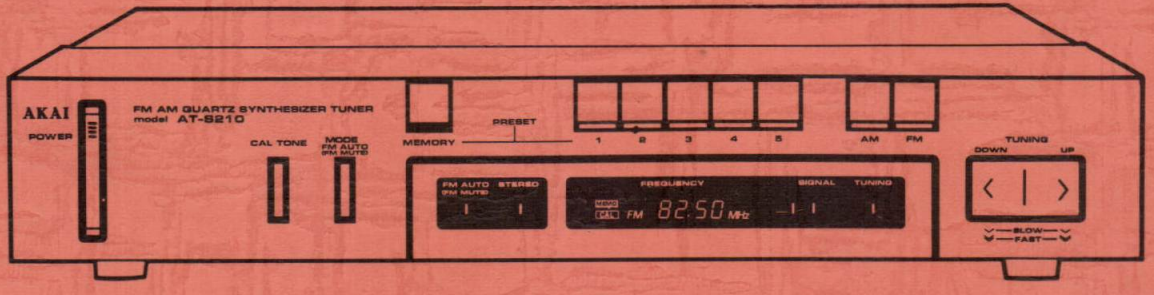
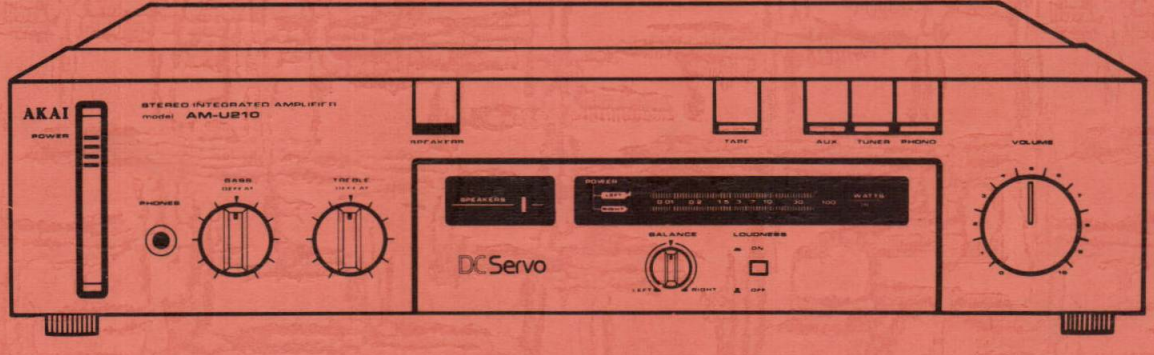
AKAI SERVICE MANUAL





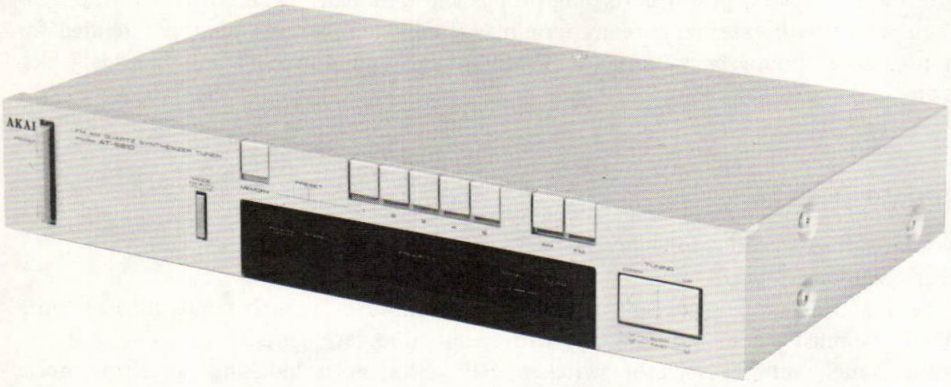
FM AM QUARTZ SYNTHESIZER TUNER

MODEL **AT-S210/J**

MODEL **AT-S210L**

STEREO INTEGRATED AMPLIFIER

MODEL **AM-U210/J**



AT-S210

AM-U210

FM AM QUARTZ SYNTHESIZOR TUNER

AT-S210/J
MODEL AT-S210L

STEREO INTEGRATED AMPLIFIER

MODEL AM-U210/J

THIS MANUAL IS APPLICABLE TO BOTH SILVER
AND PEARL SHADOW PANEL MODELS

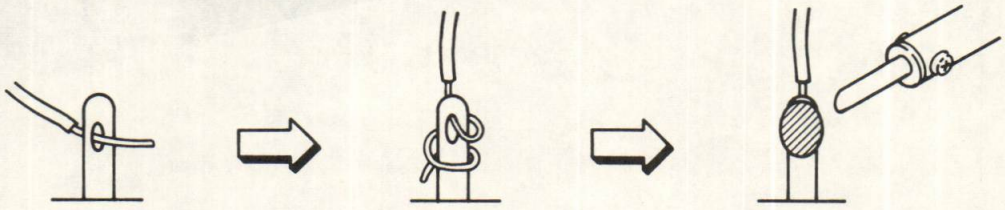
SAFETY INSTRUCTIONS

SAFETY CHECK AFTER SERVICING

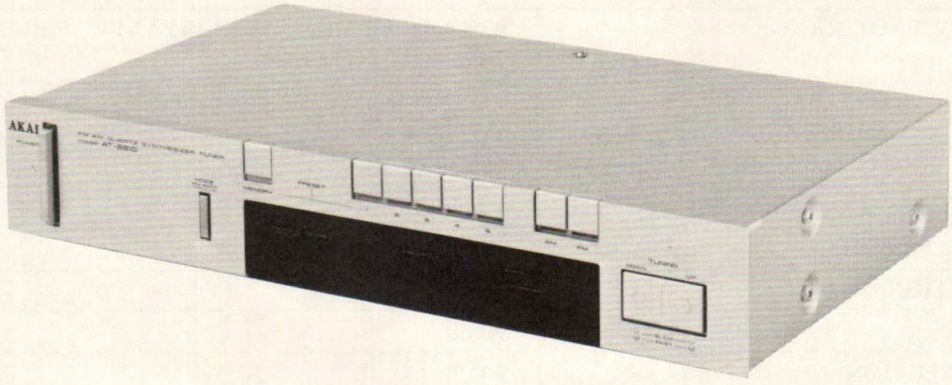
Confirm the specified insulation resistance between power cord plug prongs and externally exposed parts of the set is greater than 10 Mohms, but for equipment with external antenna terminals (tuner, receiver, etc.) and is intended for [C] or [A], specified insulation resistance should be more than 2.2 Mohms (ground terminals, microphone jacks, headphone jacks. line-in-out jacks etc.)

PRECAUTIONS DURING SERVICING

1. Parts identified by the ⚠ symbol parts are critical for safety.
   Replace only with parts number specified.
2. In addition to safety, other parts and assemblies are specified for conformance with such regulations as those applying to spurious radiation. These must also be replaced only with specified replacements.
   Examples: RF converters, tuner units, antenna selector switches, RF cables, noise blocking capacitors, noise blocking filters, etc.
3. Use specified internal wiring. Note especially:
   1) Wires covered with PVC tubing
   2) Double insulated wires
   3) High voltage leads
4. Use specified insulating materials for hazardous live parts. Note especially:
   1) Insulation Tape
   2) PVC tubing
   3) Spacers (Insulating Barriers)
   4) Insulation sheets for transistors
5. When replacing AC primary side components (transformers, power cords, noise blocking capacitors, etc.), wrap ends of wires securely about the terminals before soldering.



6. Observe that wires do not contact heat producing parts (heatsinks, oxide metal film resistors, fusible resistors, etc.).
7. Check that replaced wires do not contact sharp edged or pointed parts.
8. Also check areas surrounding repaired locations.
9. Use care that foreign objects (screws, solder droplets, etc.) do not remain inside the set.



SECTION 1

SERVICE MANUAL

MODEL AT-S210/L/J

TABLE OF CONTENTS

For basic adjustments, measuring methods, and operating principles, refer to GENERAL TECHNICAL MANUAL.

I. SPECIFICATIONS

FM TUNER SECTION

TUNING FREQUENCY RANGE	87.4 to 108.1 MHz (Except JAPAN) 76 to 90 MHz (JAPAN)
SENSITIVITY USABLE (S/N = 30 dB, Mono) QUIETING (S/N = 50 dB, Mono/Stereo)	 11.2 dBf 16.2/37.2 dBf
CAPTURE RATIO	1.5 dB
SELECTIVITY (±400 kHz)	60 dB
IMAGE REJECTION	85 dB
IF REJECTION	90 dB
SPURIOUS REJECTION	90 dB
AM SUPPRESSION	60 dB
SUB CARRIER SUPPRESSION	60 dB
S/N (Mono/Stereo)	72/65 dB
T.H.D. (±75 kHz Deviation, Mono/Stereo)	0.09/0.18%
STEREO SEPARATION (1 kHz)	45 dB
FREQUENCY RESPONSE	30 Hz to 12 kHz ± 0.5 dB
OUTPUT LEVEL (FM, 100% Modulation)	550 mV
ANTENNA INPUT IMPEDANCE	300/75 ohms (Except V) 75 ohms (V)

AM TUNER SECTION

	AM (MW for AT-S210L)	LW (AT-S210L only)
TUNING FREQUENCY RANGE USA and CANADA OTHERS	 530 to 1610 kHz 522 to 1611 kHz	 – 137 to 362 kHz
USABLE SENSITIVITY (Loop)	300 μV/m	800 μV/M
SELECTIVITY	35 dB	35 dB
IMAGE REJECTION	45 dB	45 dB
IF REJECTION	32 dB	30 dB
S/N	40 dB	34 dB
T.H.D.	1.0%	2.0%

OUTPUT SECTION

OUTPUT IMPEDANCE	2.4 kohms

OTHERS

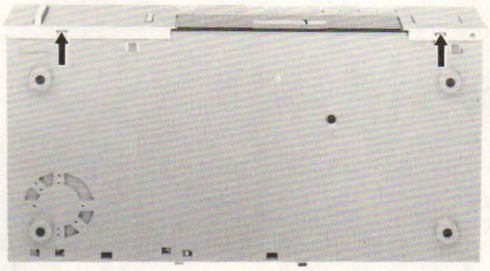
POWER CONSUMPTION	10W
POWER REQUIREMENTS	100V, 50/60 Hz for JAPAN 120V, 60 Hz for USA and Canada 220V, 50 Hz for Europe except UK 240V, 50 Hz for UK and Australia 110V/220V/240V, 50/60 Hz switchable for other countries
DIMENSIONS	440 (W) x 80 (H) x 246 (D) mm (17.3 x 3.1 x 9.7 inches)
WEIGHT	2.3 kg (5.1 lbs)

*** For improvement purposes, specifications and design are subject to change without notice.**

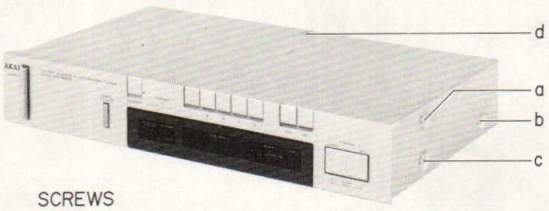
II. DISMANTLING OF UNIT

In case of trouble, etc. necessitating dismantling, please dismantle in the order shown in the photographs. Reassemble in reverse order.

3



1



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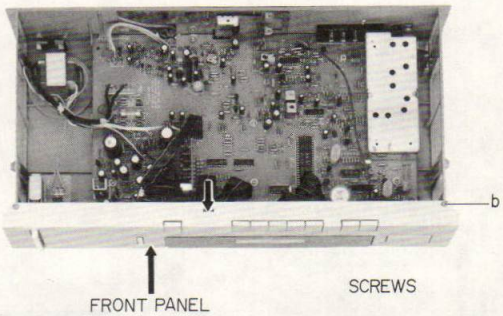

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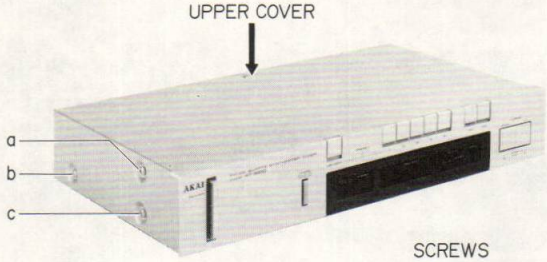

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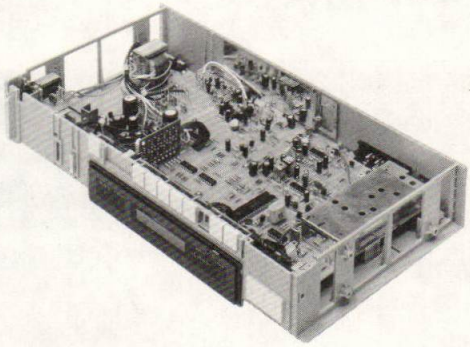


III. CONTROLS

1. MODEL AT-S210/L

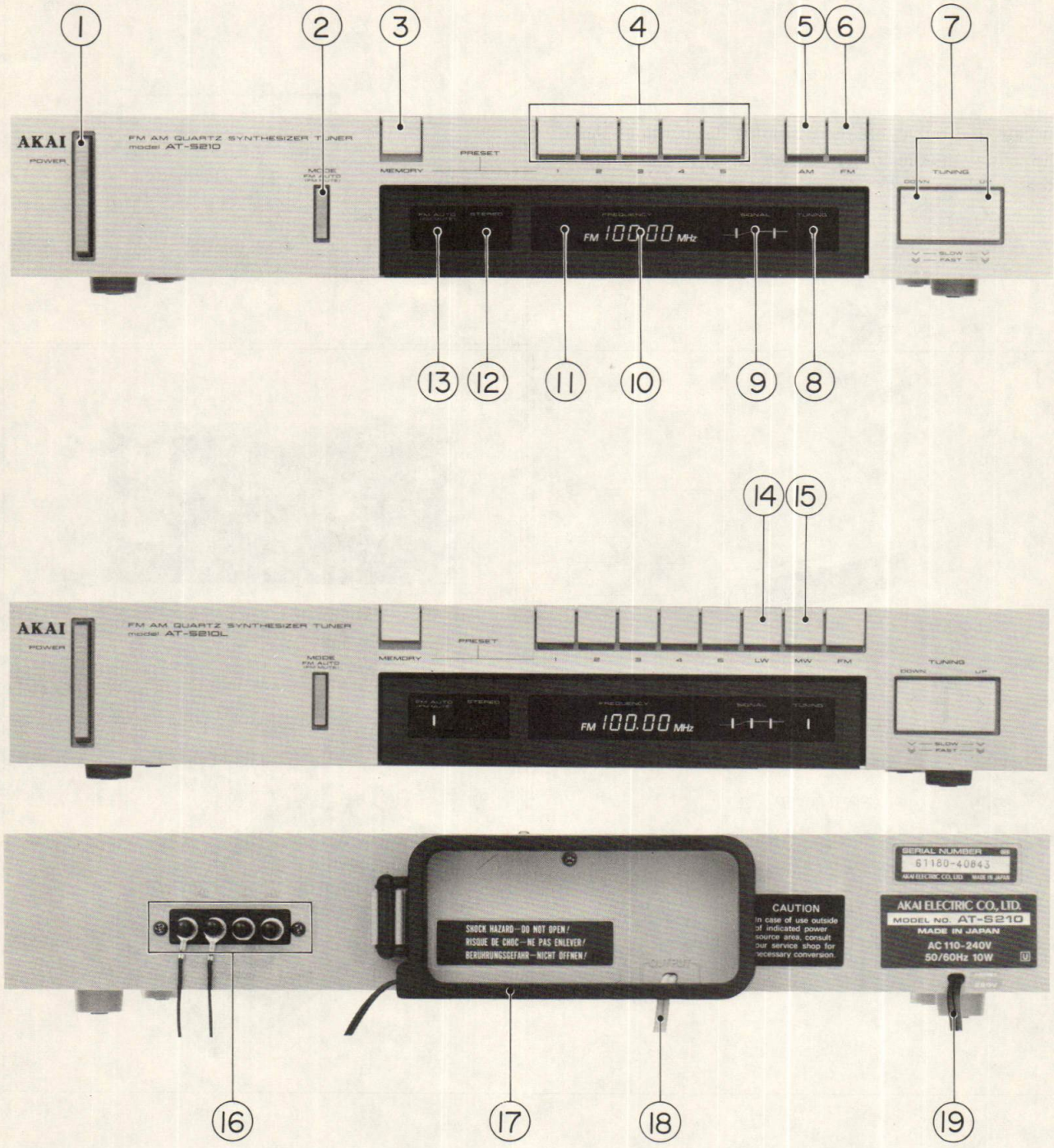


Fig. 1 Controls (AT-S210/L)

1. POWER SWITCH
2. FM MODE BUTTON [FM AUTO (FM MUTE)]
3. PRESET MEMORY BUTTON
4. PRESET STATION BUTTONS WITH INDICATORS
5. AM BUTTON WITH INDICATOR (AT-S210 ONLY)
6. FM BUTTON WITH INDICATOR
7. TUNING BUTTONS
8. FM TUNING INDICATOR
9. SIGNAL STRENGTH INDICATORS
10. DIGITAL FL DISPLAY
11. MEMORY (MEMO) INDICATOR
12. FM STEREO INDICATOR
13. FM AUTO (FM MUTE) INDICATOR
14. LW BUTTON WITH INDICATOR (AT-S210L ONLY)
15. MW BUTTON WITH INDICATOR (AT-S210L ONLY)
16. FM, AM AND AM LOOP ANTENNA TERMINALS
17. AM LOOP ANTENNA
18. OUTPUT PIN PLUG CORD
19. POWER CORD

2. MODEL AT-S210J

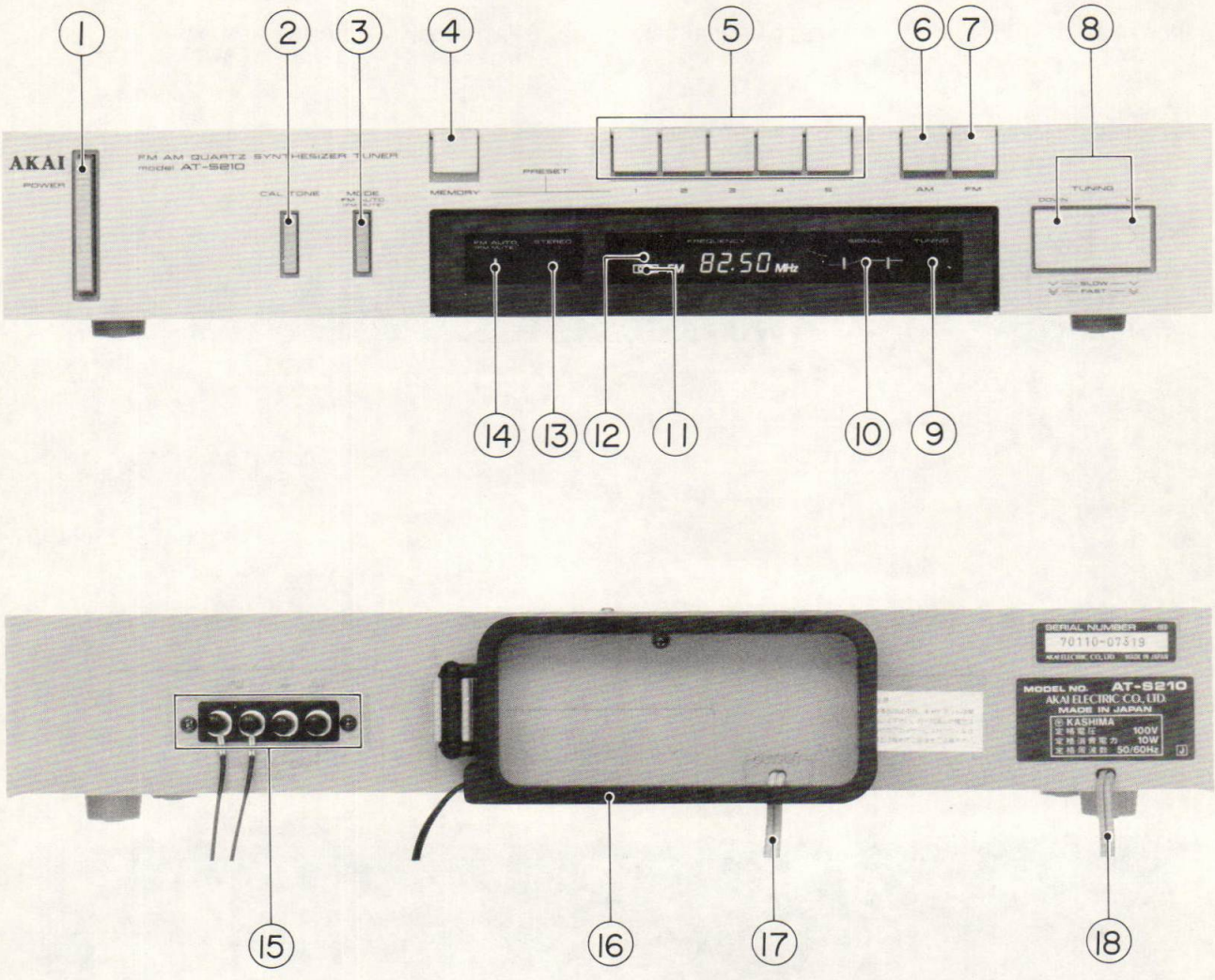


Fig. 2 Controls (AT-S210J)

1. POWER SWITCH
2. CAL TONE SWITCH
3. FM MODE BUTTON [FM AUTO (FM MUTE)]
4. PRESET MEMORY BUTTON
5. PRESET STATION BUTTONS WITH INDICATORS
6. AM BUTTON WITH INDICATOR
7. FM BUTTON WITH INDICATOR
8. TUNING BUTTON
9. FM TUNING INDICATOR
10. SIGNAL STRENGTH INDICATOR
11. CAL TONE INDICATOR
12. MEMORY (MEMO) INDICATOR
13. FM STEREO INDICATOR
14. FM AUTO INDICATOR
15. FM, AM AND AM LOOP ANTENNA TERMINALS
16. AM LOOP ANTENNA
17. OUTPUT PIN PLUG CORD
18. POWER CORD

IV. PRINCIPAL PARTS LOCATION

1. MODEL AT-210/L

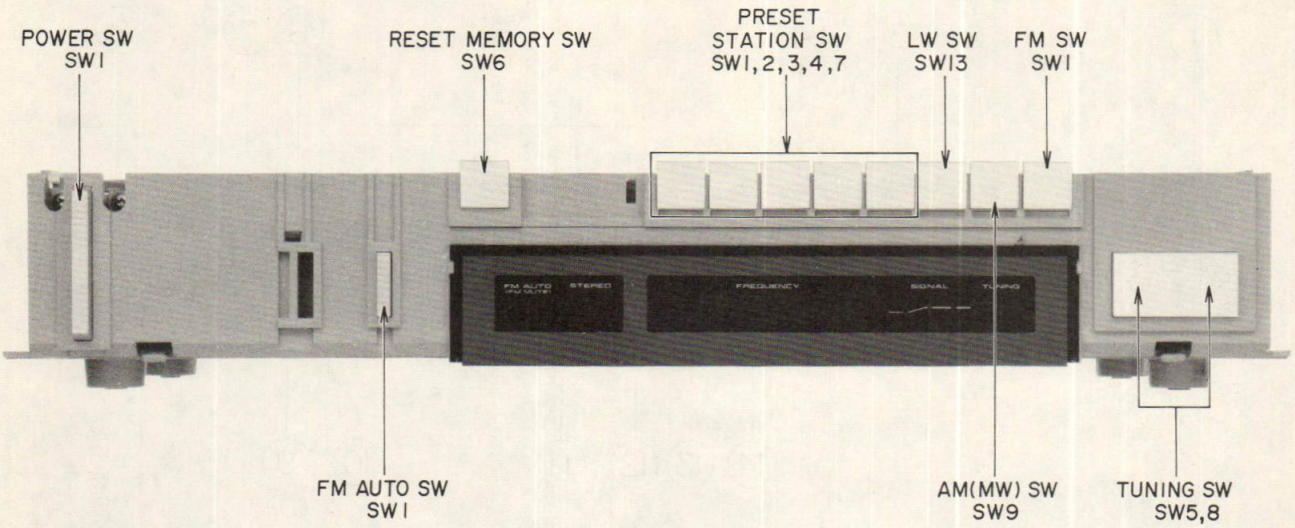


Fig. 3 Front View

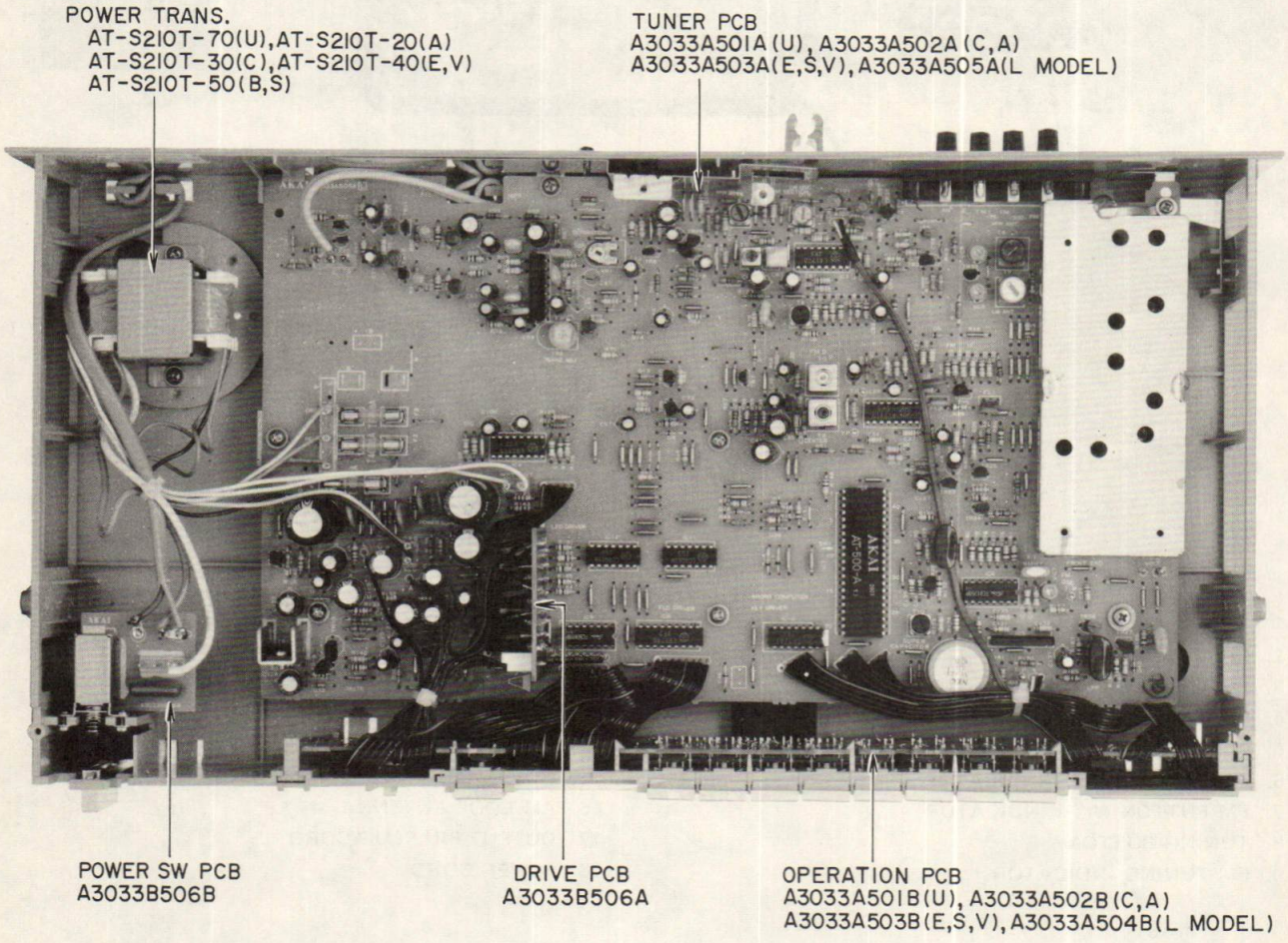


Fig. 4 Top View

2. MODEL AT-S210J

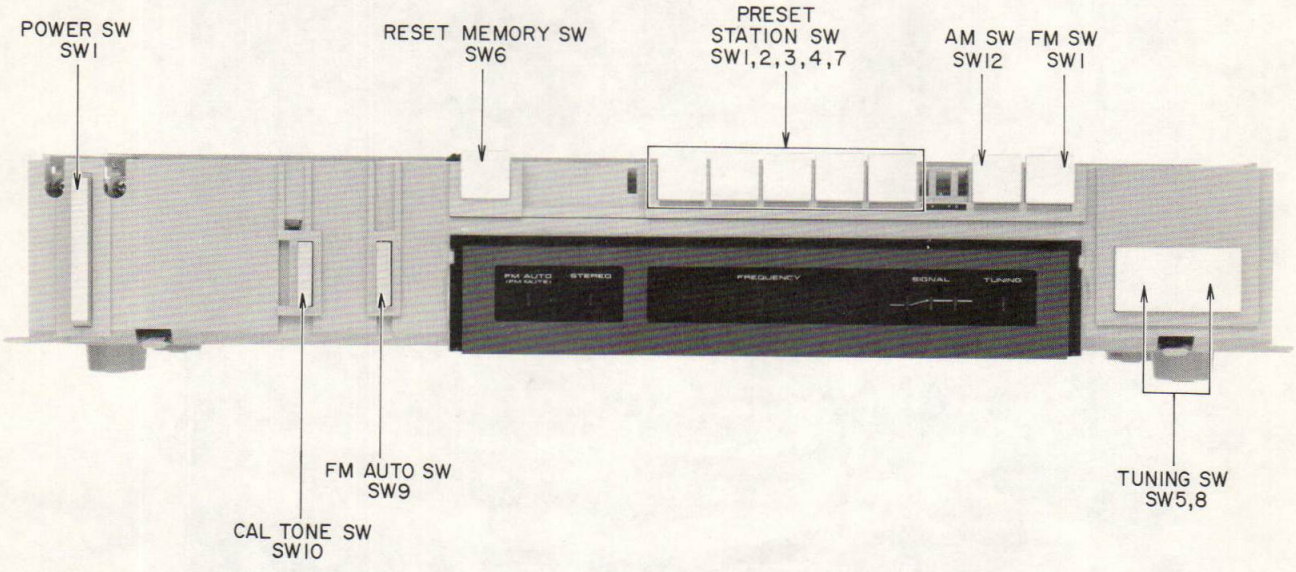


Fig. 5 Front View

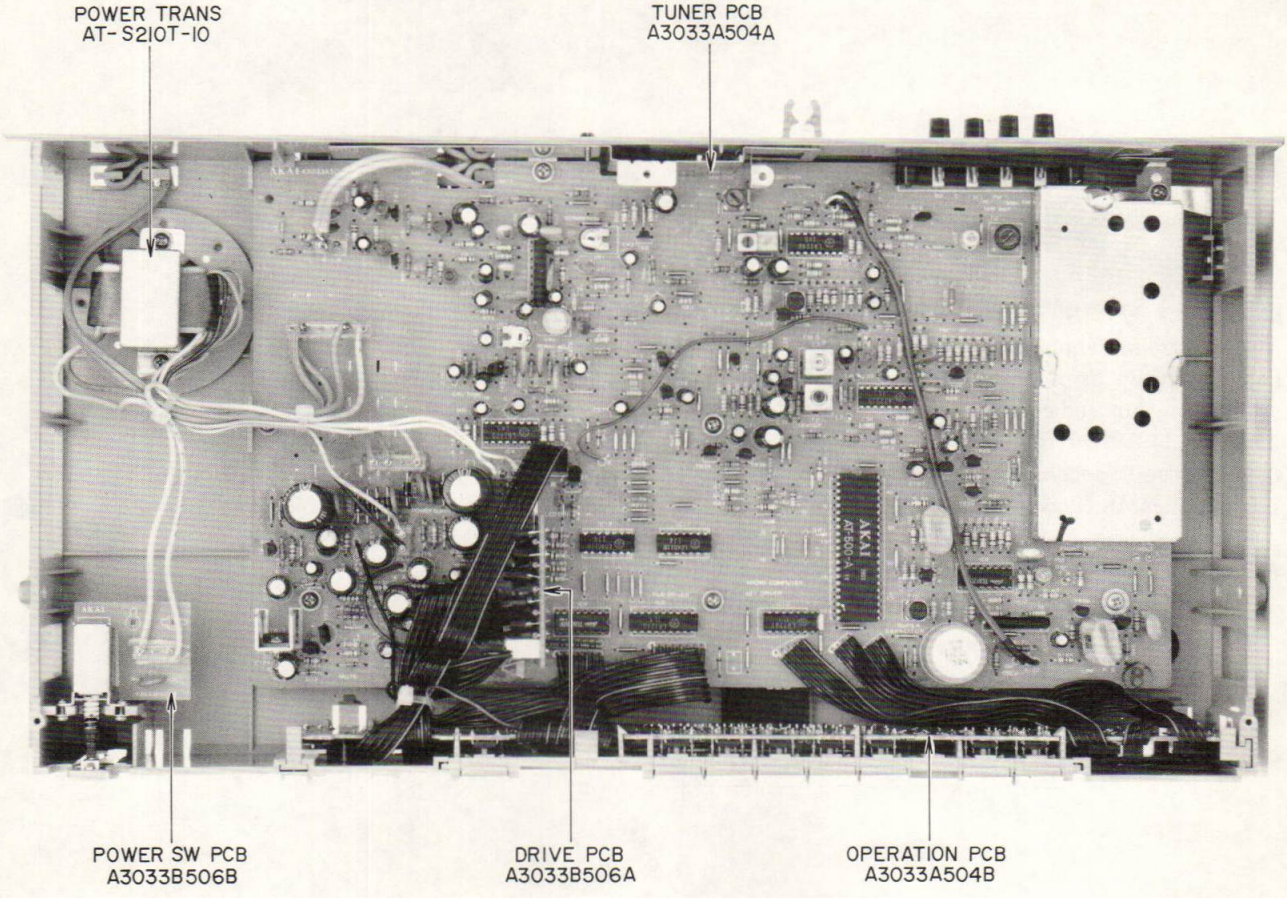


Fig. 6 Top View

V. VOLTAGE CONVERSION

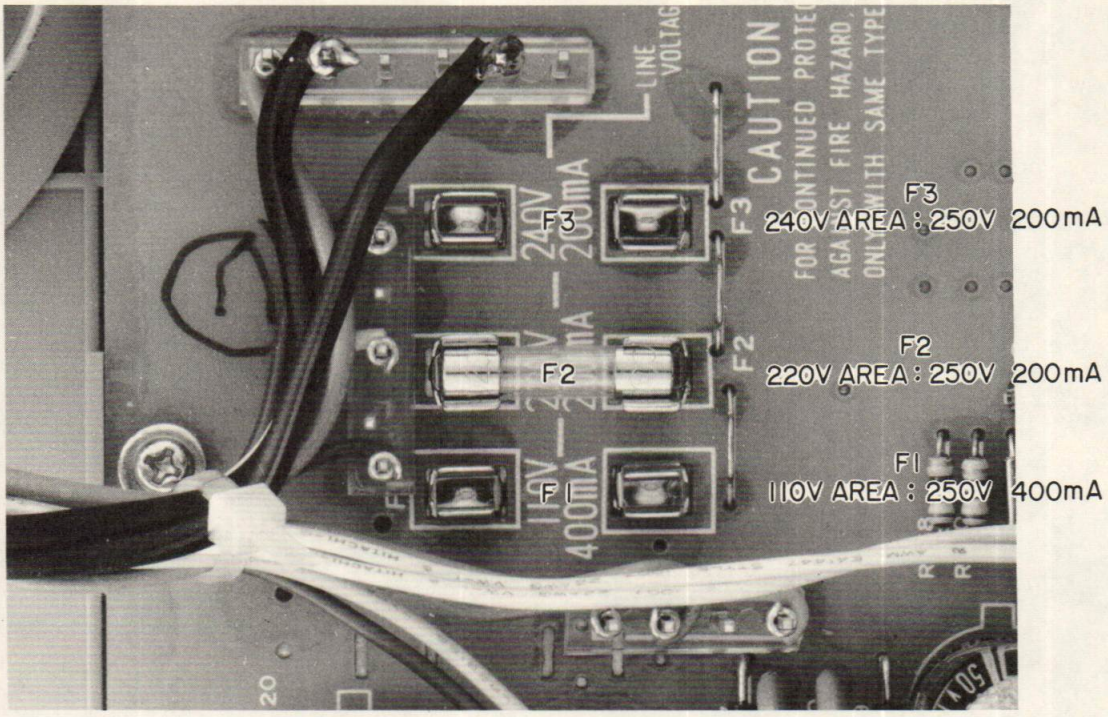


Fig. 7 Voltage Conversion (U Model Only)

Models for JAPAN, Canada, USA, Europe, UK and Australia are not equipped with this facility.
Each equipment is preset at the factory according to its destination, but some equipments can be set to 110V, 220V or 240V as required. If voltage change is necessary, this can be accomplished as follows.

1. Disconnect the Power Cord.
2. Loosen the holding screws and remove the top panel.
3. Remove the existing Line Voltage Fuse and insert the required Line Voltage Fuse into the proper fuse holder.
   Follow markings explicitly.

VI. OPERATION

1. FM SYNTHESIZER BLOCK DIAGRAM

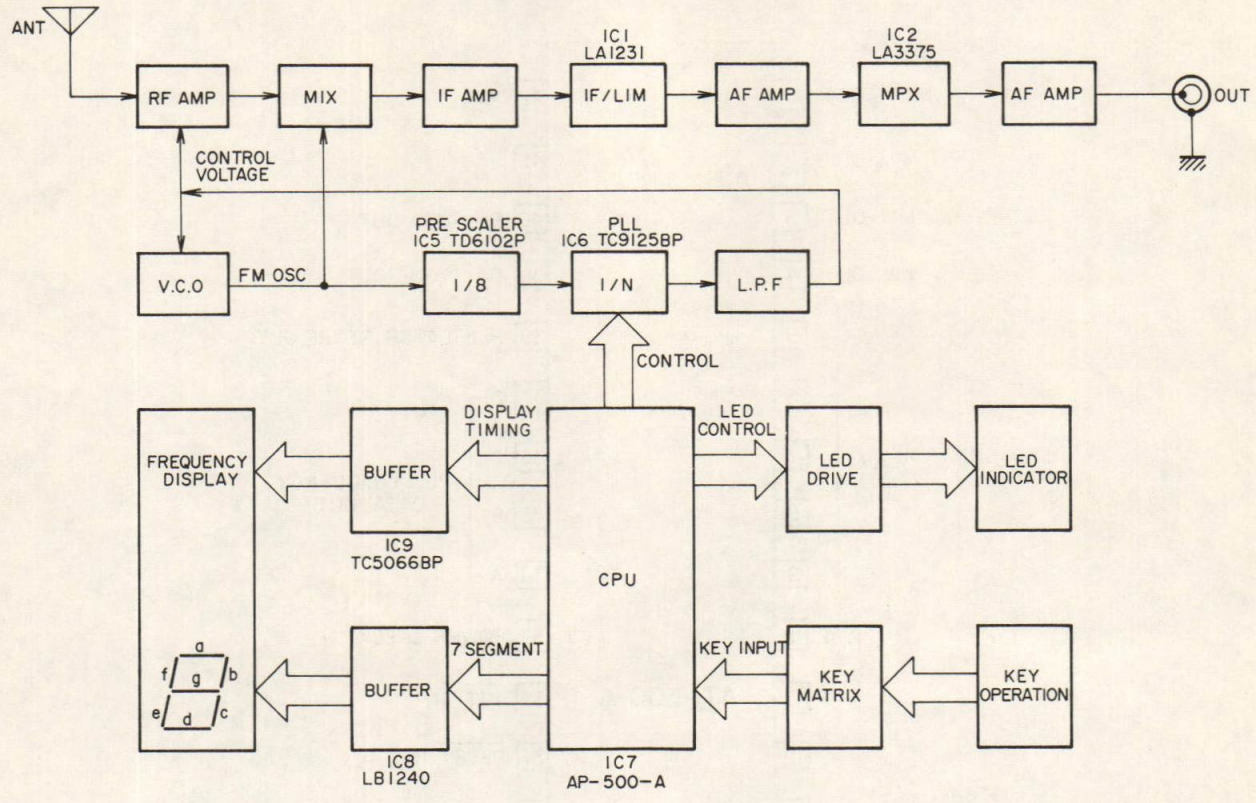


Fig. 8 FM Synthesizer Block Diagram

2. AM SYNTHESIZER BLOCK DIAGRAM

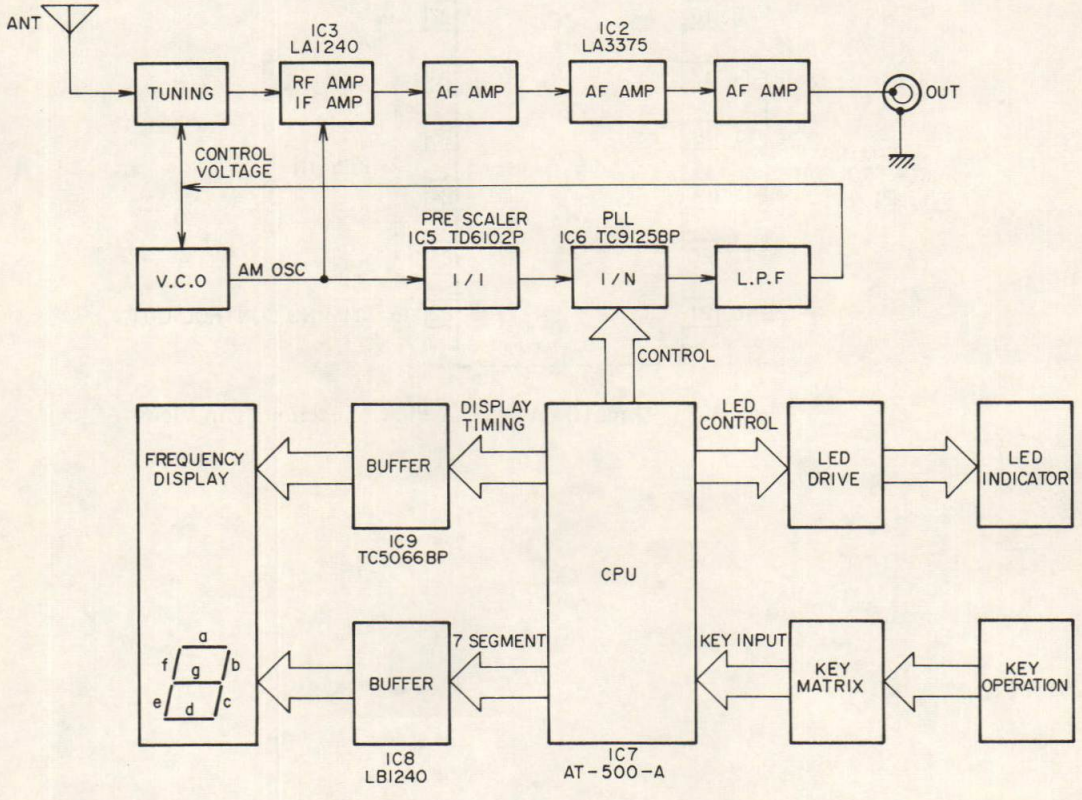


Fig. 9 AM Synthesizer Block Diagram

3. AT-500A PIN CONNECTION

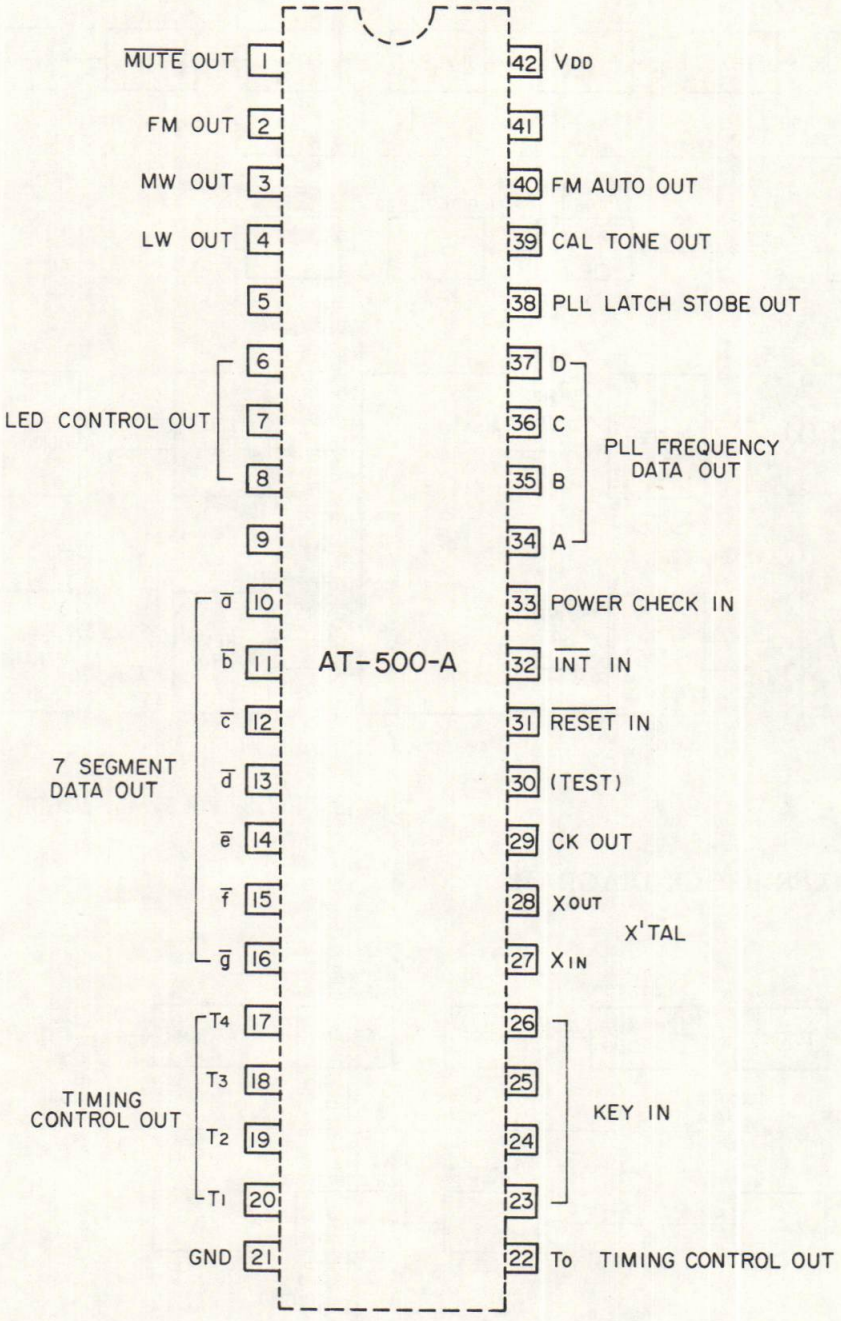


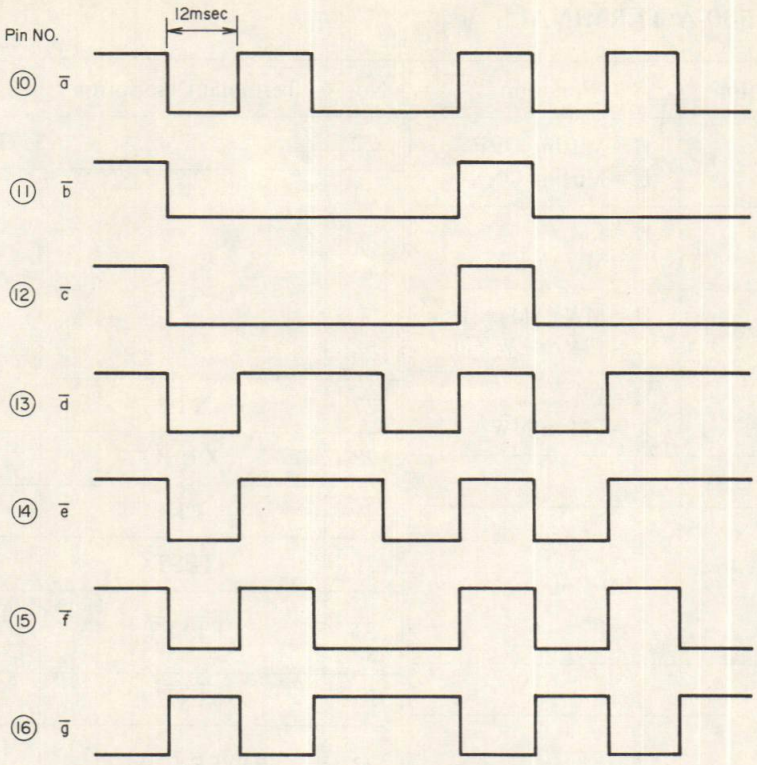
Fig. 10 AT-500-A Pin Connection (Top View)

4. FUNCTION OF AT-500-A TERMINALS

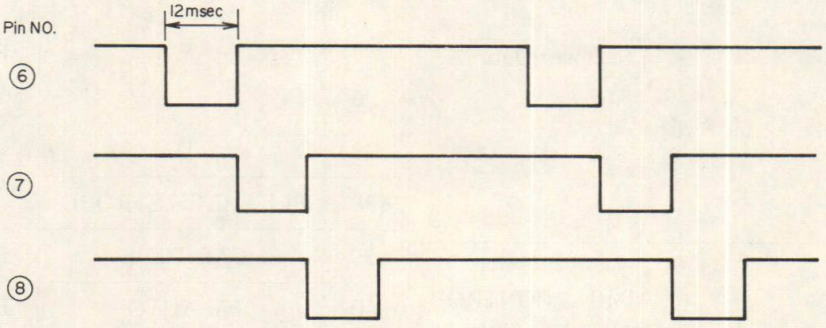
No.	Terminal Description	Function
1	MUTING	H = Muting OFF L = Muting ON
2	FM	H = FM L = MW or LW
3	MW	H = MW (AM) L = FM or LW
4	LW	H = LW L = FM or MW
5		
6 7 8		LED Control
9		
10 11 12 13 14 15 16	$\overline{a}$ $\overline{b}$ $\overline{c}$ $\overline{d}$ $\overline{e}$ $\overline{f}$ $\overline{g}$	7 Segment Data
17 18 19 20	T_4 T_3 T_2 T_1	TIMING CONTROL { Display Control LED Control Key Matrix
21	GND	

No.	Terminal Description	Function
22	T.	TIMING CONTOR
23 24 25 26		Key IN
27	X IN	
28	X OUT	
29	CK	
30	(TEST)	
31	$\overline{\text{RESET}}$	L = IN THE BEGINING
32	$\overline{\text{INT}}$	
33	POWER CHECK	H = POWER OFF L = POWER ON
34 35 36 37	A B C D	PLL FREQUENCY DATA
38	PLL LATCH STROBE	
39	CAL TONE	H = CAL TONE
40	FM AUTO	H = FM AUTO
41		
42	VDD	

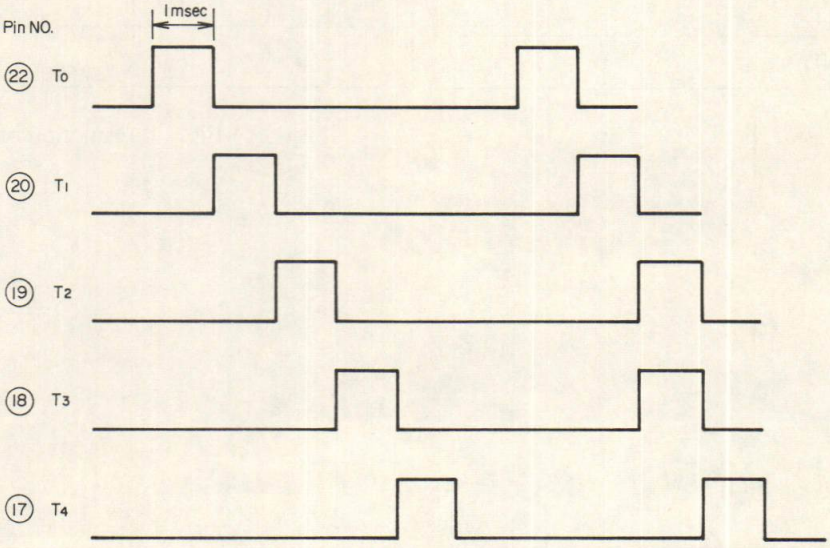
Fig. 11 Function of AT-500-A Terminals



(A) 7 Segment Data



(B) LED Control



(C) Timing Control

Fig. 12 Waveforme of IC7 (AT-500-A)

5. MUTE CIRCUIT OPERATION

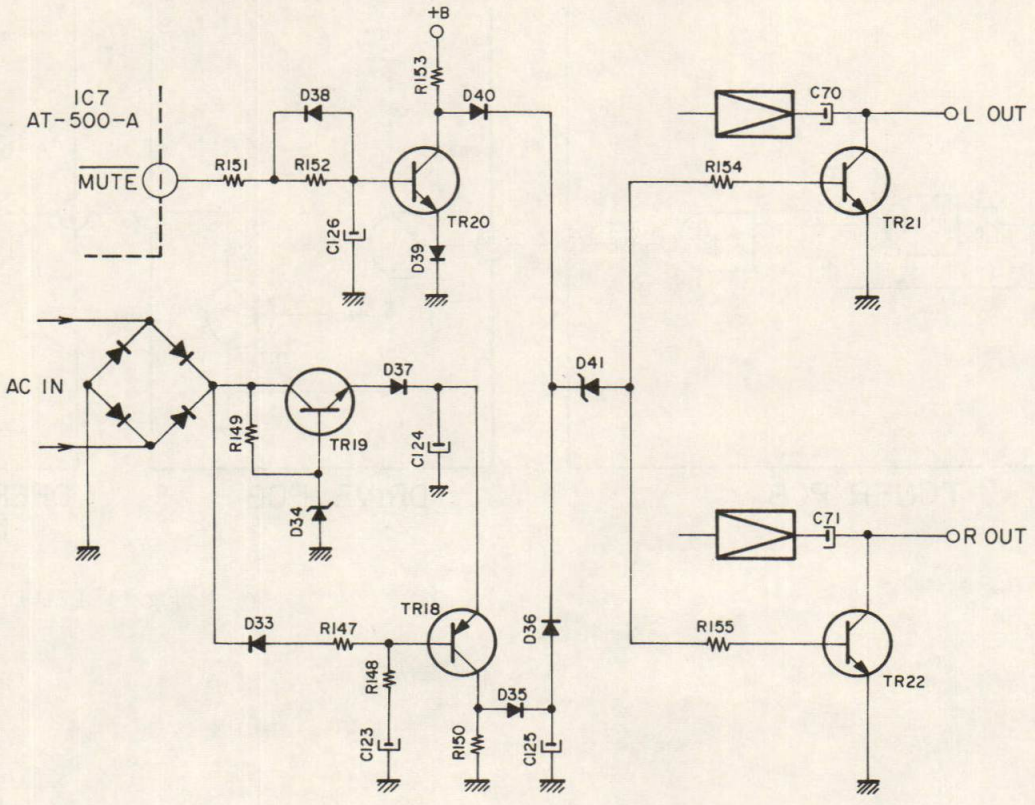


Fig. 13 Mute Circuit

1) Mute Operation When Power is Switched On
When power is switched on, the base current of TR18 flows until C123 is charged so TR18 is on. While TR18 is on, TR21 and TR22 are turned on. and no line output is produced.
When C123 has been charged, TR18 is turned off causing TR21 and TR22 to be turned off.

2) Mute Operation When Power is Switched Off
When power is switched off, the voltage built up in C124 is applied to TR18 to on TR18. While TR18 is on, TR21 and TR22 are on, and no line output is produced. When C124 has been discharged, TR18 is turned off so that TR21 and TR22 are turned off.

3) $\overline{\text{MUTE}}$ (AT500A ①) at Low Level
When $\overline{\text{MUTE}}$ (AT500A ①) goes low, the voltage charged in C126 is discharged through D38 so that TR20 is turned off. Thus, TR21 and TR22 are on, and the line output is grounded.

4) $\overline{\text{MUTE}}$ (AT500A ①) at High Level
When $\overline{\text{MUTE}}$ (AT500A ①) goes high, C126 is charged, and TR20 is turned on. Thus, TR21 and TR22 are turned off.

6. LED DRIVE CIRCUIT OPERATION

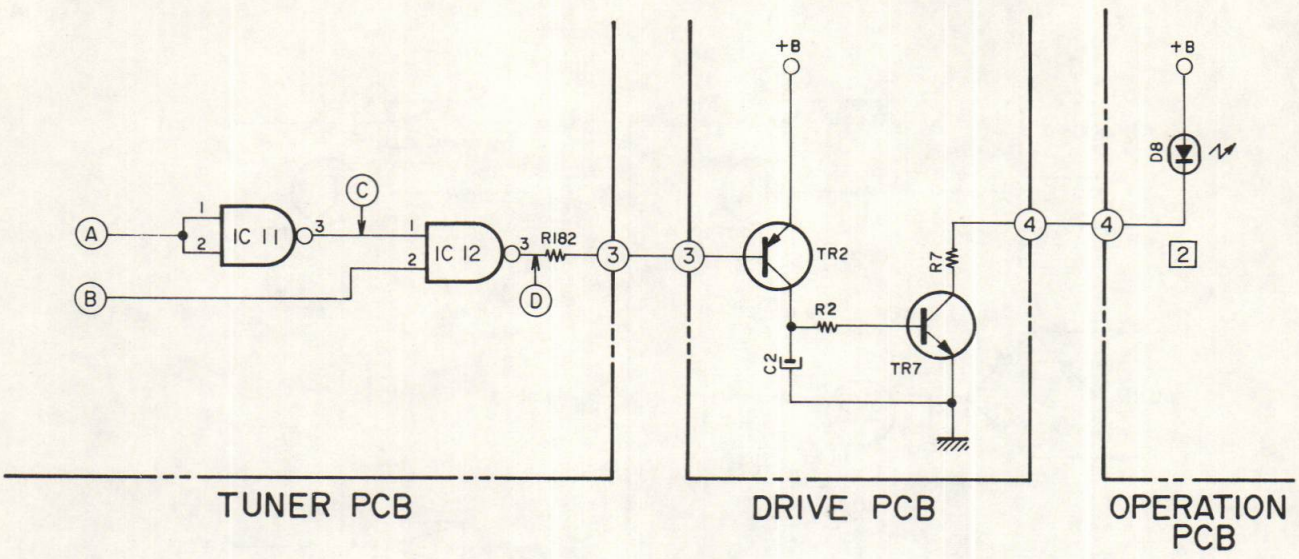
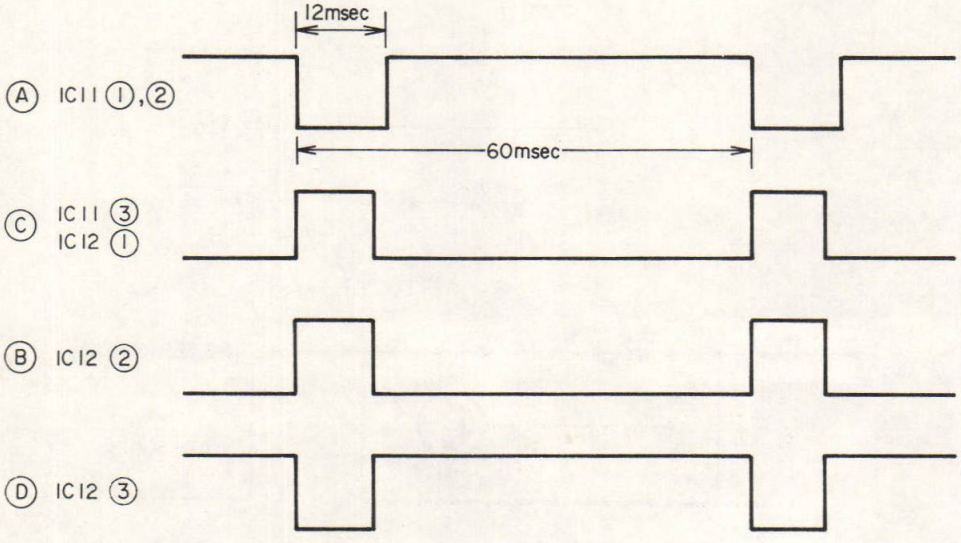
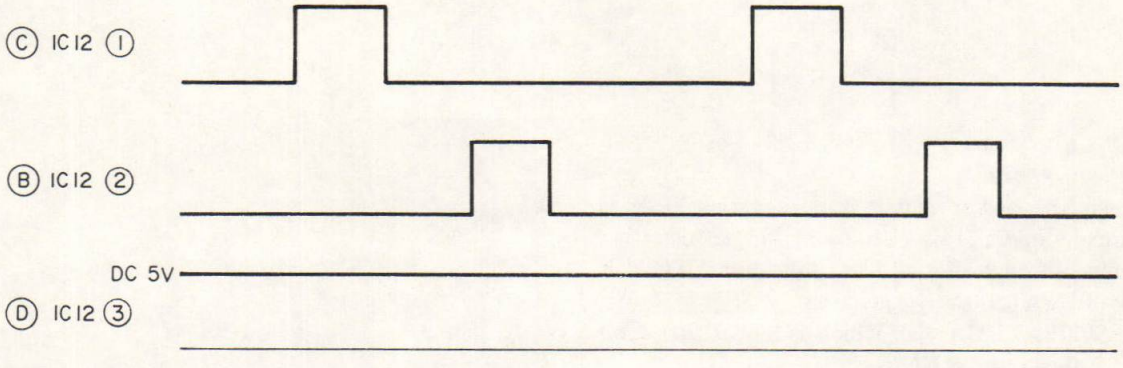


Fig. 14 LED Drive Circuit

1) When a "L" signal is input to Point Ⓐ and a "H" signal to Point Ⓑ, Point Ⓒ goes "H", and Point Ⓓ goes "L".
   When Point Ⓓ goes "L", TR2 is turned on so that TR7 is turned on and LED lights.
2) When a "H" signal is input to Point Ⓐ and Point Ⓑ, or a low "L" signal to Point Ⓐ and Point Ⓑ, Point Ⓓ goes "H". When Point Ⓓ goes "H", TR2 is turned off so that TR7 is deenergized and LED goes out.
3) Waveforms at Points Ⓐ, Ⓑ, Ⓒ, and Ⓓ are shown in Fig. 15.
   LED repeats on, off, and on, but it appears continuously lit to the human eyes because the on and off is repeated so fast.



(A) LED LIGHTS



(B) LED TURN OFF

Fig. 15 Waveforms at Points Ⓐ, Ⓑ, Ⓒ and Ⓓ

7. BACK UP CIRCUIT OPERATION

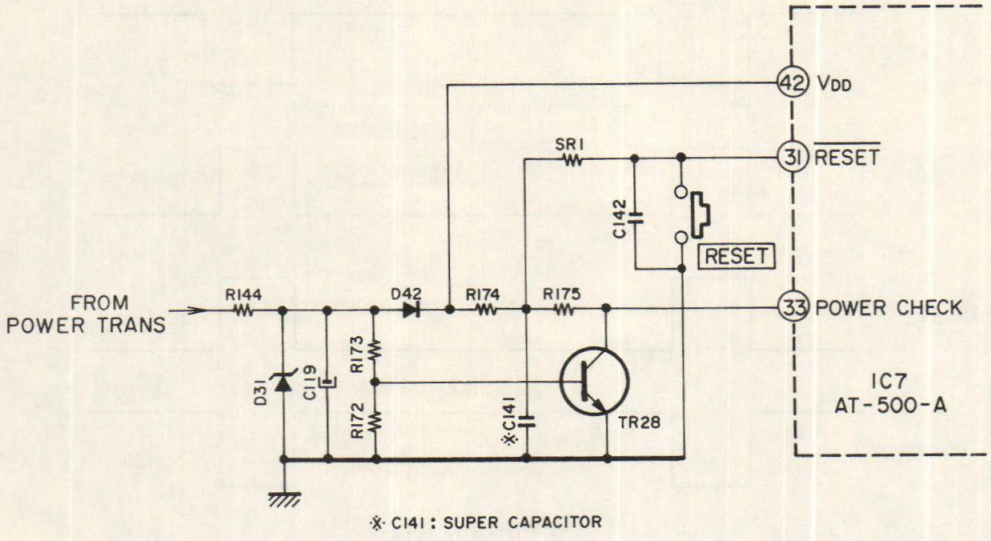


Fig. 16 Back Up

1) When the power switch is pushed on, TR28 is turned on. C141 is charged by the current that flows through R174. At this time, POWER CHECK (AT500A ㉝) goes low.
   $\overline{\text{RESET}}$ (AT500A ㉛), which is low at first, goes "H" when C142 is charged.
2) When the power switch is pushed off, TR28 is turned off. The voltage charged in C141 is applied to POWER CHECK (AT500A ㉝) via R175 so that POWER CHECK (AT500A ㉝) goes "H". As POWER CHECK goes "H", the microcomputer (AT500A) confirms that the power switch is off, stops oscillation, and brings the set into a back up state.
3) When the power switch is pushed on again, TR28 is turned on. POWER CHECK (AT500A ㉝) goes "L". As POWER CHECK (AT500A ㉝) is "L", the microcomputer (AT500A) confirms that the power switch is on, and shows the back up on the display. Different from the case of Item 1), $\overline{\text{RESET}}$ (AT500A ㉛) does not go "L".

* The memory lasts 20 days if power remains off.

8. KEY MATRIX

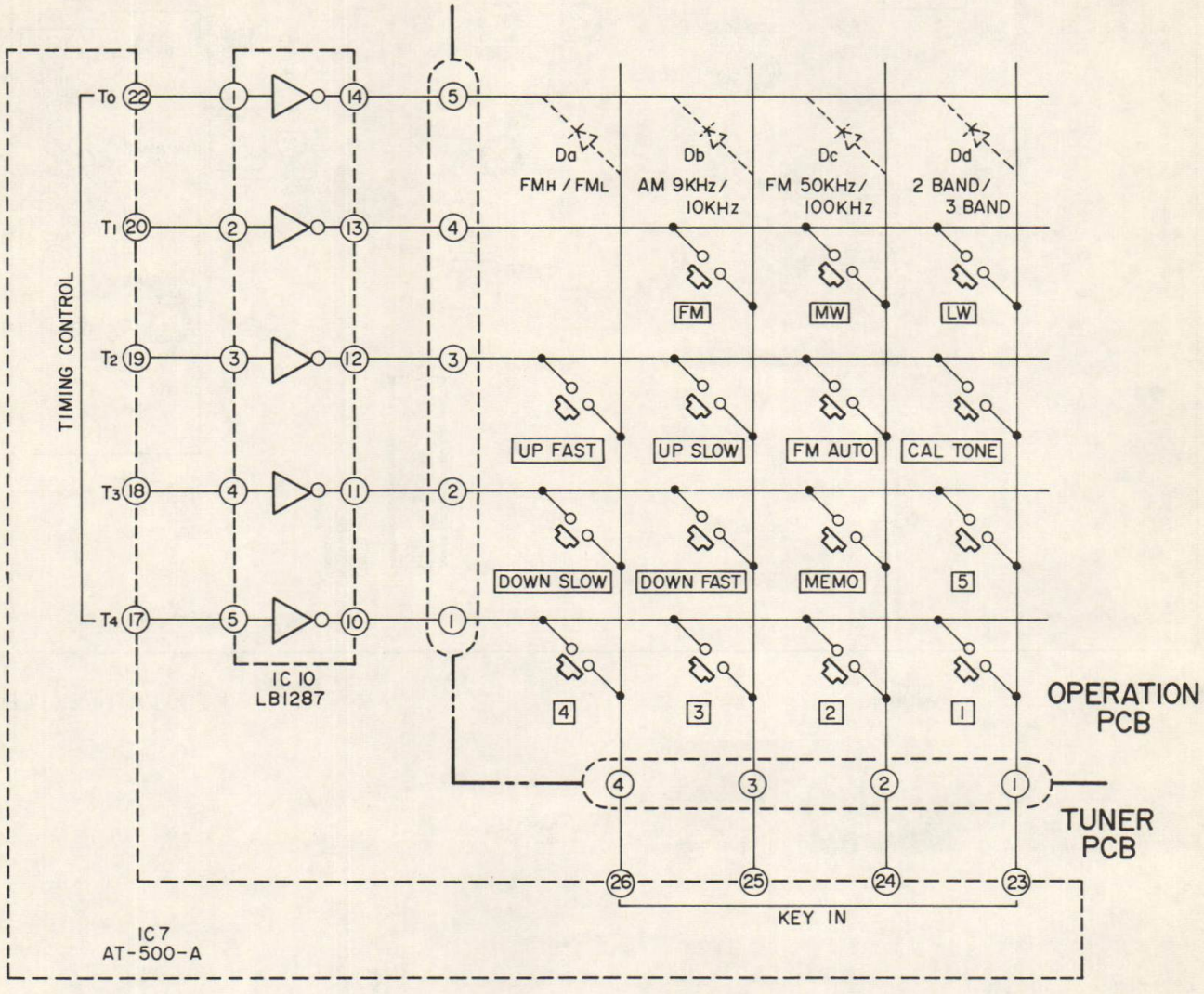


Fig. 17 Key Matrix

1) FM_H/FM_L . . . . . FM_L if diode Da is connected.
   FM_H: 87.40 MHz to 108.10 MHz
   FM_L: 76.00 MHz to 90.0 MHz
2) AM 9 kHz Step/10 kHz Step . . . . . 10 kHz Step if diode Db is connected.
   AM 9 kHz Step: 522 kHz to 1611 kHz
   AM 10 kHz Step: 530 kHz to 1610 kHz
3) FM 50 kHz Step/100 kHz Step . . . . 100 kHz Step if diode Dc is connected.
4) 2 Bands/3 Bands . . . . . 3 Bands if Dd is connected.

Destination	AM	FM
J	522 ~ 1611 kHz (9 kHz STEP)	76.00 ~ 90.00 MHz (100 kHz STEP)
C, A	530 ~ 1610 kHz (10 kHz STEP)	87.40 ~ 108.10 MHz (100 kHz STEP)
U, E, S, V	522 ~ 1611 kHz (9 kHz STEP)	87.40 ~ 108.10 MHz (50 kHz STEP)
L BAND	137 ~ 362 kHz LW (10 kHz STEP) 522 ~ 1611 kHz MW (9 kHz STEP)	87.40 ~ 108.10 MHz (50 kHz STEP)

Fig. 18

VII. ADJUSTMENTS

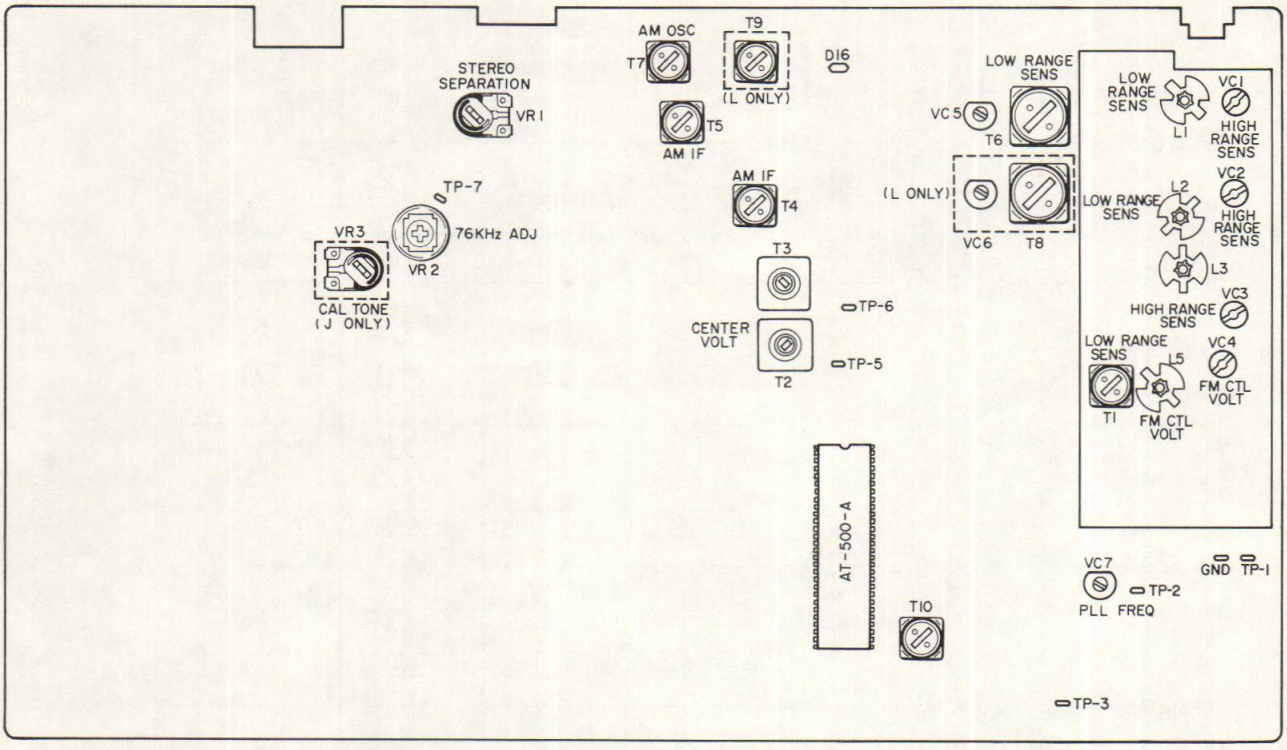


Fig. 19 Tuner PCB

1. AM (AT-S210L : MW) SECTION ADJUSTMENT

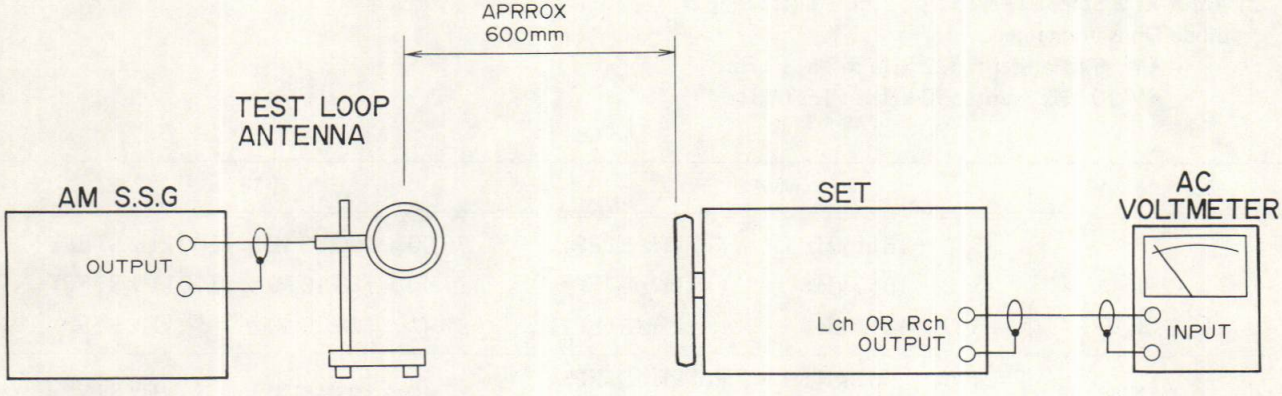


Fig. 20 Instrument Connections for AM (MW) Section Adjustment and Steps 2, 3 of LW Section Adjustment

Step	Adjustment Item	Adjustment Point	Result	Remarks
1	PLL Freq.	VC-7	Digital Display indicating Freq. + 10.7 MHz	Band SW to FM Connect Frequency Counter between TP-2 and GND (See NOTE)
2	AM (MW) OSC	T7	710 ± 1 kHz	Band SW to AM (MW). Short D16 Connect Frequency Counter between TP-3 and GND
3	AM IF	T4, 5	Max Output	1,000 kHz, 50 dB 400 Hz (30%) input.
4	Low Range Sensitivity 600 kHz (603 kHz)	T6	Max Output Distortion Factor: Less than 10%	600 kHz (603 kHz), 50 dB, 400 Hz (30%) input.
5	High Range Sensitivity 1,400 kHz (1,404 kHz)	VC5	Max Output Distortion Factor: Less than 10%	1,400 kHz (1,404 kHz), 50 dB 400 Hz (30%) input.
6				Readjust in Steps 4 and 5.
7	CAL Tone Level (J Only)	VR3		−6 ± 2 dB

NOTE: Digital display frequency +10.7 MHz means that when the display frequency of Digital Display is 100 MHz, it should be adjusted to 110.7 MHz.

2. LW (AT-S210L only) SECTION ADJUSTMENT

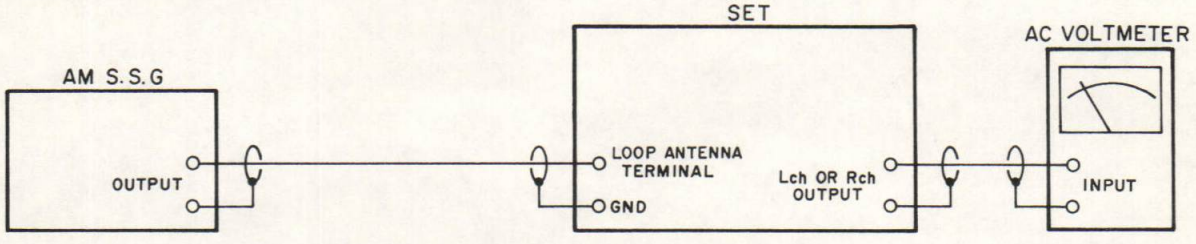


Fig. 21 Instrument Connections for Steps 2 and 3 of LW Section Adjustments

Step	Adjustment Item	Adjustment Point	Result	Remarks
1	LW OSC	T9	538 kHz ± 1 kHz	Band SW to LW Connect a Frequency Counter between TP-3 and GND.
2	Low Range Sensitivity 155 kHz	T8	Max Output Distortion Factor: Less than 10%	155 kHz, 50 dB, 400 Hz (30%) input.
3	High Range Sensitivity 300 kHz	VC6	Max Output Distortion Factor: Less than 10%	300 kHz, 50 dB, 400 Hz (30%) input.
4				Readjust in Steps 2 and 3.

3. FM SECTION ADJUSTMENT

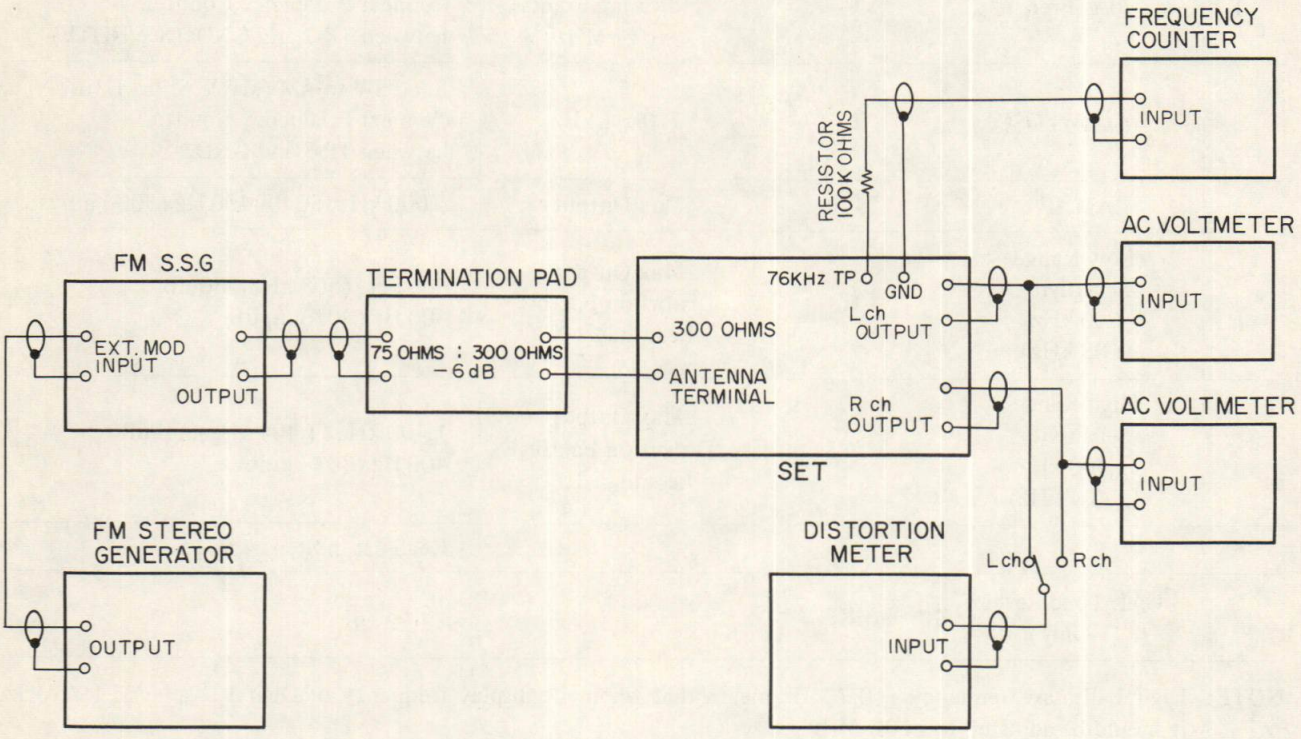


Fig. 22 Instrument Connections

Step	Adjustment Item	Adjustment Point	Result	Remarks
1	FM CTL VOLT	L5	3 ± 0.1V	1) Band SW to FM 2) Display to 87.4 MHz (76 MHz) 3) Connect a digital Voltmeter between TP-1 and GND
		VC4	20 ± 0.4V	Display to 108.1 MHz (90 MHz) same as above.
2	PLL Freq.	VC7	Digital Display Indicating Frequency + 10.7 MHz	Connect a Frequency counter between TP2 and GND (See NOTE 1).
3	Center Volt	T2	TP5, 6	1) Connect a Tuning Meter between TP5 and TP6. 2) Tunes only noise without interference from broadcasting (See NOTE 2)
4	MPX Free Running Frequency	VR2	76 kHz ± 0.2 kHz	Connect a Frequency Counter between TP7 and GND (See NOTE 3)
5	Low Range Sensitivity 88.0 MHz (78 MHz)	L1, 2 T1 (Front End)	Distortion Factor: Less than 3%	1) Mode SW to OFF 2) 88 MHz (78 MHz) less than 8 dB, 1 kHz (mono) input.
6	High Range Sensitivity 106 MHz (88 MHz)	VC1, 2, 3 (Front End)	Distortion Factor: Less than 3%	106 MHz (88 MHz), less than 8 dB, 1 kHz (mono) input.
7				Readjust in Steps 5 and 6.
8	Stereo Separation	VR1	More than 40 dB	98 MHz (84 MHz), 60 dB, 1 kHz (Stereo 100%) Lch (Rch) input. Maximum output of Rch (Lch).

NOTES:
1. Digital Display frequency +10.7 MHz means that when the display frequency of Digital Display is 100 MHz, it should be adjusted to 110.7 MHz.
2. For the Center Meter should be used the tuning meter and the like available as a part of the other models.
3. When connecting a Frequency Counter, connect from TP via 100 kohms resistor.
4. When the distortion factor of sensitivity still does not comply with the data specifications, adjust by turning the Front end IF Coil core, but not more than 1/2 turn.

VIII. CLASSIFICATION OF VARIOUS P.C BOARDS

1. P.C BOARD TITLES AND IDENTIFICATION NUMBERS

1) Model AT-S210

P.C Board Title	P.C Board Number	Notes
Tuner P.C Board	A3033A501A	U
Tuner P.C Board	A3033A502A	C, A
Tuner P.C Board	A3033A503A	E, S, V
Operation P.C Board	A3033A501B	U
Operation P.C Board	A3033A502B	C, A
Operation P.C Board	A3033A503B	E, S, V
Drive P.C Board	A3033B506A	
Power Switch P.C Board	A3033B506B	

2) Model AT-S210L

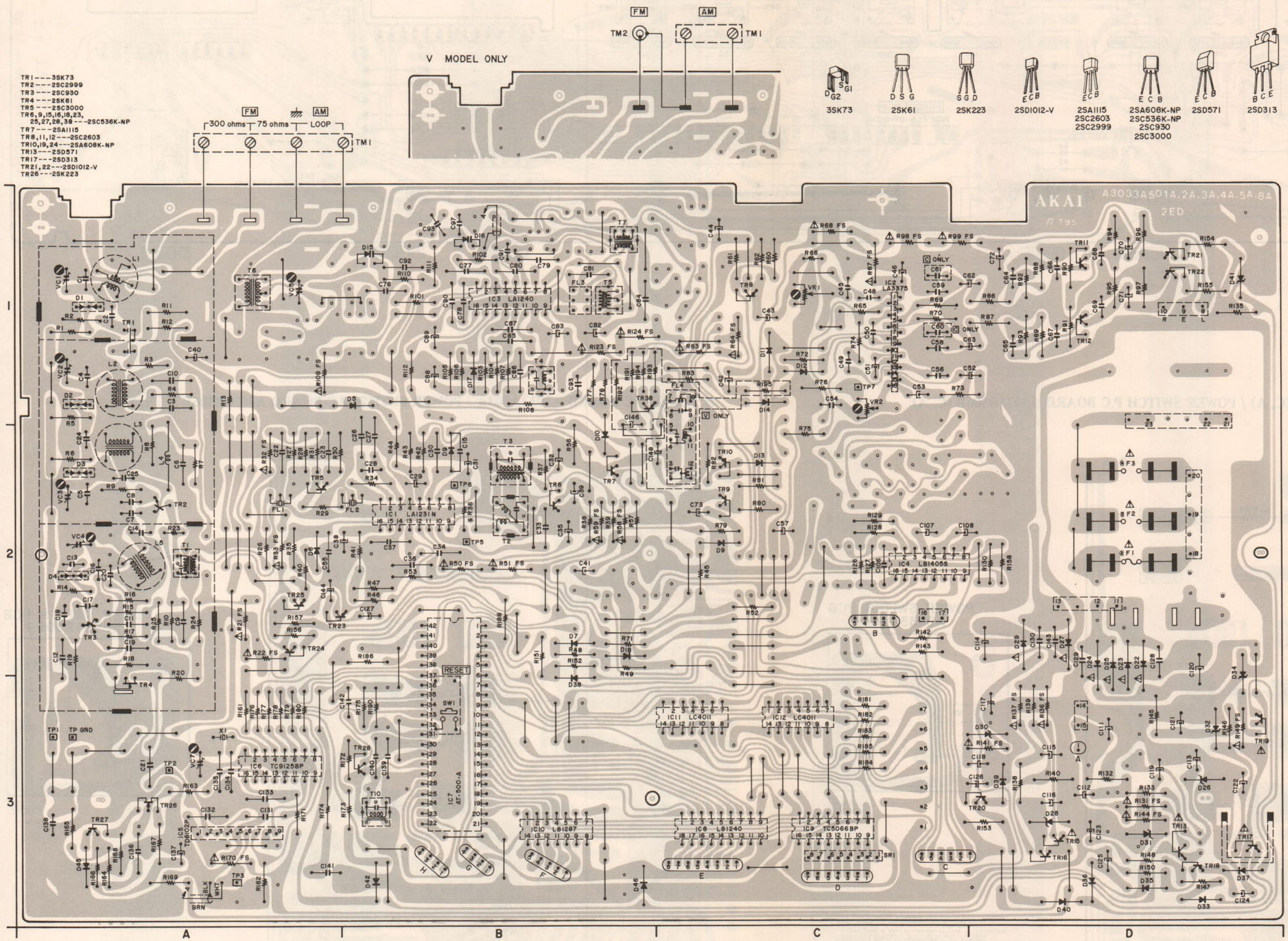
P.C Board Title	P.C Board Number	Notes
Tuner P.C Board	A3033A505A	
Operation P.C Board	A3033A505B	
Drive P.C Board	A3033B506A	
Power Switch P.C Board	A3033B506B	

3) Model AT-S210J

P.C Board Title	P.C Board Number	Notes
Tuner P.C Board	A3033A504A	
Operation P.C Board	A3033A504B	
Drive P.C Board	A3033B506A	
Power Switch P.C Board	A3033B506B	

2. MODEL AT-S210 COMPOSITION OF VARIOUS P.C BOARD

1) TUNER P.C BOARD A3033A501A (U), A3033A502A (C, A), A3033A503A (E, S, V) / POWER SWITCH P.C BOARD A3033B506B (U) / DRIVE P.C BOARD A3033A506A

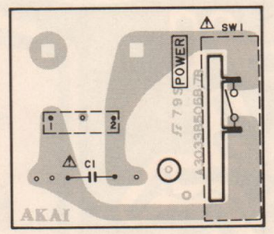


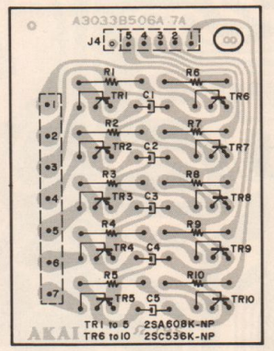
TR1---3SK73
TR2---2SC2999
TR3---2SC930
TR4---2SK61
TR5---2SC3000
TR6,9,15,16,18,23, 25,27,28,38---2SC536K-NP
TR7---2SA1115
TR8,11,12---2SC2603
TR10,19,24---2SA608K-NP
TR13---2SD571
TR17---2SD313
TR21,22---2SD1012-V
TR26---2SK223

LOCATION OF IC, TR & PIN CONNECTORS

IC1 - - - - - B2	TR15 - - - D3
IC2 - - - - - C1	TR16 - - - D3
IC3 - - - - - B1	TR17 - - - D3
IC4 - - - - - C2	TR18 - - - D3
IC5 - - - - - A3	TR19 - - - D3
IC6 - - - - - A3	TR20 - - - D3
IC7 - - - - - B3	TR21 - - - D1
IC8 - - - - - C3	TR22 - - - D1
IC9 - - - - - C3	TR23 - - - A2
IC10 - - - - B3	TR24 - - - A2
IC11 - - - - C3	TR25 - - - A2
IC12 - - - - C3	TR26 - - - A3
TR1 - - - - A1	TR27 - - - A3
TR2 - - - - A2	TR28 - - - B3
TR3 - - - - A2	TR38 - - - B1
TR4 - - - - A3	① to ⑦ - - C3
TR5 - - - - A2	⑧ to ⑩ - - D1
TR6 - - - - B2	⑪ to ⑬ - - D2
TR7 - - - - B2	⑭, ⑮ - - - D3
TR8 - - - - C1	⑯, ⑰ - - - C2
TR9 - - - - C2	A - - - - - D3
TR10 - - - - C2	B - - - - - C2
TR11 - - - - D1	C, D, E - - - C3
TR12 - - - - D1	F, G, H - - - B3
TR13 - - - D3	

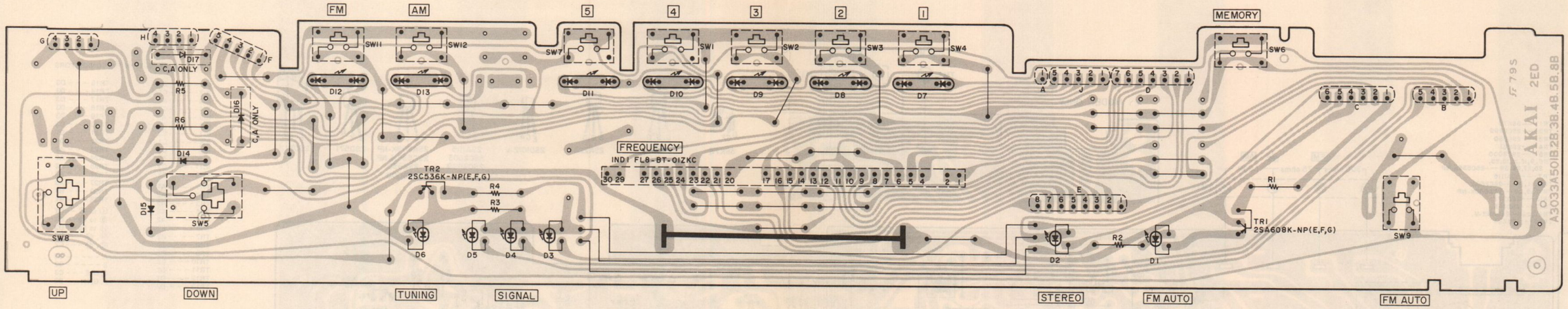
WARNING: ⚠INDICATES SAFETY CRITICAL COMPONENTS. FOR CONTINUED SAFETY, REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS
AVERTISSEMENT: ⚠ IL INDIQU LES COMPOSANTS CRITIQUES DE SÛRETÉ. POUR MAINTENIR LE DEGRÉ DE SECURITE DE L'APPAREIL NE REMPLACER LES COMPOSANTS DONT LE FONCTIONNEMENT EST CRITIQUE POUR LA SECURITE QUE PAR DES PIECES RECOMMANDEES PAR LE FABRICANT





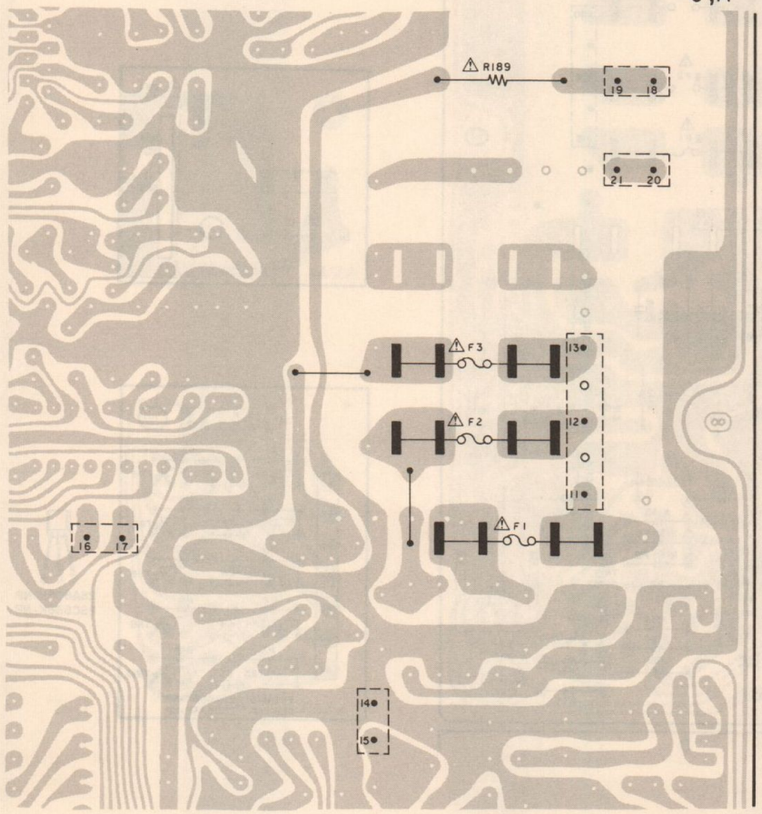
E C B
2SA608K-NP
2SC536K-NP

2) OPERATION P.C BOARD A3033A501B (U), A3033A502B (C, A), A3033A503B (E, S, V)

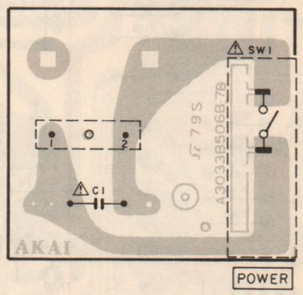


3) TUNER P.C BOARD A3033A502A (C, A) / POWER SWITCH P.C BOARD A3033B506B (C, A)

C,A



POWER SWITCH PCB
A3033B506B



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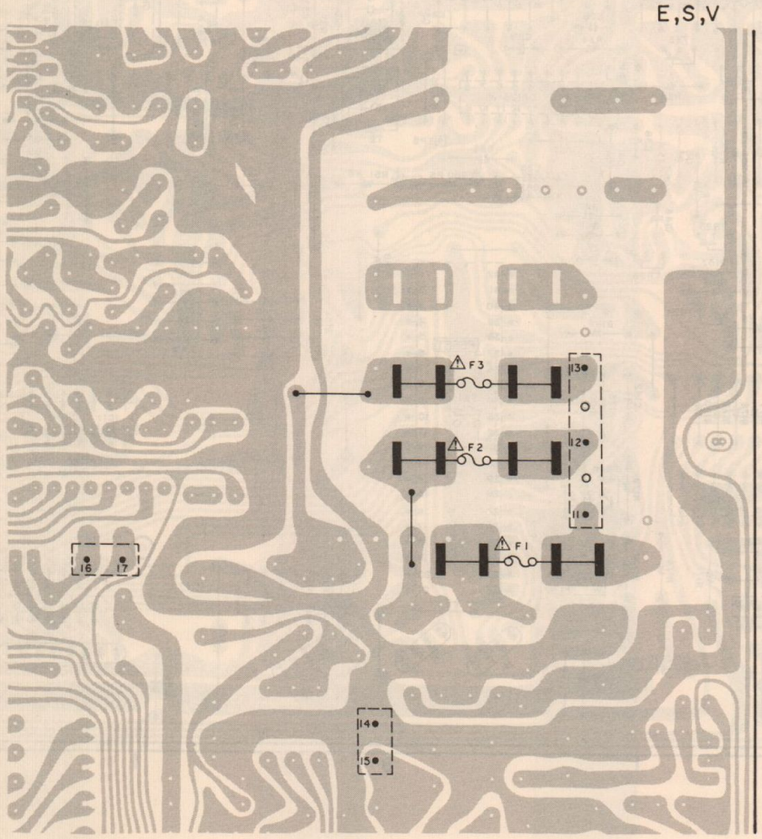
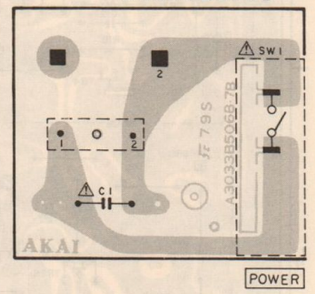
AVERTISSEMENT: ⚠ IL INDIQU LES COMPOSANTS CRITIQUES DE SURETÉ. POUR MAINTENIR LE DEGRE DE SECURITE DE L' APPAREIL NE REMPLACER LES COMPOSANTS DONT LE FONCTIONNEMENT EST CRITIQUE POUR LA SECURITE QUE PAR DES PIECES RECOMMANDEES PAR LE FABRICANT

4) TUNER P.C BOARD A3033A503A / POWER SWITCH P.C BOARD A3033B506B (E, S, V)

E,S,V

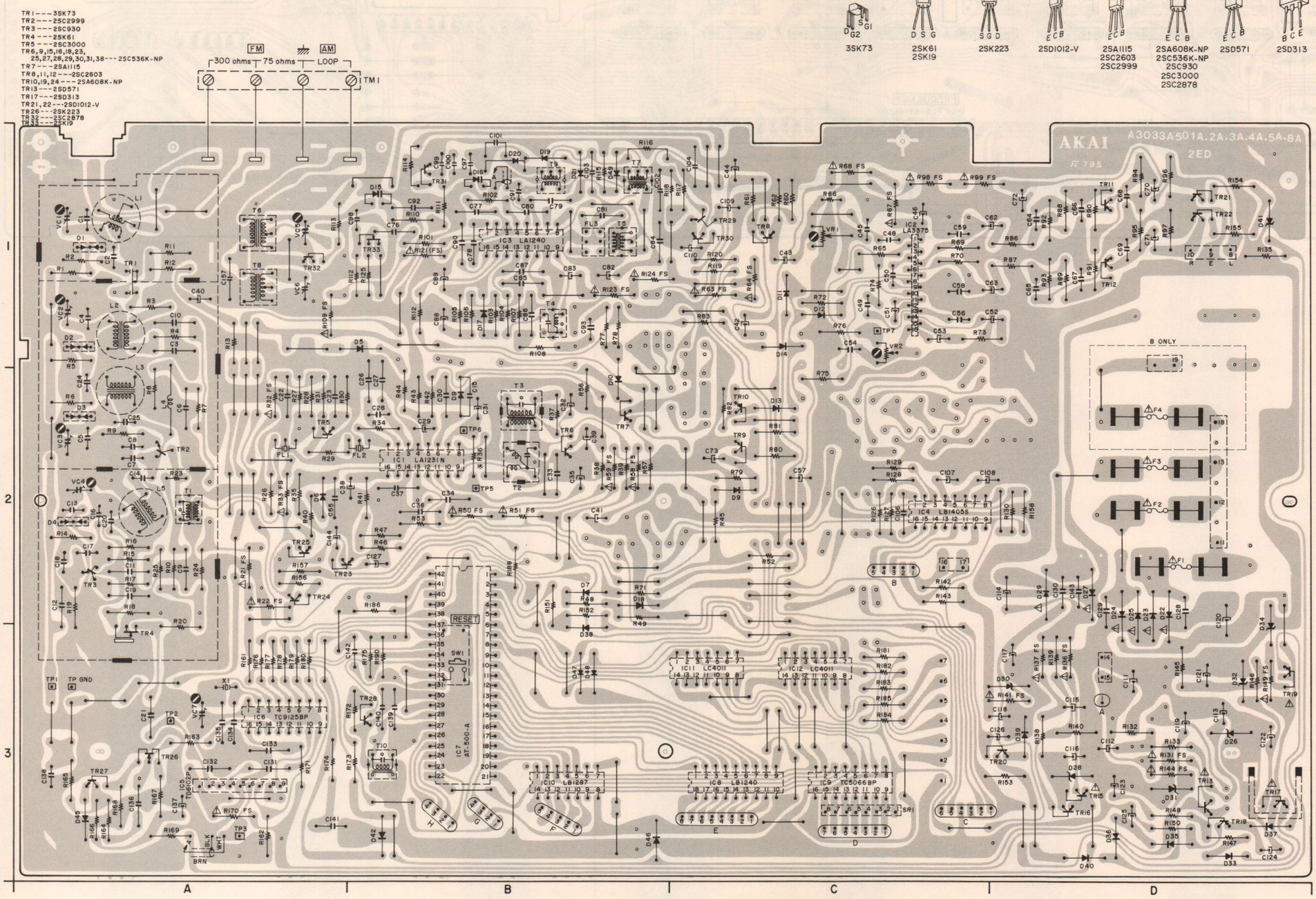


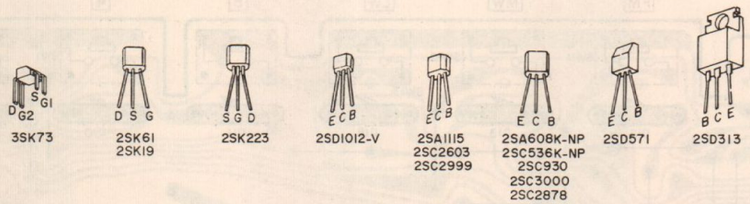
POWER SWITCH PCB
A3033B506B



3. MODEL AT-S210L COMPOSITION OF VARIOUS P.C BOARD

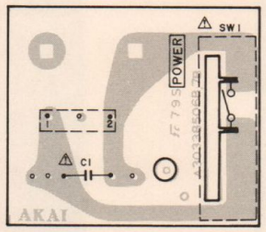
1) TUNER P.C BOARD A3033A505A / POWER SWITCH P.C BOARD A3033B506B / DRIVE P.C BOARD A3033A506A

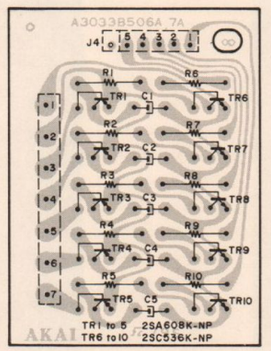




LOCATION OF IC, TR & PIN CONNECTORS

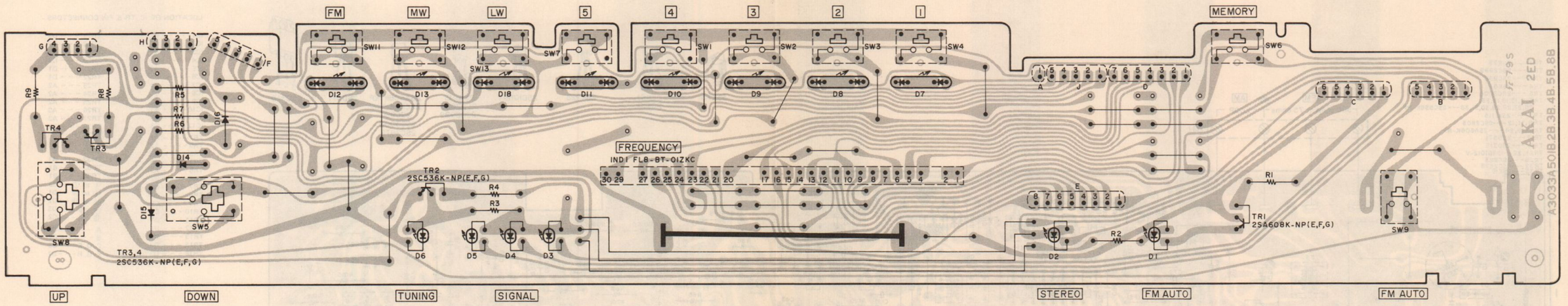
IC1 ----- B2	TR17 --- D3
IC2 ----- C1	TR18 --- D3
IC3 ----- B1	TR19 --- D3
IC4 ----- C2	TR20 --- D3
IC5 ----- A3	TR21 --- D1
IC6 ----- A3	TR22 --- D1
IC7 ----- B3	TR23 --- A2
IC8 ----- C3	TR24 --- A2
IC9 ----- C3	TR25 --- A2
IC10 ---- B3	TR26 --- A3
IC11 ---- C3	TR27 --- A3
IC12 ---- C3	TR28 --- B3
TR1 ---- A1	TR29 --- C1
TR2 ---- A2	TR30 --- C1
TR3 ---- A2	TR31 --- B1
TR4 ---- A3	TR32 --- A1
TR5 ---- A2	TR33 --- B1
TR6 ---- B2	TR38 --- B1
TR7 ---- B2	① to ⑦ --- C3
TR8 ---- C1	⑧ to ⑩ --- D1
TR9 ---- C2	⑪ to ⑬ --- D2
TR10 --- C2	⑭, ⑮ --- D3
TR11 --- D1	⑮, ⑰ --- C2
TR12 --- D1	A ------ D3
TR13 --- D3	B ------ C2
TR15 --- D3	C, D, E --- C3
TR16 --- D3	F, G, H --- B3





WARNING: ⚠ INDICATES SAFETY CRITICAL COMPONENTS. FOR CONTINUED SAFETY, REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS
AVERTISSEMENT: ⚠ IL INDIQU LES COMPOSANTS CRITIQUES DE SÛRETÉ. POUR MAINTENIR LE DEGRÉ DE SÉCURITÉ DE L'APPAREIL NE REMPLACER LES COMPOSANTS DONT LE FONCTIONNEMENT EST CRITIQUE POUR LA SÉCURITÉ QUE PAR DES PIÈCES RECOMMANDÉES PAR LE FABRICANT

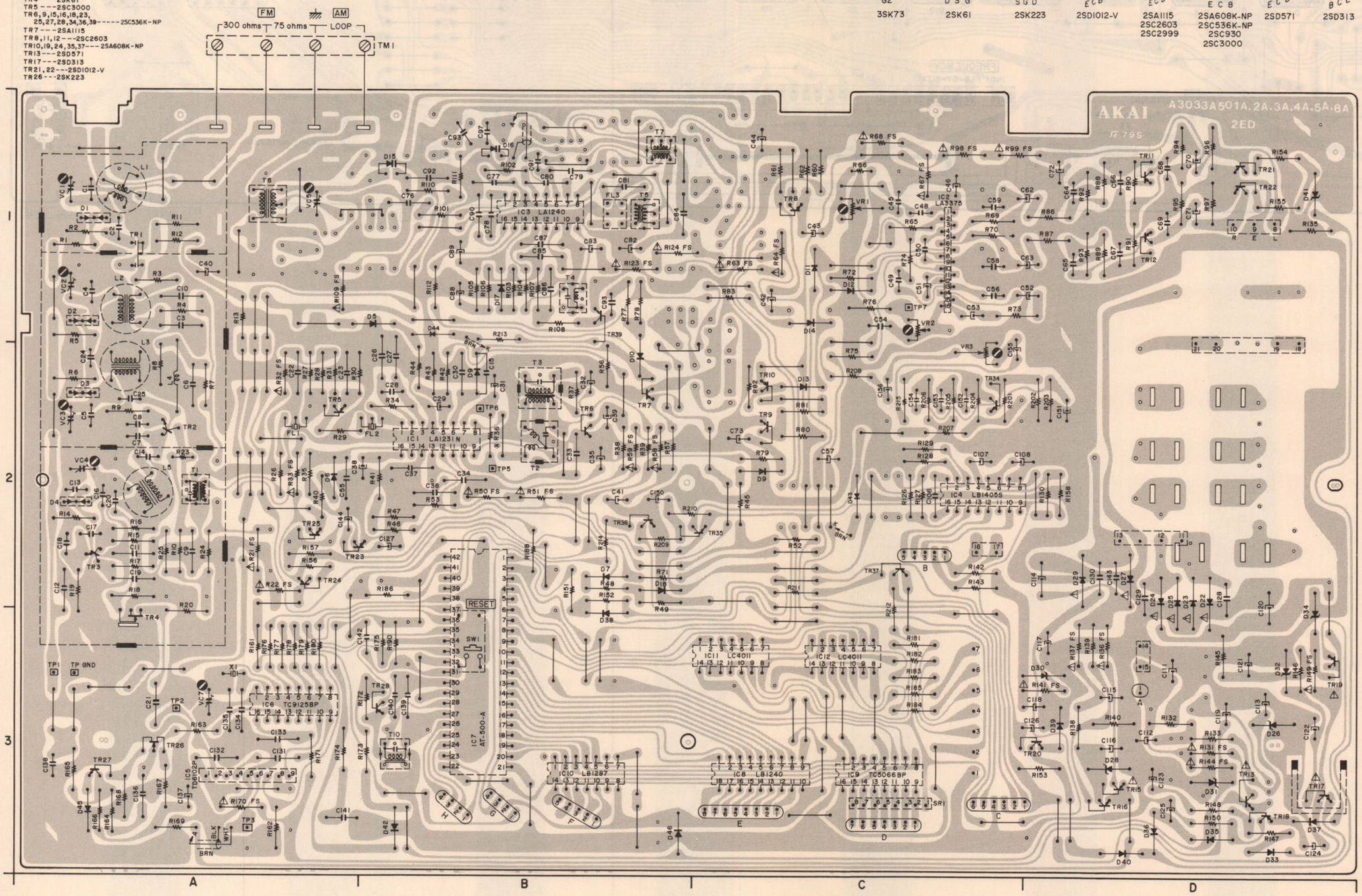
2) OPERATION P.C BOARD A3033A505B

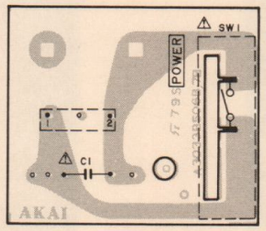


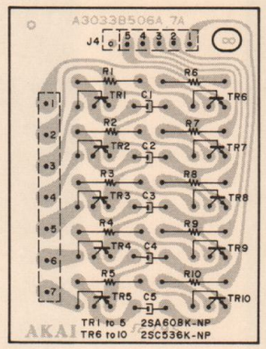
4. MODEL AT-S210J COMPOSITION OF VARIOUS P.C BOARD

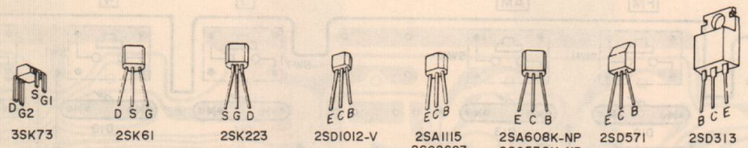
1) TUNER P.C BOARD A3033A504A / POWER SWITCH P.C BOARD A3033B506B / DRIVE P.C BOARD A3033B506A

TR1---3SK73
TR2---2SC2999
TR3---2SC930
TR4---2SK61
TR5---2SC3000
TR6,9,15,16,18,23,
25,27,28,34,36,39-----2SC536K-NP
TR7---2SA1115
TR8,11,12---2SC2603
TR10,19,24,35,37---2SA608K-NP
TR13---2SD571
TR17---2SD313
TR21,22---2SD1012-V
TR26---2SK223







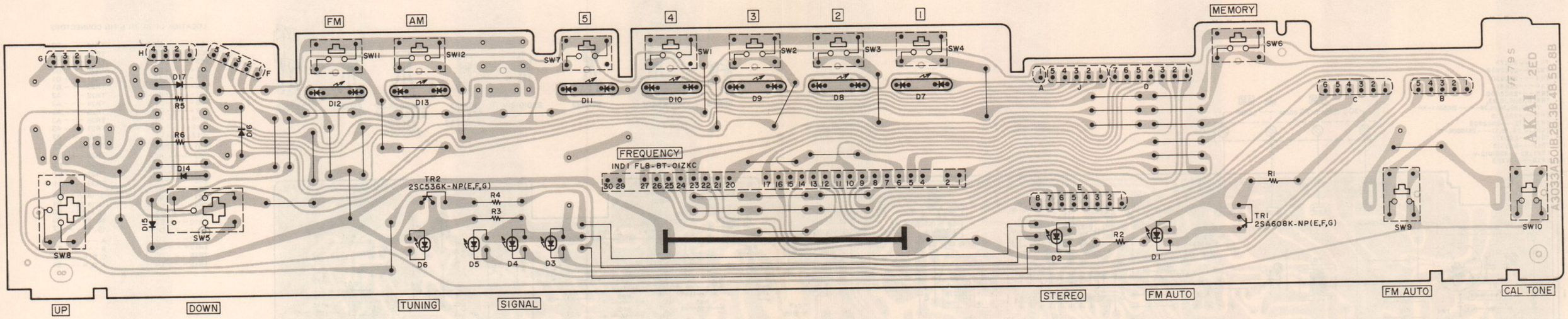


LOCATION OF IC, TR & PIN CONNECTORS

IC1 ----- B2	TR17 --- D3
IC2 ----- C1	TR18 --- D3
IC3 ----- B1	TR19 --- D3
IC4 ----- C2	TR20 --- D3
IC5 ----- A3	TR21 --- D1
IC6 ----- A3	TR22 --- D1
IC7 ----- B3	TR23 --- A2
IC8 ----- C3	TR24 --- A2
IC9 ----- C3	TR25 --- A2
IC10 ---- B3	TR26 --- A3
IC11 ---- C3	TR27 --- A3
IC12 ---- C3	TR28 --- B3
TR1 ---- A1	TR34 --- C2
TR2 ---- A2	TR35 --- C2
TR3 ---- A2	TR36 --- B2
TR4 ---- A3	TR37 --- C2
TR5 ---- A2	TR39 --- B1
TR6 ---- B2	① to ⑦ --- C3
TR7 ---- B2	⑧ to ⑩ --- D1
TR8 ---- C1	⑪ to ⑬ --- D2
TR9 ---- C2	⑭, ⑮ --- D3
TR10 --- C2	⑮, ⑰ --- C2
TR11 --- D1	A ----- D3
TR12 --- D1	B ----- C2
TR13 --- D3	C, D, E --- C3
TR15 --- D3	F, G, H --- B3
TR16 --- D3	

WARNING: ⚠INDICATES SAFETY CRITICAL COMPONENTS. FOR CONTINUED SAFETY, REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS
AVERTISSEMENT: ⚠ L'INDIQUE LES COMPOSANTS CRITIQUES DE SURETÉ. POUR MAINTENIR LE DEGRE DE SECURITE DE L'APPAREIL NE REMPLACER LES COMPOSANTS DONT LE FONCTIONNEMENT EST CRITIQUE POUR LA SECURITE QUE PAR DES PIECES RECOMMANDÉES PAR LE FABRICANT

2) OPERATION P.C BOARD A3033A504B



SECTION 2

SERVICE MANUAL

MODEL AM-U210/J

TABLE OF CONTENTS

For basic adjustments, measuring methods, and operating principles, refer to GENERAL TECHNICAL MANUAL.

I. SPECIFICATIONS

RATED POWER OUTPUT (Both Channels Driven)	
20 Hz to 20 kHz, 8 ohms	30W x 2/T.H.D. 0.05%
20 Hz to 20 kHz, 4 ohms	30W x 2/T.H.D. 0.08%
1 kHz, 8 ohms	33W x 2/T.H.D. 0.05%
1 kHz, 8 ohms	33W x 2/T.H.D. 0.08%
POWER BANDWIDTH (IHF −3 dB, 8 ohms)	5 Hz to 40 kHz (T.H.D. 0.1%)
SIGNAL TO NOISE RATIO (IHF-A)	
PHONO TO SPEAKER	80 dB
TUNER, AUX, TAPE TO SPEAKER	100 dB
RESIDUAL NOISE (IHF-A 8 ohms)	300 μV
CHANNEL SEPARATION	50 dB (1 kHz)/56 dB (40 Hz)/35 dB (10 kHz)
DAMPING FACTOR (8 ohms)	27 (1 kHz)/27 (40 Hz)/25 (12.5 kHz)
OUTPUT	
REQUIRED SPEAKER IMPEDANCE	4 to 16 ohms
INPUT SENSITIVITY/IMPEDANCE	
PHONO	2.5 mV/47 kohms (MM)
TUNER, AUX, TAPE	150 mV/100 kohms (Except JAPAN) 400 mV/100 kohms (JAPAN)
OUTPUT LEVEL/IMPEDANCE	
TAPE REC	150 mV
MIC	0.5 mV (JAPAN)
PHONO MAXIMUM INPUT LEVEL (1 kHz)	150 mV (MM)
FREQUENCY RESPONSE	
PHONO (RIAA Deviation)	±0.5 dB
TUNER, AUX, TAPE	5 Hz to 80 kHz (−3 dB)
TONE CONTROL	
BASS	±8 dB (100 Hz)
TREBLE	±8 dB (10 kHz)
LOUDNESS CONTROL	
(Volume set at −30 dB position)	+6 dB (10 kHz)
POWER CONSUMPTION	60W (JAPAN) 112.5W (U/T) 135W (CANADA) 110W (Europe)
POWER REQUIREMENTS	100V, 50/60 Hz for JAPAN 120V, 60 Hz for USA and Canada 220V, 50 Hz for Europe except UK 240V, 50 Hz for UK and Australia 110V/220V/240V, 50/60 Hz switchable for other countries
DIMENSIONS	440 (W) x 100 (H) x 247 (D) mm (17.3 x 3.9 x 9.7 inches)
WEIGHT	4.9 kg (10.8 lbs)

*** For improvement purposes, specifications and design are subject to change without notice.**

II. DISMANTLING OF UNIT

In case of trouble, etc. necessitating dismantling, please dismantle in the order shown in the photographs. Reassemble in reverse order.

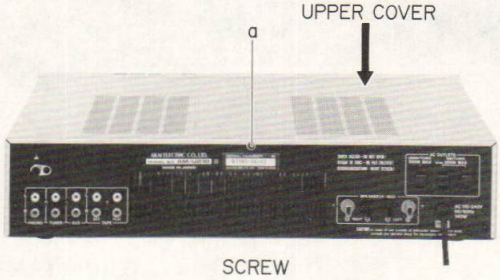
1

SCREWS

2

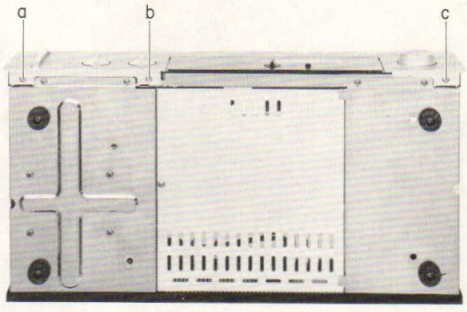
SCREWS

3



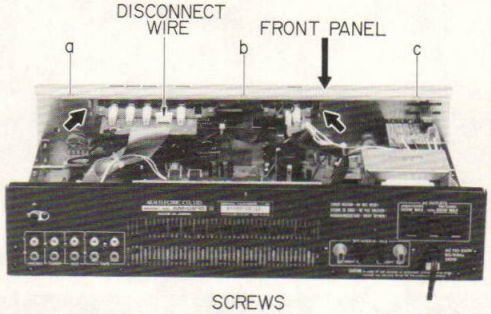
SCREW

4



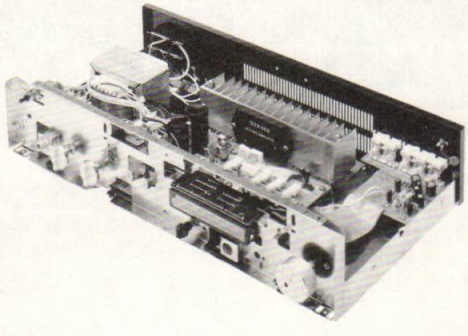
SCREWS

5



SCREWS

6



III. CONTROLS

1. MODEL AM-U210

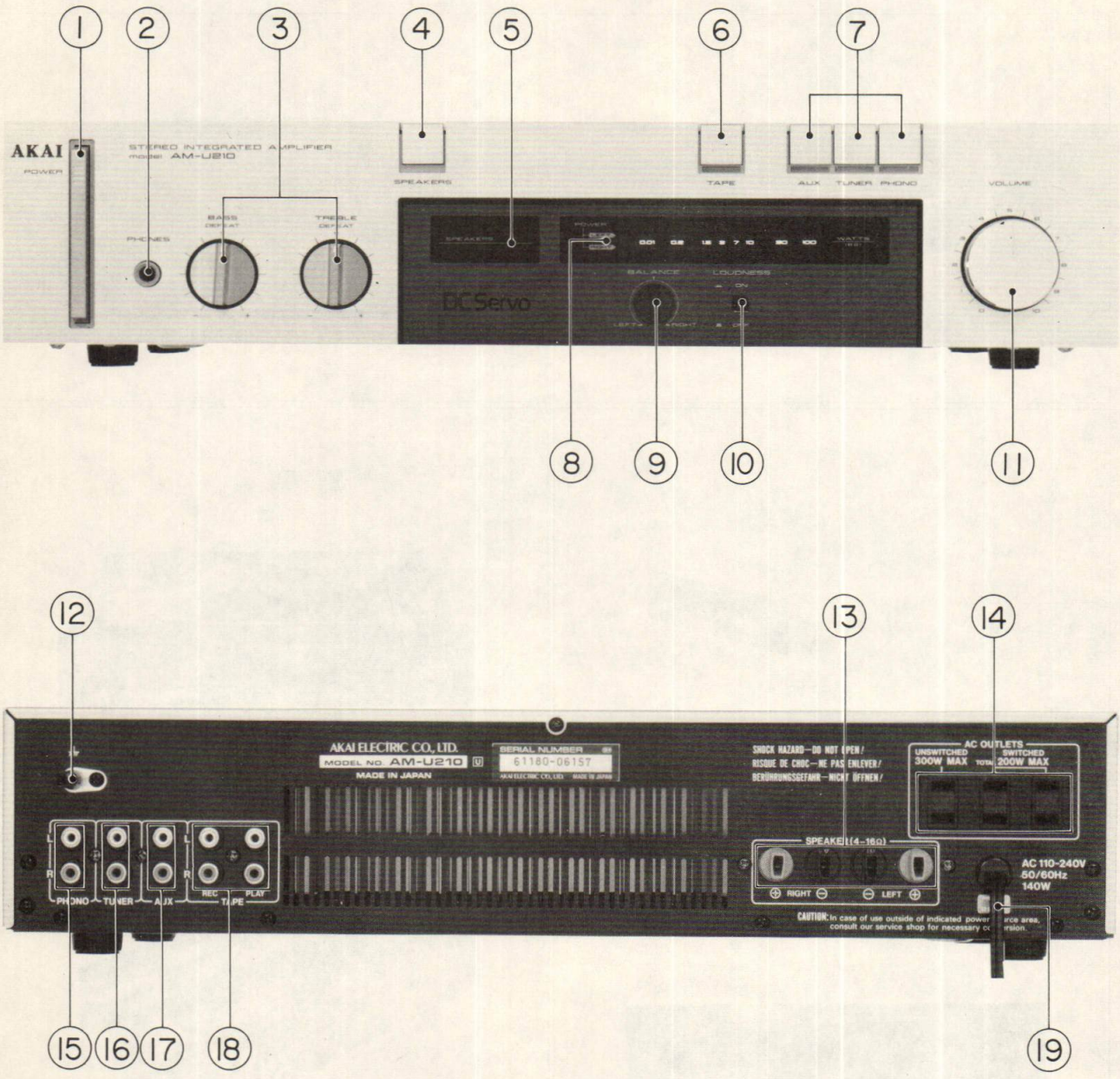


Fig. 1 Controls (AM-U210)

1. POWER SWITCH
2. HEADPHONE JACK (PHONES)
3. TONE CONTROLS
4. SPEAKERS SWITCH
5. SPEAKERS INDICATOR
6. TAPE SWITCH WITH INDICATOR
7. INPUT SELECTOR SWITCHES WITH INDICATORS
8. FLD POWER INDICATOR
9. STEREO BALANCE CONTROL
10. LOUDNESS SWITCH
11. VOLUME CONTROL
12. GROUND TERMINAL (⏚)
13. SPEAKER TERMINALS (Right and Left)
14. AC OUTLETS (Some models are not equipped with this facility.)
15. PHONO JACKS
16. TUNER JACKS
17. AUX JACKS
18. TAPE SYSTEM REC/PLAY JACKS
19. POWER CORD (Some models are equipped with an AC inlet instead of a power cord. Connect with an appropriate power cord.)

2. MODEL AM-U210J

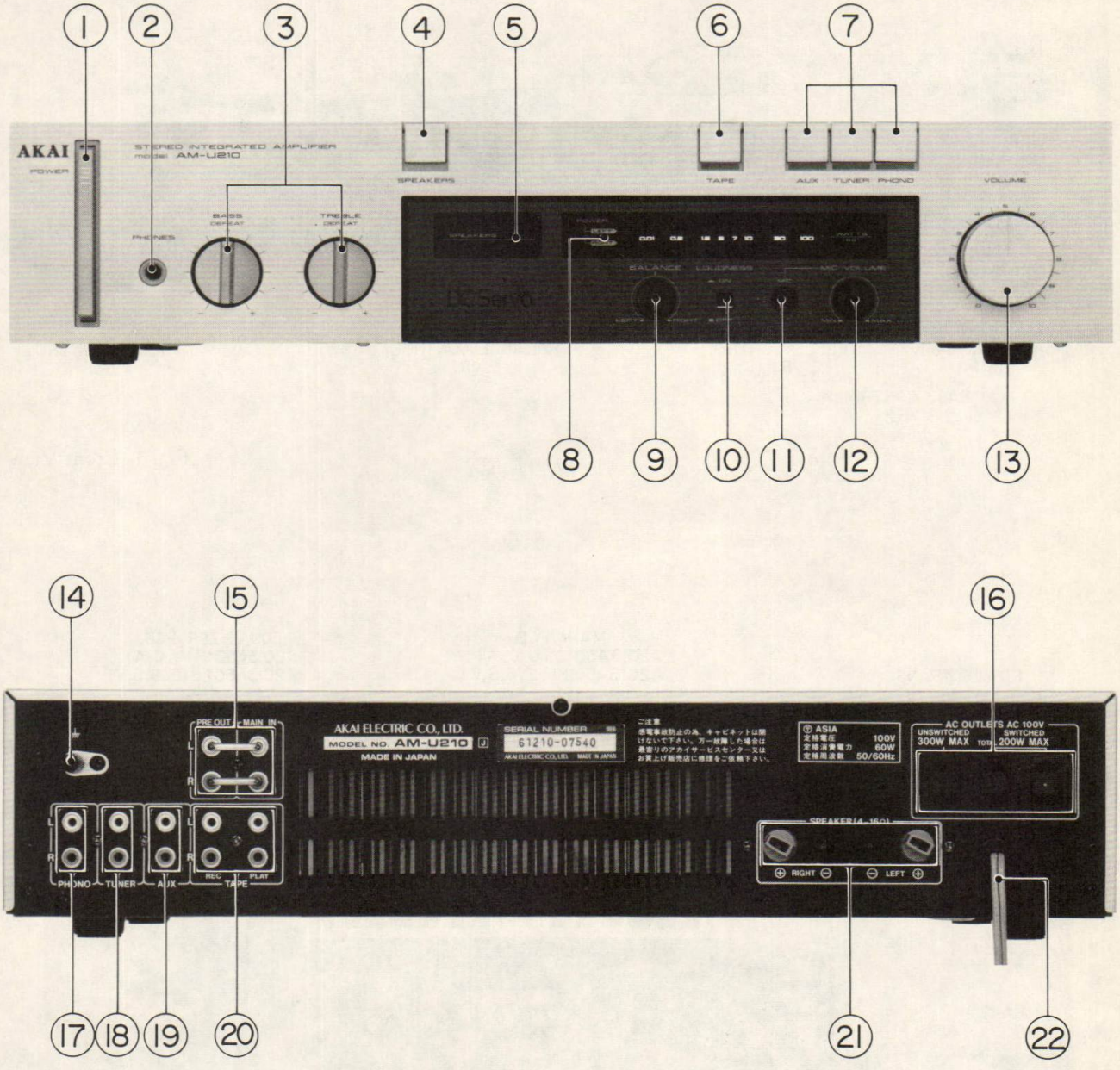


Fig. 2 Controls (AM-U210J)

1. POWER SWITCH
2. HEADPHONE JACK (PHONES)
3. TONE CONTROLS
4. SPEAKER SWITCH
5. SPEAKER INDICATOR
6. TAPE SWITCH WITH INDICATOR
7. INPUT SELECTOR SWITCH WITH INDICATORS
8. FLD POWER INDICATOR
9. STEREO BALANCE CONTROL
10. LOUDNESS SWITCH
11. MIC JACK (MIC)
12. MIC VOLUME CONTROL (MIC VOLUME)
13. VOLUME CONTROL
14. GROUND TERMINAL (⏚)
15. PRE OUT and MAIN IN JACKS
16. AC OUTLETS
17. PHONO JACKS
18. TUNER JACKS
19. AUX JACKS
20. TAPE SYSTEM REC/PLAY JACKS
21. SPEAKER TERMINALS (Right and Left)
22. POWER CORD

IV. PRINCIPAL PARTS LOCATION

1. MODEL AM-U210

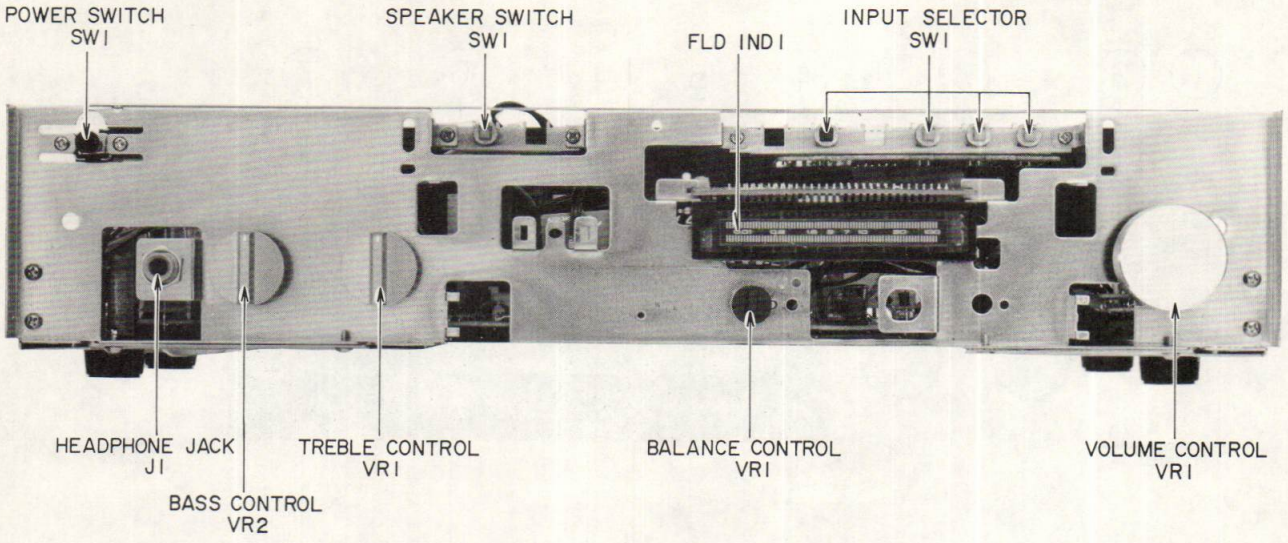


Fig. 3 Front View

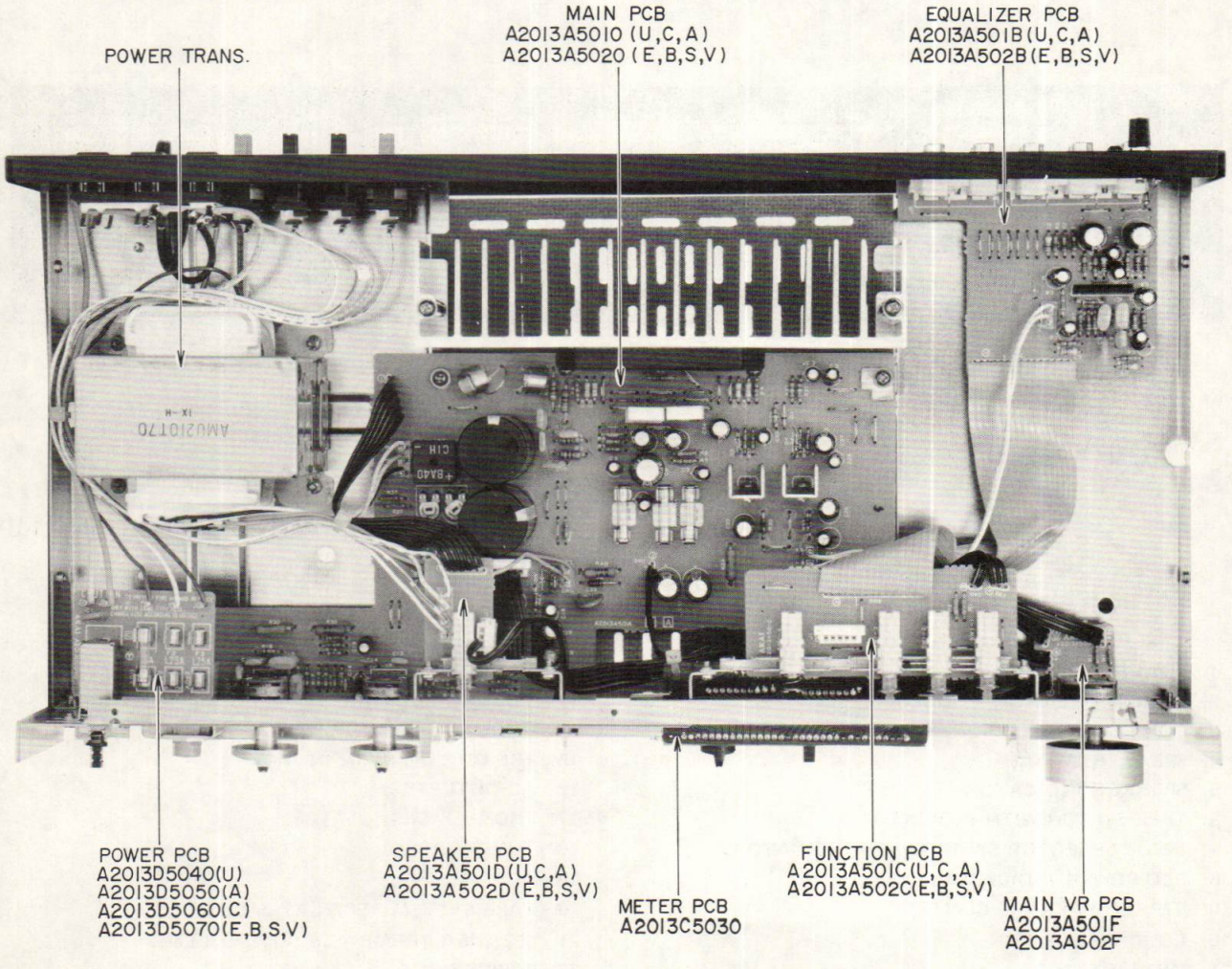


Fig. 4 Top View

2. MODEL AM-U210J

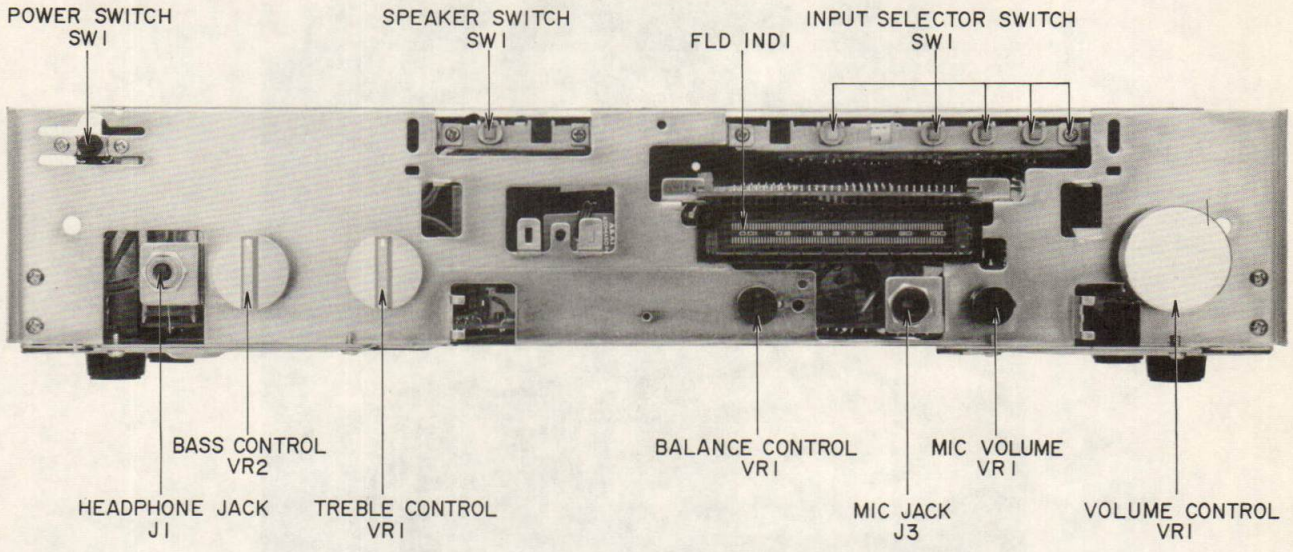


Fig. 5 Front View

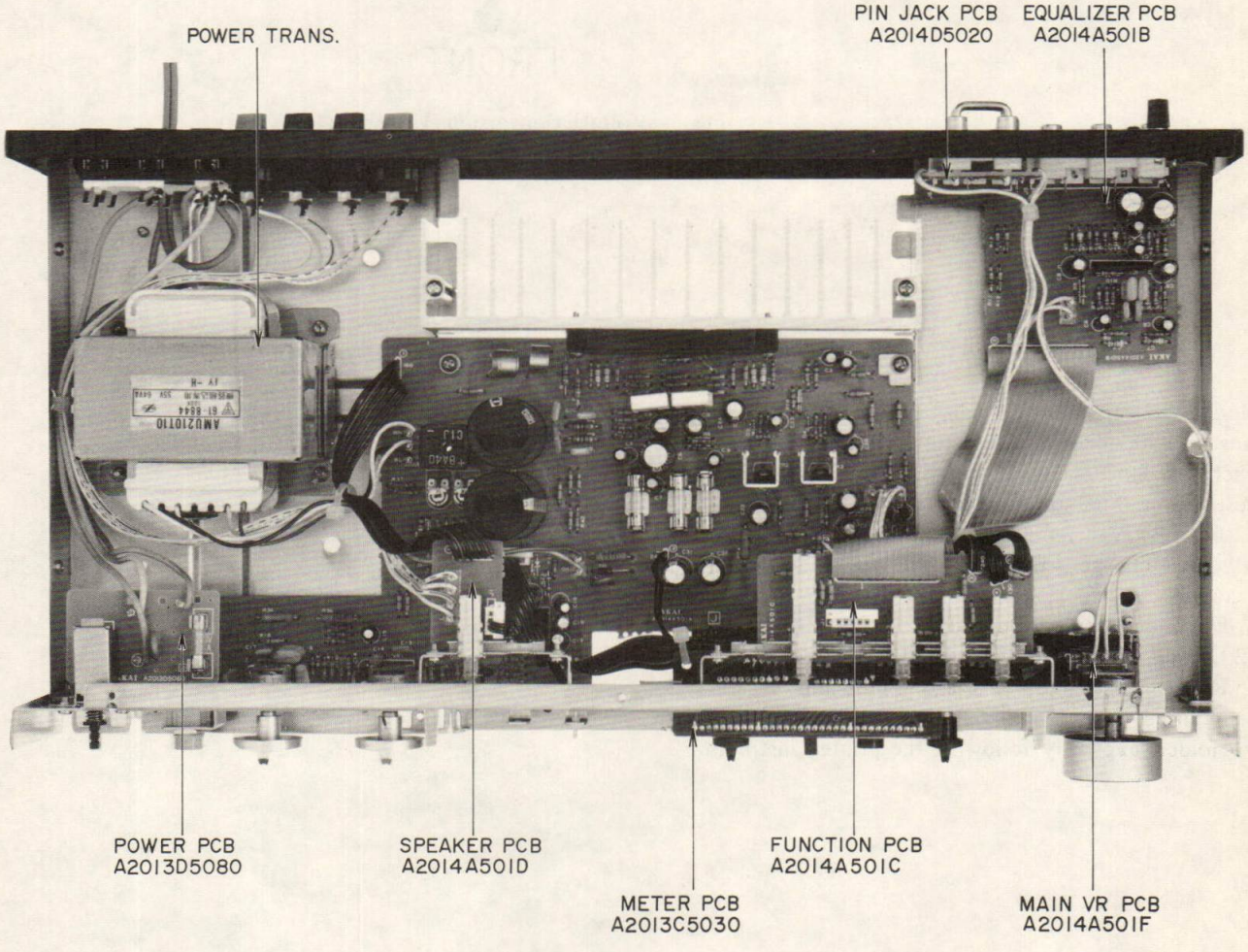


Fig. 6 Top View

V. VOLTAGE CONVERSION

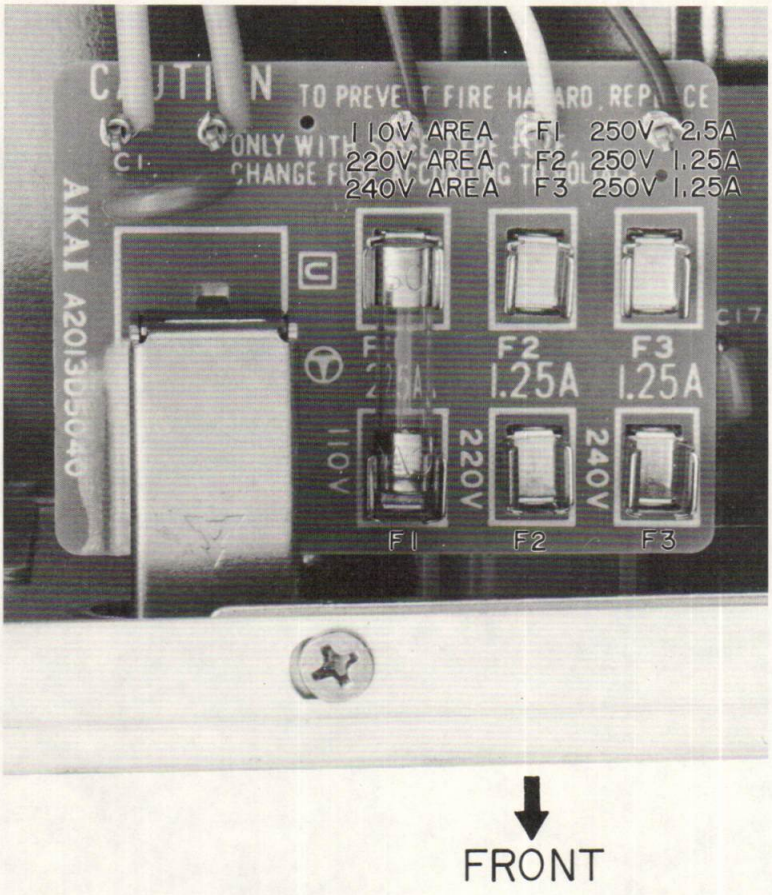


Fig. 7 Voltage Conversion (U Model Only)

Models for JAPAN, Canada, USA, Europe, UK and Australia are not equipped with this facility.

Each machine is preset at the factory according to destination, but some machines can be set to 110V, 220V or 240V as required.

If voltage change is necessary, this can be accomplished as follows.

1. Disconnect the power cord.
2. Loosen the holding screws and remove the top panel.
3. Remove the Line Voltage Fuse and insert the required Line Voltage Fuse onto the proper Fuse Holder, explicitly following the printed instructions.

VI. POWER METER SENSITIVITY ADJUSTMENT

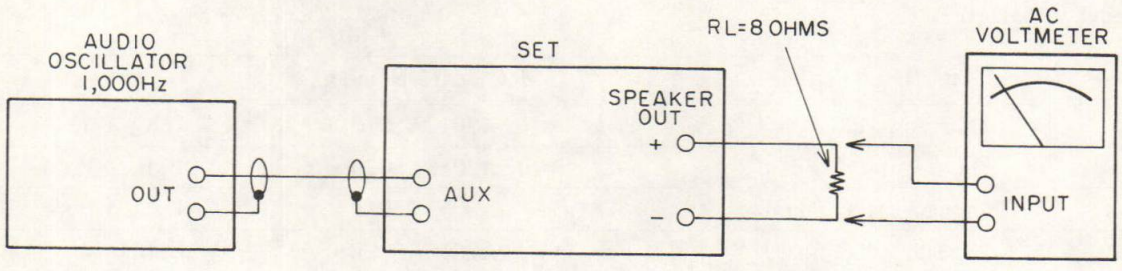


Fig. 8 Instrument Connections

Connect the load resistors (RL = 8 ohms) to Speaker terminals.
Then apply a 1 kHz signal to the AUX input terminals, adjusting the input level so as to obtain the rated output voltage level (8.94V) at both ends of the load resistor. Adjust VR3 (left channel) and VR3b (right channel) on the Main Amp P.C Board so that the 10 Watts in the Power Meter reading.

VII. CLASSIFICATION OF VARIOUS P.C BOARDS

1. P.C BOARD TITLES AND IDENTIFICATION NUMBERS

1) Model AM-U210

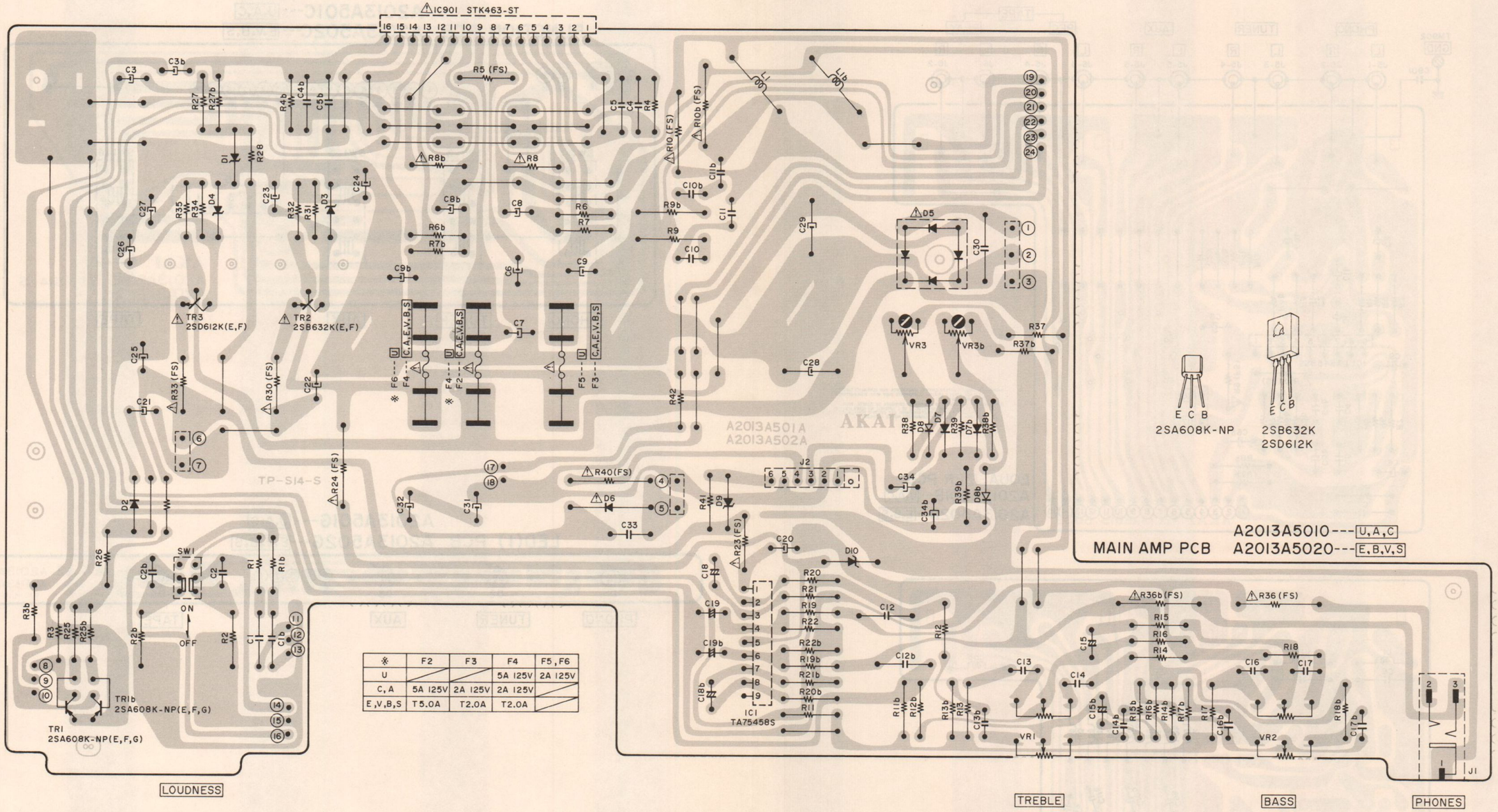
P.C Board Title	P.C Board Number	Notes
Main Amp P.C Board	A2013A5010	U, C, A
Main Amp P.C Board	A2013A5020	E, B, S, V
Equalizer P.C Board	A2013A501B	U, C, A
Equalizer P.C Board	A2013A502B	E, B, S, V
Function P.C Board	A2013A501C	U, C, A
Function P.C Board	A2013A502C	E, B, S, V
Speaker P.C Board	A2013A501D	U, C, A
Speaker P.C Board	A2013A502D	E, B, S, V
Balance P.C Board	A2013A501E	U, C, A
Balance P.C Board	A2013A502E	E, B, S, V
Main Volume P.C Board	A2013A501F	U, C, A
Main Volume P.C Board	A2013A502F	E, B, S, V
LED (1) P.C Board	A2013A501G	U, C, A
LED (1) P.C Board	A2013A502G	E, B, S, V
LED (2) P.C Board	A2013A501H	U, C, A
LED (2) P.C Board	A2013A502H	E, B, S, V
Meter P.C Board	A2013C5030	
Power P.C Board	A2013D5040	U
Power P.C Board	A2013D5050	A
Power P.C Board	A2013D5060	C
Power P.C Board	A2013D5070	E, B, S, V
Terminal P.C Board	A2013D5090	V

2) Model AM-U210J

P.C Board Title	P.C Board Number	Notes
Main Amp P.C Board	A2014A5010	
Equalizer P.C Board	A2014A501B	
Function P.C Board	A2014A501C	
Speaker P.C Board	A2014A501D	
Balance P.C Board	A2014A501E	
Main Volume P.C Board	A2014A501F	
LED (1) P.C Board	A2014A501G	
LED (2) P.C Board	A2014A501H	
MIC P.C Board	A2014A501J	
Pin Jack P.C Board	A2014D5020	
Meter P.C Board	A2013C5030	
Power P.C Board	A2013D5080	

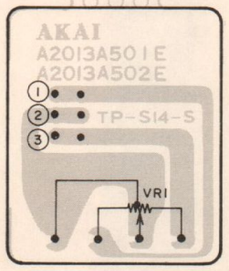
2. MODEL AM-U210 COMPOSITION OF VARIOUS P.C BOARDS

1) MAIN AMP P.C BOARD A2013A5010 (U, C, A), A2013A5020 (E, B, S, V) / BALANCE P.C BOARD A2013A501E (U, C, A), A2013A502E (E, B, S, V) / MAIN VR P.C BOARD A2013A501F (U, C, A), A2013A502F (E, B, S, V)



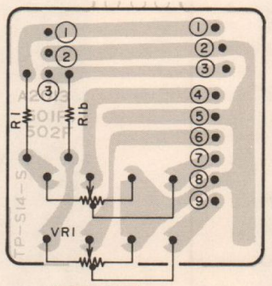
※	F2	F3	F4	F5, F6
U			5A 125V	2A 125V
C, A	5A 125V	2A 125V	2A 125V	
E, V, B, S	T5.0A	T2.0A	T2.0A	

MAIN AMP PCB
A2013A5010---[U,A,C]
A2013A5020---[E,B,V,S]



BALANCE PCB
A2013A501E--- [U,A,C]
A2013A502E---[E,V,B,S]

BALANCE

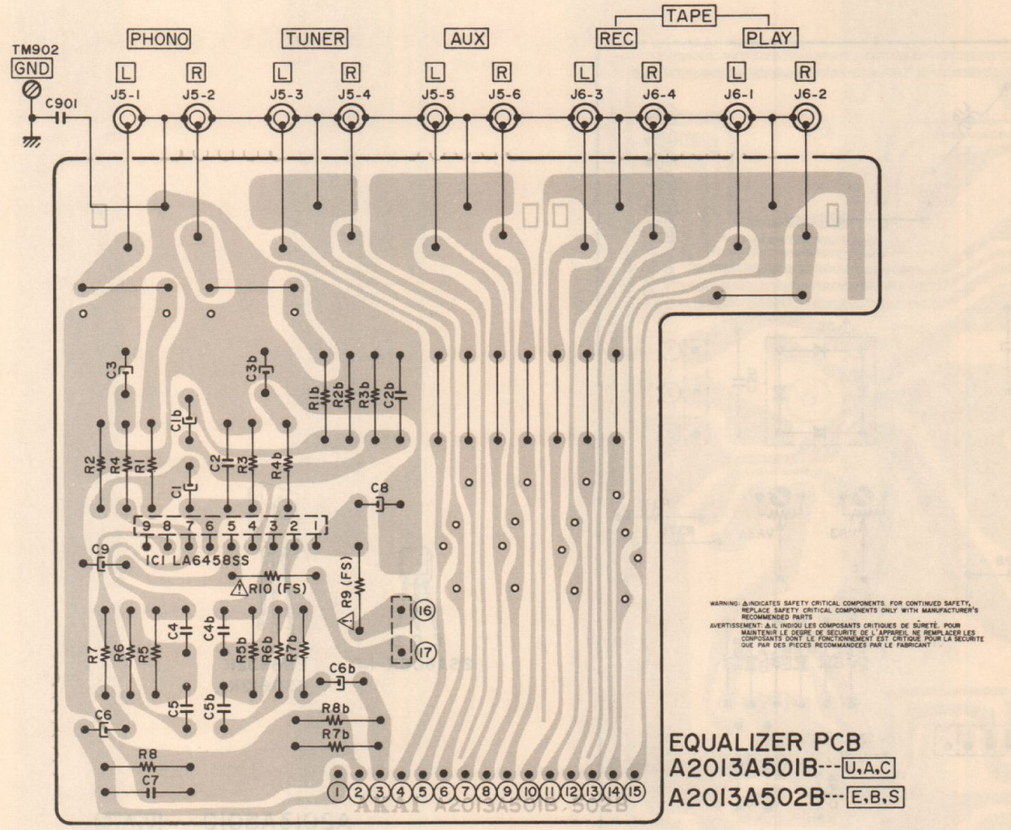


VOLUME

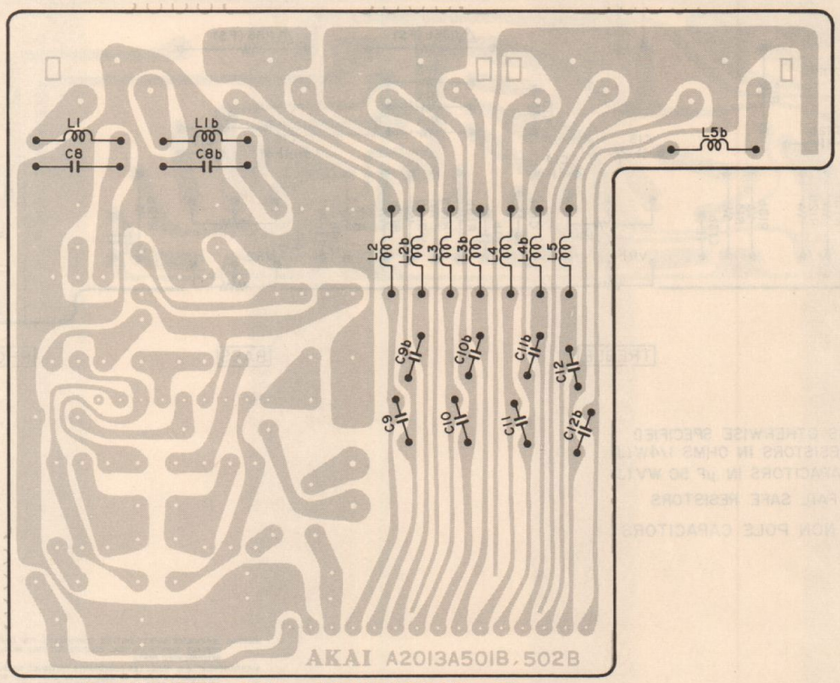
MAIN VR PCB
A2013A501F--- [U,A,C]
A2013A502F---[E,V,B,S]

NOTE
UNLESS OTHERWISE SPECIFIED
ALL RESISTORS IN OHMS 1/4W(J)
ALL CAPACITORS IN μF 50 WV(J)
(FS) = FAIL SAFE RESISTORS
⊣⊢ = NON POLE CAPACITORS

2) EQUALIZER P.C BOARD A2013A501B (U, C, A), A2013A502B (E, B, S, V) / FUNCTION P.C BOARD A2013A501C (U, C, A), A2013A502C (E, B, S, V) / LED (1) P.C BOARD A2013A501G (U, C, A), A2013A502G (E B, S, V)

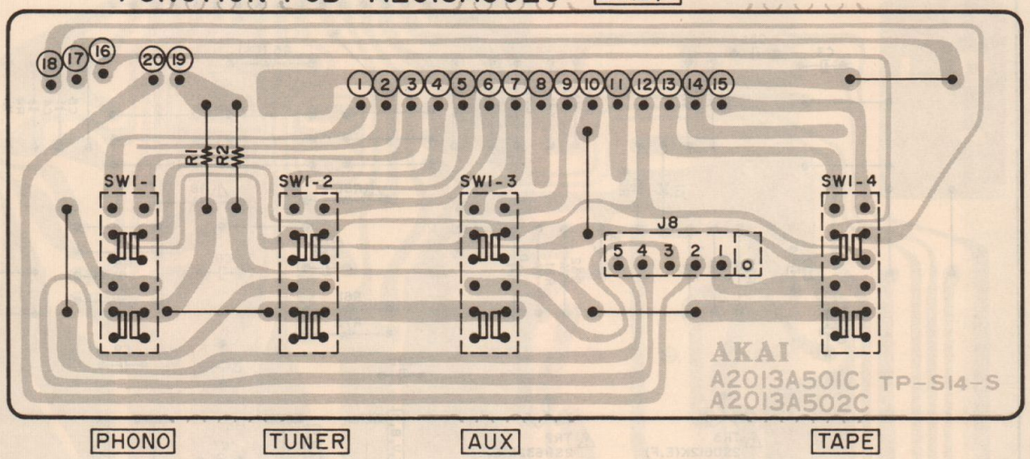


EQUALIZER PCB
A2013A501B---U,A,C
A2013A502B---E,B,S

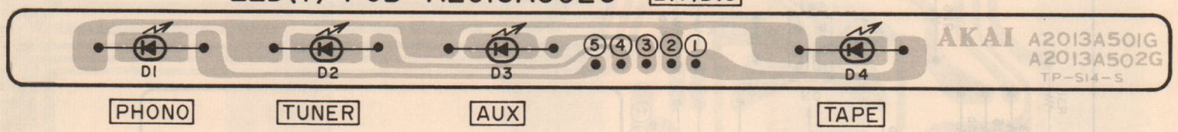


EQUALIZER PCB A2013A502B---V

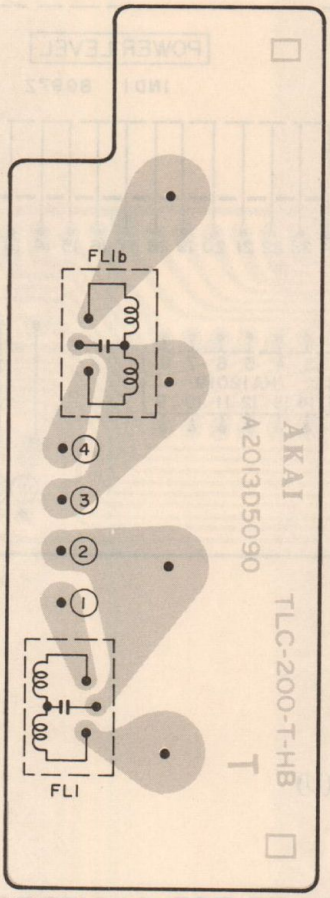
A2013A501C---U,A,C
FUNCTION PCB A2013A502C---E,V,B,S



A2013A501G---U,A,C
LED(1) PCB A2013A502G---E,V,B,S

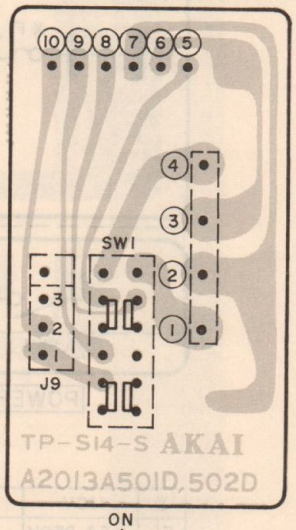


3) SPEAKER P.C BOARD A2013A501D (U, C, A), A2013A502D (E, B, S, V) / LED (2) P.C BOARD A2013A501H (U, C, A), A2013A502H (E, B, S, V) / TERMINAL P.C BOARD A2013D5090 (V)



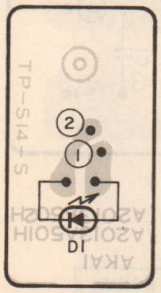
TERMINAL PCB A2013D5090
[V] MODEL ONLY

SPEAKER PCB
A2013A501D---[U,A,C]
A2013A502D---[E,V,B,S]



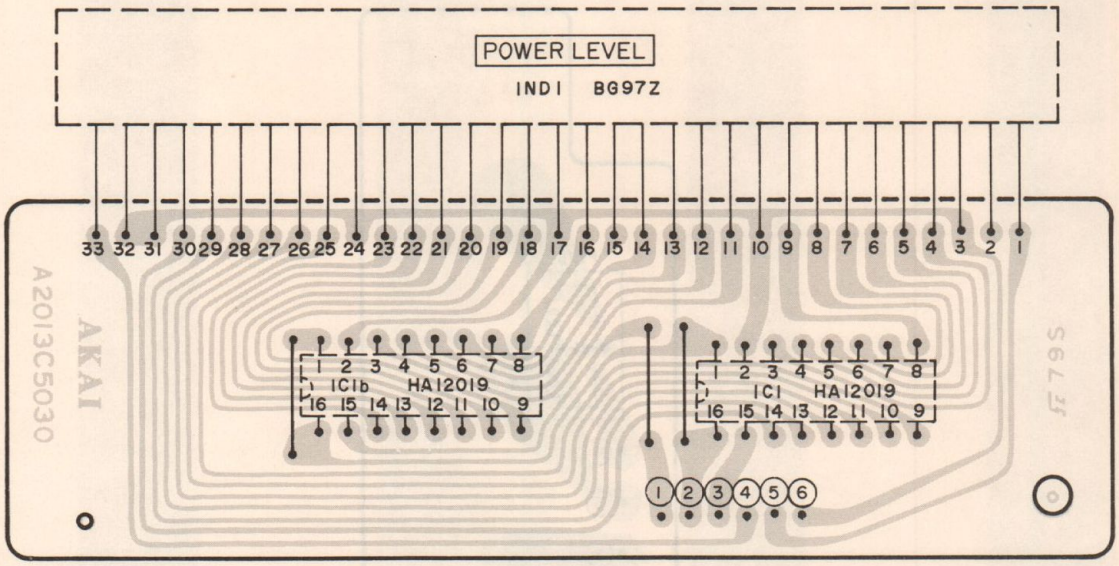
ON
OFF
SPEAKERS

LED(2) PCB
A2013A501H---[U,A,C]
A2013A502H---[E,V,B,S]

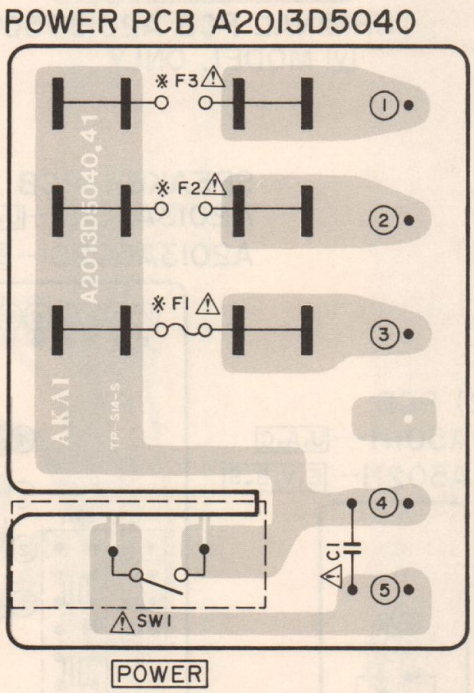


SPEAKERS

4) METER P.C BOARD A2013C503D



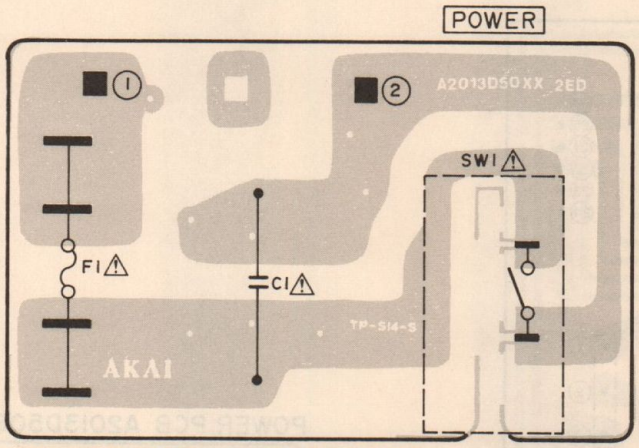
5) FUSE P.C BOARD A2013D5040 (U)



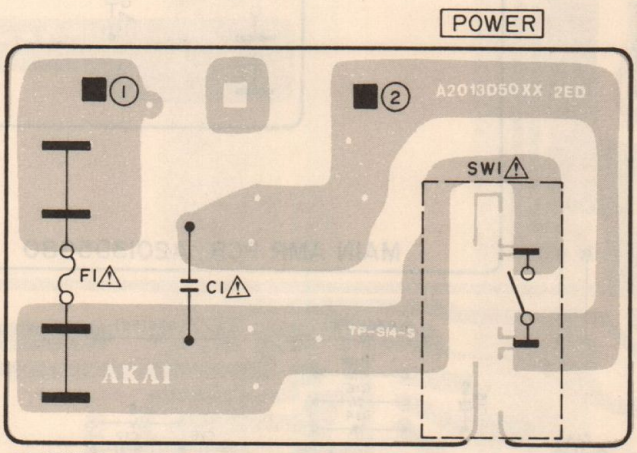
※	110V	220V	240V
F1	2.5A 250V		
F2		1.25A 250V	
F3			1.25A 250V

WARNING: △INDICATES SAFETY CRITICAL COMPONENTS. FOR CONTINUED SAFETY, REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS
AVERTISSEMENT: △ IL INDIQU LES COMPOSANTS CRITIQUES DE SÛRETÉ. POUR MAINTENIR LE DEGRE DE SECURITE DE L'APPAREIL NE REMPLACER LES COMPOSANTS DONT LE FONCTIONNEMENT EST CRITIQUE POUR LA SECURITE QUE PAR DES PIECES RECOMMANDEES PAR LE FABRICANT

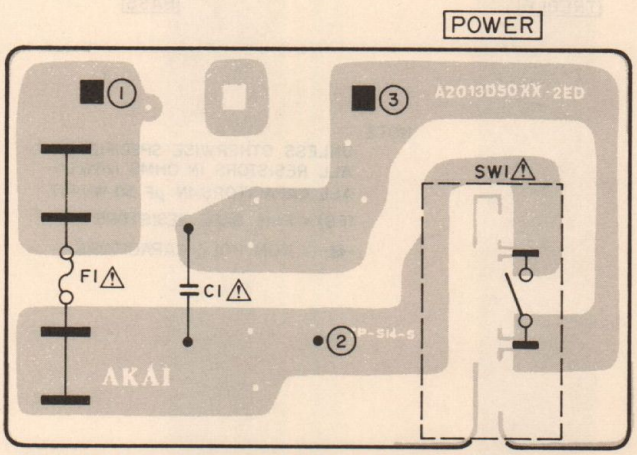
6) FUSE P.C BOARD A2013D5050 (A) / FUSE P.C BOARD A2013D5060 (C) / FUSE P.C BOARD A2013D5070 (E, B, S, V)



POWER PCB A2013D5070



POWER PCB A2013D5060



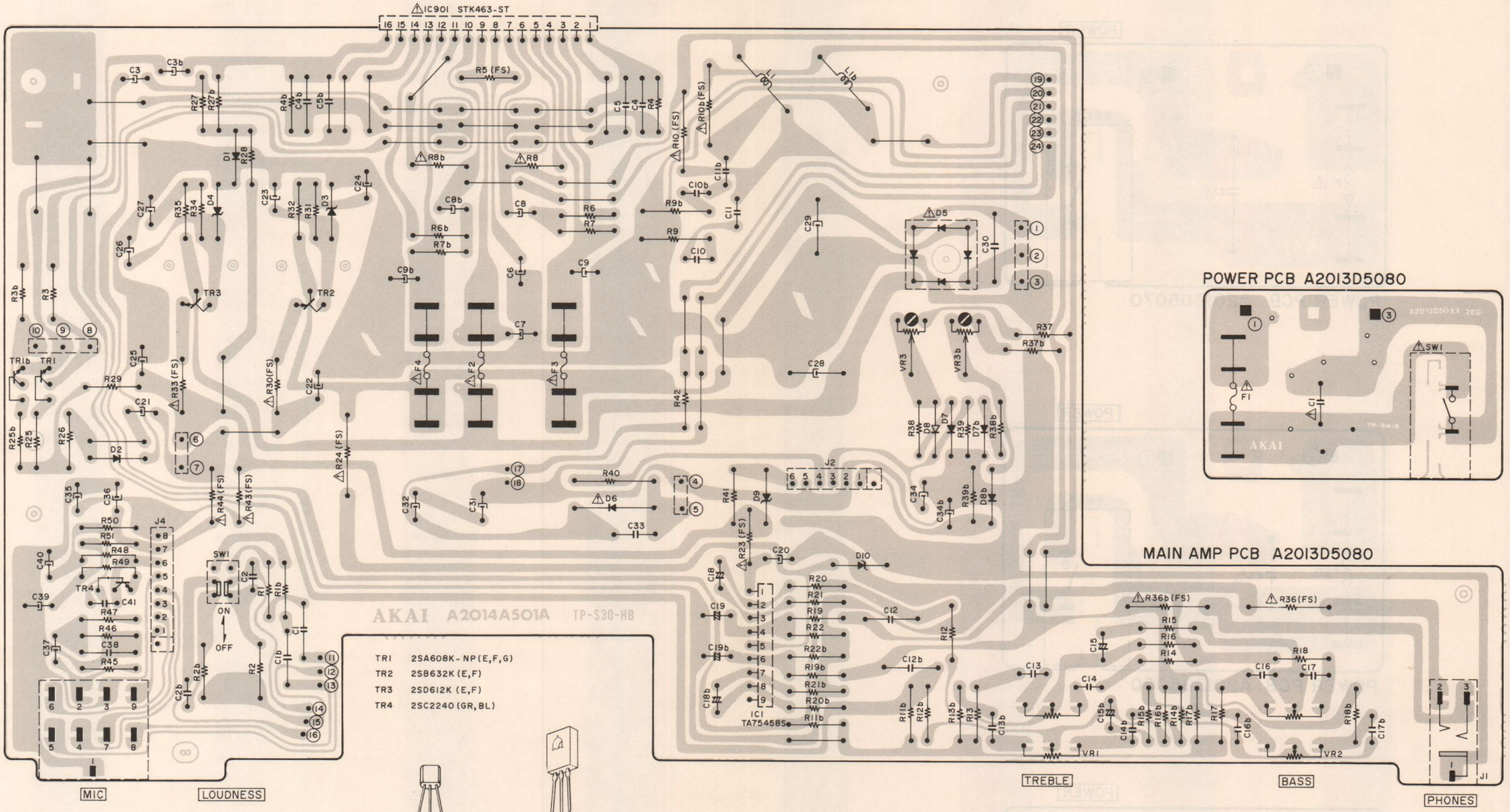
POWER PCB A2013D5050---A
A2013D5060---C

WARNING: ⚠INDICATES SAFETY CRITICAL COMPONENTS. FOR CONTINUED SAFETY, REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS

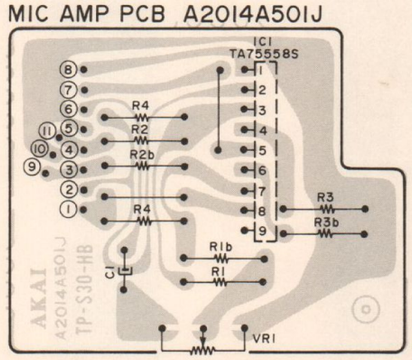
AVERTISSEMENT: ⚠IL INDIQU LES COMPOSANTS CRITIQUES DE SURETÉ. POUR MAINTENIR LE DEGRÉ DE SÉCURITÉ DE L'APPAREIL NE REMPLACER LES COMPOSANTS DONT LE FONCTIONNEMENT EST CRITIQUE POUR LA SÉCURITÉ QUE PAR DES PIÈCES RECOMMANDÉES PAR LE FABRICANT

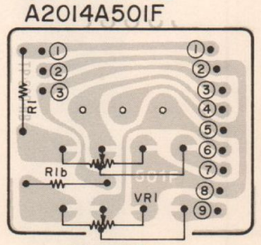
3. MODEL AM-U210J COMPOSITION OF VARIOUS P.C BOARDS

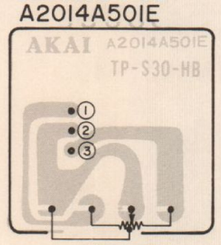
1) MAIN AMP P.C BOARD A2014A501A / BALANCE P.C BOARD A2014A501E / MAIN VR P.C BOARD / A2014A501F / MIC P.C BOARD A2014A501J / POWER P.C BOARD A2013D5080

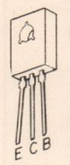


MAIN AMP PCB A2013D5080





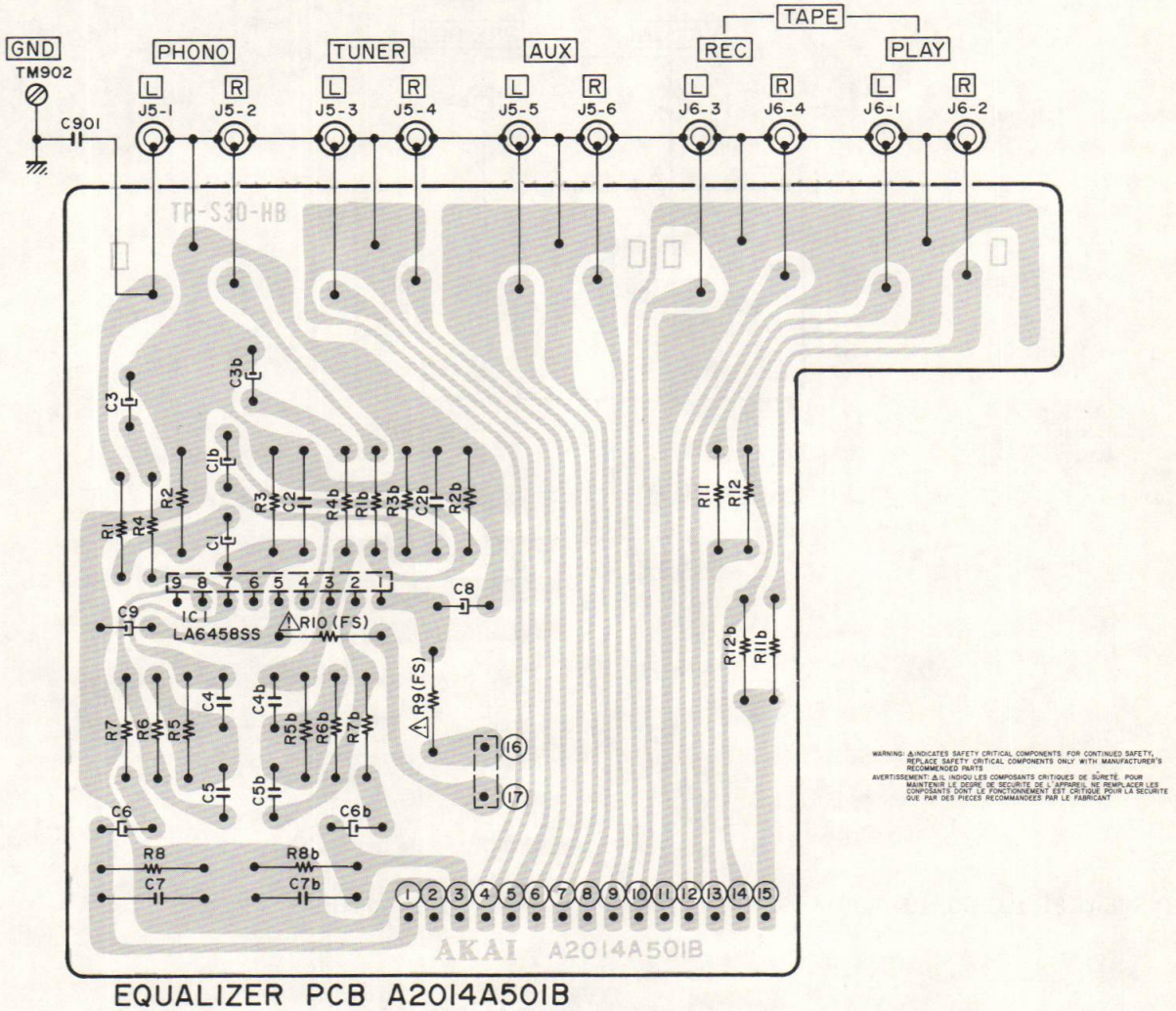




NOTE

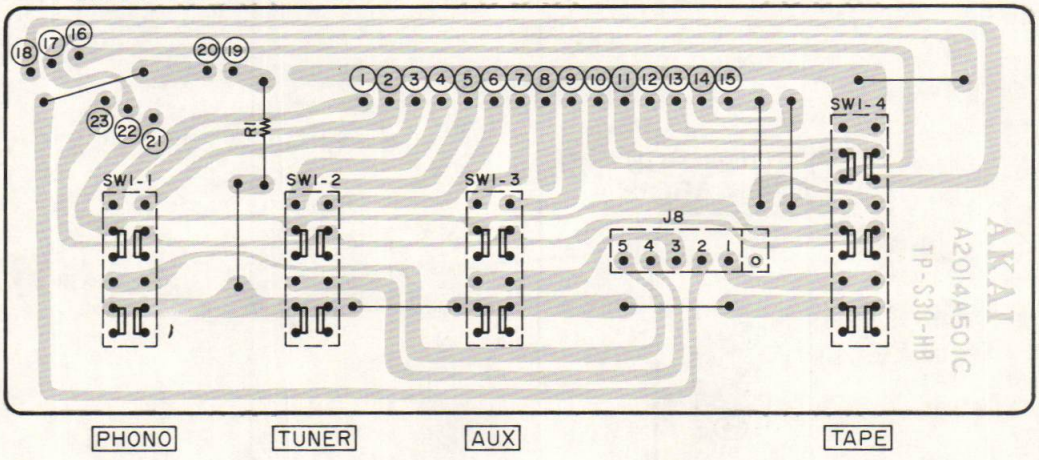
UNLESS OTHERWISE SPECIFIED
ALL RESISTORS IN OHMS 1/4W(J)
ALL CAPACITORS IN μF 50 WV(J)
(FS) = FAIL SAFE RESISTORS
⊣N⊢ = NON POLE CAPACITORS

2) EQUALIZER P.C BOARD A2014A501B / FUNCTION P.C BOARD A2014A501C / LED (1) P.C BOARD A2014A501G

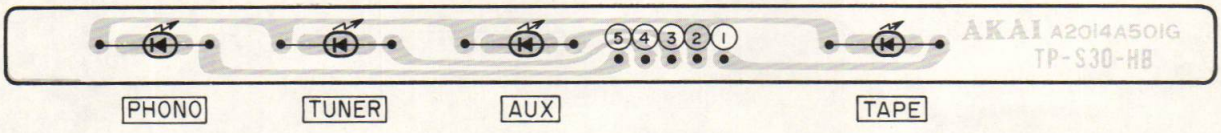


EQUALIZER PCB A2014A501B

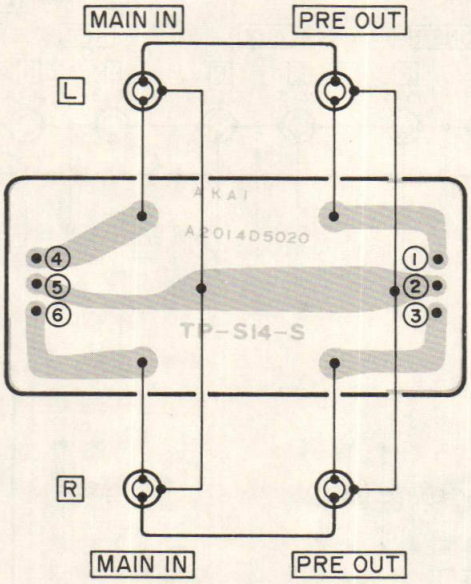
FUNCTION PCB A2014A501C



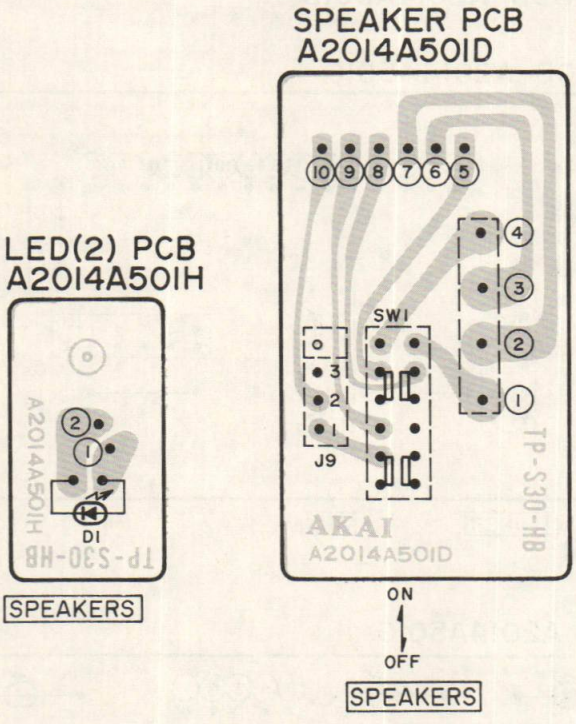
LED(1) PCB A2014A501G



3) PIN JACK P.C BOARD A2014D5020



4) SPEAKER P.C BOARD A2014A501D / LED (2) P.C BOARD A2014A501H



SECTION 3

PARTS LIST

TABLE OF CONTENTS

Resistor and Capacitor which is not listed in this parts list, please refer to COMMON LIST FOR SERVICE PARTS.

ATTENTION

1. When placing an order for parts, be sure to list the parts no. model no., and description. There are instances in which if any of this information is omitted, parts cannot be shipped or the wrong parts will be delivered.
2. Please be careful not to make a mistake in the parts no. If the parts no. is in error, a part different from the one ordered may be delivered.
3. Because parts number and parts unit supply in the Preliminary Parts List may be partially changed, please use this parts list for all future reference.

HOW TO USE THIS PARTS LIST

1. This Parts List shows the parts that are considered necessary for repairs. Other parts, such as resistors and capacitors, are shown in the "Common List for Service Parts". Select and order such parts from the "Common List for Service Parts".
2. The Recommended Spare Parts List shows those parts in the Parts List which are considered particularly important for service.
3. Parts not shown in the Parts List and "Common List for Service Parts" will not be supplied in principle.
4. How to read list

a) Mechanism Block

2. HEAD BASE BLOCK

REF. NO.	PARTS NO.	DESCRIPTION
2-1x	BH-T2023A320A	HEAD BASE BLOCK GX-F66R
2-2	HP-H2206A010A	HEAD R/P PR4-8FU C
2-3	ZS-477876	PAN20x03STL CMT
2-4	ZS-536488	BID20x08STL CMT
2-5	ZG-402895	CS ANGLE ADJUST SPRING

SP (Service Parts) Classification

A small "x" indicates the inability to show that particular part in the Photo or Illustration.

This number corresponds with the individual parts index number in that figure

This number corresponds with the Figure Number

b) P.C Board Block

6. SYS. CON. P.C BOARD BLOCK

REF. NO.	PARTS NO.	DESCRIPTION
6-1	BA-T2034A070A	PC SYS CON BLK GX-F44R
6-IC1	EI-324536	IC HD14049BP
6-IC2	EI-336801	IC MB8841-564M
6-IC3	EI-331661	IC SN7405N
6-IC4	EI-336725	IC M54527P
6-TR1to4	ET-200985	TR 2SC2603 F,G
6-TR5to28	ET-554657	TR 2SA733A P,Q
6-D1	ED-318292	D SILICON H 1S2473T-77 T26
6-D2to4	ED-308952	D GERMA V 1K34A-LR F07
6-D5to10	ED-318292	D SILICON H 1S2473T-77 T26
6-X1	EI-318384	OSC X'TAL NC-18C 3.579545MHZ

SP (Service Parts) Classification

This reference numbers corresponds with symbol numbers of Schematic Diagrams.

5. Both the kind of part and installation position can be determined by the Parts Number. To determine where a parts number is listed, utilize Parts Index at end of Parts List. It is necessary first of all to find the Parts Number. This can be accomplished by using the Reference Number listed at right of parts number in the Parts Index.

WARNING

⚠ INDICATES SAFETY CRITICAL COMPONENTS. FOR CONTINUED SAFETY, REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS.

AVERTISSEMENT

⚠ IL INDIQUE LES COMPOSANTS CRITIQUES DE SURETE. POUR MAINTENIR LE DEGRE DE SECURITE DE L'APPAREIL NE REMPLACER LES COMPOSANTS DONT LE FONCTIONNEMENT EST CRITIQUE POUR LA SECURITE QUE PAR DES PIECES RECOMMANDEES PAR LE FABRICANT.

I. MODEL AT-S210/L/J

RECOMMENDED SPARE PARTS

Because, if the parts listed below are on hand, almost any repair can be accomplished, we suggest that you stock these Recommended Spare Parts Items.

NO.	PARTS NO.	DESCRIPTION
1	BT-336883	⚠ TRANS POWER AT-S210T-10 (J)
2	BT-336884	⚠ TRANS POWER AT-S210T-20 (A)
3	BT-336859	⚠ TRANS POWER AT-S210T-30 (C)
4	BT-336860	⚠ TRANS POWER AT-S210T-40 (E,V)
5	BT-336861	⚠ TRANS POWER AT-S210T-50 (B,S)
6	BT-336862	⚠ TRANS POWER AT-S210T-70 (U)
7	EC-336865	C S-FIX H CTZ51C 3.0-10
8	EC-336808	C S-FIX H TZ03P450E 6.8-45
9	EC-330692	C S-FIX H TZ03R200E 4.2-20
10	ED-322772	D LED SLP-155D-01 RED
11	ED-322773	D LED SLP-255D-01 GRN
12	ED-336786	D LED SLP-271D GRN
13	ED-336805	D SILICON DS135D-KB1 200/1.0A
14	ED-200469	D SILICON H DS448 FA5 F10
15	ED-330207	D SILICON H DS448BT T26
16	ED-324197	D VARACTOR KV1226X DOUBLE
17	ED-336832	D VARACTOR SVC211SP
18	ED-316519	D ZENER H WZ-172
19	ED-315372	D ZENER H WZ-300
20	ED-336944	D ZENER H 05Z16 X,Y
21	ED-336945	D ZENER H 05Z5.1 Y,Z
22	ED-303155	D ZENER H 05Z5.6 Z
23	ED-336943	D ZENER-H 05Z15 Y
24	EE-330614	ANT LOOP LA-1300Y
25	EF-300599	⚠ FUSE FST3100 T 250V 0.40A (F1,2) (E,B,S,V)
26	EF-336834	⚠ FUSE FST3100 TIME 250V 0.16A (F3) (E,B,S,V)
27	EF-308933	⚠ FUSE TSC A 250V 0.20A (F2,3) (U)
28	EF-309389	⚠ FUSE TSC A 250V 0.40A (F1) (U)
29	EF-315334	⚠ FUSE TSC 125V 0.25A (F3) (C,A)
30	EF-308848	⚠ FUSE TSC 125V 0.40A (F1,2) (C,A)
31	EI-336866	IC AT500
32	EI-322248	IC LA1231N
33	EI-293185	IC LA1240
34	EI-336793	IC LA3375
35	EI-336794	IC LB1240
36	EI-336962	IC LB1287
37	EI-315491	IC LB1405S
38	EI-330689	IC LC4011
39	EI-315379	IC TC5066BP
40	EI-336717	IC TC9125BP
41	EI-315381	IC TD6102P
42	EI-327074	OSC X'TAL HC-18/U 9MHZ
43	EM-336863	IND FL 8-BT-01ZK CHARACTER
44	EO-336829	COIL OSC 2 7NR-7818F 125μH
45	EO-336828	COIL OSC 2 7NR-7819F 580μH (L)
46	EO-336939	COIL VARI 2 TFEI-ANT-J (J)
47	EO-336872	COIL VARI 2 TFEI-ANT-U
48	EO-336871	COIL VARI 2 TFEI-OSC-U
49	EO-336873	COIL VARI 2 TFEI-RF-1
50	EO-336938	COIL VARI 2 TFEI-RF-2
51	EO-336874	COIL VARI 2 25A-1253
52	EO-336876	COIL VARI 2 25A-1254 (L)
53	ER-336804	FILTER CE SFE10.7MA8 10.7MHZ
54	ER-336810	FILTER CE SFZ459A3L 0.459MHZ
55	ER-336811	FILTER CE SFZ460A3L 0.46MHZ
56	ER-336830	FILTER LC LP BL-34HD
57	ER-315407	FILTER CE SFE10.7MMKA 10.7MHZ
58	ES-328788	⚠ SW PUSH ESB-90144T 01-1 UC(C,A)
59	ES-328787	⚠ SW PUSH ESB-90149R 01-1 J (J)
60	ES-336909	⚠ SW PUSH ESB-90259S 01-1 C (U,E,B,S,V)
61	ES-336760	SW TACT EVQ-QJR02K
62	ES-328777	SW TACT EVQ-PYR12K
63	ES-300122	SW TACT EVQ-QBR08K
64	ET-330588	TR FET 2SK19 O,Y (L)
65	ET-336937	TR FET 2SK223 E,F
66	ET-315410	TR FET 2SK61 Y
67	ET-336867	TR FET 3SK73 Y
68	ET-200558	TR 2SA1115 E,F
69	ET-322778	TR 2SA608K-NP E,F,G
70	ET-200506	TR 2SC2603 F
71	ET-336869	TR 2SC2999 C,D
72	ET-336935	TR 2SC3000 E,F
73	ET-322775	TR 2SC536K-NP E,F,G
74	ET-618873	TR 2SC930 E,F
75	ET-328437	TR 2SD1012-V F,G
76	ET-452531	TR 2SD313 E,F
77	ET-655356	TR 2SD571 L,M
78	EV-315416	R S-FIX H D8 3P 103
79	EV-315414	R S-FIX H D8 3P 203 (J)
80	EV-483388	R S-FIX H SR19R 3P 0.15W 103

When ordering parts, please quote Parts Number, Description and Model Number.

1. TUNER P.C BOARD BLOCK

REF. NO.	PARTS NO.	DESCRIPTION
1-1	BA-A3033A021A	PC TUNER BLK AT-S210(U)
1-2	BA-A3033A021B	PC TUNER BLK AT-S210(C) (C,A)
1-3	BA-A3033A021C	PC TUNER BLK AT-S210(E)
1-4	BA-A3033A021D	PC TUNER BLK AT-S210(S)
1-5	BA-A3033A021E	PC TUNER BLK AT-S210(V)
1-6	BA-A3033A021F	PC TUNER BLK AT-S210-P(U)
1-7	BA-A3033A021G	PC TUNER BLK AT-S210-P(C)
1-8	BA-A3033A021H	PC TUNER BLK AT-S210-P(E)
1-9	BA-A3033A021J	PC TUNER BLK AT-S210-P(S)
1-10	BA-A3033A021K	PC TUNER BLK AT-S210-P(V)
1-11	BA-A3034A020A	PC TUNER BLK AT-S210L(E)
1-12	BA-A3034A020B	PC TUNER BLK AT-S210L(B)
1-13	BA-A3034A020D	PC TUNER BLK AT-S210L-P(E)
1-14	BA-A3034A020E	PC TUNER BLK AT-S210L-P(B)
1-15	BA-A3034A020C	PC TUNER BLK AT-S210-J
		TUNER P.C BOARD BLOCK
1-IC1	EI-322248	IC LA1231N
1-IC2	EI-336793	IC LA3375
1-IC3	EI-293185	IC LA1240
1-IC4	EI-315491	IC LB1405S
1-IC5	EI-315381	IC TD6102P
1-IC6	EI-336717	IC TC9125BP
1-IC7	EI-336866	IC AT500
1-IC8	EI-336794	IC LB1240
1-IC9	EI-315379	IC TC5066BP
1-IC10	EI-336962	IC LB1287
1-IC11,12	EI-330689	IC LC4011
1-TR1	ET-336867	TR FET 3SK73 Y
1-TR2	ET-336869	TR 2SC2999 C,D
1-TR3	ET-618873	TR 2SC930 E,F
1-TR4	ET-315410	TR FET 2SK61 Y
1-TR5	ET-336935	TR 2SC3000 E,F
1-TR6	ET-322775	TR 2SC536K-NP E,F,G
1-TR7	ET-200558	TR 2SA1115 E,F
1-TR8	ET-200506	TR 2SC2603 F
1-TR9	ET-322775	TR 2SC536K-NP E,F,G
1-TR10	ET-322778	TR 2SA608K-NP E,F,G
1-TR11,12	ET-200506	TR 2SC2603 F
1-TR13	ET-655356	⚠ TR 2SD571 L,M
1-TR15,16	ET-322775	⚠ TR 2SC536K-NP E,F,G
1-TR17	ET-452531	⚠ TR 2SD313 E,F
1-TR18	ET-322778	TR 2SA608K-NP E,F,G
1-TR19,20	ET-322775	⚠ TR 2SC536K-NP E,F,G
1-TR21,22	ET-328437	TR 2SD1012-V F,G
1-TR23	ET-322775	TR 2SC536K-NP E,F,G
1-TR24	ET-322778	TR 2SA608K-NP E,F,G
1-TR25	ET-322775	TR 2SC536K-NP E,F,G
1-TR26	ET-336937	TR FET 2SK223 E,F
1-TR27,28	ET-322775	TR 2SC536K-NP E,F,G
1-TR29to31	ET-322775	TR 2SC536K-NP E,F,G (L)
1-TR32	ET-338410	TR 2SC2878 A,B (L)
1-TR33	ET-330588	TR FET 2SK19 O,Y (L)
1-TR34	ET-322775	TR 2SC536K-NP E,F,G (J)
1-TR35	ET-322778	TR 2SA608K-NP E,F,G (J)
1-TR36	ET-322775	TR 2SC536K-NP E,F,G (J)
1-TR37	ET-322778	TR 2SA608K-NP E,F,G (J)
1-TR39	ET-322775	TR 2SC536K-NP E,F,G (J)
1-D1to4	ED-336832	D VARACTOR SVC211SP
1-D5to14	ED-301911	D SILICON H DS448
1-D15	ED-324197	D VARACTOR KV1226X DOUBLE
1-D17,18	ED-301911	D SILICON H DS448
1-D19to21	ED-200469	D SILICON H DS448 FA5 F10 (L)
1-D22to25	ED-336805	⚠ D SILICON DS135D-KB1 200/1.0A
1-D26	ED-303155	D ZENER H 05Z5.6 Z
1-D27	ED-336805	⚠ D SILICON DS135D-KB1 200/1.0A
1-D28	ED-315372	D ZENER H WZ-300
1-D29	ED-336805	⚠ D SILICON DS135D-KB1 200/1.0A
1-D30	ED-316519	D ZENER H WZ-172
1-D31	ED-303155	D ZENER H 05Z5.6 Z
1-D32	ED-336943	D ZENER H 05Z15 Y

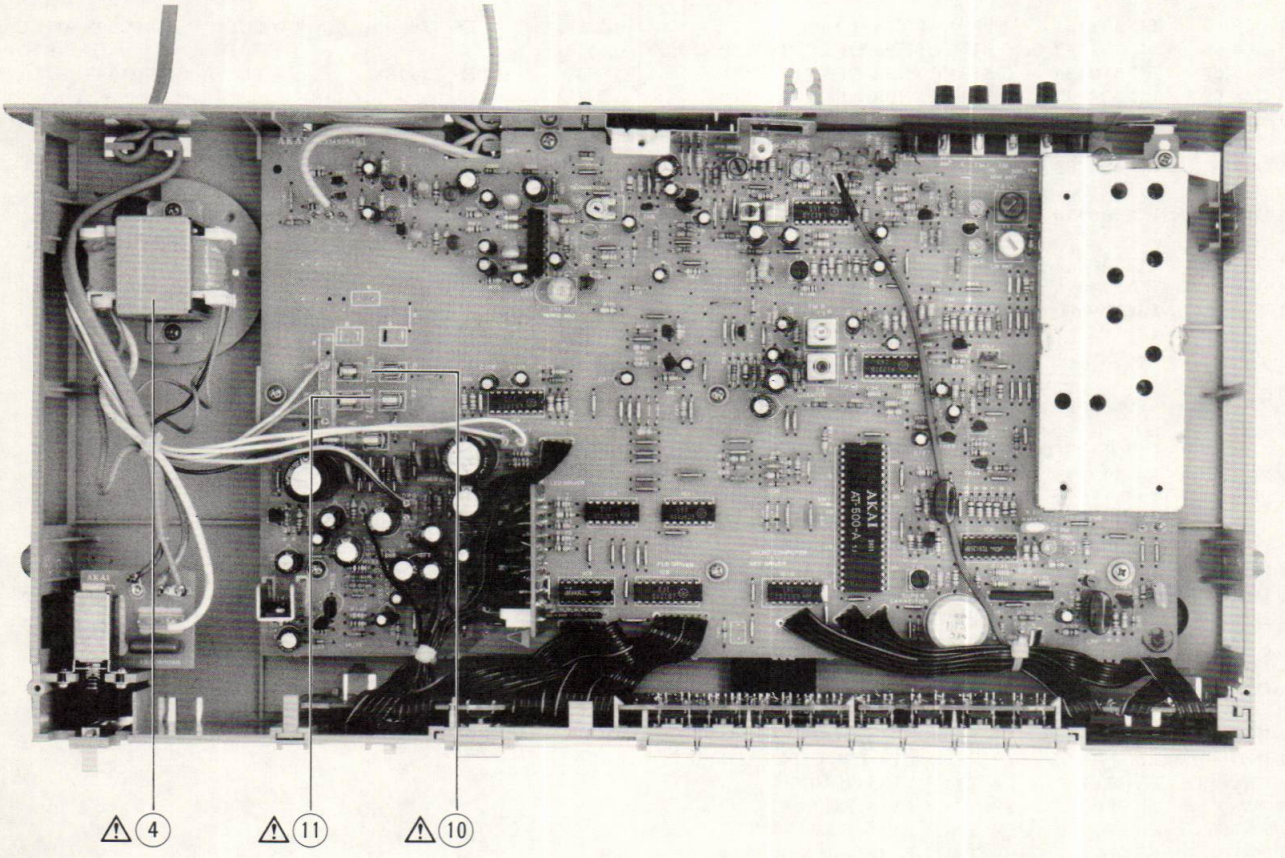
REF. NO.	PARTS NO.	DESCRIPTION
1-D33	ED-301911	D SILICON H DS448
1-D34	ED-336944	D ZENER H 05Z16 X,Y
1-D35to40	ED-301911	D SILICON H DS448
1-D41	ED-336945	D ZENER H 05Z5.1 Y,Z
1-D42	ED-301911	D SILICON H DS448
1-D43,44	ED-200469	D SILICON H DS448 FA5 F10 (J)
1-D45,46	ED-301911	D SILICON H DS448
1-D47to49	ED-200469	D SILICON H DS448 FA5 F10 (L)
1-SW1	ES-328777	SW TACT EVQ-PYR12K
1-X1	EI-327074	OSC X'TAL HC-18/U 9MHZ
1-VR1	EV-315416	R S-FIX H D8 3P 103
1-VR2	EV-483388	R S-FIX H SR19R 3P 0.15W 103
1-VR3	EV-315414	R S-FIX H D8 3P 203 (J)
1-VC1to4	EC-336865	C S-FIX H CTZ51C 3.0-10
1-VC5	EC-336808	C S-FIX H TZ03P450E 6.8-45 (EXCEPT L)
1-VC5	EC-330692	C S-FIX H TZ03R200E 4.2-2.0 (L)
1-VC6	EC-330692	C S-FIX H TZ03R200E 4.2-20 (L)
1-VC7	EC-330692	C S-FIX H TZ03R200E 4.2-20
1-L1	EO-336872	COIL VARI 2 TFEI-ANT-U (EXCEPT J)
1-L1	EO-336939	COIL VARI 2 TFEI-ANT-J (J)
1-L2	EO-336873	COIL VARI 2 TFEI-RF-1
1-L3	EO-336938	COIL VARI 2 TFEI-RF-2
1-L4	EO-332120	COIL FIX 2 103AK-005A 2.20μH
1-L5	EO-336871	COIL VARI 2 TFEI-OSC-U (EXCEPT J)
1-L5	EO-336940	COIL VARI 2 TFEI-OSC-J (J)
1-T1	EO-337640	COIL IFT 199AC-15533X 10.7MHZ
1-T2	EO-336878	COIL DET 2 78-1049
1-T3	EO-336879	COIL DET 2 78-1050
1-T4	EO-202216	COIL IFT 7MC-6733C 460KHZ
1-T5	EO-336877	COIL IFT PEGK0008B-03 455KHZ
1-T6	EO-336874	COIL VARI 2 25A-1253
1-T7	EO-336829	COIL OSC 2 7NR-7818F 125μH
1-T8	EO-336876	COIL VARI 2 25A-1254 (L)
1-T9	EO-336828	COIL OSC 2 7NR-7819F 580μH (L)
1-T10	EO-336833	COIL IFT 7MC-7736Z 460KHZ
1-FL1	ER-336804	FILTER CE SFE10.7MA8 10.7MHZ (EXCEPT V)
1-FL1	ER-338338	FILTER CE MS3GKY-A 10.7MHZ (V)
1-FL2	ER-315407	FILTER CE SFE10.7MMKA 10.7MHZ
1-FL3	ER-336810	FILTER CE SFZ459A3L 0.459MHZ (EXCEPT C)
1-FL3	ER-336811	FILTER CE SFZ460A3L 0.46MHZ (C)
1-FL4	ER-336830	FILTER LC LP BL-34HD (V)
1-SR1	ER-336880	COMP R 01-0087
1-R21,22	ER-324480	⚠ R CB H SNP FS RDS 1/4W 470J
1-R32,33	ER-324337	⚠ R CB H SNP FS RDS 1/4W 560J
1-R50,51	ER-324337	⚠ R CB H SNP FS RDS 1/4W 560J
1-R58,59	ER-324337	⚠ R CB H SNP FS RDS 1/4W 560J
1-R63,64	ER-324337	⚠ R CB H SNP FS RDS 1/4W 560J
1-R67,68	ER-324337	⚠ R CB H SNP FS RDS 1/4W 560J
1-R98,99	ER-324337	⚠ R CB H SNP FS RDS 1/4W 560J
1-R109	ER-324184	⚠ R CB H SNP FS RDS 1/4W 121J
1-R121	ER-324934	⚠ R CB H SNP FS RDS 1/4W 220J (L)
1-R123,124	ER-324337	⚠ R CB H SNP FS RDS 1/4W 560J
1-R131	ER-322787	⚠ R CB H SNP FS RDS 1/4W 100J
1-R136	ER-324934	⚠ R CB H SNP FS RDS 1/4W 220J
1-R137	ER-323074	⚠ R CB H SNP FS RDS 1/4W 102J
1-R141	ER-325269	⚠ R CB H SNP FS RDS 1/4W 222J
1-R144	ER-322421	⚠ R CB H SNP FS RDS 1/4W 820J
1-R149	ER-328067	⚠ R CB H SNP FS RDS 1/4W 331J
1-R170	ER-324934	⚠ R CB H SNP FS RDS 1/4W 220J
1-R207	ER-333359	⚠ R CB H SNP FS RDS 1/4W 111J (J)
1-C15	EC-314995	C STY V SNP CQFS 331J 50DC
1-C30	EC-314990	C STY V SNP CQFS 101J 50DC
1-C45	EC-314995	C STY V SNP CQFS 331J 50DC
1-C54	EC-331183	C STY V SNP CQFS 102J 50DC

REF. NO.	PARTS NO.	DESCRIPTION
1-C58,59	EC-337331	C PP V APS 153J 100DC
1-C64,65	EC-334397	C STY V SNP CQFS 272J 50DC
1-C66,67	EC-310439	C STY V SNP CQFS 511J 50DC
1-C68,69	EC-334397	C STY V SNP CQFS 272J 50DC
1-C97	EC-314952	C STY V F05 CQ09S 4300G 50DC (EXCEPT L)
1-C97	EC-324368	C STY V F05 CQ09S 5100G 50DC (L)
1-C101	EC-336950	C STY V F05 CQ09S 2200G 50DC (L)
1-C141	EC-336882	C SUPER 104 5.0DC
1-C158	EC-334075	C STY V F05 CQ09S 122J 50DC
1-TM1	EJ-309941	TERMINAL W/SCREW UB-1059 P 4P (EXCEPT V)
1-TM1	EJ-332213	TERMINAL W/SCREW UB-0090 P 2P (V)
1-TM2	EJ-336806	PLUG CO-AX P2132-C (V)
	OPERATION P.C BOARD BLOCK	
1-TR1	ET-322778	TR 2SA608K-NP E,F,G
1-TR2	ET-322775	TR 2SC536K-NP E,F,G
1-TR3	ET-322775	TR 2SC536K-NP E,F,G (L)
1-D1	ED-322773	D LED SLP-255D-01 GRN
1-D2to5	ED-322772	D LED SLP-155D-01 RED
1-D6	ED-322773	D LED SLP-255D-01 GRN
1-D7to9	ED-336786	D LED SLP-271D GRN
1-D10to13	ED-336786	D LED SLP-271D GRN
1-D16	ED-200469	D SILICON H DS448 FA5 F10
1-D17	ED-200469	D SILICON H DS448 FA5 F10 (EXCEPT L)
1-D18	ED-336786	D LED SLP-271D GRN (L)
1-IND1	EM-336863	IND FL 8-BT-01ZK CHARACTER
1-SW1to4	ES-336760	SW TACT EVQ-QJR02K
1-SW5	ES-300122	SW TACT EVQ-QBR08K
1-SW6,7	ES-336760	SW TACT EVQ-QJR02K
1-SW8	ES-300122	SW TACT EVQ-QBR08K
1-SW9	ES-336760	SW TACT EVQ-QJR02K
1-SW10	ES-336760	SW TACT EVQ-QJR02K (J)
1-SW11,12	ES-336760	SW TACT EVQ-QJR02K
1-SW13	ES-336760	SW TACT EVQ-QJR02K (L)
	DRIVER P.C BOARD BLOCK	
1-TR1to5	ET-322778	TR 2SA608K-NP E,F,G
1-TR6to10	ET-322775	TR 2SC536K-NP E,F,G
	LPF P.C BOARD BLOCK (V ONLY)	
1-FL1	ER-341654	FILTER LC LP 42W-1001 (V)
1-C3,4	EC-334400	C STY V SNP CQFS 392J 50DC (V)

2. POWER SW P.C BOARD BLOCK

REF. NO.	PARTS NO.	DESCRIPTION
2-SW1	ES-336909	⚠ SW PUSH ESB-90259S 01-1 C (U,E,B,S,V)
2-SW1	ES-328788	⚠ SW PUSH ESB-90144T 01-1 UC (C,A)
2-SW1	ES-328787	⚠ SW PUSH ESB-90149R 01-1 J(J)
2-C1	EC-320548	⚠ C CE V F 103Z 250AC (U,J)
2-C1	EC-314688	⚠ C CE V FZ 103P 125AC (C,A)
2-C1	EC-338496	⚠ C CE V FZ 472P 400AC (E,B,S,V)

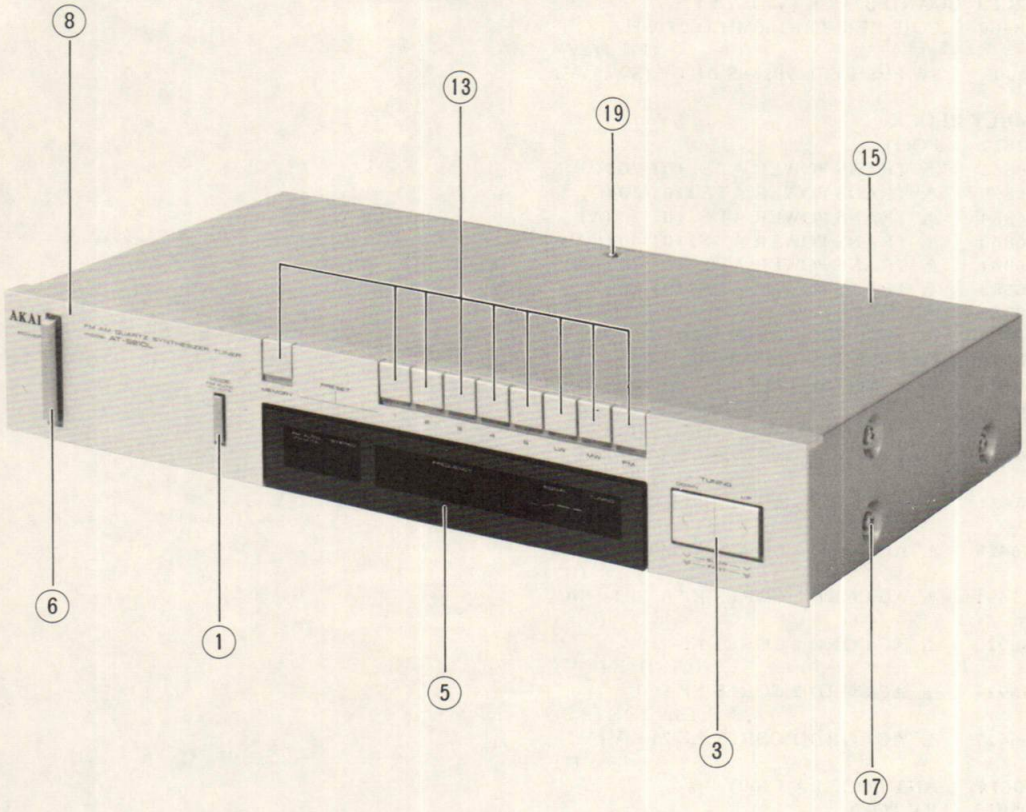
ASSEMBLY BLOCK



3. ASSEMBLY BLOCK

REF. NO.	PARTS NO.	DESCRIPTION
	FILTER P.C BOARD BLOCK (V ONLY)	
3-1x	EO-338409	COIL LF FKOB160MH02 250μH (FIL1) (V)
3-2x	ES-336909	SW PUSH ESB-90259S 01-1 C (SW1) (V)
	ASSEMBLY BLOCK	
3-3	SA-332822	FOOT
3-4	BT-336862	⚠ TRANS POWER AT-S210T-70 (U)
3-5x	BT-336859	⚠ TRANS POWER AT-S210T-30 (C)
3-6x	BT-336884	⚠ TRANS POWER AT-S210T-20 (A)
3-7x	BT-336860	⚠ TRANS POWER AT-S210T-40 (E,V)
3-8x	BT-336861	⚠ TRANS POWER AT-S210T-50 (B,S)
3-9x	BT-336883	⚠ TRANS POWER AT-S210T-10 (J)
3-10	EF-309389	⚠ FUSE TSC A 250V 0.40A (F1) (U)
3-11	EF-308933	⚠ FUSE TSC A 250V 0.20A (F2,3) (U)
3-12x	EF-308848	⚠ FUSE TSC 125V 0.40A (F1,2) (C,A)
3-13x	EF-315334	⚠ FUSE TSC 125V 0.25A (F3) (C,A)
3-14x	EF-300599	⚠ FUSE FST3100 T 250V 0.40A (F1,2) (E,B,S,V)
3-15x	EF-336834	⚠ FUSE FST3100 TIME 250V 0.16A (F3) (E,B,S,V)
3-16x	EF-336834	⚠ FUSE FST3100 TIME 250V 0.16A (F4) (B)
3-17	EW-306428	⚠ AC CORD 2 CORES KP-205A, VFF J (U)
3-18x	EW-305691	⚠ AC CORD 2 CORES KP-8, SPT-1 UC (C,A)
3-19x	EW-336923	⚠ AC CORD 2 CORES KP-419C, LTCE-2F E (E,V)
3-20x	EW-336924	⚠ AC CORD 2 CORES KP-560, LTSA-2F S (B,S)
3-21x	EW-306427	⚠ AC CORD 2 CORES KP-211, VFF J (J)
3-22	EE-330614	ANT LOOP LA-1300Y
3-23x	ZW-305013	RV POP32

FINAL ASSEMBLY BLOCK



4. FINAL ASSEMBLY BLOCK

REF. NO.	PARTS NO.	DESCRIPTION
4-1	SK-332829A	KNOB MODE
4-2x	SK-332829B	KNOB MODE-P
4-3	SK-332828A	KNOB TUNING
4-4x	SK-332828B	KNOB TUNING-P
4-5	TA-B604407	WINDOW FRONT PART
4-6	SK-332831A	KNOB POWER
4-7x	SK-332831B	KNOB POWER-P
4-8	SP-332825A	PANEL FRONT AT-S210
4-9x	SP-332825B	PANEL FRONT AT-S210-P
4-10x	SP-332825C	PANEL FRONT AT-S210L
4-11x	SP-332825D	PANEL FRONT AT-S210L-P
4-12x	SP-332825E	PANEL FRONT AT-S210 (CAL-TONE)
4-13	SK-332830A	KNOB OPERATION
4-14x	SK-332830B	KNOB OPERATION-P
4-15	SP-332826A	COVER UPPER
4-16x	SP-332826B	COVER UPPER-P
4-17	ZS-336541	T2BID40x16STL NI3
4-18x	ZS-336542	T2BID40x16STL BNI
4-19	ZS-336544	T2BID40x16STL NI3 PROJECTION
4-20x	ZS-336545	T2BID40x16STL BNI PROJECTION
4-21x	ZS-336697	T2BR30x06STL NI3 PROJECTION
4-22x	ZS-319460	T2BR30x06STL BZN PROJECTION

II. MODEL AM-U210/J

RECOMMENDED SPARE PARTS

Because, if the parts listed below are on hand, almost any repair can be accomplished, we suggest that you stock these Recommended Spare Parts Items.

NO.	PARTS NO.	DESCRIPTION
1	BT-336910	⚠ TRANS POWER AM-U210T-10 (J)
2	BT-336887	⚠ TRANS POWER AM-U210T-20 (A)
3	BT-336888	⚠ TRANS POWER AM-U210T-30 (C)
4	BT-336889	⚠ TRANS POWER AM-U210T-40 (E)
5	BT-336890	⚠ TRANS POWER AM-U210T-40-2 (V)
6	BT-336891	⚠ TRANS POWER AM-U210T-50 (B,S)
7	BT-336893	⚠ TRANS POWER AM-U210-T-70 (U)
8	ED-309341	D GERMA H 1K34A
9	ED-322773	D LED SLP-255D-01 GRN
10	ED-336786	D LED SLP-271D GRN
11	ED-200213	D SILICON DBA40C-K15 200/2.6A
12	ED-300924	D SILICON GP08D 200/0.8A
13	ED-200469	D SILICON H DS448 FA5 F10
14	ED-330218	D ZENER H HZ15L 2
15	ED-330219	D ZENER H HZ20L 2
16	ED-323354	D ZENER H 05Z6.2 X
17	EF-325683	⚠ FUSE GGS A 125V 5A (F2) (C,A)
18	EF-623103	⚠ FUSE SEMKO T 250V 1A (F1) (E,B,S,V)
19	EF-601301	⚠ FUSE SEMKO T 250V 2A (F3,4) (E,B,S,V)
20	EF-249851	⚠ FUSE SEMKO T 250V 5A (F2) (E,B,S,V)
21	EF-306949	⚠ FUSE TSC A 250V 1.25A (F2,3) (U)
22	EF-306951	⚠ FUSE TSC A 250V 2.5A (F1) (J)
23	EF-306950	⚠ FUSE TSC A 250V 2A (F3,4) (J)
24	EF-326613	⚠ FUSE TSC A 250V 5A (F2) (J)
25	EF-306954	⚠ FUSE TSC 125V 2A (F3,4) (C,A)
26	EF-323080	⚠ FUSE TSC 125V 3.15A (F1) (C,A)
27	EI-315799	IC HA12019
28	EI-336930	IC LA6458SS
29	EI-336917	IC STK463-ST
30	EI-322599	IC TA75458S
31	EI-200938	IC TA75558S (J)
32	EM-336916	IND FL BG97Z GRAPH
33	ES-328788	⚠ SW PUSH ESB-90144T 01-1 UC (C,A)
34	ES-328787	⚠ SW PUSH ESB-90149R 01-1 J (J)
35	ES-336909	⚠ SW PUSH ESB-90259S 01-1 C (U,E,B,S,V)
36	ES-336897	SW PUSH ESB-62512 2-02-02S
37	ES-336908	SW PUSH ESB-62601 2-04-02S
38	ES-336906	SW PUSH ESB-62602 4THROW
39	ET-322778	TR 2SA608K-NP E,F,G
40	ET-322598	TR 2SB632K E,F
41	ET-307195	TR 2SC2240 GR,BL (J)
42	ET-310148	TR 2SD612K E,F
43	EV-315412	R S-FIX H D8 3P 502
44	EV-336913	VR ROTARY 16P10×1K B503 (J)
45	EV-336911	VR ROTARY 16P10×1J SPECIAL W105
46	EV-336898	VR ROTARY 16P20×2L C104
47	EV-336899	VR ROTARY 16P20×2M C104
48	EV-336912	VR ROTARY 16P20×2N B254

1. MAIN P.C BOARD BLOCK

REF. NO.	PARTS NO.	DESCRIPTION
1-1	BA-A2013A080A	PC MAIN BLK AM-U210(U)(U,C,A)
1-2	BA-A2013A080B	PC MAIN BLK AM-U210(E)(E,B,S)
1-3	BA-A2013A080C	PC MAIN BLK AM-U210(V)(V)
1-4	BA-A2013A080D	PC MAIN BLK AM-U210-P(U) (U,C,A)
1-5	BA-A2013A080E	PC MAIN BLK AM-U210-P(E) (E,B,S)
1-6	BA-A2013A080F	PC MAIN BLK AM-U210-P(V)(V)
1-7	BA-A2014A020A	PC MAIN BLK AM-U210-J(J)
		MAIN P.C BOARD BLOCK
1-IC1	EI-322599	IC TA75458S
1-TR1	ET-322778	TR 2SA608K-NP E,F,G
1-TR2	ET-322598	⚠ TR 2SB632K E,F
1-TR3	ET-310148	⚠ TR 2SD612K E,F
1-TR4	ET-307195	TR 2SC2240 GR,BL (J)
1-D1,2	ED-200469	D SILICON H DS448 FA5 F10
1-D3,4	ED-330219	D ZENER H HZ20L 2
1-D5	ED-200213	⚠ D SILICON DBA40C-K15 200/2.6A
1-D6	ED-300924	⚠ D SILICON GP08D 200/0.8A
1-D7	ED-200469	D SILICON H DS448 FA5 F10
1-D8	ED-309341	D GERMA H 1K34A
1-D9	ED-323354	D ZENER H 05Z6.2 X
1-D10	ED-330218	D ZENER H HZ15L 2
1-J1	EJ-336900	PHONE J 3P HLJ0316-523 6.3
1-J1	EJ-336901	PHONE J 3P HLJ0316-520 6.3 (P)
1-J3	EJ-336929	PHONE J 3P HLJ0306-010 6.3 (J)
1-SW1	ES-336897	SW PUSH ESB-62512 2-02-02S
1-L1	EO-336902	COIL DET2 106AK-026 1.00μH
1-L2	EO-336934	COIL FIX1 LAL03KH 2.2μH M (V)
1-VR1	EV-336898	VR ROTARY 16P20x2L C104
1-VR2	EV-336899	VR ROTARY 16P20x2M C104
1-VR3	EV-315412	R S-FIX H D8 3P 502
1-R5	ER-322787	⚠ R CB H SNP FS RDS 1/4W 100J
1-R8	ER-336920	R CT P F09 PLATE 3W R33K
1-R10	ER-308875	⚠ R CB H SNP FS RDS 1/2W 100J
1-R23	ER-316802	⚠ R CB H SNP FS RDS 1/4W 471J
1-R24	ER-321153	⚠ R OMF H SNP FS 1W 102J
1-R30	ER-322787	⚠ R CB H SNP FS RDS 1/4W 100J
1-R33	ER-322787	⚠ R CB H SNP FS RDS 1/4W 100J
1-R36	ER-308028	⚠ R OMF H SNP FS 1W 181J
1-R40	ER-336919	⚠ R OMF H SNP FS 1W 121J
1-R43,44	ER-316802	⚠ R CB H SNP FS RDS 1/4W 471J (J)
1-C15	EC-313533	C EC V F05 NP 04D 4R7M 16.0DC
1-C18	EC-313532	C EC V F05 NP 04D 1R0M 50.0DC
1-C19	EC-333972	C EC V F05 NP SM 3R3M 50DC
1-C28,29	EC-320307	C EC V SNP VN 682 40DC
1-C30	EC-326583	C MMY V CUT CF921 473K 400DC
1-C33	EC-320548	C CE V F 103Z 250AC
		EQUALIZER P.C BOARD BLOCK
1-IC1	EI-336930	IC LA6458SS
1-J5	EJ-336904	PIN J C-920 P 6P
1-J6	EJ-336905	PIN J C-910 P 4P
1-L1	EO-338420	COIL FIX 2 FL12R202E 2MH (V)
1-L2to5	EO-336934	COIL FIX1 LAL03KH 2.2μH M (V)
1-R9,10	ER-316802	R CB H SNP FS RDS 1/4W 471J
		FUNCTION P.C BOARD BLOCK
1-SW1	ES-336906	SW PUSH ESB-62602 4THROW (EXCEPT J)
1-SW1	ES-336907	SW PUSH ESB-62603 4THROW (J)
		SPEAKER P.C BOARD BLOCK
1-SW1	ES-336908	SW PUSH ESB-62601 2-04-02S
		BALANCE P.C BOARD BLOCK
1-VR1	EV-336911	VR ROTARY 16P10x1J SPECIAL W105
		MAIN VR P.C BOARD BLOCK
1-VR1	EV-336912	VR ROTARY 16P20x2N B254

REF. NO.	PARTS NO.	DESCRIPTION
		MIC P.C BOARD BLOCK
1-IC1	EI-200938	IC TA75558S (J)
1-VR1	EV-336913	VR ROTARY 16P10x1K B503 (J)

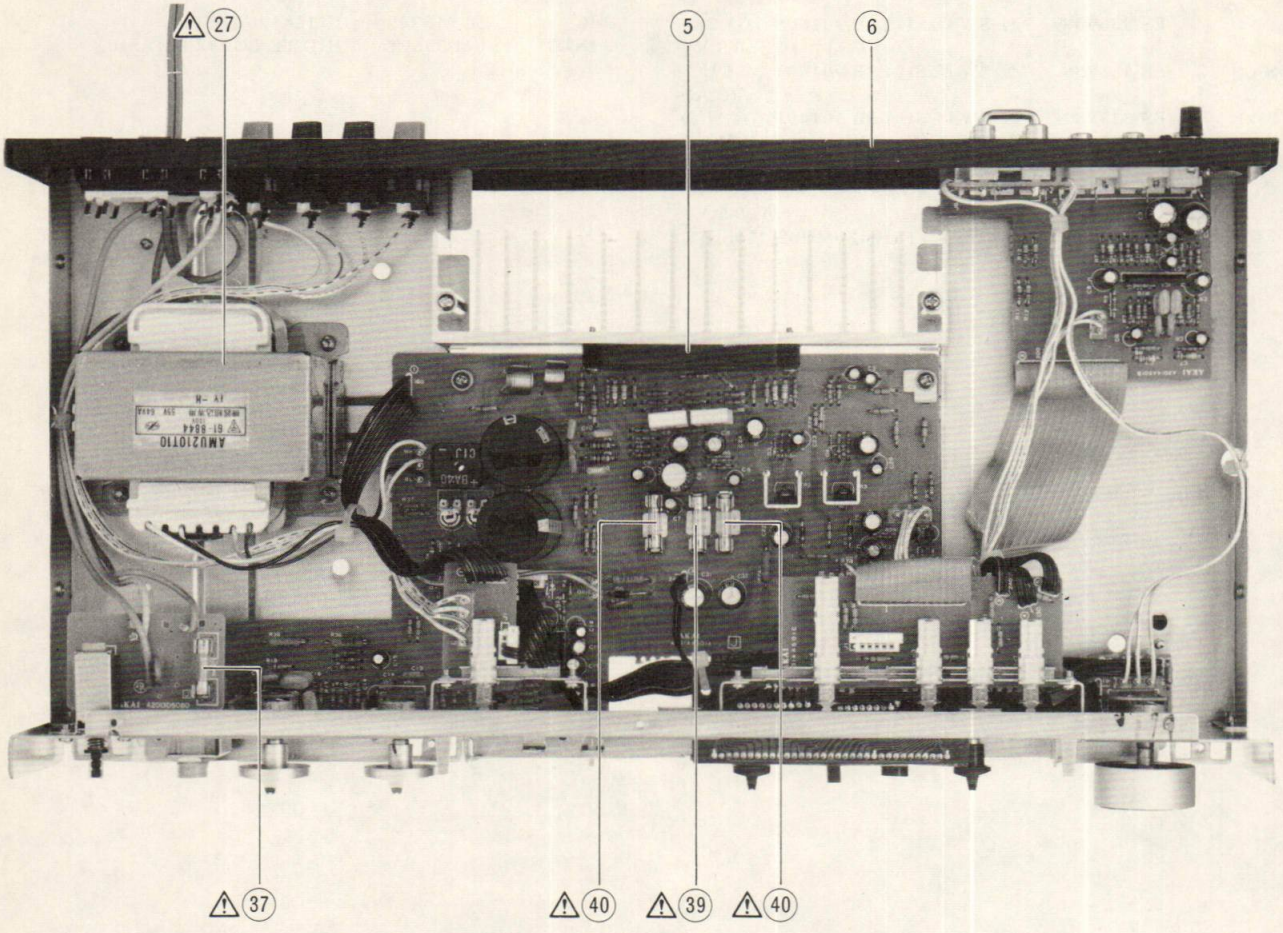
2. POWER P.C BOARD BLOCK

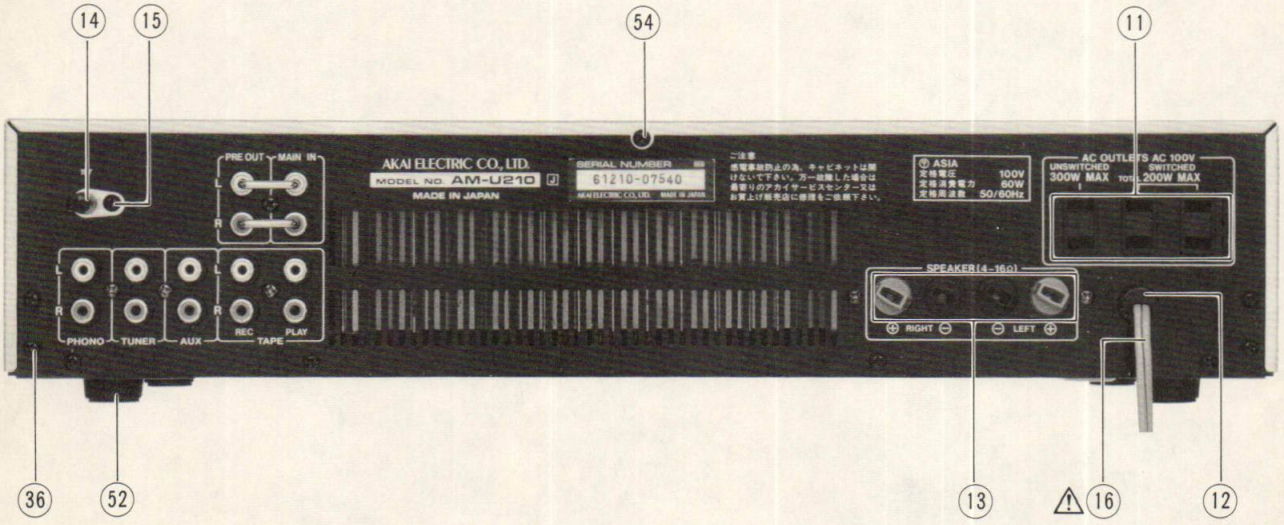
REF. NO.	PARTS NO.	DESCRIPTION
2-SW1	ES-336909	⚠ SW PUSH ESB-90259S 01-1 C (U,E,B,S,V)
2-SW1	ES-328788	⚠ SW PUSH ESB-90144T 01-1 UC (C,A)
2-SW1	ES-328787	⚠ SW PUSH ESB-90149R 01-1 J(J)
2-C1	EC-320548	⚠ C CE V F 103Z 250AC (U,J)
2-C1	EC-314688	⚠ C CE V FZ 103P 125AC (C,A)
2-C1	EC-330307	⚠ C MMY V ECQUF 472M 250AC (E,B,S,V)
2-FL1	EO-338409	COIL LF FKOB160MH02 250μH(V)

3. METER P.C BOARD BLOCK

REF. NO.	PARTS NO.	DESCRIPTION
3-IC1	EI-315799	IC HA12019
3-IND1	EM-336916	IND FL BG97Z GRAPH

ASSEMBLY BLOCK

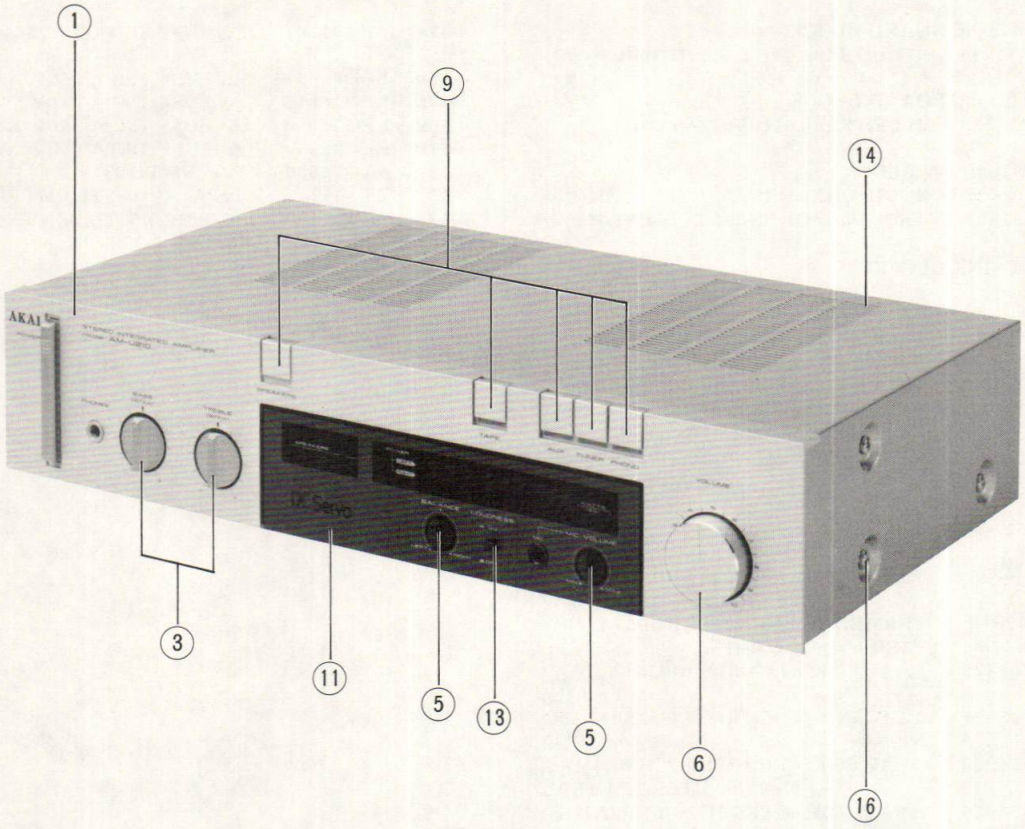




4. ASSEMBLY BLOCK

REF. NO.	PARTS NO.	DESCRIPTION
		LED (1) P.C BOARD BLOCK
4-1x	ED-336786	D LED SLP-271D GRN (D1to4)
		LED (2) P.C BOARD BLOCK
4-2x	ED-322773	D LED SLP-255D-01 GRN (D)
		ESCUTCHEON BLOCK
4-3x	SE-332531A	ESCUTCHEON KNOB SELECTOR
4-4x	SE-332531B	ESCUTCHEON KNOB SELECTOR-P
		HEAT SINK BLOCK
4-5	EI-336917	⚠ IC STK463-ST (IC901)
		REAR PANEL BLOCK
4-6	SP-342316B	PANEL REAR AM-U210 (U)
4-7x	SP-342316C	PANEL REAR AM-U210 (C,A)
4-8x	SP-332521D	PANEL REAR AM-U210 (E,V)
4-9x	SP-332521E	PANEL REAR AM-U210 (B,S)
4-10x	SP-342316F	PANEL REAR AM-U210(J) KOWA
4-11	EJ-240535	⚠ SOCKET OUTLET S-I6526 U 3x2P (U,A,J)
4-12x	EJ-332248	⚠ SOCKET OUTLET S-I6527#01 3x2P (C)
4-13	EJ-336896	TERMINAL W/SCREW ANB-017-ABA S 4P
4-14	EJ-329610	TERMINAL W/SCREW UB-0067 L 1P
4-15	ZS-447761	T2BR30x06STL BNI
4-16	EW-306428	⚠ AC CORD 2 CORES KP-205A, VFF J (U)
4-17x	EW-305691	⚠ AC CORD 2 CORES KP-8, SPT-1 UC (C,A)
4-18x	EW-336923	⚠ AC CORD 2 CORES KP-419C, LTCE-2F E (E,V)
4-19x	EW-336926	⚠ AC CORD GTBS-2F 24/0.20x2 B (B)
4-20x	EW-336924	⚠ AC CORD 2 CORES KP-560, LTSA-2F S (S)
4-21x	EW-306427	⚠ AC CORD 2 CORES KP-211, VFF J (J)
4-22	SZ-631945	STRAIN RELIEF SR-4N-4 (U,C,A,E,S,V,J)
4-23x	EJ-692908	STRAIN RELIEF SR-5N-4 (B)
		TERMINAL P.C BOARD BLOCK (V)
4-24x	ZS-337191	TERMINAL W/SCREW ANB-015-ACA P 4P (TM901) (V)
4-25x	ER-337108	FILTER LC LP CL-S-1 (FL1) (V)
		PIN JACK P.C BOARD BLOCK (J)
4-26x	EJ-336915	PIN J C-810 P 4P (J7) (J)
		ASSEMBLY BLOCK
4-27	BT-336893	⚠ TRANS POWER AM-U210T-70 (U)
4-28x	BT-336888	⚠ TRANS POWER AM-U210T-30 (C)
4-29x	BT-336887	⚠ TRANS POWER AM-U210T-20 (A)
4-30x	BT-336889	⚠ TRANS POWER AM-U210T-40 (E)
4-31x	BT-336891	⚠ TRANS POWER AM-U210T-50 (B,S)
4-32x	BT-336890	⚠ TRANS POWER AM-U210T-40-2 (V)
4-33x	BT-336910	⚠ TRANS POWER AM-U210T-10 (J)
4-34x	ZS-332541	SCREW HEAT SINK
4-35x	ZW-698308	RV NYL30x055 BL
4-36	ZS-319460	T2BR30x06STL BZN PROJECTION
4-37	EF-306951	⚠ FUSE TSC A 250V 2.5A (F1) (U)
4-38x	EF-306949	⚠ FUSE TSC A 250V 1.25A (F2,3) (U)
4-39	EF-325683	⚠ FUSE GGS A 125V 5A (F4) (U)
4-40	EF-306954	⚠ FUSE TSC 125V 2A (F5,6) (U)
4-41x	EF-323080	⚠ FUSE TSC 125V 3.15A (F1) (C,A)
4-42x	EF-325683	⚠ FUSE GGS A 125V 5A (F2) (C,A)
4-43x	EF-306954	⚠ FUSE TSC 125V 2A (F3,4) (C,A)
4-44x	EF-623103	⚠ FUSE SEMKO T 250V 1A (F1) (E,B,S,V)
4-45x	EF-249851	⚠ FUSE SEMKO T 250V 5A (F2) (E,B,S,V)
4-46x	EF-601301	⚠ FUSE SEMKO T 250V 2A (F3) (E,B,S,V)
4-47x	EF-601301	⚠ FUSE SEMKO T 250V 2A (F4) (E,B,S,V)
4-48x	EF-306951	⚠ FUSE TSC A 250V 2.5A (F1) (J)
4-49x	EF-326613	⚠ FUSE TSC A 250V 5A (F2) (J)
4-50x	EF-306950	⚠ FUSE TSC A 250V 2A (F3) (J)
4-51x	EF-306950	⚠ FUSE TSC A 250V 2A (F3,4) (J)
4-52	SA-332850	ROUND FOOT
4-53x	ZS-565942	T2PAN40x08STL CMT
4-54	ZS-319460	T2BR30x06STL BZN PROJECTION
4-55x	SP-332524	COVER BOTTOM
4-56x	ZW-305013	RV POP32 (A)

FINAL ASSEMBLY BLOCK



5. FINAL ASSEMBLY BLOCK

REF. NO.	PARTS NO.	DESCRIPTION
	FRONT PANEL BLOCK	
5-1	BD-A2013A020A	PANEL FRONT BLK AM-U210
5-2x	BD-A2013A020B	PANEL FRONT BLK AM-U210-P
	FINAL ASSEMBLY BLOCK	
5-3	SK-332533A	KNOB ROTARY (B)
5-4x	SK-332533B	KNOB ROTARY (B)-P
5-5	SK-332534	KNOB ROTARY (C)
5-6	SK-332532A	KNOB ROTARY (A)
5-7x	SK-332532B	KNOB ROTARY (A)-P
5-8x	ZG332538	SP PUSH KNOB (A)
5-9	SK-332535A	KNOB PUSH (A)
5-10x	SK-332535B	KNOB PUSH (A)-P
5-11	SP-B604404	WINDOW METER (A) PART
5-12x	SP-B604403	WINDOW METER PART (J)
5-13	SK-332536	KNOB PUSH (B)
5-14	BC-332527A	COVER UPPER
5-15x	SP-332527B	COVER UPPER-P
5-16	ZS-322570	ST BID40x08STL NI3
5-17x	ZS-322580	ST BID40x08STL BNI

INDEX

1. MODEL AT-S210/L/J

PARTS NO.	REF. NO.	PARTS NO.	REF. NO.	PARTS NO.	REF. NO.	PARTS NO.	REF. NO.
BA-A3033A021A	1-1	EI-293185	1-IC3	ET-322775	1-TR27,28		
BA-A3033A021B	1-2	EI-315379	1-IC9	ET-322775	1-TR25		
BA-A3033A021C	1-3	EI-315381	1-IC5	ET-322775	1-TR3		
BA-A3033A021D	1-4	EI-315491	1-IC4	ET-322775	1-TR9		
BA-A3033A021E	1-5	EI-322248	1-IC1	ET-322775	1-TR15,16		
BA-A3033A021F	1-6	EI-327074	1-X1	ET-322775	1-TR19,20		
BA-A3033A021G	1-7	EI-330689	1-IC11,12	ET-322775	1-TR29to31		
BA-A3033A021H	1-8	EI-336717	1-IC6	ET-322775	1-TR36		
BA-A3033A021J	1-9	EI-336793	1-IC2	ET-322775	1-TR6		
BA-A3033A021K	1-10	EI-336794	1-IC8	ET-322775	1-TR6to10		
BA-A3034A020A	1-11	EI-336866	1-IC7	ET-322775	1-TR2		
BA-A3034A020B	1-12	EI-336962	1-IC10	ET-322778	1-TR35		
BA-A3034A020C	1-15	EJ-309941	1-TM1	ET-322778	1-TR10		
BA-A3034A020D	1-13	EJ-332213	1-TM1	ET-322778	1-TR37		
BA-A3034A020E	1-14	EJ-336806	1-TM2	ET-322778	1-TR24		
BT-336859	3-5x	EM-336863	1-IND1	ET-322778	1-TR18		
BT-336860	3-7x	EO-202216	1-T4	ET-322778	1-TR1		
BT-336861	3-8x	EO-332120	1-L4	ET-322778	1-TR1to5		
BT-336862	3-4	EO-336828	1-T9	ET-328437	1-TR21,22		
BT-336883	3-9x	EO-336829	1-T7	ET-330588	1-TR33		
BT-336884	3-6x	EO-336833	1-T10	ET-336867	1-TR1		
EC-310439	1-C66,67	EO-336871	1-L5	ET-336869	1-TR2		
EC-314688	2-C1	EO-336872	1-L1	ET-336935	1-TR5		
EC-314952	1-C97	EO-336873	1-L2	ET-336937	1-TR26		
EC-314990	1-C30	EO-336874	1-T6	ET-338410	1-TR32		
EC-314995	1-C15	EO-336876	1-T8	ET-452531	1-TR17		
EC-314995	1-C45	EO-336877	1-T5	ET-618873	1-TR3		
EC-320548	2-C1	EO-336878	1-T2	ET-655356	1-TR13		
EC-324368	1-C97	EO-336879	1-T3	EV-315414	1-VR3		
EC-330692	1-VC6	EO-336938	1-L3	EV-315416	1-VR1		
EC-330692	1-VC7	EO-336939	1-L1	EV-483388	1-VR2		
EC-330692	1-VC5	EO-336940	1-L5	EW-305691	3-18x		
EC-331183	1-C54	EO-337640	1-T1	EW-306427	3-21x		
EC-334075	1-C158	EO-338409	3-1x	EW-306428	3-17		
EC-334397	1-C68,69	ER-315407	1-FL2	EW-336923	3-19x		
EC-334397	1-C64,65	ER-322421	1-R144	EW-336924	3-20x		
EC-334400	1-C3,4	ER-322787	1-R131	SA-332822	3-3		
EC-336808	1-VC5	ER-323074	1-R137	SK-332828A	4-3		
EC-336865	1-VC1to4	ER-324184	1-R109	SK-332828B	4-4x		
EC-336882	1-C141	ER-324337	1-R58,59	SK-332829A	4-1		
EC-336950	1-C101	ER-324337	1-R50,51	SK-332829B	4-2x		
EC-337331	1-C58,59	ER-324337	1-R63,64	SK-332830A	4-13		
EC-338496	2-C1	ER-324337	1-R123,124	SK-332830B	4-14x		
ED-200469	1-D16	ER-324337	1-R32,33	SK-332831A	4-6		
ED-200469	1-D17	ER-324337	1-R67,68	SK-332831B	4-7x		
ED-200469	1-D19to21	ER-324337	1-R98,99	SP-332825A	4-8		
ED-200469	1-D43,44	ER-324480	1-R21,22	SP-332825B	4-9x		
ED-200469	1-D47to49	ER-324934	1-R121	SP-332825C	4-10x		
ED-301911	1-D45,46	ER-324934	1-R136	SP-332825D	4-11x		
ED-301911	1-D33	ER-324934	1-R170	SP-332825E	4-12x		
ED-301911	1-D42	ER-325269	1-R141	SP-332826A	4-15		
ED-301911	1-D17,18	ER-328067	1-R149	SP-332826B	4-16x		
ED-301911	1-D5to14	ER-333359	1-R207	TA-B604407	4-5		
ED-301911	1-D35to40	ER-336804	1-FL1	ZS-319460	4-22x		
ED-303155	1-D26	ER-336810	1-FL3	ZS-336541	4-17		
ED-303155	1-D31	ER-336811	1-FL3	ZS-336542	4-18x		
ED-315372	1-D28	ER-336830	1-FL4	ZS-336544	4-19		
ED-316519	1-D30	ER-336880	1-SR1	ZS-336545	4-20x		
ED-322772	1-D2to5	ER-338338	1-FL1	ZS-336697	4-21x		
ED-322773	1-D1	ER-341654	1-FL1	ZW-305013	3-23x		
ED-322773	1-D6	ES-300122	1-SW5				
ED-324197	1-D15	ES-300122	1-SW8				
ED-336786	1-D18	ES-328777	1-SW1				
ED-336786	1-D7to9	ES-328787	2-SW1				
ED-336786	1-D10to13	ES-328788	2-SW1				
ED-336805	1-D29	ES-336760	1-SW1to4				
ED-336805	1-D22to25	ES-336760	1-SW9				
ED-336805	1-D27	ES-336760	1-SW11,12				
ED-336832	1-D1to4	ES-336760	1-SW13				
ED-336943	1-D32	ES-336760	1-SW6,7				
ED-336944	1-D34	ES-336760	1-SW10				
ED-336945	1-D41	ES-336909	2-SW1				
EE-330614	3-22	ES-336909	3-2x				
EF-300599	3-14x	ET-200506	1-TR8				
EF-308848	3-12x	ET-200506	1-TR11,12				
EF-308933	3-11	ET-200558	1-TR7				
EF-309389	3-10	ET-315410	1-TR4				
EF-315334	3-13x	ET-322775	1-TR23				
EF-336834	3-15x	ET-322775	1-TR34				
EF-336834	3-16x	ET-322775	1-TR39				

INDEX

2. MODEL AM-U210/J

PARTS NO.	REF. NO.	PARTS NO.	REF. NO.	PARTS NO.	REF. NO.	PARTS NO.	REF. NO.
BA-A2013A080A	1-1	ER-322787	1-R33				
BA-A2013A080B	1-2	ER-322787	1-R5				
BA-A2013A080C	1-3	ER-336919	1-R40				
BA-A2013A080D	1-4	ER-336920	1-R8				
BA-A2013A080E	1-5	ER-337108	4-25x				
BA-A2013A080F	1-6	ES-328787	2-SW1				
BA-A2014A020A	1-7	ES-328788	2-SW1				
BC-332527A	5-14	ES-336897	1-SW1				
BD-A2013A020A	5-1	ES-336906	1-SW1				
BD-A2013A020B	5-2x	ES-336907	1-SW1				
BT-336887	4-29x	ES-336908	1-SW1				
BT-336888	4-28x	ES-336909	2-SW1				
BT-336889	4-30x	ET-307195	1-TR4				
BT-336890	4-32x	ET-310148	1-TR3				
BT-336891	4-31x	ET-322598	1-TR2				
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BT-336910	4-33x	EV-315412	1-VR3				
EC-313532	1-C18	EV-336898	1-VR1				
EC-313533	1-C15	EV-336899	1-VR2				
EC-314688	2-C1	EV-336911	1-VR1				
EC-320307	1-C28,29	EV-336912	1-VR1				
EC-320548	1-C33	EV-336913	1-VR1				
EC-320548	2-C1	EW-305691	4-17x				
EC-326583	1-C30	EW-306427	4-21x				
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ED-330219	1-D3,4	SK-332533B	5-4x				
ED-336786	4-1x	SK-332534	5-5				
EF-249851	4-45x	SK-332535A	5-9				
EF-306949	4-38x	SK-332535B	5-10x				
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EF-325683	4-42x	SP-342316C	4-7x				
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EF-601301	4-47x	ZG-332538	5-8x				
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EI-322599	1-IC1	ZS-322580	5-17x				
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EJ-329610	4-14	ZS-565942	4-53x				
EJ-332248	4-12x	ZW-305013	4-56x				
EJ-336896	4-13	ZW-698308	4-35x				
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EJ-336901	1-J1						
EJ-336904	1-J5						
EJ-336905	1-J6						
EJ-336915	4-26x						
EJ-336929	1-J3						
EJ-692908	4-23x						
EM-336916	3-IND1						
EO-336902	1-L1						
EO-336934	1-L2to5						
EO-336934	1-L2						
EO-338409	2-FL1						
EO-338420	1-L1						
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SECTION 4

SCHEMATIC DIAGRAM

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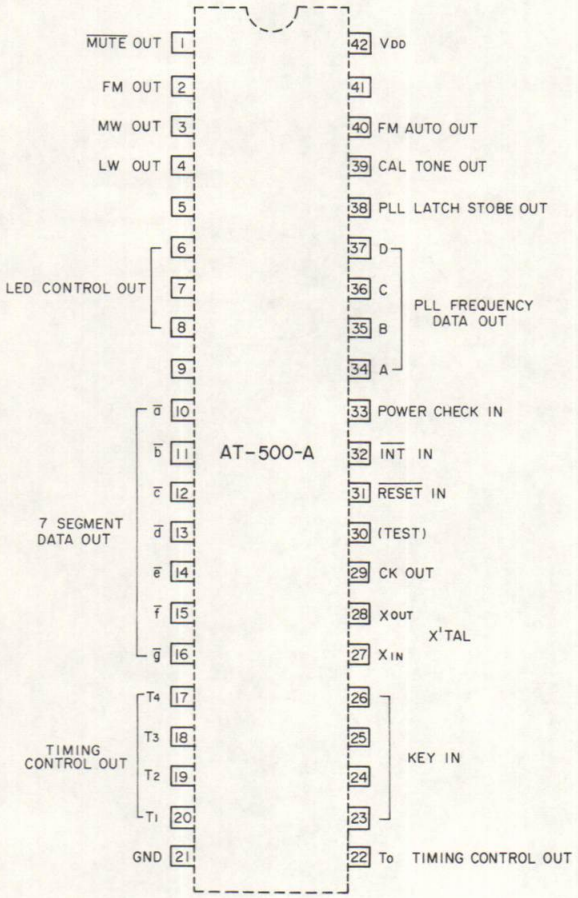
3. AT-S210L NO. 1640445A SCHEMATIC DIAGRAM
4. AT-S210J NO. 1640446A SCHEMATIC DIAGRAM
5. AM-U210 NO. 1640448A SCHEMATIC DIAGRAM
6. AM-U210J NO. 1640449A SCHEMATIC DIAGRAM

AT-500-A



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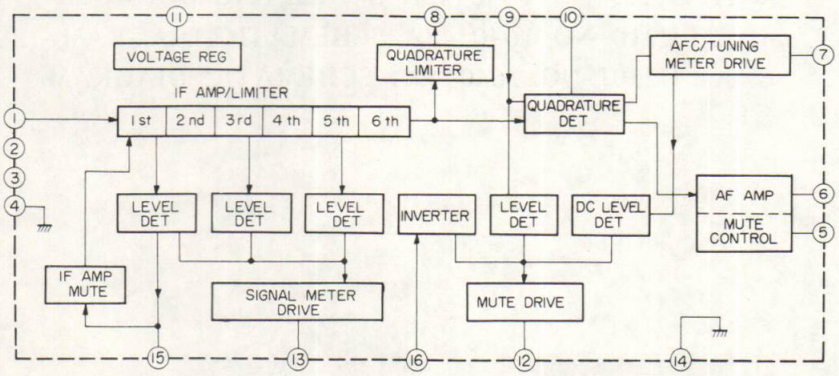

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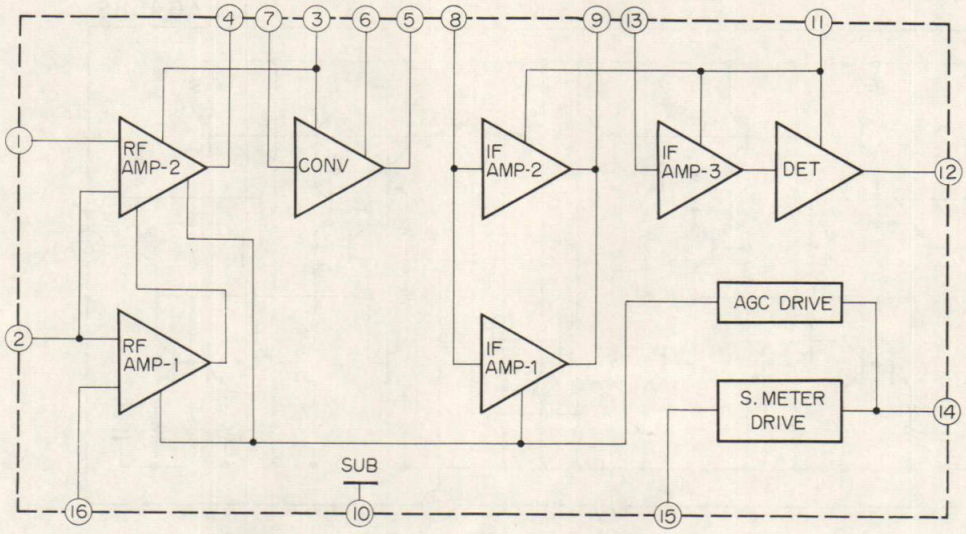

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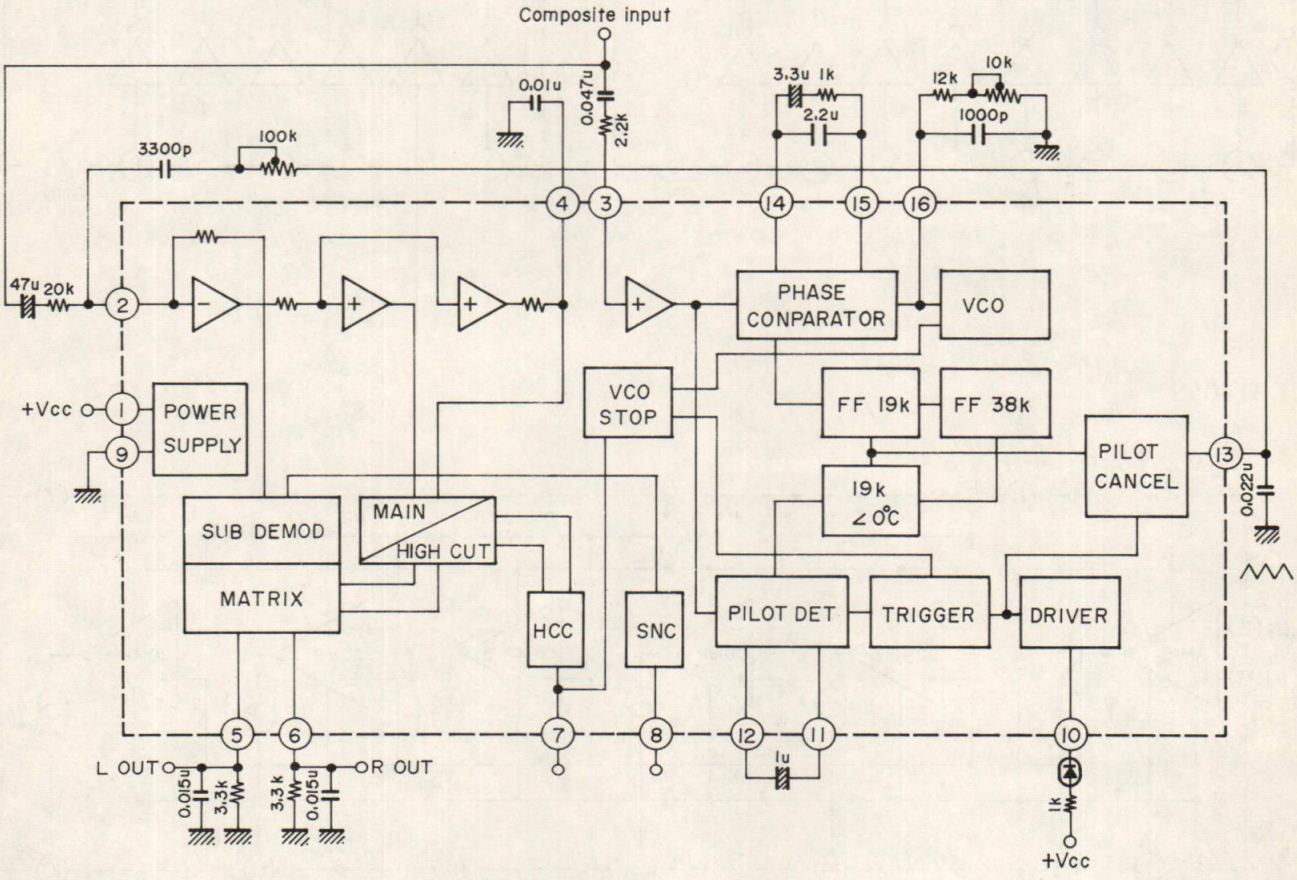

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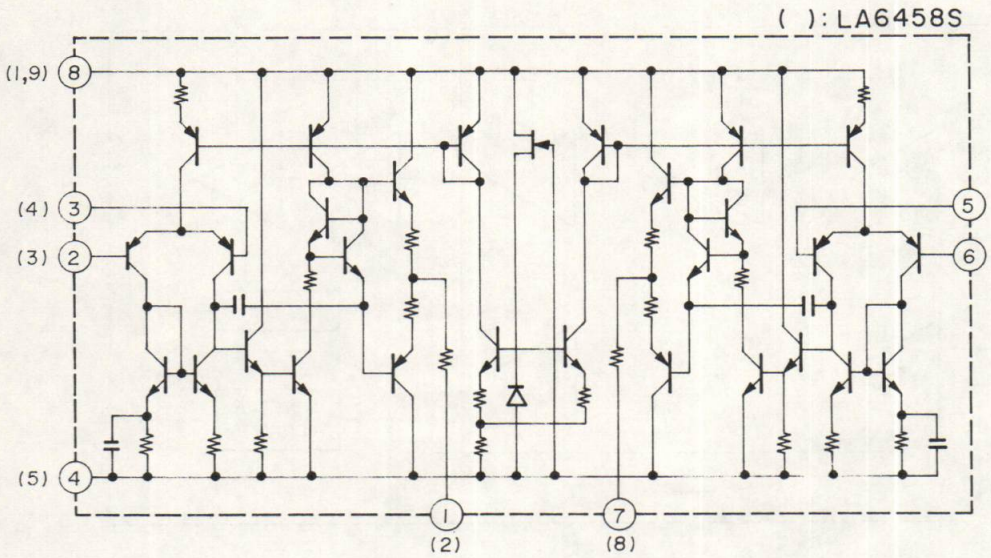

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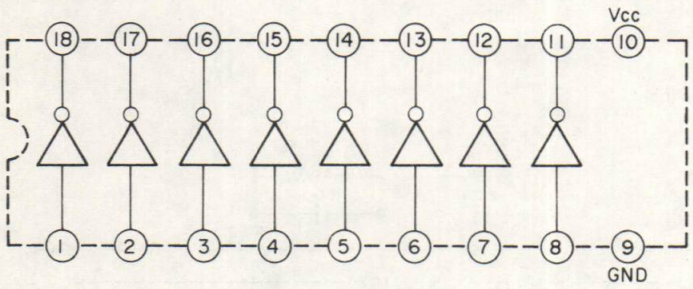

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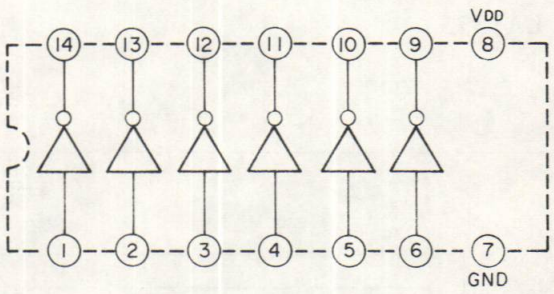

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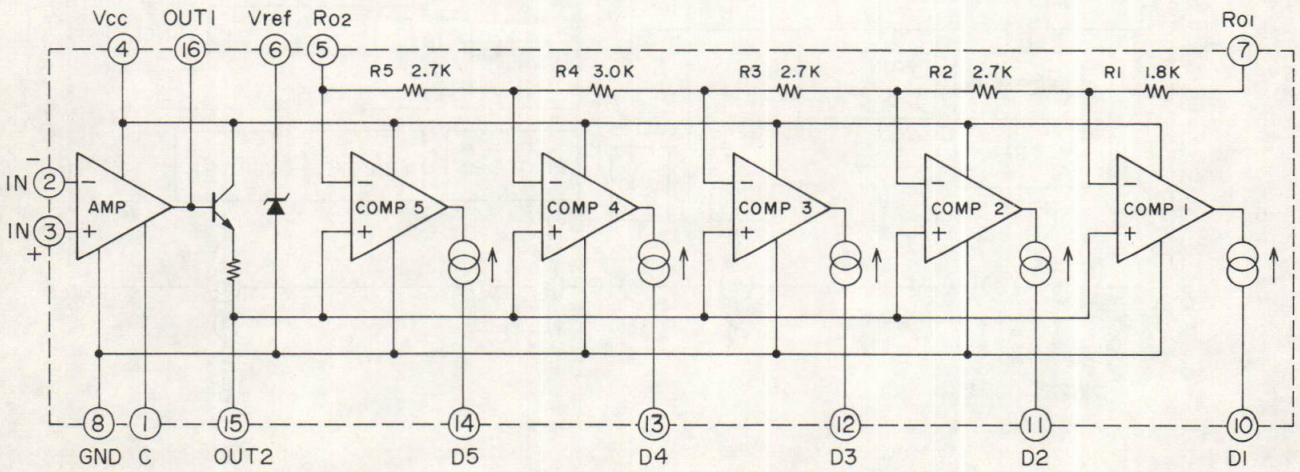

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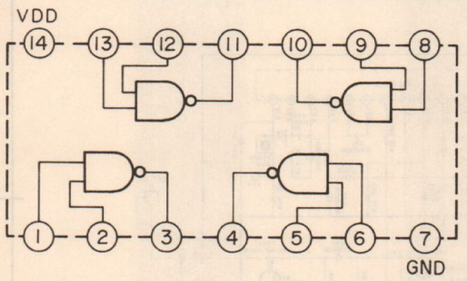

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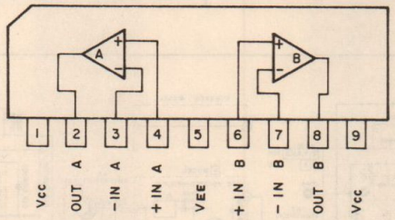

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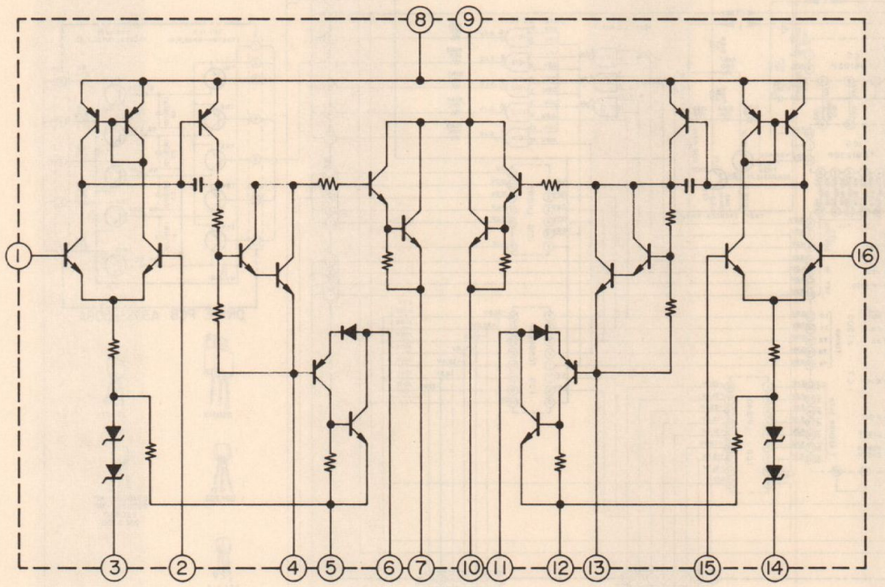

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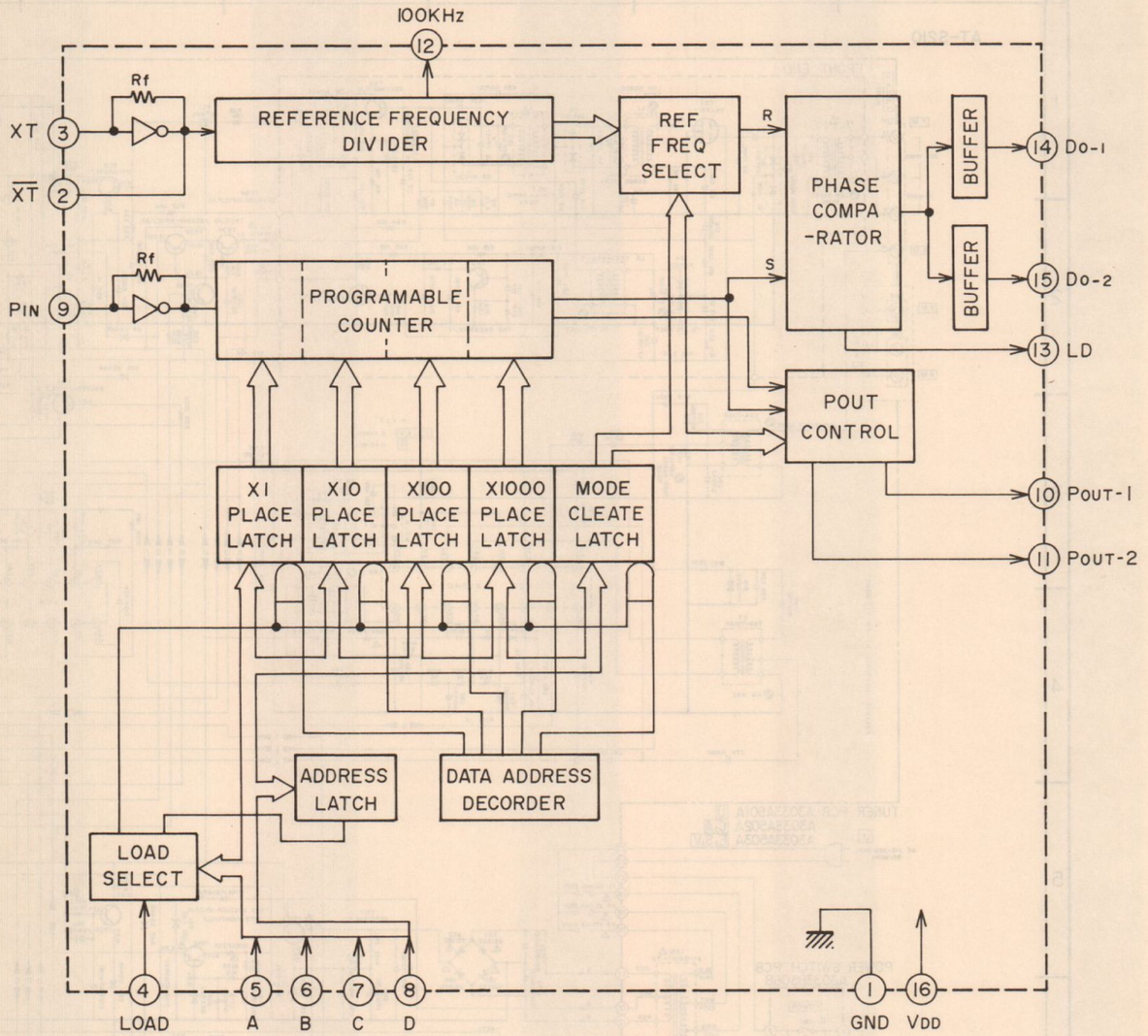

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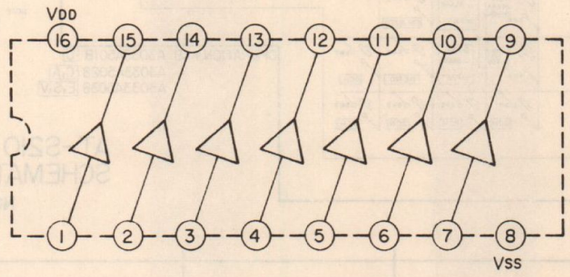
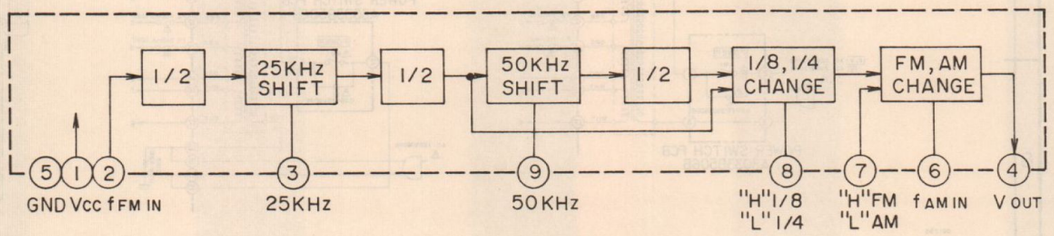
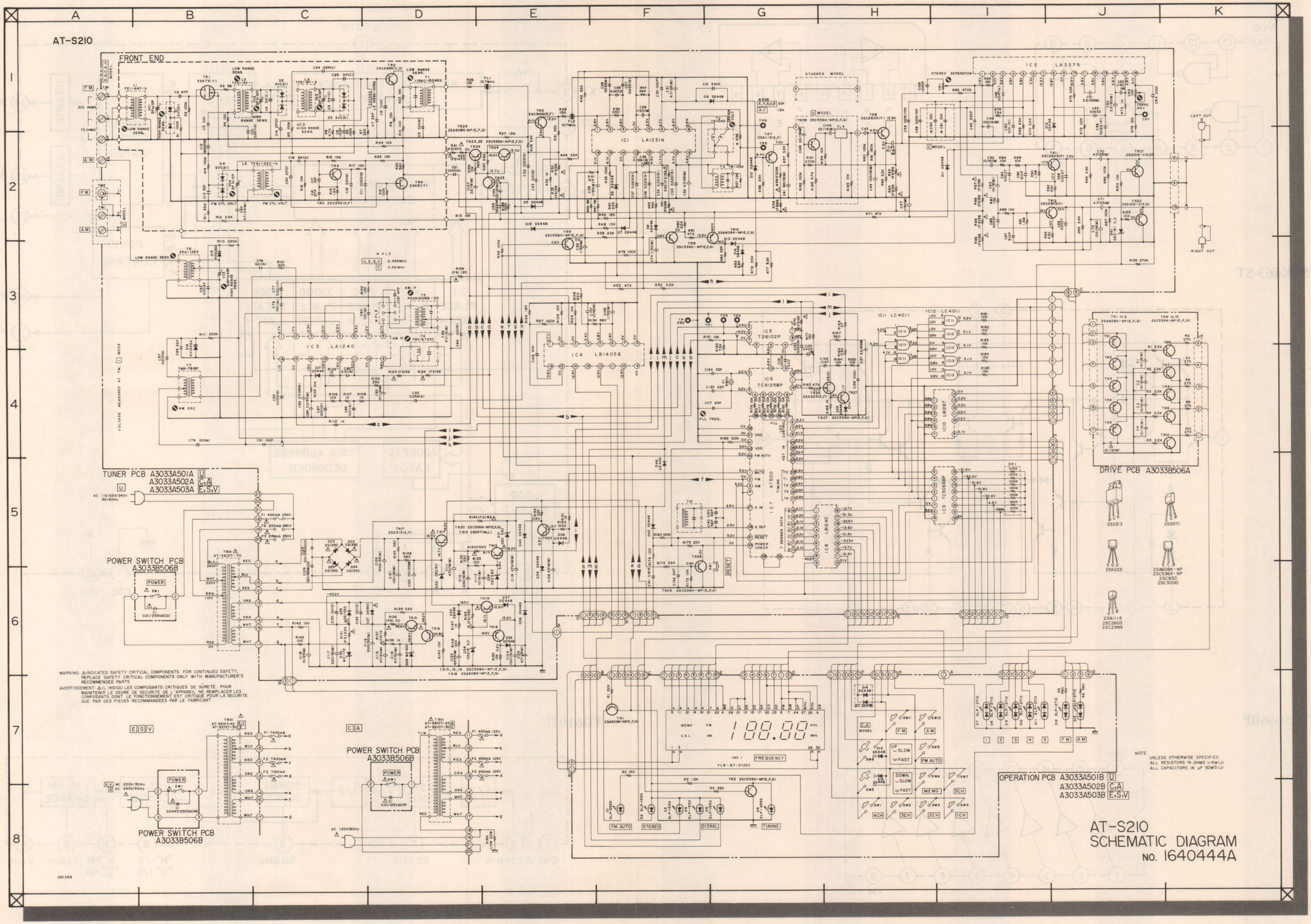


TD6102P



AT-S210



WARNING: △INDICATES SAFETY CRITICAL COMPONENTS. FOR CONTINUED SAFETY, REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS

AVERTISSEMENT: △IL INDIQU LES COMPOSANTS CRITIQUES DE SURETÉ. POUR MAINTENIR LE DEGRÉ DE SECURITE DE L'APPAREIL NE REMPLACER LES COMPOSANTS DONT LE FONCTIONNEMENT EST CRITIQUE POUR LA SECURITE QUE PAR DES PIECES RECOMMANDEES PAR LE FABRICANT

NOTE
UNLESS OTHERWISE SPECIFIED
ALL RESISTORS IN OHMS 1/4W(J)
ALL CAPACITORS IN μF 50WV(J)

AT-S210
SCHEMATIC DIAGRAM
NO. 1640444A

AT-S210L

FRONT END

TUNER PCB A3033A505A

POWER SWITCH PCB A3033B506B

POWER SWITCH PCB A3033B506B

DRIVE PCB A3033B506A

OPERATION PCB A3033A505B

2SD313 2SD571 2SK223

2SA1115 2SC2603 2SC2999 2SA608K-NP 2SC536K-NP 2SC930 2SC3000

WARNING: ⚠ INDICATES SAFETY CRITICAL COMPONENTS. FOR CONTINUED SAFETY, REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS

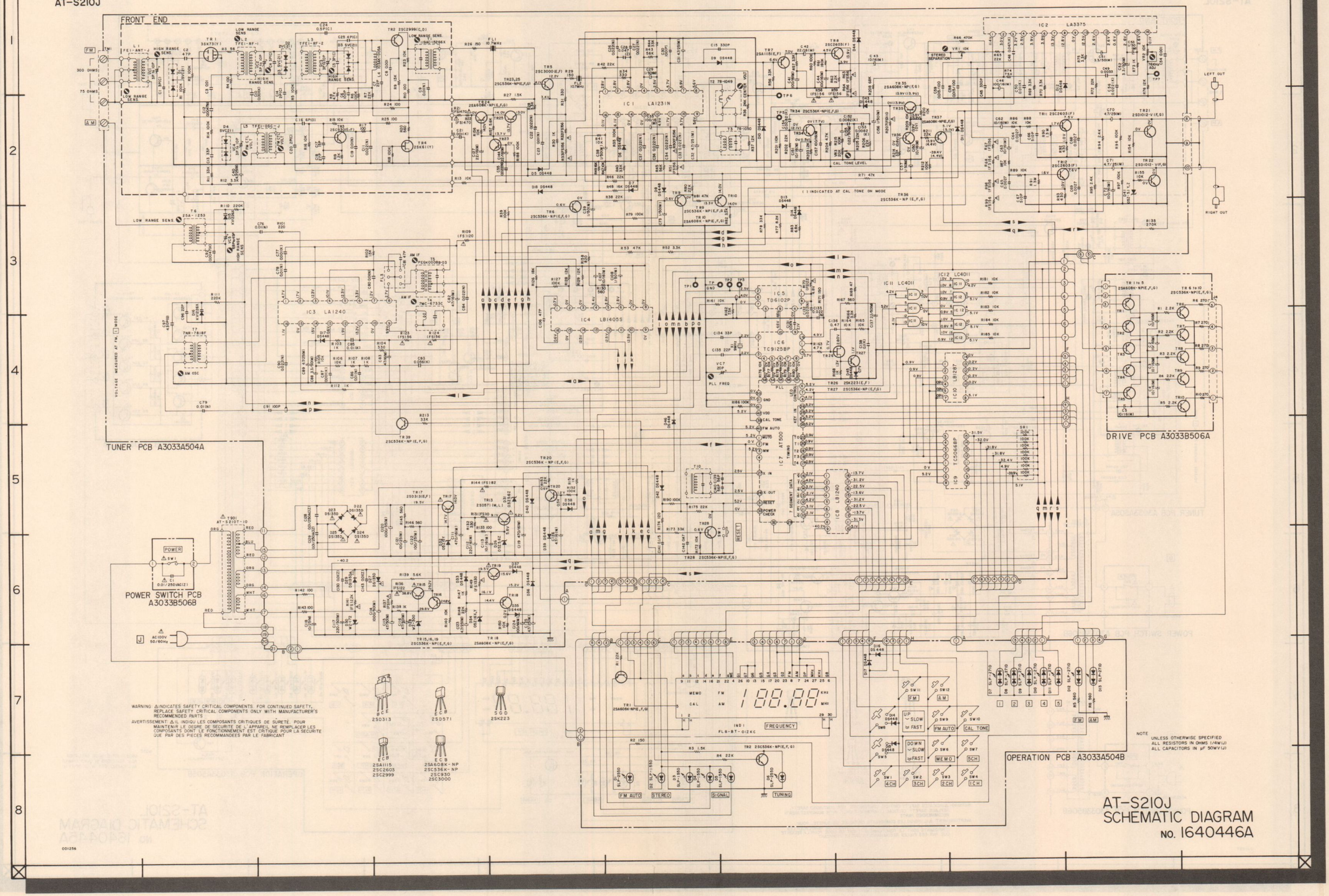
AVERTISSEMENT: ⚠ IL INDIQU LES COMPOSANTS CRITIQUES DE SÛRETÉ. POUR MAINTENIR LE DEGRÉ DE SÉCURITÉ DE L'APPAREIL NE REMPLACER LES COMPOSANTS DONT LE FONCTIONNEMENT EST CRITIQUE POUR LA SÉCURITÉ QUE PAR DES PIÈCES RECOMMANDÉES PAR LE FABRICANT

NOTE
UNLESS OTHERWISE SPECIFIED
ALL RESISTORS IN OHMS (1/4W,J)
ALL CAPACITORS IN μF 50WV(J)

AT-S210L
SCHEMATIC DIAGRAM
NO. 1640445A

001257

AT-S210J



WARNING: ⚠ INDICATES SAFETY CRITICAL COMPONENTS. FOR CONTINUED SAFETY, REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS

AVERTISSEMENT: ⚠ IL INDIQU LES COMPOSANTS CRITIQUES DE SÛRETÉ. POUR MAINTENIR LE DEGRE DE SECURITE DE L'APPAREIL NE REMPLACER LES COMPOSANTS DONT LE FONCTIONNEMENT EST CRITIQUE POUR LA SECURITE QUE PAR DES PIECES RECOMMANDEES PAR LE FABRICANT

NOTE
UNLESS OTHERWISE SPECIFIED
ALL RESISTORS IN OHMS 1/4W(J)
ALL CAPACITORS IN μF 50WV(J)

001256

AT-S210J
SCHEMATIC DIAGRAM
No. 1640446A

AM-U210

EQUALIZER PCB (U) A2013A501B U,A,C
(E) A2013A502B E,V,B,S

BALANCE PCB
(U) A2013A501E U,A,C
(E) A2013A502E E,V,B,S

MAIN VR PCB
(U) A2013A501F U,A,C
(E) A2013A502F E,V,B,S

FUNCTION PCB
(U) A2013A501C U,A,C
(E) A2013A502C E,V,B,S

METER PCB A2013C5030

LED (2) PCB
(U) A2013A501H U,A,C
(E) A2013A502H E,V,B,S

SPEAKER PCB
(U) A2013A501D U,A,C
(E) A2013A502D E,V,B,S

TERMINAL PCB A2013D5090
V MODEL

POWER PCB A2013D5040

MAIN AMP PCB (U) A2013A5010 U,A,C
(E) A2013A5020 E,V,B,S

LED (1) PCB
(U) A2013A501G U,A,C
(E) A2013A502G E,V,B,S

POWER PCB A A2013D5050
C A2013D5060

POWER PCB A2013D5070

POWER PCB A2013D5070

*	F2	F3	F4	F5,F6
U			5A / 125V	2A / 125V
C, A	5A / 125V	2A / 125V	2A / 125V	
E,V,B,S	T5.0A	T2.0A	T2.0	

2SA608K-NP
2SB632K
2SD612K

WARNING: △INDICATES SAFETY CRITICAL COMPONENTS. FOR CONTINUED SAFETY, REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS
AVERTISSEMENT: △ IL INDIQU LES COMPOSANTS CRITIQUES DE SÛRETÉ. POUR MAINTENIR LE DEGRÉ DE SECURITE DE L'APPAREIL NE REMPLACER LES COMPOSANTS DONT LE FONCTIONNEMENT EST CRITIQUE POUR LA SECURITE QUE PAR DES PIECES RECOMMANDEES PAR LE FABRICANT

NOTE
UNLESS OTHERWISE SPECIFIED
ALL RESISTORS IN OHMS 1/4W (J)
ALL CAPACITORS IN μF 50 WV (J)
= NON POLE CAPACITORS
(FS) = FAIL SAFE RESISTORS

001250

AM-U210
SCHEMATIC DIAGRAM
NO. 1640448A

AM-U210J

EQUALIZER PCB A2014A501B

MAIN VR PCB A2014A501F

BALANCE PCB A2014A501E

PIN JACK PCB A2014D5020

FUNCTION PCB A2014A501C

LED (1) PCB A2014A501G

MIC PCB A2014A501J

MAIN AMP PCB A2014A5010

METER PCB A2013C5030

LED (2) PCB A2014A501H

SPEAKER PCB A2014A501D

POWER PCB A2013D5080

WARNING: △INDICATES SAFETY CRITICAL COMPONENTS. FOR CONTINUED SAFETY, REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS

AVERTISSEMENT: △IL INDIQU LES COMPOSANTS CRITIQUES DE SÛRETÉ. POUR MAINTENIR LE DEGRÉ DE SECURITE DE L'APPAREIL NE REMPLACER LES COMPOSANTS DONT LE FONCTIONNEMENT EST CRITIQUE POUR LA SECURITE QUE PAR DES PIECES RECOMMANDEES PAR LE FABRICANT

NOTE
UNLESS OTHERWISE SPECIFIED
ALL RESISTORS IN OHMS 1/4W (J)
ALL CAPACITORS IN μF 50 WV (J)
⊣⊢ = NON POLE CAPACITORS
(FS) = FAIL SAFE RESISTORS

2SA608K-NP
2SC2240

2SB632K
2SD612K

AM-U210J
SCHEMATIC DIAGRAM
NO. 1640449A

AKAI ELECTRIC CO., LTD.

12-14, 2-Chome, Higashi-Kojiya, Ohta-Ku, Tokyo, Japan
TEL: Tokyo (742) 5111 CABLE: HIFIAKAI TOKYO TELEX: J26261
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