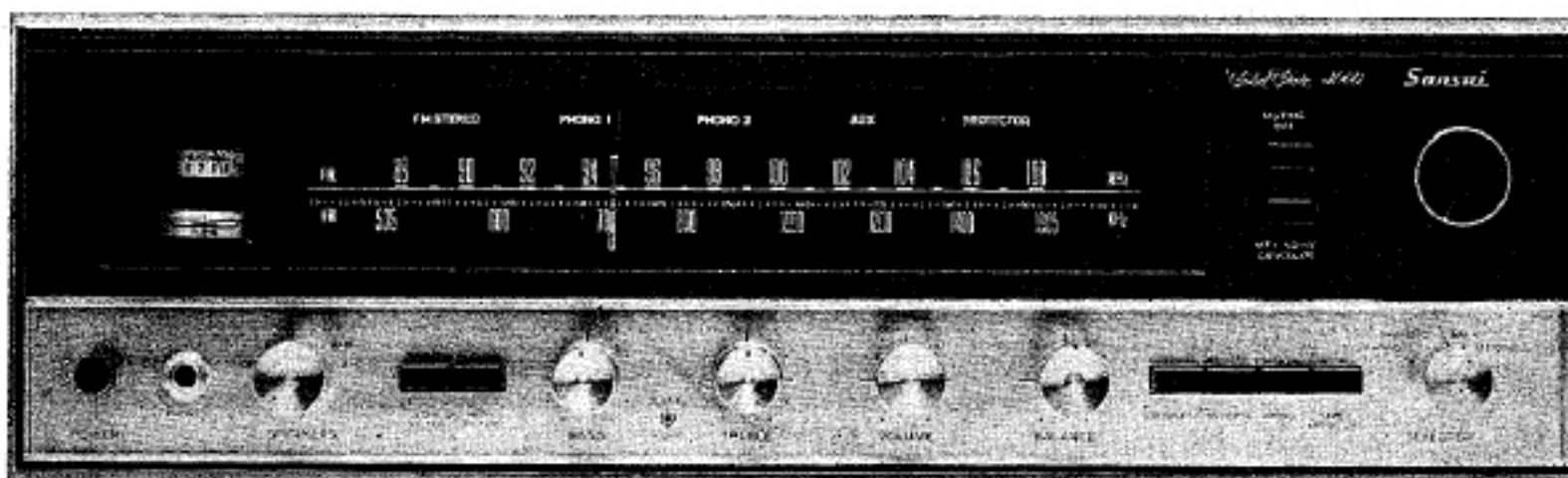


SERVICE MANUAL

AM/FM STEREO TUNER AMPLIFIER

SANSUI 4000



sansui

SANSUI ELECTRIC COMPANY LIMITED

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GENERAL TROUBLESHOOTING CHART

If the amplifier is otherwise operating satisfactorily, the more common causes of trouble may generally be attributed to the following:

1. Incorrect connections or loose terminal contacts. Check the speakers, record player, tape recorder, antenna and line cord.
2. Improper operation. Before operating any audio com-

ponent, be sure to read the manufacturer's instructions.

3. Improper location of audio components. The proper positioning of components, such as speakers and turntable, is vital to stereo.

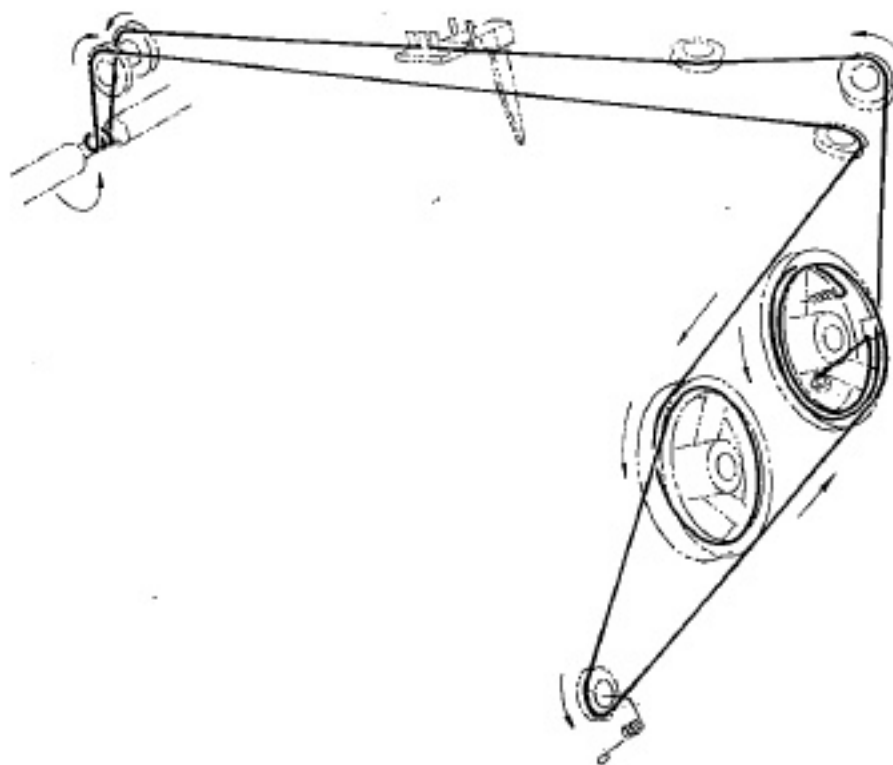
4. Defective audio components.

The following are some other common causes of malfunction and what to do about them.

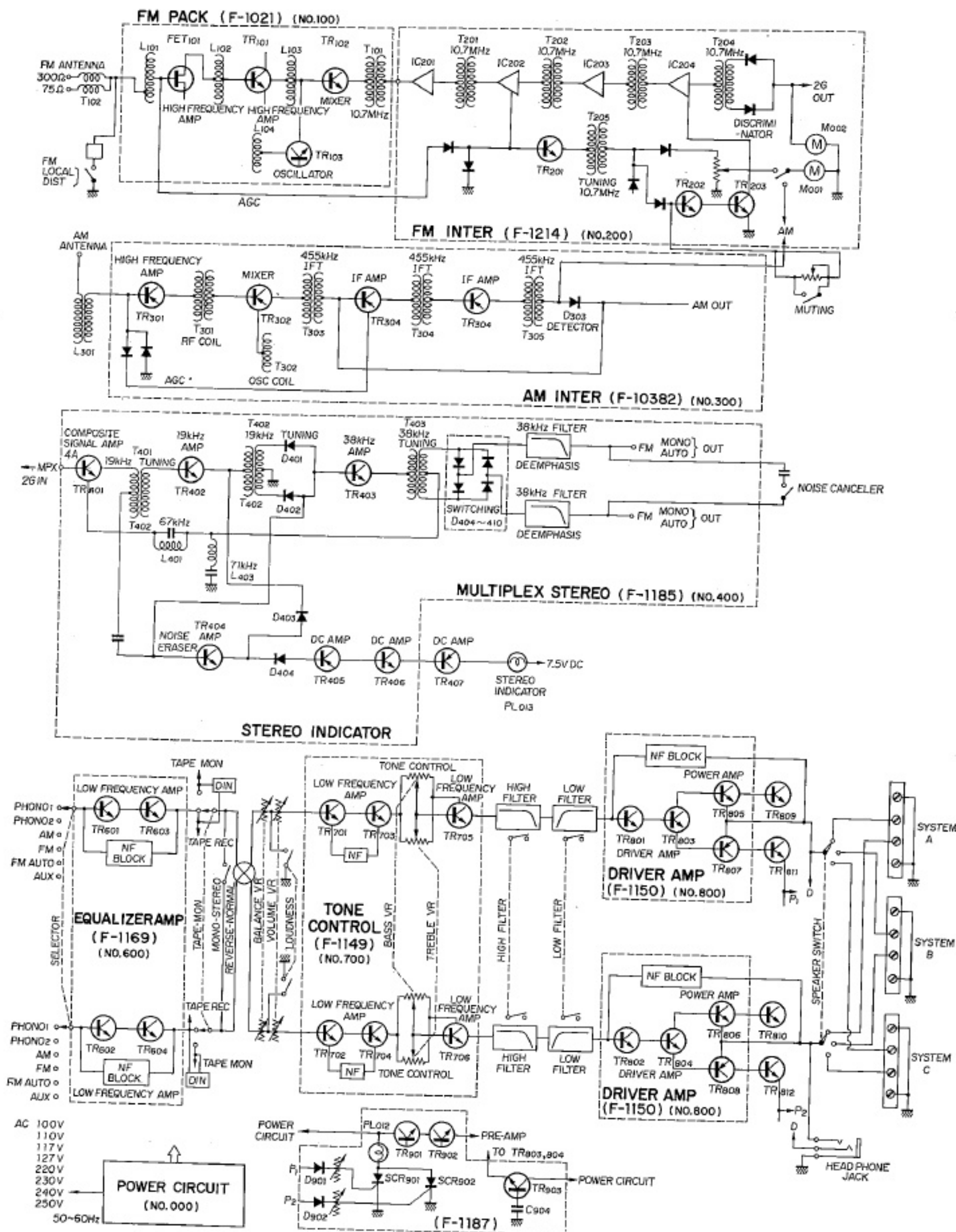
PROGRAM	SYMPTOM	PROBABLE CAUSE	WHAT TO DO
AM, FM or MPX reception	A. Constant or intermittent noise heard at times or in a certain area	* Discharge or oscillation caused by electrical appliances, such as fluorescent lamp, TV set, D.C. motor rectifier or oscillator * Natural phenomena, such as atmospherics, static or thunderbolts * Insufficient antenna input due to ferroconcrete wall or long distance from the station * Wave interference from other electrical appliances	* Attach a noise limiter to the electrical appliance causing the noise, or attach it to the amplifiers power source * Install an outdoor antenna and ground the amplifier to raise the signal-to-noise ratio * Reverse the power cord plug-receptacle connections * If the noise occurs at a certain frequency, attach a wave trap to the ANT. input * Keep the set at a proper distance from other electrical appliances
	B. The needle of the signal and tune meter does not move sharply	* Receiver is located in a weak signal area	* Place the set to receive maximum signal strength
	C. The zero point of the meter diverges much	* Regional difference in field intensity	* The unit is not at fault
AM reception	A. Noise heard at a particular time of a day, in a certain area or over part of dial	* Due to the nature of AM broadcasts	* Install the antenna for maximum antenna efficiency. See "ANTENNA" in the operating instructions * In some cases, the noise can be eliminated by grounding the amplifier or reversing the power cord plug-receptacle connections
	B. High-frequency noise	* Adjacent-channel interference or beat interference * TV set too close to audio system	* Although such noise cannot be eliminated by the amplifier, it is advisable to adjust the TREBLE control from midpoint to left and switch on the HIGH FILTER * Keep the TV set at a proper distance from the audio system
FM reception	A. Noisy	* Poor noise limiter effect or too low S/N ratio due to insufficient antenna input	* Install the antenna (supplied) for maximum signal strength * If this does not prove effective, use an outdoor antenna designed exclusively for FM. When you use a TV antenna for both TV and FM with a divider, make sure TV reception is not affected * An excessively long antenna may cause noise
Note: FM reception is affected considerably by transmission conditions of stations: power and antenna efficiency. As a result, you may receive one station quite well while receiving another station poorly			

PROGRAM	SYMPTOM	PROBABLE CAUSE	WHAT TO DO
FM reception (cont'd)	B. A series of pops is heard	* Ignition noise caused by an automobile engine	* Install the antenna and its lead-in wire in proper distance from the road or raise the antenna input as described above
	C. Tuning noise between stations	* This results from the nature of the FM reception. As the station signal becomes weak, the noise limiter effect is decreased, and the amplification of the limiter, in turn, is enlarged, generating a noise	* Turn the MUTING switch on. It reduces the sensitivity, and therefore it should be used sparingly
FM-MPX reception	A. Noise heard during FM-MPX reception while not heard during FM mono reception	* Weaker signal because the service area of the FM-MPX broadcast is only half that of the FM mono broadcast	* Install the antenna for maximum antenna input * Switch on the high filter and/or turn the TREBLE control from midpoint, left
	B. Clearness of channel separation is decreased during reception	* Excess heat	* Circulation of air is important to the amplifier. Be sure that air is flowing under the amplifier
	C. The stereo indicator blinks on and off	* Interference	* The indicator is not at fault. Adjust VR ₄₀₁
	D. The stereo indicator blinks on and off even though stereo station is not received	* Interference	* The indicator is not at fault. Adjust VR ₄₀₁
Record playing or tape playback	A. Hum or howling	* Record player placed directly on speaker * Wire other than shielded wire used * Loose terminal contact * Shielded wire too close to line cord, fluorescent lamp or other electrical appliances * Nearby amateur radio station or TV transmission antenna	* Place a cushion between the player and the speaker box or place them away from each other * The connecting shielded wire should be as short as possible * Switch on the LOW FILTER and adjust the BASS control from midpoint, left * Consult the nearest Radio Regulatory Bureau
	B. Surface noise	* Worn or old record * Worn needle * Needle dusty * Improper needle pressure	* Recondition the playback head of the tape recorder or the needle the record player * Adjust the TREBLE control from midpoint, left * HIGH FILTER on
All stereo programs	BALANCE control is not at midpoint when equal sound comes from left and right channels	* It is important to adjust for equal sound from both channels. It should not always be set to the midpoint	* Set the MONO switch to MONO and then set the BALANCE control to a position where equal sound comes from both channels

REMOVING THE FRONT PANEL, BONNET AND BOTTOM BOARD

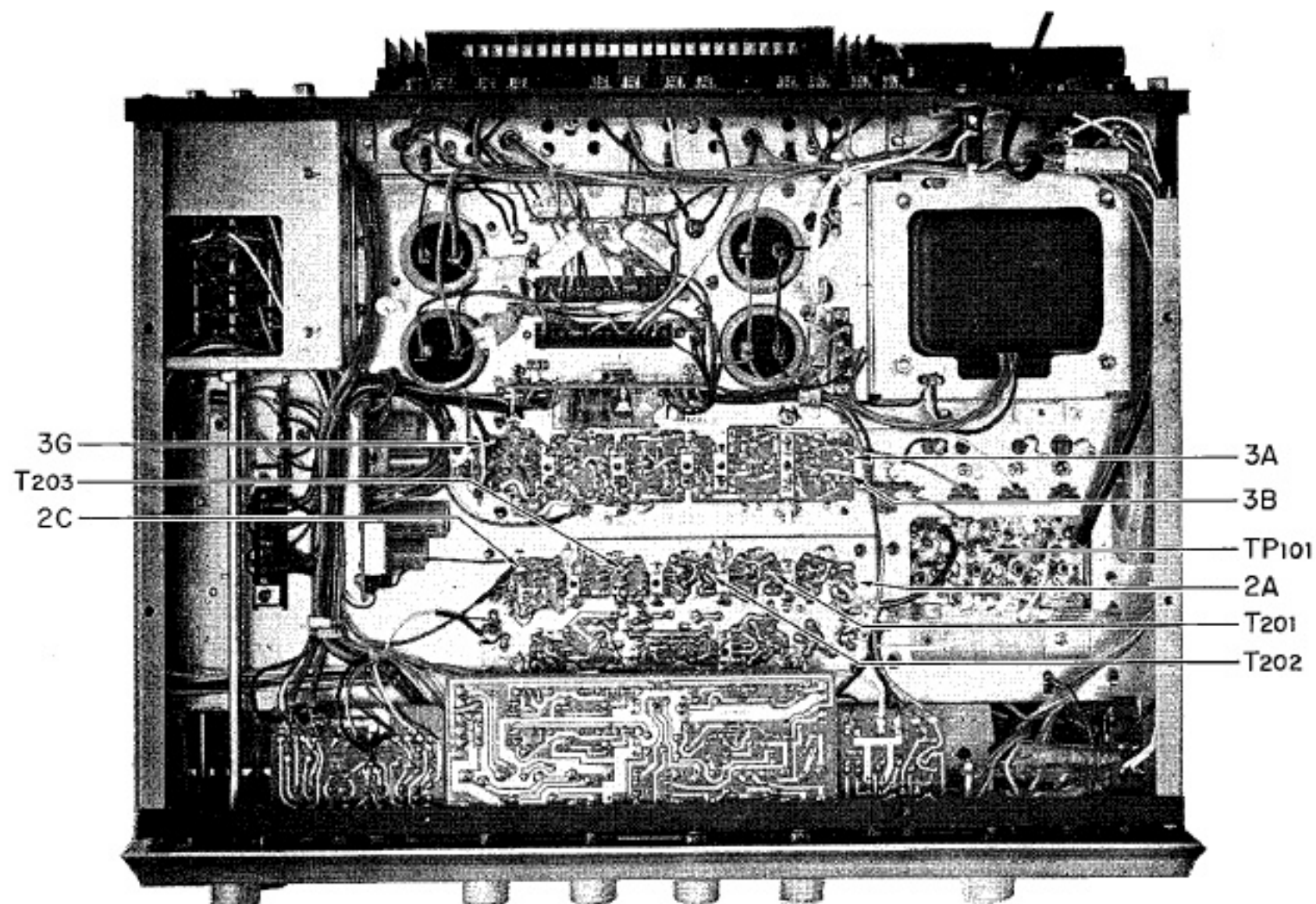
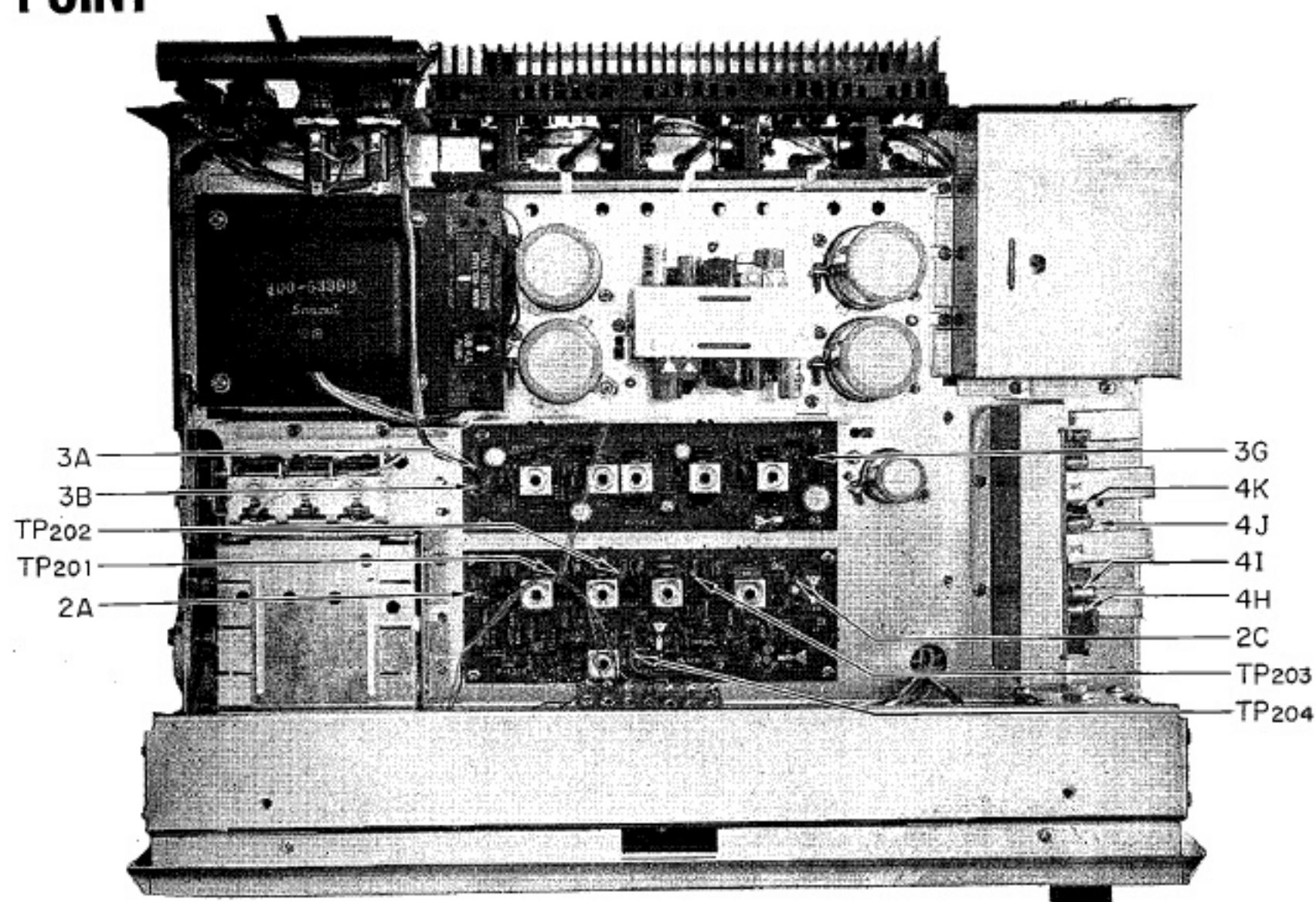


BLOCK DIAGRAM



ALIGNMENT

TEST POINT

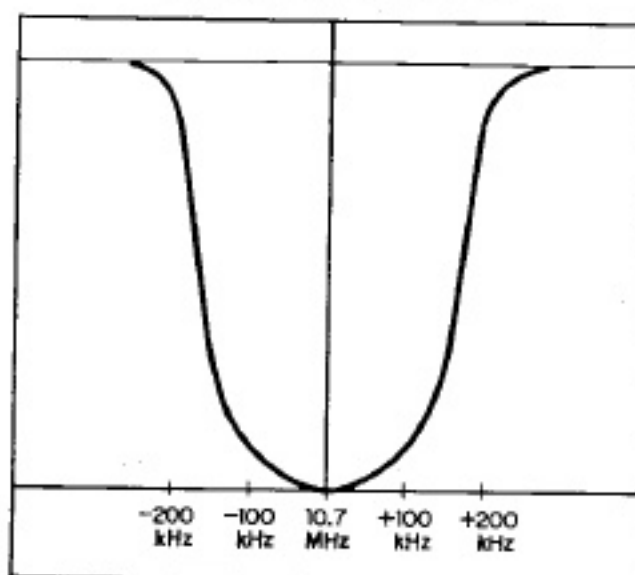


FM ALIGNMENT PROCEDURE

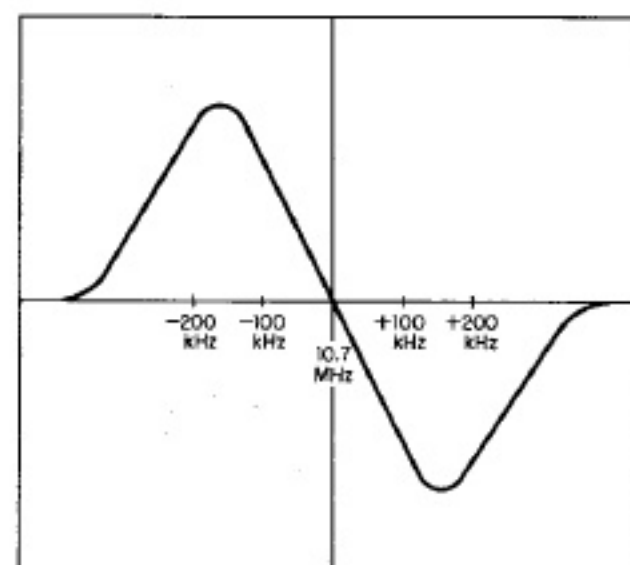
NOTE: To align, set the signal generator level to minimum.
Turn tuning gang fully.
Center carrier wave.
Set pointer at reference mark.

STEP	ALIGN	GENERATOR	FEED SIGNAL	OUTPUT INDICATOR	DIAL SETTING	ADJUST	ADJUST FOR
1.	IF Transformer	10.7 MHz ± 200 kHz	Sweep signal is sent to TP ₁₀₁ via the 10pF ceramic condenser	Oscilloscope is connected to TP ₂₀₁ , 202 and 203 via the 10pF ceramic condenser with probe		Top and bottom sides of T ₂₀₂ , 203	Best I.F.T. wave form
2.	Discriminator	10.7 MHz ± 200 kHz	Sweep signal is sent to TP ₁₀₁ via the 10pF ceramic condenser	Oscilloscope is connected to 2C		FM. Discriminator transformer T ₂₀₄ top and bottom sides	S curve
3.	O.S.C	90 MHz 400 Hz 100% Modulation	To antenna terminals	Oscilloscope and V.T.V.M. at output load	90 MHz	O.S.C. coil L ₁₀₄	Maximum
4.	O.S.C	106 MHz 400 Hz 100% Modulation	To antenna terminals	Oscilloscope and V.T.V.M. at output load	106 MHz	O.S.C. trimmer TC ₁₀₅	Maximum
5.	Reiterate 3 and 4.						
6.	High-frequency Amp. Circuit	90 MHz 400 Hz 100% Modulation	To antenna terminals	Oscilloscope and V.T.V.M. at output load	90 MHz	Antenna coil L ₁₀₁ , L ₁₀₂ and L ₁₀₃	Maximum
7.	High-frequency Amp. Circuit	106 MHz 400 Hz 100% Modulation	To antenna terminals	Oscilloscope and V.T.V.M. at output load	106 MHz	Trimmer TC ₁₀₁ , TC ₁₀₃ and TC ₁₀₄	Maximum
8.	Reiterate 6 and 7.						

FM IF WAVE FORM



FM DISCRIMINATOR WAVE FORM



ALIGNMENT

FM MULTIPLEX ALIGNMENT PROCEDURE

1. Do not attempt to align the Multiplex Circuit unless the following equipment is available:

a. Multiplex Stereo Generator b. Oscilloscope c. AC. V.T.V.M. d. Audio Oscillator e. FM Signal Generator

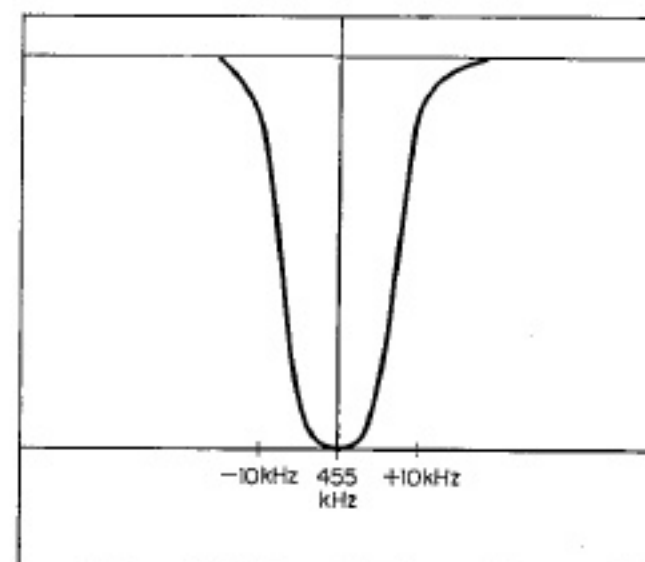
STEP	ALIGN	GENERATOR	FEED SIGNAL	OUTPUT INDICATOR	ADJUST	ADJUST FOR
1.	67 kHz Trap	67 kHz Audio Signal	Connect to TP _{4A} or 2C	V.T.V.M. at 4 _I	L ₄₀₂	Minimum
2.	71 kHz Trap	71 kHz Audio Signal	Connect to TP _{4A} or 2C	V.T.V.M. at 4 _I	L ₄₀₃	Minimum
3.	19 kHz Transformer	FM Signal Gen. Modulated 30% by STEREO Gen. sub-channel	Antenna terminals Tune to signal	V.T.V.M. and Oscilloscope at 4 _K	T ₄₀₁	Maximum
4.	19 kHz Transformer	FM Signal Gen. Modulated 30% by STEREO Gen. sub-channel	Antenna terminals Tune to signal	V.T.V.M. and Oscilloscope at 4 _J	T ₄₀₂	Maximum
5.	38 kHz Transformer	FM Signal Gen. Modulated 30% by STEREO Gen. sub-channel	Antenna terminals Tune to signal	V.T.V.M. and Oscilloscope at 4 _H	T ₄₀₃	Maximum
6.	38 kHz Transformer and Separation VR	FM Signal Gen. Modulated 30% by STEREO Signal Gen. channel-L	Antenna terminals Tune to signal	V.T.V.M. and Oscilloscope at output load channel-R	T ₄₀₂ or T ₄₀₃ within 1/4 turn and Separation VR(VR ₆₀₁)	Channel-R Minimum

AM ALIGNMENT PROCEDURE

NOTE: To align, set the signal generator level to minimum.

STEP	ALIGN	GENERATOR	FEED SIGNAL	OUTPUT INDICATOR	DIAL SETTING	ADJUST	ADJUST FOR
1.	I.F. Transformer	455 kHz ±30 kHz Sweep-generator	Antenna terminals	Oscilloscope and V.T.V.M. at 3G		top and bottom sides from the 1st I.F.T. (T ₃₀₂) to the 3rd I.F.T. (T ₃₀₄)	Best I.F.T. wave form
2.	O.S.C.	AM-generator 535 kHz 400 Hz 30% Modulation	Antenna terminals	Oscilloscope and V.T.V.M. at output load	535 kHz	O.S.C. Coil T ₃₀₂	Maximum
3.	O.S.C.	AM-generator 1600 kHz 400 Hz 30% Modulation	Antenna terminals	Oscilloscope and V.T.V.M. at output load	1600 kHz	O.S.C. Trimmer TC ₃₀₃	Maximum
4.	Reiterate 2 and 3						
5.	RF amp.	AM-generator 600 kHz 400 Hz 30% Modulation	Antenna terminals	Oscilloscope and V.T.V.M. at output load	600 kHz	RF transformer T ₃₀₁	Maximum
6.	Antenna circuit	AM-generator 600 kHz 400 Hz 30% Modulation	Antenna terminals	Oscilloscope and V.T.V.M. at output load	600 kHz	Ferrite bar Antenna T ₃₀₆	Maximum
7.	RF amp.	AM-generator or 1400 kHz 400 Hz 30% Modulation	Antenna terminals	Oscilloscope and V.T.V.M. at output load	1400 kHz	RF Trimmer TC ₃₀₂	Maximum
8.	Antenna circuit	AM-generator or 1400 kHz 400 Hz 30% Modulation	Antenna terminals	Oscilloscope and V.T.V.M. at output load	1400 kHz	Antenna circuit Trimmer TC ₃₀₁	Maximum
9.	Reiterate 5, 6, 7, 8.						

AM IF WAVE FORM

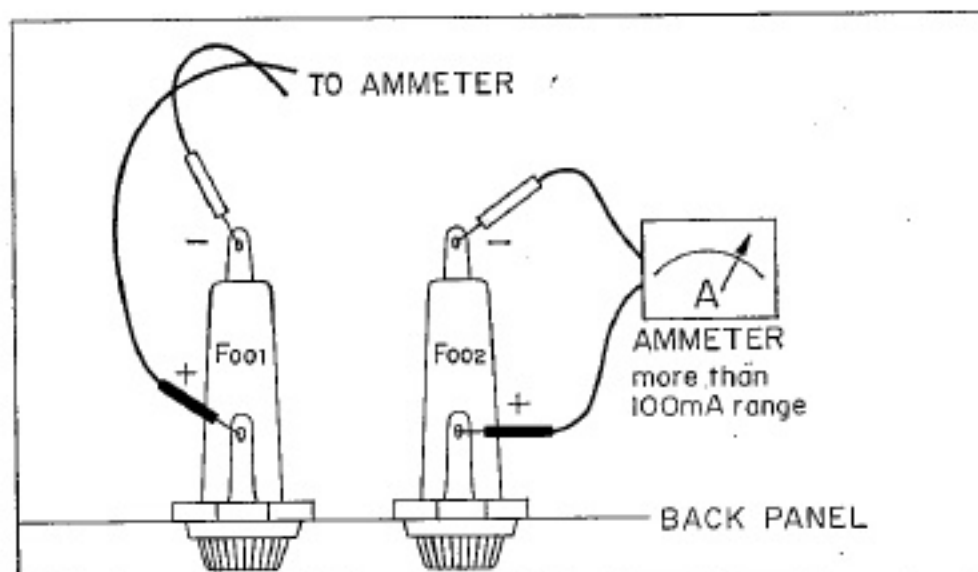


ALIGNMENT

1. CURRENT ADJUSTMENT

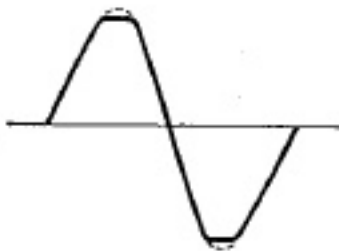
STEP	SETTING OF AMMETER (TESTER)	WHAT TO DO	NOTE
1.		Remove F_{001} and F_{002}	Use an ammeter having 100 or 50mA range.
2.		Set VR_{803} and VR_{804} to minimum.	
3.		Set VR_{701} and VR_{702} to minimum	
4.		Push the POWER switch ON	Be sure to switch on 1st and then connect the ammeter.
5.	100mA range.	Connect the ammeter to F_{001} as illustrated in Fig. 1	
6.		Turn VR_{803} clockwise and adjust current to 15mA to 10mA at room temperature of 25°C or less or to 20 to 15mA at 25°C or more.	
7.	100mA range.	Push the POWER switch OFF and attach F_{001} in place.	
8.		Push the POWER switch ON and connect the ammeter to F_{002} as illustrated in Fig. 1	
9.		Turn VR_{804} clockwise and adjust current to 5 to 10mA at of 25°C or less or o 20 to 15mA at 25°C or more.	
10.		Attach F_{002} in place	

IMPORTANT: Adjust the current first, the output second, and the protector last.



(Fig. 1) QUICK-ACTING FUSE HOLDER

2. OUTPUT ADJUSTMENT

STEP	PROCEDURE	NOTE
1.	Adjust the volume control to minimum.	
2.	Set an oscillator to 1,000 Hz and connect it to the LEFT AUX input.	The oscillator used should have the oscillation frequency of 20 to 20,000Hz and the output voltage of more than 200mV.
3.	Set the SELECTOR switch to AUX.	Set other controls and switches as follows: BALANCE to CENTER TAPE to OFF MON. to OFF MODE to STEREO TONE to CENTER Others to OFF
4.	Connect a 8- or 16-ohm load resistor having capacitor of more than 50 watts to the LEFTSPEAKER output.	
5.	Connect an oscilloscope to the SPEAKER terminal.	
6.	Push the POWER switch on and increase the volume little by little. Check the output at the terminal by means of the oscilloscope.	
7.	Adjust VR ₉₀₁ so that the fronts of sine wave are clipped simultaneously.	
8.	Adjust the right channel as above. In Step 7, adjust VR ₈₀₂ .	

3. PROTECTOR ADJUSTMENT

STEP	WHAT TO DO	NOTE
1.	Set VR ₉₀₁ and VR ₉₀₂ to minimum.	Oscillator should have the same oscillation frequency and output voltage as in OUTPUT ADJUSTMENT.
2.	Set VR ₇₀₃ and VR ₇₀₄ to minimum.	
3.	Set VR ₇₀₁ and VR ₇₀₂ to minimum. (Operate left channel only.)	
4.	Set SELECTOR to PHONO 1, BASS to maximum, TREBLE to maximum, FILTER to OFF and MONO to OFF. Set VR ₇₀₃ and VR ₇₀₄ to position at which they form hands at 3 o'clock.	It is advisable to observe wave form by connecting oscilloscope to load in parallel. Set the Oscillator 1,000Hz.
5.	Set SELECTOR to AUX and adjust input signal for clipping of wave form.	
6.	Turn VR ₉₀₁ clockwise and set it to midposition. Turn SELECTOR to each position and check to see if PROTECTOR (L ₀₁₂) is lit.	In AM and FM positions, noise is observed.
7.	Turn VR ₉₀₁ clockwise little by little and determine position at which PROTECTOR is lit. Turn VR ₉₀₁ counter-clockwise about 10° from given position.	Make sure PROTECT is not lit by turning SELECTOR again.
8.	Set VR ₇₀₁ and VR ₇₀₂ to maximum feed AUX signal to right channel and reiterate Steps 4 to 7.	

Caution: As soon as PROTECTOR is lit, turn POWER switch off and, after 5~10 seconds, turn it back on.

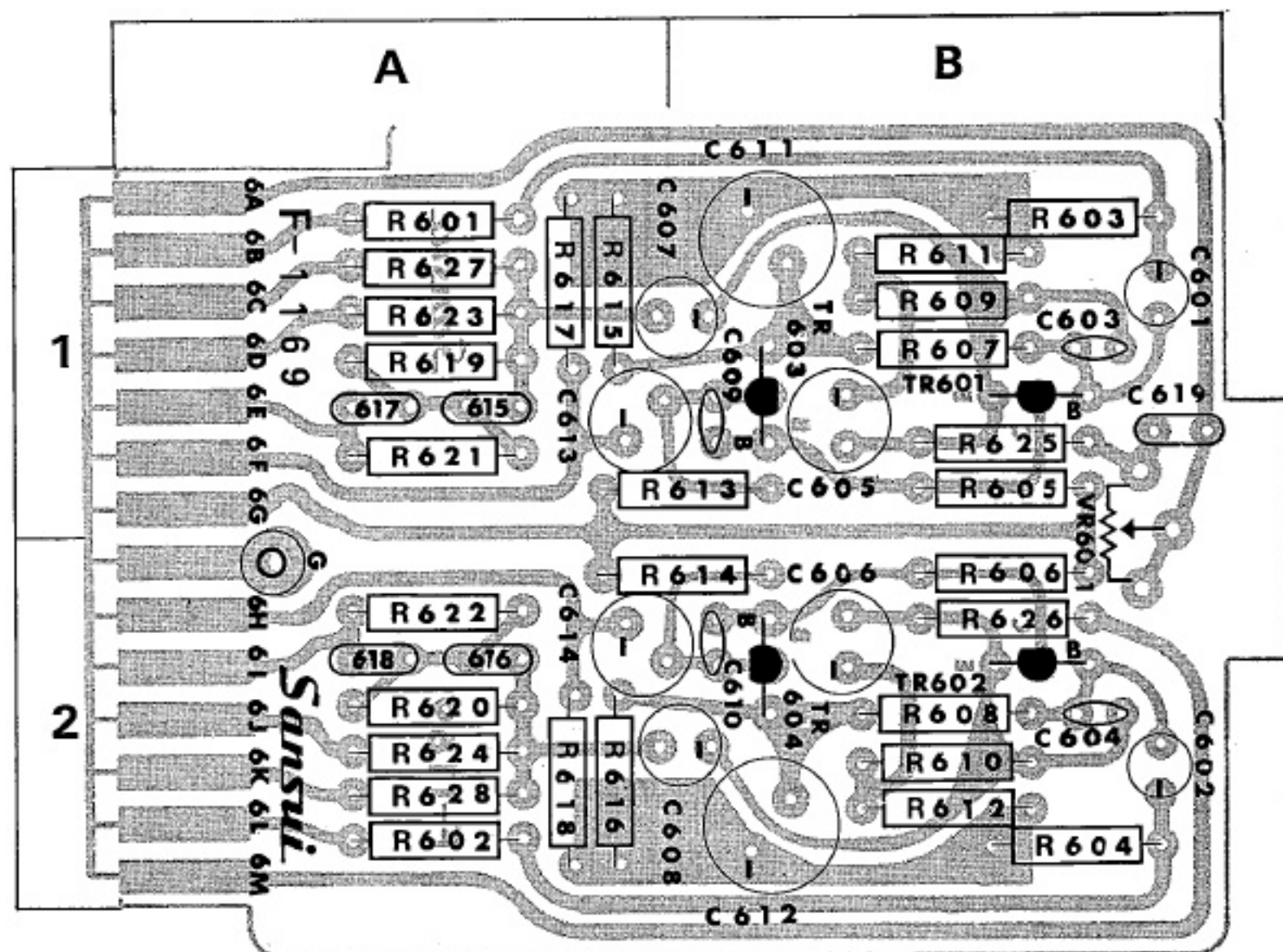
PRINTED CIRCUIT SHEETS AND PARTS LIST

X: Parts No Y: Parts Name Z: Position of Parts

F-1169 <EQUALIZER AMP. BLOCK>

X	Y	Z
R601	1k Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	1A
R602	1k Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	2A
R603	680k Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	1B
R604	680k Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	2B
R605	220k Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	1B
R606	220k Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	2B
R607	270k Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	1B
R608	270k Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	2B
R609	2.2k Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	1B
R610	2.2k Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	2B
R611	390 Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	1B
R612	390 Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	2B
R613	6.8k Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	1A, 1B
R614	6.8k Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	2A, 2B
R615	470 Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	1A
R616	470 Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	2A
R617	82k Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	1A
R618	82k Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	2A
R619	330k Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	1A
R620	330k Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	2A
R621	22k Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	1A
R622	22k Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	2A
R623	4.7k Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	1A
R624	4.7k Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	2A
R625	220 Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	1B
R626	220 Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	2B

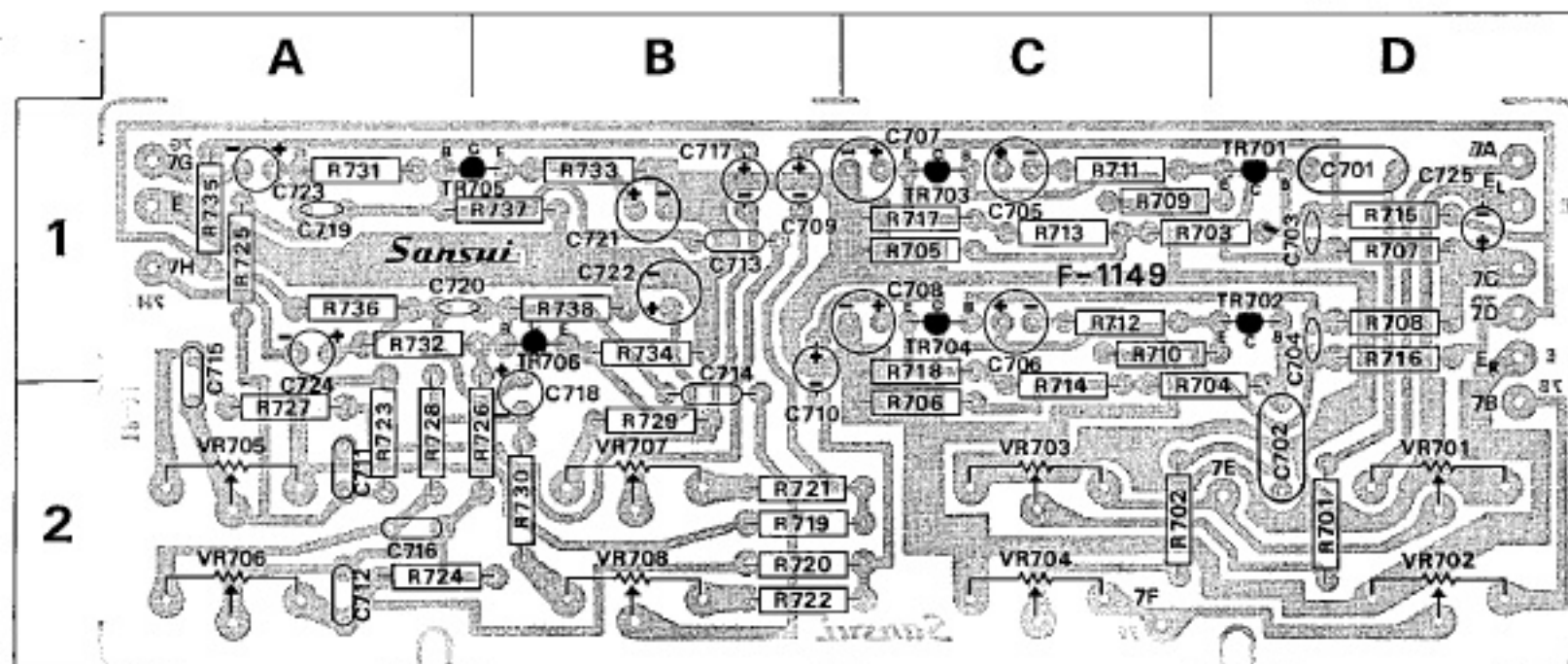
X	Y	Z
C601	1.5 μ F 15 WV Tantalum Capacitor	1B
C602	1.5 μ F 15 WV Tantalum Capacitor	2B
C603	150pF $\pm 10\%$ 50 WV Ceramic Capacitor	1B
C604	150pF $\pm 10\%$ 50 WV Ceramic Capacitor	2B
C605	47 μ F 10 WV Electrolytic Capacitor	1B
C606	47 μ F 10 WV Electrolytic Capacitor	2B
C607	10 μ F 25 WV Electrolytic Capacitor	1A
C608	10 μ F 25 WV Electrolytic Capacitor	2A
C609	150pF $\pm 10\%$ 50 WV Ceramic Capacitor	1B
C610	150pF $\pm 10\%$ 50 WV Ceramic Capacitor	2B
C611	100 μ F 6.3 WV Electrolytic Capacitor	1B
C612	100 μ F 6.3 WV Electrolytic Capacitor	2B
C613	10 μ F 50 WV Electrolytic Capacitor	1A
C614	10 μ F 50 WV Electrolytic Capacitor	2A
C615	0.012 μ F $\pm 10\%$ 50 WV Mylar Capacitor	1A
C616	0.012 μ F $\pm 10\%$ 50 WV Mylar Capacitor	2A
C617	0.003 μ F $\pm 10\%$ 50 WV Mylar Capacitor	1A
C618	0.003 μ F $\pm 10\%$ 50 WV Mylar Capacitor	2A
C619	0.0022 μ F $\pm 10\%$ 50 WV Mylar Capacitor	1B
VR601	V10k7-1-3 3k Ω B Separation Adjustor (103054)	1B, 2B
TR601	2SC871 F (030547-2)	1B
TR602	2SC871 F (030547-2)	2B
TR603	2SC871 F (E) (030547 2, -1)	1B
TR604	2SC871 F (E) (030547 2, -1)	2B



F-1149 <TONE CONTROL BLOCK>

X	Y	Z
R701	1k Ω $\pm$ 10% $\frac{1}{4}$ W Carbon Resistor	2D
R702	1k Ω $\pm$ 10% $\frac{1}{4}$ W Carbon Resistor	2C, 2D
R703	47k Ω $\pm$ 10% $\frac{1}{4}$ W Carbon Resistor	1D
R704	47k Ω $\pm$ 10% $\frac{1}{4}$ W Carbon Resistor	2D
R705	68k Ω $\pm$ 10% $\frac{1}{4}$ W Carbon Resistor	1C
R706	68k Ω $\pm$ 10% $\frac{1}{4}$ W Carbon Resistor	2C
R707	100k Ω $\pm$ 10% $\frac{1}{4}$ W Carbon Resistor	1D
R708	100k Ω $\pm$ 10% $\frac{1}{4}$ W Carbon Resistor	2D
R709	1k Ω $\pm$ 10% $\frac{1}{4}$ W Carbon Resistor	1C, 1D
R710	1k Ω $\pm$ 10% $\frac{1}{4}$ W Carbon Resistor	1C, 1D
R711	12k Ω $\pm$ 10% $\frac{1}{4}$ W Carbon Resistor	1C
R712	12k Ω $\pm$ 10% $\frac{1}{4}$ W Carbon Resistor	1C
R713	330k Ω $\pm$ 10% $\frac{1}{4}$ W Carbon Resistor	1C
R714	330k Ω $\pm$ 10% $\frac{1}{4}$ W Carbon Resistor	2C
R715	6.8k Ω $\pm$ 10% $\frac{1}{4}$ W Carbon Resistor	1D
R716	6.8k Ω $\pm$ 10% $\frac{1}{4}$ W Carbon Resistor	1D
R717	2.7k Ω $\pm$ 10% $\frac{1}{4}$ W Carbon Resistor	1C
R718	2.7k Ω $\pm$ 10% $\frac{1}{4}$ W Carbon Resistor	1C, 2C
R719	10k Ω $\pm$ 10% $\frac{1}{4}$ W Carbon Resistor	2B, 2C
R720	10k Ω $\pm$ 10% $\frac{1}{4}$ W Carbon Resistor	2B, 2C
R721	6.8k Ω $\pm$ 10% $\frac{1}{4}$ W Carbon Resistor	2B, 2C
R722	6.8k Ω $\pm$ 10% $\frac{1}{4}$ W Carbon Resistor	2B, 2C
R723	150k Ω $\pm$ 10% $\frac{1}{4}$ W Carbon Resistor	2A
R724	150k Ω $\pm$ 10% $\frac{1}{4}$ W Carbon Resistor	2A
R725	22k Ω $\pm$ 10% $\frac{1}{4}$ W Carbon Resistor	1A
R726	22k Ω $\pm$ 10% $\frac{1}{4}$ W Carbon Resistor	2B
R727	10k Ω $\pm$ 10% $\frac{1}{4}$ W Carbon Resistor	2A
R728	10k Ω $\pm$ 10% $\frac{1}{4}$ W Carbon Resistor	2A
R729	6.8k Ω $\pm$ 10% $\frac{1}{4}$ W Carbon Resistor	2B
R730	6.8k Ω $\pm$ 10% $\frac{1}{4}$ W Carbon Resistor	2B
R731	470k Ω $\pm$ 10% $\frac{1}{4}$ W Carbon Resistor	1A
R732	470k Ω $\pm$ 10% $\frac{1}{4}$ W Carbon Resistor	1A
R733	560 Ω $\pm$ 10% $\frac{1}{4}$ W Carbon Resistor	1B
R734	560 Ω $\pm$ 10% $\frac{1}{4}$ W Carbon Resistor	1B
R735	5.6k Ω $\pm$ 10% $\frac{1}{4}$ W Carbon Resistor	1A
R736	5.6k Ω $\pm$ 10% $\frac{1}{4}$ W Carbon Resistor	1A
R737	150k Ω $\pm$ 10% $\frac{1}{4}$ W Carbon Resistor	1B
R738	150k Ω $\pm$ 10% $\frac{1}{4}$ W Carbon Resistor	1B
C701	0.22 μ F $\pm$ 10% 50 WV Mylar Capacitor	1D

X	Y	Z
C702	0.22 μ F $\pm$ 10% 50 WV Mylar Capacitor	2B
C703	22pF $\pm$ 10% 50 WV Ceramic Capacitor	1A
C704	22pF $\pm$ 10% 50 WV Ceramic Capacitor	1A, 1B
C705	33 μ F 16 WV Electrolytic Capacitor	1B
C706	33 μ F 16 WV Electrolytic Capacitor	1B
C707	33 μ F 10 WV Electrolytic Capacitor	1A
C708	33 μ F 10 WV Electrolytic Capacitor	1A
C709	1 μ F 50 WV Electrolytic Capacitor	1D
C710	1 μ F 50 WV Electrolytic Capacitor	
C711	0.04 μ F $\pm$ 10% 50 WV Mylar Capacitor	
C712	0.04 μ F $\pm$ 10% 50 WV Mylar Capacitor	2D
C713	0.0015 μ F $\pm$ 10% 50 WV Mylar Capacitor	
C714	0.0015 μ F $\pm$ 10% 50 WV Mylar Capacitor	2C
C715	0.04 μ F $\pm$ 10% 50 WV Mylar Capacitor	
C716	0.04 μ F $\pm$ 10% 50 WV Mylar Capacitor	2B
C717	3.3 μ F 25 WV Electrolytic Capacitor	
C718	3.3 μ F 25 WV Electrolytic Capacitor	2A
C719	68pF $\pm$ 10% 50 WV Ceramic Capacitor	
C720	68pF $\pm$ 10% 50 WV Ceramic Capacitor	1D
C721	33 μ F 10 WV Electrolytic Capacitor	1D
C722	33 μ F 10 WV Electrolytic Capacitor	1C
C723	1 μ F 50 WV Electrolytic Capacitor	1C
C724	1 μ F 50 WV Electrolytic Capacitor	1A, 1B
C725	0.1 μ F 25 WV Aluminum Solid Capacitor	1B
VR701		2D
VR702	250k Ω M, N (101040)	1D
VR703		1C
VR704	250k Ω B (101020)	1C
VR705		1C
VR706	100k Ω B (102004)	1C
VR707		1B, 1C
VR708	100k Ω B (102004)	1B, 1C
TR701	2SC 871 F (030547-2)	2A
TR702	2SC 871 F (030547-2)	
TR703	2SC 872 E (030547-1)	
TR704	2SC 871 E (030547-1)	1A, 2A
TR705	2SC 871 E (030547-1)	2A
TR706	2SC 871 E (030547-1)	1A

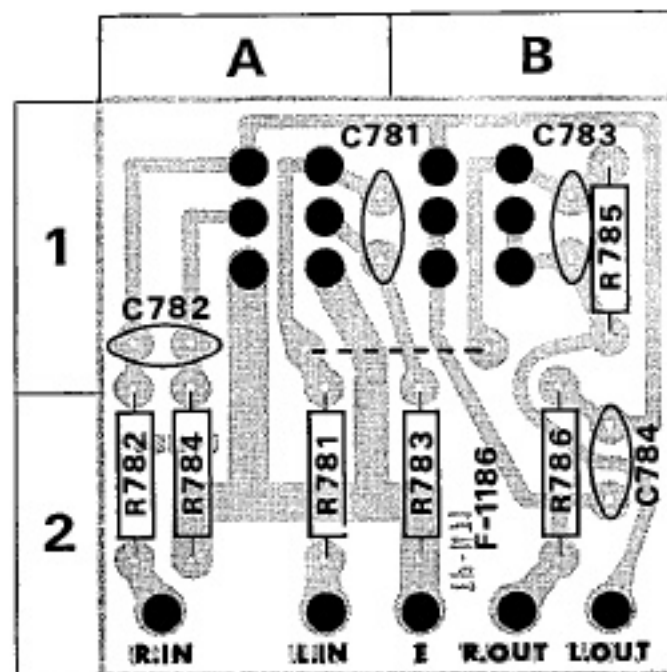


PRINTED CIRCUIT SHEETS AND PARTS LIST

X: Parts No Y: Parts Name Z: Position of Parts

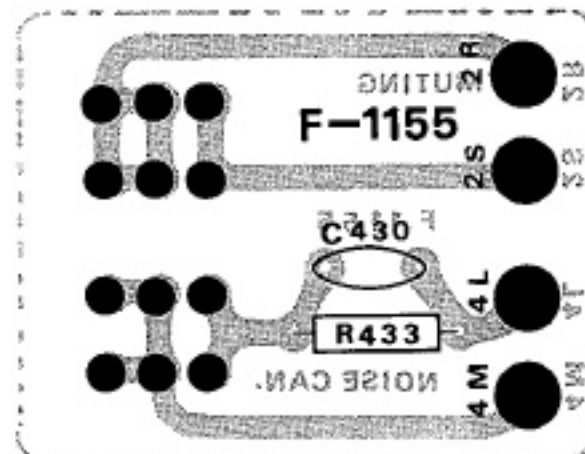
F-1186 <HIGH-LOW FILTER BLOCK>

X	Y	Z
R781	2.2k Ω $\pm$ 10% $\frac{1}{4}$ W Carbon Resistor	2A
R782	2.2k Ω $\pm$ 10% $\frac{1}{4}$ W Carbon Resistor	2A
R783	100k Ω $\pm$ 10% $\frac{1}{4}$ W Carbon Resistor	2B
R784	100k Ω $\pm$ 10% $\frac{1}{4}$ W Carbon Resistor	2A
R785	560k Ω $\pm$ 10% $\frac{1}{4}$ W Carbon Resistor	1B
R786	560k Ω $\pm$ 10% $\frac{1}{4}$ W Carbon Resistor	2B
C781	0.02 μ F $\pm$ 10% 50 WV Mylar Capacitor	1A, 1B
C782	0.02 μ F $\pm$ 10% 50 WV Mylar Capacitor	1A
C783	0.0047 μ F $\pm$ 10% 50 WV Mylar Capacitor	1B
C784	0.0047 μ F $\pm$ 10% 50 WV Mylar Capacitor	2B
S8, S9	(113007)	



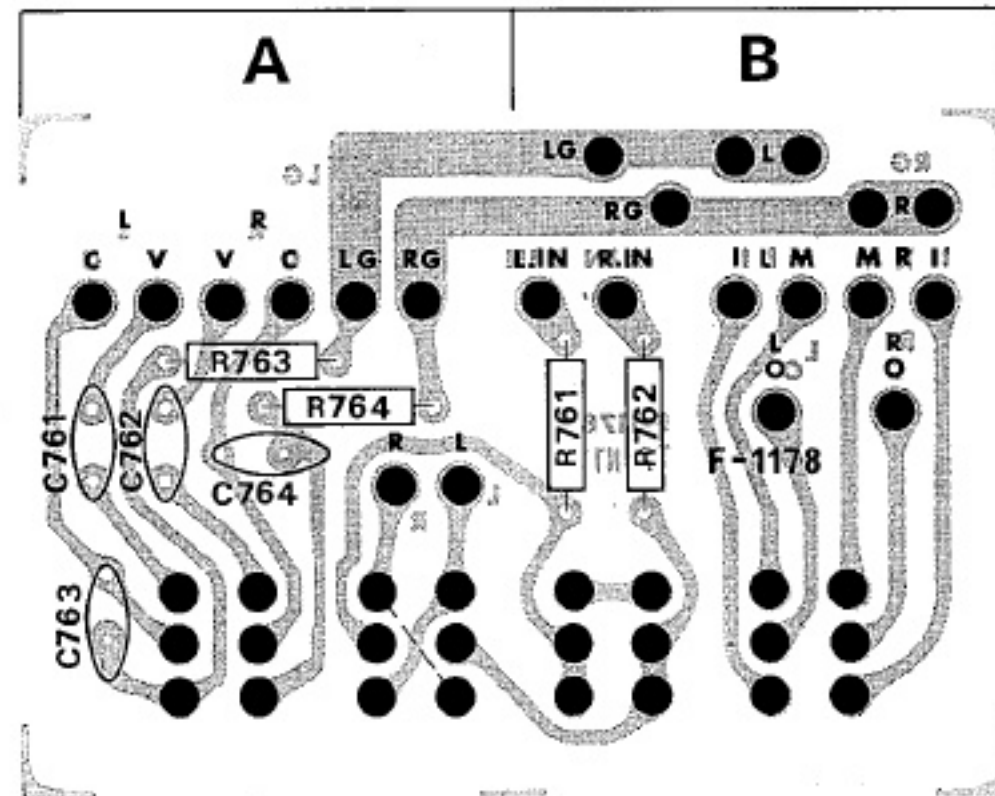
F-1155 <MUTING BLOCK>

X	Y	Z
R433	3.3M Ω $\pm$ 10% $\frac{1}{4}$ W Solid Resistor	
C430	330pF $\pm$ 5% 50 WV Styrol Capacitor	
S11, S12	(113013-1)	



F-1178 <ACCESSORIES BLOCK>

X	Y	Z
R761	12k Ω $\pm$ 10% $\frac{1}{4}$ W Carbon Resistor	B
R762	12k Ω $\pm$ 10% $\frac{1}{4}$ W Carbon Resistor	B
R763	33k Ω $\pm$ 10% $\frac{1}{4}$ W Carbon Resistor	A
R764	33k Ω $\pm$ 10% $\frac{1}{4}$ W Carbon Resistor	A
C761	150pF $\pm$ 10% 50 WV Mica Capacitor	A
C762	150pF $\pm$ 10% 50 WV Mica Capacitor	A
C763	0.01 μ F $\pm$ 10% 50 WV Mylar Capacitor	A
C764	0.01 μ F $\pm$ 10% 50 WV Mylar Capacitor	A
S3,4,5,6	(113014)	

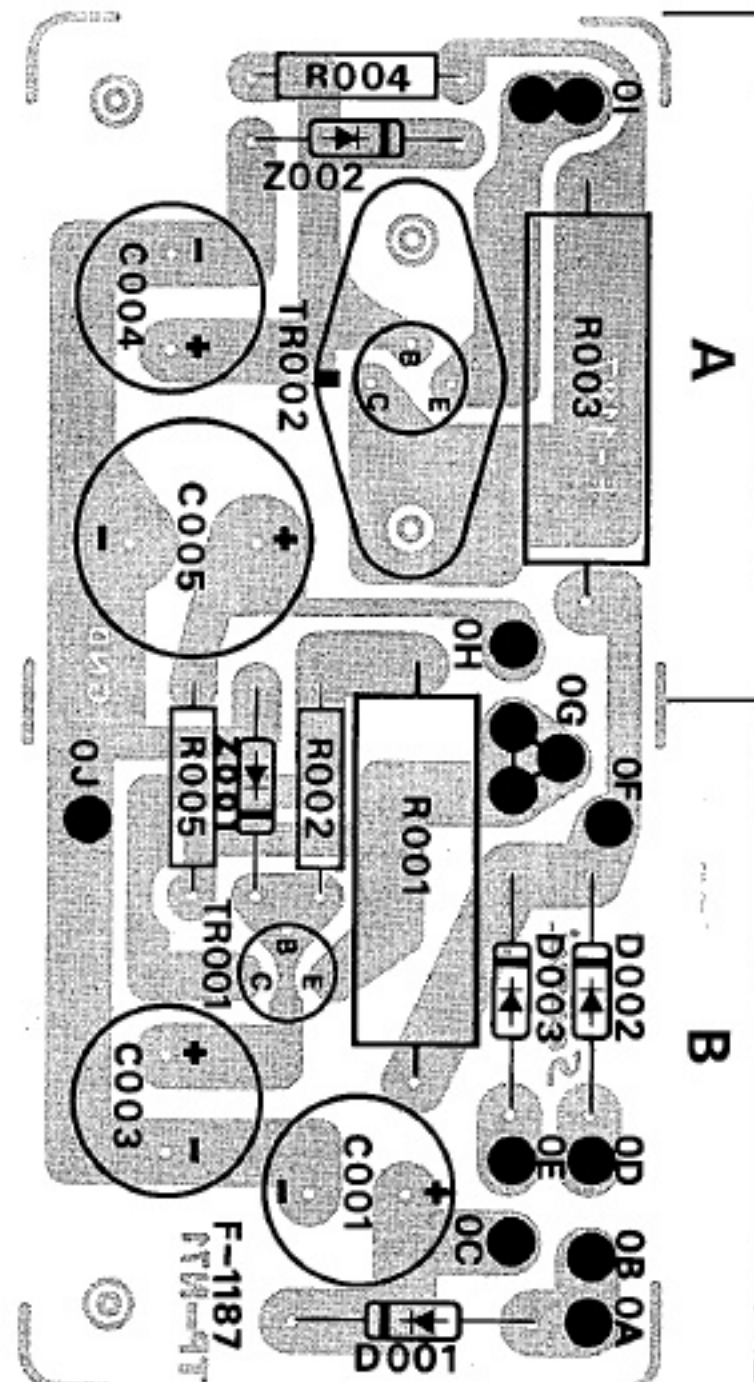
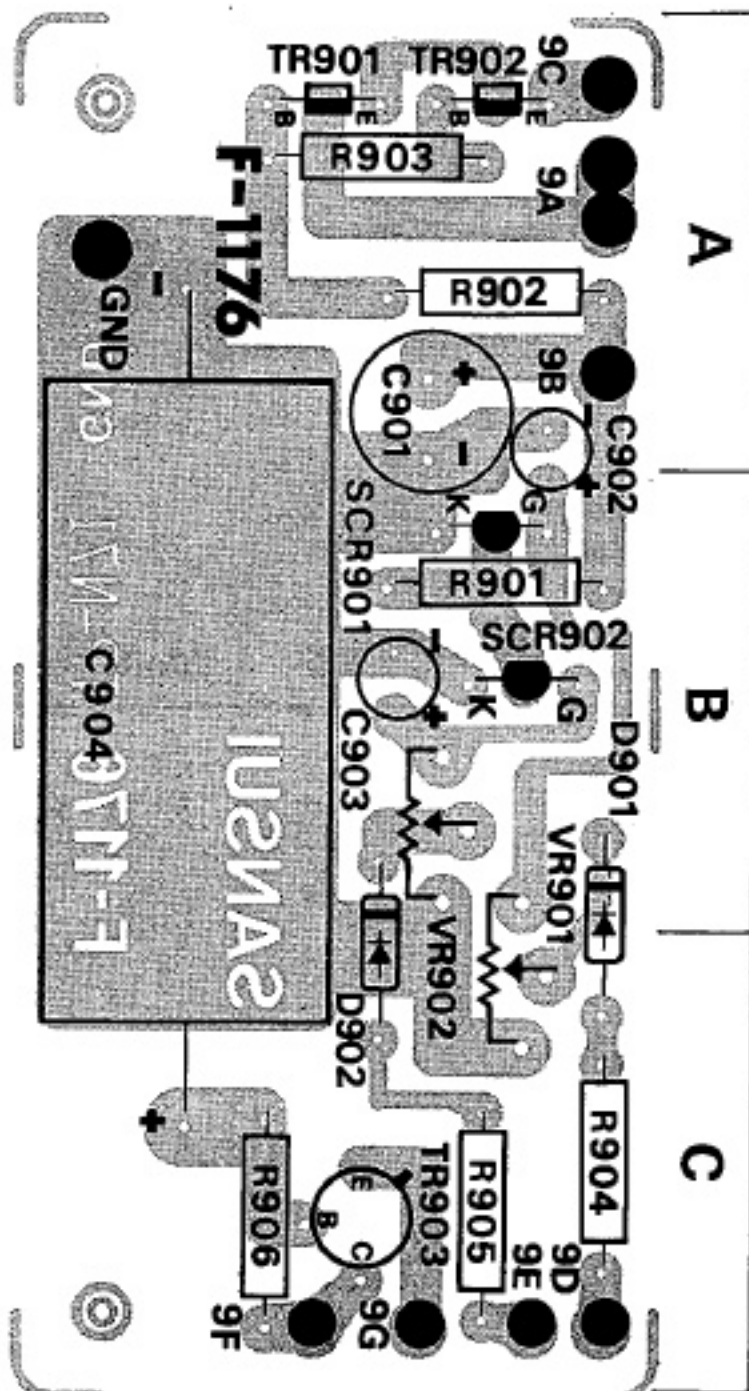


F-1176 <PROTECTOR BLOCK>

X	Y	Z
R901	6.8 Ω $\pm 10\%$ $\frac{1}{2}$ W Solid Resistor	B
R902	10 Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	A
R903	10 Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	A
R904	2.2k Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	C
R905	2.2k Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	C
R906	6.8k Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	C
VR901	V101 KR-1k Ω B (103053)	C
VR902	V101 KR-1k Ω B (103053)	B
C901	33 μ F 50 WV Electrolytic Capacitor	A
C902	0.1 μ F 25 WV Aluminum Solid Capacitor	A, B
C903	0.1 μ F 25 WV Aluminum Solid Capacitor	B
C904	100 μ F 100 WV Electrolytic Capacitor	A, B, C
TR901	2SC458 (B) (030511-1)	A
TR902	2SC458 (B) (030511-1)	A
TR903	2SC627 (030558-1)	C
SCR901	2SF656 (035002)	B
SCR902	2SF656 (035002)	B

F-1187 <RIPPLE FILTER BLOCK>

X	Y	Z
R001	68 Ω $\pm 10\%$ 3 W Wire-Wound Resistor	B
R002	3.9k Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	B
R003	180 Ω $\pm 10\%$ 3 W Wire-Wound Resistor	A
R004	1.5k Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	A
R005	680 Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	B
C001	330 μ F 10 WV Electrolytic Capacitor	B
C003	220 μ F 25 WV Electrolytic Capacitor	B
C004	330 μ F 16 WV Electrolytic Capacitor	A
C005	470 μ F 25 WV Electrolytic Capacitor	A
D001	10D-1 (031034)	B
D002	10D-1 (031034)	B
D003	10D-1 (031034)	B
Z001	ZB1-25 (031071)	B
Z002	ZB1-14 (031069-1)	A
TR001	2SC971 (030553-1)	B
TR002	2SD205 (030813-1, -2)	A



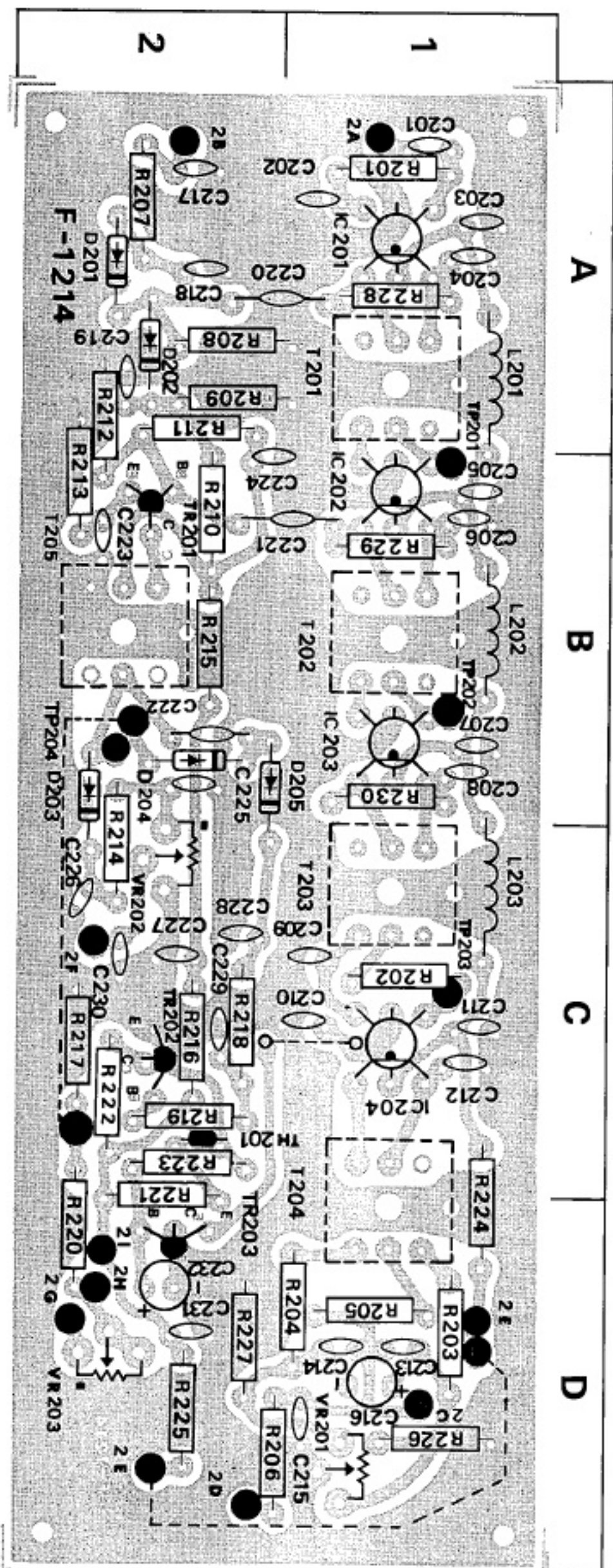
PRINTED CIRCUIT SHEETS AND PARTS LIST

X: Parts No Y: Parts Name Z: Position of Parts

F-1214 <FM IF BLOCK>

X	Y	Z
R201	1.5k Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	1 A
R202	68 Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	1 C
R203	1k Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	1 D
R204	1k Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	1 D
R205	56 Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	1 D
R206	22k Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	2 D
R207	100k Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	2 A
R208	220k Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	2 A
R209	680 Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	2 A
R210	68k Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	2 B
R211	22k Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	2 A
R212	10k Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	2 A
R213	1k Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	2 B
R214	2.2k Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	2 C
R215	22 Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	2 B
R216	22 Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	2 C
R217	10k Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	2 C
R218	1k Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	2 C
R219	68k Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	2 C
R120	100k Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	2 D
R222	18k Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	2 D
R223	2.7k Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	2 C
R224	56 Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	2 C
R225	820 Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	2 D
R228	15k Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	1 A
R229	15k Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	1 B
R230	15k Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	2 B
C201	0.01 μ F $\frac{+80}{-20}\%$ 25 WV Ceramic Capacitor	1 A
C202	0.02 μ F $\frac{+80}{-20}\%$ 25 WV Ceramic Capacitor	1 A
C203	0.02 μ F $\frac{+80}{-20}\%$ 25 WV Ceramic Capacitor	1 A
C204	0.02 μ F $\frac{+80}{-20}\%$ 25 WV Ceramic Capacitor	1 A
C205	0.02 μ F $\frac{+80}{-20}\%$ 25 WV Ceramic Capacitor	1 B
C206	0.02 μ F $\frac{+80}{-20}\%$ 25 WV Ceramic Capacitor	1 B
C207	0.02 μ F $\frac{+80}{-20}\%$ 25 WV Ceramic Capacitor	1 B
C208	0.02 μ F $\frac{+80}{-20}\%$ 25 WV Ceramic Capacitor	1 B
C209	0.02 μ F $\frac{+80}{-20}\%$ 25 WV Ceramic Capacitor	1 C
C210	0.02 μ F $\frac{+80}{-20}\%$ 25 WV Ceramic Capacitor	1 C
C211	0.02 μ F $\frac{+80}{-20}\%$ 25 WV Ceramic Capacitor	1 C
C212	0.02 μ F $\frac{+80}{-20}\%$ 25 WV Ceramic Capacitor	1 C
C213	220 pF $\pm 10\%$ 50 WV Ceramic Capacitor	1 D
C214	220 pF $\pm 10\%$ 50 WV Ceramic Capacitor	1 D
C215	47 pF $\pm 10\%$ 50 WV Ceramic Capacitor	1 D
C216	10 μ F 10 WV Electrolytic Capacitor	1 D
C217	0.05 μ F $\frac{+80}{-20}\%$ 25 WV Ceramic Capacitor	2 A
C218	0.02 μ F $\frac{+80}{-20}\%$ 25 WV Ceramic Capacitor	2 A
C219	0.02 μ F $\frac{+80}{-20}\%$ 25 WV Ceramic Capacitor	2 A
C220	3.3 pF $\pm 10\%$ 50 WV Ceramic Capacitor	2 A
C221	3.3 pF $\pm 10\%$ 50 WV Ceramic Capacitor	2 A
C222	6.8 pF $\pm 10\%$ 50 WV Ceramic Capacitor	2 B
C223	0.02 μ F $\frac{+80}{-20}\%$ 25 WV Ceramic Capacitor	2 B
C224	0.02 μ F $\frac{+80}{-20}\%$ 25 WV Ceramic Capacitor	2 B

X	Y	Z
C225	0.02 μ F $\frac{+80}{-20}\%$ 25 WV Ceramic Capacitor	2 B
C226	0.02 μ F $\frac{+80}{-20}\%$ 25 WV Ceramic Capacitor	2 C
C227	0.02 μ F $\frac{+80}{-20}\%$ 25 WV Ceramic Capacitor	2 C
C228	330 pF $\pm 10\%$ 25 WV Ceramic Capacitor	2 C
C229	330 pF $\pm 10\%$ 25 WV Ceramic Capacitor	2 C
C230	0.05 μ F $\frac{+80}{-20}\%$ 25 WV Ceramic Capacitor	2 C
C231	0.02 μ F $\frac{+80}{-20}\%$ 25 WV Ceramic Capacitor	2 D
C232	1 μ F 50 WV Electrolytic Capacitor	2 D
VR201	V101KR-1-20KB Tuning Meter Adjustor (103046)	1 D
VR202	V101KR-1-50KB Signal Meter Adjustor (103020)	2 C
VR203	V101KR-1-100KB Muting Adjustor (103034)	2 D
T201	FMIFT 10.7MHz (423537)	1 A
T202	FMIFT 10.7MHz (423548)	1 B
T203	FMIFT 10.7MHz (423549)	1 C
T204	FM Detector 10.7MHz (423518)	1 D
T205	FM Meter Transformer 10.7MHz (423529)	2 B
L201	3.3MH Choke Coil (429001-1)	1 A
L202	3.3MH Choke Coil (429001-1)	1 B
L203	3.3MH Choke Coil (429001-1)	1 C
IC201	PA-7703E (036001)	1 A
IC202	PA-7703E (036001)	1 B
IC203	PA-7703E (036001)	1 B
IC204	PA-7703E (036001)	1 C
TR201	2SC 380 (O) (030533)	2 B
TR202	2SC 828 (T) (030527-4)	2 C
TR203	2SA 564 (P) or (Q) (030008,-1)	2 D
D201	IN60 (031033)	2 A
D202	IN60 (031033)	2 A
D203	IN60 (031033)	2 B
D204	IN60 (031033)	2 B
D205	IN60 (031033)	2 B



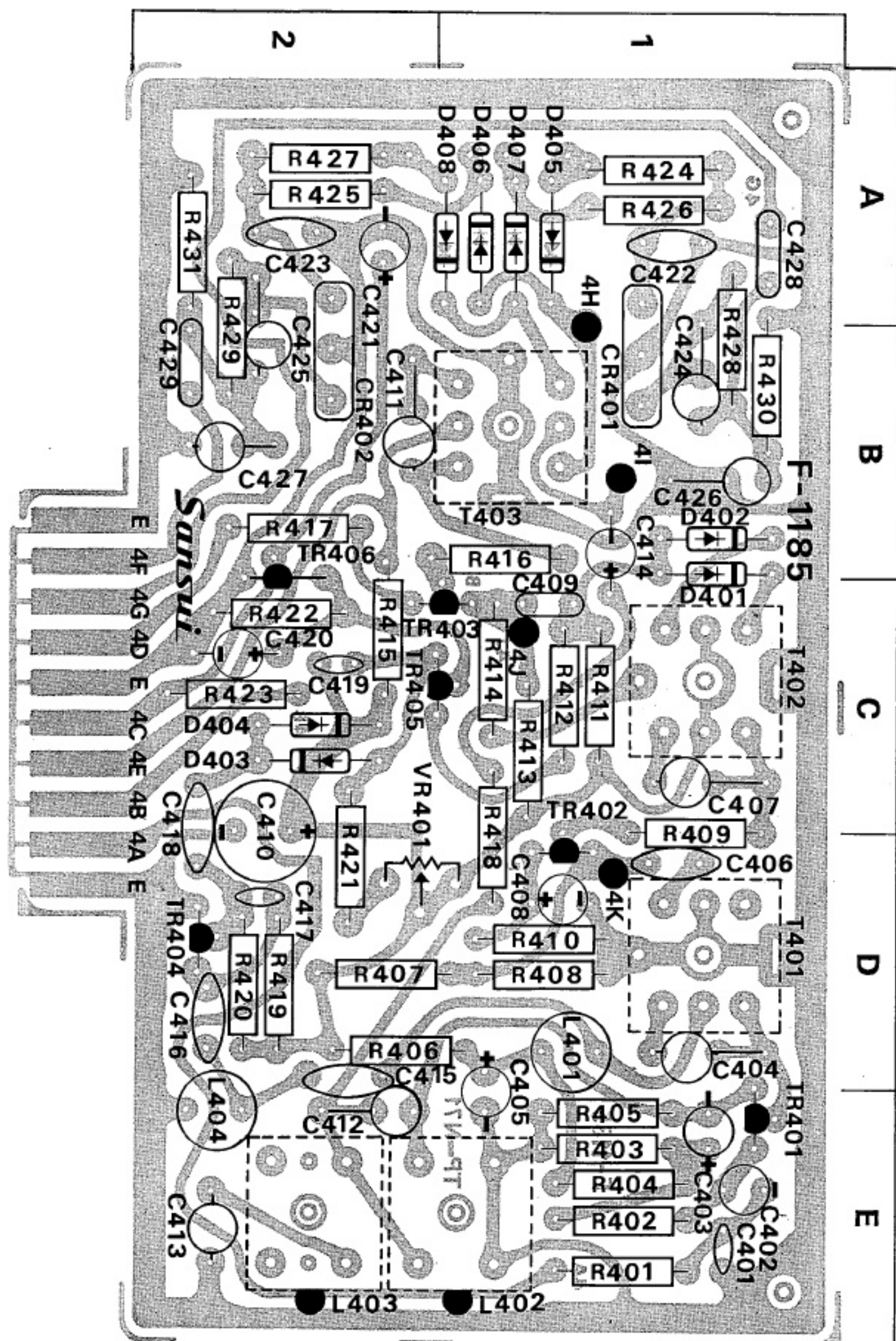
PRINTED CIRCUIT SHEETS AND PARTS LIST

X: Parts No Y: Parts Name Z: Position of Parts

F-1185 <MULTIPLEX BLOCK>

X	Y	Z
R401	1k Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	1 E
R402	100k Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	1 E
R403	22k Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	1 E
R404	100k Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	1 E
R405	680 Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	1 E
R406	100 Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	2 D
R407	47k Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	2 D
R408	22k Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	1 D
R409	1k Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	1 C, 1 D
R410	2.2k Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	1 D
R411	10k Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	1 C
R412	10k Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	1 C
R413	100k Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	1 C
R414	18k Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	1 C
R415	47 Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	2 C
R416	470 Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	1 B, 2 B
R417	5.6k Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	2 B
R418	2.2k Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	1 C, 1 D
R419	1.2M Ω $\pm 10\%$ $\frac{1}{4}$ W Solid Resistor	2 D
R420	4.7k Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	2 D
R421	3.3k Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	2 D
R422	1.8k Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	2 C
R423	4.7k Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	2 C
R424	22k Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	1 A
R425	22k Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	2 A
R426	22k Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	1 A
R427	22k Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	2 A
R428	82k Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	1 A
R429	82k Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	2 A
R430	220k Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	1 B
R431	220k Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	2 A
C401	100pF $\pm 10\%$ 50 WV Ceramic Capacitor	1 E
C402	1 μ F 50 WV Electrolytic Capacitor	1 E
C403	33 μ F 6.3 WV Electrolytic Capacitor	1 E
C404	5000pF $\pm 5\%$ 50 WV Styrol Capacitor	1 D
C405	10 μ F 25 WV Electrolytic Capacitor	1 E, 2 E
C406	0.02 μ F $\pm 10\%$ 50 WV Mylar Capacitor	1 D
C407	6800pF $\pm 5\%$ 50 WV Styrol Capacitor	1 C
C408	1 μ F 50 WV Electrolytic Capacitor	1 D
C409	0.02 μ F $\pm 10\%$ 50 WV Mylar Capacitor	1 C
C410	47 μ F 25 WV Electrolytic Capacitor	2 C, 2 D
C411	1700pF $\pm 5\%$ 50 WV Styrol Capacitor	2 B
C412	1500pF $\pm 5\%$ 50 WV Styrol Capacitor	2 E
C413	220pF $\pm 5\%$ 50 WV Styrol Capacitor	2 E
C414	10 μ F 25 WV Electrolytic Capacitor	1 B
C415	330pF $\pm 10\%$ 50 WV Ceramic Capacitor	2 D, 2 E
C416	330pF $\pm 10\%$ 50 WV Ceramic Capacitor	2 D
C417	47pF $\pm 10\%$ 50 WV Ceramic Capacitor	2 D
C418	0.02 μ F $\pm 80\%$ 25 WV Ceramic Capacitor	2 C, 2 D
C419	0.02 μ F $\pm 80\%$ 25 WV Ceramic Capacitor	2 C
C420	3.3 μ F 25 WV Electrolytic Capacitor	2 C
C421	10 μ F 10 WV Electrolytic Capacitor	2 A
C422	220pF $\pm 10\%$ 50 WV Ceramic Capacitor	1 A
C423	220pF $\pm 10\%$ 50 WV Ceramic Capacitor	2 A
C424	560pF $\pm 5\%$ 50 WV Styrol Capacitor	1 B

X	Y	Z
C425	560pF $\pm 5\%$ 50 WV Styrol Capacitor	2 A, 2 B
C426	1000pF $\pm 5\%$ 50 WV Styrol Capacitor	1 B
C427	1000pF $\pm 5\%$ 50 WV Styrol Capacitor	2 B
C428	0.047 μ F $\pm 10\%$ 50 WV Mylar Capacitor	1 A
C429	0.047 μ F $\pm 10\%$ 50 WV Mylar Capacitor	2 A
CR401	FP-38A (080008)	1 B
CR402	FP-38A (080008)	2 B
VR401	V-101kR-1-10k Ω B (Stereo Inductor ADJ.) (103019)	2 D
T401	19kHz (424028)	1 D
T402	19kHz (424029)	1 C
T403	38kHz (424029)	1 B, 2 B
L401	4.7mH (490003)	1 D
L402	68kHz (424026)	1 D, 2 D
L403	71kHz (424027)	2 D
L404	4.7mH (490003)	2 E
TR401	2SC536 E1 (030524-4)	1 E
TR402	2SC536 E1 (030524-4)	1 D
TR403	2SC536 E1 (030524-4)	2 C
TR404	2SC536 E1 (030524-4)	2 D
TR405	2SA564(PQ) (030008, -1)	2 C
TR406	2SC536 E1 (030524-4)	2 B, 2 C
D401	IN34A (031040)	1 B
D402	IN34A (031040)	1 B, 1 C
D403	IN34A (031040)	2 C
D404	IN34A (031040)	2 C
D405	IN34A $\text{\textcircled{V}}$ (031040-1)	1 A
D406	IN34A $\text{\textcircled{V}}$ (031040-1)	1 A, 2 A
D407	IN34A $\text{\textcircled{V}}$ (031040-1)	1 A
D408	IN34A $\text{\textcircled{V}}$ (031040-1)	2 A



PRINTED CIRCUIT SHEETS AND PARTS LIST

X: Parts No Y: Parts Name Z: Position of Parts

F-10382 <AM IF BLOCK>

X	Y	Z
R301	1k Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	1 A
R302	100 Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	2 A
R303	3.9k Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	1 A
R304	33k Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	2 B
R305	100 Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	2 B
R306	56k Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	2 C
R307	22 Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	1 B
R308	22 Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	2 C
R309	1k Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	1 C
R311	10k Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	2 C
R312	22 Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	2 D
R313	100 Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	1 C
R314	6.8k Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	1 C
R315	470 Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	1 C
R316	8.2k Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	1 D
R317	1k Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	2 D
R318	1k Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	1 D
R319	120k Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	1 D
R320	1k Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	1 B
R321	4.7k Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	1 D
C301	0.04 μ F $\frac{+80}{-20}\%$ 25 WV Ceramic Capacitor	1 A
C302	0.04 μ F $\frac{+80}{-20}\%$ 25 WV Ceramic Capacitor	2 A
C303	100 μ F 6.3 WV Electrolytic Capacitor	1 A
C304	0.02 μ F $\frac{+80}{-20}\%$ 25 WV Ceramic Capacitor	1 A
C305	0.04 μ F $\frac{+80}{-20}\%$ 25 WV Ceramic Capacitor	2 A
C306	0.04 μ F $\frac{+80}{-20}\%$ 25 WV Ceramic Capacitor	1 A
C307	0.02 μ F $\frac{+80}{-20}\%$ 25 WV Ceramic Capacitor	2 B
C308	0.01 μ F $\pm 10\%$ 50 WV Mylar Capacitor	1 B
C309	430pF $\pm 5\%$ 50 WV Mica Capacitor	1 B
C310	100 μ F 16 WV Electrolytic Capacitor	2 B
C311	500pF $\pm 5\%$ 50 WV Mica Capacitor	2 B
C312	500pF $\pm 5\%$ 50 WV Mica Capacitor	2 A
C313	4.7 μ F 16 WV Electrolytic Capacitor	2 C
C314	0.02 μ F $\frac{+80}{-20}\%$ 25 WV Ceramic Capacitor	2 B
C315	0.02 μ F $\frac{+80}{-20}\%$ 25 WV Ceramic Capacitor	2 C
C316	0.04 μ F $\frac{+80}{-20}\%$ 25 WV Ceramic Capacitor	1 B
C317	47 μ F 6.3 WV Electrolytic Capacitor	1 C
C318	0.02 μ F $\frac{+80}{-20}\%$ 25 WV Ceramic Capacitor	2 C
C319	500pF $\pm 5\%$ 50 WV Mica Capacitor	2 C
C320	500pF $\pm 5\%$ 50 WV Mica Capacitor	1 C
C322	0.04 μ F $\frac{+80}{-20}\%$ 25 WV Ceramic Capacitor	1 C
C323	0.02 μ F $\frac{+80}{-20}\%$ 25 WV Ceramic Capacitor	2 C
C324	220 μ F 16 WV Electrolytic Capacitor	2 D
C325	500pF $\pm 5\%$ 50 WV Mica Capacitor	2 D
C326	500pF $\pm 5\%$ 50 WV Mica Capacitor	1 D
C327	0.02 μ F $\frac{+80}{-20}\%$ 25 WV Ceramic Capacitor	1 C
C328	0.02 μ F $\pm 10\%$ 50 WV Mylar Capacitor	1 D
C329	0.1 μ F $\pm 10\%$ 50 WV Mylar Capacitor	1 D
C330	0.04 μ F $\frac{+80}{-20}\%$ 25 WV Ceramic Capacitor	1 D
C331	0.04 μ F $\frac{+80}{-20}\%$ 25 WV Ceramic Capacitor	2 D
C332	0.005 μ F $\frac{+80}{-20}\%$ 25 WV Ceramic Capacitor	

X	Y	Z
VR301	V101KR-1-10k Ω B Signal meter Adjustor (103019)	2 D
T301	AM RF (421005)	1 A, 2 A
T302	AM OSC (422007)	1 B, 2 B
T303	AM IFT 455kHz (423019)	1 B, 2 B
T304	AM IFT 455kHz (423019)	1 C, 2 C
T305	AM IFT 455kHz (423018)	1 D, 2 D
TR301	2SC 460 C (030535-1)	2 A
TR302	2SC 460 B (030535)	2 B
TR303	2SC 460 B (030535)	1 C
TR304	2SC 460 C (030535-1)	1 C
D301	IN60 (031033)	2 A
D302	IN60 (031033)	2 A
D303	IN60 (031033)	2 B
D304	IN60 (031033)	1 D
D305	IN60 (031033)	2 D

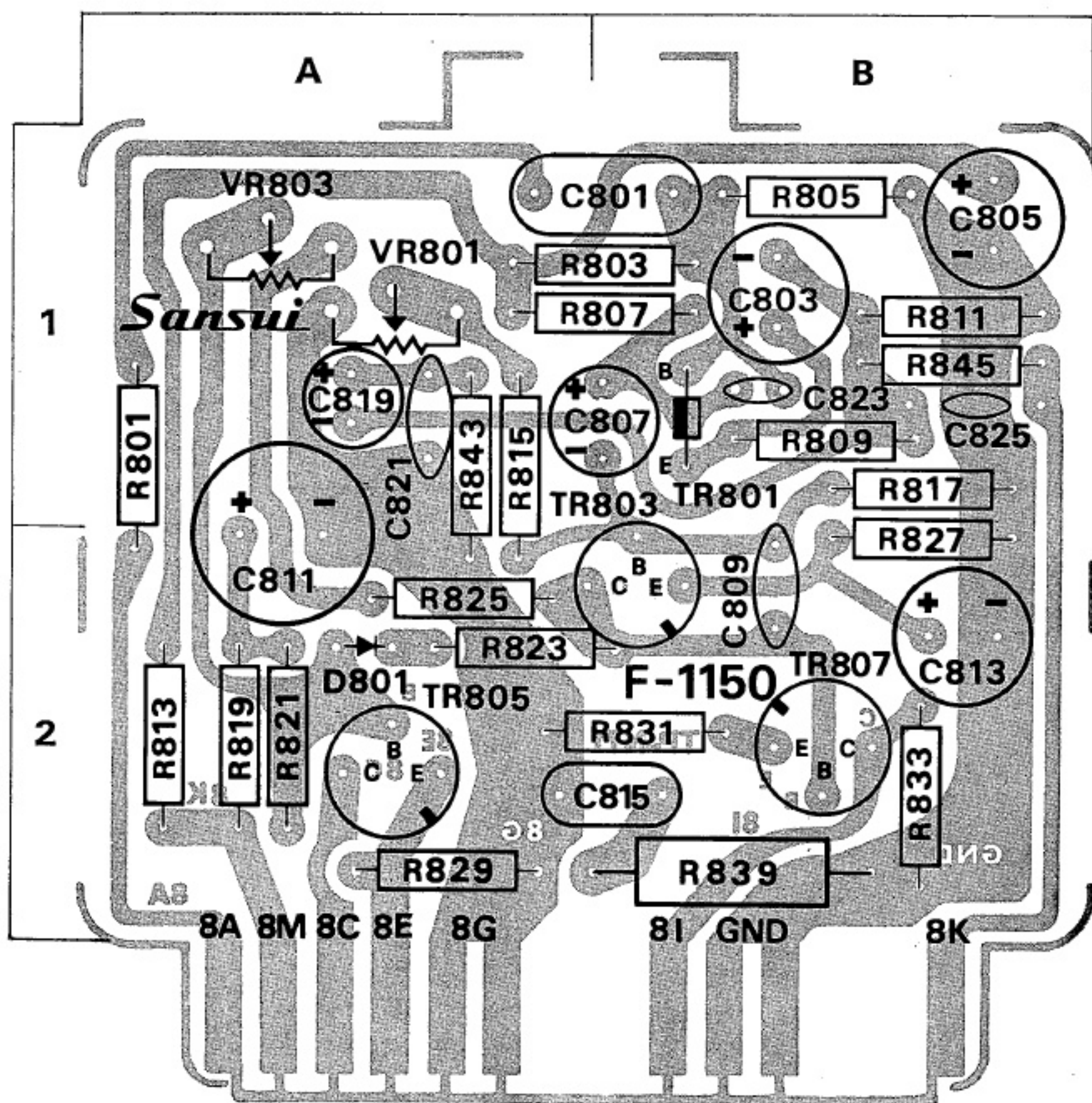
PRINTED CIRCUIT SHEETS AND PARTS LIST

X: Parts No Y: Parts Name Z: Position of Parts

F-1150 <DRIVER AMP. BLOCK>

X	Y	Z
R801	2.2k Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	1 A
R802	2.2k Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	1 A
R803	560k Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	1 A, 1 B
R804	560k Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	1 A, 1 B
R805	270k Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	1 B
R806	270k Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	1 B
R807	3.9k Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	1 A, 1 B
R808	3.9k Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	1 A, 1 B
R809	2.2k Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	1 B
R810	2.2k Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	1 B
R811	220 Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	1 B
R812	220 Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	1 B
R813	27k Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	2 A
R814	27k Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	2 A
R815	39k Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	1 A
R816	39k Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	1 A
R817	10k Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	1 B
R818	10k Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	1 B
R819	680 Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	2 A
R820	680 Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	2 A
R821	4.7k Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	2 A
R822	4.7k Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	2 A
R823	27 Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	2 A
R824	27 Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	2 A
R825	220 Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	2 A
R826	220 Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	2 A
R827	220 Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	2 B
R828	220 Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	2 B
R829	100 Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	2 A
R830	100 Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	2 A
R831	10 Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	2 B
R832	10 Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	2 B
R833	100 Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	2 B
R834	100 Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	2 B
R839	22 Ω $\pm 10\%$ 1 W Solid Resistor	2 B
R840	22 Ω $\pm 10\%$ 1 W Solid Resistor	2 B
R843	6.8k Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	1 A
R844	6.8k Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	1 A
R845	4.7k Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	1 B
R846	4.7k Ω $\pm 10\%$ $\frac{1}{4}$ W Carbon Resistor	1 B
C801	0.02 μ F $\pm 10\%$ 50 WV Mylar Capacitor	1 A, 1 B
C802	0.22 μ F $\pm 10\%$ 50 WV Mylar Capacitor	1 A, 1 B
C803	220 μ F 6.3 WV Electrolytic Capacitor	1 B
C804	220 μ F 6.3 WV Electrolytic Capacitor	1 B
C805	100 μ F 25 WV Electrolytic Capacitor	1 B
C806	100 μ F 25 WV Electrolytic Capacitor	1 A
C807	3.3 μ F 25 WV Aluminum Solid Capacitor	1 A, 1 B
C808	3.3 μ F 25 WV Aluminum Solid Capacitor	1 A, 1 B
C809	100 pF $\pm 10\%$ 50 WV Ceramic Capacitor	2 B
C810	100 pF $\pm 10\%$ 50 WV Ceramic Capacitor	2 B
C811	100 μ F 50 WV Electrolytic Capacitor	1 A, 2 A
C812	100 μ F 50 WV Electrolytic Capacitor	1 A, 2 A
C813	100 μ F 6.3 WV Electrolytic Capacitor	2 B
C814	100 μ F 6.3 WV Electrolytic Capacitor	2 B
C815	0.1 μ F $\pm 10\%$ 50 WV Mylar Capacitor	2 A, 2 B

X	Y	Z
C816	0.1 μ F $\pm 10\%$ 50 WV Mylar Capacitor	1 A, 2 B
C819	10 μ F 50 WV Electrolytic Capacitor	1 A
C820	10 μ F 50 WV Electrolytic Capacitor	1 A
C821	100 pF $\pm 10\%$ 50 WV Ceramic Capacitor	1 A
C822	100 pF $\pm 10\%$ 50 WV Ceramic Capacitor	1 A
C823	33 pF $\pm 10\%$ 50 WV Ceramic Capacitor	1 B
C824	33 pF $\pm 10\%$ 50 WV Ceramic Capacitor	1 B
C825	100 pF $\pm 10\%$ 50 WV Ceramic Capacitor	
C826	100 pF $\pm 10\%$ 50 WV Ceramic Capacitor	
VR801	V-101 kR-100k Ω B AC Balance Adjustor (103038)	1 A
VR802	V-101 kR-100k Ω B AC Balance Adjustor (103038)	1 A
VR803	V-101 kR- 5k Ω B DC Bias Adjustor (103037)	1 A
VR804	V-101 kR- 5k Ω B DC Bias Adjustor (103037)	1 A
TR801	2SC 458 LG ① (030531-2)	1 B
TR802	2SC 458 LG ① (030531-2)	1 B
TR803	2SC 708 A ② (030548-1)	2 B
TR804	2SC 708 A ② (030548-1)	2 B
TR805	2SC 708 A ② (030548-1)	2 A
TR806	2SC 708 A ② (030548-1)	2 A
TR807	2SC 537 A ③ (030012-1)	2 B
TR808	2SC 537 A ③ (030012-1)	2 B
D801	STV-3 Varistor (034004)	2 A
D802	STV-3 Varistor (034004)	2 A



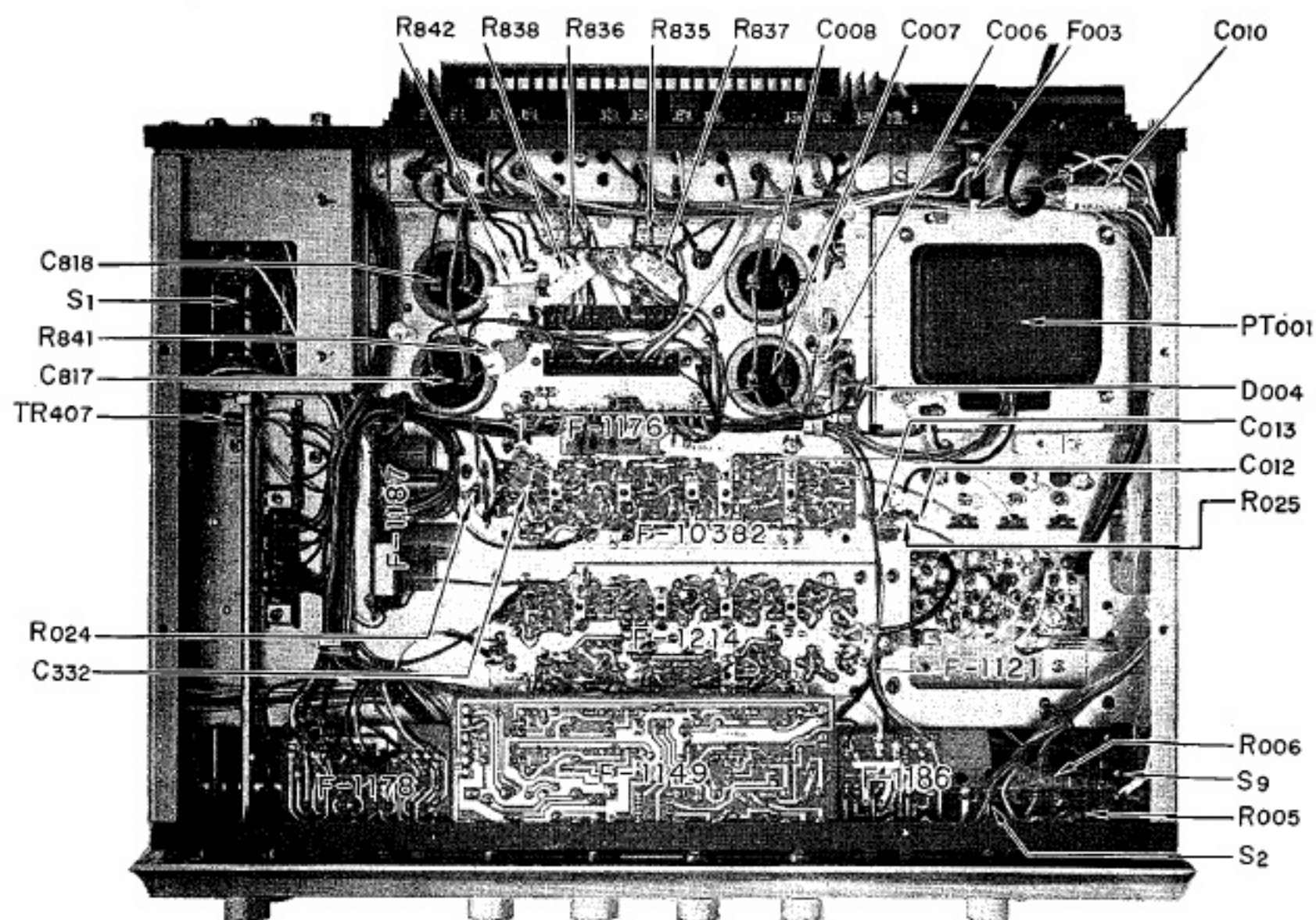
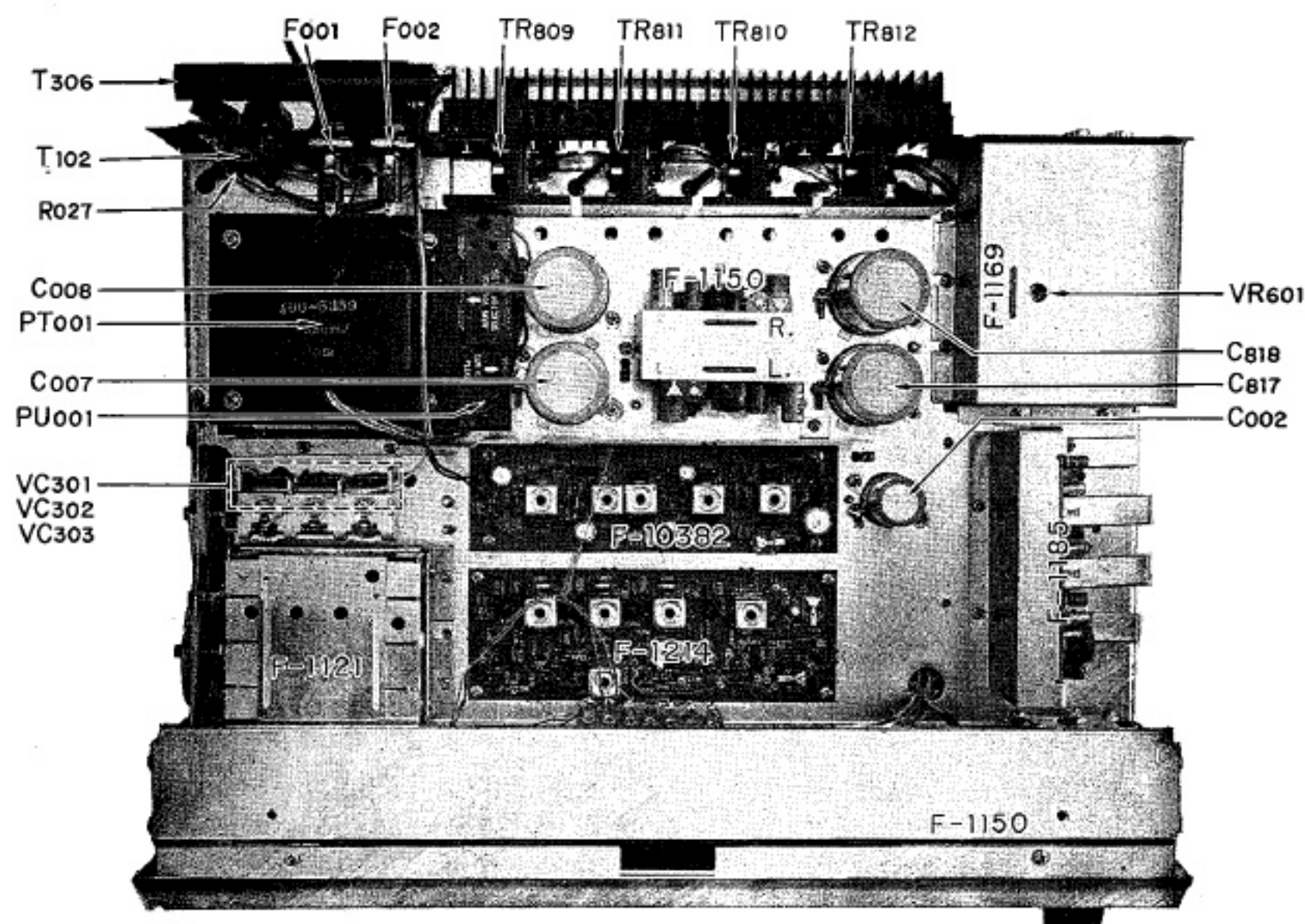
OTHER PARTS CHART AND LIST

X: Parts No Y: Parts Name

OTHER PARTS CHART AND LIST

X	Y
R006	560Ω ±10% 1 W Metal film Resistor
R007	560Ω ±10% 1 W Metal film Resistor
R008	68kΩ ±10% 1/4 W Carbon Resistor
R009	68kΩ ±10% 1/4 W Carbon Resistor
R010	180kΩ ±10% 1/4 W Carbon Resistor
R011	180kΩ ±10% 1/4 W Carbon Resistor
R012	100kΩ ±10% 1/4 W Carbon Resistor
R013	100kΩ ±10% 1/4 W Carbon Resistor
R014	180kΩ ±10% 1/4 W Carbon Resistor
R015	180kΩ ±10% 1/4 W Carbon Resistor
R016	100kΩ ±10% 1/4 W Carbon Resistor
R017	100kΩ ±10% 1/4 W Carbon Resistor
R018	10kΩ ±10% 1/4 W Carbon Resistor
R019	10kΩ ±10% 1/4 W Carbon Resistor
R020	6.8Ω ±10% 1/4 W Carbon Resistor
R021	22kΩ ±10% 1/4 W Carbon Resistor
R022	22kΩ ±10% 1/4 W Carbon Resistor
R023	1.5kΩ ±10% 1/4 W Carbon Resistor
R024	180Ω ±10% 1/4 W Carbon Resistor
R025	10Ω ±10% 1/4 W Carbon Resistor
R026	56Ω ±10% 1/4 W Carbon Resistor
R027	680Ω ±10% 1/4 W Carbon Resistor
R028	5.6kΩ ±10% 1/4 W Carbon Resistor
C002	1000μF 35 WV Electrolytic Capacitor
C006	0.0047μF 600 WV Oil Capacitor
C007	2200μF 80 WV (020535)
C008	2200μF 80 WV (020535)
C009	0.033μF 600 WV Oil Capacitor
C010	0.033μF 600 WV Oil Capacitor
C011	0.0047μF 600 WV Oil Capacitor
C012	0.04μF $\pm 100\%$ 50 WV Ceramic Capacitor
C013	0.04μF $\pm 100\%$ 50 WV Ceramic Capacitor
C017	2200μF 80 WV (020535)
C018	2200μF 80 WV (020535)
VR001	50kΩ B Level Adjustor (101501)
VR002	
VR003	1MΩ B Muting Adjustor (100508)
D004	5B2 Diode (031066)
S1(a~j)	Y-5-13-6 (110505)
S2(a, b)	Y-2-2-6
S10	SL13-8-10H6-2-2 (111004)
J001	Headphone Jack (243007)
J002	DIN Connector (243005)
TR407	2SB324 (030311)
TR809~012	2SD213 (030821, -1)
CO001~2	AC Outlet (245001)
PU001	Voltage Selector (241017)
M001	Signal Meter (090019)
M002	Tuning Meter (090012)

X	Y
PT001	400-5339 (400050)
PL001~2	7V 200mA (040015-0)
PL003~8	6.3V 250mA (040008)
PL009~010	5V 60mA (040010-1)
PL011	7V 200mA (040015-0)
PL012	25V 90mA (040007)
PL013	6V 100mA ()
VC301~303	AM 3 Gang Variable Resistor (120002)
T306	ARS-45A (420014)
T102	75~300Ω High Frequency Transformer (429002-1)
S9	()



sansui

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