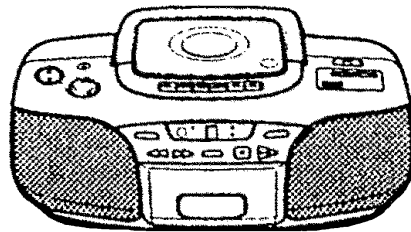


CSD-A170 U(S),K(S),HA(S)

CSD-A110 EZ(S,L),HR(S)

CSD-A100 K(S),EZ(S,L,P)
,HE(S),HT(S)

CSD-A99 K(S)



SERVICE MANUAL

COMPACT DISC RADIO
CASSETTE RECORDER

BASIC TAPE MECHANISM : ZZM-1 YR2NF
BASIC CD MECHANISM : DA11T3C

This Service Manual is the "Revision Publishing" and replaces "Simple Manual"
CSD-A100 K(S),EZ(S)/A110 EZ(S)/A170 K(S)(S/M Code No. 09-003-342-2T2)
CSD-A170 U(S),HA(S)/A110 EZ(L),HR(S)/A100 HE(S),HT(S),EZ(L,P)/A99 K(S)
(S/M Code No. 09-003-342-2T4).

SPECIFICATIONS

HR, HE MODELS

Tuner section

Frequency range, antenna — FM: 87.5 - 108.0 MHz Rod antenna, AM: 530 - 1,605 kHz Ferrite bar antenna

Deck section

Track format — 4 tracks, 2 channels / Frequency range — Normal tape: 50 - 12,500 Hz (EIAJ) / Recording system — AC bias / Erasing system — Magnet erase / Heads — Recording/playback head (1), Erasure head (1)

CD player section

Disc — Compact disc / Scanning method — Non-contact optical scanner (semiconductor laser)

General

Speaker — 100 mm cone type (2) / Output — Headphones jack (stereo mini-jack) / Power output — 2.5 W + 2.5 W (EIAJ 7 ohms, T.H.D. 10%), 1.9 W + 1.9 W (DIN 1% Rated Power) / Power requirements — DC 12 V using eight size C (R14) batteries, AC 110 - 120 V/220 - 240 V switchable, 50/60 Hz / Power consumption — 14 W / Dimensions — 420 (W) × 185 (H) × 250 (D) mm / Weight — 3.45 kg (excluding batteries)

- Design and specifications are subject to change without notice.

K, EZ MODELS

Tuner section

Frequency range, antenna — FM: 87.5 - 108.0 MHz Rod antenna, MW: 530 - 1,605 kHz Ferrite bar antenna, LW: 150 - 285 kHz Ferrite bar antenna

Deck section

Track format — 4 tracks, 2 channels / Frequency range — Normal tape: 50 - 12,500 Hz (EIAJ) / Recording system — AC bias / Erasing system — Magnet erase / Heads — Recording/playback head (1), Erasure head (1)

CD player section

Disc — Compact disc / Scanning method — Non-contact optical scanner (semiconductor laser)

General

Speaker — 100 mm cone type (2) / Output — Headphones jack (stereo mini-jack) / Power output — 2.5 W + 2.5 W (EIAJ 7 ohms, T.H.D. 10% DC), 1.9 W + 1.9 W (DIN 1% Rated Power) / Power requirements — DC 12 V using eight size C (R14) batteries, AC 230 V, 50 Hz / Power consumption — 14 W / Dimensions — 420 (W) × 185 (H) × 250 (D) mm / Weight — 3.45 kg (excluding batteries)

- Design and specifications are subject to change without notice.

HA MODEL

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 - 12,500 Hz (EIAJ) / Recording system — AC bias / Erasing system — Magnet erase / Heads — Recording/playback head (1), Erasure head (1)

CD player section

Disc — Compact disc / Scanning method — Non-contact optical scanner (semiconductor laser)

General

Speaker — 100 mm cone type (2) / Output — Headphones jack (stereo mini-jack) / Power output — 2.5 W + 2.5 W (EIAJ 7 ohms, T.H.D. 10%), 1.9 W + 1.9 W (DIN 1% Rated Power) / Power requirements — DC 12 V using eight size C (R14) batteries, AC 110 - 120 V/220 - 240 V switchable, 50/60 Hz / Power consumption — 14 W / Dimensions — 420 (W) × 185 (H) × 250 (D) mm / Weight — 3.45 kg (excluding batteries)

- Design and specifications are subject to change without notice.

U MODEL

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 - 12,500 Hz (EIAJ) / Recording system — AC bias / Erasing system — Magnet erase / Heads — Recording/playback head (1), Erasure head (1)

CD player section

Disc — Compact disc / Scanning method — Non-contact optical scanner (semiconductor laser)

General

Speaker — 100 mm cone type (2) / Output — Headphones jack (stereo mini-jack) / Power output — 2.5 W + 2.5 W (EIAJ 7 ohms, T.H.D. 10%) / Power requirements — DC 12 V using eight size C (R14) batteries, AC 120 V, 60 Hz / Power consumption — 15 W / Dimensions — 420 (W) × 185 (H) × 250 (D) mm (16⁵/₈ × 7³/₈ × 9⁷/₈ in.) / Weight — 3.45 kg (7 lbs. 10 oz.) (excluding batteries)

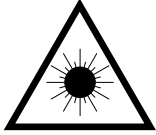
- Design and specifications are subject to change without notice.

PROTECTION OF EYES FROM LASER BEAM DURING SERVICING

This set employs laser. Therefore, be sure to follow carefully the instructions below when servicing.

WARNING!

WHEN SERVICING, DO NOT APPROACH THE LASER EXIT WITH THE EYE TOO CLOSELY. IN CASE IT IS NECESSARY TO CONFIRM LASER BEAM EMISSION. BE SURE TO OBSERVE FROM A DISTANCE OF MORE THAN 30cm FROM THE SURFACE OF THE OBJECTIVE LENS ON THE OPTICAL PICK-UP BLOCK.



- Caution: Invisible laser radiation when open and interlocks defeated avoid exposure to beam.
- Advarsel: Usynlig laserstråling ved åbning, når sikkerhedsafbrydere er ude af funktion. Undgå udsættelse for stråling.

VAROITUS!

Laiteen Käyttäminen muulla kuin tässä käyttöohjeessa mainitulla tavalla saattaa altistaa käyttäjän turvallisuusluokan 1 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

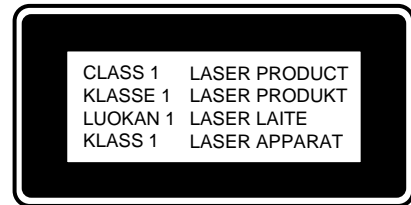
L'utilisation de commandes, réglages ou procédures autres que ceux spécifiés peut entraîner une dangereuse exposition aux radiations.

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.

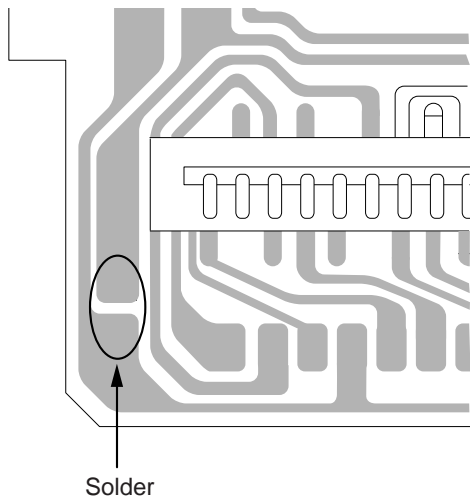
The CLASS 1 LASER PRODUCT label is located on the rear exterior.



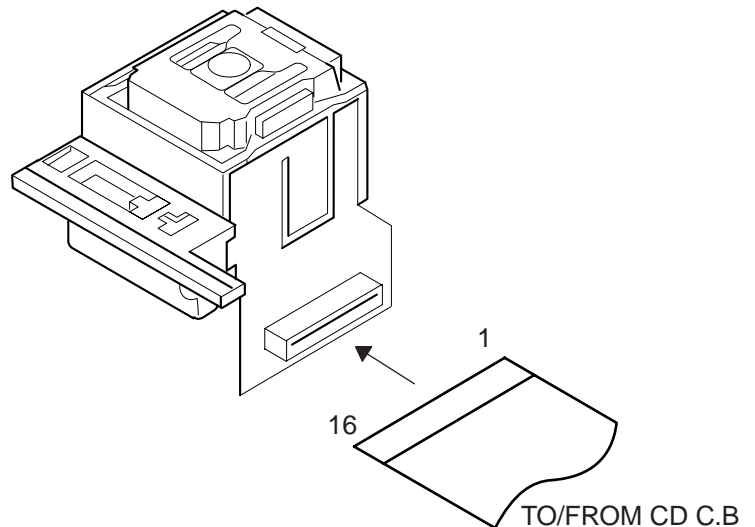
Precaution to replace Optical block (SF-P101NR)

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
SF-P101NR



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	87-A20-955-010	IC,LA1828		C247	87-010-401-080		CAP, ELECT 1-50V
	87-A21-064-010	IC,LA4227		C248	87-010-401-080		CAP, ELECT 1-50V
	87-A21-520-040	C-IC,M61509FF		C310	87-010-248-080		CAP, ELECT 220-10V
	<110HRJ(S),110EZ(S),110EZ(L),170U(S),170K(S),170HA(S)>			C316	87-010-263-080		CAP, ELECT 100-10V
	87-A21-443-040	C-IC,M62495AFP		C317	87-015-819-080		CAPACITOR,0.01
	<EXCEPT 110HRJ(S),110EZ(S),110EZ(L),170U(S),170K(S),170HA(S)>			C322	87-010-260-080		CAP, ELECT 47-25V
	87-A20-446-010	C-IC,LA9241ML		C483	87-012-156-080		C-CAP,S 220P-50 CH
				C484	87-012-156-080		C-CAP,S 220P-50 CH
	87-A20-459-010	C-IC,LC78622ED		C801	87-010-248-080		CAP, ELECT 220-10V
	87-A21-093-010	IC,LA6541D		C805	87-012-365-080		C-CAP,S 0.027-25VBK
	8A-CD9-610-010	C-IC,LC865516A-5P16		C806	87-012-365-080		C-CAP,S 0.027-25VBK
	87-A20-650-010	IC,RPM6938-V11		C807	87-010-405-080		CAP, ELECT 10-50V
		<170U(S),170K(S),170HA(S)>		C808	87-010-405-080		CAP, ELECT 10-50V
	87-A21-607-010	IC,NJMI4558LD		C809	87-010-401-080		CAP, ELECT 1-50V
				C810	87-010-401-080		CAP, ELECT 1-50V
TRANSISTOR	89-327-143-080	TR,2SC2714 (0.1W)		C811	87-010-178-080		CHIP CAP 1000P
	87-026-447-080	TR,2SC1740S R		C812	87-010-178-080		CHIP CAP 1000P
	87-026-463-080	TR,2SA933S (0.3W)		C816	87-010-180-080		C-CER 1500P
	87-026-213-080	CHIP-TR,DTC114YK		C817	87-010-180-080		C-CER 1500P
	89-318-154-080	TR,2SC1815 (0.4W)		C821	87-010-401-080		CAP, ELECT 1-50V
	89-112-965-080	TR,2SA1296 (0.75W)		C822	87-010-401-080		CAP, ELECT 1-50V
	87-026-291-080	TR,DTC124XS		C823	87-010-178-080		CHIP CAP 1000P
	89-213-702-010	TR,2SB1370 (1.8W)		C824	87-010-178-080		CHIP CAP 1000P
	87-026-462-080	TR,2SC1740 S(RS 0.3W)		C829	87-010-178-080		CHIP CAP 1000P
	89-109-332-380	TR,2SA933RS		C830	87-010-178-080		CHIP CAP 1000P
	89-113-187-080	TR,2SA1318TU		C833	87-018-195-080		CAP, CER 1200P-16V
	87-026-295-080	TR,DTC144TK		C834	87-010-248-080		CAP, ELECT 220-10V
	89-317-403-080	TR,2SC1740S		C843	87-010-197-080		CAP, CHIP 0.01 DM
	87-026-239-080	TR,DTC114TK (0.2W)		C844	87-018-124-080		CAP, CER 270P-50V
	87-026-237-080	CHIP-TR,DTC124XK		C845	87-010-178-080		CHIP CAP 1000P
		<170U(S),170K(S),170HA(S)>		C846	87-010-263-080		CAP, ELECT 100-10V
	87-026-464-080	TR,DTC114TS (0.3W)		C851	87-010-186-080		CAP,CHIP 4700P
				C852	87-010-178-080		CHIP CAP 1000P
				C853	87-A11-132-080		CAP,TC U 0.01-50 K B
				CN201	87-099-018-010		CONN,16P
				CN801	87-A60-110-010		CONN,4P V S2M-4W
				CNA302	8A-CDA-629-010		CONN ASSY,6P MA-TU
				L801	87-007-342-010		COIL,OSC 85K BIAS
				SW801	8Z-CD9-609-010		SW,SL 1-6-2 PS62D01
	DIODE	87-020-465-080	DIODE,ISS133 (110MA)		CD C.B		
87-A40-128-080		C-VARI-CAP,HVU202A		C30	87-010-260-080		CAP, ELECT 47-25V
87-A40-650-080		ZENER,MTZJ6.8A		C251	87-010-404-080		CAP, ELECT 4.7-50V
87-070-345-080		DIODE,IN4148		C261	87-010-402-080		CAP, ELECT 2.2-50V
87-A40-648-080		ZENER,MTZJ8.2A		C262	87-010-402-080		CAP, ELECT 2.2-50V
87-A40-234-080		ZENER,MTZJ5.6A		C263	87-010-178-080		CHIP CAP 1000P
87-017-978-080		DIODE,IN4003		C264	87-010-178-080		CHIP CAP 1000P
87-017-932-080		ZENER,MTJ6.2B		C265	87-010-263-080		CAP, ELECT 100-10V
87-A40-465-010		DIODE,FR202		C266	87-010-263-080		CAP, ELECT 100-10V
				C267	87-010-112-080		CAP, ELECT 100-16V
				C268	87-010-112-080		CAP, ELECT 100-16V
				C271	87-010-237-080		CAP, ELECT 1000-16V
				C272	87-010-237-080		CAP, ELECT 1000-16V
				C278	87-010-405-080		CAP, ELECT 10-50V
				C279	87-010-385-080		CAP, ELECT 220-25V
			C301	87-016-495-000		CAP,E 3300-25 M SMG	
MAIN C.B	C211	87-A11-177-080	C-CAP,S 0.15-16 K B	C306	87-010-404-080		CAP, ELECT 4.7-50V
	C212	87-A11-177-080	C-CAP,S 0.15-16 K B	C307	87-010-401-080		CAP, ELECT 1-50V
	C215	87-016-460-080	C-CAP,S 0.22-16 B	C308	87-010-221-080		CAP, ELECT 470-10V
	C216	87-016-460-080	C-CAP,S 0.22-16 B	C311	87-010-374-080		CAP, ELECT 47-10V
	C231	87-010-213-080	C-CAP,S 0.015-50 B	C312	87-010-385-080		CAP, ELECT 220-25V
	C232	87-010-213-080	C-CAP,S 0.015-50 B	C321	87-010-197-080		CAP, CHIP 0.01 DM
	C233	87-A10-201-080	C-CAP,S0.33-16 KB	C322	87-010-263-080		CAP, ELECT 100-10V
	C234	87-A10-201-080	C-CAP,S0.33-16 KB	C325	87-010-405-080		CAP, ELECT 10-50V
	C235	87-016-669-080	C-CAP,S 0.1-25 K B	C401	87-010-403-080		CAP, ELECT 3.3-50V
	C236	87-016-669-080	C-CAP,S 0.1-25 K B	C402	87-010-197-080		CAP, CHIP 0.01 DM
	C237	87-010-371-080	CAP, ELECT 470-6.3V	C403	87-010-263-080		CAP, ELECT 100-10V
	C239	87-010-197-080	CAP, CHIP 0.01 DM	C404	87-010-248-080		CAP, ELECT 220-10V
	<110HRJ(S),110EZ(S),110EZ(L),170U(S),170K(S),170HA(S)>			C405	87-010-197-080		CAP, CHIP 0.01 DM
	87-010-805-080	CAP, S 1-16					
	<EXCEPT 110HRJ(S),110EZ(S),110EZ(L),170U(S),170K(S),170HA(S)>						
	C240	87-010-197-080	CAP, CHIP 0.01 DM				
	<110HRJ(S),110EZ(S),110EZ(L),170U(S),170K(S),170HA(S)>						
	C240	87-010-805-080	CAP, S 1-16				
	<EXCEPT 110HRJ(S),110EZ(S),110EZ(L),170U(S),170K(S),170HA(S)>						

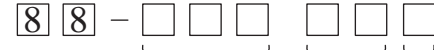
REF. NO	PART NO.	KANRI NO.	DESCRIPTION	REF. NO	PART NO.	KANRI NO.	DESCRIPTION
TUNER C.B				L17	87-A50-337-010		COIL,AM OSC (TOKO) <EXCEPT 110HRJ(S),100HRJ(S),170U(S),170HA(S)>
C1	87-010-314-080		C-CAP,S 22P-50V	S1	87-A91-548-010		SW,SL-2-3 SK23E01G06 <110HRJ(S),100HRJ(S),170U(S),170HA(S)>
C2	87-010-316-080		C-CAP,S 33P-50 CH	S1	87-A91-549-010		SW,SL-6-4 SK64D01G06 <EXCEPT 110HRJ(S),100HRJ(S),170U(S),170HA(S)>
C3	87-010-314-080		C-CAP,S 22P-50V	TC5	87-011-253-080		TRIMER,30P LAR <EXCEPT 110HRJ(S),100HRJ(S),170U(S),170HA(S)>
C4	87-010-148-080		CAP, CHIP S 4P SL <110HRJ(S),100HRJ(S),170U(S),170HA(S)>	TC6	87-011-253-080		TRIMER,30P LAR <EXCEPT 110HRJ(S),100HRJ(S),170U(S),170HA(S)>
C5	87-010-378-080		CAP, ELECT 10-16V	VC1	87-A91-635-010		TUN-CAP,20P-140P E-ACD(MITSUMI) <EXCEPT 100HE(S),170U(S),170HA(S)>
C7	87-012-156-080		C-CAP,S 220P-50 CH	VC1	87-A91-167-010		TUN-CAP,20P-160P FA-22125 N000 <170U(S),170HA(S)>
C8	87-010-197-080		CAP, CHIP 0.01 DM	VC1	87-A91-170-010		TUN-CAP,20P-335P FA-2217 N000- <100HE(S)>
C9	87-010-311-080		CAP 12P	HP C.B			
C10	87-010-197-080		CAP, CHIP 0.01 DM	CN204	87-A60-685-010		CONN,4P H WHT EH
C11	87-010-152-080		C-CAP,S 8P-50 CH	CN605	87-A60-117-010		CONN,7P H S2M-7WR
C12	87-010-314-080		C-CAP,S 22P-50V	CNA203	8A-CDA-628-010		CONN ASSY,4P MA-HP
C13	87-010-322-080		C-CAP,S 100P-50 CH	J251	87-A60-569-010		JACK,HTJ-035-18
C14	87-010-148-080		CAP, CHIP S 4P SL	LED606	88-CD6-630-010		LED,934ID RED
C15	87-016-669-080		C-CAP,S 0.1-25 K B	LED607	88-CD6-630-010		LED,934ID RED
C16	87-010-178-080		CHIP CAP 1000P	S606	87-A91-704-080		SW,TACT EVQ 214 05R
C17	87-016-669-080		C-CAP,S 0.1-25 K B	S607	87-A91-704-080		SW,TACT EVQ 214 05R
C18	87-010-198-080		CAP, CHIP 0.022	S608	87-A91-704-080		SW,TACT EVQ 214 05R
C19	87-016-669-080		C-CAP,S 0.1-25 K B	S614	87-A91-704-080		SW,TACT EVQ 214 05R
C20	87-010-400-080		CAP, ELECT 0.47-50V	S615	87-A91-704-080		SW,TACT EVQ 214 05R
C21	87-010-403-080		CAP, ELECT 3.3-50V	BATT1 C.B			
C22	87-010-197-080		CAP, CHIP 0.01 DM	C901	87-010-192-080		C-CAP,S 0.022-50 F
C24	87-010-197-080		CAP, CHIP 0.01 DM	C902	87-010-192-080		C-CAP,S 0.022-50 F
C25	87-010-197-080		CAP, CHIP 0.01 DM	C903	87-010-192-080		C-CAP,S 0.022-50 F
C26	87-012-358-080		C-CAP,S 0.47-10 F Z	C904	87-010-192-080		C-CAP,S 0.022-50 F
C27	87-012-358-080		C-CAP,S 0.47-10 F Z	CNA901	8A-CDA-627-010		CONN ASSY,3P PWR
C28	87-010-992-080		C-CAP,S 0.047-25 B	△PR901	87-A90-092-080		PROTECTOR,2.5A 491
C29	87-010-992-080		C-CAP,S 0.047-25 B	SP901	87-CD6-213-010		SPR-C,BATT (-)
C30	87-010-248-080		CAP, ELECT 220-10V	SP902	87-CD6-213-010		SPR-C,BATT (-)
C31	87-010-379-080		CAP, ELECT 22-16V	BATT2 C.B			
C32	87-010-197-080		CAP, CHIP 0.01 DM	SP903	87-CD6-213-010		SPR-C,BATT (-)
C33	87-010-197-080		CAP, CHIP 0.01 DM	SP904	87-CD6-213-010		SPR-C,BATT (-)
C34	87-010-197-080		CAP, CHIP 0.01 DM	MOTOR C.B			
C35	87-010-197-080		CAP, CHIP 0.01 DM	M2	9X-262-576-910		MOTOR GEAR ASSY
C36	87-010-263-080		CAP, ELECT 100-10V	PIN3	91-564-722-110		CONNECTOR 6P
C37	87-010-197-080		CAP, CHIP 0.01 DM	SW1	91-572-085-120		LEAF SW
C38	87-010-197-080		CAP, CHIP 0.01 DM	VOL SEL C.B<170HA(S)>			
C39	87-010-197-080		CAP, CHIP 0.01 DM <110HRJ(S),100HRJ(S),170U(S),170HA(S)>	△F901	87-035-347-010		FUSE, 2.5A 250V T<170HA(S)>
C40	87-010-150-080		C-CAP,S 6P-50 CH <EXCEPT 110HRJ(S),100HRJ(S),170U(S),170HA(S)>	FC901	87-033-213-010		CLAMP, FUSE SMK<170HA(S)>
C41	87-010-321-080		CHIP CAPACITOR,82P(J) <EXCEPT 110HRJ(S),100HRJ(S),170U(S),170HA(S)>	FC902	87-033-213-010		CLAMP, FUSE SMK<170HA(S)>
C42	87-010-150-080		C-CAP,S 6P-50 CH <EXCEPT 110HRJ(S),100HRJ(S),170U(S),170HA(S)>				
C44	87-012-140-080		CAP 470P <EXCEPT 110HRJ(S),100HRJ(S),170U(S),170HA(S)>				
C51	87-010-197-080		CAP, CHIP 0.01 DM				
C56	87-010-152-080		C-CAP,S 8P-50 CH <110HRJ(S),100HRJ(S),170U(S),170HA(S)>				
CF1	87-A90-128-010		FLTR,AM IF CFAL-455				
CF2	87-008-261-010		FILTER, SFE10.7MA5-A				
CF3	87-008-261-010		FILTER, SFE10.7MA5-A				
CN2	87-A60-116-010		CONN,6P H S2M-6WR				
L2	87-A50-560-010		COIL,FM BPF(ACD)				
L3	8A-CD9-660-010		BAR-ANT,MW 2B-ACD(COI) <110HRJ(S),100HRJ(S),170U(S),170HA(S)>				
L3	8A-CD9-661-010		BAR-ANT,MW/LW 3B-ACD(COI) <EXCEPT 110HRJ(S),100HRJ(S),170U(S),170HA(S)>				
L4	87-A50-562-010		COIL,FM RF EX(ACD)				
L5	87-A50-564-010		COIL,FM OSC EX(ACD)				
L6	87-A50-337-010		COIL,AM OSC (TOKO) <110HRJ(S),100HRJ(S),170U(S),170HA(S)>				
L7	87-A50-579-010		COIL,AM IFT(ACD)				
L8	87-A50-335-010		COIL,FM IFT (TOKO)				
L9	87-A50-577-010		COIL,FM DET(ACD)				
L10	87-005-849-080		COIL,10UH(CECS)				
L16	87-A50-569-010		COIL,LW OSC-ACD(COI) <EXCEPT 110HRJ(S),100HRJ(S),170U(S),170HA(S)>				

- 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



A
抵抗部品コード
Resistor Code

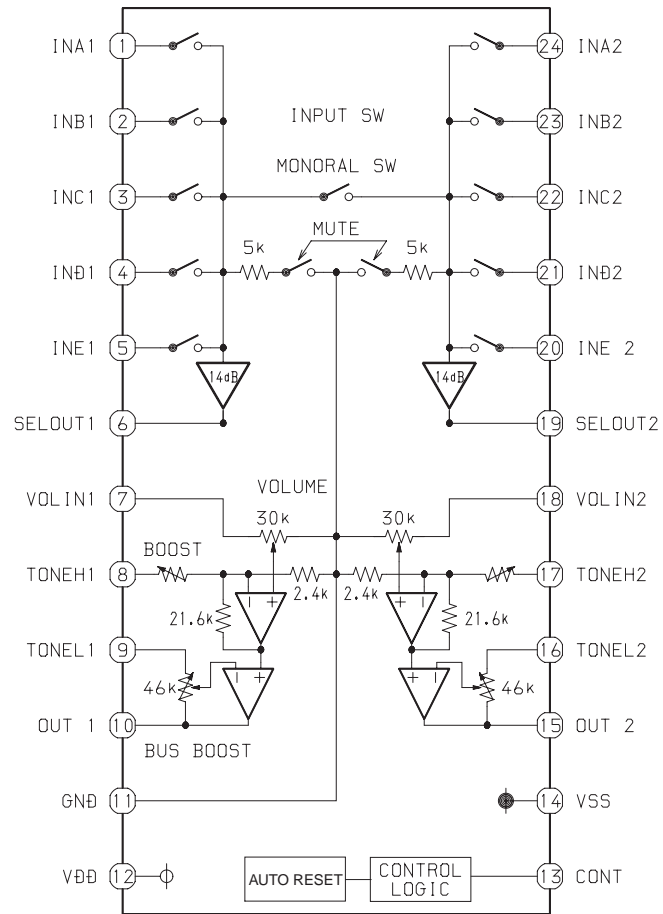
桁表示
Figure
抵抗値
Value of resistor

チップ抵抗
Chip resistor

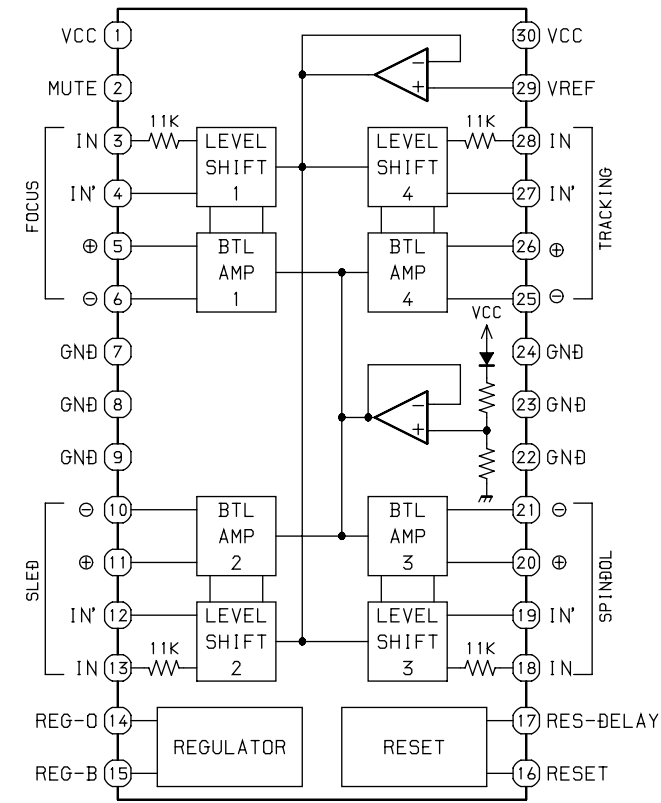
容量 Wattage	種類 Type	許容誤差 Tolerance	記号 Symbol	寸法/Dimensions (mm)			抵抗コード : A Resistor Code : A	
				外形/Form	L	W		t
1/16W	1005	± 5%	CJ		1.0	0.5	0.35	104
1/16W	1608	± 5%	CJ		1.6	0.8	0.45	108
1/10W	2125	± 5%	CJ		2	1.25	0.45	118
1/8W	3216	± 5%	CJ		3.2	1.6	0.55	128

IC BLOCK DIAGRAM

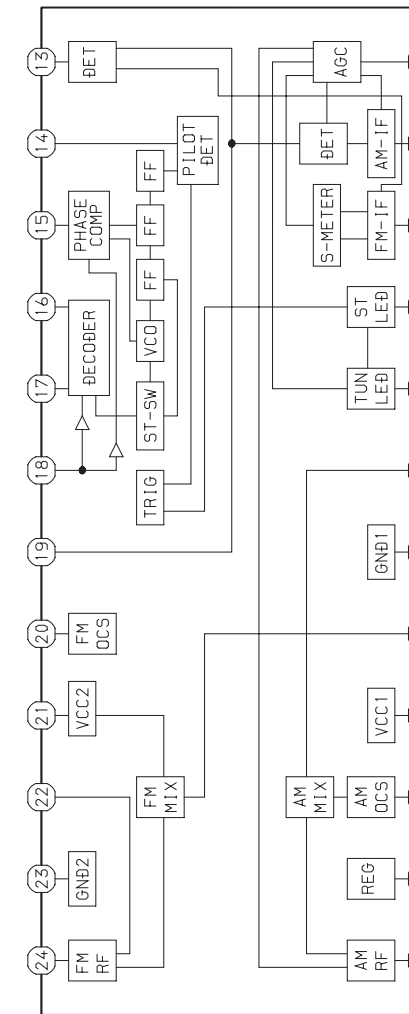
IC, M62495AFP



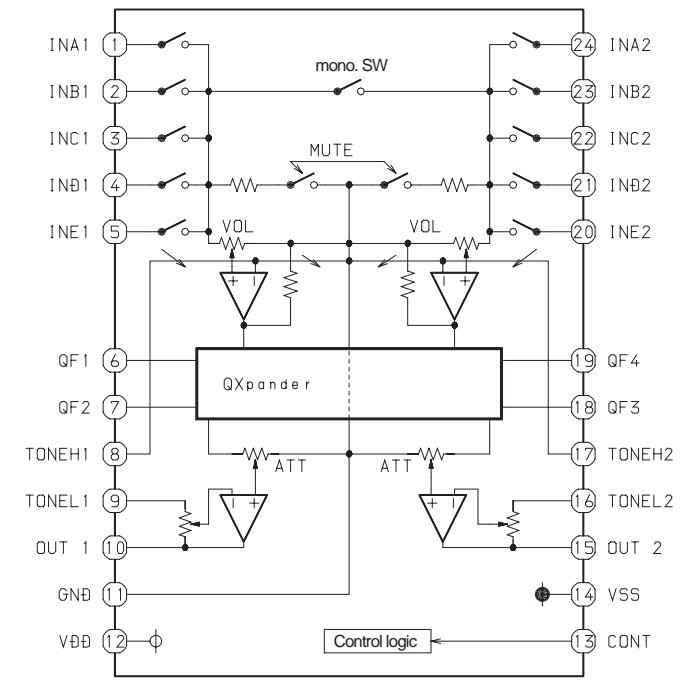
IC, LA6541D



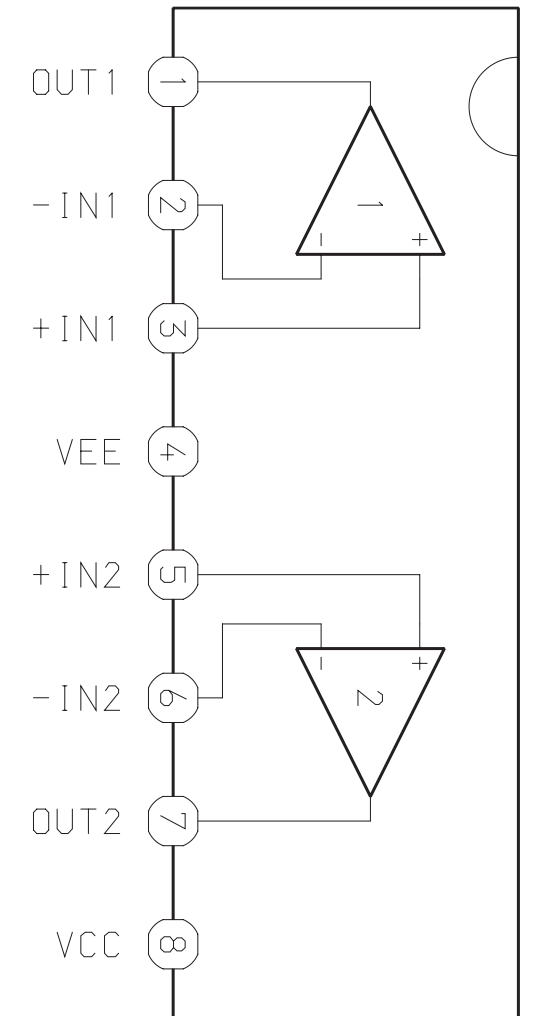
IC, LA1828



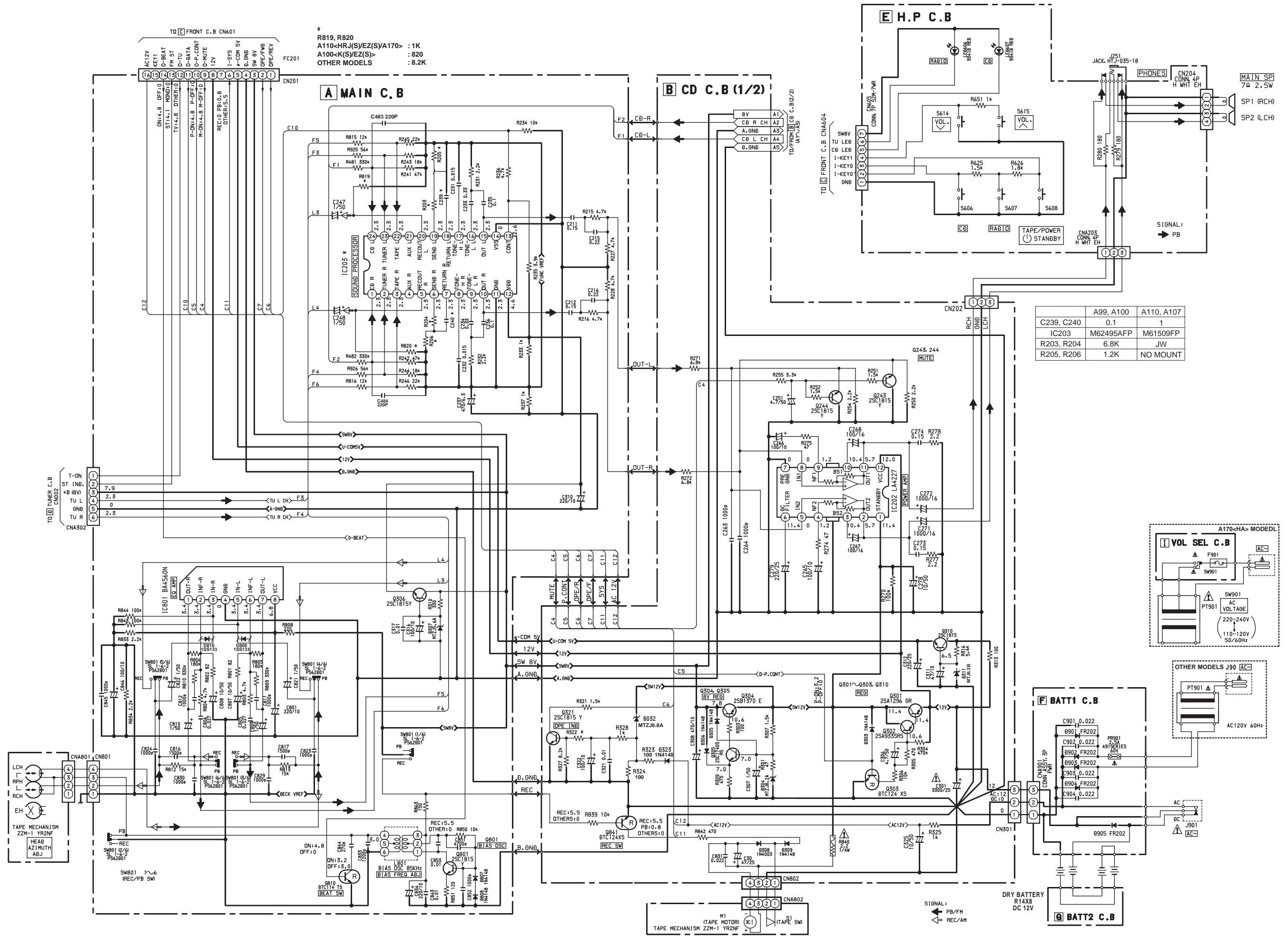
IC, M61509FP



IC, BA4560N

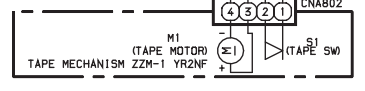
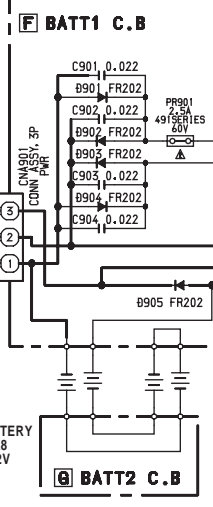
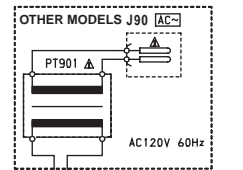
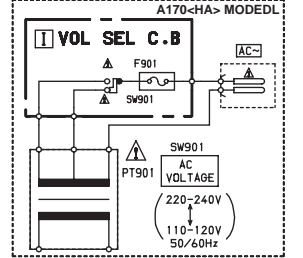


SCHEMATIC DIAGRAM-1 (MAIN)

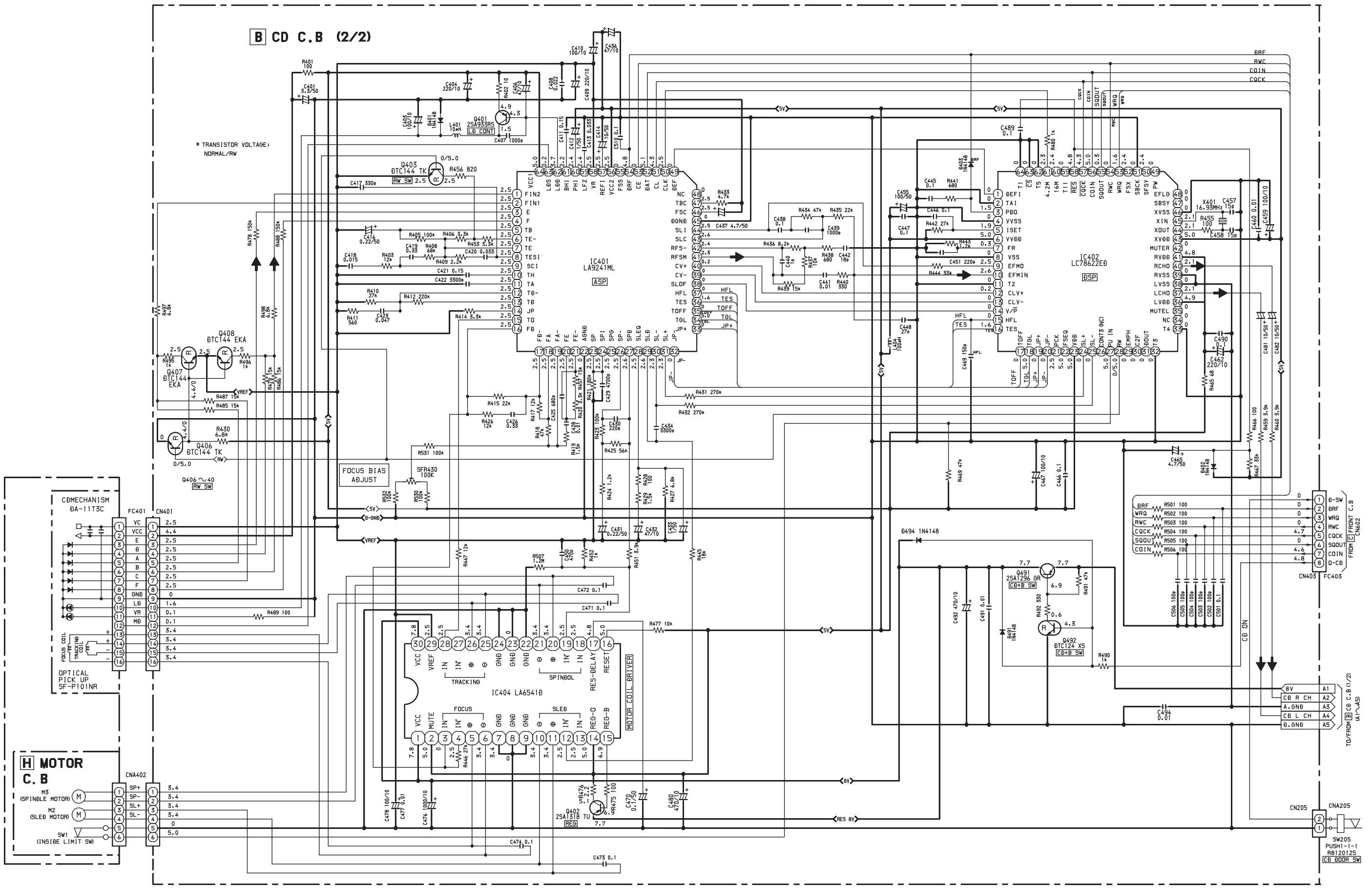


*
R819, R820
A110-HR J(S)/EZ(S)/A170 > : 1K
A100-K(S)/EZ(S) > : 820
OTHER MODELS > : 8.2K

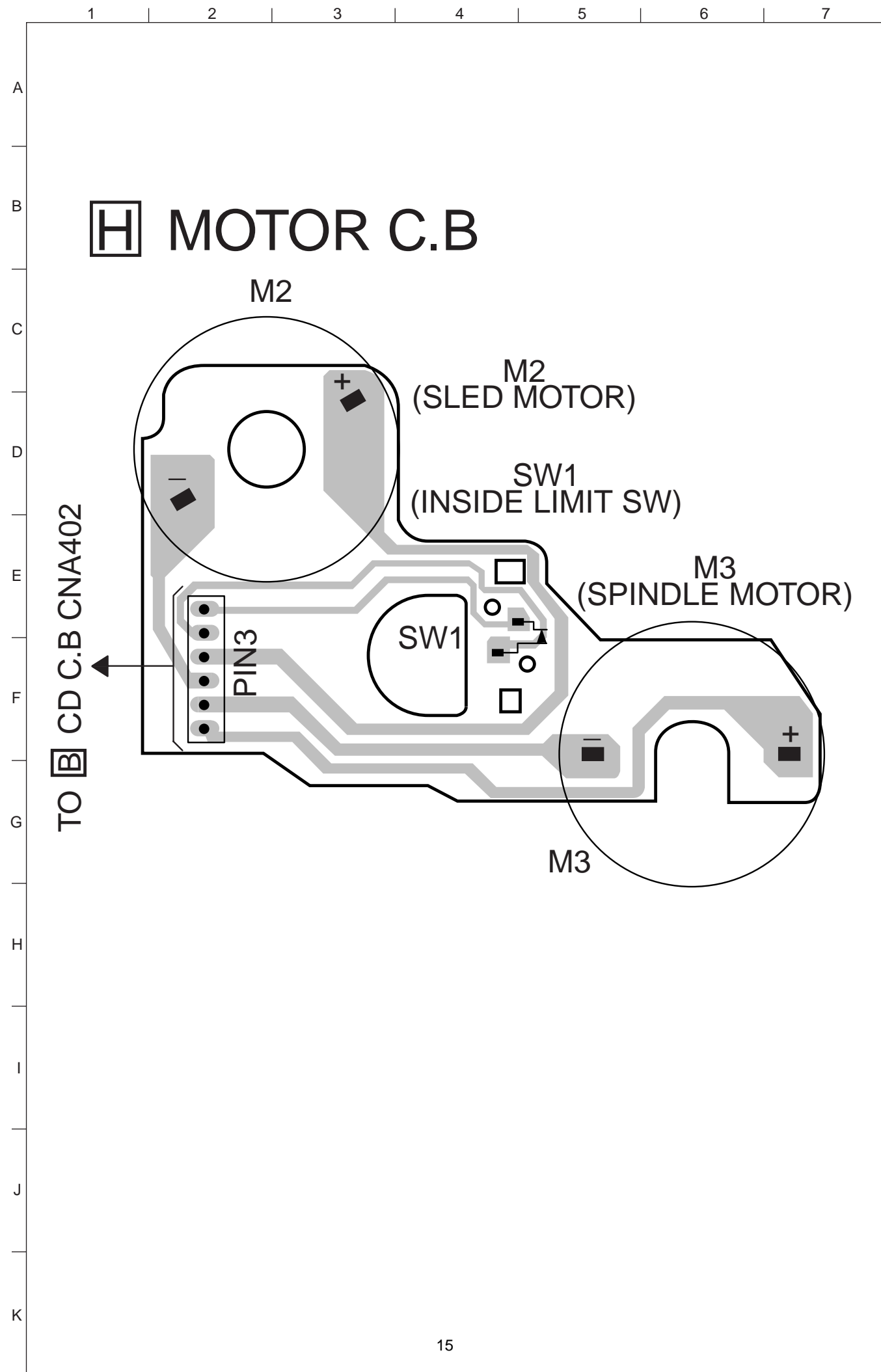
	A99, A100	A110, A107
C239, C240	0.1	1
IC203	M62495AFP	M61509FP
R203, R204	6.8K	JW
R205, R206	1.2K	NO MOUNT



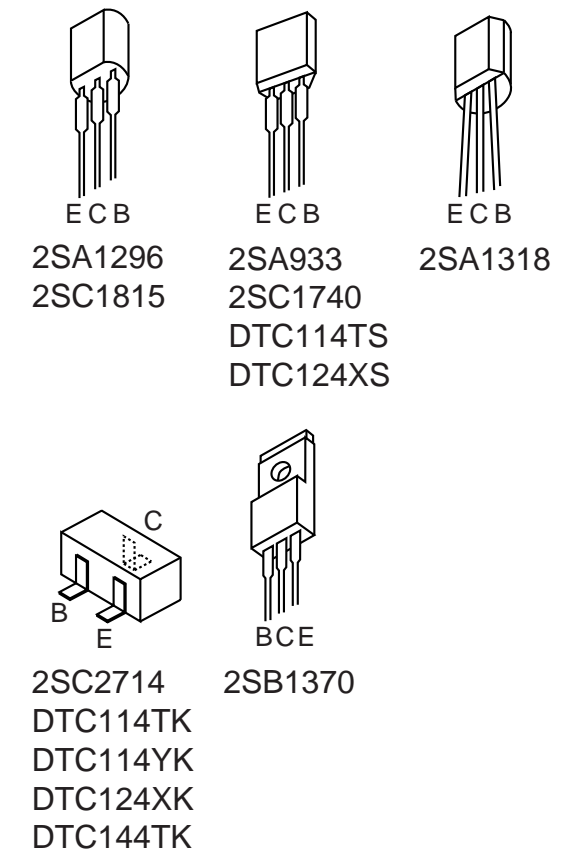
SIGNAL:
PB/FM
REC/AM



WIRING-2 (MOTOR)



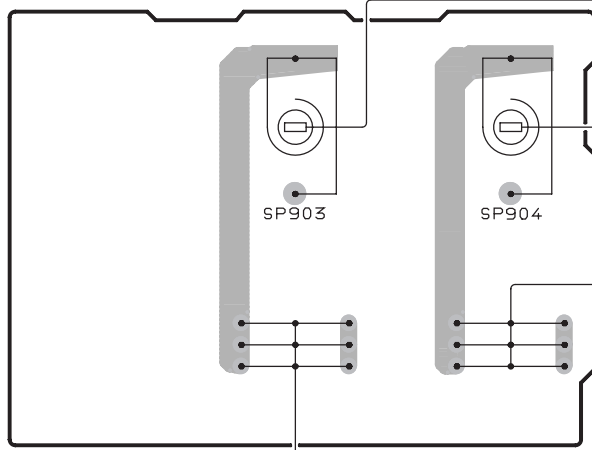
TRANSISTOR ILLUSTRATION



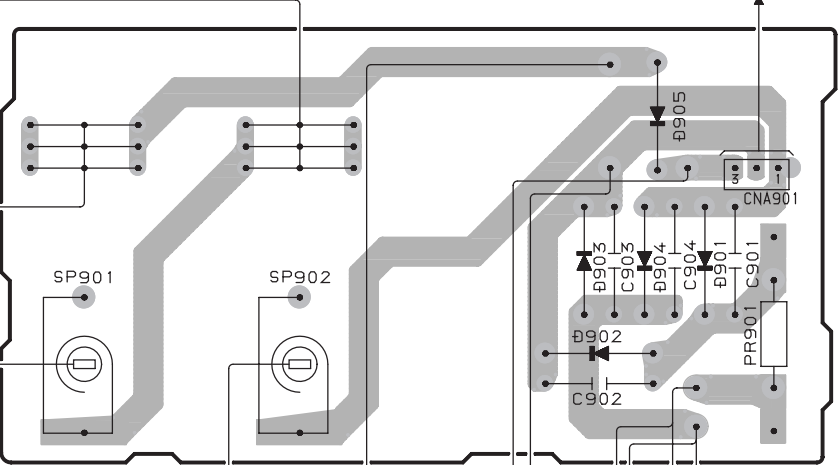
1 2 3 4 5 6 7 8 9 10 11 12 13 14

A
B
C
D
E
F
G
H
I
J
K

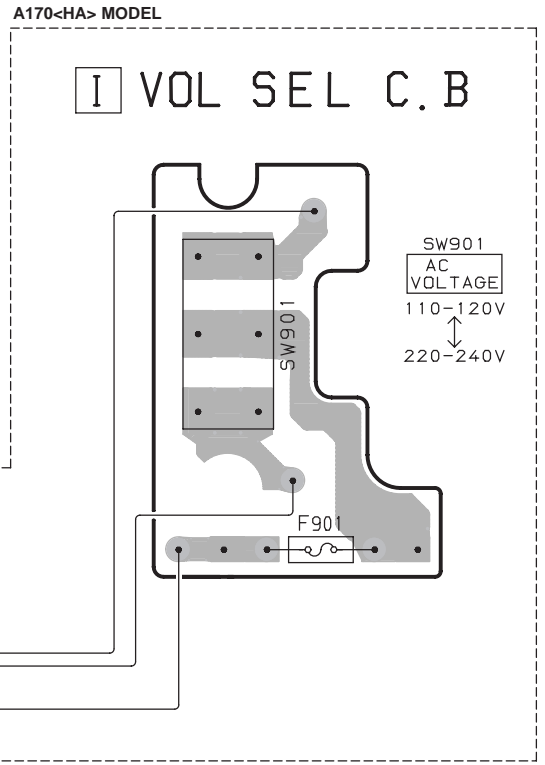
G BATT2 C.B



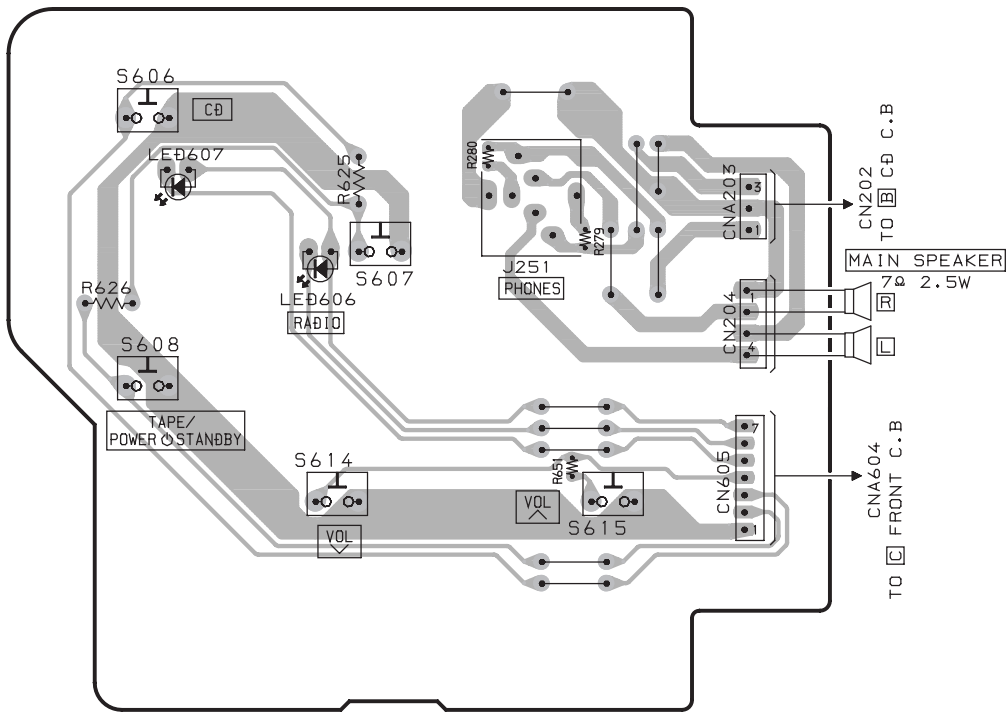
F BATT1 C.B



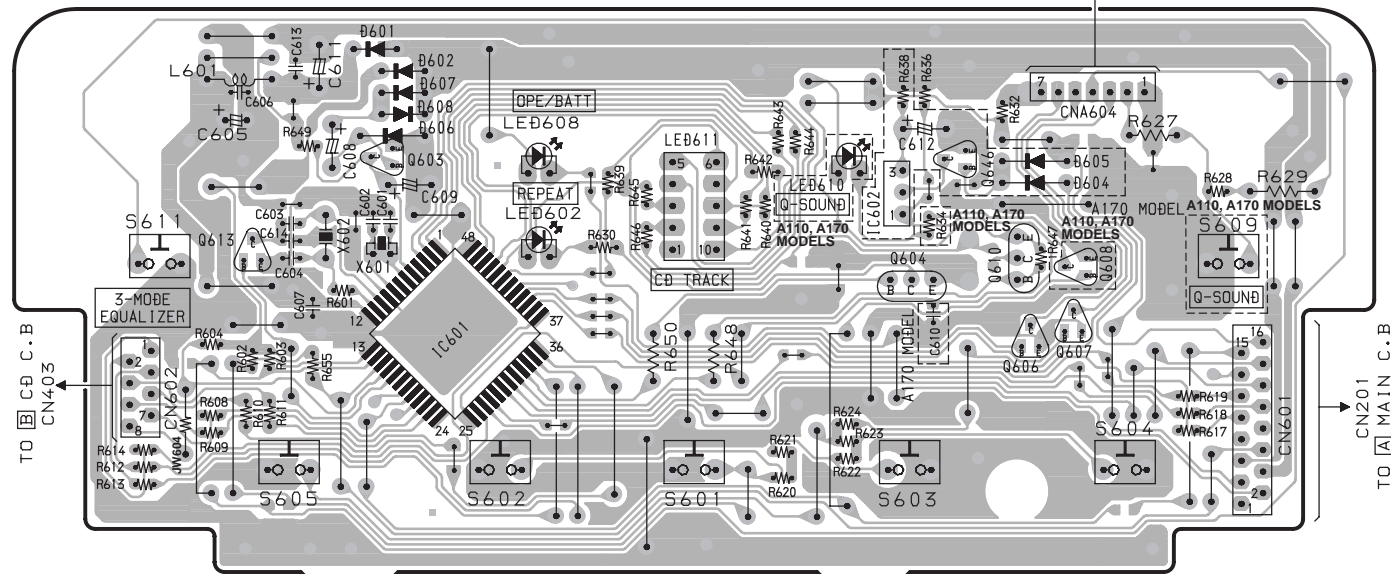
DRY BATTERY
R14x8
DC 12V



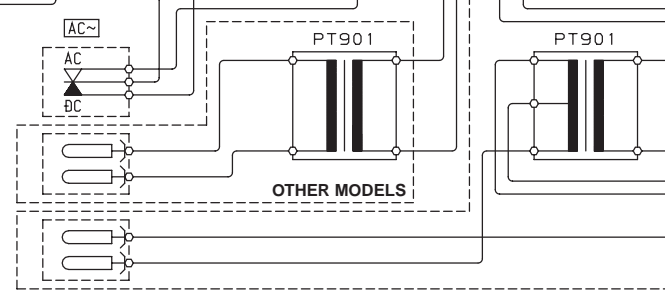
E HP C.B



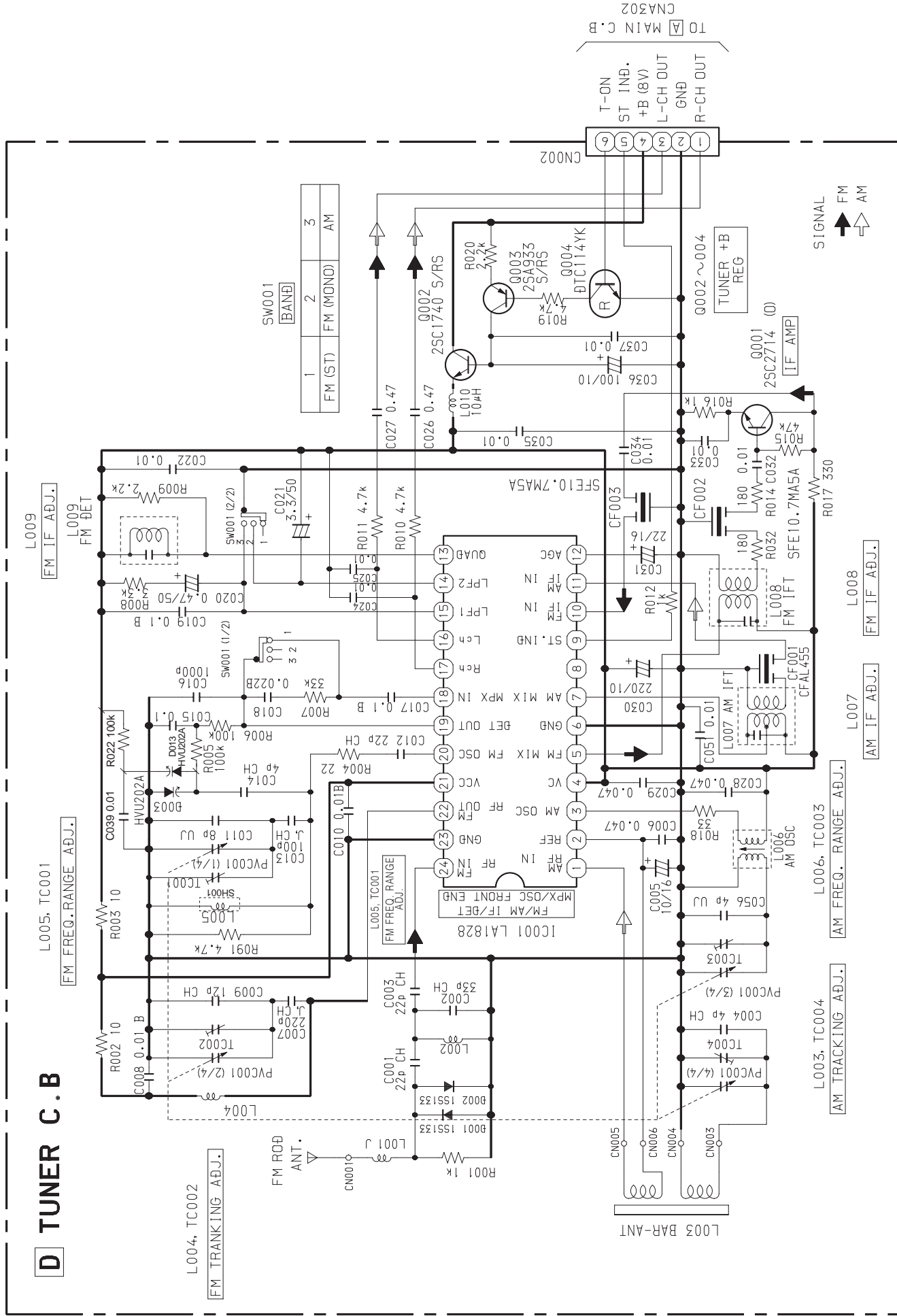
C FRONT C.B



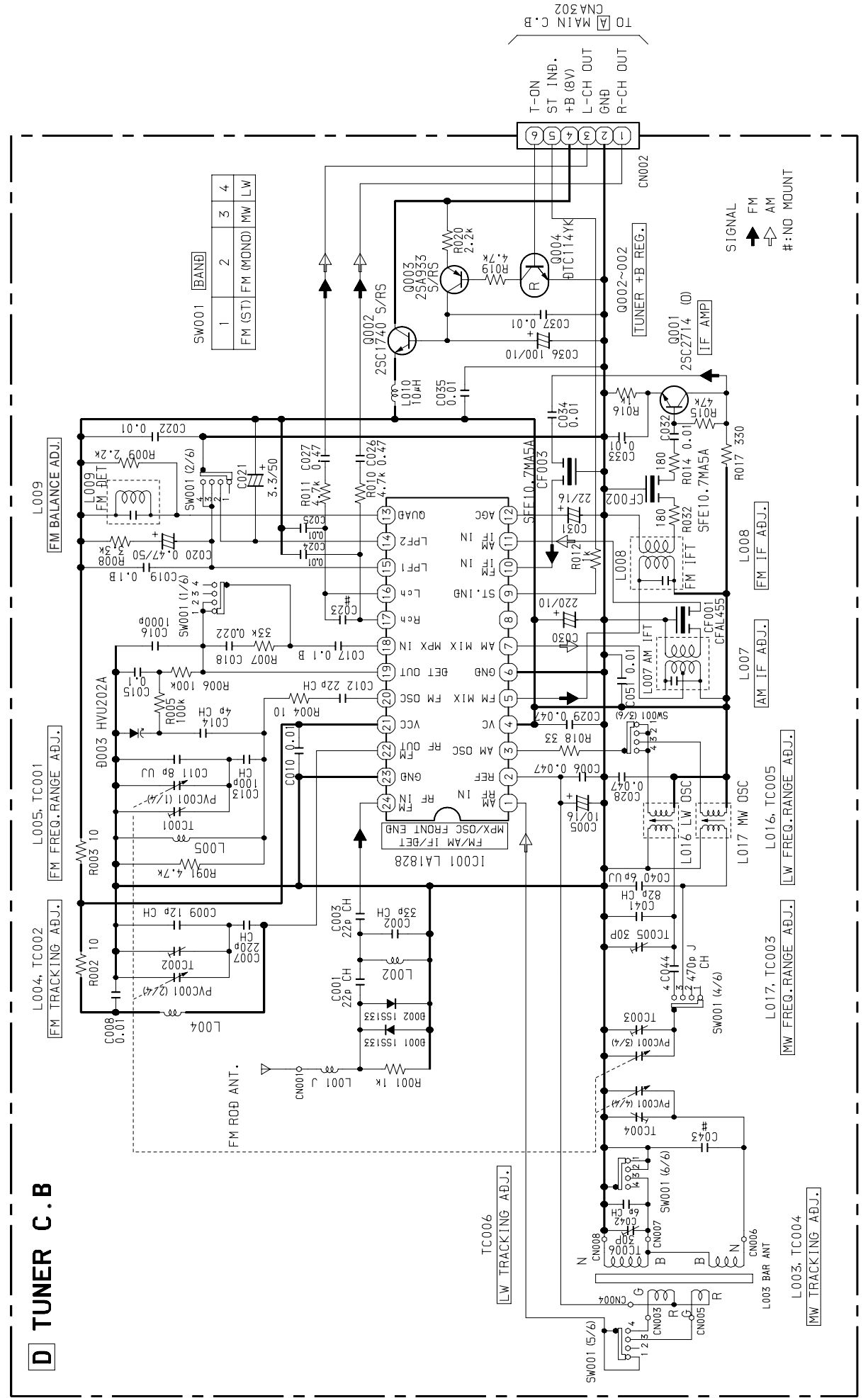
- A110 MODEL
AC 120V 60Hz
- A170 MODEL
110-120V
220-240V
50/60Hz



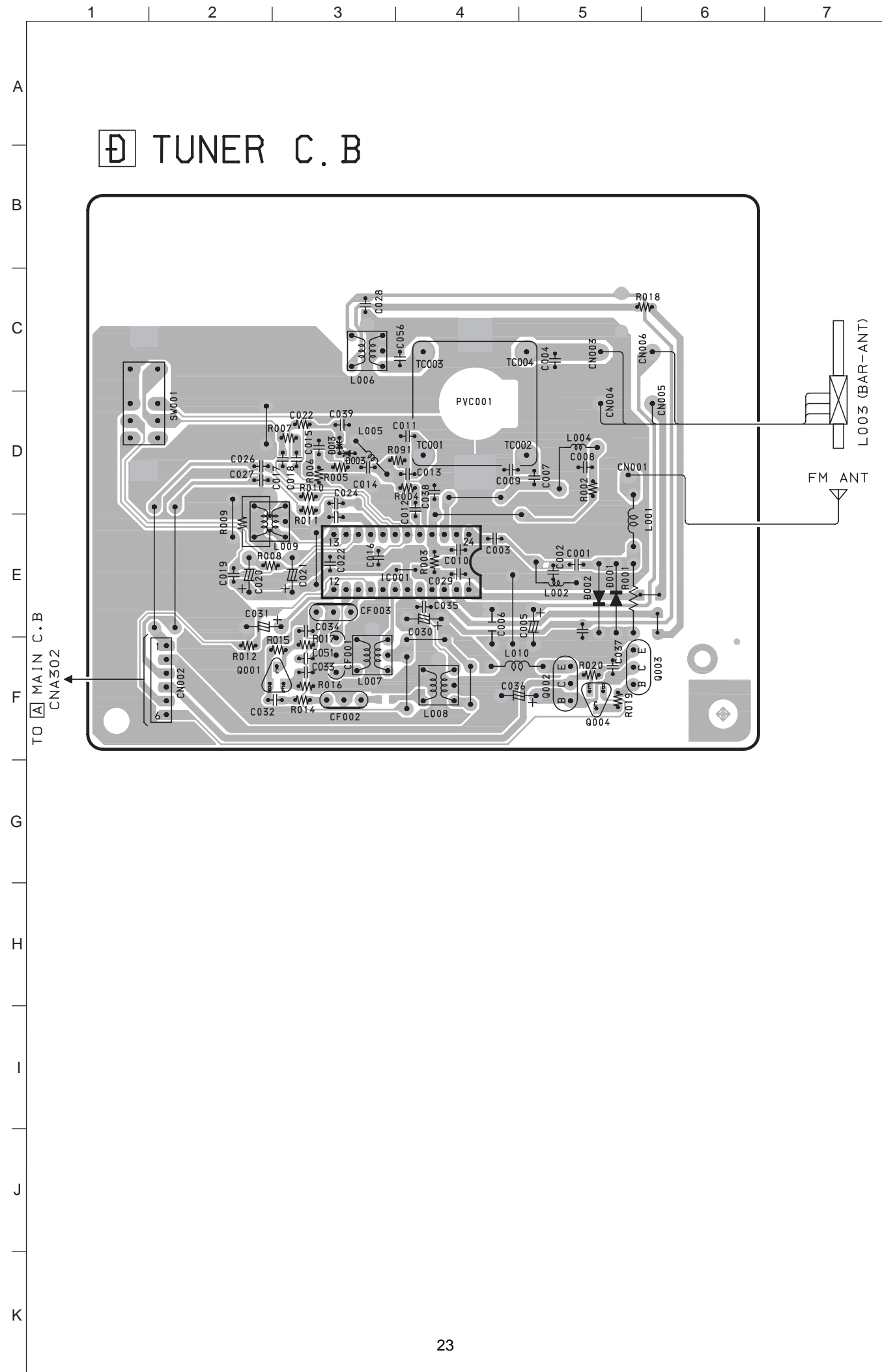
SCHEMATIC DIAGRAM-4 (TUMER: HA, HE, HR, U)



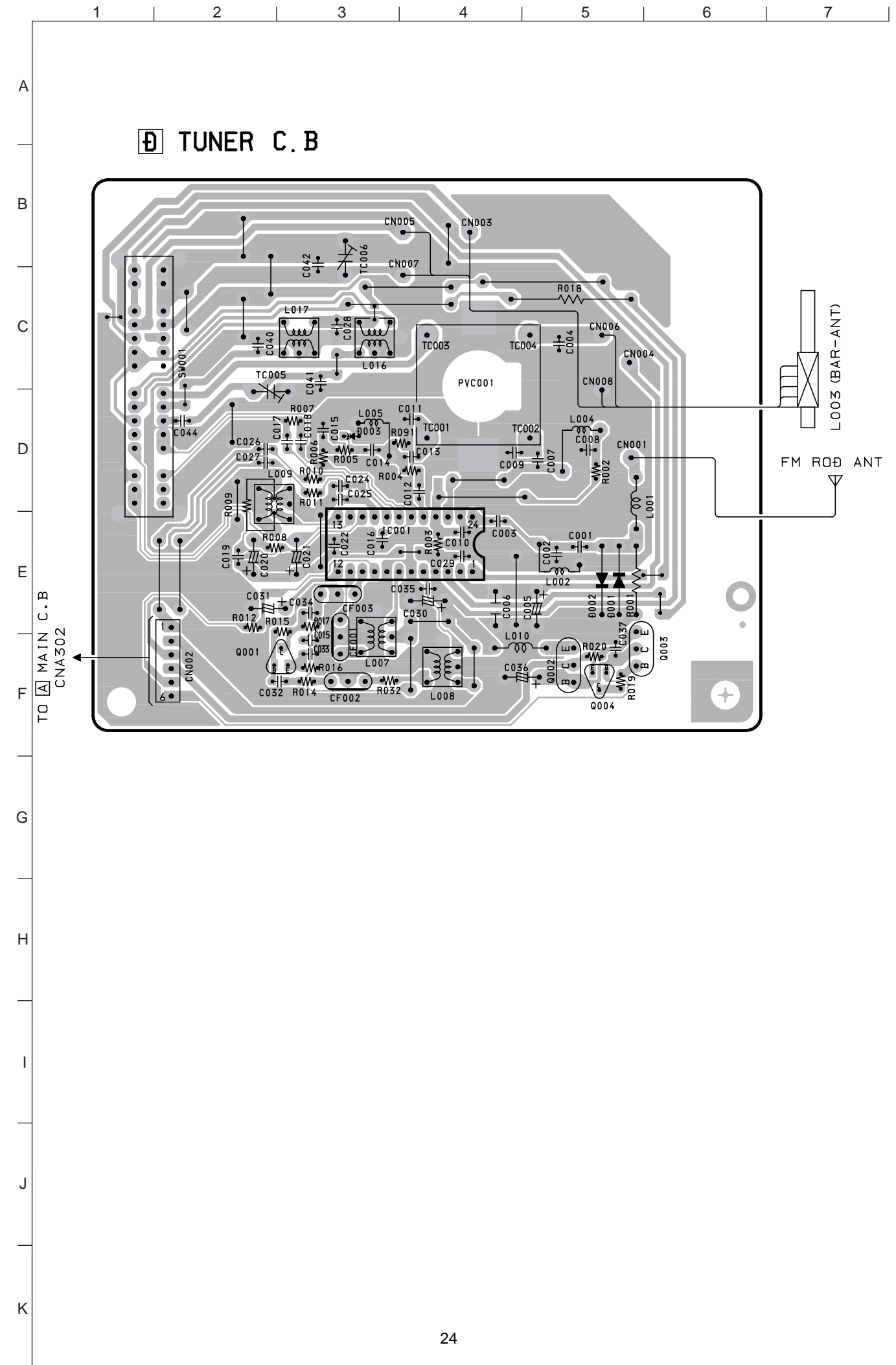
SCHEMATIC DIAGRAM-5 (TUMER: K, EZ)



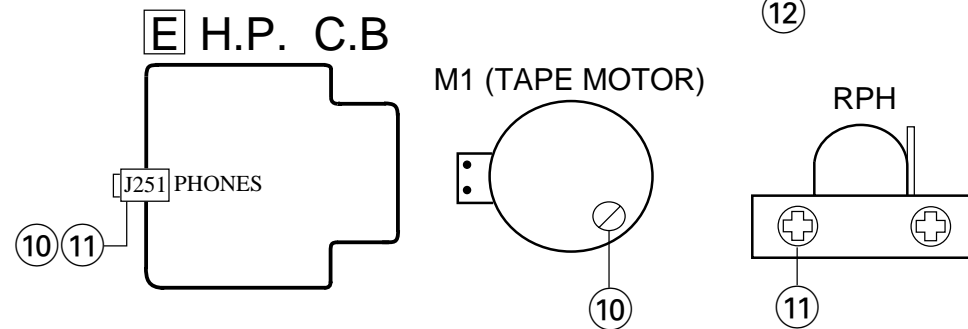
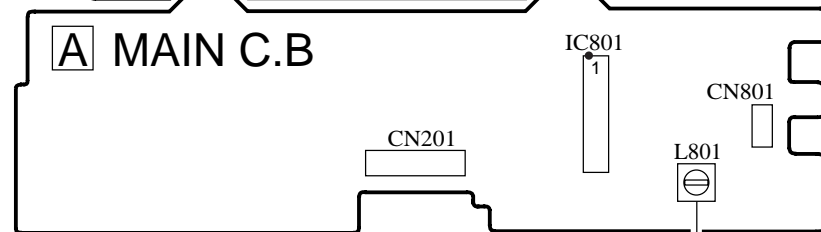
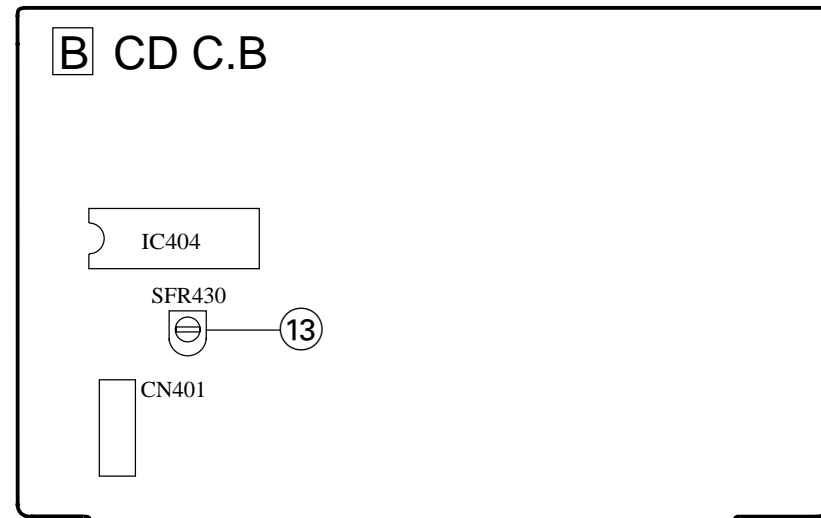
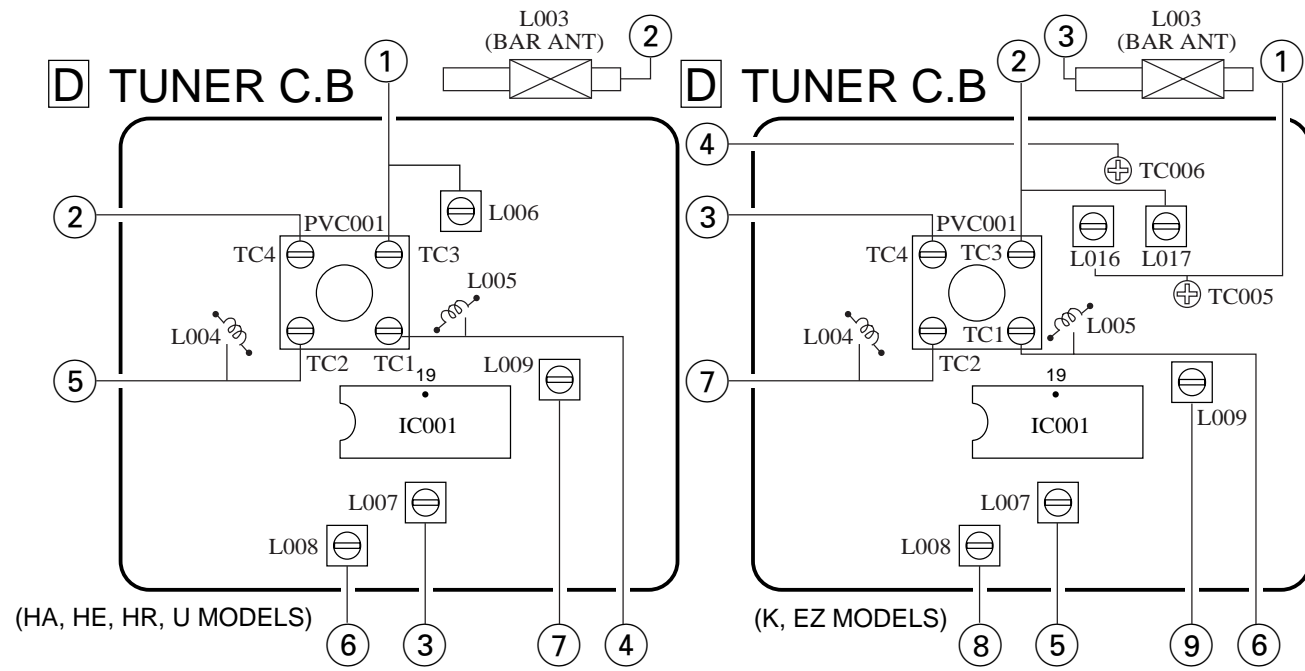
WIRING-4 (TUNER:HA, HE, HR, U)



WIRING-5 (TUNER: K, EZ)



ELECTRICAL ADJUSTMENT



< TUNER SECTION >
(HA, HE, HR, U MODELS)

- AM Freq. Range Adjustment
L006 517kHz
TC003 1750kHz
- AM Tracking Adjustment
L003 600kHz
TC004 1400kHz
- AM IF Adjustment
Settings: • Test point: IC001 (LA1828) 19PIN
• Adjustment location: L007
Method: Adjust L007 so that the output level at 1400kHz becomes maximum.
- FM Freq. Range Adjustment
L005 87.0MHz
TC001 109.0MHz
- FM Tracking Adjustment
L004 88.0MHz
TC002 108.0MHz
- FM IF Adjustment
Settings: • Test point: IC001 (LA1828) 19PIN
• Adjustment location: L008
Method: Adjust L008 so that the output level at 98.0MHz becomes balanced.
- FM Balance Adjustment
Settings: • Test point: IC001 (LA1828) 19PIN
• Adjustment location: L009
Method: Adjust L009 so that the output level at 98.0MHz becomes balanced.

(K, EZ MODELS)

- LW Freq. Range Adjustment
L016 145kHz
TC005 295kHz
- MW Freq. Range Adjustment
L017 515kHz
TC003 1635kHz
- MW Tracking Adjustment
L003 600kHz
TC004 1400kHz
- LW Tracking Adjustment
TC006 288kHz
- AM IF Adjustment
Settings: • Test point: IC001 (LA1828) 19PIN
• Adjustment location: L007
Method: Adjust L007 so that the output level at 1400kHz becomes maximum.
- FM Freq. Range Adjustment
L005 87.4MHz
TC001 108.3MHz

- FM Tracking Adjustment
L004 88.0MHz
TC002 108.0MHz
- FM IF Adjustment
Settings: • Test point: IC001 (LA1828) 19PIN
• Adjustment location: L008
Method: Adjust L008 so that the output level at 98.0MHz becomes balanced.
- FM Balance Adjustment
Settings: • Test point: IC001 (LA1828) 19PIN
• Adjustment location: L009
Method: Adjust L009 so that the output level at 98.0MHz becomes balanced.

< DECK SECTION >

- Tape Speed Adjustment
Settings: • Test tape : TTA-100
• Test point : J251 (PHONES jack)
• Adjustment location : SFR of deck motor
Method : Play back the test tape and adjust SFR so that the frequency counter reads 3000Hz ± 30Hz.
- 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
L801 85kHz±0.5kHz

< CD SECTION >

- FE Balance Adjustment
Settings: • Test point : IC401 PIN58 (VR), IC401 PIN 20 (FE)
• Adjustment location : SFR430
Method : Playback the disc and adjust SFR430 so that the test point voltage becomes 0V.

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, write 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	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	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, LC865516A-5P16

Pin No.	Pin Name	I/O	Description
1	$\overline{\text{SEG E}}$	O	SEG E control.
2	$\overline{\text{SEG F}}$	O	SEG F control.
3	$\overline{\text{SEG G}}$	O	SEG G control.
4	NC	—	Not connected.
5	I-RES	I	Micro processor reset input
6	XT(IN)	I	Connected to an external 32.768 kHz crystal oscillator.
7	NC	—	Not connected.
8	XT2(OUT)	O	Connected to an external 32.768 kHz crystal oscillator.
9	VSS	—	GND.
10	CF1(IN)	I	Connected to an external 5.76 MHz ceramic filter.
11	CF2(OUT)	O	Connected to an external 5.76 MHz ceramic filter.
12	VDD	—	Microprocessor power supply (+5V).
13	I-KEY0	I	Key AD input. (AD)
14	I-KEY1	I	Key AD input. (AD)
15	I-MOTOR	I	Deck status input. (AD)
16	I-CD SW	I	CD door switch status input.
17	O-SHIFT	O	Main clock shift output.
18	NC	—	Not connected.
19	O-BASS LED	O	BASS LED ON/OFF control output. (Not connected)
20	O-QS LED	O	Q sound LED ON/OFF control output. (Not connected)
21	O-SFT LED	—	Not connected.
22	I-DRF	I	CD RF level detection input.
23	I-WRQ	I	CD subcode Q standby input.
24	NC	—	Not connected.
25	I-REM	—	Remote control input.
26	O-CD ON	O	CD power control output.
27	O-TU ON	O	TU power control output.
28	O-P.CONT	O	The main power supply control output.
29	NC	—	Not connected.
30	O-BEAT	O	Beat control.
31	O-MUTE	O	Main mute output.
32	O-DIGIT	O	7-segment LED power supply control output.
33	O-SEG RPEAT	O	REPEAT LED ON/OFF control output.
34	O-COIN	O	CD command output.
35	I-SQOUT	I	CD subcode Q input.
36	O-CQCK	O	CD command/CLK for subcode.
37	O-WRC	O	CD read/write control output.
38	O-DATA	O	Data output to M62349FP.
39	O-CD LED	O	LED ON/OFF control output for the CD function.
40	O-TU LED	O	LED ON/OFF control output for the TU function.
41	O-TA LED	O	LED ON/OFF control output for the TA function. (Not connected)

Pin No.	Pin Name	I/O	Description
42	NC	—	Not connected.
43	$\overline{\text{SEG DP}}$	O	SEG DP control.
44	$\overline{\text{SEG A}}$	O	SEG A control.
45	$\overline{\text{SEG B}}$	O	SEG B control.
46	$\overline{\text{SEG C}}$	O	SEG C control.
47	$\overline{\text{SEG D}}$	O	SEG D control.
48	NC	—	Not connected.

MECHANICAL PARTS LIST 1/1

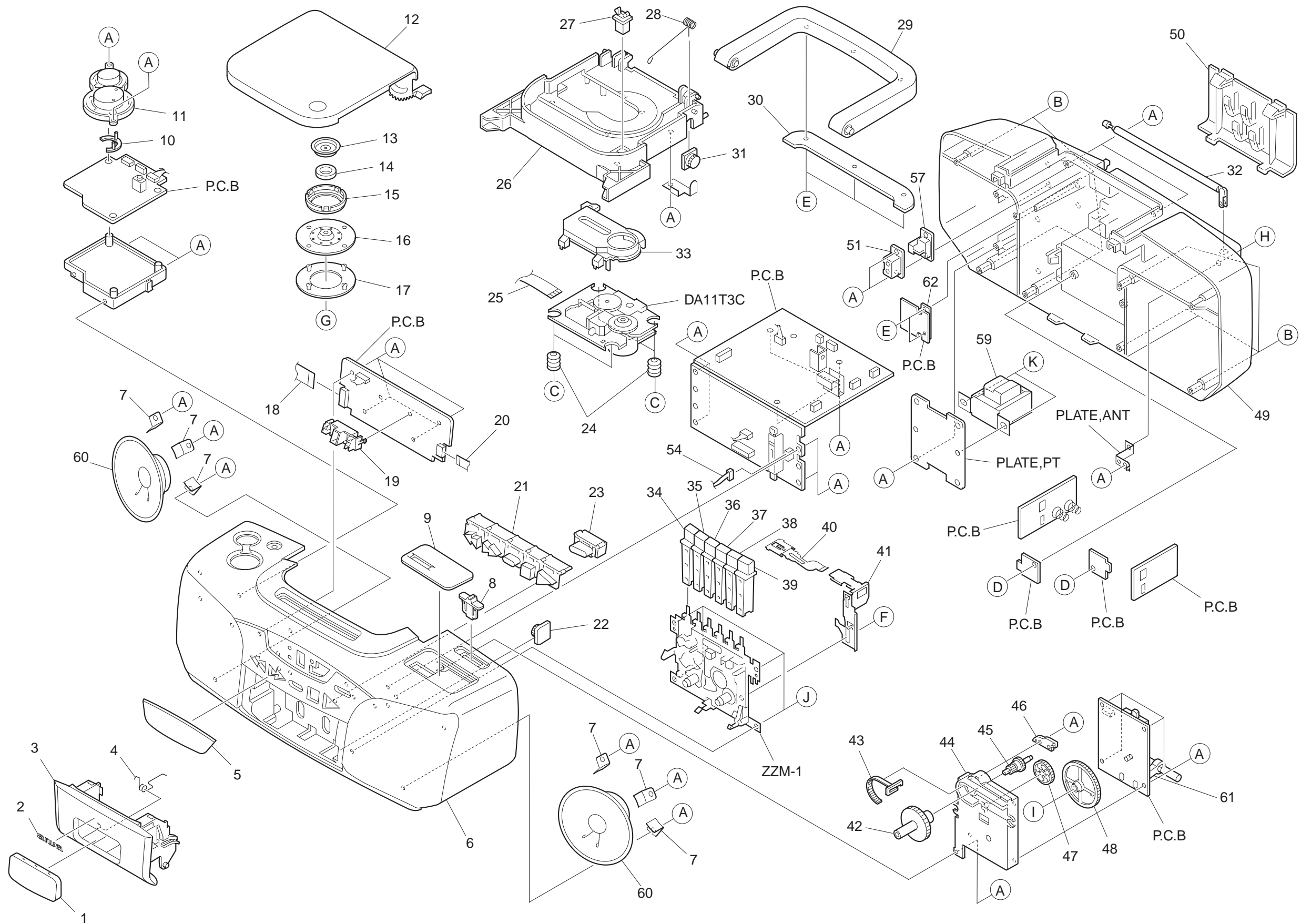
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If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

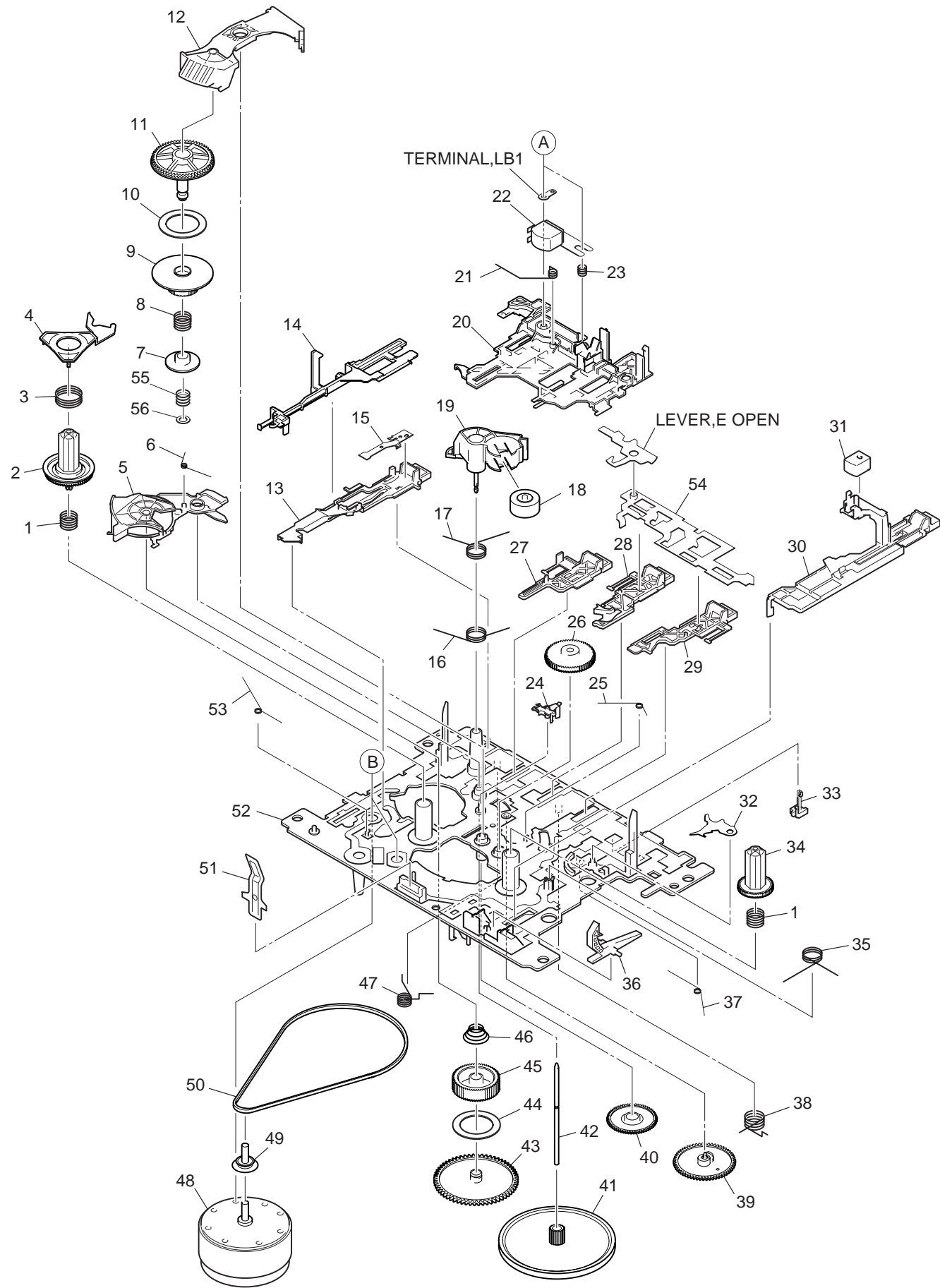
REF. NO	PART NO.	KANRI NO.	DESCRIPTION	REF. NO	PART NO.	KANRI NO.	DESCRIPTION
1	8A-CDA-006-010		WINDOW, CASS	21	8A-CDA-016-010		KEY, CD
<110HRJ(S), 100K(S), 99K(S), 100EZ(S), 170U(S), 170K(S), 170HA(S)>							<EXCEPT 100EZ(P), 100EZ(L), 110EZ(L)>
1	8A-CDA-062-010		WINDOW, CASS D	21	8A-CDA-078-010		KEY, CD EZ L
<100HE(S), 110EZ(S), 100HRJ(S)>							<100EZ(P), 100EZ(L), 110EZ(L)>
1	8A-CDA-072-010		WINDOW, CASS EZ L<100EZ(L)>	22	87-063-165-010		OIL-DMPR 150
1	8A-CDA-096-010		WINDOW, CASS EZ P<100EZ(P)>	23	8A-CDA-017-010		KEY, MODE
1	8A-CDA-128-010		WINDOW, CASS L<110EZ(L)>	23	8A-CDA-079-010		<EXCEPT 100EZ(P), 100EZ(L), 110EZ(L)>
							KEY, MODE EZ L
2	87-B00-010-010		BADGE, AIWA 30.5-5.2 S 2.5L				<100EZ(P), 100EZ(L), 110EZ(L)>
3	8A-CDA-003-010		LID, CASS	24	88-CH6-220-010		CUSHION, CD A
<EXCEPT 100EZ(P), 100EZ(L), 110EZ(L)>							FF-CABLE, 16P CD-RF
3	8A-CDA-069-010		LID, CASS EZ L<100EZ(L)>	25	8A-CDA-621-010		CHAS, CD<EXCEPT 100EZ(P), 100EZ(L)>
3	8A-CDA-093-010		LID, CASS EZ P<100EZ(P)>	26	8A-CDA-012-010		CHAS, CD EZ L<100EZ(L)>
3	8A-CDA-125-010		LID, CASS L<110EZ(L)>	26	8A-CDA-180-010		CHAS, CD EZ P<100EZ(P)>
				26	8A-CDA-114-010		CHAS, CD EZ P<100EZ(P)>
4	8A-CDA-212-010		SPR-T, CASS	27	87-036-389-010		SW, PUSH LOCK
5	8A-CDL-031-010		WINDOW, LED<170K(S), 170HA(S)>	28	8A-CDA-211-010		SPR-T, CD
5	8A-CDA-008-010		WINDOW, LED<100EZ(L)>	29	8A-CDA-010-110		HANDL, ARM
5	8A-CDA-039-010		WINDOW, LED LH				<EXCEPT 100EZ(P), 100EZ(L), 110EZ(L)>
<110HRJ(S), 110EZ(S), 110EZ(L)>				29	8A-CDA-074-010		HANDL, ARM EZ L<100EZ(L)>
5	8A-CDA-113-010		WINDOW, LED LOW EZ P<100EZ(P)>	29	8A-CDA-098-010		HANDL, ARM EZ P<100EZ(P)>
				29	8A-CDA-130-010		HANDL, ARM L<110EZ(L)>
5	8A-CDA-042-010		WINDOW, LED LOW LH	30	8A-CDA-011-010		HANDL, COVER
<100HE(S), 100K(S), 99K(S), 100EZ(S), 100HRJ(S)>							<EXCEPT 100EZ(P), 100EZ(L), 110EZ(L)>
5	8A-CDL-033-010		WINDOW, LED U<170U(S)>	30	8A-CDA-075-010		HANDL, COVER EZ L<100EZ(L)>
6	8A-CDA-028-010		CABI ASSY, FRONT	30	8A-CDA-099-010		HANDL, COVER EZ P<100EZ(P)>
<110HRJ(S), 170U(S), 170HA(S)>				30	8A-CDA-131-010		HANDL, COVER L<110EZ(L)>
6	8A-CDA-120-010		CABI ASSY, FRONT A99<99K(S)>	31	87-NF8-220-010		DMPR, 150
6	8A-CDA-034-010		CABI ASSY, FRONT EZ	32	8Z-CH4-640-010		ANT, ROD
<110EZ(S), 170K(S)>				33	8Z-CDB-169-010		PANEL, CD SANYO
				34	8A-CDA-027-010		KEY, PAUSE
6	8A-CDA-122-010		CABI ASSY, FRONT EZ L<110EZ(L)>				<EXCEPT 100EZ(P), 100EZ(L), 110EZ(L)>
6	8A-CDA-036-010		CABI ASSY, FRONT LOW EZ	34	8A-CDA-088-010		KEY, PAUSE EZ L<100EZ(L)>
<100K(S), 100EZ(S)>							
6	8A-CDA-066-010		CABI ASSY, FRONT LOW EZ L	34	8A-CDA-112-010		KEY, PAUSE EZ P<100EZ(P)>
<100EZ(L)>				34	8A-CDA-143-010		KEY, PAUSE L<110EZ(L)>
6	8A-CDA-090-010		CABI ASSY, FRONT LOW EZ P	35	8A-CDA-026-010		KEY, STOP
<100EZ(P)>							<EXCEPT 100EZ(P), 100EZ(L), 110EZ(L)>
6	8A-CDA-054-010		CABI ASSY, FRONT LOW HR	35	8A-CDA-087-010		KEY, STOP EZ L<100EZ(L)>
<100HE(S), 100HRJ(S)>				35	8A-CDA-111-010		KEY, STOP EZ P<100EZ(P)>
				35	8A-CDA-142-010		KEY, STOP L<110EZ(L)>
7	8A-CDA-206-010		HLDR, SPKR	36	8A-CDA-025-010		KEY, FF
8	8A-CDA-020-010		KNOB, SL BAND				<EXCEPT 100EZ(P), 100EZ(L), 110EZ(L)>
<110HRJ(S), 100HE(S), 100HRJ(S), 170U(S), 170HA(S)>				36	8A-CDA-085-010		KEY, FF EZ L<100EZ(L)>
8	8A-CDA-059-010		KNOB, SL BAND EZ	36	8A-CDA-109-010		KEY, FF EZ P<100EZ(P)>
<100K(S), 110EZ(S), 99K(S), 100EZ(S), 170K(S)>				36	8A-CDA-140-010		KEY, FF L<110EZ(L)>
8	8A-CDA-081-010		KNOB, SL BAND EZ L<100EZ(L)>				
8	8A-CDA-105-010		KNOB, SL BAND EZ P<100EZ(P)>	37	8A-CDA-024-010		KEY, REW
							<EXCEPT 100EZ(P), 100EZ(L), 110EZ(L)>
8	8A-CDA-136-010		KNOB, SL BAND L<110EZ(L)>	37	8A-CDA-086-010		KEY, REW EZ L<100EZ(L)>
9	8A-CDA-009-010		WINDOW, TU<170U(S)>	37	8A-CDA-110-010		KEY, REW EZ P<100EZ(P)>
9	8A-CDA-045-010		WINDOW, TU EZ	37	8A-CDA-141-010		KEY, REW L<110EZ(L)>
<100K(S), 110EZ(S), 99K(S), 100EZ(S), 170K(S)>				38	8A-CDA-023-010		KEY, PLAY
9	8A-CDA-073-010		WINDOW, TU EZ L<100EZ(L)>				<EXCEPT 100EZ(P), 100EZ(L), 110EZ(L)>
9	8A-CDA-097-010		WINDOW, TU EZ P<100EZ(P)>	38	8A-CDA-084-010		KEY, PLAY EZ L<100EZ(L)>
				38	8A-CDA-108-010		KEY, PLAY EZ P<100EZ(P)>
9	8A-CDA-046-010		WINDOW, TU HR	38	8A-CDA-139-010		KEY, PLAY L<110EZ(L)>
<110HRJ(S), 100HE(S), 100HRJ(S), 170HA(S)>				39	8A-CDA-022-010		KEY, REC
9	8A-CDA-129-010		WINDOW, TU L<110EZ(L)>				<EXCEPT 100EZ(P), 100EZ(L), 110EZ(L)>
10	8A-CDA-007-010		LENS, LED	39	8A-CDA-083-010		KEY, REC EZ L<100EZ(L)>
11	8A-CDA-019-010		KEY, VOL	39	8A-CDA-107-010		KEY, REC EZ P<100EZ(P)>
<EXCEPT 100EZ(P), 100EZ(L), 110EZ(L)>				39	8A-CDA-138-010		KEY, REC L<110EZ(L)>
11	8A-CDA-080-010		KEY, VOL EZ L<100EZ(L)>	40	8A-CDA-221-010		SPR-P, REC<EXCEPT 100HE(S)>
				41	8A-CDA-220-010		PLATE, REC
11	8A-CDA-104-010		KEY, VOL EZ P<100EZ(P)>	42	8A-CDA-021-010		KNOB, RTRY TU
11	8A-CDA-135-010		KEY, VOL L<110EZ(L)>				<EXCEPT 100EZ(P), 100EZ(L), 110EZ(L)>
12	8A-CDA-004-010		LID, CD	42	8A-CDA-082-010		KNOB, RTRY TU EZ L<100EZ(L)>
<110HRJ(S), 100K(S), 99K(S), 100EZ(S), 170U(S), 170K(S), 170HA(S)>				42	8A-CDA-106-010		KNOB, RTRY TU EZ P<100EZ(P)>
12	8A-CDA-061-010		LID, CD D	42	8A-CDA-137-010		KNOB, RTRY TU L<110EZ(L)>
<100HE(S), 110EZ(S), 100HRJ(S)>				43	8A-CDA-013-010		POINTER, TU
12	8A-CDA-070-010		LID, CD EZ L<100EZ(L)>	44	8A-CDA-201-010		HLDR, TU
12	8A-CDA-094-010		LID, CD EZ P<100EZ(P)>	45	8A-CDA-216-010		GEAR, TU B
12	8A-CDA-126-010		LID, CD L<110EZ(L)>	46	8A-CDA-203-010		GUIDE, GEAR
13	8A-CDA-213-010		COVER, CHUCK	47	8A-CDA-202-010		GEAR, RELAY
14	87-036-368-010		MAGNET	48	8A-CDA-215-010		DRUM, TU
15	8A-CDA-207-010		HLDR, CHUCK				
16	8A-CDA-150-010		BASE, CHUCK F/M				
17	88-CD9-211-210		RING, CHUCK				
18	8A-CDA-620-010		FF-CABLE, 16P FR-MAIN				
19	8A-CDA-208-110		HLDR, LED				
20	8A-CDA-622-010		FF-CABLE, 8P CD-FR				

REF. NO	PART NO.	KANRI NO.	DESCRIPTION	REF. NO	PART NO.	KANRI NO.	DESCRIPTION
49	8A-CDL-002-010		CABI, REAR<170U(S), 170K(S)>	57	87-A60-177-010		JACK, AC U W/SW<170U(S)>
49	8A-CDA-002-010		CABI, REAR<110EZ(S)>	58	8A-CDA-018-010		KEY, QSOUND
49	8A-CDA-118-010		CABI, REAR A99<99K(S)>	<110HRJ(S), 110EZ(S), 170U(S), 170K(S), 170HA(S)>			
49	8A-CDA-124-010		CABI, REAR EZ L<110EZ(L)>	58	8A-CDA-134-010		KEY, QSOUND L<110EZ(L)>
49	8A-CDA-030-010		CABI, REAR LH<110HRJ(S)>	59	8A-CDA-612-010		PT, E 2.5W
				<EXCEPT 110HRJ(S), 100HE(S), 100HRJ(S), 170U(S), 170HA(S)>			
49	8A-CDL-030-010		CABI, REAR LH<170HA(S)>	59	8A-CDA-613-010		PT, H 2.5W
49	8A-CDA-037-010		CABI, REAR LOW<100K(S), 100EZ(S)>	<110HRJ(S), 100HE(S), 100HRJ(S), 170HA(S)>			
49	8A-CDA-068-010		CABI, REAR LOW EZ L<100EZ(L)>				
49	8A-CDA-092-010		CABI, REAR LOW EZ P	59	8A-CDA-611-010		PT, U 2.5W<170U(S)>
				60	8A-CH4-682-010		SPKR, 10- 70HM
49	8A-CDA-038-010		CABI, REAR LOW LH	61	88-CD6-661-010		HLDR, BAR ANT.
			<100EZ(P)>	62	87-A91-369-010		SW, AC SL 2 2 2 SDKGA41700
				<110HRJ(S), 100HE(S), 100HRJ(S), 170HA(S)>			
50	8A-CDA-005-010		LID, BATT	A	87-721-096-410		QT2+3-10 GLD
			<EXCEPT 100EZ(P), 100EZ(L), 110EZ(L)>				
50	8A-CDA-071-010		LID, BATT EZ L<100EZ(L)>	B	87-751-104-410		VT2+3-30
50	8A-CDA-095-010		LID, BATT EZ P<100EZ(P)>	C	8A-CK4-223-010		S-SCREW, CD
50	8A-CDA-127-010		LID, BATT L<110EZ(L)>	D	87-067-566-010		TAPPING SCREW, VFMT+3-6
51	8Z-CD5-634-010		COVER, AC SOCKET	E	87-352-075-210		VT2+2.6-10
				F	8A-CDA-222-010		S-SCREW, CASS+2.6-4
52	8A-CDA-626-010		CONN ASSY, 2P DOOR	H	87-253-097-410		U+3-12 BLK
53	8A-CDA-630-010		CONN ASSY, 4P RPH	I	87-261-073-410		V+2.6-6
54	8A-CDA-633-010		CONN ASSY, 4P SP	J	87-751-096-410		VT2+3-10 GLD
55	8A-CDA-631-010		CONN ASSY, 4P TA-ME				
57	87-A60-178-010		JACK, AC E W/SW<EXCEPT 170U(S)>				

COLOR NAME TABLE

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



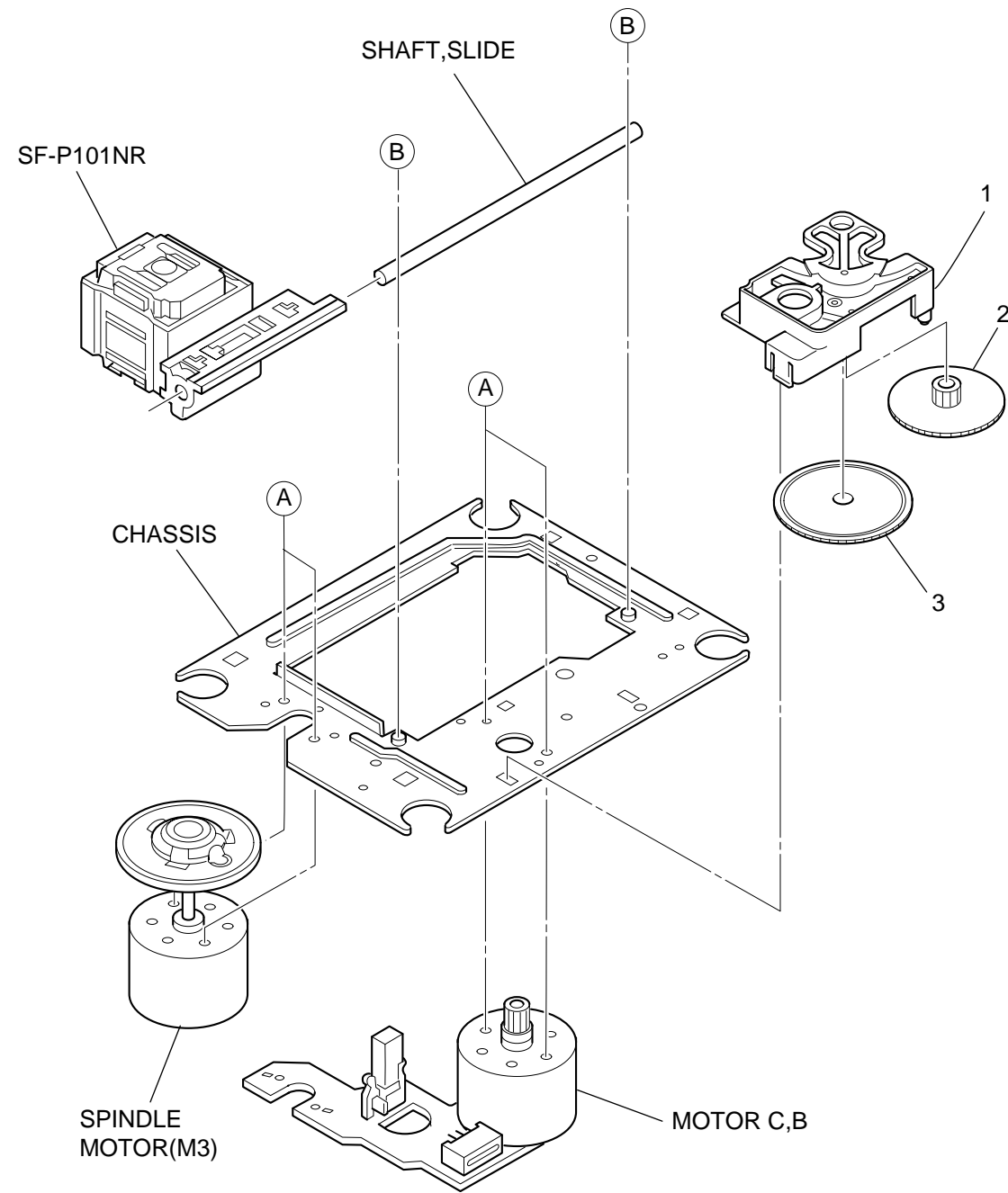


TAPE MECHANISM PARTS LIST 1/1

DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。
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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	31	87-A91-533-010		HEAD, EH PH-K380
2	8Z-ZM1-225-110		GEAR, REEL R	32	8Z-ZM1-215-010		LEVER, REC LOCK
3	8Z-ZM1-253-110		SPR-C, AUTO SENSOR	33	87-A91-492-010		SW, LEAF MSW18560
4	8Z-ZM1-217-110		LEVER, AUTO SENSOR	34	8Z-ZM1-226-010		GEAR, REEL L
5	8Z-ZM1-212-110		LEVER, T-UP	35	8Z-ZM1-241-010		SPR-T, PLAY
6	8Z-ZM1-245-010		SPR-T, AUTO	36	8Z-ZM1-220-010		LEVER, REC SENSOR
7	8Z-ZM1-236-010		CLR, SLIP FF/REW	37	8Z-ZM1-249-010		SPR-T, FR
8	8Z-ZM1-252-010		SPR-C, FF/REW	38	8Z-ZM1-242-110		SPR-T, FF/REW
9	8Z-ZM1-230-010		GEAR, SLIP FF/REW A	39	8Z-ZM1-229-010		GEAR, CAM
10	8Z-ZM1-266-010		FELT, FF/REW	40	8Z-ZM1-232-010		GEAR, IDL FF/REW
11	8Z-ZM1-231-010		GEAR, SLIP FF/REW B	41	8Z-ZM1-234-010		FLY-WHL, ZZM-1
12	8Z-ZM1-213-010		LEVER, FF/REW	42	8Z-ZM1-267-010		SHAFT, CAPSTAN 2
13	8Z-ZM1-209-110		LEVER, PAUSE	43	8Z-ZM1-228-010		GEAR, SLIP T-UP B
14	8Z-ZM1-222-010		LEVER, E-LOCK M	44	8Z-ZM1-265-010		FELT, T-UP
15	8Z-ZM1-256-010		SPR-P, PAUSE	45	8Z-ZM1-227-010		GEAR, SLIP T-UP A
16	8Z-ZM1-244-010		SPR-T, T-UP	46	8Z-ZM1-251-110		SPR-C, T-UP SLIP
17	8Z-ZM1-247-210		SPR-T, PINCH	47	8Z-ZM1-243-210		SPR-T, STOP/PAUSE
18	8Z-ZM1-261-110		ROLLER ASSY, PINCH	48	87-A91-531-010		MOT, MS15C2L
19	8Z-ZM1-221-010		LEVER, PINCH	49	8Z-ZM1-271-010		PULLEY, MOT ZZM-1
20	8Z-ZM1-205-210		LEVER, PLAY	50	8Z-ZM1-264-010		BELT, MAIN S
21	8Z-ZM1-248-010		SPR-T, BRG	51	8Z-ZM1-260-010		SPR-P, CASSETTE
22	87-A90-403-110		HEAD, RPH MS15R	52	8Z-ZM1-201-310		CHAS ASSY, ZZM-1
23	84-ZM2-227-310		SPR-C, AZIMUTH	53	8Z-ZM1-255-110		SPR-T, E-LOCK
24	8Z-ZM1-216-010		LEVER, AUTO	54	8Z-ZM1-214-010		LEVER, LOCK
25	8Z-ZM1-246-010		SPR-T, AUTO 2	55	8Z-ZM1-257-110		SPR-C, F/R
26	8Z-ZM1-233-010		GEAR, IDL REW	56	8Z-ZM1-275-010		W-L, 1.47-4-0.25
27	8Z-ZM1-208-010		LEVER, STOP	A	84-ZM2-242-010		S-SCREW, AZ1-2-6.4
28	8Z-ZM1-207-010		LEVER, FF	B	8Z-ZM1-270-110		V+2.6 ZZM-1
29	8Z-ZM1-206-010		LEVER, REW				
30	8Z-ZM1-211-110		LEVER, REC 2				

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。
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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

ACCESSORIES/PACKAGE LIST

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REF. NO	PART NO.	KANRI NO.	DESCRIPTION
1	8A-CDA-906-010	IB,EZ(9L)FM	PDF
1	8A-CDA-901-010	IB,H(ECA)FM	<110EZ(S),100EZ(P),100EZ(L),100EZ(S),110EZ(L)>
1	8A-CDA-905-110	IB,K(E)FM<100K(S),99K(S),170K(S)>	<110HRJ(S),100HE(S),100HRJ(S)>
1	8A-CDL-902-010	IB,LH(ESP)FM<170HA(S)>	
1	8A-CDA-903-010	IB,U(ESF)FM<170U(S)>	
2	8Z-CDK-962-010	RC UNIT,RC-ZAT02(VS)	<170U(S),170K(S),170HA(S)>
⚠	3 87-A80-119-010	AC CORD SET ASSY,AZ<170HA(S)>	
⚠	3 87-A80-036-010	AC CORD SET ASSY,E W/FLTR VOL	
⚠	3 87-A80-034-010	AC CORD SET ASSY,K W/F MAY-BG	<100HE(S),110EZ(S),100EZ(P),100EZ(L),100EZ(S),110EZ(L)>
⚠	3 87-A80-089-010	AC CORD SET,HC	<100K(S),99K(S),170K(S)>
⚠	3 87-A80-109-010	AC CORD,HK7281 BLK U<170U(S)>	
⚠	4 87-A91-017-010	PLUG,CONVERSION JT-0476	<110HRJ(S),100HRJ(S)>