

ALIGNMENT INSTRUCTIONS

The NC-135 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 illustration for location of all alignment adjustments.

EQUIPMENT REQUIRED:

1. Signal generator covering 450 kc to 55 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. K Test Tool — General Cement No. 5097 or equivalent.

INITIAL CONTROL SETTINGS:

Bandswitch..... As indicated in chart.
RF and AF Gain..... Fully Clockwise.
Mode Switch..... AM with AGC off.
Selectivity..... As indicated in chart.
Tuning..... Plates half-meshed unless otherwise indicated.
Antenna Tuner..... Mid range.
Lateral Dial Adjustment..... Mid range.
Calibrator..... Off.

ALIGNMENT PROCEDURE:

230 KC IF ALIGNMENT				
Signal Generator Connections	Signal Generator Frequency	Bandswitch Setting	Output Connections	Selectivity Setting
High side directly to pin 7 of 2nd 6BE6. Low side to chassis.	230 kc (unmodulated)	80 M	VTVM DC probe to junction of R24, R25, and C31. Low side to chassis.	0.6 kc
				Remarks
				Adjust FL1, FL2 for maximum indication. Rock generator to insure both cores tune through maximum. Peak both sides of T12 and T14. Maintain approximately 2V reading on VTVM.
2215 KC IF ALIGNMENT				
Signal Generator Connections	Signal Generator Frequency	Bandswitch Setting	Output Connections	Selectivity Setting
High side directly to mixer section of tuning gang.	2215 kc (unmodulated)	80 M	VTVM DC probe to junction of R24, R25, and C31. Low side to chassis.	0.6 kc
				Remarks
				Tune L11 to approximately 2445 kc for maximum response. Check to insure image is at 2675 kc. Peak top and bottom of T11. Maintain approximately 2V reading on VTVM.

BFO ALIGNMENT

Signal Generator Connections	Signal Generator Frequency	Bandswitch Setting	Output Connections	Selectivity Setting	Remarks
High side directly to pin 7 of 2nd 6BE6. Low side to chassis.	230 kc (unmodulated)	80 M	VTVM DC probe to junction of R24, R25, and C31. Low side to chassis.	0.6 kc	Rock generator for maximum output. Maintain approximately 2V reading on VTVM. Set mode switch to CW-SSB. Set BFO knob to center mark on panel. Loosen set screw and adjust L13 to zero beat with screwdriver through hole in shield. Then tighten set screw and return mode switch to AM-AGC OFF position.

TOP VIEW

