

Re: Advice on HP Function Generator Repair

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- *From:* "Arfa Daily" <arfa.daily@xxxxxxxxxxxx>
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"Jake" <mechanicaljake@xxxxxxxx> wrote in message
news:29dacea7-824e-4de6-bbd3-53a0203f5ef9@xx
On Apr 15, 1:18 am, "Matt J. McCullar" <mccul...@xxxxxxxx> wrote:

Not having seen a picture of the function generator, I'm presuming you're using an external oscilloscope to look at the FG's output.

Just a question: Have you been able to verify that the strange waveforms are actually coming from the function generator itself, rather than an artifact of... say, the oscilloscope probe and/or the oscilloscope itself not being able to handle incoming frequencies that high? Just don't want you to waste time trying to fix something that may not actually be broken. :)

If it is definitely coming from the function generator, then I'd agree with the previous posters: replace the electrolytic capacitors. They're over 20 years old now.

I am using a brand new Tektronix TDS2024B 200MHz 2GSa/s oscilloscope with a fresh calibration.

Thanks for all the advice!

Not wishing to labour the point, but what you describe as happening to the waveshapes, in that they are all heading towards a dirty sine wave the higher up in frequency that you go, sure sounds like what you will get if you glue a low-pass filter on the end of such a generator. Are you absolutely sure that there is not any bandwidth filter switched in on the 'scope, and that the probe you are using is good for the frequencies that you are looking at ? Is it a low capacitance probe for instance ? Looking at anything above a few hundred kHz generally requires the use of a low capacitance probe (typically a x10 attenuator probe, or a 'universal' probe switched to its "x10" setting)

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