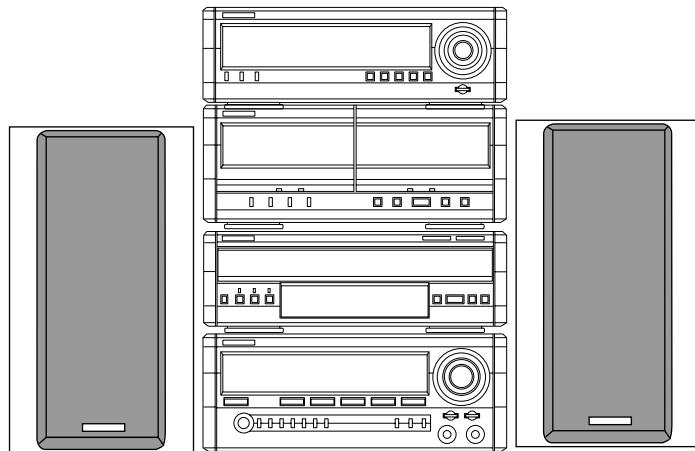




XR-H2000 LH



SERVICE MANUAL

COMPACT DISC STEREO
SYSTEM

BASIC TAPE MECHANISM : 2ZM-3MK2 PR4NM
BASIC CD MECHANISM : AZG-1 ZD3RNDM

SYSTEM	STEREO RECEIVER	CD PLAYER	CASSETTE DECK	GRAPHIC EQUALISER	SPEAKERS	REMOTE CONTROL
XR-H2000	MX-NH2000	DX-NH2000	FX-NH2000	GE-NH2000	SX-NDPH2100	RC-ZAS04

- This Service Manual is the "Revision Publishing" and replaces "Simple Manual" XR-H2000 (LH), (S/M Code No. 09-001-427-6T1).
- If requiring information about the CD mechanism, see Service Manual of AZG-1 ZD3RNDM, (S/M Code No. 09-001-335-3N8).

aiwa
S/M Code No. 09-003-427-6R1

REVISION
DATA

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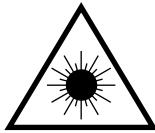
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PROTECTION OF EYES FROM LASER BEAM DURING SERVICING

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 käytäjän turvallisuusluokan 1 ylittäville näkymättömälle lasersäteilylle.

VARNING!

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

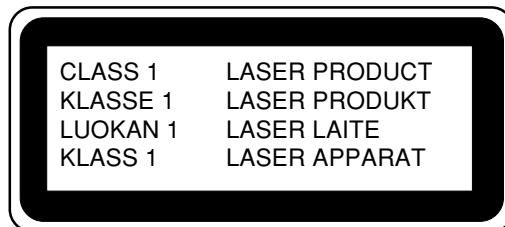
L'utilisation de commandes, réglages ou procédures autres que ceux spécifiés peut entraîner une dangereuse exposition aux radiations.

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.



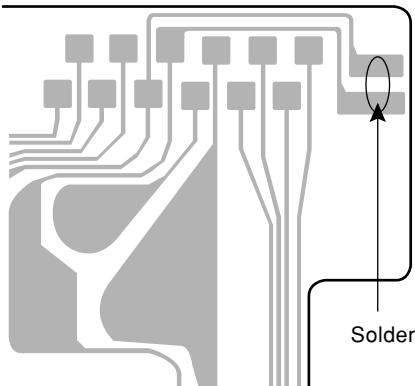
Precaution to replace Optical block

(KSS-213F)

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 right figure.

PICK-UP Assy P.C.B



SPECIFICATIONS

<STEREO RECEIVER MX-NH2000>

<FM tuner section>

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

<AM 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

<Amplifier section>

Power output	90 W + 90 W (1 kHz, T.H.D. less than 10 %, 6 ohms)
Total harmonic distortion	0.1 % (8 W, 1 kHz, 6 ohms, DIN AUDIO)
Inputs	VIDEO/AUX: 310 mV (adjustable) MD: 310 mV (adjustable)
Outputs	MIC 1, MIC 2: 1.2 mA (10 kohms) LINE OUT: 175 mV SPEAKERS: accept speakers of 6 ohms or more SURROUND SPEAKERS: accept speakers of 8 ohms to 16 ohms PHONES (stereo jack): accepts headphones of 32 ohms or more

<General>

Power requirements	120 V/ 220V~230V/ 240 V AC switchable 50/60 Hz
Power consumption	135 W
Power consumption in standby mode	If the power-economizing mode is ECO OFF: 30 W If the power-economizing mode is ECO ON or ECO AUTO: 0.9 W
Dimensions of main unit (W x H x D)	260 x 122 x 338 mm
Weight of main unit	6.2 kg

<CD PLAYER DX-NH2000>

Laser	Semiconductor laser ($\lambda = 780 \text{ nm}$)
D-A converter	1 bit dual
Signal-to-noise ratio	85 dB (1 kHz, 0 dB)
Harmonic distortion	0.05 % (1 kHz, 0 dB)
Wow and flutter	Unmeasurable
Dimensions of main unit (W x H x D)	260 x 101 x 315 mm
Weight of main unit	2.3 kg

<CASSETTE DECK FX-NH2000>

Track format	4 tracks, 2 channels stereo
Frequency response	Type II (high/CrO ₂) tape: 50 Hz – 16000 Hz
	Type I (normal) tape: 50 Hz – 15000 Hz
Signal-to-noise ratio	60 dB (Dolby B NR ON, Type II tape peak level)
Recording system	AC bias, AC erase
Heads	Deck 1: Playback head x 1 Deck 2: Recording/playback head x 1, erase head x 1
Dimensions of main unit (W x H x D)	260 x 122 x 315 mm
Weight of main unit	2.0 kg

<GRAPHIC EQUALIZER GE-NH2000>

Dimensions of main unit (W x H x D)	260x 101 x 328 mm
Weight	1.8 kg

<SPEAKER SYSTEM SX-NDPH2100>

Cabinet type	3 way (magnetic shielded type)
Speakers	Woofer: 140 mm cone type x 2 Tweeter: 60 mm cone type Super tweeter: 20 mm ceramic type
Impedance	6 ohms
Output sound pressure level	88 dB/W/m
Dimensions (W x H x D)	250 x 443 x 250 mm
Weight	7.0 kg

- Design and specifications are subject to change without notice.
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Under license from BBE Sound, Inc.

ACCESSORIES / PACKAGE LIST

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	8A-SP1-902-010	IB, LH(ESP)M	
2	8Z-NF5-702-010	RC UNIT, ZAS04	
3	87-006-225-010	AM LOOP ANT NC2	
4	87-043-115-010	ANT, FEEDER FM	
△ 5	87-A91-017-010	PLUG, CONVERSION JT-0476	

MODEL NO.

MX-NH2000**ELECTRICAL MAIN PARTS LIST**

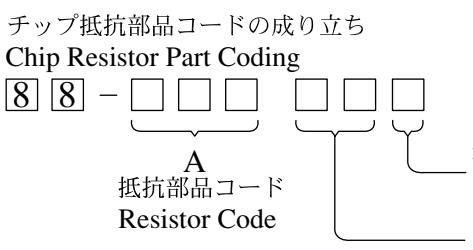
REF. NO.	PART NO.	KANRI NO.	DESCRIPTION	REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
IC				C102	87-010-917-000	CAP, E 3300-50 M SMG	
				C103	87-016-658-000	CAP, E 4700-35 M SMG	
8A-SP1-601-010	C-IC, UPD780228GF-065-3BA			C104	87-016-658-000	CAP, E 4700-35 M SMG	
87-A20-914-010	IC, SPS-442-1-F			C105	87-012-368-080	C-CAP,S 0.1-50 F	
87-A21-202-040	C-IC, M62445Afp			C106	87-012-368-080	C-CAP,S 0.1-50 F	
87-A20-804-040	C-IC, NJM2152M			C107	87-012-368-080	C-CAP,S 0.1-50 F	
87-A21-419-040	IC, NJM4558MD-TE2			C108	87-012-368-080	C-CAP,S 0.1-50 F	
87-A20-869-040	C-IC, M62449FP			C109	87-010-196-080	CHIP CAPACITOR, 0.1-25	
87-A21-051-040	C-IC, BU9990-03FS			C110	87-010-196-080	CHIP CAPACITOR, 0.1-25	
87-A21-018-040	C-IC, M65849BFP631D			C111	87-010-196-080	CHIP CAPACITOR, 0.1-25	
87-A20-913-010	IC, LA1837NL			C112	87-010-196-080	CHIP CAPACITOR, 0.1-25	
87-070-127-110	IC, LC72131D			C113	87-010-247-080	CAP, ELECT 100-50V	
TRANSISTOR				C114	87-010-385-080	CAP, ELECT 220-25V	
				C115	87-010-385-080	CAP, ELECT 220-25V	
				C116	87-010-247-080	CAP, ELECT 100-50V	
89-213-702-010	TR, 2SB1370 (1.8W)			C117	87-010-430-080	CAP, ELECT 100-63	
87-026-245-080	TR, DTC114ES			C118	87-010-263-080	CAP, ELECT 100-10V	
87-026-610-080	TR, KTC3198GR			C119	87-010-260-080	CAP, ELECT 47-25V	
87-A30-076-080	C-TR, 2SC3052F			C120	87-010-403-080	CAP, ELECT 3.3-50V	
87-A30-083-080	TR, CSD1489B			C121	87-010-174-080	C-CAP,S 470P-50	
87-A30-075-080	C-TR, 2SA1235F			C122	87-010-403-080	CAP, ELECT 3.3-50V	
87-026-609-080	TR, KTA1266GR			C123	87-010-247-080	CAP, ELECT 100-50V	
87-A30-087-080	C-FET, 2SK2158			C124	87-010-112-080	CAP, ELECT 100-16V	
87-A30-257-080	C-TR, 2SD1306E			C125	87-010-235-080	CAP, E 470-16 SME	
87-A30-086-080	C-TR, CSD1306E			C201	87-010-322-080	C-CAP,S 100P-50 CH	
87-A30-268-040	C-TR, 2SA1514K(S)			C202	87-010-322-080	C-CAP,S 100P-50 CH	
87-A30-190-080	TR, CC5551			C209	87-010-405-080	CAP, ELECT 10-50V	
87-A30-137-010	TR, 2SD2494			C210	87-010-405-080	CAP, ELECT 10-50V	
87-A30-138-010	TR, 2SB1625			C211	87-010-183-080	C-CAP,S 2700P-50 B	
87-A30-071-080	C-TR, RT1N 144C			C212	87-010-183-080	C-CAP,S 2700P-50 B	
87-A30-106-070	C-TR, CMBT5551			C213	87-010-187-080	CAP CHIP S5600P	
87-A30-072-080	C-TR, RT1P 144C			C214	87-010-187-080	CAP CHIP S5600P	
87-A30-073-080	C-TR, RT1N 141C			C215	87-010-405-080	CAP, ELECT 10-50V	
87-A30-074-080	C-TR, RT1P 141C			C216	87-010-405-080	CAP, ELECT 10-50V	
87-026-263-080	C-TR, RN1410			C217	87-010-408-080	CAP, ELECT 47-50V	
89-112-965-080	TR, 2SA1296 GR			C218	87-010-408-080	CAP, ELECT 47-50V	
87-026-226-080	CHIP-TR, DTA143EK			C219	87-A10-516-080	C-CAP,S 100P-200 J CH	
87-A30-196-080	TR, 2SC4115SRS			C220	87-A10-516-080	C-CAP,S 100P-200 J CH	
87-A30-186-010	FET, 2SK3053			C221	87-016-462-080	C-CAP,S 1-16 F	
DIODE				C222	87-016-462-080	C-CAP,S 1-16 F	
				C223	87-010-405-080	CAP, ELECT 10-50V	
87-070-274-080	DIODE, 1N4003 SEM			C226	87-010-405-080	CAP, ELECT 10-50V	
87-A40-547-090	DIODE, D55BA20			C227	87-010-407-080	CAP, ELECT 33-50V	
87-017-447-010	DIODE, GBU4DL-6419			C229	87-010-407-080	CAP, ELECT 33-50V	
87-020-465-080	DIODE, 1SS133 (110MA)			C230	87-010-408-080	CAP, ELECT 47-50V	
87-A40-269-080	C-DIODE, MC2836			C231	87-010-192-080	C-CAP,S 0.022-50 F	
87-A40-270-080	C-DIODE, MC2838			C232	87-010-192-080	C-CAP,S 0.022-50 F	
87-A40-435-080	ZENER, MTZJ30D			C233	87-010-401-080	CAP, ELECT 1-50V	
87-A40-500-080	ZENER, MTZJ30B			C234	87-010-401-080	CAP, ELECT 1-50V	
87-A40-345-080	ZENER, MTZJ10C			C235	87-010-196-080	CHIP CAPACITOR, 0.1-25	
87-A40-004-080	ZENER, MTZJ16A			C290	87-010-188-080	CAP, CHIP 6800P	
87-070-345-080	DIODE, IN4148			C503	87-010-180-080	C-CER 1500P	
87-A40-752-080	ZENER, UZ6.2BSC			C504	87-010-180-080	C-CER 1500P	
87-A40-370-090	DIODE, RK46-P20			C511	87-010-405-080	CAP, ELECT 10-50V	
87-070-136-080	ZENER, MTZJ5.1B			C512	87-010-405-080	CAP, ELECT 10-50V	
87-A40-488-080	DIODE, 1SS244			C513	87-010-404-080	CAP, ELECT 4.7-50V	
87-A40-438-080	ZENER, MTZJ4.7A			C514	87-010-404-080	CAP, ELECT 4.7-50V	
87-A40-002-080	ZENER, MTZJ5.1C			C519	87-012-142-080	CAP, S 0.33-16	
87-017-931-080	ZENER, MTZJ5.6B			C520	87-016-669-080	C-CAP,S 0.1-25 K B	
87-017-148-080	ZENER, HZS6A1L			C521	87-016-083-080	C-CAP,S 0.15-16 RK	
87-A40-270-080	C-DIODE, MC2838			C522	87-010-183-080	C-CAP,S 2700P-50 B	
MAIN C.B				C523	87-016-669-080	C-CAP,S 0.1-25 K B	
C101	87-010-917-000	CAP, E 3300-50 M SMG		C525	87-010-404-080	CAP, ELECT 4.7-50V	
				C526	87-010-404-080	CAP, ELECT 4.7-50V	
				C531	87-010-405-080	CAP, ELECT 10-50V	

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION	REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C532	87-010-263-080		CAP, ELECT 100-10V	C921	87-012-157-080		C-CAP,S 330P-50 CH
C533	87-010-263-080		CAP, ELECT 100-10V	C922	87-012-157-080		C-CAP,S 330P-50 CH
C534	87-010-406-080		CAP, ELECT 22-50	C923	87-012-157-080		C-CAP,S 330P-50 CH
C535	87-010-195-080		C-CAP,S 0.068-25 F	C951	87-010-401-080		CAP, ELECT 1-50V
C536	87-012-142-080		CAP, S 0.33-16	C952	87-010-263-080		CAP, ELECT 100-10V
C537	87-010-196-080		CHIP CAPACITOR,0.1-25	C953	87-010-380-080		CAP, ELECT 47-16V
C538	87-010-404-080		CAP, ELECT 4.7-50V	CN121	87-049-919-010		CONN,3P EH V WHT
C539	87-010-404-080		CAP, ELECT 4.7-50V	CN123	87-049-469-010		CONN,4P V
C540	87-010-314-080		C-CAP,S 22P-50J CH	CN601	87-099-196-010		CONN,8P 6216 V
C541	87-010-314-080		C-CAP,S 22P-50J CH	CN901	87-099-719-010		CONN,30P TYK-B(X)
C542	87-010-314-080		C-CAP,S 22P-50J CH	CN902	87-009-877-010		CONN,9P FG
C545	87-010-196-080		CHIP CAPACITOR,0.1-25	CN903	87-009-063-010		CONNECTOR 11P
C547	87-010-401-080		CAP, ELECT 1-50V	CN906	87-A60-058-010		CONN,10P V 9604S-10C
C548	87-010-401-080		CAP, ELECT 1-50V	CN907	87-A60-056-010		CONN,12P V 9604S-12C
C601	87-010-401-080		CAP, ELECT 1-50V	CN951	87-A60-109-010		CONN,2P V S2M-2W
C602	87-010-401-080		CAP, ELECT 1-50V	FB501	87-003-223-010		FERRITE BEAD BLO2RN2
C603	87-010-182-080		C-CAP,S 2200P-50 B	FB901	87-008-372-080		FILTER, EMI BL OIRNI
C604	87-010-182-080		C-CAP,S 2200P-50 B	J901	87-A60-602-010		JACK,DIA6.3 BLK ST W/SW TC
C605	87-010-369-080		C-CAP,S 0.033-25 K B	J902	87-A60-617-010		TERMINAL,SP 4P (MSC)
C606	87-010-369-080		C-CAP,S 0.033-25 K B	J903	87-A60-653-010		JACK,PIN 4P BLK/BLK
C607	87-010-405-080		CAP, ELECT 10-50V	J905	87-A60-658-010		JACK,PIN 6P WHITE/RED
C608	87-010-405-080		CAP, ELECT 10-50V	JW179	87-008-372-080		FILTER, EMI BL OIRNI
C609	87-010-374-080		CAP, ELECT 47-10V	L601	87-005-372-080		COIL S 1MMH
C610	87-010-374-080		CAP, ELECT 47-10V	L602	87-005-372-080		COIL S 1MMH
C611	87-010-405-080		CAP, ELECT 10-50V	L901	87-003-383-010		COIL,1UH-S
C612	87-010-112-080		CAP, ELECT 100-16V	L902	87-003-383-010		COIL,1UH-S
C613	87-010-173-080		C-CAP,S 390P-50 SL	PR201	87-002-330-080		ICP-N5
C614	87-010-173-080		C-CAP,S 390P-50 SL	R237	87-A00-262-080		RES,M/F 0.15-2W J
C668	87-010-190-080		S CHIP F 0.01	R238	87-A00-262-080		RES,M/F 0.15-2W J
C701	87-010-402-080		CAP, ELECT 2.2-50V	R239	87-A00-262-080		RES,M/F 0.15-2W J
C702	87-010-402-080		CAP, ELECT 2.2-50V	R240	87-A00-262-080		RES,M/F 0.15-2W J
C703	87-016-669-080		C-CAP,S 0.1-25 K B	R909	87-A00-440-050		RES,220-1/2W J RP
C704	87-016-669-080		C-CAP,S 0.1-25 K B	R910	87-A00-440-050		RES,220-1/2W J RP
C705	87-016-460-080		C-CAP,S 0.22-16 B	R911	87-A00-440-050		RES,220-1/2W J RP
C706	87-016-460-080		C-CAP,S 0.22-16 B	R912	87-A00-440-050		RES,220-1/2W J RP
C707	87-012-365-080		C-CAP,S 0.027-25VBK	R913	87-A00-527-080		RES,10-1/4W J NAT
C708	87-012-365-080		C-CAP,S 0.027-25VBK	R914	87-A00-527-080		RES,10-1/4W J NAT
C709	87-010-956-080		CHIP-CAP,S 0.068-25B	R915	87-A00-527-080		RES,10-1/4W J NAT
C710	87-010-956-080		CHIP-CAP,S 0.068-25B	R916	87-A00-527-080		RES,10-1/4W J NAT
C711	87-010-197-080		CAP, CHIP 0.01 DM	RY901	87-A90-713-010		RELAY,12V DQ12D1-OS(M)
C712	87-010-197-080		CAP, CHIP 0.01 DM	TH201	87-A91-081-080		C-THMS,100K-K 20P
C713	87-010-198-080		CAP, CHIP 0.022	TH202	87-A91-081-080		C-THMS,100K-K 20P
C714	87-010-198-080		CAP, CHIP 0.022	W101	8Z-SP1-627-010		F-CABLE,7P 2.5 280MM
C715	87-010-183-080		C-CAP,S 2700P-50 B	W601	88-908-281-110		FF-CABLE,8P 1.25 280MM
C716	87-010-183-080		C-CAP,S 2700P-50 B	W906	88-910-071-110		FF-CABLE,10P 1.25 70MM
C717	87-010-188-080		CAP,CHIP 6800P	W907	88-912-121-110		FF-CABLE,12P 1.25 120
C718	87-010-188-080		CAP,CHIP 6800P	WH102	87-A90-460-010		HLDR, WIRE 2.5-7P
C719	87-010-178-080		CHIP CAP 1000P				
C720	87-010-178-080		CHIP CAP 1000P				
C721	87-010-182-080		C-CAP,S 2200P-50 B				
			FRONT C.B				
C722	87-010-182-080		C-CAP,S 2200P-50 B	C101	87-010-196-080		CHIP CAPACITOR,0.1-25
C730	87-010-404-080		CAP, ELECT 4.7-50V	C201	87-010-192-080		C-CAP,S 0.022-50 F
C731	87-010-112-080		CAP, ELECT 100-16V	C202	87-010-498-040		CAP,E 10-16 5L
C735	87-010-314-080		C-CAP,S 22P-50 CH	C203	87-016-081-080		C-CAP,S 0.1-16 RK
C736	87-010-314-080		C-CAP,S 22P-50 CH	C204	87-010-981-040		CAP,E 22-35 5L SRE
C737	87-010-314-080		C-CAP,S 22P-50 CH	C205	87-010-194-080		CAP, CHIP 0.047
C738	87-010-196-080		CHIP CAPACITOR,0.1-25	C206	87-010-405-040		CAP,E 10-50
C901	87-010-182-080		C-CAP,S 2200P-50 B	C207	87-010-194-080		CAP, CHIP 0.047
C902	87-010-182-080		C-CAP,S 2200P-50 B	C208	87-A10-189-040		CAP,E 220-10
C903	87-010-196-080		CHIP CAPACITOR,0.1-25	C209	87-010-071-040		CAP,E 1-50 M 5L SRE
C904	87-010-196-080		CHIP CAPACITOR,0.1-25	C211	87-012-140-080		CAP 470P
C905	87-010-196-080		CHIP CAPACITOR,0.1-25	C220	87-016-669-080		C-CAP,S 0.1-25 K B
C906	87-010-196-080		CHIP CAPACITOR,0.1-25	C221	87-016-669-080		C-CAP,S 0.1-25 K B
C907	87-010-190-080		S CHIP F 0.01	C222	87-010-401-040		CAP,E 1-50 SME
C908	87-010-190-080		S CHIP F 0.01	C223	87-010-196-080		C-CAP,S 0.1-25 ZF
C909	87-012-368-080		C-CAP,S 0.1-50 F	C224	87-010-196-080		C-CAP,S 0.1-25 ZF
C910	87-012-368-080		C-CAP,S 0.1-50 F	C241	87-010-178-080		CHIP CAP 1000P
C911	87-012-141-080		CHIP CAPACITOR,0.22-16F	C242	87-010-316-080		C-CAP,S 33P-50 CH
C913	87-010-196-080		CHIP CAPACITOR,0.1-25	C243	87-010-313-080		CAP, CHIP 18P
C920	87-012-157-080		C-CAP,S 330P-50 CH	C244	87-010-316-080		C-CAP,S 33P-50 CH

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION	REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C247	87-016-669-080	C-CAP,S 0.1-25 K B		FB101	87-008-372-080	FILTER, EMI BL OIRNI	
C248	87-010-192-080	C-CAP,S 0.022-50 F		FB601	87-008-372-080	FILTER, EMI BL OIRNI	
C251	87-010-197-080	CAP, CHIP 0.01 DM		FL301	8Z-SP1-617-010	FL,10-BT-218GNK	
C252	87-010-197-080	CAP, CHIP 0.01 DM		J601	87-A60-651-010	JACK, 3.5MONO	
C253	87-A10-189-040	CAP,E 220-10		J602	87-A60-651-010	JACK, 3.5MONO	
C254	87-010-197-080	CAP, CHIP 0.01 DM		L101	87-005-130-080	COIL,10UH	
C255	87-018-134-080	CAPACITOR,TC-U 0.01-16		L201	87-003-152-080	COIL, 100UH	
C301	87-010-404-040	CAP,E 4.7-50 SME		L801	87-A50-093-010	COIL,CLOCK 5.76MHZ	
C302	87-010-404-040	CAP,E 4.7-50 SME		L802	87-003-102-080	COIL, 10UH	
C340	87-010-175-080	CAP 560P		LED201	87-A40-589-040	LED,SLR-56VCT31 RED	
C341	87-010-175-080	CAP 560P		LED301	87-A40-619-040	LED,SLR-56PT-T31-W GRN	
C342	87-010-175-080	CAP 560P		LED302	87-A40-619-040	LED,SLR-56PT-T31-W GRN	
C343	87-010-175-080	CAP 560P		LED303	87-A40-619-040	LED,SLR-56PT-T31-W GRN	
C344	87-010-175-080	CAP 560P		LED304	87-A40-619-040	LED,SLR-56PT-T31-W GRN	
C345	87-010-175-080	CAP 560P		LED305	87-A40-619-040	LED,SLR-56PT-T31-W GRN	
C346	87-010-175-080	CAP 560P		LED306	87-A40-606-040	LED,SLR-332VC	
C347	87-010-175-080	CAP 560P		LED307	87-A40-606-040	LED,SLR-332VC	
C348	87-010-175-080	CAP 560P		LED308	87-A40-606-040	LED,SLR-332VC	
C349	87-010-175-080	CAP 560P		LED309	87-A40-606-040	LED,SLR-332VC	
C601	87-010-405-040	CAP,E 10-50		LED310	87-A40-606-040	LED,SLR-332VC	
C602	87-010-176-080	C-CAP,S 680P-50 SL		S301	87-A90-095-080	SW,TACT EVQ11G04M	
C603	87-010-186-080	CAP,CHIP 4700P		S302	87-A90-095-080	SW,TACT EVQ11G04M	
C604	87-010-166-080	C-CAP,S 100P-50 SL		S303	87-A90-095-080	SW,TACT EVQ11G04M	
C605	87-010-321-080	CHIP CAPACITOR,82P(J)		S304	87-A90-095-080	SW,TACT EVQ11G04M	
C606	87-010-490-040	CAP,ELECT 0.1-50		S305	87-A90-095-080	SW,TACT EVQ11G04M	
C608	87-010-166-080	C-CAP,S 100P-50 SL		S306	87-A90-095-080	SW,TACT EVQ11G04M	
C609	87-010-545-040	CAP,E 0.22-50 SME		S307	87-A90-095-080	SW,TACT EVQ11G04M	
C610	87-010-177-080	C-CAP,S 820P-50 SL		S308	87-A90-095-080	SW,TACT EVQ11G04M	
C611	87-010-981-040	CAP,E 22-35 5L SRE		S309	87-A90-095-080	SW,TACT EVQ11G04M	
C614	87-010-248-040	CAP,E 220-10 SME		S310	87-A90-095-080	SW,TACT EVQ11G04M	
C615	87-010-075-040	CAP,E 10-16 5L		S311	87-A90-095-080	SW,TACT EVQ11G04M	
C619	87-016-526-080	C-CAP,S 0.47-16 BK		S312	87-A90-095-080	SW,TACT EVQ11G04M	
C801	87-010-170-080	C-CAP,S 220P-50SL		S313	87-A90-095-080	SW,TACT EVQ11G04M	
C802	87-010-176-080	C-CAP,S 680P-50 SL		S314	87-A90-095-080	SW,TACT EVQ11G04M	
C803	87-010-187-080	CAP CHIP S5600P		S315	87-A90-095-080	SW,TACT EVQ11G04M	
C804	87-010-213-080	C-CAP,S 0.015-50 B		SW201	87-A91-342-010	SW,RTRY EC16B24104W/O D L20	
C806	87-010-494-040	CAP,E 1-50 GAS		X201	87-A70-075-080	VIB,CER 4.19MHZ CRHF	
C807	87-010-196-080	CHIP CAPACITOR,0.1-25		TUNER C.B			
C809	87-012-155-080	C-CAP 180P-50CH					
C810	87-010-264-040	CAP,E 100-10 5L					
C811	87-010-552-040	CAP,E 22-16 GAS		C701	87-010-260-080	CAP, ELECT 47-25V	
C812	87-010-560-040	CAP,E 10-50 GAS		C702	87-010-404-080	CAP, ELECT 4.7-50V	
C821	87-010-318-080	C-CAP,S 47P-50 CH		C703	87-012-286-080	CAP, U 0.01-25	
C822	87-010-318-080	C-CAP,S 47P-50 CH		C704	87-012-286-080	CAP, U 0.01-25	
C823	87-010-318-080	C-CAP,S 47P-50 CH		C709	87-012-195-080	C-CAP,U 100P-50CH	
C824	87-010-196-080	CHIP CAPACITOR,0.1-25		C711	87-010-263-080	CAP, ELECT 100-10V	
C901	87-012-141-080	CHIP-CAPACITOR,0.22-16F		C712	87-010-196-080	CHIP CAPACITOR,0.1-25	
C902	87-012-141-080	CHIP-CAPACITOR,0.22-16F		C713	87-012-286-080	CAP, U 0.01-25	
C903	87-016-526-080	C-CAP,S 0.47-16 BK		C714	87-012-286-080	CAP, U 0.01-25	
C904	87-010-183-080	C-CAP,S 2700P-50 B		C717	87-012-286-080	CAP, U 0.01-25	
C905	87-010-176-080	C-CAP,S 680P-50 SL		C719	87-012-286-080	CAP, U 0.01-25	
C906	87-016-552-080	C-CAP,S 0.082-16 B K		C721	87-012-176-080	CAP 15P	
C907	87-016-552-080	C-CAP,S 0.082-16 B K		C722	87-012-176-080	CAP 15P	
C908	87-010-183-080	C-CAP,S 2700P-50 B		C723	87-012-274-080	CHIP CAP,U 1000P-50B	
C909	87-010-176-080	C-CAP,S 680P-50 SL		C725	87-012-274-080	CHIP CAP,U 1000P-50B	
C910	87-012-142-080	CAP, S 0.33-16		C727	87-010-196-080	CHIP CAPACITOR,0.1-25	
C911	87-010-196-080	CHIP CAPACITOR,0.1-25		C728	87-010-248-080	CAP, ELECT 220-10V	
C912	87-016-526-080	C-CAP,S 0.47-16 BK		C755	87-012-286-080	CAP, U 0.01-25	
C913	87-010-401-040	CAP,E 1-50 SME		C756	87-012-286-080	CAP, U 0.01-25	
C914	87-010-494-040	CAP,E 1-50 GAS		C757	87-012-188-080	C-CAP,U 47P-50 CH	
C915	87-010-184-080	CHIP CAPACITOR 3300P(K)		C758	87-012-167-080	C-CAP,U 5P-50 CH	
C916	87-010-184-080	CHIP CAPACITOR 3300P(K)		C761	87-010-196-080	CHIP CAPACITOR,0.1-25	
C917	87-010-553-040	CAP,E 47-16 GAS		C763	87-010-829-080	CAP, U 0.047-16	
C918	87-010-196-080	CHIP CAPACITOR,0.1-25		C764	87-012-337-080	C-CAP,U 56P-50 CH	
C919	87-010-264-040	CAP,E 100-10 5L		C765	87-012-286-080	CAP, U 0.01-25	
C920	87-010-318-080	C-CAP,S 47P-50 CH		C769	87-010-408-080	CAP, ELECT 47-50 M 11L	
C921	87-010-318-080	C-CAP,S 47P-50 CH		C770	87-010-829-080	CAP, U 0.047-16	
C922	87-010-318-080	C-CAP,S 47P-50 CH		C771	87-010-383-080	CAP, ELECT 33-25 M 11L	
CN101	87-099-720-010	CONN,30P TYK-B(P)		C772	87-010-829-080	CAP, U 0.047-16	
CN901	87-099-201-010	CONN,8P 6216 H		C773	87-010-196-080	CHIP CAPACITOR,0.1-25	

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION	REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C774	87-010-263-080		CAP, ELECT 100-10V	L832	87-005-847-080		COIL, 2.2UH(CECS)
C775	87-010-404-080		CAP, ELECT 4.7-50V	L981	87-NF4-650-010		COIL, AM PACK4N(TOK)
C776	87-012-286-080		CAP, U 0.01-25	X721	87-A70-061-010		VIB, XTAL 4.500MHZ CSA-309
C777	87-010-400-080		CAP, ELECT 0.47-50V				
C778	87-010-401-080		CAP, ELECT 1-50V				
C779	87-010-401-080		CAP, ELECT 1-50V				CONN 10P C.B
C780	87-010-196-080		CHIP CAPACITOR, 0.1-25	C190	87-010-196-080		CHIP CAPACITOR, 0.1-25
C781	87-010-405-080		CAP, ELECT 10-50V	CN904	87-A60-575-010		CONN, 10P H 52303
C782	87-010-405-080		CAP, ELECT 10-50V	CN905	87-099-198-010		CONN, 10P 6216 V
C783	87-012-286-080		CAP, U 0.01-25				
C784	87-012-286-080		CAP, U 0.01-25				AC 1 C.B
C785	87-010-805-080		CAP, S 1-16	△ PT101	8A-SP1-603-010		PT, ASP-1 LH
C786	87-010-805-080		CAP, S 1-16				
C787	87-012-280-080		CAP, U 3300P-50				
C788	87-012-280-080		CAP, U 3300P-50				
C789	87-012-275-080		C-CAP, U 1200P-50 B				AC 1 SW C.B
C790	87-012-275-080		C-CAP, U 1200P-50 B	△ S101	87-036-173-010		SW, SL 2-2-4 SDKG(*)
C791	87-010-405-080		CAP, ELECT 10-50V				
C793	87-012-273-080		C-CAP, U 820P-50 B				
C794	87-010-406-080		CAP, ELECT 22-50				SUB TRANS C.B
C795	87-010-194-080		C-CAP, S 0.047-25 ZF	△ C138	87-010-387-080		CAP, E 470-25 SME
C796	87-010-403-080		CAP, ELECT 3.3-50V	△ C140	87-A10-480-090		CAP, CER 4700P-250 M E KH
C797	87-012-278-080		CAP, U 2200P-50	△ C141	87-A10-480-090		CAP, CER 4700P-250 M E KH
C798	87-012-278-080		CAP, U 2200P-50	△ CN102	8Z-SP1-619-110		CONN ASSY, 4P
C799	87-010-829-080		CAP, U 0.047-16	△ PT102	8A-NF8-673-010		PT, SUB ANF-8 (H) KAMI
C812	87-012-286-080		CAP, U 0.01-25	△ RY101	87-A91-281-010		RELAY, AC DC12V OSA-SS-212DM5
C813	87-010-196-080		CHIP CAPACITOR, 0.1-25	△ T101	87-A60-317-010		TERMINAL, 1P MSC
C814	87-012-286-080		CAP, U 0.01-25	△ T102	87-A60-317-010		TERMINAL, 1P MSC
C819	87-010-197-080		CAP, CHIP 0.01 DM				
C820	87-010-260-080		CAP, ELECT 47-25V				
C821	87-012-286-080		CAP, U 0.01-25				AC 2 C.B
C822	87-012-286-080		CAP, U 0.01-25	△ PR101	87-A90-195-080		PROTECTOR 7A 125V 49
C823	87-012-286-080		CAP, U 0.01-25	△ PR102	87-A90-195-080		PROTECTOR 7A 125V 49
C828	87-010-196-080		CHIP CAPACITOR, 0.1-25	△ PR103	87-026-682-080		PROTECTOR, 10A 60V491
C829	87-010-196-080		CHIP CAPACITOR, 0.1-25	△ PR104	87-026-682-080		PROTECTOR, 10A 60V491
C959	87-010-196-080		CHIP CAPACITOR, 0.1-25	WH101	87-A90-460-010		HLDR, WIRE 2.5-7P
C960	87-010-196-080		CHIP CAPACITOR, 0.1-25				
C961	87-012-170-080		C-CAP, U 8P-50 CH				VM C.B
CF801	87-008-261-010		FILTER, SFE10.7MA5-A	C127	87-016-143-080		CAP, E 3.3-50M SME
CF802	87-008-261-010		FILTER, SFE10.7MA5-A				
CN601	87-099-028-010		CONN, 11P 6216 H				
FFE801	A8-8ZA-190-030		8ZA-1 FEUNM				ECO C.B
J801	87-A60-657-010		TERMINAL, 4P HSP-154V5-02				
L771	87-A50-266-010		COIL, FM DET-2N(TOK)				
L772	87-A90-733-010		FLTR, PCFAZH-450				
L781	87-005-847-080		COIL, 2.2UH(CECS)				
L791	87-A50-209-010		COIL, 1 POLE MPX(MIT)				
L792	87-A50-209-010		COIL, 1 POLE MPX(MIT)				

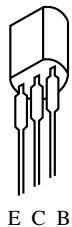
○チップ抵抗部品コード / CHIP RESISTOR PART CODE



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	1005	± 5%	CJ		1.0	0.5	0.35	104
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

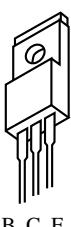
TRANSISTOR ILLUSTRATION (MX-NH2000)



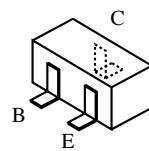
KTA1266GR
KTC3198GR



CC5551
CSD1489B

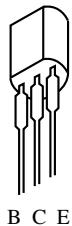


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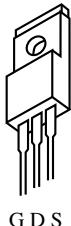


2SA1235
2SA1514
2SC3052
2SD1306E
CMBT5551
CSD1306E

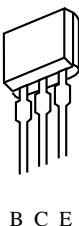
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RT1N141C
RT1N144C
RT1P141C
RT1P144C



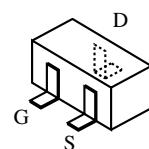
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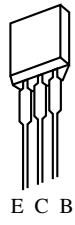
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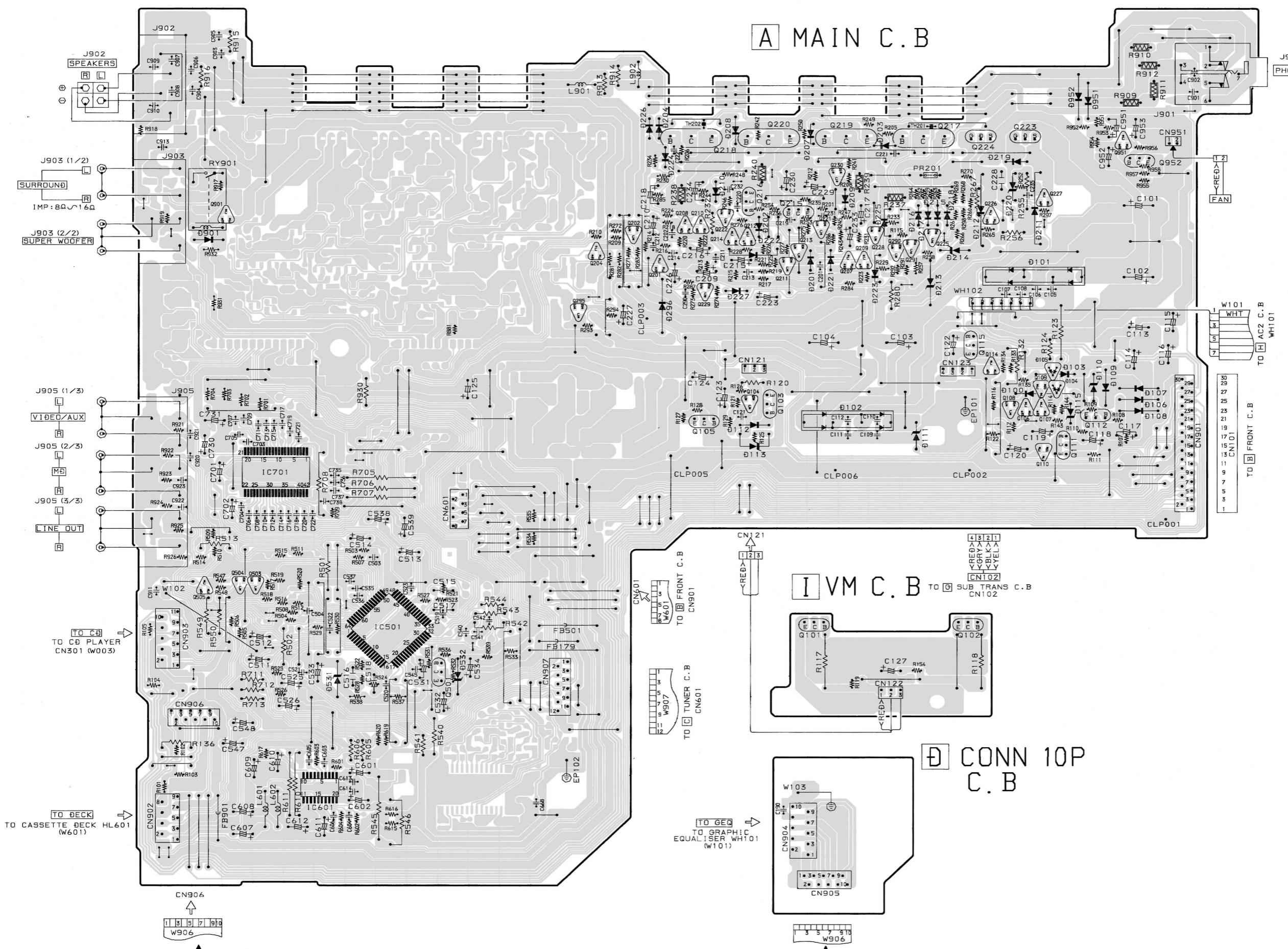


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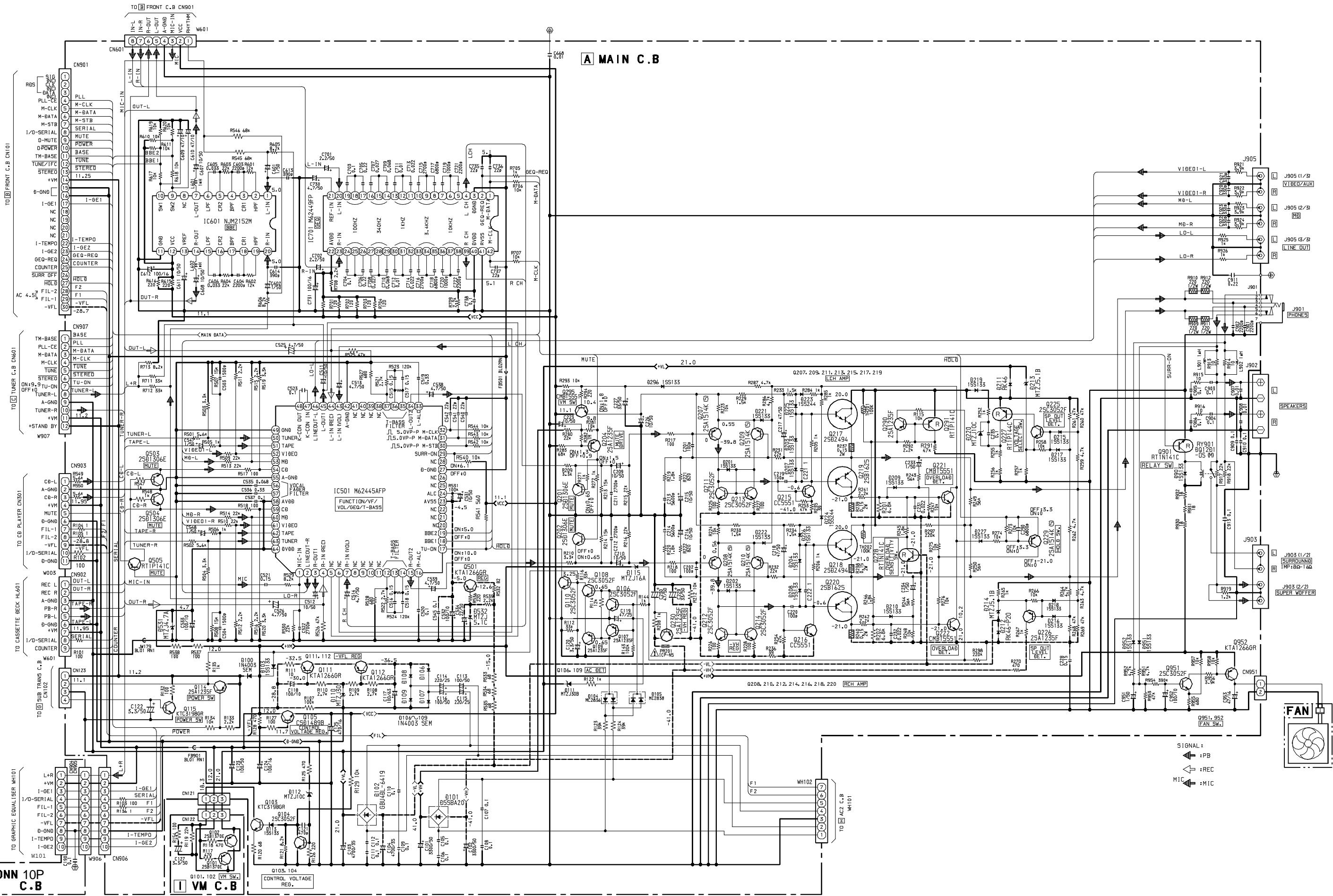


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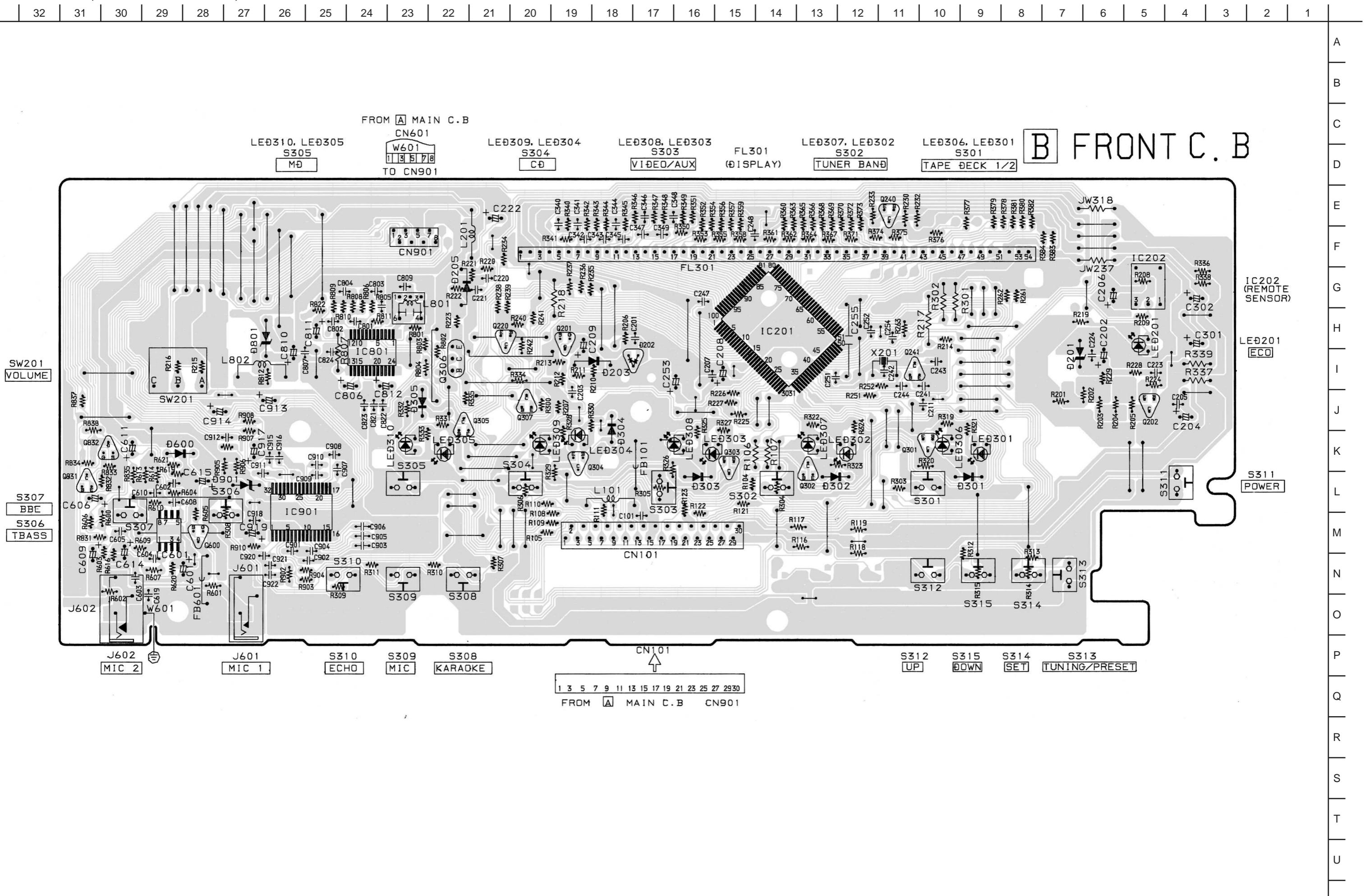
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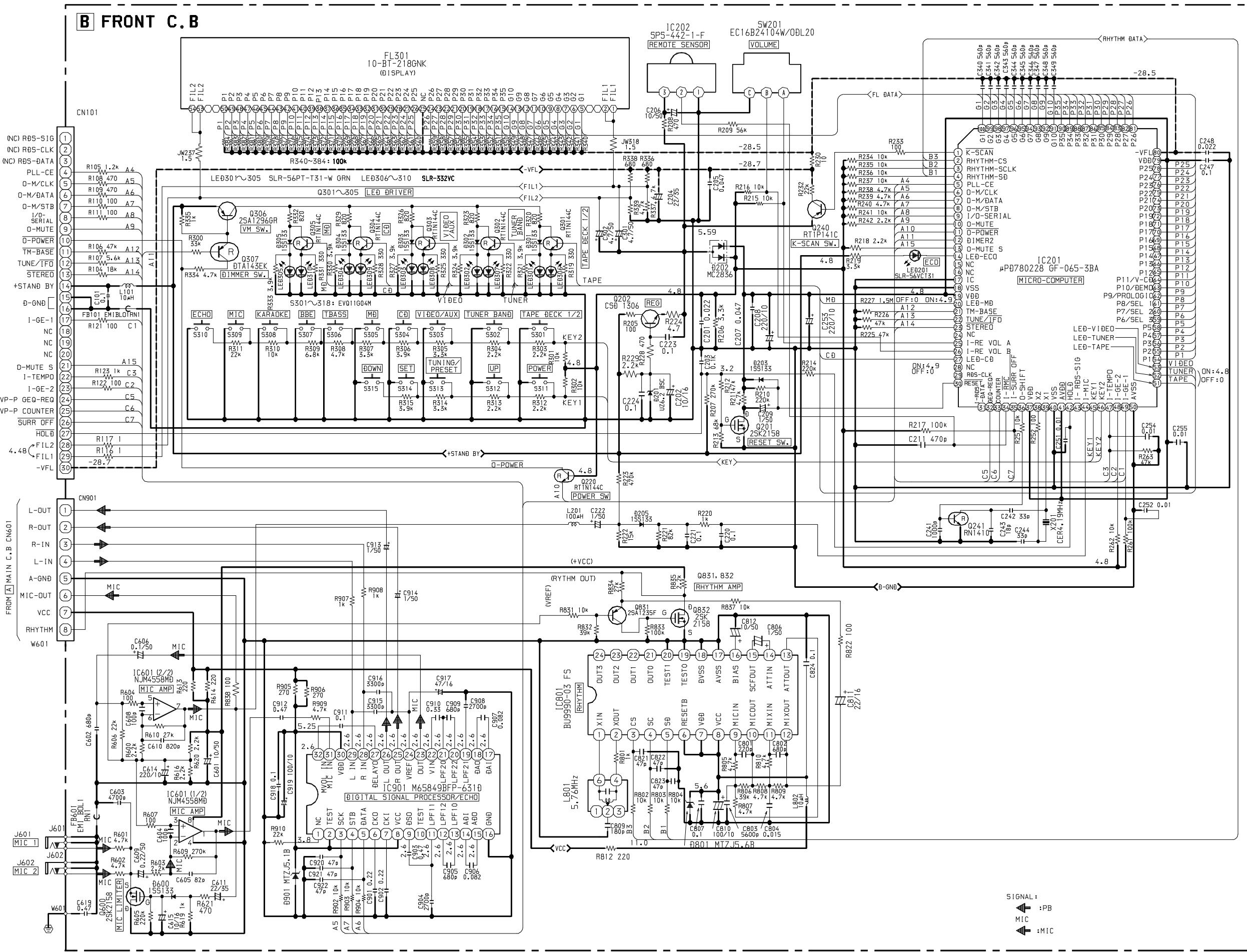
SCHEMATIC DIAGRAM – 1 (MAIN / VM / CONN 10P : MX-NH2000)



WIRING - 2 (FRONT : MX-NH2000)



SCHEMATIC DIAGRAM – 2 (FRONT : MX-NH2000)



15 | 14 | 13 | 12 | 11 | 10 | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1

A

B

C

D

F

F

G

H

1

1

K

1

14

N

8

B

8

1

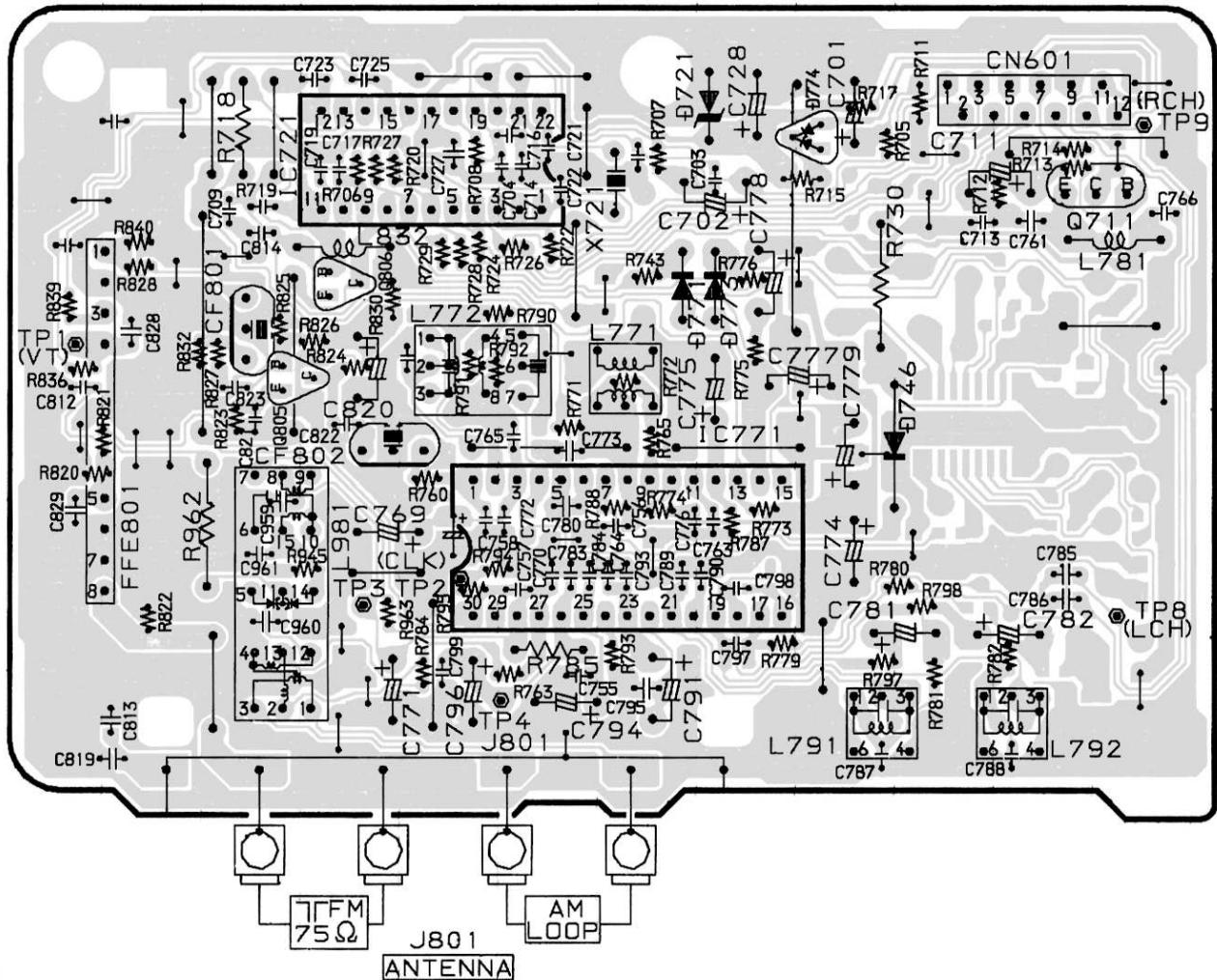
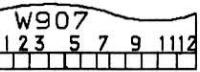
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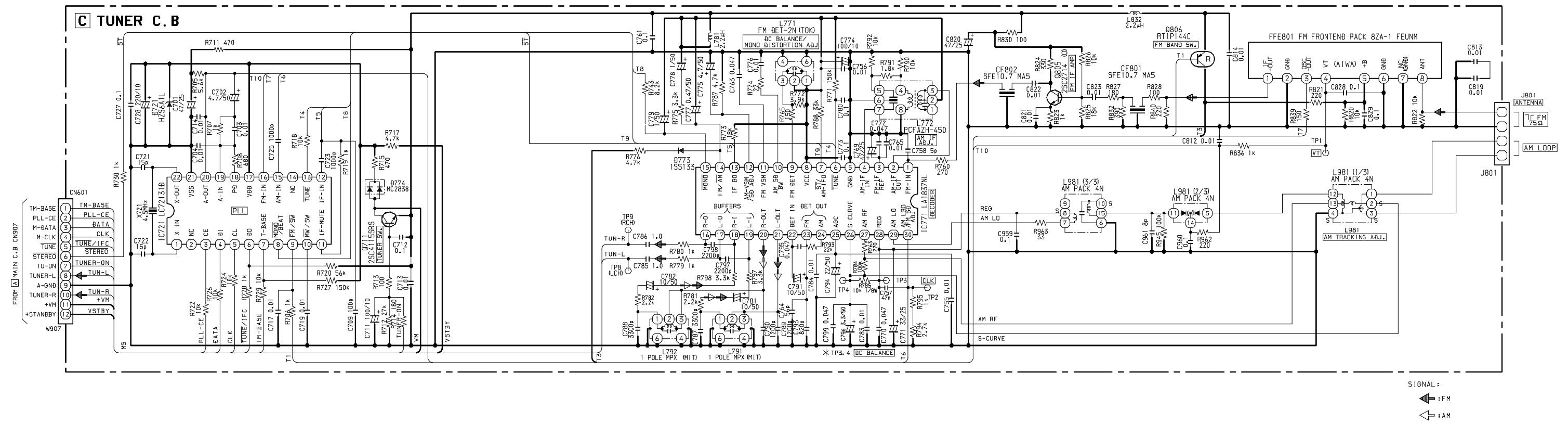
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C TUNER C. B

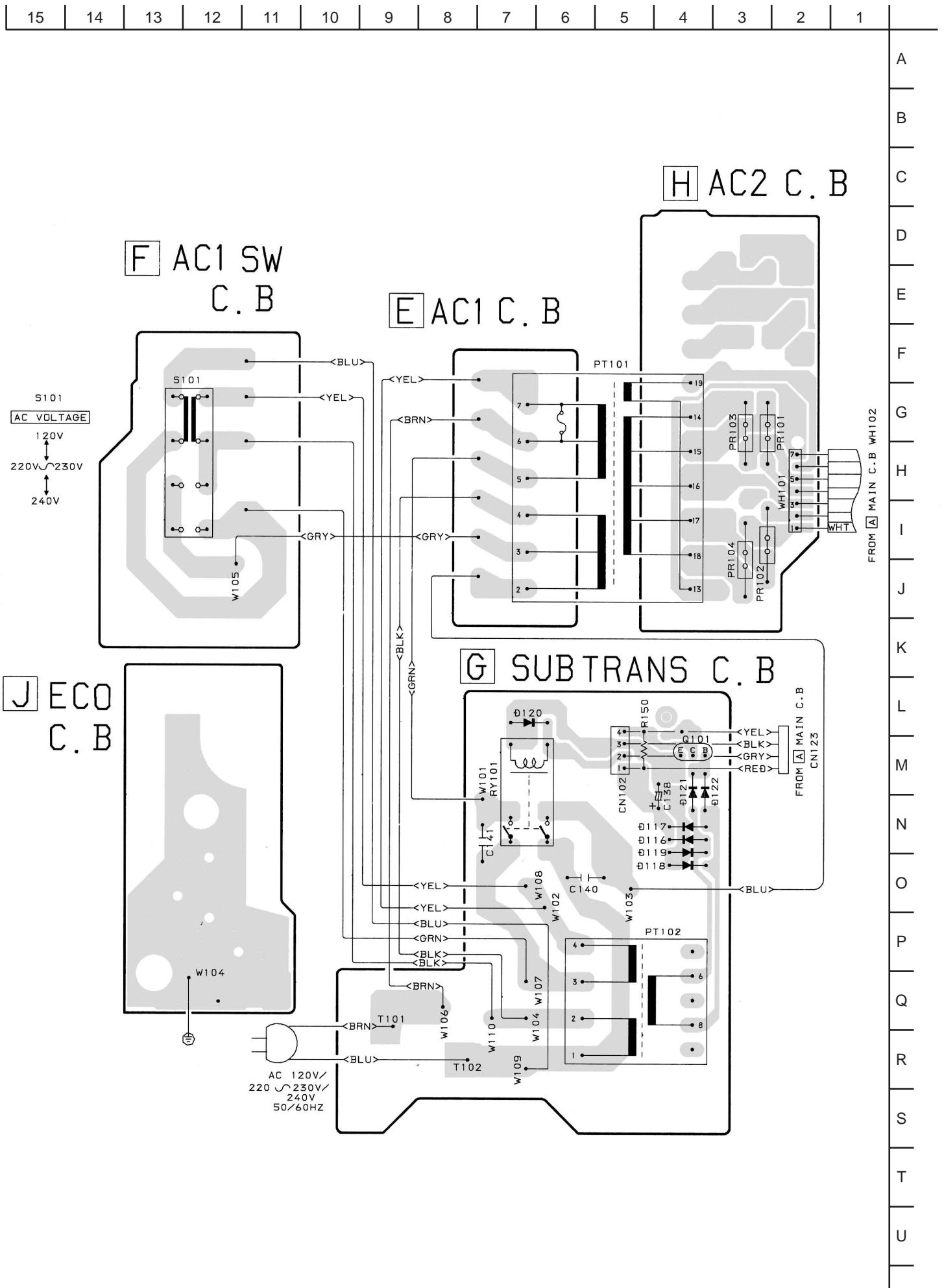
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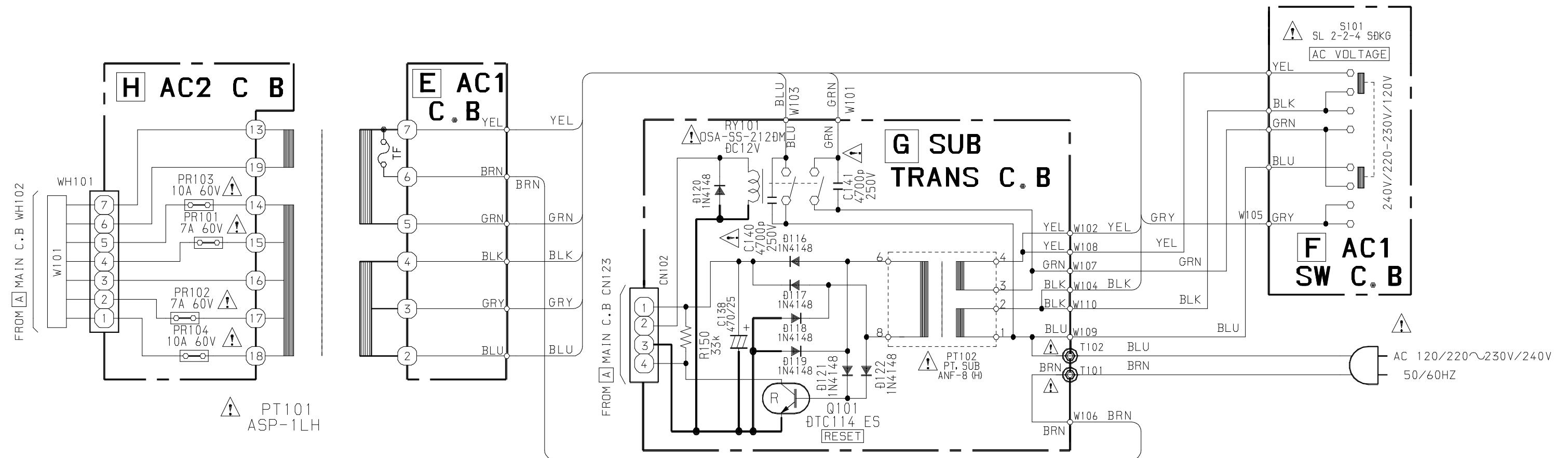
SCHEMATIC DIAGRAM – 3 (TUNER : MX-NH2000)



WIRING - 4 (AC1 / AC1 SW / SUB TRANS / AC2 / ECO : MX-NH2000)

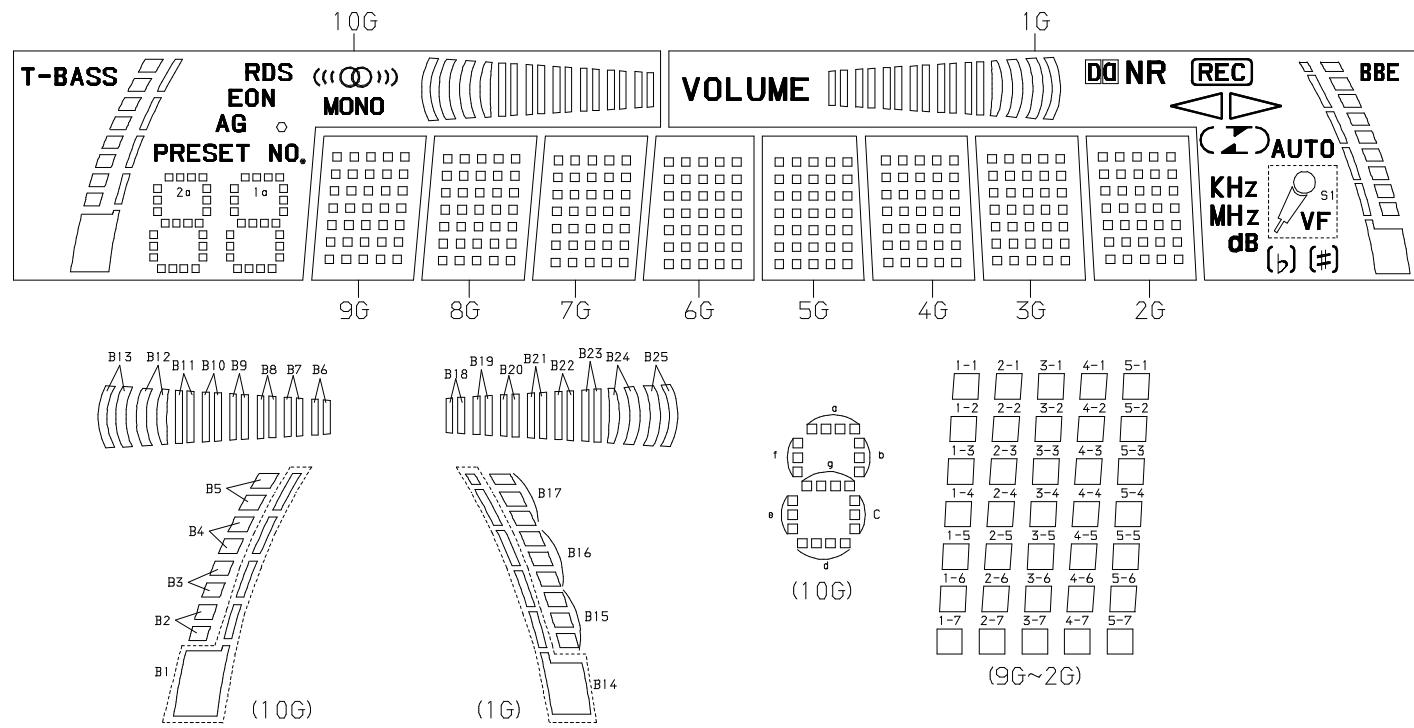


SCHEMATIC DIAGRAM – 4 (AC1 / AC1 SW / SUB TRANS / AC2 : MX-NH2000)



FL GRID (10-BT-218GNK) ASSIGNMENT AND ANODE CONNECTION (MX-NH2000)

GRID ASSIGNMENT

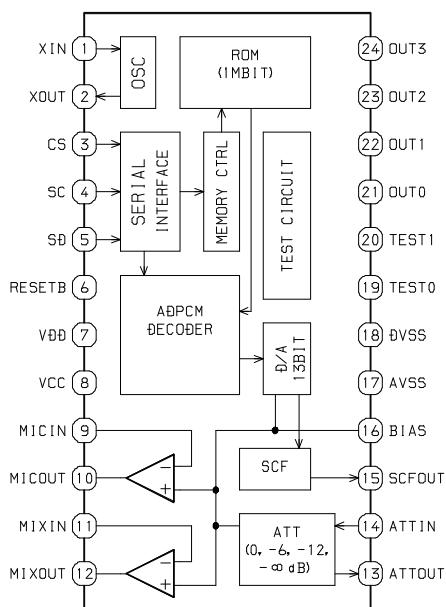


ANODE CONNECTION

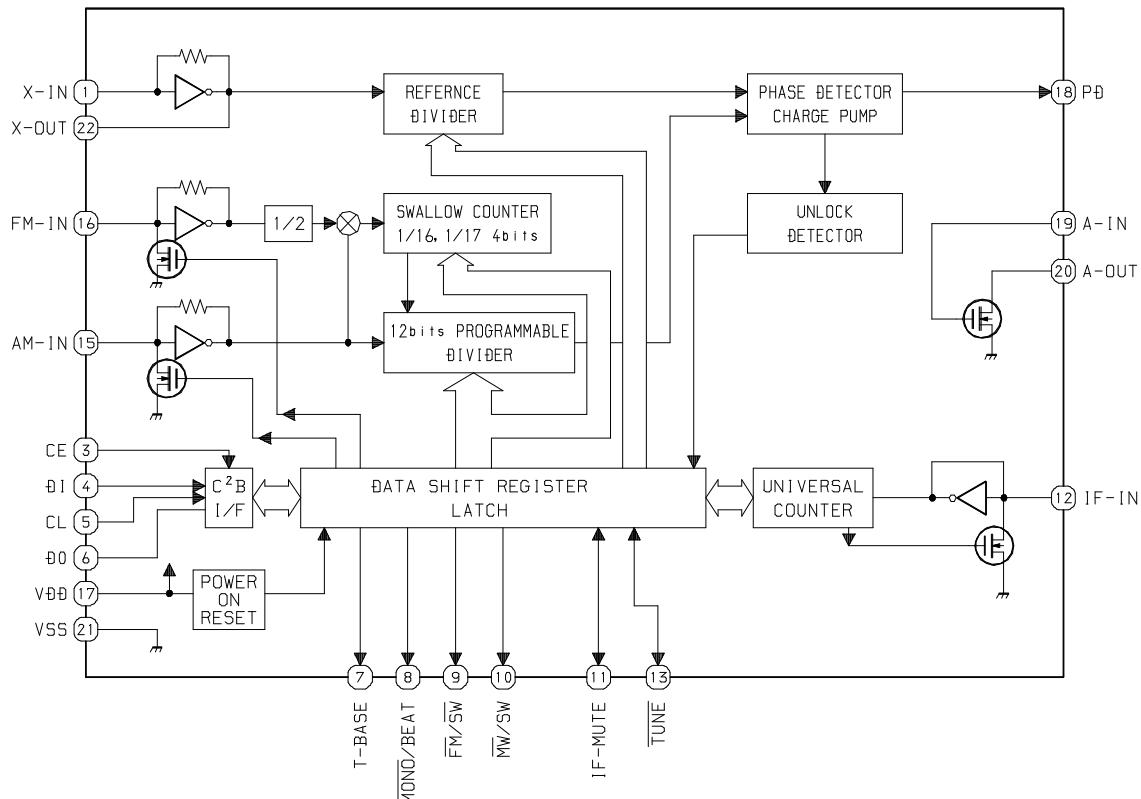
	10G	9G~2G	1G
P1	(())	1-1	VOLUME
P2	B6	2-1	B18
P3	B7	3-1	B19
P4	B8	4-1	B20
P5	B9	5-1	B21
P6	B10	1-2	B22
P7	B11	2-2	B23
P8	B12	3-2	B24
P9	B13	4-2	B25
P10	MONO	5-2	DD NR
P11	RDS	1-3	REC
P12	EON	2-3	
P13	AG	3-3	
P14	○	4-3	C
P15	PRESET No.	5-3	
P16	2a	1-4	
P17	2f	2-4	KHz
P18	2b	3-4	MHz
P19	2g	4-4	dB
P20	2e	5-4	(b)
P21	2c	1-5	D
P22	2d	2-5	S1
P23	1a	3-5	AUTO
P24	1f	4-5	#
P25	1b	5-5	(#)
P26	1g	1-6	B14
P27	1e	2-6	B17
P28	1c	3-6	B16
P29	1d	4-6	B15
P30	T-BASS	5-6	BBE
P31	B1	1-7	-
P32	B2	2-7	-
P33	B3	3-7	-
P34	B4	4-7	-
P35	B5	5-7	-

IC BLOCK DIAGRAM (MX-NH2000)

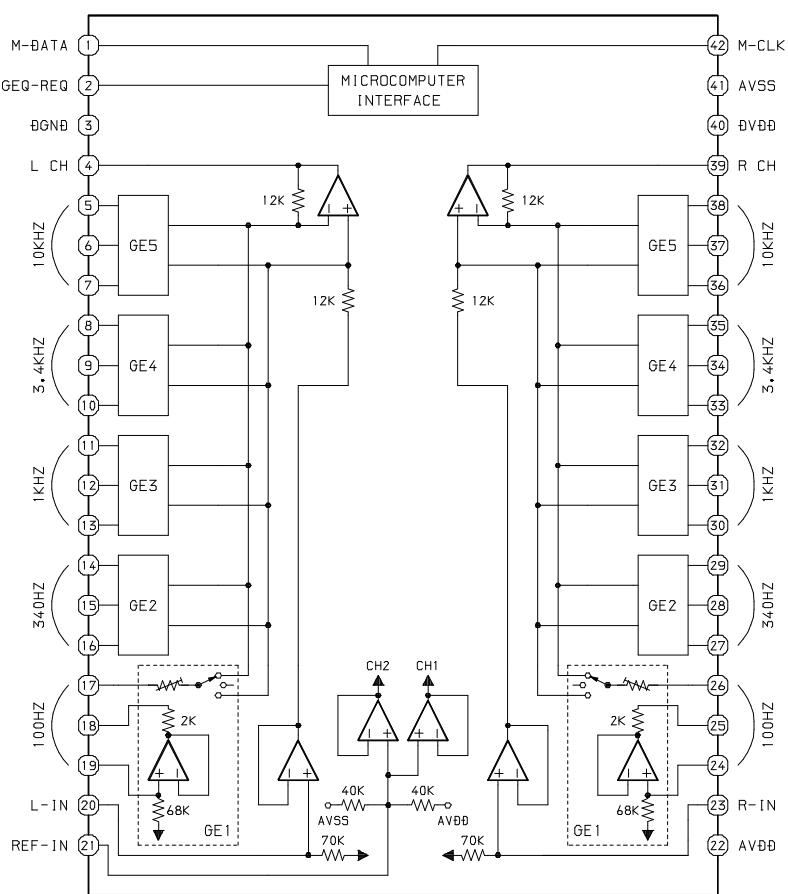
IC, BU9990-03FS



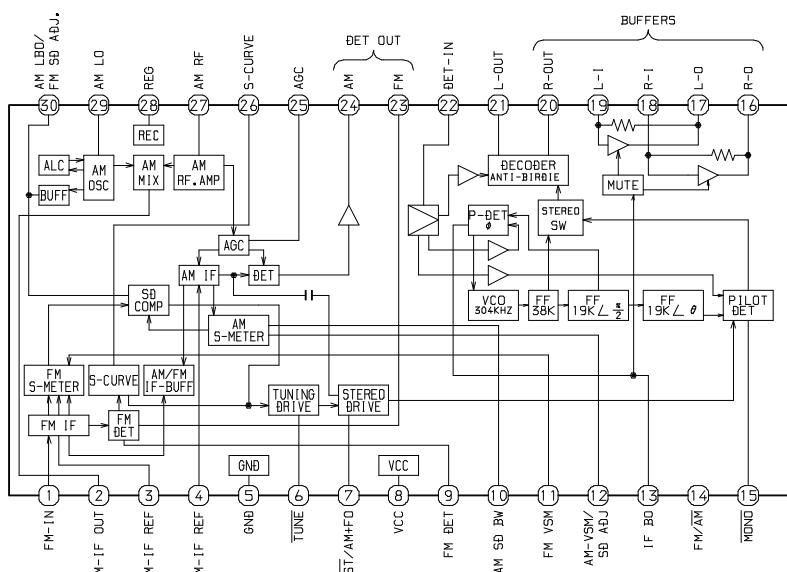
IC, LC72131D



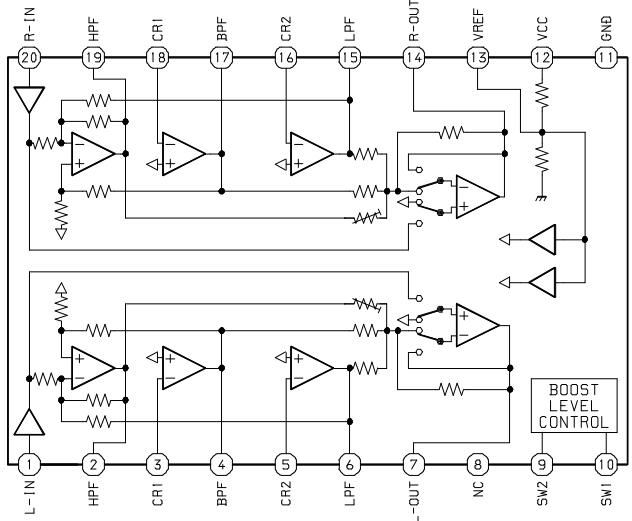
IC, M62449FP



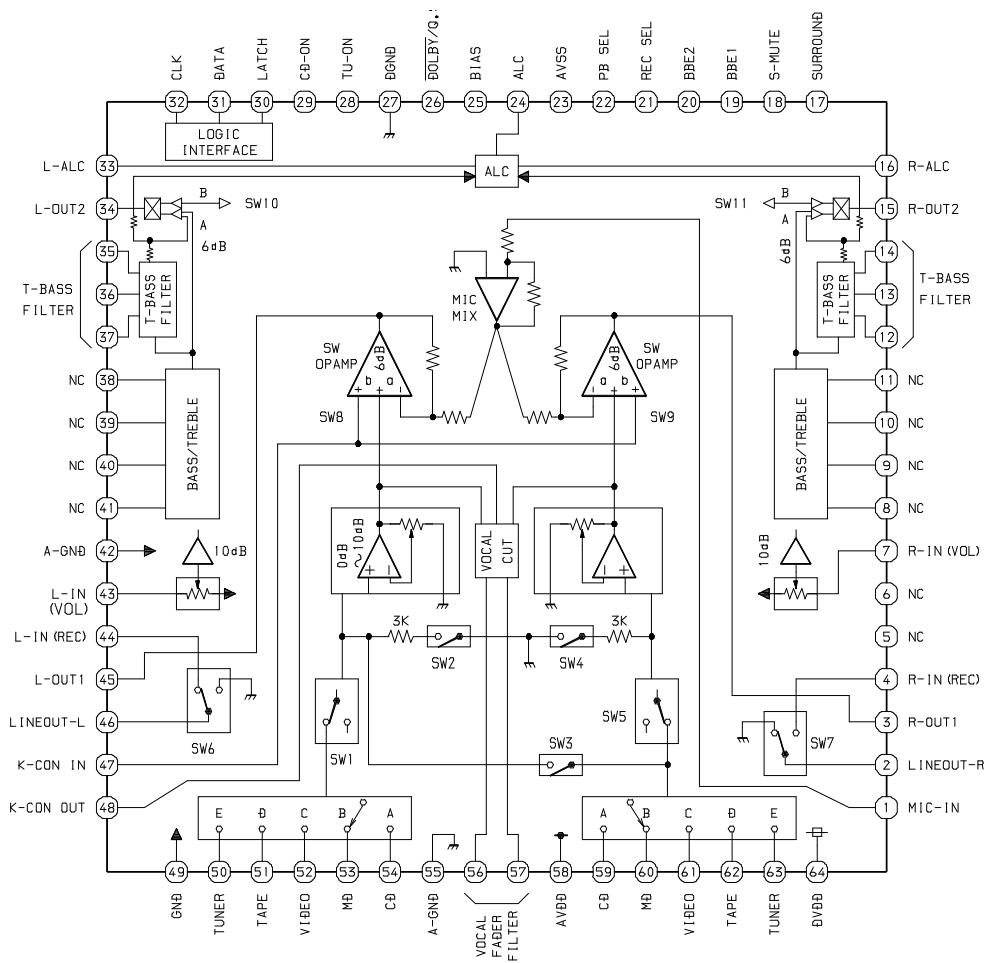
IC, LA1837NL



IC, NJM2152M



IC, M62445Afp



IC DESCRIPTION (MX-NH2000)

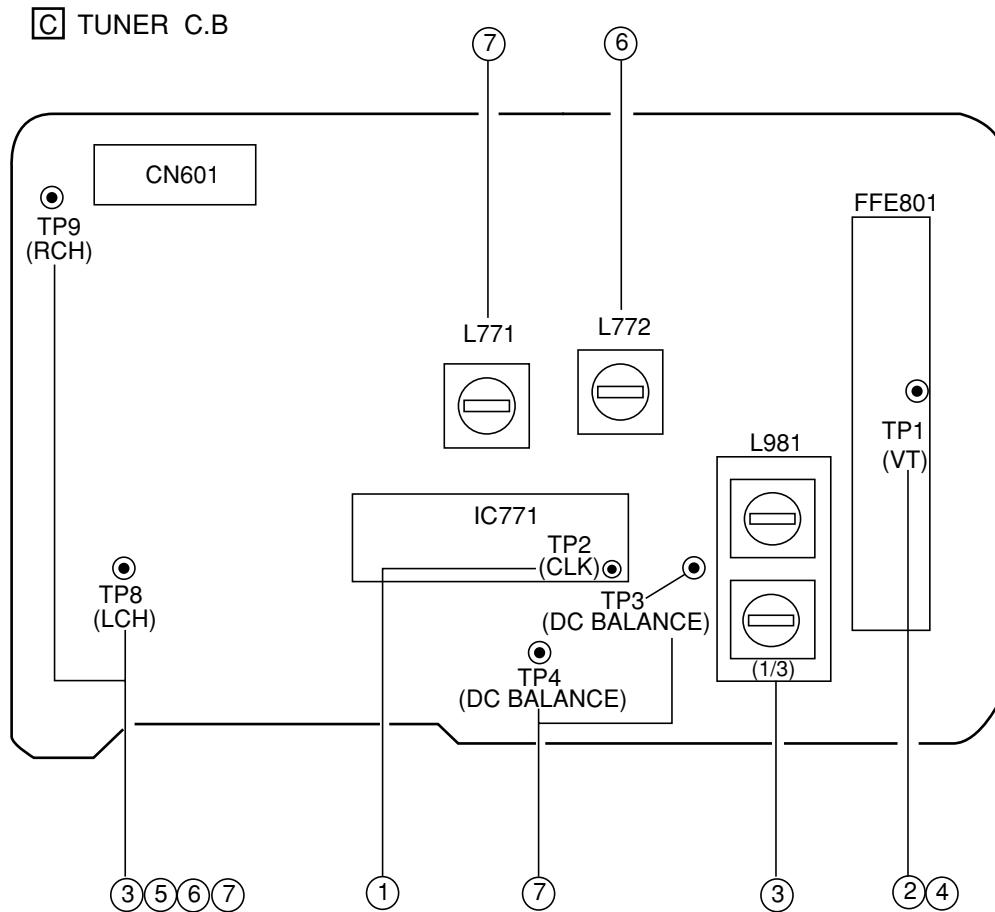
IC, UPD780228GF-065-3BA

Pin No.	Pin Name	I/O	Description
1	K-SCAN	O	Key scan output.
2	RHYTHM-CS	O	Chip select output to IC, BU9990-03FS.
3	RHYTHM-SCLK	O	Clock output to IC, BU9990-03FS.
4	RHYTHM-SD	O	Data output to IC, BU9990-03FS.
5	PLL CE	O	PLL IC chip enable output.
6	O-M/CLK	O	Main clock output.
7	O-M/DATA	O	Main data output.
8	O-M/STB	O	Main strobe output.
9	I/O-SERIAL	I/O	Communication port for GEQ, CD and DECK.
10	O-MUTE	O	System mute (ON when "H").
11	O-POWER	O	System power supply (ON when "L").
12	DIMER 2	O	Dimmer control ("L" when 2).
13	O-MUTE S	O	Sound L, R, Center, SW Mute.
14	LED-ECO	O	ECO LED output.
15	NC	-	Not connected.
16	NC	-	Not connected.
17	IC	-	Connect to GND.
18	VSS	-	GND.
19	VDD	-	Power supply terminal.
20	LED-MD	O	MD LED output.
21	TM-BASE	I	Time base input.
22	TUNE/IFO	I	Tuning detection input.
23	STEREO	I	Stereo detection input.
24	NC	-	Not connected.
25	I-RE VOL A	I	Rotary Encoder Input A / B.
26	I-RE VOL B		
27	LED-CD	O	CD LED output.
28	NC	-	Not connected.
29	RDS-CLK	I	TUNER RDS IC clock input. (Not used.)
30	RESET	I	Reset input.
31	I-RDS	I	Tuner RDS input. (Not used.)
32	GEQ-REQ	O	Latch output to IC, M62449FP.
33	COUNTER	I	Tape counter input.
34	I-RMC	I	Remote controller input (Active "L").
35	I-SURR-OFF	I	Stop surround function when using head phone.
36	O-SHIFT	O	Output for oscillated frequency shift.
37	VDD	-	Power supply terminal.
38	X2	-	4.19MHz oscillator circuit.
39	X1		
40	VSS	-	GND.
41	AVDD	-	Power supply terminal.
42	HOLD	I	Power failure / over current detected input.

Pin No.	Pin Name	I/O	Description
43	I-RDS-SIG	I	Tuner tuning signal level A/D input. (Not used.)
44	I-MIC	I	MIC input level detection.
45	KEY1	I	KEY1 input.
46	KEY2	I	KEY2 input.
47	I-TEMPO	I	TEMPO input (100Hz, 3.3kHz).
48	I-GE-2	I	DEMO, TIMER, CLOCK, SPICE A, AUTO SPICE / FILL IN input.
49	I-GE-1	I	JOG, SPICE B SW input.
50	AVSS	-	GND.
51	LED-TAPE	O	Tape LED output.
52	LED-TUNER	O	Tuner LED output.
53	LED-VIDEO	O	Video LED output.
54~58	P1~P5	O	FL segment P1~P5 output.
59	P6/SEL3	I/O	FL segment P6 output. / Select 3 diode input.
60	P7/SEL2	I/O	FL segment P7 output. / Select 2 diode input.
61	P8/SEL1	I/O	FL segment P8 output. / Select 1 diode input.
62	P9/PROLOGIC	I/O	FL segment P9 output. / PROLOGIC select diode input.
63	P10/DEMO	I/O	FL segment P10 output. / DEMO select diode input.
64	P11/V-CD	I/O	FL segment P11 output. / V-CD select diode input
65~78	P12~P25	O	FL segment P12~P25 output.
79	VDD	-	Power supply terminal.
80	-VFL	-	Power FL display negative supply terminal.
81~90	P26~P35	O	FL segment P26~P35 output.
91~100	G10~G1	O	FL grid G10~G1 output.

Pin No.	Pin Name	I/O	Description
1	MCLKONT	I	Controls build-in-clock generation circuit with external R.
2	TEST1	I	Test mode "H" : Normal / "L" : Test
3	CLOCK	I	Clock input via serial bus.
4	STB	I	Strobe input via serial bus.
5	DATA	I	Data input via serial bus
6	CKO	O	Clock output.
7	CKI	I	Clock input.
8	VCC	-	Power supply.
9	DSO	O	(L+R) or (L-R) or MIC signal output.
10	TEST	O	Memory/Mute/Sampling data output. (Not used.)
11	LPF11	I	Low pass filter 1 input 1.
12	LPF12	I	Low pass filter 1 input 2.
13	LPF1O	O	Low pass filter 1 output.
14	ADI	I	A/D integrator input.
15	ADO	O	A/D integrator output.
16	GND	-	Ground
17	DAI	I	D/A integrator input.
18	DAO	O	D/A integrator output
19	LPF21	I	Low pass filter 2 input 1.
20	LPF22	I	Low pass filter 2 input 2.
21	LPF2O	O	Low pass filter 2 output.
22	VIN	I	Feedback volume input.
23	OUT	O	Microphone output.
24	VREF	-	Reference.
25	R OUT	O	Right channel mixing output.
26	L OUT	O	Left channel mixing output.
27	DELAY OUT	O	Delay signal output.
28	R IN	I	Right channel mixing input.
29	L IN	I	Left channel mixing input.
30	VDD	-	Power supply.
31	MIC IN	I	Microphone input.
32	MVOL IN	I	Mix volume input.

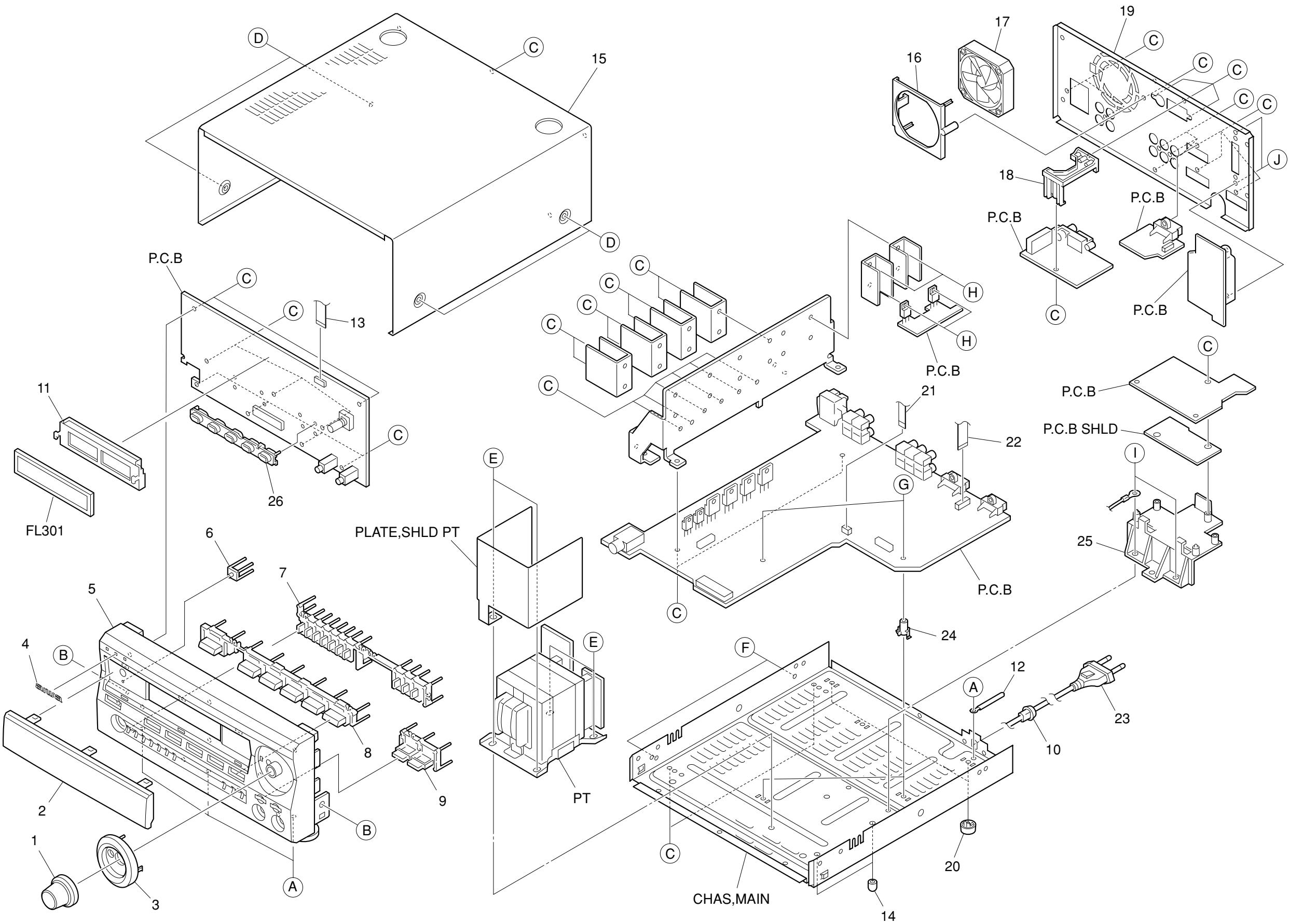
ADJUSTMENT < TUNER > (MX-NH2000)



< TUNER SECTION >

1. **Clock Check**
Settings : • Test point : TP2
Method : Set to AM 1710kHz and check that the test point is $2160\text{kHz} \pm 45\text{Hz}$.
2. **AM VT Check**
Settings : • Test point : TP1
Method : Set to AM 1710kHz and AM 530kHz and check that the test point is less than 8.5V (1710kHz) and more than 0.6V (530kHz).
3. **AM Tracking Adjustment**
Settings : • Test point : TP8(Lch), TP9(Rch)
• Adjustment location :
L981(1/3) 1000kHz
Method : Set to MW 1000kHz and adjust L981(1/3) so that the test point is max.
4. **FM VT Check**
Settings : • Test point : TP1
Method : Set to FM 108.0MHz and check that the test point is less than 8.0V .
Set to FM 87.5MHz and check that the test point is more than 0.5V .
5. **FM Tracking Check**
Settings : • Test point : TP9(Lch), TP9(Rch)
Method : • Set to FM 98.0MHz and check that the test point is less than 9.0dB .
6. **AM IF Adjustment**
Settings : • Test point : TP8(Lch), TP9(Rch)
• Adjustment location :
L772 450kHz
7. **DC Balance / Mono Distortion Adjustment**
Settings : • Test point : TP3, TP4 (DC Balance)
TP8(Lch), TP9(Rch) (Distortion)
• Adjustment location : L771
• Input level : $60\text{dB}\mu\text{V}$
Method : Set to FM 98.0MHz and adjust L771 so that the voltage between TP3 and TP4 becomes $0\text{V} \pm 0.04\text{V}$.
Next, check that the distortion is less than 1.3% .

MECHANICAL EXPLODED VIEW 1 / 1 (MX-NH2000)



MECHANICAL PARTS LIST 1 / 1 (MX-NH2000)

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	8Z-SP1-011-010		KNOB, RTRY VOL
2	8A-SP1-004-010		WINDOW, DISPLAY
3	8A-SP1-012-010		RING, VOL
4	87-CE3-023-010		BADGE, AIWA 30N SILV
5	8A-SP1-001-010		CABI, FR
6	8Z-SP1-015-010		REFLECTOR, ECO
7	8A-SP1-008-010		KEY, KARAOKE
8	8Z-SP1-010-010		KEY, ASSY FUN
9	8A-SP1-007-010		KEY, BBE
10	87-085-185-010		BUSHING, AC CORD (E)
11	88-SX1-203-210		GUIDE, FL
12	87-064-185-010		HLDR, WIRE
13	88-908-281-110		FF-CABLE, 8P 1.25 280MM
15	8A-SP1-027-010		CABI, STEEL LH
16	8Z-SP1-207-010		COVER, FAN
17	87-A91-232-010		FAN, F614R-12MC-22-350MM
18	88-AR1-203-010		HLDR, TU
19	8A-SP1-023-010		PANEL, REAR LHSM
20	87-085-213-010		FOOT, H12.5
21	88-904-151-110		FF-CABLE, 4P 1.25 150MM
22	88-910-071-110		FF-CABLE, 10P 1.25 70MM
△ 23	87-A80-092-010		AC CORD ASSY, E BLK SUN FAI
24	8Z-SP1-208-010		HLDR, PWB 13.5
25	8Z-SP1-209-010		HLDR, PWB ECO
26	8Z-SP1-202-010		GUIDE, LED FUN
A	87-067-688-010		BVTT+3-6
B	87-591-094-410		TAPPING SCREW, QIT+3-6
C	87-067-703-010		TAPPING SCREW, BVT2+3-10
D	87-B10-091-010		UTT2+3-10 W/O BLK
E	87-078-191-010		S-SCREW, IT+4-10
F	87-721-095-410		QT2+3-8GLD W/O SLOT
G	87-067-822-010		BVT2+3-20 W/O SLOT
H	87-067-758-010		BVT2+3-12 W/O SLOT
I	87-067-579-010		TAPPING SCREW, BVT2+3-8
J	81-653-215-010		SPECIAL SCREW, VT2.6-8

COLOR NAME TABLE

Basic color symbol	Color	Basic color symbol	Color	Basic color symbol	Color
B	Black	C	Cream	D	Orange
G	Green	H	Gray	L	Blue
LT	Transparent Blue	N	Gold	P	Pink
R	Red	S	Silver	ST	Titan Silver
T	Brown	V	Violet	W	White
WT	Transparent White	Y	Yellow	YT	Transparent Yellow
LM	Metallic Blue	LL	Light Blue	GT	Transparent Green
LD	Dark Blue	DT	Transparent Orange	GM	Metallic Green
YM	Metallic Yellow	DM	Metallic Orange		

MODEL NO.

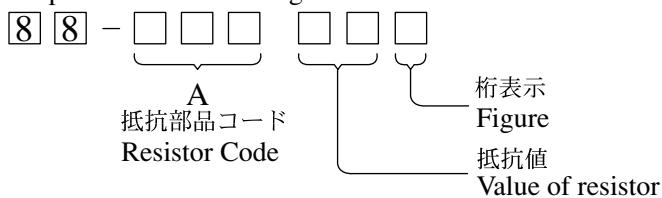
DX-NH2000**ELECTRICAL MAIN PARTS LIST**

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION	REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
IC				C7	87-010-197-080	CAP, CHIP 0.01 DM	
	8A-SX1-608-010	C-IC, UPD78044HGF		C8	87-010-314-080	C-CAP,S 22P-50V	
				C9	87-010-318-080	C-CAP,S 47P-50 CH	
				C10	87-010-316-080	C-CAP,S 33P-50 CH	
				C11	87-010-196-080	CHIP CAPACITOR, 0.1-25	
TRANSISTOR				C12	87-010-197-080	CAP, CHIP 0.01 DM	
	87-026-263-080	C-TR, RN1410		C14	87-010-405-040	CAP,E 10-50	
	87-A30-076-080	C-TR, 2SC3052F		C15	87-010-405-040	CAP,E 10-50	
				C201	87-018-134-080	CAPACITOR, TC-U 0.01-16	
				C202	87-010-197-080	CAP, CHIP 0.01 DM	
DIODE				C203	87-010-197-080	CAP, CHIP 0.01 DM	
	87-020-465-080	DIODE, 1SS133 (110MA)		C253	87-010-178-080	CHIP CAP 1000P	
	87-070-136-080	ZENER, MTZJ5.1B		C254	87-010-178-080	CHIP CAP 1000P	
				C255	87-010-178-080	CHIP CAP 1000P	
				C256	87-010-178-080	CHIP CAP 1000P	
MAIN C.B.				CN1	87-099-669-010	CONN, 8P TUC-P8X-B1	
C301	87-010-322-080	C-CAP,S 100P-50 CH		CN2	87-099-559-010	CONN, 13P TUC-P13X-B1	
C305	87-010-197-080	CAP, CHIP 0.01 DM		FL201	8Z-SX1-608-010	FL, 6-BT-303GNK	
C310	87-016-462-080	C-CAP,S 1-16 F		L1	87-005-152-080	COIL, 10UH	
C311	87-016-462-080	C-CAP,S 1-16 F		L2	87-005-152-080	COIL, 10UH	
C312	87-016-462-080	C-CAP,S 1-16 F		L3	87-005-152-080	COIL, 10UH	
C313	87-010-184-080	CHIP CAPACITOR 3300P(K)		L5	87-005-152-080	COIL, 10UH	
C314	87-010-402-040	CAP,E 2.2-50 SME		LED203	87-A40-263-080	LED, SLH-56PCT31 GRN	
CN301	87-009-241-010	CONNECTOR, 11P		LED204	87-A40-263-080	LED, SLH-56PCT31 GRN	
CN302	87-A60-061-010	CONN, 06P V 9604S-06C		LED205	87-A40-317-080	LED, SLR-342VCT31 RED	
CN303	87-099-015-010	CONN, 13P 6216V		LED206	87-A40-317-080	LED, SLR-342VCT31 RED	
CN304	87-099-667-010	CONN, 8P TUC-P8P-B1		LED207	87-A40-317-080	LED, SLR-342VCT31 RED	
CN305	87-099-570-010	CONN, 13P TUC-P13P-B1		S201	87-A90-095-080	SW, TACT EVQ11G04M	
FB301	87-008-372-080	FILTER, EMI BL OIRNI		S202	87-A90-095-080	SW, TACT EVQ11G04M	
FB302	87-008-372-080	FILTER, EMI BL OIRNI		S203	87-A90-095-080	SW, TACT EVQ11G04M	
FB303	87-008-372-080	FILTER, EMI BL OIRNI		S204	87-A90-095-080	SW, TACT EVQ11G04M	
FB304	87-008-372-080	FILTER, EMI BL OIRNI		S205	87-A90-095-080	SW, TACT EVQ11G04M	
FB305	87-008-372-080	FILTER, EMI BL OIRNI		S206	87-A90-095-080	SW, TACT EVQ11G04M	
FB306	87-008-372-080	FILTER, EMI BL OIRNI		S207	87-A90-095-080	SW, TACT EVQ11G04M	
FB307	87-008-372-080	FILTER, EMI BL OIRNI		S208	87-A90-095-080	SW, TACT EVQ11G04M	
L301	87-005-130-080	COIL, 10UH		X1	87-A70-075-080	VIB, CER 4.19MHZ CRHF	
W1	88-913-121-110	FF-CABLE, P1.25		KEY C.B.			
W2	88-906-421-110	FF-CABLE, 6P 1.25 420MM					
W3	88-SX1-610-010	CORD, FG 11P					
FRONT C.B.				S101	87-A90-095-080	SW, TACT EVQ11G04M	
				S102	87-A90-095-080	SW, TACT EVQ11G04M	
C1	87-010-264-040	CAP,E 100-10 5L					
C2	87-010-072-040	CAP,E 2.2-50 5L					
C4	87-010-246-040	CAP,E 47-35 SME					
C5	87-010-190-080	S CHIP F 0.01					
C6	87-010-196-080	CHIP CAPACITOR, 0.1-25					

○チップ抵抗部品コード／CHIP RESISTOR PART CODE

チップ抵抗部品コードの成り立ち

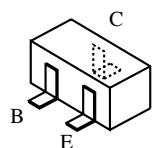
Chip Resistor Part Coding



チップ抵抗
Chip resistor

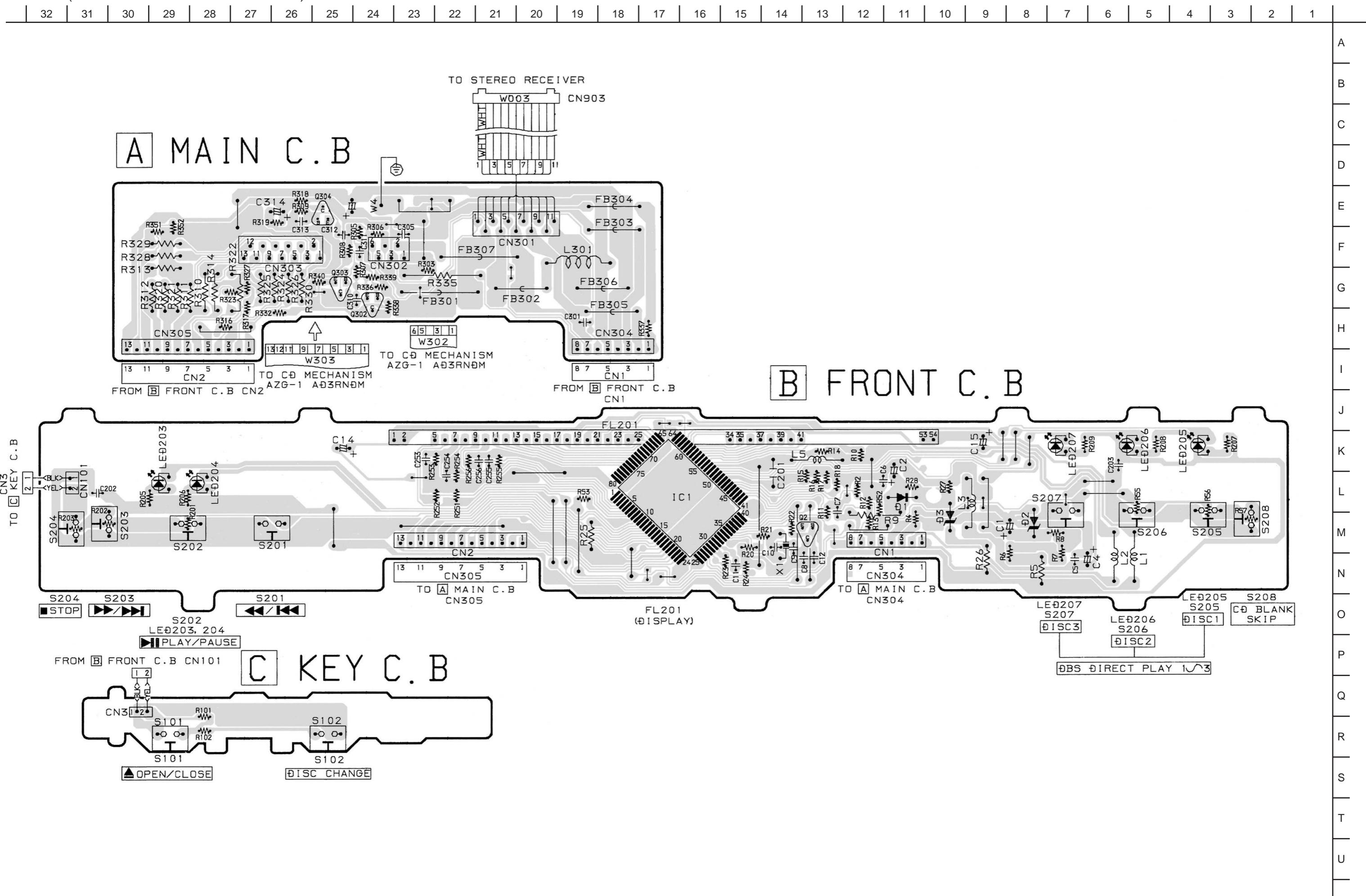
容量 Wattage	種類 Type	許容誤差 Tolerance	記号 Symbol	寸法／Dimensions (mm)			抵抗コード Resistor Code : A	
				外形／Form	L	W		
1/16W	1005	± 5%	CJ		1.0	0.5	0.35	104
1/16W	1608	± 5%	CJ		1.6	0.8	0.45	108
1/10W	2125	± 5%	CJ		2	1.25	0.45	118
1/8W	3216	± 5%	CJ		3.2	1.6	0.55	128

TRANSISTOR ILLUSTRATION (DX-NH2000)

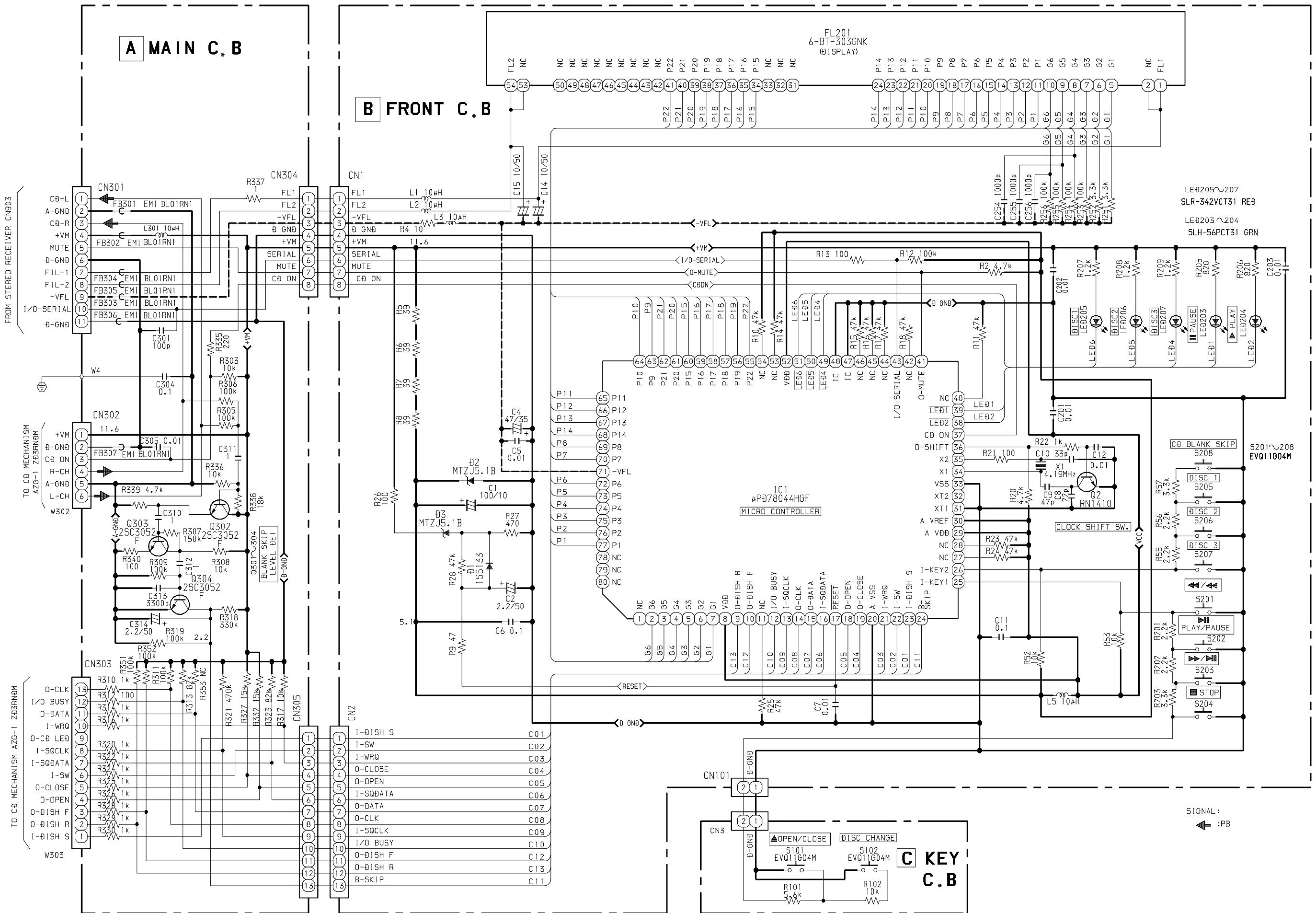


2SC3052
RN1410

WIRING (MAIN / FRONT / KEY : DX-NH2000)

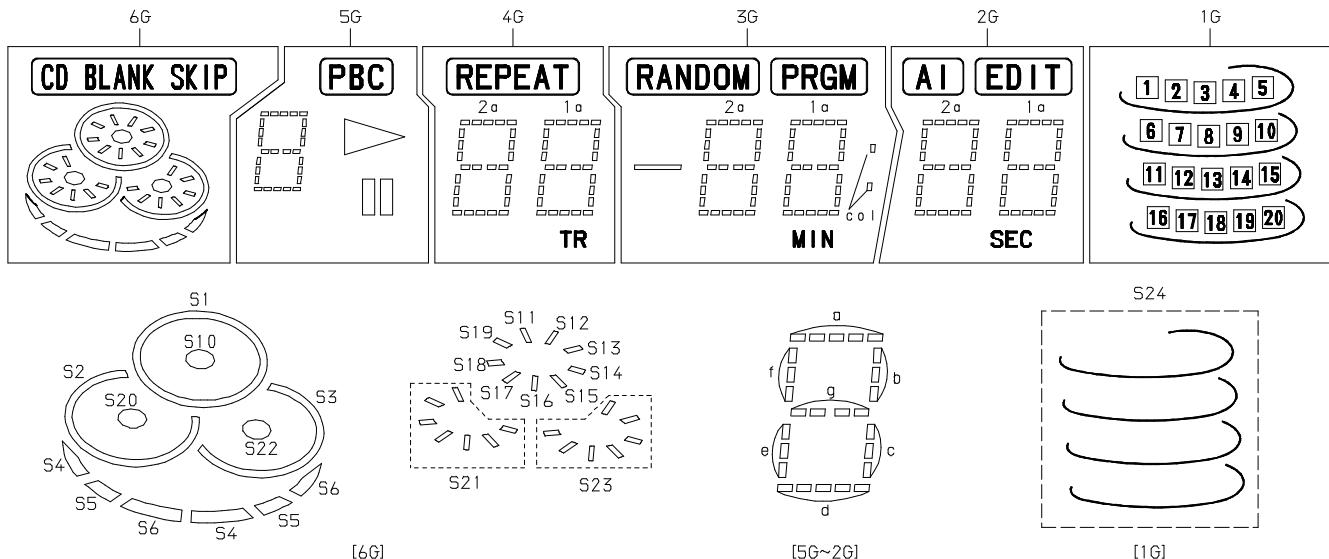


SCHEMATIC DIAGRAM (MAIN / FRONT / KEY : DX-NH2000)



FL GRID (6-BT-303GNK) ASSIGNMENT AND ANODE CONNECTION (DX-NH2000)

GRID ASSIGNMENT



ANODE CONNECTION

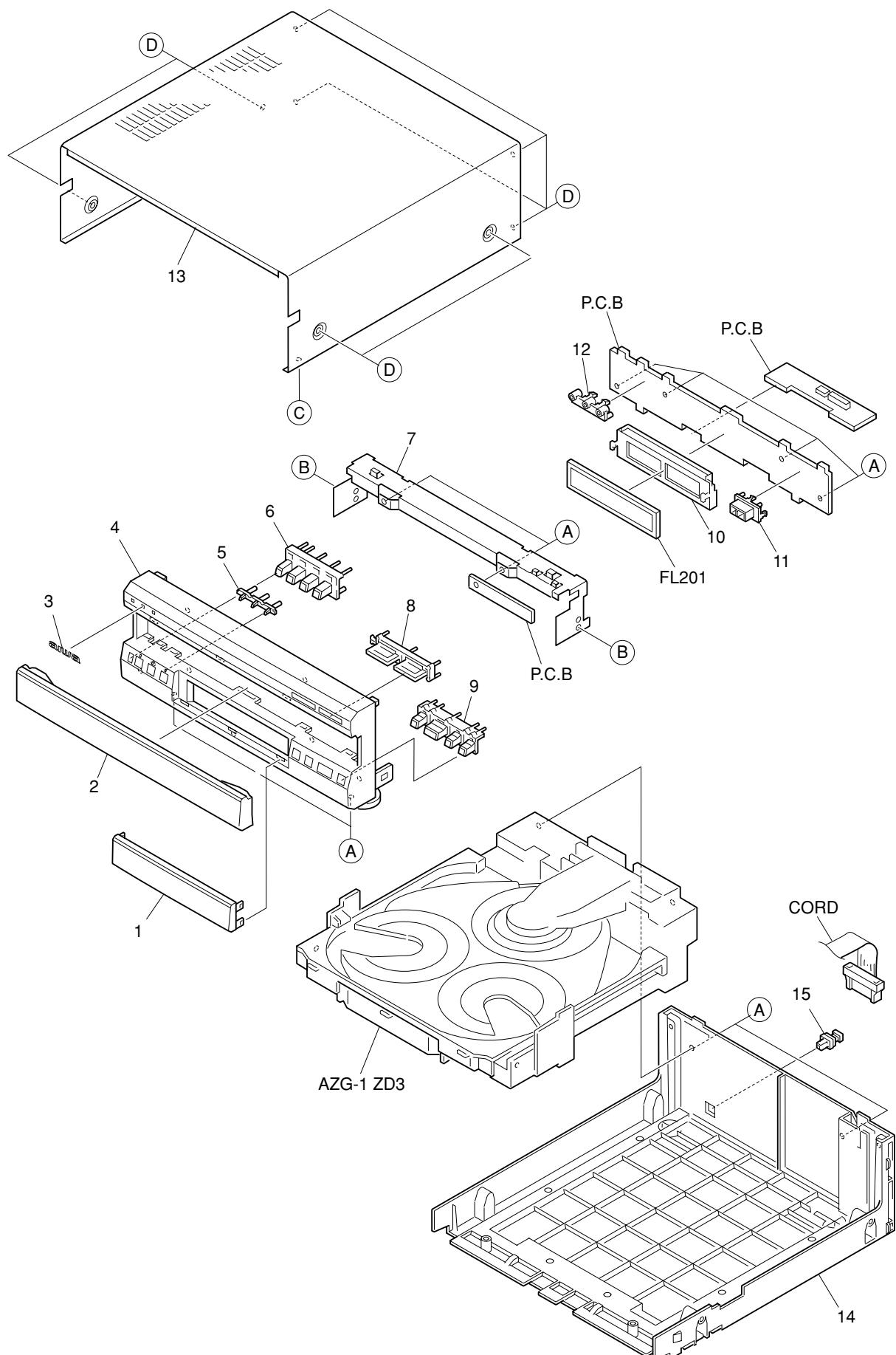
	6G	5G	4G	3G	2G	1G
P1	S10	a	1a	1a	1a	1
P2	S12	b	1b	1b	1b	2
P3	S11	f	1f	1f	1f	3
P4	S13	g	1g	1g	1g	4
P5	S19	c	1c	1c	1c	5
P6	S14	e	1e	1e	1e	6
P7	S18	d	1d	1d	1d	7
P8	S15	-	-		-	8
P9	S17	▶	2a	2a	2a	9
P10	S16		2b	2b	2b	10
P11	S1	-	2f	2f	2f	11
P12	S20	-	2g	2g	2g	12
P13	S21	-	2c	2c	2c	13
P14	S2	-	2e	2e	2e	14
P15	S22	-	2d	2d	2d	15
P16	S23	-	TR	MIN	SEC	16
P17	S3	PBC	REPEAT	c o l	EDIT	17
P18	S4	(PBC)	(REPEAT)	(PRGM)	(EDIT)	18
P19	S5	-	-	(PRGM)	AI	19
P20	S6	-	-	RANDOM	(AI)	20
P21	CD BLANK SKIP	-	-	(RANDOM)	-	S24
P22	(CD BLANK SKIP)	-	-	-	-	-

IC DESCRIPTION (DX-NH2000)
IC, UPD78044HGF

Pin No.	Pin Name	I/O	Description
1	NC	-	Not connected.
2~7	G6~G1	O	FL grid output G6~G1.
8	VDD	-	Power supply terminal.
9	O-DISH R	O	CD turntable reverse rotation output.
10	O-DISH F	O	CD turntable forward rotation output.
11	NC	-	Connected to pull-down resistor
12	I/O BUSY	I/O	DSP serial latch output.
13	I-SQCLK	I	DSP SUB Q read-out clock output.
14	O-CLK	O	CD clock output.
15	O-DATA	O	CD data output.
16	I-SQDATA	I	DSP serial data input.
17	<u>RESET</u>	I	Reset input.
18	O-OPEN	O	CD tray open output.
19	O-CLOSE	O	CD tray close output.
20	A VSS	-	GND.
21	I-WRQ	I	CD WRQ input.
22	I-SW	I	CD motor key switch A/D input.
23	I-DISH S	I	CD turntable photo sensor A/D input.
24	B-SKIP	I	BLANK SKIP A/D input.
25	I-KEY1	I	Key1 A/D input.
26	I-KEY2	I	Key2 A/D input.
27	NC	-	Not connected.
28	NC	-	Not connected.
29	A VDD	-	Power supply terminal.
30	A VREF	-	Power supply terminal.
31	XT1	-	Connect to GND.
32	XT2	-	Connect to GND.
33	VSS	-	GND.
34	X1	-	4.19MHz oscillator circuit.
35	X2		
36	O-SHIFT	O	Micro controller clock shift output. (Shift when "L").
37	CD ON	O	Power supply output for CD circuit ("H": ON).
38	<u>LED 2</u>	O	Play LED output.
39	<u>LED 1</u>	O	Pause LED output.
40	NC	-	Not connected.
41	O-MUTE	O	CD Audio mute output.
42	NC	-	Connected to pull-down resistor.
43	I/O-SERIAL	I/O	Serial data input / output.
44~46	NC	-	Connected to pull-down resistor.
47,48	IC	-	Connect to GND.
49	<u>LED4</u>	O	Disc1 LED output.
50	<u>LED5</u>	O	Disc2 LED output.

Pin No.	Pin Name	I/O	Description
51	LED6	O	Disc3 LED output.
52	VDD	—	Power supply terminal.
53	NC	—	Connected to pull-down resistor.
54	NC	—	Connected to pull-down resistor.
55	P22	O	FL segment output P22.
56	P19	O	FL segment output P19.
57	P18	O	FL segment output P18.
58	P17	O	FL segment output P17.
59	P16	O	FL segment output P16.
60	P15	O	FL segment output P15.
61	P20	O	FL segment output P20.
62	P21	O	FL segment output P21.
63	P9	O	FL segment output P9.
64	P10	O	FL segment output P10.
65	P11	O	FL segment output P11.
66	P12	O	FL segment output P12.
67	P13	O	FL segment output P13.
68	P14	O	FL segment output P14.
69, 70, 72~77	P8~P1	O	FL segment output P8~P1.
71	-VFL	—	FL display negative supply terminal.
78~80	NC	—	Not connected.

MECHANICAL EXPLODED VIEW 1 / 1 (DX-NH2000)



MECHANICAL PARTS LIST 1 / 1 (DX-NH2000)

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	8Z-SX1-003-010		WINDOW, CD
2	8A-SX1-002-010		PANEL, TRAY
3	87-CE3-023-010		BADGE, AIWA 3ON SILV
4	8A-SX1-001-010		CABI, FR
5	8Z-SX1-009-010		REFLECTOR, DISC
6	8Z-SX1-005-010		KEY, DISC
7	8Z-SX1-201-110		HLDL, CD
8	8A-SX1-004-010		KEY, OPEN
9	8Z-SX1-008-010		KEY, ASSY OPE
10	88-SX1-203-210		GUIDE, FL
11	8Z-SX1-202-110		GUIDE, LED OPE
12	8Z-SX1-203-110		GUIDE, LED DISC
13	8A-SX1-014-010		CABI, STEEL LH
14	8A-SX1-010-010		CABI, REAR YLSM
15	84-ZG1-245-210		CAP, OPTICAL
A	87-067-703-010		TAPPING SCREW, BVT2+3-10
B	87-721-097-410		QT2+3-12 GLD
C	87-067-633-010		TAPPING SCREW, BVT2+3-8
D	87-B10-091-010		UTT2+3-10 W/O SLOT BLK

COLOR NAME TABLE

Basic color symbol	Color	Basic color symbol	Color	Basic color symbol	Color
B	Black	C	Cream	D	Orange
G	Green	H	Gray	L	Blue
LT	Transparent Blue	N	Gold	P	Pink
R	Red	S	Silver	ST	Titan Silver
T	Brown	V	Violet	W	White
WT	Transparent White	Y	Yellow	YT	Transparent Yellow
LM	Metallic Blue	LL	Light Blue	GT	Transparent Green
LD	Dark Blue	DT	Transparent Orange	GM	Metallic Green
YM	Metallic Yellow	DM	Metallic Orange		

MODEL NO.

FX-NH2000

ELECTRICAL MAIN PARTS LIST

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION	REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
IC				C360	87-010-183-080	C-CAP,S 2700P-50 B	
87-A20-455-010	IC,HA12211			C363	87-A10-292-080	CAP,M 5600P-50 J	
87-A20-355-010	IC,CXA1553P			C370	87-010-196-080	CHIP CAPACITOR,0.1-25	
8Z-SW1-609-040	C-IC,M38503M4-094FP T4			C371	87-010-179-080	CAP,CHIP S B1200P	
87-020-454-010	IC,DN6851			C372	87-010-179-080	CAP,CHIP S B1200P	
TRANSISTOR				C373	87-010-179-080	CAP,CHIP S B1200P	
87-A30-087-080	C-FET,2SK2158			C374	87-010-179-080	CAP,CHIP S B1200P	
87-A30-074-080	C-TR,RT1P 141C			C375	87-010-545-080	CAP,ELECT 0.22-50V	
87-026-610-080	TR,KTC3198GR			C376	87-010-545-080	CAP,ELECT 0.22-50V	
87-A30-073-080	C-TR,RT1N 141C			C378	87-010-196-080	CHIP CAPACITOR,0.1-25	
87-A30-076-080	C-TR,2SC3052F			C381	87-010-197-080	CAP,CHIP 0.01 DM	
89-112-965-080	TR,2SA1296 (0.75W)			C382	87-010-318-080	C-CAP,S 47P-50 CH	
87-A30-085-070	C-TR,CSA1362GR			C383	87-010-197-080	CAP,CHIP 0.01 DM	
89-318-155-080	TR,2SC1815GR			C384	87-010-403-080	CAP,ELECT 3.3-50V	
89-332-665-080	TR,2SC3266GR			C385	87-010-184-080	CHIP CAPACITOR 3300P(K)	
87-026-263-080	C-TR,RN1410			C386	87-010-196-080	CHIP CAPACITOR,0.1-25	
87-A30-071-080	C-TR,RT1N 144C			C601	87-015-997-090	CAP,E 2200-16 SME	
87-026-463-080	TR,2SA933SRS			C602	87-010-381-080	CAP,ELECT 330-16V	
DIODE				C603	87-010-101-080	CAP,ELECT 220-16	
87-020-465-080	DIODE,1SS133 (110MA)			C604	87-010-237-080	CAP,ELECT 1000-16V	
87-A40-269-080	C-DIODE,MC2836			C605	87-010-198-080	CAP,CHIP 0.022	
87-017-931-080	ZENER,MTZJ5.6B			C606	87-010-404-080	CAP,ELECT 4.7-50V	
MAIN C.B				C607	87-010-263-080	CAP,ELECT 100-10V	
C301	87-010-318-080	C-CAP,S 47P-50 CH		C609	87-010-196-080	CHIP CAPACITOR,0.1-25	
C302	87-010-318-080	C-CAP,S 47P-50 CH		C610	87-010-318-080	C-CAP,S 47P-50 CH	
C303	87-012-157-080	C-CAP,S 330P-50 CH		C611	87-010-312-080	C-CAP,S 15P-50 CH	
C304	87-012-157-080	C-CAP,S 330P-50 CH		C612	87-010-315-080	C-CAP,S 27P-50 CH	
C305	87-012-145-080	CAP,CHIP S 270P CH		C613	87-010-404-080	CAP,ELECT 4.7-50V	
C306	87-012-145-080	CAP,CHIP S 270P CH		C614	87-010-197-080	CAP,CHIP 0.01 DM	
C307	87-010-196-080	CHIP CAPACITOR,0.1-25		C621	87-010-197-080	CAP,CHIP 0.01 DM	
C311	87-010-198-080	CAP,CHIP 0.022		CN301	87-049-919-010	CONN,3P EH V WHT	
C312	87-010-198-080	CAP,CHIP 0.022		CN501	87-099-750-010	CONN,15P V 9604SC	
C313	87-010-180-080	C-CER 1500P		CN702	87-A60-062-010	CONN,05P V 9604S-05C	
C314	87-010-180-080	C-CER 1500P		CN704	87-A60-060-010	CONN,07P V 9604S-07C	
C315	87-010-178-080	CHIP CAP 1000P		FB301	87-008-372-080	FILTER,EMI BL OIRNI	
C316	87-010-178-080	CHIP CAP 1000P		FB601	87-008-372-080	FILTER,EMI BL OIRNI	
C317	87-012-142-080	CAP,S 0.33-16		FB602	87-008-372-080	FILTER,EMI BL OIRNI	
C318	87-012-142-080	CAP,S 0.33-16		FB603	87-008-372-080	FILTER,EMI BL OIRNI	
C319	87-012-141-080	CHIP-CAPACITOR,0.22-16F		L301	87-A50-049-010	COIL,TRAP 85K(COI)	
C320	87-012-141-080	CHIP-CAPACITOR,0.22-16F		L302	87-A50-049-010	COIL,TRAP 85K(COI)	
C321	87-012-141-080	CHIP-CAPACITOR,0.22-16F		L351	87-007-342-010	COIL,OSC 85K BIAS	
C322	87-012-141-080	CHIP-CAPACITOR,0.22-16F		L601	87-005-130-080	COIL,10UH	
C324	87-010-260-080	CAP,ELECT 47-25V		L603	87-005-130-080	COIL,10UH	
C325	87-010-370-080	CAP,E 330-6.3 SME		PIN301	87-099-827-010	CONN,3P S2M-3W	
C327	87-010-404-080	CAP,ELECT 4.7-50V		PIN351	87-099-832-010	CONN,8P S2M-8W	
C328	87-010-404-080	CAP,ELECT 4.7-50V		SFR301	87-024-355-080	SFR,33K DIA6 H	
C332	87-010-196-080	CHIP CAPACITOR,0.1-25		SFR302	87-024-355-080	SFR,33K DIA6 H	
C335	87-010-401-080	CAP,ELECT 1-50V		SFR303	87-024-355-080	SFR,33K DIA6 H	
C336	87-010-401-080	CAP,ELECT 1-50V		SFR304	87-024-355-080	SFR,33K DIA6 H	
C337	87-010-196-080	CHIP CAPACITOR,0.1-25		SFR305	87-024-356-080	SFR,47K DIA6 H	
C339	87-010-196-080	CHIP CAPACITOR,0.1-25		SFR306	87-024-356-080	SFR,47K DIA6 H	
C340	87-010-196-080	CHIP CAPACITOR,0.1-25		SFR351	87-024-356-080	SFR,47K DIA6 H	
C351	87-012-140-080	CAP 470P		SFR352	87-024-356-080	SFR,47K DIA6 H	
C352	87-012-140-080	CAP 470P		FRONT 1 C.B.			
C356	87-010-260-080	CAP,ELECT 47-25V		FRONT 1 C.B.			
C357	87-010-197-080	CAP,CHIP 0.01 DM		CN701	87-A60-062-010	CONN,05P V 9604S-05C	
C358	87-010-183-080	C-CAP,S 2700P-50 B		D701	87-070-278-010	LED,SLZ-738A-24S PGRN	
C359	87-010-183-080	C-CAP,S 2700P-50 B		D702	87-002-787-080	LED,SEL 6215S RED	
				S701	87-A90-095-080	SW,TACT EVQ11G04M	
				S702	87-A90-095-080	SW,TACT EVQ11G04M	

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION	REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
S703	87-A90-095-080		SW, TACT EVQ11G04M	SW2	87-A90-248-010		SW, MICROESE11SH2CXQ
S704	87-A90-095-080		SW, TACT EVQ11G04M	SW3	87-A90-248-010		SW, MICROESE11SH2CXQ
W701	88-905-331-110		FF-CABLE, 5P 1.25 330MM	SW4	87-036-110-010		SW, MICRO SPPB62
				SW5	87-036-110-010		SW, MICRO SPPB62
				SW6	87-036-110-010		SW, MICRO SPPB62
FRONT 2 C.B				SW8	87-A90-248-010		SW, MICRO ESE11SH2CXQ
CN703	87-A60-060-010		CONN, 07P V 9604S-07C	SW9	87-036-110-010		SW, MICRO SPPB62
D711	87-A40-496-040		LED, SLR-342PCT31 GRN	W1	82-ZM3-601-010		RBN, CORD 4P-75
D712	87-A40-496-040		LED, SLR-342PCT31 GRN				
D713	87-A40-496-040		LED, SLR-342PCT31 GRN				
D714	87-070-278-010		LED, SLZ-738A-24-S				
S711	87-A90-095-080		SW, TACT EVQ11G04M				
S712	87-A90-095-080		SW, TACT EVQ11G04M				
S713	87-A90-095-080		SW, TACT EVQ11G04M				
S714	87-A90-095-080		SW, TACT EVQ11G04M				
S715	87-A90-095-080		SW, TACT EVQ11G04M				
W702	88-907-301-110		FF-CABLE, 7P 1.25				

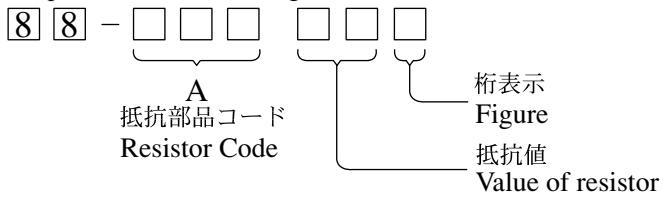
DECK C.B

CN502	87-099-756-010	CONN, 15P 9604 S F
SFR1	87-024-581-010	SFR, 3.3K DIA 6H
SOL1	82-ZM1-618-010	SOL ASSY, 27
SOL2	82-ZM1-618-010	SOL ASSY, 27
SW1	87-A90-248-010	SW, MICROESE11SH2CXQ

○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

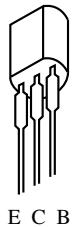
Chip Resistor Part Coding



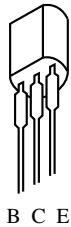
チップ抵抗
Chip resistor

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	
1/16W	1005	± 5%	CJ		1.0	0.5	0.35
1/16W	1608	± 5%	CJ		1.6	0.8	0.45
1/10W	2125	± 5%	CJ		2	1.25	0.45
1/8W	3216	± 5%	CJ		3.2	1.6	0.55

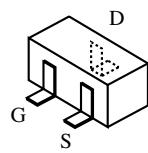
TRANSISTOR ILLUSTRATION (FX-NH2000)



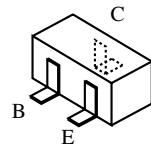
2SC1815GR
2SC3266GR
KTC3198GR



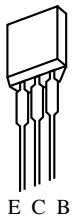
2SA1296



2SK2158



2SC3052
CSA1362
RN1410
RT1N141C
RT1N144C
RT1P141C

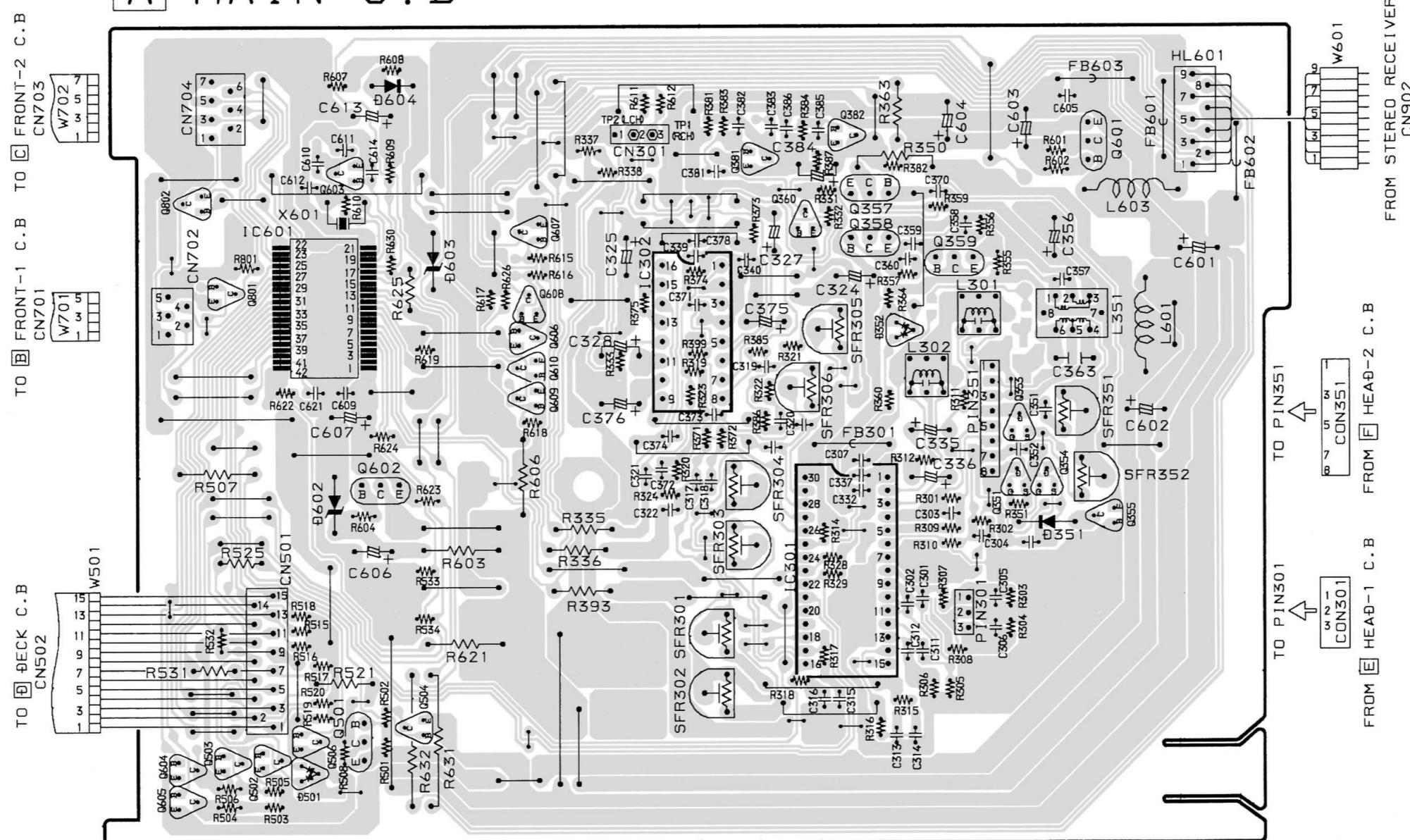


2SA933SRS

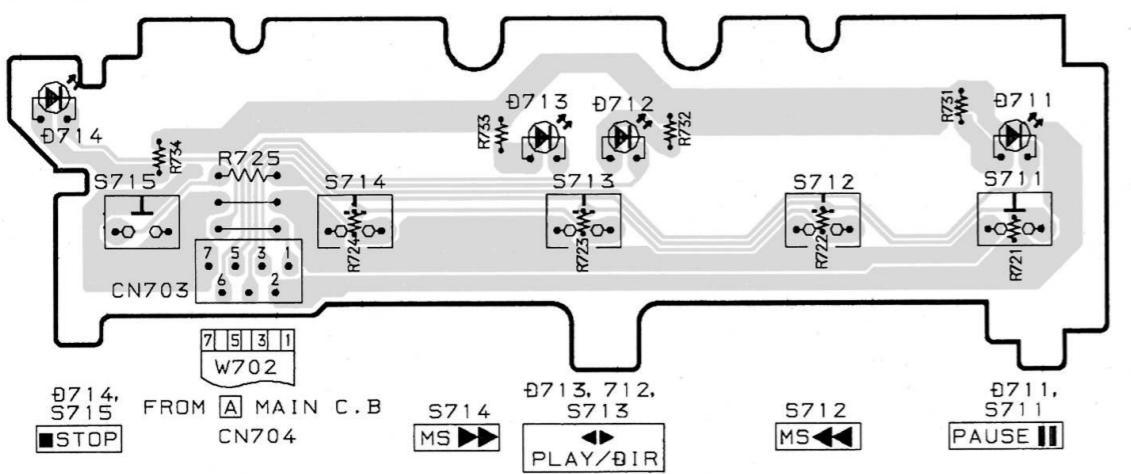
32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
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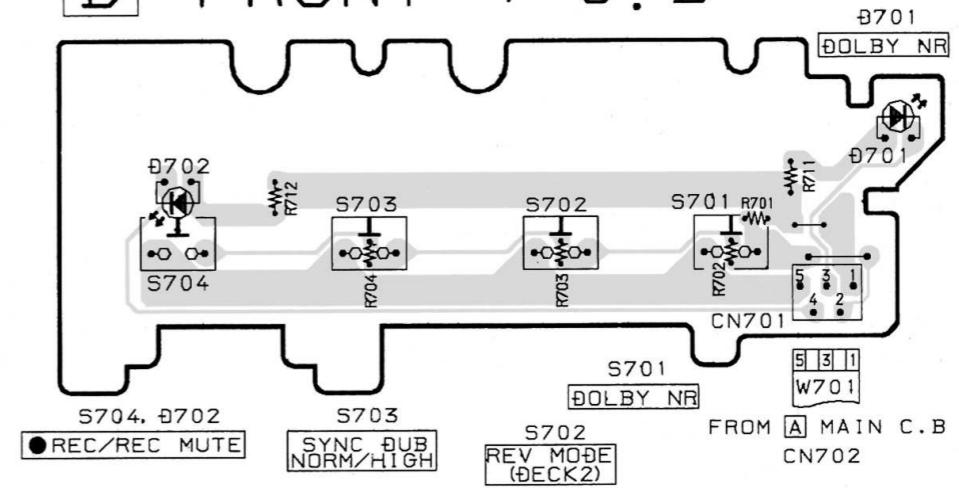
A MAIN C. B



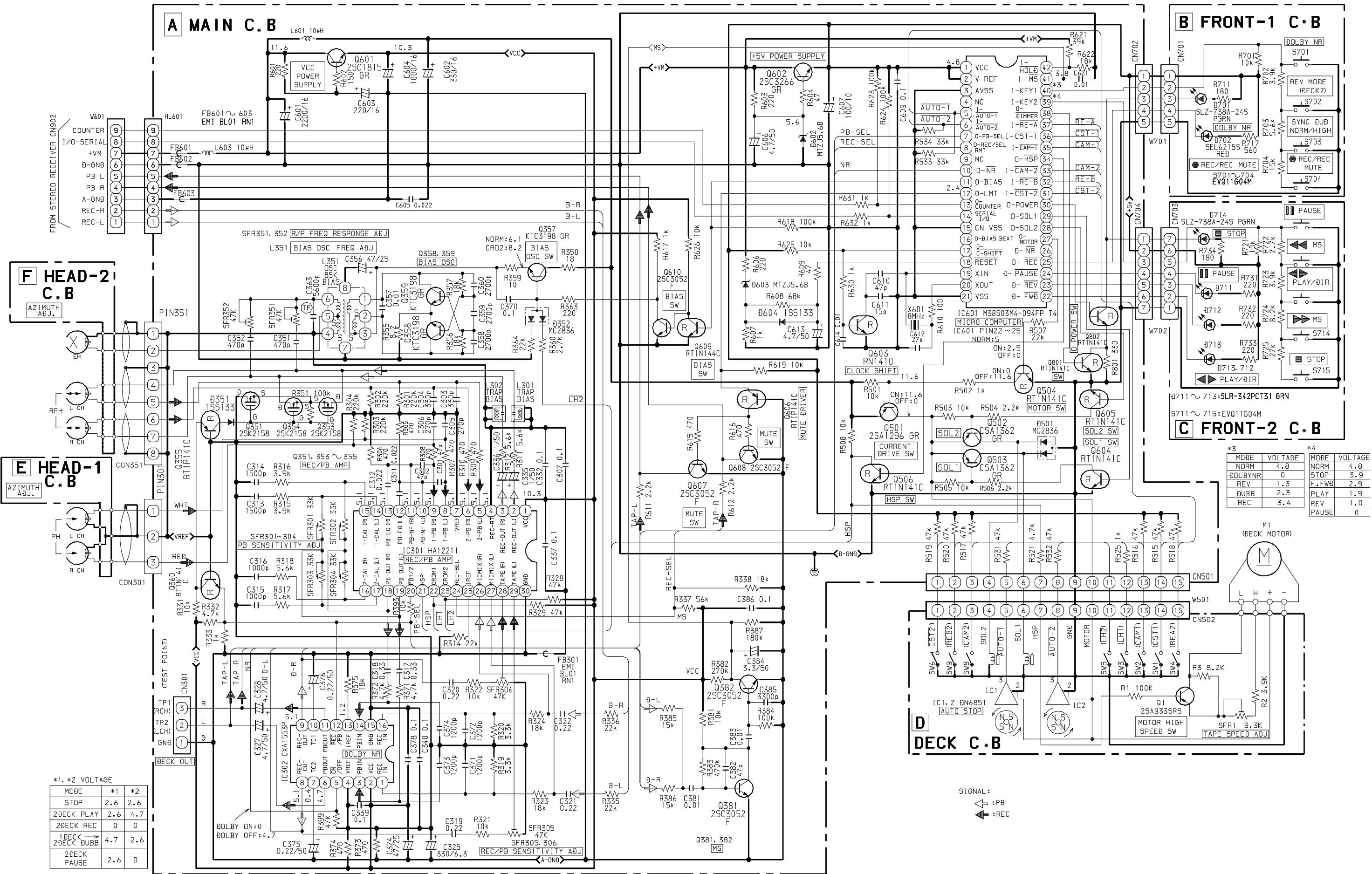
C FRONT-2 C. B



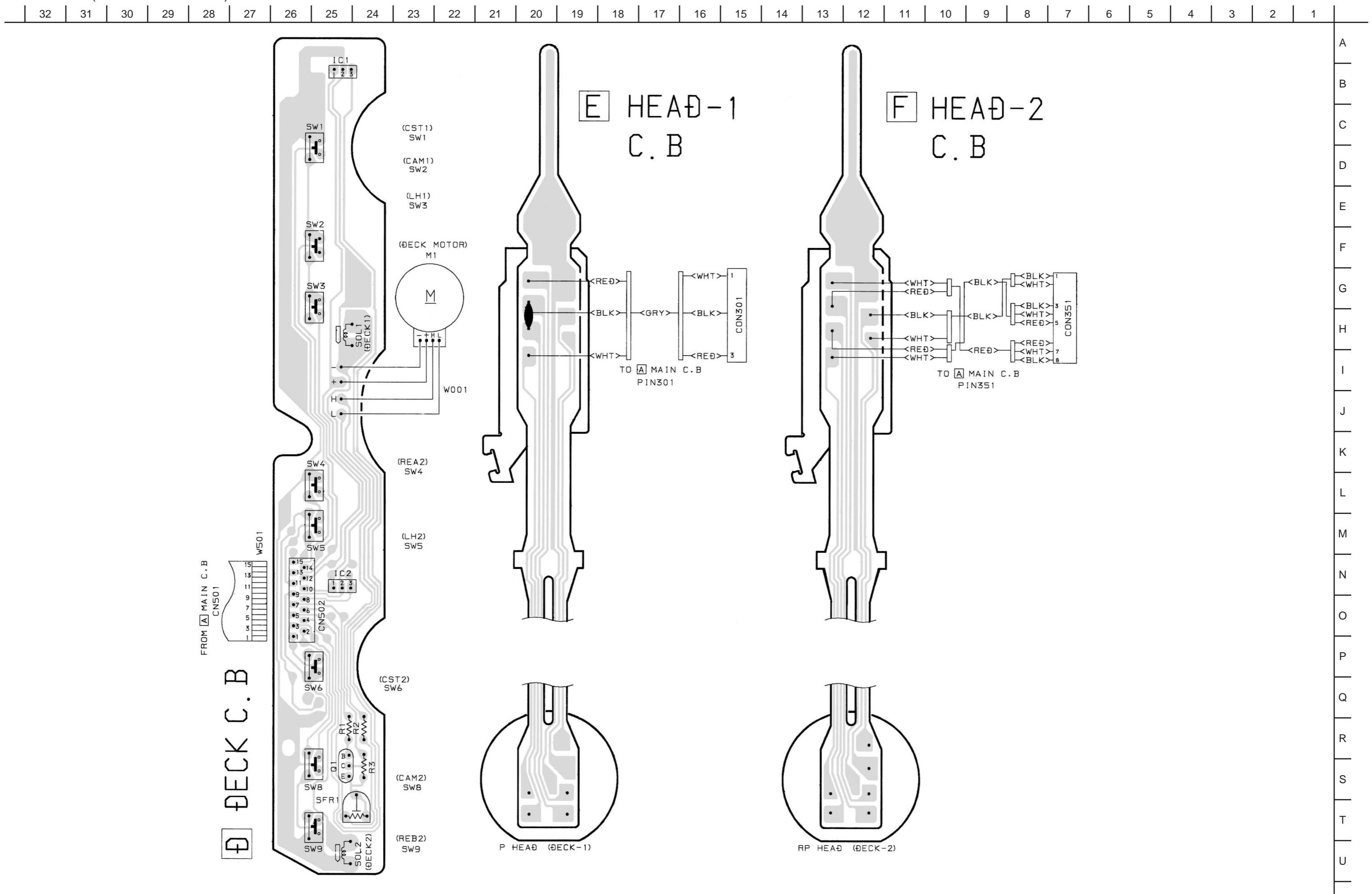
B FRONT-1 C. B



SCHEMATIC DIAGRAM (MAIN / FRONT-1 / FRONT-2 / DECK : FX-NH2000)

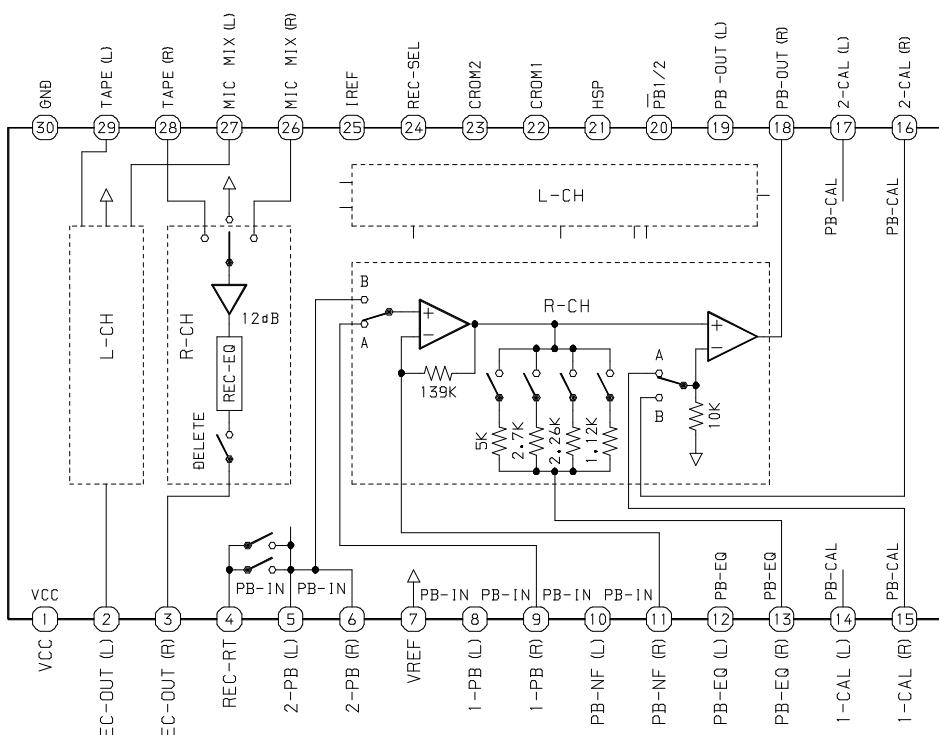


WIRING - 2 (DECK : FX-NH2000)

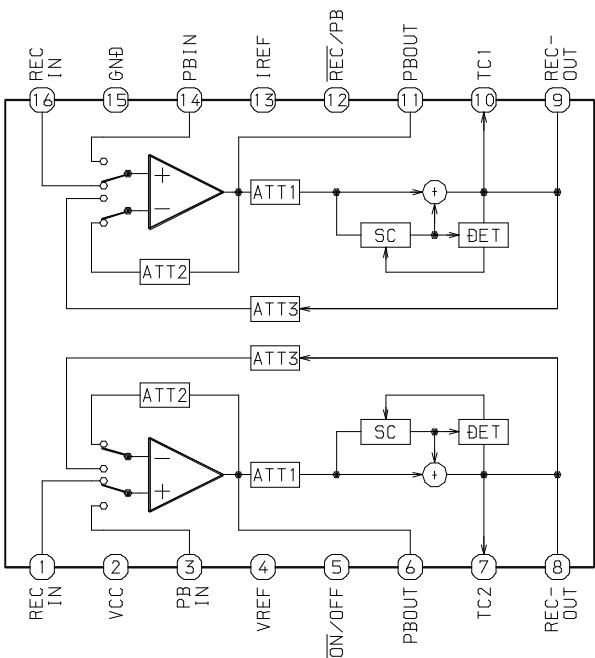


IC BLOCK DIAGRAM (FX-NH2000)

IC, HA12211



IC, CXA1553P



ATT: Attenuator
 SC: Side Chain
 DET: Detector

IC DESCRIPTION (FX-NH2000)

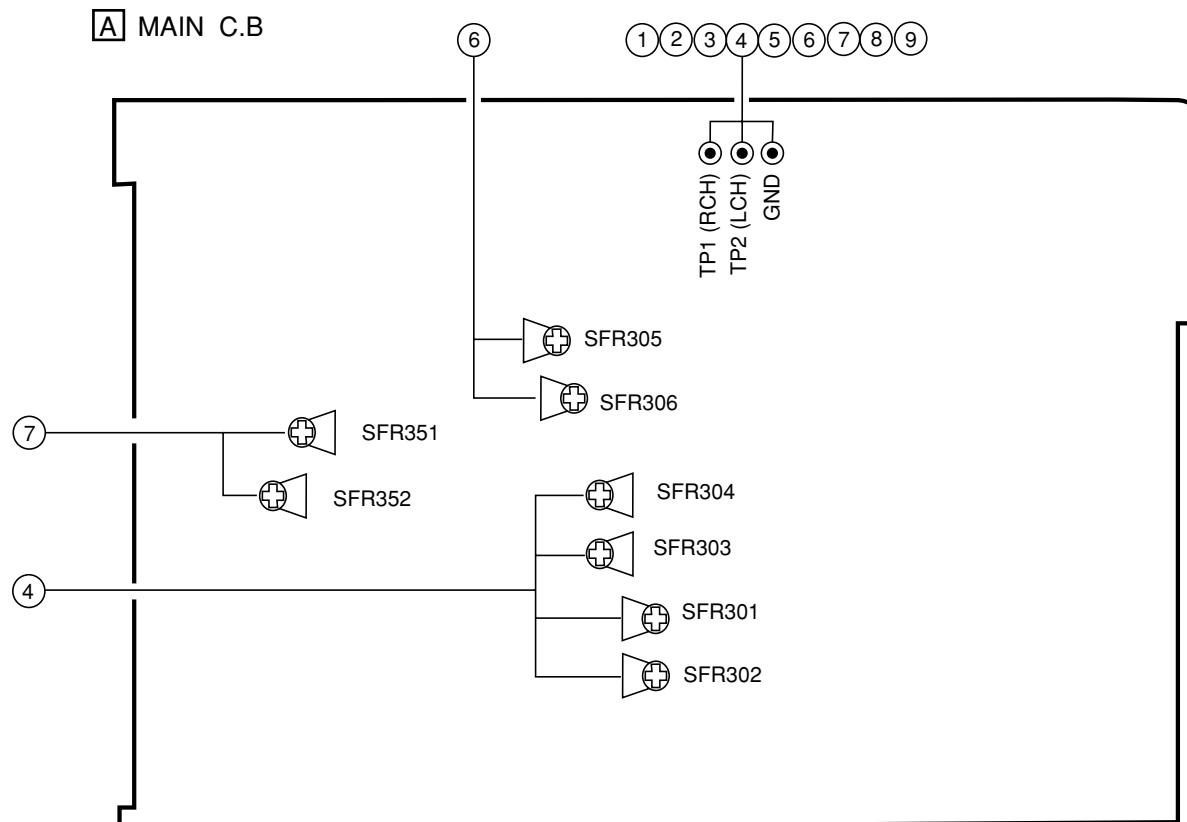
IC, M38503M4-094FP T4

Pin No.	Pin Name	I/O	Description												
1	VCC	-	IC power supply.												
2	V-REF	-	Connected to VCC.												
3	AVSS	-	Connected to GND.												
4	NC	-	Not connected.												
5	I-AUTO-1	I	Input of DECK 1 reel platform pulse.												
6	I-AUTO-2	I	Input of DECK 2 reel platform pulse.												
7	O-PB-SEL	O	Three-state output.												
8	O-REC-SEL														
			<table border="1"> <tr> <td></td><td>O-REC-SEL</td><td>O-PB-SEL</td></tr> <tr> <td>L</td><td>TAPE</td><td>DECK 2 REC</td></tr> <tr> <td>H</td><td>REC IN</td><td>DECK 2 PB</td></tr> <tr> <td>H1-Z</td><td>REC MUTE</td><td>DECK 1 PB</td></tr> </table>		O-REC-SEL	O-PB-SEL	L	TAPE	DECK 2 REC	H	REC IN	DECK 2 PB	H1-Z	REC MUTE	DECK 1 PB
	O-REC-SEL	O-PB-SEL													
L	TAPE	DECK 2 REC													
H	REC IN	DECK 2 PB													
H1-Z	REC MUTE	DECK 1 PB													
9	NC	-	Not connected.												
10	O-NR	O	When NR is ON: "L".												
11	O-BIAS	O	BIAS control.												
12	O-LMT	O	Output LINE MUTE. When MUTE: "H".												
13	O-COUNTER	O	Output tape counter data.												
14	SERIAL I/O	I/O	Serial I/O terminal.												
15	CN VSS	-	Connected to GND.												
16	O-BIAS BEAT	O	For bias beat changeover. When in operation: "H". Initial: "L". (Not used)												
17	O-C SHIFT	O	While clock shift: "L".												
18	RESET	I	RESET signal input pin.												
19	XIN	I	Crystal oscillation pin.												
20	XOUT	O	Crystal oscillation pin.												
21	VSS	-	Connected to GND.												
22	D-FWD	O	When Power is ON: "L" under STOP status. When FWD operates: flashing ("L" ↔ "H" repeated). While FF: fast flashing.												
23	D-REV	O	When Power is ON: "L" under STOP status. When RVS operates: flashing ("L" ↔ "H" repeated). While REW: fast flashing.												
24	D-PAUSE	O	When Power is ON: "L" under STOP status. While PAUSE: flashing ("L" ↔ "H" repeated).												
25	D-REC	O	While REC, DUBBING: "L". While REC, MUTE: flashing.												
26	D-NR	O	When NR is ON: "L". (Not used)												
27	O-MOTOR	O	When MOTOR is in operation or power on (500msec): "H".												
28	O-SOL2	O	When DECK 2 solenoid is in operation: "H".												
29	O-SOL1	O	When DECK 1 solenoid is in operation: "H".												
30	O-POWER	O	When POWER of MX-NH2000 is ON: "H".												
31	I-CST-2	I	DECK 2 cassette detection. When cassette exists: "L".												
32	I-RE-B	I	DECK 2 side B REC enable. When recordable: "L".												
33	I-CAM-2	I	DECK 2 cam. When switch is ON: "L".												
34	O-HSP	O	Output high speed signal. High speed: "L".												
35	I-CAM-1	I	DECK 1 mechanism cam. When switch is ON: "L".												
36	I-CST-1	I	DECK 1 cassette detection. When cassette exists: "L".												
37	I-RE-A	I	DECK 2 side A REC enable. When recordable: "L".												

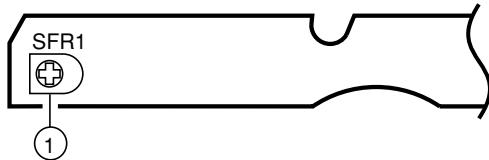
Pin No.	Pin Name	I/O	Description
38	O-DIMMER	O	Ordinarily “H”. When MX-NH2000 is in DIMMER 1 or 2 mode: “L”.
39	I-KEY2	I	KEY input 2. AD input.
40	I-KEY1	I	KEY input 1. AD input.
41	I-MS	I	MS input. AD input.
42	I-HOLD	I	System power supply monitor. AD input.

*P1Ns 22, 23, 24, 25, and 26 should be “H” when MX-NH2000 is in DIMMER 2 mode.

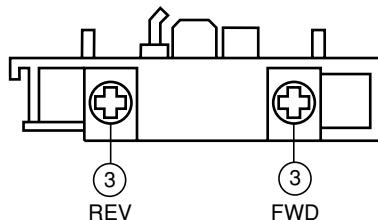
ADJUSTMENT <DECK> (FX-NH2000)



D DECK C.B



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



< DECK SECTION >

1. Tape Normal Speed Adjustment

Settings : • Test tape : TTA-100 (Tape center)
• Test point : TP1 (Rch), TP2 (Lch)
• Adjustment location : SFR1

Method : Play back the test tape and adjust SFR1 so that the test point becomes $3000\text{Hz} \pm 5\text{Hz}$ (FWD). Then check REV speed is $3000\text{Hz} \pm 45\text{Hz}$.
2. High Speed Check

Settings : • Test tape : TTA-100 (Tape center)
• Test point : TP1 (Rch), TP2 (Lch)

Method : After normal speed adjustment, play back (High speed) the test tape. Then check tape speed is $6000\text{Hz} \pm 400\text{Hz}$ (FWD).
3. Head Azimuth Adjustment

Settings : • Test tape : TTA-300
• Test point : TP1(Rch), TP2 (Lch)
• 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.

4. PB Sensitivity Adjustment (DECK1, DECK2)

Settings : • Test tape : TTA-200
• Test point : TP1 (Rch), TP2 (Lch)
• Adjustment location : SFR301 (DECK1, Lch)
SFR302 (DECK1, Rch)
SFR303 (DECK2, Lch)
SFR304 (DECK2, Rch)

Method : Play back the test tape and adjust SFRs so that the output level of the test point becomes 245mV (DECK2), 260mV (DECK1).
5. PB Frequency Response Check (DECK1, DECK2)

Settings : • Test tape : TTA-300
• Test point : TP1 (Rch), TP2 (Lch)

Method : Play back the 315Hz and 10kHz signals of the test tape and check that the output ratio of the 10kHz signal with respect to that of the 315Hz signal is 0dB. Next, check that the Lch and Rch difference level of 10kHz signal is less than 2dB.

6. REC/PB Sensitivity Adjustment (DECK2)

Settings :

- Test tape : TTA-602 (NORMAL)
- Test point : TP1 (Rch), TP2 (Lch)
- Input signal : 1kHz (LINE IN)
- Adjustment location : SFR305 (Lch)
SFR306 (Rch)

Method : Apply a 1kHz signal and REC mode. Then adjust OSC attenuator so that the output level at the TP1, TP2 becomes 0dB (17mV). Record and play back the 1kHz signals and adjust SFRs so that the output is 0dB ± 0.5dB.

7. REC/PB Frequency Response Adjustment (DECK2)

Settings :

- Test tape : TTA-602 (NORMAL)
- Test point : TP2 (Lch), TP1 (Rch)
- Input signal : 1kHz / 10kHz
(LINE IN)
- Adjustment location : SFR351 (Lch)
SFR352 (Rch)

Method : Apply a 1kHz signal and REC mode. Then adjust OSC attenuator so that the output level at the TP1, TP2 becomes 0dB (17mV). Record and play back the 1kHz and 10kHz signals and adjust SFRs so that the output level of the 10kHz signals becomes $0\text{dB} \pm 0.5\text{dB}$ with respect to that of the 1kHz signal.

8. REC/PB Frequency Response Check (DECK2)

Settings : • Test tape : TTA-615 (CrO₂)
 • Test point : TP2 (Lch), TP1 (Rch)
 • Input signal : 1kHz

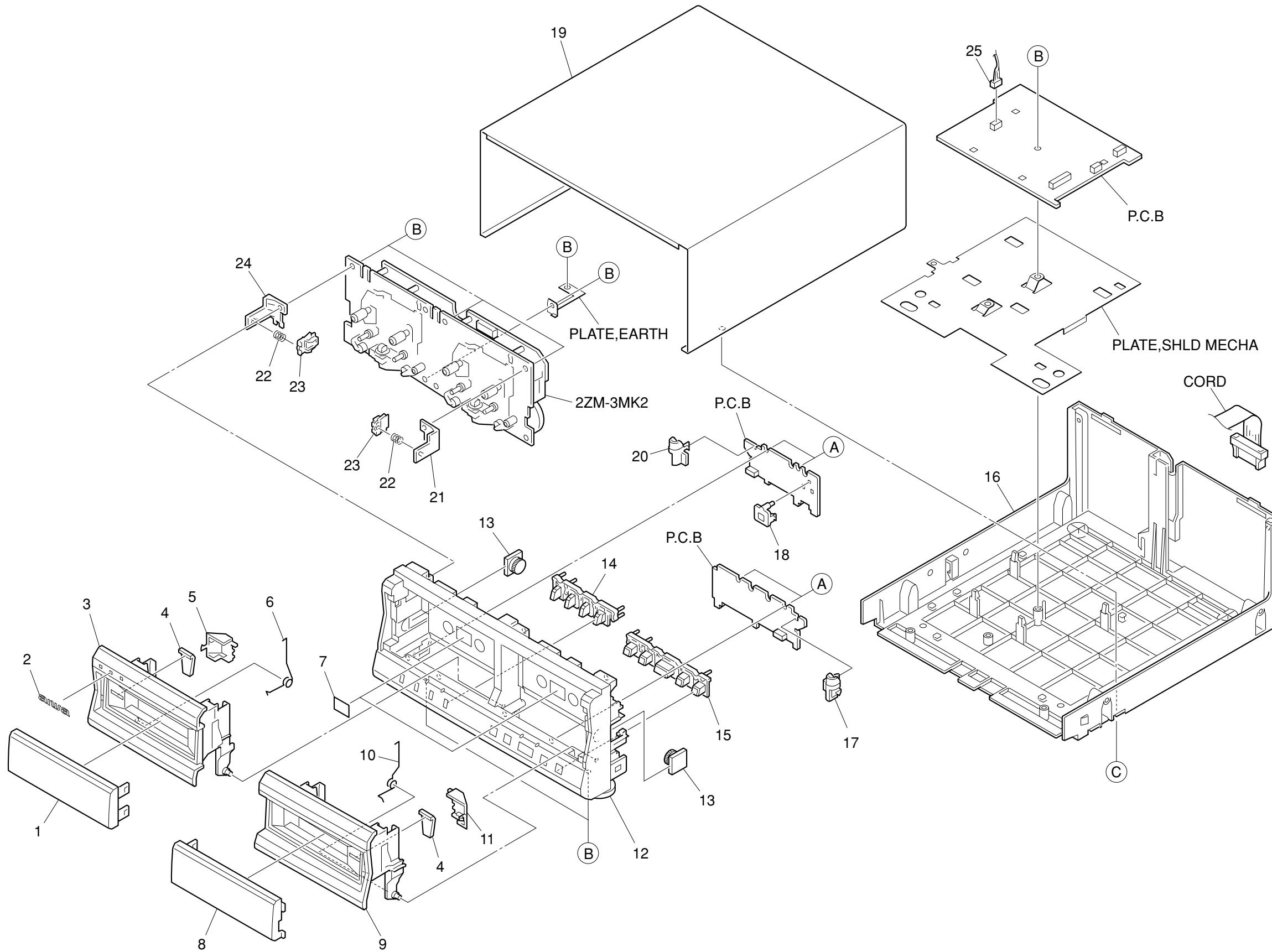
Method : Apply a 1kHz signal and REC mode. Then adjust OSC attenuator so that the output level at the TP1, TP2 becomes 0dB (17mV). Record and play back the 1kHz signal and check that the output is 0dB \pm 2.0dB.

9. REC/PB Sensitivity Check (DECK2)

Settings : • Test tape : TTA-615 (CrO₂)
 • Test point : TP2 (Lch), TP1 (Rch)
 • Input signal : 1kHz (LINE OUT)

Method : Apply a 1kHz signal and REC mode. Then adjust OSC attenuator so that the output level at the TP1, TP2 becomes 170mV. Record and play back the 1kHz signal and check that the output is $0\text{dB} \pm 2.0\text{dB}$.

MECHANICAL EXPLODED VIEW 1 / 1 (FX-NH2000)



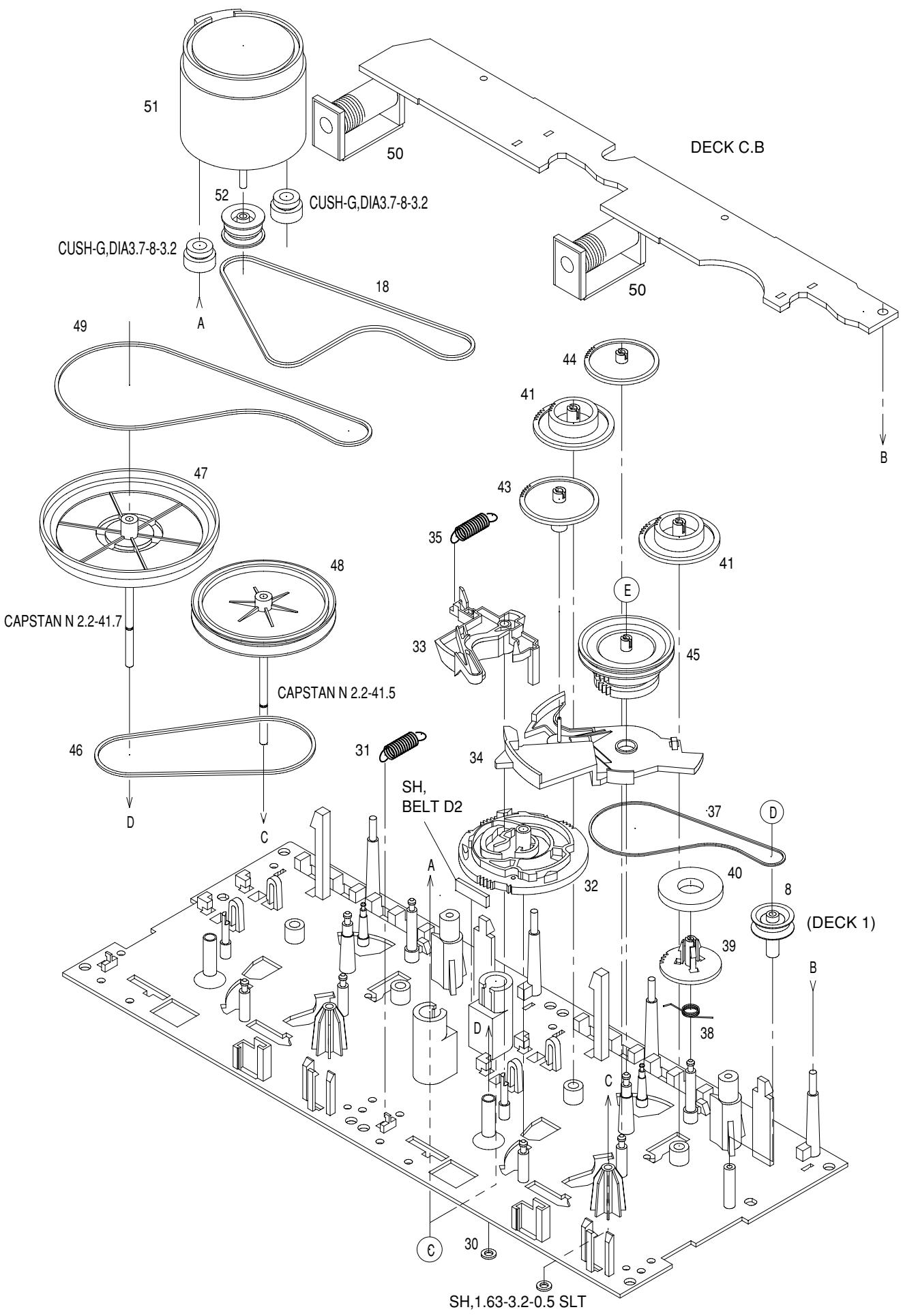
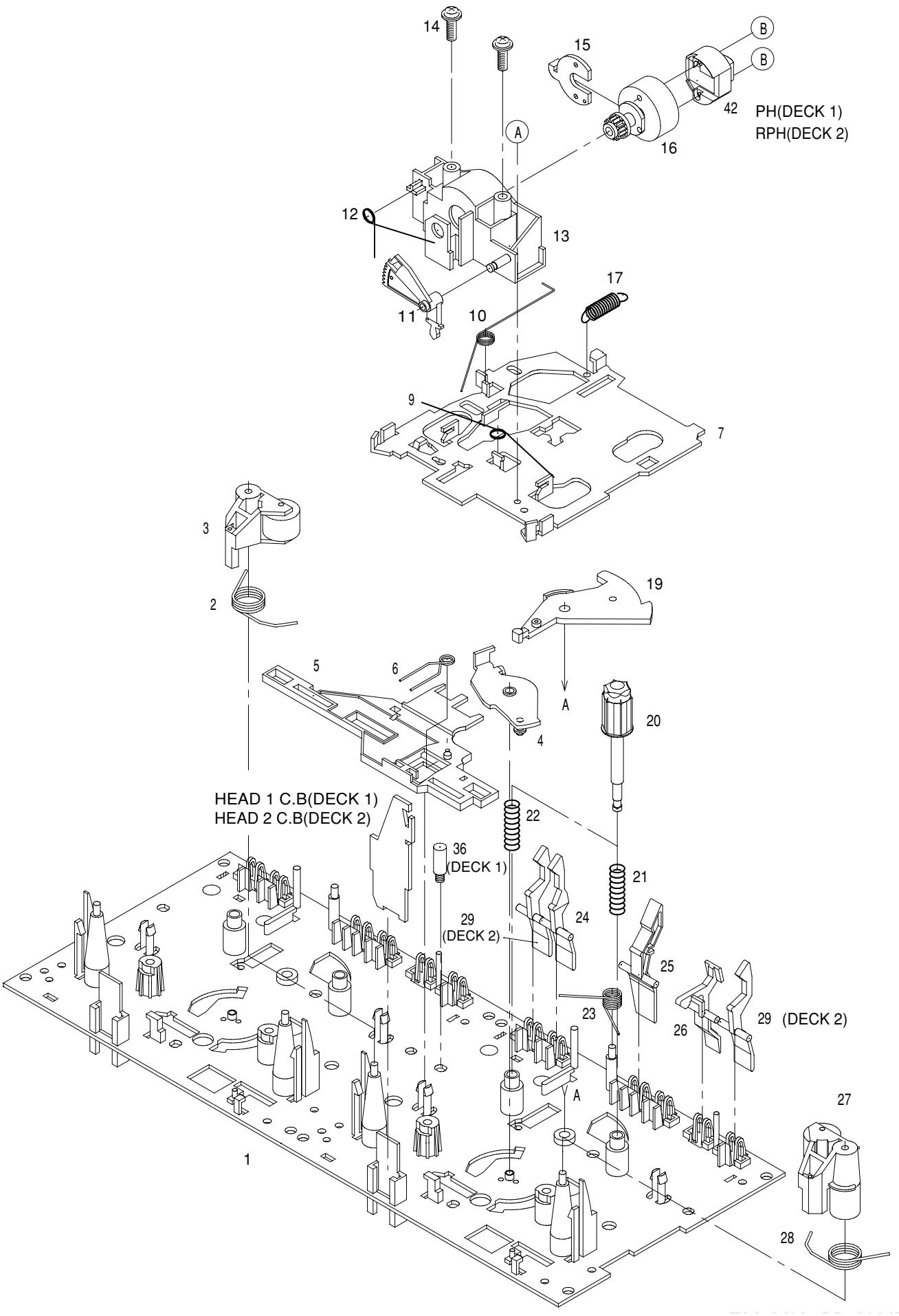
MECHANICAL PARTS LIST 1 / 1 (FX-NH2000)

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	8A-SW1-004-010		WINDOW,CASS 1
2	87-CE3-023-010		BADGE,AIWA 30N SILV
3	8A-SW1-002-010		BOX,CASS 1
4	8Z-SW1-013-010		REFLECTOR,CASS 1
5	8Z-SW1-201-010		COVER, REFLECTOR 1
6	82-NF5-218-010		SPR-T,EJECT 1 (SIN)
7	81-532-080-010		LABEL, CASS. COMPT
8	8A-SW1-005-010		WINDOW,CASS 2
9	8A-SW1-003-010		BOX,CASS 2
10	82-NF5-219-010		SPR-T,EJECT 2 (SIN)
11	8Z-SW1-202-010		COVER, REFLECTOR 2
12	8A-SW1-001-010		CABI,FR
13	87-NF8-220-010		DMPR,150
14	8A-SW1-011-010		KEY,ASSY REC
15	8Z-SW1-012-010		KEY,ASSY OPE
16	8A-SW1-019-010		CABI,REAR YLSM
17	8Z-SW1-206-110		GUIDE,LED CASS 2
18	8Z-SW1-204-110		GUIDE,LED REC
19	8A-SW1-024-010		CABI,STEEL LH
20	8Z-SW1-205-110		GUIDE,LED CASS 1
21	87-NF4-217-110		HLDL,LOCK 2
22	86-NF9-224-010		SPR-C,LOCK
23	82-NF5-229-010		PLATE,LOCK
24	87-NF4-216-010		HLDL,LOCK 1
25	86-NF5-618-110		CONN ASSY,8P RPB
A	87-067-579-010		TAPPING SCREW, BVT2+3-8
B	87-067-703-010		TAPPING SCREW, BVT2+3-10
C	87-067-633-010		TAPPING SCREW, BVT2+3-8

COLOR NAME TABLE

Basic color symbol	Color	Basic color symbol	Color	Basic color symbol	Color
B	Black	C	Cream	D	Orange
G	Green	H	Gray	L	Blue
LT	Transparent Blue	N	Gold	P	Pink
R	Red	S	Silver	ST	Titan Silver
T	Brown	V	Violet	W	White
WT	Transparent White	Y	Yellow	YT	Transparent Yellow
LM	Metallic Blue	LL	Light Blue	GT	Transparent Green
LD	Dark Blue	DT	Transparent Orange	GM	Metallic Green
YM	Metallic Yellow	DM	Metallic Orange		

TAPE MECHANISM EXPLODED VIEW 1 / 1 (FX-NH2000)



TAPE MECHANISM PARTS LIST 1 / 1 (FX-NH2000)

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION	REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	82-ZM3-301-510		CHAS ASSY,M2	36	82-ZM3-339-010		SHAFT,COUPLER N3 (DECK 1)
2	82-ZM1-258-110		SPR-T,PINCH L	37	86-ZM1-206-010		BELT,MAIN L
3	82-ZM1-341-110		LVR ASSY,PINCH L2	38	82-ZM1-322-010		SPR-T,FR60
4	82-ZM1-333-010		PLATE,LINK 2	39	82-ZM1-220-210		GEAR, IDLER
5	82-ZM1-266-11K		LVR,DIR	40	82-ZM3-616-010		RING MAGNET 4
6	82-ZM1-214-010		SPR-T,DIR	41	82-ZM1-216-31K		GEAR, REEL
7	82-ZM1-206-81K		CHAS,HEAD	42	87-A90-319-010		HEAD,PH HADKH2 FPC
8	82-ZM3-340-010		SH,BELT D2	42	87-A90-320-010		HEAD,RPH HADKH5 FPC
9	82-ZM1-269-210		SPR-T,BRG	43	82-ZM1-225-21K		GEAR, FR
10	82-ZM1-219-110		SPR-T,LINK	44	82-ZM1-226-010		GEAR,REW
11	82-ZM1-210-110		GEAR,H T	45	82-ZM3-333-310		SLIP DISK ASSY 2
12	82-ZM1-213-010		SPR-T,HEAD	46	82-ZM1-338-010		BELT FR4
13	82-ZM1-207-610		GUIDE,TAPE	47	82-ZM1-349-110		FLY-WHL,R W(DECK 2)
14	86-ZM4-206-010		S-SCREW,AZIMUTH	47	82-ZM3-338-110		FLY-WHL,R3 W(DECK 1)
15	82-ZM1-314-110		PLATE,HEAD	48	82-ZM1-348-010		FLY-WHL,L W(DECK 2)
16	82-ZM1-208-110		HLDR,HEAD	48	82-ZM1-348-010		FLY-WHL,L W(DECK 1)
17	82-ZM1-218-010		SPR-E,HB	49	82-ZM3-329-210		BELT,SBU R2
18	82-ZM1-263-110		LVR,EJECT L (DECK 1)	50	82-ZM1-245-210		HLDR,IC
18	82-ZM1-264-010		LVR,EJECT R (DECK 2)	51	87-045-347-010		MOT,SHU2L 70(M1)
19	82-ZM1-222-21K		LVR,PLAY	52	82-ZM3-221-010		PULLEY,MOT 2M
20	82-ZM1-217-310		REEL TABLE	53	82-ZM1-288-010		SH,1.63-3.2-0.5 SLT
21	82-ZM1-244-510		SPR-C,BT	54	80-ZM6-243-010		SH,1.75-3.6-0.5 SLT
22	82-ZM1-285-310		SPR-C,BT L	55	82-ZM3-335-210		PULLEY,COUPLER M3 (DECK 1)
23	82-ZM1-257-010		SPR-T,CAS	56	82-ZM3-337-010		BELT,SBU MOT 2
24	82-ZM1-241-310		LVR,MC	A	85-ZM3-202-010		S-SCREW,TG
25	82-ZM1-242-010		LVR,CAS	B	80-ZM6-207-010		V+1.6-7
26	82-ZM1-243-010		LVR,STOP	C	82-ZM3-318-010		S-SCRW MOTOR M2
27	82-ZM1-344-110		LVR ASSY,PINCH R2	D	87-B10-043-010		W-P,0.99-4-0.25 SLT
28	82-ZM1-259-110		SPR-T,PINCH R	E	82-ZM3-334-010		PW,2.16-6-0.4
29	82-ZM1-240-11K		LVR,REC (DECK 2)				
31	82-ZM1-255-310		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-ZM1-265-110		SPR-E,TRIG				

MODEL NO.

GE-NH2000

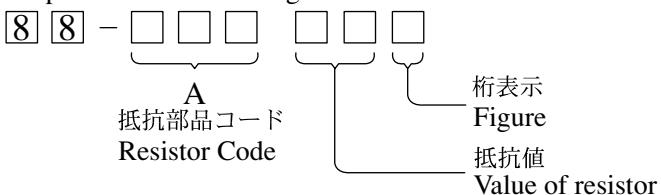
ELECTRICAL MAIN PARTS LIST

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IC				C407	87-012-158-080	C-CAP,S 390P-50 CH	
8A-SU1-608-010	IC,LC866448W			C408	87-A11-144-080	CAP,TC U 0.1-50 K B	
87-A21-023-040	C-IC,BA3835F			FL201	8Z-SU1-605-010	FL,BJ699GK	
				L101	87-005-152-080	COIL,10UH	
				L102	87-005-130-080	COIL,10UH	
TRANSISTOR				L103	87-005-130-080	COIL,10UH	
87-026-263-080	C-TR,RN1410			L104	87-005-152-080	COIL,10UH	
				L301	87-003-097-080	COIL,1UH	
				LED201	87-A40-380-080	LED,SEL6510C-TP5 GRN	
				LED202	87-A40-380-080	LED,SEL6510C-TP5 GRN	
DIODE				LED203	87-A40-380-080	LED,SEL6510C-TP5 GRN	
87-070-136-080	ZENER,MTZJ5.1B			LED204	87-A40-380-080	LED,SEL6510C-TP5 GRN	
87-017-931-080	ZENER,MTZJ5.6B			LED205	87-A40-380-080	LED,SEL6510C-TP5 GRN	
87-020-465-080	DIODE,1SS133 (110MA)			LED206	87-A40-380-080	LED,SEL6510C-TP5 GRN	
				LED207	87-A40-380-080	LED,SEL6510C-TP5 GRN	
MAIN C.B				LED208	87-A40-380-080	LED,SEL6510C-TP5 GRN	
C101	87-010-550-040	CAP,E 100-6.3 GAS		S301	87-A90-095-080	SW,TACT EVQ11G04M	
C103	87-010-497-040	CAP,E 4.7-35 GAS		S302	87-A90-095-080	SW,TACT EVQ11G04M	
C105	87-010-312-080	C-CAP,S 15P-50 CH		S303	87-A90-095-080	SW,TACT EVQ11G04M	
C106	87-010-320-080	CHIP CAP 68P		S304	87-A90-095-080	SW,TACT EVQ11G04M	
C107	87-010-316-080	C-CAP,S 33P-50 CH		S305	87-A90-095-080	SW,TACT EVQ11G04M	
C108	87-010-196-080	CHIP CAPACITOR,0.1-25		S306	87-A90-095-080	SW,TACT EVQ11G04M	
C109	87-010-196-080	CHIP CAPACITOR,0.1-25		S307	87-A90-095-080	SW,TACT EVQ11G04M	
C110	87-012-368-080	C-CAP,S 0.1-50 F		S308	87-A90-095-080	SW,TACT EVQ11G04M	
C111	87-010-552-040	CAP,E 22-16 GAS		S309	87-A90-095-080	SW,TACT EVQ11G04M	
C201	87-012-140-080	CAP 470P		S310	87-A90-095-080	SW,TACT EVQ11G04M	
C202	87-012-369-080	C-CAP,S 0.047-50F		S311	87-A90-095-080	SW,TACT EVQ11G04M	
C203	87-010-404-040	CAP,E 4.7-50 SME		S312	87-A90-095-080	SW,TACT EVQ11G04M	
C204	87-010-405-040	CAP,E 10-50		S314	87-A90-095-080	SW,TACT EVQ11G04M	
C205	87-010-405-040	CAP,E 10-50		S315	87-A90-095-080	SW,TACT EVQ11G04M	
C206	87-010-405-040	CAP,E 10-50		S316	87-A91-076-010	SW,RTRY REO121PVB25FINA1	
C301	87-010-196-080	CHIP CAPACITOR,0.1-25		W101	8Z-SU1-608-010	CORD,52305-101BLK	
C302	87-010-196-080	CHIP CAPACITOR,0.1-25		WH101	87-A90-882-010	HLDR,WIRE 10P 1.5 51016	
C303	87-010-197-080	CAP, CHIP 0.01 DM		X101	87-A70-070-080	VIB,CER 5.76MHZ CRHF	
C304	87-010-182-080	C-CAP,S 2200P-50 B					
C401	87-010-196-080	CHIP CAPACITOR,0.1-25					
C402	87-010-196-080	CHIP CAPACITOR,0.1-25					
C403	87-010-196-080	CHIP CAPACITOR,0.1-25					
C404	87-010-196-080	CHIP CAPACITOR,0.1-25					
C405	87-010-196-080	CHIP CAPACITOR,0.1-25					
C406	87-010-196-080	CHIP CAPACITOR,0.1-25					

○チップ抵抗部品コード／CHIP RESISTOR PART CODE

チップ抵抗部品コードの成り立ち

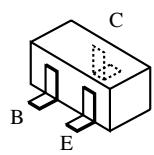
Chip Resistor Part Coding



チップ抵抗
Chip resistor

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	
1/16W	1005	± 5%	CJ		1.0	0.5	0.35
1/16W	1608	± 5%	CJ		1.6	0.8	0.45
1/10W	2125	± 5%	CJ		2	1.25	0.45
1/8W	3216	± 5%	CJ		3.2	1.6	0.55

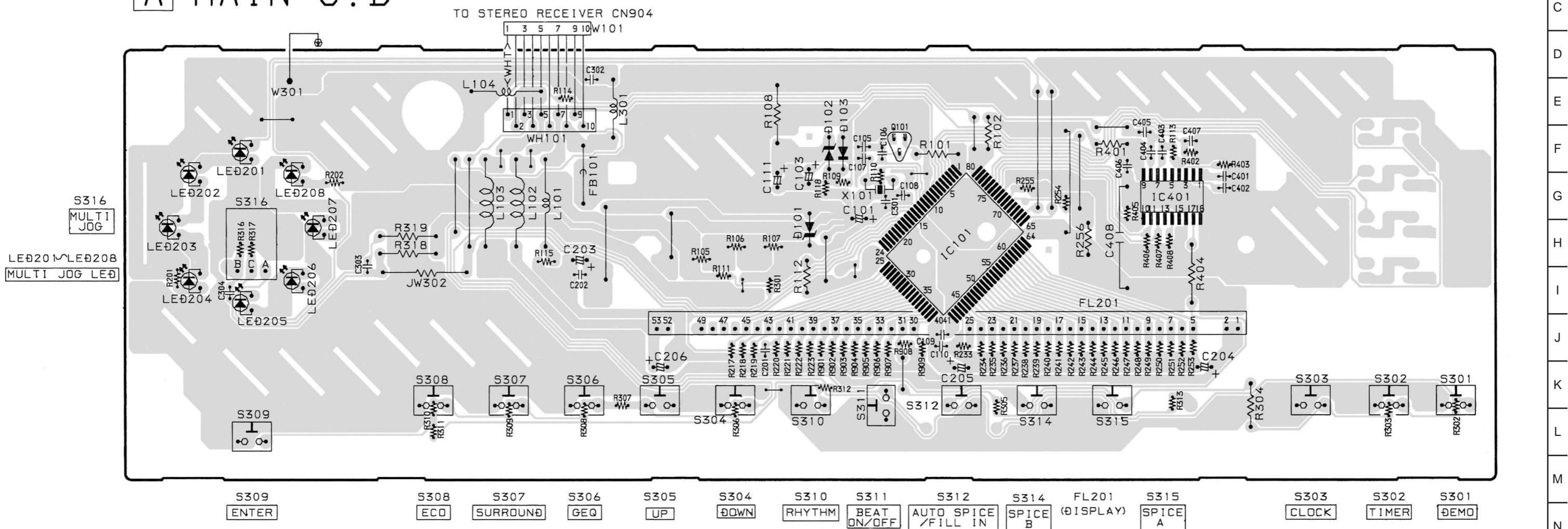
TRANSISTOR ILLUSTRATION (GE-NH2000)



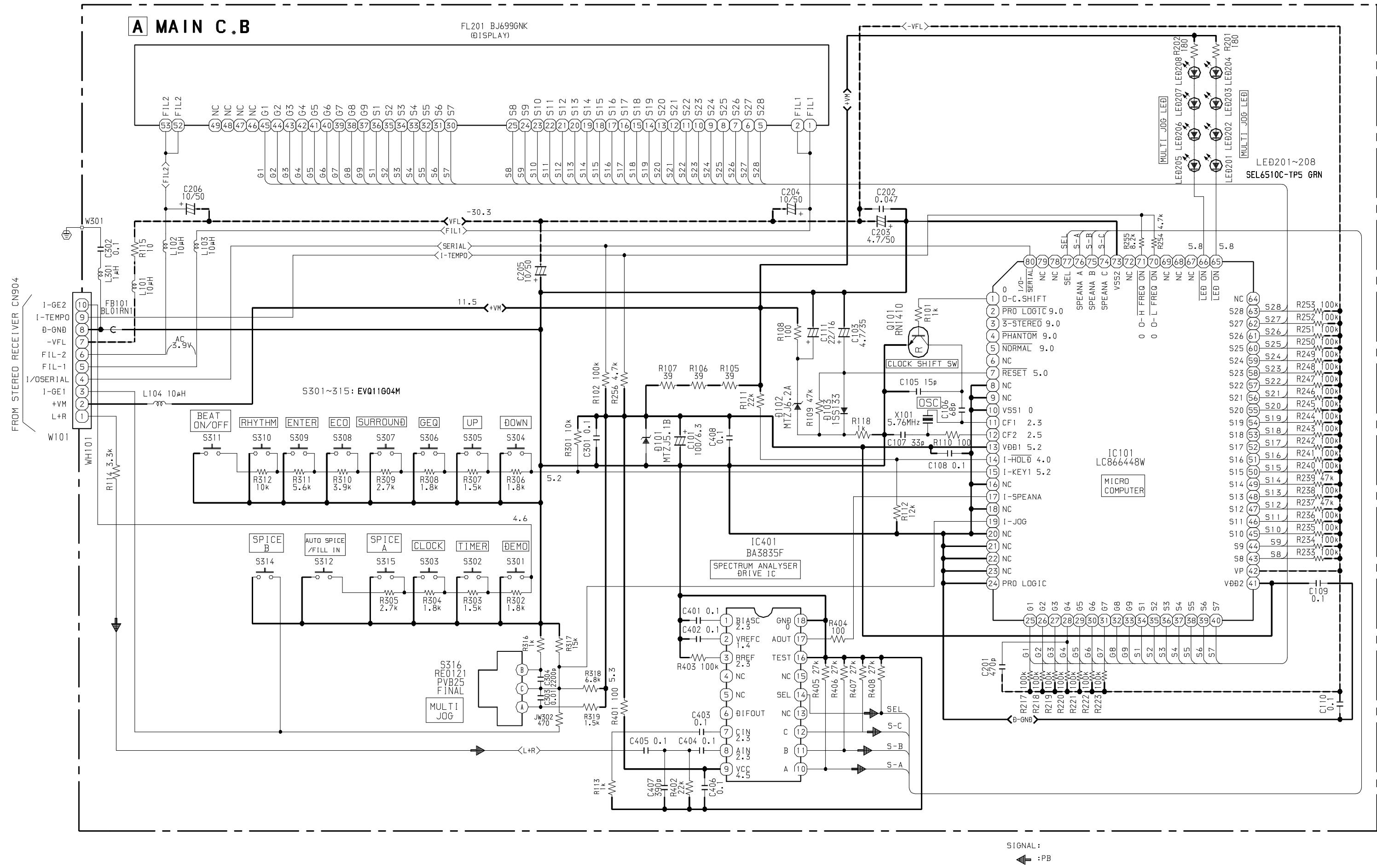
RN1410

32 | 31 | 30 | 29 | 28 | 27 | 26 | 25 | 24 | 23 | 22 | 21 | 20 | 19 | 18 | 17 | 16 | 15 | 14 | 13 | 12 | 11 | 10 | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 |

A MAIN C.B

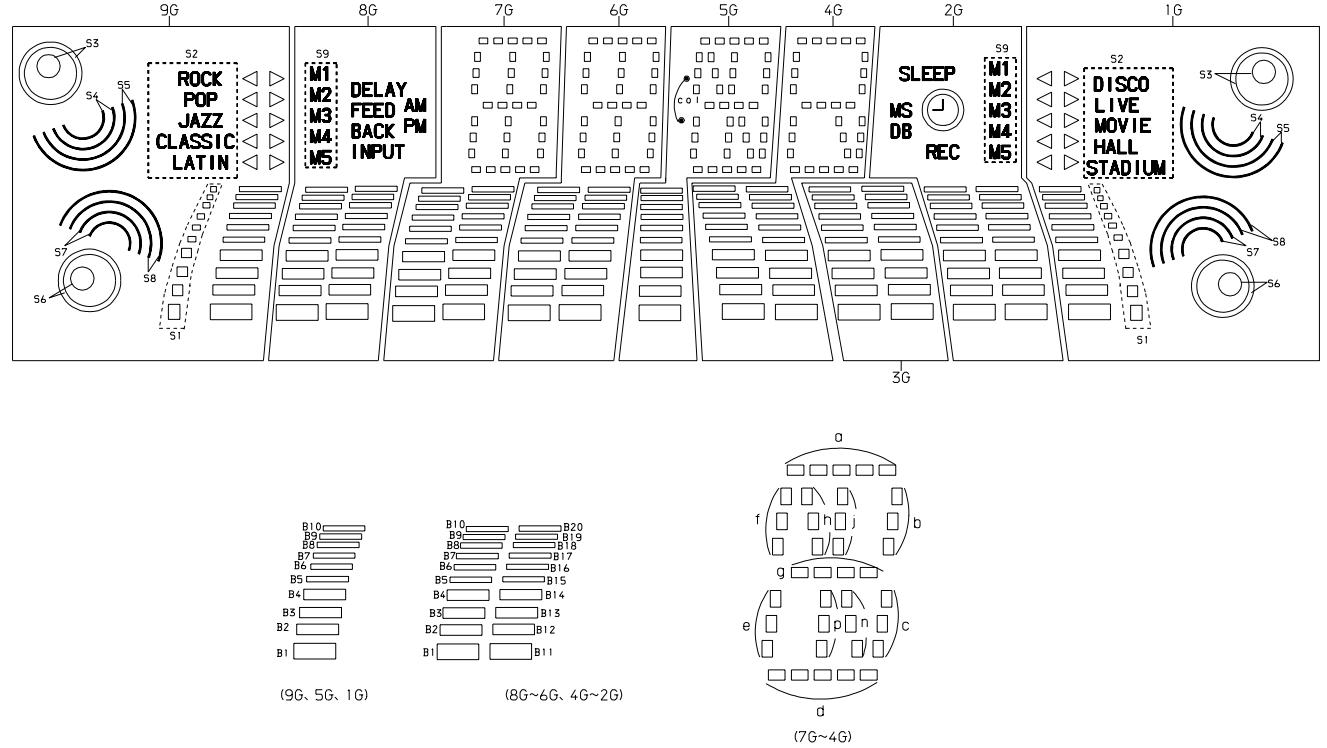


SCHEMATIC DIAGRAM (MAIN : GE-NH2000)



FL GRID ASSIGNMENT AND ANODE CONNECTION (GE-NH2000)

GRID ASSIGNMENT

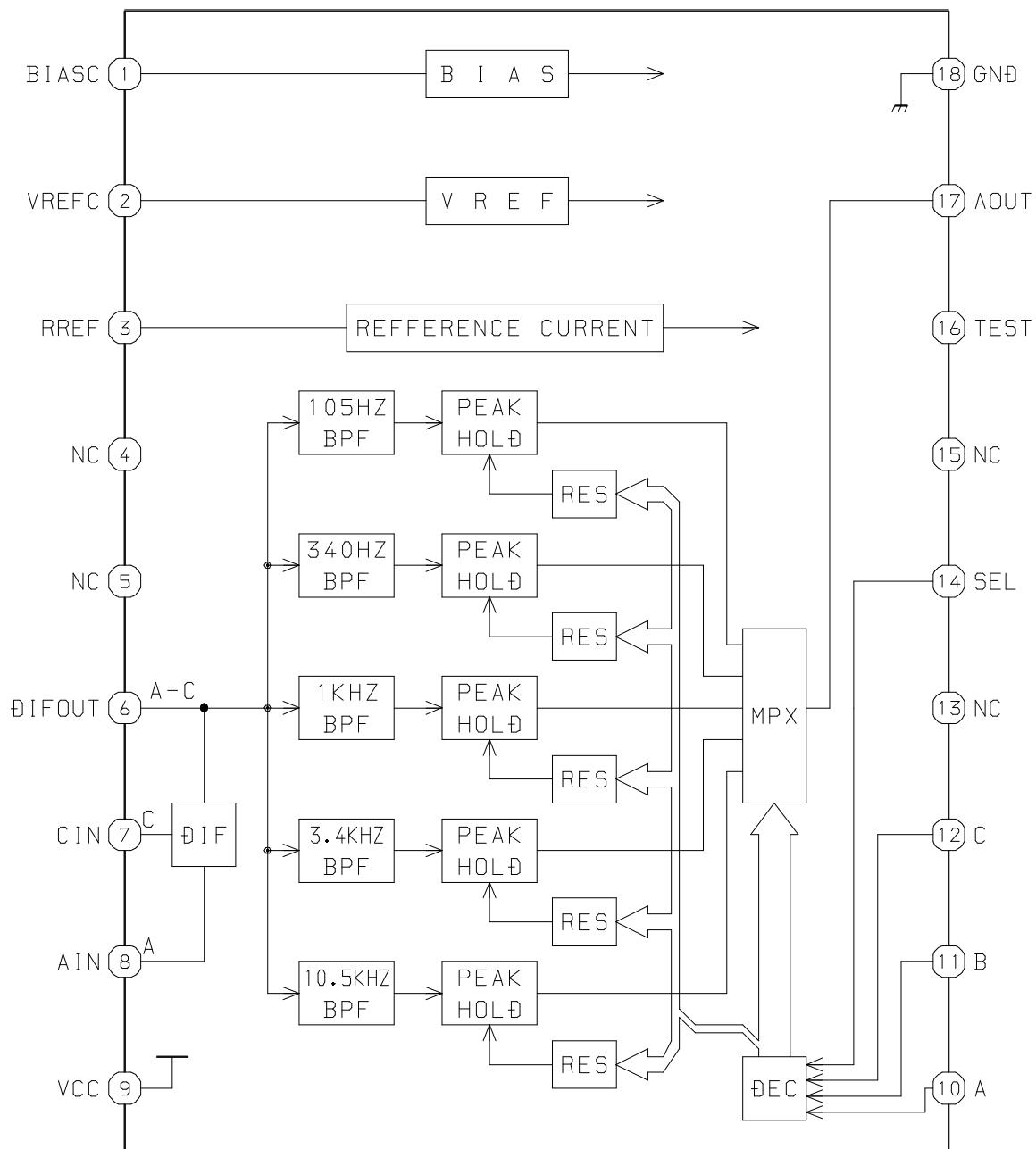


ANODE CONNECTION

	9G	8G	7G	6G	5G	4G	3G	2G	1G
P1	► [M1]	—	a	a	a	a	—	—	[M1] ▲
P2	► [M2]	S9	b	b	b	b	—	S9	[M2] ▲
P3	► [M3]	DELAY	f	f	f	f	—	SLEEP	[M3] ▲
P4	► [M4]	FEED BACK	g	g	g	g	—	REC	[M4] ▲
P5	► [M5]	INPUT	c	c	c	c	—	MS	[DISCO] ▲
P6	[ROCK] ▲	AM	e	e	e	e	—	DB	[LIVE] ▲
P7	[POP] ▲	PM	d	d	d	d	—		
P8	S1	B11	B11	B11	h	B11	B11	B11	S1
P9	B1	B1	B1	B1	B1	B1	B1	B1	B1
P10	S6	B12	B12	n	B12	B12	B12	B12	S6
P11	B2	B2	B2	B2	B2	B2	B2	B2	B2
P12	S7	B13	B13	c o l (上)	B13	B13	B13	B13	S7
P13	B3	B3	B3	B3	B3	B3	B3	B3	B3
P14	S8	B14	B14	c o l (下)	B14	B14	B14	B14	S8
P15	B4	B4	B4	B4	B4	B4	B4	B4	B4
P16	S3	B15	B15	—	B15	B15	B15	B15	S3
P17	B5	B5	B5	B5	B5	B5	B5	B5	B5
P18	S4	B16	B16	—	B16	B16	B16	B16	S4
P19	B6	B6	B6	B6	B6	B6	B6	B6	B6
P20	S5	B17	B17	—	B17	B17	B17	B17	S5
P21	B7	B7	B7	B7	B7	B7	B7	B7	B7
P22	S2	B18	B18	—	B18	B18	B18	B18	S2
P23	B8	B8	B8	B8	B8	B8	B8	B8	B8
P24	[JAZZ] ▲	B19	B19	—	B19	B19	B19	B19	[MOVIE] ▲
P25	B9	B9	B9	B9	B9	B9	B9	B9	B9
P26	[CLASSIC] ▲	B20	B20	—	B20	B20	B20	B20	[HALL] ▲
P27	B10	B10	B10	B10	B10	B10	B10	B10	B10
P28	[LATIN] ▲	—	j, p	j, p	j, p	n	—	—	[STADIUM] ▲

IC BLOCK DIAGRAM (GE-NH2000)

IC, BA3835F

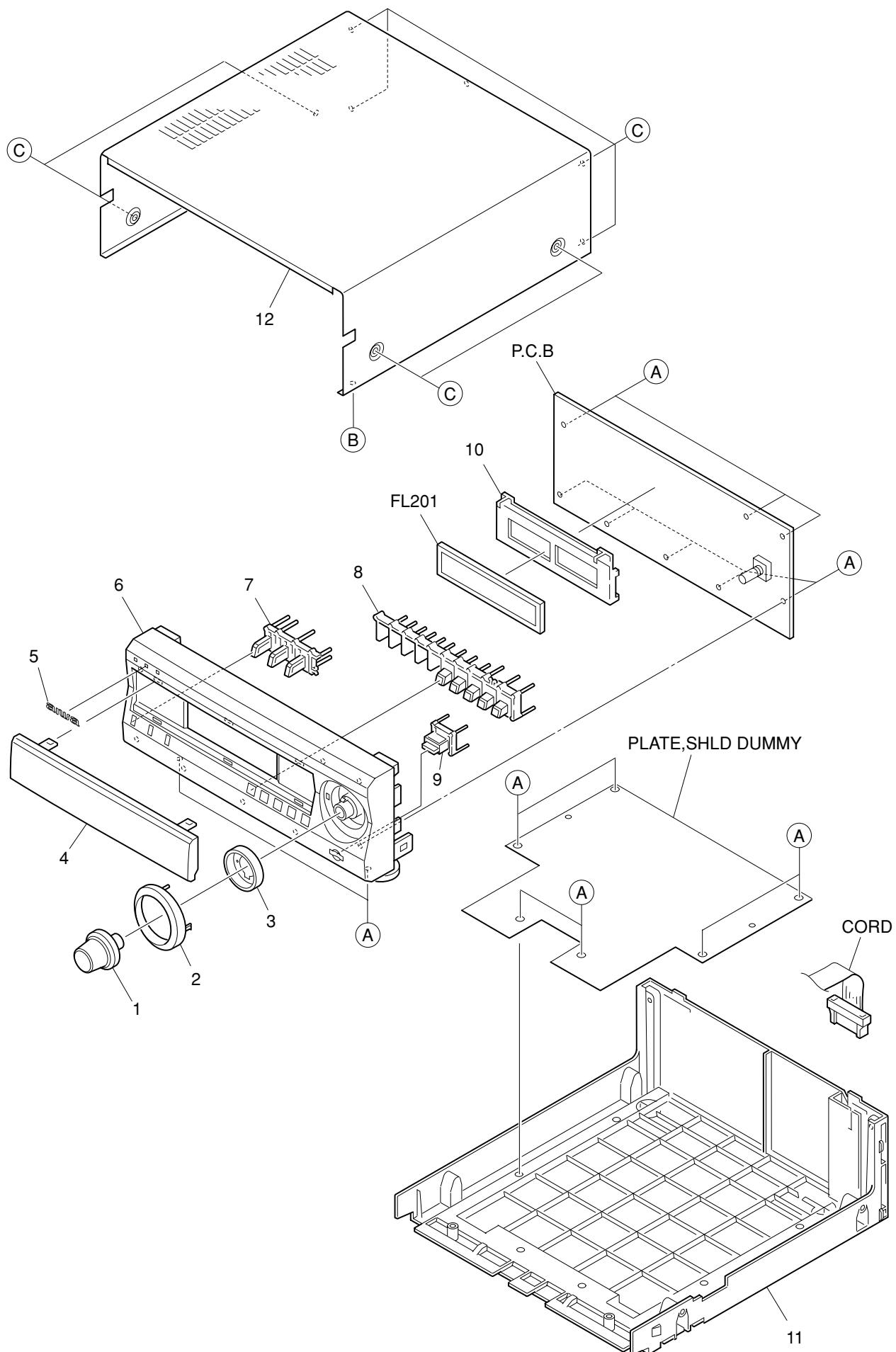


IC DESCRIPTION (GE-NH2000)

IC, LC866448W

Pin No.	Pin Name	I/O	Description
1	O-C.SHIFT	O	Micro computer clock shift output.
2	PRO LOGIC	O	PRO LOGIC LED output.
3	3-STEREO	O	3 STEREO LED output.
4	PHANTOM	O	PHANTOM LED output.
5	NORMAL	O	NORMAL LED output.
6	NC	-	Not connected.
7	RESET	I	Reset input.
8	NC	-	Connected to GND.
9	NC	-	Connected to GND.
10	VSS1	-	GND.
11	CF1	-	Connected to crystal oscillator (5.76MHz).
12	CF2	-	
13	VDD1	-	Power supply.
14	I-HOLD	I	System power supply monitor AD input.'H':Normal operation.'L':to stop clock and main memory.
15	I-KEY1	I	KEY 1 AD input.
16	NC	-	Connected to GND.
17	I-SPEANA	I	Spectrum analyzer level AD input.
18	NC	-	Connected to GND.
19	I-JOG	I	Jog rotary encoder input.
20~23	NC	-	Connected to GND.
24	PRO LOGIC	I	Input prologic switch "H" when prologic , "L" when not prologic.
25~33	G1~G9	O	FL gird output.
34~40	S1~S7	O	FL Segment output.
41	VDD2	-	Connected to GND.
42	VP	-	Power FL display negative supply terminal.
43~63	S8~S28	O	FL Segment S8~S28 output.
64	NC	-	Not used.
65	LED ON	O	MULTI JOG LED output.
66	LED ON	O	MULTI JOG LED output.
67~69,72	NC	-	Not connected.
70	O-L FREQ ON	O	Spectrum analyzer low frequency output.
71	O-H FREQ ON	O	Spectrum analyzer high frequency output.
73	VSS2	-	GND.
74	SPEANA C	O	Spectrum analyzer band switch output C.
75	SPEANA B	O	Spectrum analyzer band switch output B.
76	SPEANA A	O	Spectrum analyzer band switch output A.
77	SEL	O	Spectrum analyzer band switch output select .
78~79	NC	-	Not connected.
80	I/O-SERIAL	I/O	Input/output serial data for communication.

MECHANICAL EXPLODED VIEW 1 / 1 (GE-NH2000)



MECHANICAL PARTS LIST 1 / 1 (GE-NH2000)

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	8Z-SU1-007-010		KNOB, RTRY JOG
2	8A-SU1-006-010		RING, JOG
3	8Z-SU1-005-010		REFLECTOR, JOG
4	8A-SU1-004-010		WINDOW, DISPLAY
5	87-CE3-023-010		BADGE, AIWA 3ON SILV
6	8A-SU1-001-010		CABI, FR YJS
7	8A-SU1-009-010		KEY, DEMO
8	8Z-SU1-008-010		KEY, GEO
9	8A-SU1-010-010		KEY, ENTER
10	88-SU1-201-110		GUIDE, FL
11	8A-SU1-014-010		CABI, REAR YLSM
12	8A-SU1-011-010		CABI, STEEL LH
A	87-067-703-010		TAPPING SCREW, BVT2+3-10
B	87-067-633-010		TAPPING SCREW, BVT2+3-8
C	87-B10-091-010		UTT2+3-10 BLK

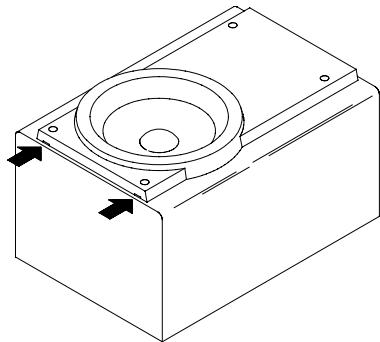
COLOR NAME TABLE

Basic color symbol	Color	Basic color symbol	Color	Basic color symbol	Color
B	Black	C	Cream	D	Orange
G	Green	H	Gray	L	Blue
LT	Transparent Blue	N	Gold	P	Pink
R	Red	S	Silver	ST	Titan Silver
T	Brown	V	Violet	W	White
WT	Transparent White	Y	Yellow	YT	Transparent Yellow
LM	Metallic Blue	LL	Light Blue	GT	Transparent Green
LD	Dark Blue	DT	Transparent Orange	GM	Metallic Green
YM	Metallic Yellow	DM	Metallic Orange		

SPEAKER DISASSEMBLY INSTRUCTIONS

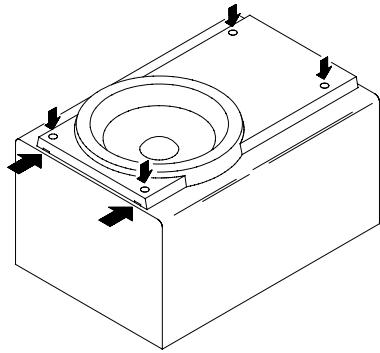
Type.1

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.



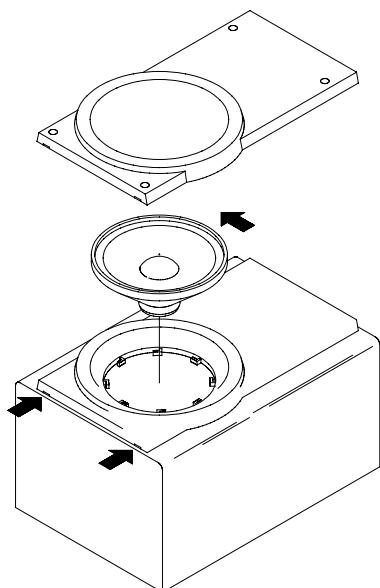
Type.2

Remove the grill frame and four pieces of rubber caps by pulling out with a flat-bladed screwdriver. Remove the screws from hole where installed rubber caps. 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.

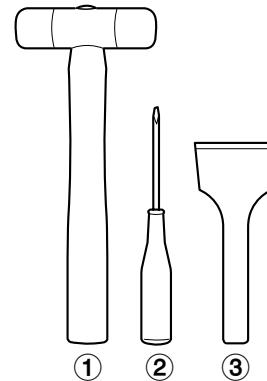


Type.3

Insert a flat-bladed screwdriver into the position indicated by the arrows and remove the panel. Turn the speaker unit to counter-clockwise direction while inserting a flat-bladed screwdriver into one of the hollows around speaker unit, and then remove the speaker unit. After replacing the speaker unit, install it turning to clockwise direction until "click" sound comes out.



Type.4



TOOLS

- ① Plastic head hammer
- ② (⊖) flat head screwdriver
- ③ Cut chisel

How to Remove the PANEL, FR

1. Insert the (⊖) flat head screwdriver tip into the gap between the PANEL, FR and the PANEL, SPKR. Tap the head of the (⊖) flat head screwdriver with the plastic hammer head, and create the clearance as shown in Fig-1.
2. Insert the cut chisel in the clearance, and tap the head of the cut chisel with plastic hammer as shown in Fig-2, to remove the PANEL, FR.
3. Place the speaker horizontally. Tap head of the cut chisel with plastic hammer as shown in Fig-3, and remove the PANEL, FR completely.

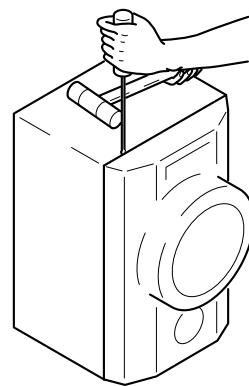


Fig-1

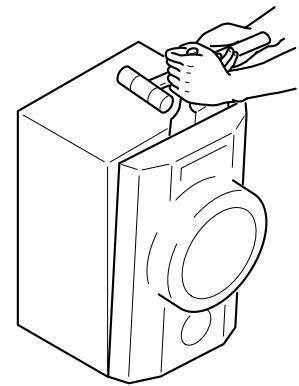


Fig-2

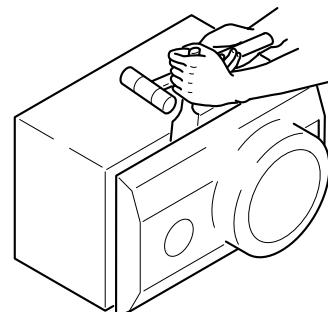


Fig-3

How to Attach the PANEL, FR

Attach the PANEL, FR to the PANEL, SPKR. Tap the four corners of the PANEL, FR with the plastic hammer to fit the PANEL, FR into the PANEL, SPKR completely.

SPEAKER PARTS LIST SX-NDPH2100 (YLTL)

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	88-NS5-610-010		CORD, SPKR
2	8A-SSM-005-010		PANEL, FR L
3	8A-SSM-001-010		PANEL, FR R
4	8A-SSM-004-010		PANEL, TW
5	8A-SSM-002-010		GRILLE, FRAME ASSY
6	8Z-SSM-009-010		PROTECTOR, TW
7	8A-SSM-601-010		SPKR, W 150
8	8Z-NSY-608-010		SPKR, CERAMIC ASSY
9	88-SSM-603-010		SPKR, TW 60



アイワ株式会社 〒110-8710 東京都台東区池之端1-2-11 ☎03(3827)3111 (代表)
AIWA CO., LTD. 2-11, IKENOHATA 1-CHOME, TAITO-KU, TOKYO 110, JAPAN TEL:03 (3827) 3111