

STR-AV210/AV310

SERVICE MANUAL

AEP Model
STR-AV210/AV310

UK Model
STR-AV310



This photo is STR-AV310.

SPECIFICATIONS

Continuous RMS power output

STR-AV210: 20 W + 20 W (8 ohms, at 40 Hz – 20 kHz less than 0.8% total harmonic distortion)

STR-AV310: AEP, WG models
30 W + 30 W (8 ohms, at 40 Hz – 20 kHz less than 0.8% total harmonic distortion)

STR-AV310: UK model
50 W + 50 W (8 ohms, at 40 Hz – 20 kHz less than 0.8% total harmonic distortion)

Power output

DIN: STR-AV210 30 W + 30 W (4 ohms at 1 kHz 0.7%)

STR-AV310 AEP, WG models
50 W + 50 W (4 ohms at 1 kHz 0.7%)

STR-AV310 UK model
55 W + 55 W (8 ohms at 1 kHz 0.7%)

IEC: STR-AV210 30 W + 30 W (4 ohms at 1 kHz 0.7%)

STR-AV310 AEP, WG models
50 W + 50 W (4 ohms at 1 kHz 0.7%)

STR-AV310 UK model
55 W + 55 W (8 ohms at 1 kHz 0.7%)

Harmonic distortion

Less than 0.8% at rated output

Frequency response

PHONO: RIAA equalization curve ± 0.5 dB

CD

VIDEO } 40 Hz – 50 kHz ± 3 dB

TAPE

Inputs

	Sensitivity	Impedance	S/N (weighting network, input level)
PHONO	2.5 mV	50 kilohms	74 dB 72 dB* (A, 2.5 mV)
CD			
VIDEO	150 mV	50 kilohms	95 dB 80 dB* (A, 150 mV)
TAPE			

Outputs

REC OUT, VIDEO (AUDIO) OUT	Voltage 150 mV Impedance 10 kilohms
SPEAKER A, B	Accepts speakers of 4–16 ohms (STR-AV210/AV310: AEP, WG models) or 8–16 ohms (STR-AV310: UK model)
HEADPHONES	Accepts low and high impedance headphones

Tone controls

BASS: ± 8 dB at 100 Hz

TREBLE: ± 8 dB at 10 kHz

Muting

– 20 dB (STR-AV310 only)

	FM tuner section	AM tuner section
Tuning range	87.5 – 108 MHz	531 – 1,602 kHz
Antenna terminals	75 ohms, unbalanced	External antenna terminal
Sensitivity at 40 dB quieting	18.3 dBf, 4.5 μ V (mono) 38.3 dBf, 45 μ V (stereo)	—
Usable sensitivity	11.2 dBf, 2 μ V (IHF)	Loop antenna: 500 μ V (at 1,000 kHz)
Signal-to-noise ratio	76 dB (mono) 70 dB (stereo)	54 dB (at 50 mV/m)

— continued on next page —

FM STEREO/FM-AM RECEIVER
SONY®



* '78 IHF

	FM tuner section	AM tuner section
Harmonic distortion	0.3% (mono), 0.5% (stereo) at 1 kHz	0.5% (at 50 mV/m, 400 Hz)
Selectivity	60 dB at 400 kHz	30 dB at 9 kHz
Separation	45 dB at 1 kHz	—
Frequency response	30 Hz – 15 kHz ± 1 dB	—

- General System

Tuner section: PLL quartz-locked digital synthesizer system
Preamplifier section: low-noise NF type equalizer amp
Power amplifier section: quasi-complementary SEPP
- Power requirements

STR-AV210/AV310: AEP, WG models: 220V AC, 50/60Hz
STR-AV310: UK model: 240V AC, 50/60Hz
- Power consumption

STR-AV210: 80 W
STR-AV310: AEP, WG models: 120W
STR-AV310: UK model : 230W
In standby condition: 5 watts (STR-AV310 only)
- AC outlets

One switched (100 watts) (STR-AV310 only)
- Dimensions

Approx. 430 × 105 × 300 mm (w/h/d)
(17 × 4 1/8 × 11 7/8 inches)
including projecting parts and controls
- Weight

Approx 6 kg (13 lb 4 oz) net (STR-AV210)
Approx. 6.4kg (14 lb 2oz) net (STR-AV310: AEP, WG models)
Approx. 6.5kg (14 lb 5oz) net (STR-AV310: UK model)
- Accessories supplied

Remote Commander RM-S70 (1)
(STR-AV310: AEP, WG models)
Remote Commander RM-U90 (1)
(STR-AV310: UK model)
Sony batteries SUM 3(NS) (2) (STR-AV310 only)
FM wired antenna (1)
(Except for WG model)
AM loop antenna (1)

WARNING !!

ADVARSEL!

Lithiumbatteri – Eksplosionsfare
Udskiftning må kun foretages
af en sagkyndig, og som
beskrevet i servicemanualen.

LITHIUM BATTERY
SHOULD ONLY BE CHANGED BY TECHNICAL
PERSONNEL. THERE IS A RISK FOR EXPLOSION
AT A WRONG HANDLING.

“Batteriet må kun udskiftes med et batteri af samme
fabrikat og type”.

Because of the risk for explosion the battery must
be replaced with the same type and manufacture.

MODEL IDENTIFICATION
— Model Number Label—

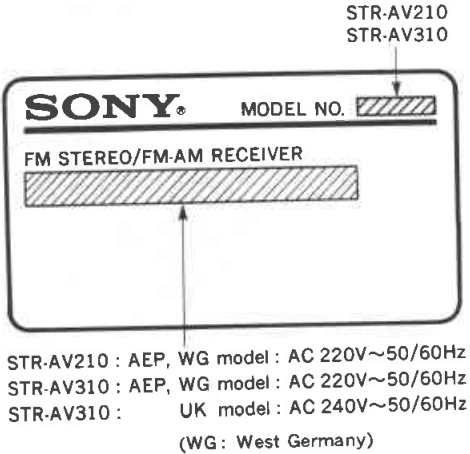


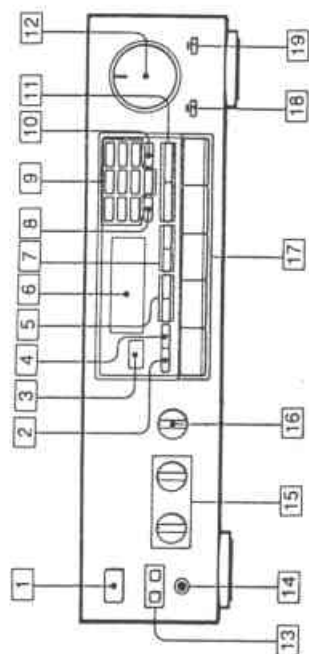
TABLE OF CONTENTS

Section	Title	Page
1.	GENERAL	
1-1.	Location and Function of Controls	3
2.	ELECTRICAL ADJUSTMENTS	5
3.	DIAGRAMS	
3-1.	Block Diagram	6
3-2.	Semiconductor Lead Layouts.....	9
3-3.	Printed Wiring Boards.....	10
3-4.	Schematic Diagram	13
4.	EXPLODED VIEWS	
4-1.	Cabinet, Front Panel Section	18
4-2.	Chassis Section	19
5.	ELECTRICAL PARTS LIST	20

SAFETY-RELATED COMPONENT WARNING!!
COMPONENTS IDENTIFIED BY MARK OR DOTTED
LINE WITH MARK ON THE SCHEMATIC DIAGRAMS
AND IN THE PARTS LIST ARE CRITICAL TO SAFE
OPERATION. REPLACE THESE COMPONENTS WITH
SONY PARTS WHOSE PART NUMBERS APPEAR AS
SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUB-
LISHED BY SONY.

SECTION 1 GENERAL

1-1. LOCATION AND FUNCTION OF CONTROLS



- [1] SYSTEM POWER switch (STR-AV310)
POWER switch (STR-AV210)

- [2] DIRECT TUNING button

- [3] Remote sensor (STR-AV310 only)

- [4] FM MODE button

When an FM stereo program is noisy or hard to receive, press this button. The STEREO indicator goes out (the sound is heard in monaural, but the reception will be improved). To return to the stereo mode, press again or change the frequency.

- [5] BAND selectors

- [6] Display window

- [7] TUNING +/- buttons

- [8] MEMORY button

- [9] Numeric buttons

- [10] SHIFT button

- [11] PRESET +/- buttons

- [12] VOLUME control and indicator

The indicator is only equipped with the STR-AV310.

- [13] SPEAKERS selectors

Depress to select which speaker system to drive. For both speaker systems, depress A and B.

- [14] HEADPHONES jack (stereo phone jack)

- [15] TONE controls

Turn the TREBLE control to adjust the high frequency sound. Turn BASS control to adjust the low frequency sound.

- [16] BALANCE control

Turn clockwise to decrease the left channel volume, and turn counterclockwise to decrease the right channel volume.

- [17] Function selectors

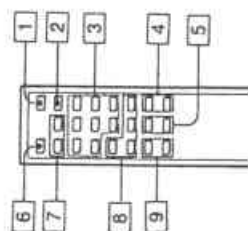
- [18] DBFB (Dynamic Bass Feed Back) button and indicator

To reinforce the bass frequency sound, press this button.

- [19] MUTING button and indicator (STR-AV310 only)

Press to attenuate the sound level immediately (-20 dB ATT). Pressing this button makes the indicator be lighted. To restore the sound level, press again.

Remote Commander RM-S70 (STR-AV310 : AEP, WG models only)



- [1] POWER switch

- [2] DBFB button

- [3] Tape deck operation buttons

TAPE ◀ or ▶ Selects the TAPE function and starts tape playback.
DECK A/B: Set this switch to select a deck of a double-deck unit.

- [4] VOLUME +/- buttons

- [5] TUNER PRESET +/- buttons

Depress to tune in a preset station.

- [6] MUTING button

- [7] Turntable system operation buttons

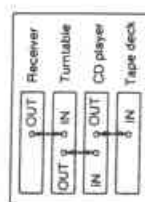
PHONO START: Selects the PHONO function and starts the playing of a phono disc.

- [8] CD player operation buttons

DISC SKIP: When your CD player is equipped with 5 disc trays, use this button to skip loaded disc.
CD▶: Selects the CD function and starts CD playback.

- [9] TUNER/VIDEO function buttons

Select TUNER or VIDEO function.

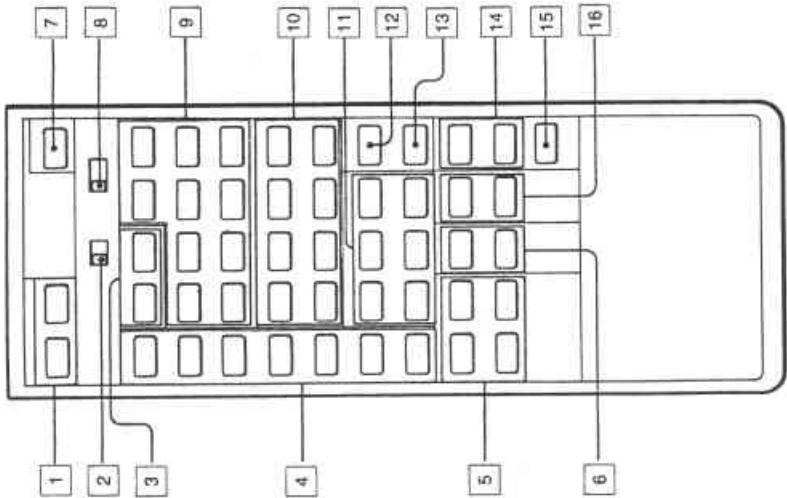


Notes on the remote commander

For the functions other than the receiver's own ones, the remote commander is effective only when the CONTROL S OUT jack on the back of the receiver is connected to the CONTROL S IN jacks of the respective components, as shown. For connection, use the special cables supplied with your components.

If the components have remote sensor with  mark, the components can be controlled with the remote commander without CONTROL S connection.

Remote Commander RM-U90 (STR-AV310 : UK model only)



- 1 TV/VTR POWER buttons**
TV: Turns the power of the TV on or off.
VTR: Turns the power of the VTR on or off.

2 DECK selector
A: Selects the tape in a single-deck unit or the tape in the "A" deck of a double-deck unit.
B: Selects the tape in the "B" deck of a double-deck unit.

3 PHONO buttons
START: Starts record play.
STOP: Stops record play.

4 Function selectors

5 TV CH (channel) and VOL (volume) buttons
CH+: Selects a higher numbered channel.
CH-: Selects a lower numbered channel.
VOL+: Increases the TV sound level.
VOL-: Decreases the TV sound level.

6 VTR CH (channel) buttons
+: Selects a higher-numbered channel.
-: Selects a lower-numbered channel.

7 POWER button
Turns off the power of the receiver on or off.

8 VTR selector
Used to select the type of the VTR.
1: Betamax VTRs
2: 8 mm VTRs
3: VHS VTRs

9 CD buttons
▶: Starts play.
⏸: Pause
■: Stops play.
⏮▶⏭ AMS (Automatic Music Sensor)
PGM: Program play.
DISC SKIP: Disc skip (for a CD player equipped with 5 disc trays)
- REPEAT: Repeat play.
SHUFFLE: Shuffle play.
CONTINUE: Continuous play.

10 TAPE buttons
◀◀: Reverse fast winding
◀: Reverse play
▶: Forward play
▶▶: Forward fast winding
■: Stop
⏸: Pause
●: Recording (While pressing ●, press ◀ or ▶)
○: Record muting

11 VTR buttons
◀◀: Rewind
▶▶: Play
▶▶▶: Fast forward
■: Stop
⏸: Pause
●: To start recording (While pressing ●, press ▶▶)

12 ANT (antenna) TV/VTR button
Selects the output signal from the antenna terminal on the VTR, either a TV signal or VTR programs.

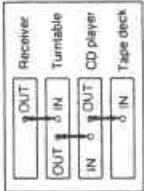
13 TV/VIDEO button
Selects the input signal to the TV set, either a TV signal or VTR programs.

14 VOL (volume) control buttons
Adjust the sound level.

15 MUTING button

16 TUNER PRESET buttons
+ : Selects the higher preset number.
- : Selects the lower preset number.

Notes on the remote commander
For the functions other than the receiver's own ones, the remote commander is effective only when the CONTROL 5 OUT jack on the back of the receiver is connected to the CONTROL 5 IN jacks of the respective components, as shown. For connection, use the special cables supplied with your components.
If the components have remote sensor with  mark, the components can be controlled with the remote commander without CONTROL 5 connection.

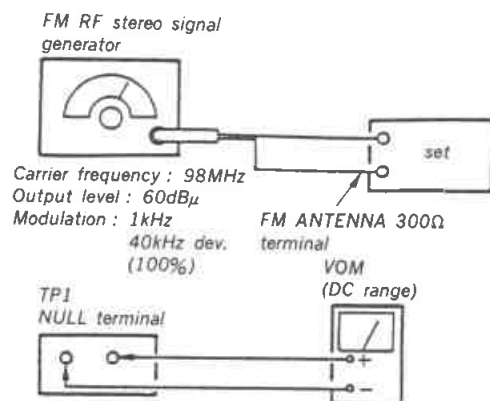


SECTION 2 ELECTRICAL ADJUSTMENTS

FM SECTION

• FM Discriminator (NULL) Adjustment

Setting :



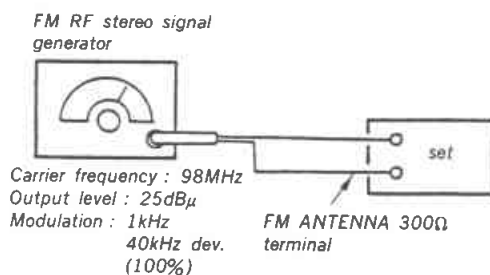
Procedure :

1. Tune the set to 98MHz.
2. Adjust T21 for 0V reading on the VOM.

Note : FM Tuning Level adjustment should be made after FM discriminator adjustment.

• FM Stereo Operation Level Adjustment

Setting :

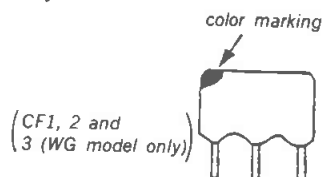


Procedure :

1. Tune the set to 98MHz.
2. Adjust RV24 so that the STEREO LED goes on.

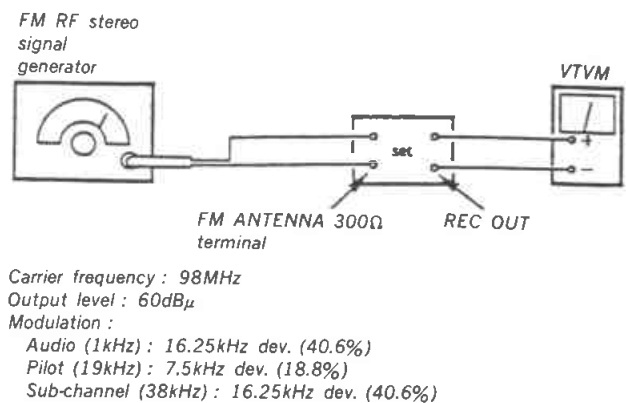
Note on Ceramic Filter (CF1, 2 and 3 (WG model only)) Replacement

This set employs three ceramic filters (CF1, 2 and 3 (WG model only)) which should have the same color marking to identify their center frequency. Therefore FM IF offset adjustment by (* A, * B) connection is necessary to match the center frequency of the ceramic filters used with FM intermediate frequency.



• FM Stereo Separation Adjustment

Setting :



Procedure :

Tune the set to 98MHz.

FM stereo signal generator output channel	VTVM connection	VTVM reading (dB)
L-CH	L-CH	Ⓐ
R-CH	L-CH	Ⓑ Adjust RV21 for minimum reading.
R-CH	R-CH	Ⓒ
L-CH	R-CH	Ⓓ Adjust RV21 for minimum reading.

L-CH Stereo separation : Ⓐ - Ⓑ

R-CH Stereo separation : Ⓒ - Ⓓ

The separations of both channels should be equal.

○ : short

× : open

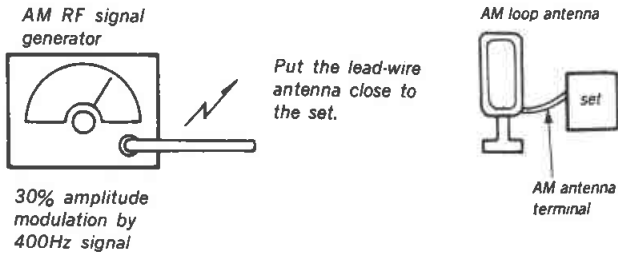
Ceramic filter		Connection		FM intermediate frequency (MHz)
Color mark	Center frequency (MHz)	* A (D321)	* B (D324)	
White	10.750	○	×	10.750
Red	10.700	×	×	10.700
Black	10.650	○	○	10.650

SECTION 3 DIAGRAMS

AM SECTION

• AM Meter Adjustment

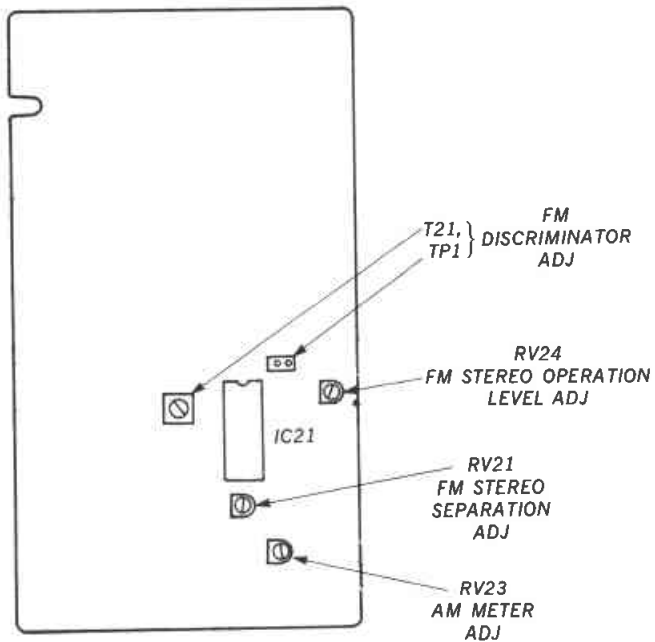
Setting :



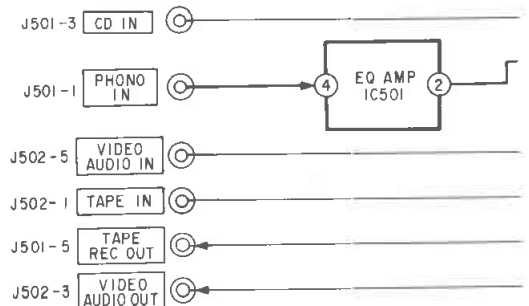
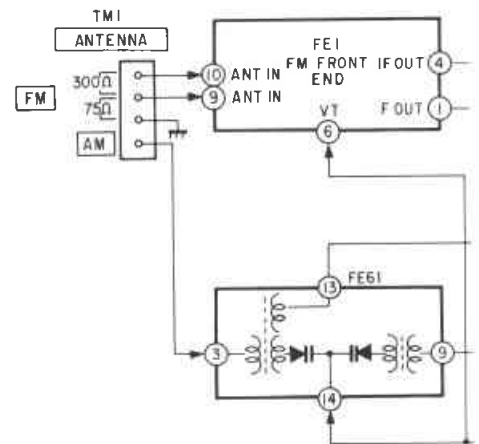
Procedure :

1. Tune the set to 1,404kHz.
2. Adjust the RV23 so that the 4 point segment of the signal meter goen on.

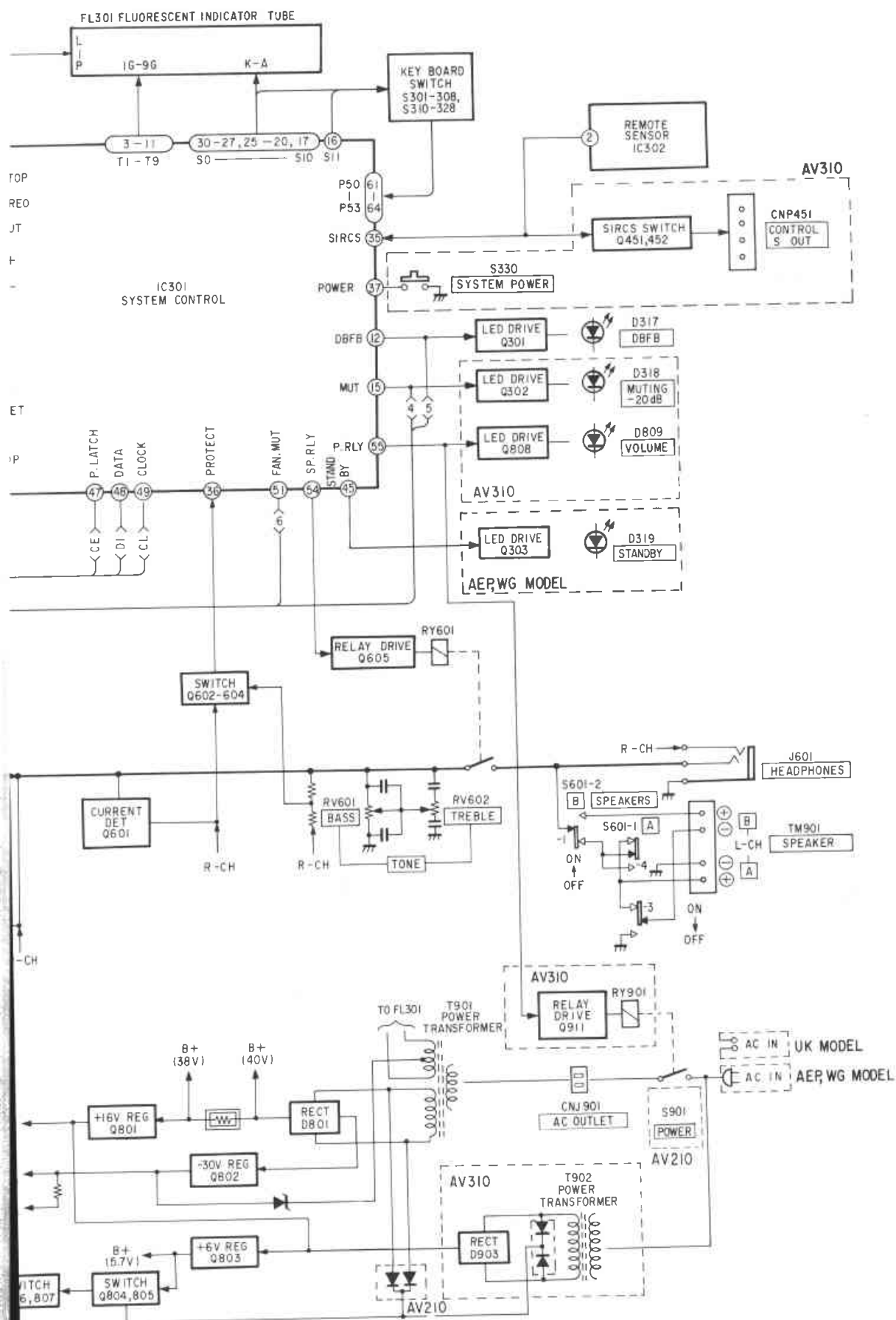
Adjustment Location : tuner board



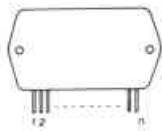
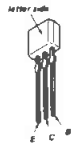
3-1. BLOCK DIAGRAM



— R-CH IS OMISSION —



3-2. SEMICONDUCTOR LEAD LAYOUTS

STK-4162MK2
STK-4182MK2BN1A3Q
2SA1175-HFE
2SC2785-HFEDTA124ES
DTC124ES

2SA988-F



2SB734-34



2SC3622A-L



2SD809



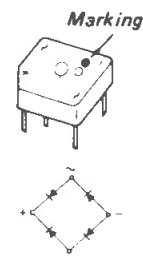
2SD1585-L

HZS6C3L
UZ-4.3BSB
UZ-6.2BSC
UZ-15BSB
UZ-16BSB
UZ-22BSCHZ4ALL
US1060M

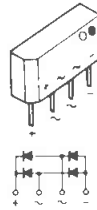
MC921



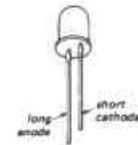
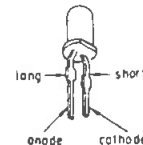
RB402



S1VB40



SEL2510C

SEL2210S-C
SEL2810A-C

● Semiconductor Location

Ref. No.	Location	Ref. No.	Location
D301	H-3	IC502	D-19
D302	H-3	IC503	F-11
D303	G-6	IC504	H-18
D304	H-3	IC601	H-23
D305	G-6		
D306	G-6	Q1	D-14
D307	G-5	Q2	D-14
D308	G-5	Q3	E-14
D309	F-5	Q4	E-14
D310	F-8	Q21	G-14
D311	H-3	Q22	G-13
D313	F-9	Q23	E-14
D314	F-8	Q24	E-14
D315	H-2	Q81	E-14
D316	G-2	Q82	E-14
D317	F-9	Q83	C-15
D318	F-11	Q84	B-15
D319	H-1	Q301	F-9
D320	H-8	Q302	F-10
D321	H-8	Q303	H-1
D322	G-8	Q305	G-3
D324	H-8	Q451	B-22
D325	H-8	Q452	B-22
D331	G-6	Q501	G-18
D332	E-7	Q502	F-18
D451	B-22	Q503	F-18
D501	H-18	Q504	F-17
D502	H-18	Q505	J-18
D503	F-17	Q551	G-18
D504	F-17	Q552	G-18
D601	E-22	Q553	E-18
D602	J-21	Q601	E-21
D603	I-21	Q602	F-21
D651	G-21	Q603	G-21
D801	D-21	Q604	G-21
D805	J-22	Q605	J-21
D806	I-20	Q651	G-22
D807	G-19	Q801	I-20
D808	G-19	Q802	G-19
D809	I-10	Q803	B-21
D810	B-21	Q804	C-21
D811	B-21	Q805	B-21
D812	C-21	Q806	C-21
D813	D-22	Q807	C-21
D903	B-24	Q808	J-19
D912	B-24	Q911	B-25
D913	B-25		
IC21	F-13		
IC81	D-15		
IC301	G-4		
IC302	G-2		
IC303	F-10		
IC501	C-17		

Note:

- : parts extracted from the component side.
- : parts mounted on the conductor side.
- : indicates side identified with part number.
- * A, * B : See Page 5 for Note on Ceramic Filter (CF1, 2 and 3) Replacement.
- WG: West Germany

3-3.

A

B

C

D

E

F

G

H

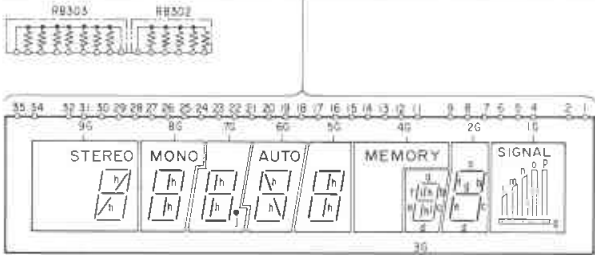
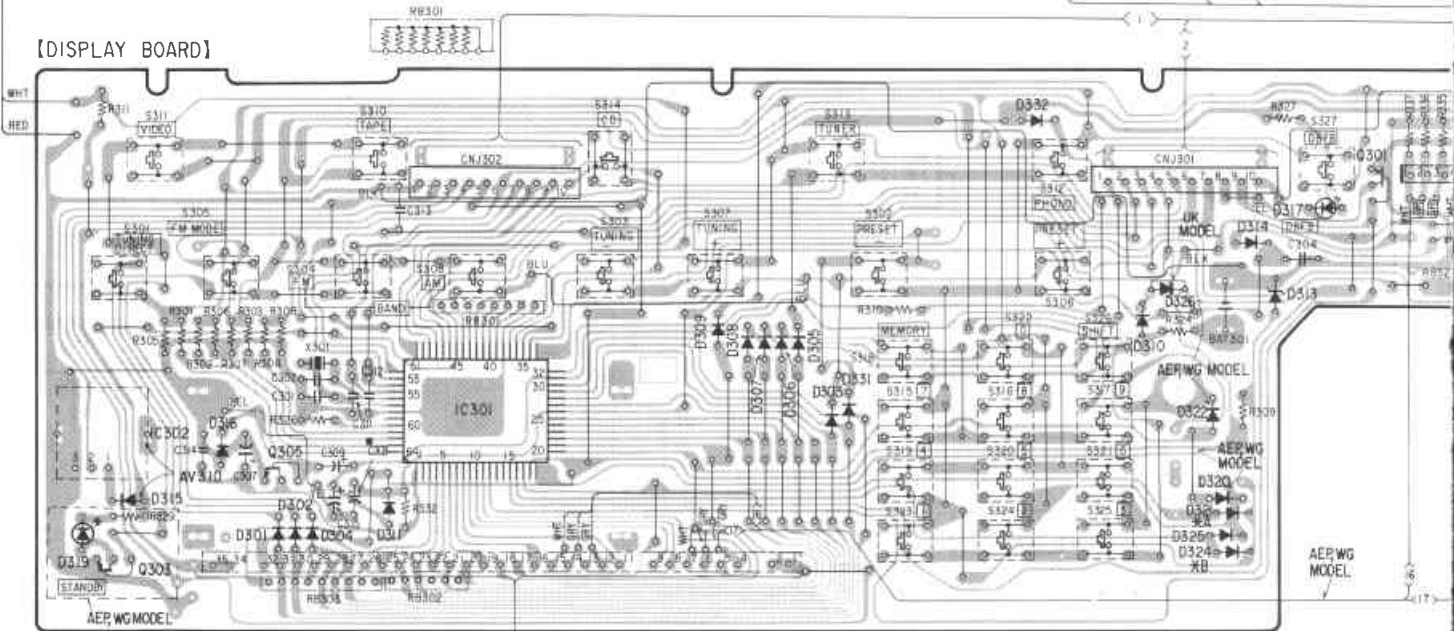
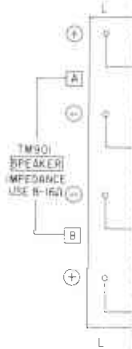
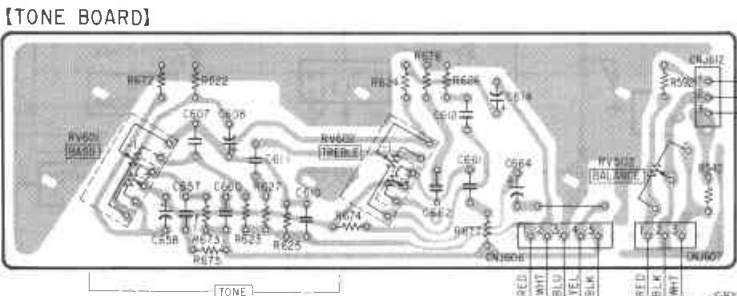
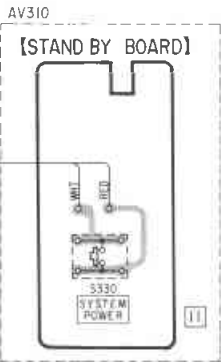
I

J

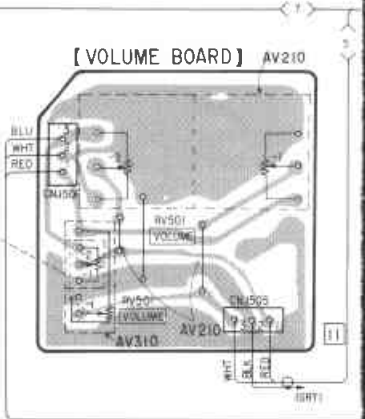
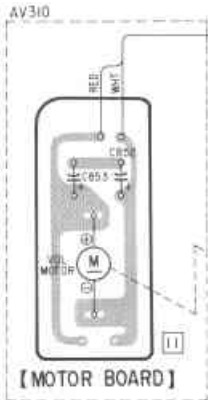
K

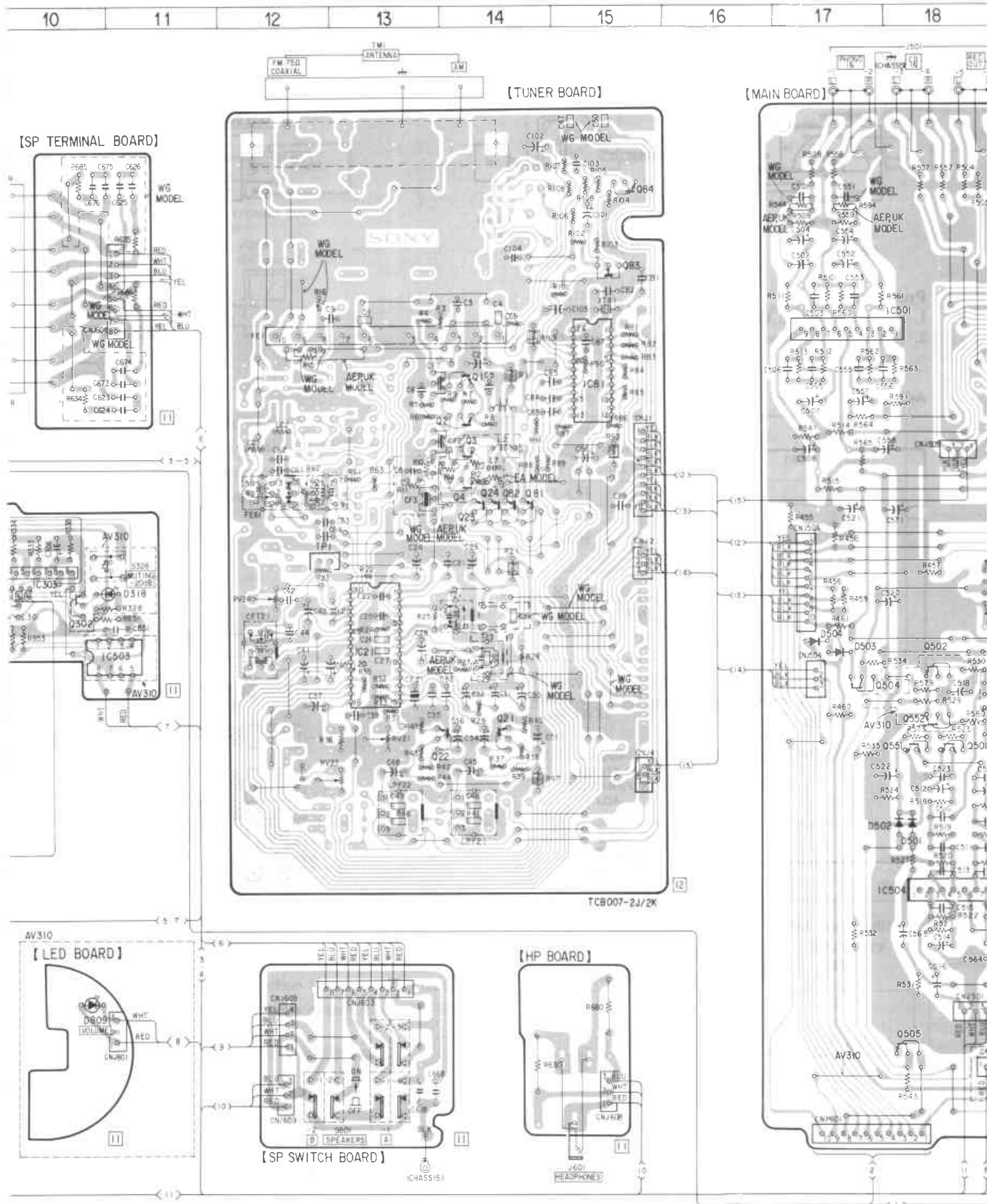
PRINTED WIRING BOARDS

1	2	3	4	5	6	7	8	9
---	---	---	---	---	---	---	---	---



FL301 FLUORESCENT INDICATOR TUBE

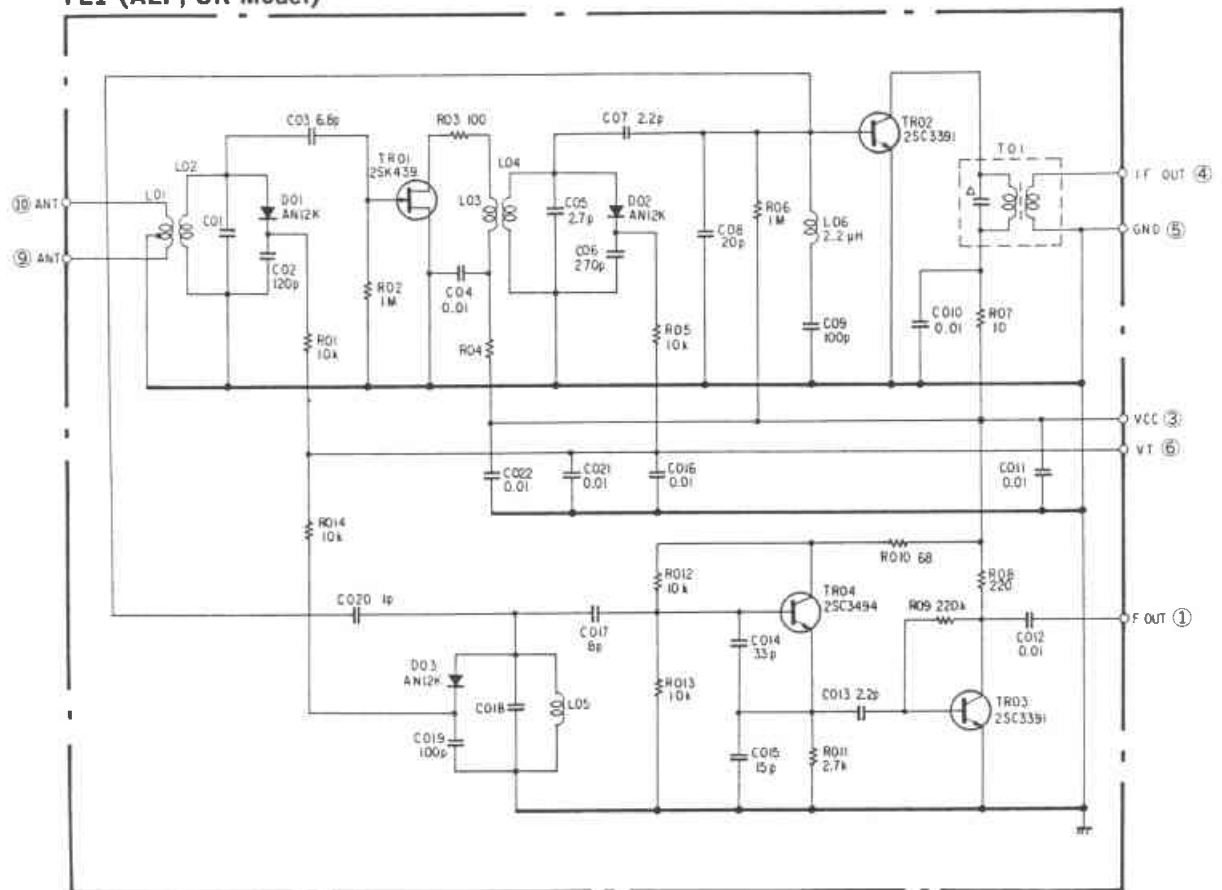




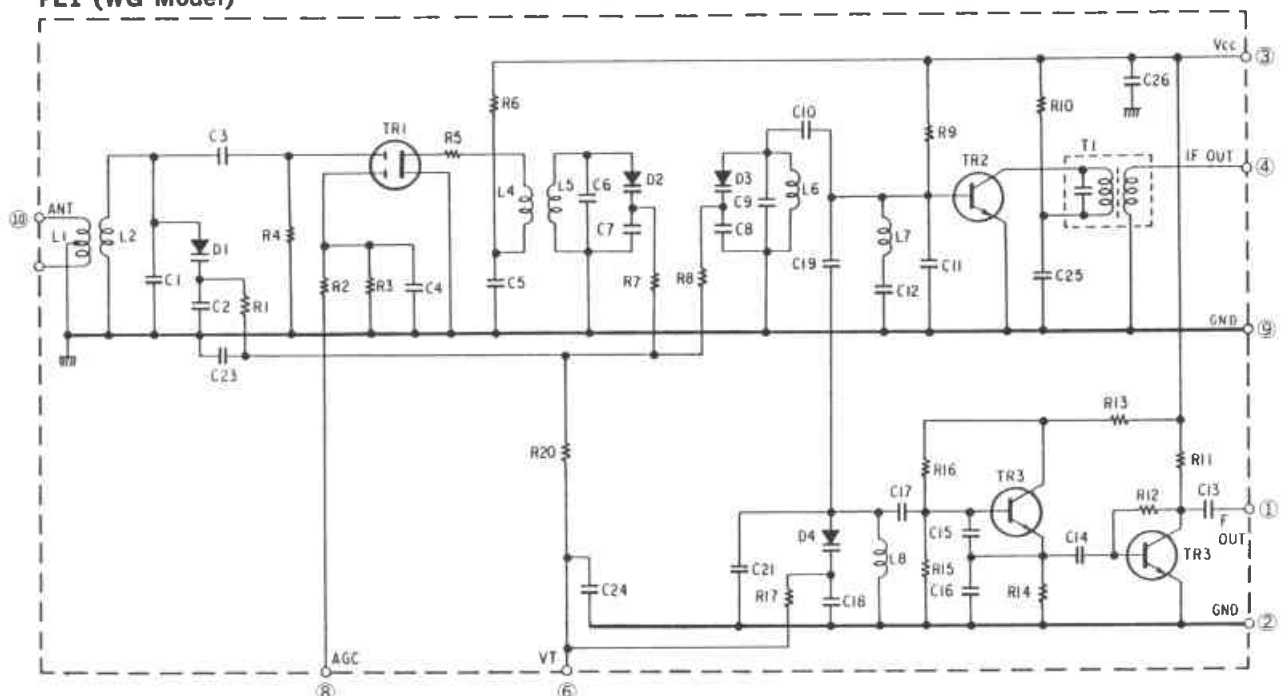


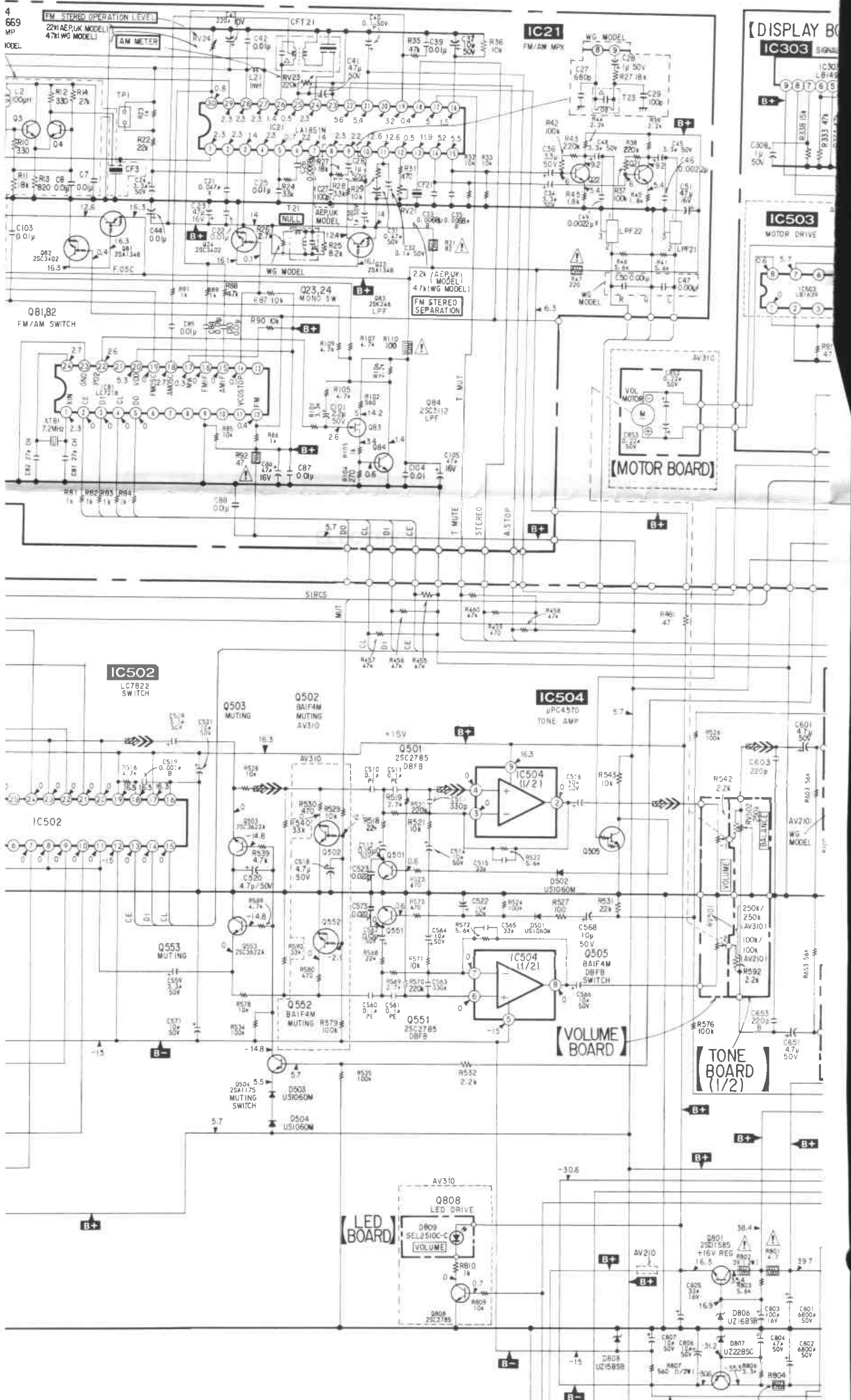
• FRONT END

FE1 (AEP, UK Model)

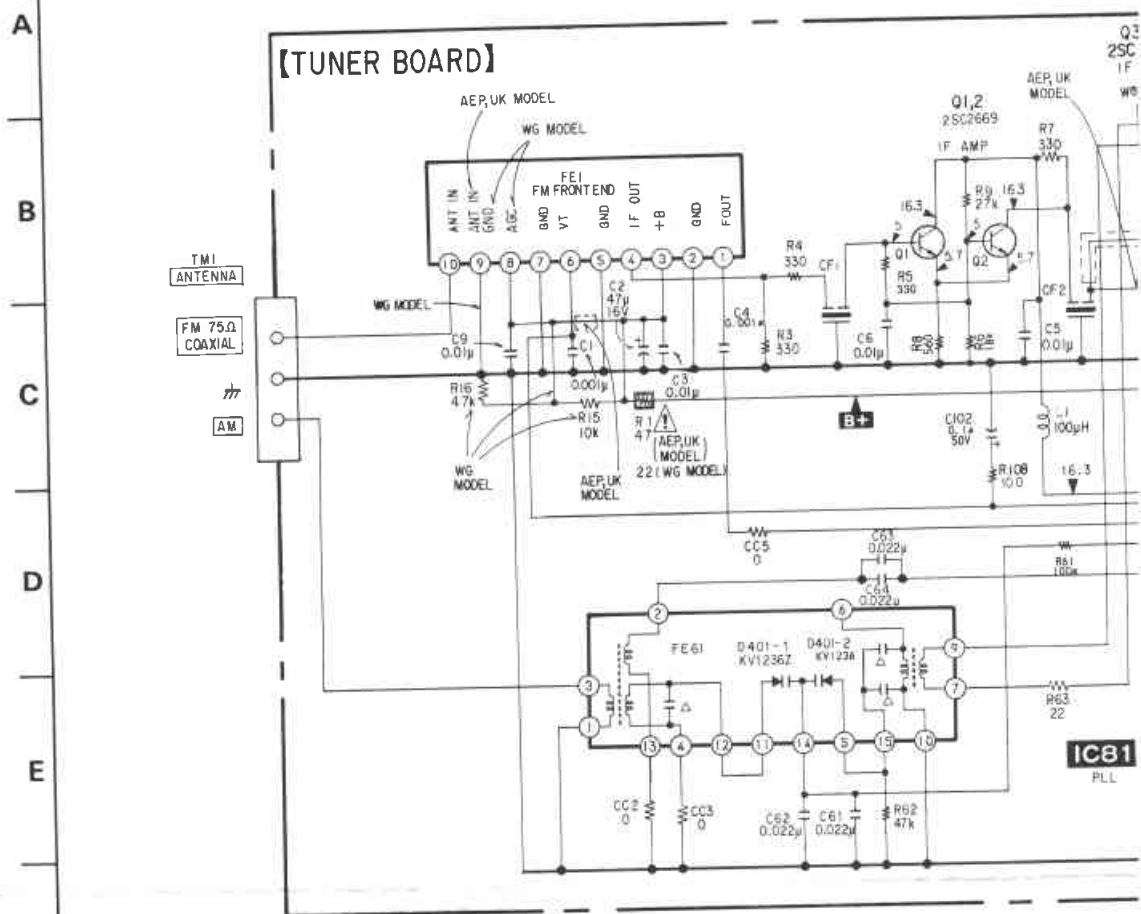


FE1 (WG Model)

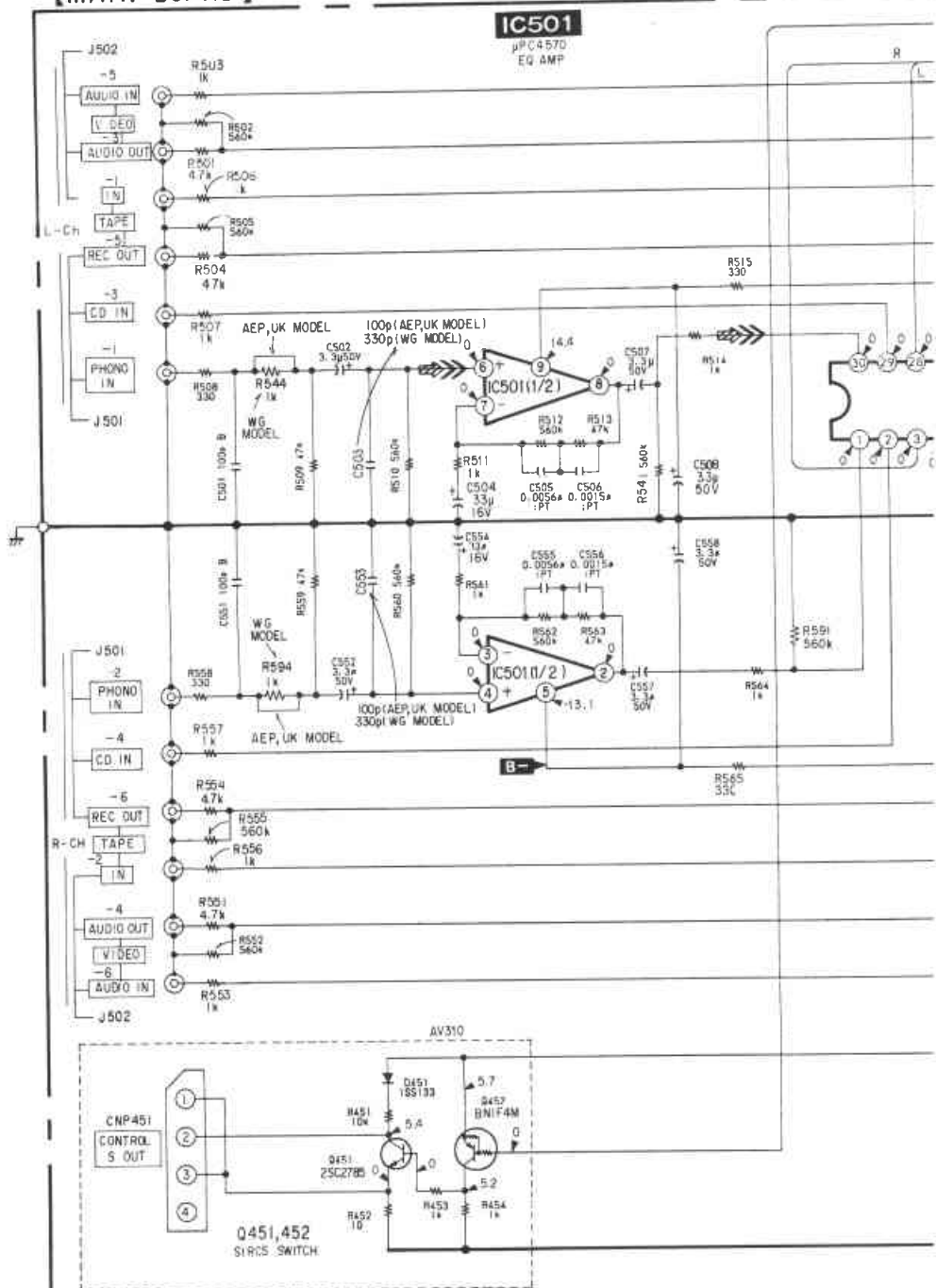




3-4. SCHEMATIC DIAGRAM



【MAIN BOARD】



SECTION 4

EXPLODED VIEWS

NOTE:

- The mechanical parts with no reference number in the exploded views are not supplied.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked "★" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

- Due to standardization, parts with part number suffix -XX and -X may be different from the parts specified in the components used on the set.
- Color Indication of Appearance Parts
Example:
(RED) ... KNOB, BALANCE (WHITE)

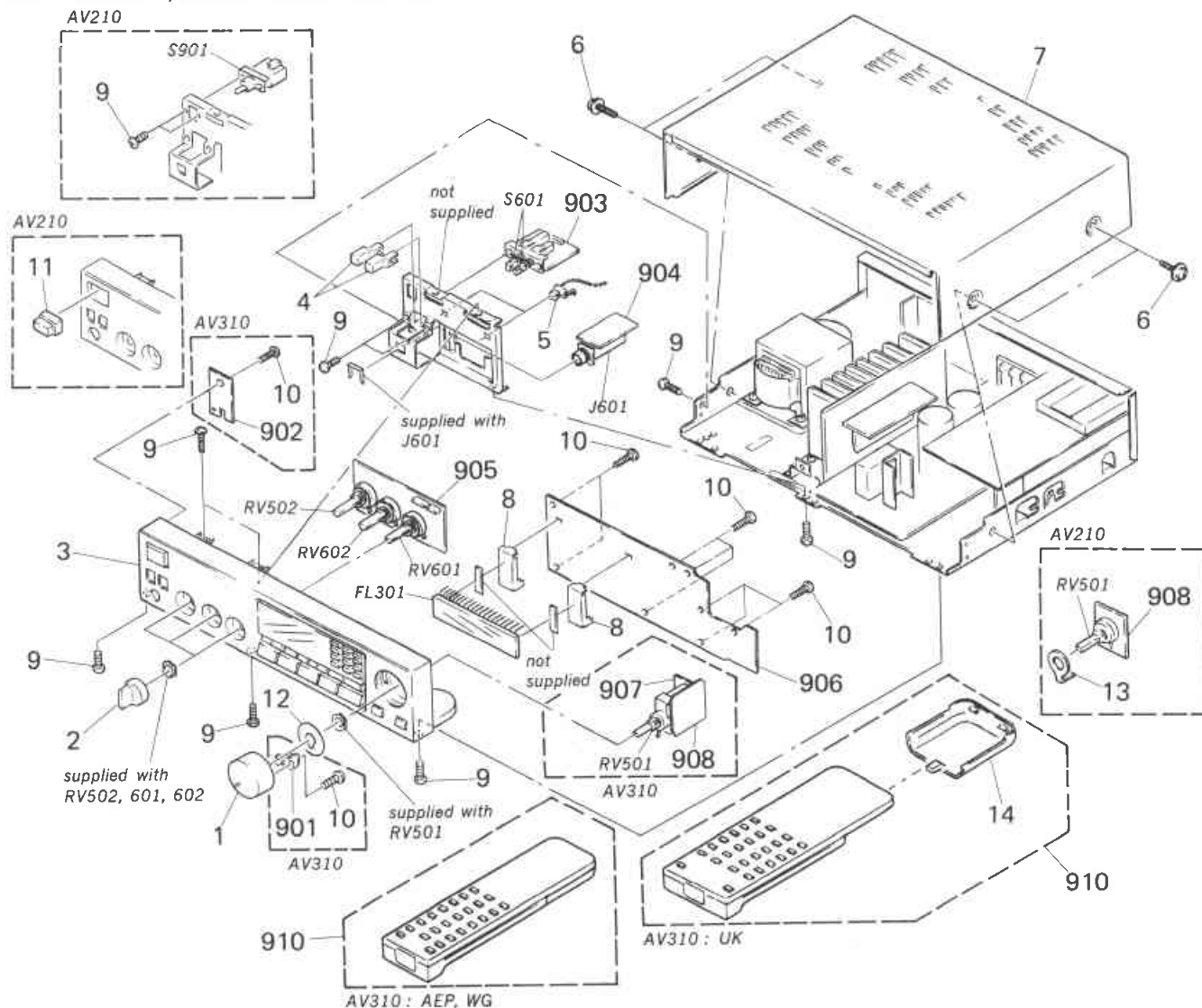
↑
Cabinet's Color

↑
Parts Color

The components identified by mark  or dotted line with mark  are critical for safety. Replace only with part number specified.

- WG: West Germany

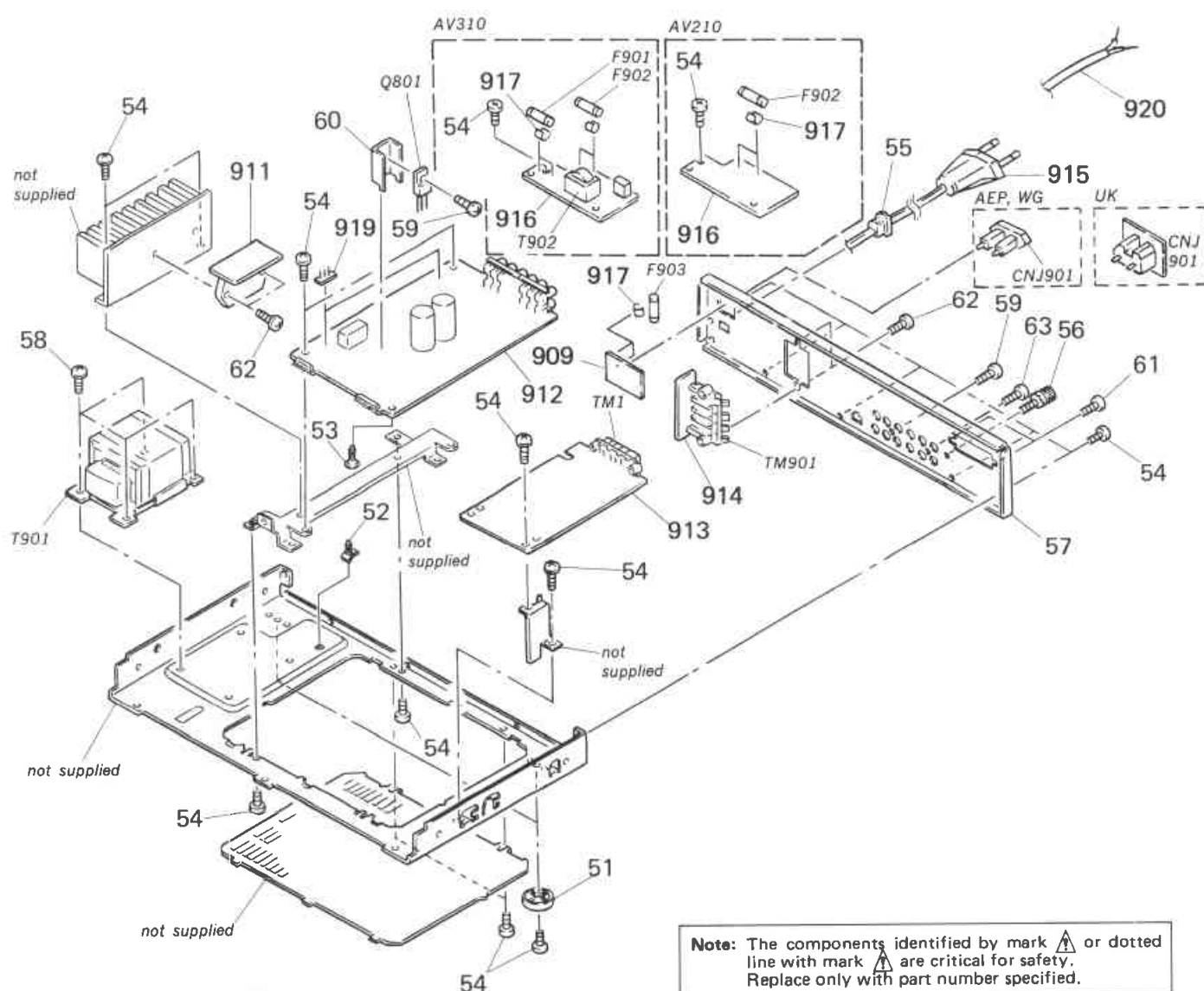
4-1. CABINET, FRONT PANEL SECTION



<u>Ref.No</u>	<u>Part No.</u>	<u>Description</u>	<u>Remark</u>
1	4-925-121-01	(AV310)... KNOB (V2)	
1	4-925-121-71	(AV210)... KNOB (V2)	
2	4-916-745-01	KNOB (DIA.21)	
3	X-4906-824-1	(AV310)... PANEL ASSY, FRONT	
3	X-4906-826-1	(AV210)... PANEL ASSY, FRONT	
4	4-906-872-01	KNOB, SQUARE	
5	3-701-748-00	CLAMP	
6	3-704-366-01	SCREW (CASE) (M3X8)	
7	4-925-066-01	CASE	
8	* 4-924-989-01	HOLDER (FL TUBE)	
9	7-682-548-04	SCREW +BVTT 3X8 (S)	
10	7-685-534-19	SCREW +BTP 2.6X8 TYPE2 N-S	
11	4-917-460-01	(AV210)... KNOB, POWER	
12	* 4-931-603-01	SPACER	
13	* 4-925-044-01	(AV210)... BRACKET (VOL GROUND)	
14	4-928-079-01	(UK)... COVER, BATTERY	
901	* 1-630-369-11	(AV310)... PC BOARD, LED	
902	* 1-630-368-11	(AV310)... PC BOARD, STAND BY	
903	* 1-630-373-11	PC BOARD, SP SWITCH	
904	* 1-630-372-11	PC BOARD, HP	

<u>Ref.No</u>	<u>Part No.</u>	<u>Description</u>	<u>Remark</u>
905	*1-630-370-11	PC BOARD, TONE	
906	*A-4333-667-A	(AV310).... MOUNTED PCB, DISPLAY	
906	*A-4333-696-A	(AV210).... MOUNTED PCB, DISPLAY	
907	*1-630-365-11	(AV310).... PC BOARD, MOTOR	
908	*1-630-364-11	PC BOARD, VOLUME	
910	1-465-096-11	(AV310 : AEP, WG).... REMOTE, COMMANDER (RM-S70)	
910	1-465-097-11	(UK).... REMOTE COMMANDER (RM-U90)	
FL301	1-519-509-11	INDICATOR TUBE, FLUORESCENT	
J601	1-507-863-51	JACK, LARGE TYPE (HEADPHONES)	
RV501	1-238-074-11	(AV210).... RES, VAR, CARBON 100K/100K (VOLUME)	
RV501	1-238-556-11	(AV310).... RES, VAR, CARBON 250K/250K (VOLUME) (INCLUDING VOL MOTOR)	
RV502	1-238-557-11	RES, VAR, CARBON 250K (BALANCE)	
RV601	1-238-558-11	RES, VAR, CARBON 100K/100K (TONE BASS)	
RV602	1-238-558-11	RES, VAR, CARBON 100K/100K (TONE TREBLE)	
S601	1-571-485-11	SWITCH, PUSH (2 KEY) (SPEAKERS A/B)	
S901	△. 1-554-685-11	(AV210).... SWITCH, PUSH (AC POWER) (1 KEY) (POWER)	

4-2. CHASSIS SECTION



Ref.No	Part No.	Description	Remark
51	X-4885-936-1	FOOT ASSY	
52	*3-346-265-11	HOLDER, PC BOARD	
53	*3-669-610-00	SPACER	
54	7-682-548-04	SCREW +BVTT 3X8 (S)	
55	*3-703-244-00	BUSHING (2104), CORD	
56	3-706-165-00	SCREW	
57	*4-925-077-31	(AV210 : AEP) ... PANEL, BACK	
57	*4-925-077-41	(AV210 : WG) ... PANEL, BACK	
57	*4-925-077-61	(AV310 : AEP) ... PANEL, BACK	
57	*4-925-077-71	(AV310 : WG) ... PANEL, BACK	
57	*4-925-077-81	(AV310 : UK) ... PANEL, BACK	
57	*4-925-077-81	(UK) ... PANEL, BACK	
58	7-682-560-04	SCREW +BVTT 4X6 (S)	
59	7-685-647-79	SCREW +BVTP 3X10 TYPE2 N-S	
60	*4-880-403-11	HEAT SINK	
61	7-685-647-79	SCREW +BTP 3X10 TYPE2 N-S	
62	7-685-650-79	SCREW +BVTP 3X16 TYPE2 N-S	
63	7-621-849-00	SCREW, TAPPING	
909	*1-631-364-11	PC BOARD, OUTLET	
911	*1-630-371-11	PC BOARD, POW IC	
912	*A-4333-662-A	(AV310 : AEP, UK) ... MOUNTED PCB, MAIN	
912	*A-4333-699-A	(AV210 : WG) ... MOUNTED PCB, MAIN	

Ref.No	Part No.	Description	Remark
912	*A-4333-705-A	(AV310 : WG) ... MOUNTED PCB, MAIN	
912	*A-4333-716-A	(AV210 : AEP) ... MOUNTED PCB, MAIN	
913	*A-4303-167-A	(AEP, UK) ... MOUNTED PCB, TUNER (TCB007-2JK)	
913	*A-4303-168-A	(WG) ... MOUNTED PCB, TUNER (TCB007-2KK)	
914	*1-630-367-11	PC BOARD, SP TERMINAL	
915	 1-555-750-00	(AEP, WG) ... CORD POWER	
916	*1-631-363-11	PC BOARD, POWER	
917	1-533-183-11	HOLDER, FUSE	
919	*1-535-116-00	TERMINAL	
920	 1-556-035-00	(UK) ... CORD, POWER	
CNJ901	 1-526-751-00	(AV310 : UK) ... OUTLET, AC	
CNJ901	 1-526-794-11	(AV310 : AEP, WG) ... OUTLET, AC	
F901	 1-532-973-11	(AV310) ... FUSE (T1.6A)	
F902	 1-532-967-11	(AV210) ... FUSE (1.25A)	
F902	 1-532-973-11	(AV310) ... FUSE (T1.6A)	
F903	 1-532-973-11	(AV310) ... FUSE (T1.6A)	
T901	 1-449-706-11	(AV310 : AEP, WG) ... TRANSFORMER, POWER	
T901	 1-449-758-11	(UK) ... TRANSFORMER, POWER	
T901	 1-449-761-11	(AV210) ... TRANSFORMER, POWER	
T902	 1-448-523-11	(AV310) ... TRANSFORMER, POWER	
TM1	*1-537-138-31	TERMINAL BOARD (ANT) (ANTENNA)	
TM901	1-536-706-00	TERMINAL BOARD (SP) (SPEAKER)	

SECTION 5 ELECTRICAL PARTS LIST

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- Items marked "★" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- If there are two or more same circuits in a set such as a stereophonic machine, only typical circuit parts may be indicated and capacitors and resistors in other same circuits may be omitted.

CAPACITORS:

MF: μ F, PF: μ P.

RESISTORS

- All resistors are in ohms.
- F: nonflammable

COILS

- MMH: mH, UH: μ H

SEMICONDUCTORS

In each case, U: μ , for example:

UA...: μ A..., UPA...: μ PA...,

UPC...: μ PC, UPD...: μ PD...

The components identified by mark  or dotted line with mark  are critical for safety. Replace only with part number specified.

• WG: West Germany

Ref.No	Part No.	Description
901	*1-630-369-11	(AV310) ... PC BOARD, LED
902	*1-630-368-11	(AV310) ... PC BOARD, STAND BY
903	*1-630-373-11	PC BOARD, SP SWITCH
904	*1-630-372-11	PC BOARD, HP
905	*1-630-370-11	PC BOARD, TONE
906	*A-4333-667-A	(AV310) ... MOUNTED PCB, DISPLAY
906	*A-4333-696-A	(AV210) ... MOUNTED PCB, DISPLAY
907	*1-630-365-11	(AV310) ... PC BOARD, MOTOR
908	*1-630-364-11	PC BOARD, VOLUME
909	*1-631-364-11	(AV310) ... PC BOARD, OUTLET
910	1-465-096-11	(AV310 : AEP, WG) ... REMOTE, COMMANDER (RM-S70)
910	1-465-097-11	(UK) ... REMOTE COMMANDER (RM-U90)
911	*1-630-371-11	PC BOARD, POW IC
912	*A-4333-662-A	(AV310 : AEP, UK) ... MOUNTED PCB, MAIN
912	*A-4333-699-A	(AV210 : WG) ... MOUNTED PCB, MAIN
912	*A-4333-716-A	(AV210 : AEP) ... MOUNTED PCB, MAIN
912	*A-4333-705-A	(AV310 : WG) ... MOUNTED PCB, MAIN
913	*A-4303-167-A	(AEP, UK) ... MOUNTED PCB, TUNER (TCB007-2JK)
913	*A-4303-168-A	(WG) ... MOUNTED PCB, TUNER (TCB007-2KK)
914	*1-630-367-11	PC BOARD, SP TERMINAL
915	 1-555-750-00	(AEP, WG) ... CORD POWER
916	*1-631-363-11	PC BOARD, POWER
917	1-533-183-11	HOLDER, FUSE
919	*1-535-116-00	TERMINAL
920	 1-556-035-00	(UK) ... CORD, POWER

BAT301 1-528-120-00 BATTERY, LITHIUM (CR-2025)

BP901 1-535-139-00 BASE POST 19MM (10MM PITCH) 2P

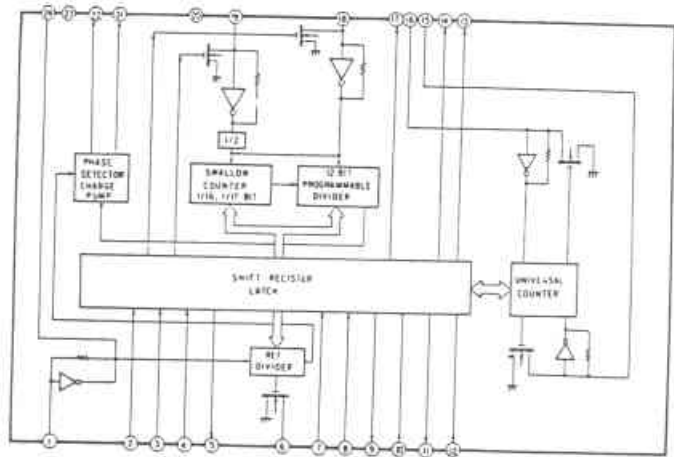
CAPACITOR

C1	1-162-294-31	CERAMIC CHIP	0.001MF	20%	25V
C2	1-124-477-11	ELECT	47MF	20%	16V
C3	1-163-059-00	CERAMIC MELF	0.01MF	20%	16V
C4	1-162-294-31	CERAMIC CHIP	0.001MF	20%	25V
C5	1-163-059-00	CERAMIC MELF	0.01MF	20%	16V
C6	1-163-059-00	CERAMIC MELF	0.01MF	20%	16V
C7	1-163-059-00	(WG) ... CERAMIC MELF	0.01MF	20%	16V
C8	1-163-059-00	(WG) ... CERAMIC MELF	0.01MF	20%	16V
C9	1-163-059-00	CERAMIC MELF	0.01MF	20%	16V
C21	1-161-021-11	CERAMIC	0.047MF	10%	25V
C22	1-163-059-00	CERAMIC MELF	0.01MF	20%	16V
C23	1-124-477-11	ELECT	47MF	20%	16V
C24	1-123-382-00	ELECT	3.3MF	20%	50V
C25	1-163-059-00	CERAMIC MELF	0.01MF	20%	16V
C26	1-163-019-00	CERAMIC CHIP	0.0068MF	20%	12V
C27	1-162-516-11	(AEP, UK) ... CERAMIC CHIP	100PF	10%	50V
C27	1-163-007-11	(WG) ... CERAMIC CHIP	680PF	20%	50V
C28	1-124-499-11	ELECT	1MF	20%	50V
C29	1-162-516-11	(WG) ... CERAMIC CHIP	100PF	10%	50V
C30	1-124-499-11	ELECT	1MF	20%	50V

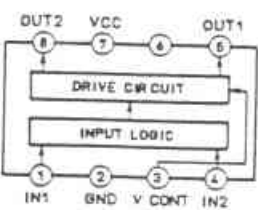
C31	1-124-902-00	ELECT	0.47MF	20%	50V
C32	1-124-463-00	ELECT	0.1MF	20%	50V
C33	1-130-481-00	MYLAR	0.0068MF	5%	50V
C34	1-123-382-00	ELECT	3.3MF	20%	50V
C35	1-130-481-00	MYLAR	0.0068MF	5%	50V
C36	1-123-382-00	ELECT	3.3MF	20%	50V
C37	1-123-875-11	ELECT	10MF	20%	50V
C39	1-163-059-00	CERAMIC MELF	0.01MF	20%	16V
C40	1-124-463-00	ELECT	0.1MF	20%	50V
C41	1-124-927-11	ELECT	4.7MF	20%	50V
C42	1-163-059-00	CERAMIC MELF	0.01MF	20%	16V
C43	1-126-176-11	ELECT	220MF	20%	10V
C44	1-163-059-00	CERAMIC MELF	0.01MF	20%	16V
C45	1-123-382-00	ELECT	3.3MF	20%	50V
C46	1-161-375-00	CERAMIC CHIP	0.0022MF	20%	25V
C47	1-162-294-31	(WG) ... CERAMIC CHIP	0.001MF	20%	25V
C48	1-123-382-00	ELECT	3.3MF	20%	50V
C49	1-161-375-00	CERAMIC CHIP	0.0022MF	20%	25V
C50	1-162-294-31	(WG) ... CERAMIC CHIP	0.001MF	20%	25V
C51	1-124-477-11	ELECT	47MF	20%	16V
C61	1-163-063-00	CERAMIC MELF	0.022MF		25V
C62	1-163-063-00	CERAMIC MELF	0.022MF		25V
C63	1-163-063-00	CERAMIC MELF	0.022MF		25V
C64	1-163-063-00	CERAMIC MELF	0.022MF		25V
C81	1-102-961-00	CERAMIC	27PF	5%	50V
C82	1-102-961-00	CERAMIC	27PF	5%	50V
C83	1-163-059-00	CERAMIC MELF	0.01MF	20%	16V
C84	1-163-059-00	CERAMIC MELF	0.01MF	20%	16V
C85	1-163-059-00	CERAMIC MELF	0.01MF	20%	16V
C86	1-124-477-11	ELECT	47MF	20%	16V
C87	1-163-059-00	CERAMIC MELF	0.01MF	20%	16V
C88	1-163-059-00	CERAMIC MELF	0.01MF	20%	16V
C101	1-124-925-11	ELECT	2.2MF	20%	50V
C102	1-124-463-00	ELECT	0.1MF	20%	50V
C103	1-163-059-00	CERAMIC MELF	0.01MF	20%	16V
C104	1-163-059-00	CERAMIC MELF	0.01MF	20%	16V
C105	1-124-477-11	ELECT	47MF	20%	16V
C301	1-162-211-31	CERAMIC	33PF	5%	50V
C302	1-162-211-31	CERAMIC	33PF	5%	50V
C303	1-124-499-11	ELECT	1MF	20%	50V
C304	1-161-055-00	CERAMIC	0.022MF	10%	25V
C306	1-161-055-00	CERAMIC	0.022MF	10%	25V
C307	1-124-499-11	ELECT	1MF	20%	50V
C308	1-124-499-11	(AEP, WG) ... ELECT	1MF	20%	50V
C309	1-124-465-00	ELECT	0.47MF	20%	50V
C311	1-161-055-00	CERAMIC	0.022MF	10%	25V
C312	1-161-055-00	CERAMIC	0.022MF	10%	25V
C313	1-161-055-00	CERAMIC	0.022MF	10%	25V
C314	1-161-055-00	CERAMIC	0.022MF	10%	25V
C315	1-161-055-00	CERAMIC	0.022MF	10%	25V
C501	1-102-106-00	CERAMIC	100PF	10%	50V
C502	1-123-382-00	ELECT	3.3MF	20%	50V

• IC Block Diagrams

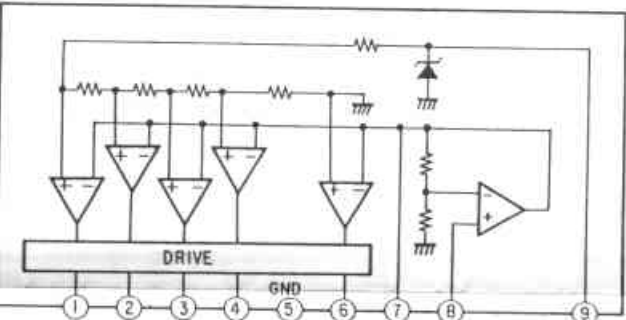
IC81 LC7218



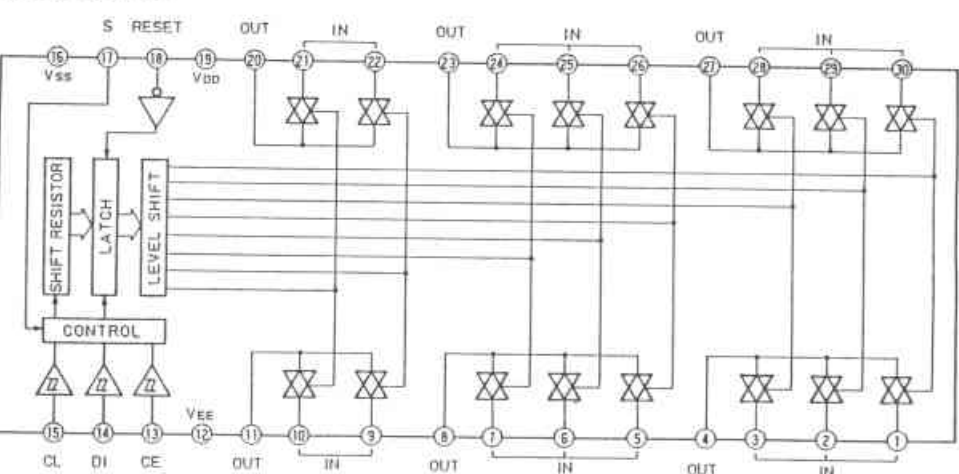
IC503 LB1639



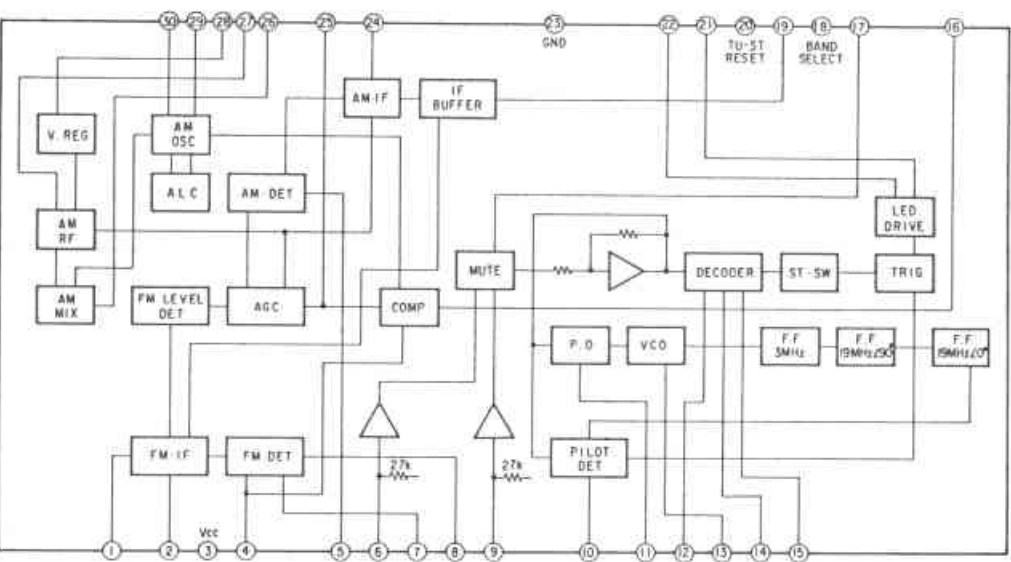
IC303 LB1493



IC502 LC7822



IC21 LA1851N



- Note:**
- * A, * B : See Page 5 for Note on Ceramic Filter (CF1, 2 and 3) Replacement.
 - All capacitors are in μF unless otherwise noted, pF, μF 50WV or less are not indicated except for electrolytics and tantalums.
 - All resistors are in Ω and $\frac{1}{4}\text{W}$ or less unless otherwise specified.
 - $\triangle$: internal component.



Ref.No	Part No.	Description			
C503	1-102-106-00	(AEP, UK)... CERAMIC	100PF	10%	50V
C503	1-102-112-00	(WG)... CERAMIC	330PF	10%	50V
C504	1-124-963-11	ELECT	33MF	20%	16V
C505	1-130-480-00	MYLAR	0.0056MF	5%	50V
C506	1-130-473-00	MYLAR	0.0015MF	5%	50V
C507	1-123-382-00	ELECT	3.3MF	20%	50V
C508	1-123-382-00	ELECT	3.3MF	20%	50V
C509	1-123-382-00	ELECT	3.3MF	20%	50V
C510	1-130-495-00	MYLAR	0.1MF	5%	50V
C511	1-130-495-00	MYLAR	0.1MF	5%	50V
C512	1-124-250-00	ELECT	0.15MF	20%	50V
C513	1-102-112-00	CERAMIC	330PF	10%	50V
C514	1-123-875-11	ELECT	10MF	20%	50V
C515	1-162-211-31	CERAMIC	33PF	5%	50V
C516	1-123-875-11	ELECT	10MF	20%	50V
C518	1-124-927-11	(AV310)... ELECT	4.7MF	20%	50V
C519	1-162-294-31	CERAMIC	0.001MF	10%	50V
C520	1-124-927-11	ELECT	4.7MF	20%	50V
C521	1-123-875-11	ELECT	10MF	20%	50V
C522	1-123-875-11	ELECT	10MF	20%	50V
C523	1-161-055-00	CERAMIC	0.022MF	10%	50V
C551	1-102-106-00	CERAMIC	100PF	10%	50V
C552	1-123-382-00	ELECT	3.3MF	20%	50V
C553	1-102-106-00	(AEP, UK)... CERAMIC	100PF	10%	50V
C553	1-102-112-00	(WG)... CERAMIC	330PF	10%	50V
C554	1-124-963-11	ELECT	33MF	20%	16V
C555	1-130-480-00	MYLAR	0.0056MF	5%	50V
C556	1-130-473-00	MYLAR	0.0015MF	5%	50V
C557	1-123-382-00	ELECT	3.3MF	20%	50V
C558	1-123-382-00	ELECT	3.3MF	20%	50V
C559	1-123-382-00	ELECT	3.3MF	20%	50V
C560	1-130-495-00	MYLAR	0.1MF	5%	50V
C561	1-130-495-00	MYLAR	0.1MF	5%	50V
C562	1-124-250-00	ELECT	0.15MF	20%	50V
C563	1-102-112-00	CERAMIC	330PF	10%	50V
C564	1-123-875-11	ELECT	10MF	20%	50V
C565	1-162-211-31	CERAMIC	33PF	5%	50V
C566	1-123-875-11	ELECT	10MF	20%	50V
C568	1-123-875-11	ELECT	10MF	20%	50V
C571	1-123-875-11	ELECT	10MF	20%	50V
C573	1-161-055-00	CERAMIC	0.022MF	10%	50V
C601	1-124-927-11	ELECT	4.7MF	20%	50V
C602	1-102-112-00	CERAMIC	330PF	10%	50V
C603	1-162-286-31	CERAMIC	220PF	10%	50V
C604	1-124-122-11	ELECT	100MF	20%	50V
C605	1-126-233-11	ELECT	22MF	20%	25V
C606	1-126-101-11	ELECT	100MF	20%	16V
C607	1-130-489-00	MYLAR	0.033MF	5%	50V
C608	1-124-464-11	ELECT	0.22MF	20%	50V
C610	1-102-108-00	CERAMIC	150PF	10%	50V
C611	1-130-477-00	MYLAR	0.0033MF	5%	50V
C612	1-130-487-00	MYLAR	0.022MF	5%	50V
C613	1-136-164-00	MYLAR	0.082MF	10%	50V
C614	1-124-261-00	ELECT	10MF	20%	50V
C615	1-130-495-00	MYLAR	0.1MF	5%	50V
C616	1-123-875-11	ELECT	10MF	20%	50V
C617	1-124-472-11	ELECT	470MF	20%	6.3V
C618	1-161-055-00	CERAMIC	0.022MF	10%	25V
C619	1-136-164-00	MYLAR	0.082MF	10%	50V
C620	1-123-875-11	ELECT	10MF	20%	50V
C623	1-161-051-00	(WG)... CERAMIC	0.01MF	10%	50V
C624	1-161-051-00	(WG)... CERAMIC	0.01MF	10%	50V
C625	1-161-051-00	(WG)... CERAMIC	0.01MF	10%	50V
C626	1-161-051-00	(WG)... CERAMIC	0.01MF	10%	50V

Ref.No	Part No.	Description			
C635	1-136-161-00	(WG)... ELECT	0.047MF	10%	50V
C636A	1-136-161-00	(WG)... ELECT	0.047MF	10%	50V
C636B	1-102-106-00	(AV210 : WG)... CERAMIC	100PF	10%	50V
C637	1-130-487-00	(WG)... MYLER	0.022MF	5%	50V
C638	1-102-110-00	(WG)... CERAMIC	220PF	10%	50V
C651	1-124-927-11	ELECT	4.7MF	20%	50V
C652	1-102-112-00	CERAMIC	330PF	10%	50V
C653	1-162-286-31	CERAMIC	220PF	10%	50V
C654	1-124-122-11	ELECT	100MF	20%	50V
C655	1-126-233-11	ELECT	22MF	20%	25V
C656	1-126-101-11	ELECT	100MF	20%	16V
C657	1-130-489-00	MAYLAR	0.033MF	5%	50V
C658	1-124-464-11	ELECT	0.22MF	20%	50V
C660	1-102-108-00	CERAMIC	150PF	10%	50V
C661	1-130-477-00	MAYLAR	0.0033MF	5%	50V
C662	1-130-487-00	MAYLAR	0.022MF	5%	50V
C663	1-136-164-00	MAYLAR	0.082MF	10%	50V
C664	1-124-261-00	ELECT	10MF	20%	50V
C665	1-130-495-00	MAYLAR	0.1MF	5%	50V
C668	1-161-055-00	CERAMIC	0.022MF	10%	25V
C669	1-136-164-00	MAYLAR	0.082MF	10%	50V
C673	1-161-051-00	(WG)... CERAMIC	0.01MF	10%	50V
C674	1-161-051-00	(WG)... CERAMIC	0.01MF	10%	50V
C675	1-161-051-00	(WG)... CERAMIC	0.01MF	10%	50V
C676	1-161-051-00	(WG)... CERAMIC	0.01MF	10%	50V
C685	1-136-161-00	(WG)... ELECT	0.047MF	10%	50V
C686	1-136-161-00	(WG)... ELECT	0.082MF	10%	50V
C801	1-126-307-11	ELECT	6800MF	20%	50V
C802	1-126-307-11	ELECT	6800MF	20%	50V
C803	1-126-101-11	ELECT	100MF	20%	16V
C804	1-124-910-11	ELECT	47MF	20%	50V
C805	1-124-963-11	ELECT	33MF	20%	16V
C806	1-123-875-11	ELECT	10MF	20%	50V
C807	1-123-875-11	ELECT	10MF	20%	50V
C808	1-124-927-11	ELECT	4.7MF	20%	50V
C810	1-124-499-11	ELECT	1MF	20%	50V
C811	1-124-477-11	ELECT	47MF	20%	16V
C812	1-123-875-11	ELECT	10MF	20%	50V
C813	1-124-464-11	ELECT	0.22MF	20%	50V
C816	1-130-777-51	FILM	0.1MF	5%	100V
C817	1-130-777-51	FILM	0.1MF	5%	100V
C818	1-161-055-00	CERAMIC	0.022MF	10%	50V
C819	1-161-055-00	CERAMIC	0.022MF	10%	50V
C851	1-123-875-11	ELECT	10MF	20%	50V
C852	1-124-464-11	(AV310)... ELECT	0.22MF	20%	50V
C853	1-124-464-11	(AV310)... ELECT	0.22MF	20%	50V
C901	1-161-744-00	CERAMIC	0.01MF		400V
C912	1-124-557-11	(AV310)... ELECT	1000MF	20%	25V
CC2	1-249-366-11	CARBON MELF	0	5%	1/5W
CC3	1-249-366-11	CARBON MELF	0	5%	1/5W
CC5	1-249-366-11	CARBON MELF	0	5%	1/5W
CF1	1-567-389-11	FILTER, CERAMIC			
CF2	1-567-389-11	FILTER, CERAMIC			
CF3	1-567-389-11	(WG)... FILTER, CERAMIC			
CF21	1-577-075-11	OSCILLATOR, CERAMIC (19KHz)			
CFT21	1-404-853-11	TRANSFORMER, IF (CERAMIC FILTER)			
CNJ1	*1-568-276-11	SOCKET, CONNECTOR 10P			
CNJ2	1-568-269-11	SOCKET, CONNECTOR 3P			
CNJ4	1-568-307-11	SOCKET, CONNECTOR 3P			
CNJ501	*1-562-327-00	SOCKET, CONNECTOR 3P			
CNJ502	*1-564-777-11	PLUG, CONNECTOR (2.5MM) 2P			
CNJ503	1-568-285-11	SOCKET, CONNECTOR 10P			
CNJ504	1-568-278-11	SOCKET, CONNECTOR 3P			

Note: The components identified by mark  or dotted line with mark  are critical for safety. Replace only with part number specified.

Ref.No	Part No.	Description		
CNJ505	*1-562-327-00	SOCKET, CONNECTOR 3P		
CNJ506	*1-562-327-00	SOCKET, CONNECTOR 3P		
CNJ601	*1-506-708-11	PLUG, CONNECTOR (2.5MM) 5P		
CNJ602	*1-506-707-11	PLUG, CONNECTOR (2.5MM) 3P		
CNJ603	*1-562-564-11	SOCKET, CONNECTOR 8P		
CNJ604	*1-562-564-11	SOCKET, CONNECTOR 8P		
CNJ605	*1-562-249-00	SOCKET, CONNECTOR 4P		
CNJ606	*1-562-250-00	SOCKET, CONNECTOR 5P		
CNJ607	*1-562-327-00	SOCKET, CONNECTOR 3P		
CNJ608	*1-562-327-00	SOCKET, CONNECTOR 3P		
CNJ609	*1-562-327-00	SOCKET, CONNECTOR 3P		
CNJ610	*1-562-250-00	SOCKET, CONNECTOR 5P		
CNJ611	*1-562-250-00	SOCKET, CONNECTOR 5P		
CNJ612	*1-506-707-11	PLUG, CONNECTOR (2.5MM) 3P		
CNJ801	*1-562-327-00	SOCKET, CONNECTOR 3P		
CNJ901	△ 1-526-751-00	(AV310 : UK) ... OUTLET, AC		
CNJ901	△ 1-526-794-11	(AV310 : AEP, WG) ... OUTLET, AC		
CNJ902	*1-562-249-00	SOCKET, CONNECTOR 4P		
CNP451	*1-564-778-11	(AV310) ... PLUG, CONNECTOR (2.5MM) 4P (CONTROL S OUT)		
CNP601	1-565-419-11	PIN, CONNECTOR 10P		
CNP602	1-565-419-11	PIN, CONNECTOR 10P		
CNP801	1-566-213-11	(AV310) ... PIN, CONNECTOR 4P		
CP801	1-102-394-11	CERAMIC 0.01MF	250VX2	
CP911	1-102-394-11	(AV310) ... CERAMIC 0.01MF	250VX2	
D301	8-719-000-26	DIODE US1060M		
D302	8-719-000-26	DIODE US1060M		
D303	8-719-000-26	DIODE US1060M		
D304	8-719-000-26	DIODE US1060M		
D305	8-719-000-26	DIODE US1060M		
D306	8-719-000-26	DIODE US1060M		
D307	8-719-000-26	DIODE US1060M		
D308	8-719-000-26	DIODE US1060M		
D309	8-719-000-26	DIODE US1060M		
D310	8-719-000-26	DIODE US1060M		
D311	8-719-000-26	DIODE US1060M		
D313	8-719-914-11	DIODE HZ4ALL		
D314	8-719-000-26	DIODE US1060M		
D315	8-719-000-26	(AV310) ... DIODE US1060M		
D316	8-719-000-26	DIODE US1060M		
D317	8-719-301-52	DIODE SEL2810A-C		
D318	8-719-301-52	(AV310) ... DIODE SEL2810A-C		
D319	8-719-301-38	(AV310) ... DIODE SEL2210S-C		
D320	8-719-000-26	(AEP, WG) ... DIODE US1060M		
D321	8-719-000-26	DIODE US1060M		
D322	8-719-000-26	(AEP, WG) ... DIODE US1060M		
D324	8-719-000-26	DIODE US1060M		
D325	8-719-000-26	DIODE US1060M		
D331	8-719-000-26	DIODE US1060M		
D332	8-719-000-26	DIODE US1060M		
D451	8-719-000-26	(AV310) ... DIODE US1060M		
D501	8-719-000-26	DIODE US1060M		
D502	8-719-000-26	DIODE US1060M		
D503	8-719-000-26	DIODE US1060M		
D504	8-719-000-26	DIODE US1060M		
D601	8-719-000-26	DIODE US1060M		
D602	8-719-000-26	DIODE US1060M		
D603	8-719-000-26	DIODE US1060M		
D651	8-719-000-26	DIODE US1060M		
D801	8-719-300-57	DIODE RB402		
D805	8-719-010-29	DIODE UZ-4.3BSB		
D806	8-719-010-86	DIODE UZ-16BSB		
D807	8-719-010-99	DIODE UZ-22BSB		
D808	8-719-010-82	DIODE UZ-15BSB		
D809	8-719-303-00	(AV310) ... DIODE SEL2510C		

Ref.No	Part No.	Description		
D810	8-719-010-47	DIODE UZ-6.2BSB		
D811	8-719-933-41	DIODE HZ56C3L		
D812	8-719-914-11	DIODE HZ4ALL		
D813	8-719-000-06	(AV210) ... DIODE MC921		
D903	8-719-511-40	(AV310) ... DIODE S1VB40		
D912	8-719-000-06	(AV310) ... DIODE MC921		
D913	8-719-000-26	(AV310) ... DIODE US1060M		
F901	△ 1-532-973-11	(AV310) ... FUSE (T1.6A)		
F902	△ 1-532-967-11	(AV210) ... FUSE (1.25A)		
F902	△ 1-532-973-11	(AV310) ... FUSE (T1.6A)		
F903	△ 1-532-973-11	(AV310) ... FUSE (T1.6A)		
FE1	1-463-857-11	(WG) ... FRONT END, FM		
FE1	1-463-862-21	(AEP, UK) ... FRONT END, FM		
FE61	1-236-461-11	ENCAPSULATED COMPONENT (MW BLOCK)		
FL301	1-519-509-11	INDICATOR TUBE, FLUORESCENT		
IC21	8-759-821-45	IC LA1851N		
IC81	8-759-820-91	IC LC7218		
IC301	8-759-144-64	IC UPD75206G-550-1B		
IC302	8-749-920-59	(AV310) ... IC AIQH3020S		
IC303	8-759-800-95	IC LB1493		
IC501	8-759-112-93	IC UPC4570HA-1		
IC502	8-759-805-14	IC LC7822		
IC503	8-759-820-62	(AV310) ... IC LB1639		
IC504	8-759-112-93	IC UPC4570HA-1		
IC601	8-749-900-24	(AV210) ... IC STK-4162MK2		
IC601	8-749-900-34	(AV310) ... IC STK-4182MK2		
J501	1-565-320-11	JACK, PIN 6P (PHONO IN/CD IN/TAPE REC OUT)		
J502	1-565-320-11	JACK, PIN 6P (TAPE IN/VIDEO AUDIO OUT/ AUDIO IN)		
J601	1-507-863-51	JACK, LARGE TYPE (HEADPHONES)		
L1	1-410-521-11	MICRO INDUCTOR 100UH		
L2	1-410-521-11	(WG) ... MICRO INDUCTOR 100UH		
L21	1-410-171-11	MICRO INDUCTOR 1MMH		
L301	1-410-521-11	INDUCTOR 100UH		
L601	*1-420-872-00	COIL, AIR CORE		
L651	*1-420-872-00	COIL, AIR CORE		
LPF21	1-235-164-00	FILTER, LOW PASS		
LPF22	1-235-164-00	FILTER, LOW PASS		
Q1	8-729-266-93	TRANSISTOR 2SC2669		
Q2	8-729-266-93	TRANSISTOR 2SC2669		
Q3	8-729-266-93	(WG) ... TRANSISTOR 2SC2669		
Q4	8-729-266-93	(WG) ... TRANSISTOR 2SC2669		
Q21	8-729-119-78	TRANSISTOR 2SC2785-HFE		
Q22	8-729-119-78	TRANSISTOR 2SC2785-HFE		
Q23	8-729-806-10	TRANSISTOR 2SA1348		
Q24	8-729-900-80	TRANSISTOR DTC114ES		
Q81	8-729-806-10	TRANSISTOR 2SA1348		
Q82	8-729-900-80	TRANSISTOR DTC114ES		
Q83	8-729-202-67	TRANSISTOR 2SK246-GR3		
Q84	8-729-201-84	TRANSISTOR 2SC3112-B		
Q301	8-729-900-36	TRANSISTOR DTC124ES		
Q302	8-729-900-36	(AV310) ... TRANSISTOR DTC124ES		
Q303	8-729-900-36	(AV310) ... TRANSISTOR DTC124ES		
Q305	8-729-900-36	TRANSISTOR DTC124ES		
Q451	8-729-119-78	TRANSISTOR 2SC2785-HFE		
Q452	8-729-900-63	(AV310) ... TRANSISTOR DTA124ES		
Q501	8-729-119-78	TRANSISTOR 2SC2785-HFE		
Q502	8-729-900-36	(AV310) ... TRANSISTOR DTC124ES		
Q503	8-729-107-98	TRANSISTOR 2SC3622A-L		
Q504	8-729-119-76	TRANSISTOR 2SA1175-HFE		
Q505	8-729-900-36	TRANSISTOR DTC124ES		
Q551	8-729-119-78	TRANSISTOR 2SC2785-HFE		

Note: The components identified by mark △ or dotted line with mark △ are critical for safety. Replace only with part number specified.

Ref.No	Part No.	Description
Q552	8-729-900-36	(AV310) ... TRANSISTOR DTC124ES
Q553	8-729-107-98	TRANSISTOR 2SC3622A-L
Q601	8-729-108-14	TRANSISTOR 2SA988-F
Q602	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q603	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q604	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q605	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q651	8-729-108-14	TRANSISTOR 2SA988-F
Q801	8-729-107-25	TRANSISTOR 2SD1585-L
Q802	8-729-140-99	TRANSISTOR 2SB734-34
Q803	8-729-180-92	TRANSISTOR 2SD809
Q804	8-729-115-22	TRANSISTOR BN1A3Q
Q805	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q806	8-729-119-76	TRANSISTOR 2SA1175-HFE
Q807	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q808	8-729-119-78	(AV310) ... TRANSISTOR 2SC2785-HFE
Q911	8-729-119-78	(AV310) ... TRANSISTOR 2SC2785-HFE

RESISTOR

R1	△ 1-249-401-11	(AEP, UK) ... CARBON (SMALL) 47	5%	1/4W	F
R1	△ 1-249-397-11	(WG) ... CARBON (SMALL) 22	5%	1/4W	F
R3	1-249-329-11	CARBON MELF 330	5%	1/8W	
R4	1-249-329-11	CARBON MELF 330	5%	1/8W	
R5	1-249-329-11	CARBON MELF 330	5%	1/8W	
R6	1-249-350-11	CARBON MELF 18K	5%	1/8W	
R7	1-249-329-11	CARBON MELF 330	5%	1/8W	
R8	1-249-332-11	CARBON MELF 560	5%	1/8W	
R9	1-249-352-11	CARBON MELF 27K	5%	1/8W	
R10	1-249-329-11	(WG) ... CARBON MELF 330	5%	1/8W	
R11	1-249-350-11	(WG) ... CARBON MELF 18K	5%	1/8W	
R12	1-249-329-11	(WG) ... CARBON MELF 330	5%	1/8W	
R13	1-249-334-11	(WG) ... CARBON MELF 820	5%	1/8W	
R14	1-249-352-11	(WG) ... CARBON MELF 27K	5%	1/8W	
R15	1-249-347-11	(WG) ... CARBON MELF 10K	5%	1/8W	
R16	1-249-343-11	(WG) ... CARBON MELF 4.7K	5%	1/8W	
R21	△ 1-249-404-00	CARBON (SMALL) 82	5%	1/4W	F
R22	1-249-433-11	CARBON (SMALL) 22K	5%	1/4W	
R23	1-249-335-11	CARBON MELF 1K	5%	1/8W	
R24	1-249-353-11	CARBON MELF 33K	5%	1/8W	
R25	1-249-346-11	CARBON 8.2K	5%	1/8W	
R26	1-249-340-11	(WG) ... CARBON MELF 2.7K	5%	1/8W	
R27	1-249-432-11	CARBON (SMALL) 18K	5%	1/4W	
R28	1-249-423-11	CARBON (SMALL) 3.3K	5%	1/4W	
R29	1-249-347-11	CARBON MELF 10K	5%	1/8W	
R31	1-249-331-11	CARBON MELF 470	5%	1/8W	
R32	1-249-347-11	CARBON MELF 10K	5%	1/8W	
R33	1-249-347-11	CARBON MELF 10K	5%	1/8W	
R35	1-249-355-11	CARBON MELF 47K	5%	1/8W	
R36	1-249-429-11	CARBON (SMALL) 10K	5%	1/4W	
R37	1-249-359-11	CARBON MELF 100K	5%	1/8W	
R38	1-249-363-11	CARBON MELF 220K	5%	1/8W	
R39	1-249-339-11	CARBON MELF 2.2K	5%	1/8W	
R40	1-249-338-11	CARBON MELF 1.8K	5%	1/8W	
R41	1-249-344-11	CARBON MELF 5.6K	5%	1/8W	
R42	1-249-359-11	CARBON MELF 100K	5%	1/8W	
R43	1-249-363-11	CARBON MELF 220K	5%	1/8W	
R44	1-249-339-11	CARBON MELF 2.2K	5%	1/8W	

R45	1-249-338-11	CARBON MELF 1.8K	5%	1/8W	
R46	1-249-344-11	CARBON MELF 5.6K	5%	1/8W	
R47	△ 1-249-409-11	CARBON (SMALL) 220	5%	1/4W	F
R61	1-249-359-11	CARBON MELF 100K	5%	1/8W	
R62	1-249-355-11	CARBON MELF 47K	5%	1/8W	
R63	1-249-315-11	CARBON MELF 22	5%	1/8W	
R81	1-249-335-11	CARBON MELF 1K	5%	1/8W	
R82	1-249-335-11	CARBON MELF 1K	5%	1/8W	
R83	1-249-335-11	CARBON MELF 1K	5%	1/8W	
R84	1-249-335-11	CARBON MELF 1K	5%	1/8W	
R85	1-249-347-11	CARBON MELF 10K	5%	1/8W	
R86	1-249-335-11	CARBON MELF 1K	5%	1/8W	
R87	1-249-347-11	CARBON MELF 10K	5%	1/8W	
R88	1-249-343-11	CARBON MELF 4.7K	5%	1/8W	
R89	1-249-335-11	CARBON MELF 1K	5%	1/8W	
R90	1-249-347-11	CARBON MELF 10K	5%	1/8W	
R91	1-249-335-11	CARBON MELF 1K	5%	1/8W	
R92	△ 1-249-401-11	CARBON (SMALL) 47	5%	1/4W	F
R101	1-249-341-11	CARBON MELF 3.3K	5%	1/8W	
R102	1-249-332-11	CARBON MELF 560	5%	1/8W	
R103	1-249-335-11	CARBON MELF 1K	5%	1/8W	
R104	1-249-328-11	CARBON MELF 270	5%	1/8W	
R105	1-249-343-11	CARBON MELF 4.7K	5%	1/8W	
R106	1-249-339-11	CARBON MELF 2.2K	5%	1/8W	
R107	1-249-343-11	CARBON MELF 4.7K	5%	1/8W	
R108	1-249-323-11	CARBON MELF 100	5%	1/8W	
R109	1-249-343-11	CARBON MELF 4.7K	5%	1/8W	
R110	△ 1-249-405-11	CARBON (SMALL) 100	5%	1/4W	F
R301	1-249-411-11	CARBON 330	5%	1/4W	
R302	1-249-411-11	CARBON 330	5%	1/4W	
R303	1-249-411-11	CARBON 330	5%	1/4W	
R304	1-249-411-11	CARBON 330	5%	1/4W	
R305	1-249-429-11	CARBON 10K	5%	1/4W	
R306	1-249-429-11	CARBON 10K	5%	1/4W	
R307	1-249-429-11	CARBON 10K	5%	1/4W	
R308	1-249-429-11	CARBON 10K	5%	1/4W	
R309	1-249-431-11	CARBON 15K	5%	1/4W	
R310	1-249-441-11	CARBON 100K	5%	1/4W	
R311	1-249-437-11	CARBON 47K	5%	1/4W	
R324	1-249-425-11	CARBON 4.7K	5%	1/4W	
R326	1-249-441-11	CARBON 100K	5%	1/4W	
R327	1-249-410-11	CARBON 270	5%	1/4W	
R328	1-249-410-11	(AV310) ... CARBON 270	5%	1/4W	
R329	1-249-410-11	(AV310) ... CARBON 270	5%	1/4W	
R332	1-249-429-11	CARBON 10K	5%	1/4W	
R333	1-249-437-11	(AEP, WG) ... CARBON 47K	5%	1/4W	
R334	1-249-437-11	(AEP, WG) ... CARBON 47K	5%	1/4W	
R335	1-249-437-11	(AEP, WG) ... CARBON 47K	5%	1/4W	
R336	1-249-437-11	(AEP, WG) ... CARBON 47K	5%	1/4W	
R337	1-249-437-11	(AEP, WG) ... CARBON 47K	5%	1/4W	
R338	1-249-431-11	(AEP, WG) ... CARBON 15K	5%	1/4W	
R451	1-249-429-11	(AV310) ... CARBON 10K	5%	1/4W	
R452	1-249-393-11	(AV310) ... CARBON 10	5%	1/4W	
R453	1-249-417-11	(AV310) ... CARBON 1K	5%	1/4W	
R454	1-249-417-11	(AV310) ... CARBON 1K	5%	1/4W	

Note: The components identified by mark △ or dotted line with mark △ are critical for safety. Replace only with part number specified.

Ref.No	Part No.	Description			
R455	1-249-437-11	CARBON	47K	5%	1/4W
R456	1-249-437-11	CARBON	47K	5%	1/4W
R457	1-249-437-11	CARBON	47K	5%	1/4W
R458	1-249-437-11	CARBON	47K	5%	1/4W
R459	1-249-413-11	CARBON	470	5%	1/4W
R460	1-249-437-11	CARBON	47K	5%	1/4W
R461	1-247-698-11	CARBON	47	5%	1/4W
R501	1-249-425-11	CARBON	4.7K	5%	1/4W
R502	1-247-897-11	CARBON	560K	5%	1/4W
R503	1-249-417-11	CARBON	1K	5%	1/4W
R504	1-249-425-11	CARBON	4.7K	5%	1/4W
R505	1-247-897-11	CARBON	560K	5%	1/4W
R506	1-249-417-11	CARBON	1K	5%	1/4W
R507	1-249-417-11	CARBON	1K	5%	1/4W
R508	1-249-411-11	CARBON	330	5%	1/4W
R509	1-249-437-11	CARBON	47K	5%	1/4W
R510	1-247-897-11	CARBON	560K	5%	1/4W
R511	1-249-417-11	CARBON	1K	5%	1/4W
R512	1-247-897-11	CARBON	560K	5%	1/4W
R513	1-249-437-11	CARBON	47K	5%	1/4W
R514	1-249-417-11	CARBON	1K	5%	1/4W
R515	1-249-411-11	CARBON	330	5%	1/4W
R516	1-249-425-11	CARBON	4.7K	5%	1/4W
R518	1-249-433-11	CARBON	22K	5%	1/4W
R519	1-249-422-11	CARBON	2.7K	5%	1/4W
R520	1-247-887-00	CARBON	220K	5%	1/4W
R521	1-249-429-11	CARBON	10K	5%	1/4W
R522	1-249-426-11	CARBON	5.6K	5%	1/4W
R523	1-249-413-11	CARBON	470	5%	1/4W
R524	1-249-441-11	CARBON	100K	5%	1/4W
R526	1-249-441-11	CARBON	100K	5%	1/4W
R527	1-249-405-11	CARBON	100	5%	1/4W
R528	1-249-429-11	CARBON	10K	5%	1/4W
R529	1-249-429-11	(AV310).... CARBON	10K	5%	1/4W
R530	1-249-413-11	(AV310).... CARBON	470	5%	1/4W
R531	1-249-433-11	CARBON	22K	5%	1/4W
R532	1-249-421-11	CARBON	2.2K	5%	1/4W
R534	1-249-441-11	CARBON	100K	5%	1/4W
R535	1-249-441-11	CARBON	100K	5%	1/4W
R539	1-249-425-11	CARBON	4.7K	5%	1/4W
R540	1-249-435-11	CARBON	33K	5%	1/4W
R541	1-247-897-11	CARBON	560K	5%	1/4W
R542	1-249-421-11	CARBON	2.2K	5%	1/4W
R543	1-249-429-11	CARBON	10K	5%	1/4W
R544	1-249-417-11	(WG).... CARBON	1K	5%	1/4W
R551	1-249-425-11	CARBON	4.7K	5%	1/4W
R552	1-247-897-11	CARBON	560K	5%	1/4W
R553	1-249-417-11	CARBON	1K	5%	1/4W
R554	1-249-425-11	CARBON	4.7K	5%	1/4W
R555	1-247-897-11	CARBON	560K	5%	1/4W
R556	1-249-417-11	CARBON	1K	5%	1/4W
R557	1-249-417-11	CARBON	1K	5%	1/4W
R558	1-249-411-11	CARBON	330	5%	1/4W
R559	1-249-437-11	CARBON	47K	5%	1/4W
R560	1-247-897-11	CARBON	560K	5%	1/4W
R561	1-249-417-11	CARBON	1K	5%	1/4W
R562	1-247-897-11	CARBON	560K	5%	1/4W
R563	1-249-437-11	CARBON	47K	5%	1/4W
R564	1-249-417-11	CARBON	1K	5%	1/4W
R565	1-249-411-11	CARBON	330	5%	1/4W
R568	1-249-433-11	CARBON	22K	5%	1/4W
R569	1-249-422-11	CARBON	2.7K	5%	1/4W
R570	1-247-887-00	CARBON	220K	5%	1/4W

Ref.No	Part No.	Description			
R571	1-249-429-11	CARBON	10K	5%	1/4W
R572	1-249-426-11	CARBON	5.6K	5%	1/4W
R573	1-249-413-11	CARBON	470	5%	1/4W
R576	1-249-441-11	CARBON	100K	5%	1/4W
R578	1-249-429-11	CARBON	10K	5%	1/4W
R579	1-249-441-11	(AV310).... CARBON	100K	5%	1/4W
R580	1-249-413-11	(AV310).... CARBON	470	5%	1/4W
R589	1-249-425-11	CARBON	4.7K	5%	1/4W
R590	1-249-435-11	CARBON	33K	5%	1/4W
R591	1-247-897-11	CARBON	560K	5%	1/4W
R592	1-249-421-11	CARBON	2.2K	5%	1/4W
R594	1-249-417-11	(WG).... CARBON	1K	5%	1/4W
R602	1-249-421-11	CARBON	2.2K	5%	1/4W
R603	1-249-438-11	CARBON	56K	5%	1/4W
R604	1-249-423-11	(AV310).... CARBON	3.3K	5%	1/4W
R604	1-249-421-11	(AV210).... CARBON	2.2K	5%	1/4W
R605	1-247-758-11	(AV310).... CARBON	3.3K	5%	1/2W
R605	1-247-756-11	(AV210).... CARBON	2.2K	5%	1/2W
R606	1-249-417-11	CARBON	1K	5%	1/4W
R607	1-217-151-00	METAL PLATE	0.22		2W
R608	1-249-438-11	CARBON	56K	5%	1/4W
R609	1-249-417-11	CARBON	1K	5%	1/4W
R610	1-249-427-11	CARBON	6.8K	5%	1/4W
R611	1-249-435-11	CARBON	33K	5%	1/4W
R612	1-247-700-11	CARBON	100	5%	1/4W
R614	1-249-437-11	CARBON	47K	5%	1/4W
R615	1-247-700-11	CARBON	100	5%	1/4W
R616	1-249-441-11	CARBON	100K	5%	1/4W
R617	1-249-433-11	CARBON	22K	5%	1/4W
R618	1-249-417-11	CARBON	1K	5%	1/4W
R619	1-249-429-11	CARBON	10K	5%	1/4W
R620	1-216-432-00	(AV310).... METAL OXIDE	820	5%	1W
R620	1-247-704-11	(AV210).... CARBON	220	5%	1/4W
R621	1-249-435-11	CARBON	33K	5%	1/4W
R622	1-249-421-11	CARBON	2.2K	5%	1/4W
R623	1-249-432-11	CARBON	18K	5%	1/4W
R624	1-249-431-11	CARBON	15K	5%	1/4W
R625	1-247-889-00	CARBON	270K	5%	1/4W
R626	1-249-416-11	CARBON	820	5%	1/4W
R627	1-249-427-11	CARBON	6.8K	5%	1/4W
R628	1-247-727-11	CARBON	10	5%	1/2W
R629	1-249-482-11	CARBON	4.7	5%	1/2W
R630	1-216-454-11	(AV310).... METAL OXIDE	390	5%	2W
R630	1-215-889-00	(AV210).... METAL OXIDE	330	5%	2W
R631	1-249-427-11	CARBON	6.8K	5%	1/4W
R633	1-247-694-11	CARBON	33	5%	1/4W
R634	1-249-393-11	(WG).... CARBON	10	5%	1/4W
R635	1-249-393-11	(WG).... CARBON	10	5%	1/4W
R652	1-249-421-11	CARBON	2.2K	5%	1/4W
R653	1-249-438-11	CARBON	56K	5%	1/4W
R654	1-249-423-11	(AV310).... CARBON	3.3K	5%	1/4W

Note: The components identified by mark  or dotted line with mark  are critical for safety. Replace only with part number specified.

Ref.No	Part No.	Description				
R654	1-249-421-11	(AV210).... CARBON	2.2K	5%	1/4W	
R655	1-247-758-11	(AV310).... CARBON	3.3K	5%	1/2W	
R655	1-247-756-11	(AV210).... CARBON	2.2K	5%	1/2W	
R656	1-249-417-11	CARBON	1K	5%	1/4W	
R657	1-217-151-00	METAL PLATE	0.22		2W	
R658	1-249-438-11	CARBON	56K	5%	1/4W	
R659	1-249-417-11	CARBON	1K	5%	1/4W	
R660	1-249-427-11	CARBON	6.8K	5%	1/4W	
R661	1-249-435-11	CARBON	33K	5%	1/4W	
R664	1-249-437-11	CARBON	47K	5%	1/4W	
R672	1-249-421-11	CARBON	2.2K	5%	1/4W	
R673	1-249-432-11	CARBON	18K	5%	1/4W	
R674	1-249-431-11	CARBON	15K	5%	1/4W	
R675	1-247-889-00	CARBON	270K	5%	1/4W	
R676	1-249-416-11	CARBON	820	5%	1/4W	
R677	1-249-427-11	CARBON	6.8K	5%	1/4W	
R678	1-247-727-11	CARBON	10	5%	1/2W	
R679	1-249-482-11	CARBON	4.7	5%	1/2W	
R680	△ 1-216-454-11	(AV310).... METAL OXIDE	390	5%	2W	F
R680	△ 1-215-889-00	(AV210).... METAL OXIDE	330	5%	2W	F
R684	1-249-393-11	(WG).... CARBON	10	5%	1/4W	
R685	1-249-393-11	(WG).... CARBON	10	5%	1/4W	
R801	△ 1-249-455-11	CARBON	4.7	5%	1/4W	F
R802	△ 1-216-448-11	METAL OXIDE	39	5%	2W	F
R803	1-249-426-11	CARBON	5.6K	5%	1/4W	
R804	△ 1-247-739-11	(AV310).... CARBON	100	5%	1/2W	F
R804	△ 1-249-455-11	(AV210).... CARBON	4.7	5%	1/4W	F
R805	△ 1-247-700-11	CARBON	100	5%	1/4W	F
R806	1-249-423-11	CARBON	3.3K	5%	1/4W	
R807	1-247-749-11	CARBON	560	5%	1/2W	
R808	△ 1-249-455-11	CARBON	4.7	5%	1/4W	F
R809	1-249-429-11	(AV310).... CARBON	10K	5%	1/4W	
R810	1-249-417-11	(AV310).... CARBON	1K	5%	1/4W	
R811	1-249-423-11	CARBON	3.3K	5%	1/4W	
R812	1-249-433-11	(AV310).... CARBON	22K	5%	1/4W	
R812	1-249-429-11	(AV210).... CARBON	10K	5%	1/4W	
R813	1-249-429-11	CARBON	10K	5%	1/4W	
R814	1-249-426-11	CARBON	5.6K	5%	1/4W	
R815	1-249-429-11	CARBON	10K	5%	1/4W	
R816	1-249-426-11	CARBON	5.6K	5%	1/4W	
R817	1-249-417-11	CARBON	1K	5%	1/4W	
R818	1-249-430-11	(AV210).... CARBON	12K	5%	1/4W	
R851	1-249-393-11	(AV310).... CARBON	10	5%	1/4W	
R852	1-249-437-11	CARBON	47K	5%	1/4W	
R853	1-249-437-11	CARBON	47K	5%	1/4W	
R911	1-249-425-11	(AV310).... CARBON	4.7K	5%	1/4W	
R912	1-249-437-11	(AV310).... CARBON	47K	5%	1/4W	
R913	1-249-396-11	(AV310).... CARBON	18	5%	1/4W	
RB301	1-233-081-11	COMPOSITION CIRCUIT BLOCK				
RB302	1-232-955-11	COMPOSITION CIRCUIT BLOCK				

Ref.No	Part No.	Description	
RB303	1-232-998-11	COMPOSITION CIRCUIT BLOCK	
RV21	1-238-013-11	(AEP, UK).... RES, ADJ. CARBON 2.2K	
RV21	1-238-015-11	(WG).... RES, ADJ. CARBON 4.7K	
RV23	1-238-021-11	RES, ADJ. CARBON 220K	
RV24	1-238-017-11	(AEP, UK).... RES, ADJ. CARBON 22K	
RV24	1-238-019-11	(WG).... RES, ADJ. CARBON 47K	
RV501	1-238-556-11	(AV310).... RES, VAR. CARBON 250K/250K (VOLUME) (INCLUDING VOL MOTOR)	
RV501	1-238-074-11	(AV210).... RES, VAR. CARBON 100K/100K (VOLUME)	
RV502	1-238-557-11	RES, VAR. CARBON 250K (BALANCE)	
RV601	1-238-558-11	RES, VAR. CARBON 100K/100K (TONE BASS)	
RV602	1-238-558-11	RES, VAR. CARBON 100K/100K (TONE TREBLE)	
RY601	1-515-533-11	RELAY	
RY901	1-515-720-11	(AV310).... RELAY	
S301	1-554-303-21	SWITCH, KEY BOARD (TUNING DIRECT)	
S302	1-554-303-21	SWITCH, KEY BOARD (PRESET -)	
S303	1-554-303-21	SWITCH, KEY BOARD (TUNING -)	
S304	1-554-303-21	SWITCH, KEY BOARD (BAND FM)	
S305	1-554-303-21	SWITCH, KEY BOARD (FM MODE)	
S306	1-554-303-21	SWITCH, KEY BOARD (PRESET +)	
S307	1-554-303-21	SWITCH, KEY BOARD (TUNING +)	
S308	1-554-303-21	SWITCH, KEY BOARD (BAND FM)	
S310	1-554-303-21	SWITCH, KEY BOARD (TAPE)	
S311	1-554-303-21	SWITCH, KEY BOARD (VIDEO)	
S312	1-554-303-21	SWITCH, KEY BOARD (PHONE)	
S313	1-554-303-21	SWITCH, KEY BOARD (TUNER)	
S314	1-554-303-21	SWITCH, KEY BOARD (CD)	
S315	1-554-303-21	SWITCH, KEY BOARD (7)	
S316	1-554-303-21	SWITCH, KEY BOARD (8)	
S317	1-554-303-21	SWITCH, KEY BOARD (9)	
S318	1-554-303-21	SWITCH, KEY BOARD (MEMORY)	
S319	1-554-303-21	SWITCH, KEY BOARD (4)	
S320	1-554-303-21	SWITCH, KEY BOARD (5)	
S321	1-554-303-21	SWITCH, KEY BOARD (6)	
S322	1-554-303-21	SWITCH, KEY BOARD (0)	
S323	1-554-303-21	SWITCH, KEY BOARD (1)	
S324	1-554-303-21	SWITCH, KEY BOARD (2)	
S325	1-554-303-21	SWITCH, KEY BOARD (3)	
S326	1-554-303-21	SWITCH, KEY BOARD (SHIFT)	
S327	1-554-303-21	SWITCH, KEY BOARD (DBFB)	
S328	1-554-303-21	(AV310).... SWITCH, KEY BOARD (MUTING -20dB)	
S330	1-554-303-21	(AV310).... SWITCH, KEY BOARD (SYSTEM POWER)	
S601	1-571-485-11	SWITCH, PUSH (2 KEY) (SPEAKERS A/B)	
S901	△ 1-554-685-11	(AV210).... SWITCH, PUSH (AC POWER) (1 KEY) (POWER)	
T21	1-404-807-11	TRANSFORMER, DISCRIMINATOR	
T23	1-236-465-11	(WG).... ENCAPSULATED COMPONENT	
T901	△ 1-449-706-11	(AV310 : AEP, WG).... TRANSFORMER, POWER	
T901	△ 1-449-758-11	(UK).... TRANSFORMER, POWER	
T901	△ 1-449-761-11	(AV210).... TRANSFORMER, POWER	
T902	△ 1-448-523-11	(AV310).... TRANSFORMER, POWER	
TM1	* 1-537-138-31	TERMINAL BOARD (ANT) (ANTENNA)	
TM901	1-536-706-00	TERMINAL BOARD (SP) (SPEAKER)	
TP1	* 1-560-060-00	PIN, CONNECTOR 2P	
VZ901	△ 1-807-180-11	(AV310).... VARISTOR SNR-14A300K	
X301	1-567-170-00	OSCILLATOR, CERAMIC (4.194MHz)	
XT81	1-577-126-11	VIBRATOR, CRYSTAL (7.2MHz)	

Note: The components identified by mark △ or dotted line with mark △ are critical for safety. Replace only with part number specified.

ACCESSORY & PACKING MATERIAL

Part No.	Description
1-501-369-11	(AEP, UK)....ANTENNA
1-501-374-11	ANTENNA, LOOP
3-701-630-00	BAG, POLYETHYLENE
3-750-264-11	(AEP, WG)....MANUAL, INSTRUCTION (ENGLISH, GERMAN)
3-750-264-41	(UK)....MANUAL, INSTRUCTION (ENGLISH)
3-750-264-51	(AEP)....MANUAL, INSTRUCTION (FRENCH, PORTUGUESE, DUTCH, SWEDISH)
*4-931-010-01	CUSHION (BOTTOM)
*4-931-011-01	CUSHION (TOP)