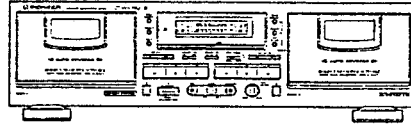


Service Manual

PIONEER®
The Art of Entertainment



• The above illustration shows CT-W703RS.

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RRV1132

The chapter 1 of this Service Manual will not be reprinted. On your additional orders, we may supply only the chapter 2. For the chapter 1, please make copies and attach to the chapter 2 at your side if necessary.

STEREO DOUBLE CASSETTE DECK

CT-W703RS

THIS MANUAL IS APPLICABLE TO THE FOLLOWING MODEL(S) AND TYPE(S).

Type	Model	Power Requirement	The voltage can be converted by the following method.
	CT-W703RS		
KUXJ	○	AC120V	_____
KCXJ	○	AC120V	_____
HEMXJ	○	AC220 - 230V	AC230 - 240V, *
HEM	○	AC220 - 230V	AC230 - 240V, *

* : Alter the wiring of the Power-supply block at the primary winding of power transformer referring to the "Line Voltage Selection" described in Service Manual.

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CHAPTER 1

1.1 SAFETY INFORMATION

This service manual is intended for qualified service technicians; it is not meant for the casual do-it-yourselfer. Qualified technicians have the necessary test equipment and tools, and have been trained to properly and safely repair complex products such as those covered by this manual.

Improperly performed repairs can adversely affect the safety and reliability of the product and may void the warranty. If you are not qualified to perform the repair of this product properly and safely, you should not risk trying to do so and refer the repair to a qualified service technician.



WARNING

Lead in solder used in this product is listed by the California Health and Welfare agency as a known reproductive toxicant which may cause birth defects or other reproductive harm (California Health & Safety Code, Section 25249.5).

When servicing or handling circuit boards and other components which contain lead in solder, avoid unprotected skin contact with the solder. Also, when soldering do not inhale any smoke or fumes produced.



NOTICE

(FOR CANADIAN MODEL ONLY)

Fuse symbols  (fast operating fuse) and/or  (slow operating fuse) on PCB indicate that replacement parts must be of identical designation.

REMARQUE

(POUR MODÈLE CANADIEN SEULEMENT)

Les symboles de fusible  (fusible de type rapide) et/ou  (fusible de type lent) sur CCI indiquent que les pièces de remplacement doivent avoir la même désignation.

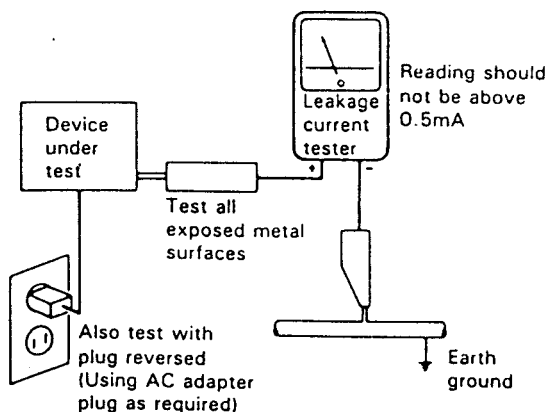
(FOR USA MODEL ONLY)

1. SAFETY PRECAUTIONS

The following check should be performed for the continued protection of the customer and service technician.

LEAKAGE CURRENT CHECK

Measure leakage current to a known earth ground (water pipe, conduit, etc.) by connecting a leakage current tester such as Simpson Model 229-2 or equivalent between the earth ground and all exposed metal parts of the appliance (input/output terminals, screwheads, metal overlays, control shaft, etc.). Plug the AC line cord of the appliance directly into a 120V AC 60Hz outlet and turn the AC power switch on. Any current measured must not exceed 0.5mA.



AC Leakage Test

ANY MEASUREMENTS NOT WITHIN THE LIMITS OUTLINED ABOVE ARE INDICATIVE OF A POTENTIAL SHOCK HAZARD AND MUST BE CORRECTED BEFORE RETURNING THE APPLIANCE TO THE CUSTOMER.

2. PRODUCT SAFETY NOTICE

Many electrical and mechanical parts in the appliance have special safety related characteristics. These are often not evident from visual inspection nor the protection afforded by them necessarily can be obtained by using replacement components rated for voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in this Service Manual.

Electrical components having such features are identified by marking with a Δ on the schematics and on the parts list in this Service Manual.

The use of a substitute replacement component which does not have the same safety characteristics as the PIONEER recommended replacement one, shown in the parts list in this Service Manual, may create shock, fire, or other hazards.

Product Safety is continuously under review and new instructions are issued from time to time. For the latest information, always consult the current PIONEER Service Manual. A subscription to, or additional copies of, PIONEER Service Manual may be obtained at a nominal charge from PIONEER.

1.2 SPECIFICATIONS

System 4-track, 2-channel stereo

Heads

CT-W803RS/CT-W703RS "Hard Permalloy"
recording/playback head × 2
"Ferrite" erasing head × 2

CT-W603RS..... "Hard Permalloy" recording/playback head × 1
"Hard Permalloy" playback head × 1
"Ferrite" erasing head × 1

Motor..... DC servo motor × 2

Wow and Flutter..... 0.1% (WRMS)

Fast Winding Time Approximately 100 seconds
(C-60 tape)

Frequency Response

–20 dB recording:

CT-W803RS/CT-W703RS

TYPE IV (Metal) tape.....20 to 20,000 Hz

TYPE II (High/CrO₂) tape20 to 19,000 Hz

TYPE I (Normal) tape20 to 18,000 Hz

CT-W603RS

TYPE IV (Metal) tape.....20 to 16,500 Hz

TYPE II (High/CrO₂) tape20 to 16,000 Hz

TYPE I (Normal) tape20 to 16,000 Hz

Signal-to-Noise Ratio

Dolby NR OFF..... More than 57 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)

Dolby S-type NR ON..... More than 22 dB (at 5 kHz)

Harmonic Distortion.....No more than 0.8%
(at –4 dB: 160 nwb/m)

Input (Sensitivity)

LINE (INPUT) 100 mV (Input impedance 68 kΩ)


MIC0.63 mV
(CT-W803RS/CT-W703RS: U.S. and Canadian model only)

Output (Reference level)

LINE (OUTPUT)0.5 V (Output impedance 1.9 kΩ)

Headphones0.63 mW (Load impedance 8 Ω)

Subfunctions

- Super AUTO BLE tuning system (CT-W803RS/CT-W703RS)
- AUTO BLE tuning system (CT-W603RS)
- Automatic reverse
- Double recording/playback reverse (CT-W803RS/CT-W703RS)
- DOLBY HX PRO recording function
- DOLBY B/C/S type NR
- Relay recording (CT-W803RS/CT-W703RS)
- Parallel recording (CT-W803RS only)
- Music search over ±15 selections
- Synchronized copy start
- High-speed and normal-speed copy (Deck I – Deck II)
- Relay playback/blank skip
- CD•DECK SYNCHRO recording capability
- Peak level meter with peak-hold function
- MPX FILTER (Interlocks with DOLBY NR switch)
(CT-W803RS/CT-W703RS)
- Automatic space recording mute
- Automatic tape selector
-  System remote control available
(CT-W703RS/CT-W603RS only)
- 2-mode electronic 4-digit twin tape counter
- Microphone jack
(CT-W803RS/CT-W703RS: U.S. and Canadian model only)
- Headphone jack
- Wireless remote control operation
(CT-W803RS: UK model only)
- Flex system

Miscellaneous

Power Requirements

U.S., Canadian models..... AC 120 V, 60 Hz

U.K. modelAC 230–240 Volts~, 50/60 Hz

Power Consumption

CT-W803RS.....24W

CT-W703RS/CT-W603RS19W

Dimensions 420(W) × 125(H) × 250(D) mm
16-1/2 (W)×4-7/8 (H)×9-13/16 (D) in.

Weight (without package)


CT-W803RS/CT-W703RS 4.2 kg (9 lb 4 oz.)

CT-W603RS..... 4.1 kg (9 lb 2 oz.)

Accessories

Operating instructions 1

Connection cord with pin plugs 2

 Remote control cord (CT-W703RS/CT-W603RS only) 1

CD•DECK SYNCHRO control cord 1

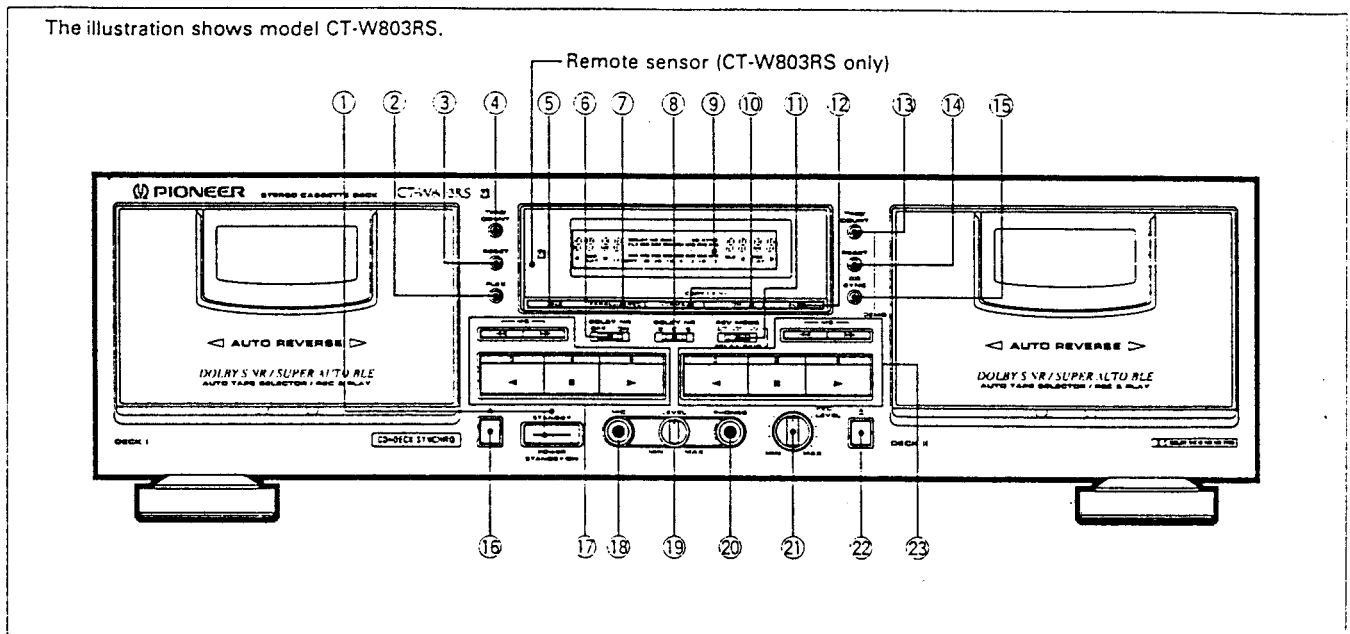
Remote control unit (CT-W803RS: UK model only)..... 1

Dry cell batteries (size AAA IEC R03/UM-4)
(CT-W803RS: UK model only) 2

NOTE:

Specifications and design subject to possible modifications without notice, due to improvements.

1.3 PANEL FACILITIES



① POWER STANDBY/ON switch/indicator

The POWER switch activates the secondary transformer only. Even when the switch is in the STANDBY position, there will be a power flow to the deck's circuits as long as the power cord is connected to a power outlet.

② FLEX button

③ DECK I counter reset button (RESET)

④ DECK I counter mode button (TIME/COUNT)

⑤ DECK I BLE button (Except for CT-W603RS)

⑥ DOLBY NR ON/OFF switch

⑦ (CT-W803RS only) Parallel recording button (PARALLEL REC)


(CT-W603RS only) Synchro copy button (COPY I ▶ II)

Normal: Normal speed copy

⑧ DOLBY* NR switch (B/C/S)

*

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  and "HX PRO" are trademarks of Dolby Laboratories Licensing Corporation.

⑨ Function display

⑩ (CT-W803RS/CT-W703RS) Synchro copy buttons (COPY I ▶ II)

NORMAL : Normal speed copy

HIGH : Double speed copy

(CT-W603RS only) Synchro copy button (COPY I ▶ II)

HIGH: Double speed copy

DECK II BLE button

⑪ Reverse mode switch (REV MODE RELAY/SKIP)

⑫ DECK II BLE button (CT-W803RS/CT-W703RS)

⑬ DECK II counter mode button (TIME/COUNT)

⑭ DECK II counter reset button (RESET)

⑮ CD-DECK SYNCHRO recording button (CD SYNC)

⑯ DECK I eject button (⏏)

• If the tape is moving (recording, playback, tape winding, etc.), press the stop (■) button before pressing this button.

NOTE:

If the power is turned off while the tape is moving, the cassette door may remain locked. In this case, turn the power on before pressing the eject (⏏) button.

⑰ Deck I operation buttons

◀ : Reverse playback

▶ : Forward playback

◀◀/MS : Fast reverse/music search

■ : Stop

▶▶/MS : Fast forward/music search

[Except for CT-W603RS]

○ : Recording mute

⏏ : Pause

● : Recording

⑱ Microphone jack (MIC) (CT-W803RS/CT-W703RS (U.S. and Canadian models only))

⑲ MIC LEVEL control (CT-W803RS/CT-W703RS (U.S. and Canadian models only))

⑳ Headphones jack (PHONES)

㉑ Recording level control (REC LEVEL)

㉒ DECK II eject button (⏏)

• If the tape is moving (recording, playback, tape winding, etc.), press the stop (■) button before pressing this button.

NOTE:

If the power is turned off while the tape is moving, the cassette door may remain locked. In this case, turn the power on before pressing the eject (⏏) button.

㉓ DECK II operation buttons

◀ : Reverse playback

▶ : Forward playback

◀◀/MS : Fast reverse/music search

■ : Stop

▶▶/MS : Fast forward/music search

○ : Recording mute

⏏ : Pause

● : Recording

1.4 TEST MODE

Entering the Test Mode

To enter the test mode, set both DECK I and DECK II into the STOP mode and press the TIME/COUNT key of DECK I, RESET key of DECK I and PAUSE key of DECK II all together.

To change the MODE NO. , press the STOP key so that the MODE NO. becomes 0 and enter other modes.

Exiting the Test Mode

To exit the test mode, press the RESET key of DECK I or turn off the power.

MODE NO.	DECK I Display	DECK II Display	Key Input	Adjustment and Check
0	—	0	STOP FWD REV FF REW REC PAUSE MUTE X1COPY X2COPY	<ul style="list-style-type: none"> ● The mechanism will operate even in the "no-half" state only for this mode. ● Tape speed adjustment mode <ul style="list-style-type: none"> • During play (except during the assist), the speed can be doubled by pressing the FAST key (FF or REW key of DECK I or II). • During double speed play, the play can be returned to normal speed by pressing the FWD or REV key. ● Auto-stop check <ul style="list-style-type: none"> • The RELAY mode will be turned on forcibly. But the REC is not relayed from DECK II to DECK I. • Auto stop is carried out at tape end for one second only in this mode. (Usually four seconds.) • Reverse is carried out as normally, but if the reverse is carried out in double speed, the tape will be played at constant speed.

CD SYNCHRO, SW check Modes

MODE NO.	Deck I Display	Deck II Display	Key Input	LINE MUTE	REC MUTE	BIAS	Adjustment and Check
1	—	1	CD SYNC	ON	ON	OFF	<ul style="list-style-type: none"> ● CD SYNCHRO Check If a cord whose input/output is short-circuited is connected, "CD SYNC" will light up when a key is input.
1	—	1	1-CTR MODE	ON	ON	OFF	<ul style="list-style-type: none"> ● SW Check (NORMAL) <ul style="list-style-type: none"> • When there is no-half, the corresponding counter will display "HALF". • Mistaken Erasure Detection Check When FWD recording is possible : "▶" lights up When REV recording is possible : "◀" lights up • Timer SW Check • Reverse SW Check ☐ : "I" ☐ (REPEAT) : "II" • Tape Detection Check Deck II Check NORMAL : Lch +3dB lights up Rch +3dB lights up CR02 : Lch +3dB goes off Rch +3dB lights up METAL : Lch +3dB goes off Rch +3dB goes off DECK I Check NORMAL : Lch -20dB lights up Rch -20dB lights up CR02 : Lch -20dB goes off Rch -20dB lights up METAL : Lch -20dB goes off Rch -20dB goes off

BLE Adjustment Mode

● Entering the BLE Adjustment Mode

Set the MODE NO. to 0 and press the BLE keys of DECK I and DECK II. Both decks will set into the BLE adjustment mode in order.

● Exiting the BLE Adjustment Mode

To exit the BLE adjustment mode, press the STOP key or turn off the power.

MODE NO.	Deck I Display	Deck II Display	Key Input	LINE MUTE	REC MUTE	BIAS	Adjustment and Check
2	—	2 00	2-BLE	ON	ON	OFF	—————
	400	2 01	2-BLE	OFF	OFF	OFF	<ul style="list-style-type: none"> • For AUTO BLE 400Hz OSC output level adjustment mode □□□■□□ ■□□□■□ Adjust so that the meter becomes as shown in the above diagram. (LINE OUT output = -26dBV)
	10K	2 02	2-BLE	OFF	OFF	OFF	<ul style="list-style-type: none"> • For AUTO BLE 10kHz OSC output level adjustment mode □□□■□□ ■□□□■□ Adjust so that the meter becomes as shown in the above diagram. (LINE OUT output = -26dBV)
	3K	2 03	2-BLE	ON	ON	OFF	<ul style="list-style-type: none"> • For AUTO BLE 3kHz OSC output level adjustment mode Not used (Used only for 3 POINT BLE)
	BIAS	2 04	2-BLE	ON	ON	ON	DECK II BIAS SWEEP mode
	LEVL	2 05	2-BLE	OFF	OFF	OFF	DECK II LEVEL SWEEP mode
	EQ	2 06	2-BLE	OFF	OFF	OFF	DECK II EQ SWEEP mode
	400	2 10	1-BLE	OFF	OFF	OFF	<ul style="list-style-type: none"> • For AUTO BLE 400Hz OSC output level adjustment mode For adjustment the same as DECK II
	10K	2 20	1-BLE	OFF	OFF	OFF	<ul style="list-style-type: none"> • For AUTO BLE 10kHz OSC output level adjustment mode For adjustment the same as DECK II
	3K	2 30	1-BLE	ON	ON	OFF	<ul style="list-style-type: none"> • For AUTO BLE 3kHz OSC output level adjustment mode Not used (Used only for 3 POINT BLE)
	BIAS	2 40	1-BLE	ON	ON	ON	DECK I BIAS SWEEP mode
	LEVL	2 50	1-BLE	OFF	OFF	OFF	DECK I LEVEL SWEEP mode
	EQ	2 60	1-BLE	OFF	OFF	OFF	DECK I EQ SWEEP mode

1.5 ADJUSTMENTS

1. MECHANICAL ADJUSTMENT

1.1 Door Damping Check and Adjustment

Set the door spring of the DECK I side to position (A) as shown in Fig. 1. Then, erect the front panel assembly vertically.

Open the doors of DECK I and DECK II at the same time. At this point, confirm that the difference between the door completely opened and the other door is within 15mm. If this standard is not satisfied install the door spring of DECK I at another position and adjust as follows:

- When the door of DECK I opens later than that of DECK II :
Change the door spring of DECK II from A to B.
- When the door of DECK I opens faster than that of DECK II :
Change the door spring of DECK I from A to B.

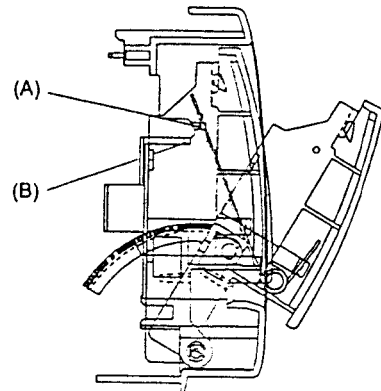


Fig. 1

1.2 Tape Speed

- Perform this adjustment in the test mode.
- TEST mode setting.

1. Press the TIME/COUNT and RESET keys of DECK I together with the PAUSE key of DECK II.
2. The speed becomes normal when the PLAY key is pressed, and double when the FF key is pressed.
3. To cancel the TEST mode, press the RESET key of DECK I.

1. Tape Speed Adjustment and Check						
No.	Deck	Mode	Test tape	Adjusting points	Specifications/Ratings (playback frequency)	Remarks
1	I	Double speed PLAY	STD-301 (3 kHz)	check	6000 Hz \pm 600 Hz	
2	II			VR851	Within \pm 10 Hz against the measurement value of the step 1 (deck I)	
3	I	NORMAL speed PLAY		VR802	2980 Hz \pm 5 Hz	
4	II			VR852	Within \pm 5 Hz against the measurement value of the step 3 (deck I)	

MAIN UNIT

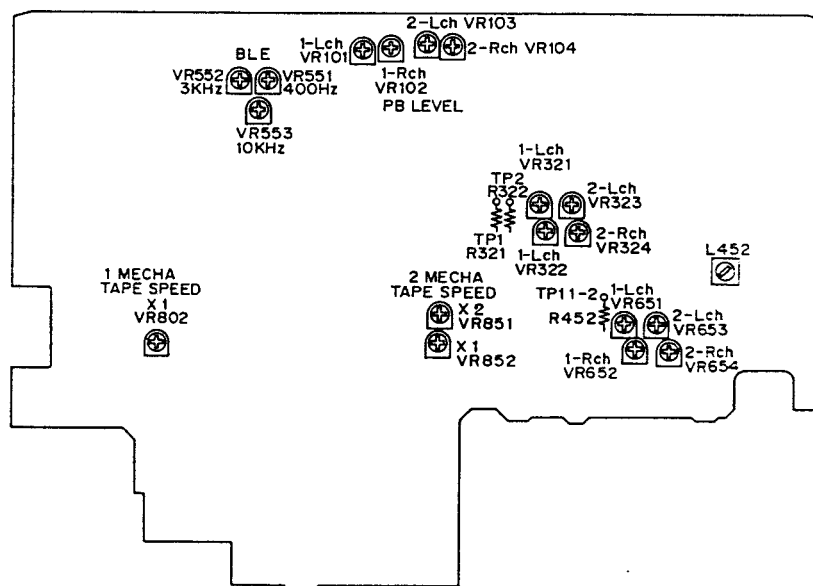


Fig. 2 Adjusting points

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 0 dBV=1 Vrms.
5. Connect a 10 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-331E : Playback adjustments
 (See Fig. 3)
- STD-631 or STD-632 : NORMAL blank tape
 STD-621 : CrO₂ blank tape
 STD-610 : METAL blank tape

* As the reference recording level is 250 nwb/m for STD-331E, the recording level will be higher by 4 dB for STD-331B (160 nwb/m). When adjusting, pay carefull attention to the type of tape used.

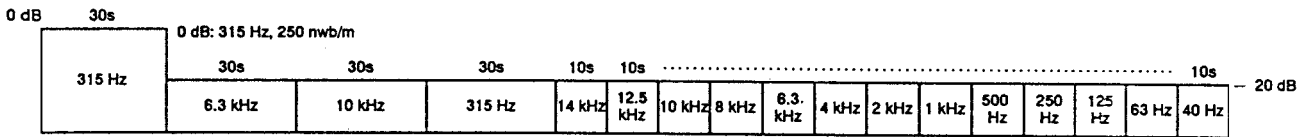


Fig. 3 Constants of the test tape STD-331E

List of Adjustments

Playback sections

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

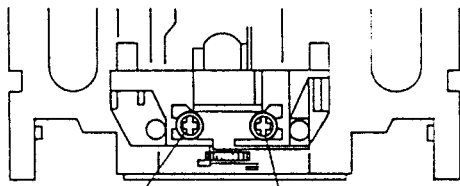
Recording sections

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

NOTE: This unit has an automatic tape selection feature.

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 and "HX PRO" are trademarks of Dolby Laboratories Licensing Corporation.

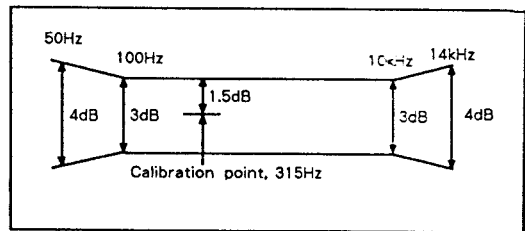
DECK I and II



REV azimuth adjustment screw FWD azimuth adjustment screw

Fig. 4 Head azimuth adjustment

PLAY BACK



RECORDING

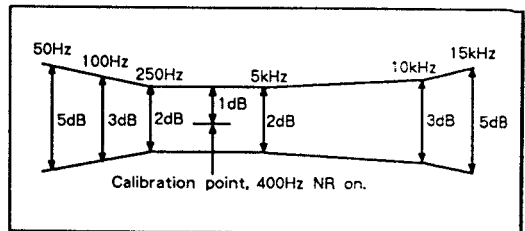


Fig. 5 Frequency response zone

PLAYBACK SECTION

1. Head Azimuth Adjustment

- Turn VR101, 102 (Deck I) or VR103, 104 (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-331E test tape.	Head azimuth adjustment screw. (See Fig. 4)	LINE OUT	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-331E test tape.	Deck II	VR 103 (Lch) VR 104 (Rch)	TP. 1 (Lch) TP. 2 (Rch)	−8.7 dBV	
			Deck I	VR 101 (Lch) VR 102 (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-810 test tape with no input signal.	Deck II	L 452	TP. 11 - 2	105 kHz \pm 0.3kHz	If the values on the left cannot be attained by adjusting, the value should be below 105 ± 0.3 kHz.

2. Recording Bias Adjustment

- 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.	REC	Record the 315 Hz and 6.3 kHz signals at −28 dBV input level and playback. (STD-831 or STD-832)	Deck I	VR851(Lch) VR852(Rch)	LINE OUT	Repeatedly record, playback and adjust so that the playback level of 6.3 kHz signal becomes 0 dB \pm 0.5 dB when compared with the 315 Hz signal.	
			Deck II	VR853(Lch) VR854(Rch)			

3. Recording Level Adjustment

No.	Mode	Input signal & test tape	Adjustment location	Measuring location	Adjustment value	Remarks	
1.	REC PAUSE	Apply a 315 Hz/0 dBV signal to the line input terminals, load the STD-831 or STD-832 test tape.	REC level control volume		TP. 1 (Lch) TP. 2 (Rch)	−11.2 dBV	
2.	REC/PLAY	Record the above signal onto the STD-831 or STD-832 test tape, and playback.	Deck I	VR321 (Lch) VR322 (Rch)	TP. 1 (Lch) TP. 2 (Rch)	Repeatedly record, playback and adjust so that the playback signal level becomes − 11.2 dBV.	
			Deck II	VR323 (Lch) VR324 (Rch)			
3.	REC/PLAY	Record the above signal onto the STD-821 test tape, and playback.	Check		TP. 1 (Lch) TP. 2 (Rch)	−11.2 dBV \pm 1.5dB	
4.	REC/PLAY	Record the above signal onto the STD-810 test tape, and playback.	Check		TP. 1 (Lch) TP. 2 (Rch)	−11.2 dBV \pm 1.5dB	

4. Level Meter Check

No.	Mode	Input signal & test tape	Adjustment location	Measuring location	Adjustment value	Remarks
1.	REC PAUSE	Apply a 315 Hz/-6 dBV (500 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 $-7.2 \text{ dBV} \pm 2 \text{ dB}$ of the signal output level.	

5. AUTO BLE Adjustment (Deck II only)

- BLE adjustment should be performed after all other adjustments are completed.
- This adjustment should be performed in the test mode.
- Entering the test mode.
For details of how to enter the test mode, refer to the "Mechanical Adjustment" section (Page 1-7)
- Refer to Page 1-8 "BLE Adjustment Mode".

No.	Mode	Input signal & test tape	Adjustment location	Measuring location	Adjustment value	Remarks
1.		Set to test mode.	—	—	—	
2.		Press the BLE key on the front panel.	Level meter (R channel)	VR551	Adjust so that -3 dB on the level meter turn on.	400 Hz adjustment
3.		Press the BLE key on the front panel.		VR553		10 kHz adjustment
4.		Press the BLE key on the front panel.		VR552		3 kHz adjustment

Reference: The output of LINE OUT after completing the adjustments for 400 Hz, 10 kHz, 3 kHz becomes $-23 \text{ dBV} \pm 1 \text{ dB}$.

1.6 PARTS LIST FOR EXPLODED VIEWS AND PACKING

NOTES:

- Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.
- The Δ 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.

1. EXTERIOR AND PACKING

■ CONTRAST OF KUXJ, KCXJ, HEMXJ AND HEM TYPES

KUXJ, KCXJ, HEMXJ and HEM have the same construction except for the following:

Mark	No.	Symbol & Description	Part No.				Remarks
			KUXJ type	KCXJ type	HEMXJ type	HEM type	
NSP Δ Δ Δ Δ Δ	1	Main Unit	RWZ3172	RWZ3172	RWZ3157	RWZ3157	
	2	Sub Unit	RWZ3173	RWZ3173	RWZ3158	RWZ3158	
	4	Transformer 2 Unit	RWZ3175	RWZ3175	RWZ3160	RWZ3160	
	5	Strain Relief	CM - 22C	CM - 22C	CM - 22B	CM - 22B	
	6	Fuse (1.5A)	REK1059	REK1059	Not Used	Not Used	
	6	Fuse (T1.6A)	Not Used	Not Used	REK1024	REK1024	
	7	AC Power Cord	PDG1015	PDG1015	PDG1003	PDG1003	
	9	Power Transformer (AC120V)	RTT1223	RTT1223	Not Used	Not Used	
	9	Power Transformer (AC220 - 230V/ 230 - 240V)	Not Used	Not Used	RTT1276	RTT1276	
	12	Rubber Sheet	AEB1111	AEB1111	Not Used	Not Used	
NSP NSP NSP	13	Foot Assy	AEC1531	AEC1531	Not Used	Not Used	
	31	FL Lens	RAH2374	RAH2374	RAH2375	RAH2375	
	32	Front Panel	RAH2357	RAH2357	RAH2358	RAH2475	
	38	Rear Panel	RNA1772	RNA1773	RNA1774	RNA1851	
	40	65 Label	ORW1069	Not Used	Not Used	Not Used	
	49	Fuse Caution Label	RRW - 111	RRW - 111	Not Used	Not Used	
	51	CSA Pass Label	Not Used	RRW - 021	Not Used	Not Used	
	53	Main Chassis	RNB1091	RNB1091	RNB1091	RNB1089	
NSP NSP NSP	58	Knob (Headphone)	VNK1262	VNK1262	Not Used	Not Used	
	59	Insulator	Not Used	Not Used	PNW1912	PNW1912	
	65	Control Cord	RDE1030	RDE1030	RDE1030	RDE1038	
	66	Operating Instructions (English)	RRB1143	Not Used	Not Used	Not Used	
	66	Operating Instructions (English/French)	Not Used	RRE1095	Not Used	Not Used	
	66	Operating Instructions (English/French/German/Italian/ Dutch/Swedish/Spanish/Portuguese)	Not Used	Not Used	RRE1090	RRE1090	
	69	Packing Case	RHG1521	RHG1552	RHG1522	RHG1594	
	70	Connection Cord with Mini Plug	PDE - 319	PDE - 319	PDE - 319	PDE1247	
	72	Sheet	Z23 - 007	Z23 - 007	Z23 - 007	RHX - 034	

■ PARTS LIST FOR KUXJ TYPE

Mark	No.	Description	Part No.	Mark	No.	Description	Part No.
NSP Δ	1	Main Unit	RWZ3172	NSP Δ Δ Δ Δ	11	2 Mechanism Unit	RYM1234
	2	Sub Unit	RWZ3173		12	Rubber Sheet	AEB1111
	3	Dolby S Unit	RWX1101		13	Foot Assy	AEC1531
	4	Transformer 2 Unit	RWZ3175		14	Eject Spring L	RBH1374
	5	Strain Relief	CM - 22C		15	Door Spring L	RBH1304
Δ Δ Δ Δ	6	Fuse (1.5A)	REK1059	16	Door Spring R	RBH1304	
	7	AC Power Cord	PDG1015	17	Half Pressure Spring	RBK1004	
	8	Lead Card 3P	RDD1299	18	Eject Spring R	RBH1384	
	9	Power Transformer	RTT1223	19	Damper Assy	REC1004	
	10	1 Mechanism Unit	RYM1234	20	Knob Spacer	REC1194	

2. 1 AND 2 MECHANISM UNIT

Mark	No.	Description	Part No.	Mark	No.	Description	Part No.
	21	Eject Arm L	RNE1763		1	PLUNGER	RLA1288
	22	Eject Arm R	RNE1764		2	.....
	23	Eject Lever L	RNK2045		3	PUSH SWITCH	RSG1018
	24	Cord Clamper	RNH - 184		4	SPLF	RSN1023
	25	Balance Knob	RAC1705		5	PHOTO - TRANSISTOR	SPI33534FG
	26	Eject Konb L	RAC1881		6	MTR MAIN BLK	RXM1075
	27	Eject Konb R	RAC1882		7	SOLENOID BLK	RXP1021
	28	Power Knob	RAC1883		8	SPRING INTERLOCK R	RBH1386
	29	Control Knob	RAC1876		9	ARM INTERLOCK R	RNE1781
	30	REC Knob A	RAC1777		10	CHASSIS BASE BLK	RXA1626
	31	FL Lens	RAH2374		11	SPRING BRAKE	RBH1387
	32	Front Panel	RAH2357		12	MAIN BELT	REB1157
	33	Door Pocket L	RAH2367		13	F/R BELT	REB1254
	34	Door Pocket R	RAH2369		14	LEVER BRAKE	RNK2071
	35	Door Lens	RAH2435		15	F/W ASSY	RXA1428
	36	Name Plate	RAM1007		16	PINCH ROLLER BLK R	RXA1628
	37	Remain Display Paper	REE - 113		17	PINCH ROLLER BLK L	RXA1629
	38	Rear Panel	RNA1772		18	CLUTCH BLK ASSY	RXA1631
	39	LED Lens	PNW2019		19	SCREW	RBA1113
	40	65 Label	CRW1069		20	WASHER 2.1 x 0.25T	RBF1038
	41	Slide Knob	REA1078		21	SPRING REEL (L)	RBH1388
	42	Bonnet	REA1077		22	SPRING REEL (R)	RBH1389
NSP	43	Spacer	REB1267		23	CAM SPRING	RBH1393
	44	.....			24	SPACER	RLA1286
	45	.....			25	LEVER F/R	RNE1782
NSP	46	Eject Collar	RLA1283		26	REEL FEATHER	RNK2072
NSP	47	Arm Collar	RLA1290		27	REEL BASE	RNK2073
NSP	48	Earth Lead Unit	XDF - 504		28	PLAY GEAR (A)	RNK2074
NSP	49	Fuse Caution Label	RRW - 111		29	FF GEAR (A)	RNK2075
NSP	50	Transformer 1 PCB	RNZ2592		30	F/R PULLEY	RNK2076
	51	.....			31	CLUTCH BLK ASSY	RXA1632
NSP	52	PCB Spacer	PNY - 404		32	WASHER	WA17D040D025
NSP	53	Main Chassis	RNB1091		33	WASHER	WA23F060M040
	54	Connector Assy 5P	RKP1676		34	SCREW	PCZ20P040FMC
	55	Connector Assy 5P	RKP1677		35	SCREW	RBA1077
NSP	56	Binder	Z09 - 057		36	SPRING HB	RBH1390
	57	Eject Lever R	RNK2046		37	HEAD BASE	RNE1783
	58	Knob (Headphone)	VNK1262		38	.....
	59	.....			39	HD PCB 5P	RXA1635
	60	Screw	EBZ30P080FZK		40	SCREW	RBA1113
	61	Screw	IEZ30P150FCU		41	WASHER 2.0 x 0.3	RBE1009
	62	Screw	BCZ26P050FMC		42	SPRING ARM PLAY	RBH1392
	63	Screw	BSZ26P120FMC		43	SPACER	RLA1286
	64	Screw	EBZ30P060FMC		44	PLATE SLIDE	RNE1785
	65	Control Cord	RDE1030		45	CAM GEAR	RNK2078
	66	Operating Instructions (English)	RRB1143		46	ARM PLAY	RNK2079
	67	Pad	RHA1115		47	SPRING CASSETTE	RNE1786
	68	Pad R	RHA1116		48	SCREW	BMZ26P040FZK
	69	Packing Case	RHG1521		49	WASHER	WA26D045D025
	70	Connection Cord with Mini Plug	PDE - 319		50	WASHER	WA26D047D050
	71	Connection Cord Assy	RDE1036		51	STOP RING	YE15FUC
	72	Sheet	Z23 - 007		52	SPRING INTERLOCK L	RBH1385
					53	ARM INTERLOCK L	RNE1780
					54	PCB CONTROL BLK	RXA1624
					55	PLATE HD BLK	RXA1634

1.7 PCB PARTS LIST

NOTES:

- Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.
- The Δ 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.
- 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 \rightarrow $56 \times 10^1 \rightarrow$ 561 RD1/8PM $\begin{matrix} 5 & 6 & 1 \\ \hline \end{matrix}$ J
 47k Ω \rightarrow $47 \times 10^3 \rightarrow$ 473 RD1/4PS $\begin{matrix} 4 & 7 & 3 \\ \hline \end{matrix}$ J
 0.5 Ω \rightarrow 0R5 RN2H $\begin{matrix} 0 & R & 5 \\ \hline \end{matrix}$ K
 1 Ω \rightarrow 010 RS1P $\begin{matrix} 0 & 1 & 0 \\ \hline \end{matrix}$ K

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

5.62k Ω \rightarrow $562 \times 10^1 \rightarrow$ 5621 RN1/4PC $\begin{matrix} 5 & 6 & 2 & 1 \\ \hline \end{matrix}$ F

LIST OF WHOLE PCB ASSEMBLIES

Mark	PCB Assemblies	Part No.				Remarks
		KUXJ type	KCXJ type	HEM type	HEMJX type	
NSP	Mother unit	RWM1684	RWM1684	RWM1681	RWM1681	
	└ Main unit	RWZ3172	RWZ3172	RWZ3157	RWZ3157	
	└└ Dolby S unit	RWX1101	RWX1101	RWX1101	RWX1101	
NSP	└ Sub unit	RWZ3173	RWZ3173	RWZ3158	RWZ3158	
	└ Transformer 2 unit	RWZ3175	RWZ3175	RWZ3160	RWZ3160	

MAIN UNIT

RWZ3172 and RWZ3157 have the same construction except for the following:

Mark	Symbol & Description	Part No.		Remarks
		RWZ3172	RWZ3157	
	IC2001	XRA15218	Not used	
	C1009	CGCYF104Z25	Not used	
	C1011	RCH1118	RCH1120	
	C2001	CKSQYB681K50	Not used	
	C2002, C2007	CCSQL101J50	Not used	
	C2003	CEAS470M16	Not used	
	C2004 - C2006	CEAS100M50	Not used	
	C2011, C2012	CEAS010M50	Not used	
	JA2001	RKN1003	Not used	
	R2001	RS1/10S471J	Not used	
	R2002	RD1/6PM104J	Not used	
	R2005	RS1/10S102J	Not used	
	R2006	RS1/10S392J	Not used	
	R2007, R2008	RS1/10S104J	Not used	
	R2009, R2011	RD1/6PM181J	Not used	
	R2010	RS1/10S583J	Not used	
	R2012	RD1/6PM682J	Not used	
	R2017, R2018	RD1/6PM153J	Not used	
	VR2003	RCV1090	Not used	
	MIC SHIELD PLATE	RNE1588	Not used	
	SHIELD PLATE A	Not used	RNE1592	

SUB UNIT

Although RWZ3173 and RWZ3158 are different in part number, they consist of the same components.

TRANSFORMER 2 UNIT

Although RWZ3175 and RWZ3160 are different in part number, they consist of the same components.

● PARTS LIST FOR KUXJ AND KCXJ TYPES

Mark No.	Description	Part No.	Mark No.	Description	Part No.
DOLBY S UNIT			MAIN UNIT		
SEMICONDUCTORS			SEMICONDUCTORS		
	IC1001, IC1002	CXA1417Q		IC101	CXA1115BP
				IC351	CXA1198AP
CAPACITORS				IC201	CXA1563S
	C1003, C1004, C1015, C1016	CEJA010M50		IC502	LC7570
	C1051, C1052	CEJA010M50		IC1701	MC14050BCP
	C1089, C1090	CEJA100M25			
	C1085, C1086	CEJA220M25		IC352	MC14051BCP
	C1033, C1034	CEJAR10M50	△	IC1003, IC1004	NJM7812FA
			△	IC1002	NJM78M06FA
	C1001, C1002, C1031, C1032	CEJAR22M50	△	IC1008	NJM79L06A
	C1045, C1046, C1091, C1092	CEJAR22M50		IC231	PA0059AM
	C1027, C1028, C1041, C1042	CEJAR47M50			
	C1075, C1076	CEJAR47M50		IC501	PD4507A
	C1019, C1020	CFTYA224J50		IC651	UPC1297CA
				IC903	XRA10393
	C1037, C1038	CFTYA334J50		IC2001, IC554, IC701	XRA15218
	C1013, C1014, C1055, C1056	CKSQYB102K50		IC1601	XRA15218N
	C1007, C1008, C1025, C1026	CKSQYB104K25			
	C1043, C1044, C1067, C1068	CKSQYB104K25		Q1005, Q235, Q801, Q851	2SA1309A
	C1077, C1078, C1081, C1082	CKSQYB104K25		Q460, Q805, Q855	2SB1238X
				Q803, Q853	2SB1425
	C1087, C1088	CKSQYB104K25		Q456, Q457	2SC1815
	C1023, C1024, C1049, C1050	CKSQYB153K50		Q1006, Q1007, Q454, Q455, Q459	2SC3311A
	C1065, C1066, C1069-C1072	CKSQYB182K50			
	C1083, C1084	CKSQYB182K50		Q807, Q857	2SC3311A
	C1079, C1080	CKSQYB183K50		Q353, Q354, Q458, Q701, Q702	2SD2144S
				Q741, Q742	2SD2144S
	C1059, C1060	CKSQYB222K50		Q553	2SK246
	C1009, C1010, C1073, C1074	CKSQYB223K50		Q151, Q152, Q161, Q162	2SK373
	C1093, C1094	CKSQYB333K50			
	C1005, C1006, C1061, C1062	CKSQYB393K50		Q171, Q172	2SK373
	C1063, C1064	CKSQYB471K50		Q1401, Q333, Q762	DTA114TS
				Q109, Q1151-Q1162, Q1166, Q123	DTC114TS
	C1047, C1048	CKSQYB473K50		Q1402, Q153, Q154, Q157, Q158	DTC114TS
	C1011, C1012	CKSQYB681K50		Q163, Q164, Q167, Q168, Q234	DTC114TS
	C1017, C1018, C1053, C1054	CKSQYB822K50			
	C1021, C1022, C1039, C1040	CKSQYB823K25		Q253-Q256, Q321-Q324, Q332	DTC114TS
	C1029, C1030, C1035, C1036 (47/16)	RCH1095		Q551, Q552	DTC114TS
				Q125, Q126, Q351, Q352	DTC115TS
RESISTORS				Q155, Q165, Q652	XDA114ES
	All Resistors	RS1/10S□□□J		Q1010, Q507, Q508, Q511, Q512	XDA124ES
OTHERS					
	CN1002	6033B-07Z029		Q101, Q102, Q231, Q233	XDC124ES
	CN1001	6033B-08Z029		Q251, Q252, Q653, Q802, Q804	XDC124ES
				Q806, Q852, Q854, Q856	XDC124ES
				Q901, Q902	XDC124ES
				D801, D851	11ES2
			△	D1001, D1006	1SR35-100AVL

CT-W703RS

Mark No.	Description	Part No.
R806, R856		RD1/6PM222J
R464, R926		RD1/6PM223J
R454, R455		RD1/6PM273J
R477		RD1/6PM302J
R1007		RD1/6PM362J
R1605, R1606		RD1/6PM470J
R156, R166, R718		RD1/6PM473J
R2012		RD1/6PM682J
R565		RD1/6PM683J
R1602		RD1/6PM823J
△ R1020		RFA1/4L470J
R1002		RS2LMF271J
R1609		RS2LMF750J
R1023		RS3LMF150J
VR851 (2. 2K)		RCP1019
VR802, VR852 (1. 0K)		RCP1044
VR551-VR553, VR651-VR654 (22K)		RCP1046
VR101-VR104, VR321-VR324 (47K)		RCP1047
VR2002 (5KA)		RCV1089
VR2003 (10KA)		RCV1090
Other Resistors		RS1/10S□□□J

OTHERS

CN1503 FFC CONNECTOR	52045-3145
CN451, CN452 CONNECTOR POST	B2B-PH-K
CN101, CN102 CONNECTOR POST	B3B-PH-K
JA1403 MINI JACK	PKN1005
JA701 PIN JACK 4P	RKB-020
JA2003 HEADPHONE JACK	RKN1002
JA2001 MIC JACK	RKN1003
JA1401, JA1402 REMOTE CONTROL JACK	RKN1004
PLATE	RNE1588
PCB BINDER	YEF1040
EARTH PLATE	VNF-091
X501 CERAMIC RESONATOR(4. 19MHz)-	VSS1014

SUB UNIT

SEMICONDUCTORS

Q1501	DTA114TS
D1501-D1514	ISS254
D527	SEL6210S

SWITCHES AND RELAYS

S1501-S1516, S1518-S1528	RSG1034
S1529, S1530	RSH1041
S1531	RSH1042

RESISTORS

All Resistors	RD1/6PM□□□J
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OTHERS

CN1501	9604S-31F
V1501	RAW1132

TRANSFORMER 2 UNIT

OTHERS

HOLDER	RKR1002
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Service Manual

ORDER NO.
RRZ1132

The chapter 1 of this Service Manual will not be reprinted. On your additional orders, we may supply only the chapter 2. For the chapter 1, please make copies and attach to the chapter 2 at your side if necessary.

STEREO DOUBLE CASSETTE DECK

CT-W703RS

CHAPTER 2

CONTENTS

CHAPTER2

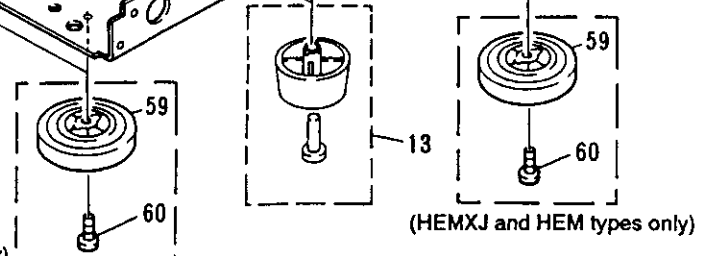
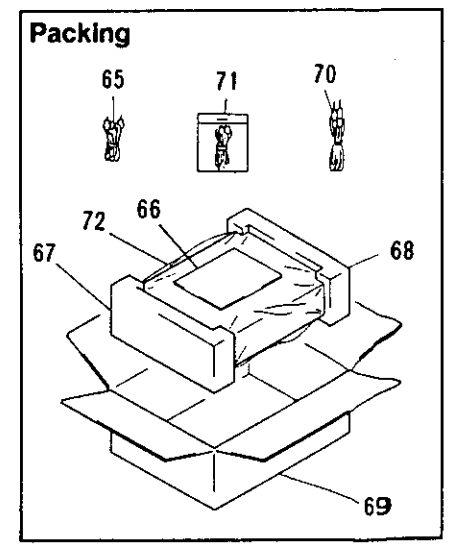
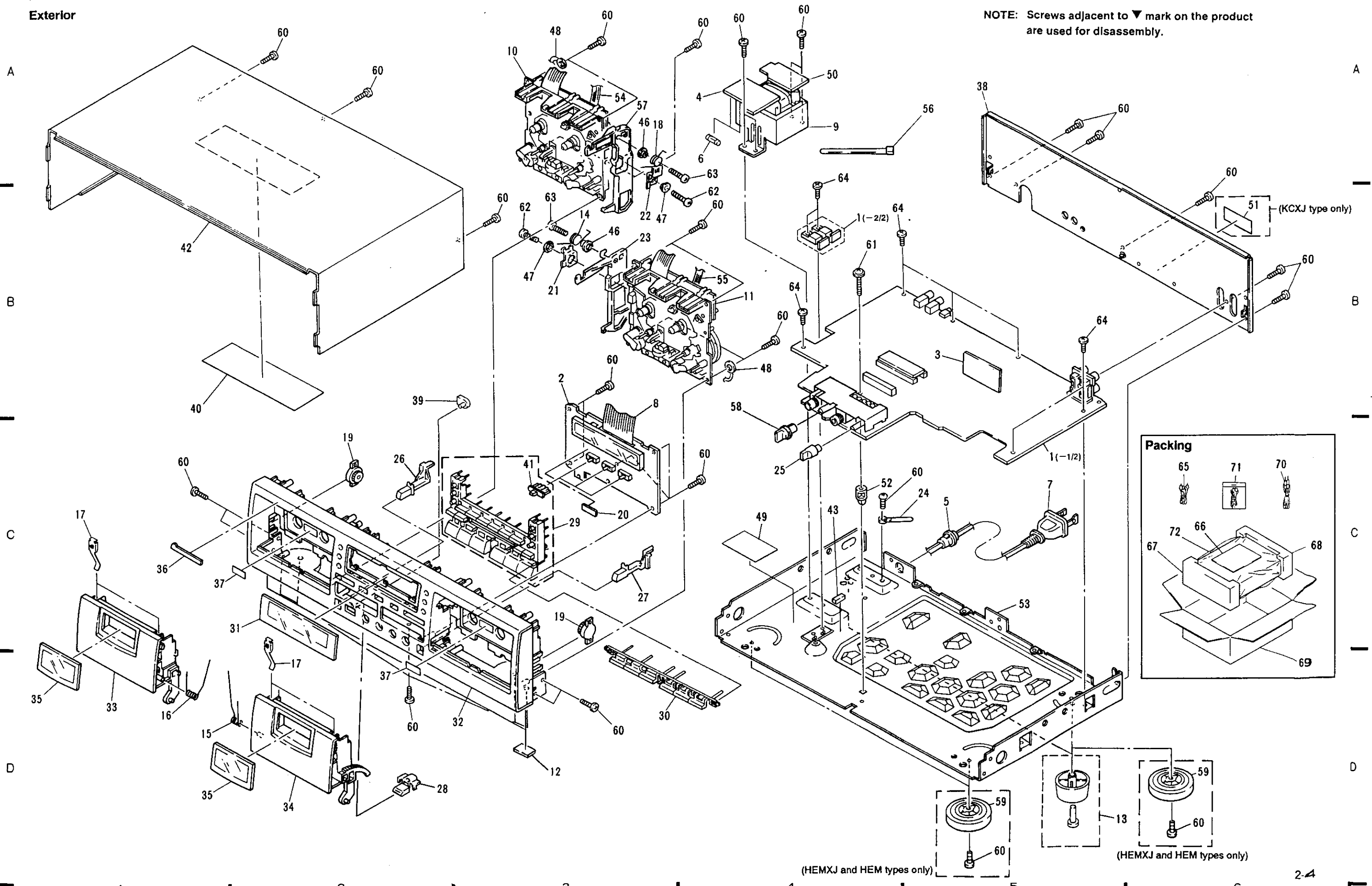
2.1 EXPLODED VIEWS AND PACKING	2-3
2.2 BLOCK DIAGRAM	2-7
2.3 SCHEMATIC DIAGRAMS.....	2-8
2.4 PCB CONNECTION DIAGRAM.....	2-13

2.1 EXPLODED VIEWS AND PACKING

1. EXTERIOR AND PACKING

Exterior

NOTE: Screws adjacent to ▼ mark on the product are used for disassembly.



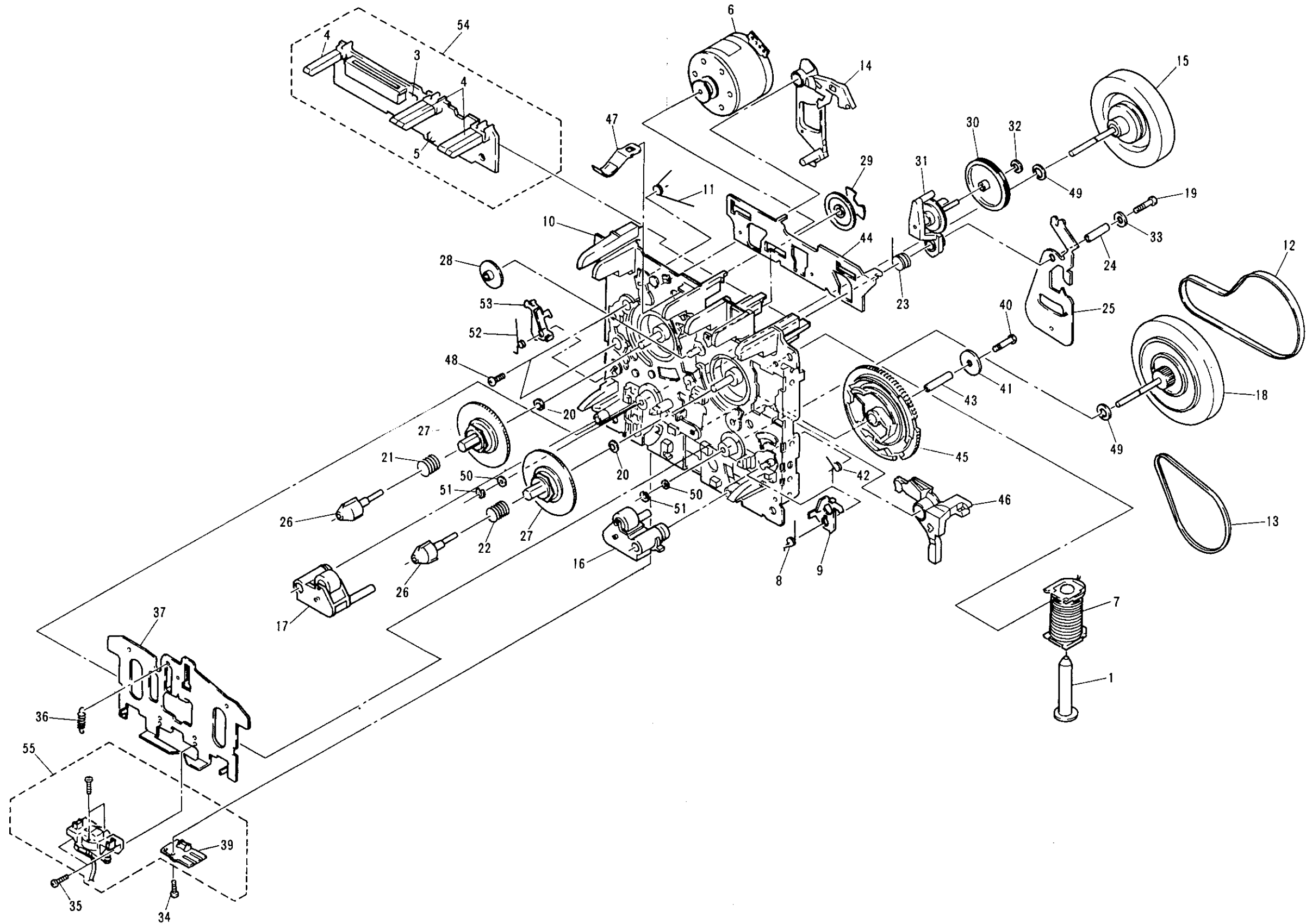
2. 1 AND 2 MECHANISM UNIT

A

B

C

D



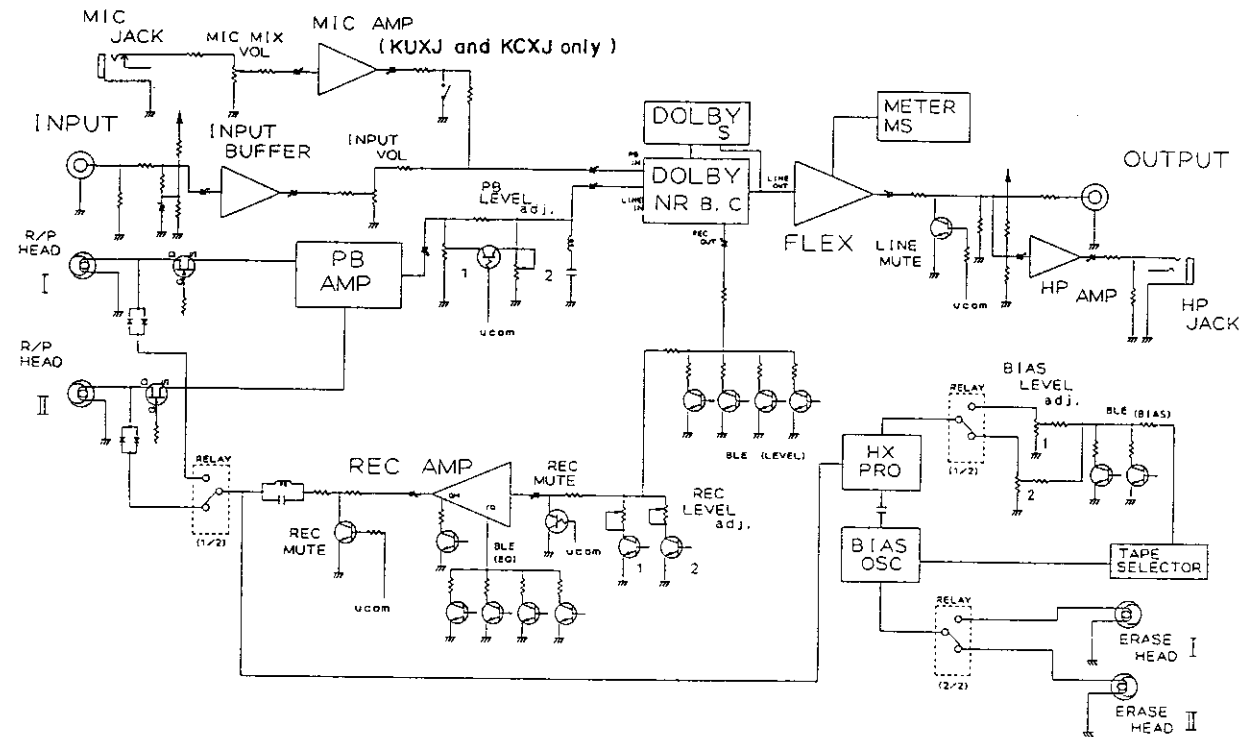
A

B

C

D

2.2 BLOCK DIAGRAM



2.3 SCHEMATIC DIAGRAMS

1. DOLBY S UNIT

A

NOTE FOR SCHEMATIC DIAGRAMS (Type 6A)

1. When ordering service parts, be sure to refer to "PARTS LIST OF EXPLODED VIEWS" or "PCB PARTS LIST".

2. Since these are basic circuits, some parts of them or the values of some components may be changed for improvement.

3. RESISTORS:
Unit: k:K Ω , M:M Ω , or Ω unless otherwise noted.
Rated power: 1/4W, 1/6W, 1/8W, 1/10W unless otherwise noted.
Tolerance: (F): $\pm 1\%$, (G): $\pm 2\%$, (K): $\pm 10\%$, (M): $\pm 20\%$ or $\pm 5\%$ unless otherwise noted.

4. CAPACITORS:
Unit: p:pF or μ : μ F unless otherwise noted.
Ratings: capacitor (μ F)/ voltage (V) unless otherwise noted.
Rated voltage: 50V except for electrolytic capacitors.

5. COILS:
Unit: m:mH or μ : μ H unless otherwise noted.

6. VOLTAGE AND CURRENT:
 \square or - V : DC voltage (V) in STOP mode unless otherwise noted.
 \diamond mA : mA : DC current in STOP mode unless otherwise noted.

7. OTHERS:
 \odot or \circ : Adjusting point.
 \triangle : Measurement point.
The Δ mark found on some component parts indicates the importance of the safety factor of the parts. Therefore, when replacing, be sure to use parts of identical designation.

8. SCH- \square ON THE SCHEMATIC DIAGRAM:
SCH- \square indicates the drawing number of the schematic diagram. (SCH stands for schematic diagram.)

9. SWITCHES (Underline indicates switch position):

- SUB UNIT
- S1501 : \blacktriangleright / MS
- S1502 : \blacktriangleleft / MS
- S1503 : \blacktriangleleft
- S1504 : \blacktriangleleft
- S1505 : \bullet
- S1506 : \bullet
- S1507 : \bullet
- S1508 : \blacktriangleright
- S1509 : \blacktriangleright / MS
- S1510 : \blacktriangleleft / MS
- S1511 : \blacktriangleleft
- S1512 : \blacktriangleleft
- S1513 : \bullet
- S1514 : \bullet
- S1515 : \bullet
- S1516 : \blacktriangleright
- S1518 : COPY I \blacktriangleright / NORMAL
- S1519 : COPY I \blacktriangleright / HIGH
- S1520 : FLEX
- S1521 : TIME / COUNT (DECK I)
- S1522 : RESET (DECK I)
- S1523 : TIME / COUNT (DECK II)
- S1524 : RESET (DECK II)
- S1525 : CD SYNC
- S1526 : BLE (DECK I)
- S1527 : BLE (DECK II)
- S1528 : POWER ON / OFF
- S1529 : DOLBY B - C - S
- S1530 : REV MODE RELAY / SKIP \blacktriangleleft - \blacktriangleleft
- S1531 : DOLBY OFF / ON

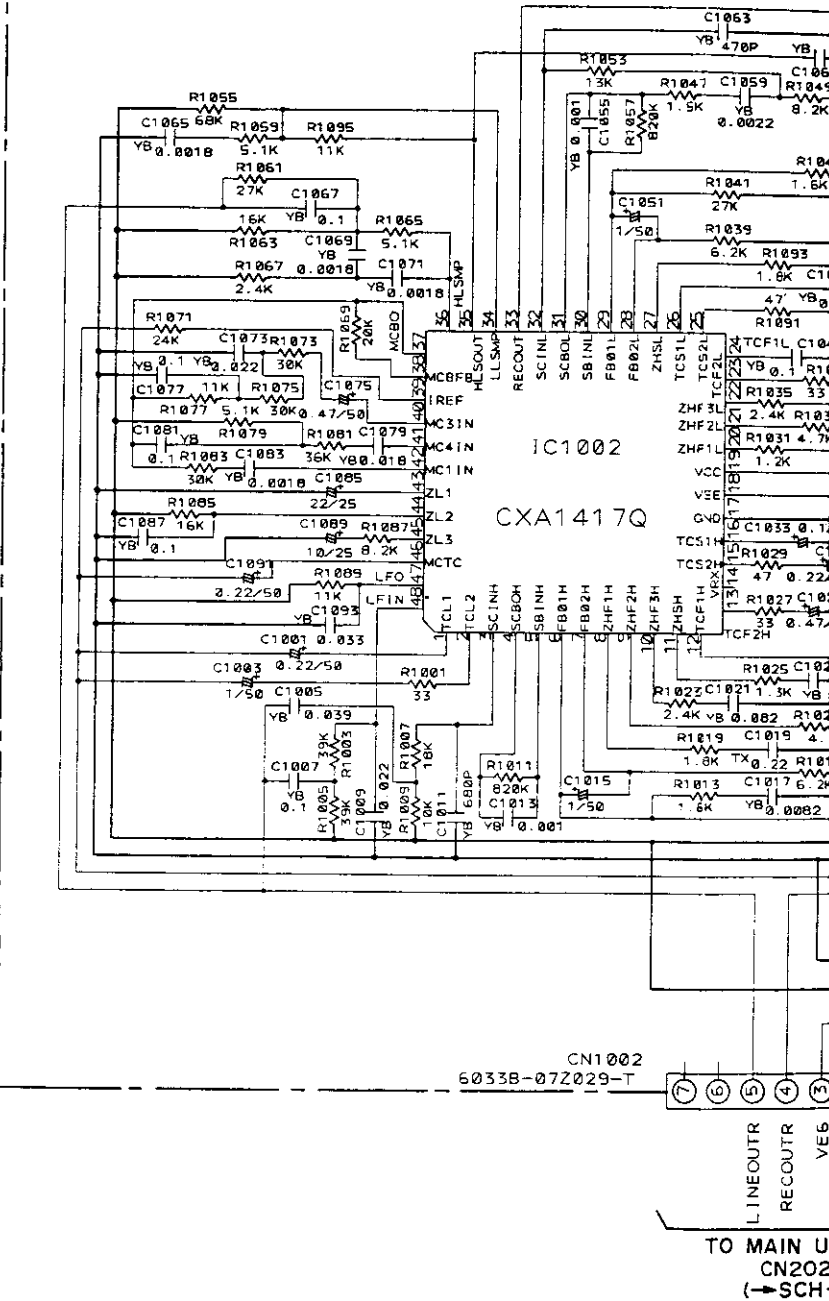
B

C

D

SCH-1 DOLBY S UNIT

DOLBY S UNIT (RWX1101)



2.3 SCHEMATIC DIAGRAMS

1. DOLBY S UNIT

SCH-1

NOTE FOR SCHEMATIC DIAGRAMS (Type 6A)

1. When ordering service parts, be sure to refer to "PARTS LIST of EXPLODED VIEWS" or "PCB PARTS LIST".

2. Since these are basic circuits, some parts of them or the values of some components may be changed for improvement.

3. RESISTORS:
Unit: k:KΩ, M:MQ, or Ω unless otherwise noted.
Rated power: 1/4W, 1/6W, 1/8W, 1/10W unless otherwise noted.
Tolerance: (F): ±1%, (G): ±2%, (K): ±10%, (M): ±20% or ±5% unless otherwise noted.

4. CAPACITORS:
Unit: p:pF or μF unless otherwise noted.
Ratings: capacitor (μF)/ voltage (V) unless otherwise noted.
Rated voltage: 50V except for electrolytic capacitors.

5. COILS:
Unit: m:mH or μH unless otherwise noted.

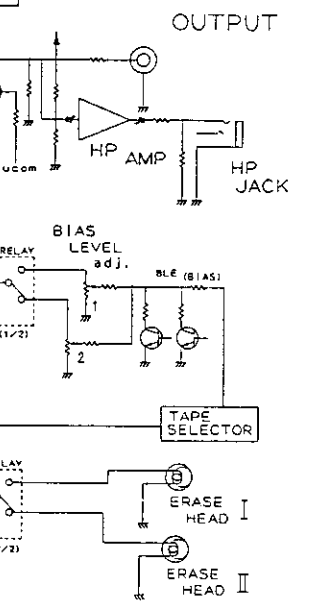
6. VOLTAGE AND CURRENT:
V or - V :
DC voltage (V) in STOP mode unless otherwise noted.
mA or - mA :
DC current in STOP mode unless otherwise noted.

7. OTHERS:
• ⊙ or ⊚ : Adjusting point.
• ⊠ : Measurement point.
• The Δ mark found on some component parts indicates the importance of the safety factor of the parts. Therefore, when replacing, be sure to use parts of identical designation.

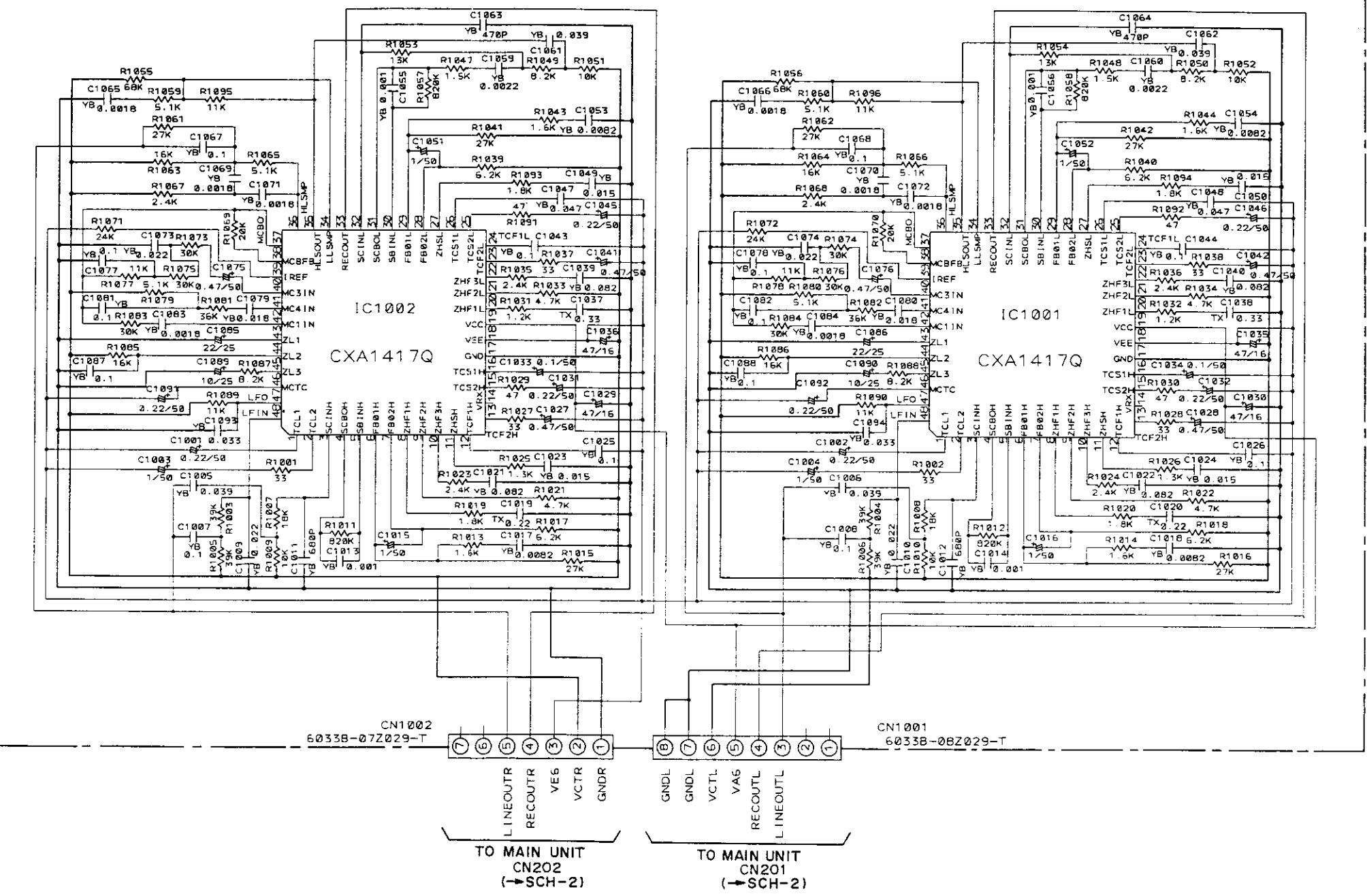
8. SCH-□ ON THE SCHEMATIC DIAGRAM:
• SCH-□ indicates the drawing number of the schematic diagram. (SCH stands for schematic diagram.)

9. SWITCHES (Underline indicates switch position):

- SUB UNIT
- S1501: ▶▶/MS
- S1502: ◀◀/MS
- S1503: ▶▶
- S1504: ◀◀
- S1505: ●
- S1506: ○
- S1507: ●
- S1508: ○
- S1509: ▶▶/MS
- S1510: ◀◀/MS
- S1511: ▶▶
- S1512: ◀◀
- S1513: ●
- S1514: ○
- S1515: ●
- S1516: ○
- S1518: COPY ▶▶ NORMAL
- S1519: COPY ◀◀ HIGH
- S1520: FLEX
- S1521: TIME/COUNT (DECK I)
- S1522: RESET (DECK I)
- S1523: TIME/COUNT (DECK II)
- S1524: RESET (DECK II)
- S1525: CD SYNC
- S1526: BLE (DECK I)
- S1527: BLE (DECK II)
- S1528: POWER ON/OFF
- S1529: DOLBY B-C-S
- S1530: REV MODE RELAY/SKIP ◀◀ - ▶▶
- S1531: DOLBY OFF/ON



DOLBY S UNIT (RWX1101)



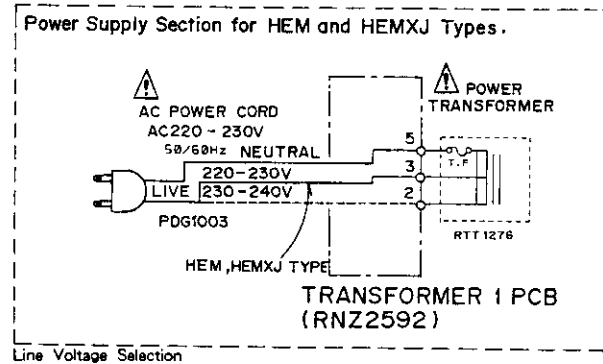
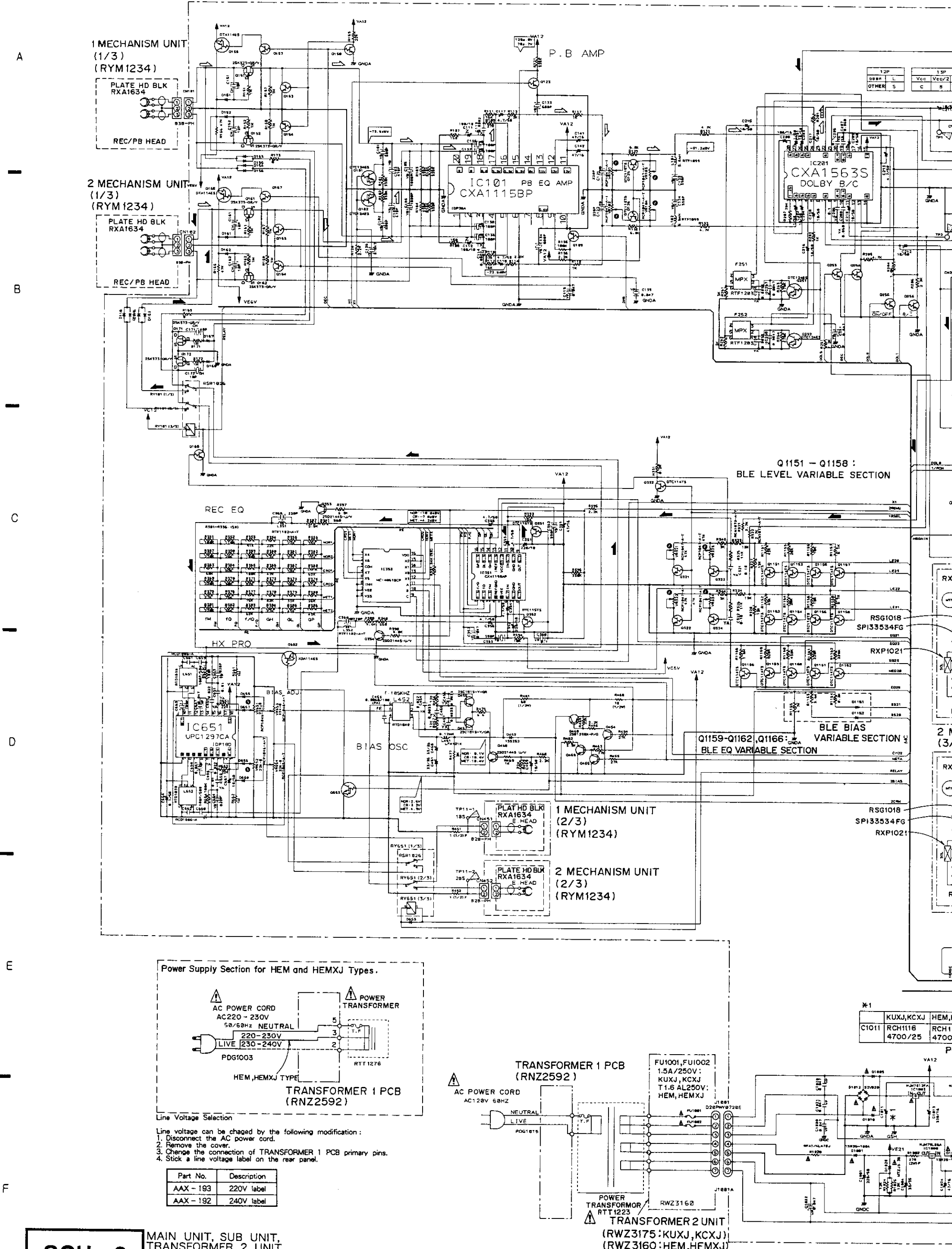
SCH-1

DOLBY S UNIT

DOLBY S UNIT

SCH-1

2. MAIN, SUB AND TRANSFORMER 2 UNIT

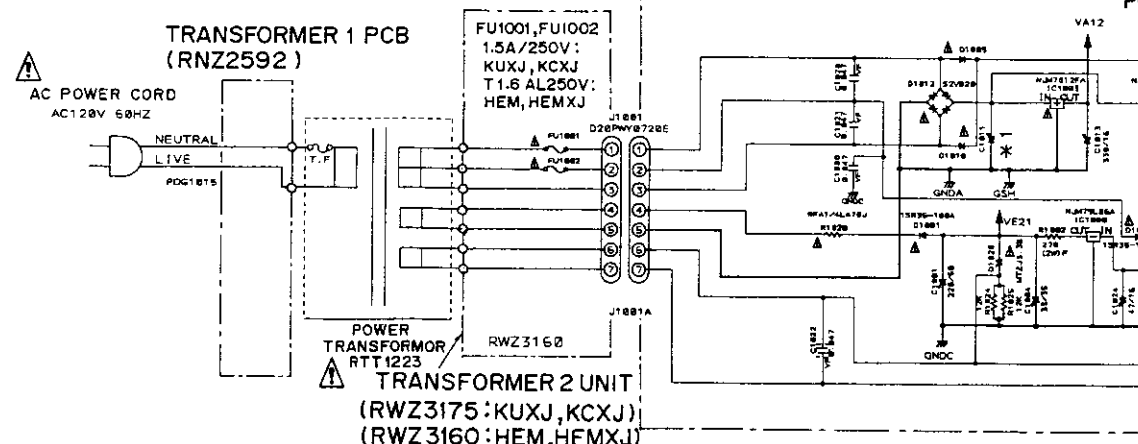


Line Voltage Selection

Line voltage can be changed by the following modification:

1. Disconnect the AC power cord.
2. Remove the cover.
3. Change the connection of TRANSFORMER 1 PCB primary pins.
4. Stick a line voltage label on the rear panel.

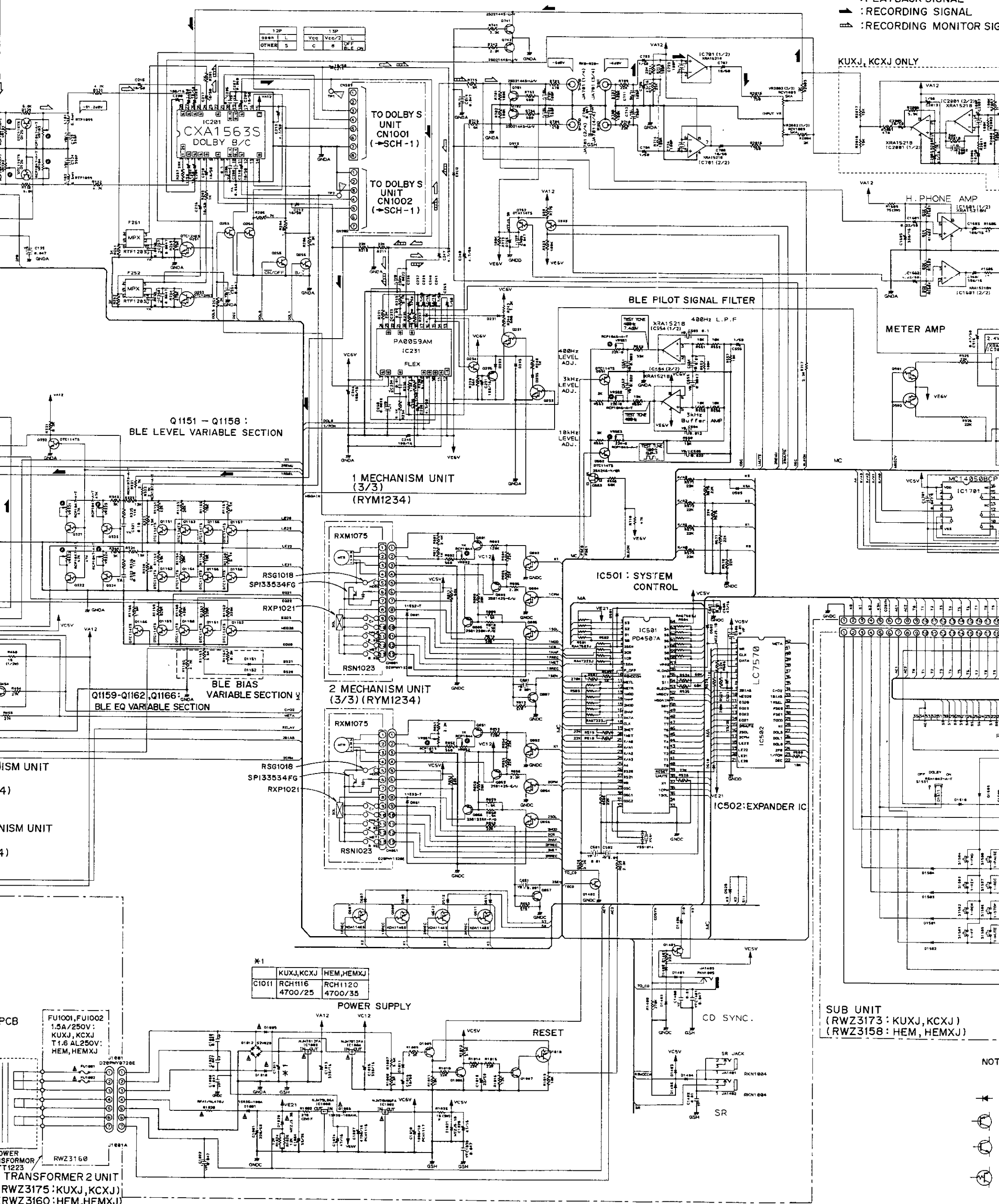
Part No.	Description
AAX-193	220V label
AAX-192	240V label



SCH-2

MAIN UNIT, SUB UNIT, TRANSFORMER 2 UNIT

SIGNAL ROUTE
 ▢ : PLAYBACK SIGNAL
 ▣ : RECORDING SIGNAL
 ▤ : RECORDING MONITOR SIGNAL



KUXJ, KCXJ ONLY

Q1151 - Q1158 :
BLE LEVEL VARIABLE SECTION

1 MECHANISM UNIT
(3/3)
(RYM1234)

2 MECHANISM UNIT
(3/3) (RYM1234)

BLE PILOT SIGNAL FILTER

IC501 : SYSTEM CONTROL

IC502 : EXPANDER IC

H. PHONE AMP

METER AMP

Q1159-Q1162, Q1166 :
BLE BIAS VARIABLE SECTION &
BLE EQ VARIABLE SECTION

*1	KUXJ, KCXJ	HEM, HEMXJ
	C1011 RCH1116 4700/25	RCH1120 4700/35

POWER SUPPLY

RESET

CD SYNC.

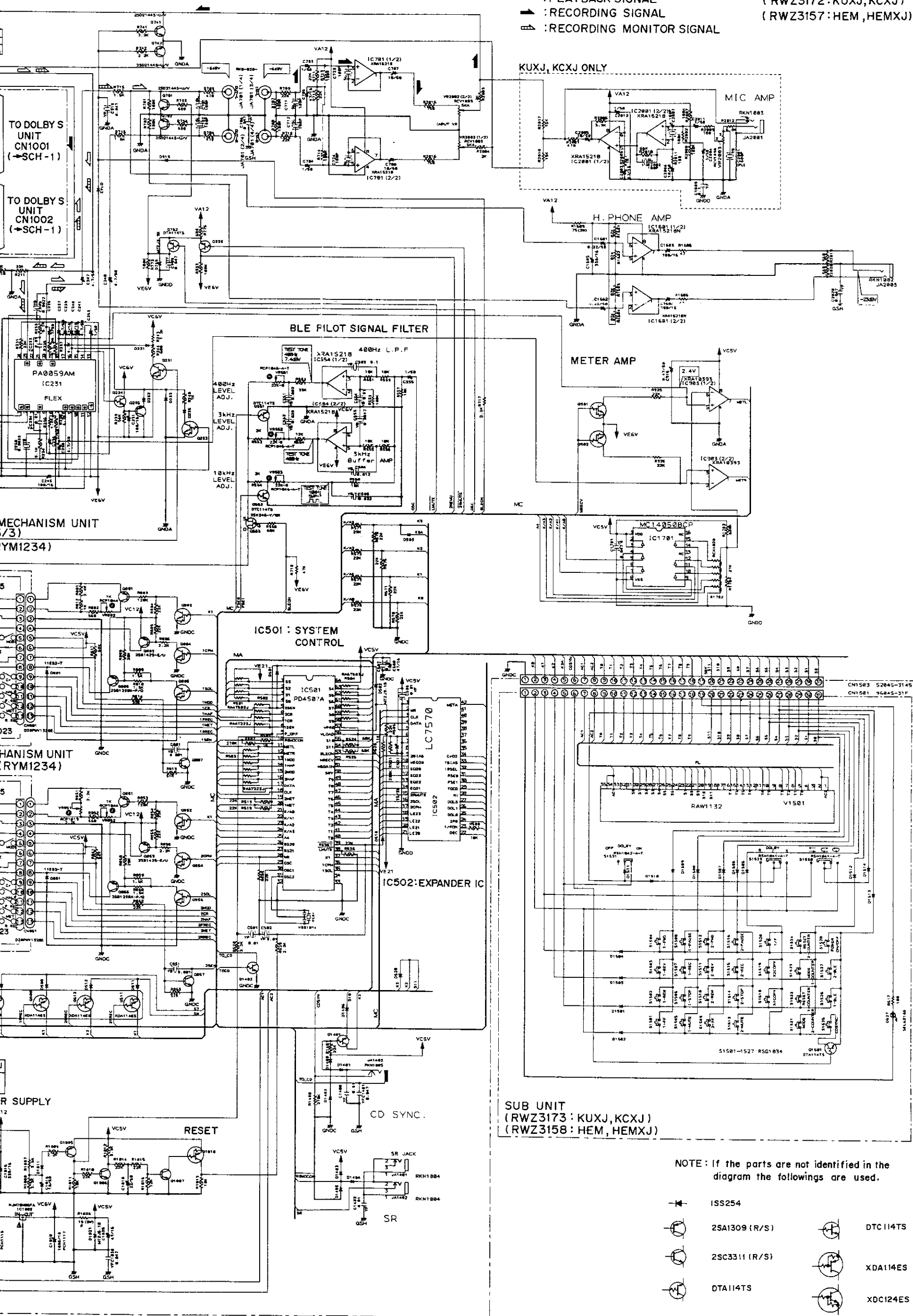
SUB UNIT
(RWZ3173 : KUXJ, KCXJ)
(RWZ3158 : HEM, HEMXJ)

PCB
 FU1001, FU1002
 1.5A/250V :
 KUXJ, KCXJ
 T.1.6 AL250V :
 HEM, HEMXJ
 TRANSFORMER 2 UNIT
 RWZ3175 : KUXJ, KCXJ
 RWZ3160 : HEM, HEMXJ

NOT

SIGNAL ROUTE
 ▾ : PLAYBACK SIGNAL
 ▴ : RECORDING SIGNAL
 ▹ : RECORDING MONITOR SIGNAL

MAIN UNIT
 (RWZ3172:KUXJ,KCXJ)
 (RWZ3157:HEM,HEMXJ)



SUB UNIT
 (RWZ3173:KUXJ,KCXJ)
 (RWZ3158:HEM,HEMXJ)

NOTE: If the parts are not identified in the diagram the followings are used.

- ISS254
- 2SA1309 (R/S)
- 2SC3311 (R/S)
- DTA114TS
- DTC114TS
- XDA114ES
- XDC124ES

MAIN UNIT, SUB UNIT,
 TRANSFORMER 2 UNIT

B

C

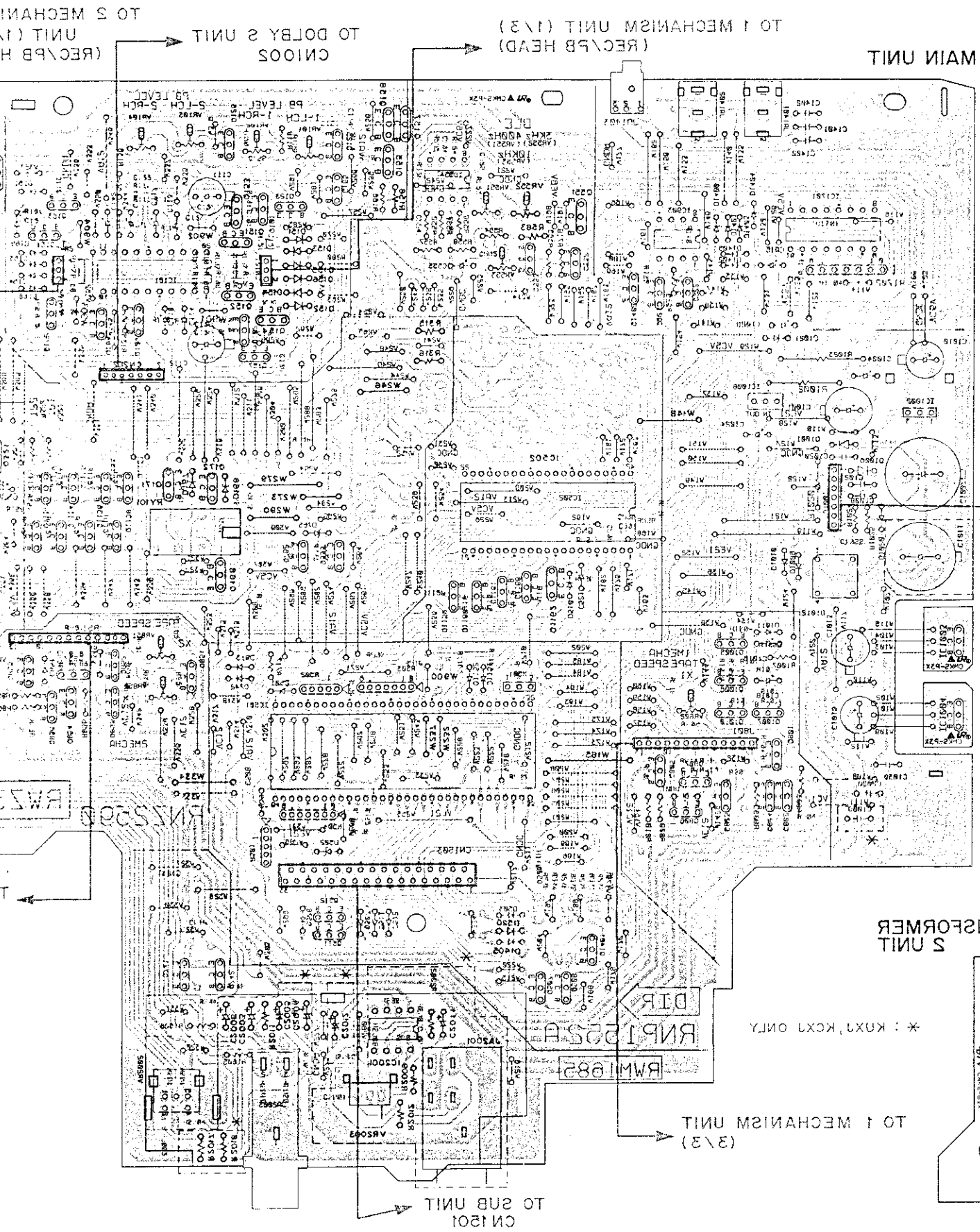
D

E

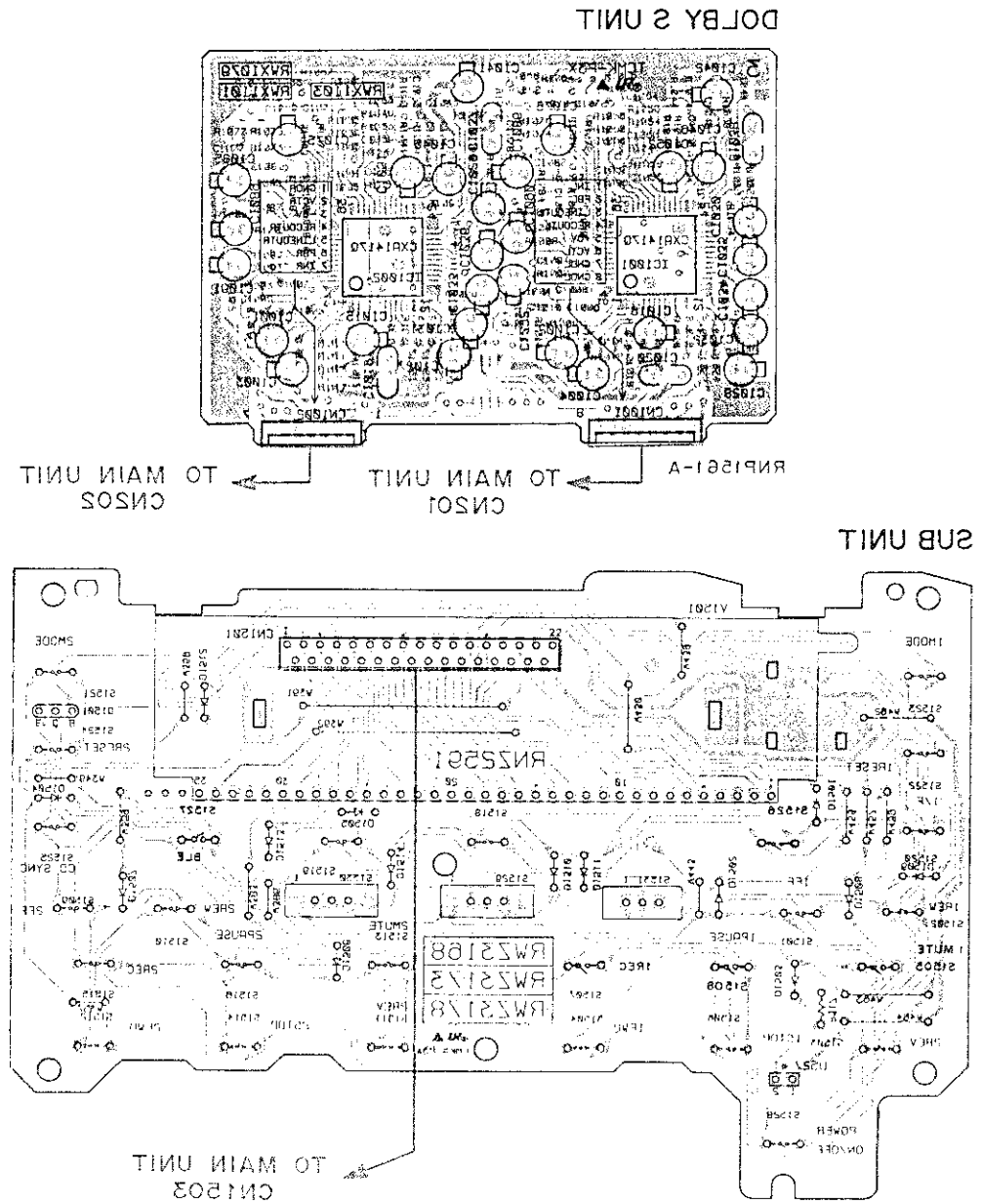
F

5.4 PCB CONNECTION DIAGRAM

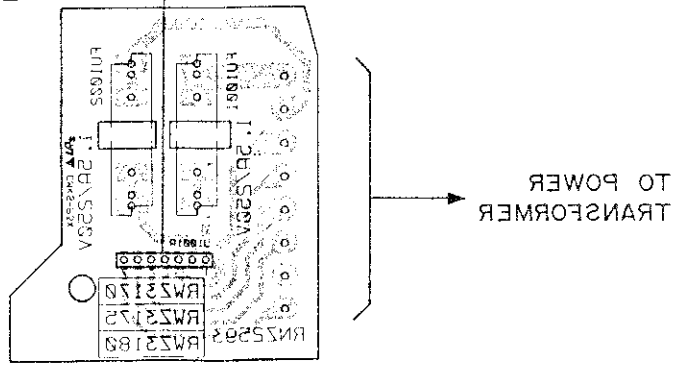
• This diagram is viewed from the foil side.



• This diagram is viewed from the gray colored foil side.
 • This PCB is double sided.



• This diagram is viewed from the foil side.



* : KX1, KX2 ONLY

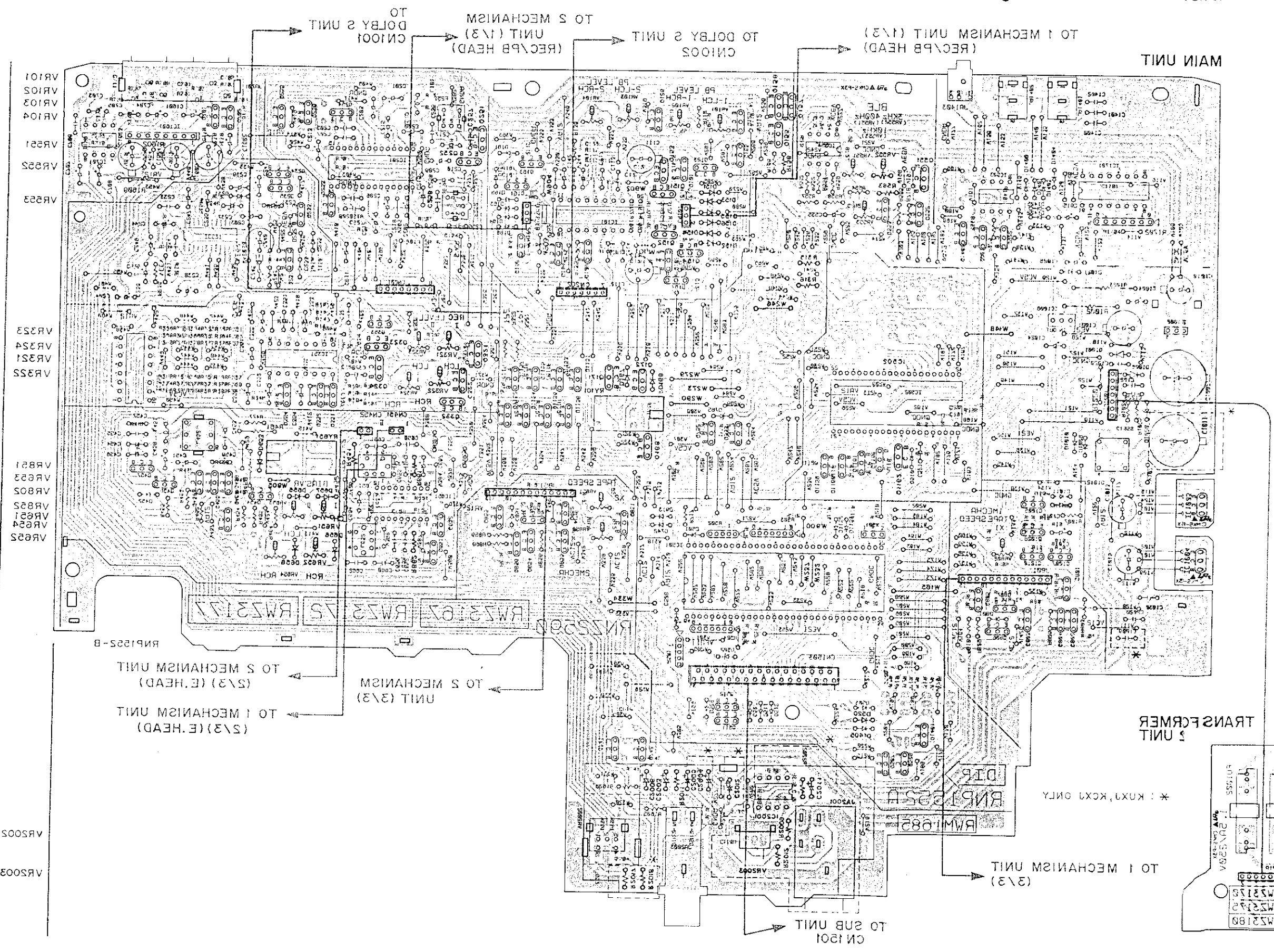
A

B

C

D

This diagram is viewed from the foil side.



AR101	0187	IC1008	0323	AR851	0186	IC1004	0821	AR953	0187	IC1001	0205
AR103	0158	AR353	0351	AR853	0181	AR851	0108	AR955	0201	AR953	0208
AR104	0155	AR354	0352	AR854	0102	AR852	0104	AR954	0822	AR954	0211
AR251	0153	AR355	0354	AR855	0103	AR854	0107	AR955	0823	AR955	0215
AR252	0152	AR351	0355	AR851	0108	AR855	0109	AR953	0824	AR953	0245
AR253	0151	AR352	0356	AR852	0112	AR854	0110	AR954	0825	AR954	
IC101	0150	AR353	0357	AR853	0115	AR855	0111	AR955	0826	AR955	
IC102	0149	AR354	0358	AR854	0118	AR851	0112	AR953	0827	AR953	
IC103	0148	AR355	0359	AR855	0122	AR852	0115	AR954	0828	AR954	
IC104	0147	IC251	0360	AR851	0125	AR853	0118	AR955	0829	AR955	
IC251	0146	IC252	0361	AR852	0128	AR854	0121	AR953	0830	AR953	
IC252	0145	IC253	0362	AR853	0132	AR855	0124	AR954	0831	AR954	
IC253	0144	IC254	0363	AR854	0135	AR851	0127	AR955	0832	AR955	
IC254	0143	IC255	0364	AR855	0138	AR852	0130	AR953	0833	AR953	
IC353	0142	IC354	0365	AR851	0142	AR853	0134	AR954	0834	AR954	
IC354	0141	IC355	0366	AR852	0145	AR854	0137	AR955	0835	AR955	
IC355	0140	IC851	0367	AR853	0148	AR855	0140	AR953	0836	AR953	
IC851	0139	IC852	0368	AR854	0152	AR851	0144	AR954	0837	AR954	
IC852	0138	IC853	0369	AR855	0155	AR852	0147	AR955	0838	AR955	
IC853	0137	IC953	0370	AR851	0158	AR853	0151	AR953	0839	AR953	
IC953	0136	IC954	0371	AR852	0162	AR854	0154	AR954	0840	AR954	
IC954	0135	IC955	0372	AR853	0165	AR855	0157	AR955	0841	AR955	
IC955	0134	AR101	0523	AR854	0169	AR101	0161	AR953	0842	AR953	
AR101	0522	AR102	0524	AR855	0172	AR102	0164	AR954	0843	AR954	
AR102	0521	AR103	0525	AR851	0175	AR103	0167	AR955	0844	AR955	
AR103	0520	AR104	0526	AR852	0178	AR104	0170	AR953	0845	AR953	
AR104	0519	AR251	0527	AR853	0181	AR251	0173	AR954	0846	AR954	
AR251	0518	AR252	0528	AR854	0184	AR252	0176	AR955	0847	AR955	
AR252	0517	AR253	0529	AR855	0187	AR253	0179	AR953	0848	AR953	
AR253	0516	AR254	0530	AR851	0190	AR254	0182	AR954	0849	AR954	
AR254	0515	AR255	0531	AR852	0193	AR255	0185	AR955	0850	AR955	
AR255	0514	AR353	0532	AR853	0196	AR353	0188	AR953	0851	AR953	
AR353	0513	AR354	0533	AR854	0199	AR354	0191	AR954	0852	AR954	
AR354	0512	AR355	0534	AR855	0202	AR355	0194	AR955	0853	AR955	
AR355	0511	IC101	0535	AR851	0205	IC101	0197	AR953	0854	AR953	
IC101	0510	IC102	0536	AR852	0208	IC102	0200	AR954	0855	AR954	
IC102	0509	IC103	0537	AR853	0211	IC103	0203	AR955	0856	AR955	
IC103	0508	IC104	0538	AR854	0214	IC104	0206	AR953	0857	AR953	
IC104	0507	IC251	0539	AR855	0217	IC251	0209	AR954	0858	AR954	
IC251	0506	IC252	0540	AR851	0220	IC252	0212	AR955	0859	AR955	
IC252	0505	IC253	0541	AR852	0223	IC253	0215	AR953	0860	AR953	
IC253	0504	IC254	0542	AR853	0226	IC254	0218	AR954	0861	AR954	
IC254	0503	IC255	0543	AR854	0229	IC255	0221	AR955	0862	AR955	
IC255	0502	IC353	0544	AR855	0232	IC353	0224	AR953	0863	AR953	
IC353	0501	IC354	0545	AR851	0235	IC354	0227	AR954	0864	AR954	
IC354	0500	IC355	0546	AR852	0238	IC355	0230	AR955	0865	AR955	
IC355	0499	IC851	0547	AR853	0241	IC851	0233	AR953	0866	AR953	
IC851	0498	IC852	0548	AR854	0244	IC852	0236	AR954	0867	AR954	
IC852	0497	IC853	0549	AR855	0247	IC853	0239	AR955	0868	AR955	
IC853	0496	IC953	0550	AR851	0250	IC953	0242	AR953	0869	AR953	
IC953	0495	IC954	0551	AR852	0253	IC954	0245	AR954	0870	AR954	
IC954	0494	IC955	0552	AR853	0256	IC955	0248	AR955	0871	AR955	
IC955	0493	AR101	0553	AR854	0259	AR101	0251	AR953	0872	AR953	
AR101	0492	AR102	0554	AR855	0262	AR102	0254	AR954	0873	AR954	
AR102	0491	AR103	0555	AR851	0265	AR103	0257	AR955	0874	AR955	
AR103	0490	AR104	0556	AR852	0268	AR104	0260	AR953	0875	AR953	
AR104	0489	AR251	0557	AR853	0271	AR251	0263	AR954	0876	AR954	
AR251	0488	AR252	0558	AR854	0274	AR252	0266	AR955	0877	AR955	
AR252	0487	AR253	0559	AR855	0277	AR253	0269	AR953	0878	AR953	
AR253	0486	AR254	0560	AR851	0280	AR254	0272	AR954	0879	AR954	
AR254	0485	AR255	0561	AR852	0283	AR255	0275	AR955	0880	AR955	
AR255	0484	AR353	0562	AR853	0286	AR353	0278	AR953	0881	AR953	
AR353	0483	AR354	0563	AR854	0289	AR354	0281	AR954	0882	AR954	
AR354	0482	AR355	0564	AR855	0292	AR355	0284	AR955	0883	AR955	
AR355	0481	IC101	0565	AR851	0295	IC101	0287	AR953	0884	AR953	
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IC102	0479	IC103	0567	AR853	0301	IC103	0293	AR955	0886	AR955	
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IC252	0475	IC253	0571	AR852	0313	IC253	0305	AR953	0890	AR953	
IC253	0474	IC254	0572	AR853	0316	IC254	0308	AR954	0891	AR954	
IC254	0473	IC255	0573	AR854	0319	IC255	0311	AR955	0892	AR955	
IC255	0472	IC353	0574	AR855	0322	IC353	0314	AR953	0893	AR953	
IC353	0471	IC354	0575	AR851	0325	IC354	0317	AR954	0894	AR954	
IC354	0470	IC355	0576	AR852	0328	IC355	0320	AR955	0895	AR955	
IC355	0469	IC851	0577	AR853	0331	IC851	0323	AR953	0896	AR953	
IC851	0468	IC852	0578	AR854	0334	IC852	0326	AR954	0897	AR954	
IC852	0467	IC853	0579	AR855	0337	IC853	0329	AR955	0898	AR955	
IC853	0466	IC953	0580	AR851	0340	IC953	0332	AR953	0899	AR953	
IC953	0465	IC954	0581	AR852	0343	IC954	0335	AR954	0900	AR954	
IC954	0464	IC955	0582	AR853	0346	IC955	0338	AR955	0901	AR955	
IC955	0463	AR101	0583	AR854	0349	AR101	0341	AR953	0902	AR953	
AR101	0462	AR102	0584	AR855	0352	AR102	0344	AR954	0903	AR954	
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AR253	0456	AR254	0590	AR851	0370	AR254	0362	AR954	0909	AR954	
AR254	0455	AR255	0591	AR852	0373	AR255	0365	AR955	0910	AR955	
AR255	0454	AR353	0592	AR853	0376	AR353	0368	AR953	0911	AR953	
AR353	0453	AR354	0593	AR854	0379	AR354	0371	AR954	0912	AR954	
AR354	0452	AR355	0594	AR855	0382	AR355	0374	AR955	0913	AR955	
AR355	0451	IC101	0595	AR851	0385	IC101	0377	AR953	0914	AR953	
IC101	0450	IC102	0596	AR852	0388	IC102	0380	AR954	0915	AR954	
IC102	0449	IC103	0597	AR853	0391	IC103	0383	AR955	0916	AR955	
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