| DATE 5/19/54 SH. 2 OF 2 COMPILED BY K.Z. | TMC SPECIFICATION NO. S- 206 | A |
|---|---|---|
| | TITLE: Resonance Method (Toroidal Inductanc ) | JOB |
| APPROVED KZ A. J. J. | | |

Procedure

(1) Connect the inductance in parallel with a capacitance of giv n value.

(2) Connect this resonance circuit across x and y of the test set-up, refer to schematic diagram.

(3) Vary oscillator frequency and observe carefully the point of maximum reading on V.T.V.M.

(4) Note frequency at this point on frequency counter; proceed only if noted frequency is lower than specified $f_r$. (If $f_r$ is higher than specified, the inductance has to be replaced. Begin with new inductance at step (1) above.)

(5) Proceed to remove turns from inductance, re-checking $f_r$ carefully after each operation as in step (3).

(6) Continue to remove turns, fewer at a time, as $f_r$ approaches the specified value.

(7) Terminate the operation as soon as $f_r$ of the inductance under test has been brought to within specified tolerance of nominal resonance value shown on coil drawing.

(8) Complete the adjustment process by equipping the inductance with terminal strip and by soldering wire ends to terminal posts.

(9) In the case that inductance and capacitance under test are to be used as a unit, mark both clearly as being a set and tag them securely together. Do not separate inductance and capacitance hereafter.

NOTE:

Capacitanc , $f_r$ and additional items ar listed in assembly drawing where reference to this specification is made.

| DATE 5/19/54 SH. 1 OF 2 COMPILED BY K.Z. | TMC SPECIFICATION NO. S- 206 | |
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| | TITLE: Resonance Method ( Toroidal Inductances) | JOB |
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## Purpose

For a given resonance frequency, $f_r$, and for a given capacitanc there is only one value of inductance that will provide resonance. The method outlined serves this very purpose of precise adjustment of toroidal inductances.

## Instruments Used

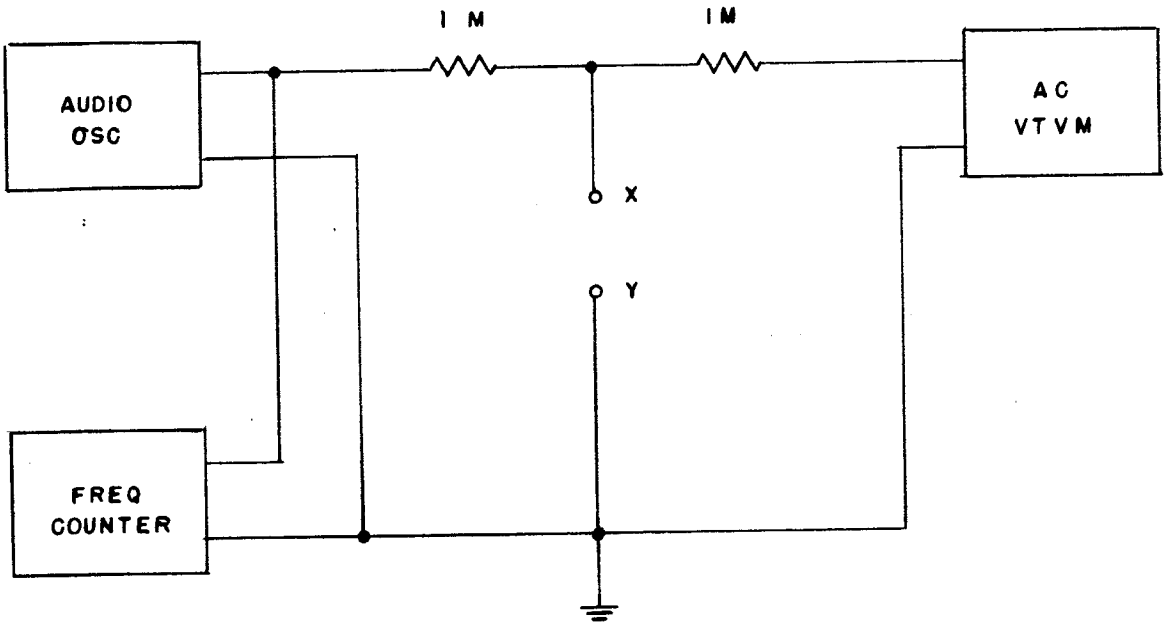
(1) Audio Oscillator, Hewlett Packard HP 2000 or Heathkit AG 8

(2) AC-V.T.V.M., Daven or Heathkit

(3) Resistors (2), 1 meg.

(4) Berkeley Frequency Counter, Model 5500 or 5558

## Test Set-Up



MODEL S-206 **REVISION SHEET**

| DATE | REV | PAGE | ITEM | DESCRIPTION | REMARKS | APP |
|---|---|---|---|---|---|---|
| 8/23/56 | A | 2 | 7 | Item #7 modified | CHK. ECO A.T.K.S. | |