

BULLETIN NO. 4

SUBJECT: 25/15PT2 Voltage Transient Suppressors

DATE: 3/1/76

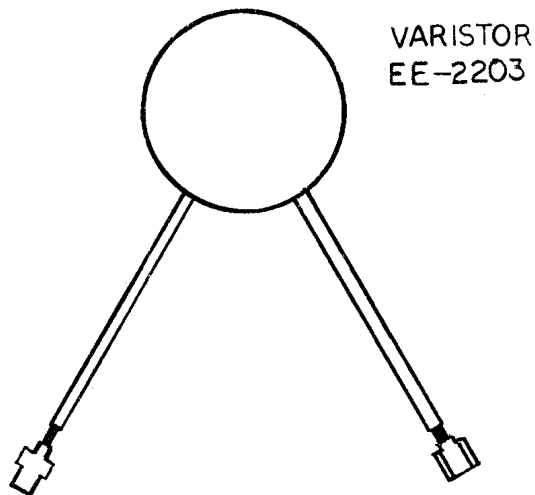
# ENGINEERING TECHNICAL BULLETIN

The series field bridge on subject generator had been protected by our EE-2142 thyrector (General Electric No. 6RS205P5B5). General Electric has phased out their thyrector production as they had developed a new product to perform the same function. This new product is called a varistor. The replacement varistor we used is our EE-2203 (General Electric No. V150LA10A). It has been found that on certain applications that there are repetitive surges which cause the varistor to fail. The varistor does an excellent job on single voltage spikes.

When this failure occurs it places a short on the input to the series field bridge which, of course, causes the generator to have a drooping voltage characteristic as load is added.

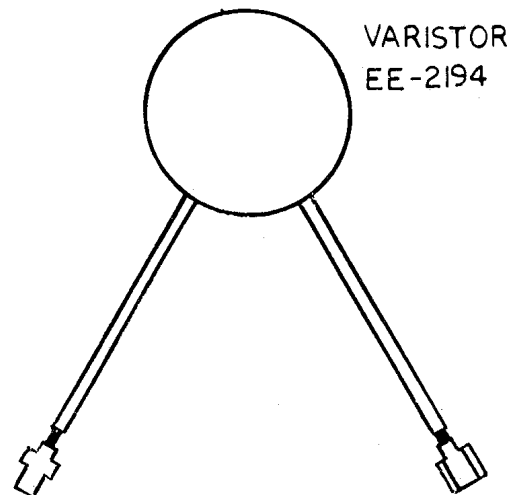
If a customer reports this failure he may be advised that he can disconnect the thyrector and run without voltage suppression protection if he has an emergency condition. He will risk a possible rectifier failure but it may be a risk that is worth taking. The rectifier is not definitely going to fail without the transient suppression protector but it may.

We have come up with a field fix and it is to place two EE-2203 varistors in series or one EE-2203 varistor and one EE-2194 varistor (General Electric No. V130LA10) in series. The additional varistor is made up as follows:

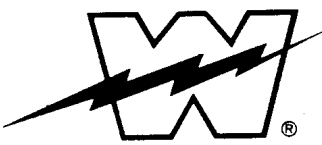


G-6351-1

OR



G-6351-2

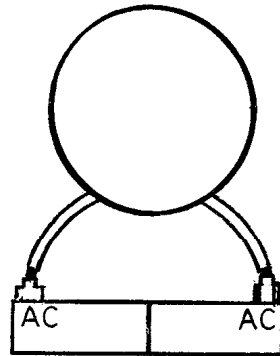


BULLETIN NO. 4 (Page 2)

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The existing connection is as follows:



The connection with the field fix is as follows:

