JVC

No. 1267-C

SERVICE MANUAL
REVISED EDITION

9407LF,LS

MODEL 9407LF,LS

Note : 1. The amplifier circuit board of 9407LS has been changed into the printed resistor circuit board after serial No. 05620001, and 67% of carbon resistors mounted on the amplifier circuit board have been changed into the printed resistors.
2. The model 9407LF has been newly manufactured.

DIMENSIONS : H-22.6cm, W-28.9cm, D-6.8cm
9″ 11½″ 2¾″

WEIGHT : 3.4 kg (with Batteries)
7.5 lbs

SPECIFICATIONS

Frequency Range :	FM 88~ 108MHz
	SW 6~ 18MHz
	MW 540~1600kHz
	LW 150~ 350kHz
Intermediate Frequency :	FM 10.7MHz
	AM 455kHz
Antenna :	FM/SW Rod Antenna
	MW/LW Ferrite Core Antenna
Speaker :	12cm PM Dynamic Speaker
Output Power :	2W
Tone Control :	Continuous
Jacks :	Earphone, Remote Switch
	Microphone, DIN, AUX
	AC Input, External DC Input

TAPE RECORDER SECTION	
Tape Speed :	4.75cm (1-7/8 ips.)
Track System :	2-track
Monitor :	Sound Monitor System
Recording System :	AC bias
Erasing System :	DC erasing
FF Time :	Within 150 sec (C-60)
Rewinding Time :	Within 100 sec (C-60)
Wow & Flutter :	Less than 0.3%
POWER SOURCE	
DC :	6V 4 pcs of UM-1 or size ASA designation D cell or equivalent
AC :	220V (110V) 50/60Hz (9407LS)
	220V 50/60Hz (9407LF)

VICTOR COMPANY OF JAPAN, LIMITED.

TO REMOVE CHASSIS

REMOVE REAR COVER (Refer to Fig. 1)

Remove 5 screws **(1)**~**(5)**: SDSP3008RS ; 4 on the rear of the cabinet and one in the battery compartment, and disconnect 2 lead wires from the rod antenna and the battery, then the rear cover can be removed.

REMOVE TUNER CHASSIS (Refer to Fig. 2)

1. Remove tuning, volume and tone control knobs.
2. Remove the screw **(6)**: SBSB2610Z on the right side of the cabinet, one stud **(7)**: V41952-010, one screw **(8)**: SBSB3010Z and 3 screws **(9)**~**(11)**: SBSB3008Z.
3. Disconnect the 6-pin jack from the amplifier circuit board then the chassis can be removed.

   Note : For easy removal of the chassis remove the stud **(12)**.

REMOVE CASSETTE MECHANISM (Refer to Fig. 2)

1. Remove 3 studs **(12)** & **(13)**: V41952-009 and **(14)**: V41576-014, and one screw **(15)**: SBSB3008Z.
2. Desolder wires from the condenser microphone, speaker and VU meter, then the mechanism can be removed.

REMOVE AMPLIFIER CIRCUIT BOARD (Refer to Fig. 2)

Remove 4 screws **(16)**~**(19)**: SPSP2606Z and one screw **(20)**: SBSB3006Z fixing the radiation plate to the cassette mechanism.

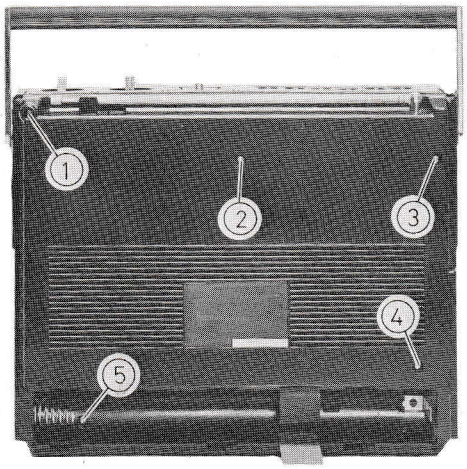


Fig. 1

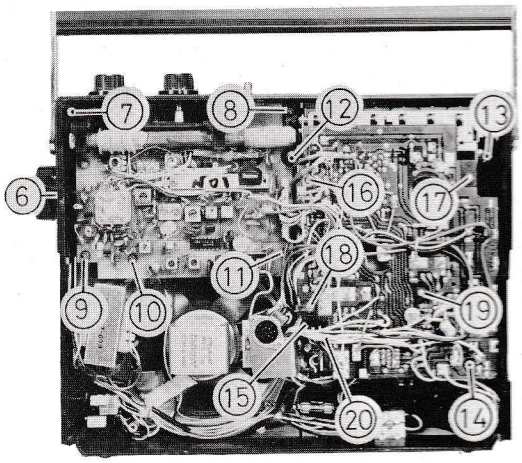


Fig. 2

TO FIT THE DIAL CORD

1. Fit the cord in accordance with the arrow mark while setting the V. Capacitor on minimum.
2. Cord length: 645 mm

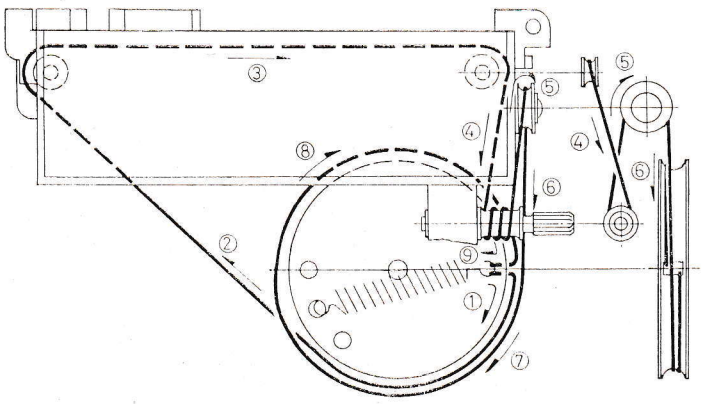


Fig. 3

5. IF Alignmnet
   a. Align the L20 so taht the wave mode will be appeared on either side of the flyback line. (Refer to Figs. 5 & 6).
   b. Align the L7,17,19 so that the maximum sensitivity and symmetrical wave mode will be obtained setting the marker 10.7MHz on the peak. (Refer to Fig. 6).
6. Discriminator Alignment
   Align the L19,20 so that the symmetrical "S" curve will be obtained setting the marker 10.7MHz on the center of the "S" curve. (Refer to Fig. 7).

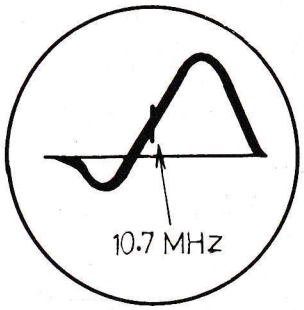


Fig. 5

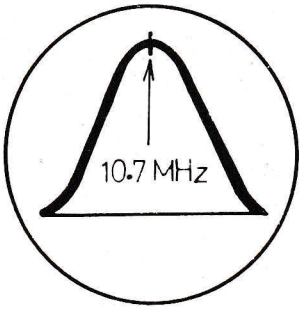


Fig. 6

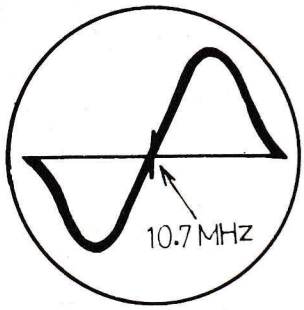


Fig. 7

FM RF ALIGNMENT

Input (S.S.G.) Use 75Ω terminal, modulation 1000Hz modulated to 22.5kHz deviation.

Step	Band	Input Signal		Place to be aligned	Set the V. Capacitor to
		Frequency	Given to		
1	FM	87.5MHz	"A" (Refer to Fig. 8)	L8	Maximum
2		109MHz		C6	Minimum
3		Repeat the Step 1 & 2.			
4		90MHz	"A" (Refer to Fig. 8)	L5	90MHz Signal
5		106MHz		C5	106MHz Signal
6		Repeat the Step 4 & 5, and adjust for no further improvement.			

PARTS ARRANGEMENT FOR ALIGNMENT

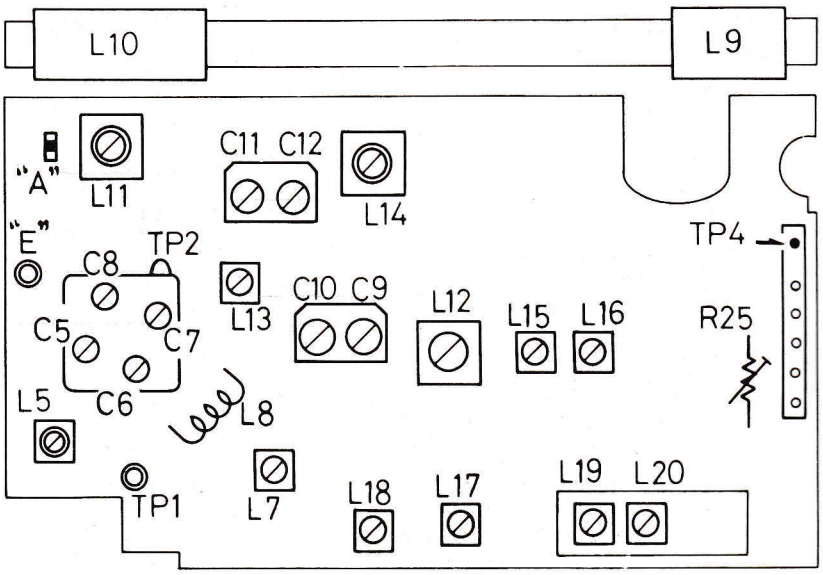


Fig. 8

BLOCK DIAGRAM

RADIO & PLAYBACK

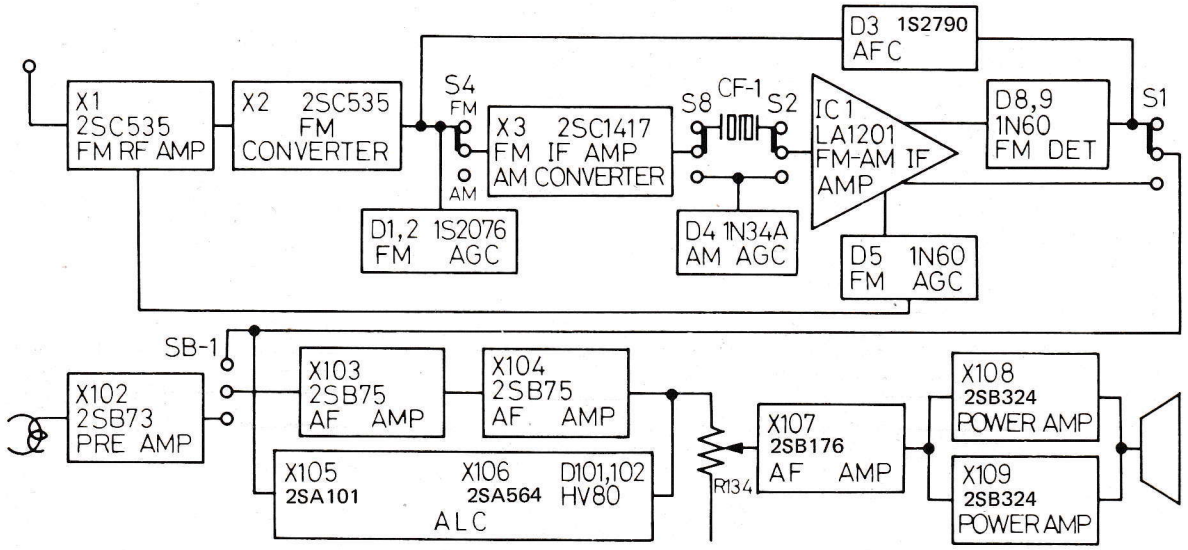


Fig. 29

RECORDING

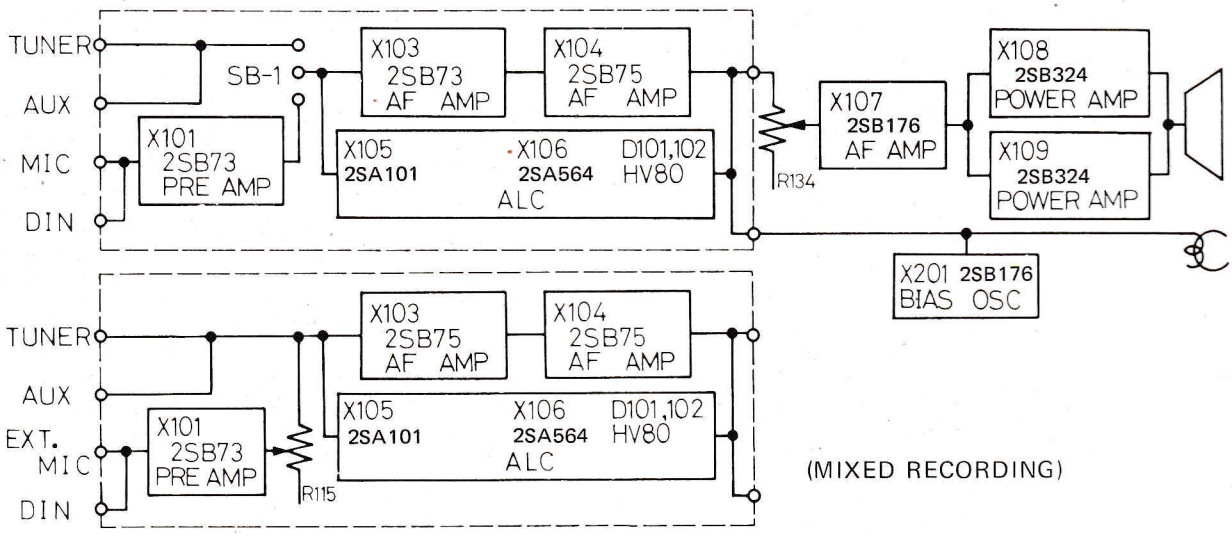


Fig. 30

MIC MIXING

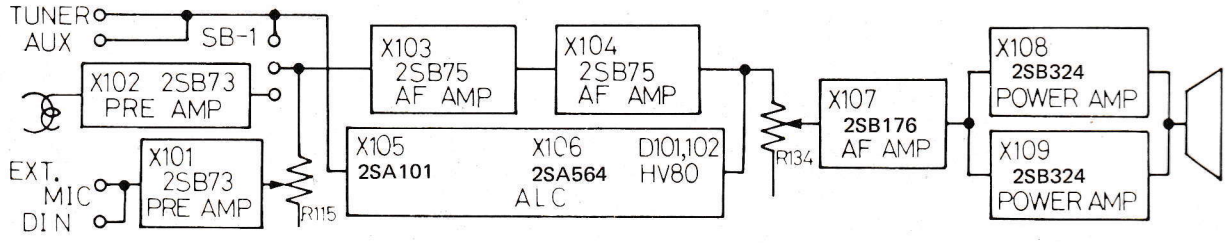


Fig. 31

PARTS ARRANGEMENT ON PRINTED CIRCUIT BOARD (TUNER)

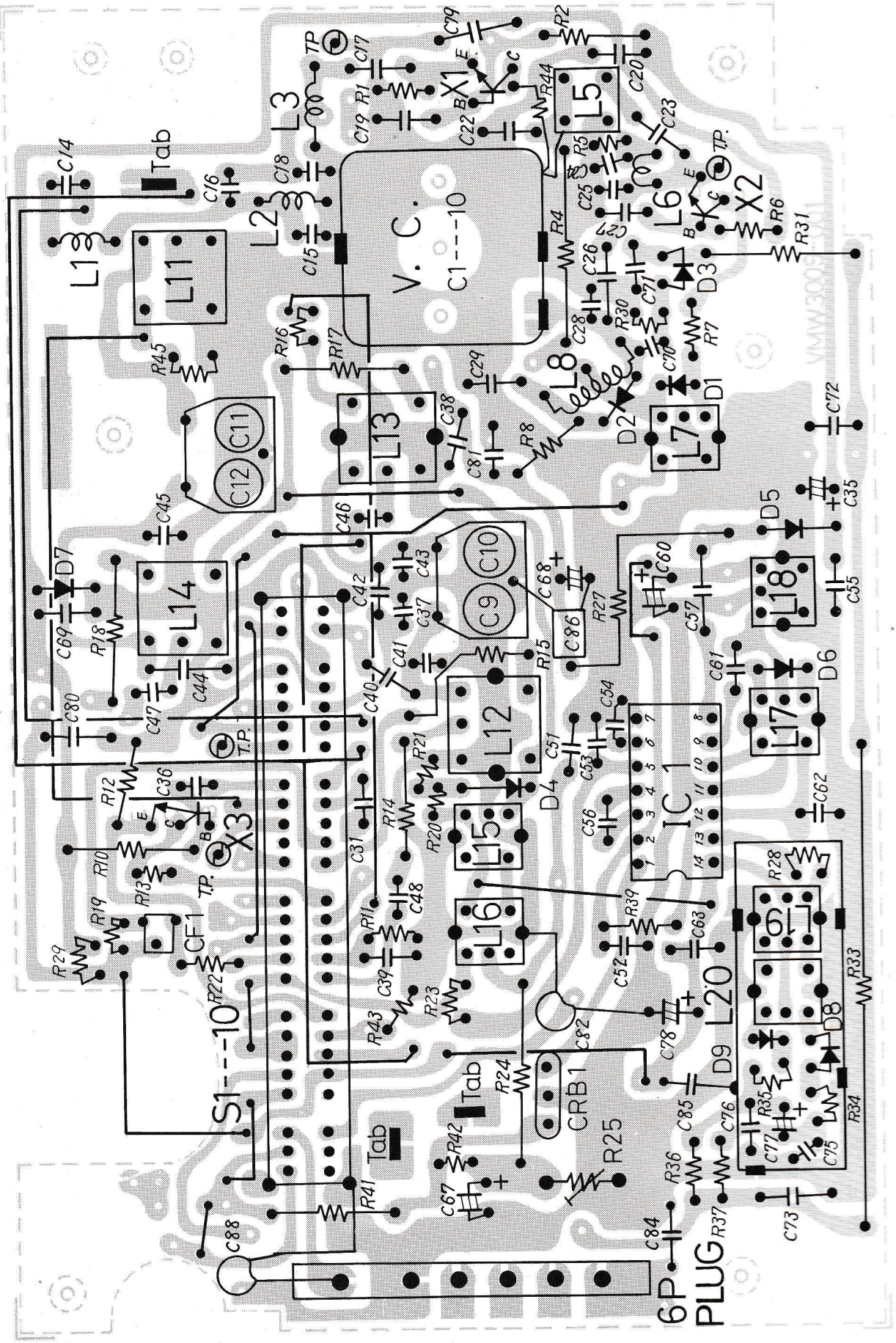


Fig. 12

PARTS ARRANGEMENT ON PRINTED CIRCUIT BOARD (AMP & BIAS OSC)

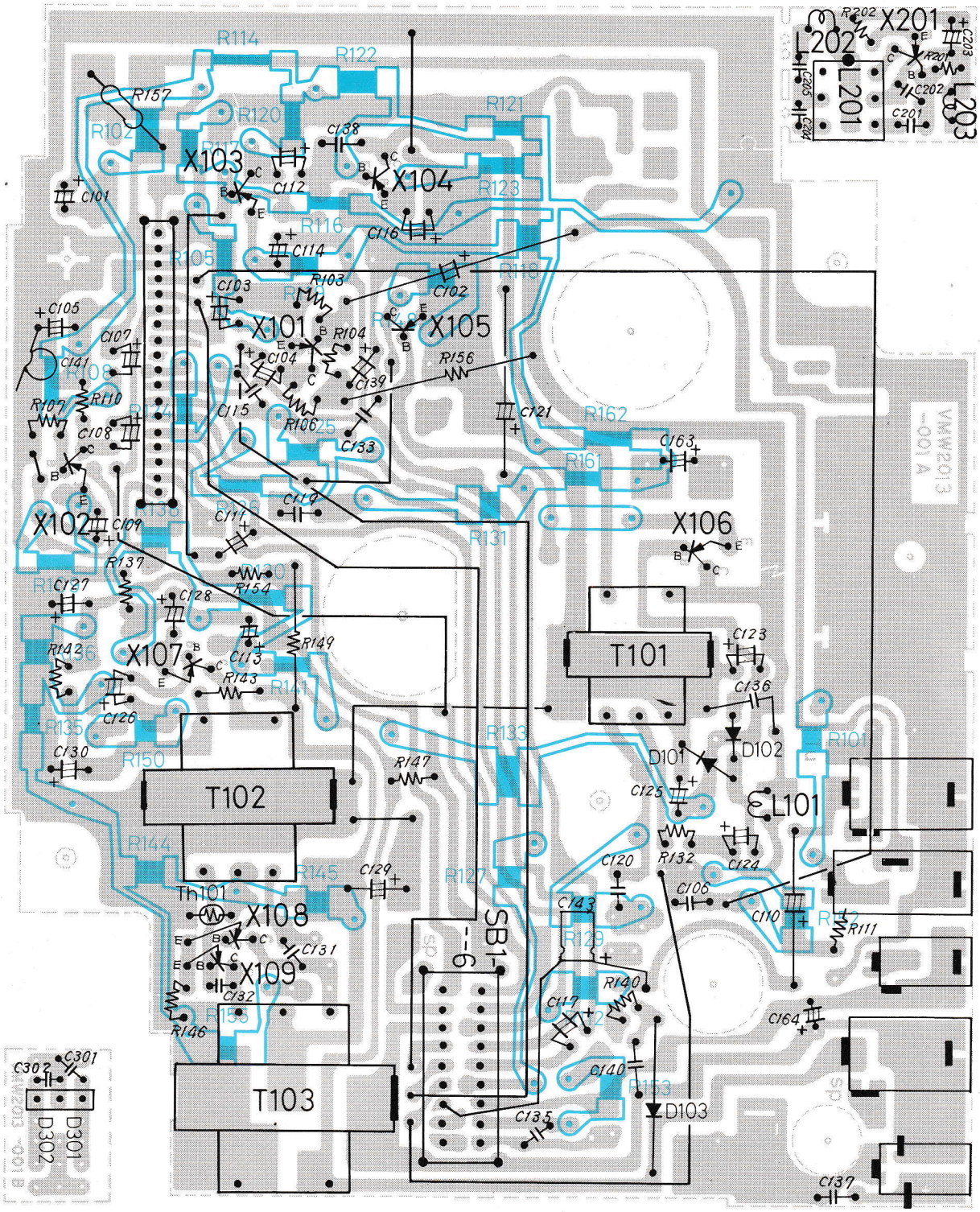


Fig. 13

SWITCH ASS'Y

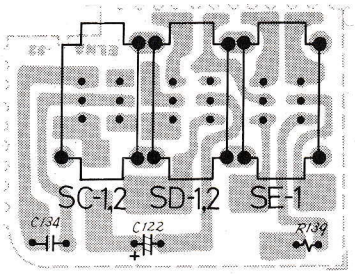
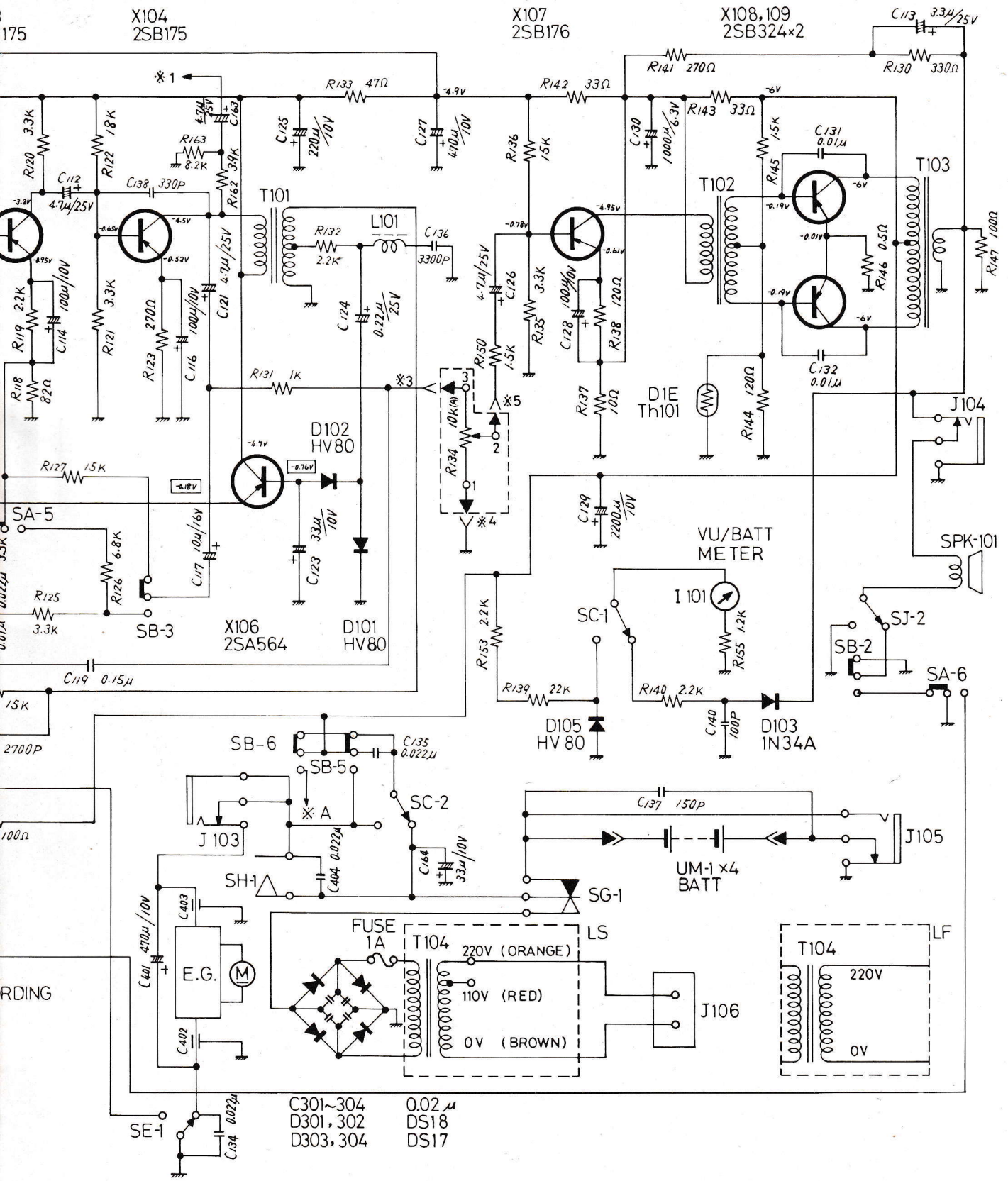
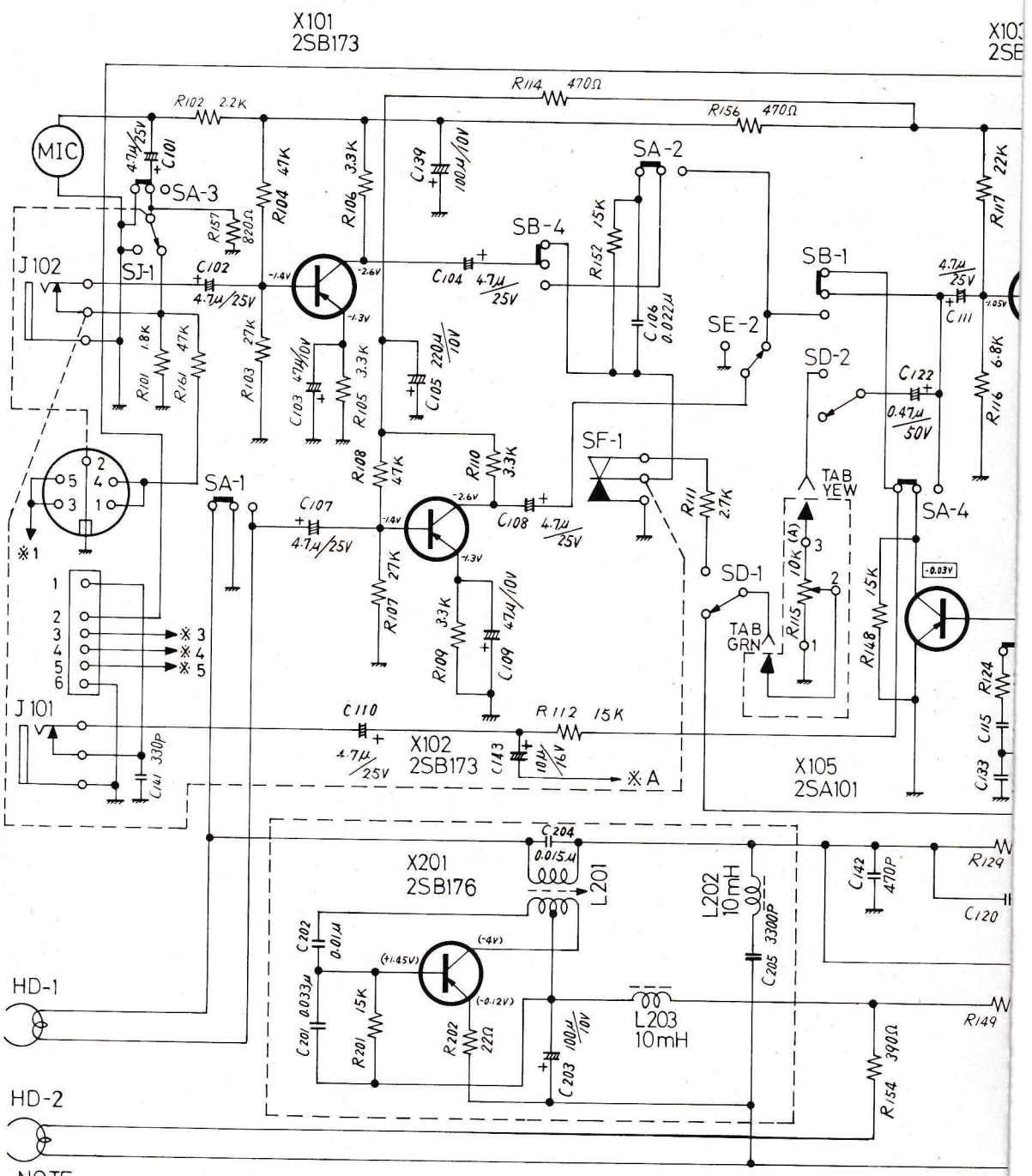


Fig. 14


X104
2SB175
X107
2SB176
X108,109
2SB324×2
T101
T102
T103
L101
D102
HV80
D101
HV80
X106
2SA564
D1E
Th101
J104
SPK-101
VU/BATT
METER
I 101
SC-1
SJ-2
SB-2
SA-6
SA-5
SB-3
D105
HV 80
D103
1N34A
SB-6
SB-5
SC-2
J 103
J105
UM-1 ×4
BATT
SH-1
SG-1
FUSE
1A
T104
220V (ORANGE)
110V (RED)
0V (BROWN)
LS
J106
LF
E.G.
SE-1
C301~304 0.02 μ
D301, 302 DS18
D303, 304 DS17

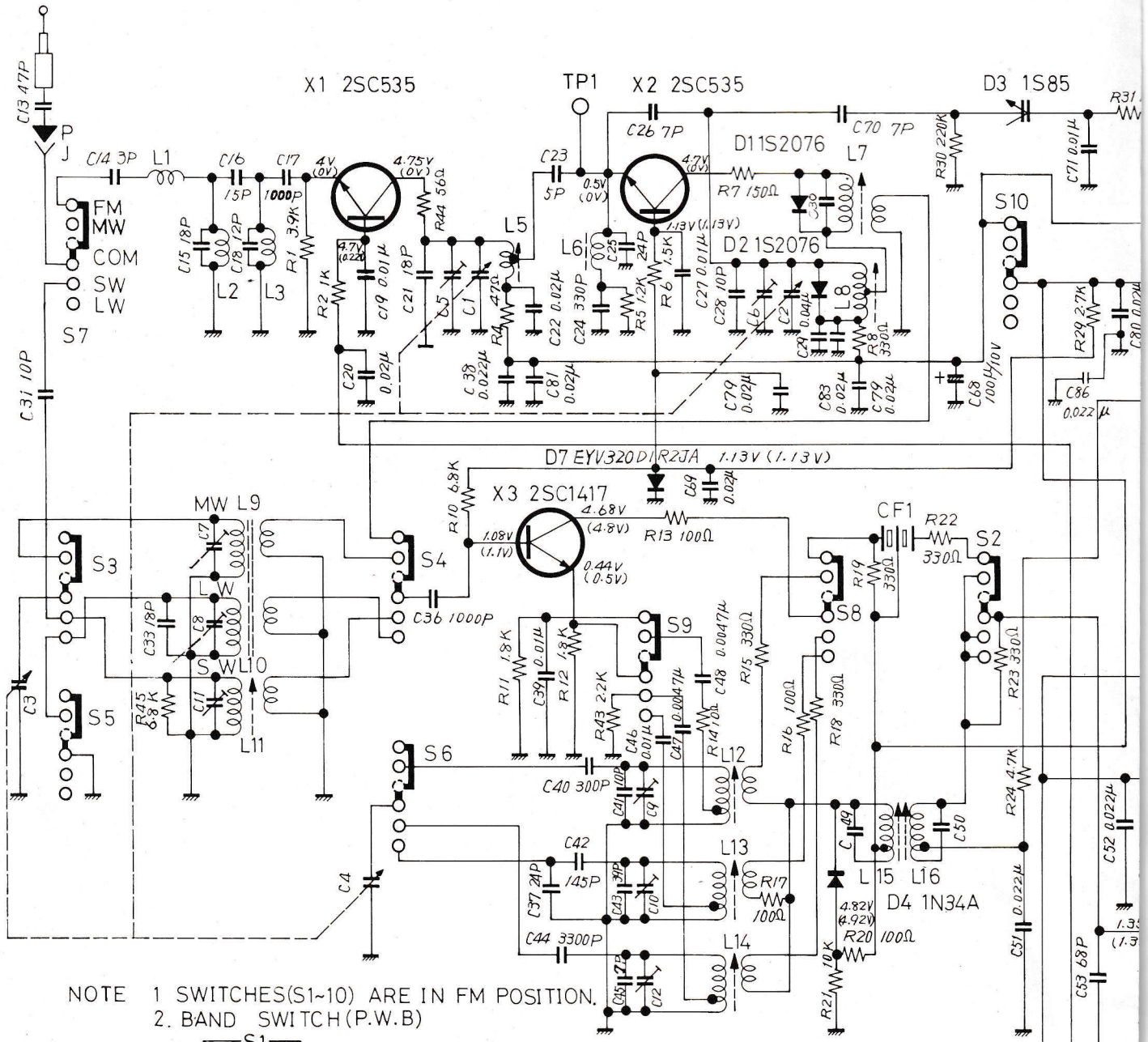
SCHEMATIC DIAGRAM OF 9407LF, LS (AMPLIFIER)



NOTE

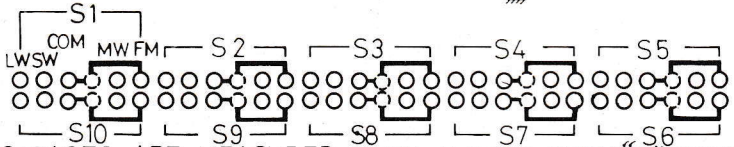
1. VOLTAGES ARE MEASURED WITH NO SIGNAL USING V.T.V.M. AT PLAY POSITION ( )VALUES AT RECO POSITION. ▭ VALUES ARE MEASURED WITH 0dBs (0.775V) SIGNAL AT 1000Hz FROM AUX.
2. SA (1···6) PLAY RECORD PLAY POSITION
   SB (1···6) RADIO TAPE RADIO POSITION
   SC (1, 2) SLEEP OFF POSITION
   SD (1, 2) MIXING OFF POSITION
   SE (1, 2) PAUSE OFF POSITION
   SF-1 MIC JACK SWITCH
   SG-1 AC SOCKET
   SH-1 MECHA LEAF SWITCH
   SJ (1, 2) DIN SOCKET SWITCH OFF POSITION
3. LAST NO C164 R163

SCHEMATIC DIAGRAM OF 9407LF, LS (TUNER)



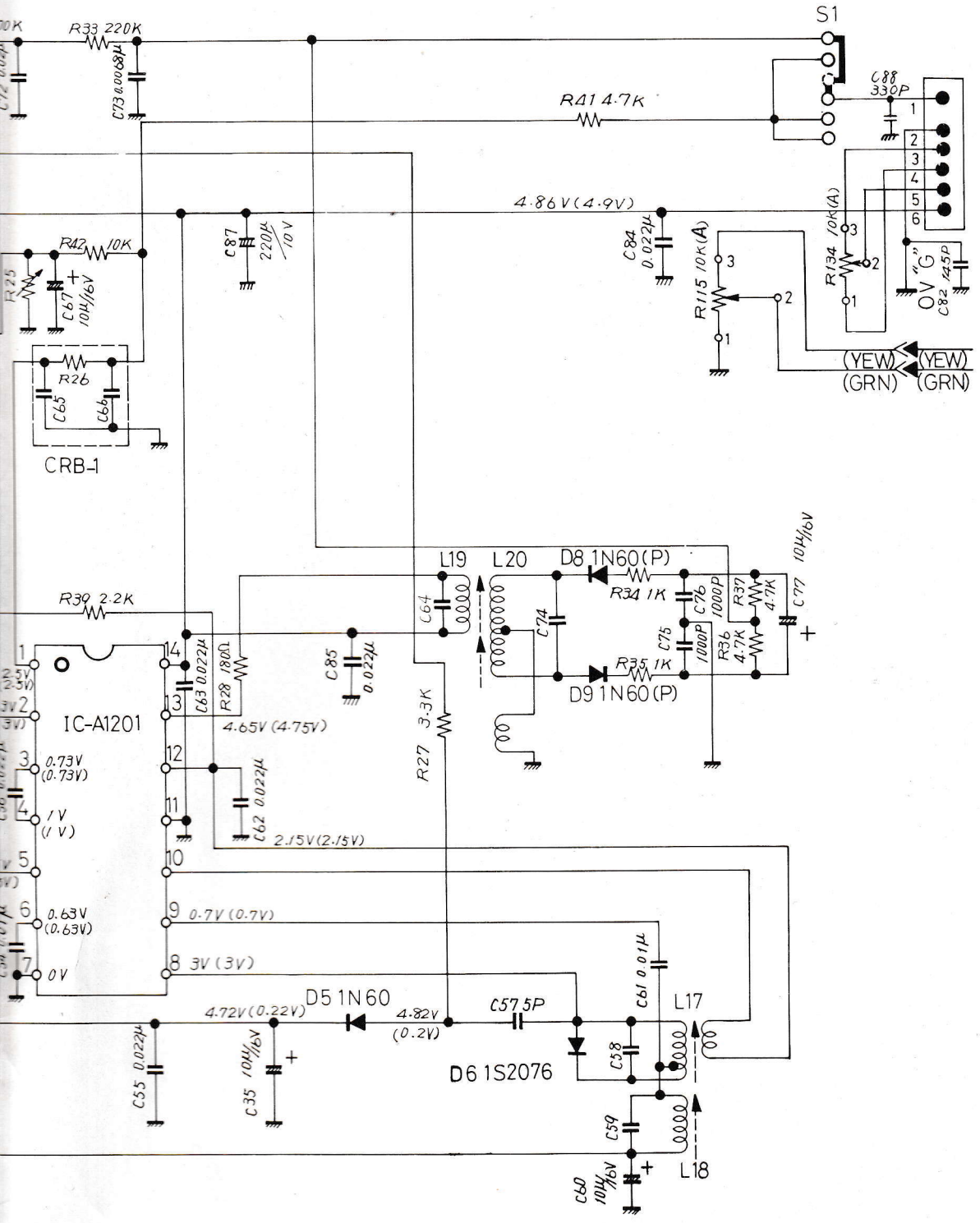
NOTE 1 SWITCHES(S1~10) ARE IN FM POSITION.

2. BAND SWITCH (P.W.B)



3. VOLTAGES ARE MEASURED WITH V.T.V.M. FROM "G" POTENTIAL AT NO SIGNAL CONDITION AND IN POSITIVE VALUE( ) VALUES AT MW POSITION.

4 LAST NO R45, C88


S1
R33 220K
R41 4.7K
C88 330P
4.86V (4.9V)
R42 10K
C87 220μ/10V
C84 0.022μ
R115 10K(A)
R134 10K(A)
OVG
C82 145P
C67 10μ/16V
R25
R26
C65
C66
CRB-1
(YEW)
(GRN)
(YEW)
(GRN)
L19
L20
D8 1N60(P)
R34 1K
C76 1000P
R37 4.7K
C77 10μ/16V
C74
C75 1000P
R36 4.7K
R35 1K
D9 1N60(P)
R39 2.2K
C64
C85 0.022μ
C63 0.022μ
R28 180Ω
IC-A1201
4.65V (4.75V)
R27 3.3K
0.73V (0.73V)
1V (1V)
C62 0.022μ
2.15V (2.15V)
0.63V (0.63V)
0.7V (0.7V)
3V (3V)
0V
D5 1N60
4.72V (0.22V)
4.82V (0.2V)
C57 5P
C61 0.01μ
L17
D6 1S2076
C58
C55 0.022μ
C35 10μ/16V
C59
C60 10μ/16V
L18

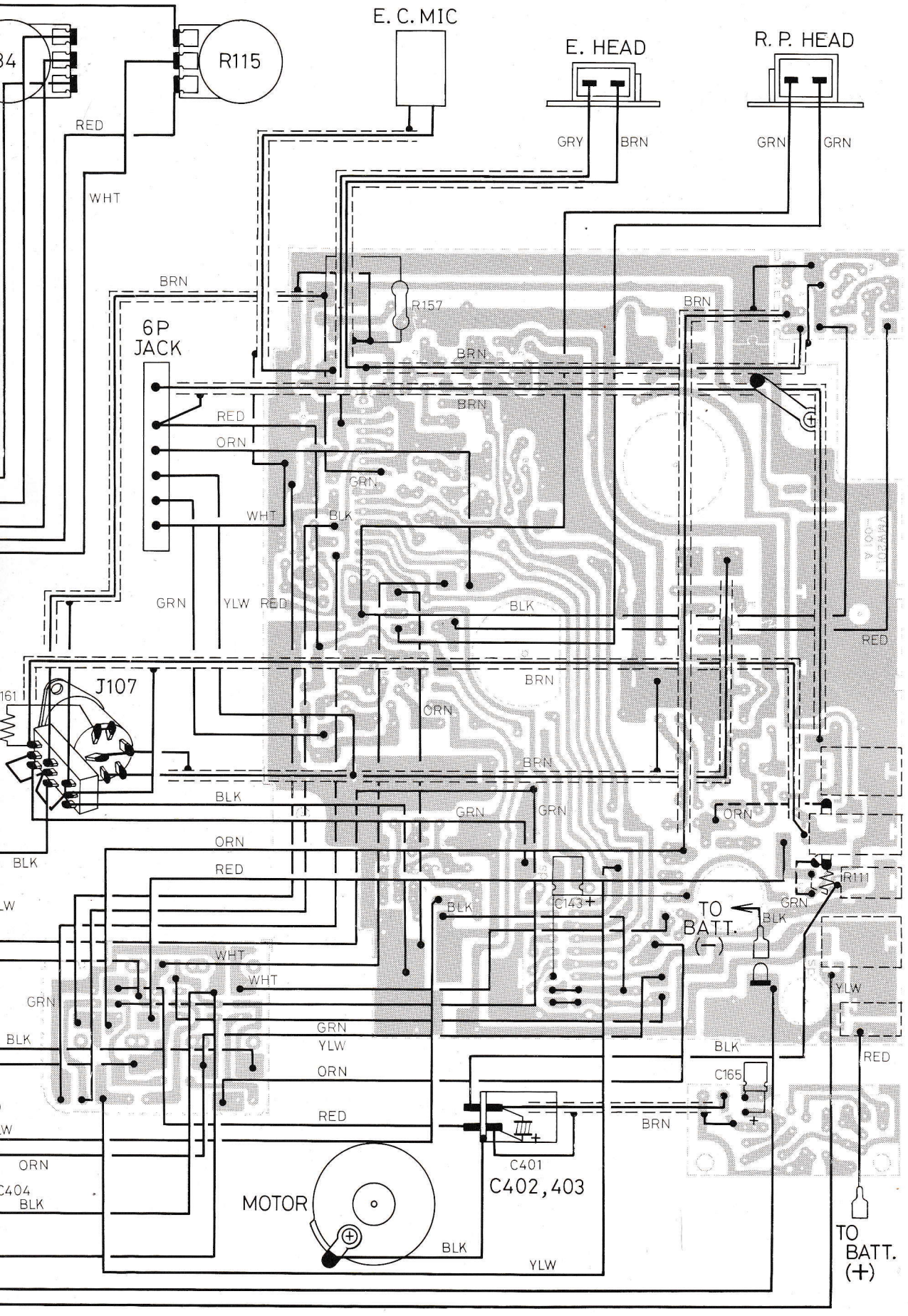

E. C. MIC
E. HEAD
R. P. HEAD
R115
RED
WHT
GRY
BRN
GRN
GRN
BRN
6P
JACK
R157
BRN
BRN
BRN
RED
ORN
GRN
WHT
BLK
GRN
YLW
RED
BLK
RED
J107
BRN
ORN
BRN
BLK
GRN
GRN
ORN
ORN
BLK
RED
R111
C143+
BLK
TO
BATT.
(−)
GRN
BLK
WHT
WHT
YLW
GRN
GRN
YLW
BLK
BLK
ORN
RED
C165
RED
BRN
ORN
C401
C402,403
MOTOR
BLK
YLW
TO
BATT.
(+)

Fig. 28

DIS

WIRING CONNECTION