

# Service Manual

Portable Stereo CD System

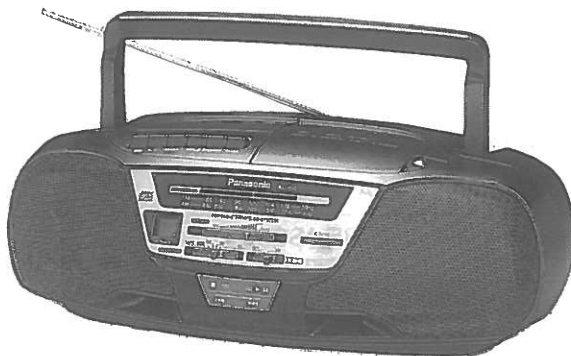
Radio Cassette

## RX-DS12

**COMPACT**  
**disc**  
**DIGITAL AUDIO**

**MASH \***  
multi-stage noise shaping

\* MASH is a trademark of NTT



**Colour**  
(K) ..... Black Type

**Areas**  
(P) ..... U.S.A.

**Tape Deck: SG-20 Mechanism Series**  
**Traverse Deck: RAE0152Z Series**

Please file and use this manual together with the service manual for Model No. RX-DS11 (P), Order No. AD9702013C1.

**Note:**

This service manual is provided to indicate the differences between the original model No. RX-DS11 (P) and the subsequent model No. RX-DS12 (P).

## ■ Main Differences from Model RX-DS11(P)

1. CD Servo
2. Cassette Mechanism R/P Head and Its Periphery.
3. Microcomputer (IC801)
  - Terminal Board and Voltage are not stated because they do not differ from those items of Model RX-DS11.

### ⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

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## ■ Replacement Parts List

**Note:** Mentioned in this parts list is only those different from Model No. RX-DS11 (P).

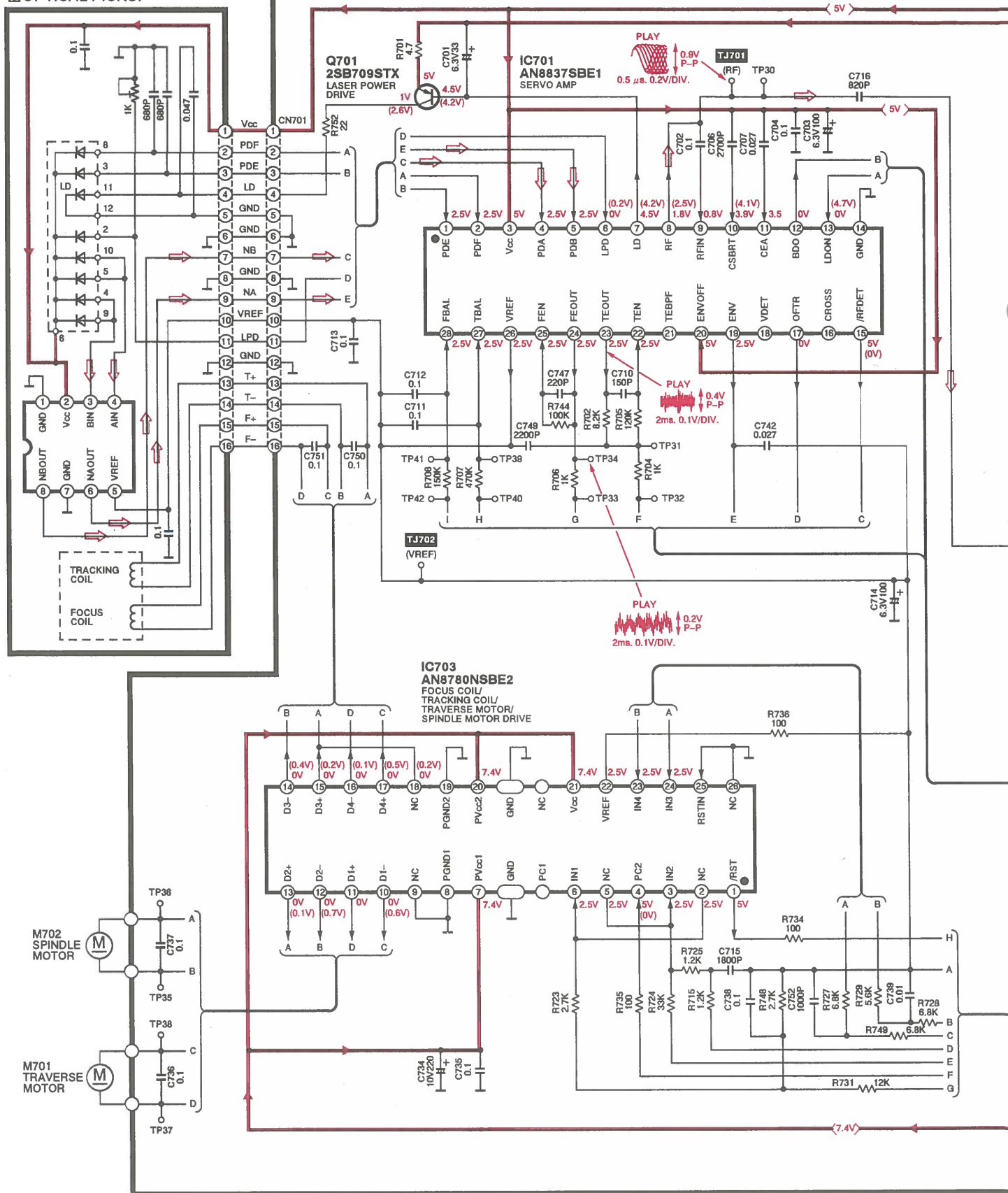
All other parts are the same as for RX-DS11 (P).

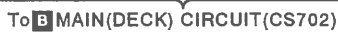
Ref. No.	Parts Number		Parts Name & Description	Remarks
	RX-DS11 (P)	➔ RX-DS12 (P)		
INTEGRATED CIRCUIT (S)				
IC801	UPD753204021	UPD753206020	IC	Change
CABINET PARTS				
1	RFKGXDS11P-K	RFKGXDS12P-K	FRONT CABINET ASS'Y	Change
3	RJC511XA	RJC511ZA	BATTERY TERMINAL	Change
22	RFX0834	_____	WIRE ASS'Y	Delete
23	RJC91009	_____	BATTERY TERMINAL	Delete
24	RJR0173	_____	ANTENNA TERMINAL	Delete
25	RKS0252A-K	_____	REAR CABINET ASS'Y	Delete
26	XEARR175EA-H	_____	TELESCOPIC ANTENNA	Delete
27	XYN3+F12FY	_____	SCREW	Delete
48	RAE0150Z	RAE0152Z	TRAVERSE DECK ASS'Y	Change
49	RMS0350	RMS0350-1	PIN 1	Change
50	RMS0123-1	RMS0627	PIN 2	Change
60	_____	RYK0676F-K	REAR CABINET ASS'Y	Addition
60 – 1	_____	REX0834	WIRE ASS'Y	Addition
60 – 2	_____	RJC91009	BATTERY TERMINAL	Addition
60 – 3	_____	RJR0173	ANTENNA TERMINAL	Addition
60 – 4	_____	XEARR175EA-C	TELESCOPIC ANTENNA	Addition
60 – 5	_____	XYN3+F12FY	SCREW	Addition
CASSETTE MECHANISM PARTS				
101	RDV0021	RDV0022	MAIN BELT A	Change
141	RXF0012	RFX0020	FLYWHEEL ASS'Y	Change
146	RBR4CY016-1W	RBR4CM004-M	R/P HEAD	Change
149	RMA0696	RMA1080	HEAD BASE ASS'Y, 1	Change
151	RMQ0384	RMR0149-2	HEAD BASE, 2	Change
153	XTN2+14F	_____	SCREW	Delete
170	_____	RHD20049	SCREW, AZIMUTH	Addition
171	_____	RMB0059	SPRING	Addition
172	_____	RJR0033	EARTH LUG	Addition
173	_____	XTN2+4F	SCREW	Addition
174	_____	XTN2+8F	SCREW	Addition
PACKING MATERIALS				
P1	RPG3190	RPG3800	GIFT BOX	Change
ACCESSORIES				
A1	RQT3644-P	RQT4279-P	INSTRUCTION MANUAL	Change

# • CD Servo Section

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
48	RAE0152Z	TRAVERSE DECK UNIT	1		R724	ERJ6GEYJ333Z	1/10W 33K	1	
48-1	SHGD113-1	RUBBER	3		R725	ERJ6GEYJ122Z	1/10W 1.2K	1	
48-2	SNSD38	SCREW	2		R727, 28	ERJ6GEYJ682Z	1/10W 6.8K	2	
49	RMS0350-1	PIN	1		R729	ERJ6GEYJ562V	1/10W 5.6K	1	
50	RMS0627	PIN	1		R731	ERJ6GEYJ123Z	1/10W 12K	1	
51	RME0109	SPRING	2		R734-36	ERJ6GEYJ101Z	1/10W 100	3	
52	RME0142	SPRING	1		R738	ERJ6GEYJ223Z	1/10W 22K	1	
53	RMR0698-K	TRAVERSE CHASSIS	1		R741-43	ERJ6GEYJ562V	1/10W 5.6K	3	
54	XTV2+6G	SCREW	2		R744	ERJ6GEYJ104Z	1/10W 100K	1	
55	XTN2+6G	SCREW	1		R745	ERJ6GEYJ106V	1/10W 10M	1	
					R748	ERJ6GEYJ272Z	1/10W 2.7K	1	
					R749	ERJ6GEYJ682Z	1/10W 6.8K	1	
C701	ECEA0JKA3301	6.3V 33U	1		R752	ERJ8GEYJ220V	1/8W 22	1	
C702	ECUZNE104MBN	25V 0.1U	1		R770	ERJ6GEYJ224Z	1/10W 220K	1	
C703	ECEA0JKA1011	6.3V 100U	1						
C704	ECUZNE104MBN	25V 0.1U	1		RJ701	ERJ6GEY0R00A	THICK FILM CHIP RESISTOR	1	
C706	ECUE1H272KBN	50V 2700P	1		RJ702-10	ERJ8GEY0R00A	1/8W 0	9	
C707	ECUV1E273KBN	25V 0.027U	1		RJ721-28	ERJ6GEY0R00A	1/10W 0	8	
C710	ECUE1H151KCN	50V 150P	1		RJ750	ERJ6GEY0R00A	1/10W 0	1	
C711, 12	ECUWNE104ZFN	25V 0.1U	2						
C713	ECUZNE104MBN	25V 0.1U	1		S701	RSH1A043-U	SW	1	
C714	ECEA0JKA1011	6.3V 100U	1						
C715	ECUE1H182KBN	50V 1800P	1		TJ701, 02	EYF8CU	TEST JUMPER	2	
C716	ECUE1H821KBN	50V 820P	1						
C717	ECUWNE104ZFN	25V 0.1U	1		X701	RSXZ16M9M01T	OSCILLATOR	1	
C718	ECUVNC224KBN	16V 0.22U	1						
C721, 22	ECUE1H150JCN	50V 15P	2						
C723	ECEA1AKA2211	10V 220U	1						
C724	ECUZNE104MBN	25V 0.1U	1						
C725, 26	ECUE1H102KBN	50V 1000P	2						
C727, 28	ECEA1HPK0101	50V 1U	2						
C730	ECUWNE104ZFN	25V 0.1U	1						
C731, 32	ECEA0JKA2211	6.3V 220U	2						
C733	ECUZNE104MBN	25V 0.1U	1						
C734	ECEA1AKA2211	10V 220U	1						
C735-37	ECUWNE104ZFN	25V 0.1U	3						
C738	ECUZNE104MBN	25V 0.1U	1						
C739	ECUE1H103KBN	50V 0.01U	1						
C742	ECUV1E273KBN	25V 0.027U	1						
C743	ECUWNE104ZFN	25V 0.1U	1						
C744	ECUV1E183KBN	25V 0.018U	1						
C745	ECUE1C473KBN	16V 0.047U	1						
C747	ECUE1H221KBN	50V 220P	1						
C749	ECUE1H222KBN	50 2200P	1						
C750, 51	ECUZNE104MBN	25V 0.1U	2						
C752	ECUE1H102KBN	50V 1000P	1						
C753	ECUV1H471KBN	50V 470P	1						
C754	ECUE1H471KBN	50V 470P	1						
C761, 62	ECUE1H471KBN	50V 470P	2						
CN701	RJU035T016-1	CONNECTOR (16P)	1						
CN702	RJS1A6723-1Q	CONNECTOR (23P)	1						
IC701	AN8837SB	IC	1						
IC702	MN662746RPK1	IC	1						
IC703	AN8780NSBE2	IC	1						
Q701	2SB709STX	TRANSISTOR	1						
Q702	DTC114YKA146	TRANSISTOR	1						
R701	ERJ6GEYJ4R7Z	1/10W 4.7	1						
R702	ERJ6GEYJ822V	1/10W 8.2K	1						
R704	ERJ6GEYJ102A	1/10W 1K	1						
R705	ERJ6GEYJ124Z	1/10W 120K	1						
R706	ERJ6GEYJ102A	1/10W 1K	1						
R707	ERJ6GEYJ474Z	1/10W 470K	1						
R708	ERJ6GEYJ154V	1/10W 150K	1						
R709	ERJ6GEYJ473Z	1/10W 47K	1						
R710	ERJ6GEYJ103V	1/10W 10K	1						
R711	ERJ6GEYJ104Z	1/10W 100K	1						
R712	ERJ6GEYJ151V	1/10W 150	1						
R715	ERJ6GEYJ122Z	1/10W 1.2K	1						
R717-20	ERJ6GEYJ102A	1/10W 1K	4						
R721	ERJ6GEYJ101Z	1/10W 100	1						
R723	ERJ6GEYJ272Z	1/10W 2.7K	1						

## A CD SERVO CIRCUIT (PCB Board: on page 6.)



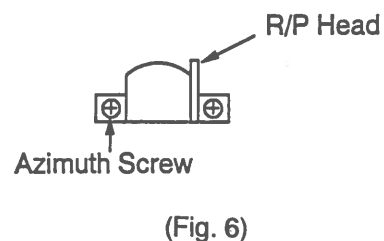
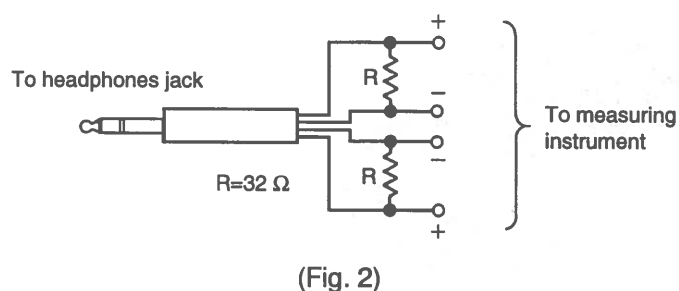




## ■ Measurements and Adjustments

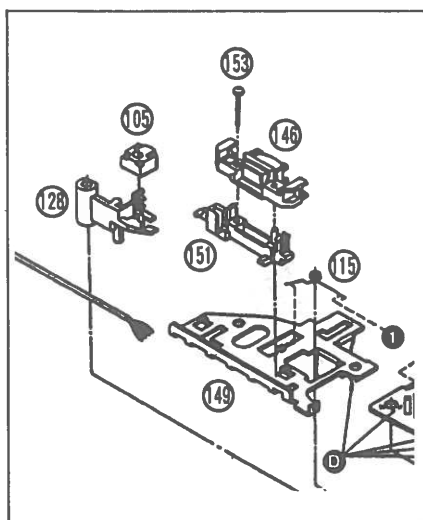
### • Head Azimuth Alignment

TEST TAPE	EQUIPMENT CONNECTION ELECTRONIC COUNTER	ADJUSTMENT	SPECIFICATION	REMARKS
QZZCFM (8 kHz, - 10 dB)	Headphone Jack (32 $\Omega$ )  ( Fabricate the plug as shown in Fig. 2 and then connect in lead wires of the plug to the measuring instrument. )	Azimuth screw (As shown in Fig. 6)	Maximum output	Playback mode

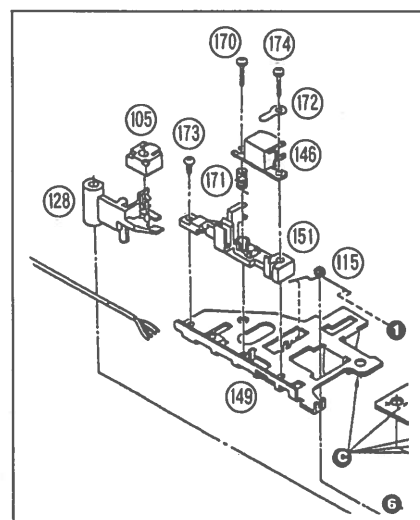


## ■ Mechanism Parts Location

RX-DS11 (P)

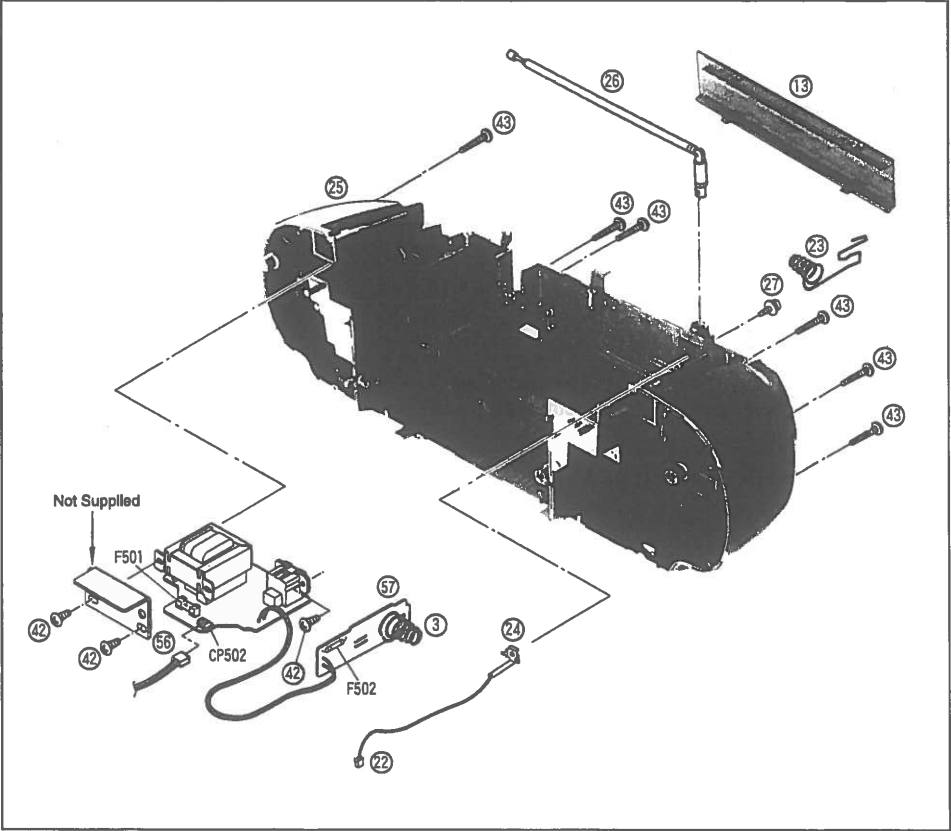


RX-DS12 (P)

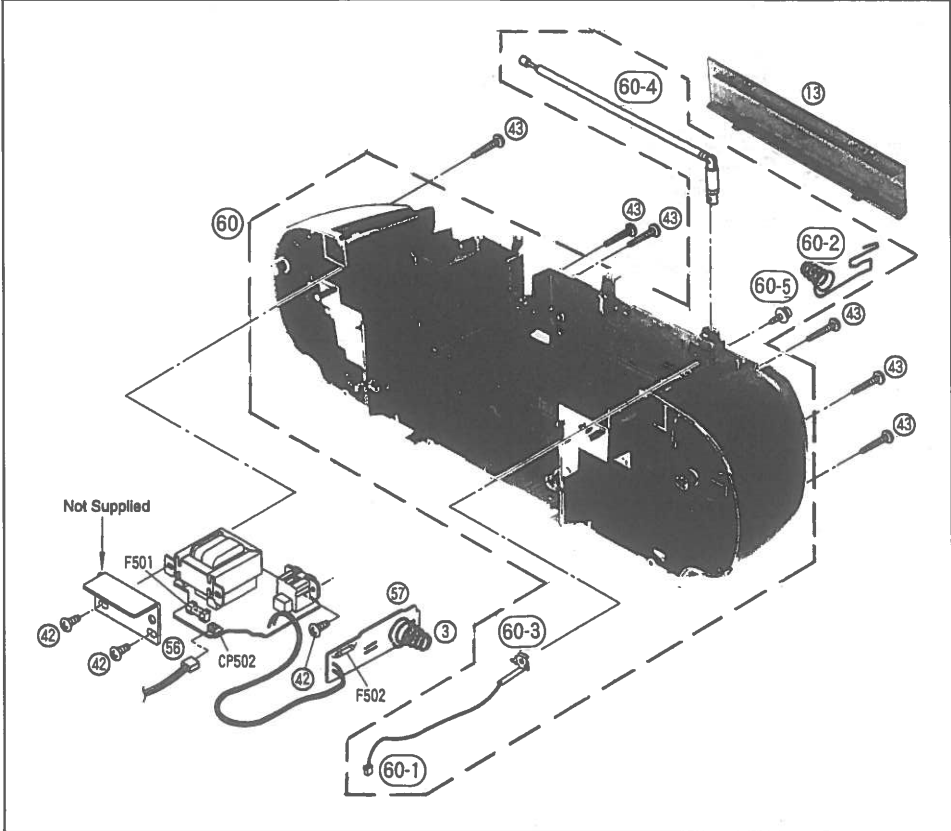


Cabinet Parts Location

RX-DS11 (P)



RX-DS12 (P)





# Service Manual

Radio Cassette

RX-DS12

**Supplement****Colour**

(S) ..... Black Type

**Areas**

P ..... U.S.A.

E, EP ..... Europe and Russia.

EB ..... Great Britain.

EG ..... Europe.

EJ ..... Italy.

GN ..... Oceania.

GC, GU .... Asia, Latin America,  
Middle East and  
Africa.

- This Document is supplementary to the following Service Manual:

Model No.	Suffix for Model No.	Order No.
RX-DS12	P	AD9803066A1
	E,EP,EB,EG,EJ,GN	AD9803072A2
	GC,GU	AD9804080A3

## ■ Purpose

This supplement is intended to correct following items to the Service Manual above:

- Replacement Parts List.

## CORRECTION

## ■ Replacement Parts List (Original Service Manual on Page 3 or 4)

Ref. No.	Change of Part No.		Part Name & Description	Pcs	Remarks
	ORIGINAL	NEW			
IC701	AN8835SB	AN8835SBE1	I C	1	[M]

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