

# Motorola



**1. IMPORTANT:** Before removing chassis, adjust all three clock hands to clear opening in dial plate, to avoid damage to hands.

2. Pull off the radio control knobs.
3. Remove the three screws from the bottom of the cabinet.
4. Remove the two screws at the upper corners of the cabinet back cover.
5. Pull the chassis from the cabinet.



NOTE: 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 .40 volts (.05 watt) across the voice coil to avoid overloading the receiver.
- 7. See Figure 4 for adjustment locations and the following chart for procedure.

STEP	ANTENNA	GENERATOR CONNECTION	GENERATOR FREQUENCY	GANG SETTING	ADJUST	REMARKS
IF ALIGNMENT						
1.	.1 mf	Grid of conv. (pin 7, 12BE6)	455 Kc	Fully open	1, 2, 3 & 4 (IF cores)	Adjust for maximum.
RF ALIGNMENT						
2.	.1 mf	Grid of conv. (pin 7, 12BE6)	1620 Kc	Fully open	5 (Osc trim)	Adjust for maximum.
3.	-	Radiation loop*	1400 Kc	Tune for max	6 (RF trim)	Adjust for maximum.
4.	-	Radiation loop*	1400 Kc	Tune for max	7 (Ant trim)	Adjust for maximum.

\*Connect generator output across 5-inch diameter, 5-turn loop and couple inductively to receiver loop. Keep generator loop perpendicular to axis of and at least 12 inches from receiver iron core loop.

TO REPLACE CLOCK DIAL BACKGROUND

- 1. Carefully pull off the three hands.
- 2. Remove the alarm dial and dial background.
- 3. Install new background.
- 4. Turn the radio control shaft to "AUTO" position.

- 5. Slowly rotate the time set shaft clockwise until the switch contacts behind the radio control shaft close. Do not overshoot this point.
- 6. Reassemble the alarm dial and three hands. Set all the hands to indicate 12 o'clock. Set the figure "12" on the alarm dial to index with the small pointer on the hour hand.
- 7. Check the automatic operation to be sure the switch contacts close at the time indicated on the alarm dial.

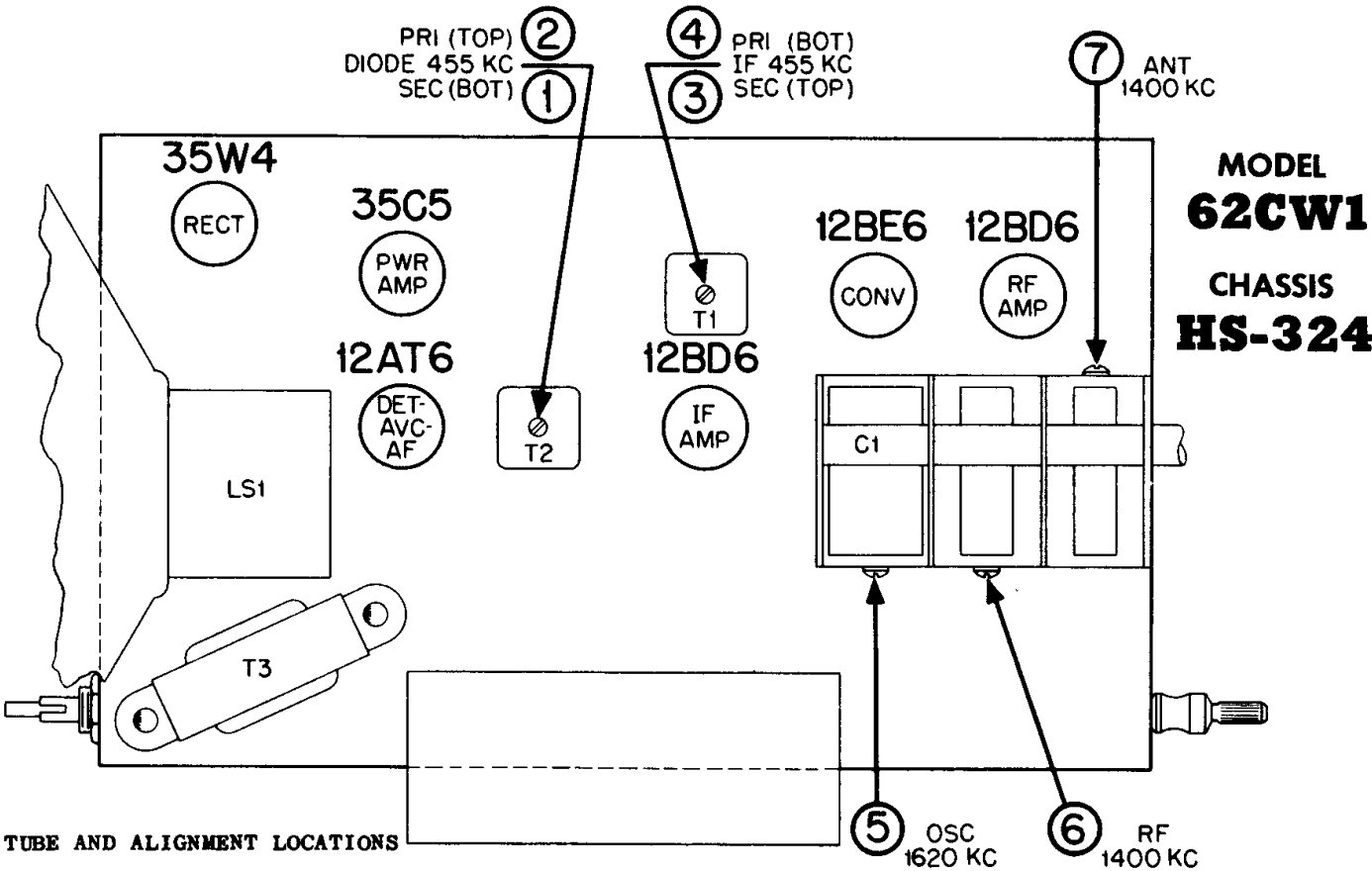


FIGURE 4. TUBE AND ALIGNMENT LOCATIONS