



Mid-Atlantic Antique Radio Club

Collecting and Preserving Our Electronics Heritage

CAR RADIO

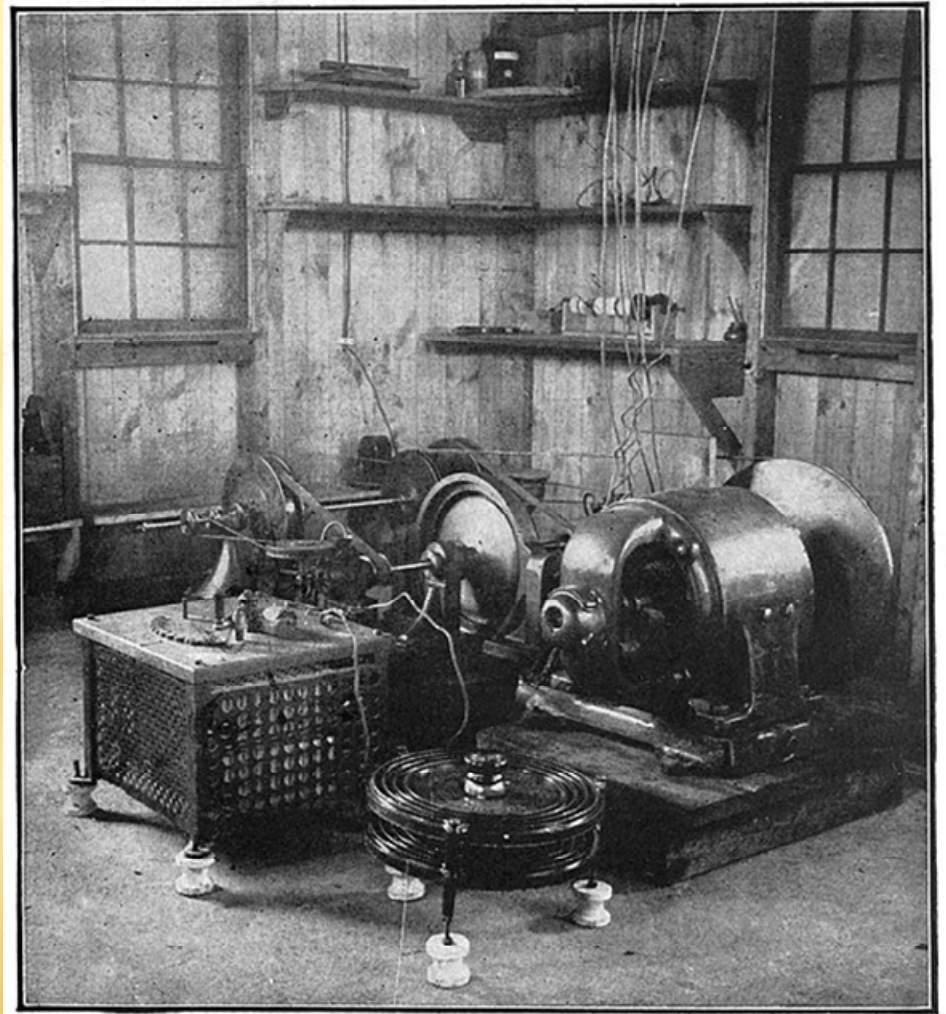
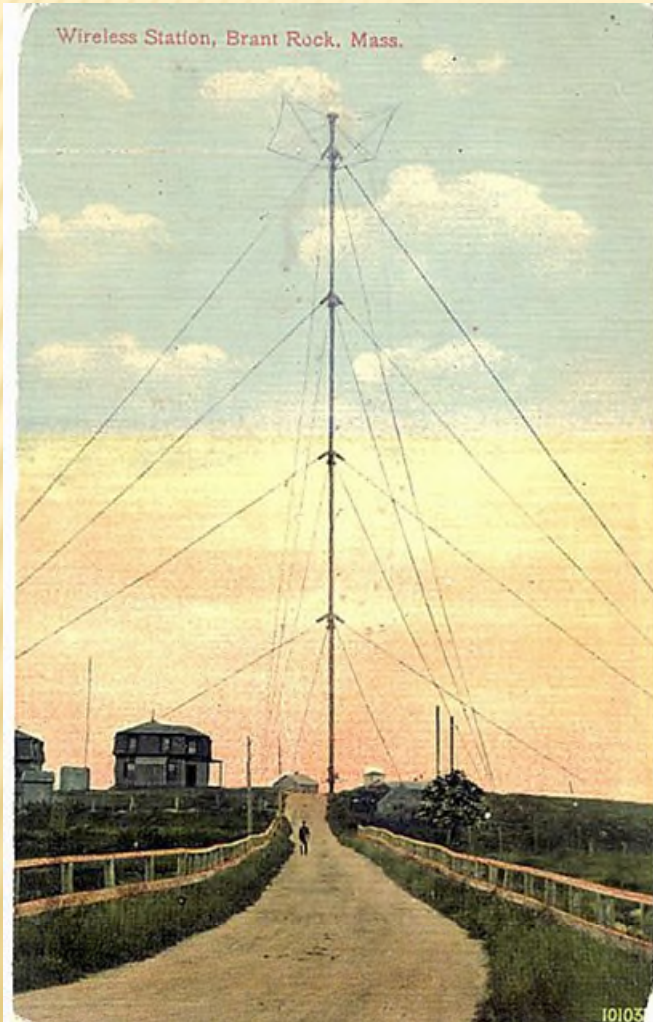
Dave Rossetti

17 November 2019



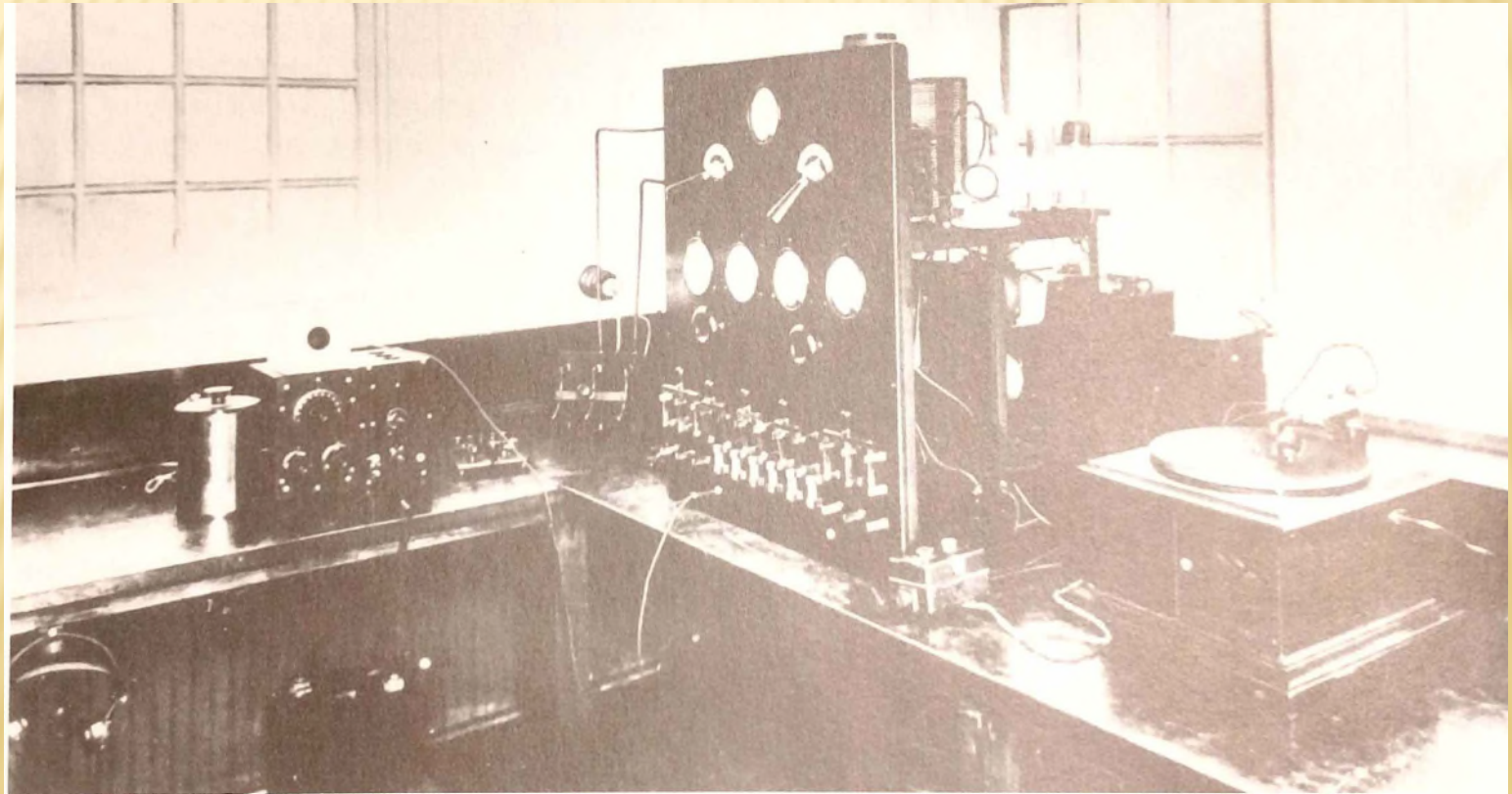
IN THE BEGINNING - FIRST MODULATED COMMUNICATIONS

- Reginald Fessenden – Christmas Eve, 1906



FIRST COMMERCIALY LICENSED RADIO STATIONS IN AMERICA

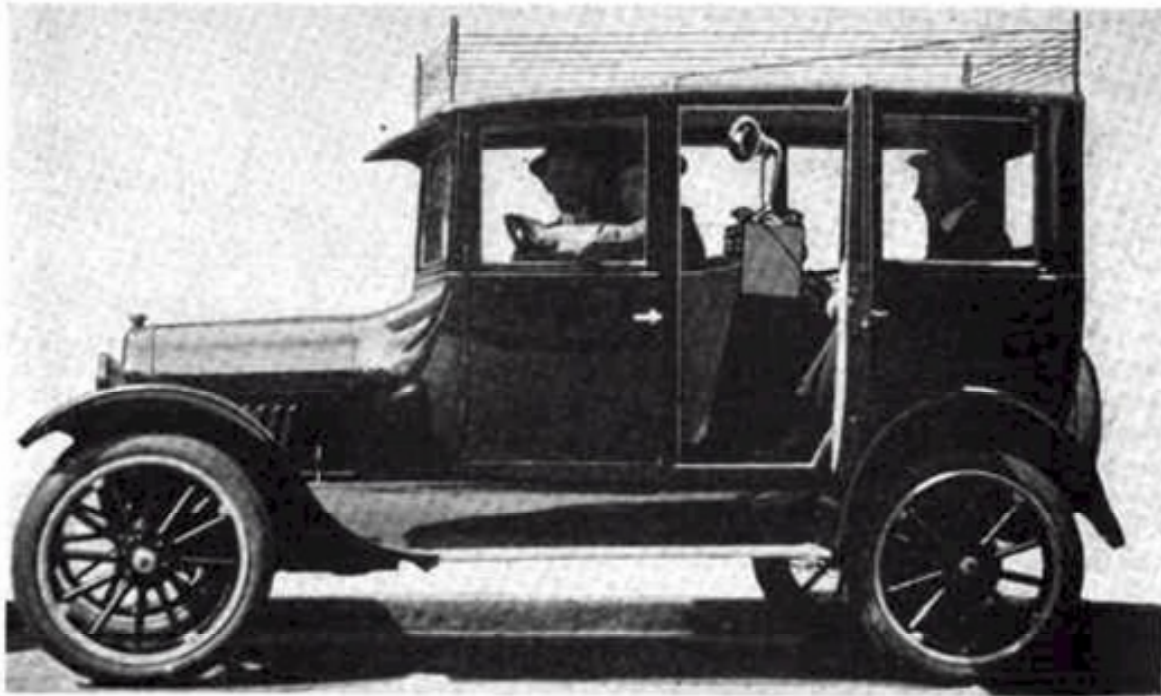
- KDKA, Pittsburg – November 2nd, 1920
- Harding-Cox presidential election results as its inaugural show



FIRST COMMERCIALY AVAILABLE CAR WITH RADIO

➤ 1922 Chevrolet

Sedan Equipped for Radio Receiving

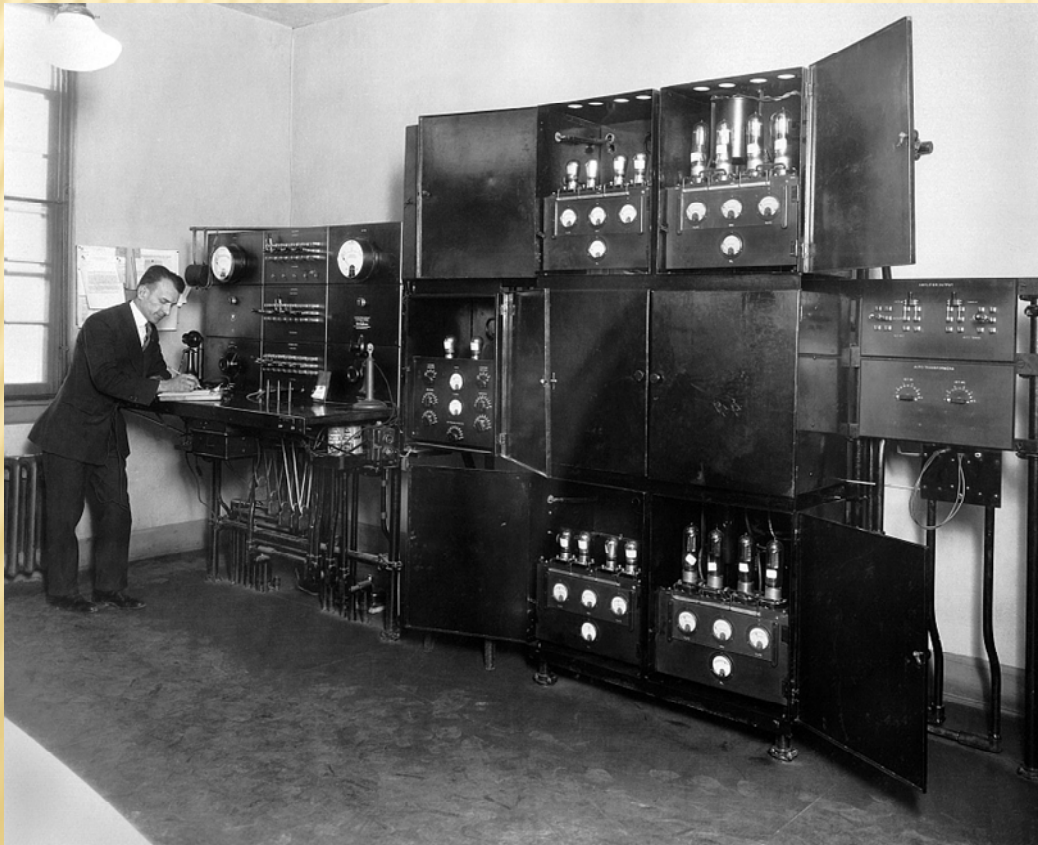


DETROIT, May 8—Satisfactory use of a radio receiving instrument in an automobile without the use of a “ground” has been demonstrated by the Chevrolet Motor Co. With a car equipped with a radio receiver the tourist or picnicker could enjoy concerts and receive news and market reports wherever he happen-

ed to stop, within a reasonable distance of a broadcasting station, the company states. The instrument installed in the Chevrolet may be readily removed to the home, office or other place for use. The company predicts that hereafter many automobiles will be equipped with radio instruments.

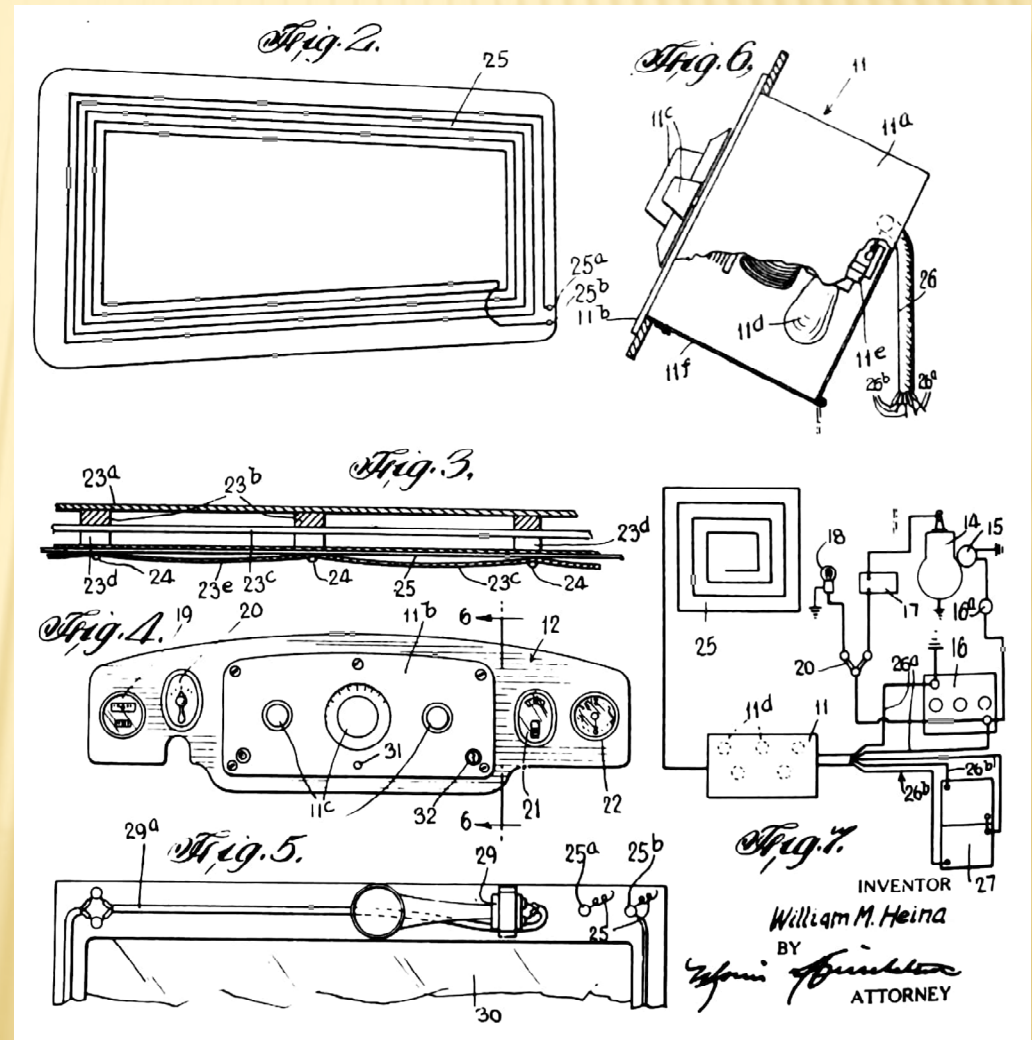
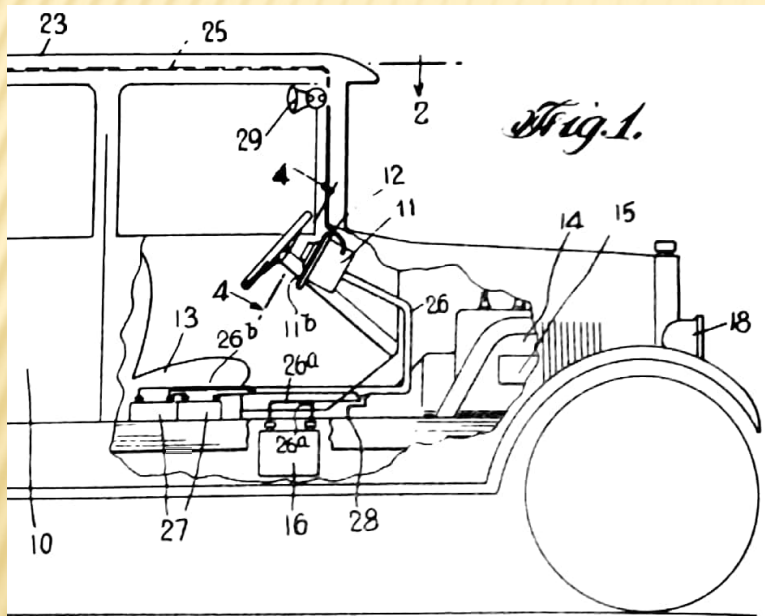
SUPER-POWER RADIO STATIONS

- 1926 – WJZ, with transmitter in Bound Brook, NJ, and studio in NYC, goes from 1,000 to 50,000 watts



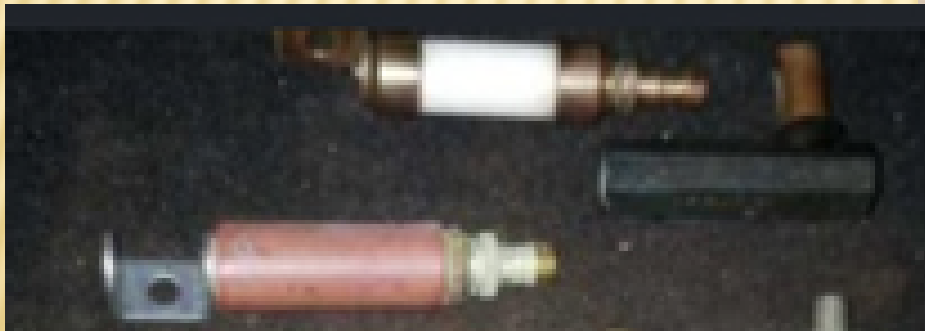
AUTOMOBILE RADIO PATENT

- 1926 – William Heina files a patent for the Heinaphone.



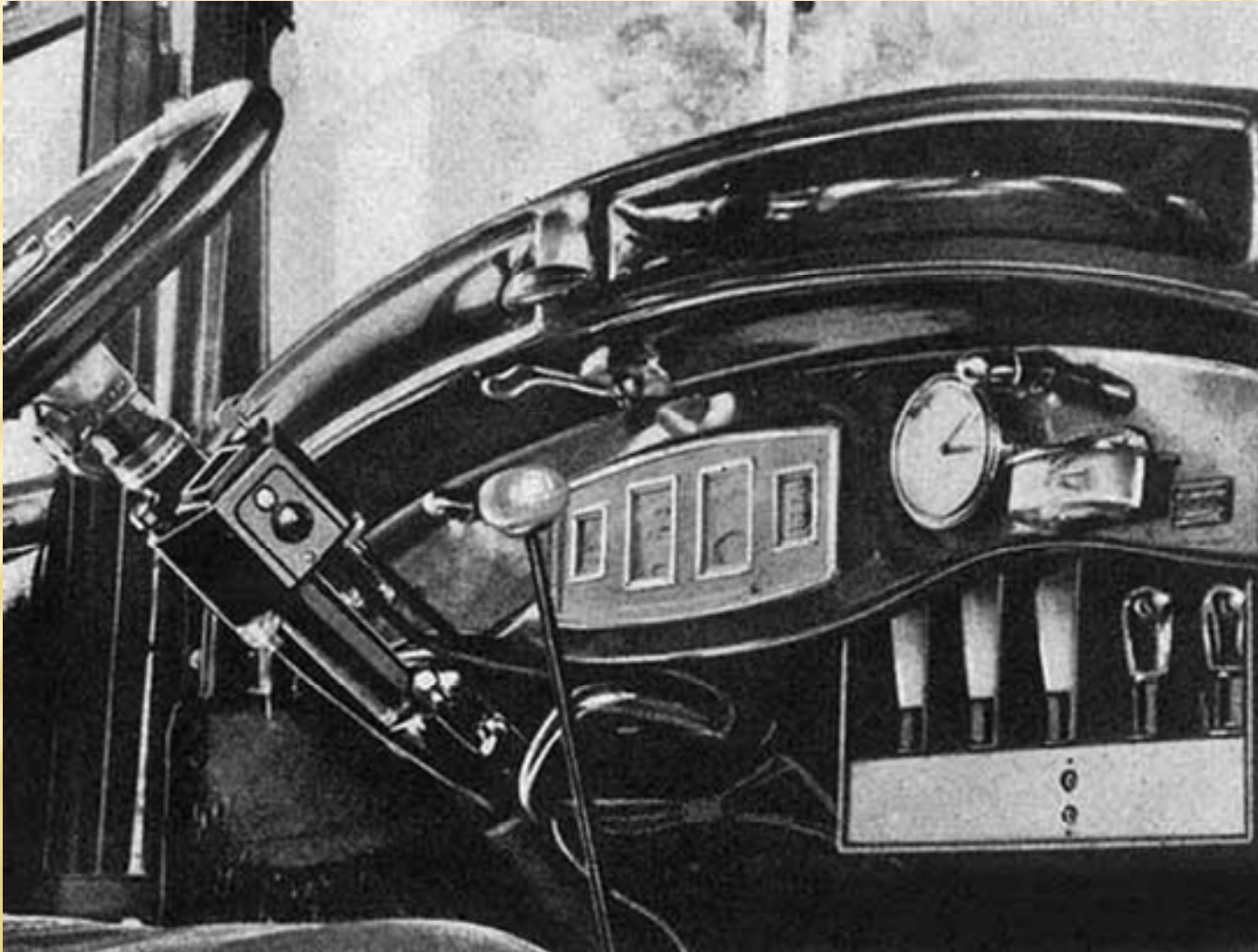
SPARK PLUG SUPPRESSORS

- 1927 – Mr. A. A. Leonard of the Automobile Radio Corporation develops the Spark Plug Suppressor.



AUTOMOBILE RADIO CORPORATION INTRODUCES THE TRANSITONE

- 1929 – The Transitone based on Heina's patent



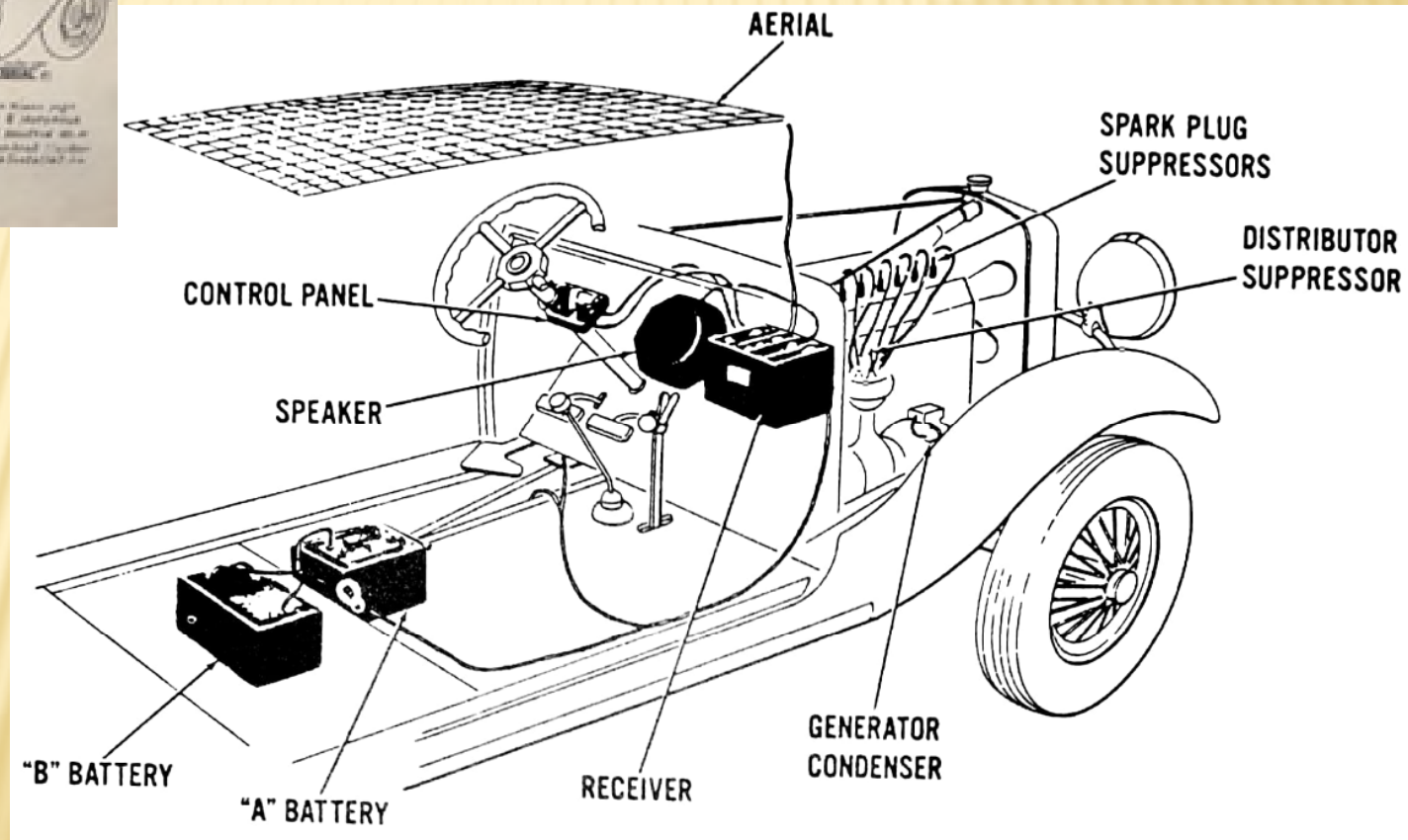
GALVIN ENTERS THE CAR RADIO MARKET

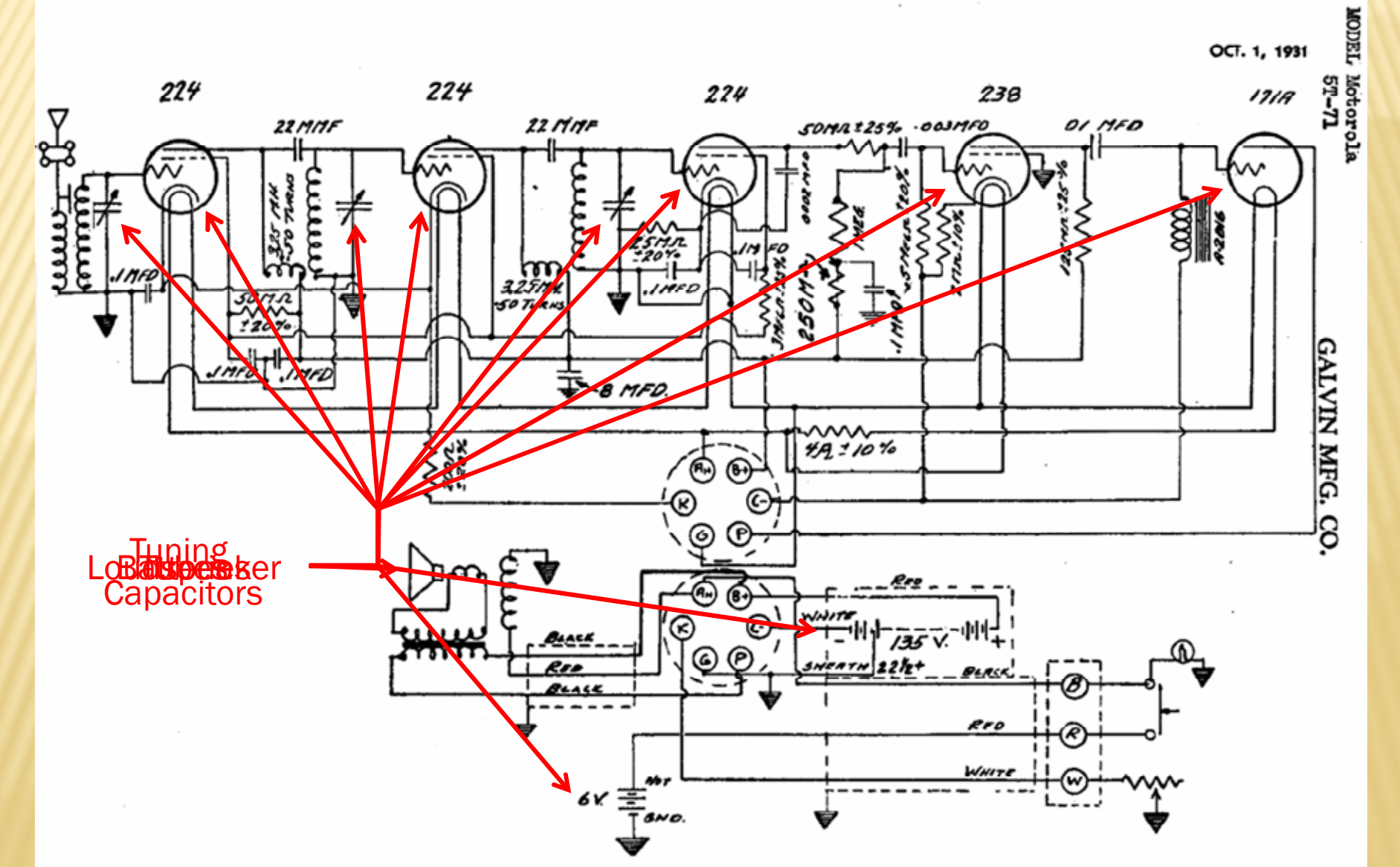
- 1930 – ‘Motorola’ (concatenation of ‘Motor’ and ‘Victrola’) becomes the first mass-produced car radio

Motorola
MODEL
5T71



INSTALLING A MOTOROLA RADIO





MOTOROLA, WAVERING, AND LEAR



DYNAMIC CAR RADIO GROWTH

- Ten new companies making car radios by the end of 1930
- 1931 – Automatic Volume Control, new 6.3 filament volt tubes, and the Magnavox developed dynamic speaker were incorporated into car radio offerings

NEW B+ SOURCES - DYNAMOTOR

- 1932 – Dynamotors come on the scene.

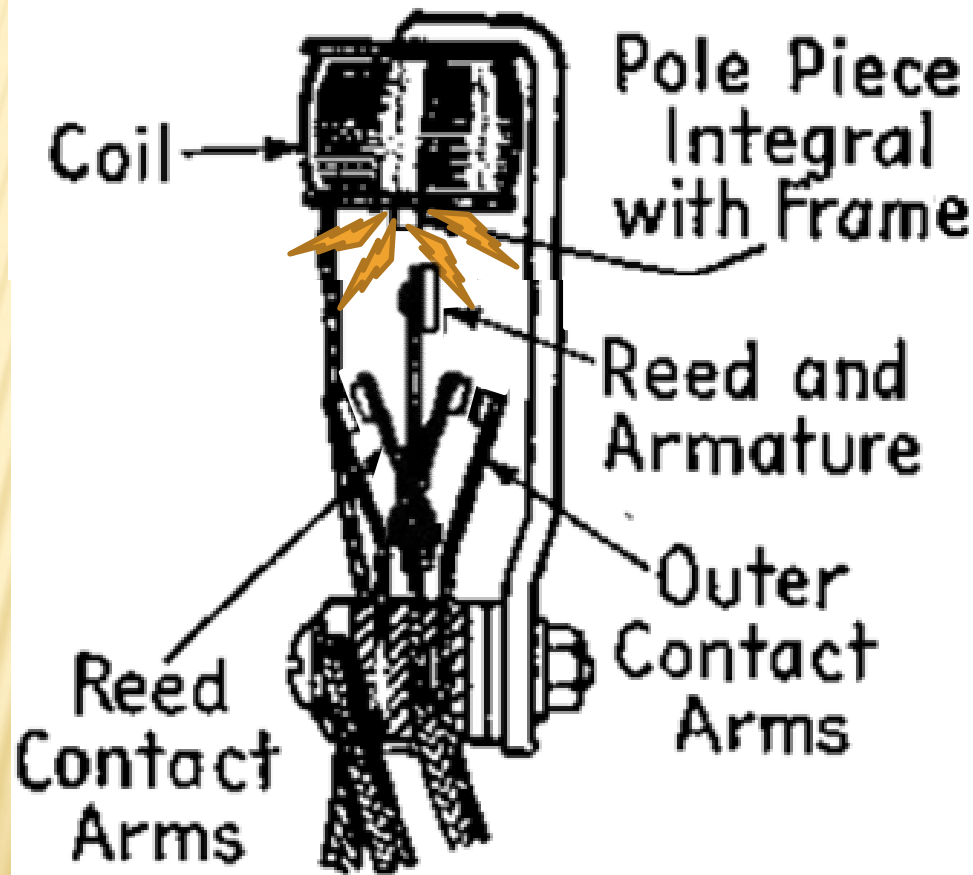


NEW B+ SOURCES - VIBRATORS

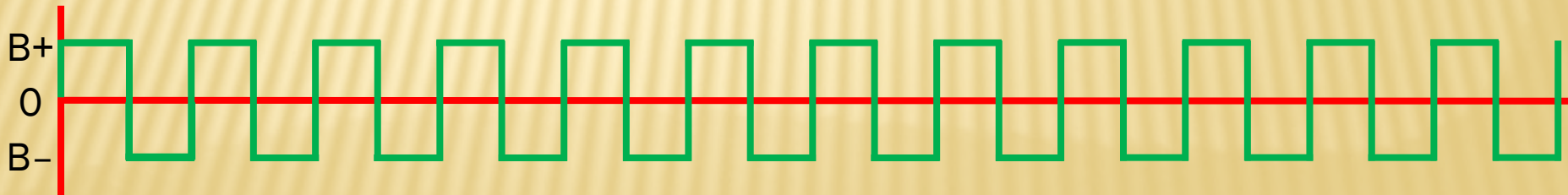
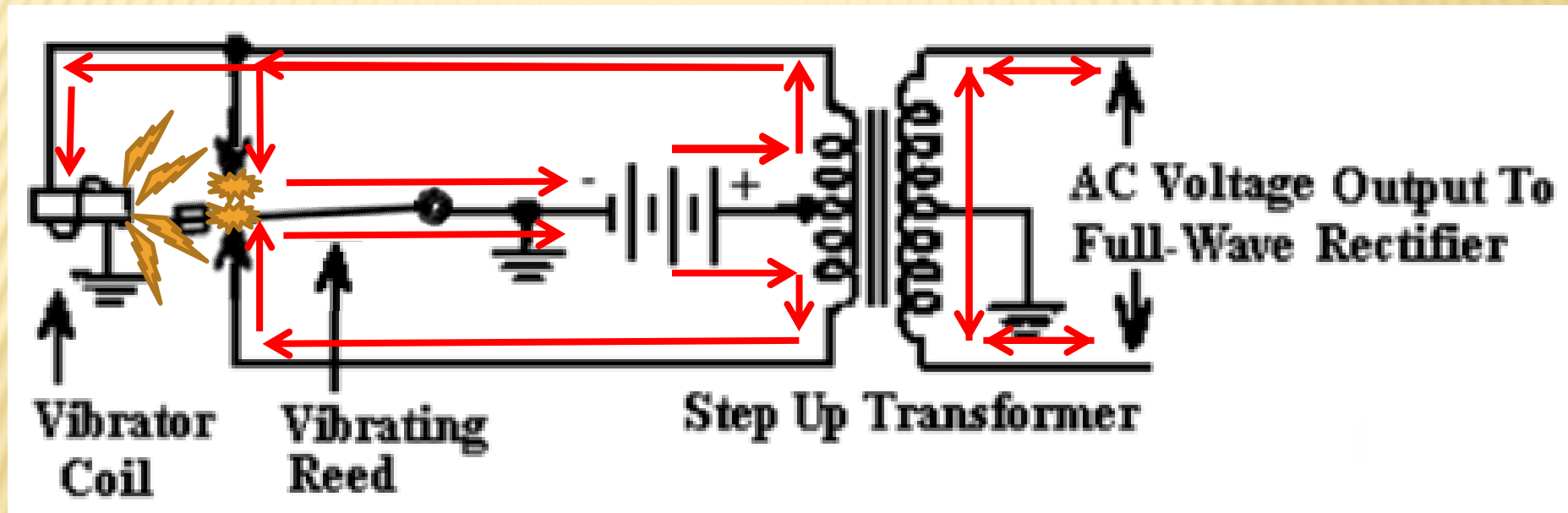
- 1932 – Vibrators come into use.



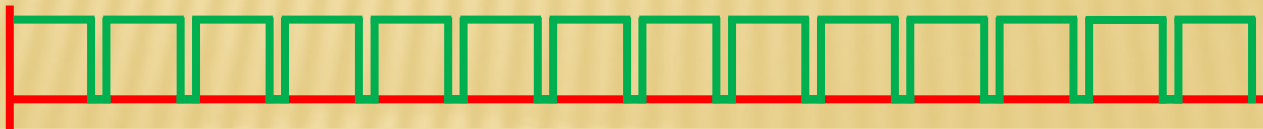
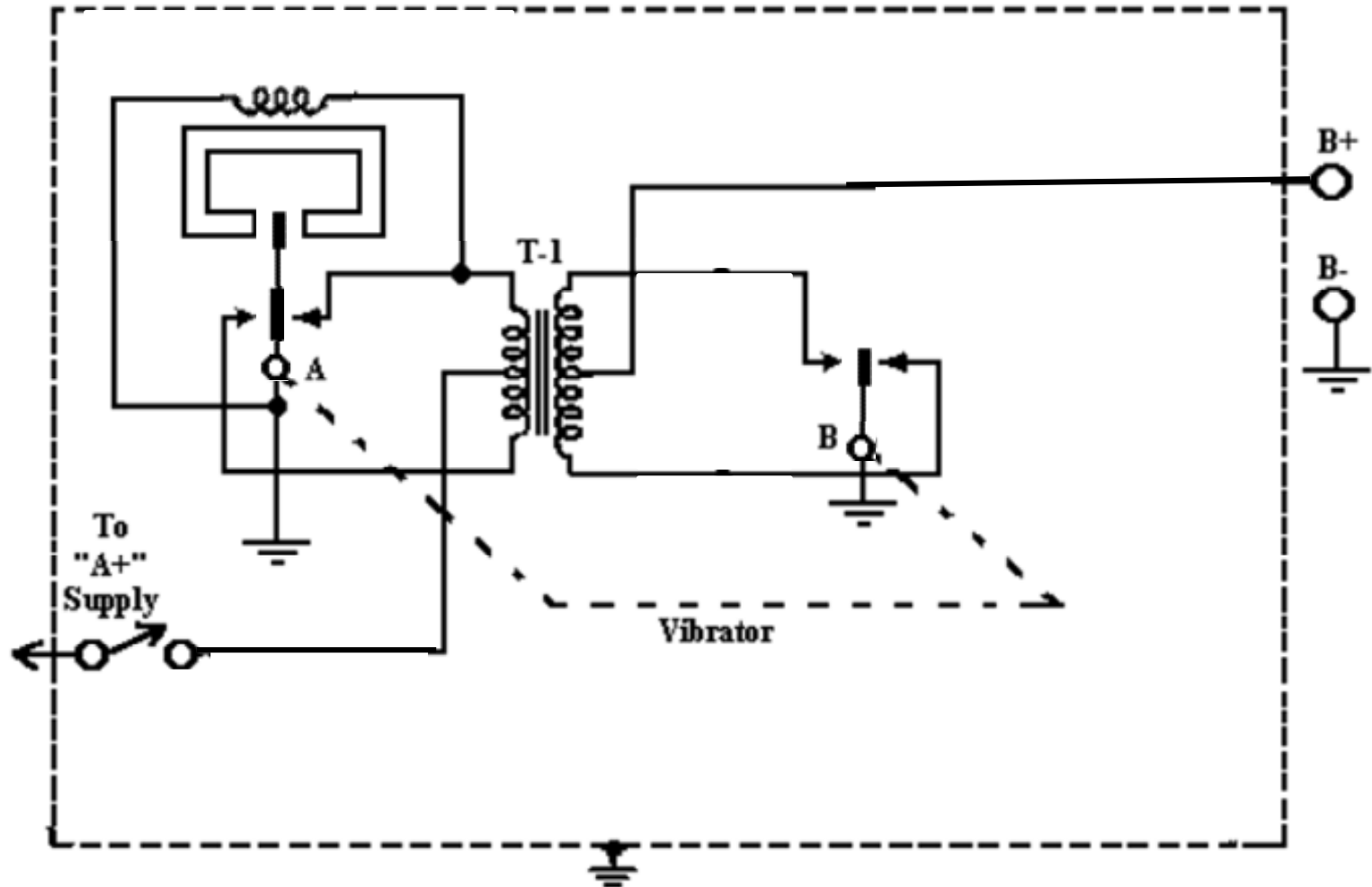
VIBRATOR INTERNALS



HOW DOES A VIBRATOR WORK?



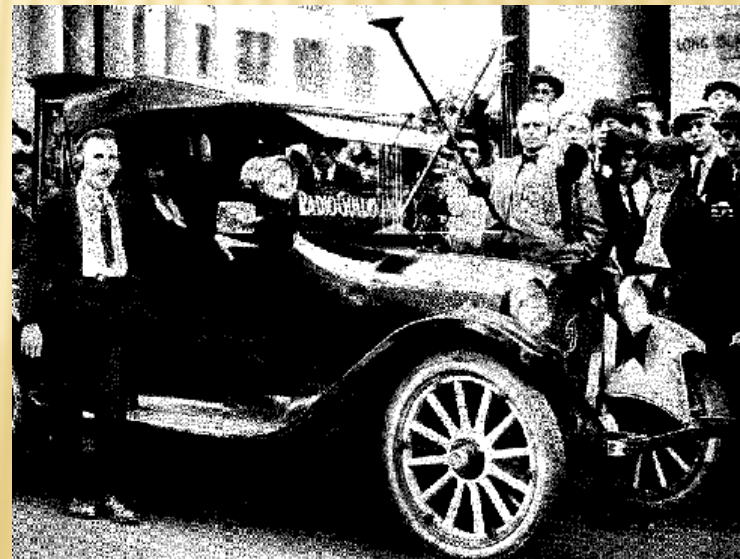
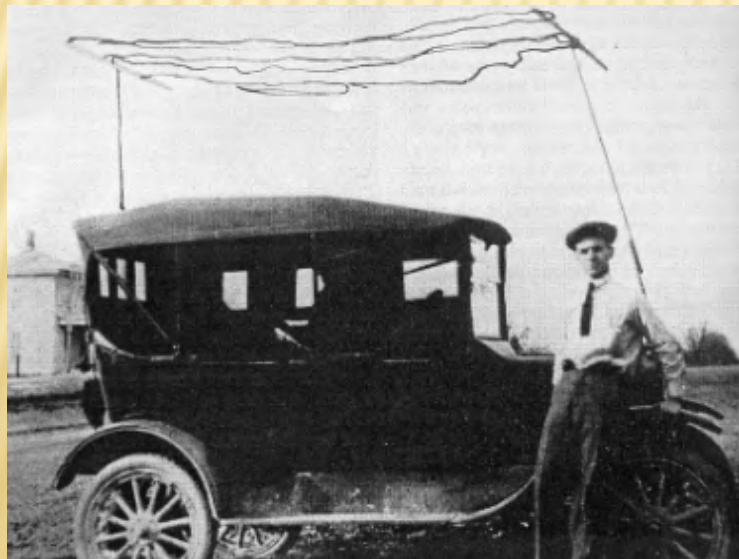
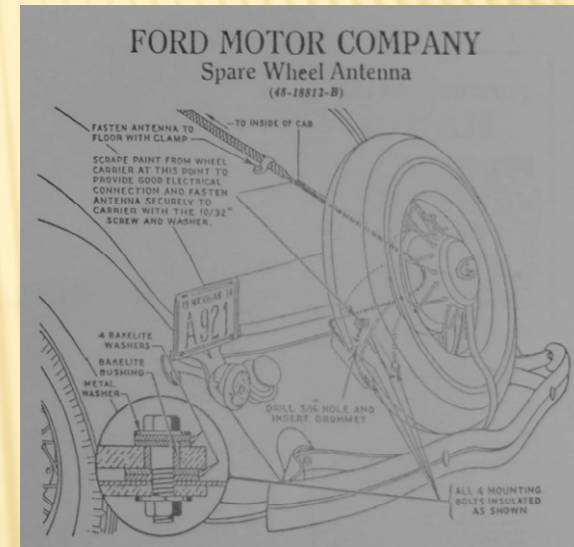
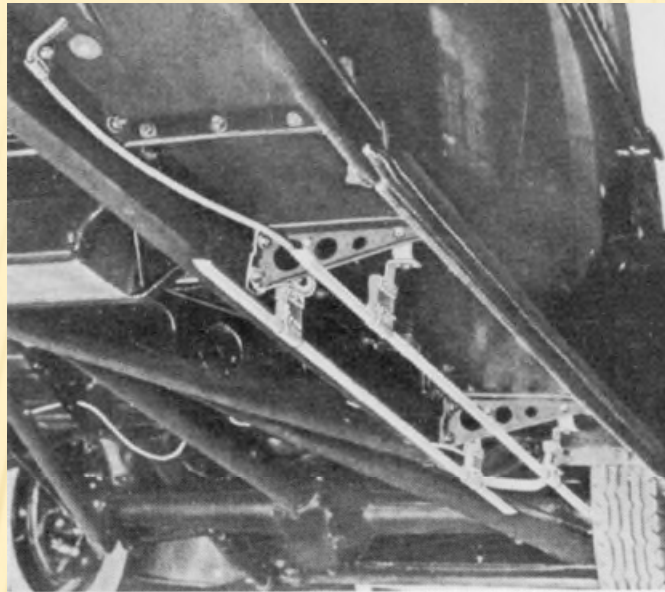
SYNCHRONOUS VIBRATOR – MECHANICAL RECTIFICATION



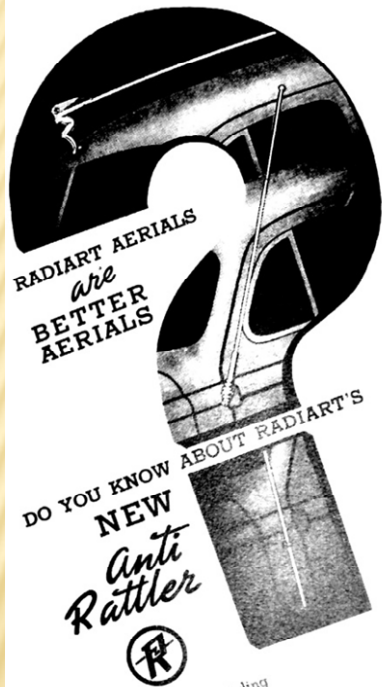
MORE ADVANCEMENTS

- 1933 – New tubes introduced
- Car manufacturers were increasingly offering radios integrated into the dashboard
- 1935 – Motorola introduces a “Supressorless” radio
- The all-steel, ‘turret top’ car construction becomes popular

EARLY CAR RADIO ANTENNAS



WHIP ANTENNAS



FIRST, it was Radiart Styling service men learned that Radiart Aerials are quiet, electrically — because built by a manufacturer who has ALWAYS done precision work. Owners found that Radiart aerials don't rust, tarnish or corrode, because Radiart demands, and pays for, the highest grade of nickel AND chrome plating on Admiralty Brass. Now comes the latest Radiart betterment — an ANTI-RATTLER (Patent Applied for) which, at last, quiets that maddening noise of long telescopic aerials. Learn about the Anti-Rattler. Learn the whole Radiart Story of quality and profit.

THE RADIART CORP.
SHAW AVENUE, CLEVELAND, OHIO
Makers of RADIART VIBRATORS

*It's RADIART
for AERIALS in '38*



Introducing the
CHIEFTAIN
MODEL F. M. — \$2.45



**WARD'S
NEWEST
TOP AERIAL**

*Made of Stainless Steel and
Brass — Chromium Plated
— Telescopic*

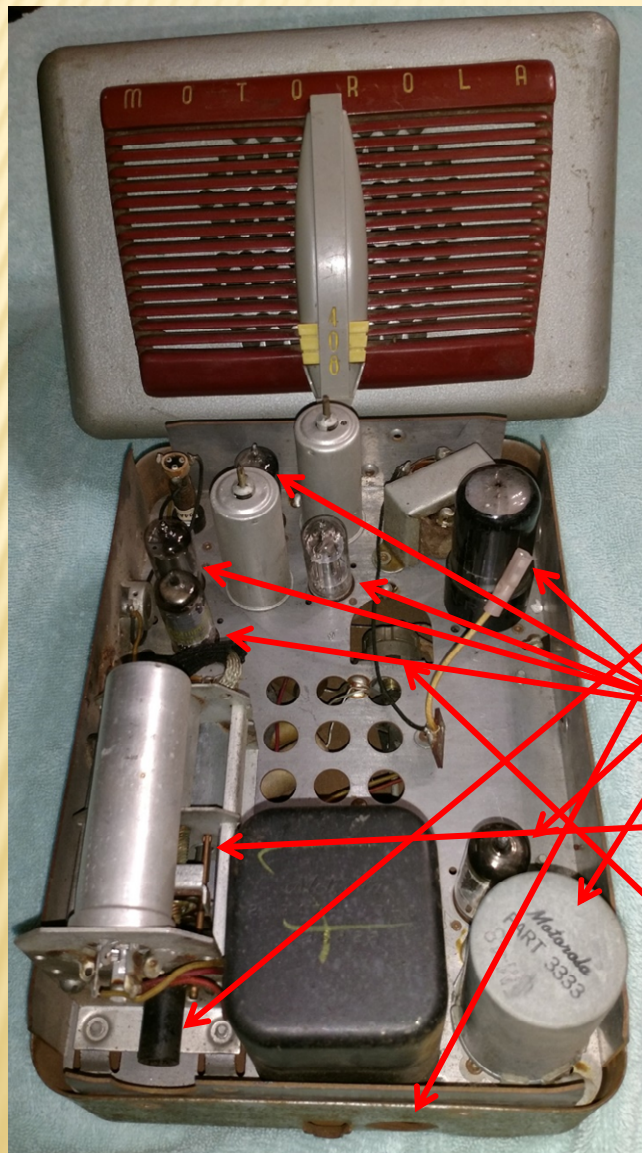
**WARD PRODUCTS CORPORATION
MANUFACTURES THE WORLD'S
FINEST LINE OF AERIALS
TOP — POLE — UNDERCAR
SEND FOR CATALOG TODAY**

WARD PRODUCTS CORP

WARD BUILDING

CLEVELAND, OHIO

POST WWII CAR RADIO



Splined
Sockets
Tubes
Vibrator
Inductive
Tuner
Volume
Control



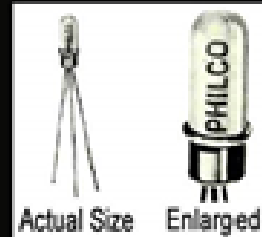
POST WWII CAR RADIO



New All-Transistor Car Radio (Model 914HR)



NO TUBES



NO TUBES

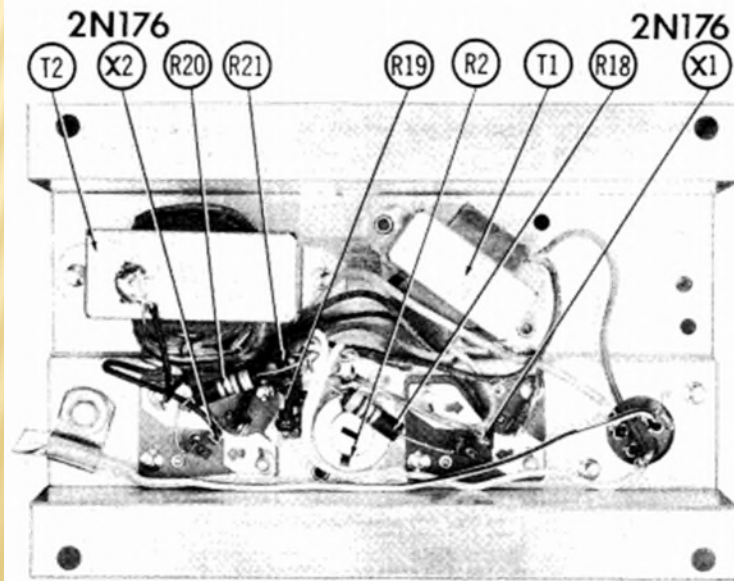
courtesy Rick Hinch

LOW VOLTAGE TUBES FOR CAR RADIO

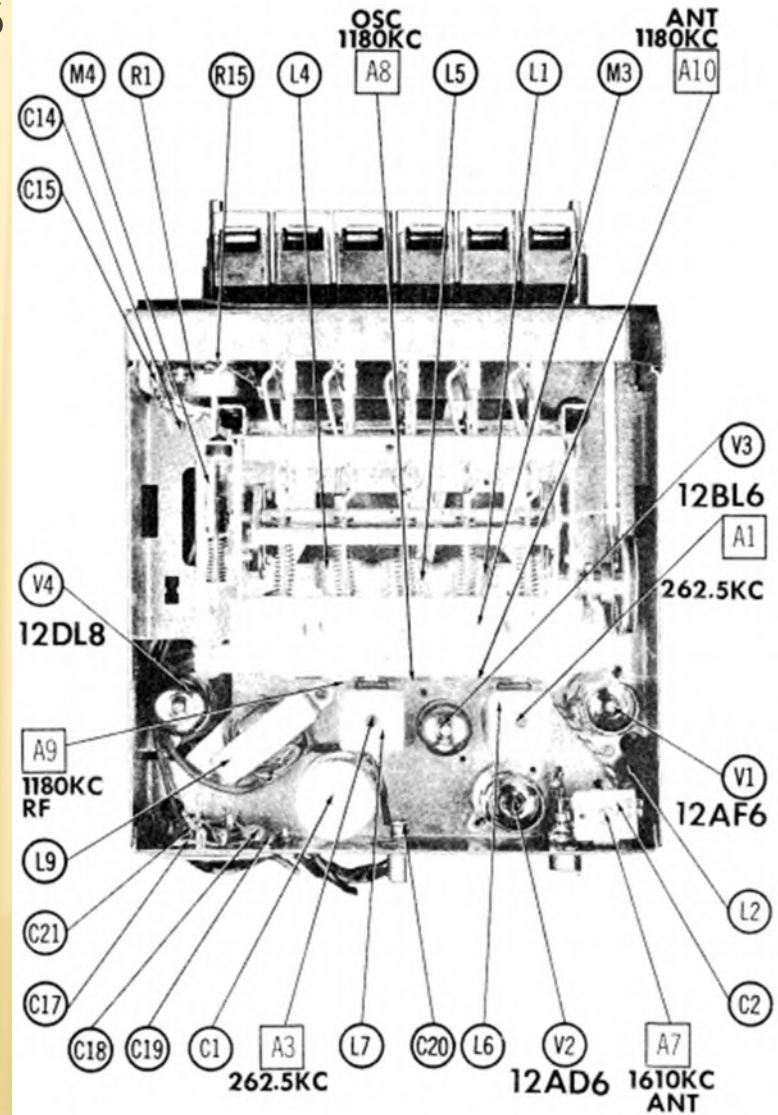
➤ 1958 – Hybrid Car Radios



POWER CHASSIS



CHASSIS—TOP VIEW



REFERENCES

- *The Auto Radio, A Romantic Genealogy*, Donald W. Matteson, 1987
- *Wikipedia* - Reginald Fessenden, KDKA Radio,
- <https://www.garemaritime.com/william-meriheina-inventive-survivor/>
- <http://www.oldcarradios.balsta.tv/histeng.htm>
- <https://laurenfix.com/article/history-car-radio/>
- <https://www.radiomuseum.org/>
- <https://zzzippy.com/auto/weird-and-wackey-history-automobile>
- <https://philcoradio.com/library/index.php/philco-history/chapter-3-leadership-in-radio/>
- <http://historysdumpster.blogspot.com/2016/11/the-history-of-car-audio.html?m=1>
- <https://images.app.goo.gl/XVWPfjmSe4ayjPcC7>
- <https://www.inventionandtech.com/content/radio-hits-road-1>
- <https://www.caranddriver.com/features/a15128476/the-history-of-car-radios/>
- <https://blog.nationwide.com/car-radio-history/>
- <https://images.app.goo.gl/GZiwmeWypQNrfuJZ9>
- <https://www.antiqueradios.com/forums/viewtopic.php?f=19&t=334201>