

# Service Manual

Portable Stereo Component System

Radio Cassette

## RX-DS515

Colour

(K) . . . . . Black Type

Area

Suffix for Model No.	Area	Colour
(P)	U.S.A.	(K)
(PC)	Canada	

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Please file and use this manual together with the Service Manual for Model No. RX-DS520, Order No : MD9510125C1.

**Note :** • This Simplified Service Manual is provided to indicate the main differences between the original model no. RX-DS520(P) and the subsequent model RX-DS515 (P/PC).

### Parts Comparison Table


### CHANGES

Notes : 1. Important safety notice :

Component identified by  $\Delta$  mark have special characteristics important for safety.

Furthermore, special parts which have purpose of fire-retardant (resistors), high quality sound (capacitors), low noise (resistors), etc. are used. When replacing any of these components, be sure to use only manufacturer's specified parts shown in the parts list.

2. [M] Indicates parts that are supplied by MESA.



Ref. No.	Description	Change of Parts Number		Remarks
		RX-DS520 (P) (Original)	 RX-DS515 (P/PC)	
CABINET AND CHASSIS				
24	CD FUNCTION BUTTON	RGUX0120-H [M]	RGUX0120A-K [M]	Changed
27	FRONT CABINET ASS'Y	RFKGXDS520PK [M]	RFKGXDS515PK [M]	Changed
30	REAR CABINET ASS'Y (P)	RFKHXDS520PK [M]	RFKHXDS515PK [M]	Changed
30	REAR CABINET ASS'Y (PC)	RFKHXDS520PK [M]	RFKHXDS515PC [M]	Changed
37	CLAMPER ASS'Y	RFKNXDT680PB [M]	RFKNRXDS15PA [M]	Changed
38	CASSETTE HOLDER ASS'Y	RFKLXDS520PK [M]	RFKLXDS515PK [M]	Changed
39	CD FFC (WIRE)	REE0275-M [M]	REEX0022 [M]	Changed
41	CD OPEN SPRING	RME0147 [M]	RMEX0003-1 [M]	Changed
42	XBAS TUNING KNOB	_____	RGWX0023-K [M]	Added
43	LEAF SWITCH COVER	_____	RMR0897-K [M]	Added
INTEGRATED CIRCUITS				
IC90	IC,NANDGATE	UPD4011BC	_____	Deleted
IC303	IC,MICRO-P	UPD753204013 [M]	UPD753204015 [M]	Changed

### $\Delta$ WARNING


This service information is designed for experience 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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Ref. No.	Description	Change of Parts Number		Remarks
		RX-DS520 (P) (Original)	 RX-DS515 (P/PC)	
IC401	IC,GRAPHICEQ	AN7330K		Deleted
<b>TRANSISTORS</b>				
Q90	TRANSISTOR	2SC1740SRTA		Deleted
Q170	TRANSISTOR		2SC2785FTA	Added
Q270	TRANSISTOR		2SC2785FTA	Added
<b>DIODE</b>				
D90 ~ D96	DIODE	RVD1SS133TA		Deleted
<b>VARIABLE RESISTORS</b>				
VR352	VR,XBS		EWCU0AF20G54 [M]	Added
VR401 ~ VR404	VR (330Hz, 1kHz, 10kHz, XBAS)	EWAJQDV06G54 [M]		Deleted
<b>CONNECTORS</b>				
CP401	7P CONNECTOR	RJS1A5207		Deleted
<b>FUSES</b>				
F502	FUSE (PC)		XBA1C25NBAL [M]	Added 
<b>FUSE CLIPS</b>				
FC1 ~ FC2	FUSE CLIP	EYF52BC	RJR0169T [M]	Changed
FC3 ~ FC4	FUSE CLIP (PC)		RJR0169T [M]	Added
<b>PACKING MATERIALS</b>				
P1	GIFT BOX (P)	RPGX0229 [M]	RPGX0245 [M]	Changed
P1	GIFT BOX (PC)	RPGX0229 [M]	RPGX0246 [M]	Changed
<b>ACCESSORIES</b>				
A1	INSTRUCTION MANUAL (P)	RQT3228-P [M]	RQT3474-1P [M]	Changed
A1	INSTRUCTION MNL ASS'Y (PC)	RQT3228-P [M]	RFKSXD515PC [M]	Changed
<b>RESISTORS</b>				
R90 ~ R91	RESISTOR 2.2kΩ 1/4W	ERDS2TJ222T		Deleted
R92	RESISTOR 10kΩ 1/4W	ERDS2TJ103T		Deleted
R93 ~ R94	RESISTOR 100kΩ 1/4W	ERDS2TJ104T		Deleted
R95	RESISTOR 2.2kΩ 1/4W	ERDS2TJ222T		Deleted
R96	RESISTOR 120kΩ 1/4W	ERDS2TJ124T		Deleted
R97	RESISTOR 47kΩ 1/4W	ERDS2TJ473T		Deleted
R107	RESISTOR 27kΩ 1/4W	ERDS2TJ393T	ERDS2TJ273T	Changed
R108	RESISTOR 82kΩ 1/4W	ERDS2TJ393T	ERDS2TJ823T	Changed
R109	RESISTOR 100Ω 1/4W	ERDS2TJ103T	ERDS2TJ101T	Changed
R111	RESISTOR 12kΩ 1/4W	ERDS2TJ273T	ERDS2TJ123T	Changed
R112	RESISTOR 8.2kΩ 1/4W	ERDS2TJ472T	ERDS2TJ822T	Changed
R113	RESISTOR 100Ω 1/4W	ERDS2TJ223T	ERDS2TJ101T	Changed
R115	RESISTOR 4.7kΩ 1/4W	ERDS2TJ472T		Deleted
R171	RESISTOR 4.7kΩ 1/4W		ERDS2TJ472T	Added
R172	RESISTOR 100kΩ 1/4W		ERDS2TJ104T	Added
R173	RESISTOR 4.7kΩ 1/4W		ERDS2TJ472T	Added
R174	RESISTOR 470kΩ 1/4W		ERDS2TJ474T	Added
R175	RESISTOR 1kΩ 1/4W		ERDS2TJ102T	Added
R181	RESISTOR 33kΩ 1/4W		ERDS2TJ333T	Added
R207	RESISTOR 27kΩ 1/4W	ERDS2TJ393T	ERDS2TJ273T	Changed
R208	RESISTOR 82kΩ 1/4W	ERDS2TJ393T	ERDS2TJ823T	Changed
R209	RESISTOR 100Ω 1/4W	ERDS2TJ103T	ERDS2TJ101T	Changed
R211	RESISTOR 12kΩ 1/4W	ERDS2TJ273T	ERDS2TJ123T	Changed
R212	RESISTOR 8.2kΩ 1/4W	ERDS2TJ472T	ERDS2TJ822T	Changed

Ref. No.	Description	Change of Parts Number		Remarks
		RX-DS520 (P) (Original)	➔ RX-DS515 (P/PC)	
R213	RESISTOR 100Ω 1/4W	ERDS2TJ223T	ERDS2TJ101T	Changed
R215	RESISTOR 4.7kΩ 1/4W	ERDS2TJ472T	_____	Deleted
R271	RESISTOR 4.7kΩ 1/4W	_____	ERDS2TJ472T	Added
R272	RESISTOR 100kΩ 1/4W	_____	ERDS2TJ104T	Added
R273	RESISTOR 4.7kΩ 1/4W	_____	ERDS2TJ472T	Added
R274	RESISTOR 470kΩ 1/4W	_____	ERDS2TJ474T	Added
R275	RESISTOR 1kΩ 1/4W	_____	ERDS2TJ102T	Added
R281	RESISTOR 33kΩ 1/4W	_____	ERDS2TJ333T	Added
R801	RESISTOR 10kΩ 1/4W	ERDS2TJ103T	_____	Deleted
R802	RESISTOR 8.2kΩ 1/4W	ERDS2TJ822T	_____	Deleted
R803	RESISTOR 33kΩ 1/4W	ERDS2TJ333T	_____	Deleted
R901	RESISTOR 10kΩ 1/4W	ERDS2TJ103T	_____	Deleted
R902	RESISTOR 8.2kΩ 1/4W	ERDS2TJ822T	_____	Deleted
R903	RESISTOR 33kΩ 1/4W	ERDS2TJ333T	_____	Deleted
<b>CAPACITORS</b>				
C11	CAPACITOR 22pF 50V	ECBT1H220JC5	ECBT1H120JC5	Changed
C30	CAPACITOR 5.6pF 50V	ECBT1H5R6KC5	ECBT1H6R8KC5	Changed
C40	CAPACITOR 10pF 50V	_____	ECBT1H100JC5	Added
C90 ~ C91	CAPACITOR 4.7μF 50V	ECEA1HU4R7B	_____	Deleted
C92 ~ C93	CAPACITOR 0.01μF 16V	ECBT1C103MS5	_____	Deleted
C120	CAPACITOR 0.033μF 16V	ECFR1C153MR	ECFR1C333MR	Changed
C171	CAPACITOR 0.1μF 50V	_____	ECBT1H104ZF5	Added
C172	CAPACITOR 0.1μF 16V	_____	ECFR1C104MR	Added
C173	CAPACITOR 1μF 50V	_____	ECEA1HU010B	Added
C174	CAPACITOR 330pF 50V	_____	ECBT1H331KB5	Added
C175	CAPACITOR 1μF 50V	_____	ECEA1HU010B	Added
C220	CAPACITOR 0.033μF 16V	ECFR1C153MR	ECFR1C333MR	Changed
C271	CAPACITOR 0.1μF 50V	_____	ECBT1H104ZF5	Added
C272	CAPACITOR 0.1μF 16V	_____	ECFR1C104MR	Added
C273	CAPACITOR 1μF 50V	_____	ECEA1HU010B	Added
C274	CAPACITOR 330pF 50V	_____	ECBT1H331KB5	Added
C275	CAPACITOR 1μF 50V	_____	ECEA1HU010B	Added
C337	CAPACITOR 100μF 10V	_____	ECEA1AU101B	Added
C400	CAPACITOR 100μF 10V	ECEA1AKA101B	_____	Deleted
C801	CAPACITOR 470pF 50V	ECBT1H471KB5	_____	Deleted
C802	CAPACITOR 0.022μF 6.3V	ECBT0J223MS5	_____	Deleted
C803	CAPACITOR 6800pF 16V	ECBT1C682MR5	_____	Deleted
C811	CAPACITOR 0.1μF 16V	ECFR1C104MR	_____	Deleted
C812	CAPACITOR 0.01μF 16V	ECFR1C103MR	_____	Deleted
C820	CAPACITOR 1μF 50V	ECEA1HKA010B	_____	Deleted
C821	CAPACITOR 10μF 16V	ECEA1CKA100B	_____	Deleted
C822	CAPACITOR 1μF 50V	ECEA1HKA010B	_____	Deleted
C823	CAPACITOR 0.68μF 50V	ECEA1HKAR68B	_____	Deleted
C824	CAPACITOR 0.22μF 50V	ECEA1HKAR22B	_____	Deleted
C825	CAPACITOR 0.1μF 50V	ECEA1HKA0R1B	_____	Deleted
C826	CAPACITOR 1μF 50V	ECEA1HKA010B	_____	Deleted
C901	CAPACITOR 470pF 50V	ECBT1H471KB5	_____	Deleted
C902	CAPACITOR 0.022μF 6.3V	ECBT0J223MS5	_____	Deleted

Ref. No.	Description	Change of Parts Number		Remarks
		RX-DS520 (P) (Original)	 RX-DS515 (P/PC)	
C903	CAPACITOR 6800pF 16V	ECBT1C682MR5	_____	Deleted
C911	CAPACITOR 0.1μF 16V	ECFR1C104MR	_____	Deleted
C912	CAPACITOR 0.01μF 16V	ECFR1C103MR	_____	Deleted
C920	CAPACITOR 1μF 50V	ECEA1HKA010B	_____	Deleted
C921	CAPACITOR 10μF 16V	ECEA1CKA100B	_____	Deleted
C922	CAPACITOR 1μF 50V	ECEA1HKA010B	_____	Deleted
C923	CAPACITOR 0.68μF 50V	ECEA1HKAR68B	_____	Deleted
C924	CAPACITOR 0.22μF 50V	ECEA1HKAR22B	_____	Deleted
C925	CAPACITOR 0.1μF 50V	ECEA1HKA0R1B	_____	Deleted
C926	CAPACITOR 1μF 50V	ECEA1HKA010B	_____	Deleted

## ■ Cabinet Parts Differences

**Note:** These differences apply to "Operation Checks and Main Component Replacement Procedures" and "Cabinet Parts Location"



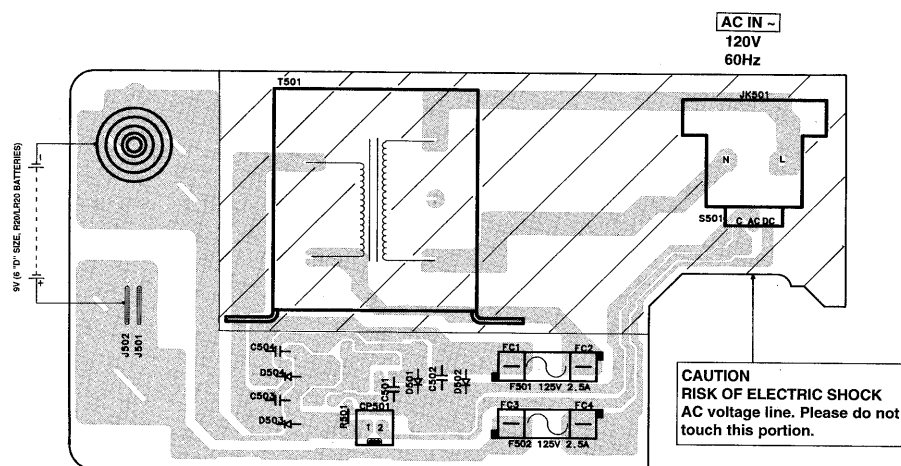
## ■ Printed Circuit Board

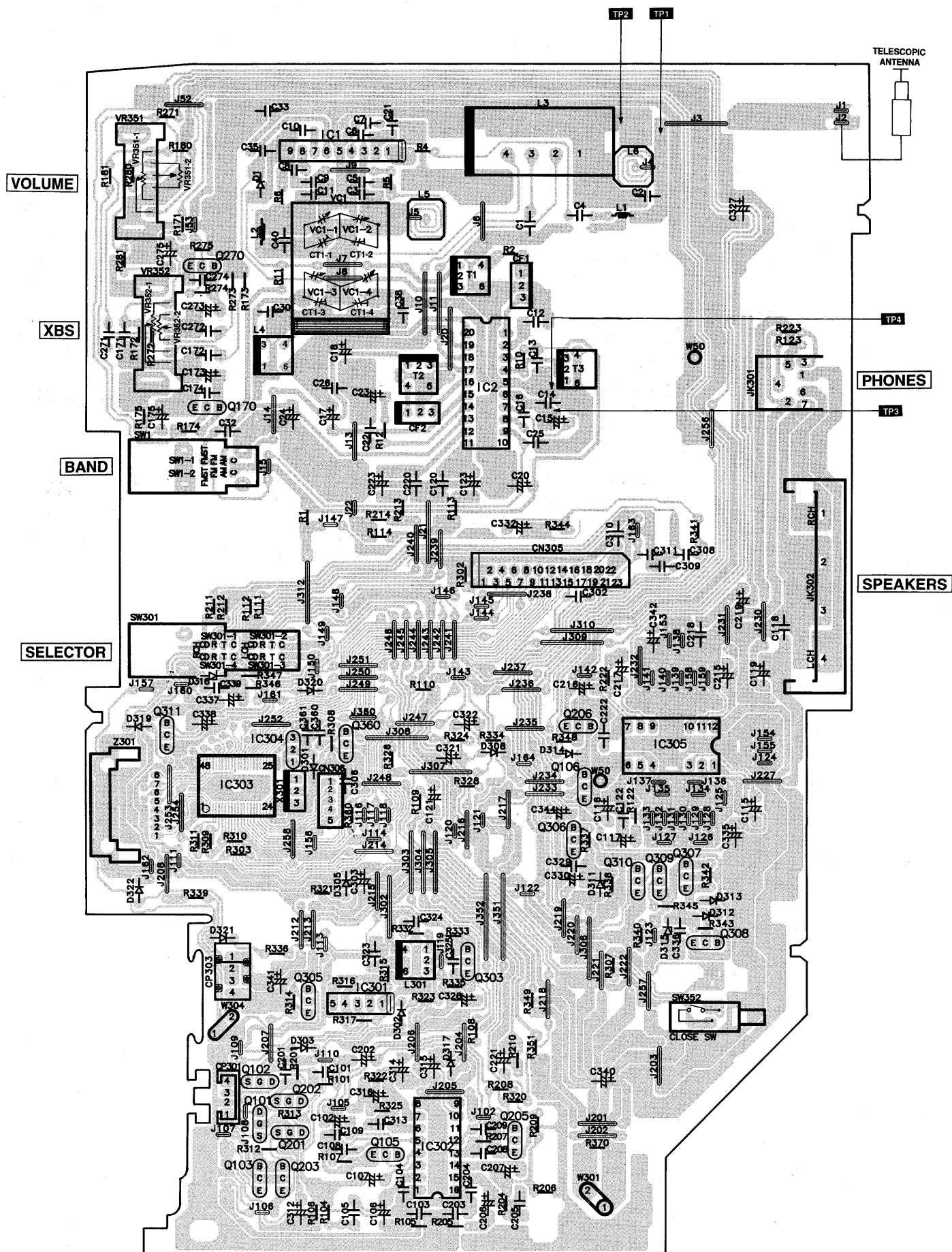
**D G.E.Q. P.C.B. (REPX0099) ... DELETED**

**OPERATIONAL P.C.B. (REPX0098 ==> REPX0098B)**

**F SWITCH P.C.B. (REPX0098 ==> REPX0098B)**

**C POWER P.C.B. (REPX0100A) ... For PC area only**

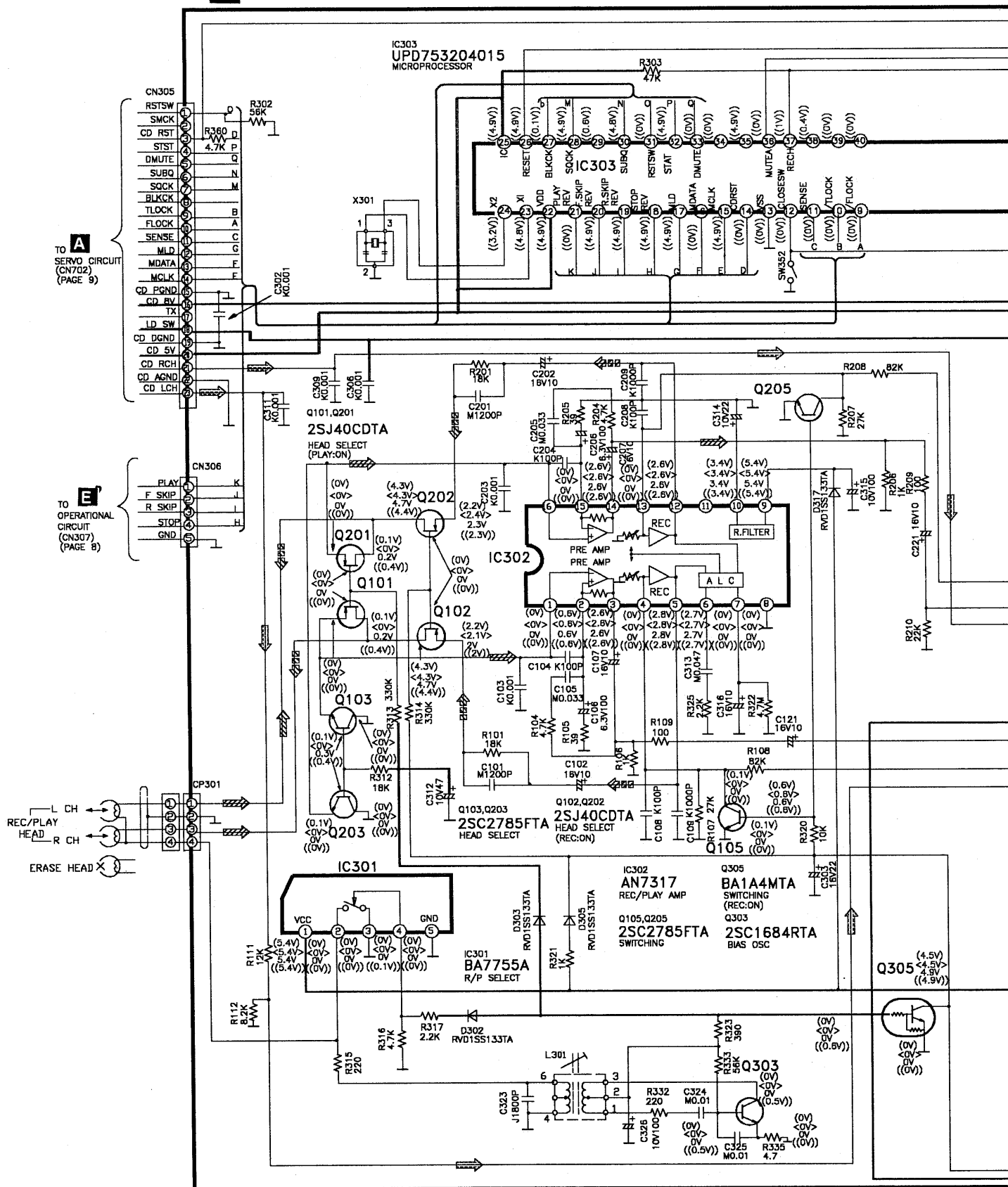


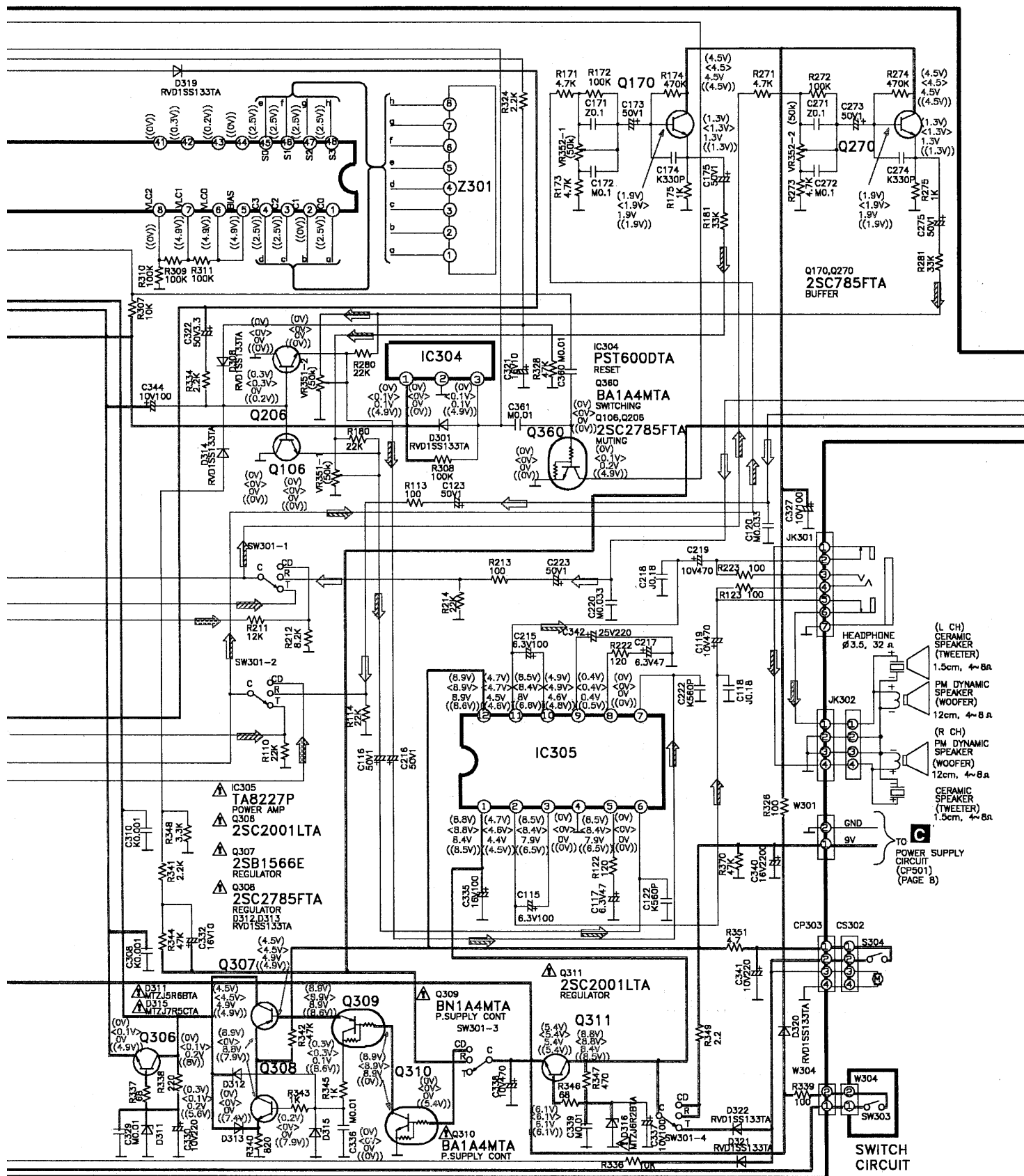
**B MAIN P.C.B. (REPX0098 ==> REPX0098B)**


### ■ Schematic Diagram

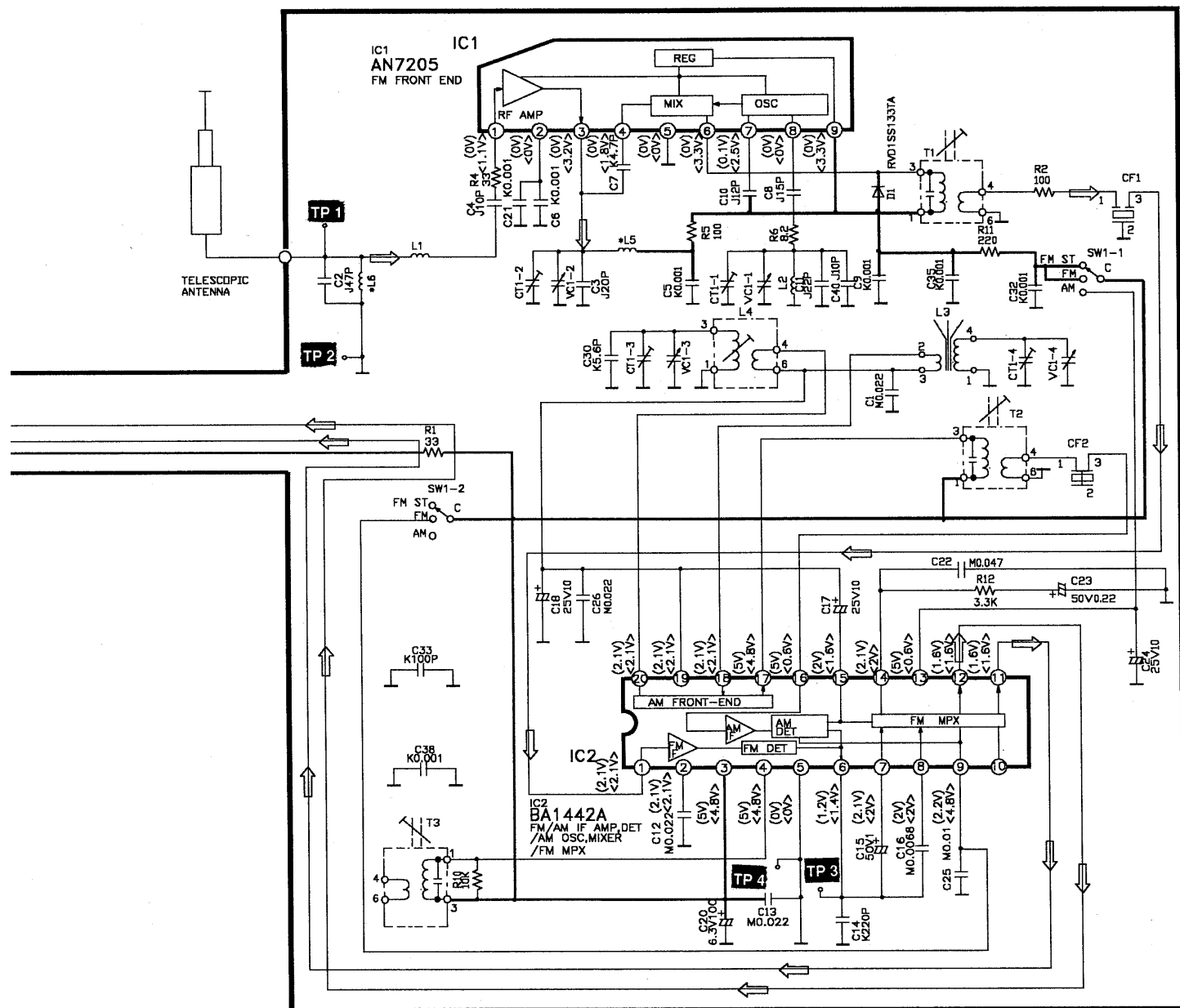
**D G.E.Q. CIRCUIT ... DELETED**

## B MAIN CIRCUIT

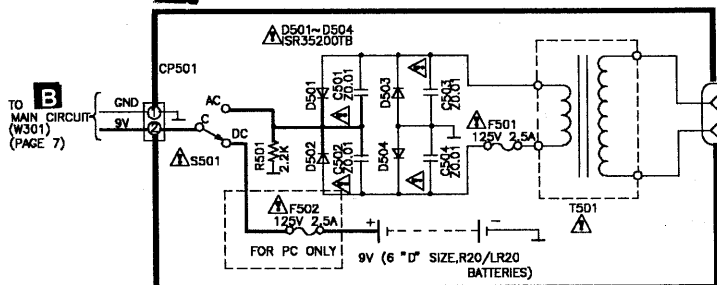








### C POWER SUPPLY CIRCUIT



### E OPERATIONAL CIRCUIT

