

MOTOROLA, Inc.

CHASSIS HS-347

MODELS
53LC1
53LC2
53LC3

ALIGNMENT

NOTE: The receiver may be operated either from batteries or from the power line during alignment. 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 shock. If an isolation transformer is not available, connect the low side of the signal generator to chassis through a .1 mf capacitor.

1. Remove chassis from cabinet. If operated from power line, during alignment, it will be necessary to TEMPORARILY place jumpers across interlock switch before power can be applied. Jumpers are not required if battery power is used.

2. Connect a low range output meter across the speaker voice coil.

3. Connect the low side of the signal generator through a

.1 mf capacitor to chassis.

4. Set the signal generator for 400 cycle, 30% modulation.

5. Turn the receiver volume control to maximum.

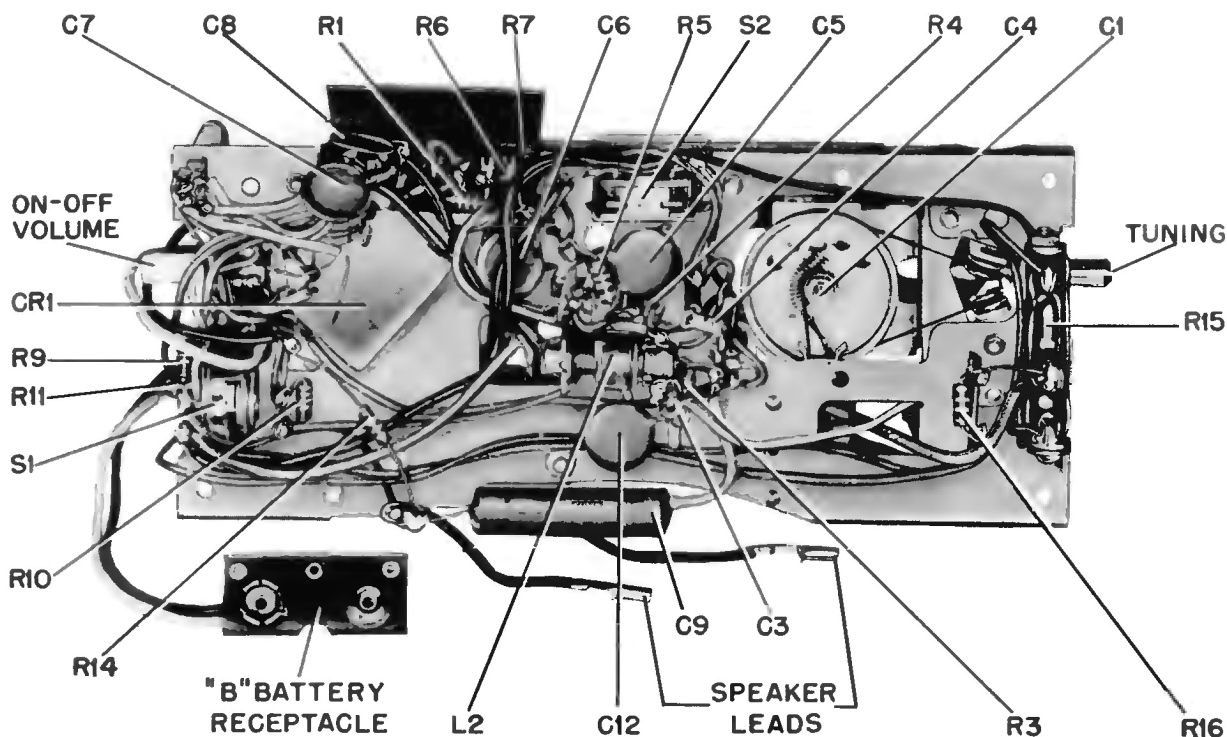
6. Use a small fibre screwdriver for aligning the IF and diode transformers.

7. Adjust the signal generator output to produce .40 volts (.05 watts) across the voice coil. As stages are aligned, reduce the generator output (not receiver volume control) to maintain the .40 volt level to avoid overloading the receiver.

8. See Figure 5 for adjustment locations and the following chart for procedure.

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

* Connect generator output across 5" diameter, 5 turn loop and couple inductively to receiver loop. Keep loops at least 12" apart.



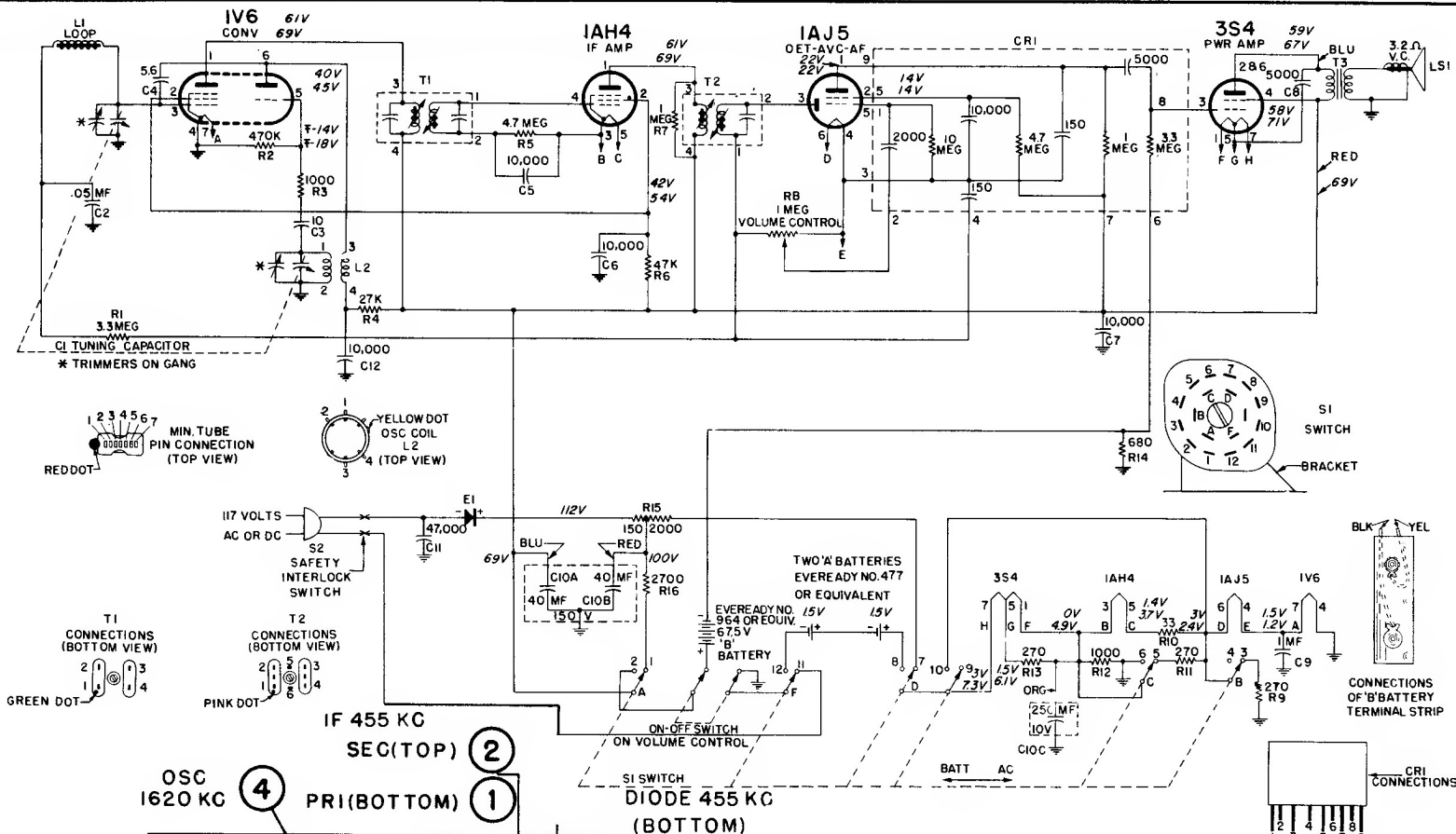


FIGURE 7. SCHEMATIC DIAGRAM

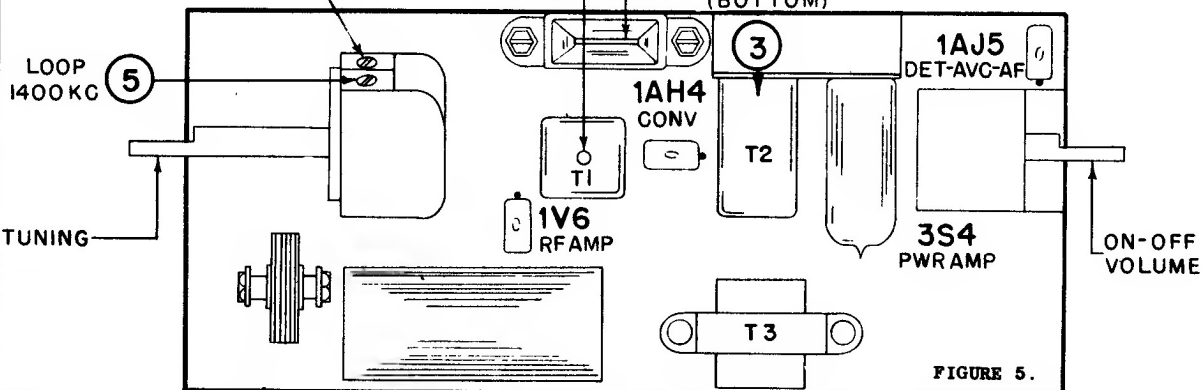


FIGURE 5.