

CHASSIS

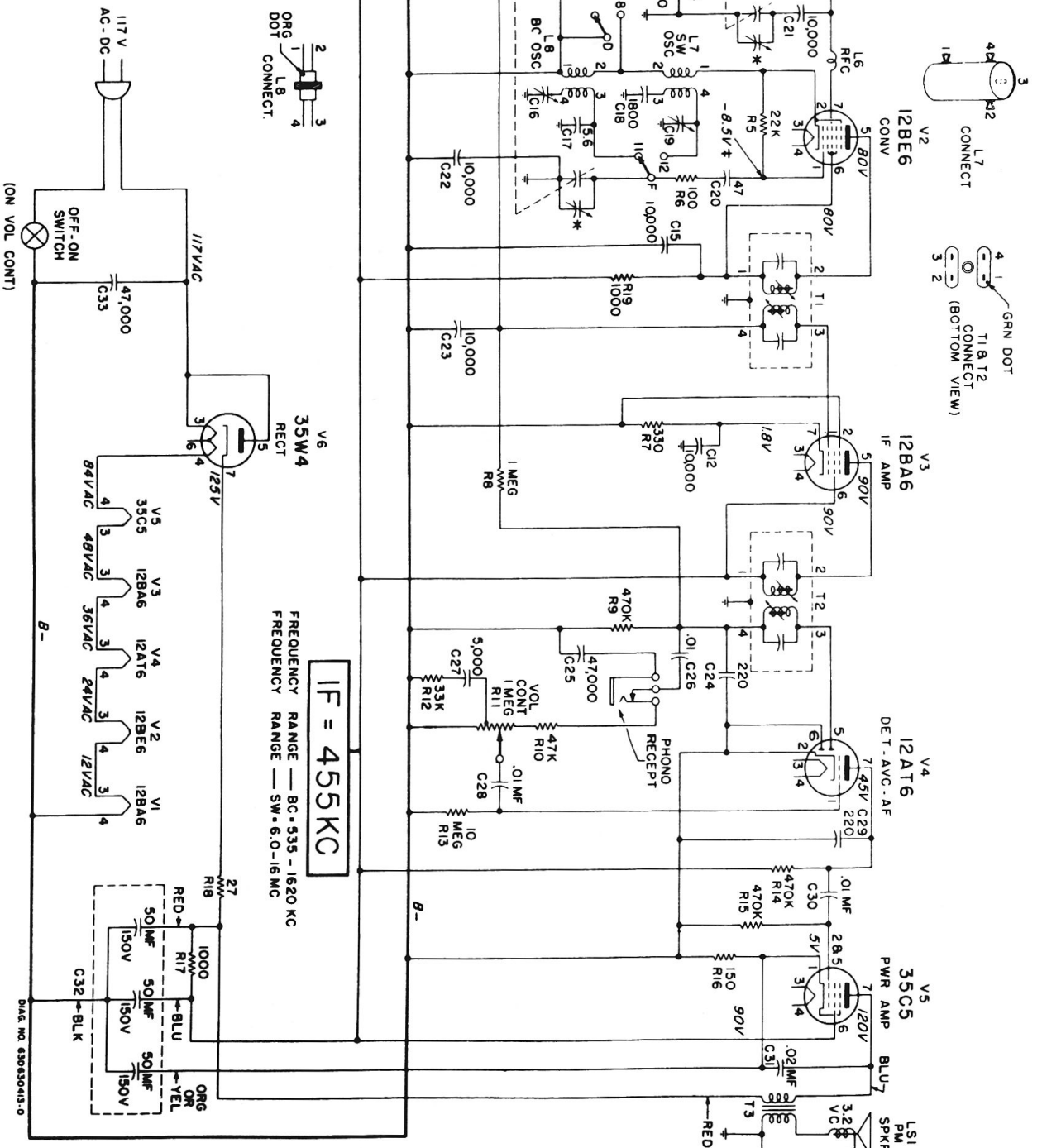
S1 BAND SWITCH (REAR VIEW)

YEL DOT CONNECT.

ORG DOT CONNECT.

- NOTES: 1. CAPACITORS INDICATED IN MICROMICRO-FARADS UNLESS OTHERWISE SPECIFIED.
2. RESISTORS INDICATED IN OHMS.
3. K - ONE THOUSAND (1000) OHMS.
4. VOLTAGE MEASUREMENTS MADE WITH ELECTRONIC TYPE VOLTMETER.
5. VOLTAGES TAKEN BETWEEN POINT INDICATED AND B-.
6. INPUT VOLTAGE 117V. AC.
7. NO SIGNAL INPUT.
8. BAND SWITCH IN BC POSITION.
9. † MEASUREMENT MADE WITH GANG FULLY OPEN.

FIGURE 7. SCHEMATIC DIAGRAM



Motorola MK-62X21 (Chassis HK-326) AC/DC 2 Band Radio

T-1,2 24C485553 IF and Diode transformers:
455 Kc; complete.....
T-3 25B482858 Output transformer.....

- L-1 24B621364 Coil, short-wave antenna....
L-2 424C510 Antenna loop and Panel As-
sembly.....
L-3 24B621366 Coil, short-wave RF.....
L-4 24B621363 Coil, broadcast RF.....
L-5 24A721274 Choke, RF.....
L-6 24A630033 Choke, RF.....
L-7 24B621365 Coil, short-wave oscillator..
L-8 24A621367 Coil, broadcast oscillator..

ALIGNMENT

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.

ALIGNMENT CHART

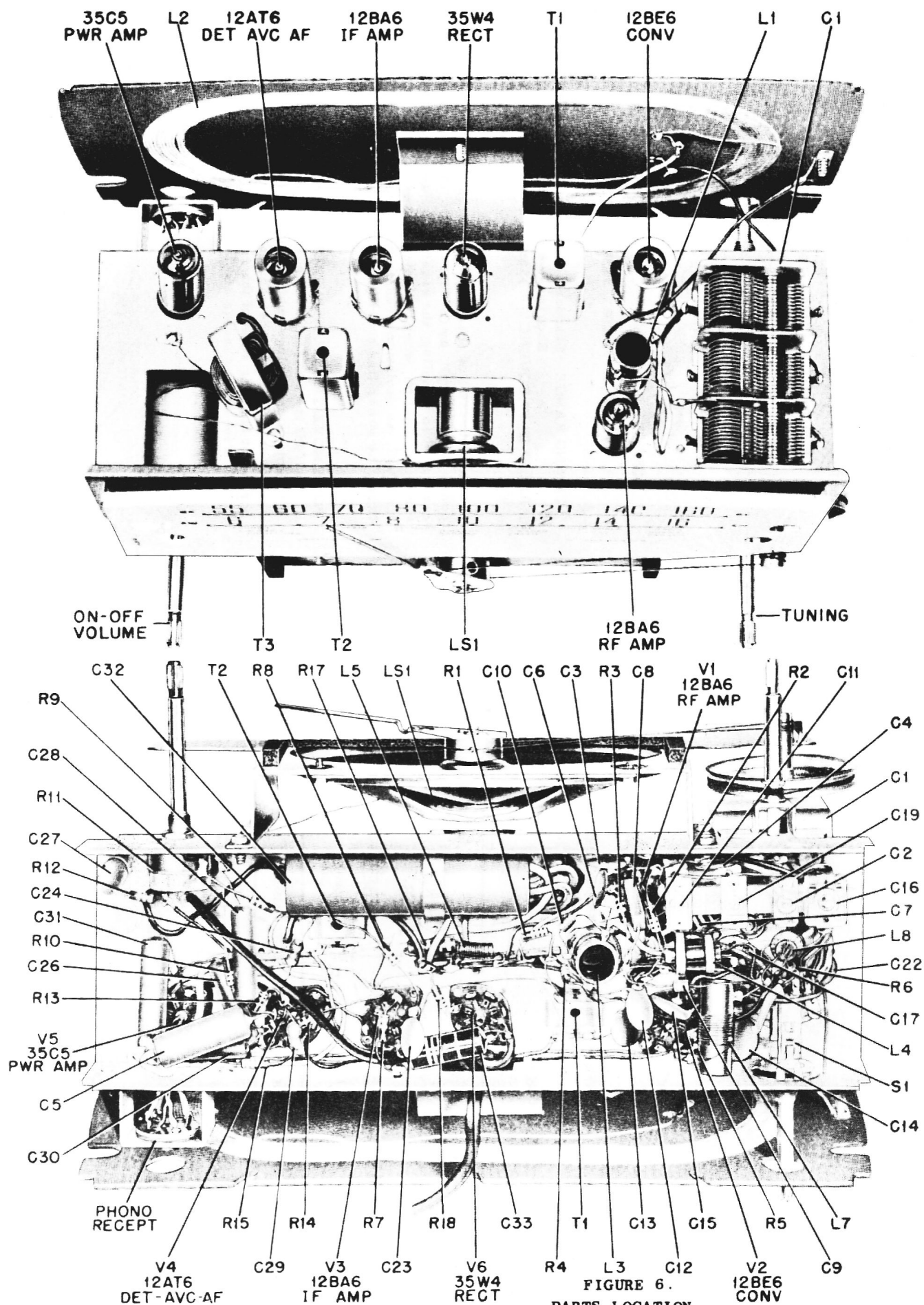
STEP	DUMMY ANTENNA	GENERATOR CONNECTION	GENERATOR FREQUENCY	GANG SETTING	ADJUST	REMARKS
IF ALIGNMENT						
1.	.1 mf	RF section of gang (rear stator)	455Kc	Fully open	1, 2, 3, & 4 (IF cores)	Adjust for Maximum.
BC BAND RF ALIGNMENT						
2.	-			Fully closed	Pointer (see Figure 4)	
3.		Radiation Loop	1600 Kc	1600 Kc on dial scale	5 (BC osc)	Adjust for Maximum.
4.	-	Radiation Loop *	1500 Kc	Tune for max.	7 7A (BC RF and Antenna Trimmer)	Adjust for Maximum.
5.	-	Radiation Loop	600 Kc	600 Kc on dial scale	6 (BC osc Pad)	Simultaneously tune gang and adjust trimmer for maximum signal.
6.	-	-	-	-	-	Repeat step 4.
SW BAND RF ALIGNMENT						
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.
9.	-	-	-	-	-	Remove short from gang.
10.	400 ohms	SW Ant terminal	16 Mc	16 Mc on dial scale	8 (SW Osc)	Generator output reduced to 25 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 receiver loop. Keep loops at least 12" apart.

Motorola MK-62X21 (Chassis HK-326) AC/DC Radio

MOTOROLA

MK-62X21



TUNING RANGE - Standard broadcast 535 to 1620 Kc
Shortwave 6 to 16 Mc
RADIO IF FREQUENCY - 455 Kc

The chassis of this receiver is isolated from the AC power line circuit by a capacitor to eliminate the shock hazard when handling the receiver. However, as an additional precaution when aligning or servicing the receiver from AC, an isolation transformer should be inserted between the power line and the chassis.

TO REMOVE THE CHASSIS FROM THE CABINET

1. Pull off the two control knobs.
2. Remove split plugs which hold the loop to the cabinet.
3. From the back of the cabinet, remove the two hex head screws at the rear edge of the radio chassis.
4. Slide the radio chassis and loop from the cabinet.

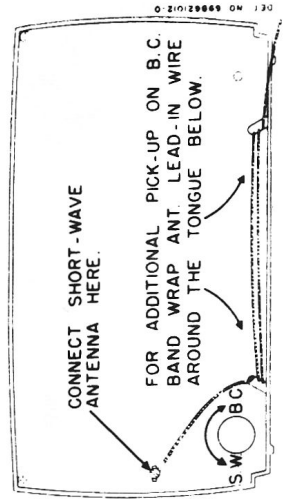


FIGURE 3. ADDITIONAL BROADCAST ANTENNA CONNECTION

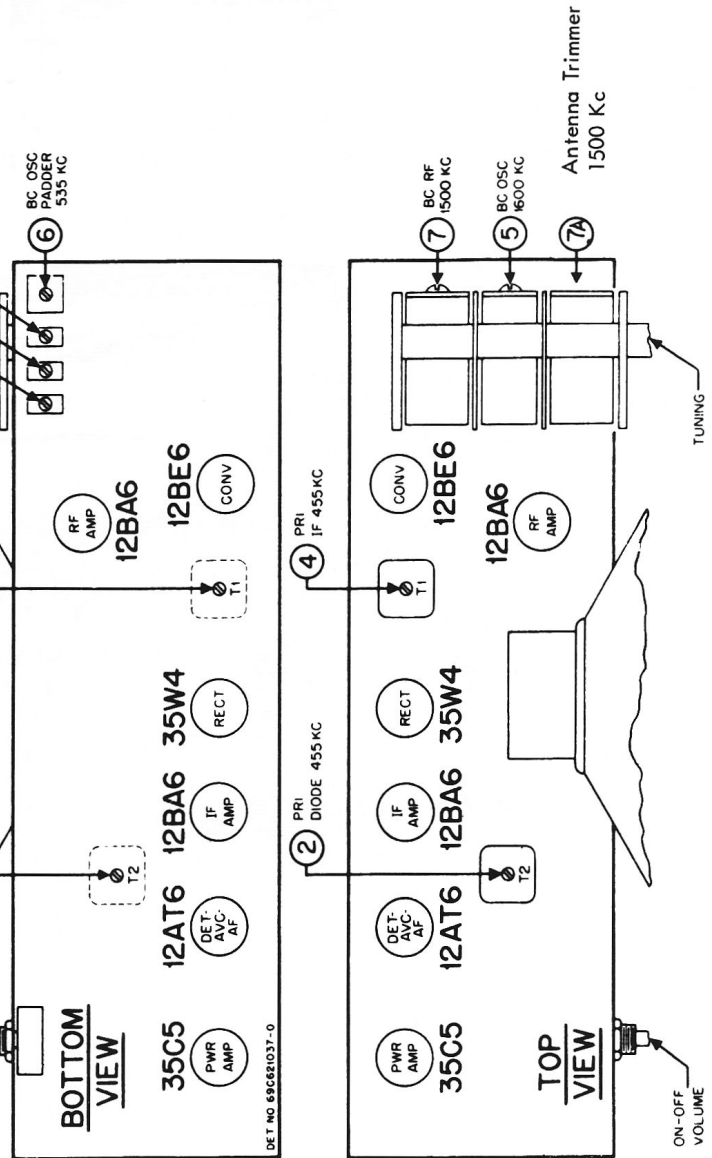


FIGURE 5. TUBE AND TRIMMER LOCATION