F
C152	87-012-368-089		C-CAP,S 0.1-50F
C153	87-016-474-099		CAP,E 3300-50
C154	87-016-474-099		CAP,E 3300-50
C161	87-010-401-089		CAP,E 1-50 SME
C172	87-012-140-089		C-CAP,S 470P-50 CH
C173	87-010-405-089		CAP,E 10-50 SME
C181	87-010-101-089		CAP,E 220-16 SME
C182	87-010-381-089		CAP,E 330-16 SME
C197	87-010-196-089		C-CAP,S 0.1-25 F
C198	87-010-196-089		C-CAP,S 0.1-25 F
C201	87-010-400-089		CAP,E 0.47-50 SME
C202	87-010-400-089		CAP,E 0.47-50 SME
C203	87-010-177-089		C-CAP,S 820P-50 SL
C204	87-010-177-089		C-CAP,S 820P-50 SL
C205	87-010-182-089		C-CAP,S 2200P-50 B
C206	87-010-182-089		C-CAP,S 2200P-50 B
C207	87-010-402-089		CAP,E 2.2-50 SME
C208	87-010-402-089		CAP,E 2.2-50 SME
C209	87-010-402-089		CAP,E 2.2-50 SME
C210	87-010-402-089		CAP,E 2.2-50 SME
C211	87-010-318-089		C-CAP,S 47P-50 CH
C212	87-010-318-089		C-CAP,S 47P-50 CH
C213	87-010-147-089		C-CAP,S 3P-50 CH
C214	87-010-147-089		C-CAP,S 3P-50 CH
C215	87-010-196-089		C-CAP,S 0.1-25 F
C216	87-010-196-089		C-CAP,S 0.1-25 F
C217	87-010-196-089		C-CAP,S 0.1-25 F
C218	87-010-196-089		C-CAP,S 0.1-25 F
C219	87-010-198-089		C-CAP,S 0.022-25 B
C220	87-010-198-089		C-CAP,S 0.022-25 B
C221	87-010-194-089		C-CAP,S 0.047-25 F
C261	87-010-197-089		C-CAP,S 0.01-25 B
C262	87-010-197-089		C-CAP,S 0.01-25 B
C263	87-010-197-089		C-CAP,S 0.01-25 B
C264	87-010-197-089		C-CAP,S 0.01-25 B
C301	87-010-197-089		C-CAP,S 0.01-25 B
C311	87-012-155-089		C-CAP,S 180P-50 CH
C312	87-012-155-089		C-CAP,S 180P-50 CH
C313	87-010-181-089		C-CAP,S 1800P-50 B
C314	87-010-181-089		C-CAP,S 1800P-50 B
C321	87-012-145-089		C-CAP S 270P-50CH
C322	87-012-145-089		C-CAP S 270P-50CH
C323	87-012-154-089		C-CAP,S 150P-50 CH
C324	87-012-154-089		C-CAP,S 150P-50 CH
C325	87-010-179-089		C-CAP,S 1200P-50 B
C326	87-010-179-089		C-CAP,S 1200P-50 B
C333	87-010-198-089		C-CAP,S 0.22-25 B
C334	87-010-198-089		C-CAP,S 0.22-25 B
C337	87-010-400-089		CAP,E 0.47-50 SME
C338	87-010-400-089		CAP,E 0.47-50 SME
C339	87-010-371-089		CAP,E 470-6.3 11L
C340	87-010-196-089		C-CAP,S 0.1-25 F
C355	87-010-401-089		CAP,E 1-50 SME
C356	87-010-401-089		CAP,E 1-50 SME
C357	87-010-178-089		C-CAP,S 1000P-50 B
C359	87-010-196-089		C-CAP,S 0.1-25 F
C360	87-010-196-089		C-CAP,S 0.1-25 F
C371	87-012-156-089		C-CAP,S 220P-50 CH
C372	87-012-156-089		C-CAP,S 220P-50 CH
C373	87-010-177-089		C-CAP,S 820P-50 SL
C374	87-010-175-089		C-CAP,S 560P-50 UJ
C376	87-010-392-089		CAP,E 33-35 SME
C377	87-010-198-089		C-CAP,S 0.022-25 B
C378	87-010-197-089		C-CAP,S 0.01-25 B
C379	87-010-183-089		C-CAP,S 2700P-50 B
C380	87-010-183-089		C-CAP,S 2700P-50 B
C381	87-010-183-089		C-CAP,S 2700P-50 B

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C401	87-012-142-089		C-CAP,S 0.33-16 F
C402	87-012-142-089		C-CAP,S 0.33-16 F
C403	87-010-177-089		C-CAP,S 820P-50 SL
C404	87-010-177-089		C-CAP,S 820P-50 SL
C405	87-010-545-089		CAP,E 0.22-50 SME
C406	87-010-545-089		CAP,E 0.22-50 SME
C407	87-010-400-089		CAP,E 0.47-50 SME
C408	87-010-400-089		CAP,E 0.47-50 SME
C409	87-010-405-089		CAP,E 10-50 SME
C452	87-010-184-089		C-CAP,S 3300P-50 B
C453	87-010-312-089		C-CAP,S 15P-50 CH
C455	87-010-197-089		C-CAP,S 0.01-25 B
C456	87-010-402-089		CAP,E 2.2-50 SME
C521	87-010-181-089		C-CAP,S 1800P-50 B
C522	87-010-181-089		C-CAP,S 1800P-50 B
C523	87-010-178-089		C-CAP,S 1000P-50 B
C524	87-010-178-089		C-CAP,S 1000P-50 B
C527	87-010-220-089		C-CAP,S 0.018-25 B
C528	87-010-220-089		C-CAP,S 0.018-25 B
C529	87-010-400-089		CAP,E 0.47-50 SME
C530	87-010-400-089		CAP,E 0.47-50 SME
C531	87-010-382-089		CAP,E 22-25 SME
C532	87-010-198-089		C-CAP,S 0.022-25 B
C551	87-010-401-089		CAP,E 1-50 SME
C552	87-010-401-089		CAP,E 1-50 SME
C553	87-010-194-089		C-CAP,S 0.047-25 F
C554	87-010-183-089		C-CAP,S 2700P-50 B
C555	87-010-196-089		C-CAP,S 0.1-25 F
C556	87-010-263-089		CAP,E 100-10 SME 5X11
C557	87-010-596-089		C-CAP,S 0.047-16 RK
C558	87-010-545-089		CAP,E 0.22-50 SME
C562	87-010-596-089		C-CAP,S 0.047-16 RK
C601	87-010-198-089		C-CAP,S 0.022-25 B
C701	87-010-404-089		CAP,E 4.7-50 SME
C702	87-010-197-089		C-CAP,S 0.01-25 B
C703	87-010-197-089		C-CAP,S 0.01-25 B
C704	87-010-178-089		C-CAP,S 1000P-50 B
C707	87-010-402-089		CAP,E 2.2-50 SME
C708	87-010-402-089		CAP,E 2.2-50 SME
C711	87-010-263-089		CAP,E 100-10 SME 5X11
C712	87-010-112-089		CAP,E 100-16 11L
C722	87-010-152-089		C-CAP,S 8P-50 CH
C723	87-010-178-089		C-CAP,S 1000P-50 B
C725	87-010-178-089		C-CAP,S 1000P-50 B
C727	87-010-196-089		C-CAP,S 0.1-25 F
C728	87-010-248-089		CAP,E 220-10 SME
C729	87-010-197-089		C-CAP,S 0.01-25 B
C730	87-018-134-089		CAP,TC-U 0.01-16 Y
C770	87-010-197-089		C-CAP,S 0.01-25 B
C771	87-010-405-089		CAP,E 10-50 SME
C772	87-010-194-089		C-CAP,S 0.047-25 F
C773	87-010-196-089		C-CAP,S 0.1-25 F
C774	87-010-263-089		CAP,E 100-10 SME 5X11
C775	87-010-405-089		CAP,E 10-50 SME
C776	87-010-197-089		C-CAP,S 0.01-25 B
C777	87-010-400-089		CAP,E 0.47-50 SME
C778	87-010-401-089		CAP,E 1-50 SME
C779	87-010-401-089		CAP,E 1-50 SME
C780	87-010-197-089		C-CAP,S 0.01-25 B
C787	87-010-184-089		C-CAP,S 3300P-50 B
C788	87-010-184-089		C-CAP,S 3300P-50 B
C789	87-010-179-089		C-CAP,S 1200P-50 B
C790	87-010-179-089		C-CAP,S 1200P-50 B
C791	87-010-401-089		CAP,E 1-50 SME
C792	87-010-183-089		C-CAP,S 2700P-50 B
C793	87-010-189-089		C-CAP,S 8200P-50 B
C794	87-010-260-089		CAP,E 47-25 SME
C795	87-010-194-089		C-CAP,S 0.047-25 F
C796	87-010-403-089		CAP,E 3.3-50 SME
C797	87-010-197-089		C-CAP,S 0.01-25 B
C799	87-010-405-089		CAP,E 10-50 SME
C801	87-010-197-089		C-CAP,S 0.01-25 B
C802	87-010-312-089		C-CAP,S 15P-50 CH
C803	87-018-134-089		CAP,TC-U 0.01-16 Y
C805	87-010-146-089		C-CAP,S 2P-50 CH
C806	87-010-147-089		C-CAP,S 3P-50 CH
C807	87-010-312-089		C-CAP,S 15P-50 CH
C808	87-010-322-089		C-CAP,S 100P-50 CH
C809	87-010-197-089		C-CAP,S 0.01-25 B
C810	87-010-197-089		C-CAP,S 0.01-25 B
C811	87-010-149-089		C-CAP,S 5P-50 CH
C812	87-010-314-089		C-CAP,S 22P-50 CH
C813	87-010-197-089		C-CAP,S 0.01-25 B
C814	87-010-197-089		C-CAP,S 0.01-25 B
C817	87-010-196-089		C-CAP,S 0.1-25 F
C820	87-010-260-089		CAP,E 47-25 SME
C821	87-010-197-089		C-CAP,S 0.01-25 B
C823	87-010-197-089		C-CAP,S 0.01-25 B
C825	87-010-196-089		C-CAP,S 0.1-25 F
C827	87-010-145-089		C-CAP,S 1P-50 CH
C831	87-010-312-089		C-CAP,S 15P-50 CH
C832	87-010-314-089		C-CAP,S 22P-50 CH
C833	87-010-197-089		C-CAP,S 0.01-25 B
C834	87-010-311-089		C-CAP,S 12P-50 CH
C835	87-010-154-089		C-CAP,S 10P-50 CH
C836	87-010-312-089		C-CAP,S 15P-50 CH
C837	87-010-312-089		C-CAP,S 15P-50 CH
C843	87-010-146-089		C-CAP,S 2P-50 CH
C849	87-010-197-089		C-CAP,S 0.01-25 B
C851	87-010-197-089		C-CAP,S 0.01-25 B
C901	87-010-197-089		C-CAP,S 0.01-25 B
C942	87-010-148-089		C-CAP,S 4P-50 CH
C946	87-010-401-089		CAP,E 1-50 SME
C952	87-010-197-089		C-CAP,S 0.01-25 B
C955	87-010-197-089		C-CAP,S 0.01-25 B
C957	87-010-315-089		C-CAP,S 27P-50 CH
C958	87-010-197-089		C-CAP,S 0.01-25 B
C960	87-010-196-089		C-CAP,S 0.1-25 F
C988	87-010-198-089		C-CAP,S 0.022-25 B
C999	87-010-196-089		C-CAP,S 0.1-25 F
CF801	87-008-423-089		CF,SFE 10.7 MS3G-A
CF802	82-785-747-089		CF,MS2 GHY,R
D801	87-002-730-089		VARI-CAP SVC203SPA
D802	87-002-730-089		VARI-CAP SVC203SPA
D803	87-002-730-089		VARI-CAP SVC203SPA
D804	87-002-730-089		VARI-CAP SVC203SPA
FT510	83-NF5-632-019		CABLE FFC 6P-1.25
IFT806	87-A50-018-019		COIL,FM IFT(4T)COI
J241	87-099-678-019		JACK,6.3 W/S BLK
J261	87-A60-238-019		TERMINAL,SP 45 MSC
J281	87-099-474-019		JACK,PIN 3P BLK
J501	80-MT3-616-019		JACK,PIN 2P
J801	87-033-241-019		TERMINAL,ANT AJ-2039
L261	87-003-383-019		COIL,1UH-S
L262	87-003-383-019		COIL,1UH-S
L351	87-A50-049-019		COIL,TRAP 85K
L352	87-A50-049-019		COIL,TRAP 85K
L371	87-007-342-019		COIL,OSC 85K BIAS
L701	87-A50-027-019		COIL,1 POLE MPX (TOK)
L702	87-A50-027-019		COIL,1 POLE MPX (TOK)
L741	87-A50-015-019		COIL,FM DET(TOK)
L742	87-A90-051-019		FLTR,CFAZ-450(TOK)
L770	87-003-102-089		COIL,10UH
L790	87-005-564-089		C-COIL,S 2,2UH K
L801	87-006-249-019		COIL,ANT FM3/4TS,L4
L802	87-006-251-019		COIL,ANT FM2-3/4TS,L4
L803	87-006-244-019		COIL,RF FM 3-1/2T,L4
L804	87-006-250-019		COIL,RF FM 3-1/2TS,L4
L805	87-003-098-089		COIL,2,2UH
L807	87-A50-031-019		COIL,FM OSC (TOK)

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
L831	87-006-250-019		COIL,RF FM 3-1/2TS,L4
L832	87-003-098-089		COIL,2.2UH
L941	87-A50-020-019		COIL,ANT LW
L942	87-A50-019-019		COIL,OSC LW
L981	86-NF4-665-019		AM PACK 1(TOK)
R191	87-022-050-089		RES,M/F 0.22-1W
R192	87-022-050-089		RES,M/F 0.22-1W
RY151	87-045-361-019		RELAY,DH12D2-OS(M)-2
RY281	87-045-382-019		RELAY,OUAZ-SH-112L
SFR311	87-024-174-089		SFR 33K DIA.6 V
SFR312	87-024-174-089		SFR 33K DIA.6 V
SFR321	87-024-174-089		SFR 33K DIA.6 V
SFR322	87-024-174-089		SFR 33K DIA.6 V
SFR371	87-024-175-089		SFR,47K DIA6 V
SFR372	87-024-175-089		SFR,47K DIA6 V
SFR401	87-024-175-089		SFR,47K DIA6 V
SFR402	87-024-175-089		SFR,47K DIA6 V
SFR722	87-024-353-089		SFR,10K DIA6 H
TC721	87-011-253-089		TRIMER,30P LAR
TC801	87-011-252-089		TRIMMER 10P LAR
TC802	87-011-252-089		TRIMMER 10P LAR
TC803	87-011-252-089		TRIMMER 10P LAR
TC942	87-011-253-089		TRIMER,30P LAR
VR501	82-NF5-660-019		VR,50KBX2 RK14K12A
W111	85-NF5-628-019		F-CABLE 7P-2.5
X703	84-508-618-019		VIB,CER CSB 456 F/5
X721	87-030-372-019		VIB,XTAL 7.2MHZ

FRONT C.B

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C201	87-010-196-089		C-CAP,S 0.1-25 F
C203	87-012-155-089		C-CAP,S 180P-50 CH
C204	87-010-313-089		C-CAP,S 18P-50 CH
C205	87-010-314-089		C-CAP,S 22P-50 CH
C206	87-012-140-089		C-CAP,S 470P-50 CH
C207	87-018-209-089		CAP,TC-U 0.1-25 F
C211	87-010-197-089		C-CAP,S 0.01-25 B
C251	87-010-560-049		CAP,E 10-50 GAS
C252	87-010-263-049		CAP,E 100-10
C253	87-010-248-049		CAP,E 220-10 SME
C255	87-010-494-049		CAP,E 1-50 GAS
C256	87-010-494-049		CAP,E 1-50 GAS
C270	87-010-196-089		C-CAP,S 0.1-25 F
C271	87-010-196-089		C-CAP,S 0.1-25 F
C272	87-010-196-089		C-CAP,S 0.1-25 F
C273	87-010-196-089		C-CAP,S 0.1-25 F
C274	87-010-322-089		C-CAP,S 100P-50 CH
C275	87-010-196-089		C-CAP,S 0.1-25 F
C276	87-010-553-089		CAP,E 47-16 5L
C277	87-018-119-089		CAP,TC-U 100P-50 KBU
C351	87-010-490-049		CAP ELECT 0.1-50
C352	87-010-490-049		CAP ELECT 0.1-50
C353	87-010-408-049		CAP,E 47-50 SME
C401	87-010-198-089		C-CAP,S 0.022-25 B
C508	87-010-060-049		CAP,E 100-16 7L
C601	87-010-405-049		CAP,E 10-50 SME
C602	87-010-248-049		CAP,E 220-10 SME
C603	87-010-196-089		C-CAP,S 0.1-25 F
C604	87-010-186-089		C-CAP,S 4700P-50 B
C605	87-010-545-049		CAP,E 0.22-50 SME
C606	87-010-321-089		C-CAP,S 82P-50 CH
C607	87-010-196-089		C-CAP,S 0.1-25 F
C608	87-010-196-089		C-CAP,S 0.1-25 F
C609	87-010-177-089		C-CAP,S 820P-50 SL
C651	87-010-494-049		CAP,E 1-50 GAS
C652	87-010-196-089		C-CAP,S 0.1-25 F
C653	87-010-491-049		CAP,E 0.22-50 GAS
C654	87-010-196-089		C-CAP,S 0.1-25 F
C655	87-010-404-049		CAP,E 4.7-50 SME
C656	87-010-404-049		CAP,E 4.7-50 SME
C715	87-010-384-049		CAP,E 100-25 SME
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
FL301	86-NF6-660-019		FL,BJ478GK
FT101	85-NF5-615-019		CABLE,FFC 15P-1.25
FT102	88-913-261-119		CABLE FFC,13P-1.25
J601	87-A60-284-019		JACK,3.5 MO(MSC)
J602	82-A60-284-019		JACK,3.5 MO(MSC)
L201	87-007-340-019		COIL,CLOCK 4.19MHZ
L203	87-003-098-089		COIL,2.2UH M LAL02
L204	87-003-098-089		COIL,2.2UH M LAL02
L205	87-003-098-089		COIL,2.2UH M LAL02
LED401	87-070-201-089		LED,SLP9118C-51-S-T1
LED402	87-070-201-089		LED,SLP9118C-51-S-T1
LED403	87-070-201-089		LED,SLP9118C-51-S-T1
LED404	87-070-201-089		LED,SLP9118C-51-S-T1
LED411	87-070-199-089		LED,SLP738F-81-S-T1
LED412	87-070-199-089		LED,SLP738F-81-S-T1
LED413	87-070-199-089		LED,SLP738F-81-S-T1
LED414	87-070-199-089		LED,SLP738F-81-S-T1
LED415	87-070-199-089		LED,SLP738F-81-S-T1
LED416	87-070-199-089		LED,SLP738F-81-S-T1
LED417	87-070-199-089		LED,SLP738F-81-S-T1
LED418	87-070-199-089		LED,SLP738F-81-S-T1
LED421	87-017-784-080		LED,SEL 1550CM TP8
LED422	87-017-784-080		LED,SEL 1550CM TP8
LED423	87-017-784-080		LED,SEL 1550CM TP8
LED424	87-017-784-080		LED,SEL 1550CM TP8
LED425	87-017-784-080		LED,SEL 1550CM TP8
LED426	87-017-784-080		LED,SEL 1550CM TP8
LED431	87-070-278-019		LED,SLZ-738A-24-S
LED432	87-070-278-019		LED,SLZ-738A-24-S
LED433	87-070-278-019		LED,SLZ-738A-24-S
LED434	87-070-278-019		LED,SLZ-738A-24-S
LED435	87-070-290-019		LED,SLZ 936-30-S
LED436	87-070-290-019		LED,SLZ 936-30-S
S301	87-A90-095-089		SW,TACT EVQ11GD4M
S302	87-A90-095-089		SW,TACT EVQ11GD4M
S303	87-A90-095-089		SW,TACT EVQ11GD4M
S304	87-A90-095-089		SW,TACT EVQ11GD4M
S305	87-A90-095-089		SW,TACT EVQ11GD4M
S306	87-A90-095-089		SW,TACT EVQ11GD4M
S307	87-A90-095-089		SW,TACT EVQ11GD4M
S313	87-A90-095-089		SW,TACT EVQ11GD4M
S314	87-A90-095-089		SW,TACT EVQ11GD4M
S315	87-A90-095-089		SW,TACT EVQ11GD4M
S316	87-A90-095-089		SW,TACT EVQ11GD4M
S317	87-A90-095-089		SW,TACT EVQ11GD4M
S318	87-A90-095-089		SW,TACT EVQ11GD4M
S320	87-A90-095-089		SW,TACT EVQ11GD4M
S321	87-A90-095-089		SW,TACT EVQ11GD4M
S322	87-A90-095-089		SW,TACT EVQ11GD4M
S323	87-A90-095-089		SW,TACT EVQ11GD4M
S324	87-A90-095-089		SW,TACT EVQ11GD4M
S325	87-A90-095-089		SW,TACT EVQ11GD4M
S326	87-A90-095-089		SW,TACT EVQ11GD4M
S327	87-A90-095-089		SW,TACT EVQ11GD4M
S328	87-A90-095-089		SW,TACT EVQ11GD4M
S329	87-A90-095-089		SW,TACT EVQ11GD4M
S330	87-A90-095-089		SW,TACT EVQ11GD4M
VR601	81-MX4-637-019		VR 10KA RK11K1130
VR801	83-NM1-627-019		VR,10KB RK11K1130

MVR C.B

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C701	87-010-993-089		C-CAP,S0.056-25 B
C702	87-010-993-089		C-CAP,S0.056-25 B

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C703	87-016-460-089		C-CAP,S0.22-16 KB
C704	87-016-460-089		C-CAP,S0.22-16 KB
C705	87-016-081-089		C-CAP,S 0.1-16 RK
C706	87-010-260-049		CAP,E 47-25 SME
C707	87-010-182-089		C-CAP,S 2200P-50 B
C708	87-010-182-089		C-CAP,S 2200P-50 B
C709	87-010-491-049		CAP,E 0.22-50 GAS
C710	87-010-491-049		CAP,E 0.22-50 GAS
C711	87-010-401-049		CAP,E 1-50 GAS
C712	87-010-401-049		CAP,E 1-50 GAS
C713	87-010-260-049		CAP,E 47-25 SME
C714	87-010-405-049		CAP,E 10-50 SME
C716	87-010-196-089		C-CAP,S 0.1-25 F
C751	87-010-196-089		C-CAP,S 0.1-25 F
C801	87-010-494-049		CAP,E 1-50 GAS
C802	87-010-494-049		CAP,E 1-50 GAS
C805	87-010-248-049		CAP,E 220-10 SME
C806	87-010-494-049		CAP,E 1-50 GAS
C807	87-010-494-049		CAP,E 1-50 GAS
C808	88-700-860-819		CAP,M 0.068-50 J
C809	87-010-186-089		C-CAP,S 4700P-50 B
C810	88-700-860-819		CAP,M 0.068-50 J
C811	87-010-101-049		CAP,E 220-16 SME
C812	87-010-152-089		C-CAP,S 8P-50 CH
C813	87-010-152-089		C-CAP,S 8P-50 CH
C814	87-010-101-049		CAP,E 220-16 SME
C816	87-010-177-089		C-CAP,S 820P-50 SL
C817	87-010-196-089		C-CAP,S 0.1-25 F
C818	87-010-186-089		C-CAP,S 4700P-50 B
C820	87-012-155-089		C-CAP,S 180P-50 CH
L801	87-005-446-089		COIL,150UH FLR50
MVR701	86-NF6-652-019		VR,MOT EUWMGJ035B54
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
AC C.B			
C101	87-010-428-089		C-CAP,S 0.015-25 B
R111	87-022-184-089		RES,METAL 0.33-1W
R112	87-022-184-089		RES,METAL 0.33-1W
PT C.B			
⚠	82-304-743-019		TERMINAL,1P
⚠F101	87-035-363-019		FUSE,1.25A 250V T E
⚠FC101	87-033-213-089		CLAMP FUSE SMK
⚠FC102	87-033-213-089		CLAMP FUSE SMK
⚠PT101	86-NF6-632-019		PT,6NF-6 EK
DECK C.B			
SFR1	87-024-581-089		SFR,3.3K DIA 6H
SOL1	82-ZM1-618-310		SOL ASSY,27
SOL2	82-ZM1-626-310		SOL ASSY,27K
SW1	87-036-378-019		SW,PUSH 1-1-1 SH2
SW2	87-036-378-019		SW,PUSH 1-1-1 SH2
SW3	87-036-378-019		SW,PUSH 1-1-1 SH2
SW4	87-036-378-019		SW,PUSH 1-1-1 SH2
SW5	87-036-378-019		SW,PUSH 1-1-1 SH2
SW6	87-036-378-019		SW,PUSH 1-1-1 SH2
SW8	87-036-378-019		SW,PUSH 1-1-1 SH2
HEAD-1 C.B			
HEAD-2 C.B			

TRANSISTOR ILLUSTRATION

E C B

2SA1296GR
2SC3266GR
2SC2878A
KTA1266GR
KTC3198GR

E C B

2SA952K
2SD655E
CSD655E
2SC2001K

E C B

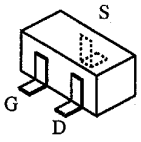
DTA114YS
DTA114ES
DTA144ES
DTA143ES
DTC144ES/WS
DTA124ES
2SA933S
2SC2785FE
2SA1175FE

S G D

2SK246BL

E C B

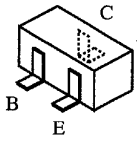
2SC3331T



2SK543
2SK360E

B C E

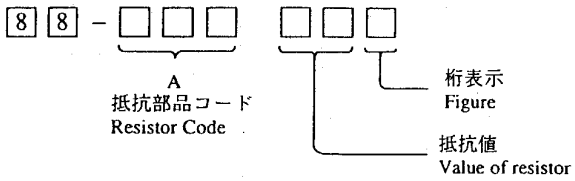
2SB1370E



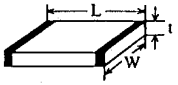
2SA1037K(R)
2SC2412KR
2SC2714(O)

○ チップ抵抗部品コード／CHIP RESISTOR PART CODE

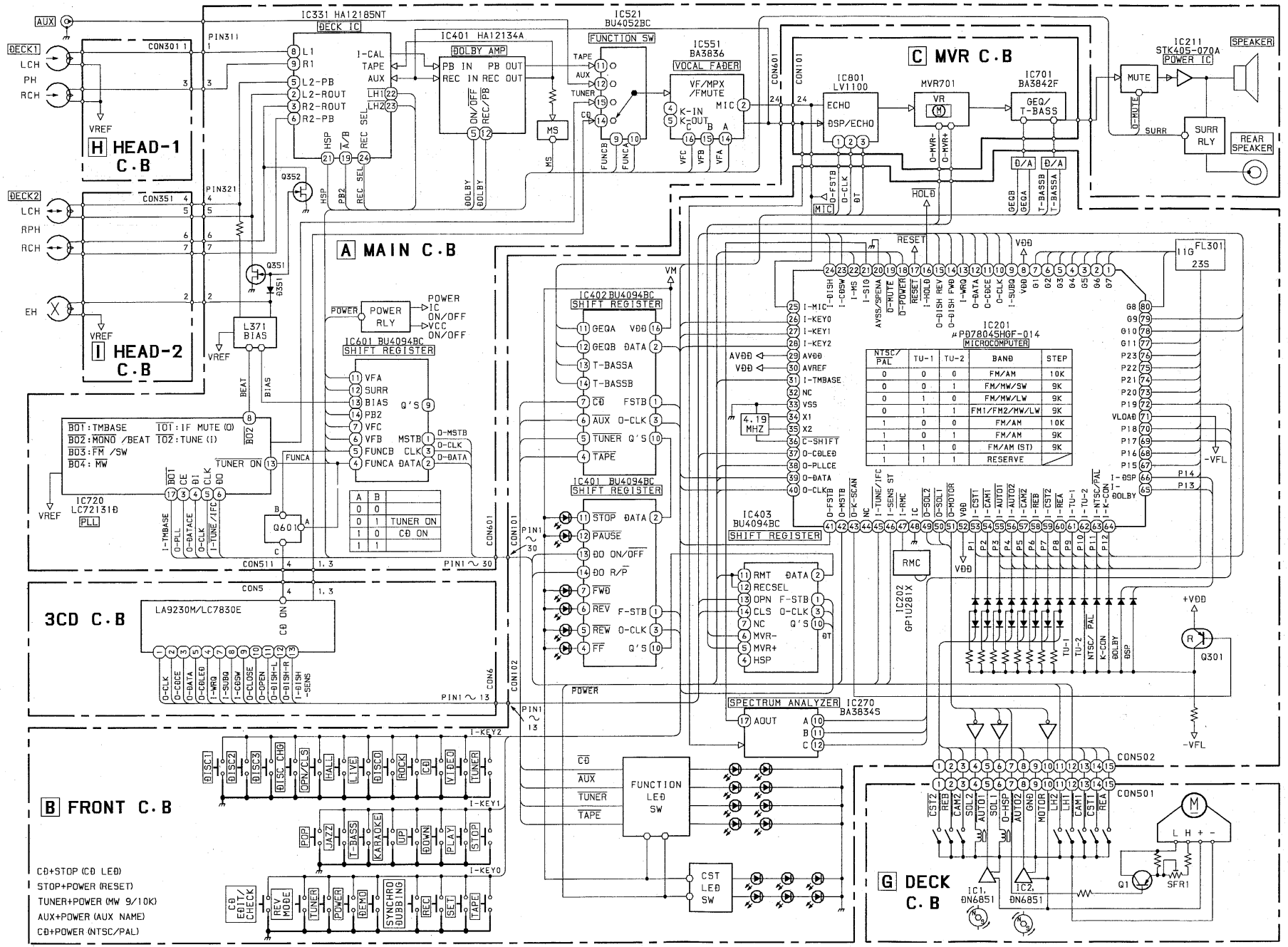
チップ抵抗部品コードの成り立ち
Chip Resistor Part Coding



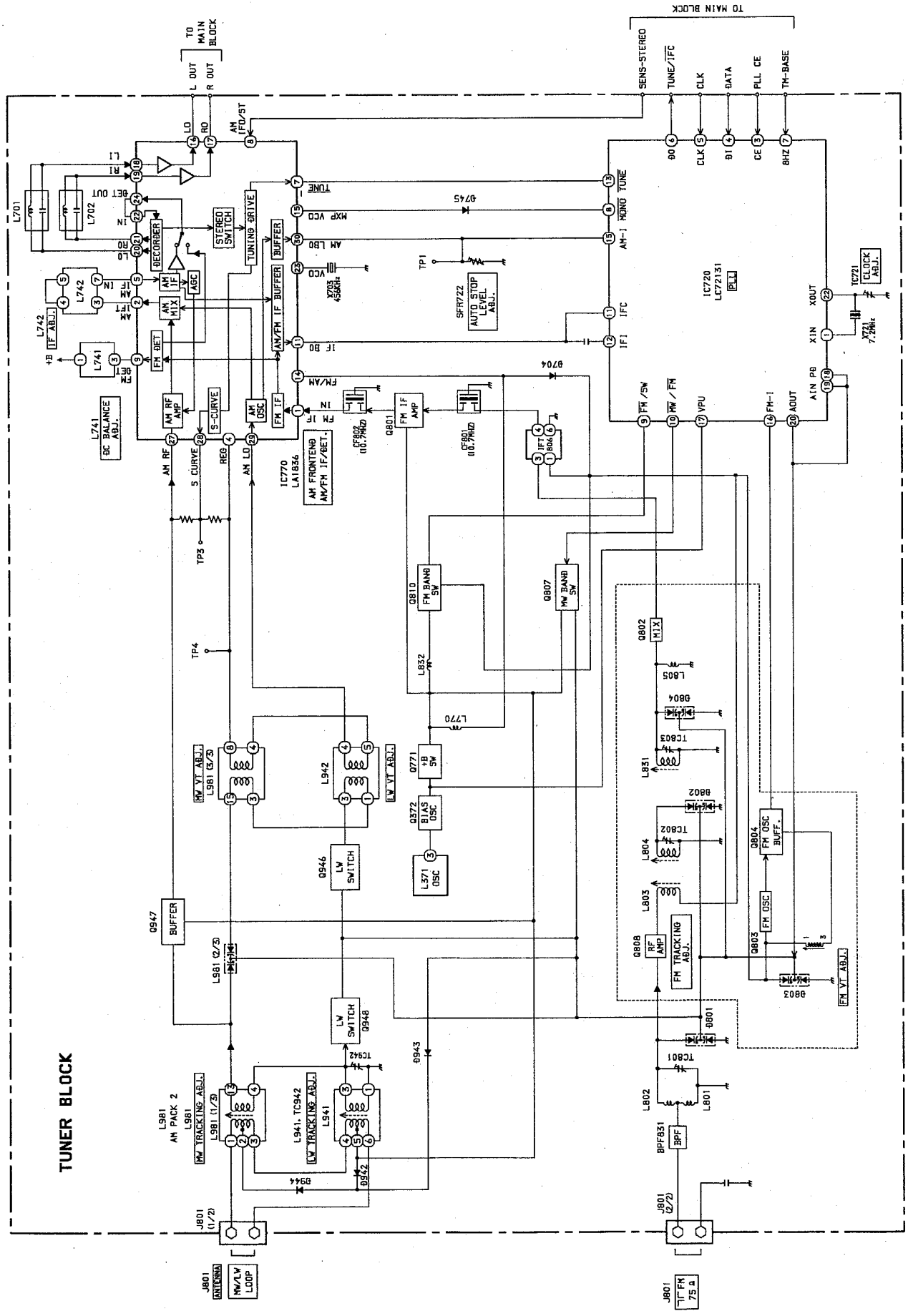
チップ抵抗
Chip resistor

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

BLOCK DIAGRAM – 1 (MAIN / FRONT)

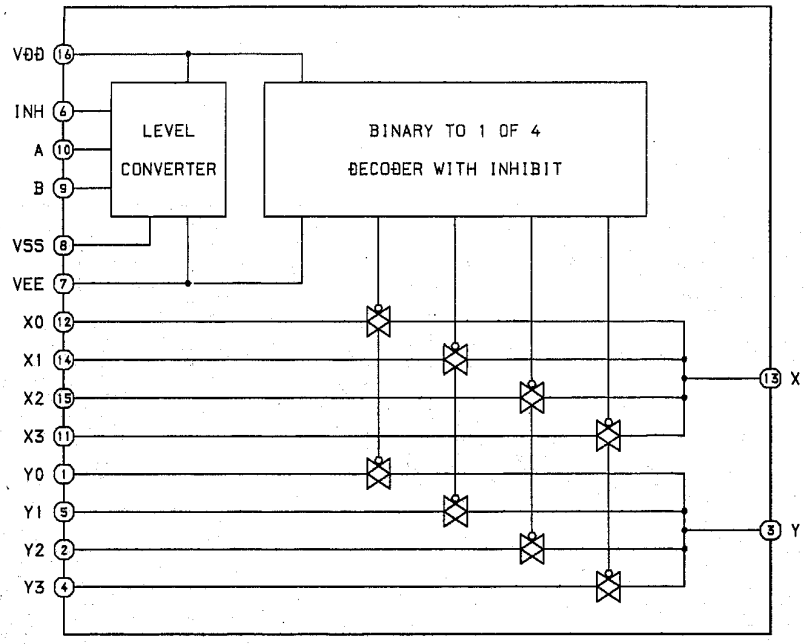


BLOCK DIAGRAM – 2 (TUNER)



IC BLOCK DIAGRAM – 1

IC, BU4052BC

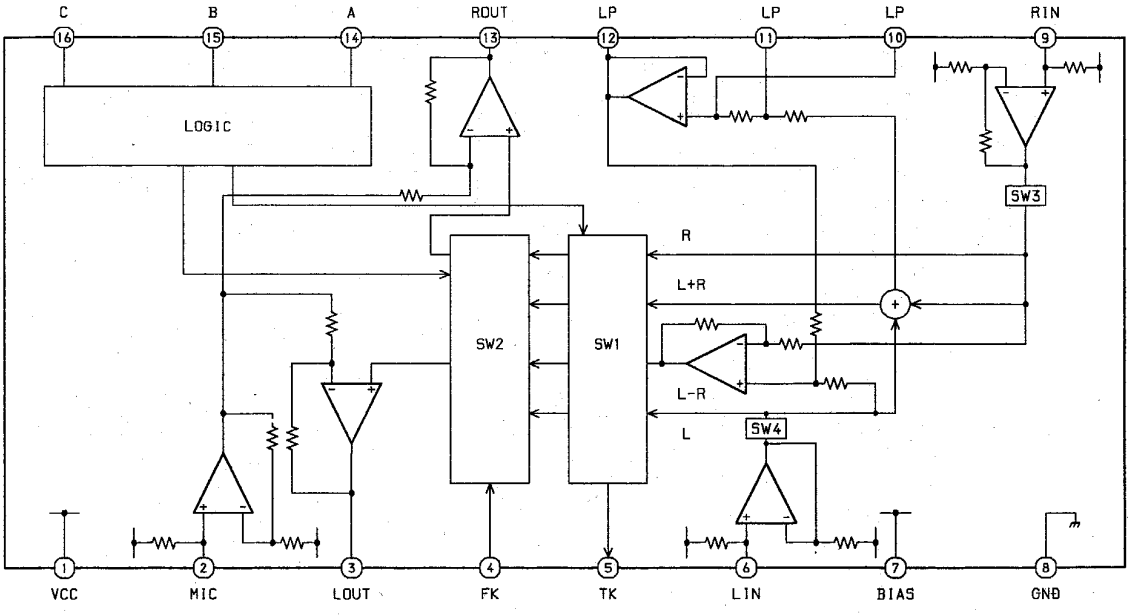


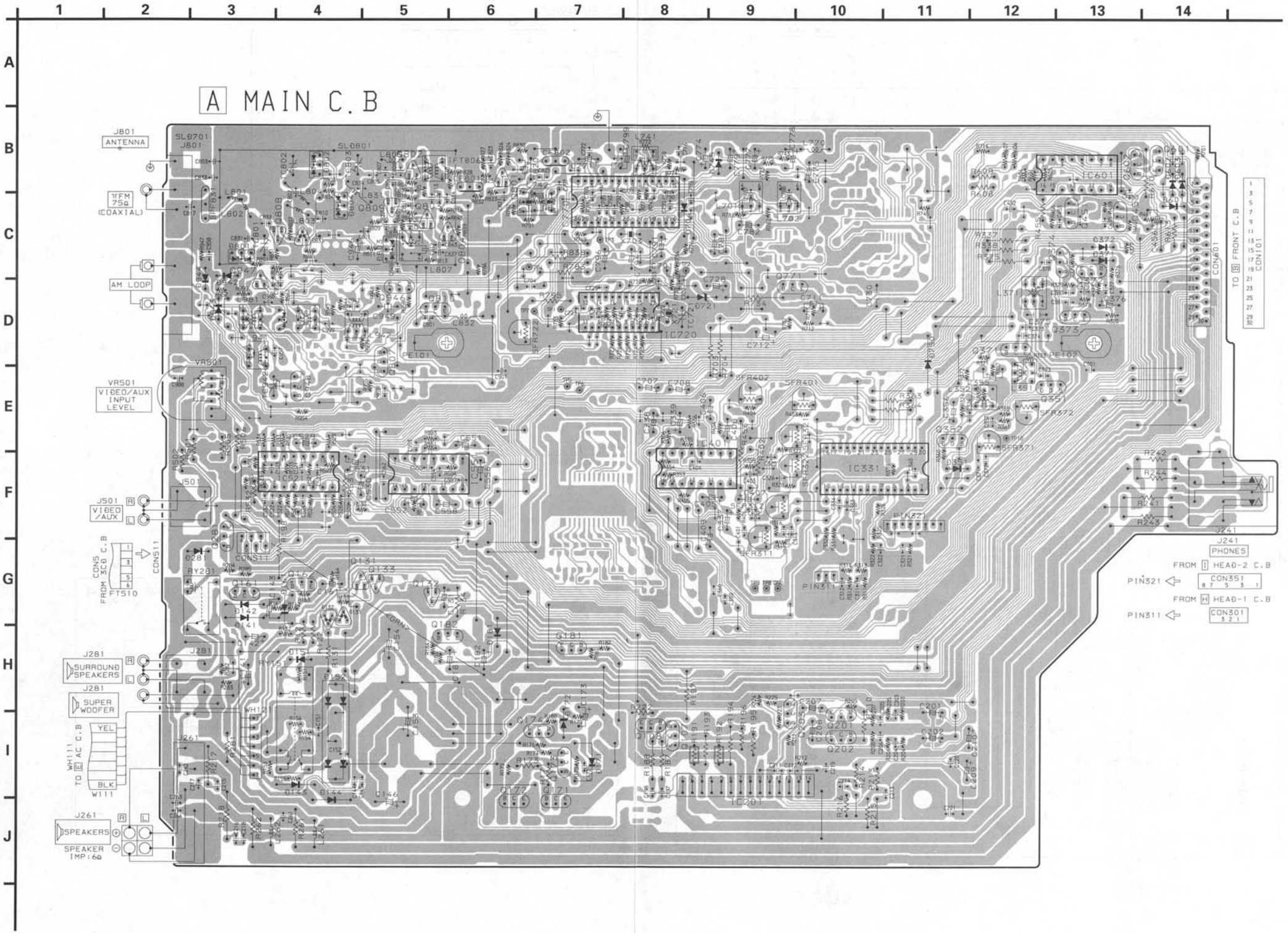
TRUTH TABLE

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

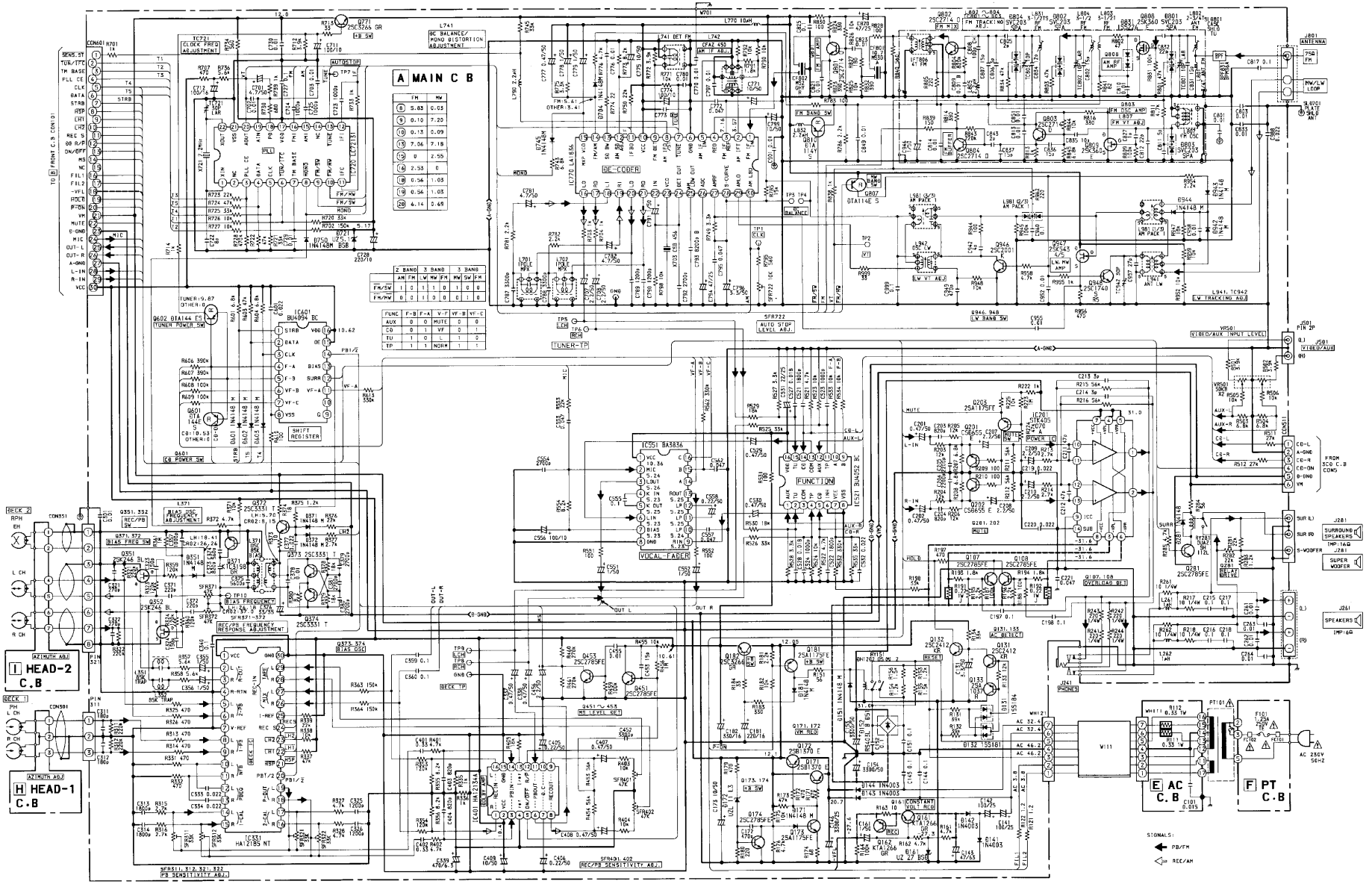
X : DON'T CARE.

IC, BA3836

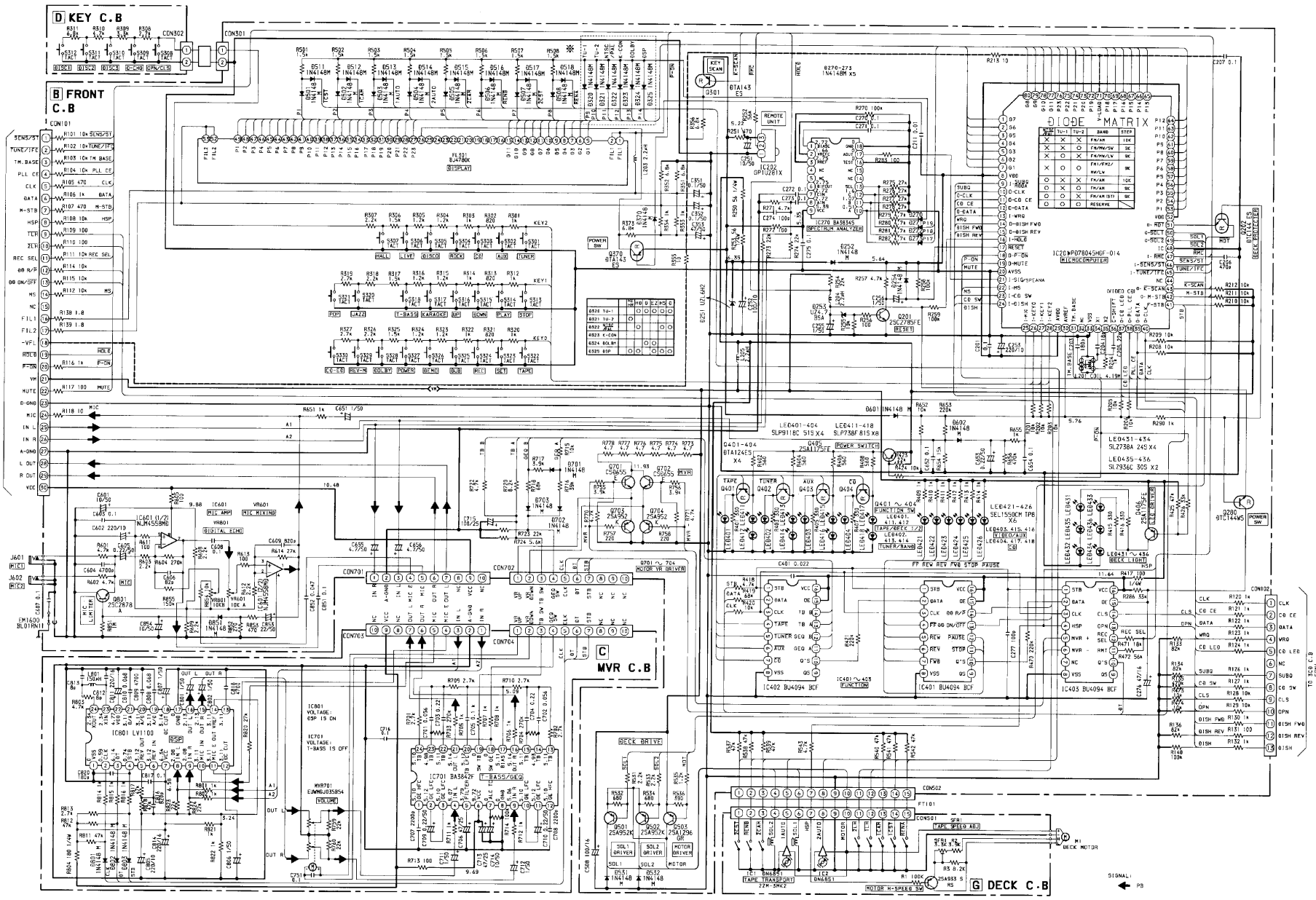


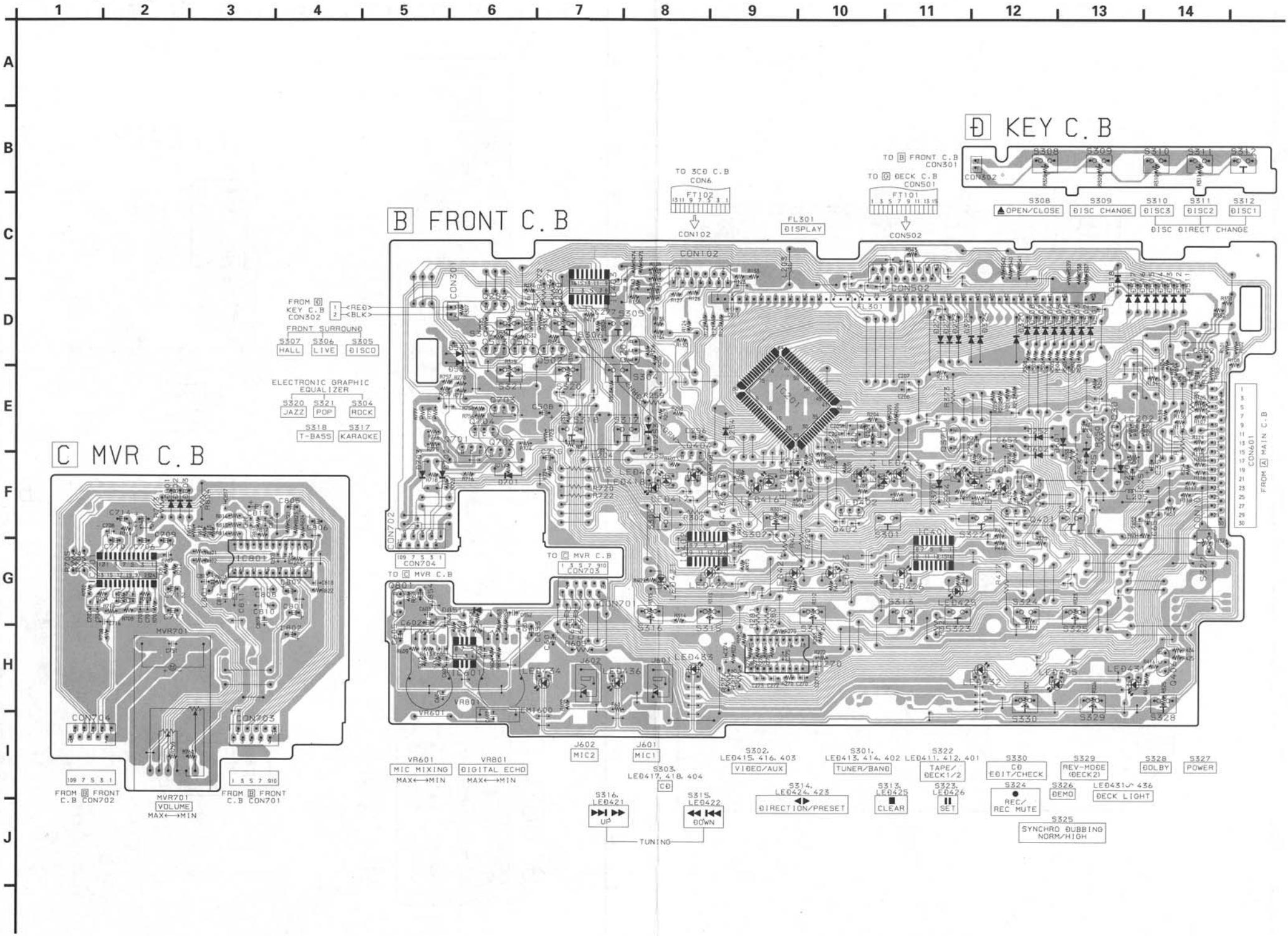

A MAIN C.B
J801 ANTENNA
1FM 75Ω (COAXIAL)
AM LOOP
VR501 VIDEO/AUX INPUT LEVEL
J501 VIDEO /AUX
CON5 FROM 3C0 C.B
CON511
FT510
J281 SURROUND SPEAKERS
J281 SUPER WOOFER
WH111 TO E AC C.B
YEL
BLK
W111
J261 SPEAKERS
SPEAKER IMP: 6Ω
TO B FRONT C.B
CON701
CON601
J241 PHONES
FROM I HEAD-2 C.B
CON351
PIN321
FROM H HEAD-1 C.B
CON301
PIN311
IC720
IC331
IC201
IC601

SCHEMATIC DIAGRAM – 1 (MAIN)

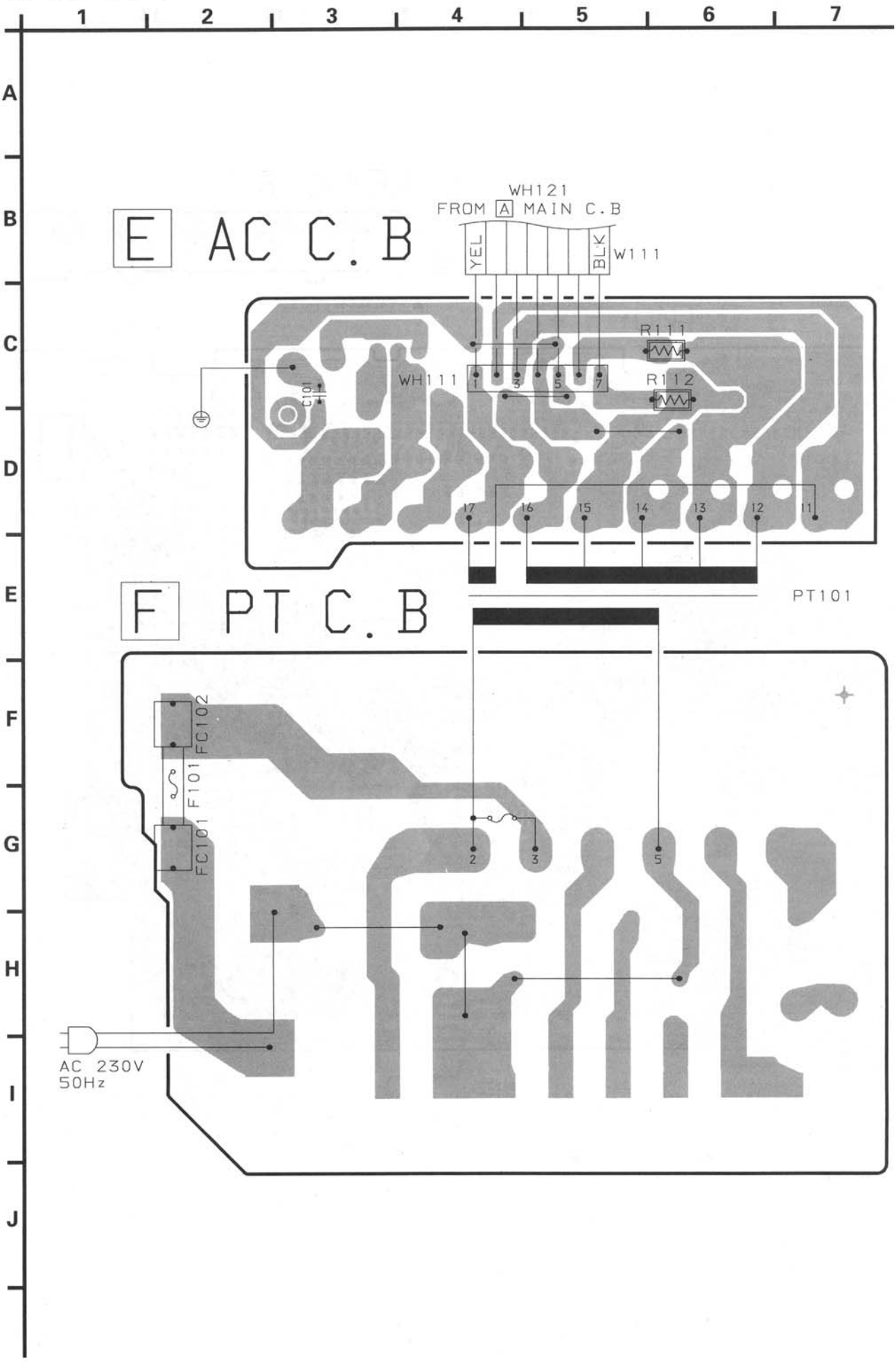


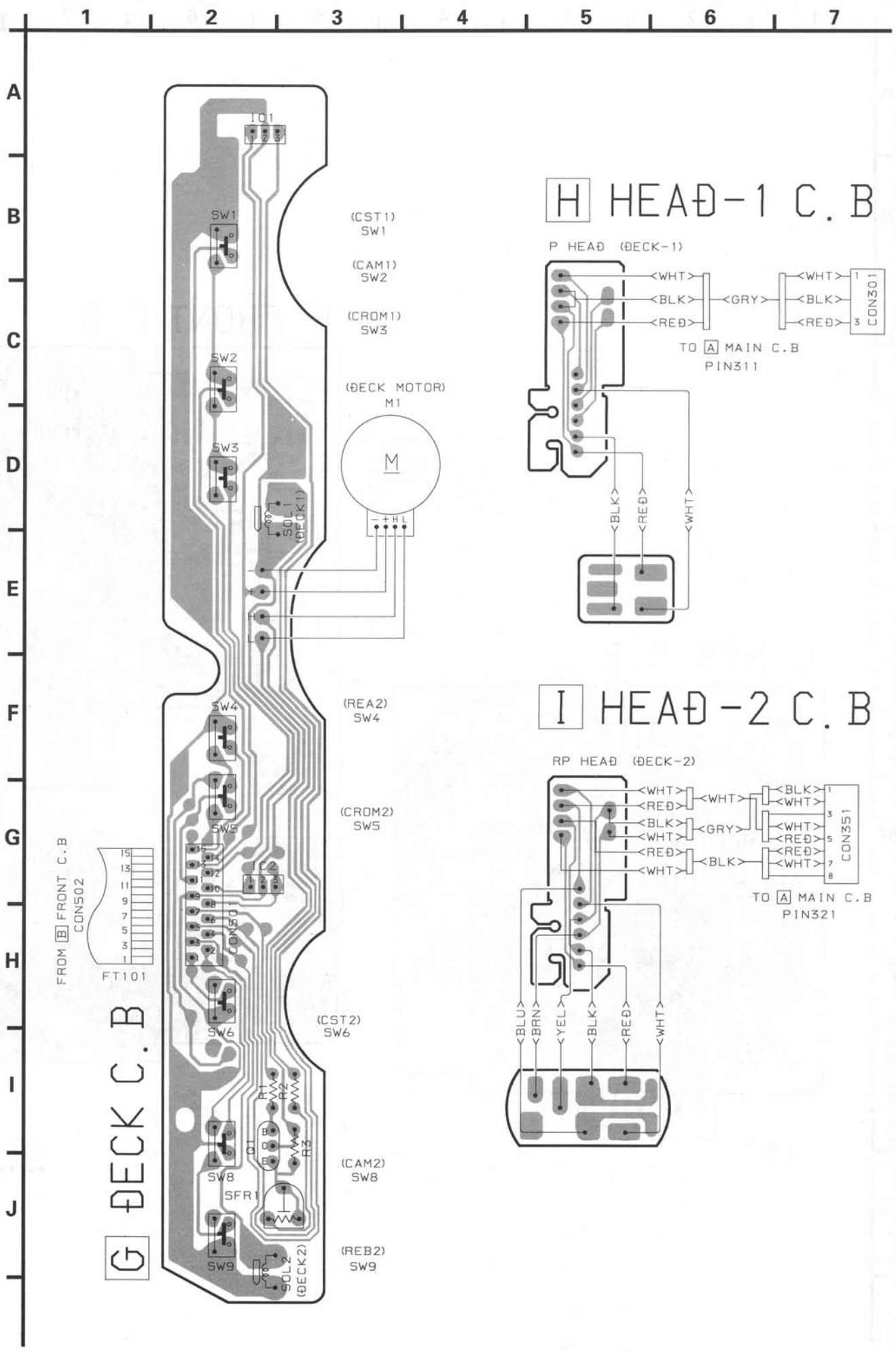
SCHEMATIC DIAGRAM – 2 (FRONT)




Đ KEY C.B
TO B FRONT C.B CON301
TO G ĐECK C.B CON501
CON302
S308 ▲OPEN/CLOSE
S309 ĐISC CHANGE
S310 ĐISC3
S311 ĐISC2
S312 ĐISC1
ĐISC ĐIRECT CHANGE
TO 3C0 C.B CON6
FT102
CON102
FT101
CON502
FL301 ĐISPLAY
B FRONT C.B
FROM Đ KEY C.B CON302
<RED>
<BLK>
FRONT SURROUND
S307 HALL
S306 LIVE
S305 ĐISCO
ELECTRONIC GRAPHIC EQUALIZER
S320 JAZZ
S321 POP
S304 ROCK
S318 T-BASS
S317 KARAOKE
C MVR C.B
MVR701
VOLUME
MAX←→MIN
FROM B FRONT C.B CON702
FROM B FRONT C.B CON701
CON704
CON703
TO C MVR C.B CON704
TO C MVR C.B CON703
FROM A MAIN C.B CON601
VR601 MIC MIXING MAX←→MIN
VR801 ĐIGITAL ECHO MAX←→MIN
J602 MIC2
J601 MIC1
S303. LEĐ417. 418. 404 CĐ
S302. LEĐ415. 416. 403 VIĐEO/AUX
S301. LEĐ413. 414. 402 TUNER/BAND
S322 LEĐ411. 412. 401 TAPE/ĐECK1/2
S330 CĐ EĐIT/CHECK
S329 REV-MODE (ĐECK2)
S328 ĐOLBY
S327 POWER
S316. LEĐ421 UP
S315. LEĐ422 ĐOWN
TUNING
S314. LEĐ424. 423 ĐIRECTION/PRESET
S313. LEĐ425 CLEAR
S323. LEĐ426 SET
S324 REC/REC MUTE
S326 ĐEMO
LEĐ431~436 ĐECK LIGHT
S325 SYNCHRO ĐUBBING NORM/HIGH

WIRING – 3 (PT)


1
2
3
4
5
6
7
A
B
C
D
E
F
G
H
I
J
E AC C.B
WH121
FROM A MAIN C.B
YEL
BLK
W111
R111
R112
WH111
1
3
5
7
C101
17
16
15
14
13
12
11
F PT C.B
PT101
FC102
F101
FC101
2
3
5
AC 230V
50Hz


1
2
3
4
5
6
7
A
B
C
D
E
F
G
H
I
J
G DECK C.B
IC1
SW1
(CST1)
SW1
(CAM1)
SW2
(CROM1)
SW3
SW2
(DECK MOTOR)
M1
M
SW3
SOL1
(DECK1)
SW4
(REA2)
SW4
SW5
(CROM2)
SW5
IC2
CON501
FROM B FRONT C.B
CON502
FT101
SW6
(CST2)
SW6
R1
R2
R3
Q1
SW8
(CAM2)
SW8
SFR1
SW9
(REB2)
SW9
SOL2
(DECK2)
H HEAD-1 C.B
P HEAD (DECK-1)
WHT
BLK
RED
GRY
CON301
TO A MAIN C.B
PIN311
I HEAD-2 C.B
RP HEAD (DECK-2)
BLU
BRN
YEL
CON351
TO A MAIN C.B
PIN321

IC DESCRIPTION

IC, μPD78045HGF-014

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 $\overline{\text{ON}}$/OFF output.
19	O-MUTE	O	System mute ON/$\overline{\text{OFF}}$ 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.
37	O-CD LED	O	CD flash window LED ON/$\overline{\text{OFF}}$ output.
38	O-PLL·CE	O	PLL IC chip enable output.
39	O-DATA	O	Main and front PLL shift register data output.

	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	

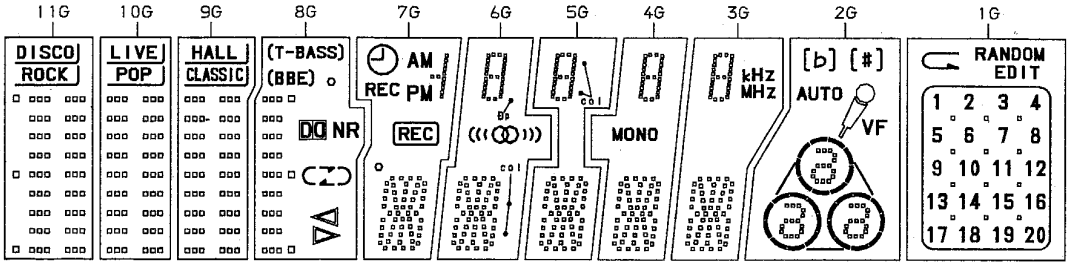
Pin No.	Pin Name	I/O	Description
40	O-CLK	O	Main and front PLL shift register clock output.
41	O-FSTB	O	Front shift register data latch strobe output.
42	O-MSTB	O	Main shift register data latch strobe output.
43	$\overline{\text{O-KSCAN}}$	O	Segment input permitted output.
44	NC	-	NC.
45	$\overline{\text{I-TUNE/IFT}}$	I	SD detected input or serial data input of IF count to and from Tuner.
46	$\overline{\text{I-SENS ST}}$	I	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/$\overline{\text{REB}}$	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/$\overline{\text{REA}}$	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/NTSC/$\overline{\text{PAL}}$	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)

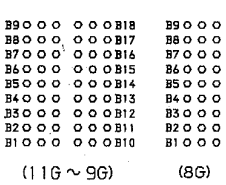
IC, LC72131D

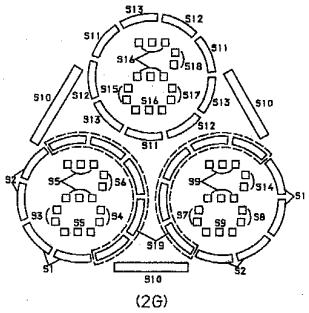
<table>
<tr><th>Pin No.</th><th>Pin Name</th><th>I/O</th><th>Description</th></tr>
<tr><td>1</td><td>XIN</td><td rowspan="2">I/O</td><td rowspan="2">A crystal oscillator (7.2MHz) is connected between these pins.</td></tr>
<tr><td>22</td><td>XOUT</td></tr>
<tr><td>2</td><td>NC</td><td>–</td><td>Not used.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

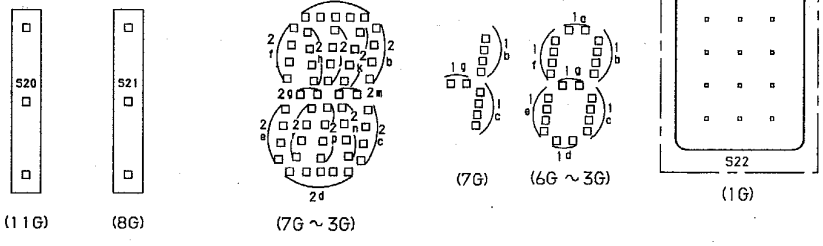
FL GRID ASSIGNMENT & ANODE CONNECTION

FL, BJ478GK
GRID ASSIGNMENT









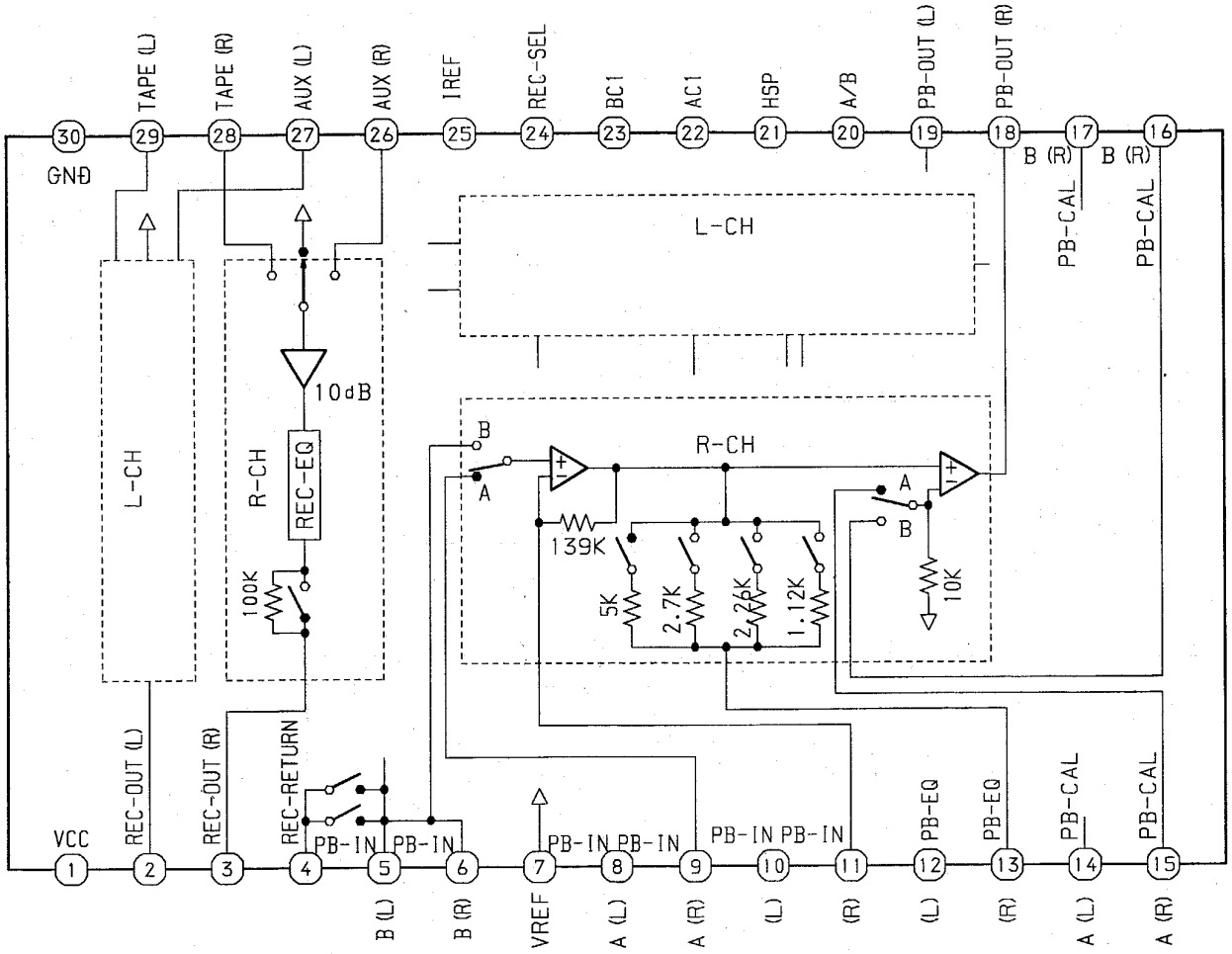
ANODE CONNECTION

	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	NR	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	CLASSIC	(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	—	—	—	—	—

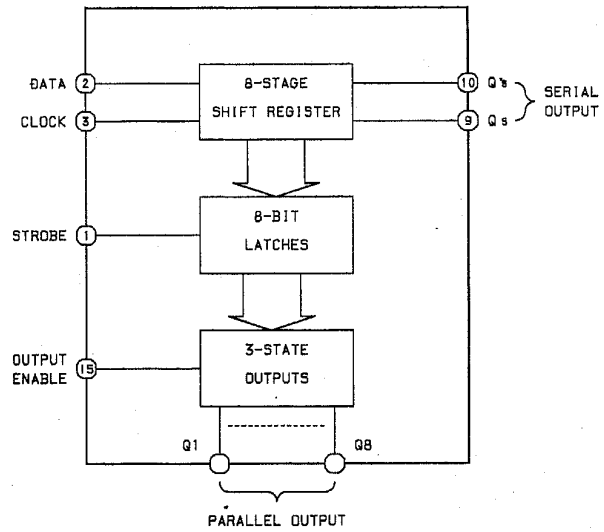
	6G	5G	4G	3G	2G	1G
P1	2d	2d	2d	2d	S1	20
P2	2n	2n	2n	2n	S2	19
P3	2j, 2p	2j, 2p	2j, 2p	2j, 2p	S3	18
P4	2r	2r	2r	2r	S4	17
P5	2e	2e	2e	2e	S5	16
P6	2c	2c	2c	2c	S6	15
P7	2g	2g	2g	2g	S7	14
P8	2m	2m	2m	2m	S8	13
P9	2f	2f	2f	2f	S9	12
P10	2b	2b	2b	2b	S10	11
P11	2k	2k	2k	2k	S11	10
P12	2h	2h	2h	2h	S12	9
P13	2a	2a	2a	2a	S13	8
P14	col	col (UPPER)	—	—	S14	7
P15	((( )))	col (BELOW)	—	MHz	S15	6
P16	Dp	—	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 #	—

IC BLOCK DIAGRAM – 2

IC, HA12185NT



IC, BU4094BC/BCF



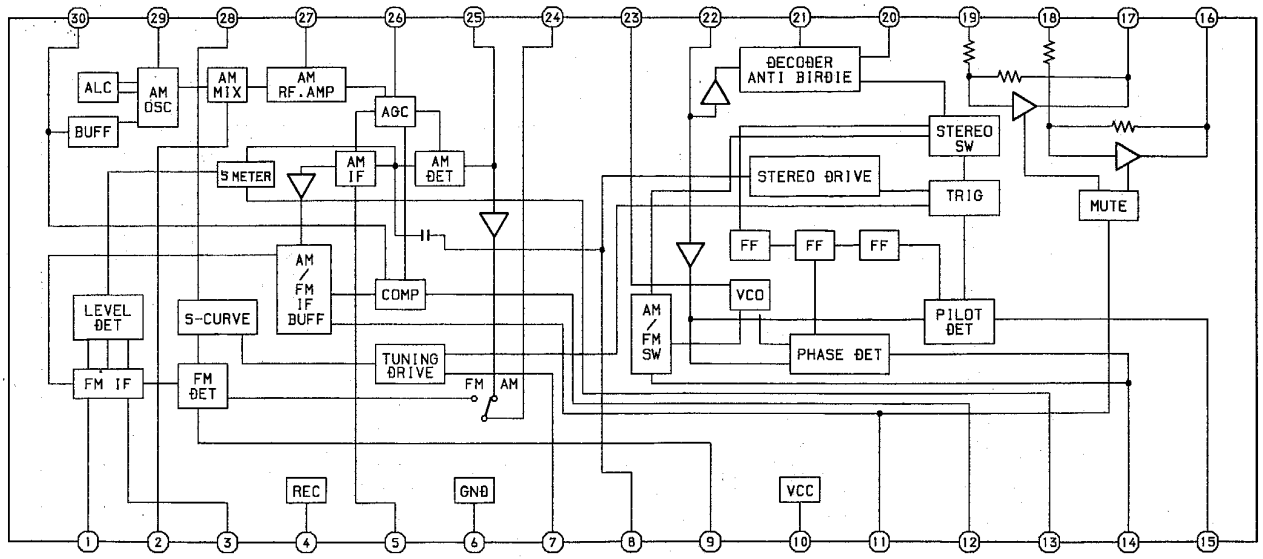
TRUTH TABLE

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

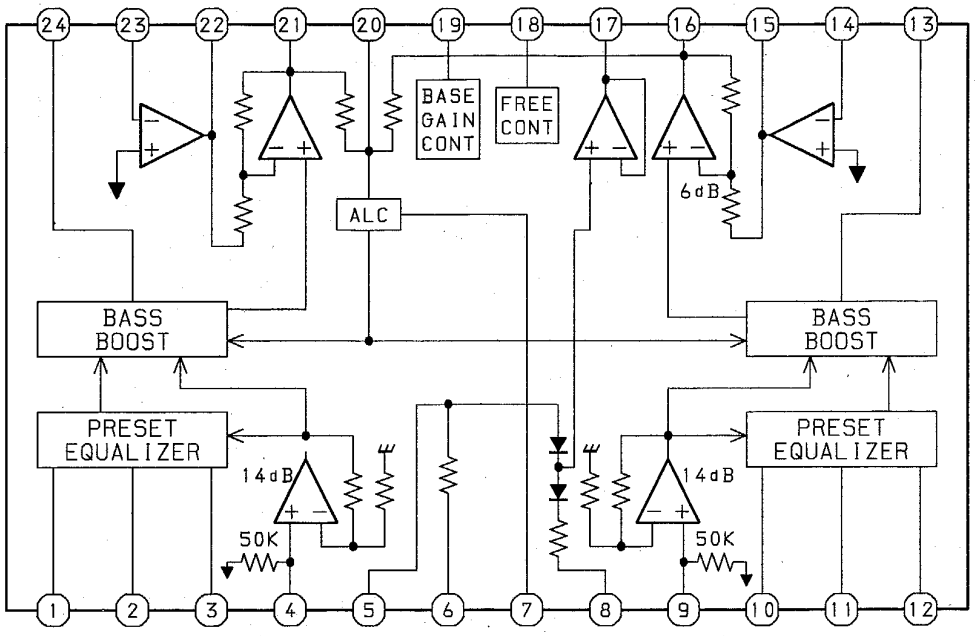
Z=High Impedance

X=Don't Care

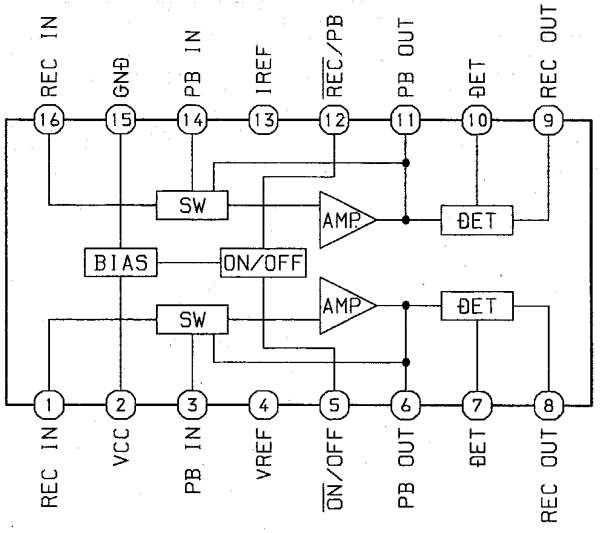
IC, LA1836L



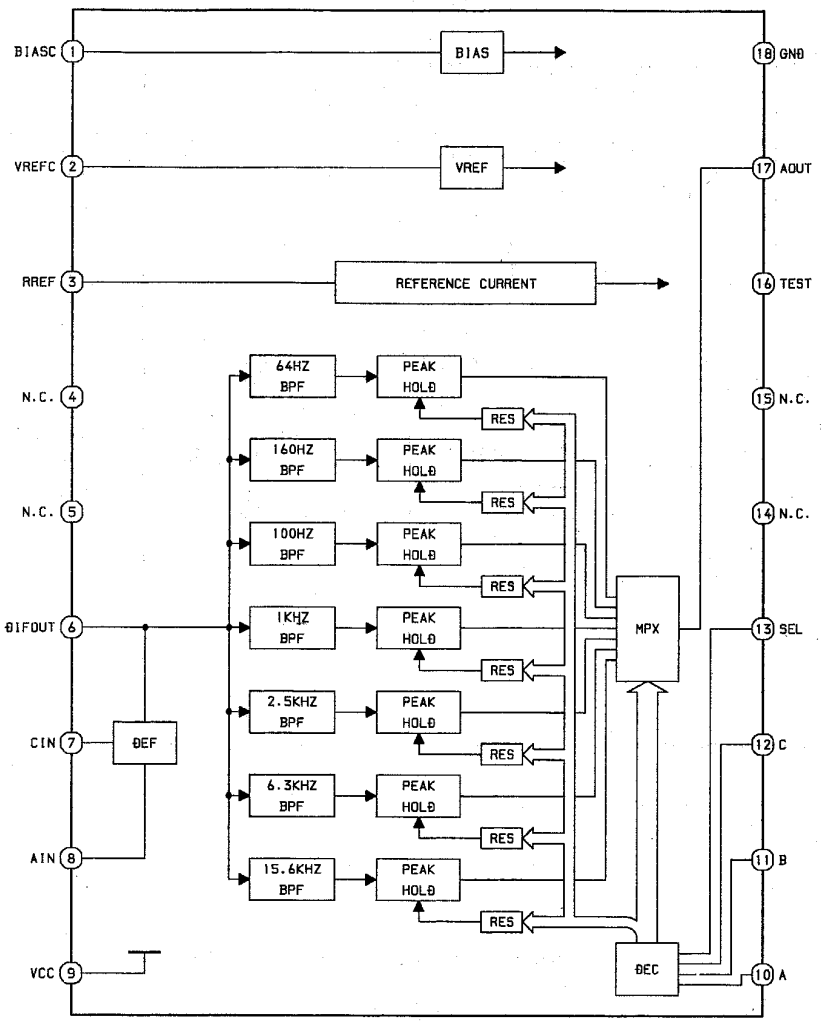
IC, BA3842F



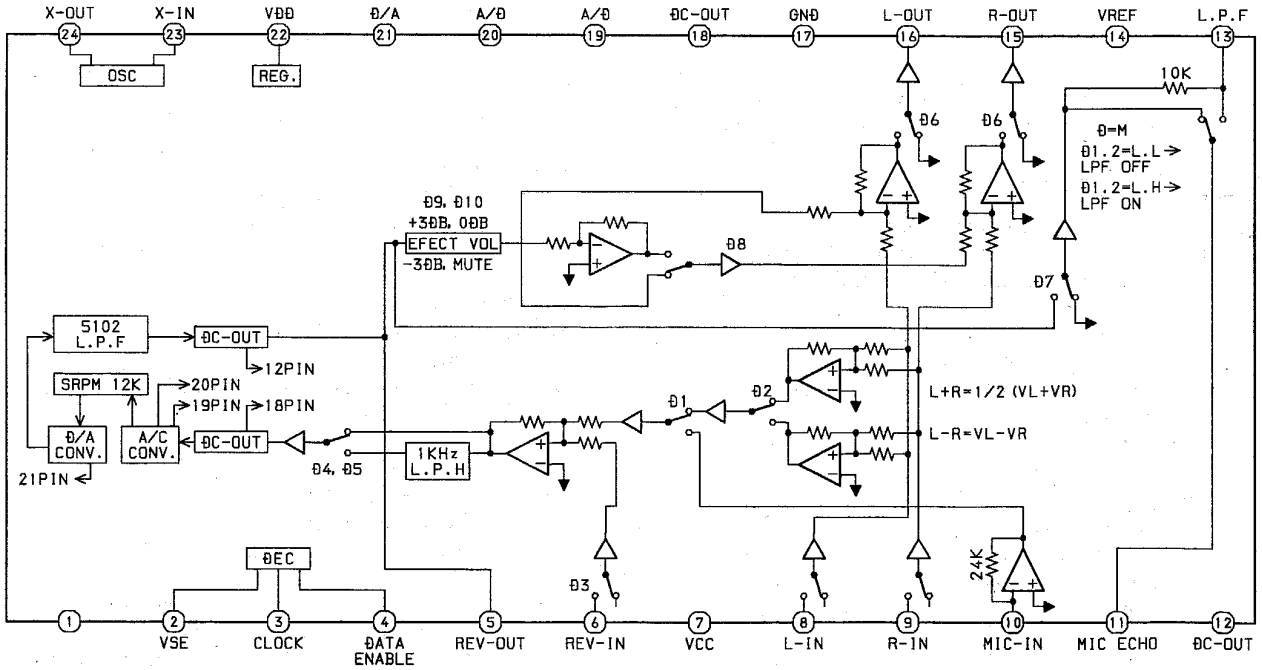
IC, HA12134A



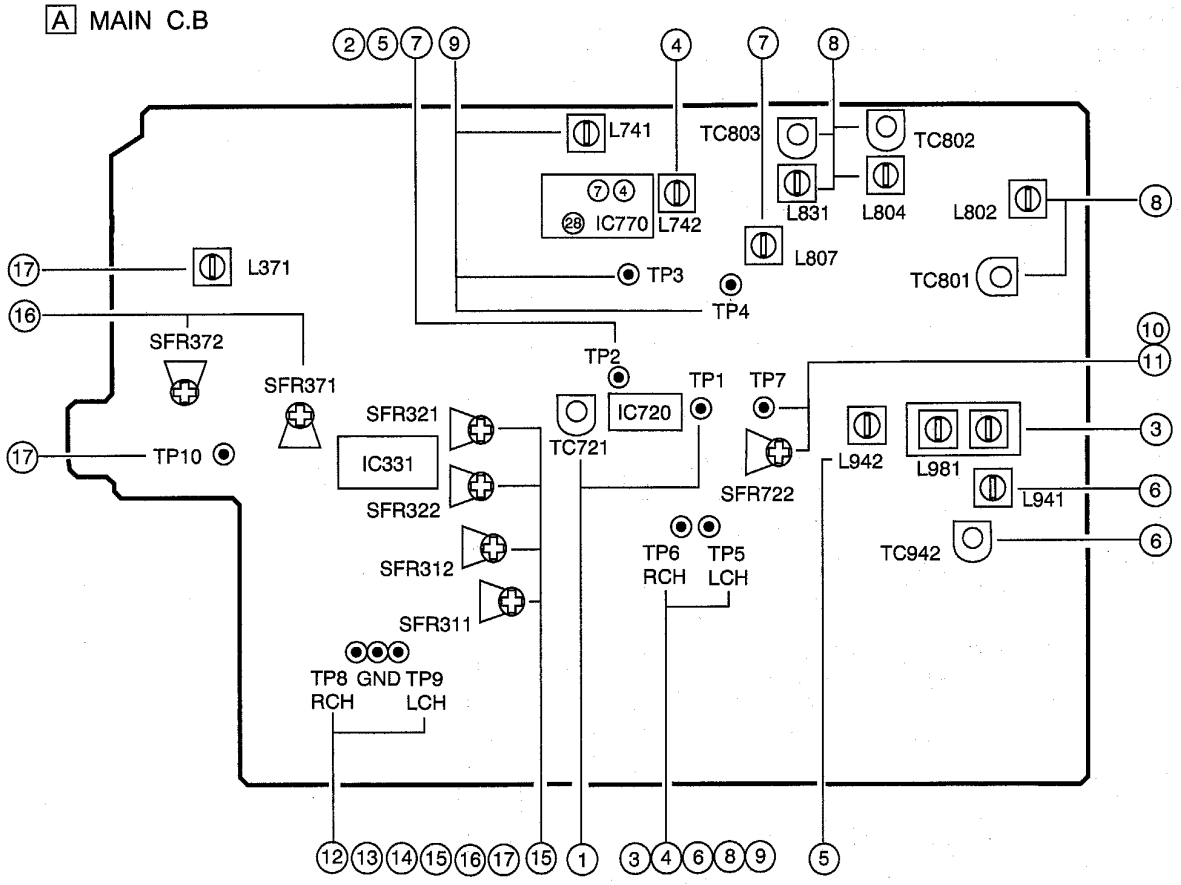
IC, BA3834S

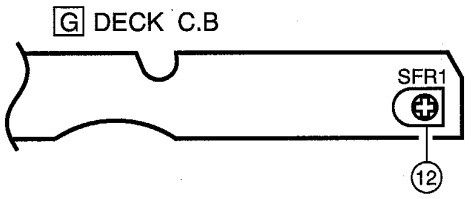


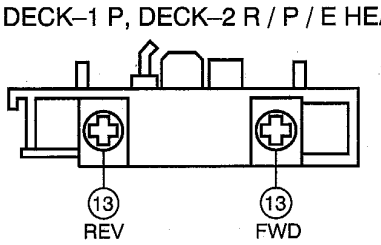
IC, LV1100



ELECTRICAL ADJUSTMENT <TUNER / DECK>







< TUNER SECTION >

1. Clock Frequency Adjustment
   Settings : • Test point : TP1
   • Adjustment location : TC721
   Method : Set to MW 1602kHz and adjust TC721 so that the test point becomes 2052kHz ± 0.01kHz.

2. MW VT Check
   Settings : • Test point : TP2 (VT)
   Method : Set to MW 1602kHz and check that the test point is 6.8V ± 1.0V.

3. MW Tracking Adjustment
   Settings : • Test point : TP-5, TP-6
   • Ajustment location :
   L981 ..... 999kHz
   Method : The level at 999kHz is adjusted to MAX by L981.

4. AM IF Adjustment
   Settings : • Test point : TP-5, TP-6
   • Ajustment location : L742
   L942 .....450kHz

5. LW VT Adjustment
   Settings : • Test point : TP2 (VT)
   • Ajustment location : L942
   Method : Set to LW 144kHz and adjust L942 so that the test point becomes 1.5V ± 0.05V.

6. LW Tracking AdjustmenT
   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.

7. 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 ± 0.05V. Then set to FM 87.5MHz and check that the test point is more than 1.5V.

8. FM Tracking Adjustment
   Settings : • Test point : TP5, TP6
   • Adjustment location :
   L802,L804,L831..... 87.5MHz
   TC801,TC802,TC803..... 108.0MHz
   Method : • The level at 87.5MHz is adjusted by L802, L804, L831. Then the level at 108.0MHz is adjusted by TC801, TC802, TC803 so that the distortion is less than 3%.

9. DC Balance / Mono Distortion Adjustment
   Settings : • Test point : TP3, TP4 (DC balance)
   TP5, TP6 (Distortion)
   • Ajustment location : L741
   • Input level : 54dB
   Method : Set to FM 98.0MHz and adjust L741 so that the voltage between TP3 and TP4 becomes 0V ± 0.04V. Next, check that the distortion is less than 1.3%.

10. 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.

11. 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 dB ± 10 dB.

    FM
    Settings : • Test point : TP7
    • Input level : Variable
    Method : Set to FM 98.0MHz and check that the test point is 20 dB ± 5 dB.

< DECK SECTION >

12. 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 ± 5Hz.

13. 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.

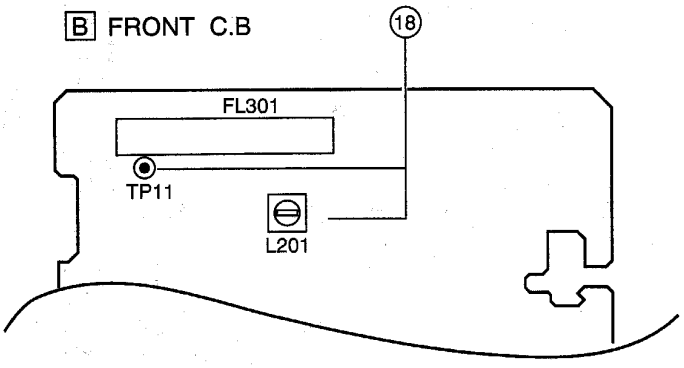
14. PB Frequency Response Check (DECK 1, DECK 2)
    Settings : • Test tape : TTA–300
    • Test point : TP8, TP9
    Method : Play back the 315Hz and 10kHz signals of the test tape and check that the output ratio of the 10kHz signal is with respect to that of the 315Hz signal is ± 2dB.

15. 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.

16. REC/PB Frequency Response Adjustment
    Settings : • Test tape : TTA–602
    • Test point : TP8, TP9
    • Input signal : 1kHz / 10kHz (LINE IN)
    • Adjutment 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 ± 0.5dB with respect to that of the 1kHz signal.

17. 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 ± 0.1kHz.

< FRONT SECTION >



18. μ-CON CLOCK Adjustment
    Settings : • Function : CD
    • Test point : TP11(IC201 PIN41)
    • Adjustment location : L201
    Method : Adjust L201 so that the test point becomes 328.1 Hz ± 0.4 Hz.

PRACTICAL SERVICE FIGURE

<TUNER SECTION>

<FM SECTION>

IHF Sensitivity :	8dB ± 6dB
(THD 3%)	[at 87.5MHz]
	7dB ± 6dB
	[at 98.0 / 108.0MHz]
S/N 46dB	
Quieting sensitivity :	34dB ± 5dB
	[at 87.5 / 98.0 / 108.0MHz]
Signal to noise ratio :	(STEREO) More than 59dB
	(MONO) More than 65dB
	[at 98.0MHz]
Distortion :	(STEREO) Less than 2.0%
	(MONO) 1.3%
	[at 98.0MHz]
Auto stop level :	22dB ± 10dB [at 98.0MHz]
Stereo separation :	More than 20dB
	[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

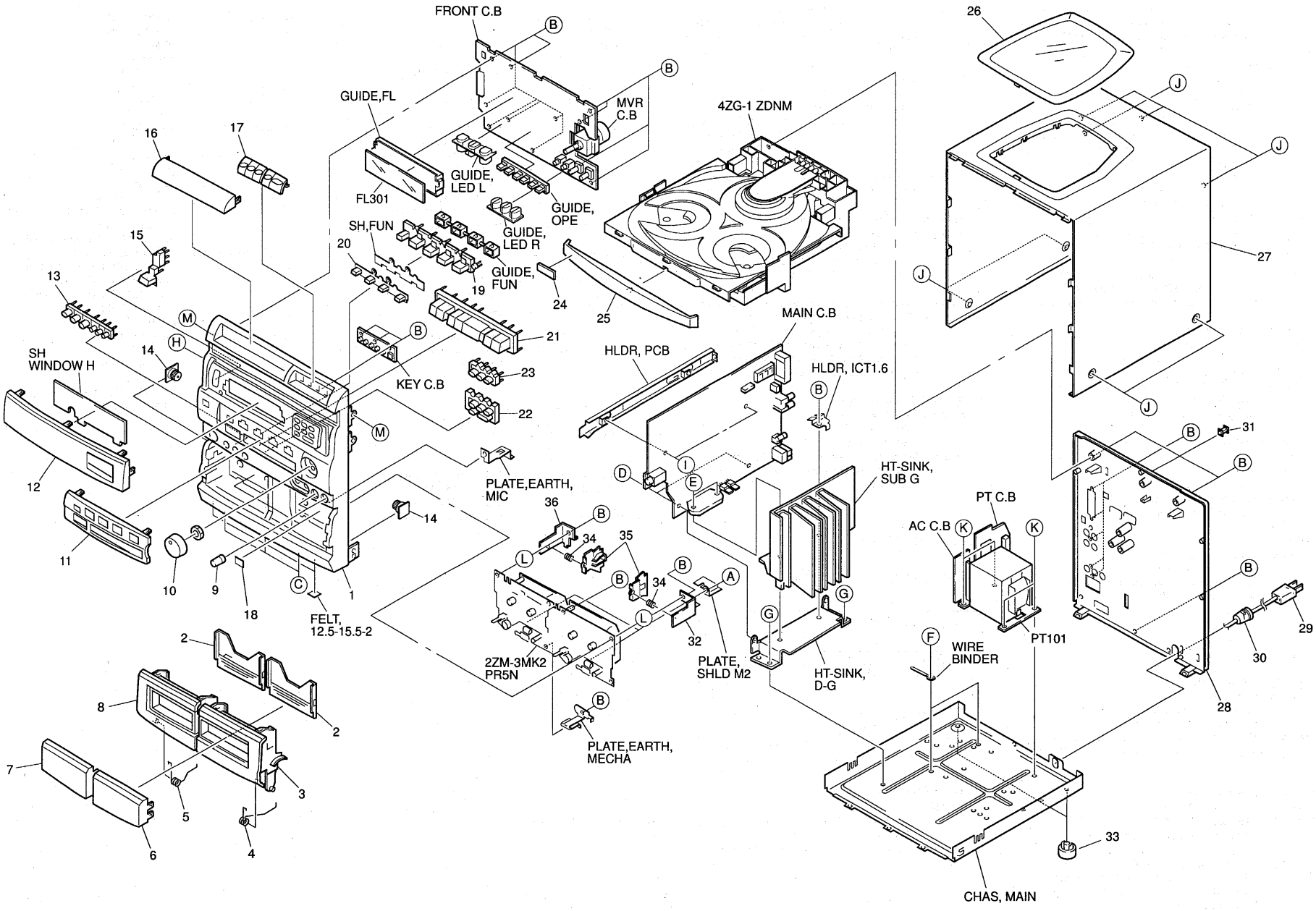
<LW SECTION>

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

<DECK SECTION>

Tape speed :	3000Hz ± 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 ± 3dB
	(SP OUT 2V)
REC/PB output level :	1.6V ± 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_2, SP OUT 2V, DOLBY OFF)
Noise level (REC/PB) :	Less than 25mV/12mV
	(NORM, DOLBY OFF / WTD)
	Less than 18mV/10mV
	(CrO_2, 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_2)

MECHANICAL EXPLODED VIEW 1/1

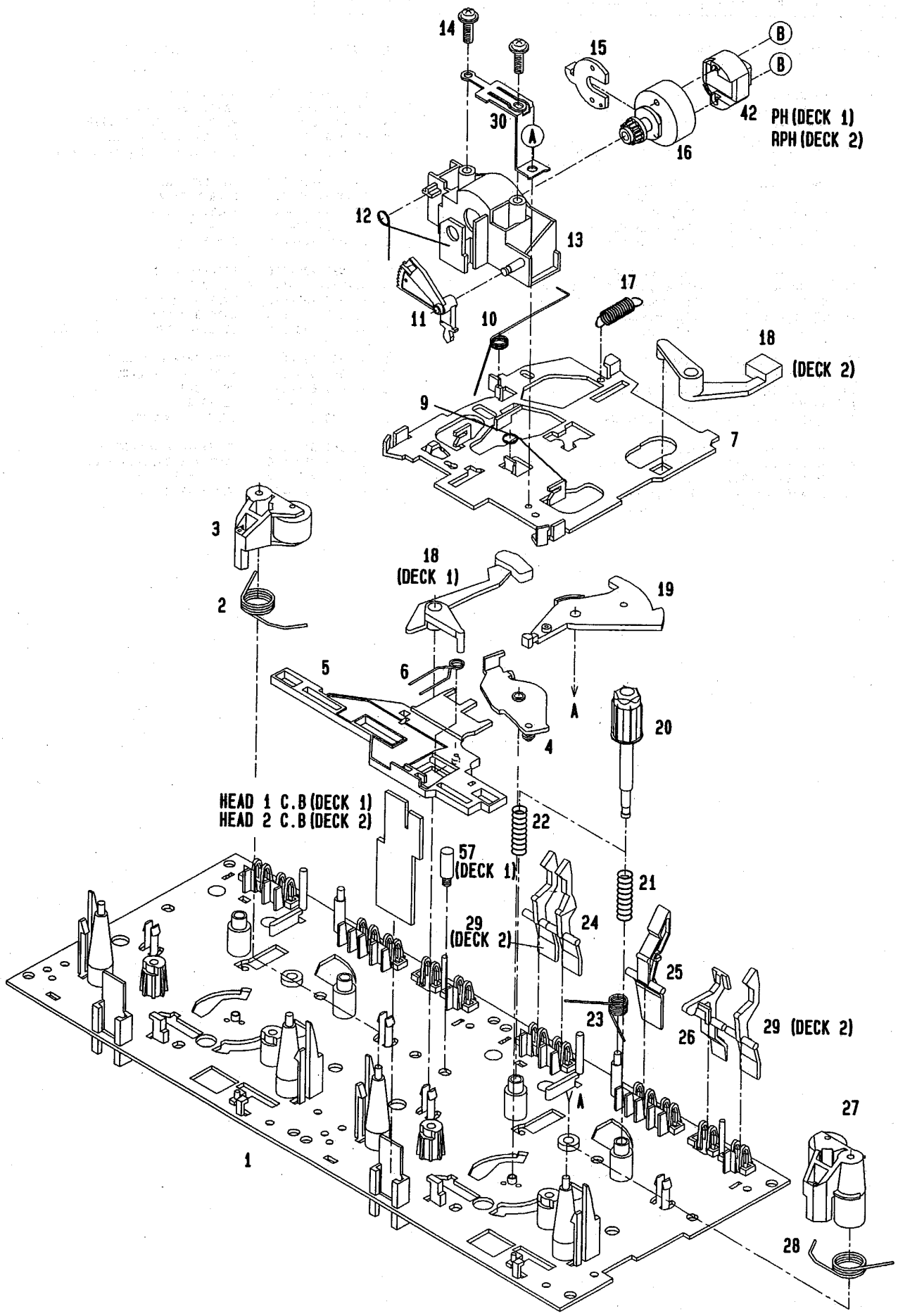


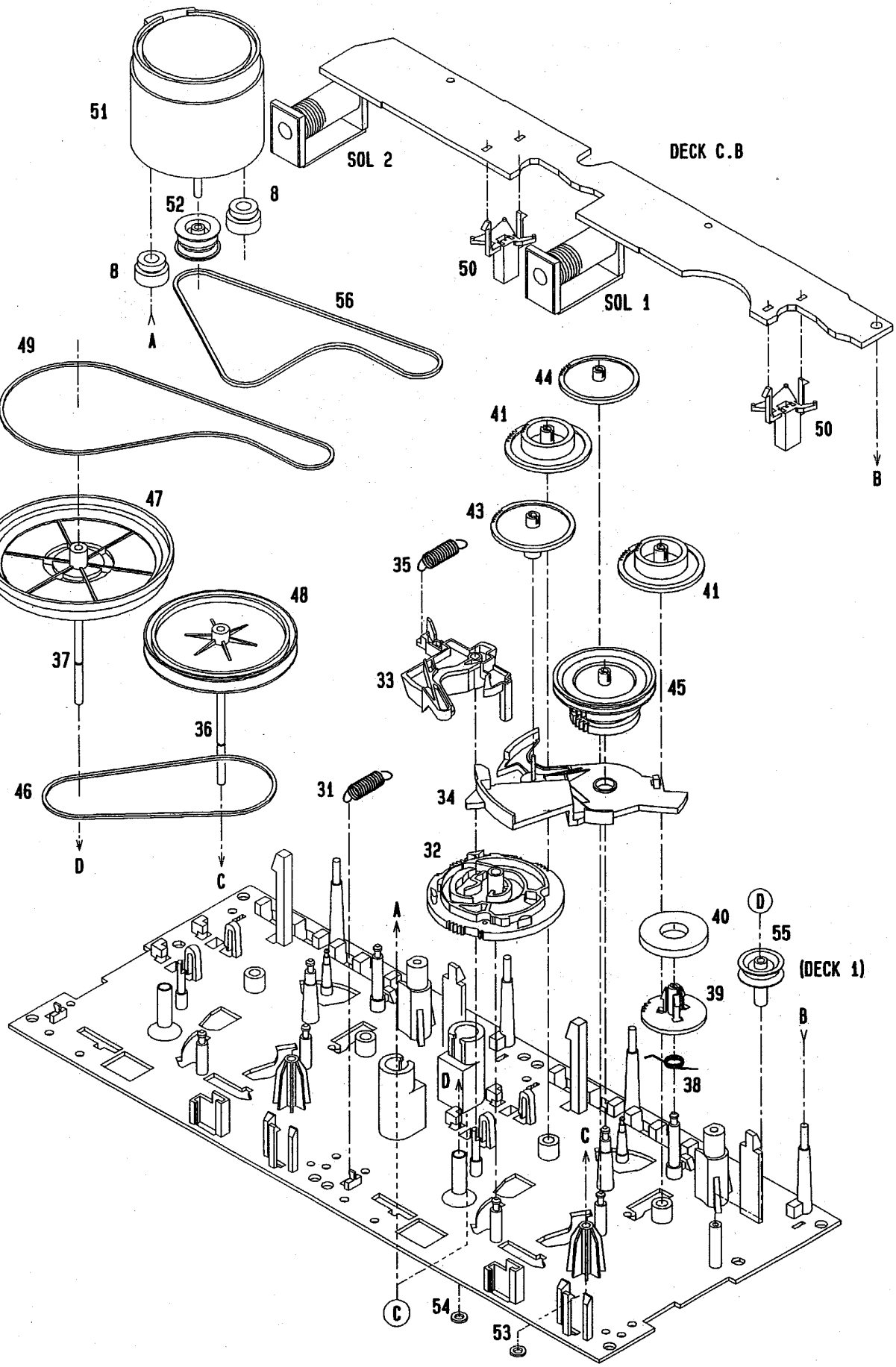
MECHANICAL PARTS LIST 1/1

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

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	86-NF6-082-010		CABI,FR E V770
2	86-NF6-061-010		REFLECTOR,CASS
3	86-NF6-047-010		BOX,CASS 2E
4	82-NF5-219-010		SPR-T,EJECT 2(SIN)
5	82-NF5-218-010		SPR-T,EJECT 1(SIN)
6	86-NF6-020-010		WINDOW,CASS 2
7	86-NF6-019-010		WINDOW,CASS 1
8	86-NF6-046-010		BOX,CASS 1E
9	86-NF6-050-010		KNOB,RTRY MIC M
10	86-NF6-063-010		KNOB,RTRY VOL
11	86-NF6-006-010		PANEL,CONTROL
12	86-NF6-079-010		WINDOW,DISP E V770
13	86-NF6-013-010		KEY,DOLBY
14	87-063-165-010		OIL-DMPR,150
15	86-NF6-009-010		KEY,POWER
16	86-NF6-018-010		WINDOW,CD
17	86-NF6-015-010		KEY,CD
18	81-532-080-010		LBL,CASS-COMPT
19	86-NF6-011-010		KEY,FUN
20	86-NF6-016-010		REFLECTOR,FUN
21	86-NF6-012-010		KEY,OPE
22	86-NF6-098-010		KEY,T-BASS HIGH
23	86-NF6-014-010		KEY,DSP
24	82-NE6-067-010		BADGE,AIWA 30N
25	86-NF6-051-010		PANEL,TRAY U
26	86-NF6-007-010		WINDOW,TOP
27	86-NF6-058-010		CABI,STEEL H-G
28	86-NF6-095-010		PANEL,REAR EZBNE V770
⚠ 29	87-050-079-010		AC CORD ASSY,E BLK
30	87-085-185-010		BUSHING,AC CORD(E) CM-22B
31	84-ZG1-245-110		CAP,OPTICAL
32	82-NF5-227-010		HLDR,LOCK 2N
33	87-085-221-010		FOOT, H 13.5
34	82-NF5-228-010		SPR-C,LOCK
35	82-NF5-229-010		PLATE,LOCK
36	82-NF5-226-010		HLDR,LOCK 1N
A	87-571-032-410		VIT+2-3
B	87-067-703-010		BVT2+3-10 W/O SLOT
C	87-067-673-010		BVTT+3-8 BLK
D	87-067-633-010		BVT2+3-8 W/O SLOT W/CONVEX
E	87-067-698-010		BVT2+3-18 W/O SLOT
F	87-067-584-010		BVT2+3-6 W/O SLOT
G	87-067-689-010		BVTT+3-8
H	87-591-094-410		QIT+3-6
I	87-078-084-010		BVTT+3-6 W/CONVEX
J	87-067-641-010		UTT2+3-8 W/O SLOT BLK
K	87-078-083-010		BVTT+4-8 SWCH16A SEMS
L	82-NE8-215-010		W,4.2-6.8-0.18
M	87-721-097-410		QT2+3-12 W/O SLOT

TAPE MECHANISM EXPLODED VIEW 1/1




51
SOL 2
DECK C.B
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SOL 1
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A
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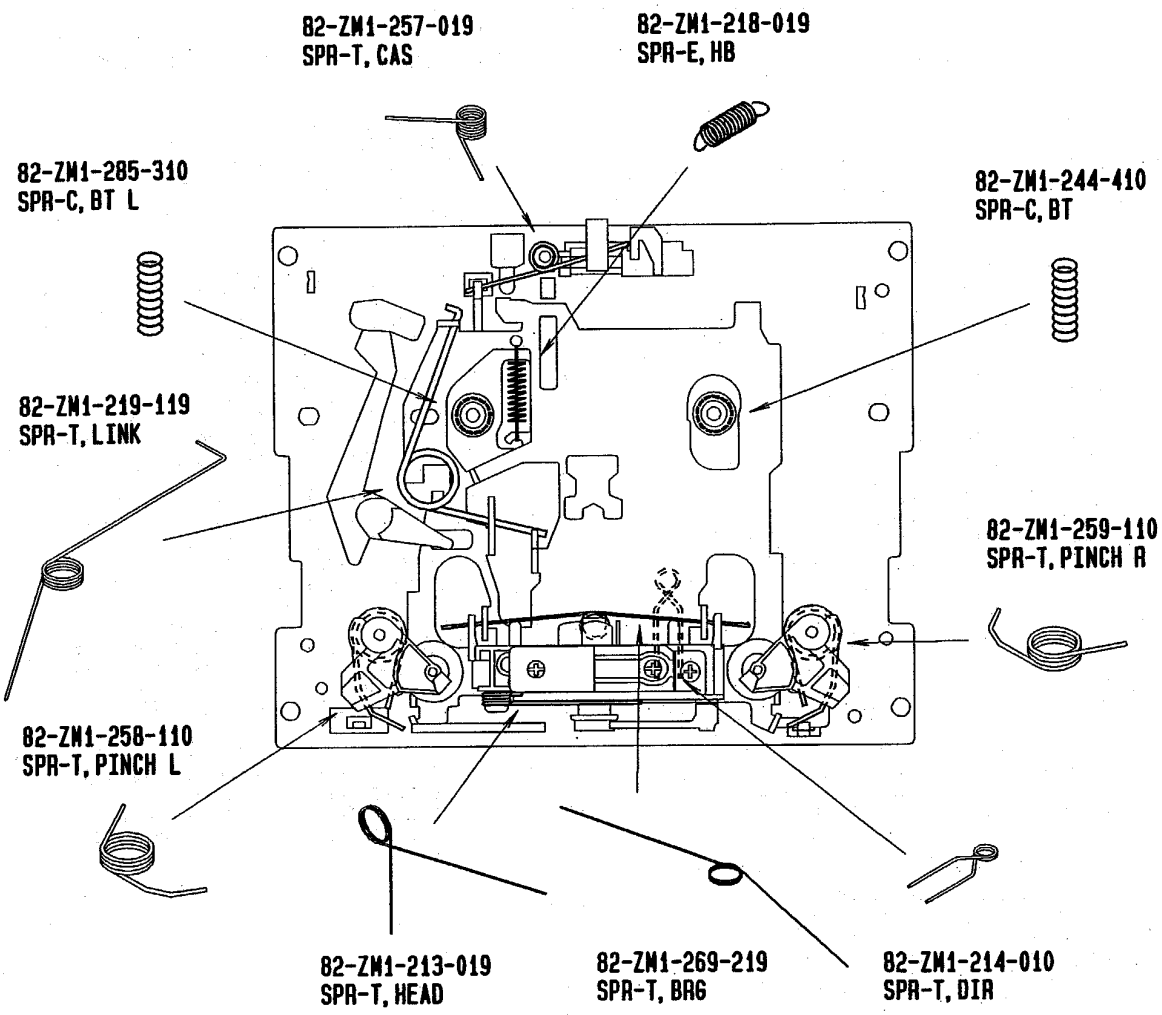
D
C
32
A
40
D
55
(DECK 1)
39
B
38
D
C
C
54
53

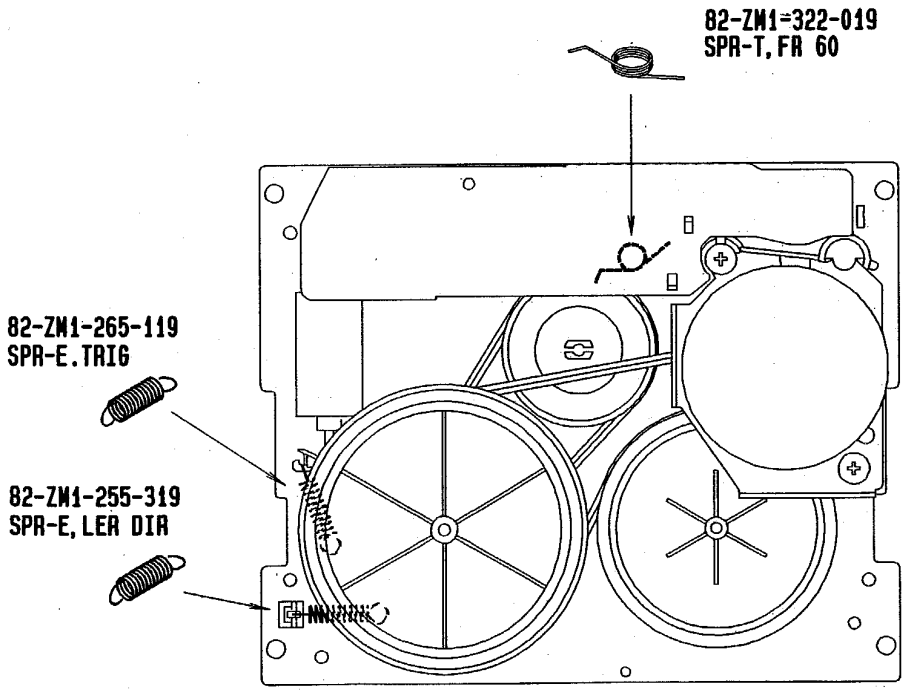
TAPE MECHANISM PARTS LIST 1/1

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

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

SPRING APPLICATION POSITION

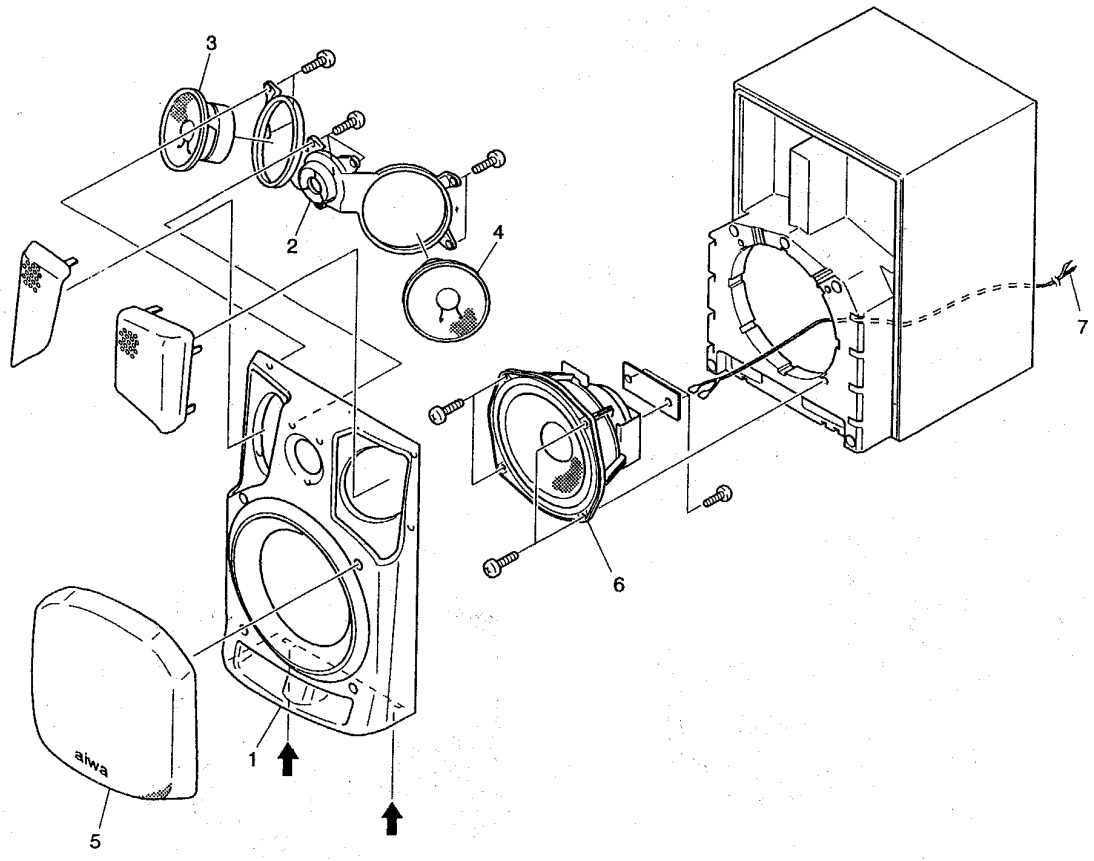




SPEAKER EXPLODED VIEW 1/1

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 (SX-FNV700)

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

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	86-NS5-001-019		PANEL FR
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	85-NS6-611-019		SPEAKER CORD Y/B

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-NF6-917-018		IB,E(EGFSI)NE 770
2	85-NF7-641-019		RC,RC-T503
3	87-006-225-019		ANT,LOOP ANT NC2
4	87-043-106-019		ANT,FM 1007AWG

REFERENCE NAME LIST

ELECTRICAL SECTION

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

MECHANICAL SECTION

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

サービス技術ニュース	
番号	連絡内容
G－ －	
G－ －	
G－ －	

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