

Marconi Model 122, 124 Alignment

In order to properly realign this receiver, the radiotrician should have available an output meter and a well attenuated test oscillator capable of giving the following frequency fundamentals.

462.5 K.C. for I.F. alignment.
1500 K.C. and 580 K.C. for broadcast band alignment.
4800 K.C. and 1720 K.C. for police band alignment.
16,000 K.C. and 6000 K.C. for Short wave band align-

should be kept as low as possible. In any case, the signal should not be of sufficient strength to bring the automatic volume control into operation. The manual volume maximum, and the s signal from the always be kept test oscillator

If a Cathode Ray Oscillograph is used instead of an output meter, the vertical plates should be connected across the volume control, R5. The alignment should produce a round top rather than a sharply peaked image.

PROCEDURE FOR REALIGNING I.F. TRANSFORMERS

- E Set gang capacitor at minimum capacity.
- (2) converter tube. 462.5 K.C. signal to the control grid of
- (3) Adjust in order C14,C13,C12 and Cll for maximum

PROCEDURE FOR REALIGNING BROADCAST BAND

- E) Set gang meshed). capacitor at maximum capacity (plates
- (2) Set dial pointer over the third tion mark from the end of the calibration. (3rd) red broadcast gradua-

Model 124 01/40

(2) Set dial pointer over the last graduation mark at the end of the broadcast band calibration.

- (3) Rotate tuning knob until pointer is at 1500 K.C.
- 4 Supply a 1500 K.C. signal from a test oscillator
- aerial and ground terminals.

Adjust broadcast oscillator trimmer in the 1500 K.C. signal.

C30

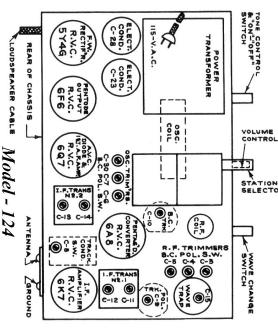
to

(5)

- Adjust broadcast R.F. trimmer C5 for maximum
- (6)
- (7) test oscillator to 580 K.C.
- (8) Rotate signal is reached. the tuning capacitor until the 580 K.C.
- (9) Adjust broadcast oscillator tracking capac ClO while rocking the gang capacitor to and past the signal until the combination of adjustation giving the greatest output is obtained. of adjustcapacitor o and fro
- (D) Recheck at 1500 K.C.

PROCEDURE FOR REALIGNING POLICE

- E Turn wave change switch to police band, centre Bod
- (2) Rotate tuning knob on dial. until poinster 18 at 4800 K.C.
- (3) 4 Apply a 4800 K.C. signal from test oscillator the aerial and ground terminals. to
- Adjust in the police band oscillator trimmer C7 4800 K.C. signal. t o tune



Procedure for Realigning Police Band-Cont'd.

Adjust police output. band R.F. trimmer C4 for maximum

(5)

- (6) Shift test oscillator to 1720 K.C.
- (7) Rotate tuning capacitor reached. until 1720 K.C. signal
- (8) Adjust police band oscillator tracking capacitor to for C9, while rocking the gang capacitor to and fro past the signal until the combination of adjustments giving the greatest output is obtained.

PROCEDURE FOR REALIGNING SHORT WAVE BAND

- (H) Turn wave change (extreme left). switch to Wave band
- (2) Rotate tuning knob until pointer marking on dial. įs at 16 M.C.
- (3) Supply a 16 M.C. sit to aerial and ground signal from terminals. test oscillator

(4)

Adjust

short wave

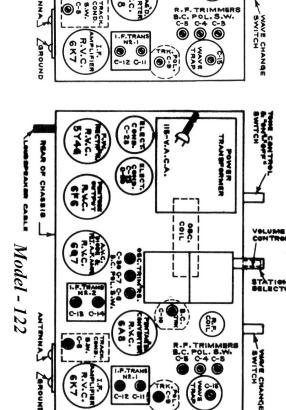
oscillator

trimmer

C6

to

- (5) Adjust short wave R.F. tune in this signal. trimmer C3 maximum
- (6) Shift test oscillator to 6000 K.C.
- (7) Rotate tuning reached. capacitor until 6000 K.C. F,
- (8) Adjust short wave oscillator tracking cape tor 08, while rooking the gang capacitor to fro past the signal until the combination adjustments giving the greatest output oscillator tracking capaciend of
- (9) Recheck 16 M.C. alignment



Model 124	CAP	PIN 1 PIN 2	PIN 2	PIN 3	PIN 4	PIN 5	PIN 6	PIN 7	PIN 8
6A8 Converter	*	0	0	260	65	11-	205	6.3 AC	0
6K7 I.F. Amp.	*	0	0	260	65	0	ı	6.3 AC	0
607 Diode	*	0	0	80	*	*	ı	6.3 AC	0
6F6 Output	ł	0	0	255	275	0	ı	6.3 AC	17.5
5Y4G Rectifier	1	1	-	365 AC	1	365 AC	-	365	365

These readings should not be taken exc with a no current voltmeter, in order avoid shorting bias cells. in order to

5Y4GRectifier	6F6 Output	6Q7 Diode	6K7 I.F. Amp.	6A8 Converter	Model 122
	1	*	*	*	CAP
	0	0	0	0	PIN 1
1	0	0	0	0	PIN 2
345 AC	250	80	260	260	PIN 3
ı	260	*	75	75	PIN 4
345 AC	0	*	0	-12	PIN 5
1	ı	1	ı	150	PIN 6
350	6.3 AC	6.3 AC	6.3 AC	150 6.3 AC	PIN 7
350	12	0	0	0	PIN 8

** These readings should not be taken except with a no current woltmeter, in order to awold shorting bias cells.

ADJUSTMENT OF WAVE TRAP

Set the dial pointer at approximately 580 K.C. and apply a 462.5 K.C. signal to the antenna and ground terminals, adjust C15 until a minimum signal is obtained.