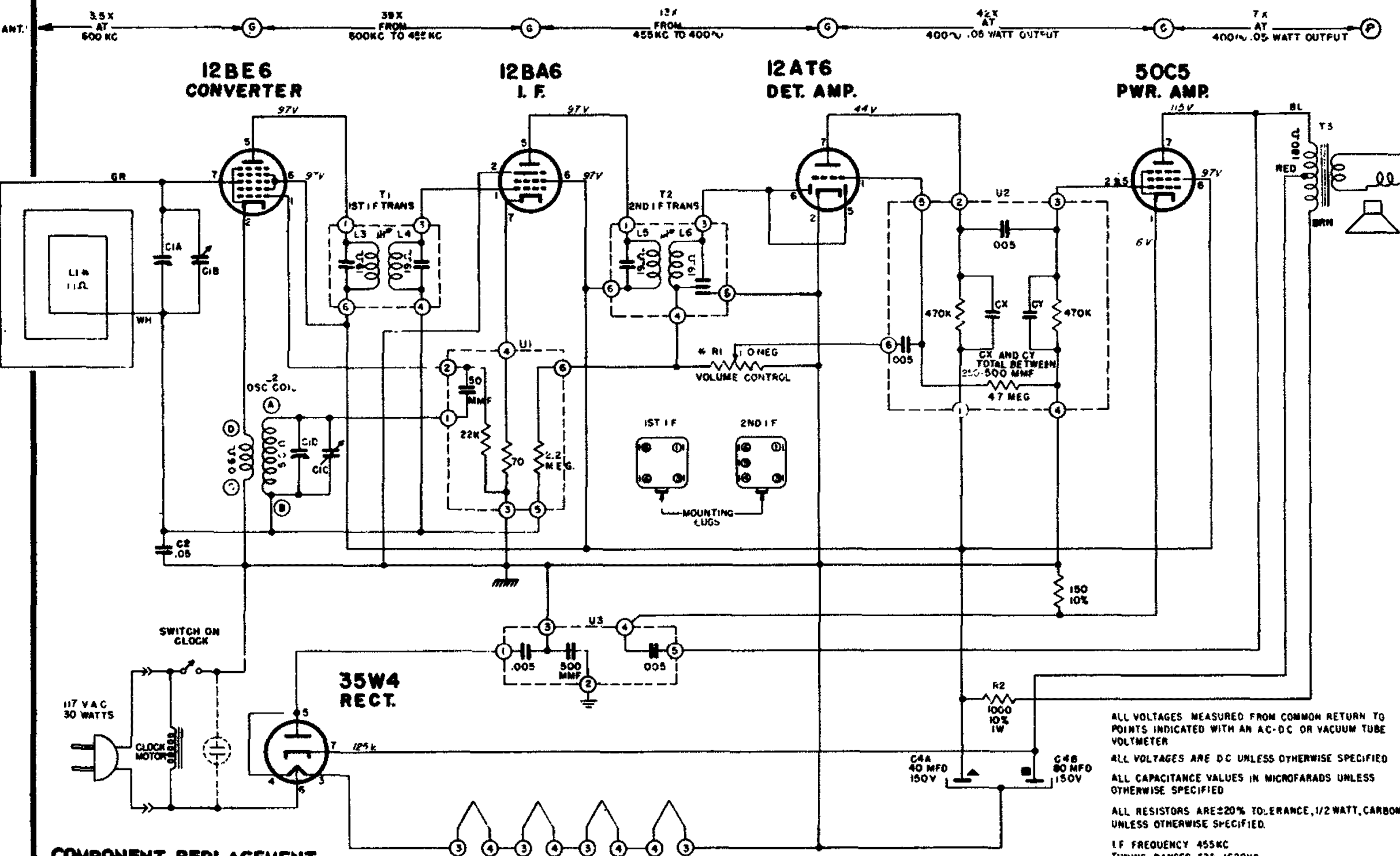


ZENITH RADIO CORPORATION

MODEL X514V & W CHASSIS 5X06 MODEL 519F, G, R & W CHASSIS 5X07



ALL VOLTAGES MEASURED FROM COMMON RETURN TO POINTS INDICATED WITH AN AC-DC OR VACUUM TUBE VOLTMETER
ALL VOLTAGES ARE DC UNLESS OTHERWISE SPECIFIED
ALL CAPACITANCE VALUES IN MICROFARADS UNLESS OTHERWISE SPECIFIED
ALL RESISTORS ARE ±20% TOLERANCE, 1/2 WATT, CARBON UNLESS OTHERWISE SPECIFIED.
I.F. FREQUENCY 455 KC
TUNING RANGES 535-1620 KC

COMPONENT REPLACEMENT:

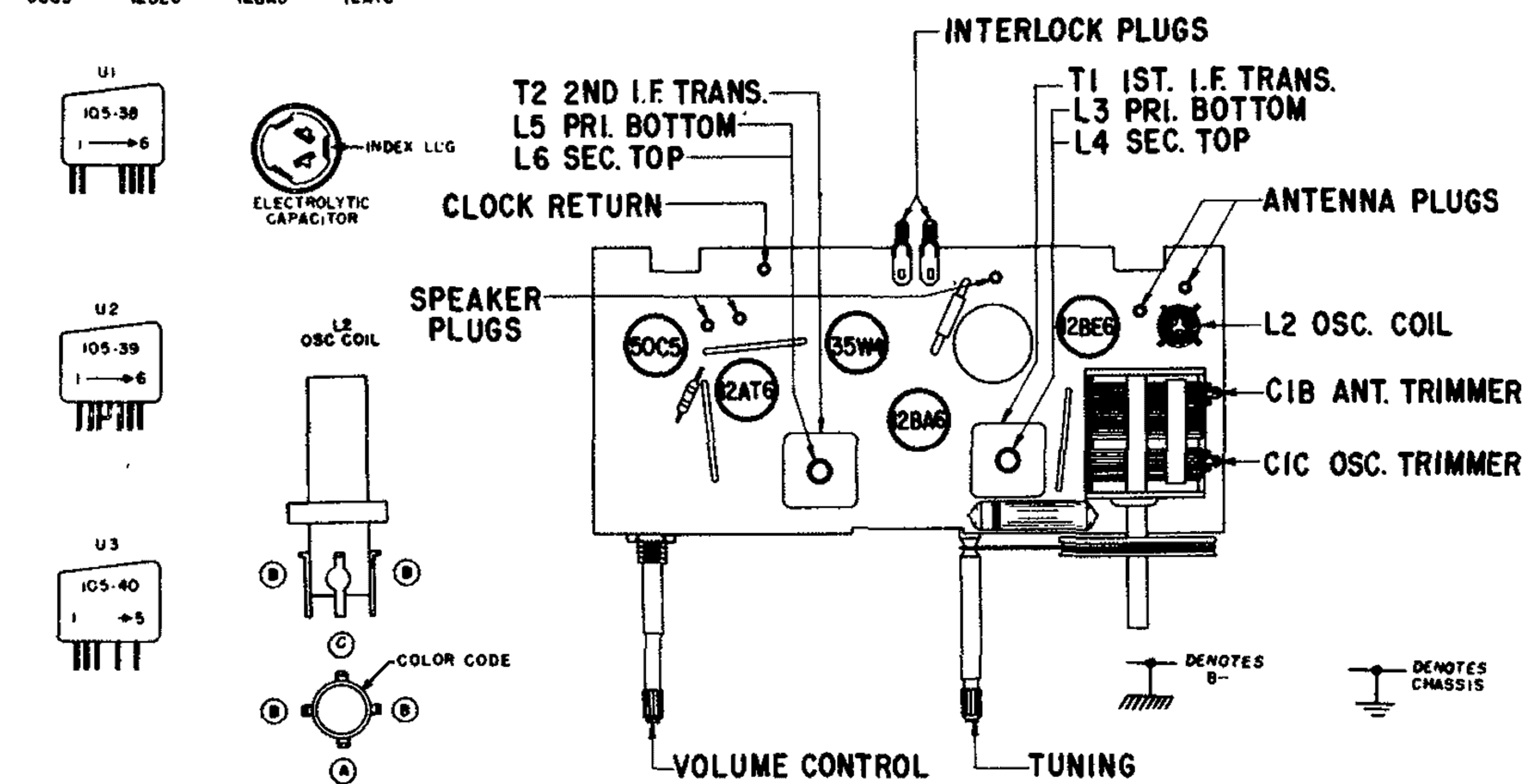
Resistors, capacitors and integnets should be replaced by clipping out the defective part and neatly soldering in the new part.

If a unit, such as the oscillator coil or I.F. transformer is to be removed, heat the mounting lugs with a pencil type soldering iron and move them away from the soldered connection with a long nose pliers or metal pick. Continue heating the lugs and brush away the molten solder with a small stiff glue brush. Remove the defective unit by lifting it off the chassis. Before inserting the new unit, be certain that the lug holes are open and free from solder. Forcing a lug against a solder filled lug hole may break the bond between the chassis base and the "printed" wiring. It is, therefore, necessary to exercise care when replacing units.

An open or damaged section of "printed" circuit wiring can be replaced by soldering a short jumper wire across the points to be connected.

I.F. TRANSFORMERS:

The I.F. transformers incorporated in this receiver are of the new permeability tuned type. The advantage of an I.F. transformer of this type is its extreme stability under various humidity and temperature conditions. The upper coil is the secondary and the lower the primary. When adjusting these I.F. transformers, the tuning wrench 68-19 can be inserted into the top slug, rotated until maximum output is obtained and then dropped down to the lower slug and the same operation repeated:



ALIGNMENT PROCEDURE

OPERATION	CONNECT OSCILLATOR TO	DUMMY ANTENNA	INPUT SIG. FREQUENCY	SET DIAL AT	TRIMMERS	PURPOSE
1	Converter Grid	.5 Mfd.	455 Kc.	600 Kc.	L3, L4, L5, L6	Align I.F. for maximum output.
2	One Turn Loop Coupled Loosely to Wave Magnet	—	1600 Kc.	1600 Kc.	C1C	Set Oscillator to Dial Scale.
3		—	1400 Kc.	1400 Kc.	C1B	Align Antenna Stage