



SERVICE MANUAL

MODEL: RBD154 (RBS154V)

MICRO Hi-Fi SYSTEM SERVICE MANUAL



MODEL: RBD154 (RBS154V)



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SECTION 1. GENERAL

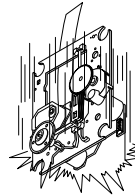
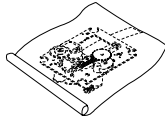
SERVICING PRECAUTIONS

NOTES REGARDING HANDLING OF THE PICK-UP

1. Notes for transport and storage

- 1) The pick-up should always be left in its conductive bag until immediately prior to use.
- 2) The pick-up should never be subjected to external pressure or impact.

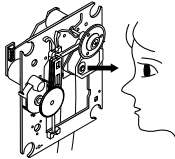
Storage in conductive bag



Drop impact

2. Repair notes

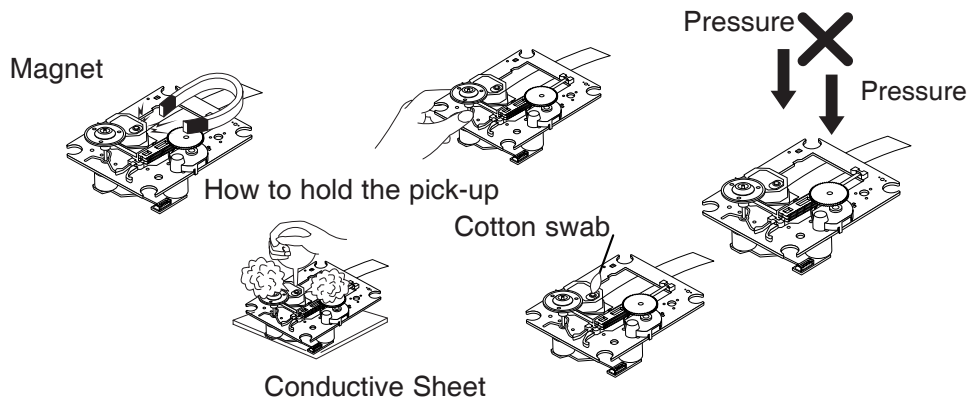
- 1) The pick-up incorporates a strong magnet, and so should never be brought close to magnetic materials.
- 2) The pick-up should always be handled correctly and carefully, taking care to avoid external pressure and impact. If it is subjected to strong pressure or impact, the result may be an operational malfunction and/or damage to the printed-circuit board.
- 3) Each and every pick-up is already individually adjusted to a high degree of precision, and for that reason the adjustment point and installation screws should absolutely never be touched.
- 4) Laser beams may damage the eyes!
Absolutely never permit laser beams to enter the eyes!
Also NEVER switch ON the power to the laser output part (lens, etc.) of the pick-up if it is damaged.



NEVER look directly at the laser beam, and don't allow contact with fingers or other exposed skin.

5) Cleaning the lens surface

If there is dust on the lens surface, the dust should be cleaned away by using an air bush (such as used for camera lens). The lens is held by a delicate spring. When cleaning the lens surface, therefore, a cotton swab should be used, taking care not to distort lens.



6) Never attempt to disassemble the pick-up.

Spring has excess pressure. If the lens is extremely dirty, apply isopropyl alcohol to the cotton swab.

(Do not use any other liquid cleaners, because they will damage the lens.) Take care not to use too much of this alcohol on the swab, and do not allow the alcohol to get inside the pick-up.

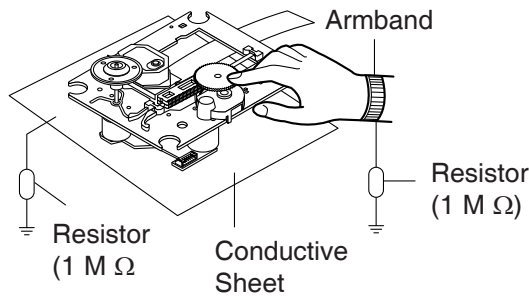
NOTES REGARDING COMPACT DISC PLAYER REPAIRS

1. Preparations

- 1) Compact disc players incorporate a great many ICs as well as the pick-up (laser diode). These components are sensitive to, and easily affected by, static electricity. If such static electricity is high voltage, components can be damaged, and for that reason components should be handled with care.
- 2) The pick-up is composed of many optical components and other high-precision components. Care must be taken, therefore, to avoid repair or storage where the temperature or humidity is high, where strong magnetism is present, or where there is excessive dust.

2. Notes for repair

- 1) Before replacing a component part, first disconnect the power supply lead wire from the unit
- 2) All equipment, measuring instruments and tools must be grounded.
- 3) The workbench should be covered with a conductive sheet and grounded.
When removing the laser pick-up from its conductive bag, do not place the pick-up on the bag. (This is because there is the possibility of damage by static electricity.)
- 4) To prevent AC leakage, the metal part of the soldering iron should be grounded.
- 5) Workers should be grounded by an armband (1M Ω)
- 6) Care should be taken not to permit the laser pick-up to come in contact with clothing, in order to prevent static electricity charges in the clothing to escape from the armband.
- 7) The laser beam from the pick-up should NEVER be directly facing the eyes or bare skin.



ESD PRECAUTIONS

Electrostatically Sensitive Devices (ESD)



Some semiconductor (solid state) devices can be damaged easily by static electricity. Such components commonly are called Electrostatically Sensitive Devices (ESD). Examples of typical ESD devices are integrated circuits and some field-effect transistors and semiconductor chip components. The following techniques should be used to help reduce the incidence of component damage caused by static electricity.

1. Immediately before handling any semiconductor component or semiconductor-equipped assembly, drain off any electrostatic charge on your body by touching a known earth ground. Alternatively, obtain and wear a commercially available discharging wrist strap device, which should be removed for potential shock reasons prior to applying power to the unit under test.
2. After removing an electrical assembly equipped with ESD devices, place the assembly on a conductive surface such as aluminum foil, to prevent electrostatic charge buildup or exposure of the assembly.
3. Use only a grounded-tip soldering iron to solder or unsolder ESD devices.
4. Use only an anti-static solder removal device. Some solder removal devices not classified as "anti-static" can generate electrical charges sufficient to damage ESD devices.
5. Do not use freon-propelled chemicals. These can generate electrical charges sufficient to damage ESD devices.
6. Do not remove a replacement ESD device from its protective package until immediately before you are ready to install it. (Most replacement ESD devices are packaged with leads electrically shorted together by conductive foam, aluminum foil or comparable conductive materials).
7. Immediately before removing the protective material from the leads of a replacement ESD device, touch the protective material to the chassis or circuit assembly into which the device will be installed.

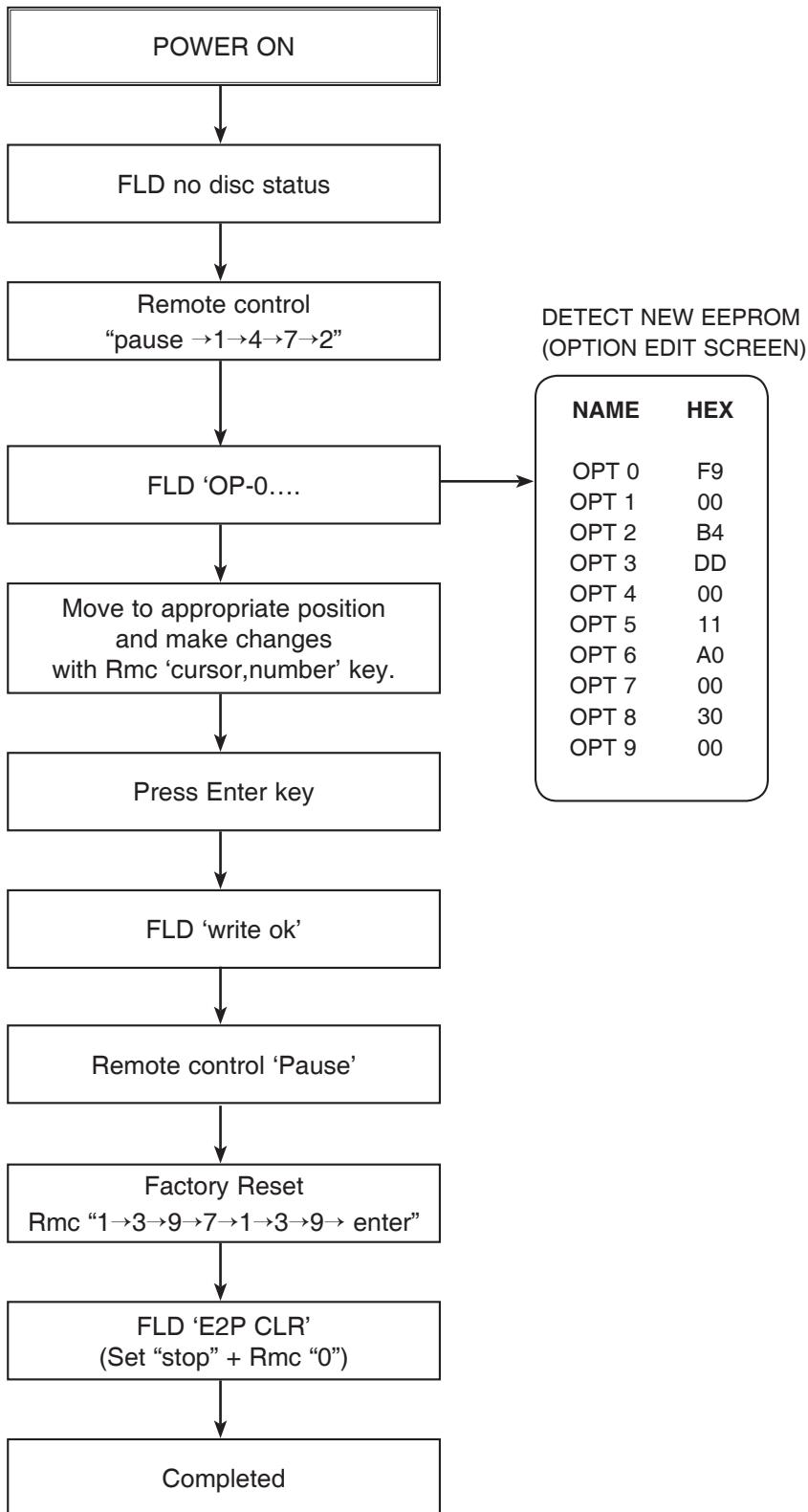
CAUTION : BE SURE NO POWER IS APPLIED TO THE CHASSIS OR CIRCUIT, AND OBSERVE ALL OTHER SAFETY PRECAUTIONS.

8. Minimize bodily motions when handling unpackaged replacement ESD devices. (Otherwise harmless motion such as the brushing together of your clothes fabric or the lifting of your foot from a carpeted floor can generate static electricity sufficient to damage an ESD device).

CAUTION. GRAPHIC SYMBOLS

	THE LIGHTNING FLASH WITH APROWHEAD SYMBOL. WITHIN AN EQUILATERAL TRIANGLE, IS INTENDED TO ALERT THE SERVICE PERSONNEL TO THE PRESENCE OF UNINSULATED "DANGEROUS VOLTAGE" THAT MAY BE OF SUFFICIENT MAGNITUDE TO CONSTITUTE A RISK OF ELECTRIC SHOCK.
	THE EXCLAMATION POINT WITHIN AN EQUILATERAL TRIANGLE IS INTENDED TO ALERT THE SERVICE PERSONNEL TO THE PRESENCE OF IMPORTANT SAFETY INFORMATION IN SERVICE LITERATURE.

SERVICE INFORMATION FOR EEPROM



PROGRAM DOWNLOAD GUIDE

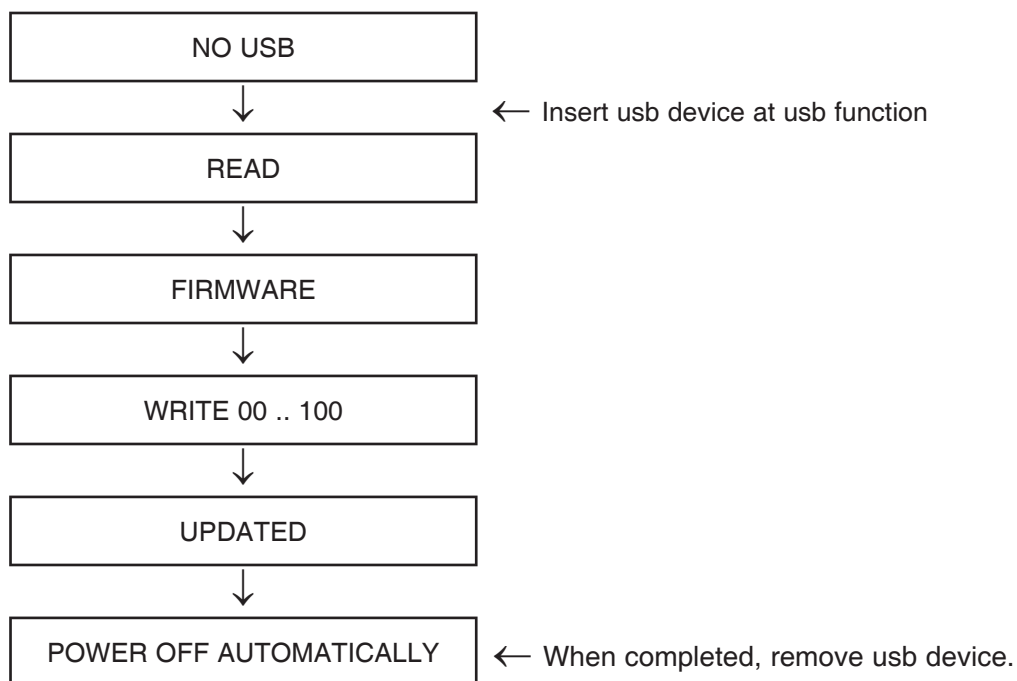
1. AUDIO PROGRAM

Download program file name must be RBD154.HEX

→ If security program (Water Wall) is activated on your PC, you must save the file to the usb storage device and disable the security software, then download the file to your set.

Caution: When downloading the file, you should neither unplug the usb device, change to the other function, nor power off the device. Usb device must be unplugged when the downloading process is completed.

ON VFD DISPLAY SCREEN



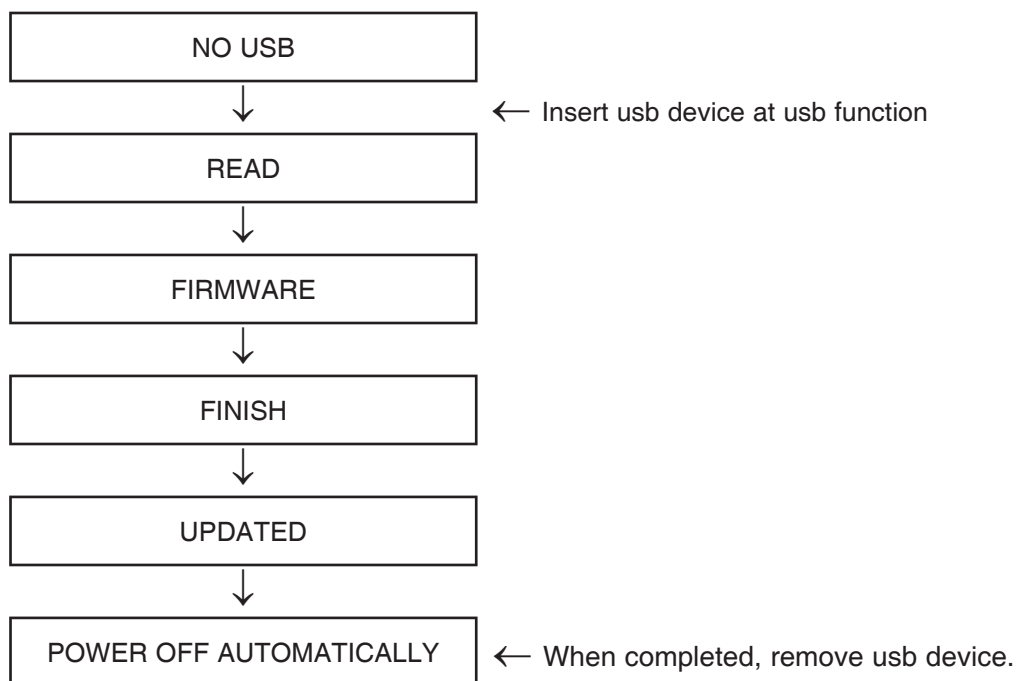
2. DVD PROGRAM

Download program file name must be HB001_DATE_00.BIN

→ If security program (Water Wall) is activated on your PC, you must save the file to the usb storage device and disable the security software, then download the file to your set.

Caution: When downloading the file, you should neither unplug the usb device, change to the other function, nor power off the device. Usb device must be unplugged when the downloading process is completed.

ON VFD DISPLAY SCREEN



SPECIFICATIONS

GENERAL

Power supply	Refer to main label.
Power consumption	Refer to main label.
Net Weight	3.8 kg
External dimensions (W x H x D)	202 x 307 x 262 mm
Operating conditions Temperature	5°C to 35°C, Operation status: Horizontal
Operating humidity	5% to 85%
Laser	Semiconductor laser, wavelength 650 nm

Tuner FM

FM Tuning Range	87.5 ~ 108.0 MHz or 87.50 ~ 108.0 MHz
FM Intermediate Frequency	128 kHz
AM Tuning Range (optional)	522 ~ 1,620 kHz or 520 ~ 1,710 kHz or 520 ~ 1,710 kHz
AM Intermediate Frequency	45 kHz

AMPLIFIER

Output Power	80 W + 80 W
T.H.D	0.5 %

SPEAKERS (RBS154V)

Type	2 Way 2 Speaker
Impedance	4 Ω
Rated Input Power	50 W
Max. Input Power	100 W
Net Dimensions (W x H x D)	165 x 316 x 198 mm
Net Weight	2.8 kg

Designs and specifications are subject to change without notice.

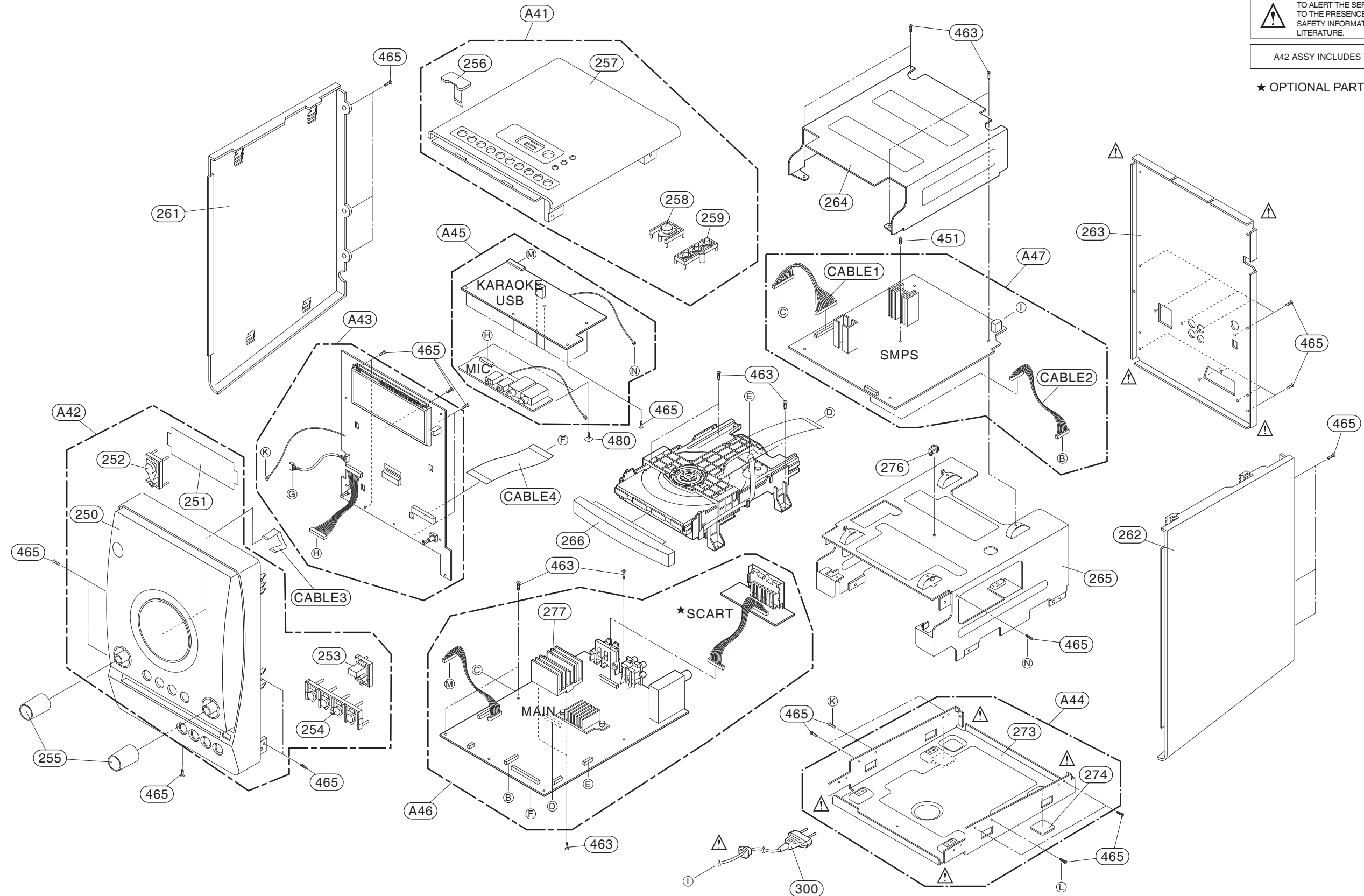
SECTION 2. EXPLODED VIEWS

• CABINET AND MAIN FRAME SECTION (RBD154)

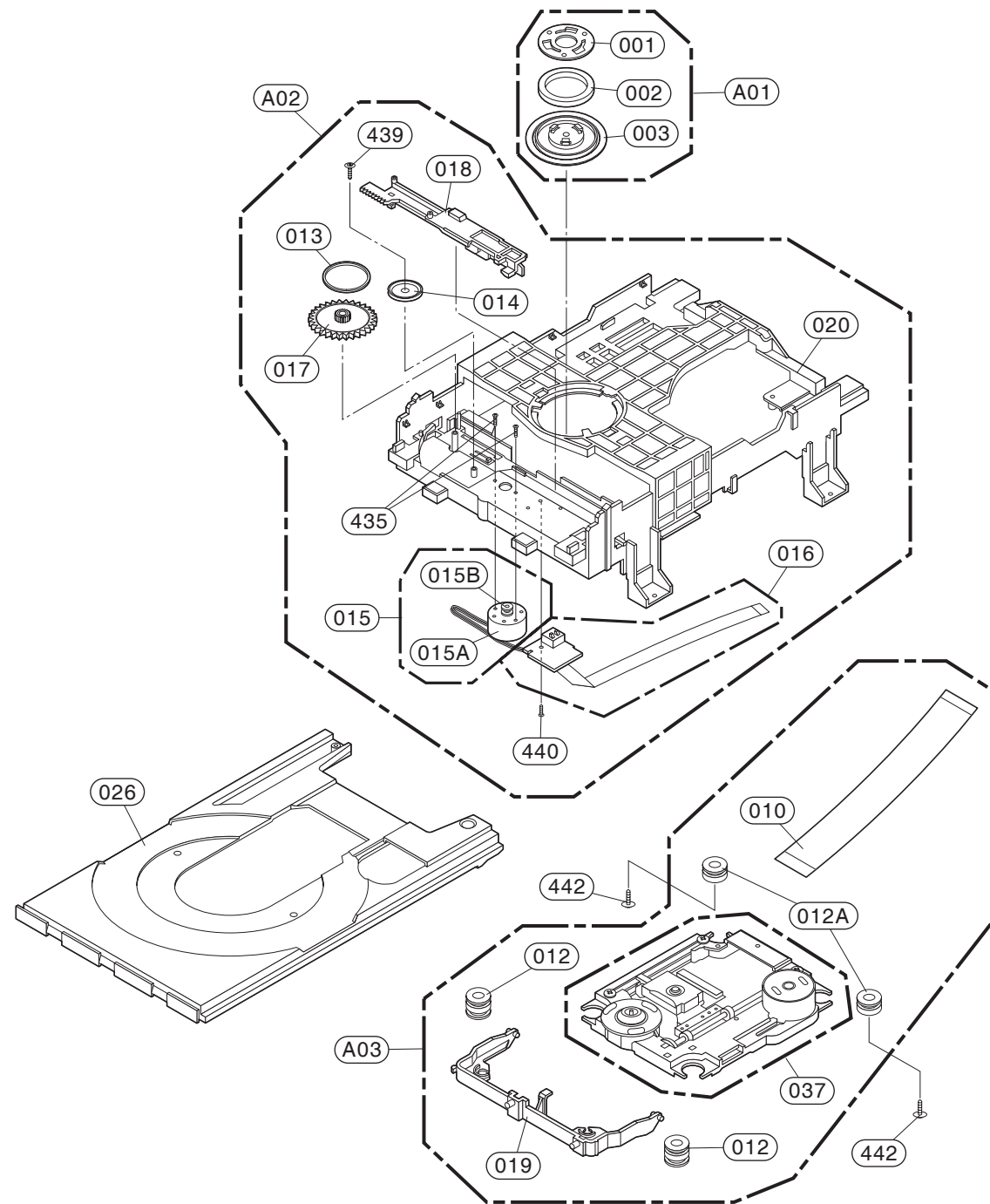
NOTES) THE EXCLAMATION POINT WITHIN AN EQUILATERAL TRIANGLE IS INTENDED TO ALERT THE SERVICE PERSONNEL TO THE PRESENCE OF IMPORTANT SAFETY INFORMATION IN SERVICE LITERATURE.

A42 ASSY INCLUDES TOUCH PCB

★ OPTIONAL PART

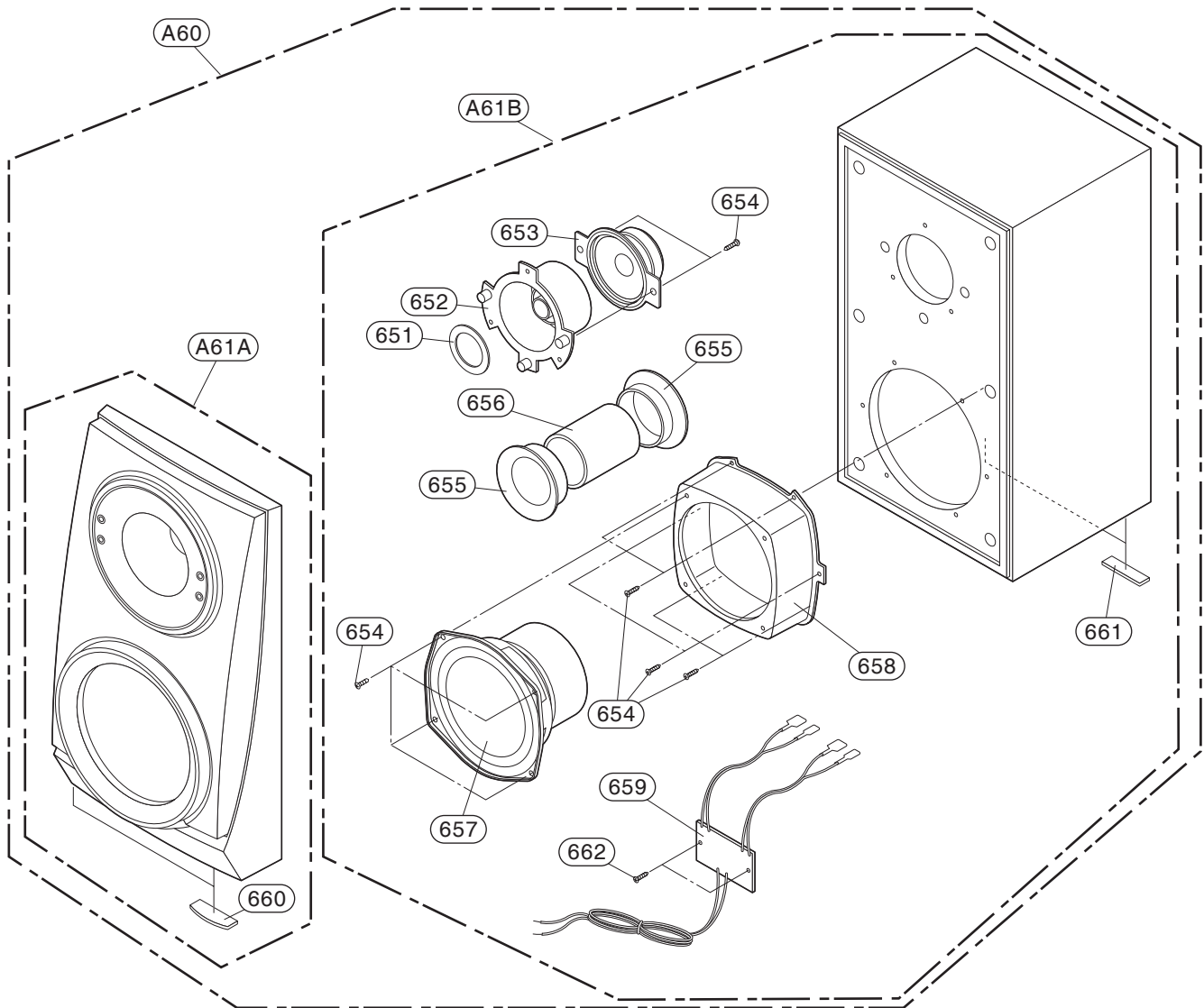


• DECK MECHANISM EXPLODED VIEW (DP-12AV)

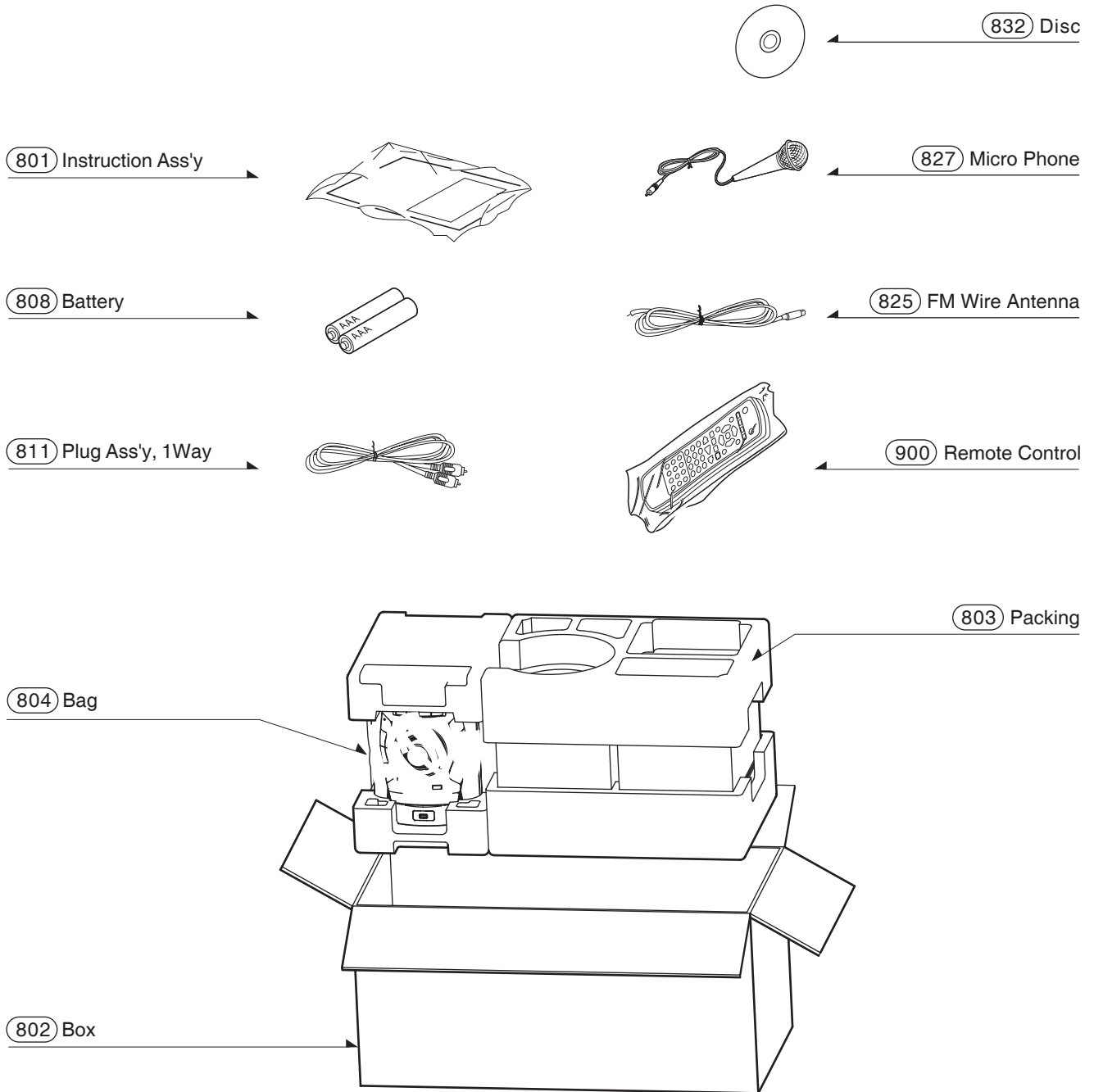


• SPEAKER SECTION

1. FRONT/REAR SPEAKER (RBS154V)



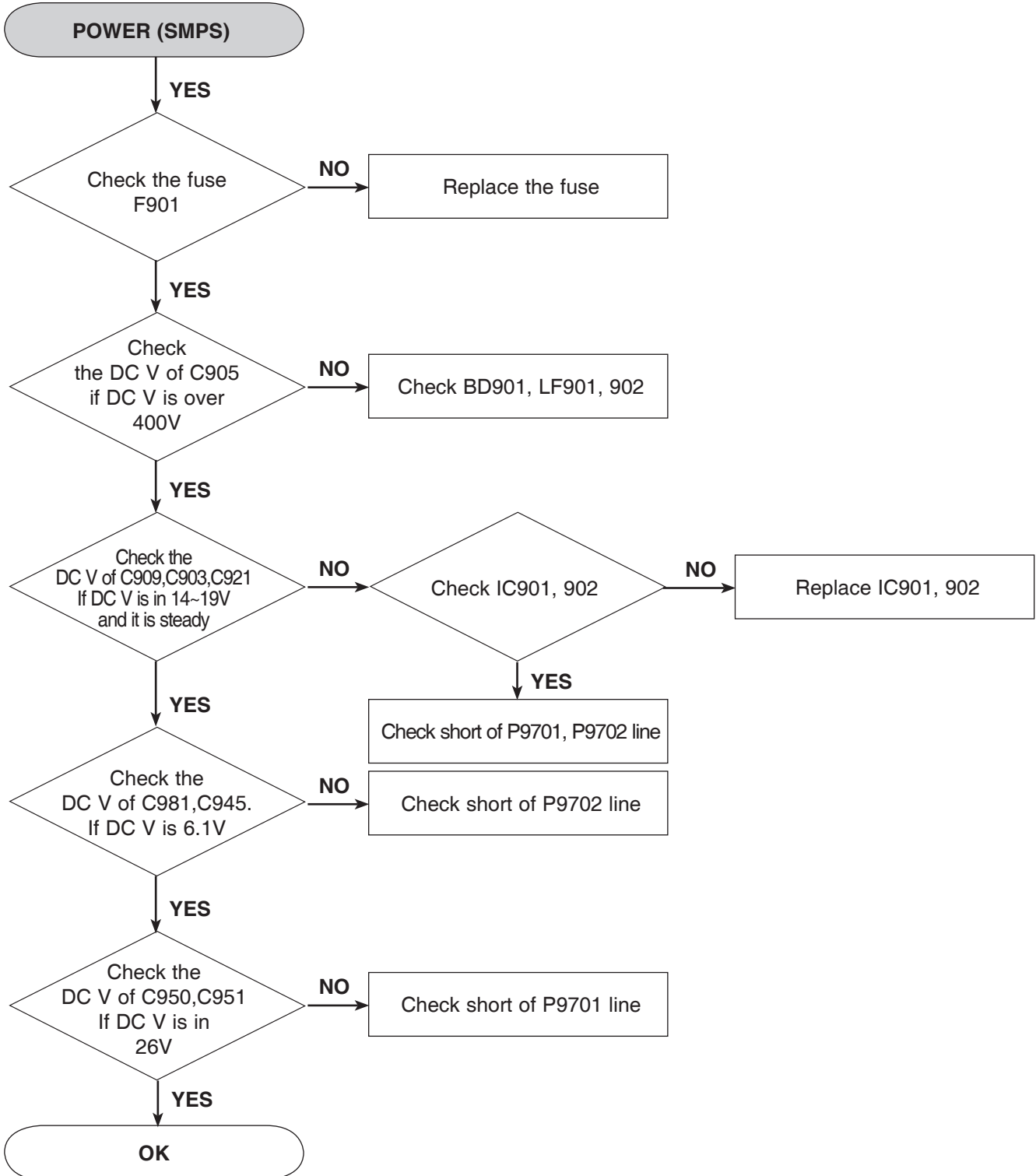
• PACKING ACCESSORY SECTION



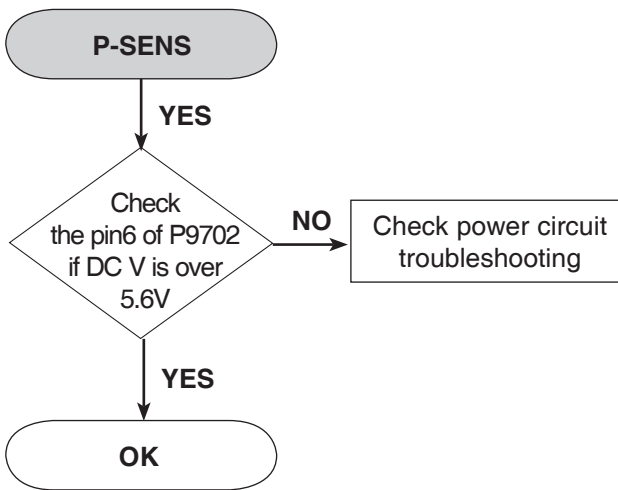
SECTION 3. ELECTRICAL PART

AUDIO ELECTRICAL TROUBLESHOOTING GUIDE

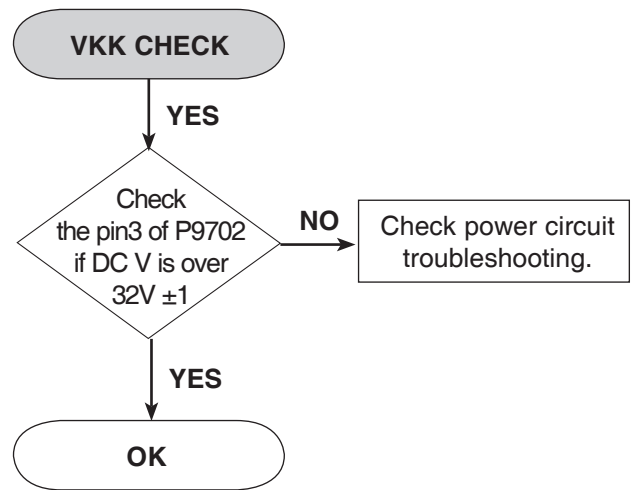
1. POWER (SMPS)



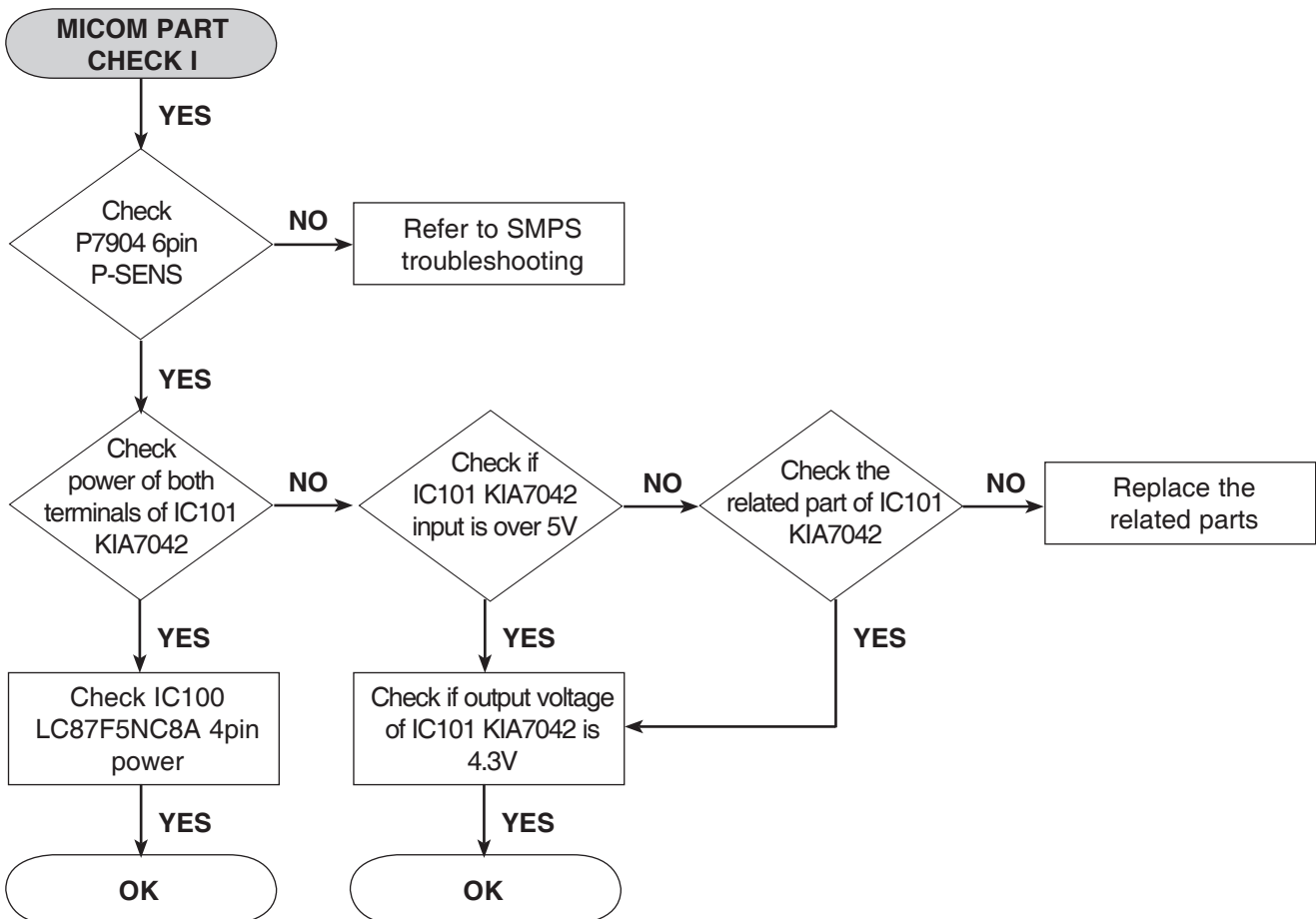
2. P-SEN



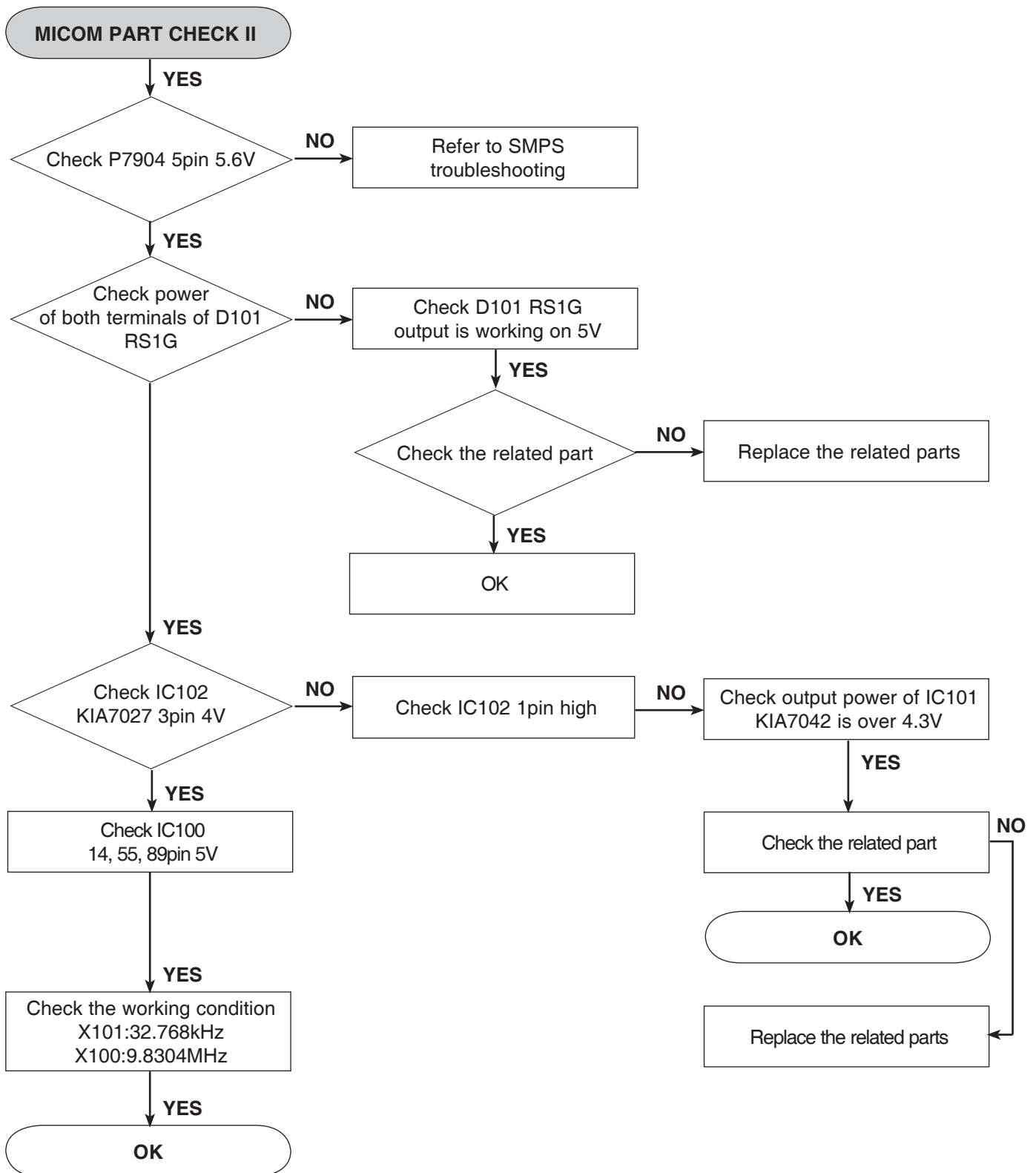
3. VKK PART CHECK



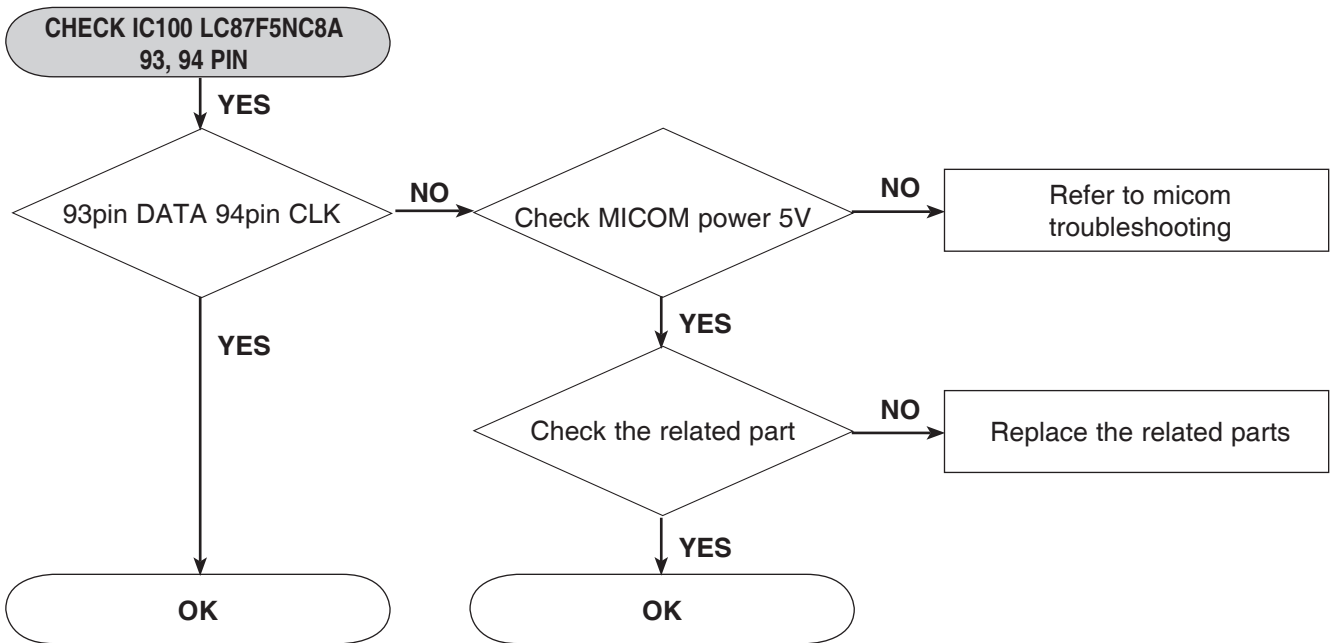
4. MICOM PART CHECK I



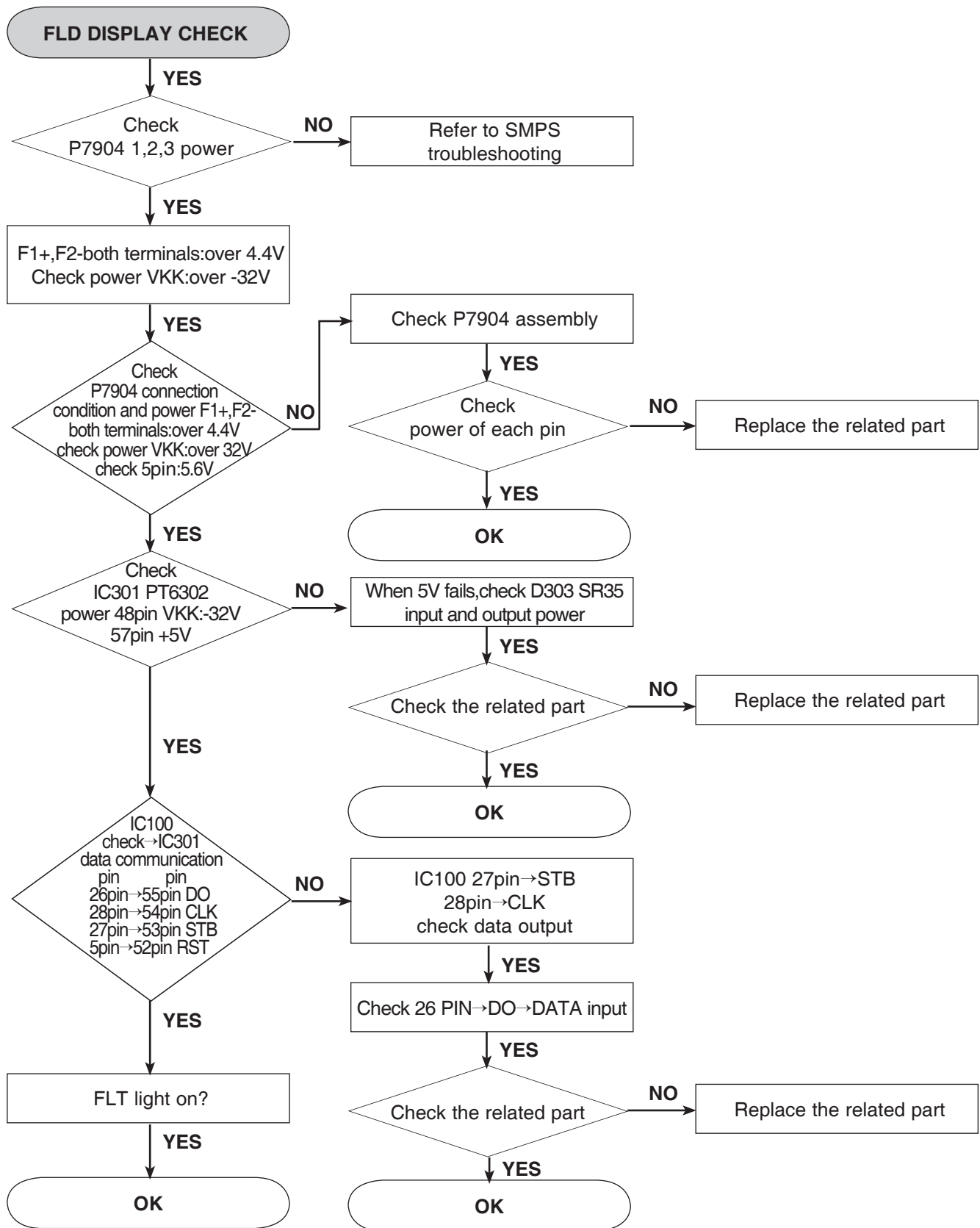
5. MICOM PART CHECK II



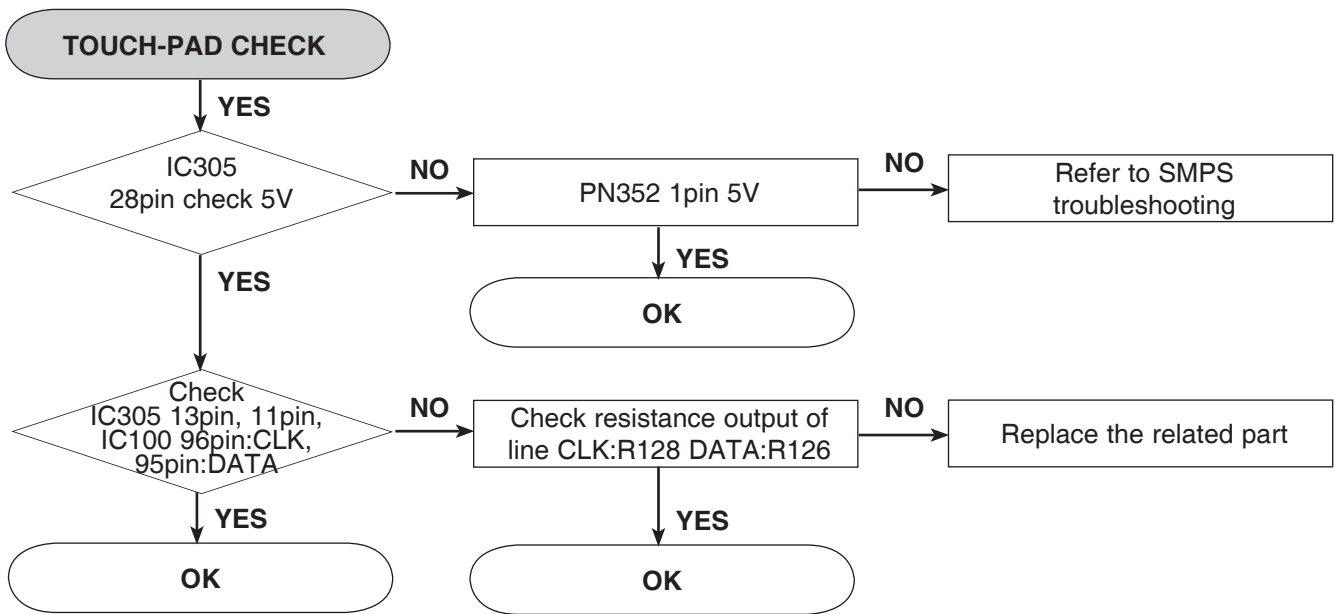
6. IC103 S-24CS16A01 PART CHECK



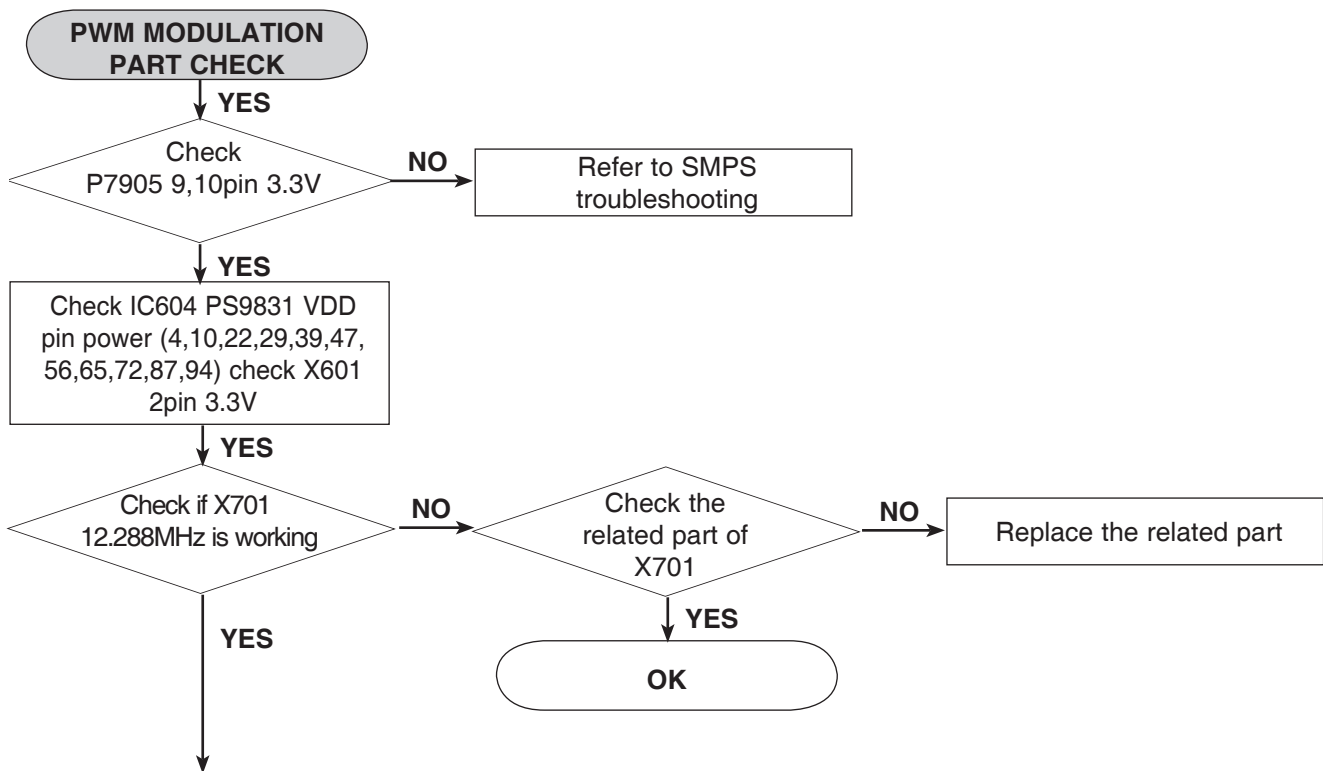
7. FLD DISPLAY PART CHECK

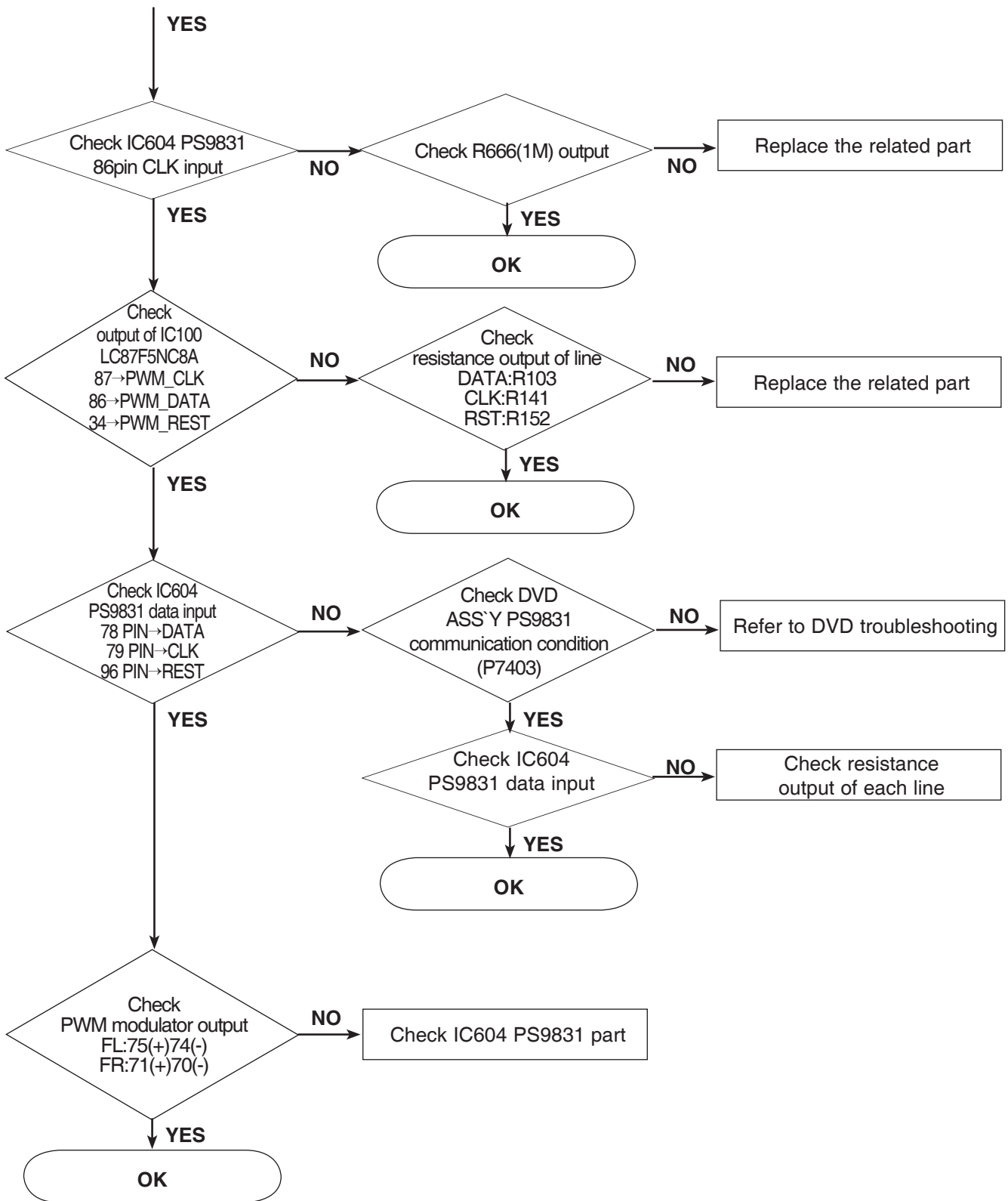


8. TOUCH-PAD PART CHECK

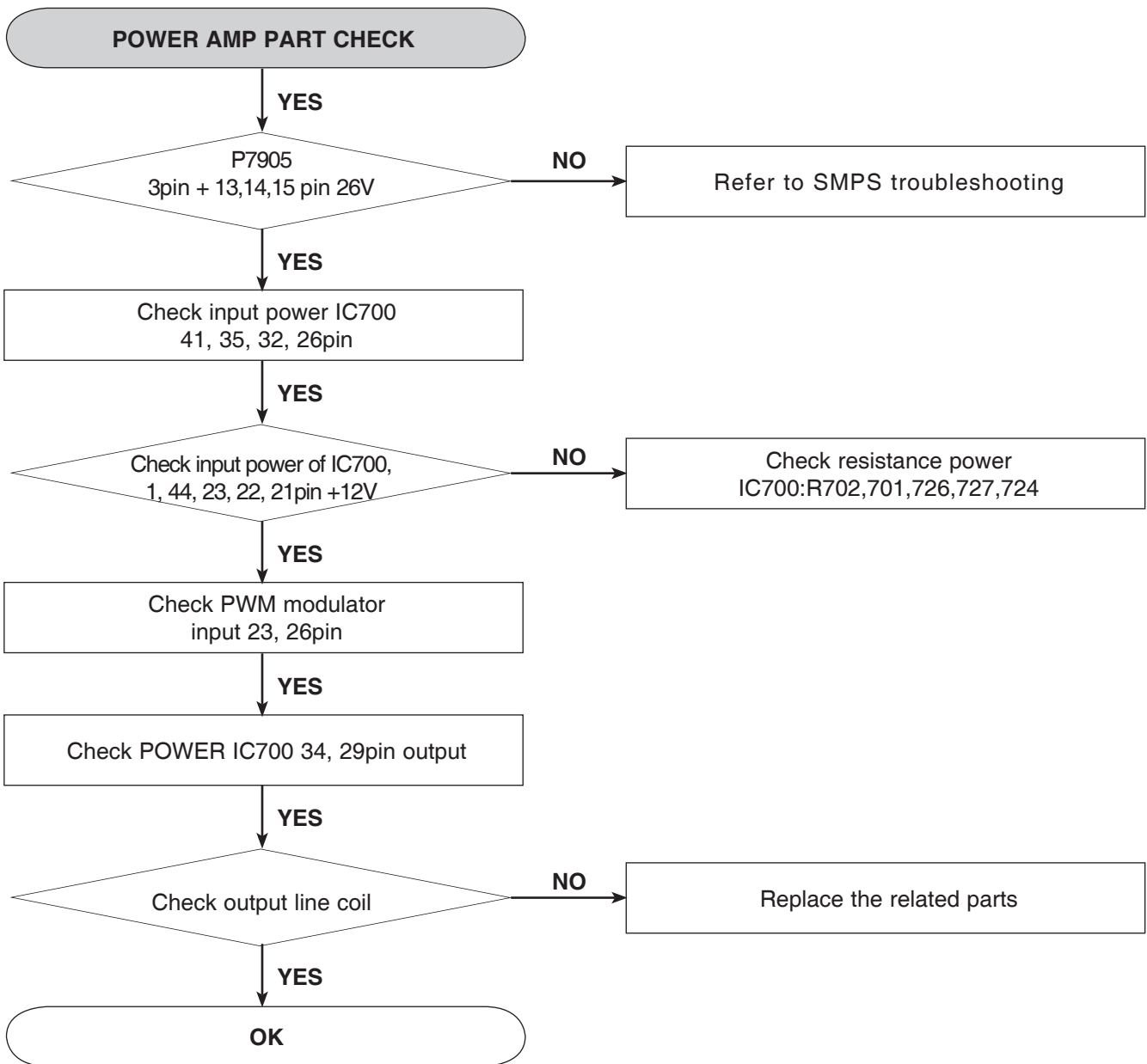


9. PWM MODULATION PART CHECK

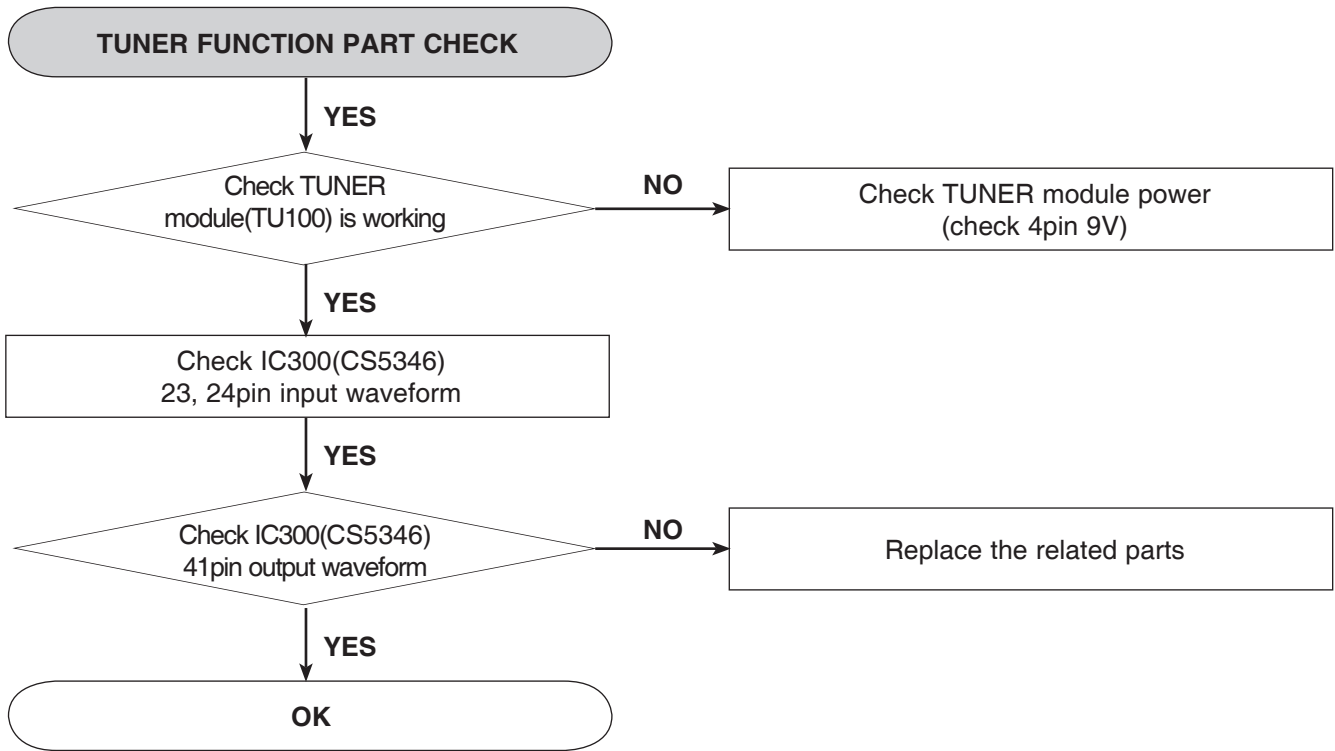




10. PWM AMP PART CHECK

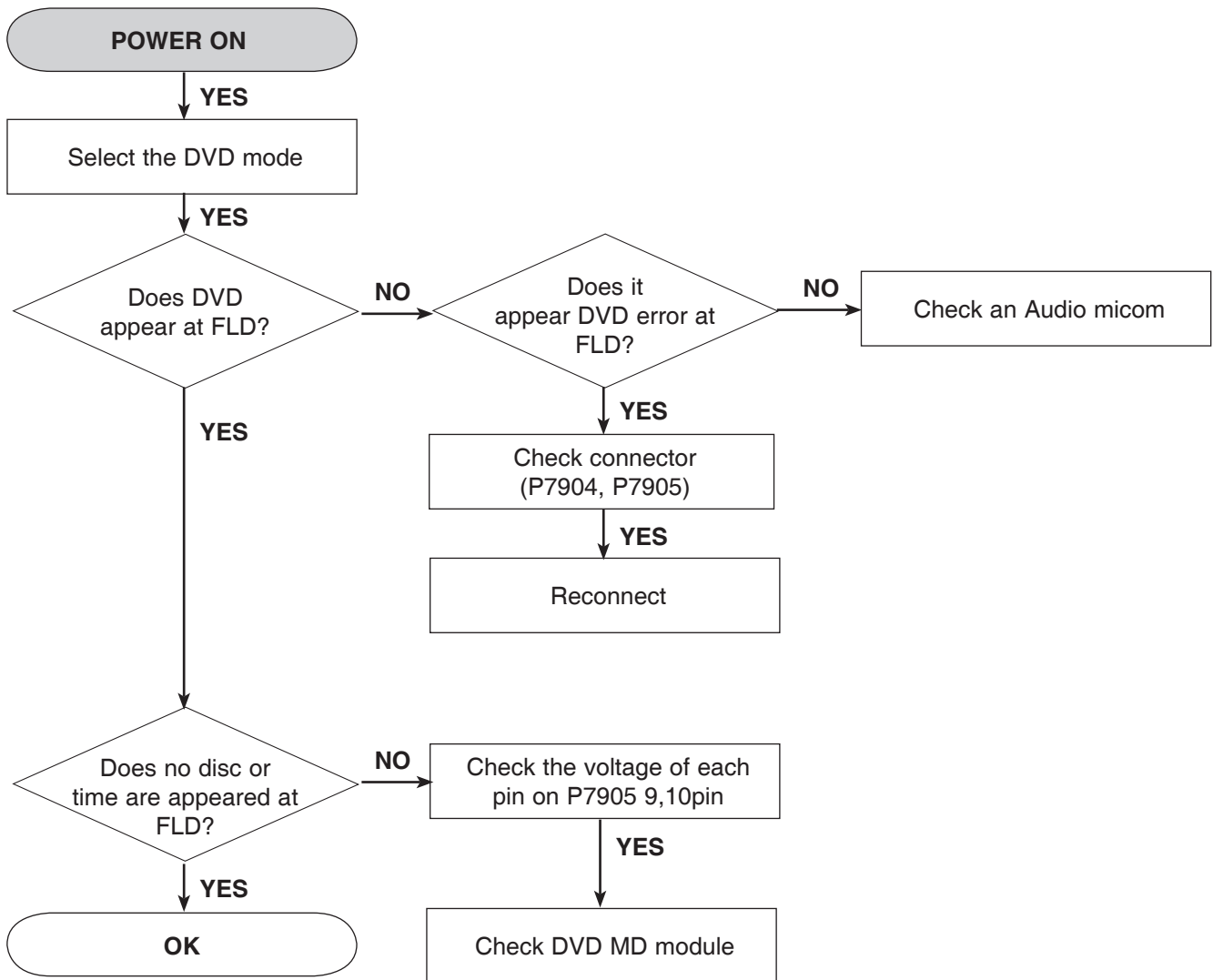


11. TUNER FUNCTION PART CHECK

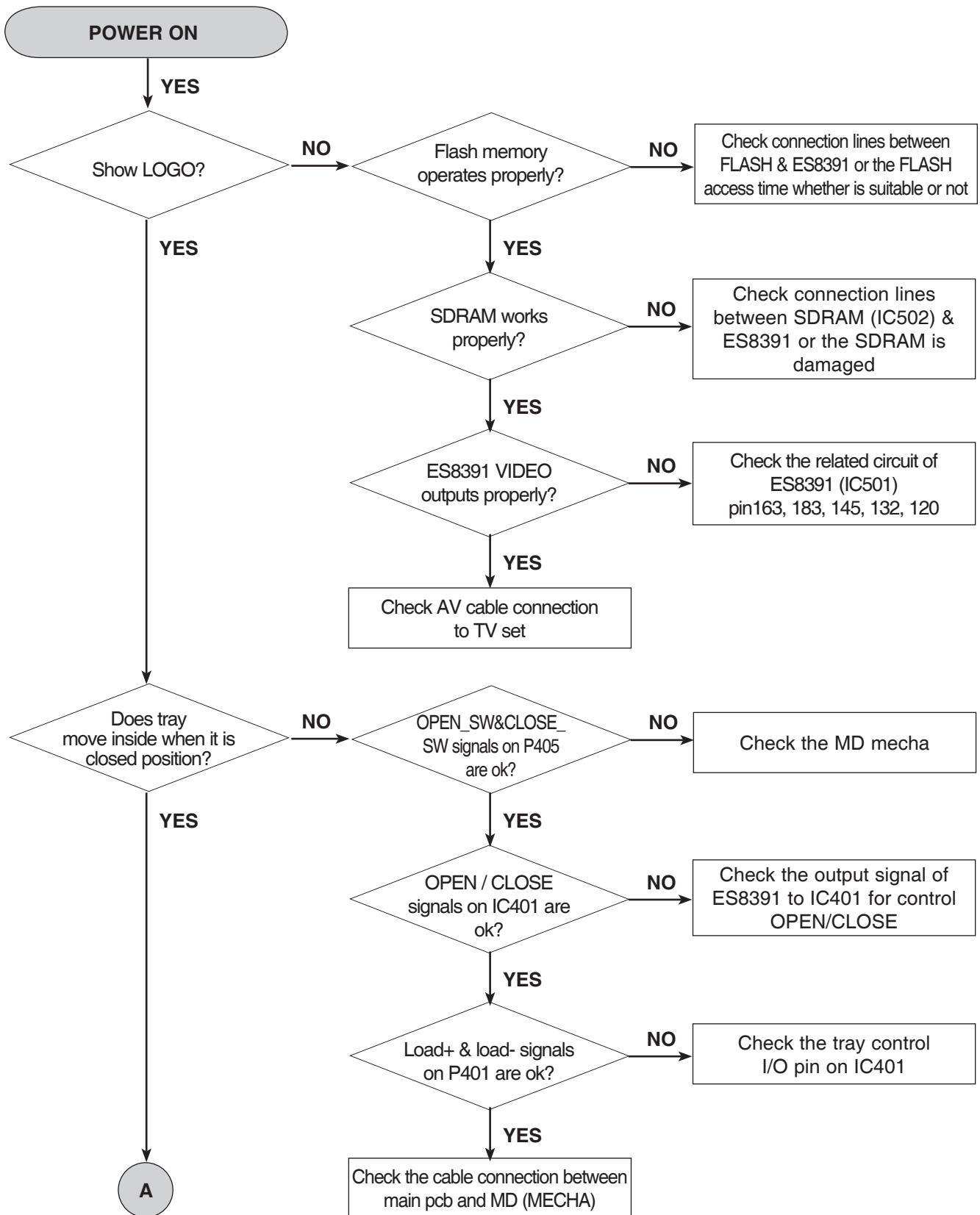


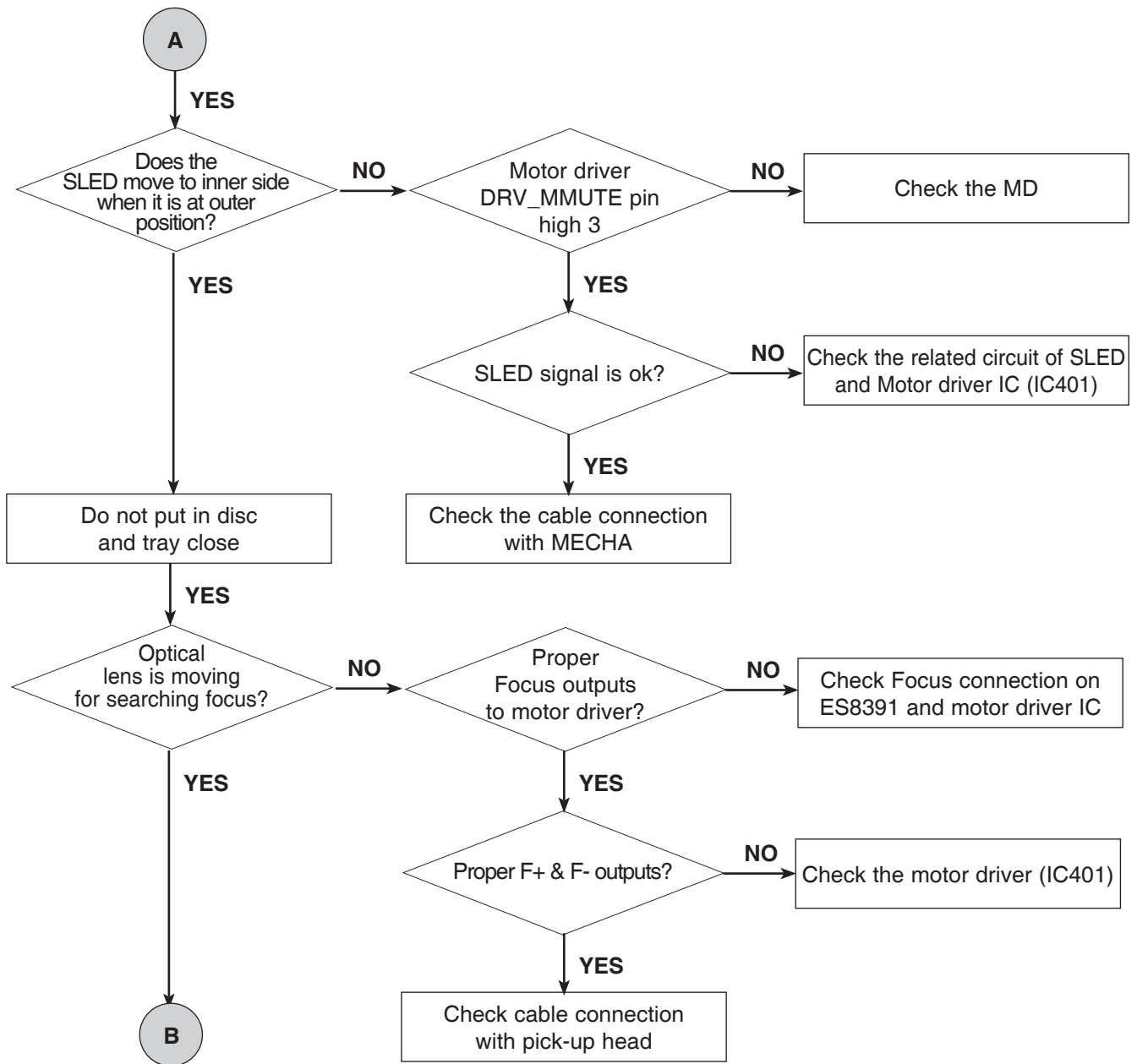
DVD ELECTRICAL TROUBLESHOOTING GUIDE

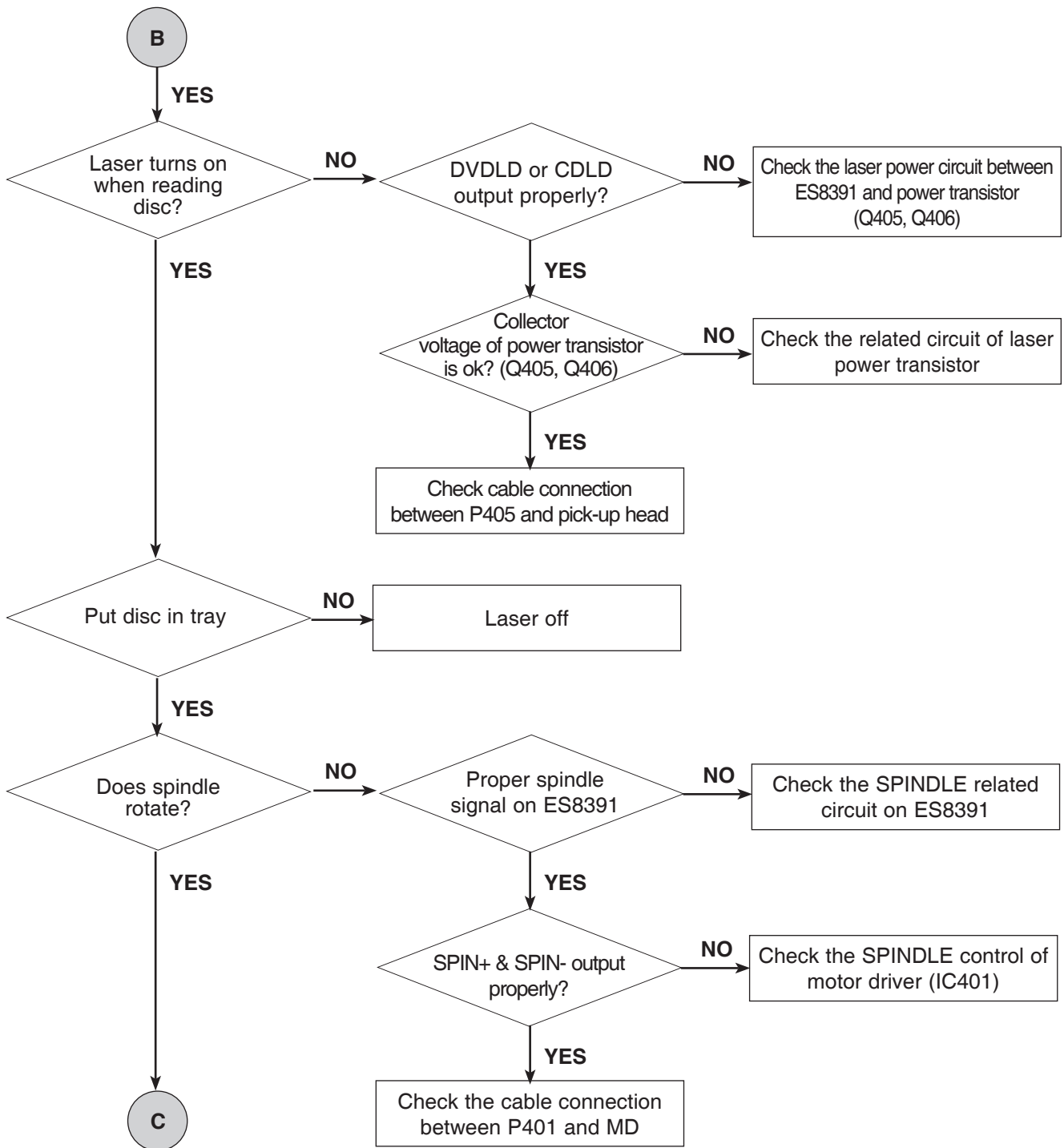
1. POWER PART CHECK GUIDE

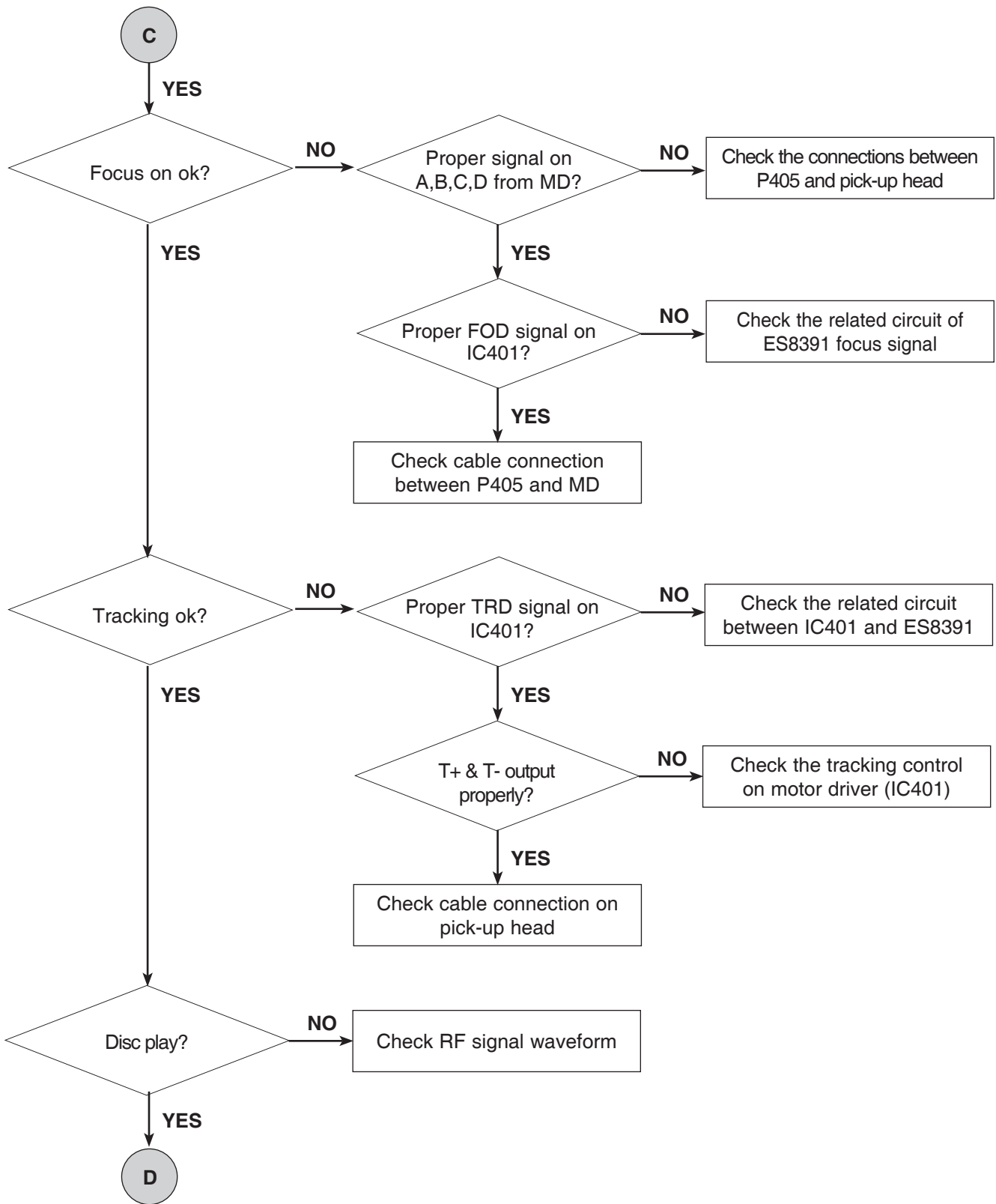


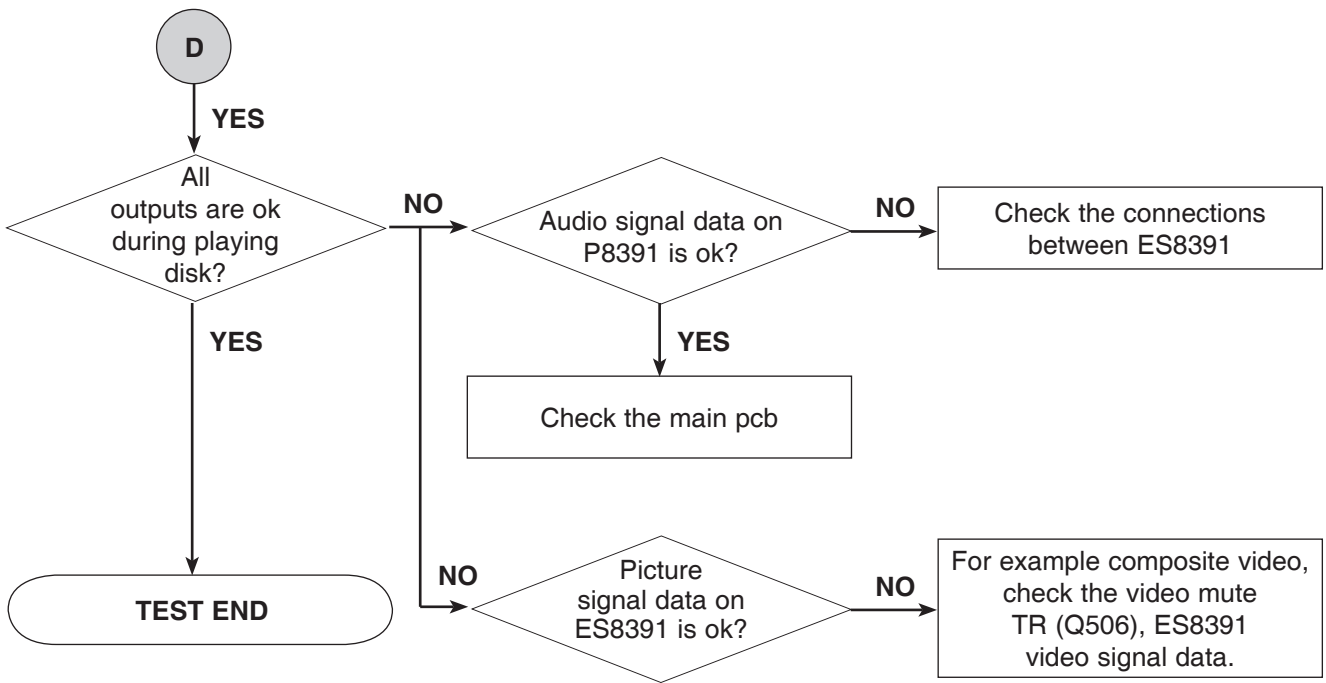
2. TEST & DEBUG FLOW



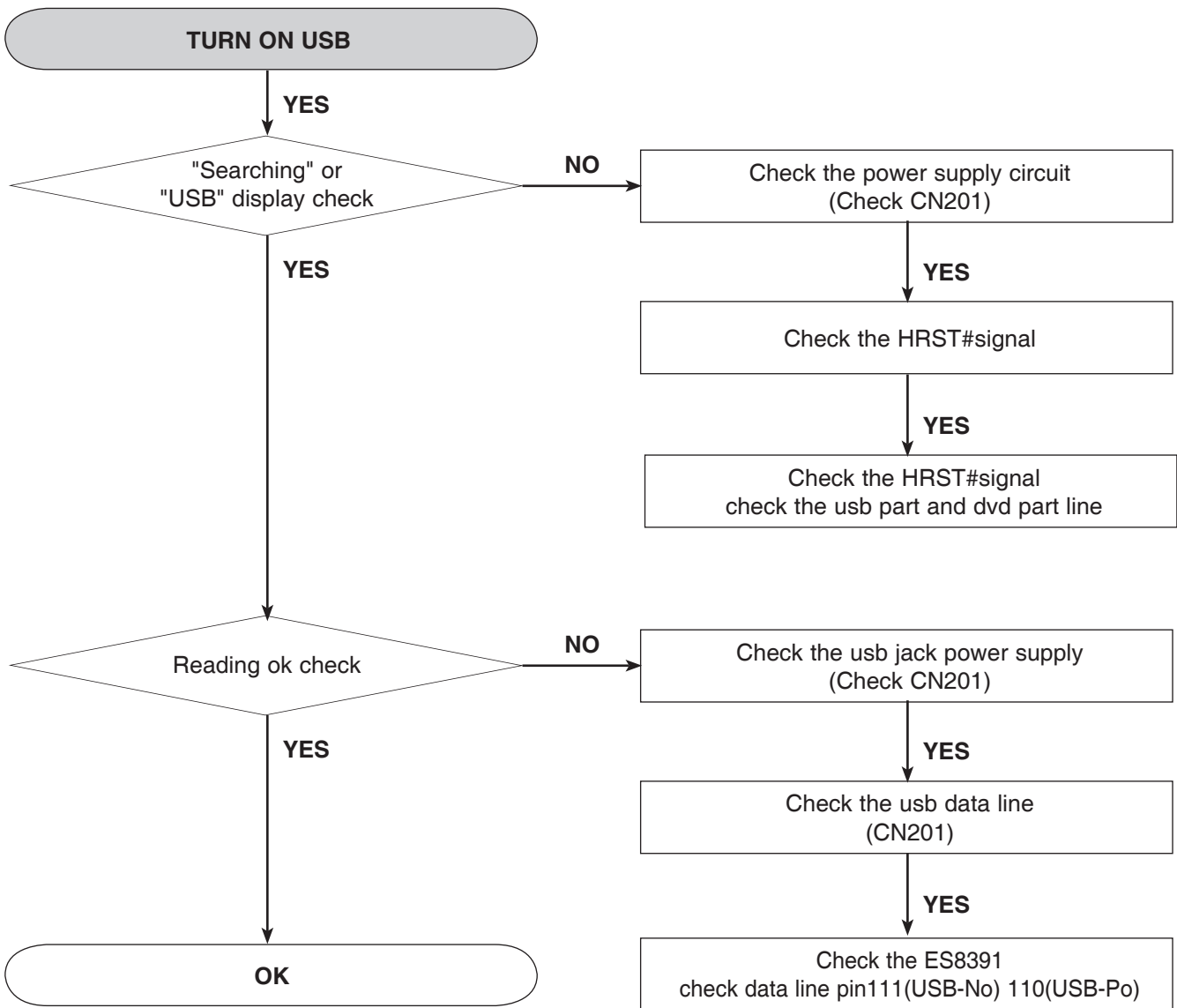






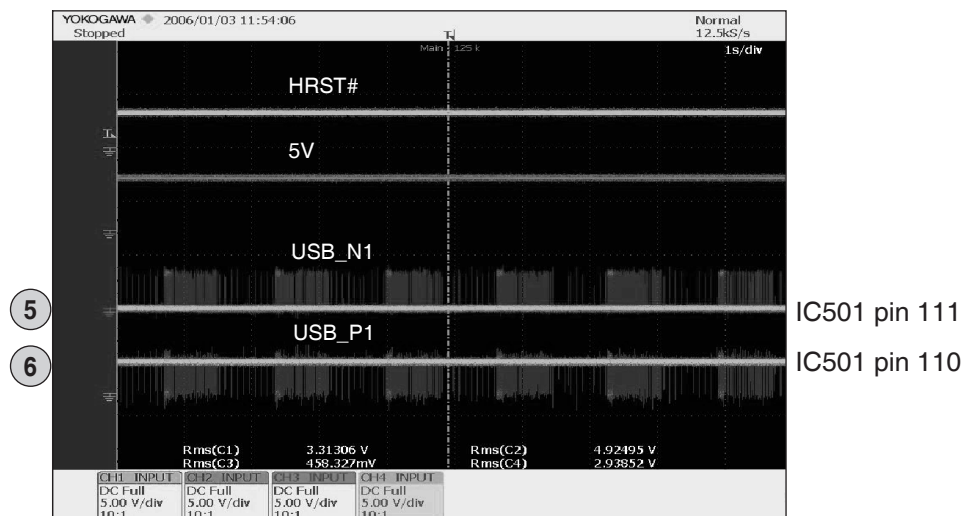
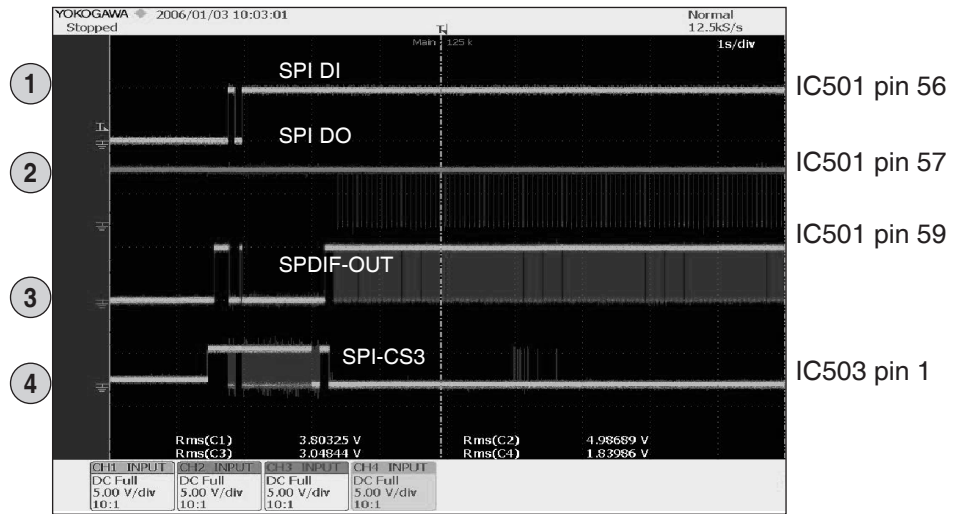


3. USB PART

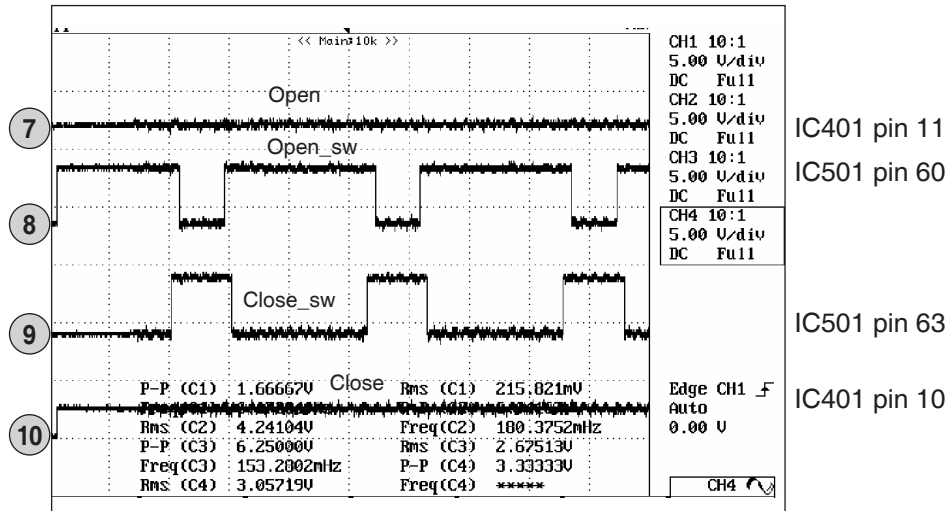


DETAILS AND WAVEFORMS ON SYSTEM TEST AND DEBUGGING

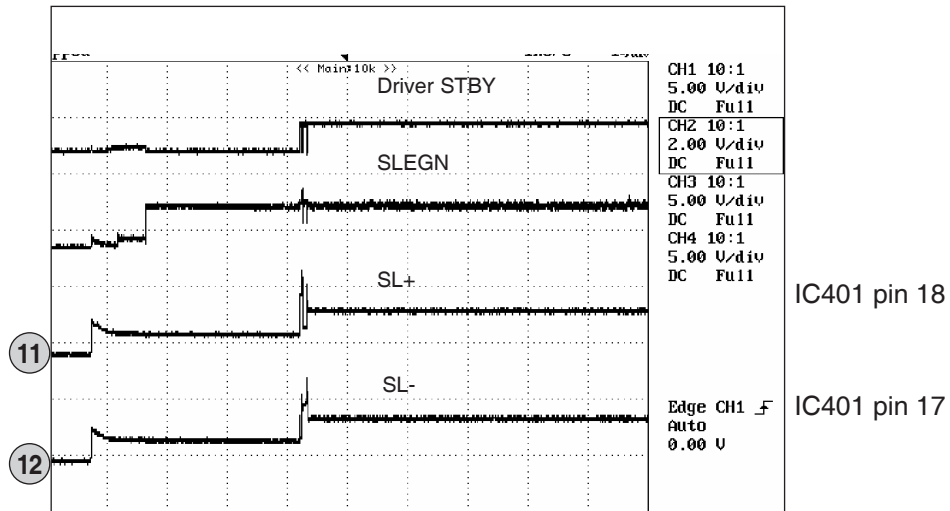
1. WHEN POWER ON, RESET & DATA ETC WAVEFORM



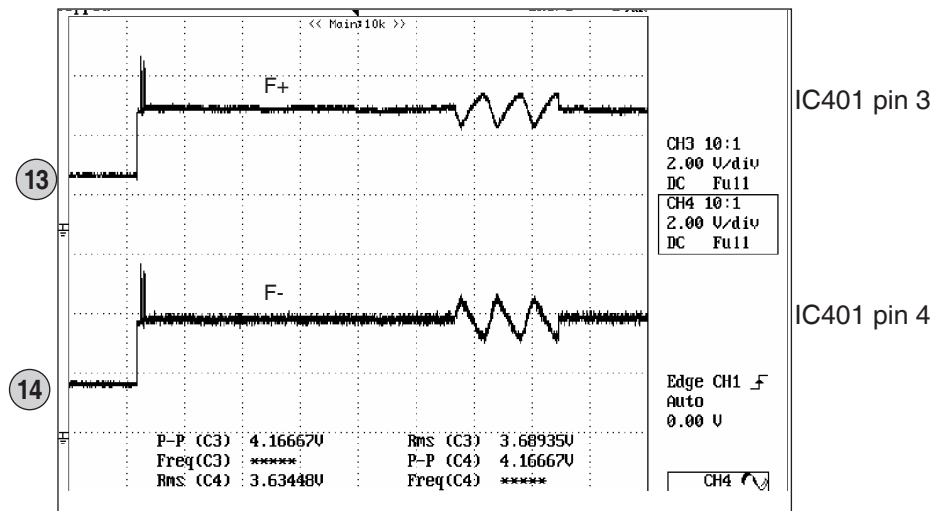
2. OPEN/CLOSE WAVEFORM AT POWER ON



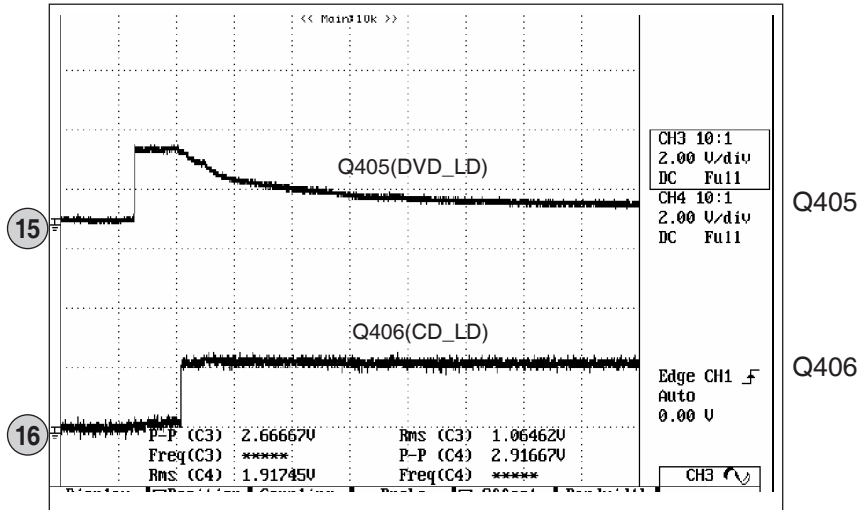
3. STARTING ACTION WAVEFORM IN MD DEVICE



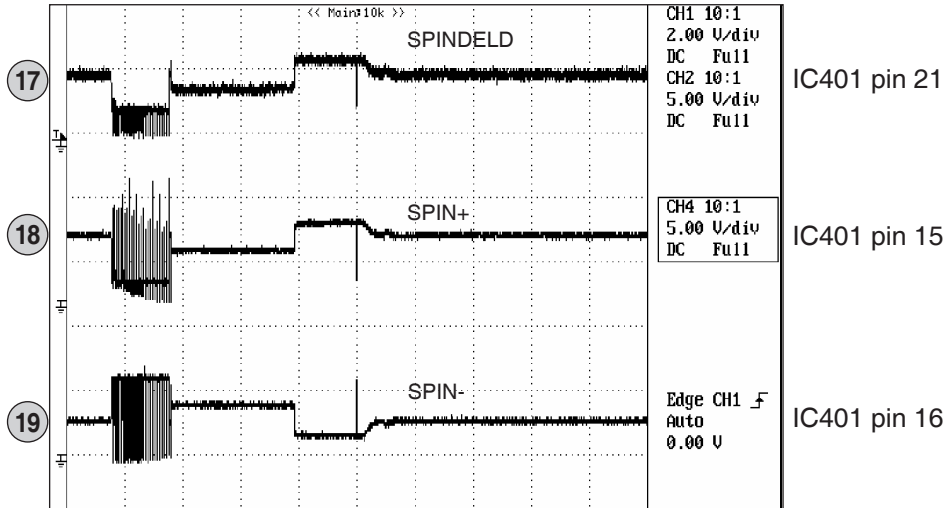
4. FOCUS WAVEFORM (AT CD)



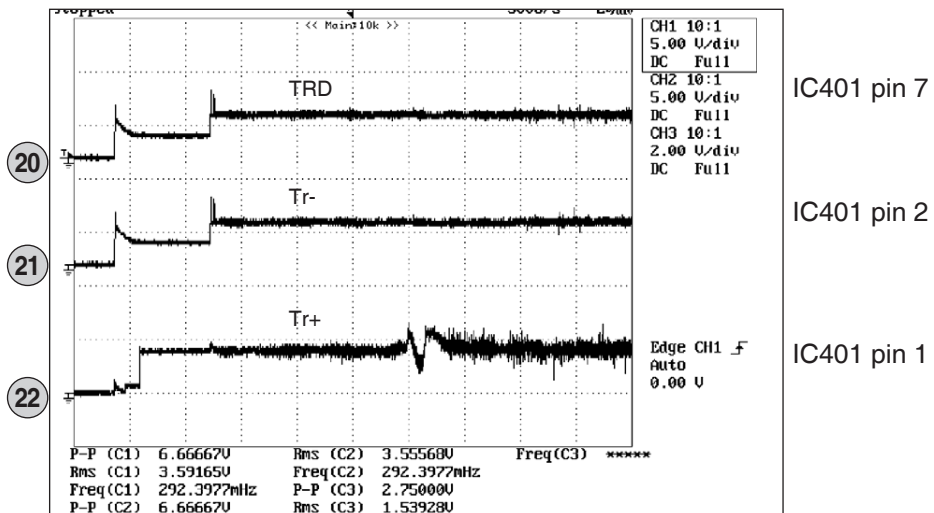
5. FOCUS WAVEFORM (AT DVD)



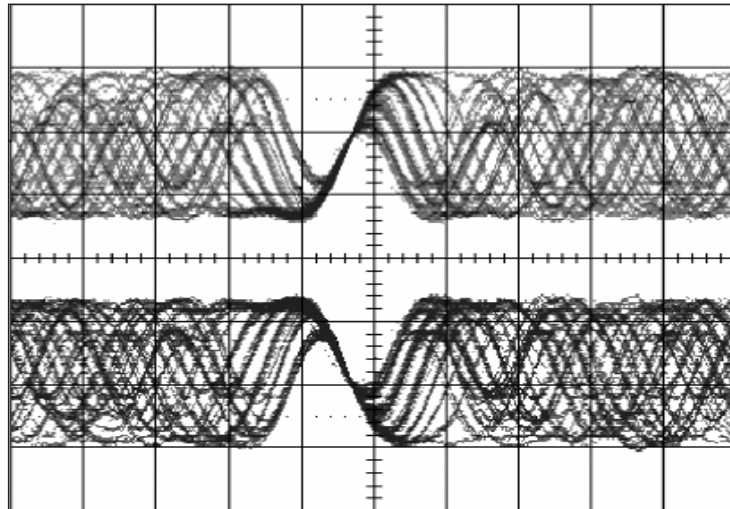
6. AT POWER ON , SPINDLE SIGNAL AT MD DECK



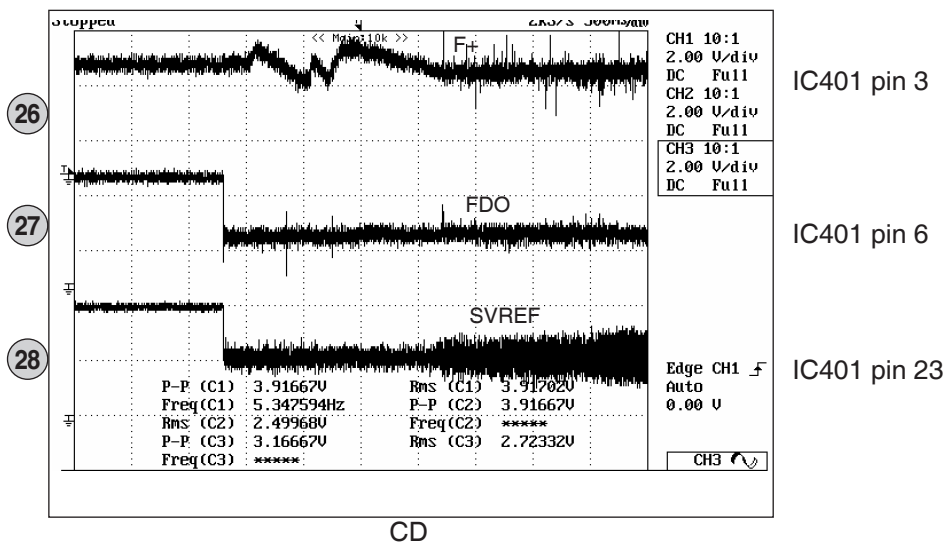
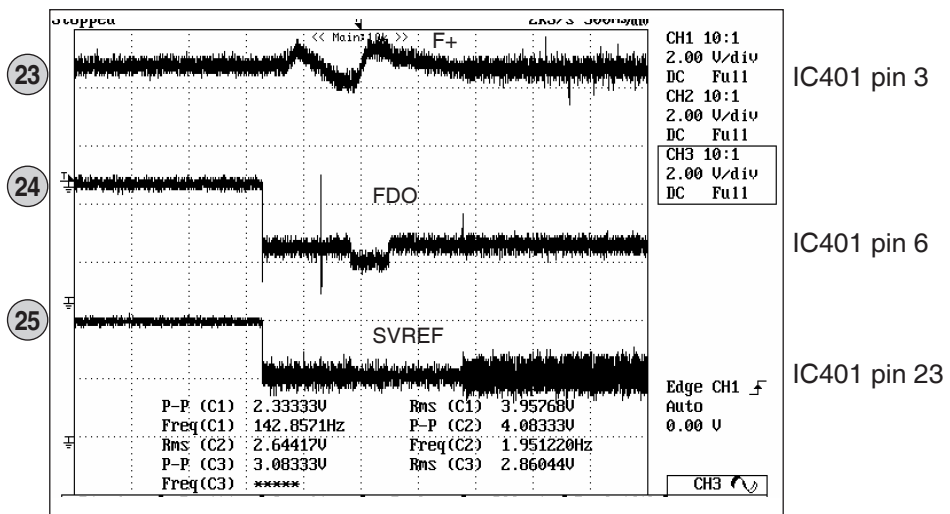
7. TRACKING SIGNAL



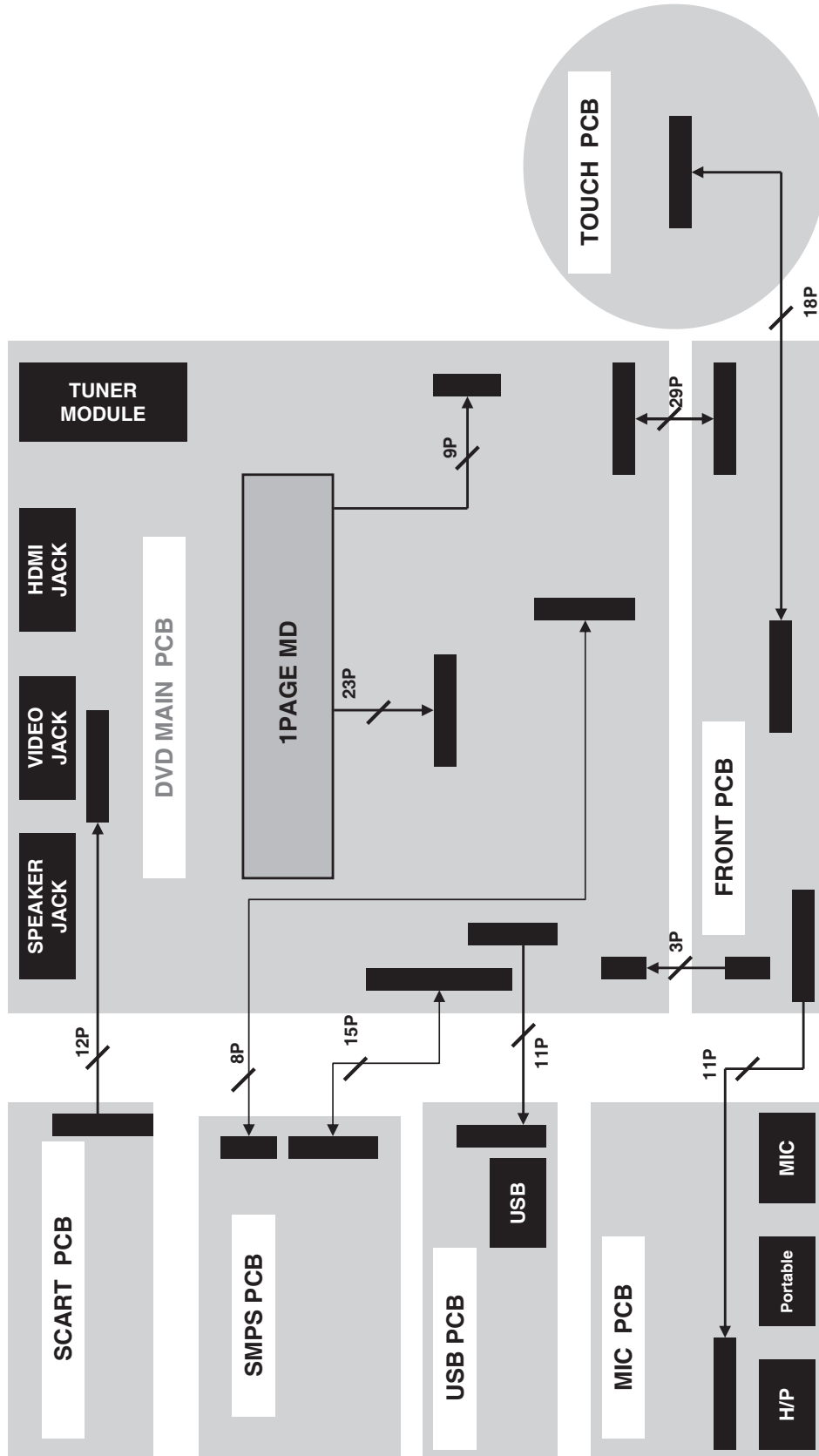
8. RF WAVEFORM



9. DISK TYPE JUGEMENT WAVEFORM

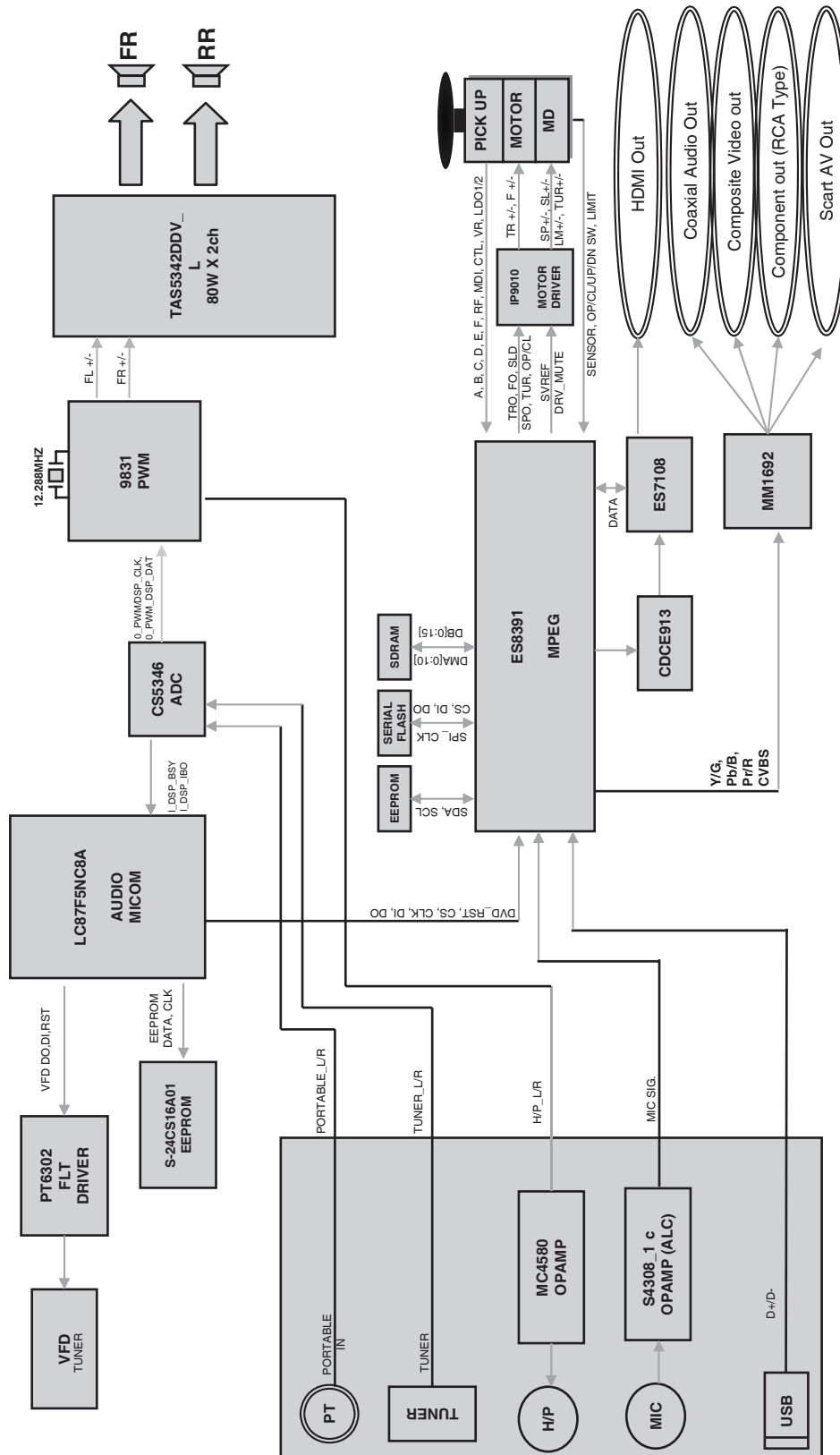


WIRING DIAGRAM

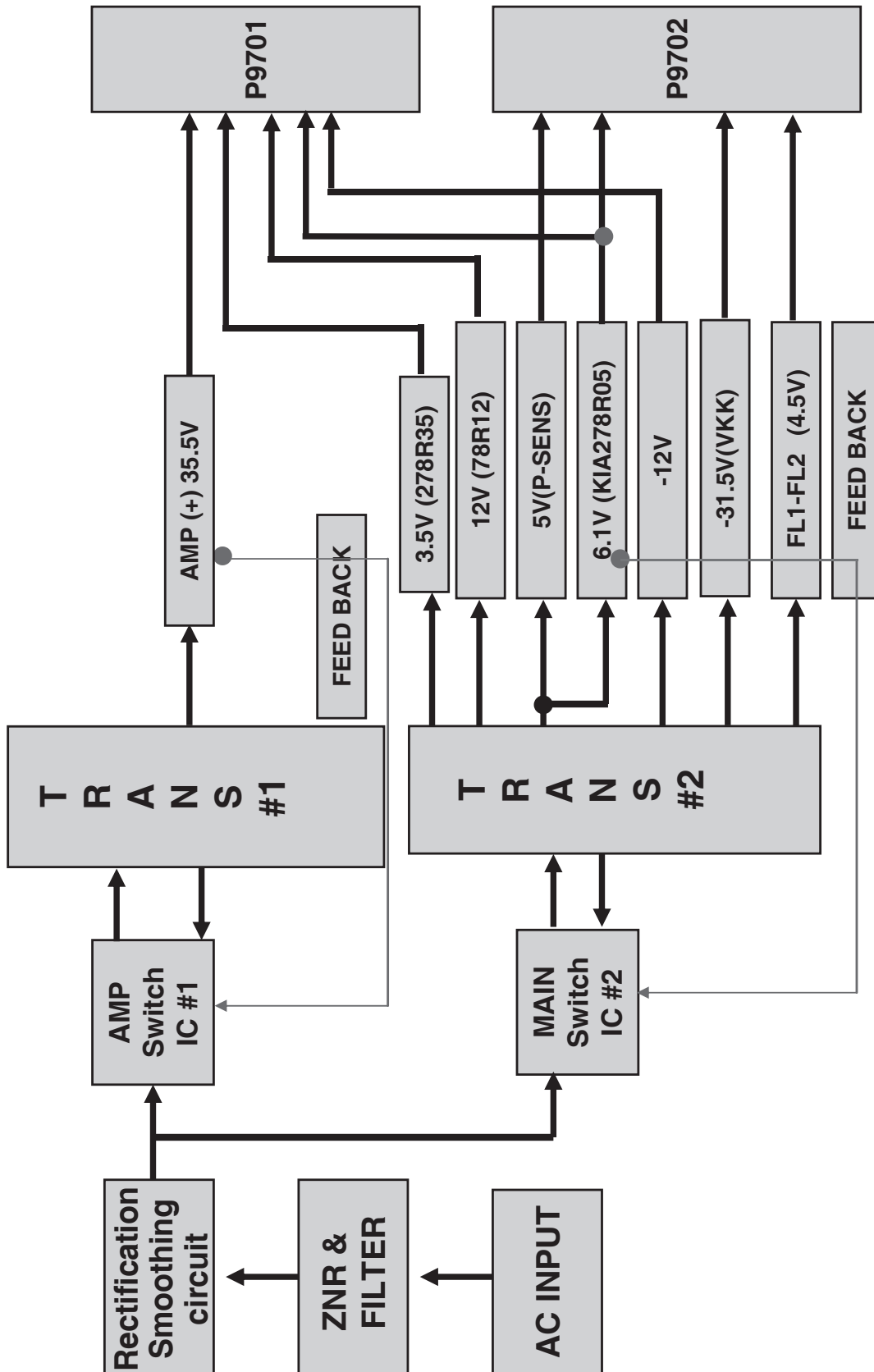


BLOCK DIAGRAMS

1. MAIN BLOCK DIAGRAM



2. SMPS BLOCK DIAGRAM



MEMO

A series of horizontal dotted lines for writing.

CIRCUIT DIAGRAMS

1. SMPS(POWER) CIRCUIT DIAGRAM

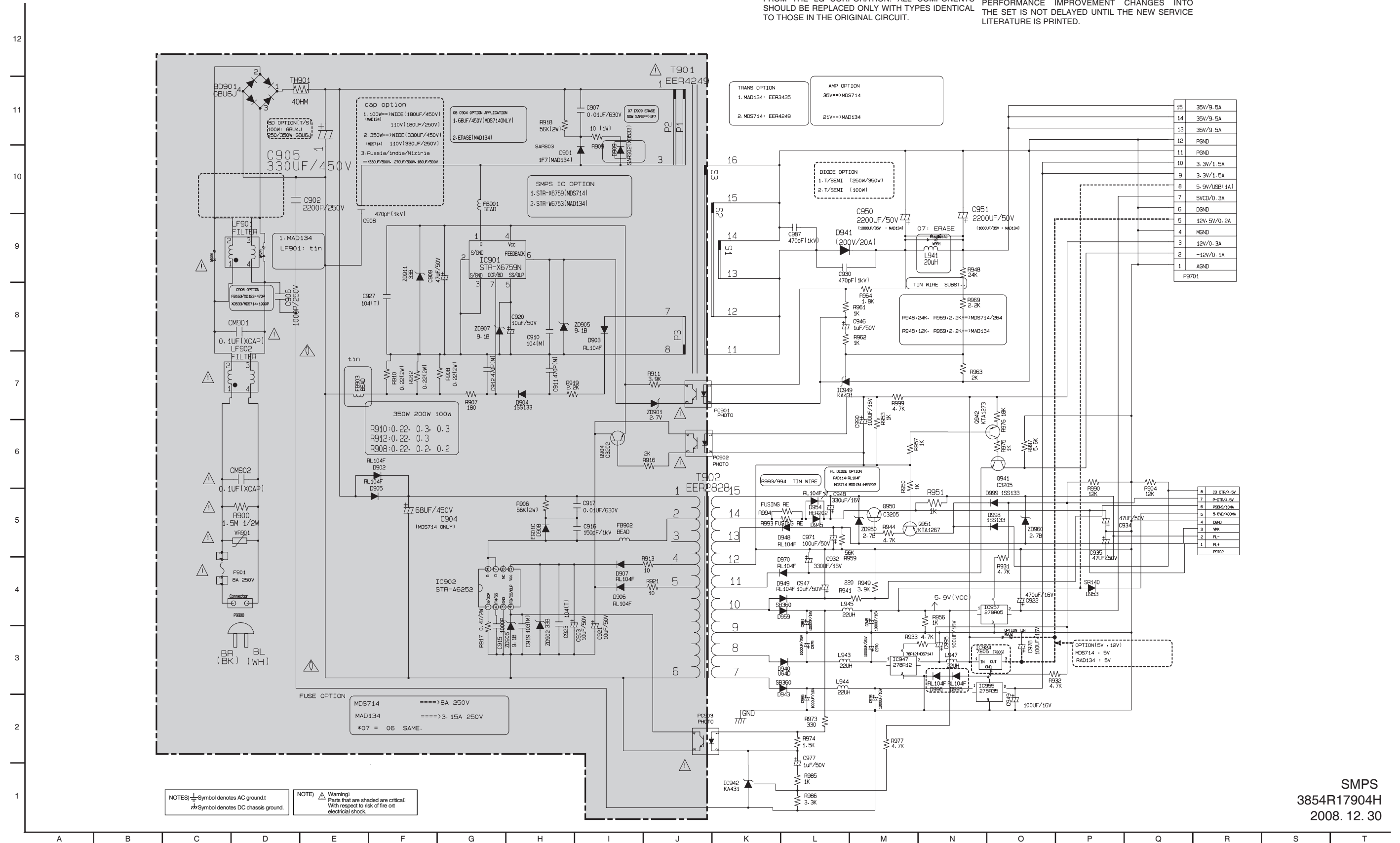
IMPORTANT SAFETY NOTICE

WHEN SERVICING THIS CHASSIS, UNDER NO CIRCUMSTANCES SHOULD THE ORIGINAL DESIGN BE MODIFIED OR ALTERED WITHOUT PERMISSION FROM THE LG CORPORATION. ALL COMPONENTS SHOULD BE REPLACED ONLY WITH TYPES IDENTICAL TO THOSE IN THE ORIGINAL CIRCUIT.

SPECIAL COMPONENTS ARE SHADED ON THE SCHEMATIC FOR EASY IDENTIFICATION. THIS CIRCUIT DIAGRAM MAY OCCASIONALLY DIFFER FROM THE ACTUAL CIRCUIT USED. THIS WAY, IMPLEMENTATION OF THE LATEST SAFETY AND PERFORMANCE IMPROVEMENT CHANGES INTO THE SET IS NOT DELAYED UNTIL THE NEW SERVICE LITERATURE IS PRINTED.

NOTE :

1. Shaded(■) parts are critical for safety. Replace only with specified part number.
2. Voltages are DC-measured with a digital voltmeter during Play mode.

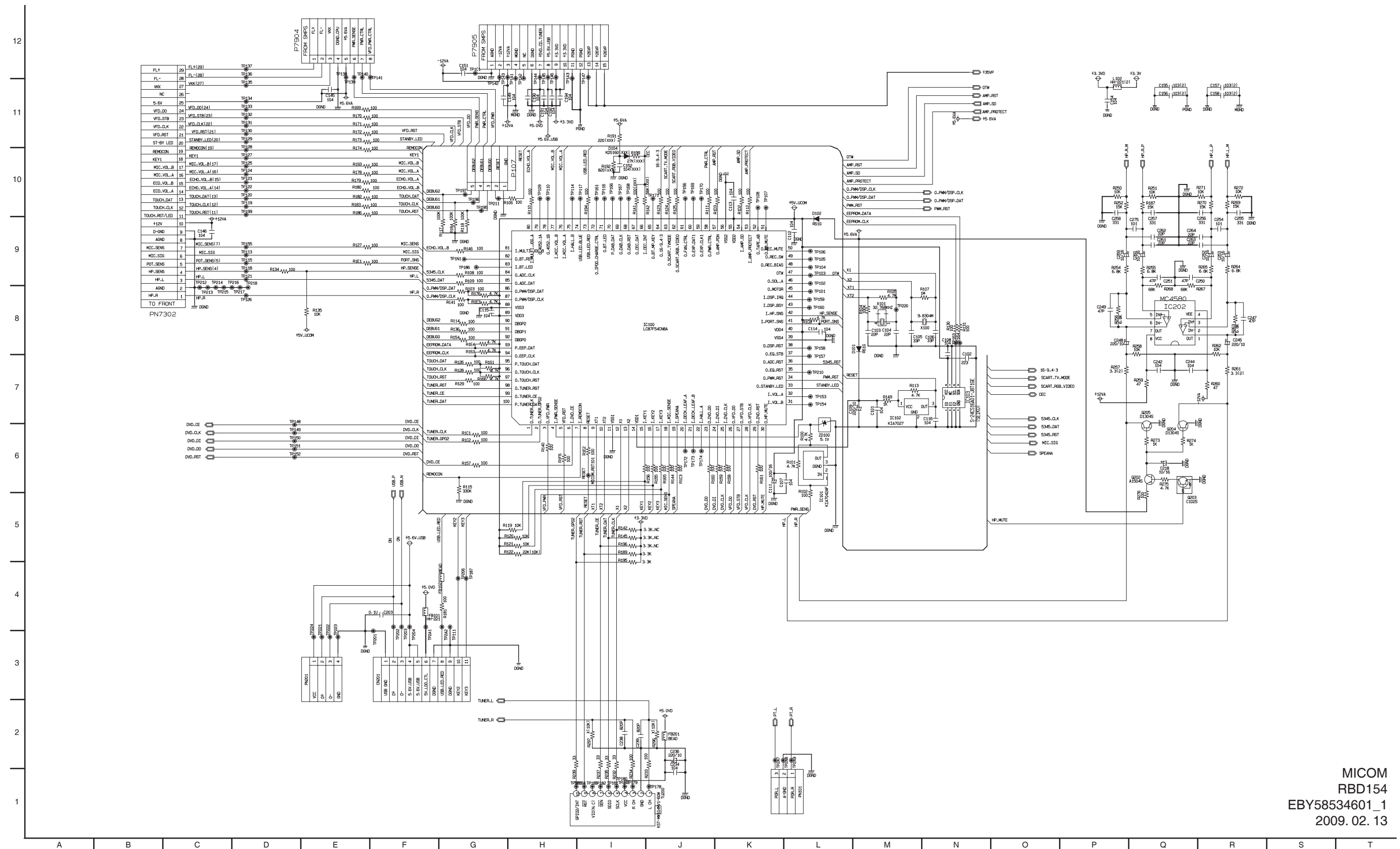


NOTES) ⚡ Symbol denotes AC ground.
 ⚡ Symbol denotes DC chassis ground.
 (NOTE) ⚡ Warning! Parts that are shaded are critical! With respect to risk of fire or electrical shock.

15	35V/9.5A
14	35V/9.5A
13	35V/9.5A
12	PGND
11	PGND
10	3.3V/1.5A
9	3.3V/1.5A
8	5.9V/USB(1A)
7	5VCD/0.3A
6	DGND
5	12V.5V/0.2A
4	MGND
3	12V/0.3A
2	-12V/0.1A
1	AGND

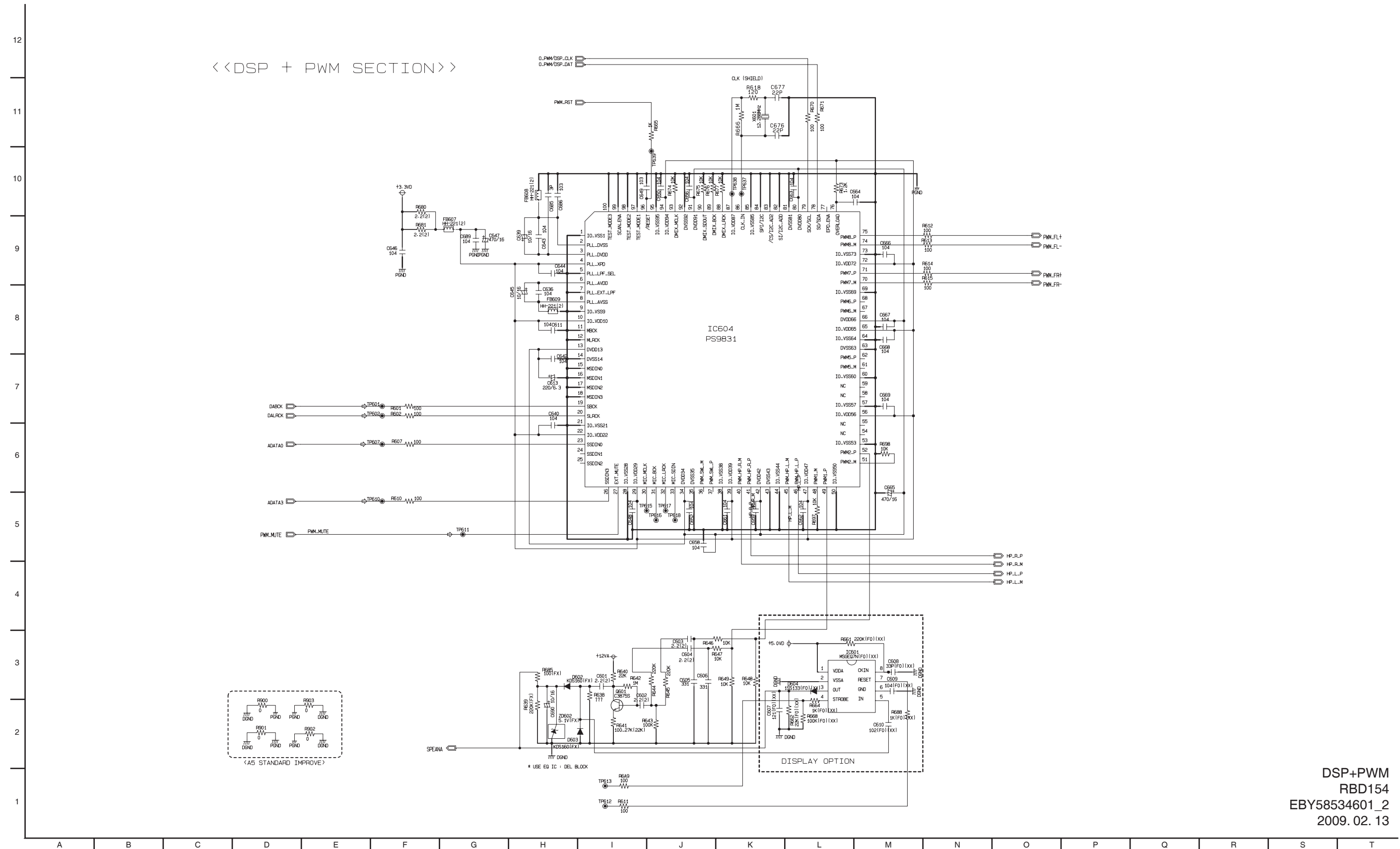
8	CD CTRL/4.5V
7	P-CTRL/4.5V
6	PSRNE/500mA
5	5.5V/400mA
4	DGND
3	5V
2	RL-
1	RL+

2. MICOM CIRCUIT DIAGRAM



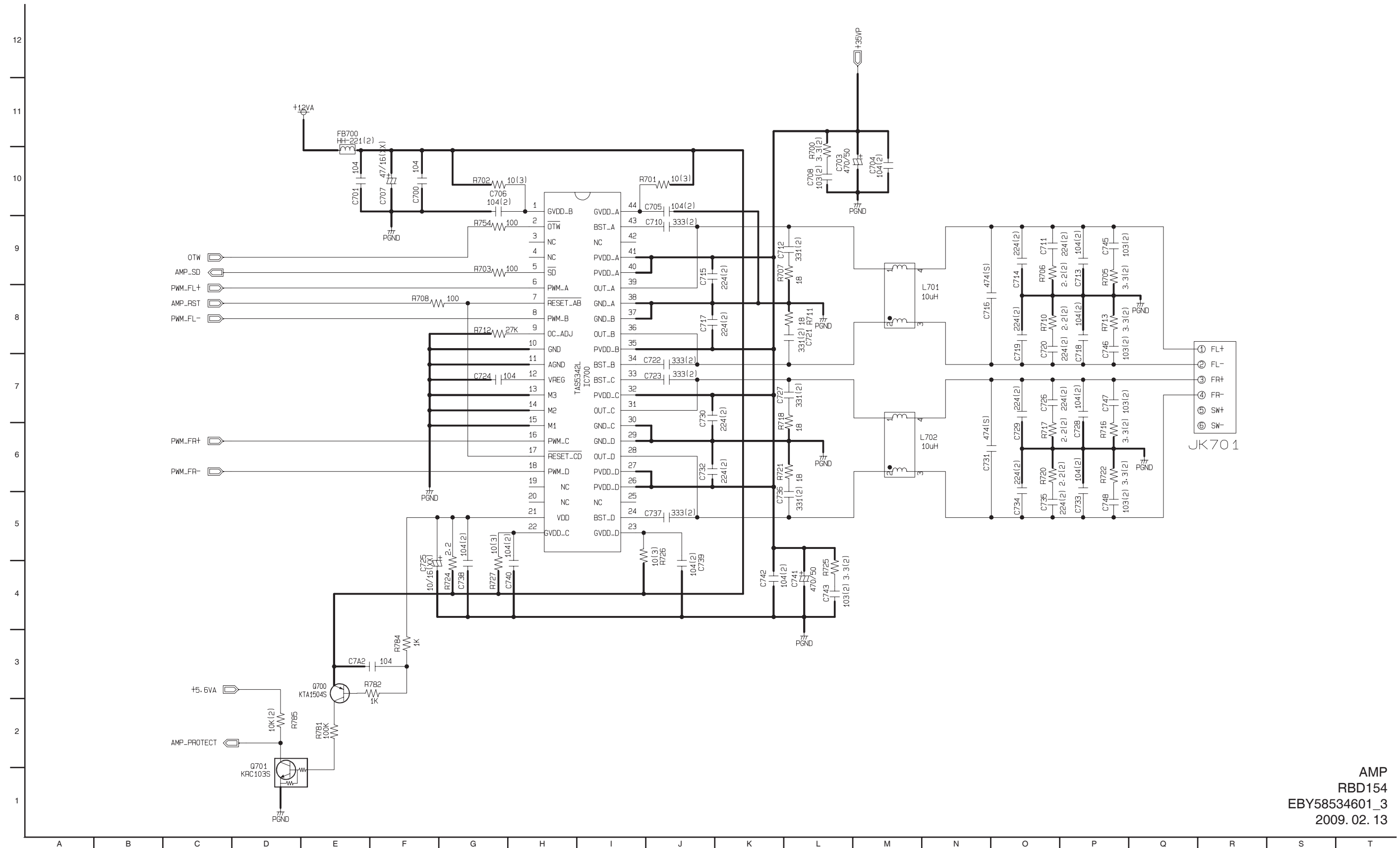
MICOM
RBD154
EBY58534601_1
2009.02.13

3. DSP & PWM CIRCUIT DIAGRAM



DSP+PWM
RBD154
EBY58534601_2
2009. 02. 13

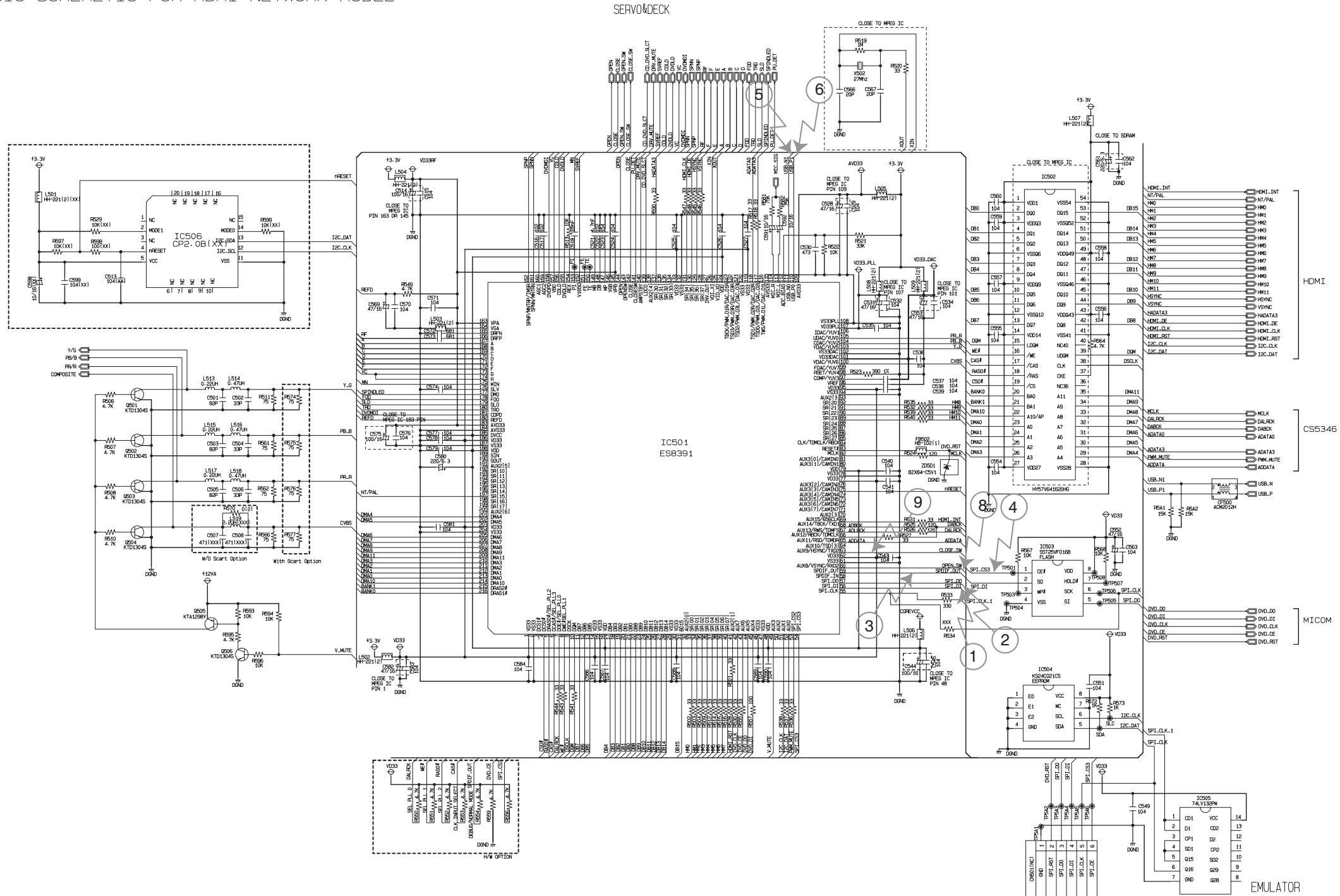
4. AMP CIRCUIT DIAGRAM



AMP
RBD154
EBY58534601_3
2009. 02. 13

5. MPEG CIRCUIT DIAGRAM

ES8391 BASIC SCHEMATIC FOR HDMI NETWORK MODEL

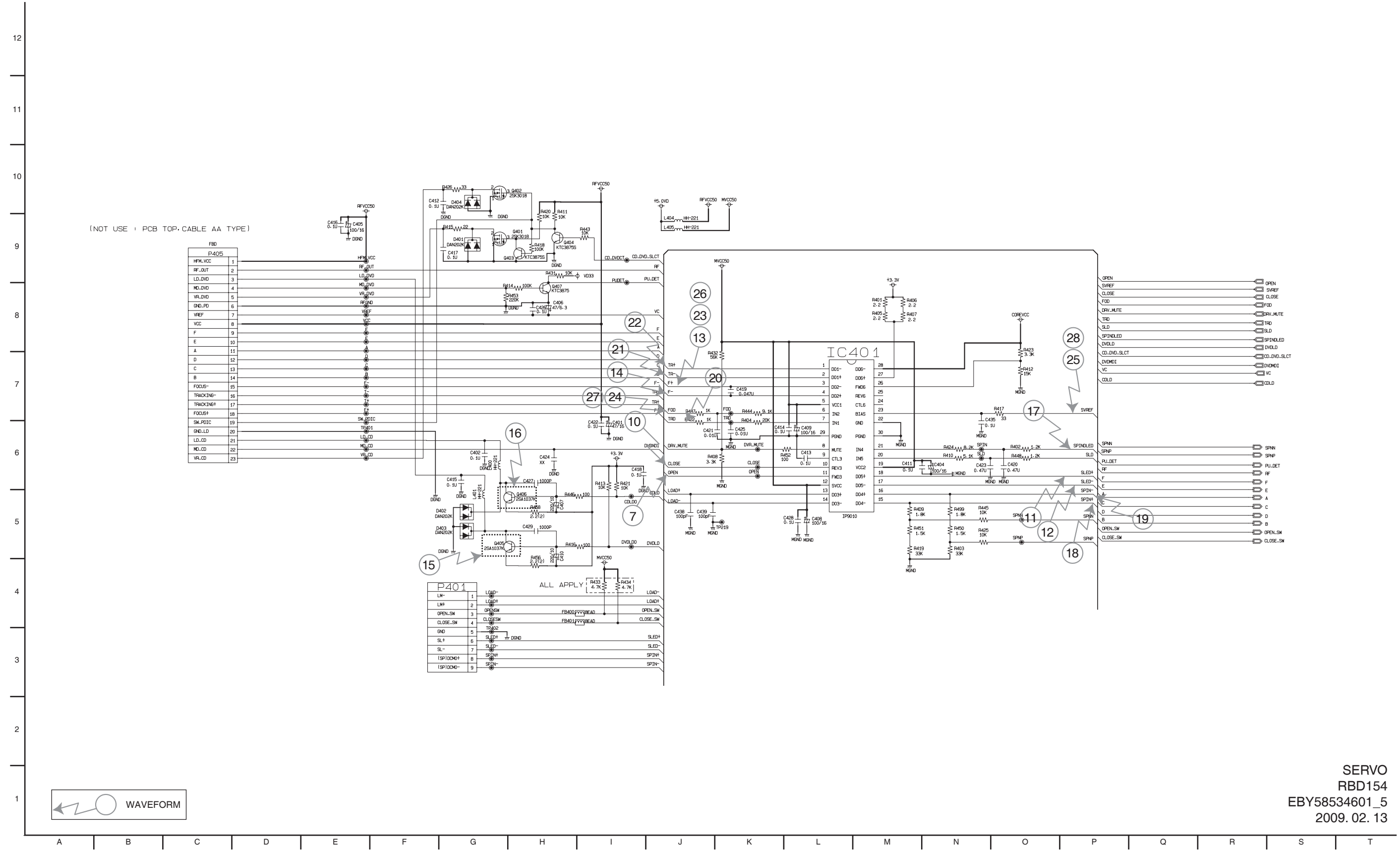


- 1. I4B-DM2 | SEL_PLL[RASD4-NEA-DALROCK] = { 1, 1 }
- 2. CLK INPUT SELECT[CASR] | HIGH = X-TAL INPUT, LOW = SYSTEM CLK INPUT
- 3. DEBUG MODE[#49-#159-#160] | 00X-NORMAL MODE, 11X-SCAN, 110-PLL TEST, 101-CTAG BEST, 100-FLASH TEST
- 4. SPT BOOT SELECT[#53] | 1=PARALLEL FLASH, 0=SPT FLASH
- 5. SPT BANK-SMAP SELECT[#54] | 1=DM27 SMAP BANK 2-3, 0=SMAP BANK2-3



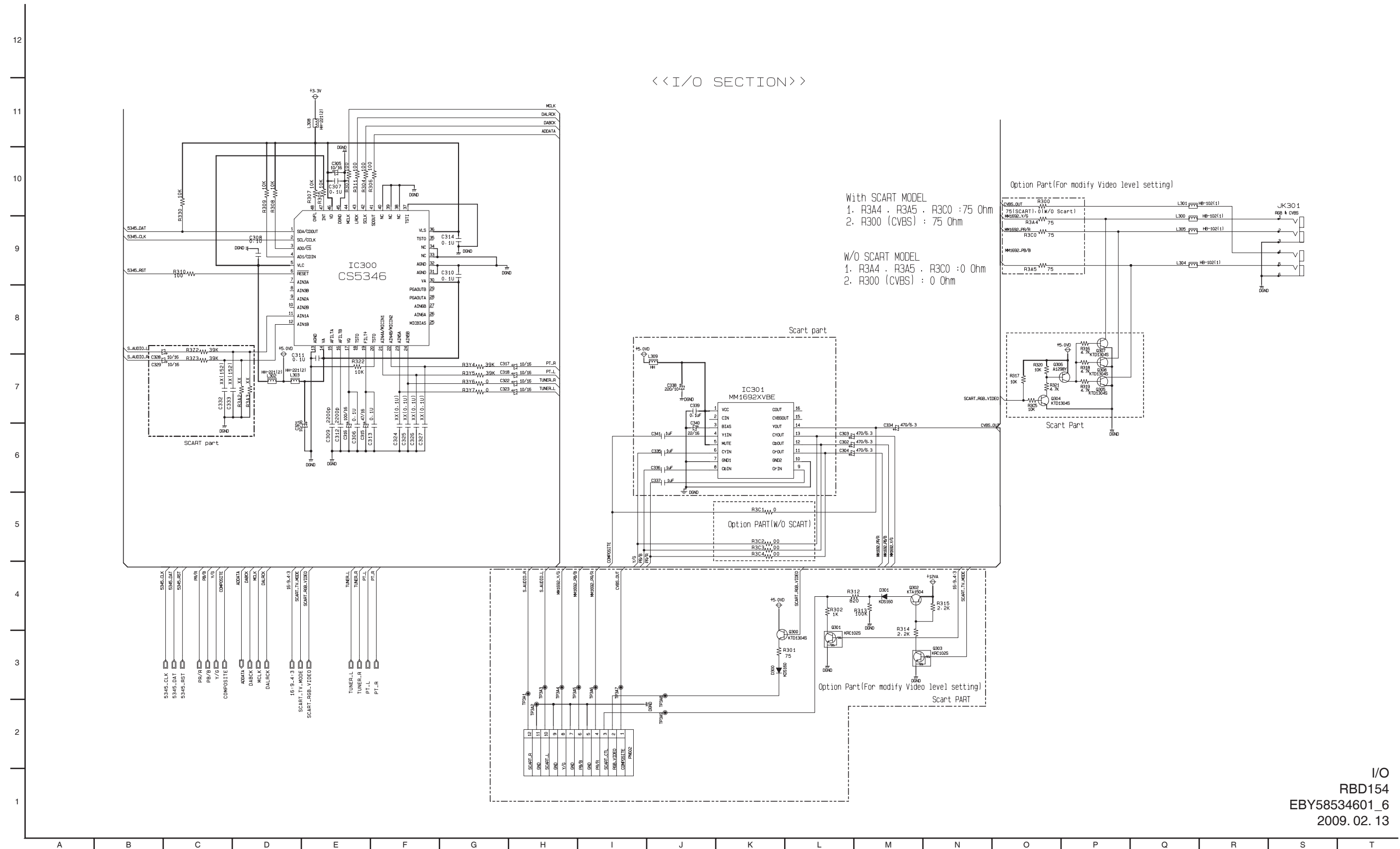
MPEG
RBD154
EBY58534601_4
2009. 02. 13

6. SERVO CIRCUIT DIAGRAM



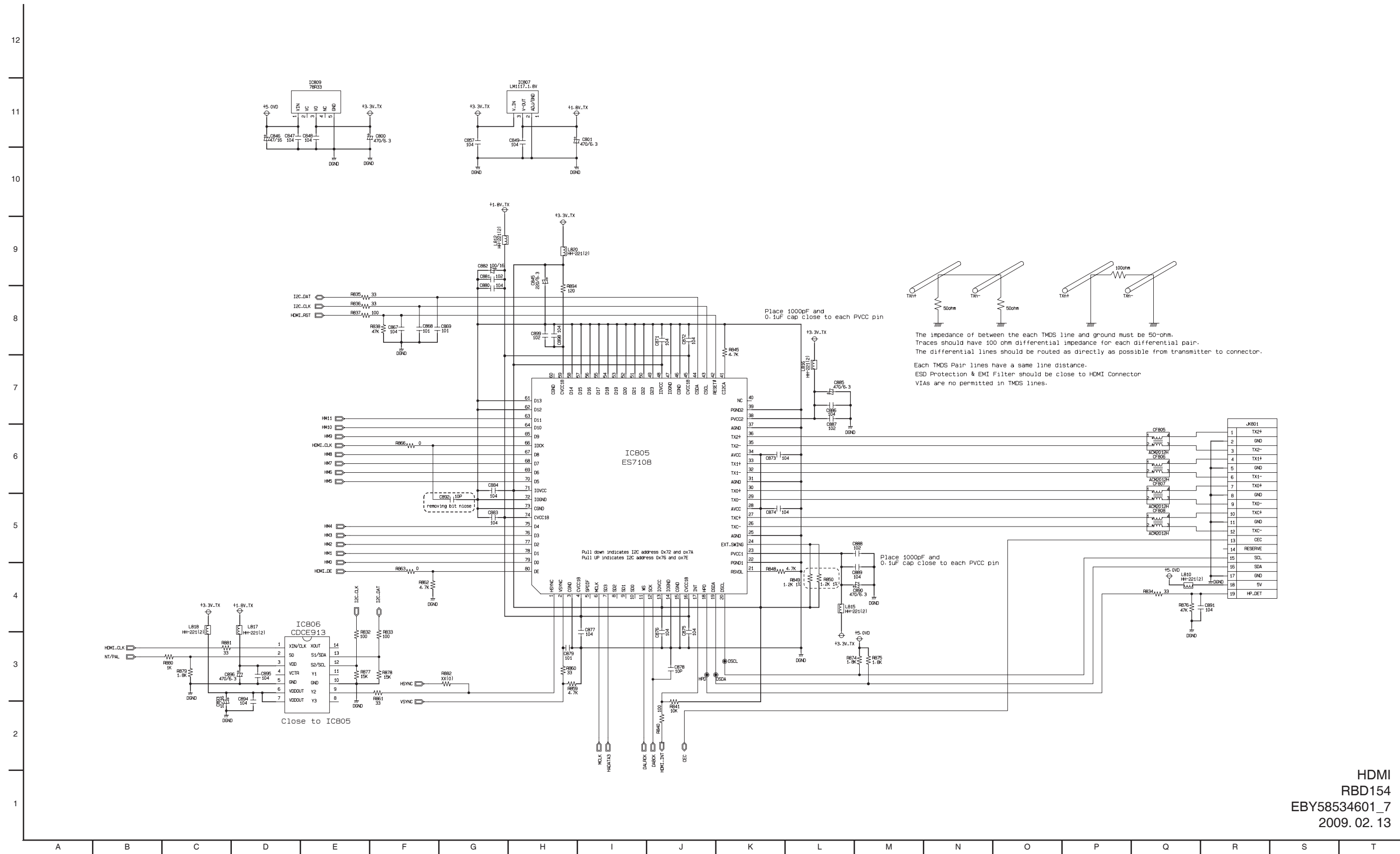
SERVO
RBD154
EBY58534601_5
2009. 02. 13

7. I/O CIRCUIT DIAGRAM



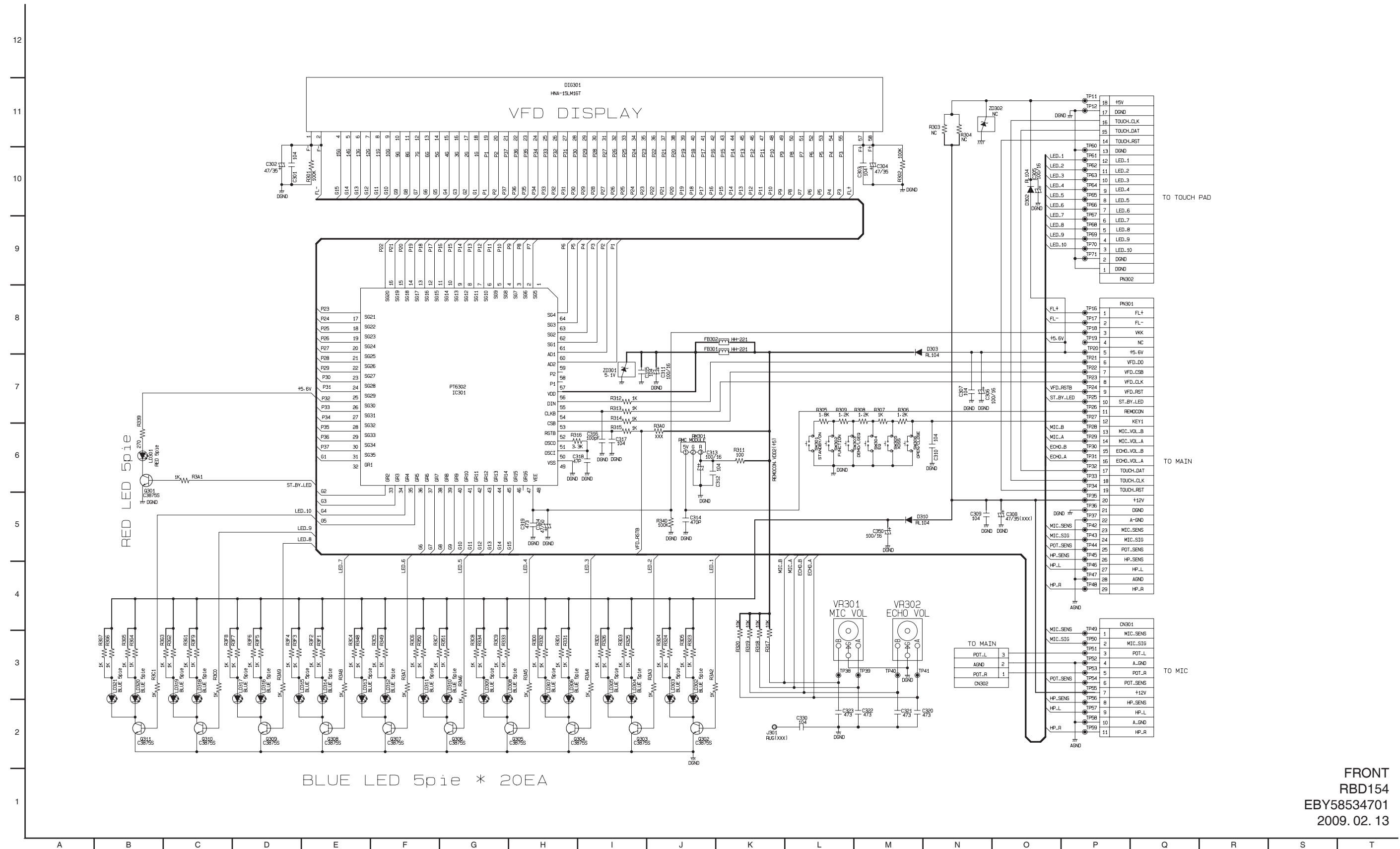
I/O
 RBD154
 EBY58534601_6
 2009. 02. 13

8. HDMI CIRCUIT DIAGRAM



HDMI
RBD154
EBY58534601_7
2009. 02. 13

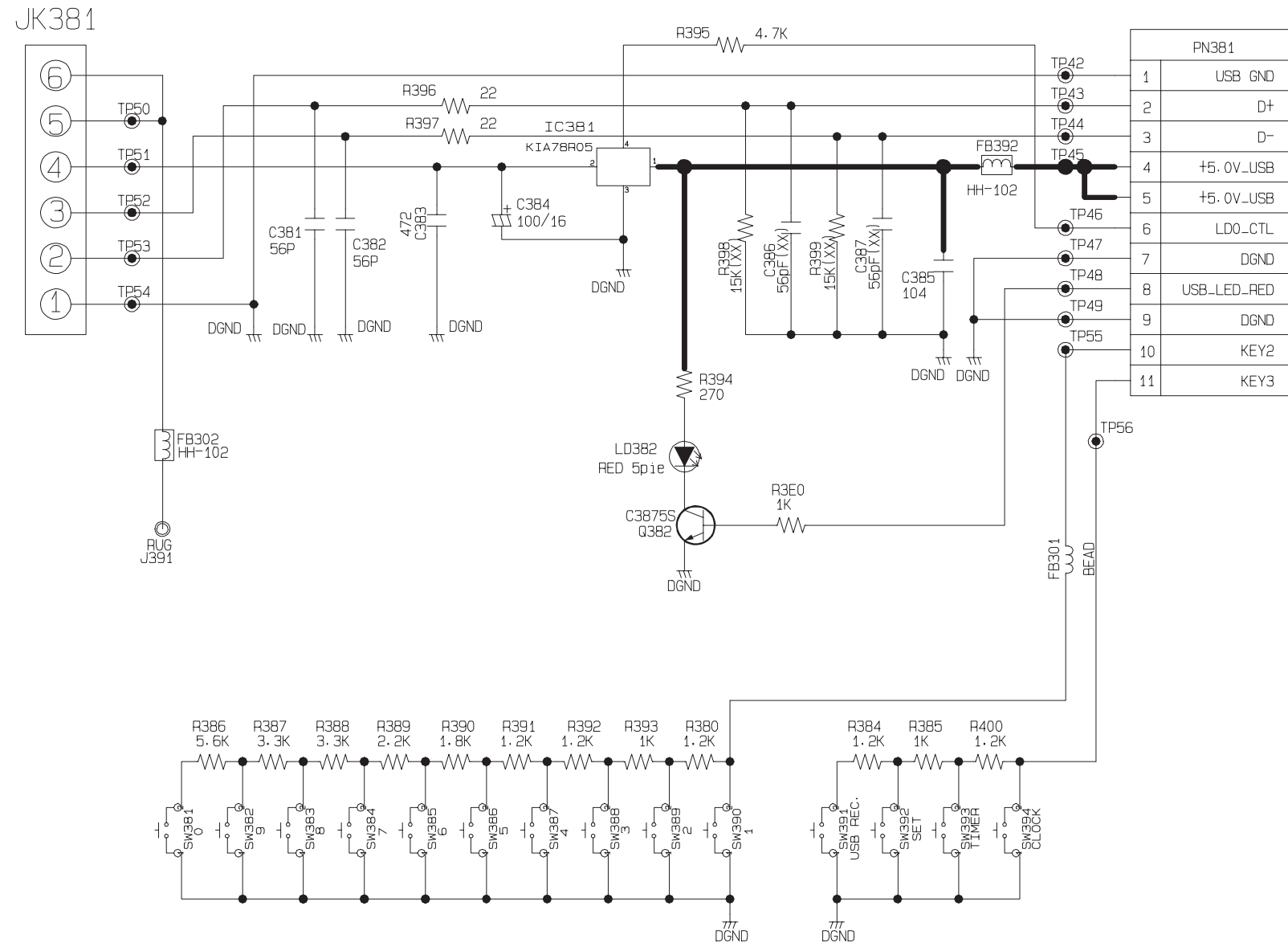
9. FRONT CIRCUIT DIAGRAM



FRONT
RBD154
EBY58534701
2009.02.13

10. KARAOKE + USB CIRCUIT DIAGRAM

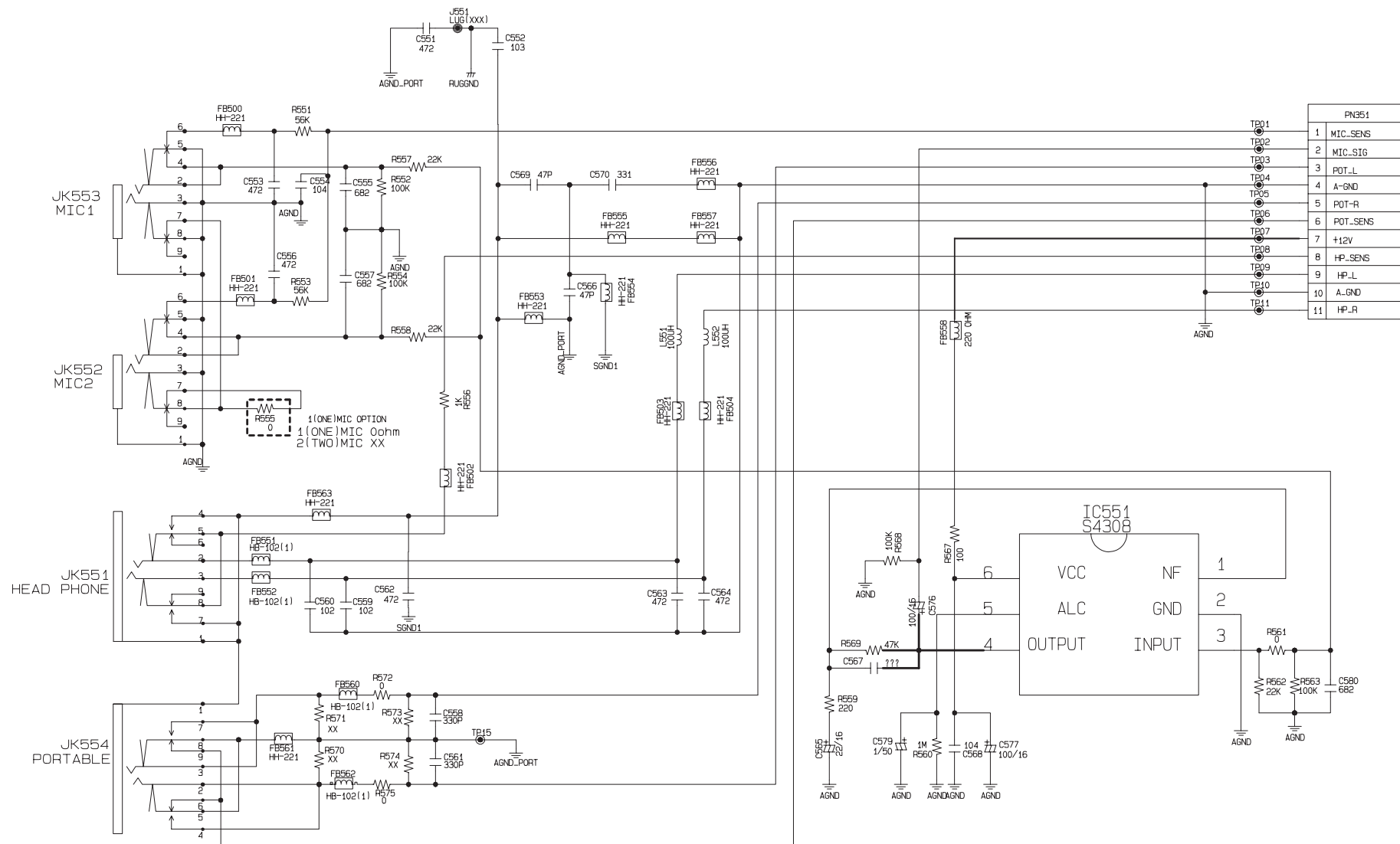
10 KEY/USB JACK PCB to MAIN PCB



KARAOKE+USB
RBD154
EBY58535901
2009.02.13

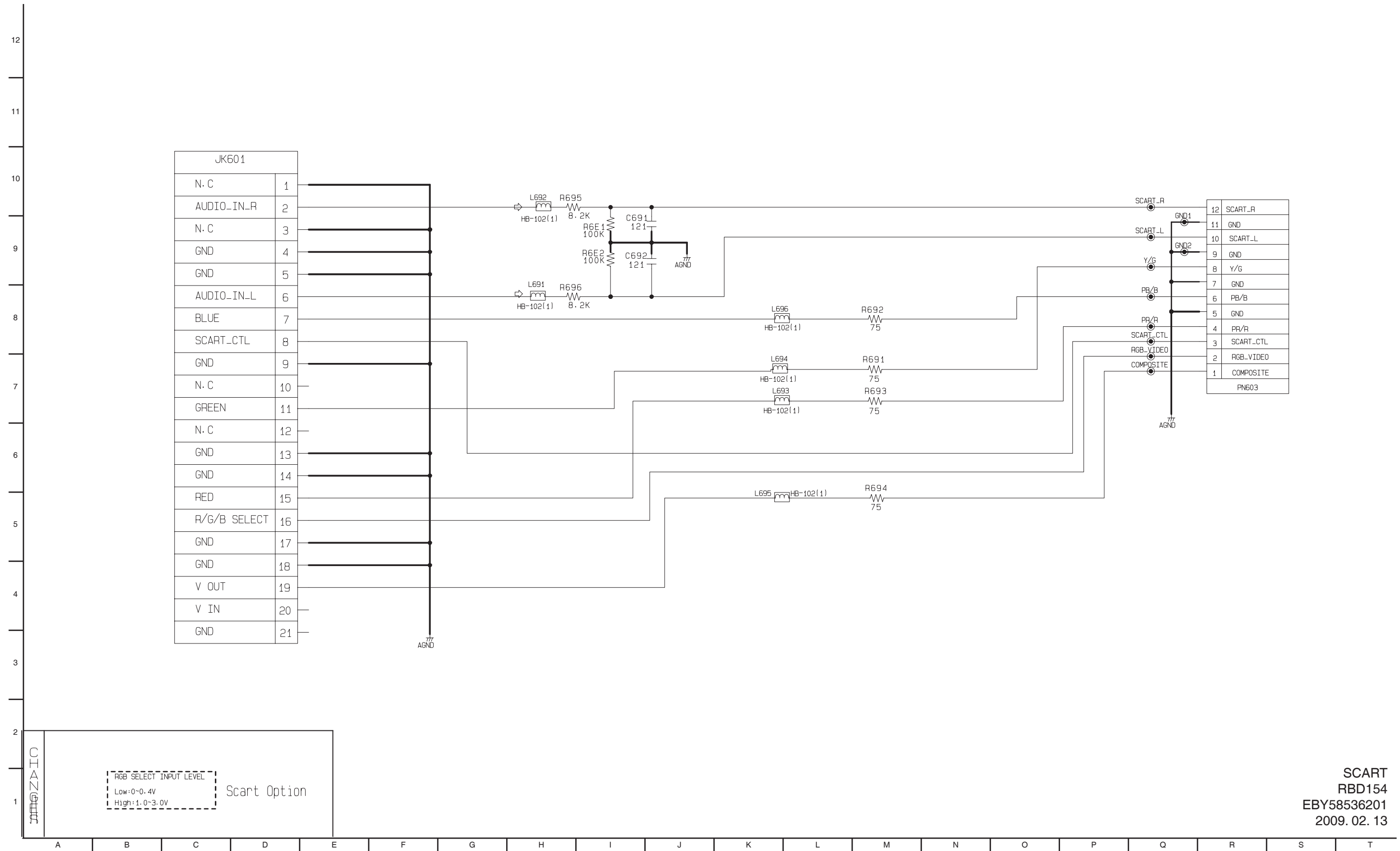
11. MIC/HEAD PHONE/PORTABLE CIRCUIT DIAGRAM

MIC/HEADPHONE/PORTABLE JACK PCB to FRONT PCB



MIC/HEAD PHONE/PORTABLE
RBD154
EBY58536101
2009. 02. 13

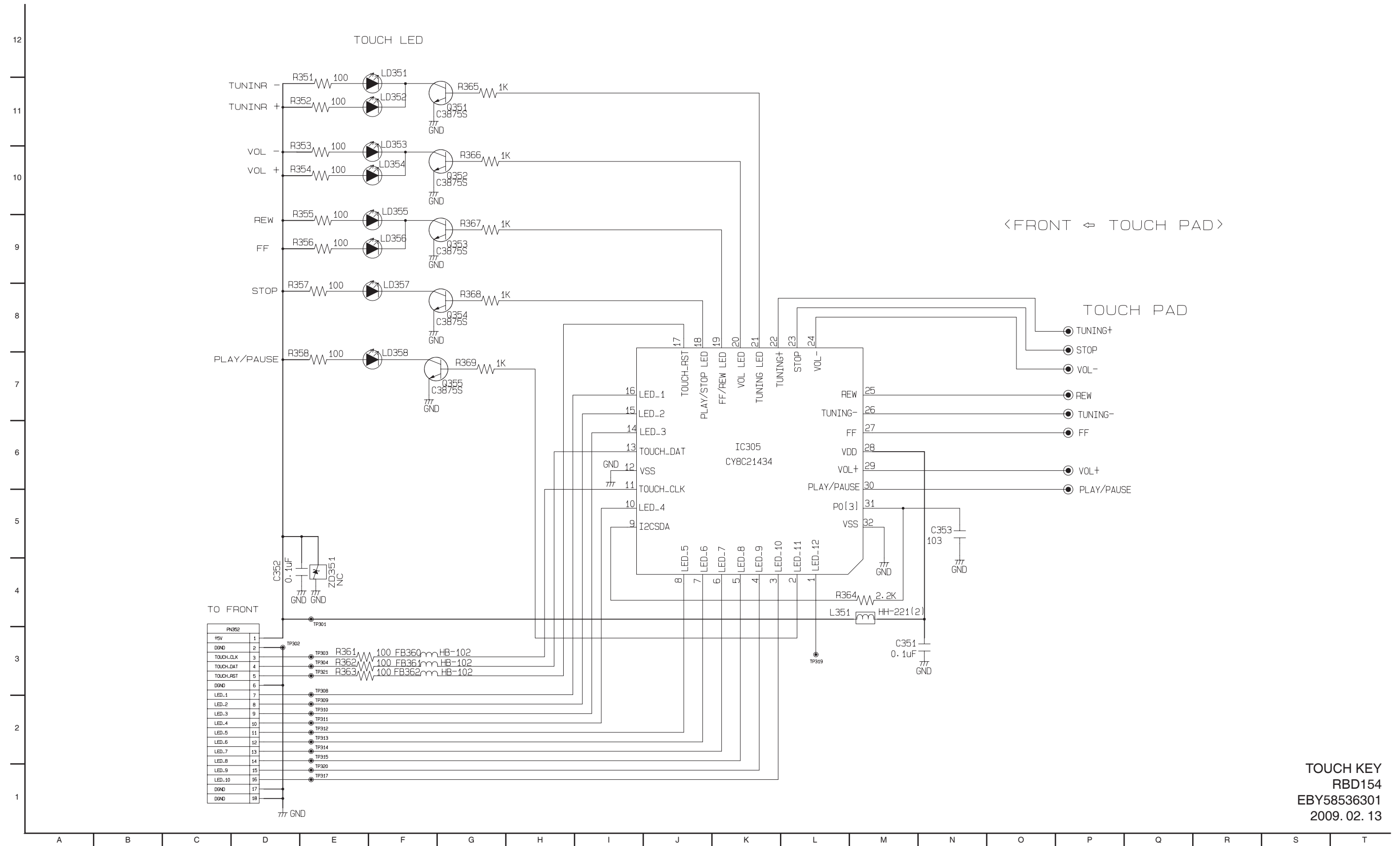
12. SCART CIRCUI T DIAGRAM



RGB SELECT INPUT LEVEL
 Low: 0-0.4V
 High: 1.0-3.0V
 Scart Option

SCART
 RBD154
 EBY58536201
 2009. 02. 13

13. TOUCH KEY CIRCUIT DIAGRAM



TOUCH KEY
RBD154
EBY58536301
2009. 02. 13

CIRCUIT VOLTAGE CHART

PIN	VOLT
IC100(MICOM LC87F54CN8A)	
1	0.05
2	3.34
3	3.48
4	4.1
5	5.09
6	0.23
7	4.5
8	5.06
9	2.21
10	2.57
11	0
12	2.47
13	2.55
14	5.09
15	5.09
16	5.06
17	5.06
18	5.05
19	0
20	0
21	0
22	0
23	1.3
24	0.8
25	3.3
26	0.1
27	3.37
28	4.67
29	4.8
30	4.96
31	0.84
32	1.1
33	0
34	5.07
35	5.06
36	5.07
37	0

PIN	VOLT
38	0
39	0
40	5.08
41	5.06
42	0.05
43	1.08
44	1.02
45	0
46	0
47	3.2
48	1.03
49	0
50	0
51	0
52	0
53	5.57
54	3.21
55	0
56	0
57	0
58	3.66
59	0
60	0
61	0
62	4.4
63	0
64	0
65	0
66	0
67	0
68	0
69	0
70	0
71	0
72	0
73	4.48
74	0
75	0.95
76	0

PIN	VOLT
77	0
78	0
79	0
80	0.06
81	0.06
82	1.7
83	1.7
84	4.48
85	4.48
86	5.01
87	0
88	0
89	0
90	0
91	0
92	0
93	0
94	0
95	0
96	0
97	0
98	0
99	0
100	0
IC101(KIA7042)	
1	5.74
2	0
3	4.94
IC102(KIA7027)	
1	5.12
2	0
3	5.12
IC103(S-24CS16A)	
1	0
2	0
3	0
4	0
5	4.5
6	4.5

PIN	VOLT
7	0
8	5.12
IC202(MC4580)	
1	0
2	0
3	0.02
4	-12.4
5	0.02
6	0.02
7	0.02
8	10.8
IC300(CS5346)	
1	4.43
2	4.43
3	3.31
4	3.31
5	4.91
6	5.06
7	2.45
8	2.44
9	2.44
10	2.44
11	0.01
12	0.01
13	0.01
14	4.9
15	0.08
16	0.08
17	0.08
18	0
19	4.73
20	0
21	2.44
22	2.44
23	2.44
24	2.44
25	0
26	2.44
27	2.44

PIN	VOLT
28	0.77
29	0.75
30	0.73
31	0.43
32	0
33	0
34	0
35	0.43
36	3.31
37	0
38	0
39	0
40	0
41	3.31
42	4.91
43	3.31
IC401(IP9010)	
1	0.03
2	0.03
3	0.03
4	0.03
5	4.93
6	1.65
7	1.65
8	0.06
9	3.3
10	0
11	0
12	4.93
13	0.05
14	0.05
15	0.19
16	0.19
17	0.02
18	0.02
19	4.93
20	1.65
21	1.64
22	0

PIN	VOLT
23	1.64
24	0
25	2.95
26	1.26
27	2.08
28	1.54
IC501(ESS8391)	
1	3.31
2	0
3	3.34
4	3.34
5	3.34
6	3.34
7	1.67
8	3.32
9	1.51
10	0
11	1.39
12	0.5
13	0.68
14	1.28
15	0
16	1.49
17	1.29
18	1.1
19	1.1
20	0.94
21	0
22	0
23	0
24	0
25	0
26	0
27	0
28	0
29	0
30	3.45
31	0
32	0.89

PIN	VOLT
33	0.96
34	0.96
35	0.96
36	0.96
37	0.96
38	0.96
39	0.96
40	0.96
41	0
42	3.31
43	0.24
44	1.2
45	0.52
46	3.39
47	0
48	1.55
49	0.03
50	0
51	0.08
52	0.08
53	0
54	3.45
55	3.3
56	0.8
57	0.3
58	1.2
59	0
60	3.98
61	0
62	3.3
63	0
64	0
65	1.7
66	1.3
67	1.68
68	1.68
69	3.31
70	0
71	0

PIN	VOLT
72	0
73	0
74	0
75	3.32
76	0
77	3.32
78	0
79	1.55
80	0
81	0
82	1.69
83	4.4
84	0
85	0
86	0
87	0
88	0
89	1.02
90	1.14
91	1.14
92	1.12
93	0
94	3.42
95	3.32
96	1.5
97	0.06
98	2.39
99	0
100	0
101	3.43
102	3.42
103	0
104	0
105	0
106	0
107	3.32
108	3.28
109	3.42
110	0

PIN	VOLT
111	0
112	3.3
113	0
114	0
115	3.42
116	0
117	3.32
118	3.32
119	3.43
120	0
121	0
122	0
123	0
124	1.55
125	1.8
126	1.8
127	0
128	0
129	0
130	0
131	0
132	0
133	0
134	0
135	0
136	0
137	3.3
138	0
139	0
140	0
141	0
142	0
143	0
144	3.42
145	3.32
146	0
147	1.26
148	1.23
149	1.23

PIN	VOLT
150	1.55
151	1.55
152	0
153	0
154	0
155	0
156	0
157	0
158	0
159	1.24
160	3.38
161	0
162	0
163	3.42
164	0
165	0
166	0
167	0
168	0
169	0
170	0.2
171	0
172	0
173	0
174	0
175	0
176	0
177	0
178	0
179	0
180	0.2
181	0
182	0
183	3.42
184	0
185	1.55
186	3.32
187	0
188	1.55

PIN	VOLT
189	0
190	0
191	0
192	0
193	0
194	0
195	0
196	0
197	0
198	0
199	0
200	0.7
201	1.2
202	1.2
203	0
204	0
205	1.2
206	1.2
207	1.2
208	1.2
209	1.2
210	3.42
211	1.2
212	1.2
213	1.2
214	1.2
215	1.2
216	1.2
IC503(SST25VF016B)	
1	3.11
2	0.8
3	3.34
4	0
5	0.42
6	3.2
7	3.34
8	3.35
IC504(KS24C021CS)	
1	0

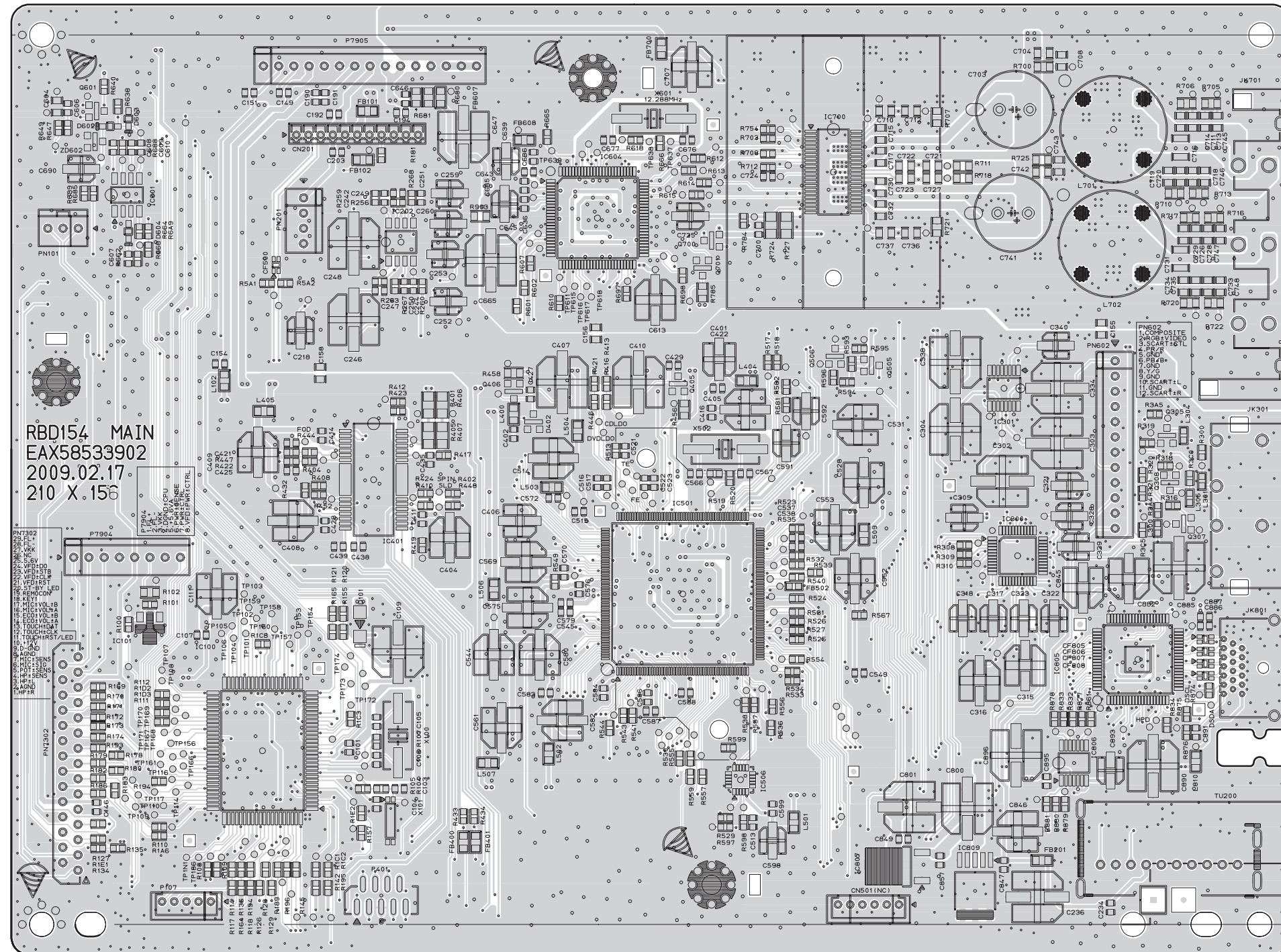
PIN	VOLT
2	0
3	0
4	0
5	3.06
6	3.06
7	0
8	3.35
IC505(74LV132PW)	
1	3.24
2	3.24
3	0.1
4	0.1
5	0.1
6	3.24
7	0
8	3.31
9	0.86
10	1.16
11	3.34
12	1.13
13	1.12
14	3.35
IC805(ES7108)	
1	0.84
2	0
3	0
4	1.81
5	1.19
6	1.6
7	0.49
8	0.46
9	0.41
10	1.67
11	1.67
12	1.61
13	3.31
14	0
15	0
16	1.8

PIN	VOLT
17	0.06
18	0
19	0.14
20	4.01
21	0
22	0
23	3.31
24	0
25	0
26	0.25
27	0
28	3.31
29	0
30	0
31	0
32	0
33	0
34	3.31
35	0
36	0
37	0
38	3.31
39	0
40	0
41	0.24
42	3.31
43	2.9
44	2.9
45	1.8
46	0
47	0
48	3.31
49	0
50	0
51	0
52	0
53	0
54	0
55	0

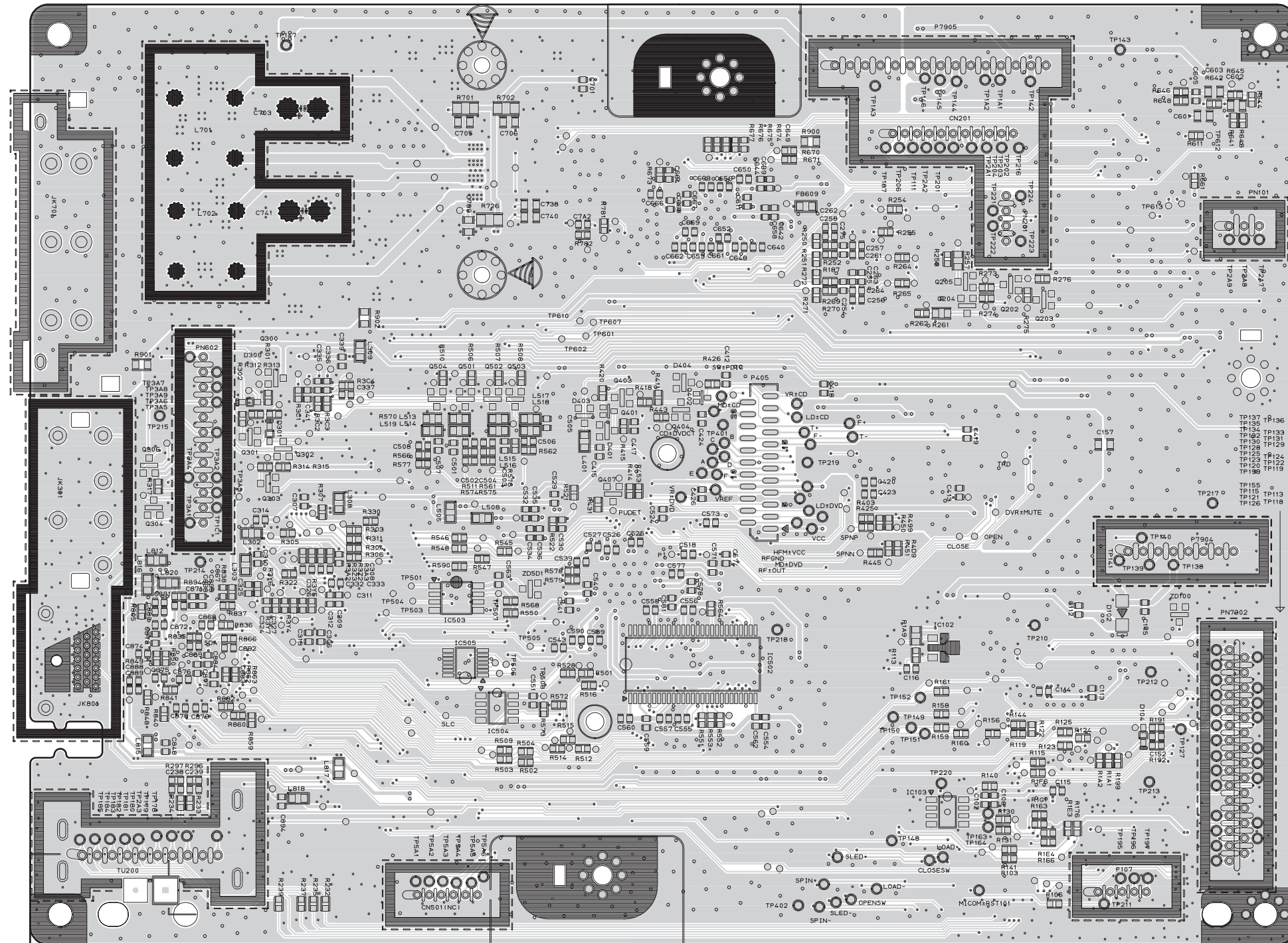
PIN	VOLT
56	0
57	0
58	0
59	2.9
60	0.2
61	0
62	0
63	0
64	0
65	0
66	0
67	0
68	0
69	0
70	0
71	3.31
72	0
73	0
74	1.67
75	0
76	0
77	0
78	0
79	0
80	0
IC807(LM1118_1.8V)	
1	0
2	1.79
3	3.31
IC809(78R33)	
1	4.91
2	0
3	3.31
4	0
5	0

PRINTED CIRCUIT BOARD DIAGRAMS


1. MAIN P.C. BOARD DIAGRAM (TOP VIEW)

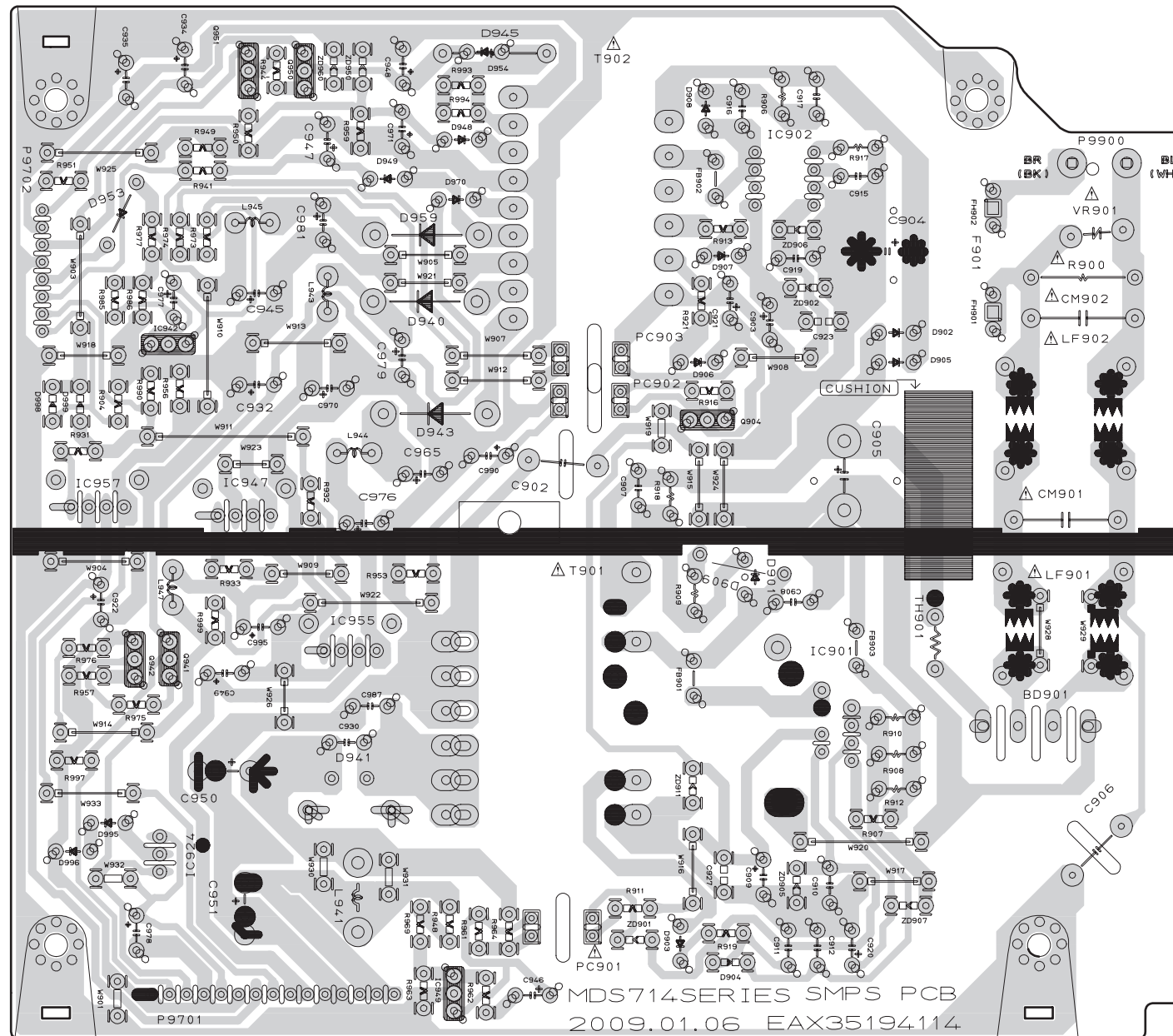


MAIN P.C. BOARD DIAGRAM (BOTTOM VIEW)

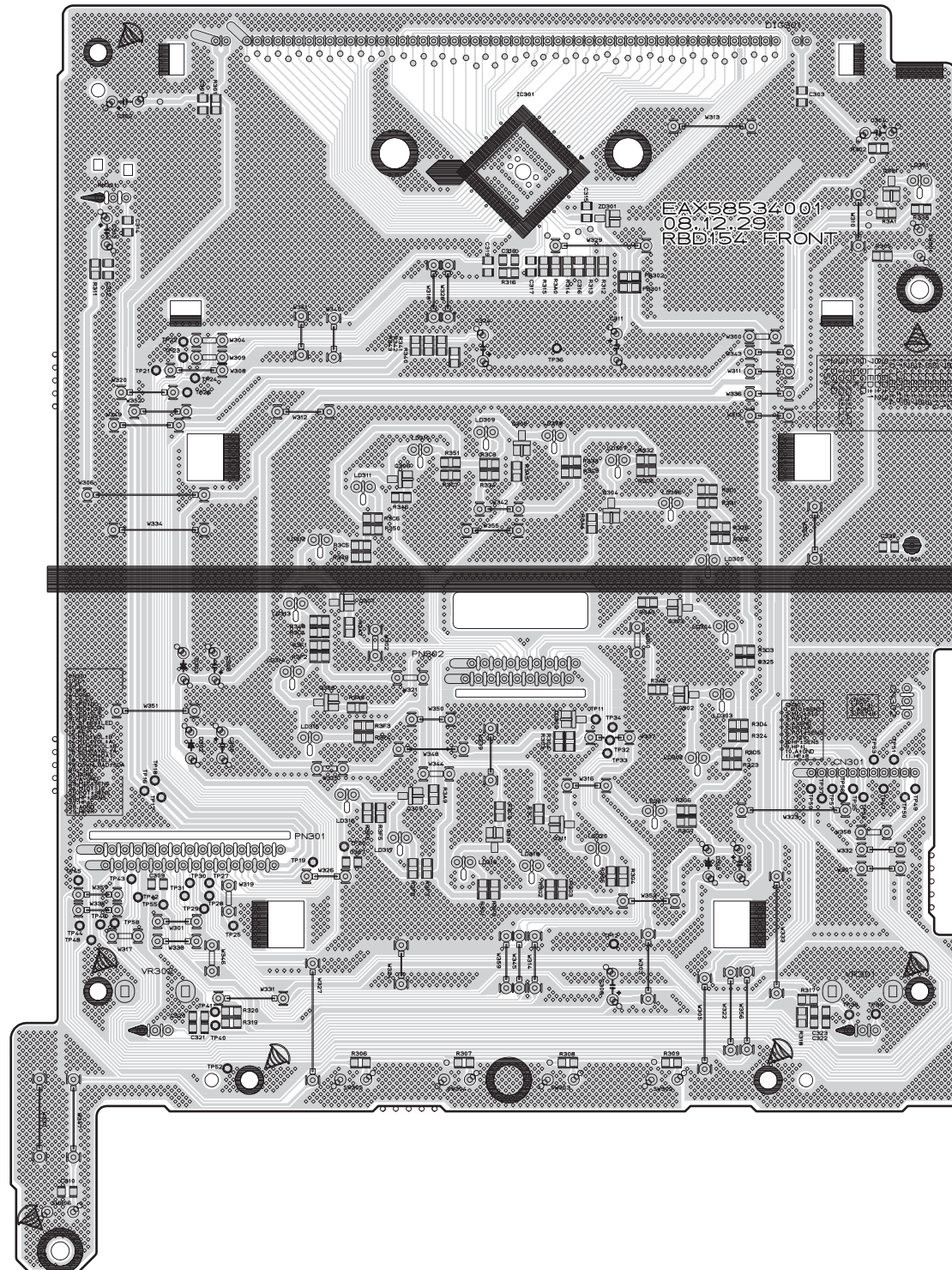


2. SMPS P.C. BOARD DIAGRAM

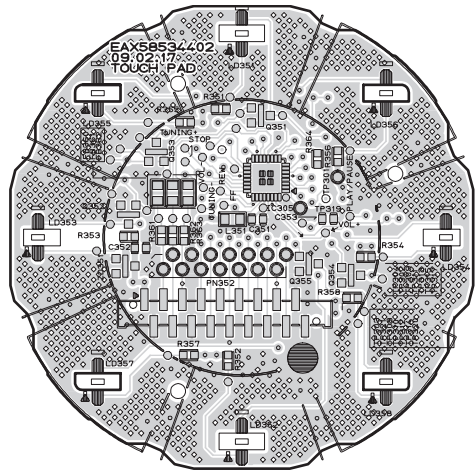
NOTE: Warning
 Parts that are shaded are critical With respect to risk of fire or electrical shock.



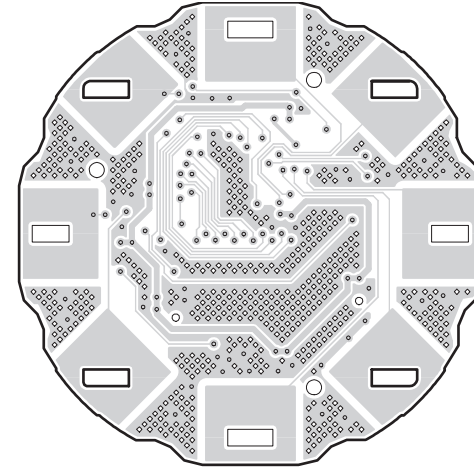
3. FRONT P.C. BOARD DIAGRAM



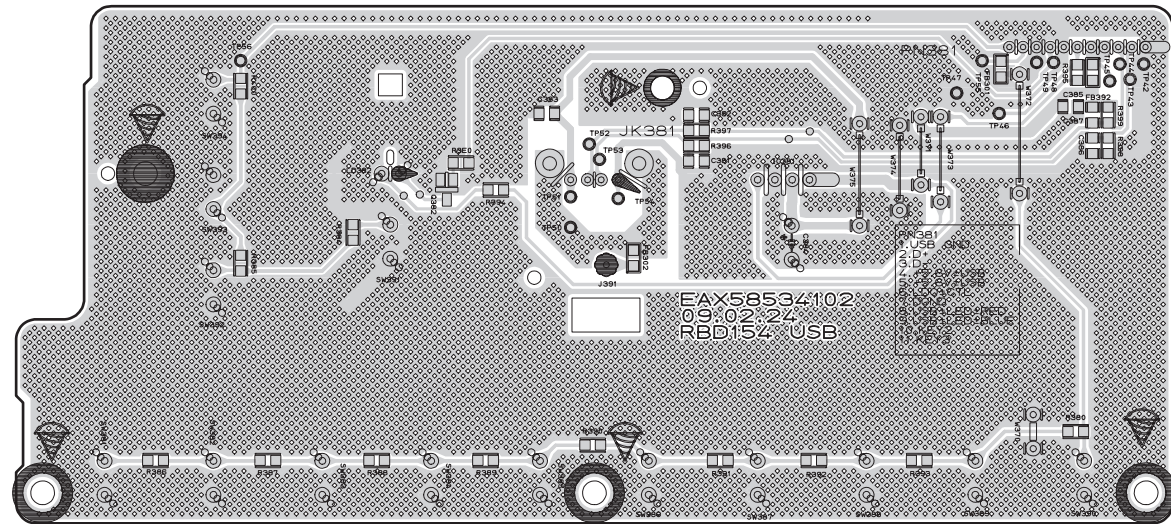
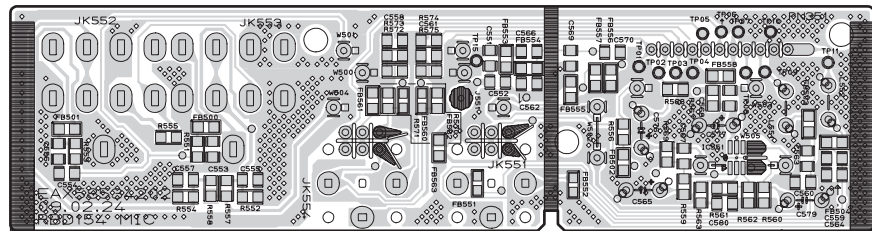
4. TOUCH PAD P.C. BOARD DIAGRAM (TOP VIEW)



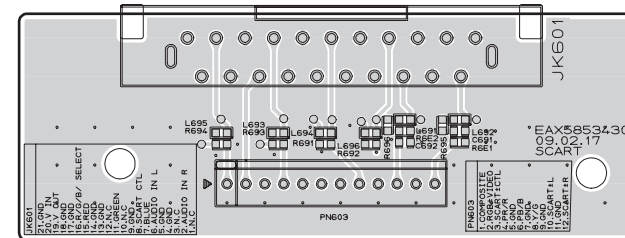
TOUCH PAD P.C. BOARD DIAGRAM (BOTTOM VIEW)



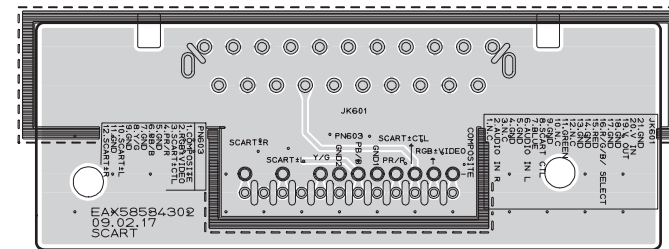
5. USB/MIC P.C. BOARD DIAGRAM



6. SCART P.C. BOARD DIAGRAM (TOP VIEW)



SCART P.C. BOARD DIAGRAM (BOTTOM VIEW)



SECTION 4. MECHANISM (DP-12AV)

[CONTENTS]

DECK MECHANISM PARTS LOCATIONS

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DECK MECHANISM DISASSEMBLY

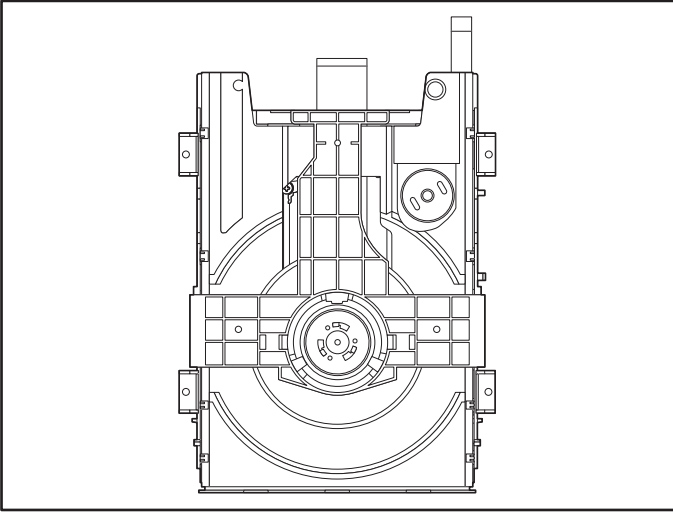
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1-1-2. Magnet Clamp	4-3
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7. Gear Pulley	4-5
8. Gear Loading	4-5
9. Guide Up/Down	4-5
10. PWB Assembly Loading	4-5
11. Base Main	4-5

EXPLODED VIEW

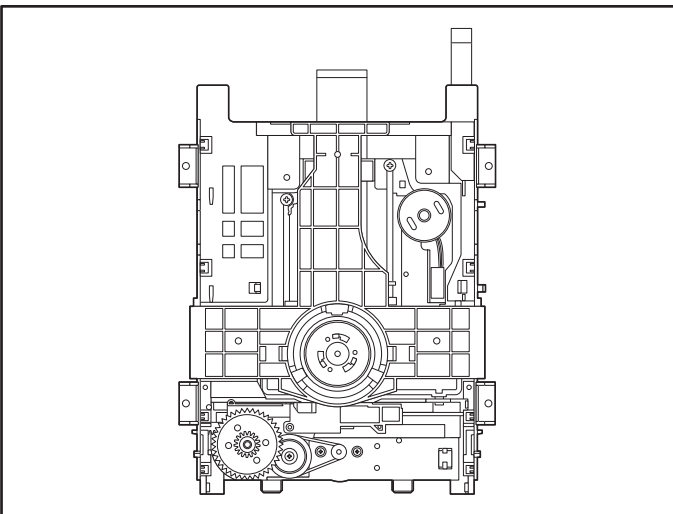
1. DECK MECHANISM EXPLODED VIEW (DP-12AV)	4-6
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DECK MECHANISM PARTS LOCATIONS

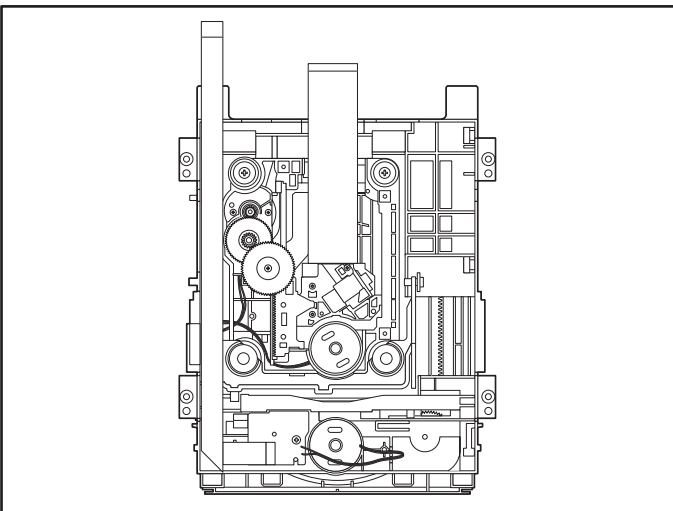
• Top View



• Top View(without Tray Disc)



• Bottom View



Procedure		Parts	Fixing Type	Disassembly	Figure
Starting No.					
	1	Main Base			4-1
1	2	Clamp Assembly Disc			4-1
1, 2	3	Plate Clamp			4-1
1, 2, 3	4	Magnet Clamp			4-1
1, 2, 3, 4	5	Clamp Upper			4-1
1	6	Tray Disc			4-2
1, 6	7	Base Assembly Sled			4-3
1, 2, 6	8	Gear Feed	4 Screws, 1 Connector 1 Locking Tabs		4-3
1, 2, 6, 8	9	Gear Middle			4-3
1, 2, 6, 8, 9	10	Gear Rack	1 Screw		4-3
1, 2, 7	11	Rubber Rear			4-3
1, 2, 7	12	Frame Assembly Up/Down	1 Screw	Bottom	4-4
1, 2	13	Belt Loading	1 Locking Tab		4-4
1, 2, 13	14	Gear Pulley			4-4
1, 2, 13, 14	15	Gear Loading	1 Locking Tab		4-4
1, 2, 7, 12, 13, 14	16	Guide Up/Down			4-4
1, 2, 13	17	PWB Assembly Loading	1 Locking Tab 1 Hook 2 Screw	Bottom	4-4
1, 2, 7, 12, 13, 14, 15, 16, 17	18	Base Main	2 Locking Tabs		4-4

Note

When reassembling, perform the procedure in reverse order.

The "Bottom" on Disassembly column of above Table indicates the part should be disassembled at the Bottom side.

DECK MECHANISM DISASSEMBLY

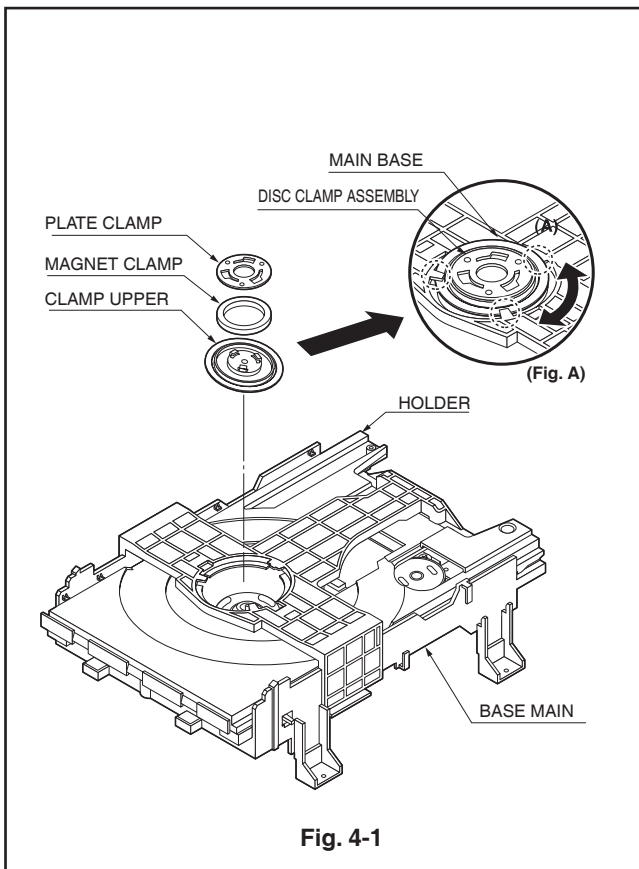


Fig. 4-1

1. Main Base (Fig. 4-1)

1-1. Clamp Assembly Disc

- 1) Place the Clamp Assembly Disc as Fig. (A)
- 2) Lift up the Clamp Assembly Disc in direction of arrow(A).
- 3) Separate the Clamp Assembly Disc from the Holder Clamp.

1-1-1. Plate Clamp

- 1) Turn the Plate Clamp to counterclockwise direction and then lift up the Plate Clamp.

1-1-2. Magnet Clamp

1-1-3. Clamp Upper

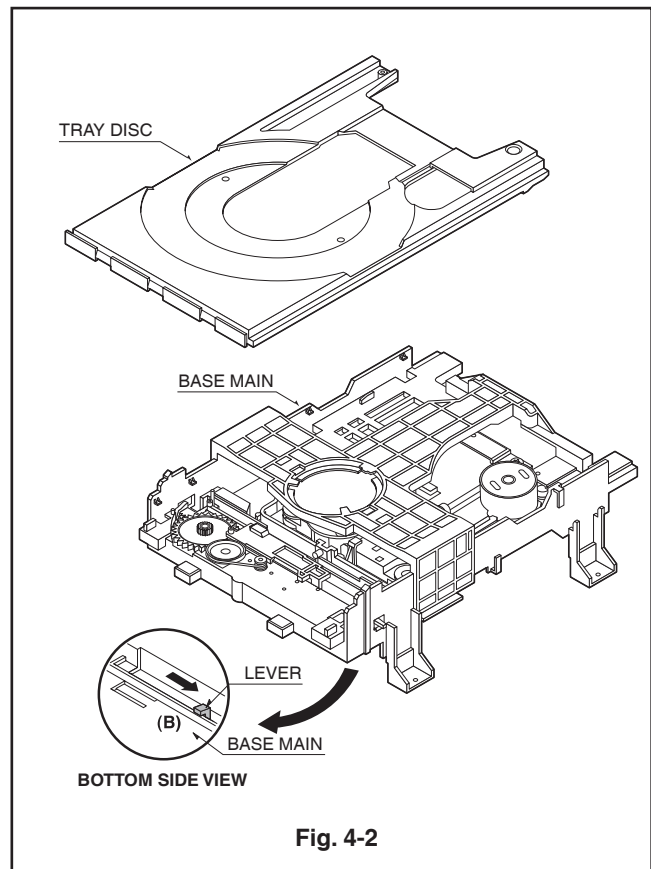
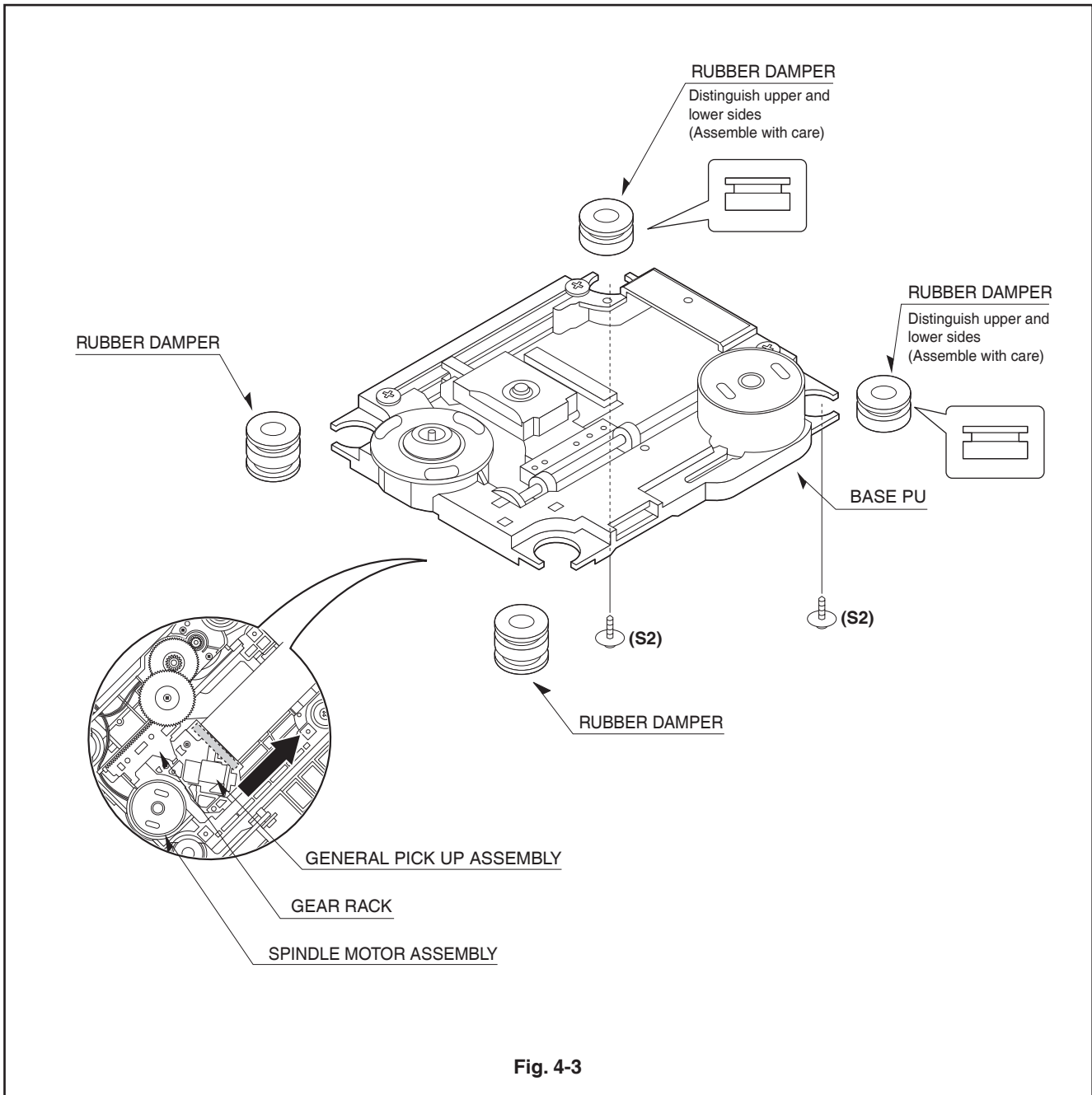


Fig. 4-2

2. Tray Disc (Fig. 4-2)

- 1) Insert and push a Driver in the emergency eject hole(A) at the right side, or put the Driver on the Lever(B) of the Gear Emergency and pull the Lever(B) in direction of arrow so that the Tray Disc is ejected about 15~20mm.
- 2) Pull the Tray Disc until it is separated from the Base Main completely.



3. Base Assembly Sled (Fig. 4-3)

- 1) Release 4 Screw(S2).
- 2) Disconnect the FFC Connector(C1)

3-1. Gear Feed

3-2. Gear Middle

3-3. Gear Rack

- 1) Release the Screw(S3)

4. Rubber Rear (Fig. 4-3)

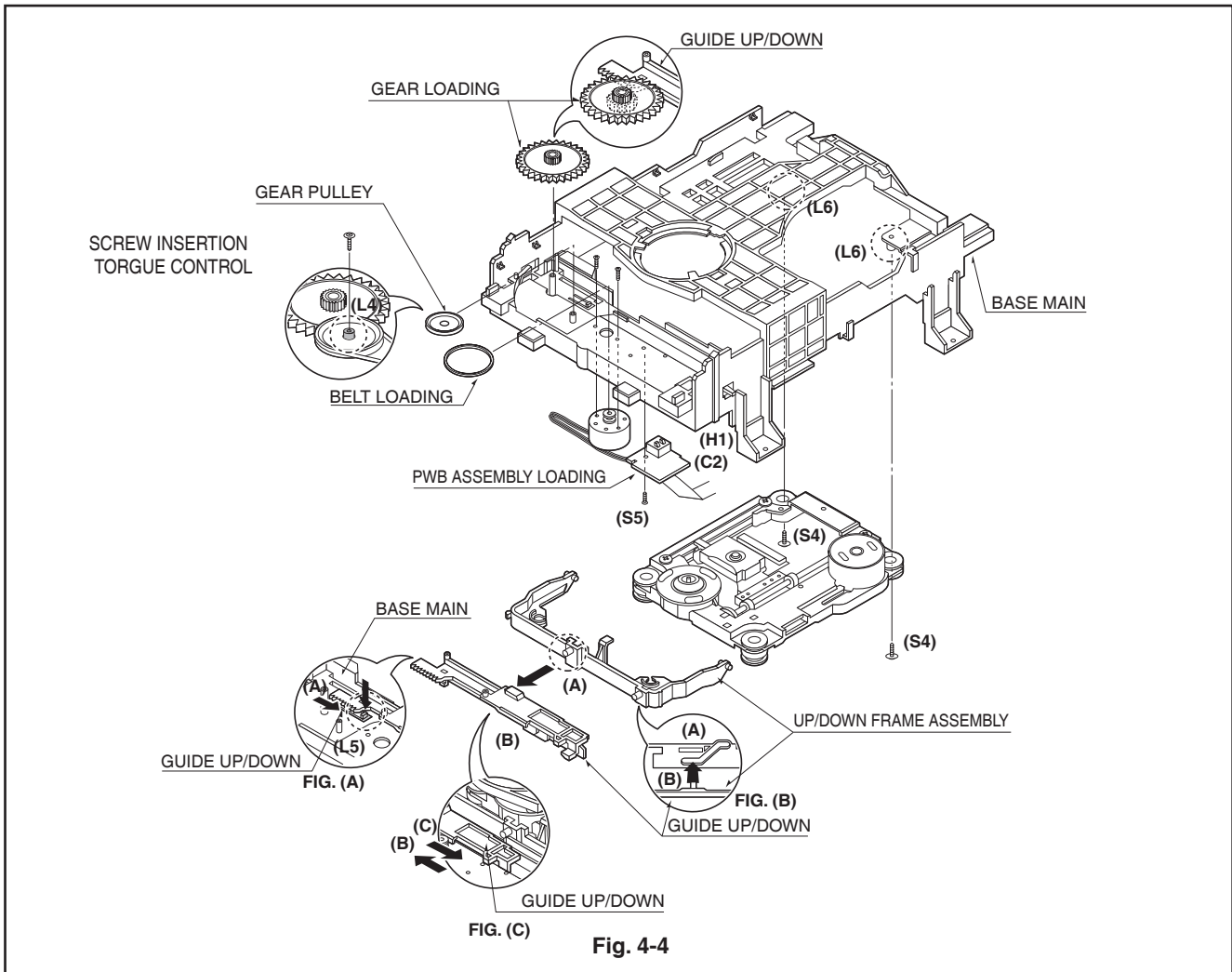


Fig. 4-4

5. Frame Assembly Up/Down (Fig. 4-4)

Note

Put the Base Main face down(Bottom Side)

- 1) Release the screw(S4)
- 2) Unlock the Locking Tab(L3) in direction of arrow and then lift up the Frame Assembly Up/Down to separate it from the Base Main.

Note

- When reassembling move the Guide Up/Down in direction of arrow(C) until it is positioned as Fig.(C).
- When reassembling insert (A) portion of the Frame Assembly Up/Down in the (B) portion of the Guide Up/Down as Fig.(B)

6. Belt Loading(Fig. 4-4)

Note

Put the Base Main on original position(Top Side)

7. Gear pulley (Fig. 4-4)

- 1) Unlock the Locking Tab(L4) in direction of arrow(B) and then separate the Gear Pulley from the Base Main.

8. GEAR LOADING (FIG. 4-4)

9. GUIDE UP/DOWN (FIG. 4-4)

- 1) Move the Guide Up/Down in direction of arrow(A) as Fig.(A)
- 2) Push the Locking Tab(L5) down and then lift up the Guide Up/Down to separate it from the Base Main.

Note

When reassembling place the Guide Up/Down as Fig.(C) and move it in direction arrow(B) until it is locked by the Locking Tab(L5). And confirm the Guide Up/Down as Fig.(A)

10. PWB Assembly Loading (Fig. 4-4)

Note

Put the Base Main face down(Bottom Side)

- 1) Release 1 Screws(S5)
- 2) Unlock the Loading Motor (C2) from the Hook (H1) on the Base Main.
- 3) Unlock 2 Locking Tabs(L6) and separate the PWB Assembly Loading from the Base Main.

11. Base Main(Fig. 4-4)

DECK MECHANISM EXPLODED VIEW (DP-12AV)

