

MOTOROLA, INC.

ALIGNMENT

Model 62X21, Chassis HS-326

NOTE: If AC power is used, it is recommended that an isolation transformer be placed between the power line and the receiver to avoid hum and electrical shocks. If an isolation transformer is not available, connect the low side of the signal generator to B- through a. 1 mf capacitor.

- 1. Connect a low range output meter across the speaker voice coil.
- 2. Connect the low side of the signal generator to B-.
- 3. Set the signal generator for 400 cycle, 30% modulation.

- 4. Turn the receiver volume control to maximum.
- 5. Use a small fibre screwdriver for aligning the IF and diode transformers.
- 6. As stages are brought into alignment, reduce the signal generator output to a level which produces less than 1.25 volts (.5 watt) across the voice coil to avoid overloading the receiver.
- 7. See Figure 5 for adjustment locations and the following chart for procedure. NOTE: The BC band must be aligned before SW. If the BC trimmers are adjusted, the SW must also be realigned.

STEP	DUMMY ANTENNA	GENERATOR CONNECTION	GENERATOR FREQUENCY	GANG SETTING	ADJUST	REMARKS
IF ALI	IGNMENT					
1.	•1 mf	RF section of gang (rear stator)	455 Kc	Fully open	1, 2, 3 & 4 (IF cores)	Adjust for maximum.
вс ва	I ND RF ALIG	NMENT				
2.	-			Fully closed	Pointer (see Fig- ure 4)	-
3.	.1 mf	RF section of gang (rear stator)	1600 Kc	1600 Kc on dial scale	5 (BC osc)	Adjust for maximum.
4.	.1 mf	RF section of gang (rear stator)	600 K c	600 Kc on dial scale	6 (BC osc pad)	Simultaneously tune gang and adjust core for maximum signal.
5.	-	-	-	-	-	Repeat steps 3 & 4.
6.	-	Radiation loop*	1500 Kc	Tune for max	7 (BC RF)	Adjust for maximum.
SW BA	I ND RF ALIGN	IMENT				
7.	-	-	-	-	-	Stop oscillator. (Place short across center section of gang) Connect VTVM to lug 4 of L-3 and B-; use lowest scale. Loosen SW Osc trim 8.
8.	400 ohms	SW Ant terminal	16 Mc	16 Mc on dial scale	9, 10 (SW Ant SW RF)	Set generator output to max. Adjust for max on VTVM.
	-	-	-	-	-	Remove short from gang.
10.	400 ohms	SW Ant terminal	16 Mc	16 Mc on dial scale	8 (S W Osc)	Generator output reduced to 29 microvolts. Adjust for max (1st peak on output meter) (Check image freq at 16.91 mc

*Connect generator output to 5" diameter, 5 turn loop and couple inductively to receiver loop. Keep loops at least

