

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

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

Frequency response

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

■ GENERAL

Power consumption	300W
Power supply	
For continental Europe	AC 50 Hz/60 Hz, 220V
For others	AC 50 Hz/60 Hz, 110V/127V/220V/240V
Dimensions (W×H×D)	360 × 128 × 303 mm (14-3/16" × 5-1/32" × 11-30/32")
Weight	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.

■ CONTENTS

	Page
LOCATION OF CONTROLS	2
ACCESSORY	2
CONNECTION	3
PROTECTION CIRCUITRY	3
BEFORE REPAIR AND ADJUSTMENT	3
DISASSEMBLY INSTRUCTIONS	4, 5
FUNCTION OF IC TERMINAL	6
RESISTORS & CAPACITORS	7, 8

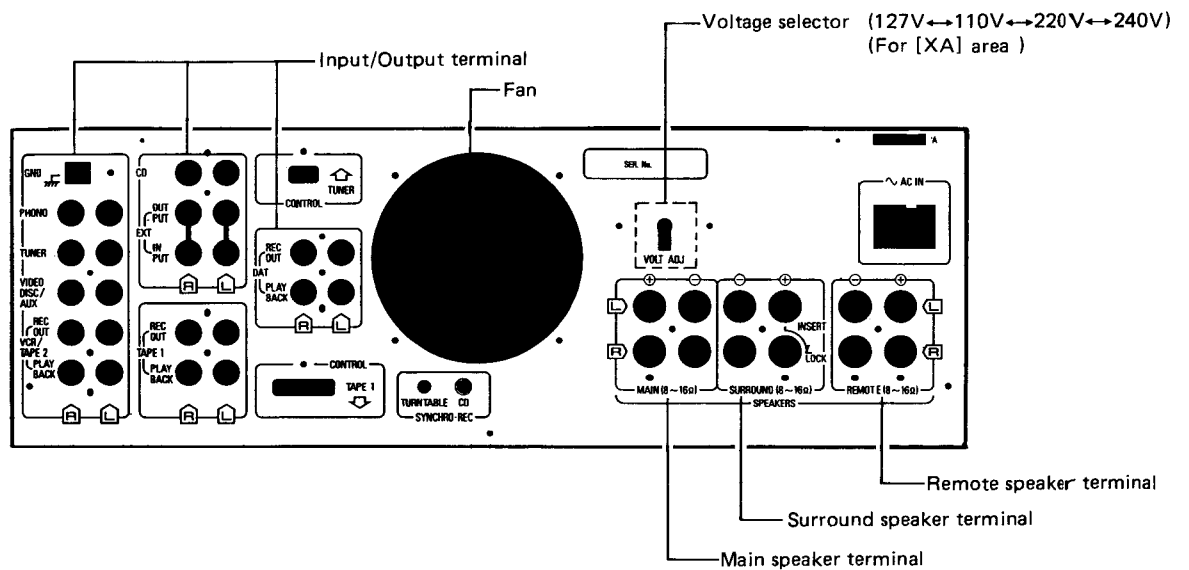
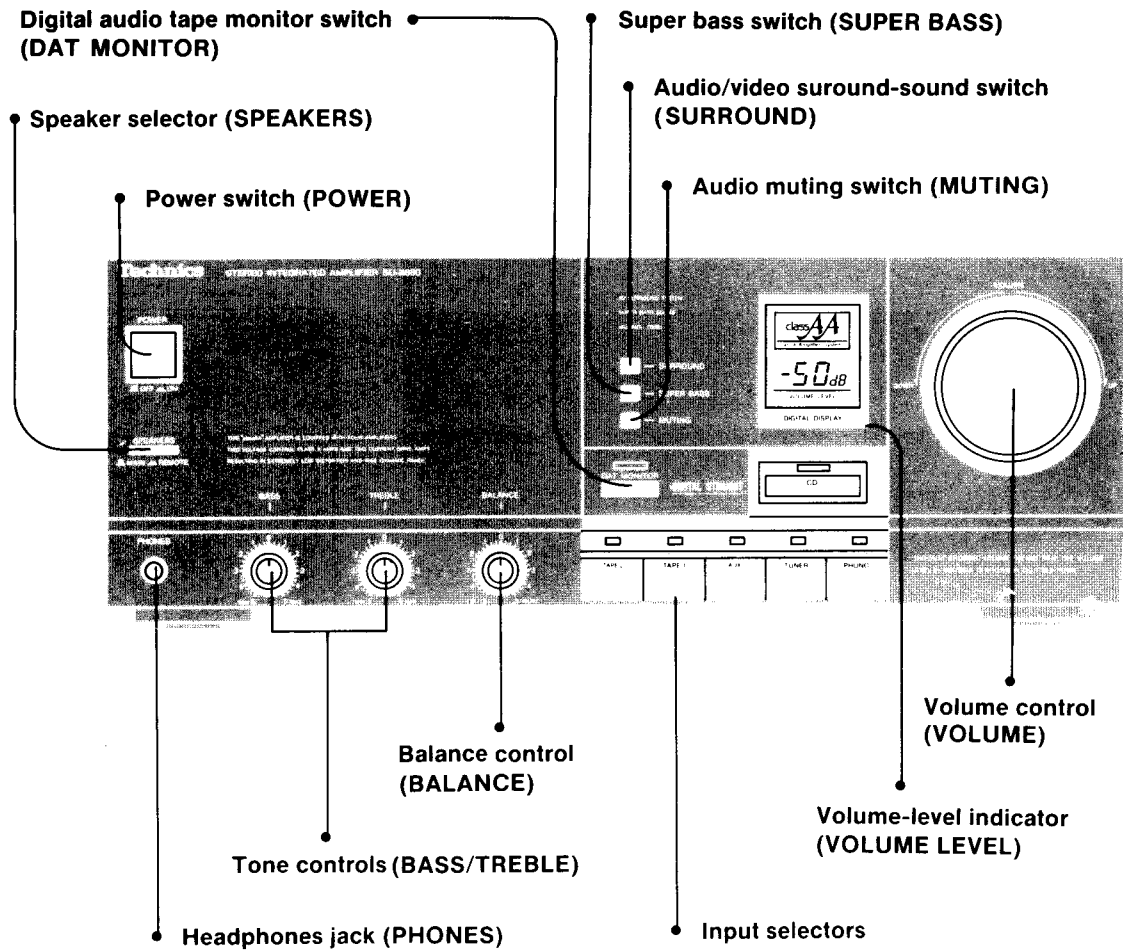
	Page
BLOCK DIAGRAM	9 ~ 11
SCHEMATIC DIAGRAM	12 ~ 21
WIRING CONNECTION DIAGRAM	22 ~ 24
PRINTED CIRCUIT BOARDS	25 ~ 29
MEASUREMENTS AND ADJUSTMENT	30
REPLACEMENT PARTS LIST	31, 32
EXPLODED VIEW	33, 34

Technics

Matsushita Electric Trading Co., Ltd.

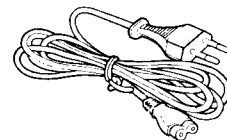
P.O. Box 288, Central Osaka Japan

■ LOCATION OF CONTROLS



■ ACCESSORY

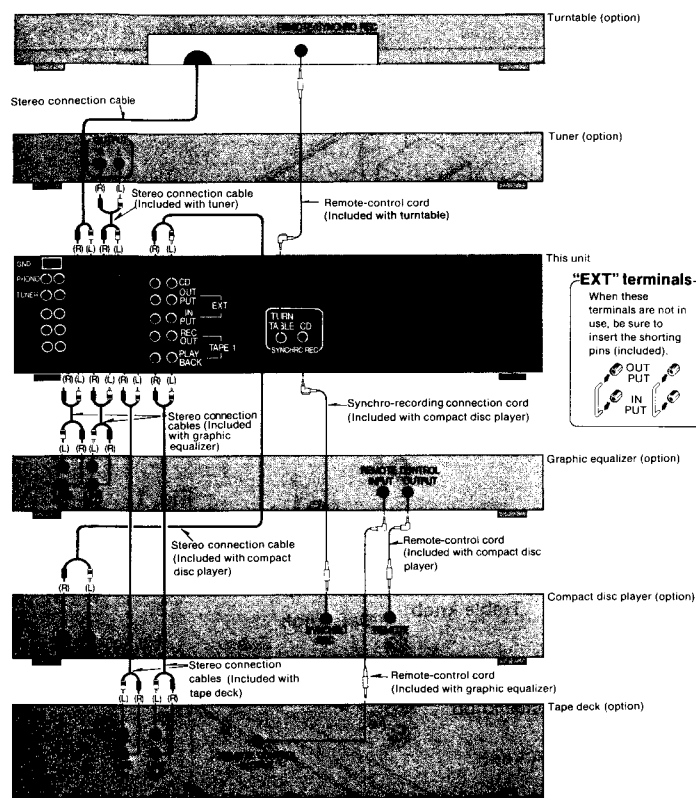
- AC power supply cord 1



CONNECTION

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

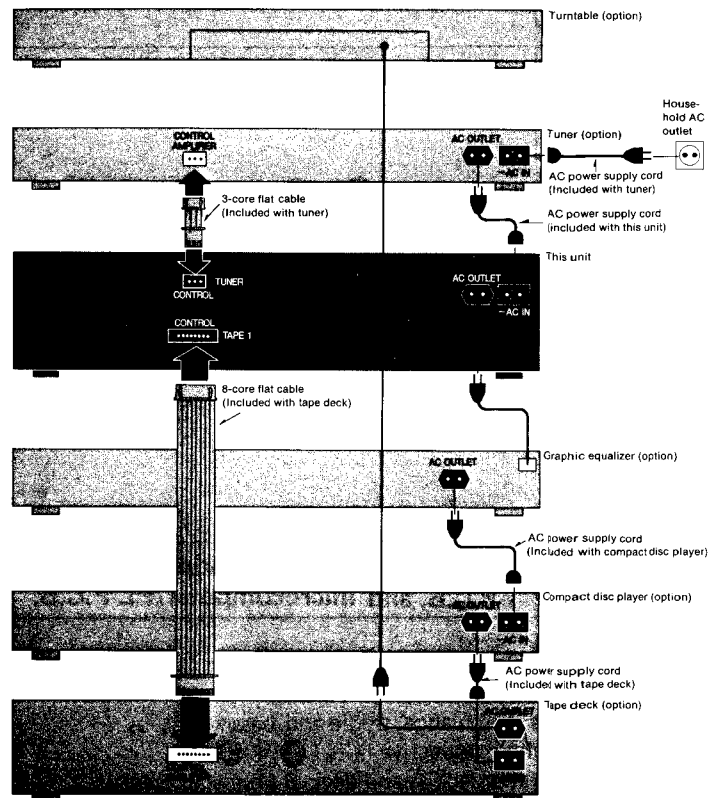
- Although the synchro-recording connection cords and the remote-control cords are differentiated in the figure below, actually they are the same shape.
- If the graphic equalizer is not used in combination with these components, connect the remote-control cord (included with the compact disc player) 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 ~ 27mA
	60Hz	186 ~ 558mA	170 ~ 510mA	95 ~ 285mA	85 ~ 25mA

■ DISASSEMBLY INSTRUCTIONS

"ATTENTION SERVICER"

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

Ref. No. 1 How to remove the cabinet

Procedure 1

1. Remove the 4 screws from both sides of the cabinet and the 2 screws from its back.

Ref. No. 2 How to remove the front panel

Procedure 1 → 2

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

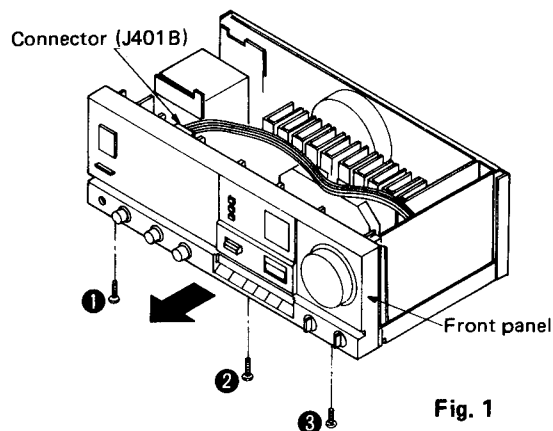


Fig. 1

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

Procedure 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.

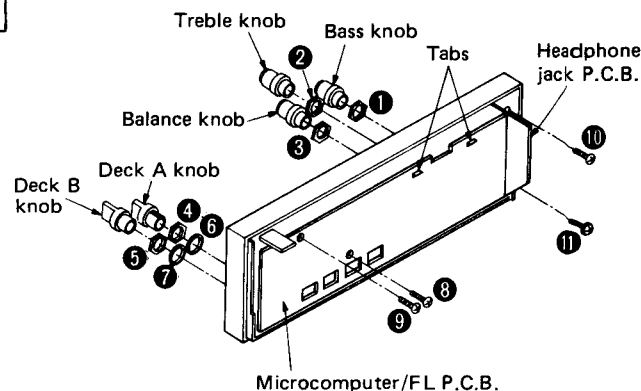


Fig. 1

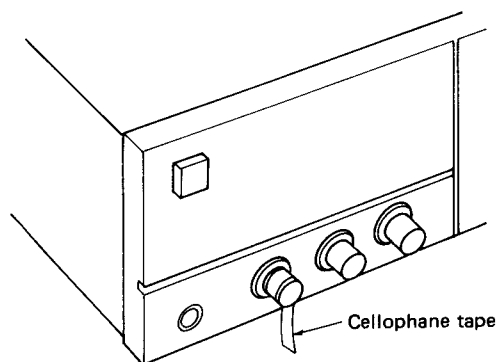


Fig. 2

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.

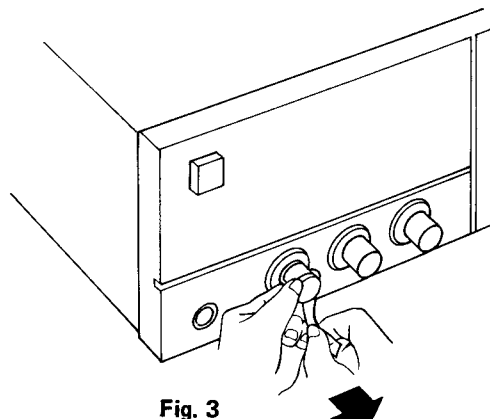


Fig. 3

Ref. No. 4	How to remove the volume control and switch P.C.B.	Volume knob Switch P.C.B. Fig. 1
Procedure 1 → 2 → 3 → 4	1. Remove the volume knob and the nut (❶). 2. Remove the 6 screws (❷ ~ ❸) from the switch P.C.B.	
Ref. No. 5	How to remove the main P.C.B., power IC and constant-voltage transistor	Fig. 1 4. Unsolder the power IC and the constant-voltage transistor. 5. Remove the 2 screws (❶ , ❷) from the power IC. 6. Remove the screw (❸) from the constant-voltage transistor. Constant-voltage transistor Power IC Fig. 2
Procedure 1 → 2 → 5	1. Remove the 8 screws (❶ ~ ❸) from the rear panel. 2. Remove the 3 screws (❹ ~ ❶) from the main P.C.B. 3. Remove the 2 screws (❷ , ❸) 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.	
Ref. No. 6	How to remove the cooling fan motor	2. Insert a screwdriver at the root of the cooling fan, it out of the motor shaft. Cooling fan Fig. 2 Fan casing Cooling fan motor Motor cover Projection Hole Fan casing Fig. 3
Procedure 1 → 6	1. Remove the 4 screws (❶ ~ ❹) and the connector. Fig. 1 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.	

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><tr><td>Output Input</td><td>5</td><td>6</td><td>7</td></tr><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></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 _{SS}	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 _P	Power supply.																								
52 ↓ 60	S0 ↓ S8	Digital multi-display (FL) output.																								
61	S music	Not used.																								
62	S movie																									
63	S mono																									
64	V _{DD}	Power supply.																								

RESISTORS & CAPACITORS

Notes: * Important safety notice:

Components identified by Δ mark have special characteristics important for safety. When replacing any of these components use only manufacturer's specified parts.

* Bracketed indications in Ref. No. columns specify the area.

Parts without these indications can be used for all areas.

Numbering System of Resistor

Example

ERD	25	F	J	102
Type	Wattage	Shape	Tolerance	Value
ERX	2	AN	J	471
Type	Wattage	Shape	Tolerance	Value
				47x10 ¹ (ohm)

Numbering System of Capacitor

Example

ECKD	1H	102	Z	F
Type	Voltage	Value	Tolerance	Peculiarity
ECEA	50		M	330
Type	Voltage		Peculiarity	Value
				(33x10 ⁰ microfarad)

Resistor Type	Wattage	Tolerance
ERD : Carbon	10 : 1/8W	J : $\pm 5\%$
ERG : Metal Oxide	12 : 1/2W	F : $\pm 1\%$
ERX : Metal Film	25 : 1/4W	G : $\pm 2\%$
ERQ : Fuse Type Metal	1A : 1W	K : $\pm 10\%$
ERD [] L : Carbon (chip)	18 : 1/8W	
ERO [] K : Metal Film (chip)	S2 : 1/4W	
ERC : Solid	S1 : 1/2W	
	2F : 1/4W	
	50 : 1/2W	
	2A : 2W	

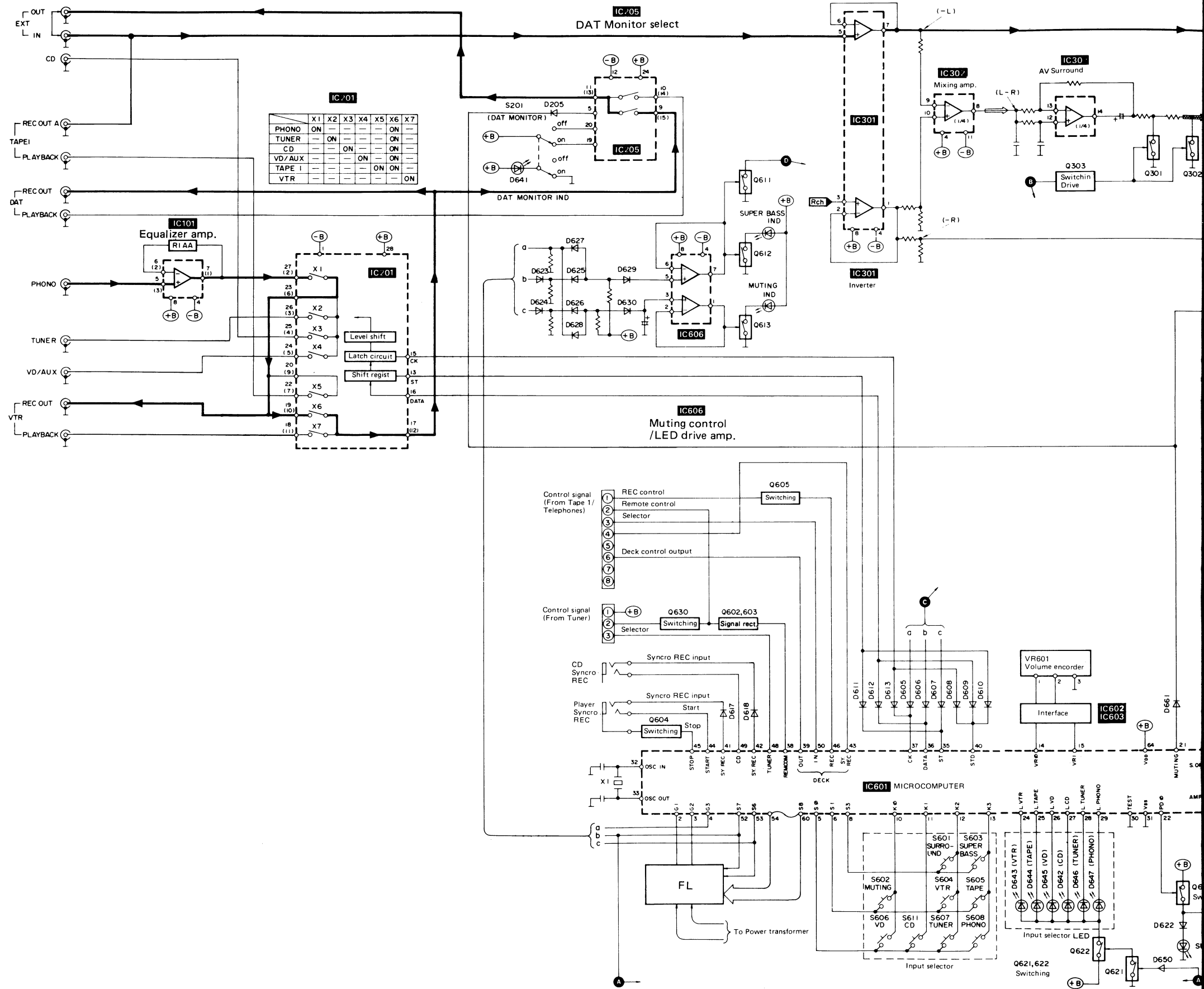
Capacitor Type	Voltage	Tolerance
ECE : Electrolytic	0J : 6.3V	C : $\pm 0.25\mu\text{F}$
ECCD : Ceramic	1A : 10V	J : $\pm 5\%$
ECKD : Ceramic	1C : 16V	K : $\pm 10\%$
ECQM : Polyester	1E : 25V	Z : $\pm 80\%$
	1H : 50V	P : $\pm 100\%$
ECQP : Polypropylene	1V : 35V	-0%
	50 : 50V	
ECG : Ceramic	05 : 50V	M : $\pm 20\%$
ECEA [] [] N : Non Polar Electrolytic	2H : 500V	
QCU [] : Ceramic (Chip Type)	2A : 100V	D : $\pm 0.5\mu\text{F}$
ECUX : Ceramic (Chip Type)	1 : 100V	G : $\pm 2\%$
ECF : Semiconductor	KC : 400V AC	
	KC : 125VAC (UL)	
	1J : 63V	
EECW : Liquid electrolyte double layer capacitor		

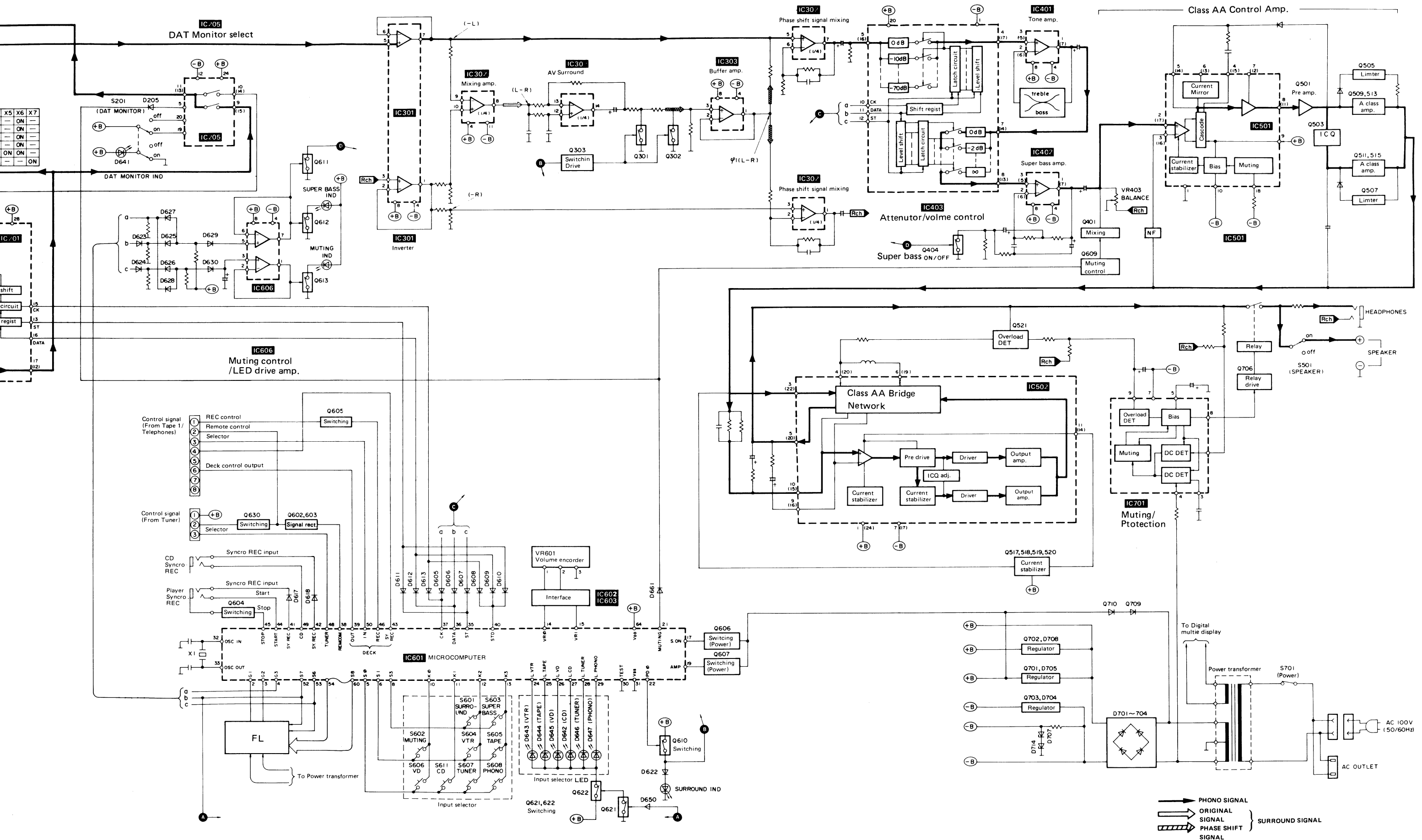
Ref. No.	Part No.	Part Code	Ref. No.	Part No.	Part Code	Ref. No.	Part No.	Part Code
RESISTORS								
R101, R102 (EG)	ERDS2TJ471	001 152 2361 5	R231 (EG)	ERDS2TJ222	001 152 2353 5	R322	ERDS2TJ104	001 152 2348 2
R103, R104	ERDS2TJ391	001 152 2360 6	R232, R235	ERDS2TJ102	001 152 2346 4	R323	ERDS2TJ103	001 152 2347 3
R105, R106	ERDS2TJ224	001 152 2433 6	R236, R237	ERDS2TJ102	001 152 2346 4	R324, R326	ERDS2TJ332	001 152 2357 1
R107, R108	ERDS2TJ563	001 152 2446 1	R237	ERDS2TJ222	001 152 2353 5	R327, R328	ERDS2TJ332	001 152 2357 1
R109, R110	ERDS2TJ221	001 152 2431 8	(EG)			R329, R330	ERDS2TJ332	001 152 2357 1
R111, R112	ERDS2TJ680	001 152 2448 9	R238	ERDS2TJ102	001 152 2346 4	R331, R332	ERDS2TJ104	001 152 2348 2
R113, R114	ERDS2TJ184	001 152 2588 8	R238 (EG)	ERDS2TJ222	001 152 2353 5	R403, R404	ERDS2TJ224	001 152 2433 6
R115, R116	ERDS2TJ123	001 152 2424 7	R239, R240	ERDS2TJ102	001 152 2346 4	R407, R408	ERDS2TJ474	001 152 2443 4
R117, R118	ERDS2TJ563	001 152 2446 1	R241	ERDS2TJ102	001 152 2346 4	R409, R410	ERDS2TJ822	001 152 2455 0
R119, R120	ERDS2TJ102	001 152 2346 4	R241 (EG)	ERDS2TJ222	001 152 2353 5	R413, R414	ERDS2TJ473	001 152 2363 3
R201	ERDS2TJ102	001 152 2346 4	R242	ERDS2TJ102	001 152 2346 4	R415, R416	ERDS2TJ182	001 152 2352 6
R201 (EG)	ERDS2TJ222	001 152 2353 5	R242 (EG)	ERDS2TJ222	001 152 2353 5	R417, R418	ERDS2TJ562	001 152 2445 2
R202	ERDS2TJ102	001 152 2346 4	R243	ERDS2TJ102	001 152 2346 4	R419, R420	ERDS2TJ474	001 152 2443 4
R202 (EG)	ERDS2TJ222	001 152 2353 5	R244	ERDS2TJ102	001 152 2346 4	R421, R422	ERDS2TJ223	001 152 2432 7
R203	ERDS2TJ102	001 152 2346 4	R245	ERDS2TJ102	001 152 2346 4	R423, R424	ERDS2TJ392	001 152 2349 0
R203 (EG)	ERDS2TJ222	001 152 2353 5	R246	ERDS2TJ102	001 152 2346 4	R425, R426	ERDS2TJ182	001 152 2352 6
R204	ERDS2TJ102	001 152 2346 4	R247, R428	ERDS2TJ273	001 152 2436 3	R427, R428	ERDS2TJ821	001 152 2454 1
R204 (EG)	ERDS2TJ222	001 152 2353 5	R249	ERDS2TJ103	001 152 2347 3	R429, R430	ERDS2TJ273	001 152 2436 3
R205, R206	ERDS2TJ102	001 152 2346 4	R250	ERDS2TJ333	001 152 2358 0	R433, R434	ERDS2TJ104	001 152 2348 2
R207	ERDS2TJ102	001 152 2346 4	R251, R252	ERDS2TJ103	001 152 2347 3	R437, R438	ERDS2TJ224	001 152 2433 6
R207 (EG)	ERDS2TJ222	001 152 2353 5	R253	ERDS2TJ103	001 152 2347 3	R439, R440	ERDS2TJ332	001 152 2357 1
R208	ERDS2TJ102	001 152 2346 4	R263, R264	ERDS2TJ104	001 152 2348 2	R441, R442	ERDS2TJ103	001 152 2347 3
R208 (EG)	ERDS2TJ222	001 152 2353 5	R265, R266	ERDS2TJ104	001 152 2348 2	R443, R444	ERDS2TJ103	001 152 2347 3
R209, R210	ERDS2TJ152	001 152 2350 8	R301	ERDS2TJ102	001 152 2346 4	R445, R446	ERDS2TJ222	001 152 2353 5
R219	ERDS2TJ182	001 152 2352 6	R301 (EG)	ERDS2TJ222	001 152 2353 5	R447, R448	ERDS2TJ392	001 152 2439 0
R220, R221	ERDS2TJ562	001 152 2445 2	R302	ERDS2TJ102	001 152 2346 4	R451	ERDS2TJ122	001 152 2423 8
R222	ERDS2TJ562	001 152 2445 2	R302 (EG)	ERDS2TJ222	001 152 2353 5	R452, R453	ERDS2TJ103	001 152 2347 3
R229	ERDS2TJ102	001 152 2346 4	R303, R304	ERDS2TJ102	001 152 2346 4	R454	ERDS2TJ681	001 152 2449 8
R229 (EG)	ERDS2TJ222	001 152 2353 5	R305, R306	ERDS2TJ223	001 152 2432 7	R455	ERDS2TJ222	001 152 2353 5
R230	ERDS2TJ102	001 152 2346 4	R307	ERDS2TJ393	001 152 2440 7	R456	ERDS2TJ153	001 152 2351 7
R230 (EG)	ERDS2TJ222	001 152 2353 5	R308	ERDS2TJ223	001 152 2432 7	R458	ERDS2TJ393	001 152 2440 7
R231	ERDS2TJ102	001 152 2346 4	R309, R310	ERDS2TJ332	001 152 2357 1	R503, R504	ERDS2TJ102	001 152 2346 4
			R311	ERDS2TJ223	001 152 2432 7	R505, R506	ERDS2TJ473	001 152 2363 3
			R312	ERDS2TJ393	001 152 2440 7	R507, R508	ERDS2TJ272	001 152 2354 4
			R313, R314	ERDS2TJ223	001 152 2432 7	R509, R510	ERDS2TJ473	001 152 2363 3
			R315	ERDS2TJ223	001 152 2432 7	R511	ERD2FCG470	001 152 0197 7
			R316	ERDS2TJ562	001 152 2445 2	R512	ERDS2TJ823	001 152 2456 9
			R317	ERDS2TJ822	001 152 2455 0	R513, R514	ERDS2TJ561	001 152 2364 2
			R318, R319	ERDS2TJ562	001 152 2445 2	R515, R516	ERD25FJ470	001 152 0309 7
			R320	ERDS2TJ224	001 152 2433 6	R531, R532	ERDS2TJ182	001 152 2352 6
			R321	ERDS2TJ473	001 152 2363 3	R533, R534	ERDS2TJ391	001 152 2360 6
						R535, R536	ERDS2TJ332	001 152 2357 1
						R537, R538	ERDS2TJ332	001 152 2357 1

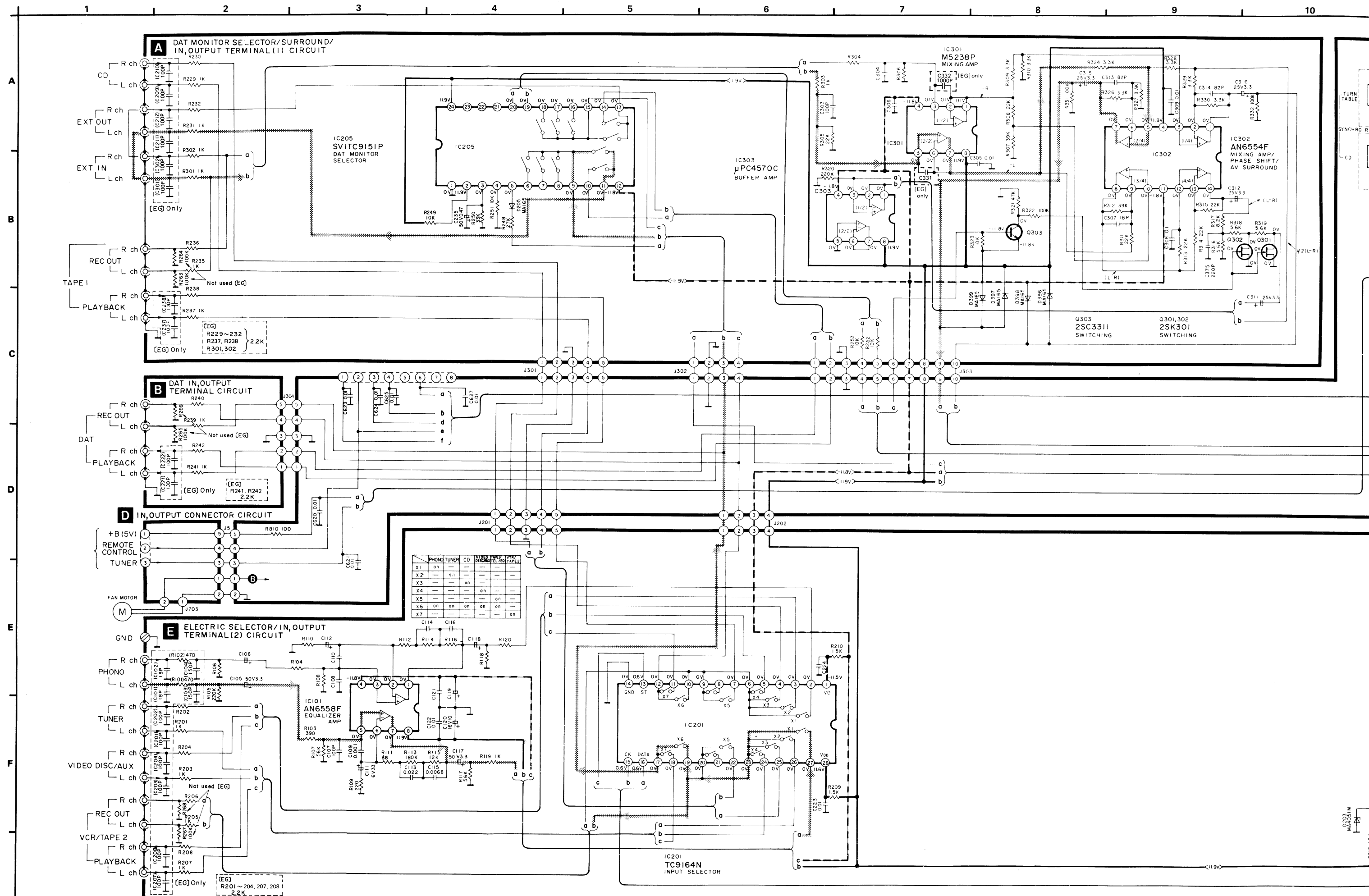
Ref. No.	Part No.	Part Code	Ref. No.	Part No.	Part Code	Ref. No.	Part No.	Part Code
R539, R540	ERDS2TJ223	001 152 2432 7	R737	ERG1ANJ681	001 151 0086 8	C507	ECEA2AU010	001 120 3578 4
R541, R542	ERDS2TJ223	001 152 2432 7	R810	ERDS2TJ101	001 152 2421 0	C508	ECEA1HK010	001 120 0341 5
R543, R544	ERDS2TJ332	001 152 2357 1	CAPACITORS			C509, C510	ECEA1CP5220	001 120 6060 7
R545, R546	ERD25FJ101	001 152 0214 3	C101, C102 (EG)	RCBS1H180JLY	001 103 5592 5	C511, C512	RCBS1H180JLY	001 103 5592 5
R547, R548	ERD25FJ101	001 152 0214 3	C103 (EG)	RCBS1H151KBY		C513, C514	ECBT1H681KB5	001 103 9167 2
R549, R550	ERD25FJ2R2	001 152 0251 8	C104 (EG)			C515, C516	RCBS1H120JLY	001 103 5578 3
R551, R552	ERD25FJ2R2	001 152 0251 8	C105, C106	ECEA1HPS3R3	001 120 6064 3	C517, C518	ECBT1H102KB5	001 103 8123 8
R553, R554	ERD25FJ6R8	001 152 0335 5	C107, C108	RCBS1H101KBY	001 103 5569 4	C520 (EG)	ECKD1H102PF	001 103 1435 3
R571, R572	ERDS2TKF4220	001 151 5927 2	C109, C110	ECFTD102KXL	001 108 0371 1	C521, C522 (EG)	ECKD1H103PF	001 103 1443 3
R573, R574	ERDS2TKF1000	001 151 5727 8	C111, C112	ECEA0JPS330	001 120 6059 0	C531, C532	ECKD1H333PF	001 103 1539 6
R575, R576	ERDS2TKF1000	001 151 5727 8	C113, C114	ECFTD223KXL	001 108 0342 6	C533, C534	RCBS1H680JLY	001 103 5640 4
R577, R578	ERD2FCG271	001 152 6537 3	C115, C116	ECFTD682KXL	001 108 0363 1	C537, C538	ECEA1HK010	001 120 0341 5
R579, R580	ERDS2TJ271	001 152 2435 4	C117, C118	ECEA1HPS3R3	001 120 6064 3	C539, C540	ECEA1VK330	001 120 4800 3
R581, R582	ERDS2TJ153	001 152 2351 7	C119, C120	ECEA1CKS100	001 120 2600 7	C541, C542	RCBS1H680JLY	001 103 5640 4
R583, R584	ERDS1FJ100	001 152 2612 5	C121, C122	ECBT1E103ZF5	001 103 8080 2	C563, C564 Δ (EG)	ECKD1H223PF	001 103 1510 9
R585, R586	ERDS2TJ472	001 152 2362 4	C201, C202 (EG)	RCBS1H101KBY	001 103 5569 4	C567, C568 Δ (EG)	ECKD1H223PF	001 103 1510 9
R587, R588	ERD25FJ100	001 152 0213 4	C203, C204 (EG)	RCBS1H101KBY	001 103 5569 4	C571, C572	RCBS1H330JLY	001 103 5617 3
R589, R590	ERG1ANJ331	001 151 0062 6	C209, C210 (EG)	RCBS1H101KBY	001 103 5569 4	C573, C574	RCBS1H560JLY	001 103 5636 0
R605	ERDS2TJ224	001 152 2433 6	C211, C212 (EG)	RCBS1H101KBY	001 103 5569 4	C575, C576	ECQM1H392JZ	001 106 0790 6
R606	ERDS2TJ223	001 152 2432 7	C221, C222 (EG)	RCBS1H101KBY	001 103 5569 4	C577, C578	ECEA1HK010	001 120 0341 5
R608	ERDS2TJ224	001 152 2433 6	C223, C224	ECBT1E103ZF5	001 103 8080 2	C579, C580	RCBS1H330JLY	001 103 5617 3
R610, R611	ERDS2TJ470	001 152 2442 5	C235	ECEA1HKR47	001 120 0338 0	C581, C582	ECEA1AU101	001 120 2830 5
R612, R613	ERDS2TJ470	001 152 2442 5	C237, C238 (EG)	RCBS1H101KBY	001 103 5569 4	C583, C584	ECEA1AU101	001 120 2830 5
R614, R615	ERDS2TJ470	001 152 2442 5	C301, C302 (EG)	RCBS1H101KBY	001 103 5569 4	C585, C586	ECBT1H821KB5	001 103 9746 0
R616, R617	ERDS2TJ470	001 152 2442 5	C303, C304	RCBS1H101KBY	001 103 5569 4	C587, C588	ECFTD472KXL	001 108 0742 0
R618, R619	ERDS2TJ470	001 152 2442 5	C305, C306	RCBS1H101KBY	001 103 5569 4	C589, C590	ECKD1H333PF	001 103 1539 6
R620	ERDS2TJ562	001 152 2445 2	C307	RCBS1H180JLY	001 103 5592 5	C591, C592	ECKD1H333PF	001 103 1539 6
R625, R626	ERDS2TJ223	001 152 2432 7	C308	ECFTD104KXL	001 108 0793 3	C593, C594	ECKD1H473ZF	001 103 5404 4
R627, R628	ERDS2TJ223	001 152 2432 7	C309	ECBT1E103ZF5	001 103 8080 2	C597, C598	ECKD1H473ZF	001 103 5404 4
R629, R630	ERDS2TJ153	001 152 2351 7	C311	ECEA1EK3R3E	001 120 0292 7	C601	ECEA0JS102	001 120 0152 8
R631, R632	ERDS2TJ473	001 152 2363 3	C312	ECEA1EK3R3E	001 120 0292 7	C602	ECBT1E223ZF	001 103 7589 2
R638, R639	ERDS2TJ101	001 152 2421 0	C313, C314	RCBS1H820KBY	001 103 5646 8	C605, C606	ECEA1HK010	001 120 0341 5
R640	ERDS2TJ330	001 152 2355 3	C315, C316	ECEA1EK3R3E	001 120 0292 7	C612, C613	RCBS1H221KBY	001 103 5603 9
R642, R643	ERDS2TJ221	001 152 2431 8	C331	RCBS1H101KBY	001 103 5569 4	C614, C615	ECEA1VK330	001 120 4800 3
R644, R645	ERDS2TJ221	001 152 2431 8	C332 (EG)	RCBS1H101KBY	001 103 5569 4	C620, C621	ECBT1E103ZF5	001 103 8080 2
R646	ERDS2TJ221	001 152 2431 8	C335	ECEA1HPS3R3	001 120 6064 3	C622, C624	ECBT1E103ZF5	001 103 8080 2
R660, R661	ERDS2TJ103	001 152 2347 3	C375	ECKD1H271KB	001 103 1515 4	C625, C627	ECBT1E103ZF5	001 103 80

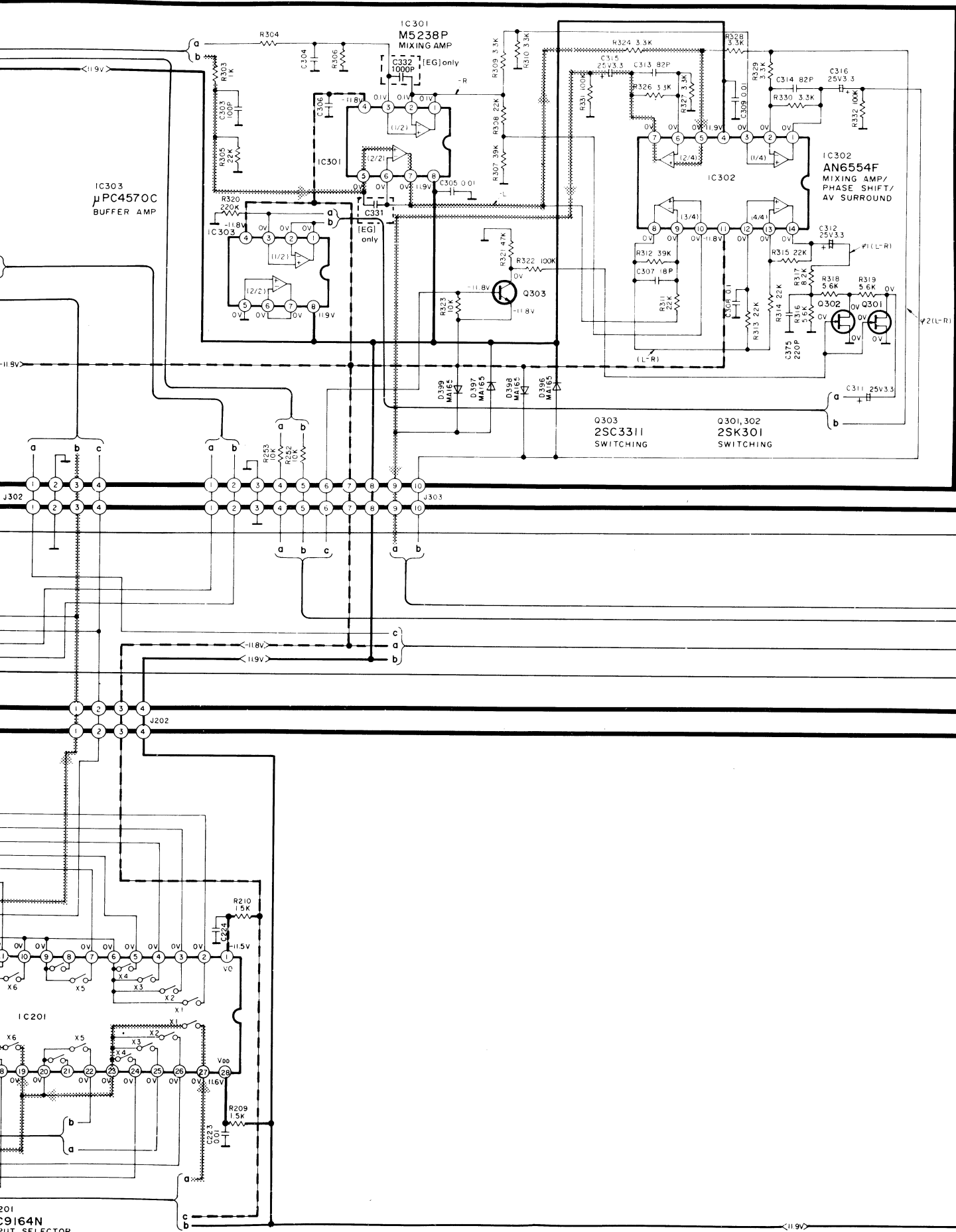
Code	Ref. No.	Part No.	Part Code	Ref. No.	Part No.	Part Code
27	R737	ERG1ANJ681	001 151 0086 8	C507	ECEA2AU010	001 120 3578 4
27	R810	ERDS2TJ101	001 152 2421 0	C508	ECEA1HK010	001 120 0341 5
27	CAPACITORS			C509, C510	ECEA1CPS220	001 120 6060 7
27	C101, C102	RCBS1H180JLY	001 103 5592 5	C511, C512	RCBS1H180JLY	001 103 5592 5
27	(EG)			C513, C514	ECBT1H681KB5	001 103 9167 2
27	C103	RCBS1H151KBY		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	RCBS1H101KBY	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	(EG)		
27	C119, C120	ECEA1CKS100	001 120 2600 7	C567, C568	ECKD1H223PF	001 103 1510 9
27	C121, C122	ECBT1E103ZF5	001 103 8080 2	(EG)		
27	C201, C202	RCBS1H101KBY	001 103 5569 4	C571, C572	RCBS1H330JLY	001 103 5617 3
27	(EG)			C573, C574	RCBS1H560JLY	001 103 5636 0
27	C203, C204	RCBS1H101KBY	001 103 5569 4	C575, C576	ECQM1H392JZ	001 106 0790 6
27	(EG)			C577, C578	ECEA1HK010	001 120 0341 5
27	C209, C210	RCBS1H101KBY	001 103 5569 4	C579, C580	RCBS1H330JLY	001 103 5617 3
27	(EG)			C581, C582	ECEA1AU101	001 120 2830 5
27	C211, C212	RCBS1H101KBY	001 103 5569 4	C583, C584	ECEA1AU101	001 120 2830 5
27	(EG)			C585, C586	ECBT1H821KB5	001 103 9382 7
27	C221, C222	RCBS1H101KBY	001 103 5569 4	C587, C588	ECFTD472KXL	001 108 0746 0
27	(EG)			C589, C590	ECKD1H333PF	001 103 1539 6
27	C223, C224	ECBT1E103ZF5	001 103 8080 2	C591, C592	ECKD1H333PF	001 103 1539 6
27	C235	ECEA1HK47	001 120 0338 0	C593, C594	ECKD1H473ZF	001 103 5404 4
27	C237, C238	RCBS1H101KBY	001 103 5569 4	C597, C598	ECKD1H473ZF	001 103 5404 4
27	(EG)			C601	ECEA0JS102	001 120 0152 8
27	C301, C302	RCBS1H101KBY	001 103 5569 4	C602	ECBT1E223ZF	001 103 7589 2
27	(EG)			C605, C606	ECEA1HK010	001 120 0341 5
27	C303, C304	RCBS1H101KBY	001 103 5569 4	C612, C613	RCBS1H221KBY	001 103 5603 9
27	C305, C306	ECBT1E103ZF5	001 103 8080 2	C614, C615	ECEA1VK330	001 120 4800 3
27	C307	RCBS1H180JLY	001 103 5592 5	C620, C621	ECBT1E103ZF5	001 103 8080 2
27	C308	ECFTD104KXL	001 108 0793 3	C623, C624	ECBT1E103ZF5	001 103 8080 2
27	C309	ECBT1E103ZF5	001 103 8080 2	C625, C627	ECBT1E103ZF5	001 103 8080 2
27	C311	ECEA1EK3R3B	001 120 0292 7	C628, C629	ECBT1E103ZF5	001 103 8080 2
27	C312	ECEA1EK3R3E	001 120 6273 6	C630, C631	ECBT1E103ZF5	001 103 8080 2
27	C313, C314	RCBS1H820KBY	001 103 5646 8	C632	ECBT1E103ZF5	001 103 8080 2
27	C315, C316	ECEA1EK3R3B	001 120 0292 7	C634	ECEA0JK470	001 120 0143 9
27	C331	RCBS1H101KBY		C635	ECEA1HK2R2B	001 120 0346 0
27	(EG)			C637, C638	ECBT1E103ZF5	001 103 8080 2
27	C332	RCBS1H101KBY	001 103 5569 4	C639, C649	ECBT1E103ZF5	001 103 8080 2
27	(EG)			C651, C652	ECEA1HK010	001 120 0341 5
27	C375	ECKD1H271KB	001 103 1515 4	C653	ECEA1CKS100	001 120 2600 7
27	C403, C404	RCBS1H101KBY	001 103 5569 4	C654	RCBS1H331KBY	001 103 5619 1
27	C405, C406	ECBT1H821KB5	001 103 9382 7	C661, C662	RCBS1H330JLY	001 103 5617 3
27	C407, C408	RCBS1H390JLY	001 103 5621 7	C698, C699	RCBS1H101KBY	001 103 5569 4
27	C409, C410	ECEA1HPS3R3	001 120 6064 3	C700	ECKDKC103PF2	001 103 3734 7
27	C421, C422	ECFTD123KXL	001 108 0745 1	C701, C702	ECETS1HV682U	001 120 2021 0
27	C423, C424	ECFTD683KXL	001 108 0346 2	C703, C704	ECKD1H103PF	001 103 1449 7
27	C425, C426	ECFTD472KXL	001 108 0746 0	C705, C706	ECEA1CK470	001 120 0227 6
27	C427, C428	ECFTD223KXL	001 108 0342 6	C707, C708	ECEA1CK220	001 120 0225 8
27	C433, C434	ECBT1E103ZF5	001 103 8080 2	C709	ECEA1VK330	001 120 4800 3
27	C435	ECEA1CKS100	001 120 2600 7	C710	ECEA1HK47	001 120 2640 9
27	C441, C442	ECFTD473KXL	001 108 0361 3	C711	ECKD2H101PE	
27	C443, C444	ECEA1HPS010	001 120 6063 4	C711	ECKD2H103PE	001 103 1626 8
27	C445, C446	ECEA1HPS010	001 120 6063 4	C712	ECEA1AU101	001 120 2830 5
27	C447, C448	ECEA1HPS3R3	001 120 6064 3	C713	ECEA1CKS100	001 120 2600 7
27	C449, C450	ECBT1E103ZF5	001 103 8080 2	C714	ECKD1H103PF	001 103 1449 7
27	C451, C452	ECEA1CKS100	001 120 2600 7	C721	ECEA1CK470	001 120 0227 6
27	C453, C454	ECBT1E103ZF5	001 103 8080 2	C722	ECEA1CKS100	001 120 2600 7
27	C455, C456	ECEA1HPS3R3	001 120 6064 3	C723	ECEA1CU101	001 120 2926 8
27	C463	ECEA1HK0R1	001 120 0340 6	C731	ECEA0JS331	001 120 2975 9
27	C464	ECBT1E223ZF	001 103 7589 2	C732	ECFTD223KXL	001 108 0342 6
27	C499	RCBS1H101KBY	001 103 5569 4	C733	ECEA0JK330	001 120 0141 1
27	C501, C502	ECEA1HPS3R3	001 120 6064 3	C734	ECEA1CKS100	001 120 2600 7
27	C503, C504	RCBS1H151KBY				
27	C505, C506	RCBS1H820KBY	001 103 5646 8			

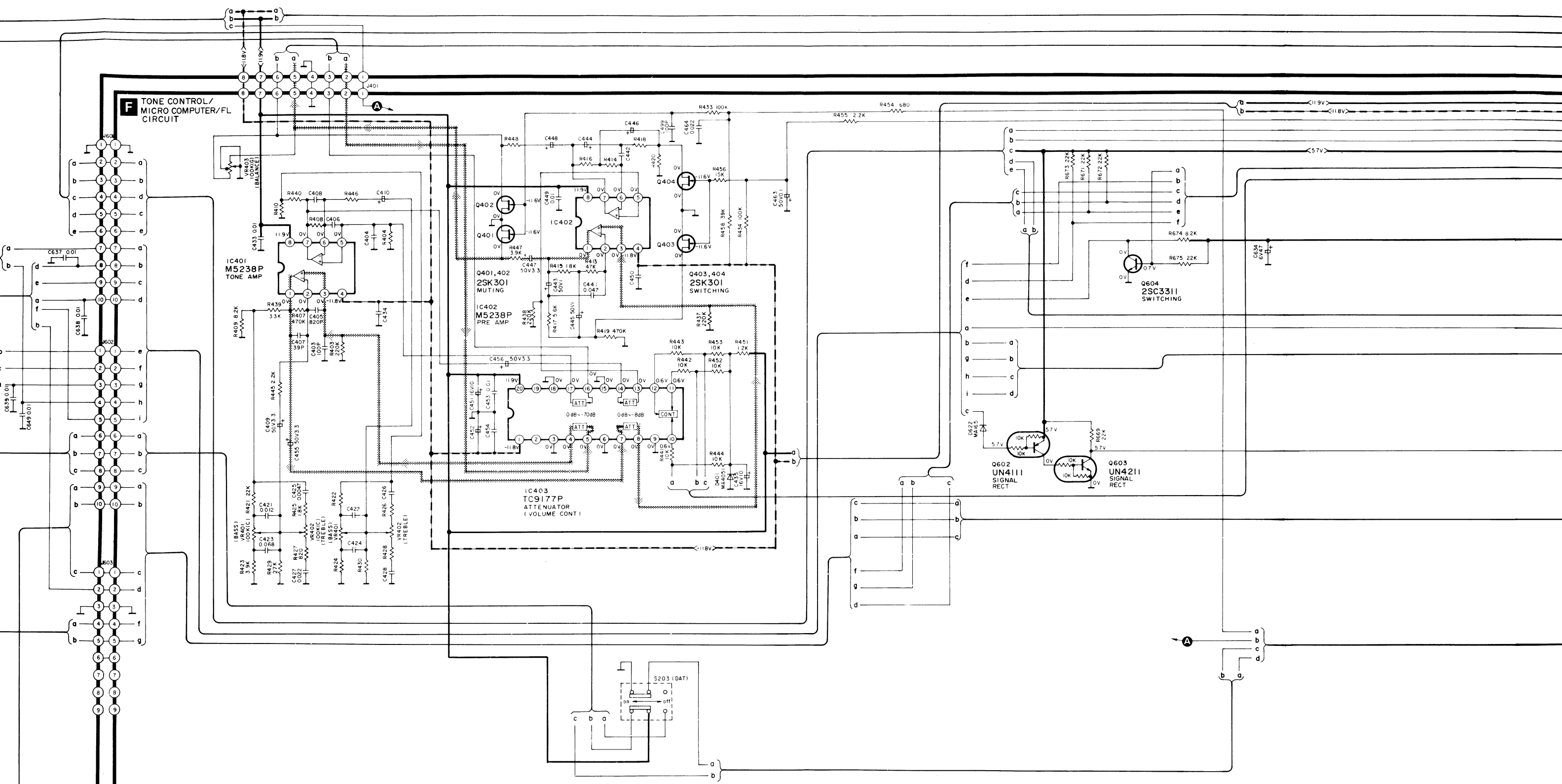
BLOCK DIAGRAM











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, S611 : Input selector switches.
S604 : VTR/tape 2, S605 : tape 1, S606 : video disc/aux.
S607 : tuner, S608 : phono, S611 : CD
9. S701 : Power switch. (off, on)

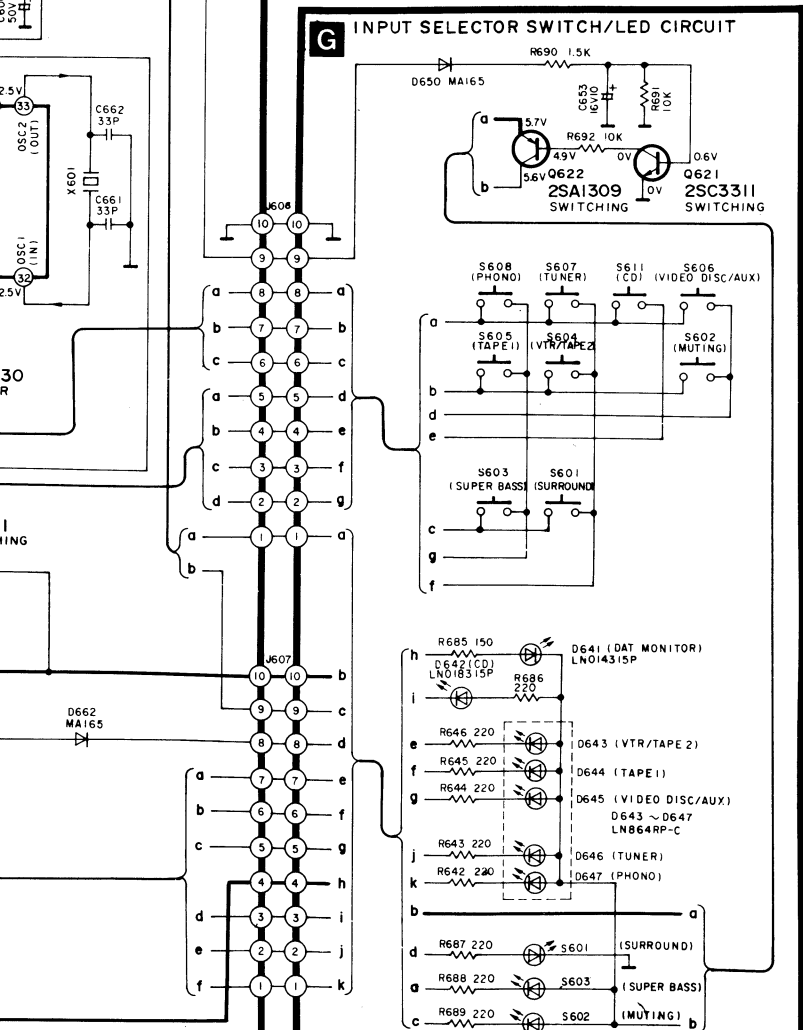
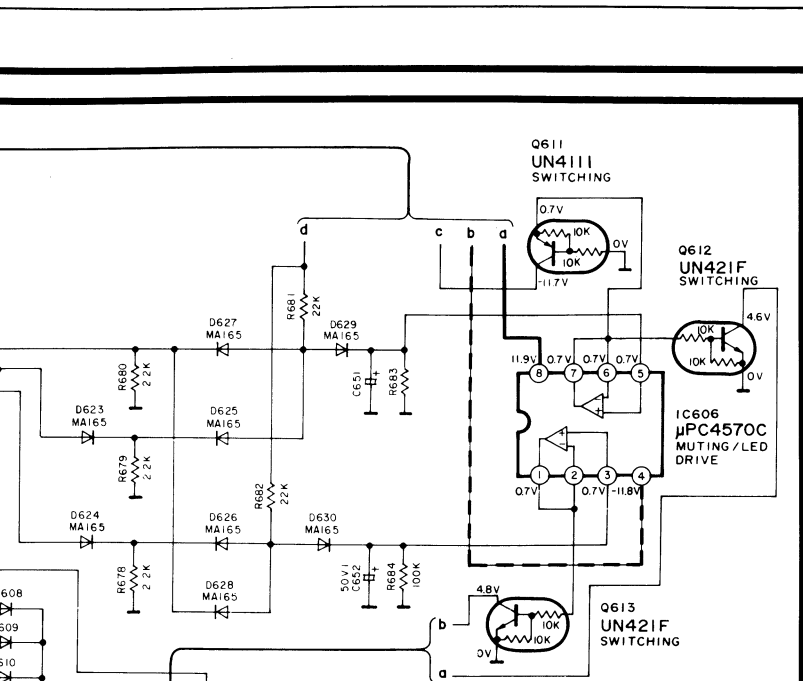
10. Indicated voltage values are the standard values for the unit measured by the DC electronic circuit tester (high-impedance) with the chassis taken as standard. Therefore, there may exist some errors in the voltage values, depending on the internal impedance of the DC circuit tester.

11. Left-channel phono signal route.
 Microphone signal.
 Phase difference signal.
 ⊕ B voltage line ⊖ B voltage line.

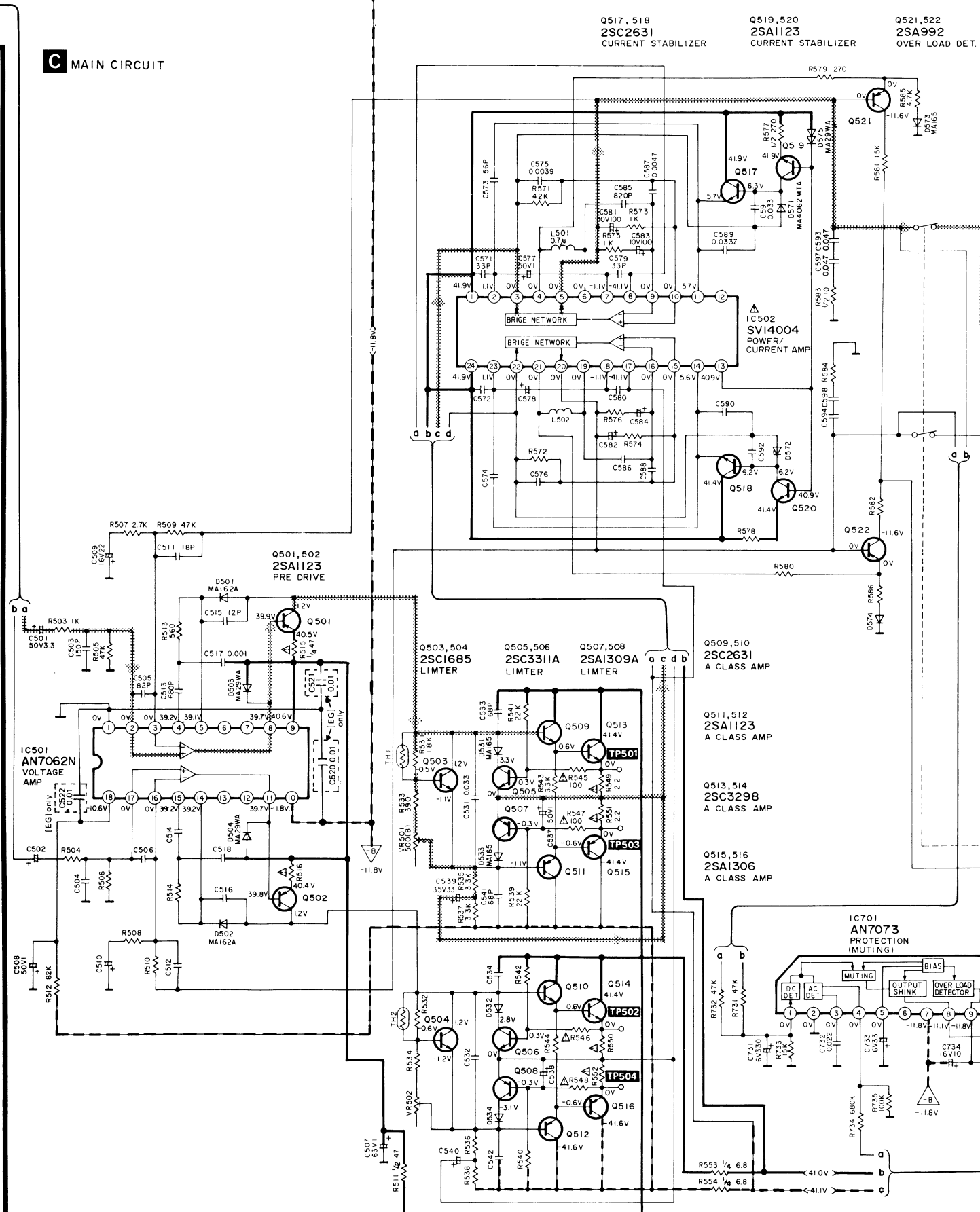
12. Important safety notice:
Components identified by mark have special characteristics important for safety. When replacing any of these components, use only manufacturer's specified parts.

* Caution!

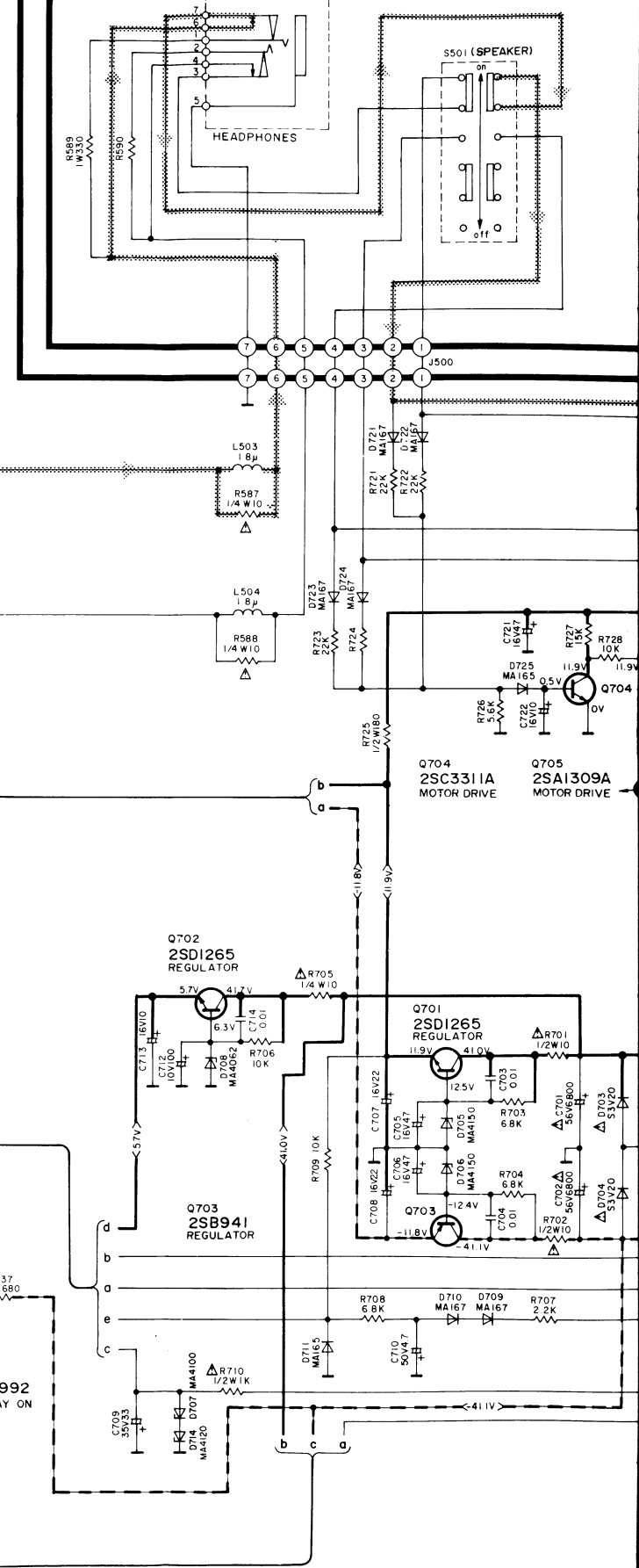
- IC and LSI are sensitive to static electricity.
- Secondary trouble can be prevented by taking care during repair.
- * Cover the parts boxes made of plastics with aluminum foil.
- * Ground the soldering iron.
- * Put a conductive mat on the work table.
- * Do not touch the legs of IC or LSI with the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



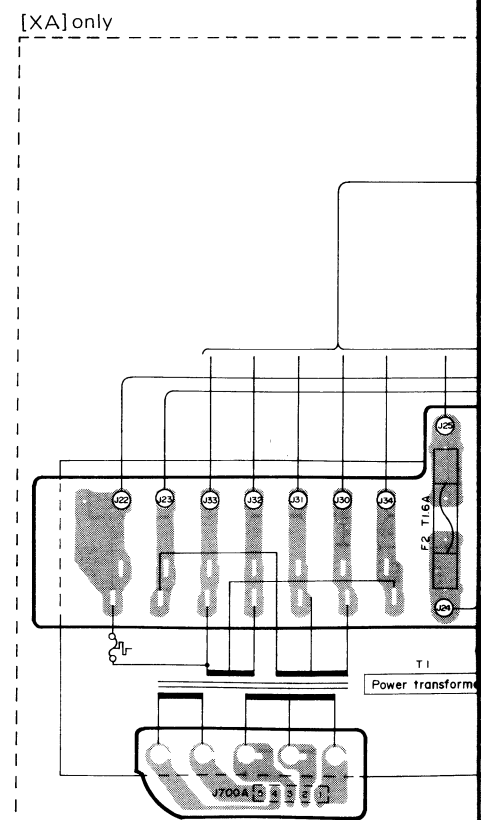
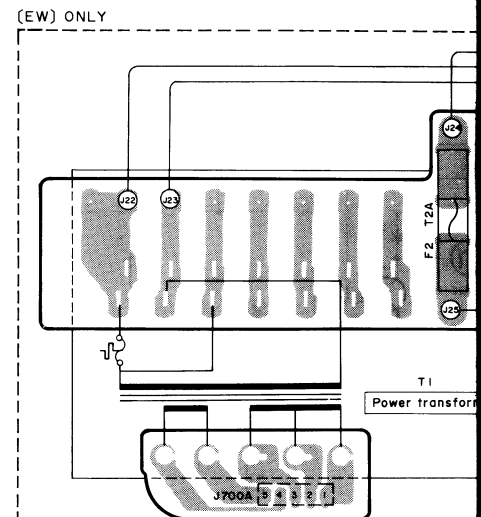
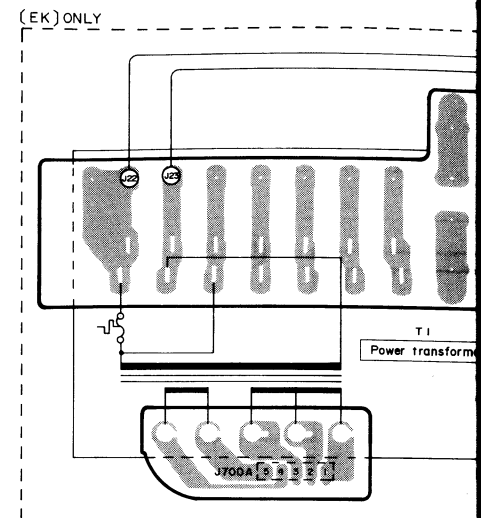
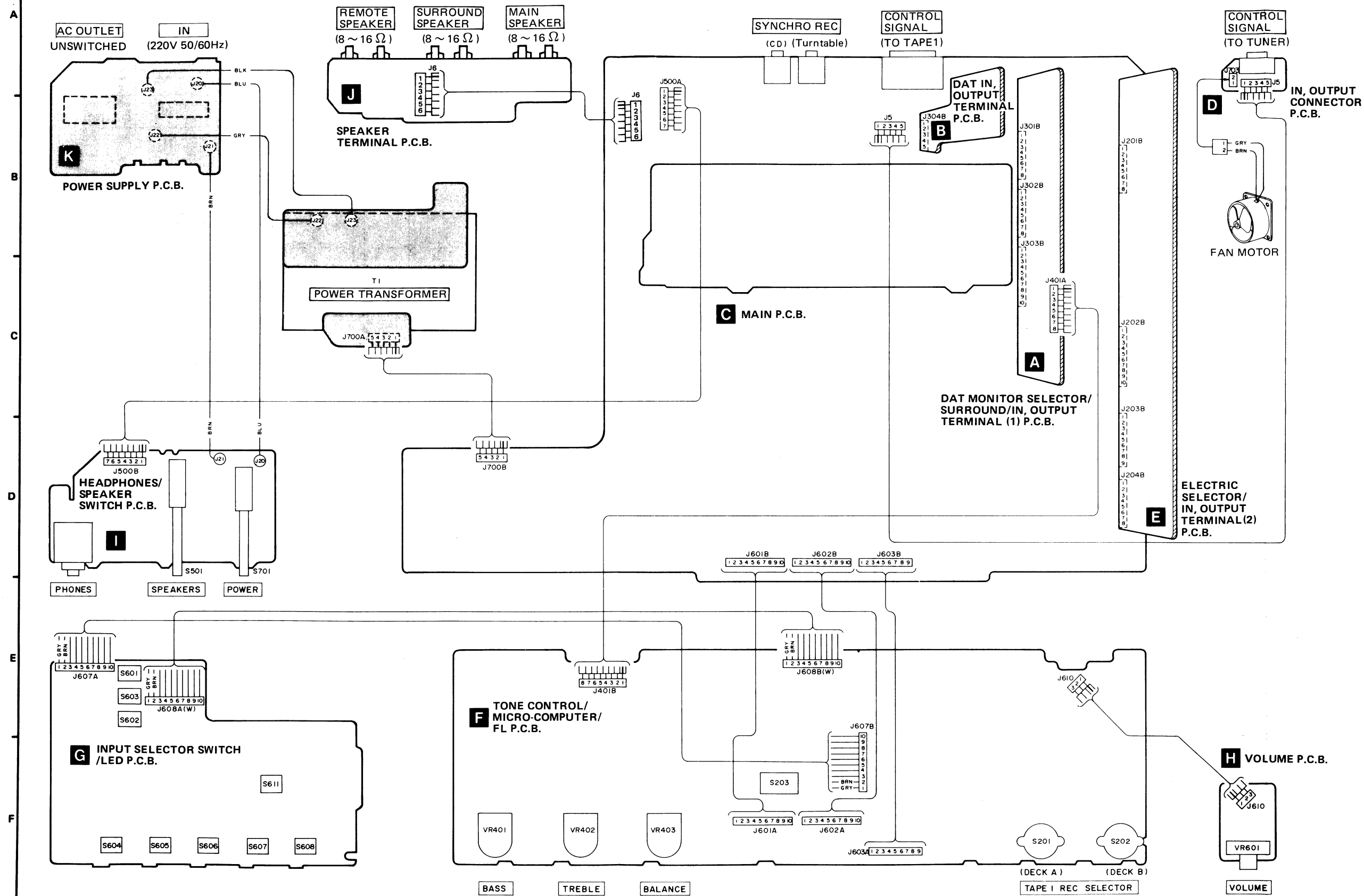
C MAIN CIRCUIT

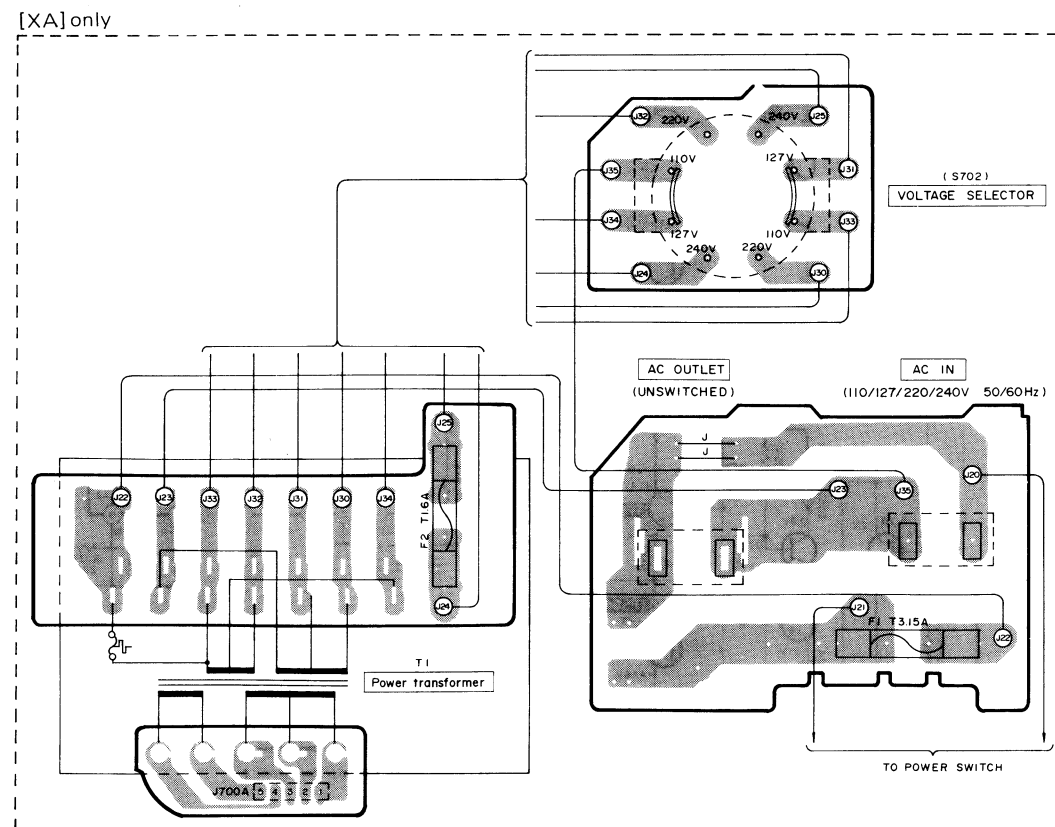
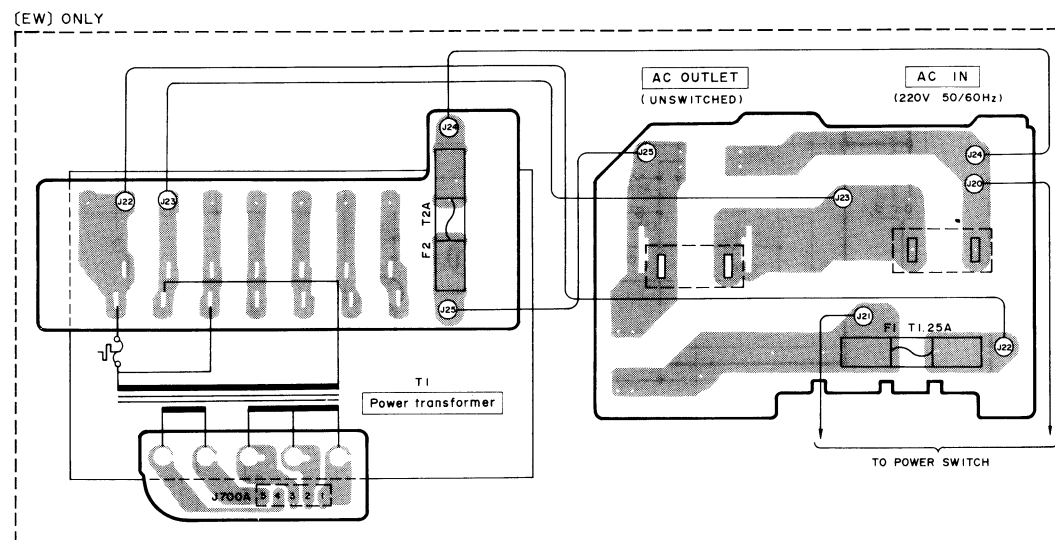
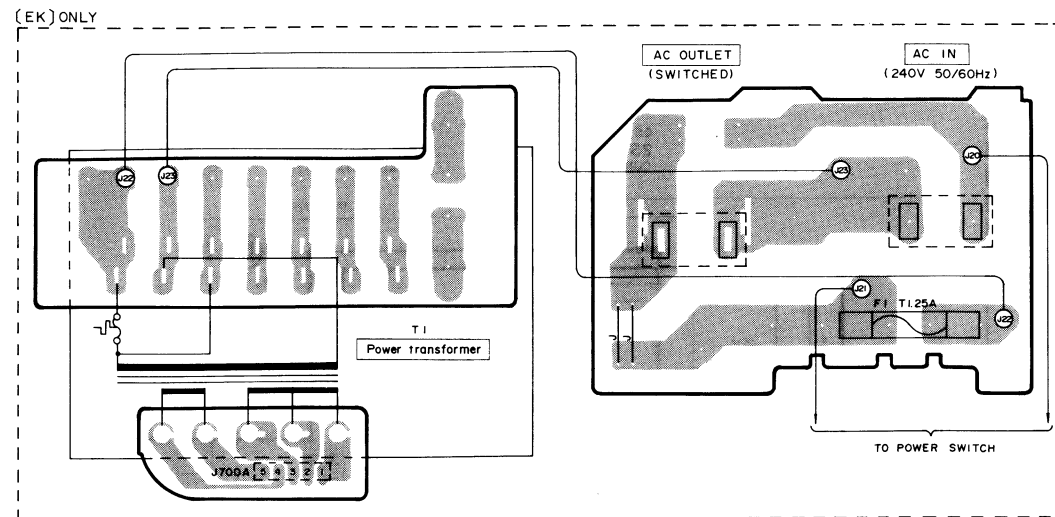
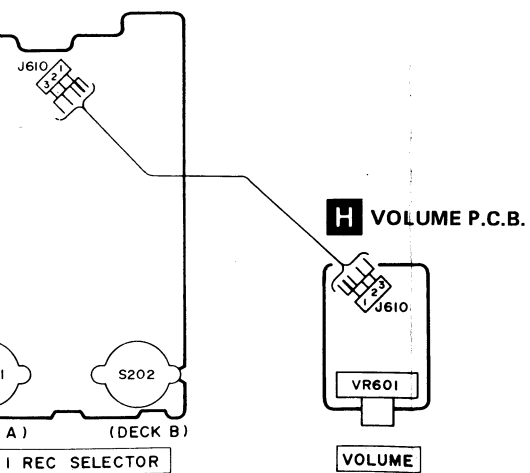
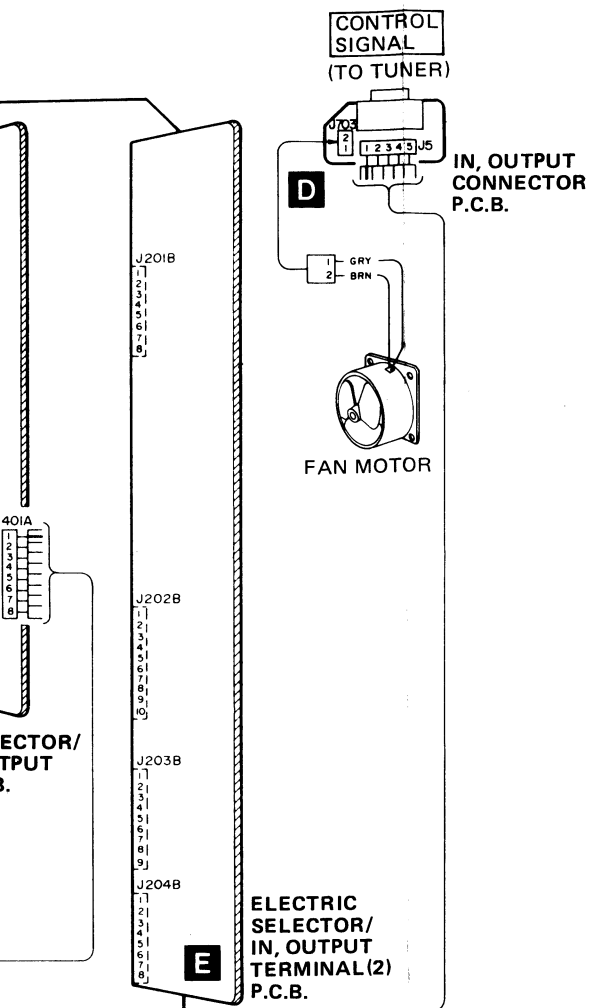


HEADPHONES SPEAKER SWITCH CIRCUIT

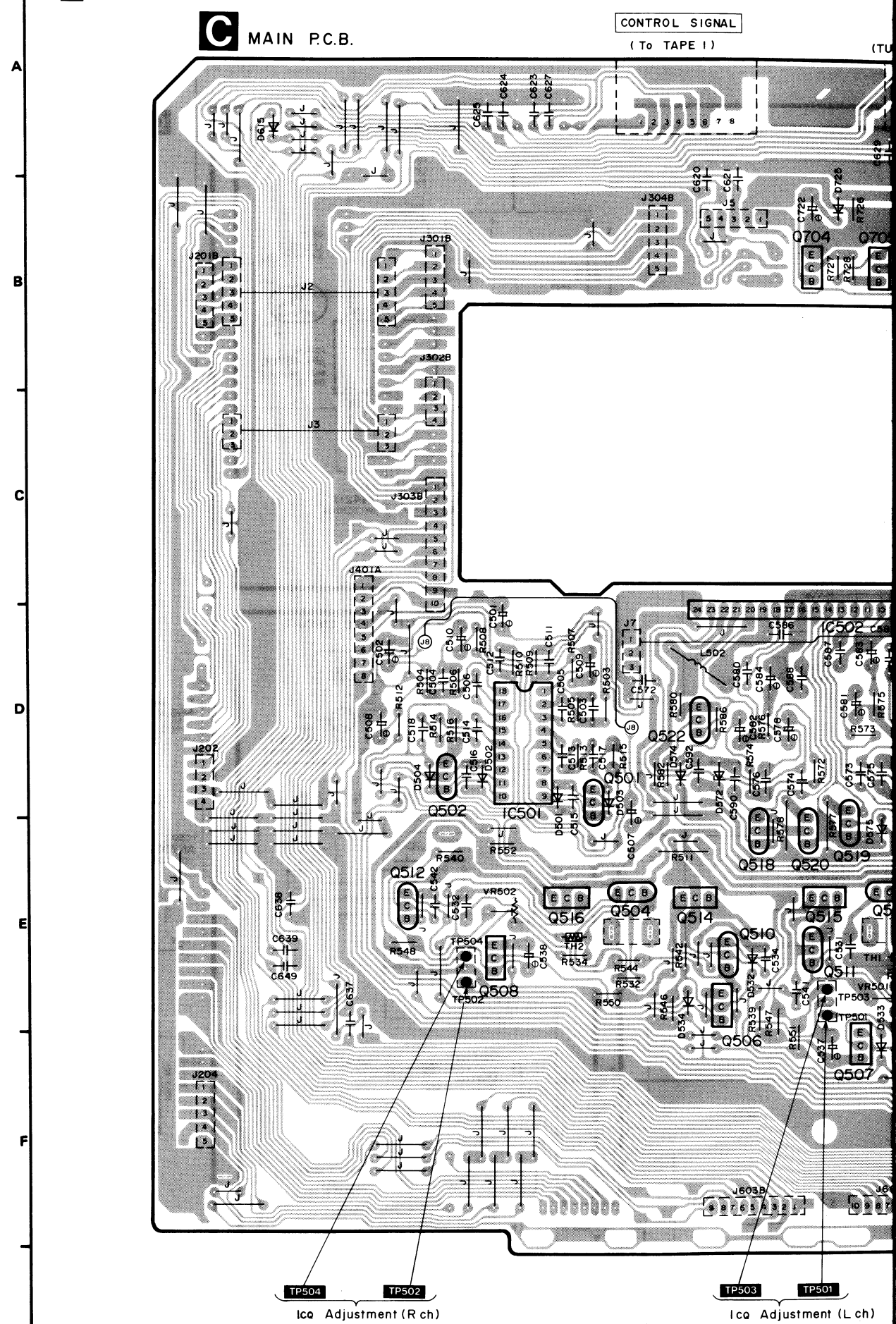


WIRING CONNECTION DIAGRAM

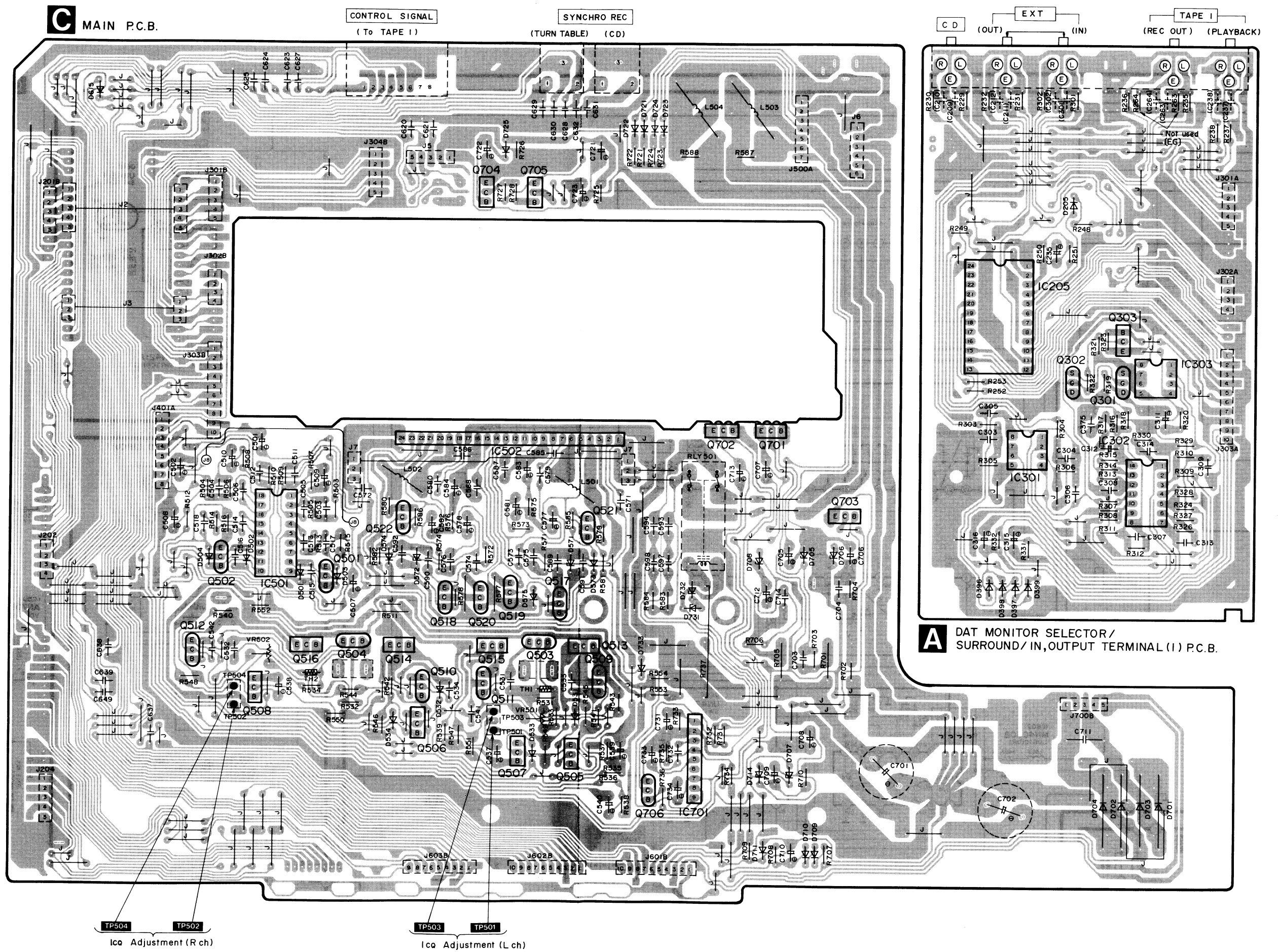


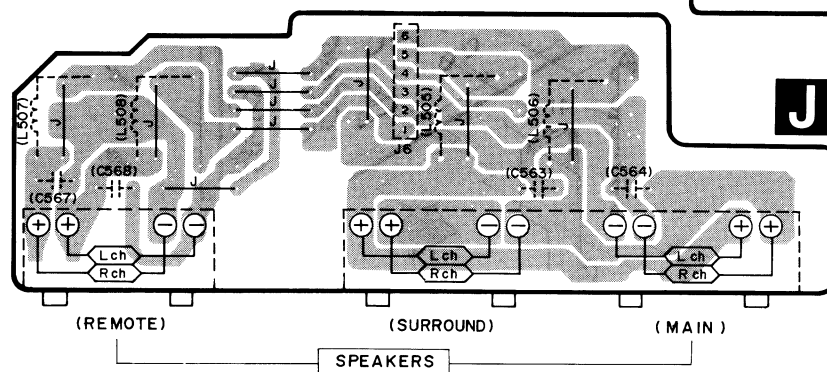
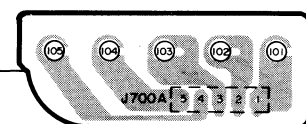
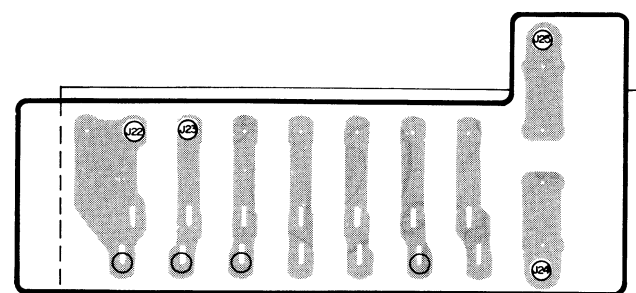
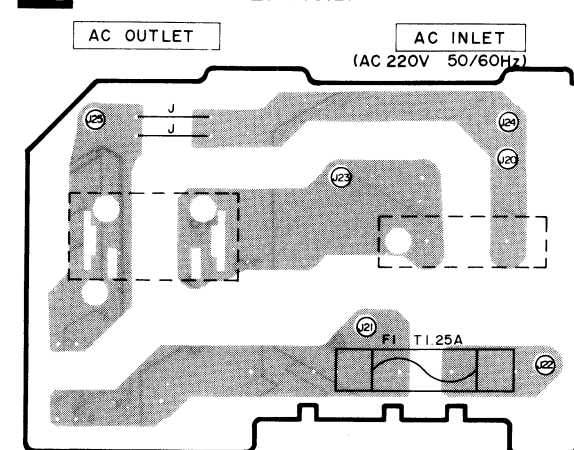
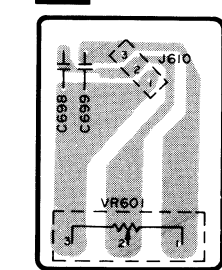
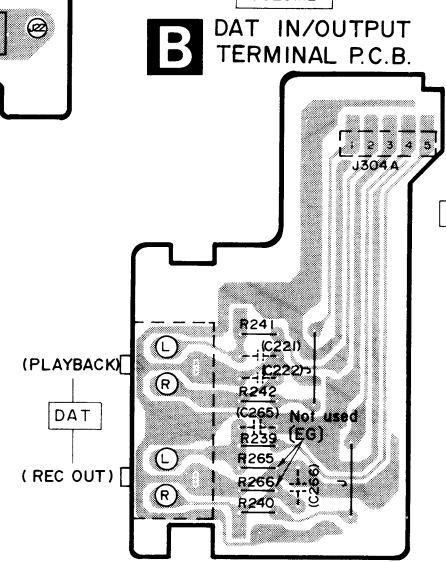
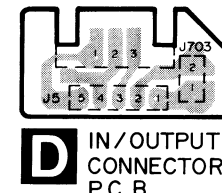
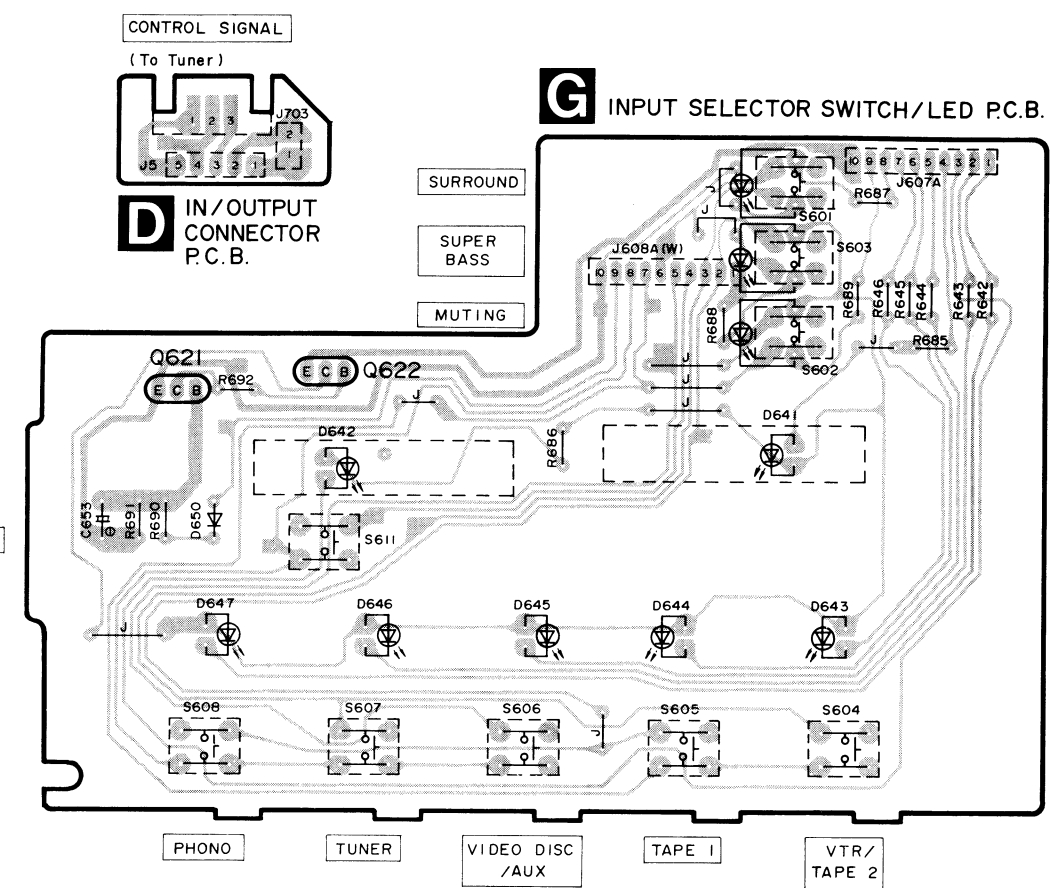
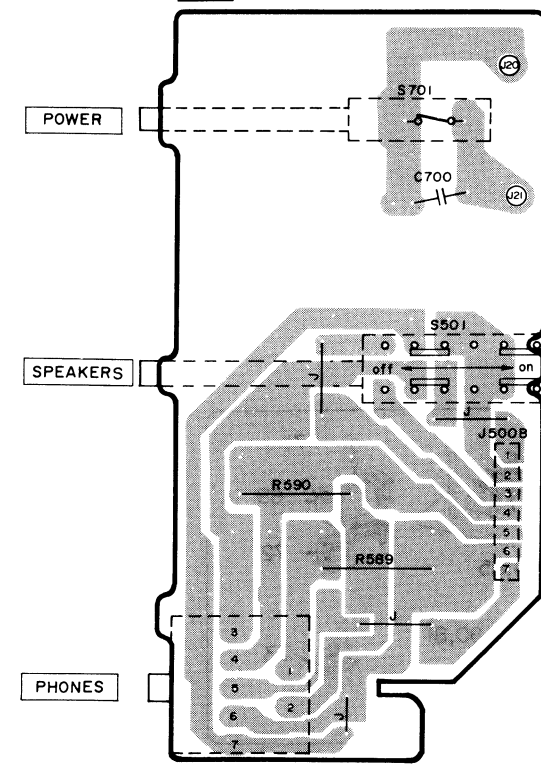
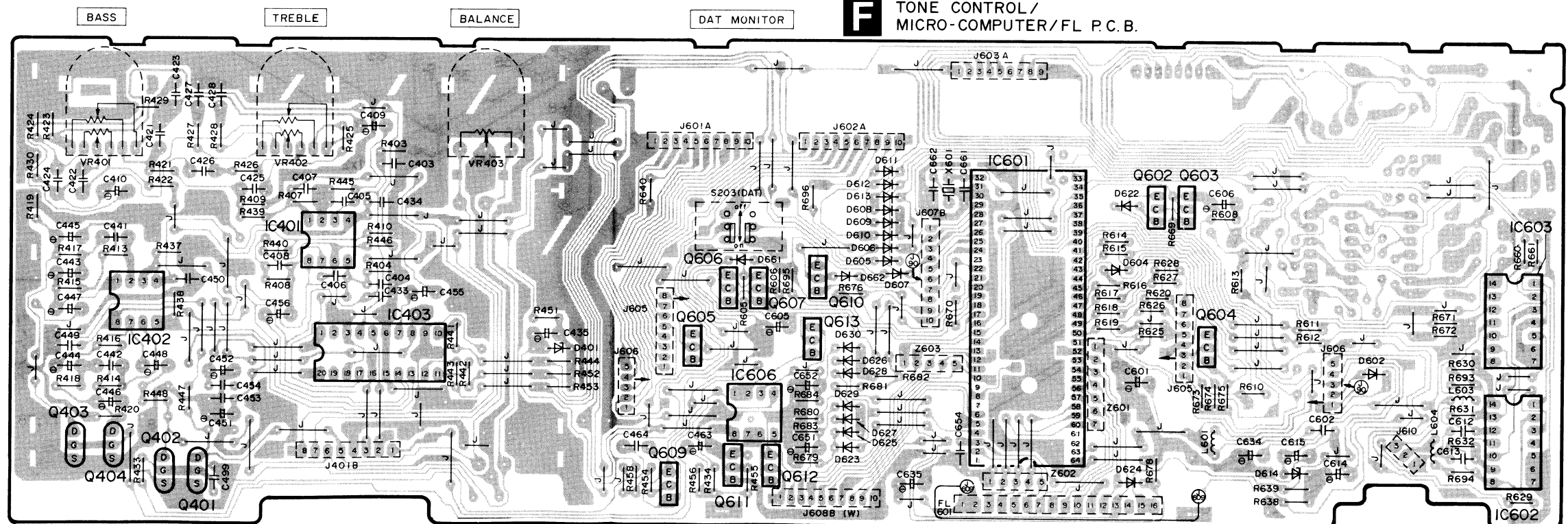


PRINTED CIRCUIT BOARDS



■ PRINTED CIRCUIT BOARDS



**K** POWER SUPPLY P.C.B.**J** SPEAKER TERMINAL 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.**I** HEADPHONES/ SPEAKER SWITCH P.C.B.**F** TONE CONTROL/ MICRO-COMPUTER/FL P.C.B.

• Terminal guide of
transistors, diodes and IC's

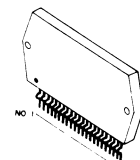
OR SWITCH/LED P.C.B.

VTR/
TAPE 2

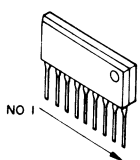
E ELECTRIC SELECTOR /
IN,OUTPUT TERMINAL (2) P.C.B.

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

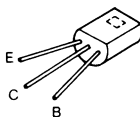
SVI4004



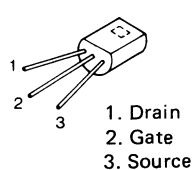
AN7073



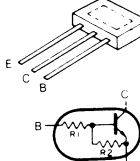
2SC2631, 2SC1685R,
2SA992, 2SA1123



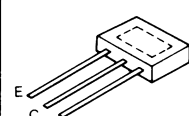
2SK301



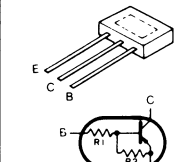
UN4211



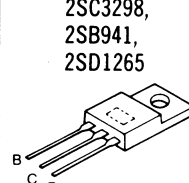
2SA1309,
2SC3311



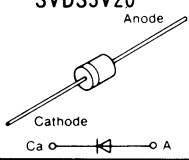
UN4111



2SA1306,
2SC3298,
2SB941,
2SD1265



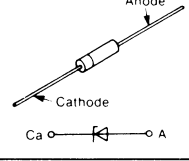
MA165, MA167,
MA29W,
SVDS3V20



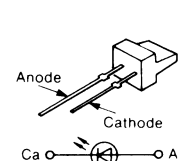
MA4100,
MA4120,
MA162AFU



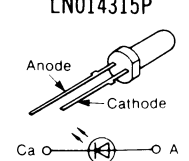
MA4051, MA4056,
MA4062, MA4150



LN846RP



LN018315P,
LN014315P



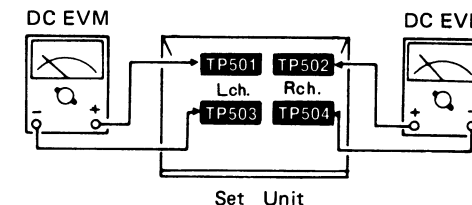
MEASUREMENTS AND ADJUSTMENTS

Control positions and equipment used.

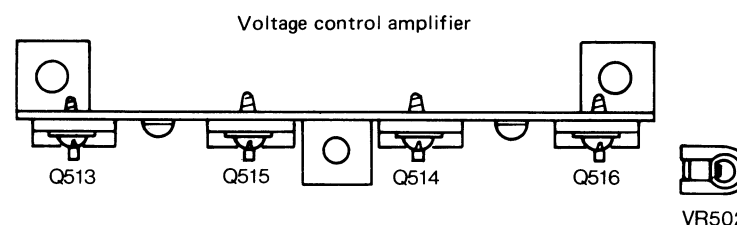
- Volume control Minimum
- Speaker switch off
- DC electronic voltmeter (EVM) (2 units)

Idling (ICQ) adjustment

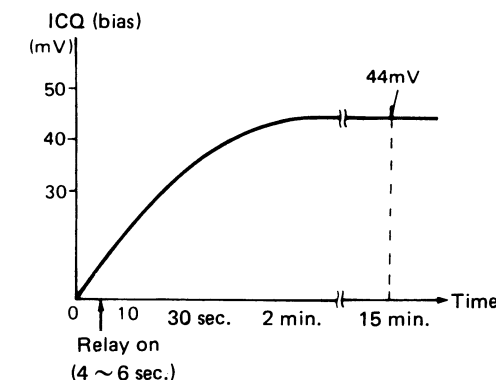
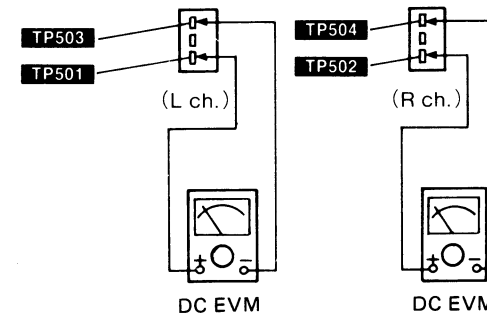
1. Connect the set and the test instruments as shown at right.
2. (Hook up the DC EVMs for both channels.)
2. Turn the ICQ adjusting controls (VR501, VR502) all the way counterclockwise.
3. Turn on the set when it is cold enough, and adjust the controls VR501 and VR502 so that the voltage of 30mV be 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



VR501



REPLACEMENT PARTS LIST

Notes:

1. Part numbers are indicated on most mechanical parts. Please use this part number for parts order.
2. Important safety notice: Components identified by Δ mark have special characteristics important for safety. When replacing any of these components, use only manufacturer's specified parts.
3. Bracketed indications in Ref. No. columns specify the area. Parts without these indications can be used for all areas.
4. The parenthesized numbers in the column of description stand for the quantity per set.

Ref. No.	Part No.	Part Code	Description	Ref. No.	Part No.	Part Code	Description
INTEGRATED CIRCUITS				D642	LN018315P	001 032 9292 2	LED
IC101	AN6558F	001 060 4009 1	I.C., EQUALIZER	D643, D644	LN846RP-C	001 032 8341 4	LED
IC201	TC9164N	001 061 0204 1	I.C., INPUT SELECTOR	D645, D646	LN846RP-C	001 032 8341 4	LED
IC205	SV1TC9151P	001 060 8344 3	I.C., DAT MONITOR SELECTOR	D647	LN846RP-C	001 032 8341 4	LED
IC301	M5238P	001 060 8887 7	I.C., MIXING	D650, D661	MA165	001 032 0494 0	DIODE
IC302	AN6554F	001 060 2992 1	I.C., MIXING	D662	MA165	001 032 0494 0	DIODE
IC303	SV1UPC4570C	001 060 8992 7	I.C., AMP	D701, D702 Δ	SVDS3V40	001 032 1347 6	RECTIFIER
IC401, IC402	M5238P	001 060 8887 7	I.C., TONE/PRE	D703, D704 Δ	SVDS3V40	001 032 1347 6	RECTIFIER
IC403	TC9177P	001 061 0839 2	I.C., VOLUME CONTROL	D705, D706	MA4150-L	001 032 4620 6	DIODE
IC501	AN7062N	001 060 8240 0	I.C., AMP	D707	MA4100M	001 032 4722 1	DIODE
IC502	SV14003	001 061 0887 4	I.C., POWER AMP	D708	MA4062-M	001 032 7211 7	DIODE
IC601	LC6554D-3230	001 061 4016 7	I.C., MICRO COMPUTER	D709, D710	MA167	001 032 4142 5	DIODE
IC602	MN4030B	001 060 6553 4	I.C., LOGIC	D711	MA165	001 032 0494 0	DIODE
IC603	MN4013B	001 060 3656 0	I.C., LOGIC	D714	MA4120	001 032 7292 0	DIODE
IC606	SV1UPC4570C	001 060 8992 7	I.C., MIXING	D721, D722	MA167	001 032 4142 5	DIODE
IC701	AN7073	001 060 8241 9	I.C., PROTECTION	D723, D724	MA167	001 032 4142 5	DIODE
TRANSISTORS				D725	MA165	001 032 0494 0	DIODE
Q301, Q302	2SK301	001 030 2428 2	TRANSISTOR	D731, D732	MA4120	001 032 7292 0	DIODE
Q303	2SC3311A-Q	001 030 5279 5	TRANSISTOR	D733	MA165	001 032 0494 0	DIODE
Q401, Q402	2SK301	001 030 2428 2	TRANSISTOR	THYRISTORS			
Q403, Q404	2SK301	001 030 2428 2	TRANSISTOR	TH1, TH2	ERT02ZHK104S	001 191 0182 5	THYRISTOR
Q501, Q502	2SA1123-R	001 030 0242 8	TRANSISTOR	VARIABLE RESISTORS			
Q503, Q504	2SC1685-QNC	001 030 2729 2	TRANSISTOR	VR401, VR402	EW2XA000C15	001 174 9012 3	V.R., BASS/TRE
Q505, Q506	2SC3311A-Q	001 030 5279 5	TRANSISTOR	VR403	EWHFDA014G15	001 174 9013 2	V.R., BASS/TRE
Q507, Q508	2SA1309Q	001 030 4058 0	TRANSISTOR	VR501, VR502	EVND4AA00B52	001 180 2318 0	V.R., 500 Ω (B)
Q509, Q510	2SC2631-Q	001 030 2505 6	TRANSISTOR	VR601	EVQWX2F2040B	001 174 8803 4	VR, ENCODER
Q511, Q512	2SA1123-R	001 030 0242 8	TRANSISTOR	COILS AND TRANSFORMERS			
Q513, Q514	2SC3288AY	001 030 4986 9	TRANSISTOR	L501, L502	SLQY07G-40	001 211 2149 9	CHOKE COIL
Q515, Q516	2SA1306AY	001 030 4845 1	TRANSISTOR	L503, L504	SLQY18G-10	001 211 2185 5	CHOKE COIL
Q517, Q518	2SC2631-Q	001 030 2505 6	TRANSISTOR	L601	ELEXT101KA	001 211 3878 9	COIL
Q519, Q520	2SA1123-R	001 030 0242 8	TRANSISTOR	L603, L604	ELEXT330KA	001 211 3880 5	COIL
Q521, Q522	2SA992E	001 030 0513 4	TRANSISTOR	T1	SLT5N470-W	001 202 9024 4	POWER TRANSFORMER
Q602	UN4111	001 030 2899 5	TRANSISTOR	(EX, EH, E1)			
Q603	UN4211	001 030 4033 9	TRANSISTOR	(EF, EB, EW)			
Q604	2SC3311A-Q	001 030 5279 5	TRANSISTOR	(EG)			
Q605, Q606	UN4211	001 030 4033 9	TRANSISTOR	(E1)	SLT5N471-W	001 202 9025 3	POWER TRANSFORMER
Q607	UN4211	001 030 4033 9	TRANSISTOR	(EK, XL)			
Q609	2SA1309Q	001 030 4058 0	TRANSISTOR	T1	SLT5N472-W	001 202 9063 7	POWER TRANSFORMER
Q610, Q611	UN4111	001 030 2899 5	TRANSISTOR	(XA, XB)			
Q612, Q613	UN421FTA	001 061 3186 4	TRANSISTOR	COMPONENT COMBINATIONS			
Q621	2SC3311A-Q	001 030 5279 5	TRANSISTOR	Z601	EXFP6331MDW	001 230 2830 2	COMPONENT COMBINATION
Q622	2SA1309Q	001 030 4058 0	TRANSISTOR	Z602	EXFP4331MDW	001 230 2829 5	COMPONENT COMBINATION
Q701, Q702	2SD1265-0	001 030 2652 6	TRANSISTOR	Z603	EXBF5E562J	001 230 1576 1	COMPONENT COMBINATION
Q703	2SB941-P	001 030 2696 4	TRANSISTOR	OSCILLATORS			
Q704	2SC3311A-Q	001 030 5279 5	TRANSISTOR	X601	SVFCSA300MG	001 241 1296 5	CERAMIC FILTER
Q705	2SA1309Q	001 030 4058 0	TRANSISTOR	DISPLAYS			
Q706	2SA992E	001 030 0513 4	TRANSISTOR	FL	SAD2MT03ZK	001 001 0501 1	DISPLAY
DIODES				FUSES			
D203	MA4051-M	001 032 4947 6	DIODE	F1	XBA2C12TB0	002 380 1310 0	FUSE, T1.2A250V
D205, D396	MA165	001 032 0494 0	DIODE	(EK)			
D397, D398	MA165	001 032 0494 0	DIODE	F1	XBA2C12TR0	002 380 1545 3	FUSE, T1.2A250V
D399	MA165	001 032 0494 0	DIODE	(EX, EH, E1)			
D401	MA4051-M	001 032 4947 6	DIODE	(EF, EB, EW)			
D501, D502	MA162A	001 032 0493 1	DIODE	(XL, XA, XB)			
D503, D504	MA29WA	001 032 7250 0	DIODE	(EG)			
D531, D532	MA165	001 032 0494 0	DIODE	F1	XBA2C25TR0	002 380 0412 9	FUSE, T2.5A250V
D533, D534	MA165	001 032 0494 0	DIODE	(XA, XB)			
D571, D572	MA4062-M	001 032 7211 7	DIODE	F2 Δ	XBAS2A2001	002 380 0410 1	FUSE, T2A250V
D573, D574	MA165	001 032 0494 0	DIODE	(EW)			
D575	MA29WA	001 032 7250 0	DIODE	SWITCHES			
D602, D604	MA165	001 032 0494 0	DIODE	S203	SSH1198	003 435 5171 7	SW
D605, D606	MA165	001 032 0494 0	DIODE	S501	SSH1073	003 435 3186 8	SW
D607, D608	MA165	001 032 0494 0	DIODE	S601, S602	EVQQLY07K	003 439 2173 7	SPECIAL SW
D609, D610	MA165	001 032 0494 0	DIODE	S603	EVQQLY07K	003 439 2173 7	SPECIAL SW
D611, D612	MA165	001 032 0494 0	DIODE	S604, S605	EVQQA005G	003 439 2072 1	SW
D613	MA165	001 032 0494 0	DIODE	S606, S607	EVQQA005G	003 439 2072 1	SW
D614	MA4056-M	001 032 7209 1	DIODE	S608, S611	EVQQA005G	003 439 2072 1	SW
D615, D622	MA165	001 032 0494 0	DIODE	S701 Δ	ESB8249V	003 435 5877 0	POWER SW
D623, D624	MA165	001 032 0494 0	DIODE	S702	ESE37263	003 430 2327 2	SW
D625, D626	MA165	001 032 0494 0	DIODE	RELAYS			
D627, D628	MA165	001 032 0494 0	DIODE	RY501	SSY126	003 450 2686 0	RELAY
D629, D630	MA165	001 032 0494 0	DIODE				
D641	LN014315P	001 032 9961 8	DIODE, GAASP				

Ref. No.	Part No.	Part Code	Description	Ref. No.	Part No.	Part Code	Description
CABINET AND CHASSIS				52	SNE2118	005 500 5011 2	SCREW
1	SGYUX860-KE		FRONT PANEL	53	SNE2129-3	005 500 8111 7	ORNAMENT SCREW
1-1	SGU544	016 842 1593 3	GLASS PLATE	54	SNE4021	005 507 0372 5	NUT
2	SGX9035	016 846 3745 7	ORNAMENT	55	XNS8FZ	005 507 0573 8	NUT
3	SGX9036	016 846 3744 8	ORNAMENT	56	XTB3+6FFZ	005 501 1590 3	SCREW
4	SGX7893	016 846 3746 6	ORNAMENT	57	XTBS3+8JFZ1	005 501 2523 0	SCREW
5	SDU325	016 842 1594 2	GLASS,TRANSPARENT PLATE	58	XTW3+8T	005 501 1358 9	SCREW
6	SGL244	016 846 3743 9	ORNAMENT	59	XTB3+8JFZ	005 501 0138 3	SCREW
7	SGL244-1	016 846 3742 0	ORNAMENT	60	XTB3+8J	005 501 1535 0	SCREW
8	SGL245	016 846 3741 1	ORNAMENT	61	XTB3+8G	005 501 2607 7	SCREW
9	SBC666-1	016 702 6076 0	BUTTON	62	XTWS3+8T	005 501 3311 6	SCREW
10	SBN1224	016 700 1972 7	KNOB	63	XTB3+8JFZ	005 501 0138 3	SCREW
11	SBN1221	016 700 1974 5	KNOB	64	XTB3+8FFR1	005 501 2667 5	SCREW
12	SBC937	016 702 6958 5	BUTTON	65	XTB3+20J	005 501 3410 4	SCREW
13	SBC936-1	016 702 7000 6	BUTTON	66	SJP9205-2Y	003 492 6791 0	SHORTING PIN
14	SBC928	016 702 6969 2	KNOB	67	SJS51080WL	003 403 7160 0	CONNECTOR
15	SBC925A	016 702 6957 6	KNOB	68	SJS50980WL	003 403 7158 4	CONNECTOR
16	SBC927A	016 702 6956 7	KNOB	69	SJS5215	003 400 5923 4	CONNECTOR
17	SJJ71E	003 400 4122 3	JACK	70	SJT388	003 410 6092 8	LUG TERMINAL
18	SJJ130-3	003 400 7580 9	JACK	71	SJT783	003 410 6001 7	CONTACT
19	SKC2070K961	016 800 3043 4	CABINET	72	SJT3213	003 410 6011 5	CONNECTOR
20	SMN2040	016 632 1868 5	ANGLE	73	SJT3311	003 410 1819 3	PLUG
21	SHE187-1	016 918 0584 9	SPACER	74	SJT30540LX-V	003 410 5996 1	CONNECTOR
22	SUN3077-1	016 650 5388 8	BRACKET	75	SJT30740LX-V	003 410 5990 7	LUG TERMINAL
23	LN014315P	001 032 9961 8	DIODE, GAASP	76	SJS50578JQ	003 403 7154 8	CONNECTOR
24	LN018315P	001 032 9292 2	LED	77	SJS51078JQ	003 403 7159 3	CONNECTOR
25	SHR9823	016 652 0773 3	SPACER	78	SJS50478JQ	003 403 7221 4	CONNECTOR
26	SUS755	016 727 0175 5	SPRING	79	SJT30545JQ	003 410 8078 8	CONNECTOR
27 (EG)	SKUUX860-EG		BOTTOM BOARD	80	SJT30445JQ	003 410 8124 9	TERMINAL PLATE
27 (EW)	SKUUX860-EW		BOTTOM BOARD	81	SJT31045JQ	003 410 8152 5	CONNECTOR
27 (EX, EH, E1)	SKUUX860-EX		BOTTOM BOARD	82	SJT31047WL	003 410 8084 0	CONNECTOR
(EF, EB)				83	SJT30947WL	003 410 8083 1	CONNECTOR
27 (EK)	SKUUX860-KEK	016 802 2191 7	BOTTOM BOARD	84	SJT30539MB	003 410 6148 9	LUG TERMINAL
27 (XA, XB)	SKUUX860-XA		BOTTOM BOARD	85	SJT30439MB	003 410 5988 1	LUG TERMINAL
27 (XL)	SKUUX860-XL		BOTTOM BOARD	86	SHR9836	016 652 0853 4	PLASTIC SPACER
28	SKL307	016 828 0325 7	FOOT	87 (XA, XB)	XYN3+C6FZ	005 503 0168 7	SCREW
29	SHE143	016 918 0045 1	FAN	88	SHD3X36J	016 634 0164 4	BRACING STRUT
30	SUS271	016 726 0367 6	SPRING	89	SJT3101	003 410 3704 5	CONNECTOR
31	SME95	016 632 0143 9	ANGLE	90	SMC6441	016 601 0651 7	SHIELD COVER
32	MMN6C2RKMS	002 310 0999 3	DC MOTOR 0.24W	PACKINGS			
33	SME97-1	016 632 1309 1	ANGLE	P1	SPP753	016 978 0504 9	PROTECTION COVER
34	SME103-5	016 601 0461 1	MAGNETIC SHIELD PARTS	P2 (EX, EH, E1)	SPG5938	016 971 5077 2	CARTON BOX
35	SUS227	016 727 0111 1	SPRING	(EB, EW, EK)			
36	SXE927	016 650 1104 0	ANGLE	(XL, XA, XB)			
37	SMY897-1	016 611 0021 5	HEAT SHIELD PARTS	(EG)			
38 (EK)	SGP7101-1A	016 840 7712 0	REAR PANEL	P2 (EF)	SPG5939	016 971 5076 3	CARTON BOX
38 (XL)	SGP7101-2A	016 840 7855 6	REAR PANEL	P3	SPS4919	016 977 3267 6	PAD
38 (XA)	SGP7101-3A	016 840 7856 5	REAR PANEL	P4	SPS4920	016 977 3266 7	PAD
38 (XB)	SGP7101-4A	016 840 7857 4	REAR PANEL	P5	XZB10X30A02	016 978 0537 0	PROTECTION COVER
38 (EX, EH, E1)	SGP7101A	016 840 7759 5	REAR PANEL	ACCESSORIES			
(EF, EB, EW)				A1 (XA, XB) Δ	SJP9215	003 402 1437 9	AC PLUG ADAPTOR
38 (EG)	SGP7101C	016 840 7859 2	REAR PANEL	A2 (EX, EH, E1) Δ	SFDAC05E03	003 490 4809 5	POWER CORD
39 (EX, EH, E1)	SJS9231A	003 410 5984 5	SOCKET COVER	(EF, EB, EW)			
(EF, EB, EW)				(EG)			
39 (XL) Δ	SJS9234A	003 400 5921 6	AC INLET COVER	A2 (XA) Δ	SJA168-1	003 490 4122 9	POWER CORD
40 (EK) Δ	SJS9332B	003 403 7377 5	CONNECTOR	A2 (XL) Δ	SJA173	003 490 4161 2	POWER CORD
41	SJF3062-14N	003 410 8175 8	TERMINAL PLATE	A2 (XB) Δ	SJA183	003 490 4873 7	POWER CORD
42	SJF3057N	003 410 3829 3	TERMINAL BOARD	A2 (EK) Δ	SJA188	003 490 5443 1	POWER CORD
43	SJF4818-1	003 410 7347 0	TERMINAL BOARD	A3	SQF12978	016 963 5234 1	INSTRUCTION BOOK
44	SJF4442-1	003 410 7774 5	TERMINAL BOARD	(EX, EH, EB)			
45	SJF3062-1N	003 410 6905 6	TERMINAL BOARD	(EW)			
46 (EX, EH, E1)	SJS9231-1B	003 400 7442 8	SOCKET	A3	SQF12979	016 963 5153 1	INSTRUCTION BOOK
(EF, EB, EW)				(EK)			
(EK, XA)				A3	SQF12980	016 963 5233 2	INSTRUCTION BOOK
(EG)				(EF, XA)			
46 (XB)	SJS9231-1B	003 400 7442 8	SOCKET	A3	SQF12981	016 963 5232 3	INSTRUCTION BOOK
46 (XL) Δ	SJS9234B	003 400 5922 5	AC INLET	(EG)			
47 (EX, EH, E1) Δ	SJS9225	003 400 3946 5	AC OUTLET	A3	SQF12982		INSTRUCTION BOOK
(EF, EB, EW)				(E1)			
(XA, EG)				A3	SQF12983	016 963 5231 4	INSTRUCTION BOOK
47 (EK)	SJS9332A	003 403 7376 6	CONNECTOR	(XL)			
48	SHR301	016 645 0044 0	CLAMPER	A3	SQF12984	016 963 5230 5	INSTRUCTION BOOK
49	SHR401-1	016 652 0085 0	PIN	(XB)			
50	SJS306	003 403 4936 8	CONNECTOR				
51	SJS804	003 403 4910 8	CONNECTOR				

