

# SERVICE MANUAL

COMPACT DISC STEREO RADIO  
CASSETTE RECORDER

BASIC TAPE MECHANISM : TN-51RV-240  
BASIC CD MECHANISM : CMS-B31TG6

- This Service Manual is the "Revision Publishing" and replaces "Simple Manual", (S/M Code No. 09-001-426-8T1).
- If requiring information about the CD mechanism, see Service Manual of CMS-B31TG6, (S/M Code No. 09-001-341-1N2).

# SPECIFICATIONS

## Tuner section

### Frequency range

**FM :** 87.5 MHz–108 MHz  
Antenna : Rod antenna

**AM :** 530/531 kHz–1,710/1,602 kHz  
(10/9 kHz/step)  
Antenna : Ferrite bar antenna

## Deck section

### Track format

4 tracks, 2 channels

### Frequency range

Normal tape : 50 Hz–12,500 Hz (EIAJ)

### Recording system

AC bias

### Erasing system

Magnet erase

### Heads

Recording/Playback head x 1/  
Erasure head x 1

## CD player section

### Disc

Compact disc

### Scanning method

Non-contact optical scanner  
(semiconductor laser)

## General

### Speaker

100 mm cone type (2), 36 mm cone type (2)

### Output

Headphones jack (stereo mini-jack)

### Power output

2.5 W + 2.5 W (EIAJ 7 ohms DC)

### Power requirements

DC 12 V using eight R14 (size C) batteries,  
AC 120 V, 60 Hz

### Power consumption

12 W

### Dimensions (W x H x D)

460 (W) x 191.9 (H) x 261.2 (D) mm  
(18<sup>1</sup>/<sub>8</sub> X 7<sup>5</sup>/<sub>8</sub> X 10<sup>3</sup>/<sub>8</sub> in.)

### Weight

4 kg (8 lbs. 13 oz.) (excluding batteries)

• Design and specifications are subject to change without notice.

## ACCESSORIES / PACKAGE LIST

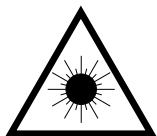
REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	8A-CH4-903-010		IB,U (ESF) B
△ 2	87-A80-109-010		AC CORD,HK7281 BLK U
3	8Z-CK4-962-010		RC UNIT,RC-ZAT04 (VS)

## 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 ylittävälle näkymättömälle lasersäteilylle.

### WARNING!

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

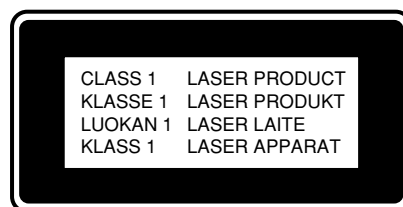
L'utilisation de commandes, réglages ou procédures autres que ceux spécifiés peut entraîner une dangereuse exposition aux radiations.

### 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.

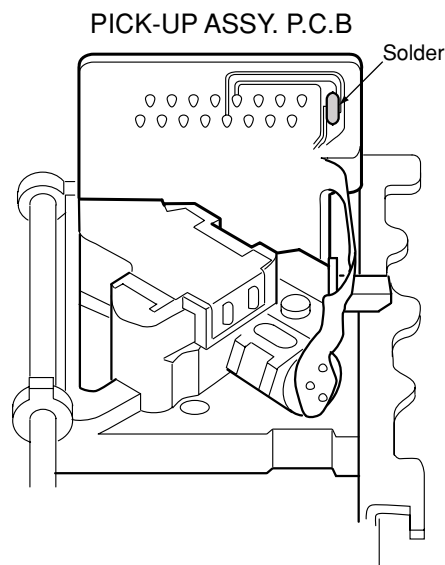
The CLASS 1 LASER PRODUCT label is located on the rear exterior.



## Precaution to replace Optical block

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.



# ELECTRICAL MAIN PARTS LIST

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION	REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
<b>IC</b>				C822	87-010-401-080		CAP, ELECT 1-50V
	87-A21-550-010		IC,TA2149N	C823	87-010-178-080		CHIP CAP 1000P
	87-A21-185-040		C-IC,LC72121M	C824	87-010-178-080		CHIP CAP 1000P
	87-A21-064-010		IC,LA4227	C829	87-010-178-080		CHIP CAP 1000P
	87-A21-520-040		C-IC,M61509FP	C830	87-010-178-080		CHIP CAP 1000P
	87-A20-446-010		C-IC,LA9241ML	C833	87-018-195-080		CAP, CER 1200P-16V
	87-A20-459-010		C-IC,LC78622ED	C834	87-010-248-080		CAP, ELECT 220-10V
	87-A21-093-010		IC,LA6541D	C843	87-010-197-080		CAP, CHIP 0.01 DM
	8A-CH4-661-010		C-IC,LC867132V-5G68	C844	87-018-124-080		CAP, CER 270P-50V
	87-A21-431-010		IC,BA4560N	C845	87-010-178-080		CHIP CAP 1000P
	87-A21-245-010		IC,RPM6938-V4	C846	87-010-263-080		CAP, ELECT 100-10V
<b>TRANSISTOR</b>				C851	87-010-186-080		CAP,CHIP 4700P
	89-327-143-080		TR,2SC2714 (0.1W)	C852	87-010-178-080		CHIP CAP 1000P
	87-026-447-080		TR,2SC1740SR	C853	87-018-211-080		CAP, CER 0.01-50
	89-111-624-080		TR,2SA1162Y	CN201	87-099-018-010		CONN,16P
	87-026-213-080		CHIP-TR,DTC114YK	CN801	87-A60-110-010		CONN,4P V S2M-4W
	89-327-125-080		CHIP TR,2SC2712GR	CNA302	8A-CH4-629-010		CONN ASSY, 6P MA-TU
	89-318-154-080		TR,2SC1815 (0.4W)	CNA801	8A-CD9-630-010		CONN ASSY, 4P RPH
	89-112-965-080		TR,2SA1296 (0.75W)	FC201	8A-CD9-620-010		FF-CABLE, 16P FR-MAIN
	87-026-463-080		TR,2SA933S (0.3W)	L801	87-007-342-010		COIL,OSC 85K BIAS
	87-026-291-080		TR,DTC124XS	SW801	8Z-CD9-609-010		SW,SL 1-6-2 PS62D01
	89-213-702-080		TR,2SB1370E	<b>CD C.B</b>			
	87-026-462-080		TR,2SC1740 S(RS 0.3W)	C30	87-010-260-080		CAP, ELECT 47-25V
	89-113-187-080		TR,2SA1318TU	C263	87-010-178-080		CHIP CAP 1000P
	87-026-239-080		TR,DTC114TK	C264	87-010-178-080		CHIP CAP 1000P
	87-026-210-080		TR,DTC144EK	C265	87-010-263-080		CAP, ELECT 100-10V
	87-026-464-080		TR,DTC114TS (0.3W)	C266	87-010-263-080		CAP, ELECT 100-10V
<b>DIODE</b>				C267	87-010-112-080		CAP, ELECT 100-16V
	87-020-465-080		DIODE,1SS133 (110MA)	C268	87-010-112-080		CAP, ELECT 100-16V
	87-017-072-080		ZENER,HZS3B1	C271	87-010-221-080		CAP, ELECT 470-10V
	87-027-703-080		ZENER,HZ7A1L	C272	87-010-221-080		CAP, ELECT 470-10V
	87-A40-648-080		ZENER,MTZJ8.2A	C278	87-010-405-080		CAP, ELECT 10-50V
	87-017-978-080		DIODE,1N4003	C279	87-010-385-080		CAP, ELECT 220-25V
	87-027-702-080		DIODE,ZENER HZ6C2L (200MA)	C301	87-016-495-000		CAP,E 3300-25 M SMG
	87-A40-465-010		DIODE,FR202	C306	87-010-404-080		CAP, ELECT 4.7-50V
	87-A40-234-080		DIODE,ZENER MTZJ5.6A	C307	87-010-401-080		CAP, ELECT 1-50V
				C308	87-010-221-080		CAP, ELECT 470-10V
<b>MAIN C.B</b>				C311	87-010-265-080		CAP, ELECT 33-16M
C211	87-010-805-080		CAP, S 1-16	C312	87-010-385-080		CAP, ELECT 220-25V
C212	87-010-805-080		CAP, S 1-16	C316	87-010-263-080		CAP, ELECT 100-10V
C215	87-016-460-080		C-CAP,S 0.22-16 B	C317	87-010-197-080		CAP, CHIP 0.01 DM
C216	87-016-460-080		C-CAP,S 0.22-16 B	C321	87-010-197-080		CAP, CHIP 0.01 DM
C231	87-010-213-080		C-CAP,S 0.015-50 B	C322	87-010-263-080		CAP, ELECT 100-10V
C232	87-010-213-080		C-CAP,S 0.015-50 B	C325	87-010-405-080		CAP, ELECT 10-50V
C233	87-A10-201-080		C-CAP,S0.33-16 KB	C401	87-010-403-080		CAP, ELECT 3.3-50V
C234	87-A10-201-080		C-CAP,S0.33-16 KB	C402	87-010-197-080		CAP, CHIP 0.01 DM
C235	87-016-669-080		C-CAP,S 0.1-25 K B	C403	87-010-263-080		CAP, ELECT 100-10V
C236	87-016-669-080		C-CAP,S 0.1-25 K B	C404	87-010-248-080		CAP, ELECT 220-10V
C237	87-010-371-080		CAP, ELECT 470-6.3M	C405	87-010-197-080		CAP, CHIP 0.01 DM
C239	87-010-197-080		CAP, CHIP 0.01 DM	C406	87-010-374-080		CAP, ELECT 47-10V
C240	87-010-197-080		CAP, CHIP 0.01 DM	C407	87-010-178-080		CHIP CAP 1000P
C247	87-010-401-080		CAP, ELECT 1-50V	C408	87-010-198-080		CAP, CHIP 0.022
C248	87-010-401-080		CAP, ELECT 1-50V	C409	87-010-248-080		CAP, ELECT 220-10V
C310	87-010-248-080		CAP, ELECT 220-10V	C410	87-010-263-080		CAP, ELECT 100-10V
C801	87-010-248-080		CAP, ELECT 220-10V	C411	87-A11-177-080		C-CAP,S 0.15-16 K B
C805	87-012-365-080		C-CAP,S 0.027-25VBK	C412	87-010-401-080		CAP, ELECT 1-50V
C806	87-012-365-080		C-CAP,S 0.027-25VBK	C413	87-016-369-080		C-CAP,S 0.033-25 B K
C807	87-010-405-080		CAP, ELECT 10-50V	C414	87-010-405-080		CAP, ELECT 10-50V
C808	87-010-405-080		CAP, ELECT 10-50V	C416	87-010-545-080		CAP, ELECT 0.22-50V
C809	87-010-401-080		CAP, ELECT 1-50V	C417	87-012-157-080		C-CAP,S 330P-50 CH
C810	87-010-401-080		CAP, ELECT 1-50V	C418	87-010-213-080		C-CAP,S 0.015-50 B
C811	87-010-178-080		CHIP CAP 1000P	C419	87-A11-608-080		C-CAP,S 0.33-25 K B
C812	87-010-178-080		CHIP CAP 1000P	C420	87-016-369-080		C-CAP,S 0.033-25 B K
C816	87-010-180-080		C-CER 1500P	C421	87-A11-177-080		C-CAP,S 0.15-16 K B
C817	87-010-180-080		C-CER 1500P	C422	87-010-183-080		C-CAP,S 2700P-50 B
C821	87-010-401-080		CAP, ELECT 1-50V	C423	87-010-956-080		CHIP-CAP,S 0.068-25B
				C424	87-010-993-080		C-CAP,S 0.056-25 B
				C425	87-010-176-080		C-CAP,S 680P-50 SL

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION	REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C426	87-A11-608-080		C-CAP,S 0.33-25 K B	CNA205	8A-CD9-626-010		CONN ASSY,2P DOOR
C428	87-010-197-080		CAP, CHIP 0.01 DM	CNA303	8A-CH4-634-010		CONN ASSY, 2P S-SP.L
C429	87-010-186-080		CAP,CHIP 4700P	CNA304	8A-CH4-635-010		CONN ASSY, 2P S-SP.R
C430	87-012-156-080		C-CAP,S 220P-50 CH	CNA402	8A-CD9-625-010		CONN ASSY,6P CD-ME
C431	87-010-545-080		CAP, ELECT 0.22-50V	CNA802	8A-CD9-631-010		CONN ASSY,4P TP-ME
C432	87-010-374-080		CAP, ELECT 47-10V	FC401	8A-CD9-621-010		FF-CABLE, 16P CD-RF
C433	87-010-401-080		CAP, ELECT 1-50V	FC403	8A-CD9-622-010		FF-CABLE, 8P CD-FR
C434	87-010-184-080		CHIP CAPACITOR 3300P(K)	L401	87-003-102-080		COIL, 10UH
C435	87-010-197-080		CAP, CHIP 0.01 DM	L404	87-003-152-080		COIL, 100UH
C436	87-010-374-080		CAP, ELECT 47-10V	R840	87-029-124-010		RES,FUSE 2.2-1/4
C437	87-010-404-080		CAP, ELECT 4.7-50V	SFR430	87-024-437-080		SFR,100K H RH063MC
C438	87-012-368-080		C-CAP,S 0.1-50 F	SW205	87-036-389-010		SW, PUSH 1-1-1 R8120125
C439	87-010-178-080		CHIP CAP 1000P	X401	8Z-CD5-633-010		VIB, CER16.93MHZ FCR16.93M2
C440	87-010-145-080		C-CAP,S 1P-50 C CH GRM				
C441	87-010-197-080		CAP, CHIP 0.01 DM				
FRONT C.B							
C442	87-010-312-080		C-CAP,S 15P-50 CH	C601	87-010-313-080		CAP, CHIP 18P
C445	87-012-368-080		C-CAP,S 0.1-50 F	C602	87-010-315-080		C-CAP,S 27P-50 CH
C446	87-012-368-080		C-CAP,S 0.1-50 F	C603	87-010-319-080		C-CAP,S 56P-50 CH
C447	87-012-368-080		C-CAP,S 0.1-50 F	C604	87-010-312-080		C-CAP,S 15P-50 CH
C448	87-010-315-080		C-CAP,S 27P-50 CH	C605	87-010-317-080		C-CAP,S 39P-50 CH
C450	87-012-140-080		CAP 470P	C607	87-010-196-080		CHIP CAPACITOR,0.1-25
C451	87-012-156-080		C-CAP,S 220P-50 CH	C608	87-010-196-080		CHIP CAPACITOR,0.1-25
C455	87-010-263-080		CAP, ELECT 100-10V	C610	87-010-555-040		CAP,E 100-10 GAS
C457	87-010-312-080		C-CAP,S 15P-50 CH	C611	87-010-196-080		CHIP CAPACITOR,0.1-25
C458	87-010-312-080		C-CAP,S 15P-50 CH	C612	87-A10-189-040		CAP,E 220-10
C459	87-010-263-080		CAP, ELECT 100-10V	C613	87-010-495-040		CAP,E 2.2-50 GAS
C460	87-015-819-080		CAPACITOR,0.01	C614	87-010-196-080		CHIP CAPACITOR,0.1-25
C461	87-010-197-080		CAP, CHIP 0.01 DM	C615	87-010-493-040		CAP,E 0.47-50 GAS
C462	87-010-248-080		CAP, ELECT 220-10V	C616	87-010-494-040		CAP,E 1-50 GAS
C463	87-010-197-080		CAP, CHIP 0.01 DM	C617	87-010-178-080		CHIP CAP 1000P
C465	87-010-404-080		CAP, ELECT 4.7-50V	C618	87-010-498-040		CAP,E 10-16 GAS
C466	87-012-368-080		C-CAP,S 0.1-50 F	C620	87-015-785-080		CHIP CAPACITOR, 0.1FZ-25Z
C467	87-010-263-080		CAP, ELECT 100-10V	C625	87-010-196-080		CHIP CAPACITOR,0.1-25
C469	87-012-154-080		C-CAP,S 150P-50 CH	CN601	87-099-033-010		16P 6216 H
C470	87-010-544-080		CAP, ELECT 0.1-50V	CN602	87-099-201-010		CONN,8P 6216 H
C471	87-010-196-080		CHIP CAPACITOR, 0.1FZ-25Z	CNA603	8A-CD9-624-010		CONN ASSY,4P TU-FR
C472	87-015-785-080		CHIP CAPACITOR, 0.1FZ-25Z	JW611	87-003-097-080		COIL,1.0UH K LAL02
C473	87-015-785-080		CHIP CAPACITOR, 0.1FZ-25Z	JW612	87-003-097-080		COIL,1.0UH K LAL02
C474	87-010-196-080		CHIP CAPACITOR, 0.1FZ-25Z	JW637	87-003-097-080		COIL,1.0UH K LAL02
C475	87-010-197-080		CAP, CHIP 0.01 DM	LCD601	8Z-CH4-635-010		LCD,HLC7365 ZCH-4
C476	87-010-236-080		CAP,E 1000-10 SME	LED602	88-CD6-630-010		LED,934ID RED
C477	87-010-197-080		CAP, CHIP 0.01 DM	LED603	88-CD6-630-010		LED,934ID RED
C478	87-010-263-080		CAP, ELECT 100-10V	LED604	88-CD6-630-010		LED,934ID RED
C479	87-010-197-080		CAP, CHIP 0.01 DM	LED606	88-CD6-630-010		LED,934ID RED
C480	87-010-221-080		CAP, ELECT 470-10V	LED607	88-CD6-630-010		LED,934ID RED
C481	87-010-405-080		CAP, ELECT 10-50V	LED608	88-CD6-630-010		LED,934ID RED
C482	87-010-405-080		CAP, ELECT 10-50V	LED609	88-CD6-630-010		LED,934ID RED
C489	87-012-368-080		C-CAP,S 0.1-50 F	LED611	88-CD6-631-010		LED,934GD GRN
C490	87-012-368-080		C-CAP,S 0.1-50 F	LED612	88-CD6-630-010		LED,934ID RED
C491	87-010-197-080		CAP, CHIP 0.01 DM	S601	87-A91-704-080		SW,TACT EVQ 214 05R
C492	87-010-221-080		CAP, ELECT 470-10V	S603	87-A91-704-080		SW,TACT EVQ 214 05R
C493	87-010-180-080		C-CAP,S 1500P-50 KB<81U>	S604	87-A91-704-080		SW,TACT EVQ 214 05R
C494	87-A11-155-080		CAP,TC U 0.01-16	S605	87-A91-704-080		SW,TACT EVQ 214 05R
C495	87-012-368-080		C-CAP,S 0.1-50 F	S606	87-A91-704-080		SW,TACT EVQ 214 05R
C501	87-012-368-080		C-CAP,S 0.1-50 F	S607	87-A91-704-080		SW,TACT EVQ 214 05R
C502	87-010-322-080		C-CAP,S 100P-50 CH	S608	87-A91-704-080		SW,TACT EVQ 214 05R
C503	87-010-322-080		C-CAP,S 100P-50 CH	S613	87-A91-704-080		SW,TACT EVQ 214 05R
C504	87-010-322-080		C-CAP,S 100P-50 CH	S621	87-A91-704-080		SW,TACT EVQ 214 05R
C505	87-010-322-080		C-CAP,S 100P-50 CH	S622	87-A91-704-080		SW,TACT EVQ 214 05R
C506	87-010-322-080		C-CAP,S 100P-50 CH	S623	87-A91-704-080		SW,TACT EVQ 214 05R
C510	87-012-368-080		C-CAP,S 0.1-50 F	X601	87-030-273-010		VIB,XTAL 32.768K5PPM
C831	87-010-198-080		CAP, CHIP 0.022	X602	87-030-376-080		VIB,CER CSA5.76MG200
CN202	8A-CH4-689-010		CONN,3P V 2.5				
CN205	87-A60-109-010		CONN,2P V S2M-2W				
CN301	8A-CH4-689-010		CONN,3P V 2.5				
CN303	8A-CH4-686-010		CONN, 2P V 2.5				
CN304	8A-CH4-686-010		CONN, 2P V 2.5				
CN401	87-A60-424-010		CONN,16P V TOC-B	C1	87-010-314-080		C-CAP,S 22P-50V
CN403	87-099-201-010		CONN,8P 6216 H	C2	87-010-316-080		C-CAP,S 33P-50 CH
CN802	8A-CH4-688-010		CONN,6P V 2.5	C3	87-010-314-080		C-CAP,S 22P-50V
				C5	87-016-669-080		C-CAP,S 0.1-25 K B
				C6	87-010-313-080		CAP, CHIP 18P
TUNER C.B							

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION	REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C7	87-012-140-080		CAP 470P	C276	87-016-280-080		CAP,E 3.3-50 M BP SME
C8	87-010-178-080		CHIP CAP 1000P	CN204	8A-CH4-687-010		CONN,4P V 2.5
C10	87-010-197-080		CAP, CHIP 0.01 DM	CNA203	8A-CD9-628-010		CONN ASSY,3P MA-HP
C11	87-010-197-080		CAP, CHIP 0.01 DM	CNA204	8A-CH4-633-010		CONN ASSY,4P SP
C12	87-010-197-080		CAP, CHIP 0.01 DM	J251	87-A60-569-010		JACK,HTJ-035-18
C13	87-010-150-080		C-CAP,S 6P-50 CH				
C14	87-010-303-080		C-CAP,S 330P-50CH	KEY C.B			
C15	87-010-178-080		CHIP CAP 1000P				
C16	87-010-374-080		CAP, ELECT 47-10V	CN605	87-A60-109-010		CONN,2P V S2M-2W
C17	87-010-198-080		CAP, CHIP 0.022	S614	87-A91-704-080		SW,TACT EVQ 214 05R
				S615	87-A91-704-080		SW,TACT EVQ 214 05R
C18	87-015-835-080		C-CAP,0.047 D				
C19	87-010-263-080		CAP, ELECT 100-10V	BATT1 C.B			
C20	87-010-404-080		CAP, ELECT 4.7-50V				
C21	87-010-197-080		CAP, CHIP 0.01 DM				
C22	87-010-197-080		CAP, CHIP 0.01 DM	C901	87-018-205-080		CAP, CERA-SOL 0.022
				C902	87-018-205-080		CAP, CERA-SOL 0.022
C23	87-010-197-080		CAP, CHIP 0.01 DM	C903	87-018-205-080		CAP, CERA-SOL 0.022
C24	87-010-303-080		C-CAP,S 330P-50CH	C904	87-018-205-080		CAP, CERA-SOL 0.022
C25	87-016-460-080		C-CAP,S 0.22-16 B	CNA901	8A-CD9-627-010		CONN ASSY,3P PWR
C27	87-A11-067-080		C-CAP,S 1-10 K B				
C28	87-016-669-080		C-CAP,S 0.1-25 K B	△ PT901	8A-CD9-606-010		PT,U 2.5W
C29	87-016-669-080		C-CAP,S 0.1-25 K B				
C30	87-010-198-080		CAP, CHIP 0.022	BATT2 C.B			
C31	87-010-198-080		CAP, CHIP 0.022				
C33	87-012-358-080		C-CAP,S 0.47-10 F Z				
C34	87-012-358-080		C-CAP,S 0.47-10 F Z	SP C.B			
C35	87-015-819-080		CAPACITOR,0.01				
C36	87-010-263-080		CAP, ELECT 100-10V				
C37	87-010-197-080		CAP, CHIP 0.01 DM				
C38	87-010-263-080		CAP, ELECT 100-10V				
C39	87-010-404-080		CAP, ELECT 4.7-50V				
C40	87-010-197-080		CAP, CHIP 0.01 DM				
C41	87-010-178-080		CHIP CAP 1000P				
C42	87-010-178-080		CHIP CAP 1000P				
C43	87-010-178-080		CHIP CAP 1000P				
C44	87-010-311-080		CAP 12P				
C45	87-010-312-080		C-CAP,S 15P-50 CH				
C46	87-010-197-080		CAP, CHIP 0.01 DM				
C47	87-010-197-080		CAP, CHIP 0.01 DM				
C48	87-010-197-080		CAP, CHIP 0.01 DM				
C49	87-012-140-080		CAP 470P				
C50	87-010-197-080		CAP, CHIP 0.01 DM				
C71	87-010-197-080		CAP, CHIP 0.01 DM				
C72	87-010-263-080		CAP, ELECT 100-10V				
C73	87-010-197-080		CAP, CHIP 0.01 DM				
C75	87-010-197-080		CAP, CHIP 0.01 DM				
C76	87-010-197-080		CAP, CHIP 0.01 DM				
C91	87-012-140-080		CAP 470P				
C92	87-010-197-080		CAP, CHIP 0.01 DM				
C93	87-010-197-080		CAP, CHIP 0.01 DM				
CF1	87-A91-094-010		FLTR,CDA10.7 MG80A				
CF2	87-008-261-010		FILTER, SFE10.7MA5-A				
CF3	87-008-261-010		FILTER, SFE10.7MA5-A				
CN2	87-099-854-010		CONN,6P S2M-6W				
CN3	87-A60-110-010		CONN,4P V S2M-4W				
D3	87-A40-616-070		VARI-CAP,SVC384 (S/T)				
D4	87-A40-128-080		C-VARI-CAP,HVU202A				
D5	87-A40-128-080		C-VARI-CAP,HVU202A				
L2	87-A50-560-010		COIL,FM BPF(ACD)				
L3	8A-CH4-670-010		BAR-ANT,MW 2B-ACH(COI)				
L4	87-A50-420-010		COIL,MW OSC(SYN)				
L5	87-A50-566-010		COIL,FM RF EX(ACH)				
L6	87-A50-567-010		COIL,FM OSC(ACH)				
L7	87-A91-308-010		FLTR,PCFAZH- 450T (TOK)				
L8	87-005-849-080		COIL,10UH(CECS)				
TC1	87-011-254-080		TRIMER,20P LAR				
X1	87-A70-061-010		VIB,XTAL 4.500MHZ CSA-309				

H.P. C.B

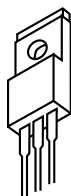
C275 87-016-280-080 CAP,E 3.3-50 M BP SME

# TRANSISTOR ILLUSTRATION



E C B

2SA933  
2SC1740  
2SC1740  
DTC114TS  
DTC124XS



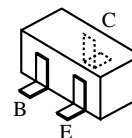
B C E

2SB1370



E C B

2SA1296  
2SC1815



2SA1162  
2SC2712  
2SC2714  
DTC114TK  
DTC114YK  
DTC144EK



E C B

2SA1318

## 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



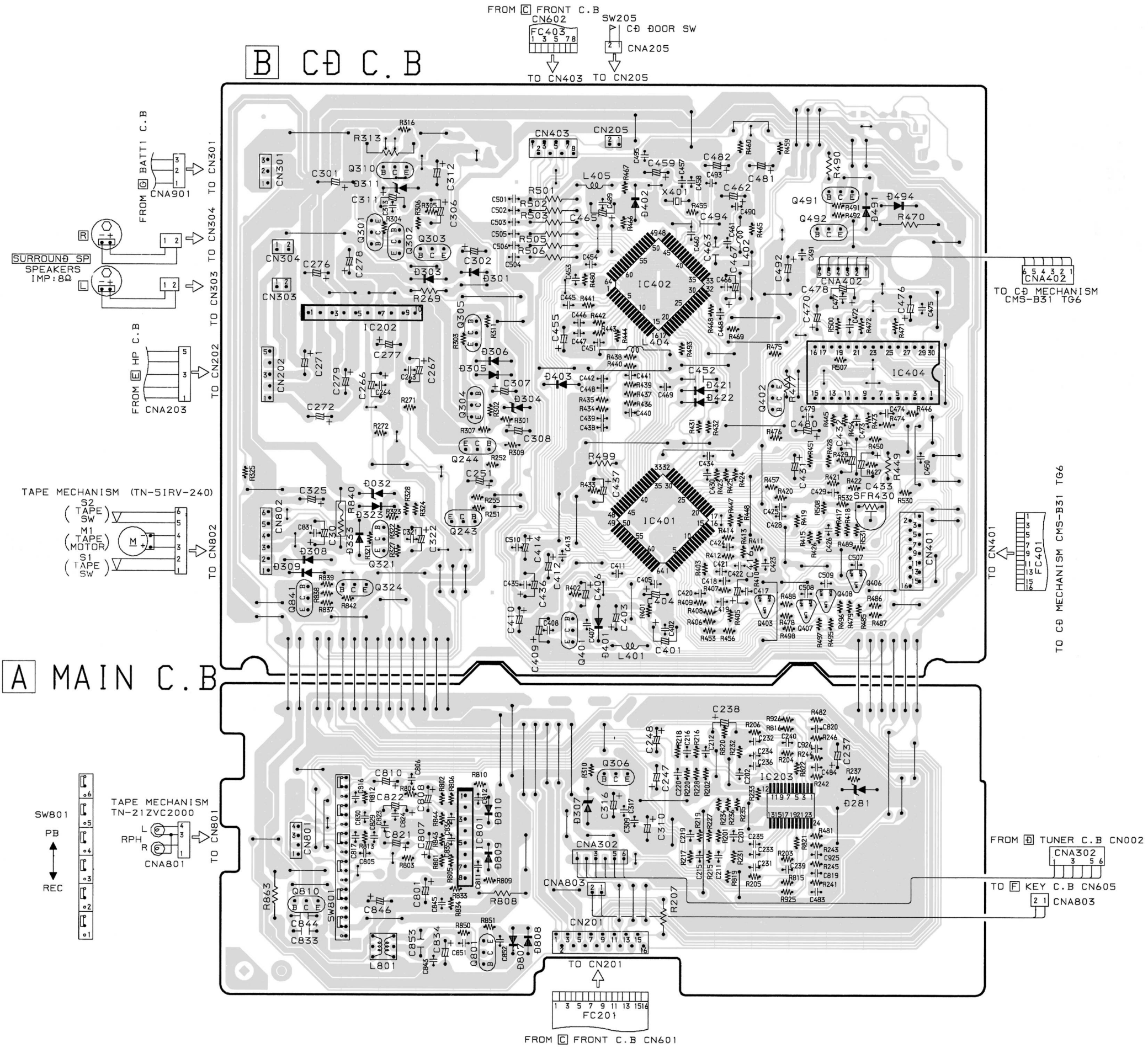
A  
抵抗部品コード  
Resistor Code

桁表示  
Figure  
抵抗値  
Value of resistor

## チップ抵抗 Chip resistor

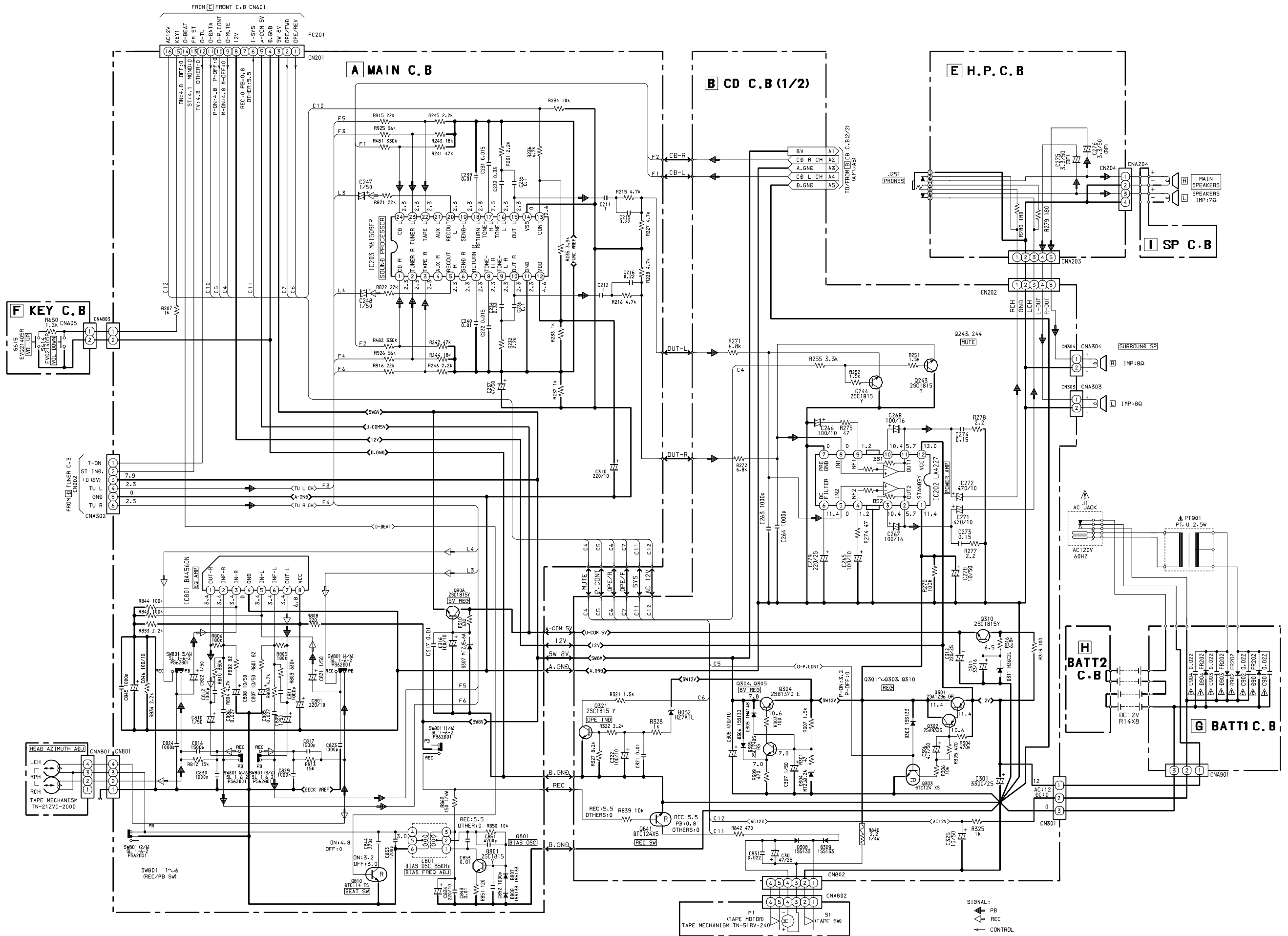
容量 Wattage	種類 Type	許容誤差 Tolerance	記号 Symbol	寸法/Dimensions (mm)			抵抗コード : A Resistor Code : A	
				外形/Form	L	W		t
1/16W	1005	± 5%	CJ		1.0	0.5	0.35	104
1/16W	1608	± 5%	CJ		1.6	0.8	0.45	108
1/10W	2125	± 5%	CJ		2	1.25	0.45	118
1/8W	3216	± 5%	CJ		3.2	1.6	0.55	128

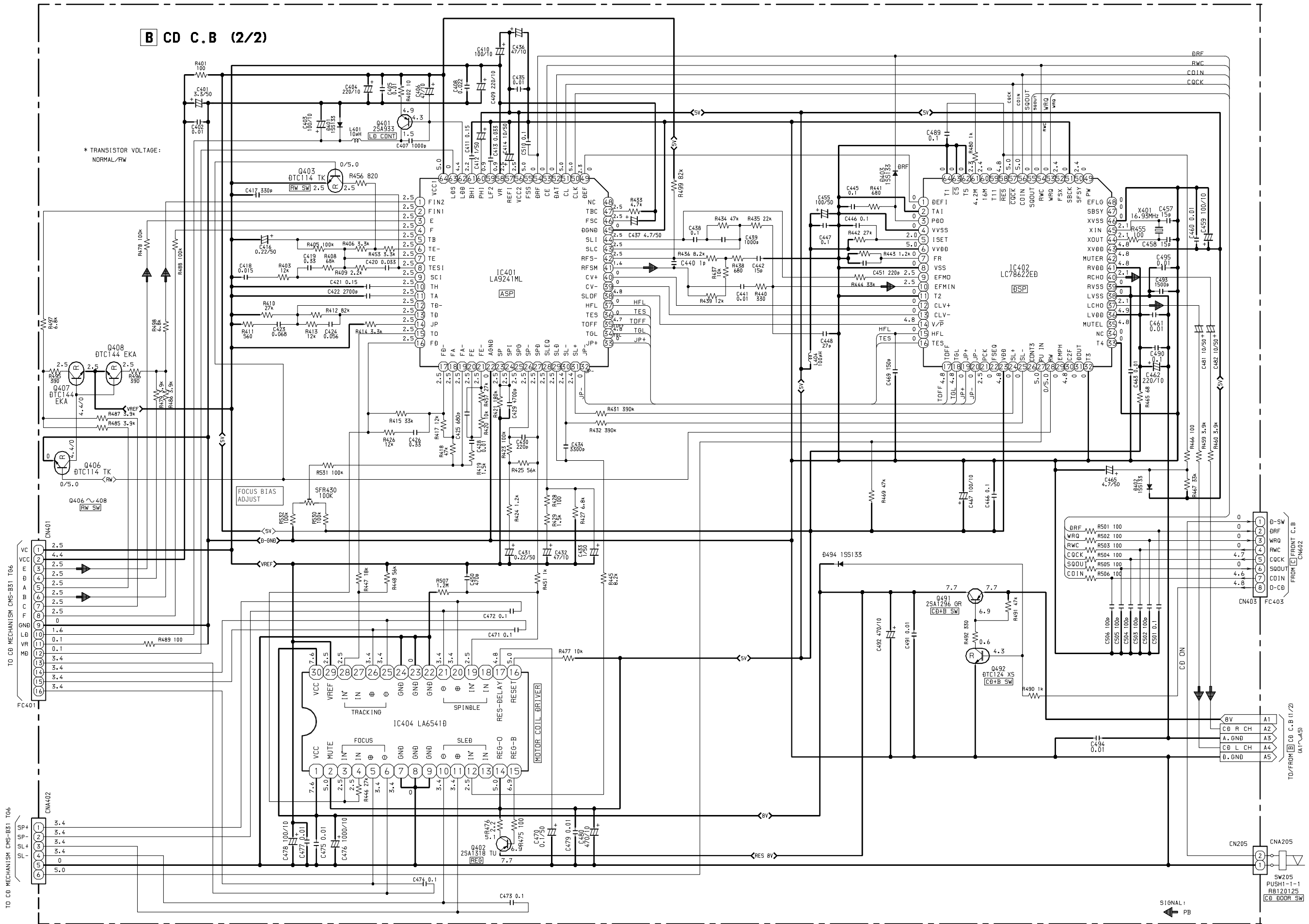






SCHEMATIC DIAGRAM- 1 (MAIN/ CD (1/2)/ H.P/ KEY/ SP/ BATT1/ BATT2)

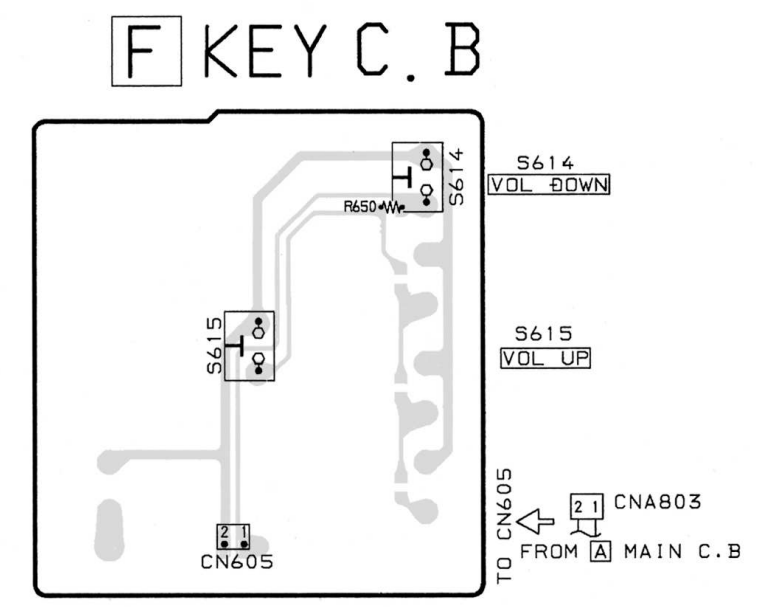
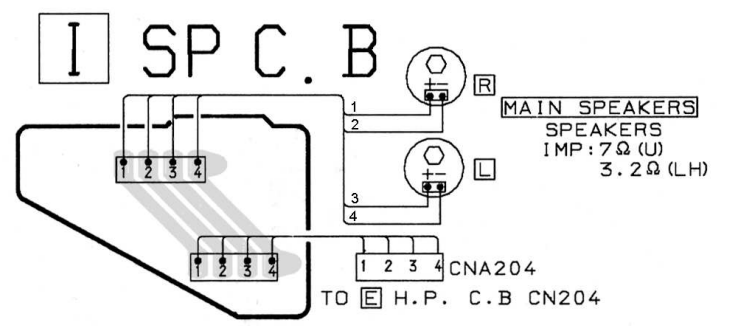
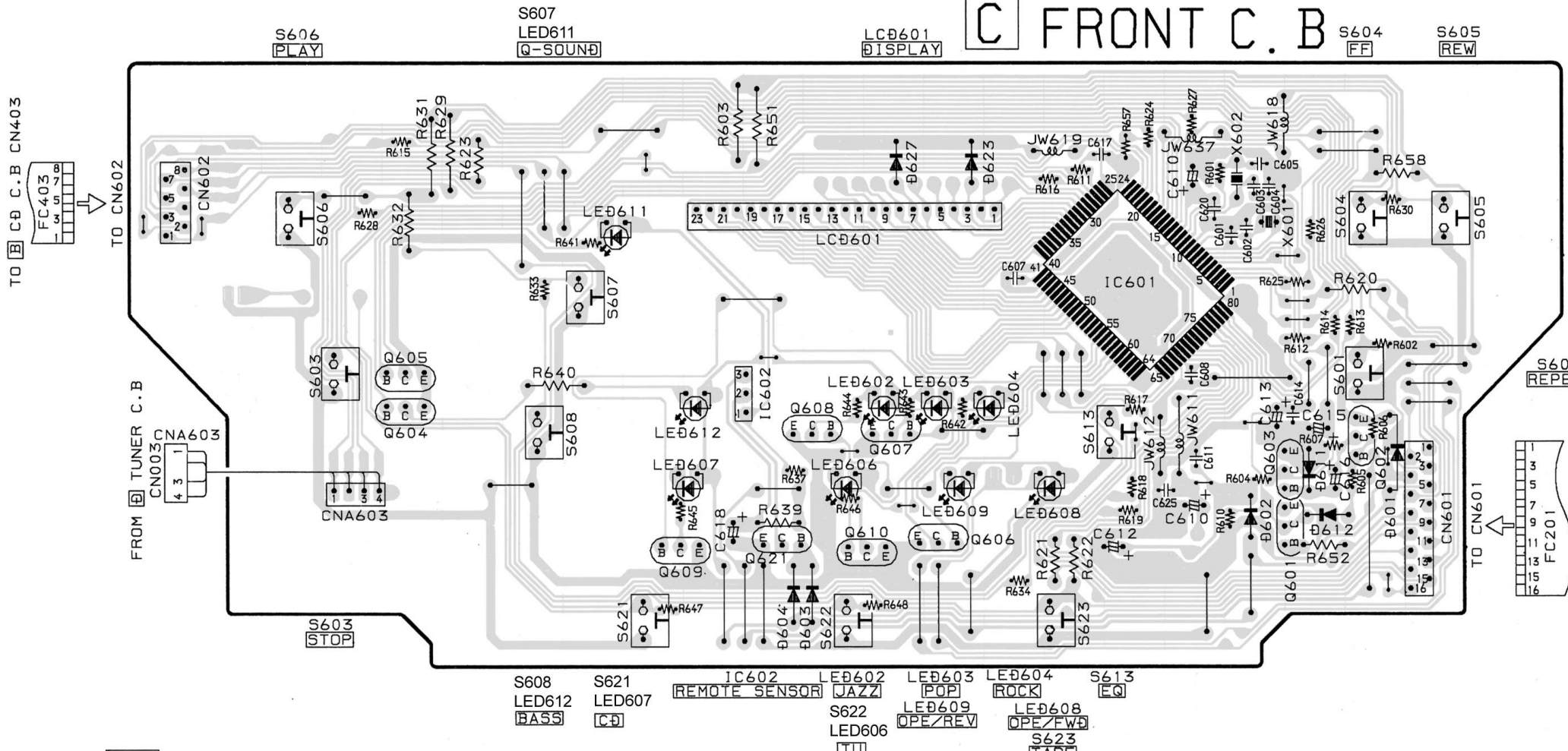




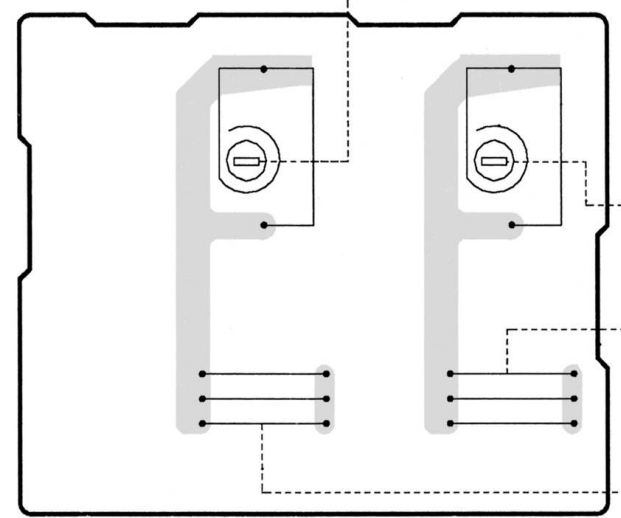
32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
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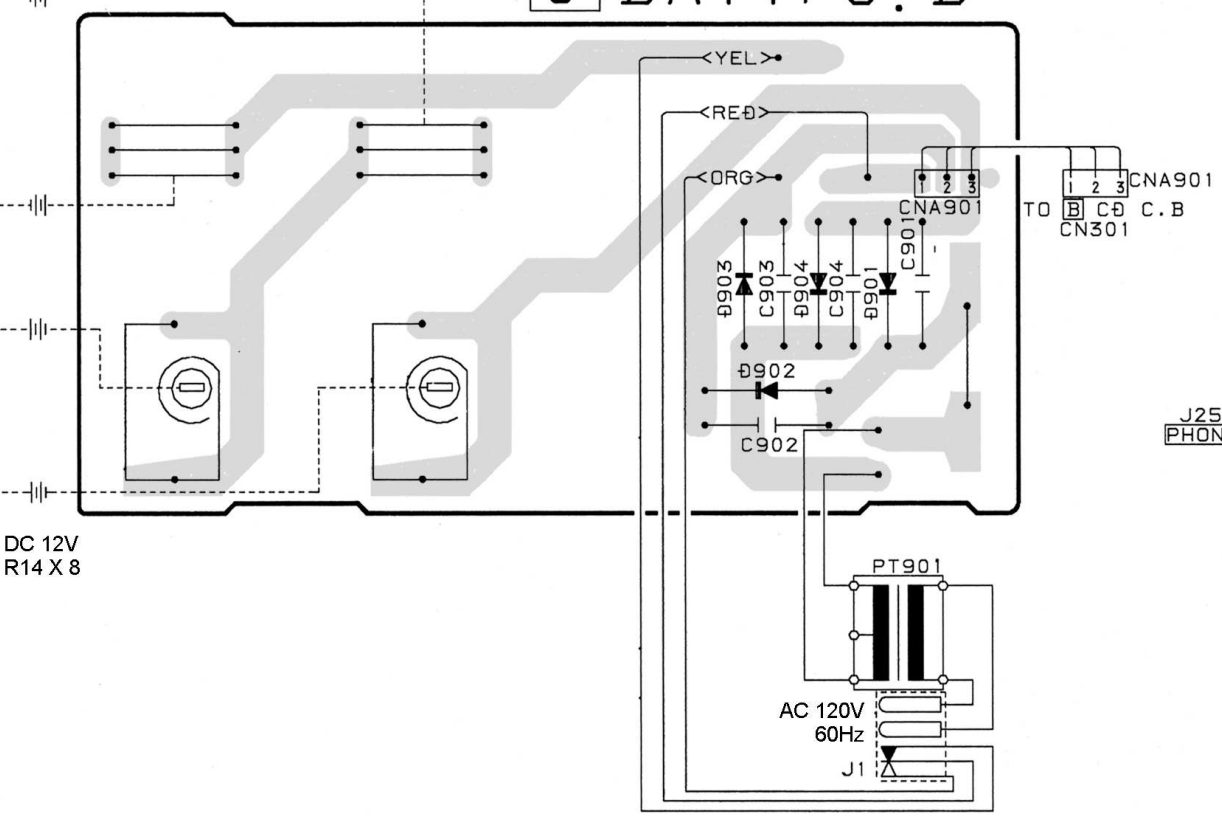
**C FRONT C. B**



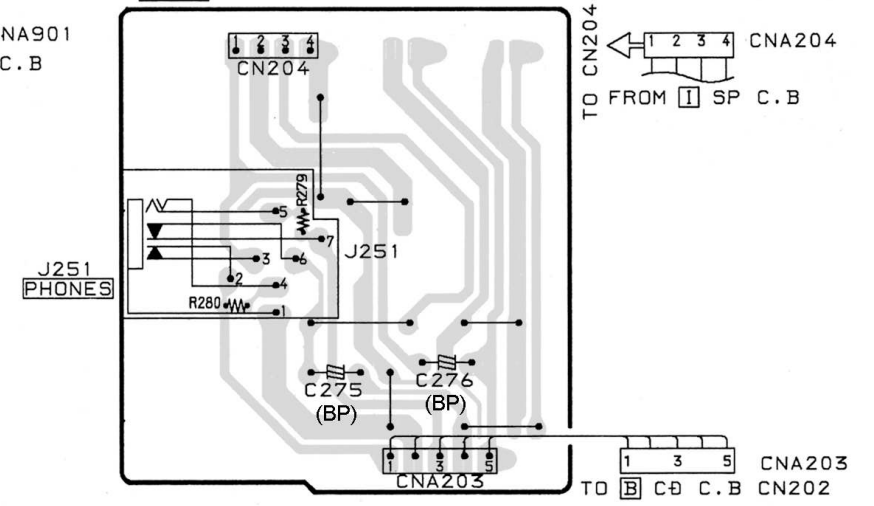
**H BATT2 C. B**



**G BATT1 C. B**

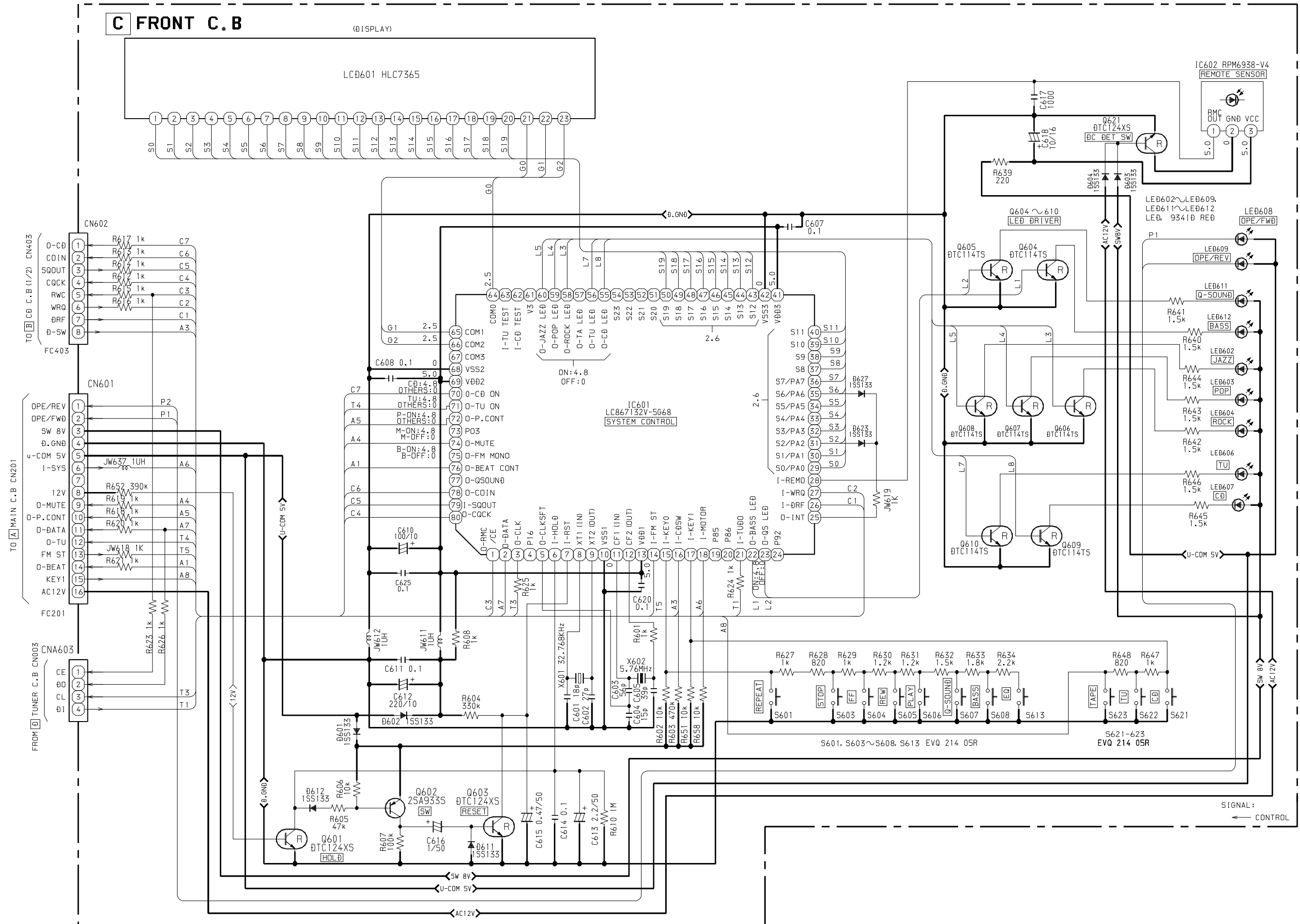


**E H.P. C. B**



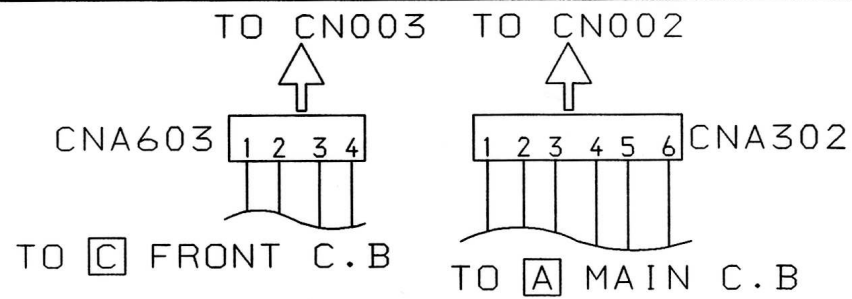
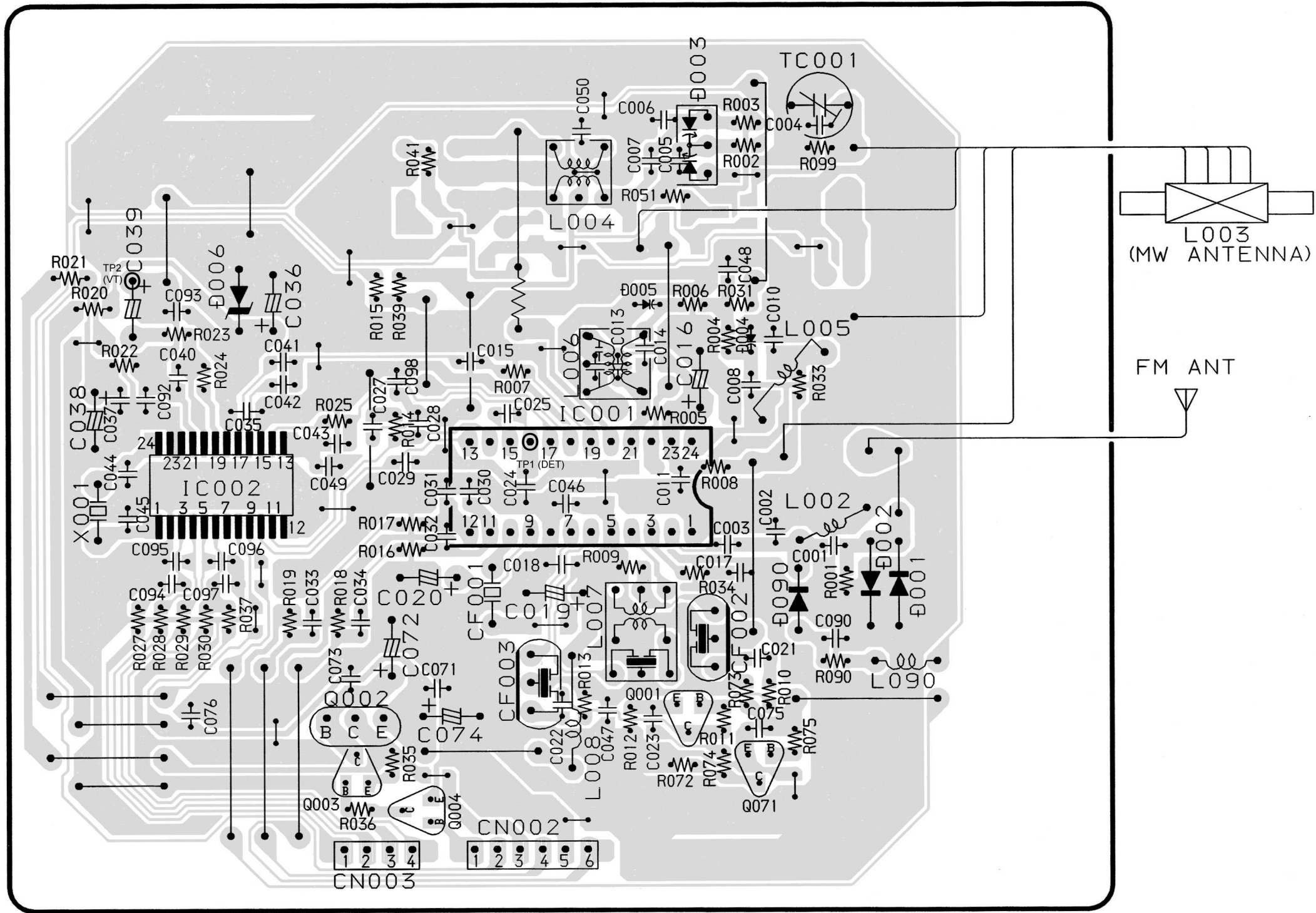
- S608 LED612 BASS
- S621 LED607 [C]
- IC602 REMOTE SENSOR
- LED602 JAZZ
- LED603 POP
- LED604 ROCK
- S613 EQ
- S622 LED609 OPE/REV
- LED606 TU
- LED608 OPE/FWD
- S623 TAPE

SCHEMATIC DIAGRAM - 3 (FRONT)

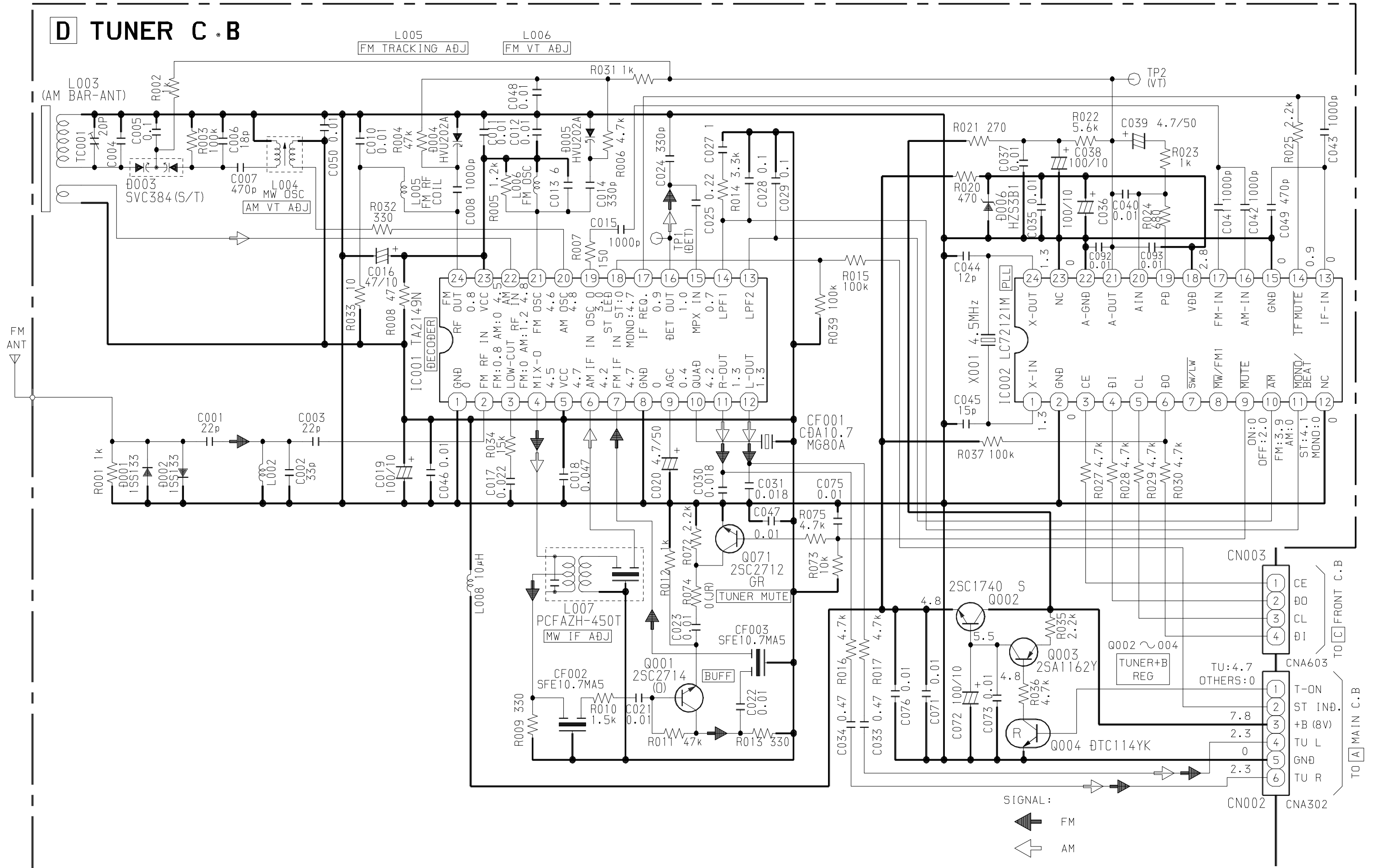




# ⊞ TUNER C. B



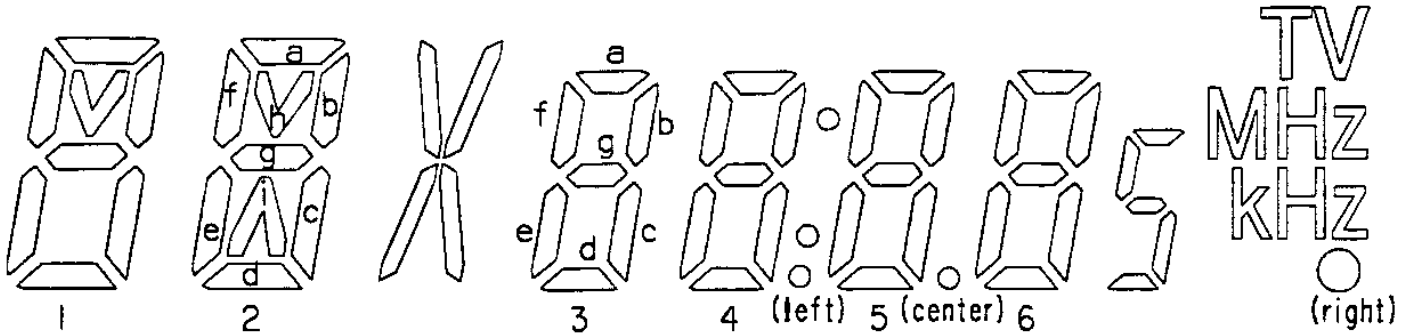
A  
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LCD DIAGRAM

LCD, HLC7365

VOL G 1 M MONO STEREO

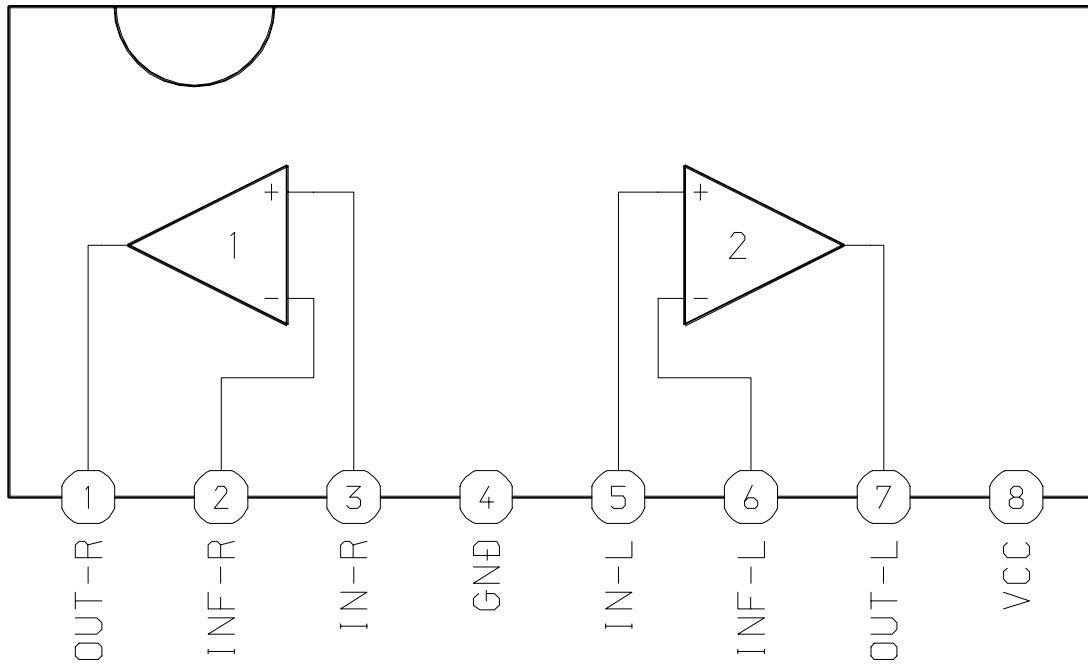


NO.	COM.1	COM.2	COM.3
1	2b	2c	2d
2	1b	1c	1d
3	1a	1f	1e
4	1h	1g	VOL
5	2a	2f	2e
6	2h	2g	2i
7	3f	3e	C
8	3a	3g	3d
9	3b	3c	I
10	4f	4e	M
11	4a	4g	4d
12	4b	4c	X
13	•	• (left)	MONO
14	5f	5e	• (right)
15	5a	5g	5d
16	5b	5c	• (center)
17	6f	6e	STEREO
18	6a	6g	6d
19	6b	6c	S
20	TV	MHz	KHz
21	COM.1		
22		COM.2	
23			COM.3

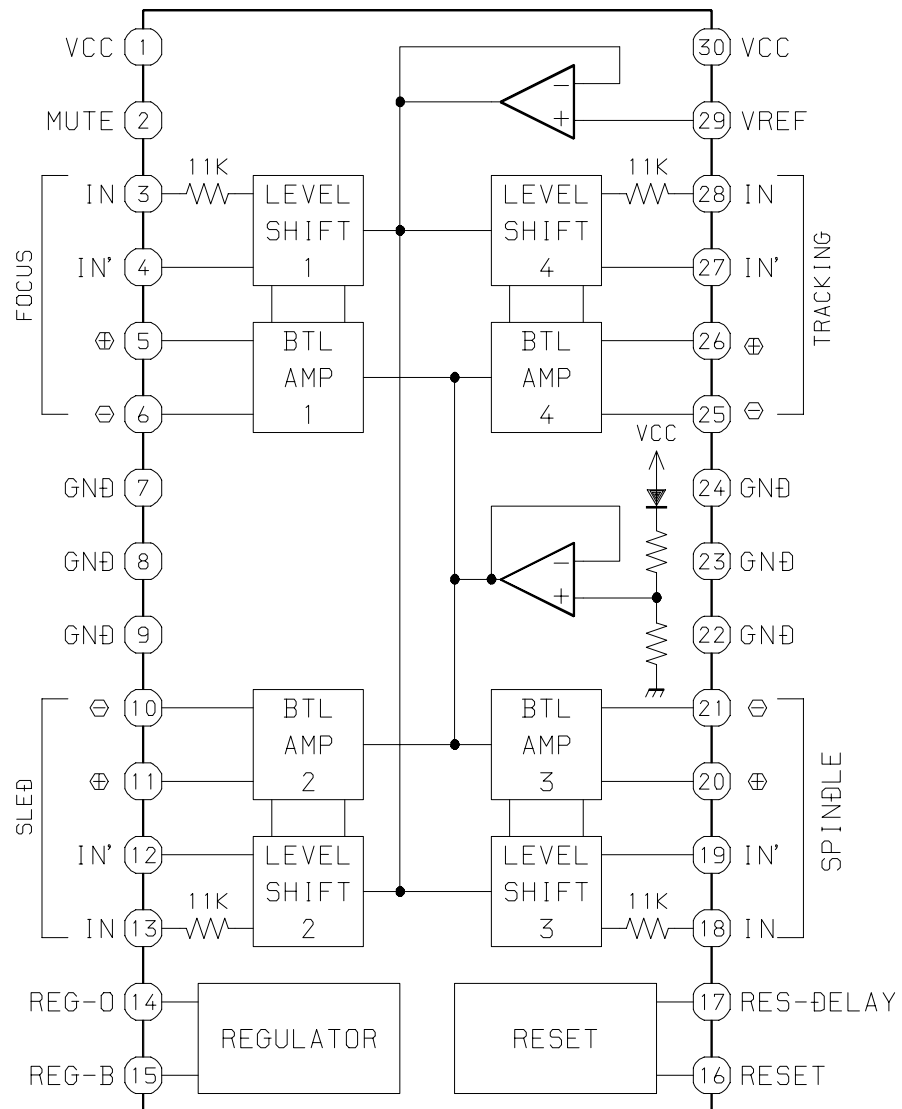


# IC BLOCK DIAGRAM

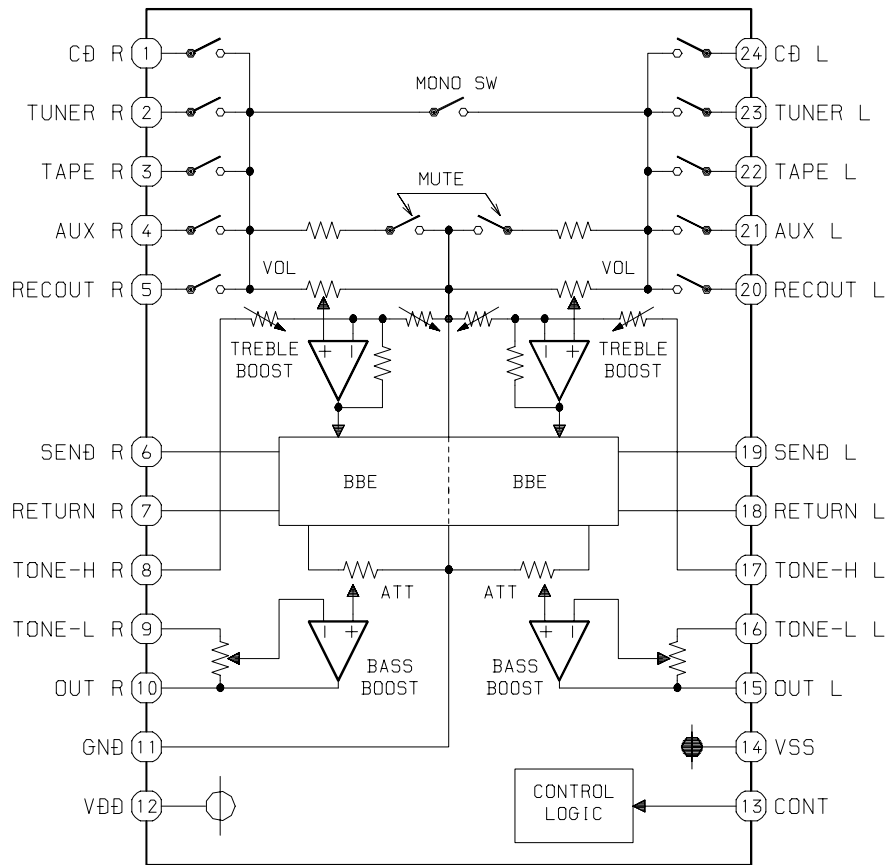
IC, BA4560N



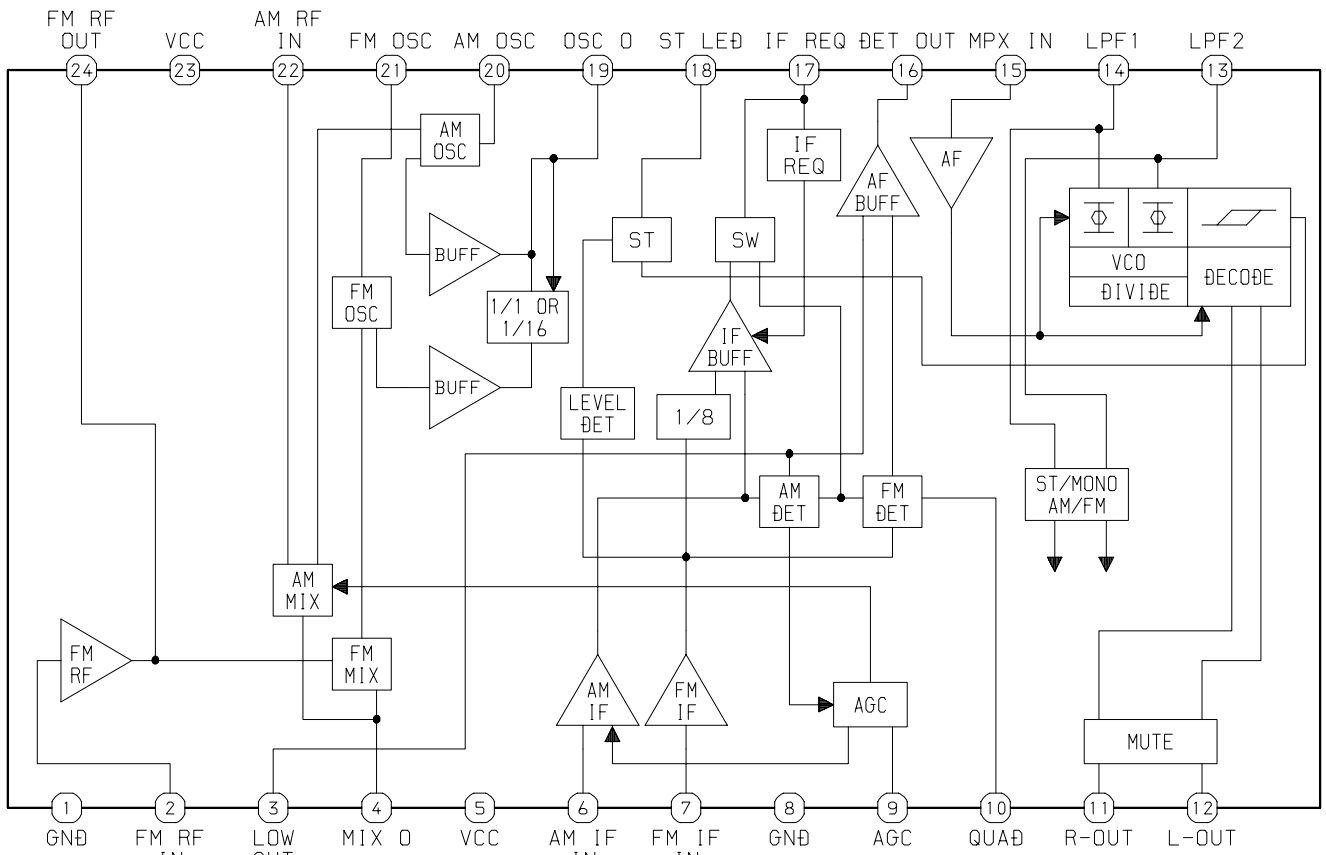
IC, LA6541D



IC, M61509FP



IC, TA2149N



## IC DESCRIPTION

IC, LC867132V-5G68

Pin No.	Pin Name	I/O	Description
1	O-RMC / CE	O	CD read/write control output and TU CE.
2	O-DATA	O	Data output to M61509FP.
3	O-CLK	O	Output to LC72121M CLK.
4	P16	-	Not used.
5	O-CLKSFT	O	Clock shift output of the microcomputer.
6	I-HOLD	I	Hold status detection.
7	I-RST	I	Microcomputer reset pin.
8	XT1 (IN)	I	Connected to 32.768 kHz crystal oscillator.
9	XT2 (OUT)	O	
10	VSS1	-	Connected to GND.
11	CF1 (IN)	I	Input pin for ceramic resonator oscillation.
12	CF2 (OUT)	O	Output pin for ceramic resonator oscillation.
13	VDD1	-	Power supply.
14	I-FM ST	I	FM STEREO status input.
15	I-KEY0	I	KEY AD input.
16	I-CDSW	I	CD DOOR SW status detection input.
17	I-KEY1	I	KEY AD input.
18	I-MOTOR	I	DECK MECHA MOTOR status input.
19	P85	-	Not used.
20	P86	-	Not used.
21	I-TUDO	I	Data input from LC72121M.
22	O-BASS LED	O	BASS LED ON/OFF control output.
23	O-QS LED	O	Q-Sound LED ON/OFF control output.
24	P92	-	Not used.
25	O-INT	O	INT DIODE MATRIX detection output.
26	I-DRF	I	CD RF level detection input.
27	I-WRQ	I	CD sub-code Q standby input.
28	I-REMO	I	Remote control input.
29	S0 / PA0	O	LCD segment output / Initial settings output (SW) (Not used).
30	S1 / PA1	O	LCD segment output / Initial settings output (LW) (Not used).
31	S2 / PA2	O	LCD segment output / Initial settings output (MW 10K).
32	S3 / PA3	O	LCD segment output / Initial settings output (FM WIDE) (Not used).
33	S4 / PA4	O	LCD segment output / Initial settings output (AMST) (Not used).
34	S5 / PA5	O	LCD segment output / Initial settings output (SW2) (Not used).
35	S6 / PA6	O	LCD segment output / Initial settings output.
36	S7 / PA7	O	
37~40	S8~S11	O	LCD segment output.
41	VDD3	-	Power supply.
42	VSS3	-	Connected to GND.
43~50	S12~S19	O	LCD segment output.
51~54	S20~S23	-	Not used.
55	O-CD LED	O	LED ON/OFF control output for CD functions.

Pin No.	Pin Name	I/O	Description
56	O-TU LED	O	LED ON/OFF control output for TUNER functions.
57	O-TA LED	-	LED ON/OFF control output for TAPE function (Not used).
58	O-ROCK LED	O	LED ON/OFF control output for ROCK.
59	O-POP LED	O	LED ON/OFF control output for POP.
60	O-JAZZ LED	O	LED ON/OFF control output for JAZZ.
61	V3	-	LCD common output (Not used).
62	I-CD TEST	-	Not used.
63	I-TU TEST	-	Not used.
64~66	COM0~COM2	O	LCD common output.
67	COM3	-	Not used.
68	VSS2	-	Connected to GND.
69	VDD2	-	Power supply.
70	O-CD ON	O	CD PWR control output.
71	O-TU ON	O	TUNER PWR control output.
72	O-P.CONT	O	Power supply control output.
73	P03	-	Not used.
74	O-MUTE	O	Main mute output.
75	O-FM MONO	-	Not used.
76	O-BEAT CONT	O	BEAT switch over output.
77	O-QSOUND	-	Not used.
78	O-COIN	O	CD command output.
79	I-SQOUT	I	CD sub-code Q input.
80	O-CQCK	O	CLK for CD commands/sub-codes.

Pin No.	Pin Name	I/O	Description
1	DEFI	I	Defect detection signal (DEF) input.
2	TAI	I	Test input. A pull-down resistor is built in. Must be connected to 0V.
3	PDO	O	External VCO control phase comparator output.
4	VVSS	–	Internal VCO ground. Must be connected to 0V.
5	ISET	O	PDO output current adjustment resistor connection.
6	VVDD	–	Internal VCO power supply.
7	FR	I	VCO frequency range adjustment.
8	VSS	–	Digital system ground. Must be connected to 0V.
9	EFMO	O	Slice level control; EFM signal output.
10	EFMIN	I	Slice level control; EFM signal input.
11	T2	I	Test input. A pull-down resistor is built in. Must be connected to 0V.
12	CLV+	O	Disc motor control output.
13	CLV–		Three-value output is also possible when specified by microprocessor command.
14	V/P	O	Rough servo/phase control automatic switching monitor output. Outputs a high level during rough servo and a low level during phase control.
15	HFL	I	Track detection signal input. This is a Schmitt input.
16	TES	I	Tracking error signal input. This is a Schmitt input.
17	TOFF	O	Tracking off output.
18	TGL	O	Tracking gain switching output. Increase the gain when low.
19	JP+	O	Track jump output.
20	JP–		Three-value output is also possible when specified by microprocessor command.
21	PCK	O	EFM data playback clock monitor. Outputs 4.3218 MHz when the phase is locked. (Not used)
22	FSEQ	O	Synchronization signal detection output. Outputs a high level when the synchronization signal detected from the EFM signal and the internally generated synchronization signal agree. (Not used)
23	VDD	–	Digital system power supply.
24	SL+	O	Serial data command sled signal output terminal from microprocessor.
25	SL–		
26	CONT3	–	Not used.
27	PU IN	I	CD pickup inside limit switch.
28	RW	O	Serial data command sled output terminal from microprocessor.
29	EMPH	O	De-emphasis monitor pin. A high level indicates playback of a de-emphasis disk. (Not used)
30	C2F	O	C2 flag output. (Not used)
31	DOUT	O	Digital output (EIAJ format). (Not used)
32	T3	I	Test input. A pull-down resistor is built in. Must be connected to 0V.
33	T4		
34	NC	–	Unused. Must be left open.
35	MUTEL	O	Left channel one-bit D/A converter mute output. (Not used)
36	LVDD	–	Left channel one-bit D/A converter power supply.
37	LCHO	O	Left channel one-bit D/A converter output.

Pin No.	Pin Name	I/O	Description
38	LVSS	–	Left channel one-bit D/A converter ground. Must be connected to 0V.
39	RVSS	-	Right channel one-bit D/A converter ground. (Must be connected to 0V.)
40	RCHO	O	Right channel one-bit D/A converter output.
41	RVDD	-	Right channel one-bit D/A converter power supply.
42	MUTER	O	Right channel one-bit D/A converter mute output. (Not used)
43	XVDD	-	Crystal oscillator power supply.
44	XOUT	O	Connections for a 16.9344 MHz crystal oscillator element.
45	XIN	I	
46	XVSS	-	Crystal oscillator ground. (Must be connected to 0V.)
47	SBSY	O	Subcode clock synchronization signal output. (Not used)
48	EFLG	O	C1, C2, single and double error correction monitor. (Not used)
49	PW	O	Subcode P, Q, R, S, T, U and W output. (Not used)
50	SFSY	O	Subcode frame synchronization signal output. This signal falls when the subcode are in standby state. (Not used)
51	SBCK	I	Subcode readout clock input. This is a Schmitt input.
52	FSX	O	Output pin for the 7.35 kHz synchronization signal divided from the crystal oscillator. (Not used)
53	WRQ	O	Subcode Q output standby output.
54	RWC	I	Read/write control input. This is a Schmitt input.
55	SQOUT	O	Subcode Q output.
56	COIN	I	Command input pin from control microprocessor.
57	$\overline{\text{CQCK}}$	I	Input for both the command input acquisition clock and the SQOUT pin subcode readout clock input pin. This is Schmitt input.
58	$\overline{\text{RES}}$	I	Reset input. This pin must be set low briefly after power is first applied.
59	T11	O	Test output. Leave open. (Normally output a low level). (Not used)
60	16M	O	16.9344 MHz output. (Not used)
61	4.2M	O	4.2336 MHz output.
62	T5	I	Test input. A pull-down resistor is built-in. (Must be connected to 0V.)
63	$\overline{\text{CS}}$	I	Chip select input. A pull-down resistor is built-in. (Must be connected to 0V if not controlled.)
64	T1	I	Test input. No pull-down resistor. (Must be connected to 0V.)

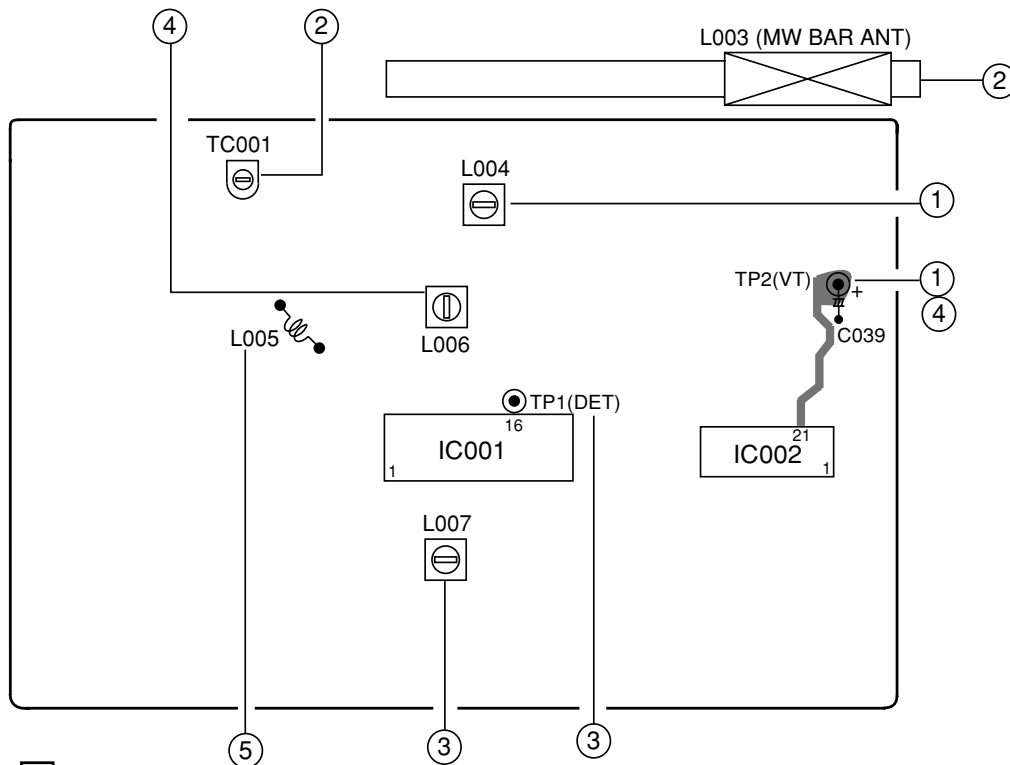
Pin No.	Pin Name	I/O	Description
1	FIN2	O	For the connection of the pickup photodiode. Addition to the FIN1 pin creates an RF signal and subtraction from it create an EF signal.
2	FIN1	O	For the connection of the pickup photodiode.
3	E	O	For the connection of the pickup photodiode. Subtraction from the F pin creates a TE signal.
4	F	O	For the connection of the pickup photodiode.
5	TB	I	Inputs the DC components in the TE signal.
6	TE-	O	For the connection of a resistor which sets the gain of the TE signal between this pin and the TE pin.
7	TE	O	TE signal output.
8	TESI	I	TES (track error sense) comparator input. The signal is passed through a BPF.
9	SCI	I	Shock detection input.
10	TH	I	Sets the time constant for the tracking gain.
11	TA	O	TA amp output.
12	TD-	I	Composes the tracking phase compensation constant between the TD and VR pins.
13	TD	I	Sets the tracking phase compensation.
14	JP	I	Sets the amplitude of the tracking jump signal (kick pulses).
15	TO	O	Tracking control signal output.
16	FD	O	Focusing control signal output.
17	FD-	I	Composes the focusing phase compensation constant between the FD and FA pins.
18	FA	O	Composes the focusing phase compensation constant between the FD and FA pins.
19	FA-	I	Composes the focusing phase compensation constant between the FD and FA pins.
20	FE	O	FE signal output.
21	FE-	I	For the connection of a resistor which sets the gain of the FE signal between this pin and the TE pin.
22	AGND	O	Ground of analog signals.
23	SP	O	Single-ended output of the signals input to the CV+ and CV- pins.
24	SPI	I	Spindle amp input.
25	SPG	I	For the connection of a resistor which sets the gain in the spindle 12cm mode.
26	SP-	I	For the connection of the spindle phase compensation constant with the SPD pin.
27	SPD	O	Spindle control signal output.
28	SLEQ	I	For the connection of sled phase compensation constant.
29	SLD	O	Sled control signal output.
30	SL-	I	Sled feed signal input from the microprocessor.
31	SL+		
32	JP-	I	Tracking signal input from the DSP.
33	JP+		
34	TGL	I	Tracking gain control signal input from the DSP. Low gain when TGL is "H".
35	TOFF	I	Tracking off control signal input from the DSP. Off when TOFF is "H".
36	TES	O	Outputs the TES signal to the DSP.



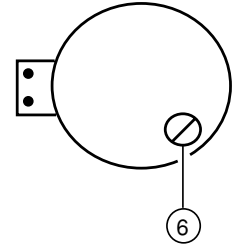
Pin No.	Pin Name	I/O	Description
37	HFL	O	The HFL (high frequency level) signal is used to judge whether the main beam is positioned on the pit or on the mirror.
38	SLOF	I	Sled servo off control input.
39	CV-	I	CLV error signal input from the DSP.
40	CV+		
41	RFSM	O	RF output.
42	RFS-	O	Sets the RF gain and the EFM signal's 3T compensation constant together with the RFSM pin.
43	SLC	O	The SLC (slice level control) signal is output to control the DSP's data slice level of the RF waveform.
44	SL1	I	Input to control the DSP's data slice level.
45	DGND	-	Ground of digital signals.
46	FSC	O	Output for the focus search smoothing capacitor.
47	TBC	I	The TBC (tracking balance control) signal sets the EF balance variation range.
48	NC	-	Not connected.
49	DEF	O	Disc defect detection output.
50	CLK	I	Reference clock input. 4.23 MHz is input from the DSP.
51	CL	I	Microprocessor command clock input.
52	DAT	I	Microprocessor command data input.
53	CE	I	Microprocessor chip enable input.
54	DRF	O	DRF (detect RF) is an output to detect the RF level.
55	FSS	I	The FSS (focus search select) signal switches the focus search modes (+/-search / +search with respect to the reference voltage). (Not connected)
56	VCC2	-	VCC of servo and digital circuits.
57	REF1	-	For the connection of bypass capacitor for the reference voltage.
58	VR	O	Reference voltage output.
59	LF2	-	Sets the time constant for disc defect detection.
60	PH1	-	For the connection of a capacitor to hold the RF signal peak.
61	BH1	-	For the connection of a capacitor to hold the RF signal bottom.
62	LDD	O	APC circuit output.
63	LDS	I	APC circuit input.
64	VCC1	-	VCC of RF signal circuits.

ADJUSTMENT  
<TUNER / DECK>

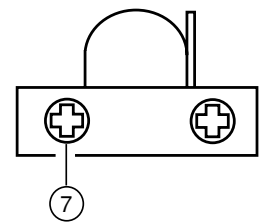
**D** TUNER C.B



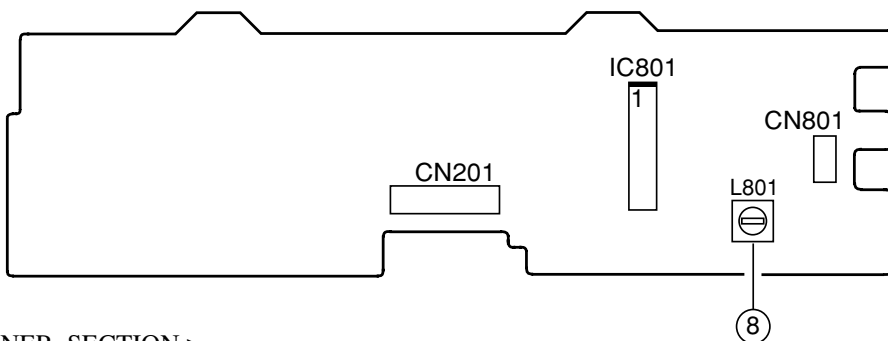
**M1** (TAPE MOTOR)



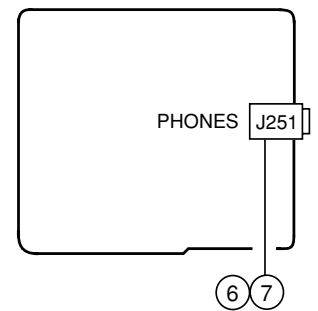
**RPH**



**A** MAIN C.B



**E** H.P. C.B



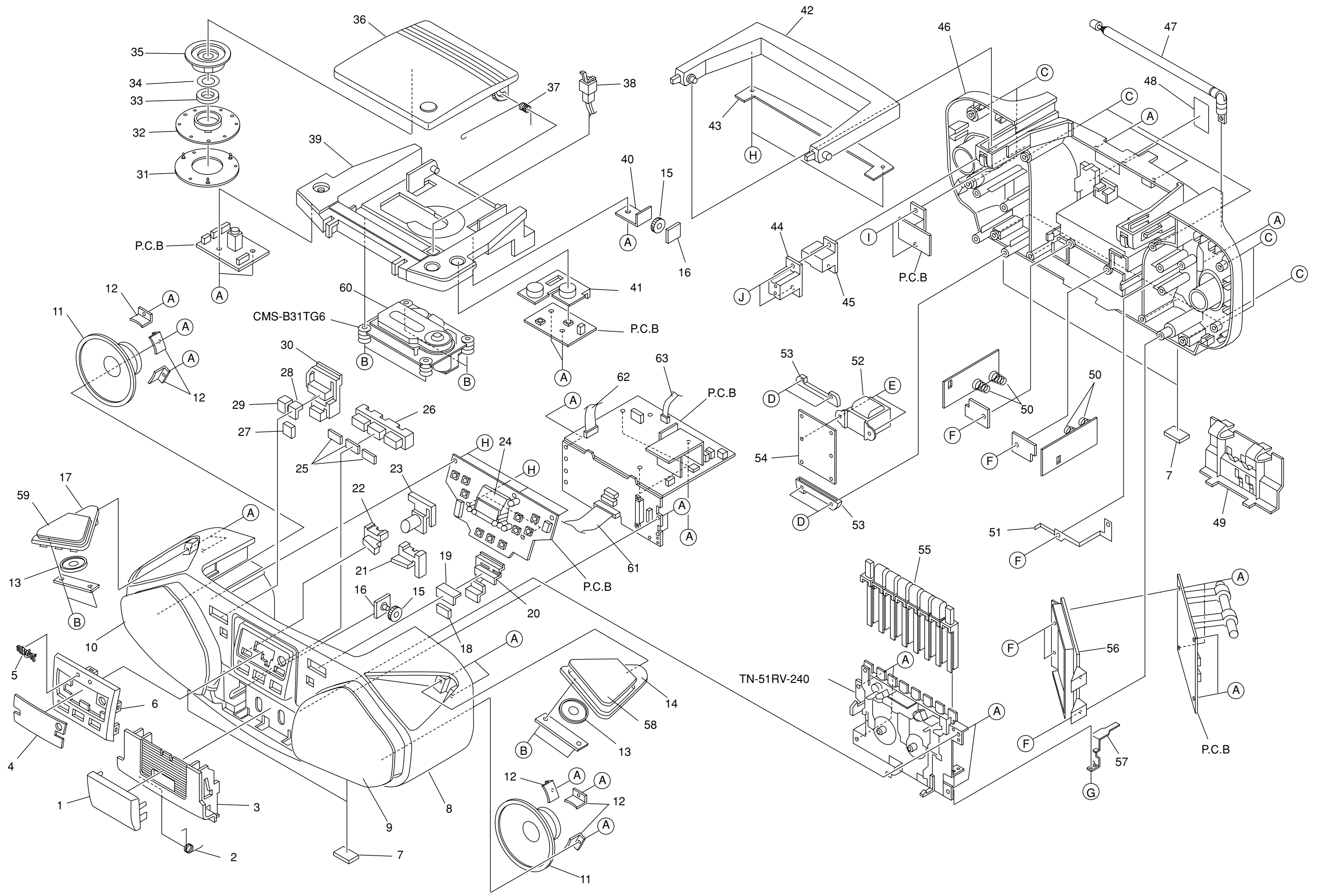
< TUNER SECTION >

1. AM VT Adjustment  
Settings : • Test point : TP2(VT)  
• Adjustment location : L004  
Method : Set to AM 1000kHz and adjust L004 so that the test point voltage becomes  $3.75V \pm 0.02V$ . Then set to AM 530kHz and check that the test point voltage is between 1.0V ~ 1.4V.
2. AM Tracking Adjustment  
L003.....600kHz  
TC001.....1400kHz
3. MW IF Adjustment  
Settings : • Test point : TP1(DET)  
• Adjustment location : L007  
Method : Adjust L007 so that the output level at 1000kHz becomes maximum.
4. FM VT Adjustment  
Settings : • Test point : TP2(VT)  
• Adjustment location : L006  
Method : Set to FM 108.0MHz and adjust L006 so that the test point voltage becomes  $6.0V \pm 0.2V$

5. FM Tracking Adjustment  
L005.....98.0MHz

< DECK SECTION >

6. Tape Speed Adjustment  
Settings : • Test tape : TTA-100  
• Test point : J251 (PHONES jack)  
• Adjustment location : SFR on Tape Motor  
Method : Play back the test tape and adjust SFR so that the frequency counter reads  $3000Hz \pm 30Hz$ .
7. Head Azimuth Adjustment  
Settings : • Test tape : TTA-320  
• Test point : J251 (PHONES jack)  
• Adjustment location : Azimuth adjustment screw  
Method : Play back the 8kHz signal of the test tape and adjust screw so that the output becomes maximum.
8. Bias frequency Adjustment  
L801.....85kHz  $\pm 0.5kHz$



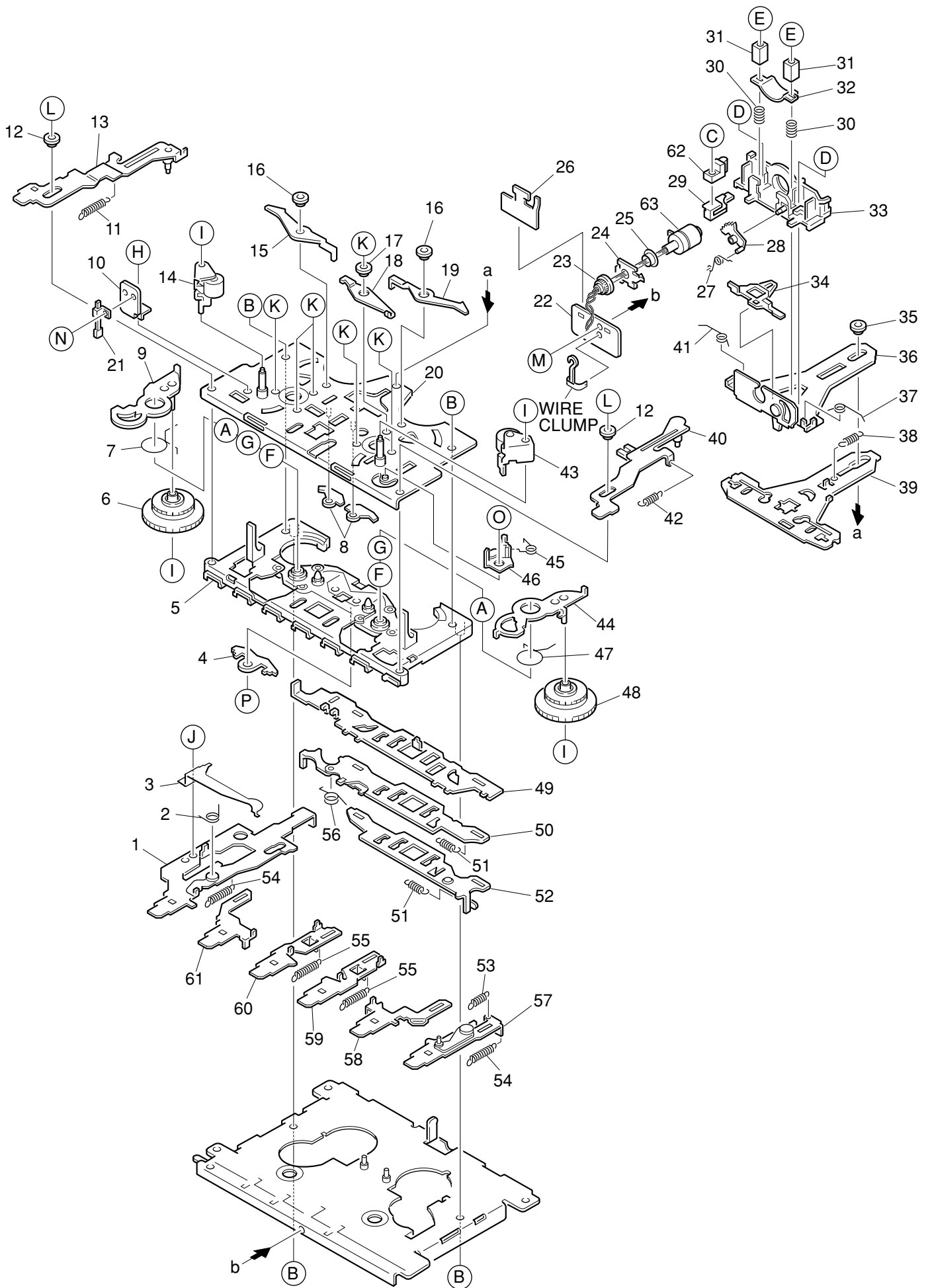
# MECHANICAL PARTS LIST 1 / 1

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION	REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	8A-CHE-126-010		WINDOW, CASS RV E	41	8A-CHE-026-010		BTN, VOL E
2	8A-CH4-205-010		SPR-T, CASS	42	8A-CHE-018-010		HANDL, GRIP E
3	8A-CH4-007-010		BOX, CASS	43	8A-CHE-019-010		COVER, HANDL E
4	8A-CHR-010-010		WINDOW, LCD R	44	87-A90-086-010		COVER, AC-SOCKET
5	87-B00-010-010		BADGE, AIWA 30.5-5.2 S 2.5L	45	87-A60-177-010		JACK, AC U W/SW
6	8A-CHE-009-010		PANEL, LCD E	46	8A-CH4-002-010		CABI, REAR
7	86-CT4-218-010		CUSHION, FOOT/PORON	47	8Z-CH4-640-010		ANT, ROD
8	8A-CH4-001-010		CABI, FR	48	87-CD6-041-010		PLATE, AC
9	8A-CH4-015-010		GRILLE, FR R	49	8A-CH4-011-010		LID, BATT
10	8A-CH4-014-010		GRILLE, FR L	50	87-CD6-213-010		SPR-C, BATT (-)
11	8A-CH4-682-010		SPKR, 10- 70HM	51	8A-CH4-210-010		HLDR, ANT
12	8Z-CH4-204-010		HLDR, SPEAKER	52	8A-CD9-606-010		PT, U 2.5W
13	8Z-CH4-645-010		SPKR, MAYLOR 80HM SILVER	53	8A-CH4-211-010		COVER, HLDR PT
14	8A-CH4-013-010		PANEL, TW R	54	8A-CH4-209-010		HLDR, PT
15	84-CD5-215-010		GEAR	55	8A-CHE-021-010		KEY, CASS 8K E
16	84-CD5-216-010		BRACKET	56	8A-CH4-203-010		HLDR, TU
17	8A-CH4-012-010		PANEL, TW L	57	8A-CH4-208-010		SPR-P, REC 8K
18	8A-CH4-030-010		CAP, STOP	58	8A-CH4-017-010		GRILLE, TW R
19	8A-CH4-029-010		CAP, PLAY	59	8A-CH4-016-010		GRILLE, TW L
20	8A-CH4-022-010		BTN, PLAY	60	88-CH6-019-010		PANEL, CD
21	8A-CH4-027-010		BTN, BASS	61	8A-CD9-620-010		FF-CABLE, 16P FR-MAIN
22	8A-CH4-024-010		BTN, EQ	62	8A-CD9-621-010		FF-CABLE, 16P CD-RF
23	8A-CH4-028-010		BTN, SOUND	63	8A-CD9-622-010		FF-CABLE, 8P CD-FR
24	8A-CH4-201-010		HLDR, LCD	A	87-741-096-410		UT2+3-10
25	8A-CH4-034-010		LENS, FUNC	B	87-342-074-010		UT2+2.6-8
26	8A-CH4-025-010		BTN, FUNC	C	87-741-100-410		UT2+3-16 (W/O) SLOT
27	8A-CH4-033-010		CAP, REPEAT	D	87-661-100-410		VFT1+3-16
28	8A-CH4-032-010		CAP, REW	E	87-067-566-010		TAPPING SCREW, VFTT+3-6
29	8A-CH4-031-010		CAP, FF	F	87-741-095-410		UT2+3-8 GLD
30	8A-CH4-023-010		BTN, SKIP	G	87-571-032-410		VIT+2-3
31	8Z-CH4-212-010		RING, CHUCK	H	87-B10-239-010		QT2+3-8 W/O CR
32	8Z-CH4-211-010		BASE, CHUCK	I	87-751-075-410		VT2+2.6-10
33	87-036-368-010		MAGNET				
34	84-CD5-217-010		PLATE, MAGNET				
35	85-CD7-217-010		HLDR, CHUCK A				
36	8A-CHR-121-010		BOX, CD U R				
37	8A-CH4-204-010		SPR-T, CD				
38	87-036-389-010		SW, PUSH LOCK				
39	8A-CHE-004-010		CHAS, CD 8K E				
40	8A-CH4-206-010		HLDR, OIL-DMPR				

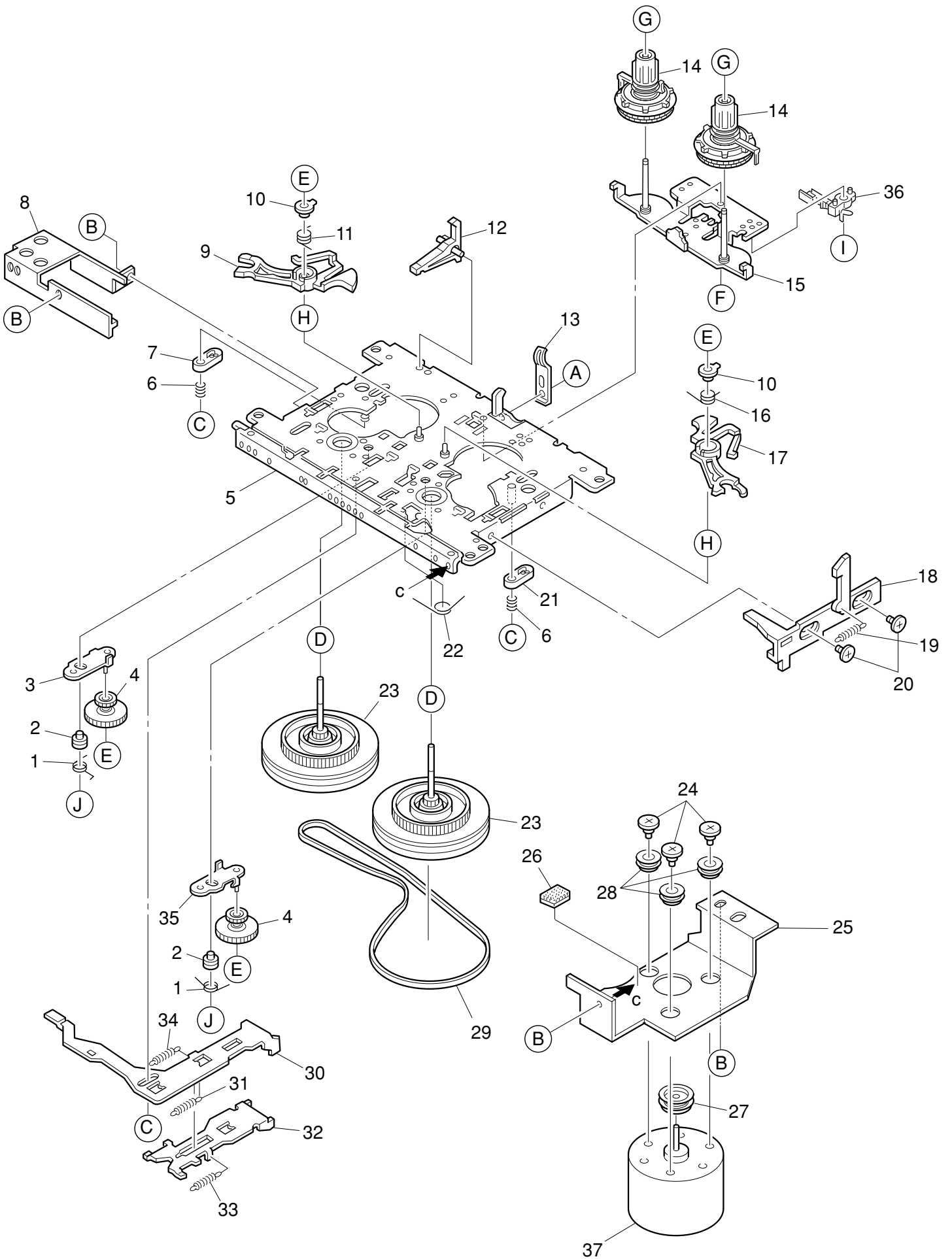
## COLOR NAME TABLE

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

# TAPE MECHANISM EXPLODED VIEW 1 / 2



# TAPE MECHANISM EXPLODED VIEW 2 / 2



# TAPE MECHANISM PARTS LIST 1 / 2

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION	REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	S1-851-023-190		REC BUTTON LEVER ASSY	51	S1-851-020-670		SW ACTUATOR SPRING
2	S1-851-020-620		E-LOCK ARM SPRING	52	S1-851-023-150		SW ACTUATOR ASSY
3	S1-851-020-570		E-HEAD ARM	53	S1-851-020-270		PULL ARM SPRING
4	S1-851-020-410		FF CONTROL ARM	54	S1-851-020-700		PROGRAM BUTTON LEVER SPRING
5	S1-851-025-040		BUTTON BASE ASSY	55	S1-851-020-690		FF BUTTON LEVER SPRING
6	S1-851-060-020		T GEAR ARM(R)	56	S1-851-020-760		LOCK RELEASE SPRING
7	S1-851-060-030		T GEAR ARM(R)SPR	57	S1-851-023-180		PROGRAM BUTTON LEVER ASSY
8	S1-851-180-100		RC ARM	58	S1-851-020-5T0		STOP BUTTON LEVER
9	S1-851-063-020		T GEAR ARM ASSY (R)ASSY	59	S1-851-020-080		FF BUTTON LEVER (F)
10	S1-851-030-050		TURN OVER SW BRACKET	60	S1-851-020-090		FF BUTTON LEVER (R)
11	S1-851-020-680		MODE BUTTON SPRING	61	S1-851-020-6T0		PLAY BUTTON LEVER
12	S1-851-020-600		LEVER COLLER	62	S6-205-100-120		E HEAD EM-1636
13	S1-851-023-240		MODE BUTTON LEVER ASSY	63	S6-205-060-010		RP HEAD RC-889
14	S1-851-105-020		PINCH ROLLER (R)ASSY	A	S9-999-000-130		P WASHER 1.75-4-0.3
15	S1-851-180-060		AUTO CONTROL ARM(R)	B	S9-674-000-000		P TAP SCREW M2-6
16	S1-851-180-120		C ARM COLLAR SCREW	C	S9-696-000-000		CAMERAS TAPING SCREW M1.7-4.5
17	S1-851-020-580		PAUSE ARM COLLER	D	S9-695-000-000		CAMERA S TAP SCREW M1.7-
18	S1-851-180-080		PAUSE ARM	E	S9-999-200-360		SCREW M2-12 (+/-)
19	S1-851-180-050		AUTO CONTROL ARM(F)	F	S9-786-000-000		P WASHER 2-3.5-0.3
20	S1-851-183-030		SUB CHASSIS ASSY	G	S9-999-030-090		P WASHER 1.45-4-0.5
21	S6-401-010-990		LEAF SW MSW-1473NBK	H	S9-999-130-060		CAMERA S TAPPING SCREW M1.7-2
22	S1-851-010-060		HW TERMINAL PLATE	I	S9-421-000-000		P WASHER 1.2-3-0.25
23	S1-851-040-440		PINION GEAR	J	S9-C19-173-030		TSS 1.7X3
24	S1-851-040-180		HOLDER	K	S9-C20-178-510		SCREW,TS 1.7-8.5
25	S1-851-040-270		H HOLDER SPRING	L	S9-185-000-000		C TAP SCREW M2-10
26	S1-851-040-410		H SHIELD PLATE	M	S9-999-200-120		TWO LOCK SCREW M2-4
27	S1-851-040-250		H TURN OVER SPRING	N	S9-077-000-000		TAMS SCREW M2-4 (+)
28	S1-851-040-200		H TURN OVER GEAR	O	S9-502-000-000		E RING S2.0
29	S1-851-040-260		E HEAD HOLDER	P	S9-999-000-160		P WASHER 2.8-6-0.5
30	S1-865-020-590		AZIMUTH SPRING				
31	S1-851-040-360		SCREW HOLDER				
32	S1-851-040-240		HEAD SPRING PLATE				
33	S1-851-040-390		HEAD MOUNT				
34	S1-851-040-210		HEAD SLIDE PLATE				
35	S1-851-040-550		H.P.COLLAR SCREW				
36	S1-851-040-140		HEAD PANEL				
37	S1-851-040-280		PINCH ROLLER SPRING (F)				
38	S1-851-040-090		R.C.PLATE SPRING				
39	S1-851-040-150		R.C. PLATE				
40	S1-851-023-230		PAUSE BUTTON LEVER ASSY				
41	S1-851-040-290		PINCH ROLLER SPRING (R)				
42	S1-800-110-230		PAUSE SPRING				
43	S1-851-095-020		PINCH ROLLER (F)ASSY				
44	S1-851-053-020		T GEAR ARM (F) ASSY				
45	S1-851-030-040		TURN OVER SPRING				
46	S1-851-030-030		TURN OVER ARM				
47	S1-851-050-040		T GEAR ARM(F)SPR				
48	S1-851-050-030		T GEAR ARM(F)				
49	S1-851-020-560		SLIDE PLATE				
50	S1-851-023-140		LOCK ACTUATOR ASSY				



# TAPE MECHANISM PARTS LIST 2 / 2

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION	REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	S1-851-070-040		FF GEAR ARM SPR(F)	36	S6-401-011-720		LEAF SW MSW-1290CV
2	S1-851-070-050		FF GEAR ARM COLLAR	37	S6-002-030-230		MOTOR EG-530AD-2F
3	S1-851-083-010		FF GEAR ARM(R)ASSY	A	S9-P33-200-320		DEL TITE SCREW M2-3
4	S1-851-070-030		FF GEAR	B	S9-180-000-000		C TAP SCREW M2-4
5	S1-851-013-050		CHASSIS ASSY	C	S9-876-000-000		P WASHER 2.1-5-0.5
6	S1-821-010-160		PAUSE LEVER SPR	D	S9-889-000-000		P WASHER 2.1-3-0.3
7	S1-851-010-080		PAUSE LEVER	E	S9-421-000-000		P WASHER 1.2-3-0.25
8	S1-851-010-070		SIDE BRACKET	F	S9-C19-173-030		TSS 1.7X3
9	S1-851-200-020		AUTO LEVER (R)	G	S9-888-000-000		P WASHER 1.2-3-0.4
10	S1-851-200-050		SPRING STOPPER	H	S9-999-000-090		P WASHER 3-8.5-0.13
11	S1-851-200-030		AUTO LEVER (R) SPR	I	S9-181-000-000		C TAP SCREW M2-5 (+)
12	S1-851-010-090		RECORD SAFETY LEVER	J	S9-C19-174-030		SCREW, TSS M1.7-4
13	S1-821-100-980		PACK SPRING PLATE				
14	S1-851-115-010		REEL ASSY				
15	S1-851-113-010		REEL PLATE ASSY				
16	S1-851-200-040		AUTO LEVER (F) SPR				
17	S1-851-200-010		AUTO LEVER (F)				
18	S1-851-170-070		EJECT SLIDE LEVER				
19	S1-851-170-020		EJECT SLIDE LEVER SPR				
20	S1-821-120-230		P.K.COLLAR SCREW (A)				
21	S1-821-010-150		PAUSE LEVER				
22	S1-851-020-210		STOP BUTTON LEVER SPR				
23	S1-851-125-050		FLYWHEEL ASSY				
24	S1-821-120-020		M. COLLER SCREW				
25	S1-921-120-540		MOTOR BRACKET				
26	S1-800-100-220		ANTI-VIBRATION FELT				
27	S1-851-140-150		MOTOR PULLEY				
28	S1-820-130-060		MOTOR RUBBER				
29	S1-851-140-170		MAIN BELT				
30	S1-851-040-080		RELEASE PLATE				
31	S1-851-040-110		R.C.SPRING (M)				
32	S1-851-160-020		FF SW PLATE				
33	S1-851-160-060		FF SW PLATE SPRING				
34	S1-851-020-420		BUTTON LEVER SPR(P)				
35	S1-851-073-010		FF GEAR ARM(F)ASSY				

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