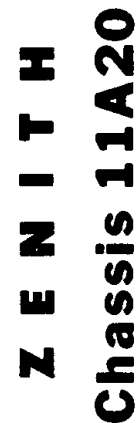


**MODELS** HF1178RD  
HF1185MD CHASSIS 11A20  
HF1185RD



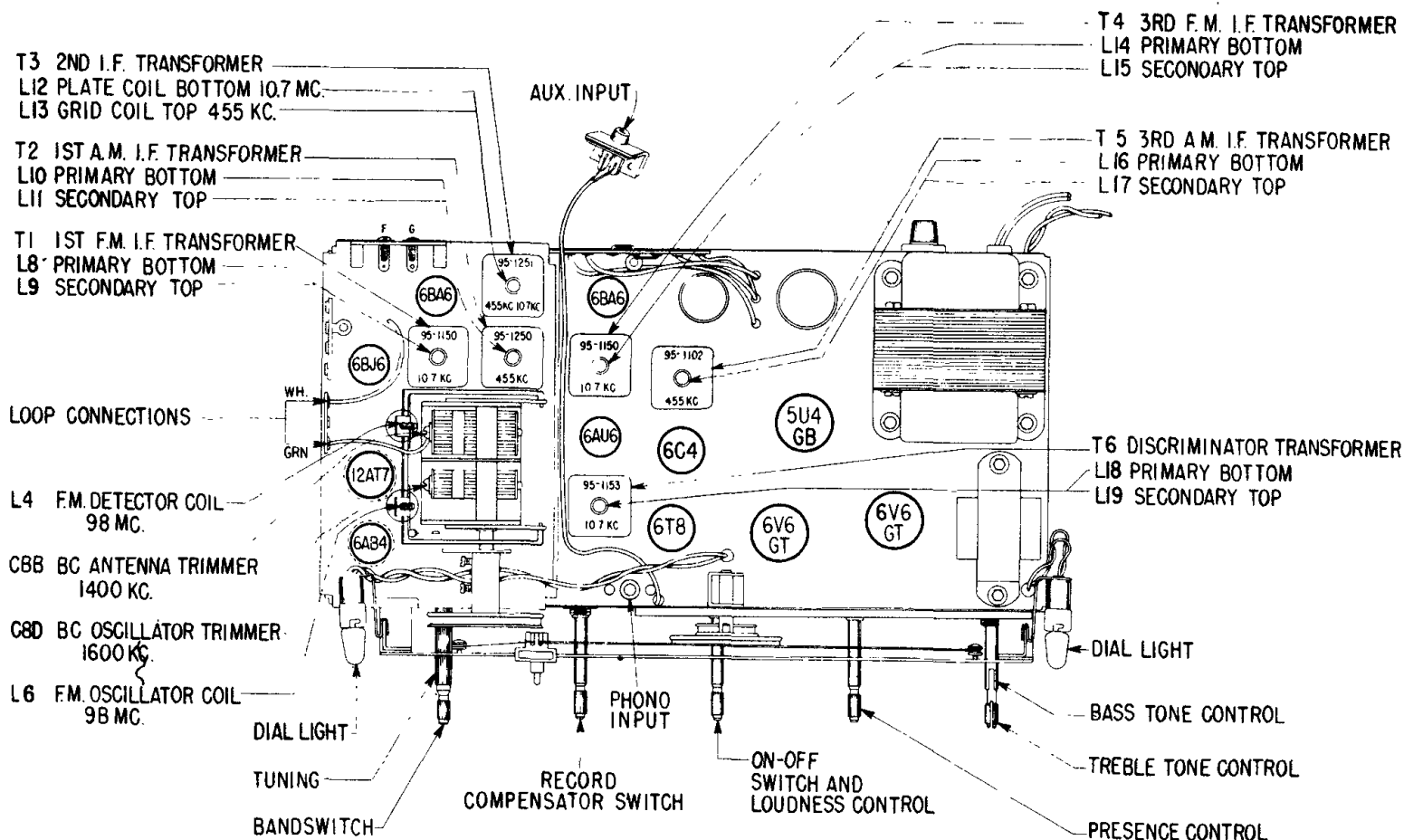
# Z E N I T H Alignment Chassis 11A20 and 11A21

A vacuum tube voltmeter with an isolation resistor of 2,000,000 ohms in series with the hot lead will serve for FM adjustments. This lead should be shielded.

An AC output meter connected across the primary or secondary of the output transformer will be satisfactory for all AM adjustments.

The signal generator output should be kept just high enough to get an indication on the meter.

OPERATION	CONNECT OSCILLATOR TO	DUMMY ANTENNA	INPUT SIGNAL FREQUENCY	BAND	SET DIAL TO	ADJ. TRIMMERS	PURPOSE
1	Pin 2 12AT7 Converter	.05 mfd.	455 Kc. Modulated	AM	600 Kc.	L10, 11, 13, 16 & 17	Align I.F. channel for maximum output.
2	Antenna Post AM	.05 mfd.	1600 Kc. Modulated	AM	1600 Kc.	C8D	Set oscillator to dial scale.
3	Antenna Post AM	.05 mfd.	1400 Kc. Modulated	AM	1400 Kc.	C8B	Align antenna stage.
4	<b>IMPORTANT:</b> Before attempting to align the FM portion of this receiver the Band switch should be turned to "FM".						
5 (a)	Pin 1 (grid) on 6AU6 limiter	.05 mfd.	10.7 Mc. Unmodulated	FM		L18	Align primary of discriminator for maximum reading.
6 (b)	Pin 1 (grid) on 6AU6 limiter	.05 mfd.	10.7 Mc. Unmodulated	FM		L19	Adjust secondary of discriminator for zero reading.
7 (c)	Pin 1 (grid) on 6BA6 2nd IF	.05 mfd.	10.7 Mc. Unmodulated	FM		L14, 15	Align 3rd IF transformer for maximum reading.
8 (c)	Pin 1 (grid) on 6BA6 1st IF	.05 mfd.	10.7 Mc. Unmodulated	FM		L12	Align primary 2nd IF transformer for maximum reading.
9 (c)	Pin 2 on 12AT7 converter	.05 mfd.	10.7 Mc. Unmodulated	FM		L8, 9	Align 1st. IF transformer for maximum reading.
10 (c)	<b>REPEAT STEPS 7, 8 &amp; 9</b>						
11 (c)	Antenna Post FM (Remove line antenna)	270 ohms	98 Mc. Unmodulated	FM	98 Mc.	L6 Osc. Coil Slug.	Set Oscillator to dial scale.
12 (c) (d)	Antenna Post FM (Remove line antenna)	270 ohms	98 Mc. Unmodulated	FM	98 Mc.	L4 Det. Coil Slug.	Align det. stage to maximum reading.



## Tube & Trimmer Location Chassis 11A20

(Chassis 11A21 is practically identical in layout except that 12AU7 replaces 6C4)