

SERVICE MANUAL

STEREO RADIO
CASSETTE PLAYER

BASIC TAPE MECHANISM : 4ZM-2 P19NC

- This Service Manual contains information about the difference between HS-TA31 <YC> / HS-TA34 <YC> and HS-TA213 <YL>. If requiring other information, see Service Manual of HS-TA213 <YL,YZ>, (S/M Code No. 09-00B-438-5R1).

SPECIFICATIONS

Frequency range:	FM: 87.5 - 108 MHz AM: 530 - 1710 kHz
Maximum output:	15 mW + 15 mW (EIAJ/32 ohms)
Power source:	DC 3V using two size AA (R6) batteries
Maximum outside dimensions:	91.5 (W) x 116.5 (H) x 36.0 (D) mm (3 ⁵ / ₈ x 4 ⁵ / ₈ x 1 ⁷ / ₁₆ in.) (excluding projecting parts and control)
Weight:	Approx. 130 g (4.6 oz) (excluding batteries)

- Design and specifications are subject to change without notice.

ACCESSORIES / PACKAGE LIST

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	8B-HRL-910-210	IB, YU (ESF) -C	
2	8B-HRL-046-010	CLIP, BELT J034N	
3	87-B30-435-010	HEADPHONE, HP-M028 (V) <[V] 34YC>	
3	87-B30-436-010	HEADPHONE, HP-M028 (BL) <[LA] 31YC>	

ELECTRICAL MAIN PARTS LIST

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION	REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
IC				C107	87-A11-056-080		C-CAP,U 1-10 Z F
	87-A21-684-040	C-IC,TA2145AF		C108	87-012-274-080		C-CAP,U 1000P-50 K B
	87-A20-851-040	C-IC,TA2111F		C109	87-A11-056-080		C-CAP,U 1-10 Z F
				C110	87-010-831-080		C-CAP,U 0.1-16 Z F
				C111	87-012-286-080		C-CAP,U 0.01-25 K B
TRANSISTOR				C112	87-012-286-080		C-CAP,U 0.01-25 K B
	87-A30-159-080	C-TR,KTA1298Y		C113	87-012-286-080		C-CAP,U 0.01-25 K B
	87-A30-062-080	C-TR,KRC104S		C114	87-A11-070-080		C-CAP,U 0.033-16 K B
	87-A30-490-080	C-TR,KRC107S		C115	87-A11-070-080		C-CAP,U 0.033-16 K B
				C116	87-015-688-040		CAP,E 4.7-35 M 7L SRA
DIODE				C117	87-010-831-080		C-CAP,U 0.1-16 Z F
				C118	87-012-274-080		C-CAP,U 1000P-50 K B
	87-A40-965-040	C-DIODE,MMBD-2838LT1		C119	87-010-503-040		CAP,E 220-4 GAS
				C120	87-012-178-080		C-CAP,U 18P-50 J CH
				C201	87-012-274-080		C-CAP,U 1000P-50 K B
MAIN C.B				C211	87-010-178-080		C-CAP,S 1000P-50 K B C2012
	87-A90-988-010	FLTR,KMFC5153 T6-Z		C401	87-A10-025-080		C-CAP,U 0.22-16 Z F
BPF101	87-A91-680-010	FLTR,GFMB5-C3		C402	87-A10-025-080		C-CAP,U 0.22-16 Z F
C1	87-012-277-080	C-CAP,U 1800P-50 K B GRM		C403	87-010-831-080		C-CAP,U 0.1-16 Z F
C2	87-012-277-080	C-CAP,U 1800P-50 K B GRM		CF101	87-A91-087-010		FLTR,PFS 450A6 B
C3	87-012-274-080	C-CAP,U 1000P-50 K B		J1	85-HRL-623-010		JACK,3.5 ST BLK
C4	87-012-274-080	C-CAP,U 1000P-50 K B		L1	87-A50-605-010		COIL,RF CHOKE CECS
C5	87-010-499-040	CAP,E 22-6.3 M 5L SRE		L2	87-005-849-080		COIL,10UH(CECS)
C6	87-015-674-040	CAP,E 22-6.3 M 7L SRA		L101	8B-HRL-607-010		BAR-ANT,MW(KTR)
C7	87-012-285-080	C-CAP,U 8200P-50 K B GRM		L102	8B-HRL-606-010		COIL,FM RF
C8	87-012-285-080	C-CAP,U 8200P-50 K B GRM		L103	8B-HRL-605-010		COIL,FM OSC
C11	87-A11-056-080	C-CAP,U 1-10 Z F		L104	87-A50-698-010		COIL,AM OSC(NEW CORE)
C12	87-A11-056-080	C-CAP,U 1-10 Z F		L105	87-A90-663-010		IFT,MW 5L H6.4
C13	87-012-277-080	C-CAP,U 1800P-50 K B GRM		PVC101	87-A92-009-010		TUN-CAP,20P-160P 16*16 444JF4C
C14	87-012-277-080	C-CAP,U 1800P-50 K B GRM		R51	87-A00-530-080		C-RES,S 180-1/10W F
C15	87-015-676-040	CAP,E 47-6.3 7L SRA		SFR51	87-024-197-010		SEMI-FIXED RESISTOR,1K
C16	87-010-831-080	C-CAP,U 0.1-16 Z F		SW1	87-A90-133-110		SW,LEAF LSA1120JAU
C17	87-010-831-080	C-CAP,U 0.1-16 Z F		SW2	87-A90-216-010		SW,SL 2-2-3 SK23D
C20	87-010-831-080	C-CAP,U 0.1-16 Z F		VR1	87-A90-981-110		VR,RTRY 20KBX1
C21	87-A10-489-040	CAP,E 220-4 7L SR		FRONT C.B			
C22	87-A10-489-040	CAP,E 220-4 7L SR		SW401	87-A92-020-010		C-SW,SL 1-1-2 LONG(NC)
C23	87-A10-489-040	CAP,E 220-4 7L SR					
C24	87-A10-706-080	C-CAP,U 0.33-16 Z F					
C25	87-A10-706-080	C-CAP,U 0.33-16 Z F					
C51	87-A11-056-080	C-CAP,U 1-10 Z F					
C101	87-012-162-080	C-CAP,U 1P-50 C CH					
C102	87-012-178-080	C-CAP,U 18P-50 J CH					
C103	87-012-182-080	C-CAP,U 27P-50 J CH					
C104	87-012-164-080	C-CAP,U 2P-50 C CH					
C105	87-012-286-080	C-CAP,U 0.01-25 K B					
C106	87-A10-463-080	C-CAP,U 0.47-10 Z F					

チップ抵抗部品コード／CHIP RESISTOR PART CODE

チップ抵抗部品コードの成り立ち


Chip Resistor Part Coding

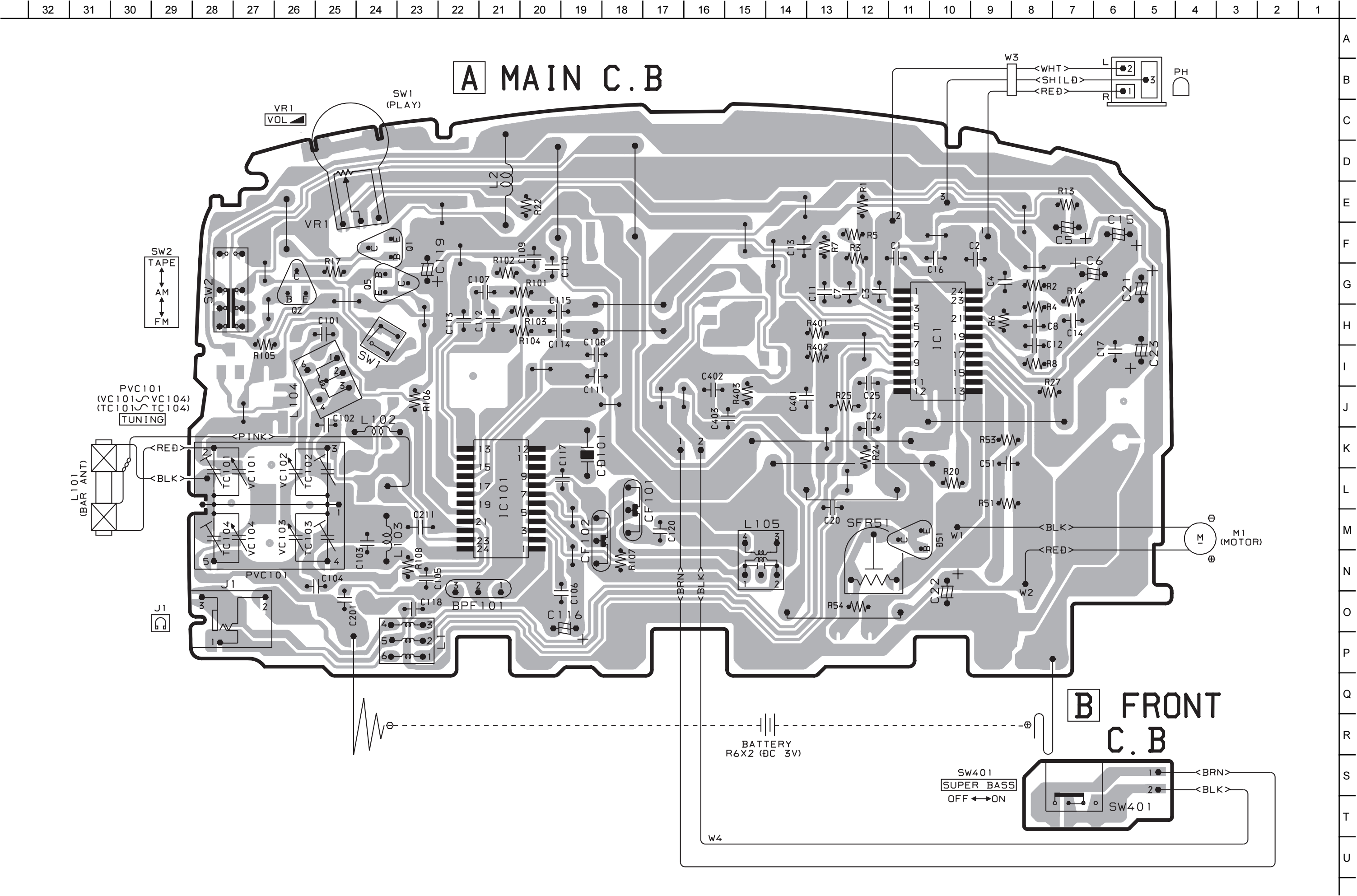


A
抵抗部品コード
Resistor Code

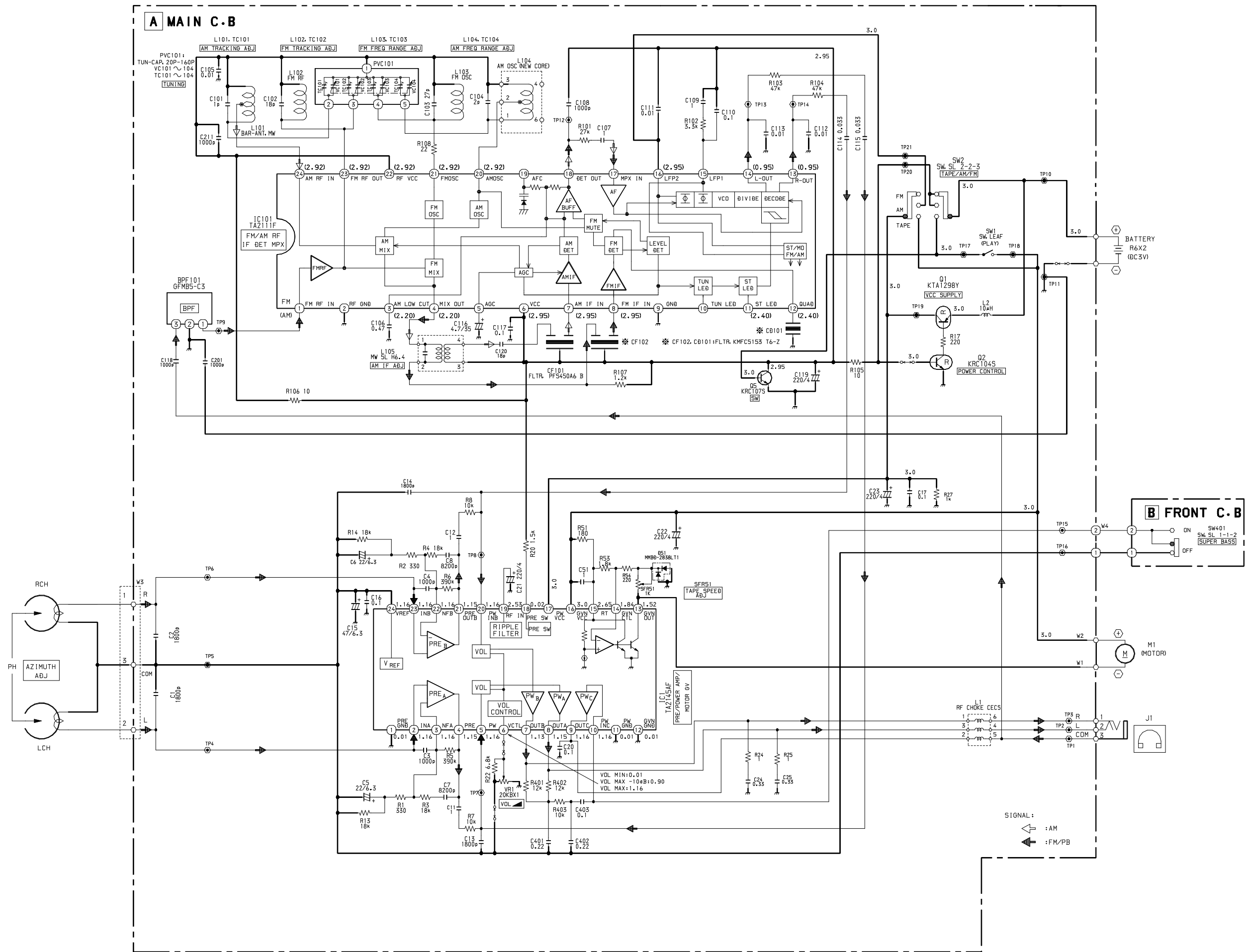
桁表示
Figure
抵抗値
Value of resistor

チップ抵抗 Chip resistor

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



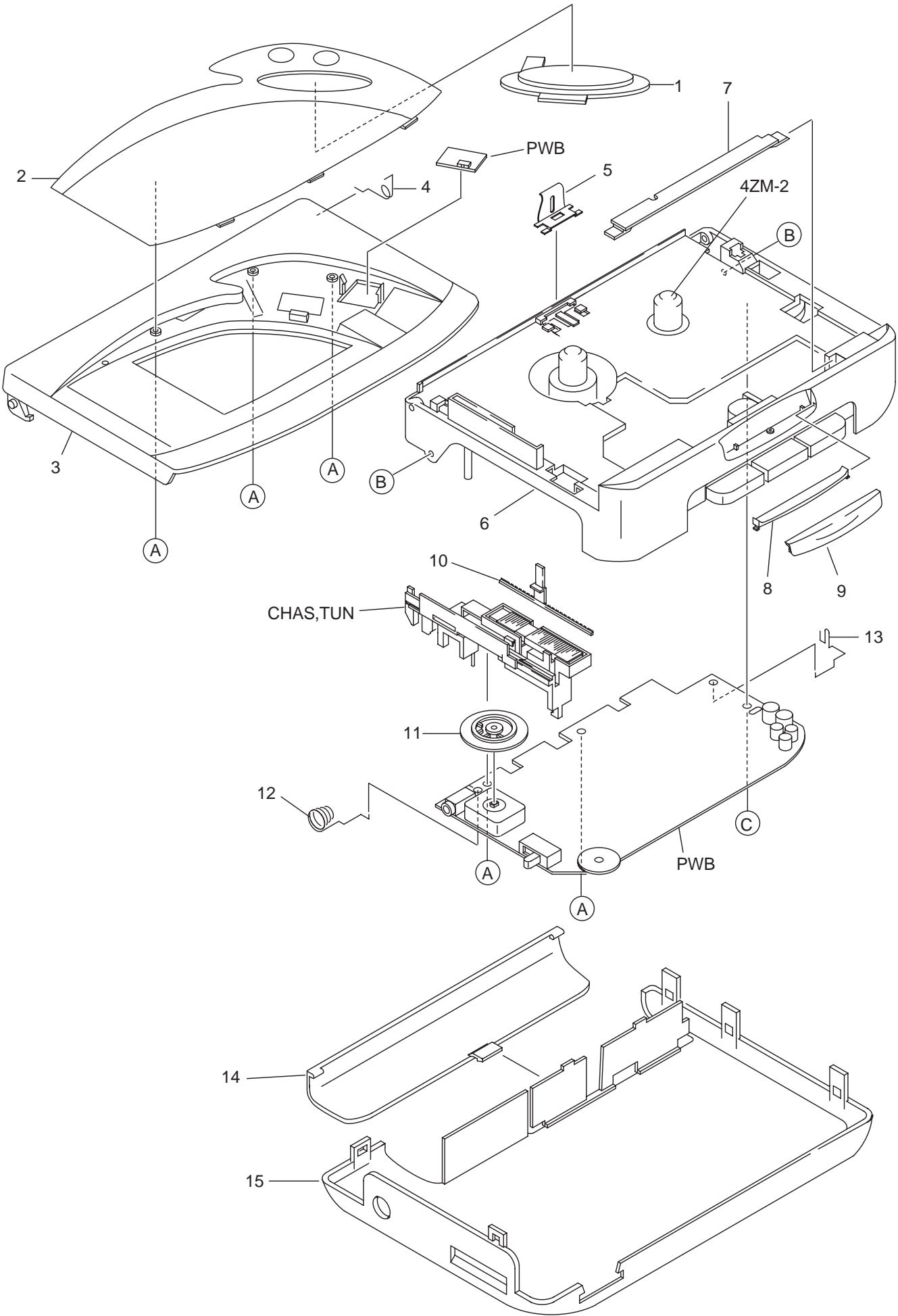
SCHEMATIC DIAGRAM



ADJUSTMENT

<TUNER SECTION>

- 2. AM Frequency range Adjustment
 - L104 515 kHz ± 5 kHz
 - TC104 1670 kHz ± 10 kHz
- 4. FM Frequency range Adjustment
 - L103 87.0 MHz ± 0.2 MHz
 - TC103 109.0 MHz ± 0.1 MHz



REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	8B-HRL-006-010		KNOB,SL SBASS
2	8B-HRL-067-110		PANEL,SBASS ABLU<[LA]31YC>
2	8B-HRL-060-110		PANEL,SBASS VIO<[V]34YC>
3	8B-HRL-072-010		LID,CASS ABLU TA31<[LA]31YC>
3	8B-HRL-075-010		LID,CASS VIO TA34<[V]34YC>
4	86-HRM-205-010		SPR-T,CLICK
5	8B-HRL-208-010		SPR-P,CASS
6	8B-HRL-002-010		FRAME,CENTER
7	8B-HRL-204-010		PLATE,HEAD
8	8B-HRL-203-010		PLATE,BTN
9	8B-HRL-007-010		BTN,PLAY
10	86-HRM-009-210		POINTER,TUN
11	86-HRM-006-010		KNOB,RTRY TUN
12	8Z-HRM-205-010		BAT,CONTACT (-)
13	8B-HRM-203-010		BAT-CONTACT, (+)
14	8B-HRL-069-010		LID,BATT ABLU<[LA]31YC>
14	8B-HRL-064-010		LID,BATT VIO<[V]34YC>
15	8B-HRL-068-010		CABI,REAR ABLU<[LA]31YC>
15	8B-HRL-062-010		CABI,REAR VIO<[V]34YC>
A	87-067-732-010		TAPPING SCREW, VT1.4-3
B	87-067-815-110		VT+1.4-3 (HL)
C	87-B10-044-010		V+1.7-6.5

COLOR NAME TABLE

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

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AIWA CO.,LTD. 2-11, IKENOHATA 1-CHOME, TAITO-KU, TOKYO 110, JAPAN TEL:03 (3827) 3111