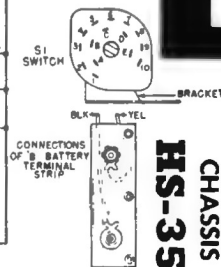
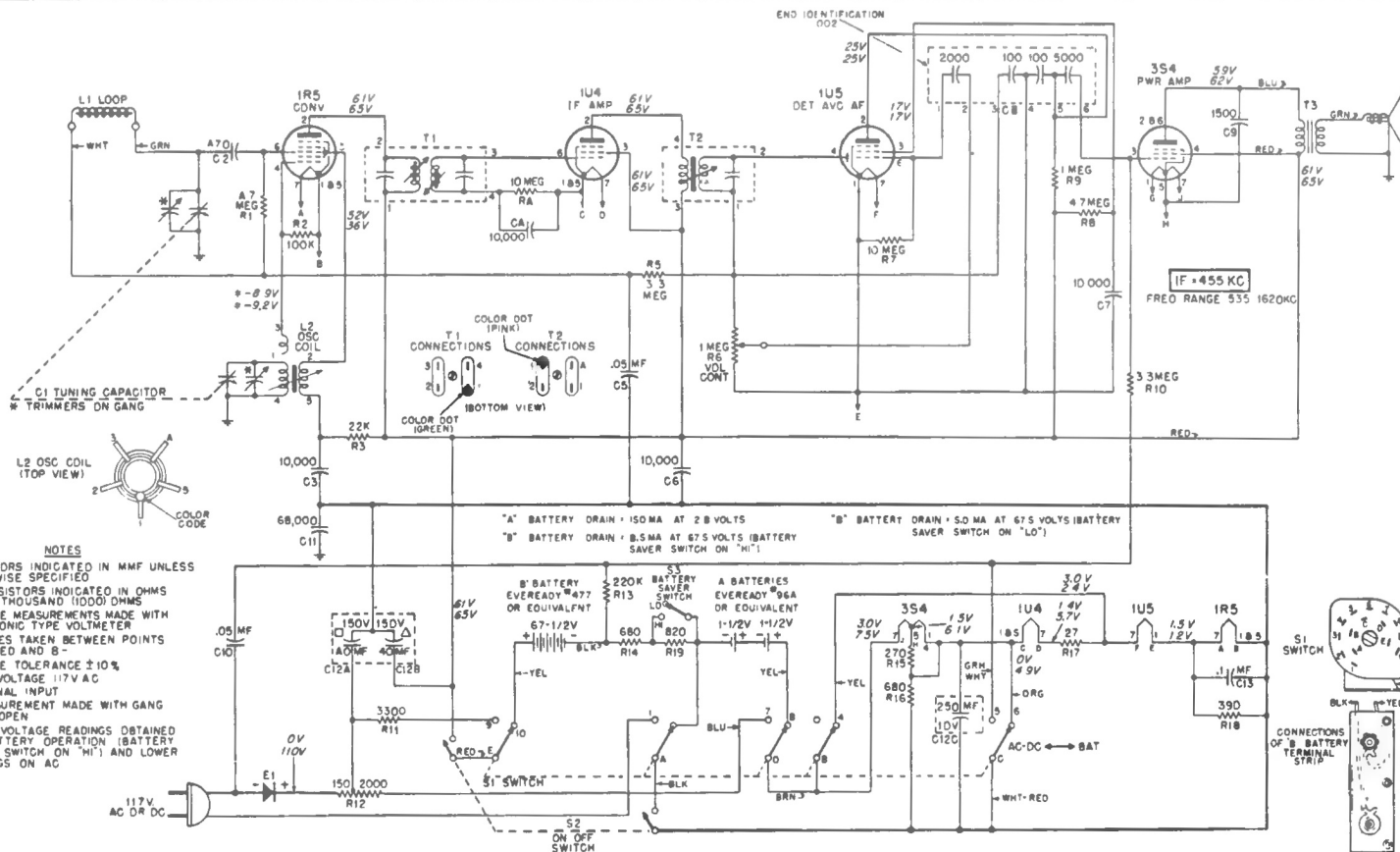


# Motorola

**MODELS**  
**52L1A**  
**52L2A**  
**52L3A**  
**CHASSIS**  
**HS-357**



The tubes are exposed when the rear cover is opened. It is not necessary to remove the chassis to replace tubes.

## TO REMOVE THE CHASSIS FROM THE CABINET

1. Open the back cover and remove the batteries.
2. Remove the two wire clips which hold the plastic retainer blocks at each end of the "A" battery compartment.
3. Remove the screw holding the cover stop cord to the chassis.
4. Remove the chassis mounting screws, at the four corners of the chassis.
5. Slide the chassis, with knobs and escutcheon, from the cabinet.

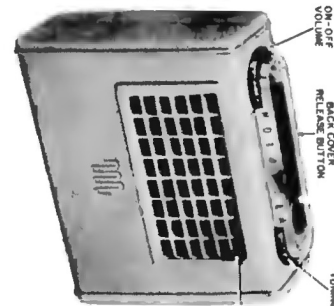
6. Remove one of the handle clips. (Squeeze the sides of the clip until it is released from the escutcheon.)

7. Remove the two screws located under the handle, and lift off the escutcheon.

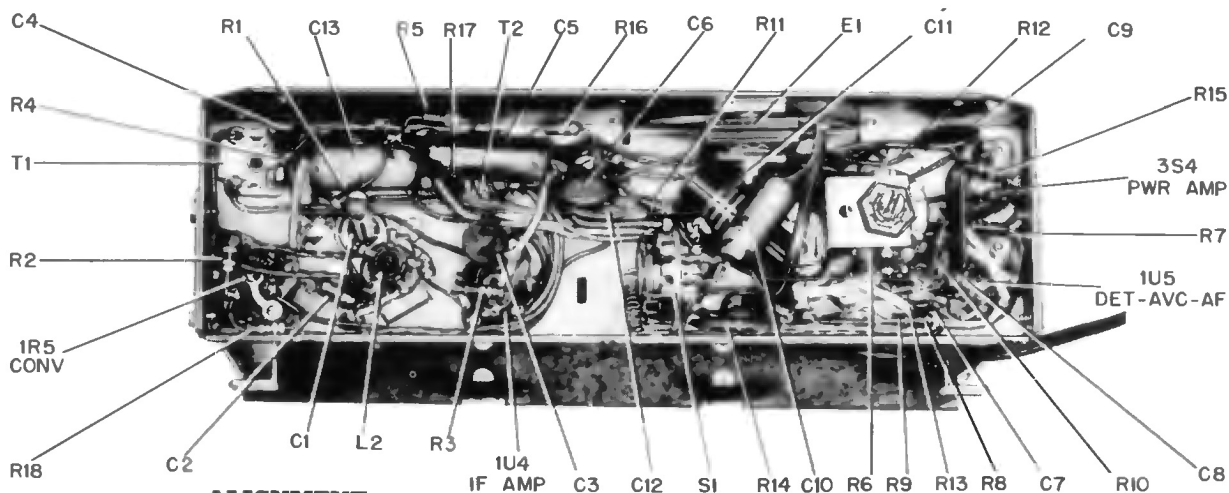
8. Pull off the knobs.

**BATTERY SAVER SWITCH.** A battery saver switch, for reception of local stations, greatly increases the life of the batteries. Figure 1 shows the location of the switch. Move the switch to the right ("LO") for local reception and to the left ("HI") for distant stations.

**ANTENNA.** A Ferrite Magnetic Iron Core Antenna is built into this receiver. Because of the slightly directional characteristics of the built-in antenna, reception from some stations may be improved by rotating the receiver.

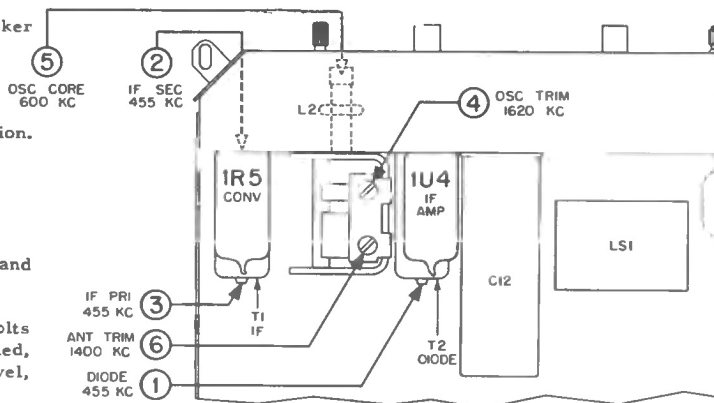


# MOTOROLA Chassis HS-357, Models 52L1A, 52L2A, 52L3A



## ALIGNMENT

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. Move the battery saver switch to the "HI" position.
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 to maintain the .40 volt level, to avoid overloading the receiver.



STEP	DUMMY ANTENNA	GENERATOR CONNECTION	GENERATOR FREQUENCY	GANG SETTING	ADJUST	REMARKS
<b>IF ALIGNMENT</b>						
1.	.1 mf	Ant section of gang (green loop lead)	455 Kc	Fully open	1, 2 & 3 (IF cores)	Adjust for maximum.
<b>RF ALIGNMENT</b>						
2.	-	-	-	-	-	Attach chassis bottom cover.
3.	-	-	-	-	-	Install batteries in chassis.
4.	.1 mf	Ant section of gang (green loop lead)	1620 Kc	Fully open	4 (Osc trim)	Adjust for maximum.
5.	-	Radiation loop*	1400 Kc	Tune for maximum	6 (Ant trim)	Adjust for maximum.
6.**	-	Radiation loop*	600 Kc	Tune for maximum	5 (Osc core)	Simultaneously tune gang and adjust core for maximum signal.
7.**	-	Radiation loop*	1620 Kc	Fully open	4 (Osc trim)	Readjust for maximum, if necessary.
8.**	-	Radiation loop*	1400 Kc	Tune for maximum	6 (Ant trim)	Readjust for maximum, if necessary.

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

\*\*Steps 6, 7, & 8 need not be performed unless receiver is off calibration or mistracks badly at low frequencies.