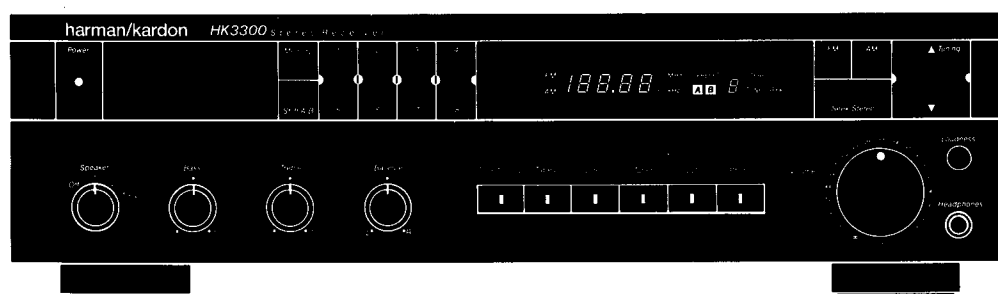


# The Harman Kardon Model HK3300 STEREO RECEIVER

Manual 167B

## Technical Manual



This manual is to be applied to the North America area model with serial number S189-04202 and above, and International and Australia models.

The following marks found in the parts list of this manual identify the models as follows.

- BK : North America area model Black version
- I : International model
- IB : International model Black version
- BB : Australia model Black version

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**harman/kardon**

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HK3300

**SPECIFICATIONS**

● **FM SECTION**

Tuning Range  
50dB Quieting Sensitivity  
Mono

Nominal Limit  
87.5 ~ 108.0MHz

15.2dBf ≧ 19dBf  
15.2dBf ≧ 27dBf (I IB BB)

Stereo

38dBf ≧ 41dBf  
38dBf ≧ 50dBf (I IB BB)

Usable Sensitivity

11.2dBf ≧ 15dBf  
11.2dBf ≧ 17dBf (I IB BB)

Image Ratio

45dB ≧ 40dB

IF Rejection

105dB ≧ 80B

Spurious Response Rejection

80dB

Capture Ratio

1.3dB ≧ 2.0dB

Alternate Channel Selectivity

77dB ≧ 60dB

(+400kHz, -400kHz)

(+300kHz, -300kHz)

77dB ≧ 60dB (I IB BB)  
60dB ≧ 45dB

AM Rejection

Signal to Noise Ratio

Mono

80.5dB ≧ 76dB

Stereo

80.5dB ≧ 70dB (I IB BB)  
73dB ≧ 68dB

Total Harmonic Distortion  
(65dBf 1kHz Input)

Mono

0.09% ≧ 0.3%

Stereo

0.12% ≧ 0.4%

Stereo Separation at 1kHz

55dB ≧ 42dB  
55dB ≧ 35dB (I IB BB)

● **AM SECTION**

Tuning Range

530 ~ 1,710kHz

Usable Sensitivity

External Antenna

27 μV ≧ 33 μV

Loop Antenna

400 μVm ≧ 700 μVm

Selectivity

35dB ≧ 25dB

Signal to Noise Ratio

52dB ≧ 47dB

Image Rejection

39dB ≧ 30dB

IF Rejection

63dB ≧ 50dB

● **AUDIO SECTION**

Usable Sensitivity

Video/CD

135mV ± 25mV  
120mV ± 25mV (I IB BB)

Phono

2.2mV ± 0.2mV  
2.0mV ± 0.2mV (I IB BB)

Signal to Noise Ratio

Video/CD

85dB ≧ 75dB

Phono

83dB ≧ 73dB

Channel Separation at 10kHz

Video/CD

59dB ≧ 45dB

Phono

71.3dB ≧ 45dB

IM Distortion Ratio

Nominal Limit  
0.047% ≧ 0.1%

RMS Output Power

8Ω, 1kHz, THD 0.1%

34.8W ≧ 25W

4Ω, 1kHz, THD 0.3%

34.8W ≧ 20W (I IB BB)

34.4W ≧ 25W

High Instantaneous Current  
Capability (HICC)

18.0A ≧ 15.0A

Damping Factor at 1kHz

86 ≧ 60

Tone Control Characteristics

Bass at 50Hz

11dB ± 2dB

Boost

-11dB ± 2dB

Cut

Treble at 10kHz

11dB ± 2dB

Boost

-11dB ± 2dB

Cut

10dB ± 2dB

Loudness Control at 50Hz

DC Output Voltage

L channel

34mV ± 60mV

R channel

24mV ± 60mV

RIAA Equalization at Tape Out (20Hz/20kHz)

0.1dB ± 0.5dB/0.2dB ± 0.5dB

(443 x 126 x 349 mm)

● **DIMENSIONS (W x H x D)**

● **WEIGHT**

14.1 lbs. (6.4 kg)

● **POWER SUPPLY**

AC120V, 60Hz

AC230/240V, 50/60Hz (I IB BB)

● **POWER CONSUMPTION**

165W

These specifications are Service target specs.

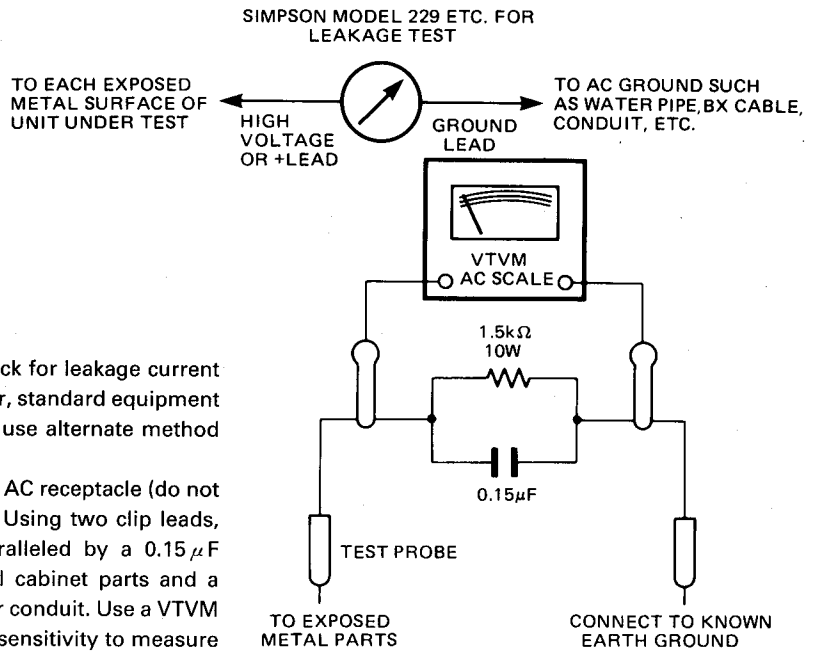
Specifications and components subject to change without notice.  
Overall performance will be maintained or improved.

### LEAKAGE TEST (FOR SERVICE ENGINEERS IN THE U.S.A.)

Before returning the unit to the user, perform the following safety checks:

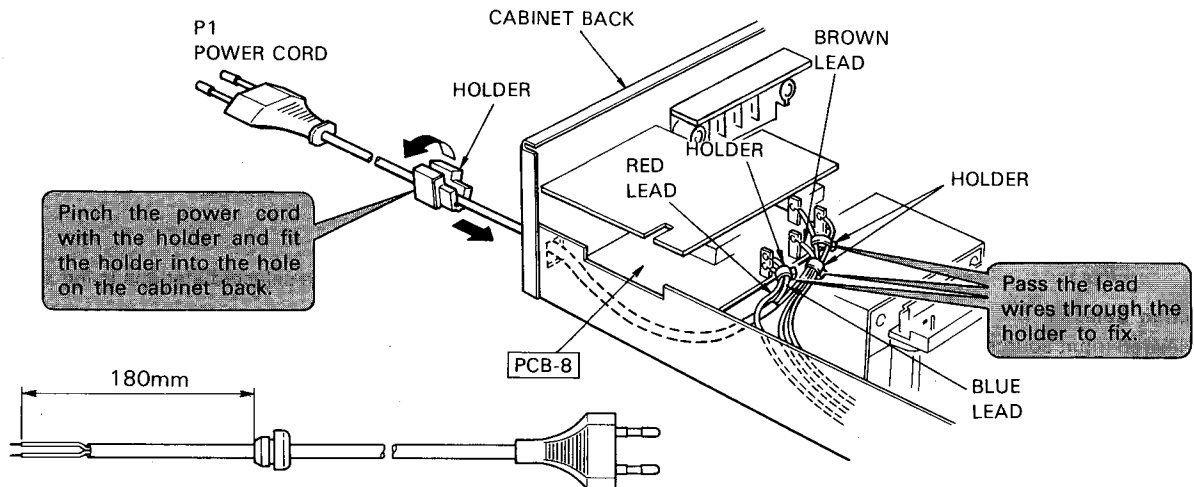
1. Inspect all lead dress to make certain that leads are not pinched or that hardware is not lodged between the chassis and other metal parts in the unit.
2. Replace all protective devices such as nonmetallic control knobs, insulating fishpapers, cabinet backs, adjustment and compartment covers or shields, isolation resistor-capacitor networks, mechanical insulators, etc.
3. Be sure that no shock hazard exists; check for leakage current using Simpson Model 229 Leakage Tester, standard equipment item No. 21641, RCA Model WT540A or use alternate method as follows:

Plug the AC line cord directly into a 120-volt AC receptacle (do not use an Isolation Transformer for this test). Using two clip leads, connect a 1500 ohm, 10-watt resistor paralleled by a 0.15  $\mu$ F capacitor, in series with all exposed metal cabinet parts and a known earth ground, such as a water pipe or conduit. Use a VTVM or VOM with 1000 ohms per volt, or higher sensitivity to measure the AC voltage drop across the resistor. (See Diagram.) Move the resistor connection to each exposed metal part having a return path to the chassis (antenna, metal, cabinet, screw heads, knobs and control shafts, escutcheon, etc.) and measure the AC voltage drop across the resistor. (This test should be performed with the power switch in both the On and Off positions.) A reading of 0.35 volt RMS or more is excessive and indicates a potential shock hazard which must be corrected before returning the unit to the owner.

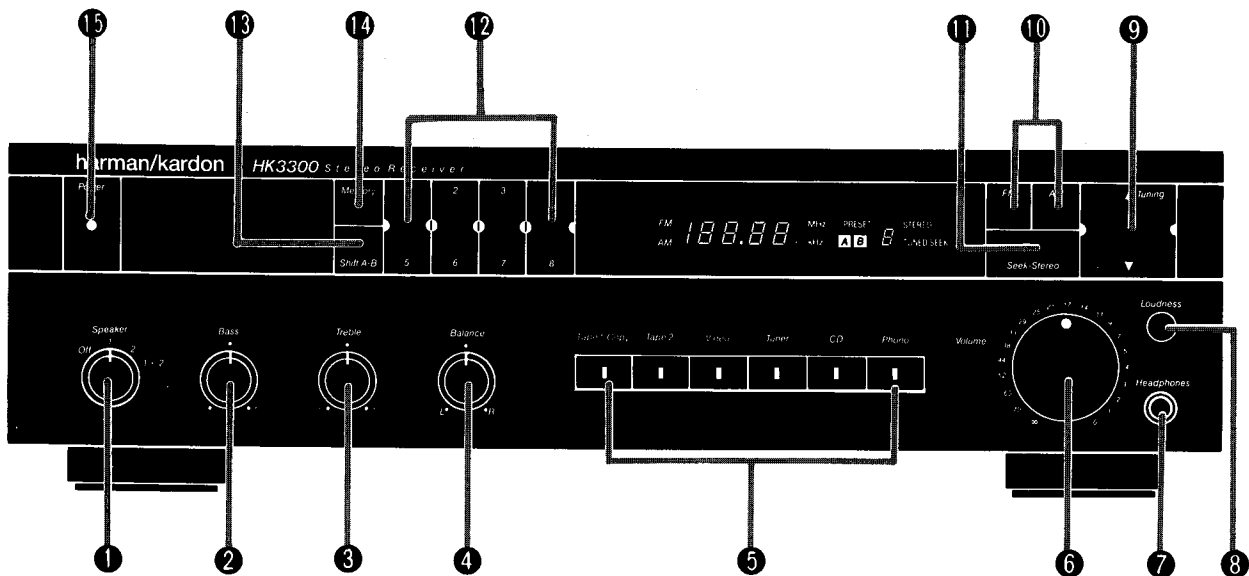


### POWER CORD REPLACEMENT (FOR SERVICE ENGINEERS OTHER THAN NORTH AMERICA)

In order to prevent fire or shock hazard when replacing the power cord, follow the procedure below to replace the parts with the standard supply parts.



## CONTROLS &amp; FUNCTIONS

**1 Speaker**

Turn to select either of two sets of speakers, or both, or neither (headphone output only).

**2 Bass**

Turn to increase or decrease the proportion of low frequency sound.

**3 Treble**

Turn to increase or decrease the proportion of high frequency sound.

**4 Balance**

Turn to adjust relative output level of left and right speakers.

**5 Function Selector**

Select desired input source by pressing the corresponding key.

**6 Volume**

Turn to raise or lower output volume.

**7 Headphone Jack**

Plug in headphones if desired. (With Speaker switch in Off position, output is supplied only to headphones.)

**8 Loudness**

Press to improve sound quality when listening to your system at low volume.

**9 Tuning**

Press ▲ to tune to stations with higher frequencies; press ▼ for lower frequencies.

**10 FM/AM**

Press to select FM or AM reception.

**11 Seek-Stereo**

Press to select Seek tuning in stereo, or manual tuning in mono.

**12 Preset Buttons**

Press to access pre-selected stations.

**13 Shift A-B**

Allows you to access 16 pre-selected stations using the 8 preset buttons.

**14 Memory**

Press to set a new preset station in memory.

**15 Power**

Press to turn the unit on and off.

**DISASSEMBLY PROCEDURES (REFER TO PAGES 9 THROUGH 13)****1 CABINET TOP (127) REMOVAL**

Remove 6 screws (A) and then remove the Cabinet Top (127).

**2 FRONT PANEL ASSEMBLY (AA) REMOVAL**

1. Remove the Cabinet Top (127), referring to the previous step 1.
2. Pull out the Volume Knob (139).
3. Disconnect the (CW100) from (CN100) on the Trans Terminal P.C. Board (PCB-13).
4. Disconnect the (JL101, JL804) from (CN101A, CN804B) on the Tuner P.C. Board (PCB-1).
5. Remove 3 screws (B) and 3 screws (C) and then remove the Front Panel Assembly (AA).

**3 FRONT P.C. BOARD (PCB-14) REMOVAL**

1. Remove the Front Panel Assembly (AA), referring to the previous step 2.
2. Remove 11 screws (D) and then remove the Front P.C. Board (PCB-14).

**4 TONE CONTROL P.C. BOARD (PCB-6) REMOVAL**

1. Remove the Front Panel Assembly (AA), referring to the previous step 2.
2. Pull out the Bass, Treble and Balance Knobs (140).
3. Remove the 3 nuts (E) and then remove the Tone Control P.C. Board (PCB-6).
4. Disconnect the (CW401) from (CN401) on the Tone Control P.C. Board (PCB-6).
5. If necessary, unsolder the lead wires.

**5 VOLUME P.C. BOARD (PCB-7) REMOVAL**

1. Remove the Front Panel Assembly (AA), referring to the previous step 2.
2. Remove the 1 nut (F) and then remove the Volume P.C. Board (PCB-7).
3. If necessary, unsolder the lead wires.

**6 HEADPHONE P.C. BOARD (PCB-10) REMOVAL**

1. Remove the Front Panel Assembly (AA), referring to the previous step 2.
2. Pull out the Loudness Button (151).
3. Remove 2 screws (G) and then remove the Headphone P.C. Board (PCB-10).
4. If necessary, unsolder the lead wires.

**7 SPEAKER SWITCH P.C. BOARD (PCB-11) REMOVAL**

1. Remove the Front Panel Assembly (AA), referring to the previous step 2.
2. Pull out the Speaker Knob (140).
3. Remove 1 nut (H) and then remove the Speaker Switch P.C. Board (PCB-11).
4. If necessary, unsolder the lead wires.

**8 POWER SWITCH P.C. BOARD (PCB-15) REMOVAL**

1. Remove the Front Panel Assembly (AA), referring to the previous step 2.
2. Remove 2 screws (I) and then remove the Power Switch P.C. Board (PCB-15).
3. Open the lid of connector (CN11) on the Power Switch P.C. Board (PCB-15) and then disconnect the lead wire.

**9 TUNER P.C. BOARD (PCB-1) REMOVAL**

1. Remove the Front Panel Assembly (AA), referring to the previous step 2.
2. Disconnect the (CW15, CW102) from (CN15, CN102) on the Tuner P.C. Board (PCB-1).
3. Open the lid of connectors (CN12, CN501) on the Tuner P.C. Board (PCB-1) and then disconnect the lead wire.
4. Remove 8 screws (J) and then remove the Front Panel Assembly and Chassis.
5. Remove 10 screws (K) and then remove the Tuner P.C. Board (PCB-1) with Equalizer P.C. Board (PCB-2) and Monitor P.C. Board (PCB-3).
6. If necessary, unsolder the lead wires.
7. Pull out the Equalizer P.C. Board (PCB-2).
8. Pull out the Monitor P.C. Board (PCB-3).

**10 SUB WOOFER P.C. BOARD (PCB-4) REMOVAL**

1. Remove the Cabinet Top (127), referring to the previous step 1.
2. Remove 2 screws (L) and then remove the Sub Woofer P.C. Board (PCB-4).
3. Open the lid of connector (CN104) on the Sub Woofer P.C. Board (PCB-4).
4. If necessary, unsolder the lead wires.

**11 SPEAKER TERMINAL P.C. BOARD (PCB-12) REMOVAL**

1. Remove the Cabinet Top (127), referring to the previous step 1.
2. Remove 2 screws (M) and then remove the Speaker Terminal P.C. Board (PCB-12).
3. If necessary, unsolder the lead wires.

**12 MAIN P.C. BOARD (PCB-5) REMOVAL**

1. Remove the Speaker Terminal P.C. Board (PCB-12), referring to the previous step 11.
2. Remove 5 screws (N) and then remove the Main P.C. Board (PCB-5) with Metal Fittings (167, 168).
3. If necessary, unsolder the lead wires.

**13 SECONDRY P.C. BOARD (PCB-9) REMOVAL**

1. Remove the Cabinet Top (127), referring to the previous step 1.
2. Remove 6 screws (O) and then remove the Power Transformer (T1) with Secondary P.C. Board (PCB-9) and Trans Terminal P.C. Board (PCB-13).
3. If necessary, unsolder the lead wires.

**14 PRIMARY P.C. BOARD (PCB-8) REMOVAL**

1. Remove the Secondary P.C. Board (PCB-9), referring to the previous step 13.
2. Remove 2 screws (P) and then remove the Primary P.C. Board (PCB-8).
3. If necessary, unsolder the lead wires.

## CIRCUIT DESCRIPTION

### ■ FM TUNER SECTION

The FM signal which has entered through the antenna is high-frequency amplified in the front end. Then it is mixed with the output of the local oscillators and converted into the 10.7MHz intermediate-frequency.

The 10.7MHz signal is amplified in the intermediate frequency amplifying section which consists of CF201, Q201, CF202, Q202 and CF203 and fed to pin 1 of IC201. In IC201, the signal is sent through the IF amplifier and after being detected in the quadrature, it is sent through the post amplifier to pin 12 and then input to pin 2 of IC301. In IC301, the pilot signal is detected out of the signal which has been fed and 38kHz signal is produced. Then by this signal, stereo signal is demodulated, output from pin 4 for the left channel and from pin 7 for the right channel and transmitted to the input selector section.

### ■ AM TUNER SECTION

The AM signal which has entered through the antenna passes through the tuning circuit consisting of CB251 and is inputted to pin 21 of IC201. In IC201, it undergoes radio-frequency amplification and local oscillation and is output from pin 20, and passed through the transformer (T251) and ceramic filter (CF252) and enters pin 18 of IC201. It is then passed through the IF amplification and detection and is output from pin 15. This signal is fed to IC301.

### ■ AUDIO AMPLIFIER SECTION

The signal which has entered from each input terminal is selected by the input selector, passes through the balance circuit, volume and loudness circuit and is fed into the pre-amplifier.

Then it is fed into the power amplifier through the tone control circuit, power is amplified and transmitted to the speaker terminal.

The power amplifier has an over-output protective circuit. If current exceeding the specification flows to Q419, Q421 (L ch), Q420, Q422 (R ch), it is detected at Q27 (L ch) and Q28 (R ch) and the protective circuit consisting of Q22 and Q24 draws in Q23 and Q29, and thus the input signal is cut to protect the circuit.

### ■ MUTING CIRCUIT

If FM or AM is received out of tuning or in a very weak field intensity, pin 31 of IC701 becomes high level. This is fed to the base of Q707, whose collector then becomes low level and the collector of Q708 high level. As a result, Q301 (L ch) and Q302 (R ch) are conducted to mute the output.

### ■ SYNTHESIZER SECTION

#### ● FM

The local oscillation output at the front end is fed to pin 21 of the prescaler IC702 and after being frequency divided into 30 or 32, control output signal is fed from IC701, compared with the divided local oscillation output and output to pin 16. This voltage is level converted at Q701 and Q702, and fed to the front end.

#### ● AM

The local oscillation output is fed from pin 24 of IC201 to pin 19 of IC702. In IC702, control output signal is fed from IC701, compared with the local oscillation output and output to pin 16. This voltage is level converted at Q701 and Q702, and fed to the AM local oscillation section.

### ■ INDICATOR SECTION

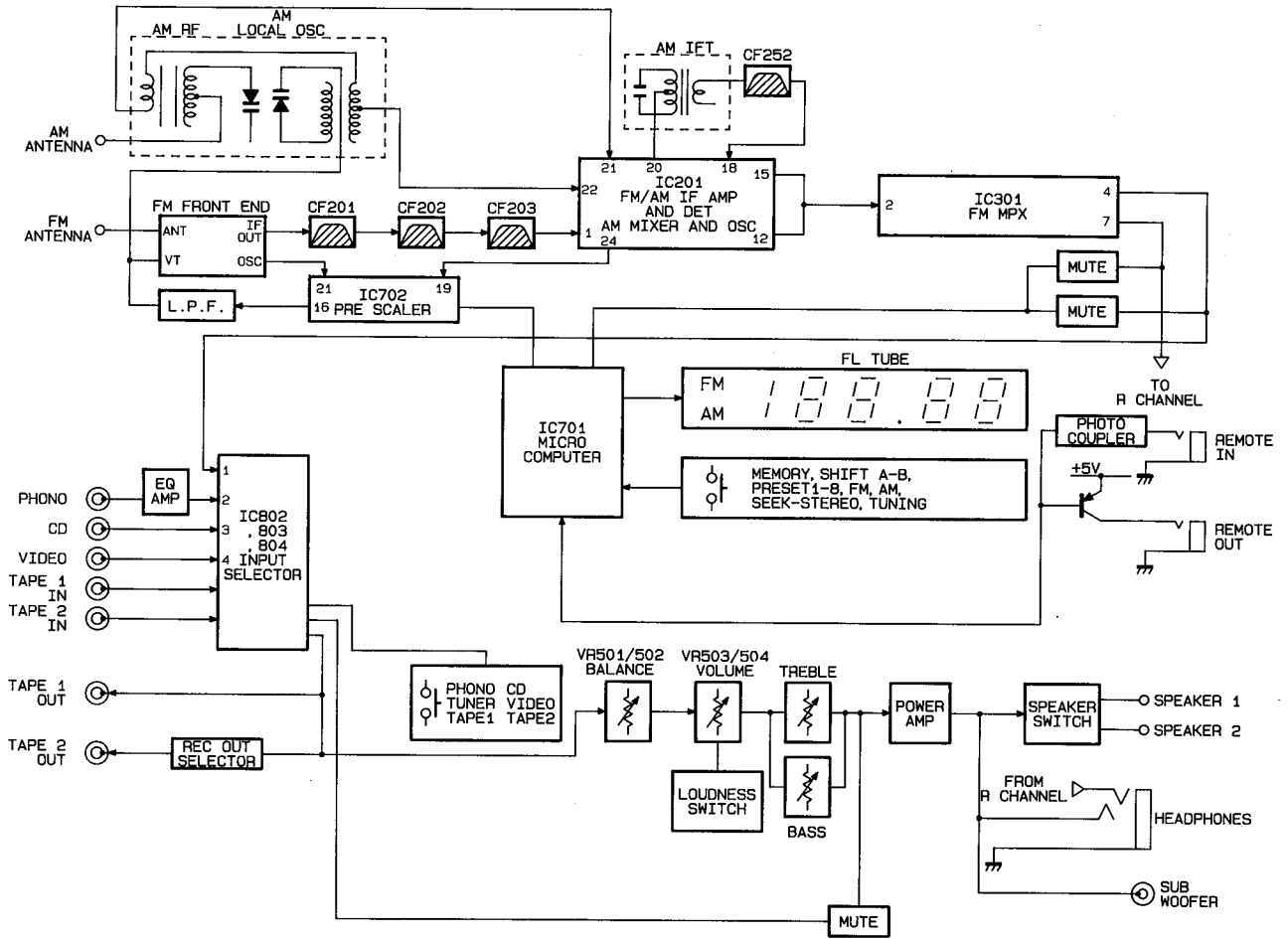
#### ● Frequency display

The indicator tube is turned ON by the output decoded in IC701.

#### ● Tuning

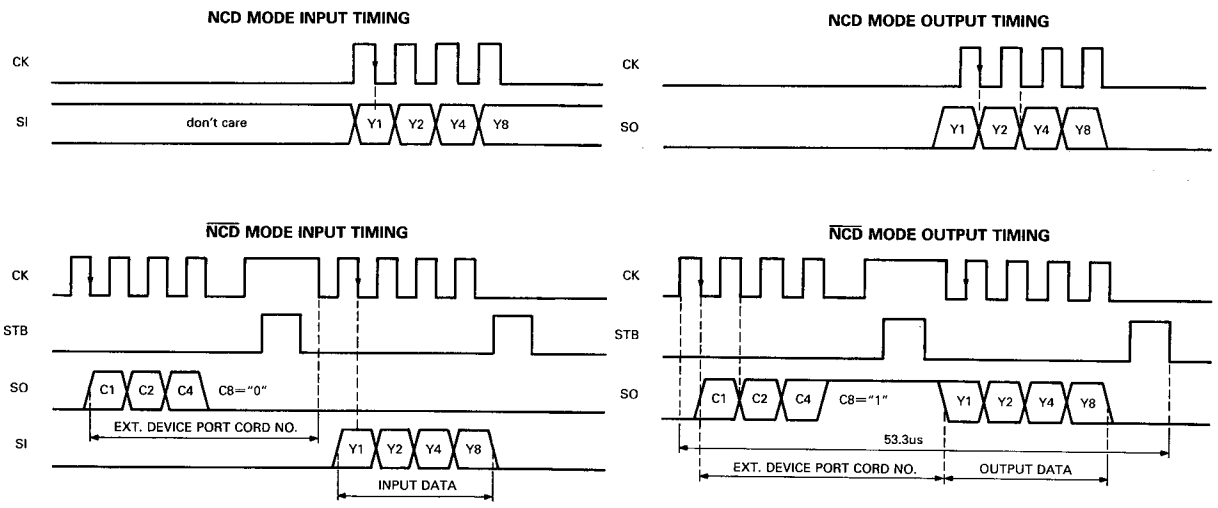
When broadcast is received, Q711 turns ON by the control signal in IC301 and "Tuned" of the indicator tube is turned ON. When FM or stereo broadcast is received, pin 9 of IC301 becomes low level, Q712 turns ON and "Stereo" of the indicator tube is turned ON.

**BLOCK DIAGRAM**

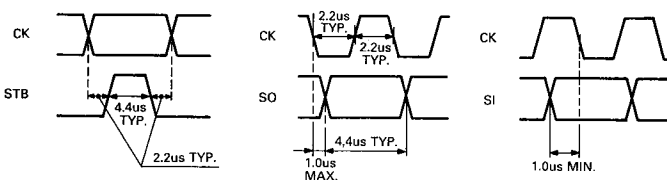


**TIMING CHART**

Frequency display timing chart of IC701 (TC9301AN-020)



**SERIAL TIMING PULSE WIDTH**



**ALIGNMENT PROCEDURES (REFER TO PAGES 14 THROUGH 17 AND 26 THROUGH 30)**

- Conditions:
- Set the Volume control to minimum.
  - Set the Speaker switches to 1 position.
  - Set the Speaker Operating Mode switch to "8Ω" position.
  - Make the adjustment at a room temperature of 77°F (25°C).
  - After the Power switch is pushed on, wait for 30 minutes before measuring to be sure of the most stable operation.

**■ IDLING CURRENT ADJUSTMENT**

Step	Terminal to be Connected	Adjustment	For
1	Connect the Digital Volt Meter to TP401 and TP403.	VR401 (L ch)	40mV ±2mV
2	Connect the Digital Volt Meter to TP402 and TP404.	VR402 (R ch)	40mV ±2mV

**■ AM ADJUSTMENT**

- Conditions:
- Set the AM mode by pressing the "AM" button.
  - Set the Seek switch to off (put out seek indicator) position.
  - Standard modulation of the AM signal Generator is 400Hz at 30%.

Step	Alignment	Terminal to be Connected	Measurement Frequency	Station Display	Adjustment	For
1	IF	<ul style="list-style-type: none"> <li>• Connect the AM Test Loop Antenna cable into the output jack of AM Signal Generator (80 dBμV signal).</li> <li>• Place AM Test Loop Antenna close enough to couple signal into the AM Loop Antenna.</li> <li>• Connect the VTVM and oscilloscope to the OUTPUT jacks.</li> </ul>	1400kHz	1400kHz	T251	Maximum output level and symmetrical curve on scope.
2	Tracking		※1404kHz	※1404kHz		
			600kHz	600kHz	CB251	Maximum output.
			※603kHz	※603kHz		

※International and Australia models

**■ FM ADJUSTMENT**

- Conditions:
- Set the FM mode by pressing the "FM" button.
  - Set the Seek switch to off (put out seek indicator) position.

<b>FM Signal Generator</b>	1kHz, 75kHz modulation ※1kHz, 40kHz modulation
<b>Stereo Modulator</b>	L+R=45.5%, L-R=45.5%, 19kHz=9% ※L+R=22.5%, L-R=22.5%, 19kHz=8%

※International and Australia models

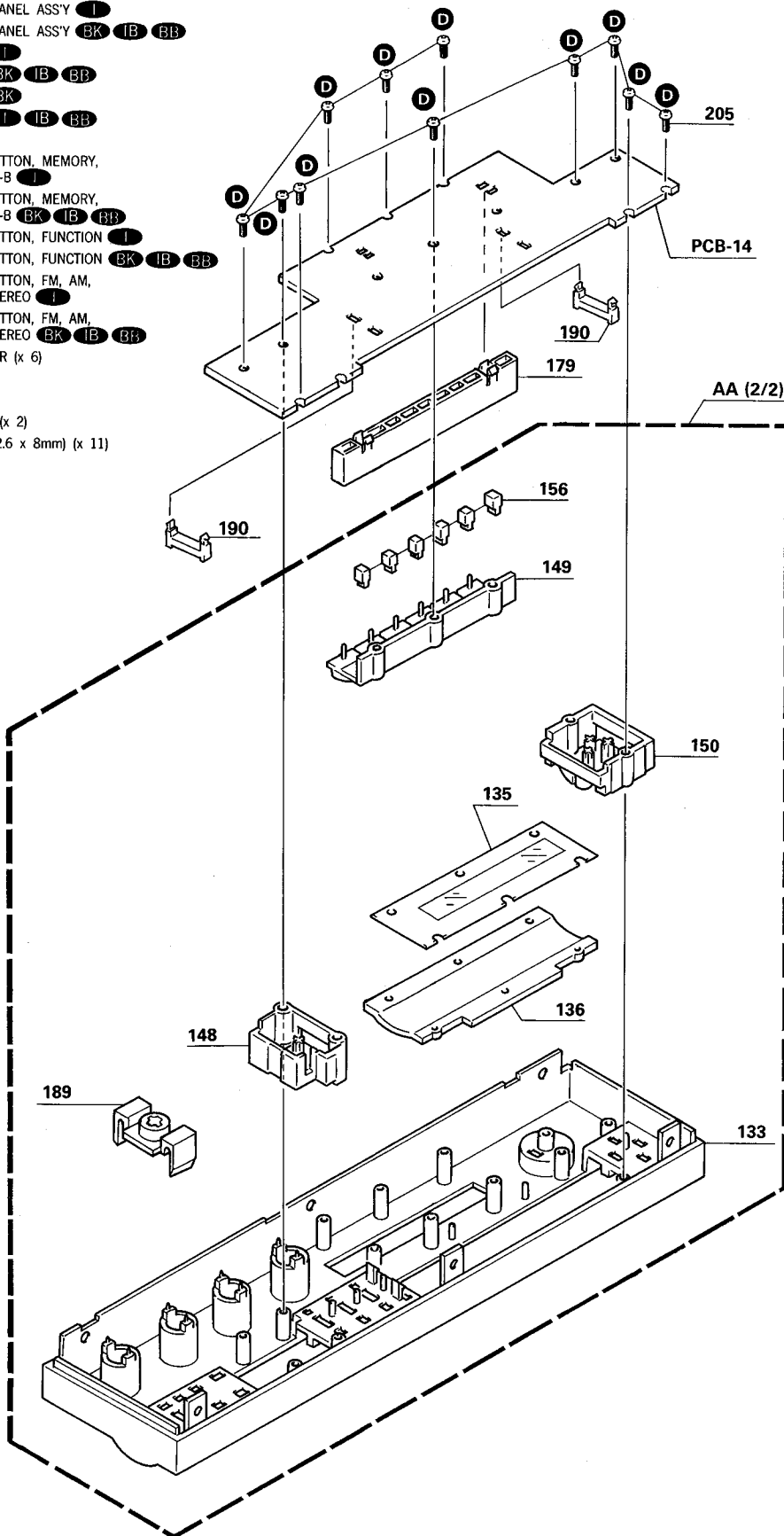
Step	Alignment	Terminal to be Connected	Measurement Frequency	Station Display	Adjustment	For
1	Discriminator	<ul style="list-style-type: none"> <li>• Connect the FM Signal Generator to FM 300Ω BAL Antenna terminals through the 300Ω balanced dummy. [1mV(65dBf) input signal]</li> <li>• Connect the Oscilloscope and Distortion meter to the Tape 1 OUTPUT jacks.</li> <li>• Set the Seek switch to on (seek indicator lights) position.</li> </ul>	97.9MHz	97.9MHz	T201(A)	Adjust so that the TUNED indicator lights in the same range on both plus (+) and minus (-) sides of 97.9 MHz.
2			97.9MHz	97.9MHz	T201(B)	Minimum distortion.
3			Repeat steps 1 and 2 for optimum sensitivity.			
4	Muting level		97.9MHz	97.9MHz	VR201	Adjust VR201 so that the waveform is disappear at 30 dBf input.
5	Separation	<ul style="list-style-type: none"> <li>• Connect the Stereo Modulator to FM Signal Generator. Connect FM Signal Generator to FM 300Ω BAL Antenna terminal through the 300Ω balanced dummy. (65 dBf input signal)</li> <li>• Connect the VTVM and Oscilloscope to the Tape 1 OUTPUT jacks.</li> </ul>	97.9MHz	97.9MHz	VR301	Adjust so that the left channel output becomes minimum when only the right channel of the Stereo Modulator is modulated.
					VR301	Adjust so that the right channel output becomes minimum when only the left channel of the Stereo Modulator is modulated.



**GENERAL UNIT PARTS LIST**

**GENERAL UNIT  
EXPLODED VIEW (FRONT PANEL ASS'Y)**

Ref. No.	Part No.	Description
1	AA	A442-HK3300A FRONT PANEL ASS'Y <b>I</b>
	AA	A442-HK3300B FRONT PANEL ASS'Y <b>BK IB BB</b>
133	1442-25601	PANEL <b>I</b>
133	1442-25602	PANEL <b>BK IB BB</b>
135	1511-19804	PLATE <b>BK</b>
135	1511-19808	PLATE <b>I IB BB</b>
136	1532-17504	WINDOW
148	1662-59003	PUSH BUTTON, MEMORY, SHIFT A-B <b>I</b>
148	1662-59004	PUSH BUTTON, MEMORY, SHIFT A-B <b>BK IB BB</b>
149	1662-62301	PUSH BUTTON, FUNCTION <b>I</b>
149	1662-62302	PUSH BUTTON, FUNCTION <b>BK IB BB</b>
150	1662-62401	PUSH BUTTON, FM, AM, SEEK-STEREO <b>I</b>
150	1662-62402	PUSH BUTTON, FM, AM, SEEK-STEREO <b>BK IB BB</b>
156	1732-08101	INDICATOR (x 6)
179	2240-7376	HOLDER
189	2240-7385	HOLDER
190	2240-7134	HOLDER (x 2)
205	2347-R0126082	SCREW (2.6 x 8mm) (x 11)



1  
2  
3  
4  
5  
6  
7

GENERAL UNIT PARTS LIST

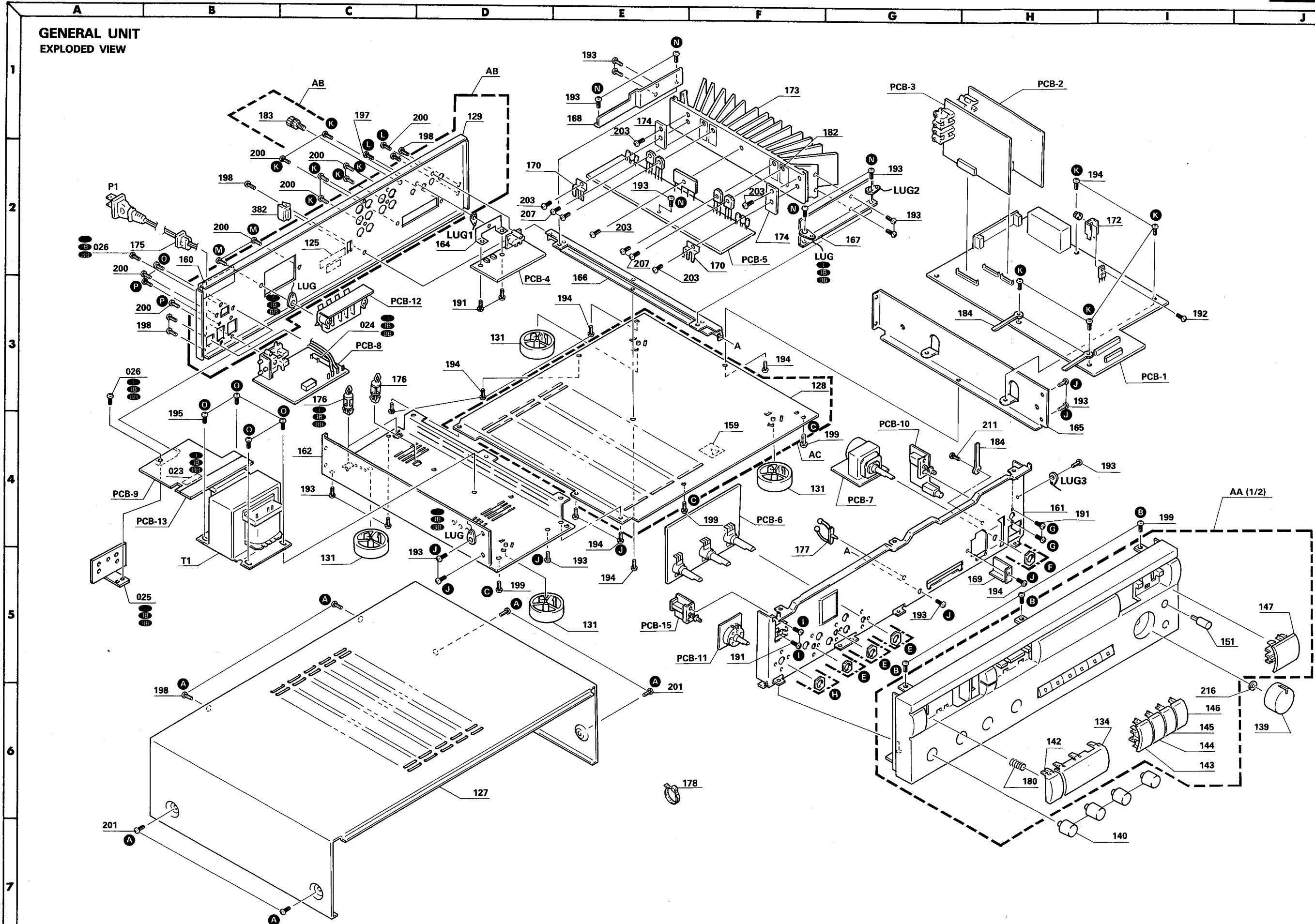
Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
AB	A424-HK3300A	CABI BACK REAR ASS'Y <b>BK</b>	166	2219-8301	METAL FITTG
AB	A424-HK3300E	CABI BACK REAR ASS'Y <b>I IB BB</b>	167	2219-8302	METAL FITTG
AC	A424-HK3300B	CABI BACK BOTTOM ASS'Y	168	2219-8303	METAL FITTG
023	1756-01409	LABEL <b>I IB BB</b>	169	2219-8304	METAL FITTG
024	1756-01412	LABEL <b>I IB BB</b>	170	2219-8305	METAL FITTG (x 2)
025	2219-8342	METAL FITTG <b>I IB BB</b>	172	2222-7230	HEAT SINK
026	2347-R0130064	SCREW (3 x 6mm) <b>I IB BB</b>	173	2222-7282	HEAT SINK
125	1756-CSA	LABEL <b>BK</b>	174	2222-7285	HEAT SINK (x 2)
127	1414-16401	CABINET, TOP <b>BK</b>	175	2240-364	HOLDER
127	1414-16403	CABINET, TOP <b>I IB BB</b>	176	2240-7369	HOLDER
128	1424-33301	CABI BACK, BOTTOM	177	2240-7049	HOLDER
129	1424-33101	CABI BACK, REAR <b>BK</b>	178	2240-R0101	HOLDER (x 18)
129	1424-33103	CABI BACK, REAR <b>I IB BB</b>	180	2651-2101736	SPRING
131	1319-03301	LEG (x 4)	182	2224-7134	INSULATOR (x 4)
134	1442-24702	PANEL	183	4214-168	TERMINAL
139	1630-04302	ROTARY KNOB, VOLUME <b>I</b>	184	2218-R0130	BRACKET, FIX (x 3)
139	1630-04301	ROTARY KNOB, VOLUME <b>BK IB BB</b>	191	2327-R0130062	SCREW (3 x 6mm) (x 6)
140	1632-20701	ROTARY KNOB, SPEAKER, BASS, TREBLE, BALANCE (x 4) <b>I</b>	192	2327-R0130082	SCREW (3 x 8mm)
140	1632-20702	ROTARY KNOB, SPEAKER, BASS, TREBLE, BALANCE (x 4) <b>BK IB BB</b>	193	2347-R0130062	SCREW (3 x 6mm) (x 17)
142	1662-52003	PUSH BUTTON, POWER <b>I</b>	194	2347-R0130062	SCREW (3 x 6mm) (x 12)
142	1662-52001	PUSH BUTTON, POWER <b>BK IB BB</b>	195	2347-R0140082	SCREW (4 x 8mm) (x 4)
143	1662-58601	PUSH BUTTON, PRESET 1/5 <b>I</b>	197	2327-R0130084	SCREW (3 x 8mm)
143	1662-58605	PUSH BUTTON, PRESET 1/5 <b>BK IB BB</b>	198	2347-R0130064	SCREW (3 x 6mm) (x 7)
144	1662-58602	PUSH BUTTON, PRESET 2/6 <b>I</b>	199	2347-R0130084	SCREW (3 x 8mm) (x 6)
144	1662-58606	PUSH BUTTON, PRESET 2/6 <b>BK IB BB</b>	200	2347-R0130104	SCREW (3 x 10mm) (x 13)
145	1662-58603	PUSH BUTTON, PRESET 3/7 <b>I</b>	201	2347-R0140064	SCREW (4 x 6mm) (x 4)
145	1662-58607	PUSH BUTTON, PRESET 3/7 <b>BK IB BB</b>	203	2347-R0130082	SCREW (3 x 8mm) (x 5)
146	1662-58604	PUSH BUTTON, PRESET 4/8 <b>I</b>	207	2557-301029	SCREW (3 x 10mm) (x 4)
146	1662-58608	PUSH BUTTON, PRESET 4/8 <b>BK IB BB</b>	211	2347-R0130062	SCREW (3 x 6mm)
147	1662-58901	PUSH BUTTON, TUNING <b>I</b>	216	2651-110519	SPRING
147	1662-58902	PUSH BUTTON, TUNING <b>BK IB BB</b>	382	2240-7208	HOLDER
151	1662-62901	PUSH BUTTON, LOUDNESS <b>I</b>	△P1	4161-71151	CORD W/PLUG <b>BK</b>
151	1662-62902	PUSH BUTTON, LOUDNESS <b>BK IB BB</b>	△P1	4161-7256	CORD W/PLUG <b>I IB</b>
159	1751-01018	LABEL <b>BK</b>	△P1	4161-04100	CORD W/PLUG <b>BB</b>
160	1756-05910	LABEL <b>BK</b>	△TI	5584-S8901	XFORMER, POWER <b>BK</b>
161	2211-7313	CHASSIS	△TI	5584-S8902	XFORMER, POWER <b>I IB BB</b>
162	2211-7314	CHASSIS			
164	2219-8298	METAL FITTG			
165	2219-8300	METAL FITTG			

NOTE



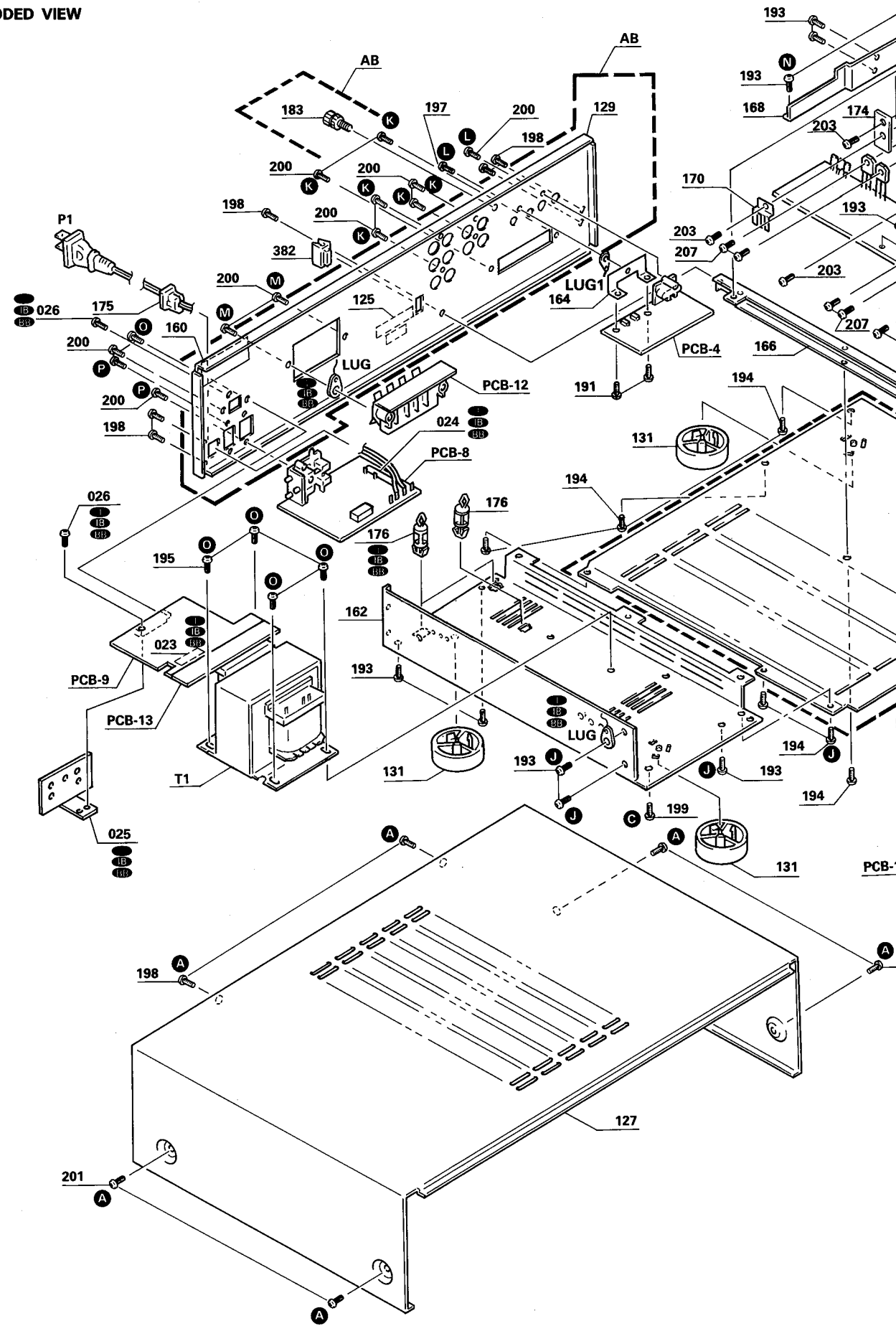
SAFETY RELATED COMPONENT. USE ONLY EXACT REPLACEMENT PART AS SPECIFIED.

**GENERAL UNIT  
EXPLODED VIEW**



**GENERAL UNIT  
EXPLODED VIEW**

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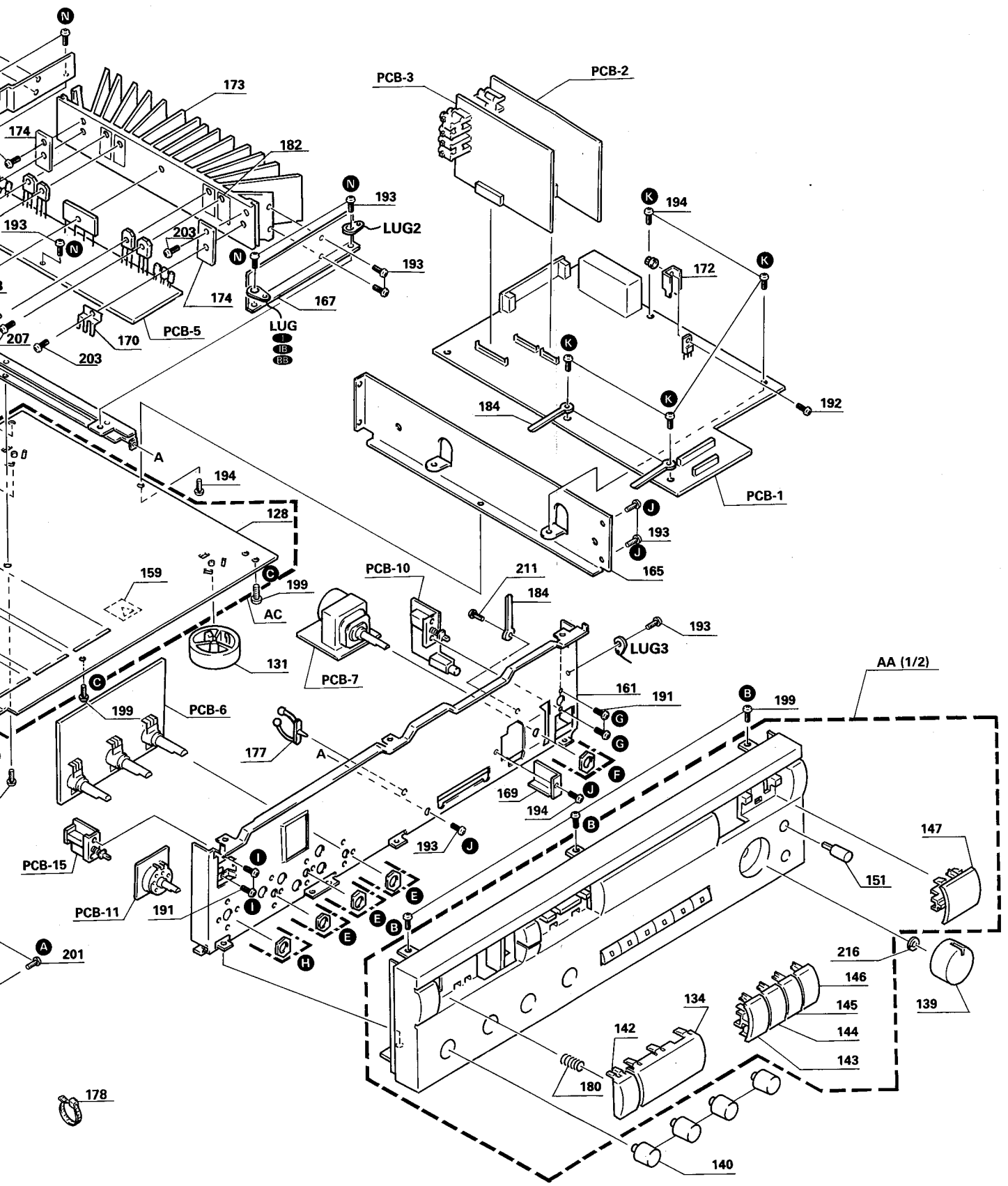
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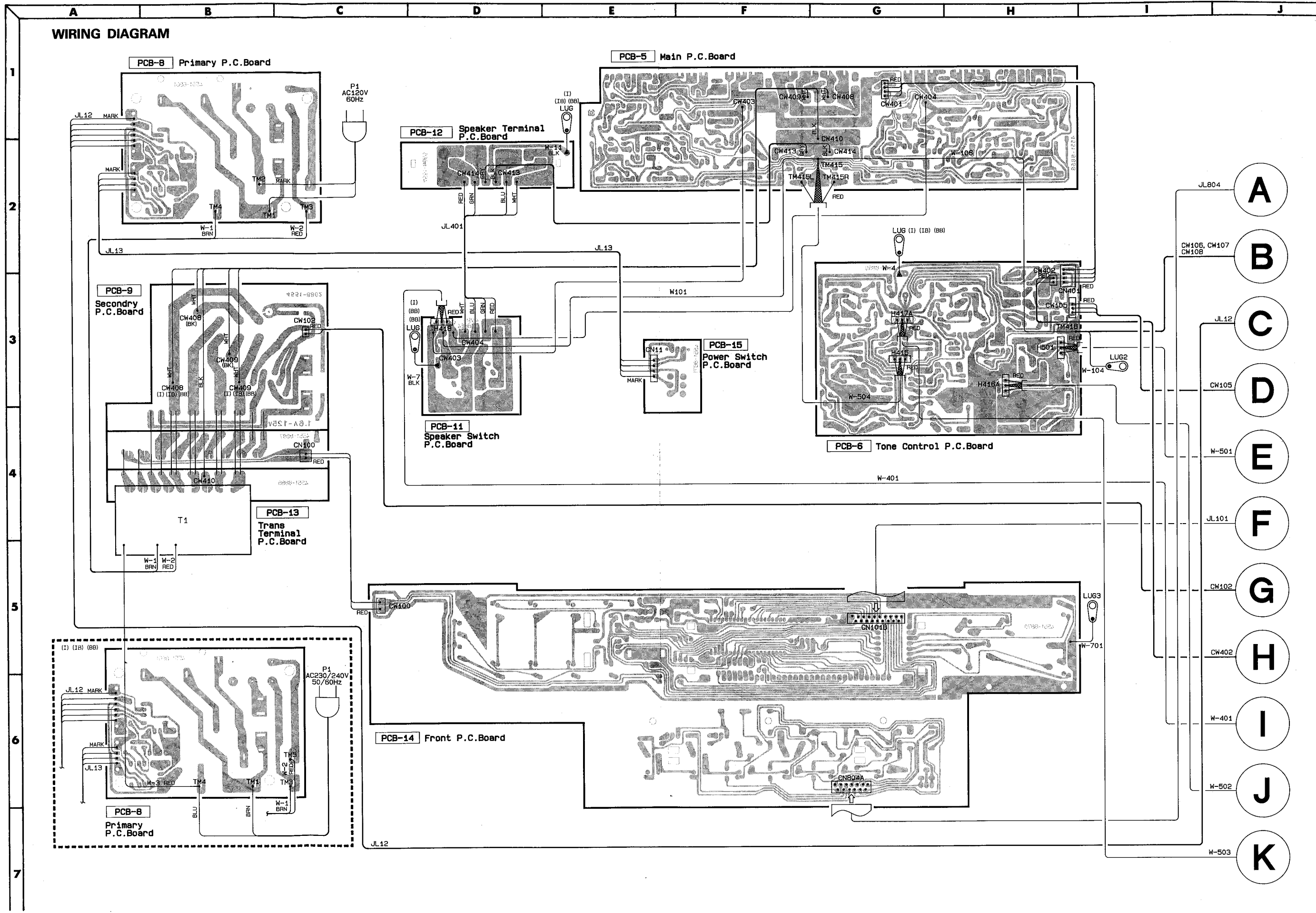
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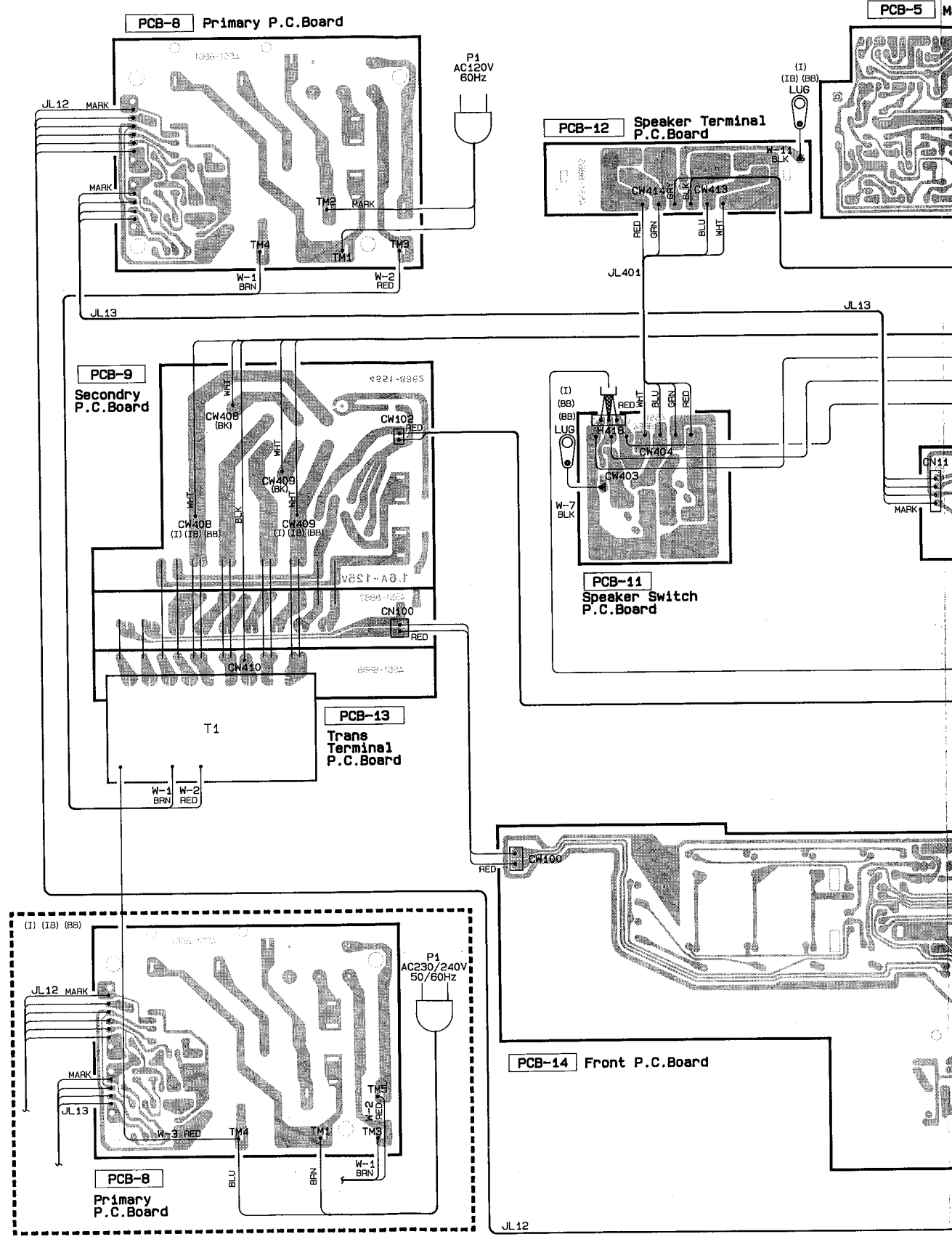
WIRING DIAGRAM



- A
- B
- C
- D
- E
- F
- G
- H
- I
- J
- K

# WIRING DIAGRAM

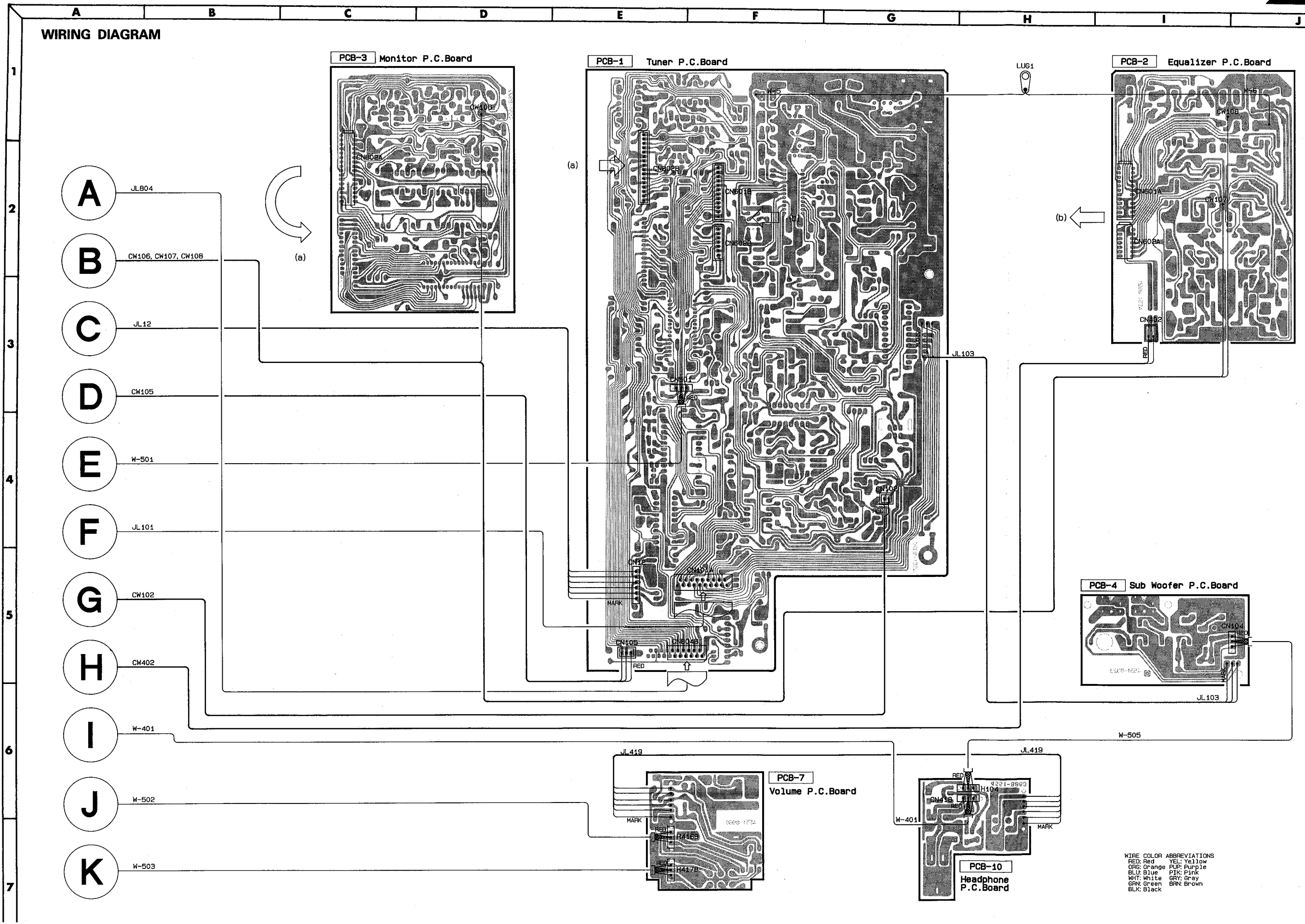
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WIRING DIAGRAM



WIRE COLOR ABBREVIATIONS  
 RED: Red YEL: Yellow  
 ORG: Orange PUR: Purple  
 BLU: Blue PPK: Pink  
 WHT: White GRY: Gray  
 GRN: Green BRN: Brown  
 BLK: Black

# WIRING DIAGRAM

- 1
  - 2
  - 3
  - 4
  - 5
  - 6
  - 7
- A
  - B
  - C
  - D
  - E
  - F
  - G
  - H
  - I
  - J
  - K

JL804

CW106, CW107, CW108

JL12

CW105

W-501

JL101

CW102

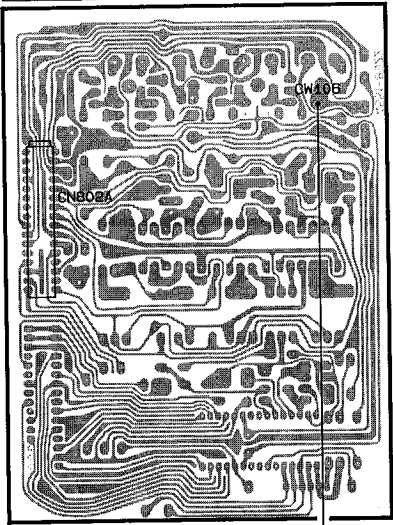
CW402

W-401

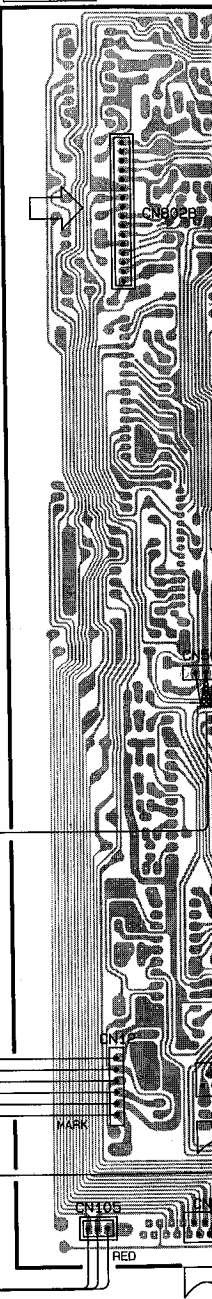
W-502

W-503

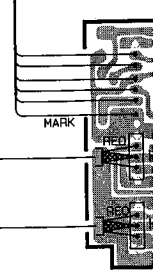
PCB-3 Monitor P.C.Board



PCB-1 Tuner P.C.Board



JL 419



F

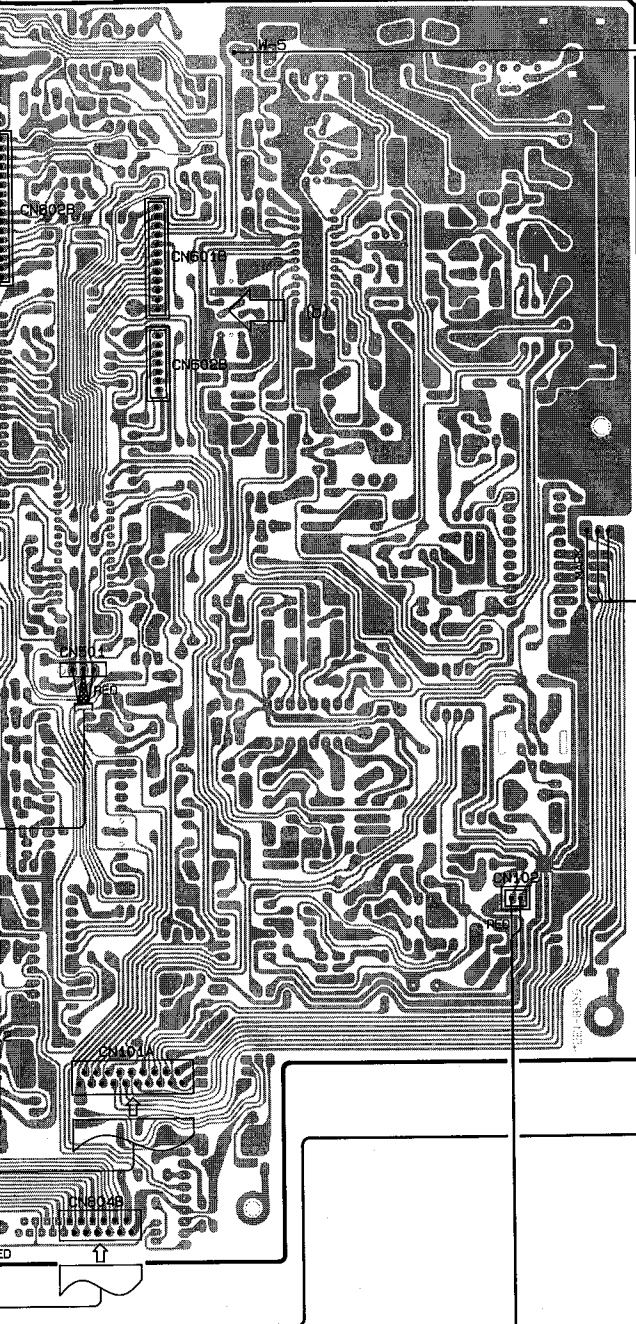
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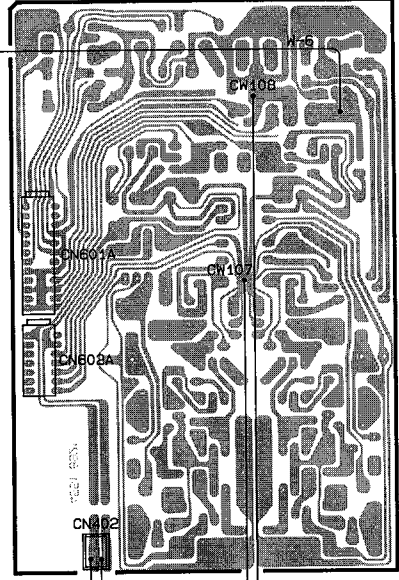
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Tuner P.C.Board

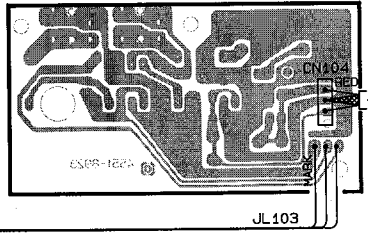


PCB-2 Equalizer P.C.Board



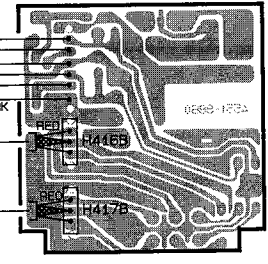
(b) ←

PCB-4 Sub Woofer P.C.Board

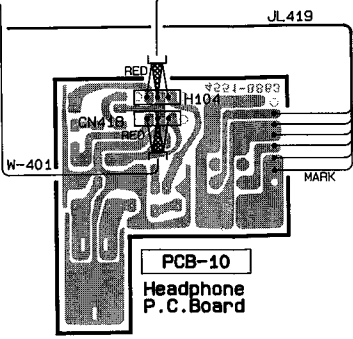


W-505

PCB-7 Volume P.C.Board



PCB-10 Headphone P.C.Board



WIRE COLOR ABBREVIATIONS

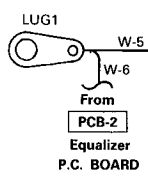
RED: Red	YEL: Yellow
ORG: Orange	PUR: Purple
BLU: Blue	PIK: Pink
GRN: Green	GRY: Gray
WHT: White	BRN: Brown
BLK: Black	

P.C. BOARDS

PCB-1 Tuner P.C. BOARD

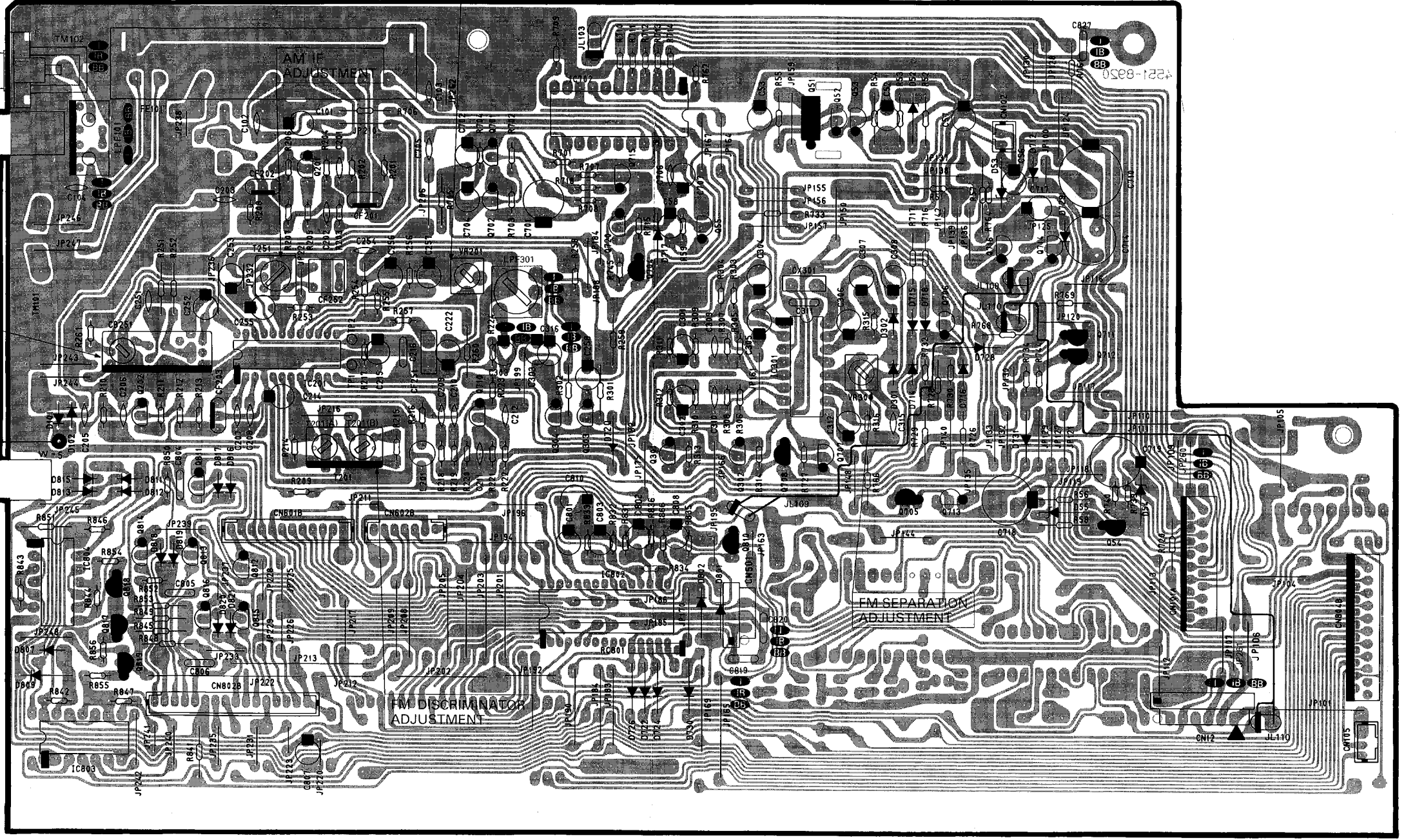
FM MUTING LEVEL ADJUSTMENT

AM TRACKING ADJUSTMENT



FM SEPARATION ADJUSTMENT

FM DISCRIMINATOR ADJUSTMENT

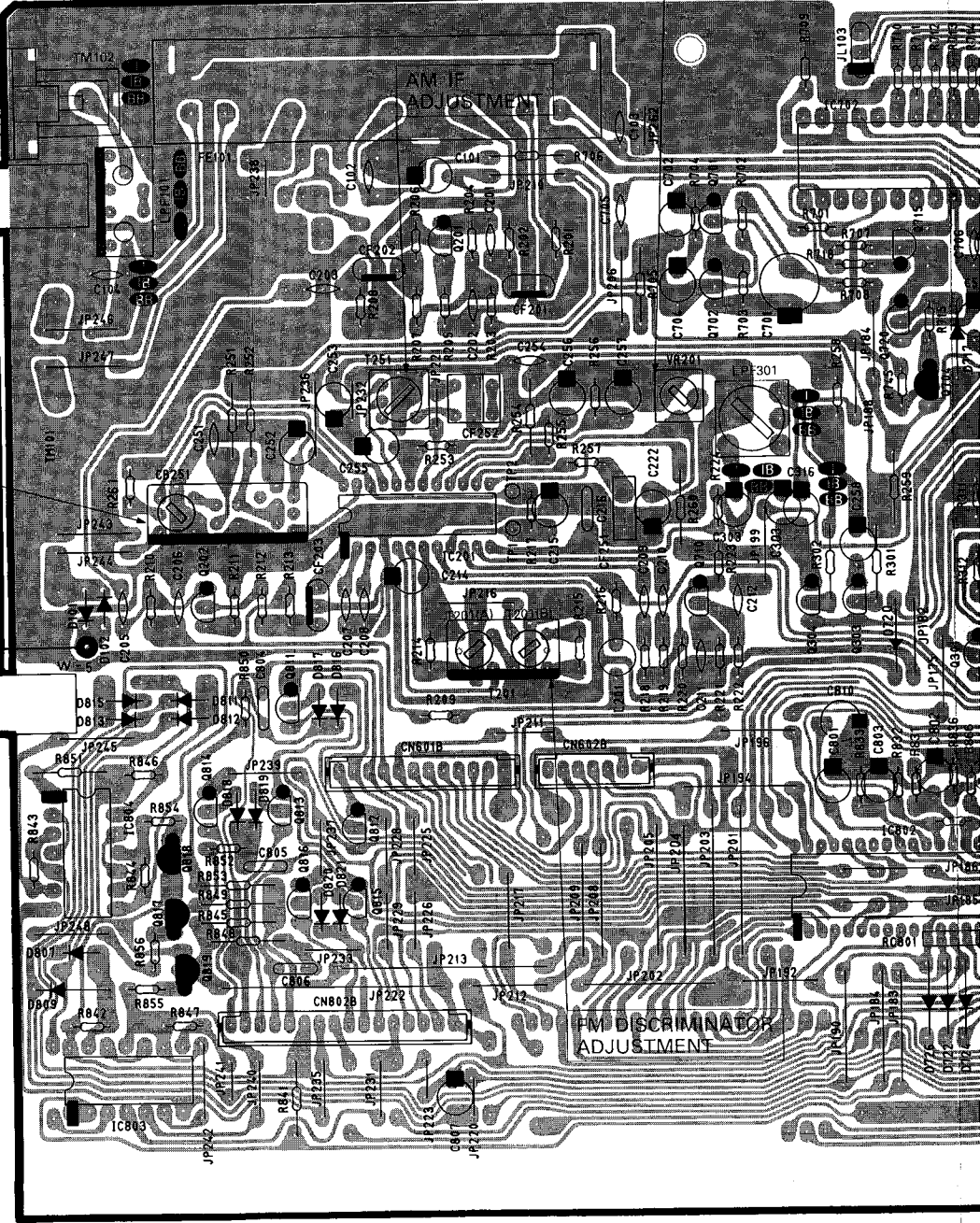
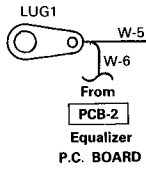


P.C. BOARDS

PCB-1 Tuner P.C. BOARD

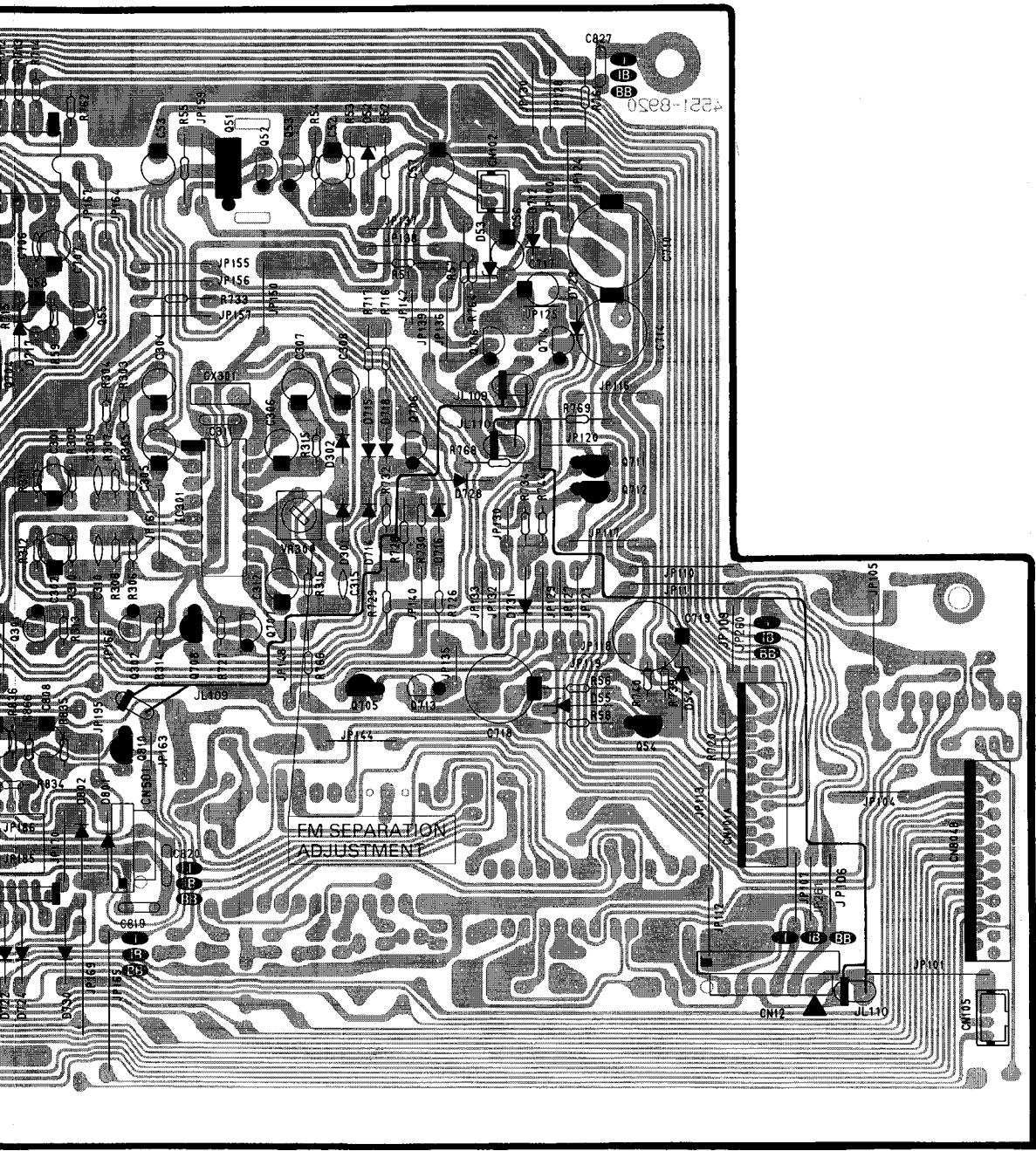
FM MUTING LEVEL ADJUSTMENT

AM TRACKING ADJUSTMENT



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A B C D E



4221-0250  
C827  
IB  
BB

FM SEPARATION  
ADJUSTMENT

C815

C812

JL110

JP106

IB

BB

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JP104

JP103

JP102

JP101

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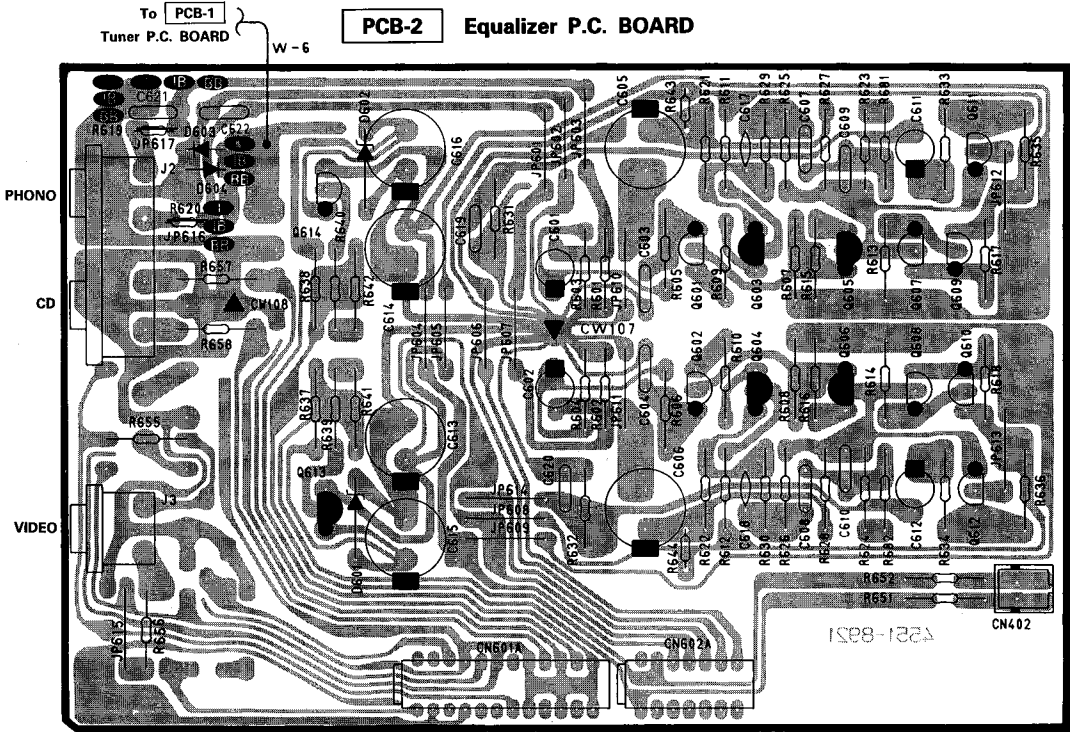
JP2

JP1

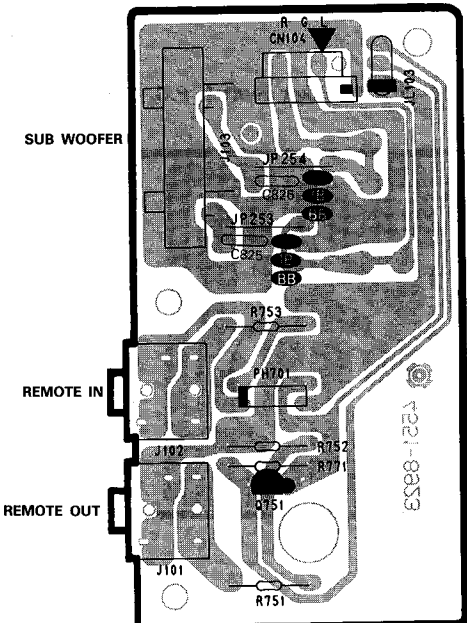


**P.C. BOARDS**

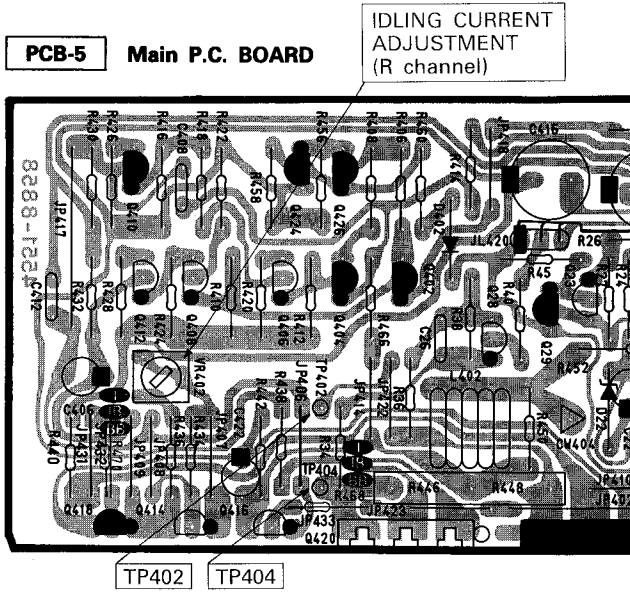
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**PCB-4 Sub Woofer P.C. BOARD**

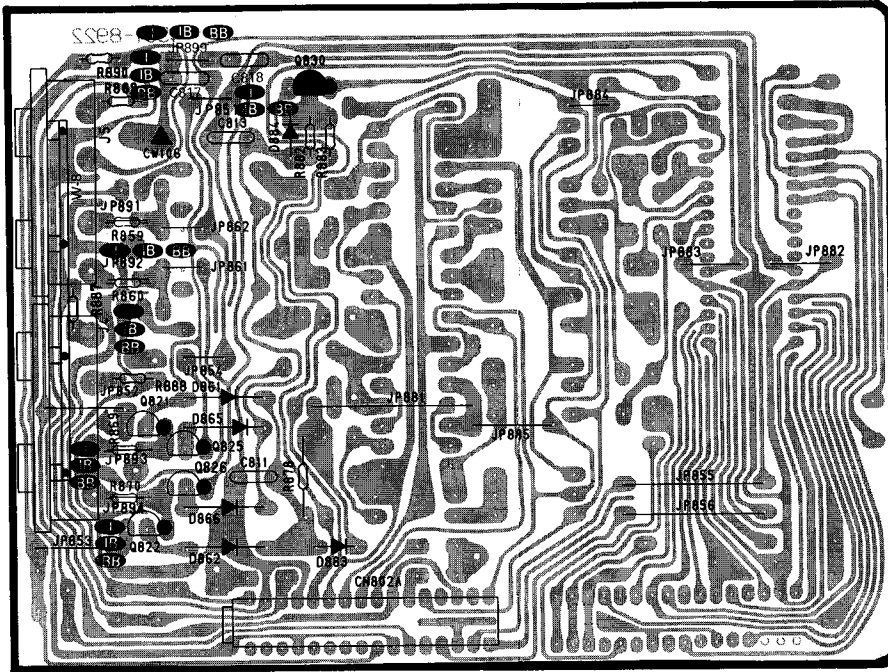


**PCB-5 Main P.C. BOARD**



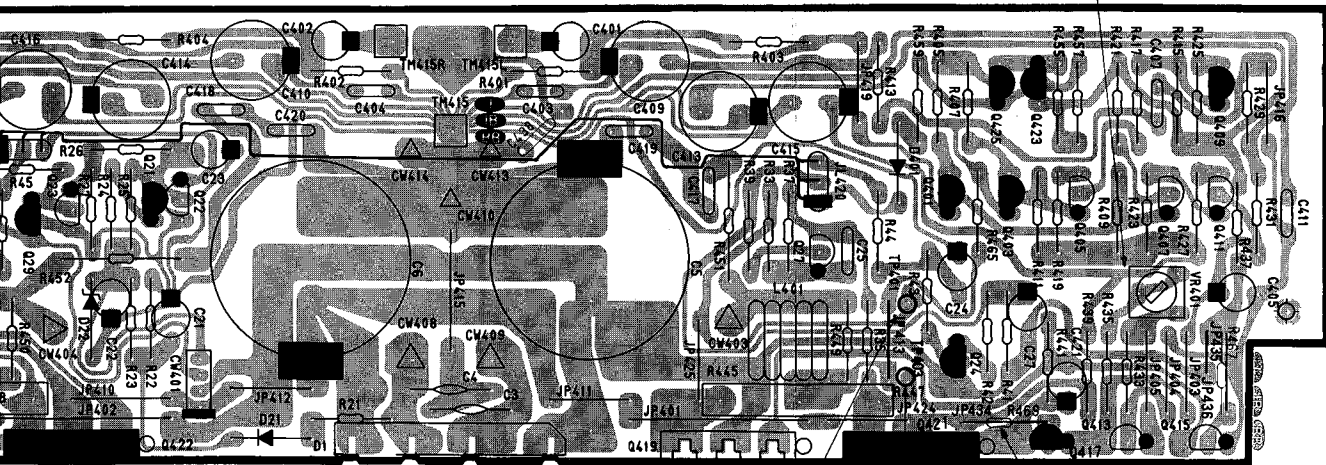


PCB-3 Monitor P.C. BOARD



ENT

IDLING CURRENT ADJUSTMENT (L channel)

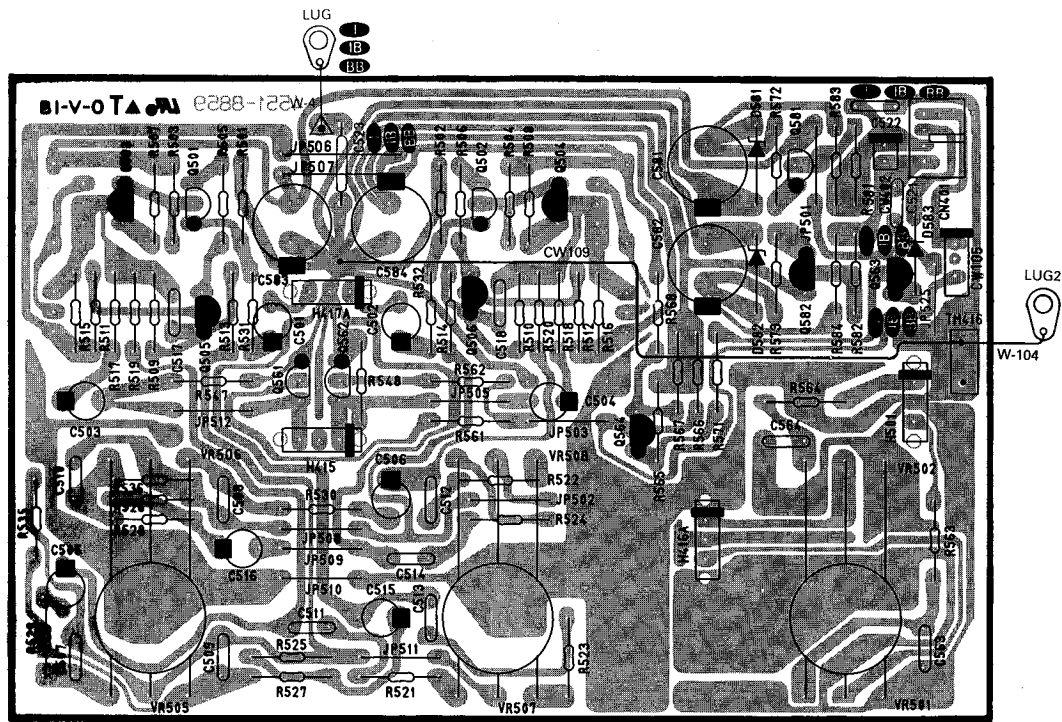


TP401 TP403

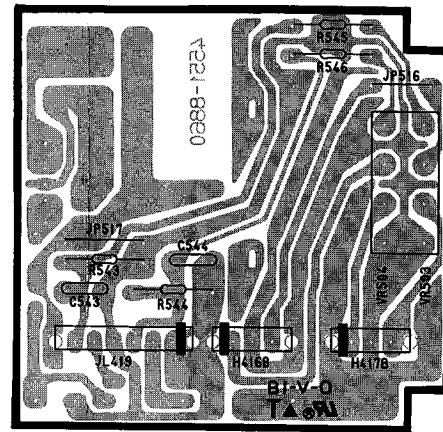


**P.C. BOARDS**

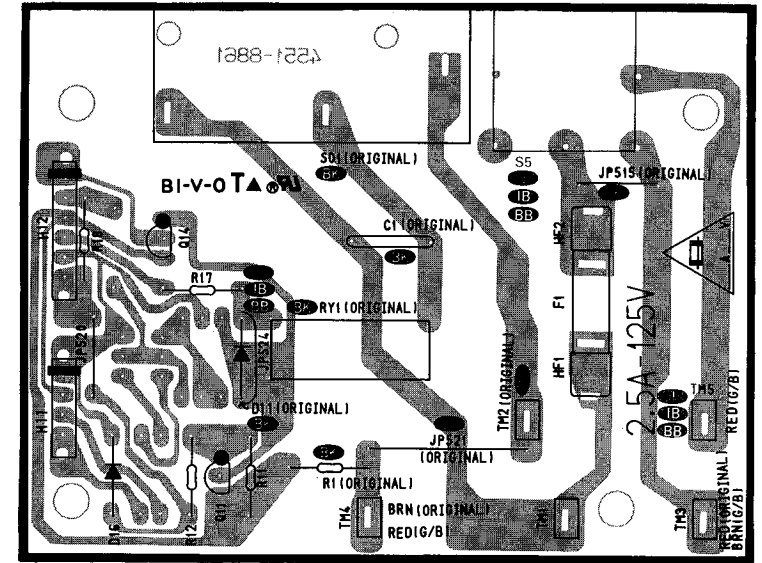
**PCB-6** Tone Control P.C. BOARD



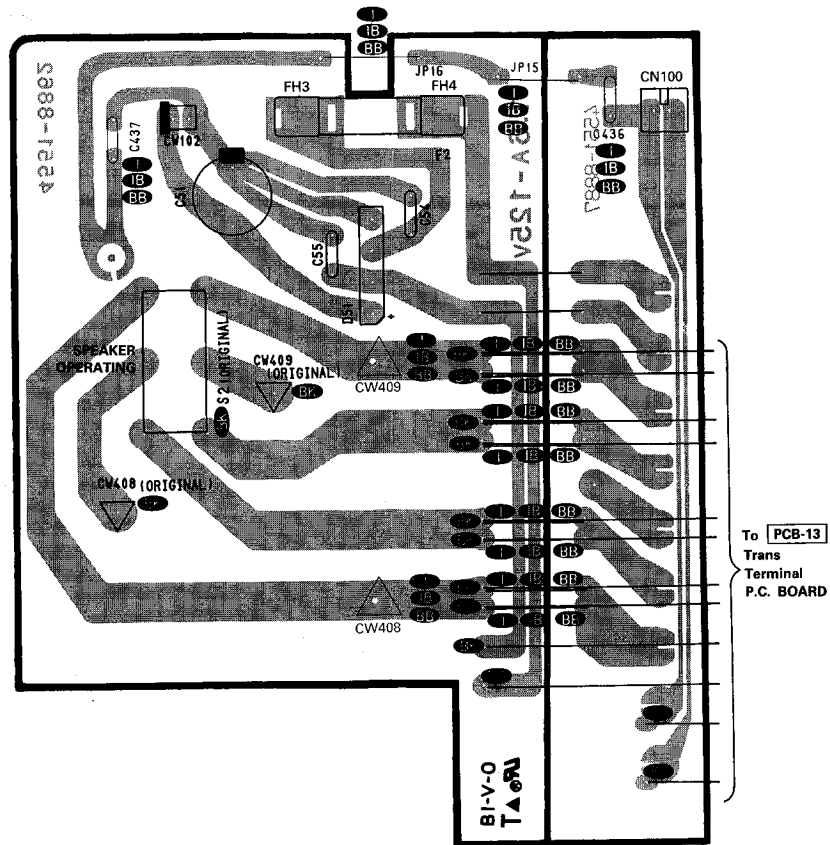
**PCB-7** Volume P.C. BOARD



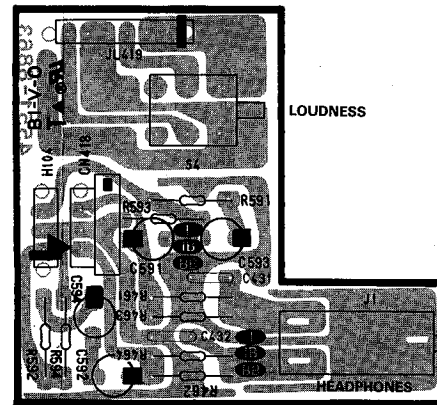
**PCB-8** Primary P.C. BOARD



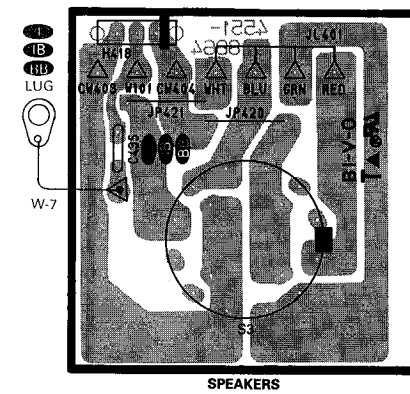
**PCB-9** Secondary P.C. BOARD



**PCB-10** Headphone P.C. BOARD

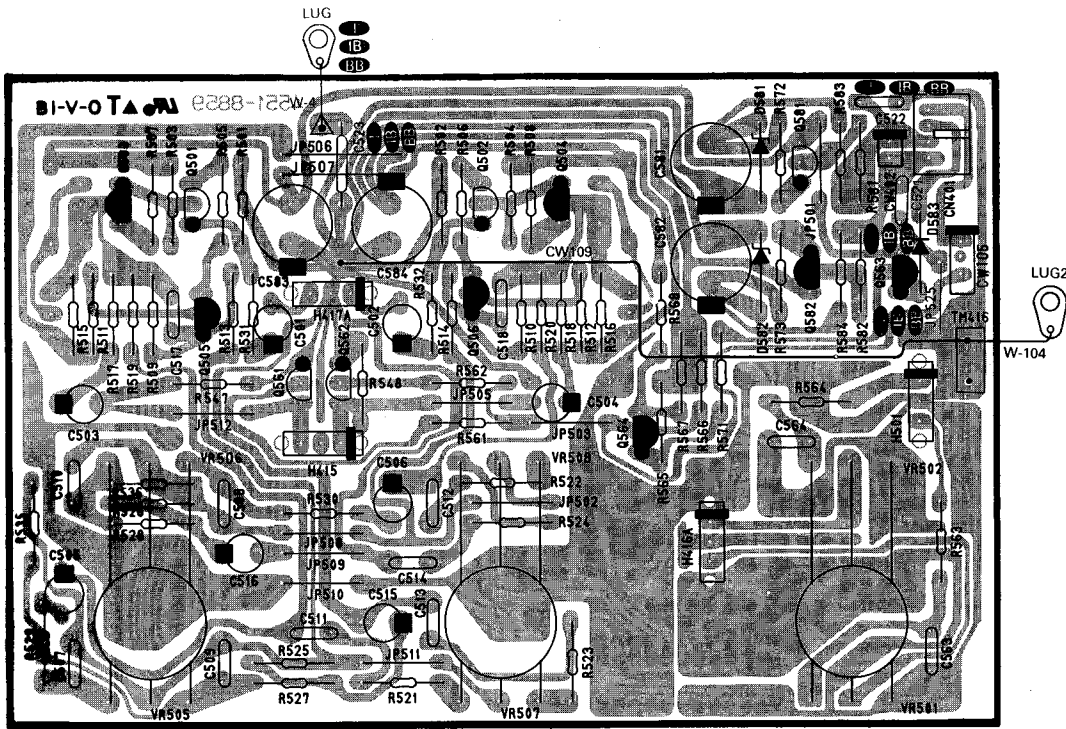


**PCB-11** Speaker Switch P.C. BOARD

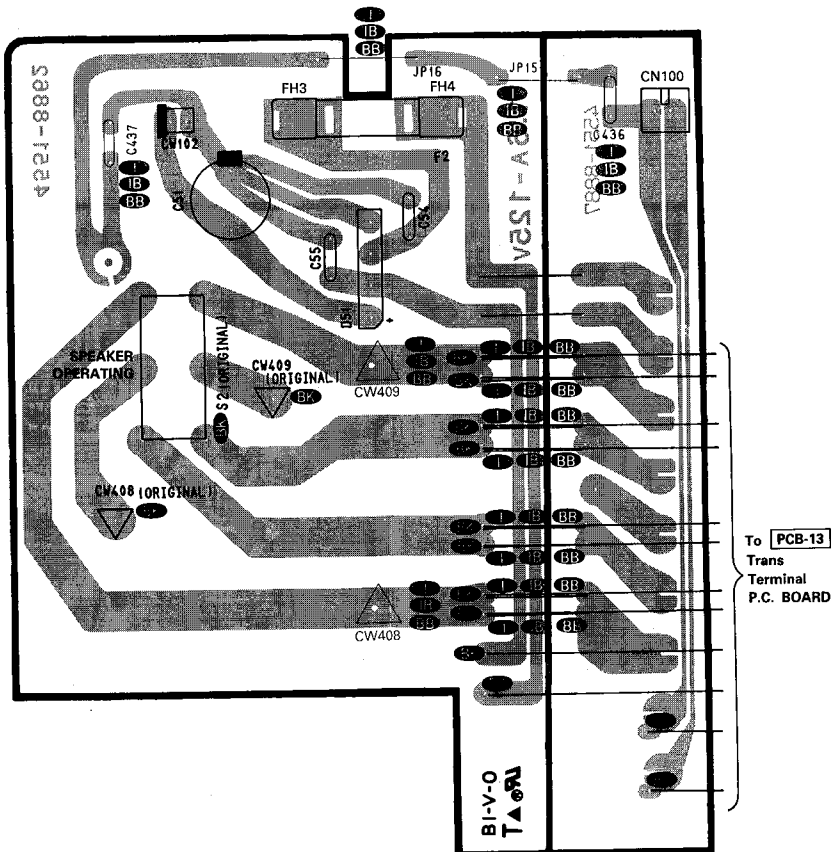


**P.C. BOARDS**

**PCB-6** Tone Control P.C. BOARD



**PCB-9** Secondary P.C. BOARD



**PCB-7**



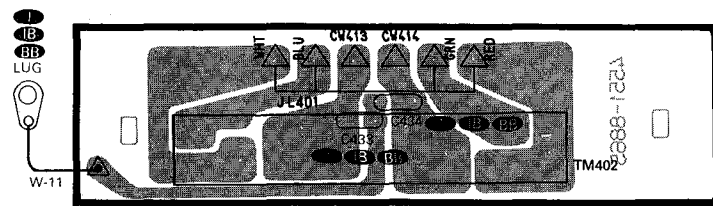
**PCB-10**



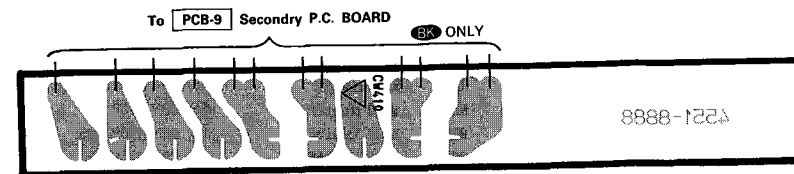


P.C. BOARDS

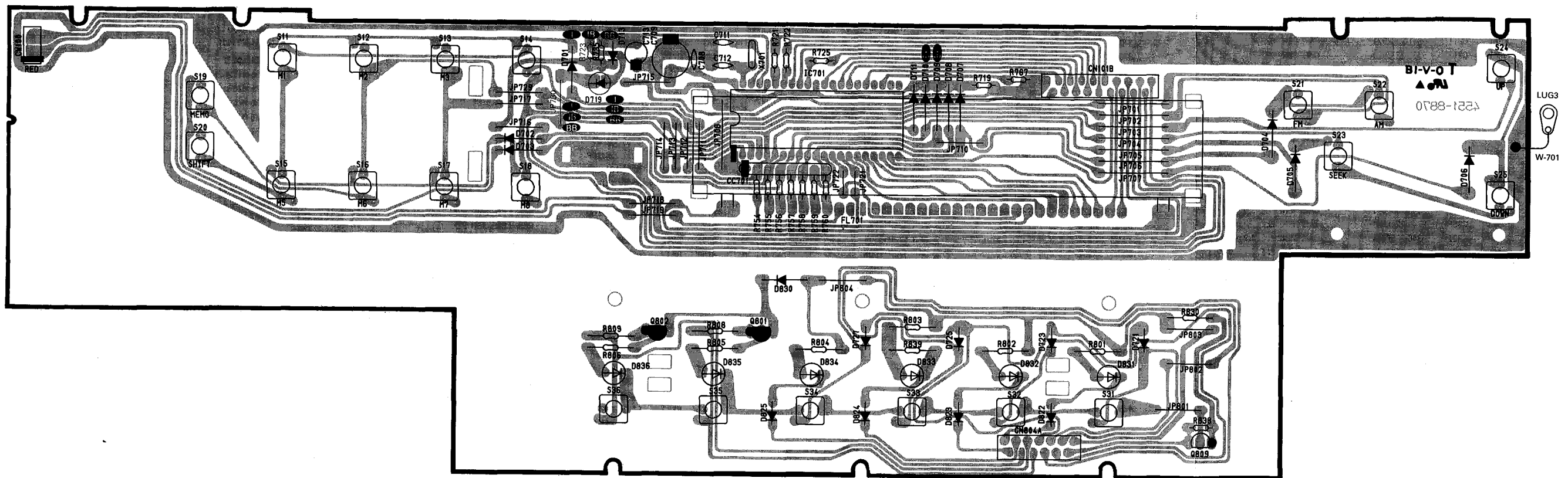
PCB-12 Speaker Terminal P.C. BOARD



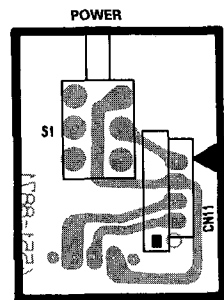
PCB-13 Trans Terminal P.C. BOARD



PCB-14 Front P.C. BOARD

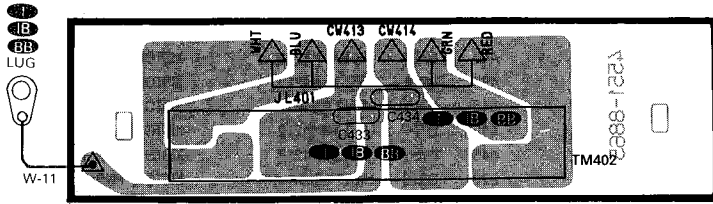


PCB-15 Power Switch P.C. BOARD

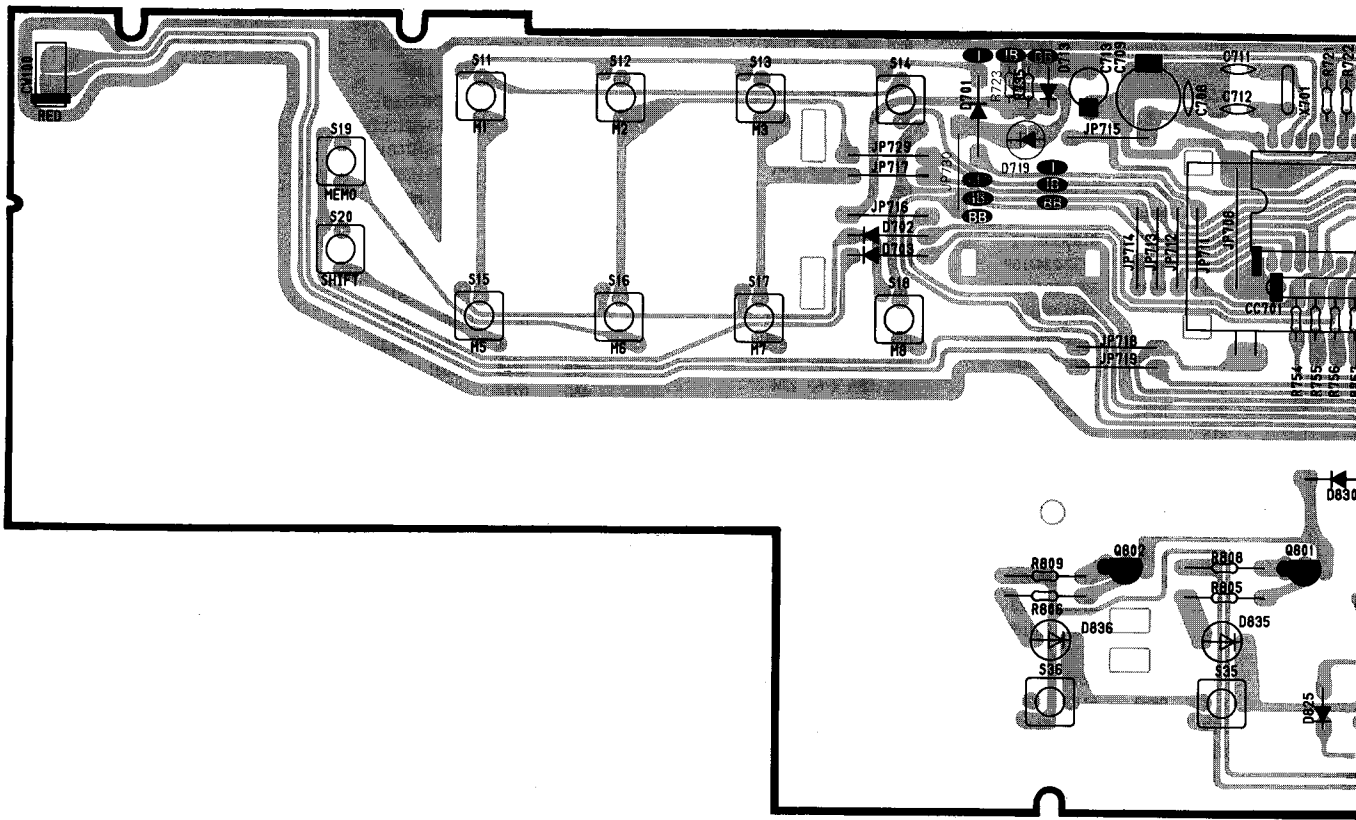


**P.C. BOARDS**

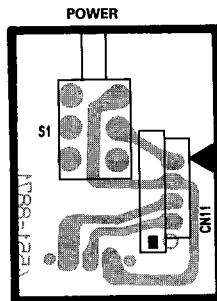
**PCB-12 Speaker Terminal P.C. BOARD**



**PCB-14 Front P.C. BOARD**



**PCB-15 Power Switch P.C. BOARD**



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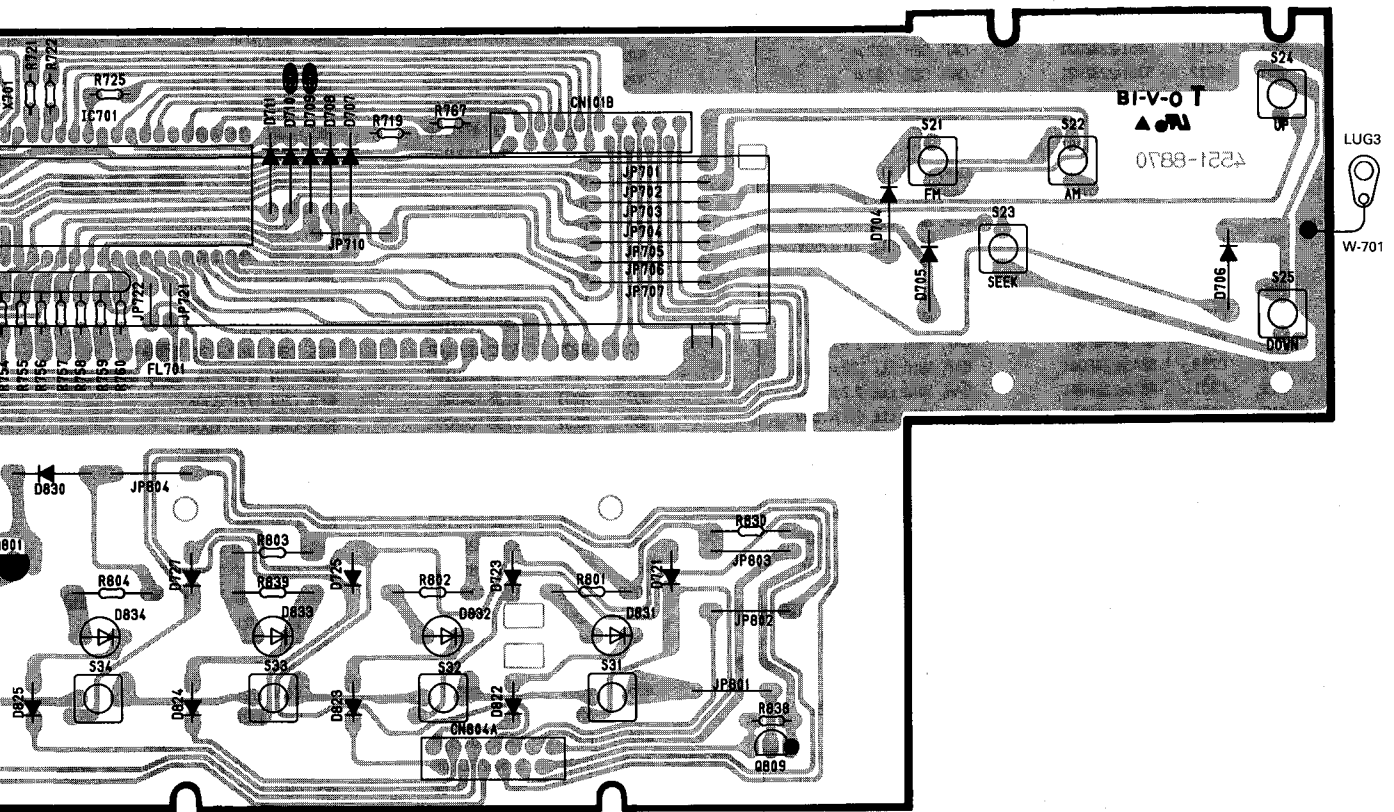
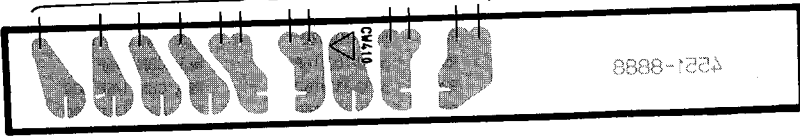
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PCB-13 Trans Terminal P.C. BOARD

To PCB-9 Secondary P.C. BOARD EX ONLY



**ELECTRICAL PARTS LIST**

Ser. No.	Ref. No.	Part No.	Description
<b>PCB-1 TUNER P.C. BOARD</b>			
<b>CAPACITORS</b>			
515	C52	5345-107C041	CAP, MINI ELE 100 $\mu$ /16V
512	C53	5345-476D041	CAP, MINI ELE 47 $\mu$ /25V
513	C56	5345-107B041	CAP, MINI ELE 100 $\mu$ /10V
512	C57	5345-476D041	CAP, MINI ELE 47 $\mu$ /25V
512	C58	5345-476D041	CAP, MINI ELE 47 $\mu$ /25V
325	C101	5345-476D041	CAP, MINI ELE 47 $\mu$ /25V
327	C102	5361-223Z921	CAP, CER .022 $\mu$
329	C103	5361-150J917	CAP, CER 15p
053B	C104	5361-220JCH	CAP, CER 22p
361	C201	5361-223Z921	CAP, CER .022 $\mu$
361	C202	5361-223Z921	CAP, CER .022 $\mu$
362	C203	5361-223ZF	CAP, CER .022 $\mu$
361	C205	5361-223Z921	CAP, CER .022 $\mu$
361	C206	5361-223Z921	CAP, CER .022 $\mu$
361	C207	5361-223Z921	CAP, CER .022 $\mu$
361	C208	5361-223Z921	CAP, CER .022 $\mu$
361	C209	5361-223Z921	CAP, CER .022 $\mu$
361	C210	5361-223Z921	CAP, CER .022 $\mu$
361	C211	5361-223Z921	CAP, CER .022 $\mu$
361	C212	5361-223Z921	CAP, CER .022 $\mu$
364	C214	5345-106F041	CAP, MINI ELE 10 $\mu$ /50V
365	C215	5345-105F041	CAP, MINI ELE 1 $\mu$ /50V
363	C216	5359-1015851	CAP, PPP 100p
393	C222	5345-224F041	CAP, MINI ELE .22 $\mu$ /50V
389	C251	5361-473ZF	CAP, CER .047 $\mu$
391	C252	5345-106F041	CAP, MINI ELE 10 $\mu$ /50V
391	C253	5345-106F041	CAP, MINI ELE 10 $\mu$ /50V
390	C254	5361-472M919	CAP, CER 4700p
392	C255	5345-475F041	CAP, MINI ELE 4.7 $\mu$ /50V
392	C256	5345-475F041	CAP, MINI ELE 4.7 $\mu$ /50V
365	C257	5345-105F041	CAP, MINI ELE 1 $\mu$ /50V
393	C258	5345-224F041	CAP, MINI ELE .22 $\mu$ /50V
419	C301	5345-225F041	CAP, MINI ELE 2.2 $\mu$ /50V
419	C302	5345-225F041	CAP, MINI ELE 2.2 $\mu$ /50V
420	C303	5345-226D041	CAP, MINI ELE 22 $\mu$ /25V
420	C304	5345-226D041	CAP, MINI ELE 22 $\mu$ /25V
421	C305	5345-476D041	CAP, MINI ELE 47 $\mu$ /25V
422	C306	5345-224F0951	CAP, MINI ELE .22 $\mu$ /50V
423	C307	5345-474F0951	CAP, MINI ELE .47 $\mu$ /50V
424	C308	5345-106F041	CAP, MINI ELE 10 $\mu$ /50V
417	C309	5359-4715851	CAP, PPP 470p
417B	C309	5359-2715851	CAP, PPP 270p
417	C310	5359-4715851	CAP, PPP 470p
417B	C310	5359-2715851	CAP, PPP 270p
418	C311	5354-473K1HM	CAP, MYL .047 $\mu$
419	C312	5345-225F041	CAP, MINI ELE 2.2 $\mu$ /50V
425	C315	5361-101K918	CAP, CER 100p
055B	C316	5345-226D041	CAP, MINI ELE 22 $\mu$ /25V
453	C701	5345-227C041	CAP, MINI ELE 220 $\mu$ /16V
459	C702	5345-224F0951	CAP, MINI ELE .22 $\mu$ /50V
454	C704	5345-684F0951	CAP, MINI ELE .68 $\mu$ /50V
460	C705	5361-223Z921	CAP, CER .022 $\mu$
461	C706	5361-102K918	CAP, CER 1000p
455	C707	5345-476D041	CAP, MINI ELE 47 $\mu$ /25V
458	C710	5345-228A041	CAP, MINI ELE 2200 $\mu$ /6.3V
456	C714	5345-108A041	CAP, MINI ELE 1000 $\mu$ /6.3V
494	C717	5345-105F041	CAP, MINI ELE 1 $\mu$ /50V
495	C718	5345-227D041	CAP, MINI ELE 220 $\mu$ /25V
496	C719	5345-106F041	CAP, MINI ELE 10 $\mu$ /50V
809	C801	5345-106F041	CAP, MINI ELE 10 $\mu$ /50V
809	C802	5345-106F041	CAP, MINI ELE 10 $\mu$ /50V
810	C803	5345-104F041	CAP, MINI ELE .1 $\mu$ /50V
808	C804	5354-104593	CAP, MYL .1 $\mu$
808	C805	5354-104593	CAP, MYL .1 $\mu$
808	C806	5354-104593	CAP, MYL .1 $\mu$
809	C807	5345-106F041	CAP, MINI ELE 10 $\mu$ /50V
809	C808	5345-106F041	CAP, MINI ELE 10 $\mu$ /50V
823	C810	5345-474F041	CAP, MINI ELE .47 $\mu$ /50V
050B	C819	5359-2215851	CAP, PPP 220p
050B	C820	5359-2215851	CAP, PPP 220p
057B	C827	5354-103K1HM	CAP, MYL .01 $\mu$

Ser. No.	Ref. No.	Part No.	Description
<b>RESISTORS</b>			
524	R51	5102-2R25116	RES, FUSE 2.2
517	R52	5135-272522	RES, CBN 1/2P 2.7K
518	R53	5135-101522	RES, CBN 1/2P 100
518	R54	5135-101522	RES, CBN 1/2P 100
519	R55	5135-331522	RES, CBN 1/2P 330
520	R56	5102-2205116	RES, FUSE 22
523	R57	5171-221593	RES, MTL 1P 220
521	R58	5135-102522	RES, CBN 1/2P 1K
522	R59	5232-102J16P	RES, CBN 1/6P 1K
369	R201	5232-331J16P	RES, CBN 1/6P 330
370	R202	5232-391J16P	RES, CBN 1/6P 390
374	R203	5232-102J16P	RES, CBN 1/6P 1K
371	R204	5232-154J16P	RES, CBN 1/6P 150K
372	R205	5232-100J16P	RES, CBN 1/6P 10
373	R206	5232-101J16P	RES, CBN 1/6P 100
370	R207	5232-391J16P	RES, CBN 1/6P 390
370	R208	5232-391J16P	RES, CBN 1/6P 390
374	R209	5232-102J16P	RES, CBN 1/6P 1K
371	R210	5232-154J16P	RES, CBN 1/6P 150K
372	R211	5232-100J16P	RES, CBN 1/6P 10
373	R212	5232-101J16P	RES, CBN 1/6P 100
370	R213	5232-391J16P	RES, CBN 1/6P 390
375	R214	5232-103J16P	RES, CBN 1/6P 10K
376	R215	5232-332J16P	RES, CBN 1/6P 3.3K
377	R216	5232-472J16P	RES, CBN 1/6P 4.7K
378	R217	5232-153J16P	RES, CBN 1/6P 15K
378B	R217	5232-273J16P	RES, CBN 1/6P 27K
377	R218	5232-472J16P	RES, CBN 1/6P 4.7K
368	R219	5232-104J16P	RES, CBN 1/6P 100K
366	R220	5232-154J16P	RES, CBN 1/6P 150K
374	R221	5232-102J16P	RES, CBN 1/6P 1K
377	R222	5232-472J16P	RES, CBN 1/6P 4.7K
367	R223	5232-104J16P	RES, CBN 1/6P 100K
377	R224	5232-472J16P	RES, CBN 1/6P 4.7K
054B	R224	5232-222J16P	RES, CBN 1/6P 22K
397	R251	5135-334522	RES, CBN 1/2P 330K
398	R252	5135-104522	RES, CBN 1/2P 100K
401	R253	5232-103J16P	RES, CBN 1/6P 10K
399	R254	5135-102522	RES, CBN 1/2P 1K
401	R255	5232-103J16P	RES, CBN 1/6P 10K
402	R256	5232-223J16P	RES, CBN 1/6P 22K
403	R257	5232-820J16P	RES, CBN 1/6P 82
405	R258	5232-183J16P	RES, CBN 1/6P 18K
405B	R258	5232-223J16P	RES, CBN 1/6P 22K
404	R259	5135-152522	RES, CBN 1/2P 1.5K
406	R260	5135-103522	RES, CBN 1/2P 10K
407	R261	5232-471J16P	RES, CBN 1/6P 470
435	R301	5135-105522	RES, CBN 1/2P 1M
435	R302	5135-105522	RES, CBN 1/2P 1M
427	R303	5232-104J16P	RES, CBN 1/6P 100K
427B	R303	5232-274J16P	RES, CBN 1/6P 270K
427	R304	5232-104J16P	RES, CBN 1/6P 100K
427B	R304	5232-274J16P	RES, CBN 1/6P 270K
428	R305	5232-753J16P	RES, CBN 1/6P 75K
428	R306	5232-753J16P	RES, CBN 1/6P 75K
429	R307	5232-164J16P	RES, CBN 1/6P 160K
429B	R307	5232-184J16P	RES, CBN 1/6P 180K
429	R308	5232-164J16P	RES, CBN 1/6P 160K
429B	R308	5232-184J16P	RES, CBN 1/6P 180K
430	R309	5232-182J16P	RES, CBN 1/6P 1.8K
430	R310	5232-182J16P	RES, CBN 1/6P 1.8K
431	R311	5232-103J16P	RES, CBN 1/6P 10K
431	R312	5232-103J16P	RES, CBN 1/6P 10K
431	R313	5232-103J16P	RES, CBN 1/6P 10K
431	R314	5232-103J16P	RES, CBN 1/6P 10K
432	R315	5232-472J16P	RES, CBN 1/6P 4.7K
431	R316	5232-103J16P	RES, CBN 1/6P 10K
465	R701	5232-103J16P	RES, CBN 1/6P 10K
465	R702	5232-103J16P	RES, CBN 1/6P 10K
466	R703	5232-473J16P	RES, CBN 1/6P 47K
467	R704	5232-222J16P	RES, CBN 1/6P 2.2K
471	R705	5135-102522	RES, CBN 1/2P 1K
471	R706	5135-102522	RES, CBN 1/2P 1K
465	R707	5232-103J16P	RES, CBN 1/6P 10K

Ser. No.	Ref. No.	Part No.	Description
468	R708	5232-102J16P	RES, CBN 1/6P 1K
470	R709	5232-104J16P	RES, CBN 1/6P 100K
467	R710	5232-222J16P	RES, CBN 1/6P 2.2K
467	R711	5232-222J16P	RES, CBN 1/6P 2.2K
467	R712	5232-222J16P	RES, CBN 1/6P 2.2K
467	R713	5232-222J16P	RES, CBN 1/6P 2.2K
469	R714	5232-472J16P	RES, CBN 1/6P 4.7K
472	R715	5232-273J16P	RES, CBN 1/6P 27K
473	R716	5135-103522	RES, CBN 1/2P 10K
473	R717	5135-103522	RES, CBN 1/2P 10K
465	R718	5232-103J16P	RES, CBN 1/6P 10K
471	R720	5135-102522	RES, CBN 1/2P 1K
473	R726	5135-103522	RES, CBN 1/2P 10K
477	R727	5232-473J16P	RES, CBN 1/6P 47K
476	R728	5135-223522	RES, CBN 1/2P 22K
473	R729	5135-103522	RES, CBN 1/2P 10K
464	R730	5232-223J16P	RES, CBN 1/6P 22K
465	R732	5232-103J16P	RES, CBN 1/6P 10K
478	R733	5135-104522	RES, CBN 1/2P 100K
465	R734	5232-103J16P	RES, CBN 1/6P 10K
470	R739	5232-104J16P	RES, CBN 1/6P 100K
470	R740	5232-104J16P	RES, CBN 1/6P 100K
470	R744	5232-104J16P	RES, CBN 1/6P 100K
472	R745	5232-273J16P	RES, CBN 1/6P 27K
483	R761	5135-101522	RES, CBN 1/2P 100
484	R762	5232-332J16P	RES, CBN 1/6P 3.3K
465	R764	5232-103J16P	RES, CBN 1/6P 10K
482	R766	5135-332522	RES, CBN 1/2P 3.3K
474	R768	5135-472522	RES, CBN 1/2P 4.7K
482	R769	5135-332522	RES, CBN 1/2P 3.3K
819	R831	5232-224J16P	RES, CBN 1/6P 220K
815	R832	5232-104J16P	RES, CBN 1/6P 100K
821	R833	5232-274J16P	RES, CBN 1/6P 270K
819	R834	5232-224J16P	RES, CBN 1/6P 220K
818	R835	5232-223J16P	RES, CBN 1/6P 22K
818	R836	5232-223J16P	RES, CBN 1/6P 22K
820	R841	5135-472522	RES, CBN 1/2P 4.7K
815	R842	5232-104J16P	RES, CBN 1/6P 100K
817	R843	5232-473J16P	RES, CBN 1/6P 47K
817	R844	5232-473J16P	RES, CBN 1/6P 47K
812	R845	5135-104522	RES, CBN 1/2P 100K
815	R846	5232-104J16P	RES, CBN 1/6P 100K
817	R847	5232-473J16P	RES, CBN 1/6P 47K
813	R848	5135-105522	RES, CBN 1/2P 1M
812	R849	5135-104522	RES, CBN 1/2P 100K
816	R850		



**ELECTRICAL PARTS LIST**

Ser. No.	Ref. No.	Part No.	Description
<b>PCB-1 TUNER P.C. BOARD</b>			
<b>CAPACITORS</b>			
515	C52	5345-107C041	CAP, MINI ELE 100 $\mu$ /16V
512	C53	5345-476D041	CAP, MINI ELE 47 $\mu$ /25V
513	C56	5345-107B041	CAP, MINI ELE 100 $\mu$ /10V
512	C57	5345-476D041	CAP, MINI ELE 47 $\mu$ /25V
512	C58	5345-476D041	CAP, MINI ELE 47 $\mu$ /25V
325	C101	5345-476D041	CAP, MINI ELE 47 $\mu$ /25V
327	C102	5361-223Z921	CAP, CER .022 $\mu$
329	C103	5361-150J917	CAP, CER 15p
053B	C104	5361-220JCH	CAP, CER 22p <b>I IB BB</b>
361	C201	5361-223Z921	CAP, CER .022 $\mu$
361	C202	5361-223Z921	CAP, CER .022 $\mu$
362	C203	5361-223ZF	CAP, CER .022 $\mu$
361	C205	5361-223Z921	CAP, CER .022 $\mu$
361	C206	5361-223Z921	CAP, CER .022 $\mu$
361	C207	5361-223Z921	CAP, CER .022 $\mu$
361	C208	5361-223Z921	CAP, CER .022 $\mu$
361	C209	5361-223Z921	CAP, CER .022 $\mu$
361	C210	5361-223Z921	CAP, CER .022 $\mu$
361	C211	5361-223Z921	CAP, CER .022 $\mu$
361	C212	5361-223Z921	CAP, CER .022 $\mu$
364	C214	5345-106F041	CAP, MINI ELE 10 $\mu$ /50V
365	C215	5345-105F041	CAP, MINI ELE 1 $\mu$ /50V
363	C216	5359-1015851	CAP, PPP 100p
393	C222	5345-224F041	CAP, MINI ELE .22 $\mu$ /50V
389	C251	5361-473ZF	CAP, CER .047 $\mu$
391	C252	5345-106F041	CAP, MINI ELE 10 $\mu$ /50V
391	C253	5345-106F041	CAP, MINI ELE 10 $\mu$ /50V
390	C254	5361-472M919	CAP, CER 4700p
392	C255	5345-475F041	CAP, MINI ELE 4.7 $\mu$ /50V
392	C256	5345-475F041	CAP, MINI ELE 4.7 $\mu$ /50V
365	C257	5345-105F041	CAP, MINI ELE 1 $\mu$ /50V
393	C258	5345-224F041	CAP, MINI ELE .22 $\mu$ /50V
419	C301	5345-225F041	CAP, MINI ELE 2.2 $\mu$ /50V
419	C302	5345-225F041	CAP, MINI ELE 2.2 $\mu$ /50V
420	C303	5345-226D041	CAP, MINI ELE 22 $\mu$ /25V
420	C304	5345-226D041	CAP, MINI ELE 22 $\mu$ /25V
421	C305	5345-476D041	CAP, MINI ELE 47 $\mu$ /25V
422	C306	5345-224F0951	CAP, MINI ELE .22 $\mu$ /50V
423	C307	5345-474F0951	CAP, MINI ELE .47 $\mu$ /50V
424	C308	5345-106F041	CAP, MINI ELE 10 $\mu$ /50V
417	C309	5359-4715851	CAP, PPP 470p <b>BK</b>
417B	C309	5359-2715851	CAP, PPP 270p <b>I IB BB</b>
417	C310	5359-4715851	CAP, PPP 470p <b>BK</b>
417B	C310	5359-2715851	CAP, PPP 270p <b>I IB BB</b>
418	C311	5354-473K1HM	CAP, MYL .047 $\mu$
419	C312	5345-225F041	CAP, MINI ELE 2.2 $\mu$ /50V
425	C315	5361-101K918	CAP, CER 100p
055B	C316	5345-226D041	CAP, MINI ELE 22 $\mu$ /25V <b>I IB BB</b>
453	C701	5345-227C041	CAP, MINI ELE 220 $\mu$ /16V
459	C702	5345-224F0951	CAP, MINI ELE .22 $\mu$ /50V
454	C704	5345-684F0951	CAP, MINI ELE .68 $\mu$ /50V
460	C705	5361-223Z921	CAP, CER .022 $\mu$
461	C706	5361-102K918	CAP, CER 1000p
455	C707	5345-476D041	CAP, MINI ELE 47 $\mu$ /25V
458	C710	5345-228A041	CAP, MINI ELE 2200 $\mu$ /6.3V
456	C714	5345-108A041	CAP, MINI ELE 1000 $\mu$ /6.3V
494	C717	5345-105F041	CAP, MINI ELE 1 $\mu$ /50V
495	C718	5345-227D041	CAP, MINI ELE 220 $\mu$ /25V
496	C719	5345-106F041	CAP, MINI ELE 10 $\mu$ /50V
809	C801	5345-106F041	CAP, MINI ELE 10 $\mu$ /50V
809	C802	5345-106F041	CAP, MINI ELE 10 $\mu$ /50V
810	C803	5345-104F041	CAP, MINI ELE .1 $\mu$ /50V
808	C804	5354-104593	CAP, MYL .1 $\mu$
808	C805	5354-104593	CAP, MYL .1 $\mu$
808	C806	5354-104593	CAP, MYL .1 $\mu$
809	C807	5345-106F041	CAP, MINI ELE 10 $\mu$ /50V
809	C808	5345-106F041	CAP, MINI ELE 10 $\mu$ /50V
823	C810	5345-474F041	CAP, MINI ELE .47 $\mu$ /50V
050B	C819	5359-2215851	CAP, PPP 220p <b>I IB BB</b>
050B	C820	5359-2215851	CAP, PPP 220p <b>I IB BB</b>
057B	C827	5354-103K1HM	CAP, MYL .01 $\mu$ <b>I IB BB</b>

Ser. No.	Ref. No.	Part No.	Description
<b>RESISTORS</b>			
524	$\Delta$ R51	5102-2R25116	RES, FUSE 2.2
517	R52	5135-272522	RES, CBN 1/2P 27K
518	R53	5135-101522	RES, CBN 1/2P 100
518	R54	5135-101522	RES, CBN 1/2P 100
519	R55	5135-331522	RES, CBN 1/2P 330
520	$\Delta$ R56	5102-2205116	RES, FUSE 22
523	R57	5171-221593	RES, MTL 1P 220
521	R58	5135-102522	RES, CBN 1/2P 1K
522	R59	5232-102J16P	RES, CBN 1/6P 1K
369	R201	5232-331J16P	RES, CBN 1/6P 330
370	R202	5232-391J16P	RES, CBN 1/6P 390
374	R203	5232-102J16P	RES, CBN 1/6P 1K
371	R204	5232-154J16P	RES, CBN 1/6P 150K
372	R205	5232-100J16P	RES, CBN 1/6P 10
373	R206	5232-101J16P	RES, CBN 1/6P 100
370	R207	5232-391J16P	RES, CBN 1/6P 390
370	R208	5232-391J16P	RES, CBN 1/6P 390
374	R209	5232-102J16P	RES, CBN 1/6P 1K
371	R210	5232-154J16P	RES, CBN 1/6P 150K
372	R211	5232-100J16P	RES, CBN 1/6P 10
373	R212	5232-101J16P	RES, CBN 1/6P 100
370	R213	5232-391J16P	RES, CBN 1/6P 390
375	R214	5232-103J16P	RES, CBN 1/6P 10K
376	R215	5232-332J16P	RES, CBN 1/6P 3.3K
377	R216	5232-472J16P	RES, CBN 1/6P 4.7K
378	R217	5232-153J16P	RES, CBN 1/6P 15K <b>BK</b>
378B	R217	5232-273J16P	RES, CBN 1/6P 27K <b>I IB BB</b>
377	R218	5232-472J16P	RES, CBN 1/6P 4.7K
368	R219	5232-104J16P	RES, CBN 1/6P 100K
366	R220	5232-154J16P	RES, CBN 1/6P 150K
374	R221	5232-102J16P	RES, CBN 1/6P 1K
377	R222	5232-472J16P	RES, CBN 1/6P 4.7K
367	R223	5232-104J16P	RES, CBN 1/6P 100K
377	R224	5232-472J16P	RES, CBN 1/6P 4.7K <b>BK</b>
054B	R224	5232-222J16P	RES, CBN 1/6P 22K <b>I IB BB</b>
397	R251	5135-334522	RES, CBN 1/2P 330K
398	R252	5135-104522	RES, CBN 1/2P 100K
401	R253	5232-103J16P	RES, CBN 1/6P 10K
399	R254	5135-102522	RES, CBN 1/2P 1K
401	R255	5232-103J16P	RES, CBN 1/6P 10K
402	R256	5232-223J16P	RES, CBN 1/6P 22K
403	R257	5232-820J16P	RES, CBN 1/6P 82
405	R258	5232-183J16P	RES, CBN 1/6P 18K <b>BK</b>
405B	R258	5232-223J16P	RES, CBN 1/6P 22K <b>I IB BB</b>
404	R259	5135-152522	RES, CBN 1/2P 1.5K
406	R260	5135-103522	RES, CBN 1/2P 10K
407	R261	5232-471J16P	RES, CBN 1/6P 470
435	R301	5135-105522	RES, CBN 1/2P 1M
435	R302	5135-105522	RES, CBN 1/2P 1M
427	R303	5232-104J16P	RES, CBN 1/6P 100K <b>BK</b>
427B	R303	5232-274J16P	RES, CBN 1/6P 270K <b>I IB BB</b>
427	R304	5232-104J16P	RES, CBN 1/6P 100K <b>BK</b>
427B	R304	5232-274J16P	RES, CBN 1/6P 270K <b>I IB BB</b>
428	R305	5232-753J16P	RES, CBN 1/6P 75K
428	R306	5232-753J16P	RES, CBN 1/6P 75K
429	R307	5232-164J16P	RES, CBN 1/6P 160K <b>BK</b>
429B	R307	5232-184J16P	RES, CBN 1/6P 180K <b>I IB BB</b>
429	R308	5232-164J16P	RES, CBN 1/6P 160K <b>BK</b>
429B	R308	5232-184J16P	RES, CBN 1/6P 180K <b>I IB BB</b>
430	R309	5232-182J16P	RES, CBN 1/6P 1.8K
430	R310	5232-182J16P	RES, CBN 1/6P 1.8K
431	R311	5232-103J16P	RES, CBN 1/6P 10K
431	R312	5232-103J16P	RES, CBN 1/6P 10K
431	R313	5232-103J16P	RES, CBN 1/6P 10K
431	R314	5232-103J16P	RES, CBN 1/6P 10K
432	R315	5232-472J16P	RES, CBN 1/6P 4.7K
431	R316	5232-103J16P	RES, CBN 1/6P 10K
465	R701	5232-103J16P	RES, CBN 1/6P 10K
465	R702	5232-103J16P	RES, CBN 1/6P 10K
466	R703	5232-473J16P	RES, CBN 1/6P 47K
467	R704	5232-222J16P	RES, CBN 1/6P 22K
471	R705	5135-102522	RES, CBN 1/2P 1K
471	R706	5135-102522	RES, CBN 1/2P 1K
465	R707	5232-103J16P	RES, CBN 1/6P 10K

Ser. No.	Ref. No.	Part No.	Description
468	R708	5232-102J16P	RES, CBN 1/6P 1K
470	R709	5232-104J16P	RES, CBN 1/6P 100K
467	R710	5232-222J16P	RES, CBN 1/6P 2.2K
467	R711	5232-222J16P	RES, CBN 1/6P 2.2K
467	R712	5232-222J16P	RES, CBN 1/6P 2.2K
467	R713	5232-222J16P	RES, CBN 1/6P 2.2K
469	R714	5232-472J16P	RES, CBN 1/6P 4.7K
472	R715	5232-273J16P	RES, CBN 1/6P 27K
473	R716	5135-103522	RES, CBN 1/2P 10K
473	R717	5135-103522	RES, CBN 1/2P 10K
465	R718	5232-103J16P	RES, CBN 1/6P 10K
471	R720	5135-102522	RES, CBN 1/2P 1K
473	R726	5135-103522	RES, CBN 1/2P 10K
477	R727	5232-473J16P	RES, CBN 1/6P 47K
476	R728	5135-223522	RES, CBN 1/2P 22K
473	R729	5135-103522	RES, CBN 1/2P 10K
464	R730	5232-223J16P	RES, CBN 1/6P 22K
465	R732	5232-103J16P	RES, CBN 1/6P 10K
478	R733	5135-104522	RES, CBN 1/2P 100K
465	R734	5232-103J16P	RES, CBN 1/6P 10K
470	R739	5232-104J16P	RES, CBN 1/6P 100K
470	R740	5232-104J16P	RES, CBN 1/6P 100K
470	R744	5232-104J16P	RES, CBN 1/6P 100K
472	R745	5232-273J16P	RES, CBN 1/6P 27K
483	R761	5135-101522	RES, CBN 1/2P 100
484	R762	5232-332J16P	RES, CBN 1/6P 3.3K
465	R764	5232-103J16P	RES, CBN 1/6P 10K
482	R766	5135-332522	RES, CBN 1/2P 3.3K
474	R768	5135-472522	RES, CBN 1/2P 4.7K
482	R769	5135-332522	RES, CBN 1/2P 3.3K
819	R831	5232-224J16P	RES, CBN 1/6P 220K
815	R832	5232-104J16P	RES, CBN 1/6P 100K
821	R833	5232-274J16P	RES, CBN 1/6P 270K
819	R834	5232-224J16P	RES, CBN 1/6P 220K
818	R835	5232-223J16P	RES, CBN 1/6P 22K
818	R836	5232-223J16P	RES, CBN 1/6P 22K
820	R841	5135-472522	RES, CBN 1/2P 4.7K
815	R842	5232-104J16P	RES, CBN 1/6P 100K
817	R843	5232-473J16P	RES, CBN 1/6P 47K
817	R844	5232-473J16P	RES, CBN 1/6P 47K
812	R845	5135-104522	RES, CBN 1/2P 100K
815	R846	5232-104J16P	RES, CBN 1/6P 100K
817	R847	5232-473J16P	RES, CBN 1/6P 47K
813	R848	5135-105522	RES, CBN 1/2P 1M
812	R849	5135-104522	RES, CBN 1/2P 100K
816	R850	5232-105J16P	RES, CBN 1/6P 1M
816	R851	5135-104522	RES, CBN 1/2P 100K
816	R852	5232-105J16P	RES, CBN 1/6P 1M
814	R853	5135-104522	RES, CBN 1/2P 100K
819	R854	5232-224J16P	RES, CBN 1/6P 220K
819	R855	5232-224J16P	RES, CBN 1/6P 220K
819	R856	5232-224J16P	RES, CBN 1/6P 220K
807	R866	5232-100J16P	RES, CBN 1/6P 10

**INTEGRATED CIRCUITS**

351	IC201	5653-LA1266	IC, LINEAR
411	IC301	5653-LA3410	IC, LINEAR
442	IC702	5654-TC9227P	IC, DIGITAL
801	IC802	5654-LC7818	IC, DIGITAL
802	IC803	5654-TC4011BP	IC, DIGITAL
802	IC804	5654-TC4011BP	IC, DIGITAL

**TRANSISTORS**

501	Q51	5612-1375	XISTOR, PNP A
502	Q52	5613-3311A (R)	XISTOR, NPN R
503	Q53	5613-UN4212	XISTOR, NPN R
504	Q54	5612-647 (C)	XISTOR, PNP A
502	Q55	5613-3311A (R)	XISTOR, NPN R
352	Q201	5613-2058 (N) OR (P)	XISTOR, NPN R
352	Q202	5613-2058 (N) OR (P)	XISTOR, NPN R
412	Q301	5614-1450 (T)	XISTOR, NPN A
412	Q302	5614-1450 (T)	XISTOR, NPN A
413	Q303	5616-2SK364BL	FET, N-CH
413	Q304	5616-2SK364BL	FET, N-CH
443	Q701	5613-2240 (BL)	XISTOR, NPN R
444	Q702	5613-3311A (R)	XISTOR, NPN R

Ser. No.	Ref. No.	Part No.	Description
446	Q704	5611-UN4112	XISTOR, PNP R
446	Q705	5611-UN4112	XISTOR, PNP R
445	Q706	5613-UN4212	XISTOR, NPN R
444	Q707	5613-3311A (R)	XISTOR, NPN R
446	Q708	5611-UN4112	XISTOR, PNP R
444	Q710	5613-3311A (R)	XISTOR, NPN R
446	Q711	5611-UN4112	XISTOR, PNP R
448	Q712	5611-1309A (R)	XISTOR, NPN R
445	Q713	5613-UN4212	XISTOR, NPN R
498	Q714	5613-UN4213	XISTOR, NPN R
445	Q715	5613-UN4212	XISTOR, NPN R
445	Q716	5613-UN4212	XISTOR, NPN R
445	Q720	5613-UN4212	XISTOR, NPN R
822	Q810	5611-1309A (R)	XISTOR, PNP R
803	Q811	5616-2SK364BL	FET, N-CH
803	Q812	5616-2SK364BL	FET, N-CH
803	Q813	5616-2SK364BL	FET, N-CH
803	Q814	5616-2SK364BL	FET, N-CH
803	Q815	5616-2SK364BL	FET, N-CH
803	Q816	5616-2SK364BL	FET, N-CH
804	Q817	5611-UN4112	XISTOR, PNP R
804	Q818	5611-UN4112	XISTOR, PNP R
804	Q819	5611-UN4112	XISTOR, PNP R

**DIODES**

506	D52	5635-HZ12C2L	DIODE, ZENER
507	D53	5635-HZ6B1L	DIODE, ZENER
508	D54	5635-HZ5B2	DIODE, ZENER
509	D55	5635-HZ24-1L	DIODE, ZENER
416	D101	5631-1SS133	DIODE, DET
416	D102	5631-1SS133	DIODE, DET
416	D301	5631-1SS133	DIODE, DET
416	D302	5631-1SS133	DIODE, DET
450	D712	5631-1SS133	DIODE, DET
450	D714	5631-1SS133	DIODE, DET
450	D715	5631-1SS133	DIODE, DET
450	D716	5631-1SS133	DIODE, DET
452	D717	5631-1S2473	DIODE, DET
450	D718	5631-1SS133	DIODE, DET
452	D720	5631-1S2473	DIODE, DET
856	D722	5631-1S2473	DIODE, DET
856	D724	5631-1S2473	DIODE, DET
856	D726	5631-1S2473	DIODE, DET
805	D728	5631-1S2473	DIODE, DET
450	D729	5631-1SS133	DIODE, DET
856	D730	5631-1S2473	DIODE, DET
452	D731	5631-1S2473	DIODE, DET
805	D801	5631-1S2473	DIODE, DET
805	D802	5631-1S2473	DIODE, DET
806	D807	5631-1SS133	DIODE, DET
805	D809	5631-1S2473	DIODE, DET
806	D811	5631-1SS133	DIODE, DET
806	D812	5631-1SS133	DIODE, DET
806	D813	5631-1SS133	DIODE, DET
806	D815	5631-1SS133	DIODE, DET
806	D816	5631-1SS133	DIODE, DET
806	D817	5631-1SS133	DIODE, DET
806	D818	5631-1SS133	DIODE, DET
806	D819	5631-1SS133	DIODE, DET
806	D820	5631-1SS133	DIODE, DET

**COIL**

358	L201	5995-2R2J69	COIL W/CORE
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**TRANSFORMERS**

357	T201	5572-10201	DISCRI 7
384	T251	5552-00712	IFT, AM 7

**CONTROLS**

354	VR201	5101-50301934	RES, SEMI FIX 50K
415	VR301	5101-10401934	RES, SEMI FIX 100K

Ser. No.	Ref. No.	Part No.	Description	Ser. No.	Ref. No.	Part No.	Description
<b>MISCELLANEOUS</b>							
383	CB251	6111-02401	RF BLOCK	593B	R606	5135-102522	RES, CBN 1/2P 1K I IB BB
355	CF201	5671-7120A	FILTER, CER S BK	594	R607	5135-122522	RES, CBN 1/2P 1.2K
355B	CF201	5671-7141A	FILTER, CER S I IB BB	594	R608	5135-122522	RES, CBN 1/2P 1.2K
355	CF202	5671-7120A	FILTER, CER S BK	595	R609	5135-220522	RES, CBN 1/2P 22
356B	CF202	5671-7142A	FILTER, CER S I IB BB	595	R610	5135-220522	RES, CBN 1/2P 22
356	CF203	5671-012A	FILTER, CER S BK	594	R611	5135-122522	RES, CBN 1/2P 1.2K
356B	CF203	5671-7142A	FILTER, CER S I IB BB	594	R612	5135-122522	RES, CBN 1/2P 1.2K
386	CF251	5671-7137C	FILTER, CER S	596	R613	5135-473522	RES, CBN 1/2P 47K
385	CF252	5671-0159	FILTER, CER S	596	R614	5135-473522	RES, CBN 1/2P 47K
941	CN12	4443-060185	CONNECTOR	597	R615	5135-820522	RES, CBN 1/2P 82
939	CN102	4443-0201140	CONNECTOR	597	R616	5135-820522	RES, CBN 1/2P 82
946	CN105	4443-0301140	CONNECTOR	597	R617	5135-820522	RES, CBN 1/2P 82
940	CN501	4443-030185	CONNECTOR	597	R618	5135-820522	RES, CBN 1/2P 82
539	CN101A	4443-05501019	CONNECTOR	059B	R619	5232-102J16P	RES, CBN 1/6P 1K I IB BB
825	CN601B	4443-01801012	CONNECTOR	059B	R620	5232-102J16P	RES, CBN 1/6P 1K I IB BB
826	CN602B	4443-01801007	CONNECTOR	599	R621	5135-821522	RES, CBN 1/2P 820
827	CN802B	4443-01801016	CONNECTOR	599	R622	5135-821522	RES, CBN 1/2P 820
867	CN804B	4443-05501013	CONNECTOR	600	R623	5135-393522	RES, CBN 1/2P 39K
414	CX301	5693-CSB456F1	OSC, CER	600	R624	5135-393522	RES, CBN 1/2P 39K
935	CW106	4163-0150039	CONNECTOR W/W	601	R625	5135-564522	RES, CBN 1/2P 560K
936	CW107	4163-0145039	CONNECTOR W/W	601	R626	5135-564522	RES, CBN 1/2P 560K
936	CW108	4163-0145039	CONNECTOR W/W	602	R627	5135-334522	RES, CBN 1/2P 330K
321	△FE101	6114-00701	FM TUNER BK	602	R628	5135-334522	RES, CBN 1/2P 330K
321B	△FE101	6114-00601	FM TUNER I IB BB	603	R629	5135-102522	RES, CBN 1/2P 1K
959	JL103	4242-R0103181	JUMPER LEAD	603	R630	5135-102522	RES, CBN 1/2P 1K
545	JL109	4132-R0100101	CORD, 2C	604	R631	5135-333522	RES, CBN 1/2P 33K
546	JL110	4132-R0100121	CORD, 2C	604	R632	5135-333522	RES, CBN 1/2P 33K
330	LUG1	4211-4	LUG	603	R633	5135-102522	RES, CBN 1/2P 1K
052B	LPF101	5214-78	LC COMPOSITE I IB BB	603	R634	5135-102522	RES, CBN 1/2P 1K
056B	LPF301	5214-86	LC COMPOSITE I IB BB	605	R635	5135-222522	RES, CBN 1/2P 2.2K
829	RC801	5212-223J0503	R COMPOSITE	605	R636	5135-222522	RES, CBN 1/2P 2.2K
547	△TM101	4214-164	TERMINAL	606	R637	5135-472522	RES, CBN 1/2P 4.7K
051B	TM102	4214-167	TERMINAL I IB BB	606	R638	5135-472522	RES, CBN 1/2P 4.7K
541	TP1	4214-132	TERMINAL	607	R639	5135-220522	RES, CBN 1/2P 22
541	TP2	4214-132	TERMINAL	607	R640	5135-220522	RES, CBN 1/2P 22

**PCB-2 EQUALIZER P.C. BOARD**

**CAPACITORS**

576	C601	5345-106C0951	CAP, MINI ELE 10 μ/16V
576	C602	5345-106C0951	CAP, MINI ELE 10 μ/16V
582	C603	5359-1215851	CAP, PPP 120p
582	C604	5359-1215851	CAP, PPP 120p
575	C605	5345-227A0951	CAP, MINI ELE 220 μ/6.3V
575	C606	5345-227A0951	CAP, MINI ELE 220 μ/6.3V
583	C607	5359-5625851	CAP, PPP 5600p
583	C608	5359-5625851	CAP, PPP 5600p
584	C609	5359-2025851	CAP, PPP 2000p
584	C610	5359-2025851	CAP, PPP 2000p
576	C611	5345-106C0951	CAP, MINI ELE 10 μ/16V
576	C612	5345-106C0951	CAP, MINI ELE 10 μ/16V
577	C613	5345-227D041	CAP, MINI ELE 220 μ/25V
577	C614	5345-227D041	CAP, MINI ELE 220 μ/25V
578	C615	5345-107D041	CAP, MINI ELE 100 μ/25V
578	C616	5345-107D041	CAP, MINI ELE 100 μ/25V
588	C617	5353-040934	CAP, MCA 4p BK
588B	C617	5353-100934	CAP, MCA 10p I IB BB
588	C618	5353-040934	CAP, MCA 4p BK
588B	C618	5353-100934	CAP, MCA 10p J IB BB
585	C619	5359-1825851	CAP, PPP 1800p BK
585	C619	5359-1225851	CAP, PPP 1200p I IB BB
585	C620	5359-1825851	CAP, PPP 1800p BK
585B	C620	5359-1225851	CAP, PPP 1200p I IB BB
060B	C621	5359-2215851	CAP, PPP 220p I IB BB
060B	C622	5359-2215851	CAP, PPP 220p I IB BB

**RESISTORS**

591	R601	5135-823522	RES, CBN 1/2P 82K
591	R602	5135-823522	RES, CBN 1/2P 82K
592	R603	5135-124522	RES, CBN 1/2P 120K
592	R604	5135-124522	RES, CBN 1/2P 120K
593	R605	5135-221522	RES, CBN 1/2P 220 BK
593B	R605	5135-102522	RES, CBN 1/2P 1K I IB BB
593	R606	5135-221522	RES, CBN 1/2P 220 BK

**TRANSISTORS**

561	Q601	5613-2320L (F)	XISTOR, NPN R
561	Q602	5613-2320L (F)	XISTOR, NPN R
563	Q603	5611-999L (F)	XISTOR, PNP R
563	Q604	5611-999L (F)	XISTOR, PNP R
564	Q605	5611-999 (F)	XISTOR, PNP R
564	Q606	5611-999 (F)	XISTOR, PNP R
562	Q607	5613-2320 (F)	XISTOR, NPN R
562	Q608	5613-2320 (F)	XISTOR, NPN R
562	Q609	5613-2320 (F)	XISTOR, NPN R
562	Q610	5613-2320 (F)	XISTOR, NPN R
562	Q611	5613-2320 (F)	XISTOR, NPN R
562	Q612	5613-2320 (F)	XISTOR, NPN R
565	Q613	5612-647 (C)	XISTOR, PNP A
566	Q614	5614-667 (C)	XISTOR, NPN A

**DIODES**

569	D601	5635-HZ15-2L	DIODE, ZENER
569	D602	5635-HZ15-2L	DIODE, ZENER
570	D603	5631-1SS133	DIODE, DET
570	D604	5631-1SS133	DIODE, DET

**MISCELLANEOUS**













938	CN402	4443-0201141	CONNECTOR
613	CN601A	4443-01701012	CONNECTOR
614	CN602A	4443-01701007	CONNECTOR
912	△J2	4484-46	PIN JACK, 4P
914	△J3	4482-0133	PIN JACK, 2P

Ser. No.	Ref. No.	Part No.	Description
<b>PCB-3 MONITOR P.C. BOARD</b>			
<b>CAPACITORS</b>			
838	C811	5354-104593	CAP, MYL .1 $\mu$
838	C813	5354-104593	CAP, MYL .1 $\mu$
049B	C817	5359-2215851	CAP, PPP 220p
049B	C818	5359-2215851	CAP, PPP 220p
<b>RESISTORS</b>			
845B	R859	5232-102J16P	RES, CBN 1/6P 1K
845B	R860	5232-102J16P	RES, CBN 1/6P 1K
845B	R869	5232-102J16P	RES, CBN 1/6P 1K
845B	R870	5232-102J16P	RES, CBN 1/6P 1K
842	R878	5135-105522	RES, CBN 1/2P 1M
850	R882	5232-105J16P	RES, CBN 1/6P 1M
847	R883	5232-104J16P	RES, CBN 1/6P 100K
845	R887	5232-102J16P	RES, CBN 1/6P 1K
845	R888	5232-102J16P	RES, CBN 1/6P 1K
845	R889	5232-102J16P	RES, CBN 1/6P 1K
845	R890	5232-102J16P	RES, CBN 1/6P 1K
<b>TRANSISTORS</b>			
833	Q821	5616-2SK364BL	FET, N-CH
833	Q822	5616-2SK364BL	FET, N-CH
833	Q825	5616-2SK364BL	FET, N-CH
833	Q826	5616-2SK364BL	FET, N-CH
834	Q830	5611-UN4112	XISTOR, PNP R
<b>DIODES</b>			
835	D861	5631-1S2473	DIODE, DET
835	D862	5631-1S2473	DIODE, DET
835	D865	5631-1S2473	DIODE, DET
835	D866	5631-1S2473	DIODE, DET
836	D883	5631-1SS133	DIODE, DET
836	D884	5631-1SS133	DIODE, DET
<b>MISCELLANEOUS</b>			
849	CN802A	4443-01701016	CONNECTOR
913	$\Delta$ J4	4484-46	PIN JACK, 4P
913	$\Delta$ J5	4484-46	PIN JACK, 4P

Ser. No.	Ref. No.	Part No.	Description
<b>PCB-4 SUB-WOOFER P.C. BOARD</b>			
<b>CAPACITORS</b>			
058B	C825	5359-2215851	CAP, PPP 220p
058B	C826	5359-2215851	CAP, PPP 220p
<b>RESISTORS</b>			
479	R751	5135-470522	RES, CBN 1/2P 47
480	R752	5135-473522	RES, CBN 1/2P 47K
481	R753	5135-271522	RES, CBN 1/2P 270
486	R771	5135-102522	RES, CBN 1/2P 1K
<b>TRANSISTOR</b>			
447	Q751	5611-UN411L	XISTOR, PNP R
<b>MISCELLANEOUS</b>			
945	CN104	4443-030185	CONNECTOR
551	J101	4451-00184	JACK, 1P
551	J102	4451-00184	JACK, 1P
552	$\Delta$ J103	4489-00705002	PIN JACK, MLT
556	PH701	5624-0N3161 (R)	PHOTO COUPLER

Ser. No.	Ref. No.	Part No.	Description
<b>PCB-5 MAIN P.C. BOARD</b>			
<b>CAPACITORS</b>			
766	C3	5362-103048	CAP, CER .01 $\mu$
766	C4	5362-103048	CAP, CER .01 $\mu$
765	C5	5341-478W0955	CAP, ELE 4700 $\mu$ /42V
765	C6	5341-478W0955	CAP, ELE 4700 $\mu$ /42V
748	C21	5345-106F041	CAP, MINI ELE 10 $\mu$ /50V
748	C22	5345-106F041	CAP, MINI ELE 10 $\mu$ /50V
749	C23	5345-107B041	CAP, MINI ELE 100 $\mu$ /10V
750	C24	5345-105F041	CAP, MINI ELE 1 $\mu$ /50V
751	C25	5354-683J1HM	CAP, MYL .068 $\mu$
751	C26	5354-683J1HM	CAP, MYL .068 $\mu$
746	C27	5345-105F0951	CAP, MINI ELE 1 $\mu$ /50V

Ser. No.	Ref. No.	Part No.	Description
696	C401	5345-476B0951	CAP, MINI ELE 47 $\mu$ /10V
696	C402	5345-476B0951	CAP, MINI ELE 47 $\mu$ /10V
699	C403	5359-6805851	CAP, PPP 68p
699	C404	5359-6805851	CAP, PPP 68p
698	C405	5345-106C0951	CAP, MINI ELE 10 $\mu$ /16V
698	C406	5345-106C0951	CAP, MINI ELE 10 $\mu$ /16V
700	C407	5353-050934	CAP, MCA 5p
700	C408	5353-050934	CAP, MCA 5p
697	C409	5345-477A0952	CAP, MINI ELE 470 $\mu$ /6.3V
697	C410	5345-477A0952	CAP, MINI ELE 470 $\mu$ /6.3V
703	C411	5359-1015851	CAP, PPP 100p
703	C412	5359-1015851	CAP, PPP 100p
704	C413	5345-476F041	CAP, MINI ELE 47 $\mu$ /50V
704	C414	5345-476F041	CAP, MINI ELE 47 $\mu$ /50V
704	C415	5345-476F041	CAP, MINI ELE 47 $\mu$ /50V
704	C416	5345-476F041	CAP, MINI ELE 47 $\mu$ /50V
701	C417	5354-104593	CAP, MYL .1 $\mu$
701	C418	5354-104593	CAP, MYL .1 $\mu$
701	C419	5354-104593	CAP, MYL .1 $\mu$
701	C420	5354-104593	CAP, MYL .1 $\mu$
705	C421	5345-475D0951	CAP, MINI ELE 4.7 $\mu$ /25V
705	C422	5345-475D0951	CAP, MINI ELE 4.7 $\mu$ /25V
043B	C438	5354-103K1HM	CAP, MYL .01 $\mu$
<b>RESISTORS</b>			
753	R21	5135-471522	RES, CBN 1/2P 470
754	R22	5135-392522	RES, CBN 1/2P 3.9K
755	R23	5135-332522	RES, CBN 1/2P 3.3K
756	R24	5135-472522	RES, CBN 1/2P 4.7K
757	R25	5135-104522	RES, CBN 1/2P 100K
758	R26	5135-683522	RES, CBN 1/2P 68K
759	R27	5135-333522	RES, CBN 1/2P 33K
762	R33	5135-681522	RES, CBN 1/2P 680
762	R34	5135-681522	RES, CBN 1/2P 680
763	R35	5135-821522	RES, CBN 1/2P 820
763	R36	5135-821522	RES, CBN 1/2P 820
752	R37	5135-331522	RES, CBN 1/2P 330
752	R38	5135-331522	RES, CBN 1/2P 330
756	R39	5135-472522	RES, CBN 1/2P 4.7K
756	R40	5135-472522	RES, CBN 1/2P 4.7K
757	R41	5135-104522	RES, CBN 1/2P 100K
758	R42	5135-683522	RES, CBN 1/2P 68K
756	R43	5135-472522	RES, CBN 1/2P 4.7K
756	R44	5135-472522	RES, CBN 1/2P 4.7K
767	R45	5135-222522	RES, CBN 1/2P 2.2K
711	R401	5135-333522	RES, CBN 1/2P 33K
711	R402	5135-333522	RES, CBN 1/2P 33K
712	R403	5135-331522	RES, CBN 1/2P 330
712B	R403	5135-102522	RES, CBN 1/2P 1K
712	R404	5135-331522	RES, CBN 1/2P 330
712B	R404	5135-102522	RES, CBN 1/2P 1K
713	R405	5135-561522	RES, CBN 1/2P 560
713	R406	5135-561522	RES, CBN 1/2P 560
713	R407	5135-561522	RES, CBN 1/2P 560
713	R408	5135-561522	RES, CBN 1/2P 560
714	R409	5135-152522	RES, CBN 1/2P 1.5K
714	R410	5135-152522	RES, CBN 1/2P 1.5K
714	R411	5135-152522	RES, CBN 1/2P 1.5K
714	R412	5135-152522	RES, CBN 1/2P 1.5K
715	R413	5135-182522	RES, CBN 1/2P 1.8K
715	R414	5135-182522	RES, CBN 1/2P 1.8K
716	R415	5135-561522	RES, CBN 1/2P 560
716	R416	5135-561522	RES, CBN 1/2P 560
716	R417	5135-561522	RES, CBN 1/2P 560
716	R418	5135-561522	RES, CBN 1/2P 560
716	R419	5135-561522	RES, CBN 1/2P 560
716	R420	5135-561522	RES, CBN 1/2P 560
716	R421	5135-561522	RES, CBN 1/2P 560
716	R422	5135-561522	RES, CBN 1/2P 560
716	R423	5135-561522	RES, CBN 1/2P 560
716	R424	5135-561522	RES, CBN 1/2P 560
717	$\Delta$ R425	5102-5605116	RES, FUSE 56
717	$\Delta$ R426	5102-5605116	RES, FUSE 56
717	$\Delta$ R427	5102-5605116	RES, FUSE 56
717	$\Delta$ R428	5102-5605116	RES, FUSE 56

Ser. No.	Ref. No.	Part No.	Description
718	R429	5135-223522	RES, CBN 1/2P 22K
718	R430	5135-223522	RES, CBN 1/2P 22K
718	R431	5135-223522	RES, CBN 1/2P 22K
718	R432	5135-223522	RES, CBN 1/2P 22K
720	R433	5135-152522	RES, CBN 1/2P 1.5K
720	R434	5135-152522	RES, CBN 1/2P 1.5K
719	R435	5135-271522	RES, CBN 1/2P 270
719	R436	5135-271522	RES, CBN 1/2P 270
721	△R437	5102-8205116	RES, FUSE 82
721	△R438	5102-8205116	RES, FUSE 82
721	△R439	5102-8205116	RES, FUSE 82
721	△R440	5102-8205116	RES, FUSE 82
722	R441	5135-820522	RES, CBN 1/2P 82
722	R442	5135-820522	RES, CBN 1/2P 82
730	R445	5275-S040JR27	RES, CEM 5P .27
730	R446	5275-S040JR27	RES, CEM 5P .27
730	R447	5275-S040JR27	RES, CEM 5P .27
730	R448	5275-S040JR27	RES, CEM 5P .27
726	R449	5135-100522	RES, CBN 1/2P 10
726	R450	5135-100522	RES, CBN 1/2P 10
731	R451	5171-100571	RES, MTL 1P 10
731	R452	5171-100571	RES, MTL 1P 10
724	R455	5135-271522	RES, CBN 1/2P 270
724	R456	5135-271522	RES, CBN 1/2P 270
725	R457	5135-103522	RES, CBN 1/2P 10K
725	R458	5135-103522	RES, CBN 1/2P 10K
723	R459	5135-333522	RES, CBN 1/2P 33K
723	R460	5135-333522	RES, CBN 1/2P 33K
723	R465	5135-333522	RES, CBN 1/2P 33K
723	R466	5135-333522	RES, CBN 1/2P 33K
068B	△R467	5102-4R75713	RES, FUSE 4.7   
068B	△R468	5102-4R75713	RES, FUSE 4.7   
068B	△R469	5102-4R75713	RES, FUSE 4.7   
068B	△R470	5102-4R75713	RES, FUSE 4.7   

**TRANSISTORS**

741	Q21	5611-1309A(R)	XISTOR, PNP R
742	Q22	5613-3311A (R)	XISTOR, NPN R
743	Q23	5613-2240 (BL)	XISTOR, NPN R
744	Q24	5611-970 (BL)	XISTOR, PNP R
743	Q27	5613-2240 (BL)	XISTOR, NPN R
743	Q28	5613-2240 (BL)	XISTOR, NPN R
744	Q29	5611-970 (BL)	XISTOR, PNP R
683	Q401	5611-970 (BL)	XISTOR, PNP R
683	Q402	5611-970 (BL)	XISTOR, PNP R
683	Q403	5611-970 (BL)	XISTOR, PNP R
683	Q404	5611-970 (BL)	XISTOR, PNP R
681	Q405	5613-2240 (BL)	XISTOR, NPN R
681	Q406	5613-2240 (BL)	XISTOR, NPN R
681	Q407	5613-2240 (BL)	XISTOR, NPN R
681	Q408	5613-2240 (BL)	XISTOR, NPN R
686	Q409	5612-646A (C)	XISTOR, PNP A
686	Q410	5612-646A (C)	XISTOR, PNP A
685	Q411	5614-666A (C)	XISTOR, NPN A
685	Q412	5614-666A (C)	XISTOR, NPN A
687	Q413	5613-945 (K)	XISTOR, NPN R
687	Q414	5613-945 (K)	XISTOR, NPN R
688	Q415	5614-667A (C)	XISTOR, NPN A
688	Q416	5614-667A (C)	XISTOR, NPN A
689	Q417	5612-647A (C)	XISTOR, PNP A
689	Q418	5612-647A (C)	XISTOR, PNP A
690	Q419	5613-3180 (O)	XISTOR, NPN R
690	Q420	5613-3180 (O)	XISTOR, NPN R
692	Q421	5611-1263 (O)	XISTOR, PNP R
692	Q422	5611-1263 (O)	XISTOR, PNP R
684	Q423	5611-999 (F)	XISTOR, PNP R
684	Q424	5611-999 (F)	XISTOR, PNP R
684	Q425	5611-999 (F)	XISTOR, PNP R
684	Q426	5611-999 (F)	XISTOR, PNP R

**DIODES**

764	D1	5685-RBV602	SILICON, BRIG
745	D21	5636-1S2471	DIODE, SWITCH
747	D22	5635-HZ6B1L	DIODE, ZENER
694	D401	5631-1S2473	DIODE, DET
694	D402	5631-1S2473	DIODE, DET

Ser. No.	Ref. No.	Part No.	Description
<b>COILS</b>			
707	L401	5991-7165	SPRING COIL
707	L402	5991-7165	SPRING COIL

**CONTROLS**










729	VR401	5101-50101930	RES, SEMI FIX 500
729	VR402	5101-50101930	RES, SEMI FIX 500

**MISCELLANEOUS**

921	CW401	4163-S0204351	CONNECTOR W/W
923	CW403	4163-0135027	CONNECTOR W/W
924	CW404	4163-0135025	CONNECTOR W/W
929	CW410	4163-0125024	CONNECTOR W/W
925	CW413	4163-0122024	CONNECTOR W/W
926	CW414	4163-0122026	CONNECTOR W/W
966	JL420	4242-R0103141	JUMPER LEAD
770	TM415	4214-11013	TERMINAL
770	TM415L	4214-11013	TERMINAL
770	TM415R	4214-11013	TERMINAL
769	TP401	4214-132	TERMINAL
769	TP402	4214-132	TERMINAL
769	TP403	4214-132	TERMINAL
769	TP404	4214-132	TERMINAL

**PCB-6 TONE CONTROL P.C. BOARD**

**CAPACITORS**

631	C501	5345-226C0951	CAP, MINI ELE 22 $\mu$ /16V
631	C502	5345-226C0951	CAP, MINI ELE 22 $\mu$ /16V
629	C503	5345-476C0951	CAP, MINI ELE 47 $\mu$ /16V
629	C504	5345-476C0951	CAP, MINI ELE 47 $\mu$ /16V
632	C505	5345-225F0951	CAP, MINI ELE 2.2 $\mu$ /50V
632	C506	5345-225F0951	CAP, MINI ELE 2.2 $\mu$ /50V
636	C507	5354-273J1HM	CAP, MYL .027 $\mu$
636	C508	5354-273J1HM	CAP, MYL .027 $\mu$
635	C509	5354-154593	CAP, MYL .15 $\mu$
635	C510	5354-154593	CAP, MYL .15 $\mu$
638	C511	5354-682J1HM	CAP, MYL 6800p
638	C512	5354-682J1HM	CAP, MYL 6800p
637	C513	5354-393J1HM	CAP, MYL .039 $\mu$
637	C514	5354-393J1HM	CAP, MYL .039 $\mu$
630	C515	5345-226C0951	CAP, MINI ELE 22 $\mu$ /16V
630	C516	5345-226C0951	CAP, MINI ELE 22 $\mu$ /16V
640	C517	5353-020934	CAP, MCA 2p
640	C518	5353-020934	CAP, MCA 2p
041B	C521	5354-103K1HM	CAP, MYL .01 $\mu$   
041B	C522	5354-103K1HM	CAP, MYL .01 $\mu$   
067B	C523	5354-103K1HM	CAP, MYL .01 $\mu$   
643	C563	5359-1015851	CAP, PPP 100p
643	C564	5359-1015851	CAP, PPP 100p
633	C581	5345-337D045	CAP, MINI ELE 330 $\mu$ /25V
633	C582	5345-337D045	CAP, MINI ELE 330 $\mu$ /25V
633	C583	5345-337D045	CAP, MINI ELE 330 $\mu$ /25V
633	C584	5345-337D045	CAP, MINI ELE 330 $\mu$ /25V

**RESISTORS**

651	R501	5135-154522	RES, CBN 1/2P 150K
651	R502	5135-154522	RES, CBN 1/2P 150K
652	R503	5135-102522	RES, CBN 1/2P 1K
652	R504	5135-102522	RES, CBN 1/2P 1K
653	R505	5135-101522	RES, CBN 1/2P 100
653	R506	5135-101522	RES, CBN 1/2P 100
654	R507	5135-820522	RES, CBN 1/2P 82
654	R508	5135-820522	RES, CBN 1/2P 82
655	R509	5135-274522	RES, CBN 1/2P 270K
655	R510	5135-274522	RES, CBN 1/2P 270K
652	R511	5135-102522	RES, CBN 1/2P 1K
652	R512	5135-102522	RES, CBN 1/2P 1K
658	R513	5135-331522	RES, CBN 1/2P 330
658	R514	5135-331522	RES, CBN 1/2P 330
657	R515	5135-222522	RES, CBN 1/2P 2.2K
657	R516	5135-222522	RES, CBN 1/2P 2.2K
658	R517	5135-331522	RES, CBN 1/2P 330
658	R518	5135-331522	RES, CBN 1/2P 330
659	R519	5135-221522	RES, CBN 1/2P 220
659	R520	5135-221522	RES, CBN 1/2P 220

Ser. No.	Ref. No.	Part No.	Description
660	R521	5135-122522	RES, CBN 1/2P 1.2K
660	R522	5135-122522	RES, CBN 1/2P 1.2K
661	R523	5135-331522	RES, CBN 1/2P 330
661	R524	5135-331522	RES, CBN 1/2P 330
656	R525	5135-473522	RES, CBN 1/2P 47K
656	R526	5135-473522	RES, CBN 1/2P 47K
662	R527	5135-272522	RES, CBN 1/2P 2.7K
662	R528	5135-272522	RES, CBN 1/2P 2.7K
663	R529	5135-153522	RES, CBN 1/2P 15K
663	R530	5135-153522	RES, CBN 1/2P 15K
658	R531	5135-331522	RES, CBN 1/2P 330 <b>BK</b>
042B	R531	5135-102522	RES, CBN 1/2P 1K <b>I</b> <b>IB</b> <b>BB</b>
658	R532	5135-331522	RES, CBN 1/2P 330 <b>BK</b>
042B	R532	5135-102522	RES, CBN 1/2P 1K <b>I</b> <b>IB</b> <b>BB</b>
651	R535	5135-154522	RES, CBN 1/2P 150K
651	R536	5135-154522	RES, CBN 1/2P 150K
656	R547	5135-473522	RES, CBN 1/2P 47K
656	R548	5135-473522	RES, CBN 1/2P 47K
666	R561	5135-105522	RES, CBN 1/2P 1M
666	R562	5135-105522	RES, CBN 1/2P 1M
667	R563	5135-331522	RES, CBN 1/2P 330
667	R564	5135-331522	RES, CBN 1/2P 330
736	R565	5135-224522	RES, CBN 1/2P 220K
735	R566	5135-104522	RES, CBN 1/2P 100K
737	R567	5135-223522	RES, CBN 1/2P 22K
738	R568	5135-153522	RES, CBN 1/2P 15K
739	R571	5135-104522	RES, CBN 1/2P 100K
740	R572	5135-100522	RES, CBN 1/2P 10
740	R573	5135-100522	RES, CBN 1/2P 10
665	△R581	5102-1215116	RES, FUSE 120
665	△R582	5102-1215116	RES, FUSE 120
664	R583	5135-562522	RES, CBN 1/2P 5.6K
664	R584	5135-562522	RES, CBN 1/2P 5.6K

**TRANSISTORS**

621	Q501	5613-2320L (F)	XISTOR, NPN R
621	Q502	5613-2320L (F)	XISTOR, NPN R
623	Q503	5611-999 (F)	XISTOR, PNP R
623	Q504	5611-999 (F)	XISTOR, PNP R
622	Q505	5611-999L (F)	XISTOR, PNP R
622	Q506	5611-999L (F)	XISTOR, PNP R
649	Q561	5616-2SK3648L	FET, N-CH
649	Q562	5616-2SK3648L	FET, N-CH
650	Q563	5611-UN4112	XISTOR, PNP R
650	Q564	5611-UN4112	XISTOR, PNP R
625	Q581	5614-667 (C)	XISTOR, NPN A
626	Q582	5612-647 (C)	XISTOR, PNP A

**DIODES**

627	D581	5635-HZ15-2L	DIODE, ZENER
627	D582	5635-HZ15-2L	DIODE, ZENER
628	D583	5631-1S2473	DIODE, DET

**CONTROLS**

900	VR501	5113-S0906503 /502	RES, V CBN 16 50K
894	VR505	5113-S0904104 /506	RES, V CBN 16 100K
897	VR507	5113-S0905503 /508	RES, V CBN 16 50K

**MISCELLANEOUS**

942	CN401	4443-0401141	CONNECTOR
933	CW105	4163-S0203141	CONNECTOR W/W
937	CW109	4163-0115039	CONNECTOR W/W
922	CW402	4163-S0202301	CONNECTOR W/W
951	H415	2240-Z031	HOLDER
951	H416A	2240-Z031	HOLDER
951	H417A	2240-Z031	HOLDER
952	H501	2240-Z031	HOLDER
063B	LUG	4211-4	LUG, W-4 <b>I</b> <b>IB</b> <b>BB</b>
647	TM416	4214-11021	TERMINAL

**PCB-7 VOLUME P.C. BOARD**

**CAPACITORS**

646	C543	5354-823J1HM	CAP, MYL .082 $\mu$
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Ser. No.	Ref. No.	Part No.	Description
646	C544	5354-823J1HM	CAP, MYL .082 $\mu$
<b>RESISTORS</b>			
673	R543	5135-273522	RES, CBN 1/2P 27K
673	R544	5135-273522	RES, CBN 1/2P 27K
674	R545	5135-472522	RES, CBN 1/2P 4.7K
674	R546	5135-472522	RES, CBN 1/2P 4.7K

**CONTROLS**

891	VR503	5113-10419122 /504	RES, V CBN 16 100K
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**MISCELLANEOUS**

953	H416B	2240-Z031	HOLDER
953	H417B	2240-Z031	HOLDER
960	JL419	4242-R0106121	JUMPER LEAD

**PCB-8 PRIMARY P.C. BOARD**

**CAPACITOR**

787	△C1	5352-S010M103	CAP, MTL .01 $\mu$ <b>BK</b>
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**RESISTORS**

788	△R1	5135-335522	RES, CBN 1/2P 3.3M <b>BK</b>
794	R11	5135-103522	RES, CBN 1/2P 10K
795	R12	5135-332522	RES, CBN 1/2P 3.3K
798	R17	5135-221522	RES, CBN 1/2P 220 <b>BK</b>
798B	R17	5135-222522	RES, CBN 1/2P 2.2K <b>I</b> <b>IB</b> <b>BB</b>
799	R18	5135-472522	RES, CBN 1/2P 4.7K

**TRANSISTORS**

791	Q11	5614-667(C)	XISTOR, NPN A
780	Q14	5613-UN4212	XISTOR, NPN R

**DIODES**

793	D11	5631-1S2473	DIODE, DET <b>BK</b>
793	D16	5631-1S2473	DIODE, DET

**MISCELLANEOUS**

784	△FH1	4472-04501	HOLDER, FUSE
785	△FH2	4472-04501	HOLDER, FUSE
962	JL12	4242-R0406651	JUMPER LEAD
961	JL13	4242-R0404351	JUMPER LEAD
789	△JY1	4331-01702	RELAY, DC <b>BK</b>
048B	△S5	4411-00501102	SWITCH, ROTARY <b>I</b> <b>IB</b> <b>BB</b>
916	△SO1	4474-02901	SOCKET <b>BK</b>
790	TM1	4214-122	TERMINAL
790	TM2	4214-122	TERMINAL <b>BK</b>
790	TM3	4214-122	TERMINAL
790	TM4	4214-122	TERMINAL
790B	TM5	4214-122	TERMINAL <b>I</b> <b>IB</b> <b>BB</b>

**PCB-9 SECONDARY P.C. BOARD**

**CAPACITORS**

511	C51	5345-228D045	CAP, MINI ELE 2200 $\mu$ /25V
514	C54	5361-473ZF	CAP, CER .047 $\mu$
514	C55	5361-473ZF	CAP, CER .047 $\mu$
047B	C436	5354-103K1HM	CAP, MYL .01 $\mu$ <b>I</b> <b>IB</b> <b>BB</b>
047B	C437	5354-103K1HM	CAP, MYL .01 $\mu$ <b>I</b> <b>IB</b> <b>BB</b>

**DIODE**

505	△D51	5685-S1VB10	SILICON, BRIG
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**MISCELLANEOUS**

943	CN100	4443-0201141	CONNECTOR
932	CW102	4163-S0202751	CONNECTOR W/W
930	CW408	4163-0130025	CONNECTOR W/W
927	CW409	4163-0130027	CONNECTOR W/W
536	△FH3	4472-04501	HOLDER, FUSE
537	△FH4	4472-04501	HOLDER, FUSE
783	△S2	4421-02001022	SWITCH, SLIDE <b>BK</b>

**PCB-10 HEADPHONE P.C. BOARD**

**CAPACITORS**

044B	C431	5359-2215851	CAP, PPP 220p <b>I</b> <b>IB</b> <b>BB</b>
044B	C432	5359-2215851	CAP, PPP 220p <b>I</b> <b>IB</b> <b>BB</b>

Ser. No.	Ref. No.	Part No.	Description
702	C591	5345-107B041	CAP, MINI ELE 100 $\mu$ /10V
702	C592	5345-107B041	CAP, MINI ELE 100 $\mu$ /10V
702	C593	5345-107B041	CAP, MINI ELE 100 $\mu$ /10V
702	C594	5345-107B041	CAP, MINI ELE 100 $\mu$ /10V

**RESISTORS**

732	R461	5135-102522	RES, CBN 1/2P 1K
732	R462	5135-102522	RES, CBN 1/2P 1K
732	R463	5135-102522	RES, CBN 1/2P 1K
732	R464	5135-102522	RES, CBN 1/2P 1K
733	R591	5135-682522	RES, CBN 1/2P 6.8K
733	R592	5135-682522	RES, CBN 1/2P 6.8K
734	R593	5135-102522	RES, CBN 1/2P 1K
734	R594	5135-102522	RES, CBN 1/2P 1K

**MISCELLANEOUS**

956	CN418	4443-030185	CONNECTOR
911	$\Delta$ J1	4451-51501	JACK, 1P
908	S4	4431-A027610	SWITCH, PUSH

**PCB-11 SPEAKER SWITCH P.C. BOARD**

**CAPACITOR**

046B	C435	5354-103K1HM	CAP, MYL .01 $\mu$
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**MISCELLANEOUS**

965	JL401	4242-044005	JUMPER LEAD
903	S3	4411-00305103	SWITCH, ROTARY
064B	LUG	4211-4	LUG, W-7

**PCB-12 SPEAKER TERMINAL P.C. BOARD**

**CAPACITORS**

045B	C433	5359-1015851	CAP, PPP 100p
045B	C434	5359-1015851	CAP, PPP 100p

**MISCELLANEOUS**

066B	LUG	4211-4	LUG, W-11
915	$\Delta$ TM402	4214-165	TERMINAL

**PCB-14 FRONT P.C. BOARD**

**CAPACITORS**

487	C708	5361-2237921	CAP, CER .022 $\mu$
488	C709	5345-476D041	CAP, MINI ELE 47 $\mu$ /25V
462	C711	5361-300JCH	CAP, CER 30p
462	C712	5361-300JCH	CAP, CER 30p
457	C713	5345-225F041	CAP, MINI ELE 2.2 $\mu$ /50V

**RESISTORS**

491	R719	5232-104J16P	RES, CBN 1/6P 100K
492	R721	5232-472J16P	RES, CBN 1/6P 4.7K
475	R722	5232-222J16P	RES, CBN 1/6P 2.2K
061B	R723	5232-331J16P	RES, CBN 1/6P 330
475	R725	5232-222J16P	RES, CBN 1/6P 2.2K
491	R735	5232-104J16P	RES, CBN 1/6P 100K
490	R754	5232-102J16P	RES, CBN 1/6P 1K
490	R755	5232-102J16P	RES, CBN 1/6P 1K
490	R756	5232-102J16P	RES, CBN 1/6P 1K
490	R757	5232-102J16P	RES, CBN 1/6P 1K
490	R758	5232-102J16P	RES, CBN 1/6P 1K
490	R759	5232-102J16P	RES, CBN 1/6P 1K
490	R760	5232-102J16P	RES, CBN 1/6P 1K
489	R767	5232-473J16P	RES, CBN 1/6P 47K
859	R801	5135-681522	RES, CBN 1/2P 680
859	R802	5135-681522	RES, CBN 1/2P 680
859	R803	5135-681522	RES, CBN 1/2P 680
859	R804	5135-681522	RES, CBN 1/2P 680
858	R805	5135-102522	RES, CBN 1/2P 1K
858	R806	5135-102522	RES, CBN 1/2P 1K
857	R808	5135-472522	RES, CBN 1/2P 4.7K
857	R809	5135-472522	RES, CBN 1/2P 4.7K
857	R830	5135-472522	RES, CBN 1/2P 4.7K
848	R838	5232-471J16P	RES, CBN 1/6P 470
858	R839	5135-102522	RES, CBN 1/2P 1K

Ser. No.	Ref. No.	Part No.	Description
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**INTEGRATED CIRCUIT**

441	IC701	5654-T9301-20	IC, DIGITAL
441B	IC701	5654-T9301-27	IC, DIGITAL

**TRANSISTORS**

852	Q801	5611-1309A (R)	XISTOR, PNP R
852	Q802	5611-1309A (R)	XISTOR, PNP R
851	Q809	5613-3311A (R)	XISTOR, NPN R

**DIODES**

451	D701	5631-1S2473	DIODE, DET
451	D702	5631-1S2473	DIODE, DET
451	D703	5631-1S2473	DIODE, DET
451	D704	5631-1S2473	DIODE, DET
451	D705	5631-1S2473	DIODE, DET
451	D706	5631-1S2473	DIODE, DET
451	D707	5631-1S2473	DIODE, DET
451	D708	5631-1S2473	DIODE, DET
451	D709	5631-1S2473	DIODE, DET
451	D710	5631-1S2473	DIODE, DET
451	D711	5631-1S2473	DIODE, DET
485	D713	5631-1SS133	DIODE, DET
062B	D719	5637-GL5HD41	LED
846	D721	5631-1SS133	DIODE, DET
846	D723	5631-1SS133	DIODE, DET
846	D725	5631-1SS133	DIODE, DET
846	D727	5631-1SS133	DIODE, DET
837	D822	5631-1SS133	DIODE, DET
837	D823	5631-1SS133	DIODE, DET
837	D824	5631-1SS133	DIODE, DET
837	D825	5631-1SS133	DIODE, DET
839	D830	5631-1S2473	DIODE, DET
853	D831	5637-S2410E1	LED
853	D832	5637-S2410E1	LED
853	D833	5637-S2410E1	LED
853	D834	5637-S2410E1	LED
854	D835	5637-S2210S1	LED
854	D836	5637-S2210S1	LED

**MISCELLANEOUS**

463	CC701	5213-S0207221	C COMPOSITE
540	CN101B	4443-05401019	CONNECTOR
860	CN804A	4443-05501013	CONNECTOR
931	CW100	4163-S0202401	CONNECTOR W/W
531	FL701	5722-057	TUBE DISPLAY
554	LUG3	4211-4	LUG, W-701
534	S11	4437-00603	SWITCH, PU-TC
534	S12	4437-00603	SWITCH, PU-TC
534	S13	4437-00603	SWITCH, PU-TC
534	S14	4437-00603	SWITCH, PU-TC
534	S15	4437-00603	SWITCH, PU-TC
534	S16	4437-00603	SWITCH, PU-TC
534	S17	4437-00603	SWITCH, PU-TC
534	S18	4437-00603	SWITCH, PU-TC
533	S19	4437-00604	SWITCH, PU-TC
533	S20	4437-00604	SWITCH, PU-TC
533	S21	4437-00604	SWITCH, PU-TC
533	S22	4437-00604	SWITCH, PU-TC
533	S23	4437-00604	SWITCH, PU-TC
534	S24	4437-00603	SWITCH, PU-TC
534	S25	4437-00603	SWITCH, PU-TC
855	S31	4437-00604	SWITCH, PU-TC
855	S32	4437-00604	SWITCH, PU-TC
855	S33	4437-00604	SWITCH, PU-TC
855	S34	4437-00604	SWITCH, PU-TC
855	S35	4437-00604	SWITCH, PU-TC
855	S36	4437-00604	SWITCH, PU-TC
449	X701	5691-00720027	XTAL, OSC

**PCB-15 POWER SWITCH P.C. BOARD**

**MISCELLANEOUS**

944	CN11	4443-040185	CONNECTOR
906	S1	4431-A027610	SWITCH, PUSH

Ser. No. Ref. No. Part No. Description

**ABBREVIATIONS IN PARTS LIST**

**CAPACITORS**

CAP, MINI ELE : Electrolytic  
 CAP, CER : Ceramic  
 CAP, PPP : Polypropylene  
 CAP, MYL : Mylar  
 CAP, MCA : Mica  
 CAP, MINI BP : Bipolar  
 CAP, ELE BP : Electrolytic Bipolar  
 CAP, STY : Polystyrene Film  
 CAP, SPE : Special  
 CAP, TAN : Tantalum  
 470  $\mu$  : 470  $\mu$  F  
 6800p : 6800pF  
 .047  $\mu$  : 0.047  $\mu$  F

**RESISTORS**

RES, CBN 1/6P : Carbon 1/6W  
 RES, FUSE : Fuse  
 RES, CEM 5P : Cement 5W  
 RES, MTL 1P : Metal 1W  
 2.2K : 2.2k $\Omega$   
 220 : 220 $\Omega$

**TRANSISTORS**

XISTOR : Transistor  
 FET : Field Effect Transistor

**CONTROLS**

RES, V CBN : Variable Carbon Resistor  
 RES, SEMI FIX : Semi-fixed Resistor


**CHASSIS MISCELLANEOUS**

786 $\Delta$ F1	5732-252031	FUSE BK
786B $\Delta$ F1	5732-801030	FUSE I IB BB
535 $\Delta$ F2	5732-162031	FUSE BK
535B $\Delta$ F2	5732-162030	FUSE I IB BB
543 JL101	4242-S0319131	JUMPER LEAD
868 JL804	4242-S0313151	JUMPER LEAD
381 L251	5911-266	ANT COIL, BC
917 $\Delta$ P1	4161-71151	CORD W/PLUG BK
917B $\Delta$ P1	4161-7256	CORD W/PLUG I IB
917C $\Delta$ P1	4161-04100	CORD W/PLUG BB
771 $\Delta$ T1	5584-S8901	XFORMER, POWER BK
771B $\Delta$ T1	5584-S8902	XFORMER, POWER I IB BB
645 LUG	4211-4	LUG

**PACKAGE PARTS LIST**

021	1756-06304	LABEL I IB BB
022	1756-03108	LABEL I IB
022	1756-03111	LABEL BB
027	1756-08501	LABEL BB
029	1111-J30235	OWNER GUIDE, POWER SW CAUTION I IB BB
111	1221-28012	CARTON BOX
112	1222-7362	CUSHION
113	1222-7365	CUSHION
116	1223-R0120055	SOFT SHEET
117	1241-R0123350	POLYETHY BAG, OWNER GUIDE
118	1241-R0160600	POLYETHY BAG, SET
119	1111-J30337	OWNER GUIDE BK
119	1111-J30338	OWNER GUIDE I IB BB
120	1113-717004	OWNER CARD BK
121	1119-047	ATTACH SHEET, WARRANTY BK
122	1119-01201	ATTACH SHEET, UL SAFETY BK
123	1119-0137	ATTACH SHEET, SERVICE AGENCIES BK
548	1397-6	T FEEDER ANT

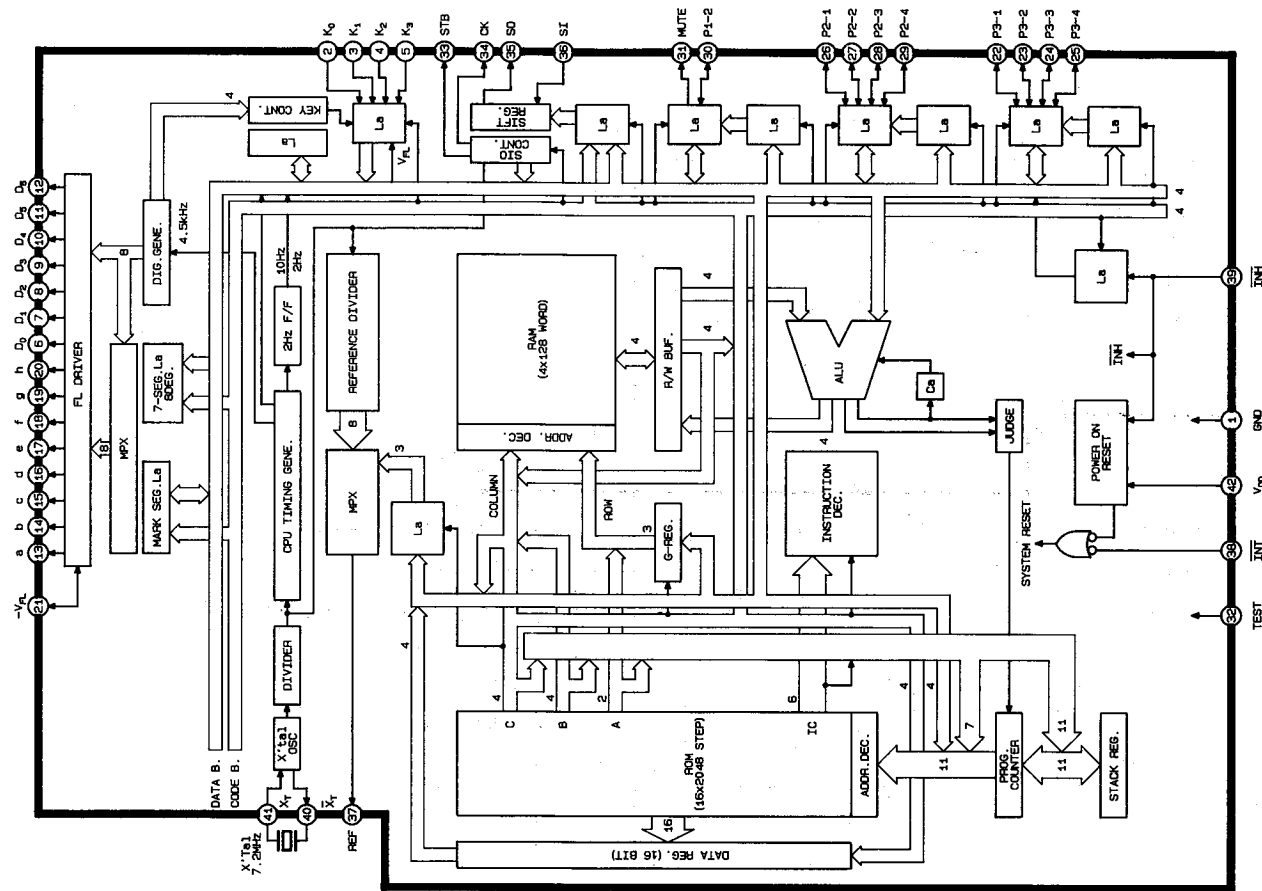
**NOTE**

 SAFETY RELATED COMPONENT. USE ONLY EXACT REPLACEMENT PART AS SPECIFIED.



IC BLOCK DIAGRAM / IC TERMINAL FUNCTIONS

IC701 : TC9301AN-020 Micro Computer

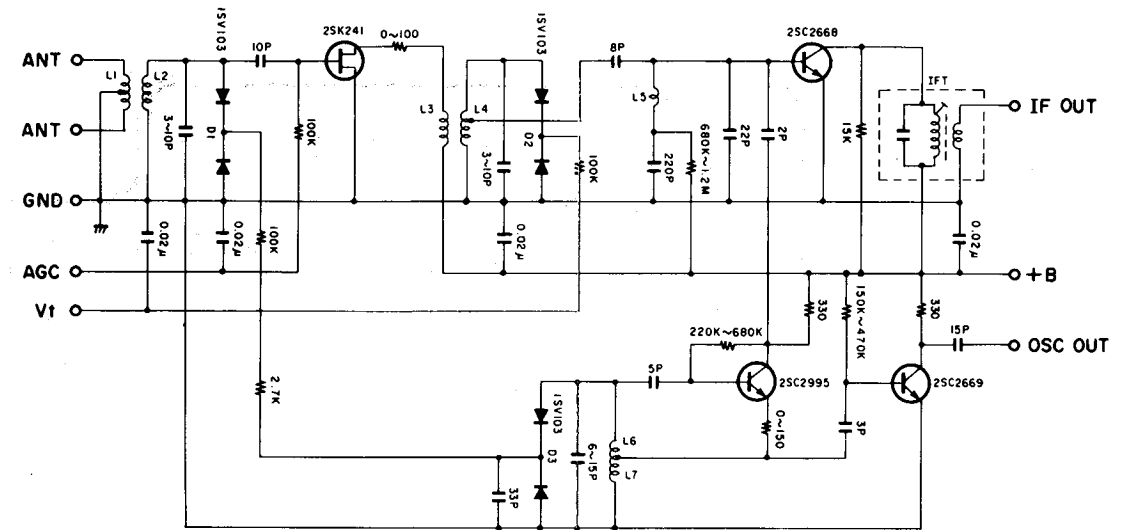


Pin No.	Pin Name	I/O	Function
1	GND	-	GND pin
2	K0	I	4-bit key input port
3	K1	I	4-bit key input port
4	K2	I	4-bit key input port
5	K3	I	4-bit key input port
6	D0	O	Digit output
7	D1	O	Digit output
8	D2	O	Digit output
9	D3	O	Digit output
10	D4	O	Digit output
11	D5	O	Digit output
12	D6	O	Digit output
13	a	O	Segment output
14	b	O	Segment output
15	c	O	Segment output
16	d	O	Segment output
17	e	O	Segment output
18	f	O	Segment output
19	g	O	Segment output
20	h	O	Segment output
21	-VFL	I	Negative power terminal (4-bit key input port, digit output, segment output)

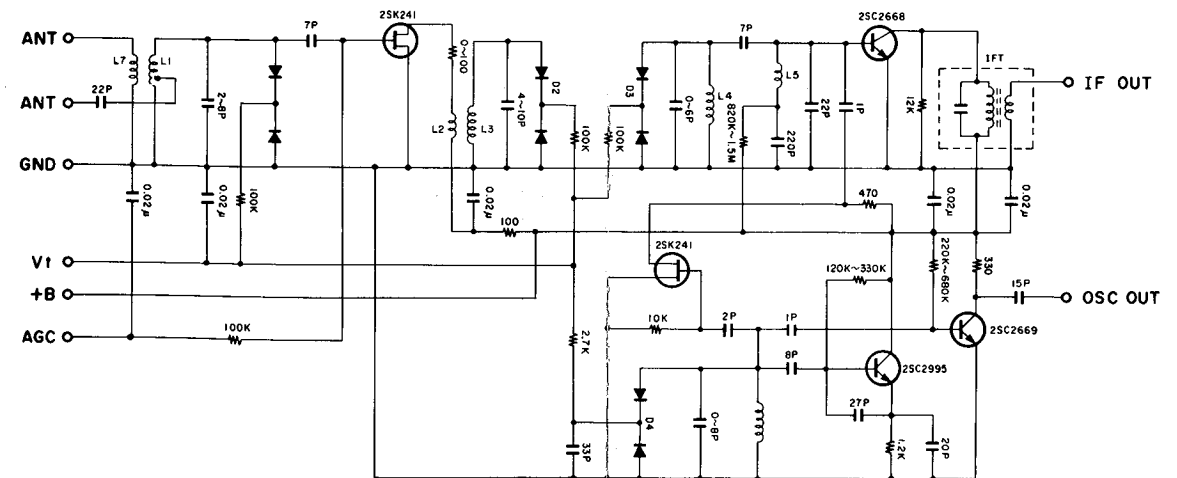
Pin No.	Pin Name	I/O	Function
22	P3-1	I/O	4-bit I/O port (3)
23	P3-2	I/O	4-bit I/O port (3)
24	P3-3	I/O	4-bit I/O port (3)
25	P3-4	I/O	4-bit I/O port (3)
26	P2-1	I/O	4-bit I/O port (2)
27	P2-2	I/O	4-bit I/O port (2)
28	P2-3	I/O	4-bit I/O port (2)
29	P2-4	I/O	4-bit I/O port (2)
30	P1-2	I/O	1-bit I/O port (1)
31	MUTE	O	1-bit muting signal output port
32	TEST	I	Test mode control input terminal
33	STB	O	Serial interface (strobe pulse output)
34	CK	O	Serial interface (serial clock output)
35	SO	O	Serial interface (serial data output)
36	SI	I	Serial interface (serial data input)
37	REF	O	Reference frequency signal output terminal
38	INT	I	Initialize input (system reset signal input terminal)
39	INH	I	Inhibit input (select signal input port of radio mode)
40	XT	-	Connect quartz oscillator
41	XT	-	Connect quartz oscillator
42	VDD	I	Power supply terminal

SCHEMATIC DIAGRAM (FM TUNER PACK SECTION)

• For North America area model



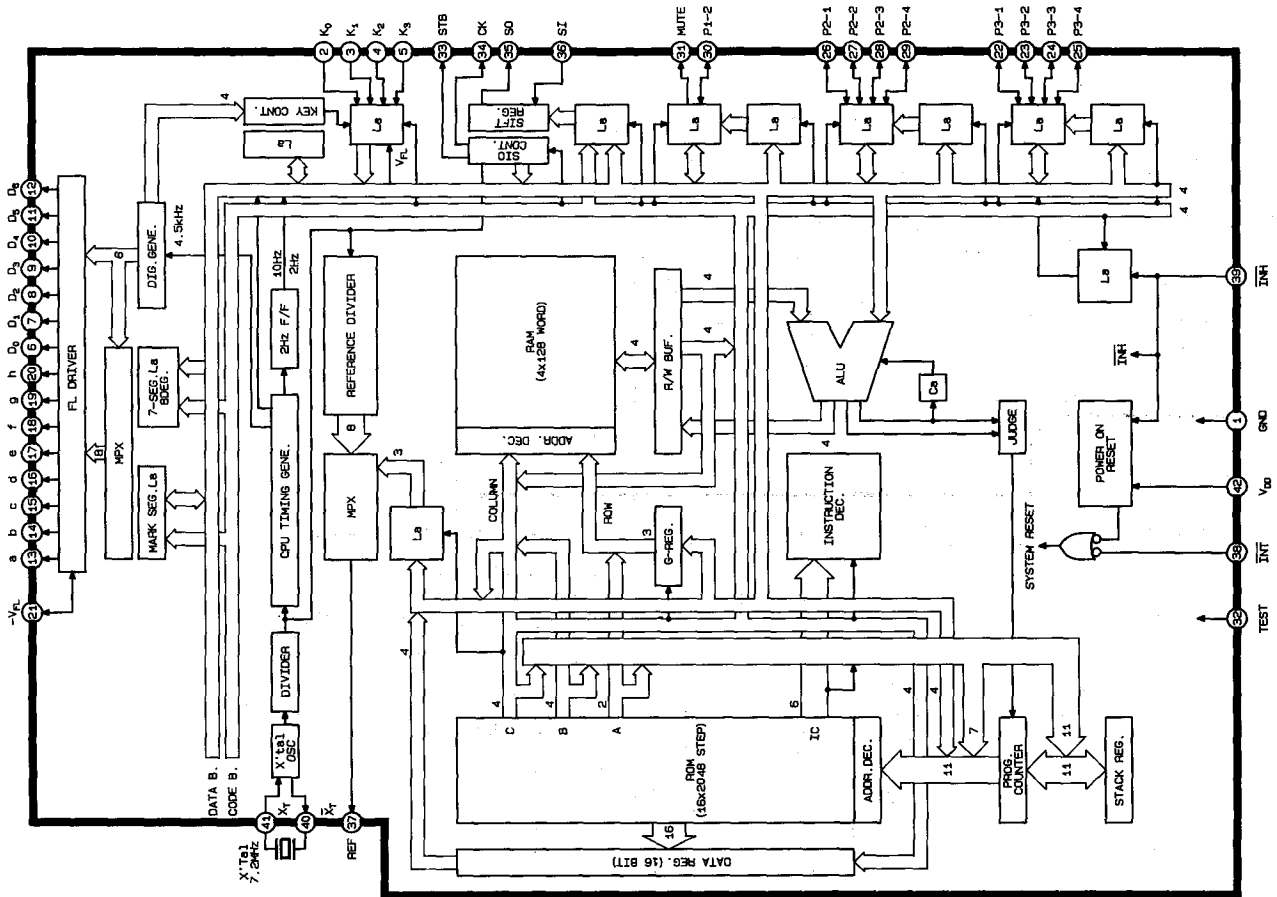
• For International and Australia models



NOTE: Front End parts not available. Schematic diagram supplied for reference only.

# IC BLOCK DIAGRAM /IC TERMINAL FUNCTIONS

## IC701 : TC9301AN-020 Micro Computer

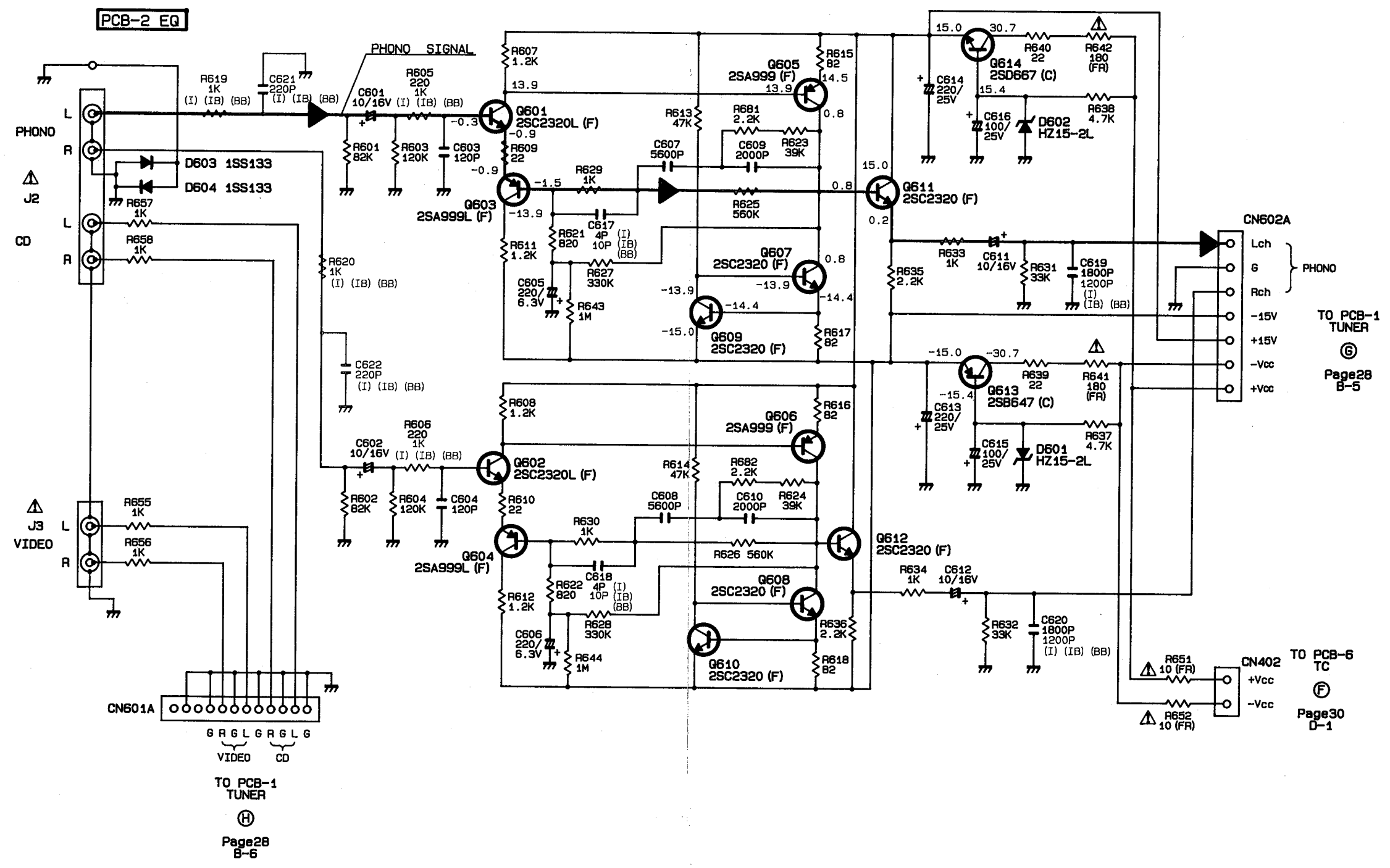


Pin No.	Pin Name	I/O	Function
1	GND	—	GND pin
2	K0	I	4-bit key input port
3	K1	I	4-bit key input port
4	K2	I	4-bit key input port
5	K3	I	4-bit key input port
6	D0	O	Digit output
7	D1	O	Digit output
8	D2	O	Digit output
9	D3	O	Digit output
10	D4	O	Digit output
11	D5	O	Digit output
12	D6	O	Digit output
13	a	O	Segment output
14	b	O	Segment output
15	c	O	Segment output
16	d	O	Segment output
17	e	O	Segment output
18	f	O	Segment output
19	g	O	Segment output
20	h	O	Segment output
21	-VFL	I	Negative power terminal (4-bit key input port, digit output, segment output)

Pin No.	Pin Name	I/O	Function
22	P3-1	I/O	4-bit I/O port (3)
23	P3-2	I/O	4-bit I/O port (3)
24	P3-3	I/O	4-bit I/O port (3)
25	P3-4	I/O	4-bit I/O port (3)
26	P2-1	I/O	4-bit I/O port (2)
27	P2-2	I/O	4-bit I/O port (2)
28	P2-3	I/O	4-bit I/O port (2)
29	P2-4	I/O	4-bit I/O port (2)
30	P1-2	I/O	1-bit I/O port (1)
31	MUTE	O	1-bit muting signal output port
32	TEST	I	Test mode control input terminal
33	STB	O	Serial interface (strobe pulse output)
34	CK	O	Serial interface (serial clock output)
35	SO	O	Serial interface (serial data output)
36	SI	I	Serial interface (serial data input)
37	REF	O	Reference frequency signal output terminal
38	$\overline{\text{INT}}$	I	Initialize input (system reset signal input terminal)
39	$\overline{\text{INH}}$	I	Inhibit input (select signal input port of radio mode)
40	XT	—	Connect quartz oscillator
41	XT	—	Connect quartz oscillator
42	VDD	I	Power supply terminal



SCHEMATIC DIAGRAM

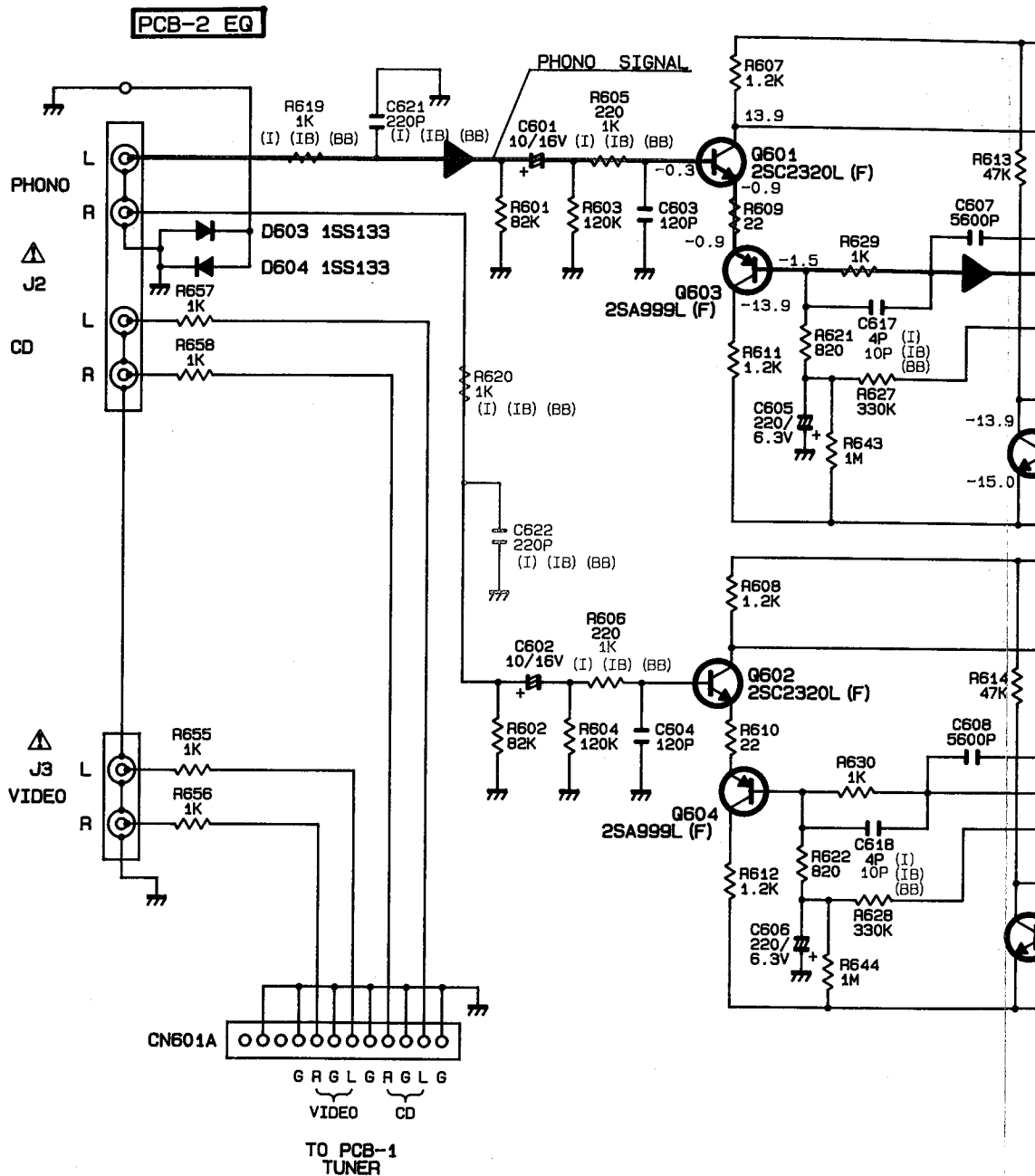


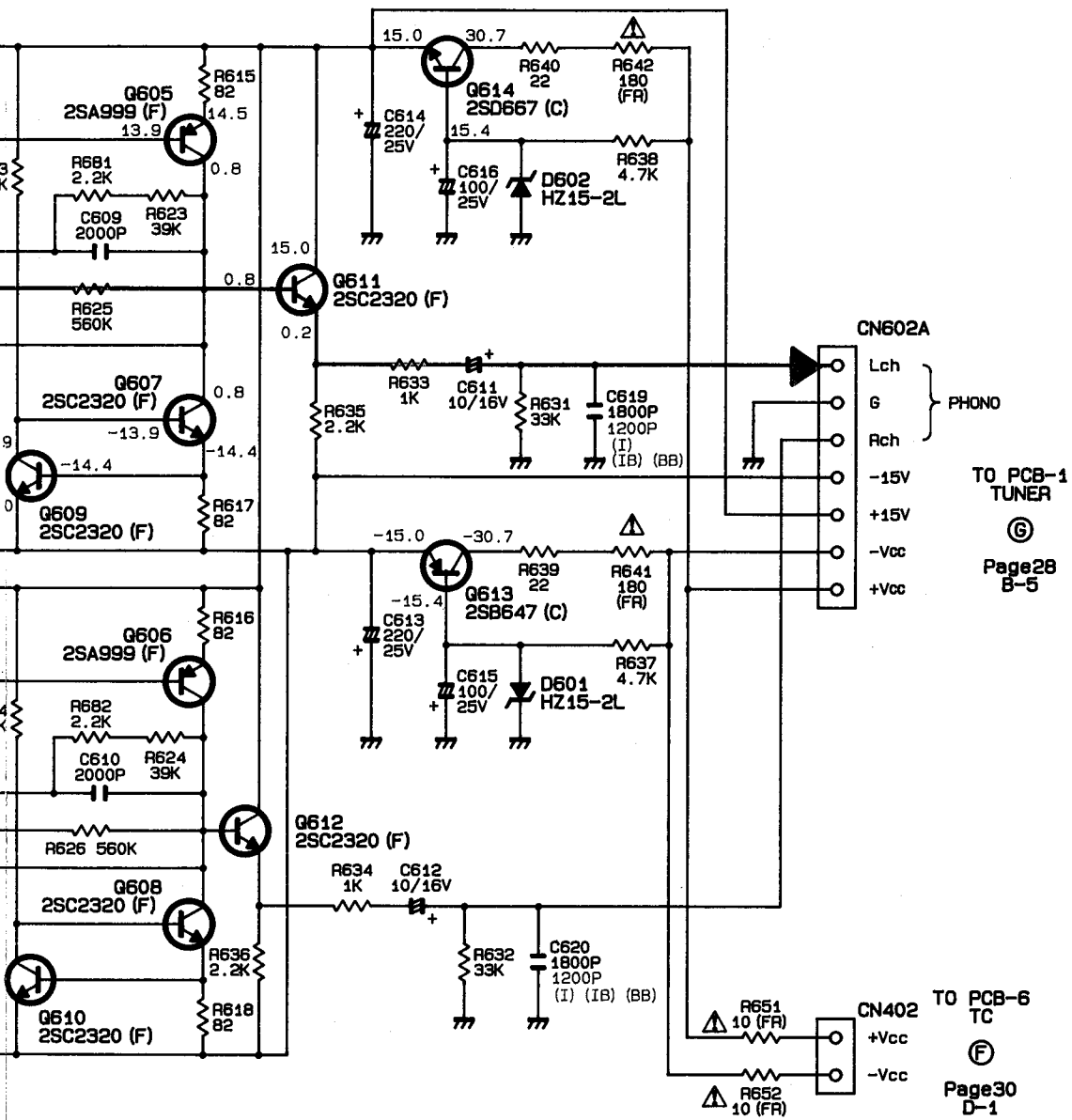
TO PCB-1 TUNER  
Page28 B-5

TO PCB-6 TC  
Page30 D-1

TO PCB-1 TUNER  
Page28 B-6

**SCHEMATIC DIAGRAM**

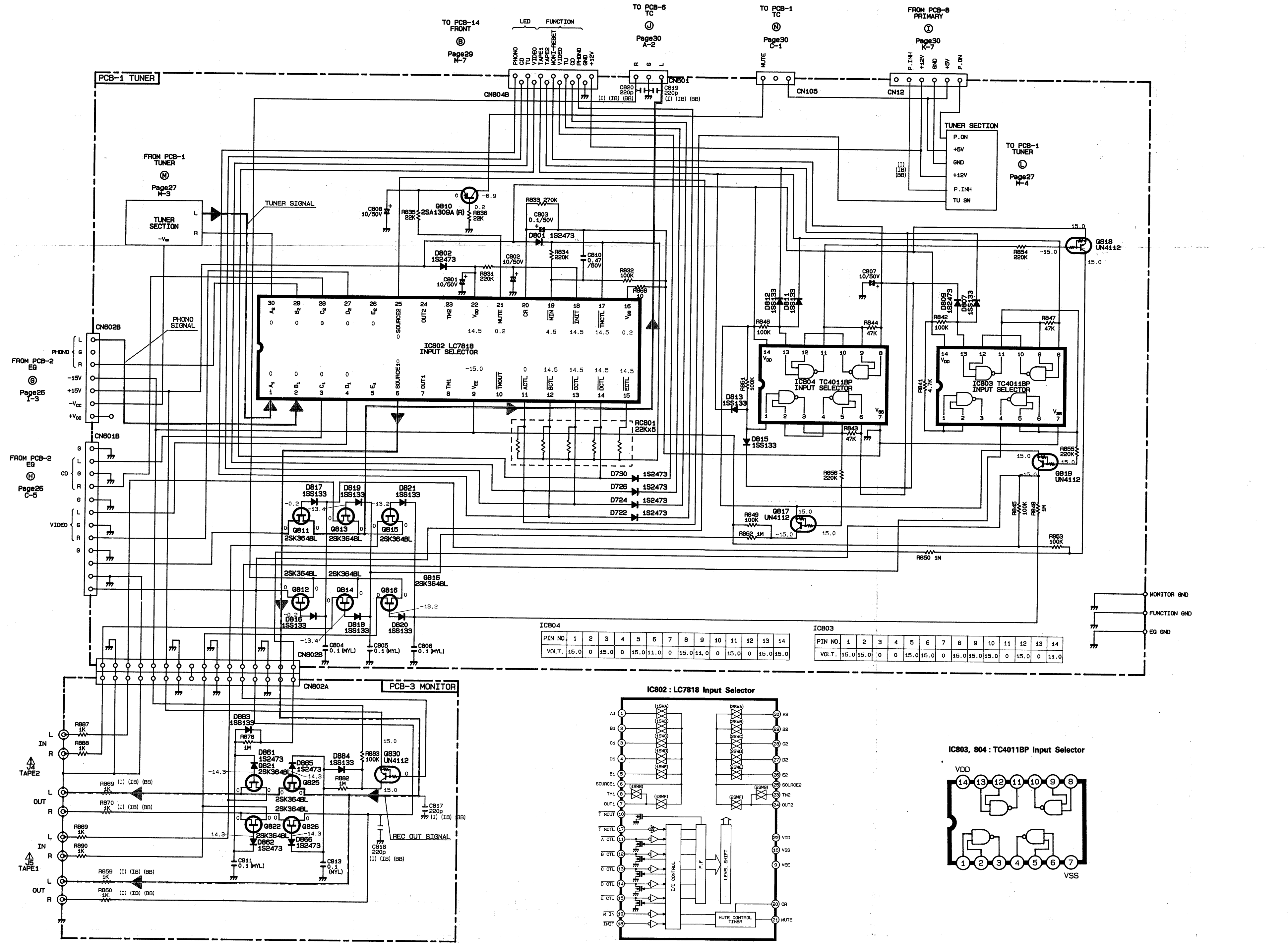




TO PCB-1  
TUNER  
Ⓢ  
Page 28  
B-5

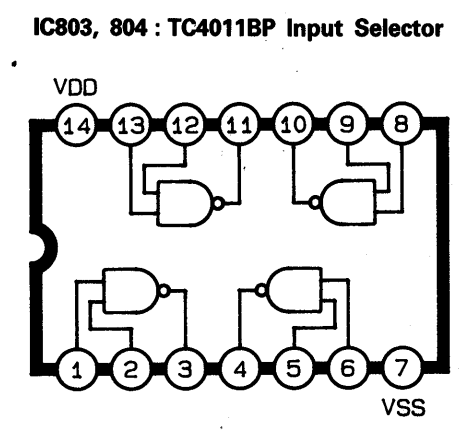
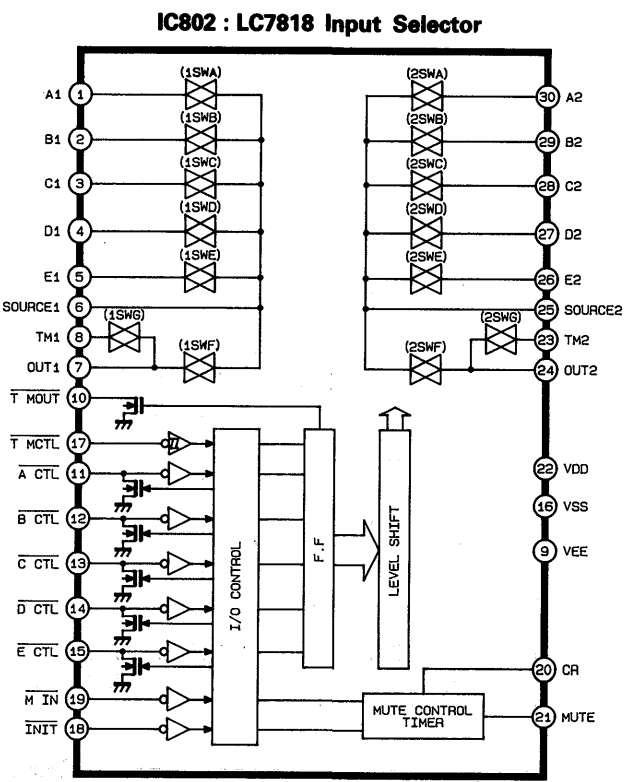
TO PCB-6  
TC  
Ⓢ  
Page 30  
D-1

SCHEMATIC DIAGRAM



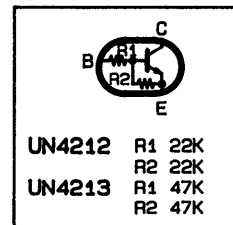
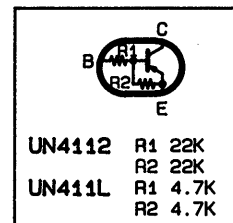
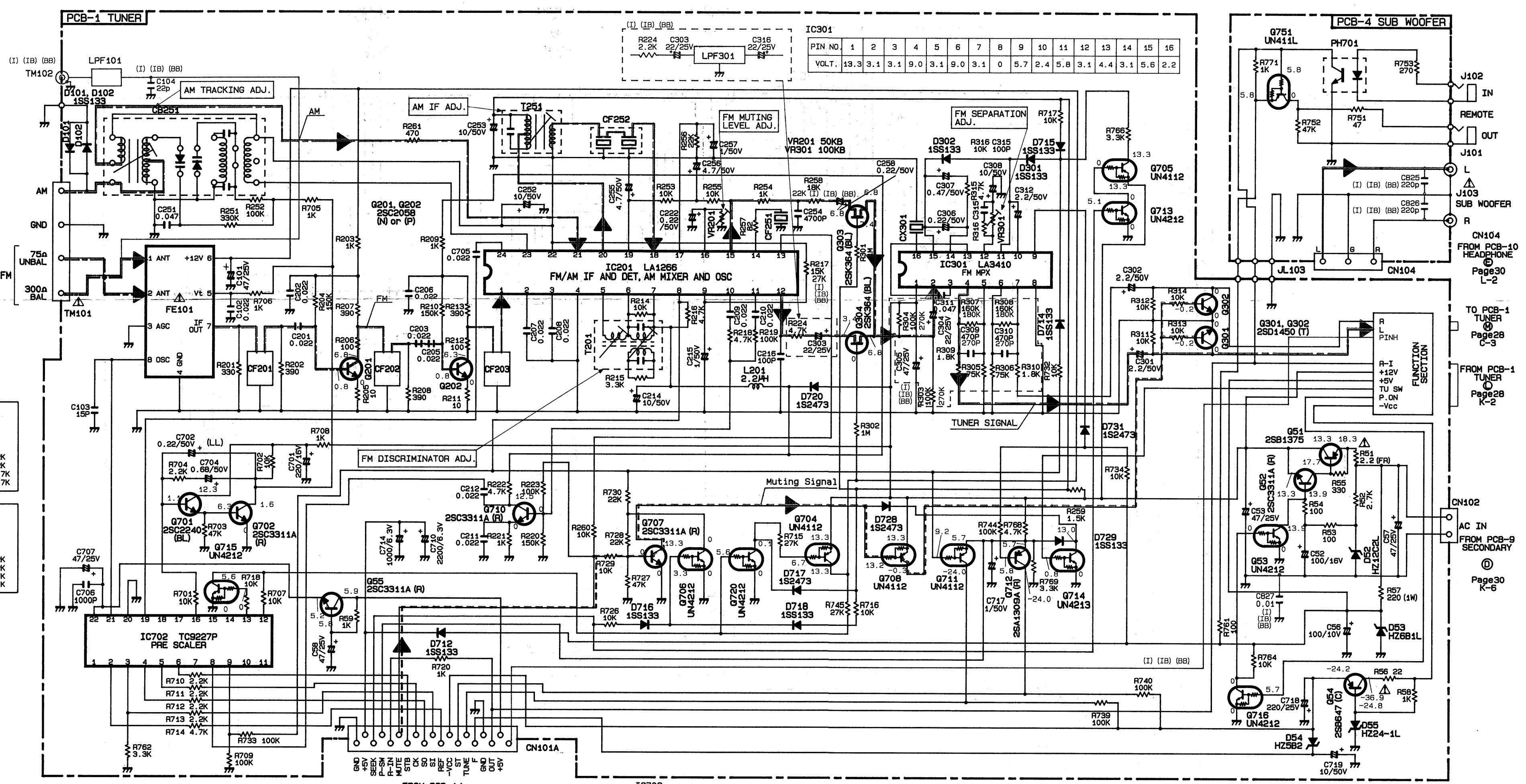
IC804														
PIN NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14
VOLT.	15.0	0	15.0	0	15.0	11.0	0	15.0	11.0	0	15.0	0	15.0	15.0

IC803														
PIN NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14
VOLT.	15.0	15.0	0	0	15.0	15.0	0	15.0	15.0	0	15.0	15.0	0	11.0



A B C D E F G H I J K L M N

SCHEMATIC DIAGRAM



IC301

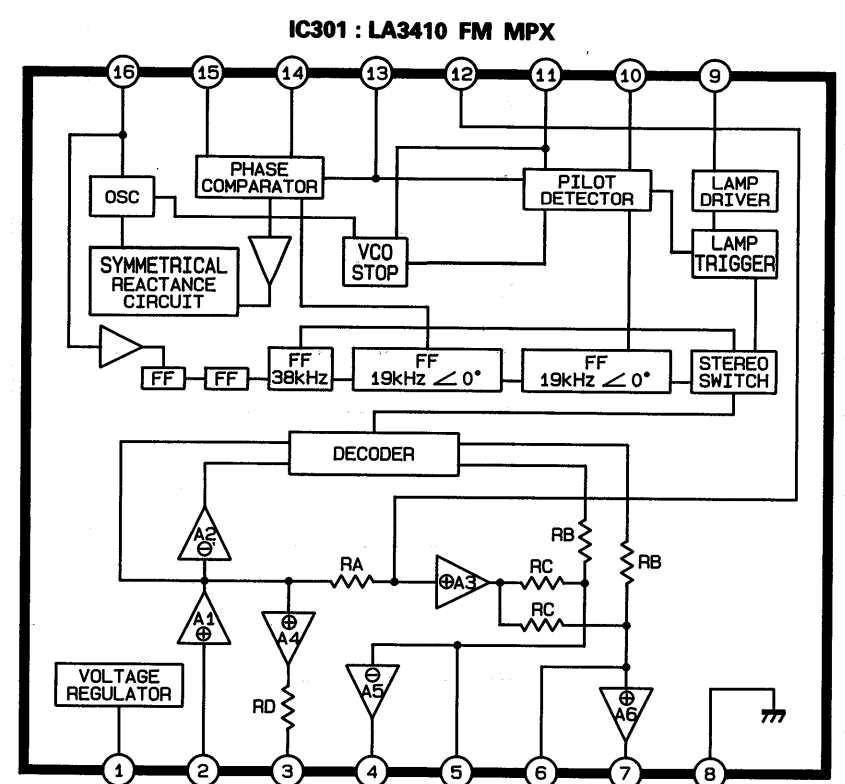
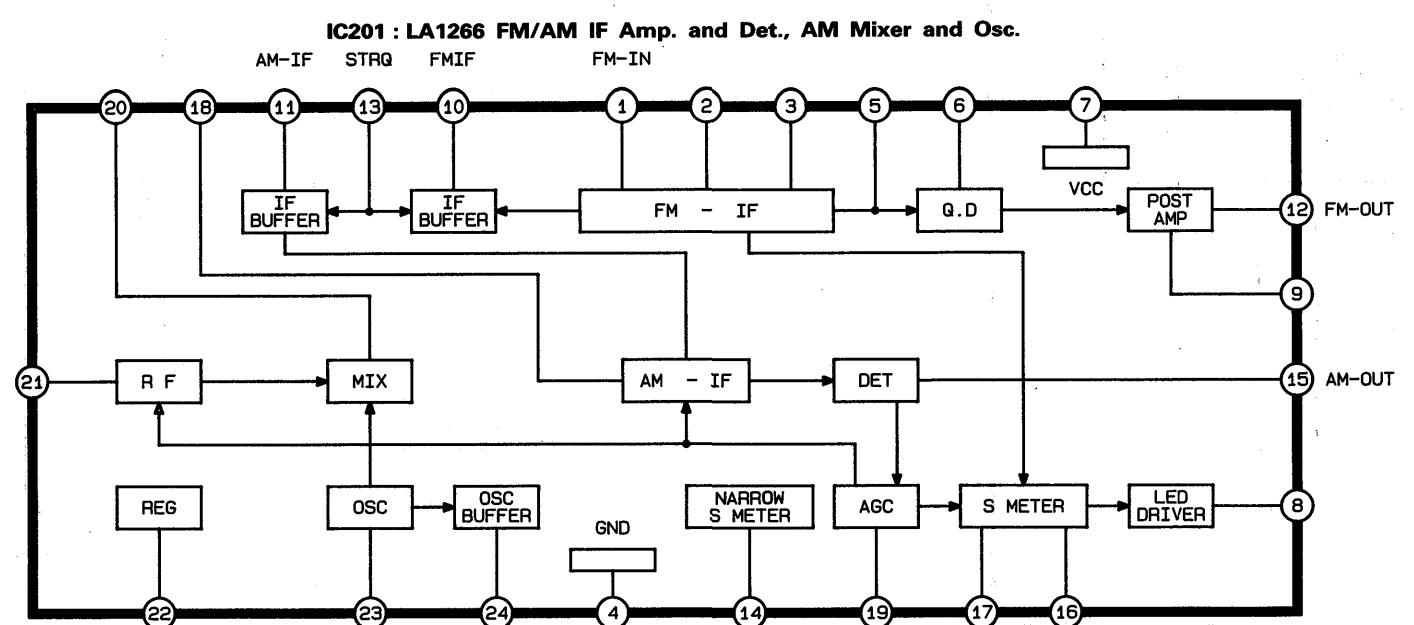
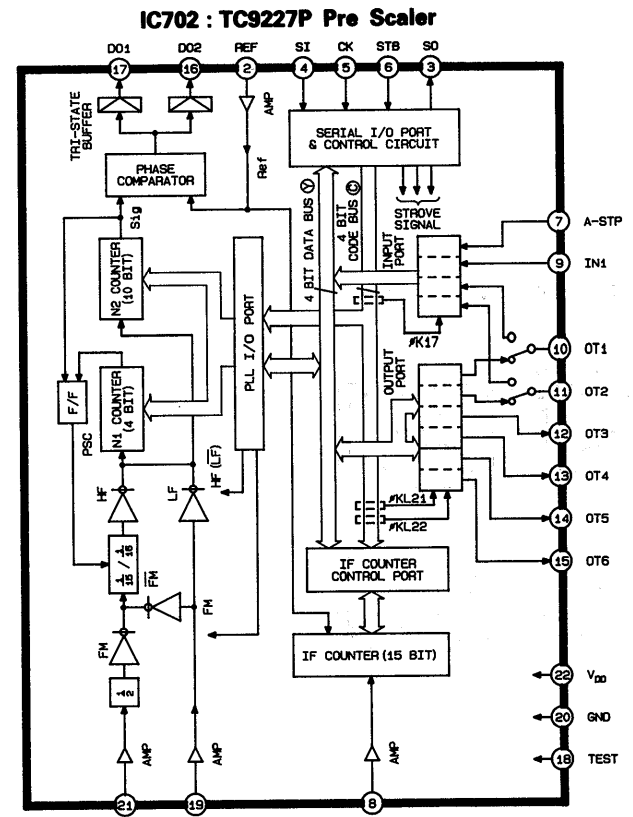
PIN NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
VOLT.	13.3	3.1	3.1	9.0	3.1	9.0	3.1	0	5.7	2.4	5.8	3.1	4.4	3.1	5.6	2.2

IC702

PIN NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
VOLT.	—	2.6	0	0	0	0	—	2.5	4.5	0	0	5.1	0	—	1.1	—	—	0	0	2.5	5.1	

IC201

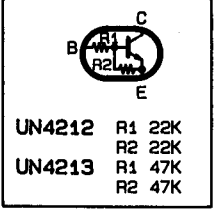
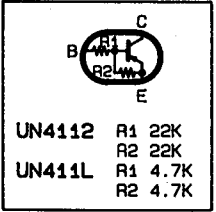
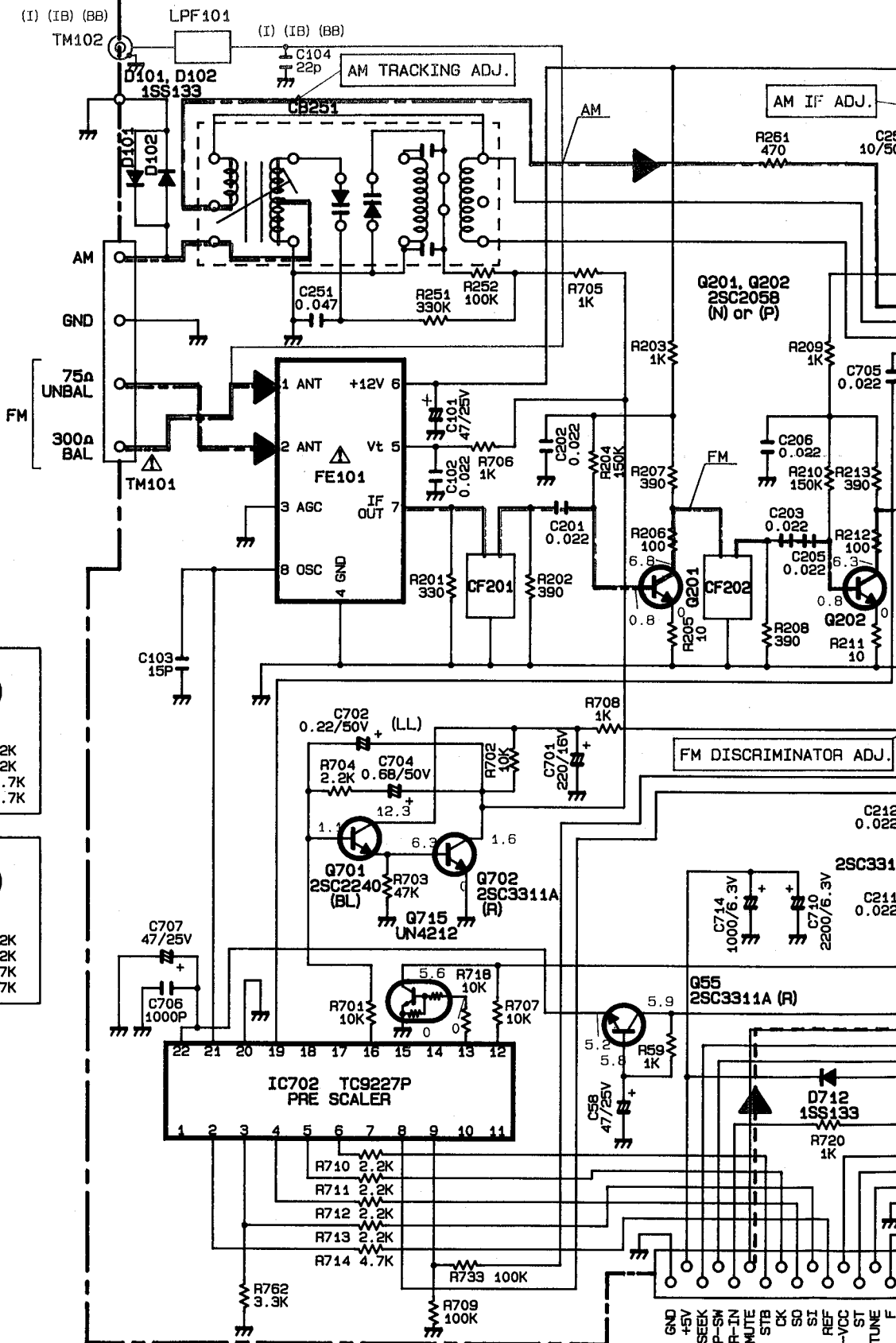
PIN NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
VOLT.	2.5	2.5	2.5	0	12.5	12.5	12.5	9.2	3.8	2.5	2.8	3.3	0	1.5	1.4	0.1	0	2.5	1.5	0.8	4.0	4.0	4.0	3.2



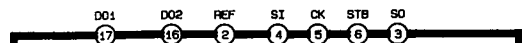


# SCHEMATIC DIAGRAM

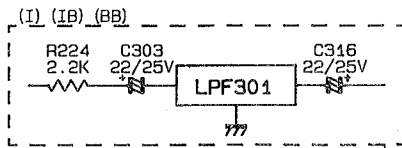
## PCB-1 TUNER



IC702 : TC9227P Pre Scaler

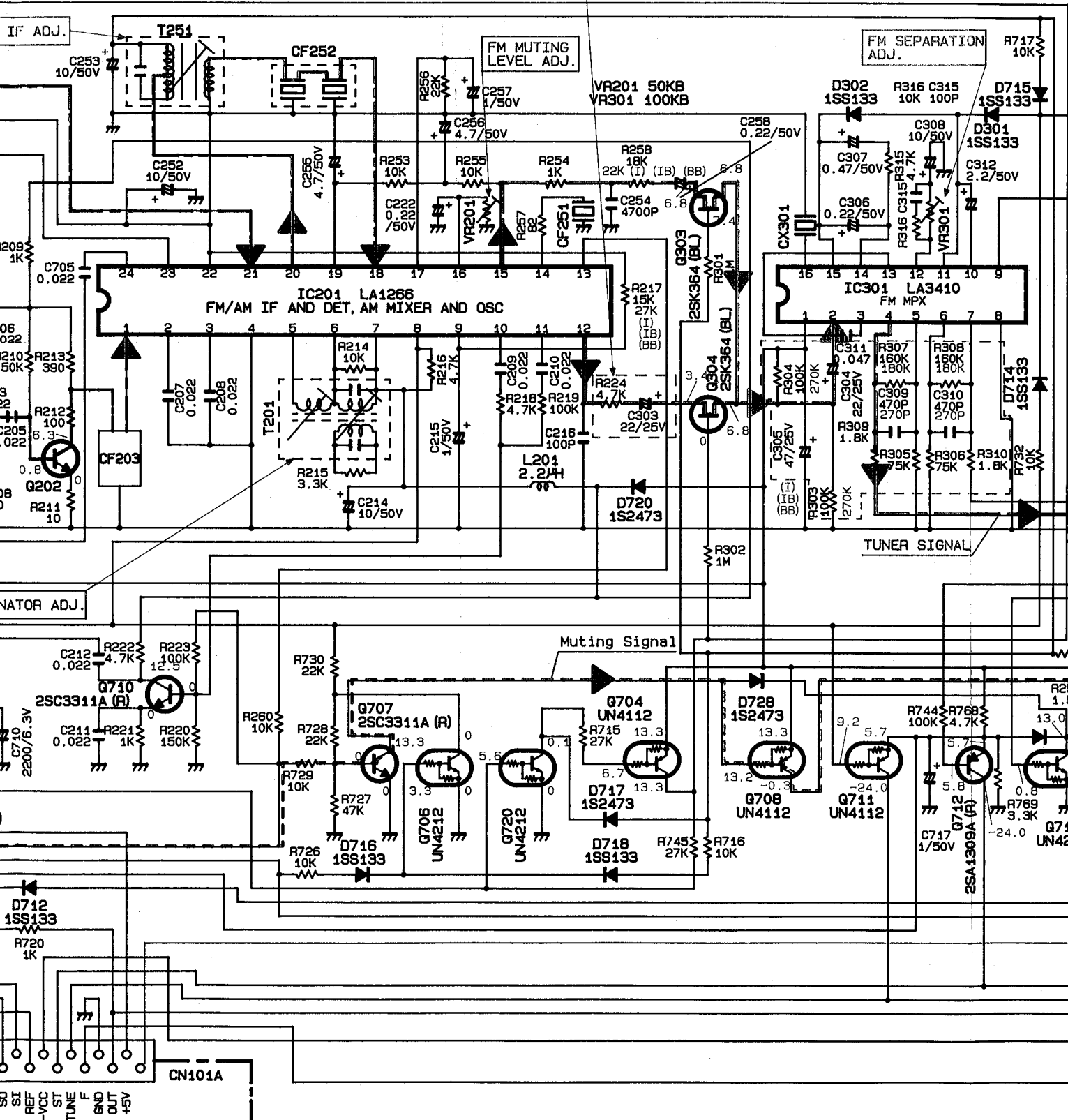


FROM PCB-14 FRONT



IC301

PIN NO.	1	2	3	4	5	6	7	8	9	10	11
VOLT.	13.3	3.1	3.1	9.0	3.1	9.0	3.1	0	5.7	2.4	5.8



IC702

PIN NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
VOLT.	—	2.6	0	0	0	0	—	2.5	4.5	0	0	5.1	0	—	—	1.1	—	—	0

J

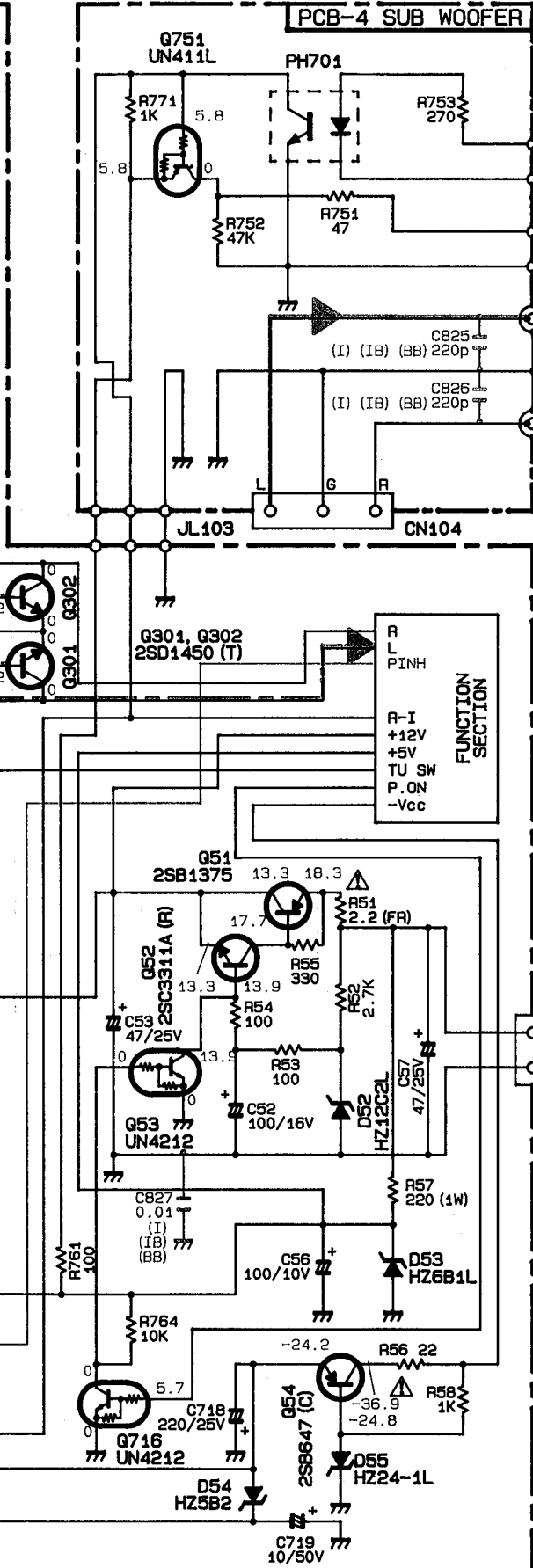
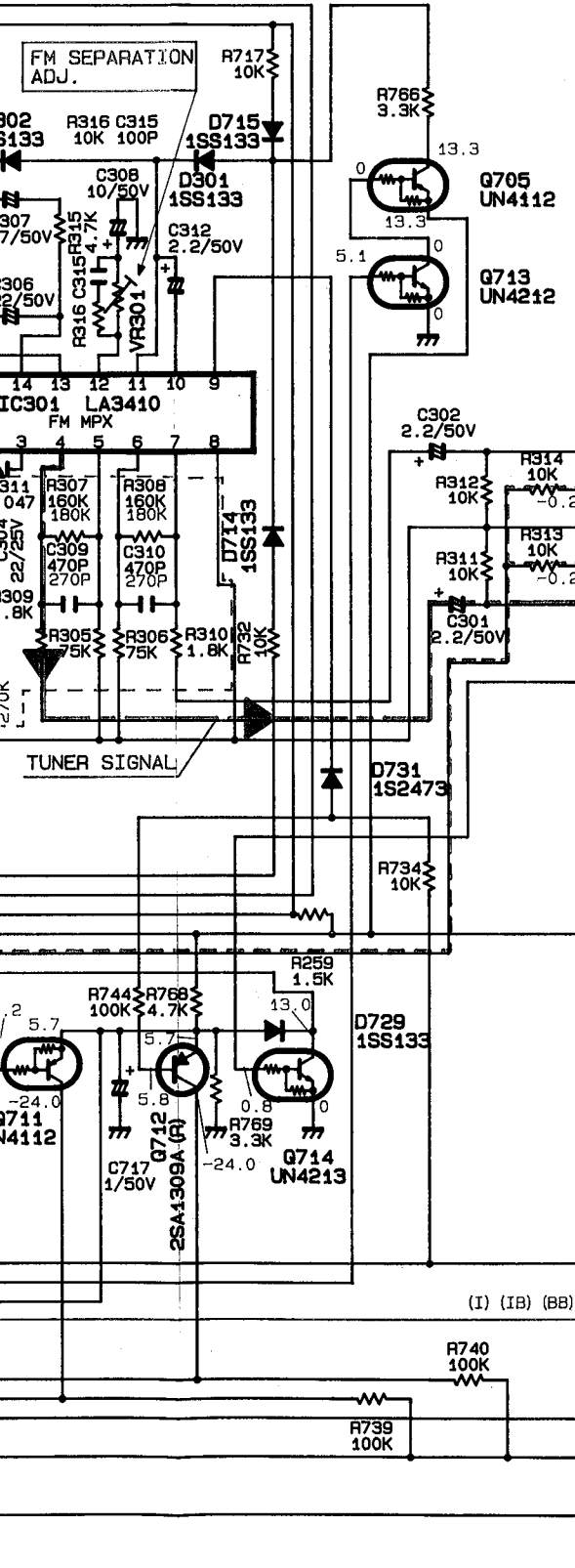
K

L

M

N

6	7	8	9	10	11	12	13	14	15	16
9.0	3.1	0	5.7	2.4	5.8	3.1	4.4	3.1	5.6	2.2



**PCB-4 SUB WOOFER**

J102 IN

REMOTE

J101 OUT

L

J103 SUB WOOFER

R

CN104 FROM PCB-10 HEADPHONE Page30 L-2

TO PCB-1 TUNER Page28 C-3

FROM PCB-1 TUNER Page28 K-2

R L PINH

R-I +12V

+5V

TU SW

P.ON

-Vcc

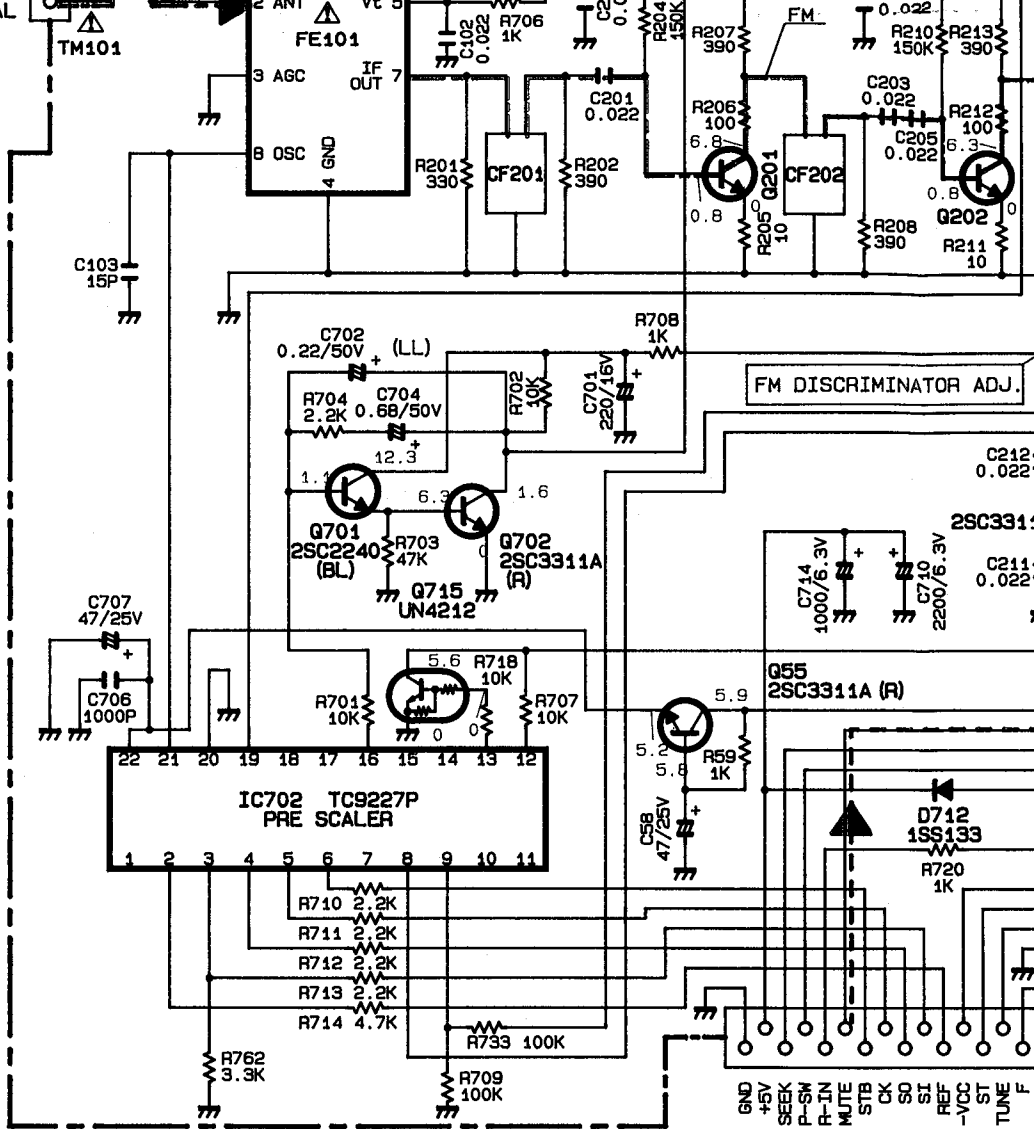
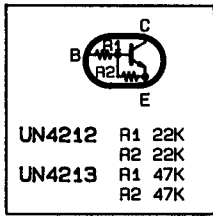
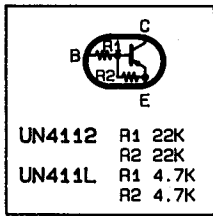
FUNCTION SECTION

CN102 AC IN FROM PCB-9 SECONDARY

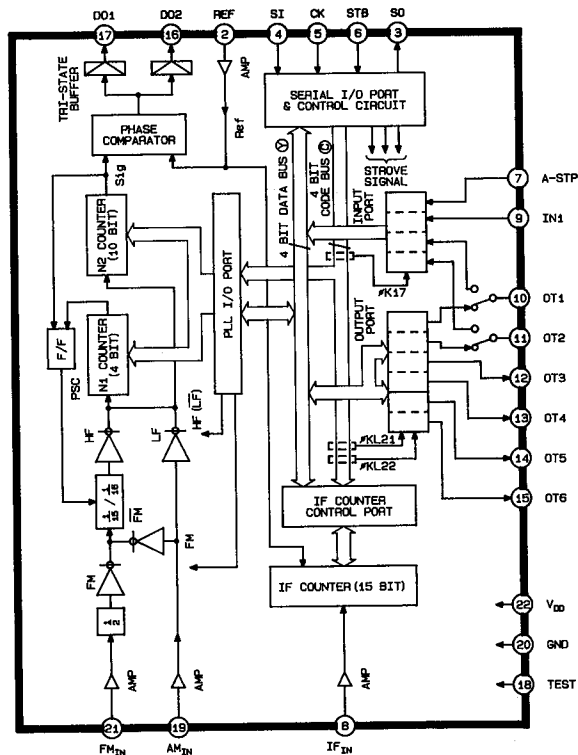
Page30 K-6

13	14	15	16	17	18	19	20	21	22
—	—	—	1.1	—	—	0	0	2.5	5.1

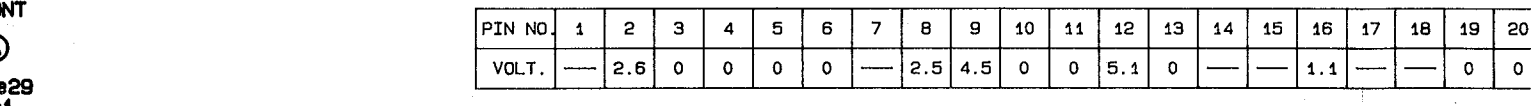
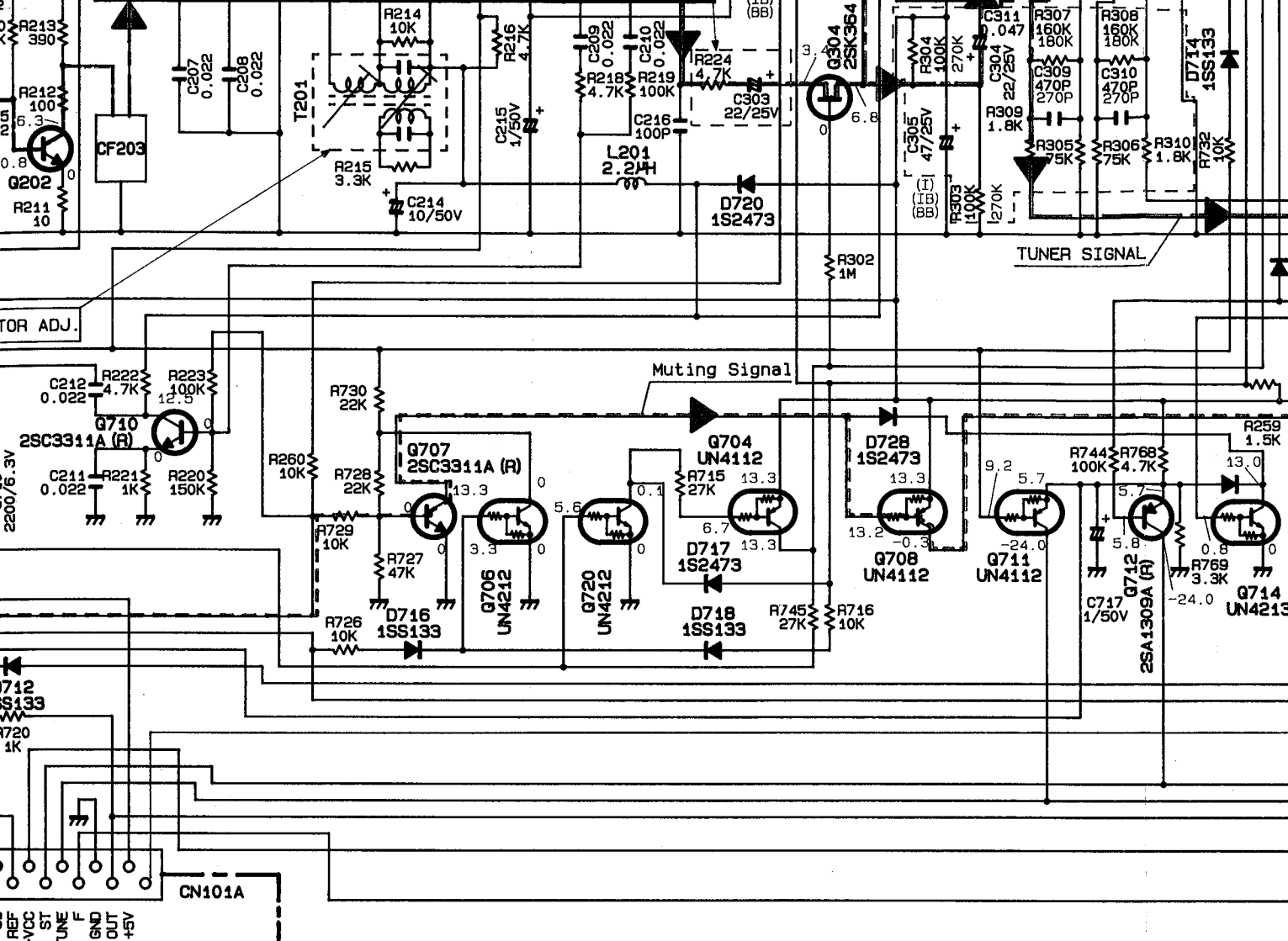
4  
5  
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10



IC702 : TC9227P Pre Scaler



FROM PCB-14 FRONT



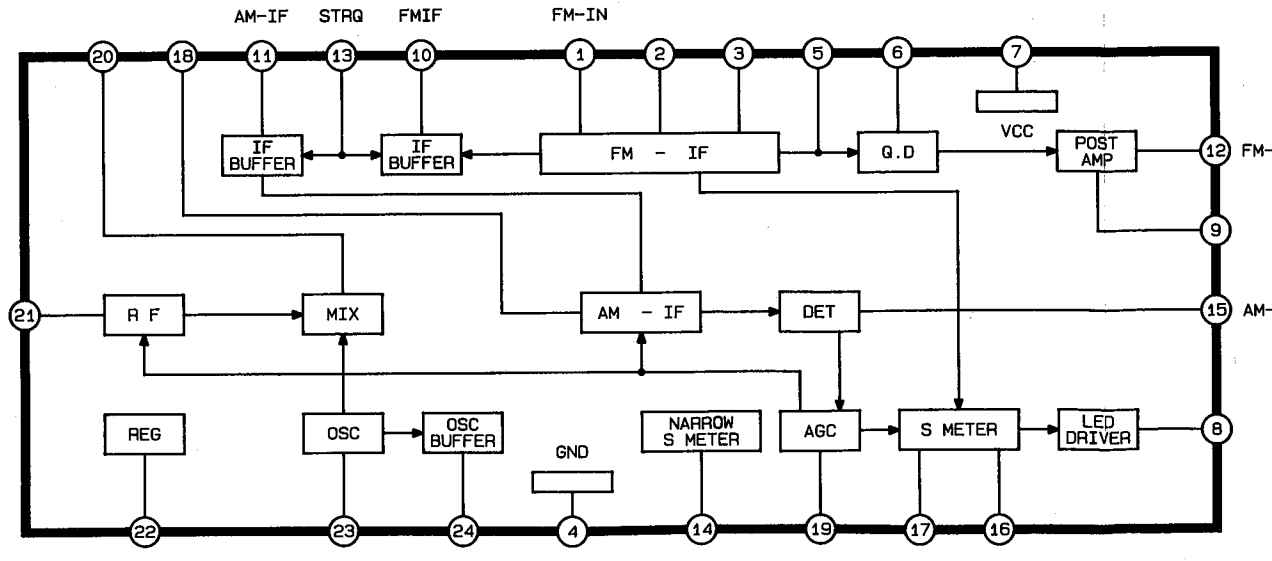
IC702

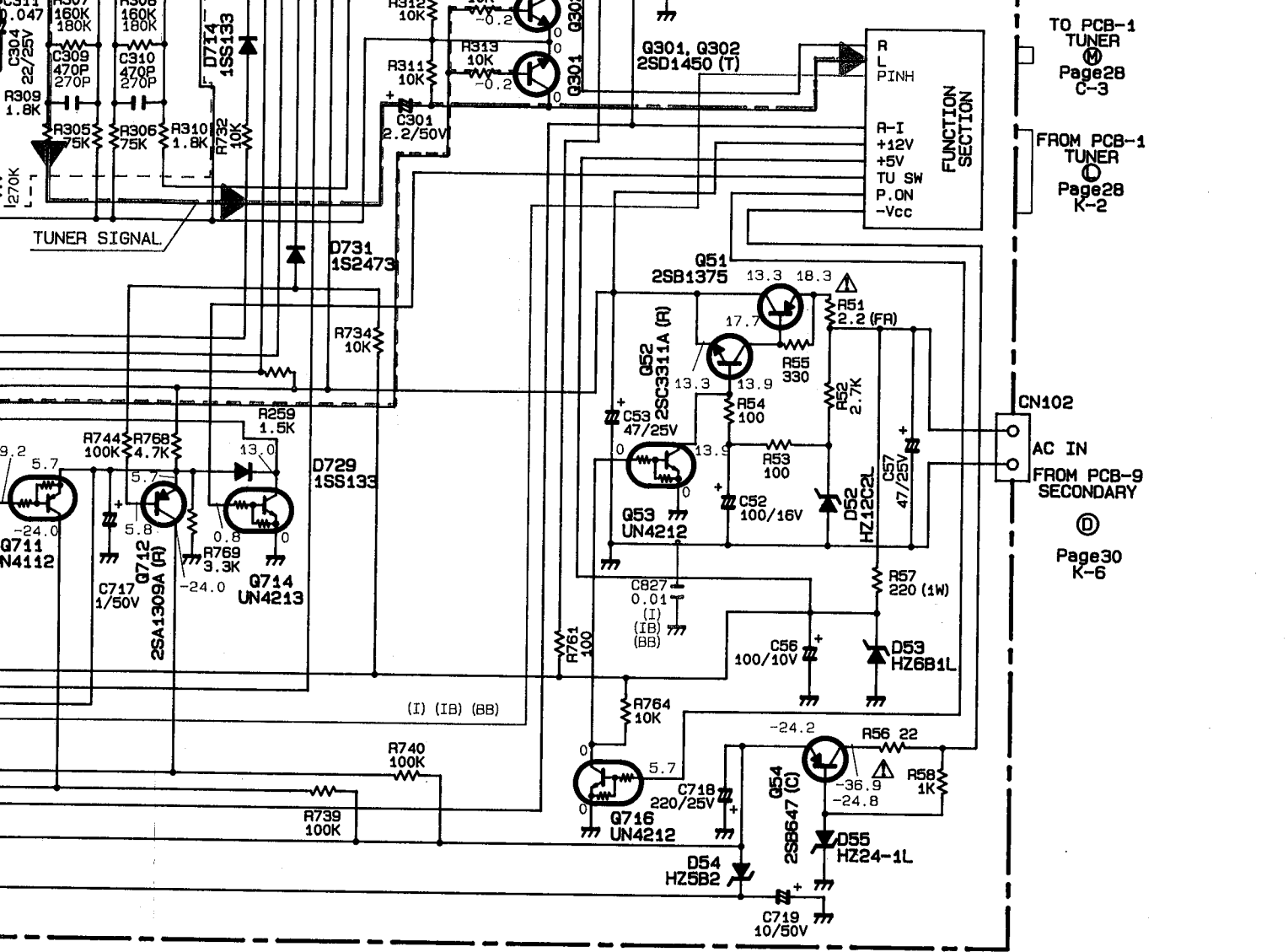
PIN NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
VOLT.	—	2.6	0	0	0	0	—	2.5	4.5	0	0	5.1	0	—	—	1.1	—	—	0	0

IC201

PIN NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
VOLT.	2.5	2.5	2.5	0	12.5	12.5	12.5	9.2	3.8	2.5	2.8	3.3	0	1.5	1.4	0.1	0	2.5	1.5	0.8

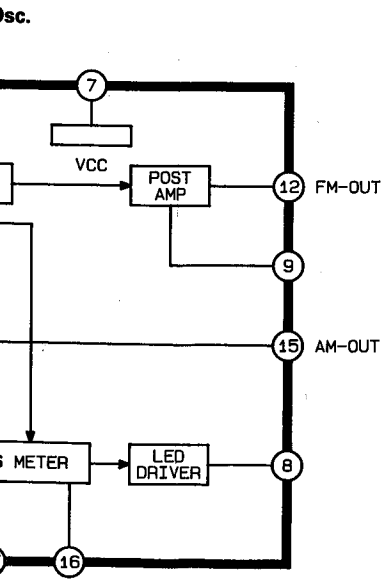
IC201 : LA1266 FM/AM IF Amp. and Det., AM Mixer and Osc.



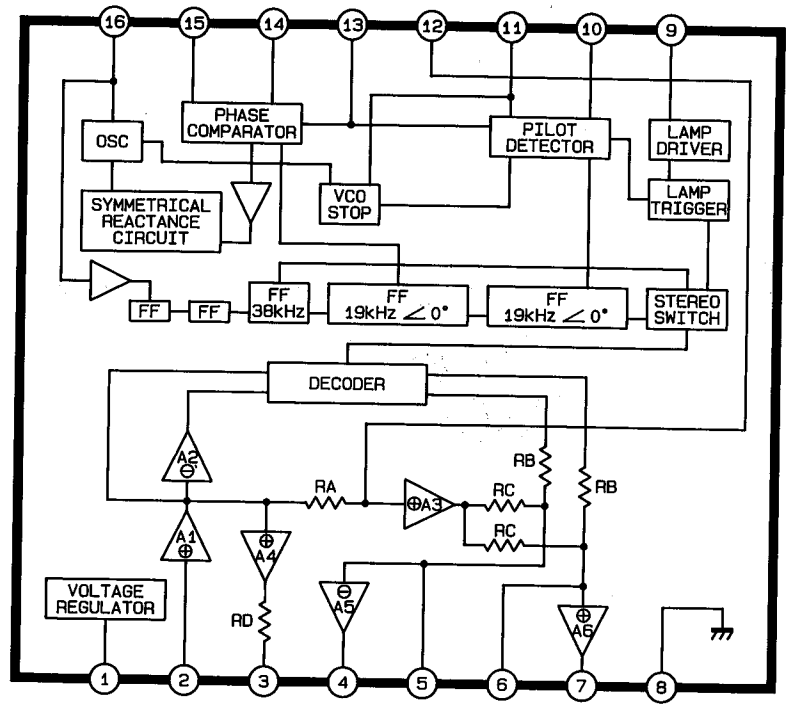


14	15	16	17	18	19	20	21	22
—	—	1.1	—	—	0	0	2.5	5.1

14	15	16	17	18	19	20	21	22	23	24
1.5	1.4	0.1	0	2.5	1.5	0.8	4.0	4.0	4.0	3.2



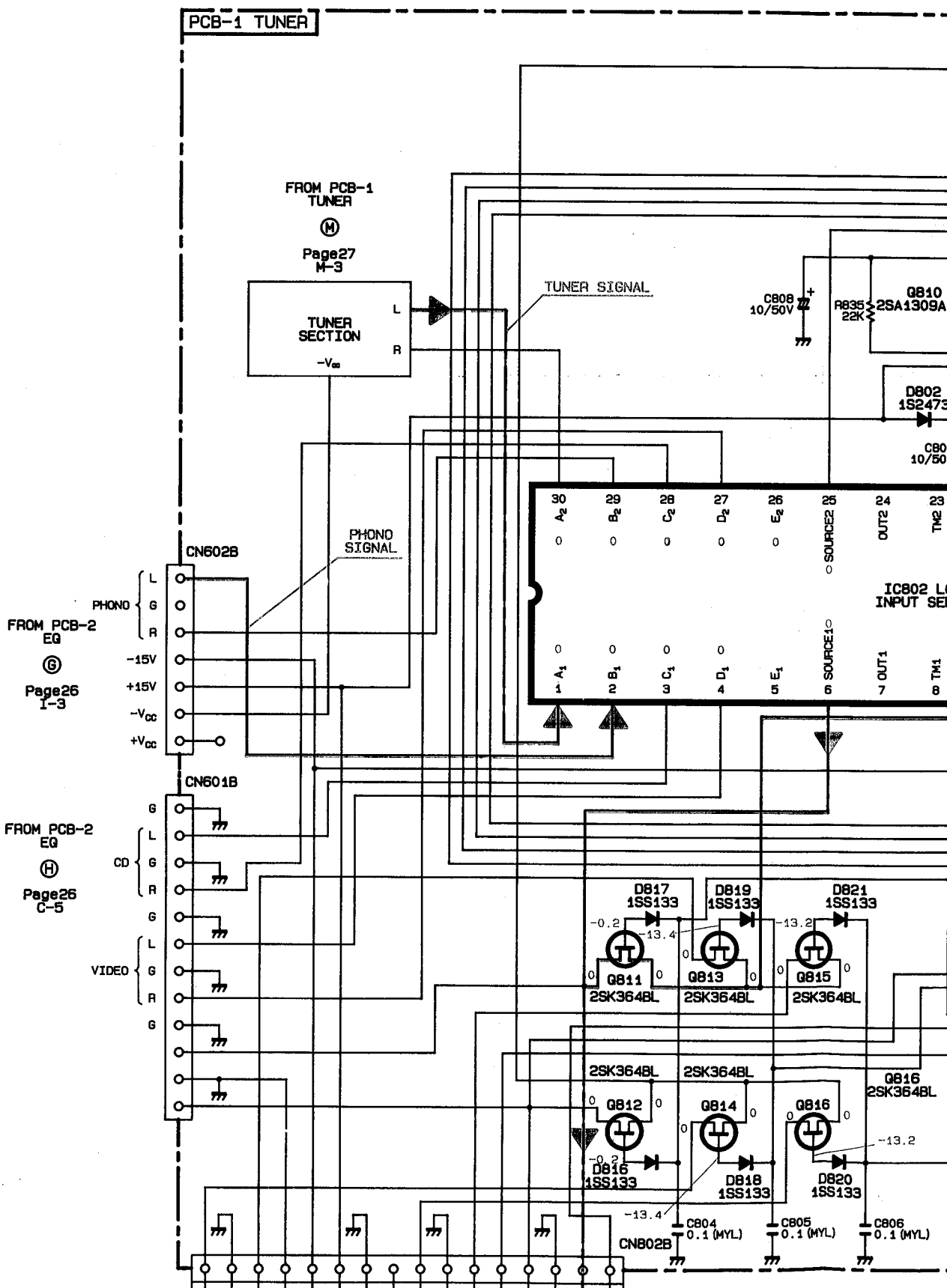
IC301 : LA3410 FM MPX



SCHMATIC DIAGRAM

1  
2  
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TO  
FR  
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I



TO PCB-14  
FRONT  
ⓑ  
Page29  
M-7

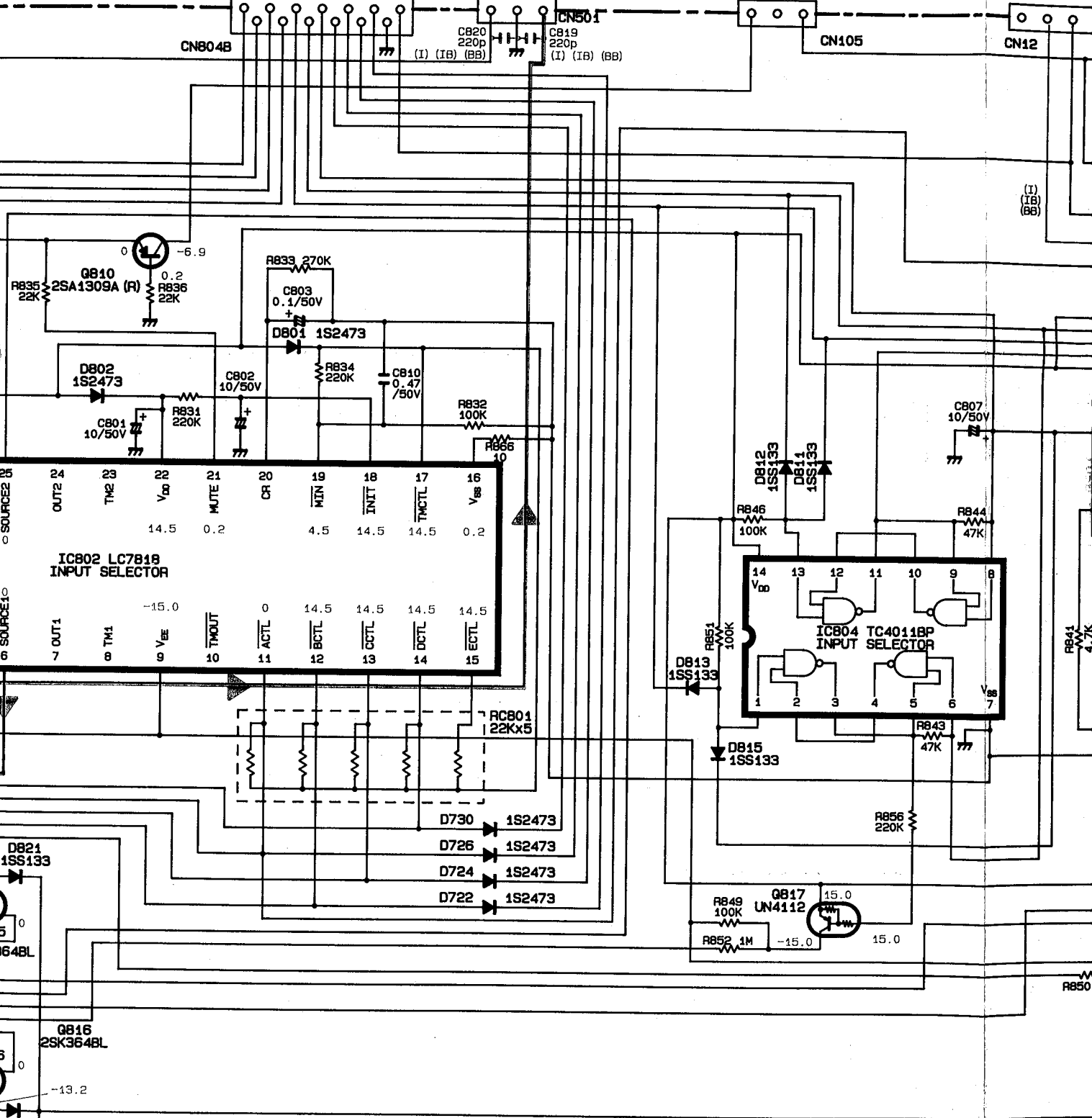
TO PCB-6  
TC  
ⓐ  
Page30  
A-2

TO PCB-1  
TC  
Ⓝ  
Page30  
C-1

FROM PCB-1  
PRIM  
ⓓ  
Page  
K-1

LED FUNCTION

PHONO CD TU VIDEO TAPE1 TAPE2 MONI-RESET VIDEO TU CD PHONO GND +12V



IC804

PIN NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14
VOLT.	15.0	0	15.0	0	15.0	11.0	0	15.0	11.0	0	15.0	0	15.0	15.0

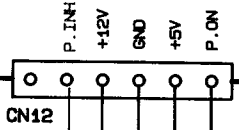
IC803

PIN NO.	1	2	3	4	5	6
VOLT.	15.0	15.0	0	0	15.0	15.0

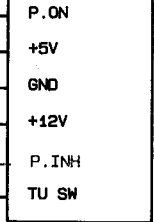


FROM PCB-8  
PRIMARY

Ⓢ  
Page30  
K-7

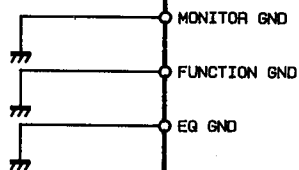
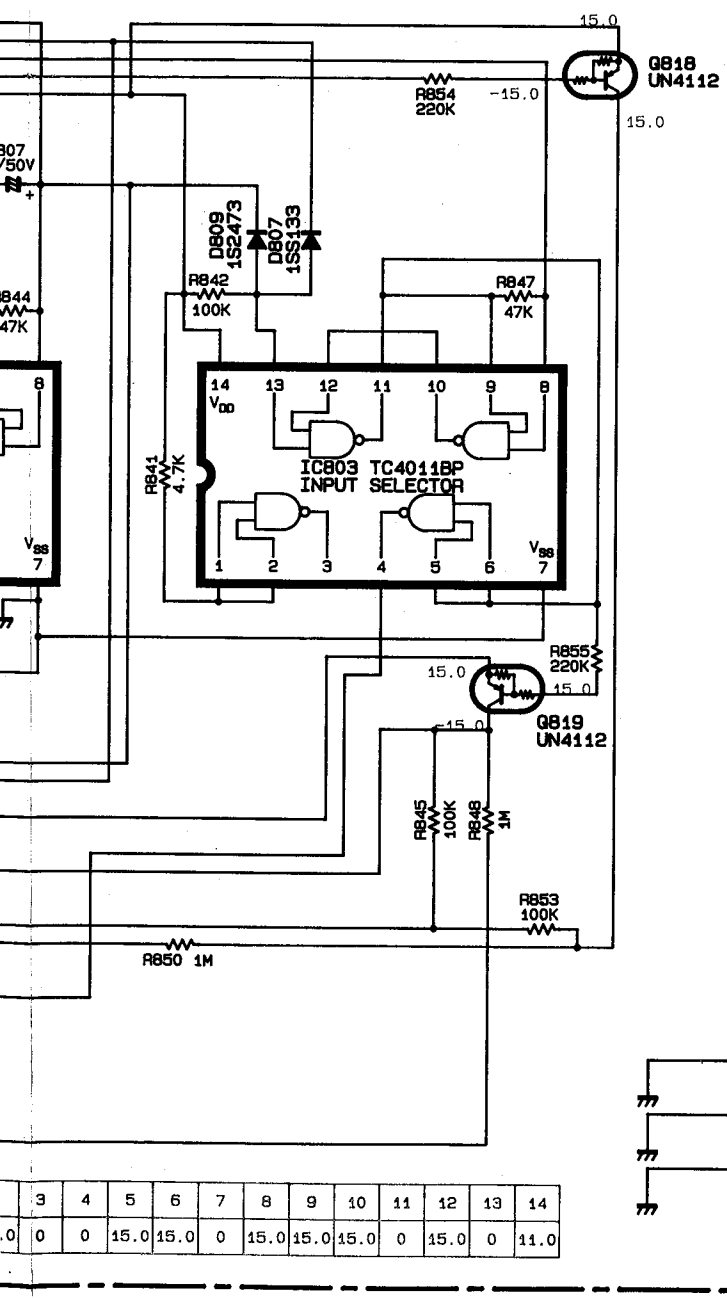


TUNER SECTION



TO PCB-1  
TUNER

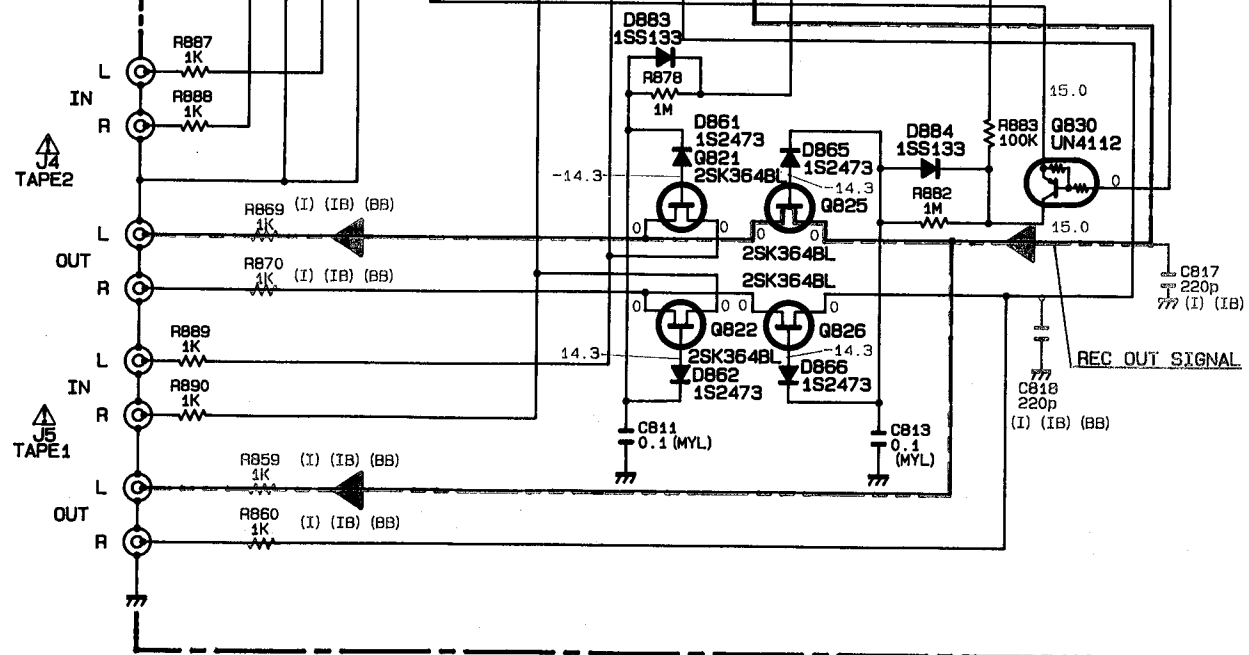
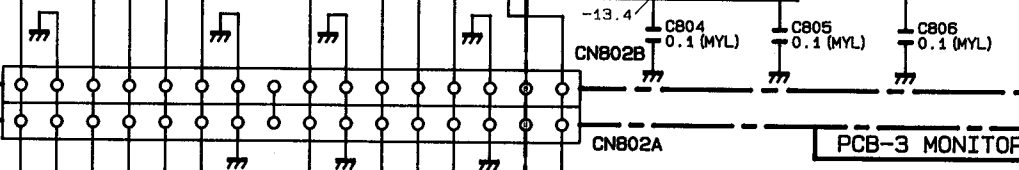
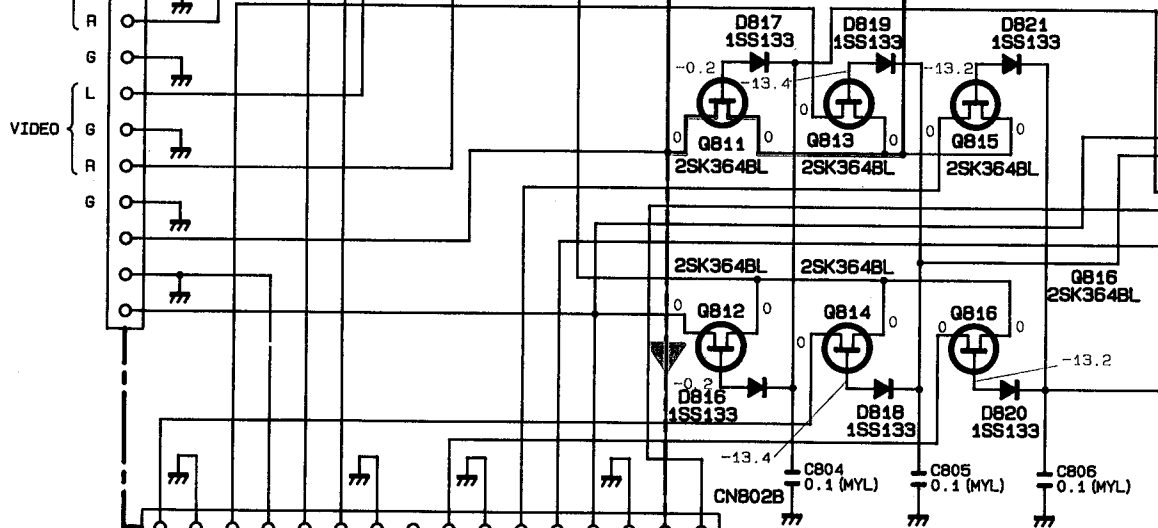
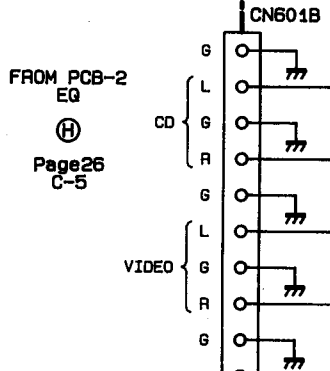
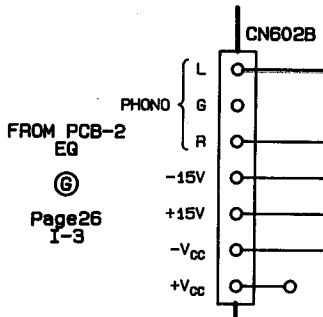
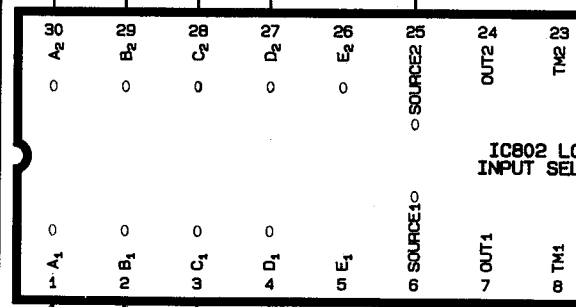
Ⓢ  
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M-4



	3	4	5	6	7	8	9	10	11	12	13	14	
	0	0	0	15.0	15.0	0	15.0	15.0	15.0	0	15.0	0	11.0

DB02  
1S2473

CB01  
10/50V



4

5

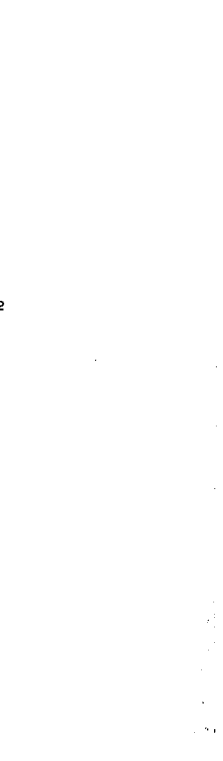
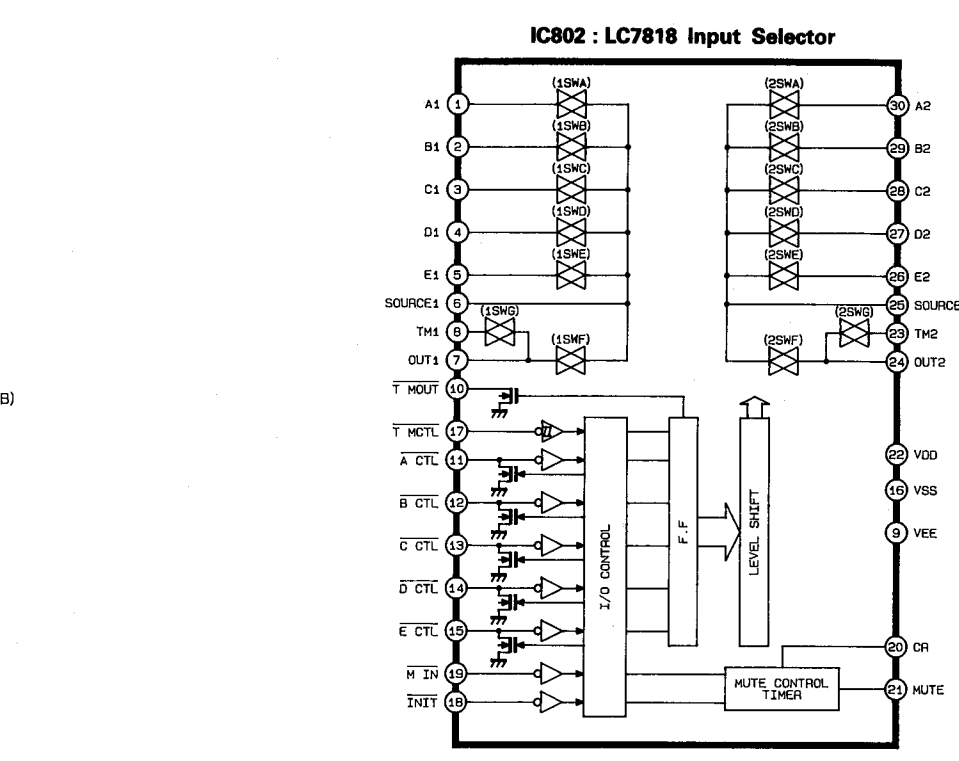
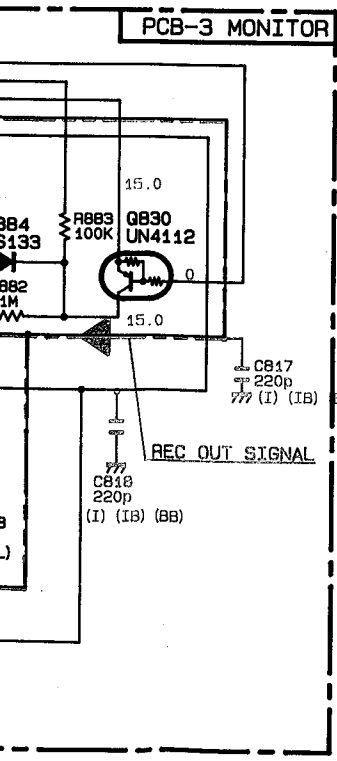
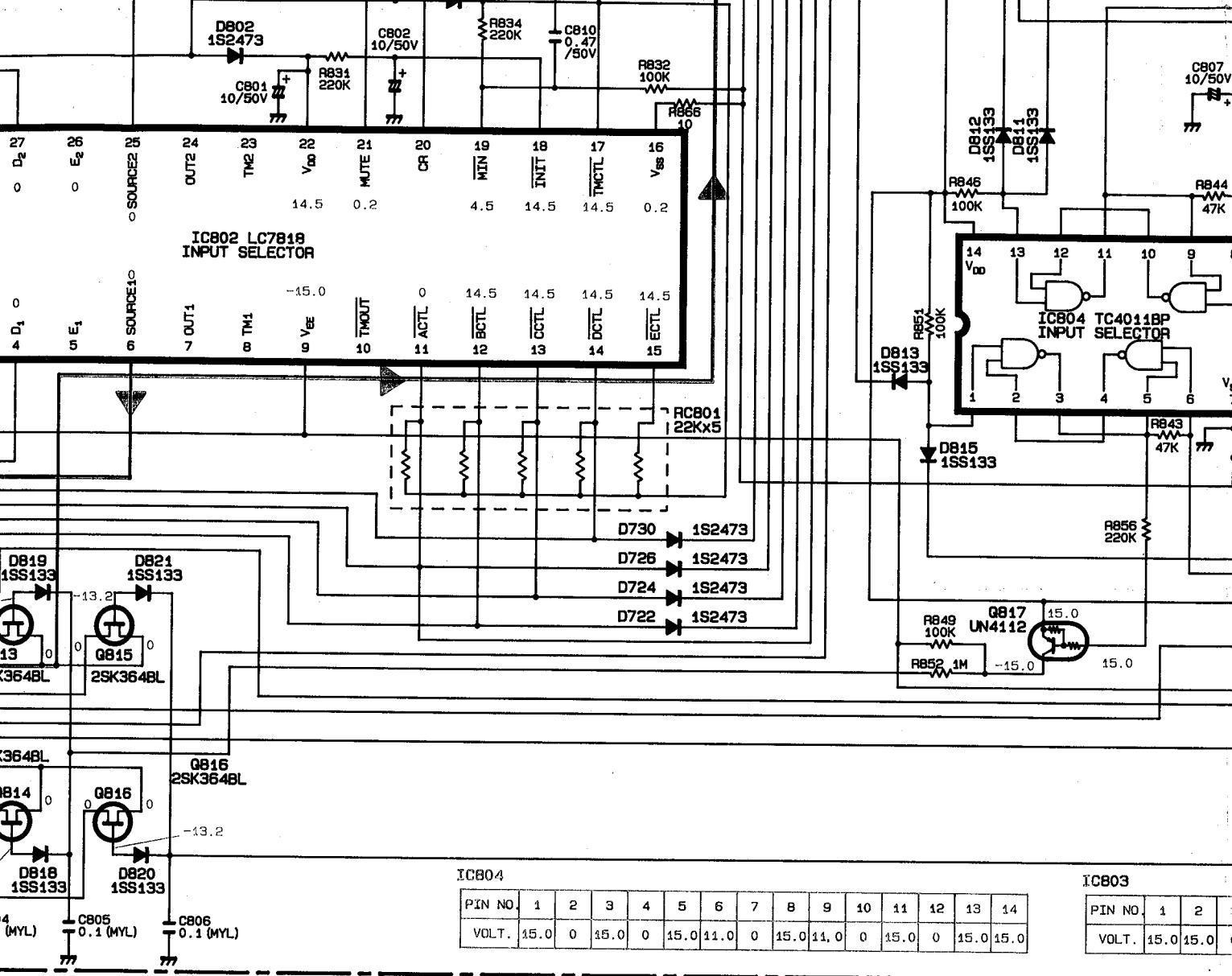
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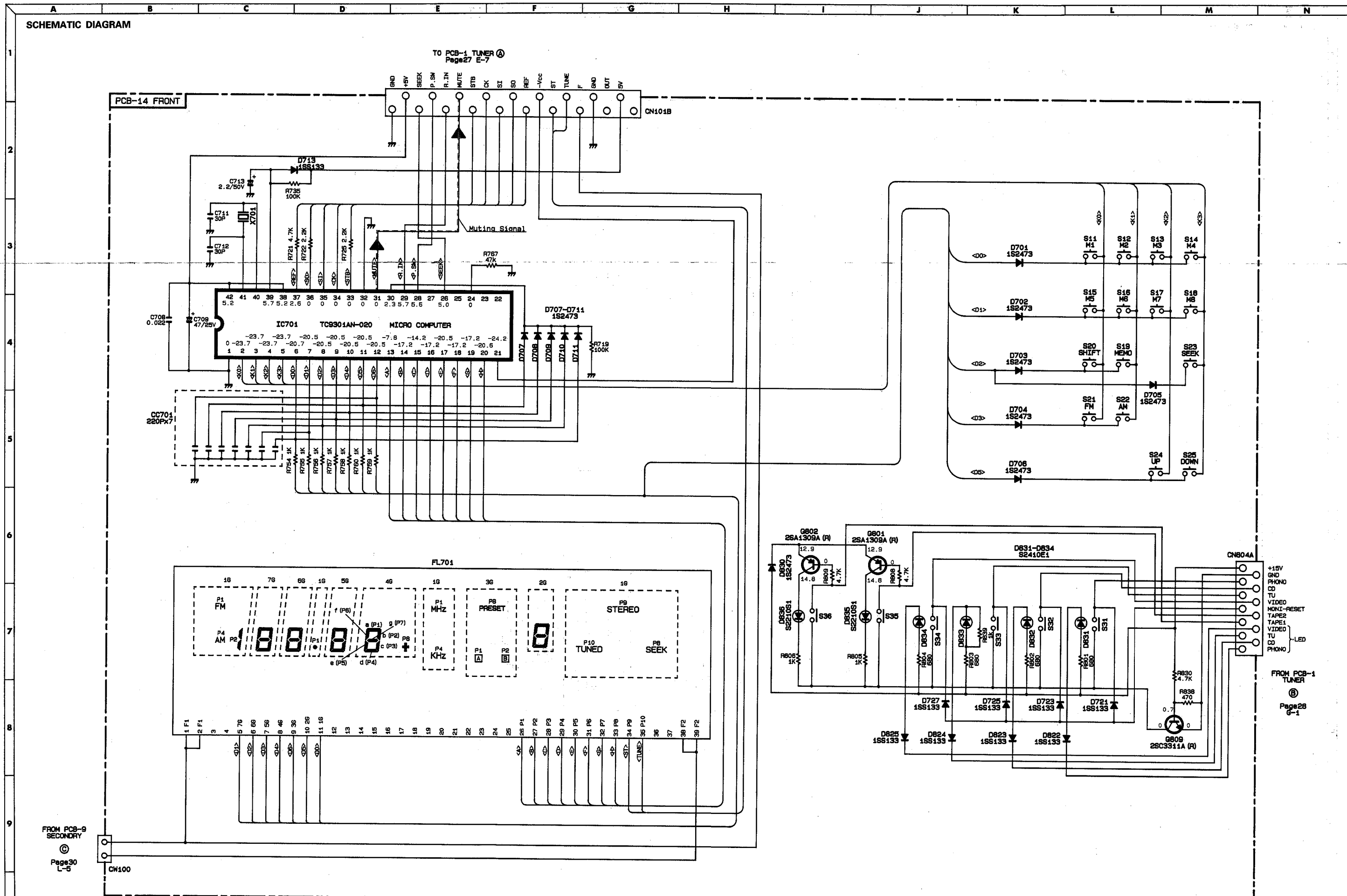
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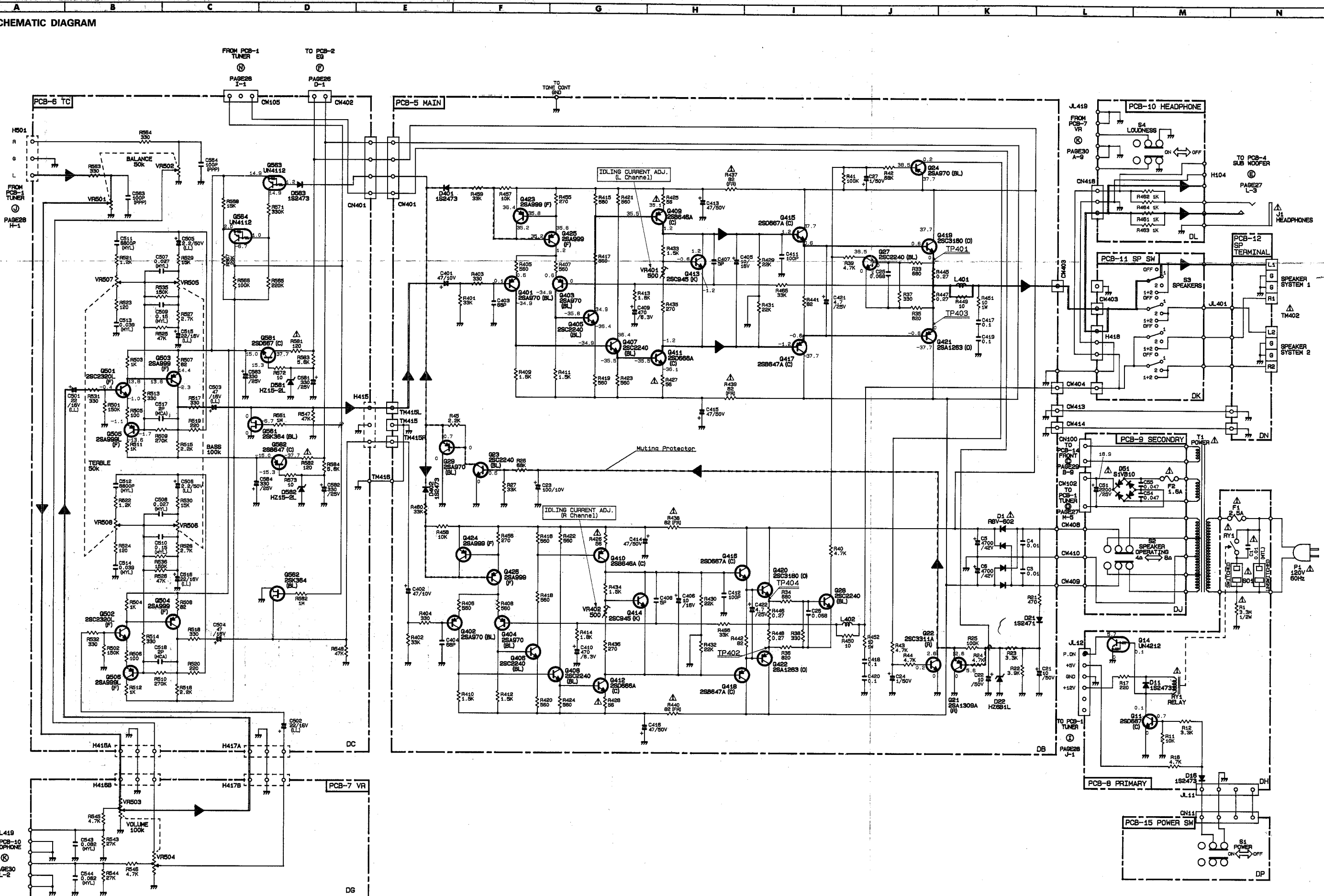




SCHEMATIC DIAGRAM



SCHEMATIC DIAGRAM



SCHEMATIC DIAGRAM

1

2

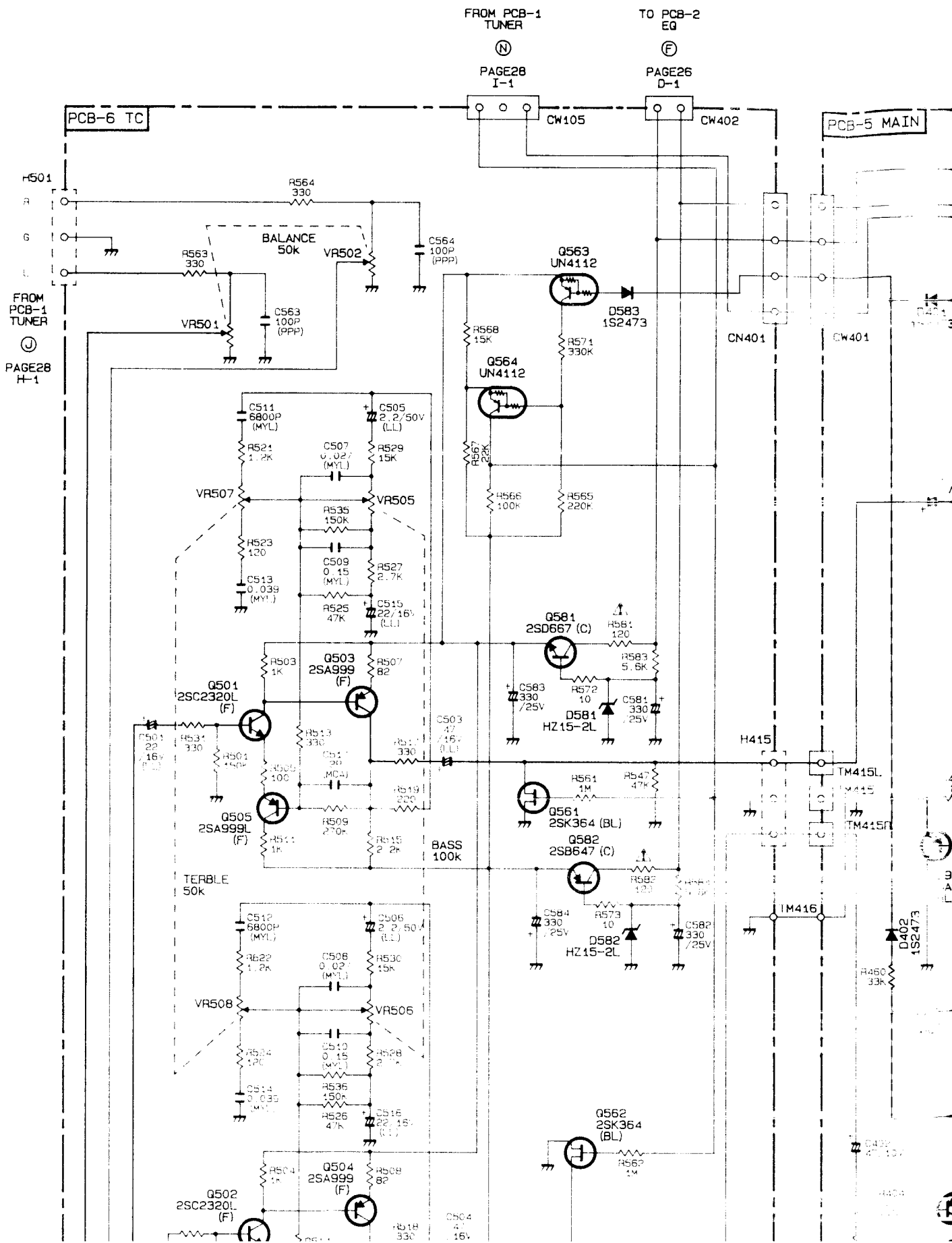
3

4

5

6

7



E

F

G

H

I

TO  
TONE CONT  
GND

PCB-5 MAIN

CW401

D401  
1S2473

R459  
33K

R457  
10K

Q423  
2SA999 (F)

R455  
270

R415  
560

R421  
560

R425  
56

C413  
47/50V

Q409  
2SB646A (C)

Q415  
2SD667A (C)

Q425  
2SA999 (F)

C401  
47/10V

R403  
330

Q401  
2SA970 (BL)

R405  
560

Q403  
2SA970 (BL)

R407  
560

Q405  
2SC2240 (BL)

R417  
560

VR401  
500

R413  
1.8K

Q413  
2SC945 (K)

C409  
470  
/6.3V

C407  
5P

C405  
16V

R420  
22K

C411  
100P

R465  
33K

R441  
82

Q421  
4.7  
/25V

R401  
37K

C403  
68P

Q407  
2SC2240 (BL)

R409  
1.5K

R411  
1.5K

Q407  
2SC2240 (BL)

R419  
560

R423  
560

Q411  
2SD666A (C)

R435  
270

R431  
22K

R465  
33K

R441  
82

Q417  
2SB647A (C)

R427  
56

R439  
82 (FR)

C415  
47/50V

TM415L

TM415

TM415R

R45  
2.2K

Q29  
2SA970 (BL)

Q23  
2SC2240 (BL)

R26  
56K

R27  
33K

C24  
100

C25  
0.058

TM416

D402  
1S2473

R402  
330

R404  
330

R406  
560

R408  
560

Q402  
2SA970 (BL)

Q404  
2SA970 (BL)

R414  
1.8K

R418  
560

R426  
56

R428  
56

R430  
560

R432  
560

R434  
1.5K

C408  
5P

C406  
15V

R430  
22K

C412  
100P

R434  
680

R446  
0.27

C25  
0.058

L402

R450

R400  
4.7K

R403  
330

Q424  
2SA999 (F)

R405  
270

R415  
560

R421  
560

R425  
56

C414  
47/50V

Q410  
2SB646A (C)

Q416  
2SD667A (C)

Q420  
2SC3180 (O)

Q426  
2SA999 (F)

Q428  
2SC2240 (BL)

R434  
1.5K

C408  
5P

C406  
15V

R430  
22K

C412  
100P

R434  
680

R446  
0.27

C25  
0.058

L402

R450

R400  
4.7K

R402  
330

Q402  
2SA970 (BL)

Q404  
2SA970 (BL)

R414  
1.8K

R418  
560

R426  
56

R428  
56

R430  
560

R432  
560

R434  
1.5K

C408  
5P

C406  
15V

R430  
22K

C412  
100P

R434  
680

R446  
0.27

C25  
0.058

L402

R450

R400  
4.7K

R402  
330

R404  
330

R406  
560

R408  
560

R410  
560

R412  
560

R414  
1.8K

R416  
560

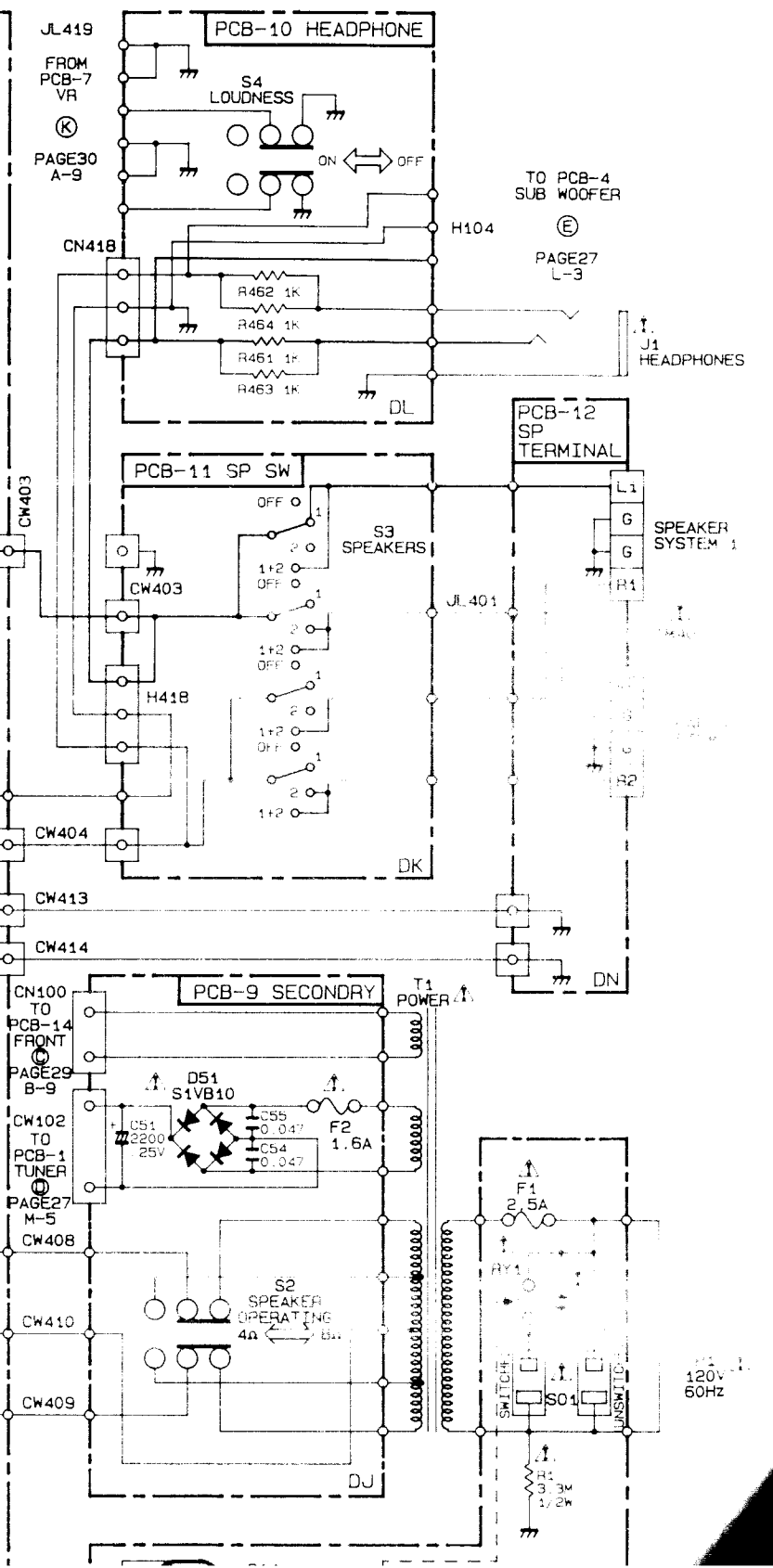
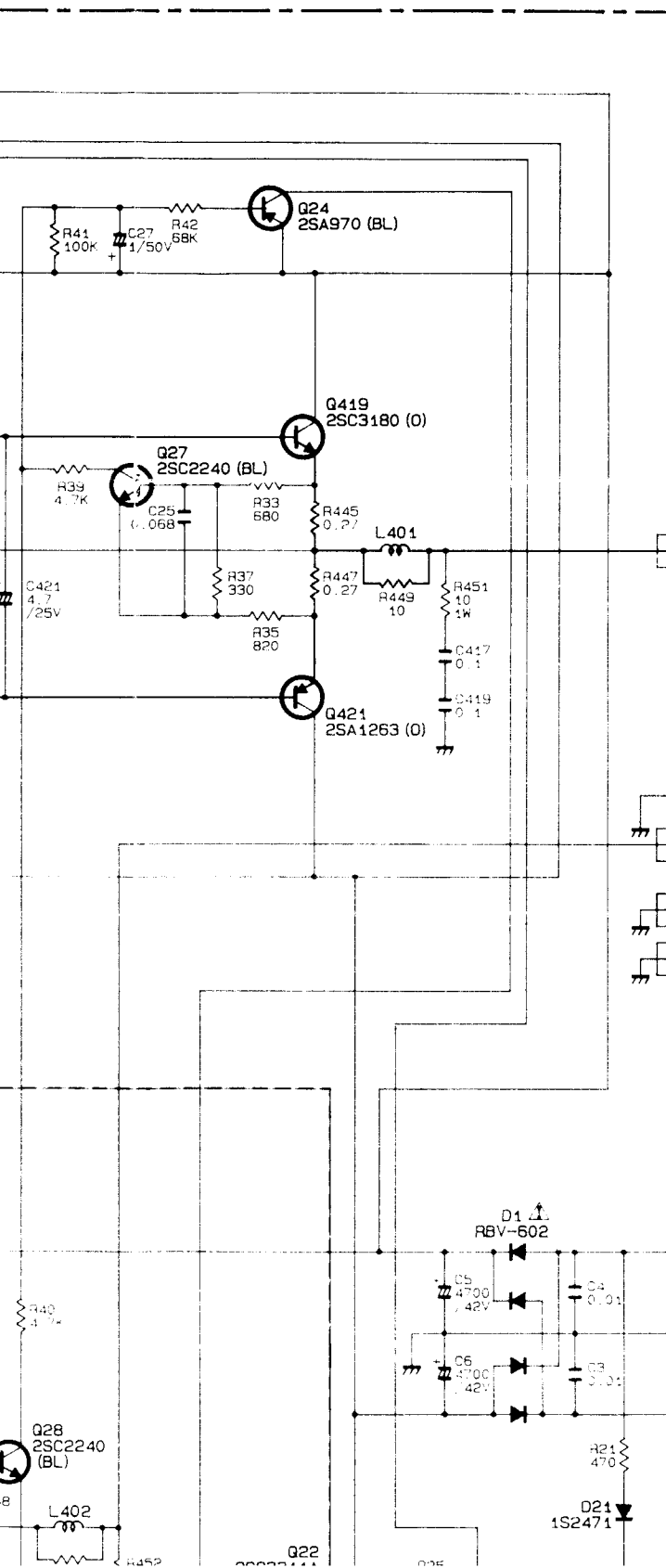
R418  
560

R420  
560

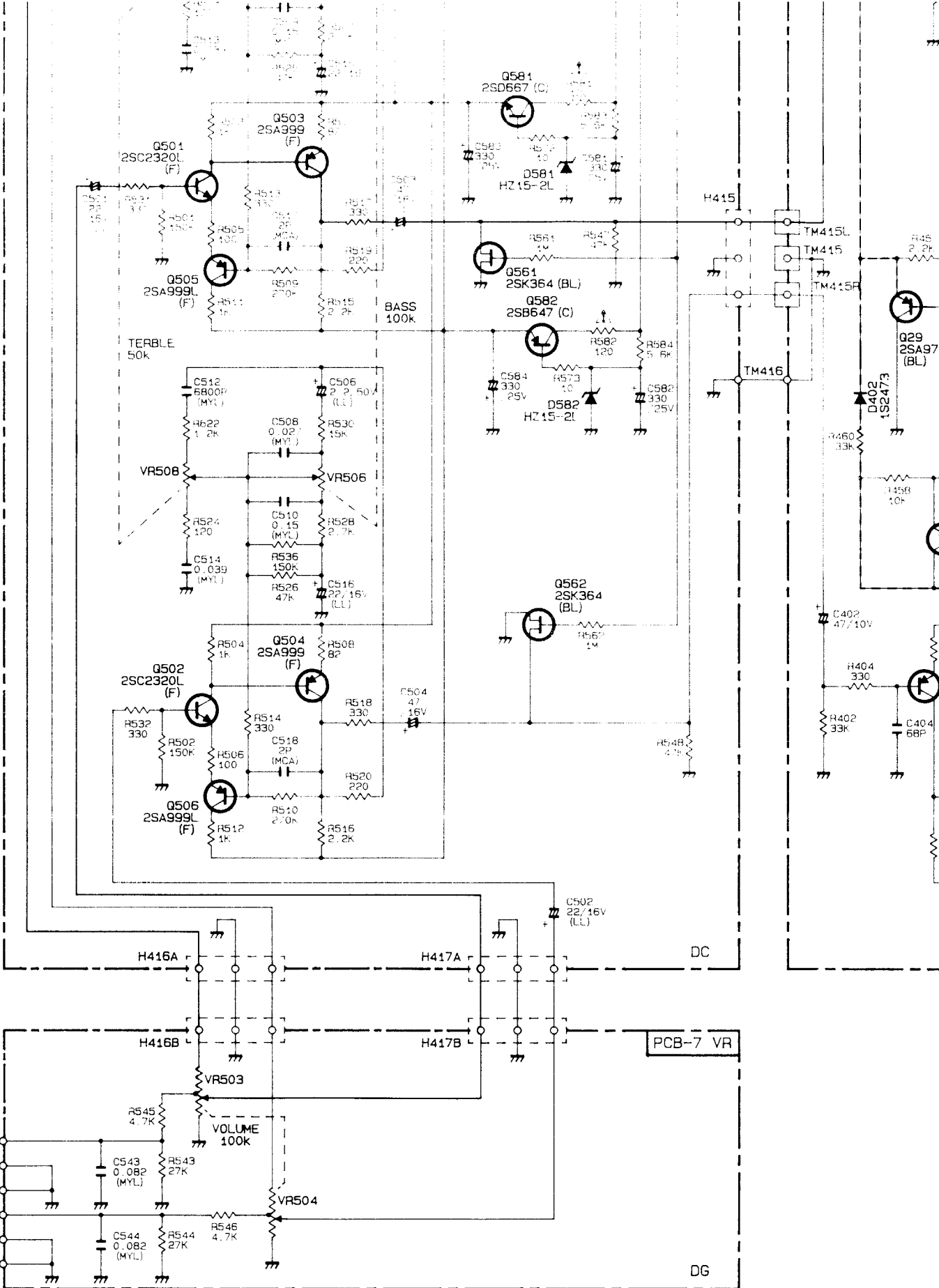
R422  
560

R424  
560

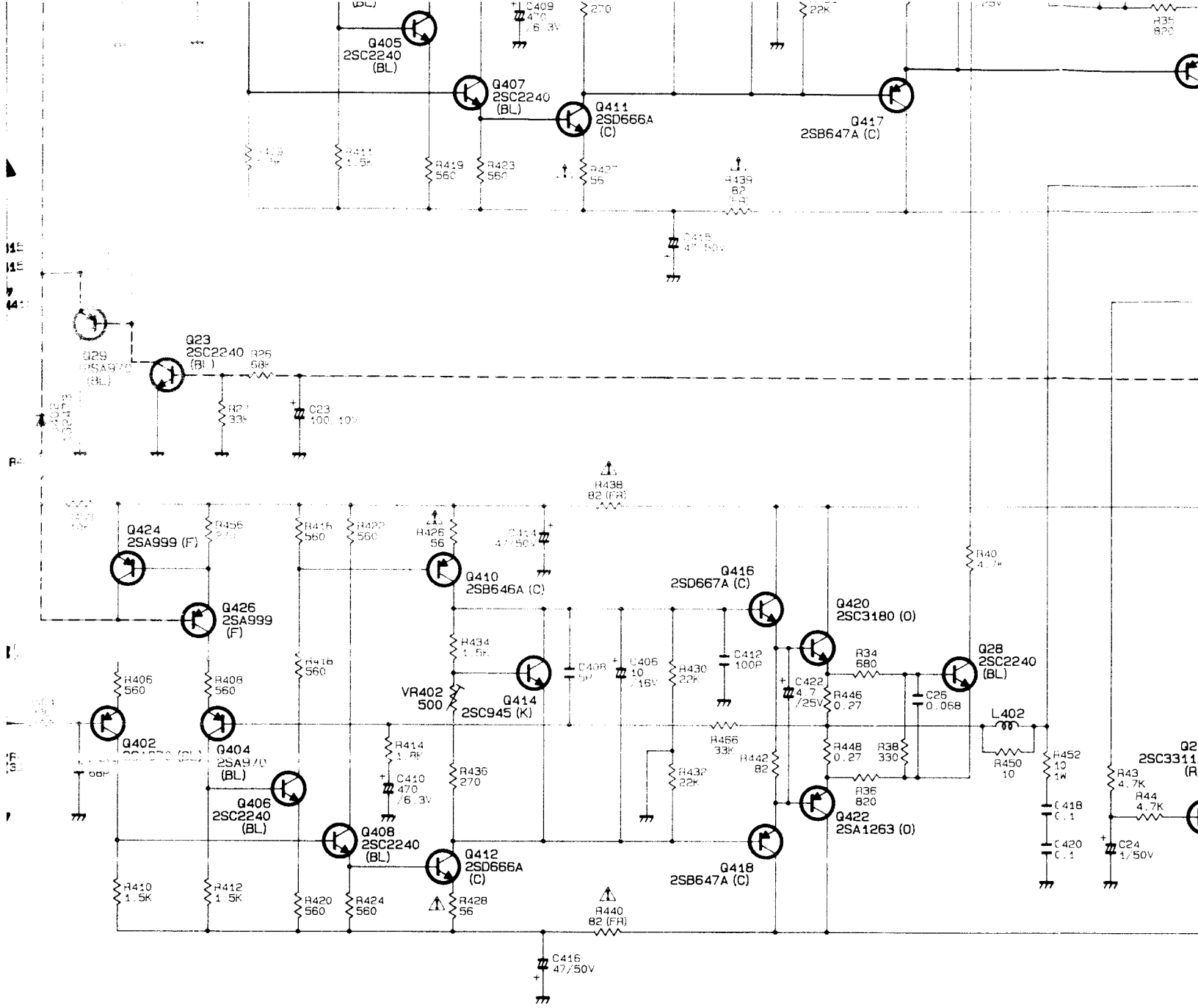


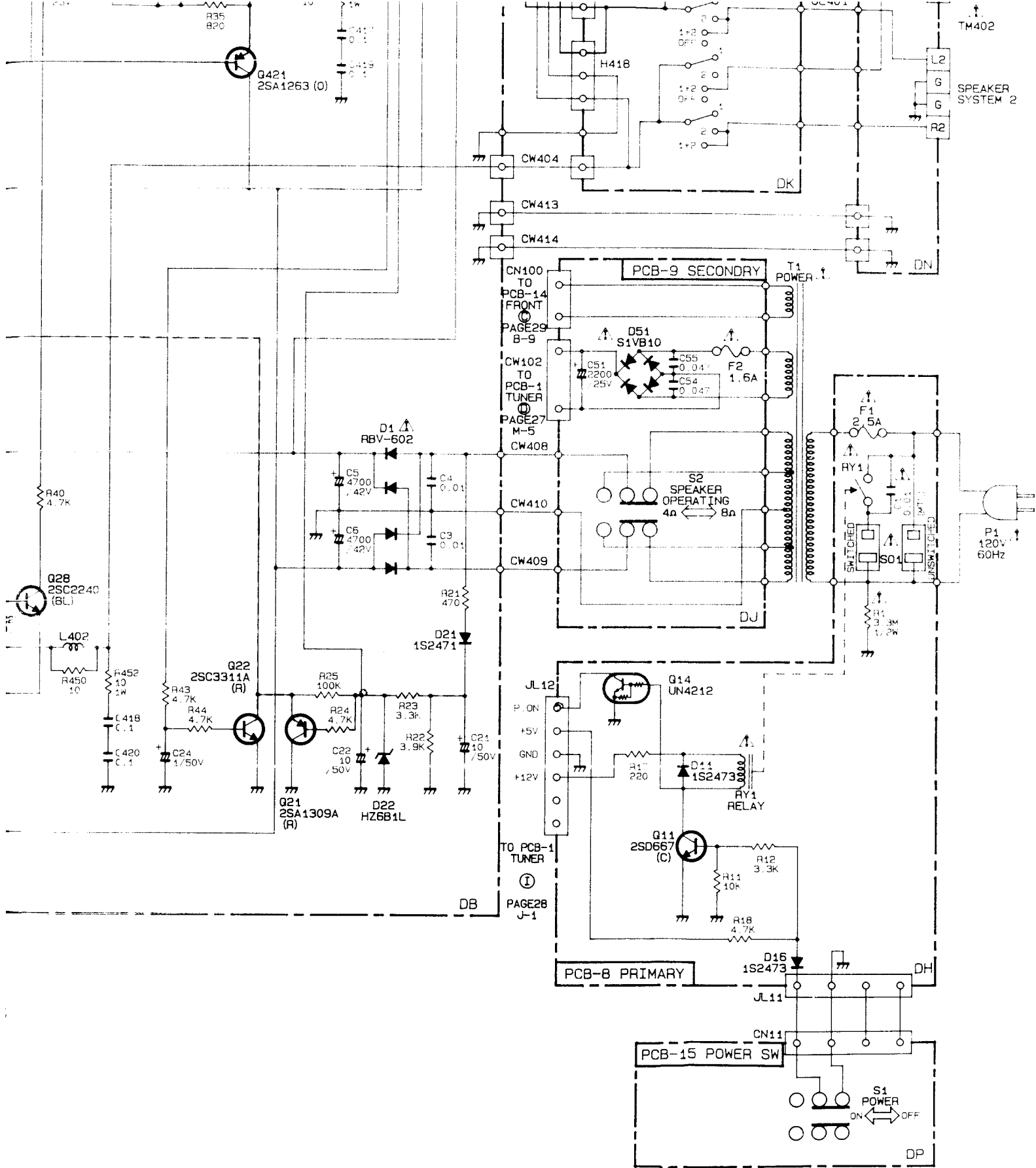


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6  
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8  
9  
10

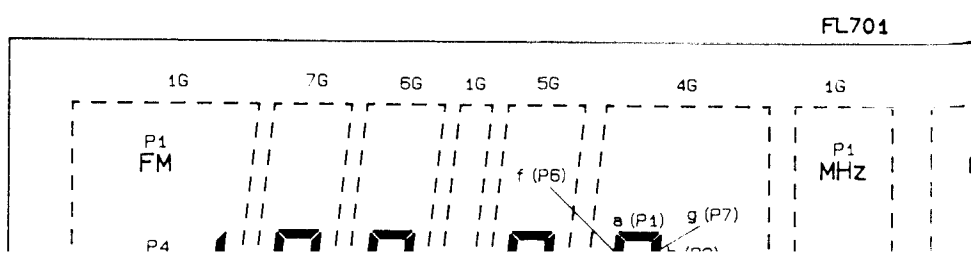
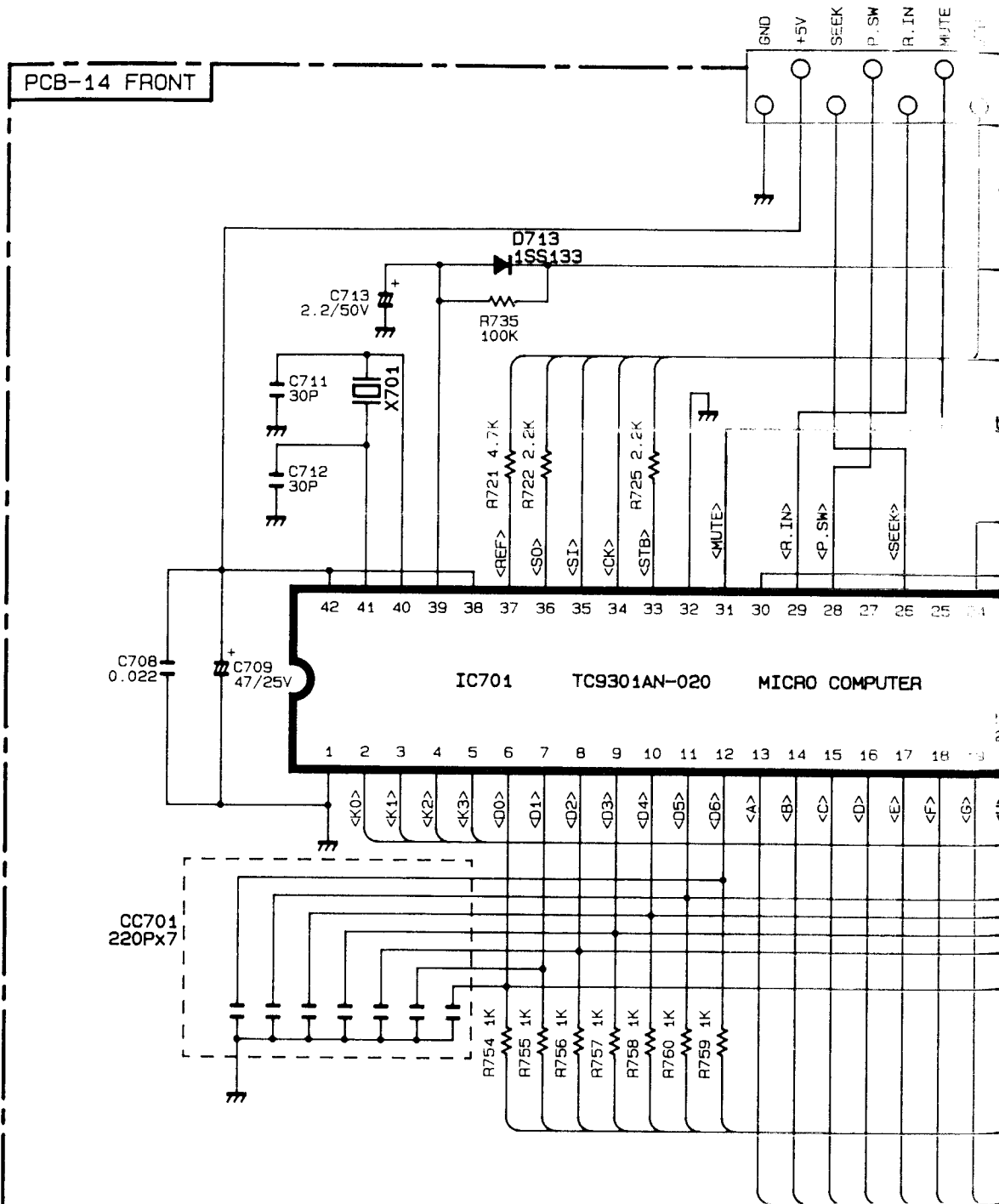


JL 419  
TO PCB

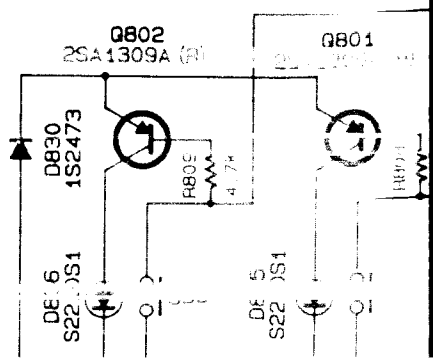
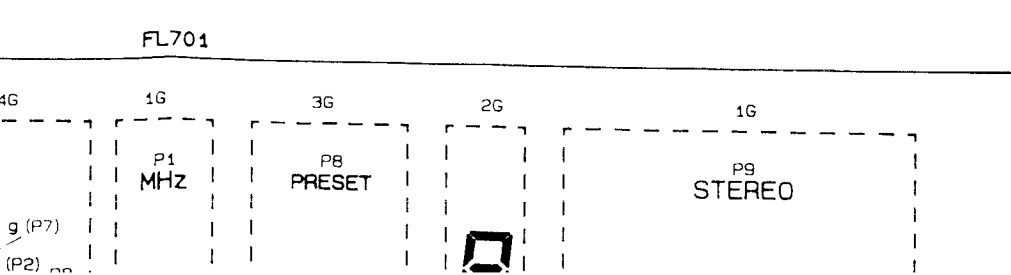
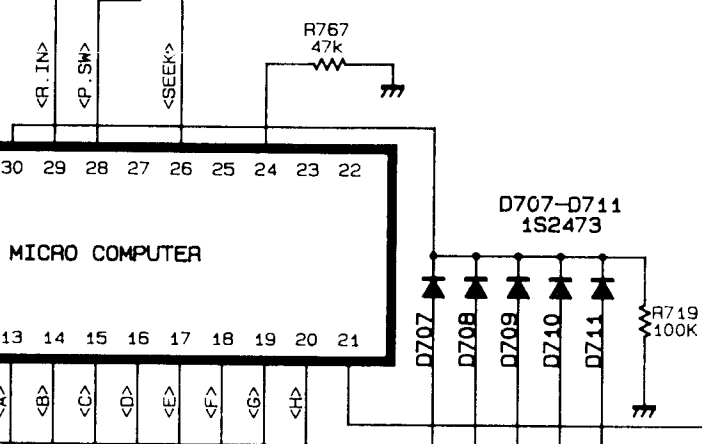
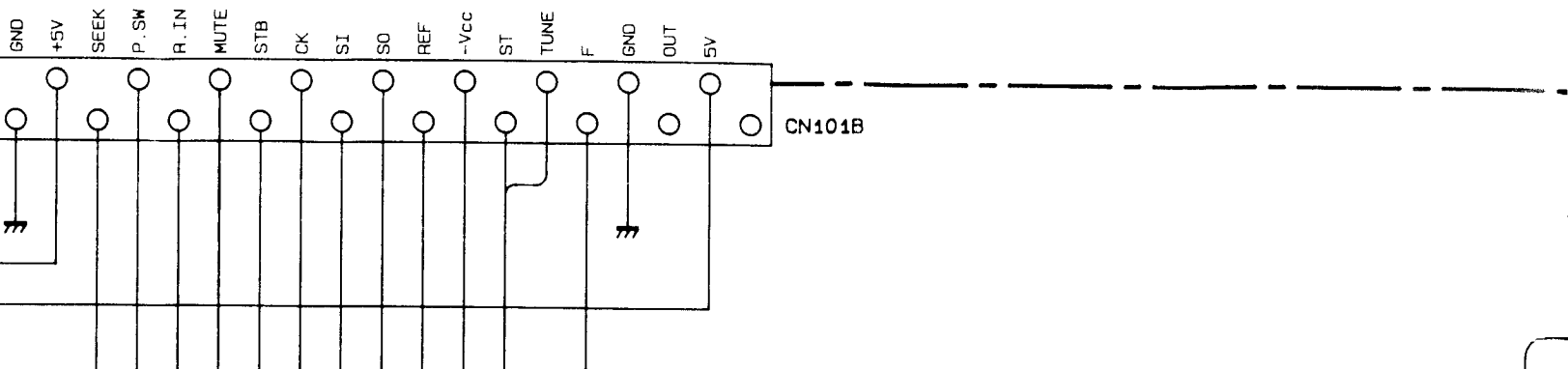




SCHEMATIC DIAGRAM



TO PCB-1 TUNER (A)  
Page 27 E-7



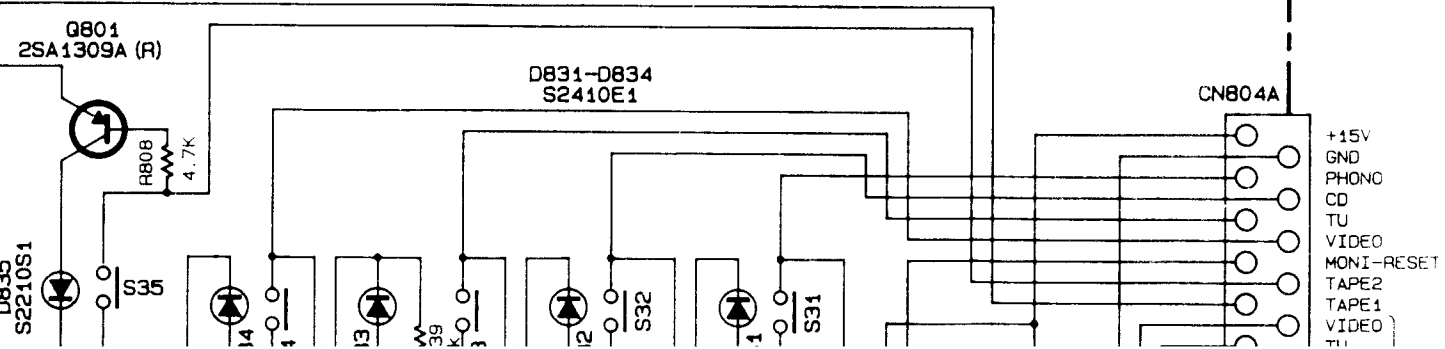
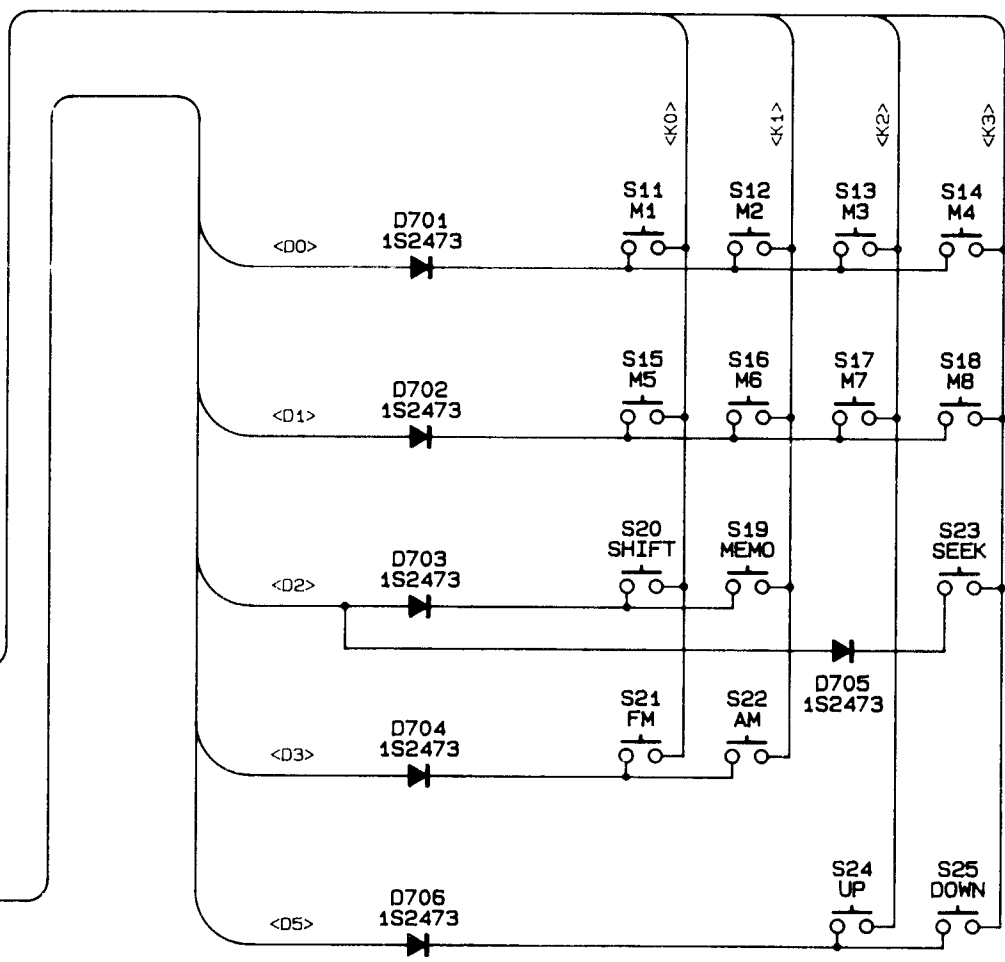
J

K

L

M

N



C708  
0.022

C709  
47/25V

IC701 TC9301AN-020 MICRO COMPUTER

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

<K0> <K1> <K2> <K3> <D0> <D1> <D2> <D3> <D4> <D5> <D6> <A> <B> <C> <D> <E> <F> <G> <H>

CC701  
220Px7

R754 1K  
R755 1K  
R756 1K  
R757 1K  
R758 1K  
R760 1K  
R759 1K

FL701

1G 7G 6G 1G 5G 4G 1G 3G

P1  
FM

P4  
AM

P2

P1

P1

P1

P1

P1

P1

P1

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P1

P1

P1

P1

P1

P1

P1

P1  
MHZ

P4  
KHZ

P8  
PRES

P1  
A

1 F1 2 F1 3 4 5 7G 6 6G 7 5G 8 4G 9 3G 10 2G 11 1G 12 13 14 15 16 17 18 19 20 21 22 23 24

<D1> <D2> <D3> <D4> <D6> <D5> <D0>

FROM PCB-9  
SECONDARY

©

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L-5

CW100



