

Medi-Products Battery Backup Generator Testing Procedures for Office Based & Ambulatory Surgery Centers

Testing your emergency power system is a requirement in order to conform to Federal, State, NFPA and other accreditation and regulatory standards. Every Surgery Center both large and small must implement and carry out regular testing of their backup generator and emergency battery backup power system.

Medi-Products sets out the following guidelines and instructions that must be understood and implemented for the use and dependence on our battery backup generators.

Weekly, Monthly and 3 Year 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 mobile 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.

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). Be sure to insure that the system switches back to charge mode and be sure that auto invert is switched back off.

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 put out 30% of its name plate capacity for 30 minutes. The following loads should be used for each of the following listed models:

System Size (watts)	Recommended Load Size	Recommended Load Amps @ 120 volt
2000	600	5
2500	750	6.25
2800	840	7
3000	900	7.5
3100	930	7.75
4000	1200	10
4400	1320	11
8800	2640	22

It is important that these monthly tests are performed for no longer than 30 minutes and the load is as close to the recommended size for your system as possible.

Another important issue to take note of is that it is possible to over test your power system. Medi-Products battery backup systems consist of AGM batteries, if they are discharged too frequently or discharged too deeply it can cause damage to batteries, shorting their life expectancy and weakening them.

Record all the testing data on the test record sheet provided by Medi-Products.

3 Year 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 a list of necessary equipment that requires power 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.

Disconnect the supply power to the system and run the equipment that would be necessary in the event of a power failure, enacting a live power outage during a procedure. This test should last up to 2 hours or the duration of the longest procedure that is practiced at the location. Record the equipment that was powered and the duration that the system was supplying power to it.

When the procedure is over restore power to the system and recharge the battery bank.

Record Keeping:

Recording these tests is important for the protection of your practice, and also is credible in the eyes of the state and accreditation agencies. You can use our test logs that are in our service manuals and on our download from our website.