

Clean:

1) Ground the bottom end ? of C15 & raise the cap value 10uf or 22uf (if you put the larger cap in parallel it can be removed pretty easy if you dont care for it. Also with a little bit of caution you SHOULD not have to remove the board

2) Try putting a 1.9k ohm (??) resistor across R14.

These small mods have made a pretty dramatic change in the clean channel on the units I have done them too, providing that the amp was well maintained & serviced with decent tubes.

???

here is my copy

I can report excellent results from the following mods

1 swapping out the C76 coupling cap after V1b from the (overly shrill) 1nf -> 2.2nf film (Xicon 1431-6222K at Mouser, \$0.41)

2 changing the parallel C75 470pf/R502 470k before V2a to 2.2nf/470k (Xicon 1431-6222K at Mouser, \$0.41)

3 upping the C35 ?? (falsch!) V1b (C15 müsst das sein) 0.47uf EL cathode bypass cap to 1uf film (Kemet R82DC4100CK60J at Mouser \$0.43)

Changed the plate resistors to 100k(R3 and R13 only) This will give less distortion but a rounder gain.

The stock voltage the preamp tubes are seeing is 260v give or take. This is not the best sounding voltage for a preamp like this. 320 or so is much better. Change R33 and R34 out for 4.7k resistors. This will bring this preamp to life.

NOTE: I think he's referring to the plate voltage feeding the preamps. This will raise the current going through the tubes, and should cause more grid-current-limiting which is what you get when you bias warmer.

That was originally for a Rockmaster preamp. I swapped out R90 and R91 for the values above, which are the resistors in the **Ultra** Plus that correspond (I think...) to R33 and R34 in the Rockmaster

These work great on the Ultra+ heads and Ultra 212 (which have Ultra+ labeled boards internally) huge low end bloom and no midrange "cocked wah" honk in the mids,

NOTE I run mine through a small accurate speaker; your mileage may vary in a 412 cab cranked up!

The older Ultras (PAG Ultra 120) have a few different values in the preamp;

A 2 x 0.47uF cathode bypass caps

B no parallel 470pF cap to R502

C C5 on main board is 820pF ceramic

and putting them to Ultra+ values sound better to my ears and even better when modded as above.

Remember the HC review "trick" peg all controls EXCEPT active EQ which is set to FULL CUT (-15db) and then carefully dial up EQ for extreme PA dist!

Yeow! hell on wheels!