

October 1 update: The drawings below preserve the earlier sofa/galley concept. The current direction is a broader insulated rebuild, projector instead of TV/DVD, removal of the second radio, LED lighting, and separate house power. These are not current construction specifications. [Read the current plan and inspection notes.](#)

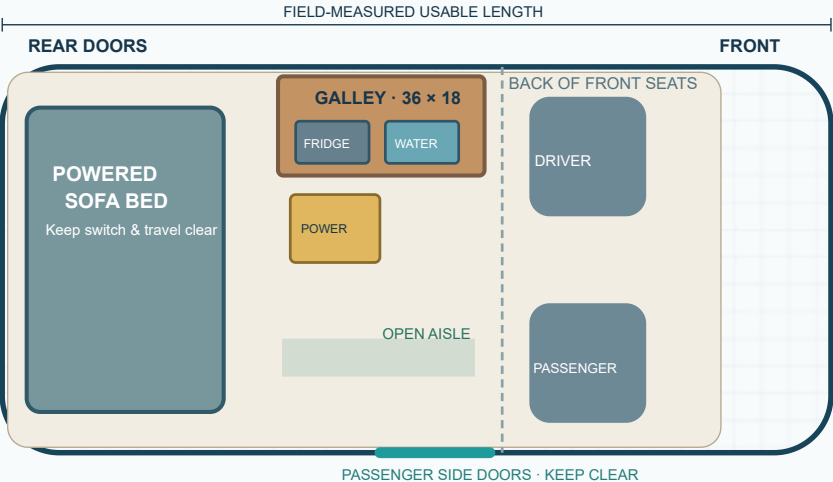
FORD ECONOLINE E-150 · EXISTING RAISED-ROOF CONVERSION

SOFA + GALLEY LAYOUT

SHEET 1 / 2
Revision B · 30 Sep 2026
Planning drawing · verify in van before cutting

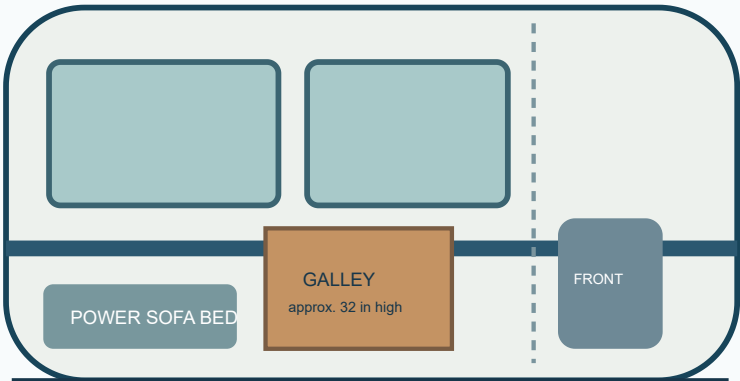
Design basis: The supplied collage is a visual concept. Its perspective and room sizes are not measurements. The owner confirms the rear sofa converts electrically to a bed. This plan keeps the powered sofa, both radio/cassette units, and rear light strip. It replaces the TV and VHS player with a modern TV and DVD player, clears the passenger side doors, and puts a narrow galley behind the driver. No dimension shown here is an as-built measurement.

TOP VIEW · ROOF REMOVED · FRONT AT RIGHT



Galley on driver side. Layout positions are diagrammatic; measure seat travel, doors, wheel wells, and sofa travel before final placement.

SIDE ELEVATION · DRIVER SIDE



Keep new TV/DVD, original radios/cassettes, rear light strip, roof vent & storage accessible

- 01**
Keep powered rear sofa bed and its original wiring
- 02**
Galley target 36 L × 18 D × 32 H in
- 03**
Clear aisle target 24 in or more

1 · MEASURE THE ACTUAL VAN

Measurement	Actual	Where to measure
A · usable floor length		Rear closed-door plane to back of driver seat at driving position
B · narrowest usable width		At planned galley height; include wall curvature and trim
C · floor-to-ceiling height		Lowest point of usable center aisle
D · clear run with bed open		Behind driver seat to forwardmost point of powered sofa in bed mode
E · flat bed sleep length		Measure after powered sofa reaches full bed position
F · side-door clear opening		Door swung open; check entry step and handhold
G · wheel-well intrusion		Max intrusion on proposed cabinet side
H · floor unevenness		Highest rise where cabinet base will sit

The galley target is **36 L × 18 D × 32 H in.** Keep its base, fridge venting, and fastening clear of the sofa-bed motor, wiring, switch, and full travel. Final length = smaller of 36 in or (D – 2 in). Final depth = smaller of 18 in or (B – 24 in aisle target). Keep a 1 in fit allowance at each wall/trim end and size the cabinet only after a cardboard mock-up.

Enter B and D to calculate a preliminary cabinet limit.

2 · PARTS AND ROUGH CUT LIST

Part	Target	Final cut rule
Galley cabinet carcass	36 L × 18 D × 30 H	Cut from actual available run and wall template; top adds ~2 in
Countertop	+1 in overhang front and ends	Template the wall curve before cutting
Fridge bay or open shelf	Per selected fridge	Use fridge maker's clearances and vent path
Water container cradle	One 5–7 gal removable jug	Size to jug; strap down near floor
Bed topper	Foldable, ~3–4 in thick	Cut only after powered sofa flat size and travel are verified
Removable table	~28 × 18 in	Place only if rear door access and sofa travel remain clear

3 · FIT GATES BEFORE CONSTRUCTION

- Run the powered sofa through a full seat-to-bed-to-seat cycle. Measure the flat sleeping surface and travel envelope; locate the switch, motor, wiring, fuse, and manual release if equipped.
- Remove only the middle seats you choose to remove; retain the powered rear sofa and all its controls. Photograph and retain original hardware; do not cut seat-belt anchor points or structural floor members.
- Make a full-size cardboard galley mock-up. Move both front seats through their full travel, operate both side doors, cycle the powered sofa, and walk the aisle.
- Check for roof/window leaks and floor rust under the carpet before hiding them with cabinetry.
- Read GVWR and axle ratings from this van's door label. Weigh the van with fuel, occupants, and planned equipment before assigning a build weight budget.

4 · INSTALLATION SEQUENCE

- Clean and repair leaks or rust; verify the mechanic's purchase inspection findings. Test the original TV/VHS wiring, both radio/cassette units, rear light strip, and sofa-bed circuit before changing equipment.
- Measure and mark floor positions; use tape and cardboard for a one-night trial layout.
- Template cabinet base and wall curve. Build lightweight plywood cabinet with rounded edges and positively latched doors/drawers.
- Fasten cabinet to verified structural mounting points with appropriate reinforcement. Do not rely on carpet, thin trim, or wood screws into the floor alone.
- Secure fridge and water jug inside the galley, and the power station separately, against movement. Keep water connections accessible and separated from electrical gear.
- Reuse the overhead cabinet if the replacement TV fits and can be mounted securely. Secure the DVD player; verify compatible TV input, power, ventilation, and cable access. Keep both radio/cassette units and rear light strip. Add new circuits separately; reweigh when complete.

5 · EQUIPMENT ARRANGEMENT

Zone	Placement / reason
Sleep / lounge	Existing powered sofa bed; leave motor, switch, wiring, and full travel accessible
Cook / prep	Driver-side counter; portable stove used with required ventilation, stored when driving
Cold storage	Under-counter fridge or portable cooler with maker-required ventilation
Water	Removable jug low in driver-side cabinet; simple basin optional
Power	Secured portable power station low, dry, and accessible

Hold point: This is ready for measuring and mock-up. It is not a cut-ready set of van-specific dimensions until fields A–H are measured, the powered sofa travels freely, and doors, seats, circuits, and axle weights are checked.