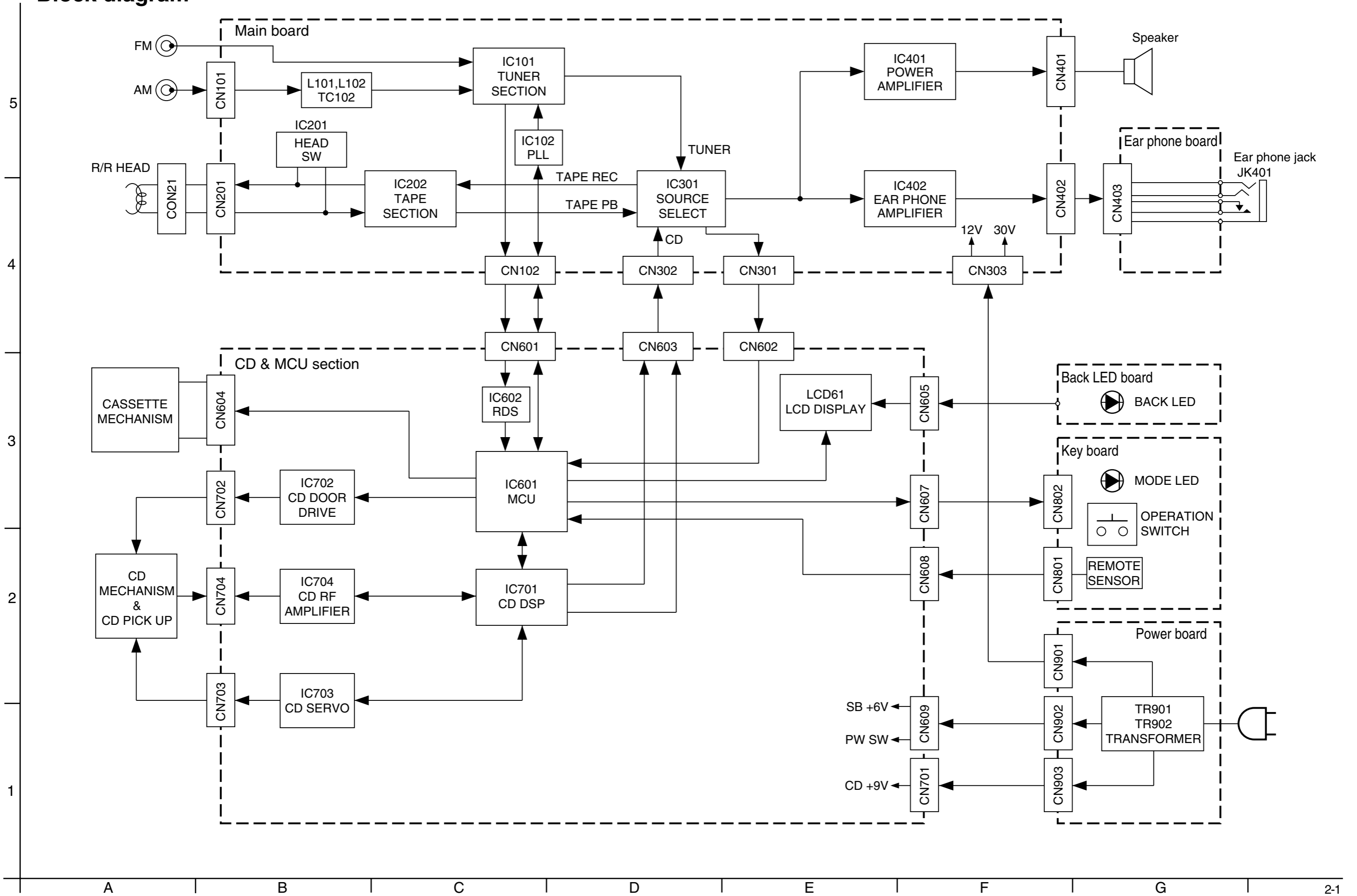


Block diagram



Standard schematic diagrams

Main section

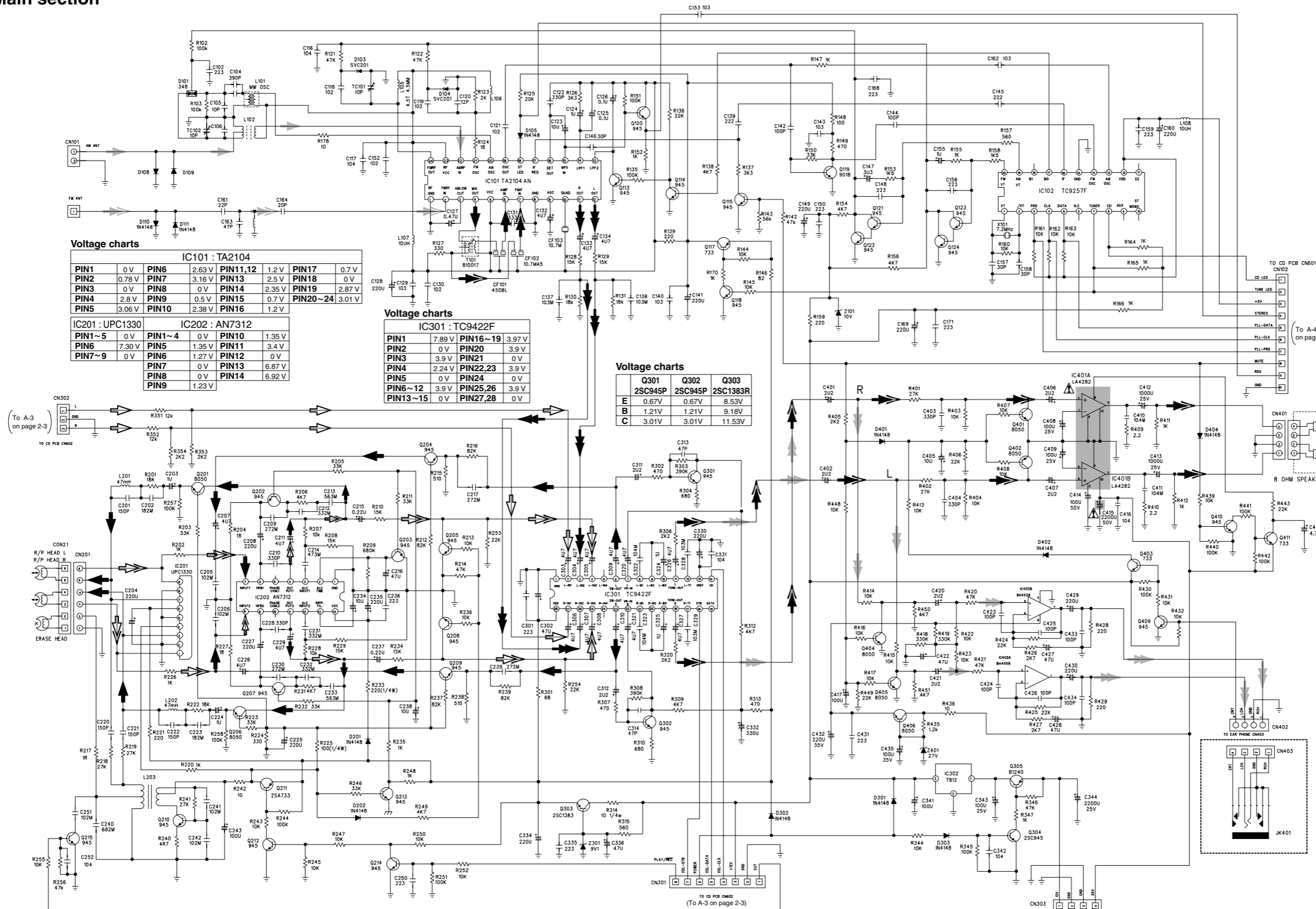
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Voltage charts

IC101 : TA2104

PIN1	0.0V	PIN6	2.63V	PIN11,12	1.2V	PIN17	0.7V
PIN2	0.78V	PIN7	3.16V	PIN13	2.5V	PIN18	0V
PIN3	0V	PIN8	0V	PIN14	2.35V	PIN19	2.87V
PIN4	2.8V	PIN9	0.5V	PIN15	0.7V	PIN20~24	3.01V
PIN5	3.06V	PIN10	2.38V	PIN16	1.2V		

IC201 : UPC1330

PIN1~5	0V	PIN1~4	0V	PIN10	1.35V
PIN6	7.30V	PIN5	1.35V	PIN11	3.4V
PIN7~9	0V	PIN6	1.27V	PIN12	0V
		PIN7	0V	PIN13	6.87V
		PIN8	0V	PIN14	6.92V
		PIN9	1.23V		

IC301 : TC9422F

PIN1	7.89V	PIN16~19	3.97V
PIN2	0V	PIN20	3.9V
PIN3	3.9V	PIN21	0V
PIN4	2.24V	PIN22,23	3.9V
PIN5	0V	PIN24	0V
PIN6~12	3.9V	PIN25,26	3.9V
PIN13~15	0V	PIN27,28	0V

Voltage charts

Q301

E	0.67V	Q302	0.67V	Q303	8.53V
B	1.21V		1.21V		9.18V
C	3.01V		3.01V		11.53V

Voltage charts

Q113

E	0V	Q114	0V	Q115	0V
B	0.51V		0V		0V
C	0V		3.2V		1.33V

Q117

E	4.56V	Q118	0V	Q119	0V
B	5.77V		0.69V		0.73V
C	6.51V		0V		3.09V

Q120

E	2.27V	Q121	0.63V	Q122	0V
B	2.89V		1.1V		0.63V
C	3.93V		2.06V		2.06V

Q123

E	0.62V	Q124	0V
B	1.09V		0.62V
C	4.23V		4.23V

Voltage charts

IC102 : TC9257

PIN1	2.61V	PIN11	0V
PIN2	2.61V	PIN12	5.3V
PIN3	5.26V	PIN13	0V
PIN4	5.26V	PIN14	2.5V
PIN5	0.5V	PIN15	0V
PIN6	0V	PIN16	2.5V
PIN7	4.25V	PIN17	5.15V
PIN8	0.3V	PIN18	0V
PIN9	0V	PIN19	1.0V
PIN10	0V	PIN20	1.0V

IC401 : LA4282

PIN1	1.0V	PIN7	16.02V
PIN2	0.7V	PIN8	0V
PIN3	16.7V	PIN9	33V
PIN4	0V	PIN10	16.3V
PIN5	0.7V	PIN11	0V
PIN6	1.09V	PIN12	0V

Voltage charts

Q304

E	0V	Q305	14.89V	Q401	0V
B	0.75V		14.1V		0V
C	0V		14.82V		0V

Q402

E	0V	Q403	11.97V	Q404	0V
B	0V		0V		0V
C	0V		11.85V		0V

Q405

E	0V	Q406	27.1V	Q409	0V
B	0V		27.9V		0V
C	0V		33.6V		11.92V

Q410

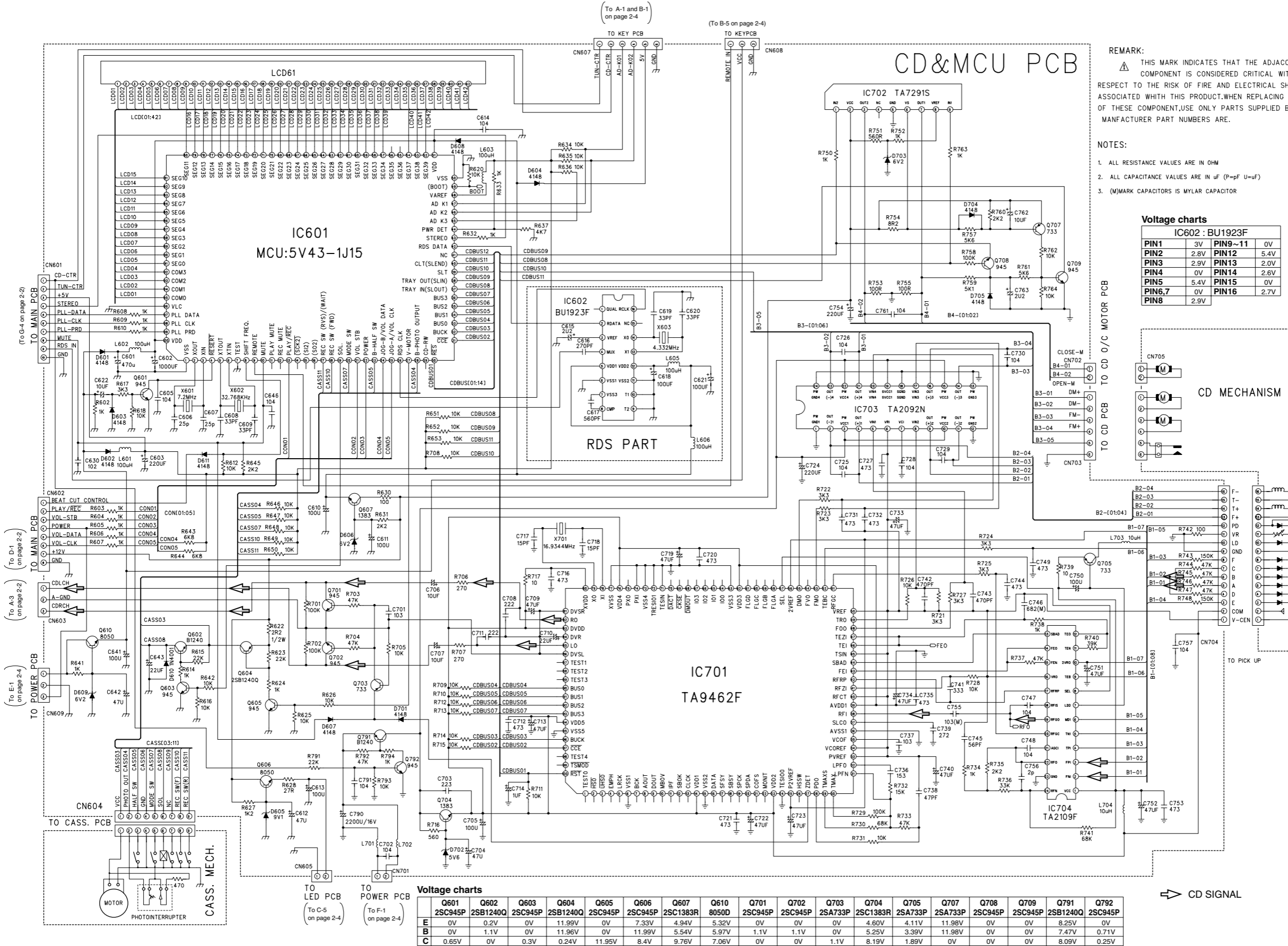
E	0V	Q411	34.1V
B	0V		33.7V
C	33.4V		0V

Voltage charts

Q201	8050D	Q202	2SC945P	Q203	2SC945P	Q204	2SC945P	Q205	2SC945P	Q206	8050D	Q207	2SC945P	Q208	2SC945P	Q209	2SC945P	Q211	2SA733P	Q212	2SC945P	Q213	2SC945P	Q214	2SC945P
E	2.1V	0V	0V	0V	0V	2.1V	0V	0V	0V	0V	2.7V	0V	0V	0.65V	0.65V	0.65V	0.65V	7.66V	0.65V	0.65V	0V	0V	0V	4.59V	
B	2.7V	0V	0.65V	0.65V	0.65V	2.7V	0V	0.65V	0.65V	7.66V	0.65V	0.65V	0V	0V	0V	0V	0V	8.11V	0V	0V	0V	0V	0V	0V	
C	2.1V	0.2V	0V	0V	0V	2.1V	0.2V	0V	0V	8.11V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	

- ➔ AM SIGNAL
- ➔ FM/RADIO SIGNAL
- ➔ RADIO SIGNAL
- ➔ TAPE PB SIGNAL
- ➔ TAPE REC SIGNAL
- ➔ CD SIGNAL
- ➔ MAIN SIGNAL
- ➔ HEAD PHONE SIGNAL
- ⚠ Parts are safety assurance parts. When replacing those parts, make sure to use the specified one.

CD & MCU section



REMARK:
 THIS MARK INDICATES THAT THE ADJACCENT COMPONENT IS CONSIDERED CRITICAL WITH RESPECT TO THE RISK OF FIRE AND ELECTRICAL SHOCK ASSOCIATED WITH THIS PRODUCT. WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY PARTS SUPPLIED BY MANUFACTURER PART NUMBERS ARE.

NOTES:
 1. ALL RESISTANCE VALUES ARE IN OHM
 2. ALL CAPACITANCE VALUES ARE IN uF (P=pF U=uF)
 3. (M) MARK CAPACITORS IS MYLAR CAPACITOR

Voltage charts

IC601 : 5V43-1J15

PIN1	0V	PIN51	1.3V
PIN2	2.4V	PIN52~54	2.38V
PIN3	2V	PIN55,56	2.36V
PIN4	4.6V	PIN57~60	2.34V
PIN5	2.3V	PIN61	2.33V
PIN6	2.81V	PIN62	2.34V
PIN7,8	0V	PIN63	2.4V
PIN9	1.8V	PIN64	2.34V
PIN10	0V	PIN65	2.31V
PIN11	4.77V	PIN66,67	2.41V
PIN12	4.7V	PIN68	2.45V
PIN13	3.59V	PIN69	2.33V
PIN14~16	0V	PIN70	2.34V
PIN17,18	5.28V	PIN71	2.37V
PIN19	0V	PIN72	2.38V
PIN20	5.28V	PIN73	2.3V
PIN21	0V	PIN74	2.38V
PIN22	4.7V	PIN75	2.32V
PIN23	5.28V	PIN76	2.31V
PIN24~27	0V	PIN77	2.44V
PIN28	5.28V	PIN78	2.45V
PIN29	0V	PIN79~81	2.38V
PIN30	5V	PIN82,83	2.4V
PIN31	0V	PIN84,85	2.36V
PIN32~36	4.8V	PIN86	2.41V
PIN37,38	0V	PIN87	2.43V
PIN39	5.28V	PIN88	2.3V
PIN40	5.28V	PIN89	2.32V
PIN41	0V	PIN90	2.44V
PIN42	1.1V	PIN91	2.47V
PIN43	0V	PIN92	2.43V
PIN44	4.43V	PIN93	2.48V
PIN45	5.28V	PIN94	2.37V
PIN46,47	5.27V	PIN95~97	0V
PIN48	5.36V	PIN98	5.27V
PIN49	5.35V	PIN99,100	4.78V
PIN50	0V		

Voltage charts

IC602 : BU1923F

PIN1	3V	PIN9~11	0V
PIN2	2.8V	PIN12	5.4V
PIN3	2.9V	PIN13	2.0V
PIN4	0V	PIN14	2.6V
PIN5	5.4V	PIN15	0V
PIN6,7	0V	PIN16	2.7V
PIN8	2.9V		

Voltage charts

IC701 : TA9462F

PIN1	4.78V	PIN51	1.6V
PIN2	4.86V	PIN52~55	2V
PIN3	4.84V	PIN56	4V
PIN4	0V	PIN57	2.4V
PIN5	2.45V	PIN58~61	0V
PIN6	0V	PIN62	5V
PIN7	2.48V	PIN63	0V
PIN8~11	0V	PIN64	0.7V
PIN12	2.21V	PIN65~67	2.4V
PIN13	1.27V	PIN68~70	4.8V
PIN14	4.9V	PIN71~74	4.9V
PIN15,16	0V	PIN75,76	0V
PIN17	2.28V	PIN77	0V
PIN18	0V	PIN78	2V
PIN19	2.49V	PIN79	2.36V
PIN20	0.48V	PIN80	4.8V
PIN21	1.65V	PIN81	0V
PIN22	0V	PIN82	2.6V
PIN23	4.9V	PIN83	4.9V
PIN24	0V	PIN84	2.49V
PIN25	4V	PIN85	2.6V
PIN26	2V	PIN86	0V
PIN27	0V	PIN87~89	4.9V
PIN28~34	2V	PIN90,91	4.7V
PIN35	1.5V	PIN92	4.5V
PIN36	0V	PIN93	4.6V
PIN37,38	2V	PIN94	4.98V
PIN39	4.9V	PIN95	0V
PIN40,41	2V	PIN96	4.6V
PIN42	2.5V	PIN97	4.15V
PIN43	2V	PIN98,99	4.96V
PIN44	2.2V	PIN100	4.94V
PIN45~50	2V		

Voltage charts

IC702 : TA7291

PIN1	0V	PIN7	0V
PIN2	12.07V	PIN8	6.13V
PIN3~5	0V	PIN9	0V
PIN6	12.06V		

Voltage charts

IC703 : TA2092

PIN1	0V	PIN13	0V
PIN2	3.42V	PIN14	3.7V
PIN3	7.69V	PIN15	7.7V
PIN4	3.72V	PIN16	3.43V
PIN5	2.09V	PIN17	1.99V
PIN6	2.05V	PIN18	0V
PIN7	3.58V	PIN19	7.71V
PIN8	2.03V	PIN20	2.14V
PIN9	3.52V	PIN21	3.92V
PIN10	7.69V	PIN22	7.7V
PIN11	3.64V	PIN23	3.3V
PIN12	0V	PIN24	0V

Voltage charts

	Q601	Q602	Q603	Q604	Q605	Q606	Q607	Q610	Q701	Q702	Q703	Q704	Q705	Q707	Q708	Q709	Q791	Q792
E	0V	0.2V	0V	11.99V	0V	7.33V	4.94V	5.32V	0V	0V	0V	4.60V	4.11V	11.98V	0V	0V	8.25V	0V
B	0V	1.1V	0V	11.96V	0V	11.99V	5.54V	5.97V	1.1V	1.1V	0V	5.25V	3.39V	11.98V	0V	0V	7.47V	0.71V
C	0.65V	0V	0.3V	0.24V	11.95V	8.4V	9.76V	7.06V	0V	0V	1.1V	8.19V	1.89V	0V	0V	0V	8.09V	0.25V

CD SIGNAL

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■ Key section

■ Power section

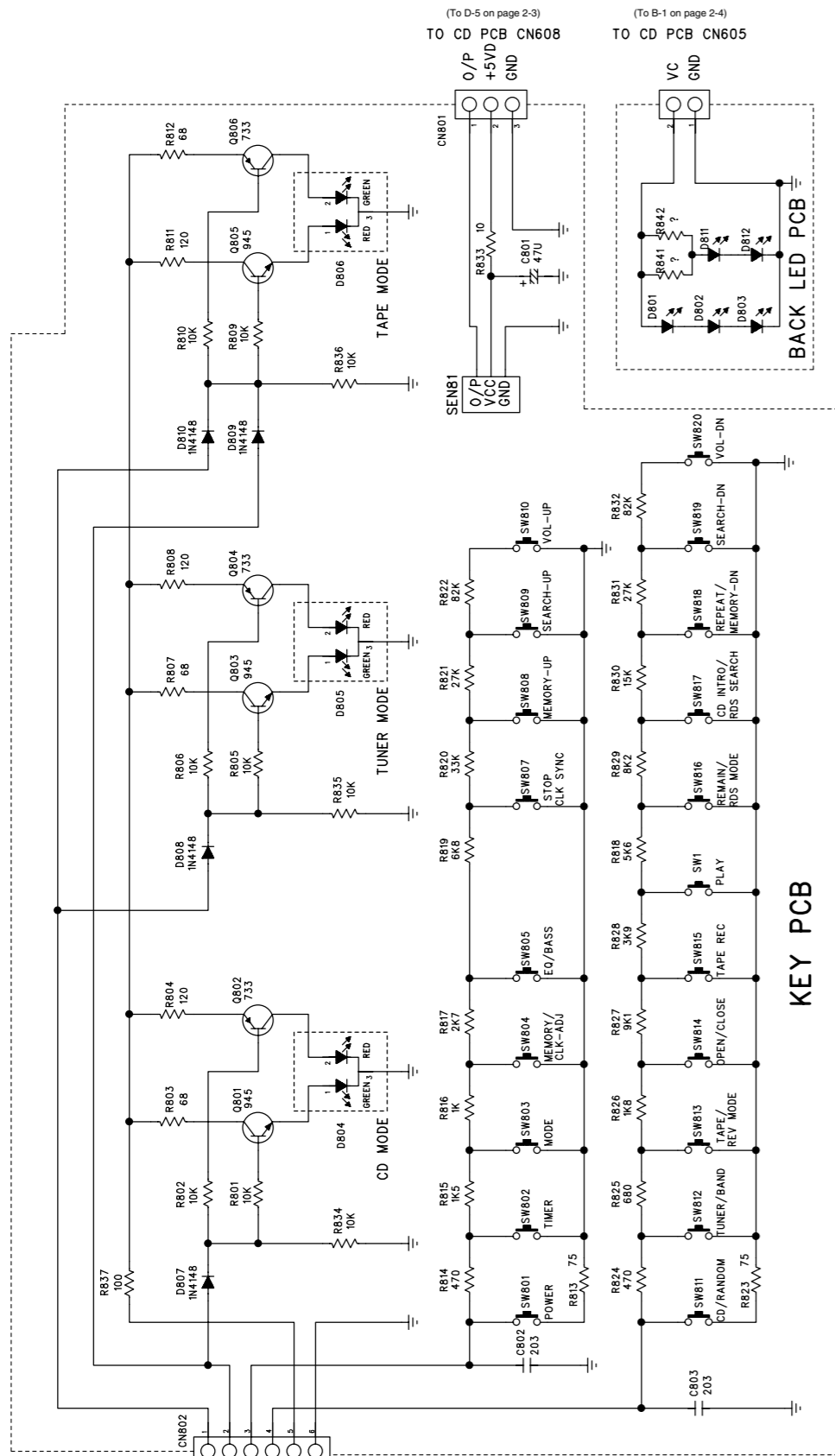
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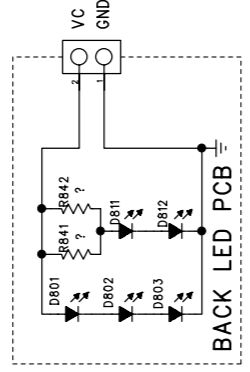
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(To D-5 on page 2-3)
TO CD PCB CN608

(To B-1 on page 2-4)
TO CD PCB CN605



KEY PCB

Voltage charts

	Q801 2SC945P	Q802 2SA733P	Q803 2SC945P	Q804 2SA733P	Q805 2SC945P	Q806 2SA733P
E	0.74V	1.89V	1.99V	2.51V	2.51V	2.51V
B	0.65V	1.22V	2.67V	3.66V	2.48V	3.65V
C	2.51V	1.79V	2.09V	0V	1.89V	0V

2-4

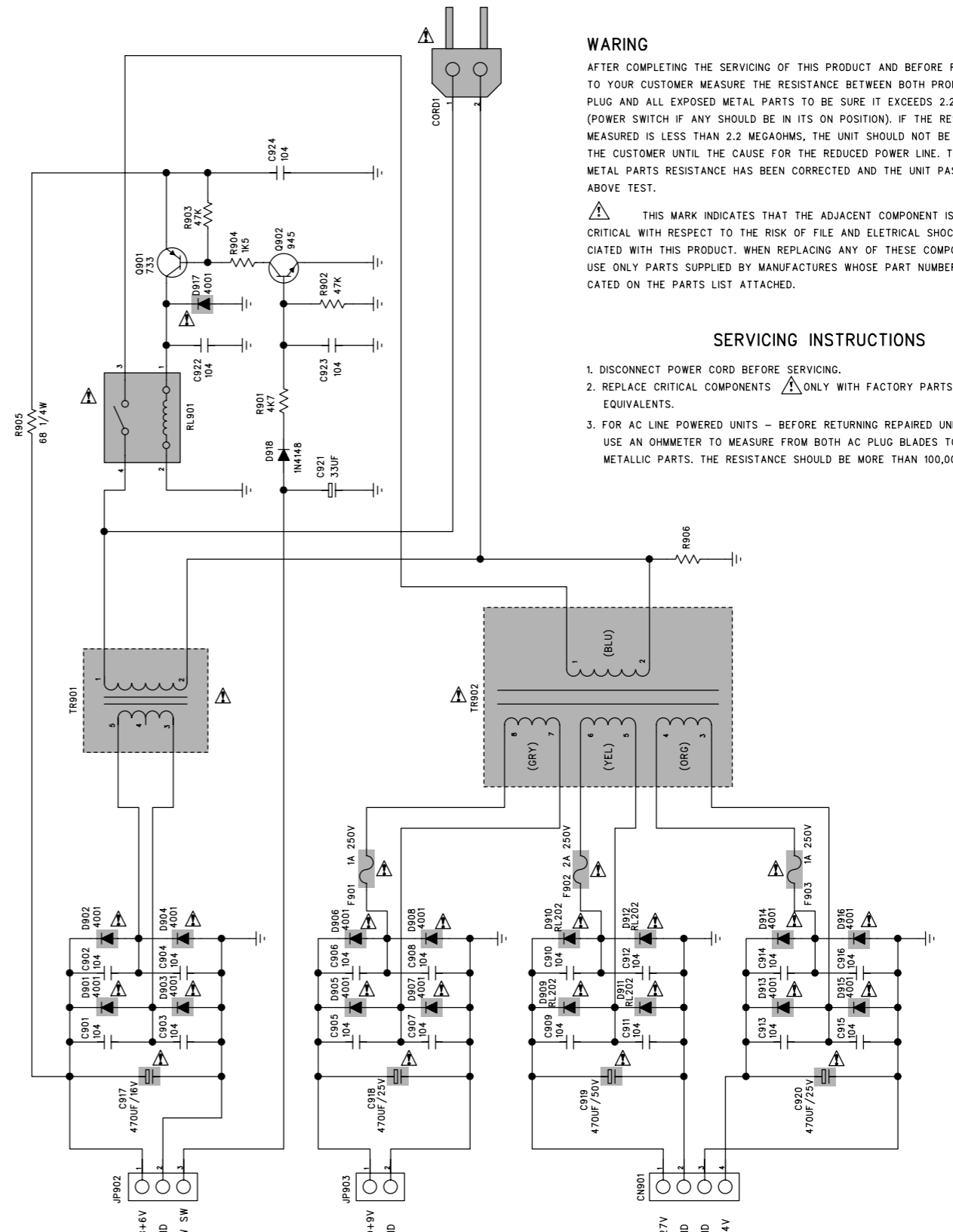
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WARING

AFTER COMPLETING THE SERVICING OF THIS PRODUCT AND BEFORE RETURNING IT TO YOUR CUSTOMER MEASURE THE RESISTANCE BETWEEN BOTH PRONGS OF THE AC PLUG AND ALL EXPOSED METAL PARTS TO BE SURE IT EXCEEDS 2.2 MEGAOHMS (POWER SWITCH IF ANY SHOULD BE IN ITS ON POSITION). IF THE RESISTANCE MEASURED IS LESS THAN 2.2 MEGAOHMS, THE UNIT SHOULD NOT BE RETURNED TO THE CUSTOMER UNTIL THE CAUSE FOR THE REDUCED POWER LINE. TO EXPOSED METAL PARTS RESISTANCE HAS BEEN CORRECTED AND THE UNIT PASSED THE ABOVE TEST.

⚠ THIS MARK INDICATES THAT THE ADJACENT COMPONENT IS CONSIDERED CRITICAL WITH RESPECT TO THE RISK OF FIRE AND ELECTRICAL SHOCK ASSOCIATED WITH THIS PRODUCT. WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY PARTS SUPPLIED BY MANUFACTURERS WHOSE PART NUMBERS ARE INDICATED ON THE PARTS LIST ATTACHED.

SERVICING INSTRUCTIONS

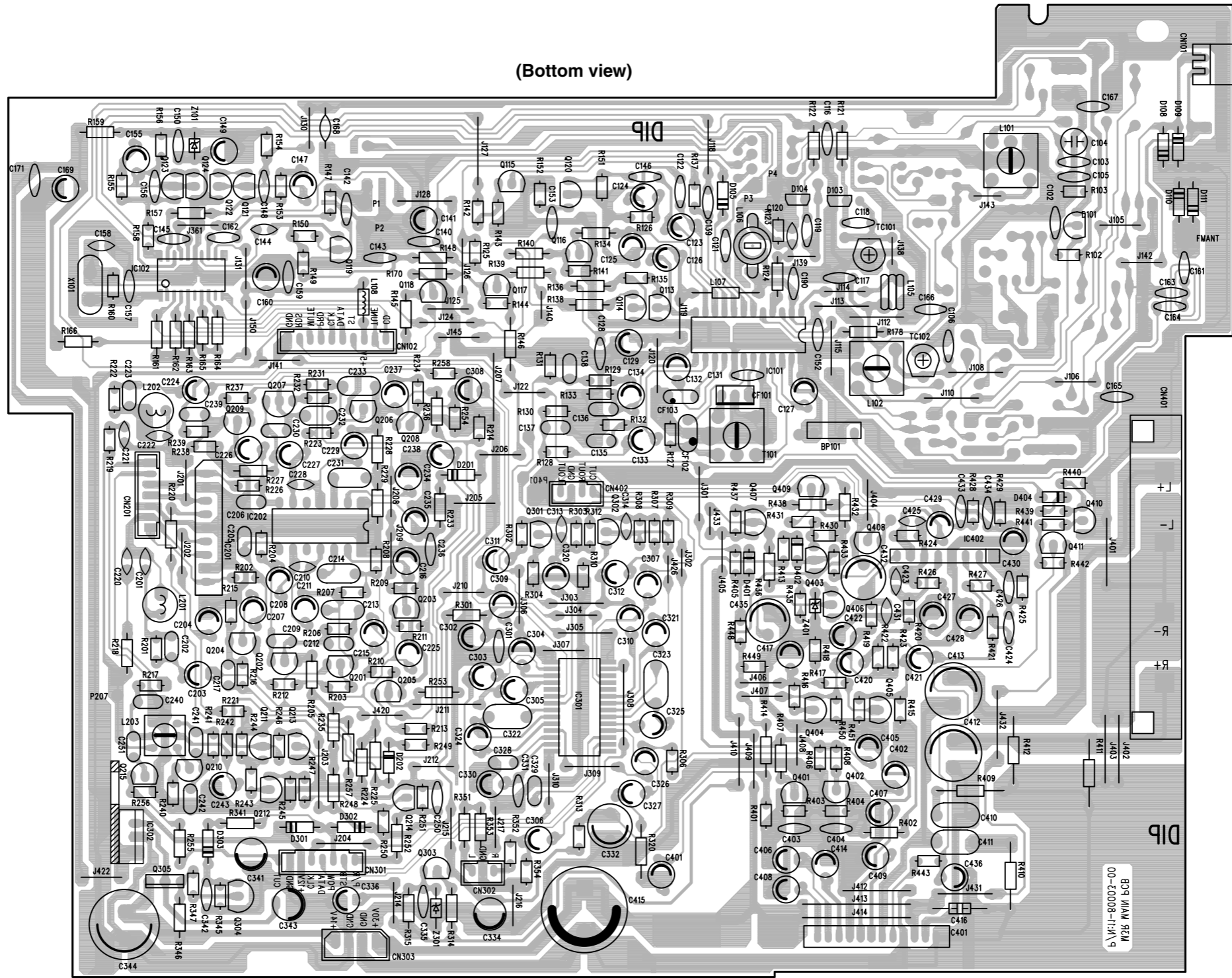
1. DISCONNECT POWER CORD BEFORE SERVICING.
2. REPLACE CRITICAL COMPONENTS ⚠ ONLY WITH FACTORY PARTS OR RECOMMENDED EQUIVALENTS.
3. FOR AC LINE POWERED UNITS - BEFORE RETURNING REPAIRED UNIT TO USER, USE AN OHMMETER TO MEASURE FROM BOTH AC PLUG BLADES TO ALL EXPOSED METALLIC PARTS. THE RESISTANCE SHOULD BE MORE THAN 100,000 OHMS.

⚠ Parts are safety assurance parts. When replacing those parts, make sure to use the specified one.

Printed circuit boards

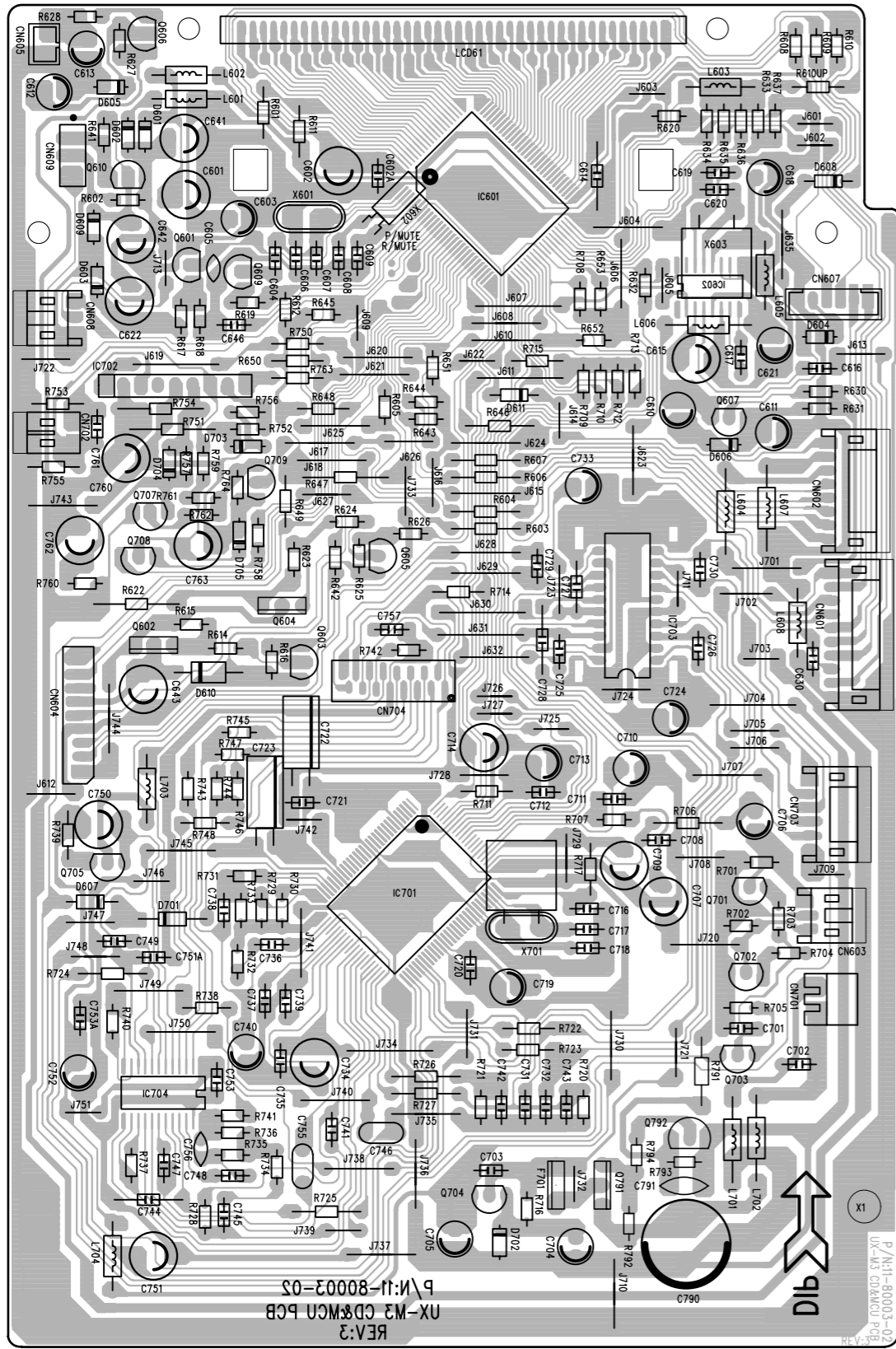
■ Main board

(Bottom view)



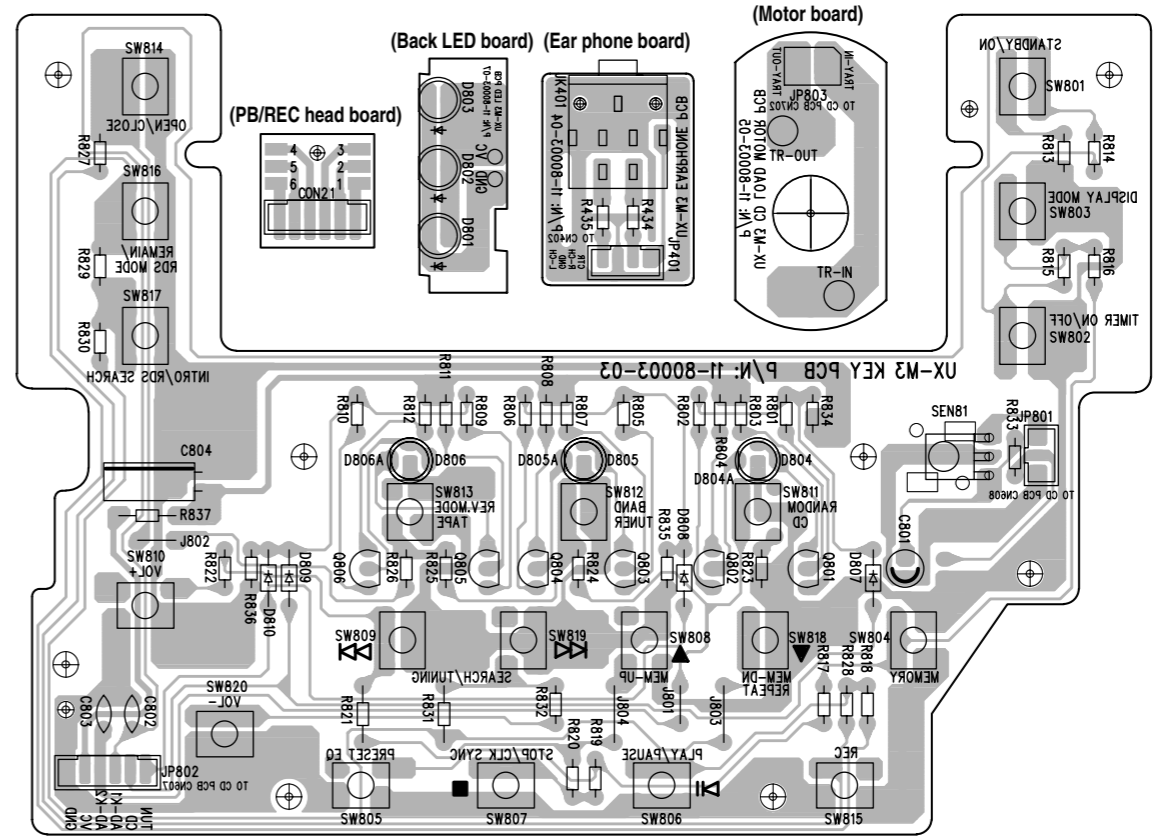
CD & MCU board

(Bottom view)



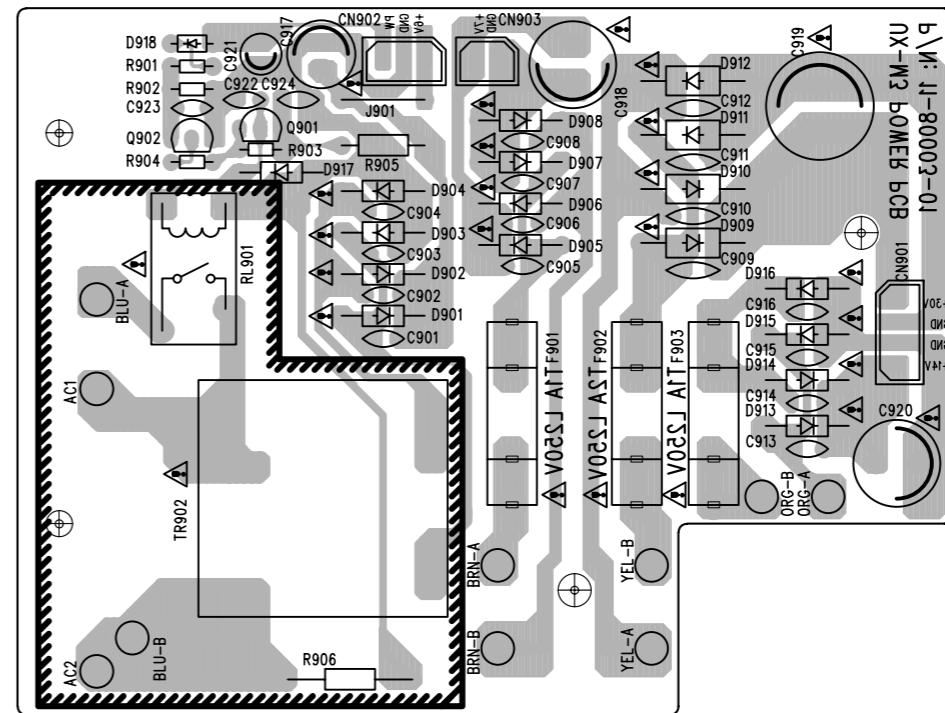
Key board

(Bottom view)



Power board

(Bottom view)



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C

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