

MODELS 5C, 6A
Alignment, Voltage
Resistance

FAIRBANKS, MORSE & CO.

ALIGNMENT

The models 5C and 6A are AC operated, superheterodyne chassis with automatic volume control. These receivers operate on three bands—broadcast, police-amateur, and short wave, Figure 4. The 6A has the tuning eye, Figures 3 and 4; the 5C does not. Otherwise, the two chassis are identical.

Alignment procedure is given below in chart form, Figures 1 and 2. Make adjustments in the order given. The output meter may be any

low range AC voltmeter, preferably about 0-15 volts. It should be connected from the plate of the 6F6G tube to ground with a .1 mfd. condenser in series with one of the leads. When the hand tends to go off scale, reduce the input from the signal generator and keep the volume control at maximum. If too strong a signal is fed to the receiver and the volume control is used to keep the output meter hand on scale, the A. V. C. will operate and inaccurate alignment will result.

No.	Connect Generator To	Signal Generator Frequency	Dummy	Range Switch	Dial Setting	Stage	Trimmer No.	AFC Switch	Peak For	Special Instructions
1	6A8G Grid	456 KC	.1 mfd. Condenser	Broadcast	530 KC	2nd IF	1		Max.	
2	6A8G Grid	456 KC	.1 mfd. Condenser	Broadcast	530 KC	2nd IF	2		Max.	
3	6A8G Grid	456 KC	.1 mfd. Condenser	Broadcast	530 KC	1st IF	3		Max.	
4	6A8G Grid	456 KC	.1 mfd. Condenser	Broadcast	530 KC	1st IF	4		Max.	
5	Antenna	456 KC*	400 ohm Resistor	Broadcast	530 KC	Wave Trap	5		Min.	*Raise input until signal is heard.
6	Antenna	5.4 MC	400 ohm Resistor	Police Amateur	5.4 MC	Police Osc.	6		Max.	
7	Antenna	5.4 MC	400 ohm Resistor	Police Amateur	5.4 MC	Police Det.	7		Max.	
8	Antenna	1.8 MC	400 ohm Resistor	Police Amateur	1.8 MC	Police Osc.	8		*Max.	*While rocking — Repeat 6, 7 and 8 until no change is noted.
9	Antenna	1500 KC	200 mmfd. Condenser	Broadcast	1500 KC	B. C. Osc.	9		Max.	
10	Antenna	1500 KC	200 mmfd. Condenser	Broadcast	1500 KC	B. C. Det.	10		Max.	
11	Antenna	600 KC	200 mmfd. Condenser	Broadcast	600 KC	B. C. Osc.	11		*Max.	*While rocking — Repeat 9, 10 and 11 until no change is noted.
12	Antenna	18 MC	400 ohm Resistor	Short Wave	18 MC	S. W. Osc.	12		Max.	
13	Antenna	18 MC	400 ohm Resistor	Short Wave	18 MC	S. W. Det.	13		Max.	
14	Antenna	6 MC	400 ohm Resistor	Short Wave	6 MC		*			*Check calibration at 6 MC—Padder is fixed.

FIGURE 2
ALIGNMENT CHART

OHMS	VOLTS	6A8G	VOLTS	OHMS	OHMS	VOLTS	6F6G	VOLTS	OHMS	OHMS	VOLTS	6K7G	VOLTS	OHMS	
INF.	210		18.2	35M	INF.	255		.10	750M	INF.	108		2.15	210	
INF.	255		.165	INF.	INF.	235		6.3	.5	INF.	253		.13	125MEG	
.5	6.3		.13	0	0	0		0	0	0	0		6.3	.5	
0	0		2.95	220	0	0		0	0	0	0		2.15	210	
OHMS	VOLTS	6Q7G	VOLTS	OHMS	OHMS	VOLTS	6G5	VOLTS	OHMS	OHMS	VOLTS	5Y3G	VOLTS	OHMS	
500M	.05		.05	500M	125MEG	0		255	INF.	1650	138		138	1650	
INF.	63		.13	500M	*	68		0	0	INF.	255				
0	0		6.3	.5	0	.5		6.3	0	0	0		0	0	
0	0			0	0				0	0	0		0	0	255

* CONNECTED TO TARGET THRU 1 MEGOHM RESISTOR ** 30 VOLT SCALE * 3 VOLT SCALE
VOLTAGE AND RESISTANCE ANALYSIS CHART