

## ALIGNMENT INSTRUCTIONS

The NC-190 receiver has been carefully aligned at the factory by specially trained and experienced personnel using precision equipment. Alignment of the receiver should not be attempted until all other possible causes of faulty operation have been investigated. Alignment should be made only by persons familiar with communications receivers and experienced in their alignment. Refer to figure 3 for location of all alignment adjustments.

### EQUIPMENT REQUIRED

1. Signal generator covering 200 Kc to 35 Mc.
2. Vacuum tube voltmeter (VTVM)
3. Output meter. The AC scale of the VTVM can be used.
4. Tuning Wand — General Cement No. 8278 or equivalent.
5. Hex alignment — General Cement No. 5097 or equivalent.

### INITIAL CONTROL SETTINGS

STBY-REC ..... Receive	Selectivity ..... 0.6 Kc
ANL ..... Off	Antenna ..... Mid-Range
AGC ..... Off	Calibrator ..... Off
BFO ..... Off	Bandspread ..... At "Set" point.
Bandswitch ..... As indicated in chart.	Main Tuning ..... At minimum capacity.
RF and AF Gain ..... Fully Clockwise	Dial Selector ..... Amateur Bandsread.

#### 230 KC IF ALIGNMENT

Signal Generator Connections	Signal Generator Frequency	Bandswitch Setting	Output Connections	Remarks
High side directly to mixer section of tuning gang. Low side to chassis.	230 Kc (unmod.)	Broadcast Band	VTVM DC probe to junction of R23 and C43. Low side to chassis.	Adjust FL1, FL2 for maximum indication. Rock generator to insure cores tune through maximum. Peak both sides of T11, T12 and T13. Maintain approximately 2V reading on VTVM.

#### BFO ALIGNMENT

High side directly to mixer section of tuning gang. Low side to chassis.	230 Kc (unmod.)	Broadcast Band	VTVM DC probe to junction of R23 and C43. Low side to chassis.	Rock generator for maximum output. Maintain approximately 2V reading on VTVM. Set BFO switch on. Set BFO knob to center mark on panel. Loosen BFO knob set screw and adjust L8 to zero beat with screwdriver through hole in shield. Then tighten set screw and return BFO switch to Off position.
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#### 2215 KC IF ALIGNMENT

High side directly to mixer section of tuning gang. Low side to chassis.	2215 Kc (unmod.)	4-10 MC	VTVM DC probe to junction of R23 and C43. Low side to chassis.	Set generator frequency to 2215 Kc. Set L7 for maximum output. The second peak from the bottom of the coil should produce the correct oscillator frequency of 1985 Kc. Peak top and bottom of T10. Maintain approximately 2V reading on VTVM.
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