

REEFER UPDATE

Multmarine Services Inc.
keeping it cool since 1981



The latest news from Multmarine Services
November 2015

“Oh The weather outside is frightful...”

Well we can hide and fight it all we want, but cooler weather is officially here! What happens in cooler weather.... Seems like that first cold morning you get in your car and the battery is dead.

Well that can happen with your reefer too! The power, or current, that batteries supply is dependent on chemical reactions and those reactions are slowed by freezing temperatures. Since the reactions are slowed, less energy is produced and the power output is lowered; with a lower output, the battery cannot keep up with the demand and can go dead, producing no current. (Fun fact: battery drain caused by leakage, on the other hand, occurs more slowly at cooler temperatures than at warmer ones).

We also face battery troubles on our reefers because of parasitic loads on the reefer battery.

Say What?!? We all do it, we hook up extra stuff to our batteries to where we need power. The lift gates uses the reefer battery. Data tracking systems suck the life out of batteries. Also in colder weather we run our units in Start/Stop mode opposed to Continuous, where the battery just keeps cycling.



One bright idea to combat this problem is to add a solar panel for assisted power production. Carrier manufactures a flat solar panel mat with an adhesive backing (for easy install) that provides alternative power for your reefer accessories. It's so flat you don't even know it's there. Why not take advantage of an extremely cost-effective, RENEWABLE power source, the sun!

Another product that Carrier produces to solve some battery concerns are the Absorbed Glass Mat batteries, or AGM. AGM batteries also use a higher purity of lead typical flooded cell batteries at 99% pure, virgin lead. This higher purity means fewer contaminants and a lower incidence of gassing, which extends battery life and increases performance. The AGM battery's design advantages include lower internal resistance and greater plate area for superior starting power, the



ability to recharge much faster, and higher voltage characteristics during discharge. AGM batteries are better at withstanding vibration compared to standard batteries.

However, as we all know: "Good things aren't cheap, so cheap isn't always good".

The price of an AGM battery might give you sticker shock: at \$429.70. Standard batteries are \$161.27. BUT let's consider the warranty here: the AGM has a 4 year warranty on it, the standard has a year and half warranty. hummm....

Sounds like the AGM is like buying bulk toilet paper; it might cost you a little more upfront but those 100 rolls of TP are going to last forever! Just a few things to consider this time of year when the mercury is low and so is the charge on your batteries.

Don't forget to check competitive replacement parts:

- ❄ Belts
- ❄ Filters
- ❄ Starters
- ❄ Alternators

“Build Carrier Quality into your Unit”