



## ALIGNMENT FOR MODELS 142 - 143

### ALIGNMENT OF INTERMEDIATE FREQUENCY TRANSFORMERS

Set gang capacitor at minimum capacity and supply a modulated 462.5 K.C. signal from a test oscillator to the control grid cap of the 6A8 converter tube through a 0.1 Mfd capacitor leaving the grid connector in place. Adjust in order C16, C15, C14 and C13 for maximum output. This operation should be checked to ascertain that maximum output has been obtained.

### ALIGNMENT OF BROADCAST BAND

- (1) Set gang capacitor at maximum capacity (plates meshed).
- (2) Set dial cursor over the last graduation mark at the end of the broadcast band calibration.
- (3) Rotate tuning knob until cursor is at 1500 K.C.
- (4) Supply a 1500 K.C. signal from a test oscillator to the aerial and ground leads.
- (5) Adjust broadcast oscillator Trimmer C8 to tune in the 1500 K.C.
- (6) Adjust broadcast R.F. trimmer C5 for maximum output.
- (7) Shift test oscillator to 580 K.C.
- (8) Rotate the tuning capacitor until the 580 K.C. signal is reached.
- (9) Adjust broadcast oscillator tracking capacitor C11 while rocking the gang capacitor to and fro past the gang capacitor to and fro past the signal until the combination of adjustments giving the greatest output is obtained.
- (10) Recheck at 1500 K.C.

### ALIGNMENT OF POLICE BAND

- (1) Turn wave change switch to police band, centre position.
- (2) Rotate tuning knob until cursor is at 4800 KC. marking on dial.
- (3) Supply a 4800 K.C. signal from test oscillator to the aerial and ground leads.
- (4) Adjust police band oscillator trimmer C7 to tune in the 4800 K.C. signal.
- (5) Adjust police band R.F. trimmer C4 for maximum output.
- (6) Shift test oscillator to 1720 K.C.
- (7) Rotate tuning capacitor until 1720 K.C. signal is reached.
- (8) Adjust police band oscillator tracking capacitor C10, while rocking the gang capacitor to and fro past the signal until the combination of adjustments giving the greatest output is obtained.

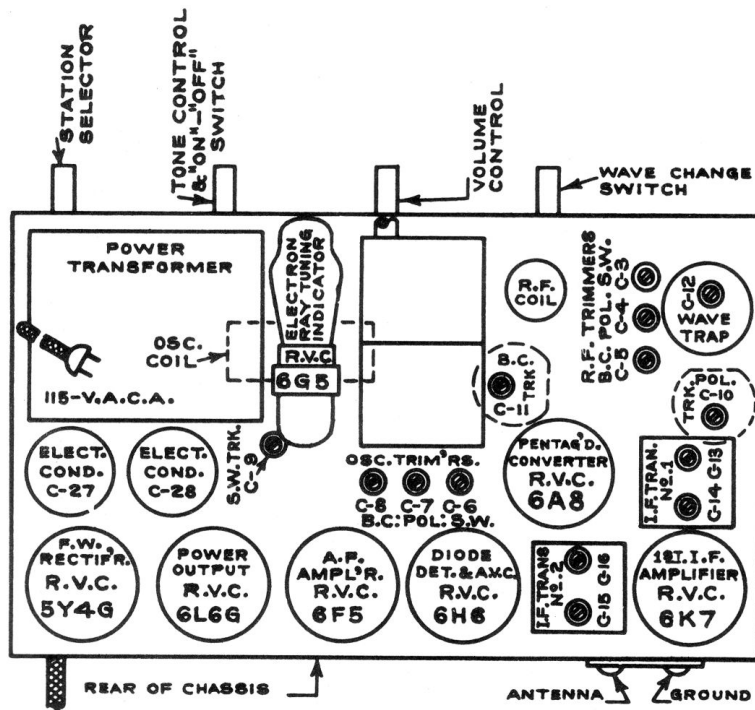
### ALIGNMENT OF POLICE BAND

- (1) Turn wave change switch to short wave band (extreme left).
- (2) Rotate tuning knob until cursor is at 16 M.C. marking on dial.
- (3) Supply a 16 M.C. signal from test oscillator to aerial and ground leads.
- (4) Adjust short wave oscillator trimmer C6 to tune in this signal.
- (5) Adjust short wave R.F. trimmer C3 for maximum output.
- (6) Shift test oscillator to 6000 K.C.
- (7) Rotate tuning capacitor until 6000 K.C. is reached.
- (8) Adjust short wave oscillator tracking capacitor C9 while rocking the gang capacitor to and fro past the signal until the combination of adjustments giving the greatest output is obtained.
- (9) Recheck 16 M.C. alignment.

### VOLTAGE READINGS SOCKET PINS TO CHASSIS

RADIOTRON	CAP	PIN 2	PIN 3	PIN 4	PIN 5	PIN 6	PIN 7	PIN 8
6A8 Converter	** 0	220	80	-14	165	6.3 AC	0	
6K7 I.F. Amp.	** 0	220	80	0	-	6.3 AC	0	
6H6 Diode & AVC	- 0	**	0	**	-	6.3 AC	0	
6F5 A.F. Amp.	** 0	-	120	-	-	6.3 AC	0	
6L6 Output	- 0	250	250	0	-	6.3 AC	16	
5Y4G Rectifier	- -	280 AC	-	280 AC	-	280	280	

\*\* Readings should not be taken except with a no-current voltmeter in order to avoid shorting bias cells.



### ADJUSTMENT OF WAVE TRAP

Set the dial cursor at approximately 580 K.C. and apply a 462.5 K.C. signal to the antenna and ground terminals, adjust C12 until a minimum signal is obtained.