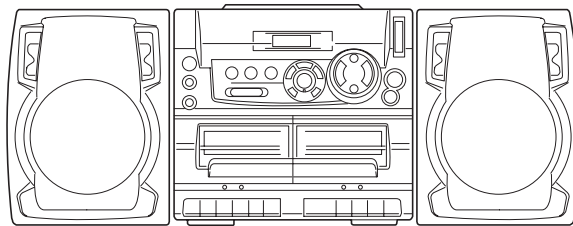




CA-DW247 U(S)

CA-DW257 LH(S)



SERVICE MANUAL

COMPACT DISC CARRY
COMPONENT SYSTEM

BASIC TAPE MECHANISM : ZZM-2 YPR3NF
BASIC CD MECHANISM : DA11T3C

This Service Manual is the "Revision Publishing" and replaces "Simple Manual"
CA-DW247 U<S>, U2<S> (S/M Code No.09-003-339-4T1)
CA-DW257 LH<S> (S/M Code No.09-003-339-4T2).

aiwa
S/M Code No. 09-003-339-4R1

REVISION
DATA

SPECIFICATIONS

Tuner section

Frequency range, antenna — FM: 87.5 - 108.0 MHz Rod antenna, AM: 530 - 1,710 kHz Ferrite bar antenna

Deck section

Track format — 4 tracks, 2 channels / Frequency range — Normal tape: 50 - 12,000 Hz (EIAJ) / Recording system — AC bias / Erasing system — Magnet erase / Heads — Deck 1: Recording/playback head (1), Erasure head (1); Deck 2: Playback head (1)

CD player section

Disc — Compact disc / Scanning method — Non-contact optical scanner (semiconductor laser) / Rotation speed — Approx. 500 - 200 rpm/CLV / Error correction — Cross interleave, Reed, Solomon code / Number of channels — 2 channels / D/A conversion — 1 bit DAC

General (257 MODEL)

Power requirements — DC 12 V using eight size D (R20) batteries, AC 110 - 120 V/220 - 240 V switchable, 50/60 Hz / Dimensions (W × H × D) — 260 × 247 × 260 mm / Weight — 3.3 kg (excluding batteries)
Power output — 4.5 W + 4.5 W (3.2 ohms, EIAJ), 3.3 W + 3.3 W (DIN 1% Rated Power) / Power consumption — 27 W

General (247 MODEL)

Power requirements — DC 12 V using eight size D (R20) batteries, AC 120 V, 60 Hz / Dimensions (W × H × D) — 260 × 247 × 260 mm (10¹/₄ × 9³/₄ × 10¹/₄ in.) / Weight — 3.3 kg (7 lb 4 oz.) (excluding batteries)
Power output — 2.5 W + 2.5 W (7 ohms, EIAJ) / Power consumption — 18 W

Speaker(257 MODEL)

Type — 120 mm cone type / Dimensions (W × H × D) — 184 × 235 × 240 mm / Weight — Approx. 1.3 kg × 2
Impedance — 3.2 ohms / Allowable max. input — 7.0 W

Speaker(247 MODEL)

Type — 120 mm cone type / Dimensions (W × H × D) — 184 × 235 × 240 mm (7¹/₄ × 9³/₈ × 9¹/₂ in.) / Weight — Approx. 1.3 kg (2 lb 14 oz.) × 2
Impedance — 7 ohms / Allowable max. input — 5 W

- Design and specifications are subject to change without notice.

ACCESSORIES/PACKAGE LIST

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

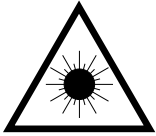
REF. NO	PART NO.	KANRI NO.	DESCRIPTION
	1	8A-CT9-902-010	IB,LH(ESP)FM<257 LH<S>>
	1	8A-CT9-903-010	IB,U(ESF)FM<EXCEPT 257 LH<S>>
△	2	87-A90-312-010	PLUG,CONVERSION WTN-1157R1 <257 LH<S>>
△	3	87-A80-036-010	AC CORD SET ASSY,E W/FLTR VOL <257 LH<S>>
△	3	87-A80-109-010	AC CORD,HK7281 BLK U <EXCEPT 257 LH<S>>
	4	8Z-CDK-962-010	RC UNIT,RC-ZAT02(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 käyt-täjän turvallisuusluokan 1 ylit-tävälle näkymättömälle lasersäteilylle.

WARNING!

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

CAUTION

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

ATTENTION

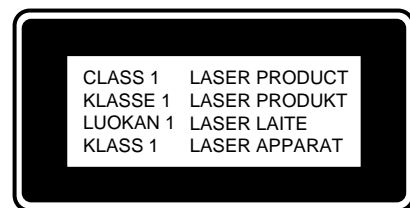
L'utilisation de commandes, réglages ou procédures autres que ceux spécifiés peut entraîner une dangereuse exposition aux radiations.

ADVARSEL!

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

This Compact Disc player is classified as a CLASS 1 LASER product.

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

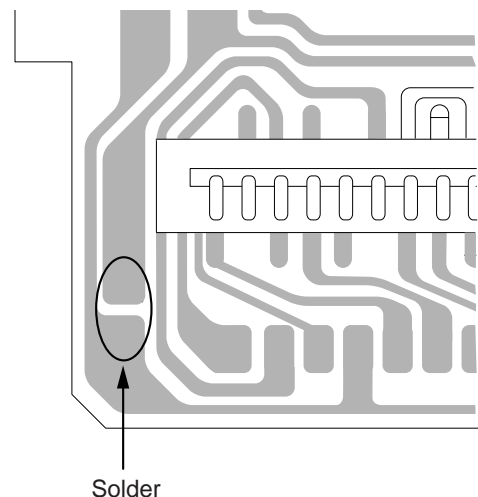


Precaution to replace Optical block (SF-P101NR)

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 kindly 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
	87-A20-955-010	IC,LA1828		C24	87-010-426-080		CHIP.CAP,S 0.012U/50V(Z)
	87-A21-090-010	IC,LA4600		C25	87-010-426-080		CHIP.CAP,S 0.012U/50V(Z)
	87-A21-520-040	C-IC,M61509FP		C26	87-A11-729-080		CHIP CA 0.47UF/25V(Z)F
	87-020-828-010	IC,BA3416BL		C27	87-A11-729-080		CHIP CA 0.47UF/25V(Z)F
	87-001-440-010	IC,BA15218N		C28	87-010-992-080		C-CAP,S 0.047-25 B
	87-A20-446-010	C-IC,LA9241ML		C29	87-010-992-080		C-CAP,S 0.047-25 B
	87-A20-459-010	C-IC,LC78622ED		C30	87-010-248-080		CAP, ELECT 220-10V
	87-A21-093-010	IC,LA6541D		C31	87-010-379-080		CAP, ELECT 22-16V
	8A-CH4-661-010	C-IC,LC867132V-5P07		C32	87-010-197-080		CAP, CHIP 0.01 DM
	87-A20-914-010	IC,SPS-442-1-F		C33	87-010-197-080		CAP, CHIP 0.01 DM
TRANSISTOR				C34	87-010-197-080		CAP, CHIP 0.01 DM
	89-327-143-080	TR,2SC2714 (0.1W)		C35	87-010-197-080		CAP, CHIP 0.01 DM
	87-026-447-080	TR,2SC1740S R		C36	87-010-263-080		CAP, ELECT 100-10V
	87-026-463-080	TR,2SA933S (0.3W)		C38	87-010-322-080		C-CAP,S 100P-50 CH
	87-026-213-080	CHIP-TR,DTC114YK		C39	87-010-197-080		CAP, CHIP 0.01 DM
	89-318-154-080	TR,2SC1815 (0.4W)		C39	87-010-197-080		CAP, CHIP 0.01 DM
	89-320-011-080	TR,2SC2001 (15W)		C51	87-010-197-080		CAP, CHIP 0.01 DM
	87-026-462-080	TR,2SC1740 S RS (0.3W)		C56	87-010-148-080		CHIP CAP S 4P/50V(C) CH
	87-026-291-080	TR,DTC124XS		C91	87-010-197-080		CAP, CHIP 0.01 DM
	89-109-332-380	TR,2SA933RS		C92	87-010-197-080		CAP, CHIP 0.01 DM
	89-113-187-080	TR,2SA1318TU		C212	87-010-805-080		CHIP.CAP,S 1U-16V(Z)F
	87-A30-287-040	CHIP TR DTC114TKA T146		C212	87-010-805-080		CHIP.CAP,S 1U-16V(Z)F
	87-A30-435-040	CHIP TR DTC144EKA T146		C215	87-016-460-080		C-CAP,S 0.22-16 B
	89-112-965-080	TR,2SA1296 (0.75W)		C216	87-016-460-080		C-CAP,S 0.22-16 B
	87-A30-226-010	TR,2SB1655E		C231	87-015-632-080		C-CAP,0.015-50 B
	87-026-291-010	TR,DTC124XS		C232	87-015-632-080		C-CAP,0.015-50 B
	87-026-463-010	TR,2SA933S,RS		C233	87-A10-201-080		C-CAP,S0.33-16 KB
	87-026-464-010	TR,DTC114TS		C234	87-A10-201-080		C-CAP,S0.33-16 KB
	87-026-610-080	TR,KTC3198GR		C235	87-015-785-080		CHIP CAPACITOR, 0.1FZ-25Z
	89-322-405-080	TR,2SC2240GR		C236	87-015-785-080		CHIP CAPACITOR, 0.1FZ-25Z
DIODE				C237	87-010-221-080		CAP, ELECT 470-10V
	87-020-465-080	DIODE,1SS133 (110MA)		C238	87-010-248-080		CAP, ELECT 220-10V
	87-A40-128-080	C-VARI-CAP,HVU202A		C239	87-010-197-080		CAP, CHIP 0.01 DM
	87-027-703-080	ZENER,HZ7A1L<257 LH<S>>		C240	87-010-197-080		CAP, CHIP 0.01 DM
	87-027-399-080	ZENER,HZ7A3L<EXCEPT 257 LH<S>>		C241	87-010-401-080		CAP, ELECT 1-50V
	87-A40-466-080	ZENER,MTZJ2.7A		C242	87-010-401-080		CAP, ELECT 1-50V
	87-070-345-080	DIODE,IN4148		C243	87-010-401-080		CAP, ELECT 1-50V
	87-A40-648-080	ZENER,MTZJ8.2A		C244	87-010-401-080		CAP, ELECT 1-50V
	87-027-702-080	ZENER,HZ6C2L		C245	87-010-401-080		CAP, ELECT 1-50V
	84-RM1-695-010	DIODE,IN4148		C246	87-010-401-080		CAP, ELECT 1-50V
	87-A40-465-010	DIODE,FR202		C247	87-010-401-080		CAP, ELECT 1-50V
MAIN C.B				C248	87-010-401-080		CAP, ELECT 1-50V
C1	87-010-314-080	C-CAP,S 22P-50V		C251	87-010-404-080		CAP, ELECT 4.7-50V
C2	87-010-316-080	C-CAP,S 33P-50 CH		C261	87-010-402-080		CAP, ELECT 2.2-50V
C3	87-010-314-080	C-CAP,S 22P-50V		C262	87-010-402-080		CAP, ELECT 2.2-50V
C4	87-010-148-080	CHIP CAP S 4P/50V(C) CH		C263	87-010-178-080		CHIP CAP 1000P
C5	87-010-378-080	CAP, ELECT 10-16V		C265	87-010-404-080		CAP, ELECT 4.7-50V
C7	87-012-156-080	C-CAP,S 220P-50 CH		C266	87-010-545-080		CAP, ELECT 0.22-50V
C8	87-010-197-080	CAP, CHIP 0.01 DM		C267	87-010-545-080		CAP, ELECT 0.22-50V
C9	87-010-311-080	CAP 12P		C271	87-010-237-080		CAP, ELECT 1000-16V<257 LH<S>>
C10	87-010-197-080	CAP, CHIP 0.01 DM		C271	87-010-221-080		CAP, ELECT 470-10V<EXCEPT 257 LH<S>>
C11	87-010-152-080	CHIP.CAP,S 8P/50V(D)CH		C272	87-010-237-080		CAP, ELECT 1000-16V<257 LH<S>>
C12	87-010-314-080	C-CAP,S 22P-50V		C272	87-010-221-080		CAP, ELECT 470-10V<EXCEPT 257 LH<S>>
C13	87-010-148-080	CHIP CAP S 4P/50V(C) CH		C277	87-010-404-080		CAP, ELECT 4.7-50V
C14	87-016-669-080	C-CAP,S 0.1-25 K B		C278	87-010-263-080		CAP, ELECT 100-10V
C15	87-016-669-080	C-CAP,S 0.1-25 K B		C279	87-010-263-080		CAP, ELECT 100-10V
C16	87-010-178-080	CHIP CAP 1000P		C280	87-010-178-080		CHIP CAP 1000P
C17	87-016-669-080	C-CAP,S 0.1-25 K B		C281	87-010-178-080		CHIP CAP 1000P
C18	87-010-197-080	CAP, CHIP 0.01 DM		C285	87-010-178-080		CHIP CAP 1000P
C19	87-016-669-080	C-CAP,S 0.1-25 K B		C287	87-010-178-080		CHIP CAP 1000P
C20	87-010-400-080	CAP, ELECT 0.47-50V		C288	87-010-178-080		CHIP CAP 1000P
C21	87-010-403-080	CAP, ELECT 3.3-50V		C291	87-010-404-080		CAP, ELECT 4.7-50V
				C293	87-010-404-080		CAP, ELECT 4.7-50V
				C301	87-010-306-080		CHIP CAP 560P/50V (J) CH
				C302	87-010-306-080		CHIP CAP 560P/50V (J) CH
				C303	87-010-177-080		C-CAP,S 820P-50 SL
				C304	87-010-177-080		C-CAP,S 820P-50 SL

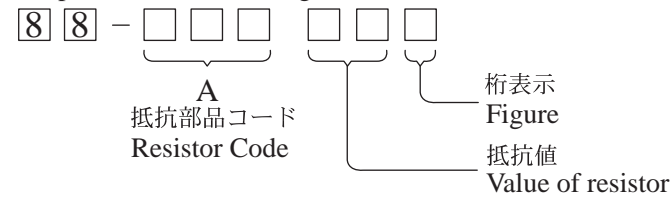
REF. NO	PART NO.	KANRI NO.	DESCRIPTION	REF. NO	PART NO.	KANRI NO.	DESCRIPTION
C305	87-010-260-080		CAP, ELECT 47-25V	C438	87-012-368-080		C-CAP,S 0.1-50 F
C306	87-010-260-080		CAP, ELECT 47-25V	C439	87-010-178-080		CHIP CAP 1000P
C307	87-010-382-080		CAP, ELECT 22-25V	C440	87-010-145-080		C-CAP,S 1P-50 CH
C308	87-010-405-080		CAP, ELECT 10-50V	C441	87-010-197-080		CAP, CHIP 0.01 DM
C309	87-010-545-080		CAP, ELECT 0.22-50V	C442	87-010-314-080		C-CAP,S 22P-50V
C310	87-010-545-080		CAP, ELECT 0.22-50V	C445	87-012-368-080		C-CAP,S 0.1-50 F
C311	87-010-248-080		CAP, ELECT 220-10V	C446	87-012-368-080		C-CAP,S 0.1-50 F
C312	87-010-260-080		CAP, ELECT 47-25V	C447	87-012-368-080		C-CAP,S 0.1-50 F
C313	87-015-828-080		C-CAP,0.033 F	C448	87-010-315-080		C-CAP,S 27P-50 CH
C314	87-015-828-080		C-CAP,0.033 F	C450	87-010-305-080		C-CAP 470P-50CH
C315	87-010-401-080		CAP, ELECT 1-50V	C451	87-012-156-080		C-CAP,S 220P-50 CH
C316	87-010-401-080		CAP, ELECT 1-50V	C455	87-010-247-080		CAP, ELECT 100-50V
C317	87-010-382-080		CAP, ELECT 22-25V	C457	87-010-312-080		C-CAP,S 15P-50 CH
C318	87-010-382-080		CAP, ELECT 22-25V	C458	87-010-312-080		C-CAP,S 15P-50 CH
C319	87-010-405-080		CAP, ELECT 10-50V	C459	87-010-263-080		CAP, ELECT 100-10V
C320	87-010-405-080		CAP, ELECT 10-50V	C460	87-015-819-080		CAPACITOR,0.01
C321	87-012-157-080		C-CAP,S 330P-50 CH	C461	87-010-197-080		CAP, CHIP 0.01 DM
C322	87-012-157-080		C-CAP,S 330P-50 CH	C462	87-010-248-080		CAP, ELECT 220-10V
C323	87-010-197-080		CAP, CHIP 0.01 DM	C463	87-A11-132-080		AXIAL CAP 0.01U/50V(K)
C324	87-010-197-080		CAP, CHIP 0.01 DM	C465	87-010-404-080		CAP, ELECT 4.7-50V
C325	87-010-180-080		C-CER 1500P	C466	87-012-368-080		C-CAP,S 0.1-50 F
C326	87-010-180-080		C-CER 1500P	C467	87-010-263-080		CAP, ELECT 100-10V
C327	87-010-404-080		CAP, ELECT 4.7-50V	C469	87-012-154-080		C-CAP,S 150P-50 CH
C328	87-010-178-080		CHIP CAP 1000P	C470	87-010-544-080		CAP, ELECT 0.1-50V
C329	87-018-132-080		CAP,CER 2200P-16V	C471	87-A11-601-080		C-CAP,S 0.1-25 K B
C330	87-010-213-080		C-CAP,S 0.015-50 B	C472	87-A11-601-080		C-CAP,S 0.1-25 K B
C331	87-010-260-080		CAP, ELECT 47-25V	C473	87-A11-601-080		C-CAP,S 0.1-25 K B
C332	87-A10-321-080		MALAY CAP 0.0012UF/50V(K)	C474	87-A11-601-080		C-CAP,S 0.1-25 K B
C334	87-012-155-080		C-CAP 180P-50CH	C475	87-015-819-080		CAPACITOR,0.01
C335	87-010-178-080		CHIP CAP 1000P	C476	87-010-236-080		CAP,E 1000-10 SME
C341	87-012-157-080		C-CAP,S 330P-50 CH	C477	87-010-197-080		CAP, CHIP 0.01 DM
C342	87-012-157-080		C-CAP,S 330P-50 CH	C478	87-010-263-080		CAP, ELECT 100-10V
C343	87-012-157-080		C-CAP,S 330P-50 CH	C479	87-010-197-080		CAP, CHIP 0.01 DM
C344	87-012-157-080		C-CAP,S 330P-50 CH	C480	87-010-221-080		CAP, ELECT 470-10V
C350	87-010-197-080		CAP, CHIP 0.01 DM	C481	87-010-405-080		CAP, ELECT 10-50V
C401	87-010-403-080		CAP, ELECT 3.3-50V	C482	87-010-405-080		CAP, ELECT 10-50V
C402	87-010-197-080		CAP, CHIP 0.01 DM	C489	87-012-368-080		C-CAP,S 0.1-50 F
C403	87-010-263-080		CAP, ELECT 100-10V	C490	87-012-368-080		C-CAP,S 0.1-50 F
C404	87-010-248-080		CAP, ELECT 220-10V	C491	87-015-819-080		CAPACITOR,0.01
C405	87-010-197-080		CAP, CHIP 0.01 DM	C492	87-010-221-080		CAP, ELECT 470-10V
C406	87-010-374-080		CAP, ELECT 47-10V	C493	87-010-184-080		CHIP CAPACITOR 3300P(K)
C407	87-010-178-080		CHIP CAP 1000P	C494	87-A11-132-080		AXIAL CAP 0.01U/50V(K)
C408	87-010-198-080		CAP, CHIP 0.022	C501	87-016-495-000		EL CAP 3300UF/25V
C409	87-010-248-080		CAP, ELECT 220-10V	C506	87-010-404-080		CAP, ELECT 4.7-50V
C410	87-010-263-080		CAP, ELECT 100-10V	C507	87-010-401-080		CAP, ELECT 1-50V
C411	87-A11-177-080		C-CAP,S 0.15-16 K B	C508	87-010-221-080		CAP, ELECT 470-10V
C412	87-010-401-080		CAP, ELECT 1-50V	C511	87-010-263-080		CAP, ELECT 100-10V
C413	87-016-369-080		C-CAP,S 0.033-25 B K	C512	87-010-385-080		CAP, ELECT 220-25V
C414	87-010-405-080		CAP, ELECT 10-50V	C521	87-010-197-080		CAP, CHIP 0.01 DM
C416	87-010-545-080		CAP, ELECT 0.22-50V	C522	87-010-263-080		CAP, ELECT 100-10V
C417	87-012-157-080		C-CAP,S 330P-50 CH	C544	87-010-405-080		CAP, ELECT 10-50V
C418	87-010-213-080		C-CAP,S 0.015-50 B	C620	87-010-197-080		CAP, CHIP 0.01 DM
C419	87-A11-608-080		C-CAP,S 0.33-25 K B	C762	87-010-198-080		CAP, CHIP 0.022
C420	87-016-369-080		C-CAP,S 0.033-25 B K	C765	87-016-669-080		C-CAP,S 0.1-25 K B
C421	87-A11-177-080		C-CAP,S 0.15-16 K B	C766	87-010-260-080		CAP, ELECT 47-25V
C422	87-010-184-080		CHIP CAPACITOR 3300P(K)	C766	87-010-260-080		CAP,ELECT 47-25V
C423	87-A10-321-080		CHIP.CAP,S 0.047U/25V(Z)F	C4001	87-010-322-080		C-CAP,S 100P-50 CH
C424	87-A10-712-080		CHIP.CAP,S 0.22U/50V	C4002	87-010-322-080		C-CAP,S 100P-50 CH
C425	87-010-176-080		C-CAP,S 680P-50 SL	C4003	87-010-322-080		C-CAP,S 100P-50 CH
C426	87-A11-608-080		C-CAP,S 0.33-25 K B	C4004	87-010-322-080		C-CAP,S 100P-50 CH
C428	87-010-197-080		CAP, CHIP 0.01 DM	C4005	87-010-322-080		C-CAP,S 100P-50 CH
C429	87-010-186-080		CAP,CHIP 4700P	C4006	87-010-322-080		C-CAP,S 100P-50 CH
C430	87-012-156-080		C-CAP,S 220P-50 CH	C4007	87-010-197-080		CAP, CHIP 0.01 DM
C431	87-010-545-080		CAP, ELECT 0.22-50V	C4008	87-010-197-080		CAP, CHIP 0.01 DM
C432	87-010-374-080		CAP, ELECT 47-10V	C4009	87-010-197-080		CAP, CHIP 0.01 DM
C433	87-010-401-080		CAP, ELECT 1-50V	C4010	87-012-368-080		C-CAP,S 0.1-50 F
C434	87-010-184-080		CHIP CAPACITOR 3300P(K)	C5001	87-010-194-080		CHIP.CAP,S 0.047U/25V(Z)F
C435	87-010-197-080		CAP, CHIP 0.01 DM	CF1	87-A90-128-010		FLTR,AM IF CFAL-455
C436	87-010-260-080		CAP, ELECT 47-25V	CF2	82-785-747-010		CF MS2 GHY R
C437	87-010-404-080		CAP, ELECT 4.7-50V	CF3	82-785-747-010		CF MS2 GHY R

REF. NO	PART NO.	KANRI NO.	DESCRIPTION	REF. NO	PART NO.	KANRI NO.	DESCRIPTION
CN0	8A-CT9-641-010		CONN,3P ULI1007	LED602	8Z-CT6-632-010		LED,L-934LID
CN401	87-A60-424-010		CONN,16P V TOC-B	LED603	8Z-CT6-632-010		LED,L-934LID
CN501	87-049-919-010		CONN,3P EH V WHT	LED604	8Z-CT6-632-010		LED,L-934LID
CN601	87-A60-109-010		CONN,2P V S2M-2W	LED605	8Z-CT6-632-010		LED,L-934LID
CNA402	8Z-CT6-631-010		CONN ASSY,6P CD MO	LED606	8Z-CT6-632-010		LED,L-934LID
L2	87-A50-347-010		COIL,FM BPF EX	LED607	8Z-CT6-632-010		LED,L-934LID
L3	87-A50-349-010		COIL,BAR ANT AMW (COI)	LED608	8Z-CT6-632-010		LED,L-934LID
L4	87-A50-345-010		COIL,FM RF EX	LED609	8Z-CT6-632-010		LED,L-934LID
L5	87-A50-449-010		COIL,FM OSC U	LED610	8Z-CT6-632-010		LED,L-934LID
L6	87-A50-337-010		COIL,AM OSC (TOKO)	SW600	8Z-CT6-636-010		SW,TACT EVQJAC04M
L7	87-A50-336-010		COIL,AM IFT (TOKO)	SW602	8Z-CT6-636-010		SW,TACT EVQJAC04M
L8	87-A50-335-010		COIL,FM IFT (TOKO)	SW603	8Z-CT6-636-010		SW,TACT EVQJAC04M
L9	87-A50-334-010		COIL,FM DET (TOKO)	SW604	8Z-CT6-636-010		SW,TACT EVQJAC04M
L10	87-005-849-080		COIL,10UH(CECS)	SW605	8Z-CT6-636-010		SW,TACT EVQJAC04M
L330	88-CT6-620-010		REC OSC	SW606	8Z-CT6-636-010		SW,TACT EVQJAC04M
L401	87-003-102-080		COIL, 10UH	SW607	8Z-CT6-636-010		SW,TACT EVQJAC04M
L404	87-003-152-080		COIL, 100UH	SW609	8Z-CT6-636-010		SW,TACT EVQJAC04M
L602	87-005-849-080		COIL,10UH(CECS)	SW610	8Z-CT6-636-010		SW,TACT EVQJAC04M
L603	87-005-849-080		COIL,10UH(CECS)	SW611	8Z-CT6-636-010		SW,TACT EVQJAC04M
PN301	87-A60-110-010		CONN,4P V S2M-4W	SW612	8Z-CT6-636-010		SW,TACT EVQJAC04M
PN302	87-A60-111-010		CONN,5P V S2M 5W	SW613	8Z-CT6-636-010		SW,TACT EVQJAC04M
PN751	88-CT6-608-010		CONN ASSY,8P MO	SW614	8Z-CT6-636-010		SW,TACT EVQJAC04M
PN751	87-099-832-010		CONN,8P S2M-8W	SW615	8Z-CT6-636-010		SW,TACT EVQJAC04M
PV1	87-A91-316-010		TUN-CAP,20P-160P U(TWD)	SW616	8Z-CT6-636-010		SW,TACT EVQJAC04M
△R761	87-029-019-010		RES, FUSEIBLE 1/2W-2.2	VR801	87-A90-768-010		VR,RTRY 10KAX1 1 H
SFR430	87-024-437-080		SFR100K,RH063EC	X601	87-030-273-010		VIB,XTAL 32.768K5PPM
SFR761	87-024-239-010		SFR,2.2K V RH0632C	X602	87-A70-070-080		VIB,CER 5.76MHZ CRHF
SW1	87-A91-548-010		SW,SL-2-3 SK23E01G06				
SW301	88-CT6-619-010		BACK SLIDE SW 6P2T SHORTIN				
X401	8Z-CD5-633-010		VIB, CER16.93MHZ FCR16.93M2	PWR C.B			
FRONT C.B				C901	87-A10-577-080		CAP,CER 0.022-50 Z YF
				C902	87-A10-577-080		CAP,CER 0.022-50 Z YF
				C903	87-A10-577-080		CAP,CER 0.022-50 Z YF
				C904	87-A10-577-080		CAP,CER 0.022-50 Z YF
C601	87-010-313-080		CAP, CHIP 18P	△F901	87-035-139-010		FUSE, 2.5A T 250V<257 LH<S>>
C602	87-010-315-080		C-CAP,S 27P-50 CH	△F901	87-035-367-010		FUSE, 3.15A 250V<EXCEPT 257 LH <S>>
C603	87-010-317-080		C-CAP,S 39P-50 CH	△FC901	87-A90-160-080		FUSE CLAMP,FC 51F
C604	87-010-314-080		C-CAP,S 22P-50V	△FC902	87-A90-160-080		FUSE CLAMP,FC 51F
C605	87-010-317-080		C-CAP,S 39P-50 CH	MOTOR C.B			
C606	87-010-197-080		CAP, CHIP 0.01 DM	M2	9X-262-576-910		MOTOR GEAR ASSY
C608	87-016-669-080		C-CAP,S 0.1-25 K B	PIN3	91-564-722-110		CONNECTOR 6P
C609	87-016-669-080		C-CAP,S 0.1-25 K B	SW1	91-572-085-120		LEAF SW
C610	87-010-263-080		CAP, ELECT 100-10V				
C611	87-016-669-080		C-CAP,S 0.1-25 K B				
C612	87-010-248-080		CAP, ELECT 220-10V				
C613	87-010-402-080		CAP, ELECT 2.2-50V				
C614	87-010-196-080		CHIP CAPACITOR,0.1-25				
C615	87-010-400-080		CAP, ELECT 0.47-50V				
C616	87-010-401-080		CAP, ELECT 1-50V				
C617	87-010-179-080		CAP,CHIP S B1200P				
C618	87-010-263-080		CAP, ELECT 100-10V				
C619	87-010-263-080		CAP, ELECT 100-10V				
C830	87-010-197-080		CAP, CHIP 0.01 DM				
C831	87-010-197-080		CAP, CHIP 0.01 DM				
C832	87-015-628-080		C-CAP,1800P-50 B				
C833	87-015-627-080		C-CAP,1000P-50 B				
C834	87-010-404-080		CAP, ELECT 4.7-50V				
C835	87-010-544-080		CAP, ELECT 0.1-50V				
C836	87-015-627-080		C-CAP,1000P-50 B				
C837	87-015-627-080		C-CAP,1000P-50 B				
C838	87-010-401-080		CAP, ELECT 1-50V				
C839	87-010-404-080		CAP, ELECT 4.7-50V				
C840	87-010-221-080		CAP, ELECT 470-10V				
C841	87-010-401-080		CAP, ELECT 1-50V				
C842	87-012-140-080		CAP 470P				
C844	87-010-401-080		CAP, ELECT 1-50V				
J251	8A-CT9-630-010		JACK,MIC ST SW				
J801	8A-CT9-630-010		JACK,MIC ST SW				
L601	87-003-149-080		COIL,47UH				
L801	87-003-098-080		FIXED IND 2.2UH K TP26				
LCD601	8A-CT9-620-010		LCD,HLC7107ACT-9				

- 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

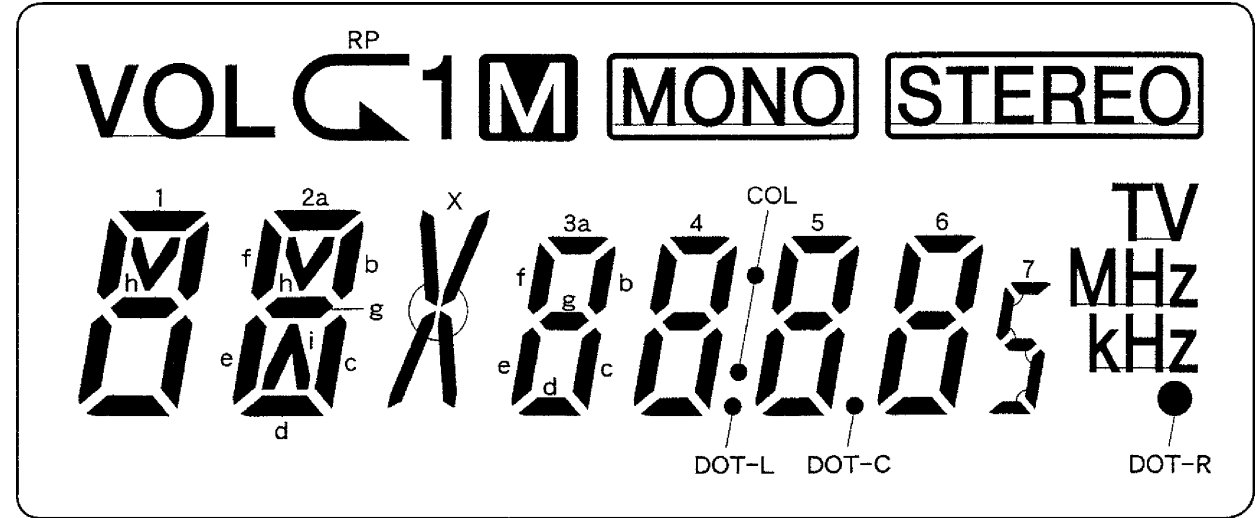
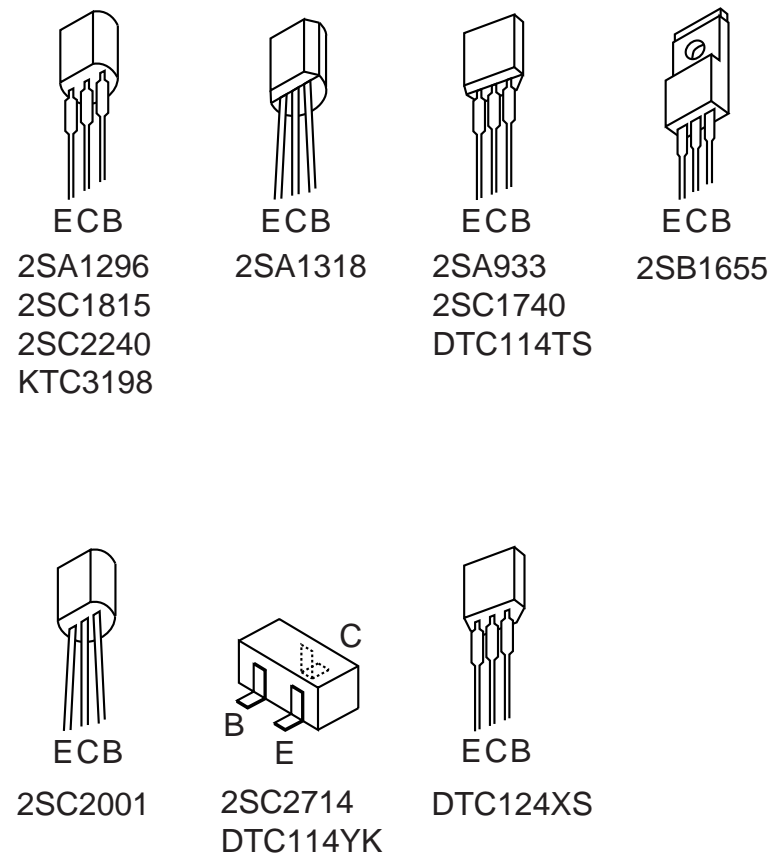
チップ抵抗部品コードの成り立ち
Chip Resistor Part Coding



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



No	COM1	COM2	COM3
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	RP
8	3a	3g	3d
9	3b	3c	1
10	4f	4e	M
11	4a	4g	4d
12	4b	4c	X
13	COL	DOT-L	MONO
14	5f	5e	DOT-R
15	5a	5g	5d
16	5b	5c	DOT-C
17	6f	6e	STEREO
18	6a	6g	6d
19	6b	6c	7
20	TV	MHz	kHz
21	COM1	---	---
22	---	COM2	---
23	---	---	COM3

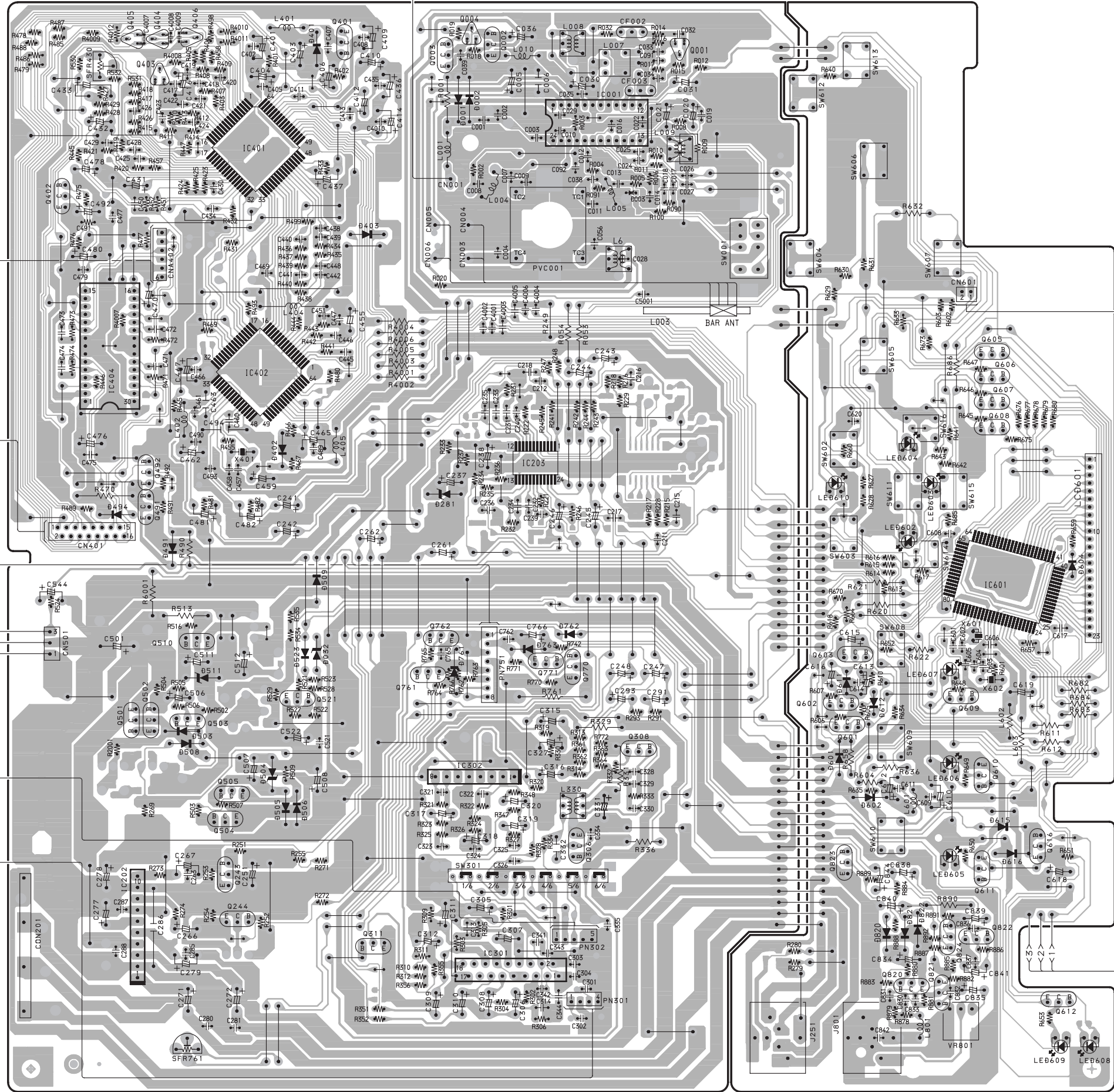
WIRING-1 (MAIN/FRONT)

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

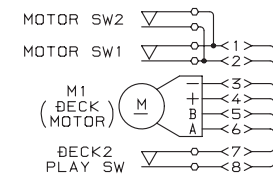
A
B
C
D
E
F
G
H
I
J
K

MAIN C.B

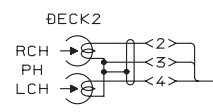
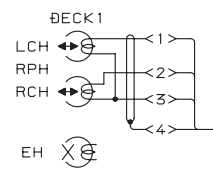
FRONT C.B



OPTICAL PICK UP SF-P101NR



TO PWR C.B
REDY
BLKY
WHT

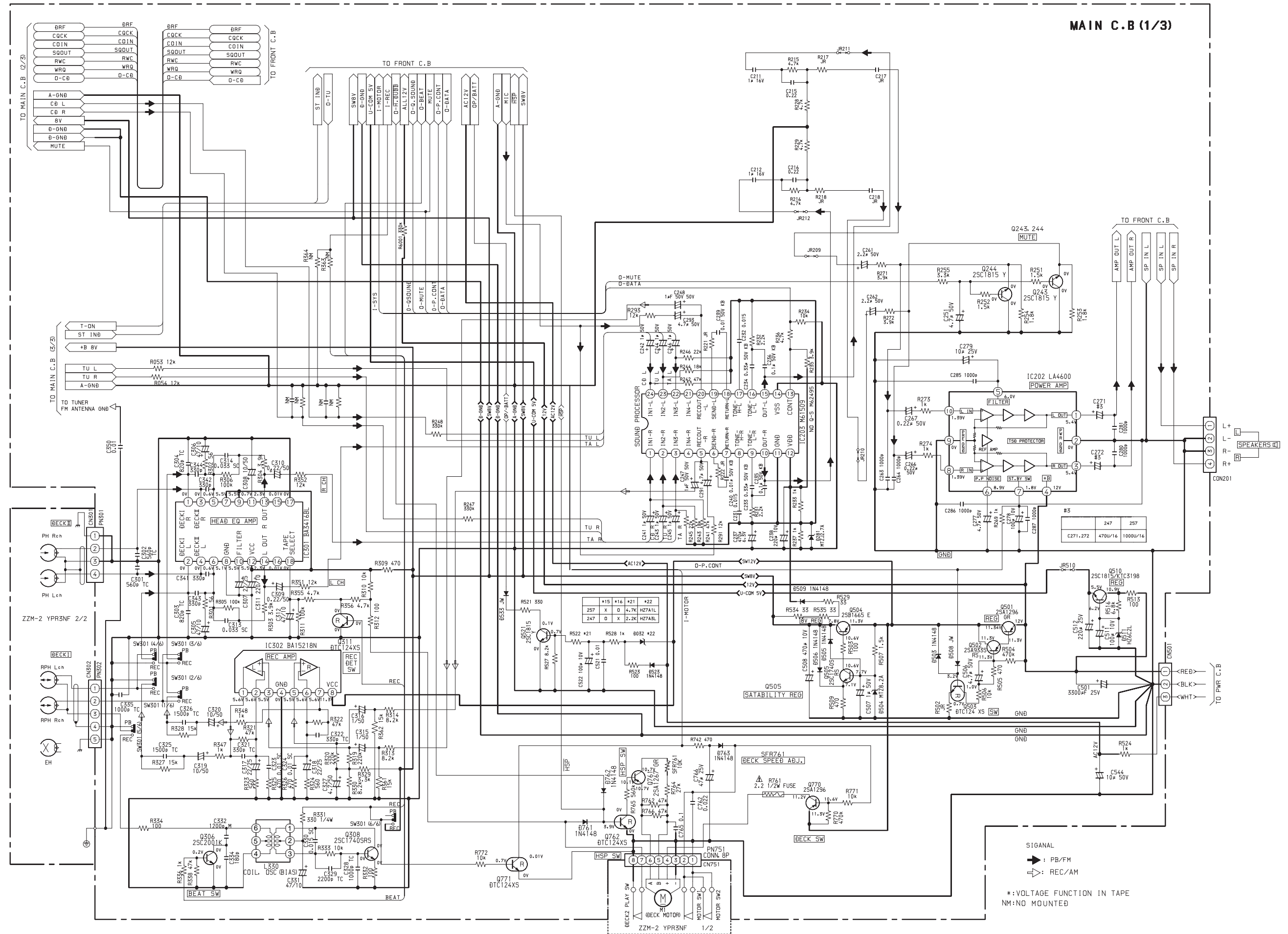


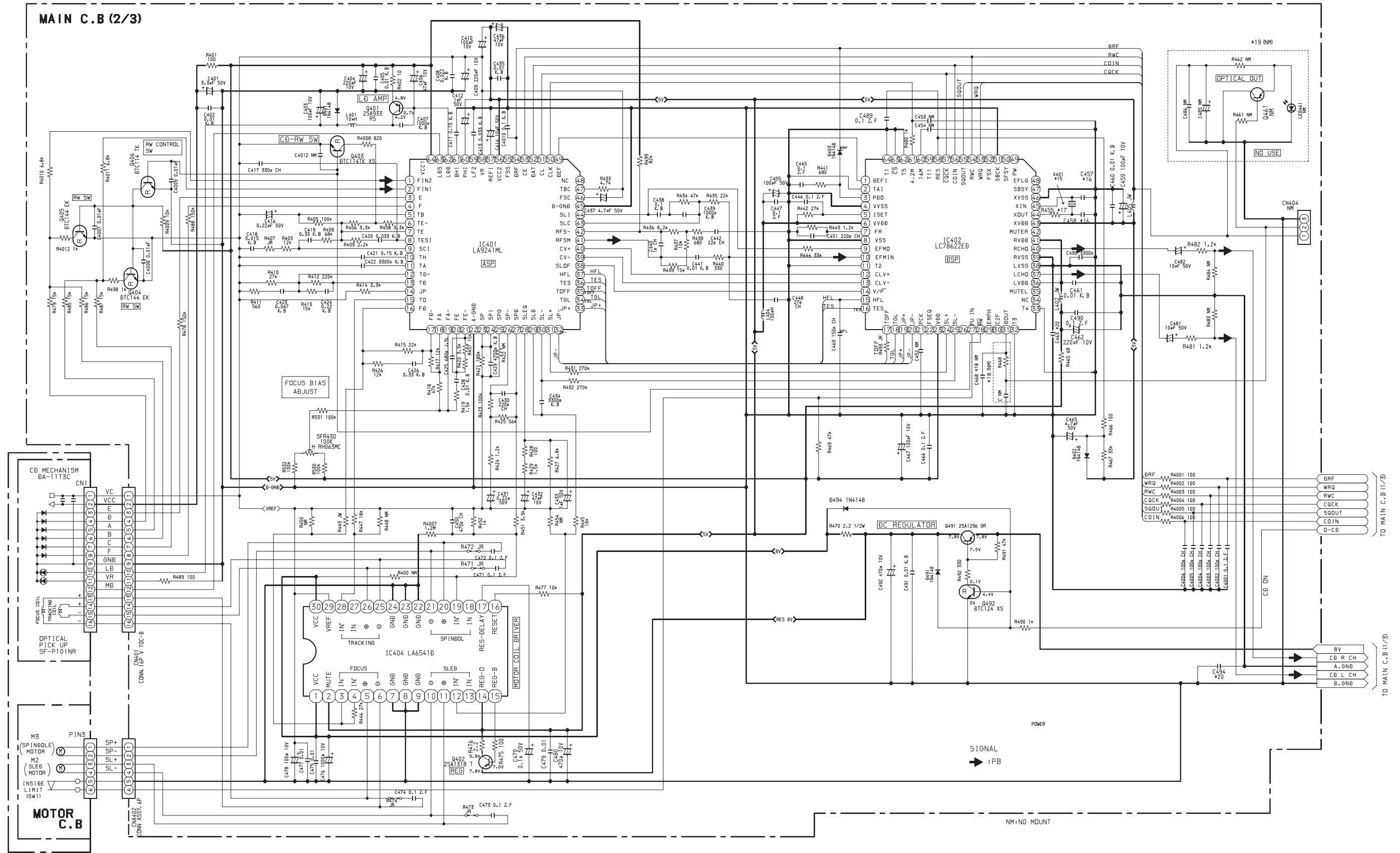
CD DOOR SWITCH

(REM SENSOR)

SCHEMATIC DIAGRAM-1 (MAIN)

MAIN C.B (1/3)



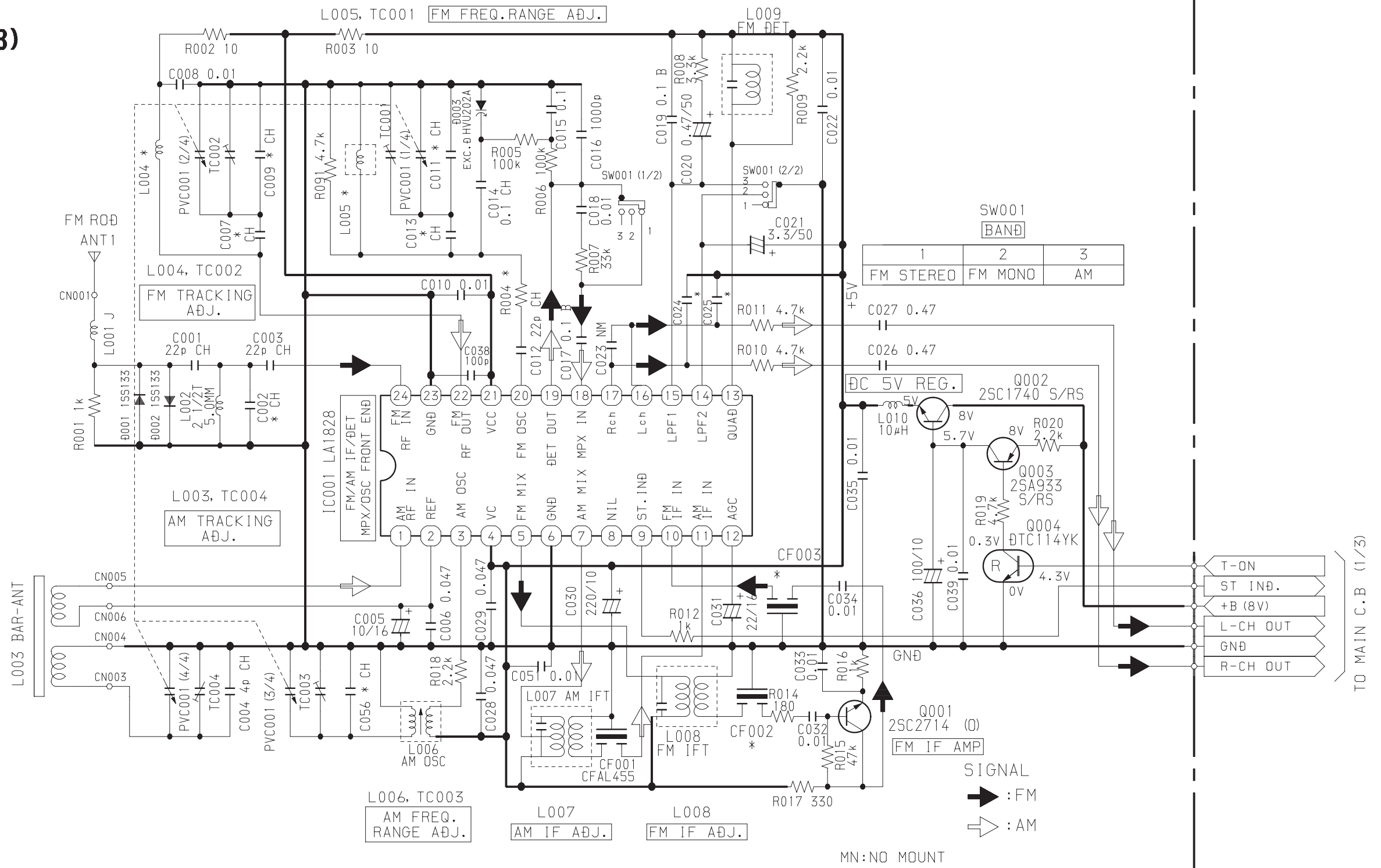


	*15 (X401)	*16 (C457, 458)	*17 (R455)	*18 (C468)	*19 (OPT1 OUT)	*20 (E468, 494)	*21 (C493)	*22 (C500)	*23 (SW401)
247/257	V1B, CER 16.954MHZ (T8D)	15p	100	N, M	NO MOUNT	0.01	N, M	NO MOUNT	NO MOUNT

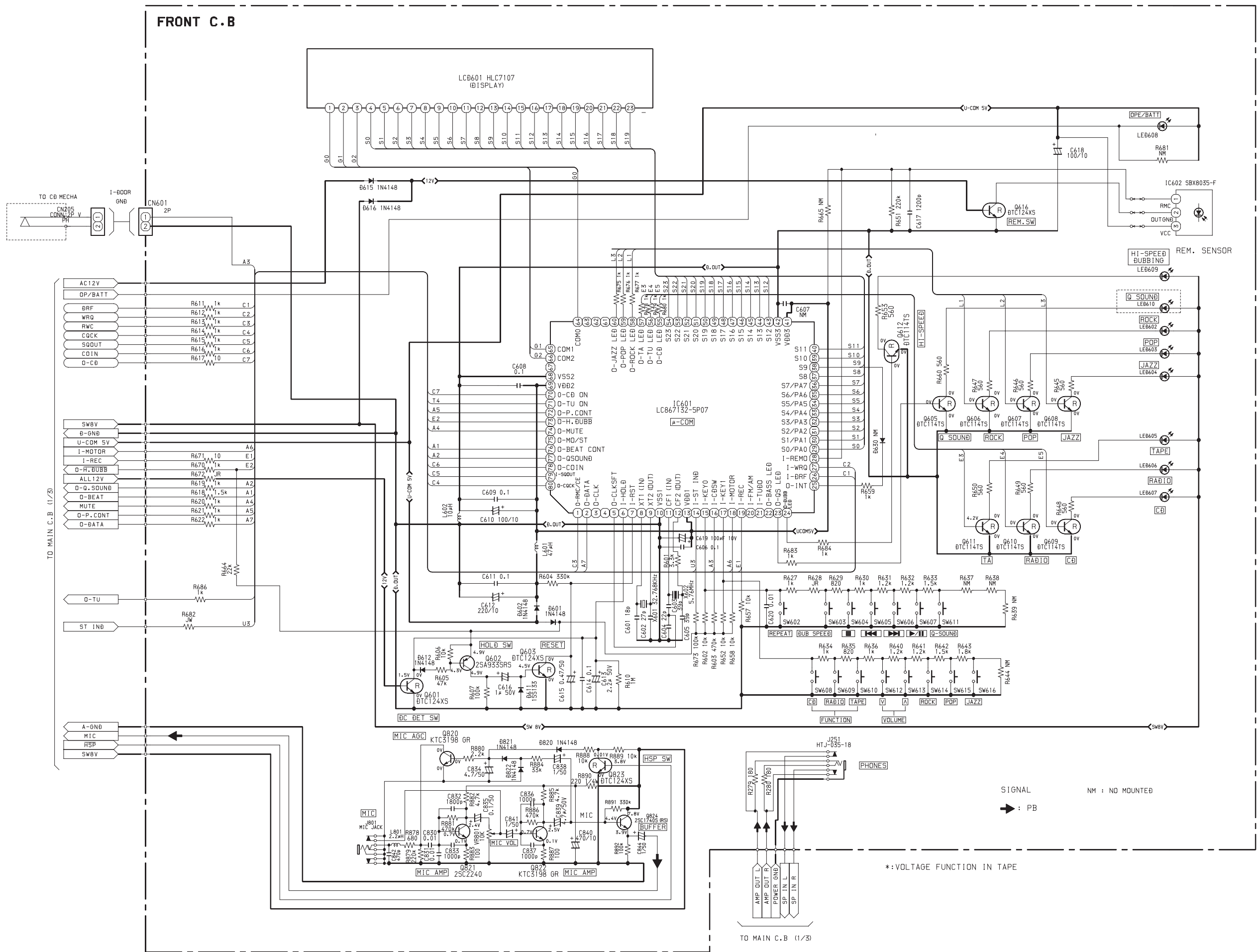
MAIN C.B (3/3)

※

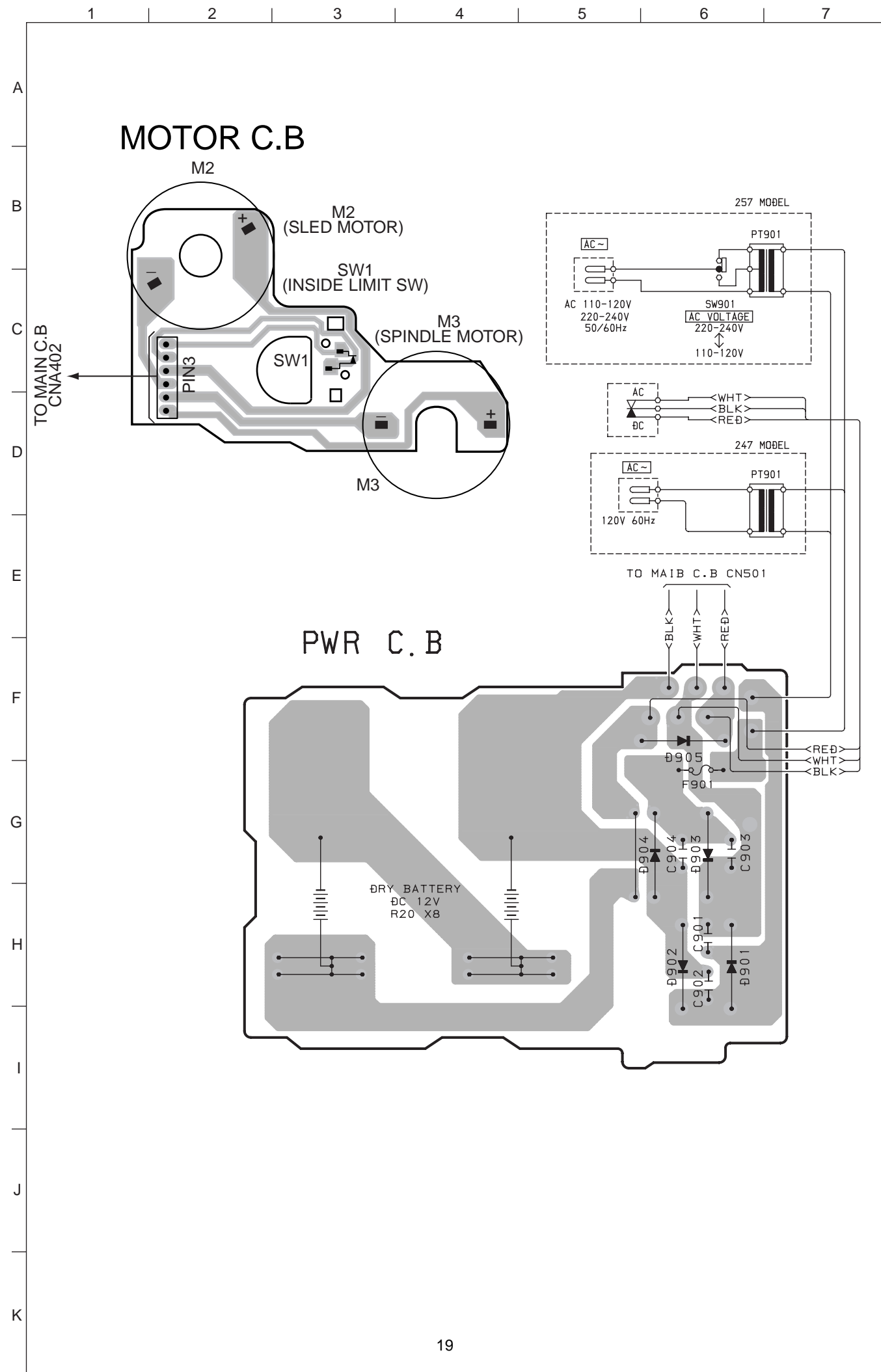
	U	LH
C002	33P	→
C007	220P	→
C009	12P	→
C011	8P	→
C013	4P	→
C024,025	0.01	→
C056	4P	→
R004	22	→
L004	COIL.FM.RF.EX	
L005	COIL.FM.OSC.EX	
CF002,003	SFE10.7MA5A	



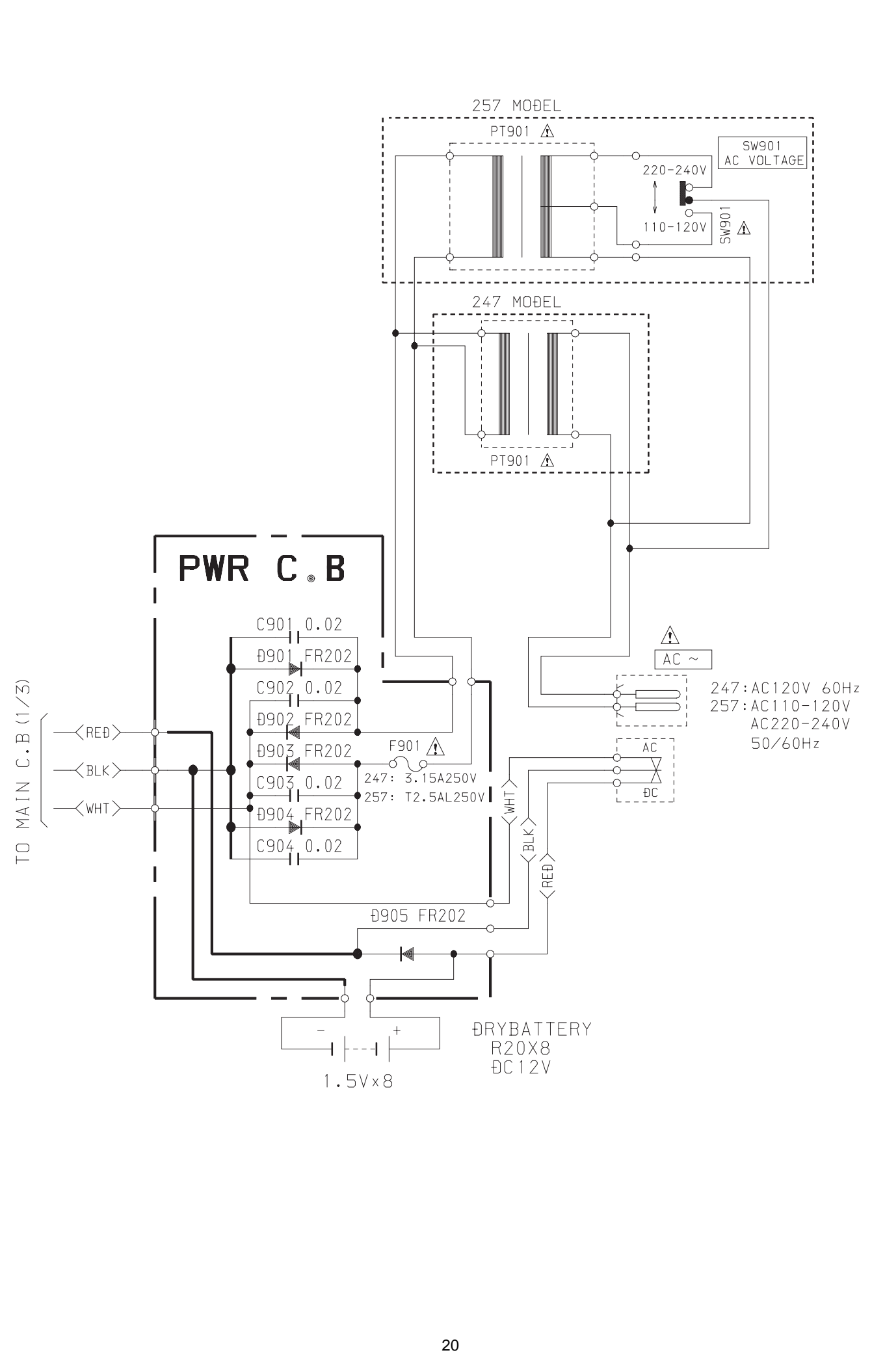
SCHEMATIC DIAGRAM-4 (FRONT)



WIRING-2 (PWR, MOTOR)

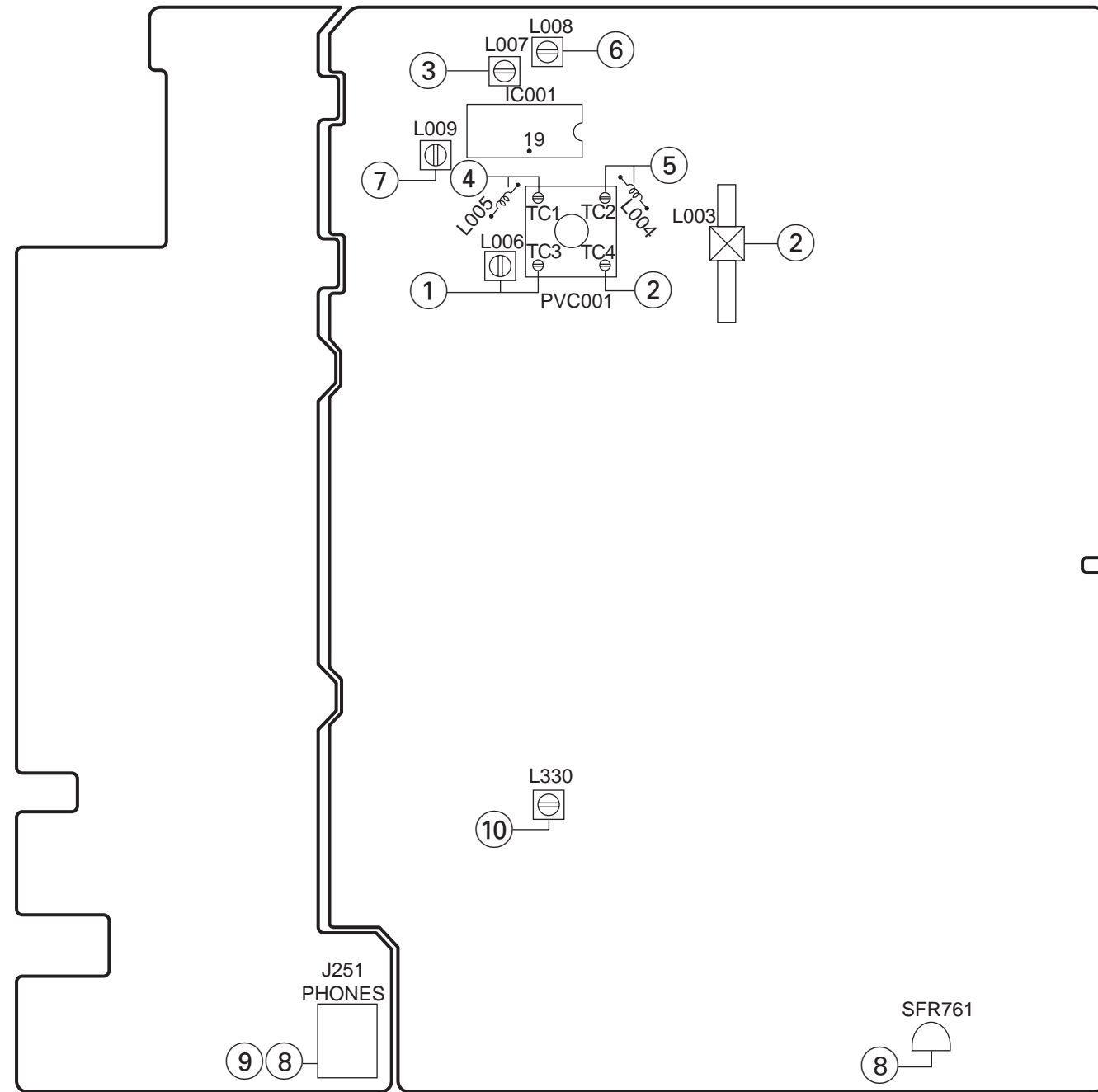


SCHEMATIC DIAGRAM-5 (POWER)

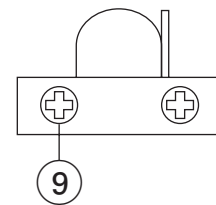


FRONTC.B

MAINC.B



RPH (DECK1)/PH (DECK2)



< TUNER SECTION >

- AM Freq. Range Adjustment
L006 517kHz
TC003 1750kHz

- AM Tracking Adjustment
L003 600kHz
TC004 1400kHz

- AM IF Adjustment
Settings: • Test point: IC001 (L81828) 19PIN
 • Adjustment location: L007
Method: Adjust L007 so that the output level at 1000kHz becomes maximum.

- FM Freq. Range Adjustment
L005 87.0MHz
TC001 109.0MHz

- FM Tracking Adjustment
L004 90.0MHz
TC002 108.0MHz

- FM IF Adjustment
Settings: • Test point: IC001 (L81828) 19PIN
 • Adjustment location: L008
Method: Adjust L008 so that the output level at 98.0MHz becomes balanced.

- FM Balance Adjustment
Settings: • Test point: IC001 (L81828) 19PIN
 • Adjustment location: L009
Method: Adjust L009 so that the output level at 98.0MHz becomes balanced.

< TAPE SECTION >

- Tape speed Adjustment
Settings: • Test tape: TTA-100
 • Test point: J251 (PHONES jack)
 • Adjustment location: SFR761
Method: Play back the test tape and adjust SFR761 so that the frequency counter reads 3000Hz ±5Hz.

- 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.

- Bias frequency Adjustment
L330 56kHz ±2kHz

< TUNER SECTION >

< FM SECTION >

Sensitivity:	Less than 19dB (88.0MHz)
(THD 3%)	Less than 19dB (98.0MHz)
	Less than 19dB (108.0MHz)
Signal to Noise Ratio:	More than 57dB (at 98.0MHz)
(Input 54dB)	
Distortion:	Less than 1.5% (at 98.0MHz)
(Input 54dB)	
Intermediate frequency:	10.7MHz ±0.3MHz
Stereo separation:	More than 18dB

< AM SECTION >

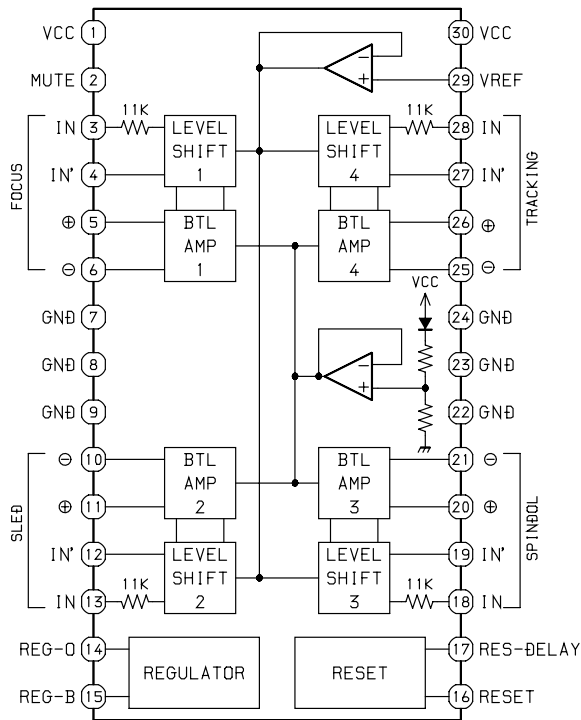
Sensitivity:	Less than 45dB (at 600kHz)
(S/N 10dB)	Less than 48dB (at 1000kHz)
	Less than 45dB (at 1400kHz)
Distortion:	Less than 1.5%
(Input 74dB)	
Intermediate frequency:	450kHz±5kHz

< CASSETTE SECTION >

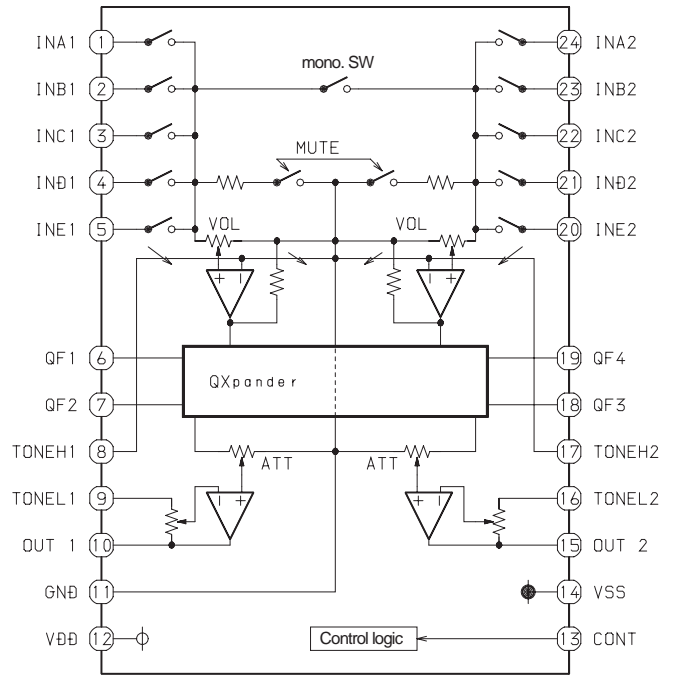
Tape speed:	3000Hz±30%
Wow & flutter:	Less than 0.35% (JIS RMS)
Take-up torque:	30-60g-cm (DECK 1/2)
FF torque:	55-140g-cm (DECK 1/2)
Reel torque:	55-140g-cm (DECK 1/2)
Back tension:	3±2g-cm
S/N ratio:	More than 40dB
Distortion:	Less than 3.0% (PB)
Noise (PB):	Less than 1mV
	(AC/DC, MIN)
Erasing Ratio (W/FILTER):	More than 40dB

IC BLOCK DIAGRAM

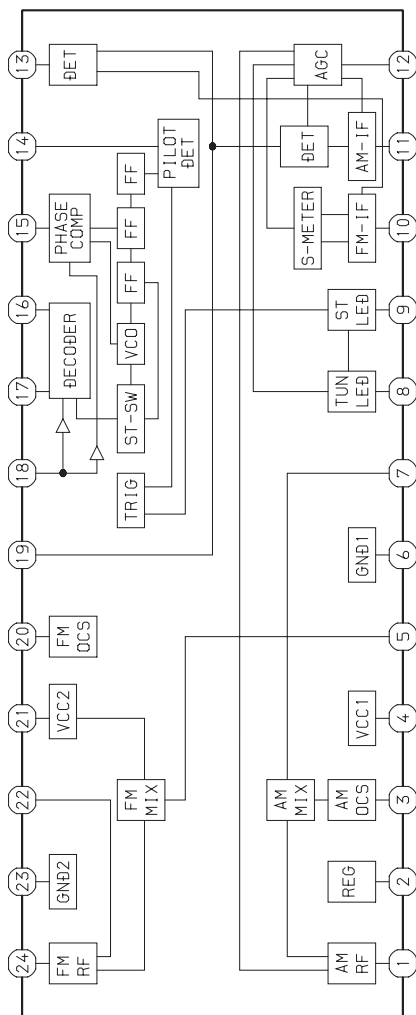
IC, LA6541D



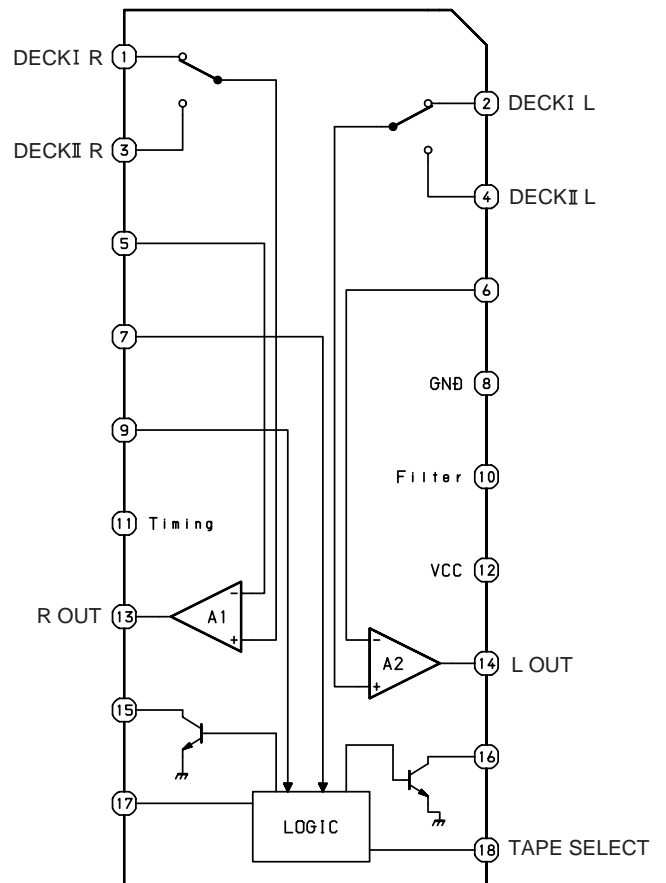
IC, M61509



IC, LA1828



IC, BA3416BL



VOLTAGE CHART

IC601(LC867132V-***)																																												
PIN NO	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40				
CD	0	0	0	0	0	0	3.5	1.4	2.5	0	2.0	2.5	4.5	0.5	5.0	0	5.0	5.0	0	0	0	4.5	0	0	4.5	5.0	1.0	5.0	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5		
TUNER	0	0	0	0	0	0	4.5	1.4	2.5	0	4.0	5.0	5.0	4.5	5.0	0	5.0	5.0	0	0	0	5.0	0	0	0	0	0	4.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
TAPE	0	0	0	0	0	0	4.5	1.4	2.5	0	2.0	2.5	4.5	0.5	5.0	0	5.0	1.5	0	0	0	5.0	0	0	4.5	0	0	4.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
PIN NO	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80				
CD	0	0	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	4.5	0	0	0	0	0	0	0	0	2.5	2.5	2.5	0	0	4.5	4.5	0	4.5	4.5	0	0	0	0	0	0	4.5	0	4.5		
TUNER	5.0	0	0	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	0	0	0	0	0	0	0	0	2.5	2.5	2.5	0	0	4.5	5.0	0	4.5	5.0	0	0	0	0	0	0	0	0	0		
TAPE	5.0	0	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	0	0	4.5	0	0	0	0	0	0	2.5	2.5	2.5	0	0	5.0	0	4.5	4.5	0	0	0	0	0	0	0	0	0	0		

IC602	
I(B+)	5.5
2	0
3	4.5

IC203(M61509)																								
PIN NO	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
VOLT	1.5	1.5	2.0	0	2.0	2.5	2.5	2.5	2.5	2.5	2.0	4.5	3.0	0	0	0	0	0	0	0	0	0	0	0

IC401(LA9241ML)

PIN NO	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
STOP	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	0	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	0
PLAY	2.5	1.0	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	0	0	2.5	2.5	2.5	2.5	2.5	0	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	0
RW	2.5	1.0	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	0	0	2.5	2.5	2.5	2.5	2.5	0	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	0
PIN NO	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64
STOP	0	5.0	0	1.0	0	0	0	0	1.5	2.5	2.5	2.5	0	2.5	2.5	0	0	2.5	4.5	4.5	0	5.0	0	5.0	2.5	2.5	1.0	3.0	2.0	4.5	0	5.0
PLAY	0	5.0	0	1.0	0	0	0	0	2.0	2.5	2.5	2.5	0	2.5	2.5	0	0	2.5	2.5	4.5	0	5.0	0	5.0	2.5	2.5	1.0	3.0	2.0	1.0	0	5.0
RW	0	5.0	0	1.0	0	0	0	0	2.0	2.5	2.5	2.5	0	2.5	2.5	0	0	2.5	2.5	4.5	0	5.0	0	5.0	2.5	2.5	1.0	3.0	2.0	1.0	0	5.0

IC402(LC78622ED)

PIN NO	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
STOP	0	0	0.5	0	1.5	4.0	0	0	0	0	0	0	0	0	0	1.0	0.5	5.0	0	0	2.5	0	5.0	0	0	0	0	4.5	0	0	0	0
PLAY	0	0	1.5	0	1.5	4.0	0	0	2.5	2.5	0	0	0	0	0	1.0	0	5.0	0	0	2.5	0	0	0	0	0	4.0	0	0	0	2.5	0
RW	0	0	1.5	0	1.5	4.0	0	0	2.5	2.5	0	0	0	0	0	1.0	0	5.0	0	0	2.5	0	0	0	0	0	4.0	5.0	0	0	2.5	0
PIN NO	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64
STOP	0	0	0	5.0	2.0	0	0	2.0	5.0	0	5.0	2.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.5	0	0	0
PLAY	0	0	0	5.0	2.0	0	0	2.0	5.0	0	5.0	2.0	0	0	0	0	0	0	0	1.0	0	0	0	0	4.5	4.5	0	2.5	0	0	0	0
RW	0	0	0	5.0	2.0	0	0	2.0	5.0	0	5.0	2.0	0	0	0	0	0	0	0	1.0	0	0	0	4.5	4.5	0	2.5	0	0	0	0	

IC404(LA6541D)

PIN NO	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
STOP	7.5	0	2.5	2.5	3.5	3.5	0	0	0	3.5	3.5	2.5	0	5.0	7.0	5.0	5.0	0	4.5	3.5	3.5	0	0	0	0	0	3.5	0	2.5	0	7.5
PLAY	7.5	0	2.5	2.5	3.0	3.5	0	0	0	3.0	3.5	2.5	0	5.0	7.0	5.0	5.0	0	2.5	3.0	3.0	0	0	0	3.0	3.5	0	2.5	2.5	7.5	

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 FD- and FA- pins.
19	FA-	I	Pin to which external focusing phase compensation constants are connected between the FA and FE pins.
20	FE	O	FE signal output pin.
21	FE-	I	Pin to which external FE signal gain setting resistor is connected between the FE pin.
22	AGND	—	Analog signal GND.
23	SP	O	Signal ended output of the CV+ and CV- pin input signal.
24	SPI	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.
35	TOFF	I	Tracking off control signal input pin from DSP. Off when TOFF = H.

Pin No.	Pin Name	I/O	Description
36	TES	O	Pin from which TES signal is output to DSP.
37	HFL	O	“High Frequency Level” is used to judge whether the main beam position is on top of bit or on top of mirror.
38	SLOF	I	Sled servo off control input pin.
39, 40	CV-, CV+	I	CLV error signal input pin from DSP.
41	RFSM	O	RF output pin.
42	RFS-	I	RF gain setting and EFM signal 3T compensation constant setting pin together with RFSM pin.
43	SLC	O	“Slice Level Control” is the output pin which controls the RF signal data slice level by DSP.
44	SLI	I	Input pin which control the data slice level by the DSP.
45	DGND	—	Digital system GND.
46	FSC	O	Output pin to which external focus search smoothing capacitor is connected.
47	TBC	I	“Tracking Balance Control” EF balance variable range setting pin.
48	NC	—	No connection.
49	DEF	O	Disc defect detector output pin.
50	CLK	I	Reference clock input pin. 4.23 MHz of the DSP is input.
51	CL	I	Microprocessor command clock input pin.
52	DAT	I	Microprocessor command data input pin.
53	CE	I	Microprocessor command chip enable input pin.
54	DRF	O	“Detect RF” RF level detector output.
55	FSS	I	“Focus Search Select” focus search mode (\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, LC78622ED

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	T2	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	RW	O	Read, wright signal.	
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	T3, T4	I	Test signal input pin with built-in pull-down resistor. Be sure to connect to 0V.	
34	N.C.	—	Not used. Set the pin to open.	
35	MUTEL	O	L-channel 1-bit DAC.	L-channel mute output pin.
36	LVDD	—		L-channel power supply pin.
37	LCHO	O		L-channel output pin.
38	LVSS	—		L-channel GND. Be sure to connect to 0V.
39	RVSS	—	R-channel 1-bit DAC.	R-channel GND. Be sure to connect to 0V.
40	RCHO	O		R-channel output pin.
41	RVDD	—		R-channel power supply pin.
42	MUTER	O		R-channel mute output pin.

Pin No.	Pin Name	I/O	Description
43	XVDD	—	Crystal oscillator power supply pin.
44	XOUT	O	Pin to which external 16.9344 MHz crystal oscillator is connected.
45	XIN	I	
46	XVSS	—	Crystal oscillator GND pin. Be sure to connect to 0V.
47	SBSY	O	Subcode block sync signal output pin.
48	EFLG	O	C1, C2, single and dual correction monitoring pin.
49	PW	O	Subcode P, Q, R, S, T, U and W output pin.
50	SFSY	O	Subcode frame sync signal output pin. Falls down when subcode enters standby.
51	SBCK	I	Subcode read clock input pin. Schmidt input. (Be sure to connected to 0V when not in use.)
52	FSX	O	Pin outputting the 7.35 kHz sync signal which is generated by dividing frequency of crystal oscillator.
53	WRQ	O	Subcode Q output standby output pin.
54	RWC	I	Read/write control input pin. Schmidt input.
55	SQOUT	O	Subcode Q output pin.
56	COIN	I	Command input pin from microprocessor.
57	$\overline{\text{CQCK}}$	I	Command input read clock or subcode read input clock from SQOUT pin
58	RES	I	LC78622 reset input pin. Set this pin to L once when the main power is turned on.
59	T11	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	T5	I	Test signal input pin with built-in pull-down resistor. Be sure to connect to 0V.
63	$\overline{\text{CS}}$	I	Chip select signal input pin with built-in pull-down resistor. Be sure to connect to 0V while it is not controlling.
64	T1	I	Test signal input pin without built-in pull-down resistor. Be sure to connect to 0V.

IC, LC867132V-5P07

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 M62495FP.
3	O-CLK	O	Output CLK to tuner PLL.(Not connected)
4	—	—	Not Connected.
5	O-CK SFT	O	Clock shift output of the microcomputer.
6	I-HOLD	I	Hold status detection.
7	I-RST	I	Microcomputer reset.
8	XT1 (IN)	I	Connected to 32.768KHZ crystal oscillator.
9	XT2 (OUT)	O	
10	VSS1	—	GND.
11	CF1 (IN)	I	Connected to 6MHZ Ceramic Filter.
12	CF2 (OUT)	O	
13	VDD1	—	Power supply for microcomputer (+5V).
14	I-ST IND	I	FM STEREO status input.
15	I-KEYO	I	KEY AD input.
16	I-CD SW	I	CD DOOR SW status detection input.
17	I-KEY1	I	KEY AD input.
18	I-MOTOR	I	DECK MECHA MOTOR status input.
19	I-REC	I	REC status input.
20	I-FM/AM	I	FM, AM status input. (Not connected)
21	I-TU DO	I	Data input from tuner PLL.(Not connected)
22	O-BASS LED	O	BASS LED ON/OFF control output.
23	O-QS LED	O	Q-Sound LED ON/OFF control output.
24	O-DUBB LED	O	LED control output used for high-speed dubbing.
25	O-INT	O	INT DIODE MATRIX detection output.(Not connected)
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.
30	S1/PA1	O	LCD segment output.
31	S2/PA2	O	LCD segment output.
32	S3/PA3	O	LCD segment output.
33	S4/PA4	O	LCD segment output.
34	S5/PA5	O	LCD segment output.
35	S6/PA6	O	LCD segment output.
36	S7/PA7	O	LCD segment output.
37-40	S8~S11	O	
41	VDD3	—	Power supply for microcomputer (+5V).
42	VSS3	—	GND.
43-54	S12~S23	O	LCD segment output.
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 TU functions.
57	O-TA LED	O	LED ON/OFF control output for TAPE functions. (Not Connected)
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.
61-63	—	—	Not connected.
64-66	COM0-COM2	O	LCD common output.
67	—	—	Not connected.
68	VSS2	—	GND.
69	VDD2	—	Power supply for microcomputer (+5V).
70	O-CD ON	O	CD PWR control output.
71	O-TU ON	O	TU PWR control output.
72	O-P.CONT	O	Power supply control output.
73	O-HI DUBB (NC)	O	Dubbing speed control output.
74	O-MUTE	O	Main mute output.
75	O-MO/ST	O	FM mono/stereo output.
76	O-BEAT CONT	O	BEAT switch over output.
77	O-QSOUND	O	Q-Sound ON/OFF output.
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.

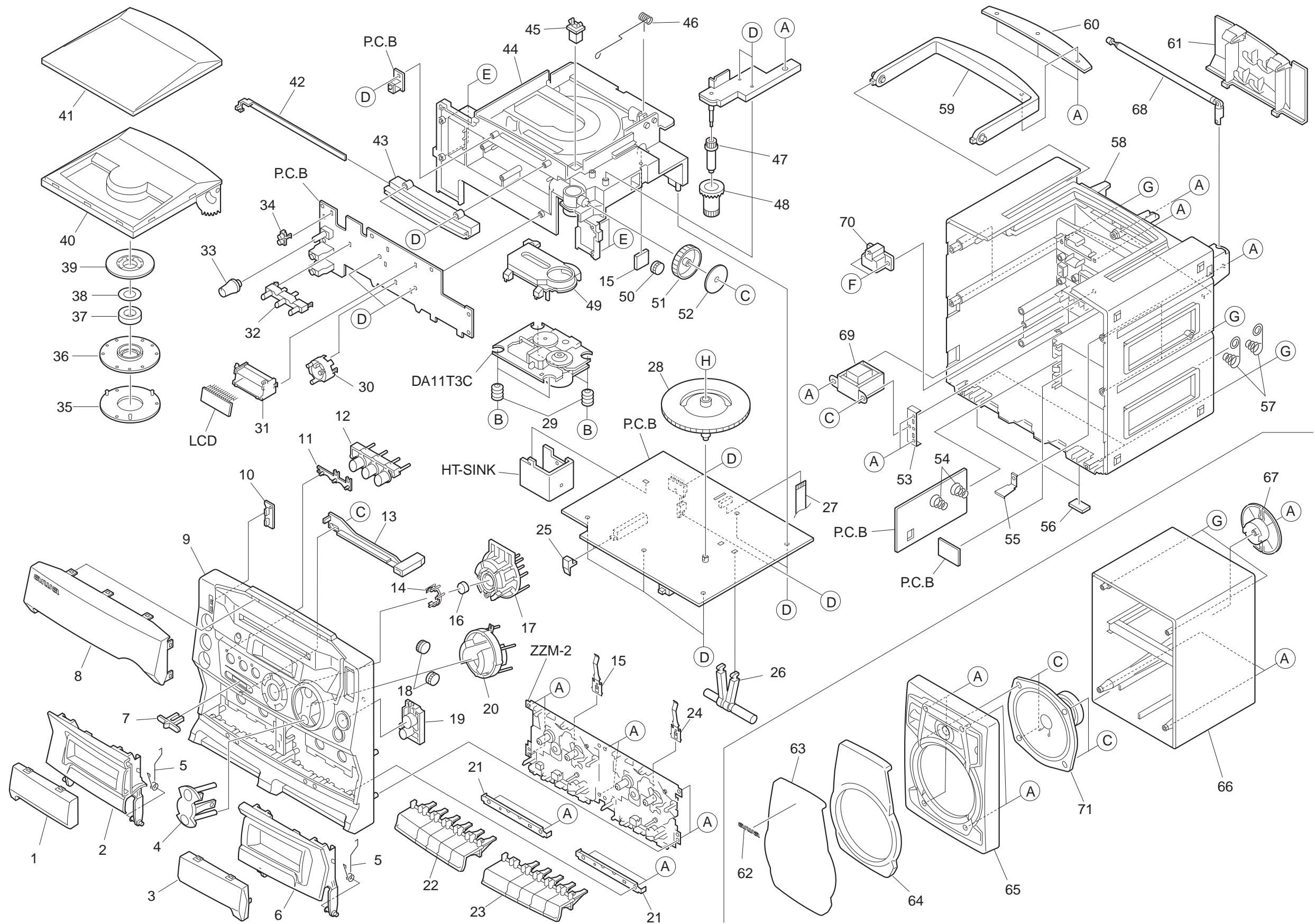
MECHANICAL PARTS LIST 1/1

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	8A-CT9-006-010		WINDOW, CASS L	43	8A-CT9-207-010		HLLDR, POINTER
2	8A-CT9-002-010		BOX, CASS L	44	8A-CT9-201-010		CHAS, CD
3	8A-CT9-007-010		WINDOW, CASS R	45	87-036-389-010		SW, PUSH LOCK<EXCEPT 247 U<S>>
4	8A-CT9-011-010		BTN, CD A	46	8A-CT9-212-010		SPR-T, CD
5	86-CT9-210-010		SPR-T, CASS	47	8A-CT9-209-010		GEAR, POINTER
6	8A-CT9-003-010		BOX, CASS R	48	8A-CT9-210-010		GEAR, ADAP
7	8A-CT9-019-010		KNOB, SL BAND	49	8Z-CT9-064-010		PANEL CD
8	8A-CT9-008-010		WINDOW, DISP<EXCEPT 257 LH<S>>	50	87-063-164-010		OIL-DMPR 80
8	8A-CT9-055-010		WINDOW, DISP LH<257 LH<S>>	51	8A-CT9-018-010		KNOB, RTRY TUN
9	8A-CT9-001-010		CABI, FR<EXCEPT 257 LH<S>>	52	8A-CT9-028-010		COVER, TUN
9	8A-CT9-050-010		CABI, FR LH<257 LH<S>>	53	86-CT9-206-010		HLLDR, TRANS<EXCEPT 257 LH<S>>
10	8A-CT9-021-010		LENS, POWER	54	86-CT9-213-010		SPR-C, BATT (-)
11	8A-CT9-020-010		LENS, FUNC	55	86-CT9-207-010		HLLDR, ANT
12	8A-CT9-010-010		KEY, FUNC	56	86-CT9-223-010		CUSH, FOOT
13	8A-CT9-202-010		LEVER, BAND	57	86-CT9-212-010		SPR-C, BATT LINK
14	8A-CT9-022-010		LENS, GEQ	58	8Z-CT9-044-010		CABI, REAR
15	8A-CT9-215-010		SPR-P, REC A	59	86-CT6-036-010		HANDL, RF
16	8A-CT9-023-010		BTN, QSOUND<EXCEPT 257 LH<S>>	60	88-CT6-022-010		COVER, HNDL
17	8A-CT9-016-010		BTN, GEQ<EXCEPT 257 LH<S>>	61	86-CT6-035-010		LID, BATT RF
17	8A-CT9-051-010		BTN, GEQ LH<257 LH<S>>	62	86-CT9-040-010		BADGE, AIWA --<247 U<S>>
18	87-063-165-010		OIL-DMPR 150	62	87-B00-010-010		BADGE, AIWA 30.5-5.2 S 2.5L <EXCEPT 247 U<S>>
19	8A-CT9-015-010		BTN, VOL	63	8A-CT9-030-010		NET, SPKR
20	8A-CT9-012-010		BTN, CD B	64	8A-CT9-027-010		FRAME, SPKR NET
21	86-CT9-208-010		HLLDR, KEY CASS	65	8A-CT9-024-010		CABI, SPKR FR
22	8A-CT9-013-010		KEY, CASS L	65	8A-CT9-025-010		CABI, SPKR FR R
23	8A-CT9-014-010		KEY, CASS R	66	86-CT9-117-010		CABI, SPKR-REAR L RF
24	8A-CT9-216-010		SPR-P, REC B	66	86-CT9-118-010		CABI, SPKR-REAR R RF
25	86-CT9-205-110		HLLDR, REC	67	86-CT9-121-010		HLLDR, CORD RF
26	88-CD6-661-010		HLLDR, BAR ANT.	68	88-CT6-633-010		ANT, ROD
27	88-CT6-606-010		FFC WIRE 16P(1.0)	69	88-CT6-631-010		POWER TRANS, EI-57/25<257 LH<S>>
28	8A-CT9-208-010		DRUM, GEAR	69	88-CT7-629-010		PT, U<EXCEPT 257 LH<S>>
29	88-CH6-220-010		CUSHION, CD A	70	87-A60-178-010		JACK, AC E W/SW<257 LH<S>>
30	8A-CT9-211-010		HLLDR, GEQ	70	87-A60-177-010		JACK, AC U W/SW<EXCEPT 257 LH<S>>
31	8A-CT9-205-010		HLLDR, LCD	71	8Z-CT9-059-010		PLATE, SPKR (3.2 OHM)<257 LH<S>>
32	8A-CT9-203-010		HLLDR, FUNC	A	87-751-097-410		SCREW 3X12
33	8A-CT9-017-010		KNOB, RTRY MIC	B	81-CD5-204-010		SCREW CD
34	8A-CT9-204-010		HLLDR, POWER	C	87-751-095-410		VT2+3-8 W/O
35	8Z-CT6-214-010		RING, CHUCK	D	87-571-095-410		VIT+3-8
36	8Z-CT6-213-010		BASE, CHUCK	E	87-651-100-410		VT1+3-16
37	87-036-368-010		MAGNET	F	87-651-075-210		VT1+2.6-10
38	86-CT9-222-010		PLATE, MAGNET	G	87-651-104-410		VT1+3-30
39	86-CT9-217-010		HLLDR, CHUCK A(S)	H	87-261-072-410		V+2.6-5
40	8A-CT9-004-010		BOX, CD				
41	8A-CT9-005-010		WINDOW, CD				
42	8A-CT9-009-010		POINTER, TUN				

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		

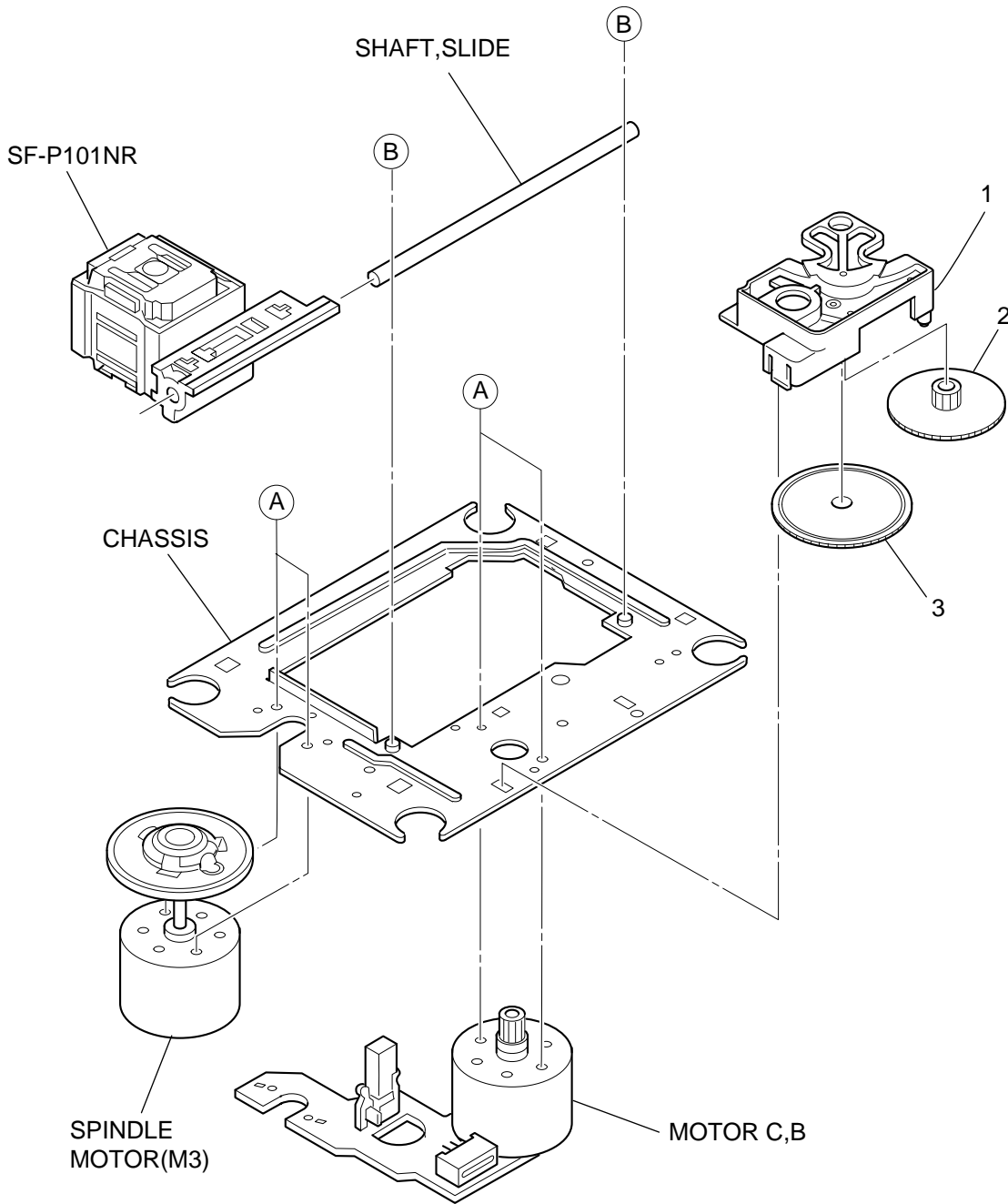


TAPE MECHANISM PARTS LIST 1/1

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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				

CD MECHANISM EXPLODED VIEW 1/1



CD MECHANISM PARTS LIST 1/1

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

REF. NO	PART NO.	KANRI NO.	DESCRIPTION
1	S2-121-A28-400		COVER GEAR
2	S2-511-A21-000		GEAR MIDDLE
3	S2-511-A21-100		GEAR,DRIVE
A	S1-PN2-03R-OSE		SCR PAN PCS 2-3
B	87-261-073-410		SCR S-TPG FLT 2.6-6
ALL	M8-ZZK-E90-070		DA11T3C

