

# Service Manual

Stereo Integrated Amplifier

Amplifier

## SU-X860

Color

(K) . . . . Black Type



Color	Areas
(K)	[EK] . . . . Continental Europe
(K)	[EH] . . . . Holland
(K)	[EB] . . . . Belgium
(K)	[EF] . . . . France
(K)	[EK] . . . . United Kingdom
(K)	[EG] . . . . F.R. Germany
(K)	[EW] . . . . Switzerland
(K)	[Ei] . . . . Italy
(K)	[XL] . . . . Australia
(K)	[XA] . . . . Asia, Latin America, Middle Near East, Africa & Oceania
(K)	[XB] . . . . Saudi Arabia

## SPECIFICATIONS

(DIN 45 500)

### ■ AMPLIFIER SECTION

<b>DIN power output</b>	
1 kHz THD: 1%	2 × 60W (8Ω)
<b>Total harmonic distortion</b>	
rated power at 1 kHz	1% (8Ω)
half power at 1 kHz	0.007% (8Ω)
<b>Residual hum and noise</b>	0.2 mV
<b>Damping factor</b>	30 (8Ω)
<b>Input sensitivity and impedance</b>	
PHONO	3 mV/47kΩ
TUNER, CD, AUX, TAPE 1, TAPE 2	200 mV/22kΩ
<b>Maximum input voltage (1 kHz, RMS)</b>	
PHONO	120 mV
<b>S/N (rated power 8Ω)</b>	
PHONO	75 dB (IHF, A, 79 dB)
TUNER, CD, AUX, TAPE 1, TAPE 2	82 dB (IHF, A: 83 dB)

### Frequency response

<b>PHONO</b>	RIAA standard curve ±0.8 dB (30 Hz~15 kHz)
<b>TUNER, CD, AUX, TAPE 1, TAPE 2</b>	10 Hz~60 kHz (-3 dB)
<b>Tone controls</b>	
<b>BASS</b>	50 Hz, +10 dB~-10 dB
<b>TREBLE</b>	20 kHz, +10 dB~-10 dB
<b>Muting</b>	-20 dB
<b>Super bass</b>	70 Hz, +10 dB
<b>Output voltage</b>	
TAPE 1, TAPE 2, REC OUT	200 mV
<b>Channel balance, AUX 250 Hz~6,300 Hz</b>	±1.0 dB
<b>Channel separation, AUX 1 kHz</b>	60 dB
<b>Headphones output level and impedance</b>	
	520 mV/330Ω
<b>Load impedance</b>	
<b>MAIN or REMOTE</b>	8Ω~16Ω
<b>SURROUND</b>	8Ω~16Ω

### ■ GENERAL

<b>Power consumption</b>	300W
<b>Power supply</b>	
For continental Europe	AC 50 Hz/60 Hz, 220V
For others	AC 50 Hz/60 Hz, 110V/127V/220V/240V
<b>Dimensions (W×H×D)</b>	360 × 118 × 303 mm (14-3/16" × 5-1/32" × 11-30/32")
<b>Weight</b>	6.9kg (15.2 lb.)

#### Note:

Total harmonic distortion is measured by the digital spectrum analyzer (H.P. 3045 system).

Specifications are subject to change without notice for further improvement.

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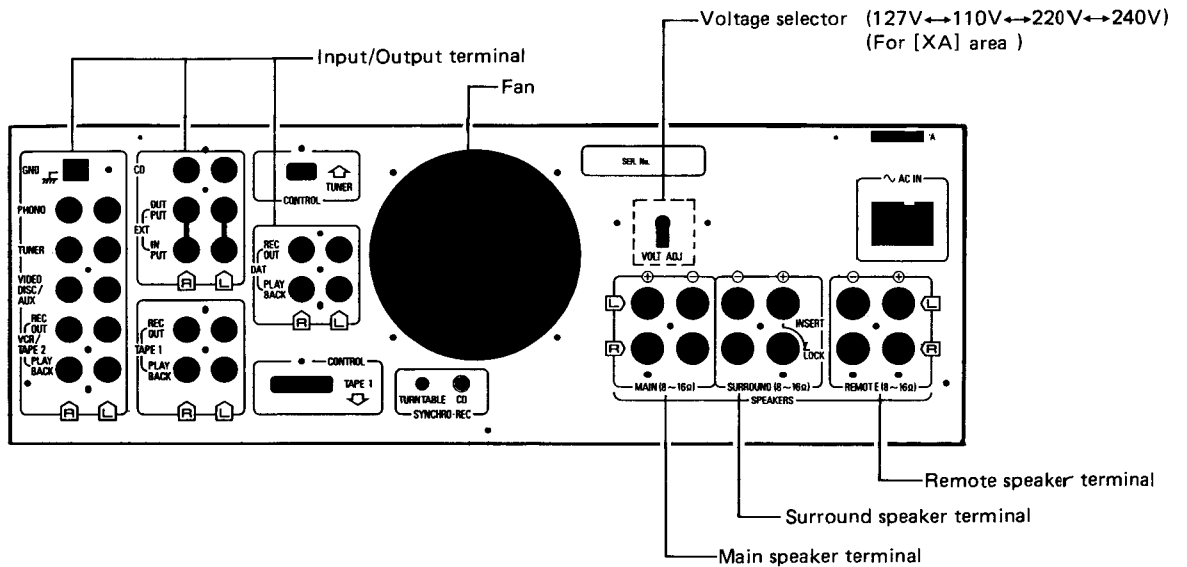
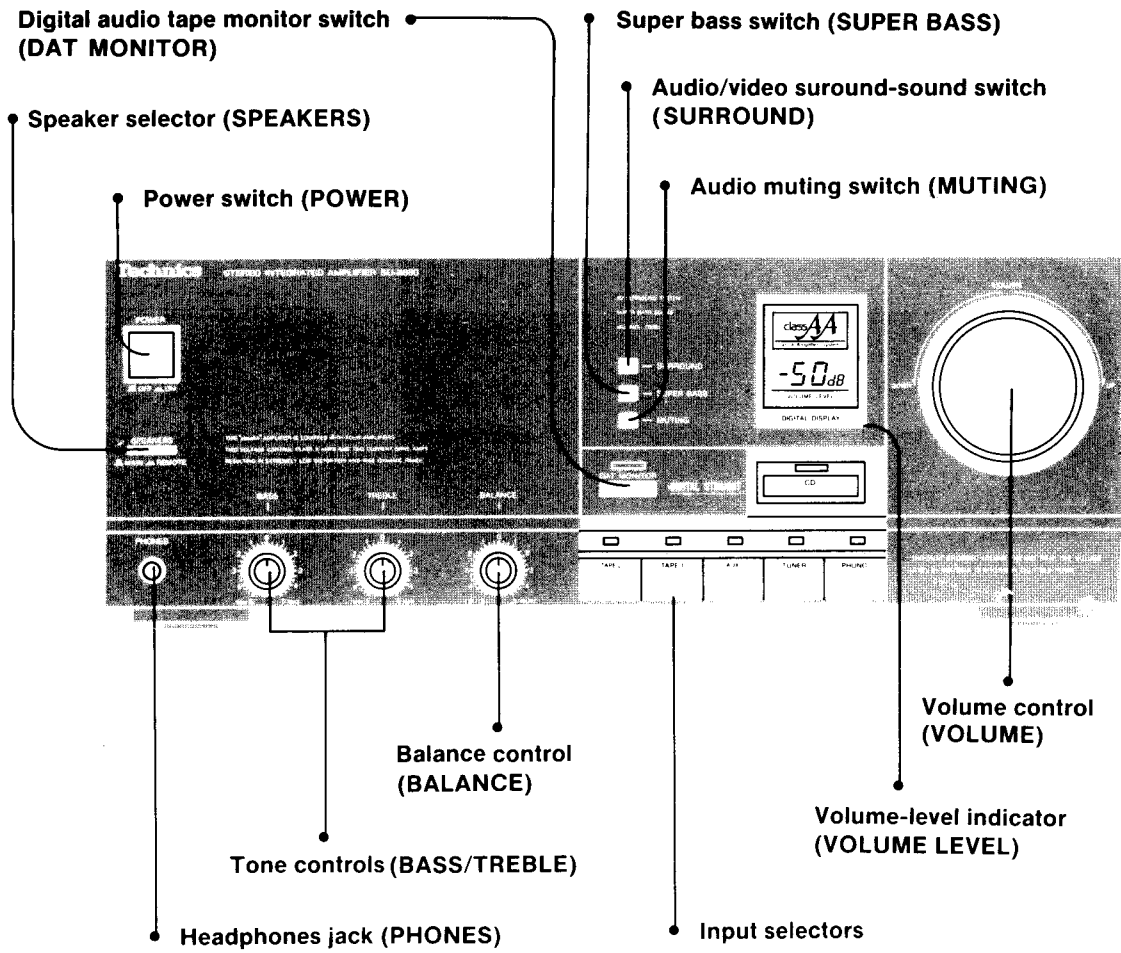
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# Technics

**Matsushita Electric Trading Co., Ltd.**

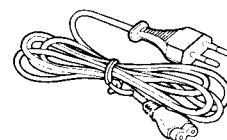
P.O. Box 288, Central Osaka Japan

# LOCATION OF CONTROLS



# ACCESSORY

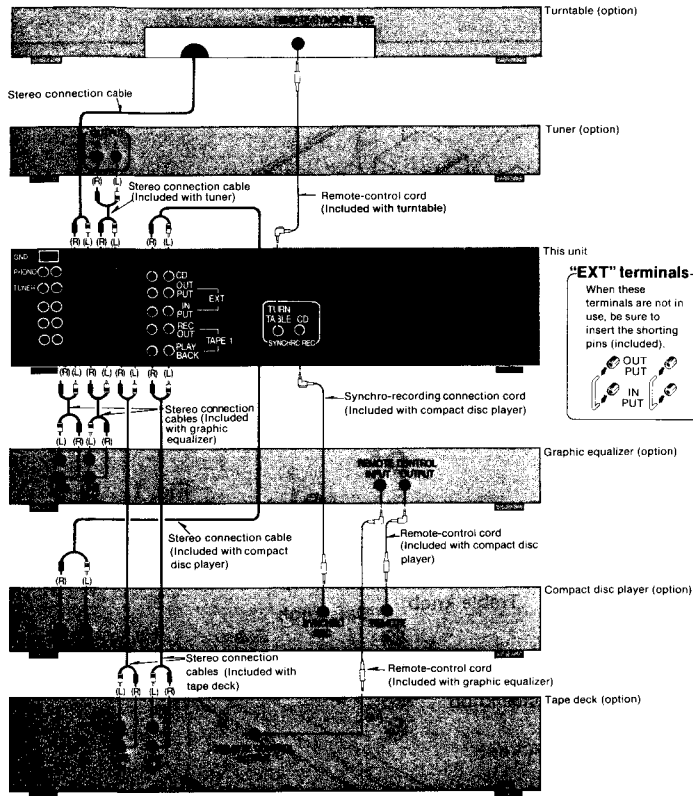
- AC power supply cord ..... 1



# CONNECTION

## 1. Make the connections of the stereo connection cables, the synchro-recording connection cords, and the remote-control cords.

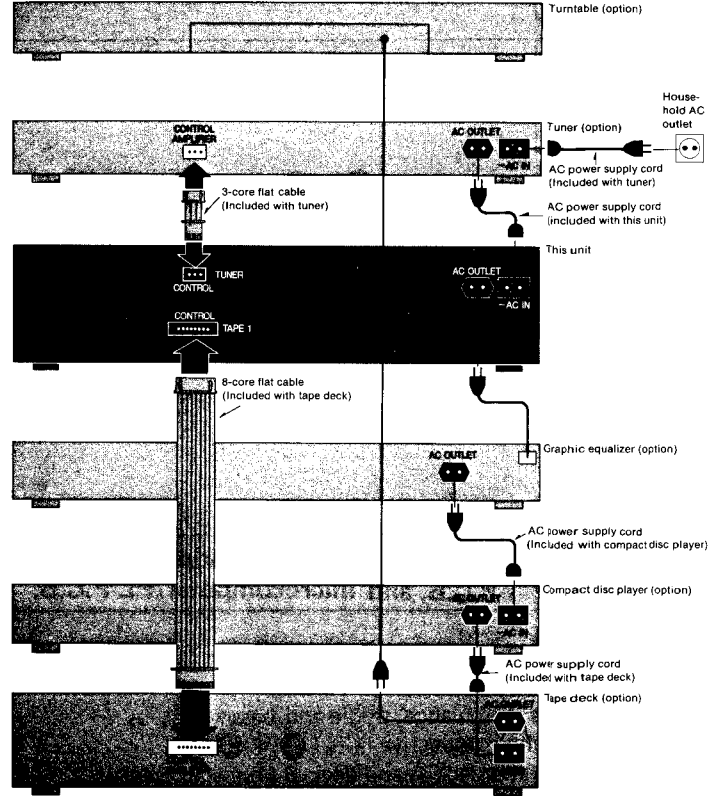
- Although the synchro-recording connection cords and the remote-control cords are differentiated in the figure below, actually they are the same shape.
- If the graphic equalizer is not used in combination with these components, connect the remote-control cord (included with the compact disc player) to the "REMOTE CONTROL" terminal ("OUTPUT") of the cassette tape deck and to the "REMOTE" terminal of the compact disc player.
- For a turntable with a ground terminal, be sure to connect the ground wire to the "GND" terminal of the amplifier.



## 2. Make the connections of the flat cables and the AC power supply cords.

- Do not connect video-related equipment (such as a TV, etc.) to the power outlets of these components. (These outlets are especially for audio equipment.) Also do not exceed the indicated (as shown in the figure) power ratings when connecting to these outlets.
- The tuner's power outlet is interlocked with the power "STAND BY" switch of the tuner.
- If the graphic equalizer is not used in combination with these components, connect the AC power supply cord of the compact disc player to the AC outlet of the amplifier. If the compact-disc player is not used in combination with these components, connect the AC power supply cord of the cassette tape deck to the AC outlet of the graphic equalizer.

Note: The configurations of the AC outlets and AC power supply cords differ according to area.



# PROTECTION CIRCUITRY

The protection circuitry may have operated if either of the following conditions is noticed:

- No sound is heard when the power is turned on.
- Sound stops during a performance.

The function of this circuitry is to prevent circuitry damage if, for example, the positive and negative speaker connection wires are "shorted", or if speaker systems with an impedance less than the indicated rated impedance of this unit are used.

If this occurs, follow the procedure outlines below:

1. Turn off the power.
2. Determine the cause of the problem and correct it.
3. Turn on the power once again after one minute.

### Note

When the protection circuitry functions, the unit will not operate unless the power is first turned off and then on again.

# BEFORE REPAIR AND ADJUSTMENT

- (1) Turn off the power supply. Using a 10Ω, 5W resistor, shortcircuit both ends of power supply capacitors ((C701, C702) in order to discharge the voltage.
- (2) Before turning the power supply on, after completion of repair, slowly apply the primary voltage by using a power supply voltage controller to make sure that the consumed current at 50Hz/60Hz in NO SIGNAL mode should be shown below with respect to supply voltage 110V/127V/220V/240V.

Power supply voltage		AC110V	AC127V	AC220V	AC240V
Consumed current	50Hz	194 ~ 582mA	178 ~ 534mA	100 ~ 300mA	90 ~ 270mA
	60Hz	186 ~ 558mA	170 ~ 510mA	95 ~ 285mA	85 ~ 250mA

## DISASSEMBLY INSTRUCTIONS

### "ATTENTION SERVICER"

SOME CHASSIS COMPONENTS MAY HAVE SHARP EDGES. BE CAREFUL WHEN DISASSEMBLING AND SERVICING.

<b>Ref. No.</b> 1	<b>How to remove the cabinet</b>
----------------------	----------------------------------

<b>Procedure</b> 1	1. Remove the 4 screws from both sides of the cabinet and the 2 screws from its back.
-----------------------	---

<b>Ref. No.</b> 2	<b>How to remove the front panel</b>
----------------------	--------------------------------------

<b>Procedure</b> 1 → 2	
---------------------------	--

1. Remove the 3 screws (① ~ ③) from the front panel.
2. Remove the connector (J401B).

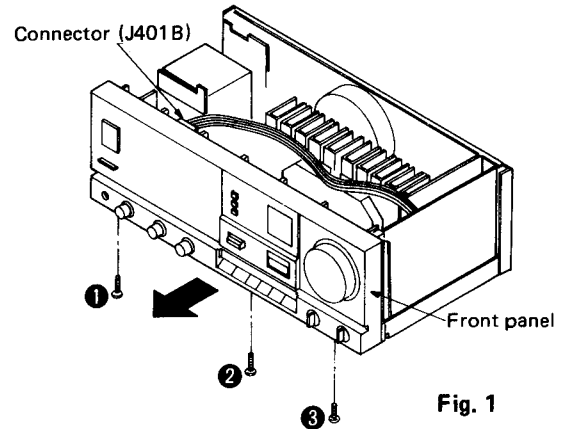


Fig. 1

<b>Ref. No.</b> 3	<b>How to remove the headphone jack P.C.B. and microcomputer/FL P.C.B.</b>
----------------------	--

<b>Procedure</b> 1 → 2 → 3	
-------------------------------	--

1. Remove the balance, treble and bass knobs, as well as their respective nuts (① ~ ③).
2. Remove the deck A and deck B knobs, as well as their respective nuts (④, ⑤) and washers (⑥, ⑦).
3. Remove the 2 screws (⑧, ⑨) from the microcomputer/FL P.C.B., and undo the 2 tabs.
4. Remove the 2 screws (⑩, ⑪) from the headphone jack P.C.B.

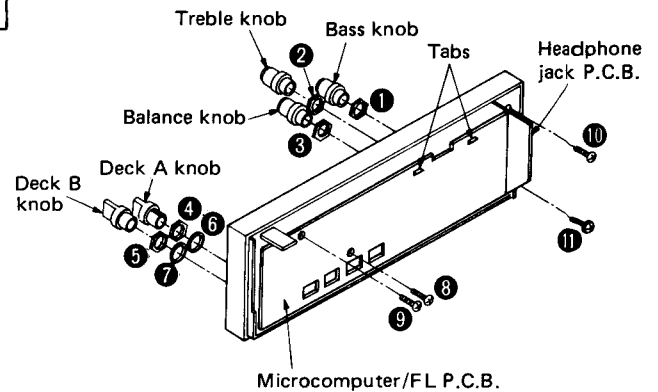


Fig. 1

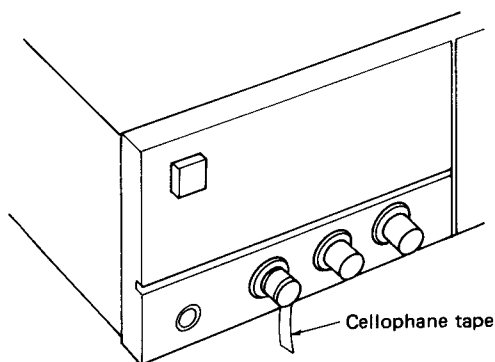


Fig. 2

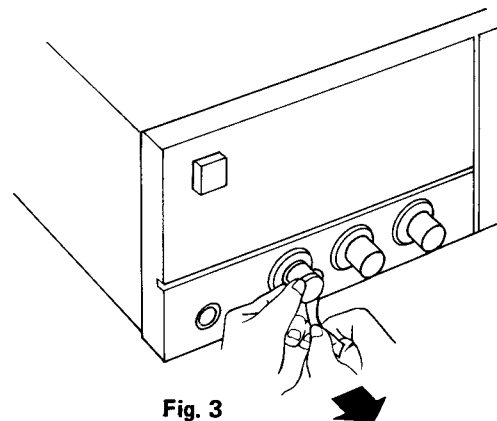


Fig. 3

#### Remove the knob

Wind cellophane tape around the knob and put it the direction of the arrow as shown in Fig. 2 and Fig. 3.

**Ref. No. 4**      **How to remove the volume control and switch P.C.B.**

**Procedure**  
1 → 2 → 3 → 4

1. Remove the volume knob and the nut ( ❶ ).
2. Remove the 6 screws ( ❷ ~ ❹ ) from the switch P.C.B.

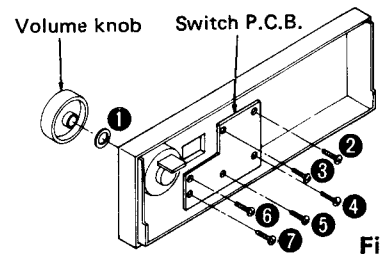


Fig. 1

**Ref. No. 5**      **How to remove the main P.C.B., power IC and constant-voltage transistor**

**Procedure**  
1 → 2 → 5

1. Remove the 8 screws ( ❶ ~ ❸ ) from the rear panel.
2. Remove the 3 screws ( ❹ ~ ❻ ) from the main P.C.B.
3. Remove the 2 screws ( ❼ , ❽ ) from the heat-sink.

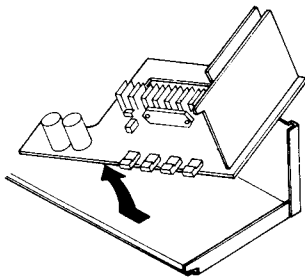


Fig. 3

7. When mounting the power IC and the constant-voltage transistor, apply silicone grease (SZ0GYG6260) over their constant areas.

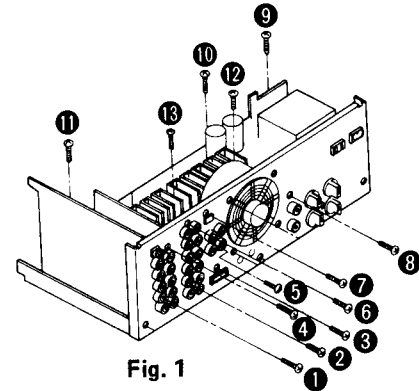


Fig. 1

4. Unsolder the power IC and the constant-voltage transistor.
5. Remove the 2 screws ( ❿ , ⓫ ) from the power IC.
6. Remove the screw ( ⓬ ) from the constant-voltage transistor.

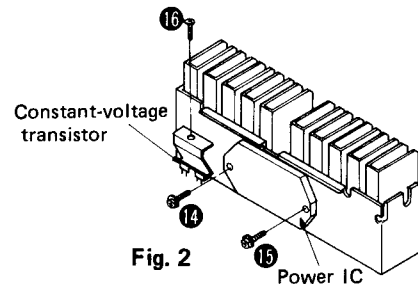


Fig. 2

**Ref. No. 6**      **How to remove the cooling fan motor**

**Procedure**  
1 → 6

1. Remove the 4 screws ( ❶ ~ ❹ ) and the connector.

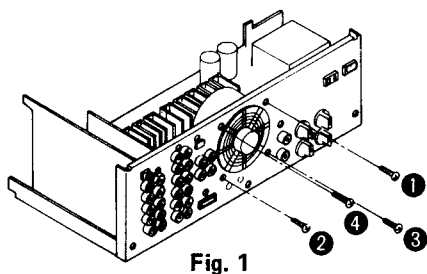


Fig. 1

2. Insert a screwdriver at the root of the cooling fan, it out of the motor shaft.

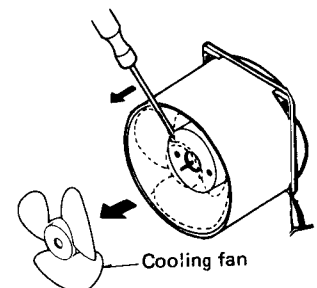


Fig. 2

3. Remove the motor cover.
4. Remove the motor from the fan casing.
5. When mounting the fan motor, align the fan casing's projection with the hole of the fan motor.

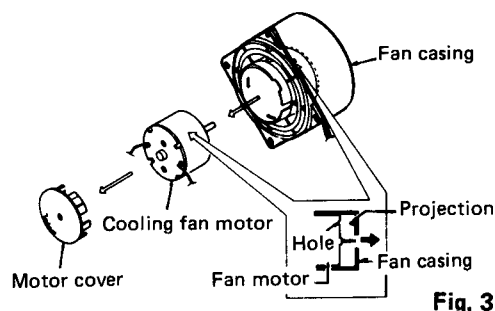


Fig. 3

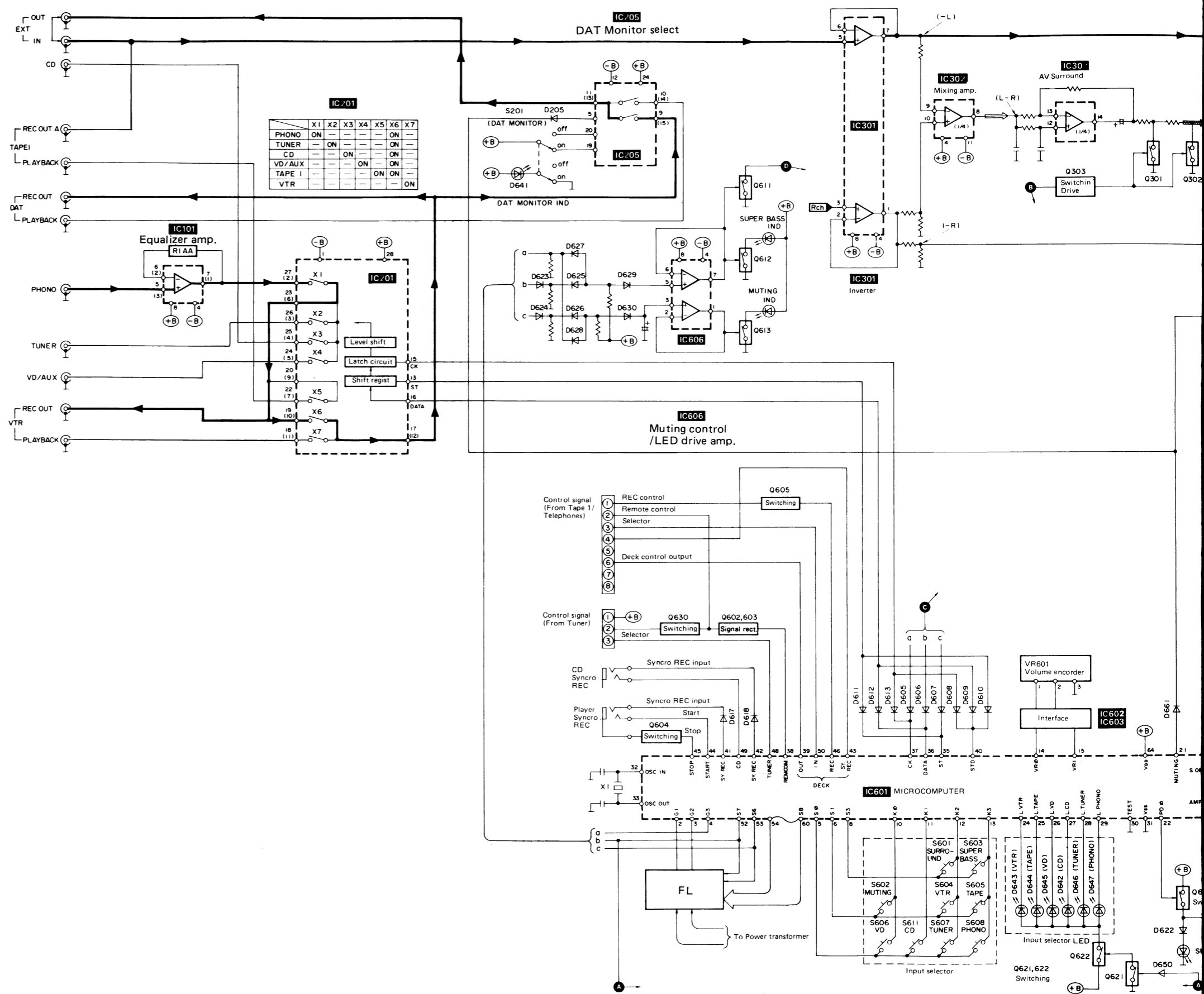
# FUNCTION OF IC TERMINAL • IC601 (LC6554D-3230)

Pin No.	Symbol	Function Description																							
1   4	G0   G3	Grid drive output for digital multi-display (FL).																							
5   7	S0   S2	Key matrix output.	<table border="1"> <thead> <tr> <th>Output Input</th> <th>5</th> <th>6</th> <th>7</th> </tr> </thead> <tbody> <tr> <td>10</td> <td>S603 VIDEO DISC/AUX</td> <td>S612 MUTE</td> <td>S608 BALANCE(R)</td> </tr> <tr> <td>11</td> <td>—</td> <td>—</td> <td>S607 BALANCE(L)</td> </tr> <tr> <td>12</td> <td>S602 TUNER</td> <td>S605 VTR/TAPE 2</td> <td>—</td> </tr> <tr> <td>13</td> <td>S601 PHONO</td> <td>S604 TAPE 1</td> <td>—</td> </tr> </tbody> </table>			Output Input	5	6	7	10	S603 VIDEO DISC/AUX	S612 MUTE	S608 BALANCE(R)	11	—	—	S607 BALANCE(L)	12	S602 TUNER	S605 VTR/TAPE 2	—	13	S601 PHONO	S604 TAPE 1	—
Output Input	5		6	7																					
10	S603 VIDEO DISC/AUX	S612 MUTE	S608 BALANCE(R)																						
11	—	—	S607 BALANCE(L)																						
12	S602 TUNER	S605 VTR/TAPE 2	—																						
13	S601 PHONO	S604 TAPE 1	—																						
10   13	K0   K3	Key matrix input.																							
8	S3	Not used.																							
9	POWER ON	Not used.																							
14	VR0	Rotary encoder input of volume control (VR601).																							
15	VR1																								
16	CS0	Not used.																							
17	HALT	Input for power detection.																							
18	CS1	Not used.																							
19	AMP	Input for power detection.																							
20	AMP POWER	Not used.																							
21	CUT	Input selector noise cut muting output.																							
22	S.ON	Not used.																							
23	DTS	Not used.																							
24	LVTR	LED selector display (VTR) output.																							
25	LTA	LED selector display (TAPE) output.																							
26	LVD	LED selector display (VIDEO DISC/AUX) output.																							
27	LCD	LED selector display (CD) output.																							
28	LTU	LED selector display (TUNER) output.																							
29	LPH	LED selector display (PHONO) output.																							
30	TEST	Not used.																							
31	V <sub>SS</sub>	Grounding.																							
32	OSC1	Clock oscillation input/output.																							
33	OSC2																								
34	RES	Reset signal input.																							
35	ST	ST signal control output																							
36	DATA	DATA signal control output.																							
37	CK	CK signal control output.																							
38	REM	Remote control data input.																							
39	DCD	Deck control output.																							
40	SID	ST, CK and DATA signal control.																							
41	SYPH	Player synchronized recording input.																							
42	SYCD	CD synchronized recording input.																							
43	SY OUT	Deck synchronized recording output.																							
44	START	Player STOP/START signal output.																							
45	STOP																								
46	REC	Deck on-recording signal input.																							
47	PH	Input selection by phono unit signal.	Direct operation input.																						
48	TU	Input selection by tuner unit signal.																							
49	CD	Input selection by CD unit signal.																							
50	DECK	Input selection by tape unit signal.																							
51	V <sub>P</sub>	Power supply.																							
52   60	S0   S8	Digital multi-display (FL) output.																							
61	S music	Not used.																							
62	S movie																								
63	S mono																								
64	V <sub>DD</sub>	Power supply.																							

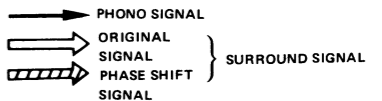
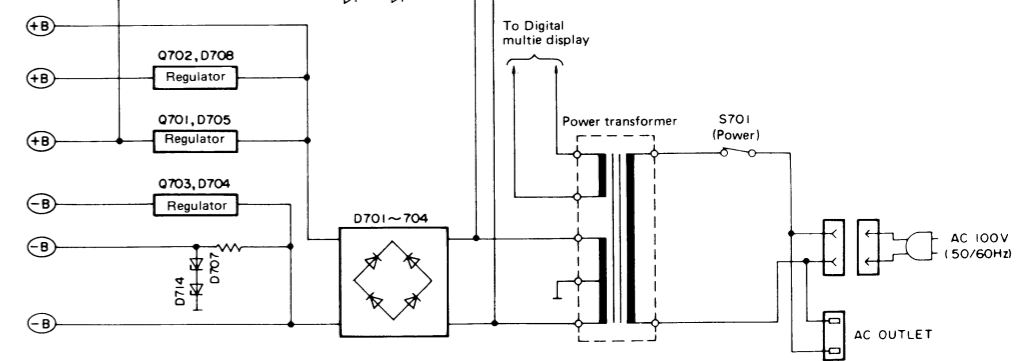
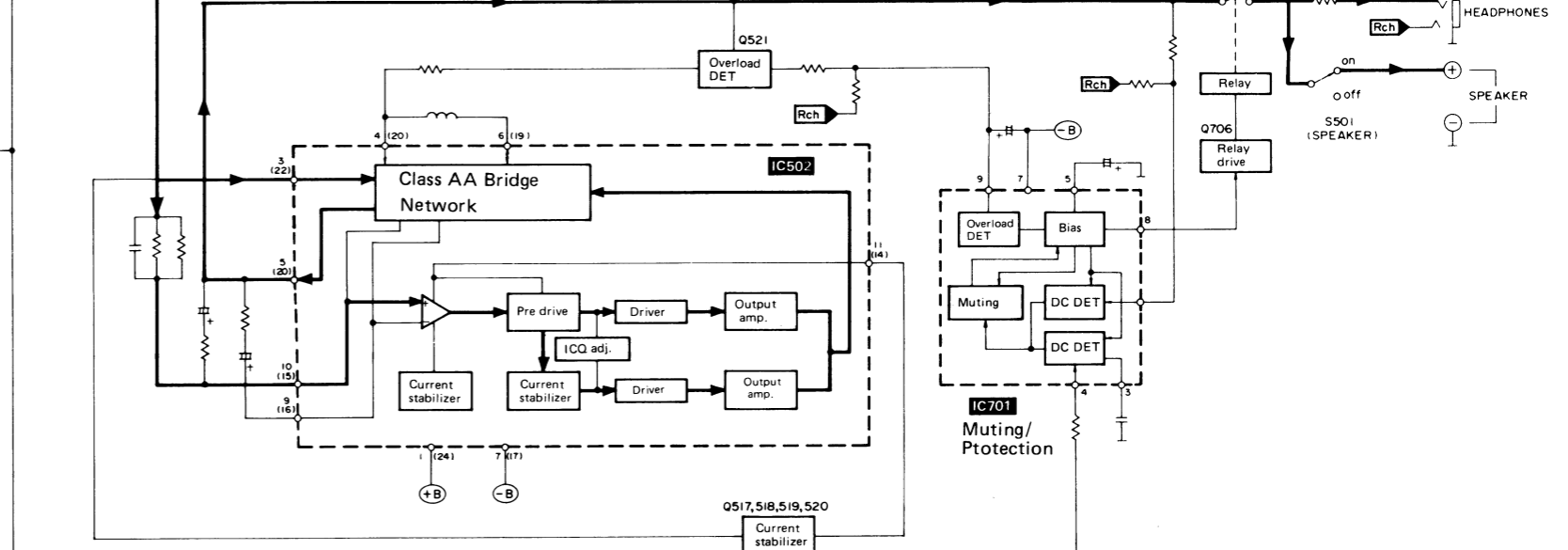
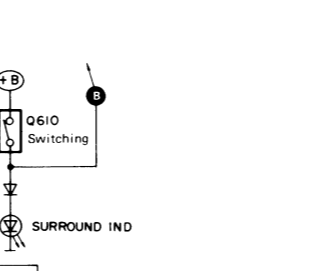
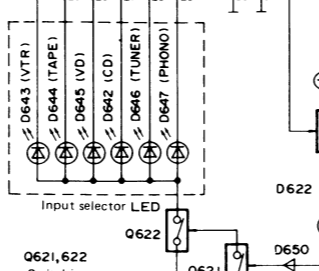
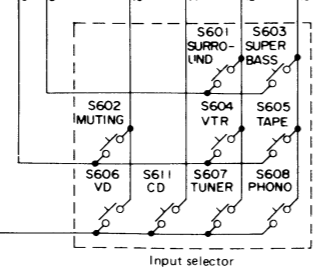
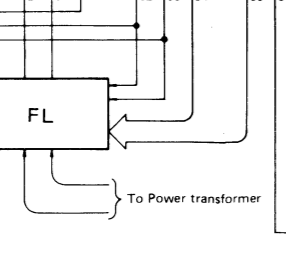
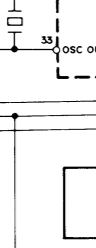
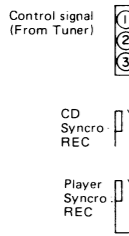
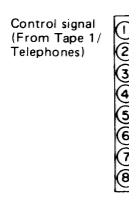
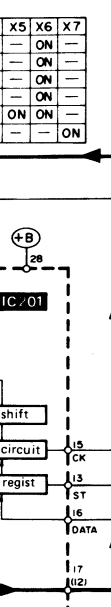
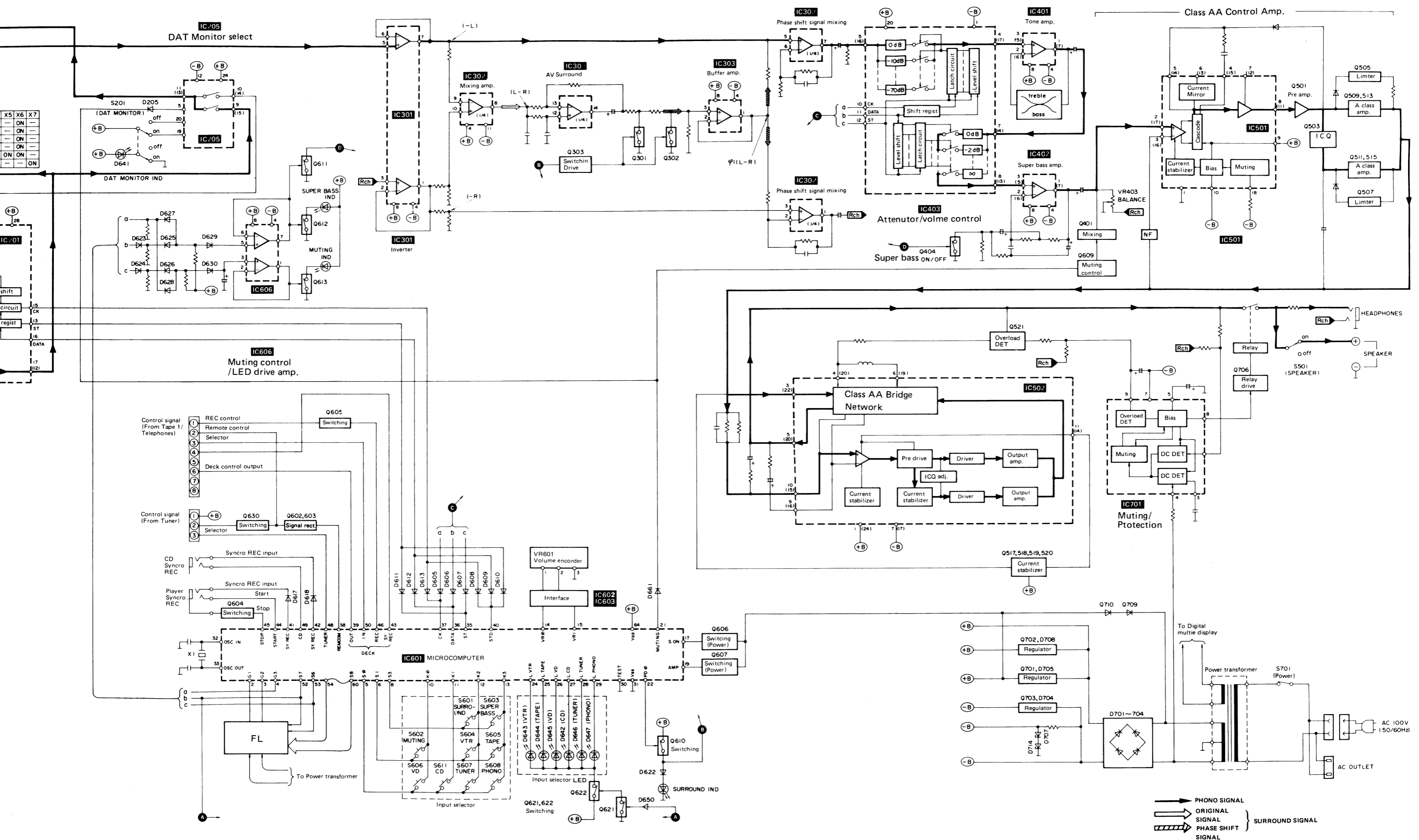


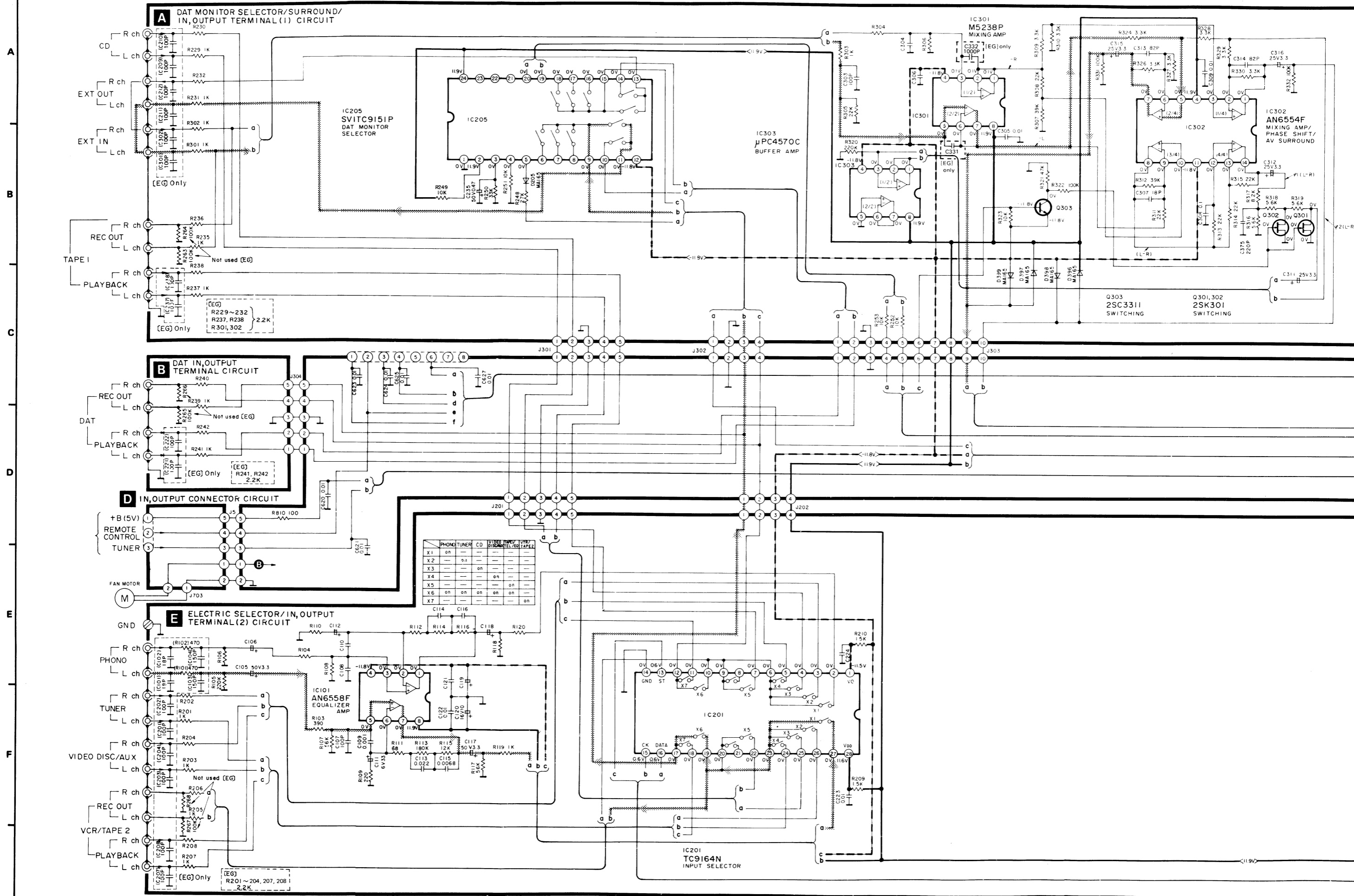
Code	Ref. No.	Part No.	Part Code	Ref. No.	Part No.	Part Code
27	R737	ERG1ANJ681	001 151 0086 8	C507	ECEA2AU010	001 120 3578 4
27	R810	ERDS2TJ101	001 152 2421 0	C508	ECEA1HK010	001 120 0341 5
27	CAPACITORS			C509, C510	ECEA1CPS220	001 120 6060 7
27	C101, C102	RCBS1H180JLY	001 103 5592 5	C511, C512	RCBS1H180JLY	001 103 5592 5
27	(EG)			C513, C514	ECBT1H681KB5	001 103 9167 2
27	C103	RCBS1H151KB5		C515, C516	RCBS1H120JLY	001 103 5578 3
27	(EG)			C517, C518	ECBT1H102KB5	001 103 8123 8
27	C104			C520	ECKD1H102PF	001 103 1435 3
27	(EG)			C521, C522	ECKD1H103PF	001 103 1443 3
27	C105, C106	ECEA1HPS3R3	001 120 6064 3	C531, C532	ECKD1H333PF	001 103 1539 6
27	C107, C108	RCBS1H101KB5	001 103 5569 4	C533, C534	RCBS1H680JLY	001 103 5640 4
27	C109, C110	ECFTD102KXL	001 108 0371 1	C537, C538	ECEA1HK010	001 120 0341 5
27	C111, C112	ECEA0JPS330	001 120 6059 0	C539, C540	ECEA1VK330	001 120 4800 3
27	C113, C114	ECFTD223KXL	001 108 0342 6	C541, C542	RCBS1H680JLY	001 103 5640 4
27	C115, C116	ECFTD682KXL	001 108 0363 1	C563, C564	ECKD1H223PF	001 103 1510 9
27	C117, C118	ECEA1HPS3R3	001 120 6064 3			
27	C119, C120	ECEA1CKS100	001 120 2600 7			
27	C121, C122	ECBT1E103ZF5	001 103 8080 2			
27	C201, C202	RCBS1H101KB5	001 103 5569 4			
27	(EG)					
27	C203, C204	RCBS1H101KB5	001 103 5569 4			
27	(EG)					
27	C209, C210	RCBS1H101KB5	001 103 5569 4			
27	(EG)					
27	C211, C212	RCBS1H101KB5	001 103 5569 4			
27	(EG)					
27	C221, C222	RCBS1H101KB5	001 103 5569 4			
27	(EG)					
27	C223, C224	ECBT1E103ZF5	001 103 8080 2			
27	C235	ECEA1HKR47	001 120 0338 0			
27	C237, C238	RCBS1H101KB5	001 103 5569 4			
27	(EG)					
27	C301, C302	RCBS1H101KB5	001 103 5569 4			
27	(EG)					
27	C303, C304	RCBS1H101KB5	001 103 5569 4			
27	C305, C306	ECBT1E103ZF5	001 103 8080 2			
27	C307	RCBS1H180JLY	001 103 5592 5			
27	C308	ECFTD104KXL	001 108 0793 3			
27	C309	ECBT1E103ZF5	001 103 8080 2			
27	C311	ECEA1EK3R3B	001 120 0292 7			
27	C312	ECEA1EK3R3E	001 120 6273 6			
27	C313, C314	RCBS1H200KB5	001 103 5646 8			
27	C315, C316	ECEA1EK3R3B	001 120 0292 7			
27	C331	RCBS1H101KB5				
27	(EG)					
27	C332	RCBS1H101KB5	001 103 5569 4			
27	(EG)					
27	C375	ECKD1H271KB	001 103 1515 4			
27	C403, C404	RCBS1H101KB5	001 103 5569 4			
27	C405, C406	ECBT1H821KB5	001 103 9382 7			
27	C407, C408	RCBS1H390JLY	001 103 5621 7			
27	C409, C410	ECEA1HPS3R3	001 120 6064 3			
27	C421, C422	ECFTD123KXL	001 108 0745 1			
27	C423, C424	ECFTD683KXL	001 108 0346 2			
27	C425, C426	ECFTD472KXL	001 108 0746 0			
27	C427, C428	ECFTD223KXL	001 108 0342 6			
27	C433, C434	ECBT1E103ZF5	001 103 8080 2			
27	C435	ECEA1CKS100	001 120 2600 7			
27	C441, C442	ECFTD473KXL	001 108 0361 3			
27	C443, C444	ECEA1HPS010	001 120 6063 4			
27	C445, C446	ECEA1HPS010	001 120 6063 4			
27	C447, C448	ECEA1HPS3R3	001 120 6064 3			
27	C449, C450	ECBT1E103ZF5	001 103 8080 2			
27	C451, C452	ECEA1CKS100	001 120 2600 7			
27	C453, C454	ECBT1E103ZF5	001 103 8080 2			
27	C455, C456	ECEA1HPS3R3	001 120 6064 3			
27	C463	ECEA1HKOR1	001 120 0340 6			
27	C464	ECBT1E223ZF	001 103 7589 2			
27	C499	RCBS1H101KB5	001 103 5569 4			
27	C501, C502	ECEA1HPS3R3	001 120 6064 3			
27	C503, C504	RCBS1H151KB5				
27	C505, C506	RCBS1H200KB5	001 103 5646 8			

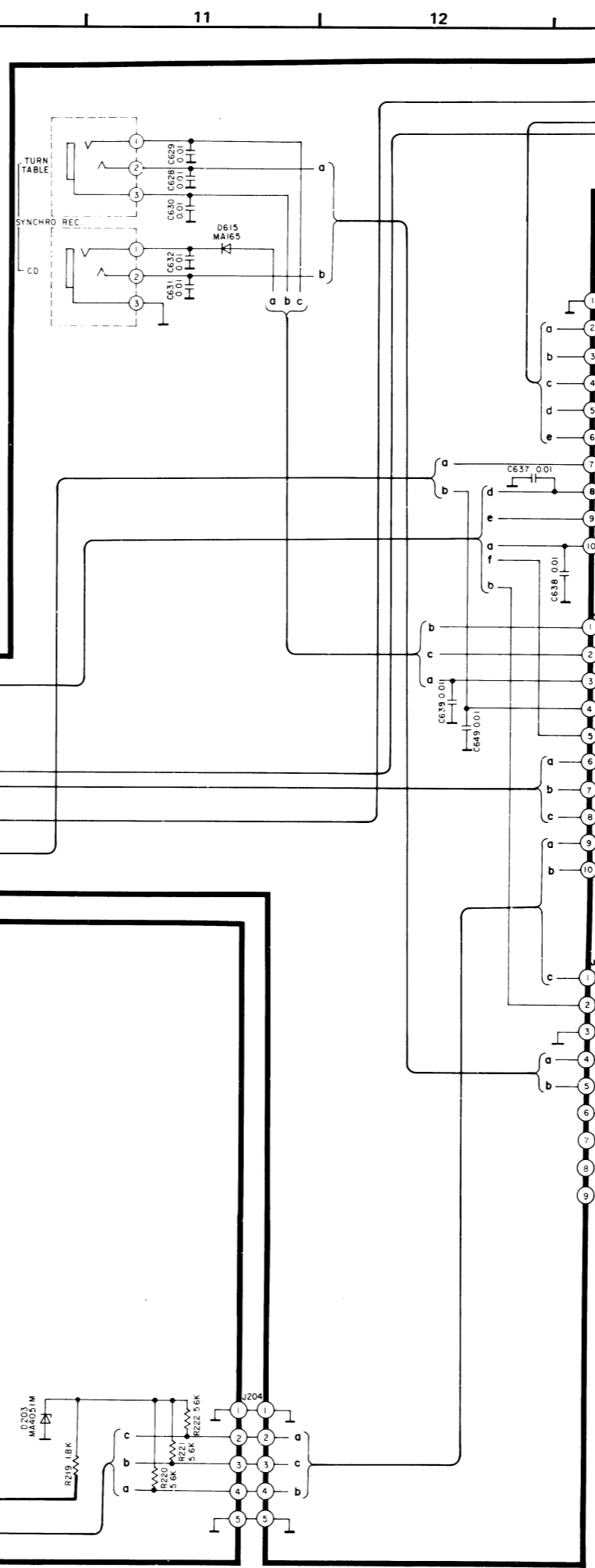
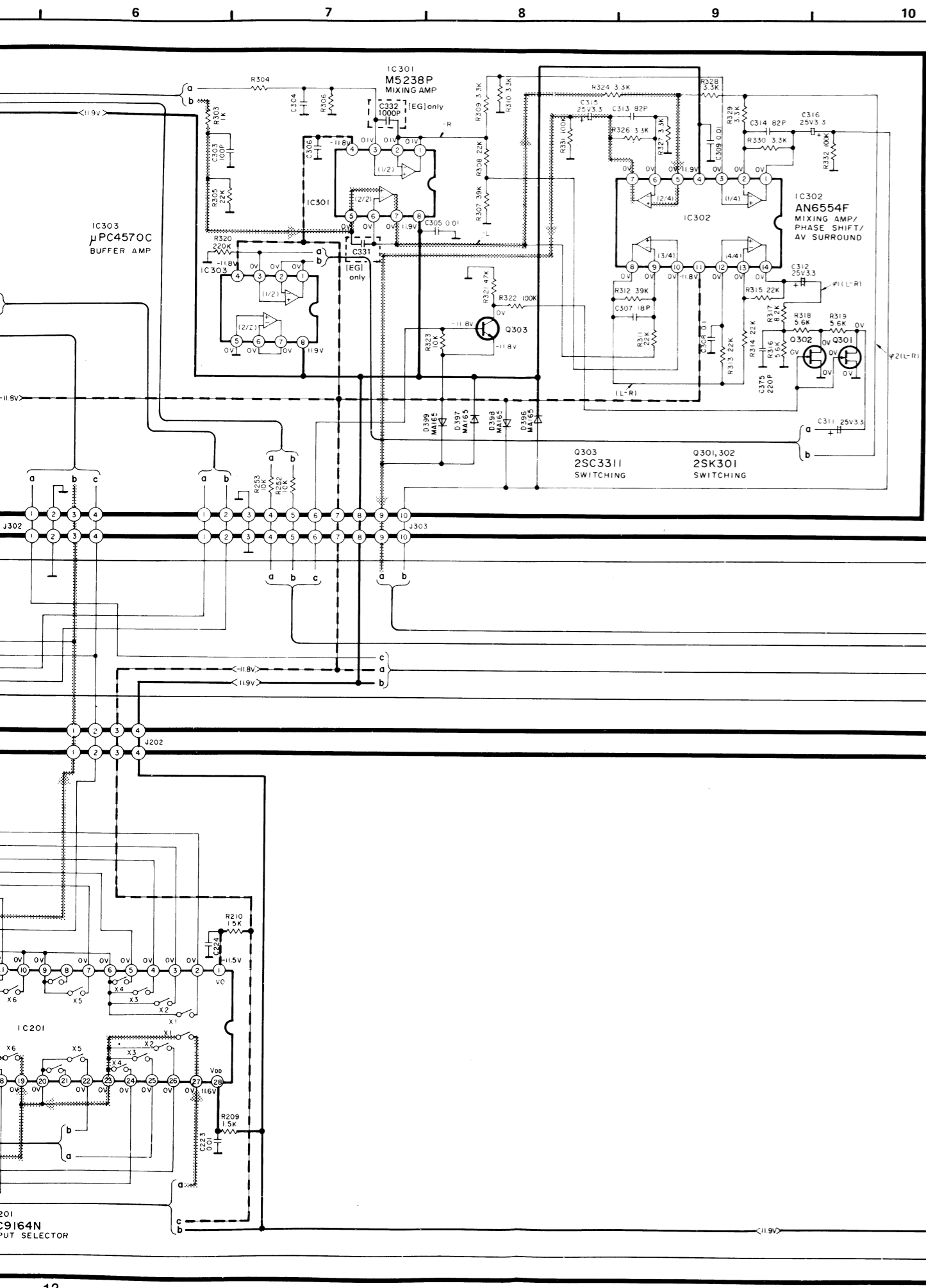
## BLOCK DIAGRAM









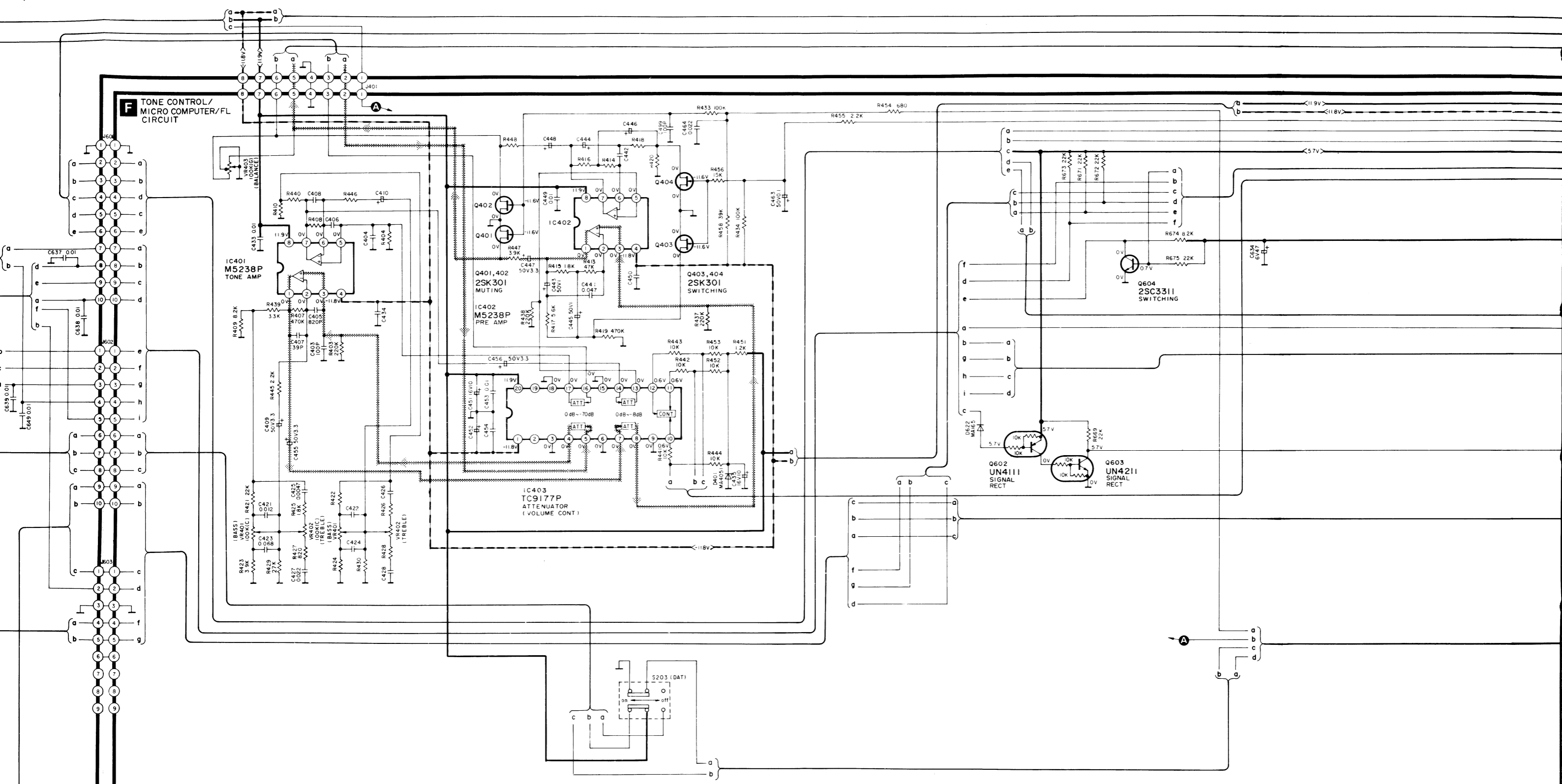


**F** TONE CONTROL/  
MICRO COMPUTER/FL  
CIRCUIT

- Notes:**
- 1. S201 : Rec selector DECK A switch in "source" position.
  - 2. S202 : Rec selector DECK B switch in "source" position.
  - 3. S203 : DAT monitor switch.
  - 4. S501 : Speakers switch ( ■ off, ▲ on)
  - 5. S601 : Surround switch.
  - 6. S602 : Muting switch.
  - 7. S603 : Super-bass switch.
  - 8. S604 ~ S608 : Input selector switches.  
S611 : S604 : VTR/tape 2, S605 : tape 1, S606 : video disc/aux.  
S607 : tuner, S608 : phono, S611 : CD
  - 9. S701 : Power switch. ( ■ off, ▲ on)

10. Indicate electronic components. Therefore internal connections are shown.

11. Important components. When re-

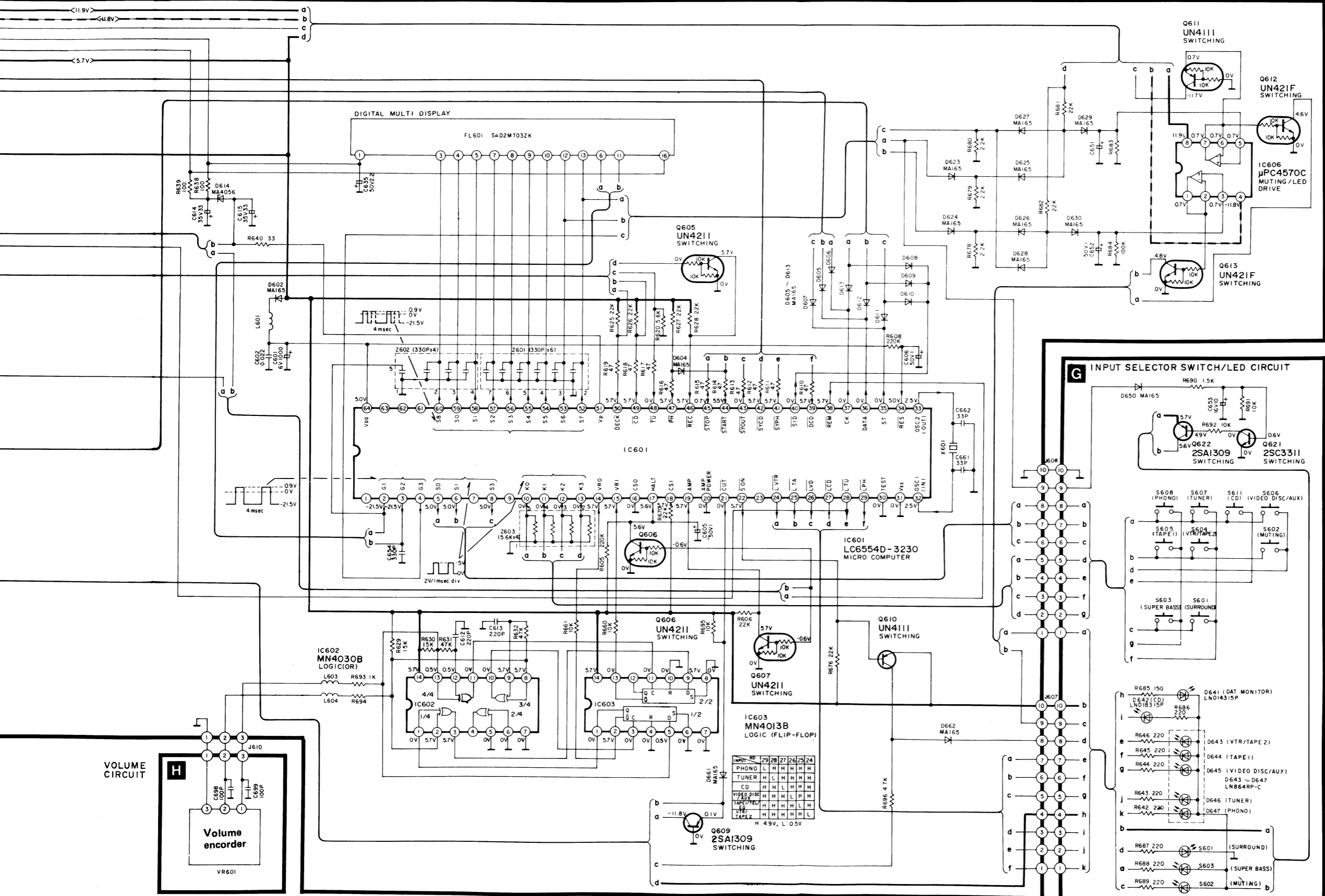


**Notes:**

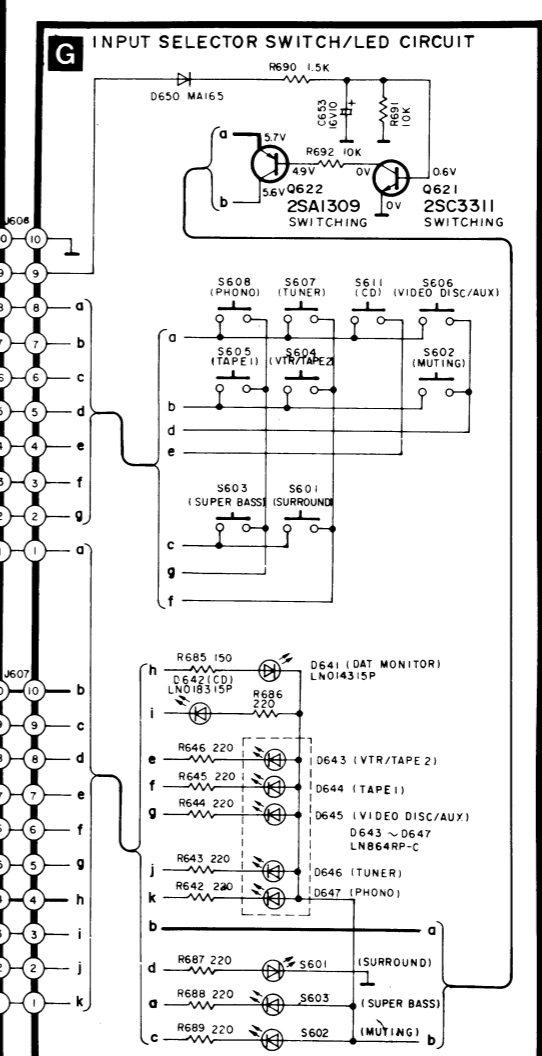
- 1. S201 : Rec selector DECK A switch in "source" position.
- 2. S202 : Rec selector DECK B switch in "source" position.
- 3. S203 : DAT monitor switch.
- 4. S501 : Speakers switch (  off,  on)
- 5. S601 : Surround switch.
- 6. S602 : Muting switch.
- 7. S603 : Super-bass switch.
- 8. S604 ~ S608, : Input selector switches.  
S611 : S604 : VTR/tape 2, S605 : tape 1, S606 : video disc/aux.  
S607 : tuner, S608 : phono, S611 : CD
- 9. S701 : Power switch. (  off,  on)

- 10. Indicated voltage values are the standard values for the unit measured by the DC electronic circuit tester (high-impedance) with the chassis taken as standard. Therefore, there may exist some errors in the voltage values, depending on the internal impedance of the DC circuit tester.
- 11.
  - Left-channel phono signal route.
  - Microphone signal.
  - Phase difference signal.
  - B voltage line
- 12. Important safety notice:  
Components identified by mark have special characteristics important for safety. When replacing any of these components, use only manufacturer's specified parts.

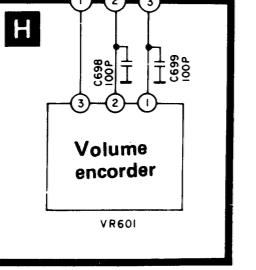
- \* Caution!**
- IC and LSI are sensitive to static electricity.
  - Secondary trouble can be prevented by taking care during repair.
  - \* Cover the parts boxes made of plastics with aluminum foil.
  - \* Ground the soldering iron.
  - \* Put a conductive mat on the work table.
  - \* Do not touch the legs of IC or LSI with the fingers directly.

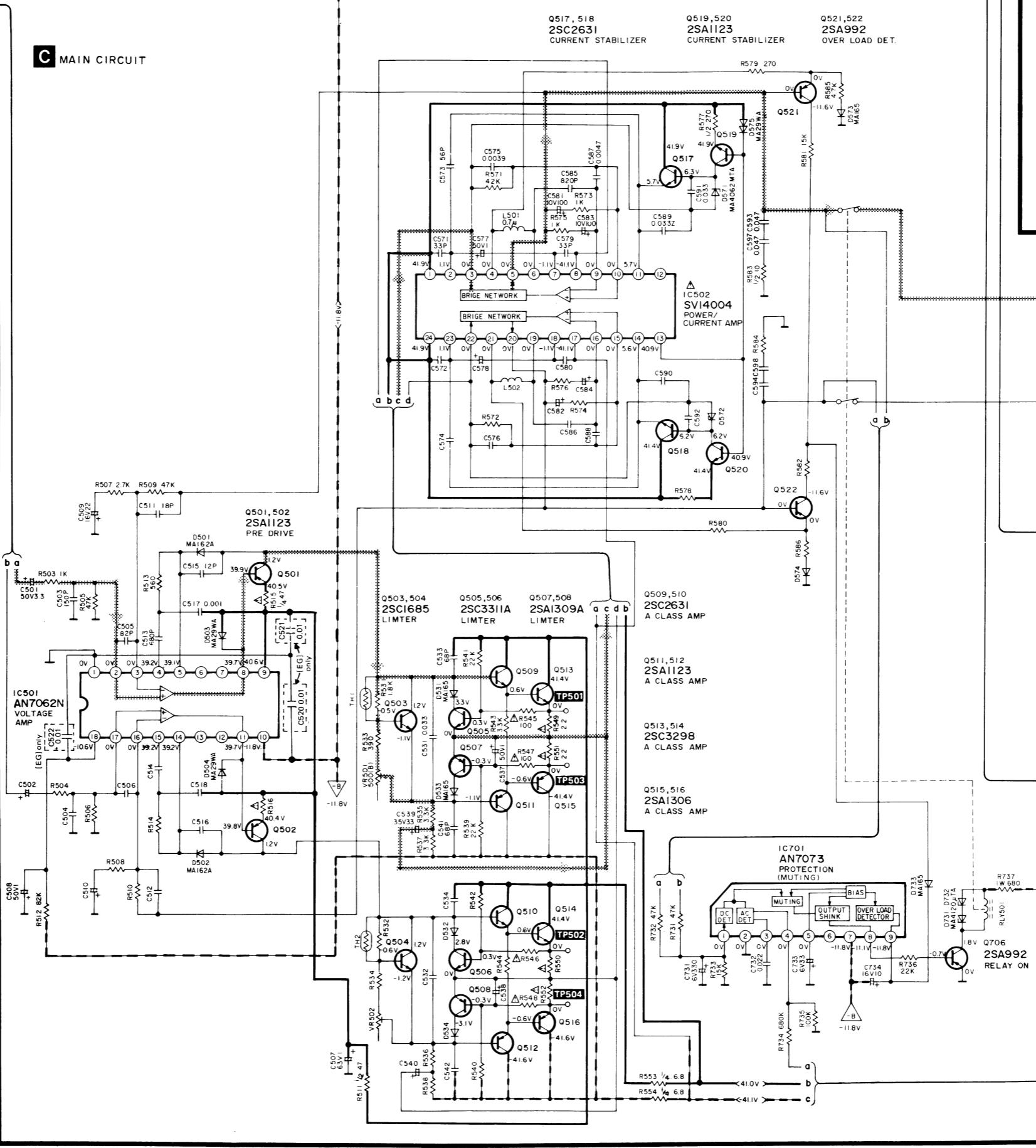
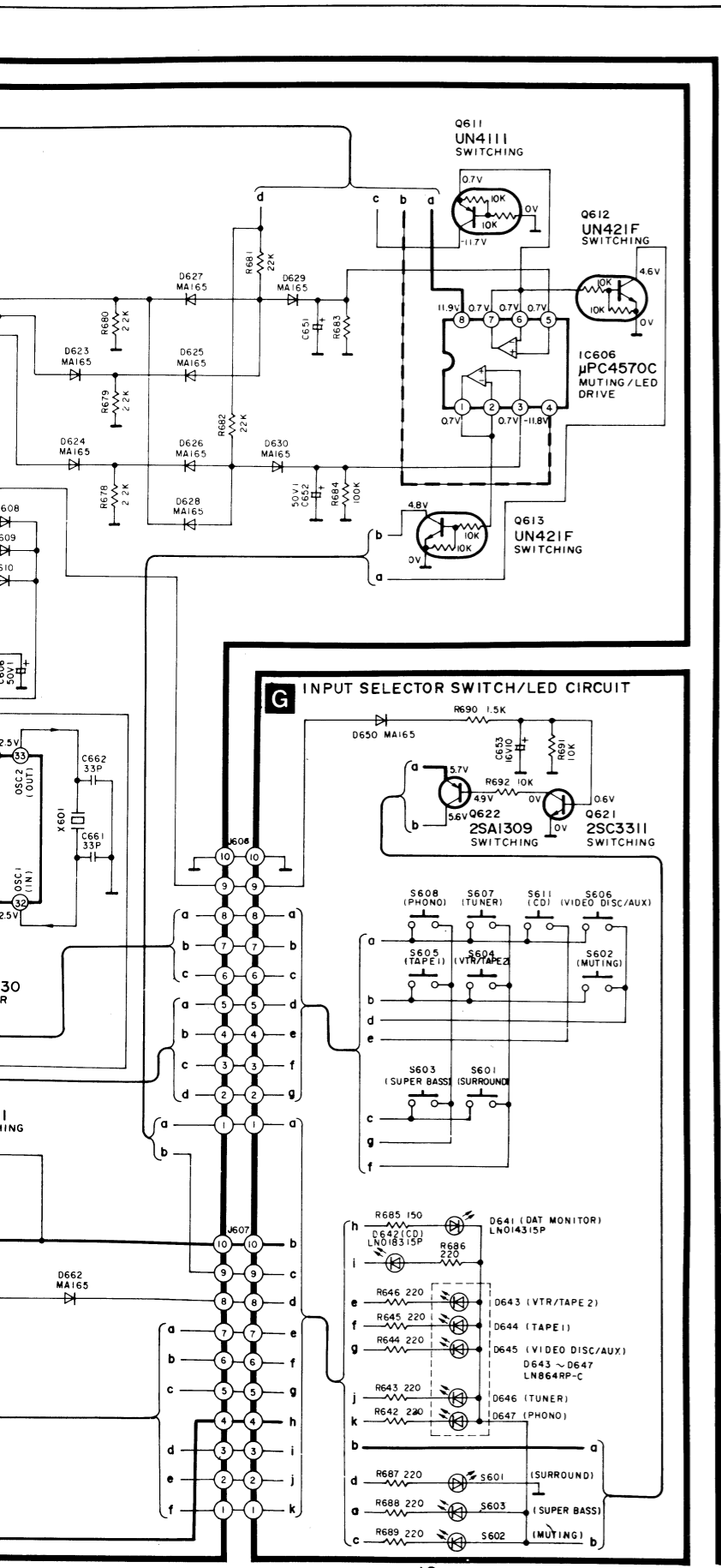


**C MAIN CIRCUIT**



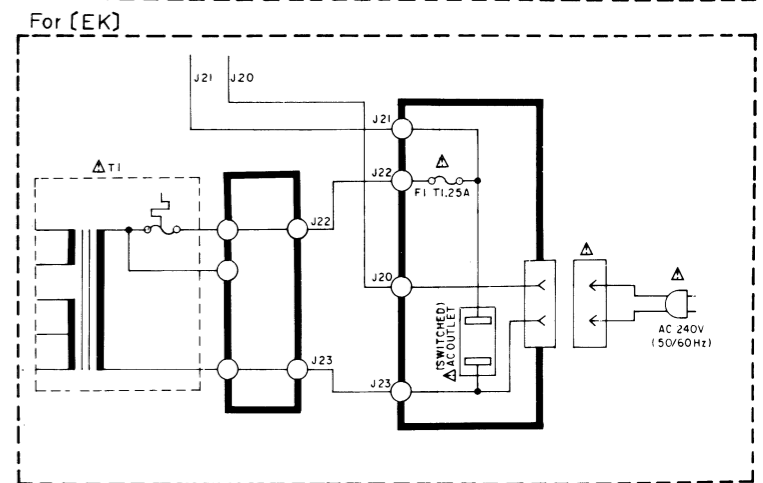
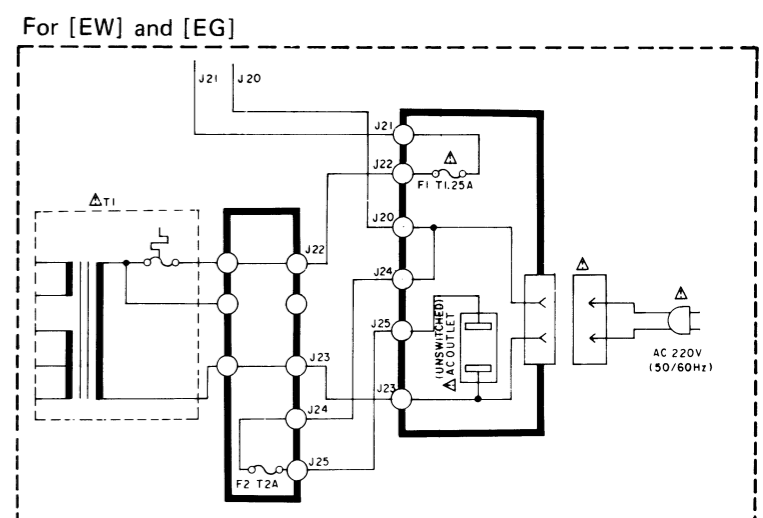
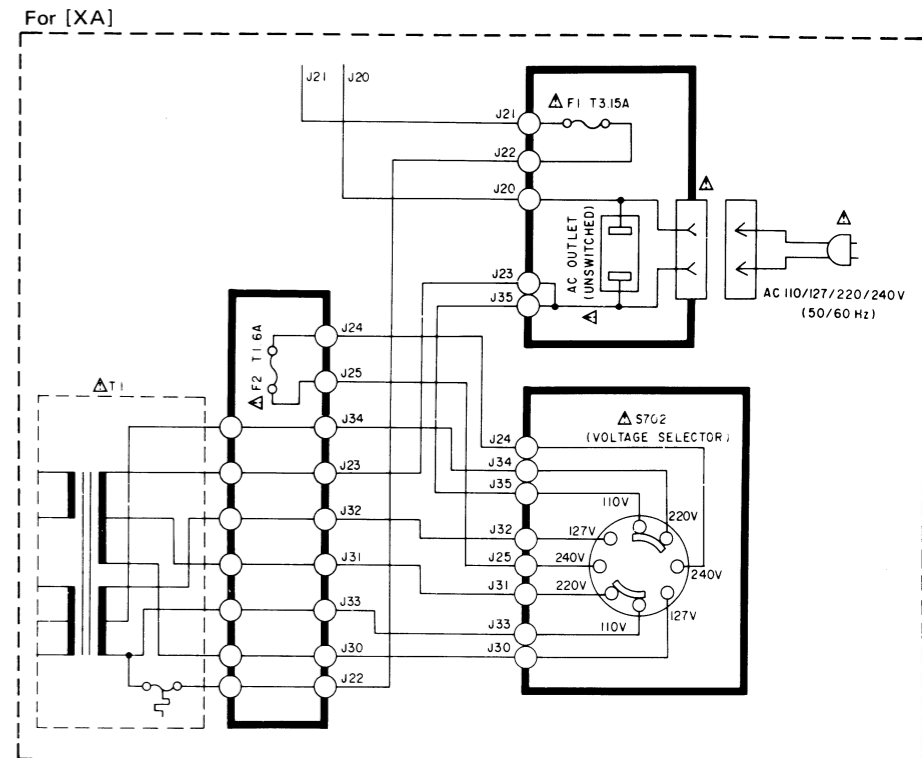
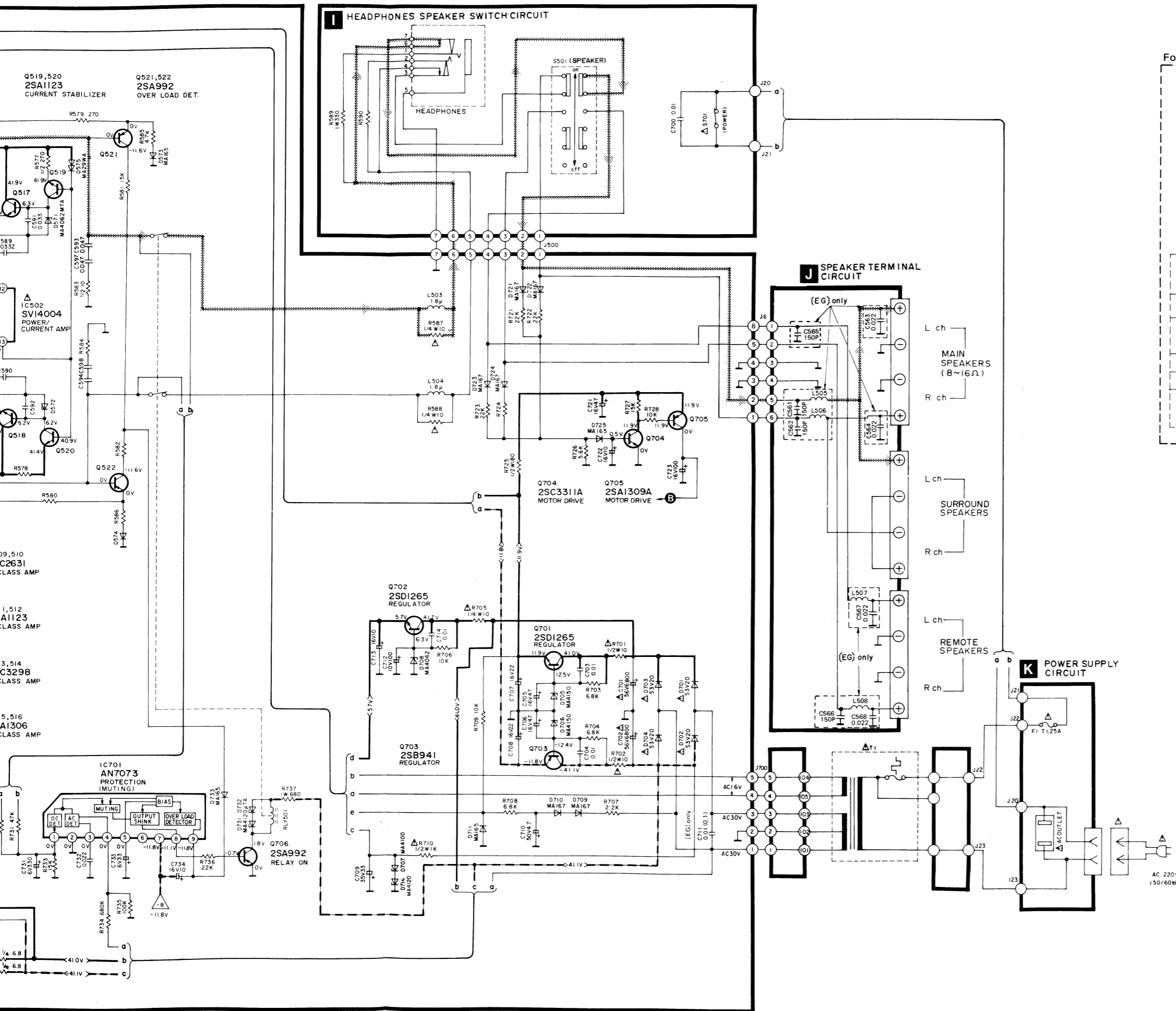
**F VOLUME CIRCUIT**



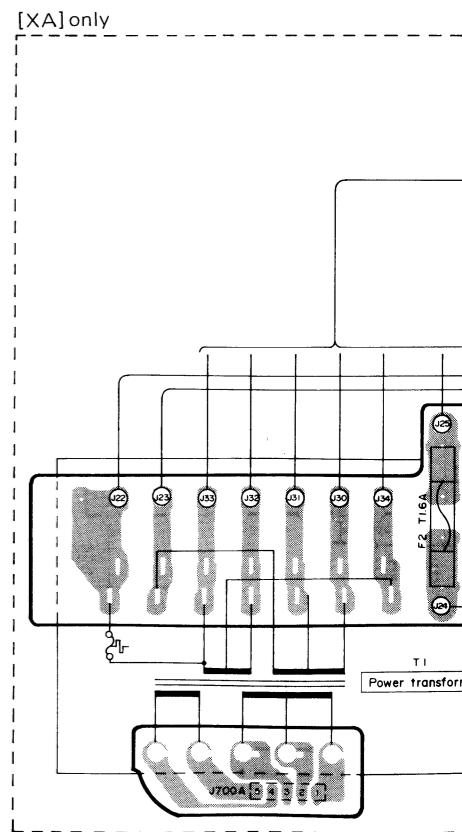
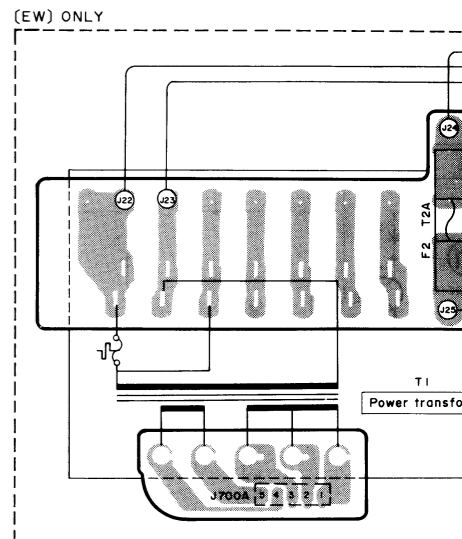
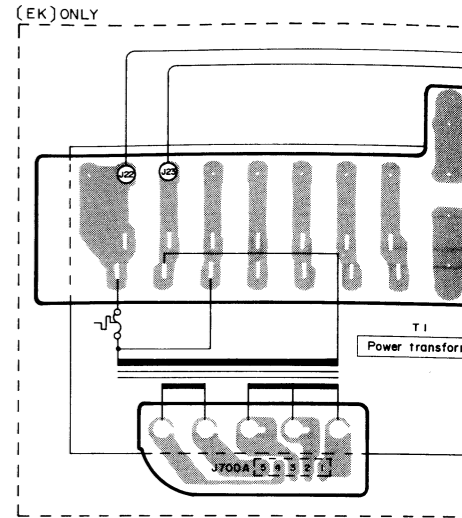
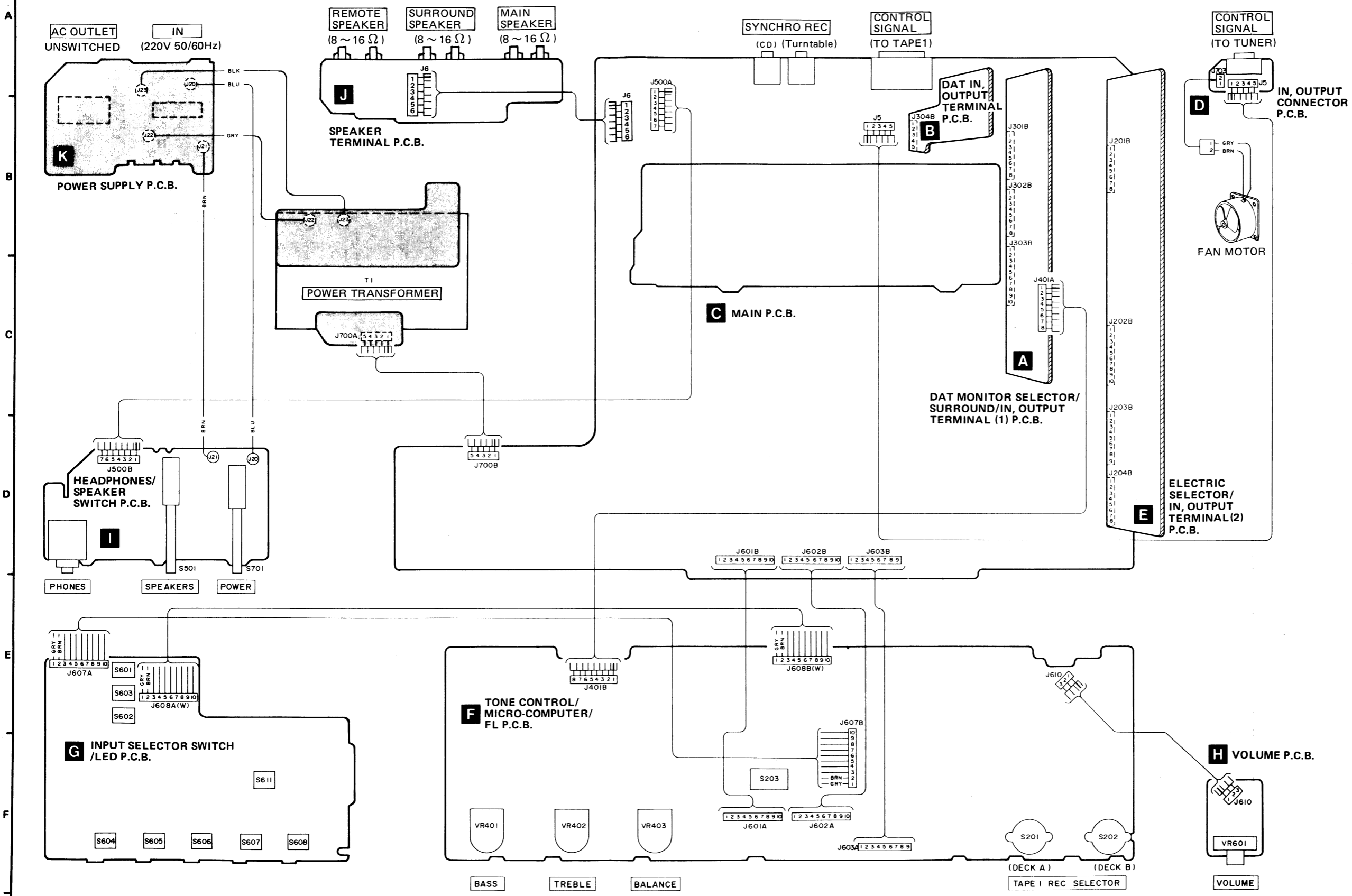


# SCHEMATIC DIAGRAM

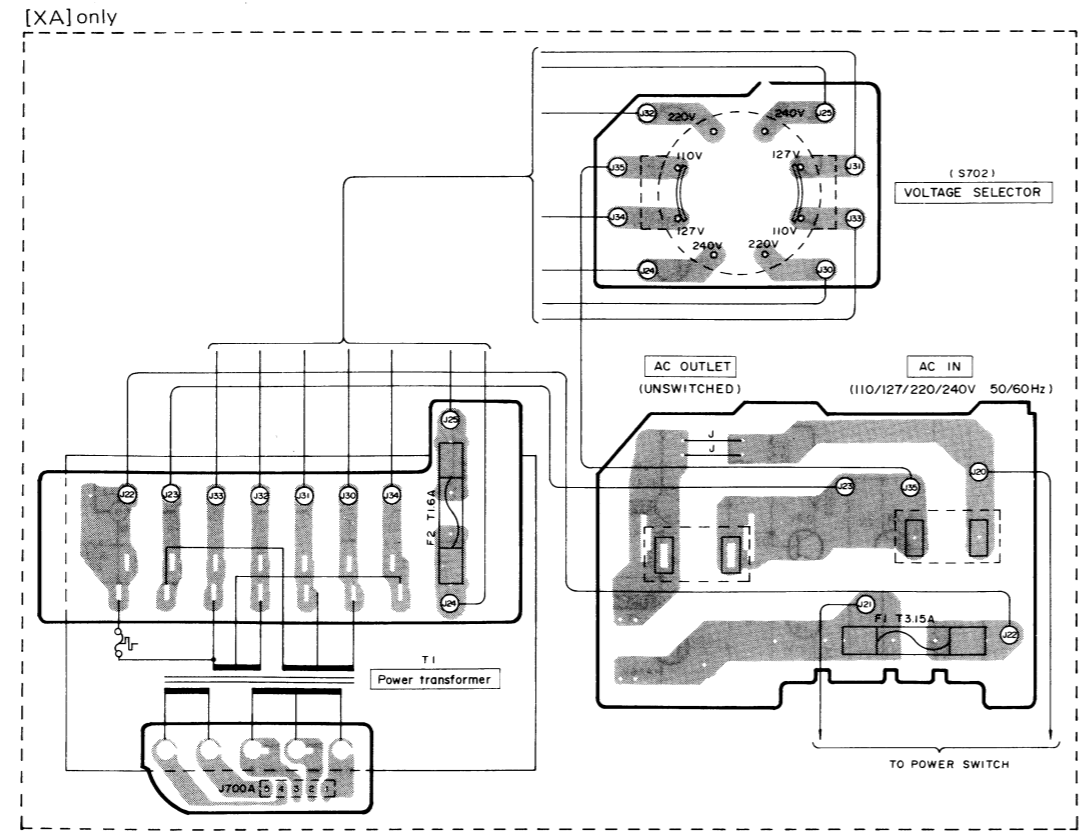
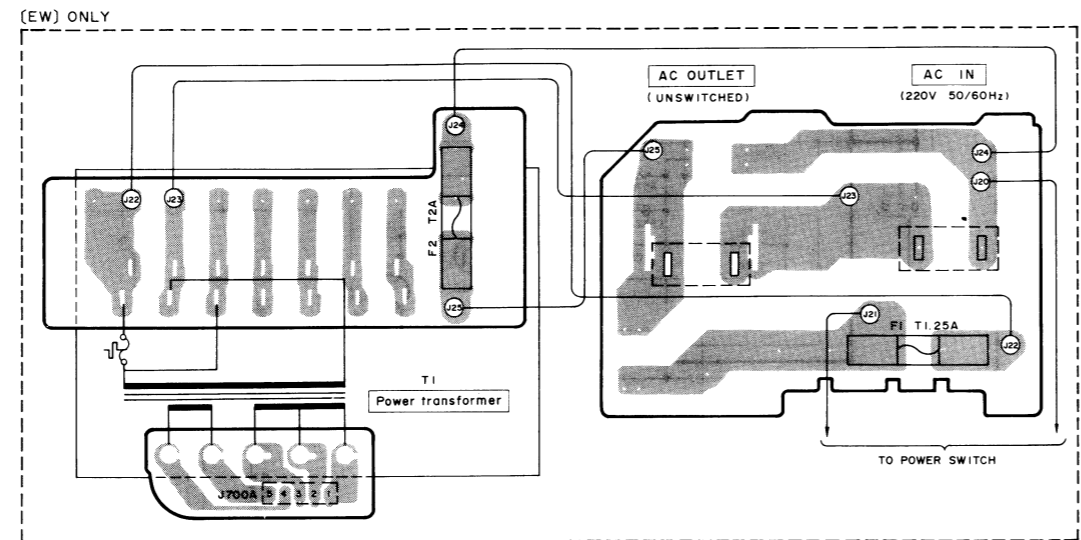
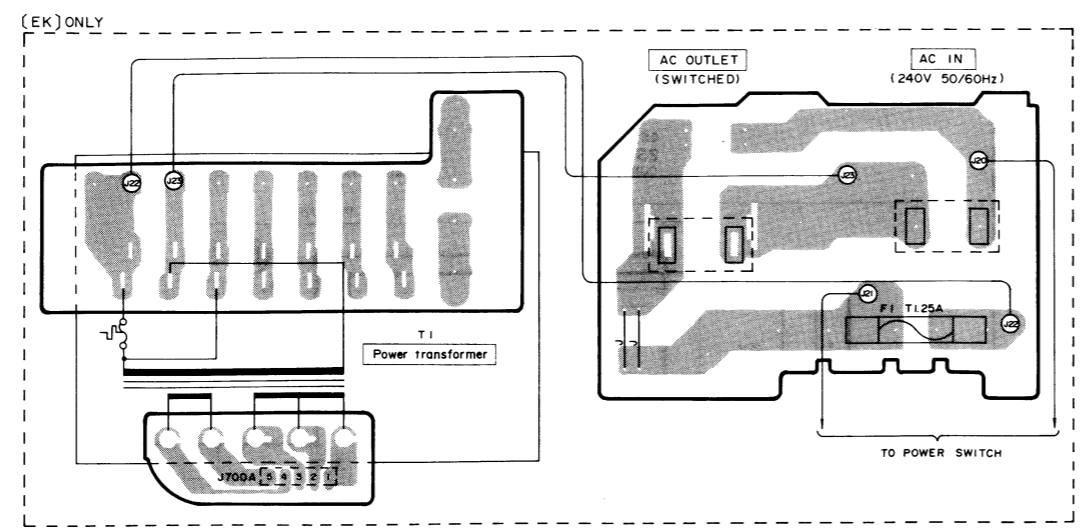
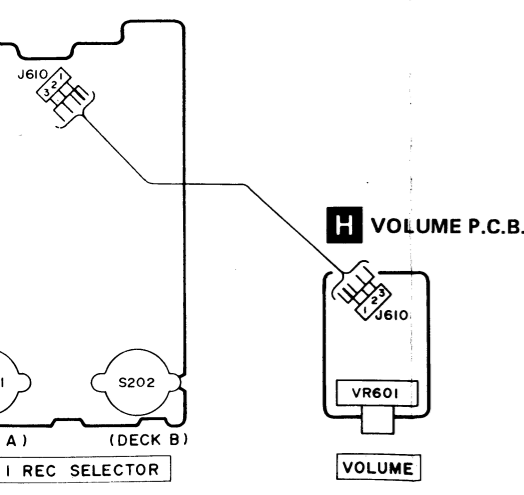
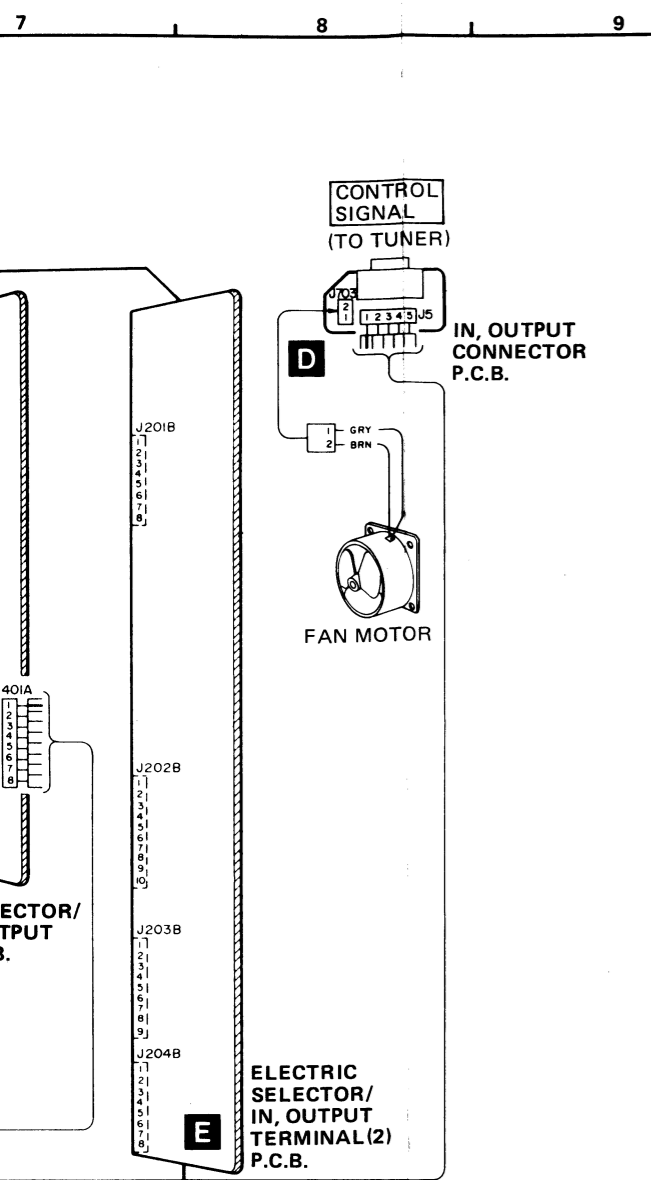
(This schematic diagram may be modified at any time with the development of new technology.)



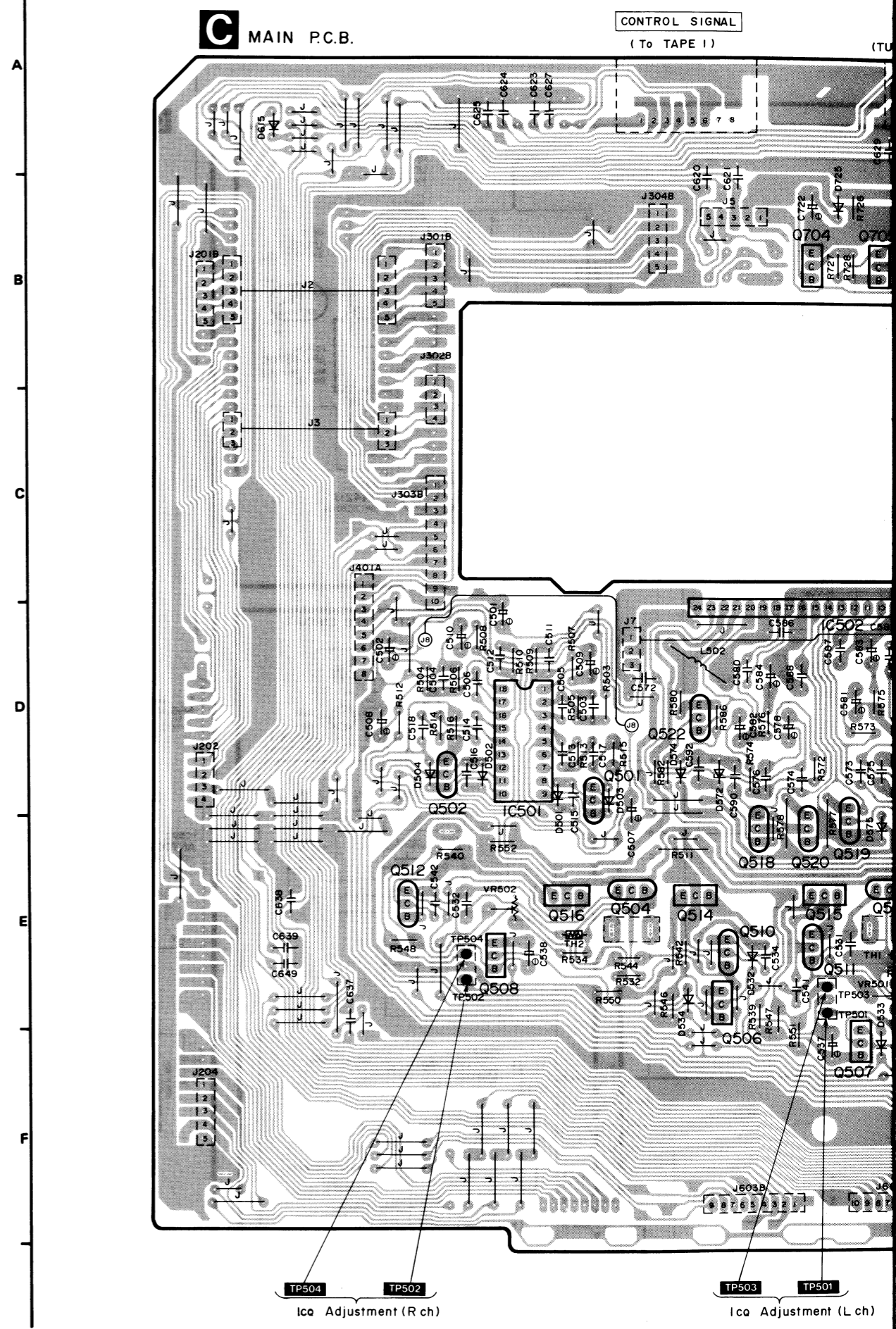
# WIRING CONNECTION DIAGRAM





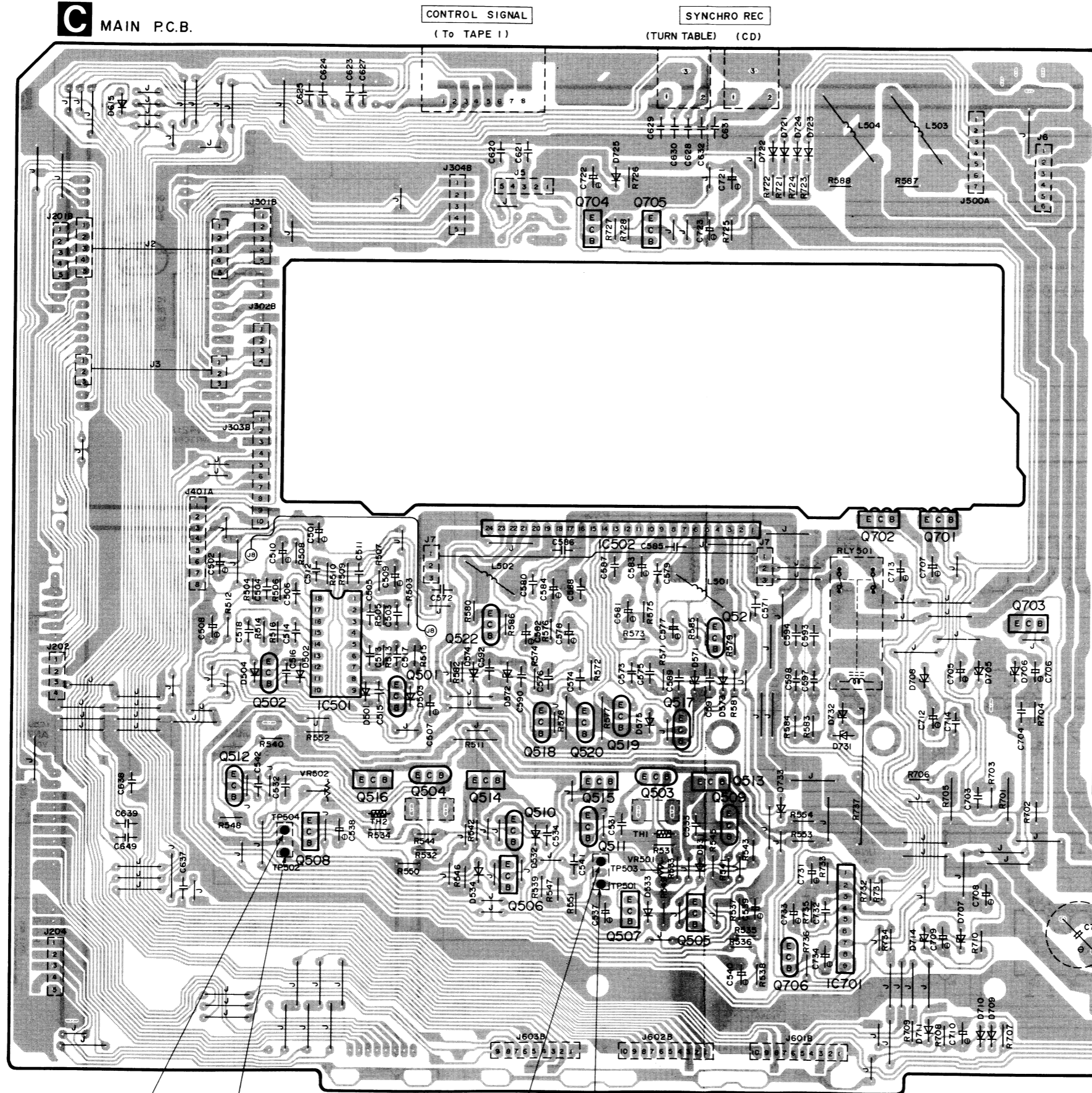


PRINTED CIRCUIT BOARDS



**PRINTED CIRCUIT BOARDS**

**C MAIN P.C.B.**

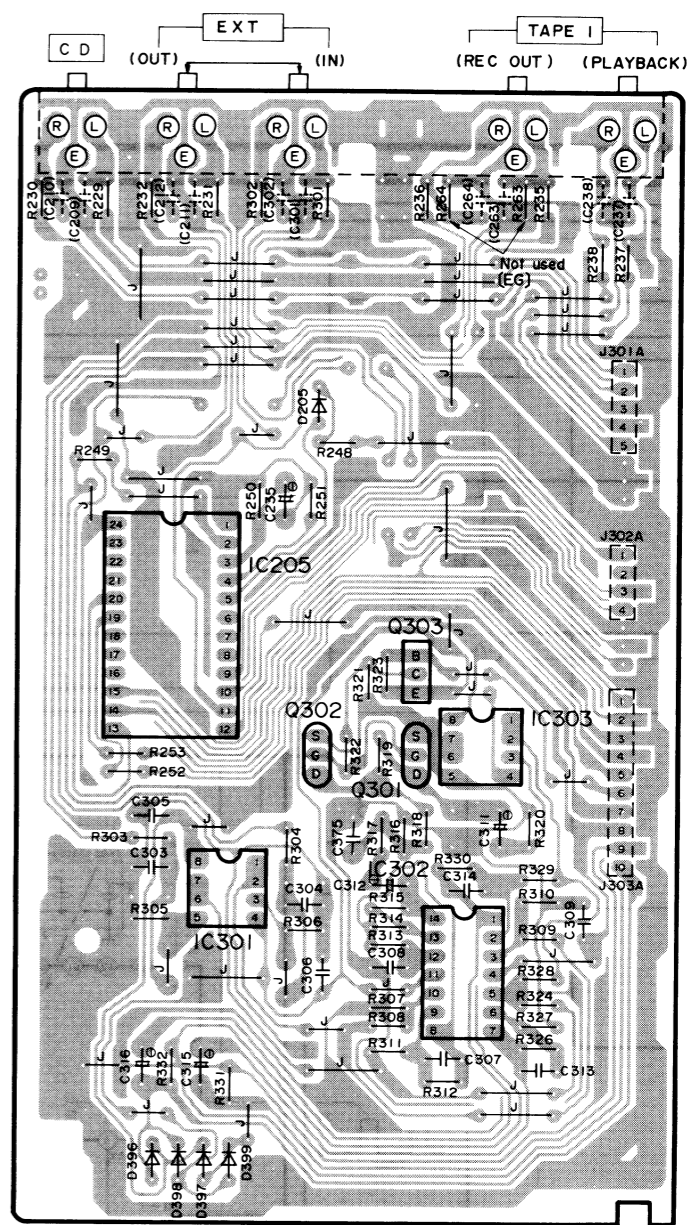


TP504 TP502  
Ic<sub>Q</sub> Adjustment (R ch)

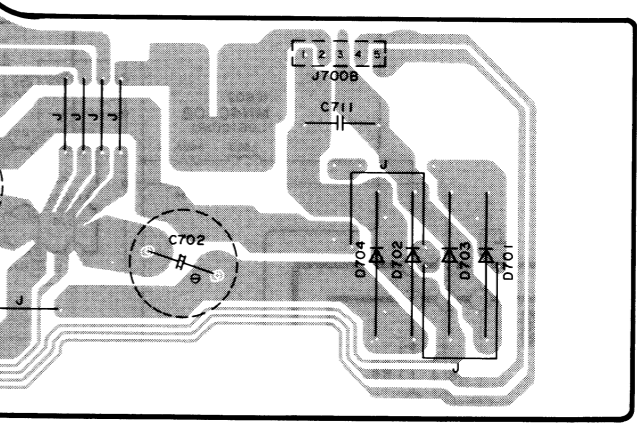
TP503 TP501  
Ic<sub>Q</sub> Adjustment (L ch)

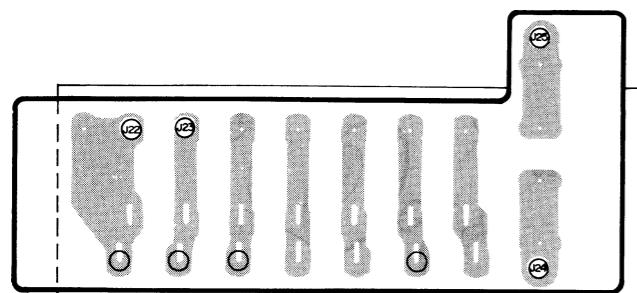
CONTROL SIGNAL  
(To TAPE I)

SYNCHRO REC  
(TURN TABLE) (CD)

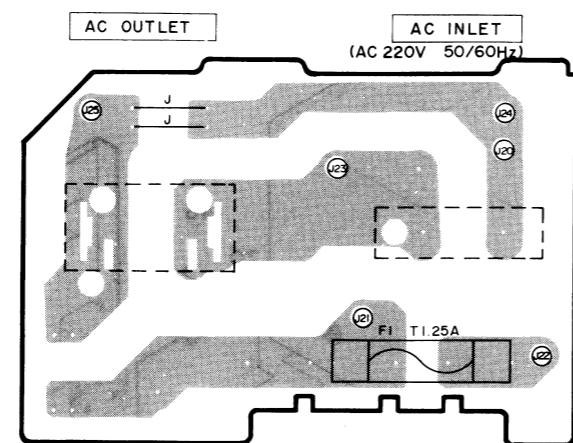


**A** DAT MONITOR SELECTOR / SURROUND / IN, OUTPUT TERMINAL (I) P.C.B.

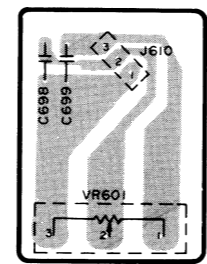




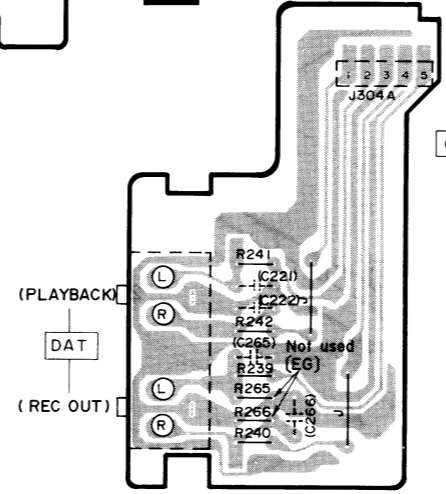
**K** POWER SUPPLY P.C.B.



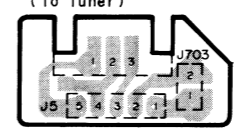
**H** VOLUME P.C.B.



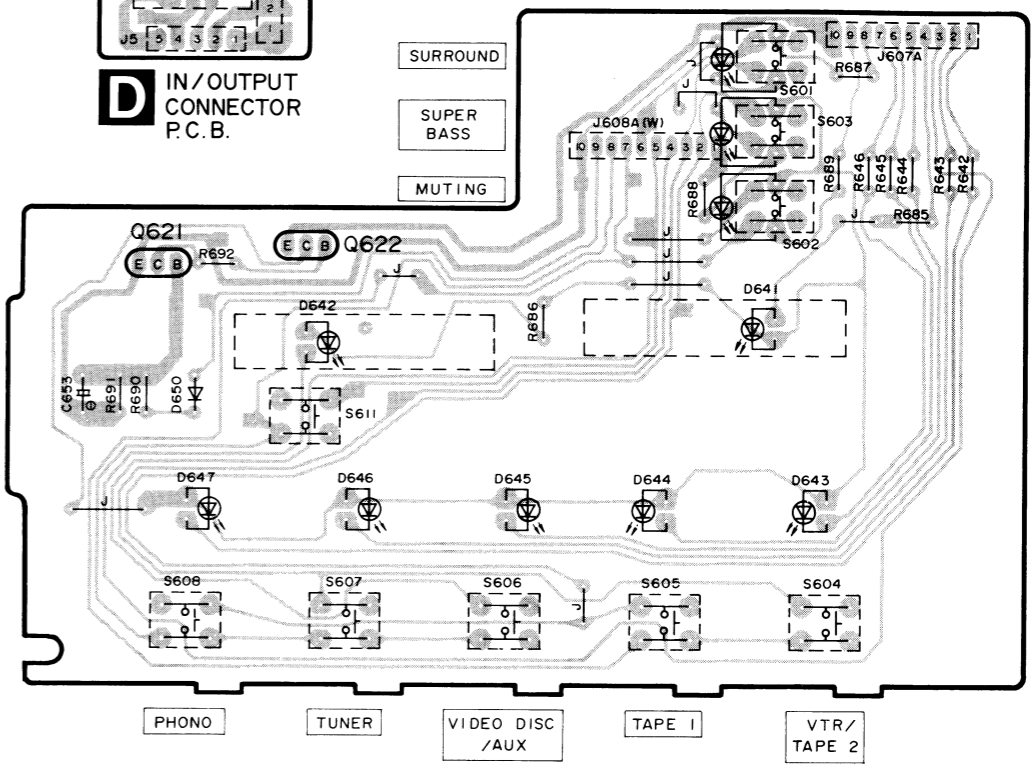
**B** DAT IN/OUTPUT TERMINAL P.C.B.



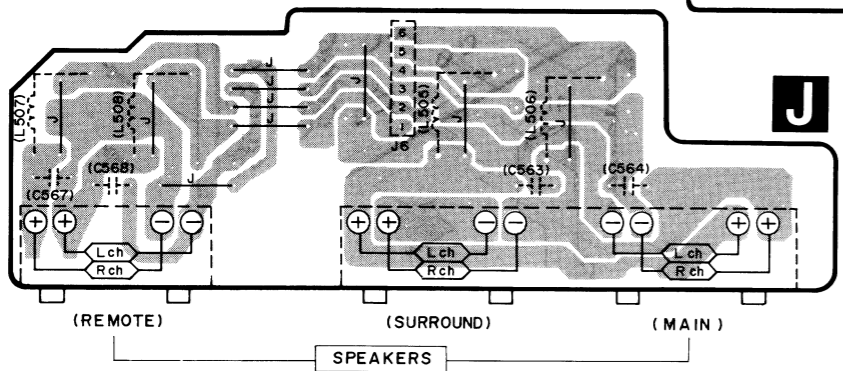
**D** IN/OUTPUT CONNECTOR P.C.B.



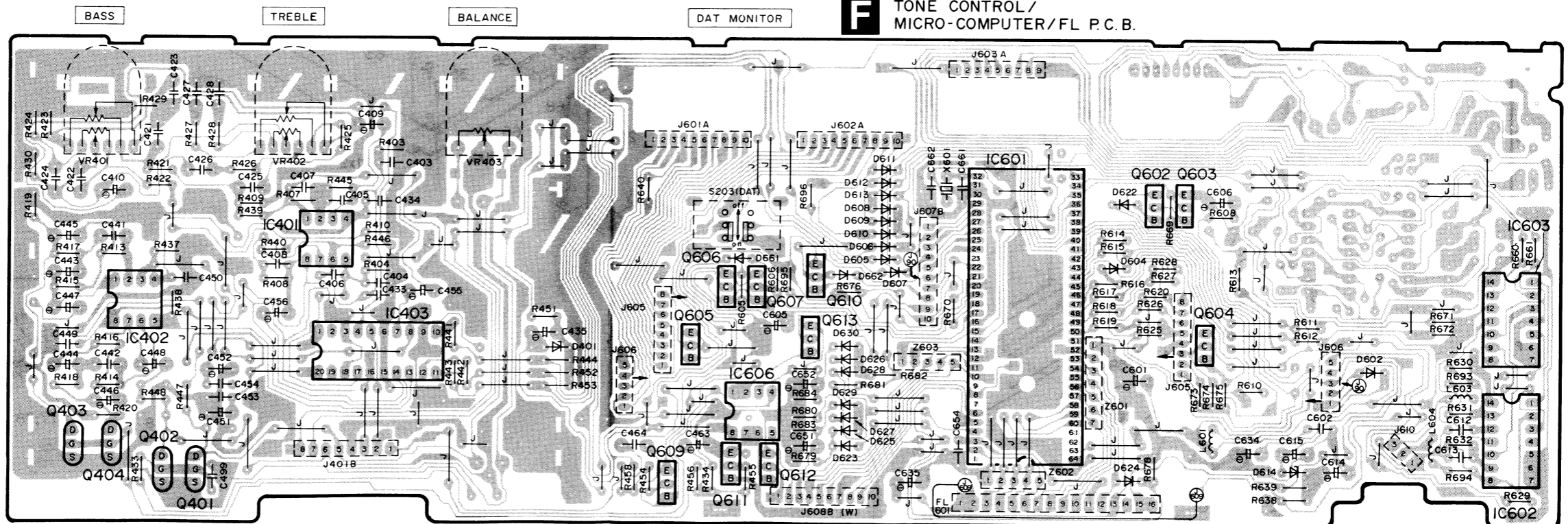
**G** INPUT SELECTOR SWITCH/LED P.C.B.



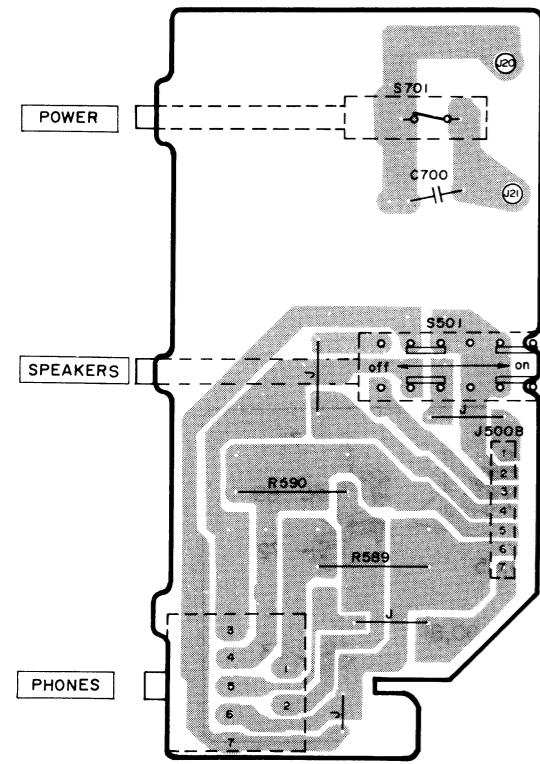
**J** SPEAKER TERMINAL P.C.B.



**F** TONE CONTROL/ MICRO-COMPUTER/FL P.C.B.

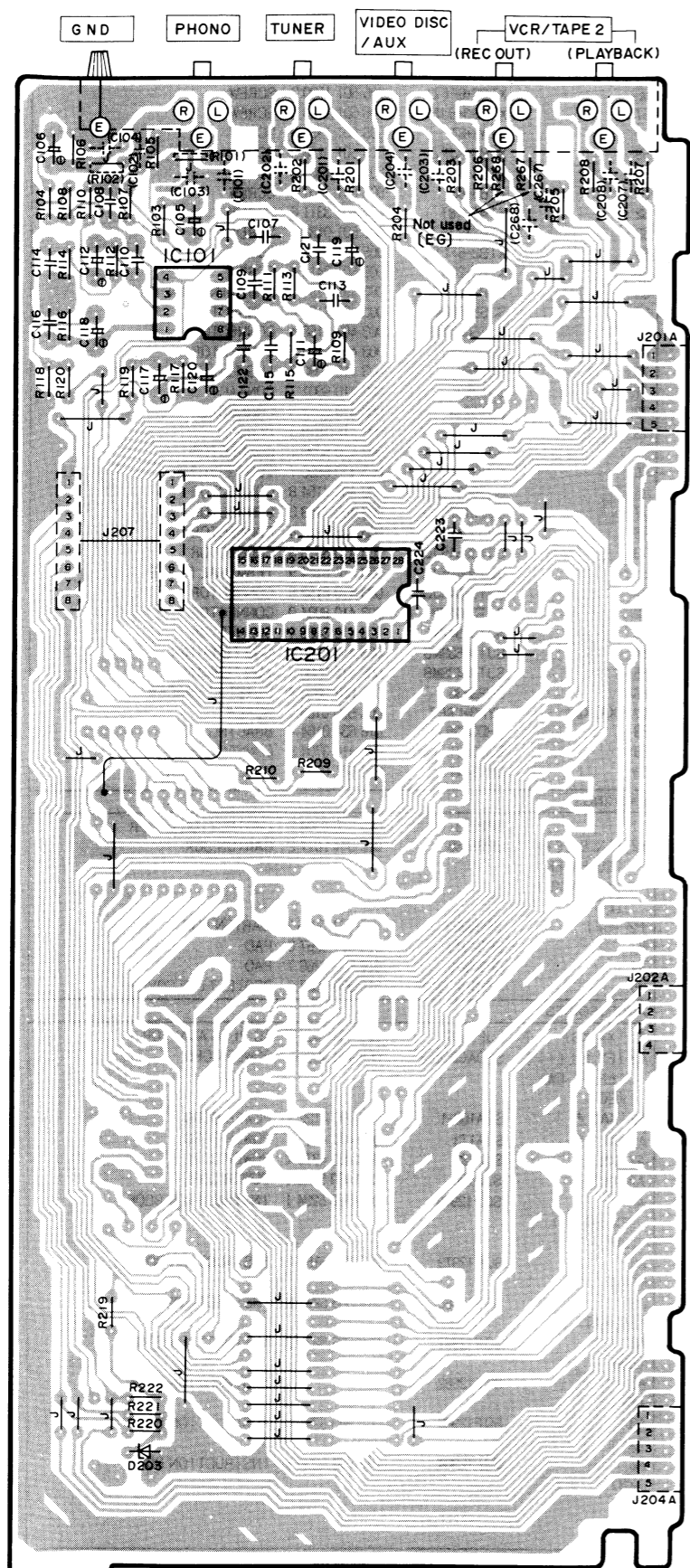
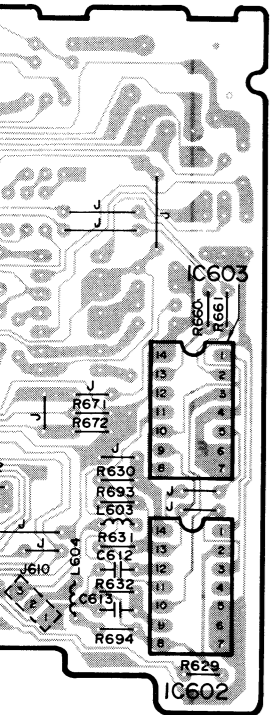


**I** HEADPHONES/ SPEAKER SWITCH P.C.B.



OR SWITCH/LED P.C.B.

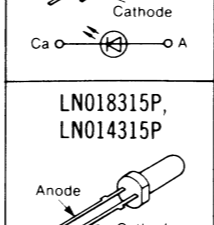
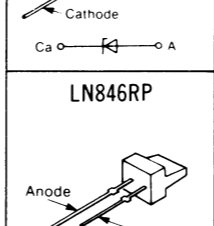
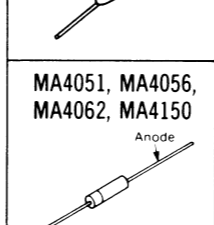
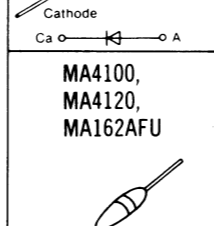
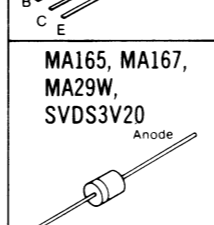
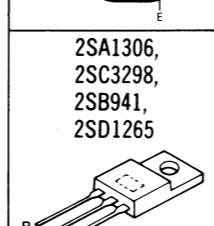
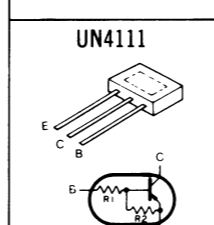
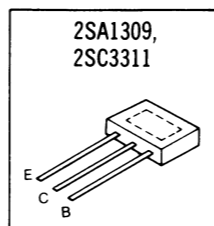
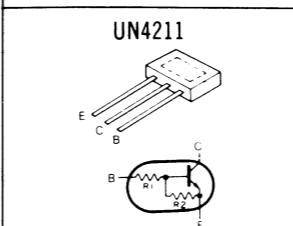
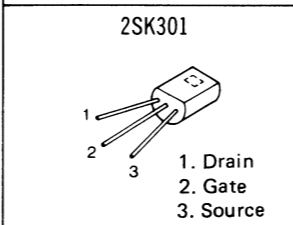
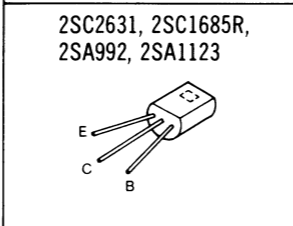
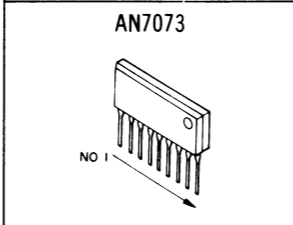
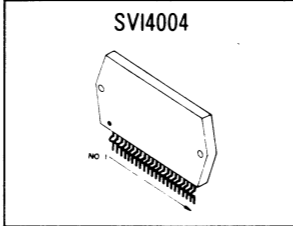
VTR/ TAPE 2



**E** ELECTRIC SELECTOR / IN,OUTPUT TERMINAL (2) P.C.B.

• Terminal guide of transistors, diodes and IC's

	LC6554D-3230	64Pin
	TC9164N	28Pin
	TC9151P	24Pin
	TC9152P	24Pin
	TC9177P	20Pin
	AN7062	18Pin
	DN74LS01	14Pin
	MN4013B	
	MN4030B	
	AN6554F	
	M5238P	8 Pin
	AN6558F	
	UPC4570C	



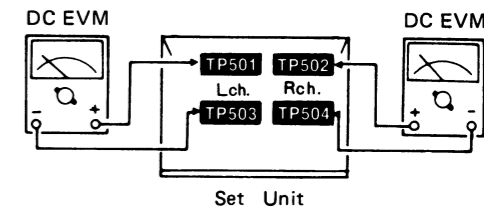
MEASUREMENTS AND ADJUSTMENTS

Control positions and equipment used.

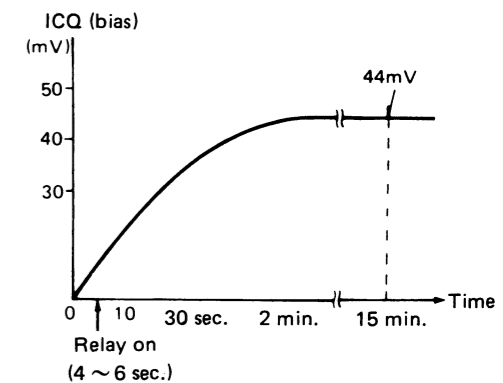
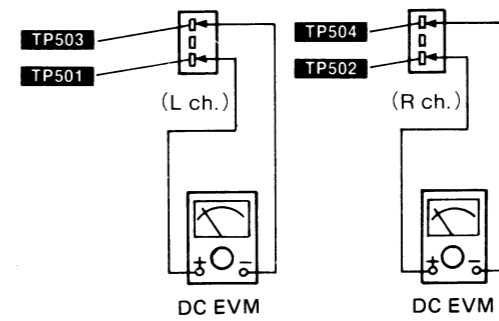
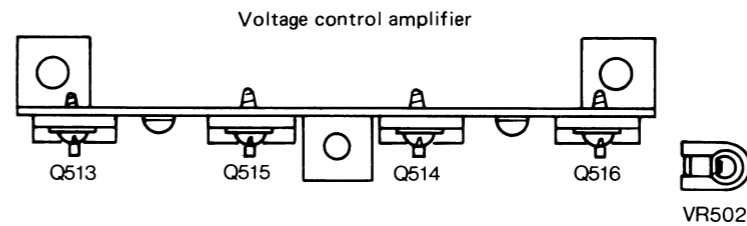
- Volume control . . . . . Minimum
- Speaker switch . . . . . off
- DC electronic voltmeter (EVM) (2 units)

Idling (ICQ) adjustment

1. Connect the set and the test instruments as shown at right.
2. (Hook up the DC EVMs for both channels.) Turn the ICQ adjusting controls (VR501, VR502) all the way counterclockwise.
3. Turn on the set when it is cold enough, and adjust the controls VR501 and VR502 so that the voltage of 30mV be reached 15 seconds after the relay is activated.  
(Adjust for both channels at a time.)  
Make sure the voltage is 18 ~ 47 mV (standard 44mV) in 10 ~ 15 minutes.  
(It should be below 50mV 60 minutes later.)



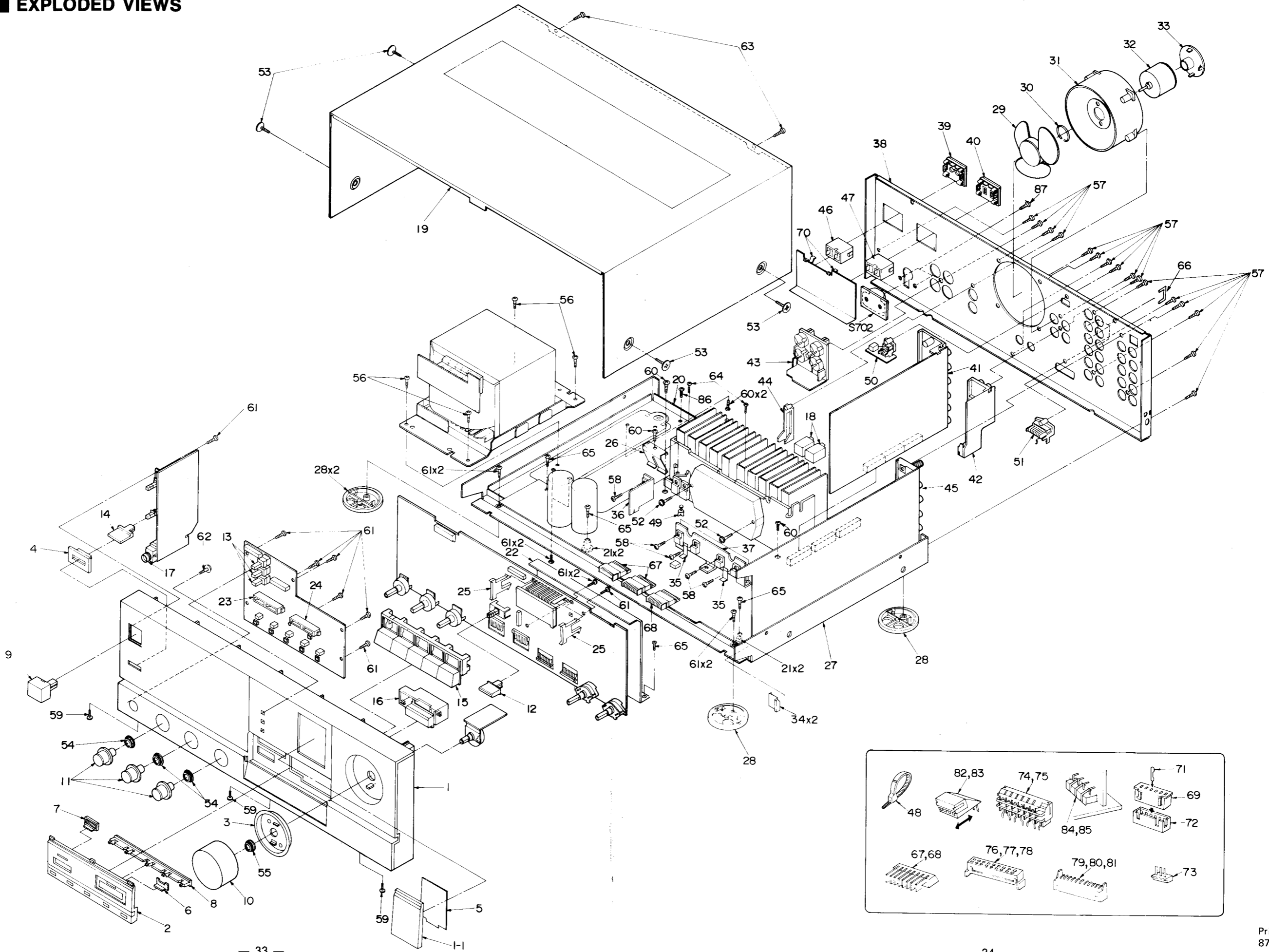
• Adjustment points





EXPLODED VIEWS

A  
B  
C  
D  
E  
F



DESCRIPTION

SCREW

PIN

R

R

R

INAL

R

R

INAL

R

R

R

R

PLATE

R

R

R

INAL

INAL

SPACER

STRUT

R

OVER

ION COVER

OX

OX

ION COVER

DAPTOR

RD

RD

RD

RD

RD

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