## BATTERIES <br> COLD WEATHER OPERATION

## This abbreviated checklist is not to be used as a replacement for the $\mathbf{- 1 0}$ series Tech Manuals or any other PMCS guide

Reference TM 9-6140-210-14 Section 2-5, Para. 2 - Cold Weather Operations

1. If equipment has a winterizing kit that includes a battery heater use it.
2. Make sure that battery is warm before checking fluid levels or state of charge indicator.
3. Keep Battery fully charged. A fully charged battery can withstand temperatures of -70 'F without freezing. A discharged battery can freeze at 10 'F. At the end of operations turn off all electrical devices to stop the drain of power from the battery and run the engine at a high idle (RPM above 1000) for 20-30 minutes or if a battery charger is available attach charger. If charger has a trickle charge setting or low amperage setting use that setting.
4. Before attempting to operate equipment visually check battery for buckled, swollen or cracked conditions; check cells for frosted or iced over electrolyte. This will indicate a frozen battery. Remove battery if case is buckled, swollen or cracked. Handle with care as electrolyte will cause damages as it thaws and flows from the battery.
5. CAUTION: DO NOT attempt to operate equipment with frozen batteries. DO NOT attempt to slave start equipment with a frozen battery. DO NOT attempt to charge a frozen battery. Attempting any of these activities can cause the battery to explode.

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6. To Thaw a frozen battery remove from vehicle and place in an area where temperature is above $32^{\prime} F$. If available batteries may be placed in a cool water bath, DO NOT totally submerge battery or get water in cells or vents. Area should be well ventilated to prevent gases from accumulating. DO NOT apply heat to battery to quickly thaw. When all fluids are liquefied, fully charge battery before placing back in service.

