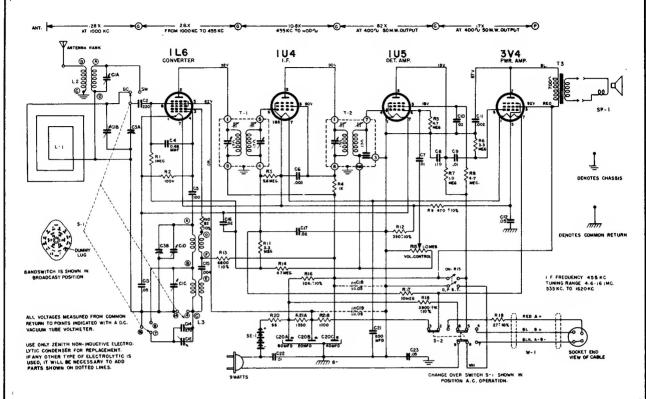
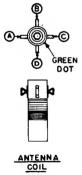
ZENITH RADIO CORPORATION

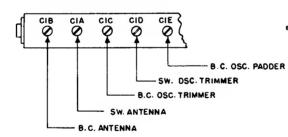
MODEL L406

CHASSIS 41.42

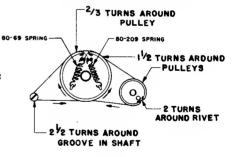


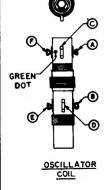


For alignment information see preceding page.



DIAL CABLE DRAWING





ALIGNMENT PROCEDURE

Oper- ation	Connect Osc. to	Dummy Ant.	Input Sig, Freq.	Band	Set Dial	Trimmer	Purpose
1	Converter Grid	.1 mfd,	455 Kc.	ВC	600 Kc.	Align.Pri & Sec. Tl & T2	Align I.F.
2	Antenna & Chassis Two turns loosely coupled to Wavemagnet	200 mmfd in series with 400 ohm carbon resistor	16.1 Mc.	sw	Open Gang	CID .	Set Osc. to Scale
3			4.6 Mc.	SW	Close Gang	L3	Set Osc. to Scale
4			15.5 Mc.	şw	Rock at 15,5 mc.	ClA	Align SW
5			16 20 Kc.	ВC	Open Gang	CIC	Set Osc. to Scale
6			1400 Kc.	ВС	1400	CIB	Align Ant.
7			600 Kc.	ВС	Rock at 600 kc.	CIE	Set Padde

ZENITH RADIO Model L406, Chassis 4L42

The 4L42 chassis is an AC, DC or battery operated superheterodyne. 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 Sl 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 Alginment: 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 wave-magnet. 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, CIE 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.

