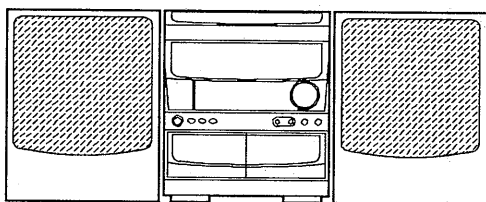


aiwa



CX-NV700



COMPACT DISC STEREO
CASSETTE RECEIVER

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

- TYPE: HE, LH

CD-CASSEIVER	SPEAKER	REMOTE CONTROLLER
CX-NV700 (TYPE: HE)	SX-FNV700	RC-T503
CX-NV700 (TYPE: LH)	SX-FNV800	

- If requiring information about the CD mechanism, see Service Manual of 4ZG-1, S/M Code No.09-963-128-10T
- If requiring information about the Speaker, see Service Manual of SX-FNV700, SX-FNV800, S/M Code No. 09-964-137-8FP

SPECIFICATIONS

<FM tuner section>

Tuning range	87.5 MHz to 108 MHz
Usable sensitivity(IHF)	13.2 dBf
Antenna	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 μ V/m
Antenna	Loop antenna

<SW tuner section>(HE only)

Tuning range	5.900 MHz ~ 17.900 MHz
Antenna	Wire antenna

<Amplifier section>

Power output	(without connecting to the SURROUND SPEAKERS) HE: Rated 40 W + 40 W (6 ohms, T.H.D. 1 %, 1 kHz) Reference: 50 W + 50 W (6 ohms, T.H.D. 10 %, 1 kHz) LH: Rated: 85 W + 85 W (6 ohms, T.H.D. 10 %, 1 kHz)
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Total Harmonic distortion	HE: 0.07 % (25 W, 1 kHz, 6 ohms, DIN AUDIO) LH: 0.07 % (40 W, 1 kHz, 6 ohms, DIN AUDIO)
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Inputs	VIDEO/AUX: 400mV MIC 1, MIC 2: 1 mV (10 kohms)
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Outputs	HE: SUPER WOOFER: 1.7 V LH: SUPER WOOFER: 2.2 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
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<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	48 dB (CrO ₂ tape)
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(HE), SX-FNV800(LH)>

Cabinet type	3way, bass reflex with surround speaker (Magnetic sealed type)
Speakers	Woofer: 140 mm (5 ⁵ / ₈ in.) cone type Tweeter: 80mm (3 ¹ / ₄ in.) cone type Super tweeter: 20 mm (13 ¹ / ₁₆ in.) ceramic type Surround speaker: 80mm (3 ¹ / ₄ in.) cone type Front speaker: 6 ohms Surround speaker: 16 ohms
Impedance	87 dB/W/m
Output sound pressure level	235 x 302 x 270 mm
Dimensions (W x H x D)	(9 ³ / ₈ x 12 x 10 ³ / ₄ in.)
Weight	3.6 kg (7 lbs 15 oz.)(HE) 3.8 kg (8 lbs 6 oz.)(LH)

<General>

Power requirements	120 V / 220 – 230 V/240 V AC, switchable 50/60 Hz
Power consumption	HE: 125 W LH: 165 W
Dimensions of main unit	260 x 308 x 343 mm
(W x H x D)	(10 ¹ / ₄ x 12 ¹ / ₄ x 13 ³ / ₈ in.)
Weight of main unit	HE: 7.2 kg (15 lbs 14 oz.) LH: 8.5 kg (18 lbs 12 oz.)

• Design and specifications are subject to change without notice.

PROTECTION OF EYES FROM LASER BEAM DURING SERVICING

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

WARNING!!

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



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

VAROITUS!

Laiteen Käyttäminen muulla kuin tässä käyttöohjeessa mainitulla tavalla saattaa altistaa käyt-täjän turvallisuusluokan 1 ylit-tävälle näkymättömälle lasersäteilylle.

WARNING!

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

CAUTION

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

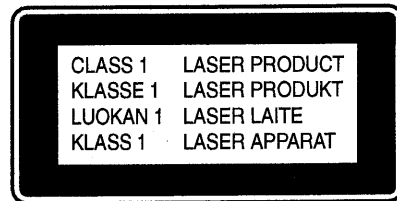
ATTENTION

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

ADVARSEL!

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

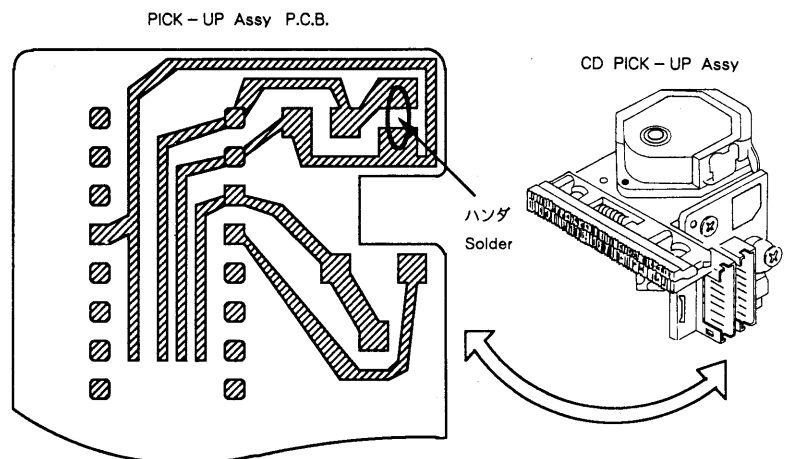
This Compact Disc player is classified as a CLASS 1 LASER product. The CLASS 1 LASER PRODUCT label is located on the rear exterior.



Precaution to replace Optical block (KSS - 210A)

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

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



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							
	86-NF6-602-010		C-IC UPD78044HGF-023	C181	87-010-101-089		CAP,E 220-16 SME
	87-A20-102-019		IC,STK405-090A<HE>	C182	87-010-381-089		CAP,E 330-16 SME
	87-A20-103-019		IC,STK405-110A<LH>	C197	87-010-196-089		C-CAP,S 0.1-25 F
	87-A20-154-010		IC,SPS-444-1	C198	87-010-196-089		C-CAP,S 0.1-25 F
	87-070-121-010		IC,HA12185NT	C201	87-010-404-089		CAP,E 4.7-50 SME
	87-017-914-019		IC,BU4094 BC	C202	87-010-404-089		CAP,E 4.7-50 SME
	87-017-804-019		IC,BU4052BC	C203	87-010-177-089		C-CAP,S 820P-50 SL
	87-A20-107-019		IC,BA3836	C204	87-010-177-089		C-CAP,S 820P-50 SL
	87-017-888-089		IC,NJM4558MD	C205	87-010-182-089		C-CAP,S 2200P-50 B
	87-A20-069-049		C-IC,BA3842F	C206	87-010-182-089		C-CAP,S 2200P-50 B
	87-070-127-119		IC,LC72131D	C207	87-010-402-089		CAP,E 2.2-50 SME
	87-017-714-119		IC,LA1836L	C208	87-010-402-089		CAP,E 2.2-50 SME
	87-A20-070-019		IC-LV1100	C209	87-010-402-089		CAP,E 2.2-50 SME
	87-020-454-010		IC,DN6851	C210	87-010-402-089		CAP,E 2.2-50 SME
				C213	87-010-147-089		C-CAP,S 3P-50 CH
TRANSISTOR				C214	87-010-147-089		C-CAP,S 3P-50 CH
	87-026-610-089		TR,KTC3198GR	C215	87-010-196-089		C-CAP,S 0.1-25 F
	89-327-125-089		C-TR,2SC2712GR	C216	87-010-196-089		C-CAP,S 0.1-25 F
	89-111-625-089		C-TR,2SA1162GR	C217	87-010-196-089		C-CAP,S 0.1-25 F
	87-026-609-089		TR,KTA1266GR	C218	87-010-196-089		C-CAP,S 0.1-25 F
	89-213-702-019		TR 2SB1370E				
	89-332-665-089		TR,2SC3266GR	C219	87-010-198-089		C-CAP,S 0.022-25 B
	89-406-555-089		TR,2SD655E	C220	87-010-198-089		C-CAP,S 0.022-25 B
	87-026-218-089		TR,DTC144ES	C221	87-010-194-089		C-CAP,S 0.047-25 F
	87-026-286-089		TR,DTA143ES	C301	87-010-197-089		C-CAP,S 0.01-25 B
	89-502-466-089		TR FET 2SK246-BL (TPE2)	C311	87-012-155-089		C-CAP,S 180P-50 CH
	89-333-317-089		TR,2SC3331T	C312	87-012-155-089		C-CAP,S 180P-50 CH
	87-026-216-089		TR,DTA124ES	C313	87-010-180-089		C-CAP,S 1500P-50 B
	89-109-521-089		TR,2SA952K	C314	87-010-180-089		C-CAP,S 1500P-50 B
	89-112-965-089		TR,2SA1296GR	C321	87-012-145-089		C-CAP S 270P-50CH
	87-026-219-089		TR,DTA144ES	C322	87-012-145-089		C-CAP S 270P-50CH
	89-327-143-089		C-TR,2SC2714 (O)	C323	87-012-154-089		C-CAP,S 150P-50 CH
	89-328-785-089		TR,2SC2878-A (E2-M)	C324	87-012-154-089		C-CAP,S 150P-50 CH
	87-026-269-089		TR,DTA114ES<HE>	C325	87-010-179-089		C-CAP,S 1200P-50 B
	89-503-602-089		C-FET,2SK360E	C326	87-010-179-089		C-CAP,S 1200P-50 B
	87-026-214-089		TR,DTA114YS	C331	87-010-392-089		CAP,E 33-35 SME
	89-505-434-549		C-FET,2SK543(4/5)	C332	87-010-392-089		CAP,E 33-35 SME
	87-026-463-080		TR,2SA933S (RS)	C333	87-010-592-089		C-CAP,S 0.22-16 R K
				C334	87-010-592-089		C-CAP,S 0.22-16 R K
				C335	87-010-189-089		C-CAP,S 8200P-50 B
				C336	87-010-189-089		C-CAP,S 8200P-50 B
DIODE				C337	87-010-400-089		CAP,E 0.47-50 SME
	87-020-027-089		C-DIODE,1SS184	C338	87-010-400-089		CAP,E 0.47-50 SME
	87-020-125-089		C-DIODE,1SS181	C339	87-010-371-089		CAP,E 470-6.3 11L
	87-017-078-089		DIODE,1N4003	C340	87-010-196-089		C-CAP,S 0.1-25 F
	87-017-437-089		DIODE,1N4148M	C351	87-010-546-089		CAP,E 0.33-50 SME
	87-A40-116-069		DIODE,RS403L-B-D-51	C352	87-010-546-089		CAP,E 0.33-50 SME
	87-001-909-089		ZENER UTZJ 24B	C353	87-010-401-089		CAP,E 1-50 SME
	87-001-916-089		ZENER UTZJ10B	C354	87-010-401-089		CAP,E 1-50 SME
	87-001-914-089		ZENER UTZJ 6.2B	C355	87-010-401-089		CAP,E 1-50 SME
	87-001-911-089		ZENER,UTZJ4.7A (TAPG)	C356	87-010-401-089		CAP,E 1-50 SME
	87-001-912-089		ZENER,UTZJ 5.1B	C357	87-010-178-089		C-CAP,S 1000P-50 B
MAIN C.B				C371	87-012-156-089		C-CAP,S 220P-50 CH
	C131	87-010-403-089	CAP,E 3.3-50 SME	C372	87-012-156-089		C-CAP,S 220P-50 CH
	C132	87-010-260-089	CAP,E 47-25 SME<LH>	C373	87-010-178-089		C-CAP,S 1000P-50 B
	C141	87-010-408-089	CAP,E 47-50 SME	C374	87-010-178-089		C-CAP,S 1000P-50 B
	C142	87-010-408-089	CAP,E 47-50 SME	C376	87-010-392-089		CAP,E 33-35 SME
	C143	87-010-764-089	CAP,E 47-63V	C377	87-010-198-089		C-CAP,S 0.022-25 B
	C144	87-010-196-089	C-CAP,S 0.1-25 F	C378	87-010-197-089		C-CAP,S 0.01-25 B
	C145	87-010-196-089	C-CAP,S 0.1-25 F	C379	87-010-183-089		C-CAP,S 2700P-50 B
	C146	87-010-389-019	CAP,E 2200-25 SME	C380	87-010-183-089		C-CAP,S 2700P-50 B
	C151	87-012-368-089	C-CAP,S 0.1-50F	C381	87-010-183-089		C-CAP,S 2700P-50 B
	C152	87-012-368-089	C-CAP,S 0.1-50F	C409	87-010-405-089		CAP,E 10-50 SME
	C153	87-016-474-099	CAP,E 3300-50	C451	87-010-197-089		C-CAP,S 0.01-25 B
	C154	87-016-474-099	CAP,E 3300-50	C453	87-010-312-089		C-CAP,S 15P-50 CH
	C161	87-010-401-089	CAP,E 1-50 SME	C454	87-012-145-089		C-CAP S 270P-50CH
	C172	87-012-140-089	C-CAP,S 470P-50 CH	C455	87-010-197-089		C-CAP,S 0.01-25 B
	C173	87-010-405-089	CAP,E 10-50 SME	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

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C524	87-010-178-089	C-CAP,S	1000P-50 B
C527	87-010-197-089	C-CAP,S	0.01-25 B<HE>
C527	87-010-213-089	C-CAP,S	0.015-25 B<LH>
C528	87-010-197-089	C-CAP,S	0.01-25 B<HE>
C528	87-010-213-089	C-CAP,S	0.015-25 B<LH>
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
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	87-010-546-089	CAP,E	0.33-50 SME
C708	87-010-546-089	CAP,E	0.33-50 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<LH>
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
C789	87-012-365-089	C-CAP,S	0.027-25 B<HE>
C789	87-010-594-089	C-CAP,S	0.033-16 R K<LH>
C790	87-012-365-089	C-CAP,S	0.027-25 B<HE>
C790	87-010-594-089	C-CAP,S	0.033-16 R K<LH>
C791	87-010-401-089	CAP,E	1-50 SME
C792	87-010-180-089	C-CAP,S	1500P-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	87-010-311-089	C-CAP,S	12P-50 CH
C803	87-018-134-089	CAP,TC-U	0.01-16 Y
C804	87-010-151-089	C-CAP,S	7P-50 CH
C805	87-010-150-089	C-CAP,S	6P-50 CH
C806	87-010-145-089	C-CAP,S	1P-50 CH
C807	87-010-154-089	C-CAP,S	10P-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

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C815	87-010-197-089	C-CAP,S	0.01-25 B
C817	87-010-196-089	C-CAP,S	0.1-25 F
C819	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
C824	87-018-134-089	CAP,TC-U	0.01-16 Y
C825	87-010-196-089	C-CAP,S	0.1-25 F
C831	87-010-312-089	C-CAP,S	15P-50 CH
C833	87-010-197-089	C-CAP,S	0.01-25 B
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
C901	87-010-197-089	C-CAP,S	0.01-25 B
C941	87-010-314-089	C-CAP,S	22P-50 CH<HE>
C943	87-010-197-089	C-CAP,S	0.01-25 B<HE>
C944	87-014-051-089	CAP,PP	560P-100 J<HE>
C945	87-010-197-089	C-CAP,S	0.01-25 B<HE>
C946	87-010-401-089	CAP,E	1-50 SME
C950	87-014-073-089	CAP,PP	4700P-100 J<HE>
C952	87-010-197-089	C-CAP,S	0.01-25 B<HE>
C953	87-010-197-089	C-CAP,S	0.01-25 B<HE>
C954	87-010-400-089	CAP,E	0.47-50 SME<HE>
C955	87-010-197-089	C-CAP,S	0.01-25 B
C956	87-010-263-089	CAP,E	100-10 SME 5X11<HE>
C960	87-010-196-089	C-CAP,S	0.1-25 F
C961	87-010-150-089	C-CAP,S	6P-50 CH
C988	87-010-198-089	C-CAP,S	0.022-25 B
C999	87-010-196-089	C-CAP,S	0.1-25 F<HE>
CF741	87-030-354-019	VIB,CF	BFU450C<HE>
CF801	87-008-261-089	FLTR	SFE 10.7 MA5-A
CF802	87-008-261-089	FLTR	SFE 10.7 MA5-A
D801	87-002-730-089	VARI-CAP	SVC203SPA
D802	87-002-730-089	VARI-CAP	SVC203SPA
D803	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-A60-024-019	JACK,6.3	BLK W/SW KM
J261	87-033-240-019	TERMINAL,SP	4P324V1-05
J281	87-099-802-019	JACK,PIN	3P BRW
J501	87-099-715-019	JACK,PIN	2P
J801	87-033-239-019	TERMINAL,HSP	-154V-2
L261	87-003-383-019	COIL,1UH-S	
L262	87-003-383-019	COIL,1UH-S	
L351	87-007-341-019	COIL,TRAP	85K
L352	87-007-341-019	COIL,TRAP	85K
L371	87-007-342-019	COIL,OSC	85K BIAS
L741	87-A50-015-019	COIL,FM	DET(TOK)
L742	87-A90-051-019	FLTR,CFAZ	-450(TOK)<LH>
L742	87-A90-052-019	FLTR,CFMT	-450A(TOK)<HE>
L770	87-005-849-089	COIL,10UH	(CECS)
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	87-005-847-089	COIL,2.2UH	(CECS)
L807	87-A50-031-019	COIL,FM	OSC (TOK)
L832	87-005-847-089	COIL,2.2UH	(CECS)
L941	87-A50-022-019	COIL,ANT	SW(COI)<HE>
L942	87-A50-021-019	COIL,OSC	SW(COI)<HE>
L943	87-005-372-089	COIL	S 1 MH TAPG<HE>
L944	87-003-131-089	COIL	S 10 MH TAPG<HE>
L981	86-NF4-665-019	AM PACK	1(TOK)<LH>
L981	86-NF4-666-019	AM PACK	3(TOK)<HE>
R191	87-A00-091-089	RES,M/F	0.15-1W<LH>
R191	87-022-050-089	RESIS	METAL 1W-0.22J<HE>
R192	87-A00-091-089	RES,M/F	0.15-1W<LH>
R192	87-022-050-089	RESIS	METAL 1W-0.22J<HE>

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION	REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
RY151	87-045-361-019		RELAY,DH12D2-OS(M)-2	C810	88-700-860-819		CAP,M 0.068-50 J
RY281	87-045-382-019		RELAY,OUAZ-SH-112L	C811	87-010-101-049		CAP,E 220-16 SME
SFR311	87-024-177-089		SFR 220K DIA.6 V	C812	87-010-152-089		C-CAP,S 8P-50 CH
SFR312	87-024-177-089		SFR 220K DIA.6 V	C813	87-010-152-089		C-CAP,S 8P-50 CH
SFR321	87-024-177-089		SFR 220K DIA.6 V	C814	87-010-101-049		CAP,E 220-16 SME
SFR322	87-024-177-089		SFR 220K DIA.6 V	C816	87-010-177-089		C-CAP,S 820P-50 SL
SFR371	87-024-175-089		SFR,47K DIA6 V	C817	87-010-196-089		C-CAP,S 0.1-25 F
SFR372	87-024-175-089		SFR,47K DIA6 V	C818	87-010-186-089		C-CAP,S 4700P-50 B
SFR722	87-024-352-089		SFR,4.7K DIA6 H	C851	87-010-196-089		C-CAP,S 0.1-25 F
TC721	87-011-253-089		TRIMER,30P LAR	C852	87-010-194-089		C-CAP,S 0.047-25 F
TC801	87-011-252-089		TRIMMER 10P LAR	C853	87-010-406-049		CAP,E 22-50 SME
TC802	87-011-252-089		TRIMMER 10P LAR	C854	87-010-560-049		CAP,E 10-50 GAS
TC941	87-011-254-089		TRIMER,20P LAR<HE>	EMI600	87-008-372-089		FLIR EMI BLOIRNI
TC942	87-011-253-089		TRIMER,30P LAR<HE>	FL301	86-NF6-609-019		FL,8-ST-18GK
W111	85-NF5-628-019		F-CABLE 7P-2.5	FT101	85-NF5-615-019		CABLE,FFC 15P-1.25
X703	84-508-618-019		VIB,CER CSB 456 F/5	FT102	88-913-261-019		CABLE FFC,13P-1.25
X721	87-030-372-019		VIB,XTAL 7.2MHZ	J601	82-NF7-630-019		JACK,3.5 MO
				J602	82-NF7-630-019		JACK,3.5 MO
				L201	87-007-340-019		COIL,CLOCK 4.19MHZ
FRONT C.B				L801	87-005-446-089		COIL,150UH FLR50
C201	87-010-196-089		C-CAP,S 0.1-25 F	LED401	87-070-201-089		LED,SLP9118C-51-S-T1
C203	87-012-155-089		C-CAP,S 180P-50 CH	LED402	87-070-201-089		LED,SLP9118C-51-S-T1
C204	87-010-313-089		C-CAP,S 18P-50 CH	LED403	87-070-201-089		LED,SLP9118C-51-S-T1
C206	87-018-127-089		CAP,TC-U 470P-50 B	LED404	87-070-201-089		LED,SLP9118C-51-S-T1
C207	87-018-209-089		CAP,TC-U 0.1-25 F	LED411	87-070-199-089		LED,SLP738F-81-S-T1
C251	87-010-560-049		CAP,E 10-50 GAS	LED412	87-070-199-089		LED,SLP738F-81-S-T1
C252	87-010-263-049		CAP,E 100-10	LED413	87-070-199-089		LED,SLP738F-81-S-T1
C253	87-010-248-049		CAP,E 220-10 SME	LED414	87-070-199-089		LED,SLP738F-81-S-T1
C255	87-010-494-049		CAP,E 1-50 GAS	LED415	87-070-199-089		LED,SLP738F-81-S-T1
C256	87-010-494-049		CAP,E 1-50 GAS	LED416	87-070-199-089		LED,SLP738F-81-S-T1
C351	87-010-490-049		CAP ELECT 0.1-50	LED417	87-070-199-089		LED,SLP738F-81-S-T1
C352	87-010-490-049		CAP ELECT 0.1-50	LED418	87-070-199-089		LED,SLP738F-81-S-T1
C353	87-010-408-049		CAP,E 47-50 SME	LED421	87-017-784-080		LED,SEL 1550CM TP8
C401	87-010-198-089		C-CAP,S 0.022-25 B	LED422	87-017-784-080		LED,SEL 1550CM TP8
C508	87-010-060-049		CAP,E 100-16 7L	LED423	87-017-784-080		LED,SEL 1550CM TP8
C601	87-010-405-049		CAP,E 10-50 SME	LED424	87-017-784-080		LED,SEL 1550CM TP8
C602	87-010-248-049		CAP,E 220-10 SME	LED425	87-017-784-080		LED,SEL 1550CM TP8
C603	87-010-196-089		C-CAP,S 0.1-25 F	LED426	87-017-784-080		LED,SEL 1550CM TP8
C604	87-010-186-089		C-CAP,S 4700P-50 B	LED431	87-070-278-019		LED,SLZ-738A-24-S
C605	87-010-545-049		CAP,E 0.22-50 SME	LED432	87-070-278-019		LED,SLZ-738A-24-S
C606	87-010-321-089		C-CAP,S 82P-50 CH	LED433	87-070-278-019		LED,SLZ-738A-24-S
C607	87-010-196-089		C-CAP,S 0.1-25 F	LED434	87-070-278-019		LED,SLZ-738A-24-S
C608	87-010-196-089		C-CAP,S 0.1-25 F	LED435	87-070-290-019		LED,SLZ 936-30-S
C609	87-010-177-089		C-CAP,S 820P-50 SL	LED436	87-070-290-019		LED,SLZ 936-30-S
C651	87-010-494-049		CAP,E 1-50 GAS	S301	87-036-397-089		SW,TACT SKQNAB
C652	87-010-196-089		C-CAP,S 0.1-25 F	S302	87-036-397-089		SW,TACT SKQNAB
C653	87-010-491-049		CAP,E 0.22-50 GAS	S303	87-036-397-089		SW,TACT SKQNAB
C654	87-010-196-089		C-CAP,S 0.1-25 F	S304	87-036-397-089		SW,TACT SKQNAB
C701	87-010-598-089		C-CAP,S0.068-16 R K	S305	87-036-397-089		SW,TACT SKQNAB
C702	87-010-598-089		C-CAP,S0.068-16 R K	S306	87-036-397-089		SW,TACT SKQNAB
C703	87-010-598-089		C-CAP,S0.068-16 R K	S307	87-036-397-089		SW,TACT SKQNAB
C704	87-010-598-089		C-CAP,S0.068-16 R K	S313	87-036-397-089		SW,TACT SKQNAB
C705	87-016-081-089		C-CAP,S 0.1-16 RK	S314	87-036-397-089		SW,TACT SKQNAB
C706	87-010-260-049		CAP,E 47-25 SME	S315	87-036-397-089		SW,TACT SKQNAB
C707	87-010-182-089		C-CAP,S 2200P-50 B	S316	87-036-397-089		SW,TACT SKQNAB
C708	87-010-182-089		C-CAP,S 2200P-50 B	S317	87-036-397-089		SW,TACT SKQNAB
C709	87-010-491-049		CAP,E 0.22-50 GAS	S318	87-036-397-089		SW,TACT SKQNAB
C710	87-010-491-049		CAP,E 0.22-50 GAS	S320	87-036-397-089		SW,TACT SKQNAB
C711	87-010-494-049		CAP,E 1-50 GAS	S321	87-036-397-089		SW,TACT SKQNAB
C712	87-010-494-049		CAP,E 1-50 GAS	S322	87-036-397-089		SW,TACT SKQNAB
C713	87-010-260-049		CAP,E 47-25 SME	S323	87-036-397-089		SW,TACT SKQNAB
C714	87-010-405-049		CAP,E 10-50 SME	S324	87-036-397-089		SW,TACT SKQNAB
C715	87-010-260-049		CAP,E 47-25 SME	S325	87-036-397-089		SW,TACT SKQNAB
C801	87-010-494-049		CAP,E 1-50 GAS	S326	87-036-397-089		SW,TACT SKQNAB
C802	87-010-494-049		CAP,E 1-50 GAS	S327	87-036-397-089		SW,TACT SKQNAB
C805	87-010-248-049		CAP,E 220-10 SME	S328	87-036-397-089		SW,TACT SKQNAB
C806	87-010-494-049		CAP,E 1-50 GAS	S329	87-036-397-089		SW,TACT SKQNAB
C807	87-010-494-049		CAP,E 1-50 GAS	S330	87-036-397-089		SW,TACT SKQNAB
C808	88-700-860-819		CAP,M 0.068-50 J	VR601	81-MX4-637-019		VR 10KA RK11K1130
C809	87-010-186-089		C-CAP,S 4700P-50 B	VR801	83-NM1-627-019		VR,10KB RK11K1130

TRANSISTOR ILLUSTRATION

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
MVR C.B			
C751	87-010-196-089		C-CAP,S 0.1-25 F
MVR701	86-NF6-650-019		VR,MOT 50KBX2RK16812



E C B



E C B



S G D

KEY C.B			
S308	87-036-397-089		SW,TACT SKQNAB
S309	87-036-397-089		SW,TACT SKQNAB
S310	87-036-397-089		SW,TACT SKQNAB
S311	87-036-397-089		SW,TACT SKQNAB
S312	87-036-397-089		SW,TACT SKQNAB

2SA1296
2SC3266
2SC2878
KTA1266
KTC3198

DTA114YS
DTA114ES
DTA144ES
DTA143ES
DTC144ES
2SA933S

2SK246

AC C.B			
R111	87-022-449-089		RES,NF 0.47-1/2WJ
R112	87-022-449-089		RES,NF 0.47-1/2WJ

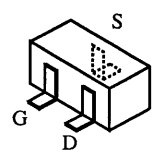
PT C.B			
△ F101	82-304-743-019		TERMINAL,1P
△ F101	87-035-366-019		FUSE,2.5A 250V T E<HE>
△ F101	87-035-367-019		FUSE,3.15A 250V T E<LH>
△ FC101	87-033-213-089		CLAMP FUSE SMK
△ FC102	87-033-213-089		CLAMP FUSE SMK
△ PT101	86-NF6-631-019		PT,6NF-6 H<LH>
△ PT101	86-NF6-633-019		PT,6NF-6 HR<HE>
△ SW101	87-036-387-019		SW,SL 1-2-3



E C B



E C B



2SA952
2SD655

2SC3331

2SK543
2SK360

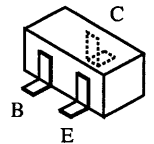
DECK C.B			
SFR1	87-024-581-089		SFR,3.3K DIA 6H
SOL1	82-ZM1-618-310		SOL ASSY,27
SOL2	82-ZM1-626-310		SOL ASSY,27K
SW1	87-036-378-019		SW,PUSH 1-1-1 SH2
SW2	87-036-378-019		SW,PUSH 1-1-1 SH2
SW3	87-036-378-019		SW,PUSH 1-1-1 SH2
SW4	87-036-378-019		SW,PUSH 1-1-1 SH2
SW5	87-036-378-019		SW,PUSH 1-1-1 SH2
SW6	87-036-378-019		SW,PUSH 1-1-1 SH2
SW8	87-036-378-019		SW,PUSH 1-1-1 SH2



B C E



D G S



HEAD-1 C.B

2SB1370

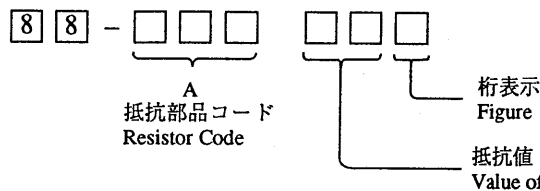
DTA124ES

2SA1162
2SC2712
2SC2714

HEAD-2 C.B

○ 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



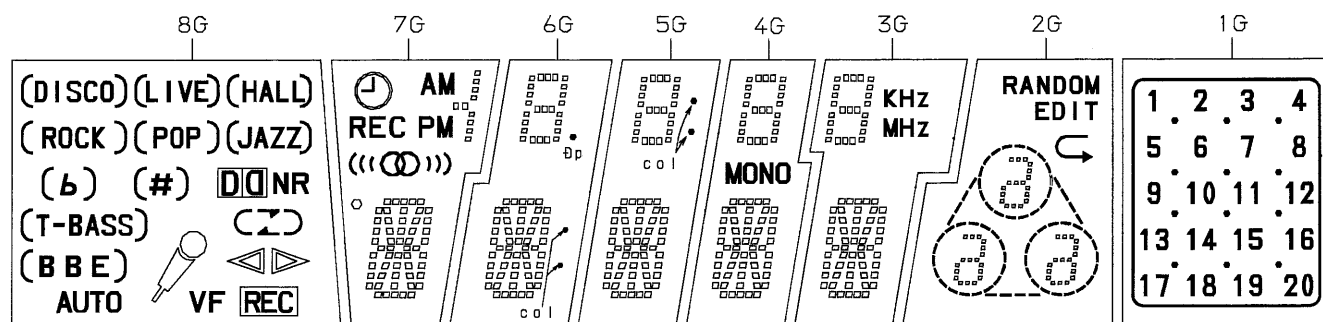
チップ抵抗
Chip resistor

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

FL GRID ASSIGNMENT & ANODE CONNECTION

FL, 8-ST-18GK

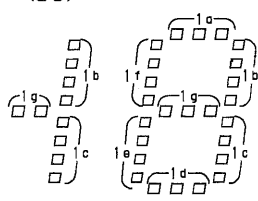
GRID ASSIGNMENT



S21
DISCO LIVE HALL

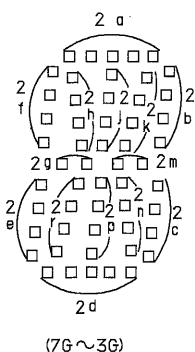
S20
ROCK POP JAZZ
T-BASS

(8G)

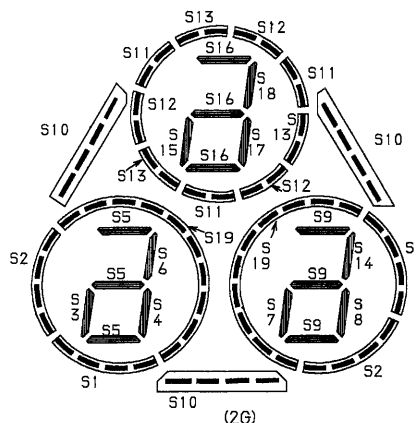


(7G)

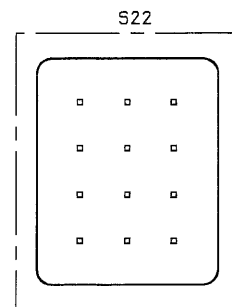
(6G ~ 3G)



(7G ~ 3G)



(2G)



(1G)

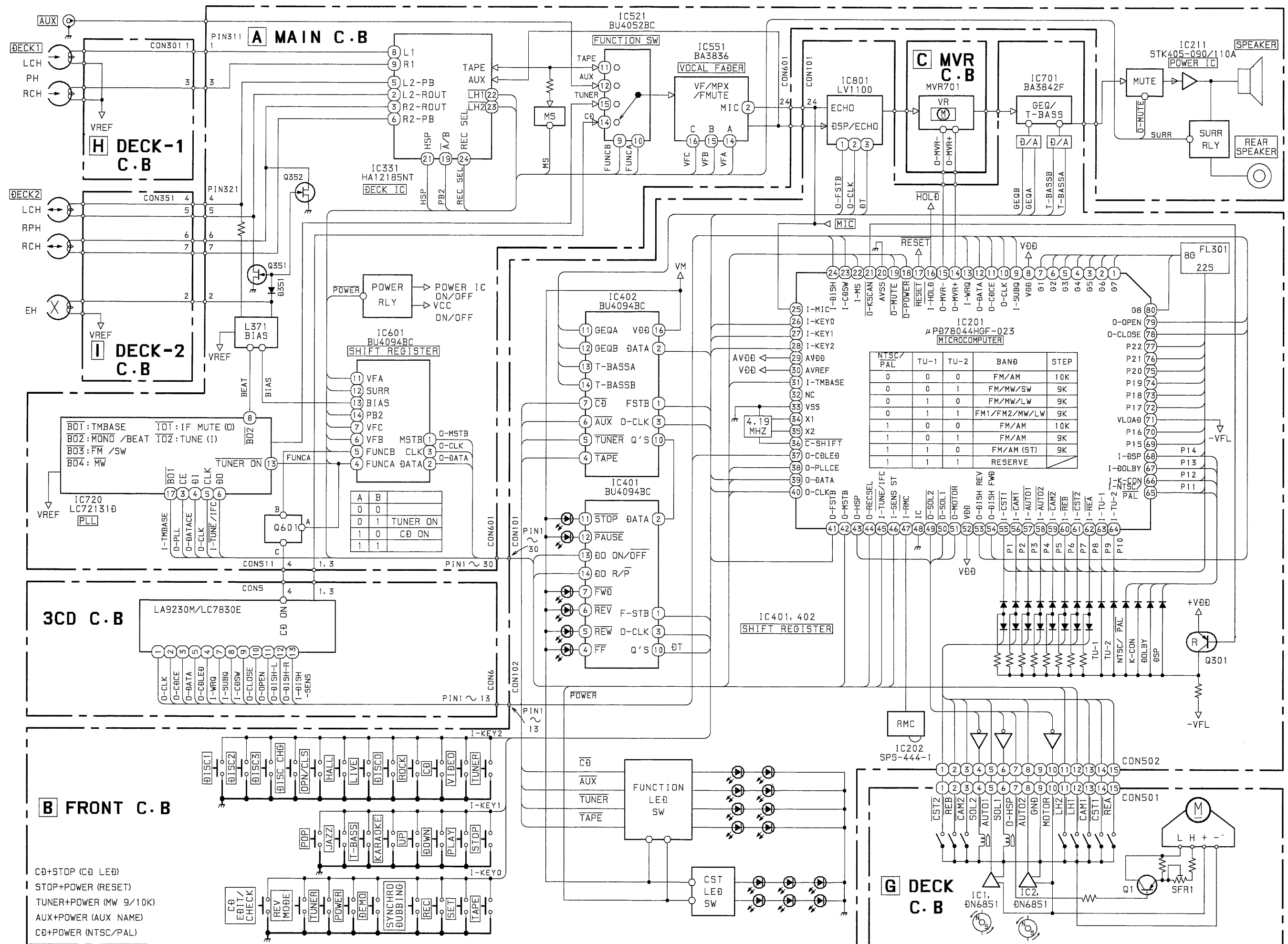
8-BT-187GK
GRID ASSIGNMENT

85-NFH-609-010

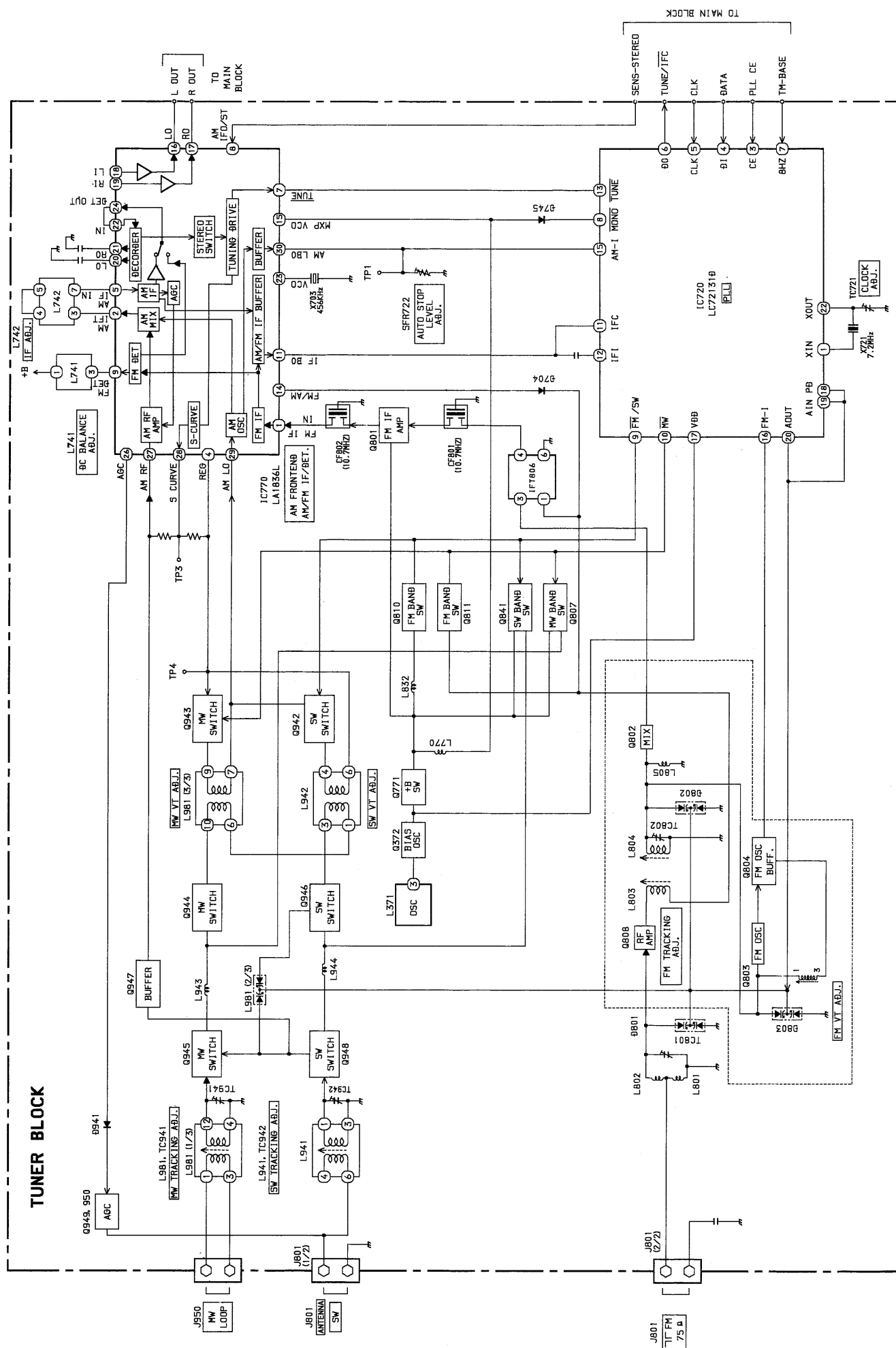
ANODE CONNECTION

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

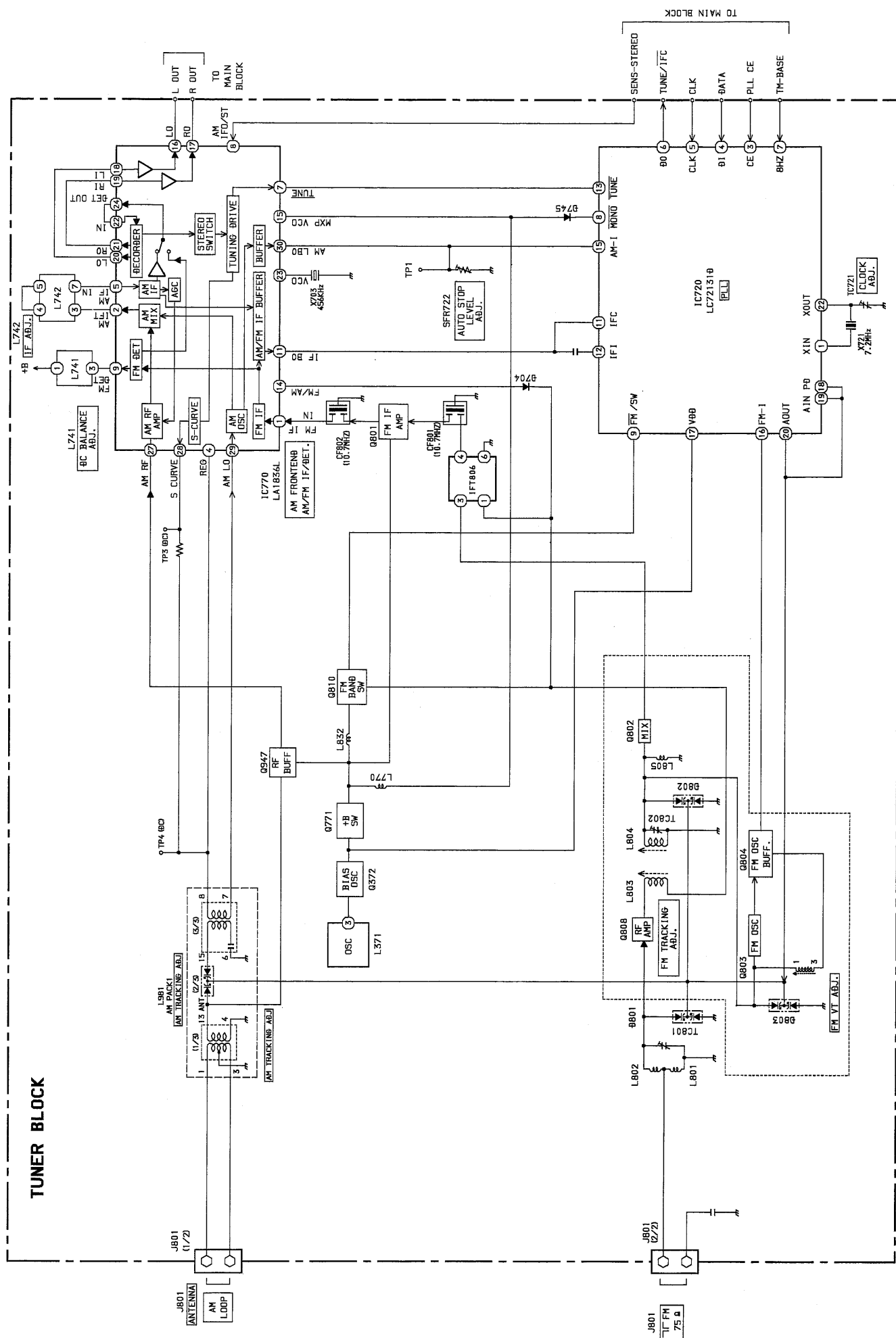
BLOCK DIAGRAM-1 (MAIN / FRONT)

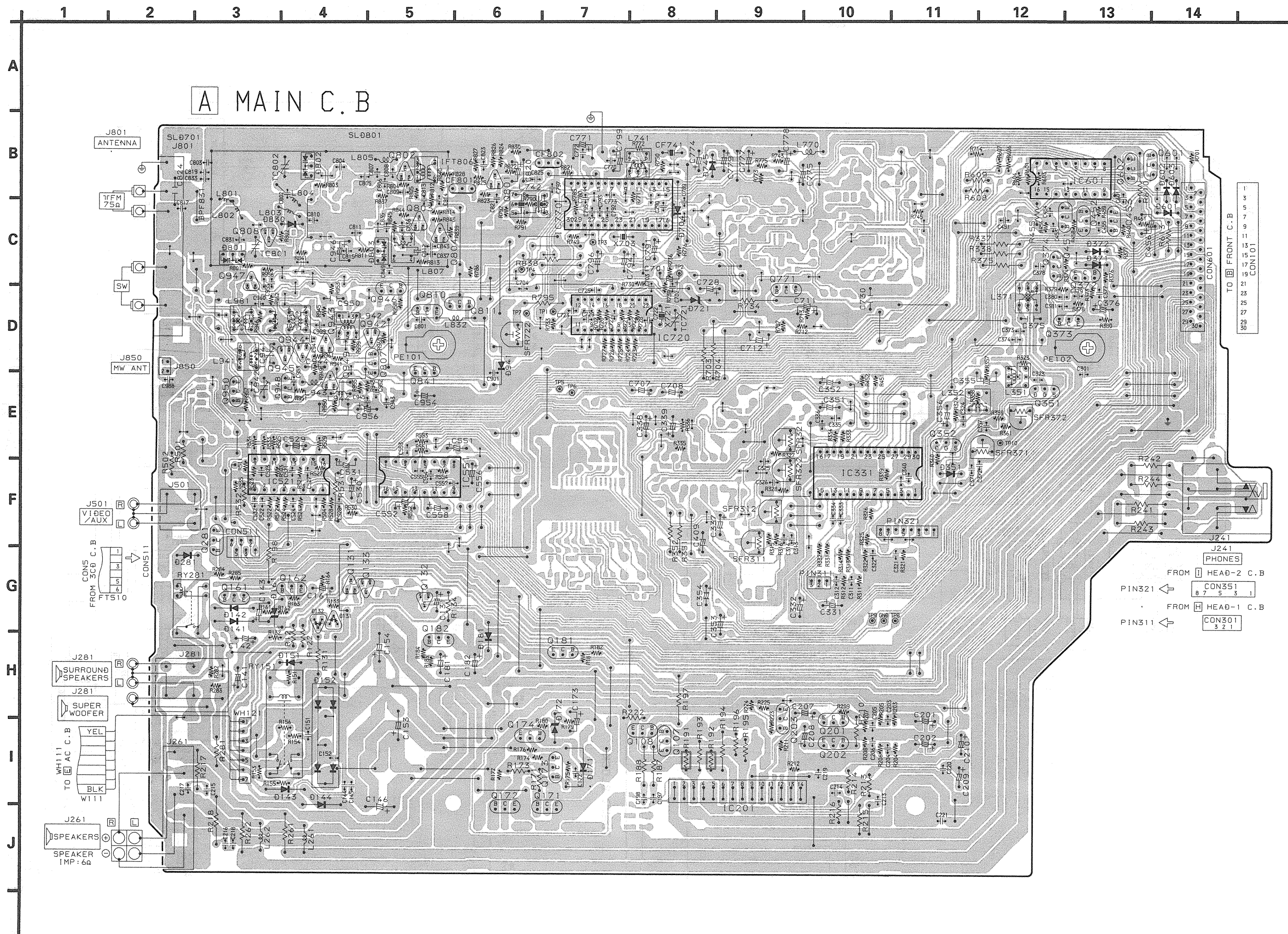


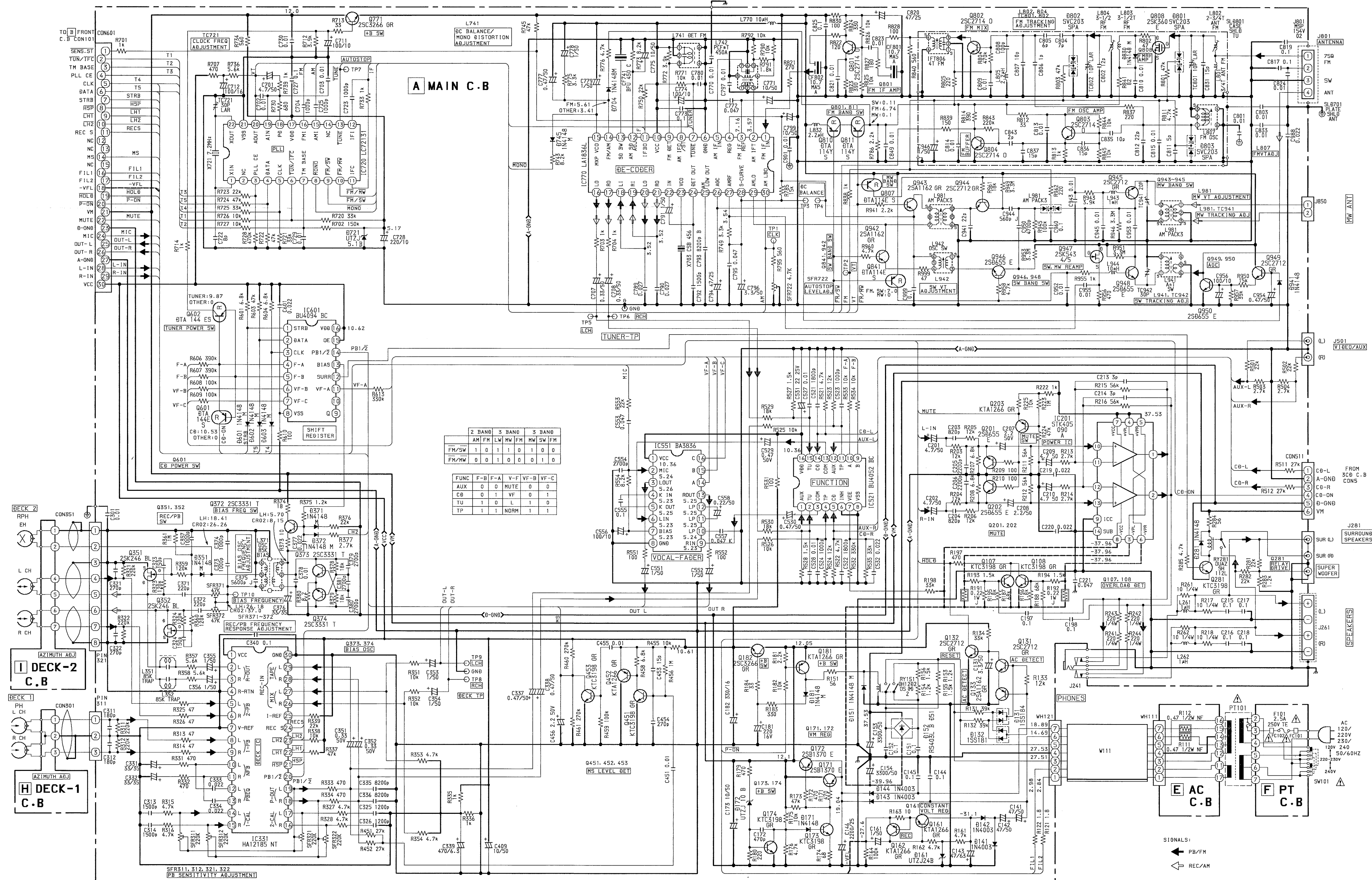
BLOCK DIAGRAM-2 (TUNER : HE)



BLOCK DIAGRAM-3 (TUNER : LH)

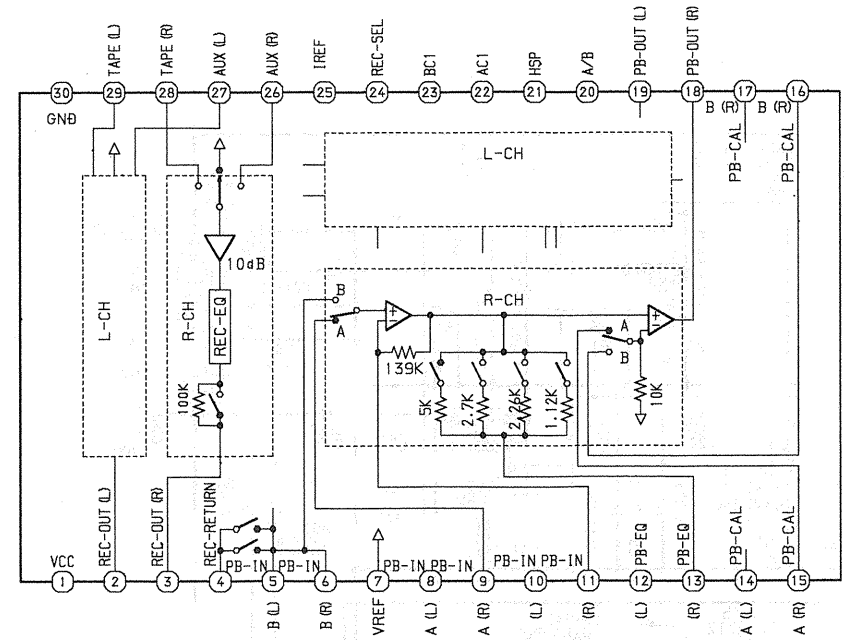




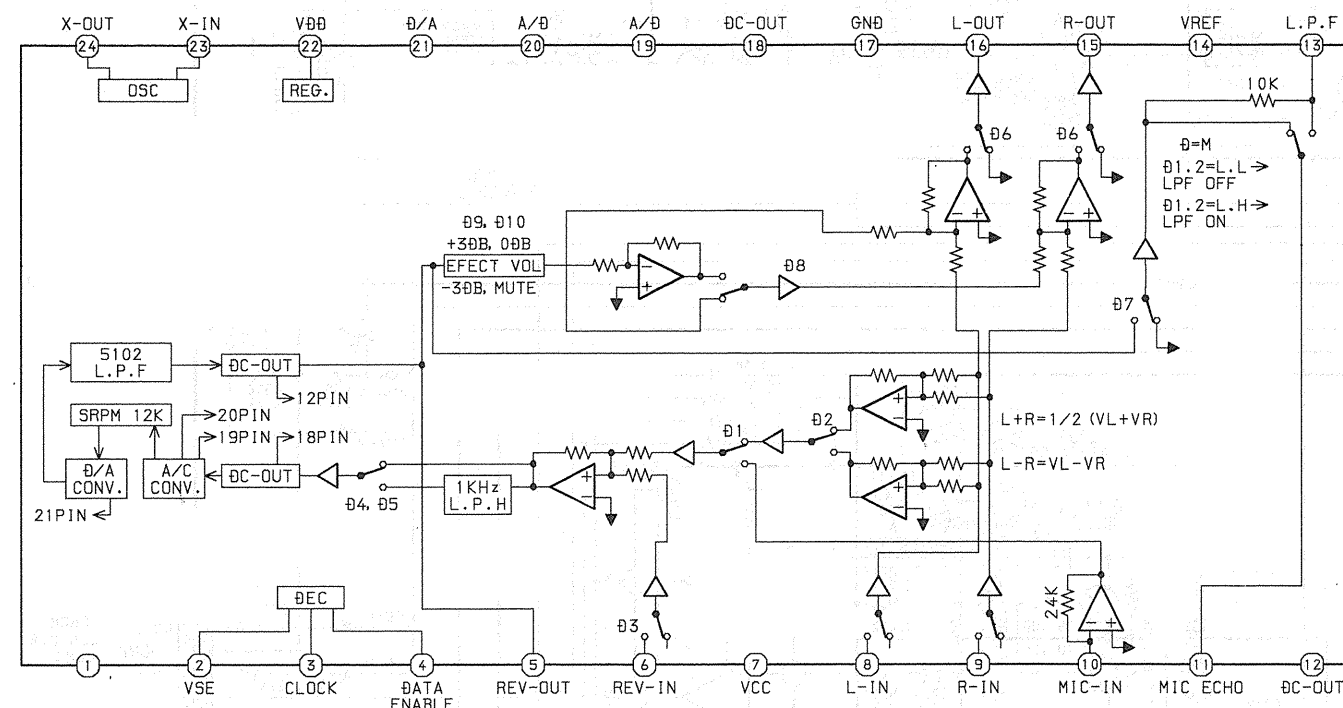


IC BLOCK DIAGRAM-1

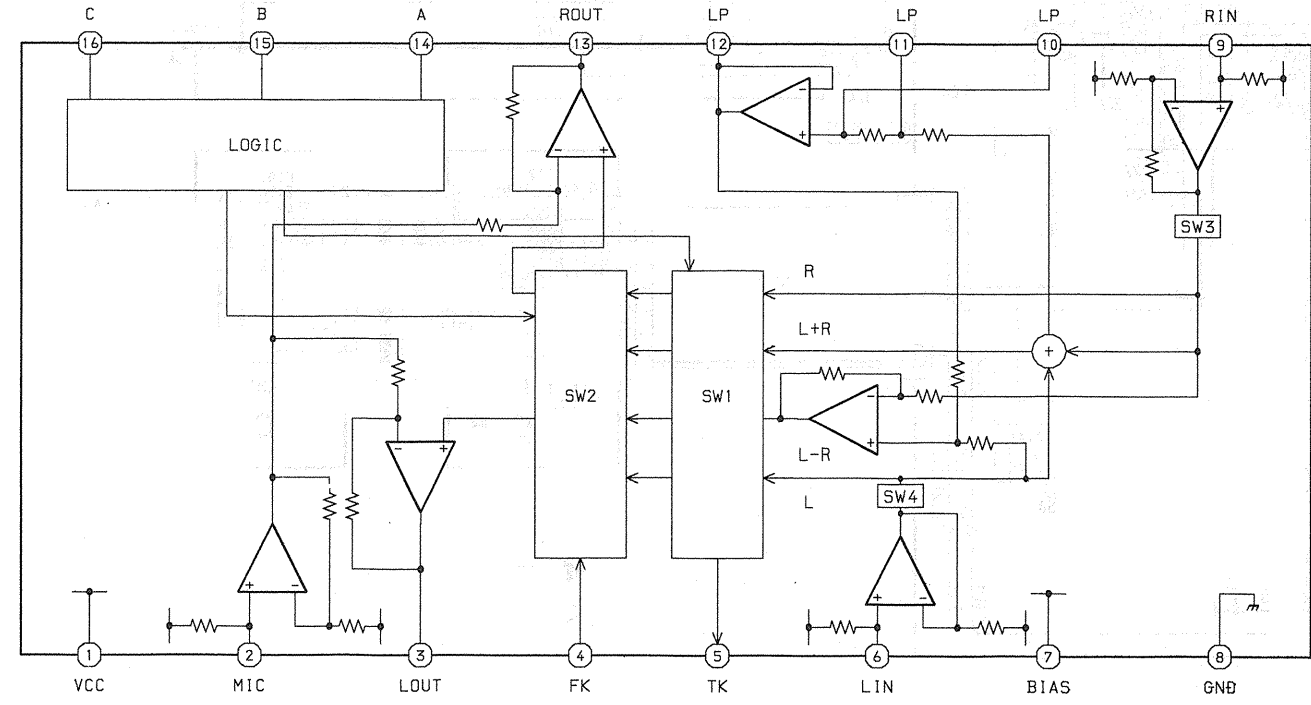
IC, HA12185NT



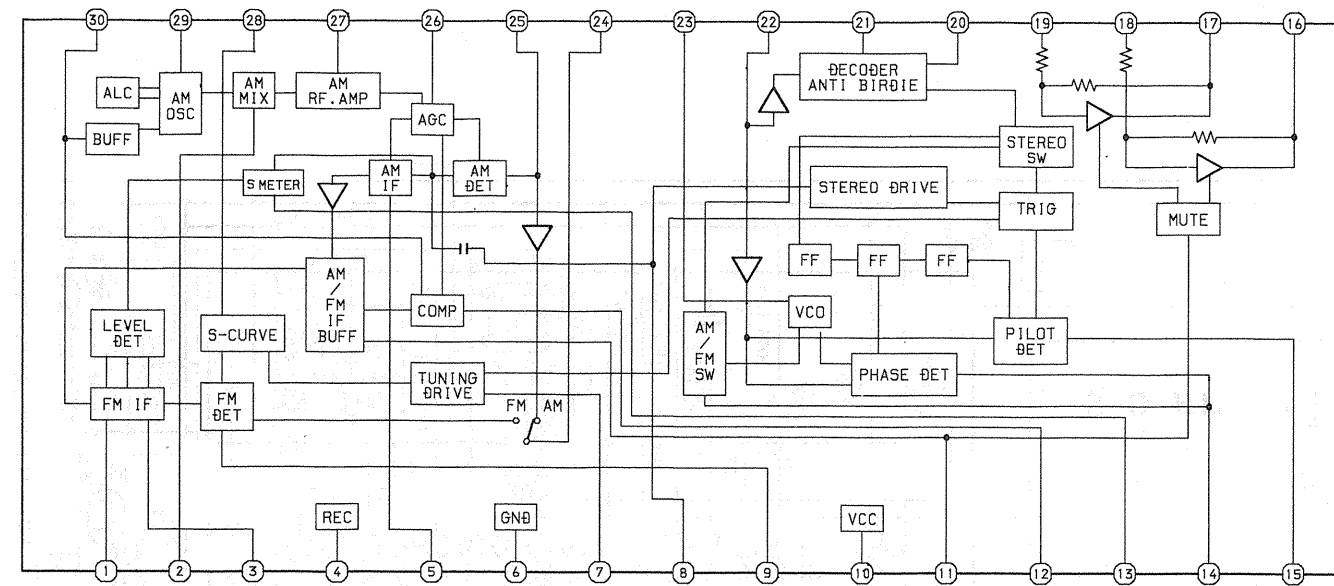
IC, LV1100



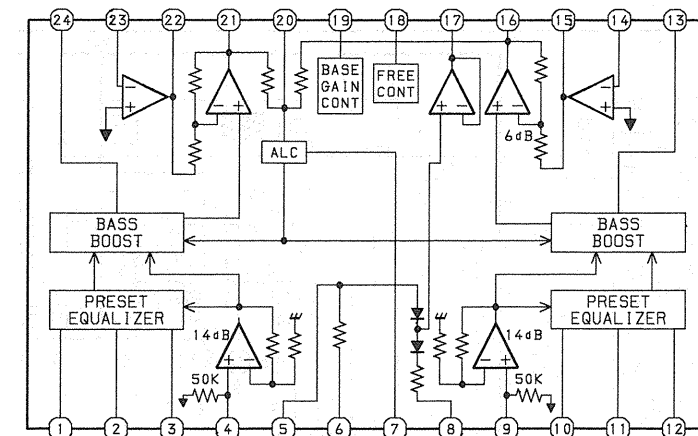
IC, BA3836



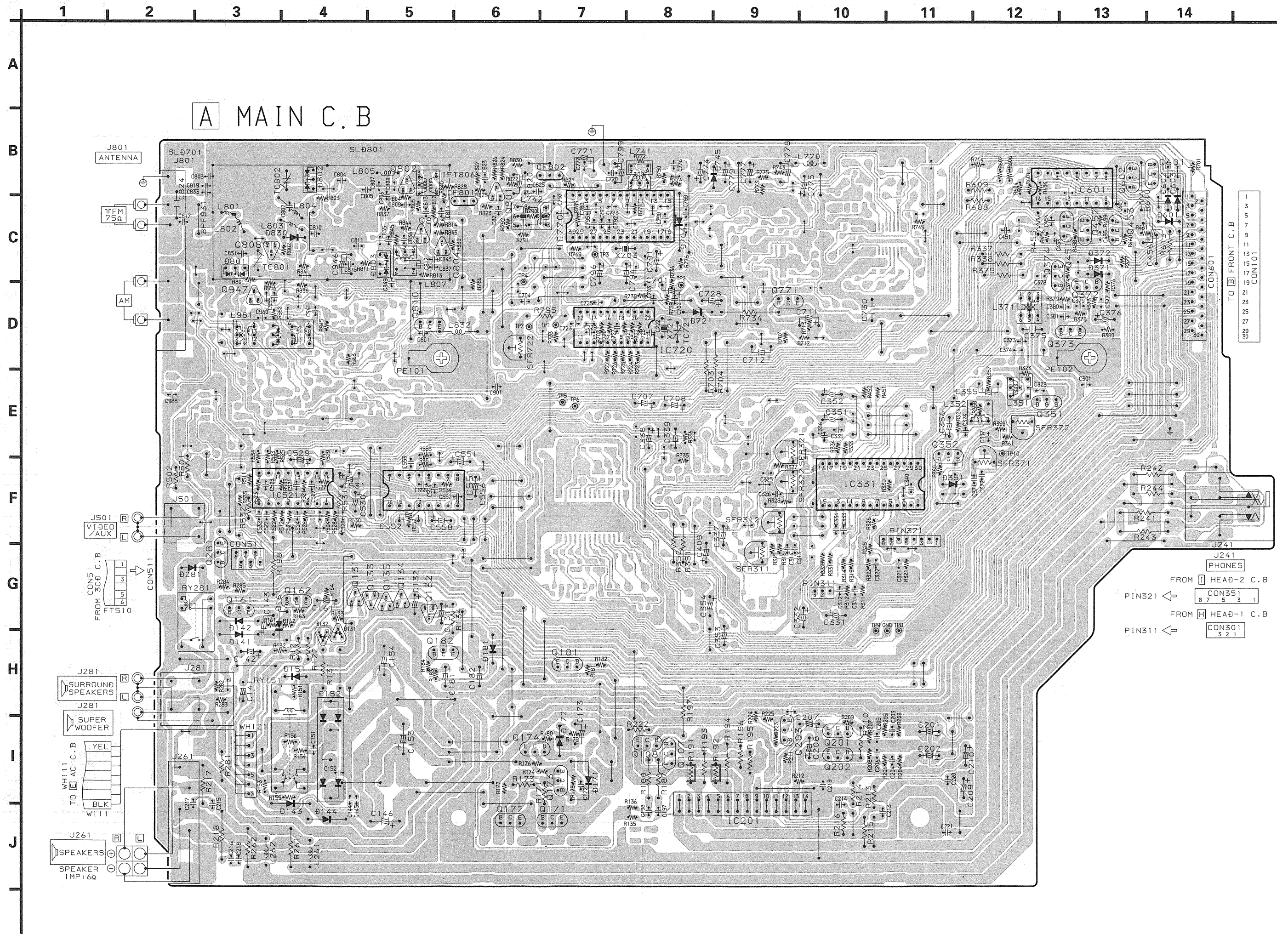
IC, LA1836L

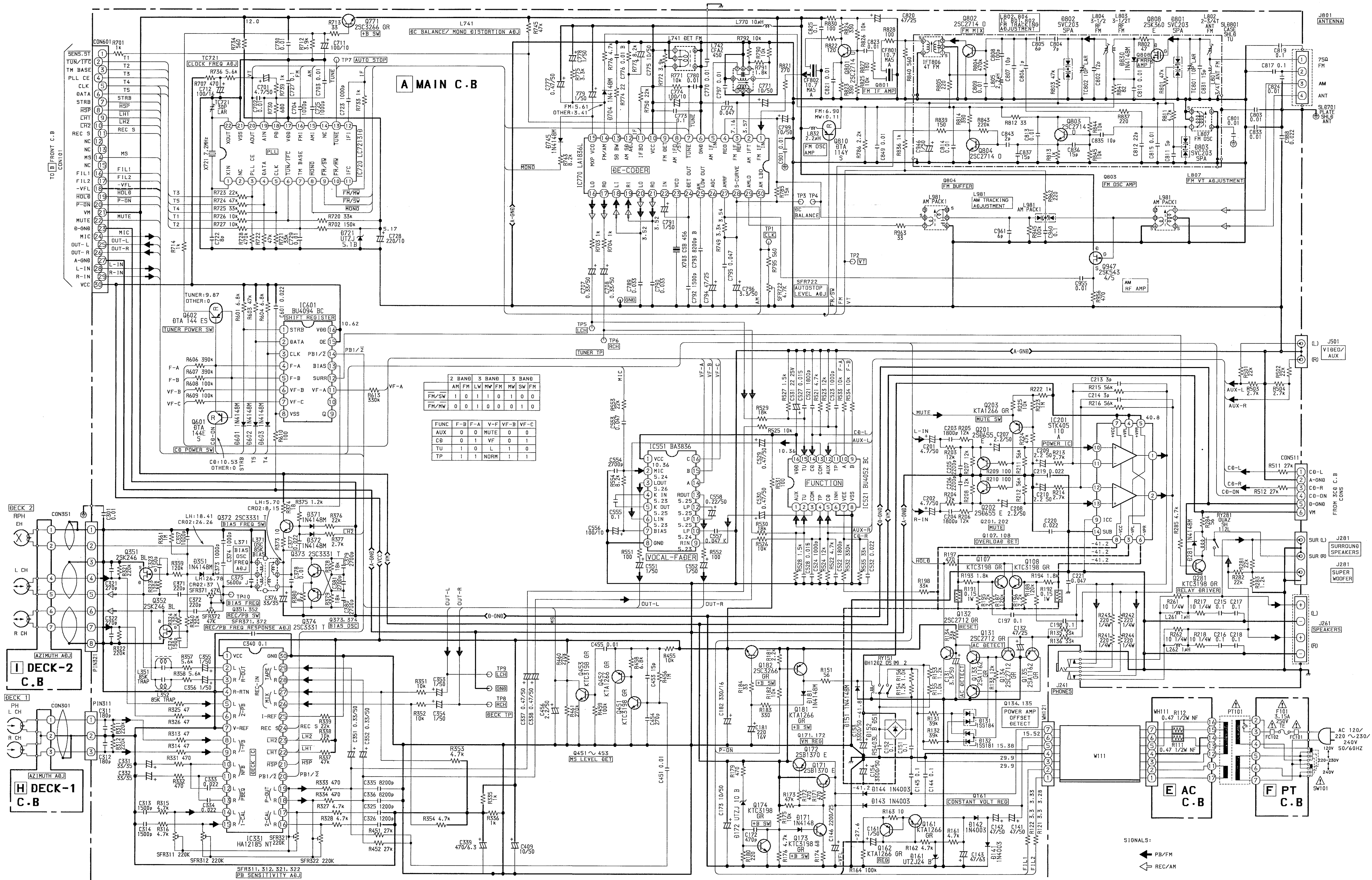


IC, BA3842F

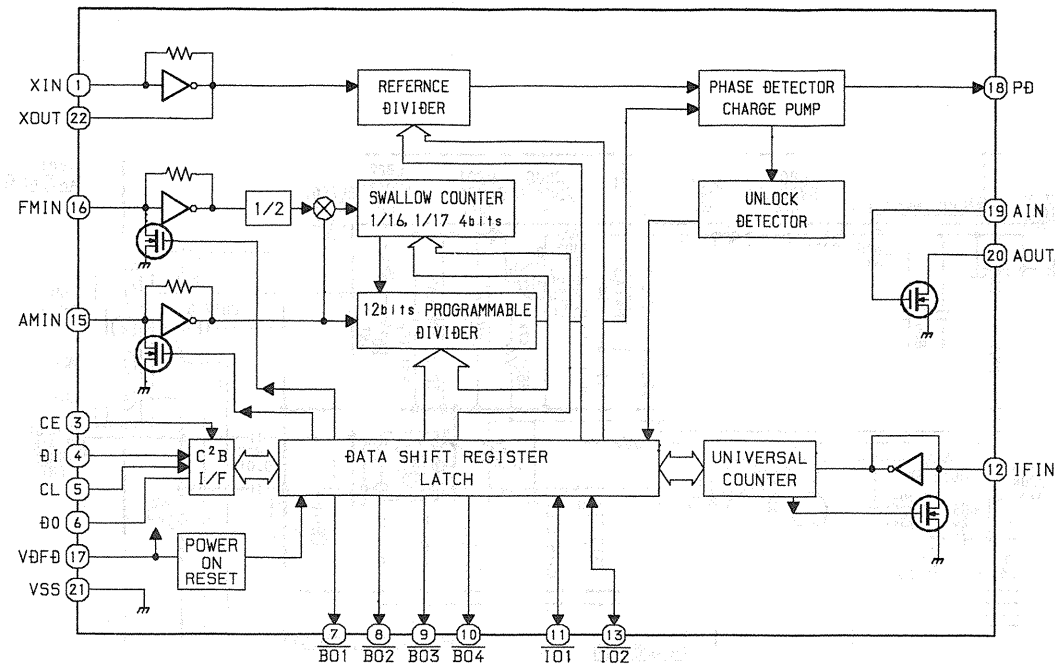


WIRING-2 (MAIN : LH)

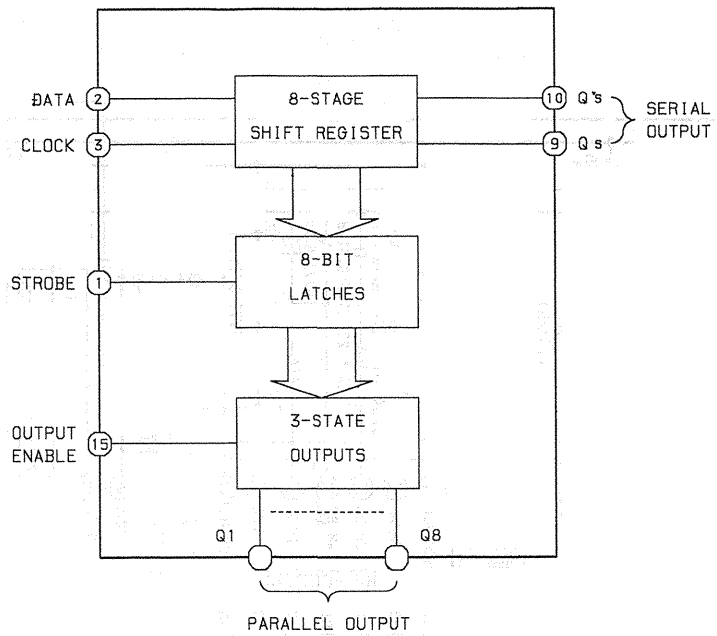




IC, LC72131D



IC, BU4094BC

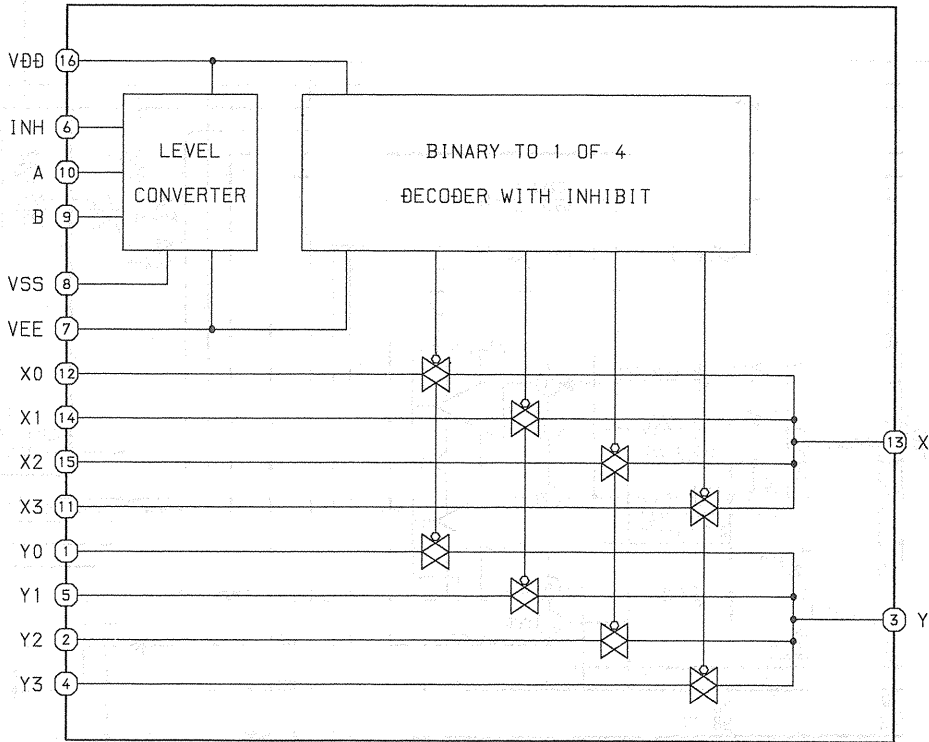


TRUTH TABLE

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

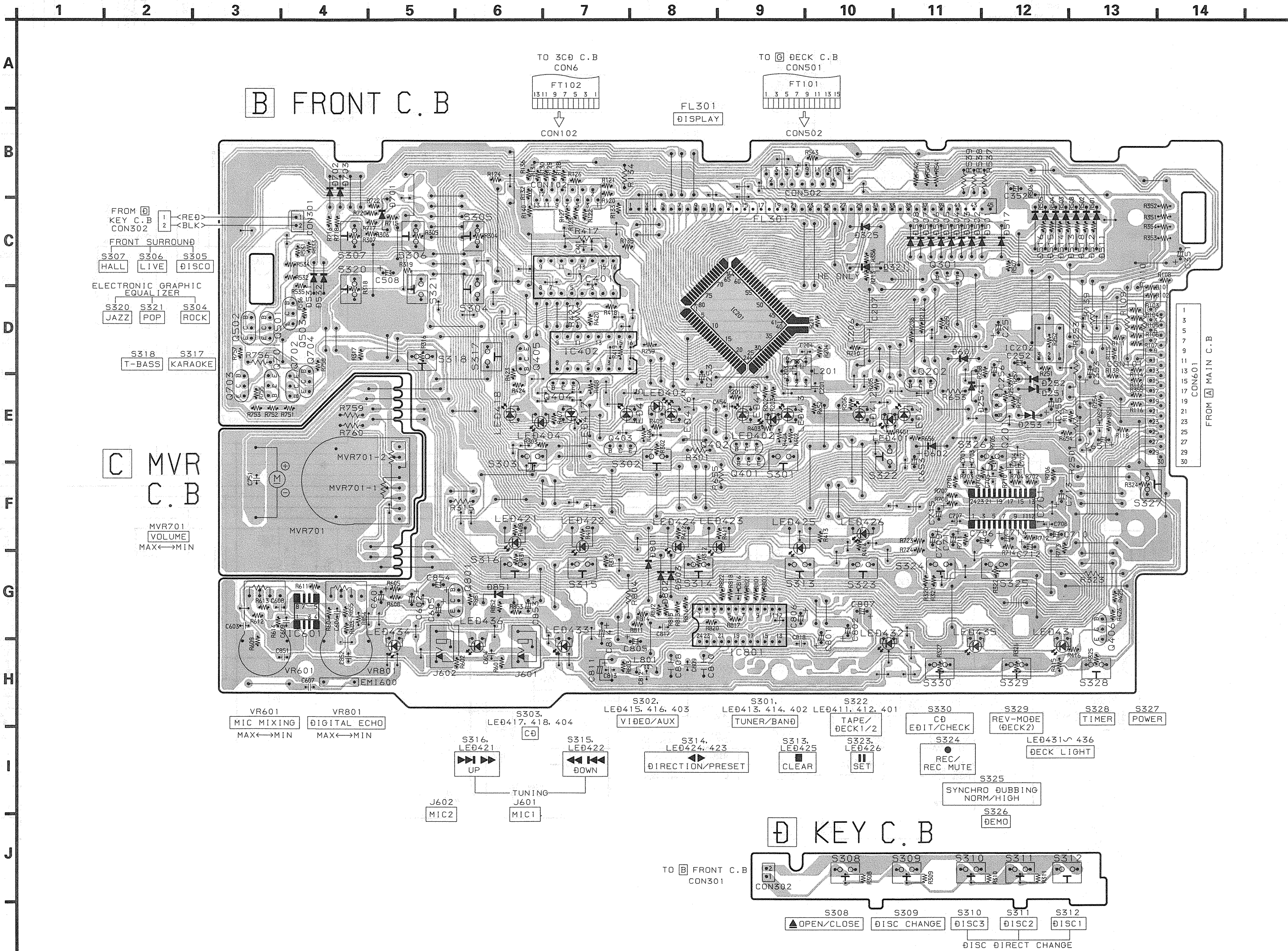


TRUTH TABLE

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

X:DON'T CARE.

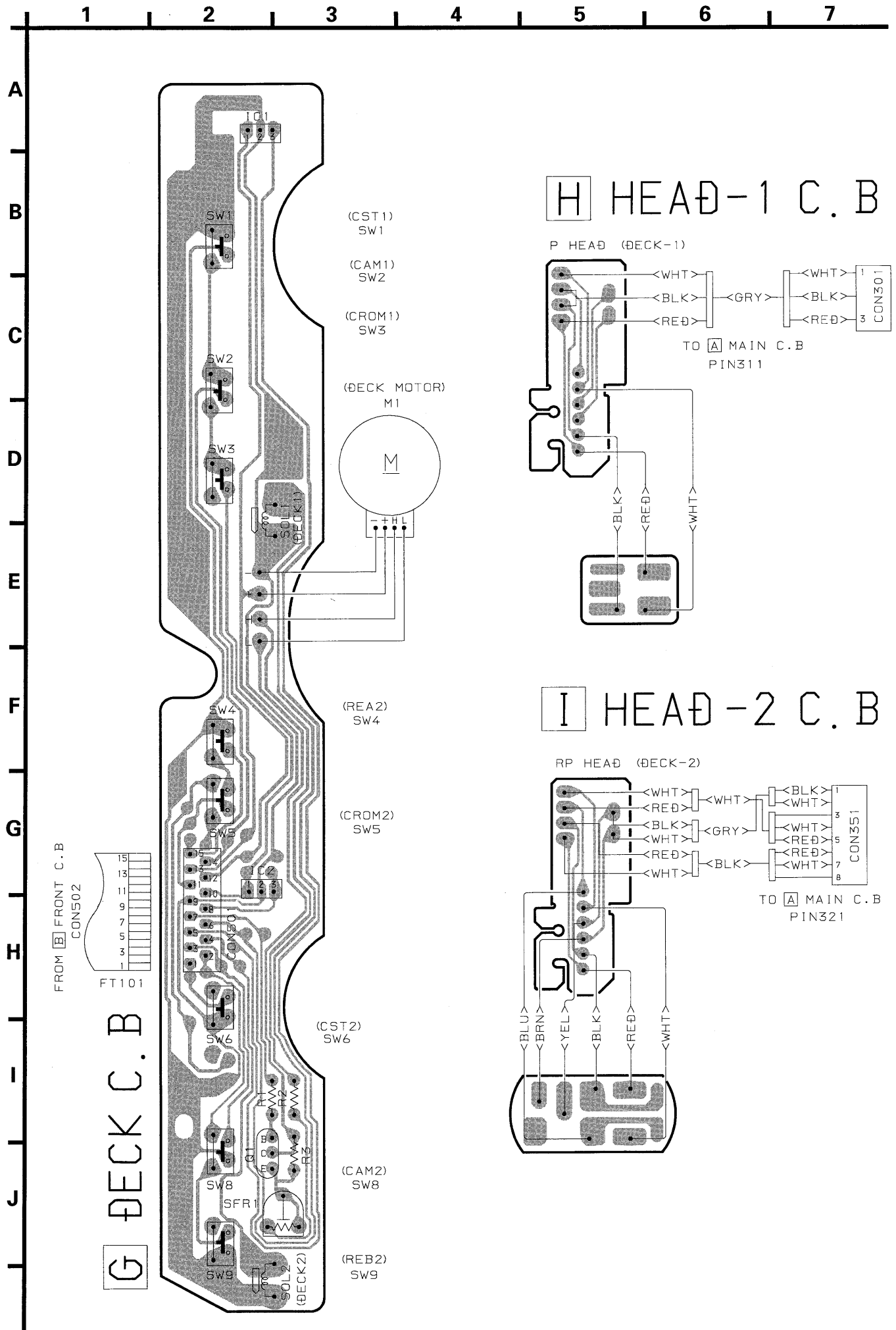
WIRING-3 (FRONT)



FROM **A** MAIN C.B.



WIRING-4 (DECK)



1 2 3 4 5 6 7

A

B

C

D

E

F

G

H

I

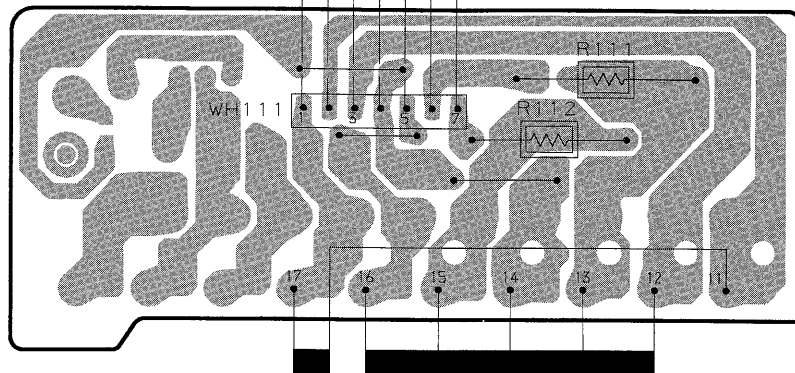
J

E AC C.B

(HE SERIES)

WH121
FROM **A** MAIN C.B

YEL W111 BLK

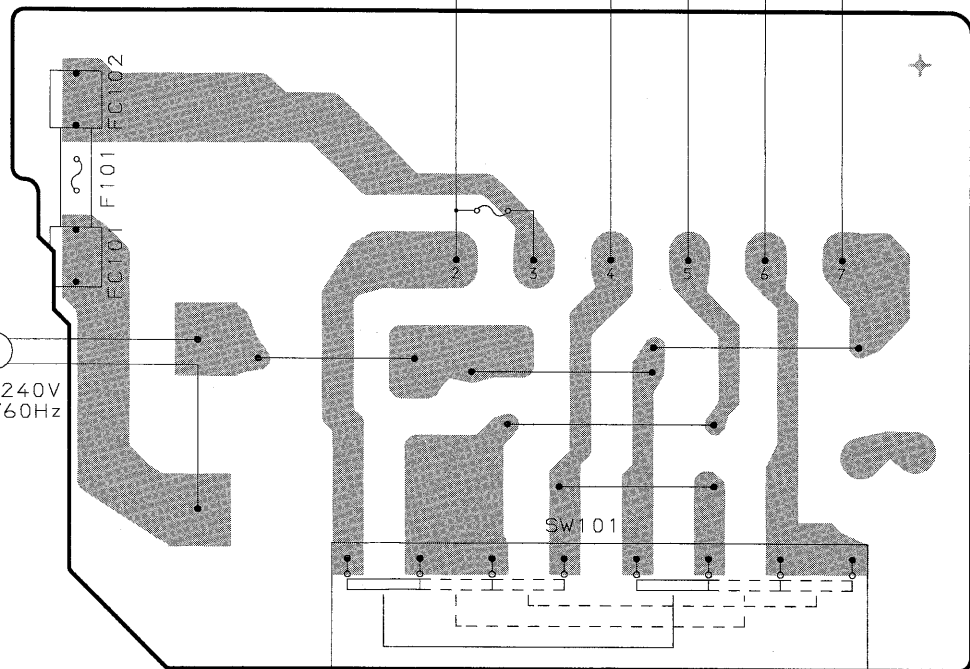


F PT C.B

(HE SERIES)

PT101

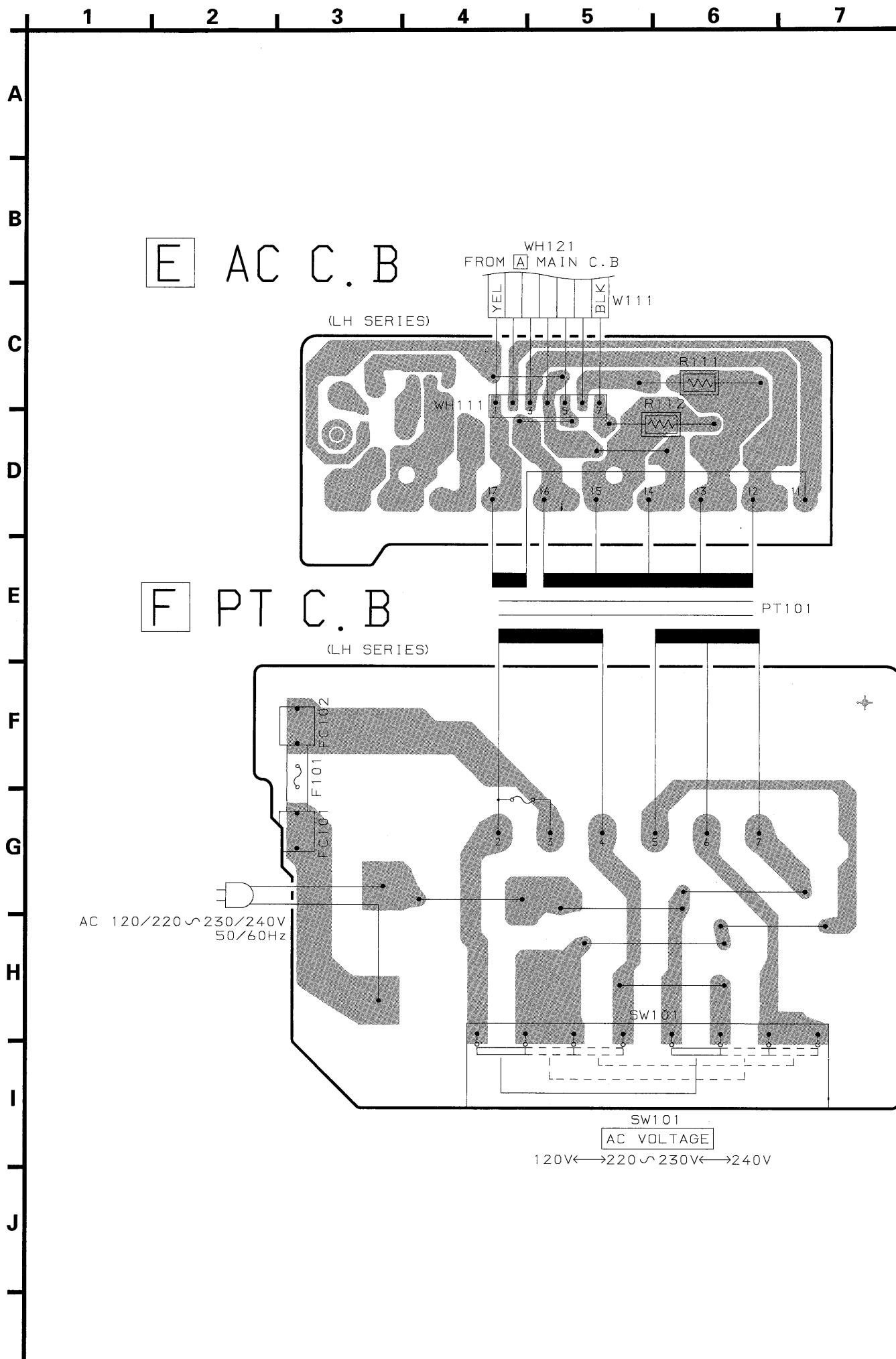
AC 120/220~230/240V
50/60Hz



SW101

AC VOLTAGE

120V~220~230V~240V



IC DESCRIPTION

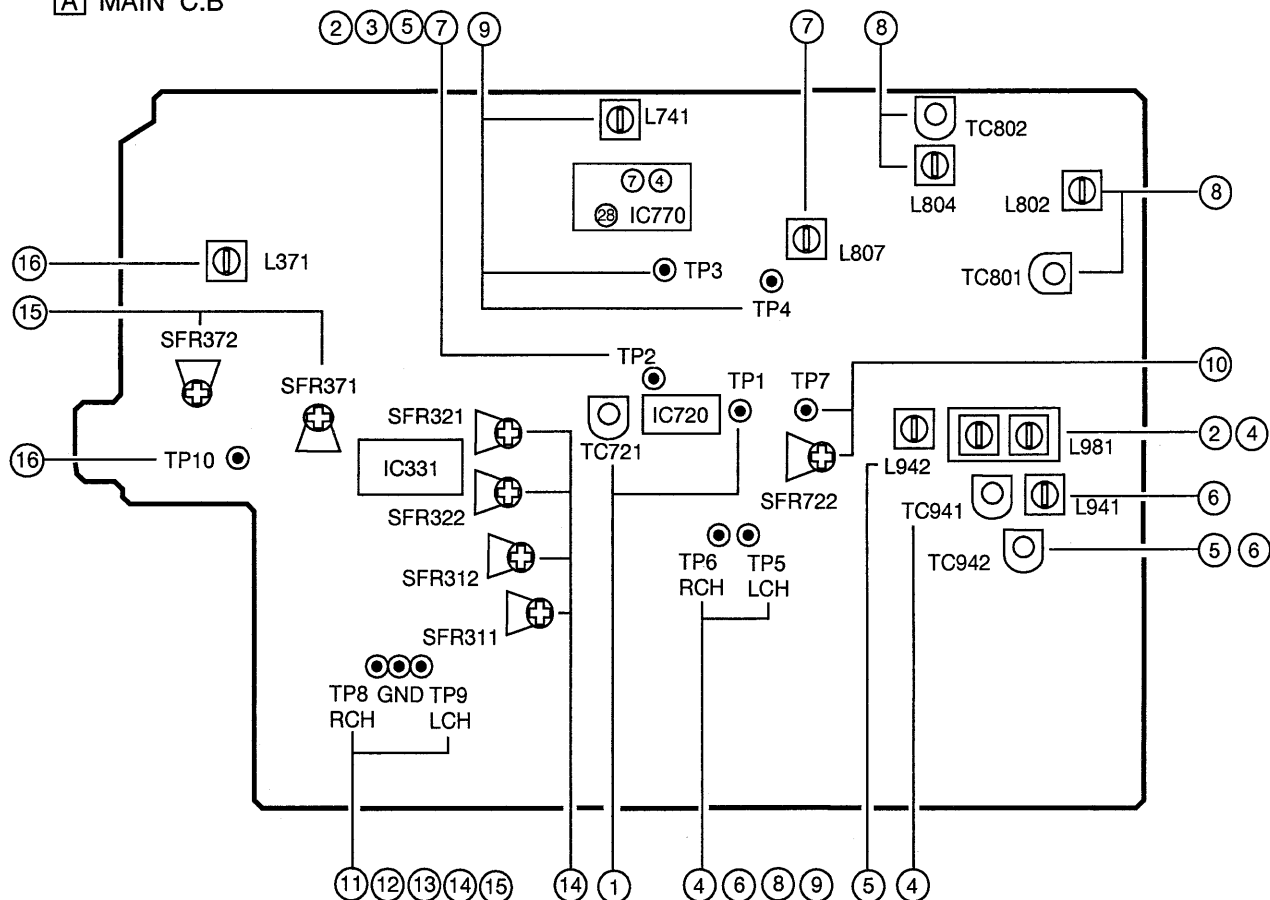
IC, μ PD78044HGF-023

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+	I/O	Motor volume up output.			
15	O-MVR-	I/O	Motor volume down output.			
16	I-HOLD	I/O	Power failure detected input. (Low when Hold)			
17	RESET	I	System reset input.			
18	O-POWER	I/O	System power supply ON/OFF output.			
19	O-MUTE	I/O	System mute ON/OFF output.			
20	AVSS	-	GND.			
21	O-KSCAN	I/O	Segment input permitted output. (Active low)			
22	I-MS	I/O	DECK MS detected A/D input.			
23	I-CD SW	I/O	CD Mechanical switch AD input.			
24	I-DISH	I/O	CD turntable photo sensor A/D input.			
25	I-MIC	I/O	Mic level A/D input for auto vocal fader.			
26	I-KEY0	I/O	KEY0 A/D input.			
27	I-KEY 1	I/O	KEY1 A/D input.			
28	I-KEY 2	I/O	KEY2 A/D input.			
29	AVDD	-	Power supply terminal.			
30	AVREF	I	Reference voltage. (+5V)			
31	I-TMBASE	I	Input a reference clock signal (8Hz) to the clock.			
32	NC	-	-			
33	VSS	-	GND.			
34	X1	I	4.19MHz clock oscillator input.			
35	X2	-	4.19MHz clock oscillator input.			
36	O-C-SHIFT	I/O	Micro clock shift output. LC oscillator, "L" clock shift.		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	I/O	CD flash window LED ON/OFF output.			
38	O-PLL-CE	I/O	PLL IC chip enable output.			
39	O-DATA	I/O	Main and front PLL shift register data output.			

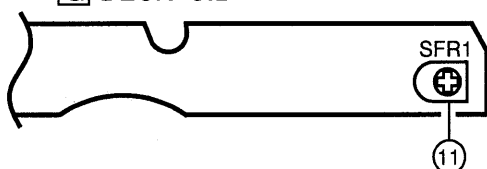
Pin No.	Pin Name	I/O	Description								
40	O-CLK	I/O	Main and front PLL shift register clock output.								
41	O-FSTB	I/O	Front shift register data latch strobe output.								
42	O-MSTB	I/O	Main shift register data latch strobe output.								
43	O-HSP	I/O	Deck motor high speed ON/OFF output.								
44	O-REC SEL	I/O	Deck recording input switch.(HiZ-RMT, H-MIX, L-TAPE) <table border="1"> <tr> <td>"HiZ" (MUTE)</td><td>"H" (MIX)</td><td>"L" (TAPE)</td><td>Dolby On : "L"(TAPE) Dolby Off : "H" (MIX)</td></tr> <tr> <td>REC muting</td><td>Manual dubbing</td><td>Synchronize dubbing</td><td>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/O	SD detected input or serial data input of IF count to and from Tuner.								
46	I-SENS ST	I/O	Stereo detected input to and from Tuner. (Active low)								
47	I-RMC	I/O	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)								

ELECTRICAL ADJUSTMENT <TUNER / DECK>

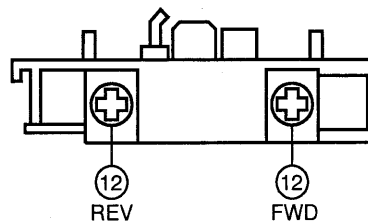
A MAIN C.B



G DECK C.B



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 and adjust TC721 so that the test point becomes 2160kHz $\pm$ 0.01kHz.

2. MW VT Adjustment <HE>

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 <LH>

Settings : • Test point : TP2 (VT)

Method : Set to MW 1710kHz and check that the test point is 7.0V $\pm$ 1.0V.

4. MW Tracking Adjustment

<HE>

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.

<LH>

Settings : • Test point : TP-5, TP-6

• Adjustment location :

L981 1000kHz

Method : Set to MW 1000kHz and adjust L981 so that the test point becomes maximum.

< DECK SECTION >

5. SW VT Adjustment <HE>

Settings : • Test point : TP2 (VT)

• Adjustment location : L942

Method : Set to SW 17.9MHz and adjust L942 so that the test point becomes $7.0V \pm 0.05V$.

6. SW Tracking Adjustment <HE>

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 5.95MHz is adjusted to MAX by L941. Then the level at 17.9MHz is adjusted to MAX by TC942.

7. FM VT Adjustment

Settings : • Test point : TP2 (VT)

• Adjustment location : L807

Method : Set to FM 87.5MHz and adjust L807 so that test point is $1.7V \pm 0.05V$.

8. FM Tracking Adjustment

Settings : • Test point : TP5, TP6

• Adjustment location :

L802,L804 87.5MHz

TC801,TC802 108.0MHz

Method : • The level at 87.5MHz is adjusted by L802, L804 .
Then the level at 108.0MHz is adjusted by TC801, TC802 so that the distortion is less than 3%.

9. 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%.

10. Auto Stop Level Adjustment

Settings : • Test point : TP7

• Adjustment location : SFR722

• Input level : 20dB

Method : Set to FM 98.0 MHz and adjust voltage low (about 0.01V) by SFR722. After that voltage high (about 7.0V) by 2dB down.

11. Tape Speed Adjustment

Settings : • Test tape : TTA-100

• Test point : TP8, TP9

• Adjustment location : SFR1

Method : Play back the test tape by DECK 2 and adjust SFR1 so that the frequency counter reads 3000Hz $\pm 5Hz$.

12. Head Azimuth Adjustment

Settings : • Test tape : TTA-300

• Test point : TP8, TP9

• Adjustment location : Head azimuth
adjustment screw

Method : Play back the 10kHz signal of the test tape and adjust screw so that the output becomes maximum.
Next, perform on each FWD PLAY and REV PLAY mode.

13. PB Frequency Response Check (DECK 1, DECK 2)

Settings : • Test tape : TTA-300

• Test point : TP8, TP9

Method : Play back the 315Hz and 10kHz signals of the test tape and check that the output ratio of the 10kHz signal is with respect to that of the 315Hz signal is $\pm 2dB$.

14. 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.

15. 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.

16. 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 minimum.

PRACTICAL SERVICE FIGURE

<TUNER SECTION>

<FM SECTION>

IHF Sensitivity : (THD 3%)	6dB ± 6dB [at 87.5 / 98.0MHz] 8dB ± 6dB [at 108.0MHz]
S/N 50dB Quieting sensitivity :	31dB ± 5dB [at 87.5 / 98.0 / 108.0MHz]
Signal to noise ratio :	More than 64dB [at 98.0MHz]
Distortion :	Less than 1.2% [at 98.0MHz]
Auto stop level :	20dB ± 10dB [at 98.0MHz]
Stereo separation :	More than 25dB [at 98.0MHz]
Intermediate frequency :	10.7MHz

<AM(MW) SECTION>

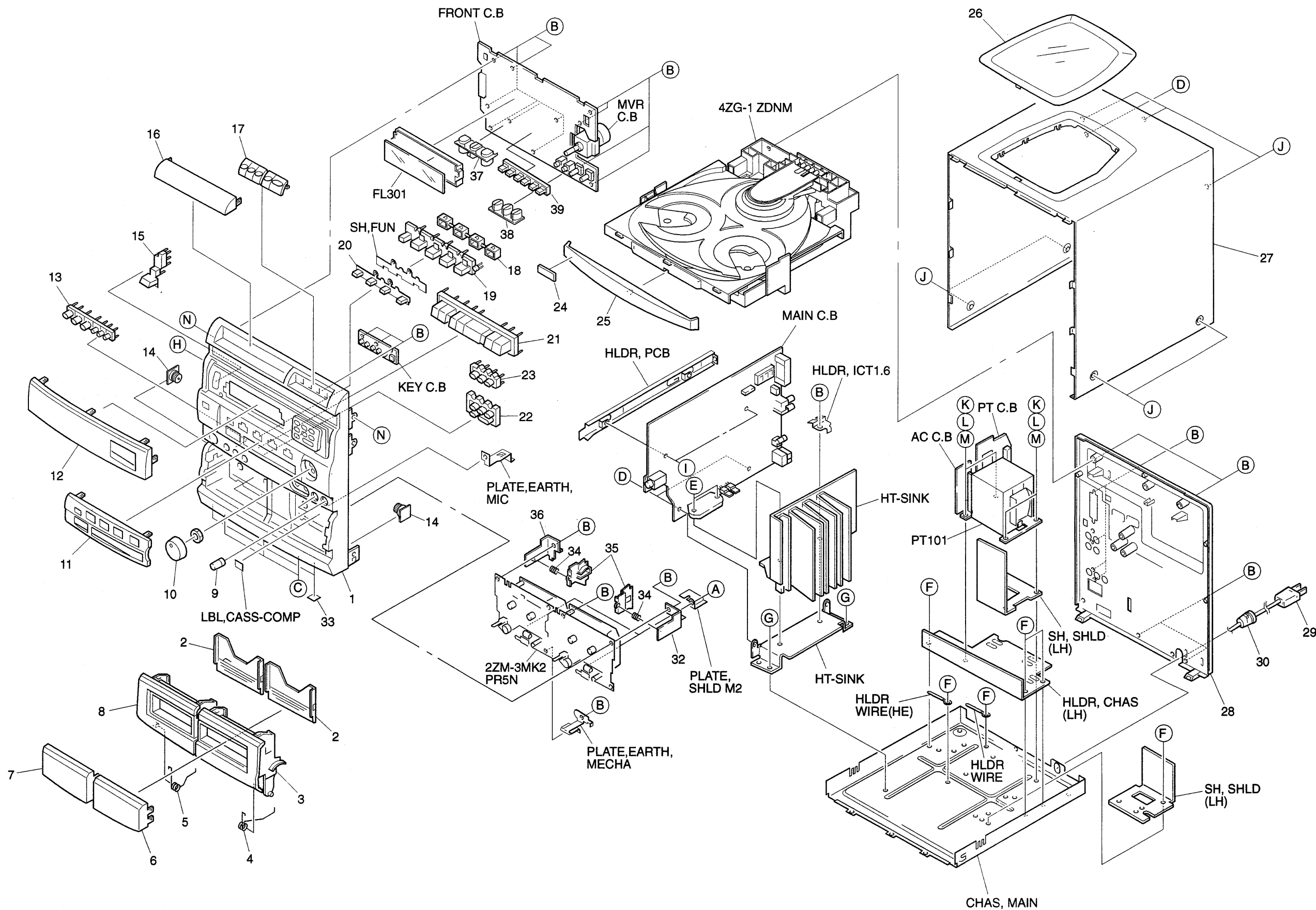
Sensitivity : (S/N 20 dB)	52 ~ 64dB [at 603kHz (HE)] [at 600kHz (LH)] 50 ~ 62dB [at 999kHz (HE)] [at 1000kHz (LH)] 50 ~ 62dB [at 1404kHz (HE)] [at 1400kHz (LH)]
Signal to noise ratio :	More than 36dB [at 999kHz (HE)] [at 1000kHz (LH)]
Distortion :	Less than 1.5% [at 999kHz (HE)] [at 1000kHz (LH)]
Auto stop level :	40dB ~ 65dB [at 999kHz (HE)] [at 1000kHz (LH)]
Intermediate frequency :	450kHz

<SW SECTION>(HE only)

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

<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) Less than 150mV (CrO ₂ , SP OUT 2V)
Noise level (REC/PB) :	Less than 25mV/12mV (NORM, SP OUT 2V) Less than 18mV/10mV (CrO ₂ , SP OUT 2V)
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)

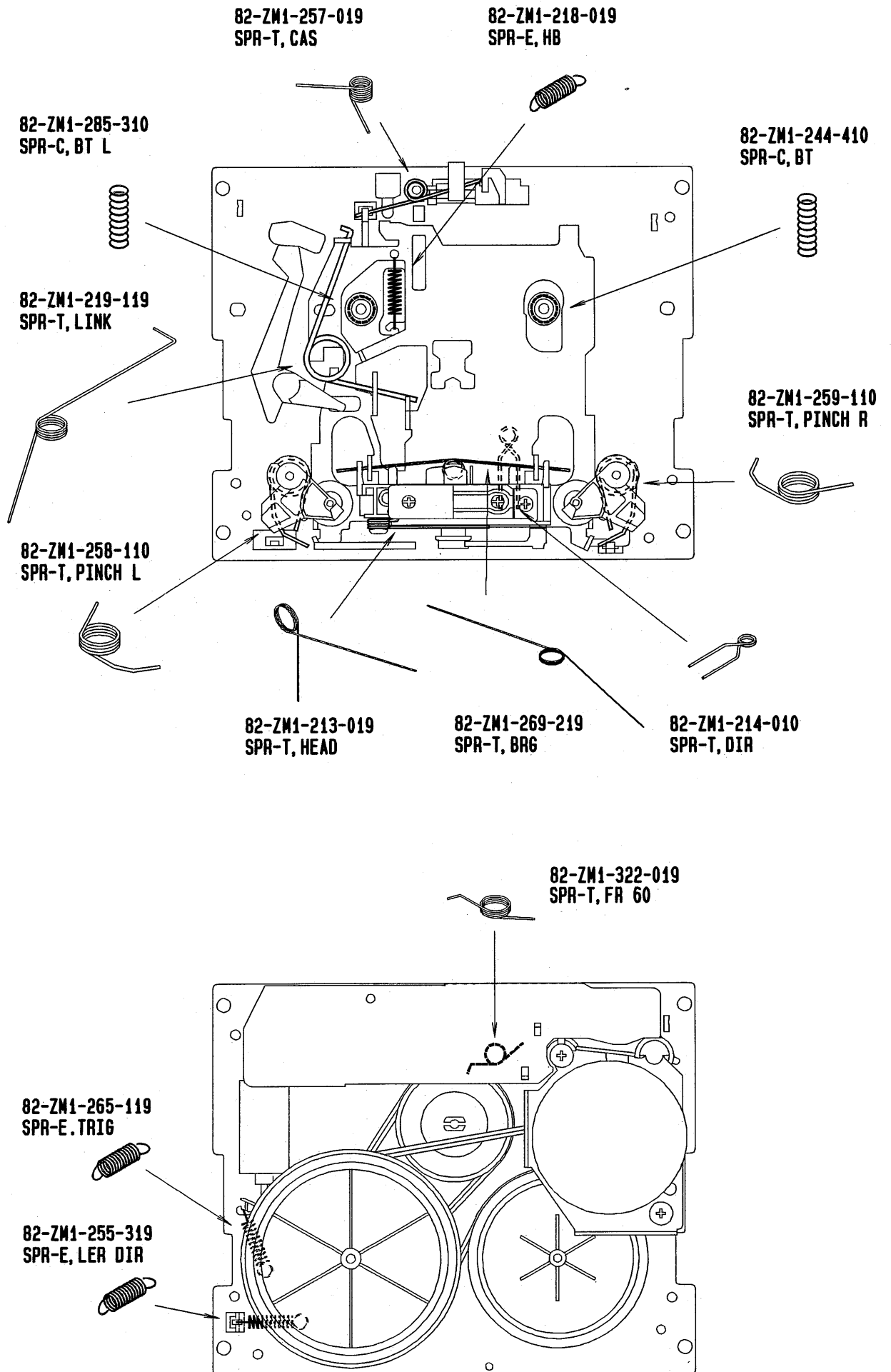


MECHANICAL PARTS LIST 1/1

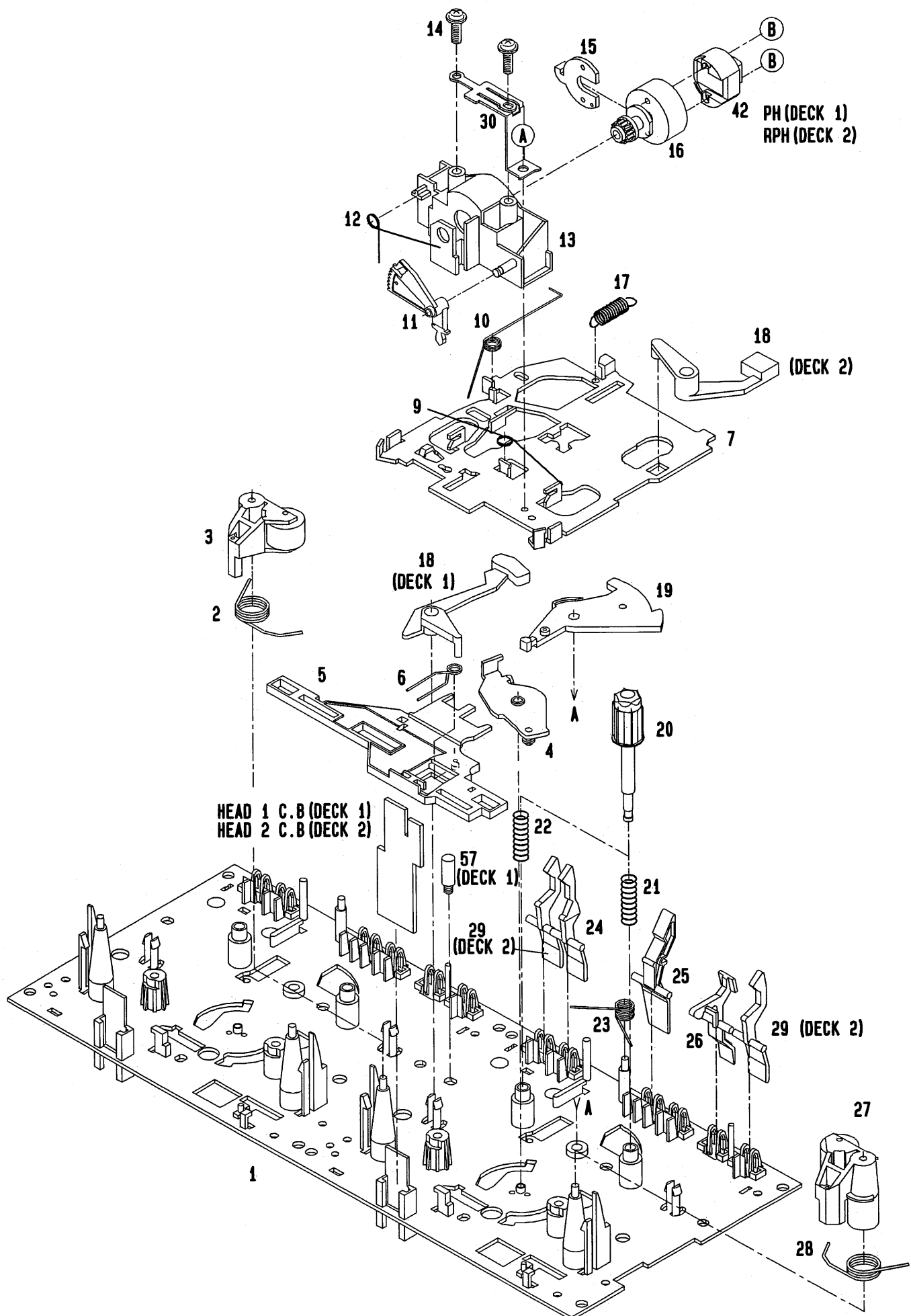
If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION	REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	86-NF6-001-019		CABI,FR H	30	87-085-185-010		BUSHING,AC CORD E
2	86-NF6-061-019		REFLECTOR,CASS	31	82-NF7-210-019		GUIDE,FL
3	86-NF6-004-019		BOX,CASS 2	32	82-NF5-227-019		HLDR,LOCK 2N
4	82-NF5-219-019		SPR-T,EJECT 2 (SIN)	33	80-VT1-202-019		FELT,12.5-15.5-2
5	82-NF5-218-019		SRT-T,EJECT 1 (SIN)	34	82-NF5-228-019		SPR-C,LOCK
6	86-NF6-020-019		WINDOW,CASS 2	35	82-NF5-229-019		PLATE,LOCK
7	86-NF6-019-019		WINDOW,CASS 1	36	82-NF5-226-019		HLDR LOCK 1N
8	86-NF6-003-019		BOX,CASS 1	37	86-NF6-210-019		GUIDE,LED L
9	86-NF6-050-019		KNOB,RTRY MIC M	38	86-NF6-209-019		GUIDE,LED R
10	86-NF6-063-019		KNOB,RTRY VOL	39	86-NF6-205-019		GUIDE,OPE
11	86-NF6-006-019		PANEL,CONTROL	A	87-571-032-419		VIT+2-3
12	86-NF6-017-019		WINDOW,DISP	B	87-067-703-019		BVT2+3-10 (W/O SLOT)
13	86-NF6-013-019		KEY,DOLBY	C	87-067-673-019		BVTT +3-8 BLK
14	87-063-165-019		OIL-DMPR 150	D	87-067-633-019		BVT2+3-8 W/CONVEX
15	86-NF6-009-019		KEY,POWER	E	87-067-698-019		BVT2+3-18 W/O SLOT
16	86-NF6-018-019		WINDOW,CD	F	87-571-092-419		VIT+3-4
17	86-NF6-015-019		KEY,CD	G	87-067-689-019		BVTT+3-8
18	86-NF6-208-019		GUIDE,FUN	H	87-591-094-419		QIT+3-6 GOLD
19	86-NF6-011-019		KEY,FUN	I	87-078-084-019		BVTT+3-6 W,CONVEX
20	86-NF6-016-019		REFLECTOR,FUN	J	87-067-641-019		UTT2+3-8 W/O SLOT BLK
21	86-NF6-012-019		KEY,OPE	K	87-067-975-019		S-SCREW,IT+4-6<LH>
22	86-NF6-054-019		KEY,T-BASS	L	87-078-083-019		BVTT SEMS+4-85W<HE>
23	86-NF6-014-019		KEY,DSP	M	87-410-225-019		W4-10-0.8<HE>
24	82-NE6-067-019		BADGE AIWA 30N	N	87-721-097-419		QT2+3-12 GLD
25	86-NF6-005-019		PANEL,TRAY				
26	86-NF6-007-019		WINDOW,TOP				
27	86-NF6-048-019		CABI,STEEL H-S				
28	86-NF6-023-019		PANEL,REAR HEJBNM<HE>				
28	86-NF6-024-019		PANEL,REAR LHBNM<LH>				
△ 29	87-050-079-019		AC-CORD ASSY,E				

SPRING APPLICATION POSITION



TAPE MECHANISM EXPLODED VIEW 1/1



TAPE MECHANISM PARTS LIST 1/1

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

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION	REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	82-ZM3-301-519		CHAS ASSY,M2	35	82-ZM1-265-119		SPR-E,TRIG
2	82-ZM1-258-110		SPR-T,PINCH L	36	82-ZM1-236-019		CAPSTAN N 2-41.5
3	82-ZM1-345-019		LVR ASSY,PINCH L W	37	82-ZM1-239-019		CAPSTAN N 2.2-41.7
4	82-ZM1-333-010		PLATE,LINK 2	38	82-ZM1-322-019		SPR-T,FR60
5	82-ZM1-266-11K		LVR,DIR	39	82-ZM1-220-219		GEAR,IDLER
6	82-ZM1-214-010		SPR-T,DIR	40	82-ZM3-616-019		RING MAGNET 4
7	82-ZM1-206-81K		CHAS,HEAD	41	82-ZM1-216-31K		GEAR,REEL
8	82-ZM3-307-019		CUSH-G,DIA3.7-8-3.2	42	87-046-355-019		HEAD,PH HADKH2529B(PH)
9	82-ZM1-269-219		SPR-T,BRG	42	87-046-356-019		HEAD,RPH HADKH5581B(RPH)
10	82-ZM1-219-119		SPR-T,LINK	43	82-ZM1-225-21K		GEAR,FR
11	82-ZM1-210-119		GEAR,H T	44	82-ZM1-226-019		GEAR,REW
12	82-ZM1-213-019		SPR-T,HEAD	45	82-ZM1-228-810		SLIP DISK ASSY
13	82-ZM1-207-619		GUIDE,TAPE	46	82-ZM1-338-010		BELT FR4
14	82-ZM1-283-310		S-SCREW,AZIMUTH	47	82-ZM1-238-81K		FLY-WHL ASSY,R (DECK 2)
15	82-ZM1-314-119		PLATE,HEAD	47	82-ZM3-210-71K		FLY-WHL ASSY,R2 (DECK 1)
16	82-ZM1-208-119		HLDR,HEAD	48	82-ZM1-235-51K		FLY-WHL ASSY,L (DECK 2)
17	82-ZM1-218-019		SPR-E,HB	48	82-ZM3-208-61K		FLY-WHL ASSY,L2 (DECK 1)
18	82-ZM1-263-110		LVR,EJECT L (DECK 1)	49	82-ZM3-329-210		BELT,SBU R2
18	82-ZM1-264-010		LVR,EJECT R (DECK 2)	50	82-ZM1-245-210		HLDR,IC
19	82-ZM1-222-21K		LVR,PLAY	51	87-045-347-019		MOT,SHU2L 70(M1)
20	82-ZM1-217-319		REEL TABLE	52	82-ZM3-221-010		PULLEY,MOT 2M
21	82-ZM1-244-510		SPR-C,BT	53	82-ZM1-288-019		SH,1.63-3.2-0.5 SLT
22	82-ZM1-285-310		SPR-C,BT L	54	80-ZM6-243-019		SH,1.75-3.6-0.5 SLT
23	82-ZM1-257-019		SPR-T,CAS	55	82-ZM3-304-110		PULLEY,COUPLER (DECK 1)
24	82-ZM1-241-319		LVR,MC	56	82-ZM3-328-110		BELT,SBU P2
25	82-ZM1-242-019		LVR,CAS	57	82-ZM3-216-019		SHAFT,COUPLER N(DECK 1)
26	82-ZM1-243-019		LVR,STOP	A	82-ZM1-315-010		S-SCREW,GVIDE TAPE
27	82-ZM1-346-019		LVR ASSY,PINCH R W	B	80-ZM6-207-019		V+1.6-7
28	82-ZM1-259-110		SPR-T,PINCH R	C	82-ZM3-318-019		S-SCRW MOTOR M2
29	82-ZM1-240-11K		LVR,REC (DECK 2)	D	87-067-972-019		PW,1.05-3-0.25 SLT
30	82-ZM1-298-010		SPR-P,EARTH				
31	82-ZM1-255-319		SPR-E,LVR DIR				
32	82-ZM3-305-01K		GEAR,CAM M2				
33	82-ZM1-227-21K		LVR,TRIG				
34	82-ZM3-306-11K		LVR,FR M2				

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-NF6-901-019		IB,ECA(M)<HE>
1	86-NF6-902-019		IB,ESF-LH(M)<LH>
2	85-NF7-641-019		RC,RC-T503
3	87-006-240-019		AM LOOP ANT CON(KO)<HE>
3	87-006-225-019		AM LOOP ANT NC2<LH>
3	87-043-095-019		ANTENNA WIRE<HE>
4	87-A90-064-019		FEEDER-ANT, FM(SHS)
5	87-099-789-019		PLUG,ADPTR IR44

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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