Subject: JCM800 50W 4210 developed crackling problem
Posted by Harlequin on Thu, 24 Aug 2006 15:24:08 GMT
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I Have an old tube 50W Marshall combo which has started to make crackling noises. It occurs on both clean and distorted channels. The guitar signal goes through fine but rudely interupted by these crackles which are loud (sounds like something is shorting to DC). I don't think the amp has ever had a cap job and is probably about 20 yrs old d'you think this would be a good place to start? (i.e. could the fault be an intermittent shorting cap?). All the obvious - guitar leads, input socket etc appear fine.

Subject: Re: JCM800 50W 4210 developed crackling problem
Posted by Aki on Thu, 24 Aug 2006 18:24:28 GMT
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If your amp is having problems, cap job may indeed be needed, but intermittent crackles can be caused by a number of things. I've seen resistor drifted or even cracked open, solder joints cracking open, tube going noisy and coupling caps leaking DC. So I'd take it to a good shop and have it checked out. Just for reference, the following is what I do when I add yet another tube amp to my collection.Re-tension or replace loose tube sockets.Look for cracked or about to be cracked solder joints. There is always a couple.Check values of resistors and change any that have drifted. Clean or replace pots and jacks.Check all coupling caps for leaking DC. I usually change the output stage coupling caps anyways, as DC leak here can cause output tubes to melt down.Check and replace power supply filter caps if needed, including bias filter caps.Check and/or replace all small value electrolytic caps. Finally, check all the voltages around tubes, set bias.Plug in and rock on away. Alternatively, sneak it into storage so Mrs. doesn't find out that you bought yet another old tube amp.

Subject: Re: JCM800 50W 4210 developed crackling problem
Posted by Harlequin on Thu, 24 Aug 2006 19:50:53 GMT
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Thanks for the comprehensive answer. Hehe, and on your final point I had actually started to look at other amps, how did you know?!I've actually found the culprit I think, one of the plates/cathodes(?) in the output valve/tube had come loose, and was floating about freely inside the glass envelope!!! Is this a common fault?Anyway I think I'll get a new pair of output valves and get an engineer to bias it properly and to give it a pat on the head. Thanks for your help