

---

Subject: More Diode Substitution Info

Posted by [Jerrybass1955](#) on Fri, 03 Oct 2014 13:40:14 GMT

[View Forum Message](#) <> [Reply to Message](#)

---

Hi Folks,

I'm having a bit of a struggle with 1/2 of the power section of my K100-pre-rev-3 and I am starting to suspect perhaps an issue with the bias diodes. They check out as diodes in-circuit, but it is looking like time to pull them and check them out. So a few questions:

- 1) My diodes CR104 and CR105 are in metal cans with a diode symbol on them. One leg is connected to the cathode (if I remember correctly). Is this consistent with a 1N3139 as you guys are familiar with?
- 2) If not, what are they?
- 3) If so, does anyone know what a good sub would be other than the NTE sub?
- 4) The same NTE116 is a general purpose diode that appears to sub for some of the 1N4000 series like 1N4003-1N4007?

In similar circuits I have seen, such bias diodes appear to just be general purpose diodes (as is the NTE116). I have some 1N4007s (specs seem similar except for max Vf), and I may need to try them unless someone has a better suggestion or can add to the common knowledge to expand the table below. But if it indeed isn't the diodes, I don't want to make other problems or make finding the problem even harder.

Looks like we know the following:

007-6004-00 / FD111 / nte177 / 1N4148/ Silicon Diode  
007-6005-00 / 1N3193 / nte116 / Silicon Diode  
007-6006-00 / 1N3754 / nte5801 / Silicon Diode  
007-6016-00 / Silicon Diode  
007-6020-00 / 1N270 / nte109 / Germanium Diode  
007-5349-00 / 1N5349 / nte5127A / 12v 5w Zener Diode

Any help appreciated. I will likely post about the power amp problem soon for more opinions. Currently driving me crazy (more of a putt than a drive in my case).  
Jerry

---

Subject: Re: More Diode Substitution Info

Posted by [chicagobill](#) on Sat, 04 Oct 2014 00:55:19 GMT

[View Forum Message](#) <> [Reply to Message](#)

---

The 1N3139 is the axial version of the radial 1N3754 diode. Use a 1N4148 to replace them.

---

---

Subject: Re: More Diode Substitution Info

Posted by [Jerrybass1955](#) on Sat, 04 Oct 2014 13:15:40 GMT

More good info Bill.

I was surfing the web yesterday and found "Surplus Sales of Nebraska". They have 1N3193's for sale at 1.50 each (no 3754s) and also carries most of the 1% resistors I have seen used in Kustom Amps. Worth a look if you want to do some exact restorations.

I also bought some 2N4249's from this guy:

MISTER SPROCKETS

19392 FRANCISCA WAY

YORBA LINDA, CA 92886

He is on Ebay and the transistors are used pulls, but he is good to do business with and you gotta love a guy whose Ebay handle spacelysprockets00 !!! I has a few bad transistors which he found unusual so he quarantined his batch and tested them all and sent me extras in addition to replacements.

Jerry

---