

# SERVICE MANUAL

COMPACT DISC CARRY  
COMPONENT SYSTEM

BASIC TAPE MECHANISM : ZZM-2 YPR2NF  
BASIC CD MECHANISM : 3ZG-3 E2NC

- This Service Manual is the "Revision Publishing" and replaces "Simple Manual" (S/M Code No. 09-003-339-3T1).

# SPECIFICATIONS

## 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** Deck 1: Recording/playback head × 1  
Erasure head × 1  
Deck 2: Playback head × 1

## Compact disc player section

**Laser** Semiconductor laser ( $\lambda = 780 \text{ nm}$ )  
**D-A converter** 1 bit dual

## General

**Power output** 5 W + 5 W (4 ohms, EIAJ)  
4 W + 4 W (65 Hz – 15 kHz, THD  
less than 1%, 4 ohms)  
**Output** PHONES (stereo minijack)  
**Power requirements** DC 12 V using eight size D (R20)  
batteries  
AC 120 V, 60 Hz  
**Power consumption** 30 W  
**Dimensions of main unit (W × H × D)**  
266 × 303 × 251.5 mm  
(10<sup>1</sup>/<sub>2</sub> × 12 × 10 in.)  
**Weight of main unit** 4.1 kg (9 lbs. 1 oz.)

## Speaker

**Type** 120 mm cone type  
27 mm ceramic type  
**Dimensions (W × H × D)**  
198 × 303 × 226 mm  
(7<sup>7</sup>/<sub>8</sub> × 12 × 9 in.)  
**Weight** 1.65 kg (3 lbs. 10 oz.) × 2  
**Impedance** 4 ohms  
**Allowable max. input** 10 W

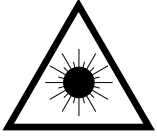
• Design and specifications are subject to change without notice.

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

## VAROITUS!

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

## WARNING!

Om apparaten används på annat sätt än vad som specificeras i denna bruksanvisning, kan användaren utsättas för osynlig 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

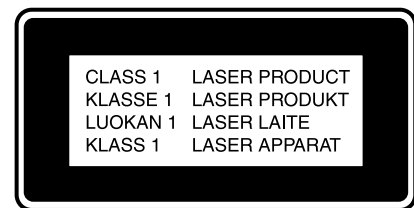
L'utilisation de commandes, réglages ou procédures autres que ceux spécifiés peut entraîner une dangereuse exposition aux radiations.

## 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.

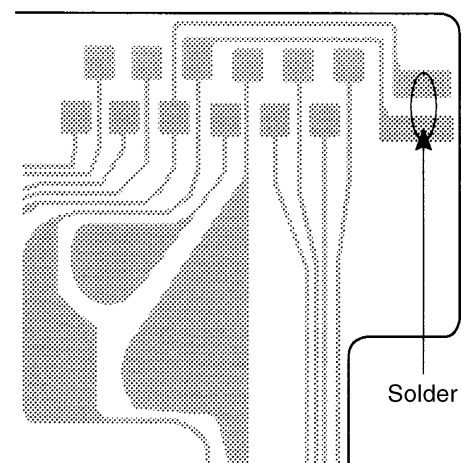


## Precaution to replace Optical block (KSS-213F)

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 the right figure.

PICK-UP Assy P.C.B



# 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 kinly refer to "REFERENCE NAME LIST".

REF. NO	PART NO.	KANRI NO.	DESCRIPTION	REF. NO	PART NO.	KANRI NO.	DESCRIPTION
IC				C22	87-010-197-080		CAP, CHIP 0.01 DM
				C23	87-010-197-080		CAP, CHIP 0.01 DM
	87-A20-446-010		C-IC,LA9241ML	C24	87-010-303-080		C-CAP,S 330P-50CH
	8A-CT4-625-010		C-IC,LC867232A	C25	87-016-460-080		C-CAP,S 0.22-16 B
	87-A21-576-010		IC,TA2104BN	C27	87-A11-067-080		C-CAP,S 1-10 K B
	87-A21-185-040		C-IC,LC72121M				
	87-A20-459-010		C-IC,LC78622ED	C28	87-016-669-080		C-CAP,S 0.1-25 K B
				C29	87-016-669-080		C-CAP,S 0.1-25 K B
	87-A20-914-010		IC,SPS-442-1-F	C30	87-010-198-080		CAP, CHIP 0.022
	87-A21-093-010		IC,LA6541D	C31	87-010-198-080		CAP, CHIP 0.022
	87-001-982-010		IC,TA7291S	C33	87-010-401-080		CAP, ELECT 1-50V
	87-A21-416-040		C-IC,M61500FP				
	87-017-889-010		IC,NJM4558LD	C34	87-010-401-080		CAP, ELECT 1-50V
				C35	87-015-819-080		CAPACITOR,0.01
	87-070-417-010		IC,NJM4558 DD	C36	87-010-112-080		CAP, ELECT 100-16V
	87-A21-020-010		IC,TA8223K	C37	87-010-197-080		CAP, CHIP 0.01 DM
△	87-001-132-010		FUSE, ICP-N38	C38	87-010-380-080		CAP, ELECT 47-16V
	87-A21-213-010		IC,BA17808T				
	87-070-416-010		IC,NJU7201 L55	C39	87-010-404-080		CAP, ELECT 4.7-50V
TRANSISTOR				C40	87-010-197-080		CAP, CHIP 0.01 DM
	89-319-233-080		TR,2SC1923 (0.1W)	C41	87-012-349-080		C-CAP,S 1000P-50 CH
	87-026-291-080		TR,DTC124XS	C42	87-012-349-080		C-CAP,S 1000P-50 CH
	87-A30-197-080		TR,KTA1267GR	C43	87-012-349-080		C-CAP,S 1000P-50 CH
	87-026-464-080		TR,DTC114TS (0.3W)				
	87-026-610-080		TR,KTC3198GR	C44	87-010-311-080		CAP 12P
				C45	87-010-312-080		C-CAP,S 15P-50 CH
	87-026-218-080		TR,DTC144ES (0.2W)	C47	87-010-197-080		CAP, CHIP 0.01 DM
	87-026-215-080		TR,DTC114YS	C48	87-010-197-080		CAP, CHIP 0.01 DM
	87-026-287-080		TR,DTC143ES	C49	87-012-157-080		C-CAP,S 330P-50 CH
	89-113-187-880		TRNSISTOR,2SA1318 (0.5W)	C50	87-010-197-080		CAP, CHIP 0.01 DM
	89-112-964-580		TR,2SA1296Y 0.75W 120M	C56	87-018-131-080		CAP, CER 1000P-50V
				C57	87-018-115-080		CAP, CER 47P-50V
	89-406-555-080		TR,2SD655 (0.5W)	C58	87-016-669-080		C-CAP,S 0.1-25 K B
	87-A30-090-080		FET,2SK2541	C59	87-016-669-080		C-CAP,S 0.1-25 K B
	87-A30-091-080		FET,2SJ460				
	89-320-011-080		TR,2SC2001 (15W)	C211	87-010-546-080		CAP, ELECT 0.33-50V
	87-026-214-080		TR,DTA114YS (0.3W)	C212	87-010-546-080		CAP, ELECT 0.33-50V
				C213	87-010-401-080		CAP, ELECT 1-50V
	87-A30-219-080		TR,2SB1443(Q)	C214	87-010-401-080		CAP, ELECT 1-50V
	87-026-219-080		TR,DTA144ES (0.3W)	C215	87-010-401-080		CAP, ELECT 1-50V
	89-109-521-080		TR,2SA952 (0.6W)	C216	87-010-401-080		CAP, ELECT 1-50V
				C217	87-010-248-080		CAP, ELECT 220-10V
				C220	87-010-545-080		CAP, ELECT 0.22-50V
				C221	87-010-545-080		CAP, ELECT 0.22-50V
DIODE				C223	87-010-545-080		CAP, ELECT 0.22-50V
	87-020-465-080		DIODE,1SS133 (110MA)	C224	87-010-545-080		CAP, ELECT 0.22-50V
	87-070-345-080		DIODE,IN4148	C225	87-018-205-080		CAP, CERA-SOL 0.022
	87-A40-683-080		ZENER,HZ7A3LTD	C226	87-010-248-080		CAP, ELECT 220-10V
	87-017-084-080		ZENER,HZS4C3	C227	87-010-401-080		CAP, ELECT 1-50V
	87-017-072-080		ZENER,HZS3B1	C228	87-010-401-080		CAP, ELECT 1-50V
	87-A40-466-080		ZENER,MTZJ2.7A	C229	87-018-209-080		CAP, CER 0.1-50V
△	87-A40-156-080		DIODE,1N5392	C230	87-010-401-080		CAP, ELECT 1-50V
	87-017-139-080		ZENER,HZS15-2	C231	87-010-401-080		CAP, ELECT 1-50V
				C232	87-010-404-080		CAP, ELECT 4.7-50V
				C233	87-010-401-080		CAP, ELECT 1-50V
MAIN C.B							
C1	87-010-314-080		C-CAP,S 22P-50V	C234	87-010-401-080		CAP, ELECT 1-50V
C2	87-010-316-080		C-CAP,S 33P-50 CH	C260	87-010-405-080		CAP, ELECT 10-50V
C3	87-010-314-080		C-CAP,S 22P-50V	C301	87-018-131-080		CAP, CER 1000P-50V
C5	87-010-196-080		CHIP CAPACITOR,0.1-25	C302	87-018-131-080		CAP, CER 1000P-50V
C6	87-010-313-080		CAP, CHIP 18P	C303	87-018-130-080		CAP,TC-U 820P-50 B
C7	87-014-049-080		CAP,PP 470P-100 J	C304	87-018-130-080		CAP,TC-U 820P-50 B
C8	87-012-349-080		C-CAP,S 1000P-50 CH	C305	87-010-263-080		CAP, ELECT 100-10V
C10	87-010-197-080		CAP, CHIP 0.01 DM	C306	87-010-263-080		CAP, ELECT 100-10V
C11	87-010-197-080		CAP, CHIP 0.01 DM	C309	87-018-130-080		CAP,TC-U 820P-50 B
C12	87-010-197-080		CAP, CHIP 0.01 DM	C310	87-018-130-080		CAP,TC-U 820P-50 B
C13	87-010-150-080		C-CAP,S 6P-50 CH	C311	87-010-546-080		CAP, ELECT 0.33-50V
C14	87-010-303-080		C-CAP,S 330P-50CH	C312	87-010-546-080		CAP, ELECT 0.33-50V
C15	87-012-349-080		C-CAP,S 1000P-50 CH	C315	87-018-205-080		CAP, CERA-SOL 0.022
C16	87-010-380-080		CAP, ELECT 47-16V	C321	87-018-131-080		CAP, CER 1000P-50V
C17	87-010-198-080		CAP, CHIP 0.022	C331	87-018-126-080		CAP,TC-U 390P-50 B
C18	87-015-819-080		CAPACITOR,0.01	C332	87-018-126-080		CAP,TC-U 390P-50 B
C19	87-010-112-080		CAP, ELECT 100-16V	C333	87-018-124-080		CAP, CER 270P-50V
C20	87-010-404-080		CAP, ELECT 4.7-50V	C334	87-018-123-080		CAP, CER 220P-50V
C21	87-010-197-080		CAP, CHIP 0.01 DM	C340	87-010-374-080		CAP, ELECT 47-10V
				C341	87-018-209-080		CAP, CER 0.1-50V

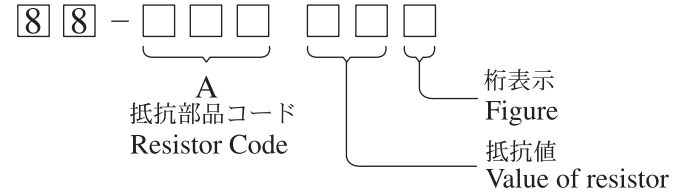
REF. NO	PART NO.	KANRI NO.	DESCRIPTION	REF. NO	PART NO.	KANRI NO.	DESCRIPTION
C343	87-018-123-080		CAP, CER 220P-50V	L7	87-A91-308-010		FLTR,PCFAZH- 450T (TOK)
C344	87-018-123-080		CAP, CER 220P-50V	L8	87-005-849-080		COIL,10UH(CECS)
C355	87-018-132-080		CAP, CER 2200P-16V	L9	87-005-849-080		COIL,10UH(CECS)
C356	87-018-132-080		CAP, CER 2200P-16V	L331	87-007-342-010		COIL,OSC 85K BIAS
C369	87-018-118-080		CAP,TC-U 82P-50 B	L601	87-A50-087-080		COIL,100UH (CECS)
C370	87-018-118-080		CAP,TC-U 82P-50 B	L602	87-A50-087-080		COIL,100UH (CECS)
C371	87-018-205-080		CAP, CERA-SOL 0.022	R607	87-029-124-010		RES,FUSE 2.2-1/4
C373	87-010-401-080		CAP, ELECT 1-50V	R608	87-029-124-010		RES,FUSE 2.2-1/4
C374	87-010-401-080		CAP, ELECT 1-50V	SCR3	87-A40-616-080		VARI-CAP,SVC384(S/T)
C382	87-010-401-080		CAP, ELECT 1-50V	SCR4	87-A40-615-040		VARI-CAP,KV1311NT
C383	87-010-374-080		CAP, ELECT 47-10V	SCR5	87-A40-615-040		VARI-CAP,KV1311NT
C384	87-010-402-080		CAP, ELECT 2.2-50V	SFR751	87-024-354-080		SFR,22K DIA6 H
C385	87-010-405-080		CAP, ELECT 10-50V	TC1	87-011-254-080		TRIMER,20P LAR
C386	87-018-198-080		CAP,TC-U 2700P-16 X	X1	87-A70-061-010		VIB,XTAL 4.500MHZ CSA-309
C387	87-018-198-080		CAP,TC-U 2700P-16 X				
C388	87-018-198-080		CAP,TC-U 2700P-16 X	FRONT C.B			
C601	87-010-401-080		CAP, ELECT 1-50V	C1	87-010-196-080		CHIP CAPACITOR,0.1-25
C602	87-010-401-080		CAP, ELECT 1-50V	C2	87-010-196-080		CHIP CAPACITOR,0.1-25
C603	87-018-208-080		CAP 0.047-50F	C3	87-010-196-080		CHIP CAPACITOR,0.1-25
C604	87-018-208-080		CAP 0.047-50F	C6	87-010-196-080		CHIP CAPACITOR,0.1-25
C605	87-018-132-080		CAP, CER 2200P-16V	C7	87-010-400-080		CAP, ELECT 0.47-50V
C606	87-018-132-080		CAP, CER 2200P-16V	C8	87-010-401-080		CAP, ELECT 1-50V
C607	87-010-406-080		CAP, ELECT 22-50	C10	87-010-405-080		CAP, ELECT 10-50V
C608	87-010-406-080		CAP, ELECT 22-50	C12	87-010-374-080		CAP, ELECT 47-10V
C609	87-010-260-080		CAP, ELECT 47-25V	C13	87-010-178-080		CHIP CAP 1000P
C610	87-018-209-080		CAP, CER 0.1-50V	C15	87-010-321-080		CHIP CAPACITOR,82P(J)
C613	87-010-263-080		CAP, ELECT 100-10V	C16	87-010-318-080		C-CAP,S 47P-50 CH
C614	87-010-263-080		CAP, ELECT 100-10V	C17	87-010-321-080		CHIP CAPACITOR,82P(J)
C615	87-010-376-090		CAP 10-2200	C18	87-A10-189-040		CAP,E 220-10
C616	87-010-376-090		CAP 10-2200	C19	87-A10-189-040		CAP,E 220-10
C623	87-010-546-080		CAP, ELECT 0.33-50V	C21	87-010-196-080		CHIP CAPACITOR,0.1-25
C624	87-010-546-080		CAP, ELECT 0.33-50V	C22	87-010-196-080		CHIP CAPACITOR,0.1-25
C625	87-010-404-080		CAP, ELECT 4.7-50V	C23	87-010-196-080		CHIP CAPACITOR,0.1-25
C641	87-010-248-080		CAP, ELECT 220-10V	C73	87-010-178-080		CHIP CAP 1000P
C643	87-010-387-080		CAP,E 470-25 SME	C98	87-010-263-080		CAP, ELECT 100-10V
C644	87-010-260-080		CAP, ELECT 47-25V	C101	87-010-545-080		CAP, ELECT 0.22-50V
C720	87-010-405-080		CAP, ELECT 10-50V	C200	87-010-312-080		C-CAP,S 15P-50 CH
C722	87-010-385-080		CAP, ELECT 220-25V	C201	87-010-314-080		C-CAP,S 22P-50V
C723	87-010-248-080		CAP, ELECT 220-10V	C401	87-010-182-080		C-CAP,S 2200P-50 B
C724	87-018-205-080		CAP, CERA-SOL 0.022	C403	87-012-154-080		C-CAP,S 150P-50 CH
C726	87-010-404-080		CAP, ELECT 4.7-50V	C404	87-010-401-080		CAP, ELECT 1-50V
C727	87-010-385-080		CAP, ELECT 220-25V	C405	87-010-545-080		CAP, ELECT 0.22-50V
C728	87-010-385-080		CAP, ELECT 220-25V	C406	87-010-178-080		CHIP CAP 1000P
C731	87-018-205-080		CAP, CERA-SOL 0.022	C407	87-010-405-080		CAP, ELECT 10-50V
C741	87-010-384-080		CAP, ELECT 100-25V	C408	87-010-248-080		CAP, ELECT 220-10V
C750	87-010-404-080		CAP, ELECT 4.7-50V	C409	87-010-248-080		CAP, ELECT 220-10V
C751	87-010-405-080		CAP, ELECT 10-50V	C410	87-010-405-080		CAP, ELECT 10-50V
C753	87-010-385-080		CAP, ELECT 220-25V	C414	87-012-153-080		C-CAP,S 120P-50 CH
C754	87-010-405-080		CAP, ELECT 10-50V	CN1	87-099-720-010		CONN,30P TYK-B(P)
C761	87-010-928-090		CAP,E 4700-25 SMG	CN2	88-CT4-610-010		CONN ASSY,10P
C800	87-010-378-080		CAP, ELECT 10-16V	D4	87-001-519-010		LIGHT EMITTING DIODE,SLR-37
C1832	87-018-209-080		CAP, CER 0.1-50V	D5	87-A40-410-010		LED,SEL2515C PGRN
CF1	87-A91-094-010		FLTR,CDA10.7 MG80A	D6	87-A40-410-010		LED,SEL2515C PGRN
CF2	82-785-747-080		CF,MS2 GHY,R	D7	87-A40-410-010		LED,SEL2515C PGRN
CF3	82-785-747-080		CF,MS2 GHY,R	D8	87-A40-410-010		LED,SEL2515C PGRN
CN201	87-099-719-010		CONN,30P TYK-B(X)	D9	87-001-519-010		LIGHT EMITTING DIODE,SLR-37
CN203	87-A60-623-010		CONN,6P V 2MM JMT	D10	87-001-519-010		LIGHT EMITTING DIODE,SLR-37
CN301	87-A60-622-010		CONN,5P V 2MM JMT	D11	87-001-519-010		LIGHT EMITTING DIODE,SLR-37
CN302	87-A60-621-010		CONN,4P V 2MM JMT	D21	87-A40-161-010		LED,L-1154SGD
CN701	87-A60-621-010		CONN,4P V 2MM JMT	D25	87-A40-161-010		LED,L-1154SGD
CN751	87-A60-626-010		CONN,9P V 2MM JMT	D27	87-A40-161-010		LED,L-1154SGD
△ ICP705	87-002-330-010		FUSE UNIT,ICP-N5	D29	87-A40-161-010		LED,L-1154SGD
J202	87-A60-354-010		JACK,PIN 2P MSP -242V-05	D31	87-A40-161-010		LED,L-1154SGD
J601	87-A60-420-010		JACK,3.5 ST (MSC)	D33	87-A40-161-010		LED,L-1154SGD
J602	87-A60-217-010		TERMINAL,SPKR 4P	D35	87-A40-161-010		LED,L-1154SGD
L2	87-A50-347-010		COIL,FM BPF EX	J401	87-A60-651-010		JACK,3.5MONO
L3	8Z-CT4-616-010		BAR-ANT,MW2B	L1	87-003-171-010		COIL,15UH TROIDAL
L4	87-A50-420-010		COIL,MW OSC(SYN)	L11	87-003-171-010		COIL,15UH TROIDAL
L5	87-A50-424-010		COIL,FM RF EX(SYN)	L401	87-A50-067-080		COIL,1.00UH (CECS)
L6	87-A50-454-010		COIL,FM OSC U(SYN)				

REF. NO	PART NO.	KANRI NO.	DESCRIPTION	REF. NO	PART NO.	KANRI NO.	DESCRIPTION
LCD1	8Z-CT4-607-110		LCD,AIW4176	C67	87-010-263-080		CAP, ELECT 100-10V
S40	87-A90-483-080		SW,TACT TS2101	C69	87-012-154-080		C-CAP,S 150P-50 CH
S41	87-A90-483-080		SW,TACT TS2101	C70	87-010-263-080		CAP, ELECT 100-10V
S43	87-A90-483-080		SW,TACT TS2101	C71	87-010-197-080		CAP, CHIP 0.01 DM
S44	87-A90-483-080		SW,TACT TS2101	C72	87-010-221-080		CAP, ELECT 470-10V
S45	87-A90-483-080		SW,TACT TS2101	C73	87-010-197-080		CAP, CHIP 0.01 DM
S46	87-A90-483-080		SW,TACT TS2101	C78	87-010-221-080		CAP, ELECT 470-10V
S47	87-A90-483-080		SW,TACT TS2101	C79	87-010-197-080		CAP, CHIP 0.01 DM
S48	87-A90-483-080		SW,TACT TS2101	C80	87-010-544-080		CAP, ELECT 0.1-50V
S49	87-A90-483-080		SW,TACT TS2101	C81	87-010-405-080		CAP, ELECT 10-50V
S50	87-A90-483-080		SW,TACT TS2101	C82	87-010-405-080		CAP, ELECT 10-50V
S51	87-A90-483-080		SW,TACT TS2101	C83	87-012-157-080		C-CAP,S 330P-50 CH
S52	87-A90-483-080		SW,TACT TS2101	C84	87-012-157-080		C-CAP,S 330P-50 CH
S53	87-A90-483-080		SW,TACT TS2101	C89	87-010-197-080		CAP, CHIP 0.01 DM
S54	87-A90-483-080		SW,TACT TS2101	C91	87-010-197-080		CAP, CHIP 0.01 DM
S55	87-A90-483-080		SW,TACT TS2101	C92	87-010-221-080		CAP, ELECT 470-10V
S56	87-A90-483-080		SW,TACT TS2101	C98	87-010-322-080		C-CAP,S 100P-50 CH
S57	87-A90-483-080		SW,TACT TS2101	C99	87-010-178-080		CHIP CAP 1000P
S58	87-A90-483-080		SW,TACT TS2101	C101	87-010-197-080		CAP, CHIP 0.01 DM
S59	87-A90-483-080		SW,TACT TS2101	C102	87-010-263-080		CAP, ELECT 100-10V
S60	87-A90-483-080		SW,TACT TS2101	C111	87-010-196-080		CHIP CAPACITOR,0.1-25
S61	87-A90-483-080		SW,TACT TS2101	C112	87-010-196-080		CHIP CAPACITOR,0.1-25
VR401	82-NK7-615-010		VR,10KA RK11K1130	C130	87-012-140-080		CAP 470P
X1	87-030-273-010		VIB,XTAL 32.768K5PPM	C1101	87-010-221-080		CAP, ELECT 470-10V
X2	87-A70-070-080		VIB,CER 5.76MHZ CRHF	CN1	87-A60-424-010		CONN,16P V TOC-B
CD C.B				CN2	87-A60-131-010		CONN,6P V FE
C1	87-010-403-080		CAP, ELECT 3.3-50V	CN4	87-A60-627-010		CONN,10P V 2MM JMT
C2	87-010-197-080		CAP, CHIP 0.01 DM	CN5	88-CT4-612-010		CONN ASSY,6PAF
C3	87-010-263-080		CAP, ELECT 100-10V	CN101	87-A60-130-010		CONN,5P V FE
C4	87-010-248-080		CAP, ELECT 220-10V	L1	87-005-849-080		COIL,10UH(CECS)
C5	87-010-197-080		CAP, CHIP 0.01 DM	L2	87-005-849-080		COIL,10UH(CECS)
C6	87-010-374-080		CAP, ELECT 47-10V	L1101	87-005-849-080		COIL,10UH(CECS)
C7	87-010-178-080		CHIP CAP 1000P	SFR1	87-024-357-080		SFR,100K DIA6 H
C9	87-010-248-080		CAP, ELECT 220-10V	X1	81-592-641-010		VIB,CER 16.93MHZ
C10	87-010-263-080		CAP, ELECT 100-10V	AC C.B			
C12	87-010-401-080		CAP, ELECT 1-50V	C701	87-018-205-080		CAP, CERA-SOL 0.022
C14	87-010-405-080		CAP, ELECT 10-50V	C702	87-018-205-080		CAP, CERA-SOL 0.022
C16	87-010-545-080		CAP, ELECT 0.22-50V	C703	87-018-205-080		CAP, CERA-SOL 0.022
C17	87-012-157-080		C-CAP,S 330P-50 CH	C704	87-018-205-080		CAP, CERA-SOL 0.022
C22	87-010-183-080		C-CAP,S 2700P-50 B	△ F380	87-035-488-010		FUSE,3.15A 125V D UL
C25	87-010-176-080		C-CAP,S 680P-50 SL	△ FC1	87-033-213-080		CLAMP, FUSE
C29	87-010-186-080		CAP,CHIP 4700P	△ FC2	87-033-213-080		CLAMP, FUSE
C30	87-012-156-080		C-CAP,S 220P-50 CH	DRIVE C.B			
C31	87-010-545-080		CAP, ELECT 0.22-50V	M20	87-045-358-010		MOT,RF-310TA 43
C32	87-010-374-080		CAP, ELECT 47-10V	M21	87-045-356-010		MOT,RF-310TA 30
C33	87-010-401-080		CAP, ELECT 1-50V	SW1	87-A90-042-010		SW,LEAF MSW-17310MVPO
C34	87-010-184-080		CHIP CAPACITOR 3300P(K)	LOAD C.B			
C35	87-010-197-080		CAP, CHIP 0.01 DM	CN4	87-099-210-010		CONN,5P 6216 H
C36	87-010-374-080		CAP, ELECT 47-10V	M1	87-045-305-010		MOTOR, RF-500TB DC-5V (2MA)
C37	87-010-404-080		CAP, ELECT 4.7-50V	SW1	87-036-110-010		PUSH SWITCH
C38	87-010-196-080		CHIP CAPACITOR,0.1-25	SW2	87-036-110-010		PUSH SWITCH
C39	87-010-178-080		CHIP CAP 1000P				
C40	87-010-145-080		C-CAP,S 1P-50 CH				
C42	87-010-312-080		C-CAP,S 15P-50 CH				
C45	87-010-196-080		CHIP CAPACITOR,0.1-25				
C46	87-010-196-080		CHIP CAPACITOR,0.1-25				
C47	87-010-196-080		CHIP CAPACITOR,0.1-25				
C48	87-010-315-080		C-CAP,S 27P-50 CH				
C50	87-012-140-080		CAP 470P				
C51	87-012-156-080		C-CAP,S 220P-50 CH				
C57	87-010-316-080		C-CAP,S 33P-50 CH				
C58	87-010-316-080		C-CAP,S 33P-50 CH				
C59	87-010-263-080		CAP, ELECT 100-10V				
C60	87-010-196-080		CHIP CAPACITOR,0.1-25				
C61	87-010-196-080		CHIP CAPACITOR,0.1-25				
C62	87-010-186-080		CAP,CHIP 4700P				
C65	87-010-404-080		CAP, ELECT 4.7-50V				
C66	87-010-196-080		CHIP CAPACITOR,0.1-25				

- 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/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

ECB	ECB	ECB	SDG
DTA114YS DTA144ES DTC114YS DTC124XS DTC144ES KTA1267	2SA952 2SC1923 2SC2001 2SD655 KTC3198	2SB1443	2SJ460 2SK2541

LCD DISPLAY

The LCD display layout includes:  
 - Indicators: T-BASS, SLEEP, PRG, VOL, QSURROUND, STEREO MONO, REPEAT ALL, and a frequency display (KHz/MHz).  
 - A numeric keypad with buttons 1-16.

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

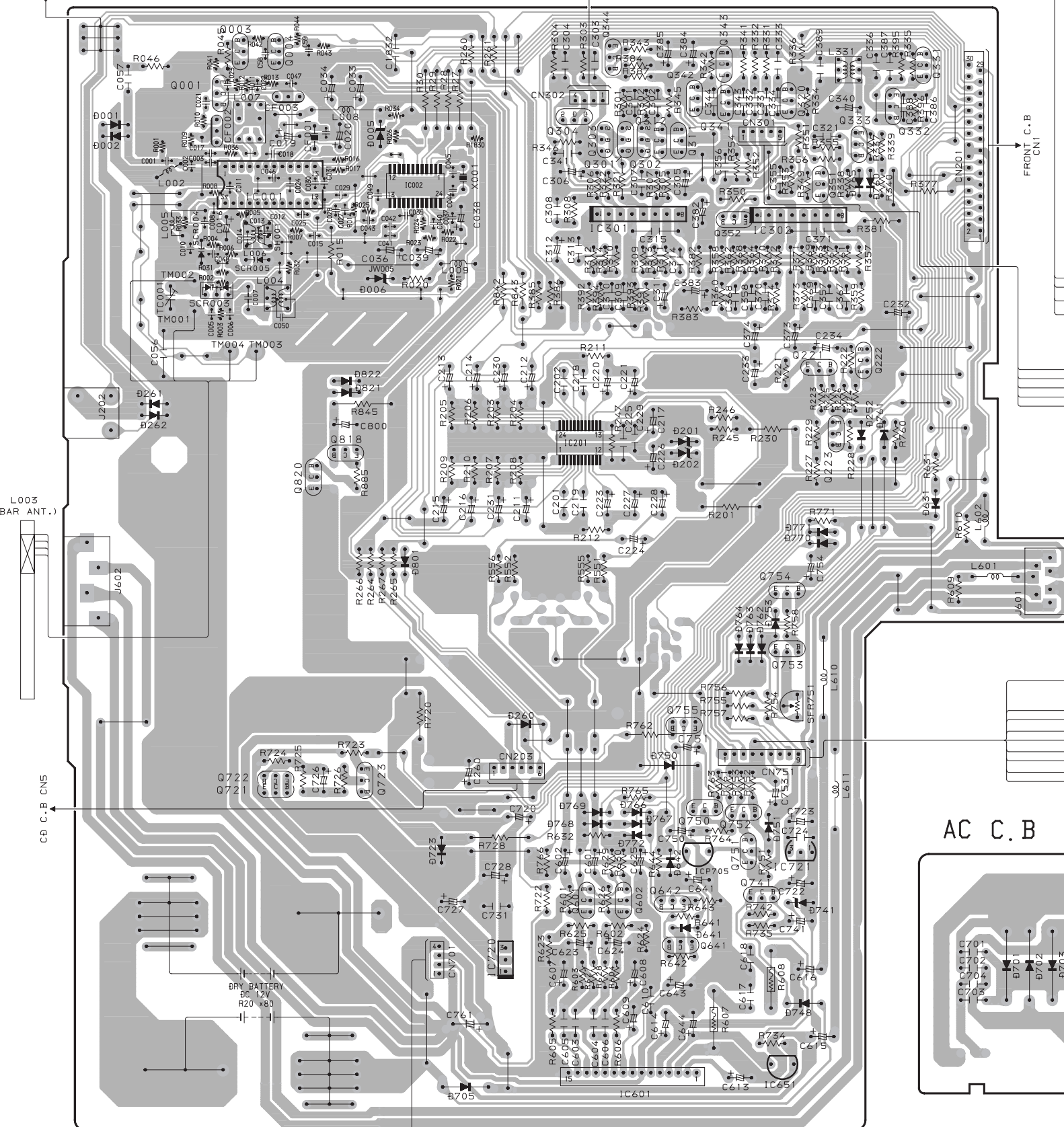
WIRING-1 (MAIN)

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

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K

MAIN C.B

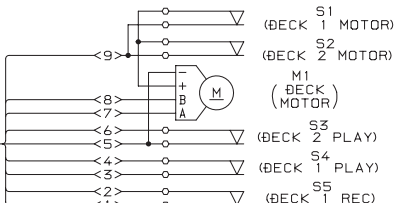
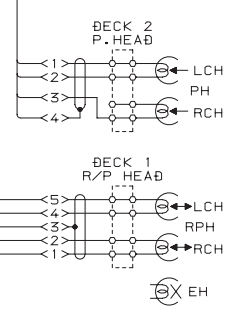
FM LOT ANT.



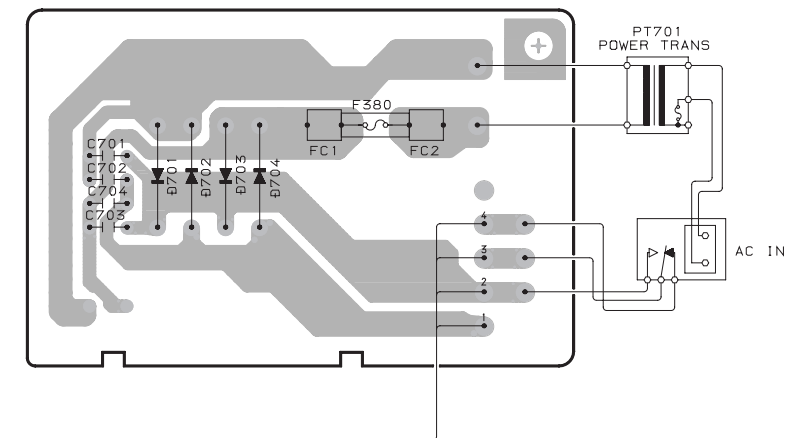
L003 (AM BAR ANT.)

CB C.B CN5

DRY BATTERY DC 1.2V R20 x80

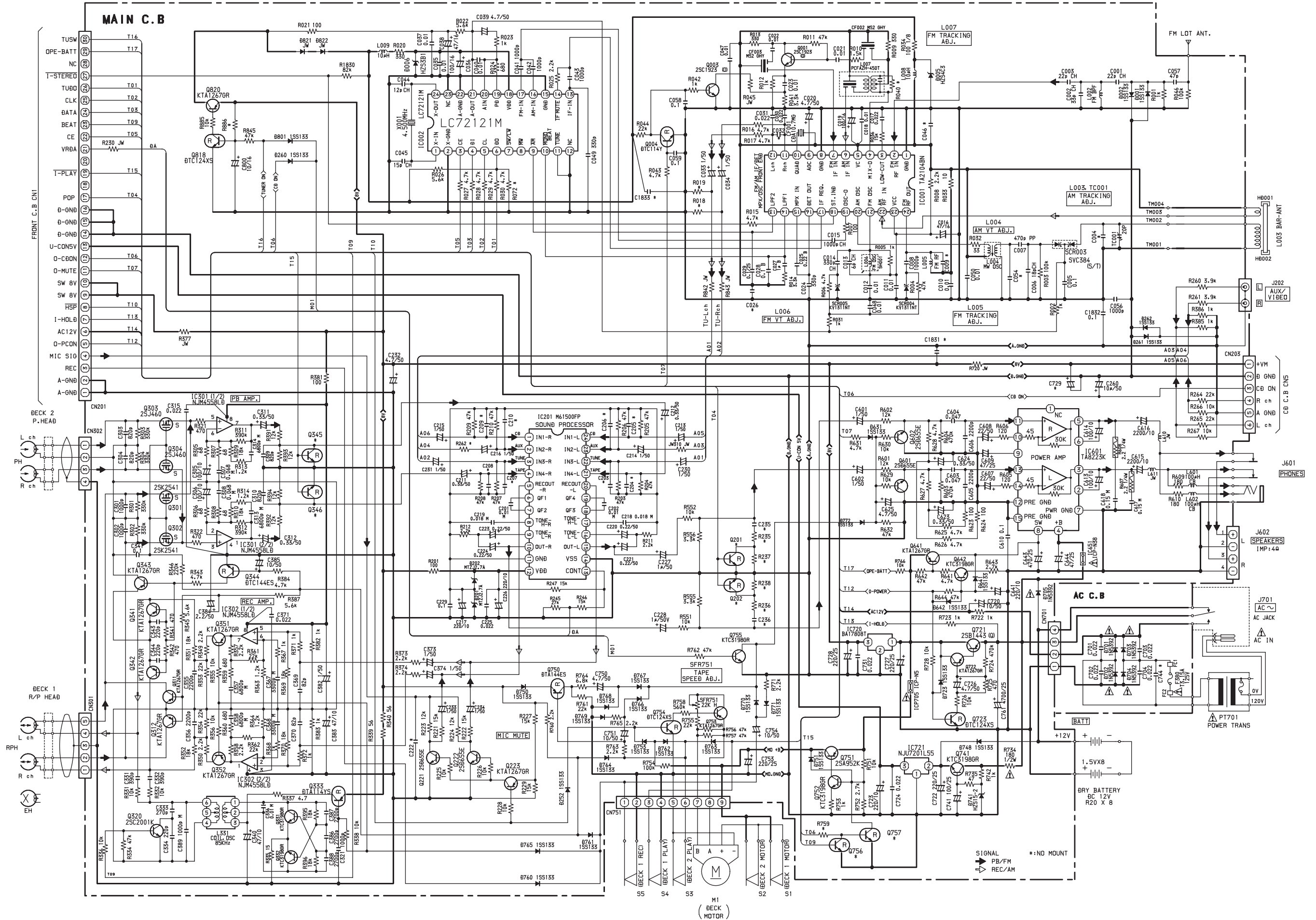


AC C.B





SCHEMATIC DIAGRAM-1 (MAIN)

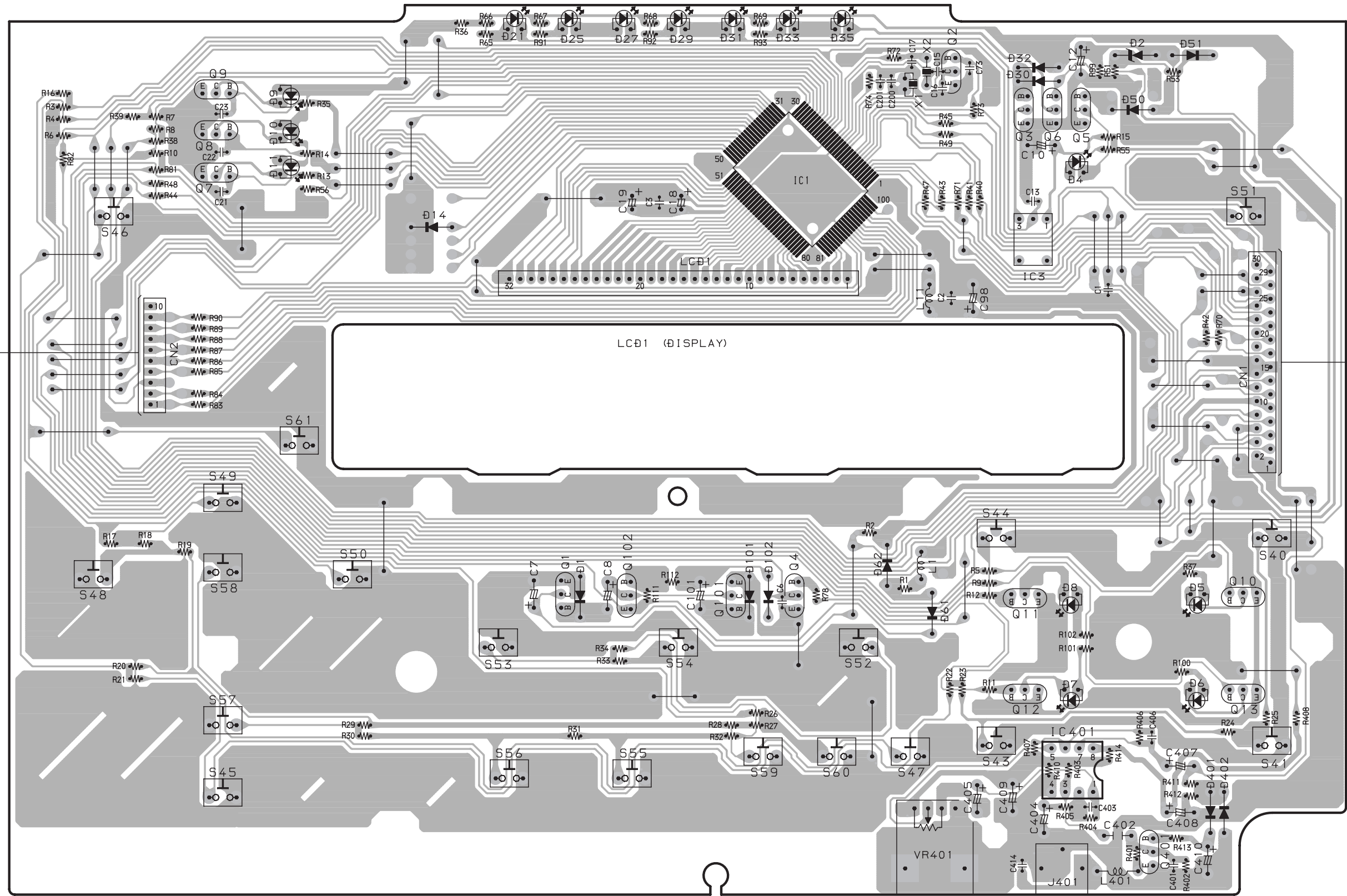


FRONT C. B

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K

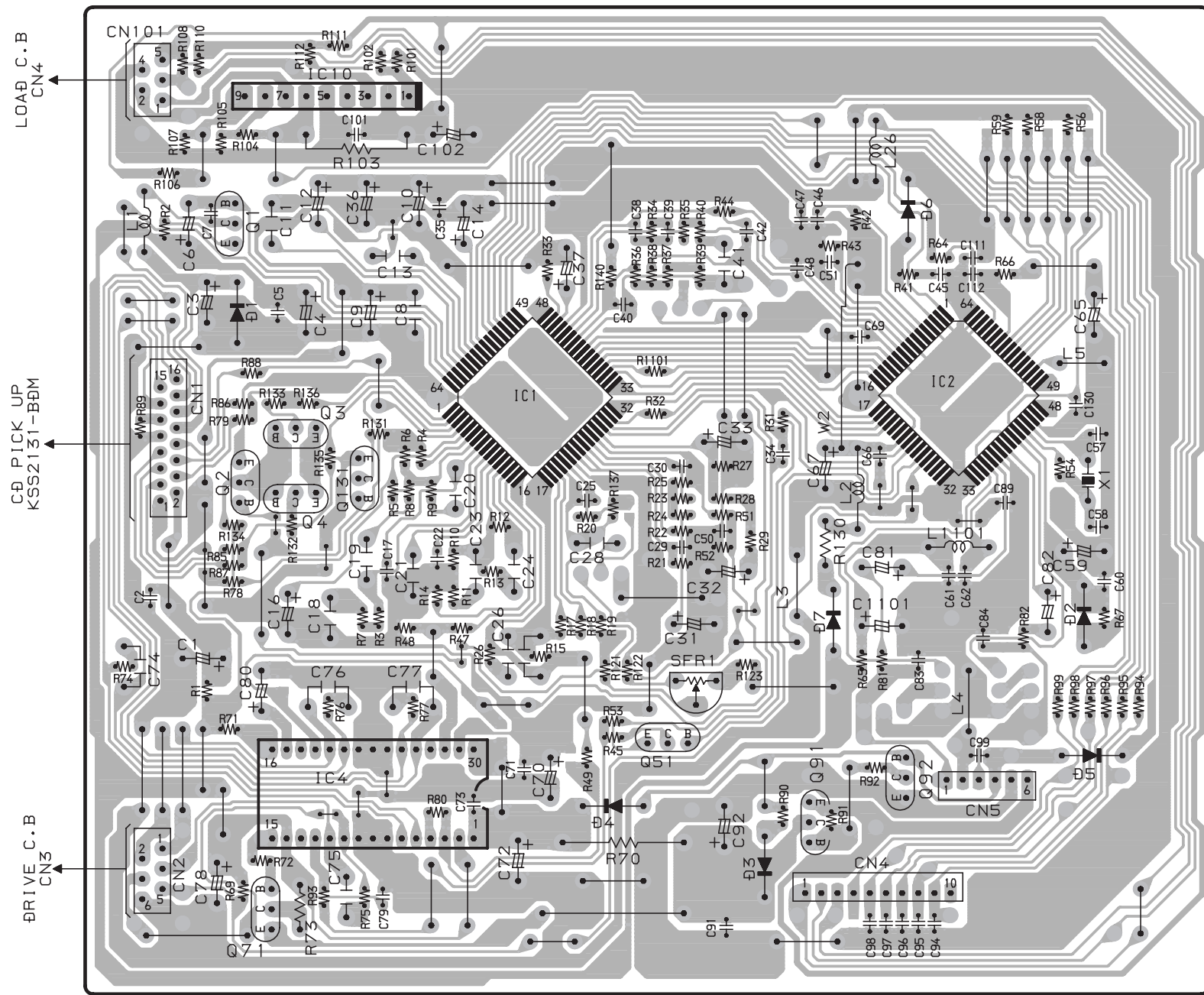
← CB C. B CN4

→ MAIN C. B CN201

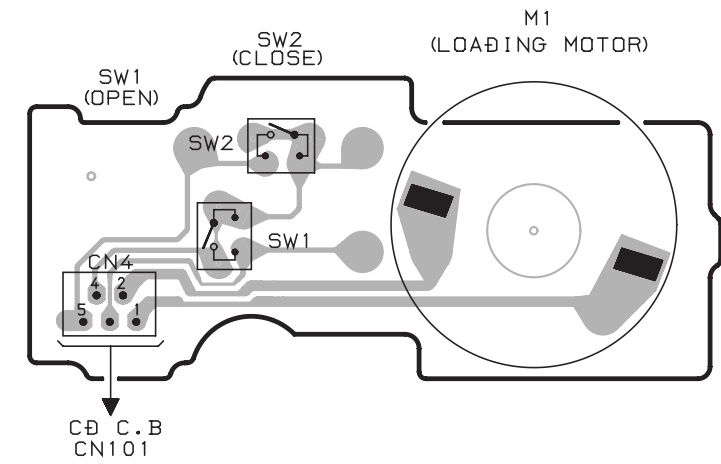




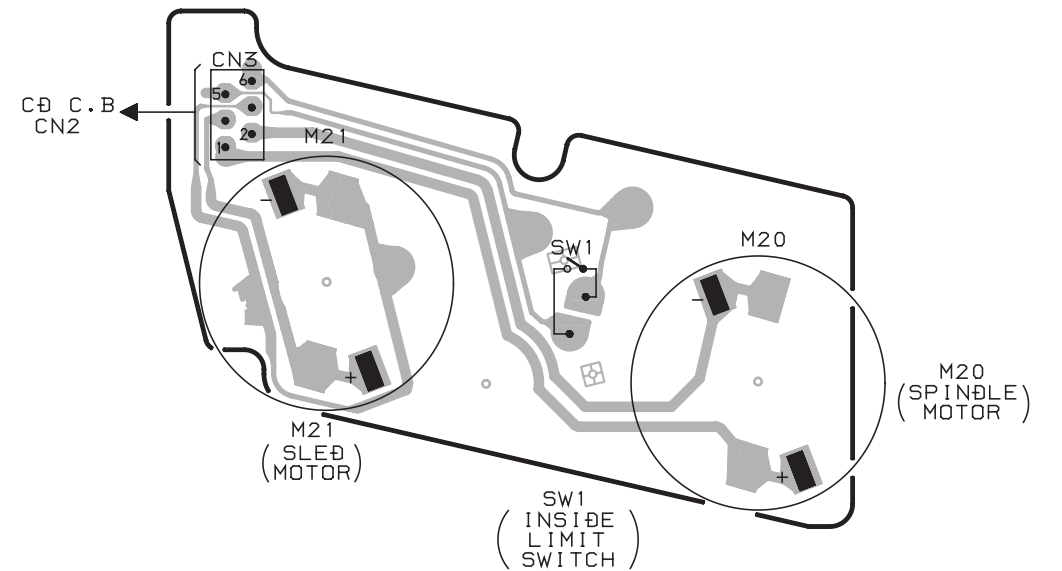
CD C.B



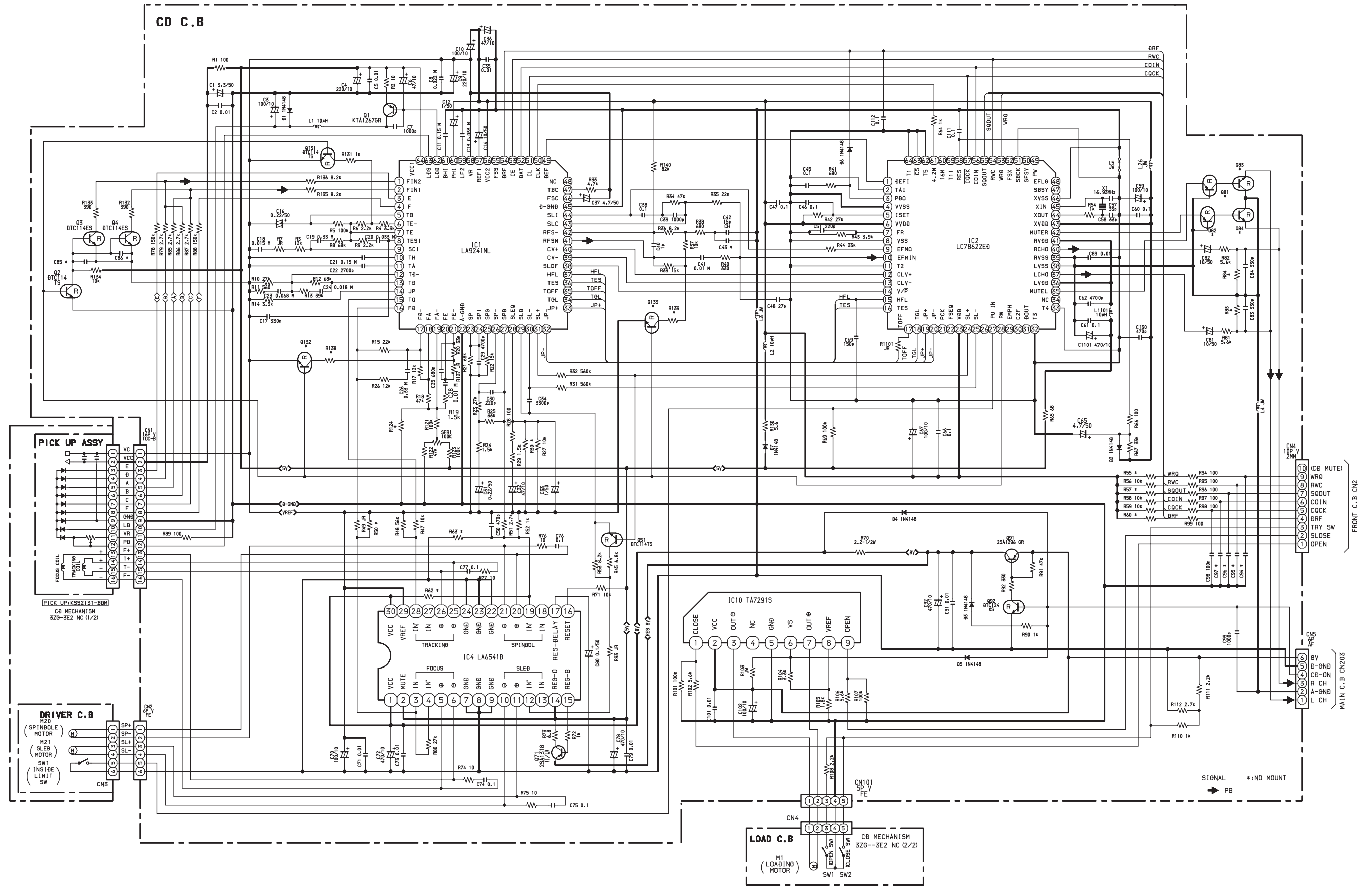
LOAD C.B



DRIVE C.B



SCHEMATIC DIAGRAM-3 (CD)



# SEMICONDUCTOR FUNCTION AND VOLTAGE CHART

## MAIN C.B

### IC1 (FRONT END)

Pin No.	1	2	3	4	5	6	7	8	9	10
FM/AM(V)	0	0.8/0	0.2-0.3/1.1	3.5/4.7	3.7/4.8	3.2/4.1	3.7/4.8	0	0.3/0.3	3/4.2
Pin No.	11	12	13	14	15	16	17	18	19	20
FM/AM(V)	1.2/1.2	1.2/1.2	3.1/0	3.4	0.7/0.7	1/1.1	1/0.9	5.1/5.1	2.7/4	4/4.8
Pin No.	21	22	23	24						
FM/AM(V)	2.3/4.2	4/4.8	2.3/4.2	3.7/4.8						

### IC2(PLL)

Pin No.	1	2	3	4	5	6	7	8	9	10
FM/AM(V)	1.6/1.6	0	0/0	0/0	0/0	5/5	0	0	0	3.4/0
Pin No.	11	12	13	14	15	16	17	18	19	20
FM/AM(V)	0	0	0/0	1/1	0	0/1.6	1.6/0	3.3/3.4	1/1	1/1
Pin No.	21	22	23	24						
FM/AM(V)	2.1/1.3	0	0	1.7/1.7						

### IC201(SOUND PROCESSOR)

Pin No.	1	2	3	4	5	6	7	8	9	10
(V)	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Pin No.	11	12	13	14	15	16	17	18	19	20
(V)	2.5	5	2.76	0	2.5	2.5	2.5	2.5	2.5	2.5
Pin No.	21	22	23	24						
(V)	2.5	2.5	2.5	2.5						

### IC301(PB AMP)

Pin No.	1	2	3	4	5	6	7	8
(V)	3.3	3.3	3.3	0	3.3	3.3	3.3	7.3

### IC302(REC AMP)

Pin No.	1	2	3	4	5	6	7	8
(V)	3.3	3.3	3.3	0	3.3	3.3	3.3	7.3

### IC601(POWER AMP)

Pin No.	1	2	3	4	5	6	7	8	9	10
(V)	0	15.1	8.2	16.1	8	15.1	0	11.25	8.2	0.6
Pin No.	11	12	13	14	15					
(V)	0	0	0.6	0	0					

### IC720(REG)

Pin No.	1	2	3
(V)	11.25	0	8

### IC721(REG)

Pin No.	1	2	3
(V)	0	11.25	5.4

### Transistors

Ref No.	Q1			Q3			Q4		
Function	IF AMP			AUTO STOP SENS.SW			CONTROL SW		
Pin No.	E	C	B	E	C	B	E	C	B
(V)	-	-	-	0	-	-	0	-	-

Ref No.	Q221			Q222			Q223		
Function	MIC MUTE			MIC MUTE			MIC MUTE		
Pin No.	E	C	B	E	C	B	E	C	B
(V)	0	-	-	0	-	-	-	-	-

Ref No.	Q301			Q302			Q303		
Function	D1/D2 SELECT			D1/D2 SELECT			D1/D2 SELECT		
Pin No.	E	C	B	E	C	B	E	C	B
(V)	-	-	-	-	-	-	-	-	-

Ref No.	Q304			Q311			Q312		
Function	D1/D2 SELECT			REC/PB SELECT			REC/PB SELECT		
Pin No.	S	D	G	S	D	G	S	D	G
(V)	-	-	-	-	-	-	-	-	-

Ref No.	Q320			Q331			Q332		
Function	BEAT SWITCH			TAPE BIAS OSC			TAPE BIAS OSC		
Pin No.	S	D	G	E	C	B	E	C	B
(V)	-	-	-	-	-	-	-	-	-

Ref No.	Q333			Q341			Q342		
Function	BIAS SW			REC/PB SELECT			REC/PB SELECT		
Pin No.	E	C	B	E	C	B	E	C	B
(V)	-	-	-	-	-	-	-	-	-

Ref No.	Q343			Q344			Q351		
Function	INV.			INV.			RMT SW		
Pin No.	E	C	B	E	C	B	E	C	B
(V)	-	-	-	0	-	-	-	-	-

Ref No.	Q352			Q601			Q602		
Function	RMT SW			MUTE			MUTE		
Pin No.	E	C	B	E	C	B	E	C	B
(V)	-	-	-	-	0	-	-	0	-

Ref No.	Q641			Q642			Q721		
Function	POWER AMP SW			POWER AMP SW			REG		
Pin No.	E	C	B	E	C	B	E	C	B
(V)	16.3	16.3	15.6	3.5	9.5	4.2	17.0	16.3	16.3

Ref No.	Q722			Q723			Q741		
Function	REG			POWER SW			REG		
Pin No.	E	C	B	E	C	B	E	C	B
(V)	16.3	16.3	15.7	0	23m	3.2	12.6	13.4	13.4

Ref No.	Q750			Q751			Q752		
Function	SW			REG			REG		
Pin No.	E	C	B	E	C	B	E	C	B
(V)	-	-	-	-	-	-	-	-	-

Ref No.	Q753			Q754			Q755		
Function	TAPE SPEED CONTROL			Hi-SPEED SW			MUTE OFF SW		
Pin No.	E	C	B	E	C	B	E	C	B
(V)	-	-	-	-	-	-	0	-	-

Ref No.	Q818			Q820		
	INV.			TU +B SW		
Pin No.	E	C	B	E	C	B
When tuner is operating (V)	0	27m	1.9	8.0	7.8	7.3
When tuner is not operating(V)	0	7.5	10m	8.0	0.6	7.5

Ref No.	Q4			Q5			Q101		
	HOLD			LED SW			RESET		
Pin No.	E	C	B	E	C	B	E	C	B
(V)	0	34m	1.1	0	59m	0.7	0	-	-

Ref No.	Q102			Q401		
	RESET			MIC AGC		
Pin No.	E	C	B	E	C	B
(V)	-	-	-	0	-	-

**FRONT C.B**  
IC1(SYSTEM CONTROL)

Pin No.	1	2	3	4	5	6	7	8	9	10
(V)	20m	20m	20m	20m	24m	20m	20m	4.7	20m	20m
Pin No.	11	12	13	14	15	16	17	18	19	20
(V)	N.C.	4.5	1.9	2.5	0	2.3	2.4	4.7	4.9	4.9
Pin No.	21	22	23	24	25	26	27	28	29	30
(V)	13m	4.9	0.55	2.6	10m	4.9	34m	N.C.	5.0	4.6
Pin No.	31	32	37	41	42	43	44	45	46	47
(V)	4.6	4.6	N.C.	-	-	-	-	-	-	-
Pin No.	48	49	50	51	52	53	54	55	56	57
(V)	N.C.	LCD							4.7	0
Pin No.	58	59	60	61	62	63	64	65	66	67
(V)	LCD									
Pin No.	68	69	70	71	72	73	74	75	76	77
(V)	LCD									
Pin No.	78	79	80	81	82	83	84	85	86	87
(V)	LCD		N.C.	N.C.	N.C.	LCD		N.C.	18m	
Pin No.	88	89	90	91	92	93	94	95	96	97
(V)	20m	0	4.7	18m	4.7	4.7	34m	N.C.	10m	10m
Pin No.	98	99	100							
(V)	N.C.	N.C.	N.C.							

Pin No.	33	34	35	36
When FUNCTION is selected(V)	4.6V(CD)	4.6V(AUX)	4.6V(TU)	4.6V(TA)
When FUNCTION is not selected(V)	10m	10m	10m	10m

Pin No.	38	39	40
When EQ is selected(V)	4.6V(ROCK)	4.6V(POP)	4.6V(JAZZ)
When EQ is not selected(V)	10m	10m	10m

IC3(REMOTE SENSOR)

Pin No.	1	2	3
(V)	0	5.0	5.0

IC401(MIC AMP)

Pin No.	1	2	3	4	5	6	7	8
(V)	3.9	3.9	3.9	0	3.9	3.9	3.9	7.8

Transistors

Ref No.	Q1			Q2			Q3		
	RESET			CLOCK SHIFT			AC/DC SW		
Pin No.	E	C	B	E	C	B	E	C	B
(V)	0	4.5	-	0	-	-	0	20m	7.5

Ref No.	Q6		
	BACK LIDHT SW		
Pin No.	E	C	B
(V)	0	6.5	During AC operation 13.8V During DC operation 10mV

Ref NO.	Q7			Q8			Q9		
	EQ LED SW			EQ LED SW			EQ LED SW		
Pin No.	E	C	B	E	C	B	E	C	B
EQ ON (V)	0	75m	0.7	0	75m	0.7	0	75m	0.7
EQ OFF (V)	0	0.9	20m	0	0.9	20m	0	0.9	20m

Ref No.	Q10			Q11			Q12		
	FUNCTION LED SW			FUNCTION LED SW			FUNCTION LED SW		
Pin No.	E	C	B	E	C	B	E	C	B
When FUNCTION is selected(V)	0	134m	0.7	0	134m	0.7	0	134m	0.7
When FUNCTION is not selected(V)	0	6.6	20m	0	6.6	20m	0	6.6	20m

Ref No.	Q13		
	FUNCTION LED SW		
Pin No.	E	C	B
When FUNCTION is selected(V)	0	134m	0.7
When FUNCTION is not selected(V)	0	6.6	20m

**CD C.B**

**IC1(ASP)**

Pin No.	1	2	3	4	5	6	7	8	9	10
(V)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Pin No.	11	12	13	14	15	16	17	18	19	20
(V)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Pin No.	21	22	23	24	25	26	27	28	29	30
(V)	2.0	0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9
Pin No.	31	32	33	34	35	36	37	38	39	40
(V)	1.9	0	0	3.9	3.9	0	0	3.9	0	0
Pin No.	41	42	43	44	45	46	47	48	49	50
(V)	1.3	1.9	2.0	2.0	0	2.0	2.0	0	0	1.9
Pin No.	51	52	53	54	55	56	57	58	59	60
(V)	4.5	4.5	0.4	0	0	3.9	2.0	2.0	0.6	0.6
Pin No.	61	62	63	64						
(V)	1.9	4.3	1.1	5.0						

**IC2(DSP)**

Pin No.	1	2	3	4	5	6	7	8	9	10
(V)	0	0	0	0	1.4	3.9	0	0	1.9	2.0
Pin No.	11	12	13	14	15	16	17	18	19	20
(V)	0	0	0	3.9	0	0	3.9	3.9	0	0
Pin No.	21	22	23	24	25	26	27	28	29	30
(V)	0	0	3.9	0	0	0	0	0	0	0
Pin No.	31	32	33	34	35	36	37	38	39	40
(V)	0	0	0	0	3.9	4.9	2.1	0	0	2.1
Pin No.	41	42	43	44	45	46	47	48	49	50
(V)	4.9	3.9	3.9	1.7	1.7	0	0	0	0	0
Pin No.	51	52	53	54	55	56	57	58	59	60
(V)	0	0	0	0.4	0	4.5	4.5	3.9	0	0
Pin No.	61	62	63	64						
(V)	1.9	0	0	0						

**IC4(MOTOR/COIL DRIVER)**

Pin No.	1	2	3	4	5	6	7	8	9	10
(V)	7.9	5.0	2.0	2.0	3.6	3.6	0	0	0	3.6
Pin No.	11	12	13	14	15	16	17	18	19	20
(V)	3.6	2.0	2.0	5.0	7.3	5.0	4.8	2.0	2.0	3.6
Pin No.	21	22	23	24	25	26	27	28	29	30
(V)	3.6	0	0	3.6	3.6	3.6	2.0	2.0	2.0	7.9

**IC10(LOADING MOTOR DRIVER)**

Pin No.	1	2	3	4	5	6	7	8	9
(V)	0	8.3	0.3	0	0	8.3	0.3	2.9	0

**Transistors**

Ref No.	Q1			Q51			Q71		
Function	APC			SWITCH			REG		
Pin No.	E	C	B	E	C	B	E	C	B
(V)	5.0	1.6	4.3	2.0	2.0	0	8.0	5.2	7.3

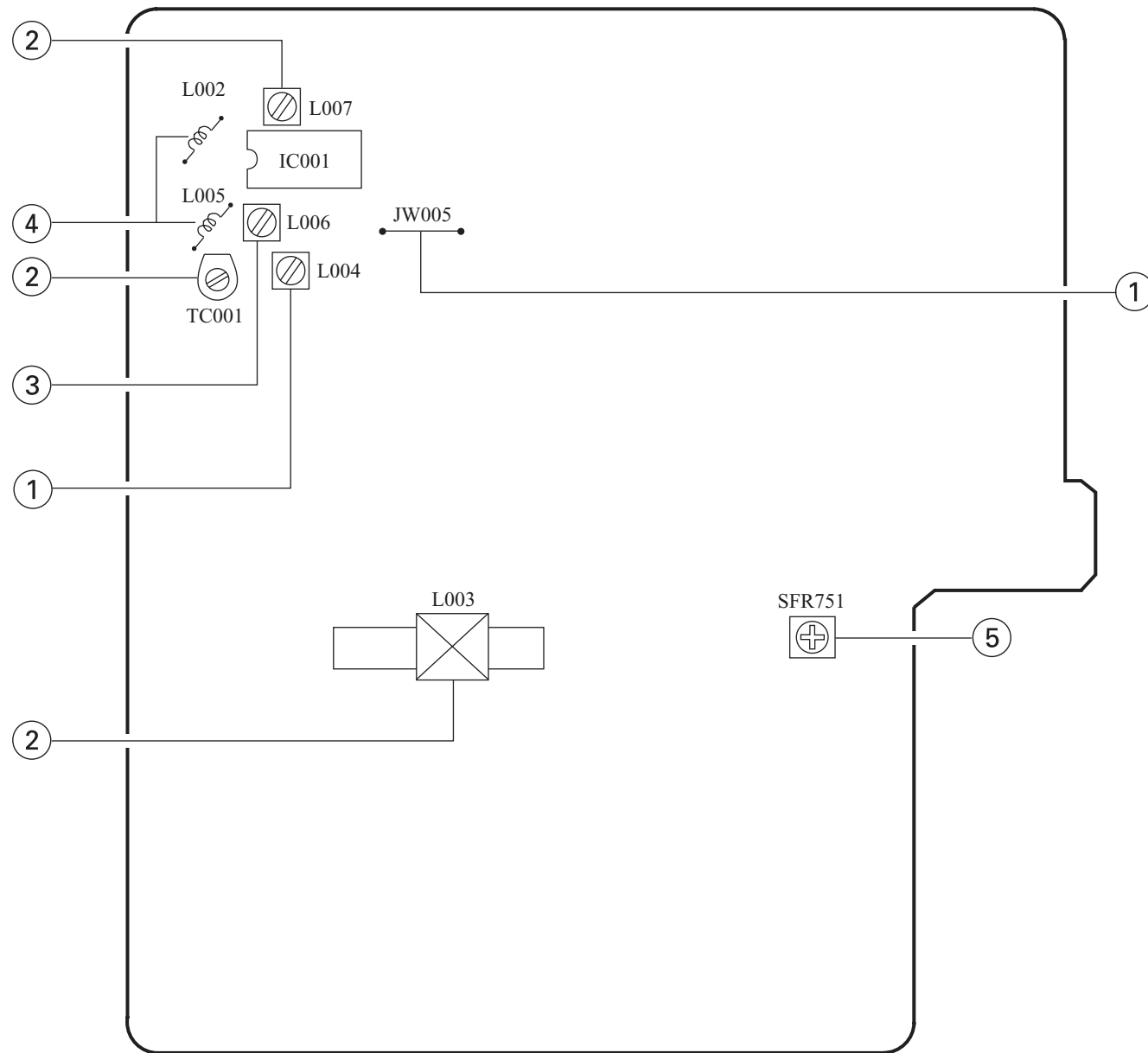
Ref No.	Q91			Q92		
Function	+B SWITCH			REG		
Pin No.	E	C	B	E	C	B
(V)	8.1	8.0	7.3	0	207m	3.6

Ref No.	Q2			Q3			Q4		
Function	RW CONTROL SW			RW SW			RW SW		
Pin No.	E	C	B	E	C	B	E	C	B
When CD,CD-R is operating(V)	14m	3.5	15m	2.0	2.0	3.5	2.0	2.0	3.5
When CD,CD-R is not operating(V)	14m	20m	3.9	2.0	2.0	20m	2.0	2.0	20m

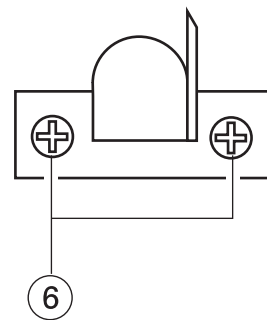
Ref No.	Q131		
Function	RW SW		
Pin No.	E	C	B
When CD,CD-R is operating(V)	2.0	2.0	15m
When CD,CD-R is not operating(V)	2.0	2.0	3.9



MAIN C.B



RPH (DECK1) / PH (DECK2)



< TUNER SECTION >

1. AM VT Adjustment  
 Settings: • Test point: JW005  
 • Adjustment location: L004  
 Method: Set to AM 1710kHz adjust L004 so that the test point becomes 6.0V±0.05V.
2. AM Tracking Adjustment  
 L003 (Bar-Ant.), L007 ..... 600kHz  
 TC001 ..... 1400kHz
3. FM VT Adjustment  
 Settings: • Test point: JW005  
 • Adjustment location: L006  
 Method: Set to FM 108.0MHz adjust L006 so that the test point is 5.5V±0.2V.
4. FM Tracking Adjustment  
 L005, L002 ..... 87.5MHz

< TAPE SECTION >

5. Tape speed Adjustment (DECK2)  
 Settings: • Test tape: TTA-1101  
 • 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.
6. Azimuth Adjustment (DECK1, DECK2)  
 Settings: • Test tape: TTA-1420  
 • 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:	18±5dB (87.5MHz)
(THD 3%)	18±5dB (98.0MHz)
	18±5dB (108.0MHz)
Signal to Noise Ratio:	65±5dB (98MHz)
(Input 54dB)	
Distortion:	Less than 2% (98MHz)
(Input 54dB)	
Intermediate frequency:	10.7MHz
Stereo separation:	More than 22dB

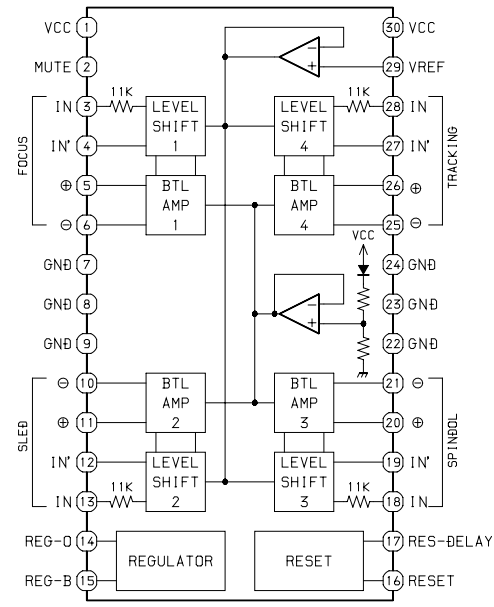
< AM SECTION >

Sensitivity:	54dB±5dB (600kHz)
(S/N 10dB)	53dB±5dB (1000kHz)
	49dB±5dB (1400kHz)
Distortion:	Less than 5% (1000kHz)
(Input 74dB)	
Intermediate frequency:	450kHz±1.2kHz

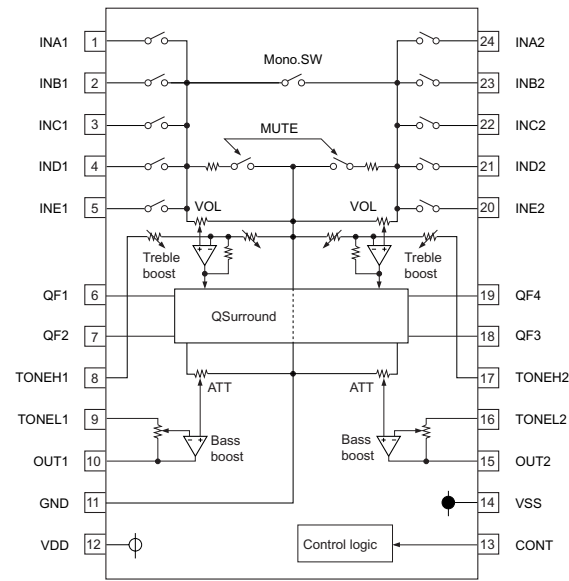
< CASSETTE SECTION >

Tape speed:	3000Hz±45
Wow & flutter:	Less than 0.38% (JIS RMS)
Take-up torque:	30-60g-cm (DECK 1/2)
F.F torque:	55-140g-cm (DECK 1/2)
Rew torque:	55-140g-cm (DECK 1/2)
Back tension:	3±2g-cm
S/N ratio:	More than 40dB
Distortion:	Less than 3.0% (PB)
Noise (PB):	Less than 1mV (AC/DC, MIN)
Erasing Ratio (W/FILTER):	More than 50dB

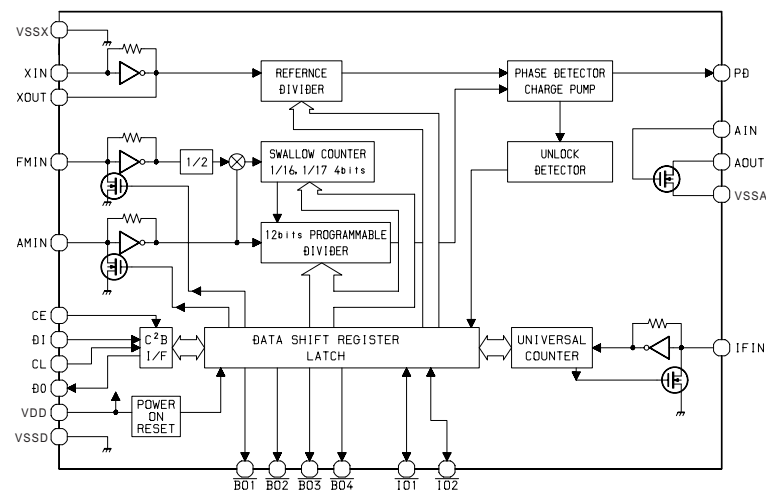
IC BLOCK DIAGRAM  
IC LA6541D



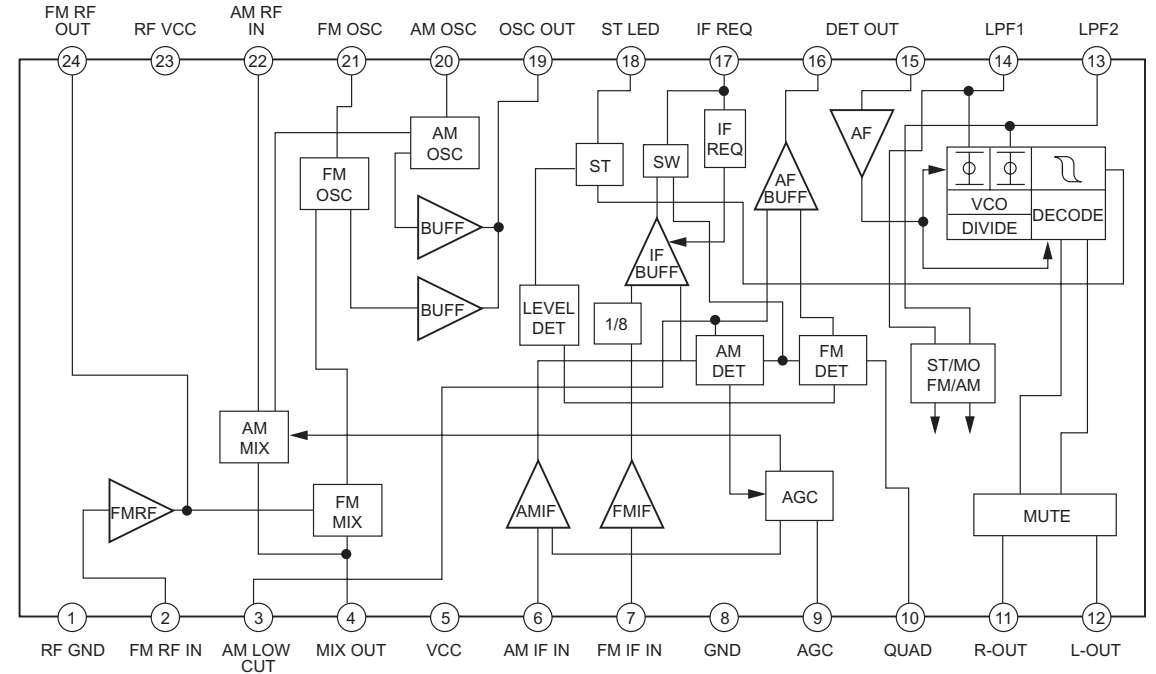
IC M61500FP



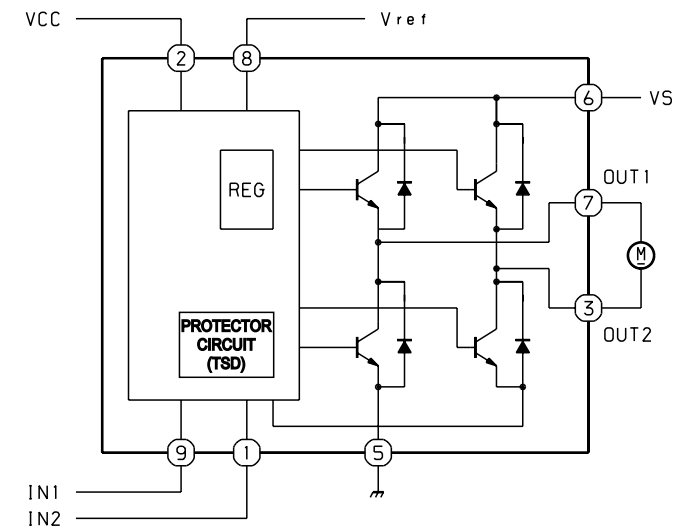
IC LC72121M



IC TA2104BN



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 DESCRIPTION  
IC, LA9241ML

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 FDD and FAD 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	SP	O	Signal ended output of the CV+and CV- pin input signal.
24	I	I	Spindle amp input.
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.

Pin No.	Pin Name	I/O	Description
35	TOFF	I	Tracking off control signal input pin from DSP. Off when TOFF = H.
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	CVB, 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 ( $\pm$ 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 PDO 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/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 the sync signal which is internally generated agree.	
23	VDD	—	Digital system power supply pin.	
24	SL+	O	Moves the sled to outer circumference.	
25	SL-	O	Moves the sled to inner circumference.	
26	—	—	Not connected.	
27	PUIN	I	CD pickup inner switch detection.	
28	—	—	Not connected.	
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.

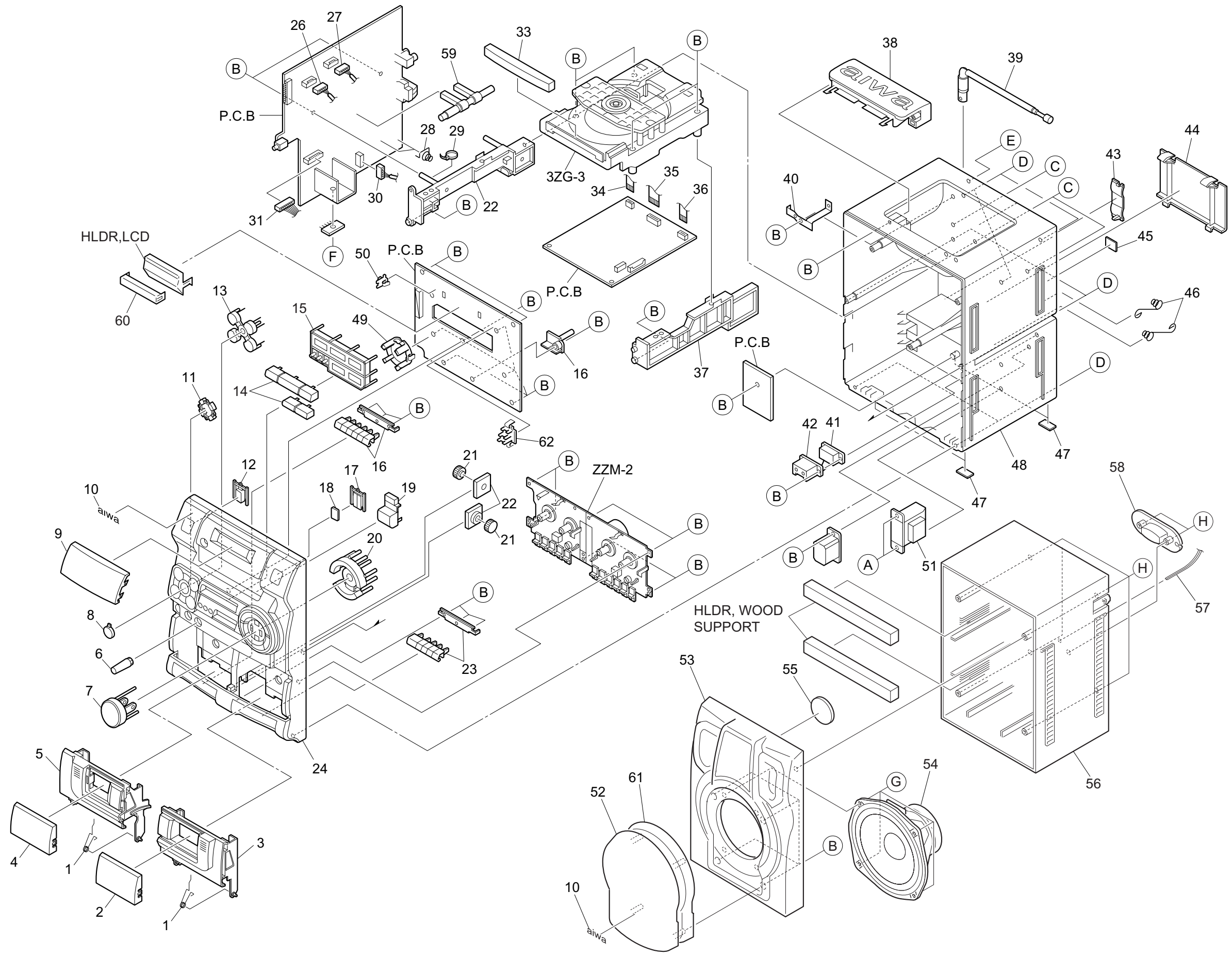
Pin No.	Pin Name	I/O	Description
43	XVDD	—	Crystal oscillator power supply pin.
44	XOUT	O	Pin to which external 16.9344 MHz crystal oscillator is connected.
45	XIN	I	
46	XVSS	—	Crystal oscillator GND pin. Be sure to connect to 0V.
47	SBSY	O	Subcode block sync signal output pin.
48	EFLG	O	C1, C2, single 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	CQCK	I	Command input read clock or subcode read input clock from SQOUT pin
58	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	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)

IC, LC867232A

Pin No.	Pin Name	I/O	Description
1	POP	O	POP external filter ON/OFF output. ON:H.
2	O-BEAT	O	AM RECORD beat cancel output.
3	O-TUSW	O	TUNER ON/OFF output. ON: H, OFF: L.
4	O-CE	O	PLL chip enable output.
5	O-VRDA	O	Sound processor control output 3state.
6	O-DATA	O	Connected to tuner PLL LC72121(4Pin).
7	O-CLK	O	Connected to tuner PLL LC72121CL (5Pin).
8	O-PCONT	O	Power supply ON/OFF control. ON: H.
9	O-MUTE	O	Main mute output. Mute: H.
10	O-CKSFT	O	5.76 MHz master clock shift output.
11	NC	O	Not connected.
12	$\overline{\text{I-RST}}$	I	Microprocessor reset input. (L: reset).
13	XT1	I	External 32.768 kHz crystal oscillator is connected to this terminal.
14	XT2	O	
15	VSS1	—	GND.
16	CF1	I	External 5.76 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 PLAY:L).
23	I-TUDO	I	Connected to tuner PLL LC72121 (6Pin) DO.
24	$\overline{\text{I-STEREO}}$	O	Tuner stereo detection input. ST = L
25	I-BATT	—	Pull down.
26	$\overline{\text{I-REC}}$	I	Tape RECORD detection input.
27	I-KOLD	I	HOLD detection input. H: HOLD.
28	NC	—	Not connected.
29	I-RMT	I	Remote control input.
30	O-CD	O	CD power supply control output. ON: H, OFF: L.
31	O-HSP	O	High speed dubbing selector output. ON: L.
32	I-INIT	I	Initial setting (diode matrix) input.
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.
41	FM WIDE	O	Initial setting diode output. FM WIDE.

Pin No.	Pin Name	I/O	Description
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	—	Not used.
47	OIRT	O	Initial setting diode output. OIRT.
48	NC	—	Not connected.
49-55	SEG19-SEG25	O	LCD segment output.
56	VDD2	—	LCD VDD.
57	VSS	—	LCD VSS.
58-79	SEG26-SEG47	O	LCD segment output.
80-82	V3-V1	—	NC. (External power supply for LCD drive is connected to this terminal).
83-85	COM0-COM2	O	LCD common output.
86	NC	—	Not connected. (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	—	Not connected.
99	CLCKADJ	O	“L” is outputted during the watch setting mode (Not used).
100	NC	—	Not connected.



# 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	REF. NO	PART NO.	KANRI NO.	DESCRIPTION
1	82-NF7-218-010		SPR-T,CASS<U2<S>>	39	86-CT4-616-010		ANT,ROD
1	8Z-CT4-211-010		SPR-T,CASS<U<S>>	40	88-CT4-224-010		HLDR,ANT
2	8A-CT4-017-010		WINDOW,CASS R	41	87-A60-177-010		JACK,AC U W/SW
3	8A-CT4-004-010		BOX,CASS R	42	87-A90-086-010		COVER,AC-SOCKET
4	8A-CT4-016-010		WINDOW,CASS L	43	87-CT4-037-010		COVER, BATT
5	8A-CT4-003-010		BOX,CASS L	44	8Z-CT4-040-010		LID,BATT<U<S>>
6	88-CT4-027-210		KNOB,RTRY TU	44	8A-CT4-026-010		LID,BATT 626<U2<S>>
7	8A-CT4-014-010		KEY,VOL	45	88-CT4-025-010		PLATE,VOLTAGE
8	8A-CT4-019-010		LENS,COVER	46	88-CT4-207-010		SPR-C,BATT A
9	8A-CT4-015-010		WINDOW,DISP	47	88-CT4-026-010		CUSH,FOOT
10	87-B00-010-010		BADGE,AIWA 30.5-5.2 S 2.5L<U2<S>>	48	8A-CT4-025-010		CABI,REAR 626<U2<S>>
11	8A-CT4-018-010		LENS,FUNC	48	8Z-CT4-028-010		CABI,REAR N<U<S>>
12	8A-CT4-007-010		KEY,POWER	49	8A-CT4-202-010		HLDR,FUNC
13	8A-CT4-013-010		KEY,FUNC	50	8A-CT4-203-010		HLDR,POWER
14	8A-CT4-012-010		KEY,CAP	51	8Z-CT1-612-010		PT,U
15	8A-CT4-011-010		KEY,MAIN	52	8A-CT4-022-010		PANEL,SPKR
16	8A-CT4-005-010		KEY,CASS L	53	8A-CT4-021-010		CABI,SPKR FRONT
17	8A-CT4-010-010		KEY,SURROUND	54	86-CT4-625-010		SPKR,W 120 40HM 10W 6CT-4
18	8A-CT4-020-010		LENS,SURROUND	55	8Z-CK3-627-010		VIB,PIEZO
19	8A-CT4-008-010		KEY,EJECT	56	8Z-CT4-020-010		CABI,REAR SPKR L<U<S>>
20	8A-CT4-009-010		KEY,EQ	56	8A-CT4-031-010		CABI,REAR SPKR L 626<U2<S>>
21	88-CT4-225-010		GEAR,OIL DUMP	56	8Z-CT4-021-010		CABI,REAR SPKR R<U<S>>
22	88-CT4-226-010		HLDR,OIL DUMP	56	8A-CT4-032-010		CABI,REAR SPKR R 626<U2<S>>
23	8A-CT4-006-010		KEY,CASS R	57	86-CT4-627-010		CORD,2PSPKR
24	8A-CT4-001-010		CABI,FRONT	58	84-CT4-106-110		HLDR,CORD
25	8A-CT4-206-010		BOSS,FRONT CABI	59	8Z-CT4-624-010		HLDR,BAR-ANT.
26	88-CT4-607-010		CONN ASSY,5P	60	88-CT4-218-010		COVER,LED
27	88-CT4-606-010		CONN ASSY,4P	61	8Z-CT4-044-010		NET,SPKR
28	88-CT4-208-010		SPR-C,BATT B	61	8A-CT4-023-010		NET,SPKR
29	87-A90-193-010		HLDR,CV100 (B)	62	8A-CT4-201-010		HLDR,EQ
30	88-CT4-609-010		CONN ASSY,4P	A	87-661-100-410		VFT1+3-16
31	8A-CT4-620-010		CONN ASSY,9P DECK	B	87-751-096-410		VT2+3-10 GLD
32	8A-CT4-204-010		CHAS,CD L	C	87-753-097-410		VT2+3-12 W/O BLK
33	8A-CT4-002-010		PANEL,CD	D	87-753-104-410		VT2+3-30 W/O BLK
34	88-905-201-210		FF-CABLE, 5P 1.25	E	87-493-100-410		VVWS+3-16 BLK
35	88-CT4-623-010		FF-CABLE, 16P 1.0 120MM	F	87-067-579-010		BVT2+3-8 W/O SLOT
36	88-906-121-110		FF-CABLE,6P	G	87-661-097-410		TAPPING SCREW, VFT1+3-12
37	8A-CT4-205-010		CHAS,CD R	H	87-751-098-410		SCREW 3X14
38	8A-CT4-027-010		PANEL,TOP 626<U2<S>>				
38	8Z-CT4-041-010		PANEL,TOP ST<U<S>>				

## COLOR NAME TABLE

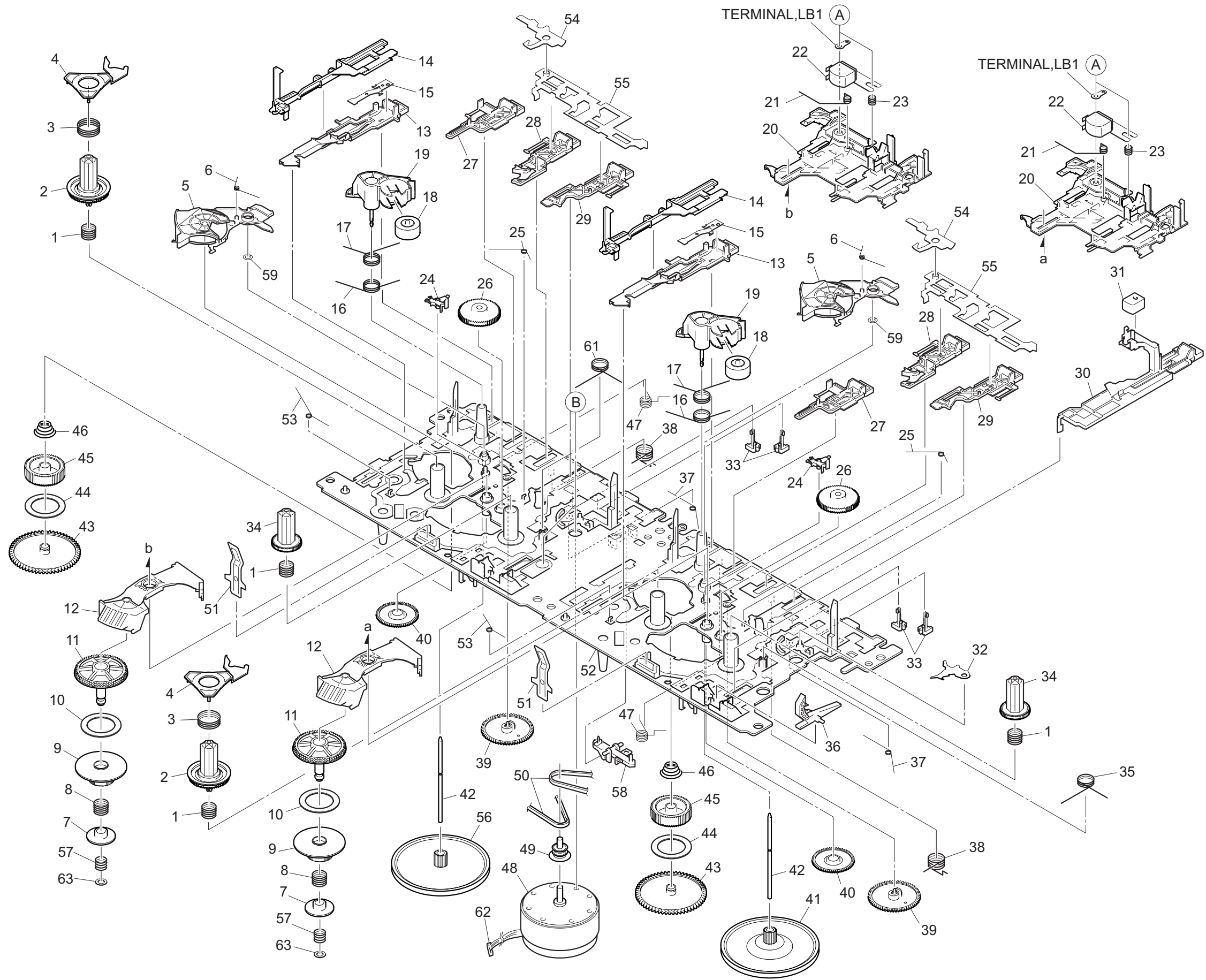
Basic color symbol	Color	Basic color symbol	Color	Basic color symbol	Color
B	Black	C	Cream	D	Orange
G	Green	H	Gray	L	Blue
LT	Transparent Blue	N	Gold	P	Pink
R	Red	S	Silver	ST	Titan Silver
T	Brown	V	Violet	W	White
WT	Transparent White	Y	Yellow	YT	Transparent Yellow
LM	Metallic Blue	LL	Light Blue	GT	Transparent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

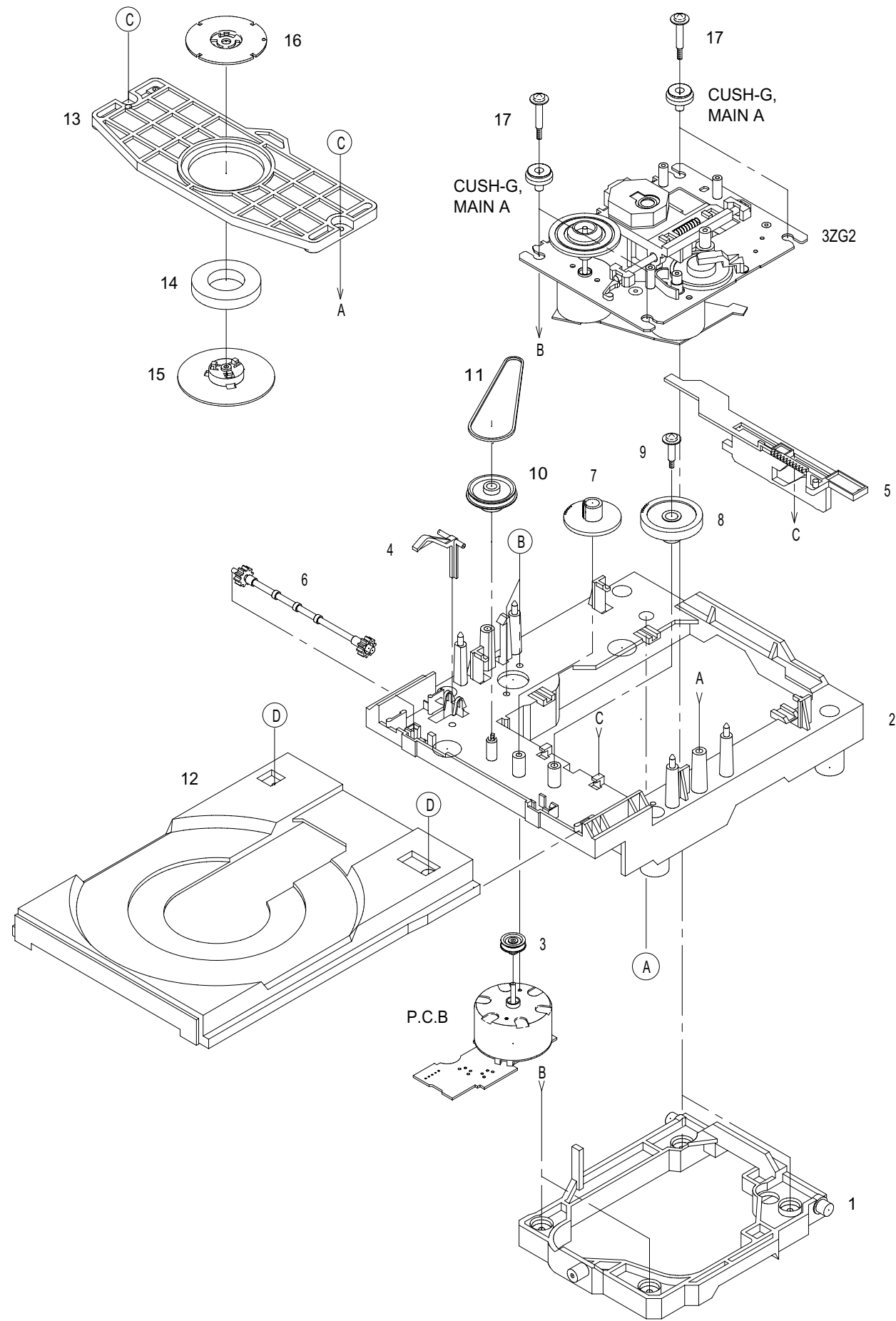
# TAPE MECHANISM PARTS LIST 1/1

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 kinly refer to "REFERENCE NAME LIST".

REF.NO	PART.NO.	KANRI NO.	DESCRIPTION	REF.NO	PART.NO.	KANRI NO.	DESCRIPTION
1	8Z-ZM1-254-210		SPR-C, REEL R	34	8Z-ZM1-226-010		GEAR, REEL L
2	8Z-ZM1-225-110		GEAR, REEL R	35	8Z-ZM1-241-010		SPR-T, PLAY
3	8Z-ZM1-253-110		SPR-C, AUTO SENSOR	36	8Z-ZM1-220-110		LEVER, REC SENSOR
4	8Z-ZM1-217-110		LEVER, AUTO SENSOR	37	8Z-ZM1-249-010		SPR-T, FR
5	8Z-ZM1-212-110		LEVER, T-UP	38	8Z-ZM1-242-110		SPR-T, FF/REW
6	8Z-ZM1-245-010		SPR-T, AUTO	39	8Z-ZM1-229-010		GEAR, CAM
7	8Z-ZM1-236-010		CLR, SLIP FF/REW	40	8Z-ZM1-232-010		GEAR, IDL FF/REW
8	8Z-ZM1-252-010		SPR-C, FF/REW	41	8Z-ZM1-234-010		FLY-WHL, ZZM-1
9	8Z-ZM1-230-010		GEAR, SLIP FF/REW A	42	8Z-ZM1-267-010		SHAFT, CAPSTAN 2
10	8Z-ZM1-269-010		FELT, FF/REW 2	43	8Z-ZM1-228-010		GEAR, SLIP T-UP B
11	8Z-ZM1-238-110		GEAR, SLIP FF/REW B 2	44	8Z-ZM1-265-010		FELT, T-UP
12	8Z-ZM1-237-010		LEVER, FF/REW 2	45	8Z-ZM1-227-010		GEAR, SLIP T-UP A
13	8Z-ZM1-209-210		LEVER, PAUSE	46	8Z-ZM1-251-110		SPR-C, T-UP SLIP
14	8Z-ZM1-218-110		LEVER, E-LOCK H	47	8Z-ZM1-243-210		SPR-T, STOP/PAUSE
15	8Z-ZM1-256-010		SPR-P, PAUSE	48	87-A91-532-010		MOT, MS15U2LW1A
16	8Z-ZM1-244-010		SPR-T, T-UP	49	8Z-ZM1-235-010		PULLEY, MOT
17	8Z-ZM1-247-210		SPR-T, PINCH	50	8Z-ZM2-216-010		BELT, MAIN M
18	8Z-ZM1-261-110		ROLLER ASSY, PINCH	51	8Z-ZM1-260-010		SPR-P, CASSETTE
19	8Z-ZM1-221-010		LEVER, PINCH	52	8Z-ZM2-201-010		CHAS ASSY, ZZM-2
20	8Z-ZM1-205-210		LEVER, PLAY	53	8Z-ZM1-255-110		SPR-T, E-LOCK
21	8Z-ZM1-248-110		SPR-T, BRG	54	8Z-ZM2-219-010		LEVER, E-OPEN ZZM-2
22	87-A90-403-110		HEAD, RPH MS15R	55	8Z-ZM1-214-110		LEVER, LOCK
23	84-ZM2-227-310		SPR-C, AZIMUTH	56	8Z-ZM2-211-010		FLY-WHL, ZZM-2
24	8Z-ZM1-216-010		LEVER, AUTO	57	8Z-ZM1-257-110		SPR-C, F/R
25	8Z-ZM1-246-010		SPR-T, AUTO 2	58	8Z-ZM2-210-010		LEVER, BRIDGE<YR2NF, YR3NF>
26	8Z-ZM2-214-010		GEAR, IDL REW ZZM-2	59	80-ZM6-243-010		SH 1.75-3.6-0.5 SLT
27	8Z-ZM2-212-010		LEVER, STOP ZZM-2	60	87-A91-494-010		SW, LEAF MSW17820<YR1NF, YR2NF>
28	8Z-ZM1-207-010		LEVER, FF	61	8Z-ZM1-241-010		SPR-T, PLAY<YR1NF>
29	8Z-ZM1-206-010		LEVER, REW	61	8Z-ZM2-217-010		SPR-T, PLAY 2<YR2NF, YR3NF>
30	8Z-ZM1-210-010		LEVER, REC<YR1NF>	62	8Z-ZM2-601-010		CONN ASSY, 9P ZZM-2<YR1NF>
30	8Z-ZM1-211-110		LEVER, REC 2<YR2NF, YR3NF>	63	8Z-ZM1-275-010		W-L, 1.47-4-0.25
31	87-A90-404-010		HEAD, EH LE15B<YR1NF>	A	84-ZM2-242-010		S-SCREW, AZ1-2-6.4
31	87-A91-533-010		HEAD, EH PH-K380<YR2NF, YR3NF>	B	8Z-ZM2-220-110		V+2.6 ZZM-2
32	8Z-ZM2-218-010		LEVER, REC LOCK ZZM-2				
33	87-A91-492-010		SW, LEAF MSW18560				



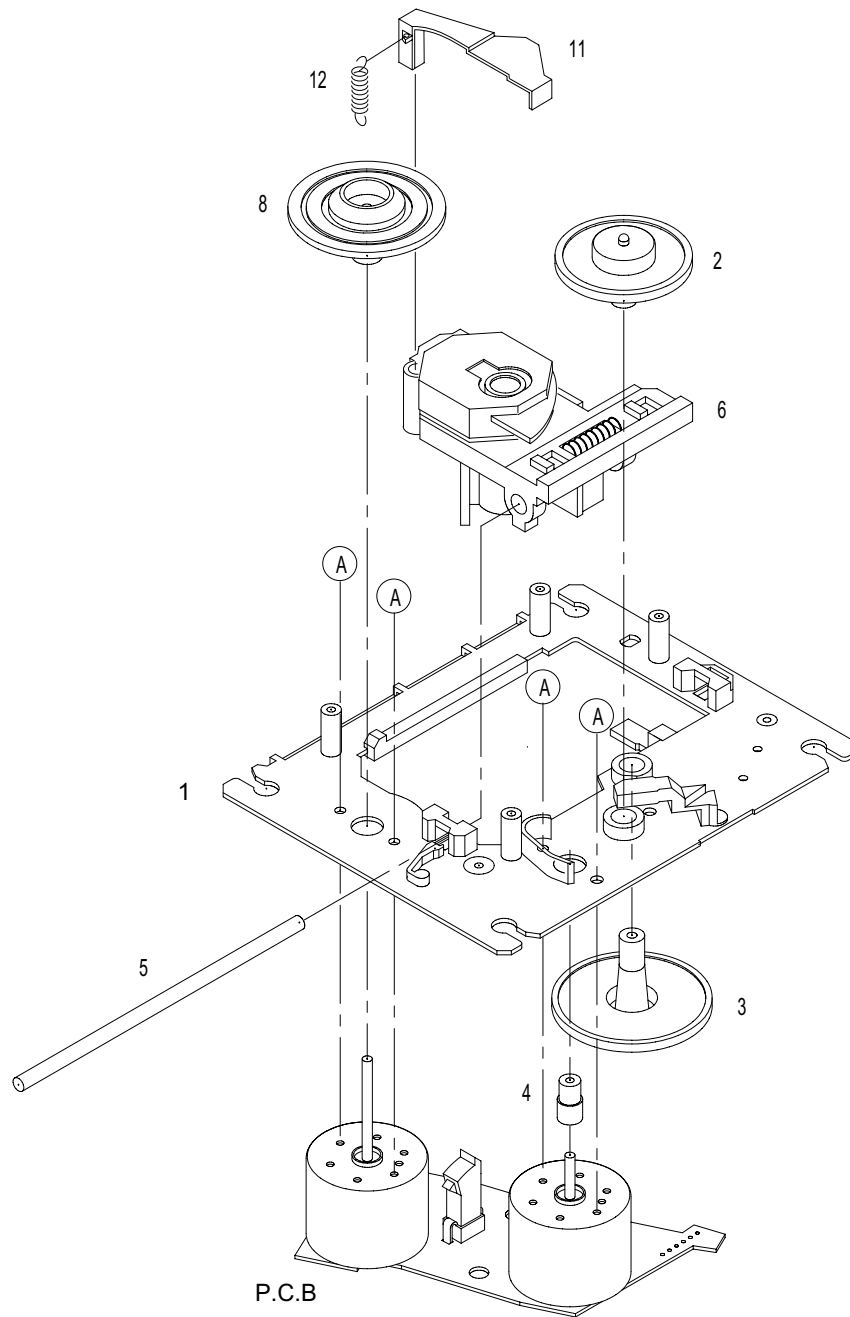




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REF. NO	PART NO.	KANRI NO.	DESCRIPTION
1	83-ZG3-224-310		HLD, M2
2	83-ZG3-228-610		CHAS, L6
3	83-ZG3-208-010		PULLEY, MOTOR
4	83-ZG3-213-010		LVR, SW
5	83-ZG3-209-610		CAM, SLIDE
6	83-ZG3-207-010		GEAR, TRAY
7	83-ZG3-204-210		GEAR, C
8	83-ZG3-205-010		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-ZG3-210-110		HLD, CHUCK
14	83-ZG3-602-010		RING, MAG
15	83-ZG3-212-010		CAP, DISC
16	83-ZG3-211-010		PLATE, DISC
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 kinly refer to "REFERENCE NAME LIST".

REF. NO	PART NO.	KANRI NO.	DESCRIPTION
1	83-ZG2-243-210		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-ZG2-253-010		SHAFT, SLIDE 5
6	87-A90-836-010		PICKUP, KSS-213F
8	83-ZG2-227-210		TURN TABLE, C1
11	83-ZG2-245-410		LEVER, SHUTTER
12	83-ZG2-250-110		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 kinly refer to "REFERENCE NAME LIST".

REF.NO	PART NO.	KANRI NO.	DESCRIPTION
1	8A-CT4-903-010		IB,U(ESF)S
2	8Z-CK4-962-010		RC UNIT,RC-ZAT04 (VS)
△ 3	87-A80-109-010		AC CORD,HK7281 BLK U

# 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



**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)  
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