



ENTERPRISES INC.

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Hoffman Blues Junior Performance Issue Description

This amp project is built from a new blank chassis and the Hoffman Blues Junior Kit. The amp is utilizing a TP24 PT and a TO22 OT. I also added a Hammond 166E36 transformer to replace the bias supply windings on the TP24 in support of 6V6 power tubes. The brown wires on the TP24 were insulated and tucked aside.

Current symptoms after recent advice.

- Very nice tone. Very minor distortion at low E and A.
- Seems to be missing a third of volume/power.
- Low Volume/Lack of Power
- Mild Distortion on cleanest settings
- Meat control doesn't seem to have any affect

Current Positives

- Removing C9 opened up the amp quite a bit
- Great tone
- Solid power system
- Good voltage readings
- Good stable control of bias

Modifications/Troubleshooting

- After I had the amp stabilized I made a few component changes looking for a culprit.
- Upgraded the 47 uF Power Capacitor to a 100 uF component.
- Made some modifications to the capacitors in the signal path
- Modified some of the power resistors R35 & R36 changed from 100 ohm to 470 ohm.
- Modified R48 & R49 changed from 10K ohm to 2,2 K ohm
- Removed C9 temporarily with great results.
- Temp connected a 500KA guitar Pot at MV Bad distortion. Re-connected the 50KI MV
- Temp connected a 100KA Pot at MV Less distortion. Re-connected the 50ki MV
- Adjusted bias to 19mA Nice tone but looking for power
- Changed R17 from 1.5K to 10K No noticeable change
- Changed R17 from 1.5K to 20K Distorted tone. Changed back to 10K
- Changed R10 from 1.5K to 2.2K No noticeable change
- I have not bypassed isolated the tone stack yet Recommended by John
- I have not bypassed the volume pots yet Recommended by John

Summary

- The tone seems real close with some very mild distortion.
- With MV on 10 and volume at 3 there is nice tone but the volume feels like an attenuator cranked to bedroom levels
- Same with Volume at 12 and MV at 3.
- It appears that I have all of the wiring correct, but I cannot rule out anything.
- I have attached a schematic with my modifications highlighted in red and most recently blue.

I am now considering the shielded wire connections. Is it possible that a fouled connection could limit the power/signal?