

REPLACING THE TRANSPORT BELT MODEL N-100V VAN DE GRAAFF GENERATOR

Following is the suggested procedure for installing a new belt (RP-601) on the WINSKO model N-100V Van de Graaff Generator.

Be sure your hands are clean and dry before proceeding.

1. Unplug the line cord from the electrical outlet.
CAUTION: Do not proceed until this is done.
2. Carefully remove the top half of the dome and set it aside.
3. Remove the six cabinet screws from the front and back sides and the top of the base. There are two screws down low in the front, two more down low in the back, and two on top near the handles. Do not disturb any other screws.
4. Lift the upper part of the machine clear of the bottom and lay it down in a horizontal position. If there is an old belt still installed, slip it off the motor pulley. Stand the machine upright, remove the upper pulley from the top of the column and discard the old belt.
5. Hang the new belt over the upper pulley, hang the "pull down" ribbon in the bottom loop of the belt, and then re-insert the pulley assembly back into the slots at the top of the column, allowing the belt to hang down inside the column.
6. Carefully tilt the machine at about 45 degrees, grab the "pull down ribbon" and slip the new belt over the motor pulley.
7. Stand the machine vertically again and reconnect the line cord to a 115 volt 60 Hz electrical outlet. Start the machine at slow speed and check to see that the belt is tracking correctly (in the center) on the upper pulley. If it is not tracking correctly, press down on one end or the other of the axle to force the upper pulley into a more horizontal alignment.

8. After you have the belt tracking well at low speed, increase the speed and repeat the alignment procedure until you can operate successfully at full speed.

9. Unplug the line cord from the electrical outlet.

Caution: Do not start re-assembly until this is done.

10. During the belt installation process, the brush electrodes will have been moved. They should now be re-positioned, both upper and lower, with the points of the screen wires perpendicular to the belt and approximately 3/16" away from the belt – not any closer.

11. Re-assemble the cabinet and the upper half of the dome. Clean the outside surface of the dome with alcohol or other non-abrasive cleaner followed by quick polish with an aerosol dusting preparation.