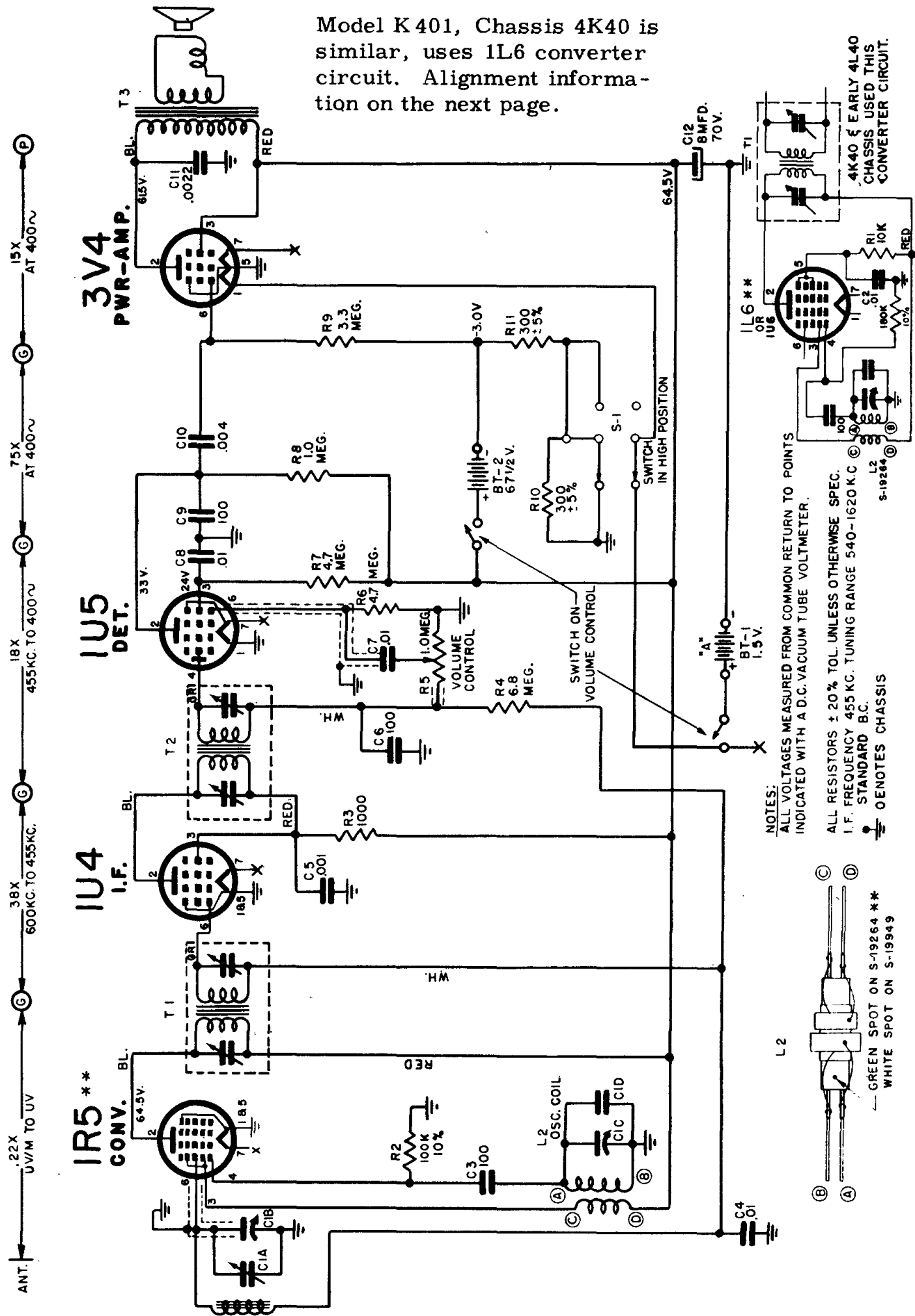


# MODEL L401 CHASSIS 4L40

ZENITH RADIO CORPORATION

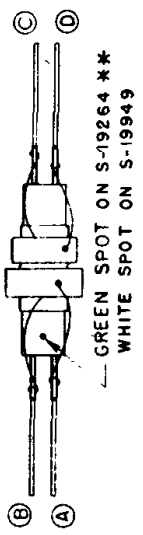
Model L401, Chassis 4L40

Model K401, Chassis 4K40 is similar, uses 1L6 converter circuit. Alignment information on the next page.



NOTES:  
ALL VOLTAGES MEASURED FROM COMMON RETURN TO POINTS INDICATED WITH A D.C. VACUUM TUBE VOLTMETER.

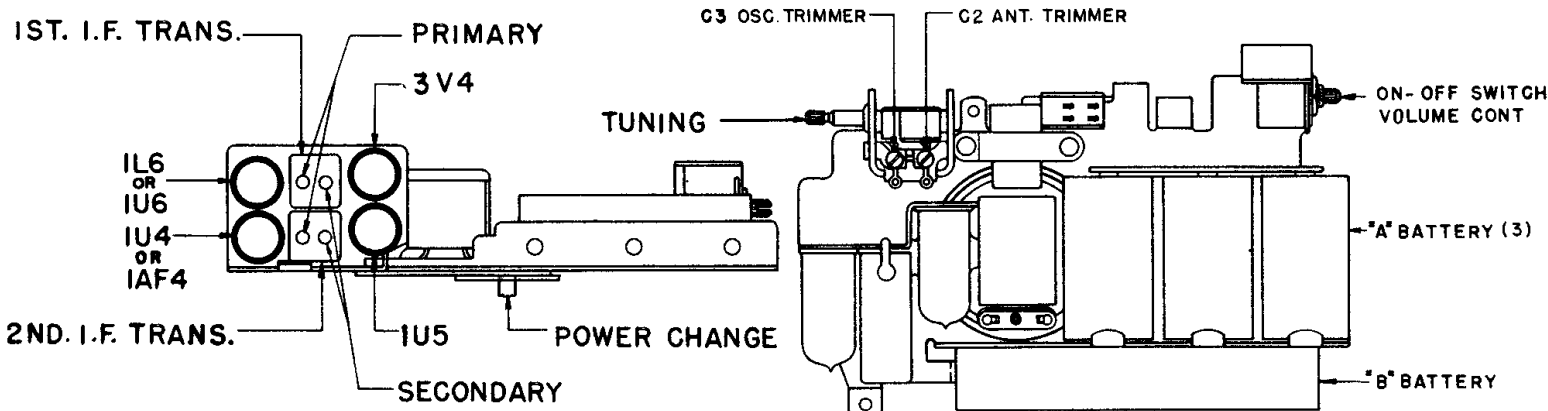
ALL RESISTORS  $\pm 20\%$  TOL. UNLESS OTHERWISE SPEC.  
I.F. FREQUENCY 455 KC. TUNING RANGE 540-1620 KC.  
STANDARD B.C.  
OENOTES CHASSIS



ZENITH  
Alignment  
Model L 401,  
Chassis 4L40,  
continued from  
the page at left.

## ALIGNMENT PROCEDURE

OPERA- TION	CONNECT OSCILLATOR TO	DUMMY ANTENNA	INPUT SIG. FREQUENCY	BAND	SET DIAL TO	TRIMMERS	PURPOSE
1	Converter Grid	.1 Mfd	455 Kc.	BC	600 Kc.	Adjust pri. and sec. trimmers for max- imum output.	I.F. Alignment
2	Connect a .1 mfd capacitor across the generator output. Advance the generator output and place the capa- citor approximately six inches from the receiver.		1600 Kc.	BC	1600 Kc.	Osc. Trim. C3	Set Oscillator to scale
3			1400 Kc.	BC	1400 Kc.	Ant. Trim. C2	Align Wavemagnet



## ZENITH RADIO Model L 406, Chassis 4L42, continued on next page.

The 4L42 chassis is an AC, DC or battery operated super-heterodyne. The chassis is isolated from the DC circuit, and all measurements must be made from a common negative point. The most convenient place to reach this negative point is the negative side or container of the electrolytic. When the change-over Switch S1 is in AC position, the DC resistance from chassis to any circuit must be almost infinite. If an circuit becomes grounded a hum will result.

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.

IF Alignment: Remove the chassis from the cabinet and arrange the units so that the wavemagnet can be connected. All the connections and adjustments can be made from the top of the chassis. Connect a signal generator, through a .1 mfd. dummy antenna, to the converter grid and B-(common return). Connect an output meter across the voice coil

of the speaker. Set the signal generator to 455 Kc. and adjust Pri. & Sec. of T1 & T2 for the maximum indication on the output meter.

SW-RF Alignment: Set the generator to 16.1 mc., open the gang and adjust trimmer CID for maximum output. Then close the gang, set the generator to 4.6 mc. and adjust L3 for maximum output. Set the generator to 15.5 mc. and tune in the signal and rock gang, adjusting CIA for maximum signal. Caution: Do not tune in the image which is 15.5 mc. plus 2x the IF frequency.

BC RF Alignment: Connect a two turn loop across the leads of the signal generator, loosely couple this loop to the wavemagnet. Set the signal generator and the dial pointer of the receiver to 1620 Kc. and adjust C1C oscillator trimmer to resonance. Set the signal generator and dial pointer to 1400 and adjust C1B antenna trimmer to resonance.

Set the signal generator to 600 KC, turn the gang to approximately 600 KC, and then rock the gang and adjust, C1E trimmer for maximum output.

To track the BC band during final alignment the chassis must be installed in the cabinet, the Wavemagnet installed in the normal position and the battery pack placed on top of the cabinet to simulate actual operating conditions.

