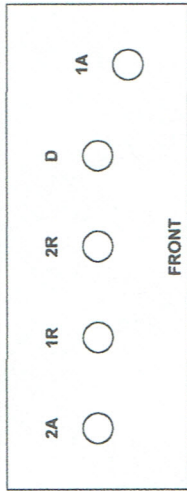


| REF | QTY USED | VALUE | DESCRIPTION |
|-----|----------|------------------------|--------------------------------------|
| 1 | 3 | 6-225 pfd | Tuning condenser |
| 2 | 3 | 5-15 pfd ¹ | Trimmer condenser ³ |
| 3 | 1 | 400 pfd ¹ | Detector grid condenser ² |
| 4 | 1 | 0.001 mfd ¹ | "Phone" condenser ² |
| 5 | 1 | 250 pfd ¹ | Antenna coupling condenser |
| 6 | 2 | 1 mfd | Bypass condenser |
| 7 | 1 | unk | Dual filament rheostat ² |
| 8 | 1 | 2 megohms ¹ | Detector grid resistor |
| 9 | 1 | unk | Tone color switch assembly |
| 10 | 1 | unk | Tone color condenser pack |
| 11 | 1 | Mazda 19 | Fuse lamp, 1.5v |
| 12 | 1 | Mazda T-3 | Pilot lamp, 6.3v |

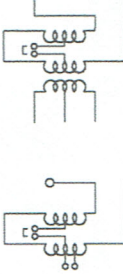
Notes
 1 - Based on several measured values - factory data absent.
 2 - Technology used is not from factory documents.
 3 - Mounted on tuning cap. Neutralization on 1R & 2R, tracking on D.

Tube Layout

Please note that the tube locations are not what one would expect.



Coil Data



Primary

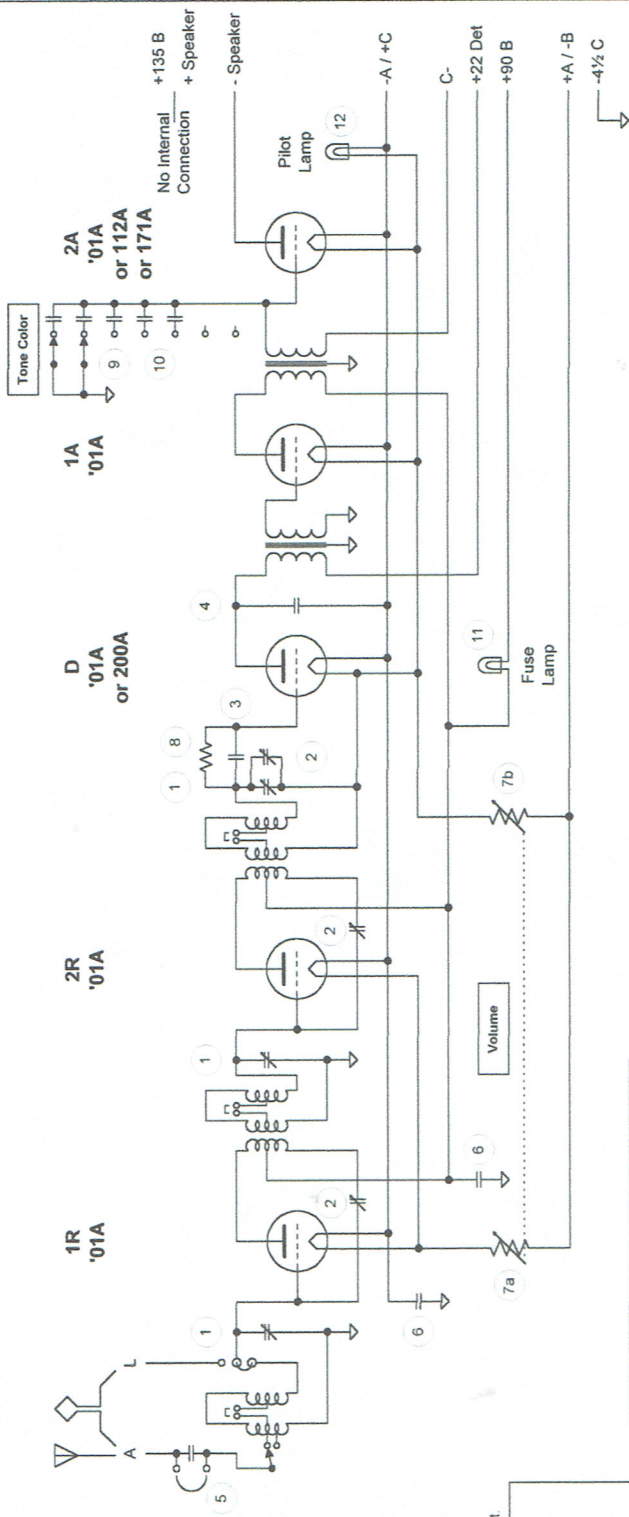
The primary is wound on a 1.3/8" dia form mounted inside the front secondary, i.e. the one that connects to ground. The primary is wound with 18 turns of #14 wire, lapped at the 9th turn. The antenna coil has no primary.

Secondary

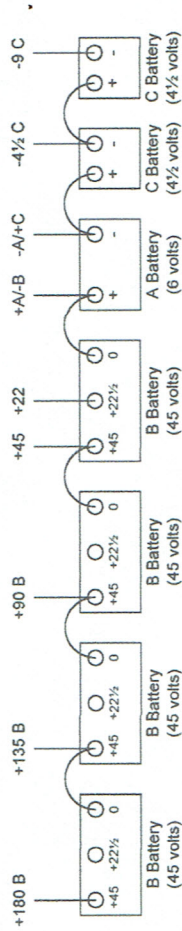
The secondary consists of a pair of "binocular" coils. Both coils are wound in the same direction (clockwise, viewed from and starting at the bottom). The bottom of the front coil goes to ground; the bottom of the rear coil goes to the grid. The tops of the two coils are connected together. Each coil consists of 85 turns of 20/38 Litz wire. The forms are 1.5/8" diameter and 2.2" high. Wall thickness is 0.0625". Coils are spaced 1/4" apart.

The coils are lapped for range switching. The front coil at 50 turns from the bottom, the rear coil at 40 1/2 turns from the bottom.

The tap locations on the antenna binocular coil are at 10 and 15 turns from the bottom. The antenna coil has no primary.



From schematic dated 16 Aug 1926



NOTES:

- 1) Detector B supply can be either 22 1/2 or 45 volts for type 200A, 45 volts for type '01A.
- 2) 2nd audio B supply is +90, +135, or +180 depending on tube used (see voltage chart).
- 2) 2nd audio C supply is -4.5, -9, or -45 depending on tube used (see voltage chart).

Voltage Table

| Element | 1R, 2R | D | 1A | 2A(01) | 2A(112) | 2A(171) |
|---------|--------|------|------|--------|---------|---------|
| Plate | 90 | 45 | 90 | 90 | 135 | 180 |
| Grid | -4.5 | -4.5 | -4.5 | -4.5 | -9 | -40 |

All voltages measured from tube F with volume at maximum.

PRELIMINARY

The data presented herein is believed to be correct, but is subject to revision as new information becomes available.

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 Grebe Synchronic Phase MU-1 (late) Schematic Diagram
 All dimensions in inches All dimensions nominal
 DWG NO: F30M100
 Scale: 01 Aug 2005
 SHEET: 1 OF 1