

Ottawa Vintage Radio Club

June 2020 Meeting

June 10, 2020

Gord Rabjohn

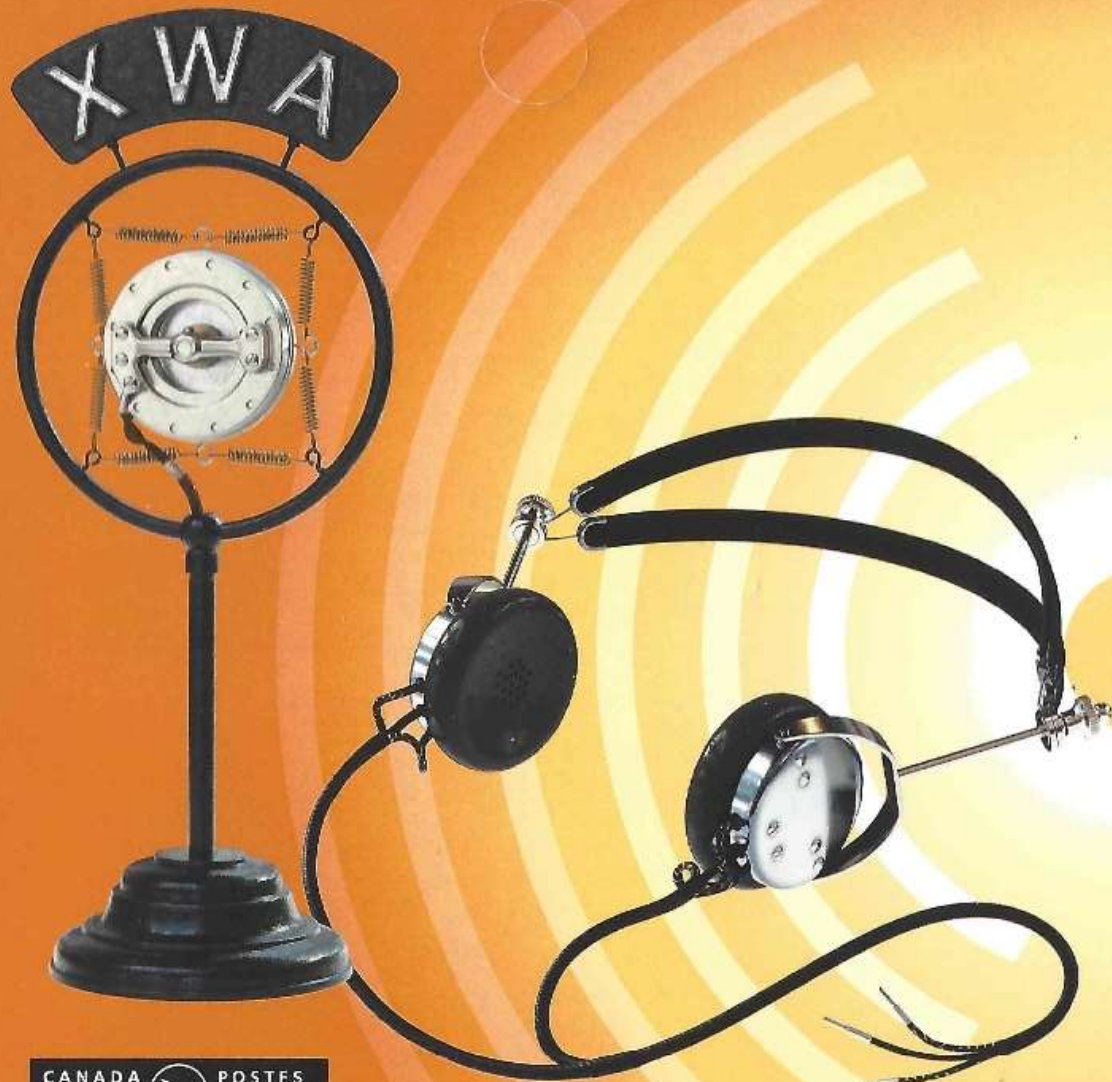
On-line

Announcements and Agenda

- Fall auction: Saturday October 17 has been booked with the city. Still TBD whether we will be able to hold the auction.
- Next meeting: September 9 “The Dawning of Wireless: Spark Technology”, by Rick Patch. This is best done in-person, so if we are still unable to meet face-to-face, we may postpone this topic. Watch ovrc.org for details.
- A new postage stamp celebrating 100 years of radio broadcasting in Canada has been released. Paul Guibord was instrumental in its design!
- Rick Patch offers advice on right-sizing your collection.
- Tell us about your Stewart-Warner Radios.
- I expect the newsletter will be out this month.
- Always looking for topics and facilitators for meetings.

Canada Post celebrates 100 years of Canadian Broadcast History





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CANADA



— HISTORY OF —
HISTOIRE DE LA RADIO IN AU CANADA

A few words from Rick Patch

The Stewart Warner Speedometer
Corporation

–

Stewart-Warner-Alemite* Corp. of
Canada Ltd.

* Pronounced: Al + soft i + might

THE THRILL OF EXPLORING THE WORLD WITH A STEWART-WARNER RADIO



World Wide Short Wave Radio Map

A NEW WORLD OF
ENTERTAINMENT



Now Made Available with
The "MAGIC DIAL"



RADIO'S NEWEST
DEVELOPMENT

The US Parent

- John K Stewart (with Tom Clark) founded Chicago Flexible Shaft in 1890.
- Clark was killed in 1907 demonstrating a speedometer in a Packard. (there's a lesson in there somewhere)
- 1912: Stewart merges with Walter Bassick's Alemite Co. (or just Bassick?) Stewart buys the Warner Instrument Company. Forms the **Stewart Warner Speedometer Corporation** (Huge headquarters and factory on Diversey St., Chicago)
- Largely an automotive parts supplier.
- 1915: phonograph
- 1925: made ~100,000 radios
- Made radio, TV, phonograph until 1954
- Military work...
- The S-W name survives today, but only in auto instruments. Take-over history is too convoluted.
- In Canada: the Stewart-Warner Alemite Corp.



By Burke, Tom at English Wikipedia, CC BY-SA 3.0,
<https://commons.wikimedia.org/w/index.php?curid=32927661>

Reference: Wikipedia, stewartwarner.com and Alan Douglas, volume 3

From current US Alemite SKF web site

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From current US Stewart Warner web site



Stewart-Warner-Alemite Corp. of Canada Ltd.

- S-W had a Canadian factory (now a distribution centre) in Belleville, Ontario.
- Opened in 1921, and made Alemite lubrication systems, Bassick Castors, gauges for the automotive industry, pumps, refrigerators, military gear, and the score board for the Toronto Blue Jays in CNE stadium.
- Made radios from 1929 until 1956, even including speakers and the cabinetry.
- After 1934, many were of Canadian design.
- War effort included:
 - ASDIC (Anti Submarine Detection Investigation Committee) Sonar
 - Airforce Transponders
 - Field sets for the Army
 - Aircraft Radio
 - Radar parts
 - Flame throwers!

Reference: The Belleville Intelliger May 2 1986. and <http://vitacollections.ca/BellevilleHistory/3401749/page/8?n=>
This is a 8 page essay about the Belleville Stewart-Warner factory

Tweed Plant 1946-1948

- 1946-1948, there was also a satellite factory in Tweed, 40km north of Belleville, made the “Baby Grand”.
- Apparently, only 1 model was made???
- Approximately 100 were employed in Tweed.
- Lea Barker supplied the Tweed Museum with a model R552.

Reference: The Belleville Intellinger May 2 1986.



Where are Belleville and Tweed?



Alemite Belleville Plant, Post War

- 1947: a 12" Canadian TV, "One of the first in Canada".
- 1948-1952: Supplied Chevy Car radios. (In 1952, GM set up their own radio plant in St. Catharines, Ont.)
- Commercial radio/TV ceased in 1956 in Canada (1954 in the US)
- After 1956: Joint Canada/US defense contracts. 1959 IFF for DND.
- Late 50's; Model 7057 on-car wheel balancers. ← quite a successful business
- Expo '67: electronic information display system. After, Terre des Hommes, la Ronde.
- The Expo display system was repurposed at Jarry Park (Montreal Expo's first stadium).
- 1976- 1979: Giant score board at CNE stadium (first Toronto Blue Jays stadium).

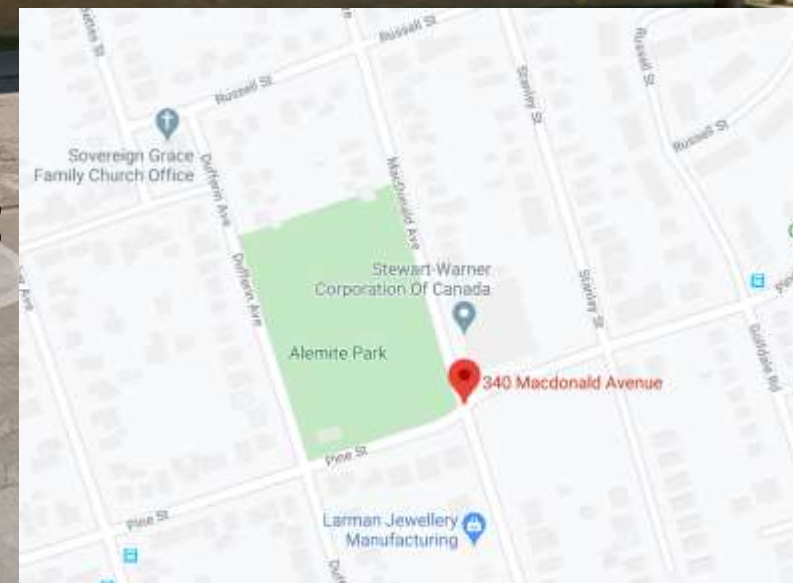
Reference: <http://vitacollections.ca/BellevilleHistory/3401749/page/3?n=>

The Demise of the Belleville Plant

- After 1970, no electronic work in Belleville (except Blue Jays score board, and wheel balancers), leaving just Alemite lubrication and Bassick Castors.
- Purchased in 1988 by BTR (British Tyre and Rubber)
- Strike in March 1989
- In 1990, the Belleville plant was closed (as were most of the US plants), all that remains now is a distribution centre.



**2012 Google Street View Picture:
Stewart Warner Alemite Canada
349 MacDonald Ave., Belleville
...Now part of SKF Group**





Excellent Reference on S-W Belleville, this 8-page essay

<http://vitacollections.ca/BellevilleHistory/3401749/page/3?n=>

Four Decades of Radio, Television and Electronics, June 26 1986. Author unknown!

FOUR DECADES OF RADIO, TELEVISION AND ELECTRONICS

Next to the affection and familiarity displayed by the public in the 1920's and 1930's for ALEMITE, the words "Stewart-Warner" became synonymous with quality and performance in radio sets.

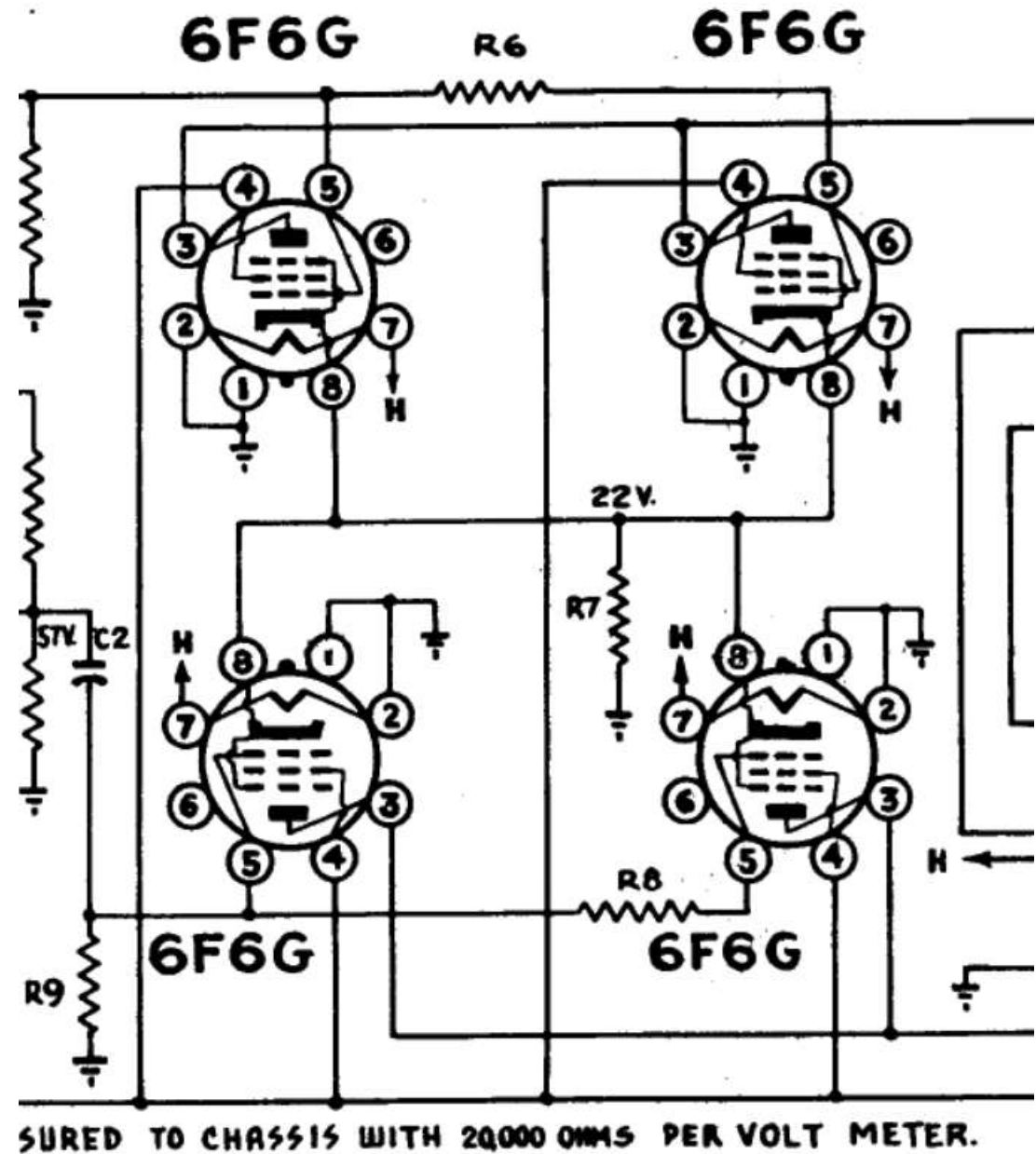
While Stewart-Warner, U.S.A. had entered the radio field in 1925, it was in 1929 that the Belleville plant added this line of products to the manufacturing facilities. A new addition, which became known as the "Radio Wing" was constructed that year. It was a two-storey facility, the upper floor was laid out with two production assembly lines, used for installing components into the "chassis" of a radio set. On this floor, all testing, inspection, and even the final assembly into cabinets was performed here. Originally, the first models of 1929 were housed in metal cabinets, with a lid. This was a steel stamping, approximately 30 inches long, by 18 inches wide by 18 inches high. It was the renowned 950 series.

Very rapidly, Stewart-Warner radios gained a favourable reputation in Canada for endurance and reliability. Dealers and dist-

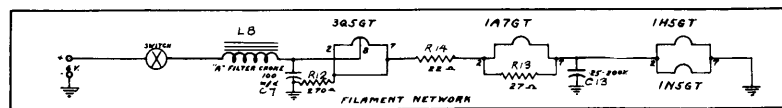
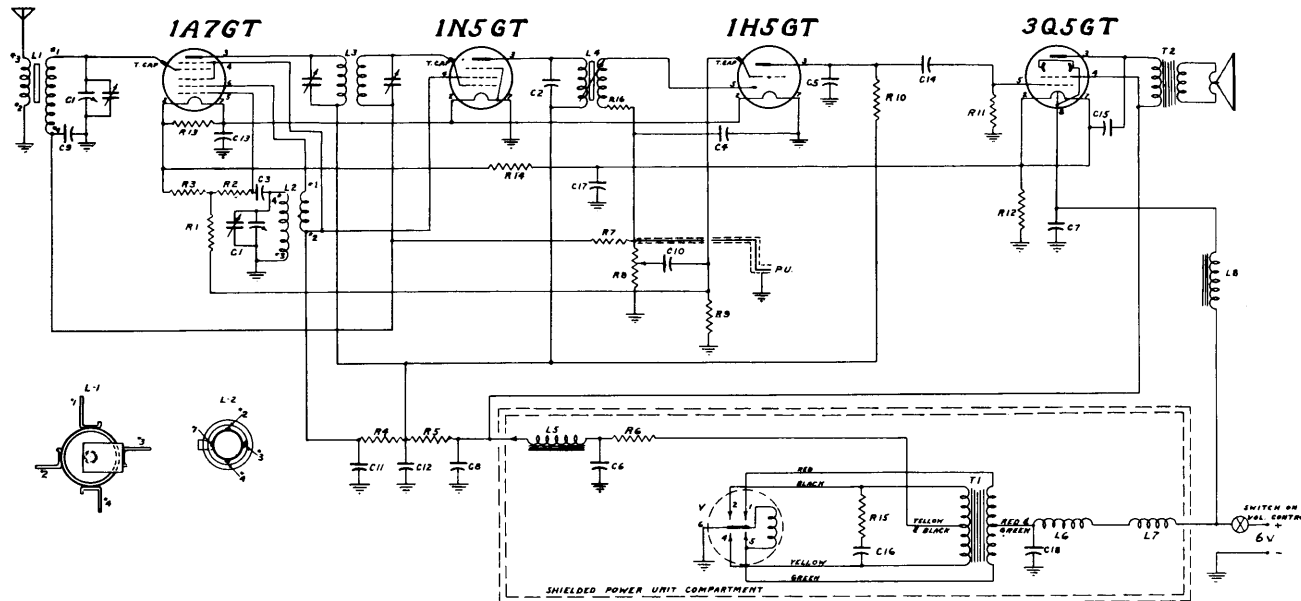
Diverse range of Radio Products

- Radios of course, cheap and expensive
- Shortwave converters
- Radio power supplies
- Short-wave radios (double conversion)
- Economy radios
- Really fancy cabinets
- Car radios (pre war, not very successful)

Push-Pull Parallel 6F6's



6V battery set, with vibrator



A1 CONDENSERS		A2 RESISTORS	
C1	90M CONDENSER	R1	33 MEGOHM 1/4 W.
C2	150 μ CERAMIC (WLS)	R2	270,000 OHM 1/4 W.
C3	100 μ CERAMIC	R3	220,000 OHM 1/4 W.
C4	270 μ CERAMIC	R4	10,000 OHM 1/4 W.
C5	150 μ CERAMIC	R5	970 OHM 1/4 W.
C6	10 μ 150 VOLT D.E.C.	R6	200 OHM 1/4 W.
C7	100 μ 15 VOLT D.E.C.	R7	33 MEGOHM 1/4 W.
C8	15 μ 150 VOLT D.E.C.	R8	VOLUME CONTROL
C9	.05-400 VOLT PAPER	R9	22 MEGOHM 1/4 W.
C10	01-400 VOLT PAPER	R10	50,000 OHM 1/4 W.
C11	1-250 VOLT PAPER	R11	470,000 OHM 1/4 W.
C12	1-200 VOLT PAPER	R12	200 OHM 1/4 W.
C13	.35-200 VOLT PAPER	R13	27 OHM 1/4 W.
C14	.05-400 VOLT PAPER	R14	22 OHM 1/4 W.
C15	.008-400 VOLT PAPER	R15	55,000 OHM 1/4 W.
C16	.015-1600 VOLT PAPER	R16	30,000 OHM 1/4 W.
C17	100 μ 10 VOLT D.E.C.	COILS	
C18	.5-100 VOLT PAPER	L1	ANTENNA COIL
		L2	OSCILLATOR COIL
		L3	150 I.F. TRANSFORMER
		L4	250 I.F. TRANSFORMER
TRANSFORMERS		L5	"B" FILTER CHOKE
T1	POWER TRANSFORMER	L6	"A" R.F. CHOKE
T2	OUTPUT TRANSFORMER	L7	"A" R.F. CHOKE
		L8	"B" FILTER CHOKE
MISCELLANEOUS			
V VIBRATOR, MALLORY 244A			

1949-50

$$f = 455 \text{ KC}$$

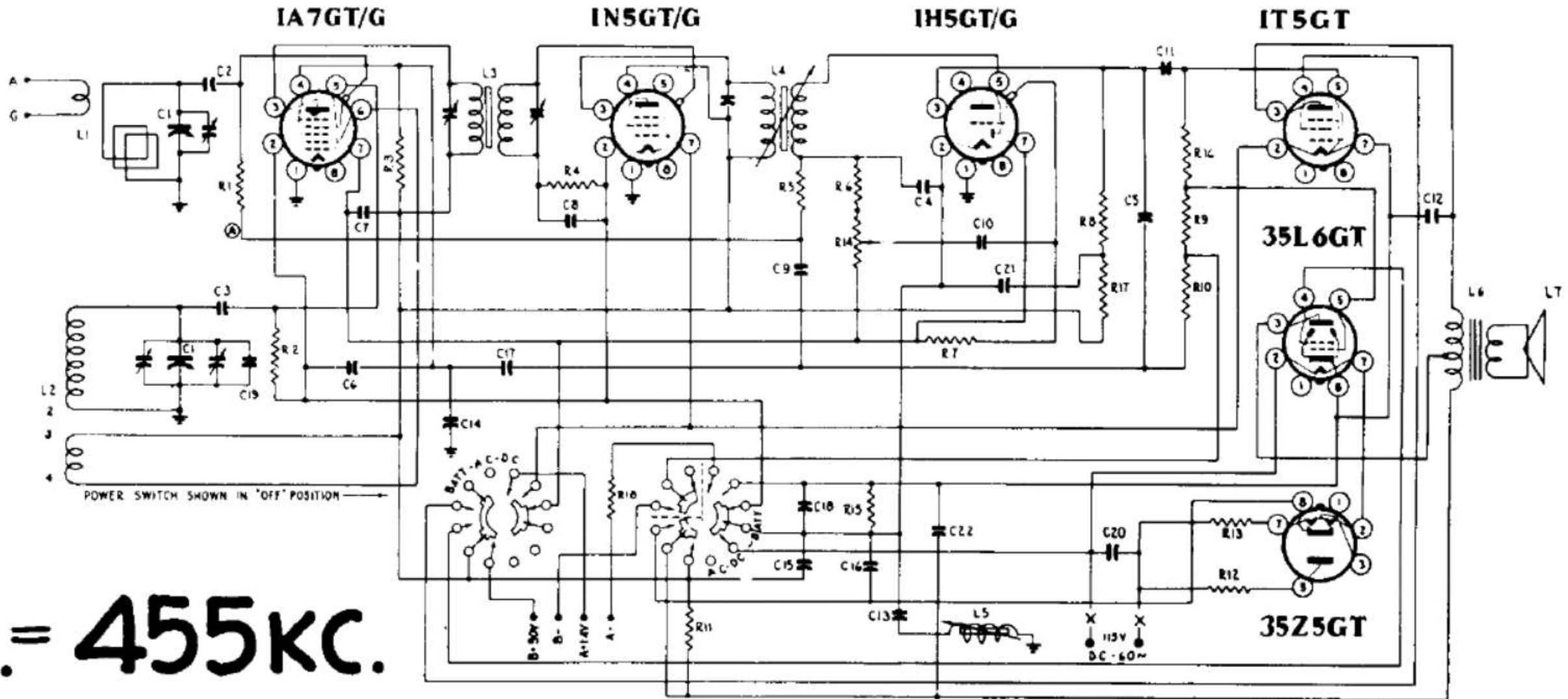
**ALIGNMENT, LAYOUT
EDIAL CORD DATA ON
SHEET 147**

6 v. BATTERY MODEL

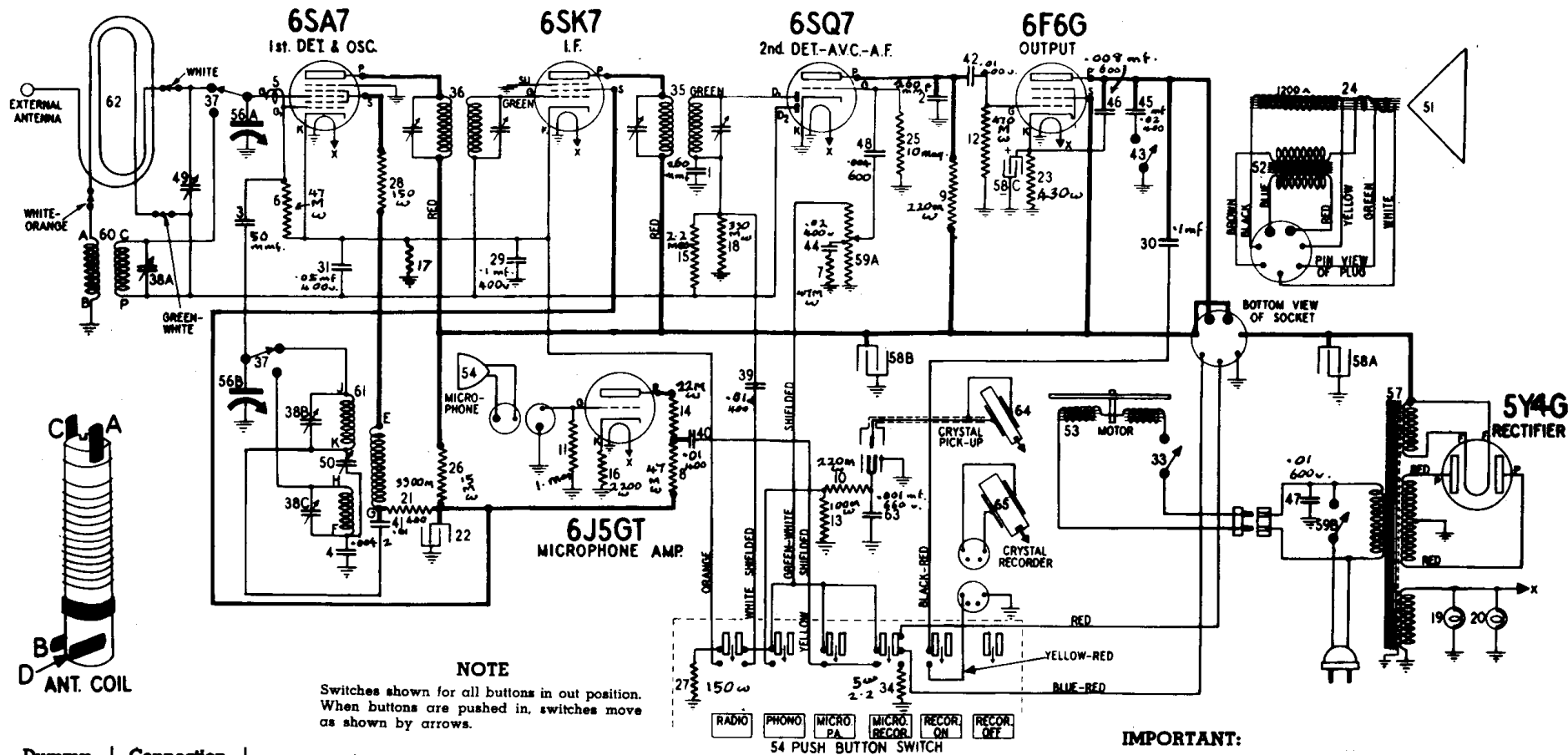
R-574-1

STEWART-WARNER DATA SHEET 146

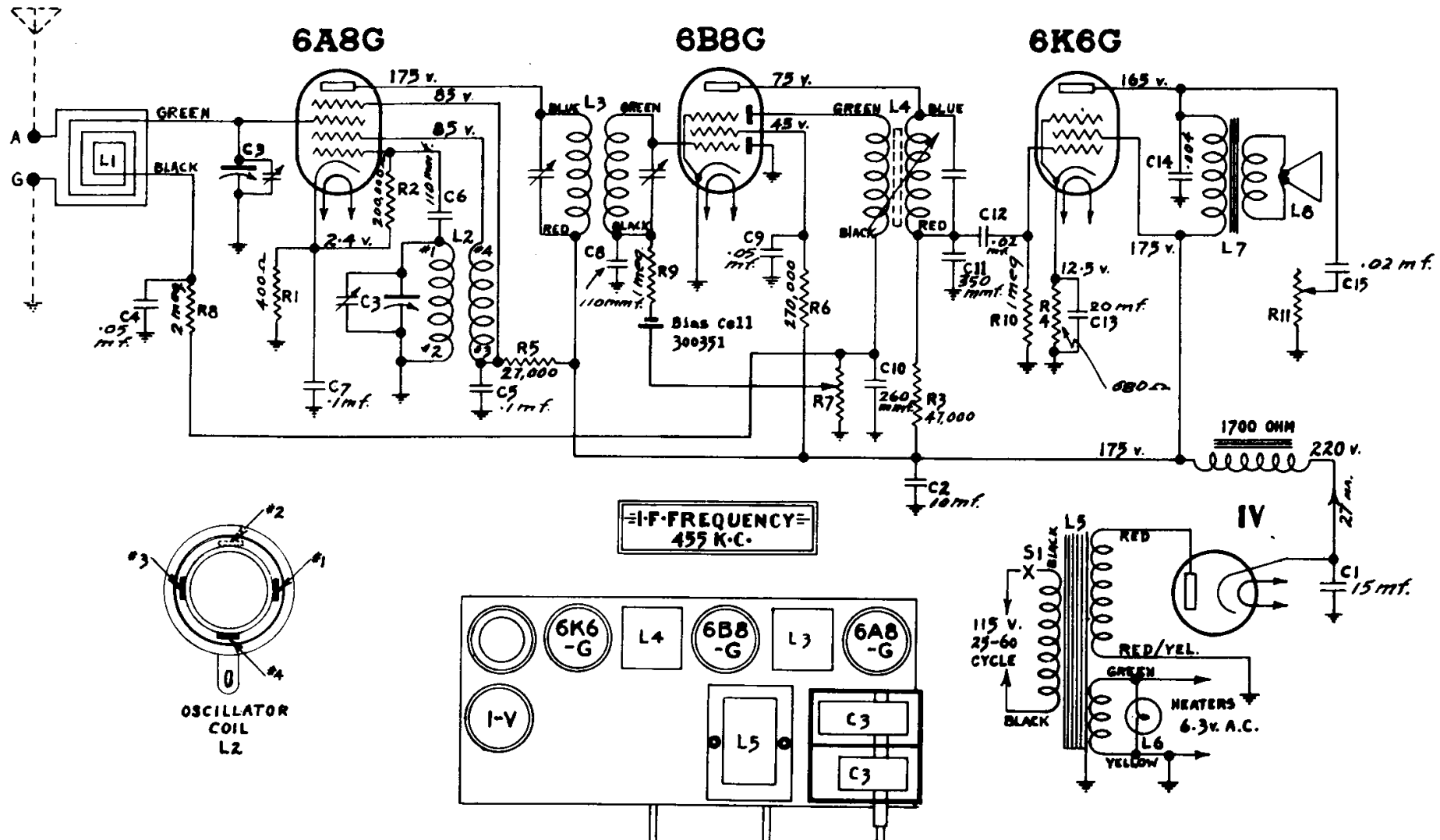
Battery/AC/DC set, but with two output stages: one for battery, one for mains



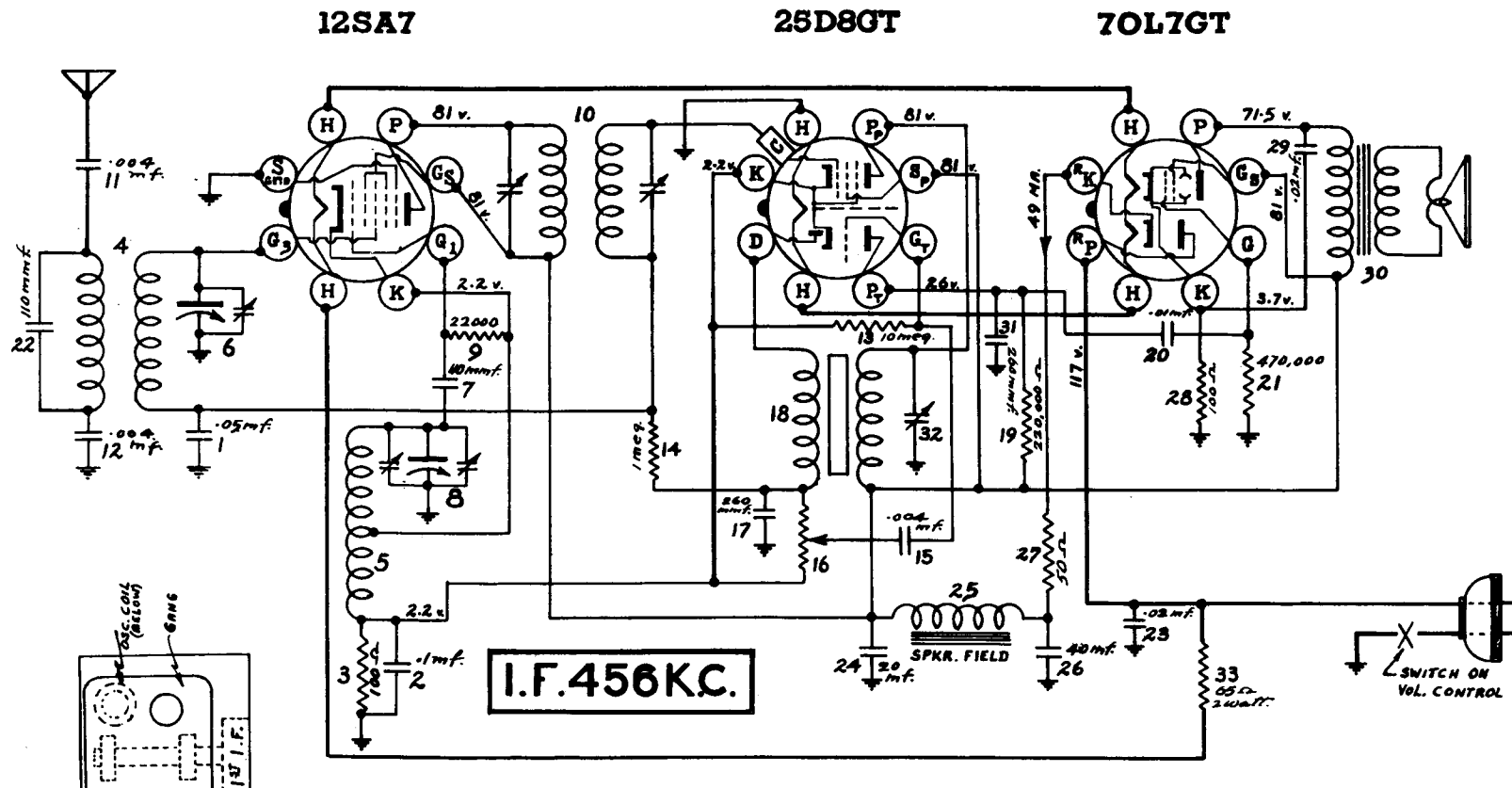
Radio/phonograph, with phono cutter



Economy 4-tube superhet: Reflex IF & Audio

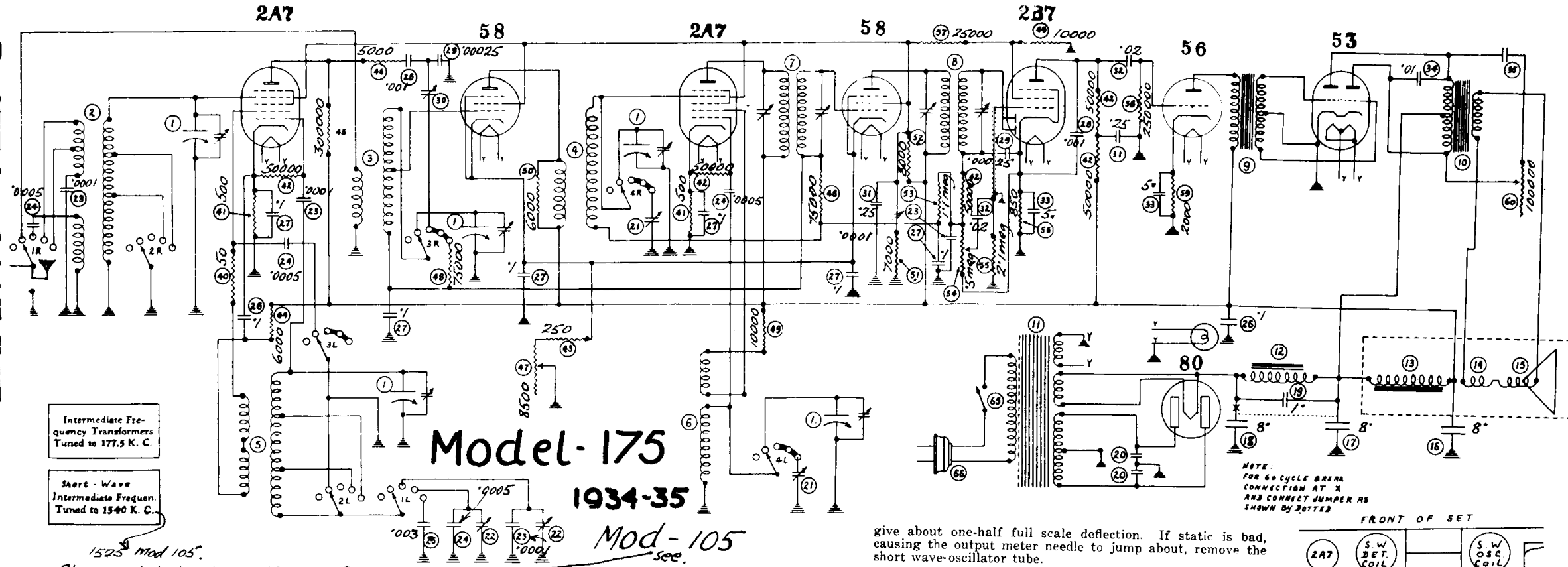


Ultra-Economy 3-tube superhet. Not reflex!



Single-Conversion Broadcast / Dual Conversion Short Wave

DATA SHEET



Alignment Instructions Mods 175-105.
There are five distinct circuits to be aligned in the 105 receiver. The order in which they are given below is the

(I) ALIGNING THE I. F. CIRCUITS AT 177.5 K. C.

give about one-half full scale deflection. If static is bad, causing the output meter needle to jump about, remove the short wave-oscillator tube.

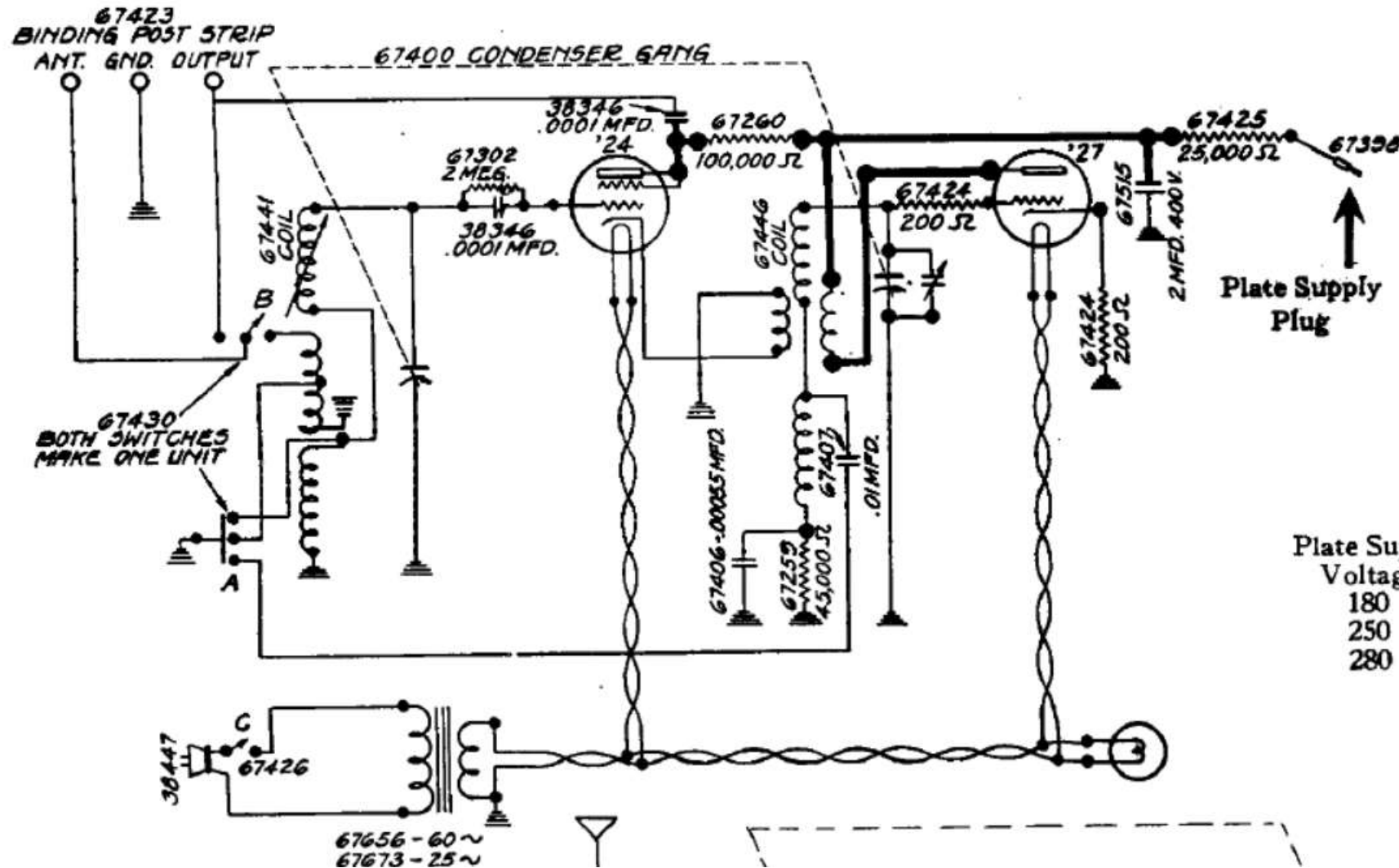
Using a Bakelite screwdriver, adjust trimmers Nos. 10, 11 and 12 to give maximum output.

NOTE: It should never be necessary to adjust trimmer No. 13.

Short Wave Converter

Circuit Data of Stewart-Warner Short Wave Converter R301-A, B, and E

1931-32-33-34



SWITCH POSITIONS

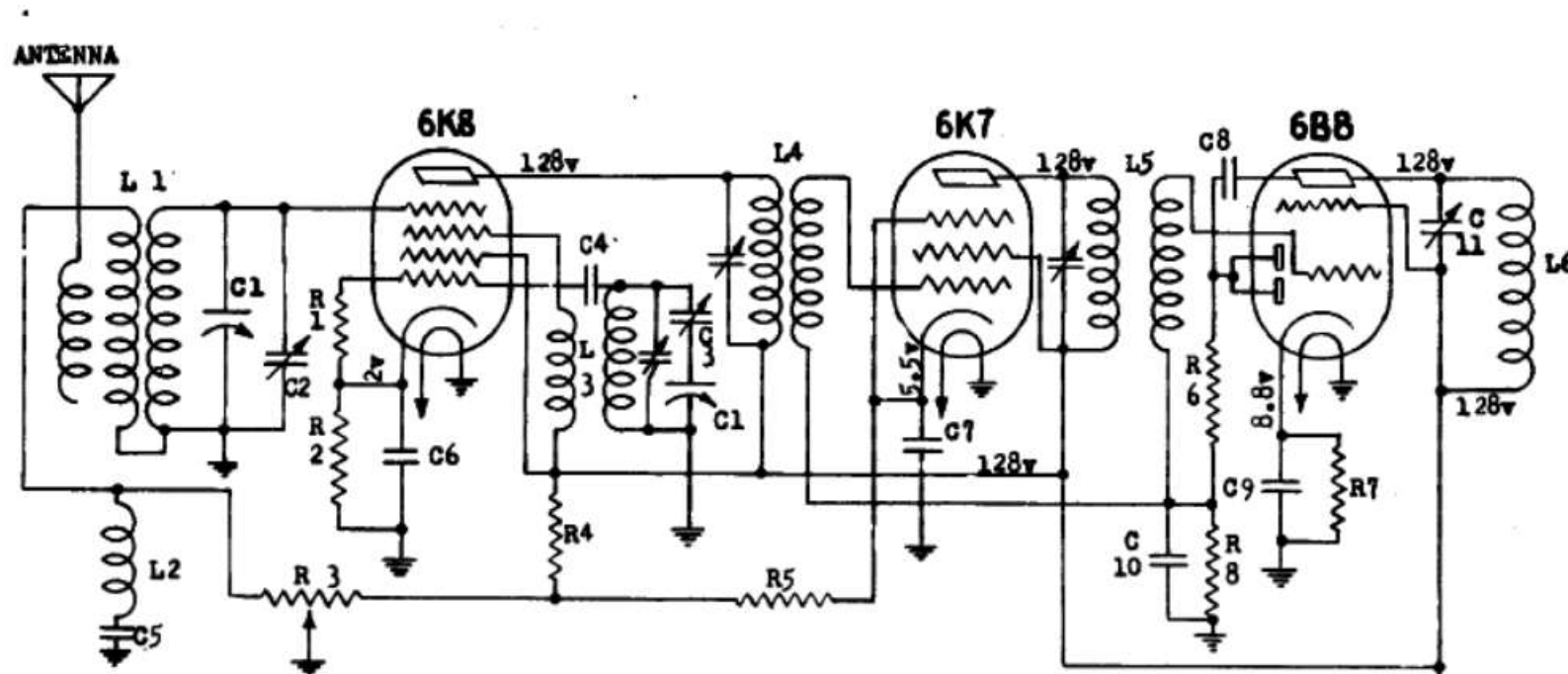
- A - 'OFF' IN POSITION 1 AND 2 OF SELECTOR SWITCH
'ON' IN POSITION 3 OF SELECTOR SWITCH
- B - TO OUTPUT POST IN POSITION 1
TO COIL IN POSITIONS 2 AND 3
- C - 'OFF' IN POSITION 1 OF SELECTOR SWITCH
'ON' IN POSITION 2 AND 3 OF SELECTOR SWITCH

Plate Supply
Voltage
180
250
280

'24 Plate
26
34
37

'27 Plate
70
93
102

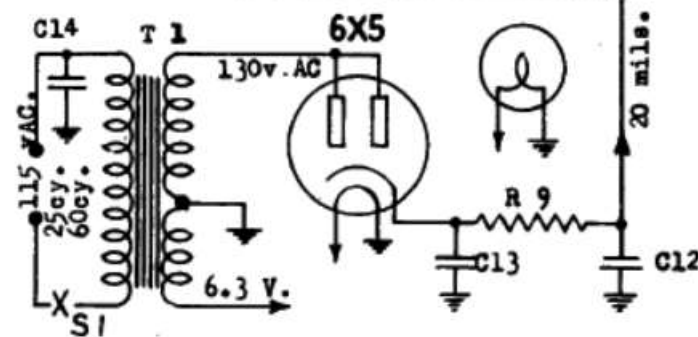
“Magic Tuner”



MODEL R-432
"MAGIC TUNER"

1938-39

Alignment Data



I.F. • 1570 Kc.

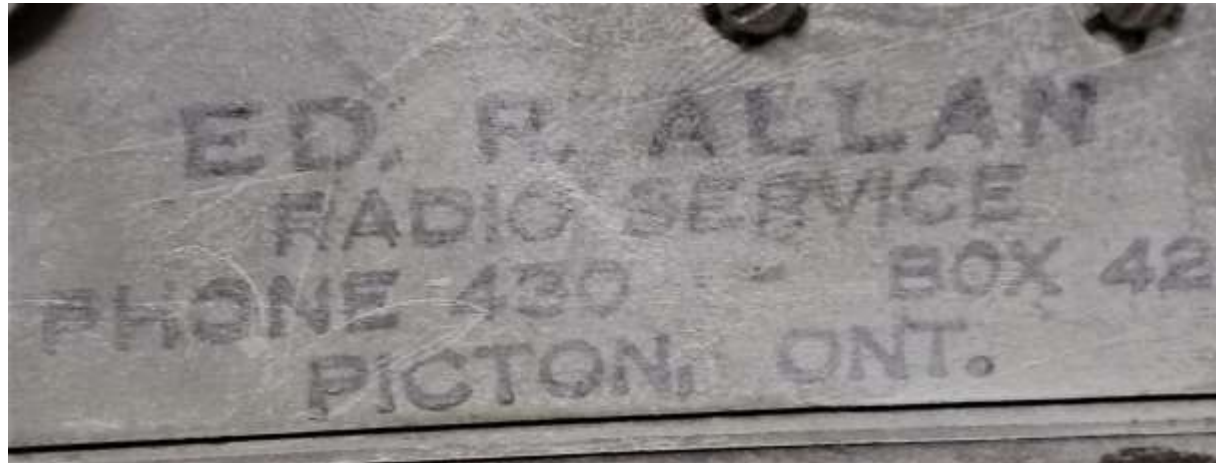
My Stewart Warner “Little Colonel”

- Standard AC-only 5 tube set.
- I have had it for at least 45 years.
- My Grandfather got it in Picton.
- As received, it had a dud “1V” rectifier and dud transformer (likely related).
- The transformer was replaced with one from a European radio (so, it works from 110 to 240V!), and the 1V was replaced with a silicon diode. Works great.





I'd love to learn more about Ed Allen.
Half of my radios are stamped with
his name!



Brian Griffin's S-W



Brian Griffin's Stewart-Warner
Battery set (2V tubes)

Circa 1938

A very unusual size! (or Brian has
turned into a giant)

From Ed Kraushar's Collection

STEWART WARNER 705



STEWART WARNER 806



STEWART WARNER 300

STEWART WARNER 345





STEWART WARNER R-402



Bird House Speaker

Pretty Pictures form the Web



91-513



R-1262



Model 300 (circa 1925)



91-65



Image courtesy of James LeFevre

B92CR3LP



62 T36



1691 Cube



R1362A



108X





R452



R486S: A Baby Grand