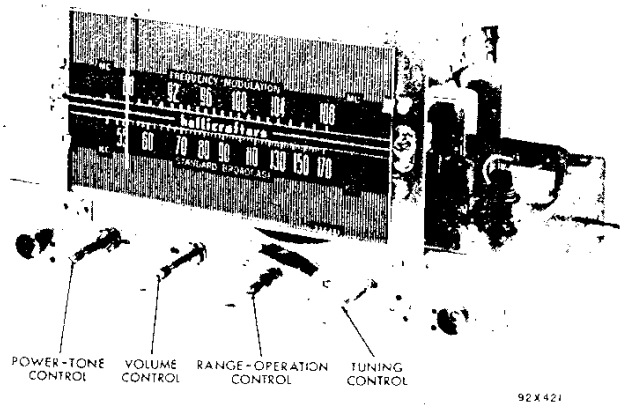


RESTRINGING DIAL CORD

Restring the dial drive with 30 lb test dial cord. Tie one end to the tension spring and follow the sequence outlined in Fig. 1. Stretch the tension spring and tie the end of the cord securely to the spring as shown.

Set the tuning condenser at maximum capacity (closed), attach the pointer to the string and line it up with the left hand index mark on the dial scale.

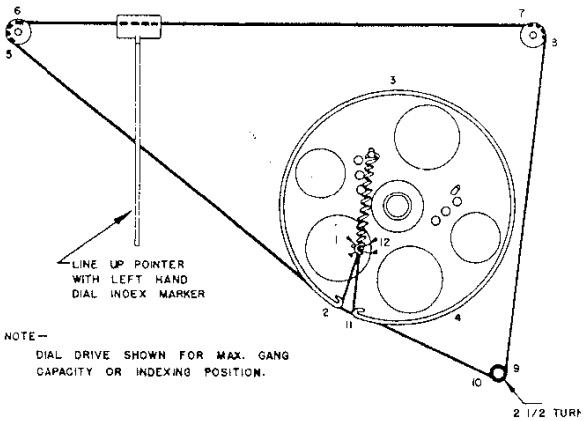


Fig. 1. Dial cable stringing procedure. (92R382.

REPLACING LAMPS

Refer to Fig. 7 for the location of two dial lamps used in the receiver. To gain access to defective lamps, reach in through the cabinet cover and unclip the dial lamp socket by compressing the side springs. The socket may then be brought out into the open to change the defective lamp. Replace all lamps with 6-8 V. Mazda #44 (Blue bead) lamps or equivalent.

ALIGNMENT PROCEDURE

The receiver is equipped with AUTOMATIC FREQUENCY CONTROL on the FM band to compensate for oscillator drift and improve the tuning function on the FM band. The correction factor is approximately 5 times: AFC takes hold 250 kc before the station frequency is reached and releases before tuning 500 kc beyond the station frequency when receiving a 1000 microvolt signal.

The standard RMA dummy specified in the alignment chart consist of a 200 mmf condenser in series with a 20 uh r-f choke which is shunted by a 400 mmf condenser in series with a 400 ohm carbon resistor.

When making the alignment adjustments set the tone control at NORMAL and the volume control at maximum volume. Use just enough signal generator output to obtain the results indicated on the chart.

ALIGNMENT CHART:

Step	Dummy Antenna	Signal Generator Coupling	Signal Generator Frequency	Band Switch Pos.	Radio Dial Setting	Adjust	Remarks
1	0.01 mfd. cap.	To high cap. stator of center section.	455 kc	"BC"	1000 kc	A,B,C, D,E	Adjust for max. audio output. Keep audio output below 500 MW to avoid AVC action.
2	0.01 mfd. cap. in series with a 4700 ohm carbon resistor.	To low cap. stator of center section.	10.7 mc	"FM"	90 mc	F,G,H, I,J,K	Adjust for max. voltage as measured between pin #3 of 6H6 and ground with an electronic volt meter. Adjust signal generator output for approx. 2 volts DC at this point.
3	0.01 mfd. cap.	See step 2.	10.7 mc	"FM"	90 mc	L	Adjust for zero voltage as measured between the junction of R27 and R28 and ground with an electronic volt meter.
4	Std RMA dummy	To terminals "A" and "G" on terminal strip TS-2.	1500 kc	"BC"	1500 kc	*M,N,O	Adjust for max. output as in step 1.
5	Two 150 ohm carbon resistors	To terminals "D-D" on terminal strip TS-1.	105 mc	"FM"	105 mc	*P,Q	Adjust for max. voltage as measured across R24 with an electronic volt meter. Adjust signal generator output for approx. 1 volt DC at this point.

*Note - Calibration adjustments.

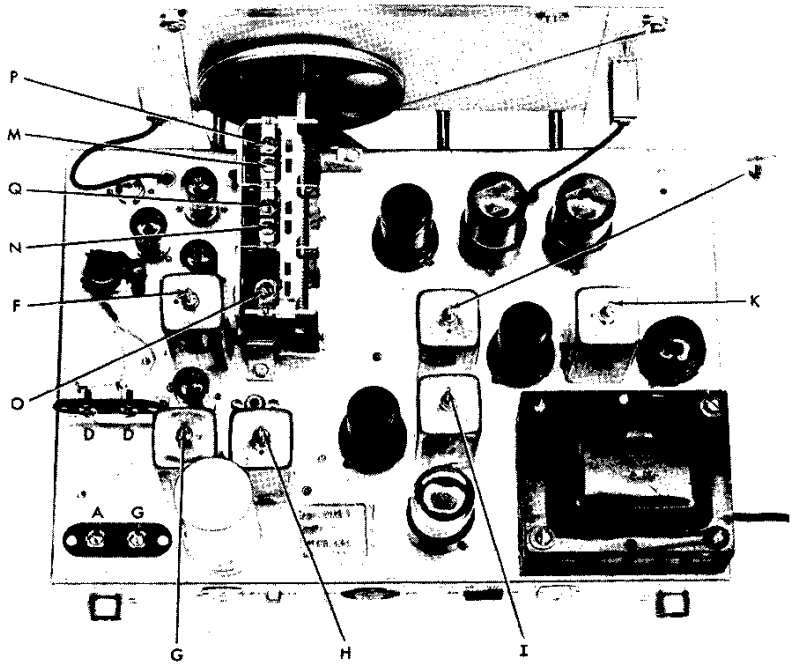


Fig. 2. Alignment adjustments, top view.

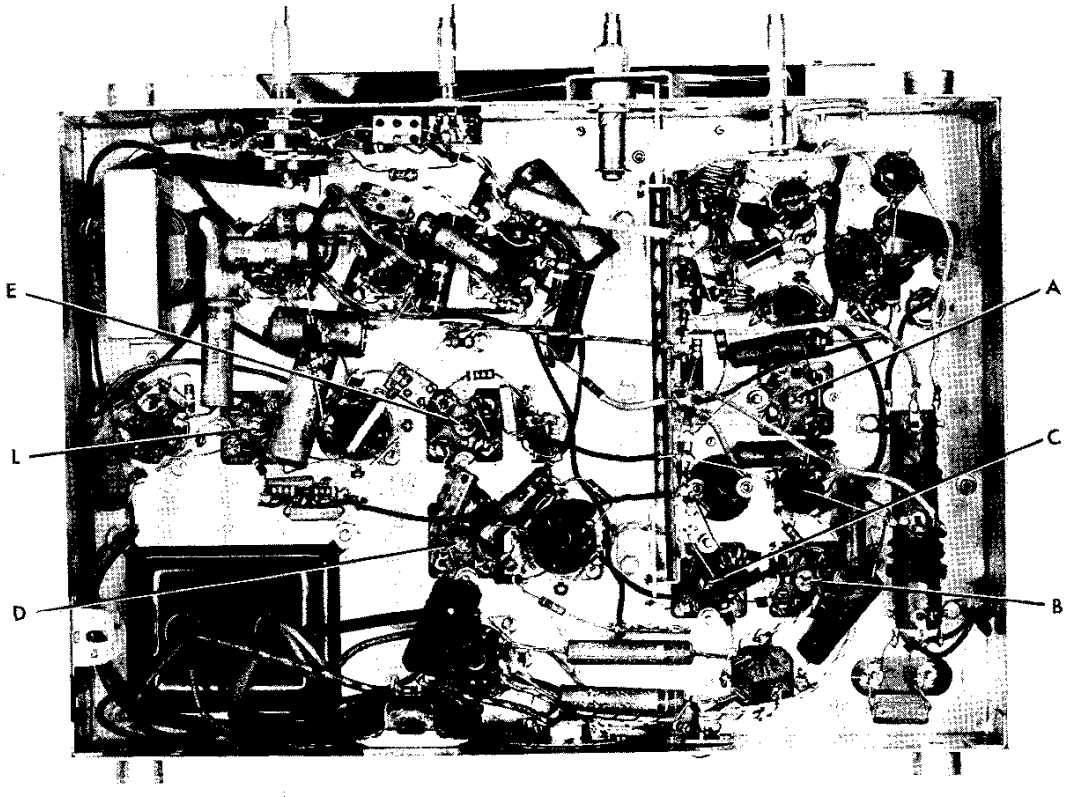


Fig. 3. Alignment adjustments, bottom view. (92X410)

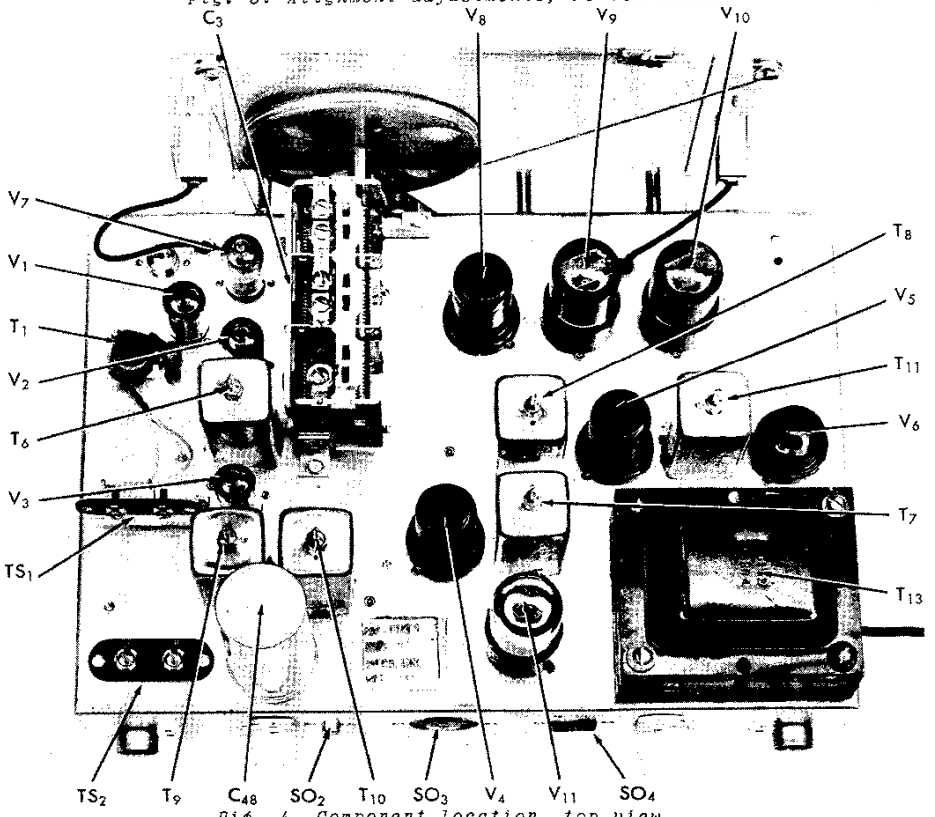


Fig. 4. Component location, top view.

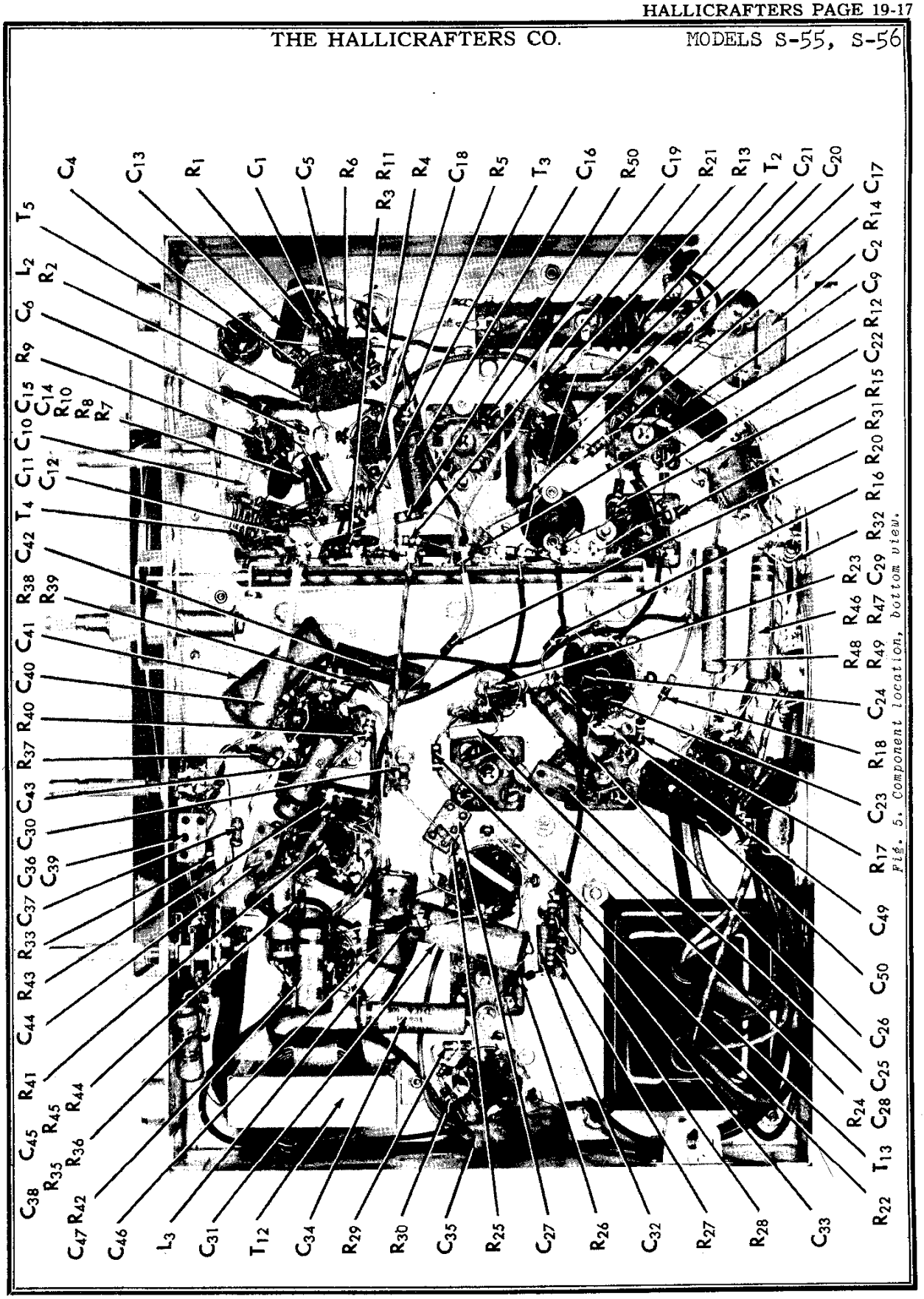
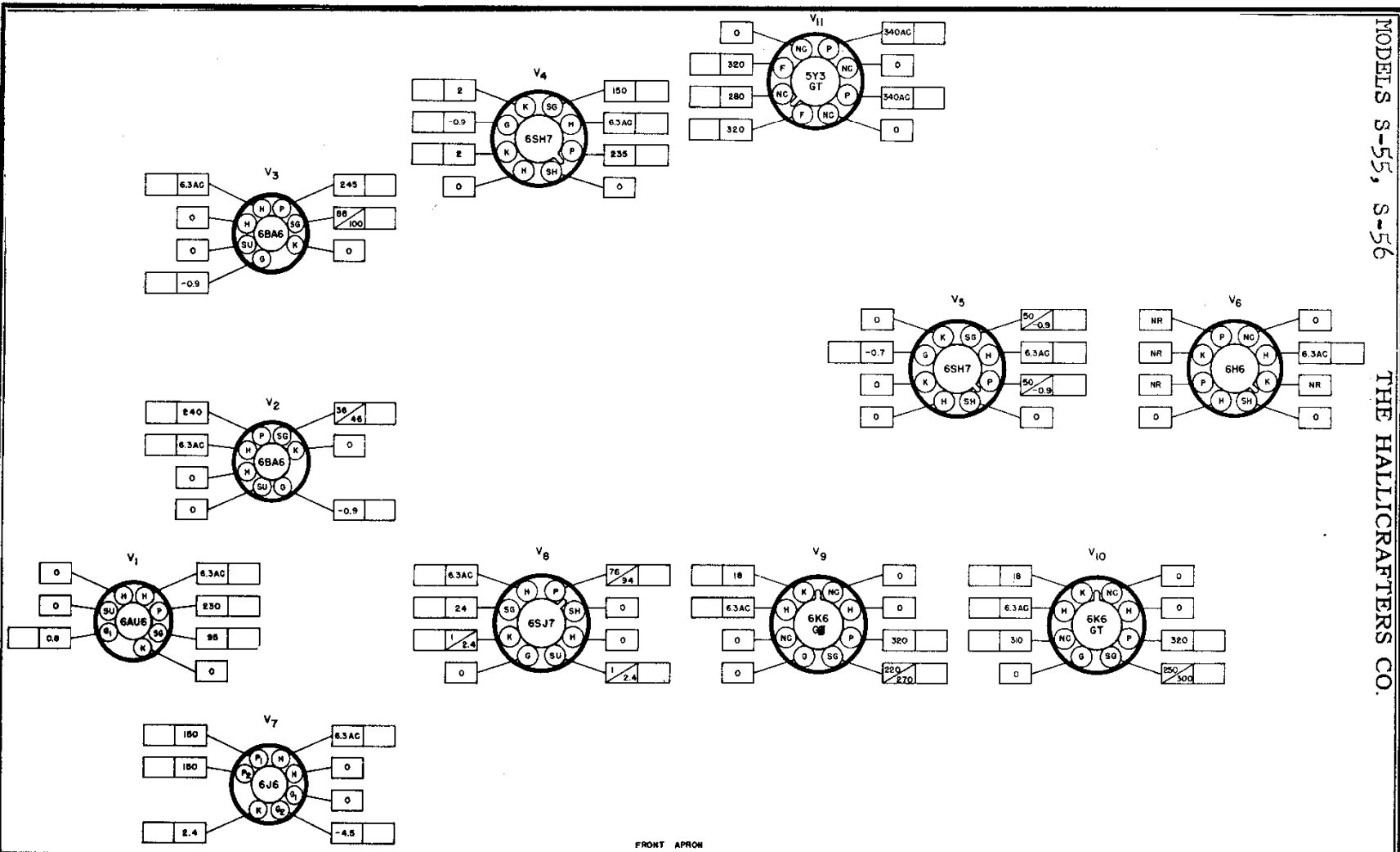


Fig. 5. Component location, bottom view.



NOTES—

1. SOCKET VIEWS ARE BOTTOM VIEWS.
2. ALL VOLTAGES MEASURED BETWEEN TUBE SOCKET TERMINALS AND CHASSIS.
3. LINE VOLTAGE—117 V. AC.
4. ALL VOLTAGES SHOWN WERE MEASURED WITH A 20,000 OHM/VOLTMETER AND AT ZERO SIGNAL.
5. ALL VOLTAGES ARE DC UNLESS OTHERWISE SPECIFIED.
6. "NC"—NO CONNECTION.
7. [ ] THE BLANK SPACES ARE PROVIDED FOR THE SERVICEMAN. FILL IN THE ACTUAL READING AS TAKEN WITH YOUR OWN EQUIPMENT. A NORMAL OPERATING RADIO SHOULD BE USED FOR THESE MEASUREMENTS.
8. [FM/AM] WHERE TUBE SOCKET VOLTAGES CHANGE FROM FM TO AM RECEPTION TWO READINGS ARE SHOWN, UPPER LEFT SHOWS FM READINGS—LOWER RIGHT SHOWS AM READINGS.
9. "NR"—NOT READABLE.

Fig. 6. Tube socket voltage chart.

19-1920

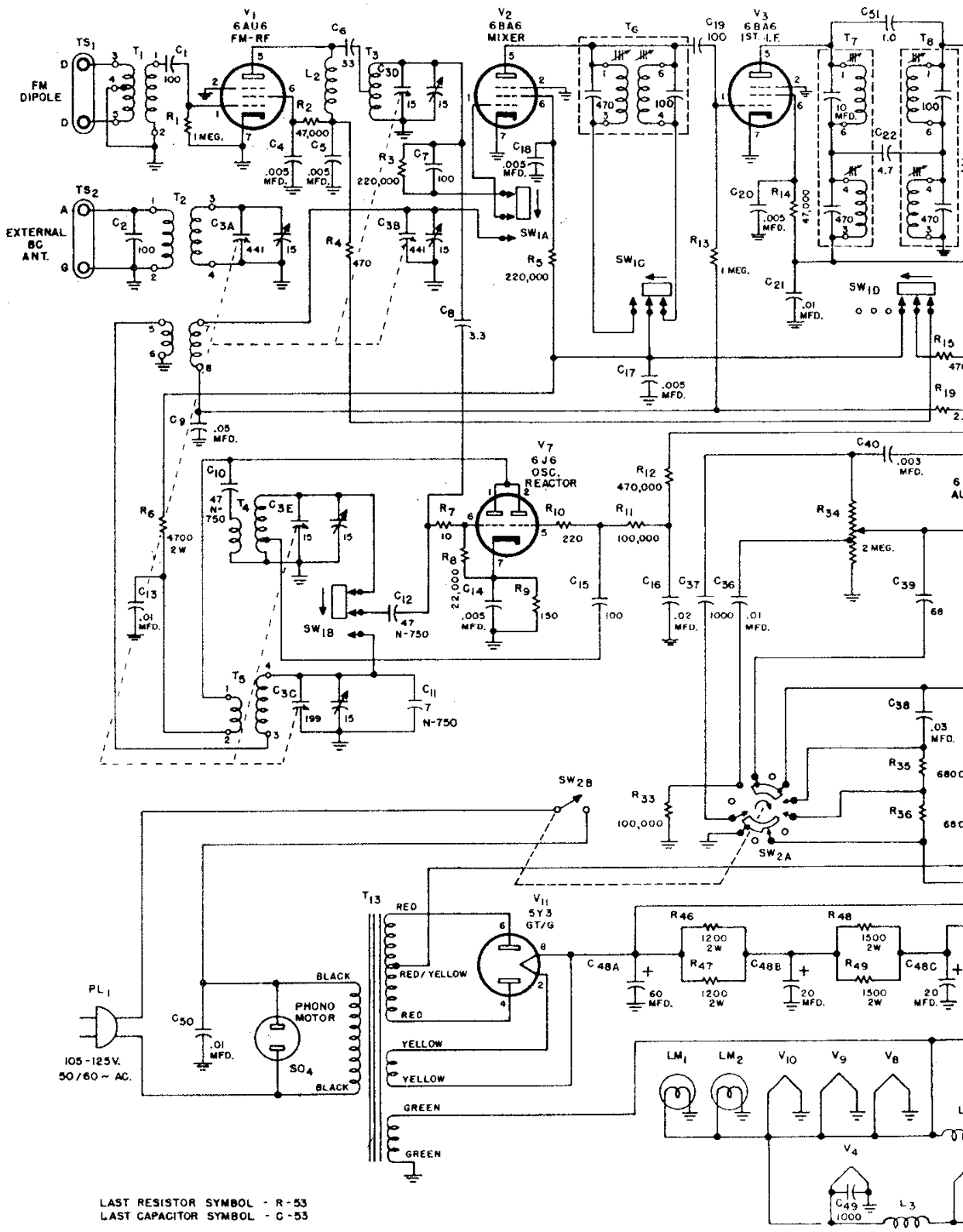
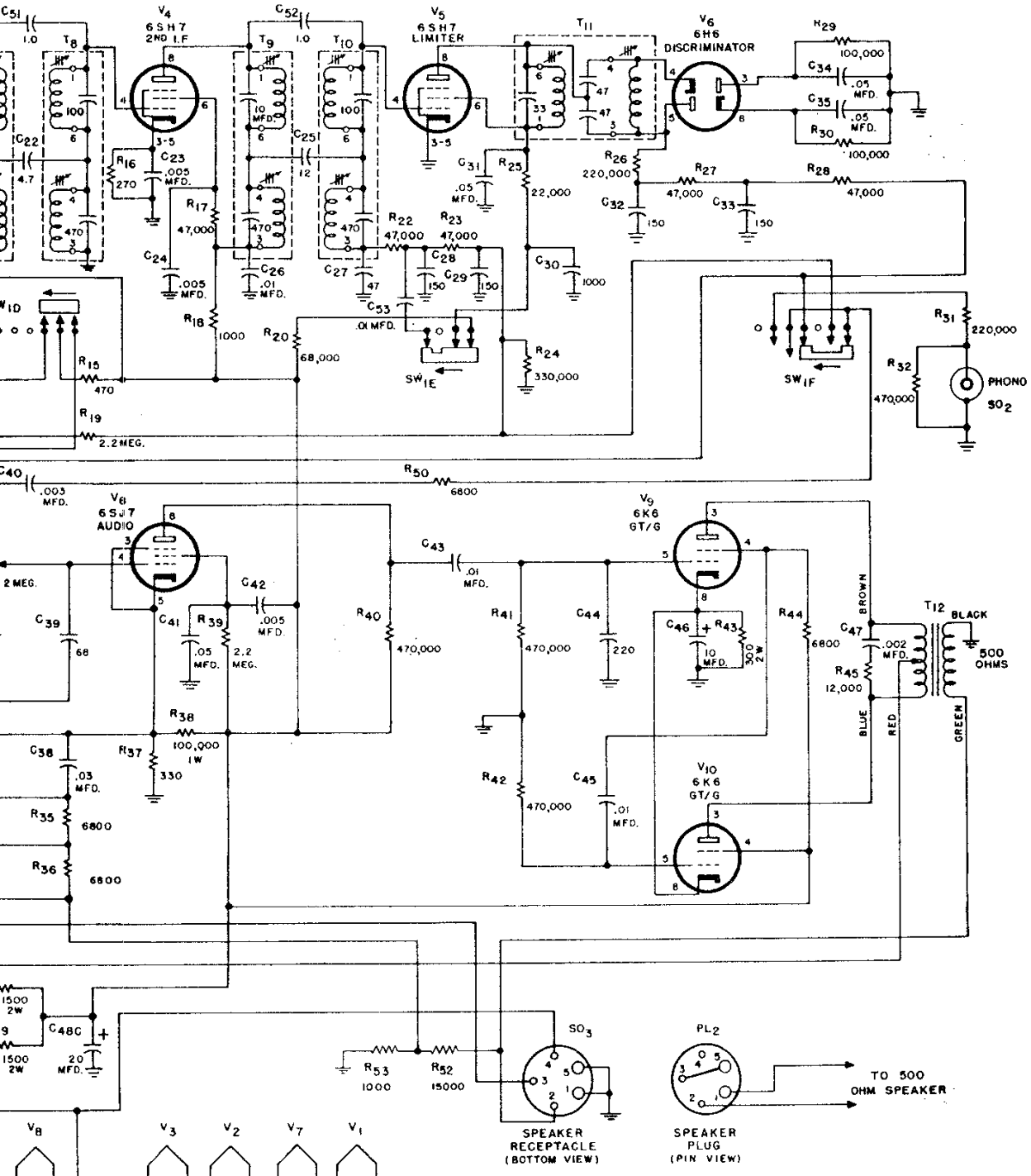


Fig. 8. Schemati



NOTE - RESISTOR VALUES ARE IN OHMS.
ALL RESISTORS ARE 1/2 W. UNLESS OTHERWISE SPECIFIED.
CAPACITOR VALUES ARE IN MMF. UNLESS OTHERWISE SPECIFIED.

BAND SWITCH, SW-1, SHOWN IN "FM" POSITION.
TONE CONTROL, SW-2, SHOWN IN AC OFF POSITION.

8. *Schematic diagram.*

SERVICE PARTS LIST

Ref. No.	Description	Hallicrafter's Part Number
	CONDENSERS	
C-1,7,15,19	100 mmf. 500 V., ceramic	47B20101M5
C-2	100 mmf. 500 V., mica	CM20A101M
C-3	Tuning condenser, 5 sections	48C196
C-4,5,14,17, 18,20,23,24	.005 mfd. 450 V., ceramic	47A168
C-6	3.3mmf. 500 V., ceramic	CC20UK330K
C-8	3.3 mmf. 500 V., bakelite	47A160-5
C-9,34,35	.05 mfd. 200 V., tubular paper	46AU503J
C-10,12	47 mmf. 500 V., ceramic	CC20UK470M
C-11	7 mmf. 500 V., ceramic	CC20UJ070K
C-13,21,26, 36,43,45	.01 mfd. 600 V., tubular paper	46AZ103F
C-16	.02 mfd. 200 V., tubular paper	46AU203J
C-22	4.7 mmf. 500 V., bakelite	47A160-6
C-25	12 mmf. 500 V., mica	CM20A120K
C-27	47mmf. 500 V., mica	CM20A470M
C-28,29,32, 33	150 mmf. 500 V., mica	CM20A151M
C-30,37,49	1000 mmf. 500 V., ceramic	47B20102M5
C-31,41	.05 mfd. 600 V., tubular paper	46AY503J
C-38	.03 mfd. 200 V., tubular paper	46AU303J
C-39	68 mmf. 500 V., mica	CM20A680M
C-40	.003 mfd. 600 V., tubular paper	46AZ302J
C-42	.005 mfd. 600 V., tubular paper	46AZ502J
C-44	220 mmf. 500 V., mica	CM20A221M
C-46	10 mfd. 25 V., electrolytic	45A121
C-47	.002 mfd. 600 V., tubular paper	46AZ202J
C-48	60-20-20 mfd. 450 V., electrolytic	45B113
C-50	.01 mfd. 600 V., molded paper	46AG103J
C-51,52	1 mmf. 500 V., bakelite	47A160-2
C-53	.01 mfd. 600 V., tubular paper	46AY103J
	RESISTORS	
R-1,13	1 megohm ½ watt, carbon	RC20AE105M
R-2,14,17, 22,23,27,28	47,000 ohms ½ watt, carbon	RC20AE473M
R-3,5,26,31	220,000 ohms ½ watt, carbon	RC20AE224M
R-4,15	470 ohms ½ watt, carbon	RC20AE471M
R-6	4700 ohms 2 watts, carbon	RC40AE472M
R-7	10 ohms ½ watt, carbon	RC20AE100M
R-8,25	22,000 ohms ½ watt, carbon	RC20AE223M
R-9	150 ohms ½ watt, carbon	RC20AE151M
R-10	220 ohms ½ watt, carbon	RC20AE221M
R-11,33	100,000 ohms ½ watt, carbon	RC20AE104M
R-12,32,40, 41,42	470,000 ohms ½ watt, carbon	RC20AE474M
R-16	270 ohms ½ watt, carbon	RC20AE271K
R-18,53	1000 ohms ½ watt, carbon	RC20AE102M
R-19,39	2.2 megohms ½ watt, carbon	RC20AE225M
R-20	68,000 ohms ½ watt, carbon	RC20AE683M
R-24	330,000 ohms ½ watt, carbon	RC20AE334M
R-29,30	100,000 ohms ½ watt, carbon	RC20AE104K
R-34	Volume control, 2 megohms (tapped)	25B623
R-35,36 44,50	6800 ohms ½ watt, carbon	RC20AE682M
R-37	330 ohms ½ watt, carbon	RC20AE331K
R-38	100,000 ohms 1 watt, carbon	RC30AE104K
R-43	300 ohms 2 watt, carbon	RC40AE301J
R-45	12,000 ohms ½ watt, carbon	RC20AE123K
R-46,47	1200 ohms 2 watt, carbon	RC40AE122K
R-48,49	1500 ohms 2 watt, carbon	RC40AE152K
	TRANSFORMERS AND COILS	
T-1	Transformer, FM, antenna stage	51B1021
T-2	Transformer, BC, mixer stage	51B1059
T-3	Transformer, FM, mixer stage	51B1022
T-4	Transformer, FM, osc. stage	51B1073
T-5	Transformer, BC, osc. stage	51B1020
T-6	Transformer, 1st I.F.	50B409
T-7,9	Transformer, 2nd I.F. and AM Detector & FM limiter	50B407
T-8,10	Transformer, 2nd I.F. and AM Detector & FM limiter	50B408
T-11	Transformer, FM, detector stage	50B410
T-12	Transformer, audio output	55B109
T-13	Transformer, power	52C152
L-2	Plate choke for tube V1	53B124
L-3	Filament choke for tubes V5 & 6	53B123
L-4	Filament choke for tubes V1,2,3, & 7	53A136

SWITCHES

SW-1	Band switch assembly	60B318
SW-2	Switch, tone control	60B319

PLUGS AND SOCKETS

PL-1	Line cord and plug	87A078
SO-2	Receptacle, television, phono	36A029
SO-3	Receptacle, speaker	6A277
SO-4	Receptacle, phono motor	10A015
	Socket, octal (tube)	6A296
	Socket, miniature (tube)	6A297
	Socket & bracket, dial light	86A062

TUBES, RECTIFIERS AND LAMPS

V-1	6AU6 antenna	90X6AU6
V-2,3	6BA6 mixer, 1st I.F.	90X6BA6
V-4,5	6SH7 2nd I.F., limiter	90X6SH7
V-6	6H6 discriminator	90X6H6
V-7	6J6 osc. & AFC	90X6J6
V-8	6SJ7 audio amp.	90X6SJ7
V-9,10	6K6GT power amp.	90X6K6GT
V-11	5Y3GT rectifier	90X5Y3GT
LM-1,2	Lamp, 6-8 V., 250 Ma., Mazda #44	39A003

MISCELLANEOUS

Shaft, tuning	74A247
Pulley, idler	28A052-6
Switch, cam	77A261
Drive pin	74A246
Collar	77A267
Bushing	77A266
Bracket, dial plate mtg.	67A793
Dial plate	63B332
Dial background (paper)	32A446
Dial glass (calibrated)	22C201
Clip (for dial glass 22C201)	76A390
Rubber spacer, for dial clip	16A126
Pointer	82A147
Dial cord	38A019
Spring, dial cord	75A012
Dial glass (clear)	22B205
Clip (for dial glass 22B205)	76A331
Escutcheon (Model S-55)	7C067-1
Escutcheon (Model S-56)	7C067
Knob, tone and range controls (Model S-55)	15B077-4
Knob, tone and range controls (Model S-56)	15B068-3
Knob, tuning and volume controls (Model S-55)	15B068-4
Knob, tuning and volume controls (Model S-56)	15B077-3
TS-1 Terminal strip, antenna (Marked D-D)	87A379
TS-2 Terminal strip, antenna (Marked A-G)	88A327
Line cord lock	76A299
Mounting foot, rubber	16A007

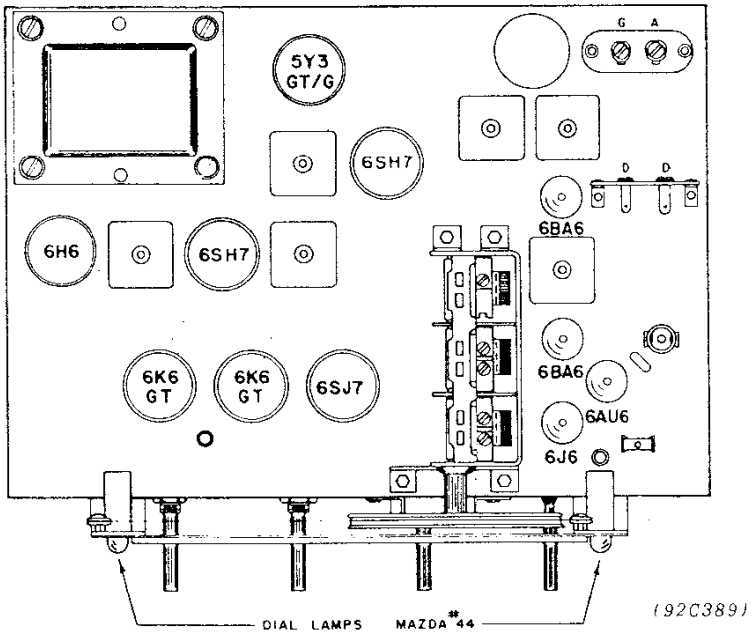


Fig. 7. Top view, location of tubes and dial lamps.