## OPERATING INSTRUCTIONS

Important - When you first use your Q Multiplier, you will probably have trouble locating the notch. The <u>Q BALANCE</u> control is a nulling adjustment for which there is only one correct setting. This setting will give maximum rejection for all notching. To set Q BALANCE control for the first time follow these instructions:

- 1. Locate the approximate setting of the <u>TUNING</u> dial for some stable heterodyne or calibrator signal by using the <u>PEAK</u> position of switch.
- Switch to <u>NOTCH</u> and carefully turn the <u>Q BALANCE</u> control until some rejection of the heterodyne is observed.
- 3. Slight adjustment alternately of <u>TUNING</u> and <u>Q BALANCE</u> will give maximum rejection of the heterodyne.
- 4. Note the position of the Q BALANCE control so that it may be found easily in the future when notching.

## Notching Out a Heterodyne

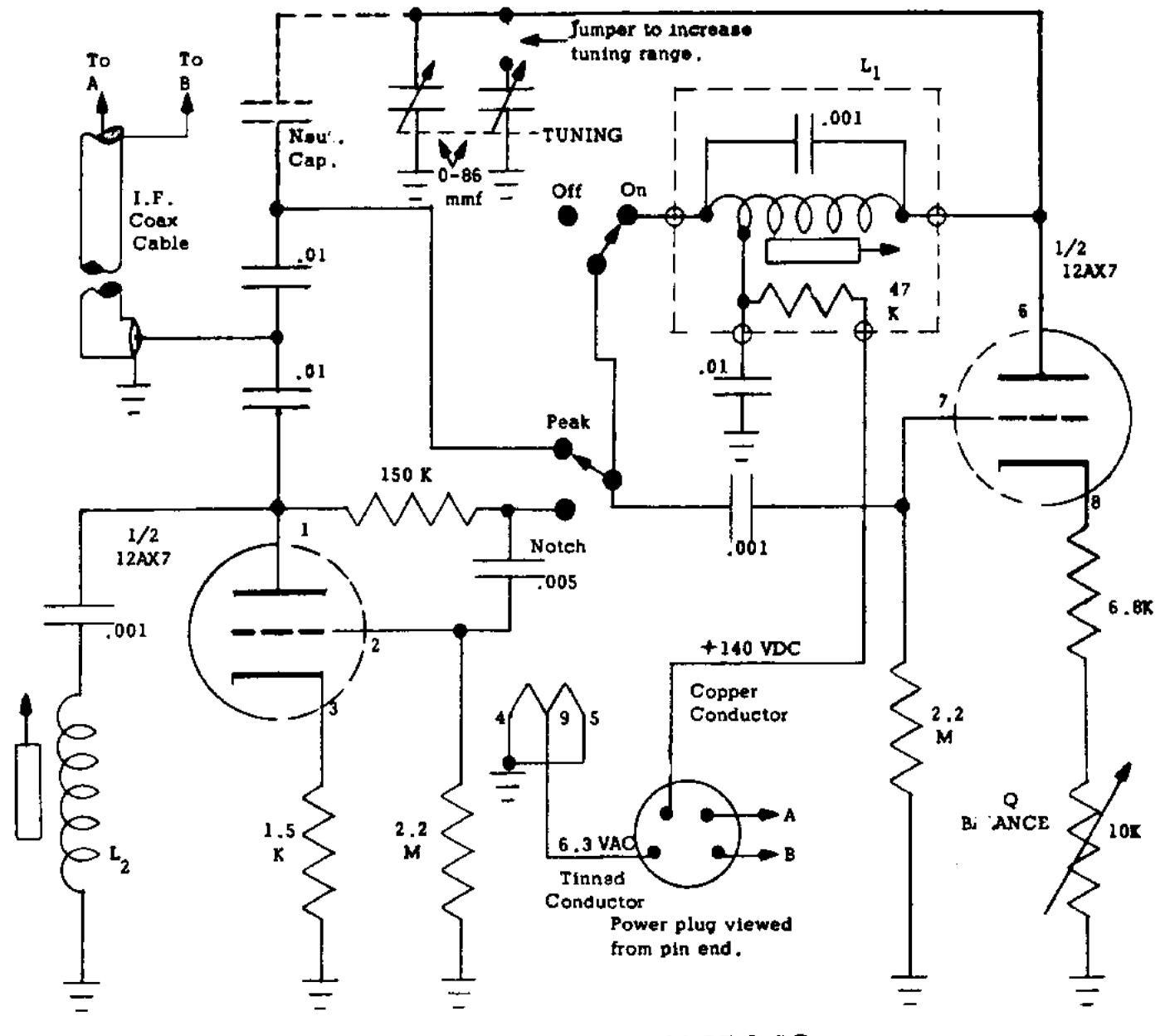
- 1. Move <u>PEAK-NOTCH</u> switch to <u>NOTCH</u> position.
- 2. Tune in desired signal with ON-OFF switch OFF.
- 3. Switch to <u>ON</u> and turn <u>TUNING</u> knob to the point where the heterodyne attenuated. Slight adjustment alternately of <u>TUNING</u> and <u>Q BALANCE</u> will give maximum rejection of the heterodyne. Note: The heterodyne is caused by a beat between the desired carrier and the interfering carrier. On AM, the removal of either will stop the heterodyne but if you notch out the carrier of the desired signal, the audio will become greatly distorted.
- 4. If the interfering carrier drifts in frequency, follow it with the Q Multiplier <u>TUNING</u>; do not retune receiver. This flexibility is a distinct advantage over the crystal filter; i.e., you tune receiver for best signal; tune Q Multiplier to remove interference.

## Peaking a C.W. Signal

- 1. Move <u>PEAK-NOTCH</u> switch to <u>PEAK</u> position.
- 2. Tune in a signal with ON-OFF switch OFF.
- 3. Switch to <u>ON</u> and turn <u>TUNING</u> knob to signal by noting a marked increase in signal level.
- 4. Set <u>Q BALANCE</u> for desired sharpness of response. Sharpest peak occurs just below point where Q Multiplier goes into oscillation.
- Q Multiplier <u>TUNING</u> control can be used for a fine adjustment in tuning a signal.

## Installation with Model 2-B Receiver

- 1. Plug cable into Q MULT socket on back of 2-B.
- 2. Connect speaker leads to screw terminals marked SPKR and GND.



SCHEMATIC DIAGRAM OF 2-BQ