## PRODUCT CATEGORY: ELECTROSTATICS

## IT'S TIME TO PUT IT AWAY... MODEL N-100V VAN DE GRAAFF GENERATOR

Fun with the pie plates and the packing peanuts is finished. The hair standing on end and playing with the Electric Whirl are now done and over. It's time to put your Van de Graaff Generator away for another year. Will it go on some closet shelf or into a crowded storeroom? In either case, it may have to survive a long hot summer.

Every year we have pleading phone calls wanting to know how to clean up the mess of a melted latex belt that is now lovingly adhered to the upper pulley and, in some places, to the main column. Perhaps you are a new teacher and the innocent victim of the teacher that left last year. We do the best we can to suggest cleaning methods and materials, but it doesn't have to be this way. There is a simple, sensible routine to prepare your machine for perhaps ten or eleven months of storage.

First, you must understand that the latex belt is made from a natural rubber material, and like all products that come from Mother Nature, are subject to deterioration over time. Drying, rotting, melting, oxidizing, call it what you will, that belt will be absolutely useless next year if left in place. SO BEGIN BY REMOVING THE BELT. (If you have forgotten the routine, download Product Note PN—104). If the belt still has good elasticity and you want to try to save it for next year, put it in a locking-type plastic bag and store it in the refrigerator. Although it may possibly be up to the job for the following year, we strongly suggest that you purchase a spare a week or two before game time just to be on the safe side. You can easily do this directly from our website "Replacement Parts" page (www.winsco.com).

Re-assemble the cabinet and dome parts that were involved in removing the belt and your machine is ready for the long sleep. Store it in the original shipping carton packed into its cushioning pillows if still available. Turn the box upside down and insert the machine dome first while holding the cabinet base. Be sure to carefully tape the carton closed so that bad things don't happen when you turn the box right side up.

Next year, be sure to let the stored belt warm up to room temperature before taking it out of the bag so as to avoid unwelcome moisture condensation on the cold surface. To prepare your belt for use, put it in a baggy with a little talcum powder. Cover it completely, then remove the belt and wipe away all the powder with a dry paper towel. The purpose of the talcum is to act as a blotting or drying agent, but after its work is done, get rid of it.

Before re-installing the belt, it's a good idea to blow dry the wool on the lower pulley that is on the motor shaft. Use an ordinary hair dryer and let it run for 15–20 minutes on LOW HEAT. It takes time to drive out all the moisture that may have been absorbed by the wool during the off season, so be sure you let it run the full recommended time. This is best done by laying the machine on its side and running the motor at slow to moderate speed. Please be sure there are no curious fingers around that might touch electric connections.

And now let's get back to that clean-up job that was surely caused by someone else. Denatured alcohol is the solvent of choice to loosen the sticky stuff. It may be necessary to remove the column from the cast aluminum collar. Loosen only the three horizontal screws — do not loosen any others. When putting the column back be sure to get the upper pulley parallel to the motor pulley. After the belt has been re-installed, start the motor at low speed to check on the tracking at the upper pulley. Rotating the column slightly will have a very noticeable effect on tracking. You must, of course, adjust the rubber bushings of the upper pulley to be sure it is horizontal.