

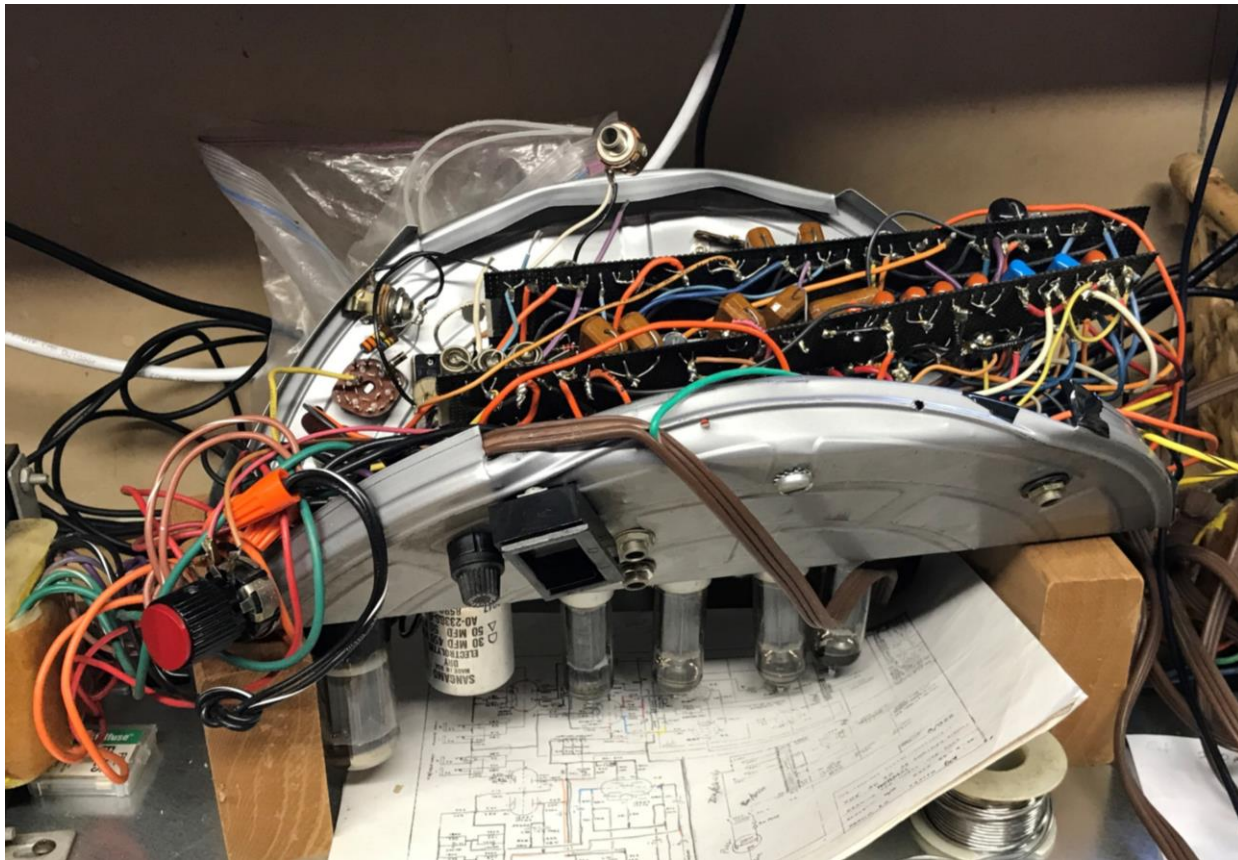
Dan Plaster's

VOX AC-30

Guitar Amplifier Project

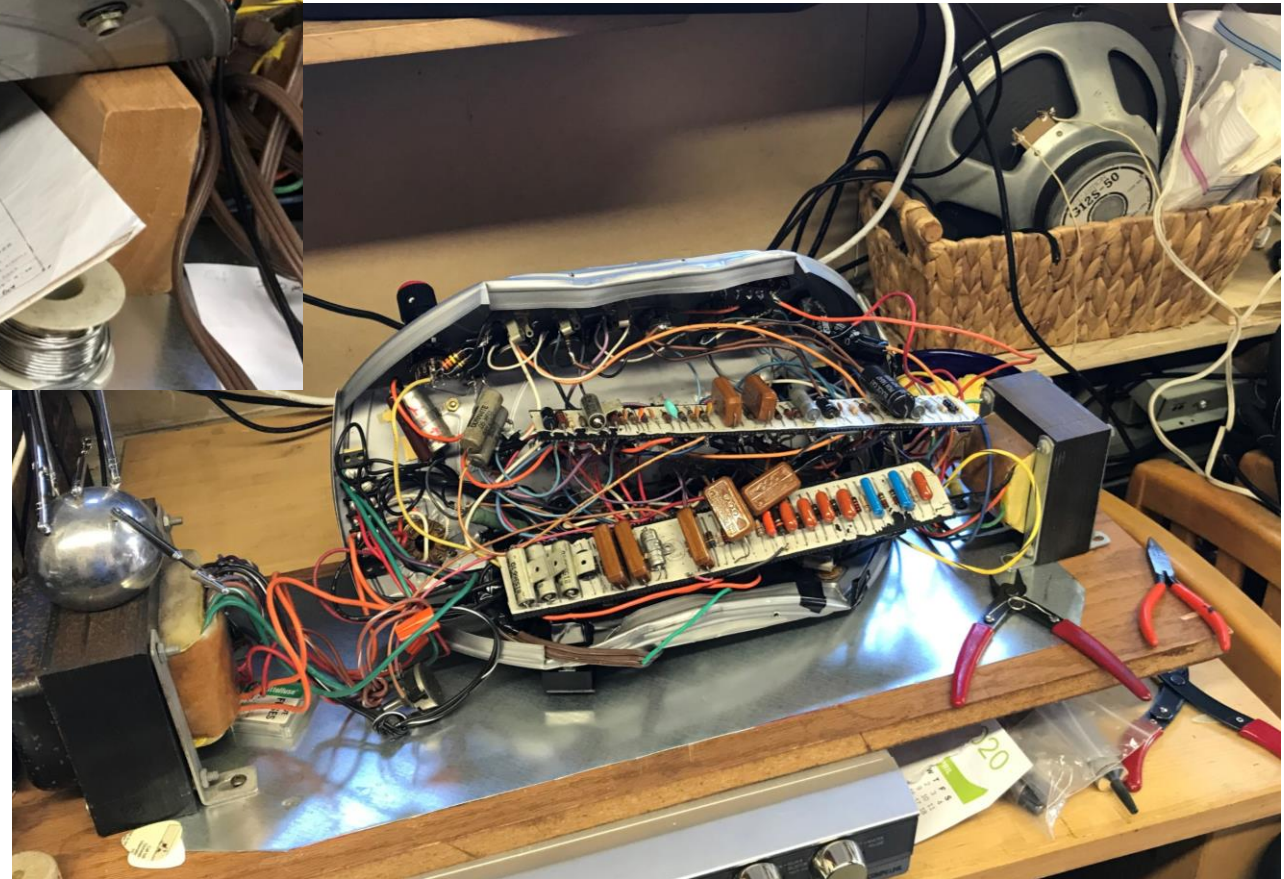
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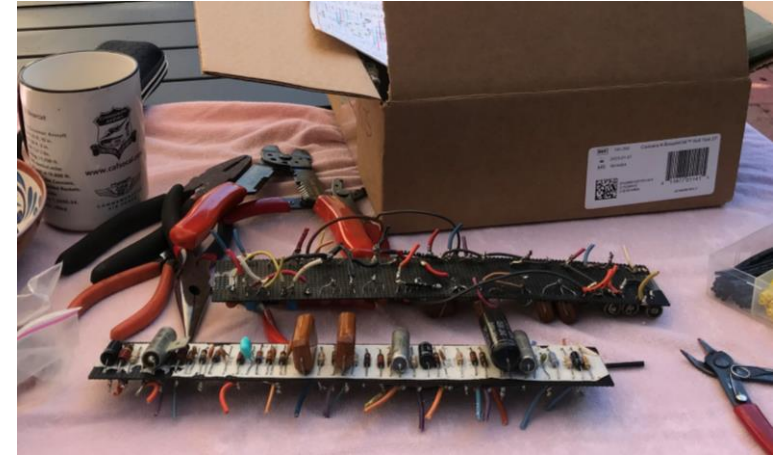
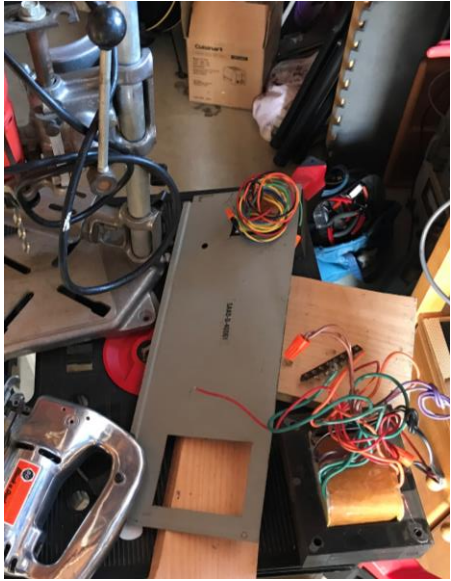
- New and salvage electronic components
- Schematics and assembly diagrams from books and online
 - Transformers and choke mfg'd by Mercury Magnetics
 - New chassis in 2022-2023 cut from surplus chassis
 - (first chassis in 1990s created from a film reel tin half)



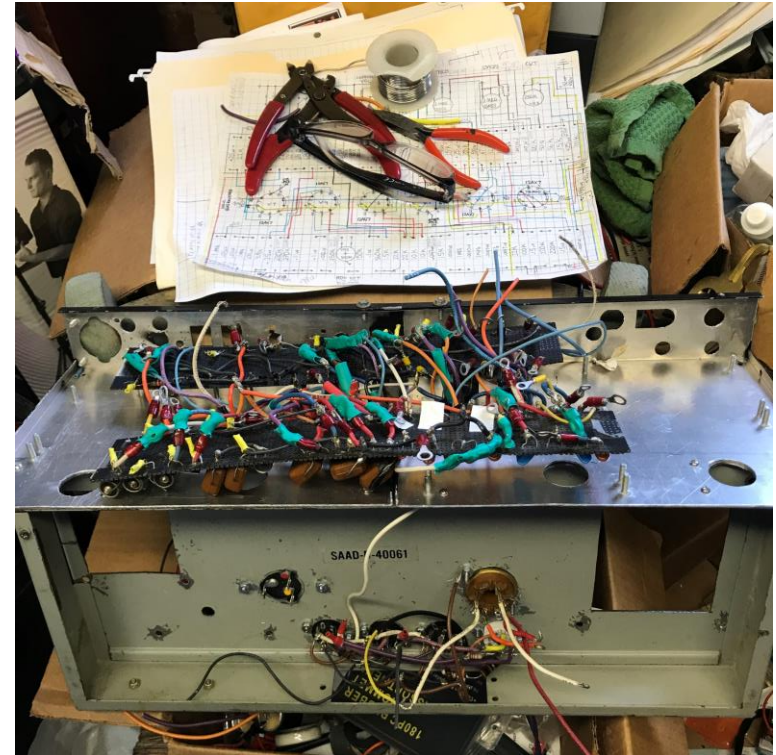
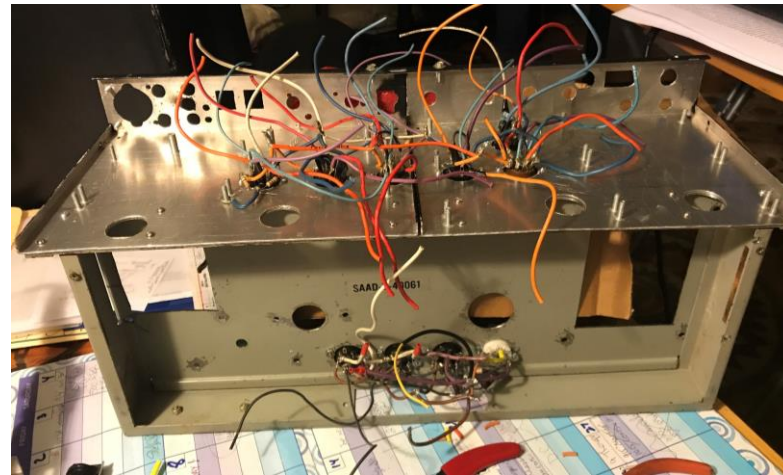
First attempt in mid 1990's using a shelf board and a film reel cover half. Shown here turned upside-down.

This attempt worked a bit but was very noisy and the tremolo and treble boost channels were not functioning well. It sat on a garage shelf for 25+ years with hopes of giving it another try, some day.





Military Reserves retirement and renewed electronics study in 2021 motivated a second effort in 2022. Two Surplus chassis purchased in the 90s were finally assembled and cut in the style of Vox amplifiers.



Circuit boards were kept intact. Holes cut & drilled into the chassis.



As of February 2023, after several months of gradual progress, the amplifier is sounding rather good with only a minor hum to resolve and the tremolo circuit not yet functioning. Having taken many hours to reach this stage, it is back in the garage awaiting completion of other neglected needs and projects. The intention for the next phase of work is to learn to use available oscilloscopes and a tone generator to assist in working out the remaining challenges.

Current process:

- resolve power amp hum
- reduce preamp buzz.
- change grounding wiring to minimize ground loops.



- studying online discussions and video about AC-30 amplifier constructions and troubleshooting.
- measuring resistance of ground connections.
- creating common grounding points for preamp and powers circuits.





Progress made so far,

- Reduced power amp hum and preamp buzz
- Tremolo/Vibrato channel it now working although not with great depth.
- Tonal range of amplifier is rewarding and it could potentially be brought up to performance readiness. (A cabinet for amp & speakers will be needed.)



- First recorded track made: rhythm guitar riff for Beatle's "I've Got A Feeling" to be developed by high school friends.