

RF ALIGNMENT

Before proceeding with RF alignment, check dial pointer for proper indexing. With tuning gang fully closed, set the pointer so that it is directly under "set" mark at low end of 80 M band with the lateral dial control set in mid-position. Attach temporary bottom plate to receiver.

OUTPUT METER CONNECTIONS — VTVM DC probe to junction of R24, R23, and C31. Low side to chassis. Maintain approximately 2 V reading on VTVM.

SIGNAL GENERATOR CONNECTIONS — Connect high side of generator to "Ant." terminal through a 68 ohm 1/2W resistor. Low side to "G" terminal.

CONTROL SETTINGS — Adjust generator for 30 per cent modulation. Set selectivity control for 3.0 kc, and all other controls at their initial settings given previously.

GENERAL INSTRUCTIONS — Always check for proper tracking on each band by inserting tuning wand into mixer and antenna transformers. Repeat high and low end steps until tuning wand shows reduced output, with either end inserted into both mixer and antenna coils. If pointer does not read close to the correct frequency at the low end of all bands (except 6 M), C15 must be re-adjusted. If pointer reads above the correct frequency, reduce C15 capacity. If pointer is below, reduce C15 capacity. Then repeat the entire RF alignment procedure, omitting all C15 adjustments. Oscillator frequency is always on the high side of signal frequency, except on 6 M band. Suitable precautions or checks should be used to insure these conditions.

	Bandwidth Setting	Generator and Receiver Frequency	Adjust for Maximum
Step #1	6 M	50.0 mc	L3 (oscillator slug) L10 (mixer coil) spread turns L9 (antenna coil) spread turns with antenna trimmer 1/4 closed.
Step #2	6 M	54.0 mc	C15 (oscillator trimmer) C13 (mixer trimmer) C2 (antenna trimmer)
Step #3	10 M	29.7 mc	L4 (oscillator slug) C12 (mixer trimmer) C2 (antenna trimmer)
Step #4	10 M	28.0 mc	T6 (mixer slug) T1 (antenna slug)
Step #5	15 M	21.5 mc	L5 (oscillator slug) C11 (mixer trimmer) C2 (antenna trimmer)
Step #6	15 M	21.0 mc	T1 (mixer slug) T2 (antenna slug)
Step #7	20 M	14.33 mc	L6 (oscillator slug) C10 (mixer trimmer) C2 (antenna trimmer)
Step #8	20 M	14.0 mc	T8 (mixer slug) T3 (antenna slug)
Step #9	40 M	7.3 mc	L7 (oscillator slug) C9 (mixer trimmer) C2 (antenna trimmer)
Step #10	40 M	7.0 mc	T9 (mixer slug) T4 (antenna slug)
Step #11	80 M	4.0 mc	L8 (oscillator slug) C8 (mixer trimmer) C2 (antenna trimmer)
Step #12	80 M	3.5 mc	T10 (mixer slug) T3 (antenna slug)

ALL READILY AVAILABLE RESISTORS AND CAPACITORS ARE OMITTED FROM THE FOLLOWING PARTS LIST, BUT ARE COMPLETELY IDENTIFIED ON THE SCHEMATIC.

PARTS LIST

PART NAME	PART NO.	PART NAME	PART NO.
I1, I3 Panel Lamp	NP247	Bottom Cover Painted	D50462-2
V1 6B26 Tube	6B26	Cabinet Assy Complete	D50418-5
V2, V3 6BE6 Tube	6BE6	Balls, Dial	B50496
V4, V5 6BA6 Tube	6BA6	Panel Terminal (Relay)	A12616
V7 6TR Tube	6TR	Panel Terminal (Speaker)	A12617
V6 6CW5 Tube	12A7	Panel Terminal (Antenna)	E365-28
V8 6CW5 Tube	12A7	Socket 7 pin Black Phenolic	B27669-3
V10 OB2 Tube	OB2	Socket 9 pin Black Phenolic	B27664-1
V9 3Y3-GT Tube	3Y3-GT	Socket Octal	B27674-1
R17 Resistor 330 ohm		Transformer - Output	B22025-2
R17 10W ±10%	B17436-1	Main Tuning Capacitor	C50529-2
C69 Capacitor - Mica 170mmf ±1%	NCS-20-171-F-5	Dial Drive	A50125
C23, C27 Capacitor - Mica 3900mmf ±1%	NCS-20-392-F-5	Trimmer Ceramicon	B19783-2
C16 Capacitor - Ceramic 100mmf ±2%, Special ±10 PPM	A50113	Transformer - Power	C50087
L1 RF Choke Encapsulated	A50206-1	Capacitor - Electrolytic	C19458-3
Line Cord	B50473-1	Capacitor - Mica Trimmer	A50137
Front Panel - Complete	D50492-3	Potentiometer - 5 M	B50466
Coil Mfg - Bushing	A50107	Potentiometer - AF Gain	B50089
Clamp, BFO Coil	A50148-52	Switch - Selectivity	B50431
Slug Iron, BFO	B50188-4	Switch - Mode	B50490
Coil BFO	B50470	Potentiometer - RF Gain	B50092
Spring Slug Screw	A50421	Phone Jack	A50263
Window - Complete	B50493-2	Switch Toggle	B50203
Pointer Rail	B50110-3	RF Shield	C50093
Window Light Shield	C50498-4	Switch Band	C50094
Switch Calibrate	C50441-1	Variable Capacitor - Antenna	B50093
S Meter	B50130	Coupling Spring	B50300
Pointer	B19347	Transformer - IF Output	B50103
Dial Cord Assy	B50398	2nd Oscillator Coil	B50443
Bushing Panel	A50117-4	FL1, FL2 Ferrite Filter	B50529
Bushing Nut	B50399	Transformer - 2215 kc	B50510
Bezel Front Panel	A50282-4	Coil - Antenna 80 M	B50167
Bezel Ring (Sharp)	B50132-1	Coil - Antenna 40 M	B50161
Knob - BFO	B50318-2	Coil - Antenna 20 M	B50168
Knob - RFG or Depth	B50319-2	Coil - Antenna 15 M	B50169
Set Screw No. 6 X 1/8	SS-6-R-C-6-X	Coil - Antenna 10 M	B50170
Set Screw No. 6 X 1/4	SS-6-R-C-2-Z	Transformer of 80 M	B50171
Knobs - AFG and Ant.	D22300-X42-X-4AC	Transformer of 40 M	B50172
Knob - Selectivity	D22300-X42-X-4U	Transformer of 20 M	B50173
Knob - Band	D22300-X42-X-4Z	Transformer of 15 M	B50174
Knob Assy, Main Tuning	C11916-6	Transformer of 10 M	B50175
Knob, Calibrate and Lateral	B50399-3	Mounting Clip	A19403
Sockets, Light	B50386-2	Coil Dec. 80 M	B50197
Flip Foot, Silver	B50300	Coil Dec. 40 M	B50196
Rivers	SR-125-B-14-N	Coil Dec. 20 M	B50195
Push-on Timmerman	A50284-1	Coil Dec. 10 M	B50193
Rubber Foot	A50281-2	Coil Dec. 6 M	B50192
		Coil Antenna 6 M	B50190
		Coil of 6 M	B50200