Brown Eye Mod

Glad to see this thread moving forward.

I have a friend who got one of these BE modded JCA20H with the Sat switch.

I was able to take a peek inside.

Here is what I found:

- **First stage:**
  - Anode - 220k in series with 100k // 500p -- very interesting!
  - Cathode - 2.7k // .68 -- standard marshall
  - then into 2n2 coupling cap then into 68k/68k voltage divider.
  - then into 33k which is soldered straight to the grid of the next gain stage
- **Second stage:**
  - anode - 100k
  - cathode - 2.7k // .68
  - then into 2n2 coupling cap
  - then into the standard 470K/470K divider with 470pf treble peaker (it think the actual value in the amp was 500p silver mica)
- **3rd stage:**
  - anode - 100k
  - cathode - 820 // 22u

The gain pot is moved to between the 2nd and 3rd gain stage.

Tone stack values changed to stock marshall -- slope R 33k, treble cap 500p mica

Also, there is a "fixed depth" mod installed -- it looks like a 4n7 cap in series with a 100k resistor.

That's all I remember off the top of my head.

Hopefully that'll get you in the ballpark.

I'm really interested to find out what is hidden in the SAT switch, the stuff that is covered in the black stuff.

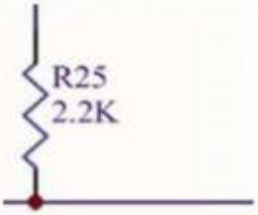
It is most likely a jose master, but I have heard that the jose master does not use diodes like everyone thinks.

Notes on the Brown Eye Mod from Edge11 on HCAF.

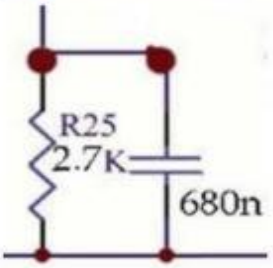
This is my take on the brown eye based on everything I know about Jose Arredondo's mods and what i have heard on the net about the brown eye amps. I have never been inside of a brown eye modded jca but people who have one told me I am spot on. It's a pretty standard Jose mod. I didn't include Jose's master (or the saturation switch as Friedman calls it because it doesn't add too much gain and well honestly diode clipping isn't my thing. If you want to add it google "jose master volume". I may make a version of this in the future that doesn't require you to move the gain control.

Brown Eye Mod for JCA20H
Actual Changes by Board Value

- ***Rework 1st Gain Stage***
  - C27 – 1mf cap to **680nf**
  - R28 – 220k to (**500pf/100k parallel**) in series with existing 220k
    - pin six > **mod** > existing 220k
  - R29 – 1.8k to **2.7k**
  - C26 – .02mf cap to **2n2 cap**
  - R30 – 100k to **120k**
  - R25 – 2.2k to **680nf/2.7k**
    - Add 680n cap as illustrated below
      - From this:

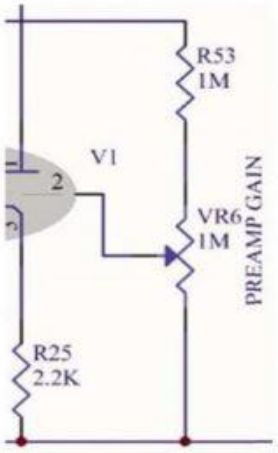


      - To this:

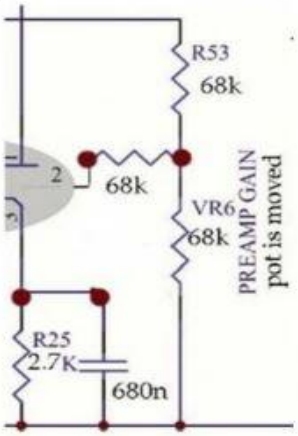


  - C24 – 0.2mf to **2n2 cap**
  - R43 – 1.8k to **820 ohms**
  - R21 – 47k to **33k**
  - R53 – 1M to **68k**

- VR6 – 1M var with **68k**
  - Insert **68k** from pin 2 of V1 between R53 and the 68k that replaced VR6 above (should be 2 leads)

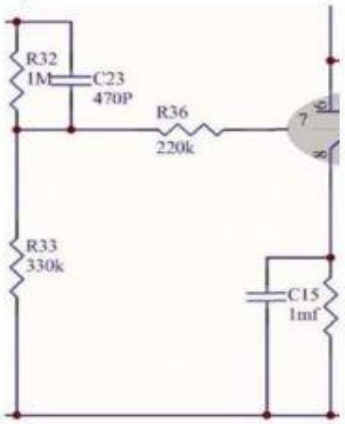


- From this:

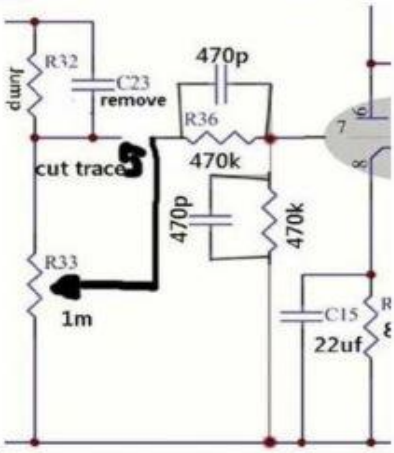


- To this:

- ***Rework 2nd Gain Stage***
  - R32 – 1M to **"Jump"**
  - C23 – 470pf to **"Remove"**
  - Cut trace between C23 and R36
  - R36 – 220k to **500pf/470k**
  - Add 2nd **500pf/470k** voltage divider just after R36 to ground before C15
  - R33 – 330k to **VR6 ground lead** (previously removed)
  - Move VR6 wiper lead before R36
  - C15 – 1mf to **22uf cap**
    - From this:



    - To this:



- ***Rework 3rd Gain Stage***
  - R43 – 1.8k to **820ohm**
- ***Tone Stack Change***
  - *Slope Resistor*
    - R21 – 47k to **33k**

Parts List:

- 2 x 680nf (.68uf) capacitors – 250v
- 3 x 500pf Silver Mica capacitors – 500v
- 2 x 2n2 capacitors – 100v
- 1 x 22uf cap – 500v
- 2 x 2.7k resistors – 1/2 watt carbon comp
- 1 x 120k resistor – 1/2 watt metal film
- 2 x 820 ohm resistors - 1/2 watt carbon comp
- 2 x 33k resistors - 1/2 watt carbon comp
- 3 x 68k resistors - 1/2 watt carbon comp
- 2 x 470k resistors - 1/2 watt carbon comp