Subject: Update on my A4
Posted by Shaun_Musings on Fri, 15 Jan 2016 21:07:02 GMT
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Okay, so I replaced the NTE129, discovered a blown TO-3 (2N3055) on the floor of the chassis, replaced that with an old one (I know they need to be matched, but I want to make sure another one won't blow., and booted it up. Getting 6-7 VDC from the output jack. I plugged the speaker in, and there is a loud hum, but no crackling and popping. Loud enough to be annoying, but not loud enough to blow my ear drums out.

I tested the furthest 2N3055 to see if the collector and base or emitter and base would show a short. The yellow wire back there (not sure if it is B or E) beeped, signaling a short. I pulled off the black connector (which broke in half. What is a replacement?) and found that the yellow wire beeps a short with the chassis even though it is disconnected. This is either the - DC PCB or the + DC PCB, not sure. What could be causing this?

So, just a few questions:

1. Why am I still getting 6-7 VDC at the output? I have ordered replacement 5 watt resistors (to replace the Memcor ones). Someone in an earlier post stated those 5-watt resistors should be replaced with either 7 or 10-watts (still 1 ohm).

2. Why am I still getting a short (it is a quick beep, never continuous) between the yellow wire and the grounded chassis?

3. Why does it seem the two input boards are not connected?

Subject: Re: Update on my A4
Posted by chicagobill on Sat, 16 Jan 2016 03:03:39 GMT
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Shaun_Musings wrote on Fri, 15 January 2016 15:07So, just a few questions:

1. Why am I still getting 6-7 VDC at the output? I have ordered replacement 5 watt resistors (to replace the Memcor ones). Someone in an earlier post stated those 5-watt resistors should be replaced with either 7 or 10-watts (still 1 ohm).
You still have a problem in the amp. The hum you are hearing is because of the voltage on the output. Are you using a light bulb limiter now? As long as they are not open circuit, the 1 ohm ballast resistors have nothing to do with your problem. I don't like over-rating these, as they can act like a fuse if the power transistor shorts. Increasing the wattage just increases the possibility of doing damage to other parts of the circuit just to save a few cents for a 5 watt resistor.

Shaun_Musings wrote on Fri, 15 January 2016 15:072. Why am I still getting a short (it is a quick beep, never continuous) between the yellow wire and the grounded chassis?
There are still other transistors and resistors connected to the yellow wire, so your meter is reacting to those parts. My meter short beeps when a transistor junction is good and not shorted. It will beep continuously if the transistor is shorted. I don't know about your meter or what you are

hearing. Yellow wires on the power transistors are connected to the Emitters.

Shaun_Musings wrote on Fri, 15 January 2016 15:073. Why does it seem the two input boards are not connected?What do you mean by this? The input jacks are connected to the boards right? The output wire from the right side preamp should go directly to the power amp board and the output from the left side preamp should go to the Reverb/Vibrato boards and then to the Clipper/Boost boards and then to the power amp.

Subject: Re: Update on my A4
Posted by stevem on Sat, 16 Jan 2016 11:53:03 GMT
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If the amp does not blow a fuse ,hums and has a voltage on the output Jack and your not on the lamp limiter, then you no longer have a blown output transistor but a bad driver transistor, or one that is installed wrong.

You can use plastic model glue to put the black output transistor back together and then pile epoxy on it to reinforce it, just do not get any in the connector portion.
I like to use a clay type epoxy for this repair.
