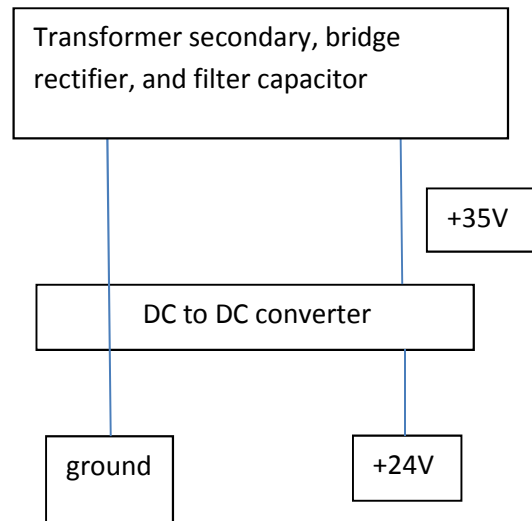


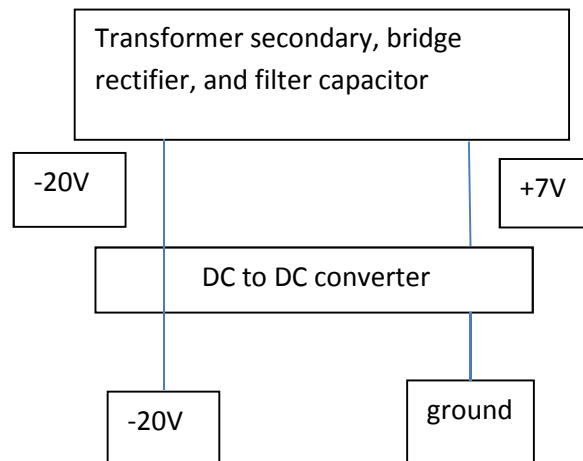
## USING DC TO DC CONVERTERS FOR PLUS AND NEGATIVE POWER SUPPLIES

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The first diagram shows a DC to DC converter set up to deliver a positive voltage. Note that the ground connection is continuous between the input and the output.



The next diagram shows a DC to DC converter used to deliver a negative voltage. Note that the transformer secondary, bridge rectifier, and filter capacitor must be floating and not connected to ground. The negative rail is connected from the input to the output of the DC to DC converter.



The reason that I am presenting this information is that I originally planned to use an LM337 for the negative supply and an LM317T for the positive supply. I had connected the positive of the filter capacitor for the negative supply to ground and the negative of the filter capacitor for the positive supply to ground. There would have been no problem if I had stayed with linear regulators but I decided to use DC to DC converters because they are more efficient. Fortunately I caught the wiring error prior to damaging any parts of my project. Luckily I had decided to use two transformers at the outset. A center tapped transformer driving both the positive and negative supplies would not have worked. If you have any questions please contact me at [gstratford1@cogeco.ca](mailto:gstratford1@cogeco.ca)