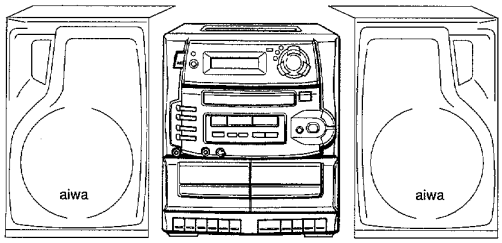
aiwa

aiwa SERVICE

NSX-S3



COMPACT DISC STEREO RADIO
CASSETTE RECORDER

• BASIC TAPE MECHANISM: 3ZG-2 E1 / TN-21-1791

• TYPE: HEJ,LH

SERVICE MANUAL

S/M Code No. 09-987-259-9O2

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SPECIFICATIONS

HE MODEL:

FM tuner section

Tuning range	87.5 MHz to 108 MHz
Antenna	Rod antenna

MW tuner section

Tuning range	531 kHz to 1602 kHz (9 kHz step) 530 kHz to 1710 kHz (10 kHz step)
Antenna	Ferrite bar antenna

SW tuner section

Tuning range	3.8 MHz to 12.5 MHz
Antenna	Rod antenna

Cassette deck section

Track format	4 tracks, 2 channels stereo
Frequency response	Normal tape: 50 Hz – 12500 Hz
Recording system	AC bias
Heads	Recording/playback/erasure head × 1

Compact disc player section

Laser	Semiconductor laser (λ = 780 nm)
D-A converter	1 bit dual

General

Power output	5 W + 5 W (4 ohms, EIAJ)
Output	PHONES (stereo minijack)
Power requirements	DC 12 V using eight size DD (R20) batteries AC 110 - 120 V/220 - 240 V switchable, 50/60 Hz
Power consumption	30 W
Dimensions of main unit (W × H × D)	266 × 303.7 × 275.5 mm
Weight of main unit	4.3 kg

Speaker

Type	120 mm cone type 27 mm ceramic type
Dimensions (W × H × D)	197 × 303.7 × 240 mm
Weight	1.75 kg × 2
Impedance	4 ohms
Allowable max. input	10 W

- Design and specifications are subject to change without notice.

LH MODEL:

FM tuner section

Tuning range	87.5 MHz to 108 MHz
Antenna	Rod antenna

AM tuner section

Tuning range	530 kHz to 1710 kHz (10 kHz step) 531 kHz to 1602 kHz (9 kHz step)
Antenna	Ferrite bar antenna

Cassette deck section

Track format	4 tracks, 2 channels stereo
Frequency response	Normal tape: 50 Hz – 12500 Hz
Recording system	AC bias
Heads	Recording/playback/erasure head × 1

Compact disc player section

Laser	Semiconductor laser (λ = 780 nm)
D-A converter	1 bit dual

General

Power output	5 W + 5 W (4 ohms, EIAJ)
Output	PHONES (stereo minijack)
Power requirements	DC 12 V using eight size D (R20) batteries AC 110 - 120 V/220 - 240 V switchable, 50/60 Hz
Power consumption	30 W
Dimensions of main unit (W × H × D)	266 × 303.7 × 275.5 mm
Weight of main unit	4.3 kg

Speaker

Type	120 mm cone type 27 mm ceramic type
Dimensions (W × H × D)	197 × 303.7 × 240 mm
Weight	1.75 kg × 2
Impedance	4 ohms
Allowable max. input	10 W

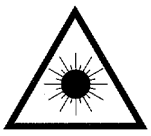
- Design and specifications are subject to change without notice.

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: Usynling 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 ylittävälle näkymättömälle lasersäteilylle.

VARNING!

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

CAUTION

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

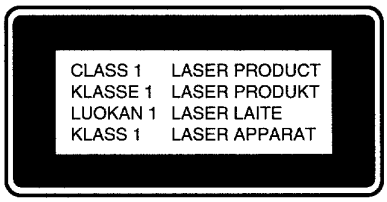
ATTENTION

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

ADVARSEL!

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

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

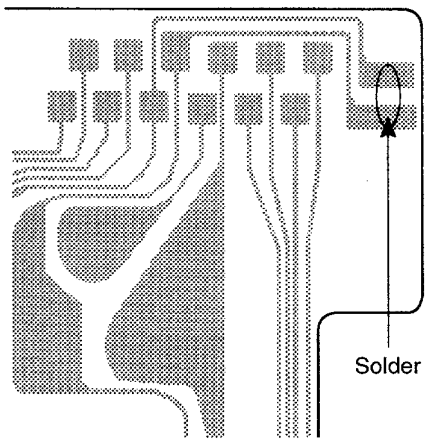


Precaution to replace Optical block (KSS-213F)

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 the right figure.

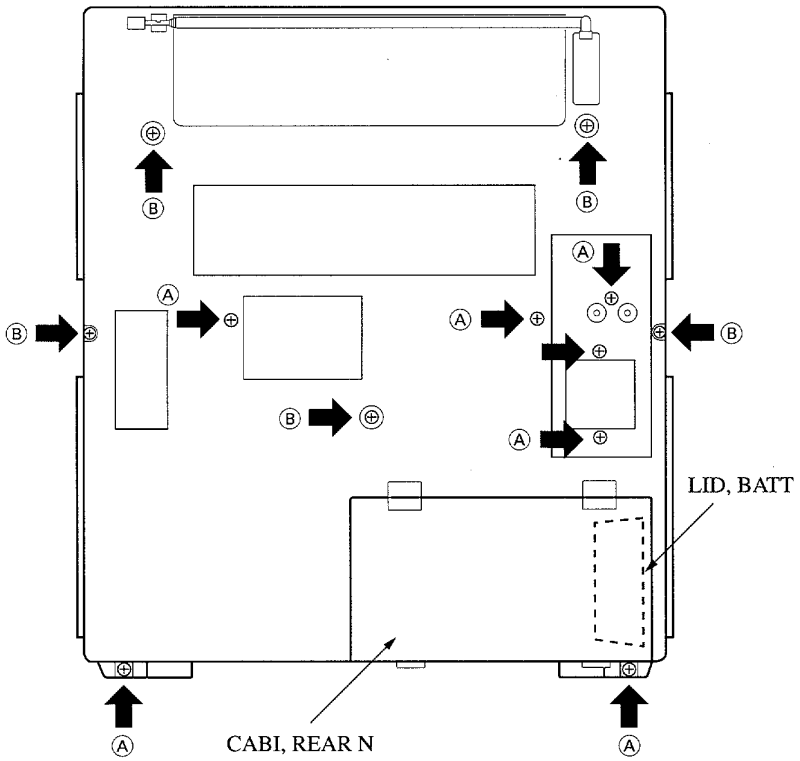
PICK-UP Assy P.C.B



DISASSEMBLY INSTRUCTIONS

1. Removal of CABI, REAR N.

1) Remove the LID, BATT and remove the COVER, BATT inside.
2) Remove the 12 screws (A×7, B×5) and remove the CABI, REAR N.



ELECTRICAL MAIN PARTS LIST

DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。
If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

REF. NO	PART NO.	KANRI NO.	DESCRIPTION
IC			
	87-A20-446-010		C-IC,LA9241ML
	88-CT4-615-010		C-IC,LC867220W-5H52
	87-A20-187-010		IC,LC78622E
	87-NF8-614-010		IC,SPS-442-1-W
	87-A20-856-010		IC,BA6898S
	87-001-982-010		IC,TA7291S
	87-A20-715-010		IC,M62439SP
	87-017-889-010		IC,NJM4558LD
	87-070-417-010		IC,NJM4558 DD
	87-A20-946-040		C-IC,MM1434XF
	87-002-848-010		IC,TA8229K
⚠	87-001-132-010		IC,ICP-N38
	87-070-416-010		IC,NJU7201 L55
	87-A20-438-010		IC,LA1837
	87-070-127-110		IC,LC72131 D
TRANSISTOR			
	87-026-463-080		TR,2SA933S (0.3W)
	87-026-291-080		TR,DTC124XS
	87-026-218-080		TR,DTC144ES (0.2W)
	87-026-462-080		TR,2SC1740 S(RS 0.3W)
	87-026-287-080		TR,DTC143ES
	87-026-464-080		TR,DTC114TS
	89-113-187-880		TRNSISTOR,2SA1318 (0.5W)
	87-026-486-080		TR,DTA144TS
	87-026-502-080		DTC144TS
	89-112-964-580		TR,2SA1296Y 0.75W 120M
	89-414-683-080		TR,2SD1468S 150MHZ 0.4
	87-A30-090-080		FET,2SK2541
	87-A30-091-080		FET,2SJ460
	87-A30-197-080		TR,KTA1267GR
	89-320-011-080		TR,2SC2001 (15W)
	87-026-214-080		TR,DTA114YS (0.3W)
	89-406-555-080		TR,2SD655 (0.5W)
	89-213-702-010		TR,2SB1370 (1.8W)
	87-026-219-080		TR,DTA144ES (0.3W)
	89-109-521-080		TR,2SA952 (0.6W)
	87-A30-092-080		FET,2SK439E/F
	89-305-352-380		TR,2SC535(B/C)
	89-319-233-080		TR,2SC1923 (0.1W)
	87-026-269-080		TR,DTA114ES<HE>
	89-318-154-080		TR,2SC1815 (0.4W)
DIODE			
	87-020-465-010		DIODE,1SS133 (110MA)
	87-A40-347-080		ZENER,MTZJ2.2B
	87-070-345-080		DIODE,IN4148
	87-A40-156-080		DIODE,1N5392
	87-017-164-080		ZENER,HZS9A2L
	87-017-148-080		ZENER,HZS6A1L
	87-017-139-080		ZENER,HZS15-2
	87-A40-234-080		ZENER,MTZJ5.6A
MAIN C.B			
C4	87-018-133-080		CAPACITOR,CER 4700P-16V
C5	87-018-133-080		CAPACITOR,CER 4700P-16V
C201	87-010-405-080		CAP, ELECT 10-50V
C202	87-010-405-080		CAP, ELECT 10-50V
C203	87-010-546-080		CAP, ELECT 0.33-50V
C204	87-010-546-080		CAP, ELECT 0.33-50V
C205	87-010-546-080		CAP, ELECT 0.33-50V
C206	87-010-546-080		CAP, ELECT 0.33-50V
C207	87-010-546-080		CAP, ELECT 0.33-50V
C208	87-010-546-080		CAP, ELECT 0.33-50V
C209	87-010-546-080		CAP, ELECT 0.33-50V
C210	87-010-546-080		CAP, ELECT 0.33-50V
C213	87-010-544-080		CAP, ELECT 0.1-50V<LH>
C213	87-010-545-080		CAP, ELECT 0.22-50V<HE>
C214	87-010-544-080		CAP, ELECT 0.1-50V<LH>
C214	87-010-545-080		CAP, ELECT 0.22-50V<HE>
C215	87-010-544-080		CAP, ELECT 0.1-50V
C216	87-010-544-080		CAP, ELECT 0.1-50V
C217	87-010-248-080		CAP, ELECT 220-10V
C218	87-010-263-080		CAP, ELECT 100-10V
C240	87-010-544-080		CAP, ELECT 0.1-50V
C241	87-010-544-080		CAP, ELECT 0.1-50V
C260	87-010-405-080		CAP, ELECT 10-50V
C301	87-018-131-080		CAP, CER 1000P-50V
C302	87-018-131-080		CAP, CER 1000P-50V
C303	87-018-130-080		CAP,TC-U 820P-50 B
C304	87-018-130-080		CAP,TC-U 820P-50 B
C305	87-010-263-080		CAP, ELECT 100-10V
C306	87-010-263-080		CAP, ELECT 100-10V
C309	87-018-130-080		CAP,TC-U 820P-50 B
C310	87-018-130-080		CAP,TC-U 820P-50 B
C311	87-010-546-080		CAP, ELECT 0.33-50V
C312	87-010-546-080		CAP, ELECT 0.33-50V
C321	87-018-131-080		CAP, CER 1000P-50V
C331	87-018-126-080		CAP,TC-U 390P-50 B
C332	87-018-126-080		CAP,TC-U 390P-50 B
C333	87-018-195-080		CAP, CER 1200P-16V
C334	87-018-122-080		CAP 180P-50 B
C337	87-018-131-080		CAP, CER 1000P-50V
C340	87-010-374-080		CAP, ELECT 47-10V
C341	87-018-205-080		CAP, CERA-SOL 0.022
C355	87-018-132-080		CAP, CER 2200P-16V
C356	87-018-132-080		CAP, CER 2200P-16V
C369	87-018-118-080		CAP,TC-U 82P-50 B
C370	87-018-118-080		CAP,TC-U 82P-50 B
C373	87-010-401-080		CAP, ELECT 1-50V
C374	87-010-401-080		CAP, ELECT 1-50V
C382	87-010-401-080		CAP, ELECT 1-50V
C383	87-010-401-080		CAP, ELECT 1-50V
C384	87-010-374-080		CAP, ELECT 47-10V
C385	87-010-405-080		CAP, ELECT 10-50V
C520	87-010-405-080		CAP, ELECT 10-50V
C521	87-010-263-080		CAP, ELECT 100-10V
C522	87-018-134-080		CAPACITOR,TC-U 0.01-16
C544	87-010-382-080		CAP, ELECT 22-25V
C545	87-010-382-080		CAP, ELECT 22-25V
C547	87-010-374-080		CAP, ELECT 47-10V
C551	87-010-402-080		CAP, ELECT 2.2-50V
C552	87-010-382-080		CAP, ELECT 22-25V
C553	87-010-382-080		CAP, ELECT 22-25V
C601	87-010-401-080		CAP, ELECT 1-50V
C602	87-010-401-080		CAP, ELECT 1-50V
C603	87-018-208-080		CAP 0.047-50F
C604	87-018-208-080		CAP 0.047-50F
C605	87-018-132-080		CAP, CER 2200P-16V
C606	87-018-132-080		CAP, CER 2200P-16V
C607	87-010-406-080		CAP, ELECT 22-50
C608	87-010-406-080		CAP, ELECT 22-50
C609	87-010-260-080		CAP, ELECT 47-25V
C613	87-010-263-080		CAP, ELECT 100-10V
C614	87-010-263-080		CAP, ELECT 100-10V
C615	87-010-376-090		CAP 10-2200
C616	87-010-376-090		CAP 10-2200
C623	87-010-546-080		CAP, ELECT 0.33-50V
C624	87-010-546-080		CAP, ELECT 0.33-50V
C625	87-010-405-080		CAP, ELECT 10-50V
C641	87-010-248-080		CAP, ELECT 220-10V
C643	87-010-387-080		CAP,E 470-25 SME
C644	87-010-260-080		CAP, ELECT 47-25V
C720	87-010-405-080		CAP, ELECT 10-50V
C722	87-010-385-080		CAP, ELECT 220-25V
C723	87-010-248-080		CAP, ELECT 220-10V

REF. NO	PART NO.	KANRI NO.	DESCRIPTION
C724	87-018-205-080		CAP, CERA-SOL 0.022
C726	87-010-404-080		CAP, ELECT 4.7-50V
C727	87-010-401-080		CAP, ELECT 1-50V
C728	87-010-221-080		CAP, ELECT 470-10V
C729	87-010-263-080		CAP, ELECT 100-10V
C730	87-010-248-080		CAP, ELECT 220-10V
C741	87-010-263-080		CAP, ELECT 100-10V
C750	87-010-404-080		CAP, ELECT 4.7-50V
C751	87-010-404-080		CAP, ELECT 4.7-50V
C761	87-010-928-090		CAP,E 4700-25 SMG
C801	87-018-102-080		CAP,TC-U 6.8P-50 SL
C802	87-018-134-080		CAPACITOR,TC-U 0.01-16
C803	87-018-106-080		CAP,TC-U 15P-50 SL
C804	87-018-131-080		CAP, CER 1000P-50V
C805	87-018-101-080		CAP,TC-U 5.6P-50 SL
C806	87-018-102-080		CAP,TC-U 6.8P-50 SL
C807	87-018-127-080		CAP, CER 470P-50V
C808	87-018-109-080		CAP, CER 22P-50V
C809	87-018-105-080		CAP,TC-U 12P-50 SL
C810	87-018-113-080		CAP, CER 33P-50V
C811	87-018-109-080		CAP, CER 22P-50V
C812	87-018-098-080		CAP,TC-U 3.3P-50 SL
C813	87-018-119-080		CAP, CER 100P-50V
C814	87-018-134-080		CAPACITOR,TC-U 0.01-16
C815	87-018-134-080		CAPACITOR,TC-U 0.01-16
C816	87-018-133-080		CAPACITOR,CER 4700P-16V<HE>
C817	87-014-073-010		PP CAPACITOR, 4700P<HE>
C818	87-018-134-080		CAPACITOR,TC-U 0.01-16<HE>
C819	87-018-199-080		CAP, CER 3300P<HE>
C820	87-018-134-080		CAPACITOR,TC-U 0.01-16<HE>
C821	87-018-209-080		CAP, CER 0.1-50V
C822	87-018-100-080		CAP, CER 4.7P-50V
C823	87-018-208-080		CAP 0.047-50F
C825	87-018-208-080		CAP 0.047-50F
C827	87-010-405-080		CAP, ELECT 10-50V
C828	87-018-208-080		CAP 0.047-50F
C829	87-010-248-080		CAP, ELECT 220-10V
C830	87-018-134-080		CAPACITOR,TC-U 0.01-16
C831	87-018-209-080		CAP, CER 0.1-50V
C832	87-010-404-080		CAP, ELECT 4.7-50V
C833	87-018-134-080		CAPACITOR,TC-U 0.01-16
C834	87-010-400-080		CAP, ELECT 0.47-50V
C835	87-010-401-080		CAP, ELECT 1-50V
C836	87-010-401-080		CAP, ELECT 1-50V
C838	87-010-407-080		CAP, ELECT 33-50V
C839	87-018-208-080		CAP 0.047-50F
C840	87-018-134-080		CAPACITOR,TC-U 0.01-16
C842	87-010-546-080		CAP, ELECT 0.33-50V
C843	87-010-546-080		CAP, ELECT 0.33-50V
C845	87-018-134-080		CAPACITOR,TC-U 0.01-16
C846	87-010-406-080		CAP, ELECT 22-50
C847	87-018-208-080		CAP 0.047-50F
C848	87-010-403-080		CAP, ELECT 3.3-50V
C849	87-018-149-080		CAP,TC-U 15P-50 CH
C850	87-018-148-080		CAP,TC-U 12P-50 CH
C851	87-018-131-080		CAP, CER 1000P-50V
C852	87-018-131-080		CAP, CER 1000P-50V
C853	87-018-131-080		CAP, CER 1000P-50V
C854	87-018-209-080		CAP, CER 0.1-50V
C855	87-018-134-080		CAPACITOR,TC-U 0.01-16
C856	87-018-134-080		CAPACITOR,TC-U 0.01-16
C857	87-010-404-080		CAP, ELECT 4.7-50V
C858	87-010-112-080		CAP, ELECT 100-16V
C859	87-018-134-080		CAPACITOR,TC-U 0.01-16
C860	87-010-248-080		CAP, ELECT 220-10V
C861	87-018-134-080		CAPACITOR,TC-U 0.01-16
C862	87-018-196-080		CAP, CER 1500P-16V<HE>
C863	87-018-196-080		CAP, CER 1500P-16V<HE>
C864	87-010-405-080		CAP, ELECT 10-50V
C865	87-010-405-080		CAP, ELECT 10-50V
C866	87-018-131-080		CAP, CER 1000P-50V
C867	87-018-115-080		CAP, CER 47P-50V
C880	87-010-405-080		CAP, ELECT 10-50V
C882	87-018-134-080		CAPACITOR,TC-U 0.01-16
C884	87-018-100-080		CAP, CER 4.7P-50V
C885	87-018-102-080		CAP,TC-U 6.8P-50 SL<HE>
C886	87-010-374-080		CAP, ELECT 47-10V
C902	87-018-134-080		CAPACITOR,TC-U 0.01-16
C1237	87-018-134-080		CAPACITOR,TC-U 0.01-16
C1802	87-018-134-080		CAPACITOR,TC-U 0.01-16
C1822	87-014-051-010		CAP,PP 560P-100 J<HE>
C1823	87-018-134-080		CAPACITOR,TC-U 0.01-16<HE>
C1824	87-018-134-080		CAPACITOR,TC-U 0.01-16<HE>
C1866	87-018-118-080		CAP,TC-U 82P-50 B
CF801	87-008-261-010		FILTER, SFE10.7MA5-A
CON301	88-CT4-607-010		CONN ASSY,5P
CON751	88-CT4-608-010		CONN ASSY,9P
D801	87-A40-226-080		VARI-CAP,SVC251SPA
D802	87-A40-226-080		VARI-CAP,SVC251SPA
D805	87-A40-532-080		VARI-CAP,KV1590ATS2
J202	87-099-715-010		JACK,PIN 2P
J601	87-A60-420-010		JACK,3.5 ST (MSC)
J602	87-A60-217-010		TERMINAL,SPKR 4P
L331	87-007-322-010		COIL OSC BIAS 61 KHZ
L601	87-A50-087-080		COIL,100UH (CECS)
L602	87-A50-087-080		COIL,100UH (CECS)
L801	87-A50-110-010		COIL,FM BPF EX
L802	87-006-244-010		COIL,RF FM 3-1/2T,L4
L803	87-006-246-010		COIL,RF FM 3-1/2T,L4
L804	87-CHH-605-010		COIL,FM OSC EX
L805	87-005-847-080		COIL,2.2UH(CECS)
L806	86-ZA1-604-010		IFT,FM IFT 7-6.2
L807	87-005-847-080		COIL,2.2UH(CECS)
L808	87-CHH-601-010		COIL,BAR-ANT,U<LH>
L808	88-CT4-622-010		COIL,BAR-ANT.H<HE>
L809	87-CHH-620-010		COIL,SW ANT (COI)<HE>
L810	87-CHH-609-010		COIL,OSC MW H(COI)<HE>
L810	87-CHH-608-010		COIL,OSC MW U(COI)<LH>
L811	87-CHH-621-010		COIL,SW OSC (COI)<HE>
L812	87-003-131-080		COIL, 10MH<HE>
L814	87-A90-245-010		FLTR,CFAZH-450 (TOK)<LH>
L814	87-A90-052-010		FLTR,CFMT-450A(TOK)<HE>
L815	87-A50-015-010		COIL,FM DET(TOK)
L816	87-005-849-080		COIL,10UH(CECS)<HE>
L820	87-003-147-080		COIL, 22UH
L821	87-A50-067-080		COIL,1.00UH (CECS)
L826	87-005-372-080		COIL S 1MHM<HE>
L1802	87-A50-067-080		COIL,1.00UH (CECS)
SFR751	87-024-430-080		SFR,2.2K RH063EC
SFR801	87-024-433-080		SFR,10K RH063EC
SFR802	87-024-433-080		SFR,10K RH063EC
TC801	87-011-221-080		CAP, TRIMMER 30P<HE>
TC802	87-011-220-080		TRIMMER CAP 20P VTC
X802	87-A70-061-010		VIB,XTAL 4.500MHZ CSA-309

FRONT C.B

C2	87-018-209-080		CAP, CER 0.1-50V
C3	87-018-209-080		CAP, CER 0.1-50V
C7	87-010-400-080		CAP, ELECT 0.47-50V
C8	87-010-401-080		CAP, ELECT 1-50V
C10	87-010-405-080		CAP, ELECT 10-50V
C12	87-010-263-080		CAP, ELECT 100-10V
C13	87-018-131-080		CAP, CER 1000P-50V
C15	87-018-118-080		CAP,TC-U 82P-50 B
C16	87-018-116-080		CAP, CER 56P-50V
C17	87-018-117-080		CAP,TC-U 68P-50 SL
C18	87-010-248-080		CAP, ELECT 220-10V
C21	87-018-209-080		CAP, CER 0.1-50V
C22	87-018-209-080		CAP, CER 0.1-50V

REF. NO	PART NO.	KANRI NO.	DESCRIPTION
C23	87-018-209-080		CAP, CER 0.1-50V
C73	87-018-131-080		CAP, CER 1000P-50V
C98	87-010-263-080		CAP, ELECT 100-10V
C101	87-010-545-080		CAP, ELECT 0.22-50V
C102	87-018-209-080		CAP, CER 0.1-50V
C200	87-018-106-080		CAP, CER 15P-50V
C201	87-018-109-080		CAP, CER 22P-50V
C401	87-018-132-080		CAP, CER 2200P-16V
C402	87-018-133-080		CAPACITOR,CER 4700P-16V
C403	87-018-121-080		CAP, CER 150P-50V
C404	87-010-401-080		CAP, ELECT 1-50V
C405	87-010-545-080		CAP, ELECT 0.22-50V
C406	87-018-131-080		CAP, CER 1000P-50V
C407	87-010-401-080		CAP, ELECT 1-50V
C408	87-010-260-080		CAP, ELECT 47-25V
C409	87-010-248-080		CAP, ELECT 220-10V
C410	87-010-405-080		CAP, ELECT 10-50V
C413	87-010-374-080		CAP, ELECT 47-10V
C414	87-018-120-080		CAP, CERA-SOL SS 120P
CN2	88-CT4-612-010		CONN ASSY,6PAF
D4	87-001-519-010		LIGHT EMITTING DIODE,SLR-37
D5	87-A40-410-010		LED,SEL2515C PGRN
D6	87-A40-410-010		LED,SEL2515C PGRN
D7	87-A40-410-010		LED,SEL2515C PGRN
D8	87-A40-410-010		LED,SEL2515C PGRN
D9	87-001-519-010		LIGHT EMITTING DIODE,SLR-37
D10	87-001-519-010		LIGHT EMITTING DIODE,SLR-37
D11	87-001-519-010		LIGHT EMITTING DIODE,SLR-37
D21	87-A40-161-010		LED,L-1154SGD
D25	87-A40-161-010		LED,L-1154SGD
D27	87-A40-161-010		LED,L-1154SGD
D29	87-A40-161-010		LED,L-1154SGD
D31	87-A40-161-010		LED,L-1154SGD
D33	87-A40-161-010		LED,L-1154SGD
D35	87-A40-161-010		LED,L-1154SGD
J401	87-A60-651-010		JACK,3.5MONO
L1	87-003-171-010		COIL,15UH TROIDAL
L10	87-003-171-010		COIL,15UH TROIDAL
L11	87-003-171-010		COIL,15UH TROIDAL
L401	87-003-097-080		COIL,1UH
LCD1	88-CT4-616-010		LCD,AIW4136
S40	87-A90-770-080		SW,TACT TRT134-L4.3
S41	87-A90-770-080		SW,TACT TRT134-L4.3
S43	87-A90-770-080		SW,TACT TRT134-L4.3
S44	87-A90-770-080		SW,TACT TRT134-L4.3
S45	87-A90-770-080		SW,TACT TRT134-L4.3
S46	87-A90-770-080		SW,TACT TRT134-L4.3
S47	87-A90-770-080		SW,TACT TRT134-L4.3
S48	87-A90-770-080		SW,TACT TRT134-L4.3
S49	87-A90-770-080		SW,TACT TRT134-L4.3
S50	87-A90-770-080		SW,TACT TRT134-L4.3
S51	87-A90-770-080		SW,TACT TRT134-L4.3
S52	87-A90-770-080		SW,TACT TRT134-L4.3
S53	87-A90-770-080		SW,TACT TRT134-L4.3
S54	87-A90-770-080		SW,TACT TRT134-L4.3
S55	87-A90-770-080		SW,TACT TRT134-L4.3
S56	87-A90-770-080		SW,TACT TRT134-L4.3
S57	87-A90-770-080		SW,TACT TRT134-L4.3
S58	87-A90-770-080		SW,TACT TRT134-L4.3
S59	87-A90-770-080		SW,TACT TRT134-L4.3
S60	87-A90-770-080		SW,TACT TRT134-L4.3
S61	87-A90-770-080		SW,TACT TRT134-L4.3
VR401	82-NK7-615-010		VR,10KA RK11K1130
X1	87-030-273-010		VIB,XTAL 32.768K5PPM
X2	87-A70-018-080		VIB,CER 6.00MHZ MG200

CD C.B

C1	87-010-403-080	CAP, ELECT 3.3-50V
C2	87-018-134-080	CAPACITOR,TC-U 0.01-16

REF. NO	PART NO.	KANRI NO.	DESCRIPTION
C3	87-010-263-080		CAP, ELECT 100-10V
C4	87-010-248-080		CAP, ELECT 220-10V
C5	87-018-134-080		CAPACITOR,TC-U 0.01-16
C6	87-010-374-080		CAP, ELECT 47-10V
C7	87-018-131-080		CAP, CER 1000P-50V
C9	87-010-248-080		CAP, ELECT 220-10V
C10	87-010-263-080		CAP, ELECT 100-10V
C12	87-010-401-080		CAP, ELECT 1-50V
C14	87-010-405-080		CAP, ELECT 10-50V
C16	87-010-545-080		CAP, ELECT 0.22-50V
C17	87-018-125-080		CAP, CER 330P-50V
C22	87-018-196-080		CAP, CER 1500P-16V
C25	87-018-129-080		CAP, CER 680P-50V
C29	87-018-133-080		CAPACITOR,CER 4700P-16V
C30	87-018-123-080		CAP, CER 220P-50V
C31	87-010-545-080		CAP, ELECT 0.22-50V
C32	87-010-374-080		CAP, ELECT 47-10V
C33	87-010-401-080		CAP, ELECT 1-50V
C34	87-018-199-080		CAP, CER 3300P
C35	87-018-134-080		CAPACITOR,TC-U 0.01-16
C36	87-010-374-080		CAP, ELECT 47-10V
C37	87-010-404-080		CAP, ELECT 4.7-50V
C38	87-018-209-080		CAP, CER 0.1-50V
C39	87-018-131-080		CAP, CER 1000P-50V
C40	87-018-141-080		CAP, CERA-SOL SS 3.3P CH
C42	87-018-150-080		CAP,TC-U 18P-50 CH
C45	87-018-209-080		CAP, CER 0.1-50V
C46	87-018-209-080		CAP, CER 0.1-50V
C47	87-018-209-080		CAP, CER 0.1-50V
C48	87-018-111-080		CAP, CERA-SOL SS 27P
C50	87-018-127-080		CAP, CER 470P-50V
C57	87-A10-142-010		CAP,CER 33P-50 K CH
C58	87-A10-142-010		CAP,CER 33P-50 K CH
C59	87-010-263-080		CAP, ELECT 100-10V
C60	87-018-209-080		CAP, CER 0.1-50V
C61	87-018-209-080		CAP, CER 0.1-50V
C62	87-010-370-080		CAP,E 330-6.3 SME
C65	87-010-404-080		CAP, ELECT 4.7-50V
C66	87-018-209-080		CAP, CER 0.1-50V
C67	87-010-263-080		CAP, ELECT 100-10V
C69	87-018-121-080		CAP, CER 150P-50V
C70	87-010-263-080		CAP, ELECT 100-10V
C71	87-018-134-080		CAPACITOR,TC-U 0.01-16
C72	87-010-221-080		CAP, ELECT 470-10V
C73	87-018-134-080		CAPACITOR,TC-U 0.01-16
C78	87-010-221-080		CAP, ELECT 470-10V
C79	87-018-134-080		CAPACITOR,TC-U 0.01-16
C81	87-010-405-080		CAP, ELECT 10-50V
C82	87-010-405-080		CAP, ELECT 10-50V
C83	87-018-125-080		CAP, CER 330P-50V
C84	87-018-125-080		CAP, CER 330P-50V
C89	87-018-134-080		CAPACITOR,TC-U 0.01-16
C91	87-018-134-080		CAPACITOR,TC-U 0.01-16
C92	87-010-221-080		CAP, ELECT 470-10V
C98	87-018-119-080		CAP, CER 100P-50V
C101	87-018-134-080		CAPACITOR,TC-U 0.01-16
C102	87-010-112-080		CAP, ELECT 100-16V
C111	87-018-209-080		CAP, CER 0.1-50V
C112	87-018-209-080		CAP, CER 0.1-50V
CN5	88-CT4-610-010		CONN ASSY,10P
FC1	88-CT4-623-010		FF-CABLE, 16P 1.0 120MM
FC2	88-906-121-110		FF-CABLE,6P
FC3	88-905-201-110		FF-CABLE, 5P 1.25
L1	87-003-102-080		COIL, 10UH
L2	87-003-102-080		COIL, 10UH
L26	87-003-102-080		COIL, 10UH
X1	81-592-641-010		CERAMIC FILTER, 16.93MHZ

AC C.B

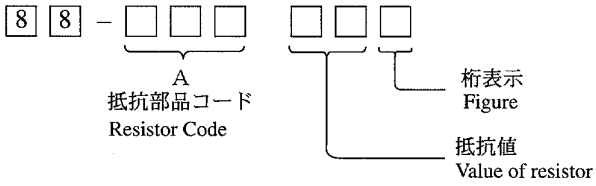
REF. NO	PART NO.	KANRI NO.	DESCRIPTION
⚠	87-A90-505-080		FUSE CLAMP,TP00351-51
C701	87-018-205-080		CAP, CERA-SOL 0.022
C702	87-018-205-080		CAP, CERA-SOL 0.022
C703	87-018-205-080		CAP, CERA-SOL 0.022
C704	87-018-205-080		CAP, CERA-SOL 0.022
⚠F380	87-035-191-010		FUSE,3.15A 250V
DRIVE C.B			
CN3	87-009-349-010		CONN,6P H WHT PH
M20	87-045-358-010		MOT,RF-310TA 43
M21	87-045-356-010		MOT,RF-310TA 30
SW1	87-A90-042-010		SW,LEAF MSW-17310MVPO

REF. NO	PART NO.	KANRI NO.	DESCRIPTION
CD MOTOR C.B			
CN4	87-099-210-010		CONN,5P H BLK 6216
M1	87-045-305-010		MOT,RF-500TB
SW1	87-035-110-010		SW,MICRO SPPB62
SW2	87-035-110-010		SW,MICRO SPPB62

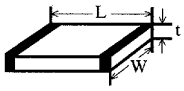
- コネクタについては、初回発注の扱いとはせず、受注後に業者へ発注し、供給致します。
- Regarding connectors, they are not stocked as they are not the initial order items.
  The connectors are available after they are supplied from connector manufacturers upon the order is received.

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

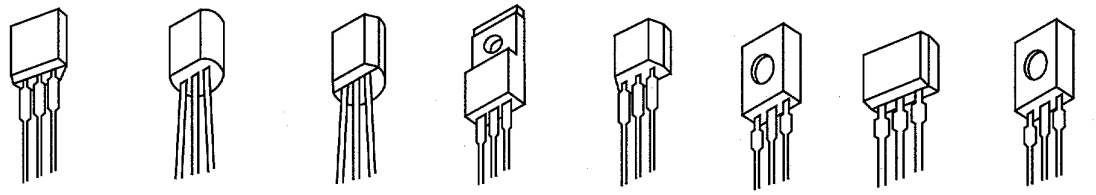
チップ抵抗部品コードの成り立ち
Chip Resistor Part Coding



チップ抵抗
Chip resistor

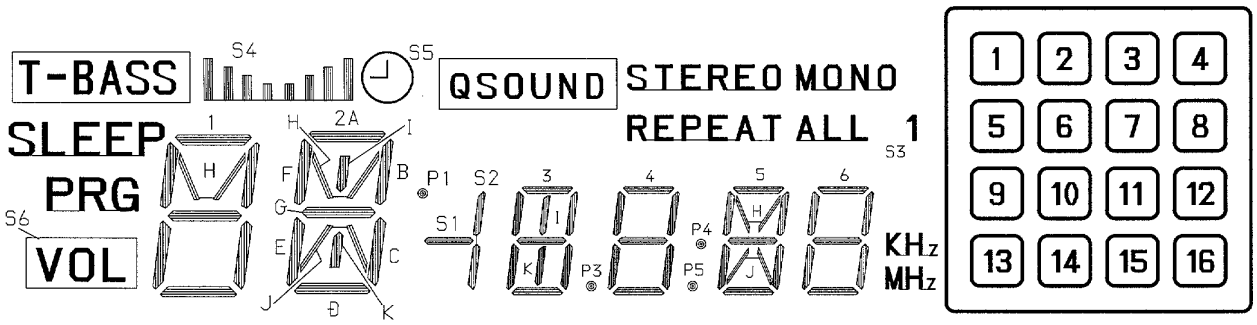
容量 Wattage	種類 Type	許容誤差 Tolerance	記号 Symbol	寸法 / Diamensions (mm) 外形 / Form	L	W	t	抵抗コード : A Resistor Code : A
1/16W	1608	5%	CJ		1.6	0.8	0.45	108
1/10W	2125	5%	CJ		2	1.25	0.45	118
1/8W	3216	5%	CJ		3.2	1.6	0.55	128

TRANSISTOR ILLUSTRATION



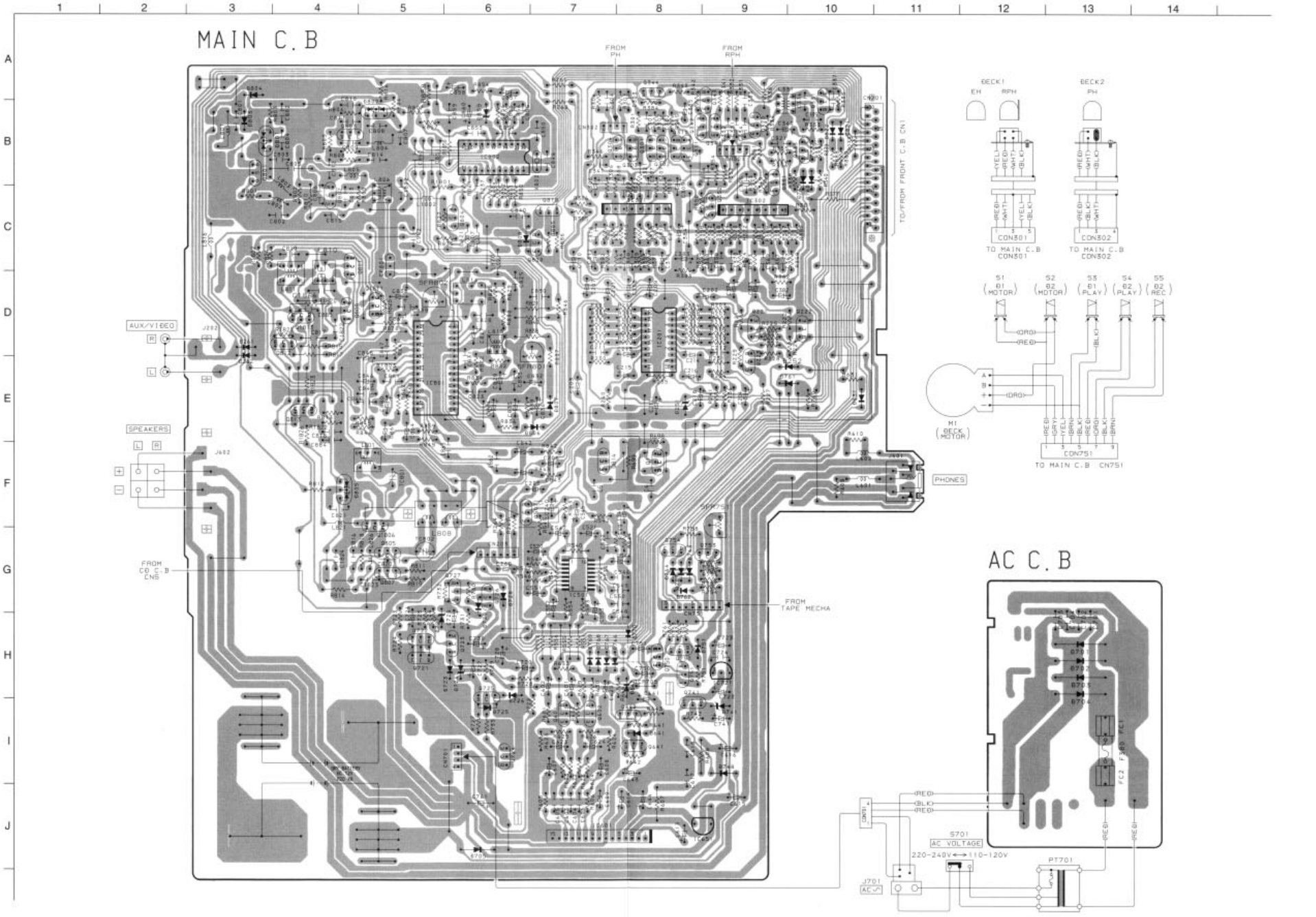
ECB	ECB	ECB	BCE	ECB	DGS	GSD	SDG
2SA933S	2SA952	2SA1318	2SB1370	2SD1468S	2SJ460	2SK439E/F	2SK2541
2SC1740	2SA1296Y						
DTA114ES	2SC2001						
DTA114YS	2SC535						
DTA144ES	2SC1815						
DTA144TS	2SC1923						
DTC114TS	2SD655						
DTC124XS	KTA1267GR						
DTC143ES							
DTC144ES							
DTC144TS							

LCD DISPLAY

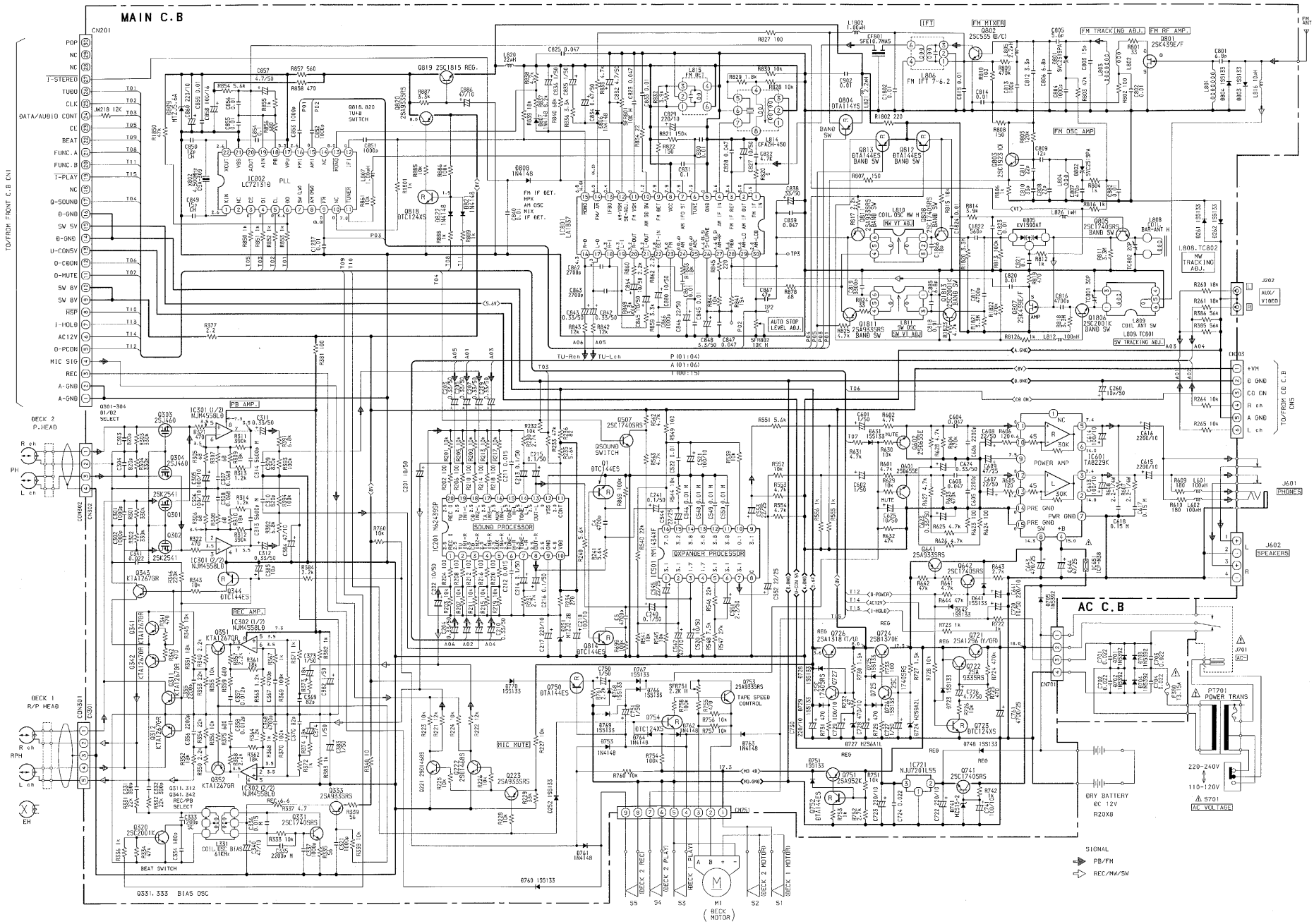


NO	COM1	COM2	COM3
1	COM1	—	—
2	—	COM2	—
3	—	—	COM3
4	S4	PRG	S6
5	1A	1F	1E
6	1H	1G	1Đ
7	T-BASS VOL	1B	1C
8	21	2A	STEREO
9	2G	2H	2F
10	2K	2J	2E
11	2B	2C	2Đ
12	MONO	P1	S1
13	REPEAT	S5	S2
14	3F	3G	3E
15	3A	31, K	3Đ
16	3B	3C	P3
17	4F	4G	4E
18	4B	4C	4Đ
19	4A	P4	P5
20	—	5F	5E
21	5A	5H, J	5G
22	5B	5C	5Đ
23	6F	6G	6E
24	6B	6C	6Đ
25	6A	KHz	MHz
26	5	9	13
27	6	10	14
28	7	11	15
29	8	12	16
30	4	3	2
31	S7	QSOUNĐ	1
32	ALL	SLEEP	S3

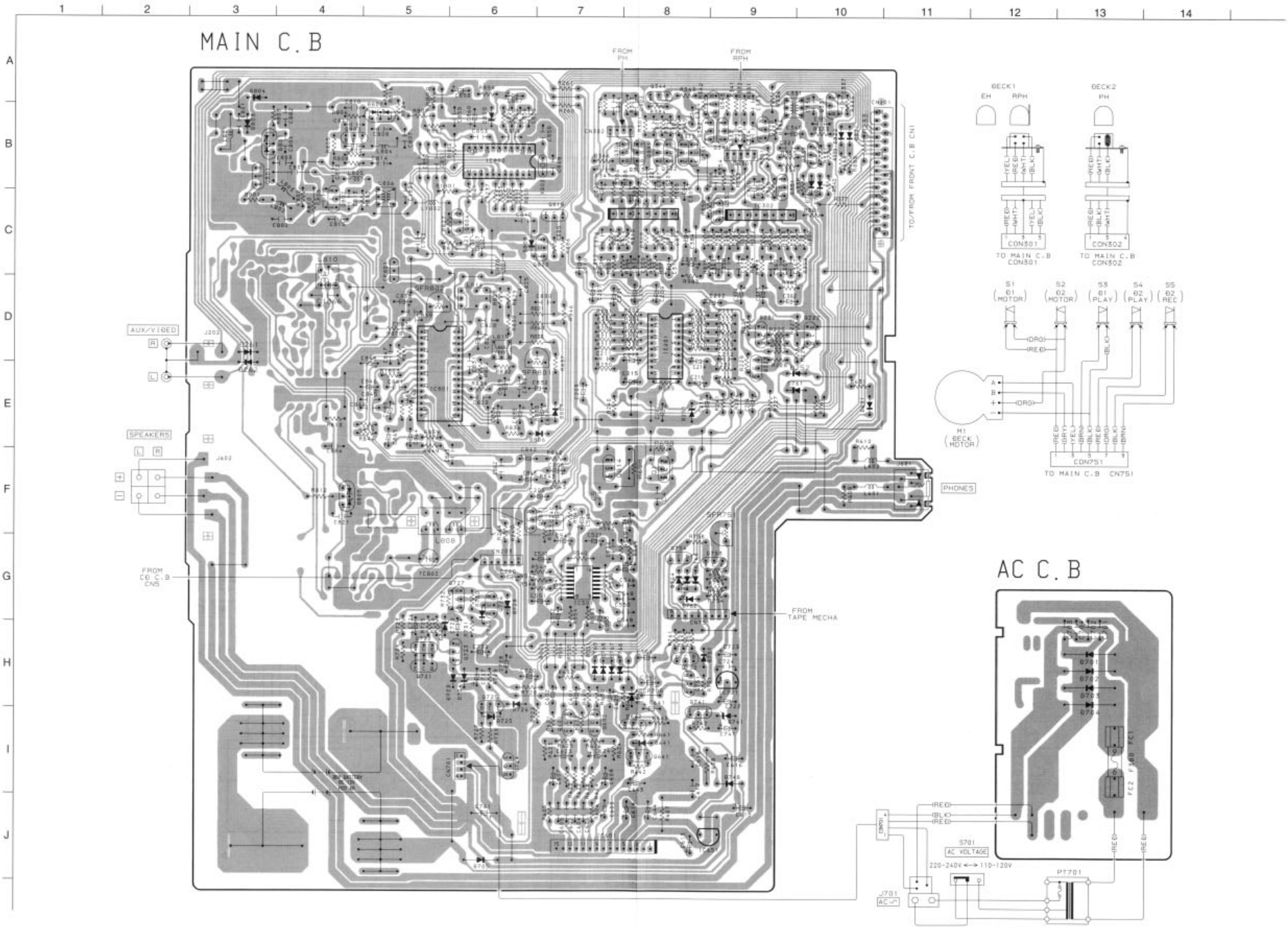
WIRING-1 (MAIN: HE)



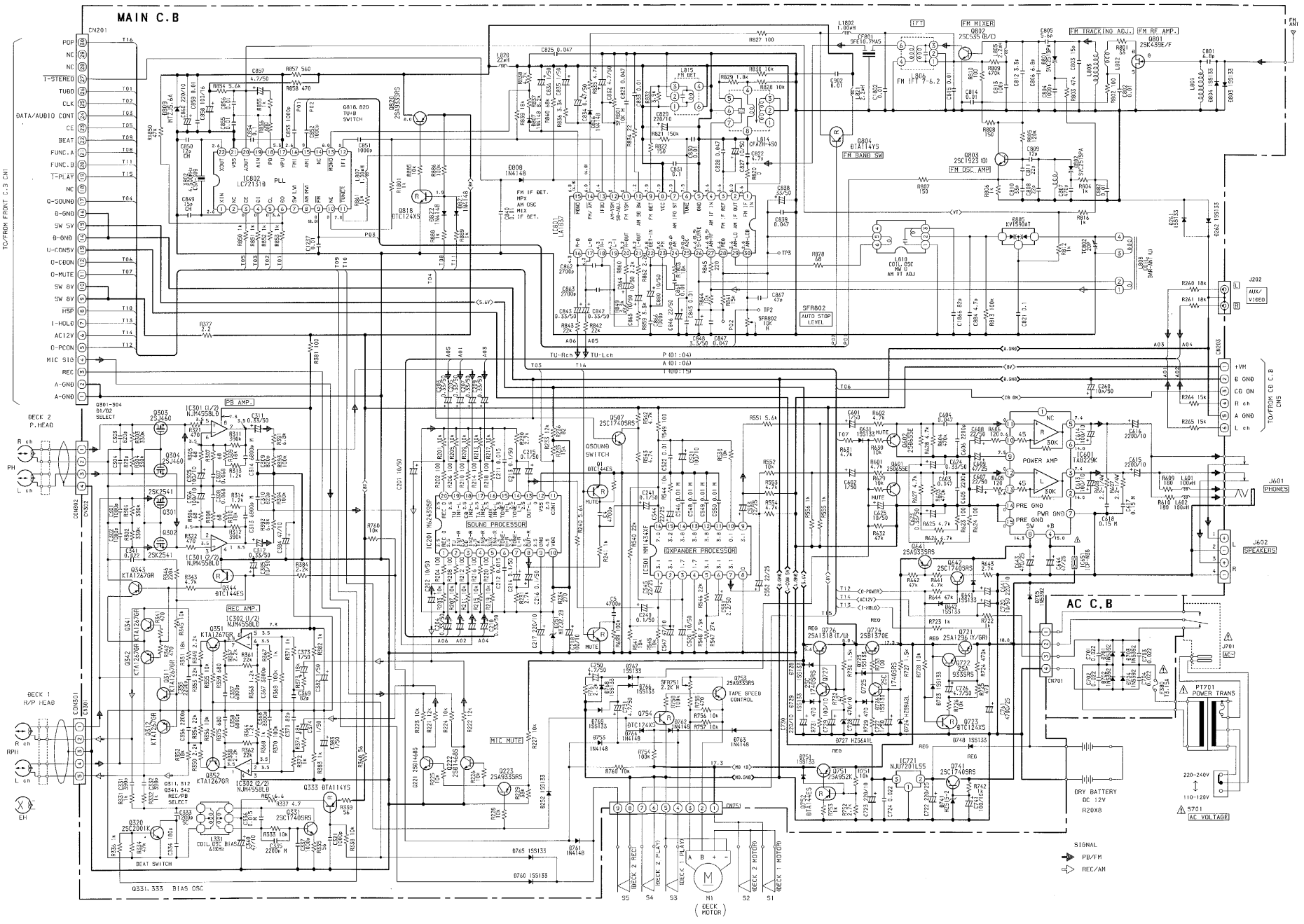
SCHEMATIC DIAGRAM-1 (MAIN: HE)



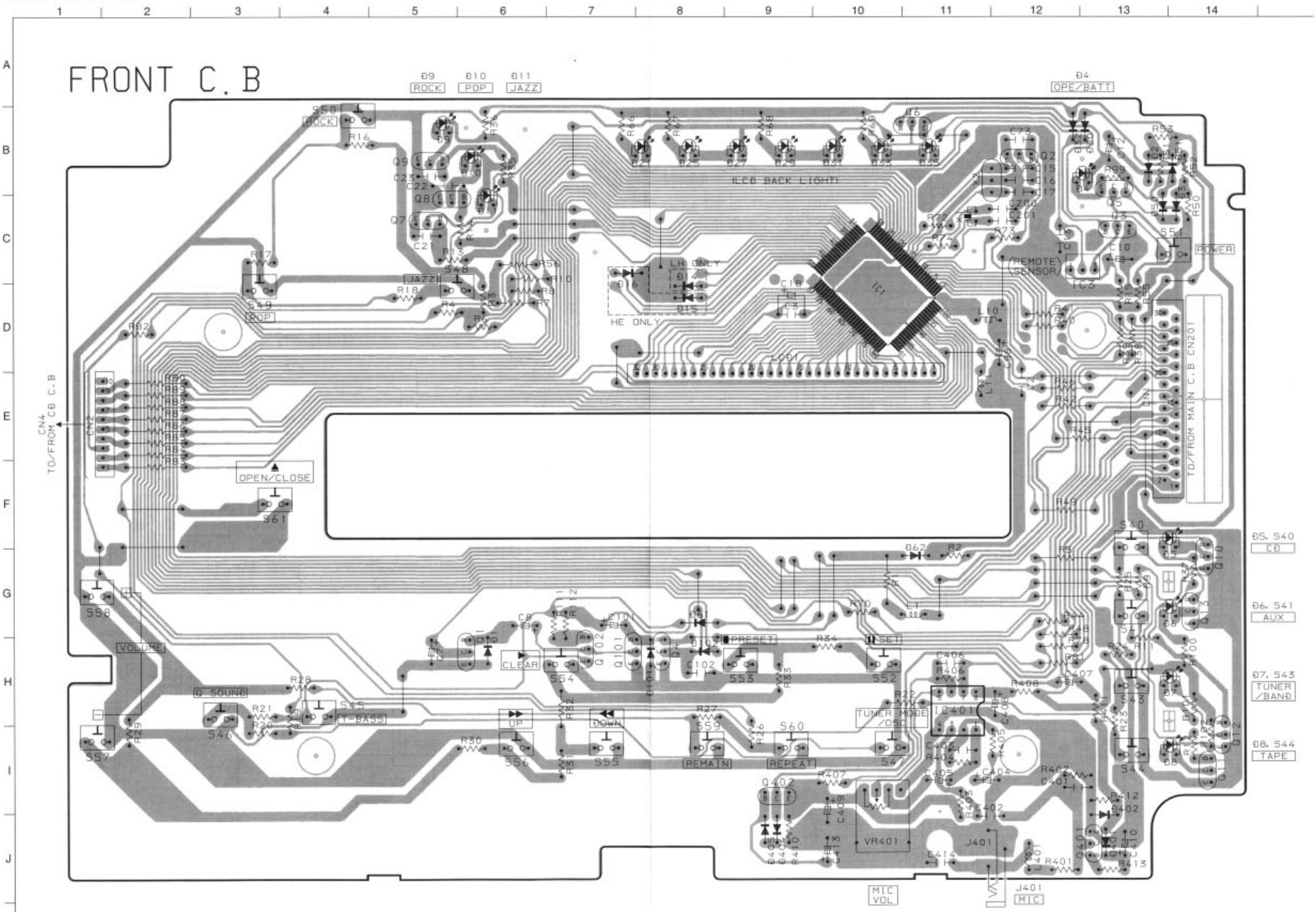
WIRING-2 (MAIN: LH)



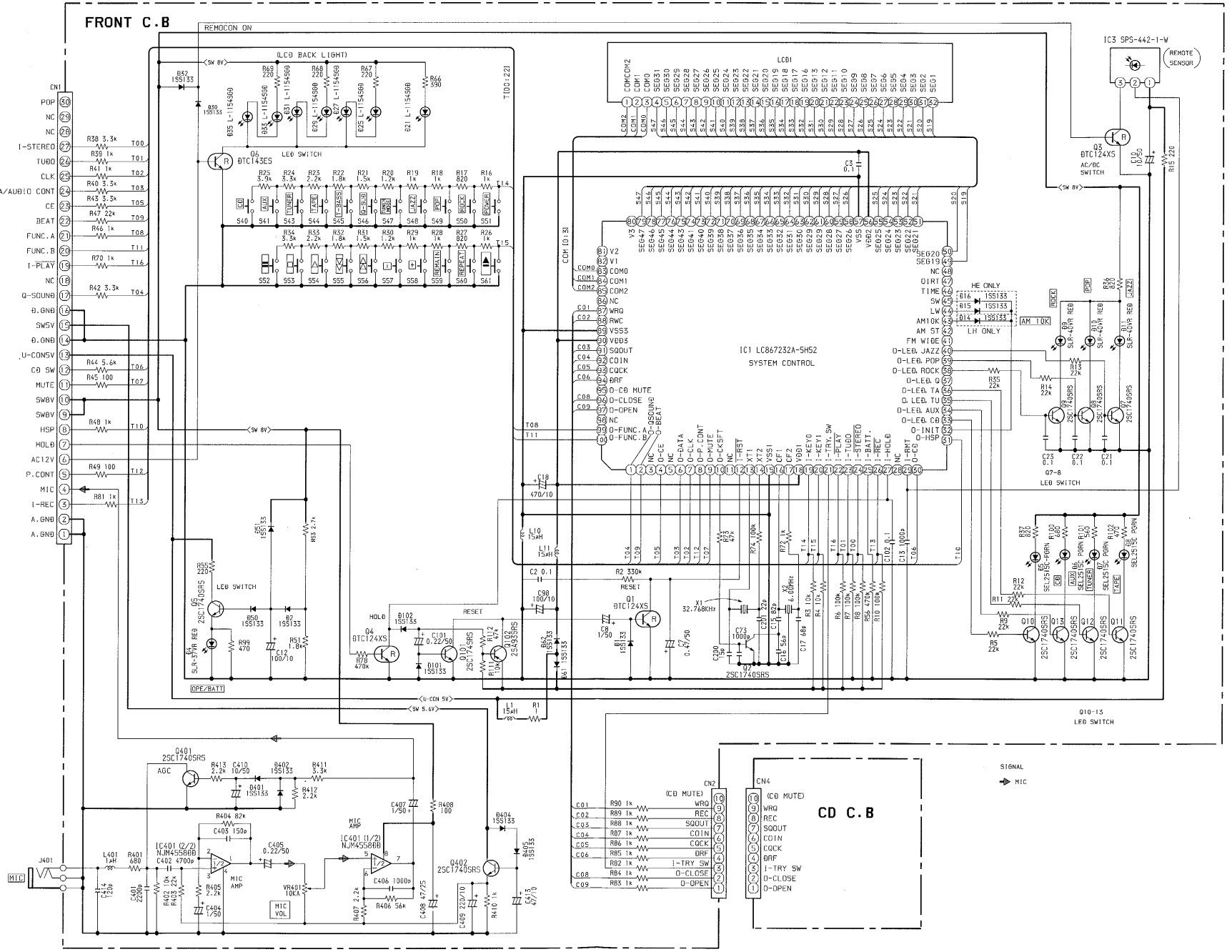
SCHEMATIC DIAGRAM-2 (MAIN: LH)



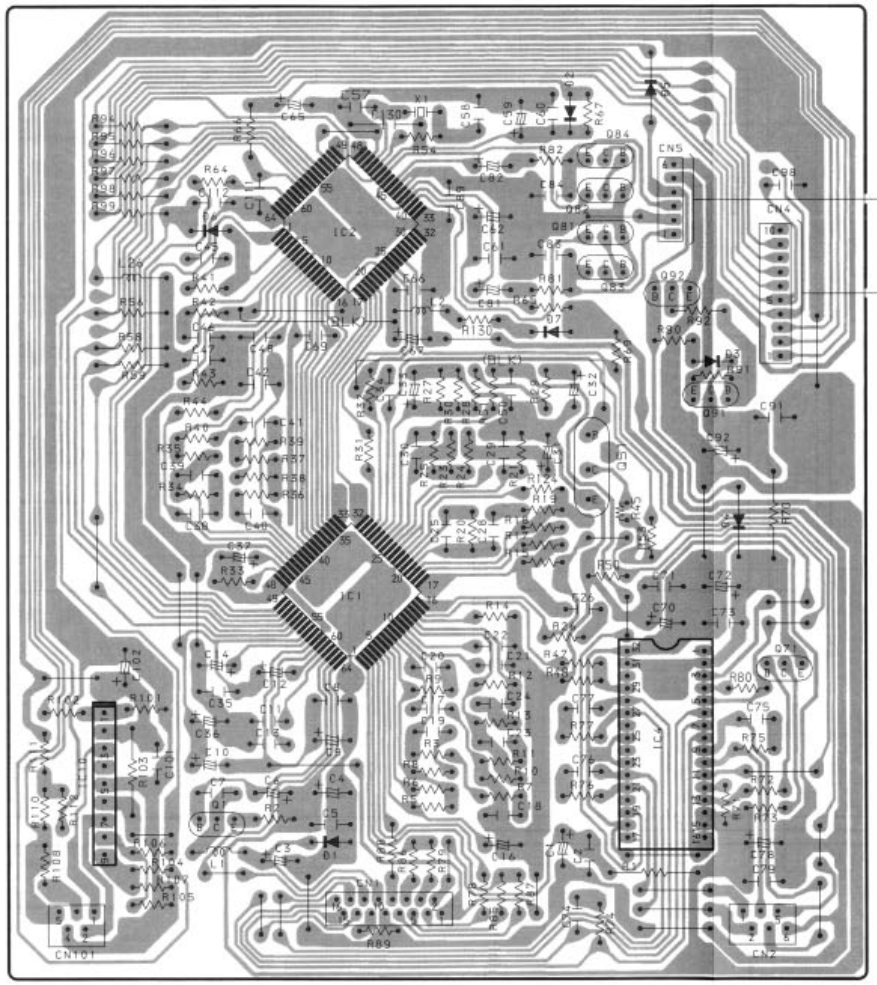
WIRING-3 (FRONT)



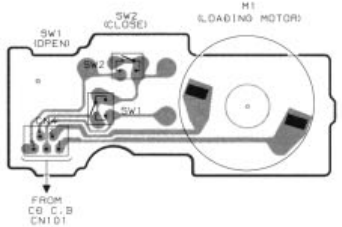
SCHEMATIC DIAGRAM-3 (FRONT)



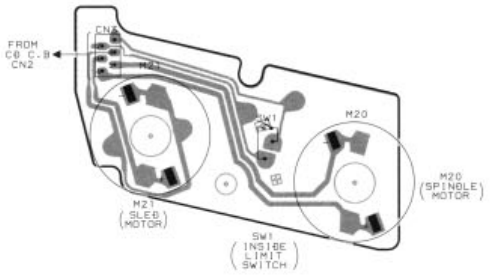
CÐ C.B

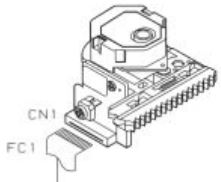


LOAÐ C.B

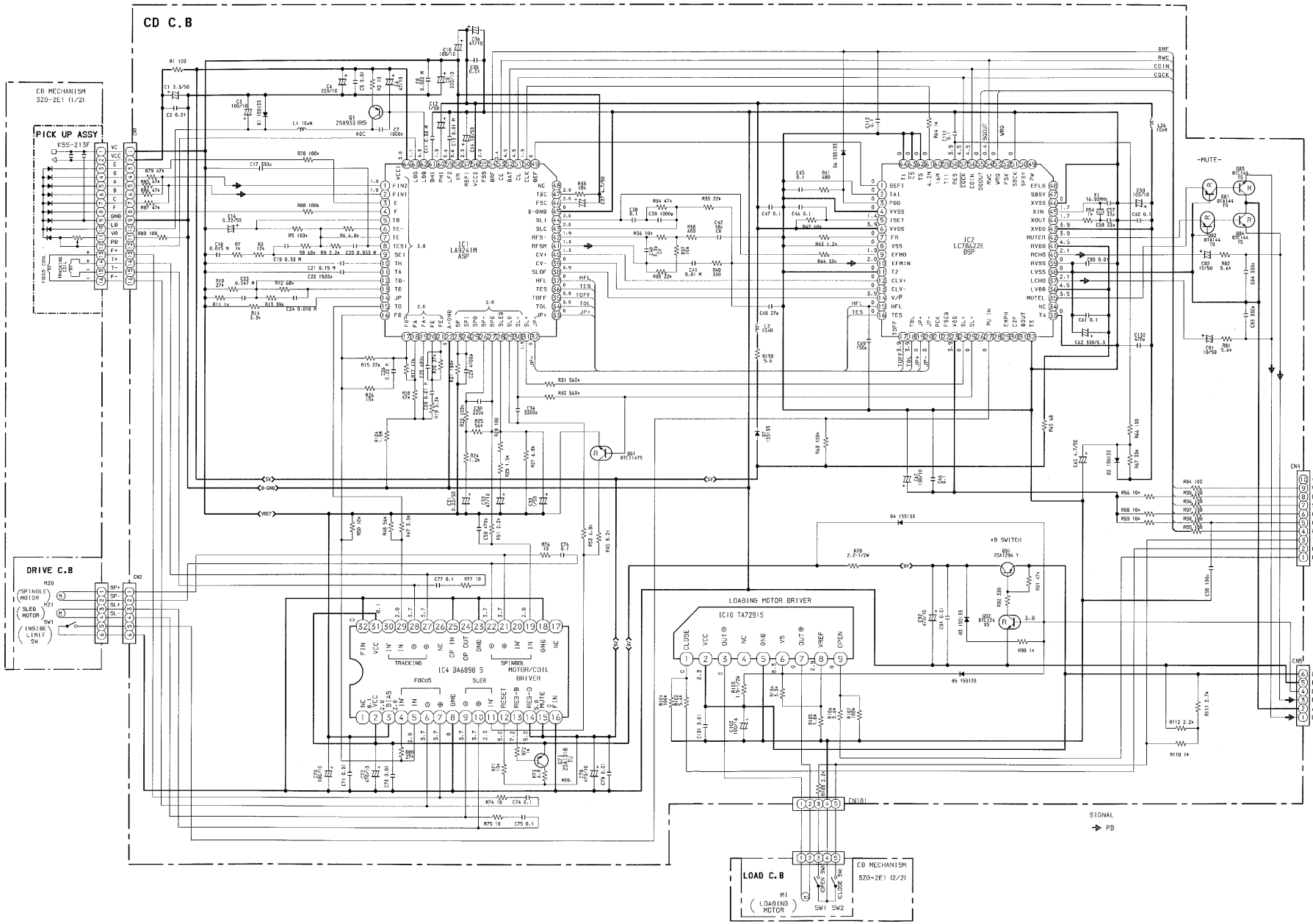


ÐRIVE C.B



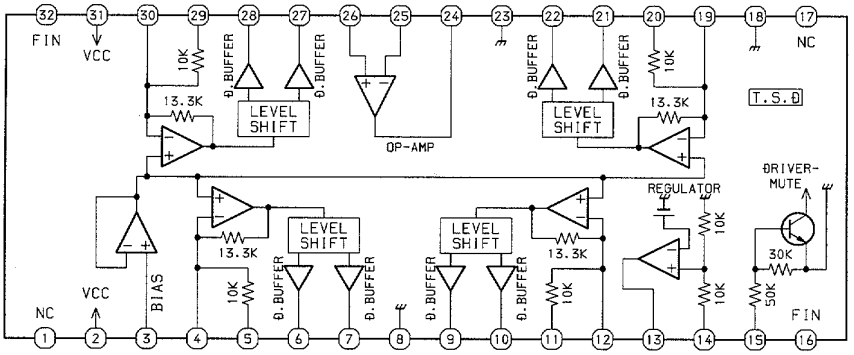


SCHEMATIC DIAGRAM-4 (CD)



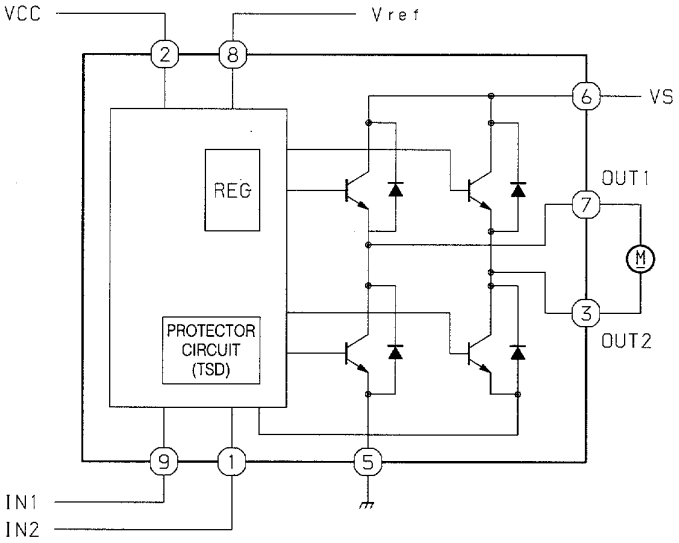
IC BLOCK DIAGRAM

IC, BA6898S



T.S.D:Thermal shift down circuit
D.BUFFER:Drive Buffer

IC, TA7291S

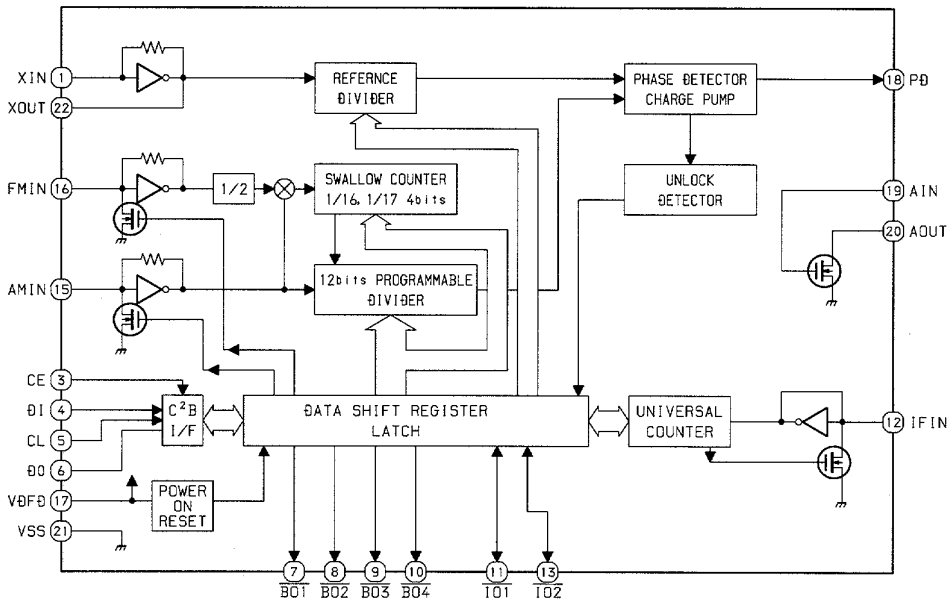


INPUT		OUTPUT		MODE
IN1	IN2	OUT1	OUT2	
0	0	∞	∞	STOP
1	0	H	L	CW/CCW
0	1	L	H	CCW/CW
1	1	L	L	BRAKE

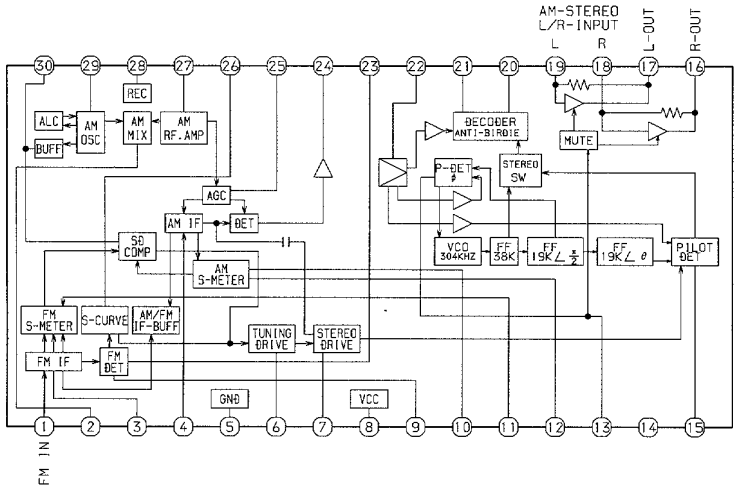
∞ : HI IMPEDANCE

NOTE : INPUT "H" ACTIVE

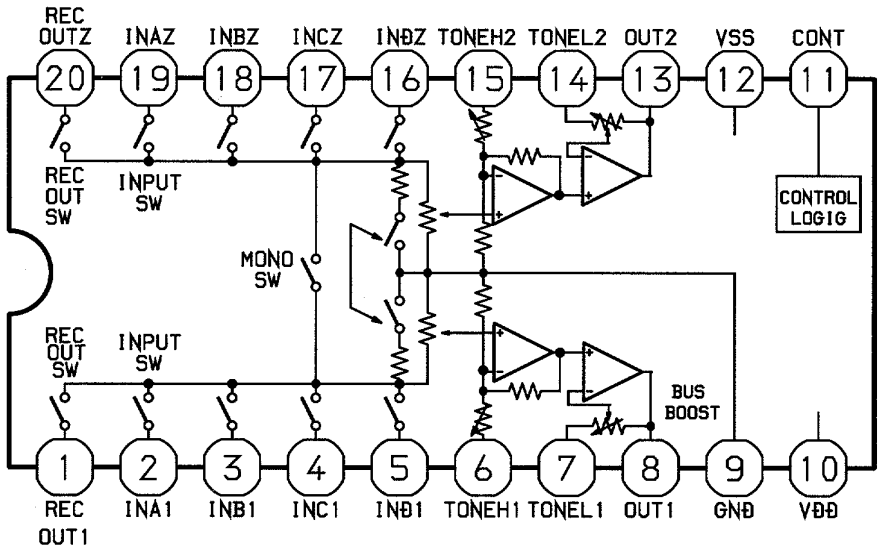
IC, LC72131D



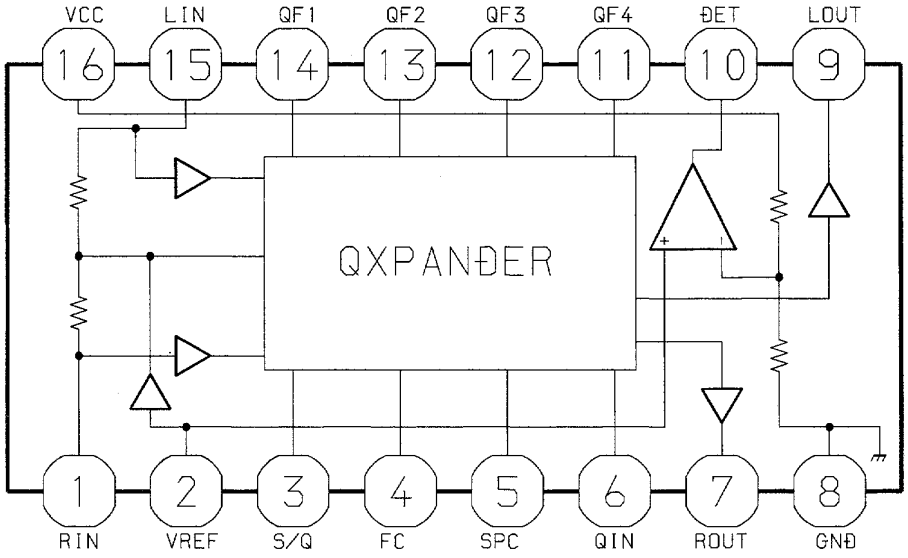
IC, LA1837



IC, M62439SP



IC, MM1434XF



IC DESCRIPTION

IC, LC867232A-5H52

Pin No.	Pin Name	I/O	Description
1	$\overline{\text{O-QSOUND}}$	O	Q sound ON/OFF output. ON: L, OFF: H.
2	O-BEAT	O	AM RECORD beat cancel output.
3	NC	O	N.C.
4	O-CE	O	PLL chip enable output.
5	NC	—	N.C.
6	O-DATA	O	Connected to tuner PLL LC72131 ④ DI/SOUND M62439 ⑪ .
7	O-CLK	O	Connected to tuner PLL LC72131 ⑤ CL.
8	O-PCONT	O	Power supply ON/OFF control. ON: H.
9	O-MUTE	O	Main mute output. Mute: H.
10	O-CKSFT	O	6 MHz master clock shift output.
11	NC	O	N.C.
12	$\overline{\text{I-RST}}$	I	Microprocessor reset input. (L: reset).
13	XT1	I	External 32.768 kHz crystal oscillator is connected to this termianl.
14	XT2	O	
15	VSS1	—	GND.
16	CF1	I	External 6 MHz ceramic filter is connected to this terminal.
17	CF2	O	
18	VDD1	—	Microprocessor power supply 5 V.
19	I-KEY0	I	Operation key A/D input 1.
20	I-KEY1	I	Operation key A/D input 2.
21	I-TRY SW	I	CD tray open/close detection switch signal to A/D input.
22	$\overline{\text{I-PLAY}}$	I	(CD pick up inside limit switch signal to A/D input).
23	I-TUDO	I	Connected to tuner PLL LC72131 ⑥ DO.
24	$\overline{\text{I-STEREO}}$	I	Tuner stereo detection input. ST = L
25	I-BATT	I	Use of this terminal is under investigation. (The remaining power of battery is detected to decrease the gain.)
26	$\overline{\text{I-REC}}$	I	Tape RECORD detection input.
27	I-HOLD	I	HOLD detection input.
28	NC	—	N.C.
29	I-REMO	I	Remote control input.
30	O-CD	O	CD power supply control input. OFF: L, ON: H.
31	O-HSP	O	High speed dubbing selector output. ON: L.
32	O-INIT	O	Initial setting (diode matrix) output.
33	O-LED.CD	O	Function. CD LED display control output. ON: H.
34	O-LED.AUX	O	Function. AUX LED display control output. ON: H.
35	O-LED.TU	O	Function. TUNER LED display control output. ON: H.
36	O-LED.TA	O	Function. TAPE LED display control output. ON: H.
37	O-LED.Q	O	Q-SOUND LED display control output. ON: H.
38	O-LED.ROCK	O	EQ ROCK display (LED) control output. ON: H.
39	O-LED.POP	O	EQ POP display (LED) control output. ON: H.
40	O-LED.JAZZ	O	EQ JAZZ display (LED) control output. ON: H.

Pin No.	Pin Name	I/O	Description
41	FM WIDE	O	Initial setting diode output. FM WIDE.
42	AM ST	O	Initial setting diode output. AM ST.
43	AM 10K	O	Initial setting diode output. AM 10K STEP.
44	LW	O	Initial setting diode output. LW.
45	SW	O	Initial setting diode output. SW.
46	TIME	O	Initial setting diode output. TIME.
47	OIRT	O	Initial setting diode output. OIRT.
48	NC	—	N.C.
49-55	SEG19-SEG25	O	LCD segment output.
56	VDD2	—	LCD VDD.
57	VSS2	—	LCD VSS.
58-79	SEG26-SEG47	O	LCD segment output.
80-82	V3-V1	—	N.C. (External power supply for LCD drive is connected to this terminal).
83-85	COM0-COM2	O	LCD common output.
86	NC	—	N.C. (1/3 duty cycle is used for LCD).
87	WRQ	O	CD subcode Q output standby.
88	RWC	O	CD read/write control output.
89	VSS3	—	GND.
90	VDD3	—	Microprocessor power supply 5 V.
91	SQOUT	I	CD subcode Q input.
92	COIN	O	CD control command output.
93	CQCK	O	CD clock output.
94	DRF	I	CD RF (DET. RF) level detection output.
95	O-CD-MUTE	O	CD mute output (not used).
96	O-CLOSE	O	CD tray close output.
97	O-OPEN	O	CD tray open output.
98	NC	—	N.C.
99	O-FUNC.A	O	Function selector output A. Tuner ON at L.L.
100	O-FUNC.B	O	Function selector output B. Tuner ON at L.L.

IC, LA9241M

Pin No.	Pin Name	I/O	Description
1	FIN2	I	Pin to which external pickup photo diode is connected. RF signal is created by adding with the FIN1 pin signal. FE signal is created by subtracting from the FIN1 pin signal.
2	FIN1	I	Pin to which external pickup photo diode is connected.
3	E	I	Pin to which external pickup photo diode is connected. TE signal is created by subtracting from the F pin signal.
4	F	I	Pin to which external pickup photo diode is connected.
5	TB	I	DC component of the TE signal is input.
6	TE–	I	Pin to which external resistor setting the TE signal gain is connected between the TE pin.
7	TE	O	TE signal output pin.
8	TESI	I	TES "Track Error Sense" comparator input pin. TE signal is passed through a band-pass filter then input.
9	SCI	I	Shock detection signal input pin.
10	TH	I	Tracking gain time constant setting pin.
11	TA	O	TA amplifier output pin.
12	TD–	I	Pin to which external tracking phase compensation constants are connected between the TD and VR pins.
13	TD	I	Tracking phase compensation setting pin.
14	JP	I	Tracking jump signal (kick pulse) amplitude setting pin.
15	TO	O	Tracking control signal output pin.
16	FD	O	Focusing control signal output pin.
17	FD–	I	Pin to which external focusing phase compensation constants are connected between the FD and FA pins.
18	FA	I	Pin to which external focusing phase compensation constants are connected between the FD– and FA– pins.
19	FA–	I	Pin to which external focusing phase compensation constants are connected between the FA and FE pins.
20	FE	O	FE signal output pin.
21	FE–	I	Pin to which external FE signal gain setting resistor is connected between the FE pin.
22	AGND	—	Analog signal GND.
23	NC	—	No connection.
24	SP	O	Single ended output of the CV+ and CV– pin input signal.
25	SPG	I	Pin to which external spindle gain setting resistor in 12 cm mode is connected.
26	SP–	I	Pin to which external spindle phase compensation constants are connected together with SPD pin.
27	SPD	O	Spindle control signal output pin.
28	SLEQ	I	Pin to which external sled phase compensation constants are connected.
29	SLD	O	Sled control signal output pin.
30, 31	SL–, SL+	I	Sled advance signal input pin from microprocessor.
32, 33	JP–, JP+	I	Tracking jump signal input pin from DSP.
34	TGL	I	Tracking gain control signal input from DSP. Low gain when TGL = H.
35	TOFF	I	Tracking off control signal input pin from DSP. Off when TOFF = H.

Pin No.	Pin Name	I/O	Description
36	TES	O	Pin from which TES signal is output to DSP.
37	HFL	O	"High Frequency Level" is used to judge whether the main beam position is on top of bit or on top of mirror.
38	SLOF	I	Sled servo off control input pin.
39, 40	CV–, CV+	I	CLV error signal input pin from DSP.
41	RFSM	O	RF output pin.
42	RFS–	I	RF gain setting and EFM signal 3T compensation constant setting pin together with RFSM pin.
43	SLC	O	"Slice Level Control" is the output pin which controls the RF signal data slice level by DSP.
44	SLI	I	Input pin which control the data slice level by the DSP.
45	DGND	—	Digital system GND.
46	FSC	O	Output pin to which external focus search smoothing capacitor is connected.
47	TBC	I	"Tracking Balance Control" EF balance variable range setting pin.
48	NC	—	No connection.
49	DEF	O	Disc defect detector output pin.
50	CLK	I	Reference clock input pin. 4.23 MHz of the DSP is input.
51	CL	I	Microprocessor command clock input pin.
52	DAT	I	Microprocessor command data input pin.
53	CE	I	Microprocessor command chip enable input pin.
54	DRF	O	"Detect RF" RF level detector output.
55	FSS	I	"Focus Search Select" focus search mode (± search/+ search) select pin.
56	VCC2	—	Servo system and digital system Vcc pin.
57	REFI	—	Pin to which external bypass capacitor for reference voltage is connected.
58	VR	O	Reference voltage output pin.
59	LF2	I	Disc defect detector time constant setting pin.
60	PH1	I	Pin to which external capacitor for RF signal peak holding is connected.
61	BH1	I	Pin to which external capacitor for RF signal bottom holding is connected.
62	LDD	O	APC circuit output pin.
63	LDS	I	APC circuit input pin.
64	VCC1	—	RF system Vcc pin.

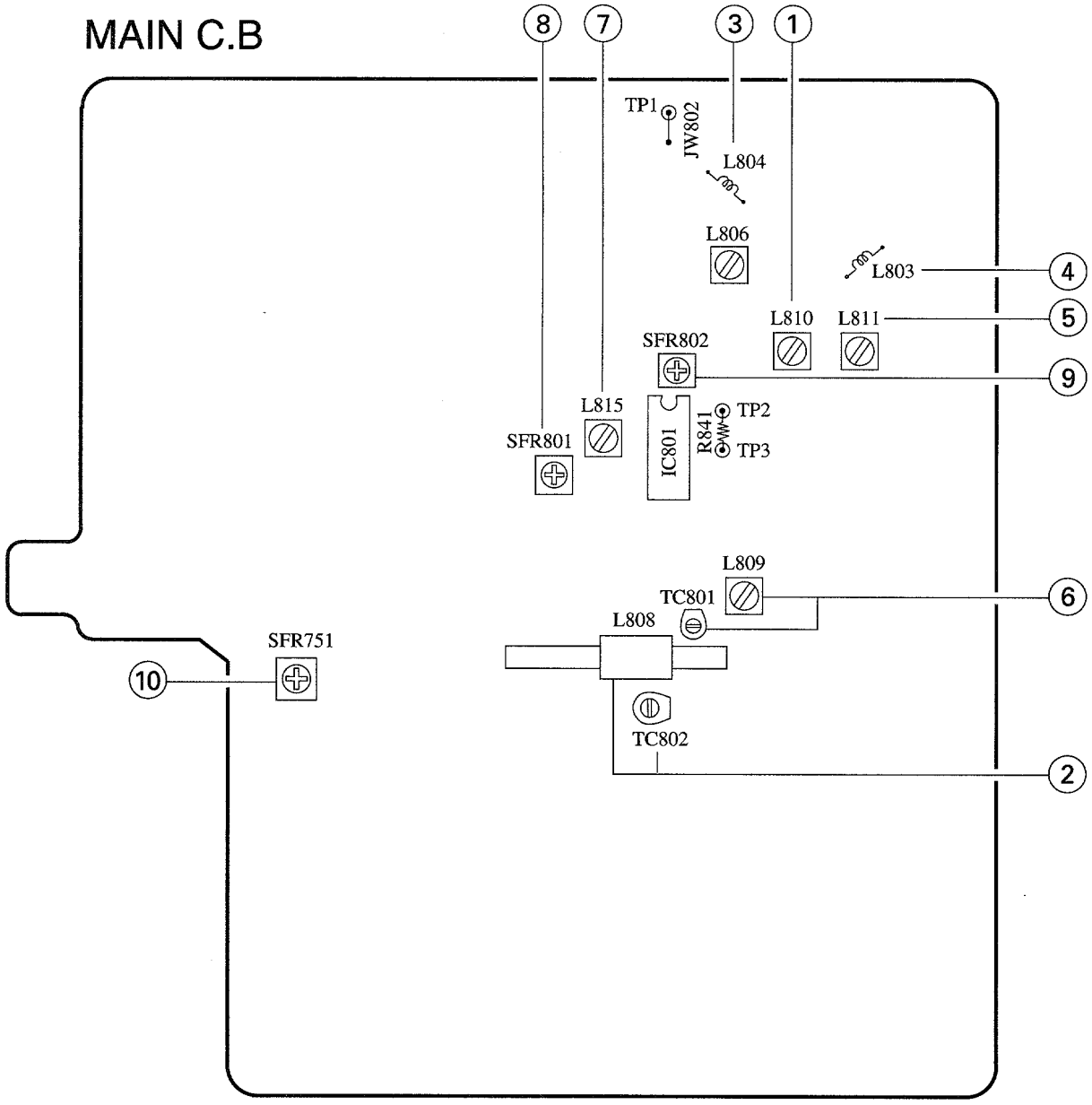
IC, LC78622E

Pin No.	Pin Name	I/O	Description	
1	DEFI	I	Defect sense signal (DEF) input pin. (Connect to 0V when not used).	
2	TAI	I	For PLL.	Test signal input pin with built-in pull-down resistor. Be sure to connect to 0V.
3	PDO	O		Phase comparator output pin to control external VCO.
4	VVSS	—		GND pin for built-in VCO. Be sure to connect to 0V.
5	ISET	I		Pin to which external resistor adjusting the PD0 output current.
6	VVDD	—		Power supply pin for built-in VCO.
7	FR	I		Pin for VCO frequency range adjustment.
8	VSS	—	Digital system GND. Be sure to connect to 0V.	
9	EFMO	O	For slice level control.	EFM signal output pin.
10	EFMIN	I		EFM signal input pin.
11	TEST2	I	Test signal input pin with built-in pull-down resistor. Be sure to connect to 0V.	
12, 13	CLV+, CLK–	O	Disc motor control output. Three level output is possible using command.	
14	V/$\overline{P}$	O	Rough servo or phase control automatic selection monitoring output pin. Rough servo at H. Phase servo at L.	
15	HFL	I	Track detect signal input pin. Schmidt input.	
16	TES	I	Tracking error signal input pin. Schmidt input.	
17	TOFF	O	Tracking OFF output pin.	
18	TGL	O	Tracking gain selection output pin. Gain boost at L.	
19, 20	JP+, JP–	O	Track jump control signal output pin. Three level output is possible using command.	
21	PCK	O	EFM data playback clock monitoring pin 4.3218 MHz when phase is locked in.	
22	FSEQ	O	Sync signal detection output pin. H when the sync signal which is detected from EFM signal and thesync signal which is internally generated agree.	
23	VDD	—	Digital system power supply pin.	
24-28	CONT1-CONT5	I/O	General purpose input/output pin 1 to 5.	The pin is controlled by the serial data command from microprocessor. When the pin is not used, set the pin to the input terminal and connect to 0V, or alternately set the pin to output terminal and leave the pin open.
29	EMPH	O	De-emphasis monitor output pin. De-emphasis disc is being played back at H.	
30	C2F	O	C2 flag output pin.	
31	DOUT	O	DIGITAL OUT output pin. (EIAJ format).	
32, 33	TEST3, TEST4	I	Test signal input pin with built-in pull-down resistor. Be sure to connect to 0V.	
34	N.C.	—	Not used. Set the pin to open.	
35	MUTEL	O	L-channel 1-bit DAC.	L-channel mute output pin.
36	LVDD	—		L-channel power supply pin.
37	LCHO	O		L-channel output pin.
38	LVSS	—		L-channel GND. Be sure to connect to 0V.
39	RVSS	—	R-channel 1-bit DAC.	R-channel GND. Be sure to connect to 0V.
40	RCHO	O		R-channel output pin.
41	RVDD	—		R-channel power supply pin.
42	MUTER	O		R-channel mute output pin.

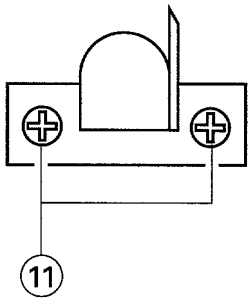
Pin No.	Pin Name	I/O	Description
43	XVDD	—	Crystal oscillator power supply pin.
44	XOUT	O	Pin to which external 16.9344 MHz crystal oscillator is connected.
45	XIN	I	
46	XVSS	—	Crystal oscillator GND pin. Be sure to connect to 0V.
47	SBSY	O	Subcode block sync signal output pin.
48	EFLG	O	C1, C2, single and dual correction monitoring pin.
49	PW	O	Subcode P, Q, R, S, T, U and W output pin.
50	SFSY	O	Subcode frame sync signal output pin. Falls down when subcode enters standby.
51	SBCK	I	Subcode read clock input pin. Schmidt input. (Be sure to connected to 0V when not in use.)
52	FSX	O	Pin outputting the 7.35 kHz sync signal which is generated by dividing frequency of crystal oscillator.
53	WRQ	O	Subcode Q output standby output pin.
54	RWC	I	Read/write control input pin. Schmidt input.
55	SQOUT	O	Subcode Q output pin.
56	COIN	I	Command input pin from microprocessor.
57	$\overline{\text{CQCK}}$	I	Command input read clock or subcode read input clock from SQOUT pin
58	$\overline{\text{RES}}$	I	LC78622 reset input pin. Set this pin to L once when the main power is turned on.
59	TST11	O	Test signal output pin. Use this pin as open (normally L output).
60	16M	O	16.9344 MHz output pin.
61	4.2M	O	4.2336 MHz output pin.
62	TEST5	I	Test signal input pin with built-in pull-down resistor. Be sure to connect to 0V.
63	$\overline{\text{CS}}$	I	Chip select signal input pin with built-in pull-down resistor. Be sure to connect to 0V while it is not controlling.
64	TEST1	I	Test signal input pin without built-in pull-down resistor. Be sure to connect to 0V.

Note: The same potential must be applied to the respective power supply terminals. (VDD, VVDD, LVDD, RVDD, XVDD)

MAIN C.B



RPH (DECK1) / PH (DECK2)



< TUNER SECTION >

1. MW VT Adjustment
   Settings: • Test point: TP1
   • Adjustment location: L810
   Method: Set to AM 531kHz adjust L810 so that the test point becomes 1.05V±0.05V.

2. MW Tracking Adjustment
   L808 ..... 603kHz
   TC802 ..... 1404kHz

3. FM VT Adjustment
   Settings: • Test point: TP1
   • Adjustment location: L804
   Method: Set to FM 87.5MHz adjust L804 so that the test point is 1.6V±0.3V.

4. FM Tracking Adjustment
   L803 ..... 87.5MHz

5. SW VT Adjustment
   Settings: • Test point: TP1
   • Adjustment location: L811
   Method: Set to SW 3.8MHz adjust L811 so that the test point is 0.8V±0.1V.

6. SW Tracking Adjustment
   L809 ..... 3.8MHz
   TC801 ..... 12.5MHz

7. DC Balance/MONO Distortion Adjustment
   Settings: • Test point: TP2, TP3
   • Adjustment location: L815
   • Input level: 54dB
   Method: Set to FM 98.0MHz and adjust L815 so that the voltage between TP2 and TP3 becomes 0V±0.02V.

8. MW Auto Stop Level Adjustment
   SFR801 ..... 50±2dB

9. FM Auto Stop Level Adjustment
   SFR802 ..... 26±2dB

< TAPE SECTION >

10. Tape speed Adjustment (DECK2)
    Settings: • Test tape: TTA-100
    • Adjustment location: SFR751
    Method: Play back the test tape with DECK1 and adjust SFR751 so that the output frequency is 3000Hz. After the adjustment, check that the frequency of DECK2 is 3000±45Hz.

11. Azimuth Adjustment (DECK1, DECK2)
    Settings: • Test tape: TTA-320
    • Adjustment location: Head azimuth adjustment screw
    Method: Play back the 8kHz signal of the test tape and adjust screw so that the output becomes maximum. Next, perform on each FWD PLAY and REV PLAY mode.

PRACTICAL SERVICE FIGURE

< TUNER SECTION >

< FM SECTION >

Sensitivity:	Less than 15dB (88/98MHz)
(THD 3%)	Less than 16dB (108MHz)
Signal to Noise Ratio:	Less than 60dB (98MHz)
(Input 54dB)	
Distortion:	Less than 2% (98MHz)
(Input 54dB)	
Intermediate frequency:	10.7MHz
Stereo separation:	More than 22dB

< MW SECTION >

Sensitivity:	49dB±6dB (603kHz)
(S/N 10dB)	49dB±6dB (999kHz)
	48dB±6dB (1404kHz)
Distortion:	Less than 5% (999kHz)
(Input 74dB)	
Intermediate frequency:	450kHz

< SW SECTION >

Sensitivity:	15dB±6dB (3.8/8.0/12.5MHz)
(S/N 10dB)	
Signal to Noise Ratio:	40dB±35dB (3.8MHz)
(Input 54dB)	

< CASSETTE SECTION >

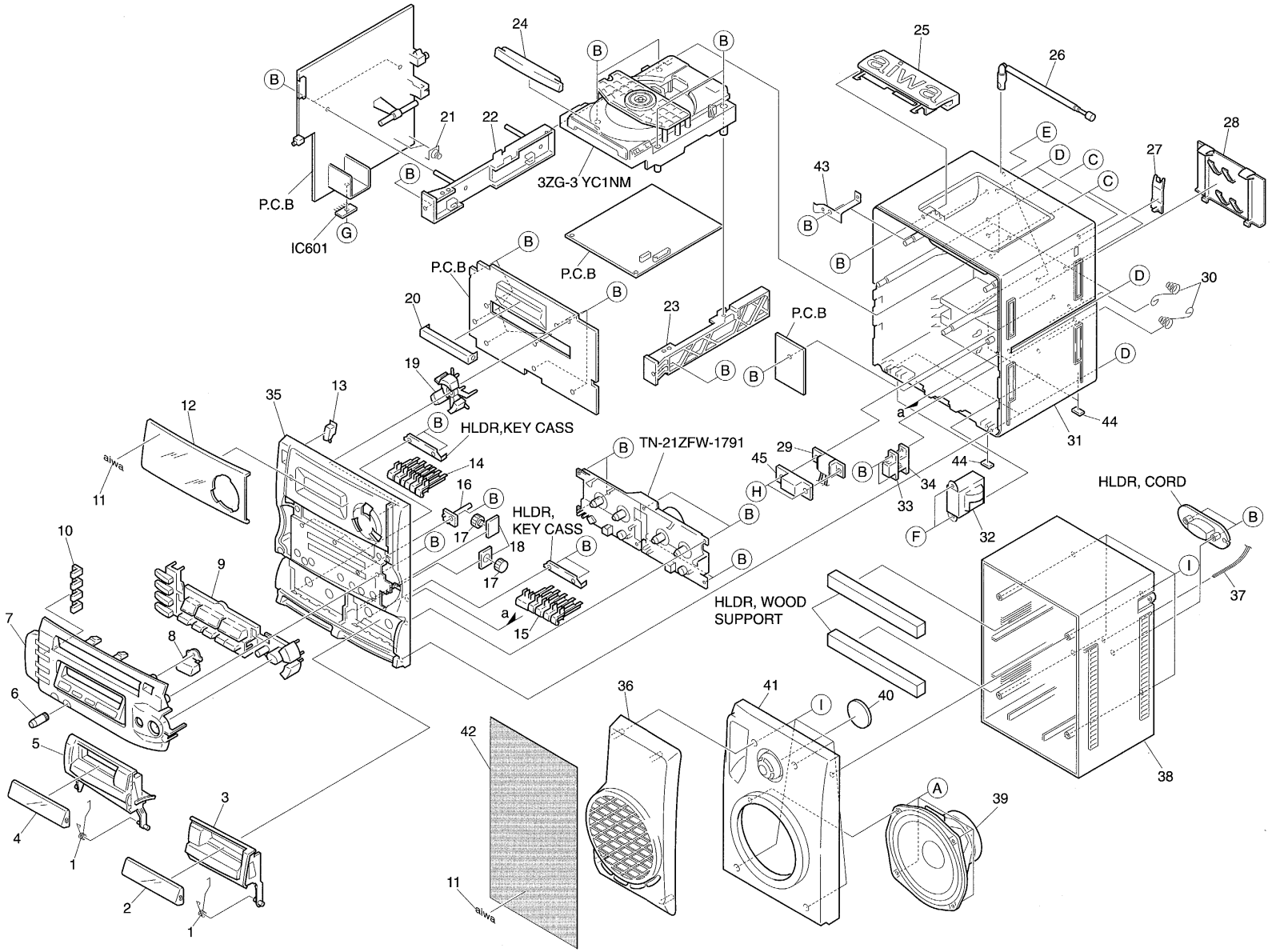
Tape speed:	3000Hz+60Hz
Wow & flutter:	Less than 0.38% (JIS RMS)
Take-up torque:	30-55g-cm (DECK 1/2)
F.F torque:	55-140g-cm (DECK 1/2)
Rew torque:	55-140g-cm (DECK 1/2)
Back tension:	3±4g-cm
Distortion:	Less than 5% (REC/PB)
Noise (PB):	Less than 35mV (Normal, Vol Max)
Noise (REC/PB):	Less than 55mV (Normal, Vol Max)
Erasing Ratio (W/FILTER):	More than 40dB

MECHANICAL PARTS LIST 1/1

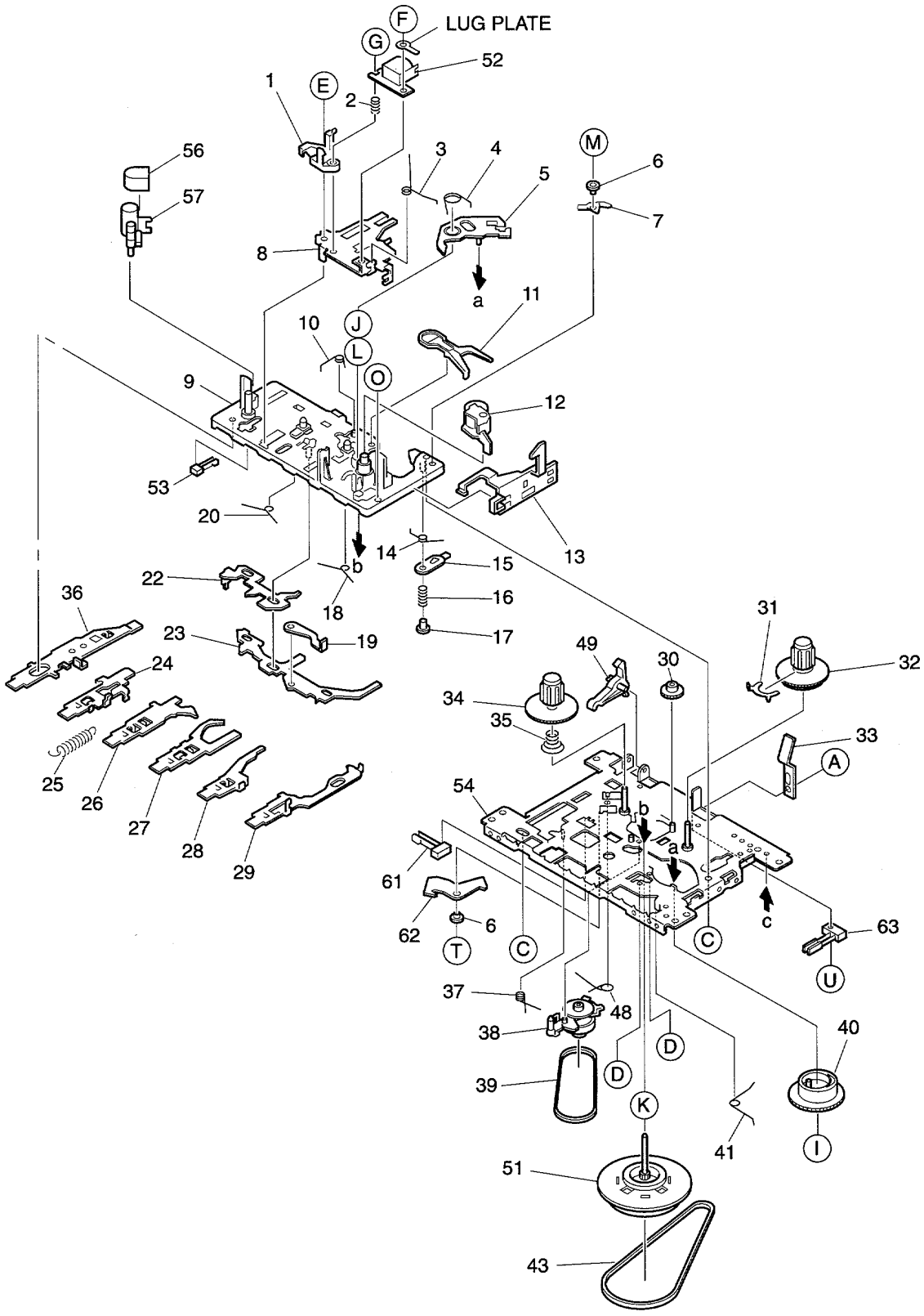
DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。
If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

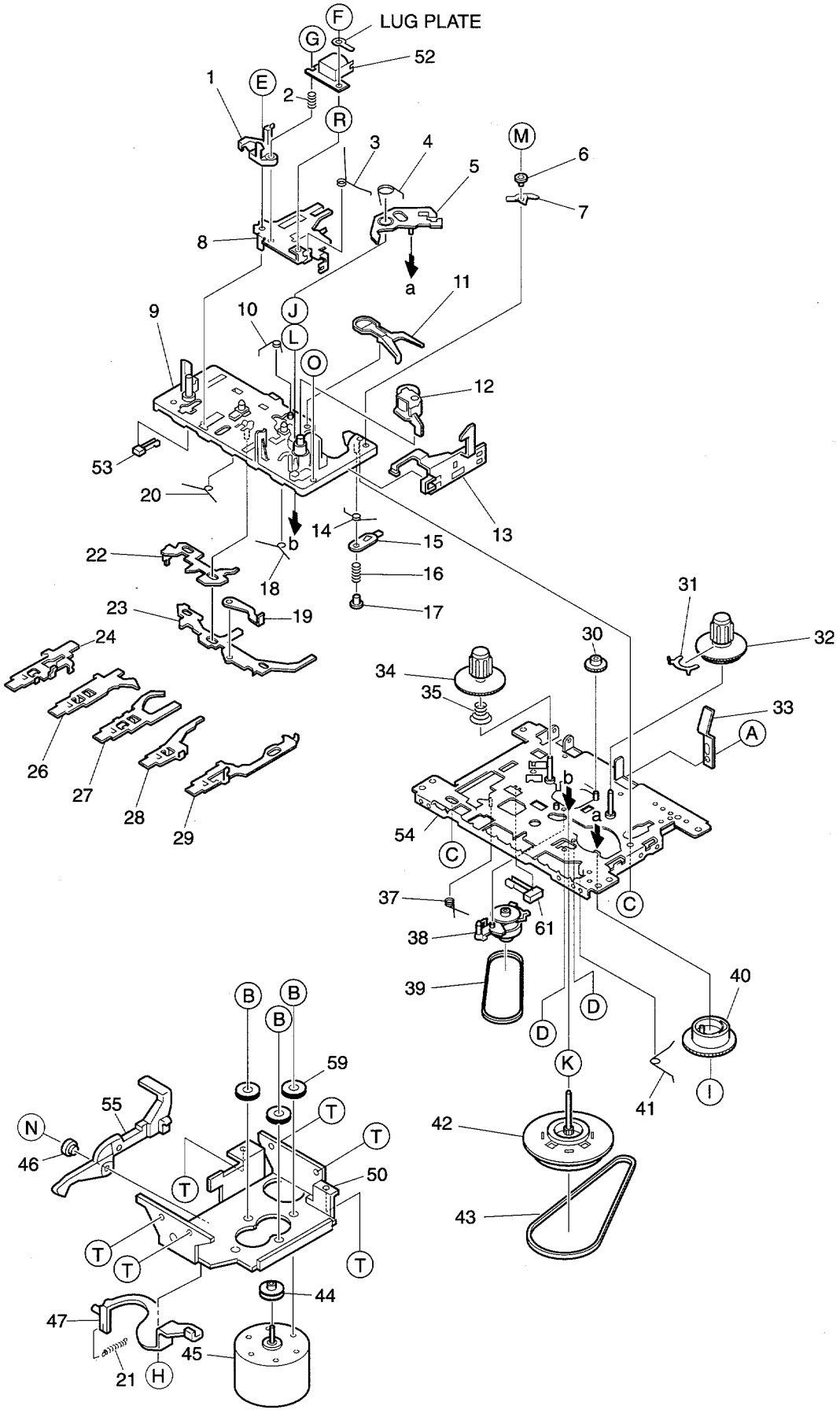
REF. NO	PART NO.	KANRI NO.	DESCRIPTION
1	88-CT4-206-010		SPR-T,CASS
2	88-CT4-014-010		WINDOW,CASS R
3	88-CT4-004-010		BOX,CASS R
4	88-CT4-013-010		WINDOW,CASS L
5	88-CT4-003-010		BOX,CASS L
6	88-CT4-027-010		KNOB,RTRY TU
7	88-CT4-002-010		PANEL,FRONT
8	88-CT4-009-010		KEY,CONT EJECT
9	88-CT4-010-010		KEY,CONT OPE
10	88-CT4-015-010		LENS,FUNCTION
11	81-CD1-032-010		BADGE,AIWA 30J
12	88-CT4-012-010		WINDOW,DISP<LH>
12	88-CT4-022-010		WINDOW,DISP S3<HE>
13	88-CT4-007-010		KEY,CONT POWER
14	88-CT4-023-010		KEY,CONT CASS L
15	88-CT4-024-010		KEY,CONT CASS R
16	88-CT4-205-010		BOSS,FRONT CABI
17	84-CD5-215-010		GEAR
18	84-CD5-216-010		BRACKET
19	88-CT4-008-010		KEY,CONT EQ<HE>
19	88-CT4-011-010		KEY,CONT EQ LH<LH>
20	88-CT4-218-010		COVER,LED
21	88-CT4-208-010		SPR-C,BATT B
22	88-CT4-202-010		CHAS,CD R
23	88-CT4-201-010		CHAS,CD L
24	88-CT4-005-010		DOOR,CD
25	87-CT4-024-010		PANEL,TOP ST
26	86-CT4-616-010		ANT,ROD
27	87-CT4-037-010		COVER, BATT
28	87-CT4-022-010		LID,BATT
⚠ 29	87-A90-146-010		SW,SL 1-1-2
30	88-CT4-207-010		SPR-C,BATT A
31	87-CT4-036-010		CABI,REAR N
⚠ 32	86-CT4-614-010		PT,H
33	87-A90-086-010		COVER,AC-SOCKET
⚠ 34	87-A60-178-010		JACK,AC E W/SW
35	88-CT4-006-010		CABI,FRONT
36	88-CT4-018-010		PANEL,FRONT SPKR L
36	88-CT4-019-010		PANEL,FRONT SPKR R
37	86-CT4-627-010		CORD,2PSPKR
38	87-CT4-027-010		CABI,REAR SPKR L
38	87-CT4-028-010		CABI,REAR SPKR R
39	86-CT4-625-010		SPKR,W 120 40HM 10W 6CT-4
40	86-CT4-626-010		SPKR,T
41	88-CT4-016-010		CABI,FRONT SPKR L
41	88-CT4-017-010		CABI,FRONT SPKR R
42	88-CT4-020-010		NET,SPKR
43	88-CT4-224-010		HLDR,ANT
44	88-CT4-026-010		CUSH,FOOT
45	87-A90-147-010		COVER,AC SEL SW
A	87-661-097-410		TAPPING SCREW, VFT1+3-12
B	87-751-096-410		VT2+3-10 GLD
C	87-753-097-410		VT2+3-12 W/O BLK
D	87-753-104-410		VT2+3-30 W/O BLK
E	87-493-100-410		VWWS+3-16 BLK
F	87-661-100-410		VFT1+3-16
G	87-067-579-010		TAPPING SCREW, BVT2+3-8
H	87-651-075-410		VT1 +2.6-10
I	87-751-098-410		SCREW 3X14

MECHANICAL EXPLODED VIEW 1/1



TAPE MECHANISM EXPLODED VIEW 1/1




LUG PLATE
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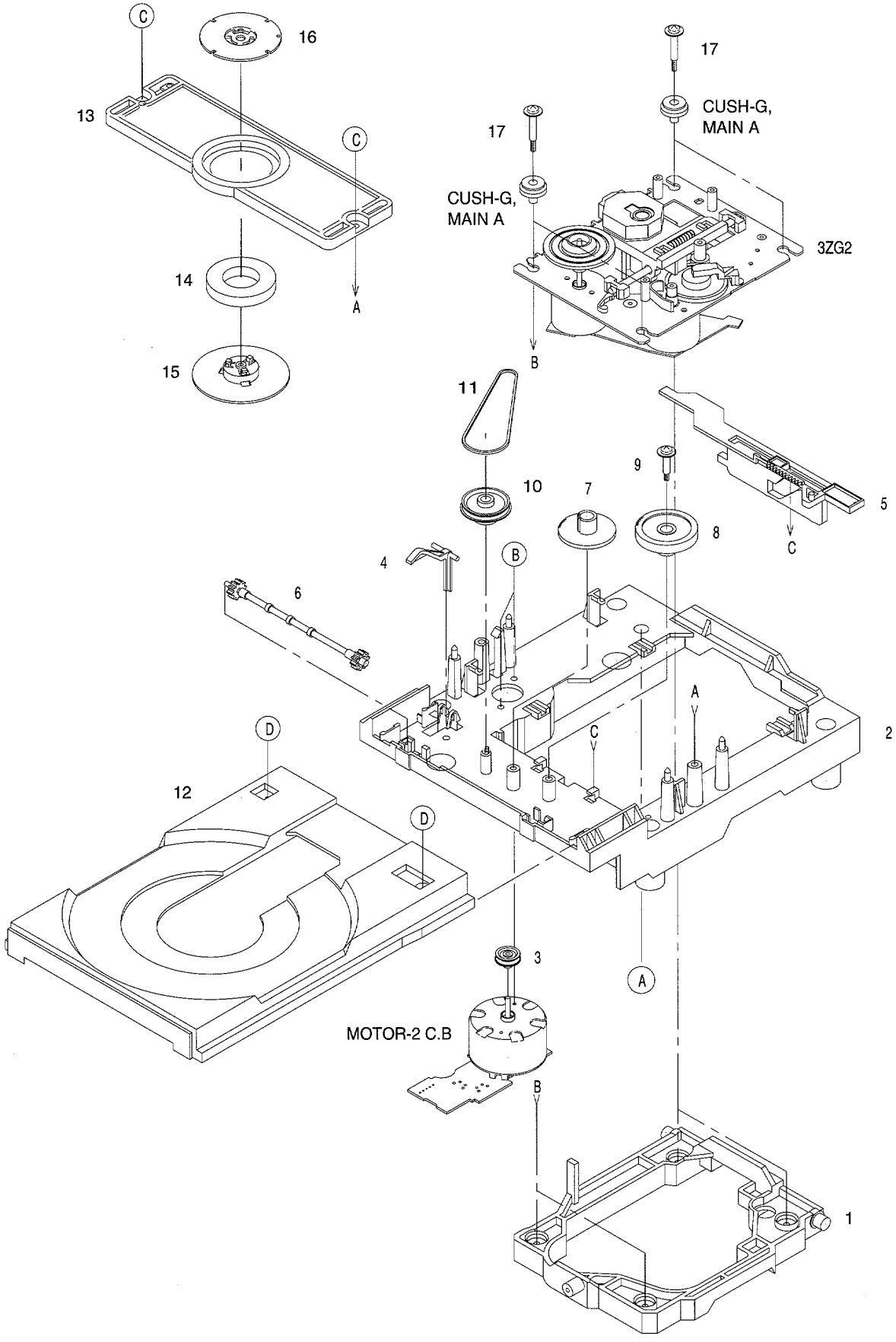
TAPE MECHANISM PARTS LIST 1/1

DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。
If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

REF. NO	PART NO.	KANRI NO.	DESCRIPTION
1	S1-921-030-4A0		HEAD BASE
2	S1-821-030-070		AZIMUTH SPRING
3	S1-921-030-090		PANEL P SPRING
4	S1-921-260-050		GEAR PLATE SPRING
5	S1-921-265-020		GEAR PLATE ASSY
6	S1-921-140-370		P ARM COLLER
7	S1-921-140-340		P ARM
8	S1-921-030-110		HEAD PANEL
9	S1-921-143-160		BASE ASSY
10	S1-921-141-8A0		M CONTROL SPRING
11	S1-921-260-4A0		SENSING LEVER
12	S1-921-043-100		PINCH ROLLER ARM ASSY
13	S1-921-130-020		EJECT SLIDE LEVER
14	S1-921-141-3A0		P CONTROL SPRING
15	S1-921-140-820		PAUSE LEVER(F)
16	S1-921-140-120		PAUSE LEVER SPRING
17	S1-921-140-110		PAUSE STOPPER
18	S1-921-140-150		BUTTON LEVER SPRING(B)
19	S1-821-011-590		E KICK LEVER
20	S1-921-140-140		BUTTON LEVER SPRING(A)
21	S1-821-120-250		P KICK LEVER SPRING
22	S1-921-140-090		SWITCH ACTUATOR
23	S1-921-140-080		PUSH BUTTON ACTUATOR
24	S1-921-140-230		PLAY BUTTON LEVER
25	S1-821-010-500		PLAY BUTTON LEVER SPRING
26	S1-921-140-240		REW BUTTON LEVER
27	S1-921-140-250		FF BUTTON LEVER
28	S1-921-140-260		STOP BUTTON LEVER
29	S1-921-140-610		PAUSE BUTTON LEVER
30	S1-821-100-700		FF GEAR
31	S1-921-050-060		SENSOR
32	S1-921-053-100		TAKE UP REEL ASSY
33	S1-829-100-010		PACK SPRING
34	S1-921-050-150		S REEL HUB
35	S1-921-050-220		BACK TENSION SPRING
36	S1-921-140-220		REC BUTTON LEVER
37	S1-921-140-170		P.S.LEVER SPRING
38	S1-921-073-080		RF CLUTCH ASSY
39	S1-921-070-030		RF BELT
40	S1-921-260-020		CAM GEAR
41	S1-921-140-160		E ACTUATOR SPRING
42	S1-921-093-040		FLYWHEEL ASSY
43	S1-921-090-240		MAIN BELT
44	S1-921-120-130		MOTOR PULLEY
45	S6-002-030-290		MOTOR EG530YD-2BH
46	S1-821-120-650		COLLER B
47	S1-821-120-680		P KICK LEVER (A)
48	S1-921-140-210		REC BUTTON LEVER SPRING
49	S1-821-100-690		RECORD SAFETY LEVER
50	S1-921-120-110		MOTOR BRACKET
51	S1-921-093-030		FLYWHEEL ASSY
52	S6-202-010-920		R.P HEAD MS15R-AK0N1
53	S6-401-011-520		LEAF SW MSW-1541F
54	S1-921-015-010		CHASSIS ASSY
55	S1-921-120-090		P KICK LEVER B
56	S6-209-100-100		E HEAD PH-K380-MS1
57	S1-921-030-050		MG ARM
59	S1-820-130-060		MOTOR RUBBER
61	S6-401-011-610		LEAF SW MSW-17820MVEI
62	S1-921-020-010		REC ARM
63	S6-401-010-380		LEAF SWITCH MSW-1275
A	S9-P33-200-320		DEL TITE SCREWM2-3
B	S1-821-120-020		MOTOR COLLER SCREW
C	S9-B10-200-510		P TAPPING BIND SCREW M2-5
D	S9-C07-204-510		SCREW,TAPPING(CAMERA)M2-4.5
E	87-261-553-310		SCREW,M2-6
F	87-261-032-410		SCREW,M2-3
G	S9-F08-200-710		AZIMUTH SCREW M2-7
H	S1-821-120-230		PK COLLER SCREW A
I	S9-W02-300-100		P WASHER CUT 1.2-3.8-0.3
J	S9-W02-500-100		P WASHER CUT 1.45-3.8-0.5
K	S9-W01-400-100		P WASHER 2-3.5-0.4
L	S9-W01-130-200		P WASHER 2.1-4-0.13
M	S9-P08-203-010		PS TAPPING SCREW M2-3
N	S9-P04-200-610		C TAPPING SCREW M2-6
O	S9-P05-200-810		SCREW,S TAP 2-8
R	S9-W13-000-100		Y WASHER PB 0.1T
T	S9-P04-200-410		C TAPPING SCREW M2-4
U	S9-P04-200-510		C TAPPING SCREW M2-5

CD MECHANISM EXPLODED VIEW 1/2

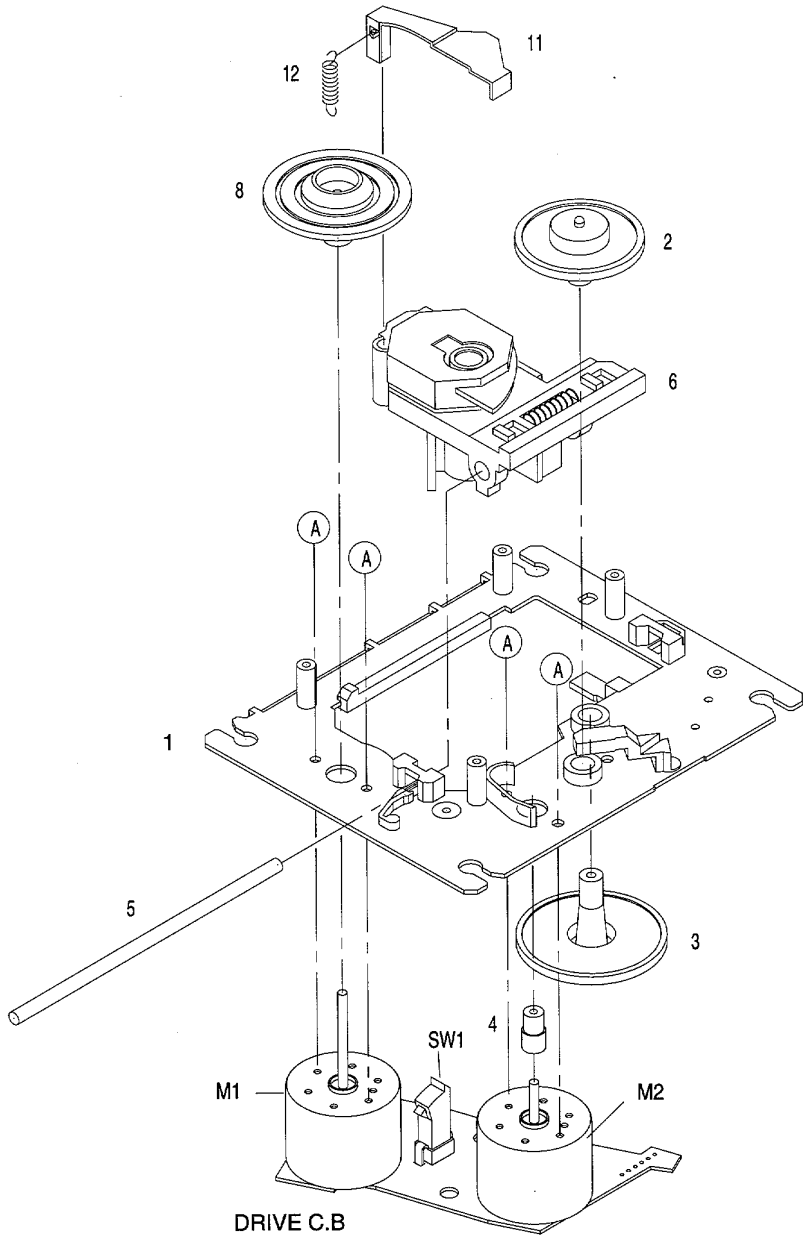


CD MECHANISM PARTS LIST 1/2

DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。
If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

REF. NO	PART NO.	KANRI NO.	DESCRIPTION
1	83-ZG3-224-310		HLDR,M2
2	83-ZG3-228-610		CHAS,L6
3	83-ZG3-208-010		PULLEY,MOTOR
4	83-ZG3-213-010		LVR,SW
5	83-ZG3-209-610		CAM,SLIDE
6	83-ZG3-207-010		GEAR,TRAY
7	83-ZG3-204-210		GEAR,C
8	83-ZG3-205-010		GEAR,D
9	83-ZG3-217-010		S-SCREW,GEAR D
10	83-ZG3-220-210		GEAR,PULLEY 2
11	83-ZG3-214-010		BELT,L
12	83-ZG3-229-410		TRAY,CD 2
13	83-ZG3-230-010		HLDR,CHUCK 2
14	83-ZG3-602-010		RING,MAG
15	83-ZG3-212-010		CAP,DISC
16	83-ZG3-219-010		PLATE,CLAMP
17	81-ZG1-254-010		S-SCEW,MECH HLDR
A	87-067-945-110		VFT2+3-12(F10)
B	87-251-071-110		U+2.6-4
C	87-512-074-210		VFT2+2.6-8
D	87-352-075-210		VT2+2.6-10

CD MECHANISM EXPLODED VIEW 2/2



CD MECHANISM PARTS LIST 2/2

DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。
If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

REF. NO	PART NO.	KANRI NO.	DESCRIPTION
1	83-ZG2-243-110		CHAS ASSY,SHT
2	83-ZG2-235-010		GEAR,A3
3	83-ZG2-205-210		GEAR,B
4	83-ZG2-236-010		GEAR MOTOR 3
5	83-ZG2-240-010		SHAFT,SLIDE 3
6	87-A90-836-010		PICKUP,KSS-213F
8	83-ZG2-233-010		TURN TABLE,A5
11	83-ZG2-245-110		LEVER,SHUTTER
12	83-ZG2-250-010		SPR-E,SHT 2
A	87-261-032-210		SCREW V+2-3

ACCESSORIES/PACKAGE LIST

DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。
If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

REF. NO		PART NO.	KANRI NO.	DESCRIPTION
	1	88-CT4-906-010		IB,ESP<LH>
	1	88-CT4-907-010		IB,ECA<HE>
	2	88-CT4-951-010		RC UNIT,RC-6AS07
⚠	3	87-050-076-010		AC CORD SET ASSY,E
⚠	4	87-A90-312-010		PLUG,CONVERSION WTN-1157R1

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
TRIMMER	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— —	
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912162

Tokyo Japan

Printed in Singapore