



Plush Hum & Tone

Amp Man, Someone recently gave me a Plush P100S 100-watt tube head. I retubed it with 4 Mesa 6L6 tubes on the power section, and I purchased some 12AX7 Groove Tubes for the preamp section. I also picked up a used Boss overdrive pedal. This thing is sounding better than great, but there are two items I can't figure out. First, I am getting a buzzing sound when I turn up the reverb chamber (anything past 2). When I keep it turned down, it is more or less very quiet. It does have the standard buzz when I take my hands off of the neck. Second thing is, while I have a pretty good tone, I can't seem to get better definition out of my notes. The lower strings tend to sound muddy while soloing. The high notes are fine, and actually have a really cool tone. Any help would be great. - Jim

Wow, a cool amp at the best possible price ... free! Those Plush amps are pretty reliable workhorses, and make a great loud and clean platform from which to build on, very similar to a Fender Twin Reverb.

First, the reverb issue. There could be a few causes for the reverb hum; possible faulty cables or dirty connections could be one. I would suggest cleaning the RCA plugs and jacks on each end of both cables. Remove each plug (one at a time so there's no chance of the connections becoming reversed) and spray a little contact cleaner/lubricant into and on the RCA jack. Re-insert the RCA plug into the jack a few times with a slight rotating movement each time if you can; this helps assure full surface contact. Do this to each of the four RCA connections and then give the amp a try.

If that didn't help, it could be that the cables are faulty. Check the length of the cables, find yourself a replacement set and give those a try. Remember, as you remove the cables, be sure to follow the cables and mark the connections on each end of one cable so that there's no confusion when you install the new ones. If the cables didn't solve the problem, another cause may be the orientation of the reverb tank itself. Who knows how many times or in what way this amp has been serviced in the last 35 years? Someone may have installed/reinstalled the reverb tank incorrectly.

Check the location of the "in" and "out" jacks. Normally (at least in transformer-driven reverb circuits like this) the "in" jack should be the one closest to the AC mains transformer on the chassis (generally the transformer closest to the AC line input). This is because the mains transformer can induce hum into the reverb tank transformers. The reverb tank "in" transformer, being a much lower impedance transformer than the "out" transformer, is far less susceptible to this hum. If the tank is incorrectly positioned, simply turn it around and re-mount it.

There is one more issue we can explore that may help. You mentioned that the amp "does have the standard buzz when I take my hands off the neck." You might want to have a 3-conductor line cord installed on the amp to make sure that the chassis has a good ground connection. It's generally safe, effective, and cures most forms of "shock therapy." If all that doesn't take care of the reverb hum, then it just may be a design issue that you'll have to live with.

Now let's look at the tone issue. You mentioned that you replaced the output

tubes, but you never made mention of having them biased. Under-biased tubes can sound muddy on the low end when pushed, so I'd definitely have that checked by a tech when you have the 3-conductor line cord installed. Next, have you checked to see if it's the pedal itself that has the muddy low end? It's entirely possible that the pedal lacks the low end definition that you're looking for. I would suggest trying a myriad of different pedals to find one that suits your needs. I mean, you are a guitar player! Our quest is never over!

You might even try something like a cool old pedal called the Dallas Rangemaster – it was the secret weapon of many a '60s rock god. Basically known as a "treble booster," it works by keeping the gain relatively unison on the lower notes and increasing the gain as the notes go up in frequency. This keeps the low end clean and tight while overdriving the amp in the upper registers. There are a few Rangemaster clones made today; check out the Java Boost by Robert Keeley and the Beano Boost by Analog Man. Just know that these units do not produce any form of distortion or overdrive, but simply drive the amp's input stage into overdrive, so ya' gotta play em' loud and proud! 🎸

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