

SERVICE MANUAL

STEREO CASSETTE PLAYER

BASIC TAPE MECHANISM : 4ZM-2 P17NC

- This Service Manual is the "Revision Publishing" and replaces "Simple Manual" HS-PS173 (Y), S/M Code No. 09-00A-438-2T1.

SPECIFICATIONS

Maximum output:	Y: 4 mW + 4 mW (EIAJ 16 ohms) YH, YJ: 15 mW + 15 mW (EIAJ 32 ohms)
Power source:	DC 3 V using two R6 (size AA) batteries YH: AC house current using the optional AC adaptor AIWA AC-D302
Maximum dimensions:	91.5 (W) x 116.5 (H) x 31.0 (D) mm (3 ⁵ / ₈ x 4 ⁵ / ₈ x 1 ¹ / ₄ in.) (excluding projecting parts and control)
Weight	Approx. 109 g (3.8 oz) (excluding batteries)

- Design and specifications are subject to change without notice.

ACCESSORIES / PACKAGE LIST

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	8A-HKA-079-010		CLIP, BELT TRANS
2	87-B30-430-010		HEADPHONE, HP-M029 (R) <[R] Y>
2	87-B30-431-010		HEADPHONE, HP-M029 (BL) <[L] Y>
2	87-B30-432-010		HEADPHONE, HP-M029 (G) <[G] Y>
2	87-B30-434-010		HEADPHONE, HP-M029 (DG) <[LD] Y>
2	87-B30-444-010		HEADPHONE, HP-M029 (T2R) <[P] YH>
2	87-B30-445-010		HEADPHONE, HP-M029 (T2BL) <[LD] YH>
2	87-B30-446-010		HEADPHONE, HP-M029 (T2G) <[GL] YH>
2	87-B30-448-010		HEADPHONE, HP-M029 (T2DG) <[LD] YJ>
3	8B-HKB-901-010		IB, Y (EGFSI) -C <Y>
3	8B-HKB-902-010		IB, Y (EDPOHCZ) -C <Y>
3	8B-HKB-905-010		IB, YH (ECC) -C <YH>
3	8B-HKB-906-010		IB, YJ (ECCA) -C <YJ>

ELECTRICAL MAIN PARTS LIST

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
IC			
	87-A21-684-040	C-IC,TA2145AF	
DIODE			
	87-A40-630-040	C-DIODE,RB411D <YH>	
MAIN C.B			
C1	87-012-277-080	C-CAP,U 1800P-50 K B	
C2	87-012-277-080	C-CAP,U 1800P-50 K B	
C3	87-012-284-080	C-CAP,U 6800P-50 K B	
C4	87-012-284-080	C-CAP,U 6800P-50 K B	
C5	87-015-674-040	CAP,E 22-6.3 M 7L SRA	
C6	87-015-674-040	CAP,E 22-6.3 M 7L SRA	
C7	87-012-277-080	C-CAP,U 1800P-50 K B	
C8	87-012-277-080	C-CAP,U 1800P-50 K B	
C9	87-012-274-080	C-CAP,U 1000P-50 K B	
C10	87-012-274-080	C-CAP,U 1000P-50 K B	
C11	87-A10-489-040	CAP,E 220-4 7L SR	
C12	87-A10-489-040	CAP,E 220-4 7L SR	
C14	87-015-681-040	CAP,E 10-16 7L SRA	
C15	87-010-831-080	C-CAP,U 0.1-16 Z F	
C17	87-A11-056-080	C-CAP,U 1-10 Z F	
C18	87-A11-056-080	C-CAP,U 1-10 Z F	
C27	87-010-831-080	C-CAP,U 0.1-16 Z F <YH, YJ>	
C51	87-015-695-040	CAP,E 1-50 7L SRA	
J1	85-HRL-623-010	JACK,3.5 BLK ST BLK	
J2	87-A61-124-010	JACK,DC DIA2.75 BLK TC <YH>	
R51	87-A00-530-080	C-RES, S 180-1/10W F	
SFR51	87-024-197-010	SFR,1K H VZ066L3	
SW1	87-A90-133-110	SW,LEAF LSA1120JAU	
VR1	87-A91-581-110	VR,RTRY 20KBX1	
FRONT C.B			
SW401	87-A92-020-010	C-SW,SL 1-1-2LONG (NC)	

○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



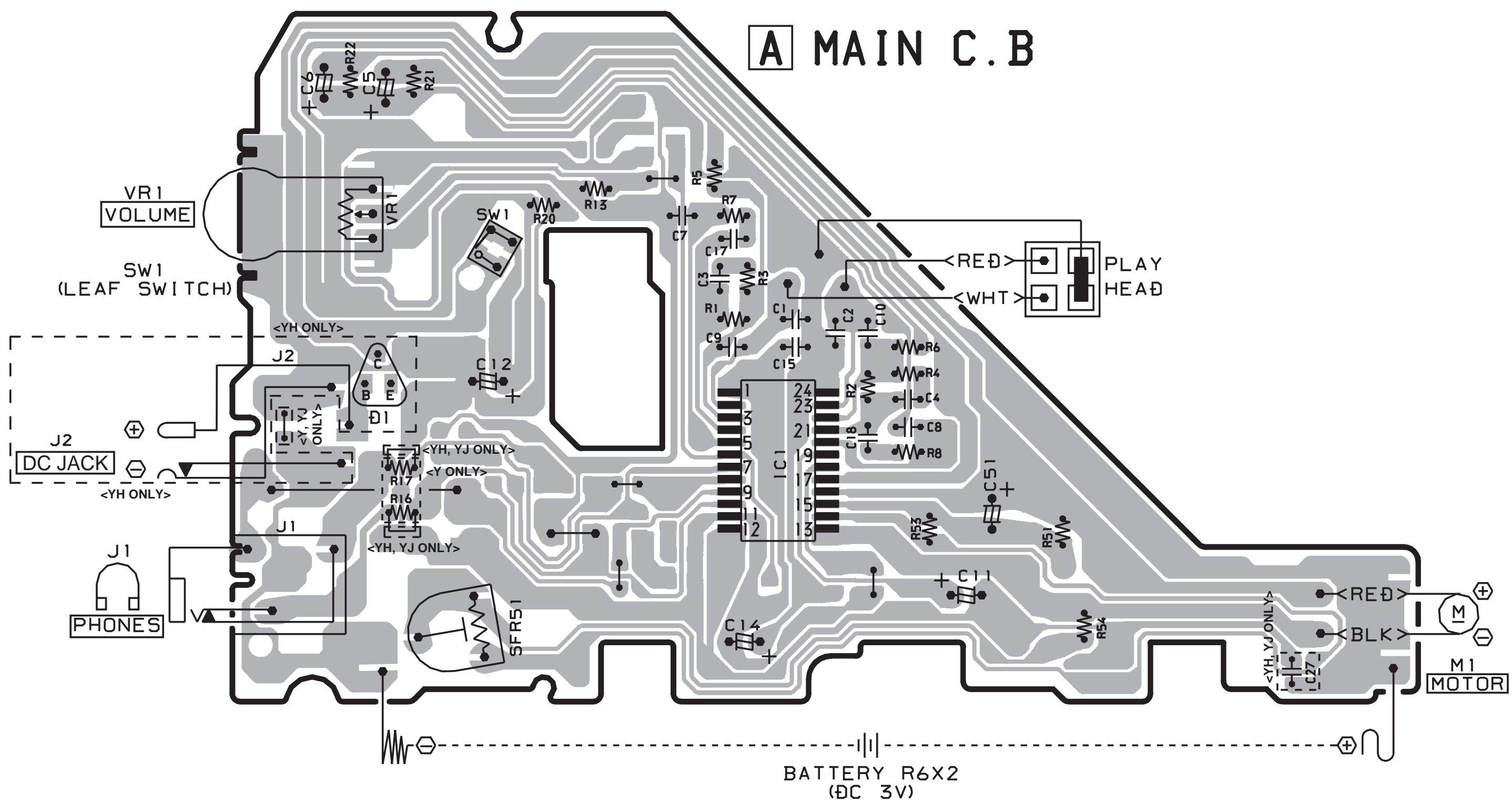
A
抵抗部品コード
Resistor Code

桁表示
Figure
抵抗値
Value of resistor

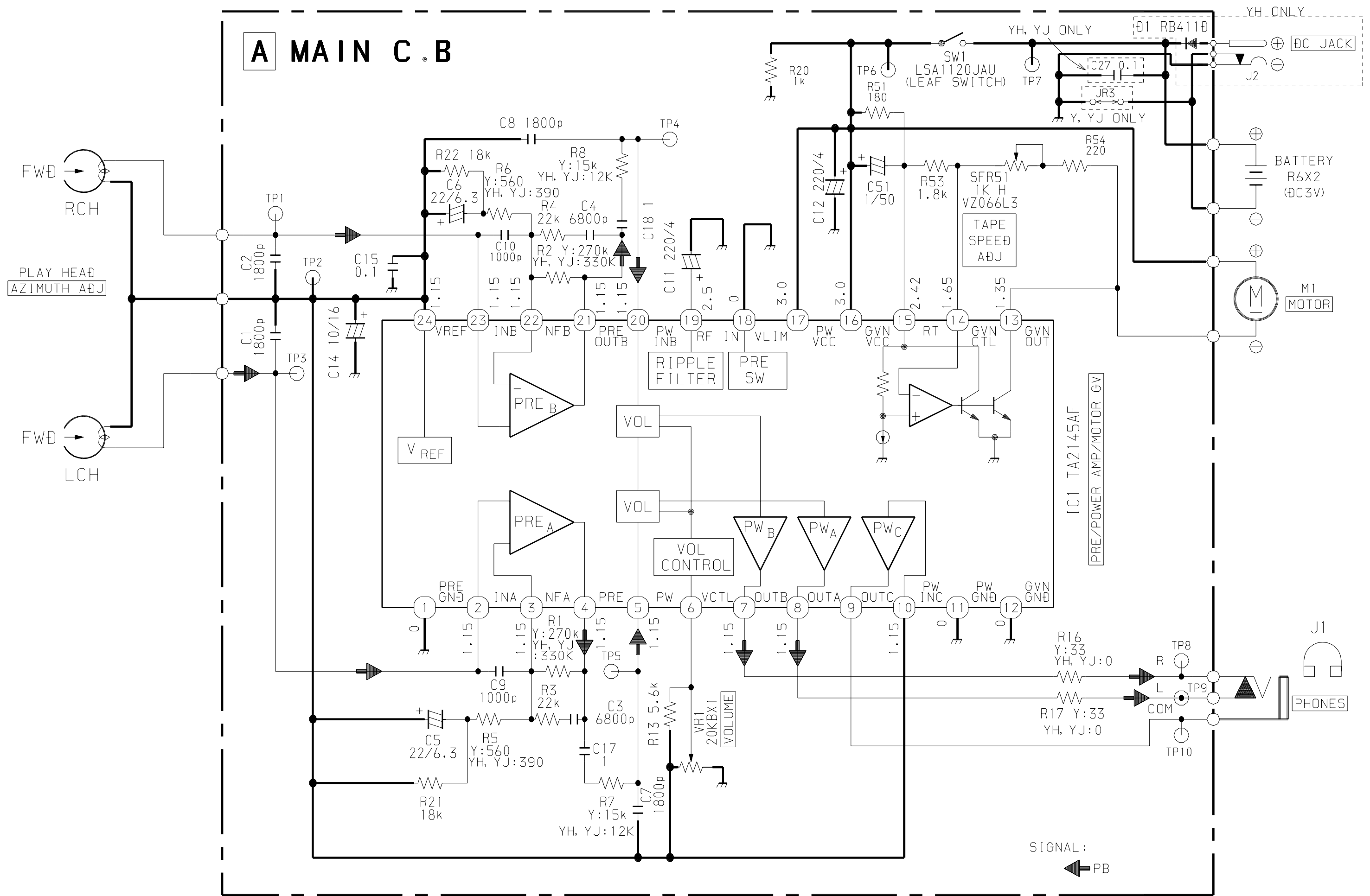
チップ抵抗 Chip resistor

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

A MAIN C.B



SCHEMATIC DIAGRAM (MAIN)



ADJUSTMENT

1. Tape Speed Adjustment

Settings : • Test tape : TTA - 100 (TAPE CENTER)

- Test point : PHONES JACK (J1)
- Adjustment location : SFR 51
- Volume : NON-CLIP (MAX - 10dB DOWN)

Method : Play back the test tape and adjust SFR 51 so that the frequency is $3000 \text{ Hz} \pm 10 \text{ Hz}$. Then confirm WOW is less than 0.50%.

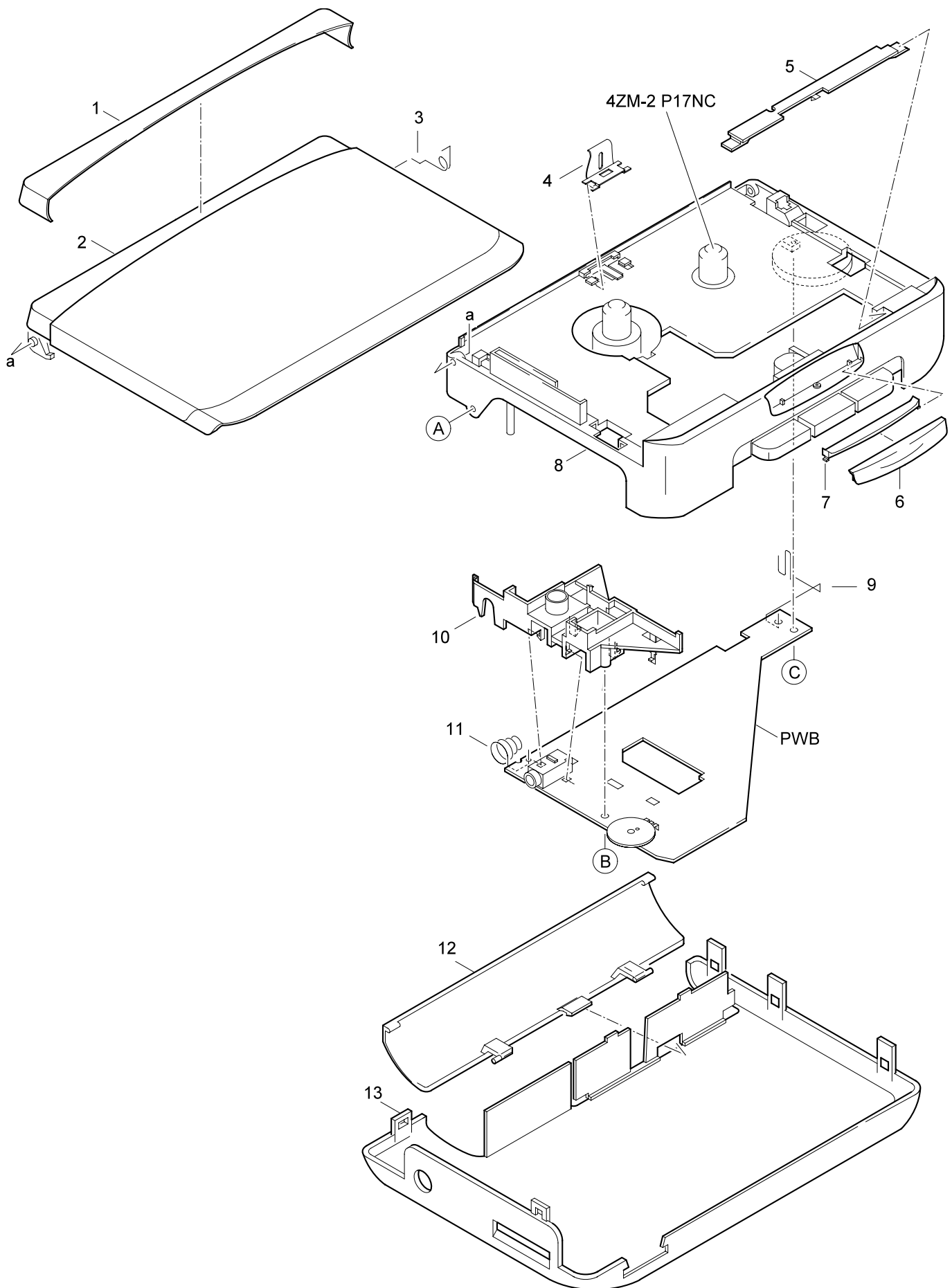
2. Head Azimuth Adjustment

Settings : • Test tape : TTA - 330 / 420 (TAPE CENTER)

- Test point : PHONES JACK (J1)
- Adjustment location : Head Azimuth Adjustment Screw
- Volume : NON-CLIP (MAX - 10dB DOWN)

Method : Play back the test tape and adjust the screw so that the output becomes maximum and same phase.

MECHANICAL EXPLODED VIEW 1 / 1



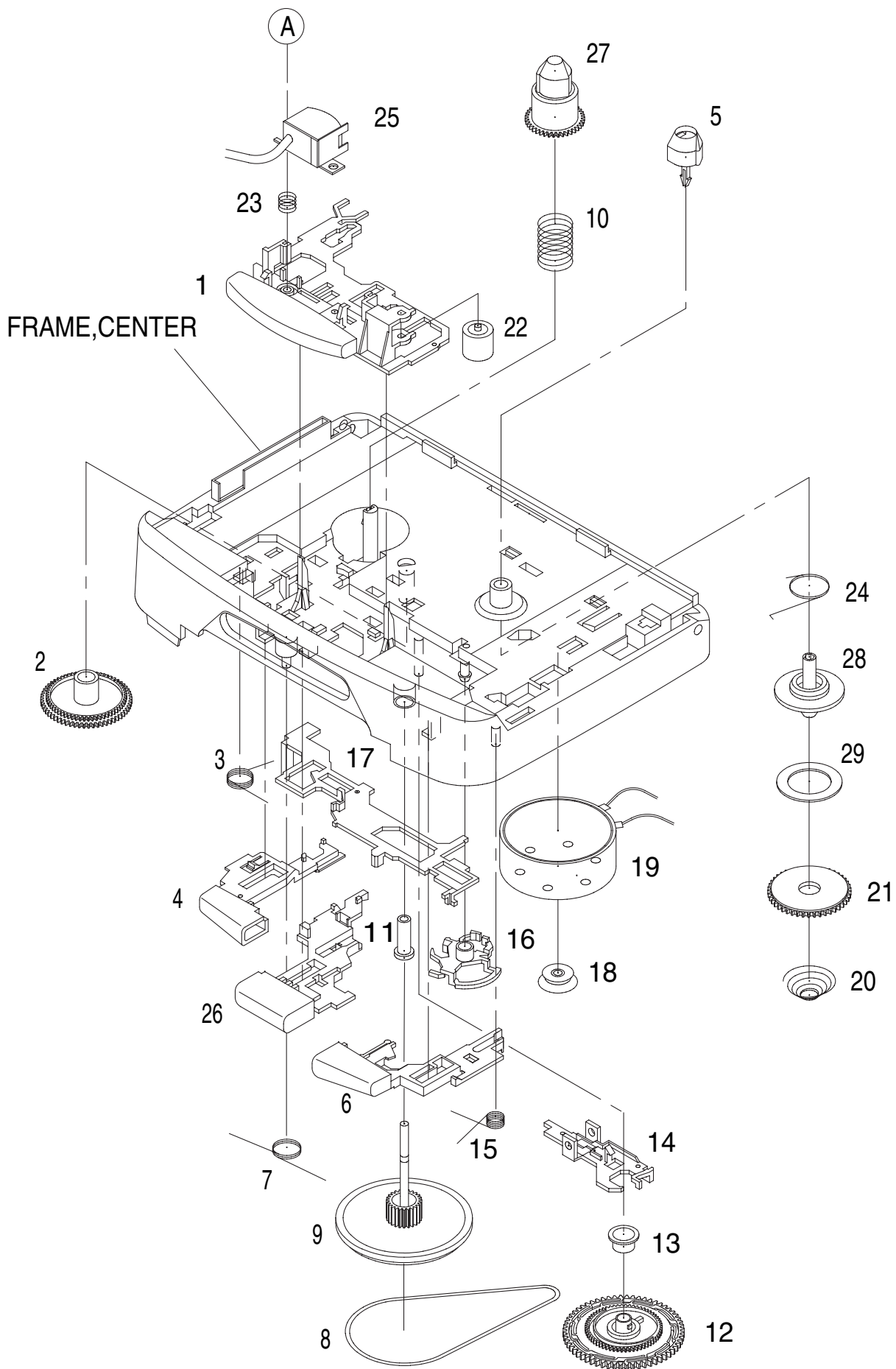
MECHANICAL PARTS LIST 1 / 1

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	8B-HRM-010-010		COVER, LIDCASS BLU
2	8B-HKB-004-010		LID,CASS BLU YZ<[L]Y>
2	8B-HKB-010-010		LID,CASS DBLU YZ<[LD]Y>
2	8B-HKB-020-010		LID,CASS GRE YZ<[G]Y>
2	8B-HKB-015-010		LID,CASS RED YZ<[R]Y>
3	86-HRM-205-010		SPR-T,CLICK
4	8B-HRL-208-010		SPR-P,CASS
5	8B-HRM-201-010		PLATE,HEAD BLU
6	8B-HRM-016-010		BTN,PLAY BLU
7	8B-HRM-202-010		PLATE,BTN BLU
8	8B-HRM-011-010		FRAME,CENTER BLU
9	8B-HKA-201-010		BAT-CONTACT, (+)
10	8Z-HKA-201-110		HLDL,JACK
11	8Z-HKA-205-010		BAT-CONTACT, (-)
12	8B-HKB-008-010		LID,BATT BLU<[L]Y>
12	8B-HKB-013-010		LID,BATT DBLU<[LD]Y>
12	8B-HKB-025-010		LID,BATT GRE<[G]Y>
12	8B-HKB-018-010		LID,BATT RED<[R]Y>
13	8B-HKB-007-010		CABI,REAR BLU YZ<[L]Y>
13	8B-HKB-012-010		CABI,REAR DBLU YZ<[LD]Y>
13	8B-HKB-027-010		CABI,REAR GRE YZ<[G]Y>
13	8B-HKB-017-010		CABI,REAR RED YZ<[R]Y>
A	87-067-815-110		VT+1.4-3(HL)
B	87-067-384-010		SCREWVT1.4-3.5HL
C	87-264-525-310		SCREW, V+1.7-2.5

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		

TAPE MECHANISM EXPLODED VIEW 1 / 1



TAPE MECHANISM PARTS LIST 1 / 1

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	84-ZM2-072-010		LEVER, PLAY DENT
2	84-ZM2-211-110		GEAR, CONNECT
3	84-ZM2-222-110		SPR-T, PLAY
4	84-ZM2-075-010		LEVER, STOP DENT
5	84-ZM2-216-210		REEL TABLE, R
6	84-ZM2-073-010		LEVER, FF DENT
7	84-ZM2-223-110		SPR-T, REW STOP
8	84-ZM2-232-310		BELT, MAIN
9	09-001-421-010		FLY-WHL, P ASSY
10	84-ZM2-228-310		SPR-C, BT
11	84-ZM2-220-110		BRG, P
12	84-ZM2-210-210		GEAR, AUTO
13	84-ZM2-218-110		CAP, GEAR AUTO
14	84-ZM2-208-510		LEVER, SHIFT
15	84-ZM2-224-110		SPR-T, FF LOCK
16	84-ZM2-207-310		LEVER, AUTO
17	84-ZM2-206-410		LEVER, LOCK
18	84-ZM2-219-010		PULLEY, MOTOR
19	87-A91-379-010		MOT, BCY3B-13
20	84-ZM2-226-510		SPR-C, CLUTCH
21	84-ZM2-212-010		GEAR, CLUTCH
22	84-ZM2-233-210		ROLLER ASSY, PINCH
23	84-ZM2-227-310		SPR-C, AZIMUTH
24	84-ZM2-225-010		SPR-T, AUTO FIND
25	87-A91-458-010		HEAD, AP 4211TA
26	84-ZM2-074-010		LEVER, REW DENT
27	84-ZM2-215-110		REEL TABLE, L
28	84-ZM2-217-210		SHAFT, REEL
29	84-ZM2-231-110		FELT, CLUTCH
A	84-ZM2-252-010		S-SCREW, AZI-2-6.4 C

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