

**Happy Summer to all! By now the temps are getting warmer, the sun is out, and your batteries are discharging faster than ever. Wait, what? That's right, lead acid batteries have a natural self-discharge rate, and All are negatively affected by heat. The hotter the temps the faster a battery will drain! Here are some facts:**

- Heat increased self-discharge rates can easily cause increased plate sulfation. This combination of discharge and sulfation always shortens a batteries useful life.
- AGM batteries (example, Optima) will discharger slower than flooded lead-acid batteries. These higher quality batteries can have significantly lower self-discharge rates in extreme heat. Example. At 120F an Optima battery can have a monthly self-discharge rate of 12%. Seems high until you realize that a comparable flooded lead acid battery can have a self-discharge rate of over 32% under the same conditions.
- Flooded / wet batteries will lose fluid through evaporation; they must be serviced and filled with distilled water when required. In extreme heat this can be weekly.

**What can help lower heat related increased self-discharge rates?** Run equipment more often, charge batteries during scheduled services, or whenever you see someone jump starting a vehicle. Also, use mitigation tools such as Solar and the Pro12 maintainer.

**Air Force Aerospace Ground Equipment (AGE) reps:** Did you know that TO 1-1A-15 now has multiple pieces of PulseTech gear you are authorized to utilize for your battery maintenance program, including 12V and 24V solar? TO 1-1A-15 update includes:



**Pallet Charger**  
12V, 12 Station Charger  
NSN 6130-01-532-7711



**ProHD Charger**  
12 / 24 V Charger  
NSN 6130-01-500-3401



**World Charger**  
12V Charger w/case  
NSN 6130-01-477-4703



**Pro-12 Maintainer**  
12V – 12 Station Maintainer  
NSN 6130-01-535-2718



**490PT+ Diagnostic Tester**  
12V Conductance Tester  
NSN 6130-01-510-9594

**12 and 24 VDC Solar Maintainers**  
Each panel comes with an installation kit.

**12V Panel NSN 6130-01-546-8432**  
**24V Panel NSN 6130-01-487-0035**



**Website: [WWW.PULSETECH.NET](http://WWW.PULSETECH.NET)**

**Online PulseTech Military catalog: <http://read.dmtmag.com/i/493915-2015-military-catalog>**

**We have some Brand New NSNs that may be of interest to your operation!**



**NEW: SP-2 SolarPulse**  
**12V – 2Watt Solar Maintainer**  
**NSN 6130-01-535-2718**

We would like to introduce the SolarPulse® SP-2, our 2-Watt 12-Volt Solar Charger. This smaller solar system is designed to restore and maintain the normal loss of 12-Volt lead-acid battery power on seldom used outdoor vehicles and equipment. This is a smaller panel so is suggested for use on smaller 12V batteries. Larger 12V batteries (example: group 31 and larger) should use one of our higher wattage solar applications.

Ever heard of a PulseTech PowerPulse? Bet not, these newer systems are designed especially for frequently used and charged 12, 24, 36 or 48 Volt battery systems. These are NOT chargers. They are inexpensive mitigation devices which apply our patented high frequency pulsation algorithm directly to the equipment batteries whenever the equipment charging system (alternator) is engaged. They can increase maximum performance and extend battery life on both single lead-acid batteries or batteries connected in series / parallel up to 48V systems.

These systems are ideal for virtually any kind of vehicle or equipment which is used on a regular basis (minimum of multiple times a week), including forklifts, trucks, cars, engineer equipment, boats, emergency vehicles and generators.



**NEW: PowerPulse**  
**High Frequency Pulsation**  
**12V NSN 6130-01-446-7166**  
**24V NSN 6130-01-417-7509**  
**36V NSN 6130-01-417-7507**  
**48V NSN 6130-01-417-7506**

**Reminder: On-site BMMP training and technical assistance visits are available to ALL Military organizations. Don't start from scratch, we also have a complete example battery maintenance SOP our FSRs can send you!** For questions about gear, specs, troubleshooting, or would like to discuss a training / assistance visit please contact your supporting FSR.

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FYI: The latest Battery Maintenance Management Program (BMMP) training slides, previous Newsletters, and other pertinent information is available on our website: <http://www.pulsetech.net/Content/Applications/Military-LP.aspx>

**Website: [WWW.PULSETECH.NET](http://WWW.PULSETECH.NET)**

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