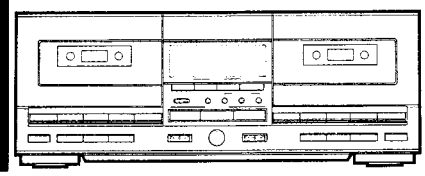
PIONEER®
The Art of Entertainment

Service Manual



ORDER NO.
ARP2151

STEREO DOUBLE CASSETTE DECK

CT-Z570WR
CT-Z470WR
CT-Z370WR

MODEL CT–Z570WR, CT–Z470WR AND CT–Z370WR HAVE FOLLOWING VERSIONS:

Type	Applicable model			Power requirement	Export destination
	CT–Z570WR	CT–Z470WR	CT–Z370WR		
ZEBM	○	○	○	(DC power supply)	European continent, United Kingdom and Germany
ZEBMXJ	○	○	○	(DC power supply)	European continent, United Kingdom and Germany

- **This manual is applicable to the ZEBM and ZEBMXJ types.**
- **Ce manuel pour le service comprend les explications de réglage en français.**
- **Este manual de servicio trata del método ajuste escrito en español.**
- **These products are components of systems. As to the system composition, refer to the system manuals.**
- **Each of these products does not function properly when independent; to avoid malfunctions, be sure to connect it to the prescribed system component (s), otherwise damage may result.**

CONTENTS

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SI JAN. 1991 Printed in Japan

1. EXPLODED VIEWS, PACKING AND PARTS LIST

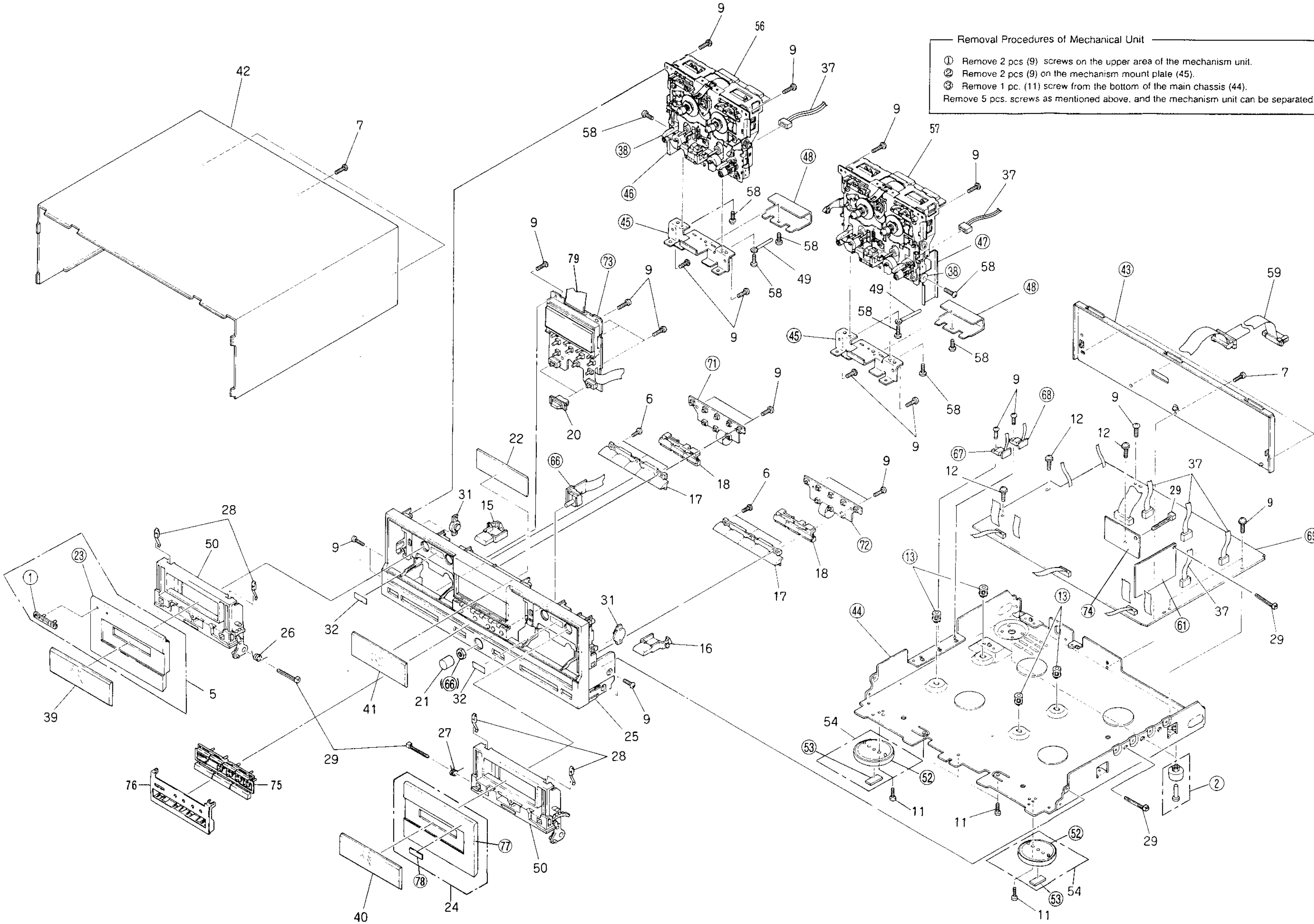
NOTES:

- Parts without part number cannot be supplied.
- The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
- Parts marked by "⊙" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.

Parts List

Mark	No.	Symbol & Description	Part No.
	1	Name plate	
	2	Foot assembly (S)	
	3	Caution card ("NOTE") (ZEBM type)	ARH1047
		Caution card ("NOTE") (ZEBMXJ type)	RRY1001
	4	Caution card	RRN1001
	5	Door panel (L) assembly	RXA1418
	6	Screw	BBZ26P060FMC
	7	Screw	BBZ30P060FCC
	8	.....	
	9	Screw	BBZ30P080FZK
	10	.....	
	11	Screw	BBZ30P120FZK
	12	Screw	IBZ30P150FCU
	13	PCB Spacer	
	14	.....	
	15	Knob (EJECT L)	RAC1375
	16	Knob (EJECT R)	RAC1376
	17	Knob (PLAY)	RAC1377
	18	Knob (REC)	RAC1602
	19	.....	
	20	Knob (SLIDE)	RAC1382
	21	Knob (VR)	RAC1383
	22	Filter (FL)	RAH1512
	23	Door panel (L)	
	24	Door panel (R) assembly	RXA1421
	25	Front panel	RAH1756
	26	Spring (Door L)	RBH1203
	27	Spring (Door R)	RBH1204
	28	Spring	RBK1004
	29	Binder	REC – 371
	30	.....	
	31	Damper assembly	REC1013
	32	Indicating panel	REE – 113
	33	Pad (F)	RHA1036
	34	Pad (R)	RHA1037
	35	Polystyrene cover	RHC1002
	36	Packing case (ZEBM type)	RHG1221
		Packing case (ZEBMXJ type)	RHG1243
	37	Connector assembly 5P	RKP1323
	38	Arm collor	
	39	Door lens (L)	RLP1036
	40	Door lens (R)	RLP1038
	41	FL lens	RLP1040
	42	Bonnet	RXX1225
	43	Rear panel	
	44	Main chassis	
	45	Mechanism mount plate	
	46	Eject arm (L)	
	47	Eject arm (R)	
	48	Mechanism shield plate	
	49	Cord clamper	RNH – 184
	50	Door pocket	RNT1008
	51	.....	
	52	Foot	
	53	Cushion	
	54	Foot assembly	RXA1276
	55	.....	
⊙	56	Mechanism unit (Deck I)	RYM1144
⊙	57	Mechanism unit (Deck II)	RYM1143
	58	Screw	BCZ26P050FMC
	59	Connector assembly 15P	RKP1358
	60	.....	
	61	HX unit	
	62	.....	
	63	.....	
	64	.....	
	65	.....	
	66	VR unit	
	67	Transistor 1 unit	
	68	Transistor 2 unit	
	69	Main unit	
	70	.....	
	71	Operation 1 unit	
	72	Operation 2 unit	
	73	Display unit	
	74	BLE unit	
	75	Center knob	RAC1564
	76	Center panel	RAH1759
	77	Door panel (R)	
	78	BLE badge	
	79	Lead card 29P	RDD1211

1.1 EXTERIOR

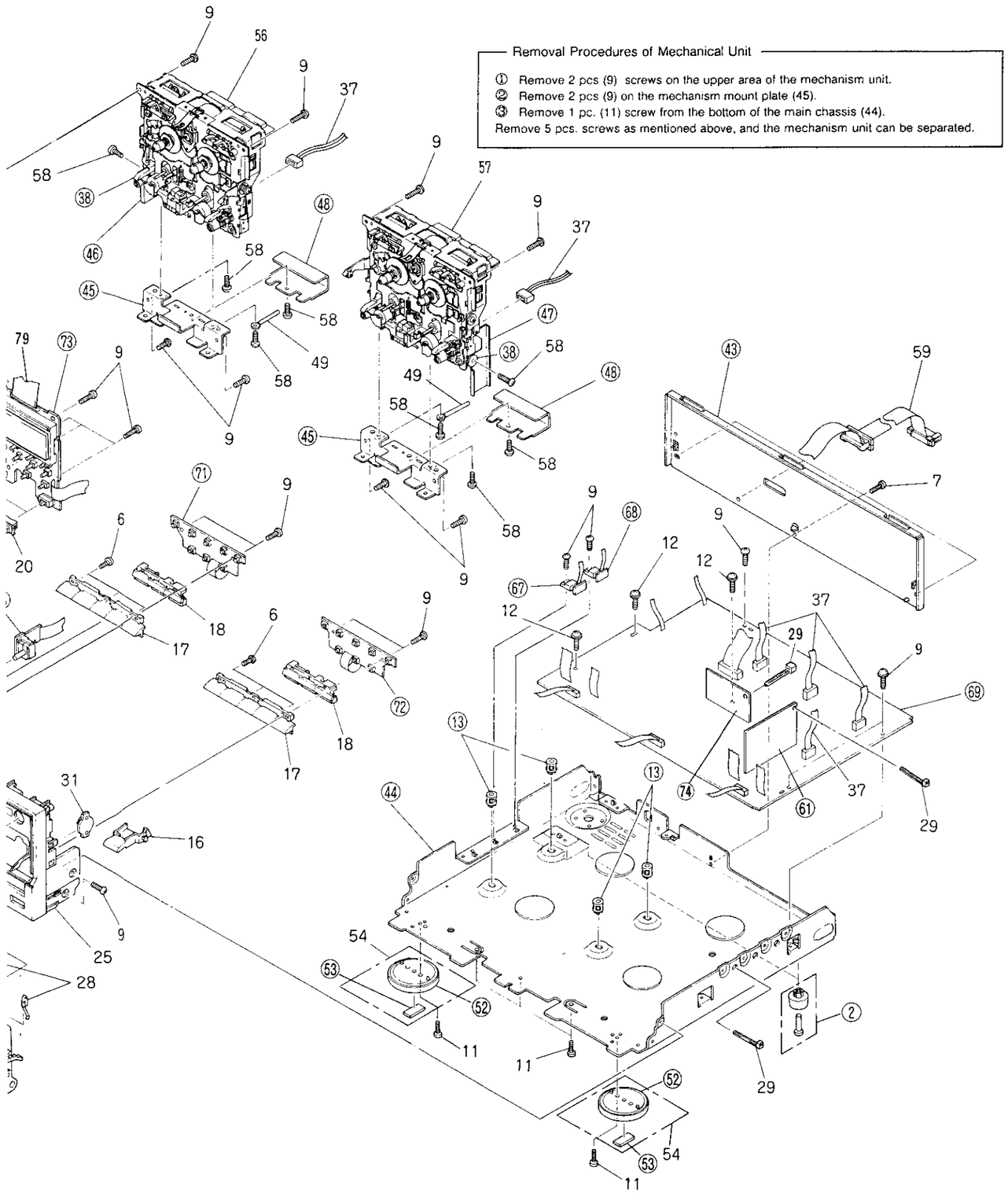


Removal Procedures of Mechanical Unit

① Remove 2 pcs (9) screws on the upper area of the mechanism unit.
② Remove 2 pcs (9) on the mechanism mount plate (45).
③ Remove 1 pc. (11) screw from the bottom of the main chassis (44).
Remove 5 pcs. screws as mentioned above, and the mechanism unit can be separated.

Removal Procedures of Mechanical Unit

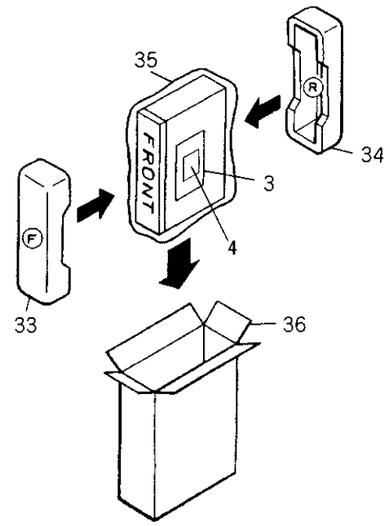
① Remove 2 pcs (9) screws on the upper area of the mechanism unit.
② Remove 2 pcs (9) on the mechanism mount plate (45).
③ Remove 1 pc. (11) screw from the bottom of the main chassis (44).
Remove 5 pcs. screws as mentioned above, and the mechanism unit can be separated.



1.2 PACKING

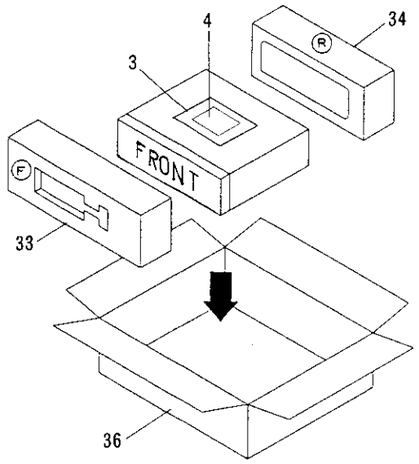
A

ZEBM type



B

ZEBMXJ type



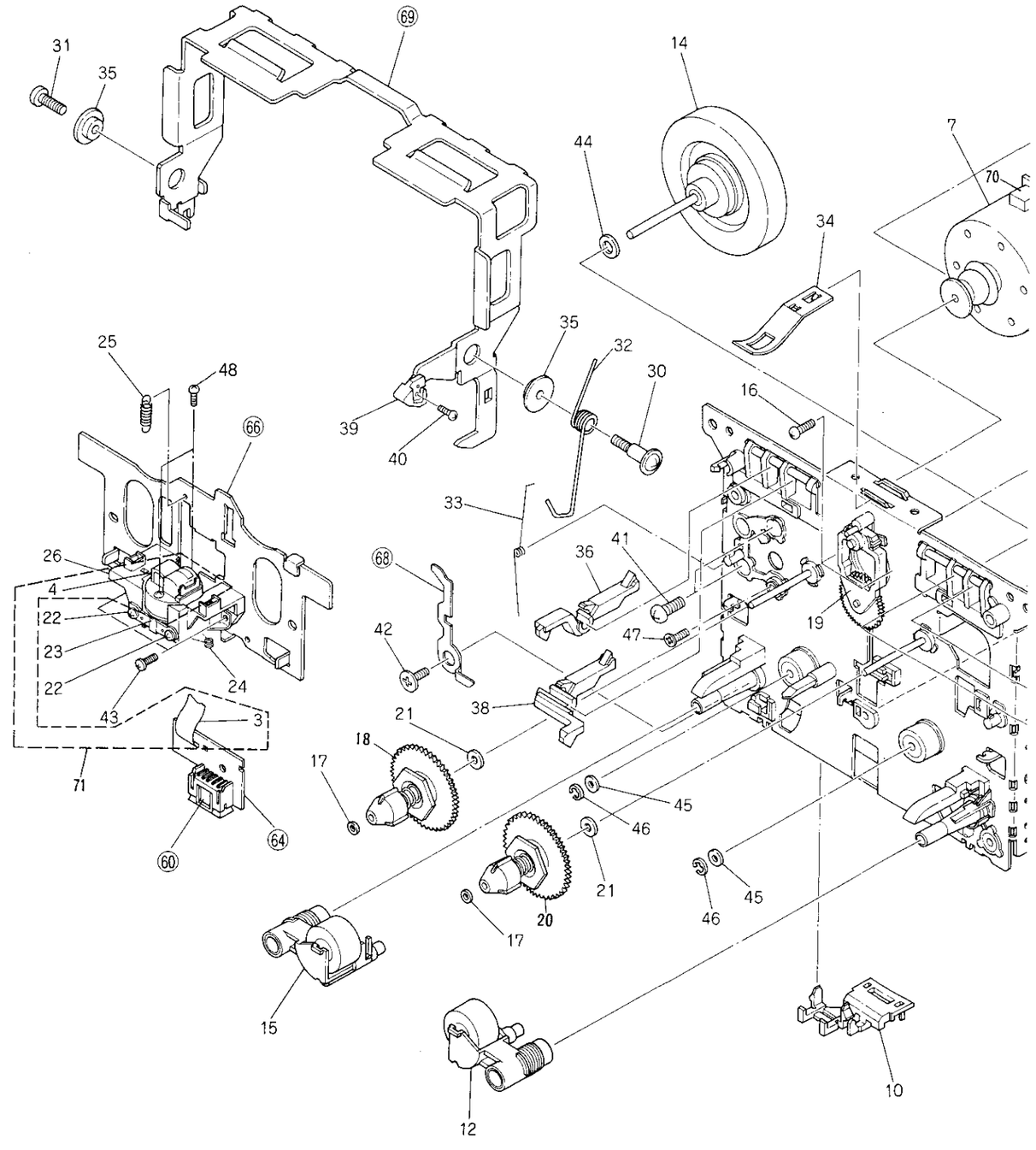
C

D

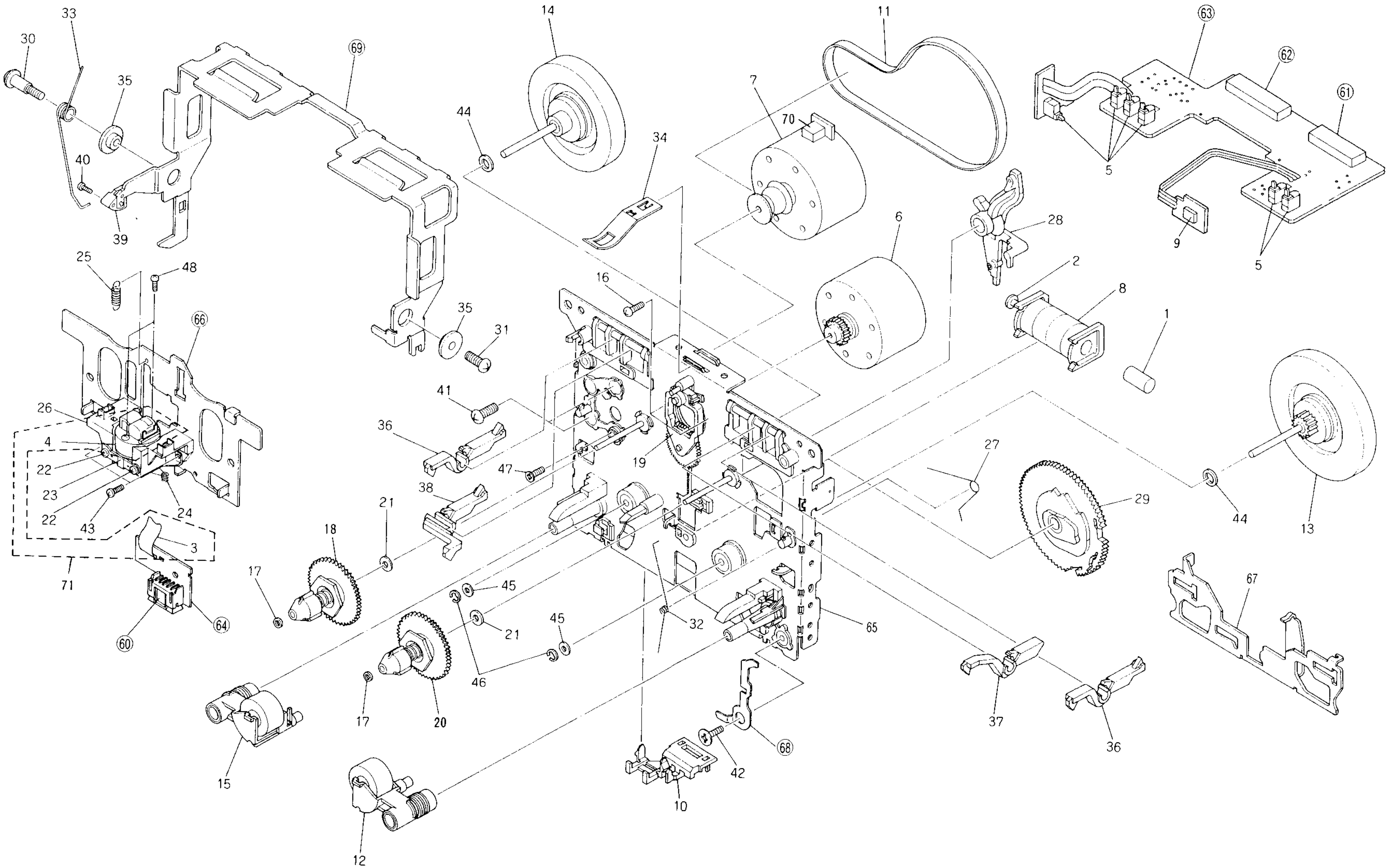
1.3 MECHANISM UNIT (DECK I: RYM1144)

Parts List of Mechanism Unit (Deck I)

Mark	No.	Description	Parts No.
	1.	CORE	RLA1130
	2.	PLUNGER	RLA1132
	3.	HD FPC (R/P)	RNP1232
	4.	HEAD R/P, E	RPB1030
	5.	PUSH SWITCH	RSG1018
	6.	REEL MOTOR BLK	RXM1029
	7.	MAIN MOTOR BLK	RXM1030
	8.	SOLENOIDE BLK	RXP1010
	9.	PHOTO-TRANSISTOR	SPI3534FG
	10.	LEAD HOLDER	RNK1530
	11.	MAIN BELT	**REB1157**
	12.	PINCH ROLLER ASS'Y	RXA1183
	13.	F/W ASS'Y	RXA1294
	14.	F/W ASS'Y	RXA1295
	15.	PINCH ROLLER ASS'Y (L)	RXA1296
	16.	SCREW 2.6×6.4 (ZN)	RBA1076
	17.	WASHER (PLASTIC)	RBF-057
	18.	BASE REEL BLK	RXA1184
	19.	IDLER BLK	RXA1248
	20.	BASE REEL BLK	RXC-040
	21.	POLISLIDER WASHER	**RBF1038**
	22.	AZIMUTH SCREW	RBA1080
	23.	AZIMUTH SPRING	RBK1029
	24.	SPRING	RBL-085
	25.	SPRING	RBL1003
	26.	HOUSING HD BLK	RXA1293
	27.	SLIDE SPRING	RBH1239
	28.	PLAY ARM	RNK1525
	29.	CAM GEAR (3R)	**RNK1672**
	30.	SCREW	RBA1078
	31.	SCREW 2.6×5(ZN)	RBA1079
	32.	SPRING (R)	RBH1233
	33.	SPRING (L)	RBH1234
	34.	SPRING	RBK1030
	35.	COLLAR	RLA1133
	36.	REC DETECTOR LEVER	RNK1527
	37.	PACK DETECTOR LEVER	**RNK1543**
	38.	METAL DETECTOR LEVER (L)	RNK1529
	39.	HOOK	RNM-160
	40.	SCREW	PCZ20P040FMC
	41.	SCREW	PMZ26P050FMC
	42.	SCREW	RBA1048
	43.	SCREW TT 2.0×5(ZN)	RBA1077
	44.	POLISLIDER WASHER	WA26D045D025
	45.	WASHER	WA26D047D050
	46.	E RING	YE15FUC
	47.	SCREW	PBZ30P080FMC
	48.	SCREW	PMZ14P050FNI
	60.	CONNECTOR (5P)	
	61.	CONNECTOR (7P)	
	62.	CONNECTOR (10P)	
	63.	CONNECTION PCB	
	64.	HEAD P.C.B R/P	
	65.	CHASSIS BASE BLK	**RXA1291**
	66.	HEAD BASE	
	67.	SLIDE PLATE	**RNE1345**
	68.	ARM (L)	
	69.	EJECT LEVER (R)	
	70.	HOLDER CUSHION (L)	**RED1027**
	71.	HEAD ASSY (R/P)	RXA1378

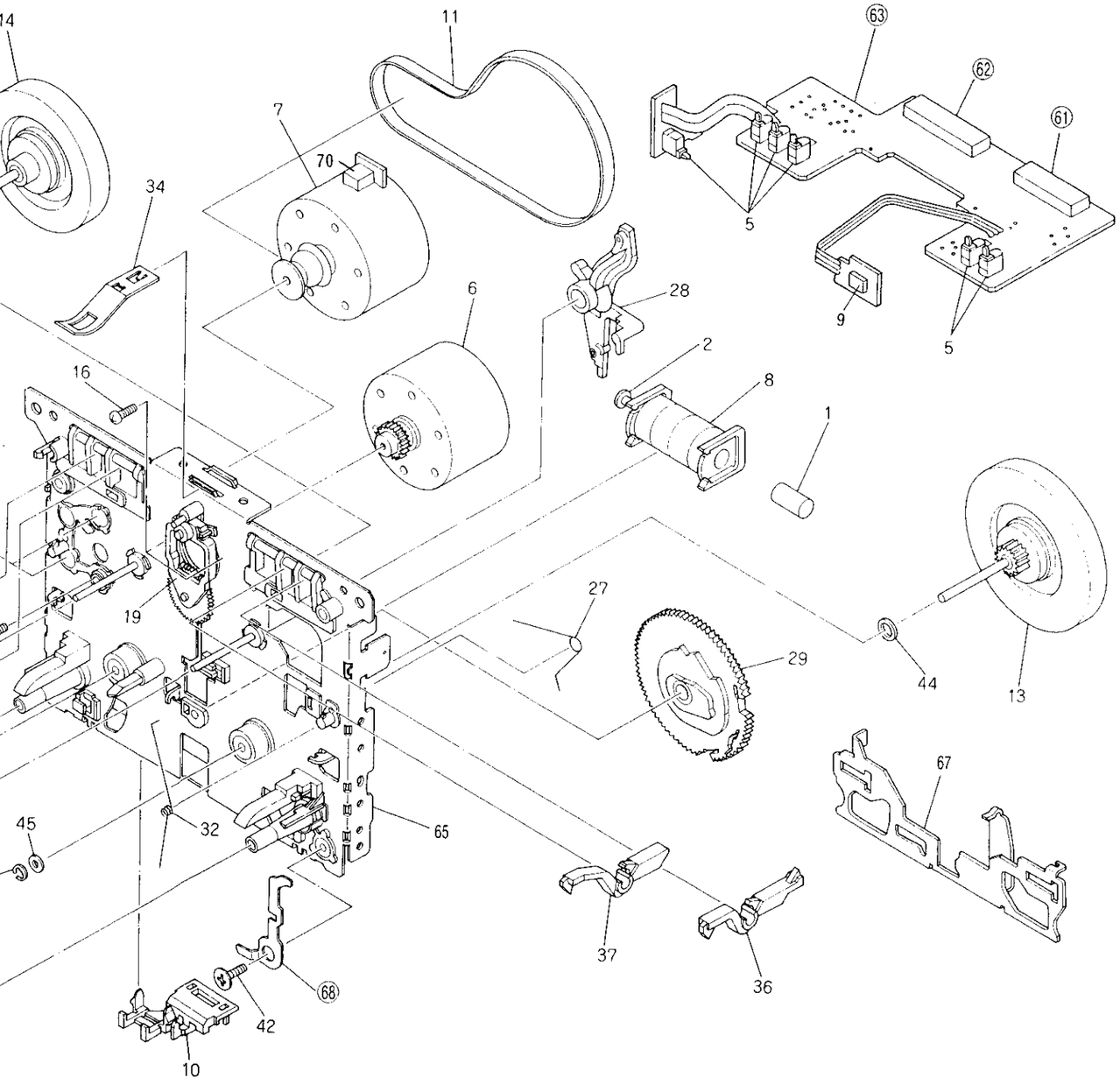


1.4 MECHANISM UNIT (DECK II: RYM1143)



Parts

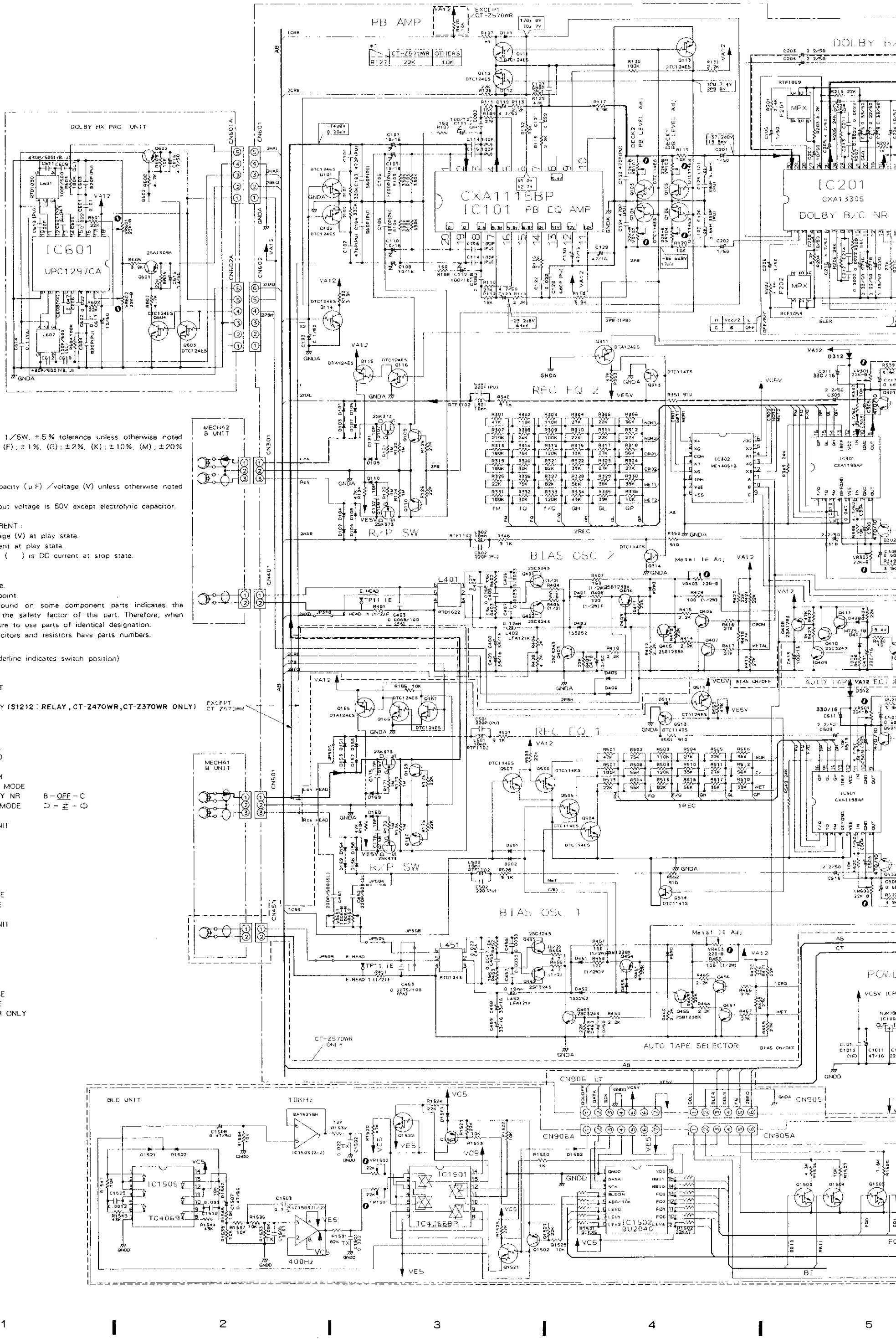
Mark



Parts List of Mechanism Unit (Deck II)

Mark	No.	Description	Parts No.
A	1.	CORE	RLA1130
	2.	PLUNGER	RLA1132
	3.	HD FPC (R/P)	RNP1232
	4.	HEAD R/P, E	RPB1030
	5.	PUSH SWITCH	RSG1018
	6.	REEL MOTOR BLK	RXM1029
	7.	MAIN MOTOR BLK	RXM1030
	8.	SOLENOIDE BLK	RXP1010
	9.	PHOTO-TRANSISTOR	SPI33534FG
	10.	LEAD HOLDER	RNK1530
	11.	MAIN BELT	**REB1157**
	12.	PINCH ROLLER ASS'Y	RXA1183
	13.	F/W ASS'Y	RXA1294
	14.	F/W ASS'Y	RXA1295
	15.	PINCH ROLLER ASS'Y (L)	RXA1296
B	16.	SCREW 2.6×6.4 (ZN)	RBA1076
	17.	WASHER (PLASTIC)	RBF-057
	18.	BASE REEL BLK	RXA1184
	19.	IDLER BLK	RXA1248
	20.	BASE REEL BLK	RXC-040
	21.	POLISLIDER WASHER	**RBF1038**
	22.	AZIMUTH SCREW	RBA1080
	23.	AZIMUTH SPRING	RBK1029
	24.	SPRING	RBL-085
	25.	SPRING	RBL1003
C	26.	HOUSING HD BLK	RXA1293
	27.	SLIDE SPRING	RBH1239
	28.	PLAY ARM	RNK1525
	29.	CAM GEAR (3R)	**RNK1672**
	30.	SCREW	RBA1078
	31.	SCREW 2.6×5(ZN)	RBA1079
	32.	SPRING (R)	RBH1230
	33.	SPRING (L)	RBH1231
	34.	SPRING	RBK1030
	35.	COLLAR	RLA1133
	36.	REC DETECTOR LEVER	RNK1527
	37.	PACK DETECTOR LEVER	**RNK1543**
	38.	METAL DETECTOR LEVER (L)	RNK1529
	39.	HOOK	RNM-160
	40.	SCREW	PCZ20P040FMC
	41.	SCREW	PMZ26P050FMC
	42.	SCREW	RBA1048
	43.	SCREW TT 2.0×5(ZN)	RBA1077
	44.	POLISLIDER WASHER	WA26D045D025
	45.	WASHER	WA26D047D050
D	46.	E RING	YE15FUC
	47.	SCREW	PBZ30P080FMC
	48.	SCREW	PMZ14P050FNI
	60.	CONNECTOR (5P)	
	61.	CONNECTOR (7P)	
	62.	CONNECTOR (10P)	
	63.	CONNECTION PCB	
	64.	HEAD P.C.B R/P	
	65.	CHASSIS BASE BLK	**RXA1291**
	66.	HEAD BASE	
	67.	SLIDE PLATE	**RNE1345**
	68.	ARM (R)	
	69.	EJECT LEVER (L)	
	70.	HOLDER CUSHION (L)	**RED1027**
	71.	HEAD ASSY (R/P)	RXA1378

2. SCHEMATIC DIAGRAM



1. RESISTORS :
   Indicated in Ω, 1/6W, ±5% tolerance unless otherwise noted k ; kΩ, M ; MΩ, (F) ; ±1%, (G) ; ±2%, (K) ; ±10%, (M) ; ±20% tolerance.

2. CAPACITORS :
   Indicated in capacity (μF) /voltage (V) unless otherwise noted p ; pF.
   Indication without voltage is 50V except electrolytic capacitor.

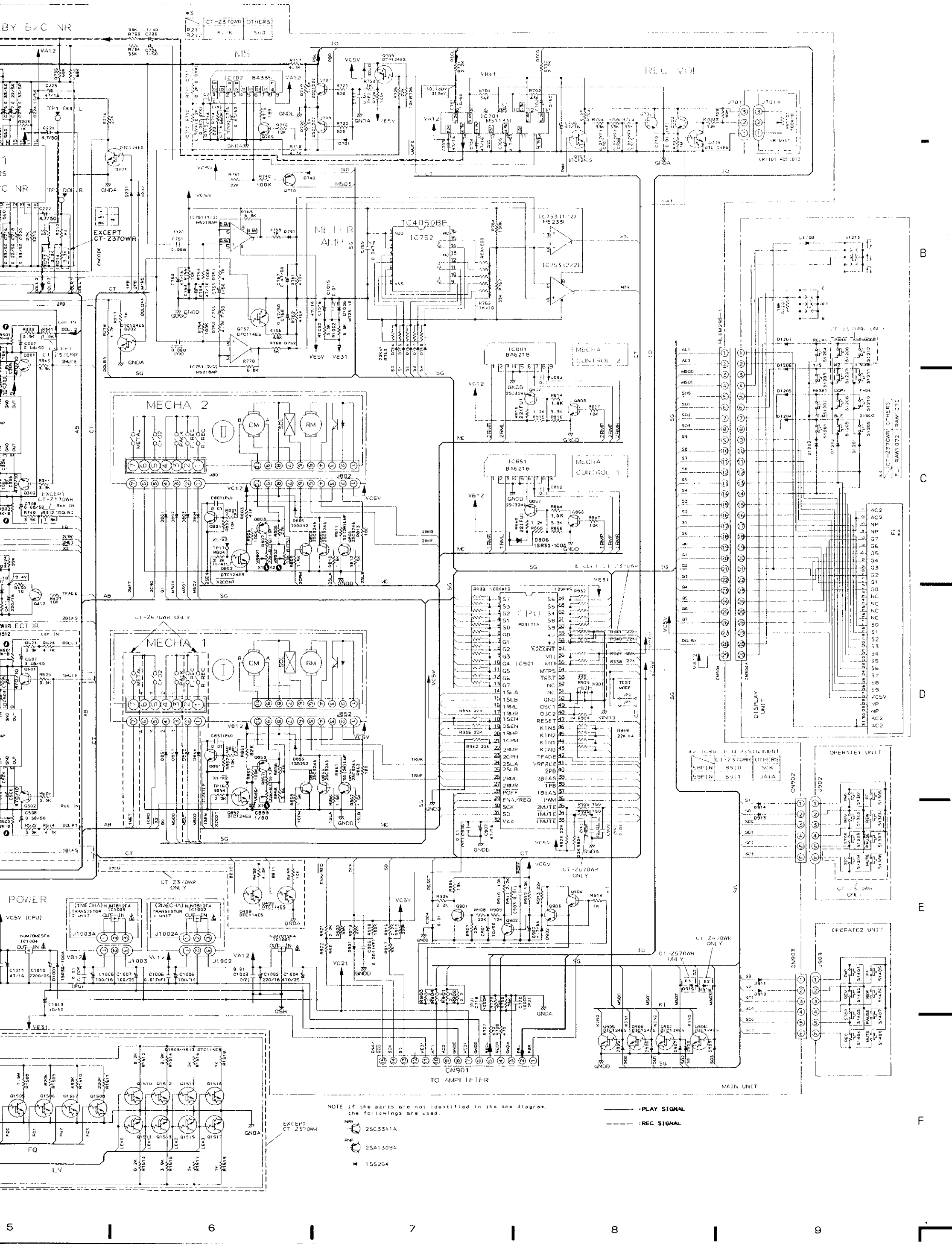
3. VOLTAGE CURRENT :
   ⌐¬ ; DC voltage (V) at play state.
   ⇐mA ; DC current at play state.
   Value in ( ) is DC current at stop state.

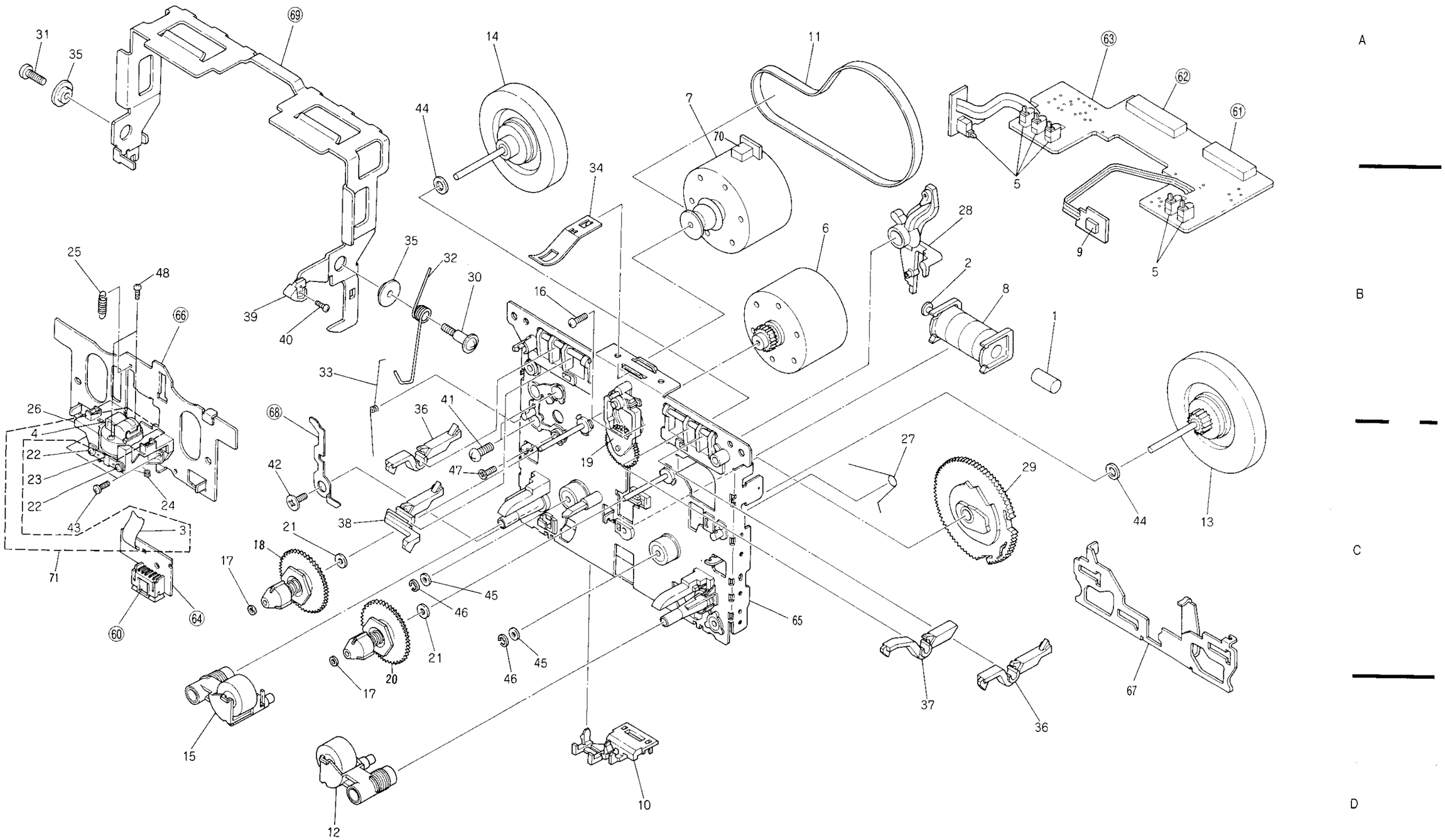
4. OTHERS :
   ➡ ; Signal route.
   ⊘ ; Adjusting point.
   The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
   ※ marked capacitors and resistors have parts numbers.

5. SWITCHES (Underline indicates switch position)
   DISPLAY UNIT
   S1201 : TIME
   S1202 : RESET
   S1203 : 1/2
   S1204 : RELAY (S1212 : RELAY, CT-Z470WR, CT-Z370WR ONLY)
   S1205 : BLE
   S1206 : COPY
   S1207 : X2
   * S1208 : PARA
   S1209 : DISCO
   S1210 : FADE
   S1211 : NORM
   * S1212 : ASES MODE
   S1213 : DOLBY NR B – OFF – C
   S1214 : REV MODE ⊃ – ⇄ – ○

   OPERATE 1 UNIT
   S1301 : FWD
   S1302 : REV
   S1303 : STOP
   * S1304 : REC
   S1305 : FF
   S1306 : REW
   * S1307 : PAUSE
   * S1308 : MUTE

   OPERATE 2 UNIT
   S1401 : FWD
   S1402 : REV
   S1403 : STOP
   S1404 : REC
   S1405 : FF
   S1406 : REW
   S1407 : PAUSE
   S1408 : MUTE
   * : CT – Z570WR ONLY


MS
REC VOL
METER AMP
TC4050BP
IC752
IC901
CPU
PD3171A
MECHA 2
MECHA 1
MECHA CONTROL 2
MECHA CONTROL 1
IC801 BA6218
IC851 BA6218
DISPLAY UNIT
OPERATE1 UNIT
OPERATE2 UNIT
POWER
CN901
TO AMPLIFIER
MAIN UNIT
EXCEPT CT-Z370WR
CT-Z370WR ONLY
NOTE If the parts are not identified in the the diagram, the followings are used.
NPN 2SC3311A
PNP 2SA1309A
1SS254
PLAY SIGNAL
REC SIGNAL


1
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A
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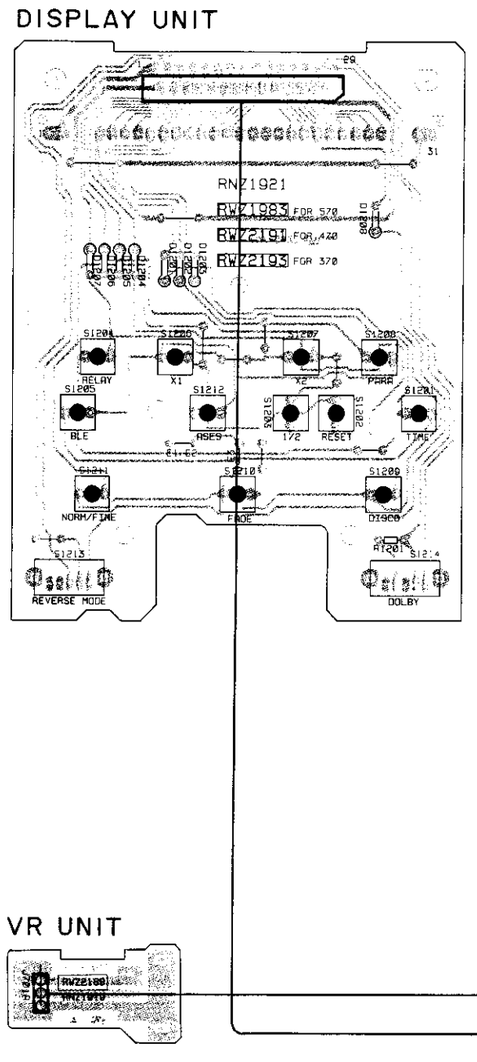
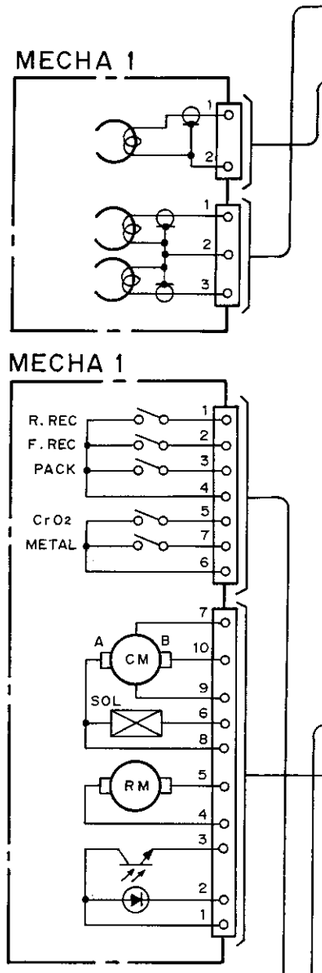
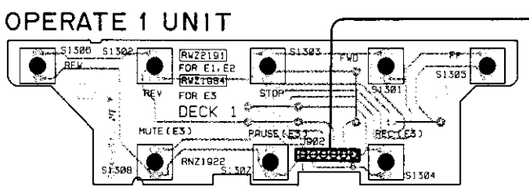
13

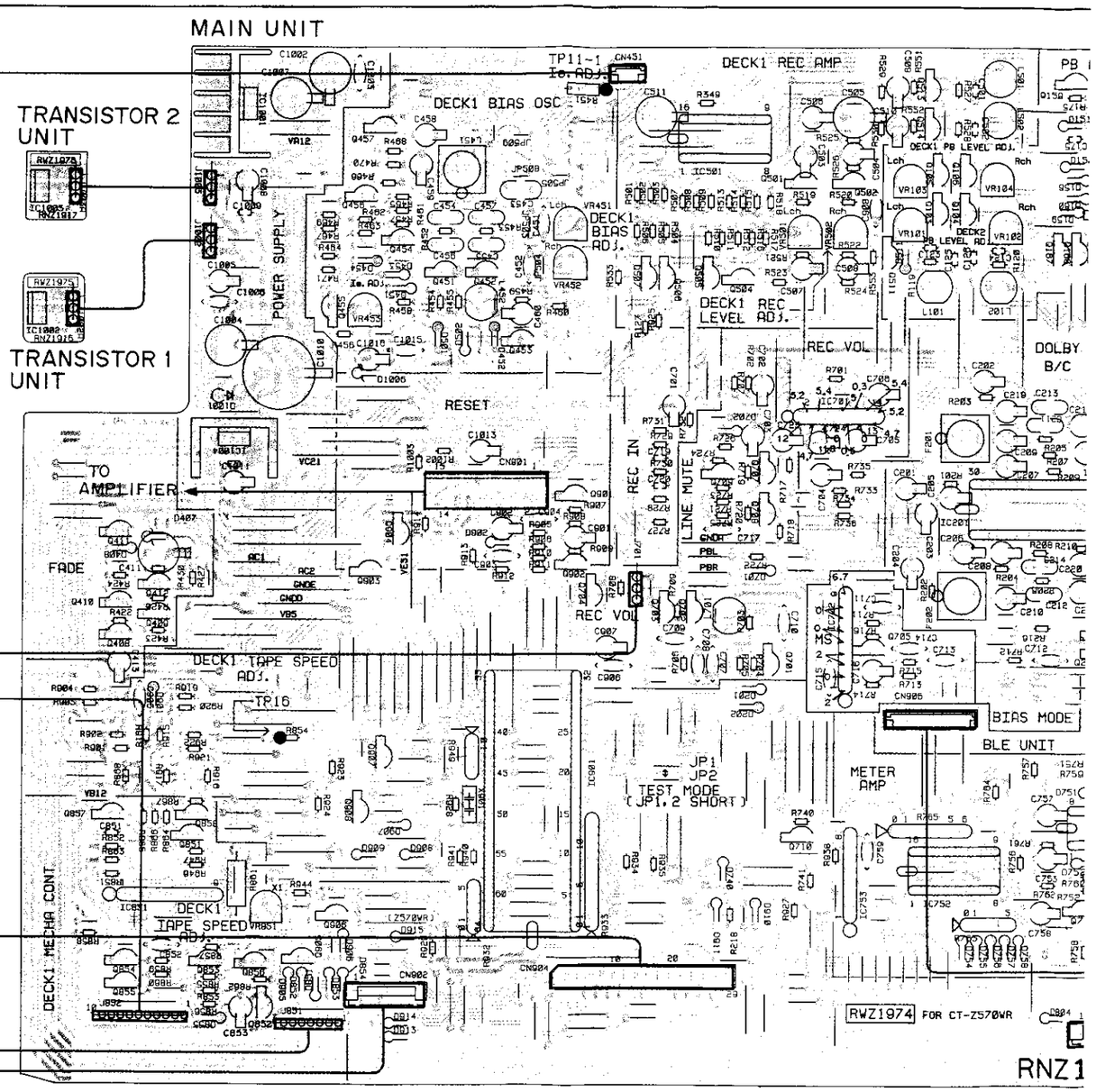
3. P.C. BOARDS CONNECTION DIAGRAM

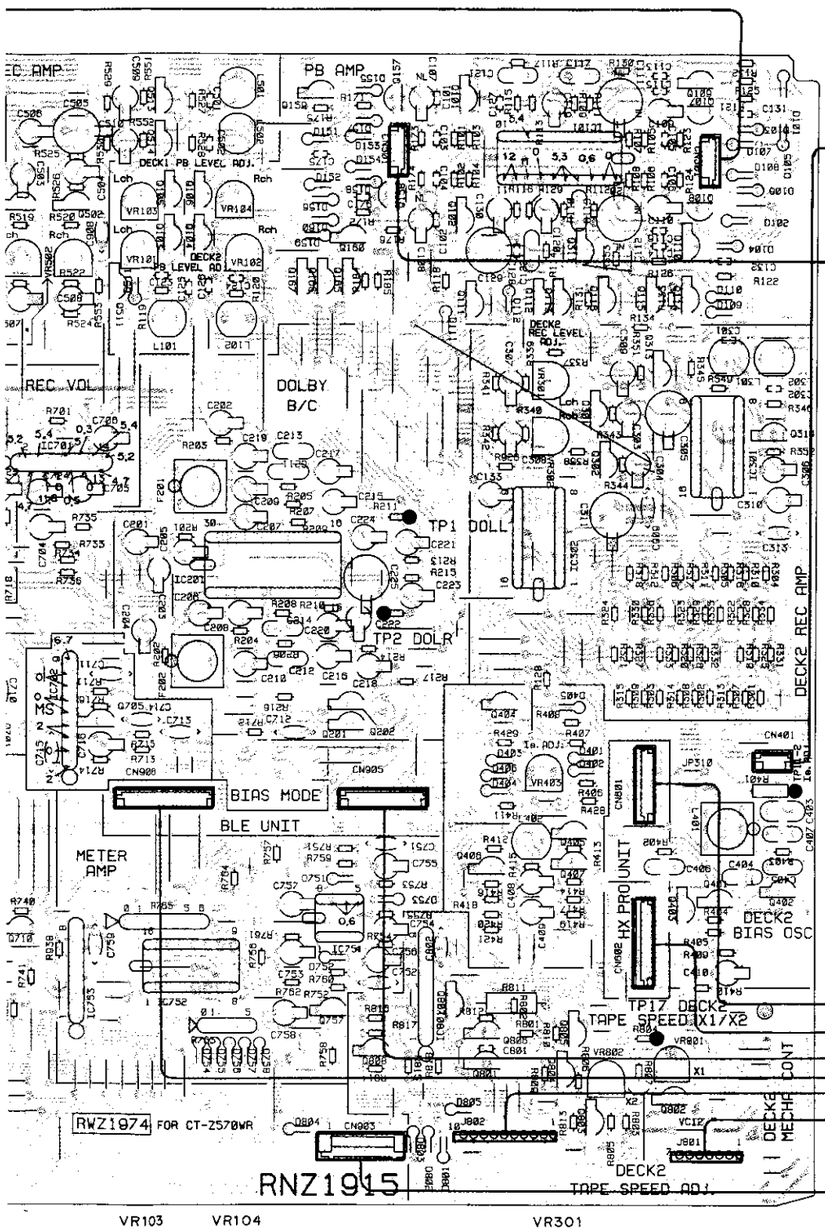
3.1 FOR CT-Z570WR

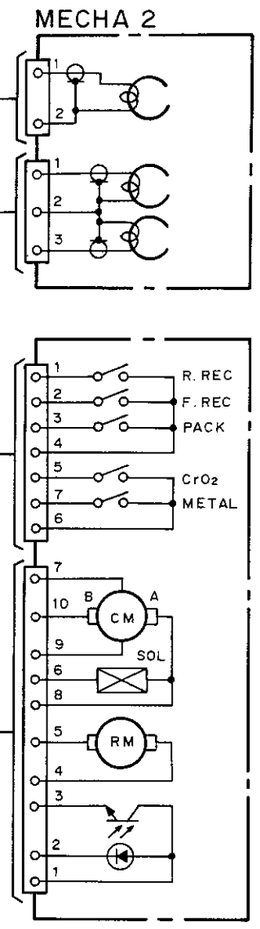


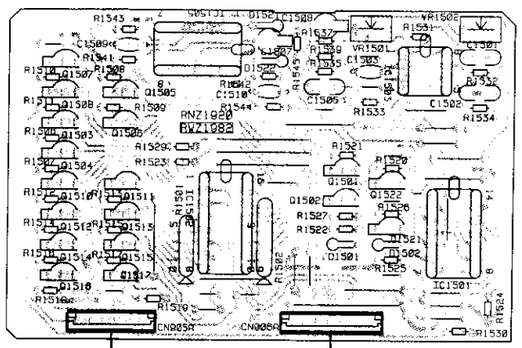


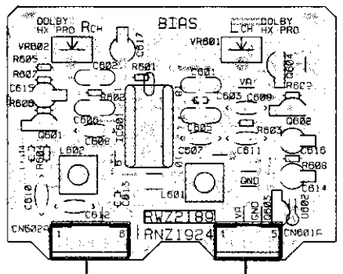


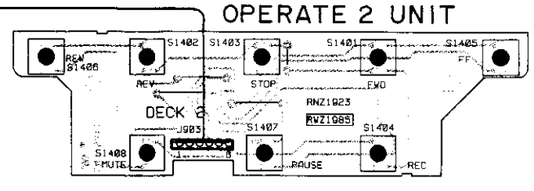








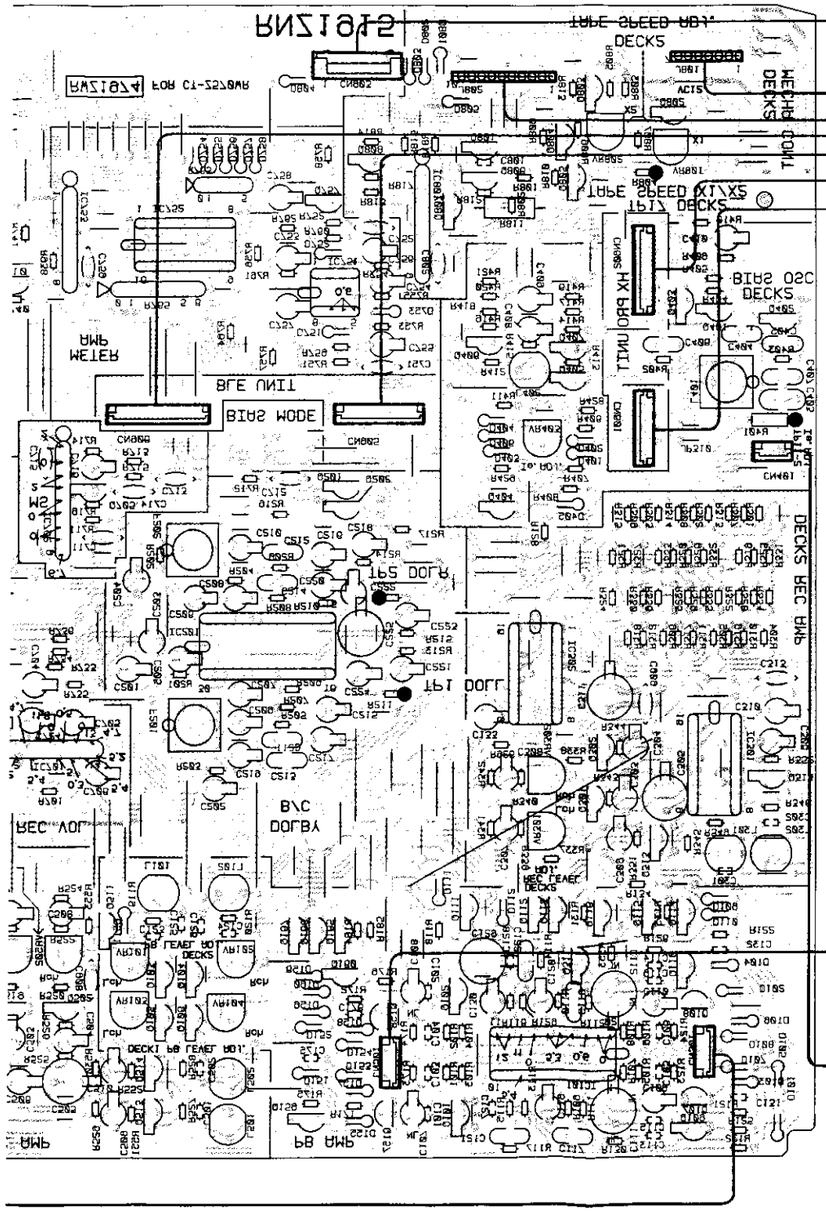




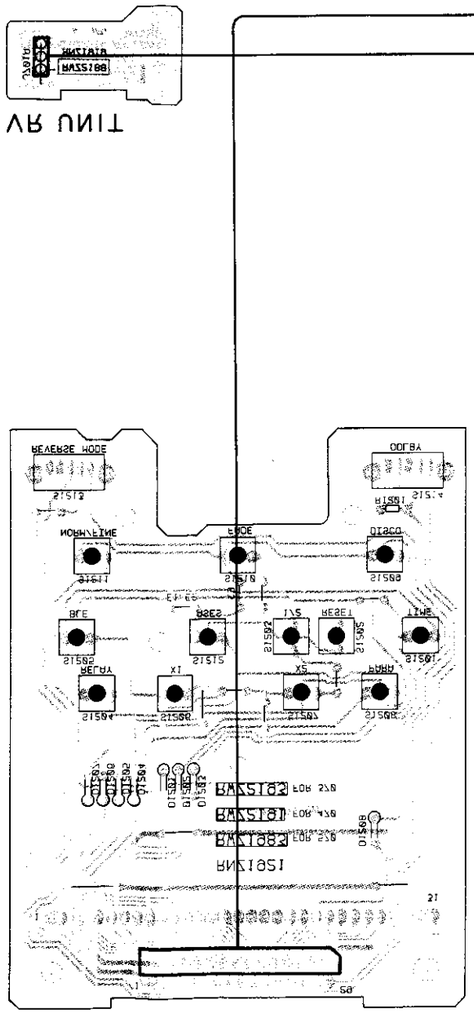
P.C.B. pattern diagram indication	Corresponding part symbol	Part name
		Transistor
		FET
		Diode
		Zenner diode
		LED
		Varactor
		Tact switch
		Inductor
		Coil
		Transformer
		Filter
		Ceramic capacitor
		Mylar capacitor
		Styrol capacitor
		Electrolytic capacitor (Non polarized)
		Electrolytic capacitor (Noiseless)
		Electrolytic capacitor (Polarized)
		Electrolytic capacitor (Polarized)
		Power capacitor
		Semi-fixed resistor
		Resistor array
		Resistor
		Resonator
		Thermistor

1. This P.C.B. connection diagram is viewed from the parts mounted side.
2. The parts which have been mounted on the board can be replaced with those shown with the corresponding wiring symbols listed in the above Table
3. The capacitor terminal marked with ▭ shows negative terminal
4. The diode marked with ○ shows catnode side.
5. The transistor terminal marked with ▭ shows emitter

VR103 VR104 VR301
R501 VR502 VR101 VR102 VR403 VR302 VR802 VR801
Q513 Q159 Q157 Q101 IC101 Q109 Q107
1501 Q502 Q514 Q105 Q106 Q160 Q158 Q102 Q311 Q110 Q108
4 Q511 Q103 Q104 Q167 Q166 Q165 Q111 Q112 Q113 Q116 Q115 Q114
IC701 Q301 Q313 Q314
07 Q302 IC301
08 IC201 IC302
01 IC702 Q705 Q202
Q201 Q404
10 Q806 Q405
IC753 IC752 IC751 Q406 Q407 Q403 Q401 Q402
Q757 Q808 IC801 Q807 Q812 Q805
Q801 Q804 Q803 Q802



BLE UNIT
MECHA 2
HX UNIT
BIAS
OPERATE 2 UNIT
R.REC
F.REC
PACK
CrO2
METAL
CM
SOL
RM
PB AMP
REC VOL
DOLBY B/C
DECK2 REC AMP
BIAS MODE
BLE UNIT
METER AMP
DECK2 BIAS OSC
HX PRO UNIT
TP17 DECK2 TAPE SPEED X1/X2
MECHA CONT DECK2
DECK2 TAPE SPEED ADJ.
RNZ1915
RNZ1974 FOR CT-Z570WR
RNZ1928
RNZ1924
RNZ1923
FF
STOP
REW
REC
PAUSE
MUTE

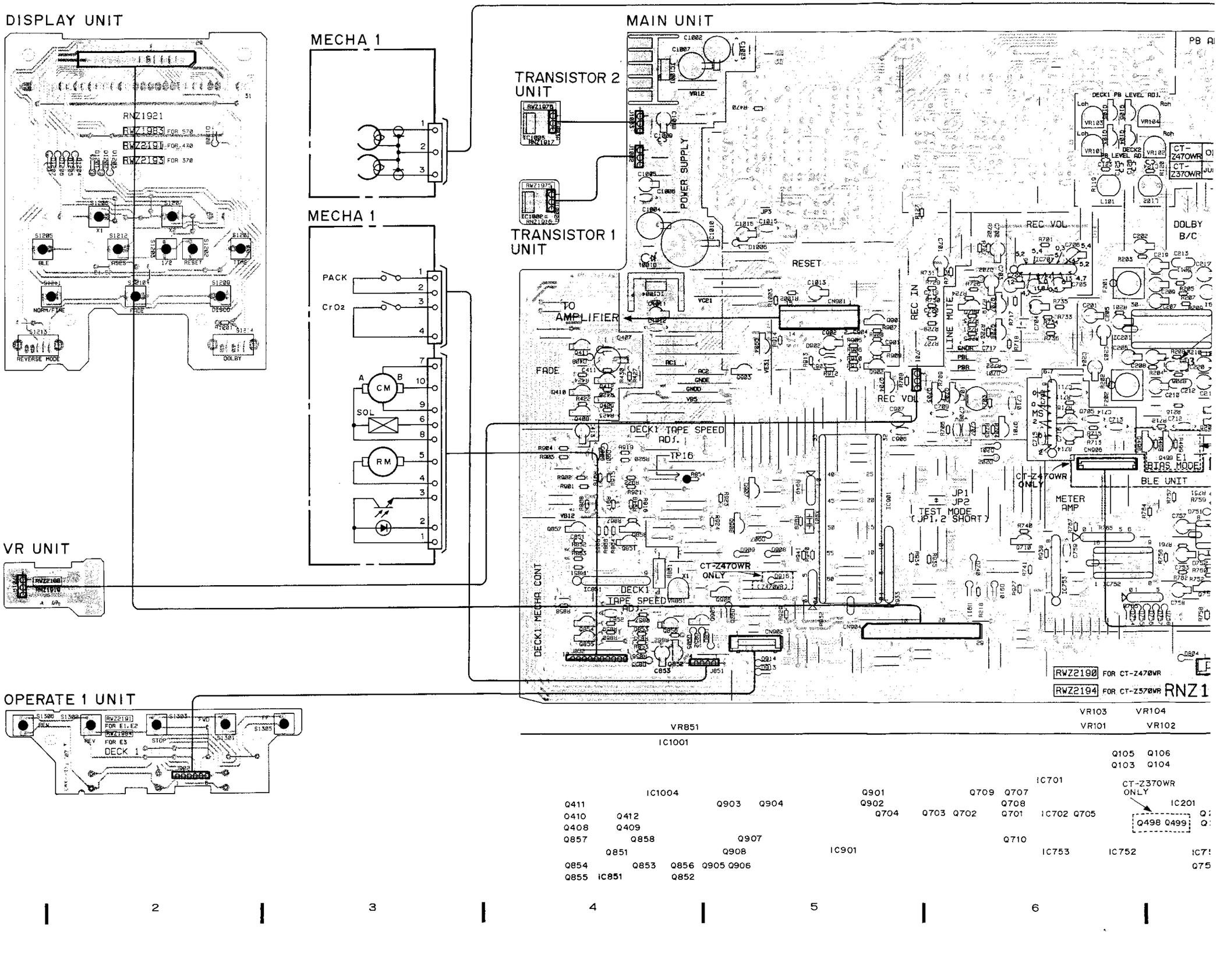


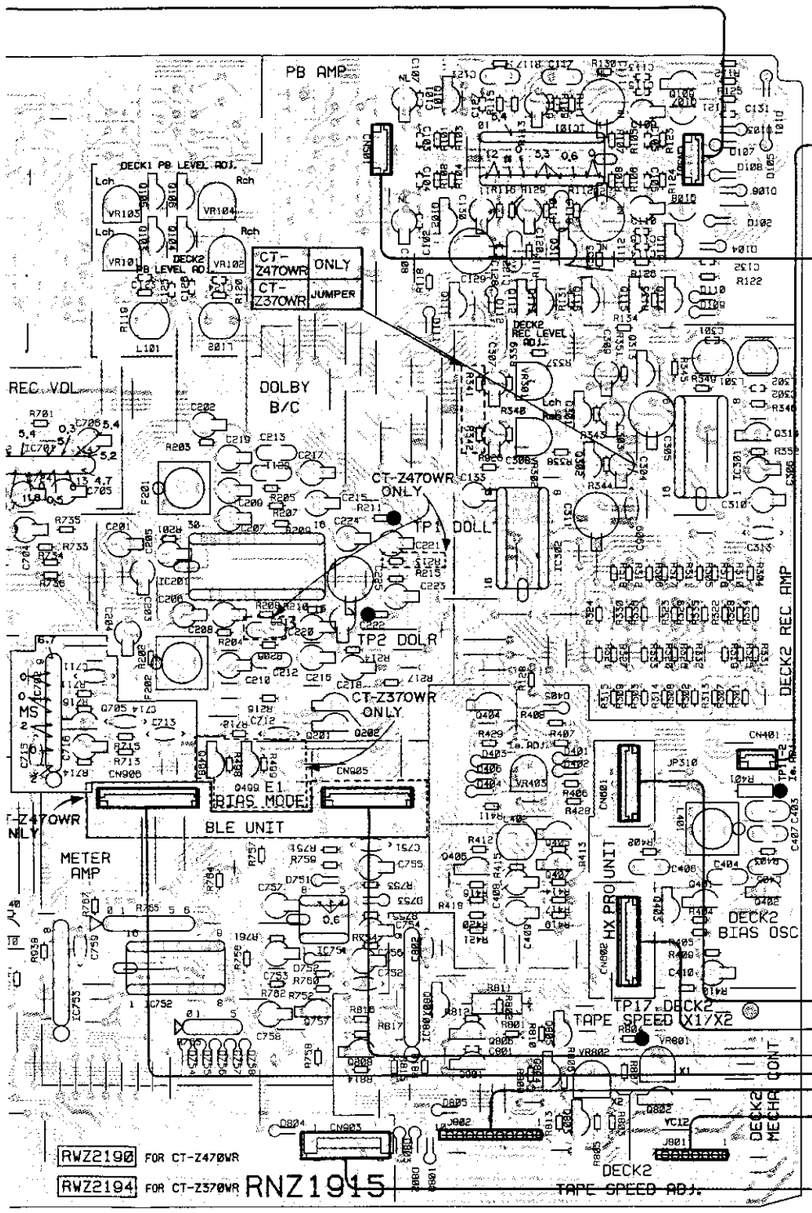
3. P.C. BOARDS CONNECTION DIAGRAM

3.1 FOR CT-Z570WR

- View from soldering side

3.2 FOR CT–Z470WR AND CT–Z370WR



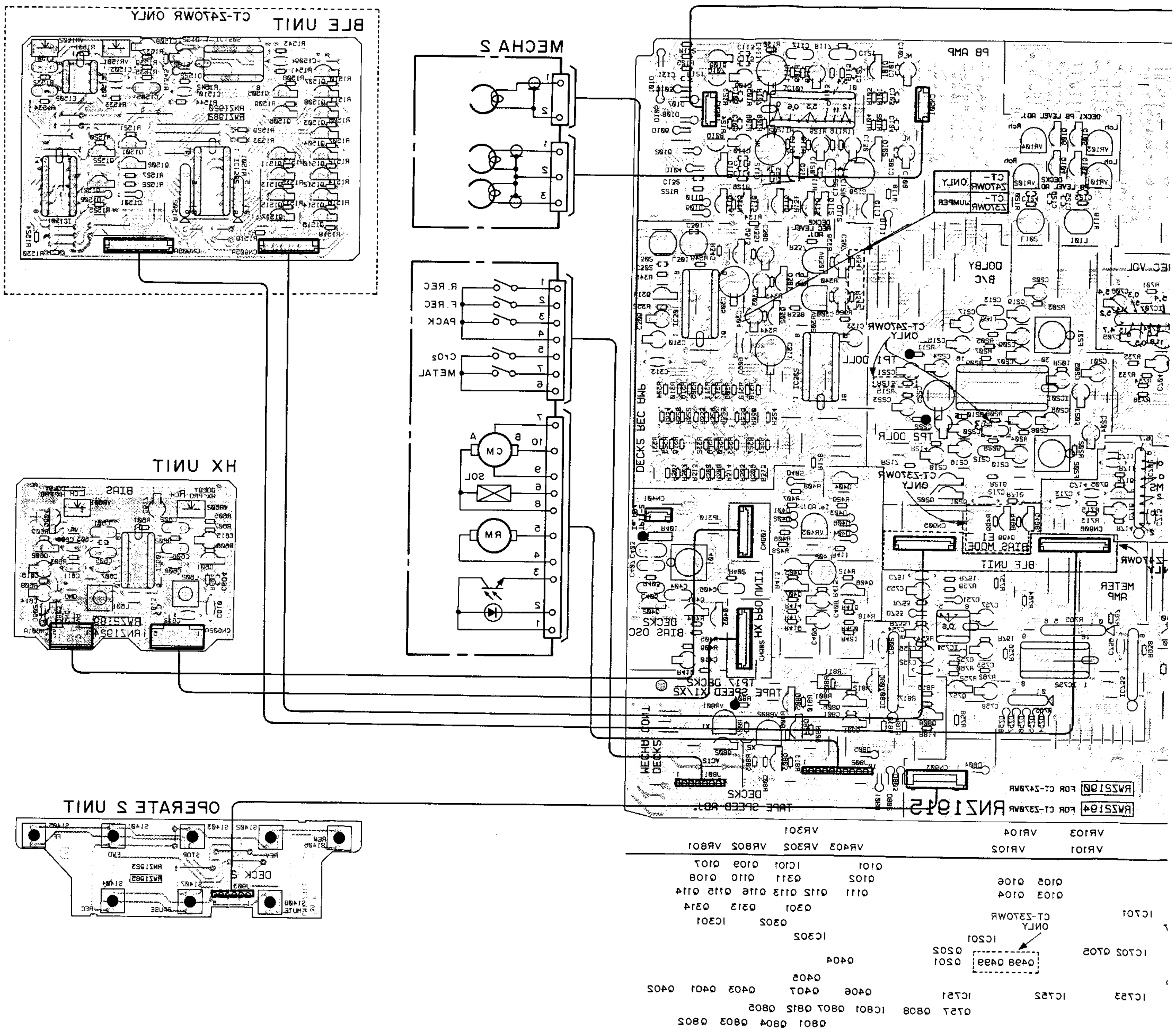


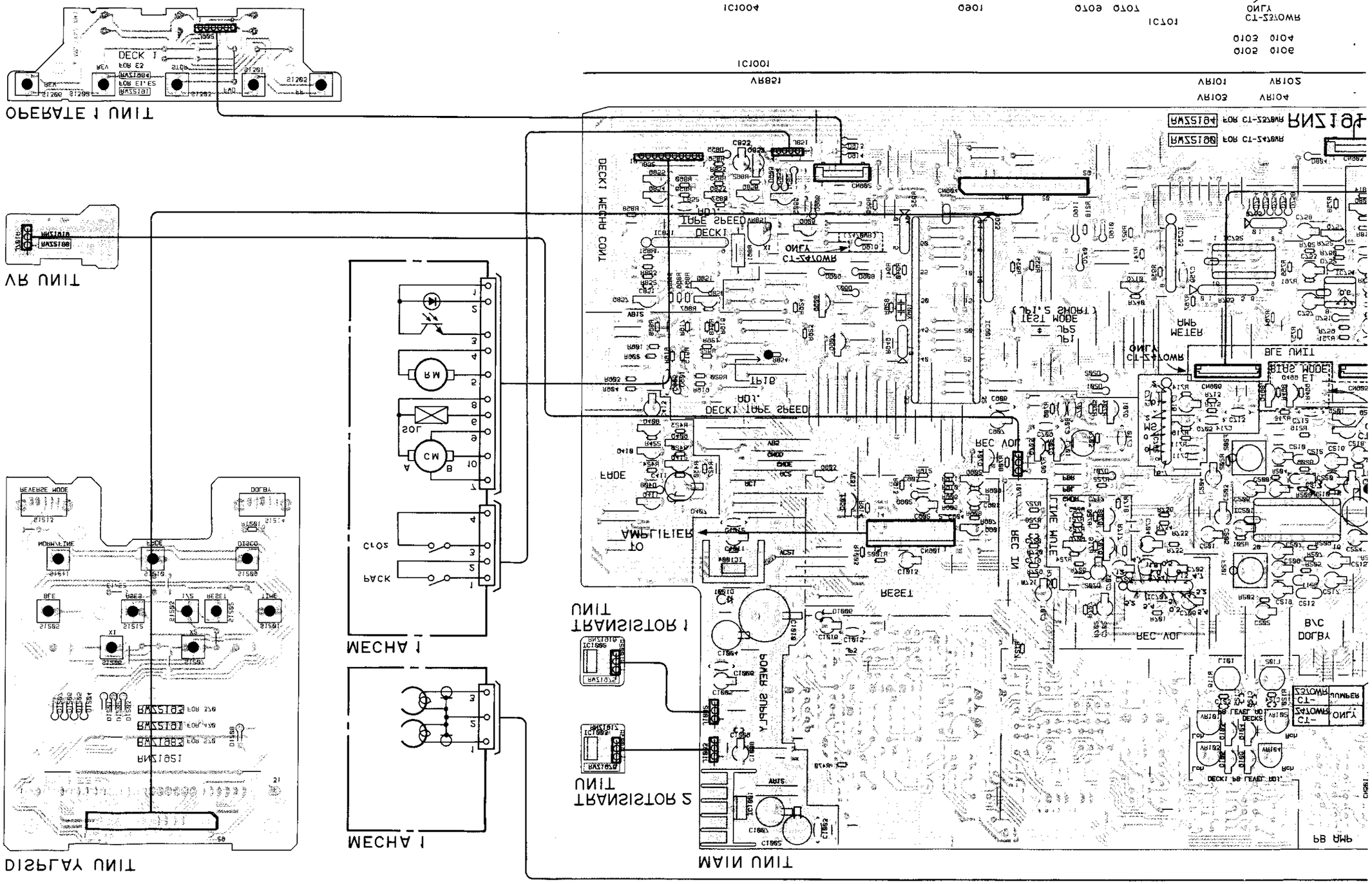
VR103 VR104 VR301
VR101 VR102 VR403 VR302 VR802 VR801

Q101 IC101 Q109 Q107
Q105 Q106 Q102 Q311 Q110 Q108
Q103 Q104 Q111 Q112 Q113 Q116 Q115 Q114
IC701 Q301 Q313 Q314
CT-Z370WR ONLY Q302 IC301
IC201 IC302
IC702 Q705 Q202
Q498 Q499 Q201 Q404
Q405
IC753 IC752 IC751 Q406 Q407 Q403 Q401 Q402
Q757 Q808 IC801 Q807 Q812 Q805
Q801 Q804 Q803 Q802

P.C.B. pattern diagram indication	Corresponding part symbol	Part name
		Transistor
		FET
		Diode
		Zenner diode
		LED
		Varactor
		Tact switch
		Inductor
		Coil
		Transformer
		Filter
		Ceramic capacitor
		Mylar capacitor
		Styrol capacitor
		Electrolytic capacitor (Non polarized)
		Electrolytic capacitor (Noiseless)
		Electrolytic capacitor (Polarized)
		Electrolytic capacitor (Polarized)
		Power capacitor
		Semi-fixed resistor
		Resistor array
		Resistor
		Resonator
		Thermistor

1. This P.C.B. connection diagram is viewed from the parts mounted side.
2. The parts which have been mounted on the board can be replaced with those shown with the corresponding wiring symbols listed in the above Table.
3. The capacitor terminal marked with ▭ shows negative terminal
4. The diode marked with ○ shows cathode side
5. The transistor terminal marked with ▭ shows emitter


BLE UNIT
CT-Z470WR ONLY
MECHA 2
HX UNIT
OPERATE 2 UNIT
PB AMP
DOLBY B/C
METER AMP
DECKS REC AMP
RNZ1915



3.5 FOR CT-2470WR AND CT-2370WR

• View from soldering side

4. P.C.B's PARTS LIST

NOTES:

- Parts without part number cannot be supplied.
- Parts marked by "⊙" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.
- The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
- When ordering resistors, first convert resistance values into code form as shown in the following examples.

Ex.1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J=5%, and K=10%)

560 Ω → 56 × 10^1 → 561 ····· RD1/4PS 5 6 1 J
47k Ω → 47 × 10^3 → 473 ····· RD1/4PS 4 7 3 J
0.5 Ω → 0R5 ····· RN2H 0 R 5 K
1 Ω → 010 ····· RS1P 0 1 0 K

Ex.2 When there are 3 effective digits (such as in high precision metal film resistors).

5.62k Ω → 562 × 10^1 → 5621 ····· RN1/4SR 5 6 2 1 F

Mark	No.	Symbol & Description	Part No.
MAIN UNIT			
SEMICONDUCTORS			
		IC101 PB-EQ AMP IC	CXA1115BP
		IC201 DOLBY B/C IC	CXA1330S
		IC301 REC EQUALIZER IC	CXA1198AP
		IC302 LOGIC IC	MC14051B
		IC501 REC EQUALIZER IC	CXA1198AP
		IC701 VCA	M51131L
		IC702 IC	BA335
		IC751 OP-AMP, IC	M5218AP
		IC752 CMOS LOGIC IC	TC4050BP
		IC753 DUAL-COMPARATOR IC	M5233L
		IC801 IC	BA6218
		IC851 IC	BA6218
		IC901 CPU(C-MOS)	PD3171A
⚠		IC1001 REGULATOR IC	NJM7812FA
⚠		IC1004 REGULATOR IC	NJM78M05FA
		Q101, 102 TRANSISTOR	DTC124ES
		Q103-106 TRANSISTOR	DTC114ES
		Q107, 108 N-FET	2SK373
		Q109, 110 TRANSISTOR	2SC3311A
		Q111-114 TRANSISTOR	DTC124ES
		Q115 TRANSISTOR	DTA124ES
		Q116 TRANSISTOR	DTC124ES
		Q157, 158 N-FET	2SK373
		Q159, 160 TRANSISTOR	2SC3311A
		Q165 TRANSISTOR	DTA124ES
		Q166, 167 TRANSISTOR	DTC124ES
		Q201, 202 TRANSISTOR	DTC124ES
		Q301, 302 TRANSISTOR	2SC3311A
		Q311 TRANSISTOR	DTA124ES
		Q313, 314 DIGITAL TRANSISTOR	DTC114TS
		Q401-403 TRANSISTOR	2SC3243
		Q404, 405 TRANSISTOR	2SB1238X
		Q406, 407 TRANSISTOR	2SC3311A
		Q408 TRANSISTOR	2SA1283
		Q409 TRANSISTOR	2SC3311A
		Q410 TRANSISTOR	2SC3243
		Q411, 412 TRANSISTOR	2SC3311A
		Q451-453 TRANSISTOR	2SC3243
		Q454, 455 TRANSISTOR	2SB1238X
		Q456, 457 TRANSISTOR	2SC3311A
		Q501, 502 TRANSISTOR	2SC3311A
		Q504-507 TRANSISTOR	DTC114ES
		Q511 TRANSISTOR	DTA124ES
		Q513, 514 DIGITAL TRANSISTOR	DTC114TS
		Q701 TRANSISTOR	DTC124ES
		Q702, 703 TRANSISTOR	2SC3311A
		Q704 TRANSISTOR	DTC114ES
		Q705 TRANSISTOR	2SC3311A
		Q707, 708 TRANSISTOR	2SD1302
		Q709 TRANSISTOR	DTA124ES
		Q710 TRANSISTOR	2SA1309A
		Q757 TRANSISTOR	DTC114ES
		Q801 TRANSISTOR	2SC3311A
		Q802 TRANSISTOR	DTC124ES
		Q803 TRANSISTOR	2SA1309A
		Q804-807 TRANSISTOR	2SC3246
		Q808 TRANSISTOR	2SC3311A
		Q851 TRANSISTOR	2SC3311A
		Q852 TRANSISTOR	DTC124ES
		Q853 TRANSISTOR	2SA1309A
		Q854-857 TRANSISTOR	2SC3246
		Q858 TRANSISTOR	2SC3311A
		Q901-904 TRANSISTOR	2SC3311A
		Q905-908 TRANSISTOR	DTC124ES
		D101-112 DIODE	1SS254
		D151-160 DIODE	1SS254
		D201, 202 DIODE	1SS254
		D312 DIODE	1SS254
		D401 DIODE	1SS254
		D402 DIODE	1SS252
		D403-406 DIODE	1SS254
⚠		D407 ZENER DIODE	MTZ9.1B
		D408 DIODE	1SS254

Mark	No.	Symbol & Description	Part No.
	D451	DIODE	1SS254
	D452	DIODE	1SS252
	D453, 454	DIODE	1SS254
	D501, 502	DIODE	1SS254
	D511, 512	DIODE	1SS254
	D701, 702	DIODE	1SS254
	D740	DIODE	1SS254
	D751-758	DIODE	1SS254
	D801-804	DIODE	1SS254
	D805	DIODE	1SS252
	D851-854	DIODE	1SS254
	D855	DIODE	1SS252
	D901, 902	DIODE	1SS254
	D905-911	DIODE	1SS254
	D913-915	DIODE	1SS254
	D806, 1001	DIODE	1SR35-100AVL
⚠	D1006	ZENER DIODE	MTZ5.1B
COILS/TRANSFORMERS			
	L101, 102	COIL	RTF1022
	L301, 302	COIL	RTF1004
	L401	COIL	RTD1022
	L402	RADIAL INDUCTOR	LFA121K
	L451	COIL	RTD1043
	L452	RADIAL INDUCTOR	LFA121K
	L501, 502	COIL	RTF1004
	F201, 202	FILTER	RTF1059
CAPACITORS			
	C101, 102	AXIAL CAPACITOR	CKPUYB471K50
	C103, 104	AXIAL CAPACITOR	CKPUYB561K50
	C105, 106	CERAMIC CAPACITOR	CKPUYB102K50
	C107-110	ELECTR. CAPACITOR	CEANL100M16
	C111, 112	ELECTR. CAPACITOR	CEANL101M10
	C113-116	AXIAL CAPACITOR	CKPUYB101K50
	C117, 118	AUDIO FILM CAPACITOR	CFTXA822J50
	C119, 120	ELECTR. CAPACITOR	CEAS4R7M50
	C121, 122	AUDIO FILM CAPACITOR	CFTXA223J50
	C123, 124	AXIAL CAPACITOR	CKPUYB471K50
	C125, 126	AXIAL CAPACITOR	CKPUYB391K50
	C127, 128	AXIAL CAPACITOR	CKPUYB681K50
	C129, 130	ELECTR. CAPACITOR	CEAS470M16
	C131, 132	AXIAL CERAMIC C.	CCPUSL100J50
	C133	ELECTR. CAPACITOR	CEASR10M50
	C175, 176	AXIAL CERAMIC C.	CCPUSL100J50
	C201, 202	ELECTR. CAPACITOR	CEAS010M50
	C203, 204	ELECTR. CAPACITOR	CEAS2R2M50
	C205, 206	ELECTR. CAPACITOR	CEAS010M50
	C207, 208	ELECTR. CAPACITOR	CEAS100M50
	C209, 210	ELECTR. CAPACITOR	CEAS4R7M50
	C211-214	AUDIO FILM CAPACITOR	CFTXA222J50
	C215, 216	ELECTR. CAPACITOR	CEASR33M50
	C217, 218	ELECTR. CAPACITOR	CEASR22M50
	C219, 220	ELECTR. CAPACITOR	CEASR33M50
	C221, 222	ELECTR. CAPACITOR	CEAS4R7M50
	C223, 224	ELECTR. CAPACITOR	CEAS100M50

Mark	No.	Symbol & Description	Part No.
	C225	ELECTR. CAPACITOR	CEAS470M16
	C301, 302	AXIAL CAPACITOR	CKPUYB221K50
	C303, 304	ELECTR. CAPACITOR	CEAS4R7M50
	C305, 306	ELECTR. CAPACITOR	CEAS471M10
	C307, 308	ELECTR. CAPACITOR	CEASR68M50
	C309, 310	ELECTR. CAPACITOR	CEAS2R2M50
	C311	ELECTR. CAPACITOR	CEAS331M16
	C313	CERAMIC CAPACITOR	CKCYF473Z50
	C403	CAPACITOR	CQPA682J100
	C404	AUDIO FILM CAPACITOR	CFTXA273J50
	C405	AUDIO FILM CAPACITOR	CFTXA682J50
	C406, 407	AUDIO FILM CAPACITOR	CFTXA332J50
	C408, 409	ELECTR. CAPACITOR	CEAS330M16
	C410	ELECTR. CAPACITOR	CEAS100M50
	C411	ELECTR. CAPACITOR	CEAS221M16
	C413	ELECTR. CAPACITOR	CEAS101M16
	C451, 452	CERAMIC CAPACITOR	CCCSL221K500
	C453	CAPACITOR	CQPA752J100
	C454	AUDIO FILM CAPACITOR	CFTXA223J50
	C455	AUDIO FILM CAPACITOR	CFTXA472J50
	C456, 457	AUDIO FILM CAPACITOR	CFTXA332J50
	C458, 459	ELECTR. CAPACITOR	CEAS330M16
	C460	ELECTR. CAPACITOR	CEAS100M50
	C501, 502	AXIAL CAPACITOR	CKPUYB221K50
	C503, 504	ELECTR. CAPACITOR	CEAS4R7M50
	C505, 506	ELECTR. CAPACITOR	CEAS471M10
	C507, 508	ELECTR. CAPACITOR	CEASR68M50
	C509, 510	ELECTR. CAPACITOR	CEAS2R2M50
	C511	ELECTR. CAPACITOR	CEAS331M16
	C701, 702	ELECTR. CAPACITOR	CEAS100M50
	C703, 704	ELECTR. CAPACITOR	CEAS470M16
	C705	ELECTR. CAPACITOR	CEAS4R7M50
	C706	ELECTR. CAPACITOR	CEAS470M16
	C707-710	CERAMIC CAPACITOR	CKCYF103Z50
	C711-713	CERAMIC CAPACITOR	CGCYX104K25
	C714	CERAMIC CAPACITOR	CGCYX473K25
	C715	CERAMIC CAPACITOR	CGCYX104K25
	C716	ELECTR. CAPACITOR	CEASR47M50
	C717	CERAMIC CAPACITOR	CKCYF103Z50
	C719, 720	CERAMIC CAPACITOR	CKPUYB102K50
	C723, 724	ELECTR. CAPACITOR	CEAS010M50
	C751, 752	CERAMIC CAPACITOR	CGCYX683K25
	C753, 754	ELECTR. CAPACITOR	CEAS470M16
	C755, 756	ELECTR. CAPACITOR	CEAS010M50
	C757, 758	ELECTR. CAPACITOR	CEASR47M50
	C759	CERAMIC CAPACITOR	CKCYF473Z50
	C801	CERAMIC CAPACITOR	CKPUYY103N16
	C802	CERAMIC CAPACITOR	CGCYX104M25
	C851	CERAMIC CAPACITOR	CKPUYY103N16
	C852	CERAMIC CAPACITOR	CGCYX104M25
	C853	ELECTR. CAPACITOR	CEAS010M50
	C901	ELECTR. CAPACITOR	CEAS100M50
	C902	ELECTR. CAPACITOR	CEAS4R7M50
	C903	CERAMIC CAPACITOR	CKDYF103Z50

Mark	No.	Symbol & Description	Part No.
		C904 CERAMIC CAPACITOR	CKCYF103Z50
		C905 CERAMIC CAPACITOR	CKCYF102Z50
		C906 CERAMIC CAPACITOR	CKCYF103Z50
		C907 ELECTR. CAPACITOR	CEAS470M16
		C908, 909 CERAMIC CAPACITOR	CKCYF103Z50
		C912, 913 CERAMIC CAPACITOR	CKCYF103Z50
		C1002 ELECTR. CAPACITOR	CEAS221M16
		C1003 CERAMIC CAPACITOR	CKCYF103Z50
		C1004 ELECTR. CAPACITOR	CEAS471M25
		C1005 ELECTR. CAPACITOR	CEAS101M16
		C1006 CERAMIC CAPACITOR	CKCYF103Z50
		C1007 ELECTR. CAPACITOR	CEAS101M25
		C1008 ELECTR. CAPACITOR	CEAS101M16
		C1009 CERAMIC CAPACITOR	CKPUYY103N16
		C1010 ELECTR. CAPACITOR	CEAS222M25
		C1011 ELECTR. CAPACITOR	CEAS470M16
		C1012 CERAMIC CAPACITOR	CKCYF103Z50
		C1013 ELECTR. CAPACITOR	CEAS100M50
		C1015 CERAMIC CAPACITOR	CKCYF103Z50
		C1016 ELECTR. CAPACITOR	CEAS470M16

RESISTORS

		R101-134 CARBONFILM RESISTOR	RD1/6PM□□□J
		R171-176 CARBONFILM RESISTOR	RD1/6PM□□□J
		R184, 185 CARBONFILM RESISTOR	RD1/6PM□□□J
		R201-210 CARBONFILM RESISTOR	RD1/6PM□□□J
		R211, 212 CARBONFILM RESISTOR	RCN1024
		R213-218 CARBONFILM RESISTOR	RD1/6PM□□□J
		R301-346 CARBONFILM RESISTOR	RD1/6PM□□□J
		R349 CARBONFILM RESISTOR	RD1/6PM□□□J
		R351-353 CARBONFILM RESISTOR	RD1/6PM□□□J
		R401 CARBONFILM RESISTOR	RD1/2LF□□□J
		R402, 403 CARBONFILM RESISTOR	RD1/6PM□□□J
		R404, 405 CARBONFILM RESISTOR	RCN1033
		R406 CARBONFILM RESISTOR	RD1/6PM□□□J
		R407 CARBONFILM RESISTOR	RCN1026
		R408 CARBONFILM RESISTOR	RCN1020
		R409-424 CARBONFILM RESISTOR	RD1/6PM□□□J
		R426-428 CARBONFILM RESISTOR	RD1/6PM□□□J
		R429 CARBONFILM RESISTOR	RCN1025
		R430 CARBONFILM RESISTOR	RD1/6PM□□□J
		R451 CARBONFILM RESISTOR	RD1/2LF□□□J
		R452, 453 CARBONFILM RESISTOR	RD1/6PM□□□J
		R454, 455 CARBONFILM RESISTOR	RCN1022
		R456 CARBONFILM RESISTOR	RCN1025
		R457 CARBONFILM RESISTOR	RCN1026
		R458 CARBONFILM RESISTOR	RCN1020
		R459-471 CARBONFILM RESISTOR	RD1/6PM□□□J
		R501-528 CARBONFILM RESISTOR	RD1/6PM□□□J
		R533 CARBONFILM RESISTOR	RD1/6PM□□□J
		R549 CARBONFILM RESISTOR	RD1/6PM□□□J
		R551-553 CARBONFILM RESISTOR	RD1/6PM□□□J
		R701-709 CARBONFILM RESISTOR	RD1/6PM□□□J
		R711-736 CARBONFILM RESISTOR	RD1/6PM□□□J
		R740, 741 CARBONFILM RESISTOR	RD1/6PM□□□J
		R751-762 CARBONFILM RESISTOR	RD1/6PM□□□J
		R763 RESISTOR ARRAY (22K)	RA5T□□□J
		R764 CARBONFILM RESISTOR	RD1/6PM□□□J
		R765 LADDER RESISTOR	RCX□□□□
		R767 CARBONFILM RESISTOR	RD1/6PM□□□J
		R801-807 CARBONFILM RESISTOR	RD1/6PM□□□J
		R809, 810 CARBONFILM RESISTOR	RD1/6PM□□□J
		R811 METAL OXIDE RESISTOR	RS2LMF□□□J
		R812-817 CARBONFILM RESISTOR	RD1/6PM□□□J
		R818 FUSIBLE RESISTOR	RFA1/4L220J
		R851-860 CARBONFILM RESISTOR	RD1/6PM□□□J
		R861 METAL OXIDE RESISTOR	RS2LMF□□□J
		R862-867 CARBONFILM RESISTOR	RD1/6PM□□□J
		R868 FUSIBLE RESISTOR	RFA1/4L220J
		R901-929 CARBONFILM RESISTOR	RD1/6PM□□□J
		R932 RESISTOR ARRAY 100K	RA5T□□□J
		R933 RESISTOR ARRAY(100K)	RA13T□□□J
		R934, 935 CARBONFILM RESISTOR	RD1/6PM□□□J
		R938 CARBONFILM RESISTOR	RD1/6PM□□□J
		R940, 941 CARBONFILM RESISTOR	RD1/6PM□□□J
		R949 RESISTOR ARRAY (22K)	RA4T□□□J
		R1002, 1003 CARBONFILM RESISTOR	RD1/6PM□□□J
		VR101-104 VR	RCP1046
		VR301, 302 VR	RCP1046
		VR403 VR	RCP1075
		VR451, 452 VR	RCP1048
		VR453 VR	RCP1075
		VR501, 502 VR	RCP1046
		VR801 VR	VRTG6VS223
		VR802 VR	RCP1054
		VR851 VR	VRTG6VS223

OTHERS

		CN904 CONNECTOR	HLEM29S-1
		X901 CERAMIC RESONATOR	VSS1014
		SCREW	BBZ30P080FCC

TRANSISTOR 1 UNIT

SEMICONDUCTORS

⚠		IC1002 REGULATOR IC	NJM7812FA

TRANSISTOR 2 UNIT

SEMICONDUCTORS

⚠		IC1003 REGULATOR IC	NJM7812FA

Mark	No.	Symbol & Description	Part No.

BLE UNIT

SEMICONDUCTORS

	IC1501	LOGIC IC TC4066BP
	IC1502	LOGIC IC BU2040
	IC1503	OP-AMP IC BA15218
	IC1505	LOGIC IC TC4069UBP
	Q1501, 1502	TRANSISTOR 2SA1309A
	Q1503-1508	TRANSISTOR DTC114ES
	Q1510-1517	TRANSISTOR DTC114ES
	Q1521, 1522	TRANSISTOR DTC124ES
	D1501, 1502	DIODE 1SS254
	D1521, 1522	DIODE 1SS254

CAPACITORS

	C1501, 1502	AUDIO FILM CAPACITOR CFTXA223J50
	C1503	CERAMIC CAPACITOR CGCYX104K25
	C1505	AUDIO FILM CAPACITOR CFTXA103J50
	C1507, 1508	ELECTR. CAPACITOR CEASR47M50
	C1509	AUDIO FILM CAPACITOR CFTXA122J50
	C1510	AUDIO FILM CAPACITOR CFTXA333J50

RESISTORS

	R1501	RESISTOR ARRAY (22K) RA5T□□□J
	R1502	RESISTOR ARRAY (22K) RA7T□□□J
	R1506-1525	CARBONFILM RESISTOR RD1/6PM□□□J
	R1527	CARBONFILM RESISTOR RD1/6PM□□□J
	R1529-1535	CARBONFILM RESISTOR RD1/6PM□□□J
	R1537	CARBONFILM RESISTOR RD1/6PM□□□J
	R1539	CARBONFILM RESISTOR RD1/6PM□□□J
	R1541-1545	CARBONFILM RESISTOR RD1/6PM□□□J
	VR1501, 1502	VR VRTB6HS223

DISPLAY UNIT

SEMICONDUCTORS

	D1201-1208	DIODE 1SS254

SWITCHES

	S1201-1212	SWITCH RSG1034
	S1213, 1214	SWITCH RSH1019
	FLUORESCENT TUBE	RAW1070

RESISTORS

	R1201	CARBONFILM RESISTOR RD1/6PM□□□J

OTHERS

	CN9041	CONNECTOR HLEM29S-1

OPERATE 1 UNIT

SWITCHES

	S1301-1308	SWITCH RSG1033

OPERATE 2 UNIT

SWITCHES

	S1401-1408	SWITCH RSG1033

Mark	No.	Symbol & Description	Part No.

VR UNIT

RESISTORS

	VR1	VARIABLE RESISTOR RCS1012

HX UNIT

SEMICONDUCTORS

	IC601	DOLBY HX PRO IC UPC1297CA
	Q601, 602	TRANSISTOR 2SA1309A
	Q603, 604	TRANSISTOR DTC124ES
	D602	DIODE 1SS254

COILS/TRANSFORMERS

	L601, 602	COIL RTD1046

CAPACITORS

	C601, 602	AUDIO FILM CAPACITOR CFTXA103J50
	C603, 604	AXIAL CAPACITOR CKPUYB821K50
	C605, 606	AUDIO FILM CAPACITOR CFTXA223J50
	C607, 608	CERAMIC CAPACITOR CGCYX473K25
	C609, 610	CERAMIC CAPACITOR CCCSL101K500
	C611, 612	CERAMIC CAPACITOR RCG1005
	C613	AXIAL CAPACITOR CKPUYB101K50
	C614	CERAMIC CAPACITOR CGCYX104M25
	C615	ELECTR. CAPACITOR CEAS100M50
	C616	ELECTR. CAPACITOR CEAS4R7M50
	C617	ELECTR. CAPACITOR CEAS100M50

RESISTORS

	R601-609	CARBONFILM RESISTOR RD1/6PM□□□J
	VR601, 602	VR VRTB6HS223

5. ADJUSTMENTS

5.1 MECHANICAL ADJUSTMENT

This adjustment should be performed in test mode.

• Entering the test mode. – Short circuit JP1 and JP2 inside the main unit and turn the power on.

1. Tape Speed Adjustment and Check

No.	Deck	Mode	Test tape	Adjusting points	Specifications/Ratings (playback frequency)	Remarks
1	I	Normal speed PLAY	STD-301 (3 kHz)		Play back for 1 minute and press the FF (REW) key. * 1	
2		Double speed PLAY		check	6000 Hz ±600 Hz	
3		Normal speed PLAY			Release the FF (REW) key after checking.	
4	II				Play back for 1 minute and press the FF (REW) key. * 1	
5		Double speed PLAY		VR802	Within ±10Hz of step 2 (deck I) check value.	
6		Normal speed PLAY			Release the FF (REW) key after checking.	
7				VR801	3000 Hz ±5 Hz	
8	I			VR851	Within ±5 Hz of step 7 (deck II) adjustment value.	

* 1 : As long as the FF (REW) key is pressed during playback, the unit is set to double speed mode.

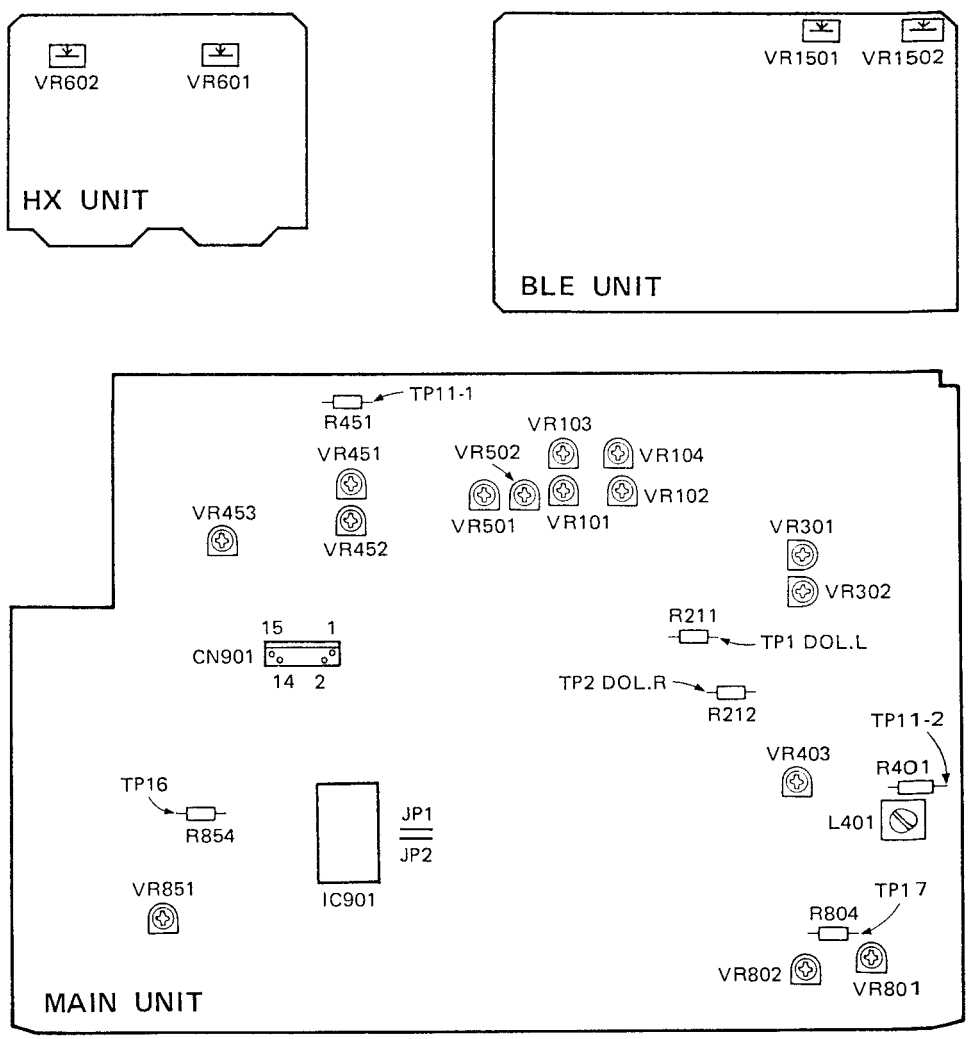


Fig. 5-1 Adjusting points

5.2 ELECTRICAL ADJUSTMENTS

Adjustment Conditions

1. The mechanical adjustments must be completed first.
2. The head must be cleaned and demagnetized.
3. Turn power on allow the deck to warm up for at least a few minutes before commencing any electrical adjustments.
4. The reference signal is 0dBv=1Vrms.
5. Connect a 50 kΩ (or between 47k to 52 kΩ) load resistance to the OUTPUT terminals.
6. Unless otherwise specified, the switches listed below are left in the positions indicated.
   DOLBY NR : OFF
   TAPE SELECTOR : NORM

Test Tapes

STD-331B : Playback adjustments (See Fig. 5-2)
STD-630 : NORMAL blank tape
STD-620 : CrO_2 blank tape
STD-610 : METAL blank tape

List of Adjustments

Playback sections

1. Head azimuth adjustment.
2. Playback level adjustment.

Recording sections

1. Bias oscillator adjustment.
2. Erase current adjustment.
3. Recording bias adjustment.
4. Recording level adjustment.
5. Level meter check.
6. AUTO BLE adjustment.

NOTE: This unit has an automatic tape selection feature.

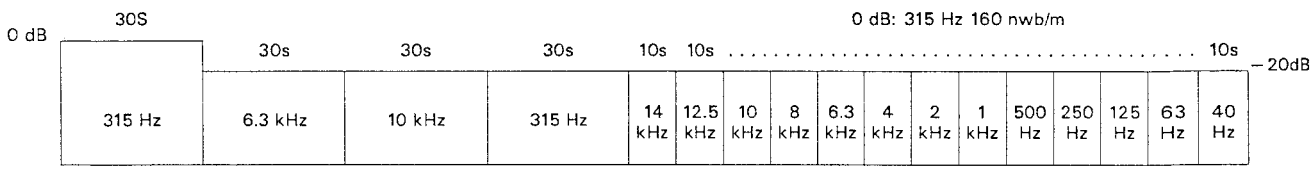


Fig. 5-2 Constants of the test tape STD-331B

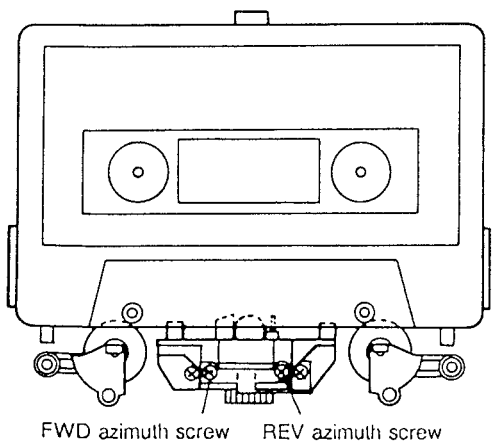


Fig. 5-3 Head azimuth adjustment

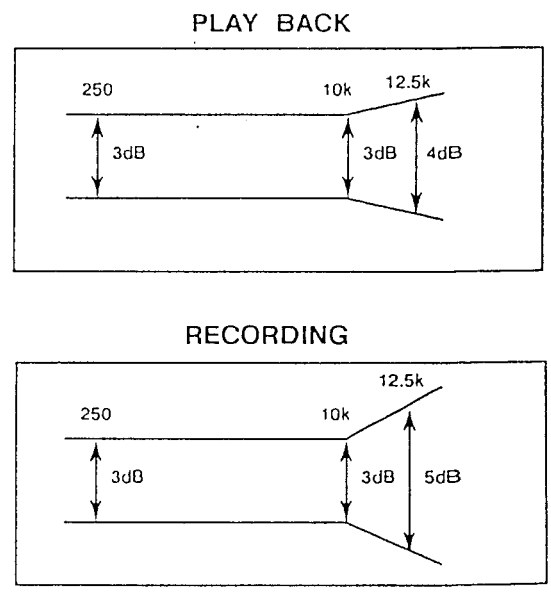


Fig. 5-4 Frequency response zone

PLAYBACK SECTION

1. Head Azimuth Adjustment

• Turn VR103, 104 (Deck I) or VR101, 102 (Deck II) to mechanical center positions.

No.	Mode	Input signal & test tape	Adjustment location	Measuring location	Adjustment value	Remarks
1.	PLAY	Play the 10 kHz/−20 dB section of STD-331B test tape.	Head azimuth adjustment screw. (See Fig. 5-3)	LINE OUT (CN901-1, 2 Pin)	Maximum playback signal level.	
2.	STOP	Lock the screw with screw lock after completing adjustment.				

2. Playback level Adjustment

• This adjustment determines the DOLBY NR level, and must be performed with great care.

No.	Mode	Input signal & test tape	Adjustment location		Measuring location	Adjustment value	Remarks
1.	PLAY	Play the 315 Hz/0 dB section of the STD-331B test tape.	Deck I	VR103 (Lch) VR104 (Rch)	TP. 1 (Lch) TP. 2 (Rch)	−10.7 dBv	
			Deck II	VR101 (Lch) VR102 (Rch)			

RECORDING SECTION

1. Bias Oscillator Adjustment

No.	Mode	Input signal & test tape	Adjustment location		Measuring location	Adjustment value	Remarks
1.	REC	Load the STD-610 test tape with no input signal.	Deck II	L401	TP. 11-2	105 kHz±0.3 kHz	

2. Erase Current Adjustment

• Adjust the bias oscillator with decks I and II set to recording mode indenpendently. ← (CT-Z570WR only)

No.	Mode	Input signal & test tape	Adjustment location		Measuring location	Adjustment value	Remarks
1.	REC	Load the STD-610 test tape with no input signal.	Deck I *1	VR453	TP. 11-1	165 mV AC	
			Deck II	VR403	TP. 11-2		

3. Recording Bias Adjustment

• Adjust the bias oscillator with decks I and II set to recording mode indenpendently. ← (CT-Z570WR only)
• After the adjustment, caution should be exercised so as not to become under bias by checking the distortion rate.

No.	Mode	Input signal & test tape	Adjustment location		Measuring location	Adjustment value	Remarks
1.	STOP	Set the TAPE SELECTOR switch to the NORM position.					
2.	REC	Record the 315 Hz and 6.3 kHz signals at −20 dBv input level and playback.	Deck I *1	VR451 (Lch) VR452 (Rch)	LINE OUT (CN901-1, 2 Pin)	Repeatedly record, playback and adjust so that the playback level of 6.3 kHz signal becomes +0.5 dB±0.5 dB when compared with the 315 Hz signal.	
			Deck II	VR601 (Lch) VR602 (Rch)			

*1: DECK 1 adjustment is needed only for CT-Z570WR.

4. Recording Level Adjustment

• Adjust the bias oscillator with decks I and II set to recording mode indenpendently. ← (CT-Z570WR only)

No.	Mode	input signal & test tape	Adjustment location		Measuring location	Adjustment value	Remarks
1.	STOP	Set the TAPE SELECTOR switch to the NORM position.					
2.	REC PAUSE	Apply a 315 Hz/0 dBv signal to the line Input terminals, load the STD-630 test tape.	Rec Level control volume		TP. 1 (Lch) TP. 2 (Rch)	– 11.2 dBv	
3.	STOP	Set the DOLBY NR switch to the ON position. (DOLBY B)					
4.	REC/ PLAY	Record the above signal onto the STD-630 test tape, and playback.	Deck I *1	VR501 (Lch) VR502 (Rch)	TP. 1 (Lch) TP. 2 (Rch)	Repeatedly record, playback and adjust so that the playback signal level becomes – 11.2 dB.	
			Deck II	VR301 (Lch) VR302 (Rch)			
5.	STOP	Set the TAPE SELECTOR switch to the CrO_2 position.					
6.	REC/ PLAY	Record the above signal onto the STD-620 test tape, and playback.	Check		TP. 1 (Lch) TP. 2 (Rch)	– 11.2 dBv ± 1.5 dB	
7.	STOP	Set the TAPE SELECTOR switch to the METAL position.					
8.	REC/ PLAY	Record the above signal onto the STD-610 test tape, and playback.	Check		TP. 1 (Lch) TP. 2 (Rch)	– 11.2 dBv ± 1.5 dB	

*1: DECK 1 adjustment is needed only for CT-Z570WR.

5. Level Meter Check

No.	Mode	Input signal & test tape	Adjustment location	Measuring location	Adjustment value	Remarks
1.	REC PAUSE	Apply a 315 Hz/– 10 dBv (316 mV) signal to the Line Input terminals.	Rec Level control volume	TP. 1 (Lch) TP. 2 (Rch)	Check that the level meters "0 dB" light up within – 11.2 dBv ± 2 dB of the signal output level.	

6. AUTO BLE Adjustment

- BLE adjustment should be performed after all other adjustments are completed.
- This adjustment should be performed in the test mode.
- Entering the test mode.
  Short JP1 and JP2, and turn on the power switch to set the test mode.

No.	Mode	Input signal & test tape	Adjustment location	Measuring location	Adjustment value	Remarks
1.	—	Set to test mode.	—	—	—	
2.		Press the NORM COPY key on the front panel.	Level meter	VR1501	Adjust so that 0 dB on the level meter lights up. *2	400 Hz adjustment
3.		Press the Hi-SPEED COPY key.		VR1502	Adjust so that 0 dB on the level meter lights up. *2	10 kHz adjustment

*2: Adjustment is performed starting with the lower level, by adjusting to the point where – 3 dB changes to 0 dB.

5. RÉGLAGE

5.1 RÉGLAGES MECANIQUES

Ce réglage doit être effectué dans le mode d'essai.

• Passage au mode d'essai. – Court-circuiter JP1 et JP2 à l'intérieur de l'unité principale et mettre sous tension.

1. Réglage et vérification de la vitesse de defilement de la bande

No.	Platine	Mode	Bande test	Points de réglage	Spécifications/valeurs (fréquence de lecture)	Remarques
1	I	Lecture à vitesse normale	STD-301 (3 kHz)	Reproduire pendant 1 minute et appuyer sur la touche FF (REW). * 1		
2		Lecture à vitesse double		Vérifier	6000 Hz ± 600 Hz	
3				Relâcher la touche FF (REW) après la vérification.		
4	II	Lecture à vitesse normale		Reproduire pendant 1 minute et appuyer sur la touche FF (REW). * 1		
5		Lecture à vitesse double		VR802	Dans la limite de ± 10 Hz de la valeur de vérification de 1' étape 2 (platine I)	
6				Relâcher la touche FF (REW) après la vérification.		
7		Lecture à vitesse normale		VR801	3000 Hz ± 5 Hz	
8	I			VR851	Dans la limite de ± 5 Hz de la valeur de réglage de 1'étape 7 (platine II).	

* 1 : L'unité est réglée dans le mode de vitesse double tant que la touche FF (REW) est maintenue enfoncée pendant la lecture.

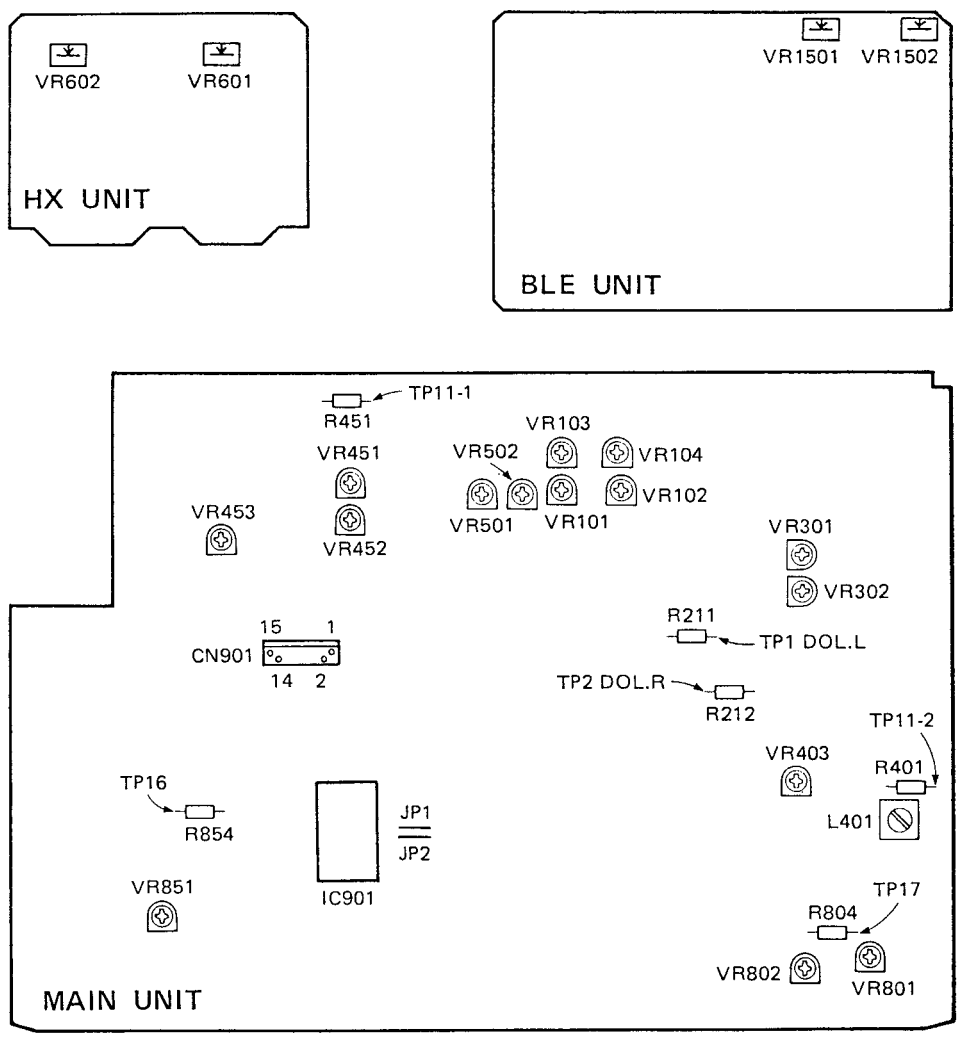


Fig. 5-1 Points de réglage

5.2 REGLAGES ELECTRIQUES

Conditions de réglage

1. Les réglages mécaniques doivent tout d'abord être terminés.
2. Les têtes doivent être nettoyées et démagnétisées.
3. Mettre la platine sous tension et la laisser chauffer pendant au moins quelques minutes avant de commencer les réglages électriques.
4. Le signal de référence est de dBv=1 Vrms.
5. Connecter une résistance de charge de 50 kΩ (tolérance 47k à 52 kΩ) aux bornes de sortie (OUTPUT).
6. Sauf indication contraire, les commutateurs ci-dessous doivent être laissés sur les positions indiquées.
   DOLBY NR : OFF
   Sélecteur de bande : NORM
   (TAPE SELECTOR)

Bandes d'essai

STD-331B : Réglages de la lecture (Voir fig. 5-2)
STD-630 : Bande vierge de type normal
STD-620 : Bande vierge de type chrome
STD-610 : Bande vierge de type métal

Liste des réglages

Sections de lecture

1. Réglage de l'azimut de la tête.
2. Réglage du niveau de lecture.

Sections d'enregistrement

1. Réglage de l'oscillateur de polarisation.
2. Réglage du courant d'effacement.
3. Réglage de la polarisation d'enregistrement.
4. Réglage du niveau d'enregistrement.
5. Vérification de l'indicateur de niveau.
6. Réglage de AUTO BLE.

REMARQUE:
Cette unité est dotée d'une sélection automatique de bande.

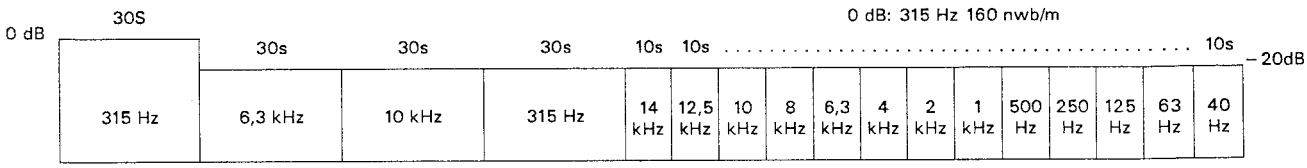


Fig. 5-2 Constantes de la bande d'essai STD-331B

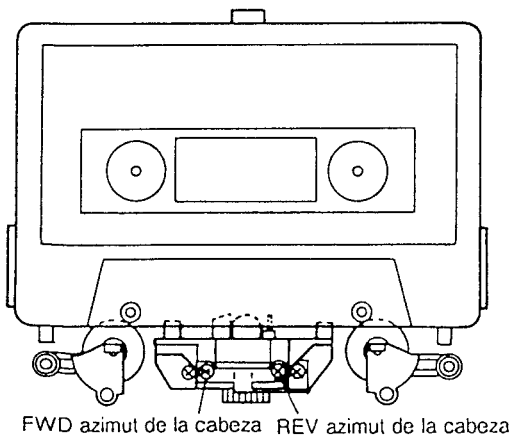


Fig. 5-3 Réglage de l'azimut de la tête

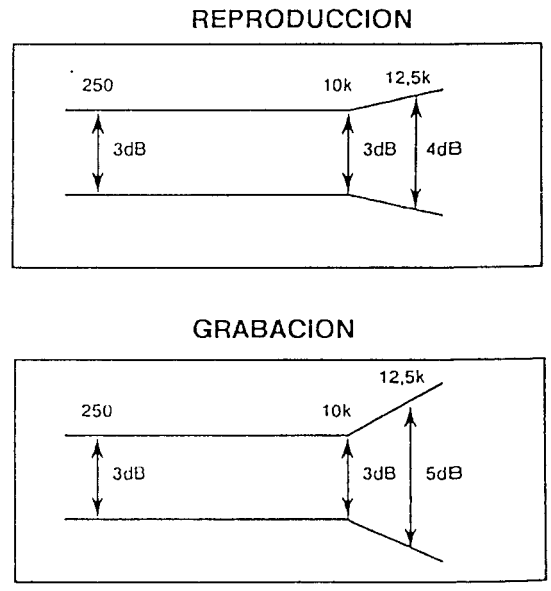


Fig. 5-4 Zone de réponse en fréquence

SECTION DE LECTURE

1. Réglage de l'azimut de la tête

• Tourner VR103, 104 (Platine I) ou VR101, 102 (Platine II) sur leur position centrale mécanique.

No.	Mode	Signal d'entrée et bande d'essai	Points de réglage	Points de mesure	Valeur de réglage	Remarques
1.	PLAY	Reproduire la section 10 kHz/ – 20 dB de la bande d'essai STD-331B.	Vis de réglage de l'azimut de la tête. (Voir fig. 5-3)	Sortie de ligne (LINE OUT) (CN901-1, 2 broche)	Niveau du signal de reproduction maximum.	
2.	STOP	Verrouiller la vis avec le verrouillage de vis après avoir terminé le réglage.				

2. Réglage du niveau de lecture

• Ce réglage détermine le niveau DOLBY NR et il doit être effectué très soigneusement.

No.	Mode	Signal d'entrée et bande d'essai	Points de réglage		Points de mesure	Valeur de réglage	Remarques
1.	PLAY	Reproduire la section 315 Hz/0 dB de la bande d'essai STD-331B.	Platine I	VR103 (can. G) VR104 (can. D)	TP. 1 (can. G) TP. 2 (can. D)	– 10,7 dBv	
			Platine II	VR101 (can. G) VR102 (can. D)			

SECTION D'ENREGISTREMENT

1. Réglage de l'oscillateur de polarisation

No.	Mode	Signal d'entrée et bande d'essai	Points de réglage		Points de mesure	Valeur de réglage	Remarques
1.	REC	Charger la bande d'essai STD-610 et n'introduire aucun signal.	Platine II	L401	TP. 11-2	105 kHz ±0,3 kHz	

2. Réglage du courant d'effacement

• Régler l'oscillateur de polarisation, les platines I et II étant réglées indépendamment dans le mode d'enregistrement. ← (CT-Z570WR seulement)

No.	Mode	Signal d'entrée et bande d'essai	Points de réglage		Points de mesure	Valeur de réglage	Remarques
1.	REC	Charger la bande d'essai STD-610 et n'introduire aucun signal.	Platine I *1	VR453	TP. 11-1	165 mV AC	
			Platine II	VR403	TP. 11-2		

3. Réglage de la polarisation d'enregistrement

• Régler l'oscillateur de polarisation, les platines I et II étant réglées indépendamment dans le mode d'enregistrement. ← (CT-Z570WR seulement)
• Après le réglage, des précautions doivent être prises pour éviter une sous-polarisation en vérifiant le taux de distorsion.

No.	Mode	Signal d'entrée et bande d'essai	Points de réglage		Points de mesure	Valeur de réglage	Remarques
1.	STOP	Régler le sélecteur de bande (TAPE SELECTOR) sur la position NORM.					
2.	REC	Enregistrer les signaux 315 Hz et 6,3 kHz à un niveau d'entrée de – 20 dBv et les reproduire.	Platine I *1	VR451 (can. G) VR452 (can. D)	Sortie de ligne (LINE OUT) (CN901-1, 2 broche)	Enregistrer, reproduire et régler de manière répétée de sorte que le niveau de lecture du signal 6,3 kHz devienne +0,5 dB ±0,5 dB lorsqu'il est comparé avec le signal 315 Hz.	
			Platine II	VR601 (can. G) VR602 (can. D)			

*1: Le réglage de la Platine I (DECK I) n'est nécessaire que pour le CT-Z570WR.

4. Réglage du niveau d'enregistrement

• Régler l'oscillateur de polarisation, les platines I et II étant réglées indépendamment dans le mode d'enregistrement. ← (CT-Z570WR seulement)

No.	Mode	Signal d'entrée et bande d'essai	Points de réglage		Points de mesure	Valeur de réglage	Remarques
1.	STOP	Régler le sélecteur de bande (TAPE SELECTOR) sur la position NORM.					
2.	REC PAUSE	Appliquer un signal de 315 Hz/0 dBv aux bornes d'entrée de ligne, charger la bande d'essai STD-630.	Volume de la commande de niveau d'enregistrement.		TP. 1 (can. G) TP. 2 (can. D)	– 11,2 dBv	
3.	STOP	Régler le commutateur DOLBY NR sur la position ON. (DOLBY B)					
4.	REC/ PLAY	Enregistrer le signal cidessus sur la bande d'essai STD-630 et le reproduire.	Platine I *1	VR501 (can. G) VR502 (can. D)	TP. 1 (can. G) TP. 2 (can. D)	Enregistrer, reproduire et régler de manière répétée de sorte que le niveau du signal devienne – 11,2dB.	
			Platine II	VR301 (can. G) VR302 (can. D)			
5.	STOP	Régler le sélecteur de bande (TAPE SELECTOR) sur la position CrO_2.					
6.	REC/ PLAY	Enregistrer le signal cidessus sur la bande d'essai STD-620 et le reproduire.	Vérifier		TP. 1 (can. G) TP. 2 (can. D)	– 11,2 dBv ± 1,5 dB	
7.	STOP	Régler le sélecteur de bande (TAPE SELECTOR) sur la position METAL.					
8.	REC/ PLAY	Enregistrer le signal cidessus sur la bande d'essai STD-610 et le reproduire.	Vérifier		TP. 1 (can. G) TP. 2 (can. D)	– 11,2 dBv ± 1,5 dB	

*1: Le réglage de la Platine I (DECK I) n'est nécessaire que pour le CT-Z570WR.

5. Vérification de l'indicateur de niveau

No.	Mode	Signal d'entrée et bande d'essai	Points de réglage	Points de mesure	Valeur de réglage	Remarques
1.	REC PAUSE	Appliquer un signal de 315 Hz/– 10 dBv (316 mV) aux bornes d'entrée de ligne.	Volume de la commande de niveau d'enregistrement	TP. 1 (can. G) TP. 2 (can. D)	Vérifier que les indicateurs de niveau "0 dB" s'allument dans la limite de – 11,2 dBv ± 2 dB du niveau de sortie du signal.	

6. Réglage de AUTO BLE

- Le réglage BLE doit être effectué après que tous les autres réglages sont complétés.
- Ce réglage doit être effectué dans le mode d'essai.
- Passage au mode d'essai.
  Court-circuiter JP1 et JP2 et enclencher l'interrupteur d'alimentation pour régler le mode d'essai.

No.	Mode	Signal d'entrée et bande d'essai	Points de réglage	Points de mesure	Valeur de réglage	Remarques
1.	—	Régler dans le mode d'essai.	—	—	—	
2.		Appuyer sur la touche NORM COPY du panneau avant.	L'indicateur de niveau	VR1501	Régler de sorte que 0 dB sur l'indicateur de niveau s'allume. *2	Réglage 400 Hz
3.		Appuyer sur la touche Hi-SPEED COPY.		VR1502	Régler de sorte que 0 dB sur l'indicateur de niveau s'allume. *2	Réglage 10 kHz

*2: Le réglage est effectué en commençant par le niveau inférieur, en ajustant sur le point où – 3 dB change en 0 dB.

5. AJUSTE

5.1 AJUSTE MECANICO

Este ajuste debe efectuarse en el modo de prueba.

- Cómo poner el modo de prueba. – Cortocircuite JP1 y JP2 dentro de la unidad principal y conecte el interruptor de corriente.

1. Ajuste y verificación de la velocidad de cinta

No.	Platina	Modo	Cinta de prueba	Puntos de ajuste	Especificaciones/valores nominales (frecuencia de reproducción)	Comentarios
1	I	PLAY (velocidad normal)	STD-301 (3 kHz)	Reproduzca durante I minuto y pulse la tecla FF (REW). * 1		
2		PLAY (velocidad doble)		Verificar	6000 Hz ± 600 Hz	
3		PLAY (velocidad normal)		Suelte la tecla FF (REW) después de la comprobación.		
4	II			Reproduzca durante I minuto y pulse la tecla FF (REW). * 1		
5		PLAY (velocidad doble)		VR802	Dentro de un margen de ± 10 Hz del valor de verificación del paso 2 (platina I).	
6		PLAY (velocidad normal)		Suelte la tecla FF (REW) después de la comprobación.		
7				VR801	3000 Hz ± 5 Hz	
8	I			VR851	Dentro de un margen de ± 5 Hz del valor de verificación del paso 7 (platina II).	

* 1 : Mientras mantenga pulsada la tecla FF (REW) durante reproducción, la unidad estará puesta en el modo de doble velocidad.

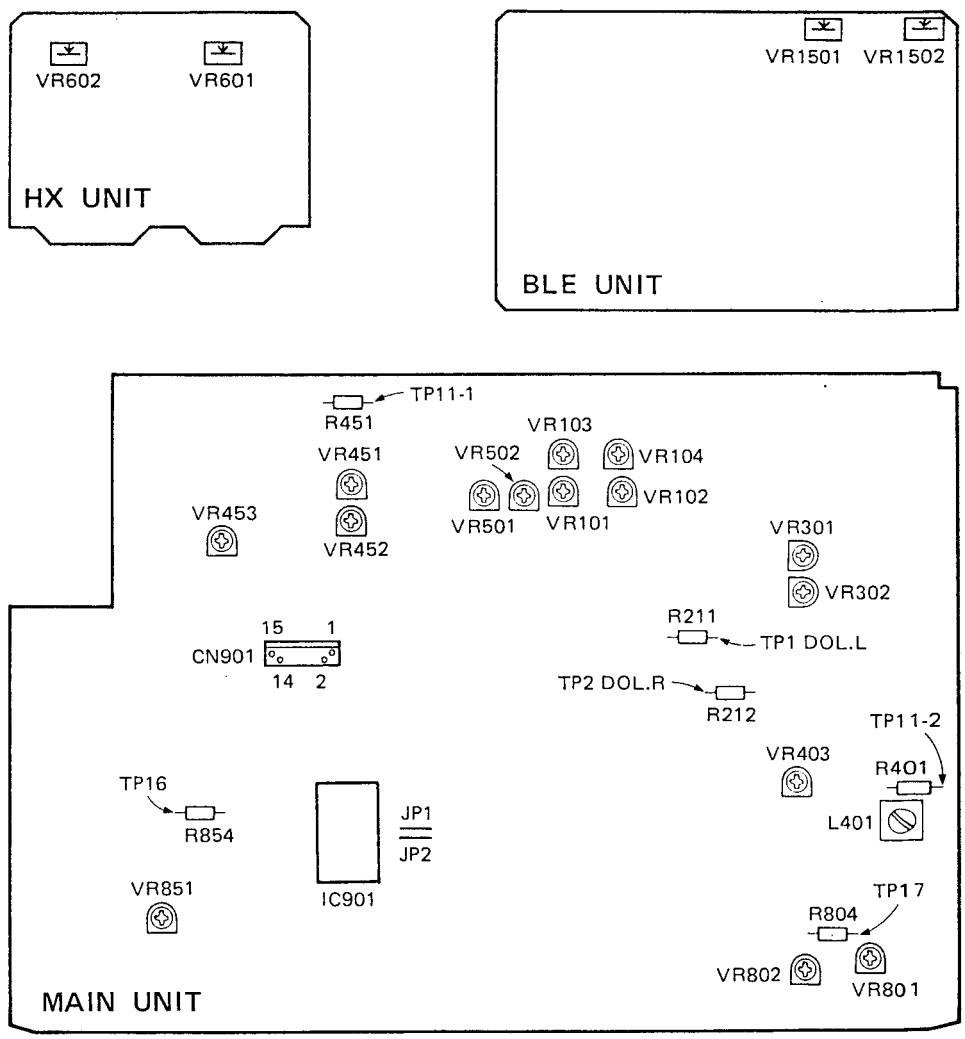


Fig. 5-1 Puntos de réglage

5.2 AJUSTES ELÉCTRICOS

Condiciones de ajuste

1. Los ajustes mecánicos deben haberse completado primero.
2. La cabeza debe estar limpia y desmagnetizada.
3. Encienda la alimentación para permitir que la platina se caliente durante unos pocos minutos por lo menos antes de realizar cualquier ajuste eléctrico.
4. La señal de referencia es de 0 dBv=1 Vrms.
5. Conecte una resistencia de 50 kΩ (o entre 47k y 52 kΩ) en los terminales OUTPUT.
6. A menos que se especifique lo contrario, los conmutadores indicados más abajo deben dejarse en las posiciones indicadas.
   DOLBY NR : OFF
   TAPE SELECTOR : NORM

Cintas de prueba

STD-331B : Ajustes de reproducción (Consulte la figura 5-2)
STD-630 : Cinta virgen NORMAL
STD-620 : Cinta virgen de CrO_2
STD-610 : Cinta virgen de METAL

Lista de ajustes

Secciones de reproducción

1. Ajuste de azimut de la cabeza
2. Ajuste del nivel de reproducción

Secciones de grabación

1. Ajuste del oscillador de polarización
2. Ajuste de la corriente de borrado
3. Ajuste de la polarización de grabación
4. Ajuste del nivel de grabación
5. Verificación del medidor de nivel
6. Ajustes eléctricos

NOTA:
Esta unidad posee una función de selección automática de cinta.

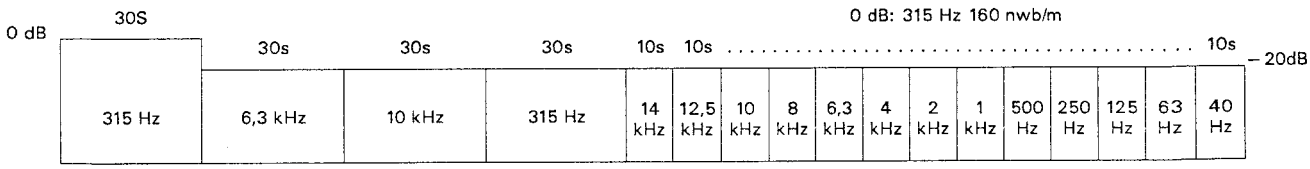


Figura 5-2 Constantes de la cinta de prueba STD-331B

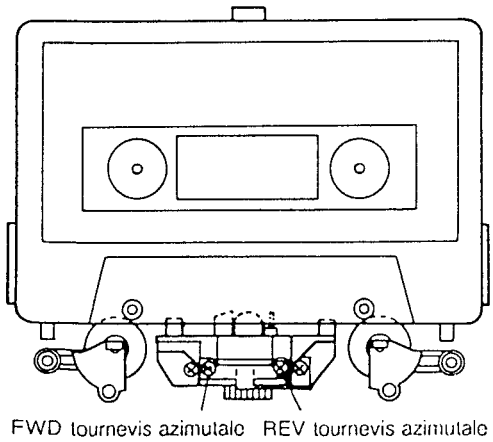


Figura 5-3 Ajuste de azimut de la cabeza

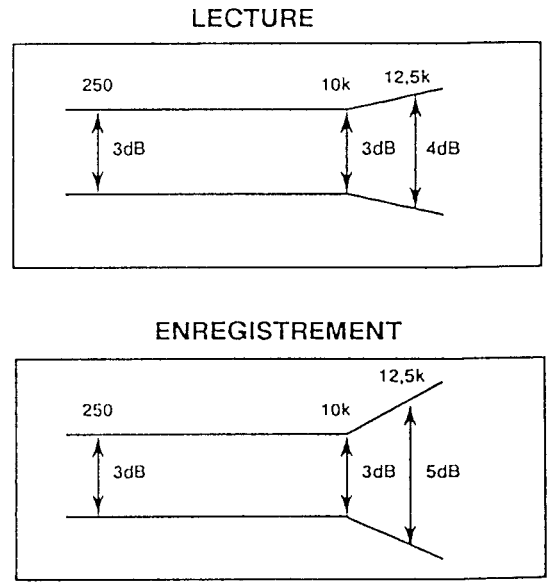


Figura 5-4 Zona de respuesta de frecuencia

SECCIÓN DE REPRODUCCIÓN

1. Ajuste del azimut de la cabeza

• Poner VR103, 104 (platina I) o VR101, 102 (platina II) en las posiciones del centro mecánico.

N.º	Modo	Señal de entrada y cinta de prueba	Punto de ajuste	Punto de medición	Valor de ajuste	Comentarios
1.	PLAY	Reproduzca la sección de 10 kHz/ – 20 dB de la cinta de prueba STD-331B.	Tornillo de ajuste del azimut de la cabeza. (Vea la figura 5-3)	LINE OUT (CN901-1, 2 contacto)	Nivel máximo de la señal de reproducción.	
2.	STOP	Bloquee el tornillo con su cierre una vez finalizado el ajuste.				

2. Ajuste del nivel de reproducción

• Este ajuste determina el nivel DOLBY NR y debe realizarse con mucho cuidado.

N.º	Modo	Señal de entrada y cinta de prueba	Punto de ajuste		Punto de medición	Valor de ajuste	Comentarios
1.	PLAY	Produzca la parte de 315 Hz/0 dB de la cinta de prueba STD-331B.	Platina I	VR103 (Lch) VR104 (Rch)	TP. 1 (Lch) TP. 2 (Rch)	– 10,7 dBv	
			Platina II	VR101 (Lch) VR102 (Rch)			

SECCIÓN DE GRABACIÓN

1. Ajuste del oscilador de polarización

N.º	Modo	Señal de entrada y cinta de prueba	Punto de ajuste		Punto de medición	Valor de ajuste	Comentarios
1.	REC	Introduzca la cinta de prueba STD-610 sin señal de entrada.	Platina II	L401	TP. 11-2	105 kHz ± 0,3 kHz	

2. Ajuste de la corriente de borrado

• Ajuste el oscilador de polarización con las platinas I y II puestas independientemente en el modo de grabación. ← (CT-Z570WR sólo)

N.º	Modo	Señal de entrada y cinta de prueba	Punto de ajuste		Punto de medición	Valor de ajuste	Comentarios
1.	REC	Introduzca la cinta de prueba STD-610 sin señal de entrada.	Platina I *1	VR453	TP. 11-1	165 mV AC	
			Platina II	VR403	TP. 11-2		

3. Ajuste de polarización de grabación

• Ajuste el oscilador de polarización estando las platinas I y II ajustadas independientemente para el modo de grabación. ← (CT-Z570WR sólo)
• Una vez finalizado el ajuste, compruebe el porcentaje de distorsión para no obtener subpolarización.

N.º	Modo	Señal de entrada y cinta de prueba	Punto de ajuste		Punto de medición	Valor de ajuste	Comentarios
1.	STOP	Ponga el conmutador TAPE SELECTOR en la posición NORM.					
2.	REC	Grabe la señal de 315 Hz y 6,3 kHz a un nivel de entrada de – 20 dBv y reprodúzcala.	Platina I *1	VR451 (Lch) VR452 (Rch)	LINE OUT (CN901-1, 2 contacto)	Grabe, reproduzca y ajuste repetidamente para que el nivel de la señal de reproducción de 6,3 kHz sea de + 0,5 dB ± 0,5 dB cuando se compare con la señal de 315 Hz.	
			Platina II	VR601 (Lch) VR602 (Rch)			

*1: El ajuste del DECK 1 sólo es necesario para el CT-Z570WR.

4. Ajuste del nivel de grabación

• Ajuste el oscilador de polarización con las platinas I y II puestas independientemente en el modo de grabación. ← (CT-Z570WR sólo)

N.°	Modo	Señal de entrada y cinta de prueba	Punto de ajuste		Punto de medición	Valor de ajuste	Comentarios
1.	STOP	Ponga el conmutador TAPE SELECTOR en la posición NORM.					
2.	REC PAUSE	Aplique una señal de 315 Hz/0 dBv a los terminales de entrada de línea e introduzca la cinta de prueba STD-630.	Control de nivel de grabación.		TP. 1 (Lch) TP. 2 (Rch)	– 11,2 dBv	
3.	STOP	Ponga el conmutador DOLBY NR en la posición ON. (DOLBY B)					
4.	REC/ PLAY	Grabe la señal de arriba en la cinta de prueba STD-630 y reprodúzcala.	Platina I *1	VR501 (Lch) VR502 (Rch)	TP. 1 (Lch) TP. 2 (Rch)	Grabe, reproduzca y ajuste repetidamente para que el nivel de la señal de reproducción sea de – 11,2 dB.	
			Platina II	VR301 (Lch) VR302 (Rch)			
5.	STOP	Ponga el conmutador TAPE SELECTOR en la posición CrO_2.					
6.	REC/ PLAY	Grabe la señal de arriba en la cinta de prueba STD-620 y reprodúzcala.	Verifique		TP. 1 (Lch) TP. 2 (Rch)	– 11,2 dBv ± 1,5 dB	
7.	STOP	Ponga el conmutador TAPE SELECTOR en la posición METAL.					
8.	REC/ PLAY	Grabe la señal de arriba en la cinta de prueba STD-610 y reprodúzcala.	Verifique		TP. 1 (Lch) TP. 2 (Rch)	– 11,2 dBv ± 1,5 dB	

*1: El ajuste del DECK 1 sólo es necesario para el CT-Z570WR.

5. Verificación del medidor de nivel

N.°	Modo	Señal de entrada y cinta de prueba	Punto de ajuste	Punto de medición	Valor de ajuste	Comentarios
1.	REC PAUSE	Aplique una señal de 315 Hz/– 10 dBv (316 mV) a los terminales de entrada de línea.	Control de nivel de grabación	TP. 1 (Lch) TP. 2 (Rch)	Verifique si se encienden los medidores de nivel "0 dB" cuando el nivel de salida de la señal sea – 11,2 dBv ± 2 dB.	

6. Ajuste AUTO BLE

- El ajuste BLE debe efectuarse después de haber terminado todos los otros ajustes.
- Este ajuste debe efectuarse en el modo de prueba.
- Cómo establecer el modo de prueba.
  Cortocircuite JP1 y JP2, y conecte el interruptor de corriente para establecer el modo de prueba.

N.°	Modo	Señal de entrada y cinta de prueba	Punto de ajuste	Punto de medición	Valor de ajuste	Comentarios
1.	—	Establezca el modo de prueba.	—	—	—	
2.		Pulse la tecla NORM COPY del panel delantero.	En medidor de nivel	VR1501	Ajuste de modo que se encienda 0 dB en el medidor de nivel. *2	Ajuste de 400 Hz
3.		Pulse la tecla Hi-SPEED COPY.		VR1502	Ajuste de modo que se encienda 0 dB en el medidor de nivel. *2	Ajuste de 10 kHz

*2: El ajuste se efectúa empezando con el nivel inferior y ajustando el punto en donde – 3 dB cambia a 0 dB.

6. IC DESCRIPTIONS

● PD3171A

Pin Function

Pin No.	Name	Function
1	S4	S0 to S9 are FL segments, keys and level meters scanning outputs.
2	S3	
3	S2	
4	S1	
5	S0	
6	G0	G0 to G7 are FL grids and keys outputs.
7	G1	
8	G2	
9	G3	
10	G4	
11	G5	
12	G6	
13	G7	
14	1 – SOL A	"H" : Solenoid ON.
15	1 – SOL B	Reduces current when the solenoid is ON. "H" : Current reduce.
16	1 – RM L	"H" : REV direction reel ON.
17	1 – RM R	"H" : FWD direction reel ON.
18	1 – SENS	Used for detecting tape end and indication of the tape counter by inputting the sensing pulses from the reel table.
19	2 – SENS	
20	1 – RM PLAY	Used for controlling the reel motor torque. "H" : Play torque.
21	1 – CPM	"H" : Capstan motor ON.
22	2 – RM PLAY	Used for controlling the reel motor torque. "H" : Play torque.
23	2 – CPM	"H" : Capstan motor ON.
24	1 – SOL A	"H" : Solenoid ON.
25	1 – SOL B	Reduces current when the solenoid is ON. "H" : Current reduce.
26	1 – RM L	"H" : REV direction reel ON.
27	1 – RM R	"H" : FWD direction reel ON.
28	$\overline{\text{POFF}}$	The interruption of the power OFF occurs in rise timing. Normally "H" level.
29	ENA/$\overline{\text{REQ}}$	Normally, used as output terminal. During communication it works as input to determine the execution of communication. Normally "H" level.
30	SCK	The clock for the system bus. Normally "H" level.
31	SD	The data for the system bus. Normally, used as input terminal. Becomes output terminal when output.
32	VCC	+ 5V terminal.
33	$\overline{\text{LINE MUTE}}$	When play mode, the line mute is turned OFF. "L" : Line mute ON.
34	1 – REC MUTE	When REC mode, the REC mute is turned OFF. In space mute, the REC mute is turned ON. "H" : REC mute ON.
35	2 – REC MUTE	
36	VR CONT	Used for controlling the amount of attenuation of the electronic VR with PWM waveform. "L" : Attenuation 0. "H" : Attenuation ∞.
37	1 – BIAS	Turns ON the BIAS oscillator.
38	1 – PB	Select signal for REC and PB heads. Normally "L" level. In play and MS modes it goes "H" and the PB head is turned ON. Switches the encode and decode of the Dolby system.

Pin No.	Name	Function
39	2 – BIAS	Same as the 1 – BIAS.
40	2 – PB	Same as the 1 – PB.
41	VR FREE	Makes the manual VR free from the electronic VR control. When other than ASES : "L".
42	FADE	Works when DISCO ASES is in cross fade. "H" : BIAS OFF, "L" : BIAS ON.
43	KEYIN0	The key IN 0 to 3 are key scanning input terminals. Normally "H" level.
44	KEYIN1	"L" : When key or switch is turned ON.
45	KEYIN2	
46	KEYIN3	
47	RESET	"H" : CPU reset, "L" : During normal operation.
48	OSC2	Connect 4.19 MHz ceramic oscillator between the OSC1 and OSC2.
49	OSC1	
50	GND	GND terminal.
51	CL1	Not used. Connected to GND.
52	CL2	Not used. NC.
53	$\overline{\text{TEST}}$	Not used. Connected to Vcc.
54	METER RESET (RECOVERY FAST)	In ASES peak search, the meter will be reset with each peak detected. "H" : Reset, "H" : Recovery first during BLE.
55	METER R	Level input for lighting the level meter. Synchronizes with the level scanning of the S0 to S4 terminals and receives "H" and "L" output from the comparator to detect level.
56	METER L	
57	$\overline{\text{X2CONT}}$	Controls the speed of the capstan motor. "L" : Double speed.
58	BLE CLK	Communication clock with the expanded IC.
59	BLE DATA	Communication data with the expanded IC.
60	S9	S0 to S9 are the FL segments, keys and level meter scanning outputs.
61	S8	
62	S7	
63	S6	
64	S5	

7. FOR CT-Z470WR/ZEBM, ZEBMXJ, CT-Z370WR/ZEBM AND ZEBMXJ TYPES

CONTRAST OF MISCELLANEOUS PARTS

NOTES:

- Parts without part number cannot be supplied.
- The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
- Parts marked by "⊙" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.

The CT-Z470WR/ZEBM, ZEBMXJ, CT-Z370WR/ZEBM and ZEBMXJ types are the same as the CT-Z570WR/ZEBM type with the exception of the following sections.

Mark	Symbol & Description	Part No.				
		CT-Z570WR/ ZEBM type	CT-Z470WR/ ZEBM type	CT-Z470WR/ ZEBMXJ type	CT-Z370WR/ ZEBM type	CT-Z370WR/ ZEBMXJ type
	MAIN unit	Non supply	Non supply	Non supply	Non supply	Non supply
	BLE unit	Non supply	Non supply	Non supply	.....	.....
	DISPLAY unit	Non supply	Non supply	Non supply	Non supply	Non supply
	OPERATE 1 unit	Non supply	Non supply	Non supply	Non supply	Non supply
	Center knob	RAC1564	RAC1565	RAC1565	RAC1565	RAC1565
	Knob (REC), (DECK I)	RAC1602	.....	.....	.....	.....
	Front panel	RAH1756	RAH1757	RAH1757	RAH1757	RAH1757
	Center panel	RAH1759	RAH1760	RAH1760	RAH1761	RAH1761
	Connector assembly 3P, (DECK I)	.....	RKP1322	RKP1322	RKP1322	RKP1322
	Connector assembly 5P, (DECK I)	RKP1323	.....	.....	.....	.....
	Door lens (L)	RLP1036	RLP1037	RLP1037	RLP1037	RLP1037
	Door lens (R)	RLP1038	RLP1039	RLP1039	RLP1039	RLP1039
	FL lens	RLP1040	RLP1041	RLP1041	RLP1041	RLP1041
	Door panel (L) assembly	RXA1418	RXA1419	RXA1419	RXA1420	RXA1420
	Door panel (R) assembly	RXA1421	RXA1421	RXA1421	.....	.....
	Caution card ("NOTE")	ARH1047	ARH1047	RRY1001	ARH1047	RRY1001
	Door panel (R)	.....	.....	.....	RAH1766	RAH1766
⊙	Mechanism unit (Deck I)	RYM1144	RYM1142	RYM1142	RYM1142	RYM1142
	Packing case	RHG1221	RHG1222	RHG1244	RHG1223	RHG1245

MECHANISM UNIT (DECK I)

- **Mechanism unit (Deck I) on the CT-Z470WR/ZEBM, ZEBMXJ, CT-Z370WR/ZEBM and ZEBMXJ types are same as mechanism unit (Deck I) on the CT-Z570WR/ZEBM type with the exception of the following section.**
- **Deck I on the CT-Z470WR/ZEBM, ZEBMXJ, CT-Z370WR/ZEBM and ZEBMXJ types has not a recording function.**

Mark	Symbol & Description	Part No.		Remarks
		CT-Z570WR	CT-Z470WR, CT-Z370WR	
	Head ass'y (R/P)	RXA1378	.....	
	HD FPC (R/P)	RNP1232	.....	
	Head R/P, E	RPB1030	.....	
	Head ass'y (PB)	.....	RXA1402	
	HD FPC (PB)	.....	RNP1235	
	Head PB	.....	RPB1031	

MAIN UNIT

Tne main units (for the CT–Z470WR/ZEBM, ZEBMXJ, CT–Z370WR/ZEBM and ZEBMXJ types) are the same as the main unit (for the CT–Z570WR/ZEBM type) with the exception of the following sections.

Mark	Symbol & Description	Part No.			Remarks
		CT–Z570WR/ ZEBM type	CT–Z470WR/ ZEBM and ZEBMXJ types	CT–Z370WR/ ZEBM and ZEBMXJ types	
	IC501	CXA1198AP	.....	.....	
	Q157, Q158	2SK373	.....	.....	
	Q159, Q160	2SC3311A	.....	.....	
	Q165	DTA124ES	.....	.....	
	Q166, Q167	DTC124ES	.....	.....	
	Q451–Q453	2SC3243	.....	.....	
	Q454, Q455	2SB1238X	.....	.....	
	Q456, Q457, Q501, Q502	2SC3311A	.....	.....	
	Q504–Q507	DTC114ES	.....	.....	
	Q511	DTA124ES	.....	.....	
	Q513, Q514	DTC114TS	.....	.....	
	Q498, Q499	DTC114ES	.....	DTC114ES	
	D151–D160, D451, D453, D454, D501, D502, D511, D915	1SS254	.....	.....	
	D916	.....	1SS254	.....	
	C175, C176	CCPUSL100J50	.....	.....	
	C451, C452	CCCSL221K500	.....	.....	
	C453	CQPA752J100	.....	.....	
	C454	CFTXA223J50	.....	.....	
	C455	CFTXA472J50	.....	.....	
	C456, C457	CFTXA332J50	.....	.....	
	C458, C459	CEAS330M16	.....	.....	
	C460	CEAS100M50	.....	.....	
	C501, C502	CKPUYB221K50	.....	.....	
	C503, C504	CEAS4R7M50	.....	.....	
	C505, C506	CEAS471M10	.....	.....	
	C507, C508	CEASR68M50	.....	.....	
	C509, C510	CEAS2R2M50	.....	.....	
	C511	CEAS331M16	.....	.....	
	C908	CKCYF103Z50	.....	.....	
	L451 Coil	RTD1043	.....	.....	
	L452 Radial inductor	LFA121K	.....	.....	
	L501, L502 Coil	RTF1004	.....	.....	
	R127	RD1/6PM223J	RD1/6PM103J	RD1/6PM103J	
	R175, R176, R459, R461, R463, R471, R505, R513, R533	RD1/6PM223J	.....	.....	
	D452	1SS252	.....	.....	
	D512	1SS254	.....	.....	
	D853	1SS254	.....	.....	
	D854	1SS254	.....	.....	
	R940, R941	RD1/6PM223J	RD1/6PM223J	.....	

Mark	Symbol & Description	Part No.			Remarks
		CT-Z570WR/ ZEBM type	CT-Z470WR/ ZEBM and ZEBMXJ types	CT-Z370WR/ ZEBM and ZEBMXJ types	
	R171-R174	RD1/6PM105J	.....	.....	
	R184, R501, R553	RD1/6PM473J	.....	.....	
	R185, R519, R520	RD1/6PM103J	.....	.....	
	R451	RD1/2LF010J	.....	.....	
	R452, R453	RD1/6PM153J	.....	.....	
	R454, R455	RCN1022	.....	.....	
	R456	RCN1025	.....	.....	
	R457	RCN1026	.....	.....	
	R458	RCN1020	.....	.....	
	R460, R462, R464, R465	RD1/6PM222J	.....	.....	
	R466-R469, R504, R511	RD1/6PM273J	.....	.....	
	R502	RD1/6PM753J	.....	.....	
	R503	RD1/6PM114J	.....	.....	
	R506, R517	RD1/6PM363J	.....	.....	
	R507	RD1/6PM184J	.....	.....	
	R508, R514, R516	RD1/6PM563J	.....	.....	
	R509	RD1/6PM124J	.....	.....	
	R510	RD1/6PM333J	.....	.....	
	R515	RD1/6PM823J	.....	.....	
	R518	RD1/6PM393J	.....	.....	
	R521, R522	RD1/6PM392J	.....	.....	
	R523, R524	RD1/6PM472J	.....	.....	
	R525, R526	RD1/6PM332J	.....	.....	
	R527, R528	RD1/6PM912J	.....	.....	
	R551, R552	RD1/6PM911J	.....	.....	
	R553	RD1/6PM473J	.....	.....	
	R925	RD1/6PM151J	.....	.....	
	R470	RD1/6PM223J	RD1/6PM103J	RD1/6PM103J	
	R498	.....	.....	RD1/6PM432J	
	R499	.....	.....	RD1/6PM103J	
	VR451, VR452	RCP1048	.....	.....	
	VR453	RCP1075	.....	.....	
	VR501, VR502	RCP1046	.....	.....	
	R211, R212	RCN1024	RCN1024	RCN1028	
	R213, R214	RD1/6PM332J	RD1/6PM332J	.....	
	R302	RD1/6PM114J	RD1/6PM114J	RD1/6PM753J	
	R308	RD1/6PM243J	RD1/6PM243J	RD1/6PM223J	
	R314	RD1/6PM753J	RD1/6PM753J	RD1/6PM563J	
	R320	RD1/6PM303J	RD1/6PM303J	RD1/6PM273J	
	R326	RD1/6PM753J	RD1/6PM753J	RD1/6PM563J	
	R332	RD1/6PM303J	RD1/6PM303J	RD1/6PM273J	
	R341, R342	RD1/6PM182J	RD1/6PM182J	.....	
	R512	RD1/6PM563J	.....	.....	
	R549	RD1/6PM243J	.....	.....	
	R814	RD1/6PM182J	RD1/6PM182J	RD1/6PM152J	

DISPLAY UNIT

The display units (for the CT-Z470WR/ZEBM, ZEBMXJ, CT-Z370WR/ZEBM and ZEBMXJ types) are the same as the display unit (for the CT-Z570WR/ZEBM type) with the exception of the following sections.

Mark	Symbol & Description	Part No.			Remarks
		CT-Z570WR/ ZEBM type	CT-Z470WR/ ZEBM and ZEBMXJ types	CT-Z370WR/ ZEBM and ZEBMXJ types	
	S1208, S1212 Switch	RSG1034	.....	.....	
	Fluorescent tube	RAW1070	RAW1070	RAW1072	

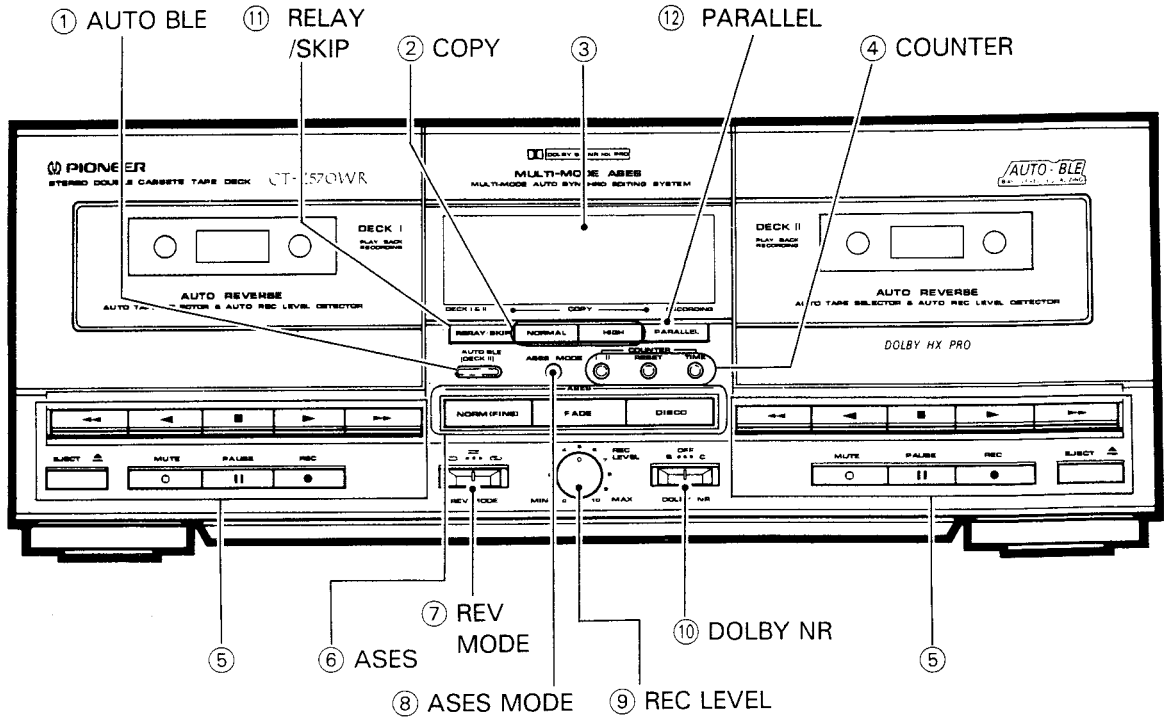
OPERATE 1 UNIT

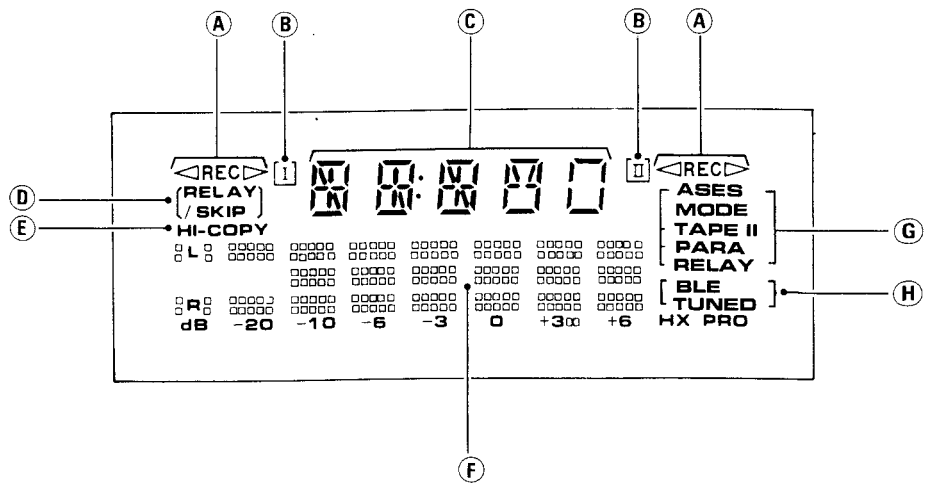
The operate 1 units (for the CT-Z470WR/ZEBM, ZEBMXJ, CT-Z370WR/ZEBM and ZEBMXJ types) are the same as the operate 1 unit (for the CT-Z570WR/ZEBM type) with the exception of the following sections.

Mark	Symbol & Description	Part No.			Remarks
		CT-Z570WR/ ZEBM type	CT-Z470WR/ ZEBM and ZEBMXJ types	CT-Z370WR/ ZEBM and ZEBMXJ types	
	S1304, S1307, S1308 Switch	RSG1033	.....	.....	

8. PANEL FACILITIES

[CT-Z570WR]





① AUTO BLE (Bias, Level, Equalizing) button

Pressing this button automatically sets the optimum recording bias, level, and equalization for your selected tape. With the CT-Z570WR, it operates only for deck II.

② COPY button

Used for tape copying.

NORMAL: Copying from the deck I tape to the deck II tape at normal recording/playback speed.

HIGH: Copying at about twice normal tape speed. (Copies can be made in about half the NORMAL time.)

③ Display section

Ⓐ Displays tape travel direction.
Ⓑ Displays the counter mode (DECK I/DECK II).
Ⓒ Displays the counter or letters.
Ⓓ Lights during RELAY/ SKIP operation.
Ⓔ Lights during tape copy.
Ⓕ Level meter.
The DOLBY mark at the +3 dB position displayed on the level meter is the Dolby NR system standard level.
Ⓖ Displays the deck's A.S.E.S. mode
Ⓗ This lights when AUTO BLE adjustment has finished.

④ COUNTER buttons

I/II : Use this to switch between deck I and deck II counter display.

RESET : Use this to reset the tape counter display to 0000.

TIME : Use this to switch between tape counter number display and display of elapsed time.

⑤ Operation buttons

⏏ EJECT : This ejects the cassette.
▷ (PLAY) : For playing back a tape in the forward mode.
◁ (PLAY) : For playing back a tape in the reverse mode.
▶▶ (FAST) : Fast forward in forward mode, rewind in reverse mode. Music search (MS) starts if this is pressed during playback.
◀◀ (FAST) : Rewind in forward mode, fast forward in reverse mode. Music search (MS) starts if this is pressed during playback.
□ (STOP) : For stopping the tape.
O MUTE : Used for creating a blank space between songs.
II PAUSE : Temporarily stops tape travel.
● REC : To set to recording standby mode. Recording begins when you press the play button (◁ or ▷) or PAUSE button.

On DECK I of the CT-Z470WR, there are no MUTE (O), PAUSE (II), or REC (●) buttons.

⑥ A.S.E.S. buttons

These can be used when recording from a PD-Z570T or PD-Z970M CD player.
Use this to select the desired type of editing you want A.S.E.S. to perform. The A.S.E.S.(Auto Synchro Editing System) function automatically edits when recording from a CD to a tape.
NORM (FINE): Tracks are recorded in sequence from the CD. If COMPU PGM is performed first on the CD player, FINE mode operates.
FADE: This automatically fades out at the end of a tape during recording.
DISCO: This cross-fades between songs during recording.

NOTE:
The NORM (FINE) and FADE modes provide a blank space of about five seconds between songs.

⑦ REV (reverse) MODE switch

Use this to select tape travel direction during play and record.

⇉ : One-sided play and record.
⇄ : This enables auto reverse recording and auto reverse play. If you start with the tape running in reverse, only reverse play and recording are possible.
↻ : This enables auto reverse recording and auto repeat play of up to 16 times.
The tape does not reverse if recording starts from the (◁) direction.

⑧ ASES MODE button (CT-Z570WR only)

Use this to select A.S.E.S. mode RELAY, PARALLEL, and TAPE II.

⑨ REC LEVEL control

Use to adjust the recording level. It adjusts the input signal level.

⑩ DOLBY* NR switch

Set this switch to B or C for recording with the built-in Dolby Noise Reduction system and for playback of tapes which have been recorded using the Dolby Noise Reduction system. For other tapes, set the DOLBY NR switch to OFF.

NOTE:
When playing back Dolby NR-encoded tapes, always set this switch to the same position (B-type or C-type) used for recording.

*

- *Dolby noise reduction and HX Pro headroom extension manufactured under license from Dolby Laboratories Licensing Corporation. HX Pro originated by Bang & Olufsen.*
- *"DOLBY", the double-D symbol DOLBY and "HX PRO" are trademarks of Dolby Laboratories Licensing Corporation.*

⑪ RELAY/SKIP button

Use this when you want to perform relay play from deck I to deck II, or from deck II to deck I. During relay play, if there is no sound for more than about 15 seconds, the SKIP function operates to automatically fast forward to the beginning of the next song.

Also use to perform relay recording from deck I to deck II with the CT-Z570WR.

⑫ PARALLEL button (CT-Z570WR only)

Use this when you want to start simultaneous recording from the same source on deck I and deck II.

9. SPECIFICATIONS

Cassette Deck: CT-Z570WR

Systems ..... 4 track, 2-channel stereo
Heads ..... "Hard Permalloy" recording/playback head x 2
"Ferrite" erasing head x 2
Motor ..... DC servo capstan motor x 2
DC reel motor x 2
Wow and Flutter ..... No more than ±0.16 % (DIN)
Fast Winding Time ..... Approximately 90 seconds (C-60 tape)
Frequency Response (– 20 dB recording):
Normal tape ..... 25 Hz to 16,000 Hz ±6 dB
CrO_2 tape ..... 25 Hz to 16,000 Hz ±6 dB
Metal tape ..... 25 Hz to 17,000 Hz ±6 dB
Signal-to-Noise ratio
Dolby NR OFF ..... More than 58 dB
Noise Reduction Effect
Dolby B type NR ON ..... More than 10 dB (at 5 kHz)
Dolby C type NR ON ..... More than 19 dB (at 5 kHz)
Harmonic Distortion ..... No more than 1.0% (0 dB)

Miscellaneous
Dimensions ..... 360 (W) x 135.5 (H) x 325 (D) mm
Weight (without package) ..... 4.2 kg

Cassette Deck: CT-Z470WR

Systems ..... 4 track, 2-channel stereo
Heads ..... "Hard Permalloy" playback head x 1
"Hard Permalloy" recording/playback head x 1
"Ferrite" erasing head x 1
Motor ..... DC servo capstan motor x 2
DC reel motor x 2
Wow and flutter ..... No more than ±0.16 % (DIN)
Fast winding Time ..... Approximately 90 seconds (C-60 tape)

Frequency Response
– 20 dB recording:
Normal tape ..... 25 Hz to 16,000 Hz ±6 dB
CrO_2 tape ..... 25 Hz to 16,000 Hz ±6 dB
Metal tape ..... 25 Hz to 17,000 Hz ±6 dB
Signal-to-Noise ratio
Dolby NR OFF ..... More than 58 dB
Noise Reduction Effect
Dolby B type NR ON ..... More than 10 dB (at 5 kHz)
Dolby C type NR ON ..... More than 19 dB (at 5 kHz)
Harmonic Distortion ..... No more than 1.0 % (0 dB)

Miscellaneous
Dimensions ..... 360 (W) x 135.5 (H) x 325 (D) mm
Weight (without package) ..... 4.2 kg

Piastra a cassette: CT-Z370WR

Sistemi ..... 4 piste, 2 canali stereo
Testine ..... Testina di riproduzione in "Hard Permalloy" x 1
Testina di registrazione/riproduzione in "Hard Permalloy" x 1
Testina di cancellazione in "Ferrite" x 1
Motore ..... servomotore CC a due velocità x 2
Rullini in CC x 2
Wow & flutter ..... Non superiore a ±0,17% (DIN)
Tempo di avvolgimento rapido ..... circa 90 sec. (nastri C-60)
Risposta di frequenza (registrazione a – 20 dB):
Nastri normali ..... da 25 Hz a 16.000 Hz ±6 dB
Nastri al cromo ..... da 25 Hz a 16.000 Hz ±6 dB
Nastri al metallo ..... da 25 Hz a 17.000 Hz ±6 dB
Rapporto segnale/rumore
Dolby NR su OFF ..... 58 dB
Effetto riduzione rumore
Dolby NR tipo B su ON ..... Superiore a 10 dB (a 5 kHz)
Dolby NR tipo C su ON ..... Superiore a 19 dB (a 5 kHz)
Distorsione armonica ..... Nin superiore all' 1,0% (0 dB)

Generale
Dimensioni ..... 360 (L) x 135,5 (H) x 325 (P) mm
Peso (senza imballaggio) ..... 4,2 kg