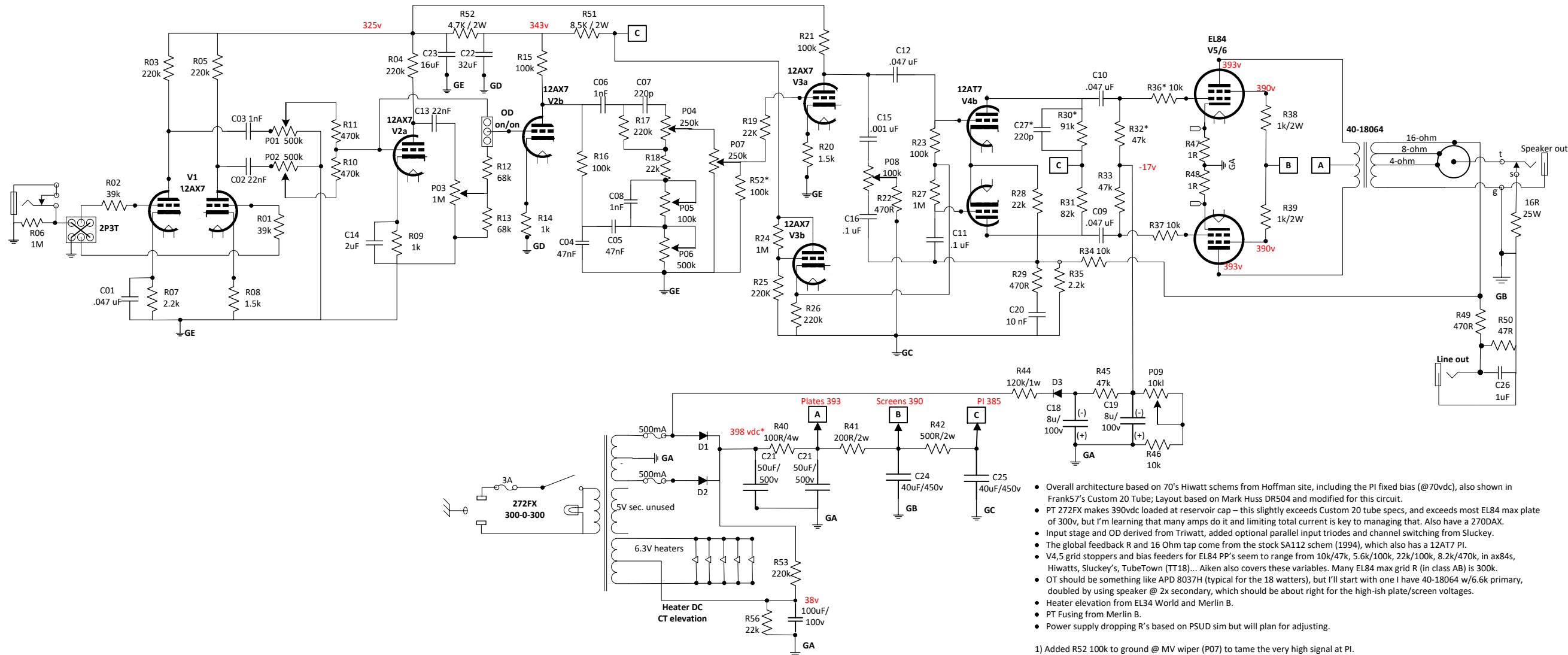


# EL84 DROL

DROL preamp with switchable OD,  
 classic DR tone stack, fixed bias PI grid,  
 Fixed bias ~20 watt power section.

CascoSieg 09.2021  
 (v 3.8.5)



- Overall architecture based on 70's Hiwatt schems from Hoffman site, including the PI fixed bias (@70vdc), also shown in Frank57's Custom 20 Tube; Layout based on Mark Huss DR504 and modified for this circuit.
- PT 272FX makes 390vdc loaded at reservoir cap – this slightly exceeds Custom 20 tube specs, and exceeds most EL84 max plate of 300v, but I'm learning that many amps do it and limiting total current is key to managing that. Also have a 270DAX.
- Input stage and OD derived from Triwatt, added optional parallel input triodes and channel switching from Sluckey.
- The global feedback R and 16 Ohm tap come from the stock SA112 schem (1994), which also has a 12A7 PI.
- V4,5 grid stoppers and bias feeders for EL84 PP's seem to range from 10k/47k, 5.6k/100k, 22k/100k, 8.2k/470k, in ax84s, Hiwatts, Sluckey's, TubeTown (TT18)... Aiken also covers these variables. Many EL84 max grid R (in class AB) is 300k.
- OT should be something like APD 8037H (typical for the 18 watters), but I'll start with one I have 40-18064 w/6.6k primary, doubled by using speaker @ 2x secondary, which should be about right for the high-ish plate/screen voltages.
- Heater elevation from EL34 World and Merlin B.
- PT Fusing from Merlin B.
- Power supply dropping R's based on PSUD sim but will plan for adjusting.

- 1) Added R52 100k to ground @ MV wiper (P07) to tame the very high signal at PI.
- 2) Added 200p enhance cap on PI to ease harsh OD distortion.
- 3) Added voltage divider on OD pot to tame gain.