

**Objective:** Installing the generator to the Windspire

**Summary:** Proper assembly of the generator to the Windspire

Clean off the generator clamp flange with acetone and a paper towel or rag.



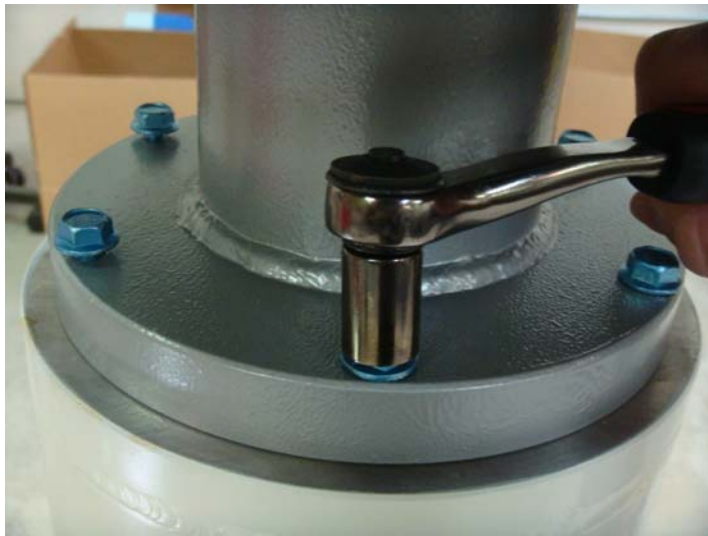
Locate the generator clamp wedge and generator clamp disk and clean them with acetone and a paper towel or rag. Silicone the bottom end of the generator base as shown below, as well as the top shaft sleeve on the bottom shaft.



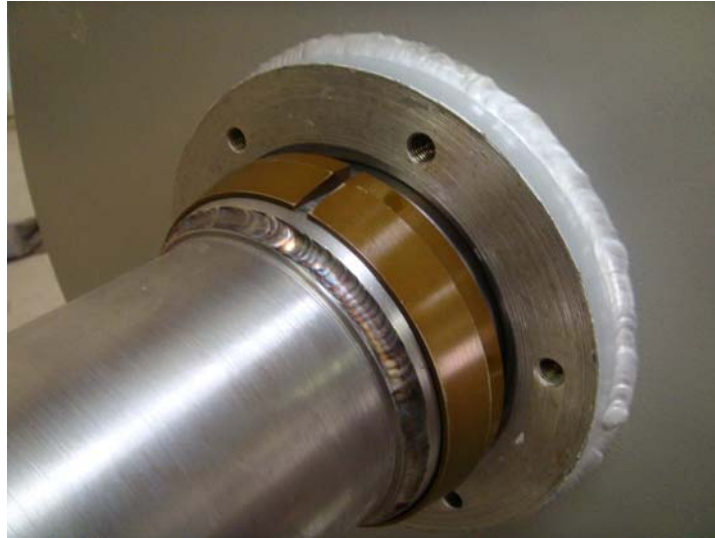
Slide the generator over the bottom shaft into position as shown below.



Secure the generator base using six generator screws (M8 x 35mm) to the top of the base pole.



Slide the generator clamp wedge over the bottom shaft and insert it into the stepped face of the generator clamp flange.



Insert the generator clamp disk over the generator clamp wedge, and attach it to the generator with 6 generator clamp screws (M8 x 25mm). Tighten all generator clamp screws finger tight.



Set the generator gap using the three plastic gapping tools as follows:

1. Place the generator gapping tools in the space between the magnets and the plastic armature, placing them into the inside-diameter accessible side of the bottom back iron.
2. **Gently** pull the generator housing towards the top of the bottom shaft to tighten the gap where the plastic gapping tools are placed. If too much force is applied to the generator, the armature will bend with the pressure and the gap will be set incorrectly. The gapping tools should be snug within the generator gap, so they won't move when placed in the gap, but not so tight in place that you require force to insert or remove them.



3. While maintaining the proper positioning of the generator, use a socket and wrench to evenly tighten each generator clamp screw in a circular sequence, with  $\frac{1}{4}$  turns for each screw. Tighten each screw to 25 ft-lb using a torque wrench in a circular sequence, and double-check all screws are fully tightened by continuing in a circular sequence until all screws are fully tightened. **Note:** This step should be done with the magnetic bearing uninstalled, or before the magnetic bearing is installed.



Silicone the two interfaces between the generator clamp disk and the generator clamp flange and the bottom shaft.





Apply silicone around the generator base contact to the top of the base pole:



Continue with the Windspire installation.