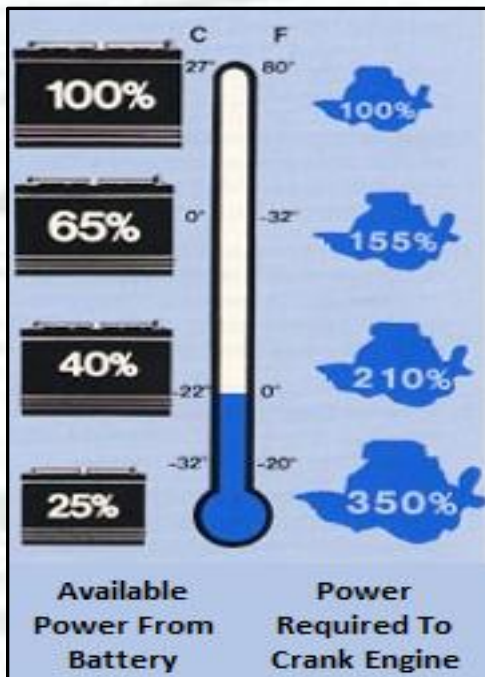


Happy Fall everyone! The weather is getting colder and on a healthy battery the self-discharge rate is slowing down. What, slower? Yep, we

know that batteries have a natural self-discharge rate, and on healthy batteries this process will slow down in the cold.



However, in colder temps when amperage is demanded for starting, lights, ignition, etc. The battery can drain much faster, and it takes more energy to crank your engine (thicker oil, etc.). See pic at left for how temperature can drastically affect battery power and amperage required to crank many larger truck engines.

Conclusion: If we go into the winter months with a discharged battery we may end up with a failure at the least opportune time.

How do we avoid or mitigate the chances of a cold weather battery failure? Think preventative maintenance! Use that same logic on batteries that you would with your engine. We check oil periodically and if the check engine light comes on we investigate right away. So, with our batteries what PM can we check and do?

- **Test and Charge batteries during services. We check the state of charge (SOC). A good ballpark SOC on a 12V battery is 12.6V or above. If low, we then charge batteries to bring up the SOC.**
- **Charge batteries when symptoms of being in a low state of charge (example when they must be jumped/ slaved off to start) are evident.**
- **Utilize a mitigation device such as solar or AC maintainer. Solar or other maintainers are a great option for any seldom used equipment in the winter.**
 - **As discussed above Battery discharge is slower and a solar or maintainer has a better chance at overcoming self-discharge rates.**
 - **There are many solar and maintainer options to consider, see next page for some examples. For additional options contact your FSR, see page 8 of our gear listing, or visit <https://www.pulsetech.net/store/solar-battery-chargers.html>**



PulseTech Solar Applications and AC powered Maintainers:



24V Pulse Solar Charger 6.3 Watt
 12V Pulse Solar Charger 6.3 Watt
 24V NSN 6130-01-487-0035
 12V NSN 6130-01-546-8432
 These systems include install kits.



12 & 24-V Pulse Charge systems:
 Solar with AC Maintainer, or just AC Maintainer.
 24V *System NSN: 6130-01-521-1387
 24V *System w/case: NSN 6130-01-540-3380
 24V AC Maintainer Only NSN: 6130-01-521-1329
 12V *System NSN 6130-01-521-1317
 12V AC Maintainer Only NSN: 6130-01-521-1765
 *Systems contain Solar panel and AC powered maintainer.



24V Solar Pulse Charge Monitor 6.3 Watt
 24V Pulse Charge Monitor System 6.3 Watt
 NSN 6130-01-558-5371 – Nato Slave
 NSN 6130-01-497-0964 – Hard Wired



12V Solar Pulse 5 Watt
 12V Solar Pulse 2 Watt
 5 Watt NSN 6130-01-446-7154
 2 Watt NSN 6130-01-535-2718



Battery Rumors, True or False? Will putting batteries on a concrete floor cause them to discharge faster? False: Many people believe that when batteries sit on concrete the energy will drain out and ruin the battery. Modern batteries can sit on concrete without causing harm or discharging them. However, we are not allowed to store nor charge batteries resting on a concrete floor. The only exception would be in a specifically designed battery service room.

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

Online PulseTech Military catalog: <http://read.dmtmag.com/i/812820-2017-military-catalog>