

DIY Van Build



Winterizing Van Batteries

Since I live in Minnesota, I must remove my house batteries from the Van due to our cold winters. You do not want to charge lithium batteries when the temps are negative over a long period of time. LiFePO₄ *can* survive cold temperatures, but long-term deep-cold storage is not ideal.

Note: This document assumes that you have installed your batteries in parallel.

Step One - Disconnect Negatives

You do not have to remove each battery simultaneously — just make sure every negative cable is removed before you touch any positive cables.

So it will look like:

- Negative off battery #1
- Negative off battery #2
- Negative off battery #3

(At this point, nothing in the system is referenced to ground and it's safe to touch positives.)

Step Two - Disconnect Positives

- Positive off battery #1
- Positive off battery #2
- Positive off battery #3

Why this order matters:

If the positives are still connected and you try to remove a negative last, any accidental contact between the positive and the van chassis could complete a circuit and arc. Removing all negatives first removes that risk.

Storage

Store batteries at:

- ~40–60% charge (not full, not near-empty)
- Indoors above freezing (basement, closet, etc.)
- Check charge occasionally and recharge as needed

Reinstallation

When you reinstall in spring:

Reverse it:

1. **All positives on first (all 3)**
2. **All negatives on last (all 3)**