

SERVICE MANUAL

PARTS LIST

AKAI STEREO RECEIVER

MODEL **AA-8080**

ALSO APPLICABLE TO MODEL AA-8030,
AA-8080L & AA-8030L



MODEL AA-8080



MODEL AA-8030

STEREO RECEIVER

MODEL AA-8080

ALSO APPLICABLE TO MODEL
AA-8030, AA-8080L & AA-8030L

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SECTION 1

SERVICE MANUAL

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I. SPECIFICATIONS

MODEL: AA-8080, AA-8080L

An asterisk next to a figure indicates the minimum guaranteed performance.

§ AMPLIFIER SECTION

MUSIC OUTPUT POWER		130W (65W + 65W) at 4Ω 120W (60W + 60W) at 8Ω
CONTINUOUS OUTPUT POWER		90W (45W + 45W) at 4Ω 80W (40W + 40W) at 8Ω
*MAXIMUM OUTPUT POWER		36W at 1 kHz/8Ω H.D. 0.5% 60W at 1 kHz/8Ω H.D. 0.5%
FREQUENCY RESPONSE	MIC AUX	100 to 10,000 Hz -3.5 ± 2 dB 10 to 50,000 Hz *20 to 20,000 Hz ± 1.5 dB (TONE FLAT)
PHONO EQUALIZER CHARACTERISTIC		13.1 ± 1.5 dB at 100 Hz -13.75 ± 1.5 dB at 10,000 Hz
POWER BAND WIDTH		5 to 50,000 Hz at 8Ω *20 to 20,000 Hz at 8Ω H.D. 0.5%
HARMONIC DISTORTION		Less than 0.03% at 8Ω 20W *Less than 0.1% at 8Ω 30W
INPUT SENSITIVITY	PHONO MIC AUX TAPE	3 mV Impedance: 50 kΩ 2.5 mV Impedance: 50 kΩ 160 mV Impedance: 50 kΩ 160 mV Impedance: 50 kΩ
SIGNAL TO NOISE RATIO	PHONO MIC AUX TAPE	Better than 65 dB *Better than 60 dB Better than 58 dB Better than 80 dB *Better than 73 dB Better than 73 dB
HUM AND NOISE		Less than 1 mV *Less than 1.5 mV at 8Ω
TONE CONTROL	BASS TREBLE	10 ± 2 dB, -10 ± 2 dB at 100 Hz 10 ± 2 dB, -10 ± 2 dB at 10,000 Hz
LOUDNESS CONTROL		8 ± 1.5 dB at 100 Hz 5 ± 1.5 dB at 10,000 Hz
FILTER	Low Cut Filter High Cut Filter	-4.5 dB *-8 ± 1.5 dB at 50 Hz -5.5 dB *-6 ± 1.5 dB at 10,000 Hz
CHANNEL SEPARATION (AUX)		Better than 65 dB *Better than 45 dB at 8Ω 1 kHz
L-R DEVIATION		1.5 dB at volume control maximum 3 dB at volume control center

§ FM TUNER SECTION

FREQUENCY RANGE		87.5 to 108.5 MHz
DIAL TRACKING ERROR		90 MHz ± 250 kHz 98 MHz ± 300 kHz 106 MHz ± 250 kHz
SENSITIVITY		2 μV *3.2 μV I.H.F.
IMAGE REJECTION RATIO		Better than 85 dB at 98 MHz *Better than 75 dB at 98 MHz
IF REJECTION RATIO		Better than 95 dB at 98 MHz *Better than 85 dB at 98 MHz
SPURIOUS RADIATION		Within UMI Specifications
LIMITING SENSITIVITY		8 dB at 98 MHz, 2.5 μV input
SELECTIVITY		Better than 65 dB *Better than 55 dB at 98 MHz
CAPTURE RATIO		Less than 2 dB *Less than 3.5 dB at 98 MHz
HARMONIC DISTORTION	Monaural (400 Hz) Stereo (1,000 Hz)	Less than 0.3% *Less than 0.6% at 98 MHz 60 dB input Less than 0.6% *Less than 1.2% at 98 MHz 60 dB input
SIGNAL TO NOISE RATIO		Better than 68 dB *Better than 60 dB at 98 MHz 60 dB input

MPX. SEPARATION	(1,000 Hz)	Better than 38 dB *Better than 33 dB at 98 MHz 60 dB input
MUTING SENSITIVITY		20 ± 6 dB at 98 MHz
CARRIER LEAK		Less than 45 dB at 60 dB input
SCA INTERFERENCE RATIO		45 dB at 98 MHz
RECORDING OUTPUT	PIN DIN	1V ± 2 dB 200 mV ± 2 dB
RECORDING OUTPUT L-R DEVIATION		Within 1.2 dB
§ AM TUNER SECTION		
FREQUENCY RANGE	AM, MW LW	525 to 1,625 kHz ± 2% 145 to 355 kHz ± 2%
SENSITIVITY	AM, MW LW	320 μV I.H.F. 800 μV I.H.F.
IMAGE REJECTION RATIO	AM MW LW	Better than 48 dB *Better than 35 dB at 1,400 kHz Better than 48 dB *Better than 32 dB at 1,400 kHz Better than 30 dB *Better than 20 dB at 160 kHz
IF REJECTION RATIO	AM MW LW	Better than 40 dB *Better than 35 dB at 600 kHz Better than 40 dB Better than 50 dB *Better than 40 dB at 340 kHz
SELECTIVITY	AM, MW LW	Better than 25 dB *Better than 20 dB at 1,000 kHz *Better than 20 dB at 240 kHz
AGC CHARACTERISTIC		Better than 40 dB at 1,000 kHz
HARMONIC DISTORTION	AM, MW LW	Less than 1% *Less than 2% at 1,000 kHz *Less than 3% at 240 kHz
SIGNAL TO NOISE RATIO	AM MW LW	Better than 45 dB *Better than 40 dB at 1,000 kHz Better than 45 dB *Better than 38 dB at 1,000 kHz Better than 32 dB at 240 kHz
F.E.T.		2SK41 . . . 2
TRANSISTORS		2SA666A . . . 4 2SC871 . . . 2 2SC1211 . . . 1 2SC693 . . . 6 2SC930D . . . 4 2SC945 . . . 6 2SC1318 (A) . . . 2 2SC710 (C) (D) . . . 5 2SC828 . . . 4 CDC8000 . . . 2 2SC 711 . . . 4 2SC1030 . . . 4 TSC8002 . . . 4 2SC1047 . . . 3 TSC9002 . . . 2
I.C.		TA7061AP . . . 1
DIODES		1N34A . . . 8 1S1212 . . . 1 V06C . . . 3 1N60 . . . 7 1S2139 . . . 1 Z-1-12 . . . 1 1S188 . . . 16 V03C . . . 4
THERMISTERS		TH6014 . . . 2
POWER SUPPLY		100 to 240V A.C., 50/60 Hz (Universal Models) 120V A.C., 60 Hz (CUL Models)
POWER CONSUMPTION		200 W
DIMENSIONS		464 (W) x 146 (H) x 380 (D) mm (18.3" x 5.8" x 15")
WEIGHT		12 kg (26.4 lbs.)

NOTE: Specifications subject to change without notice.

II. SPECIFICATIONS

MODEL: AA-8030, AA-8030L

An asterisk next to a figure indicates the minimum guaranteed performance.

§ AMPLIFIER SECTION

MUSIC OUTPUT POWER		80W (40W + 40W) at 4Ω 70W (35W + 35W) at 8Ω
CONTINUOUS OUTPUT POWER		60W (30W + 30W) at 4Ω 50W (25W + 25W) at 8Ω
*MAXIMUM OUTPUT POWER		20W at 1 kHz/8Ω H.D. 0.7% 18W at 1 kHz/8Ω H.D. 0.7%
	when operating 1 channel	
	when operating both channels	
FREQUENCY RESPONSE	AUX	15 to 40,000 Hz *20 to 20,000 Hz ± 1.5 dB (TONE FLAT)
PHONO EQUALIZER CHARACTERISTIC		13.15 ± 1.5 dB at 100 Hz -13.75 ± 1.5 dB at 10,000 Hz
POWER BAND WIDTH		10 to 50,000 Hz at 8Ω *20 to 30,000 Hz at 8Ω H.D. 0.7%
HARMONIC DISTORTION		Less than 0.05% at 8Ω *Less than 0.1% at 8Ω 10W
INPUT SENSITIVITY	PHONO	3 mV Impedance: 50 kΩ
	AUX	150 mV Impedance: 50 kΩ
	TAPE	150 mV Impedance: 50 kΩ
SIGNAL TO NOISE RATIO	PHONO	Better than 60 dB *Better than 55 dB
	AUX	Better than 75 dB
	TAPE	Better than 75 dB
HUM AND NOISE		Less than 1 mV *Less than 1.5 mV at 8Ω
TONE CONTROL	BASS	10 ± 2 dB, -10 ± 2 dB at 100 Hz
	TREBLE	10 ± 2 dB, -10 ± 2 dB at 10,000 Hz
LOUDNESS CONTROL		8 ± 1.5 dB at 100 Hz 6 ± 1.5 dB at 10,000 Hz
HIGH CUT FILTER		-8 dB at 10,000 Hz *-7 ± 1.5 dB at 10,000 Hz
CHANNEL SEPARATION		Better than 50 dB *Better than 45 dB at 8Ω 1 kHz
L-R DEVIATION		1.5 dB at volume control maximum 3 dB at volume control center

§ FM TUNER SECTION

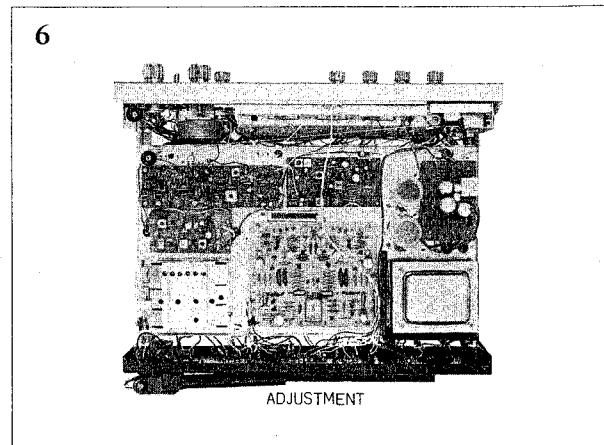
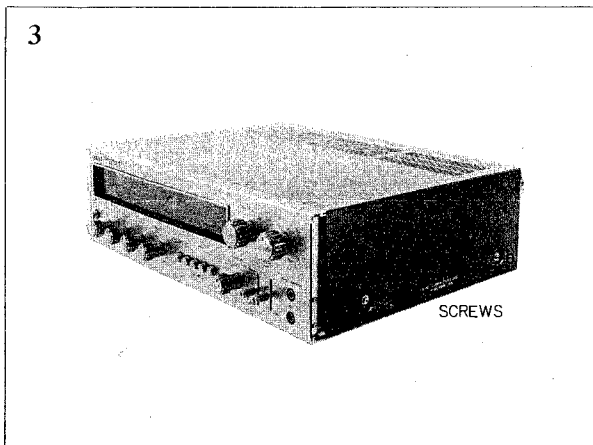
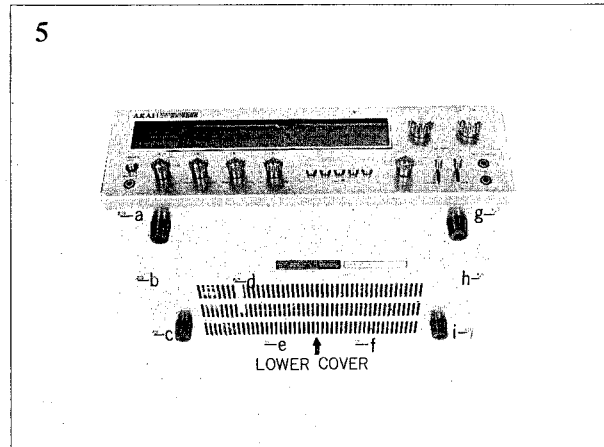
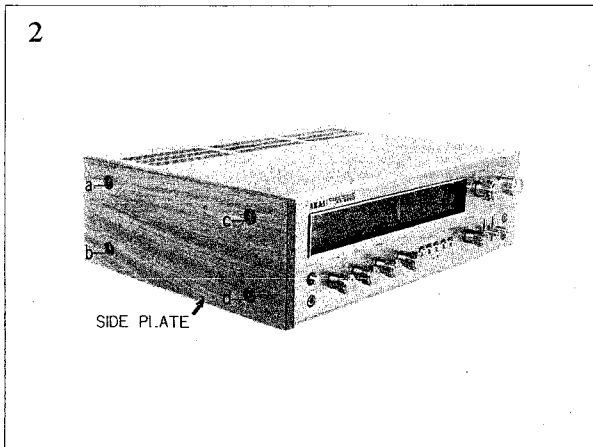
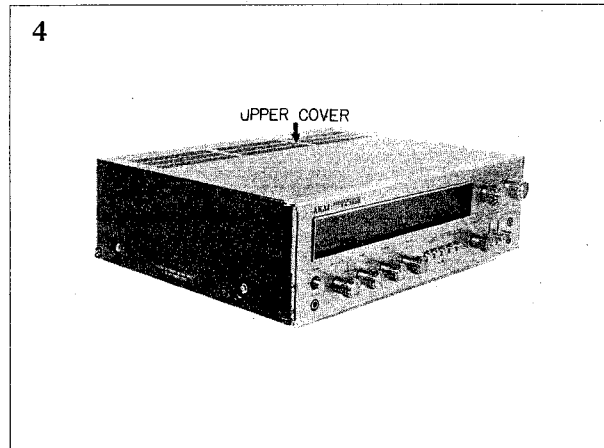
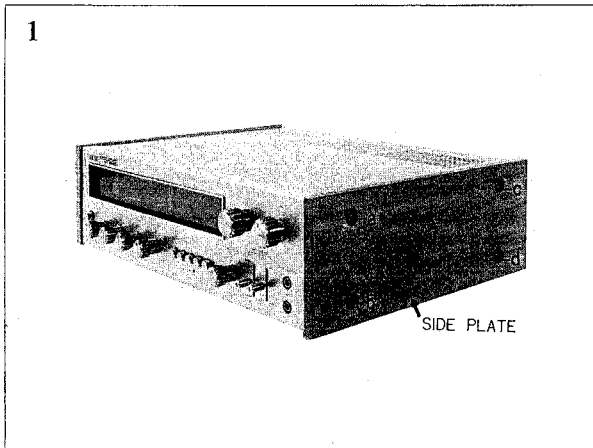
FREQUENCY RANGE		87.5 to 108.5 MHz
DIAL TRACKING ERROR		90 MHz ± 250 kHz 98 MHz ± 300 kHz 106 MHz ± 250 kHz
SENSITIVITY		2.5 μV *3.1 μV I.H.F.
IMAGE REJECTION RATIO		Better than 60 dB at 98 MHz *Better than 50 dB at 98 MHz
IF REJECTION RATIO		Better than 90 dB at 98 MHz *Better than 80 dB at 90 MHz
SPURIOUS RADIATION		Within UMI Specifications
LIMITING SENSITIVITY		8 dB at 98 MHz, 2.5 μV input
SELECTIVITY		Better than 65 dB *Better than 55 dB at 98 MHz
CAPTURE RATIO		Less than 2 dB *Less than 3.5 dB
HARMONIC DISTORTION	Monaural (400 Hz)	Less than 0.5% *Less than 0.6% at 98 MHz 60 dB input
	Stereo (1,000 Hz)	Less than 0.8% *Less than 1.2% at 98 MHz 60 dB input
SIGNAL TO NOISE RATIO		Better than 60 dB at 98 MHz 60 dB input
MPX. SEPARATION (1,000 Hz)		Better than 35 dB *Better than 33 dB at 98 MHz 60 dB input (75 μS) *Better than 30 dB at 98 MHz 60 dB input (50 μS)

MUTING SENSITIVITY		20 ± 6 dB at 98 MHz
CARRIER LEAK	Model AA-8030 Model AA-8030L	Less than 40 dB at 98 MHz, 60 dB input Less than 48 dB at 98 MHz, 60 dB input (75 μS) Less than 45 dB at 98 MHz, 60 dB input (50 μS)
SCA INTERFERENCE RATIO		45 dB at 98 MHz
RECORDING OUTPUT	PIN DIN	1V ± 2 dB 200 mV ± 2 dB
RECORDING OUTPUT L-R DEVIATION		Within 1 dB
§ AM TUNER SECTION		
FREQUENCY RANGE	AM, MW LW	525 to 1,625 kHz ± 2% 145 to 355 kHz ± 2%
SENSITIVITY	AM, MW LW	320 μV I.H.F. 800 μV I.H.F.
IMAGE REJECTION RATIO	AM MW LW	Better than 50 dB *Better than 35 dB at 1,400 kHz Better than 50 dB *Better than 32 dB at 1,400 kHz Better than 30 dB *Better than 20 dB at 160 kHz
IF REJECTION RATIO	AM MW LW	Better than 40 dB *Better than 30 dB at 600 kHz Better than 40 dB Better than 40 dB at 340 kHz
SELECTIVITY	AM, MW LW	Better than 20 dB at 1,000 kHz Better than 20 dB at 240 kHz
AGC CHARACTERISTIC		Better than 40 dB at 1,000 kHz
HARMONIC DISTORTION	AM, MW LW	Less than 1% *Less than 2% at 1,000 kHz Less than 3% at 240 kHz
SIGNAL TO NOISE RATIO	AM MW LW	Better than 40 dB at 1,000 kHz Better than 40 dB *Better than 38 dB at 1,000 kHz Better than 32 dB at 240 kHz
F.E.T.		2SK19GR ... 1
TRANSISTORS		2SA666 (A) ... 2 2SC930 (D) ... 4 TSC8002 ... 2 2SC693 (F) ... 4 2SC945 (P) ... 2 TSC9002 (C) ... 2 2SC710 (C) (D) ... 5 2SC1047 (C) ... 3 2SC711 (E) (F) ... 4 2SC1318 (Q) ... 2 2SC828 (A) (Q) (R) ... 7 2SD313 ... 4
I.C.		TA7061AP ... 1
DIODES		1N34A ... 8 1S351 ... 1 Z-1-12 ... 1 1S1212 ... 1 1S188 ... 16 V03C ... 4
THERMISTERS		TH6014 ... 2
POWER SUPPLY		100 to 240V A.C., 50/60 Hz (Universal Models) 120V A.C., 60 Hz (CUL Models) 220V A.C., 50 Hz (CEE Models)
POWER CONSUMPTION		150W
DIMENSIONS		464 (W) x 146 (H) x 380 (D) mm (18.3" x 5.8" x 15")
WEIGHT		11.6 kg (25.5 lbs.)

NOTE: Specifications subject to change without notice.

III. DISMANTLING OF UNIT

In case of trouble, etc. necessitating disassembly, please disassemble in the order shown in photographs. Re-assemble in reverse order.



IV. ARRANGEMENT OF MAIN PARTS

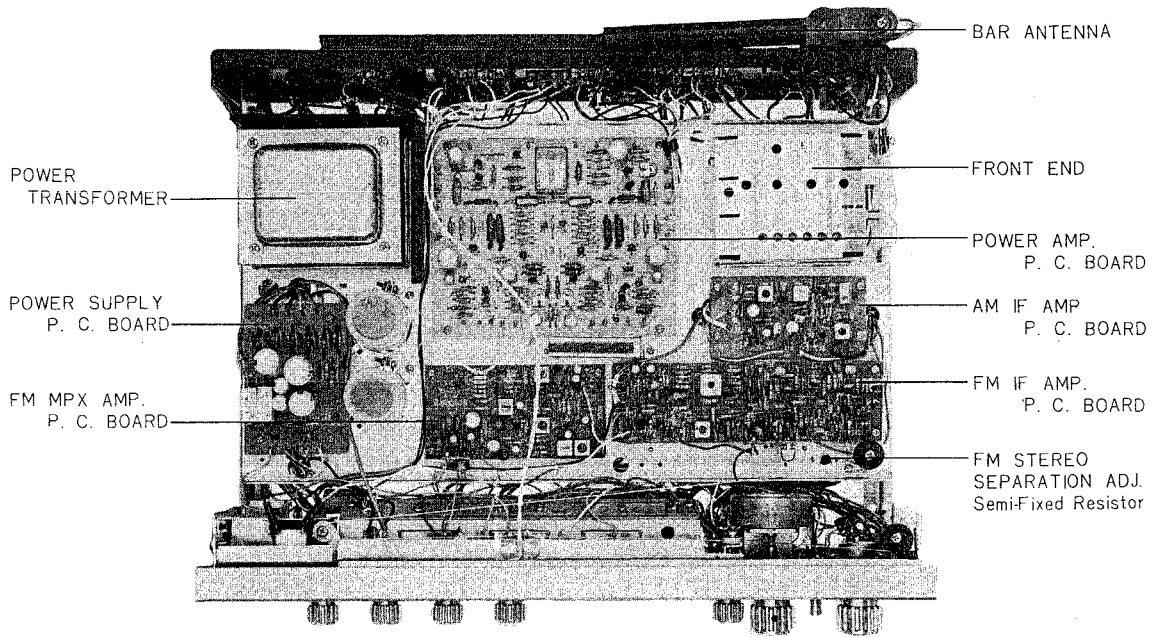


Fig. 1 MODEL AA-8080

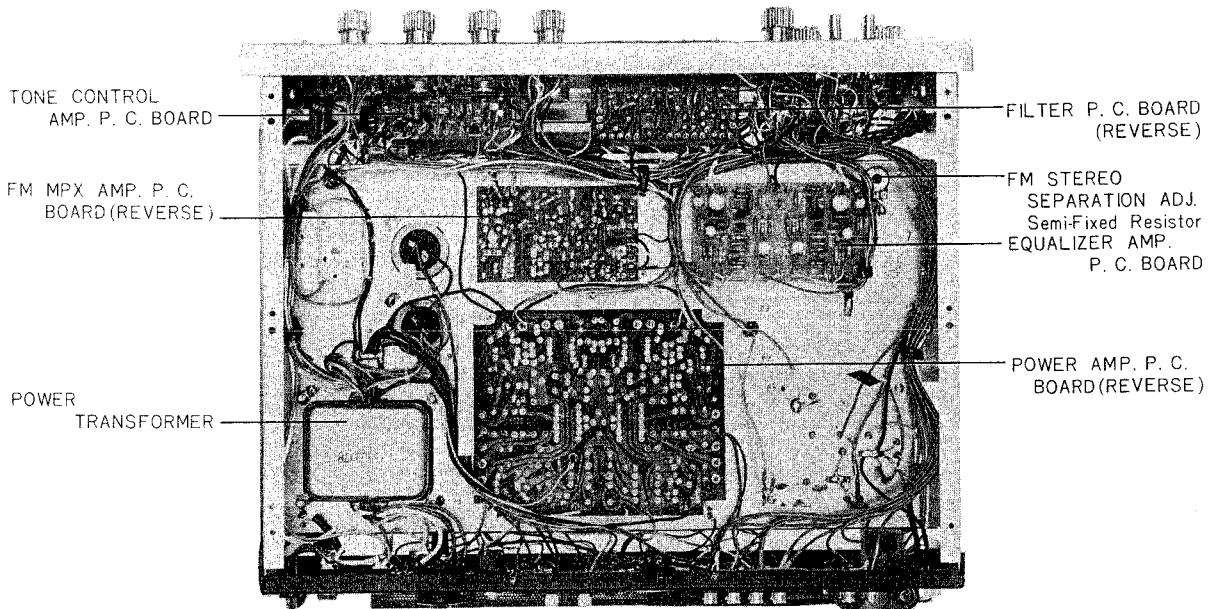


Fig. 2 MODEL AA-8080

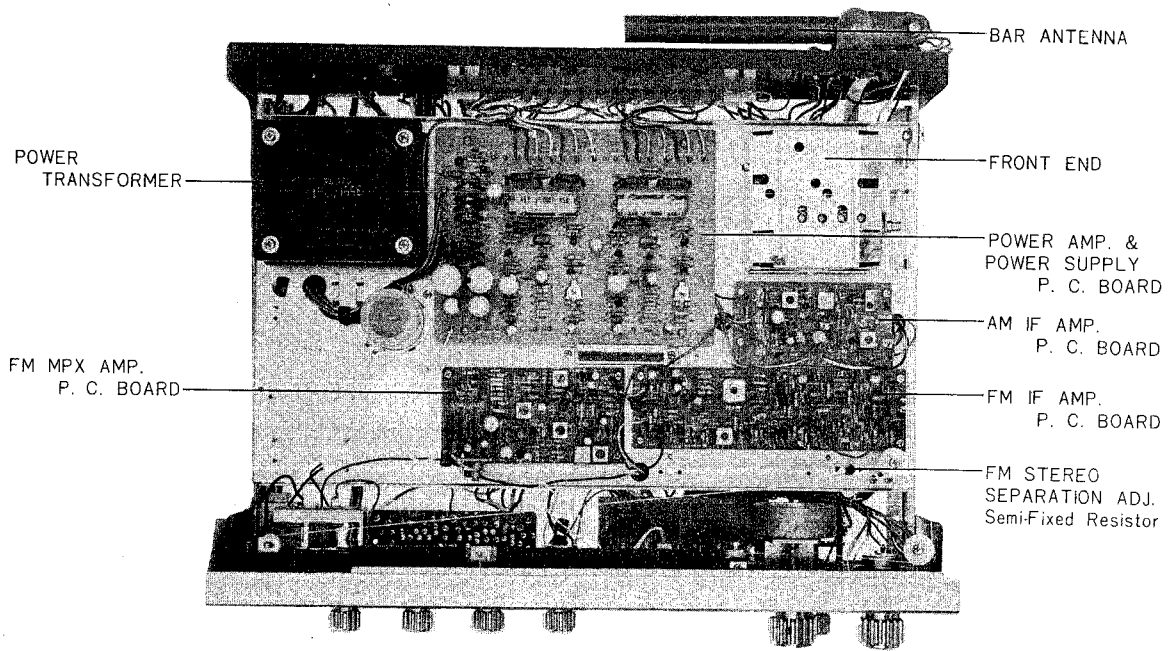


Fig. 3 MODEL AA-8030

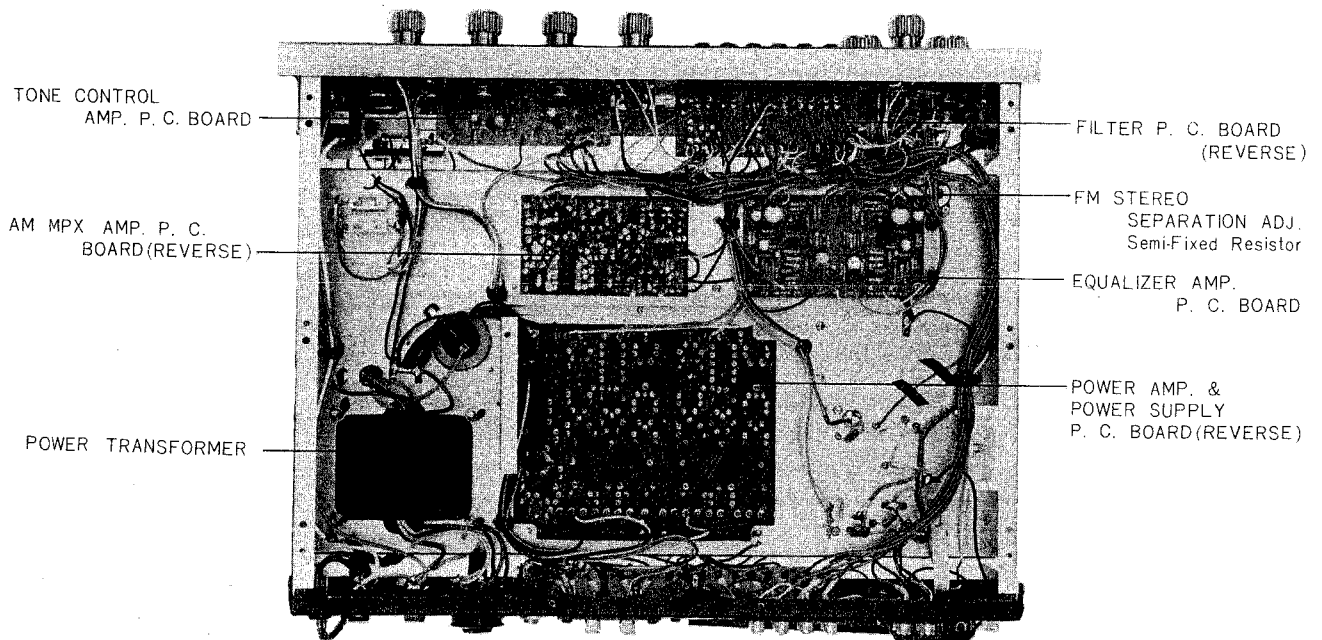


Fig. 4 MODEL AA-8030

V. FM TUNER ADJUSTMENTS

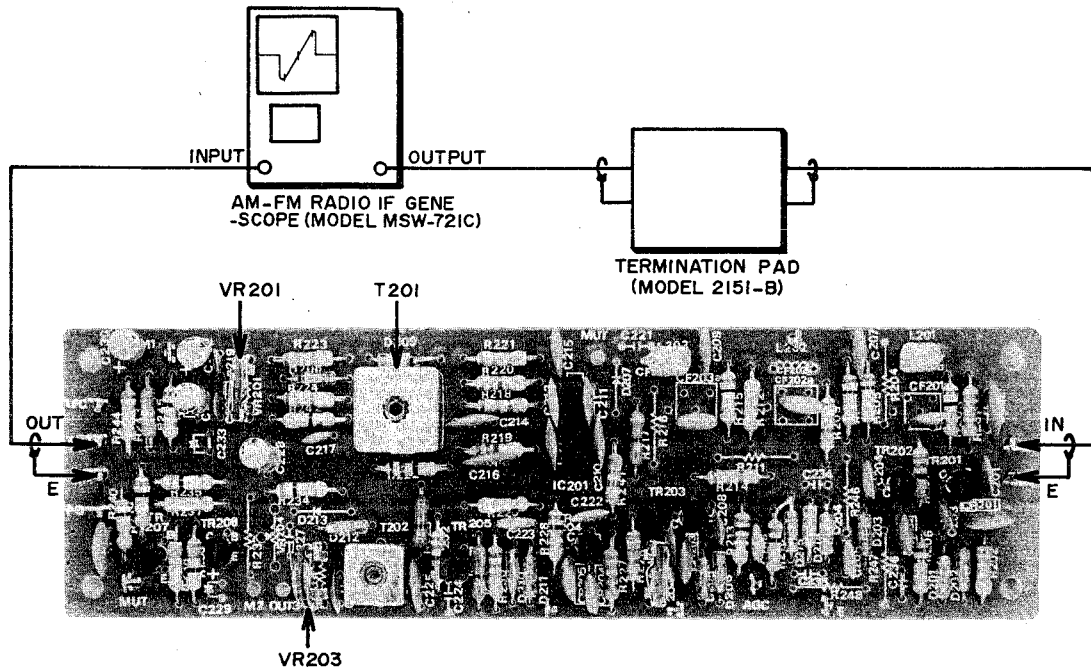


Fig. 5a FM IF AMP. P.C. BOARD 2014 (Face Side)

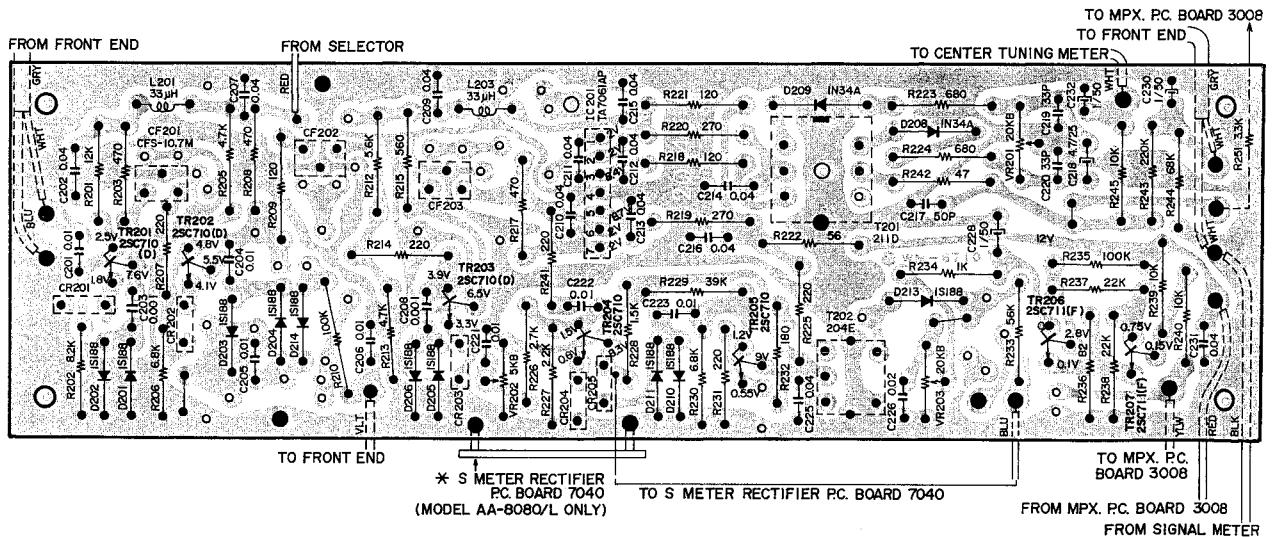


Fig. 5b FM IF AMP. P.C. BOARD 2014 (Reverse Side)

1. FM IF CIRCUIT ADJUSTMENT

- 1) As shown in Fig. 5, connect the lead wires from an AM-FM Radio IF Genescope to the FM IF Amp. P.C. Board IN and OUT terminals.
- 2) Set AM-FM Radio IF Genescope to FM mode and adjust V Gain to obtain a 15 mm amplitude of the 0.3V p-p calibration voltage on the Genescope screen. Set Genescope Attenuator to 70 dB.
- 3) Set receiver Selector to FM, and set the tuning indicator needle to the right end of the dial. At this time, confirm that there is no noise at the S curve.
- 4) Manually center FM IF Amp. P.C. Board semi-fixed resistors VR-201(20 k Ω) and VR-203(5 k Ω).

- 5) Adjust the upper and lower cores of FM IF Amp. P.C. Board coil T201 to point at which the amplitude of the S curve is maximum and optimum rectilinear characteristics are obtained.
- 6) In making this adjustment, the marker on the Screen will vary slightly depending upon the rank of the ceramic filter, but it is satisfactory if S curve characteristics as shown in Fig. 6 can be obtained.

NOTE: The upper and lower parts of the S curve waveform must be symmetrical. (Refer to Fig. 7)

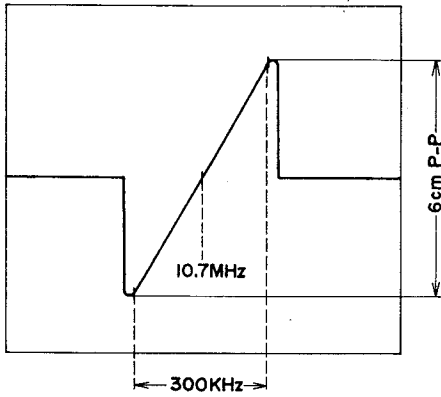


Fig. 6 S CURVE CHARACTERISTIC

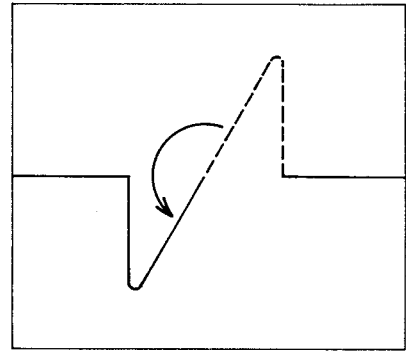


Fig. 7

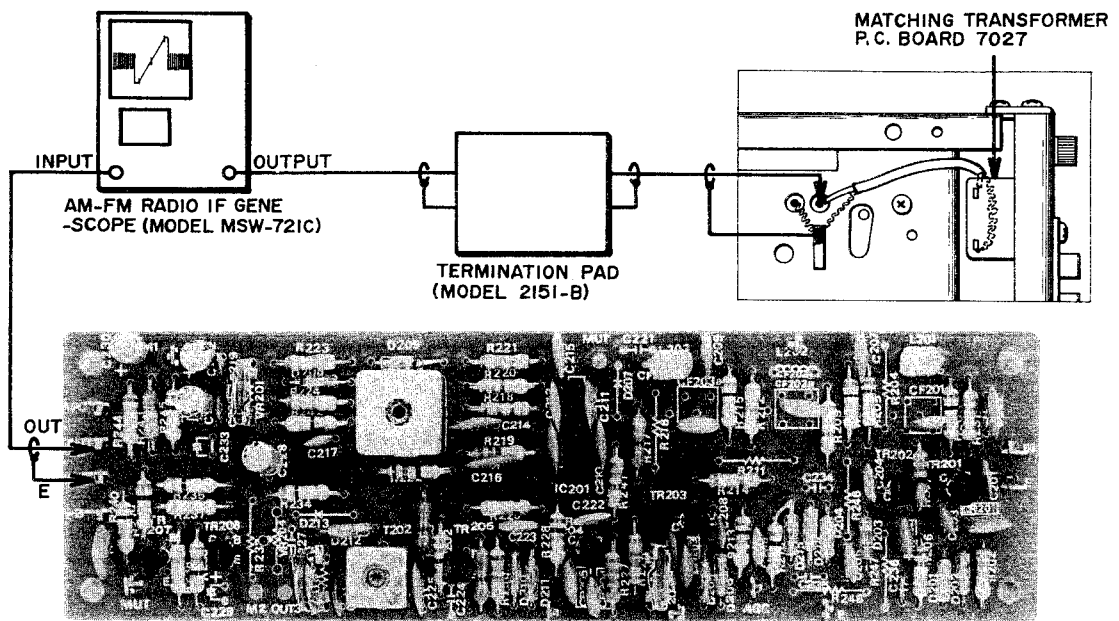


Fig. 8 FM IF AMP. P.C. BOARD 2014

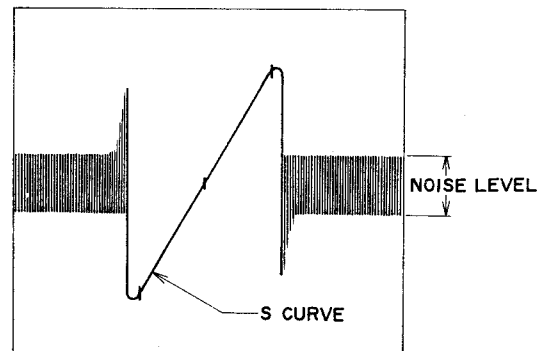


Fig. 9

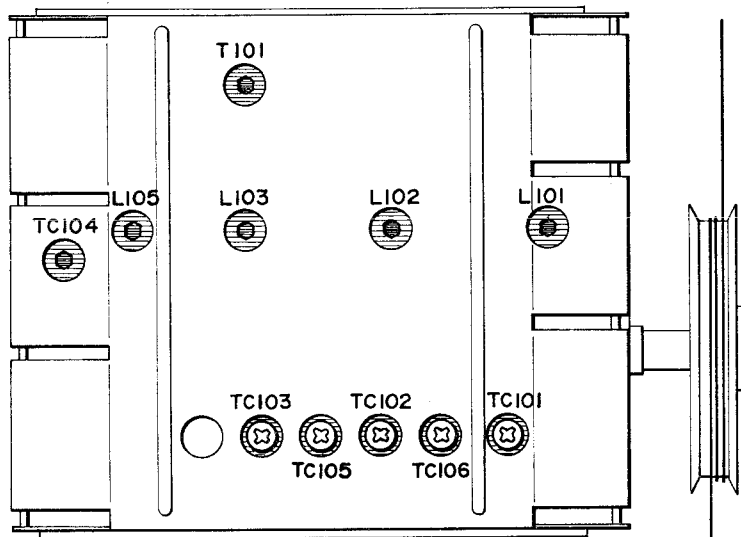


Fig. 10 FRONT END MODEL AA-8080, AA-8080L

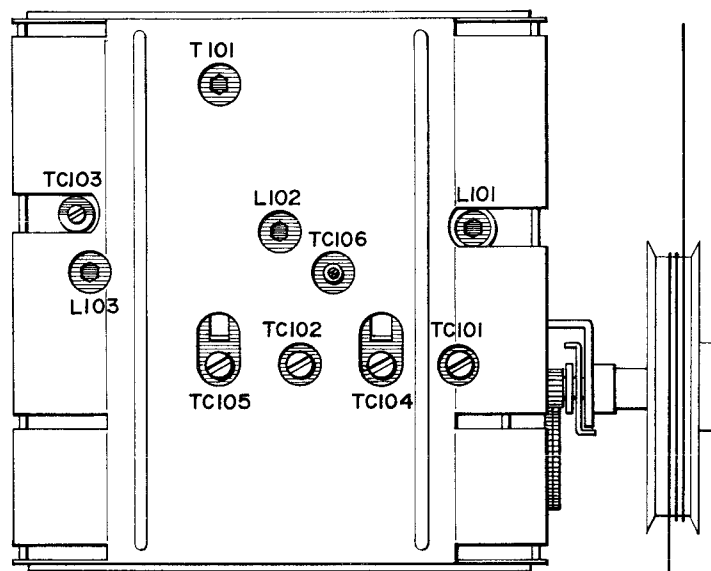


Fig. 11 FRONT END MODEL AA-8030, AA-8030L

2. FRONT END AND FM IF MATCHING ADJUSTMENT

- 1) Connect the lead wires of an AM-FM Radio IF Genescope to the antenna terminal of the Front End and FM IF Amp. P.C. Board output terminal as shown in Fig. 8.
- 2) Adjust the V Gain until the 0.3V p-p calibration voltage displays a 15 mm amplitude on the genescope screen and set the genescope attenuator to 100 dB.
- 3) Set receiver selector to FM and set the tuning indicator to the right end of the dial.
- 4) Adjust the upper core of Front End (Figs. 10, 11) IF coil T101 to obtain maximum S curve amplitude, and adjust the lower core of coil T101 to obtain maximum noise level.
- 5) Check the final matching adjustment with "Sensitivity Adjustment" procedure.

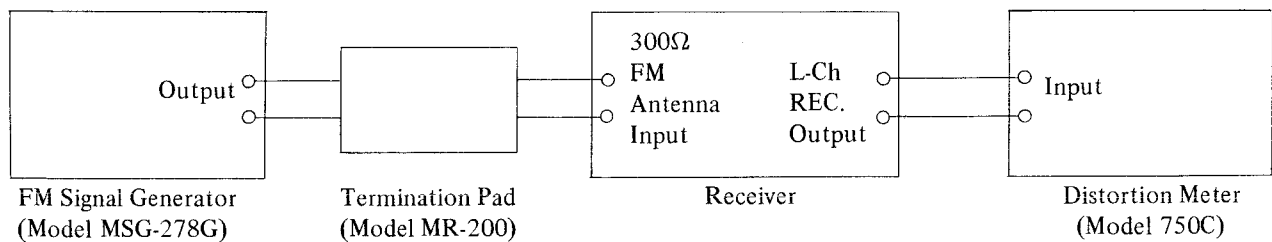


Fig. 12

3. RECEPTION BAND WIDTH ADJUSTMENT (Tracking Adjustment)

- 1) Connect the various measuring instruments shown in Fig. 12.
- 2) Set the FM Signal Generator oscillation frequency to 90 MHz (400 Hz, 75% internal modulation) and set attenuator to 40 dB.
- 3) Set the receiver dial to 90 MHz and adjust the core of front end coil (coil marked "*1" in Chart 2 below) shown in Figs. 10 and 11 until the distortion meter level is maximum, and the distortion factor is minimum.
- 4) Switch the FM signal generator oscillation frequency to 106 MHz (400 Hz, 75% internal modulation).
- 5) Set the receiver dial to 106 MHz, and adjust Front End trimmer condenser (*2 in Chart 2 below) shown in Figs. 10 and 11 until the distortion meter level is maximum and the distortion factor is minimum.
- 6) For minimum tracking error, repeat Items 2) through 5) two or three times. Dial tracking error should be within the tolerance shown in Chart 1.

Frequency	Tolerance
90 MHz	± 250 kHz
98 MHz	± 300 kHz
106 MHz	± 250 kHz

Chart 1

Band Width Adjustment Points

According to Model Number

Model	*1 Coil	*2 Trimmer Condensers
AA-8080	L105	TC104
AA-8080L	L105	TC104
AA-8030	L103	TC103
AA-8030L	L103	TC103

Chart 2

Ref.

- 1) In making reception band width adjustments, set dial to following positions.

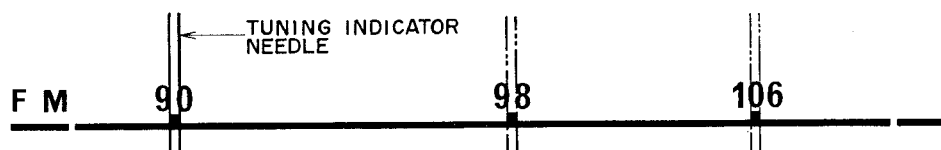


Fig. 13

- 2) In case of replacement of Front End or dial string, with varicon capacity at maximum position, set tuning indicator needle to end of dial (position indicated by dotted line in Fig. 13), and then replace.

4. TUNING METER CENTER ADJUSTMENT

After completing the adjustments outlined in parts 1, 2, and 3, set the FM signal generator attenuator to "0" (non-output condition), and adjust the upper core of FM IF Amp. P.C. Board coil T201 shown in Fig. 15 until the tuning indicator of tuning meter M2 comes to the center as shown in Fig. 14. Then set receiver dial to 98 MHz, supply a 98 MHz (400 Hz, 75% internal modulation) 66 dB signal from the FM signal generator, and fine-adjust the lower core of coil T201 for minimum distortion factor.

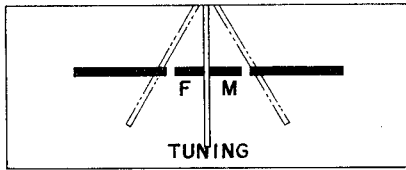


Fig. 14 TUNING METER M2

5. SENSITIVITY ADJUSTMENT

- 1) Connect the various measuring instruments as shown in Fig. 12.
- 2) Set the FM signal generator oscillation frequency to 90 MHz (400 Hz, 75% internal modulation), and the attenuator to within 15 to 20 dB.
- 3) Set receiver dial to 90 MHz, and adjust front end coils (Coil marked "*3" in Chart 3 below) shown in Figs. 10 and 11 until the distortion meter level is maximum, and the distortion factor is minimum.
- 4) Switch the FM signal generator oscillation frequency to 106 MHz (400 Hz, 75% internal modulation).
- 5) Set receiver dial to 106 MHz, and adjust front end trimmer condensers (marked "*4" in Chart 3 below) until the distortion meter level is maximum and the distortion factor is minimum.
- 6) Repeat Items 2) through 5) above at 90 MHz, 98 MHz, and 106 MHz frequencies 2 or 3 times until uniform and maximum sensitivity is attained.
- 7) Confirm that the distortion factor is less than 0.6% at 98 MHz when the attenuator of the FM signal generator is set to 66 dB.

Sensitivity Adjustment Points According to Model Number

Model	*3 Coil	*4 Trimmer Condenser
AA-8080	L101, L102, L103	TC101, TC102, TC103
AA-8080L	L101, L102, L103	TC101, TC102, TC103
AA-8030	L101, L102	TC101, TC102
AA-8030L	L101, L102	TC101, TC102

Chart 3

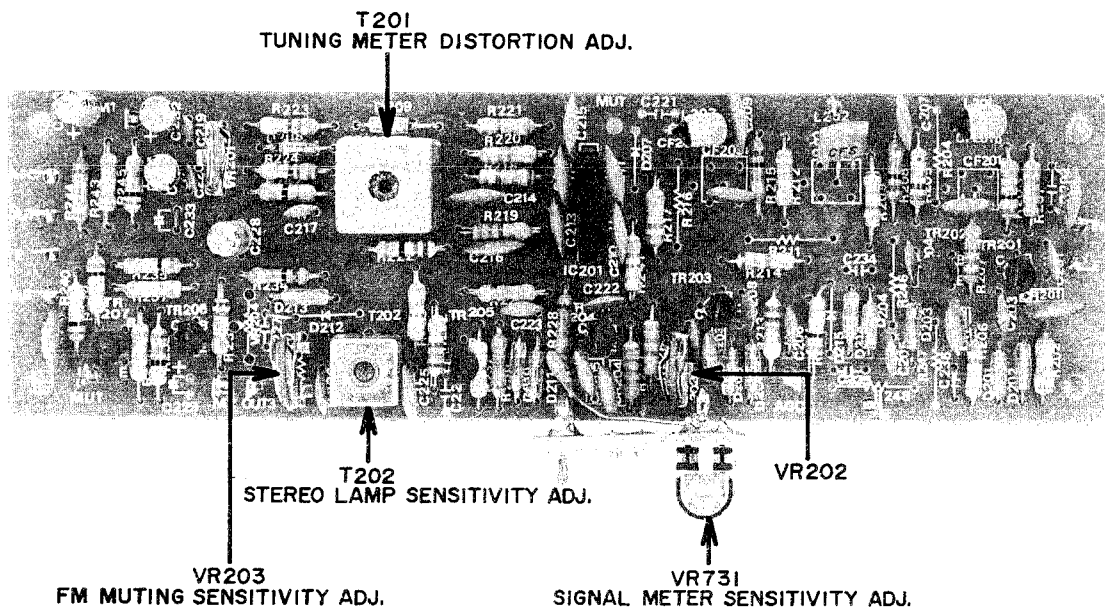


Fig. 15 FM IF AMP. P.C. BOARD 2014

6. MUTING SENSITIVITY ADJUSTMENT
(Stereo Indicator Sensitivity Adjustment)

- 1) Connect the various measuring instruments as shown in Fig. 12.
- 2) Set the FM signal generator oscillation frequency to 98 MHz (400 Hz, 75% internal modulation), and set attenuation volume of attenuator to maximum.
- 3) Set receiver dial to 98 MHz and set FM muting to "ON" (There will be no output at the left channel Rec. output terminal at this time).
- 4) Adjust FM IF Amp. P.C. Board semi-fixed resistor VR-203 (50 kΩ) so that when the attenuation volume decreases and the attenuator scale is at 20 ± 6 dB, signal output is emitted at the left channel Rec. output terminal.

At this time, with VR-202 manually set at approximately center point, when signal output is not emitted even when VR-203 is turned fully in the direction of the arrow, adjust by turning VR-202 in direction of arrow.

7. SIGNAL METER SENSITIVITY ADJUSTMENT

NOTE: This adjustment is for models AA-8080, and AA-8080L only.

- 1) Connect the various measuring instruments as shown in Fig. 12.
- 2) Set the FM signal generator oscillation frequency to 98 MHz (400 Hz, 75% internal modulation), and the attenuator to 66 dB.
- 3) Set receiver dial to 98 MHz.
- 4) Under these conditions, adjust FM IF Amp. P.C. Board semi-fixed resistor VR-731 (20 kΩ) in Fig. 15 so that the indicator comes to the center of the extreme right hand block of the signal meter scale as shown in Fig. 16.
- 5) Confirm that the meter does not scale out (over extend scale) even when the FM signal generator attenuator is set to over 66 dB.

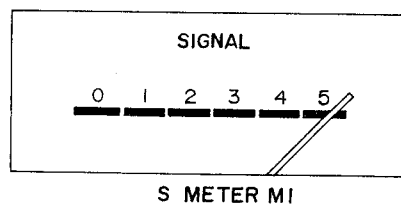


Fig. 16

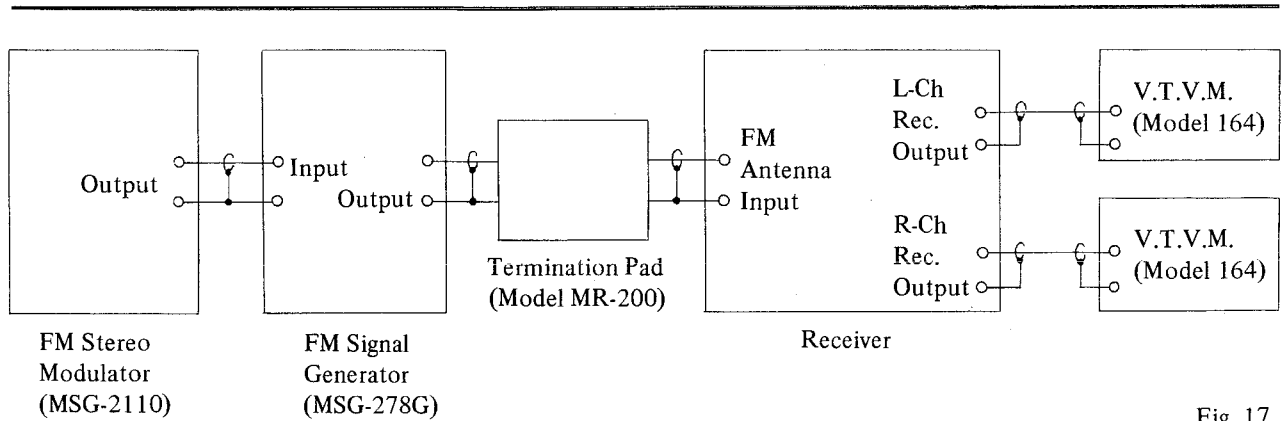


Fig. 17

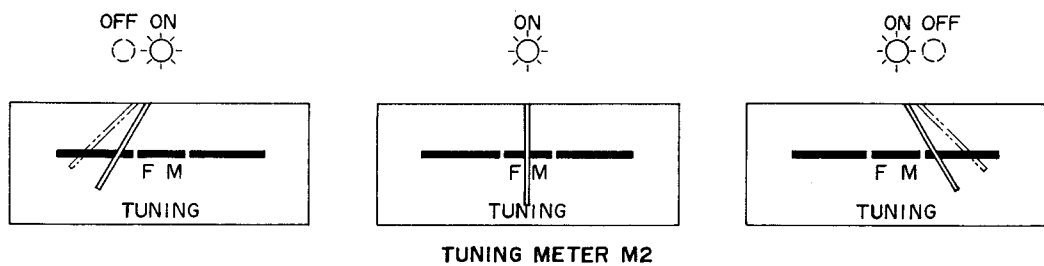


Fig. 18

8. STEREO INDICATOR OPERATING RANGE ADJUSTMENT

- 1) Connect the various measuring instruments as shown in Fig. 17.
- 2) Set the 19 kHz pilot signal of the FM stereo modulator to 10% modulation, and the main signal (left and right) to 400 Hz, 90% modulation. Then supply this composite signal (ratio 9:1) to the EXT MOD. terminals of the FM signal generator.
- 3) Set the FM signal generator oscillation frequency to 98 MHz, and the attenuator to 66 dB.
- 4) Set receiver dial to 98 MHz (Tuning Meter to center), and confirm that the stereo indicator lights.
- 5) Adjust the core of FM IF Amp. P.C. Board coil T202 so that when the receiver dial is turned and detuned to left and right from the tuned condition in Item 4), left and right tuning meter balance is attained and the stereo indicator lights as shown in Fig. 18.

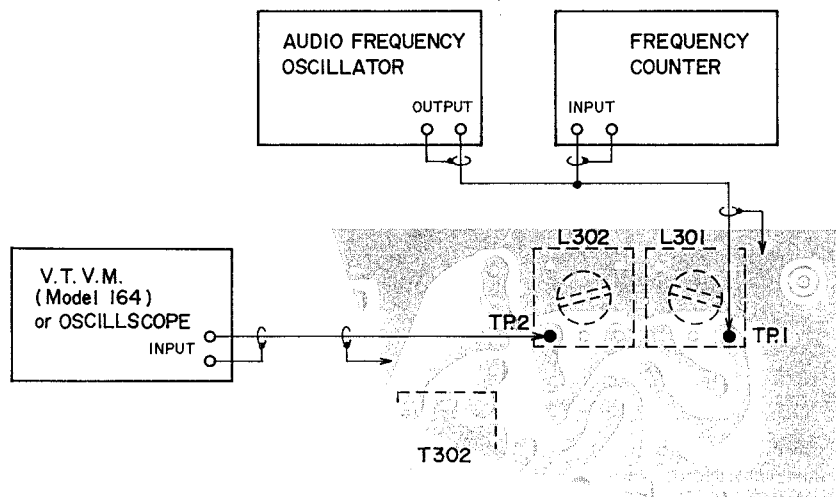


Fig. 19 FM MPX. AMP. P.C. BOARD 3008 (Reverse Side)

9. 19 kHz, 67 kHz FILTER ADJUSTMENT

- 1) Connect the various measuring instruments as shown in Fig. 19.
- 2) Supply a 19 kHz (output level 300 mV) accurately determined by a frequency counter to test point TP. 1 of the FM MPX. Amp. P.C. Board from the audio frequency oscillator as shown in Fig. 19, and adjust the core of FM MPX. Amp. P.C. Board coil C301 shown in Fig. 20 so that indication of the high sensitivity V.T.V.M. connected to TP.2 or the wave height value of the oscilloscope is minimum.
- 3) Supply an accurately determined 67 kHz audio signal, and proceed in the same way as at the 19 kHz filter adjustment, adjusting the core of FM MPX. Amp. P.C. Board coil L302 shown in Fig. 20 to obtain minimum V.T.V.M. indication, or minimum oscilloscope wave height value.

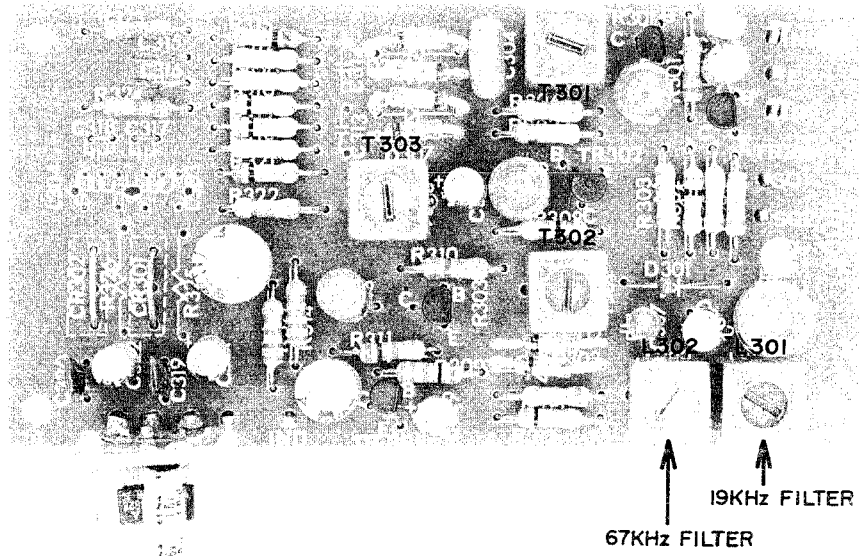


Fig. 20a FM MPX. AMP. P.C. BOARD 3008 (Face Side)

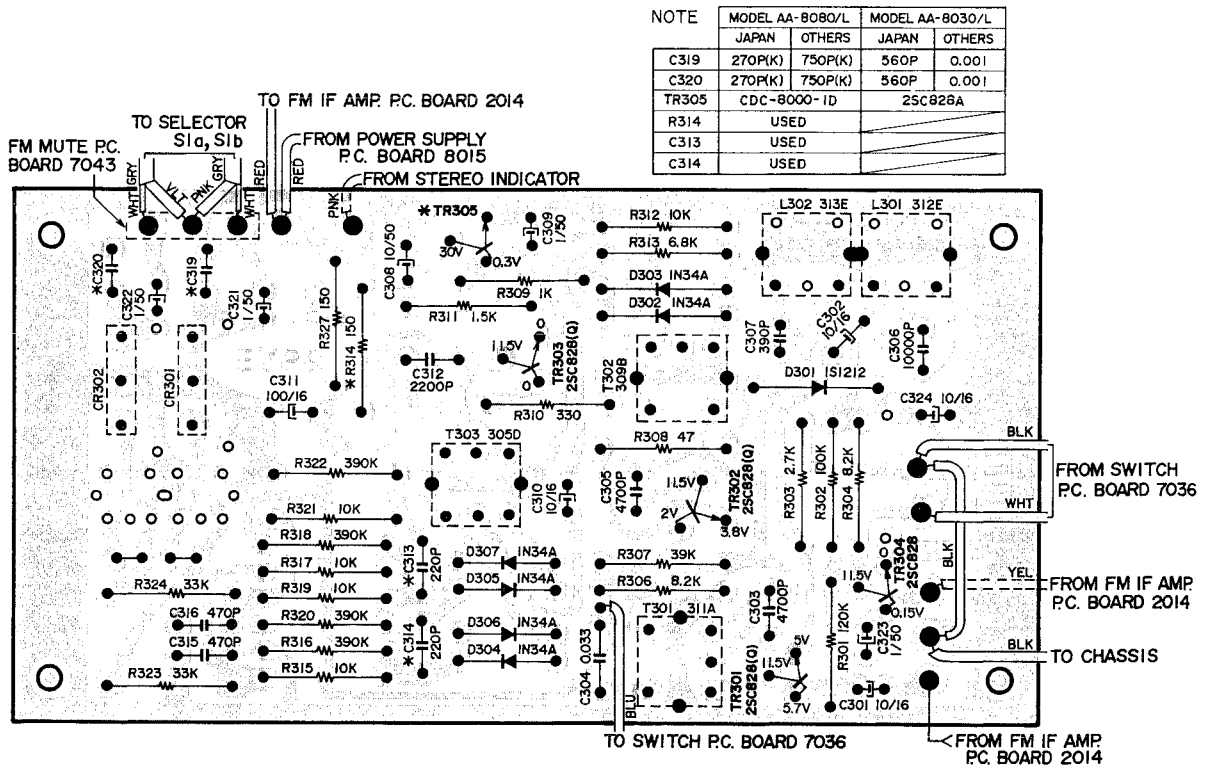


Fig. 20b FM MPX. AMP. P.C. BOARD 3008 (Reverse Side)

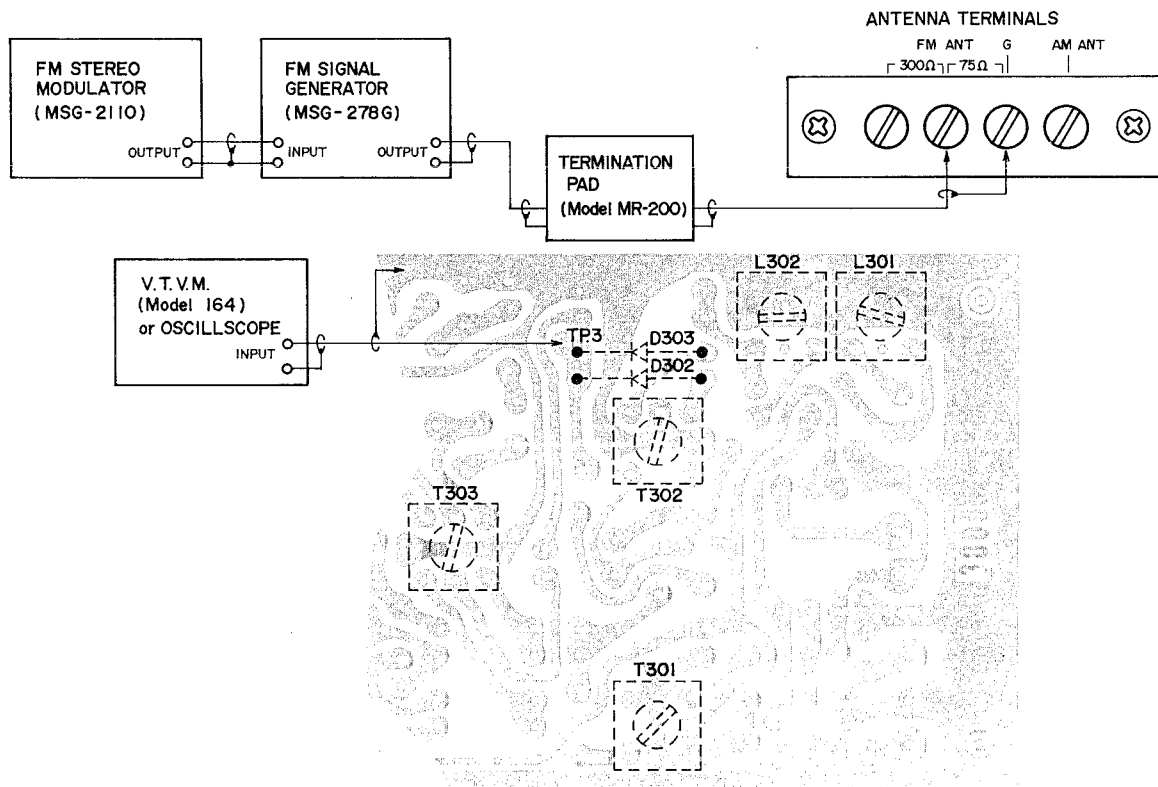


Fig. 21 FM MPX. AMP. P.C. BOARD 3008 (Reverse Side)

10. STEREO SEPARATION ADJUSTMENT

- 1) Connect the various measuring instruments as shown in Fig. 21.
- 2) Set the 19 kHz Pilot Signal of the FM stereo modulator to 10% modulation, and the main signal (left and right) to 400 Hz, 90% modulation. Then supply this composite signal (ratio 9:1) to the EXT MOD. terminals of FM signal generator.
- 3) Set the FM signal generator oscillation frequency to 98 MHz, and the attenuator to 66 dB.
- 4) Set the receiver dial to 98 MHz, and set the main signal switch of the FM stereo modulator to LEFT channel position.
- 5) Adjust the cores of FM MPX. Amp. P.C. Board coils T301 and T302 as shown in Fig. 20 so that the indication of the high sensitivity V.T.V.M. connected to test point TP.3 shown in Fig. 21 or the wave height value of the oscilloscope is maximum.
- 6) After the above adjustments have been completed, adjust the core of FM MPX. Amp. P.C. Board coil T303 so that the indication of the high sensitivity V.T.V.M. connected to the left channel Rec. output is maximum. (For measuring instrument connection method, refer to Fig. 17.)
- 7) Adjust main chassis semi-fixed resistor VR551 (5 kΩ) shown in Figs. 1 and 3 so that the indication of the high sensitivity V.T.V.M. connected to the right channel Rec. output is minimum. (For measuring instrument connection method, refer to Fig. 17.)
- 8) Set the main signal switch of the FM stereo modulator to RIGHT Channel position, and adjust the core of FM MPX. Amp. P.C. Board coil T303 as well as main chassis semi-fixed resistor VR551 (5 kΩ) so that the high sensitivity V.T.V.M. connected to the left and right channels of the receiver indicates maximum on right channel, and minimum on left channel.
- 9) An FM stereo separation of better than 33 dB must be obtained through the above adjustments.

VI. AM TUNER ADJUSTMENTS

(MODEL:AA-8080, AA-8030)

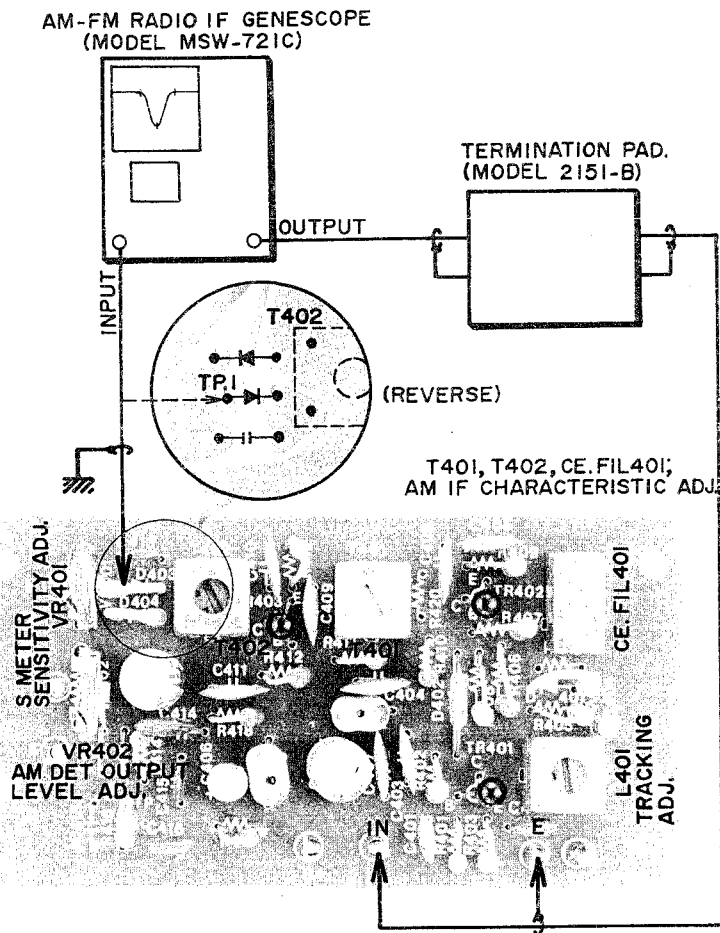


Fig. 22a AM IF AMP. P.C. BOARD 4009 (Face Side)

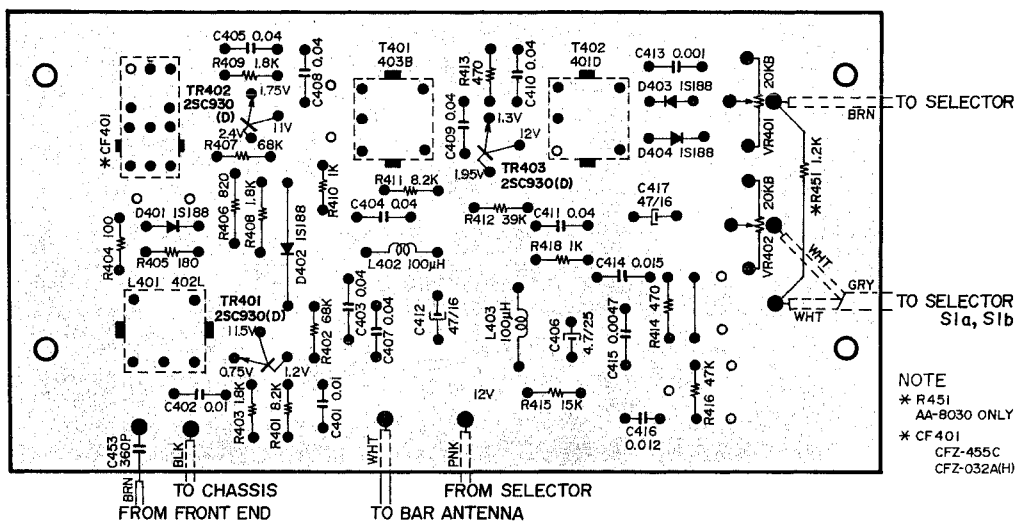


Fig. 22b AM IF AMP. P.C. BOARD 4009 (Reverse Side)

1. AM IF CIRCUIT ADJUSTMENT

1) Connect the lead wires from an AM-FM Radio IF Genescope to the AM IF Amp. P.C. Board IN terminal as well as to test point TP.1 as shown in Fig. 22.

- 2) Set AM-FM Radio IF Genescope to AM mode, and adjust V-Gain to obtain a 10 mm amplitude of the 0.3V p-p calibration voltage on the genescope screen. Set genescope attenuator to 70 dB.
- 3) Set receiver mode selector to AM, and set the tuning indicator needle to the right end of the dial.

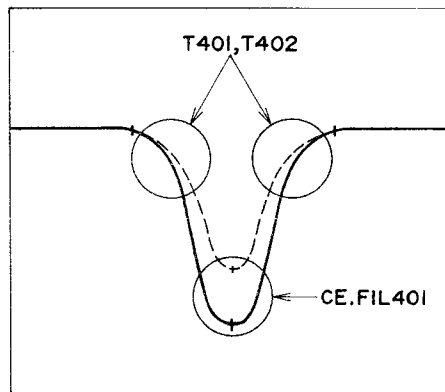


Fig. 23

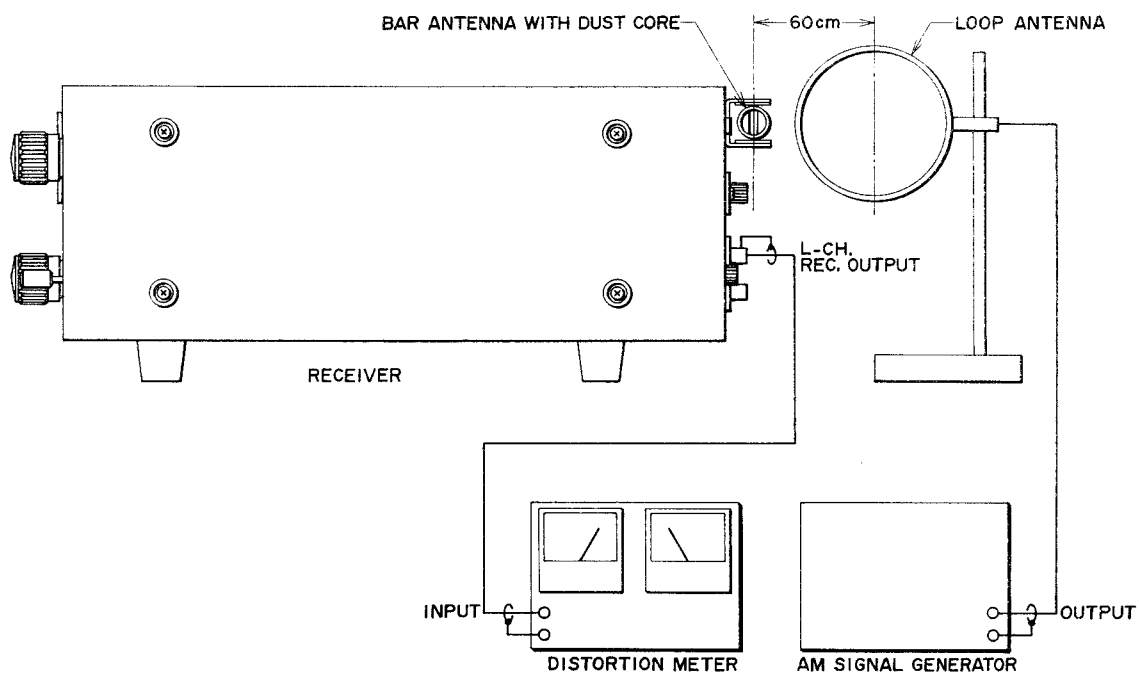


Fig. 24

- 4) Adjust AM IF Amp. P.C. Board coils T401 and T402 shown in Fig. 22 as well as the core of ceramic filter CE.FIL401 to obtain the fastest angle rise up of parts (A) and (B) of the waveform shown in Fig. 23, and also maximum amplitude at (C).

2. RECEPTION BAND WIDTH ADJUSTMENT (Tracking Adjustment)

- 1) Connect the various measuring instruments as shown in Fig. 24.
- 2) Set the AM signal generator oscillation frequency to 600 kHz (400 Hz, 30% internal modulation), and the attenuator to 76 dB.
- 3) Set receiver dial to 600 kHz.
- 4) Adjust the core of AM IF Amp. P.C. Board coil L401 shown in Fig. 22 until the distortion meter level is maximum and the distortion factor is minimum.
- 5) Set the AM signal generator oscillation frequency and receiver dial to 1,400 kHz.

- 6) Adjust Front End trimmer condenser TC106 (AA-8080) in Fig. 10 or TC105 (AA-8030) in Fig. 11 until the Distortion Meter level is maximum and the distortion factor is minimum.
- 7) Repeat Items 2) through 6) above until the tracking error is minimum. Also set AM signal generator oscillation frequency and receiver dial to 1,000 kHz to confirm that tracking error is minimum. Dial tracking error should be within the tolerance range shown in Chart 4.

Frequency	Tolerance
600 kHz	$\pm 2\%$
1000 kHz	$\pm 2\%$
1400 kHz	$\pm 2\%$

Chart 4

Ref. In making reception band width adjustments, set dial to following positions.

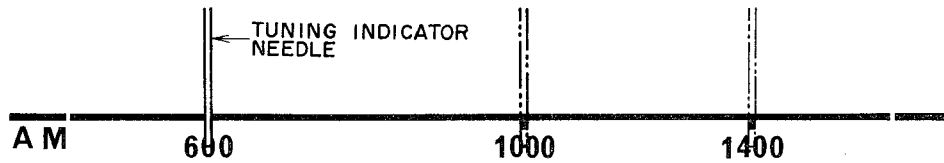


Fig. 25

3. SENSITIVITY ADJUSTMENT

- 1) Connect the various measuring instruments as shown in Fig. 24.
- 2) Set the AM signal generator oscillation frequency to 600 kHz (400 Hz, 30% internal modulation) and the attenuator to 76 dB.
- 3) Set receiver dial to 600 kHz.
- 4) Adjust the core of bar antenna shown in Fig. 24 so that the distortion meter level is maximum and the distortion factor is minimum (less than 10%).
- 5) Set the AM signal generator oscillation frequency and the receiver dial to 1,400 kHz.
- 6) Adjust Front End trimmer condenser TC105 (AA-8080) in Fig. 10, TC104 (AA-8030) in Fig. 11 until the distortion meter level is maximum, and the distortion factor is minimum (less than 10%).
- 7) For optimum sensitivity adjustment throughout the entire frequency range, repeat adjustments in Items 2) through 6) two or three times.
- 8) For dial setting positions, see Fig. 25.

4. AM DETECTOR OUTPUT LEVEL

ADJUSTMENT

- 1) Connect the various measuring instruments as shown in Fig. 24, deleting the distortion meter connected to the left channel Rec. output terminal. Then connect an 8Ω dummy load resistor in series with a high sensitivity V.T.V.M. and connect this to the left channel speaker output terminal of the receiver as shown in Fig. 26.
- 2) Set AM signal generator oscillation frequency to 1,000 kHz (400 Hz, 30% internal modulation), and the attenuator to 100 dB.
- 3) Set receiver dial to 1,000 kHz.
- 4) With receiver Tone Controls (bass and treble) at flat and volume control at maximum position, adjust AM IF Amp. P.C. Board semi-fixed resistor VR-402 (20 k Ω) shown in Fig. 22 so that the speaker output is $12 \pm 2V$ (model AA-8080) or $10 \pm 2V$ (model AA-8030).

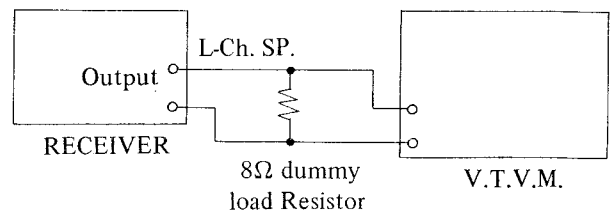


Fig. 26

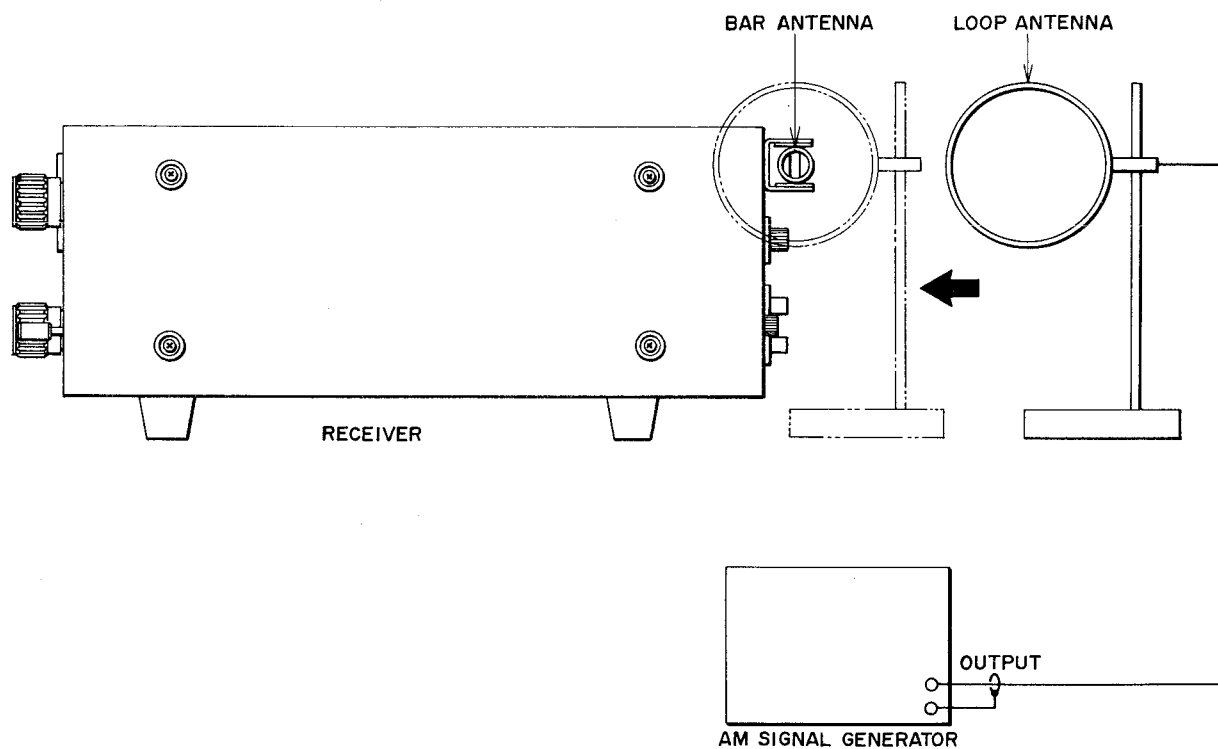


Fig. 27

5. SIGNAL METER SENSITIVITY ADJUSTMENT

- 1) Connect the various measuring instruments as shown in Fig. 27.
- 2) Set the AM signal generator oscillation frequency to 1,000 kHz (400 Hz, 30% internal modulation) and the attenuator to 100 dB.
- 3) Set receiver dial to 1,000 kHz.
- 4) Adjust AM IF Amp. P.C. Board semi-fixed resistor VR-401 (20 k Ω) shown in Fig. 22 so that when the loop antenna is brought close to the bar antenna (indicated by dotted lines) as shown in Fig. 27, the signal meter M1 indicator comes to the center of the extreme right hand block of the scale as shown in Fig. 16.

VII. AM TUNER ADJUSTMENTS (MODEL:AA-8080L, AA-8030L)

MW (MEDIUM WAVE) SECTION

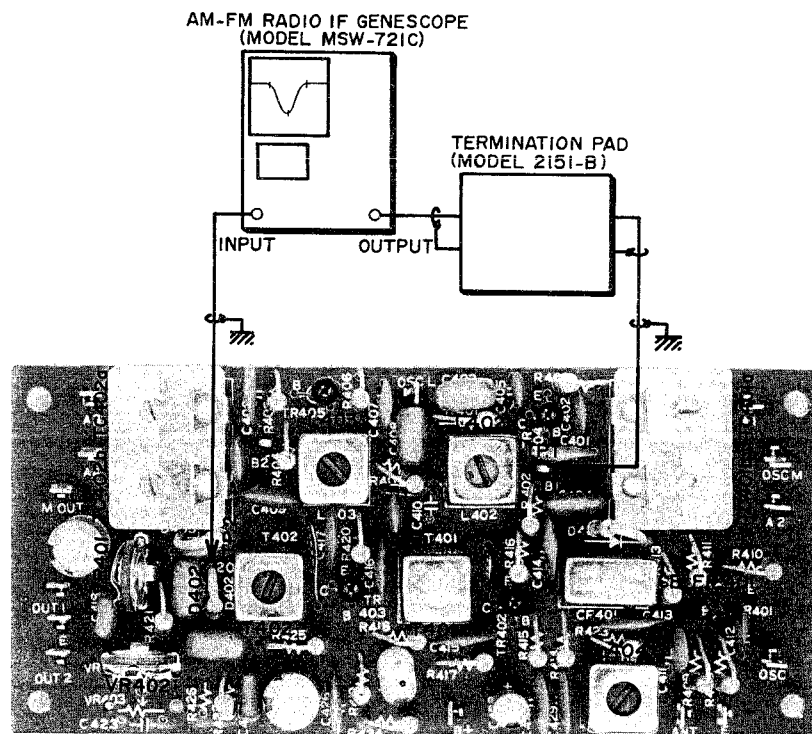


Fig. 28a AM IF AMP. P.C. BOARD 4013 (Face Side)

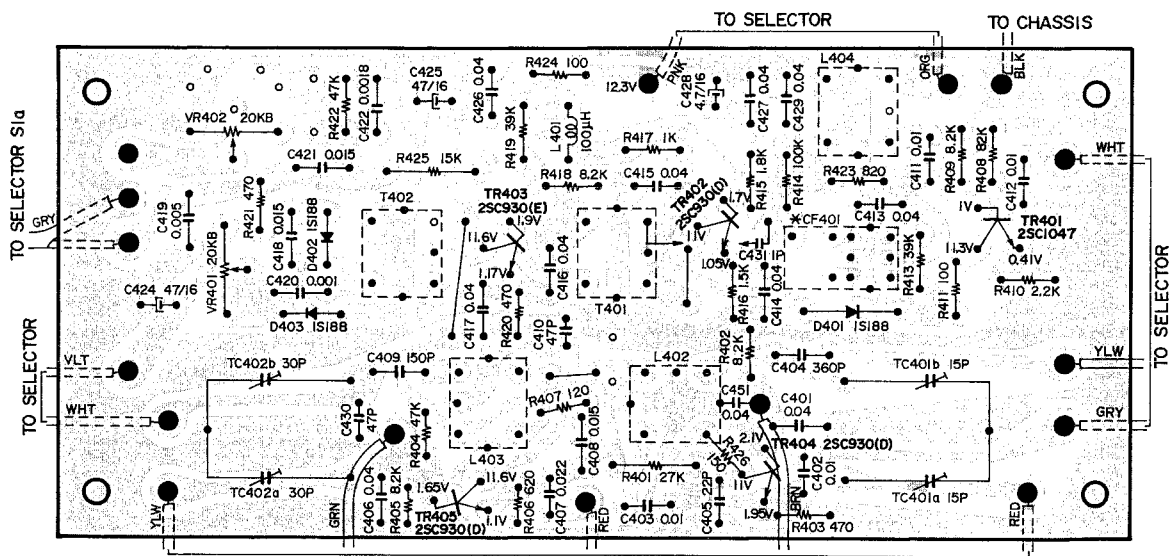


Fig. 28b AM IF AMP. P.C. BOARD 4013 (Reverse Side)

1. IF CIRCUIT ADJUSTMENT

- 1) Connect the lead wires of an AM-FM Radio IF genescope to the various AM IF Amp. P.C. Board test points as shown in Fig. 28.
- 2) Set AM-FM Radio IF genescope to AM mode, and adjust V-Gain to obtain a 10 mm amplitude of the 0.3V p-p calibration voltage on the genescope screen. Set genescope attenuator to 70 dB.

- 3) Set receiver mode selector to MW, and set the tuning indicator needle to the right end of the dial.
- 4) Adjust AM IF Amp. P.C. Board coils T401 and T402 shown in Fig. 28 as well as the core of ceramic filter CE.FIL401 to obtain the fastest rise up angle of parts (A) and (B) of the waveform shown in Fig. 23 and also maximum amplitude at (C).

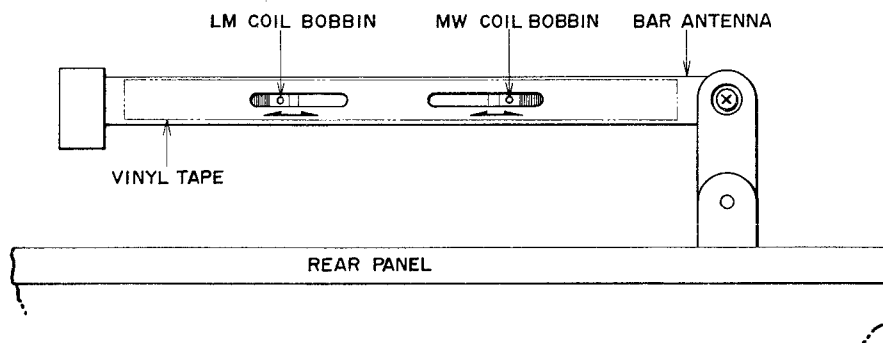


Fig. 29

2. RECEPTION BAND WIDTH ADJUSTMENT (Tracking Adjustment)

- 1) Connect the various measuring instruments as shown in Fig. 24.
- 2) Set the AM signal generator oscillation frequency to 600 kHz (400 Hz, 30% internal modulation) and the attenuator to 76 dB.
- 3) Set receiver dial to 600 kHz.
- 4) Adjust the core of AM IF Amp. P.C. Board coil L402 shown in Fig. 28 until the distortion meter level is maximum and the distortion factor is minimum.
- 5) Set the AM signal generator oscillation frequency and the receiver dial to 1,400 kHz.
- 6) Adjust AM IF Amp. P.C. Board trimmer condenser TC401b shown in Fig. 28 until the distortion meter level is maximum and the distortion factor is minimum.
- 7) Repeat Items 2) through 6) above two or three times until the tracking error is minimum. Also set AM signal generator oscillation frequency and receiver dial to 1,000 kHz to confirm that tracking error is minimum. Dial tracking error should be within the tolerance range shown in Chart 4.
- 8) For band width adjustment dial position, refer to Fig. 25.

3. SENSITIVITY ADJUSTMENT

- 1) Connect the various measuring instruments as shown in Fig. 24.
- 2) Set AM signal generator oscillation frequency to 600 kHz (400 Hz, 30% internal modulation, and attenuator to 76 dB.
- 3) Set receiver dial to 600 kHz.
- 4) Adjust bar antenna MW coil bobbin shown in Fig. 29 to left and right until the distortion meter level is maximum and the distortion factor is minimum (less than 10%).
- 5) Set AM signal generator oscillation frequency and receiver dial to 1,400 kHz.
- 6) Adjust AM IF Amp. P.C. Board trimmer condenser TC401a shown in Fig. 28 until the distortion meter level is maximum, and the distortion factor is minimum (less than 10%).
- 7) For optimum sensitivity adjustment throughout the entire frequency range, repeat adjustments in Items 2) through 4) above two or three times.
- 8) For dial setting positions, see Fig. 25.

4. 455 kHz IF TRAP ADJUSTMENT

- 1) Connect the various measuring instruments as shown in Fig. 24, deleting the distortion meter connected to the left channel Rec. output terminal, and connecting a high sensitivity V.T.V.M. to this terminal.
- 2) Set the AM signal generator oscillation frequency to 455 kHz (400 Hz, 30% internal modulation) and set the attenuator to 100 dB.
- 3) Set receiver dial to 600 kHz.
- 4) Adjust the core of AM IF Amp. P.C. Board coil L404 shown in Fig. 28 so that the high sensitivity V.T.V.M. connected to the left channel Rec. output terminal indicates minimum.

5. AM DETECTOR OUTPUT LEVEL ADJUSTMENT

- 1) Connect the various measuring instruments as shown in Fig. 24, deleting the distortion meter connected to the left channel output terminal. Then connect an 8Ω dummy load resistor in series with a high sensitivity V.T.V.M. and connect this to the left channel speaker output (see Fig. 26).
- 2) Set the AM signal generator oscillation frequency to 1,000 kHz (400 Hz, 30% internal modulation), and the attenuator to 100 dB.
- 3) Set receiver dial to 1,000 Hz.
- 4) With receiver tone controls (bass and treble) at flat, and volume control at maximum position, adjust AM IF Amp. P.C. Board semi-fixed resistor VR402 (20 k Ω) shown in Fig. 28 so that the speaker output is $12 \pm 2V$ (model AA-8080L), or $10 \pm 2V$ (model AA-8030L).

6. SIGNAL METER SENSITIVITY ADJUSTMENT

- 1) Connect the various measuring instruments as shown in Fig. 27.
- 2) Set the AM signal generator oscillation frequency to 1,000 kHz (400 Hz, 30% internal modulation), and the attenuator to 100 dB.
- 3) Set receiver dial to 1,000 kHz.
- 4) Adjust AM IF Amp. P.C. Board semi-fixed resistor VR-401 (20 k Ω) shown in Fig. 28 so that when the loop antenna is brought close to the bar antenna (indicated by dotted lines in Figure) as shown in Fig. 27, the signal meter M1 indicator comes to the center of the extreme right hand block of the scale as shown in Fig. 16.

LW (LONG WAVE) SECTION

1. IF CIRCUIT ADJUSTMENT

If the MW IF circuit adjustment has been made, LW adjustment is not necessary.

2. RECEPTION BAND WIDTH ADJUSTMENT (Tracking Adjustment)

- 1) Connect the various measuring instruments as shown in Fig. 24.
- 2) Set the AM signal generator oscillation frequency to 160 kHz (400 Hz, 30% internal modulation), and the attenuator to 88 dB.
- 3) Set receiver mode selector to LW, and set tuning dial to 160 kHz.
- 4) Adjust the core of AM IF Amp. P.C. Board coil L403 shown in Fig. 28 until the distortion meter level is maximum, and the distortion factor is minimum.
- 5) Set AM signal generator oscillation frequency and receiver dial to 340 kHz.
- 6) Adjust AM IF Amp. P.C. Board trimmer condenser TC402b shown in Fig. 28 until the distortion meter is maximum and the distortion factor is minimum.
- 7) Repeat Items 2) through 6) two or three times until tracking error is minimum. Also set AM signal generator oscillation frequency and receiver dial to 240 kHz and confirm that tracking error is minimum. Dial tracking error should be within the tolerance range shown in Chart 5.

Frequency	Tolerance
160 kHz	2%
240 kHz	2%
340 kHz	2%

Chart 5

Ref: In making reception band width adjustments, set dial to following positions:

3. SENSITIVITY ADJUSTMENT

- 1) Connect the various measuring instruments as shown in Fig. 24.
- 2) Set the AM signal generator oscillation frequency to 160 kHz (400 Hz, 30% internal modulation) and the attenuator to 100 dB.
- 3) Set receiver dial to 160 kHz.
- 4) Adjust bar antenna LW coil bobbin shown in Fig. 29 to left and right until the distortion meter level is maximum and the distortion factor is minimum (less than 10%).
- 5) Set AM signal generator oscillation frequency and dial scale to 340 kHz.
- 6) Adjust AM IF Amp. P.C. Board trimmer condenser TC402a shown in Fig. 28 until the distortion meter level is maximum and the distortion factor is minimum (less than 10%).
- 7) For optimum sensitivity adjustment throughout the entire frequency range, repeat adjustments in Items 2) through 6) above two or three times.
- 8) For dial setting positions, see Fig. 30.

4. 455 KHZ IF TRAP ADJUSTMENT

If the MW Trap Adjustment has been made, LW adjustment is not necessary.

5. AM DETECTOR OUTPUT ADJUSTMENT

If the MW AM Detector Output Adjustment has been made, LW adjustment is not necessary, but the specified output should be reconfirmed (refer to "AM Detector Output Adjustment" procedure of AM Tuner Adjustment Section).

6. SIGNAL METER SENSITIVITY ADJUSTMENT

If the MW Signal Meter Adjustment has been made, LW adjustment is not necessary, but confirmation should be made of proper signal meter indication (refer to "Signal Meter Adjustment" procedure of AM Tuner Section).

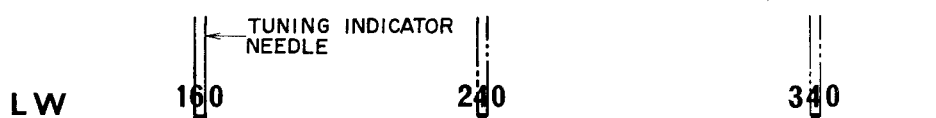


Fig. 30

VIII. POWER AMPLIFIER ADJUSTMENTS

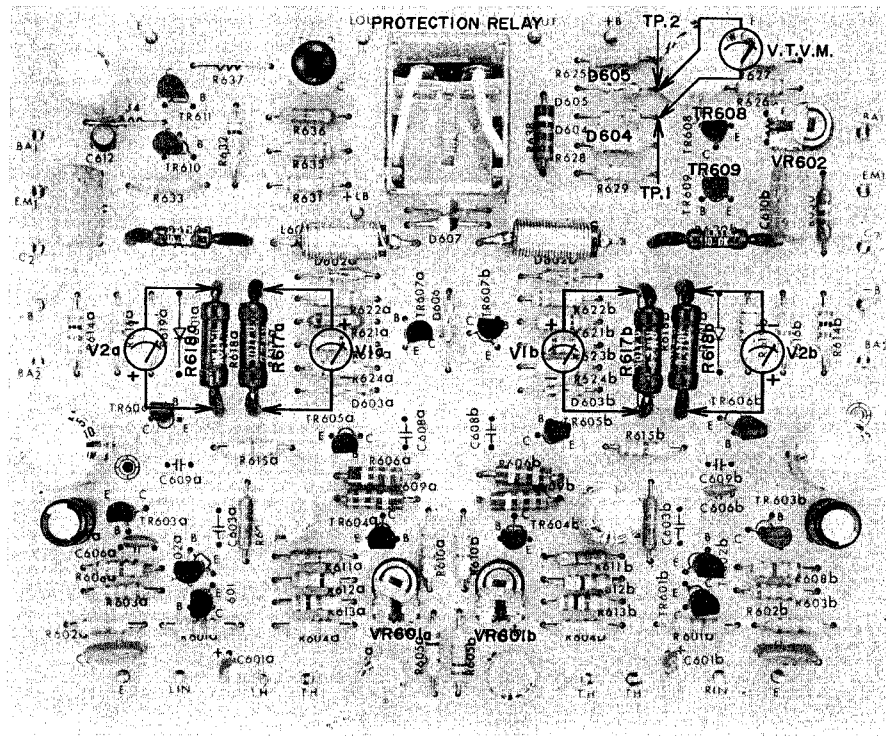
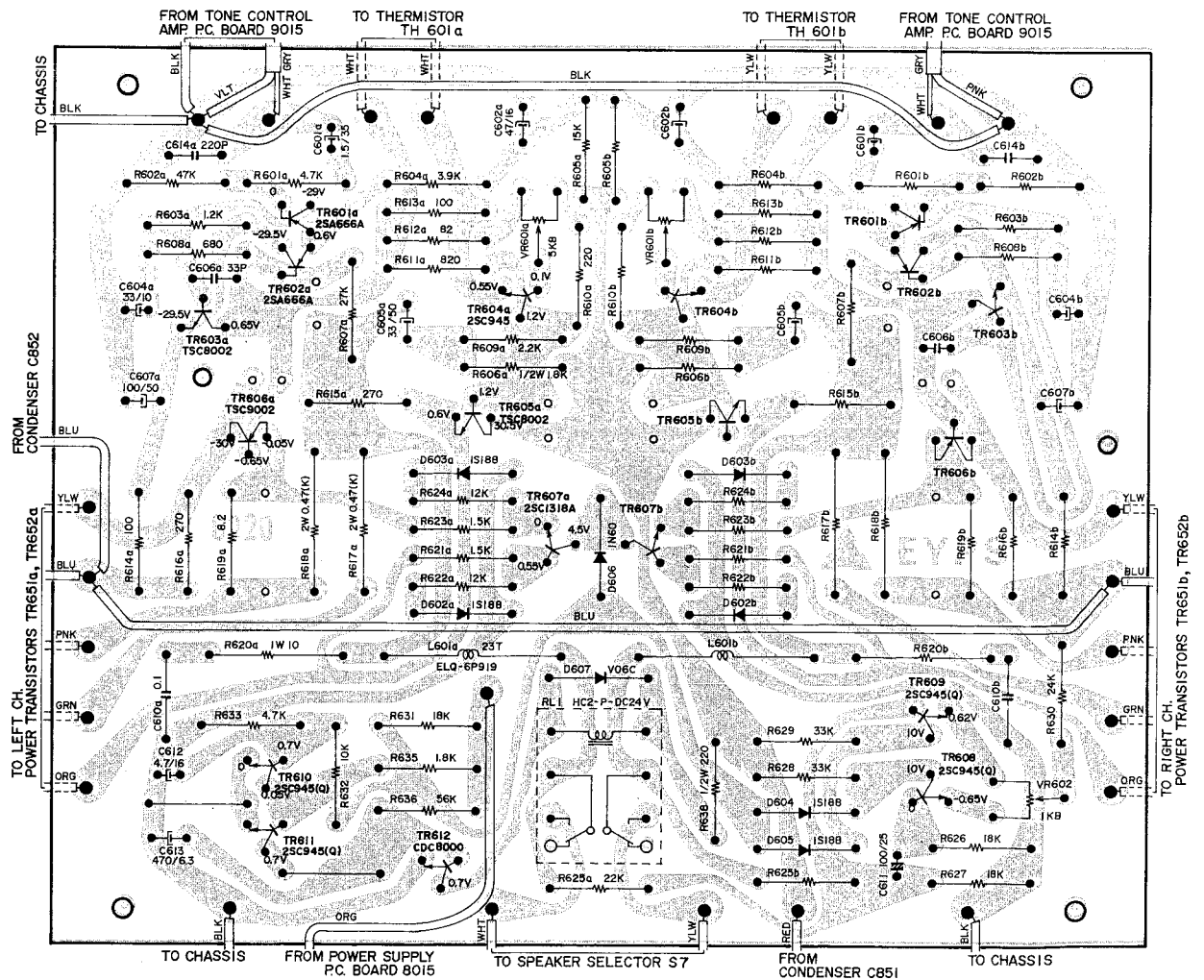


Fig. 31a POWER AMP. P.C. BOARD 6020 (Face Side)



1. MODEL AA-8080, AA-8080L

Caution: In making power amplifier adjustments, the volume control must be kept at minimum.

1) Power Transistors TR651 and TR652 Emitter Voltage Adjustment

Adjust Power Amp. P.C. Board semi-fixed resistor according to Chart 6 for proper emitter voltage of each power transistor (refer to Fig. 31).

	Proper Voltage	Adjustment Point
Left Channel	V1a, V2a 14 mV	VR601a 5 k Ω
Right Channel	V1b, V2B 14 mV	VR601b 5 k Ω

Chart 6

2) Power Transistor Protector Circuit Adjustment

Connect a V.T.V.M. (1.5V range) to Power Amp. P.C. Board test points TP1 and TP2 shown in Fig. 31, and adjust Power Amp. P.C. Board semi-fixed resistor VR602 (1 k Ω) so that the voltage error between test points is "0"V.

3) Confirmation of Power Transistor Protector Circuit Function

When the mode selector is set to "AUX" and the rated output is emitted, shorting the speaker output terminals, confirm that the protection relay functions, and reverts back to normal in about 2 or 3 seconds.

2. MODEL AA-8030, AA-8030L

Power Transistors TR651 and TR652 Emitter Voltage Adjustment

Adjust Power Amp. P.C. Board semi-fixed resistor according to Chart 7 for proper emitter voltage of each power transistor (see Fig. 32).

	Proper Voltage	Adjustment Point
Left Channel	V1a, V2a 9 mV	VR601a 1 k Ω
Right Channel	V1b, V2b 9 mV	VR601b 1 k Ω

Chart 7

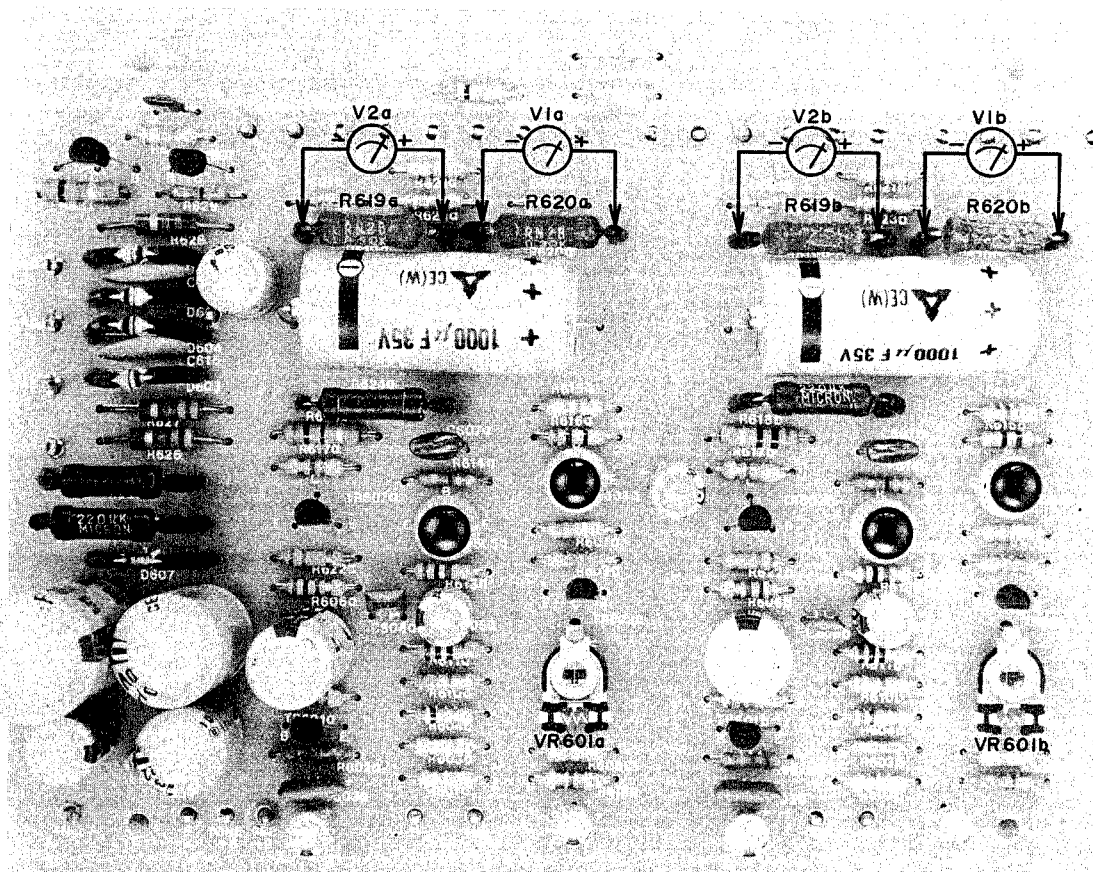


Fig. 32a POWER AMP. P.C. BOARD 6023 (Face Side)

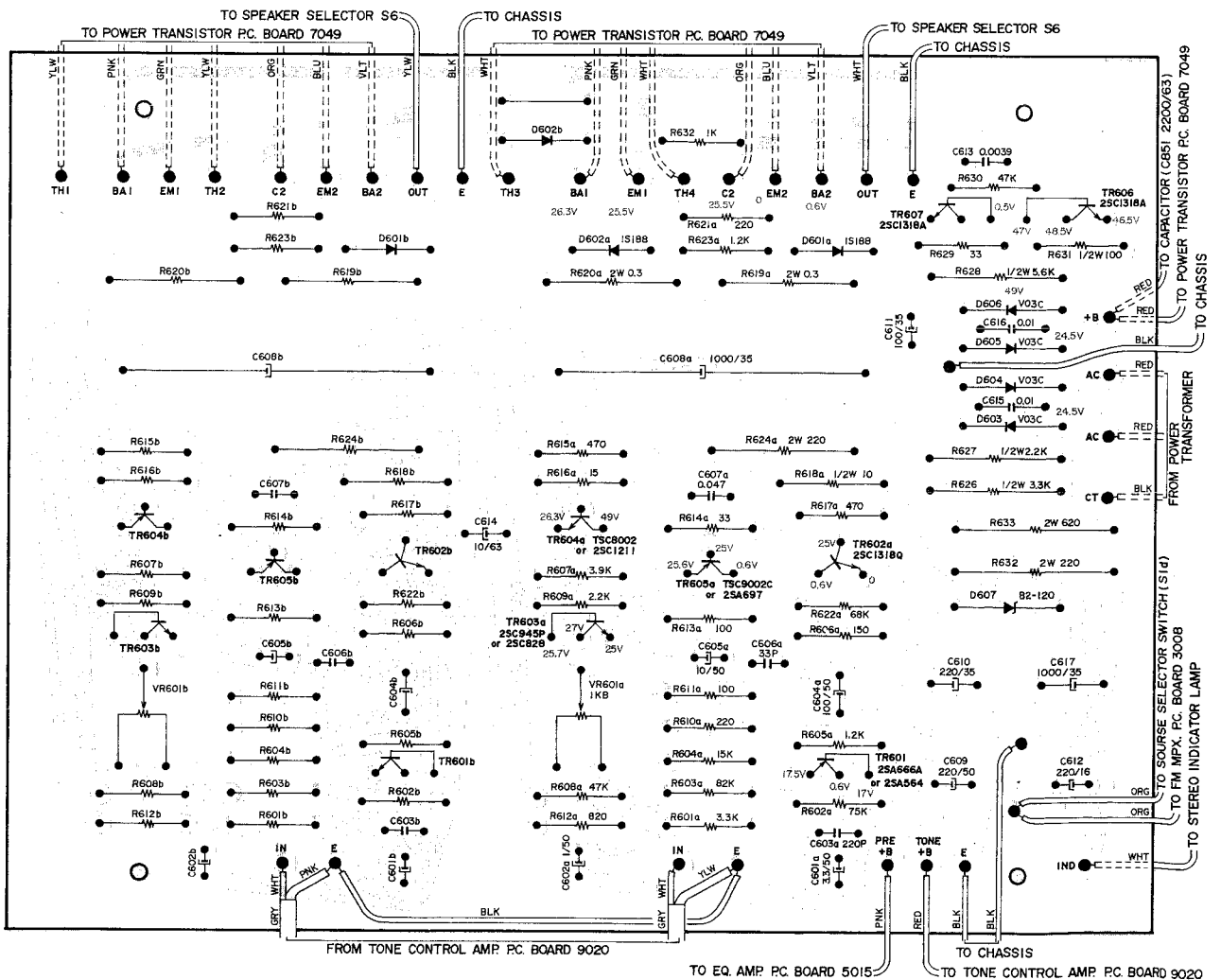


Fig. 32b POWER AMP. P.C. BOARD 6023 (Reverse Side)

IX. TUNING CORD THREADING

Caution: Vanes must be closed to maximum before threading the tuning cord.

MODEL AA-8080, AA-8080L

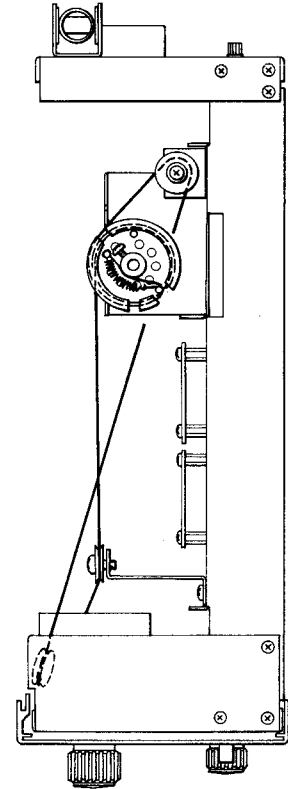
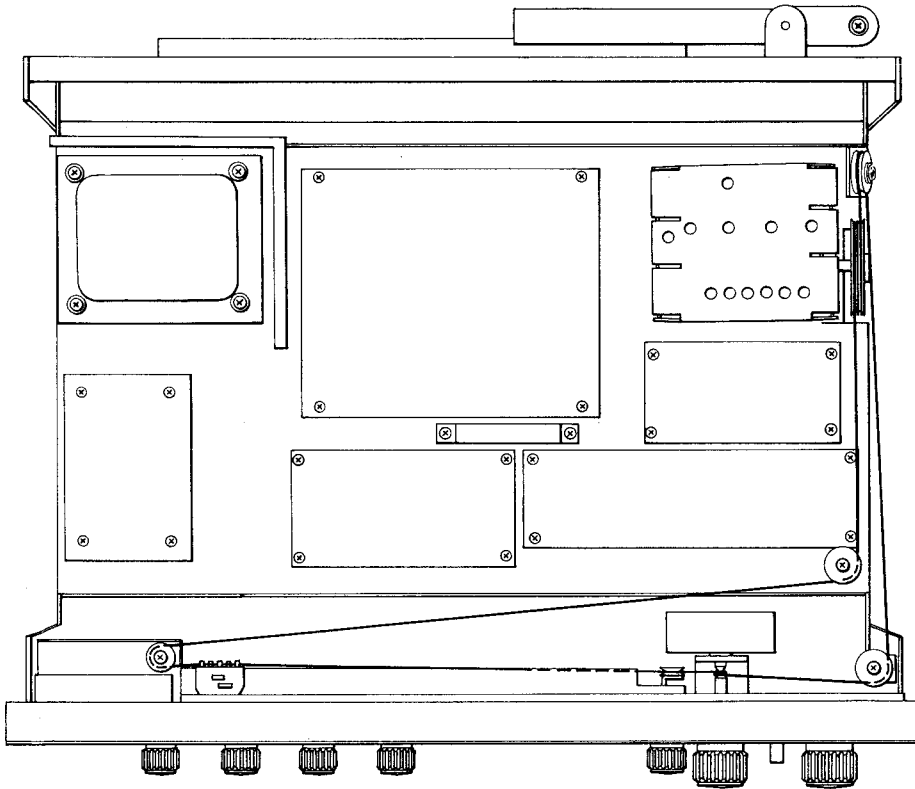


Fig. 33

MODEL AA-8030, AA-8030L

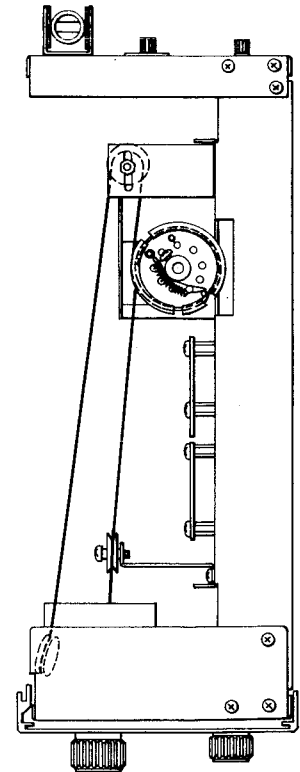
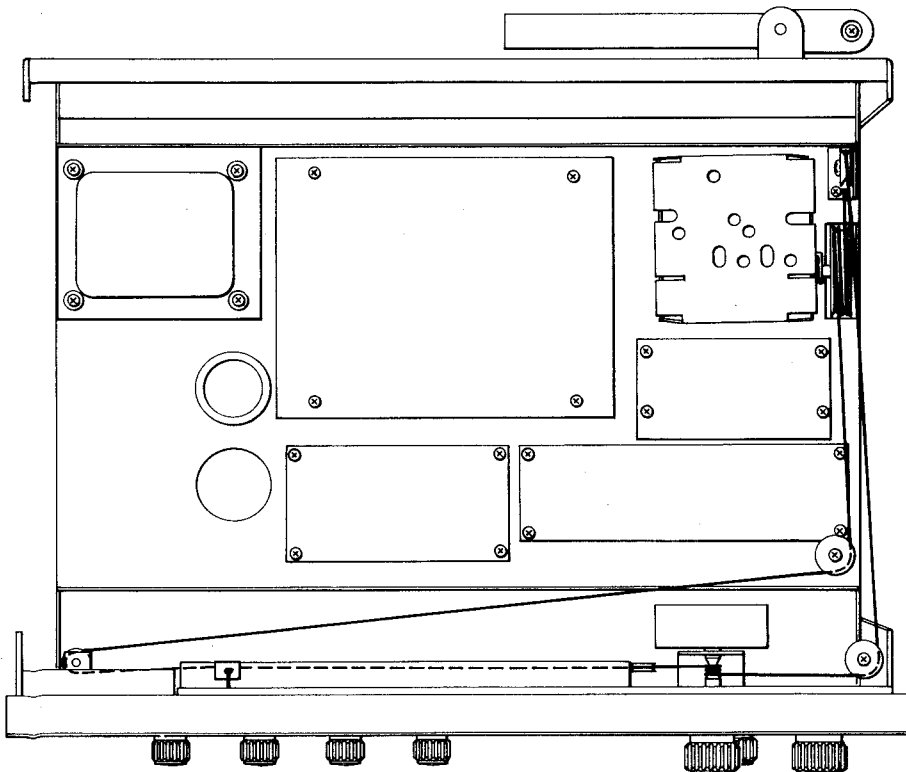
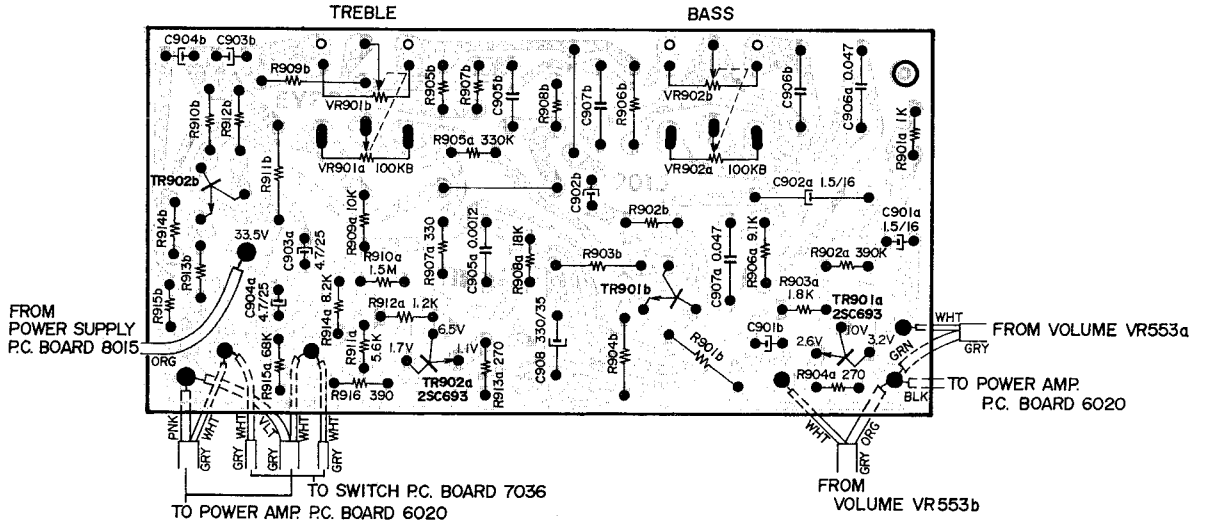


Fig. 34

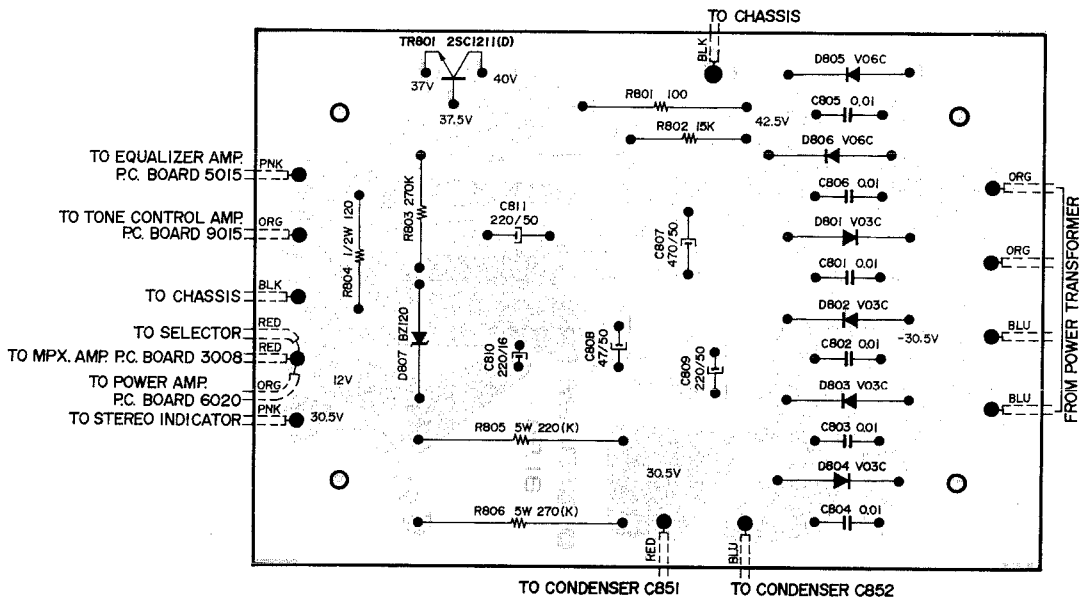
X. COMPOSITE VIEWS OF COMPONENTS

MODEL AA-8080/L

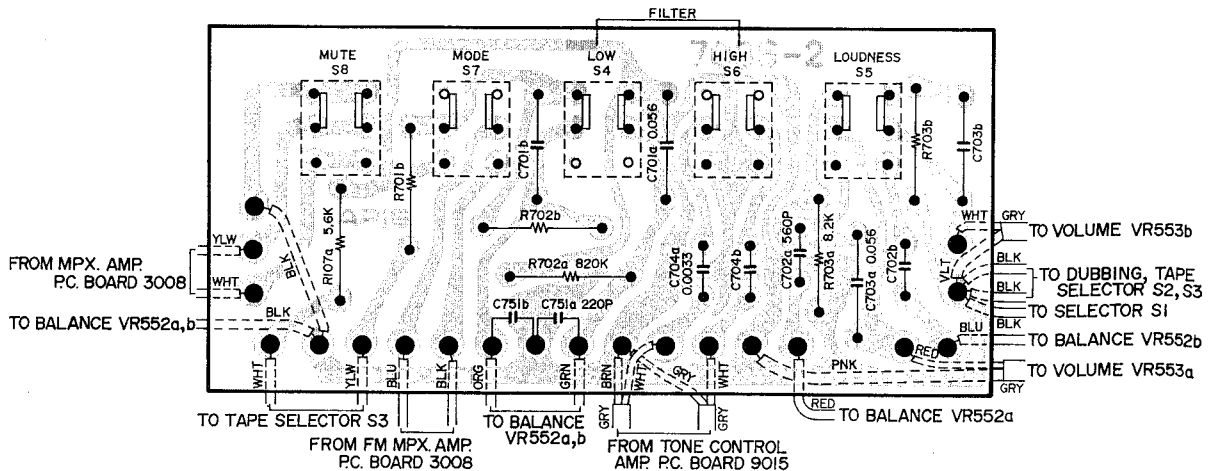
1. TONE CONTROL AMP. P.C. BOARD (9015)



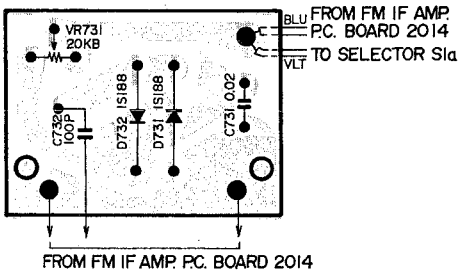
2. POWER SUPPLY P.C. BOARD (8015)



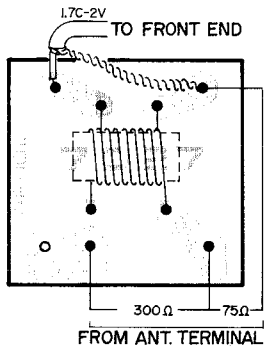
3. SWITCH P.C. BOARD (7036-2)



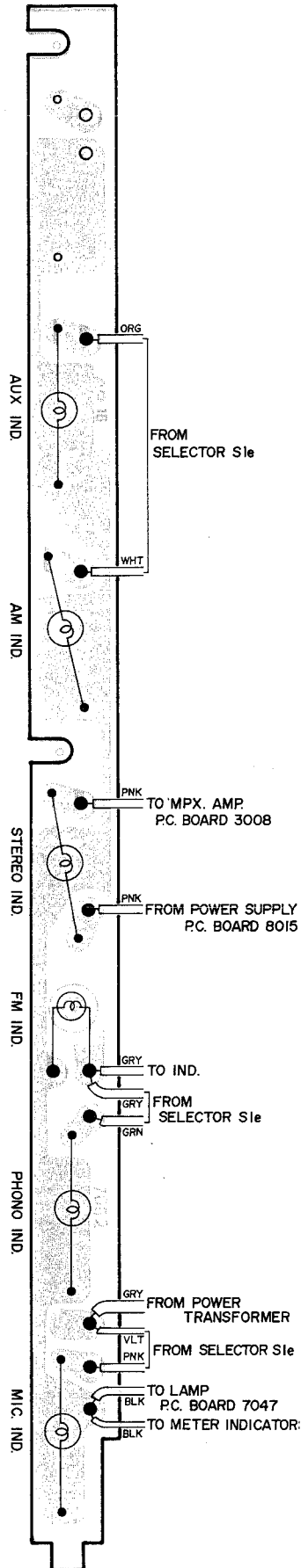
4. S METER RECTIFIER
P.C. BOARD (7040)



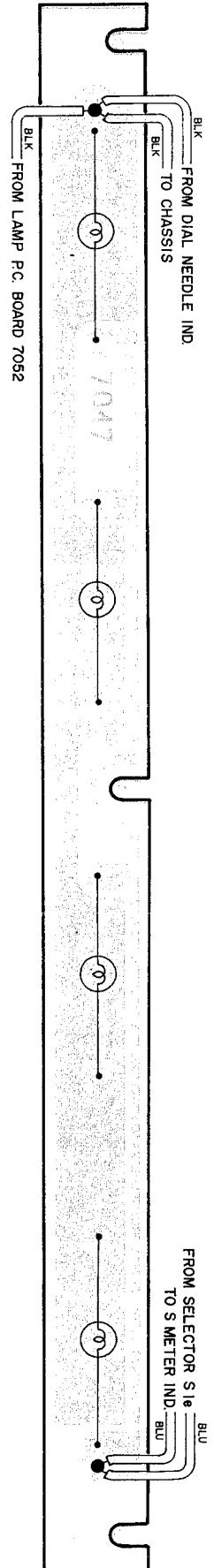
5. BALLOON P.C. BOARD (7027)



6. LAMP P.C. BOARD (7052)

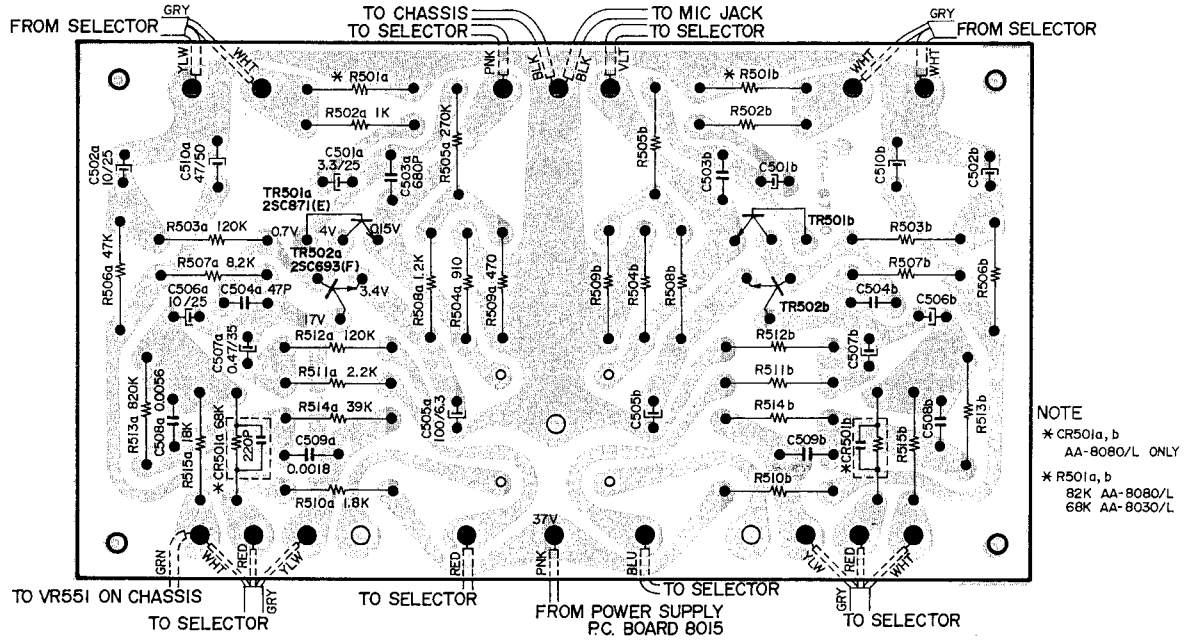


7. DIAL LAMP
P.C. BOARD (7047)

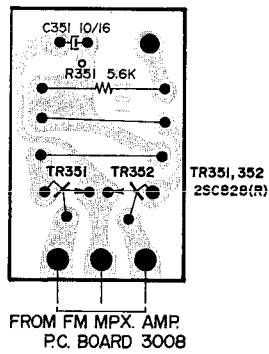


MODEL AA-8080/L, AA-8030/L

8. EQUALIZER AMP. P.C. BOARD (5015)

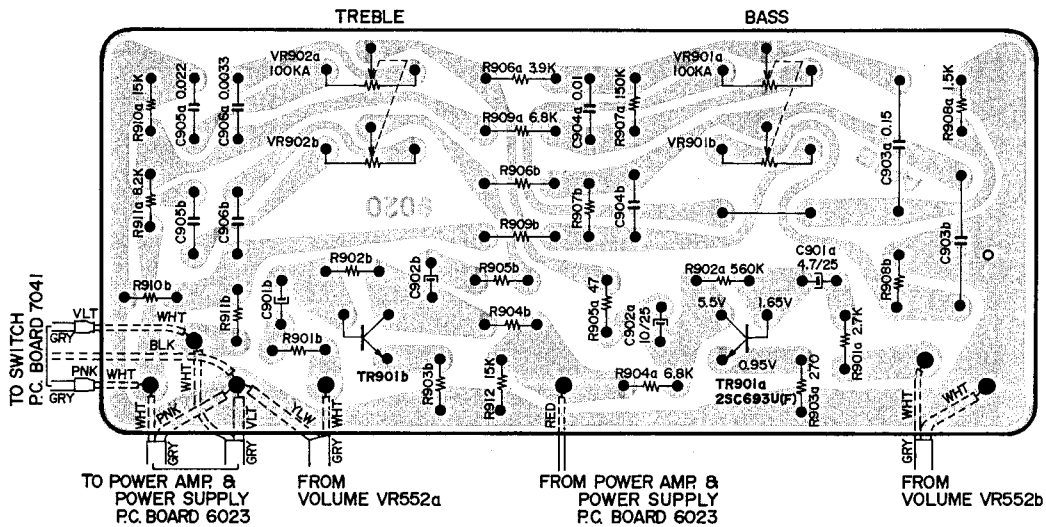


9. FM MUTE P.C. BOARD (7043)

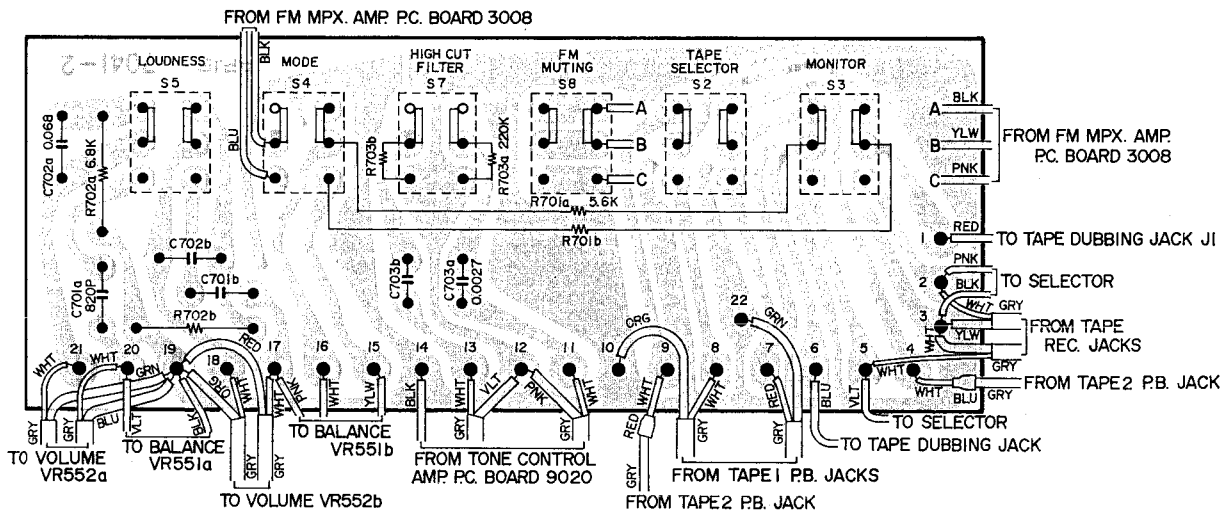


MODEL AA-8030/L

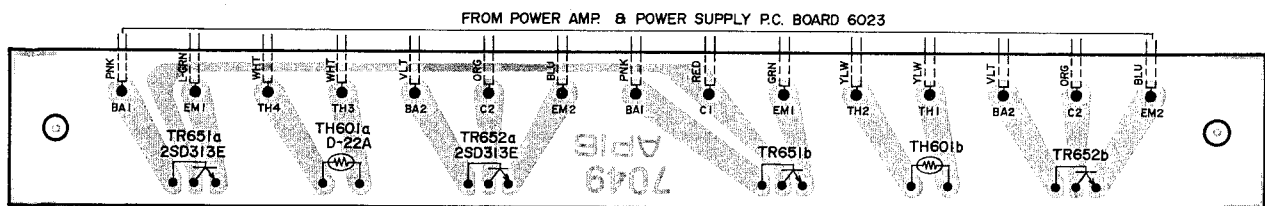
10. TONE CONTROL AMP. P.C. BOARD (9020)



11. SWITCH P.C. BOARD (7041-2)



12. POWER TRANSISTOR P.C. BOARD (7049)



SECTION 2

PARTS LIST

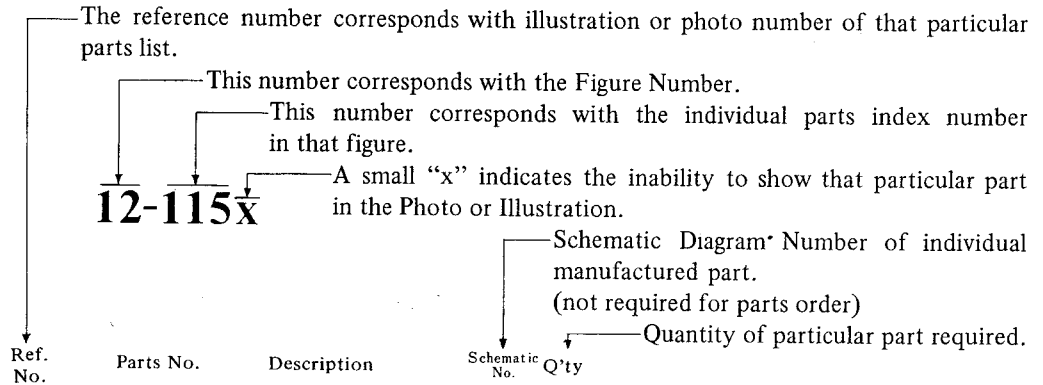
MODEL AA-8080, 8080L

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HOW TO USE THIS PARTS LIST

1. This parts list is compiled by various individual blocks based on assembly process.
2. When ordering parts, please describe parts number, serial number, and model number in detail.
3. How to read List



12-115x

FLYWHEEL BLOCK #13

12-115x	800425	Flywheel Block Assy. Comp.	RDG #13	1
12-116	244506	Flywheel Only	RD-233	1
12-117x	244754	Felt, Flywheel	RD-275	1
12-118	251324	Main Metal Case	RD-236	1
12-119	253080	Main Metal	RD-237	1

4. The symbol numbers shown on the P.C. Board list can be matched with the Composite Views of components of the Schematic Diagram or Service Manual.
5. The indications of Resistors and Capacitors in the photos of P.C. Board are being eliminated.
6. The shape of the parts and parts name, etc. can be confirmed by comparing them with the parts shown on the Electrical Parts List Table of P.C. Board.
7. 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. (meaning of ref. no. outlined in Item 3 above).
8. Utilize separate "Price List for Parts" to determine unit price. The most simple method of finding parts Price is to utilize the reference number.

ELECTRICAL PARTS LIST TABLE





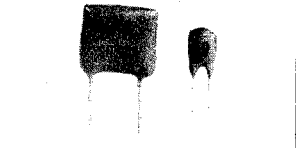

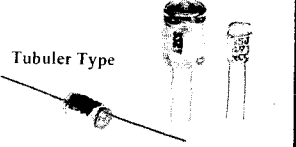



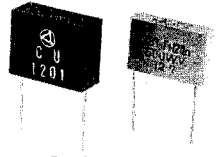
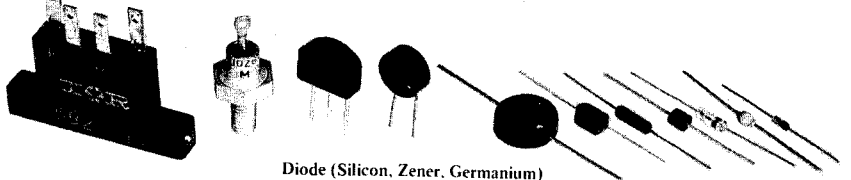
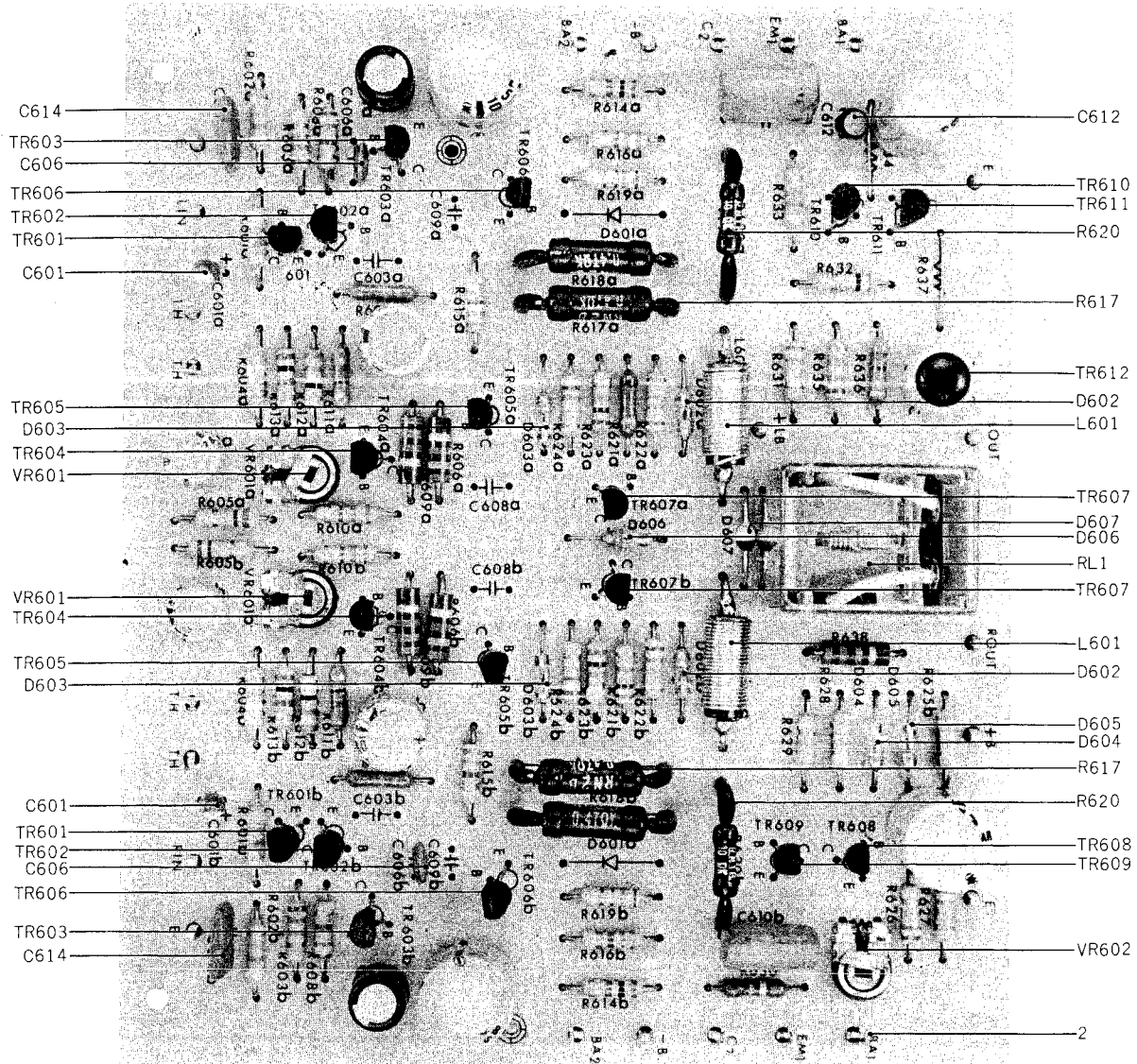
<p>ELECTRICAL PARTS LIST TABLE Because the indication of resistors and capacitors in the P.C. Board photos are being eliminated, please confirm parts name and shape by comparing them with the parts shown in this table.</p>	<p>1</p>  <p>Solid Resistor</p>	<p>2</p> <p style="text-align: right;">Stopper Type</p>  <p>Carbon Resistor</p>	<p>3</p>  <p>Metal Oxide Film Resistor</p>	
	<p>4</p>  <p>Cement Resistor</p>	<p>5</p>  <p>Wire-Wound Resistor</p>	<p>6</p>  <p>Thermister</p>	<p>7</p>  <p>Enamel Resistor</p>
	<p>1</p>  <p>MP Capacitor (Tubuler Type)</p>	<p>2</p>  <p>Plastic Capacitor</p>	<p>3</p>  <p>Mylar Capacitor</p>	<p>4</p>  <p>VFM (Hi-Q) Capacitor</p>
<p>5</p>  <p>Mylar Capacitor</p>	<p>6</p>  <p>Tantalum Capacitor</p>	<p>7</p>  <p>Oil Capacitor (Tubuler Type)</p>	<p>8</p> <p style="text-align: right;">Vertical Type</p>  <p>Styrol Capacitor</p>	
<p>9</p>  <p>Electrolytic Capacitor (Tubuler Type)</p>	<p>10</p> <p style="text-align: right;">Vertical Type</p>  <p>Electrolytic Capacitor</p>	<p>11</p>  <p>Ceramic Capacitor</p>	<p>12</p>  <p>Metalized Mylar (Paper) Capacitor</p>	
<p>13</p>  <p>Trimmer Condenser</p>		<p>VR</p>  <p>Semi-Fixed Volume</p>		
<p>L</p>  <p>Ferri Inductor</p>	<p>TR</p>  <p>Transistor</p>			
<p>CR</p>  <p>Spark Quencher</p>	<p>D</p>  <p>Diode (Silicon, Zener, Germanium)</p>			

FIG. 1 PHOTO OF MAIN AMP. P.C. BOARD (6020-2)

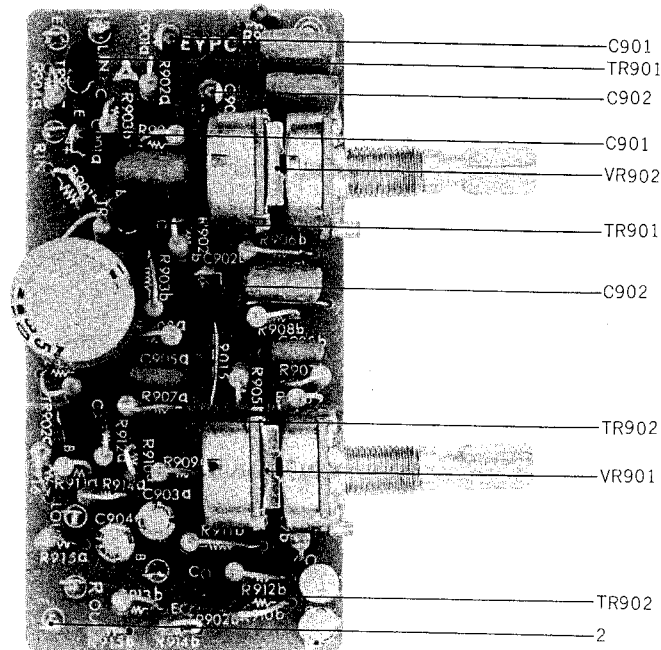


MAIN AMP. P.C. BOARD (6020-2) BLOCK

Symbol No.	Parts No.	Description	Q'ty	Symbol No.	Parts No.	Description	Q'ty
1-1x	BA707073	Main Amp. P.C. Board Comp. (6020-2)	1	1-C604	EC337691	Elect. 33 μ F 10WV	2
1-TR601, 2	ET705003	Transistor 2SA666A-S	4	1-C605	EC373296	Elect. 33 μ F 50WV	2
1-TR603	ET705014	Transistor TSC-8002-3BCR	2	1-C606	EC704654	Mica Z-12 33PK	2
1-TR604	ET398788	Transistor 2SC945 (R)	2	1-C607	EC450641	Elect. 100 μ F 50WV	2
1-TR605	ET705014	Transistor TSC-8002-3BCR	2	1-C610	EC705148	Mylar ECG 0.1 μ F	2
1-TR606	ET704722	Transistor TSC-9002-3BCR	2	1-C611	EC705137	Elect. ECE 100 μ F 25WV	1
1-TR607	ET705025	Transistor SPS5456	2	1-C612	EC705115	Tantalum CS15 4.7 μ F 10WV	1
1-TR608 to 11	ET399846	Transistor 2SC945 (Q)	4	1-C613	EC705126	Elect. 470 μ F 6WV	1
1-TR612	ET705036	Transistor CDC-8000-IC	1	1-C614	EC704711	Mica Z-18 220PK	2
1-D602 to 6	ED705047	Germanium Diode 1S188AM	7	Resistor, Insulator Type			
1-D607	ED315843	Silicon Diode V06C	1	1-R601	ER214290	Carbon RD1/4 4.7k(J)	2
1-VR601, 2	EV705150	Semi-fixed Volume EVN 1kB	3	1-R602	ER329308	Carbon RD1/4 47k(J)	2
1-L601	ER704700	Resistor Choke ELQ-6P919	2	1-R603	ER364961	Carbon RD1/4 1.2k(J)	2
1-RL1	EP704698	Relay AP-3422	1	1-R604	ER430211	Carbon RD1/4 3.9k(J)	2
1-2	ZW704193	Pin F3 Type	23	1-R605	ER345677	Carbon RD1/4 15k(J)	2
Capacitor, Vertical Type				1-R606	ER705058	Solid RC1/2W 1.8k(J)	2
1-C601	EC705104	Tantalum CS15 1.5 μ F 35WV	2	1-R607	ER440921	Carbon RD1/4 27k(J)	2
1-C602	EC335485	Elect. 47 μ F 16WV	2	1-R608	ER430288	Carbon RD1/4 680(J)	2
				1-R609	ER705060	Solid RC1/2W 2.2k(J)	2

When ordering parts, please describe Parts Number, Serial Number, and Model Number in detail.

FIG. 3 PHOTO OF TONE CONTROL AMP. P.C. BOARD (9015)

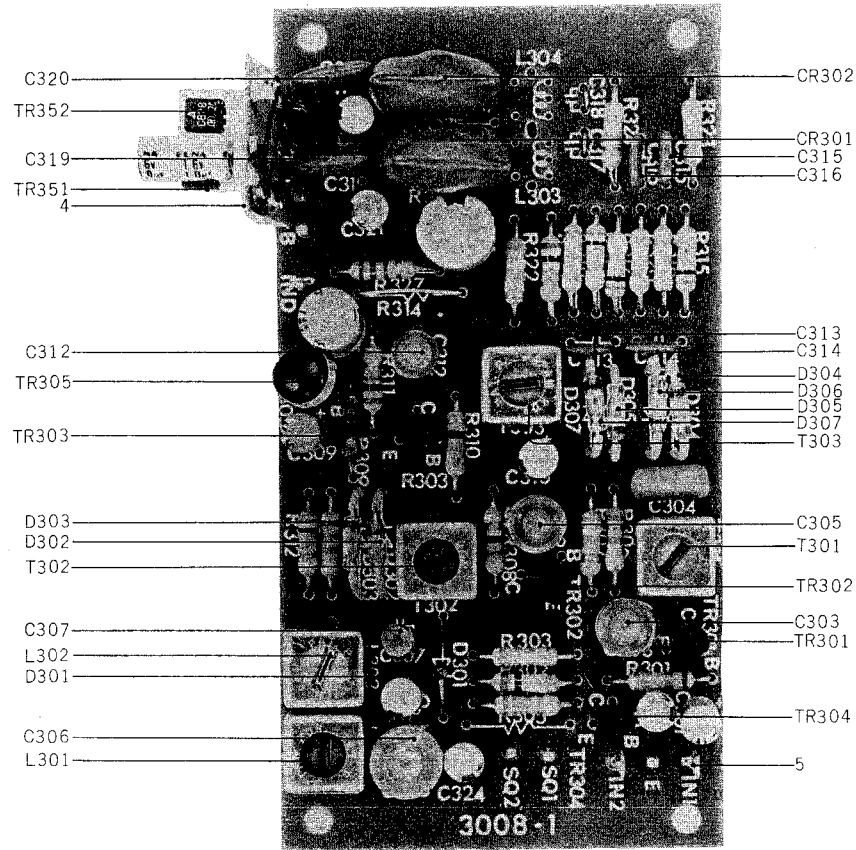


**TONE CONTROL AMP.
P.C. BOARD (9015) BLOCK**

Symbol No.	Parts No.	Description	Q'ty
3-1x	BA707117	Tone Amp. P.C. Board Comp. (9015)	1
3-TR901, 2	ET315472	Transistor 2SC693U(F)	4
3-VR901, 2	EV705328	Volume GM10R-100k Bx2	2
3-2	ZW704193	Pin F3 Type	7
Capacitor, Vertical Type			
3-C901, 2	EC704823	Tantalum CS15 1.5 μ F 35WV	4
3-C903, 4	EC450538	Elect. 4.7 μ F 25WV	4
3-C905	EC705306	Mylar ECQ 0.0012 μ	2
3-C906, 7	EC705317	Mylar ECQ 0.047 μ	4
3-C908	EC458201	Elect. 330 μ F 35WV	1
Resistor, Stopper Type			
3-R901	ER211465	Carbon RD1/4 1k(J)	2
3-R902	ER392850	Carbon RD1/4 390k(J)	2
3-R903	ER362441	Carbon RD1/4 1.8k(J)	2
3-R904	ER347038	Carbon RD1/4 270(J)	2
3-R905	ER362485	Carbon RD1/4 330k(J)	2
3-R906	ER399060	Carbon RD1/4 9.1k(J)	2
3-R907	ER212681	Carbon RD1/4 330(J)	2
3-R908	ER346994	Carbon RD1/4 18k(J)	2
3-R909a	ER336442	Carbon RD1/4 10k(J)	1
3-R909b	ER213647	Carbon RD1/4 10k(J)	1
3-R910	ER430007	Carbon RD1/4 1.5M(J)	2
3-R911	ER213030	Carbon RD1/4 5.6k(J)	2
3-R912	ER306843	Carbon RD1/4 1.2k(J)	2
3-R913	ER347038	Carbon RD1/4 270(J)	2
3-R914	ER349942	Carbon RD1/4 8.2k(J)	2
3-R915	ER345756	Carbon RD1/4 68k(J)	2
3-R916	ER349784	Carbon RD1/4 390(J)	1

When ordering parts, please describe Parts Number, Serial Number, and Model Number in detail.

FIG. 4 PHOTO OF FM MPX. P.C. BOARD (3008)

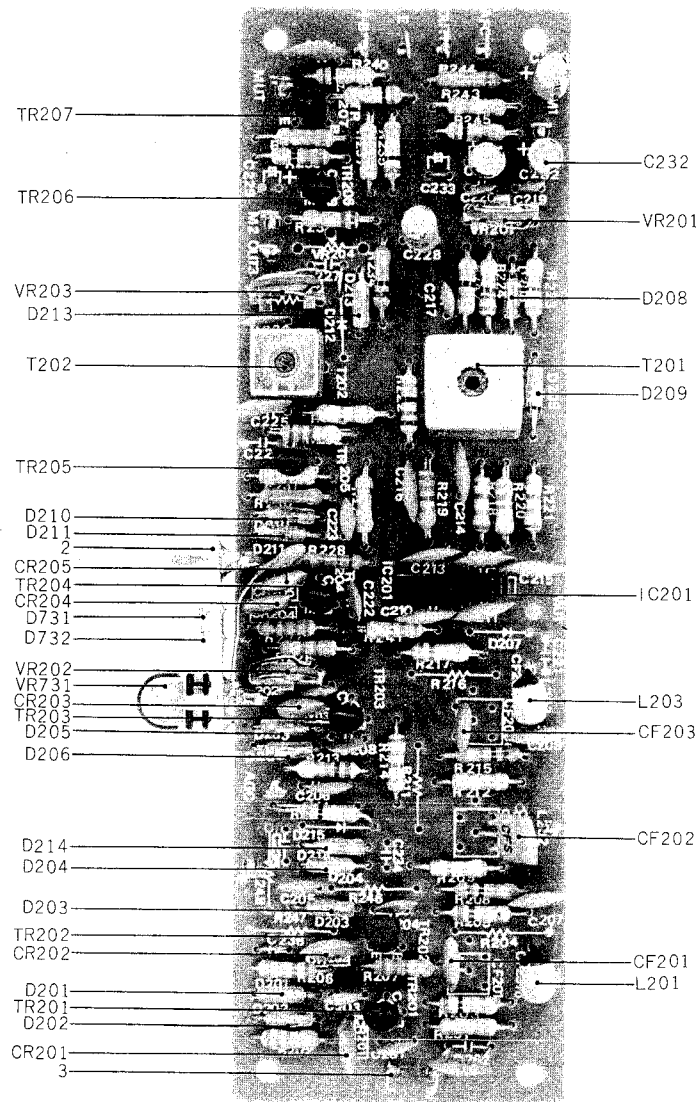


FM MPX. P.C. BOARD (3008) BLOCK

Symbol No.	Parts No.	Description	Q'ty	Symbol No.	Parts No.	Description	Q'ty
4-1x	BA706994	FM MPX. P.C. Board Comp. (3008)	1	4-C313, 4	EC704395	Mica Z-12 220PK	2
4-2x	BA707005	FM MPX. P.C. Board Comp. (3008) (J)	1	4-C315, 6	EC704384	Mica Z-12 470PK	2
4-3x	BA702674	FM MPX. P.C. Board Comp. (3008) (L)	1	4-C319, 20	EC704373	Mica Z-18 750PK	2
4-4	EA704428	Meter P.C. Board (7043)	1	4-C319, 20	EC702753	Mica Z-17 270PJ(L)	2
4-5	ZW704193	Pin F3 Type	10	4-C321,22,23	EC704338	Elect. ECE 1μF 50WV	3
4-TR301,2,3	ET402794	Transistor 2SC828(Q)	3	4-C324	EC704340	Elect. ECE 10μF 16WV	1
4-TR304	ET234933	Transistor 2SC828(R)	1	4-C325	EC702764	Mylar ECQ 0.033μF	1
4-TR305	ET704226	Transistor CDC-8000-1D	1	4-C351	EC704430	Elect. 10μF 16WV	1
4-TR351, 2	ET234933	Transistor 2SC828(R)	2	Resistor, Insulator Type			
4-D301	ED704237	Silicon Diode 1S1212	1	4-R301	ER213794	Carbon RD1/4 120k(J)	1
4-D302 to 7	ED704035	Germanium Diode 1N34A-YL	6	4-R302	ER213715	Carbon RD1/4 100k(J)	1
4-T301	E0704248	Coil (MPX) 311A	1	4-R303	ER334923	Carbon RD1/4 2.7k(J)	1
4-T302	E0704250	Coil (MPX) 309B	1	4-R304	ER315213	Carbon RD1/4 8.2k(J)	1
4-T303	E0704261	Coil (MPX) 305D	1	4-R306	ER315213	Carbon RD1/4 8.2k(J)	1
4-L301	E0704272	Coil (MPX) 312E	1	4-R307	ER364994	Carbon RD1/4 39k(J)	1
4-L302	E0704283	Coil (MPX) 313E	1	4-R308	ER450358	Carbon RD1/4 47(J)	1
4-CR301, 2	E1704406	CR Compound Parts F1M-38	2	4-R309	ER324641	Carbon RD1/4 1k(J)	1
Capacitor, Vertical Type				4-R310	ER364950	Carbon RD1/4 330(J)	1
4-C301, 2	EC704340	Elect. ECE 10μF 16WV	2	4-R311	ER364972	Carbon RD1/4 1.5k(J)	1
4-C303	EC704294	Styrol ECQ 4700PF(J)	1	4-R312	ER213647	Carbon RD1/4 10k(J)	1
4-C305	EC704294	Styrol ECQ 4700PF(J)	1	4-R313	ER214536	Carbon RD1/4 6.8k(J)	1
4-C306	EC704316	Styrol ECQ 10000PF(J)	1	4-R315	ER213647	Carbon RD1/4 10k(J)	1
4-C307	EC704327	Styrol ECQ 390PF(J)	1	4-R316	ER430233	Carbon RD1/4 390k(J)	1
4-C308	EC704351	Elect. ECE 10μF 50WV	1	4-R317	ER213647	Carbon RD1/4 10k(J)	1
4-C309	EC704338	Elect. ECE 1μF 50WV	1	4-R318	ER430233	Carbon RD1/4 390k(J)	1
4-C310	EC704340	Elect. ECE 10μF 16WV	1	4-R319	ER213647	Carbon RD1/4 10k(J)	1
4-C311	EC704362	Elect. ECE 100μF 16WV	1	4-R320	ER430233	Carbon RD1/4 390k(J)	1
4-C312	EC704305	Styrol ECQ 2200PF(J)	1	4-R321	ER213647	Carbon RD1/4 10k(J)	1
				4-R322	ER430233	Carbon RD1/4 390k(J)	1
				4-R323, 24	ER704417	Carbon RD1 33k(J)	2
				4-R327	ER430165	Carbon RD1/4 150(J)	1
				4-R352	ER324720	Carbon RD1/4 5.6k(J)	1

When ordering parts, please describe Parts Number, Serial Number, and Model Number in detail.

FIG. 5 PHOTO OF FM IF. P.C. BOARD (2014)



FM IF. P.C. BOARD (2014) BLOCK

Symbol No.	Parts No.	Description	Q'ty	Symbol No.	Parts No.	Description	Q'ty
5-1x	BA706983	FM IF. P.C. Board Comp. (2014)	1	5-T201	ET704081	FM IF. Trans. 211D	1
5-2	EA704788	Meter P.C. Board (7040)	1	5-T202	ET704092	FM IF. Trans. 204E	1
5-3	ZW704193	Pin F3 Type	14	5-VR201	EV704103	Semi-fixed Volume	
5-IC201	EI704046	I.C. TA-7061AP	1			EVL-S1A00 20k B	1
5-TR201	ET704002	Transistor 2SC710D	1	5-VR202	EV704114	Semi-fixed Volume	
5-TR202	ET704013	Transistor 2SC710C	1			EVL-S1A00 5k B	1
5-TR203, 4	ET704002	Transistor 2SC710D	2	5-VR203	EV704103	Semi-fixed Volume	
5-TR205	ET704013	Transistor 2SC710C	1			EVL-S1A00 20k B	1
5-TR206, 7	ET399881	Transistor 2SC711(F)	2	5-VR731	EV704790	Semi-fixed Volume	
5-D201 to 6	ED704024	Germanium Diode 1S188 FM-1	6			EVN-K0AA00 20k B	1
5-D208, 9	ED704035	Germanium Diode 1N34A-YL	2	Capacitor, Vertical Type			
5-D210, 11	ED704024	Germanium Diode 1S188 FM-1	2	5-C201	EC704125	Ceramic MC-70 0.01Z	1
5-D213, 14	ED704024	Germanium Diode 1S188 FM-1	2	5-C202	EC704136	Ceramic MC-100 0.04Z	1
5-D731, 32	ED705183	Germanium Diode 1S188FM	2	5-C203	EC704147	Ceramic SCP-60 0.001M	1
5-CR201 to 4	EI704057	CR Compound Parts PK1008		5-C204, 5, 6	EC704125	Ceramic MC-70 0.01Z	3
		PG1010P	4	5-C207	EC704136	Ceramic MC-100 0.04Z	1
5-CR205	EI704068	CR Compound Parts PK1008		5-C208	EC704147	Ceramic SCP-60 0.001M	1
		SG1010P	1	5-C209 to 16	EC704136	Ceramic MC-100 0.04Z	8
5-CF201,2,3	ER492355	Ceramic Filter CFS-107M	3	5-C217	EC704158	Ceramic FC-60 50PFK	1
5-L201	EO704070	Ferri Inductor FL0710 330MH	1	5-C218	EC450527	Elect. 4.7µF 25WV	1
5-L203	EO704070	Ferri Inductor FL0710 330MH	1	5-C219, 20	EC704160	Ceramic FC-50 33PFK	2

When ordering parts, please describe Parts Number, Serial Number, and Model Number in detail.

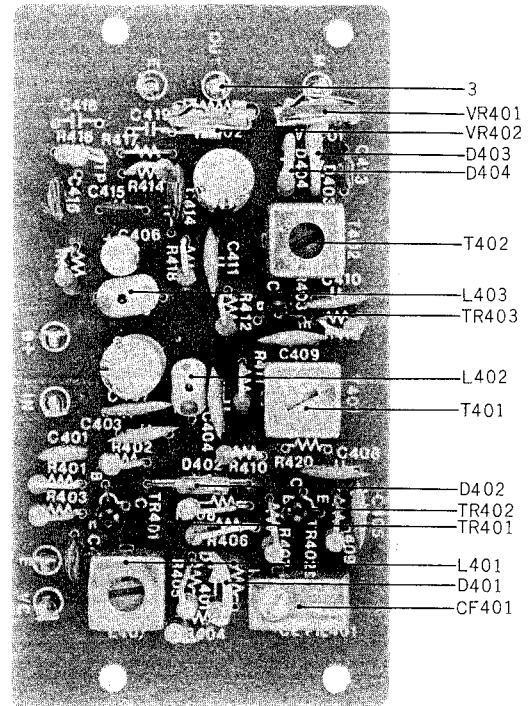
Symbol No.	Parts No.	Description	Q'ty
5-C221	EC704171	Ceramic MC-75 0.02Z	1
5-C222, 23	EC704125	Ceramic MC-70 0.01Z	2
5-C225	EC704136	Ceramic MC-100 0.04Z	1
5-C226	EC704171	Ceramic MC-75 0.02Z	1
5-C228	EC338501	Elect. 1 μ F 50WV	1
5-C231	EC704136	Ceramic MC-100 0.04Z	1
5-C232, 33	EC704182	Aluminum Elect. 1 μ 50WV	2
5-C234	EC704125	Ceramic MC-70 0.01Z	1
5-C731	EC705205	Ceramic FC-70 1000PK	1
5-C732	EC704171	Ceramic MC-75 0.02Z	1

Resistor, Insulator Type			
Symbol No.	Parts No.	Description	Q'ty
5-R201	ER345712	Carbon RD1/4 22k(J)	1
5-R202	ER315213	Carbon RD1/4 8.2k(J)	1
5-R203	ER324641	Carbon RD1/4 1k(J)	1
5-R205	ER364972	Carbon RD1/4 1.5k(J)	1
5-R206	ER324887	Carbon RD1/4 1.6k(J)	1
5-R207	ER406034	Carbon RD1/4 220(J)	1
5-R208	ER324641	Carbon RD1/4 1k(J)	1
5-R209	ER430143	Carbon RD1/4 120(J)	1
5-R210	ER213715	Carbon RD1/4 100k(J)	1
5-R212	ER329264	Carbon RD1/4 2.2k(J)	1
5-R213	ER364972	Carbon RD1/4 1.5k(J)	1
5-R214	ER430143	Carbon RD1/4 120(J)	1
5-R215	ER324641	Carbon RD1/4 1k(J)	1
5-R217	ER364950	Carbon RD1/4 330(J)	1
5-R218	ER430143	Carbon RD1/4 120(J)	1
5-R219, 20	ER496181	Carbon RD1/4 270(J)	2
5-R221	ER430143	Carbon RD1/4 120(J)	1
5-R222	ER356501	Carbon RD1/4 56(J)	1
5-R223, 24	ER430288	Carbon RD1/4 680(J)	2
5-R225	ER406034	Carbon RD1/4 220(J)	1
5-R226	ER334923	Carbon RD1/4 2.7k(J)	1
5-R227	ER329264	Carbon RD1/4 2.2k(J)	1
5-R228	ER364972	Carbon RD1/4 1.5k(J)	1
5-R229	ER364994	Carbon RD1/4 39k(J)	1
5-R230	ER214536	Carbon RD1/4 6.8k(J)	1
5-R231	ER406034	Carbon RD1/4 220(J)	1
5-R232	ER427950	Carbon RD1/4 180(J)	1
5-R234	ER324641	Carbon RD1/4 1k(J)	1
5-R235	ER213715	Carbon RD1/4 100k(J)	1
5-R236	ER430290	Carbon RD1/4 82(J)	1
5-R237, 38	ER345712	Carbon RD1/4 22k(J)	2
5-R239, 40	ER213647	Carbon RD1/4 10k(J)	2
5-R241	ER406034	Carbon RD1/4 220(J)	1
5-R242	ER450358	Carbon RD1/4 47(J)	1
5-R243	ER365016	Carbon RD1/4 220k(J)	1
5-R244	ER345756	Carbon RD1/4 68k(J)	1
5-R245	ER213647	Carbon RD1/4 10k(J)	1
5-R251	ER704204	Carbon RD1/4 56k(J)	1

AM IF. P.C. BOARD (4009) BLOCK

Symbol No.	Parts No.	Description	Q'ty
6-1x	BA707027	AM IF. P.C. Board Comp.(4009)	1
6-2x	BA707038	AM IF. P.C. Board Comp. (4009) (H)	1
6-TR401,2,3	ET704463	Transistor 2SC930D	3

FIG. 6 PHOTO OF
AM IF. P.C. BOARD (4009)

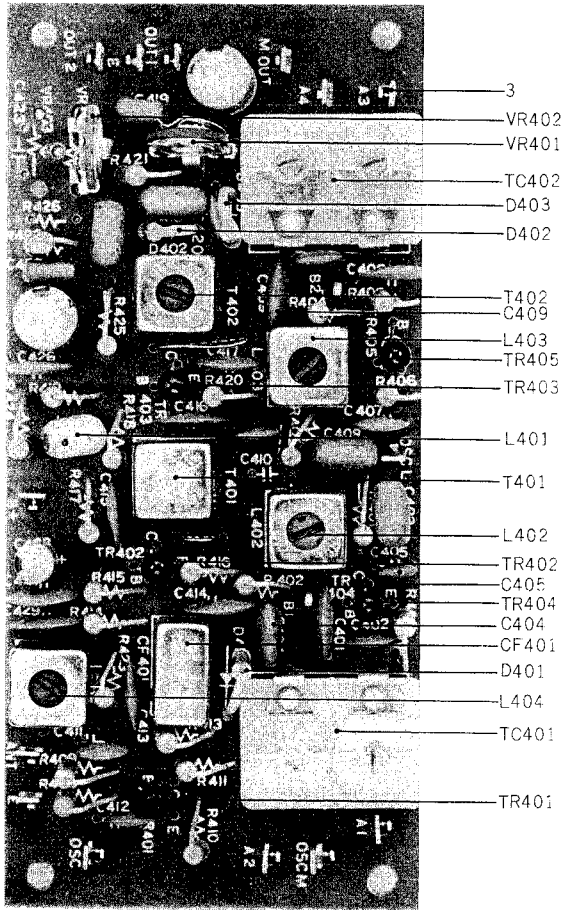


Symbol No.	Parts No.	Description	Q'ty
6-D401 to 4	ED704474	Germanium Diode 1S188 FM1	4
6-VR401, 2	EV704564	Semi-fixed Volume EVL S1AA00 20k B	2
6-CF401	ER704485	Ceramic Filter CFZ-455C	1
6-CF401	ER704575	Ceramic Filter CFZ-032A (H)	1
6-L401	EO704507	OSC Coil 402L	1
6-L402, 3	EO704496	Ferri Inductor LTB-100	2
6-T401	BT704518	AM IF. Trans. 403B	1
6-T402	BT704520	AM IF. Trans. 401D	1
6-3	ZW704193	Pin F3 Type	7

Capacitor, Vertical Type			
Symbol No.	Parts No.	Description	Q'ty
6-C401	EC704125	Ceramic MC-70 0.01Z	1
6-C402	EC706410	Mylar MFL 0.01 μ F(K)	1
6-C403, 4, 5	EC704136	Ceramic MC-100 0.04Z	3
6-C406	EC704542	Elect. ECE 4.7 μ F 25WV	1
6-C407 to 11	EC704136	Ceramic MC-100 0.04Z	5
6-C412	EC704553	Elect. ECE 47 μ F 16WV	1
6-C413	EC706408	Mylar MFL 0.001 μ F(K)	1
6-C414	EC706421	Mylar MFL 0.015 μ F(K)	1
6-C415	EC706432	Mylar MFL 0.0047 μ F(K)	1
6-C416	EC706443	Mylar 0.012 μ F(K)	1
6-C417	EC704553	Elect. ECE 47 μ F 16WV	1

Resistor, Stopper Type			
Symbol No.	Parts No.	Description	Q'ty
6-R401	ER349942	Carbon RD1/4 8.2k(J)	1
6-R402	ER350100	Carbon RD1/4 68k(J)	1
6-R403	ER362441	Carbon RD1/4 1.8k(J)	1
6-R404	ER211667	Carbon RD1/4 100(J)	1
6-R405	ER361563	Carbon RD1/4 180(J)	1
6-R406	ER213467	Carbon RD1/4 820(J)	1
6-R408, 9	ER362441	Carbon RD1/4 1.8k(J)	2
6-R410	ER211465	Carbon RD1/4 1k(J)	1
6-R411	ER349942	Carbon RD1/4 8.2k(J)	1
6-R412	ER357535	Carbon RD1/4 39k(J)	1
6-R413, 14	ER304402	Carbon RD1/4 470(J)	2
6-R415	ER306887	Carbon RD1/4 15k(J)	1
6-R416	ER346601	Carbon RD1/4 47k(J)	1
6-R418	ER211465	Carbon RD1/4 1k(J)	1

FIG. 7 PHOTO OF
AM IF. P.C. BOARD (4013)



AM IF. P.C. BOARD (4013) BLOCK (L)

Symbol No.	Parts No.	Description	Q'ty
7-1x	BA702808	AM IF. P.C. Board Comp. (4013) (L)	1
7-2x	BA702810	AM IF. P.C. Board Comp. (4013) (L-H)	1
7-TR401	ET702516	Transistor 2SC1047C	1
7-TR402 to 5	ET704463	Transistor 2SC930D	4
7-D401, 2, 3	ED704024	Germanium Diode 1S188 FM-1	3
7-VR401, 2	EV704103	Semi-fixed Volume EVL-S1A00 20k B	2
7-CF401	ER704485	Ceramic Filter CFZ-455C	1
7-CF401	ER704575	Ceramic Filter CFZ-032A (H)	1
7-L401	EO704496	Ferri Inductor LTB-100	1
7-L402	EO702527	OSC Coil 405L(MW)	1
7-L403	EO702538	OSC Coil 409L(LW)	1
7-L404	EO702663	Trap Coil 401E	1
7-T401	BT702540	FM IF. Trans. 401B	1
7-T402	BT702551	FM IF. Trans. 401D	1
7-3	ZW704193	Pin F3 Type	16
Capacitor, Vertical Type			
7-C401	EC704136	Ceramic MC-100 0.04Z	1
7-C402	EC704125	Ceramic MC-70 0.01Z	1
7-C403	EC702652	Mylar ECQ-M05 103KZ	1
7-C404	EC706342	Mica Z-17 360P	1
7-C405	EC702595	Mica Z-11 22PK	1
7-C406	EC704136	Ceramic MC-100 0.04Z	1
7-C407	EC704171	Ceramic MC-75 0.02Z	1
7-C408	EC702628	Mylar ECQ-MO5 153KZ	1
7-C409	EC702584	Mica Z-17 150PJ	1
7-C410	EC702606	Mica Z-11 47PK	1
7-C411, 12	EC704125	Ceramic MC-70 0.01Z	2
7-C413 to 17	EC704136	Ceramic MC-100 0.04Z	5
7-C418	EC702628	Mylar ECQ-MO5 153KZ	1
7-C419	EC702617	Mylar ECQ-MO5 472KZ	1
7-C420	EC702573	Ceramic SCY-85 0.001	1
7-C421	EC702628	Ceramic ECQ-MO5 153KZ	1
7-C422	EC704744	Mylar ECQ 0.0018μKZ	1
7-C424, 25	EC704553	Elect. ECE 47μF 16WV	2
7-C426, 27	EC704136	Ceramic MC-100 0.04Z	2
7-C428	EC704542	Elect. ECE 4.7μF 25WV	1
7-C429	EC704136	Ceramic MC-100 0.04Z	1
7-C430	EC702606	Mica Z-11 47PK	1
7-C432	EC702630	Mica Z-11 1P	1
7-C451, 2	EC704136	Ceramic MC-100 0.04Z	2
7-TC401	EC702641	Trimmer AT2-5W	1
7-TC402	EC702562	Trimmer AT2-5W	1
Resistor, Stopper Type			
7-R401	ER342933	Carbon RD1/4 27k(J)	1
7-R402	ER349942	Carbon RD1/4 8.2k(J)	1
7-R403	ER304402	Carbon RD1/4 470(J)	1
7-R404	ER346601	Carbon RD1/4 47k(J)	1
7-R405	ER349942	Carbon RD1/4 8.2k(J)	1
7-R406	ER361980	Carbon RD1/4 620(J)	1
7-R407	ER433877	Carbon RD1/4 120(J)	1
7-R408	ER357491	Carbon RD1/4 82k(J)	1
7-R409	ER349942	Carbon RD1/4 8.2k(J)	1
7-R410	ER357456	Carbon RD1/4 2.2k(J)	1
7-R411	ER211667	Carbon RD1/4 100(J)	1
7-R413	ER357535	Carbon RD1/4 39k(J)	1
7-R414	ER211757	Carbon RD1/4 100k(J)	1
7-R415	ER362441	Carbon RD1/4 1.8k(J)	1
7-R416	ER211320	Carbon RD1/4 1.5k(J)	1
7-R417	ER211465	Carbon RD1/4 1k(J)	1
7-R418	ER349942	Carbon RD1/4 8.2k(J)	1
7-R419	ER357535	Carbon RD1/4 39k(J)	1
7-R420, 21	ER304402	Carbon RD1/4 470(J)	2
7-R422	ER346601	Carbon RD1/4 47k(J)	1
7-R423	ER213467	Carbon RD1/4 820(J)	1
7-R424	ER211667	Carbon RD1/4 100(J)	1
7-R425	ER306887	Carbon RD1/4 15k(J)	1

When ordering parts, please describe Parts Number, Serial Number, and Model Number in detail.

FIG. 8 PHOTO OF
POWER SUPPLY P.C. BOARD (8015)

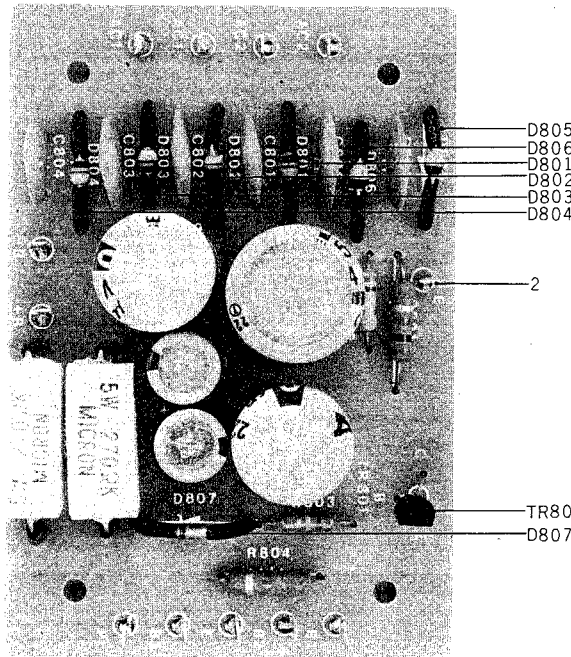
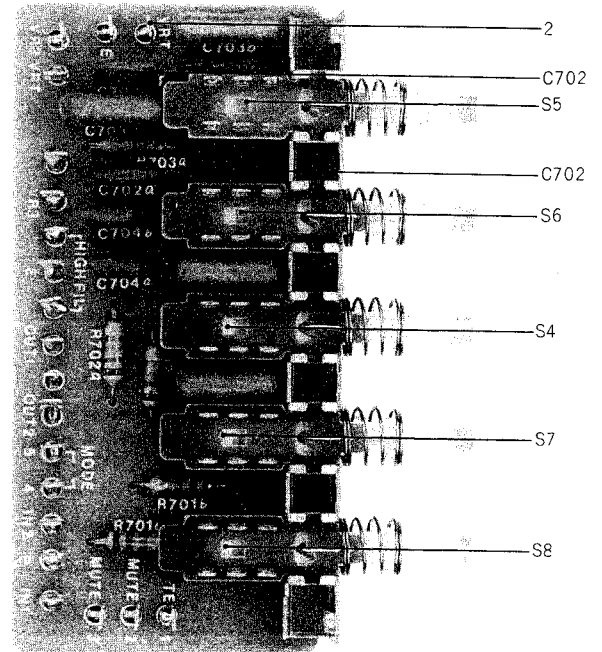


FIG. 9 PHOTO OF
SWITCH P.C. BOARD (7036-2)



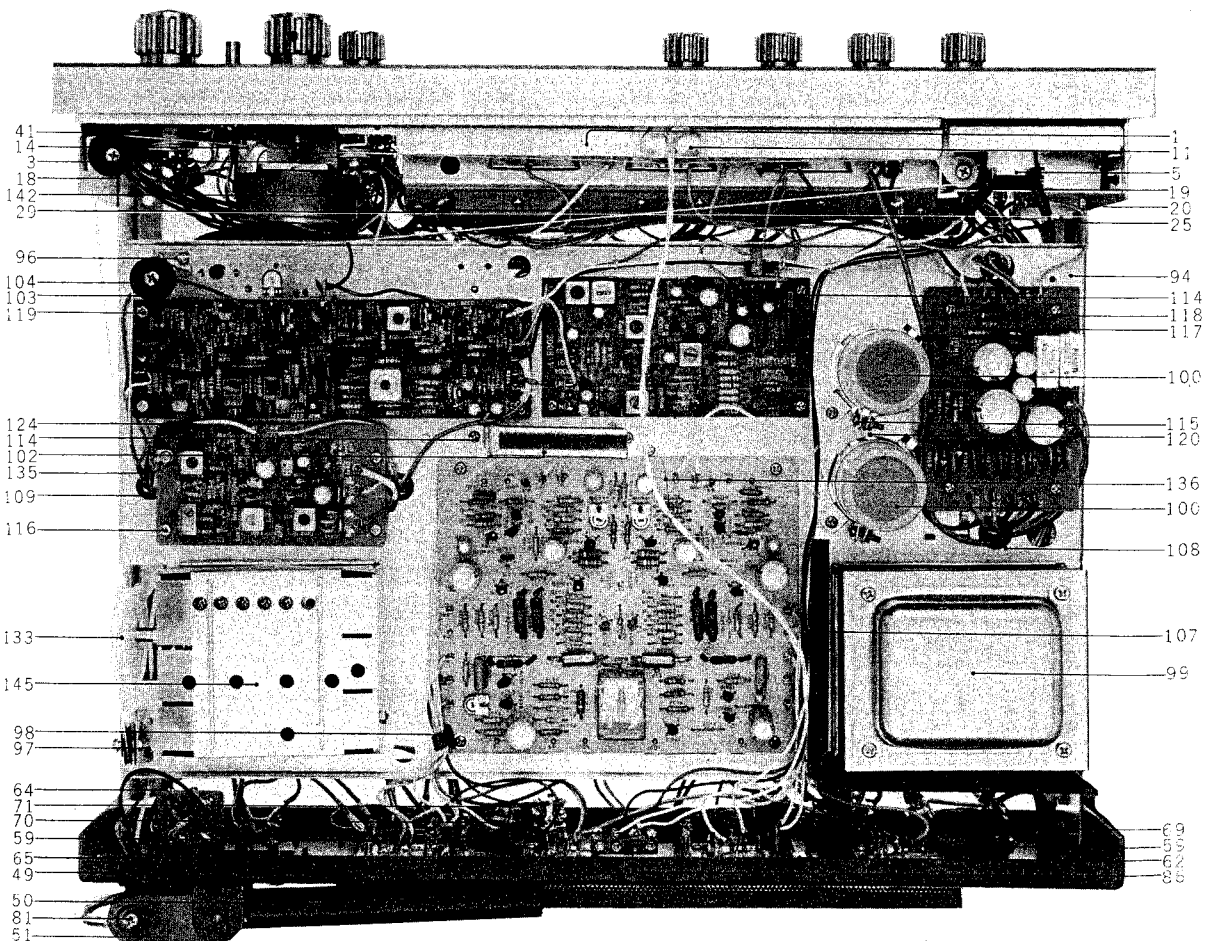
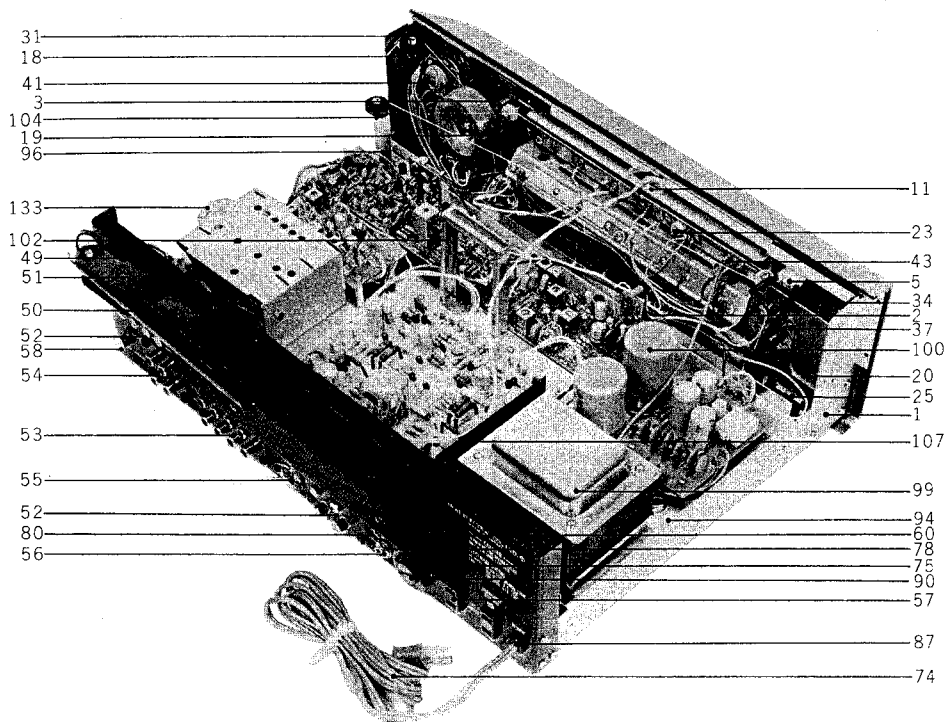
POWER SUPPLY P.C. BOARD (8015) BLOCK

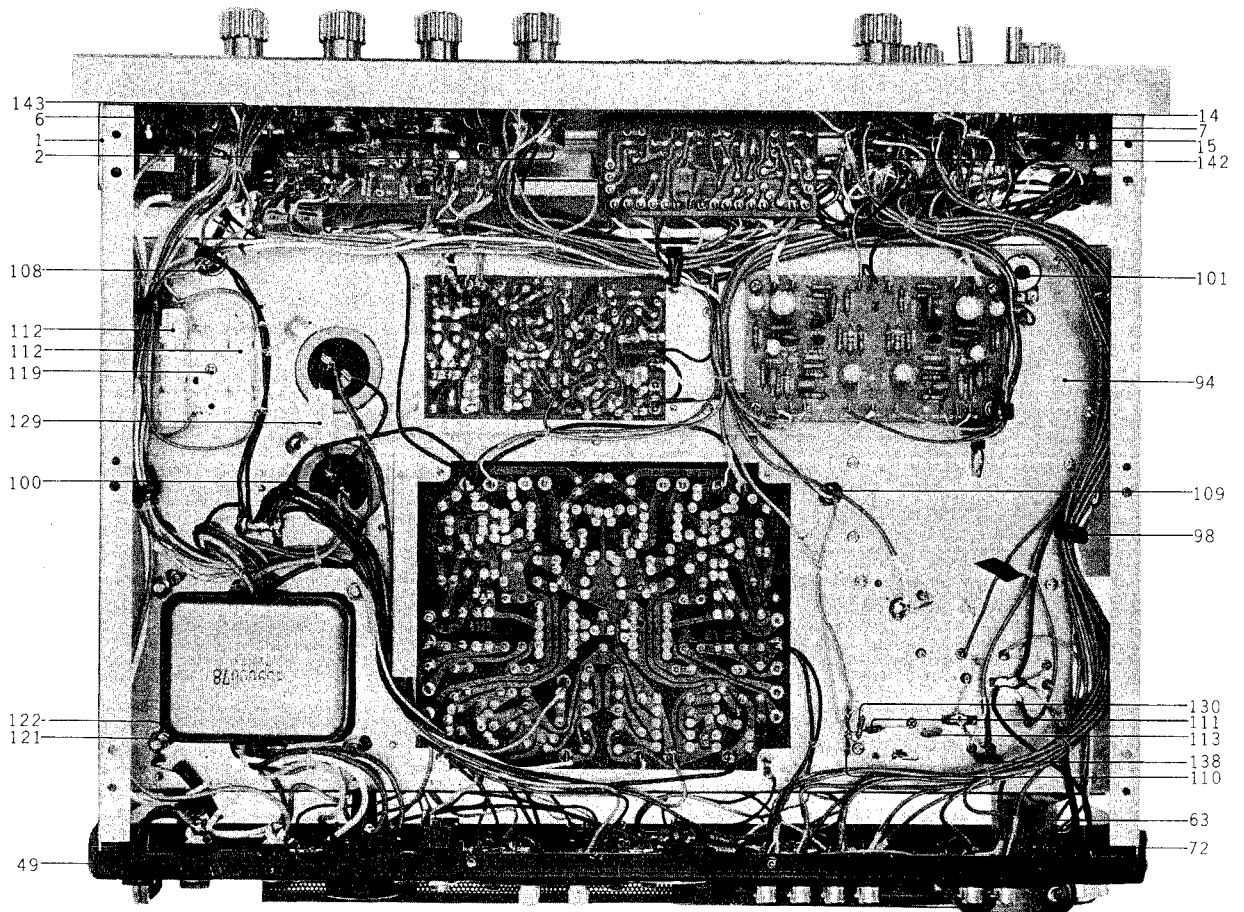
Symbol No.	Parts No.	Description	Q'ty
8-1x	BP707106	Power Supply P.C. Board Comp. (8015)	1
8-TR801	ET495415	Transistor 2SC1211(D)	1
8-D801 to 4	ED421795	Silicon Diode VO3C	4
8-D805, 6	ED315843	Silicon Diode VO6C	2
8-D807	ED705216	Zener Diode BZ-120	1
8-2	ZW704193	Pin F3 Type	12
Capacitor, Vertical Type			
8-C801 to 6	EC705251	Ceramic CKZ 0.01YZ	6
8-C807	EC705262	Elect. 470 μ F 50WV	1
8-C808	EC704992	Elect. ECE 47 μ F 50WV	1
8-C809	EC705284	Elect. ECE 220 μ F 50WV	1
8-C810	EC705295	Elect. ECE 220 μ F 16WV	1
8-C811	EC704992	Elect. ECE 47 μ F 50WV	1
Resistor, Insulator Type			
8-R801	ER705227	Carbon RD1/4W 100(J)	1
8-R802	ER345677	Carbon RD1/4 15k(J)	1
8-R803	ER368223	Carbon RD1/4 270k(J)	1
8-R804	ER705238	Carbon RD1/2W 120(J)	1
8-R805, 6	ER705240	Cement 5W 270	2

SWITCH P.C. BOARD (7036-2) BLOCK

Symbol No.	Parts No.	Description	Q'ty
9-1x	BA707084	Switch P.C. Board Comp. (7036-2)	1
9-S4 to 8	ES704755	Push Switch 5FS-10U-79	1
9-2	ZW704193	Pin F3 Type	20
9-3x	BZ704766	Push Switch Shield Plate	1
Capacitor, Vertical Type			
9-C701	EC705161	Mylar ECQ 0.056 μ	2
9-C702	EC704777	Mica Z-17 560PK	2
9-C703	EC705161	Mylar ECQ 0.056 μ	2
9-C704	EC705172	Mylar ECQ 0.0033 μ	2
9-C751	EC704711	Mica Z-18 220PK	2
Resistor, Insulator Type			
9-R701	ER324720	Carbon RD1/4 5.6k(J)	2
9-R702	ER704608	Carbon RD1/4 820k(J)	2
9-R703	ER315213	Carbon RD1/4 8.2k(J)	2
9-R704	ER464297	Carbon RD1/4 330k(J)	2

FIG. 10 (A,B,C) PHOTO OF ASSEMBLY BLOCK





ASSEMBLY BLOCK

Ref. No.	Parts No.	Description	Schematic No.	Q'ty	Ref. No.	Parts No.	Description	Schematic No.	Q'ty
FRONT CHASSIS BLOCK									
10-1	AA705508	Front Chassis AA-8080	03028004	1	10-29	ZW705780	Tapping Screw #2 3x6(pan)	40130061	11
10-2	EV705510	Volume GJ10A100KMN	VR552	1	10-30x	ZW417352	Screw, pan head 3x6		2
10-3	AA705521	Dial Shaft, w/wheel	23024001	1	10-31	ZW424620	Screw, pan head 3x10		4
10-4x	EM705532	Meter (signal)	M1	1	10-32x	ZW705802	Washer A	42100004	2
10-5	EM705543	Meter (tuning)	M2	1	10-33x	ZW705813	Washer B	42100005	1
10-6	EJ705554	2P HeadPhone Jack SG7615-18	J2-4	1	10-34	AA705824	Meter Filter	84086003	2
10-7	EJ705565	3P HeadPhone Jack SG7702-02	J1	2	10-35x	AA705835	Meter Filter B	73110001	2
10-8x	AA705576	Glass Mt. Rubber	74058001	2	10-36x	AA705846	Meter Cushion Sponge	74067001	2
10-9x	AA705587	Glass Mt. Metal	63157002	2	10-37	AA705857	Fuse Holder S-NO105	34005001	2
10-10x	AA705598	Dial Filter	84093001	1	10-38x	AA702786	Fuse Holder (L)	34005002	2
10-11	AA705600	Indicator	25019001	1	10-39x	EL705868	Lamp (bar type) 8V 0.25A	37008006	2
10-12x	AA705611	Indicator Mylar Plate			10-40x	AA705870	PL Brushing	74001002	1
		26x26x0.16	84087001	1	10-41	EV705881	Volume GJ20T100k Bx2	VR553	1
10-13x	AA705622	Glass Spacer B	84027001	4	10-42x	AA705892	Spacer L=8	55040001	2
10-14	ES705655	Lever Switch EVL-1891S	SW3	1	10-43	ZW704193	Pin F3 Type	19004001	14
10-15	ES705666	Lever Switch EVL-1892S	SW2	1	10-44x	ZW706577	Washer (ZMC3) 3S	42120321	4
10-16x	AA705677	Spacer L=4	55048001	4	10-45x	ZW705903	Insulator Washer 15x9x0.25S	75029001	1
10-17x	ZW705688	Half Screw E	24003001	3	10-46x	AA705936	Dial Scale Plate	20045001	1
10-18	AA705690	Pulley	84085001	1	10-47x	AA705947	Dial Scale Plate (J)	20049001	1
10-19	AA705701	Resin Pulley (white)	84010001	2	10-48x	AA702832	Dial Scale Plate (L)	20056001	1
10-20	AA705712	Meter Mt. Metal	63184002	1	REAR CHASSIS BLOCK				
10-21x	EL705723	Lamp (bar type) 8V 0.25A	37008019	4	10-49	AA704834	Rear Chassis	11054001	1
10-22x	EL705734	Lamp (bar type) 8V 0.1A	37008016	5	10-50	AA704845	Bar Antenna L-451	35400262	1
10-23	EL705745	Lamp (S) 8V 0.1A	37008017	1	10-51	AA704856	Bar Antenna Mt. Metal	63186003	1
10-24x	AA705756	Insulator Fiber #9015	75022001	1	10-52	AA704867	4P Screw Terminal	53041600	2
10-25	ES705767	Push Switch UEH120A	S4-6	1	10-53	EJ379023	8P Pin-jack S-Q 3654	31-1-70	1
10-26x	AA705778	Spacer L=15	55045001	2	10-54	EJ298607	4P Jack	31-1-10	1
10-27x	EC705161	Mylar ECQ 0.056μ	R552	1	10-55	EJ299316	5P Din-jack	31-1-24	1
10-28x	ER345756	Carbon RD1/4 68k(J)			10-56	AA704878	2P Head Phone Jack S-G7615-01	33020600	2
		(Insu. type)	R551	1	10-57	EJ704880	Power Socket XS-057-1-2	34040001	2

When ordering parts, please describe Parts Number, Serial Number, and Model Number in detail.

Ref. No.	Parts No.	Description	Schematic No.	Q'ty	Ref. No.	Parts No.	Description	Schematic No.	Q'ty
10-58	EZ704891	Earth Terminal X-PO701	53012300	1	10-119	ZW706667	Screw, pan head 3x5	40330051	16
10-59	AA704902	Socket. Transistor S-A3915	34011002	4	10-120	ZW516611	Nut, M3		5
10-60	ET705330	Transistor 2SC1030B (Power)	TR654	4	10-121	ZW413188	Nut, M4		4
10-61x	ED705341	Thermister SDT-04	TH601	2	10-122	ZW706678	Washer (ZMC) 4S	42120421	4
10-62	AA704913	Thermister Mt. Metal	63162001	2	10-123x	ZG706680	Spring Washer (ZMC3) 4S	42250441	4
10-63	BT704935	Balum Trans. AT0867 RDQB-402-33	LI52	1	10-124	EC706342	Mica/C. Z-17 360P	C451	1
10-64	ZW704193	Pin F3 Type	19004001	2	10-125x	ZW705363	Earth Lug M3	51036001	1
10-65	EJ705352	Lug Plate 2P1L	51031001	3	10-126x	ZW705374	Toothed Lock Washer (outside)	42380331	2
10-66x	ZW706555	Washer 3x10	42100008	1	10-127x	ZW706691	Earth Lug M4	51030001	1
10-67x	ZW705363	Earth Lug M3	51036001	1	10-128x	ZW706702	Toothed Lock Washer M4	42380431	1
10-68x	ZW705374	Toothed Lock Washer (outside)	42380331	1	10-129	ER706713	Cement/R. 5W 750	R852	1
10-69	EI704946	CR Compound Parts CU120033	43000013	1	10-130	ER364948	Carbon/R. RD1/4 3.3k (J) (Insu. type)	R351	1
10-70	ER364983	Carbon/R. RD1/4 18k (J) (Insu. type)	R551	4	10-131x	EC706320	Mylar/C. ECQ 0.0022μ	C551	1
10-71	ER345756	Carbon/R. RD1/4 68k (J) (Insu. type)	R552	4	10-132x	ZG706724	Spring B	19029001	1
10-72	AA705385	Cord Stopper CU120033	74035001	1	10-133	AA706735	Dial Drum	21007001	1
10-73x	AA705396	Blind Rivet AC4-4A	18004001	4	10-134x	ER496181	Carbon/R. RD1/4 270 (J) (Insu. type)	R151	1
10-74	EZ374894	U/L AC Cord 3M	26-3-19	1	10-135	EJ706746	Lug Plate 1L1P	51027001	1
10-75	AA706566	Transistor Panching Cover	06004002	1	10-136	ZW706757	Spring (S)	19017001	1
10-76x	ZW705420	Tapping Screw #2 3x8 (binding)	40630081	19	10-137x	ZW706768	Washer	75013001	1
10-77x	ZW705431	Tapping Screw #2 3x8 (pan)	40130081	10	10-138	EC706353	Mica/C. Z-18 1000P	C151	1
10-78	ZW393726	Screw, truss head 3x10		2	10-139x	EC706375	Ceramic/C. FC50 6P	C451	1
10-79x	ZW706577	Washer (ZMC3) 3S	42120321	4	10-140x	EC706386	Ceramic/C. FC50 12P	C452	1
10-80	ZW413785	Screw, binding head 3x12		8	10-141x	EC704621	Mica/C. Z-18 680PK	C453	2
10-81	ZW705442	Screw, pan head 4x22	40340221	1	10-142	ES706083	Rotary Switch F-5135	S1	1
10-82x	ZW413188	Nut, M4		1	10-143	ES706094	Rotary Switch F-144	S7	1
10-83x	ZW516611	Nut, M3		1	10-144x	ER706105	Solid/R. RC1/2W 270 (J)	R651	2
10-84x	ER705453	Solid/R. RC1/2 2.2M (J)	R851	1	10-145	AF706950	Front End Comp.		1
10-85x	ZW705464	Tapping Screw #3 3x10 (binding)	40000024	1	10-146x	AF706961	Front End Comp. (J)		1
10-86	ER706476	Metal Oxide Film/R. RN1/2W 8.2	R825	1	10-147x	AA708478	Bar Antenna L-451-L	35400262	1
10-87	EZ382263	Strain Relief SR-4K-4	2-7-12	1					
10-88x	EZ2246936	Strain Relief SR-6W-1 (3 core)	2-7-8	1					
10-89x	EZ315448	Australia Cord (3 core)	26-3-11	1					
10-90	AA706364	Volt Selector S-17205-2	34004001	1					
10-91x	ZW706770	Screw, binding head 3x10	40430105	2					
10-92x	EF444183	Fuse 1.5A 250V	39-1-41	1					
10-93x	EF323616	Fuse ST-2 3A (US, J)	39-1-26	1					
MAIN CHASSIS BLOCK									
10-94	AA705958	Main Chassis	01039001	1					
10-95x	AA702911	Main Chassis (L)	01046001	1					
10-96	AA705960	Pulley Mt. Metal C	63115001	1					
10-97	AA705971	Pulley Mt. Metal G	63187002	1					
10-93	AA705982	Wire Fitting Metal	63075001	7					
10-99	BT705993	Power Trans.	35900078	1					
10-100	EC706004	Elect./C. ECE 220μF 35WV (Block type)	64244338	2					
10-101	EV706533	Semi-fixed Volume 5 kB	28100032	1					
10-102	AA706015	Bonnet Supporting Metal	63185001	1					
10-103	ZW705688	Half Screw E	24003001	2					
10-104	AA705690	Pulley (black)	84085001	2					
10-105x	AA706544	Spacer	55023001	8					
10-106x	AA706026	Spacer L=10	55007001	8					
10-107	AA706037	P.T. Shield Plate	09012002	1					
10-108	AA706048	Snap Bushing SB500-6	74037001	2					
10-109	AA706050	Snap Bushing SB375-4	74036001	2					
10-110	EJ705352	Lug Plate 2P1L	51031001	1					
10-111	EO706061	Choke Coil SPO426L 100K	L151	1					
10-112	ER706072	Cement/R. 10W 2	R652	2					
10-113	EC704136	Ceramic/C. MC-100 0.04Z	C151	3					
10-114	ZW705431	Tapping Screw #2 3x8 (pan)	40130081	22					
10-115	ZW706634	Tapping Screw #3 3x12 (pan)	40000020	2					
10-116	ZW705791	Screw, pan head 3x6	40000019	4					
10-117	ZW706645	Tapping Screw #2 3x15 (pan)	40130151	2					
10-118	ZW706656	Tapping Screw #3 3x18 (pan)	40000022	2					

When ordering parts, please describe Parts Number, Serial Number, and Model Number in detail.

FIG. 11 PHOTO OF CASE BLOCK



CASE BLOCK

Ref. No.	Parts No.	Description	Schematic No.	Qty
11-1	SP706263	Front Panel	10082002	1
11-2x	SP702933	Front Panel (L)	10089001	1
11-3	AA706274	Knob D28, without plot	29090002	1
11-4	AA706285	Knob D28, w/plot	29091002	1
11-5	AA706296	Knob D21	29089002	5
11-6	AA706781	Lever Switch Knob	29088001	2
11-7	AA706792	Power Switch Knob	29092001	6
11-8x	AA706307	Bottom Plate	05029002	1
11-9	AA706825	Bonnet	70012001	1
11-10	AA706836	Side Plate (R)	04010001	1
11-11	AA706847	Side Plate (L)	04009001	1
11-12	ZW706858	Spot Facing Washer B	84092001	4
11-13x	AA706318	Resin Foot, w/#4 biss	84091001	4
11-14x	ZW705420	Tapping Screw #2 3x8		
		(binding)	40630081	3
11-15	ZW413245	Screw, pan head 4x15		12
11-16x	AA706893	Panel Mt. Metal	63211001	1
11-17x	AA706241	Panel Fiber	84111002	2
11-18x	ZW706678	Washer (ZMC) 4S	42120421	4
11-19x	AA706252	Panel Protector Plate	74031001	1
11-20x	AA707681	Lever Knob D21 (L)	29118001	1
11-21x	EF323616	Fuse ST-2 3A	39-1-26	1
11-22x	EF444183	Fuse 1.5A 250V	39-1-41	1
11-23x	AA706217	Di-pole Antenna	62120001	1
11-24x	AA706915	Di-pole Antenna	62120002	1

SECTION 3

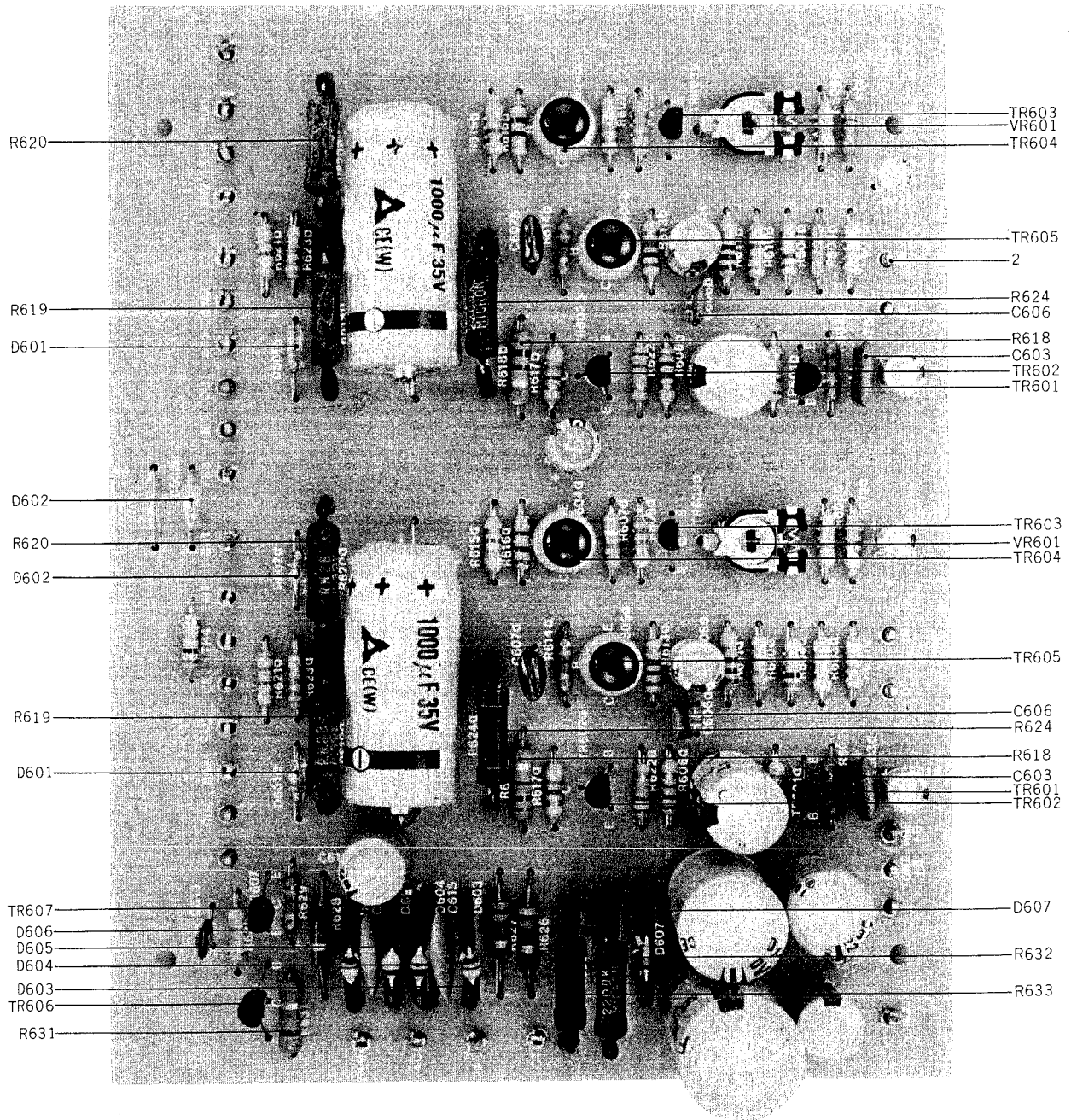
PARTS LIST

MODEL AA-8030, 8030L

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FIG. 12 PHOTO OF MAIN AMP. P.C. BOARD (6023)



MAIN AMP. P.C. BOARD (6023) BLOCK

Symbol No.	Parts No.	Description	Q'ty
12-1x	BA708085	Main Amp. P.C. Board Comp. (6023)	1
12-TR601	ET705003	Transistor 2SA666A-S	2
12-TR602	ET703168	Transistor 2SC1318 (Q)	2
12-TR603	ET495483	Transistor 2SC945 (P)	2
12-TR604	ET703170	Transistor TSC-8002-3BC	2
12-TR605	ET703181	Transistor TSC-9002-3BC	2
12-TR606, 7	ET703168	Transistor 2SC1318 (Q)	2
12-D601, 2	ED705047	Germanium Diode 1S188AM	4
12-D603 to 6	ED421795	Silicon Diode VO3C	4
12-D607	ED705216	Zener Diode BZ-120	1
12-VR601	EV703192	Semi-fixed Volume EVL-S3AB13 1k B	2
12-2	ZW704193	Pin F3 Type	33
Capacitor, Vertical Type			
12-C601	EC703203	Elect. ECE 3.3 μ F 50WV	2
12-C602	EC704338	Elect. ECE 1 μ F 50WV	2
12-C603	EC704711	Mica Z-18 220PK	2
12-C604	EC321221	Elect. 100 μ F 50WV	2
12-C605	EC704351	Elect. ECE 10 μ F 50WV	2
12-C606	EC704654	Mica Z-12 33PK	2
12-C607	EC703236	Mylar ECQ 0.047 μ F	2
12-C608	EC401185	Elect. 1000 μ F 35WV (Tubular type)	2
12-C609	EC705284	Elect. ECE 220 μ F 50WV	1
12-C610	EC372148	Elect. 220 μ F 35WV	1
12-C611	EC455354	Elect. 100 μ F 35WV	1
12-C612	EC705295	Elect. ECE 220 μ F 16WV	1
12-C613	EC703247	Mylar ECQ 0.0039 μ F	1
12-C614	EC703225	Elect. ECE 10 μ F 63WV	1
12-C615, 6	EC703214	Ceramic 0.01 μ F	2
12-C617	EC432652	Elect. 1000 μ F 35WV	1
Resistor, Insulator Type			
12-R601	ER364948	Carbon RD1/4 3.3k (J)	2
12-R602	ER458076	Carbon RD1/4 75k (J)	2
12-R603	ER365005	Carbon RD1/4 82k (J)	2
12-R604	ER345677	Carbon RD1/4 15k (J)	2
12-R605	ER364961	Carbon RD1/4 1.2k (J)	2
12-R606	ER430165	Carbon RD1/4 150 (J)	2
12-R607	ER430211	Carbon RD1/4 3.9k (J)	2
12-R608	ER329308	Carbon RD1/4 47k (J)	2
12-R609	ER329264	Carbon RD1/4 2.2k (J)	2
12-R610	ER406034	Carbon RD1/4 220(J)	2
12-R611	ER324808	Carbon RD1/4 100 (J)	2
12-R612	ER430301	Carbon RD1/4 820 (J)	2
12-R613	ER324808	Carbon RD1/4 100 (J)	2
12-R614	ER364950	Carbon RD1/4 330 (J)	2
12-R615	ER214402	Carbon RD1/4 470 (J)	2
12-R616	ER430154	Carbon RD1/4 15 (J)	2
12-R617	ER214402	Carbon RD1/4 470 (J)	2
12-R618	ER703258	Carbon RD1/2 10 (Incombustible)	2
12-R619	ER703271	Metal Oxide Film 2W 0.3 (P type)	2
12-R620	ER703271	Metal Oxide Film 2W 0.3 (P type)	2
12-R621	ER406034	Carbon RD1/4 220 (J)	2
12-R622	ER345756	Carbon RD1/4 68k (J)	2
12-R623	ER329264	Carbon RD1/4 2.2k (J)	2
12-R624	ER703282	Metal Oxide Film 2W 220 (P type)	2
12-R626	ER703304	Solid RC1/2 4.7k (J)	1
12-R627	ER703315	Solid RC1/2 3.3k (J)	1
12-R628	ER703326	Solid RC1/2 5.6k (J)	1
12-R629	ER364950	Carbon RD1/4 330 (J)	1
12-R630	ER329308	Carbon RD1/4 47k (J)	1
12-R631	ER703260	Carbon RD1/2 100 (Incombustible)	1
12-R632	ER703282	Metal Oxide Film 2W 220 (P type)	1
12-R633	ER703293	Metal Oxide Film 2W 620 (P type)	1
12-R634	ER324641	Carbon RD1/4 1k (J)	1

When ordering parts, please describe Parts Number, Serial Number, and Model Number in detail.

FIG. 13 PHOTO OF EQUALIZER
AMP. P.C. BOARD (5015)

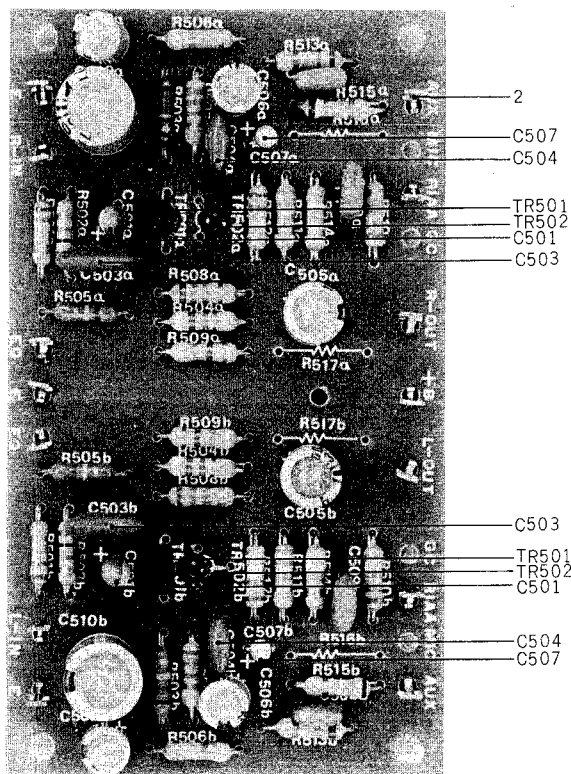
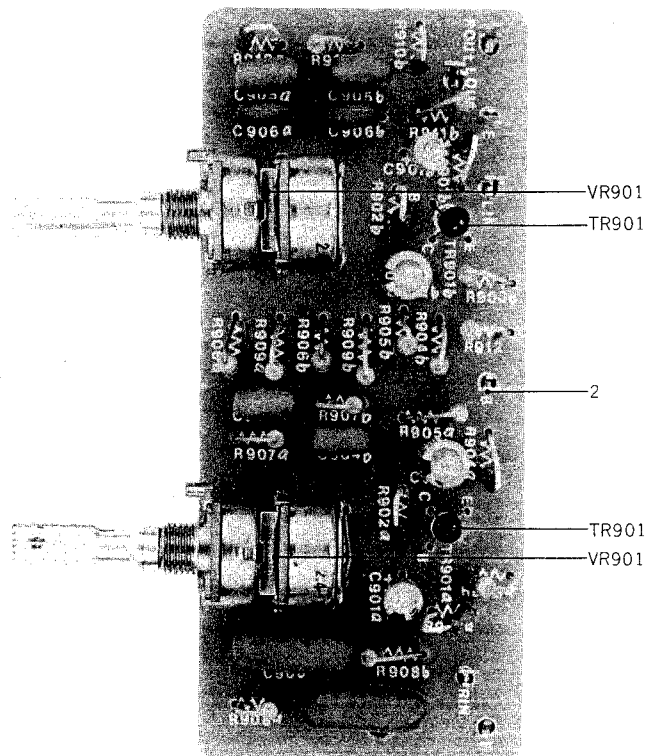


FIG. 14 PHOTO OF TONE CONTROL
AMP. P.C. BOARD (9020)



**EQUALIZER AMP.
P.C. BOARD (5015) BLOCK**

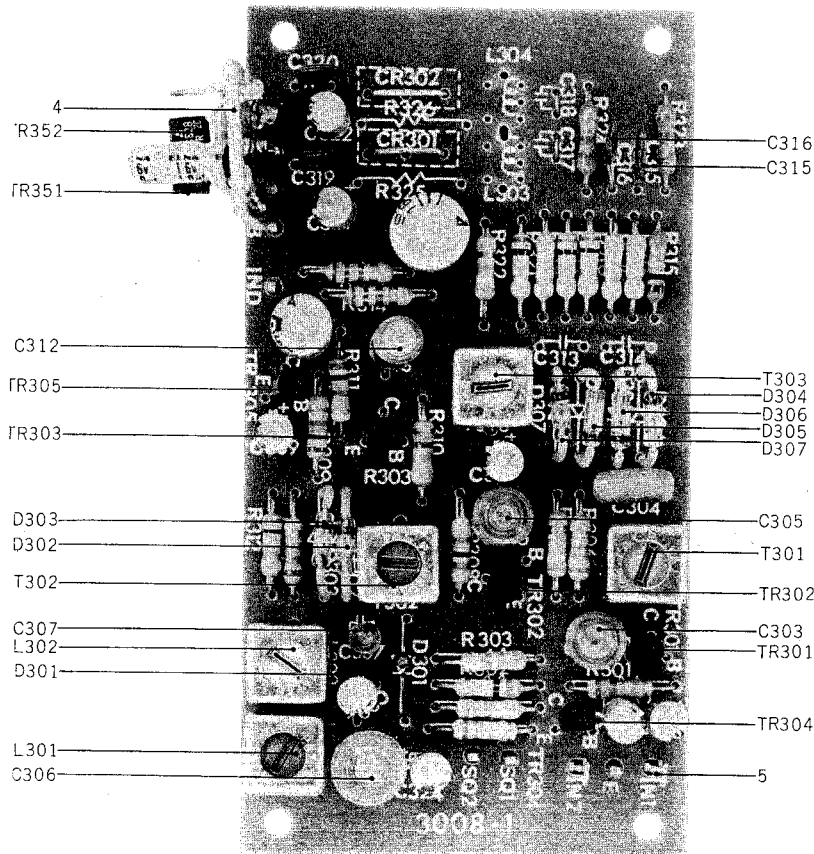
Symbol No.	Parts No.	Description	Q'ty
13-1x	BA708074	Equalizer Amp. P.C. Board Comp. (5015)	1
13-TR501	ET399857	Transistor 2SC871 (E)	2
13-TR502	ET703135	Transistor 2SC693 (F)	2
13-2	ZW704193	Pin F3 Type	14
Capacitor, Vertical Type			
13-C501	EC704957	Tantalum CS15 3.3 μ F 25WV	2
13-C502	EC704970	Elect. ECE 10 μ F 25WV	2
13-C503	EC703146	Mica Z-18 220PK	2
13-C504	EC704610	Mica Z-17 47PK	2
13-C505	EC704981	Elect. ECE 100 μ F 6.3WV	2
13-C506	EC704970	Elect. ECE 10 μ F 25WV	2
13-C507	EC704968	Tantalum CS15 0.47 μ F 35WV	2
13-C508	EC704632	Mylar ECQ 0.0056 μ FKZ	2
13-C509	EC704744	Mylar ECQ 0.0018 μ KZ	2
13-C510	EC704992	Elect. ECE 47 μ F 50WV	2
Resistor, Insulator Type			
13-R501	ER345767	Carbon RD1/4 68k (J)	2
13-R502	ER324641	Carbon RD1/4 1k (J)	2
13-R503	ER213794	Carbon RD1/4 120k (J)	2
13-R504	ER704597	Carbon RD1/4 910 (J)	2
13-R505	ER368223	Carbon RD1/4 270k (J)	2
13-R506	ER443790	Carbon RD1/4 470k (J)	2
13-R507	ER315213	Carbon RD1/4 8.2k (J)	2
13-R508	ER364961	Carbon RD1/4 1.2k (J)	2
13-R509	ER214402	Carbon RD1/4 470 (J)	2
13-R510	ER329387	Carbon RD1/4 1.8k (J)	2
13-R511	ER329264	Carbon RD1/4 2.2k (J)	2
13-R512	ER213794	Carbon RD1/4 120k (J)	2
13-R513	ER704608	Carbon RD1/4 820k (J)	2
13-R514	ER364994	Carbon RD1/4 39k (J)	2
13-R515	ER364983	Carbon RD1/4 18k (J)	2

**TONE CONTROL AMP.
P.C. BOARD (9020) BLOCK**

Symbol No.	Parts No.	Description	Q'ty
14-1x	BA708006	Tone Control Amp. P.C. Board Comp. (9020)	1
14-TR901	ET315472	Transistor 2SC693U (F)	2
14-VR901	EV703416	Volume GJ20T 100k Bx2	2
14-2	ZW704193	Pin F3 Type	7
Capacitor, Vertical Type			
14-C901	EC704542	Elect. ECE 4.7 μ F 25WV	2
14-C902	EC704970	Elect. ECE 10 μ F 25WV	2
14-C903	EC368370	Mylar 0.15 μ F (J) 50WV	2
14-C904	EC250841	Mylar 0.01 μ F (J) 50WV	2
14-C905	EC368335	Mylar 0.022 μ F (J) 50WV	2
14-C906	EC379157	Mylar 0.033 μ F (J) 50WV	2
Resistor, Stopper Type			
14-R901	ER343078	Carbon RD1/4 2.7k (J)	2
14-R902	ER430086	Carbon RD1/4 560k (J)	2
14-R903	ER347038	Carbon RD1/4 270 (J)	2
14-R904	ER306360	Carbon RD1/4 6.8k (J)	2
14-R905	ER361642	Carbon RD1/4 47 (J)	2
14-R906	ER352045	Carbon RD1/4 3.9k (J)	2
14-R907	ER357570	Carbon RD1/4 150k (J)	2
14-R908	ER211320	Carbon RD1/4 1.5k (J)	2
14-R909	ER306360	Carbon RD1/4 6.8k (J)	2
14-R910	ER306887	Carbon RD1/4 15k (J)	2
14-R911	ER349942	Carbon RD1/4 8.2k (J)	2
14-R912	ER306887	Carbon RD1/4 15k (J)	1

When ordering parts, please describe Parts Number, Serial Number, and Model Number in detail.

FIG. 15 PHOTO OF FM MPX. P.C. BOARD (3008)

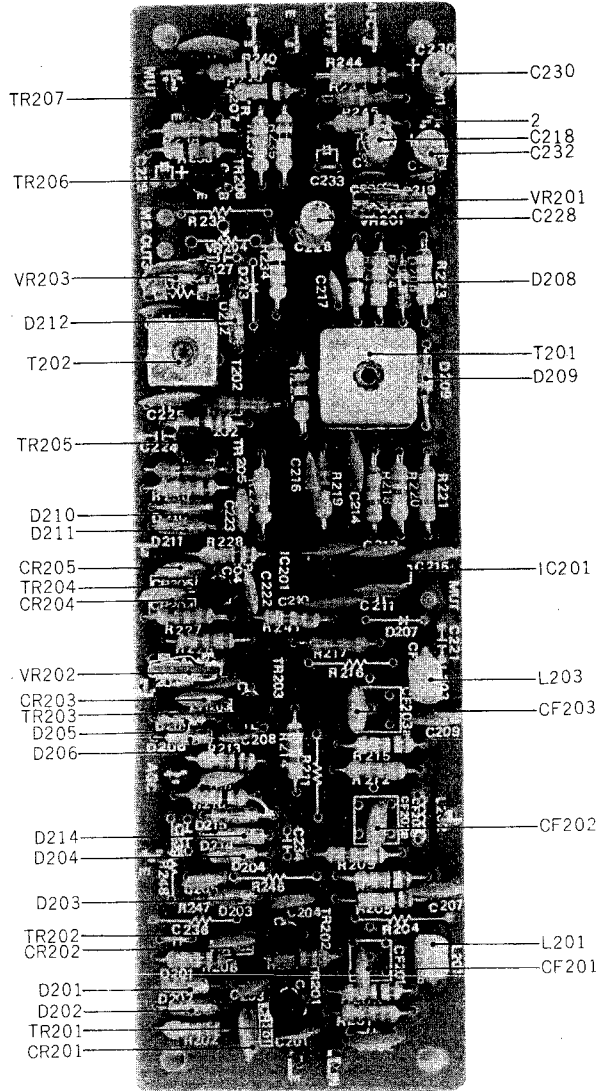


FM MPX. P.C. BOARD (3008) BLOCK

Symbol No.	Parts No.	Description	Q'ty	Symbol No.	Parts No.	Description	Q'ty
15-1x	BA707962	FM MPX. P.C. Board Comp. (3008)	1	15-C319	EC703078	Mica Z-18 560PJ (L)	1
15-2x	BA707973	FM MPX. P.C. Board Comp. (3008) (J)	1	15-C320	EC350875	Mylar 0.001μF(J) 50WV	1
15-3x	BA707984	FM MPX. P.C. Board Comp. (3008) (L)	1	15-C320	EC703078	Mica Z-18 560PJ (L)	1
15-TR301,2,3	ET402794	Transistor 2SC828(Q)	3	15-C321, 22	EC704338	Elect. ECE 1μF 50WV	2
15-TR304	ET234933	Transistor 2SC828(R)	1	15-C323	EC704338	Elect. ECE 1μF 50WV	1
15-TR305	ET703056	Transistor 2SC828(A)	1	15-C324	EC704340	Elect. ECE 10μF 16WV	1
15-TR351, 2	ET234933	Transistor 2SC828(R)	2	15-C351	EC704430	Elect. 10μF 16WV	1
15-D301	ED704237	Silicon Diode 1S1212	1				
15-D302 to 7	ED704035	Germanium Diode 1N34A-YL	6				
15-T301	EO704248	Coil (MPX) 311A	1	15-R301	ER213794	Carbon RD1/4 120k(J)	1
15-T302	EO704250	Coil (MPX) 309B	1	15-R302	ER213715	Carbon RD1/4 100k(J)	1
15-T303	EO704261	Coil (MPX) 305D	1	15-R303	ER334923	Carbon RD1/4 2.7k(J)	1
15-L301	EO704272	Coil (MPX) 312E	1	15-R304	ER315213	Carbon RD1/4 8.2k(J)	1
15-L302	EO704283	Coil (MPX) 313E	1	15-R305	ER348480	Carbon RD1/4 12k(J)	1
15-4	EA704428	Mute P.C. Board (7043)	1	15-R306	ER315213	Carbon RD1/4 8.2k(J)	1
15-5	ZW704193	Pin F3 Type	11	15-R307	ER364994	Carbon RD1/4 39k(J)	1
15-CR301, 2	EI704406	CR Compound Parts FIM-38	2	15-R308	ER450358	Carbon RD1/4 47(J)	1
		Capacitor, Vertical Type		15-R308	ER430165	Carbon RD1/4 150(J) (J)	1
15-C301, 2	EC704340	Elect. ECE 10μF 16WV	2	15-R309	ER324641	Carbon RD1/4 1k(J)	1
15-C303	EC704294	Styrol ECQ 4700PF(J)	1	15-R310	ER364950	Carbon RD1/4 330(J)	1
15-C304	EC379157	Mylar 0.033μF(J) 50WV	1	15-R311	ER364972	Carbon RD1/4 1.5k(J)	1
15-C305	EC704294	Styrol ECQ 4700PF(J)	1	15-R312	ER213647	Carbon RD1/4 10k(J)	1
15-C306	EC704316	Styrol ECQ 10000PF(J)	1	15-R313	ER214536	Carbon RD1/4 6.8k(J)	1
15-C307	EC704327	Styrol ECQ 390PF(J)	1	15-R314	ER430165	Carbon RD1/4 150(J)	1
15-C308	EC704351	Elect. ECE 10μF 50WV	1	15-R315	ER213647	Carbon RD1/4 10k(J)	1
15-C309	EC704338	Elect. ECE 1μF 50WV	1	15-R316	ER430233	Carbon RD1/4 390k(J)	1
15-C310	EC704340	Elect. ECE 10μF 16WV	1	15-R317	ER213647	Carbon RD1/4 10k(J)	1
15-C311	EC704362	Elect. ECE 100μF 16WV	1	15-R318	ER430233	Carbon RD1/4 390k(J)	1
15-C312	EC704305	Styrol ECQ 2200PF(J)	1	15-R319	ER213647	Carbon RD1/4 10k(J)	1
15-C315, 16	EC703067	Mica Z-17 150PJ	2	15-R320	ER430233	Carbon RD1/4 390k(J)	1
15-C319	EC350875	Mylar 0.001μF(J) 50WV	1	15-R321	ER213647	Carbon RD1/4 10k(J)	1
				15-R322	ER430233	Carbon RD1/4 390k(J)	1
				15-R323, 24	ER213647	Carbon RD1/4 10k(J)	2
				15-R327	ER430165	Carbon RD1/4 150(J)	1
				15-R352	ER324720	Carbon RD1/4 5.6k(J)	1

When ordering parts, please describe Parts Number, Serial Number, and Model Number in detail.

**FIG. 16 PHOTO OF
FM IF. P.C. BOARD (2014)**



Symbol No.	Parts No.	Description	Q'ty
16-T201, 2	BT704081	FM IF. Trans. 211D	2
16-VR201	EV704103	Semi-fixed Volume EVL-S1A00 20k B	1
16-VR202	EV704114	Semi-fixed Volume EVL-S1A00 5k B	1
16-VR203	EV704103	Semi-fixed Volume EVL-S1A00 20k B	1
16-2	ZW704193	Pin F3 Type	11
Capacitor, Vertical Type			
16-C201	EC704125	Ceramic MC-70 0.01Z	1
16-C202	EC704136	Ceramic MC-100 0.04Z	1
16-C203	EC703012	Ceramic 0.01M	1
16-C204,5,6	EC704125	Ceramic MC-70 0.01Z	3
16-C207	EC704136	Ceramic MC-100 0.04Z	1
16-C208	EC703012	Ceramic 0.01M	1
16-C209 to 16	EC704136	Ceramic MC-100 0.04Z	8
16-C217	EC704158	Ceramic FC-60 50PFK	1
16-C218	EC703023	Aluminum Elect. 4.7M 25WV	1
16-C219, 20	EC704160	Ceramic FC-50 33PFK	2
16-C221	EC704171	Ceramic MC-75 0.02Z	1
16-C222, 23	EC704125	Ceramic MC-70 0.01Z	2
16-C225	EC704136	Ceramic MC-100 0.04Z	1
16-C226	EC704171	Ceramic MC-75 0.02Z	1
16-C228	EC703034	Aluminum Elect. 1M 50WV	1
16-C230	EC704182	Aluminum Elect. 1μ 50WV	1
16-C231	EC704136	Ceramic MC-100 0.04Z	1
16-C232	EC704182	Aluminum Elect. 1μ 50WV	1

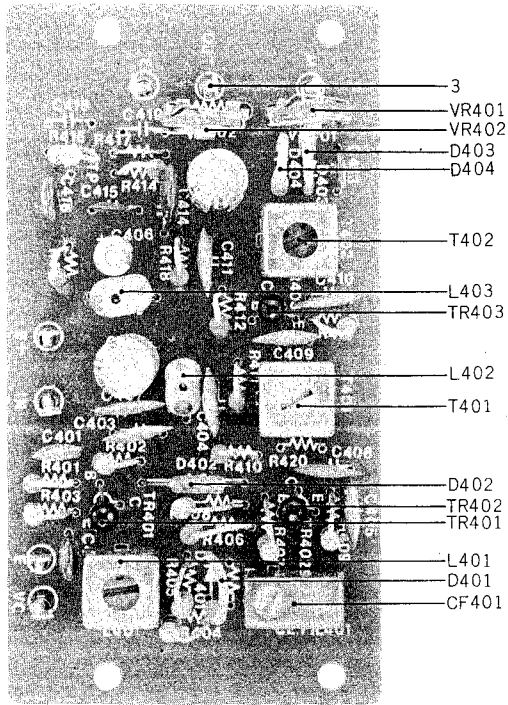
Resistor, Insulator Type			
16-R201	ER345712	Carbon RD1/4 22k(J)	1
16-R202	ER315213	Carbon RD1/4 8.2k(J)	1
16-R203	ER324641	Carbon RD1/4 1k(J)	1
16-R205	ER364972	Carbon RD1/4 1.5k(J)	1
16-R206	ER324887	Carbon RD1/4 1.6k(J)	1
16-R207	ER365016	Carbon RD1/4 220k(J)	1
16-R208	ER324641	Carbon RD1/4 1k(J)	1
16-R209	ER213794	Carbon RD1/4 120k(J)	1
16-R210	ER213715	Carbon RD1/4 100k(J)	1
16-R212	ER329264	Carbon RD1/4 2.2k(J)	1
16-R213	ER364972	Carbon RD1/4 1.5k(J)	1
16-R214	ER213794	Carbon RD1/4 120k(J)	1
16-R215	ER324641	Carbon RD1/4 1k(J)	1
16-R217	ER364950	Carbon RD1/4 330(J)	1
16-R218	ER430143	Carbon RD1/4 120(J)	1
16-R219, 20	ER703045	Carbon RD1/4 271	2
16-R221	ER430143	Carbon RD1/4 120(J)	1
16-R222	ER356501	Carbon RD1/4 56(J)	1
16-R223, 24	ER430288	Carbon RD1/4 680(J)	2
16-R225	ER365016	Carbon RD1/4 220k(J)	1
16-R226	ER334923	Carbon RD1/4 2.7k(J)	1
16-R227	ER329264	Carbon RD1/4 2.2k(J)	1
16-R228	ER364972	Carbon RD1/4 1.5k(J)	1
16-R229	ER364994	Carbon RD1/4 39k(J)	1
16-R230	ER214536	Carbon RD1/4 6.8k(J)	1
16-R231	ER365016	Carbon RD1/4 220k(J)	1
16-R232	ER427950	Carbon RD1/4 180(J)	1
16-R234	ER324641	Carbon RD1/4 1k(J)	1
16-R235	ER213715	Carbon RD1/4 100k(J)	1
16-R236	ER430290	Carbon RD1/4 82(J)	1
16-R237, 38	ER345712	Carbon RD1/4 22k(J)	1
16-R239, 40	ER213794	Carbon RD1/4 120k(J)	2
16-R241	ER365016	Carbon RD1/4 220k(J)	1
16-R242	ER450358	Carbon RD1/4 47(J)	1
16-R243	ER365016	Carbon RD1/4 220k(J)	1
16-R244	ER345756	Carbon RD1/4 68k(J)	1
16-R245	ER324641	Carbon RD1/4 1k(J)	1

FM IF. P.C. BOARD (2014) BLOCK

Symbol No.	Parts No.	Description	Q'ty
16-1x	BA707940	FM IF. P.C. Board Comp.(2014)	1
16-IC201	EI704046	I.C. TA-7061AP	1
16-TR201	ET704002	Transistor 2SC710D	1
16-TR202	ET704013	Transistor 2SC710C	1
16-TR203, 4	ET704002	Transistor 2SC710D	2
16-TR205	ET704013	Transistor 2SC710C	1
16-TR206, 7	ET399881	Transistor 2SC711(F)	2
16-D201 to 6	ED704474	Germanium Diode 1S188 FM1	6
16-D208, 9	ED704035	Germanium Diode 1N34A-YL	2
16-D210,11,12	ED704474	Germanium Diode 1S188 FM1	3
16-D214	ED704474	Germanium Diode 1S188 FM1	1
16-CR201 to 4	EI704057	CR Compound Parts PK1008 PG1010P	4
16-CR205	EI703001	CR Compound Parts SIK-0.01	1
16-CF201, 2	ER492355	Ceramic Filter CFS-107M	2
16-CF203	ER492355	Ceramic Filter CFS-107M	1
16-L201	EO704070	Ferri Inductor EL0710 330MH	1
16-L203	EO704070	Ferri Inductor EL0710 330MH	1

When ordering parts, please describe Parts Number, Serial Number, and Model Number in detail.

**FIG. 17 PHOTO OF
AM IF. P.C. BOARD (4009)**

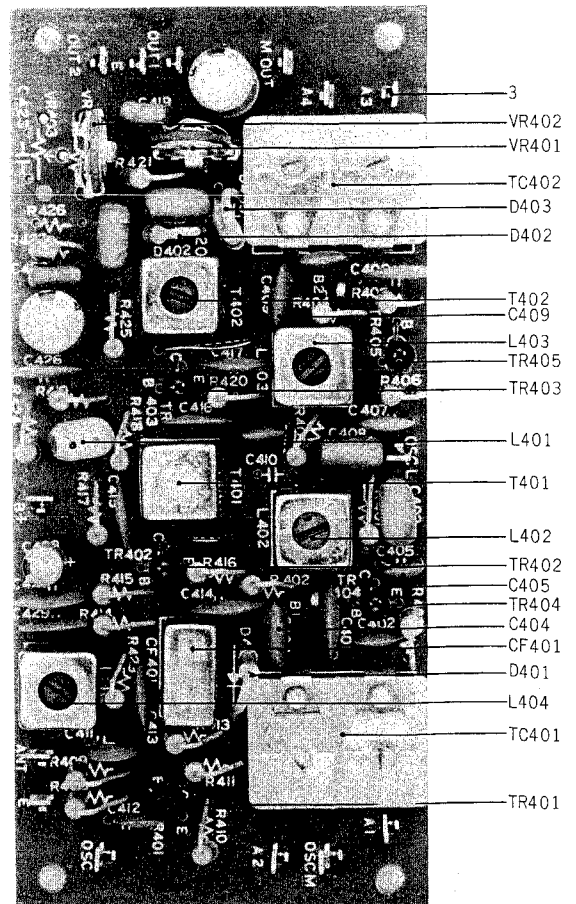


Symbol No.	Parts No.	Description	Q'ty
17-R407	ER350100	Carbon RD1/4 68k(J)	1
17-R408, 9	ER362441	Carbon RD1/4 1.8k(J)	2
17-R410	ER211465	Carbon RD1/4 1k(J)	1
17-R411	ER349942	Carbon RD1/4 8.2k(J)	1
17-R412	ER357535	Carbon RD1/4 39k(J)	1
17-R413, 14	ER304402	Carbon RD1/4 470(J)	2
17-R415	ER306887	Carbon RD1/4 15k(J)	1
17-R416	ER346601	Carbon RD1/4 47k(J)	1
17-R418	ER211465	Carbon RD1/4 1k(J)	1

AM IF. P.C. BOARD (4009) BLOCK

Symbol No.	Parts No.	Description	Q'ty
17-1x	BA708028	AM IF. P.C. Board Comp. (4009)	1
17-2x	BA708030	AM IF. P.C. Board Comp. (4009) (H)	1
17-TR401,2,3	ET704463	Transistor 2SC930D	3
17-D401 to 4	ED704474	Germanium Diode 1S188 FM1	4
17-CF401	ER704485	Ceramic Filter CFZ-455C	1
17-CF401	ER704575	Ceramic Filter CFZ-032A (H)	1
17-L401	EO704507	OSC Coil 402L	1
17-L402, 3	EO704496	Ferri Inductor LTB-100	2
17-T401	BT704518	AM IF. Trans. 403B	1
17-T402	BT704520	AM IF. Trans. 401D	1
17-VR401, 2	EV704114	Semi-fixed Volume EVL-S1A00 5k B	2
17-3	ZW704193	Pin F3 Type	7
Capacitor, Vertical Type			
17-C401	EC704125	Ceramic MC-70 0.01Z	1
17-C402	EC706410	Mylar MFL 0.01 μ F(K)	1
17-C403,4,5	EC704136	Ceramic MC-100 0.04Z	3
17-C406	EC704542	Elect. ECE 4.7 μ F 25WV	1
17-C406	EC703091	Elect. ECE 47 μ F 16WV (H)	1
17-C407 to 11	EC704136	Ceramic MC-100 0.04Z	5
17-C412	EC704553	Elect. ECE 47 μ F 16WV	1
17-C412	EC703102	Elect. ECE 47 μ F 16WV (H)	1
17-C413	EC706408	Mylar MFL 0.001 μ F(K)	1
17-C414	EC706421	Mylar MFL 0.015 μ F(K)	1
17-C415	EC706432	Mylar MFL 0.0047 μ F(K)	1
17-C416	EC706443	Mylar MFL 0.012 μ F(K)	1
17-C417	EC704553	Elect. ECE 47 μ F 16WV	1
17-C417	EC703102	Elect. ECE 47 μ F 16WV (H)	1
Resistor, Stopper Type			
17-R401	ER349942	Carbon RD1/4 8.2k(J)	1
17-R402	ER350100	Carbon RD1/4 68k(J)	1
17-R403	ER362441	Carbon RD1/4 1.8k(J)	1
17-R404	ER211667	Carbon RD1/4 100(J)	1
17-R405	ER361563	Carbon RD1/4 180(J)	1
17-R406	ER213467	Carbon RD1/4 820(J)	1

**FIG. 18 PHOTO OF
AM IF. P.C. BOARD (4013)**

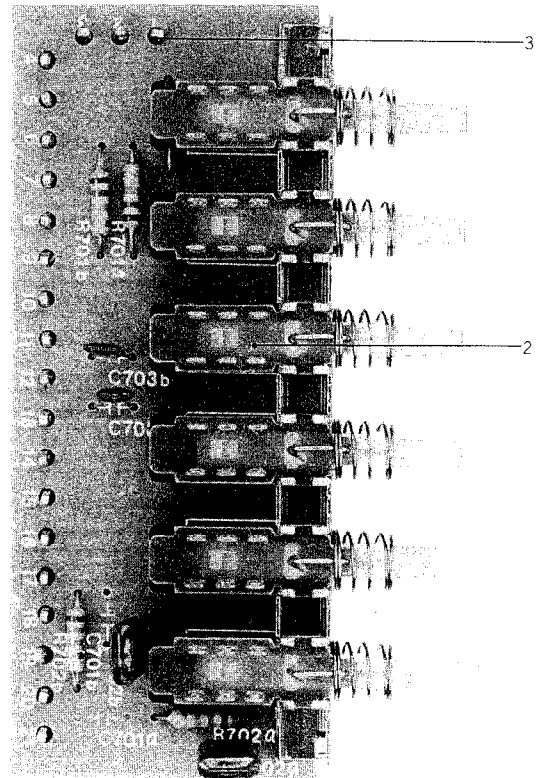


When ordering parts, please describe Parts Number, Serial Number, and Model Number in detail.

AM IF. P.C. BOARD (4013) BLOCK (L)

Symbol No.	Parts No.	Description	Q'ty
18-1x	BA708052	AM IF. P.C. Board Comp. (4013) (L)	1
18-2x	BA708063	AM IF. P.C. Board Comp. (4013) (L-H)	1
18-TR401	ET702516	Transistor 2SC1047C	1
18-TR402,3,4,5	ET704463	Transistor 2SC930D	4
18-D401,2,3	ED704474	Germanium Diode 1S138 FM1	3
18-VR401, 2	EV704564	Semi-fixed Volume EVL-S1AA00 20k B	2
18-CF401	ER704485	Ceramic Filter CFZ-455C	1
18-L401	EO704496	Ferri Inductor LTB-100	1
18-L402	EO702527	OSC Coil 405L(MW)	1
18-L403	EO702538	OSC Coil 409L(LW)	1
18-L404	EO702663	Trap Coil 401D	1
18-T401	BT702540	FM IF. Trans. 401B	1
18-T402	BT702551	FM IF. Trans. 401D	1
18-3	ZW704193	Pin F3 Type	16
Capacitor, Vertical Type			
18-C401	EC704136	Ceramic MC-100 0.04Z	1
18-C402	EC704125	Ceramic MC-70 0.01Z	1
18-C403	EC702652	Mylar ECQ-MOS 103KZ	1
18-C404	EC706342	Mica Z-17 360P	1
18-C405	EC702595	Mica Z-11 22PK	1
18-C406	EC704136	Ceramic MC-100 0.04Z	1
18-C407	EC704171	Ceramic MC-75 0.02Z	1
18-C408	EC702628	Mylar ECQ-MOS 153KZ	1
18-C409	EC702584	Mica Z-17 150PJ	1
18-C410	EC702606	Mica Z-11 47PK	1
18-C411, 12	EC704125	Ceramic MC-70 0.01Z	2
18-C413 to 17	EC704136	Ceramic MC-100 0.04Z	5
18-C418	EC702628	Mylar ECQ-MOS 153KZ	1
18-C419	EC702617	Mylar ECQ-MOS 472KZ	1
18-C420	EC702573	Ceramic SCY-85 0.001	1
18-C421	EC702628	Ceramic ECQ-MOS 153KZ	1
18-C422	EC704744	Mylar ECQ 0.0018μKZ	1
18-C424, 25	EC704553	Elect. ECE 47μF 16WV	2
18-C426, 27	EC704136	Ceramic MC-100 0.04Z	2
18-C428	EC704542	Elect. ECE 4.7μF 25WV	1
18-C429	EC704136	Ceramic MC-100 0.04Z	1
18-C430	EC702606	Mica Z-11 47PK	1
18-C432	EC702630	Mica Z-11 1PD	1
18-C451, 52	EC704136	Ceramic MC-100 0.04Z	2
18-TC401	EC702641	Trimmer AT2-5W	1
18-TC402	EC702562	Trimmer AT2-5W	1
Resistor, Stopper Type			
18-R401	ER342933	Carbon RD1/4 27k(J)	1
18-R402	ER349942	Carbon RD1/4 8.2k(J)	1
18-R403	ER304402	Carbon RD1/4 470(J)	1
18-R404	ER346601	Carbon RD1/4 47k(J)	1
18-R405	ER349942	Carbon RD1/4 8.2k(J)	1
18-R406	ER361980	Carbon RD1/4 620(J)	1
18-R407	ER433877	Carbon RD1/4 120(J)	1
18-R408	ER357491	Carbon RD1/4 82k(J)	1
18-R409	ER349942	Carbon RD1/4 8.2k(J)	1
18-R410	ER357456	Carbon RD1/4 2.2k(J)	1
18-R411	ER211667	Carbon RD1/4 100(J)	1
18-R413	ER703124	Carbon RD1/4 35k(J)	1
18-R414	ER211757	Carbon RD1/4 100k(J)	1
18-R415	ER362441	Carbon RD1/4 1.8k(J)	1
18-R416	ER211320	Carbon RD1/4 1.5k(J)	1
18-R417	ER211465	Carbon RD1/4 1k(J)	1
18-R418	ER349942	Carbon RD1/4 8.2k(J)	1
18-R419	ER703124	Carbon RD1/4 35k(J)	1
18-R420, 21	ER304402	Carbon RD1/4 470(J)	2
18-R422	ER346601	Carbon RD1/4 47k(J)	1
18-R423	ER213467	Carbon RD1/4 820(J)	1
18-R424	ER211667	Carbon RD1/4 100(J)	1
18-R425	ER306887	Carbon RD1/4 15k(J)	1

FIG. 19 PHOTO OF SWITCH P.C. BOARD (7041-2)



SWITCH P.C. BOARD (7041-2) BLOCK

Symbol No.	Parts No.	Description	Q'ty
19-1x	BA708096	Switch P.C. Board Comp.(7041-2)	1
19-2	ES703361	Push Switch 6FS-12U-56	1
19-3	ZW704193	Pin F3 Type	21
19-4x	BZ704766	Push Switch Shield Plate	1
Capacitor, Vertical Type			
19-C701	EC703383	Mica Z-17 360P	2
19-C702	EC380621	Mylar 0.0068μF(J) 50WV	2
19-C703	EC379765	Mylar 0.0027μF(J) 50WV	2
Resistor, Insulator Type			
19-R701	ER703372	Solid RC1/2 5.6k(J)	2
19-R702	ER214536	Carbon RD1/4 6.8k(J)	2
19-R703	ER450101	Carbon RD1/4 330k(J)	2
19-R704	ER464297	Carbon RD1/8 330k(J)	2

FIG. 20 (A, B) PHOTO OF ASSEMBLY BLOCK

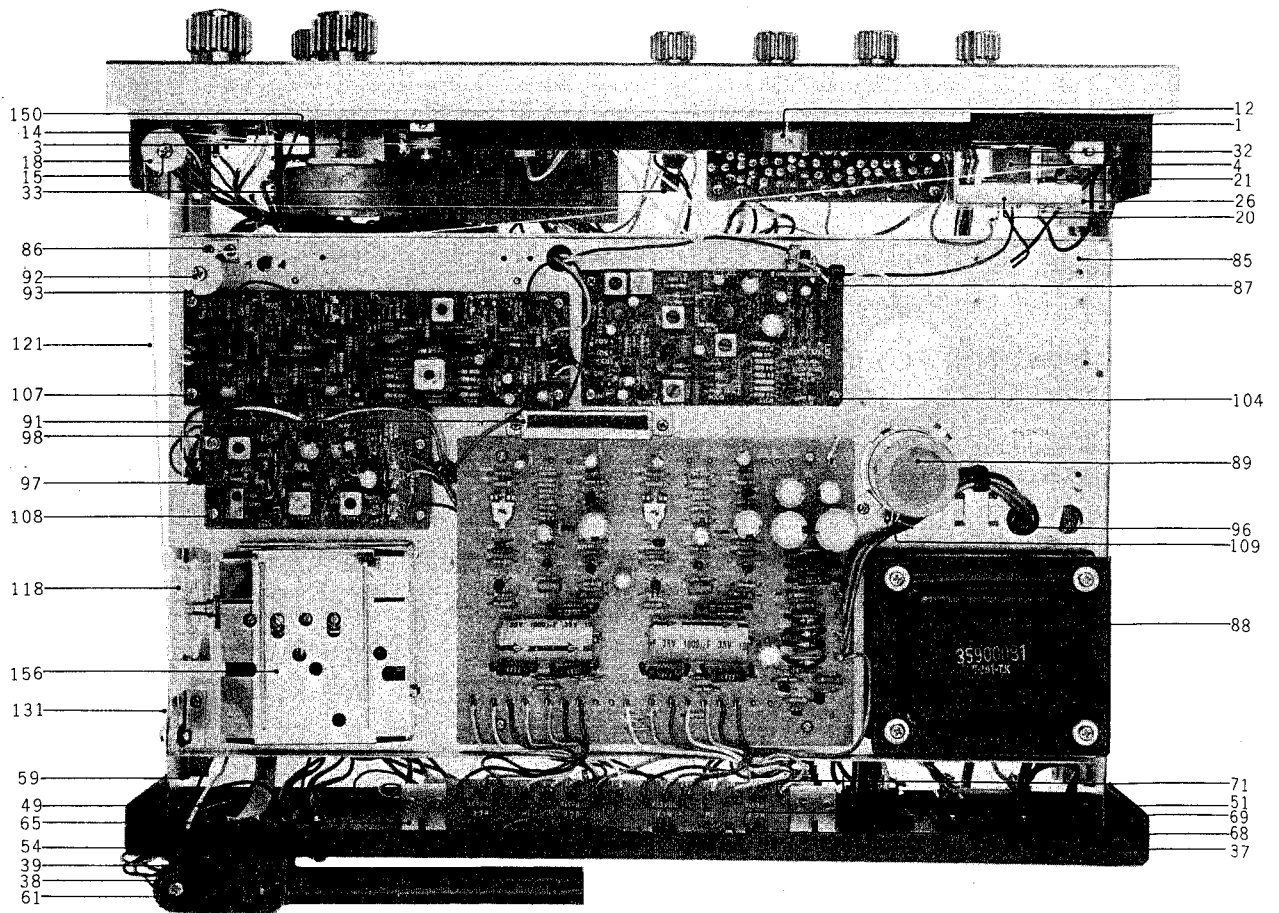
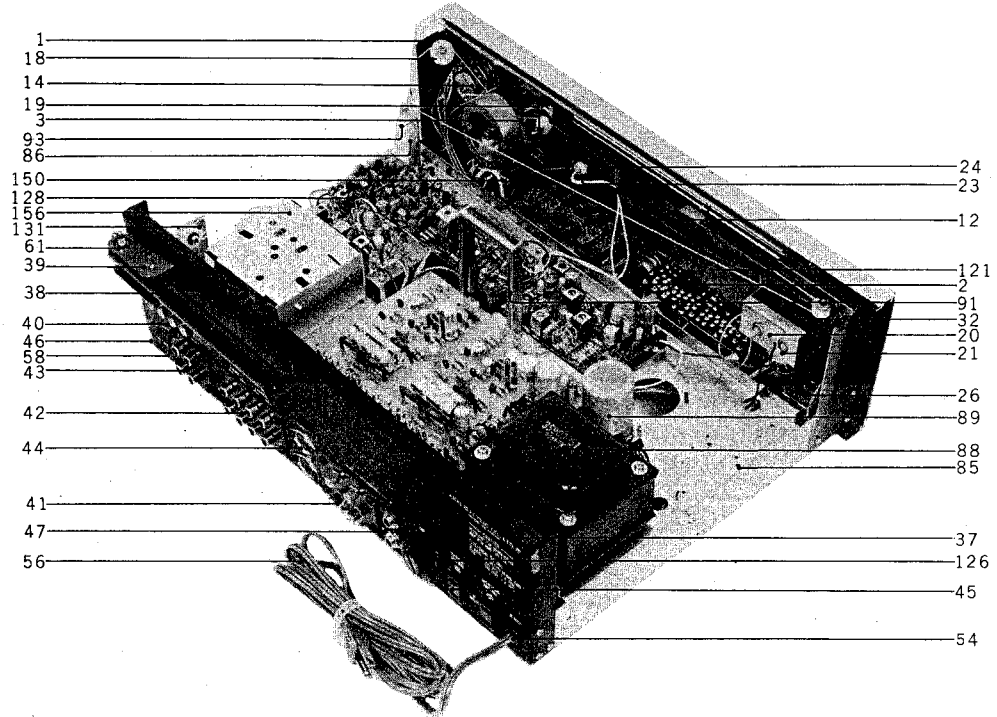
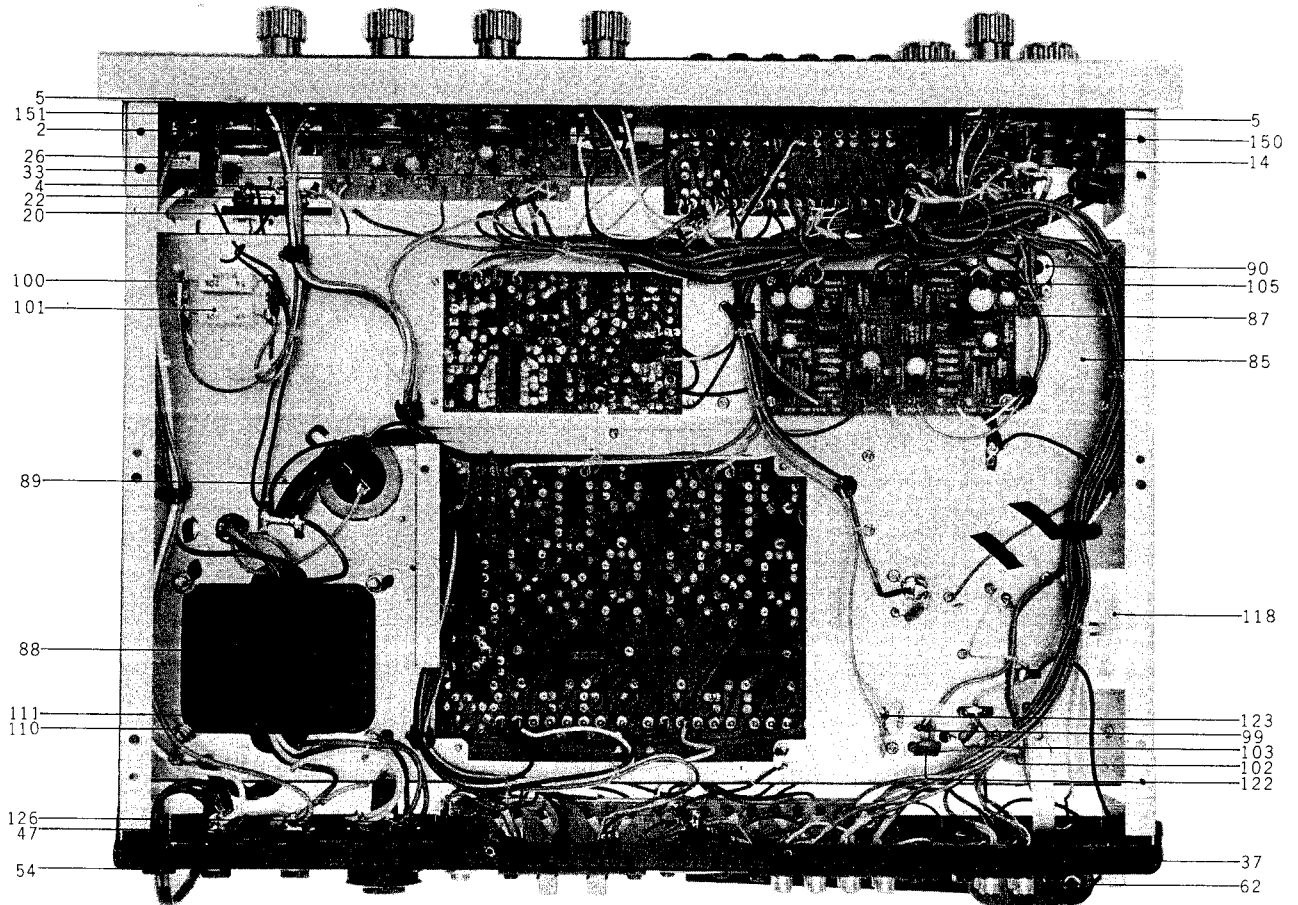


FIG. 20 (C) PHOTO OF ASSEMBLY BLOCK



ASSEMBLY BLOCK

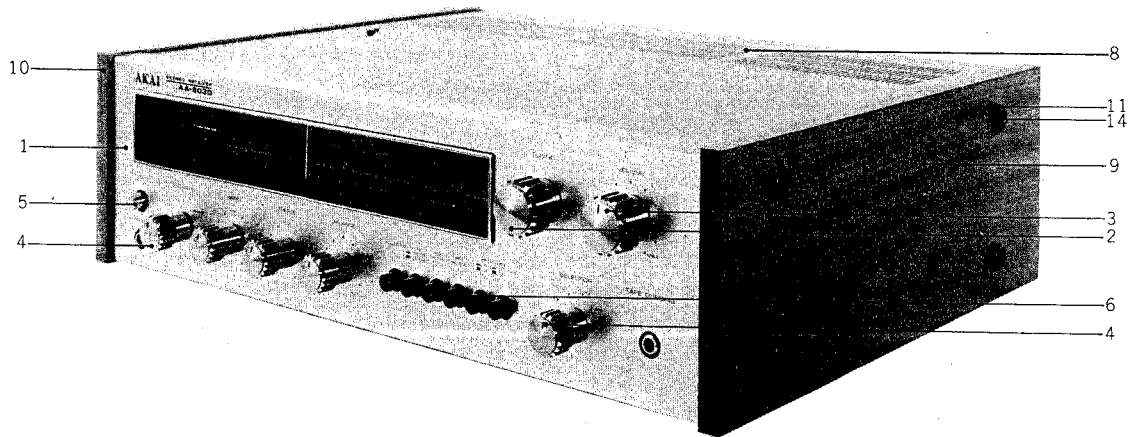
Ref. No.	Parts No.	Description	Schematic No.	Q'ty	Ref. No.	Parts No.	Description	Schematic No.	Q'ty
FRONT CHASSIS BLOCK									
20-1	AA703710	Front Chassis AA-8030	03031004	1	20-24	AA703901	Acrylic Window	71001002	1
20-2	EV705510	Volume GJ10A100KMN	28000008	1	20-25x	AA705778	Spacer L=15	55045001	2
20-3	AA705521	Dial Shaft, w/wheel	23024001	1	20-26	ES705767	Push Switch UEH120A (Power)	27200026	1
20-4	EM703721	Meter (Tuning)	60075013	1	20-27x	AA705870	PL Brushing	74001002	1
20-5	EJ705565	3P Head Phone Jack	SG7702-02	2	20-28x	ZW472274	Tapping Screw #2 3x6 (binding)		5
20-6x	AA703732	Dial Scale Plate AA-8030	20048003	1	20-29x	ZW318475	Screw, pan head 3x6		8
20-7x	AA703934	Dial Scale Plate AA-8030(J)	20053001	1	20-30x	ZW705802	Washer A	42100004	2
20-8x	AA703754	Glass Mt. Rubber	74009001	1	20-31x	ZW705813	Washer B	42100005	1
20-9x	AA703776	Glass Mt. Metal A	63196002	1	20-32	AA703890	Meter Filter	84096003	1
20-10x	AA703787	Glass Mt. Metal B	63197001	1	20-33	EC703923	Mica/C. Z-17 270PK	48271430	2
20-11x	AA703743	Dial Filter	84095001	2	20-34x	ES488226	Push Switch JH-5 (CEE)	25-5-67	1
20-12	AA703798	Indicator	25020002	1	20-35x	AA703945	Dial Scale Plate (L)	20055001	1
20-13x	AA703811	Shading Sponge A	73120002	4	20-36x	AA703956	Fuse Lamp Holder (L)	34005002	3
20-14	EV705881	Volume GJ20T 100k Bx2	28000054	1	REAR CHASSIS BLOCK				
20-15	ZW705688	Half Screw E	24003001	3	20-37	AA703427	Rear Chassis	11058001	1
20-16x	AA703765	Glass Mt. Rubber B	74070001	2	20-38	AA704845	Bar Antenna L-1578	35400262	1
20-17x	AA705892	Spacer L=8	55040001	2	20-39	AA704856	Bar Antenna Mt. Metal	63186003	1
20-18	AA705690	Pulley	84085001	1	20-40	EJ703438	4P Screw Terminal	530416004	1
20-19	AA705701	Resin Pulley	84010001	2	20-41	EJ703440	4P Screw Terminal	53041500	1
20-20	AA703855	Meter Mt. Metal	63045001	1	20-42	EJ703473	8P Pin Jack S-Q 3654	33080300	1
20-21	AA703866	Fuse Lamp Holder S-NO105	34005001	3	20-43	EJ703451	4P Pin Jack	33040500	1
20-22	EL703877	Lamp (Bar type) 8V 0.3A	37008008	3	20-44	EJ703462	5P Din Jack S-I 8123	34034001	2
20-23	EL703888	Lamp (S) 8V 0.1A	37008001	1					

When ordering parts, please describe Parts Number, Serial Number, and Model Number in detail.

Ref. No.	Parts No.	Description	Schematic No.	Q'ty	Ref. No.	Parts No.	Description	Schematic No.	Q'ty
20-45	EJ704880	AC Consent XS-057-1-2	34040001	2	20-109	ZW273756	M3 Nut		4
20-46	EZ704891	Earth Terminal X-P0701	53012300	1	20-110	ZW273960	M4 Nut		5
20-47	AA704878	2P Head Phone Jack			20-111	ZW706678	Washer (ZMC) 4S	42120421	4
		S-G7615-01	33020600	2	20-112x	ZG706680	Spring Washer (ZMC3) 4S	42250441	4
20-48x	ZW703484	Washer 3x10x0.8B	42100008	1	20-113x	ZW705363	Earth Lug M3	51036001	1
20-49	ZW705363	Earth Lug M3	51036001	1	20-114x	ZW706691	Earth Lug M4	51030001	1
20-50x	ZW705374	Toothed Lock Washer			20-115x	ZW706702	Toothed Lock Washer		
		(outside)	42380331	1			(outside)	42380431	1
20-51	E1704946	CR Compound Parts			20-116x	ER364948	Carbon/R. RD1/4 3.3k(J)		
		CU120033	43000013	1			(Insu. type)	35-9-5	1
20-52x	ER364983	Carbon/R. RD1/4 18k(J)			20-117x	EC705306	Mylar/C. ECQ 0.0012μ	45122404	1
		(Insu. type)	35-9-5	2	20-118	AA707376	Dial Drum	21009001	1
20-53x	ER345756	Carbon/R. RD1/4 68k(J)			20-119x	ZW706757	Spring (S)	19017001	1
		(Insu. type)	35-9-5	2	20-120x	EC706375	Ceramic/C. FC50 6P	47060201	1
20-54	AA705475	Cord Stopper SR-4K4	74035001	2	20-121	ZW707387	Dial String		1
20-55x	AA705396	Blind Rivet AC4-4A	18004001	4	20-122	EC707477	Mica/C. Z-18 470P	48471440	1
20-56	EZ705407	AC Cord, w/plug	62110004	1	20-123	EJ707488	Lug Plate 1L2P	51043001	1
20-57x	ER705453	Solid/R. RC1/2 2.2M(J)	77704225	1	20-124x	ER496181	Carbon/R. RD1/4 270(J)		
20-58	ZW200698	Tapping Screw #2 3x8					(Insu. type)	35-9-5	1
		(round)		18	20-125x	ER364961	Carbon/R. RD1/4 1.2k(J)		
20-59	ZW344305	Screw, pan head 3x10		4			(Insu. type)	35-9-5	1
20-60x	ZW379350	Iso Screw, pan head 3x6		4	20-126	AA706364	Volt Selector S-I7205-2	34004001	1
20-61	ZW705442	Screw, pan head 4x22	40340221	1	20-127x	EF707490	Fuse UL 2A	38300020	1
20-62	ZW273960	M4 Nut		1	20-128	EC704621	Mica/C. Z-18 680PK	48681440	2
20-63x	ZW273756	M3 Nut		3	20-129x	ZW706768	Washer	75013001	1
20-64x	ZW515586	Washer D3x8x0.5t		1	20-130x	EC707422	Ceramic/C. 18PK	47180401	1
20-65	AA703517	P.C. Board Mt. Metal	63195002	2	20-131	AA707433	Pulley Mt. Metal H	63218001	1
20-66x	AA704913	Thermister Mt. Metal	63162001	2	20-132x	ZW317970	Screw, binding head 3x10		2
20-67x	ED350482	Thermister D22A	45-5-7	2	20-133x	EF707501	Fuse UL 1A	38700010	1
20-68	ET703530	Transistor, w/parts			20-134x	BT707400	Power Trans. (CUL)	35900100	1
		2SD313(E)	30300182	4	20-135x	BT707411	Power Trans. P-1 (CEE)	35900090	1
20-69	ZW433348	Screw, binding head 2.6x10		4	20-136x	AA707444	Main Chassis (L)	01046001	1
20-70x	ZW357658	M2.6 Nut		4	20-137x	ZG707455	Spring	19034001	1
20-71	ZW704193	Pin F3 Type	19004001	15	20-138x	AA707512	Joint (L)	19036002	1
20-72x	ZW703552	Fiber Washer M3 T=1	42400009	4	20-139x	AA707466	Shaft (L)	19037001	1
20-73x	AA703563	Transistor Insulated Bush	75014001	4	20-140x	AA707523	Joint (L)	19039001	1
20-74x	EZ705497	Australia Cord (3 core, S)	62010001	1	20-141x	ES707534	Slide Switch S-JO230-08(L)	27300006	1
20-75x	EJ703585	Lug Plate 1L1P SE (CUL)	51049002	1	20-142x	ZW706634	Tapping Screw #3 3x12		
20-76x	ZW202140	Screw, binding head 3x8					(pan) (L)	40000020	2
		(CUL)	19038001	1	20-143x	ZW355511	Screw, binding head 3x6 (L)		2
20-77x	AA703631	Blind Plate (CUL)		1	20-144x	EC707545	Mylar/C. ECQ-M4104KZ(L)	45104584	1
20-78x	EF332098	Fuse ST-1 2A (CUL)	39-1-25	1	20-145x	EC703078	Mica/C. Z-18 560PJ (L)	48561340	2
20-79x	AA705486	Cord Stopper SR-5P4			20-146x	EJ707556	Lug Plate (L)	51026001	1
		(3 core, S)	74045001	1	20-147x	AA707567	Rotary Switch Mt. Metal(L)	63216002	1
20-80x	AA703653	Fuse Holder (CEE)	34043001	1	20-148x	AA707578	Slide Switch Mt. Metal (L)	63217001	1
20-81x	EZ377561	AC Cord ER-0150 (CEE)		1	20-149x	ER707580	Carbon/R. RD1/4 680k (L)	76813684	2
20-82x	ZW202127	Screw, binding head 3x6					(CEE)		2
		(CEE)		2	20-150	ES707714	Rotary Switch Y-4114	27100059	1
20-83x	EF703664	Fuse (T type) 6AT (CEE)	38410016	3	20-151	ES706094	Rotary Switch F-144	27100044	1
20-84x	AA703675	Free Map Belt (CEE)	84118001	1	20-152x	ER705093	Solid/R. RC1/2 220(J)	77704221	2
					20-153x	ES707725	Rotary Switch Y-4105 (L)	27100064	1
					20-154x	ES707736	Rotary Switch F-285 (L)	27100068	1
					20-155x	ER496181	Carbon/R. RD1/4 270(J)		
							(Insu. type) (L)	35-9-5	1
					20-156	AF707927	Front End Comp.		1
					20-157x	AF707938	Front End Comp. (J)		1
MAIN CHASSIS BLOCK									
20-85	AA703967	Main Chassis AA-8030	01039001	1					
20-86	AA705960	Pulley Mt. Metal C AA-8030	63115001	1					
20-87	AA705982	Wire Fitting Metal	63075001	10					
20-88	BT707310	Power Trans. K2061D	35900081	1					
20-89	EC707321	Elect./C. ECE-M63R2200E	64246228	1					
20-90	EV707332	Semi-fixed Volume 5k B	28100032	1					
20-91	AA706015	Bonnet Supporting Metal	63185001	1					
20-92	ZW705688	Half Screw E	24003001	2					
20-93	AA705690	Pulley	84085001	2					
20-94x	AA706544	Spacer	55023001	8					
20-95x	AA706026	Spacer L=10	55007001	8					
20-96	AA706048	Snap Bushing SB500-6	74037001	1					
20-97	AA706050	Snap Bushing SB375-4	74036001	3					
20-98	EJ706746	Lug Plate 1L1P	51027001	1					
20-99	EO706061	Choke Coil SPO426L 100K	35500100	1					
20-100	EJ707343	Lug Plate 1L1P1L	51041001	2					
20-101	ER707354	Cement/R. 5W 2	79514208	2					
20-102	EC704136	Ceramic/C. MC-100 0.04Z	46403682	3					
20-103	EC707365	Mica/C. Z-17 360P	48361430	1					
20-104	ZW705431	Tapping Screw #2 3x8(pan)	40130081	26					
20-105	ZW706656	Tapping Screw #3 3x18(pan)	40000022	4					
20-106x	ZW706645	Tapping Screw #2 3x15(pan)	40130151	2					
20-107	ZW706667	Screw, pan head 3x5	40330051	18					
20-108	ZW707782	Screw, pan head 3x5	40000010	4					

When ordering parts, please describe Parts Number, Serial Number, and Model Number in detail.

FIG. 21 PHOTO OF CASE BLOCK



CASE BLOCK

Ref. No.	Parts No.	Description	Schematic No.	Q'ty	Ref. No.	Parts No.	Description	Schematic No.	Q'ty
21-1	SP707613	Front Panel AA-8030	10086002	1	21-16x	ZW413245	Screw, pan head 4x15		4
21-2	AA706274	Knob D28, without plot	29090002	1	21-17x	ZW706678	Washer (ZMC) 4S	42120421	4
21-3	AA706285	Knob D28, w/plot	29091002	1	21-18x	AA706252	Panel Protector Plate	74031001	1
21-4	AA706296	Knob D21	29089002	5	21-19x	AA707657	Shading Fiber B	73145001	1
21-5	AA707624	Power Switch Knob	29093001	1	21-20x	AA707668	Panel Fiber	73144001	2
21-6	AA707635	Push Switch Knob	29101001	6	21-21x	SP707670	Front Panel (L)	10088001	1
21-7x	AA706307	Bottom Plate AA-8030	05029002	1	21-22x	AA707681	Lever Knob D21 (L)	29118001	1
21-8	AA707646	Bonnet	70012004	1	21-23x	EF707490	Fuse UL 2A (110VUS, J)	38300020	1
21-9	AA706836	Side Plate (R)	04010001	1	21-24x	EF707501	Fuse UL 1A (220VUS, H, 3 core, S)	38700010	1
21-10	AA706847	Side Plate (L)	04009001	1	21-25x	AA706217	Di-pole Antenna	62120001	1
21-11	ZW706858	Spot Facing Washer B	84092001	8	21-26x	AA706915	Di-pole Antenna (J)	62120002	1
21-12x	AA706318	Resin Foot, w/#4 biss	84091001	4					
21-13x	ZW705420	Tapping Screw #2 3x8 (binding)	40630081	3					
21-14	ZW707872	Screw, pan head 4x15(bronze)	40340155	8					
21-15x	AA706241	Panel Fiber	84111002	2					

INDEX

Parts No.	Ref. No. & Symbol No.	Parts No.	Ref. No. & Symbol No.	Parts No.	Ref. No. & Symbol No.	Parts No.	Ref. No. & Symbol No.	Parts No.	Ref. No. & Symbol No.
AA702786	10-38x	AA706026	10-106x	BA708074	13-1x	EC703078	15-C319	EC704327	15-C307
AA702832	10-48x	AA706026	20-95x	BA708085	12-1x	EC703078	15-C320	EC704338	4-C309
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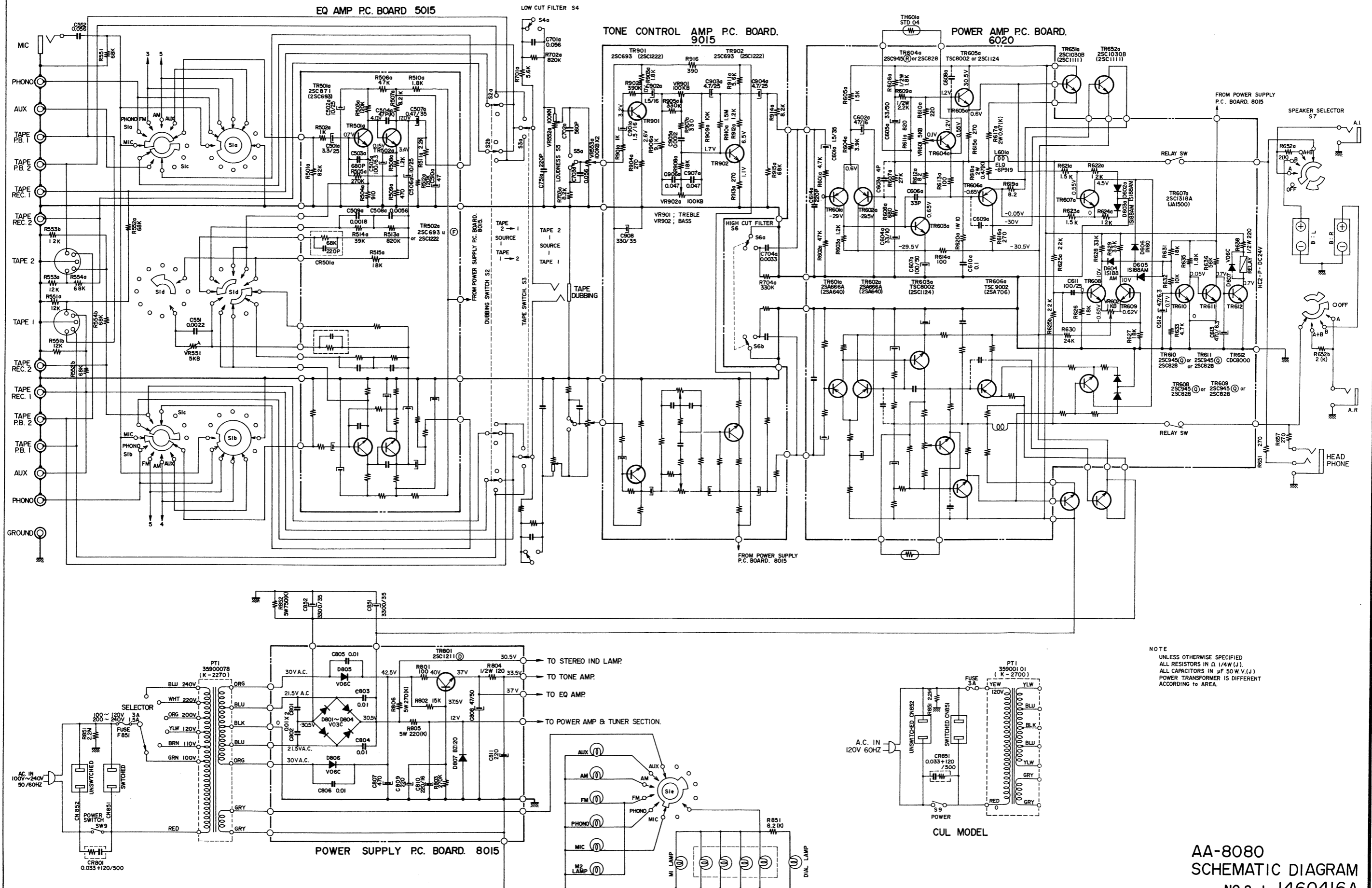
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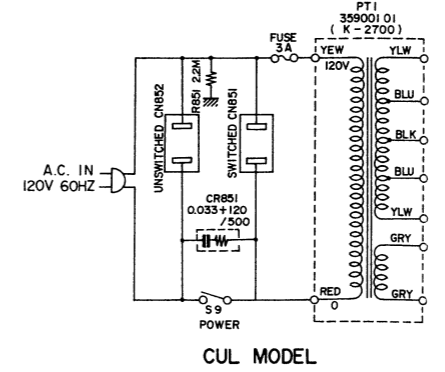
SECTION 4

SCHEMATIC DIAGRAM

1. AA-8080 SCHEMATIC DIAGRAM
2. AA-8080L SCHEMATIC DIAGRAM
3. AA-8030 SCHEMATIC DIAGRAM
4. AA-8030L SCHEMATIC DIAGRAM



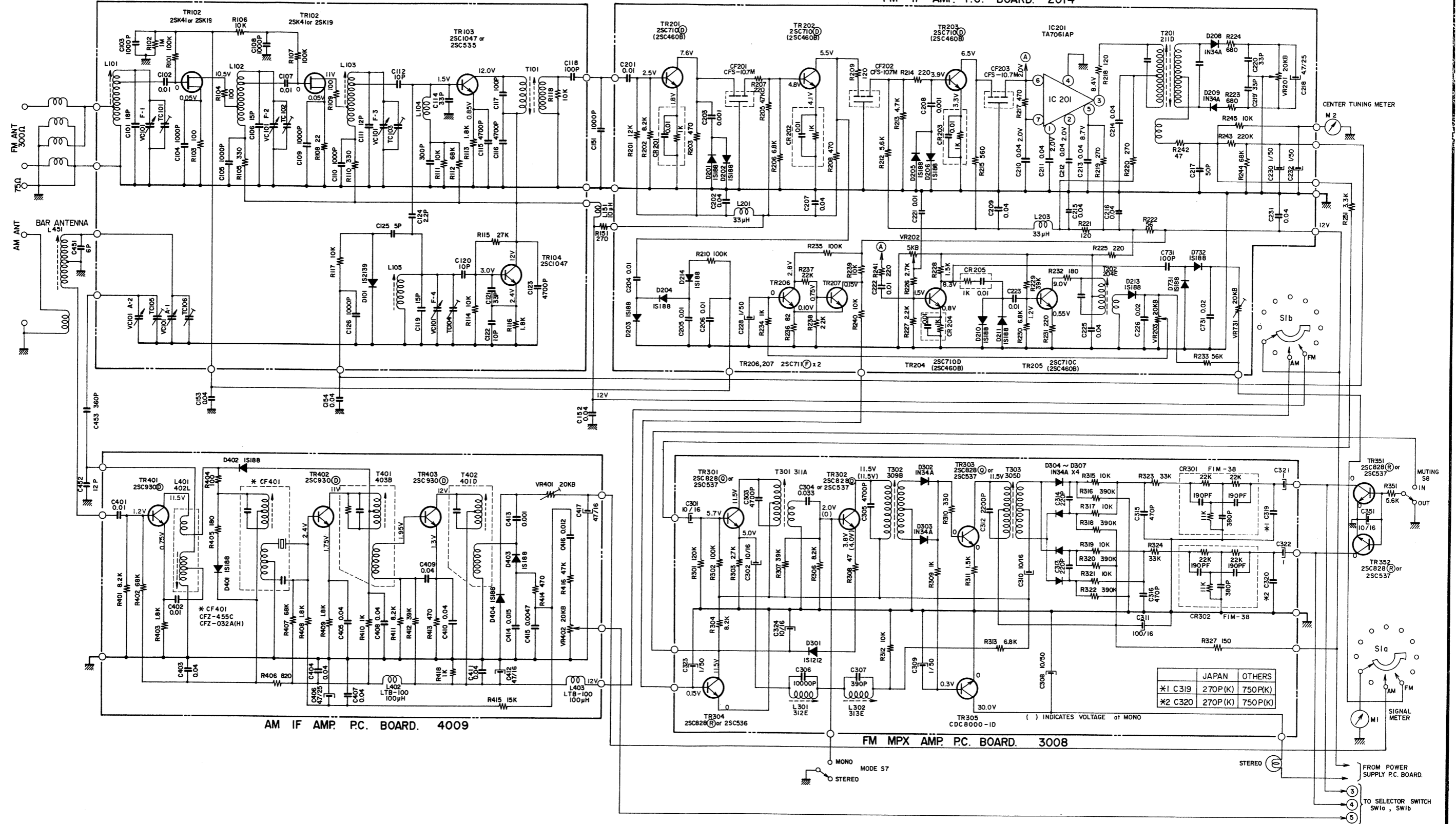
NOTE
 UNLESS OTHERWISE SPECIFIED
 ALL RESISTORS IN Ω 1/4W (J)
 ALL CAPACITORS IN μF 50V V.(J)
 POWER TRANSFORMER IS DIFFERENT
 ACCORDING TO AREA.



AA-8080
 SCHEMATIC DIAGRAM
 NO.2-1 1460416A

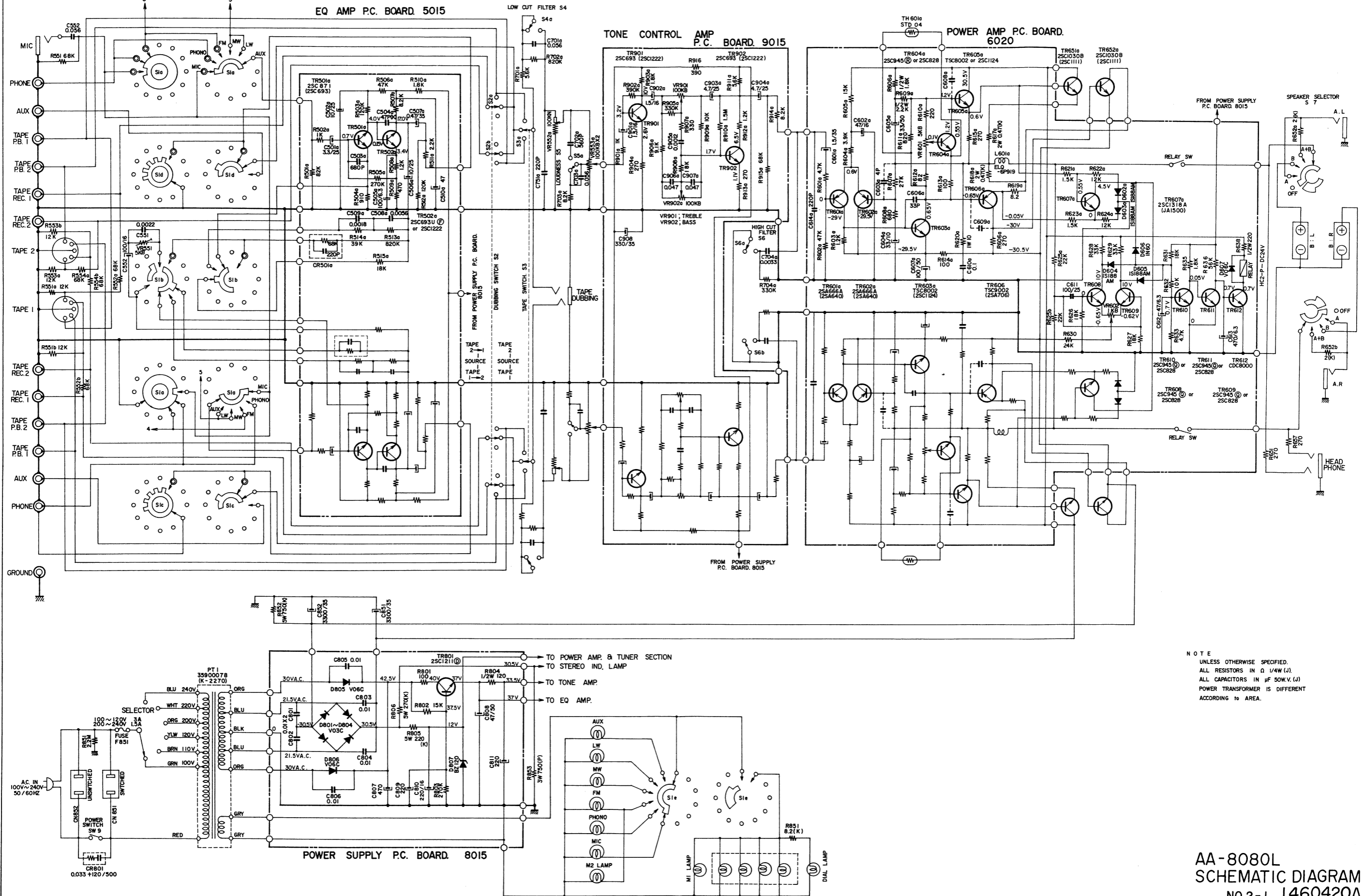
FRONT END IO15

FM IF AMP. P.C. BOARD. 2014



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

AA-8080
SCHEMATIC DIAGRAM
NO.2-2 1460417A



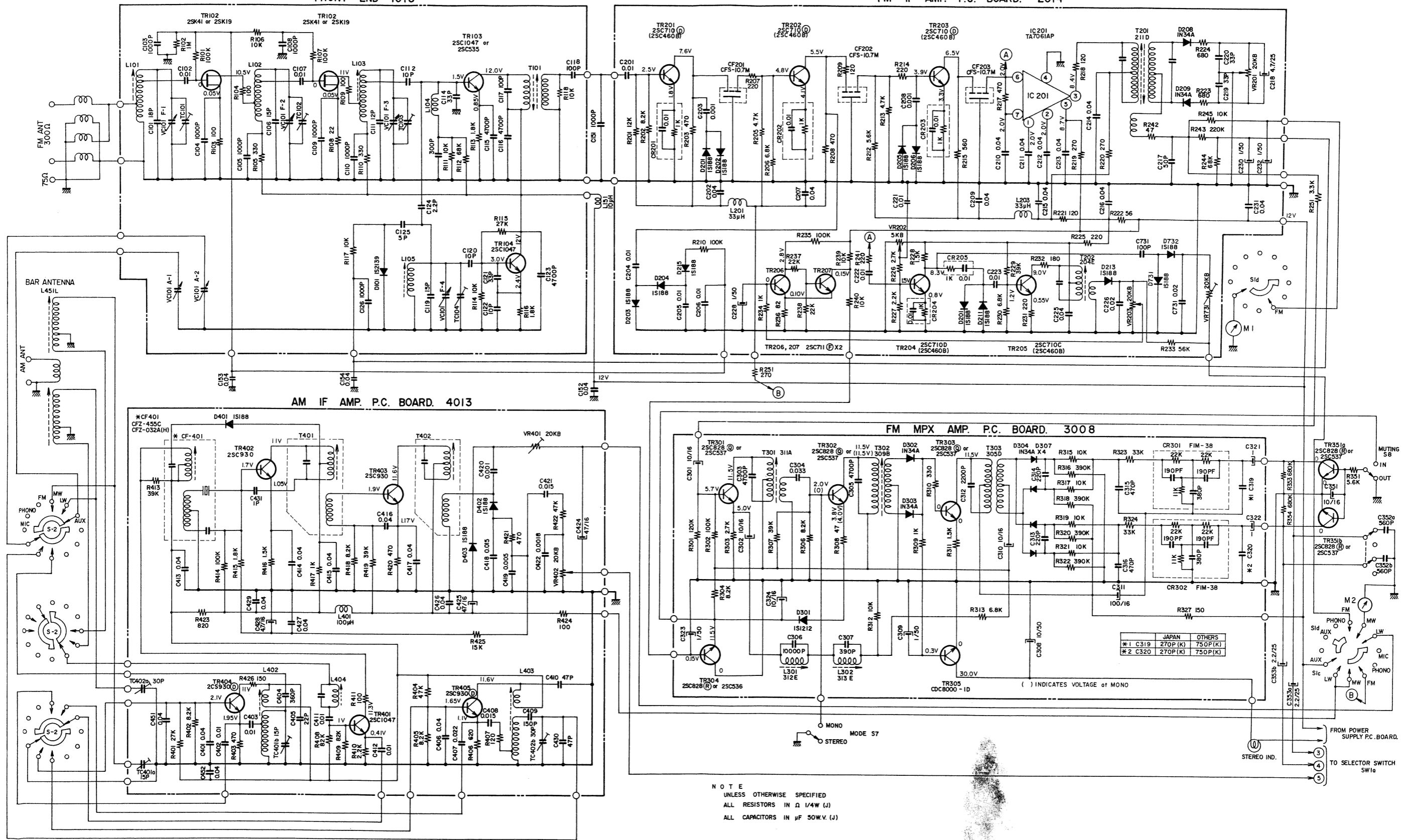
NOTE
 UNLESS OTHERWISE SPECIFIED,
 ALL RESISTORS IN Ω 1/4W (J).
 ALL CAPACITORS IN μ F 50W.V.(J)
 POWER TRANSFORMER IS DIFFERENT
 ACCORDING TO AREA.

FRONT END 1015

FM IF AMP. P.C. BOARD. 2014

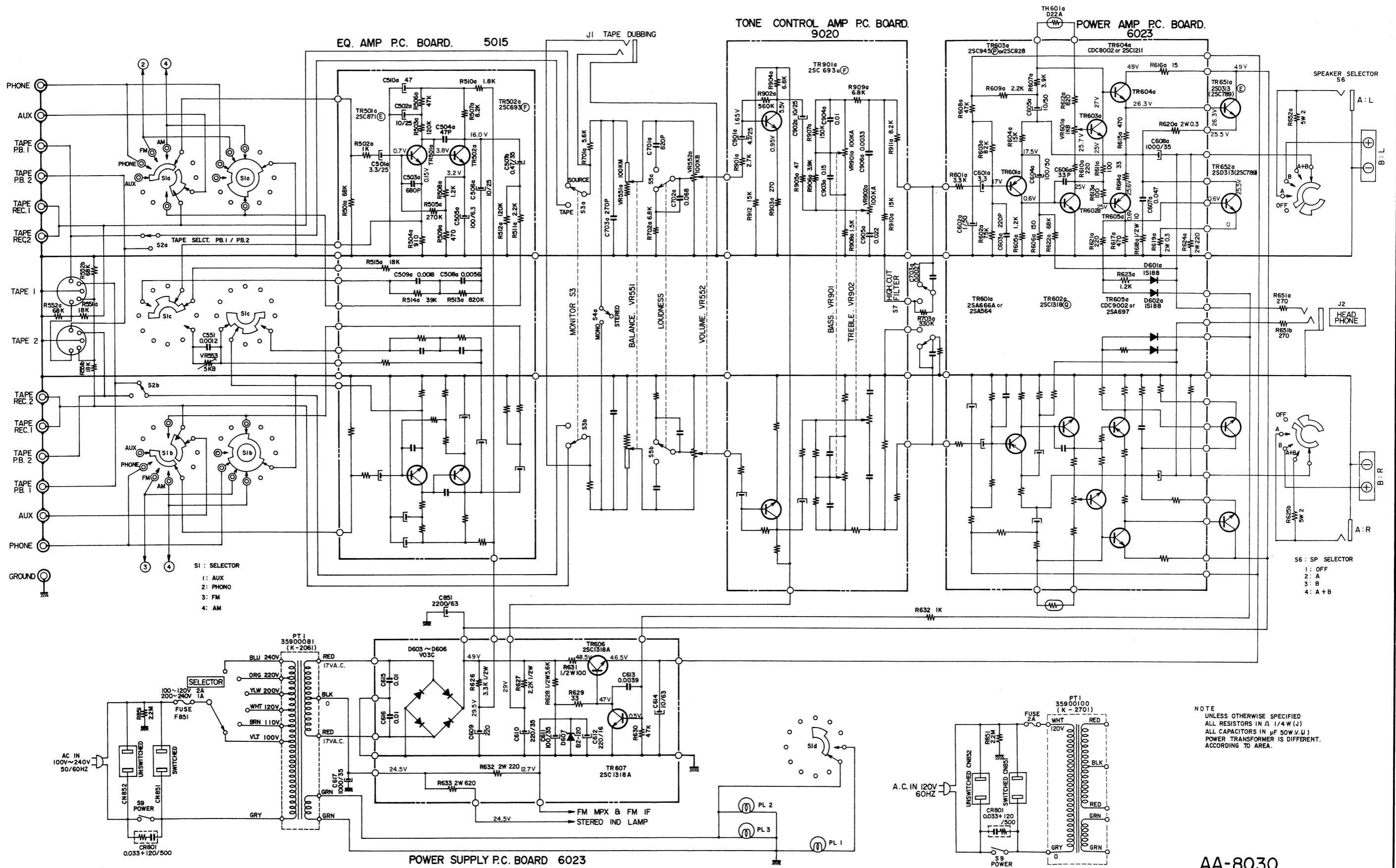
AM IF AMP. P.C. BOARD. 4013

FM MPX AMP. P.C. BOARD. 3008



	JAPAN	OTHERS
*1 C319	270P (K)	750P (K)
*2 C320	270P (K)	750P (K)

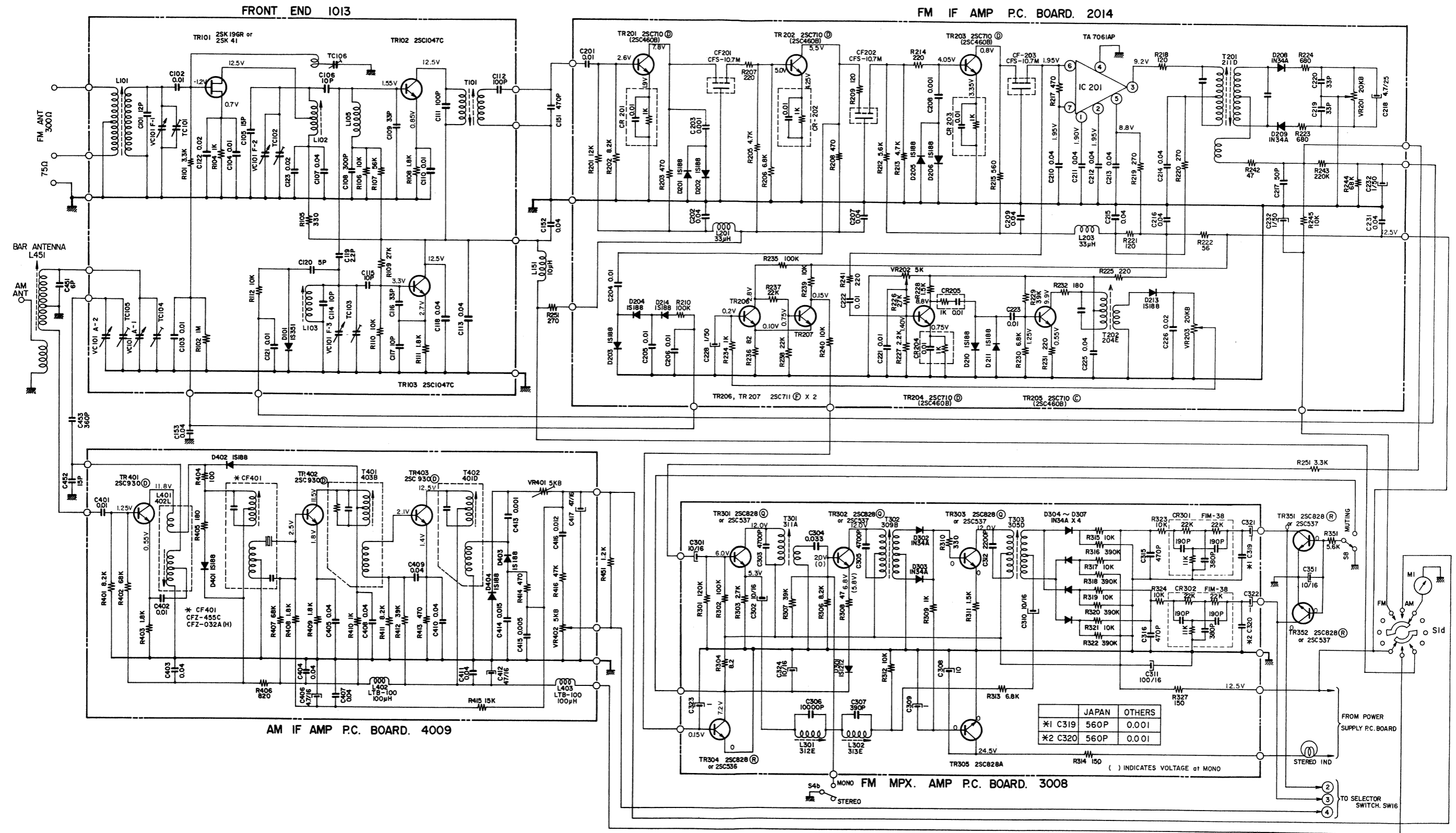
NOTE
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ALL RESISTORS IN Ω 1/4W (J)
ALL CAPACITORS IN μF 50W.V. (J)



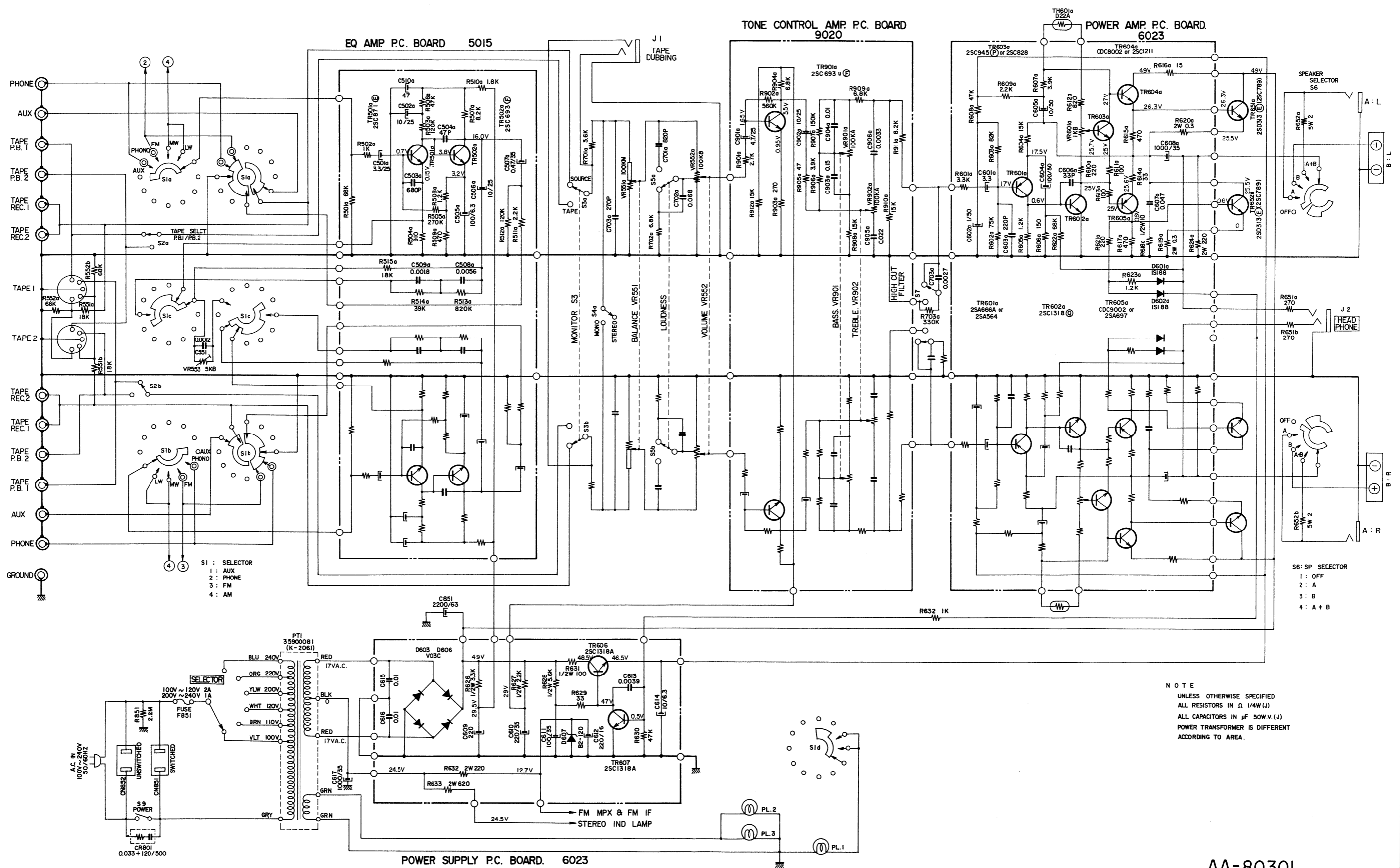
- S1 : SELECTOR
 1 : AUX
 2 : PHONO
 3 : FM
 4 : AM

- S6 : SP SELECTOR
 1 : OFF
 2 : A
 3 : B
 4 : A + B

NOTE
 UNLESS OTHERWISE SPECIFIED
 ALL RESISTORS IN Ω 1/4 W (J)
 ALL CAPACITORS IN μ F 50W.V.(J)
 POWER TRANSFORMER IS DIFFERENT
 ACCORDING TO AREA.



AA-8030
SCHEMATIC DIAGRAM
NO.2-2 1460419A

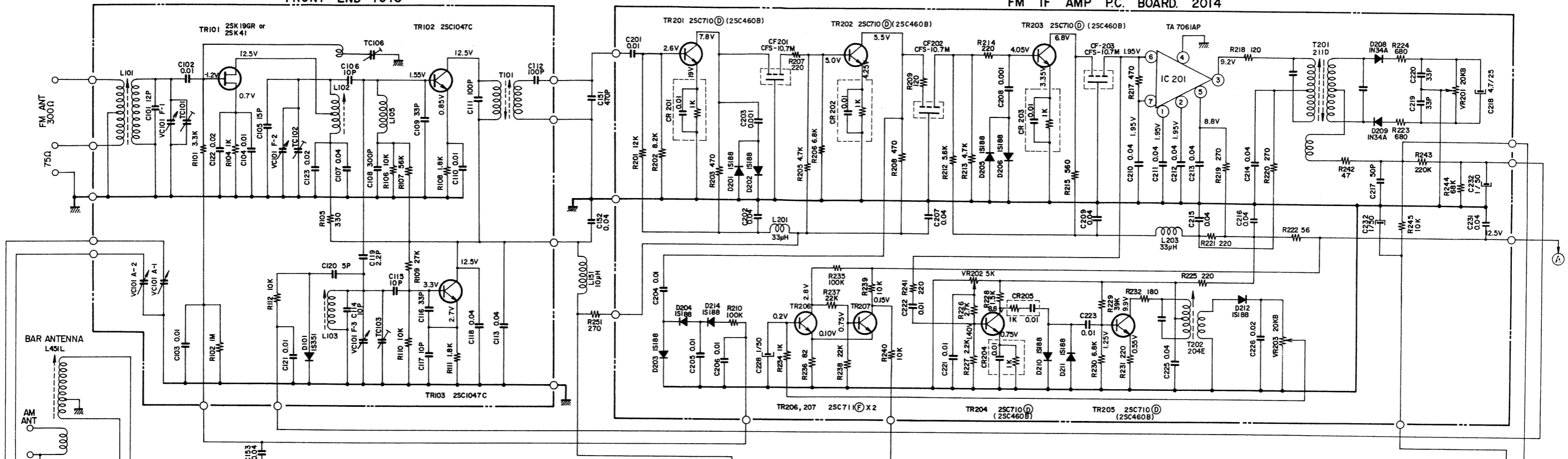


NOTE
 UNLESS OTHERWISE SPECIFIED
 ALL RESISTORS IN Ω 1/4W (J)
 ALL CAPACITORS IN μF 50W.V.(J)
 POWER TRANSFORMER IS DIFFERENT
 ACCORDING TO AREA.

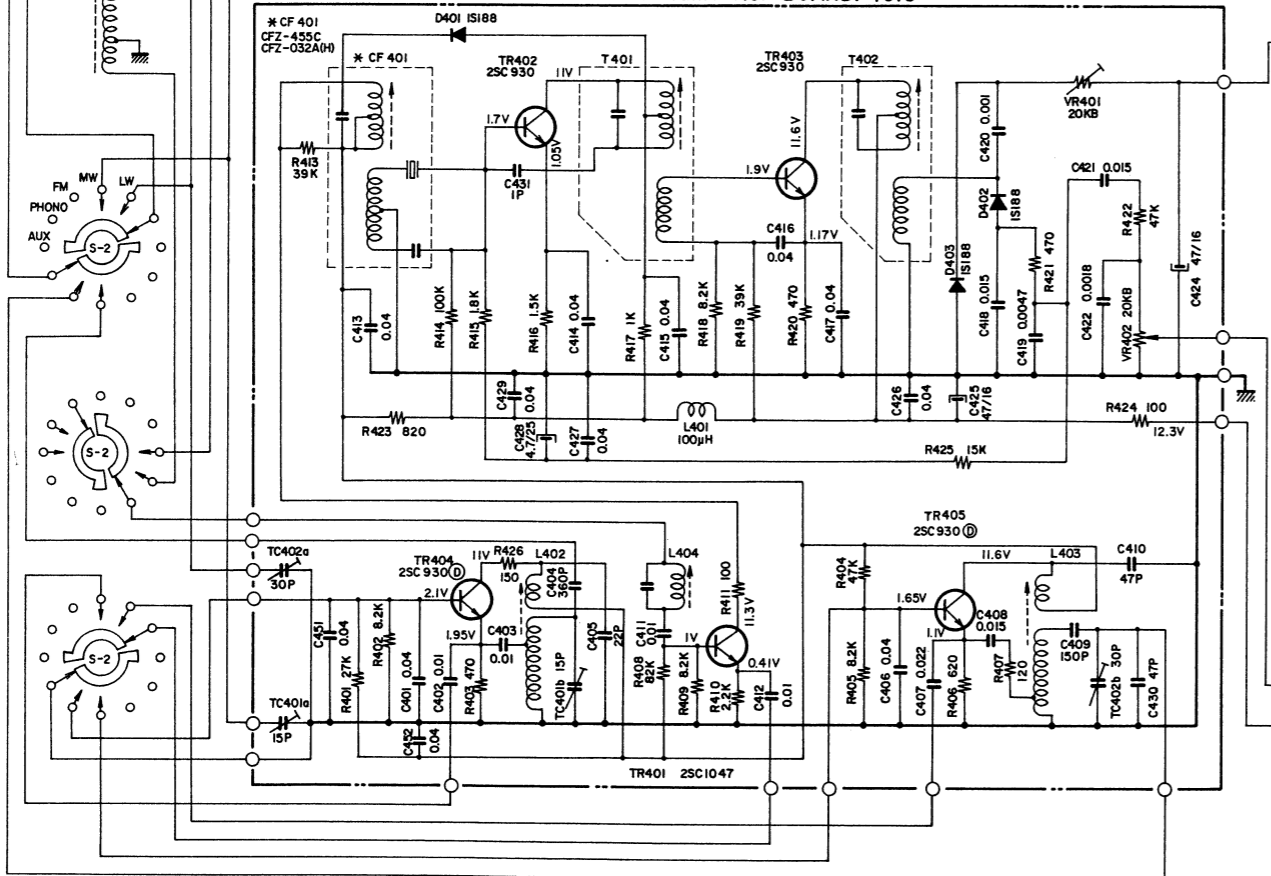
AA-8030L
 SCHEMATIC DIAGRAM
 NO.2-1 1460422A

FRONT END 1013

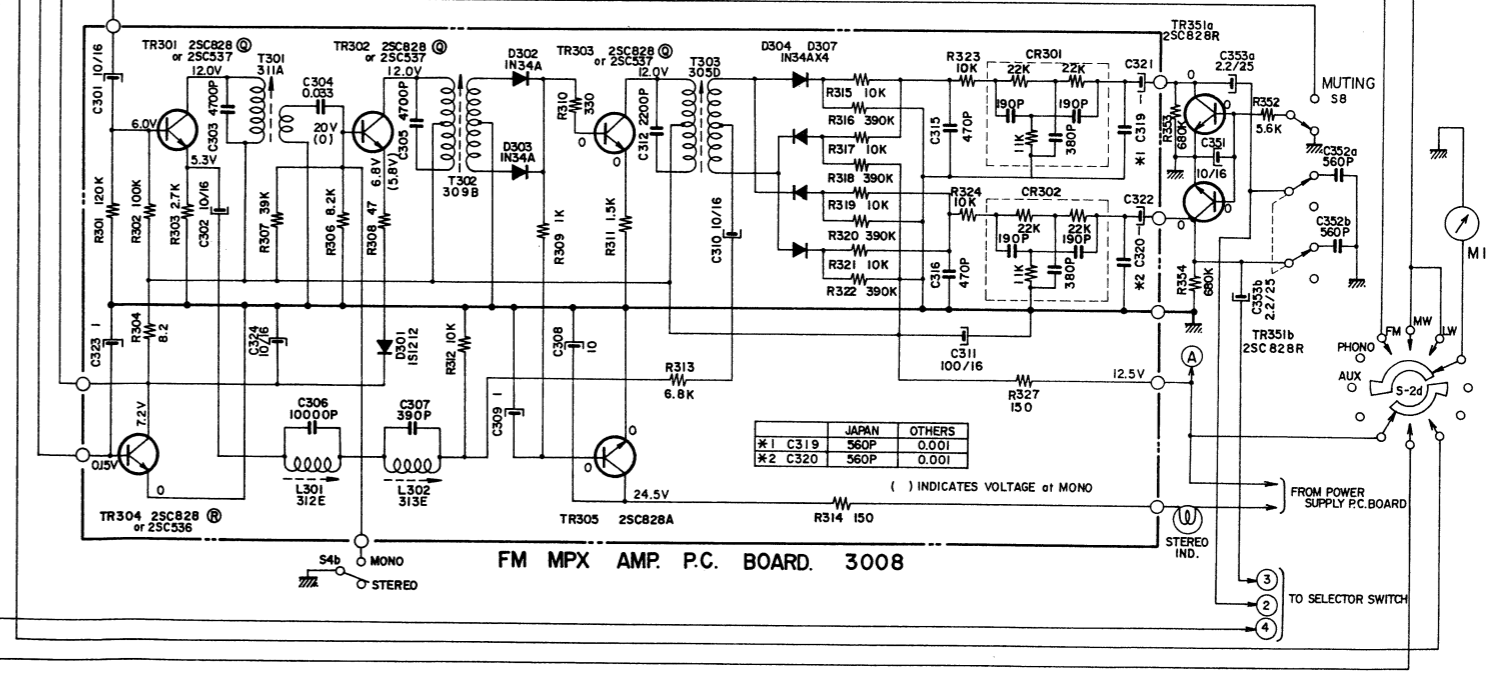
FM IF AMP. P.C. BOARD. 2014



AM IF AMP. P.C. BOARD. 4013



FM MPX AMP. P.C. BOARD. 3008



	JAPAN	OTHERS
*1 C319	560P	0.001
*2 C320	560P	0.001

NOTE
UNLESS OTHERWISE SPECIFIED
ALL RESISTORS IN Ω 1/4W (J)
ALL CAPACITORS IN μ F 50W.V. (J)