

Falcon Upgrade Roadmap

Trip-debrief conversion: what worked, what failed, and the prioritized path to reliable campground and boondocking service.

Priority	Project	Status / target	Why it matters
P0	Cracked roof dome cover	Replace after matching flange/opening	Active leak risk; discrete repair despite otherwise inspected/resealed roof.
P1	Water heater	Price/source Suburban ST60; compare DIY purchase vs Abe's RV Service	Restore reliable hot water after suspected winterization-related failure.
P1	Water filtration	Build FAL-WTR-001	Stops hauling fresh water and giant bags of ice; improves cooking, dogs, coffee, and daily use.
P1	Electrical bank	Measure loads, then 300 Ah LiFePO4 + ~2 kW inverter/charger	Current 1500 W inverter + lead-acid bank has tripped under refrigerator + coffee load.
P2	Bedroom A/C insert	Build FAL-ENV-001 removable foam system	A/C is a major success; seal bugs/heat and protect escape-window glass.
P2	Starlink deploy	Long cable, protected fridge-area exit, high router mount, slim dish case	Less clutter, better storage use, better Wi-Fi positioning.
P2	Nose-cone storage	Task bins + fishing-rod rack	Preserve recovered storage volume.
P3	Rockford audio / bedroom AV	Troubleshoot amp/head unit; add projector + screen	Reuse existing speakers; bedroom entertainment without a bouncing TV.
P3	Radio infrastructure	Antenna bulkhead + 12 V + Ethernet + reserve shelf	DX10 now, clean Flex migration path later.

Confirmed wins from the latest trip

Win	Result
9,800 BTU inverter bedroom A/C	Held Falcon around 75-78 F during 98 F+ heat with circulation fans. Keep it.
Oscillating fans	Meaningfully improved cabin comfort and distribution.
Nose-cone cleanout	Recovered substantially more useful storage; now needs bin discipline to prevent relapse.
Campground usage trend	More campground nights lately, but Falcon now needs a deliberate boondocking mode.

Next field-measurement list

These are the measurements / model tags that turn the Rev A concepts into fabrication-ready Rev B drawings.

Measure / identify	Needed for
Bedroom escape-window full opening height + corner radius + sill depth + exact A/C case W/H	Final foam insert cut pattern.
Cracked dome exterior flange dimensions / screw pattern / manufacturer marks	Correct replacement dome.
Existing water-heater model tag, cutout, door size, gas/electrical connections	ST60 replacement fit and Abe's quote.
Existing solar-controller model, converter/charger model, battery cable length/gauge	Final LiFePO4/inverter design.
Rockford head-unit and amplifier model numbers + fuse locations	Audio troubleshooting and interface choice.
Available nose-cone panel dimensions	Filter service-box fit and rod-storage layout.

Rev B trigger

Once these six items are captured at the Falcon, update the water service-box footprint, A/C cut template, battery/inverter conductor schedule, roof-dome replacement selection, and AV wiring diagram. That will convert the current concept package into install-ready drawings.