

Service Manual

Dolby NR-Equipped
Stereo Double Cassette Deck

Cassette Deck
RS-X520

Simplified



Colour

(K)...Black Type



Area

Suffix for Model No.	Area	Colour
(E)	Europe.	(K)
(EB)	Great Britain.	
(EG)	Germany and Italy.	
(GC)	Asia, Latin America, Middle Near East and Africa	
(GN)	Oceania.	

- Please file and use this manual together with the service manual for Model No. RS-X502, Order No. AD9103046C8.
- This service manual indicates the main differences between; Original RS-X502.

LINE-UP OF COMPONENTS

System Name	Unit
SC-X520 (E)	ST-X902LA (E) : Tuner
	SU-X520D (E) : Amplifier
	RS-X520 (E) : Cassette Deck
	— : CD Player
	SL-J110R (E) : Turntable
SC-X520 (EB)	SB-CS75 (E) : Speaker (Made in PAES)
	ST-X902LA (EB) : Tuner
	SU-X520D (EB) : Amplifier
	RS-X520 (EB) : Cassette Deck
	SL-PJ38A (EB) : CD Player (Made in MBV)
SC-X520 (EG)	SL-J110R (EB) : Turntable
	SB-CS75 (E) : Speaker (Made in PAES)
	ST-X902LA (EG) : Tuner
	SU-X520D (EG) : Amplifier
	RS-X520 (EG) : Cassette Deck
SC-X520 (EI)	SL-PJ38A (EG) : CD Player (Made in MBV)
	SL-J110R (EG) : Turntable
	SB-CS75 (E) : Speaker (Made in PAES)
	ST-X902LA (EI) : Tuner (Made in PFS)
	SU-X520D (EG) : Amplifier

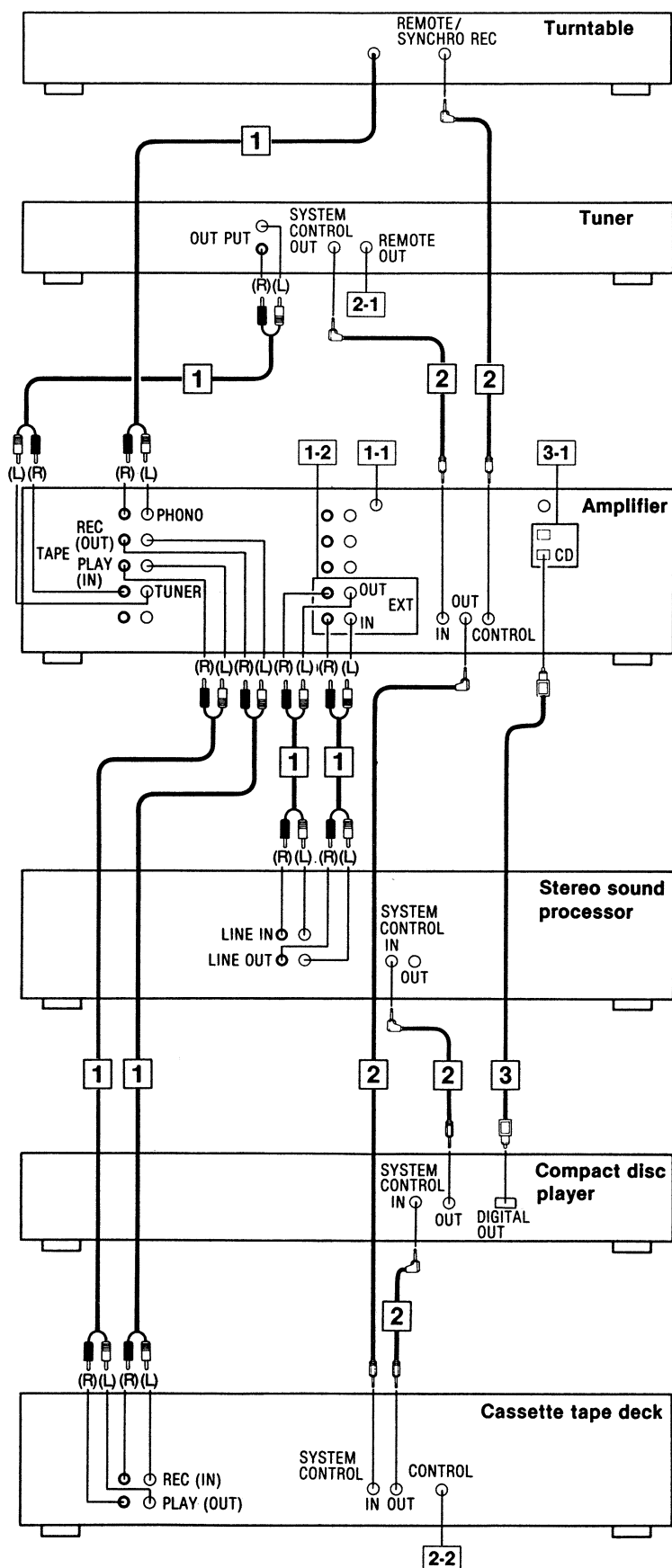
System Name	Unit
SC-X520 (EF)	ST-X902LA (EF) : Tuner (Made in PFS)
	SU-X520D (E) : Amplifier
	RS-X520 (E) : Cassette Deck
	SL-PJ38A (E) : CD Player (Made in MBV)
	SL-J110R (E) : Turntable
SC-X520 (GC)	SB-CS75 (E) : Speaker (Made in PAES)
	ST-X902LA (GC) : Tuner
	SU-X520D (GC) : Amplifier
	RS-X520 (GC) : Cassette Deck
	SL-PJ38 (GC) : CD Player
SC-X520 (GN)	SL-J110R (GC) : Turntable
	SB-CD520 (GC) : Speaker
	ST-X902LA (GN) : Tuner
	SU-X520D (GN) : Amplifier
	RS-X520 (GN) : Cassette Deck

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

Technics

CONNECTIONS

Connections of each unit



Connection diagrams shown are for connections to a Technics hi-fi component system.

Make connections in the numbered sequential order.

- 1 Connect the stereo connection cables** (included with the turntable, tuner, stereo sound processor, and cassette tape deck).

Stereo connection cable

White (L)
Red (R)

1-1

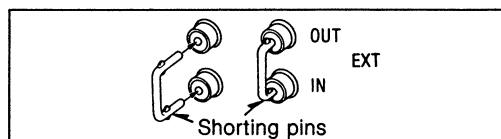
"GND" terminal of the amplifier

This terminal is for use with a turntable which has a ground wire.

1-2

"EXT" terminals of the amplifier

When these terminals are not in use, be sure to insert the "shorting" pins (included).



- 2 Connect the L-type cable** (included with the turntable, tuner, stereo sound processor, compact disc player, and cassette tape deck).

2-1

"REMOTE OUT" terminal

This terminal is used to connect to the "REMOTE IN" terminal of the Technics multi-compact disc player (not included).

2-2

"CONTROL" terminal

Make a connection from this terminal to the "CONTROL" terminal for a cassette deck on a Technics multi compact disc player.

(For detailed information, refer to the operating instructions of the Technics multi compact disc player.)

- 3 Connect the optical-fiber cable** (included with the compact disc player).

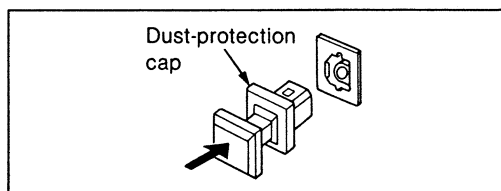
3-1

"DIGITAL IN" (CD, DAT) terminals of the amplifier

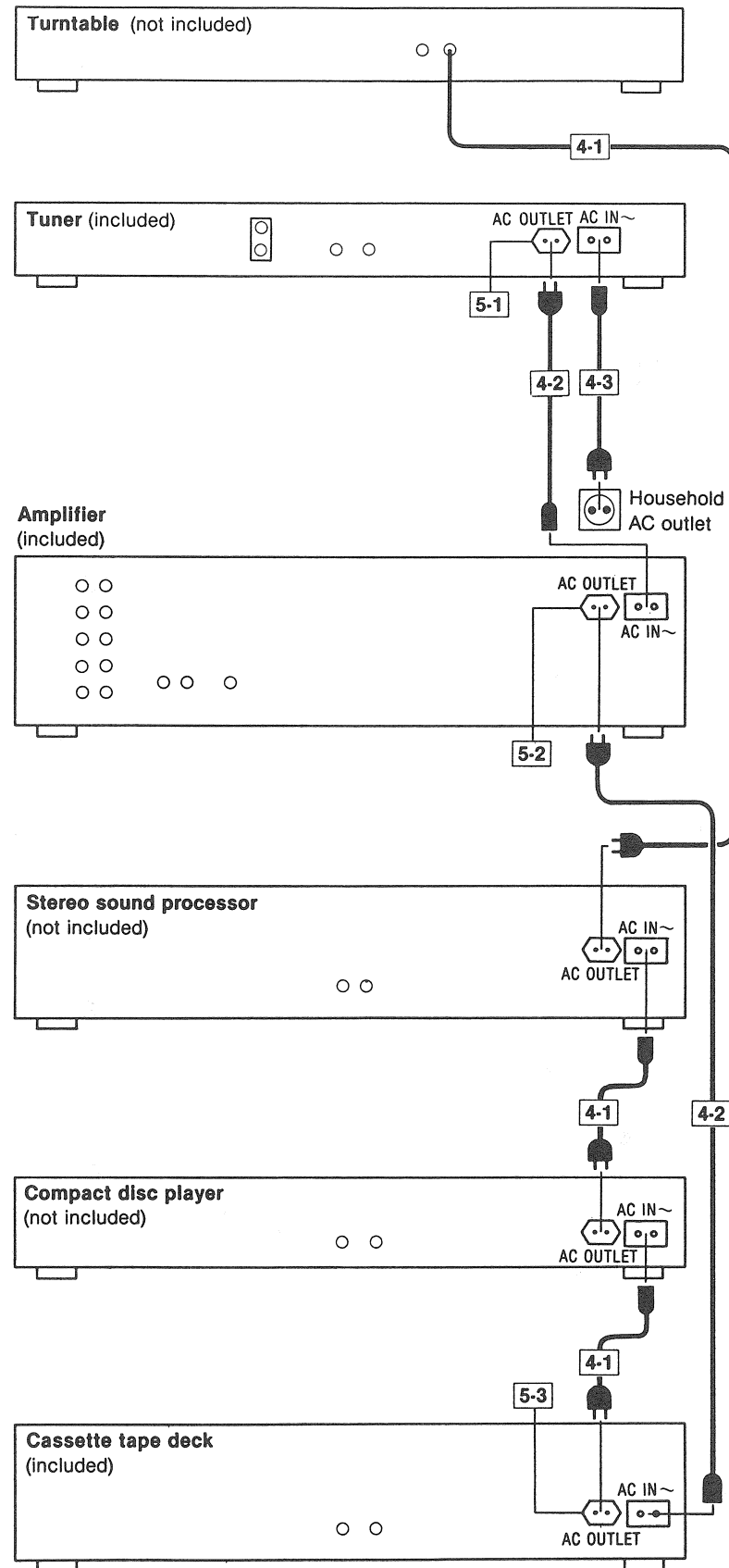
These terminals are protected by the dust-protection caps to avoid damage by the dust, etc.

Remove the caps only when the "DIGITAL IN" terminals are to be used.

When these terminals are not being used, attach the caps as shown in the illustration below.



Connections of each unit (continued)

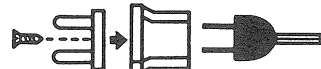


- 4 Connect the AC power supply cords.**
- 4-1 Connect the AC power supply cords (not included).**
- 4-2 Connect the AC power supply cords (short for continental Europe) (included).**
- 4-3 Connect the AC power supply cord (long for continental Europe) (included).**

Connect this cord only after all other cables have been connected.

For areas except continental Europe

If the power plug will not fit your socket, use the power plug adaptor (included).



Notes:

- Configuration of the AC outlets and AC power supply cords differ according to area.
- If the compact disc player is not used in combination with these components, connect the AC power supply cord of the stereo sound processor to the AC outlet of the cassette deck.

5 "AC OUTLET"

5-1 "SWITCHED" outlet

Power is controlled by the power switch. Audio equipment rated up to 500 W can be connected here.

5-2 "UNSWITCHED" outlet:

Power is always available, regardless of power switch. Audio equipment rated up to 60 W can be connected here.

5-3 "UNSWITCHED" outlet:

Power is always available, regardless of power switch. Audio equipment rated up to 100 W can be connected here.

Note:

If other audio equipments are to be connected to these outlets, make sure that the total power consumption does not exceed the rating of each outlet.

After other units have been connected, tie up the cords in a bundle with a clip, etc. and place them behind the units.

CHANGE IN REPLACEMENT PARTS LIST (on pages 32~35, 38, 43, 44)

Notes: • Mentioned in this parts list is only those different from Model No. RS-X502 (E).

All other parts are the same as for RS-X502 (E).

• Important safety notice:

Components identified by Δ mark have special characteristics important for safety.

When replacing any of these components, use only manufacturer's specified parts.

Ref. No.	Change of Part No.		Part Name & Description	Remarks
	RS-X502 (E)	RS-X520 (E, EB, EG, GC, GN)		
INTEGRATED CIRCUIT(S)				
IC951	DN6851ALB	LB9051A-WD	HALL (DECK 1)	
IC971	DN6851ALB	LB9051A-WD	HALL (DECK 2)	
TRANSISTOR(S)				
Q5—8	KSA1175YGTA	2SA1309A-R	TRANSISTOR	
Q9— 14	KSC2785YGTA	2SC3311A-Q	TRANSISTOR	
Q303	KSB564ACYGTA	2SB621A-R	TRANSISTOR	
Q551	KSA1175YGTA	2SA1309A-R	TRANSISTOR	
Q607	KSB564ACYGTA	2SB621A-R	TRANSISTOR	
Q816	KSC2785YGTA	2SC3311A-Q	TRANSISTOR	
Q905	KSC2785YGTA	2SC3311A-Q	TRANSISTOR	
Q911	KSA1175YGTA	2SA1309A-R	TRANSISTOR	
Q918	KSA1175YGTA	2SA1309A-R	TRANSISTOR	
Q929	KSC2785YGTA	2SC3311A-Q	TRANSISTOR	
Q932	KSC2785YGTA	2SC3311A-Q	TRANSISTOR	
TRANSFORMER(S)				
PT1	RTP1K4B013	RTP1K4B013	POWER TRANSFORMER	(E, EB, EG, GN) △
		RTP1K4E021	POWER TRANSFORMER	(GC) △
FUSE(S)				
F1	XBA2C25TB0	XBA2C25TB0	FUSE 250V T2.5A	(E, EB, EG, GN) △
		—————	FUSE 250V T2.5A	(GC) △ Deletion
SWITCH(ES)				
S701A	—————	—————	—————	(E, EB, EG, GN)
		SSR187-1	VOLTAGE SELECTOR	(GC) △ Addition
CONNECTOR(S)				
CN4	RJS1A1704	RJS1A6604	CONNECTOR (4P)	
CN6	RJS1A1704	RJS1A6604	CONNECTOR (4P)	
CN600A	RJS1A1703	RJS1A6603	CONNECTOR (3P)	
CN600B	RJS1A1703	RJS1A6603	CONNECTOR (3P)	
JACK(S)				
JK701	SJS9236	SJS9236	AC INLET	(E, EB, EG, GC) △
		SJSD16	AC INLET	(GN) △
JK702	RJS1A4902-B	RJS1A4802-B	AC OUTLET	(EB) △
		RJS1A4902-B	AC OUTLET	(E, EG) △
		RJS1A8102	AC OUTLET	(GN) △
		SJS9331B	AC OUTLET	(GC) △
FUSE HOLDER(S)				
FC701, 702	EYF52BC	EYF52BC	FUSE HOLDER	(E, EB, EG, GN)
		—————	FUSE HOLDER	(GC) Deletion

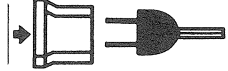
■ CHANGE IN REPLACEMENT PARTS LIST (on pages 32~35, 38, 43, 44)

- Notes:**
- Mentioned in this parts list is only those different from Model No. RS-X502 (E). All other parts are the same as for RS-X502 (E).
 - Important safety notice:
Components identified by △ mark have special characteristics important for safety. When replacing any of these components, use only manufacturer’s specified parts.

Ref. No.	Change of Part No.		Part Name & Description	Remarks
	RS-X502 (E)	RS-X520 (E, EB, EG, GC, GN)		
INTEGRATED CIRCUIT(S)				
IC951	DN6851ALB	LB9051A-WD	HALL (DECK 1)	
IC971	DN6851ALB	LB9051A-WD	HALL (DECK 2)	
TRANSISTOR(S)				
Q5－8	KSA1175YGTA	2SA1309A-R	TRANSISTOR	
Q9－14	KSC2785YGTA	2SC3311A-Q	TRANSISTOR	
Q303	KSB564ACYGTA	2SB621A-R	TRANSISTOR	
Q551	KSA1175YGTA	2SA1309A-R	TRANSISTOR	
Q607	KSB564ACYGTA	2SB621A-R	TRANSISTOR	
Q816	KSC2785YGTA	2SC3311A-Q	TRANSISTOR	
Q905	KSC2785YGTA	2SC3311A-Q	TRANSISTOR	
Q911	KSA1175YGTA	2SA1309A-R	TRANSISTOR	
Q918	KSA1175YGTA	2SA1309A-R	TRANSISTOR	
Q929	KSC2785YGTA	2SC3311A-Q	TRANSISTOR	
Q932	KSC2785YGTA	2SC3311A-Q	TRANSISTOR	
TRANSFORMER(S)				
PT1	RTP1K4B013	RTP1K4B013	POWER TRANSFORMER	(E, EB, EG, GN) △
		RTP1K4E021	POWER TRANSFORMER	(GC) △
FUSE(S)				
F1	XBA2C25TB0	XBA2C25TB0	FUSE 250V T2.5A	(E, EB, EG, GN) △
		————	FUSE 250V T2.5A	(GC) △ Deletion
SWITCH(ES)				
S701A	————	————	————	(E, EB, EG, GN)
		SSR187-1	VOLTAGE SELECTOR	(GC) △ Addition
CONNECTOR(S)				
CN4	RJS1A1704	RJS1A6604	CONNECTOR (4P)	
CN6	RJS1A1704	RJS1A6604	CONNECTOR (4P)	
CN600A	RJS1A1703	RJS1A6603	CONNECTOR (3P)	
CN600B	RJS1A1703	RJS1A6603	CONNECTOR (3P)	
JACK(S)				
JK701	SJS9236	SJS9236	AC INLET	(E, EB, EG, GC) △
		SJSD16	AC INLET	(GN) △
JK702	RJS1A4902-B	RJS1A4802-B	AC OUTLET	(EB) △
		RJS1A4902-B	AC OUTLET	(E, EG) △
		RJS1A8102	AC OUTLET	(GN) △
		SJS9331B	AC OUTLET	(GC) △
FUSE HOLDER(S)				
FC701, 702	EYF52BC	EYF52BC	FUSE HOLDER	(E, EB, EG, GN)
		————	FUSE HOLDER	(GC) Deletion

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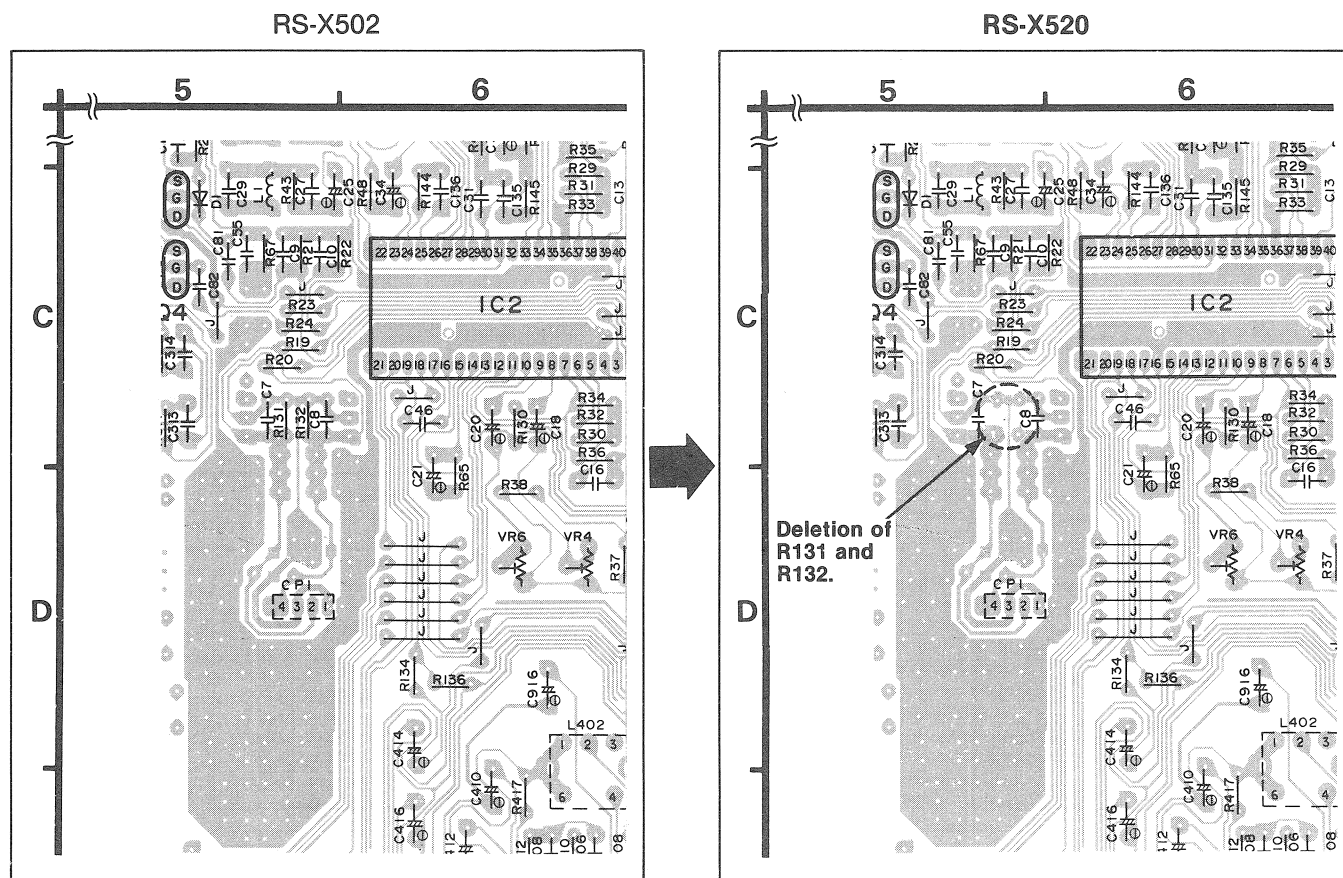
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Ref. No.	Change of Part No.		Part Name & Description	Remarks
	RS-X502 (E)	RS-X520 (E, EB, EG, GC, GN)		
FLAT CABLE(S)				
W3	RWJ0207210QQ	RWJ5707210QQ	FLAT CABLE (7P)	
W5	RWJ0210200QQ	RWJ5710200QQ	FLAT CABLE (10P)	
W8	RWJ0210200KQ	RWJ5710200KQ	FLAT CABLE (10P)	
RESISTORS				
R35, 36	ERDS2TJ474	ERDS2TJ394	C. RESISTOR, 1/4W, 390kΩ	
R131, 132	ERDS2TJ104	————	C. RESISTOR, 1/4W, 100kΩ	Deletion
R144, 145	ERDS2TJ103	ERDS2TJ562	C. RESISTOR, 1/4W, 5.6kΩ	
CAPACITORS				
C7, 8	ECBT1H561KB5	ECBT1H471KB5	C. CAPACITOR, 50V, 470pF	
C13, 14	ECEA0JKA101B	ECEA1AU101	E. CAPACITOR, 10V, 100μF	
C15, 16	ECQB1H682JZ3	ECQB1H822JF3	C. CAPACITOR, 50V, 8200pF	
C21	ECEA0JKA101B	ECEA1AU101	E. CAPACITOR, 10V, 100μF	
C57, 58	ECEA1AKA470B	ECEA1CKA470B	E. CAPACITOR, 16V, 47μF	
C135, 136	ECQB1H822JZ	ECQB1H153JF3	C. CAPACITOR, 50V, 0.015μF	
CABINET AND CHASSIS				
3	RYF0136A-K	RYF0136C-K	CASSETTE LID (DECK 1)	
4	RYF0137A-K	RYF0137B-K	CASSETTE LID (DECK 2)	
6	RGR0102C-C	RGR0102B-C1	REAR PANEL	(EB)
		RGR0102C-E1	REAR PANEL	(EG)
		RGR0102C-G1	REAR PANEL	(E)
		RGR0102D-B1	REAR PANEL	(GC)
		RGR0102E-B1	REAR PANEL	(GN)
7	RJS1A4902-A	RJS1A4602	AC OUTLET COVER	(GN)
		RJS1A4802-A	AC OUTLET COVER	(EB)
		RJS1A4902-A	AC OUTLET COVER	(E, EG)
		SJS9331A	AC OUTLET COVER	(GC)
13	RGG0066A-K	RGG0066C-K	FRONT AL PANEL	
14	RFKGSX502E-K	RFKGSX520E-K	FRONT PANEL ASS'Y	
PACKING MATERIAL				
P1	RPG0844	RPG1210	PACKING CASE	
P3	SPSD152	RPQ0164	ACCESSORIES PAD	
P4	SPP756	XZB50X65A02Z	PROTECTION COVER (UNIT)	
P5	————	XZB24X34C04	PROTECTION BAG (ACCESSORIES)	Addition
ACCESSORIES				
A1	RQF1073	————	INSTRUCTION MANUAL UNIT	(E) Deletion
		————	INSTRUCTION MANUAL UNIT	(EB) Deletion
		————	INSTRUCTION MANUAL UNIT	(EG) Deletion
		————	INSTRUCTION MANUAL UNIT	(GC) Deletion
		————	INSTRUCTION MANUAL UNIT	(GN) Deletion
A1-1	RFKSSX502E-K	RFKSCX520DEK	INSTRUCTION MANUAL ASS'Y	(E)
		RQT1491-G	INSTRUCTION MANUAL	(GC)
		RQT1493-D	INSTRUCTION MANUAL	(EG)
		RQT1494-B	INSTRUCTION MANUAL	(EB, GN)
A1-2	RQA0013	RQA0013	WARRANTY CARD	(E, EB, EG)
		RQX7433ZA	WARRANTY CARD	(GN)
		————	WARRANTY CARD	(GC) Deletion

Ref. No.	Change of Part No.		Part Name & Description	Remarks
	RS-X502 (E)	RS-X520 (E, EB, EG, GC, GN)		
A2	SJA187	RJA0004	AC POWER SUPPLY CORD	(GC) △
		RJA0018-1K	AC POWER SUPPLY CORD	(E, EG) △
		SJA173	AC POWER SUPPLY CORD	(GN) △
		SJA188	AC POWER SUPPLY CORD	(EB) △
A3	SJP2249-3	SJP2276	STEREO CONNECTION CABLE	
A6	—	RQLA0134	CAUTION LABEL (VOL. SELECTOR)	(E, EB, EG, GN) (GC) Addition
MECHANISM PARTS LIST				
DECK 1				
161	XTW2+6L	—	SCREW	Change of Pcs
162	XTW2+8L	—	SCREW	Deletion
DECK 2				
261	XTW2+6L	—	SCREW	Change of Pcs
262	XTW2+8L	—	SCREW	Deletion

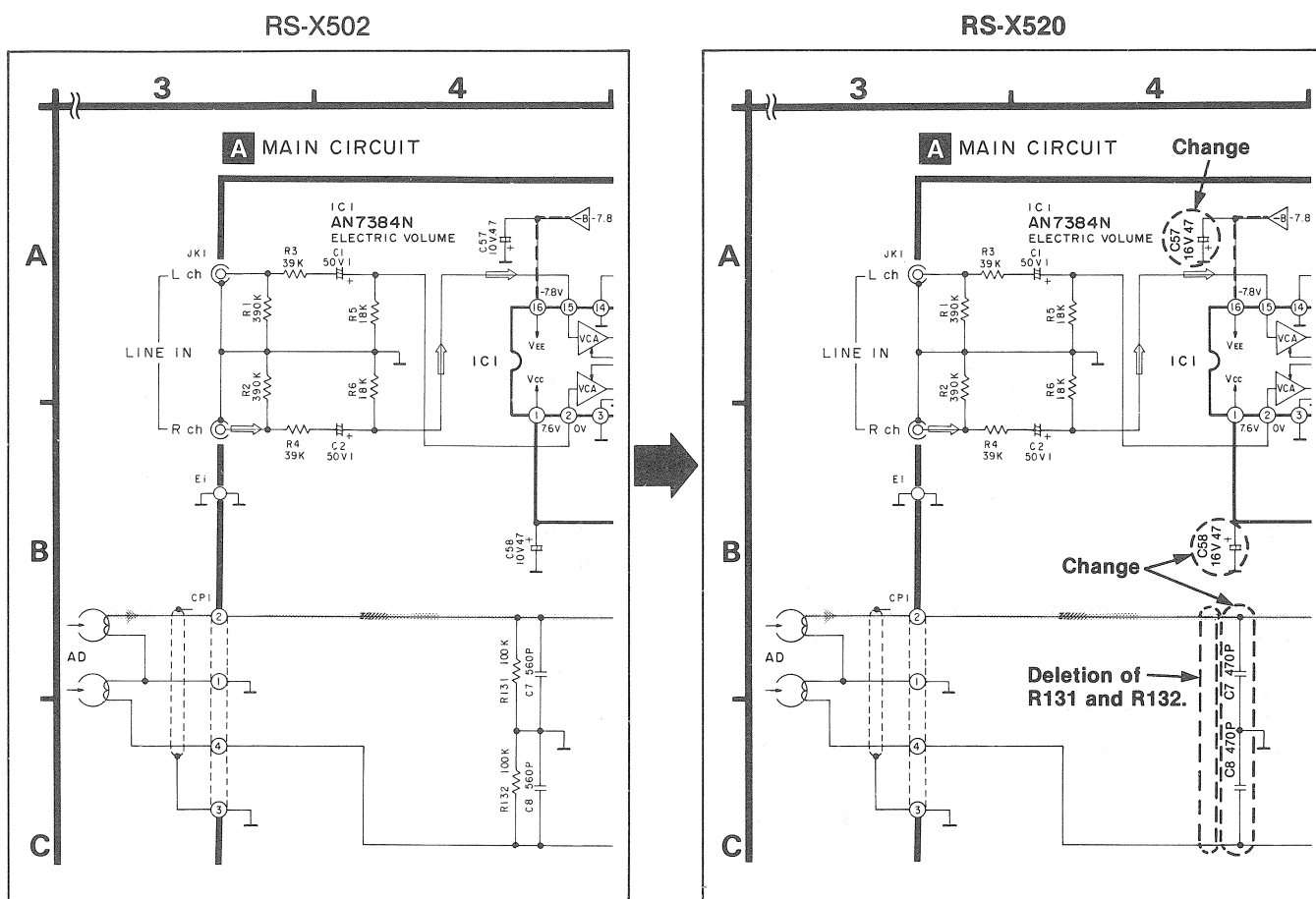
PRINTED CIRCUIT BOARDS (on pages 13, 14.)

A MAIN P.C.B.

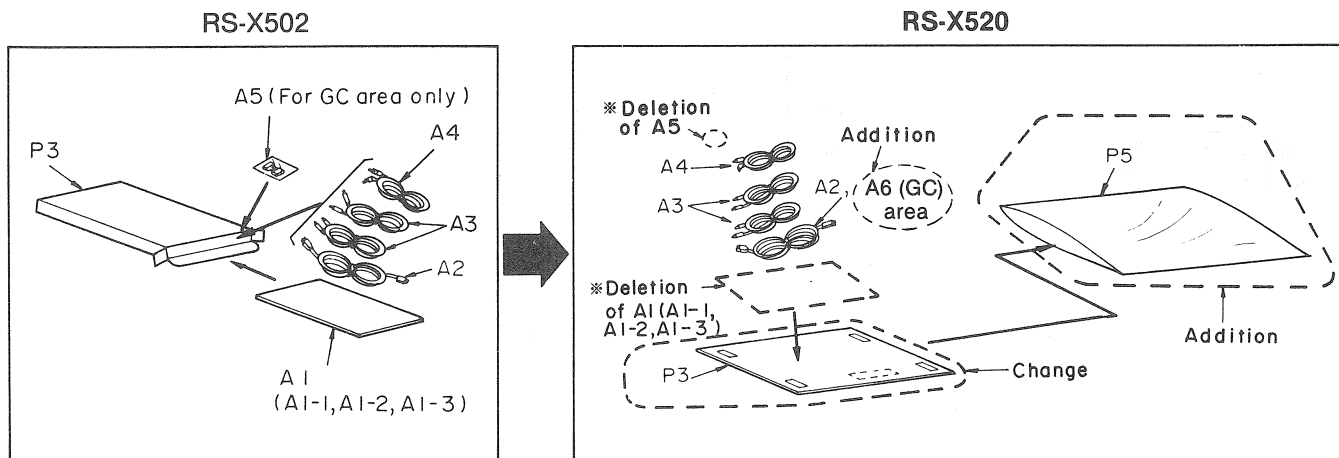


SCHEMATIC DIAGRAM (on page 19.)

A MAIN CIRCUIT



PACKAGING (on page 31.)



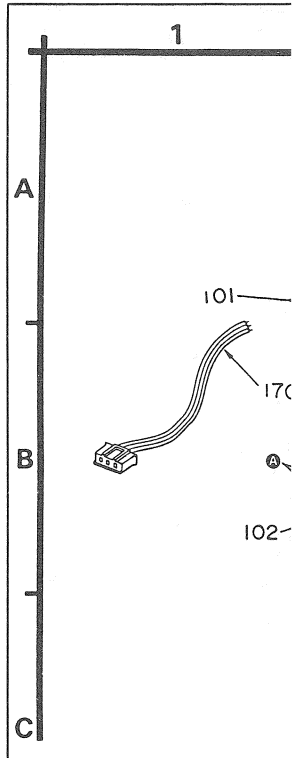
* Note:

This packaging not illustrated Ref. No. A1 (A1-1, A1-2, A1-3). Refer to the packaging on page 42 of the service manual for Model No. SU-X502, Order No. AD9103051C8.

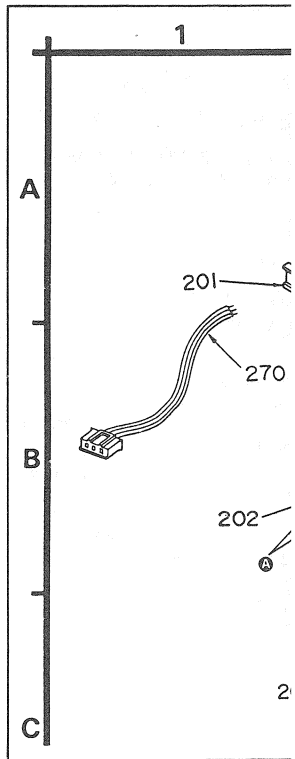
EXPLODED VIEW

• Mechanical parts

• DECK 1



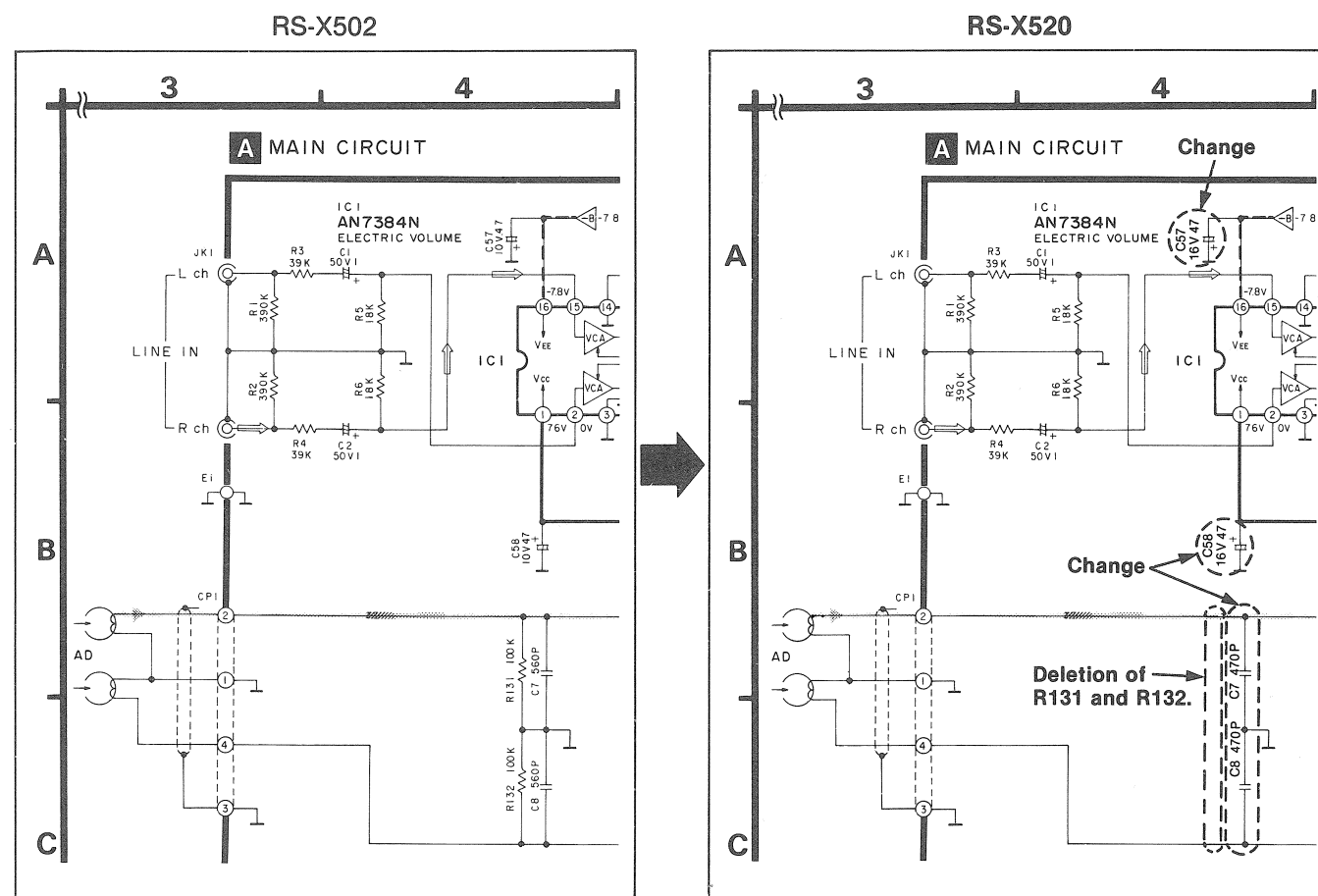
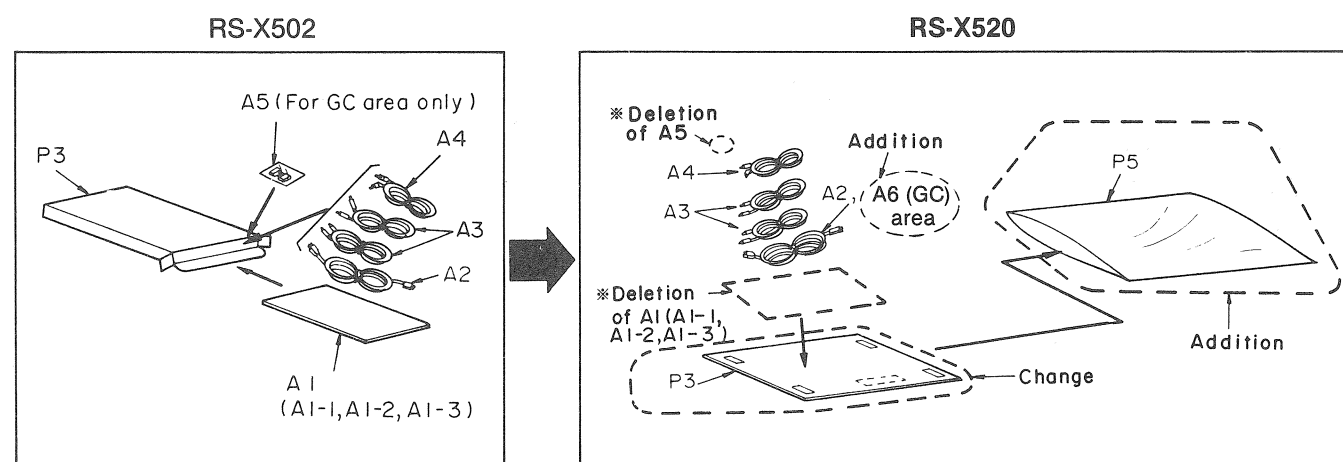
• DECK 2



Remarks
(GC) Δ
(E, EG) Δ
(GN) Δ
(EB) Δ
(E, EB, EG, GN)
(GC) Addition
Change of Pcs
Deletion
Change of Pcs
Deletion

■ **SCHEMATIC DIAGRAM** (on page 19.)

A MAIN CIRCUIT

**■ PACKAGING** (on page 31.)

※ **Note:**
This packaging not illustrated Ref. No. A1 (A1-1, A1-2, A1-3).
Refer to the packaging on page 42 of the service manual for Model
No. SU-X502, Order No. AD9103051C8.

■ **EXPLODED VIEWS** (on pages 39, 41.)

- **Mechanical parts**

