Subject: Retaining nuts stuck

Posted by JDinPA17603 on Sun, 23 Sep 2018 17:01:06 GMT

View Forum Message <> Reply to Message

Ok, I am at wits end. Friend has a 300 that got dropped and the cast faceplate got bent. Good news amp works perfectly. T&R took some repair but decent. I had the entire front from a parts only 300 solsaid "let's just swap the faceplates. Ahh the innocence of being a naive old man. Took off the knobs and got off all but 4 of the retaining nuts. They are frozen to the shafts of the pots. Soaked in WD40 for days...even did some impacting with a screwdriver. No luck. Suggestions on what to spray these with to free them from the corrosion.

Thanks in advance for the suggestions. Really looking to getting his 300-5 back in shape for him.

Subject: Re: Retaining nuts stuck

Posted by chicagobill on Mon, 24 Sep 2018 15:59:05 GMT

View Forum Message <> Reply to Message

I've had that happen before and have found that the easiest way is to Dremel the nut off and replace it with a new one.

I grind through the nut at the center of one of the flat sides, not all the way through, just to the edge of the threads. Then I use a flat blade screwdriver to twist the nut open. Then it can be removed with no damage to the pot threads or the face plate.

Good luck!

Subject: Re: Retaining nuts stuck

Posted by stevem on Mon, 24 Sep 2018 16:08:42 GMT

View Forum Message <> Reply to Message

I have had to do the same thing at times with the Dremal tool and a cut off disc!

Whatever you do don't force it as sure as hell you will do damage to the pot, ask me how I know this!

One last thing to try that I heard of just last week but have not tryed myself is to soak the threads with vinagar since it's a mild acid .

Subject: Re: Retaining nuts stuck

Posted by JDinPA17603 on Mon, 24 Sep 2018 17:39:43 GMT

View Forum Message <> Reply to Message

Thanks Bill and Steve.

So far I tried WD-40 and PB Blaster ... no luck.

I'll try the vinegar first...the Dremel is on standby.

Hey Steve, unfortunately I too already know the results of trying too hard.

I'll let you know the results.

John

Subject: Re: Retaining nuts stuck

Posted by stevem on Wed, 26 Sep 2018 09:48:09 GMT

View Forum Message <> Reply to Message

How many nuts / pots are you having issues with?

Subject: Re: Retaining nuts stuck

Posted by JDinPA17603 on Fri, 28 Sep 2018 05:27:02 GMT

View Forum Message <> Reply to Message

Steve, 5 of the nuts are frozen on three of the input boards.

Tried vinegar soak with "tapping" no luck.

Looked at things real close with an electronic microscope. Looks like someone at one time took the tighten the nuts statement to the extreme. They put so much torque on them that they stretched the threads on the shafts.

Going to end up dremeling them off and then run a chaser die over the shafts to try and save the ones I didn't over rotate trying to get them off in the first place.

Unfortunately I ended up toasting a reverb pot on one channel. Luckily it is my "parts" faceplate so while disappointing not the disaster it could have been.

Should have this one done by tonight and be able to get it to him in time for a gig.

Next up will be a SC100-7 black combo that I'm going over to give to my stepson as a birthday present. Have a question about reverb and trem-vibe on it but will start a new thread for that one. John

Subject: Re: Retaining nuts stuck

Posted by JDinPA17603 on Thu, 18 Oct 2018 01:32:20 GMT

View Forum Message <> Reply to Message

Well ended up having to use the dremel to cut almost all the way through the nuts and then pop them with a screwdriver. Sort of amazing how they almost fused over the years. Good news is the system got back together and a final test and delivered in time. Bad news was forgot to take any pictures. Thanks guys for the tips.

The 100C7 took two transistors and a couple of electrolytic caps and is now singing nicely. Will be delivering that one to northwestern Massachusettes this weekend for the son in law's birthday.

Wife says she thinks he will be blown away by it. He is a budding guitarist and has a small 10 watt no name practice amp that he has been using. I'll get some pictures up of it and of some of the

other Kustom pieces that seem to have found their way into my world. Seems every one of them needs some technical attention. Gives me an excuse to break out the meters and scope and jostle my 70 year old brain cells around. Have a great weekend all.

Subject: Re: Retaining nuts stuck

Posted by chicagobill on Thu, 18 Oct 2018 03:00:41 GMT

View Forum Message <> Reply to Message

I thought that it is some sort of reaction between the brass threads of the pot mount and the steel of the hex nut. If they start to strip when I try and loosen them, I just cut them off.

I've tried PB Blaster, WD-40, etc., etc. There's no real benefit in saving the vintage nuts.

Subject: Re: Retaining nuts stuck

Posted by IowaBoy on Thu, 18 Oct 2018 03:12:43 GMT

View Forum Message <> Reply to Message

Has anyone tried using a heat gun on the low setting to warm the metal enough to make it expand and break the rust? Not sure if it would damage the pot or not, so am asking. For brazing we use a putty that acts as a heat shield and that could be used to protect the faceplate.

Subject: Re: Retaining nuts stuck

Posted by JDinPA17603 on Thu, 18 Oct 2018 12:37:27 GMT

View Forum Message <> Reply to Message

Like ChicagoBill, I had tried WD-40, then PB Blaster, then Stevem mentioned vinegar so gave that a chance, even sprayed the shaft with freeze spray (CO2) while insulating the nut...sort of the reverse of heating the nut... all to no avail. In the end, cutting part way through the nut with the dremel tool with a cut off disc then splitting it with a small bladed screwdriver proved to be the fastest way. I wish I had remembered to take pictures because it looked as if the nut had actually started to bond with the shaft much in the same way bone grafts to platinum in knee replacement surgery.

Subject: Re: Retaining nuts stuck

Posted by chicagobill on Thu, 18 Oct 2018 17:03:43 GMT

View Forum Message <> Reply to Message

Heat might work. The next time it happens, I'll try heating it with a 40 watt soldering iron, that way the heat will be directly applied to the nut.

Too much heat could be a problem, as the wiper assembly inside the pot is made of plastic.

Subject: Re: Retaining nuts stuck

Posted by IowaBoy on Thu, 18 Oct 2018 17:15:05 GMT

View Forum Message <> Reply to Message

I'd clamp a pair of vice grips onto the pot's shaft to act as a heat sink to pull some of the heat off of the pot itself. A damp cloth on the back of the pot will also help as well. I'm Leary about using a Dremel for fear of gouging the face plate. I'd never make it as a surgeon.

Subject: Re: Retaining nuts stuck

Posted by JDinPA17603 on Fri, 19 Oct 2018 00:17:16 GMT

View Forum Message <> Reply to Message

Hear that on being a surgeon. Believe me, I tackled it VERY carefully. I also had a thin sheet of aluminum that I placed just in case. Worked out quite well. Thing of it is I did consider heat but felt the mass of the cast aluminum faceplate would draw it off before it could have a effect. That was why I tried CO2 on the shaft and collar joint but it had no effect. I would be extremely leery of using heat on a plexi face for sure.

John