Mike Lammer’s compilation of Epoch 300Ah battery installation information.

This is being presented for review and criticism, not as instructions or as a comprehensive guide. Note that some of this was generated by artificial intelligence and may not be reasonable or accurate.

Dual Epoch 12V 300Ah Lithium Battery Upgrade – DIY Guide

For 2020 Winnebago View/Navion 24V

This guide documents the installation of 600Ah of heated $LiFePO_4$ batteries under the entry step of a 2020 Winnebago View 24V. It includes preparation, wiring, fuse placement, SmartShunt setup, AC breaker relocation, and lessons learned.

Materials Used

- 2x Epoch 12V 300Ah Heated $LiFePO_4$ Batteries
- 2x BESTEK 1/0 AWG Battery Cables (12", 3/8" lugs – Positive & Negative)
- 1x RIOCAN 2 AWG Battery Cables (8", 3/8" lugs – for fuses)
- 2x Ampper M8 Brass Battery Terminal Posts
- 1x Huazu 4-Stud Positive Bus Bar
- 1x Negative Bus Bar
- 2x Victron SmartShunt IP65 (300A)
- 1x Baomain ANL-300A Fuse + Holder (Inverter Protection)
- 1x BOJACK 2-Way Mega Fuse Holder
- Joinfworld 3-Pack 300A MEGA Fuses
- Joinfworld 3-Pack 100A MEGA Fuses
- 1x Victron Smart Battery Sense (Long Range)
- Kilmat 80 mil Butyl Sound Deadening Mat
- 3/4” Foam Board Insulation (20" x 12")
- 1.25” Hole Saw + 1/2” Pipe Insulation

Battery Compartment Prep

1. Cut and place 3/4” foam insulation in the battery bay floor, between the steel ridges.
2. Line the compartment walls with Kilmat insulation for thermal and sound dampening.
3. Drill two 1.25” holes at the top rear of the compartment:
    - One for negative cables (driver-side hole)
    - One for positive cables (coach-interior side)
4. Seal both holes with split pipe insulation.
5. Remove plastic battery handles to ease placement under the step.

Fuse & Wiring Layout

Recommended Fuse Ratings

Circuit	Fuse Size	Purpose
Victron MPPT 100/50 (Solar)	100A Mega	Protects solar controller output
DC-DC Charger	300A Mega	Protects alternator charging circuit
Inverter (Xantrex 2000W)	300A ANL or Mega	Protects high-current inverter input

Fuses should be installed as close to the battery or positive busbar as possible to minimize unfused wire lengths.

BOJACK 2-Way Mega Fuse Holder Setup

- Mount near the battery compartment or positive busbar.
- One slot holds a 100A Mega Fuse for the Victron solar controller output.
- The second holds a 300A Mega Fuse for the DC-DC charger.
- Outputs from both fuses are routed to the positive busbar.

Inverter Fuse

- Install a 300A Mega or ANL fuse between the battery and inverter input cable.
- Use 1/0 or 4/0 cable depending on inverter size and run length.
- Mount the fuse holder within 12” of the battery if possible.

Victron SmartShunt Wiring

Correct SmartShunt installation is essential for accurate monitoring.

Wiring Flow:
Battery negatives → SmartShunt “BATT” side → SmartShunt “LOAD” side → Negative busbar

Instructions:

1. Connect each battery's negative terminal to the “BATT” side of the SmartShunt.
2. From the “LOAD” side, run a cable to your main negative busbar.
3. All system loads and charge sources (inverter, solar, DC-DC, chassis ground) connect to the busbar.
4. Do not connect anything directly to battery negative posts — everything must flow through the shunt.
5. Optionally connect the Victron Smart Battery Sense to monitor voltage and temperature.

Breaker Panel Access – 2020 View/Navion 24V

To enable the inverter to power your A/C circuit:

- Move the A/C circuit breaker and its neutral wire to the inverter side of the load center.
- On the 2020 24V model, this is easily done by removing the passenger-side twin bed drawer to access the panel from the rear.

Terminal Connection Tips

- Use this hardware stack on battery studs:
  Hex bolt → Lock washer → Flat washer → Lug → Terminal
- Ensure the lug holes match the M8 studs.
- Use correct torque specs and verify all connections are snug.
- Check for heat at terminals under heavy inverter load after install.

Extra Tips and Lessons Learned

- You can power off the Epoch batteries using the app before starting the wiring — making installation safer and stress-free.
- The Xantrex inverter pass-through is limited to ~25A. On 30A shore power, be mindful of combined loads (A/C + microwave).
- Label every fuse, cable, and shunt connection now — it's a huge help during future troubleshooting.
- This setup lays the groundwork for solar expansion, efficient boondocking, or switching to induction cooking.

Community Shoutouts

Thanks to the View/Navion community for helpful advice and prior build threads. Special thanks to:

- Koert DuBois – for wiring safety, terminal torque guidance, and SmartShunt clarity
- Morgan MacDonald – for pioneering the dual Epoch install under the step
- Tim & Monica Junod – for sharing layout photos and wiring insights

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Summary

This upgrade resulted in:

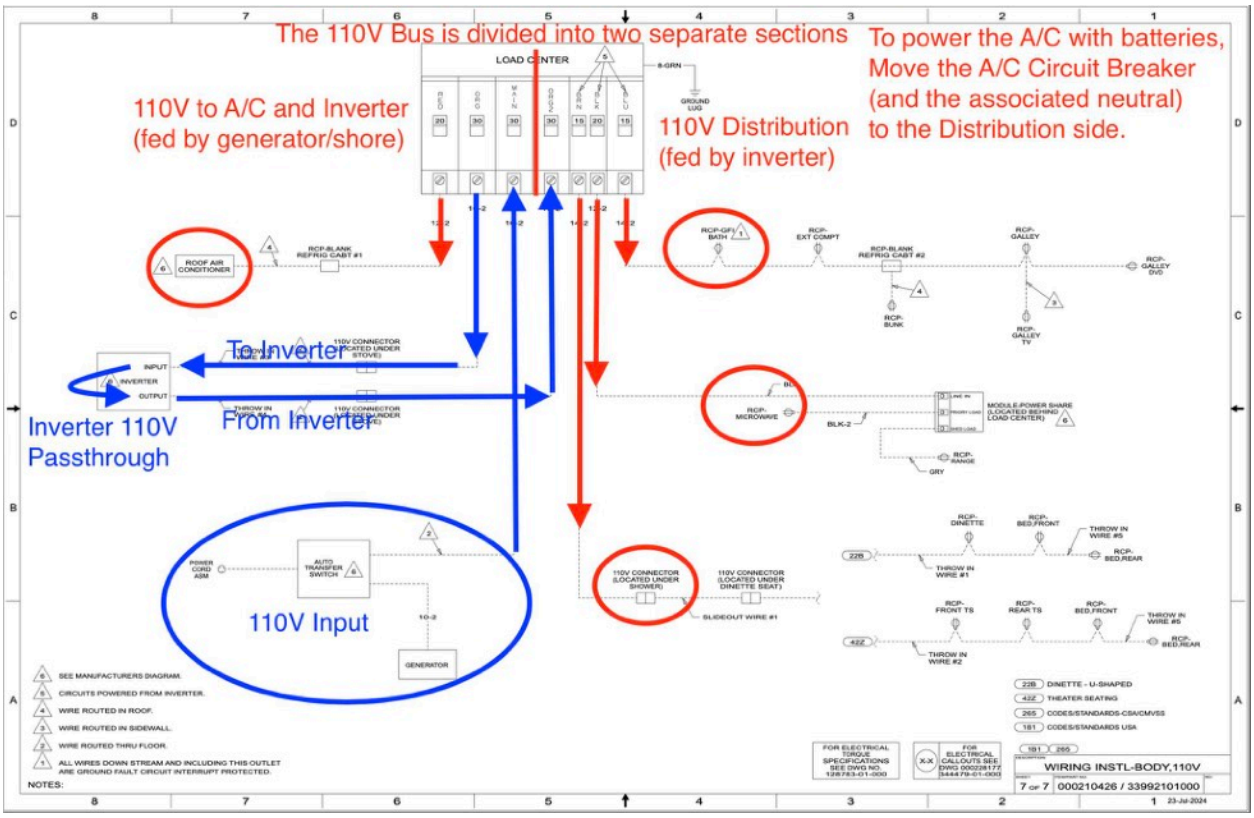
- 600Ah of heated lithium battery capacity
- Full monitoring via Victron SmartShunt and Bluetooth
- Inverter-powered A/C and future-ready solar/alternator charging

- Well-insulated and noise-dampened battery compartment
- A safe, fused, and expandable DC system

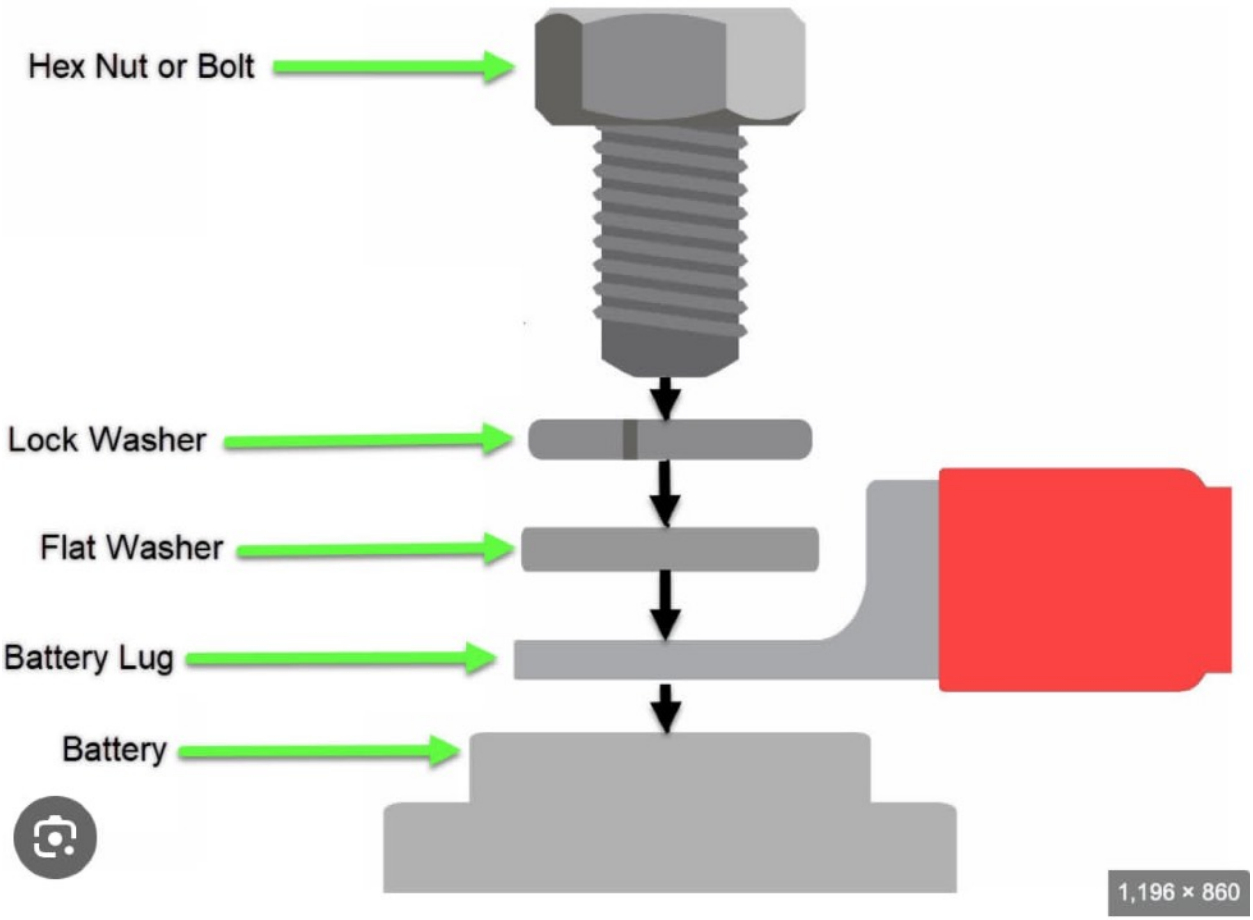
Examples of finished project.






The 110V Bus is divided into two separate sections
To power the A/C with batteries, Move the A/C Circuit Breaker (and the associated neutral) to the Distribution side.
110V to A/C and Inverter (fed by generator/shore)
110V Distribution (fed by inverter)
LOAD CENTER
ROOF AIR CONDITIONER
RCP-BLANK REFRIG CAST #1
RCP-GFI BATH
RCP-EXT COMPT
RCP-BLANK REFRIG CAST #2
RCP-GALLEY
RCP-GALLEY DVD
RCP-BLNK
RCP-GALLEY TV
To Inverter
From Inverter
INPUT
INVERTER
OUTPUT
Inverter 110V Passthrough
RCP-MICROWAVE
MODULE-POWER SHARE (LOCATED BEHIND LOAD CENTER)
RCP-RANGE
110V Input
POWER CORD ASM
AUTO TRANSFER SWITCH
GENERATOR
110V CONNECTOR (LOCATED UNDER SHOWER)
110V CONNECTOR (LOCATED UNDER DINETTE SEAT)
SLIDEOUT WIRE #1
RCP-DINETTE
RCP-BED,FRONT
THROW IN WIRE #5
RCP-BED,REAR
THROW IN WIRE #1
RCP-FRONT TS
RCP-REAR TS
THROW IN WIRE #2
NOTES:
SEE MANUFACTURERS DIAGRAM.
CIRCUITS POWERED FROM INVERTER.
WIRE ROUTED IN ROOF.
WIRE ROUTED IN SIDEWALL.
WIRE ROUTED THRU FLOOR.
ALL WIRES DOWN STREAM AND INCLUDING THIS OUTLET ARE GROUND FAULT CIRCUIT INTERRUPT PROTECTED.
228 DINETTE - U-SHAPED
422 THEATER SEATING
265 CODES/STANDARDS-CSA/CMVSS
181 CODES/STANDARDS USA
WIRING INSTL-BODY,110V
7 OF 7
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TO



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