

Chester the Bus

2007 Thomas MVP-EF Skoolie Conversion

Drivetrain

- 2007 Thomas MVP-EF school bus. Titled as an RV
- 5.9L Cummins ISB diesel
- Allison 2500 transmission
- 37 feet long
- 86,000 original miles
- 28,700 lbs fully loaded
- New tires: rears installed January 2026, steers installed November 2025
- Fully serviced. Maintenance log available.

Exterior Features

- 16" roof raise
- RV windows installed
- New storage boxes. 80+ cubic feet of dry, lockable storage
- New stairway and door at midship; original door closed over
- Paint: Sherwin-Williams Multi-Surface Acrylic (Pewter Green & Tricorn Black)
- 100-gallon fresh water tank
- 100-gallon grey water tank
- Erapta camera system: 2 rear-facing, 1 on each side
- Exterior shower
- 50-amp shore power inlet
- City pressure and gravity fresh water tank fill
- 21' RecPro powered awning
- New LED marker lights
- New LED brake and turn signal lights
- New LED headlights
- Exterior LED lights all around
- 2.5" Tow hitch rated for 18,000 pounds
- 2" Front tow hitch
- Compressed air outlet

Interior Features

- Large curved couch area
- Natural walnut slat wall
- Junior-sized bunk beds with hand-carved railings
- Queen-sized bed

- Large kitchen area
- 30" x 36" shower
- Bathroom sink
- Farmhouse kitchen sink
- Rotating driver's seat
- Double trash pullout
- Fold-out table, solid maple with walnut leaf inlay
- Formica countertops
- Natural walnut shoe rack
- Automatic cabinet door and drawer locks
- Home Assistant central control dashboard
- 12V power to each window opening for future powered window blinds
- 2.5"-3" spray foam everywhere except floor
- 4" total extruded XPS foam on floor
- Heated floor zones (2)
- 3/4" AdvanTech subfloor with 5/8" engineered hardwood flooring
- 1/2" plywood on all walls and ceiling
- Walls built with 3/4" and 1/2" plywood
- Natural walnut hardwood trim and lower cabinets
- Natural walnut hardwood pocket door
- Maple hardwood upper cabinets, painted

48V Solar & Electrical System

- 3,200W solar array, 2S4P configuration
- Victron 150|100 MPPT solar charge controller
- Victron MultiPlus-II 45/3000/35 120V inverter/charger
- Victron Lynx distributor
- Victron Orion-Tr 48/12 30A converters (2, in parallel)
- Victron Ekrano GX 7" display
- Victron SmartShunt 300A, measuring DC loads
- Victron SmartShunt 500A, measuring battery capacity
- Battery: ReLion RB48V300, LiFePO4 chemistry, 1.5 years old, 83 total charge cycles
- Alternator charging

Air Conditioning

- 12,000 BTU Perfect Aire mini-split (front), also a heat pump
- 11,000 BTU 48VDC OutEquip Summit 2 rooftop AC, also a heat pump

Heating System

- Hydronic heating system with diesel boiler and electric backup

- 2 zones for floor heat
- 1 zone for water-to-air heat exchanger (front heat) with custom thermostat; includes a water-to-water heat exchanger coupled to the engine coolant, allowing engine heating in winter and system heating while driving
- 1 zone for grey water tank heat
- 1 zone for domestic hot water via water-to-water heat exchanger
- Main hydronic pump: Grundfos Alpha 15-58F smart ECM high-efficiency circulator pump
- Diesel boiler

Lighting

- All interior lighting is dimmable
- Puck lights throughout
- Undercabinet LED strip lighting
- Toe-kick LED strip lighting

Appliances

- Dometic DMC4101 fridge, 10 cubic feet, 12VDC
- RecPro propane stove, freestanding, 24"
- LG washer/dryer combo unit (used)
- Ogo composting toilet
- COMFEE dishwasher
- RVLovent reversible 10-speed vent fans (2)

What You Will Get

- Everything listed above
- Our spreadsheet covering the entire bus build: budget, material usage, bus info, and maintenance log
- A full set of as-built blueprint drawings
- A manual detailing the different systems and how they work