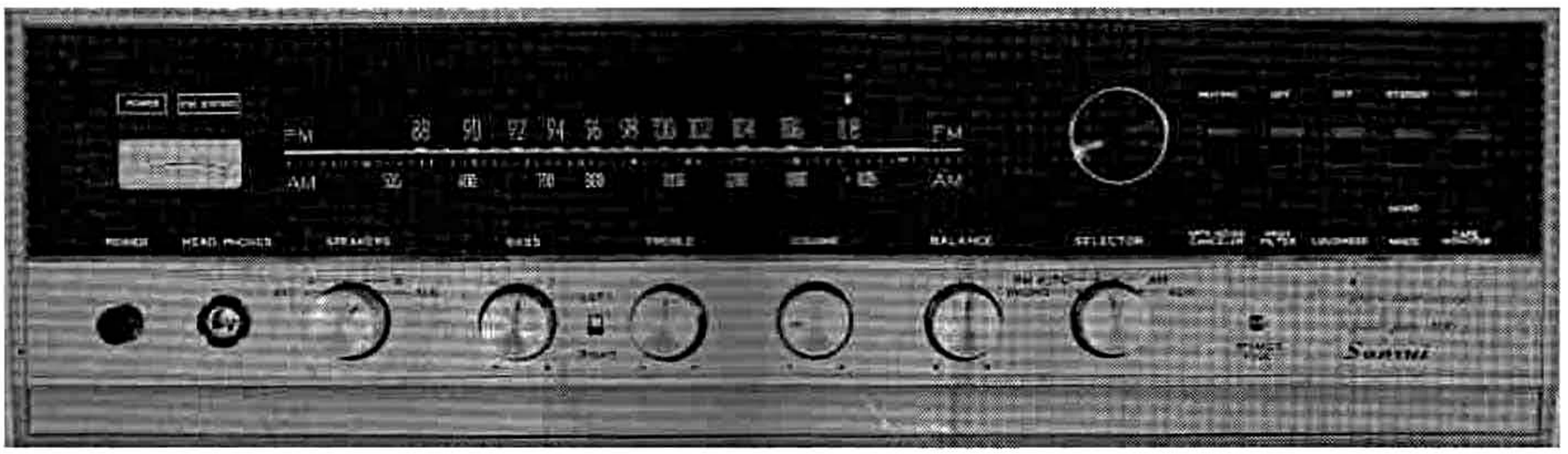
SERVICE MANUAL

SOLID-STATE AM/FM STEREO TUNER AMPLIFIER

SANSUI 800



Sansui®

SANSUI ELECTRIC COMPANY LIMITED

CONTENTS


Sansui

TROUBLESHOOTING CHART

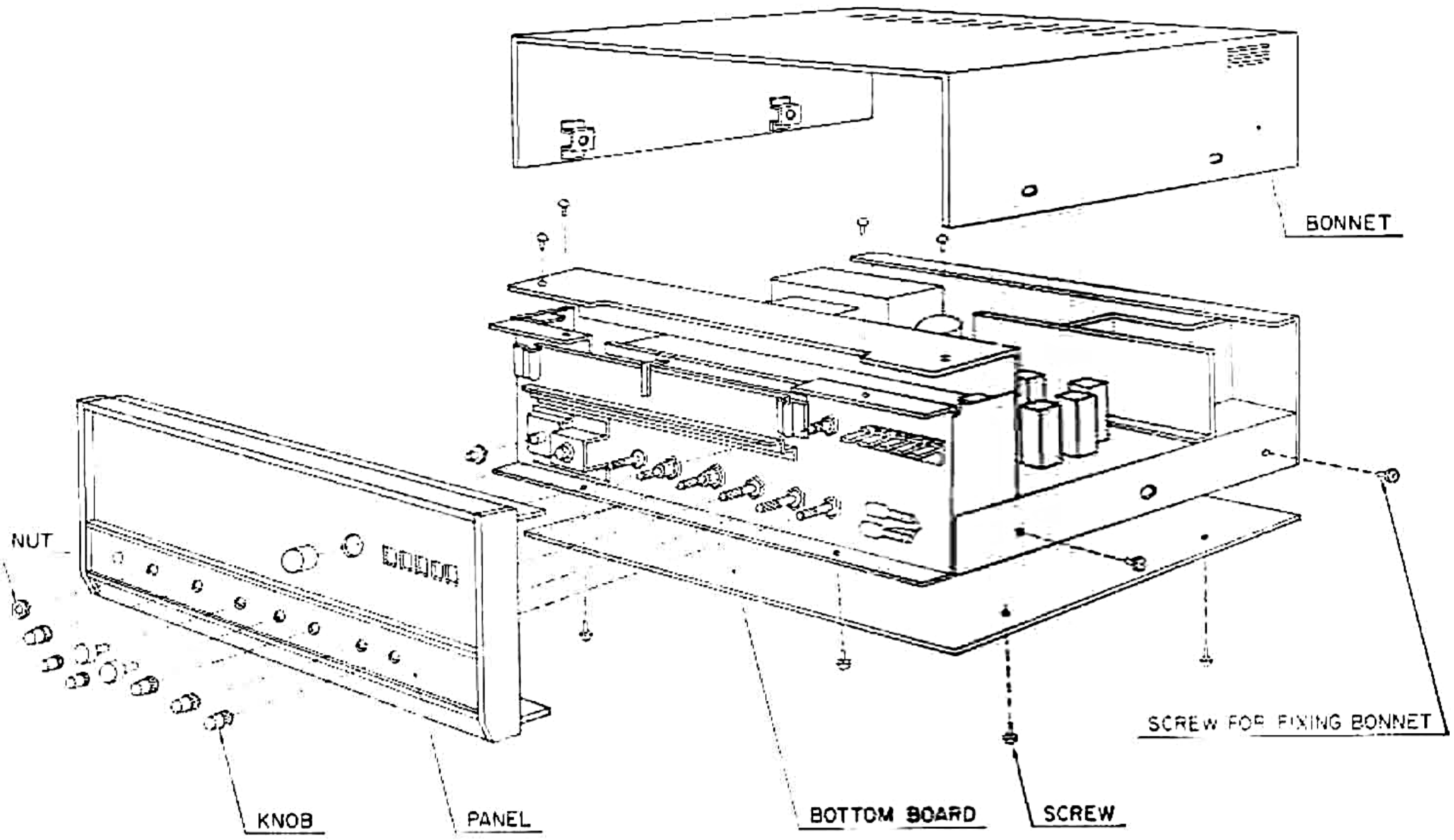
If the amplifier is otherwise operating satisfactorily, the more common causes of trouble may generally be attributed to the following:
1. Incorrect connections or loose terminal contacts. Check the speakers, record player, tape recorder, antenna and line cord.
2. Improper operation. Before operating any audio component, 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.
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 certain times or in a certain area.	* Discharge or oscillation caused by electrical appliances, such as fluorescent lamps, TV sets, D.C. motors, rectifier and oscillator * Natural phenomena, such as atmospheric, static, and thunderstorms. * Insufficient antenna input due to reinforced concrete walls or long distance from the station * Wave interference from other electrical appliances	* Attach a noise limiter to the electrical appliance that causes the noise, or attach it to the power source of the amplifier. * 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. * Place the set away from other electrical appliances.
	B. Needle of the tuning meter does not move sharply.	* Needle movement is not necessarily related to the sensitivity of the amplifier.	* Tune the set for maximum signal strength.
	C. Zero point of the meter moves greatly.	* Regional difference in field intensity.	* The unit is not at fault.
AM reception	A. Noise heard at a particular time of day, in a certain area or over part of the dial.	* Natural AM reception phenomenon.	* Install an antenna for maximum antenna efficiency. See "ANTENNA" in the Operating Instructions. * In some causes, 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	* Although such noise cannot be eliminated by the amplifier, it is advisable to turn the TREBLE control from midpoint to left and switch on the HIGH FILTER.
		* TV set is too close to the audio system	* Place the TV set away from the audio system.
FM reception	A. Noisy	* Poor noise limiter effect or too low S/N ratio due to insufficient antenna input.	* Adjust the antenna provided for maximum signal strength. * If this is not effective, use an out door 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 the conditions of the transmitting stations power and antenna efficiency. As a result, you may receive one station quite well while having difficulty receiving another station.		

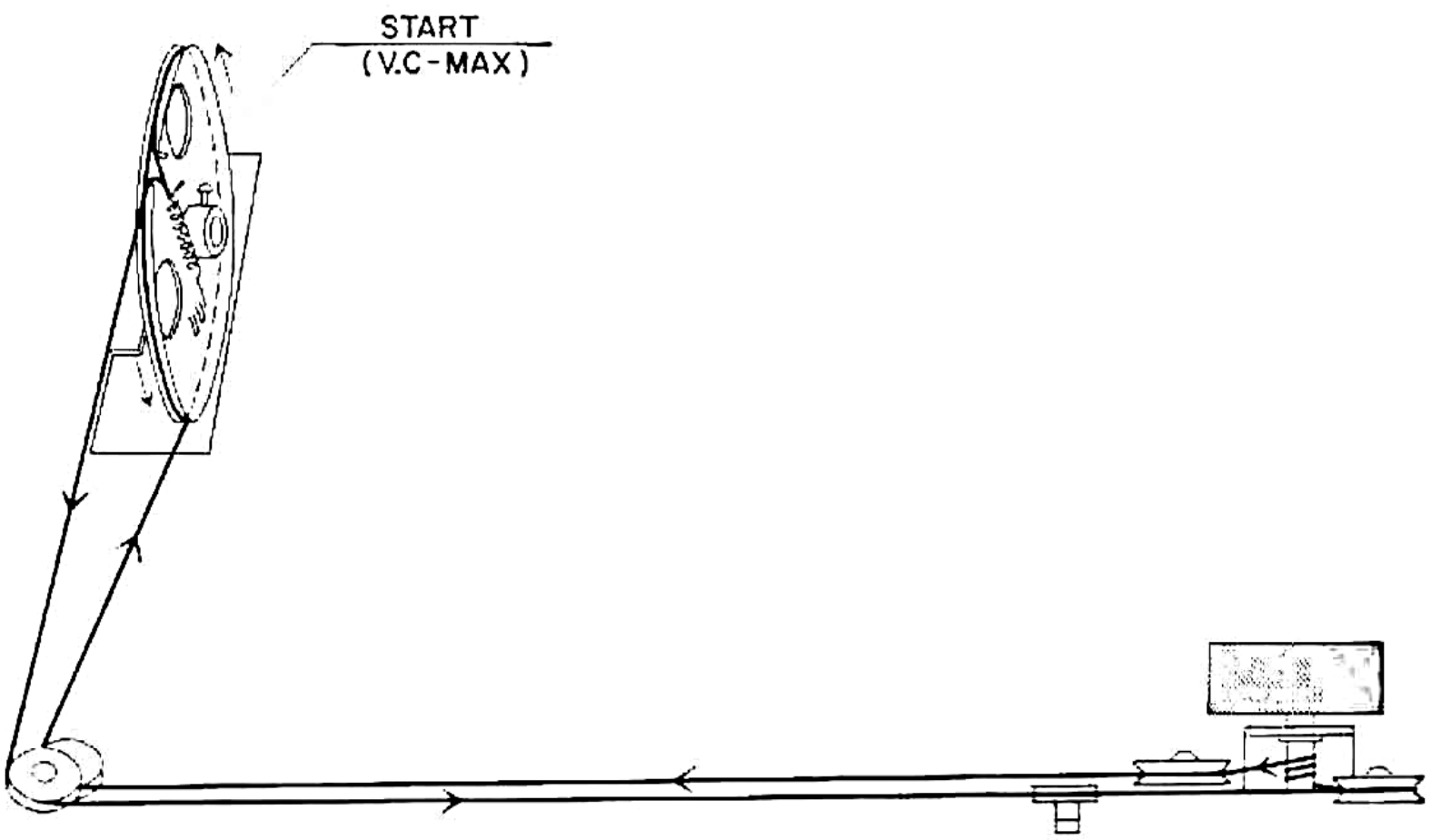
PROGRAM	SYMPTOM	PROBABLE CAUSE	WHAT TO DO
FM reception (Cont'd)	B. "Scratch-like" noise is heard	* Ignition noise caused by the starting of an automobile.	* Install the antenna and its lead-in wire away from the road or raise the antenna input as previously described.
	C. Tuning noise between stations	* This noise results from the nature of FM reception. As the station signal becomes weak, the noise limiter effect is decreased. The amplification of the limiter, in turn, is enlarged and a noise is generated.	* Turn on the MUTING switch. Since it also reduces the sensitivity, it should be used sparingly.
FM-MPX reception	A. Noise heard during FM-MPX reception while not heard during FM mono reception	* 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 HIGHFILTER and/or turn the TREBLE control from midpoint to left.
	B. Clearness of channel separation is decreased during reception.	* Excess heat	* Make sure that air can flow underneath the amplifier.
	C. The stereo indicator goes on and off.	* Interference * Station signal is weak	* The indicator is not at fault.
	D. The stereo indicator goes on and off even though a stereo station is not received.	* Interference	* The indicator is not at fault.
Record playing or tape playback	A. Hum or howling	* Record player placed directly on the speaker box.	* Put a cushion between the player. and the speaker box or separate them.
		* Use of unshielded wire.	* The connecting shield wire should be as short as possible.
		* Loose terminal contact.	
		* Shielded wire too close to line cord fluorescent lamp or other electrical appliances.	* Turn the BASS control from midpoint to left.
		* Nearby amateur radio station or TV transmission antenna.	* Consult the nearest Radio Regulatory Bureau.
	B. Surface noise	* Worn or old record * Worn pick-up needle * Dusty needle * Improper needle pressure	* Recondition the playback head of the tape recorder or the pick-up of the record player * Turn the TREBLE control properly from midpoint to left. * Switch on the HIGH FILTER.
Overall stereo program	The BALANCE control is not at midpoint when equal sound comes from left and right channels.	* It is important to adjust the control for equal sound from both channels. It should not always be set to midpoint.	* Set the MODE switch to the MONO position and then set the BALANCE control to the position where equal sound comes from both channels.

DISASSEMBLY PROCEDURE

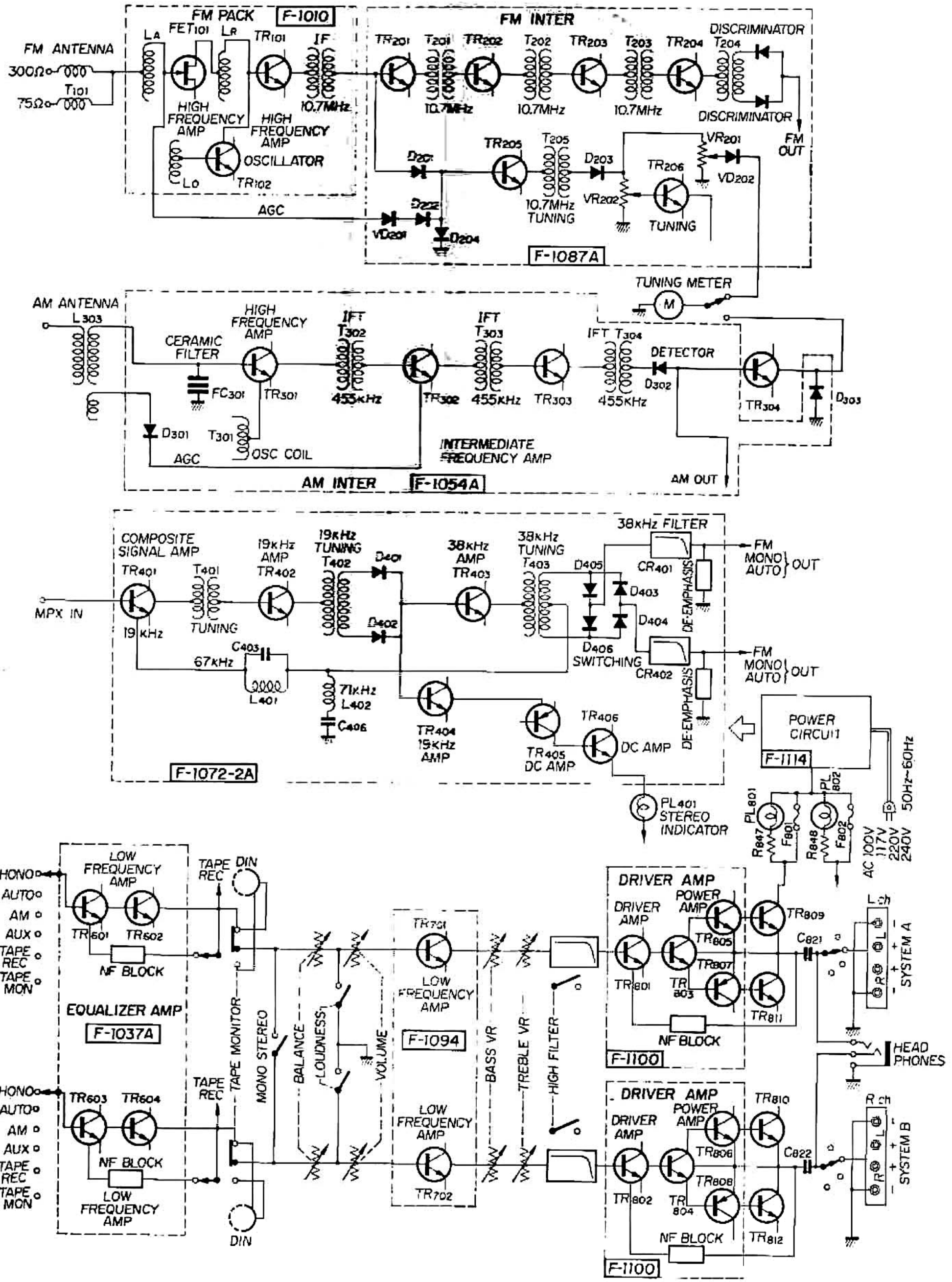
REMOVING THE FRONT PANEL, BONNET AND BOTTOM PLATE



DIAL MECHANISM



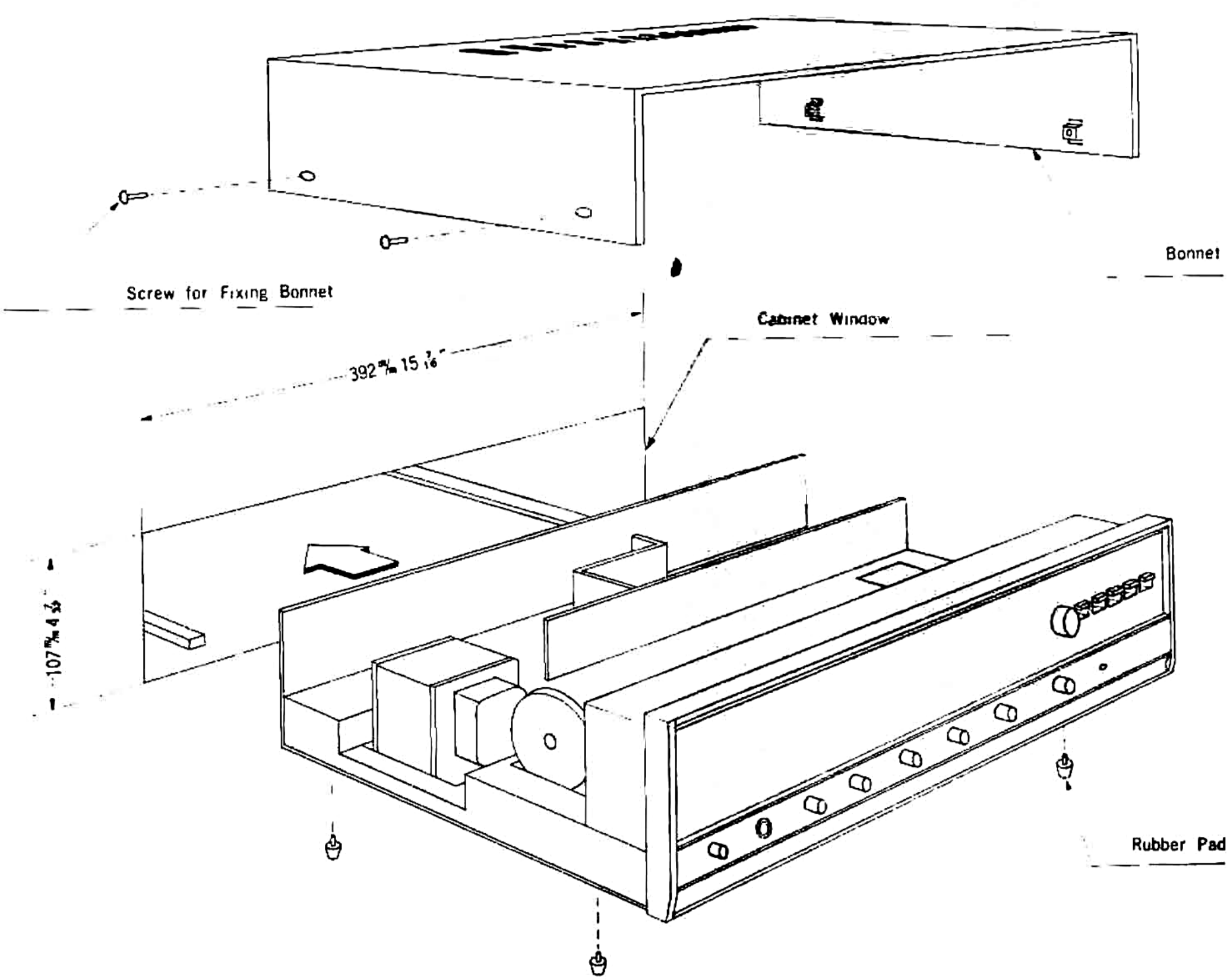
BLOCK DIAGRAM

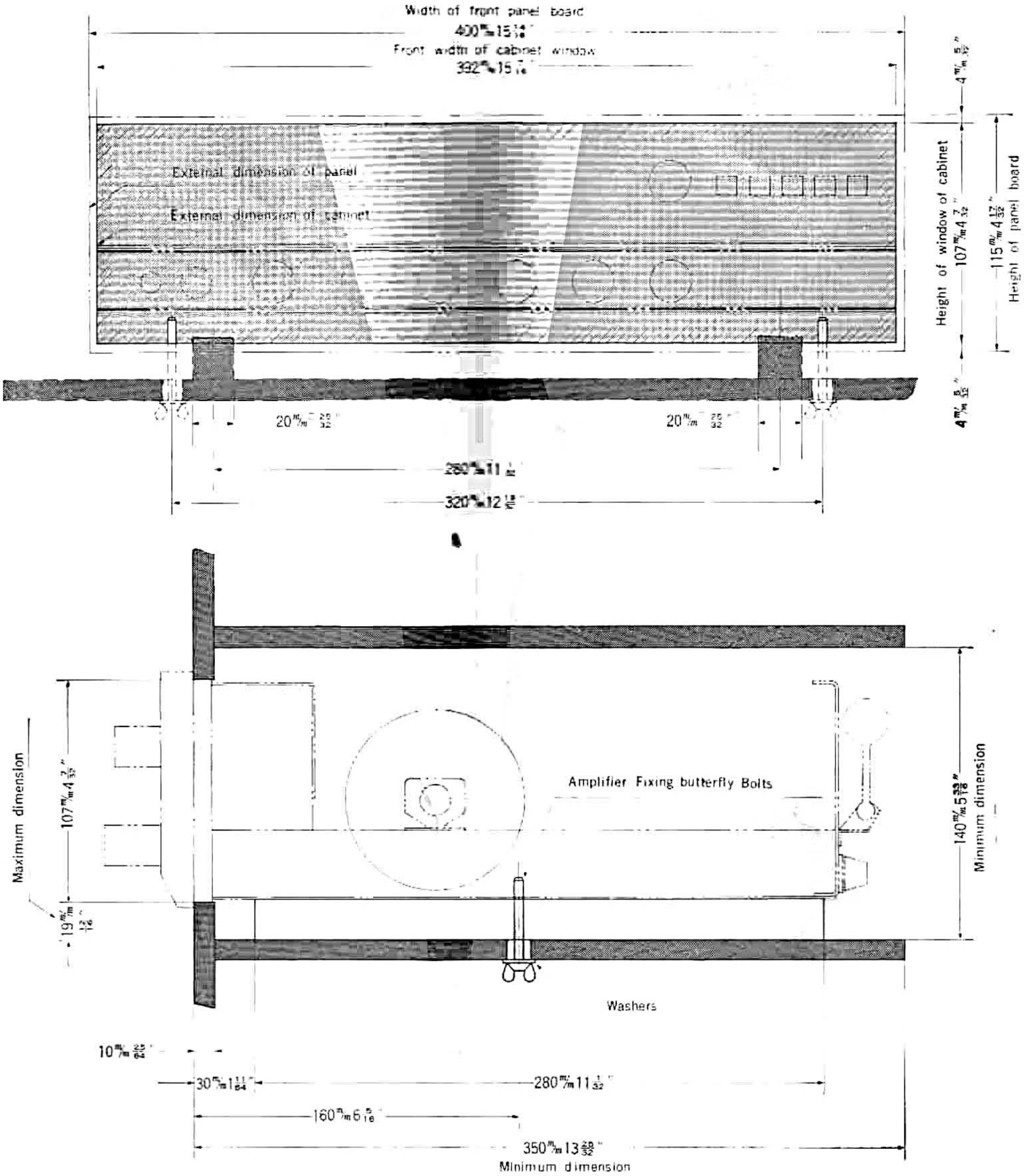


CUSTOM MOUNTING

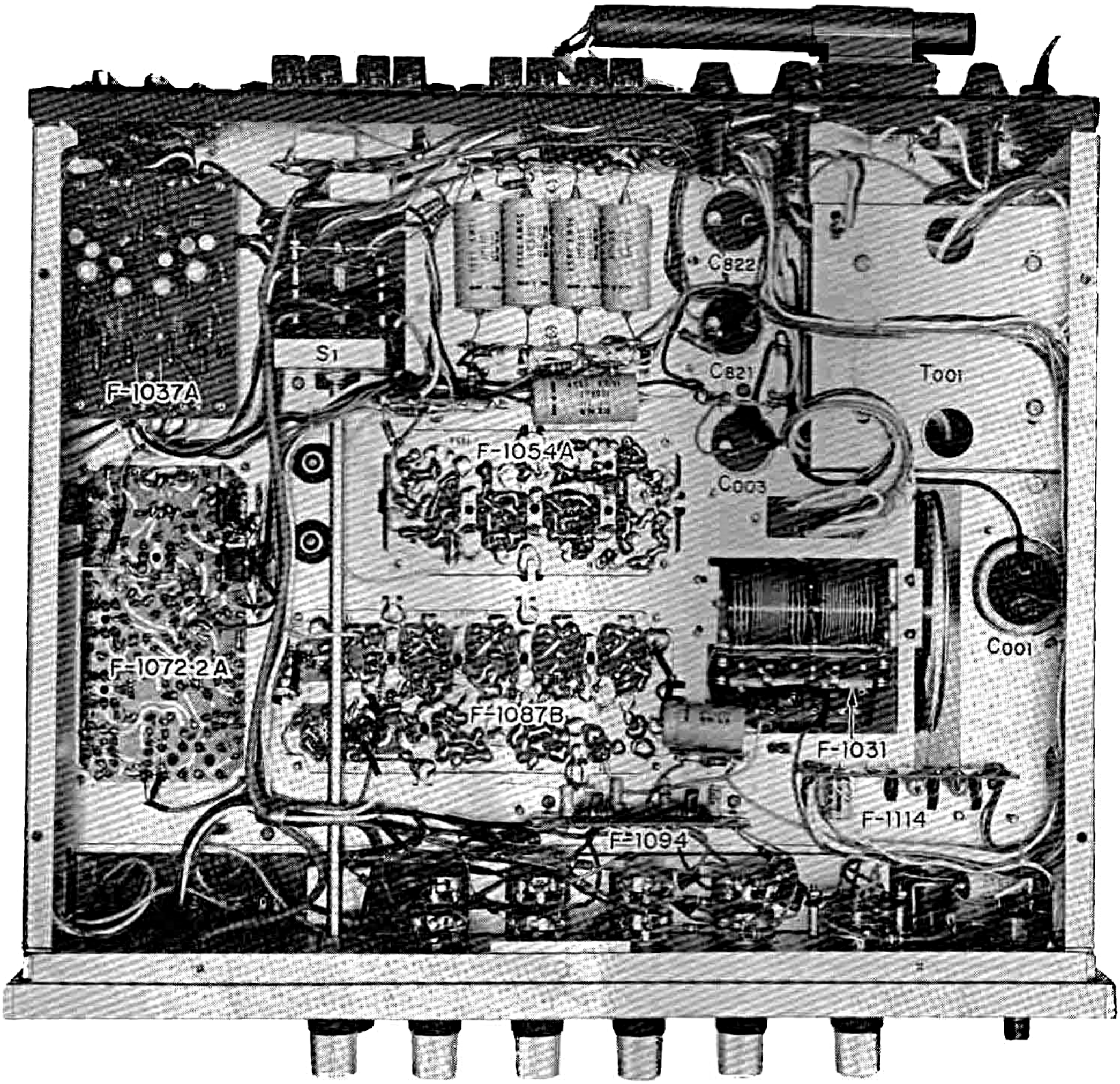
1. Make a cabinet window of 392 mm or 15 7/16" in width and 107 mm or 4 7/32" in height.
2. Place two square pieces of food (20 × 20 × 280 mm or 25/32" × 25/32" × 11 1/32") for supporting the amplifier in bottom board of the cabinet.
3. Cut two holes for attachment bolts in the bottom board of the cabinet.
4. Remove the four rubber pads from the amplifier
5. Place the amplifier is in position through the cabinet window.
6. Make sure the amplifier is in position, then put the washers in butterfly bolts (supplied) and fix the amplifier to the cabinet with butterfly bolts.

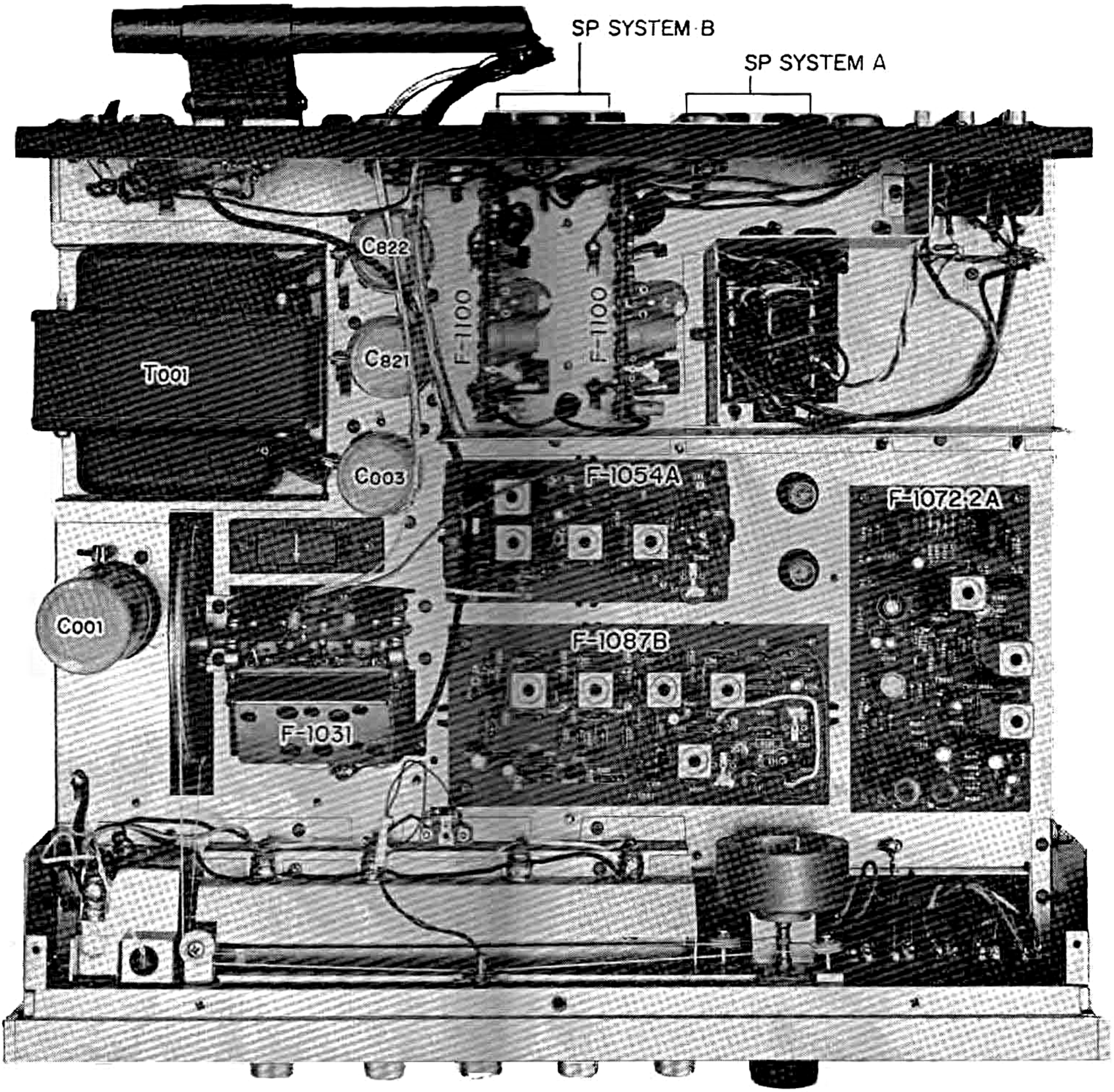
NOTE: When the amplifier is built into the cabinet the four rubber pads are not used Retain them for future use.




Width of front panel board
400 m/m 15 13/16"
Front width of cabinet window
392 m/m 15 7/16"
External dimension of panel
External dimension of cabinet
Height of window of cabinet
107 m/m 4 7/32"
4 m/m 5/32"
115 m/m 4 17/32"
Height of panel board
20 m/m 25/32"
20 m/m 25/32"
280 m/m 11 1/32"
320 m/m 12 5/8"
Amplifier Fixing butterfly Bolts
Maximum dimension
107 m/m 4 7/32"
19 m/m 12/16"
140 m/m 5 33/64"
Minimum dimension
Washers
10 m/m 25/64"
30 m/m 1 11/64"
280 m/m 11 1/32"
160 m/m 6 5/16"
350 m/m 13 25/32"
Minimum dimension

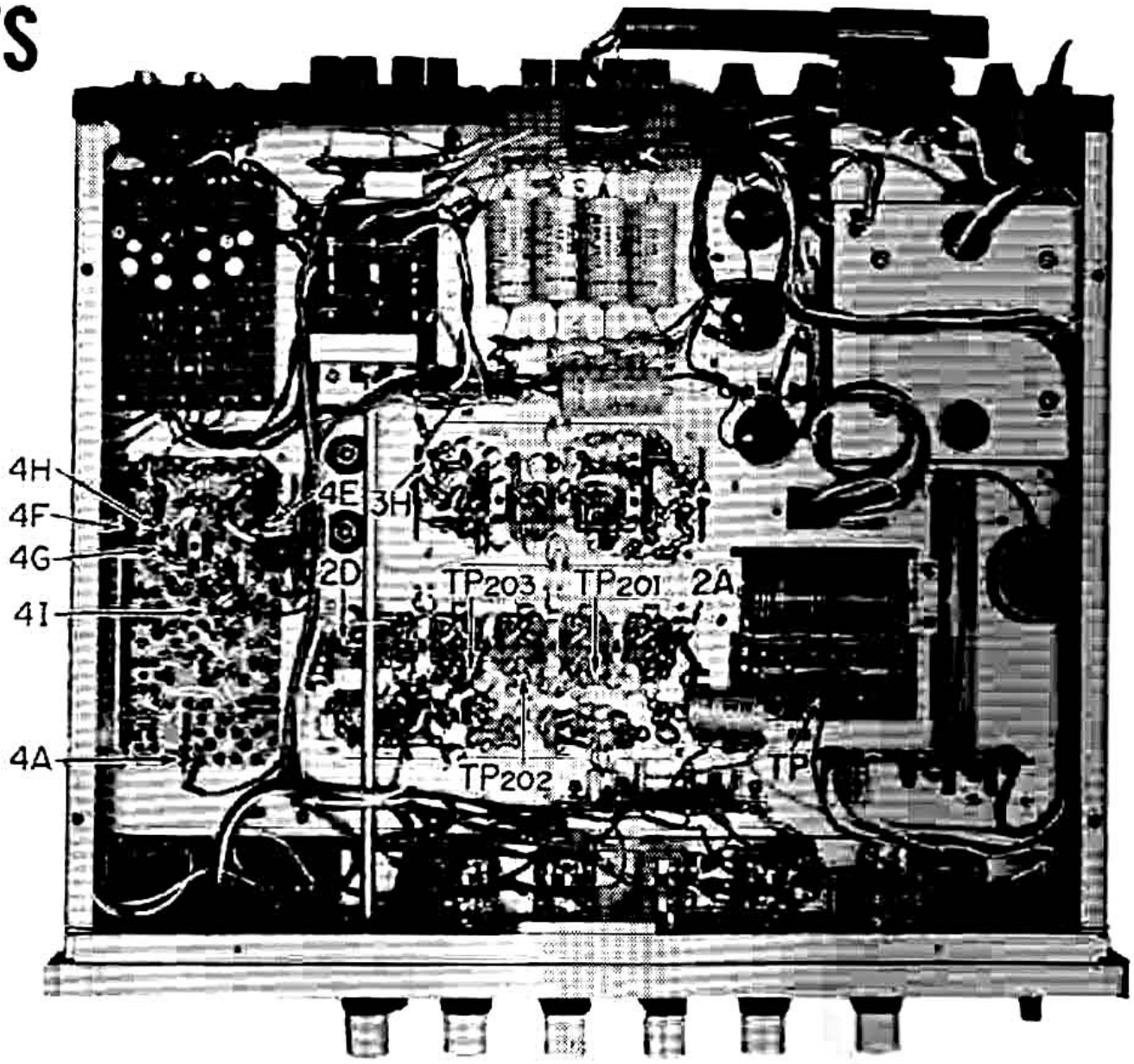
PARTS LAYOUT

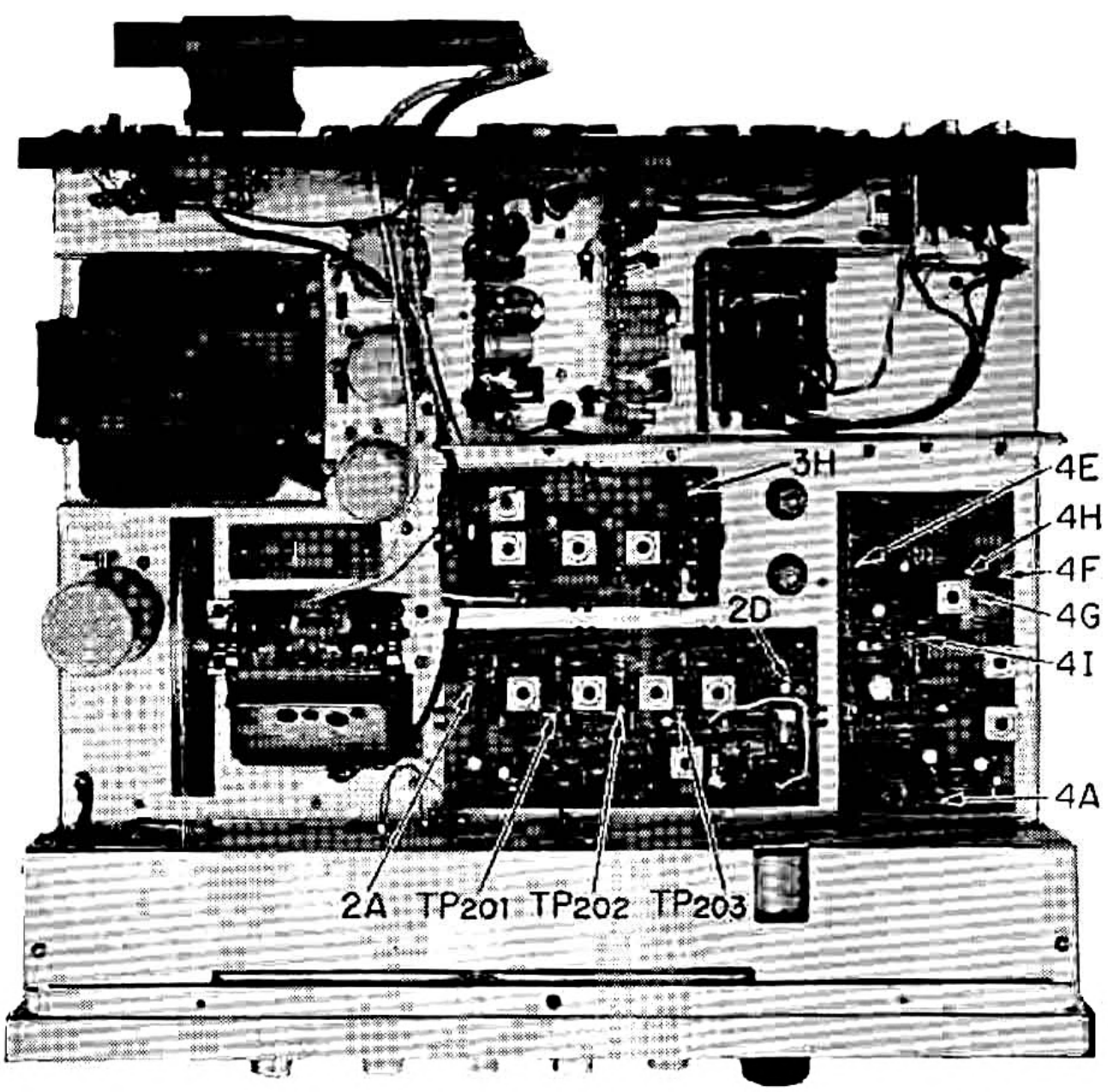



SP SYSTEM B
SP SYSTEM A
C822
C821
T001
F-1100
F-1100
C003
F-1054A
F-1072-2A
C001
F-1087B
F-1031

ALIGNMENT

TEST POINTS



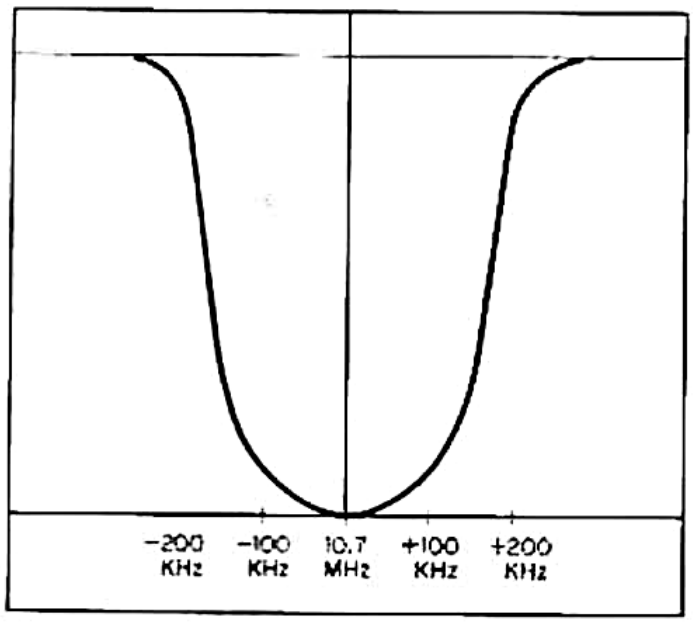


FM ALIGNMENT PROCEDURE

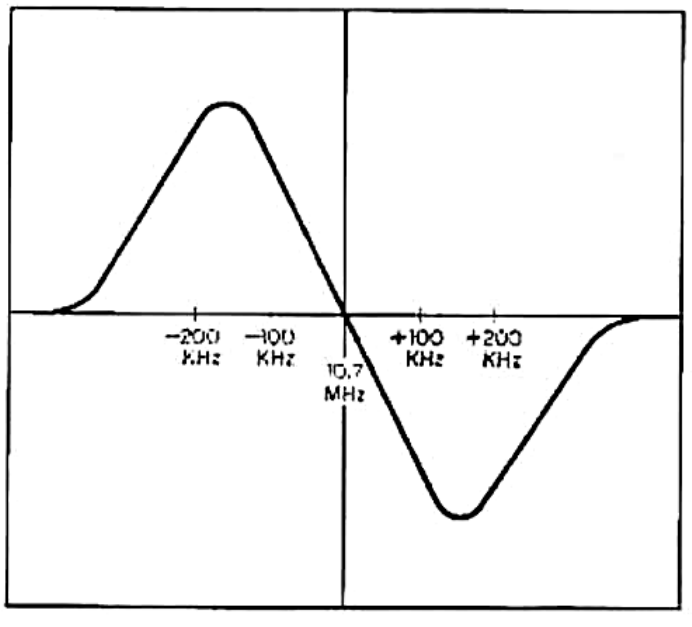
NOTE: To align, set the FM signal generator level to minimum turn tuning gang fully, center carrier wave, and set pointer to reference mark.

STEP	ALIGN	GENERATOR	FEED SIGNAL	OUTPUT INDICATOR	DIAL SETTING	ADJUST	ADJUST FOR
1.	IF Transformer	10.7M Hz ±200 kHz	Sweep signal is sent to TP_{101} via the 0.02μF ceramic capacitor	Oscilloscope is connected to TR_{202} emitter, and then TR_{205} collector to ground via the 0.02μF ceramic capacitor		Primary and secondary sides of T_{201}, T_{202}, and T_{203}	Best I.F.T. wave form
2.	Discriminator	10.7 MHz ±200 kHz	Sweep signal is sent to 2A via the 0.02μF ceramic capacitor	Oscilloscope is connected to 2K via the 0.05μF capacitor		FM Discriminator transformer T_{204} primary and secondary	S curve
3.	O.S.C	88 MHz 400 Hz 100% Modulation	To antenna terminals	Oscilloscope and V.T.V.M. at output load	88 MHz	O.S.C. coil L_O	Maximum
4.	O.S.C.	108 MHz 400 Hz 100% Modulation	To antenna terminals	Oscilloscope and V.T.V.M. at output load	108 MHz	O.S.C. trimmer TC_{104}	Maximum
5.	Repeat 3&4						
6.	RF 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_R, L_A and IF_1	Maximum
7.	RF Amp. Circuit	106 MHz 400 Hz 100% Modulation	To antenna terminals	Oscilloscope and V.T.V.M. at output load	106 MHz	Trimmer TC_A and TC_R	Maximum
8.	Repeat 6&7						

FM IF CHARACTERISTIC



FM DISCRIMINATOR CHARACTERISTIC



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

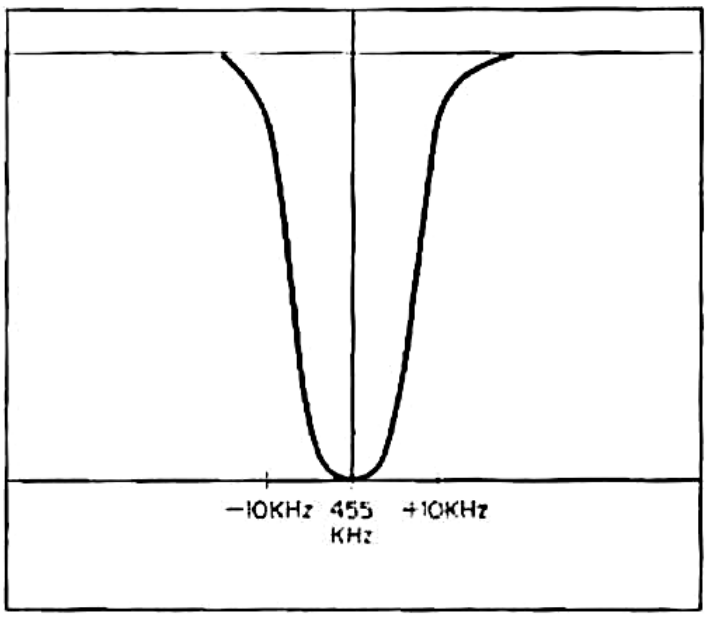
STEP	ALIGN	GENERATOR	FEED SIGNAL	OUTPUT INDICATOR	ADJUST	ADJUST FOR
1.	67 kHz Trap	67 kHz Audio Signal	Connect to TP_{4A}	V.T.V.M. at 4 H	L_{401}	Minimum
2.	71 kHz Trap	71 kHz Audio Signal	Connect to TP_{4A}	V.T.V.M. at 4 H	L_{402}	Minimum
3.	19 kHz Transformer	FM Signal Gen. Modulated 30% by STEREO Gen. sub-channel	Antenna terminals Tune to signal	V.T.V.M. and Oscilloscope at 4 I	T_{401}, T_{402}	Maximum
4.	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 G	T_{403}	Maximum
5.	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	VR(VR_{601})	Channel-R Minimum
6.	Repeat 5~6					

AM ALIGNMENT PROCEDURE

NOTE: To align, set the AM 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. is connected to 3H		Primary and secondary sides from the lst I.F.T. (T_{302}~T_{304})	Best I.F.T. wave form
2.	O.S.C	AM-generator 600 kHz 400 Hz 30% Modulation	Antenna terminals	Oscilloscope and V.T.V.M. at output load	600 kHz	O.S.C. Coil T_{301}	Maximum
3.	O.S.C.	AM-generator 1400 kHz 400 Hz 30% Modulation	Antenna terminals	Oscilloscope and V.T.V.M. at output load	1400 kHz	O.S.C. Trimmer cap. TC_{302}	Maximum
4.	Repeat 2 and 3						
5.	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 coil L_{303}	Maximum
6.	Antenna circuit	AM-generator 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
7.	Repeat 5 and 6						

AM IF CHARACTERISTIC



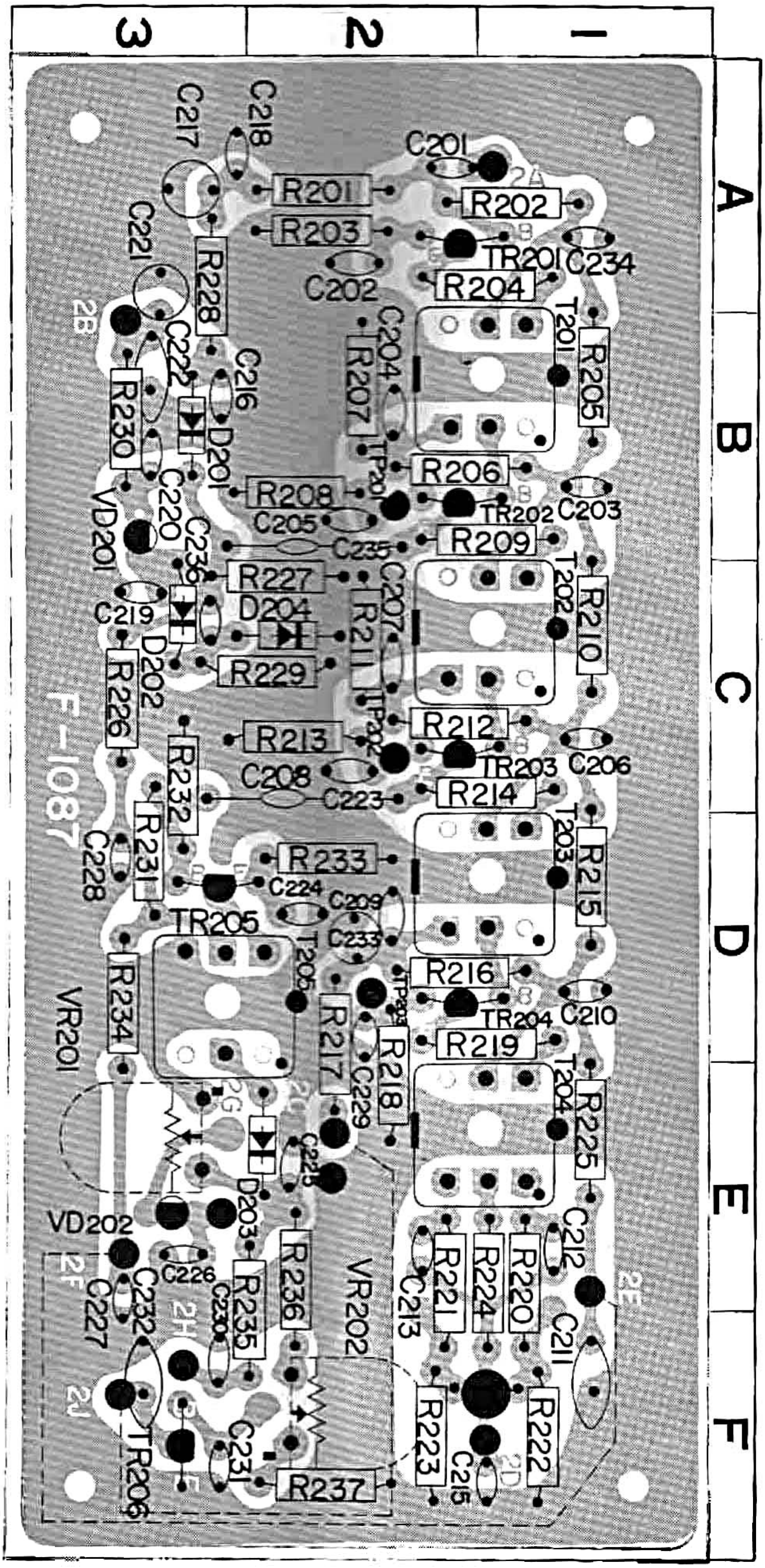
PRINTED CIRCUIT SHEETS AND PARTS LIST

FM IF BLOCK 〈F-1087B〉

X	Y	Z
R201	4.7kΩ ±10% ¼W Carbon Resistor	2 A
R202	180kΩ ±10% ¼W Carbon Resistor	1 A
R203	390Ω ±10% ¼W Carbon Resistor	2 A
R204	560Ω ±10% ¼W Carbon Resistor	1 A
R205	22Ω ±10% ¼W Carbon Resistor	1 B
R206	12kΩ ±10% ¼W Carbon Resistor	2 B
R207	6.8kΩ ±10% ¼W Carbon Resistor	2 B
R208	1kΩ ±10% ¼W Carbon Resistor	2 B
R209	820Ω ±10% ¼W Carbon Resistor	1 B
R210	22Ω ±10% ¼W Carbon Resistor	1 C
R211	6.8kΩ ±10% ¼W Carbon Resistor	2 C
R212	10kΩ ±10% ¼W Carbon Resistor	2 C
R213	1kΩ ±10% ¼W Carbon Resistor	2 C
R214	680Ω ±10% ¼W Carbon Resistor	1 C
R215	22Ω ±10% ¼W Carbon Resistor	1 D
R216	10kΩ ±10% ¼W Carbon Resistor	2 D
R217	6.8kΩ ±10% ¼W Carbon Resistor	2 D
R218	1kΩ ±10% ¼W Carbon Resistor	2 E
R219	1kΩ ±10% ¼W Carbon Resistor	1 D
R220	1.5kΩ ±10% ¼W Carbon Resistor	1 E
R221	1kΩ ±10% ¼W Carbon Resistor	2 E
R222	10kΩ ±10% ¼W Carbon Resistor	1 F
R223	10kΩ ±10% ¼W Carbon Resistor	2 F
R224	68Ω ±10% ¼W Carbon Resistor	1 E
R225	22Ω ±10% ¼W Carbon Resistor	1 E
R226	100kΩ ±10% ¼W Carbon Resistor	3 C
R227	12kΩ ±10% ¼W Carbon Resistor	2 C
R228	1kΩ ±10% ¼W Carbon Resistor	3 A
R229	22kΩ ±10% ¼W Carbon Resistor	2 C
R230	39kΩ ±10% ¼W Carbon Resistor	3 B
R231	22kΩ ±10% ¼W Carbon Resistor	3 D
R232	10kΩ ±10% ¼W Carbon Resistor	3 C
R233	1kΩ ±10% ¼W Carbon Resistor	2 D
R234	22Ω ±10% ¼W Carbon Resistor	3 D
R236	39kΩ ±10% ¼W Carbon Resistor	2 E
R237	12kΩ ±10% ¼W Carbon Resistor	2 F
C201	1000 pF +80 −20% 25 WV Ceramic Capacitor	2 A
C202	0.02μF +80 −20% 25 WV Ceramic Capacitor	2 A
C203	0.02μF +80 +20% 25 WV Ceramic Capacitor	1 B
C204	0.02μF +80 −20% 25 WV Ceramic Capacitor	2 B
C205	0.02μF +80 −20% 25W V Ceramic Capaciter	2 B
C206	0.02μF +80 −20% 25 WV Ceramic Capacitor	1 C
C207	0.02μF +80 −20% 25 WV Ceramic Capacitor	2 C
C208	0.02μF +80 −20% 25 WV Ceramic Capacitor	2 C
C209	0.02μF +80 −20% 25 WV Ceramic Capacitor	2 D
C210	0.02μF +80 −20% 25 WV Ceramic Capacitor	1 D
C211	0.04μF +80 −20% 25 WV Ceramic Capacitor	1 F
C212	220 pF ±10% 50 WV Ceramic Capacitor	1 E
C213	220pF ±10% 50 WV Ceramic Capacitor	2 E
C214	10μF 10 WV Electrolytic Capacitor	1 F
C215	47 pF ±10% 50 WV Ceramic Capacitor	3 B
C216	100 pF ±10% 50 WV Ceramic Capacitor	3 B

X: Parts No **Y:** Parts Name **Z:** Position of Parts
(Co-ordinate number and letter in Printed circuit)

X	Y	Z
C217	3.3μF 25 WV Electrolytic Capacitor	3 A
C218	0.02μF +80 −20% 25 WV Ceramic Capacitor	3 A
C219	1000 pF +80 −20% 25 WV Ceramic Capacitor	3 C
C220	1000 pF +80 −20% 25 WV Ceramic Capacitor	3 B
C221	0.47μF 25 WV Electrolytic Capacitor	3 A
C222	0.04μF +80 −20% 25 WV Ceramic Capacitor	3 B
C223	2.2pF ±10% 50 WV Ceramic Capacitor	2 C
C224	0.02μF +80 −20% 25 WV Ceramic Capacitor	2 D
C225	0.01μF +80 −20% 25 WV Ceramic Capacitor	2 E
C226	0.02μF +80 −20% 25 WV Ceramic Capacitor	3 E
C227	0.02μF +80 −20% 25 WV Ceramic Capacitor	3 E
C228	0.02μF +80 −20% 25 WV Ceramic Capacitor	3 D
C229	0.02μF +80 −20% 25 WV Ceramic Capacitor	2 D
C230		
C231	0.02μF +80 −20% 25 WV Ceramic Capacitor	
C232	0.04μF +80 −20% 25 WV Ceramic Capacitor	
C234	0.02μF +80 −20% 25 WV Ceramic Capacitor	
C235	4.7pF ±10% 50 WV Ceramic Capacitor	
C236	47pF ±10% 50 WV Ceramic Capacitor	2 C
VR201	50kΩ(B) Semi-Variable Resistor (103020)	2 F
VR202	200kΩ(B) Semi-Variable Resistor (103035)	3 E
T201	10.7Mc FM IFT (423532)	1 B
T202	10.7Mc FM IFT (423533)	1 C
T203	10.7Mc FM IFT (423533)	1 D
T204	10.7Mc FM Detector Transformer (423534)	4 E
T205	10.7Mc FM Meter Transformer (423529)	3 D
TR201	2SC829 (000546-1)	2 A
TR202	2SC829 (030546)	2 B
TR203	2SC829 (030546)	2 C
TR204	2SC829 (030546)	2 D
TR205	2SC829 (030546-1)	3 D
TR206	2SC828 (030527)	3 F
D201	IN60 Diode (031033)	3 B
D202	IN60 Diode (031033)	3 C
D203	IN60 Diode (031033)	3 E
D204	IN60 Diode (031033)	2 C
VD201	DS410 Varistor (031046)	3 B
VD202	DS410 Varistor (031046)	3 E



1
2
3
A
B
C
D
E
F
F-1087
R201
R202
R203
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R206
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TR203
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TR205
TR206
T201
T202
T203
T204
T205
D201
D202
D203
D204
VD201
VD202
VR201
VR202

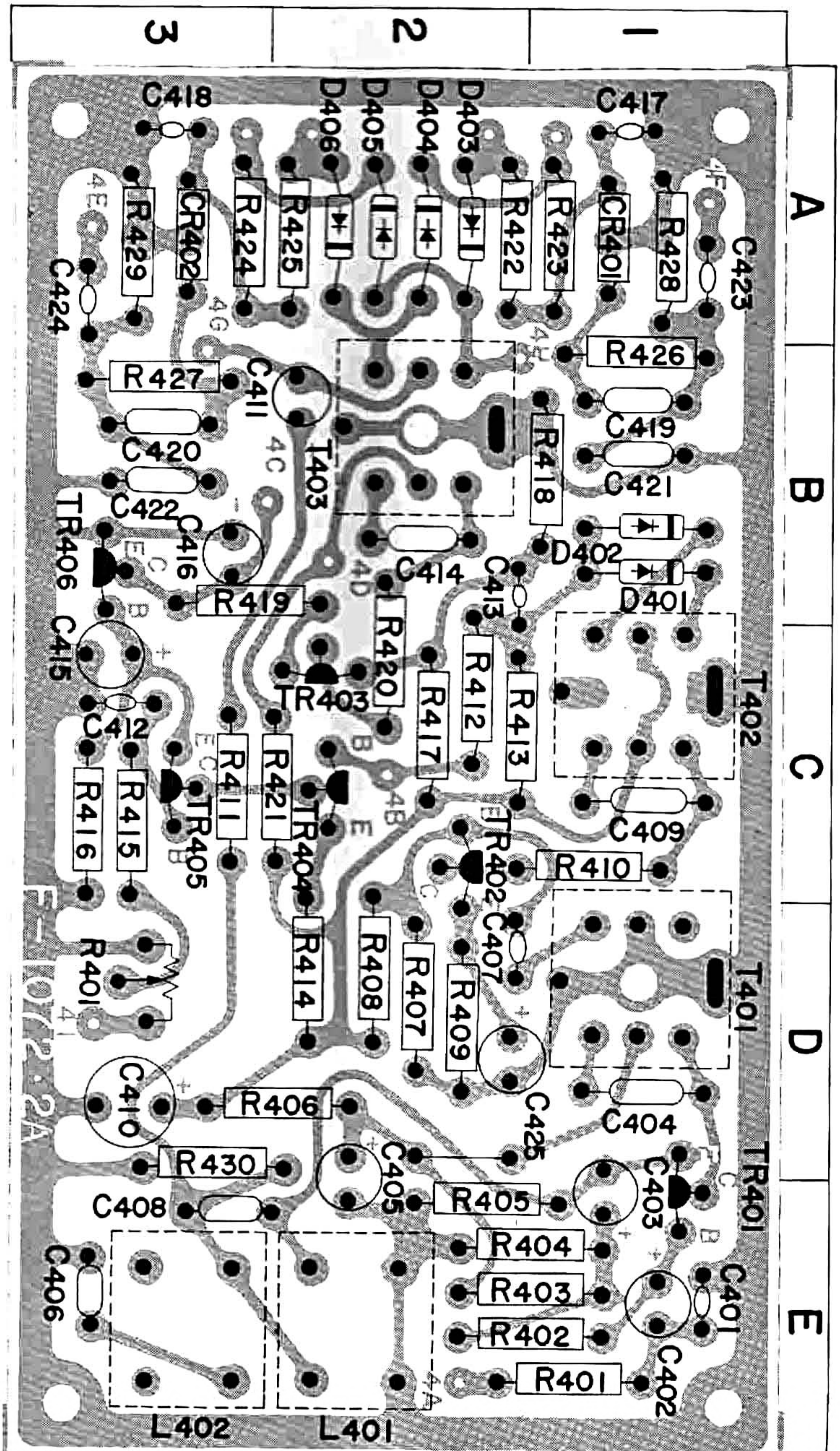
PRINTED CIRCUIT SHEETS AND PARTS LIST

FM MULTIPLEX 〈F-1072·2A〉

X	Y	Z
R401	1kΩ ±10% ¼W Carbon Resistor	1 E
R402	100kΩ ±10% ¼W Carbon Resistor	1 E
R403	100kΩ ±10% ¼W Carbon Resistor	1 E
R404	22kΩ ±10% ¼W Carbon Resistor	1 E
R405	680Ω ±10% ¼W Carbon Resistor	1 E
R406	100Ω ±10% ¼W Carbon Resistor	2 D
R407	22kΩ ±10% ¼W Carbon Resistor	2 D
R408	47kΩ ±10% ¼W Carbon Resistor	2 D
R409	2.2kΩ ±10% ¼W Carbon Resistor	2 D
R410	470Ω ±10% ¼W Carbon Resistor	1 C
R411	2.2kΩ ±10% ¼W Carbon Resistor	3 C
R412	10kΩ ±10% ¼W Carbon Resistor	2 C
R413	10kΩ ±10% ¼W Carbon Resistor	2 C
R414	3.3kΩ ±10% ¼W Carbon Resistor	2 D
R415	3.3kΩ ±10% ¼W Carbon Resistor	3 C
R416	1kΩ ±10% ¼W Carbon Resistor	3 C
R417	100kΩ ±10% ¼W Carbon Resistor	2 C
R418	18kΩ ±10% ¼W Carbon Resistor	1 B
R419	5.6kΩ ±10% ¼W Carbon Resistor	2 C
R420	470Ω ±10% ¼W Carbon Resistor	2 C
R421	47Ω ±10% ¼W Carbon Resistor	2 C
R422	22kΩ ±10% ¼W Carbon Resistor	1 A
R423	22kΩ ±10% ¼W Carbon Resistor	1 A
R424	22kΩ ±10% ¼W Carbon Resistor	3 A
R425	22kΩ ±10% ¼W Carbon Resistor	2 A
R426	100kΩ ±10% ¼W Carbon Resistor	1 A
R427	100kΩ ±10% ¼W Carbon Resistor	3 B
R428	220kΩ ±10% ¼W Carbon Resistor	1 A
R429	220kΩ ±10% ¼W Carbon Resistor	3 A
R430	10kΩ ±10% ¼W Carbon Resistor	3 E
C401	100pF ±20% 50 WV Ceramic Capacitor	1 E
C402	1μF 50 WV Electrolytic Capacitor	1 E
C403	33μF 6.3 WV Electrolytic Capacitor	1 E
C404	5000pF ± 5% 50 WV Mica Capacitor	1 D
C405	10μF 25 WV Electrolytic Capacitor	2 E
C406	220pF ± 5% 50 WV Mica Capacitor	3 E
C407	0.02μF $^{+100}_{-0}$% 50 WV Ceramic Capacitor	1 D
C408	1500pF ± 5% 50 WV Mica Capacitor	3 E
C409	6800pF ± 5% 50 WV Mica Capacitor	1 C
C410	47μF 25 WV Electrolytic Capacitor	3 D
C411	10μF 25 WV Electrolytic Capacitor	3 B
C412	0.02μF $^{+100}_{-0}$% 50 WV Ceramic Capacitor	3 C
C413	0.02μF $^{+100}_{-0}$% 50 WV Ceramic Capacitor	2 B
C414	1700pF ± 5% 50 WV Mica Capacitor	2 B
C415	1μF 50 WV Electrolytic Capacitor	3 C
C416	10μF 10 WV Electrolytic Capacitor	3 B
C417	220pF ±20% 50 WV Ceramic Capacitor	1 A
C418	220pF ±20% 50 WV Ceramic Capacitor	3 A
C419	560pF ± 5% 50 WV Mica Capacitor	1 B
C420	560pF ± 5% 50 WV Mica Capacitor	3 B
C421	1000pF ± 5% 50 WV Mica Capacitor	1 B
C422	1000pF ± 5% 50 WV Mica Capacitor	3 B
C423	0.047μF ±10% 50 WV Mylar Capacitor	1 A
C424	0.047μF ±10% 50 WV Mylar Capacitor	3 A

X: Parts No **Y:** Parts Name **Z:** Position of Parts
(Co-ordinate number and letter in Printed circuit)

X	Y		Z
T401	19kHz Coil	(424028)	1 D
T402	19kHz Coil	(424029)	1 C
T403	38kHz Coil	(424029)	2 B
L401	3.8mH Inductor	(424026)	2 E
L402	23mH Inductor	(424027)	3 E
TR401	2SC536E	(030515-4)	1 E
TR402	2SC536E	(030515-4)	2 C
TR403	2SC536E	(030515-4)	2 C
TR404	2SA564(Pair Q)	(030008-1)	2 C
TR405	2SC536E	(030515-4)	3 C
TR406	2SC458L(D)	(030531-2)	3 B
D401	IN34A Diod	(031040)	1 B
D402	IN34A Diod	(031040)	1 B
D403	IN34A Diod	(031040-1)	2 A
D404	IN34A Diod	(031040-1)	2 A
D405	IN34A Diod	(031040-1)	2 A
D406	IN34A Diod	(031040-1)	2 A
CR401	FP-38A CR	(080008)	1 A
CR402	FP-38A CR	(080008)	3 A



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C417
C418
D403
D404
D405
D406
R422
R423
CR401
R428
C423
R424
R425
R429
CR402
C424
R426
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T403
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R414
R408
R407
R409
C407
T401
C410
R406
C404
C425
R430
C405
C403
TR401
C408
R405
R404
C406
R403
C401
R402
C402
L402
L401

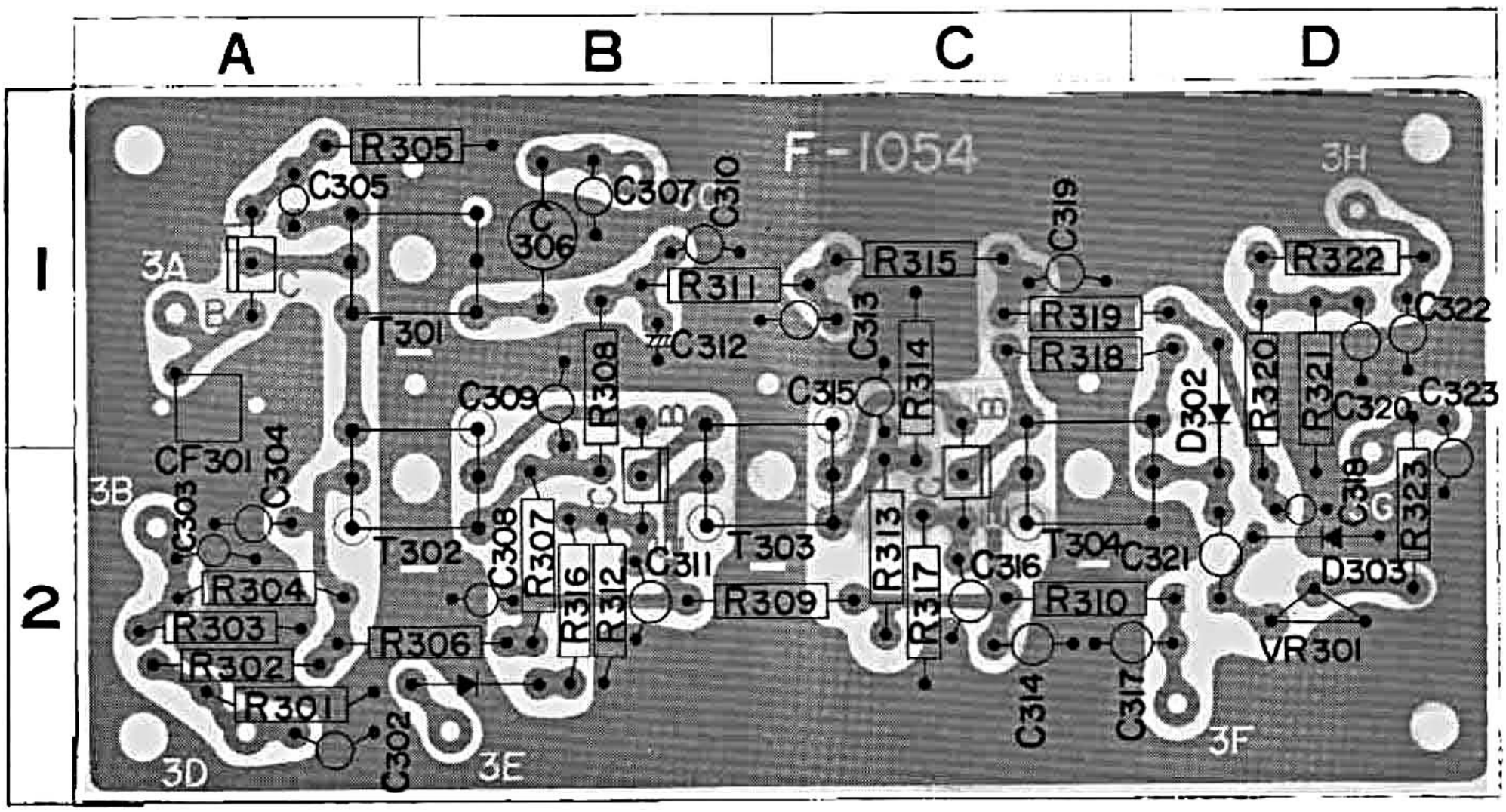
PRINTED CIRCUIT SHEETS AND PARTS LIST

AM BLOCK ⟨F-1054A⟩

X	Y	Z
R301	3.3kΩ ±10% ¼W Carbon Resistor	2A
R302	100kΩ ±10% ¼W Carbon Resistor	2A
R303	3.9kΩ ±10% ¼W Carbon Resistor	2A
R304	27kΩ ±10% ¼W Carbon Resistor	2A
R305	1kΩ ±10% ¼W Carbon Resistor	1A
R306	220Ω ±10% ¼W Carbon Resistor	2A
R307	150kΩ ±10% ¼W Carbon Resistor	2B
R308	12kΩ ±10% ¼W Carbon Resistor	1B
R309	220Ω ±10% ¼W Carbon Resistor	2B
R310	220Ω ±10% ¼W Carbon Resistor	2C
R311	220Ω ±10% ¼W Carbon Resistor	1B
R312	1kΩ ±10% ¼W Carbon Resistor	2B
R313	27kΩ ±10% ¼W Carbon Resistor	2C
R314	6.8kΩ ±10% ¼W Carbon Resistor	1C
R315	220Ω ±10% ¼W Carbon Resistor	1C
R316	100Ω ±10% ¼W Carbon Resistor	2B
R317	1kΩ ±10% ¼W Carbon Resistor	2C
R318	150kΩ ±10% ¼W Carbon Resistor	1C
R319	10kΩ ±10% ¼W Carbon Resistor	1C
R320	1kΩ ±10% ¼W Carbon Resistor	1D
R321	10kΩ ±10% ¼W Carbon Resistor	1D
R322	1kΩ ±10% ¼W Carbon Resistor	1D
R323	1kΩ ±10% ¼W Carbon Resistor	2D
C302	0.04μF $^{+100}_{-0}$% 50 WV Ceramic Capacitor	2A
C303	0.04μF $^{+100}_{-0}$% 50 WV Ceramic Capacitor	2A
C304	0.04μF $^{+100}_{-0}$% 50 WV Ceramic Capacitor	2A
C305	0.01μF ±10% 50 WV Mylar Capacitor	1A
C306	430pF ±10% 50 WV Mica Capacitor	1B
C307	10pF ±10% 50 WV Ceramic Capacitor	1B
C308	0.04μF $^{+100}_{-0}$% 50 WV Ceramic Capacitor	2B

X: Parts No **Y:** Parts Name **Z:** Position of Parts
(Co-ordinate number and letter in Printed circuit)

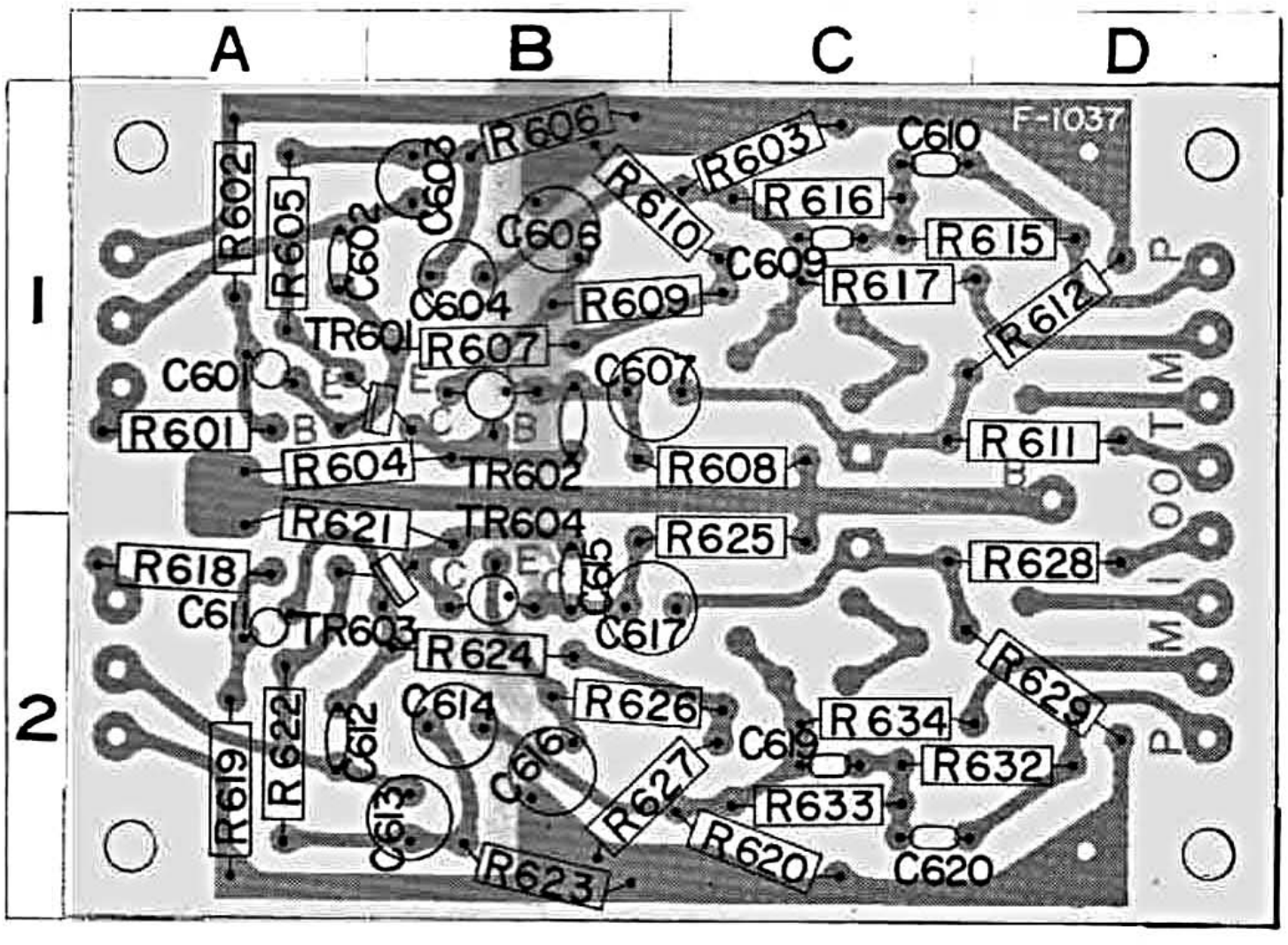
X	Y	Z
C309	0.04μF $^{+100}_{-0}$% 50 WV Ceramic Capacitor	1B
C310	0.04μF $^{+100}_{-0}$% 50 WV Ceramic Capacitor	1B
C311	0.04μF $^{+100}_{-0}$% 50 WV Ceramic Capacitor	2B
C312	1μF 50 WV Electrolytic Capacitor	1A
C313	0.04μF $^{+100}_{-0}$% 50 WV Ceramic Capacitor	1C
C314	0.04μF $^{+100}_{-0}$% 50 WV Ceramic Capacitor	2C
C315	0.04μF $^{+100}_{-0}$% 50 WV Ceramic Capacitor	1C
C316	0.04μF $^{+100}_{-0}$% 50 WV Ceramic Capacitor	2C
C317	0.04μF $^{+100}_{-0}$% 50 WV Ceramic Capacitor	2C
C318	0.01μF ±10% 50 WV Mylar Capacitor	2D
C319	0.04μF $^{+100}_{-0}$% 50 WV Ceramic Capacitor	1C
C320	0.02μF ±10% 50 WV Mylar Capacitor	1D
C321	0.02μF $^{+100}_{-0}$% 50 WV Ceramic Capacitor	2D
C322	0.01μF ±10% 50 WV Mylar Capacitor	1D
C323	0.04μF $^{+100}_{-0}$% 50 WV Ceramic Capacitor	2D
VR301	20kΩ(B) Semi-Variable Resistor (103046)	2D
T301	AM OSC Coil (423017)	1A
T302	455kHz IFT (423016)	2A
T303	455kHz IFT (423015)	2B
T304	455kHz IFT (423014)	2C
TR301	2SC829 (030546-1)	1A
TR302	2SC829 (030546-1)	2B
TR303	2SC829 (030546)	2C
D301	IN34A Diode (031040)	2B
D302	IN34A Diode (031040)	1D
D303	IN34A Diode (031040)	2D



EQUALIZER AMP ⟨F-1037A⟩

X	Y	Z
R601	1kΩ ±10% ¼W Carbon Resistor	1A
R602	680kΩ ±10% ¼W Carbon Resistor	1A
R603	4.7kΩ ±10% ¼W Carbon Resistor	1A
R604	100kΩ ±10% ¼W Carbon Resistor	1A
R605	1.8kΩ ±10% ¼W Carbon Resistor	1A
R606	390Ω ±10% ¼W Carbon Resistor	1B
R607	270kΩ ±10% ¼W Carbon Resistor	1B
R608	6.8kΩ ±10% ¼W Carbon Resistor	1C
R609	220Ω ±10% ¼W Carbon Resistor	1B
R610	820Ω ±10% ¼W Carbon Resistor	1B
R611	100Ω ±10% ¼W Carbon Resistor	1D
R612	82kΩ ±10% ¼W Carbon Resistor	1D
R615	22kΩ ±10% ¼W Carbon Resistor	1D
R616	330kΩ ±10% ¼W Carbon Resistor	1C
R617	8.2kΩ ±10% ¼W Carbon Resistor	1C
R618	1kΩ ±10% ¼W Carbon Resistor	2A
R619	680kΩ ±10% ¼W Carbon Resistor	2A
R620	47kΩ ±10% ¼W Carbon Resistor	2C
R621	100kΩ ±10% ¼W Carbon Resistor	2A
R622	1.8kΩ ±10% ¼W Carbon Resistor	2A
R623	390Ω ±10% ¼W Carbon Resistor	2B
R624	270kΩ ±10% ¼W Carbon Resistor	2B
R625	6.8kΩ ±10% ¼W Carbon Resistor	2C
R626	220Ω ±10% ¼W Carbon Resistor	2B
R627	820Ω ±10% ¼W Carbon Resistor	2B
R628	100Ω ±10% ¼W Carbon Resistor	2D
R629	82kΩ ±10% ¼W Carbon Resistor	2D

X	Y	Z
R632	22kΩ ±10% ¼W Carbon Resistor	2D
R633	330kΩ ±10% ¼W Carbon Resistor	2C
R634	8.2kΩ ±10% ¼W Carbon Resistor	2C
C601	1.5μF 15 WV Tantalum Capacitor	1A
C602	150pF ±10% 50 WV Ceramic Capacitor	1A
C603	33μF 6.3 WV Electrolytic Capacitor	1B
C604	33μF 6.3 WV Electrolytic Capacitor	1B
C605	150pF ±10% 50 WV Ceramic Capacitor	1B
C606	47μF 6.3 WV Electrolytic Capacitor	1B
C607	10μF 50 WV Electrolytic Capacitor	1B
C609	0.01μF ±10% 50 WV Mylar Capacitor	1C
C610	0.0033μF ±10% 50 WV Mylar Capacitor	1C
C611	1.5μF 15 WV Tantalum Capacitor	2A
C612	150pF ±10% 50 WV Ceramic Capacitor	2A
C613	33μF 6.3 WV Electrolytic Capacitor	2B
C614	33μF 6.3 WV Electrolytic Capacitor	2B
C615	150pF ±10% 50 WV Ceramic Capacitor	2B
C616	47μF 6.3 WV Electrolytic Capacitor	2B
C617	10μF 50 WV Electrolytic Capacitor	2B
C619	0.01μF ±10% 50 WV Mylar Capacitor	2C
C620	0.0033μF ±10% 50 WV Mylar Capacitor	2C
TR601	2SC458LG (030531-1)	1B
TR602	2SC281 (030512-2)	1B
TR603	2SC458LG (030531-1)	2B
TR604	2SC281 (030512-2)	2B



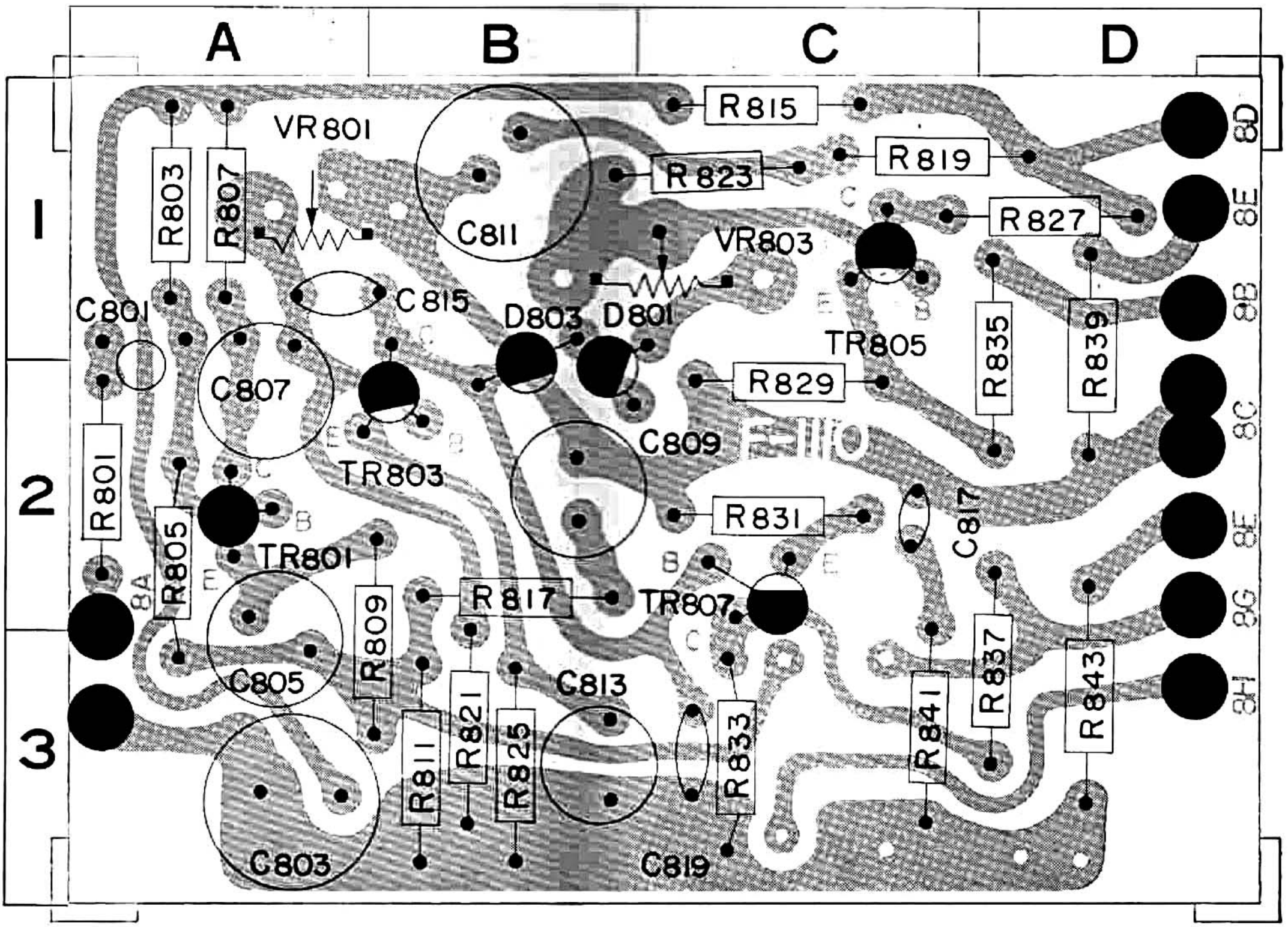
PRINTED CIRCUIT SHEETS AND PARTS LIST

MAIN AMP 〈F-1100〉

X	Y	Z
R801	2.2kΩ ±10% ¼W Carbon Resistor	2A
R802	2.2kΩ ±10% ¼W Carbon Resistor	2A
R803	680kΩ ±10% ¼W Carbon Resistor	1A
R804	680kΩ ±10% ¼W Carbon Resistor	1A
R805	150kΩ ±10% ¼W Carbon Resistor	1A
R806	150kΩ ±10% ¼W Carbon Resistor	1A
R807	4.7kΩ ±10% ¼W Carbon Resistor	1A
R808	4.7kΩ ±10% ¼W Carbon Resistor	1A
R809	3.3kΩ ±10% ¼W Carbon Resistor	3A
R810	3.3kΩ ±10% ¼W Carbon Resistor	3A
R811	100Ω ±10% ¼W Carbon Resistor	3B
R812	100Ω ±10% ¼W Carbon Resistor	3B
R815	22kΩ ±10% ½W Solid Resistor	1C
R816	22kΩ ±10% ½W Solid Resistor	1C
R817	8.2kΩ ±10% ¼W Carbon Resistor	2C
R818	8.2kΩ ±10% ¼W Carbon Resistor	2C
R819	1kΩ ±10% ¼W Carbon Resistor	1C
R820	1kΩ ±10% ¼W Carbon Resistor	1C
R821	6.8kΩ ±10% ¼W Carbon Resistor	3B
R822	6.8kΩ ±10% ¼W Carbon Resistor	3B
R823	4.7kΩ ±10% ¼W Solid Resistor	1C
R824	4.7kΩ ±10% ½W Solid Resistor	1C
R825	120Ω ±10% ¼W Carbon Resistor	3B
R826	120Ω ±10% ¼W Carbon Resistor	3B
R827	10Ω ±10% ¼W Carbon Resistor	1D
R828	10Ω ±10% ¼W Carbon Resistor	1D
R829	220Ω ±10% ¼W Carbon Resistor	2C
R830	220Ω ±10% ¼W Carbon Resistor	2C
R831	33Ω ±10% ¼W Carbon Resistor	2C
R832	33Ω ±10% ¼W Carbon Resistor	2C
R833	220Ω ±10% ¼W Carbon Resistor	3C
R834	220Ω ±10% ¼W Carbon Resistor	3C
R835	10Ω ±10% ¼W Carbon Resistor	1D
R836	10Ω ±10% ¼W Carbon Resistor	1D
R837	10Ω ±10% ¼W Carbon Resistor	3D
R838	10Ω ±10% ¼W Carbon Resistor	3D
R839	0.7Ω ±10% 1W Wire-Wound Resistor	1D
R840	0.7Ω ±10% 1W Wire-Wound Resistor	1D
R841	10Ω ±10% ½W Solid Resistor	3C
R842	10Ω ±10% ½W Solid Resistor	3C
R843	0.7Ω ±10% 1W Wire-Wound Resistor	3D
R844	0.7Ω ±10% 1W Wire-Wound Resistor	3D
C801	1μF 50 WV Electrolytic Capacitor	1A
C802	1μF 50 WV Electrolytic Capacitor	1A
C803	100pF 50 WV Electrolytic Capacitor	3A
C804	100μF 50 WV Electrolytic Capacitor	3A
C805	100μF 6.3 WV Electrolytic Capacitor	3A
C806	100μF 6.3 WV Electrolytic Capacitor	3A
C807	1μF 50 WV Electrolytic Capacitor	1A
C808	1μF 50 WV Electrolytic Capacitor	1A
C809	10μF 50 WV Electrolytic Capacitor	2B
C810	10μF 50 WV Electrolytic Capacitor	2B
C811	47μF 50 WV Electrolytic Capacitor	1B
C812	47μF 50 WV Electrolytic Capacitor	1B
C813	100μF 6.3 WV Electrolytic Capacitor	3B
C814	100μF 6.3 WV Electrolytic Capacitor	3B

X: Parts No **Y:** Parts Name **Z:** Position of Parts
(Co-ordinate number and letter in Printed circuit)

X	Y	Z
C815	47pF ±10% 50 WV Ceramic Capacitor	1A
C816	47pF ±10% 50 WV Ceramic Capacitor	1A
C817	0.04μF ±10% 50 WV Mylar Capacitor	2C
C818	0.04μF ±10% 50 WV Mylar Capacitor	2C
C819	300pF ±10% 50 WV Ceramic Capacitor	3C
C820	300pF ±10% 50 WV Ceramic Capacitor	3C
VR801	200kΩ(B) Semi-Variable Resistor (103015)	
VR802	200kΩ(B) Semi-Variable Resistor (103015)	
VR803	200Ω(B) Semi-Variable Resistor (103012)	
VR804	200Ω(B) Semi-Variable Resistor (103012)	
TR801	2SC281 (030512-1)	2A
TR802	2SC281 (030512-1)	2A
TR803	2SC734 (030536-1)	2B
TR804	2SC734 (030536-1)	2B
TR805	2SC734 (030536-1)	1C
TR806	2SC734 (030536-1)	1C
TR807	2SA561 (030010-1)	2B
TR808	2SA561 (030010-1)	2B
D801	DS41G Varistor (031046)	2B
D802	DS41G Varistor (031046)	2B
D803	DS41G Varistor (031046)	1B
D804	DS41G Varistor (031046)	1B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R803
R807
VR801
C811
R815
R819
R823
R827
VR803
C801
C815
D803
D801
TR805
R829
R835
R839
C807
TR803
C809
R801
R805
TR801
R831
C817
R817
TR807
R809
C805
C813
R811
R821
R825
R833
R841
R837
R843
C803
C819
8A
8B
8C
8D
8E
8F
8G
8H

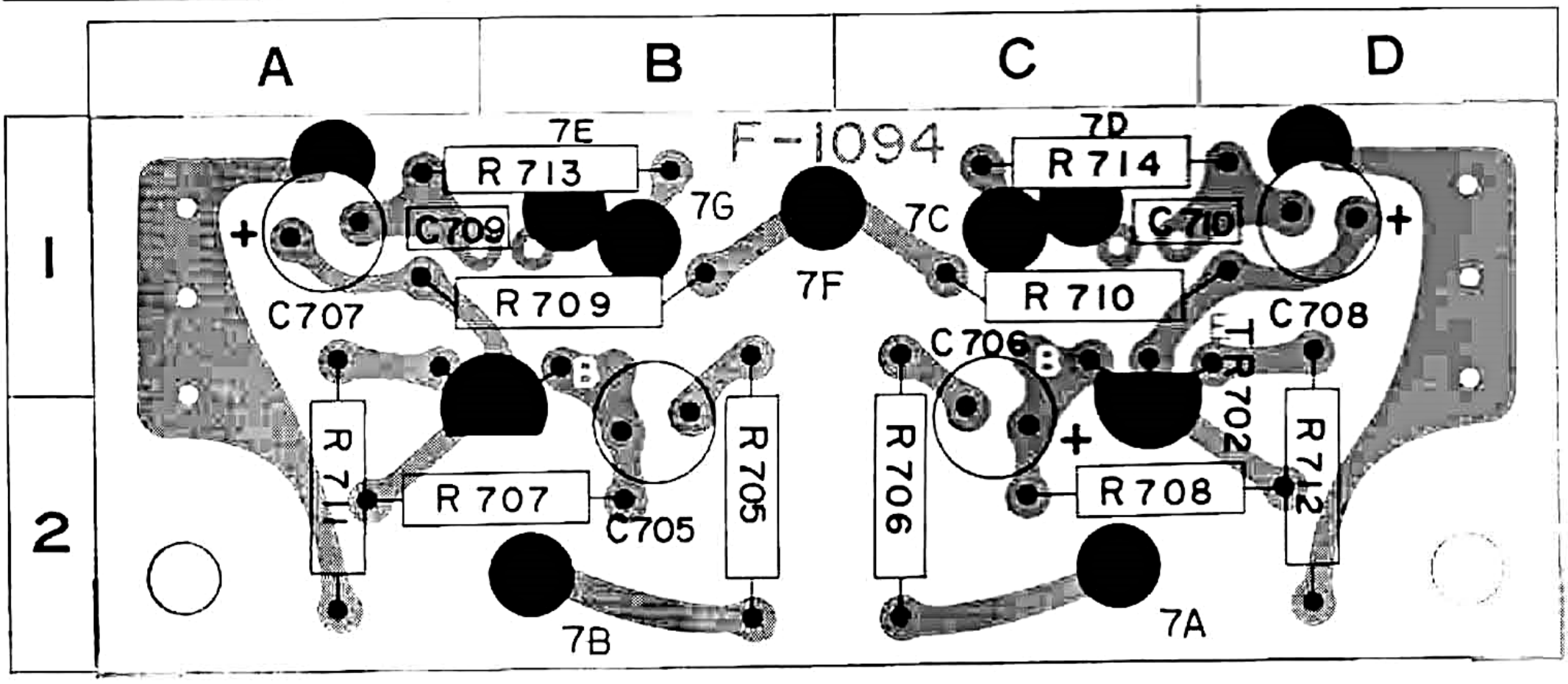
PRINTED CIRCUIT SHEETS AND PARTS LIST

TONE CONTROL AMP 〈F-1094〉

X	Y	Z
R705	1kΩ ±10% ¼W Carbon Resistor	2 B
R706	1kΩ ±10% ¼W Carbon Resistor	2 C
R707	1MΩ ±10% ¼W Carbon Resistor	2 B
R708	1MΩ ±10% ¼W Carbon Resistor	2 C
R709	15kΩ ±10% ¼W Carbon Resistor	1 B
R710	15kΩ ±10% ¼W Carbon Resistor	1 C
R711	560Ω ±10% ¼W Carbon Resistor	2 A
R712	560Ω ±10% ¼W Carbon Resistor	2 D
R713	18kΩ ±10% ¼W Carbon Resistor	1 B
R714	18kΩ ±10% ¼W Carbon Resistor	1 C

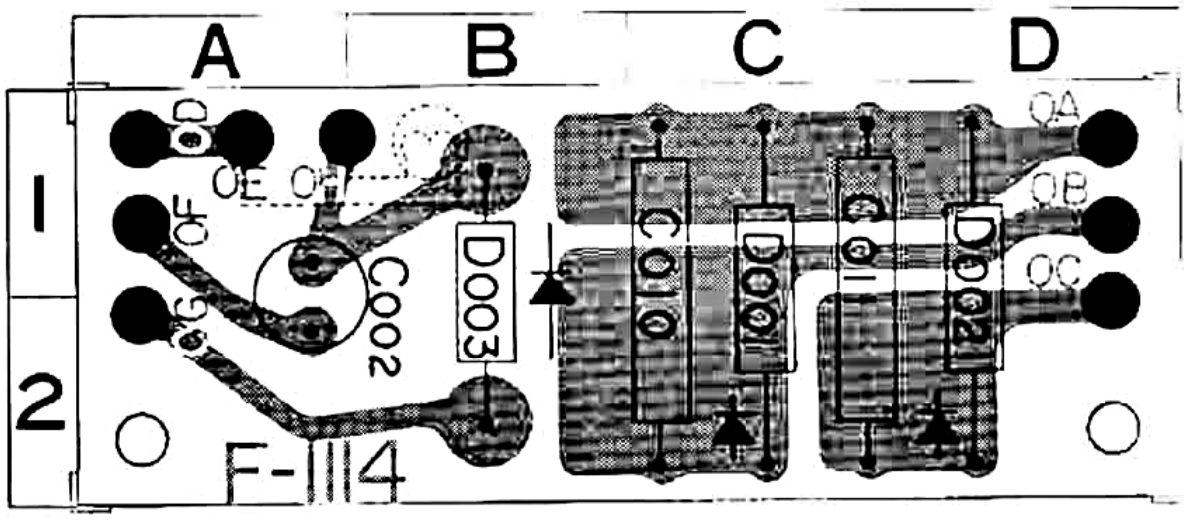
X: Parts No Y: Parts Name Z: Position of Parts
(Co-ordinate number and letter in Printed circuit)

X	Y	Z
C705	1 μF 50 WV Electrolytic Capacitor	2 B
C706	1 μF 50 WV Electrolytic Capacitor	2 C
C707	3.3 μF 25 WV Electrolytic Capacitor	1 A
C708	3.3 μF 25 WV Electrolytic Capacitor	1 D
C709	0.001 μF ±10% 50 WV Mylar Capacitor	1 B
C710	0.001 μF ±10% 50 WV Mylar Capacitor	1 C
TR601	2SC458 LG (C) (030531-1)	1 B
TR602	2SC458 LG (C) (030531-1)	1 C



POWER 〈F-1114〉

X	Y	Z
D001	SW-1-02 Diode (031055)	1 C
D002	SW-05-02 Diode (035017)	1 D
D003	SW-05-02 Diode (031017)	1 B
C002	220 μF 10 WV Electrolytic Capacitor	1 A
C010	0.01 μF 400 WV Oil Capacitor	1 C
C011	0.01 μF 400 WV Oil Capacitor	1 C



OTHER PARTS AND THEIR POSITION ON CHASSIS

OTHER PARTS LIST

X	Y	
R120	680Ω ±10% ¼W Carbon Resistor	
R121	68Ω ±10% ¼W Carbon Resistor	
C120	0.02μF $\pm^{100}_{0}$% 50 WV Ceramic Capacitor	
T101	300 : 75Ω (F-1010)	
S8	SL 13-8-10H Slide Switch	(111004)
R334	10kΩ ±10% ¼W Carbon Resistor	
R335	6.8kΩ ±10% ¼W Carbon Resistor	
C301	0.04μF $\pm^{100}_{0}$% 50WV Ceramic Capacitor	
C324	0.01μF ±10% 50WV Mylar Capacitor	
VC301 TC301	F-1010 AM Variable Capacitor	(081015)
L302	1μH Coil	(429003)
L303	ARS-48A Antenna Coil	(420010)
R431	3.3MΩ ±10% ½W Solid Resistor	
C428	470pF ±10% 50 WV HIQ Capacitor	
PL401	6V 30mA Pilot Lamp	(040011)
R635	100kΩ ±10% ½W Solid Resistor	
R636	4.7kΩ ±10% ¼W Carbon Resistor	
R637	100Ω ±10% ¼W Carbon Resistor	
R638	100kΩ ±10% ¼W Carbon Resistor	
R639	220kΩ ±10% ¼W Carbon Resistor	
R640	220kΩ ±10% ¼W Carbon Reristor	
R641	100kΩ ±10% ¼W Carbon Resistor	
R642	100kΩ ±10% ½W Solid Resistor	
R643	4.7kΩ ±10% ¼W Carbon Resistor	
R644	68kΩ ±10% ¼W Carbon Resistor	
R645	68kΩ ±10% ¼W Carbon Resistor	
VR601	10kΩ(B) Variable Resistor	(100502)
C621	0.002μF ±10% 50WV Mylar Capacitor	
R701	12kΩ ±10% ¼W Carbon Resistor	
R702	12kΩ ±10% ¼W Carbon Resistor	
R703	15kΩ ±10% ½W Solid Resistor	
R704	15kΩ ±10% ½W Solid Resistor	
R705	22kΩ ±10% ¼W Carbon Resistor	
R706	22kΩ ±10% ¼W Carbon Resistor	
R717	12kΩ ±10% ¼W Carbon Resistor	
R718	12kΩ ±10% ¼W Carbon Resistor	
R719	3.9kΩ ±10% ½W Solid Resistor	
R720	3.9kΩ ±10% ½W Solid Resistor	
R721	1.2kΩ ±10% ½W Solid Resistor	
R722	1.2kΩ ±10% ½W Solid Resistor	
R723	1MΩ ±10% ¼W Carbon Resistor	
R724	1MΩ ±10% ¼W Carbon Resistor	

X: Parts No **Y:** Parts Name

X	Y	
C701	180pF ±10% 50 WV HIQ Capacitor	
C702	180pF ±10% 50 WV HIG Capacitor	
C703	0.022μF ±10% 50 WV Mylar Capacitor	
C704	0.022μF ±10% 50 WV Mylar Capacitor	
C711	0.01μF ±10% 50 WV Mylar Capacitor	
C712	0.01μF ±10% 50 WV Mylar Capacitor	
C713	0.1μF ±10% 50 WV Mylar Capacitor	
C714	0.1μF ±10% 50 WV Mylar Capacitor	
C715	0.01μF ±10% 50 WV Mylar Capacitor	
C716	0.01μF ±10% 50 WV Mylar Capacitor	
C717	0.007μF ±15% 50 WV Mylar Capacitor	
C718	0.007μF ±10% 50 WV Mylar Capacitor	
R845	390Ω ±10% ½W Solid Resistor	
R846	390Ω ±10% ½W Solid Resistor	
R847	180Ω ±10% 3 W	
R848	180Ω ±10% 3 W	
C821	2000μF 35 WV Electrolytic Capacitor	(020527)
C822	2000μF 35 WV Electrolytic Capacitor	(020527)
VR701 VR702	125kΩ(M) 125kΩ(N) Balance, Variable Resistor	(103034)
VR703 VR704	250kΩ(B) 250kΩ(B) Volume, Variable Resistor	(101035)
VR705 VR706	100kΩ(A) 100kΩ(A) Treble, Variable Resistor	(102005)
VR707 VR708	100kΩ(A) 100kΩ(A) Bass, Variable Resistor	(102005)
TR809	2SD180	(030806-1～3)
TR810	2SD180	(030806-1～3)
TR811	2SD180	(030806-1～3)
TR812	2SD180	(030806-1～3)
F801	2.5A Quick Acting Fuse	(043011)
F802	2.5A Quick Acting Fuse	(043011)
PL801	25V 90mA Pilot Lamp	(040007)
PL802	25V 90mA Pilot Lamp	(040007)
R001	120Ω ±10% ½W Carbon Resistor	
R002	47Ω ±10% ½W Solid Resistor	
R003	270Ω ±10% ½W Solid Resistor	
R004	560Ω ±10% ½W Solid Resistor	
R005	560Ω ±10% ½W Solid Resistor	
R006	2.2kΩ ±10% ½W Solid Resistor	
R007	1kΩ ±10% ½W Solid Resistor	
R008	1.8kΩ ±10% ½W Solid Resistor	
R009	1kΩ ±10% ½W Solid Resistor	
C001	2000μF 60 WV Electrolytic Capacitor	(020519-1)
C003	2000μF 35 WV Electrolytic Capacitor	(020527)
C004	330μF 35 WV Electrolytic Capacitor	
C005	470μF 25 WV Electrolytic Capacitor	
C006	470μF 25 WV Electrolytic Capacitor	
C007	1000μF 16 WV Electrolytic Capacitor	
M001	100μA Tuning Meter	(090015-1)

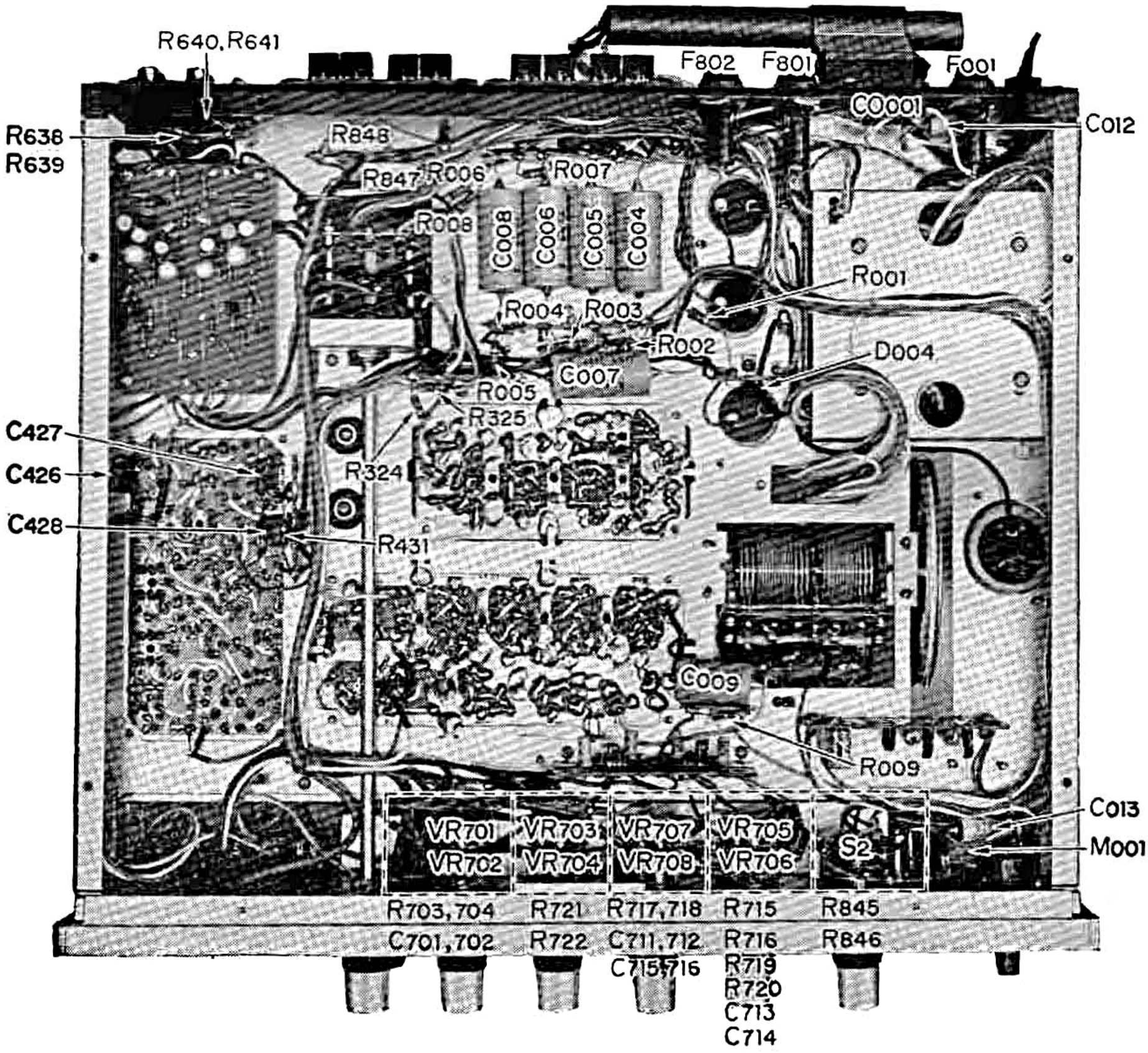
OTHER PARTS AND THEIR POSITION ON CHASSIS

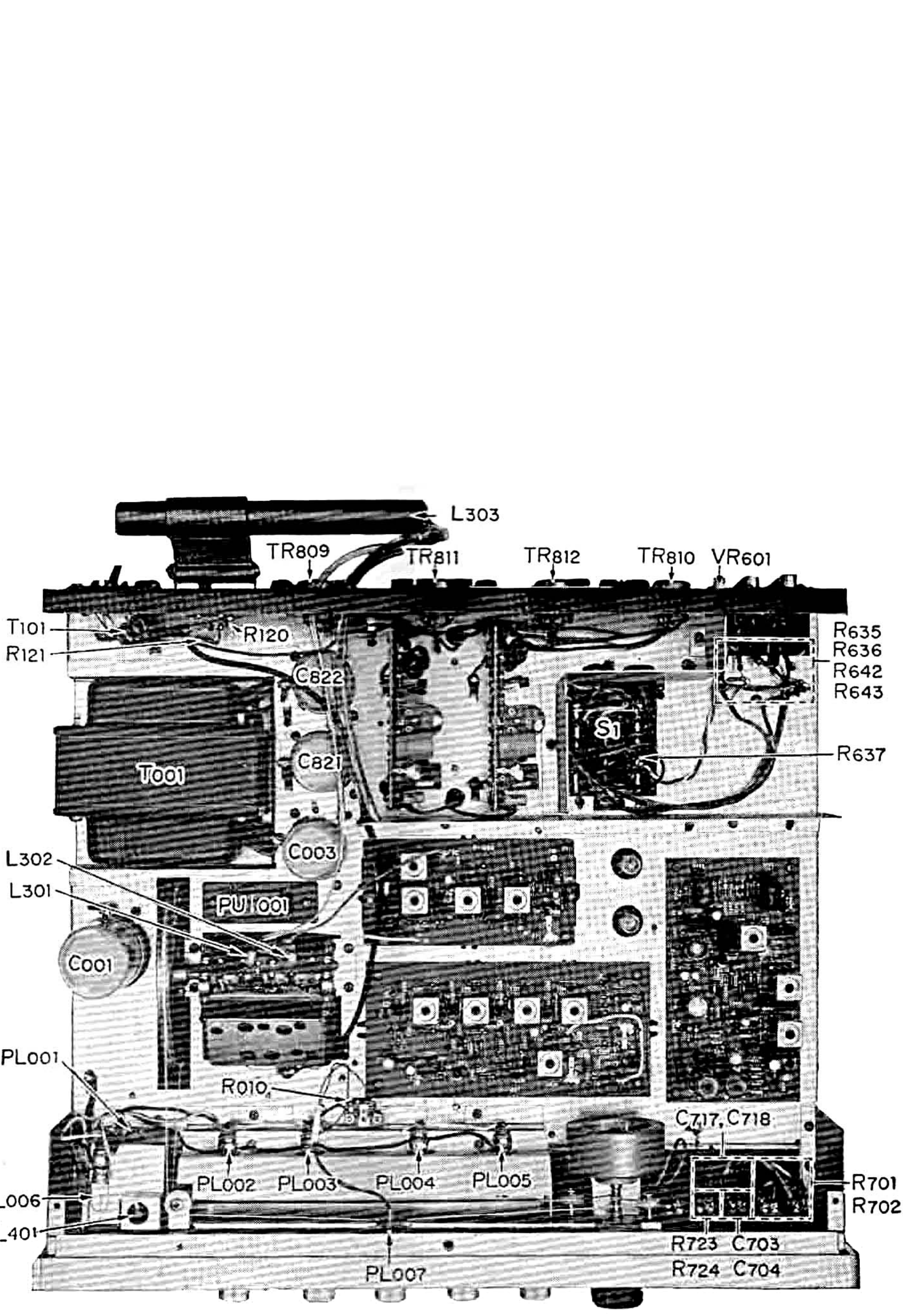
OTHER PARTS LIST

X	Y	
C008	1000μF 16 WV Electrolytic Capacitor	
C009	330μF 25 WV Electrolytic Capacitor	
C012	0.0047μF 600WV Oil Capacitor	
C013	0.033μF 600WV Oil Capacitor	
S1(a~i)	Selector Switch	(110317)
S2(a~d)	Speaker Switch	(110111)
S3(a, b)	SJ-1855 Lever Switch	(117006)
S4(a, b)	SJ-1855 Lever Switch	(117006)
S5(a, b)	SJ-1855 Lever Switch	(117006)
S6(a, b)	SJ-1855 Lever Switch	(117006)
S7(a, b)	SJ-1855 Lever Switch	(117006)
S001	EUQA8E R11 Power Switch	(113009)
D004	SW-05-02 Diode	(031017)
T001	400-5312 Power Transformer	(400040)

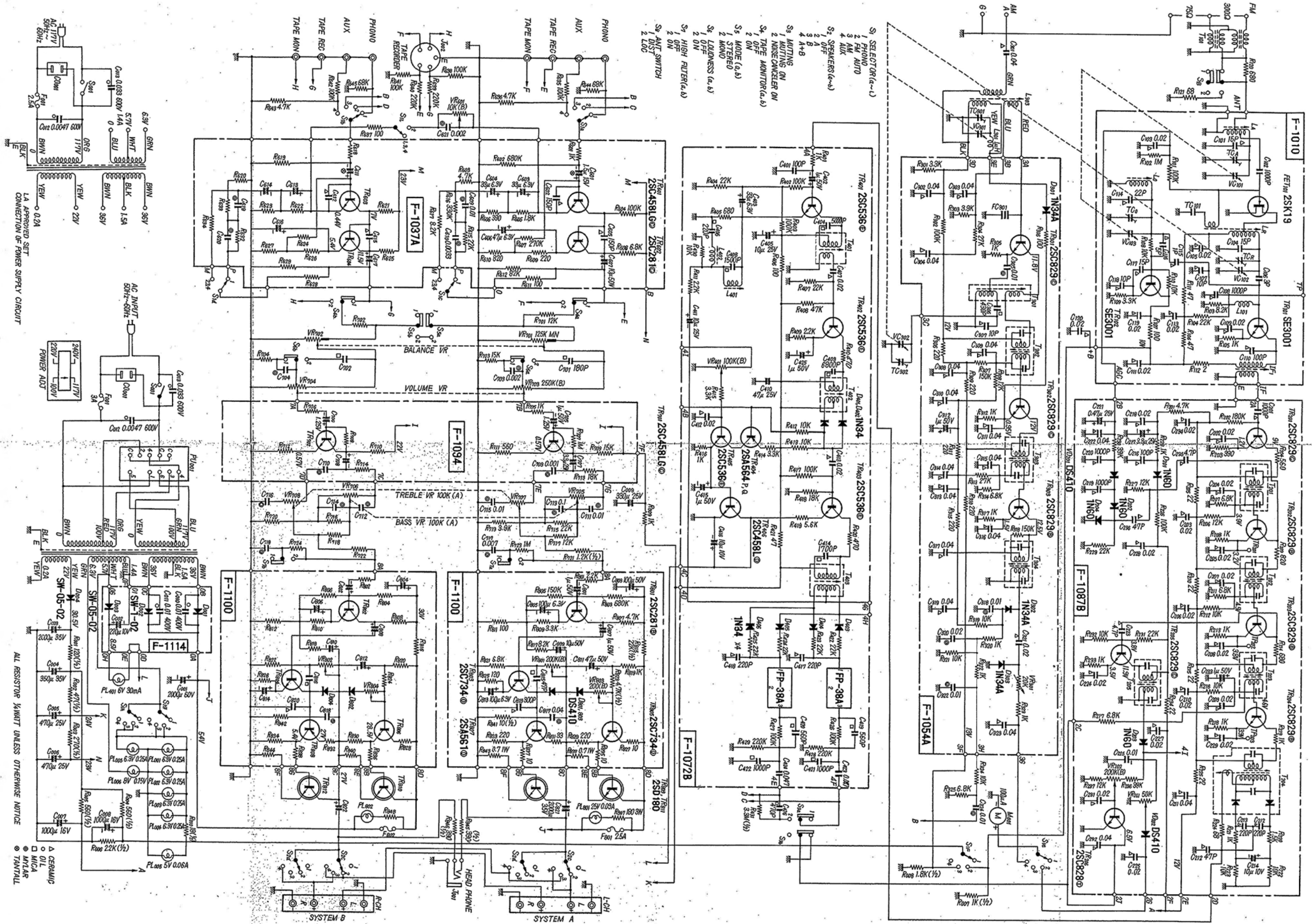
X: Parts No Y: Parts Name

X	Y		
F001	2.5A GTD Power Fuse		(043025)
PL001	6.3V 250mA Pilot Lamp		(040008)
PL002	6.3V 250mA Pilot Lamp		(040008)
PL003	6.3V 250mA Pilot Lamp		(040008)
PL004	6.3V 250mA Pilot Lamp		(040008)
PL005	6.3V 250mA Pilot Lamp		(040008)
PL006	8V 150mA Pilot Lamp		(040008)
PL007	5V 60mA Pilot Lamp		(040010)
CO001	AC Consent 2P		(245001)
PU001	Voltage Selector	X-B0001	(241006)
		X-10001	(241009)
J001	Headphone Jack 3P 64M		(243007)
J002	DIN Jack S-1 8113		(243004)





SANSUI 800 SCHEMATIC DIAGRAM



SANSUI ELECTRIC COMPANY LIMITED
Printed in Japan (89060M8)