

# EverSafe Battery Backup Generator Testing Procedures for Vaccine and Medical Refrigerators and Freezers.

Weekly, Monthly and Annual load tests must be performed, recorded and documented. The following criteria must be followed in order to complete each test:

## **Weekly Testing:**

The recommended weekly test is a quick and simple test which assures the functionality of the transfer switch, auto-invert and charge mode.

This test is performed by disconnecting the power that feeds the battery backup unit or if your system is a plug and play standalone system, unplug its power cord. Upon disconnecting the feed power, your system should switch over to invert mode and draw its power from the batteries. At this point you should be sure your refrigerator is still on and running.

After you have ensured that your system has switched over and inverting, you will need to restore the feed power (or re-plug the system in for mobile system. This test should not last more than 2 to 3 minutes.

## **Monthly Testing:**

The monthly test is a load test that needs to be conducted no sooner than 20 days and no longer than 40 days from the prior (monthly) load test. This test is to ensure the generator can last 25% of its intended runtime. Your runtime is predetermined amount of time that your refrigerator will run on the battery backup. This would have been calculated at the time you purchased the unit.

For the week you are performing the monthly test, it is not necessary to also perform the weekly test.

Example: 12 hour run time = Monthly test 3 hours

Another important issue to take note of is that it is possible to overtest your power system. EverSafe battery backup systems use of AGM batteries, which they are discharged too frequently or discharged too deeply it can cause damage to the batteries, shorting their life expectancy and weakening them.

Record all the testing data on the test record sheet provided by EverSafe.

### **Annual Load Testing:**

This test is to ensure that your system can provide enough power for its intended use. It is important to understand that each system is generally sized to meet predetermined design criteria that pertains to the particular make and model of your refrigerator or freezer that is necessary to stay powered on in the event of a power outage. The primary objective of this test must be to ensure that the system is able to meet the needs of an anticipated emergency situation.

For the week and month you are performing the annual test it is not necessary to also preform the weekly or monthly test.

Disconnect the supply power to the system and run the appliance for the amount of backup time it is intended to power. Record the duration that the system was supplying power.

You may want to set a timer to remind you to restore the input power to the system and not over discharge the batteries. Reconnect the input power and recharge the battery bank. This may take several hours.

### **Record Keeping:**

Recording these tests is important for the protection of your vaccines and costly inventory. You can use our test logs that are in our service manuals and on our download from our website.