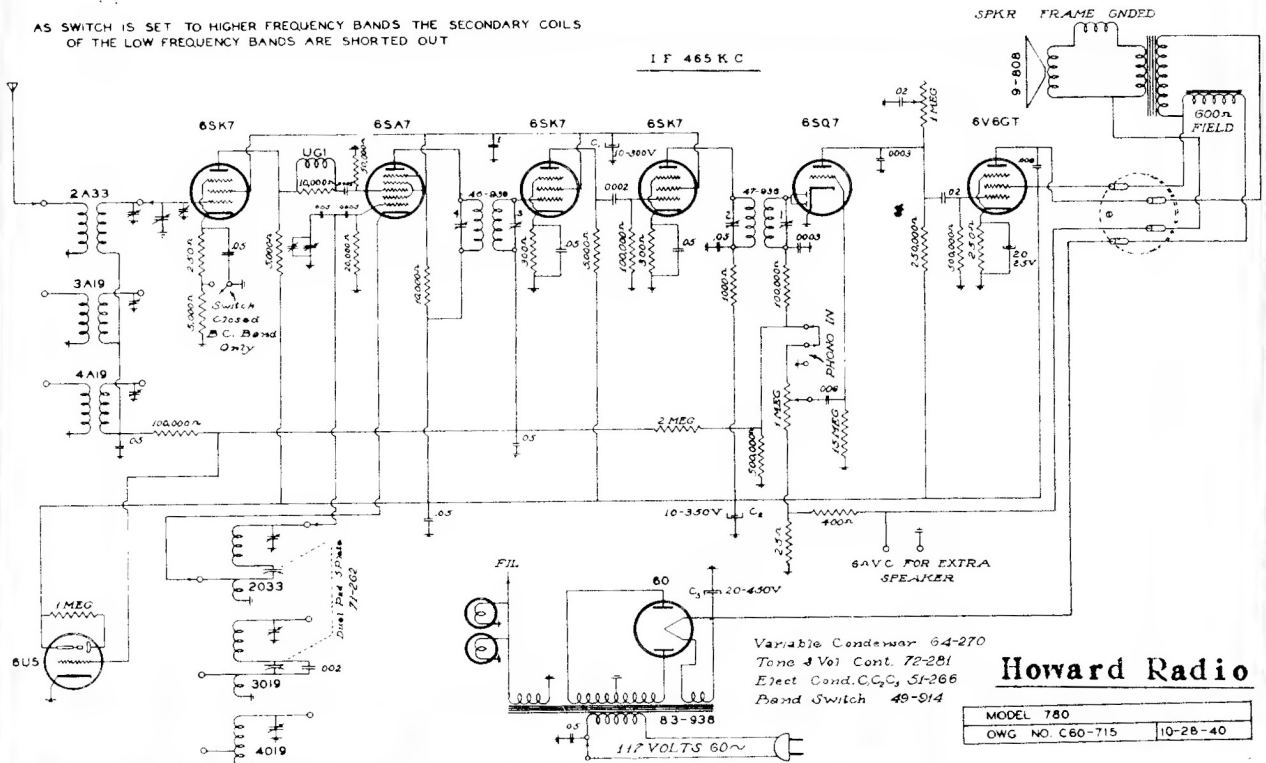


AS SWITCH IS SET TO HIGHER FREQUENCY BANDS THE SECONDARY COILS OF THE LOW FREQUENCY BANDS ARE SHORTED OUT



ALIGNMENT PROCEDURE

Howard Radio

MODEL 780  
OWG NO C60-715 10-28-40

See Fig. 1 and Fig. 2.

Wave-Band Switch Position	Position of Dial Pointer	Generator Frequency	Generator Connection	See Note	Trimmers Adjusted (In order shown)	Trimmer Function
Broadcast	Max. Cap.	465 KC	Converter Grid	A, D	I <sub>1</sub> , I <sub>2</sub> , I <sub>3</sub> , I <sub>4</sub>	IF
7-22 MC	21	21 MC	Ant. (Brown)	B	O <sub>5</sub> , A <sub>6</sub>	Osc., Ant.
2.2-7 MC	6	6 MC	" "	"	O <sub>7</sub> , A <sub>8</sub>	Osc., Ant.
2.2-7 MC	2.2	2.2 MC	" "	"	P <sub>9</sub>	Osc. Pad.
Broadcast	1400	1400 KC	" "	"	O <sub>10</sub> , A <sub>11</sub>	Osc., Ant.
Broadcast	600	600 KC	" "	C	P <sub>12</sub>	Osc. Pad.

A--Each step of the alignment should be repeated in the original order for greater accuracy. Keep output from Signal Generator low. The I.F. trimmers are reached through the two holes on the top of each I.F. can.

B--When aligning the short wave bands, do not adjust to the IMAGE frequency. For example, if the adjustment is correctly made at 21 MC, then a weaker image will be heard at 21,000 KC less 930 KC, or about 20,070 KC on the dial.

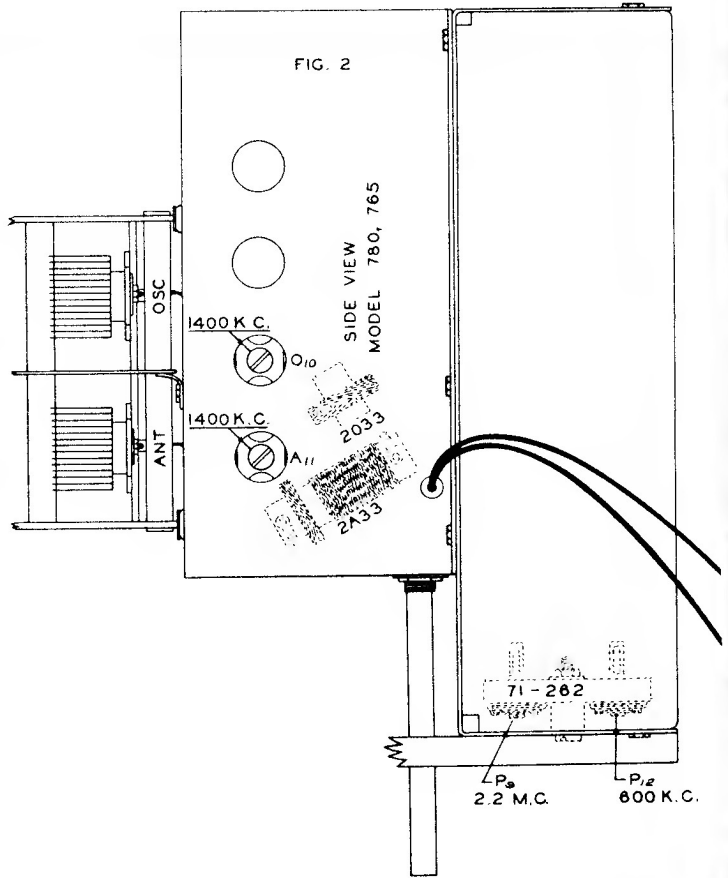
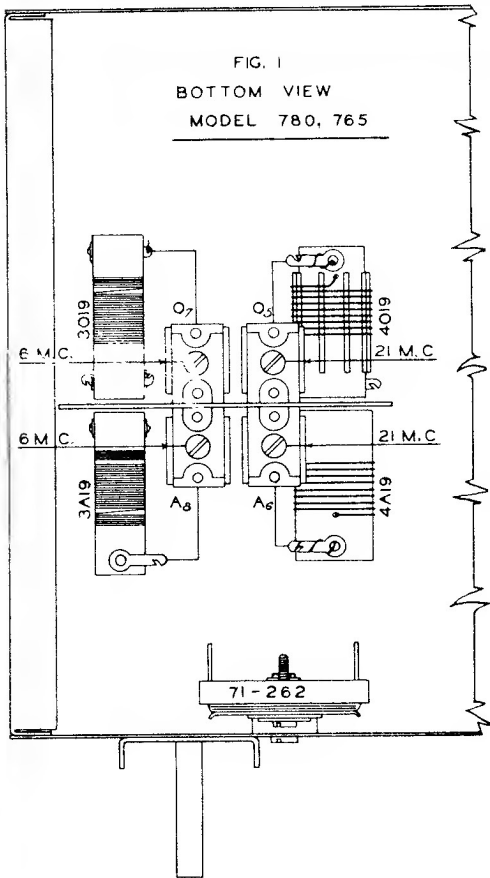
C--When adjusting this pad, move the tuning hand back and forth and adjust padder until the peak of greatest intensity is obtained.

D--See that the tuning hand is set exactly on the last line above 540 when the condenser is at maximum capacity.

TUBE	FUNCTION	CATH-ODE	SCR. GRID	PLATE	OSC. PLATE
6SK7	R.F. BC SW	8.5 2.5	110 98	260 210	
6SA7	Mixer		110	265	110
6SK7	I.F. Amp.	2	110	230	
6SK7	I.F. Amp.	4	110	250	

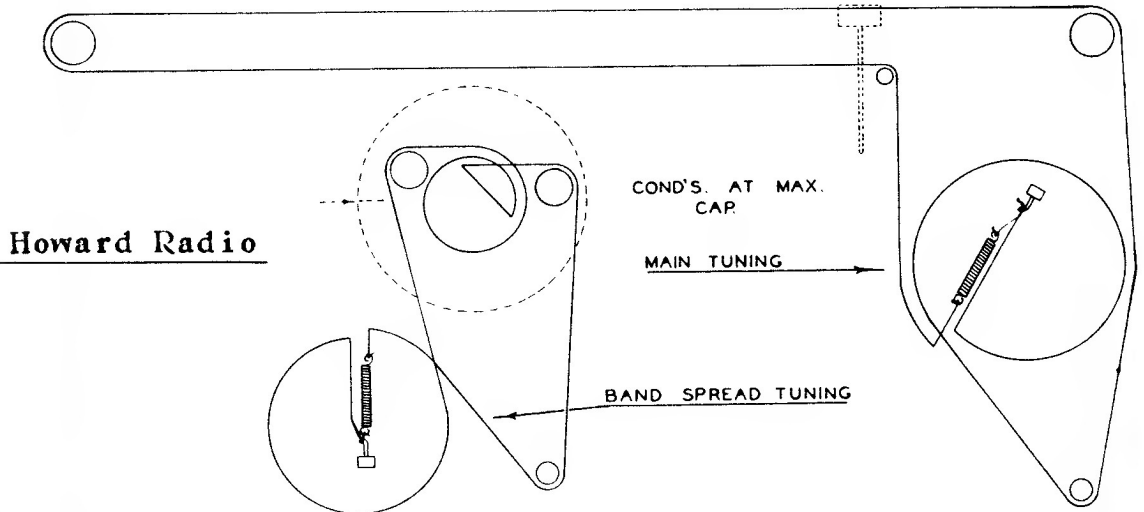
TUBE	FUNCTION	CATH-ODE	SCR. GRID	PLATE	OSC. PLATE
6SQ7	Diode-AVC			50	
6V6GT	Output	12.5	265	250	
80	Rect.				
6U5	Tuning Eye	265			

Voltage taken from ground with line voltage at - 120 V.  
High voltage reading off rectifier - 325 V.  
Drop across speaker field - 58 V.  
Voltage taken with 1,000 Ohm per volt meter.  
Band Switch in BC position except R.F. Stage measurements.



The below layout shows the order of the drive cord for the tuning and Band Spread mechanisms should any servicing or replacement be necessary.

STRING LAYOUT INTERNATIONAL SERIES



Trimmer Location for Models 765 and 780