

AM/FM STEREO RECEIVER

SX-650

HG, S

Additional

Service Manual

NOTE:

This leaflet provides the description of the parts applies only to the HG, S models.
For detailed please refer to the Service Manual of SX-650/KCU.

 **PIONEER®**

1. SPECIFICATIONS

Power Requirements 120V 60Hz MODEL KC, KU
 220V and 240V (Switchable) MODEL HG
 110V, 120V, 220V and 240V (Switchable) MODEL S
 Power Consumption . . . UL, 80W, 185W (max.) MODEL KC, KU
 185W MODEL HG
 185W MODEL S

2. CONTRAST OF MISCELLANEOUS PARTS

FUSES

Symbol	Amp	Part No.			Remarks
		KCU type	HG type	S type	
FU1	1.5A 1.6A	AEK-104 .....	..... AEK-405	AEK-104	
FU2	0.8A	AEK-111	AEK-031	AEK-111	
FU3	0.8A	AEK-111	AEK-031	AEK-111	
FU4	3A 1.6A 1.5A	AEK-101 ..... .....	..... AEK-405	AEK-101 AEK-104	Primary voltage: 220V, 240V Primary voltage: 110V, 120V

SWITCHES

Symbol	Part Name	Part No.			Remarks
		KCU type	HG type	S type	
S1	Selector	ASA-039	ASA-040	ASA-038	POWER
S2	Plug in selector (Line voltage selector)	..... .....	AKX-037 .....	..... AKR-033	2-positions 4-positions with fuse holder

TRANSFORMER

Symbol	Part Name	Part No.			Remarks
		KCU type	HG type	S type	
T1	Power transformer	ATT-315 (KC) ATT-303 (KU)	ATT-340	ATT-339	

RESISTOR

Symbol	Part Name	Part No.			Remarks
		KCU type	HG type	S type	
R1	Carbon film 2.2M ½W	RD½PS 225J	.....	.....

CAPACITORS

Symbol	Part Name			Part No.			Remarks
				KCU type	HG type	S type	
C3	Ceramic	0.01	150V	ACG-003	.....	.....
	Ceramic	0.01	250V	.....	ACG-001	ACG-001	
C4	Ceramic	0.01	150V	ACG-003 (KC)	.....	.....
	Ceramic	0.01	250V	ACG-001 (KU)	.....	ACG-001	
	Polystyrene	560P	50V	.....	CQSA 561J 50	.....
C5	Polystyrene	560P	50V	.....	CQSA 561J 50	.....

P.C. BOARD ASSEMBLIES

Part Name	Part No.			Remarks
	KCU type	HG type	S type	
De-emphasis switch assembly	AWX-095	.....	.....	2-positions (25μs/75μs) 3-positions (25μs/50μs/75μs)
	.....	.....	AWX-100	
Power supply assembly	AWR-117	AWR-118	AWR-117	

OTHERS

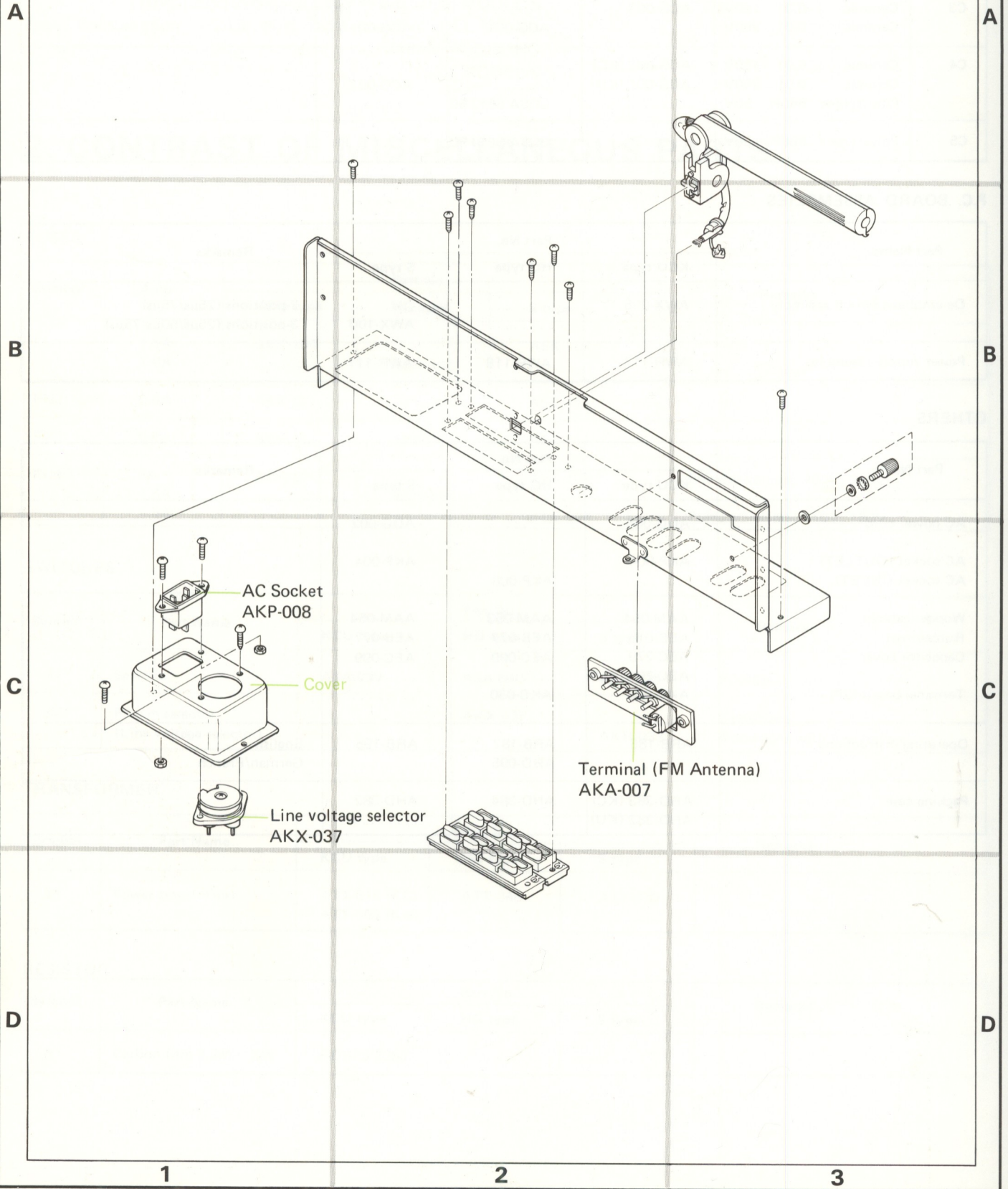
Part Name	Part No.			Remarks	
	KCU type	HG type	S type		
AC power cord	ADG-005	ADG-002		
AC socket (OUTLET)	AKP-004	.....	AKP-004	
AC socket (INLET)	.....	AKP-008	.....	
Woodencabinet	AAM-054	AAM-053	AAM-054		
Rubber mat	AEB-075	AEB-077	AEB-077		
Capacitor cover	AEC-279	AEC-099	AEC-099		
Terminal board (2P)	AEC-294 (KU)	.....	.....
	AKC-038	AKC-030	.....	
Operating instructions	ARB-186	ARB-187	ARB-195		English German/French
	.....	ARD-095	.....	
Packing case	AHD-383 (KC)	AHD-384	AHD-382		
	AHD-382 (KU)	.....	.....

3. MODEL SX-650/HG

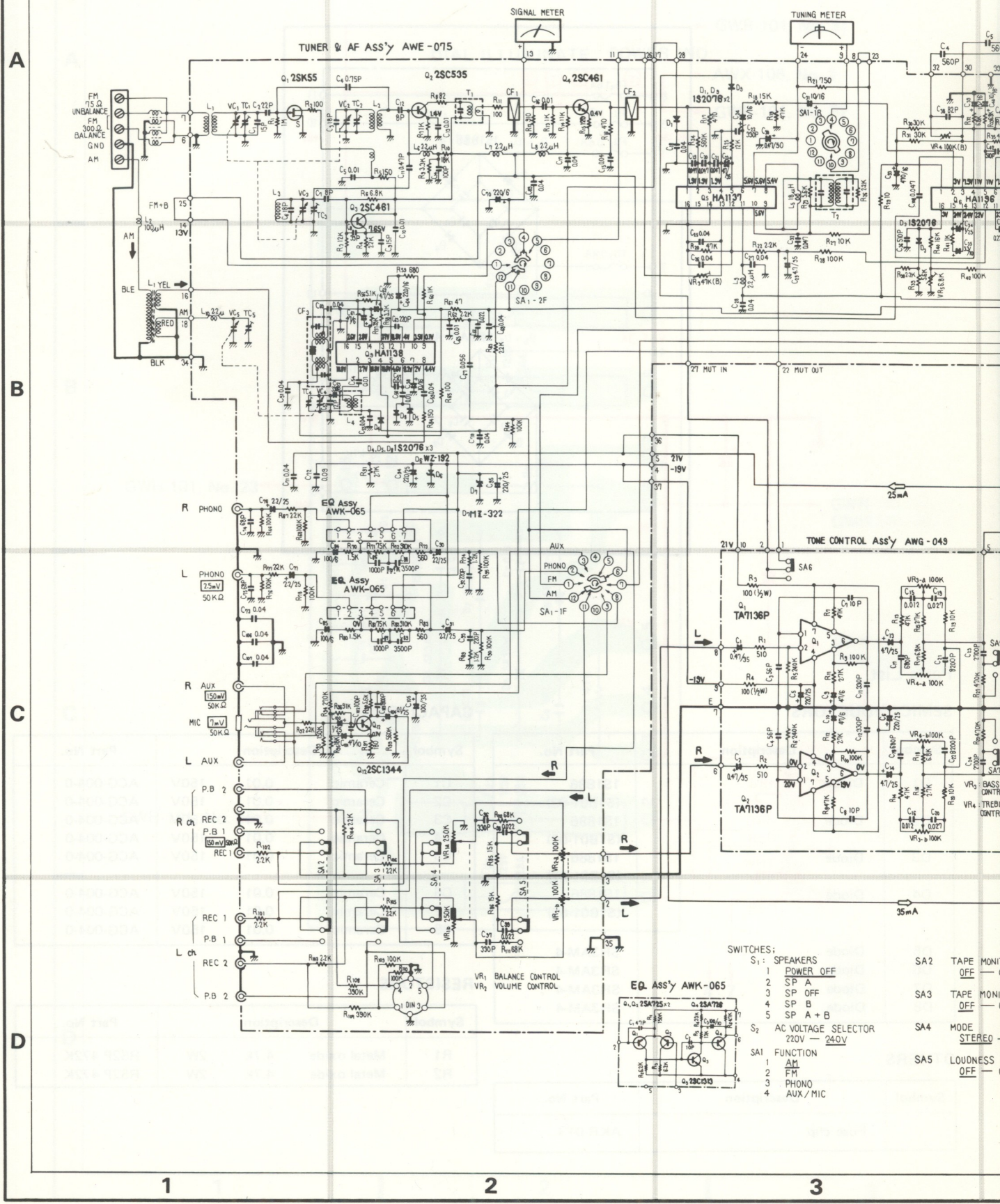
3.1 REAR PANEL

NOTE:

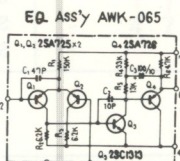
Parts indicated in green type cannot be supplied.

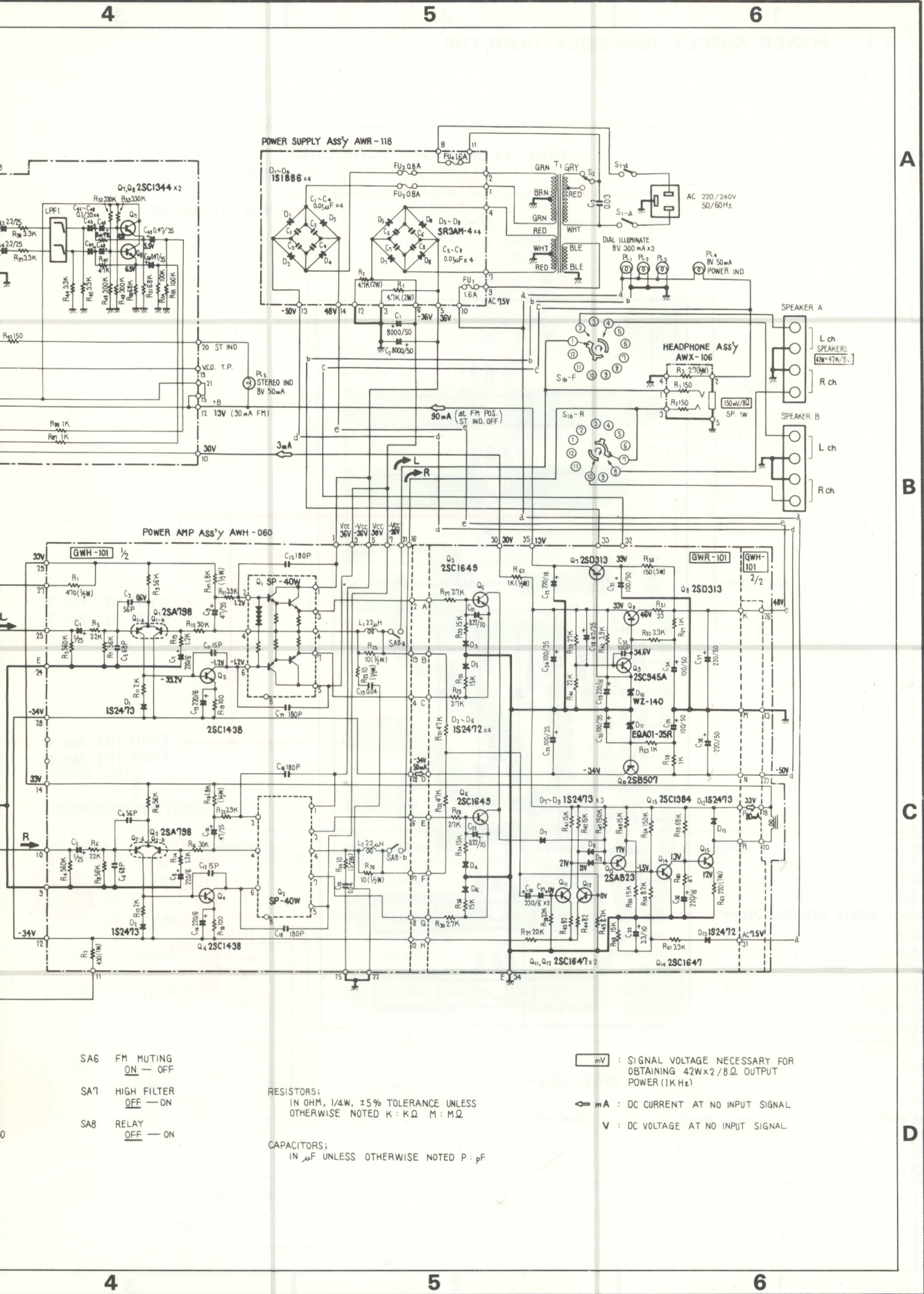


3.2 SCHEMATIC DIAGRAM



- SWITCHES:
- S₁: SPEAKERS
 - 1 POWER OFF
 - 2 SP A
 - 3 SP OFF
 - 4 SP B
 - 5 SP A + B
 - S₂: AC VOLTAGE SELECTOR
 - 220V
 - 240V
 - SA1: FUNCTION
 - 1 AM
 - 2 FM
 - 3 PHONO
 - 4 AUX/MIC
 - SA2: TAPE MONIT OFF
 - SA3: TAPE MONIT OFF
 - SA4: MODE STEREO
 - SA5: LOUDNESS OFF





- SA6 FM MUTING
ON — OFF
- SA7 HIGH FILTER
OFF — ON
- SA8 RELAY
OFF — ON

RESISTORS:
IN OHM, 1/4W, ±5% TOLERANCE UNLESS
OTHERWISE NOTED K : KΩ M : MΩ

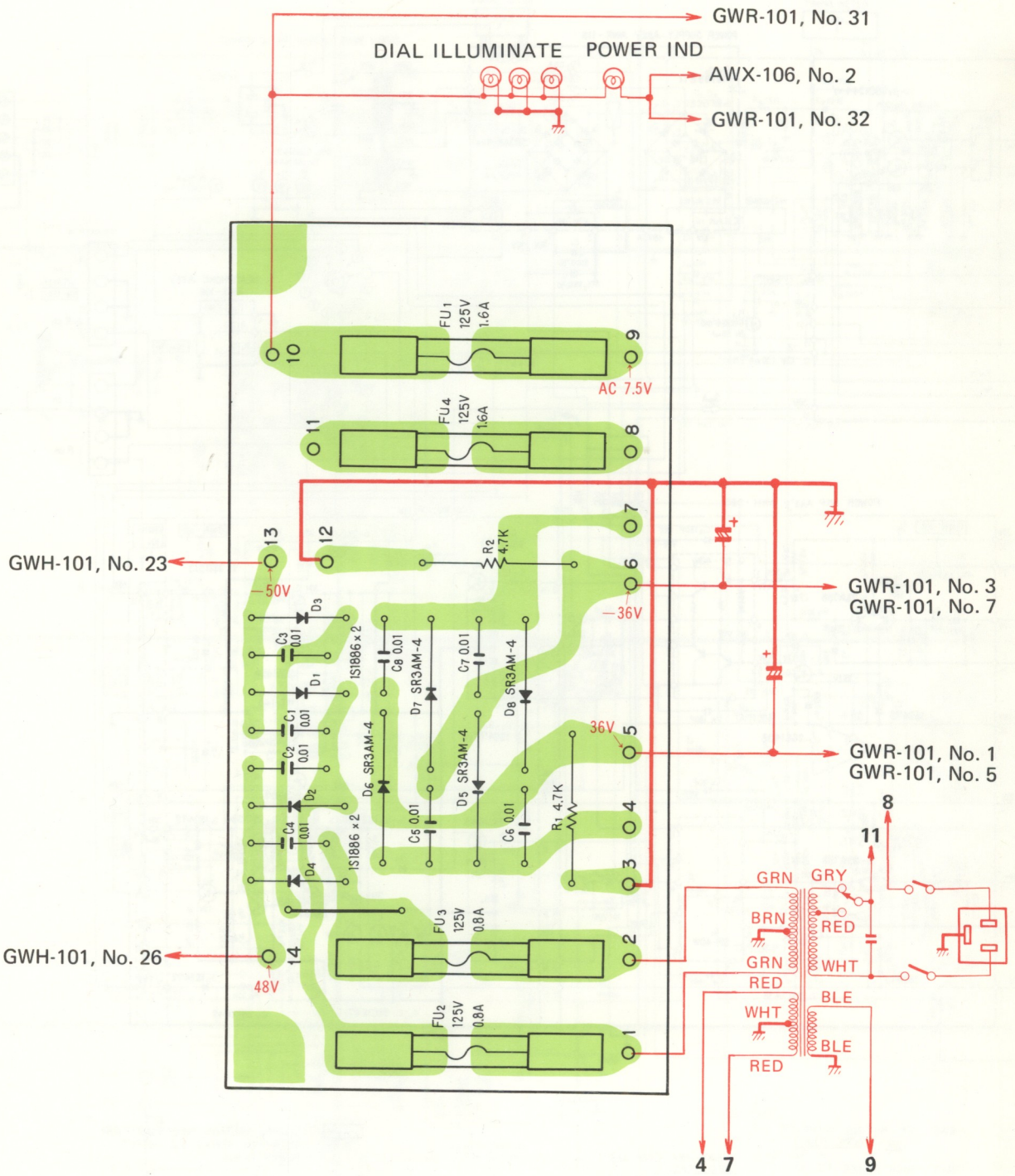
CAPACITORS;
IN μF UNLESS OTHERWISE NOTED P : pF

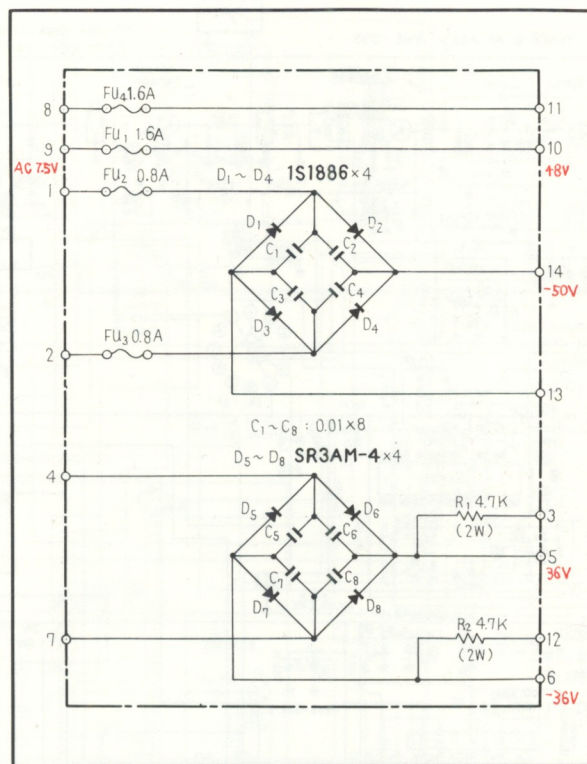
mV : SIGNAL VOLTAGE NECESSARY FOR
OBTAINING 42Wx2 / 8Ω OUTPUT
POWER (1K Hz)

mA : DC CURRENT AT NO INPUT SIGNAL

V : DC VOLTAGE AT NO INPUT SIGNAL

3.3 POWER SUPPLY ASSEMBLY (AWR-118)





Parts List

SEMICONDUCTORS

Symbol	Description	Part No.
D1	Diode	1S1886 (S1B01-02)
D2	Diode	1S1886 (S1B01-02)
D3	Diode	1S1886 (S1B01-02)
D4	Diode	1S1886 (S1B01-02)
D5	Diode	SR3AM-4
D6	Diode	SR3AM-4
D7	Diode	SR3AM-4
D8	Diode	SR3AM-4

CAPACITORS

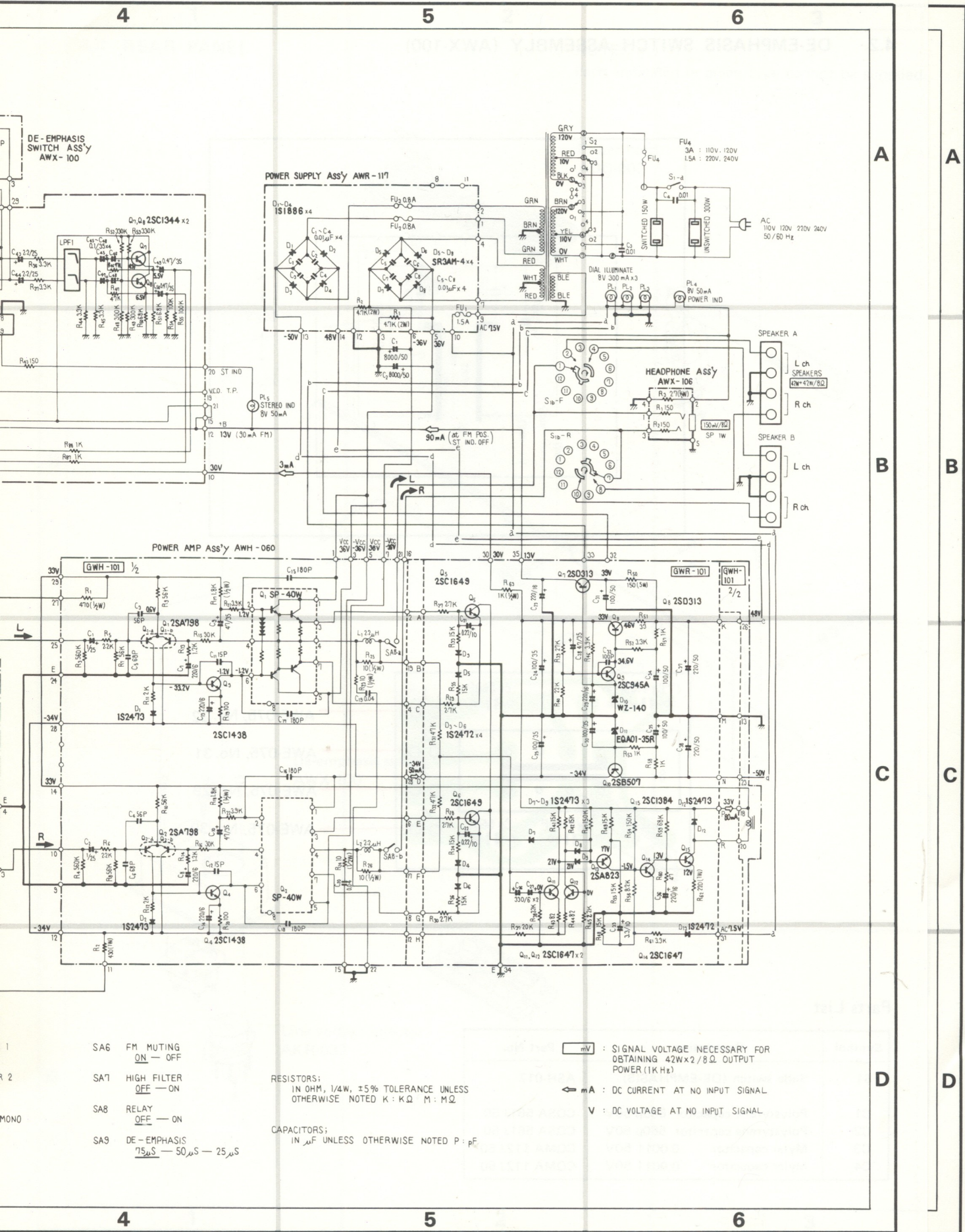
Symbol	Description	Part No.
C1	Ceramic 0.01 150V	ACG-004-0
C2	Ceramic 0.01 150V	ACG-004-0
C3	Ceramic 0.01 150V	ACG-004-0
C4	Ceramic 0.01 150V	ACG-004-0
C5	Ceramic 0.01 150V	ACG-004-0
C6	Ceramic 0.01 150V	ACG-004-0
C7	Ceramic 0.01 150V	ACG-004-0
C8	Ceramic 0.01 150V	ACG-004-0

RESISTORS

Symbol	Description	Part No.
R1	Metal oxide 4.7k 2W	RS2P 472K
R2	Metal oxide 4.7k 2W	RS2P 472K

OTHERS

Symbol	Description	Part No.
	Fuse clip	AKR-013



- SA6 FM MUTING
ON — OFF
- SA7 HIGH FILTER
OFF — ON
- SA8 RELAY
OFF — ON
- SA9 DE-EMPHASIS
75 μ S — 50 μ S — 25 μ S

RESISTORS:
IN OHM, 1/4W, \pm 5% TOLERANCE UNLESS
OTHERWISE NOTED K: K Ω M: M Ω

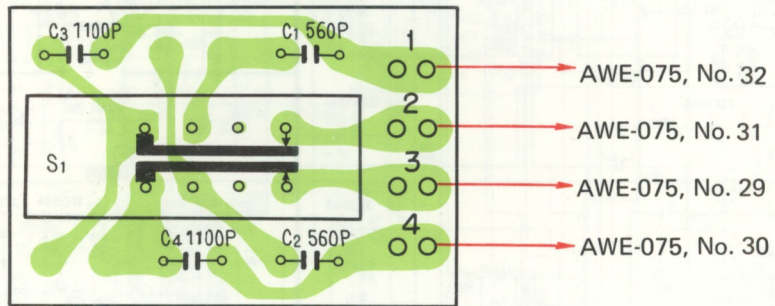
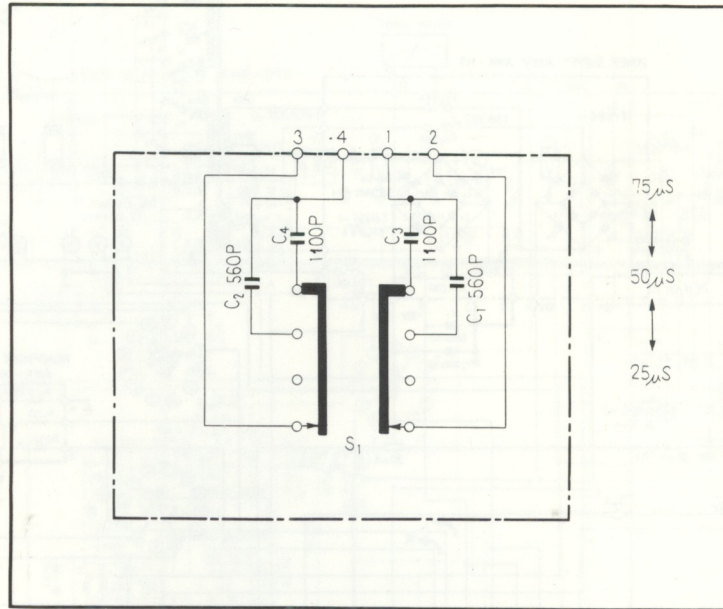
CAPACITORS:
IN μ F UNLESS OTHERWISE NOTED P: pF

mV : SIGNAL VOLTAGE NECESSARY FOR
OBTAINING 42W \times 2 / 8 Ω OUTPUT
POWER (1K Hz)

\leftarrow mA : DC CURRENT AT NO INPUT SIGNAL

V : DC VOLTAGE AT NO INPUT SIGNAL

4.2 DE-EMPHASIS SWITCH ASSEMBLY (AWX-100)

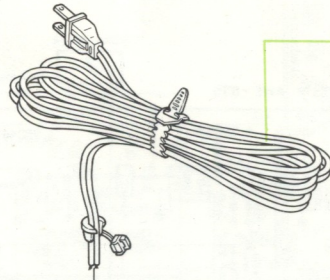


Parts List

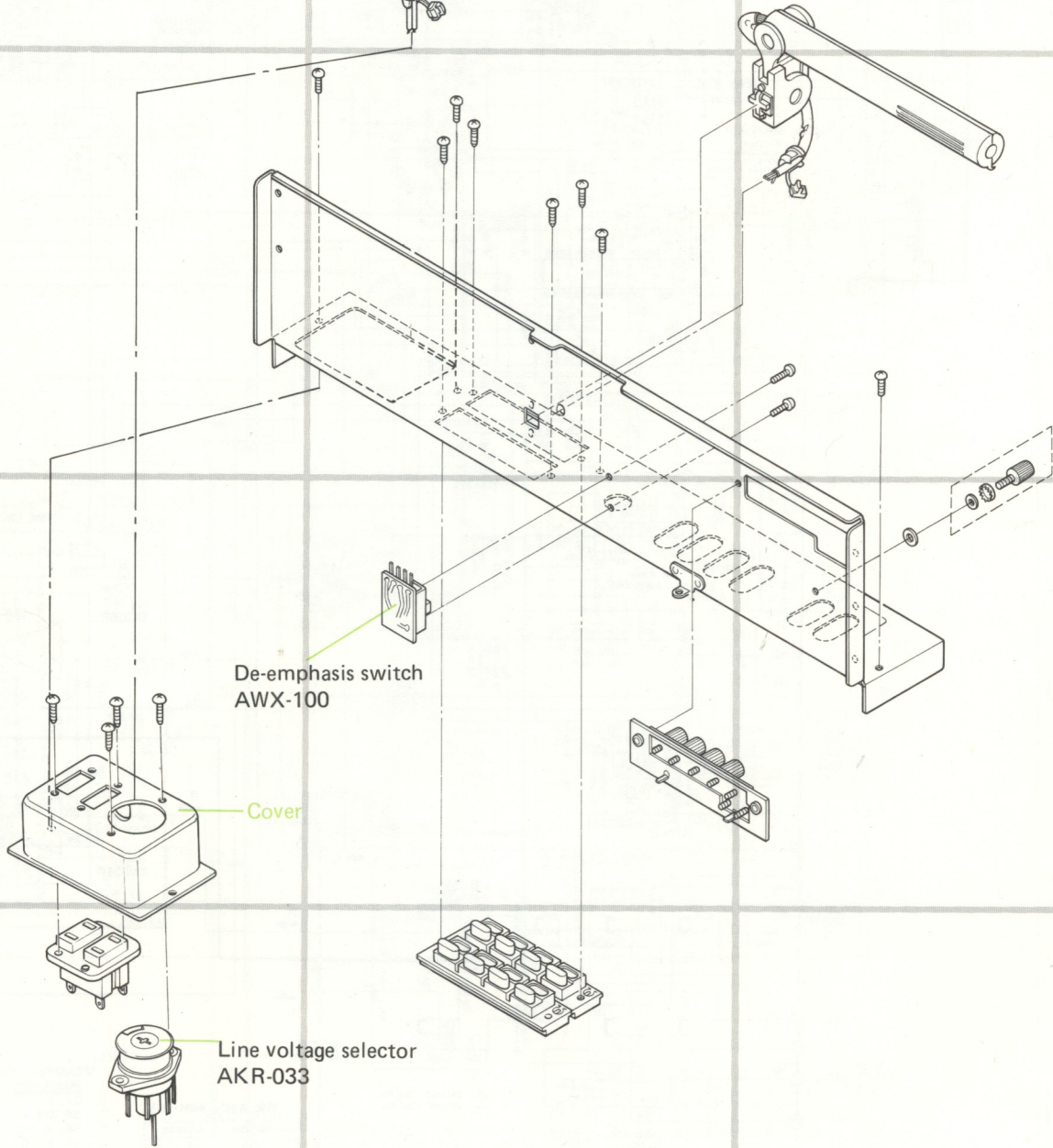
Symbol	Description	Part No.
S1	Slide switch (DE-EMPHASIS)	ASH-017
C1	Polystyrene capacitor 560p 50V	CQSA 561J 50
C2	Polystyrene capacitor 560p 50V	CQSA 561J 50
C3	Mylar capacitor 0.0011 50V	CQMA 112J 50
C4	Mylar capacitor 0.0011 50V	CQMA 112J 50

4.3 REAR PANEL

NOTE:
Parts indicated in green type cannot be supplied.



Power cord
ADG-002



De-emphasis switch
AWX-100

Cover

Line voltage selector
AKR-033

PIONEER ELECTRONIC CORPORATION

4-1, Meguro 1-Chome, Meguro-ku, Tokyo 153, Japan

U.S. PIONEER ELECTRONICS CORPORATION

75 Oxford Drive, Moonachie, New Jersey 07074, U.S.A.

PIONEER ELECTRONIC (EUROPE) N.V.

Luithagen-Haven 9, 2030 Antwerp, Belgium

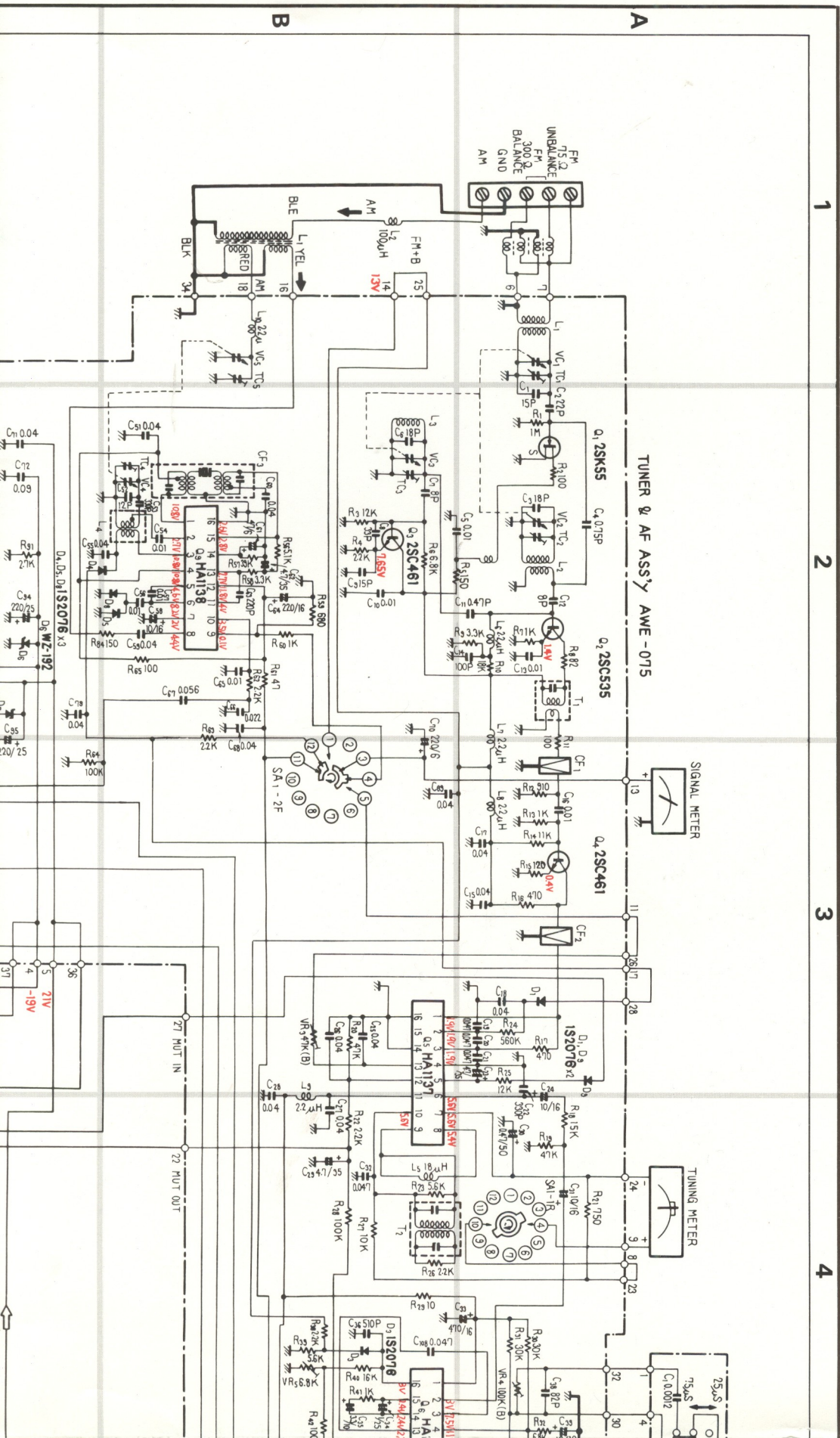
PIONEER ELECTRONICS AUSTRALIA PTY. LTD.

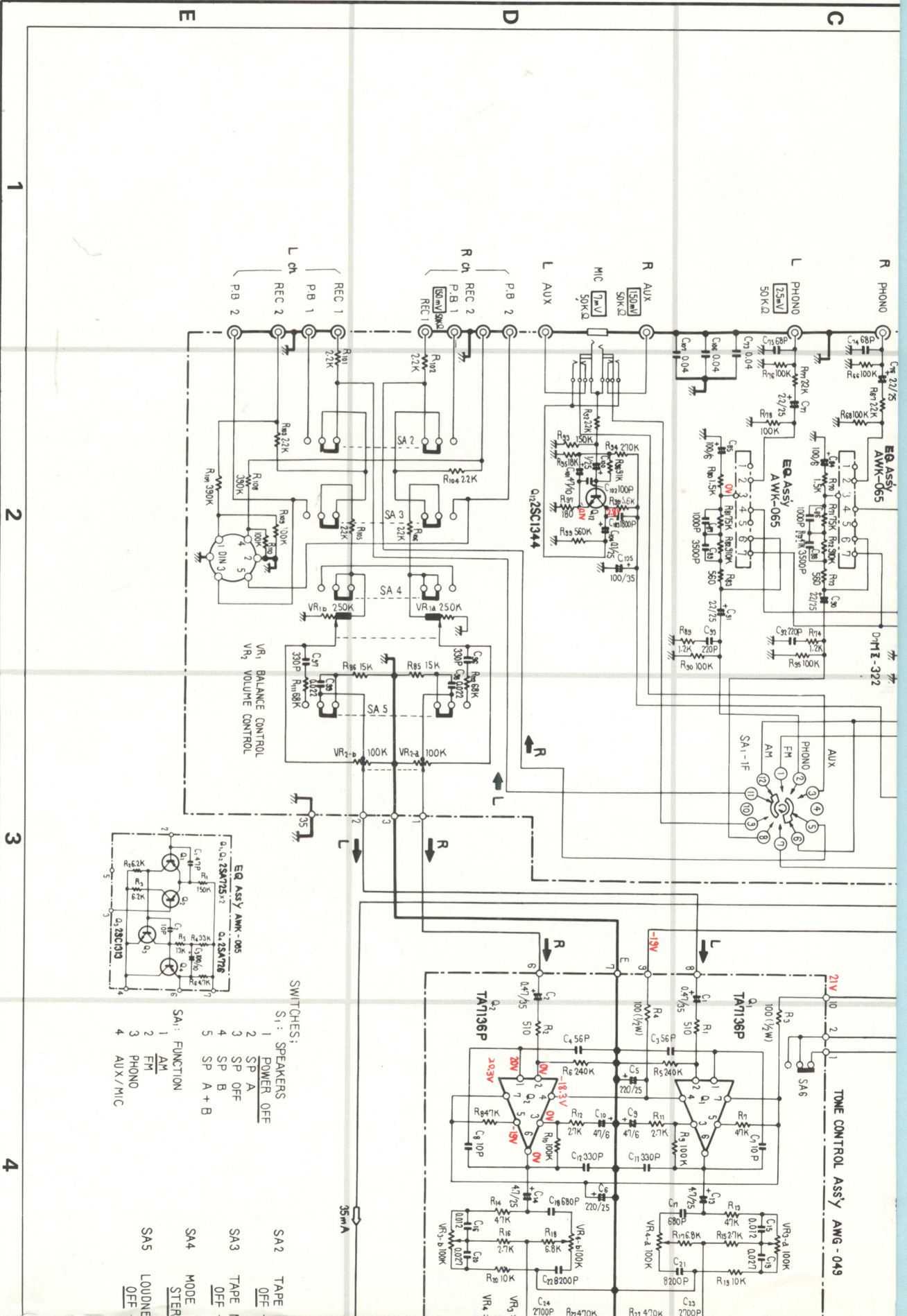
178-184 Boundary Road, Braeside, Victoria 3195, Australia

AM/FM STEREO RECEIVER

SX-650

KU KC



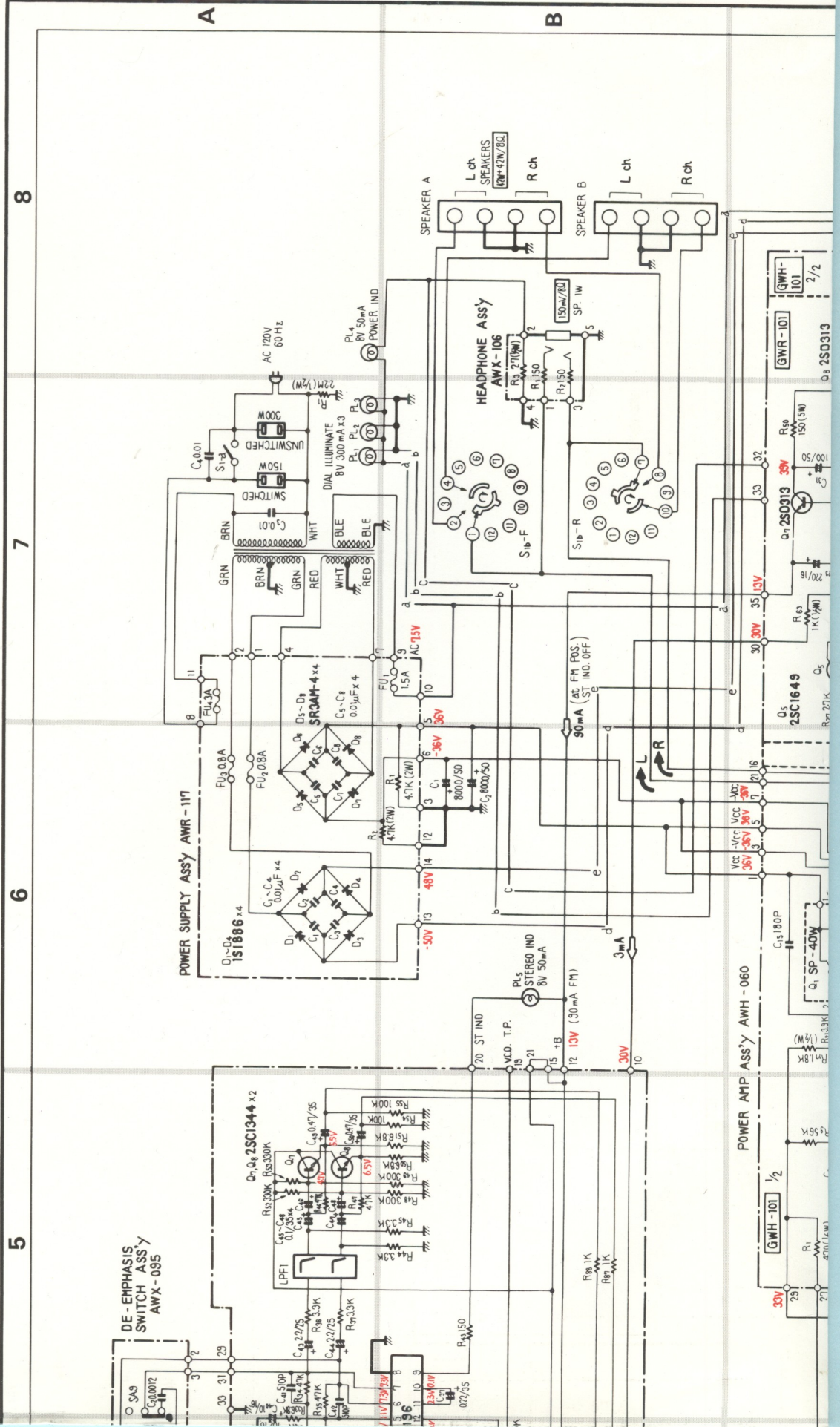


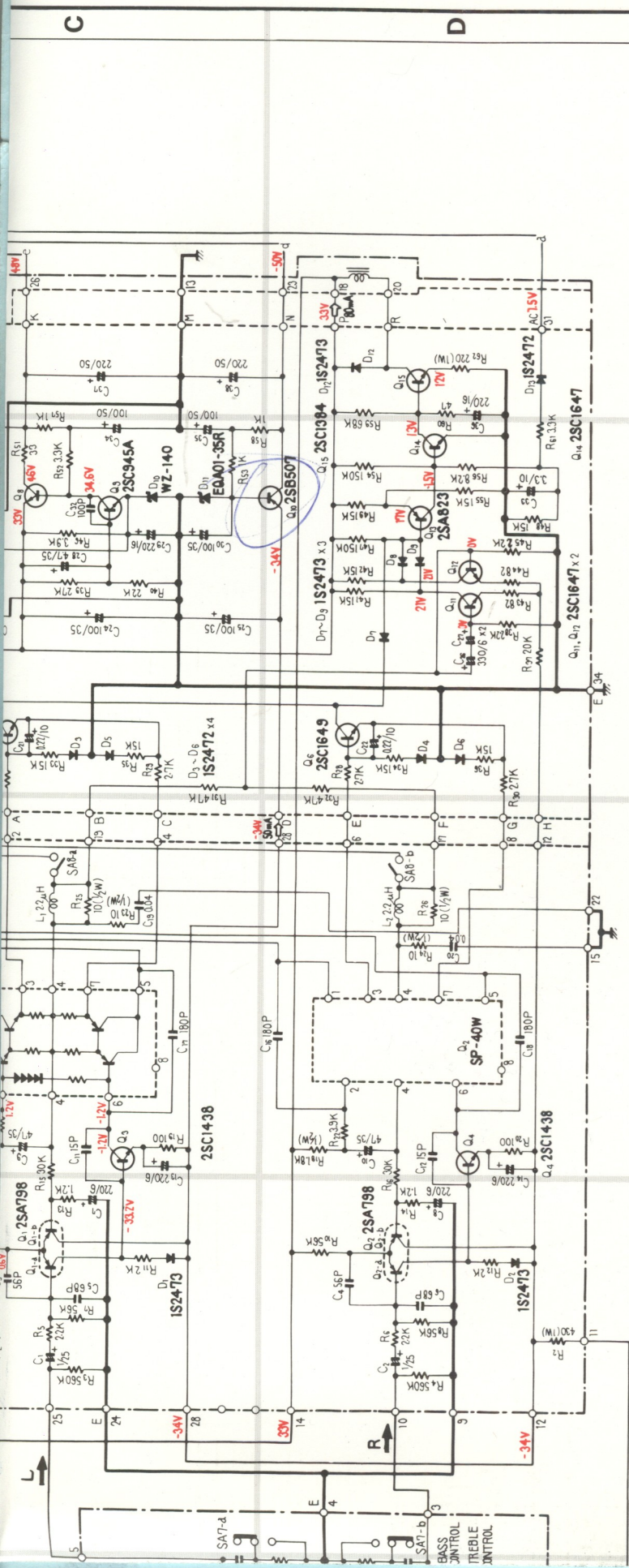
1

2

3

4





MONITOR 1
ON — OFF

MONITOR 2
ON — OFF

ED — MONO
SS — ON

SA6 FM MUTING
ON — OFF

SAT HIGH FILTER
OFF — ON

SA8 RELAY
OFF — ON

SA9 DE-EMPHASIS
75μS — 25μS

RESISTORS:
IN OHM, 1/4W, ±5% TOLERANCE UNLESS
OTHERWISE NOTED K : KΩ M : MΩ

CAPACITORS:
IN μF UNLESS OTHERWISE NOTED P : pF

mV : SIGNAL VOLTAGE NECESSARY FOR
OBTAINING 42W x 2 / 8Ω OUTPUT
POWER (1K Hz)

mA : DC CURRENT AT NO INPUT SIGNAL

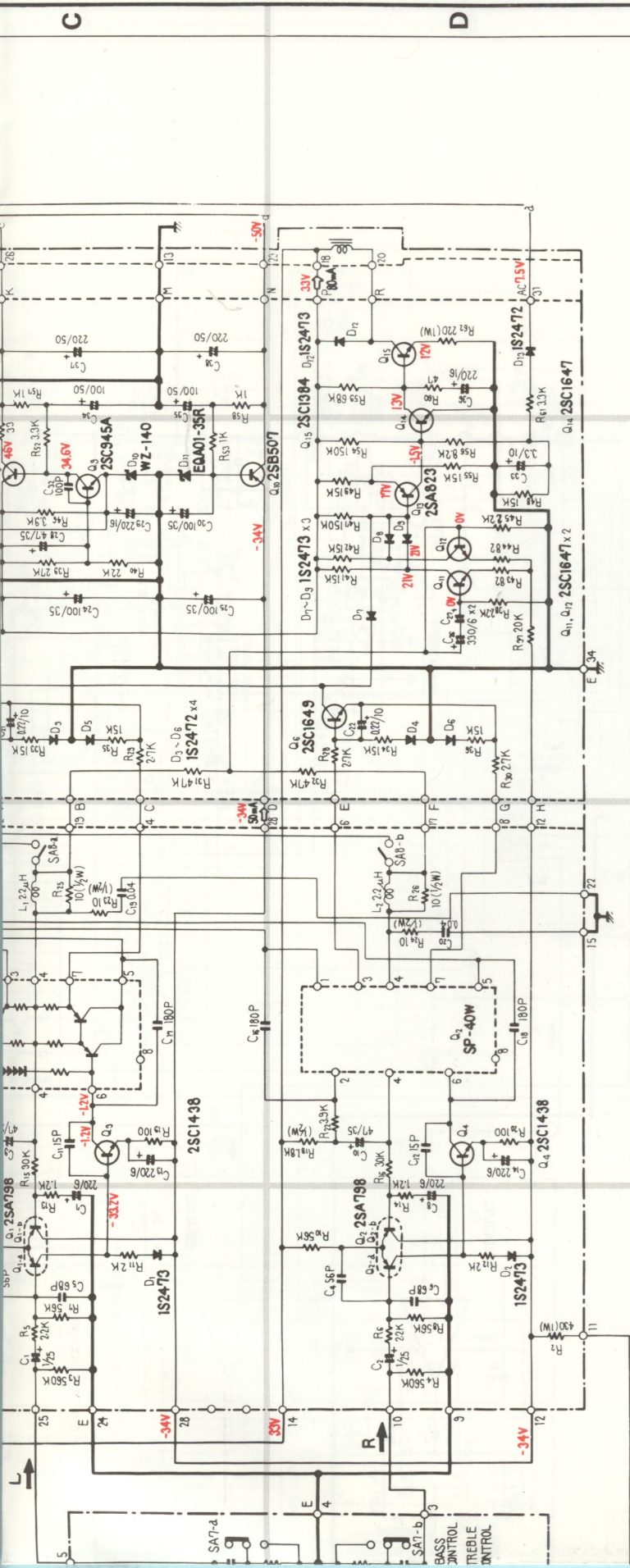
V : DC VOLTAGE AT NO INPUT SIGNAL

5

6

7

8



mV : SIGNAL VOLTAGE NECESSARY FOR
 OBTAINING 42W x 2 / 8Ω OUTPUT
 POWER (1K Hz)

mA : DC CURRENT AT NO INPUT SIGNAL
 V : DC VOLTAGE AT NO INPUT SIGNAL

RESISTORS:
 IN OHM, 1/4W, ±5% TOLERANCE UNLESS
 OTHERWISE NOTED K : KΩ M : MΩ

CAPACITORS:
 IN μF UNLESS OTHERWISE NOTED P : pF

- MONITOR 1
- ON
- OFF
- MONITOR 2
- ON
- OFF
- BASS CONTROL
- ON
- OFF
- TREBLE CONTROL
- ON
- OFF

- SA6 FM MUTING
- ON — OFF
- SA7 HIGH FILTER
- OFF — ON
- SA8 RELAY
- OFF — ON

5

6

7

8