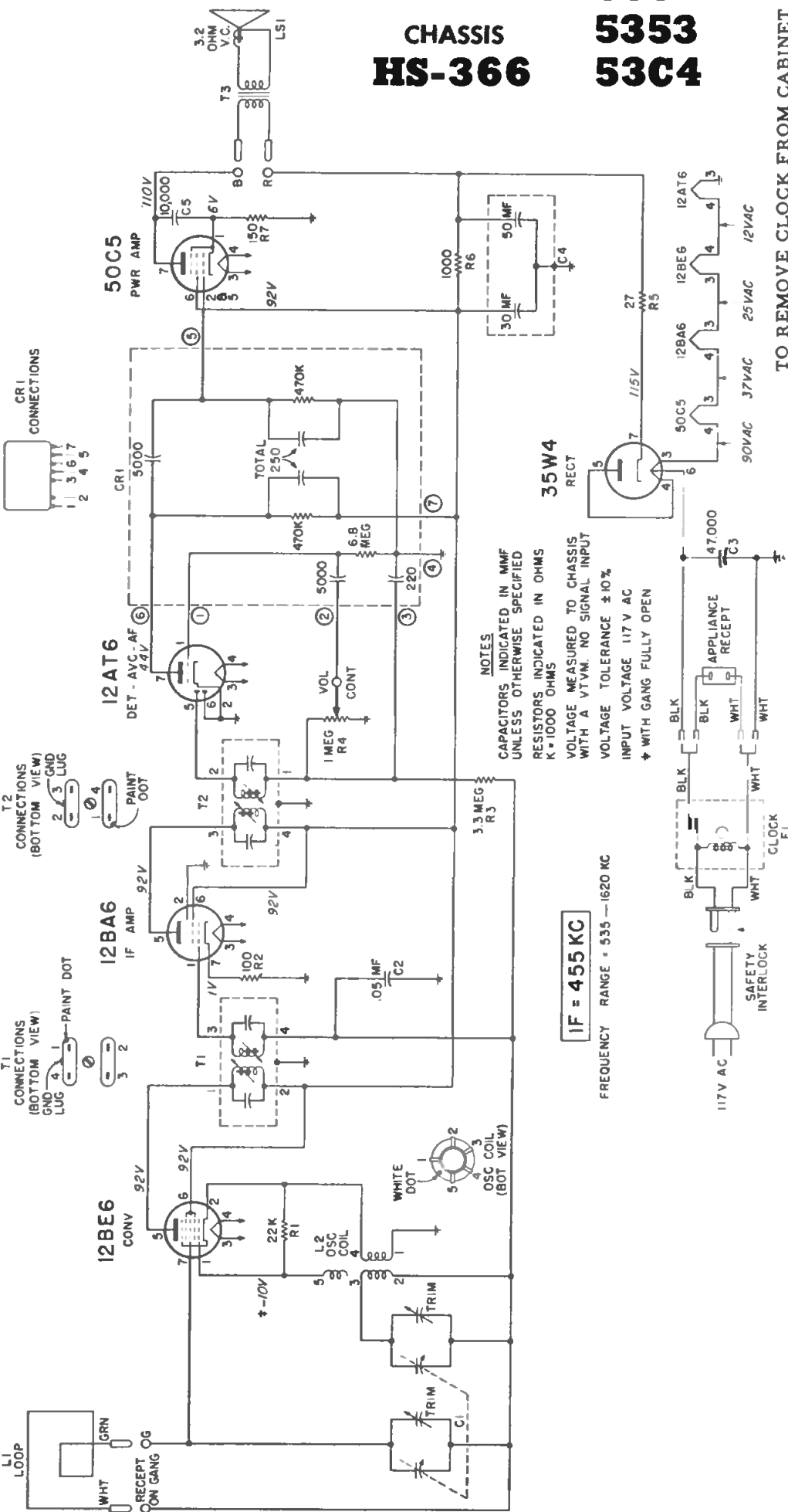


MOTOROLA

CHASSIS HS-366

MODELS

53C1
53C2
5353
53C4



TO REMOVE CLOCK FROM CABINET

1. Remove the two speaker mounting screws and remove speaker.
2. Pull off the operation selector knob on front of cabinet.
3. Remove the four screws that hold the clock bracket to the cabinet.
4. Carefully remove the clock and clock bracket from the cabinet.
5. Unsolder leads and remove the two small nuts and washers mounting the clock to the clock bracket.

CIRCUIT DESCRIPTION

1. The circuit of this chassis is conventional -there are no built-in resistors or capacitors. Leads are plated on both sides of the chassis base, thereby replacing the usual connecting wires and making wiring more uniform.
2. The metal plating extends through all the holes on the chassis, connecting circuits on the front with those on the rear.

TO REMOVE RADIO CHASSIS FROM CABINET

1. Remove the four screws which hold the rear cover; disconnect the antenna and appliance outlet leads and remove the cover.
2. Pull off the two control knobs from the front of the cabinet.
3. Remove the Phillips head screw under the tuning knob on the front of the receiver.
4. Disconnect the chassis power leads from clock.
5. Disconnect speaker leads from chassis.
6. From the back, remove the three screws that mount the chassis to the cabinet.
7. Remove the chassis from the cabinet.

MOTOROLA, INC. MODELS 53C1
(Continued from preceding page.) CHASSIS 53C2
HS-366 5353
53C4

SAFETY PRECAUTIONS

- 1. The chassis of this receiver is connected directly to the power line. However, the power cord circuit is broken by an interlock when the cabinet back is removed for replacing tubes. When aligning or servicing the chassis from AC, an isolation transformer should be inserted between the power line and the chassis.
- 2. Do not service the chassis on a metal plate, because of the possibility of a short circuit.
- 3. Use caution when handling the chassis with power applied, because all high voltage leads are exposed.
- 4. The outer edges of the chassis and the large plated areas in the center are at ground potential.

COMPONENT REPLACEMENT

- 1. To prevent tube breakage, remove them before replacing components. CAUTION: Remove the tubes only by pulling them straight out. Wiggling a tube may bend a socket clip, causing poor contact with the tube pin.

- 2. WHEN REMOVING DEFECTIVE COMPONENTS, USE ONLY A SMALL SOLDERING IRON (60 WATTS OR LESS) TO AVOID DAMAGE TO THE WIRING. DO NOT USE A SOLDERING GUN. WARNING: THE LEADS ARE VERY THIN, AND EXCESSIVE HEAT WILL BURN THEM OR LOOSEN THEM FROM THE BASE MATERIAL.
- 3. Plated connections or leads, if damaged, may be replaced with a jumper of regular hook-up wire.
- 4. It is recommended that IF transformers, tuning capacitor, volume control, oscillator coil, or the electrolytic capacitor be removed by immersing all the lugs simultaneously into a small soldering pot. The component may then be lifted off the chassis easily. If a soldering pot is not available, heat each lug individually with a small soldering iron, and shake off as much molten solder as possible. Then, by alternately heating and loosening each lug, the entire component will be freed. The disadvantage of using a soldering iron instead of a soldering pot is that the plated connections may be pulled loose from the chassis.
- 5. An individual tube clip may be removed by squeezing it with pliers and then unsoldering it. The new clip snaps into the hole.
- 6. Resistors or capacitors may be removed by unsoldering one end at a time.

CAUTION: Clean all the solder from the holes before installing a new component. Do not let the solder run onto an adjacent lead, as a short circuit will be created.

ALIGNMENT CHART

STEP	DUMMY 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)	Adjust for maximum.
3.		Radiation loop*	1400 Kc	Tune for max	6 (Ant)	Adjust for maximum.

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

