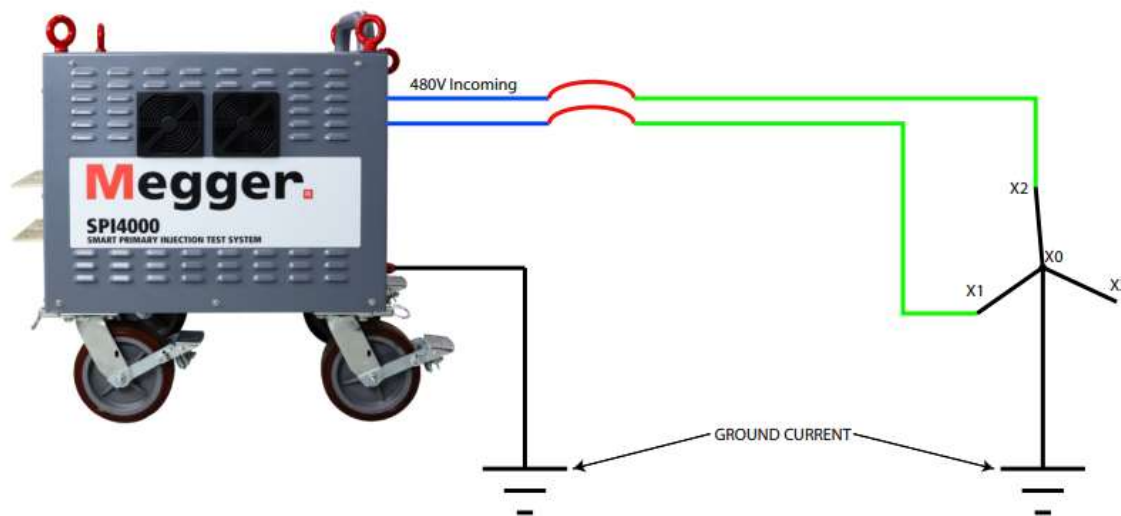


Ground Reference Error On SPI4000

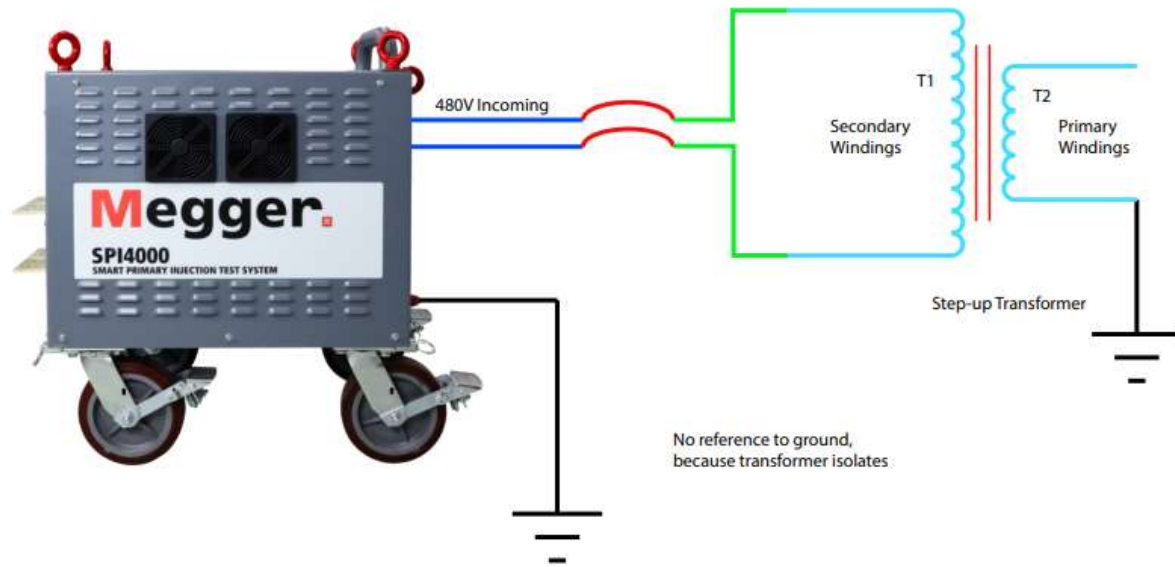
The SPI 4000 requires a ground for safety. The ground is to ensure if a failure occurs the case is protected from having high voltage present.

In order to ensure there is a ground the SPI checks that a few microamps of current can flow from the case to ground. A very small voltage is applied to the case, and this should create current to ground. If no current is detected, then a ground reference error will occur. See Figure-1.



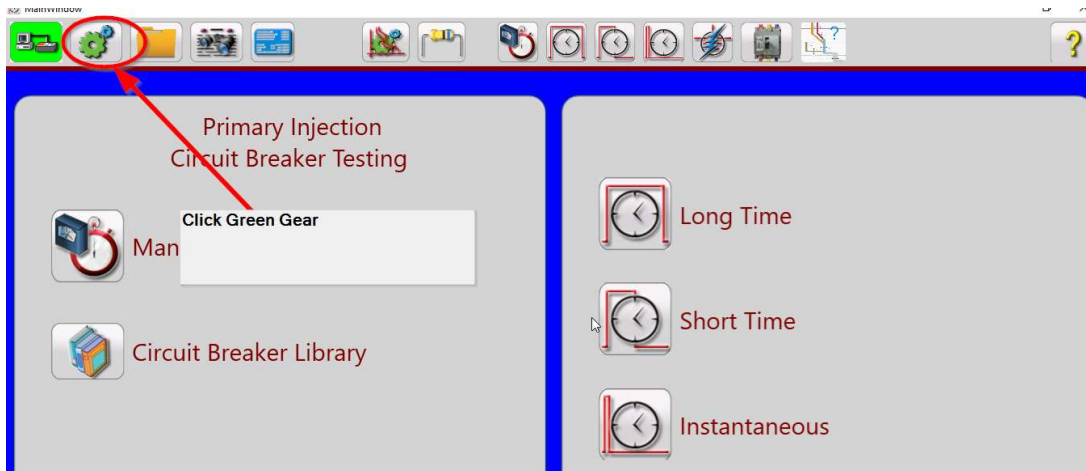
Note that Figure-1 also applies to generators. The Neutral of the generator must be grounded in order to create a ground reference.

Some sites have isolation step up transformers to power the high current test set, because 480V was not available in the building, or the building may have a delta secondary. In these cases there is not a reference to ground through the power source and the SPI4000 will give an alarm. However, this condition is not dangerous if the ground lead is truly connected to the SPI4000. Therefore an option has been given to allow a qualified user to use the test set without the SPI Detecting the ground reference. This should only be done by qualified individuals and the ground connection must be manually verified. See Figure-2 and the procedure below to use the SPI4000 on a delta system.



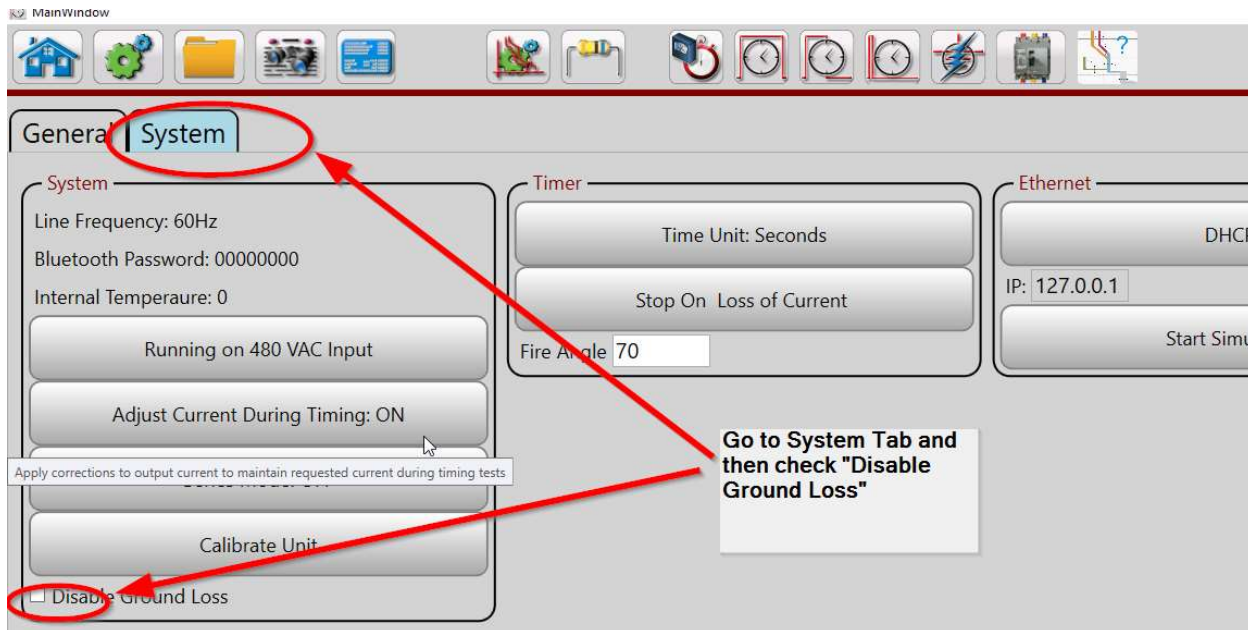
Follow Steps below to run SPI4000 on a delta system:

1. Click Green Gear



Application Note

2. Go to the system tab



3. Check the "Disable Ground Loss" box