

SERVICE MANUAL

STEREO
CASSETTE PLAYER

BASIC TAPE MECHANISM : 4ZM-2 P12NC

- This Service Manual is the “Revision Publishing” and replaces “Simple Manual”, S/M Code No. 09-002-401-6T1.
- This Service Manual is for HS-PS163 (Y) Silver color.

aiwa
S/M Code No. 09-002-401-6R1

REVISION

DATA

SPECIFICATIONS

Maximum output: 15 mW + 15 mW (EIAJ 32 ohms)<YJ>
4 mW + 4 mW (EIAJ 16 ohms)<Y>
Power source: DC 3V using two size AA (R6) batteries.
Maximum dimensions: 116.6 (W) x 92.0 (H) x 34.3 (D) mm
(4 ⁵/₈ x 3 ⁵/₈ x 1 ³/₈ in.)
Weight: Approx.110.0 g (3.9 oz) (excluding batteries)

• Design and specifications are subject to change without notice.

ACCESSORIES/PACKAGE LIST

REF.NO.	PARTNO.	KANRI NO.	DESCRIPTION
1	84-447-019-310		CLIP, BELT
2	87-B30-195-010		HEADPHONE, HP-M029 (F)
3	8Z-HKB-909-010		IB, Y (EGFSI) 163 <Y>
3	8Z-HKB-910-010		IB, Y (EDPOHCZ) 163 <Y>
3	8Z-HKB-911-010		IB, YL (ESC) 163 <YJ>

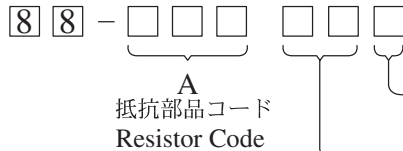
ELECTRICAL MAIN PARTS LIST

REF.NO.	PARTNO.	KANRI NO.	DESCRIPTION
IC			
	87-A21-387-040	C-IC,TA2145F	
DIODE			
	87-020-027-080	CHIP-DIODE 1SS184	
MAIN C.B			
C1	87-A11-554-080	C-CAP,S 1800P-50 K B	
C2	87-A11-554-080	C-CAP,S 1800P-50 K B	
C3	87-A11-565-080	C-CAP,S 8200P-50 K B	
C4	87-A11-565-080	C-CAP,S 8200P-50 K B	
C5	87-015-674-040	CAP E 22-6.3M SRA	
C6	87-015-674-040	CAP E 22-6.3M SRA	
C7	87-A11-553-080	C-CAP,S 1500P-50 K B	
C8	87-A11-553-080	C-CAP,S 1500P-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	E/CAP 10-16	
C15	87-A11-718-080	C-CAP,S 0.1-25 Z F	
C16	87-A11-733-080	C-CAP,S 1-16 Z F<YJ>	
C17	87-A11-733-080	C-CAP,S 1-16 Z F	
C18	87-A11-733-080	C-CAP,S 1-16 Z F	
C51	87-015-695-040	E/CAP 1UF 50V TAPG	
J1	85-HRL-623-010	JACK, 3.5 ST BLK	
R51	87-A00-530-080	C-RES,S 180-1/10W F	
SFR51	87-024-197-010	SEMI-FIXED RESISTOR, 1K	
SW1	87-A90-133-110	SW,LEAF LSA1120JAU	
VR1	87-A91-581-010	VR,RTRY 20KBX1	

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

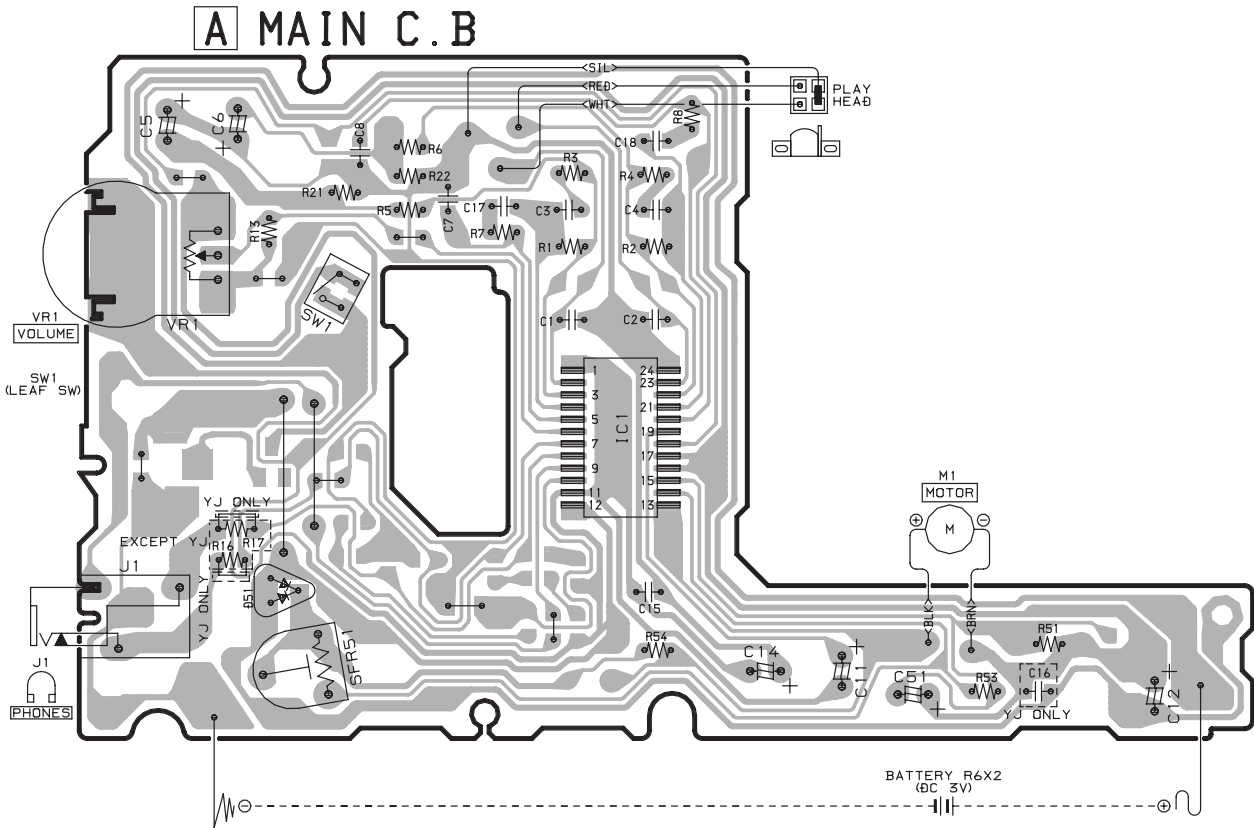
Chip Resistor Part Coding

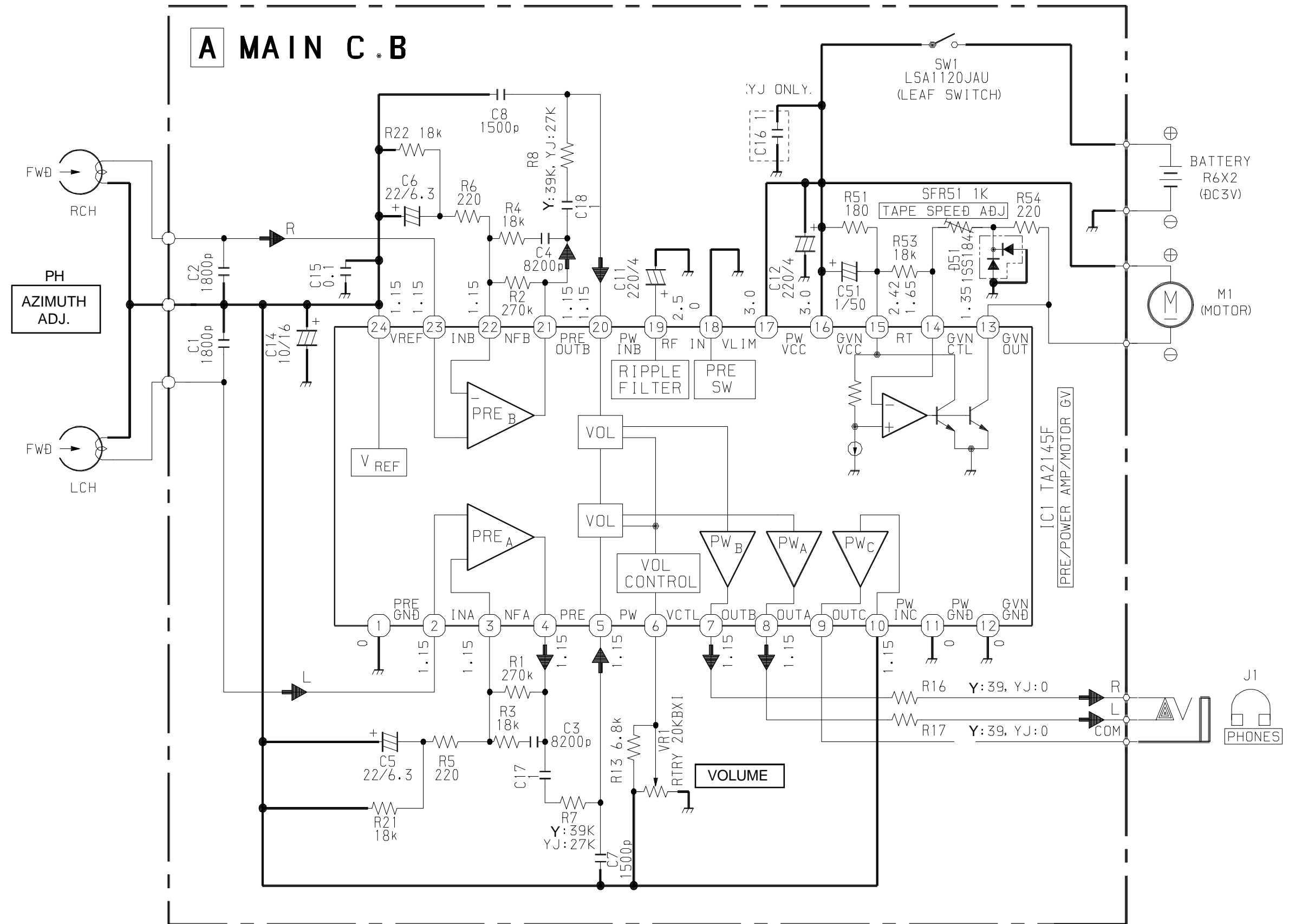


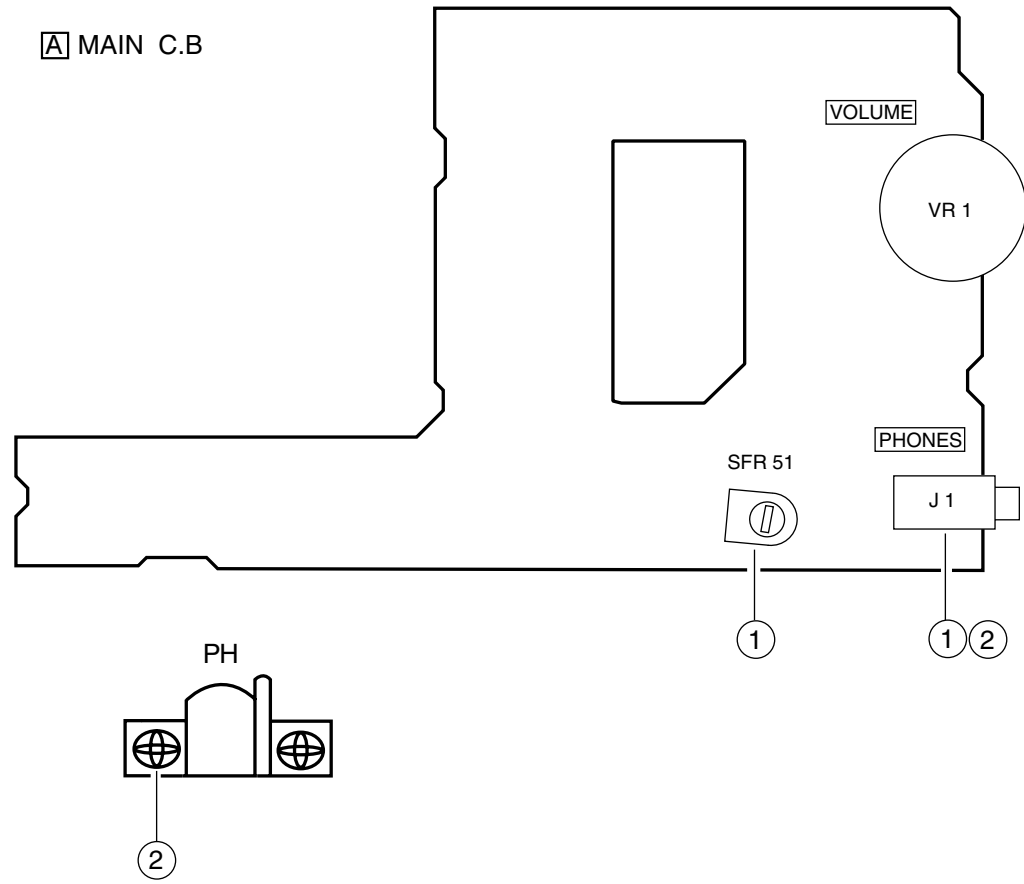
チップ抵抗 Chip resistor

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

WIRING (MAIN)







1. Tape Speed Adjustment

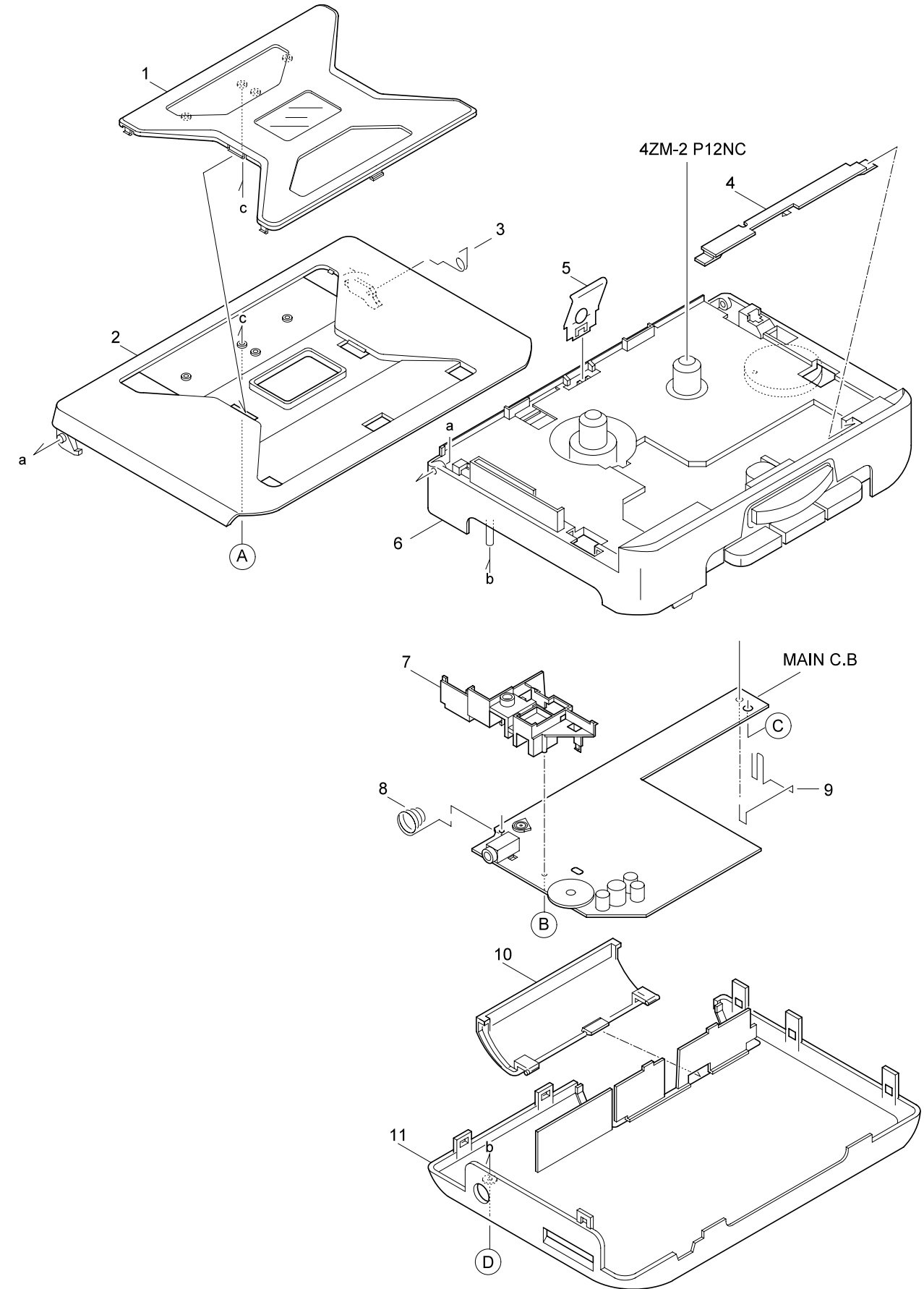
- Settings : • Test tape : TTA-100 (Tape center)
 • Test point : PHONES JACK (J1)
 • Adjustment location : SFR51

Method : Play back the test tape and adjust SFR51 so that the frequency is $3000\text{Hz} \pm 10\text{Hz}$.

2. Head Azimuth Adjustment

- Settings : • Test tape : TTA-300
 • Test point : PHONES JACK (J1)
 • Adjustment location: Head azimuth adjustment screw

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



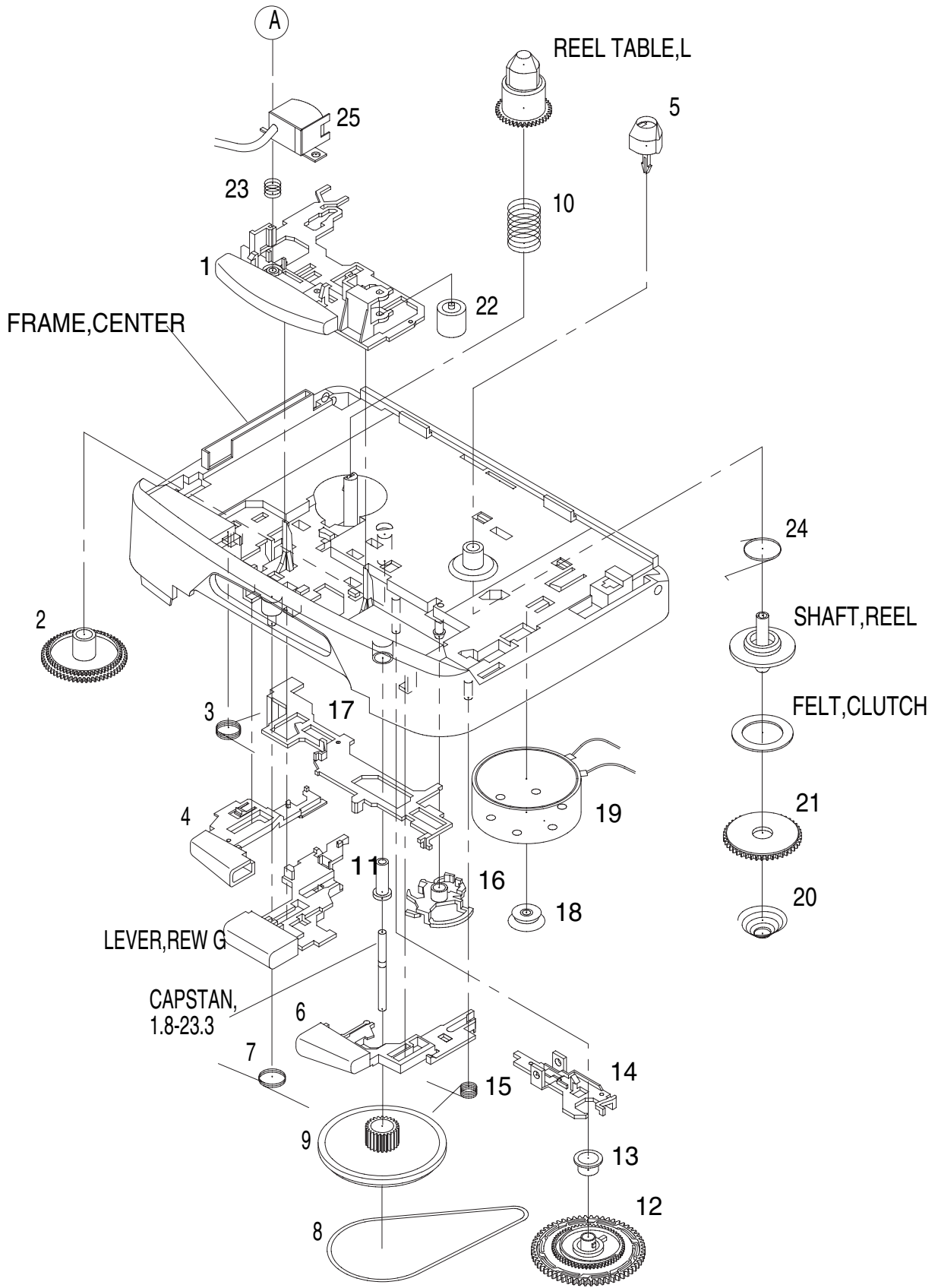
MECHANICAL PARTS LIST 1 / 1

REF.NO.	PARTNO.	KANRI NO.	DESCRIPTION
1	8Z-HKB-050-010		PANEL,CASS YZ 163<Y>
1	8Z-HKB-051-010		PANEL,CASS YU 163<YJ>
2	8Z-HKB-009-010		LID,CASS SIL
3	86-HRM-205-010		SPR-T,CLICK
4	87-HRR-206-010		PLATE,HEAD J034
5	8A-HRL-202-010		SPR-P,CASS
6	88-HRJ-038-010		FRAME CENTER
7	8Z-HKA-201-010		HOLDER,JACK
8	8Z-HKA-205-010		BAT-CONTACT, (-)
9	8A-HKA-201-010		BAT-CONTACT, (+)
10	8Z-HKA-019-010		LID,BATT J049N
11	8A-HKA-008-010		CABI,REAR YZ<Y>
11	8A-HKA-007-010		CABI,REAR YU<YJ>
A	87-067-732-010		TAPPING SCREW, VT1.4-3
B	87-067-384-010		SCREWVT1.4-3.5HL
C	87-264-525-310		SCREW, V+1.7-2.5
D	87-067-691-010		SCREW VT+1.7-6

COLOR NAME TABLE

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

TAPE MECHANISM EXPLDED VIEW 1 / 1



TAPE MECHANISM PARTS LIST 1 / 1

REF.NO.	PARTNO.	KANRI NO.	DESCRIPTION
1	84-ZM2-012-110		LEVER, PLAY G
2	84-ZM2-211-110		GEAR, CONNECT
3	84-ZM2-222-110		SPR-T, PLAY
4	84-ZM2-015-110		LEVER, STOP G
5	84-ZM2-216-210		REEL TABLE, R
6	84-ZM2-013-110		LEVER, FF G
7	84-ZM2-223-110		SPR-T, REW STOP
8	84-ZM2-232-310		BELT, MAIN
9	84-ZM2-221-110		FLY-WHL, P2
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-ZM2-233-110		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
A	84-ZM2-252-010		S-SCREW, AZI-2-6.4 C

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