Subject: sidewinder 24-c

Posted by StevieDen on Fri, 01 Feb 2019 20:56:45 GMT

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Was playing guitar thru amp, sounded great, then went low volume...opened amp, cked power supply voltage +40 -40at filter caps... good, transister Q9 getting hot. Both Q8 andQ9 ck good out of circuit. Found open c8 replaced both c7 and c8 with electrolytics 33uf @ 50v. negative voltage dropped down to 34v while positive stayed at about 39v. Q9 still getting warm?? Any suggestions appreciated....

Subject: Re: sidewinder 24-c

Posted by stevem on Sat, 02 Feb 2019 11:36:57 GMT

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In all my years of doing repairs I have never seen a open electrolytic cap unless it first shorted and blew apart!

Well here's some suggestions, first make sure you new caps ARE good and if you replaced 7 and 8 with electrolytics make sure they are installed right.

Next make sure that the 3 diodes those caps are in parallel with are good.

Be very careful the leads of the diode that loads in the clip as they are fragile!

Also when putting that diode in the clip make sure the clip grips it tight and the the leads keep the diode from slipping in the clip far enoght to have the leads short out on the clip.

These diodes set the bias voltage on the two output transistors.

When the bias circuit is good the 2 output transistors should be a little warm after the amp has been sitting and idling for 10 minutes.

When you get it all good I would then go ahead and replace all of the other electrolytics on that output / driver board while your in there.

Subject: Re: sidewinder 24-c

Posted by chicagobill on Sat, 02 Feb 2019 17:11:03 GMT

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I've seen electrolytics dry up and lose all of their capacitance, which would be pretty much the same thing as being open.

The hot transistor would be a cause for the loss of negative power supply voltage. Those output transistors usually run fairly cool, so there is a reason for the heat. Have you read the voltages around Q9 and compared them to the schematic voltages?

I'd want to check R14-R18 and Q5. They are all part of the circuit that controls Q9.

And yes, be very careful of the leads of CR3. I usually unclip the diode from the heatsink and then just let it float until I'm done removing and replacing the pc board, which sometimes can be many times before a repair is finished.