



# Corona Supplies Ltd

for all your corona needs

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## Unable To Reach Maximum Output - GX10, 20, 30 & GXR Range

Run through the following sequence of checks:

- The most important check is to verify that the electrode discharge air gap is correctly set. It should be 1 – 1.5mm for ceramic dielectrics, or 2mm for all other dielectrics. This setting should be done with the web removed from the treater. Care should be taken to ensure that not only is the gap correct, but also the electrode tilt angle.
- Check that if using a segmented electrode, the treat area has not been reduced too much. If this treat face is made too small, and the output from the generator is set too high, the generator will automatically reduce its output to a safe level, so as not to damage the inverter.
- If the web thickness has dramatically increased it may be necessary to re-tap the HT transformer. To do this, **switch the generator off** and remove the lid of the terminal cover fitted to the HT transformer. There will be a cable connection on the terminal identified as E. There will also be another cable on the terminal identified as 1. The remaining cable will be on any of the terminals identified as 2 to 7. Remove this cable and re-affix to the next lowest tap. So if the remaining cable, for instance is on 7, go to 6. If it's already on 6 go to 5. Switch on the generator again and see if it is possible to obtain full output power. If full power is obtained then leave the cable on this tapping. If full power is not obtained then reduce the tapping again and test. The first tapping that full power is reached is the tapping that should be used. **Note: If the web thickness is once again reduced, the transformer tapping should be reverted back to the tapping that it was on previously. If not, before full power is obtained the generator will "Trip" due to limitation of current through the inverter. This is designed to prevent damage to the inverter.**
- Check the inside of the treater for cleanliness. This is especially important if a metal electrode is used. When corona discharge takes place, it is possible for a film of oxidation to build up on the treat face of the electrode. This oxidation acts in the same way as an insulator, and hence the corona cannot fully break down the air gap due to excessive resistance.
- If paper is regularly run through the treater, it is possible for some of the paper fibres to be lifted off the paper, and settle on the electrode. If this is allowed to build up then again full output power may not be obtainable. **Note: Regular maintenance of the treater and electrodes will prevent repairs and downtime.**