

Information Sheet

Winter is coming and the batteries in your Work Platform equipment may be on the way out.

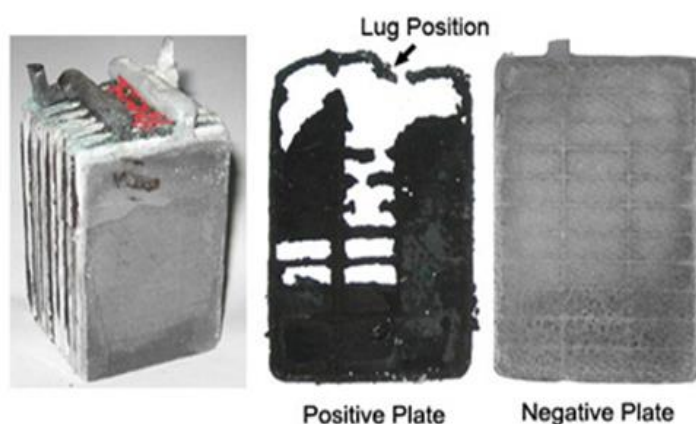
The equipment that may cost you the most, may be right in front of your eyes, especially your service truck that you kept on a 3 to 4 year operating lease. Early morning starts and cold nights, and running that flashing light on site with the engine off. It drains the battery, and there may not be enough reserve power to crank over the engine on a cold morning. Install the manufacturers recommended capacity battery, or a higher capacity option. Don't be conned into putting in a lower capacity battery. Taxi operator's understand this, that's why they have higher capacity batteries in taxi cabs.

Your battery powered scissor-lifts, vertical lifts and mast lifts rely on batteries to lift the scissor platform and the workers in their heavy winter gear. This may reduce the amount of lift and drive cycles available, especially in cold weather with a reduction of up to 50% of battery capacity. Realistically the elevated platform may be able to be lowered using the emergency lowering valve.

Your Diesel engine powered Boom-lift may be your next BIG problem, especially the larger booms with the new safety systems. If the battery drops below a preset voltage during engine start-up, the "manufacturers control system" may see a "Low Voltage" fault and prevent the boom operation. But that's not the very big issue, when boom-lift's engine has a stop and start of up to 80 times a day, the battery may not have enough reserve power to retract an operator from a fully elevated position. Your "Safe Work Method" procedure for the site may fail as the battery runs out of power from the ground controls. The platform level system may not power up. The person at the ground may not be able to retrieve a trapped operator.

Why does this happen:

1. Just think about a battery full of electrolyte (Sulphuric acid and water) eating away at the battery plates 24 hours a day. The plates corrode away as the stronger acid sinks to the bottom of the cell and the shed material sinks to the bottom. The battery gradually has less capacity, but they charge up faster. So you effectively have a smaller battery, and every month it gets smaller. The same size engine alternator is pumping in the same current for the original larger battery, so the charging may cause the electrolyte to boil and you lose electrolyte. If the original equipment is a "maintenance free type battery", replace it with a maintenance free battery.

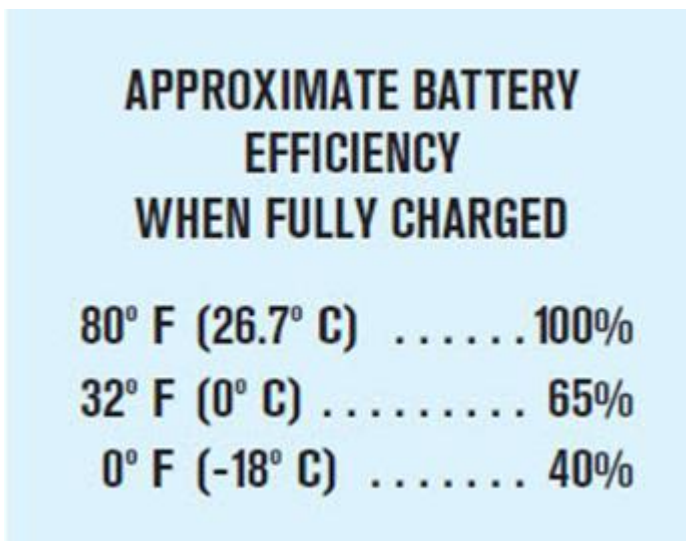


2. Everyone wants to save money and this is one of the items that you need to think ahead to make a plan to save money. First of all, the taller the boom, the bigger the battery that is needed. Look at a 135ft boom, it has an approximately 1400CCA battery. (CCA is Cold Cranking Amps). Look at a 60ft boom, it is a 1000CCA battery. This particular size is similar in looks to a generic N70Z 660CCA

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battery. DON'T BE CONNED, DON'T FIT A GENERIC BATTERY. You could contribute to a "change in design of the boom lift" and the "Manufacturers emergency retrieval system may NOT work". Your service technician and your purchasing team could be causing you issues that you don't need.

3. Check the manufacturer's specification, and where possible install the same battery size, type and capacity. Don't replace a failed incorrect 660CCA battery in a boom-lift, with another new 660CCA battery. Ask the service guys in the North West of Australia travelling around remote mine sites, and dealing with summer temperatures of 50 degrees C, then down to minus 3 C overnight in winter. They will tell you that the incorrect battery(s) cost wasted service calls. The batteries die early, especially on mine sites with 6am starts, 12 hour work shifts and flashing lights running all the time, even when the engine is switched off and on, up to 80 times a day.



4. This caution is more important with the new water cooled Tier 4 Final (T4F) and Stage 4 diesel engines coming into production and new engine control systems. The problem of low battery capacity becomes another issue that the owner and maintenance team need to be aware of.

Finally,

Do yourself a favour, connect an external battery charger to the battery of your boom-lift overnight when it returns from hire. It's the best way to reduce load on the system and keep your long term costs down.